

PROJECT ID:
1060-10-72

COUNTY:
WAUKESHA

WITH: N/A

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 =

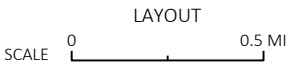
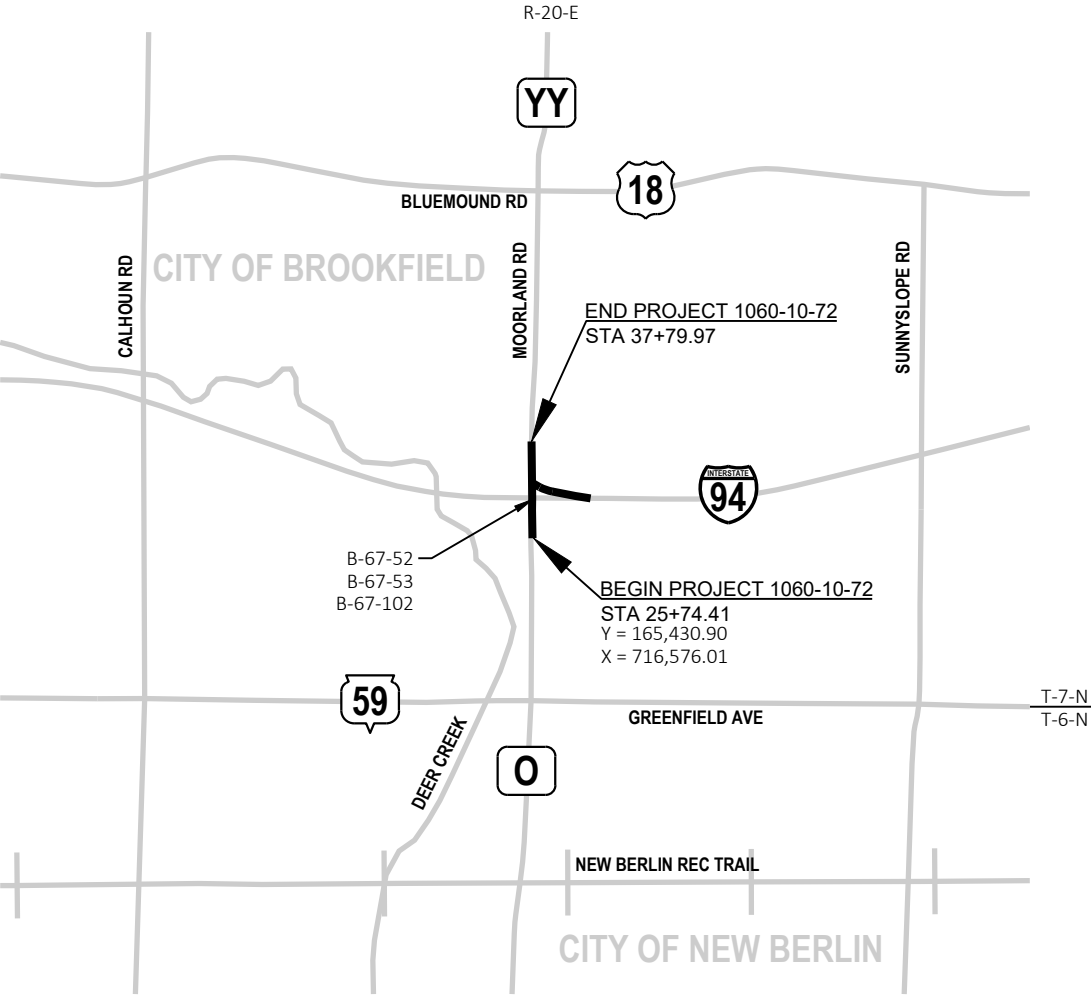
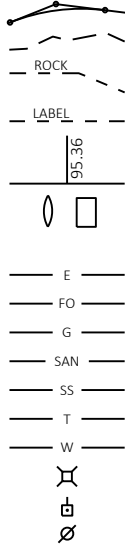


DESIGN DESIGNATION		MOORLAND RD	RAMP C
A.A.D.T.	2019	= 39,600	9,600
A.A.D.T.	2042	= 40,600	10,100
D.H.V.		= 4,350	1,085
D.D.		= 59/41	59/41
T.		= 6%	2.2%
DESIGN SPEED		= 40 MPH	50 MPH
ESALS		= N/A	1,500,000

CONVENTIONAL SYMBOLS

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



TOTAL NET LENGTH OF CENTERLINE = 0.228 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WAUKESHA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

IH 94 EAST WEST FREEWAY

MOORLAND INTERCHANGE

IH 94

WAUKESHA COUNTY

STATE PROJECT NUMBER
1060-10-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1060-10-72		

DRAFT PS&E
NOVEMBER 1, 2022

WISDOT TO PROVIDE FTMS
PLANS FOR FINAL PS&E

ORIGINAL PLANS PREPARED BY

raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com

(Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	
Designer	RASMITH
Project Manager	AMANDA JOHANSEN
Regional Examiner	
Regional Supervisor	WAFA ELQAAQ

APPROVED FOR THE DEPARTMENT
DATE: (Signature)

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SEWER

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FTMS

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TRAFFIC SIGNALS

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141 NW BARSTOW STREET
WAUKESHA, WI 53188
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parwinder.virk@dot.wi.gov

GENERAL NOTES:

- EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.
- EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
- ALL DISTURBED/GRADED/SOIL STOCKPILE AREAS SHALL BE PERMANENTLY RESTORED WITHIN FOURTEEN (14) CALENDAR DAYS OF ANY CONTRACTOR DISTURBANCE. IF ANY DISTURBED/GRADED/SOIL STOCKPILE AREAS (INCLUDING ALL PARTIAL/FULL CUTS AND FILLS, ADJUSTED/REPLACEMENT STORM SEWER, SIDEWALKS, CURBS, ETC...) WILL NOT BE PERMANENTLY RESTORED WITHIN FOURTEEN (14) CALENDAR DAYS THEY SHALL BE RESTORED WITH TEMPORARY SEED AND EROSION MAT WITHIN FIVE (5) CALENDAR DAYS OF THE INITIAL & REPEATED DISTURBANCE.
- STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS, AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS TO BE LEFT FOR MORE THAN FOURTEEN (14) DAYS, RESTORE THE STOCKPILE WITH TEMPORARY SEED AND MULCH.
- RESHAPE, RESTORE, AND FINISH ALL PREVIOUSLY GRASSED AREAS DISTURBED OUTSIDE THE NORMAL CONSTRUCTION LIMITS AT NO EXPENSE TO THE DEPARTMENT.
- PLACE TOPSOIL TO 1 INCH BELOW TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS IN SOD AREAS.
- THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS IN THE AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.
- ALL CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE LINE UNLESS OTHERWISE NOTED.
- VERIFY EXISTING PAVEMENT ELEVATIONS AT ALL TIE-INS TO EXISTING PAVEMENT PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF A DISCREPANCY IS FOUND BETWEEN PROPOSED PLAN ELEVATIONS AND EXISTING PAVEMENT ELEVATIONS.
- SAWCUT EXISTING ASPHALT AND CONCRETE PAVEMENT AT THE MATCHLINE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- CONSTRUCT INSIDE EDGE OF SIDEWALK 1/2-INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.
- CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN REGIONAL PLANNING COMMISSION (SEWRPC) AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.
- HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

THICKNESS	LAYERS
1.75-INCH	1 3/4" UPPER LAYER 4 MT 58-28S
2-INCH	2" UPPER LAYER 4 MT 58-28 S
3.5-INCH	1 3/4" UPPER LAYER 4 MT 58-28 S 1 3/4" LOWER LAYER 4 MT 58-28 S
4-INCH	4" UPPER LAYER 4 MT 58-28 S
5-INCH	2" UPPER LAYER 4 MT 58-28 S 3" LOWER LAYER 3 MT 58-28 S

DESIGN CONSULTANT

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WDNR LIASON
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WISDOT REGION CONTACT

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rmerry@sewrpc.org

ORDER OF SECTION 2 SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- REMOVAL PLAN
- PAVING DETAILS
- PAVING GRADES
- CURB RAMP DETAILS
- EROSION CONTROL
- STORM SEWER PLANS
- EXISTING SIGN REMOVALS
- PERMANENT SIGNING
- TRAFFIC SIGNAL PLANS
- LIGHTING PLANS
- FTMS PLANS
- PAVEMENT MARKING
- TRAFFIC CONTROL PLANS
- DETOUR PLAN
- ALIGNMENT PLAN

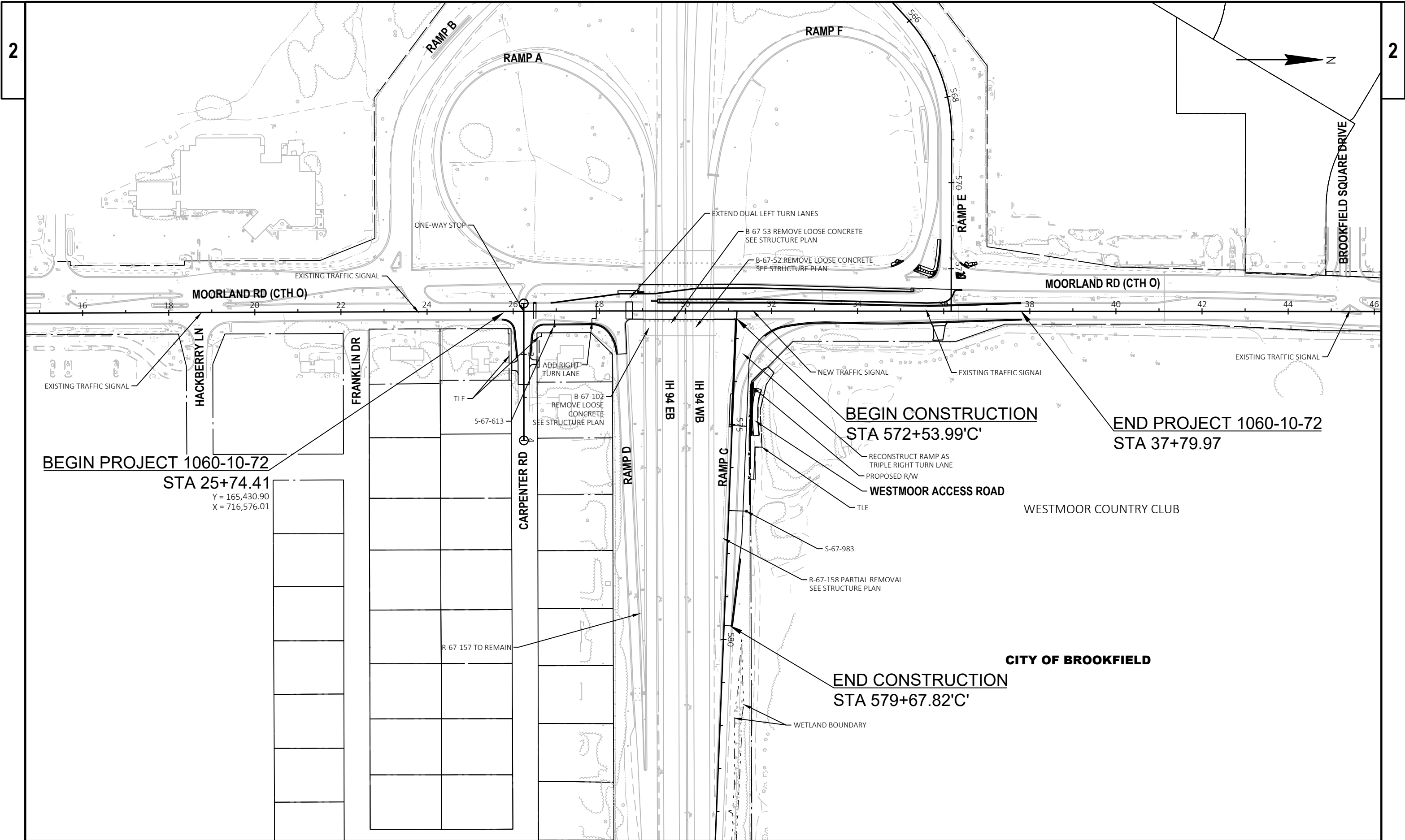
STANDARD ABBREVIATIONS

- | | |
|-----|------------------------|
| AC | ASPHALT CEMENT |
| ADJ | ADJUST |
| BAD | BASE AGGREGATE DENSE |
| CFS | CUBIC FEET PER SECOND |
| FPS | FEET PER SECOND |
| HP | HIGH POINT |
| LP | LOW POINT |
| MAX | MAXIMUM |
| OH | OVERHEAD |
| OPT | OPTIONAL |
| PSF | POUNDS PER SQUARE FOOT |

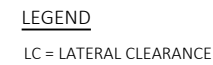
THE FOLLOWING ENTITIES HAVE COMPLETED PLANS FOR THIS PROJECT:
- LIGHTING PLANS - WISDOT
- FTMS PLANS - WISDOT

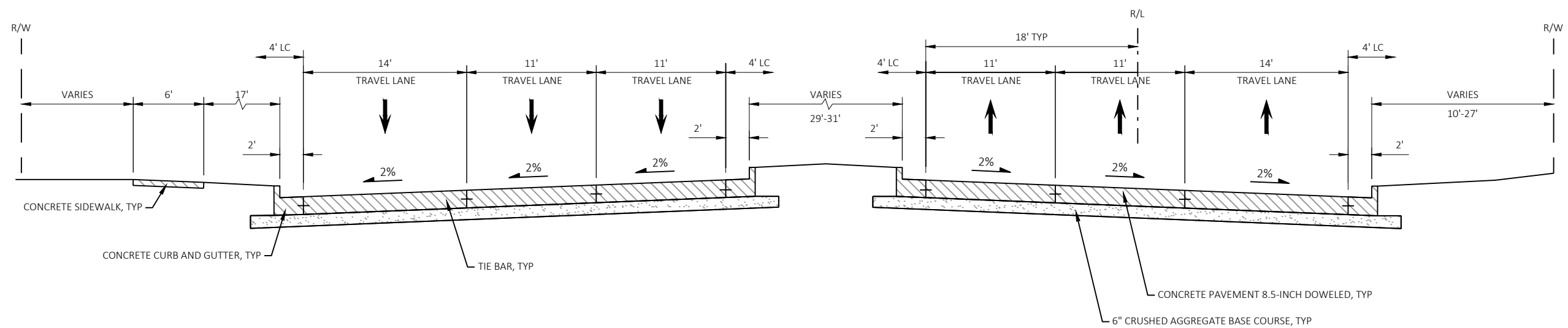


Dial 811 or (800)242-8511
www.DiggersHotline.com



PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	PROJECT OVERVIEW	SHEET 3	E
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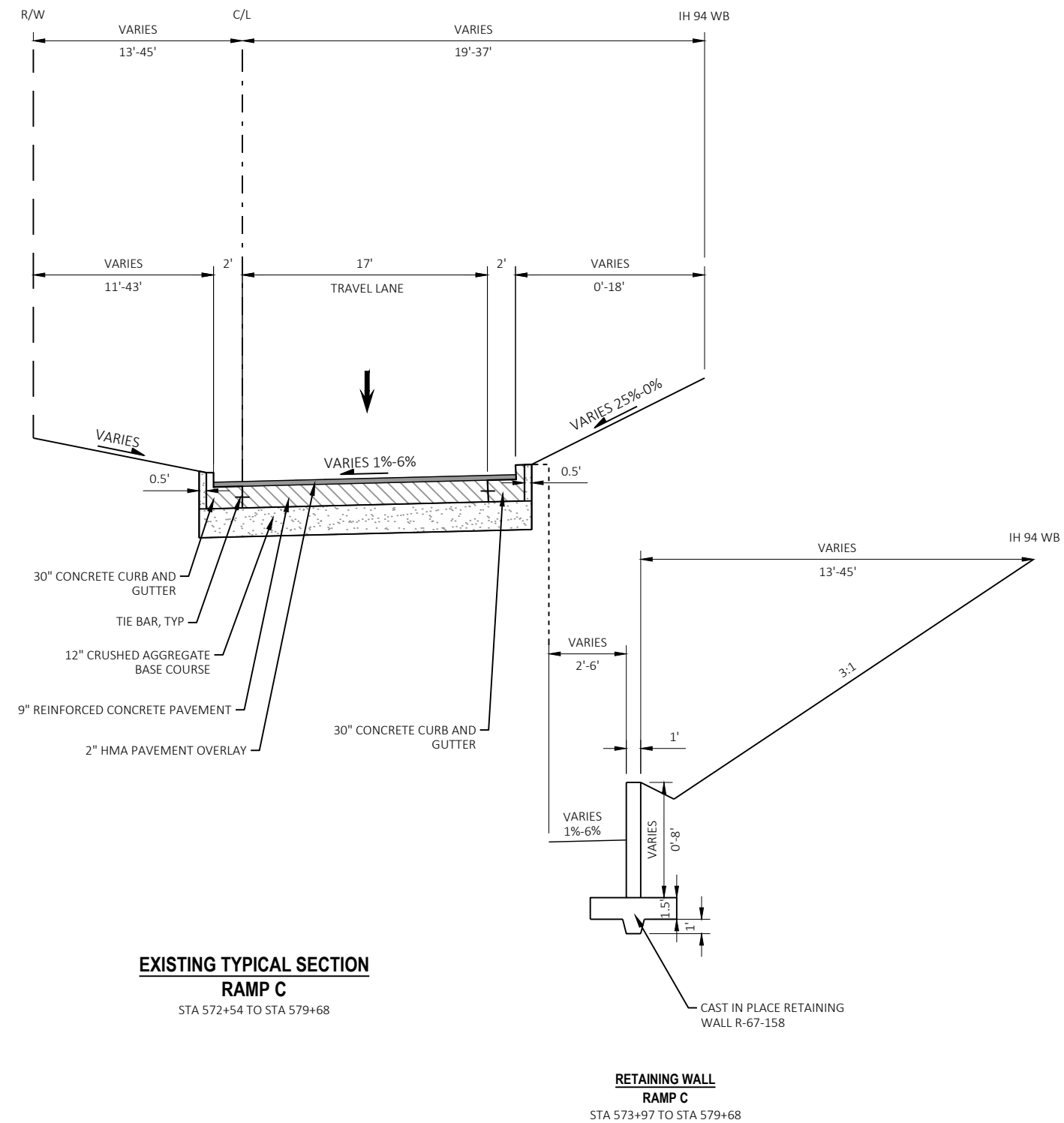


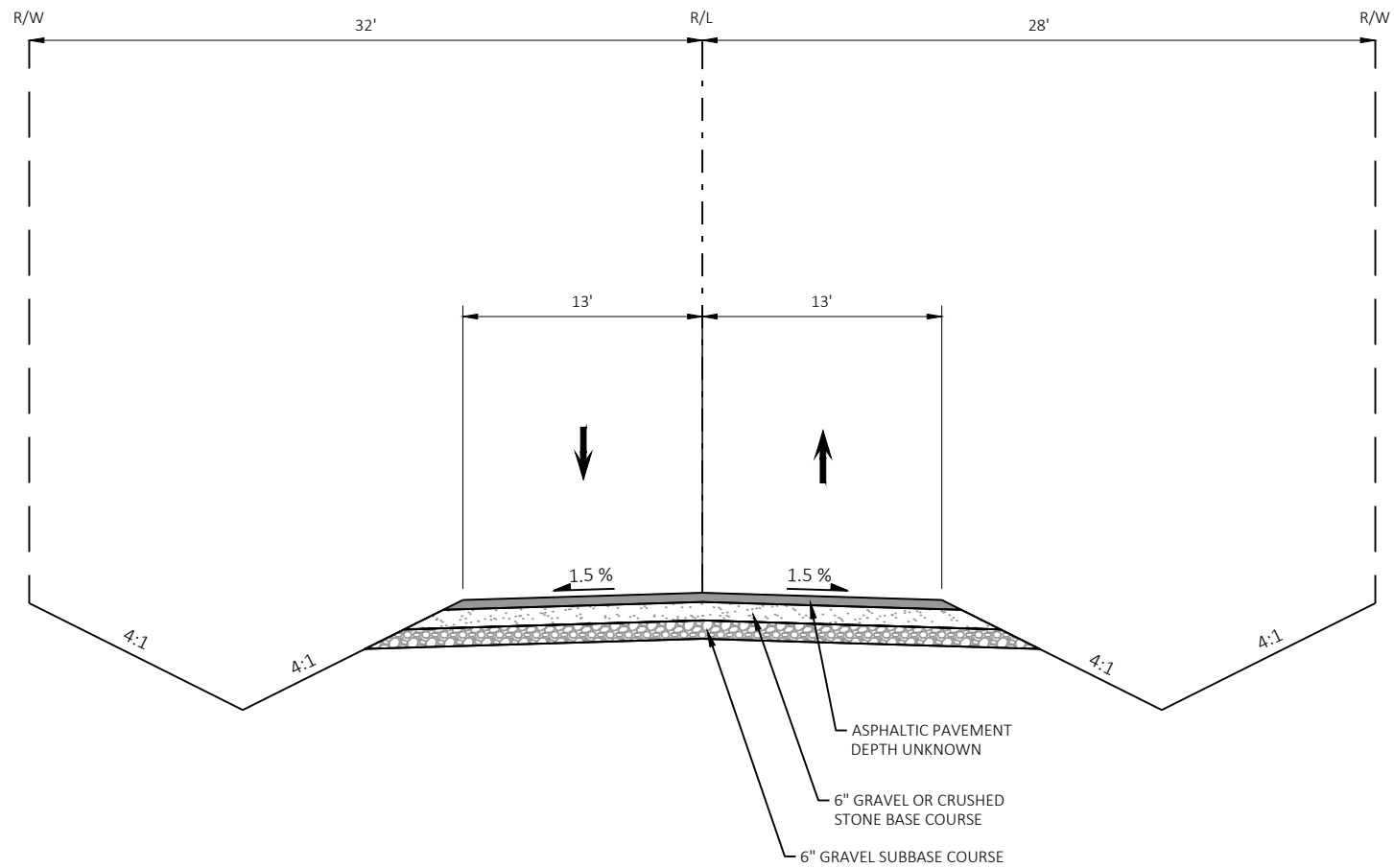
EXISTING TYPICAL SECTION
MOORLAND ROAD
STA 36+93 TO STA 37+80

LEGEND

LC = LATERAL CLEARANCE

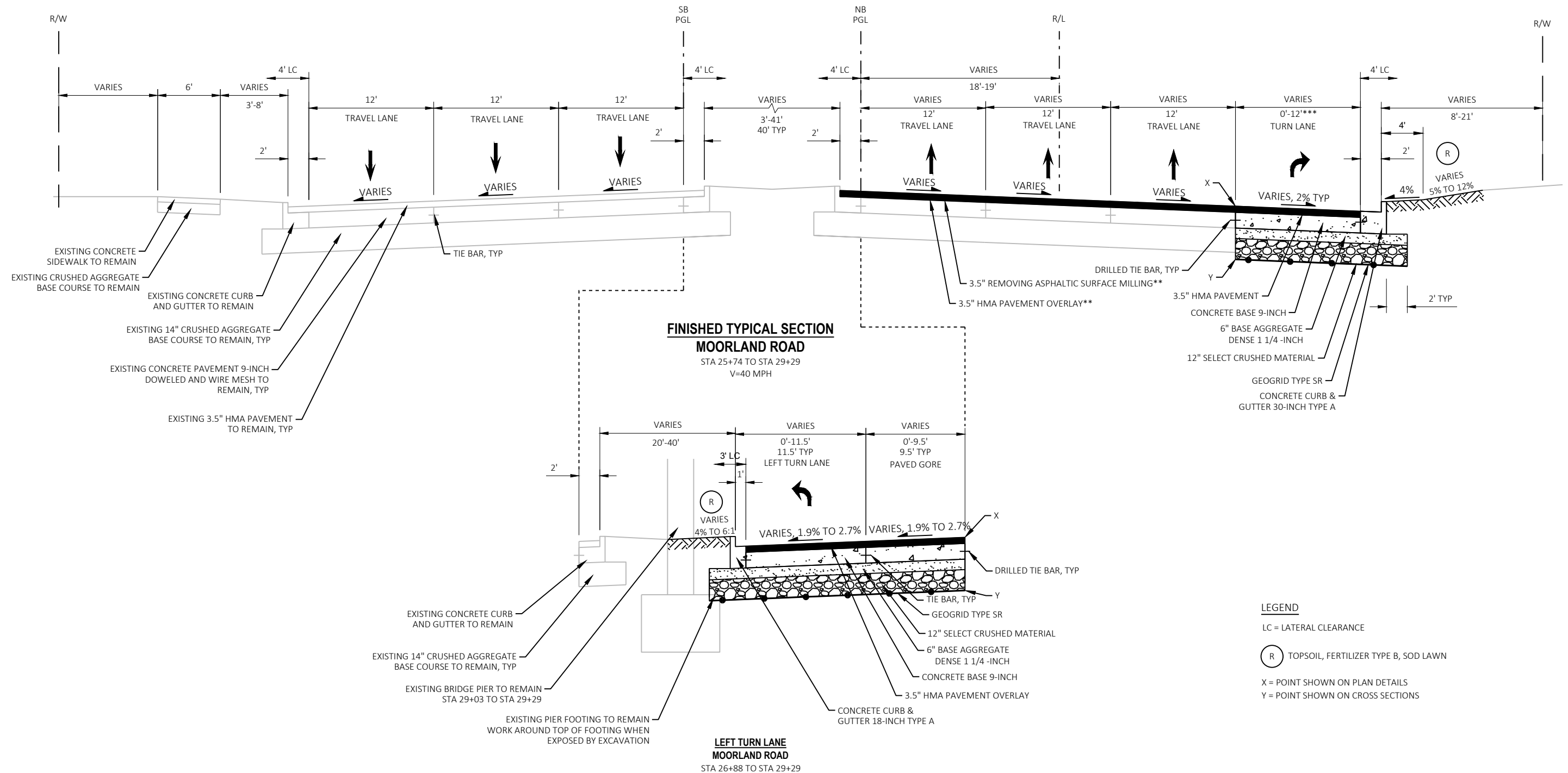


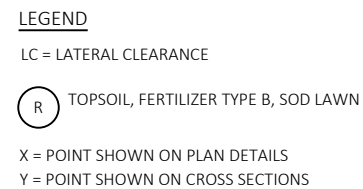


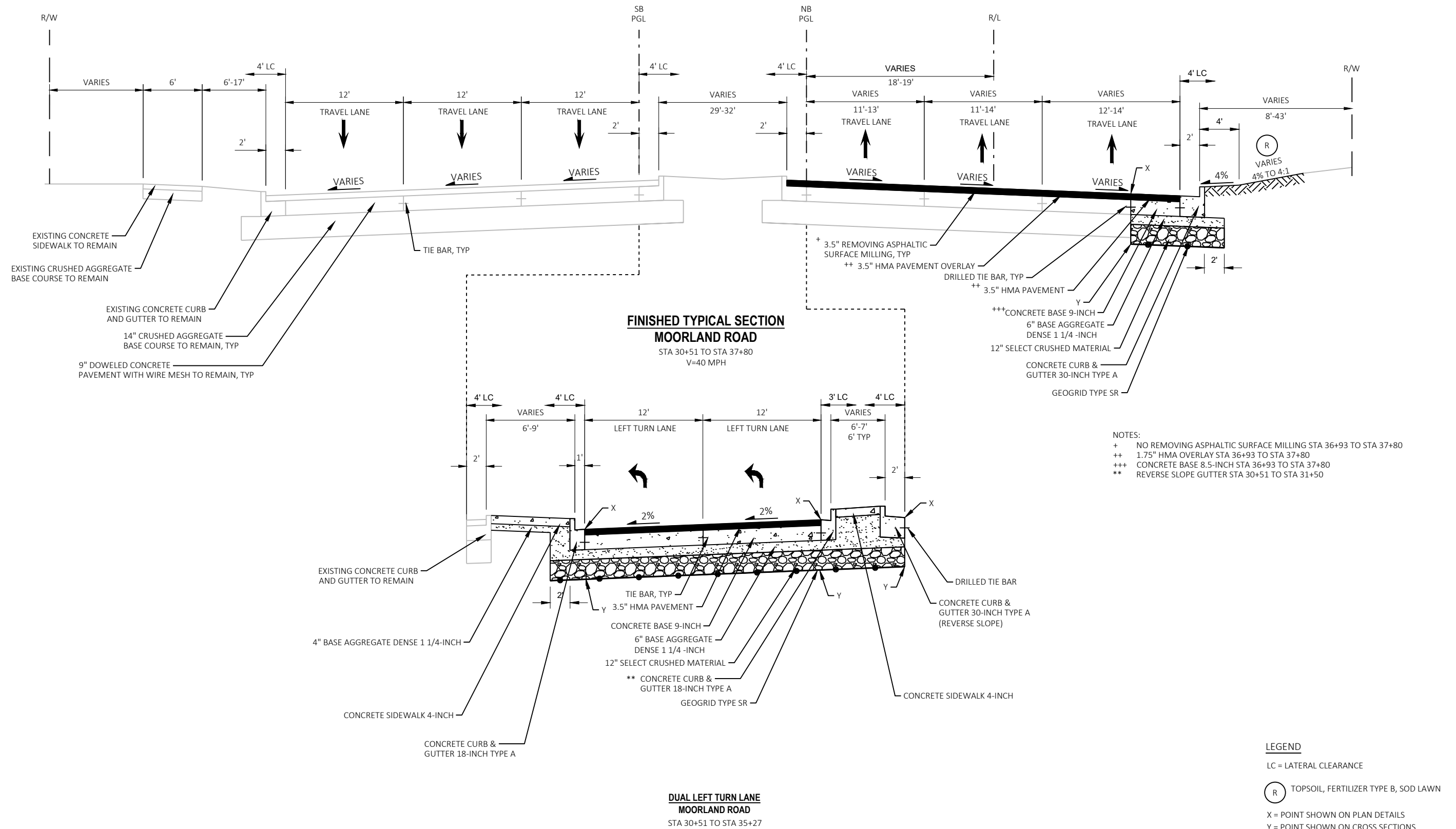


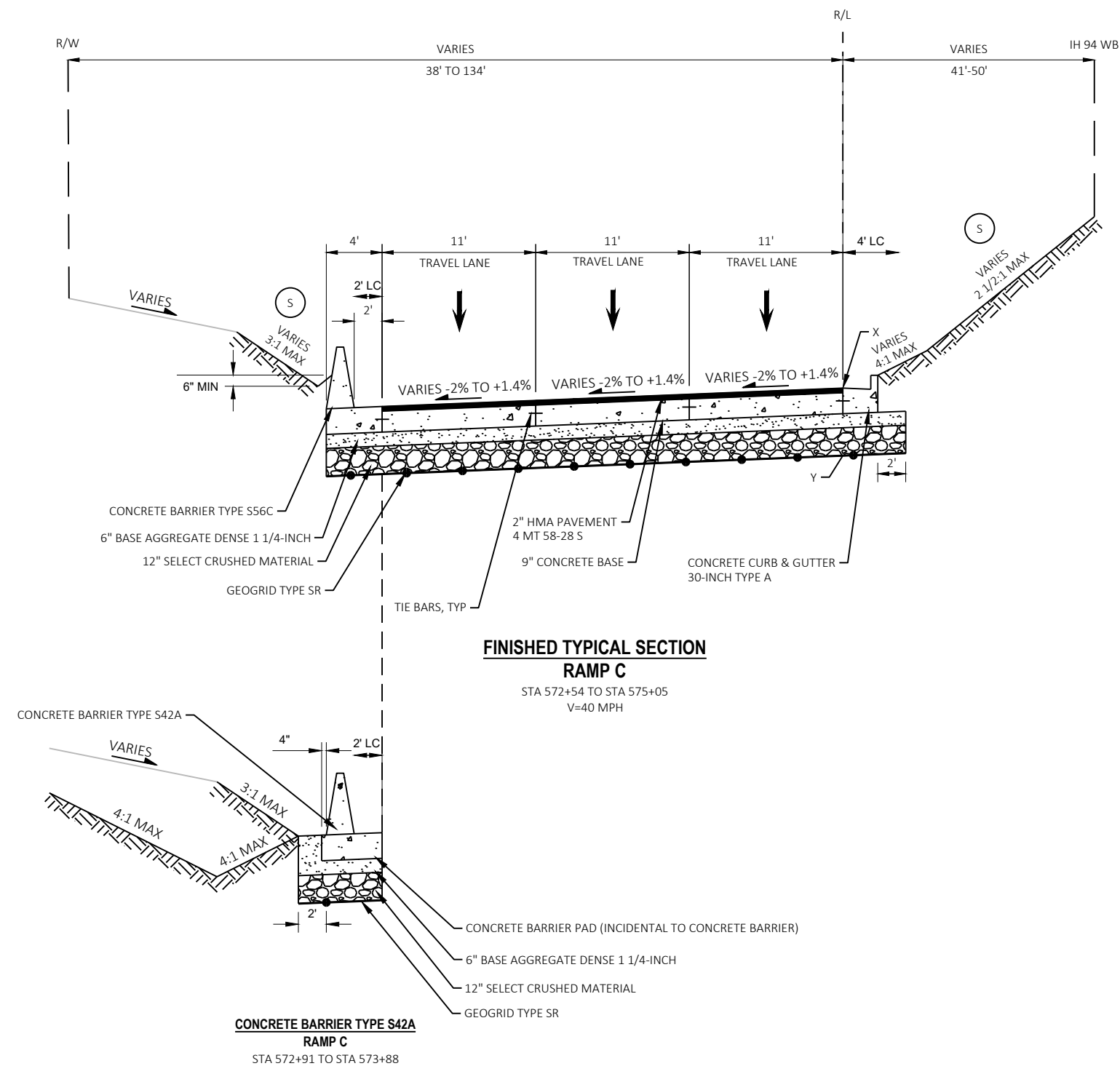
EXISTING TYPICAL SECTION
CARPENTER ROAD
STA 1+18 TO STA 2+70

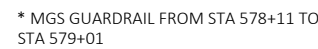
** 3.5" REMOVING ASPHALTIC SURFACE MILLING AND 3.5" HMA PAVEMENT OVERLAY ONLY
FROM STA 27+93 TO STA 29+29. NO MILL AND OVERLAY OF NORTHBOUND THROUGH
LANES STA 25+74 TO STA 27+93
*** NO RIGHT TURN LANE STA 28+74 TO STA 29+29





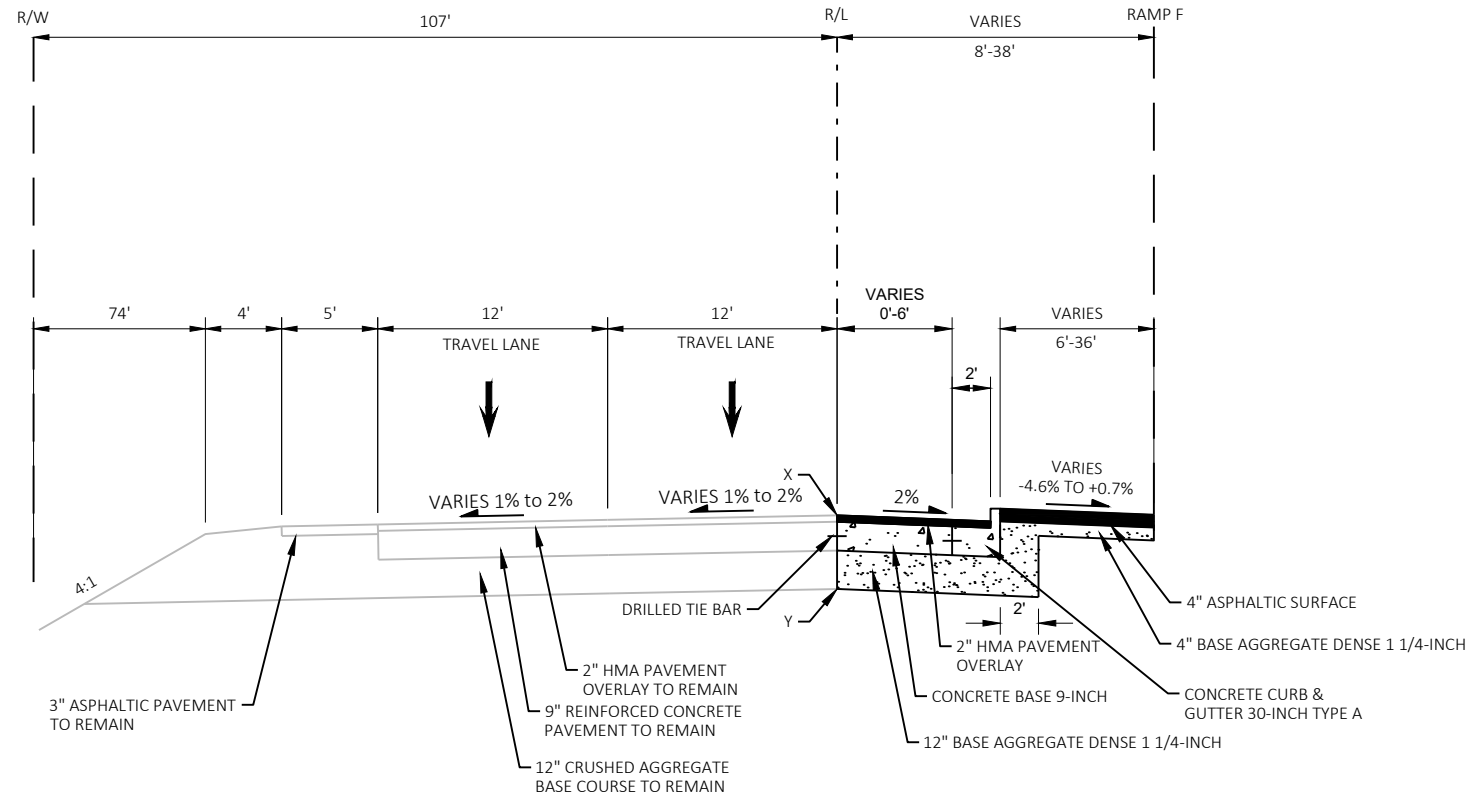






STA 575+05 TO STA 579+68
V=50 MPH

Y = POINT SHOWN ON CROSS SECTIONS



**FINISHED TYPICAL SECTION
RAMP E**

STA 571+33 TO STA 572+21
V=50 MPH

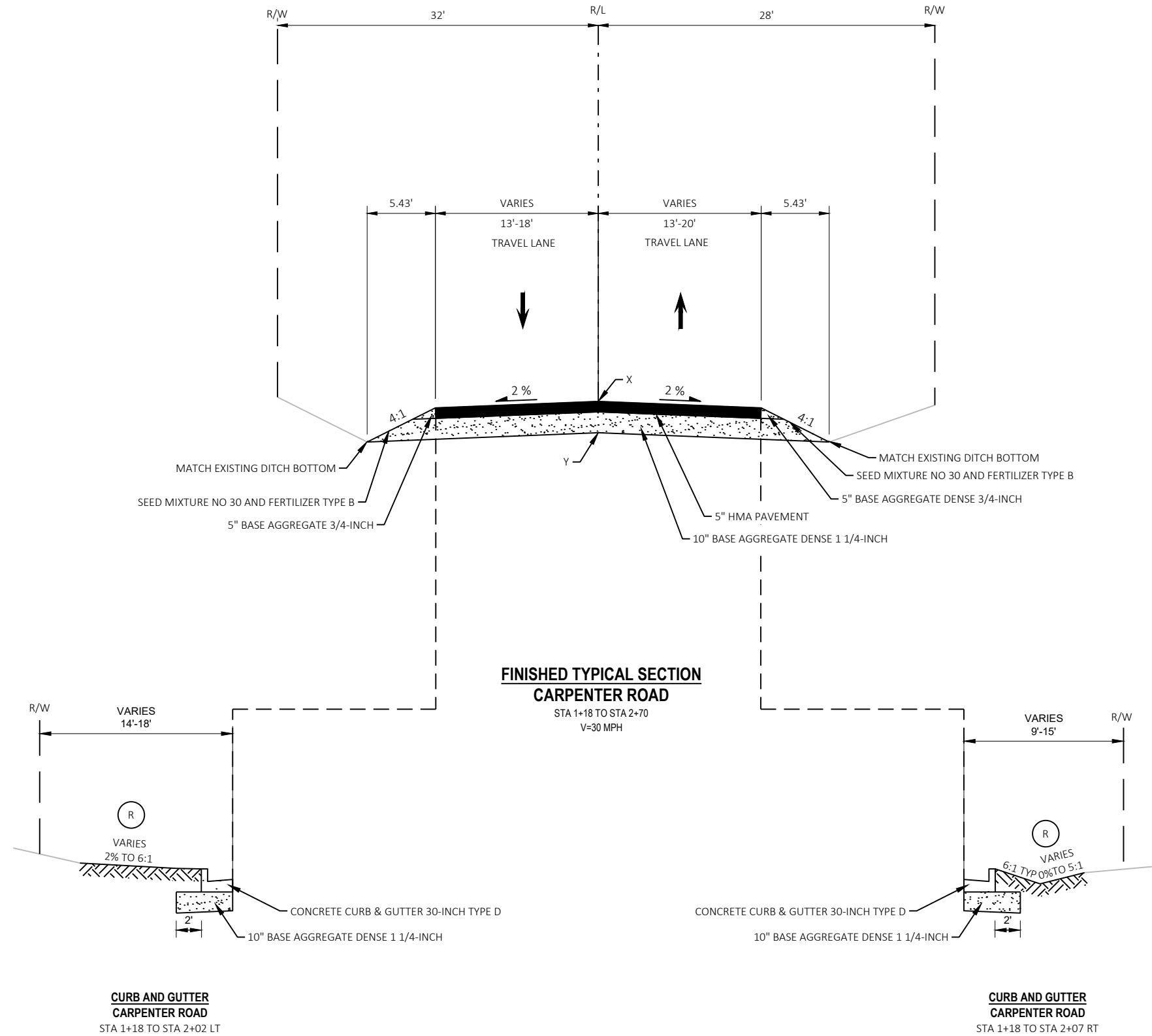
LEGEND

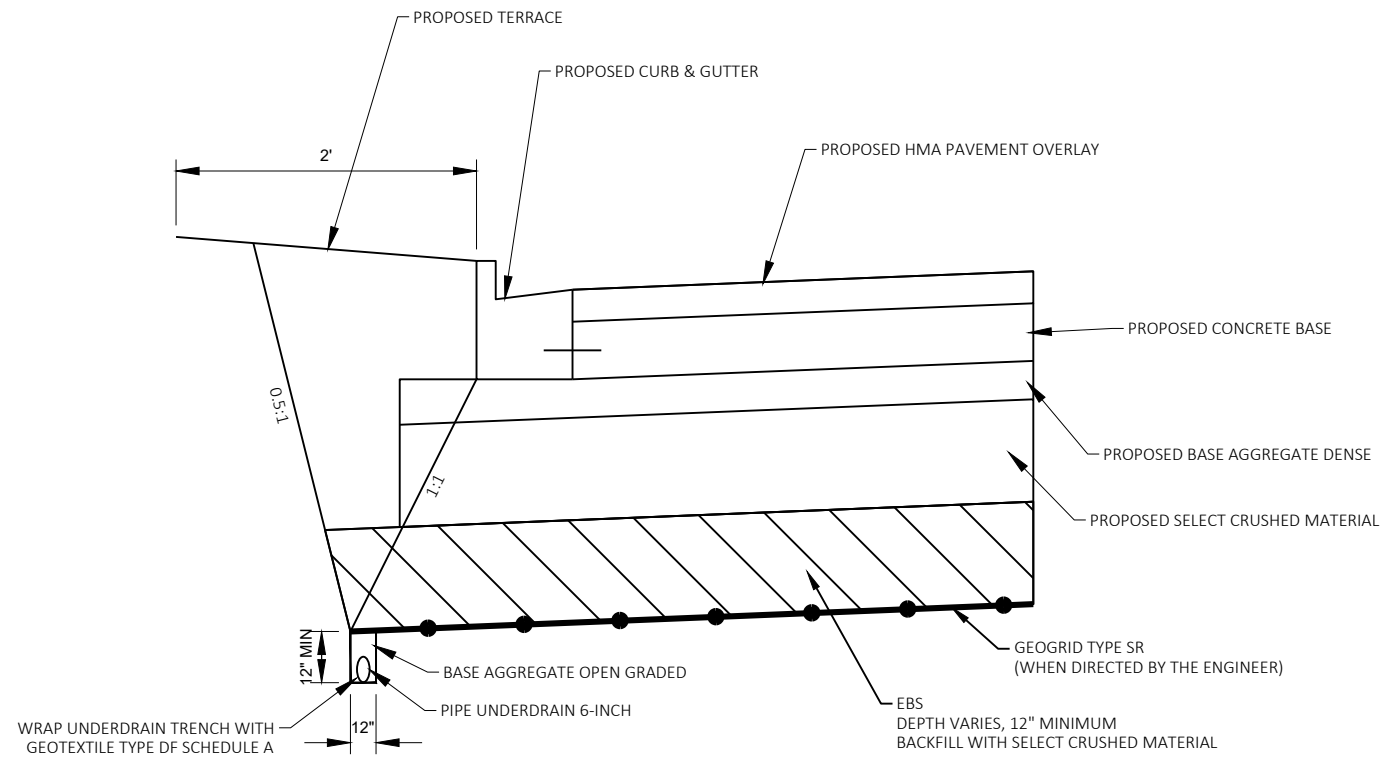
LC = LATERAL CLEARANCE

(R) TOPSOIL, FERTILIZER TYPE B, SOD LAWN

X = POINT SHOWN ON PLAN DETAILS

Y = POINT SHOWN ON CROSS SECTIONS

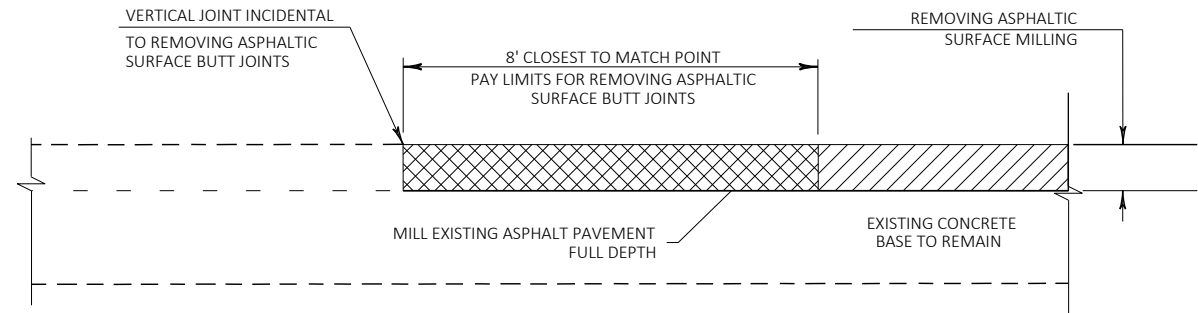




EXCAVATION BELOW SUBGRADE (EBS)

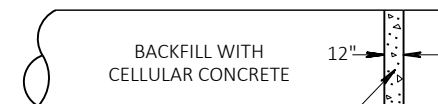
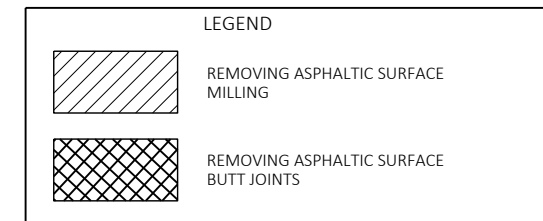
NOTES:

1. USE AS DIRECTED BY THE ENGINEER FOR AREAS OF UNSTABLE SUBGRADE.
2. EBS SHALL BE PAID FOR AS COMMON EXCAVATION.
3. GEOGRID TYPE SR SHALL BE USED AT THE DISCRETION OF THE ENGINEER WHEN THE EBS DEPTH EXCEEDS 18 INCHES TO LIMIT THE DEPTH OF THE REQUIRED EBS. GEOGRID TYPE SR PLACED WITHOUT THE AUTHORIZATION OF THE ENGINEER SHALL NOT BE PAID FOR.
4. PROVIDE 20 FEET OF PIPE UNDERDRAIN UPSTREAM OF EACH INLET IN EBS AREAS. SEE UNDERDRAIN PLACEMENT AT INLET CONSTRUCTION DETAIL. AT LOW POINTS IN EBS AREAS UNDERDRAIN SHALL EXTEND PARALLEL TO THE CURB AND GUTTER IN BOTH DIRECTIONS FROM THE INLET.
5. WRAP THE UNDERDRAIN TRENCH WITH GEOTEXTILE TYPE DF SCHEDULE A. OVERLAP THE FABRIC BY 8" AT THE TOP OF THE TRENCH. TOTAL FABRIC WIDTH IS 6'-0" FOR PAYMENT.
6. SLOPE THE UNDERDRAIN PIPE AT 0.5% MINIMUM , 1.0% DESIRABLE.
7. CONNECT THE UNDERDRAIN TO THE INLET BY CORING A HOLE IN THE INLET STRUCTURE. MORTAR THE UNDERDRAIN TO THE INLET STRUCTURE. CORING A HOLE IN THE INLET STRUCTURE AND MORTARING THE UNDERDRAIN INTO THE INLET IS INCIDENTAL TO PIPE UNDERDRAIN 6-INCH.
8. THE BOTTOM OF THE PIPE UNDERDRAIN SHALL ENTER THE INLET STRUCTURE HIGHER THAN THE CROWN OF ANY STORM SEWER PIPES IN THE INLET STRUCTURE UNLESS OTHERWISE APPROVED BY THE ENGINEER.



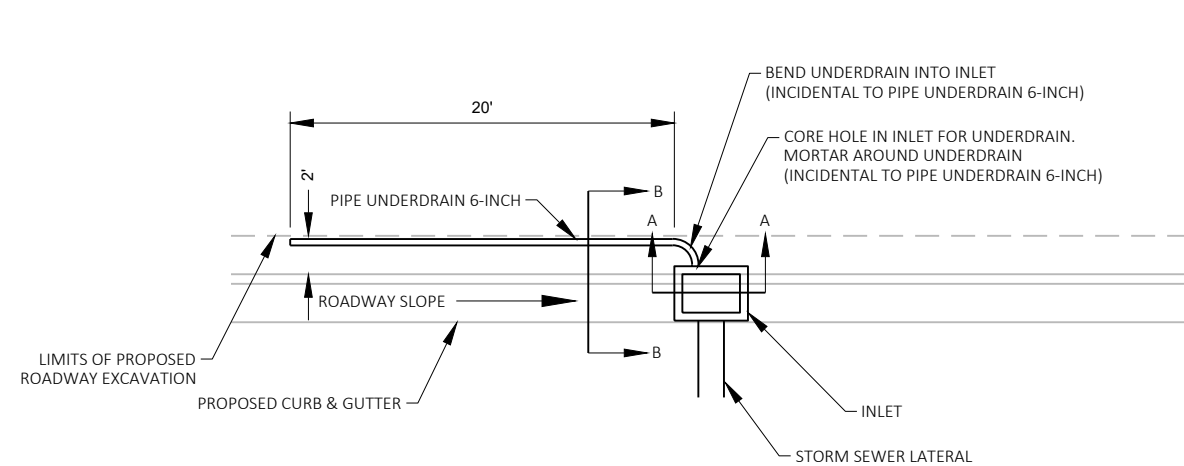
MILLING DETAIL - NO PROFILE CHANGE

SEE PLAN DETAILS FOR LOCATIONS

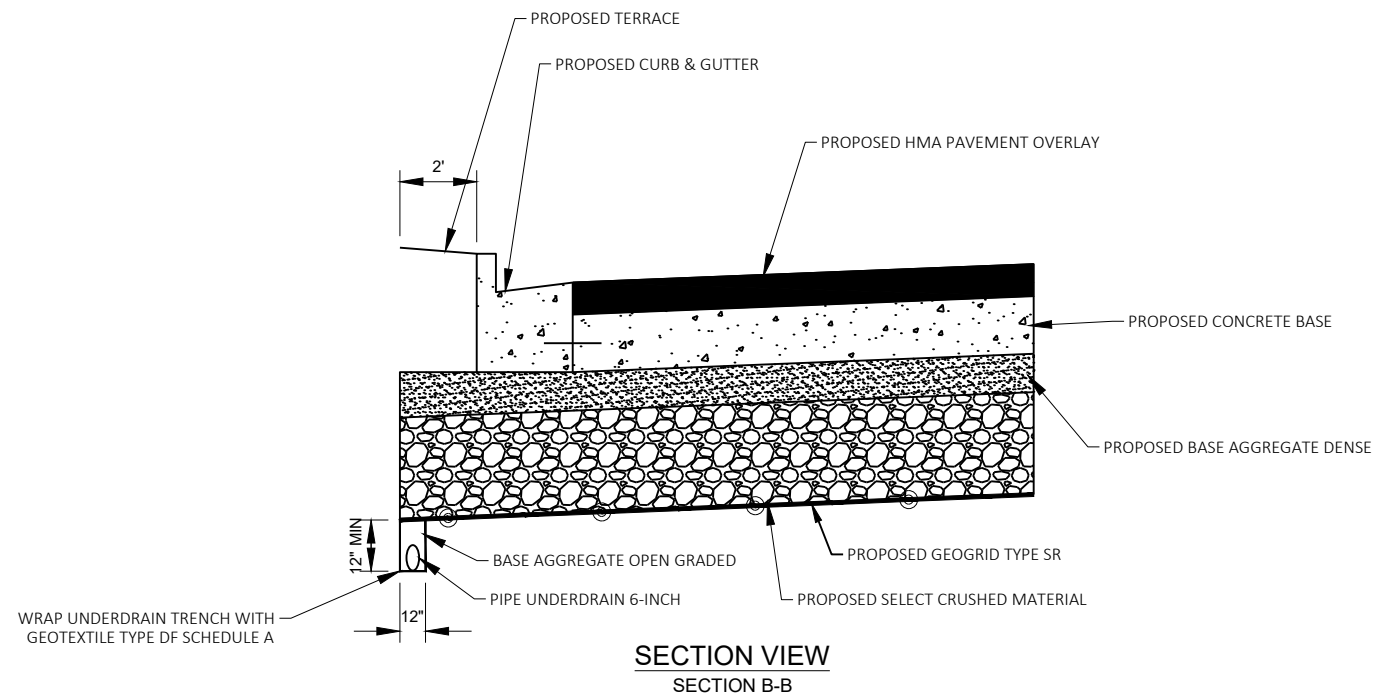


SEAL END WITH
CONCRETE MASONRY OR
BRICK & MORTAR SEAL

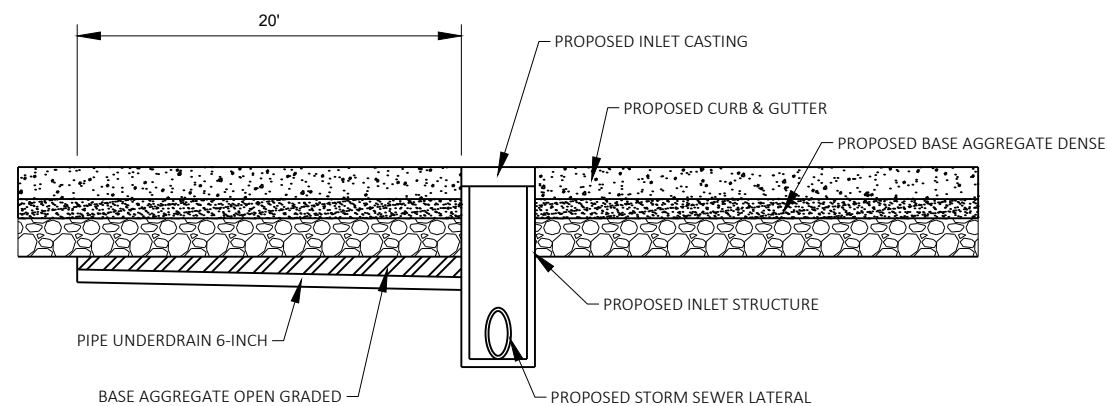
ABANDONING SEWER DETAIL



PLAN VIEW



SECTION VIEW
SECTION B-B

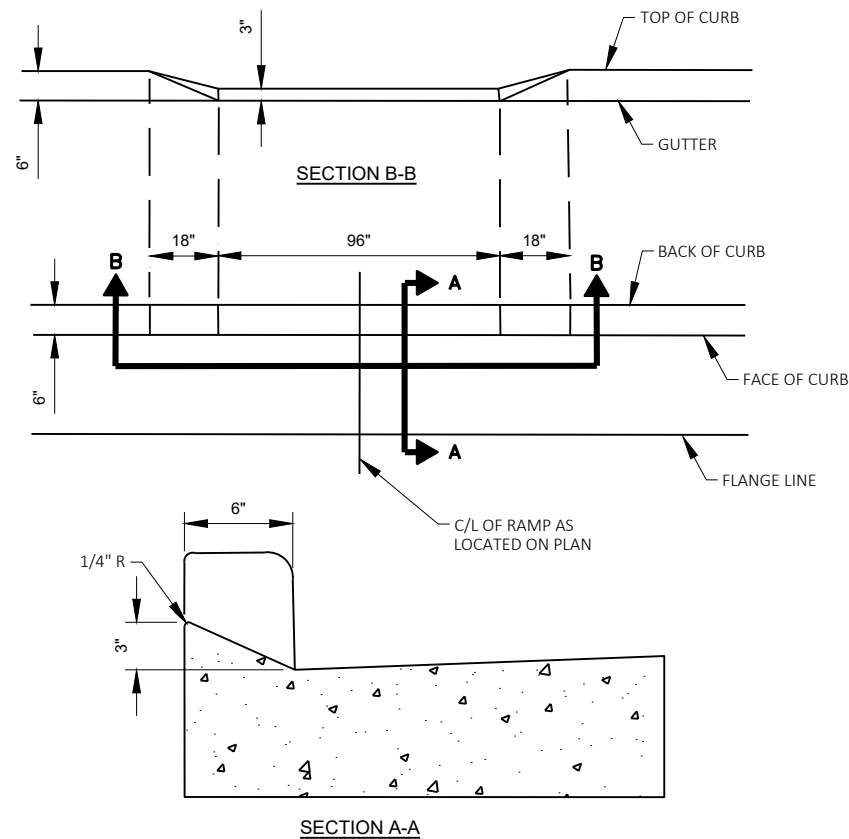


PROFILE VIEW
SECTION A-A

NOTES:

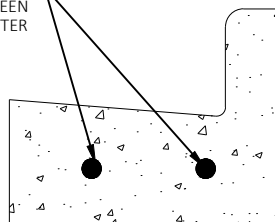
1. PROVIDE 20 FEET OF PIPE UNDERDRAIN UPSTREAM OF EACH INLET. AT LOW POINTS UNDERDRAIN SHALL EXTEND PARALLEL TO THE CURB AND GUTTER IN BOTH DIRECTIONS FROM THE INLET.
2. WRAP THE UNDERDRAIN TRENCH WITH GEOTEXTILE TYPE DF SCHEDULE A. OVERLAP THE FABRIC BY 8" AT THE TOP OF THE TRENCH. TOTAL FABRIC WIDTH IS 5'-0" FOR PAYMENT.
3. SLOPE THE UNDERDRAIN PIPE AT 0.5% MINIMUM , 1.0% DESIRABLE.
4. CONNECT THE UNDERDRAIN TO THE INLET BY CORING A HOLE IN THE INLET STRUCTURE. MORTAR THE UNDERDRAIN TO THE INLET STRUCTURE. CORING A HOLE IN THE INLET STRUCTURE AND MORTARING THE UNDERDRAIN INTO THE INLET IS INCIDENTAL TO PIPE UNDERDRAIN 6-INCH.
5. THE BOTTOM OF THE PIPE UNDERDRAIN SHALL ENTER THE INLET STRUCTURE HIGHER THAN THE CROWN OF ANY STORM SEWER PIPES IN THE INLET STRUCTURE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

UNDERDRAIN PLACEMENT AT INLETS

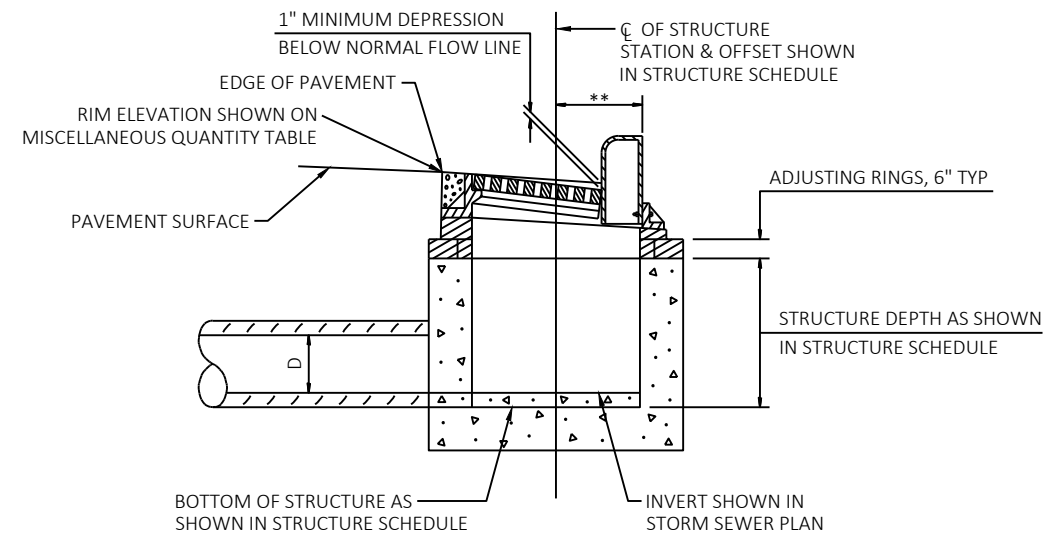
**MAINTENANCE OPENING**

SEE PLAN DETAILS FOR LOCATIONS

DRILL TWO NO. 4 X 2'-0" TIE BARS INTO EXISTING CURB AND GUTTER AT MATCH POINTS BETWEEN EXISTING AND PROPOSED CURB AND GUTTER

**DRILLED TIE BARS AND CURB & GUTTER MATCH POINTS**

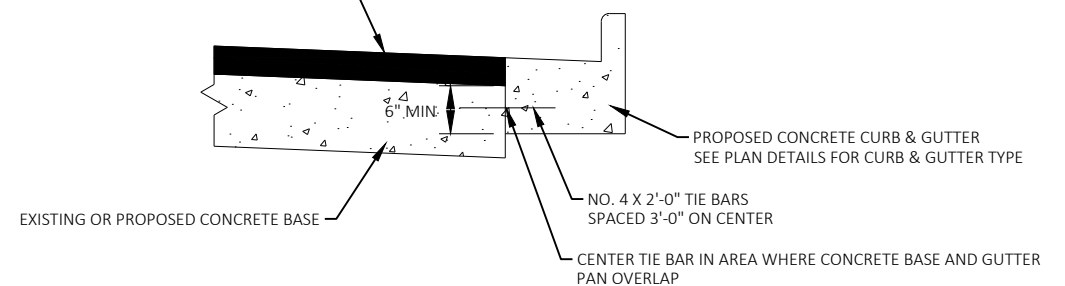
CONSTRUCT AT ALL LOCATIONS WHERE PROPOSED CURB & GUTTER MATCHES EXISTING CURB & GUTTER

**DETAIL OF CURB AND GUTTER AT INLETS**

** OFFSET TO CENTER OF STRUCTURE TO BACK OF CURB:

CASTING TYPE	OFFSET
S	18"
H	12"
HM	18"
Z	9"

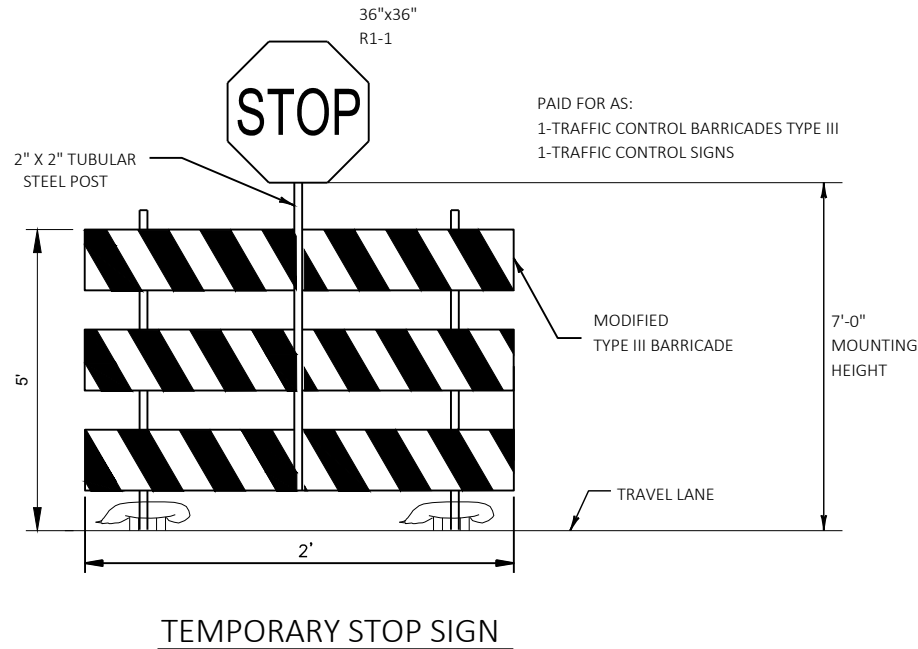
2" OR 3 1/2" HMA PAVEMENT OVERLAY

**CURB & GUTTER DETAIL IN CONCRETE BASE AREAS**

SEE PLAN DETAILS FOR LOCATIONS

NOTES:

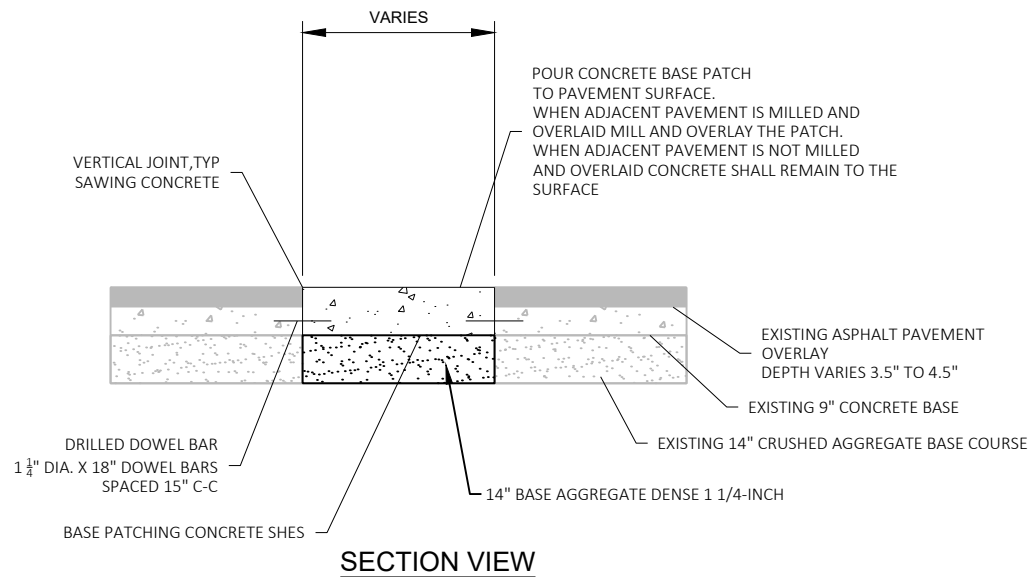
- GUTTER PAN TO EXTEND A MINIMUM OF 6" DOWN INTO CONCRETE BASE. CONTRACTOR MAY ELECT TO EXTEND BOTTOM OF CURB AND GUTTER TO BOTTOM OF CONCRETE BASE.
- BOTTOM OF CURB & GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE ADJACENT PAVEMENT.
- PAYMENT SHALL BE MADE USING THE FOLLOWING STANDARD CURB & GUTTER ITEMS. SEE PLAN DETAILS FOR THE LOCATIONS OF EACH CURB & GUTTER TYPE.
 - CONCRETE CURB & GUTTER 18-INCH TYPE A
 - CONCRETE CURB & GUTTER 30-INCH TYPE A
 - CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
- WHEN CURB & GUTTER IS PLACED ADJACENT TO NEW CONCRETE BASE THE TIE BARS ARE INCIDENTAL TO CONSTRUCTION OF THE CONCRETE BASE.
- WHEN CURB AND GUTTER IS PLACED ADJACENT TO EXISTING CONCRETE BASE THE TIE BARS SHALL BE DRILLED INTO THE EXISTING CONCRETE BASE AND PAID FOR AS DRILLED TIE BARS.
- SEE SDD CONCRETE CURB AND GUTTER FOR ADDITIONAL DETAILS



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											

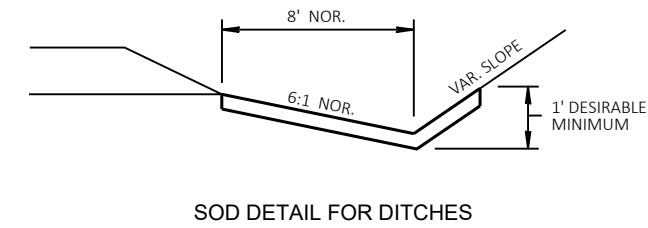
TOTAL PROJECT AREA = 29.35 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 2.21 ACRES

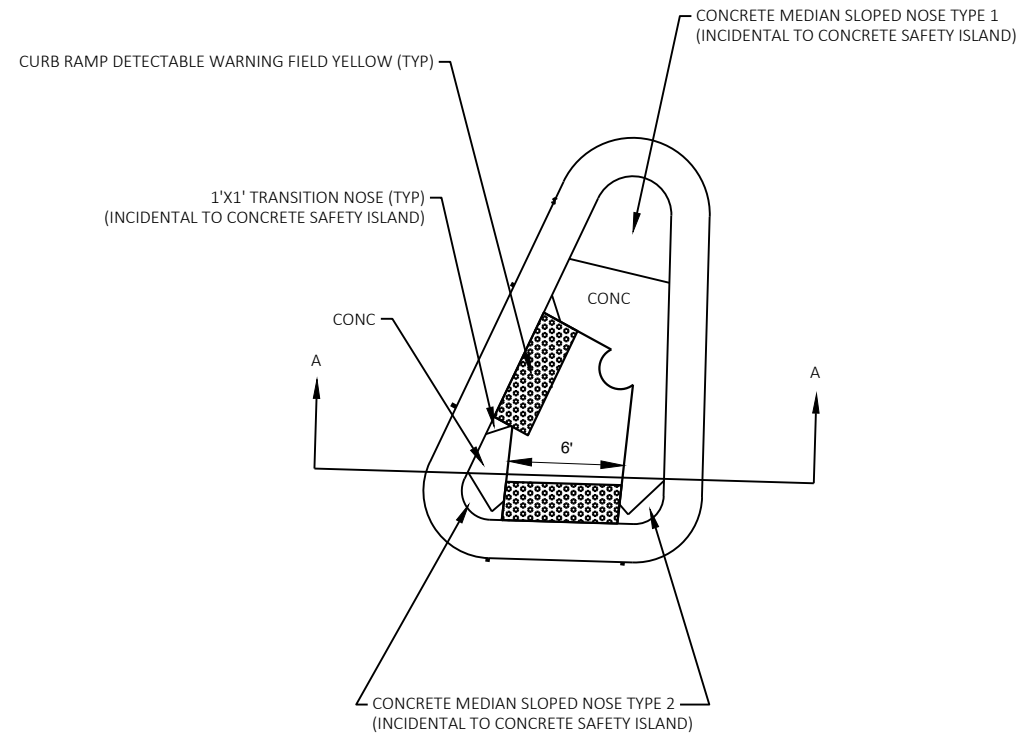


- NOTE:
1. CONSTRUCT IN ACCORDANCE WITH SDD "BASE PATCHING CONCRETE"
 2. PROVIDE NO. 6 X 12" TIE BARS SPACED 30" C-C INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.

BASE PATCHING CONCRETE SHES

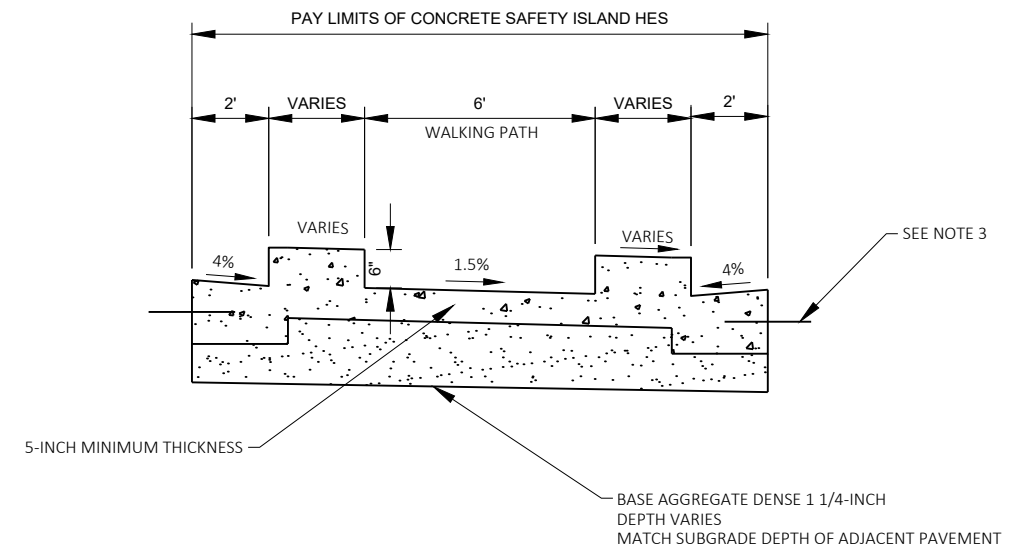
SEE PLAN DETAILS FOR LOCATIONS



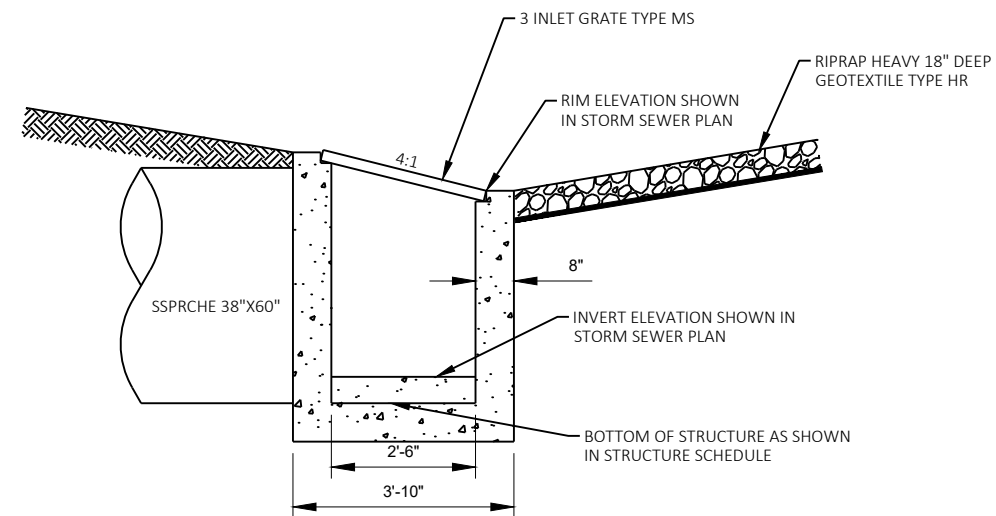
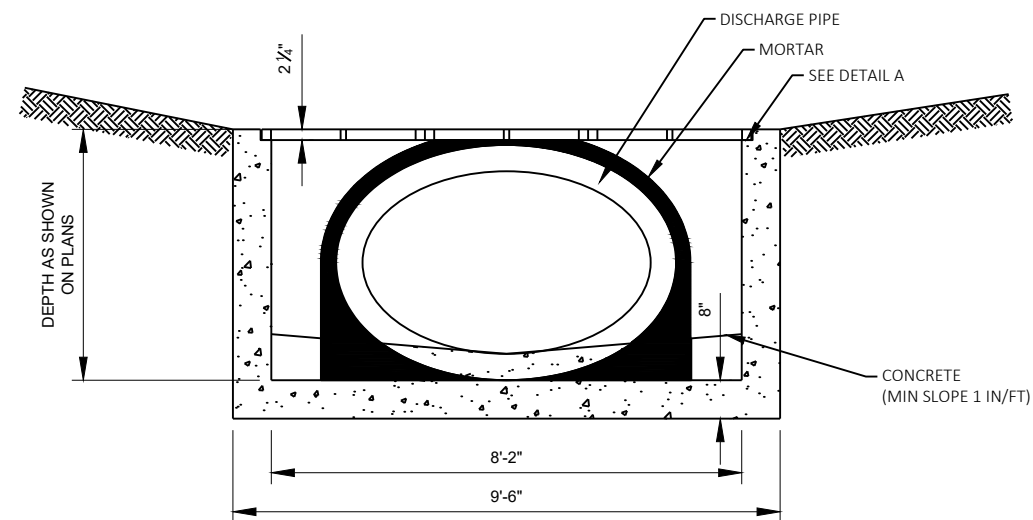
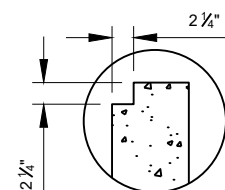
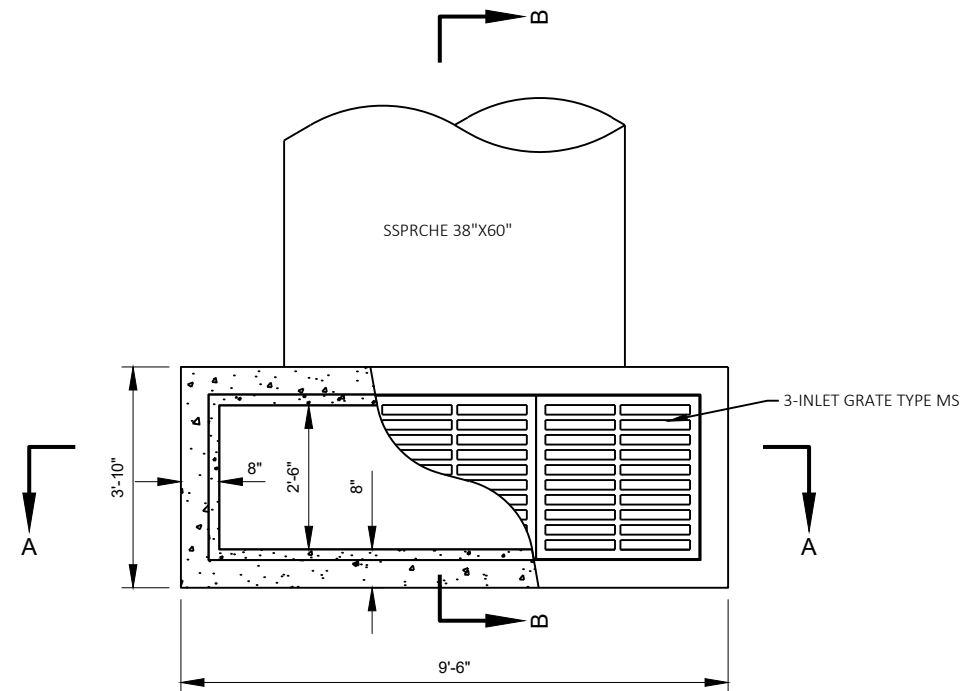


NOTES:

1. ENTIRE ISLAND INCLUDING WALKING PATH IS PAID FOR AS CONCRETE SAFETY ISLAND HES.
2. SIZE AND SHAPE OF INDIVIDUAL ISLANDS VARIES, SEE PLAN FOR DIMENSIONS OF EACH ISLAND.
3. #4X2' TIE BARS SPACE AT 3' CENTER TO CENTER. TIE BARS INCIDENTAL TO CONCRETE SAFETY ISLAND HES.
4. CONCRETE SAFETY ISLAND MAY BE CONSTRUCTED AS ONE MONOLITHIC SLAB OR INDIVIDUAL SECTIONS OF CURB & GUTTER, SIDEWALK, AND PEDESTRIAN CURB. PAYMENT SHALL BE THE SAME FOR BOTH METHODS OF CONSTRUCTION.
5. WALKING PATH SHALL MEET ADA REQUIREMENTS

SECTION A-ACONCRETE SAFETY ISLAND DETAIL

SEE PLAN FOR LOCATION

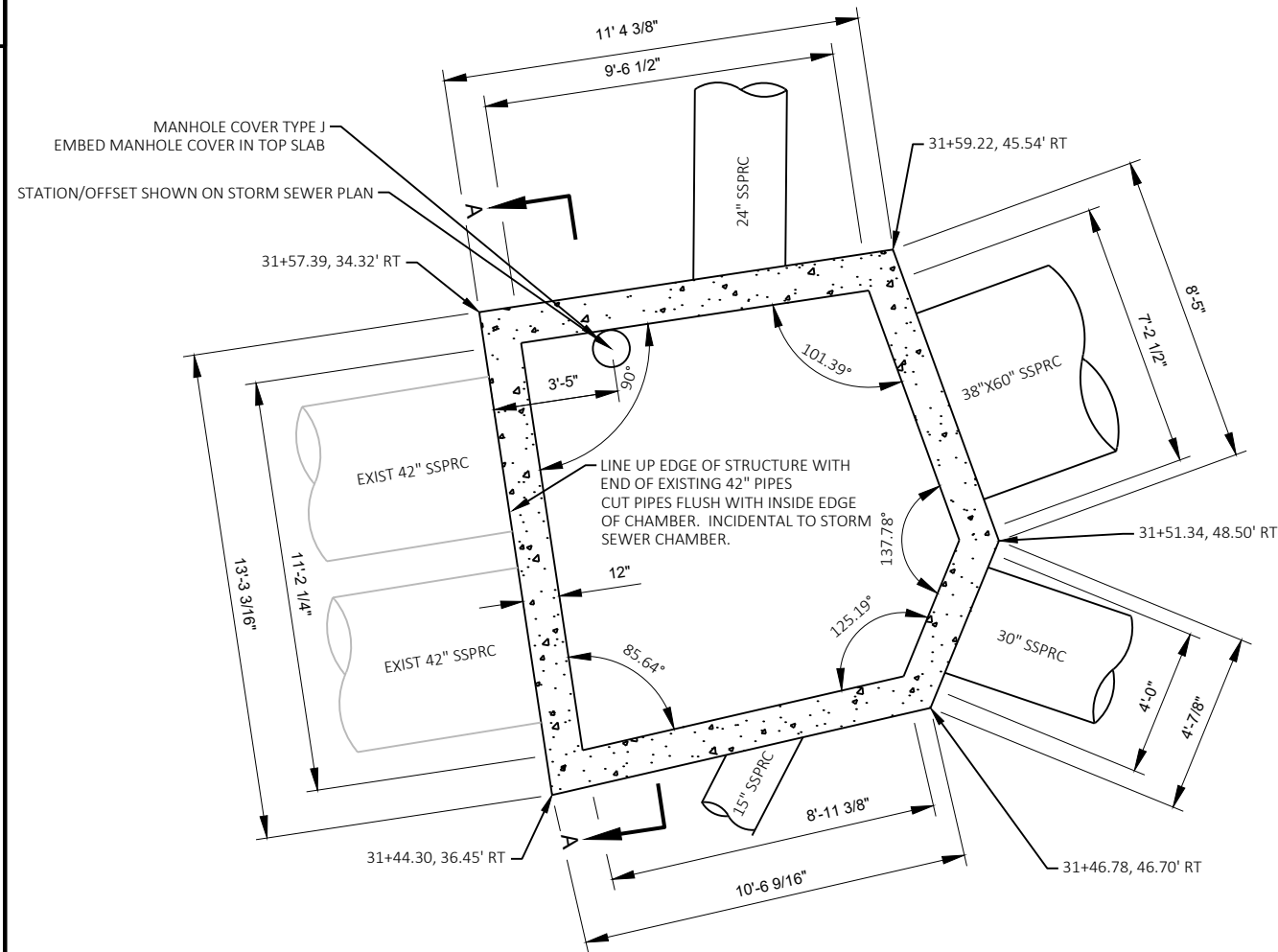


NOTES

1. INLET SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SDD INLETS MEDIAN 1 AND 2 GRATE UNLESS OTHERWISE SPECIFIED IN THIS DETAIL.
2. REINFORCEMENT SHALL BE IN ACCORDANCE WITH SDD INLETS MEDIAN 1 AND 2 GRATE UNLESS OTHERWISE SPECIFIED.
3. INLET SHALL BE PRECAST SO THAT IT MAY BE INSTALLED AND PLACED INTO SERVICE DURING ONE WORKING DAY.
4. BYPASS PUMP FLOW FROM POND WHEN INSTALLING INLET AND PIPE.
5. STATION/OFFSET SHOWN ON PLAN MEASURED TO CENTER OF STRUCTURE. INLET ELEVATION MEASURED AS SHOWN IN SECTION B-B BELOW.

INLET MEDIAN 3 GRATE MODIFIED

STA 573+32.80'C, 58.7' LT RAMP C



PLAN VIEW



STORM SEWER CHAMBER

STA 572+72.80'C, 37.9' LT

STEEL REINFORCEMENT TO BE IN ACCORDANCE WITH
SDD MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT,
8-FT, 9-FT AND 10-FT DIAMETER

2" HMA PAVEMENT OVERLAY

NO. 10 X 2'-0" LONG TIE BAR REQUIRED
SPACE @ 12" C-C

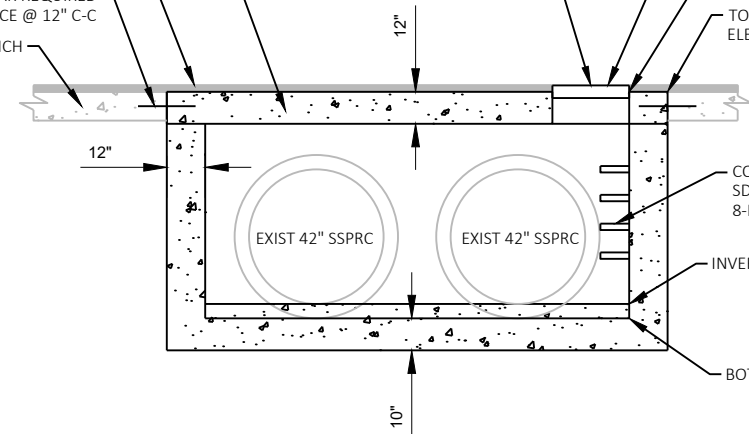
CONCRETE BASE 9-INCH

STATION/OFFSET LOCATION
SHOWN ON STORM SEWER PLAN

MANHOLE COVER TYPE L
RIM ELEV = 844.90

EMBED MANHOLE COVER INTO TOP SO THAT TOP OF MANHOLE
COVER WILL BE 2" ABOVE TOP OF FLAT TOP SLAB

TOP OF FLAT TOP SLAB
ELEV = 844.73



SECTION A-A

NOTES:

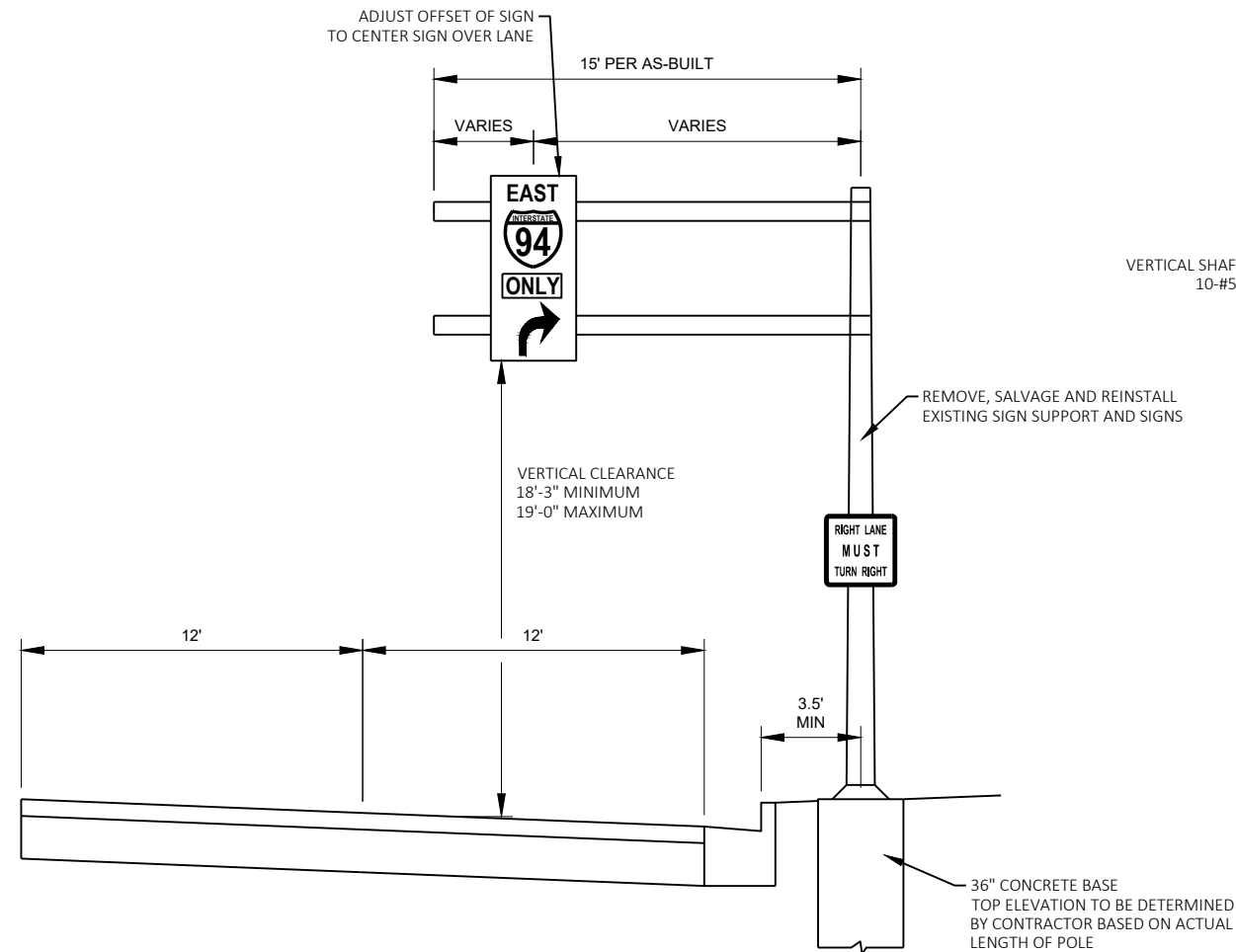
1. CHAMBER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SDD "MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER UNLESS OTHERWISE SPECIFIED IN THIS DETAIL.
2. FIELD VERIFY THE INVERT ELEVATIONS OF THE EXISTING 42-INCH PIPES PRIOR TO ORDERING STRUCTURE.
3. STRUCTURE SHALL BE PRECAST CONCRETE OR CONSTRUCTED ON THE PROJECT SITE SO THAT THE EXISTING STRUCTURE CAN BE REMOVED AND THE PROPOSED BOTTOM AND WALLS OF STRUCTURE ARE INSTALLED IN ONE WORKING DAY. CHAMBER TOP MAY BE INSTALLED AT A LATER DATE.
4. BYPASS PUMPING OR ANOTHER ENGINEER APPROVED METHOD WILL BE REQUIRED TO CONTROL THE FLOW OF WATER WHILE THE CHAMBER AND UPSTREAM PIPES ARE BEING INSTALLED. THE COST OF BYPASS PUMPING OR OTHER ENGINEER APPROVED METHODS SHALL BE INCIDENTAL TO CONSTRUCTION OF THE CHAMBER.
5. COMPRESSIVE STRENGTH OF THE CONCRETE (f'c) SHALL BE 5,000 PSI.
6. YIELD STRENGTH OF REINFORCING BARS (fy) SHALL BE 60 KSI. REBAR SHALL BE EPOXY COATED.
7. DESIGN OF THE STRUCTURE SHALL BE IN ACCORDANCE WITH ASTM C913 WITH DESIGN LOADS PER ASTM C890.
8. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS AND STRUCTURAL CALCULATIONS, PREPARED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF WISCONSIN FOR REVIEW. DO NOT ORDER PRECAST STRUCTURE OR CONSTRUCT STRUCTURE ON SITE UNTIL ENGINEER APPROVES SHOP DRAWINGS AND STRUCTURAL CALCULATIONS.
9. BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECS.

CONSTRUCTION NOTES:

1. REMOVE AND SALVAGE EXISTING OVERHEAD SIGN SUPPORT, SIGNS, AND SIGN CONNECTION HARDWARE AT BEGINNING OF STAGE 1.
2. STORE EXISTING OVERHEAD SIGN SUPPORT, SIGNS, AND SIGN CONNECTION HARDWARE DURING STAGE 1.
3. CONSTRUCT A NEW CONCRETE BASE AS SHOWN ON THIS DETAIL AFTER ADJACENT CURB AND GUTTER HAS BEEN CONSTRUCTED.
4. REINSTALL OVERHEAD SIGN SUPPORT, SIGNS, AND SIGN CONNECTION HARDWARE AT END OF STAGE 1 BEFORE TRAFFIC SWITCH TO STAGE 2 OCCURS.
5. EXACT LOCATION OF OVERHEAD SIGN SUPPORT TO BE DETERMINED BY ENGINEER BASED ON LOCATION OF UNDERGROUND UTILITIES THAT ARE STILL ACTIVE. OUTSIDE EDGE OF CONCRETE BASE SHALL BE A MINIMUM OF 2 FEET FROM THE FACE OF CURB.
6. ADJUST LOCATION OF SIGN ON OVERHEAD SIGN SUPPORT SO THAT IT IS CENTERED OVER THE LANE.
7. FIELD MEASURE AND DOCUMENT THE DIMENSIONS OF THE EXISTING SIGN SUPPORT.
8. SUBMIT SHOP DRAWINGS TO SOUTHEAST REGION SIGNING ENGINEER AND BUREAU OF STRUCTURES. SHOP DRAWINGS SHALL SHOW THE FIELD MEASURED DIMENSIONS OF THE OVERHEAD SIGN SUPPORT, LOCATION AND DIMENSION OF ALL SIGNS, VERTICAL CLEARANCE, OFFSET FROM FACE OF CURB TO CENTER OF POLE, ELEVATION OF TOP OF CONCRETE BASE, AND LAYOUT AND SPACING OF ALL REINFORCEMENT AND ANCHOR RODS..
9. MAINTAIN THE EXISTING STRUCTURE ID PLAQUE. REPLACEMENT OF DAMAGED ID PLAQUE IS INCIDENTAL TO CONSTRUCTION.
10. THE NUMBER OF ANCHOR RODS AND LAYOUT OF ANCHOR RODS SHALL MATCH THE LAYOUT OF THE EXISTING ANCHOR RODS.
11. REFER TO SIGN PLATE A4-7 FOR ATTACHMENT OF SIGNS TO OVERHEAD SIGN SUPPORT.
12. INSTALL ALL SIGNS ON OVERHEAD SIGN SUPPORT PRIOR TO OPENING LANE BELOW SIGN SUPPORT.
13. PAYMENT FOR THE NEW CONCRETE BASE IS INCLUDED IN THE BID ITEM REMOVE, SALVAGE, AND REINSTALL OVERHEAD SIGN SUPPORT. SEPARATE PAYMENT SHALL NOT BE MADE FOR THE CONCRETE BASE.

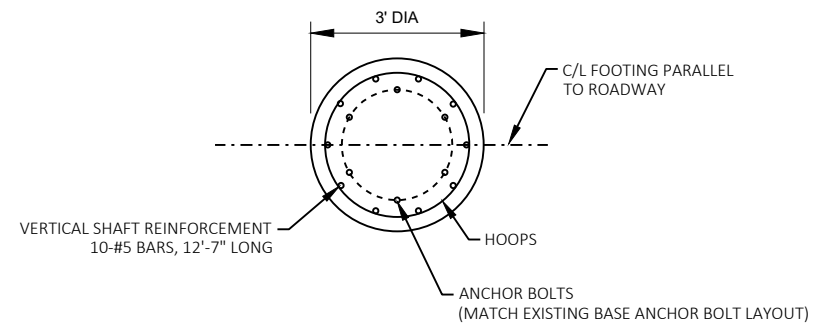
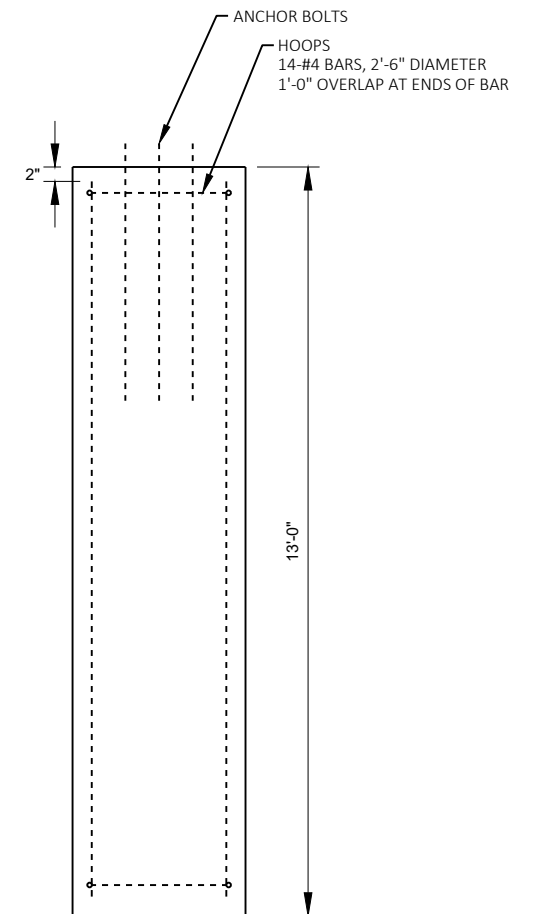
CONCRETE BASE GENERAL NOTES:

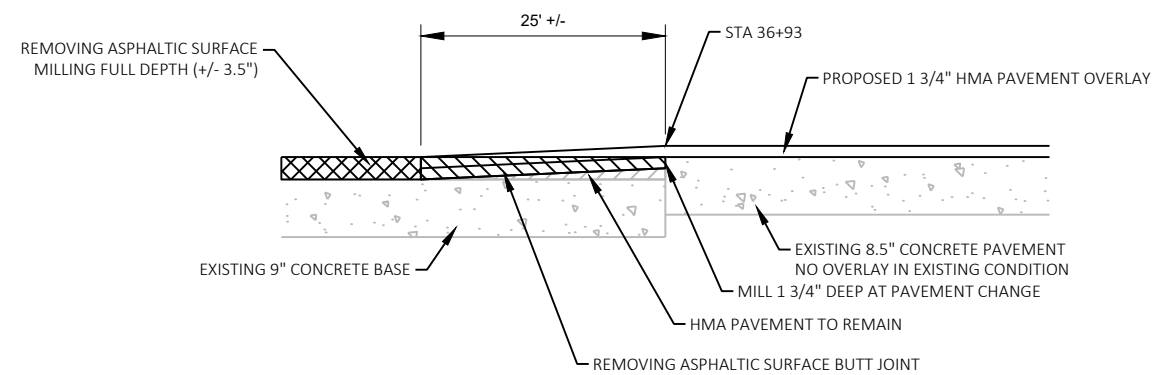
1. ALL DIMENSIONS, REINFORCEMENT DETAILS, AND ANCHOR BOLT DETAILS HAVE BEEN TAKEN FROM THE STANDARD DETAIL DRAWING THAT WAS IN USE WHEN SIGN SUPPORT WAS CONSTRUCTED IN 2011. IF EXISTING CONCRETE BASE DOES NOT MEET THE DETAILS SHOWN ON THIS SHEET NOTIFY THE ENGINEER IMMEDIATELY.
2. ORIENT ANCHOR BOLTS IN FOOTING AND PROVIDE ANCHOR BOLT STICK OUT ABOVE TOP OF CONCRETE FOOTING PER FABRICATION DRAWING.
3. BENDING DIMENSIONS FOR REINFORCING ARE OUT TO OUT.
4. USE 3" CLEAR FOR ALL REINFORCING UNLESS OTHERWISE NOTES.
5. SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
7. WELDING OF ANCHOR BOLTS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.
8. BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY. WELDING WILL NOT BE PERMITTED.
9. BASES SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IN AREAS WHERE THE BASE IS IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES HYDROEXCAVATION MAY BE REQUIRED FOR PART OF ALL OF THE BASE EXCAVATION. THE COST OF HYDROEXCAVATION IS INCIDENTAL TO THE COST OF CONSTRUCTING THE OVERHEAD SIGN SUPPORT.
10. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL , THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO THAT NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.
11. EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.
12. THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.
13. IF THE DRILLED HOLE CONTAINS STANDING WATER THE CONCRETE SHALL BE PLACED USING A TREME TO DISPLACE THE WATER.
14. THE REINFORCEMENT AND ANCHOR BOLTS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.
15. ANY DAMAGE TO THE CONCRETE BASE DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEERS DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.
16. MATERIALS PROVIDED SHALL MEET THE FOLLOWING REQUIREMENTS:
CONCRETE MASONRY.....fc = 3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 psi
ANCHOR BOLTS.....AASHTO M314 GRADE 55

OVERHEAD SIGN SUPPORT DETAIL

S-67-613
NORTHBOUND MOORLAND ROAD
LOOKING NORTH

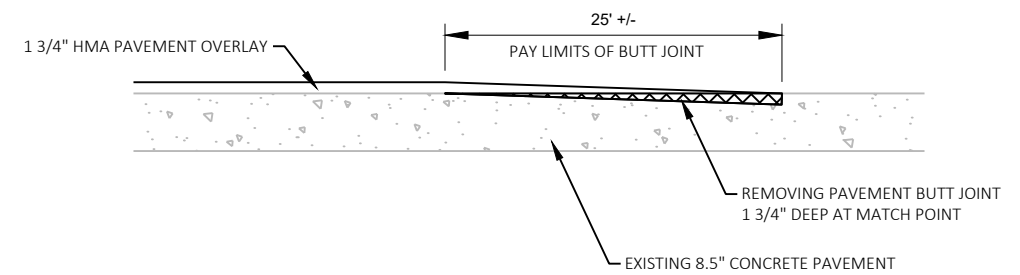
REMOVE, SALVAGE AND REINSTALL EXISTING SIGN SUPPORT AND SIGNS

BASE PLAN VIEWBASE ELEVATION VIEW



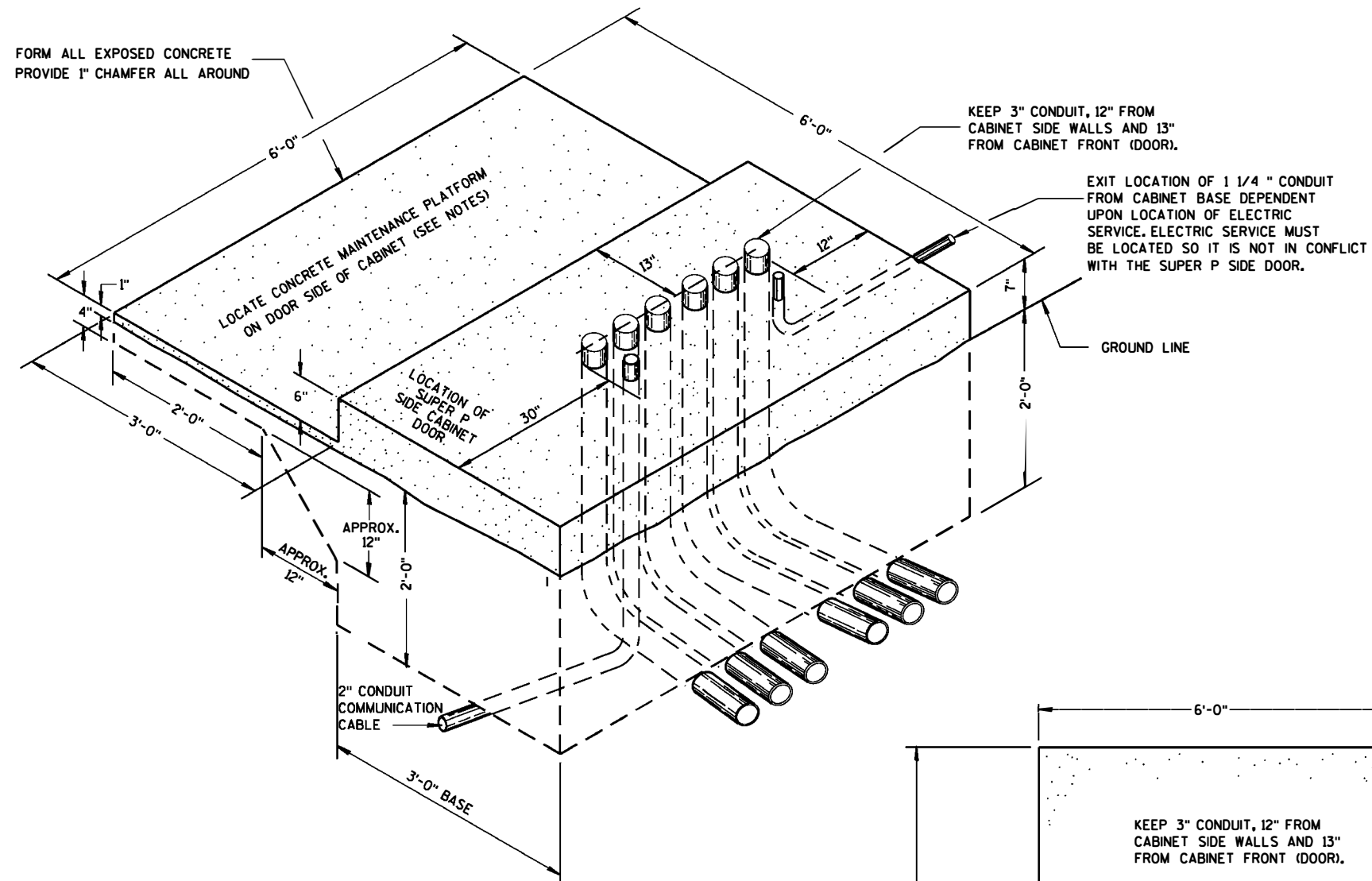
MILLING DETAIL - 1 3/4" PROFILE CHANGE

STA 36+93 NB MOORLAND ROAD

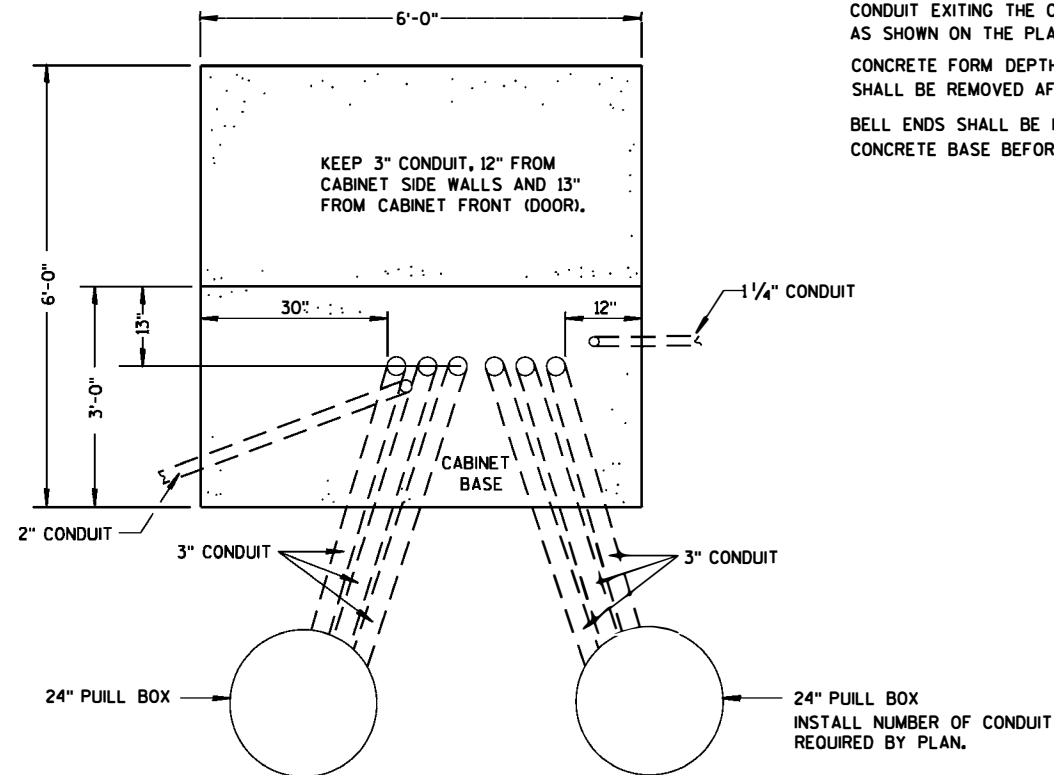


REMOVING PAVEMENT BUTT JOINT

STA 37+80 NB MOORLAND ROAD



ISOMETRIC VIEW
TYPE 9, SPECIAL SUPER P
 (C.Y. CONCRETE = APPROX. 2.11)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL SUPER P

GENERAL NOTES

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

INSTALL FOUR 1/2 INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

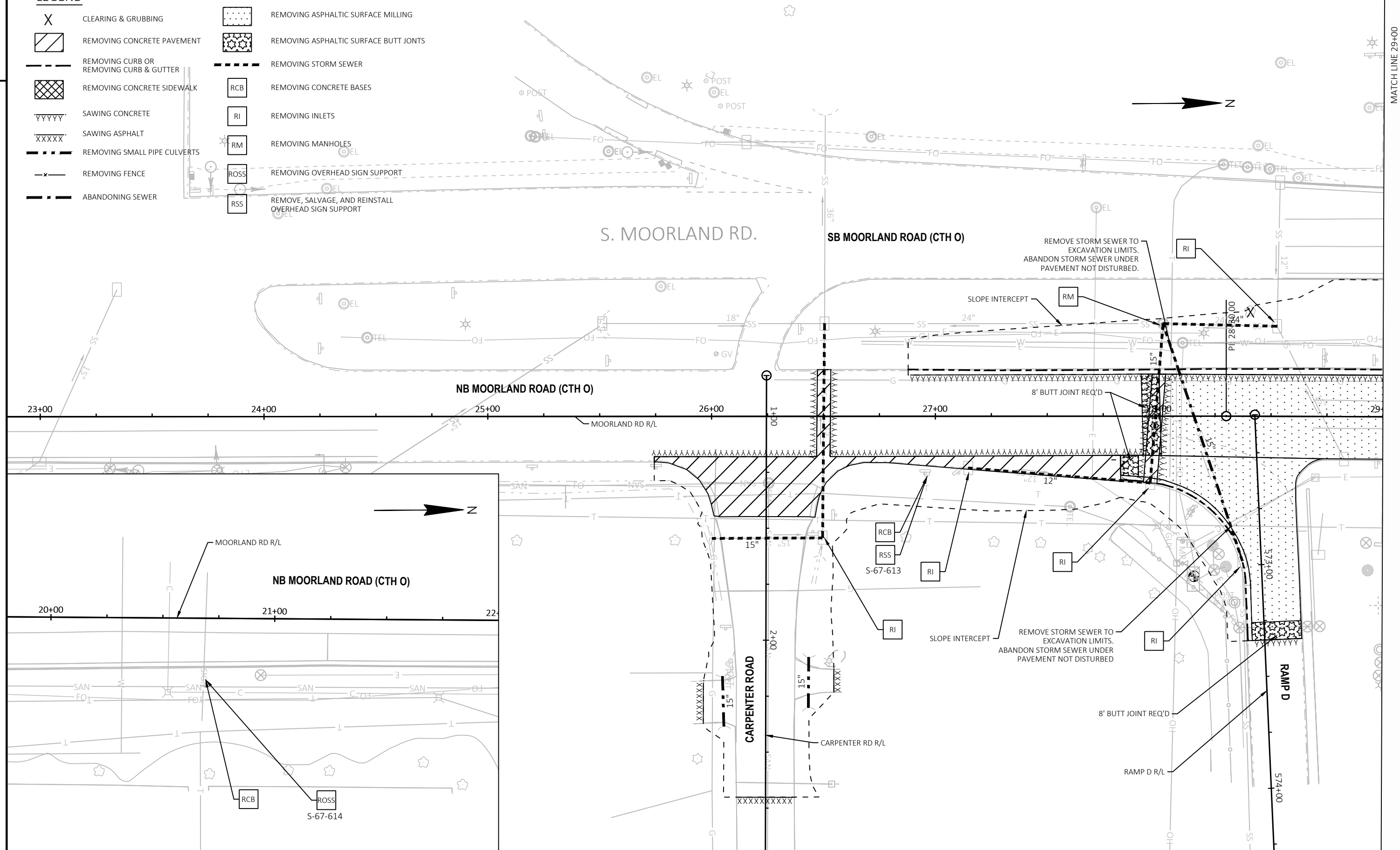
ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

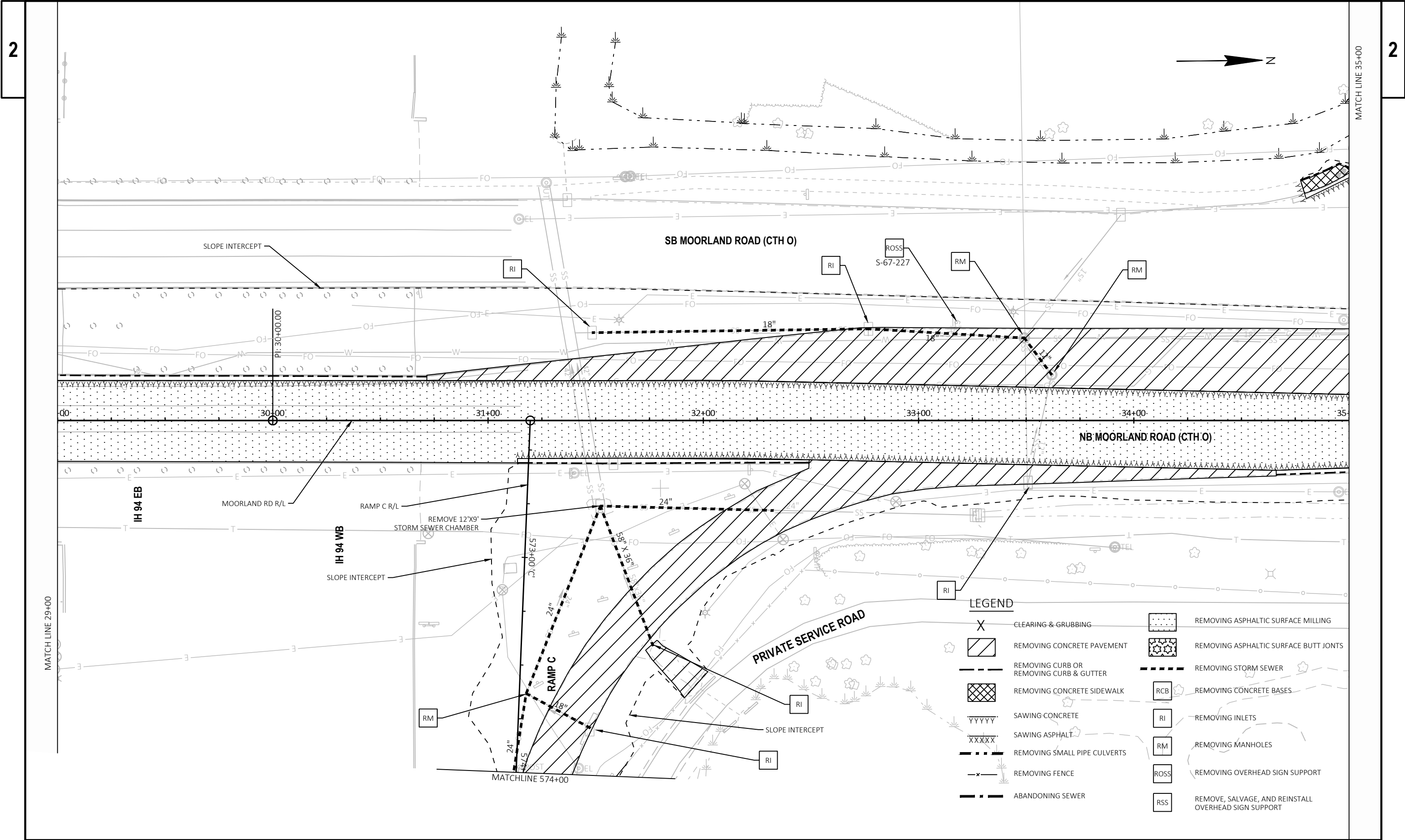
CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

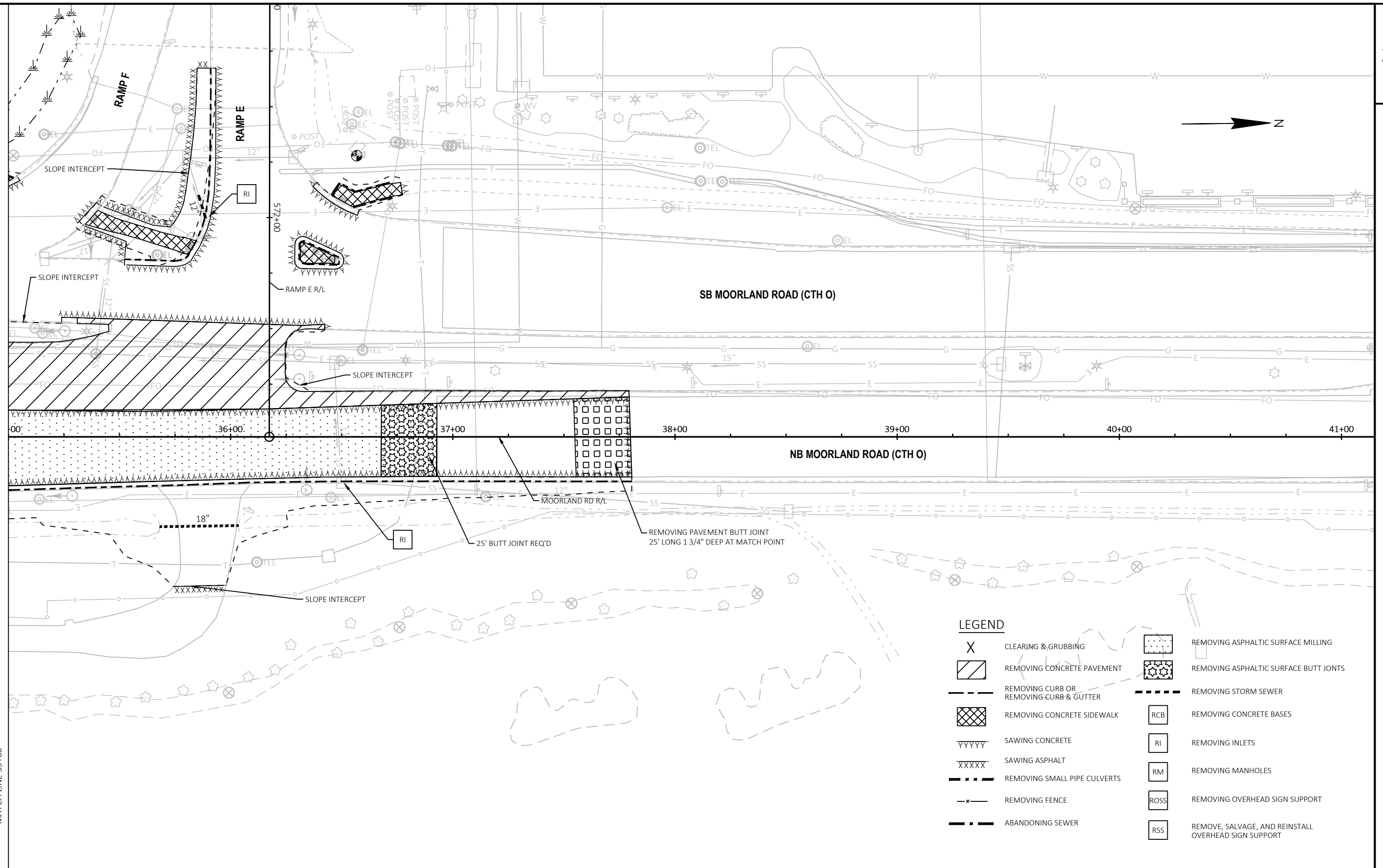
	CLEARING & GRUBBING		REMOVING ASPHALTIC SURFACE MILLING
	REMOVING CONCRETE PAVEMENT		REMOVING ASPHALTIC SURFACE BUTT JOINTS
	REMOVING CURB OR REMOVING CURB & GUTTER		REMOVING STORM SEWER
	REMOVING CONCRETE SIDEWALK		REMOVING CONCRETE BASES
	SAWING CONCRETE		REMOVING INLETS
	SAWING ASPHALT		REMOVING MANHOLES
	REMOVING SMALL PIPE CULVERTS		REMOVING OVERHEAD SIGN SUPPORT
	REMOVING FENCE		REMOVE, SALVAGE, AND REINSTALL OVERHEAD SIGN SUPPORT
	ABANDONING SEWER		





2

2



PROJECT NO:	1060-10-72
-------------	------------

HWY: IH 94

COUNTY: WAUKESHA

REMOVALS

SHEET 28

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETSP\PLAN\021101-RM.DWG
LAYOUT NAME - 03

PLOT DATE : 10/27/2022 11:11 PM

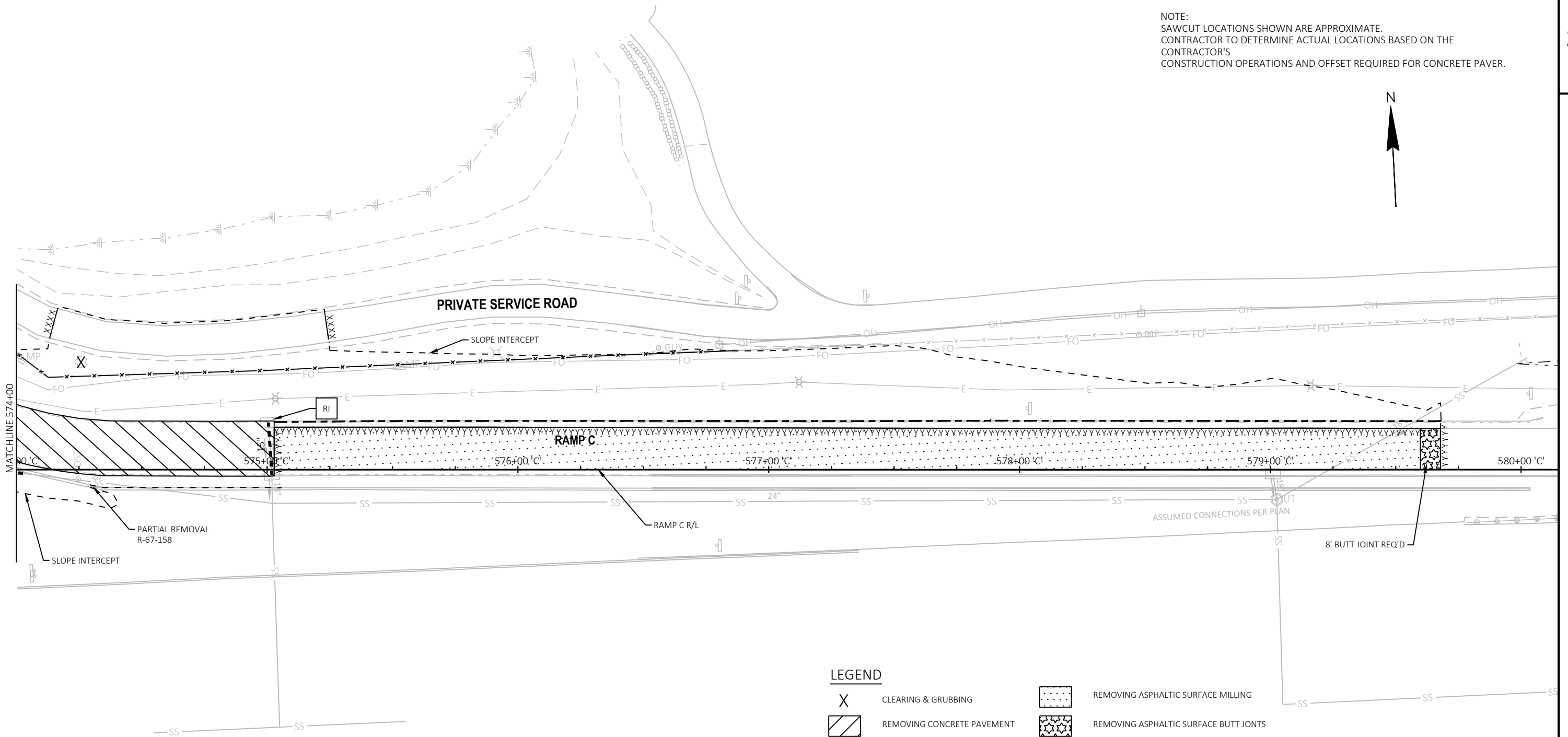
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE:
SAWCUT LOCATIONS SHOWN ARE APPROXIMATE.
CONTRACTOR TO DETERMINE ACTUAL LOCATIONS BASED ON THE
CONTRACTOR'S
CONSTRUCTION OPERATIONS AND OFFSET REQUIRED FOR CONCRETE PAVER.



LEGEND

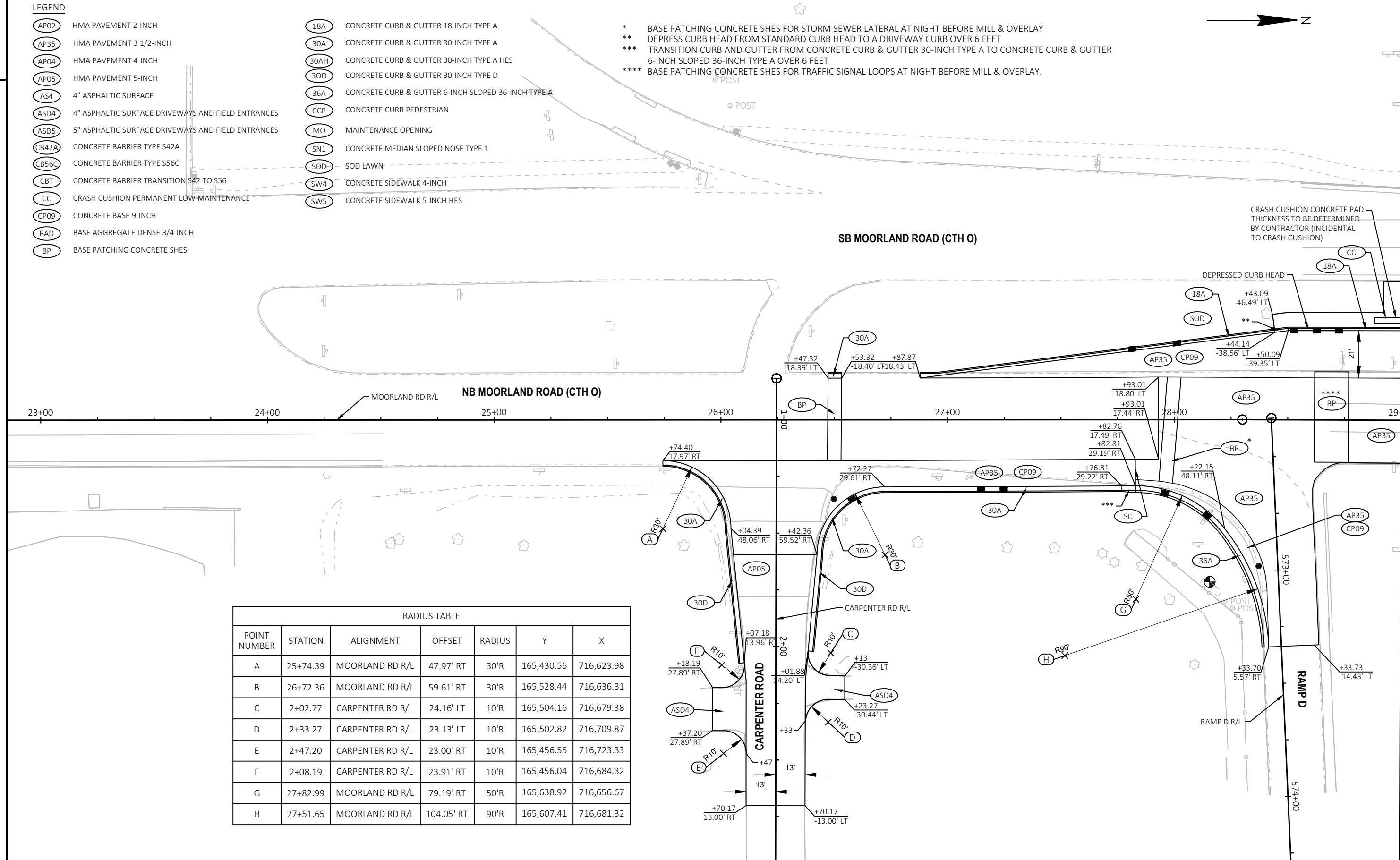
	CLEARING & GRUBBING		REMOVING ASPHALTIC SURFACE MILLING
	REMOVING CONCRETE PAVEMENT		REMOVING ASPHALTIC SURFACE BUTT JOINTS
	REMOVING CURB OR REMOVING CURB & GUTTER		REMOVING STORM SEWER
	REMOVING CONCRETE SIDEWALK		REMOVING CONCRETE BASES
	SAWING CONCRETE		REMOVING INLETS
	SAWING ASPHALT		REMOVING MANHOLES
	REMOVING SMALL PIPE CULVERTS		REMOVING OVERHEAD SIGN SUPPORT
	REMOVING FENCE		REMOVE, SALVAGE, AND REINSTALL OVERHEAD SIGN SUPPORT
	ABANDONING SEWER		

LEGEND

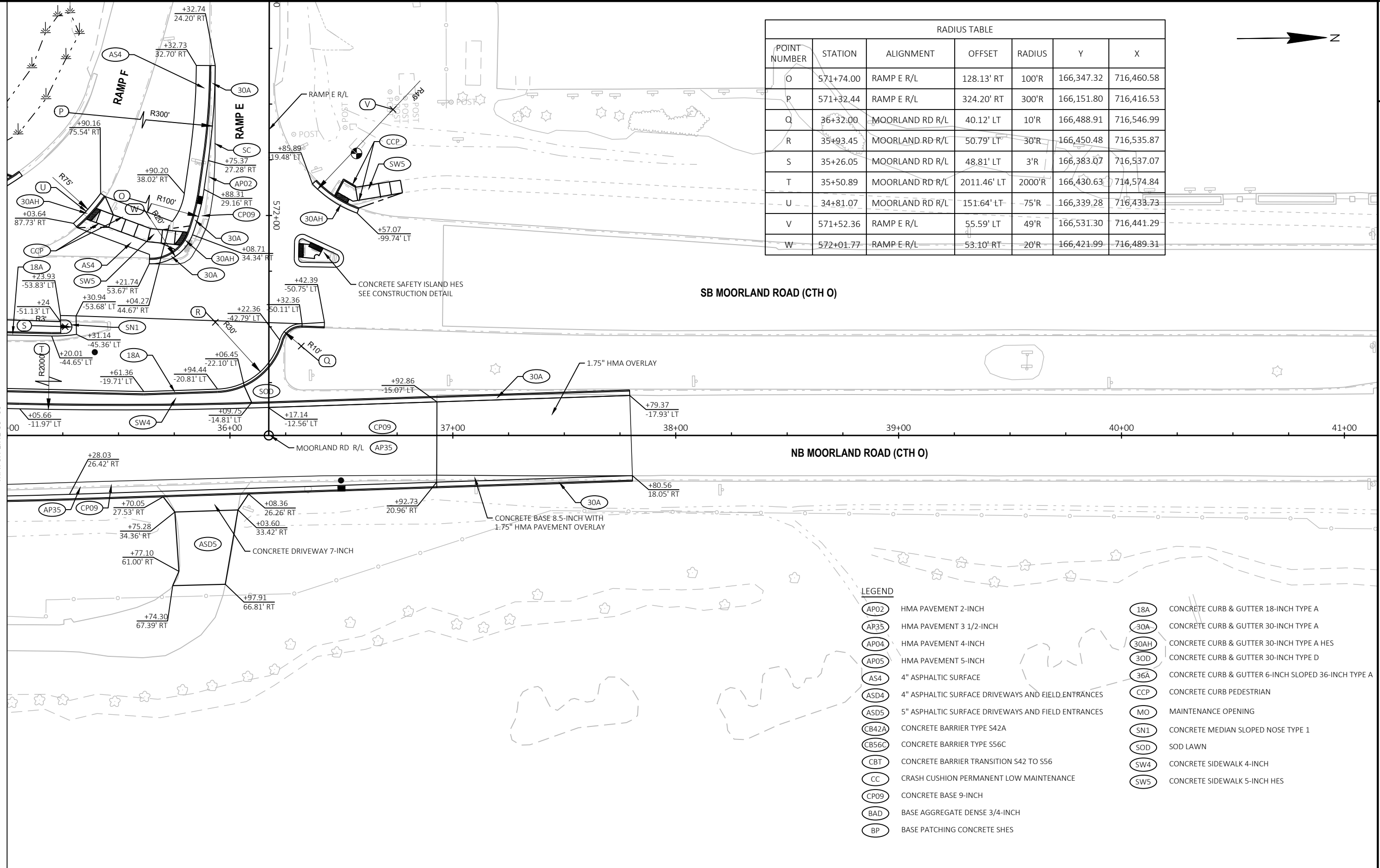
- AP02 HMA PAVEMENT 2-INCH
- AP35 HMA PAVEMENT 3 1/2-INCH
- AP04 HMA PAVEMENT 4-INCH
- AP05 HMA PAVEMENT 5-INCH
- AS4 4" ASPHALTIC SURFACE
- ASD4 4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- ASD5 5" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- CB42A CONCRETE BARRIER TYPE S42A
- CB56C CONCRETE BARRIER TYPE S56C
- CBT CONCRETE BARRIER TRANSITION S42 TO S56
- CC CRASH CUSHION PERMANENT LOW MAINTENANCE
- CP09 CONCRETE BASE 9-INCH
- BAD BASE AGGREGATE DENSE 3/4-INCH
- BP BASE PATCHING CONCRETE SHES

- 18A CONCRETE CURB & GUTTER 18-INCH TYPE A
- 30A CONCRETE CURB & GUTTER 30-INCH TYPE A
- 30AH CONCRETE CURB & GUTTER 30-INCH TYPE A HES
- 30D CONCRETE CURB & GUTTER 30-INCH TYPE D
- 36A CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
- CCP CONCRETE CURB PEDESTRIAN
- MO MAINTENANCE OPENING
- SN1 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- SOD SOD LAWN
- SW4 CONCRETE SIDEWALK 4-INCH
- SW5 CONCRETE SIDEWALK 5-INCH HES

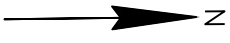
- * BASE PATCHING CONCRETE SHES FOR STORM SEWER LATERAL AT NIGHT BEFORE MILL & OVERLAY
- ** DEPRESS CURB HEAD FROM STANDARD CURB HEAD TO A DRIVEWAY CURB OVER 6 FEET
- *** TRANSITION CURB AND GUTTER FROM CONCRETE CURB & GUTTER 30-INCH TYPE A TO CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A OVER 6 FEET
- **** BASE PATCHING CONCRETE SHES FOR TRAFFIC SIGNAL LOOPS AT NIGHT BEFORE MILL & OVERLAY.



RADIUS TABLE						
POINT NUMBER	STATION	ALIGNMENT	OFFSET	RADIUS	Y	X
A	25+74.39	MOORLAND RD R/L	47.97' RT	30'R	165,430.56	716,623.98
B	26+72.36	MOORLAND RD R/L	59.61' RT	30'R	165,528.44	716,636.31
C	2+02.77	CARPENTER RD R/L	24.16' LT	10'R	165,504.16	716,679.38
D	2+33.27	CARPENTER RD R/L	23.13' LT	10'R	165,502.82	716,709.87
E	2+47.20	CARPENTER RD R/L	23.00' RT	10'R	165,456.55	716,723.33
F	2+08.19	CARPENTER RD R/L	23.91' RT	10'R	165,456.04	716,684.32
G	27+82.99	MOORLAND RD R/L	79.19' RT	50'R	165,638.92	716,656.67
H	27+51.65	MOORLAND RD R/L	104.05' RT	90'R	165,607.41	716,681.32



RADIUS TABLE						
POINT NUMBER	STATION	ALIGNMENT	OFFSET	RADIUS	Y	X
O	571+74.00	RAMP E R/L	128.13' RT	100'R	166,347.32	716,460.58
P	571+32.44	RAMP E R/L	324.20' RT	300'R	166,151.80	716,416.53
Q	36+32.00	MOORLAND RD R/L	40.12' LT	10'R	166,488.91	716,546.99
R	35+93.45	MOORLAND RD R/L	50.79' LT	30'R	166,450.48	716,535.87
S	35+26.05	MOORLAND RD R/L	48.81' LT	3'R	166,383.07	716,537.07
T	35+50.89	MOORLAND RD R/L	2011.46' LT	2000'R	166,430.63	714,574.84
U	34+81.07	MOORLAND RD R/L	151.64' LT	75'R	166,339.28	716,438.73
V	571+52.36	RAMP E R/L	55.59' LT	49'R	166,531.30	716,441.29
W	572+01.77	RAMP E R/L	53.10' RT	20'R	166,421.99	716,489.31



LEGEND

- AP02

HMA PAVEMENT 2-INCH
- AP35

HMA PAVEMENT 3 1/2-INCH
- AP04

HMA PAVEMENT 4-INCH
- AP05

HMA PAVEMENT 5-INCH
- AS4

4" ASPHALTIC SURFACE
- ASD4

4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- ASD5

5" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- CB42A

CONCRETE BARRIER TYPE S42A
- CB56C

CONCRETE BARRIER TYPE S56C
- CBT

CONCRETE BARRIER TRANSITION S42 TO S56
- CC

CRASH CUSHION PERMANENT LOW MAINTENANCE
- CP09

CONCRETE BASE 9-INCH
- BAD

BASE AGGREGATE DENSE 3/4-INCH
- BP

BASE PATCHING CONCRETE SHES

18A

CONCRETE CURB & GUTTER 18-INCH TYPE A

30A

CONCRETE CURB & GUTTER 30-INCH TYPE A

30AH

CONCRETE CURB & GUTTER 30-INCH TYPE A HES

30D

CONCRETE CURB & GUTTER 30-INCH TYPE D

36A

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

CCP

CONCRETE CURB PEDESTRIAN

MO

MAINTENANCE OPENING

SN1

CONCRETE MEDIAN SLOPED NOSE TYPE 1

SOD

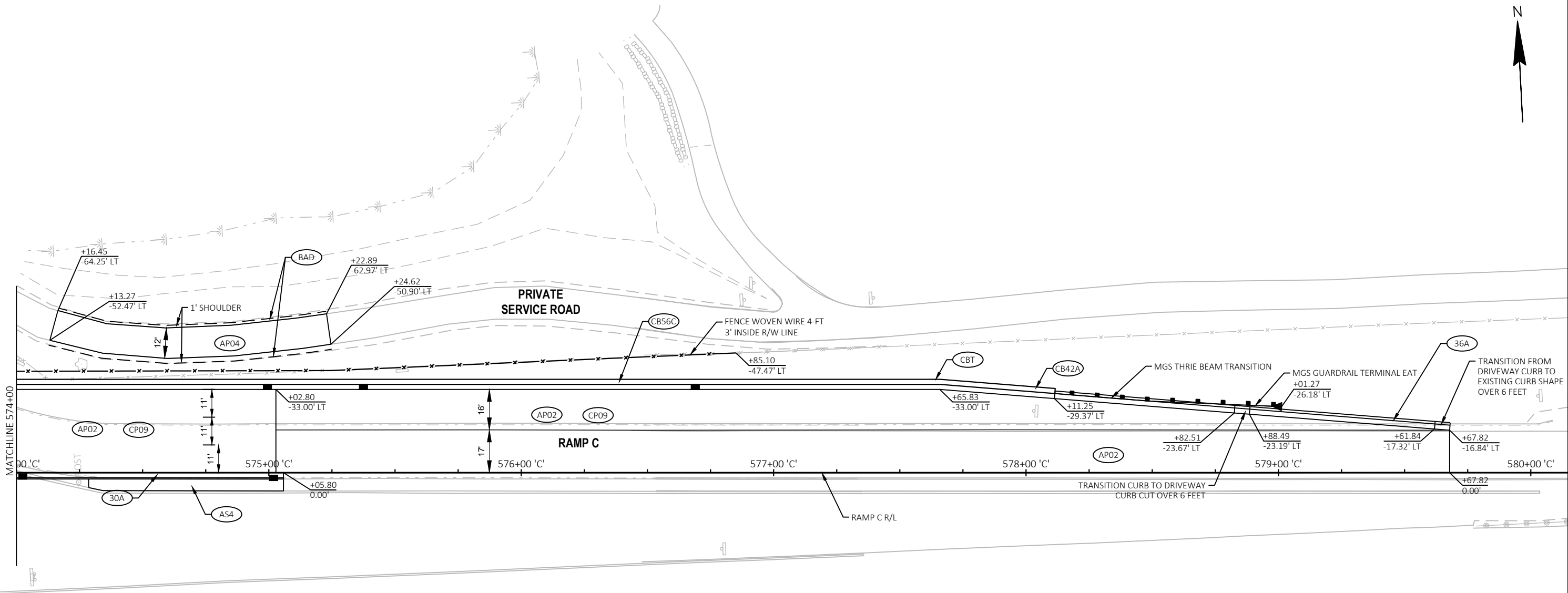
SOD LAWN

SW4

CONCRETE SIDEWALK 4-INCH

SW5

CONCRETE SIDEWALK 5-INCH HES



LEGEND

AP02	HMA PAVEMENT 2-INCH	18A	CONCRETE CURB & GUTTER 18-INCH TYPE A
AP35	HMA PAVEMENT 3 1/2-INCH	30A	CONCRETE CURB & GUTTER 30-INCH TYPE A
AP04	HMA PAVEMENT 4-INCH	30AH	CONCRETE CURB & GUTTER 30-INCH TYPE A HES
AP05	HMA PAVEMENT 5-INCH	30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
AS4	4" ASPHALTIC SURFACE	36A	CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A
ASD4	4" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	CCP	CONCRETE CURB PEDESTRIAN
ASD5	5" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	MO	MAINTENANCE OPENING
CB42A	CONCRETE BARRIER TYPE S42A	SN1	CONCRETE MEDIAN SLOPED NOSE TYPE 1
CB56C	CONCRETE BARRIER TYPE S56C	SOD	SOD LAWN
CBT	CONCRETE BARRIER TRANSITION S42 TO S56	SW4	CONCRETE SIDEWALK 4-INCH
CC	CRASH CUSHION PERMANENT LOW MAINTENANCE	SW5	CONCRETE SIDEWALK 5-INCH HES
CP09	CONCRETE BASE 9-INCH		
BAD	BASE AGGREGATE DENSE 3/4-INCH		
BP	BASE PATCHING CONCRETE SHES		

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

PLAN DETAILS - RAMP C

SHEET 33

E

- LEGEND
- XXX.XX

ELEVATION ON PAVEMENT OR ALONG GUTTER FLANGE
- XXX.XX(E)

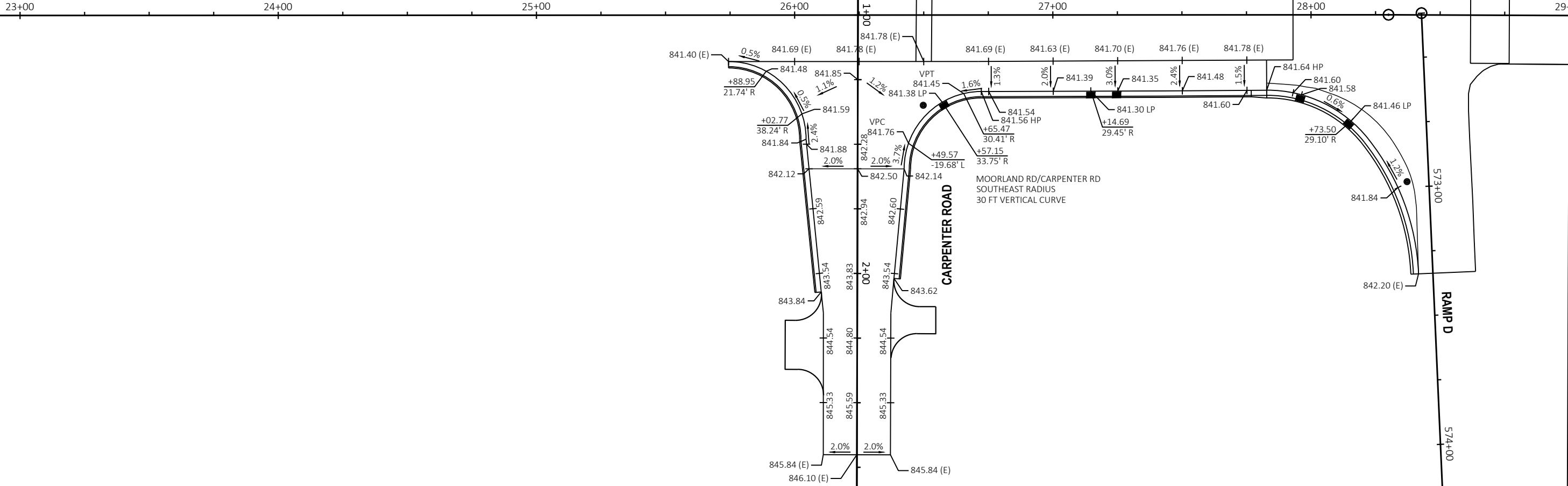
EXISTING ELEVATION
- HP

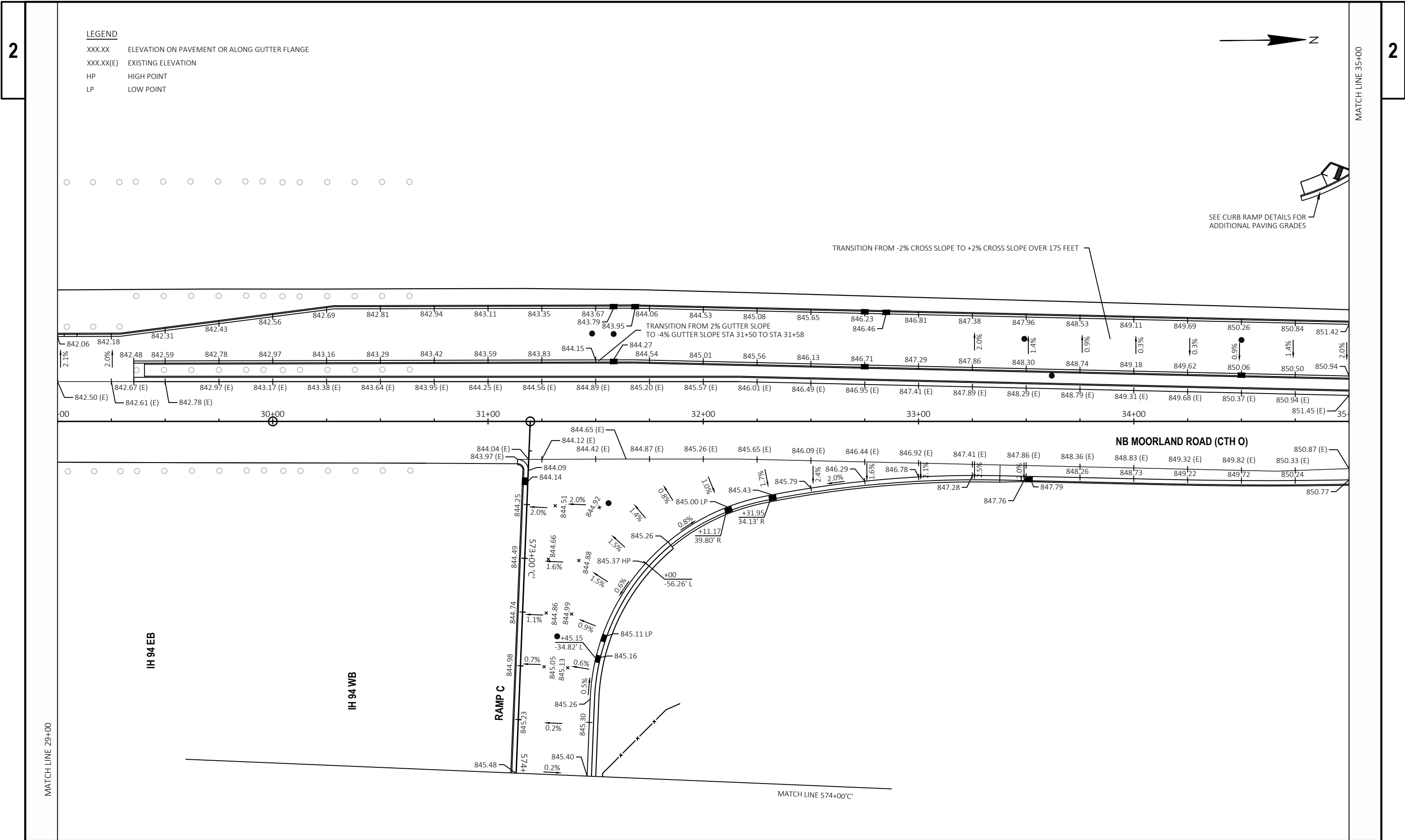
HIGH POINT
- LP

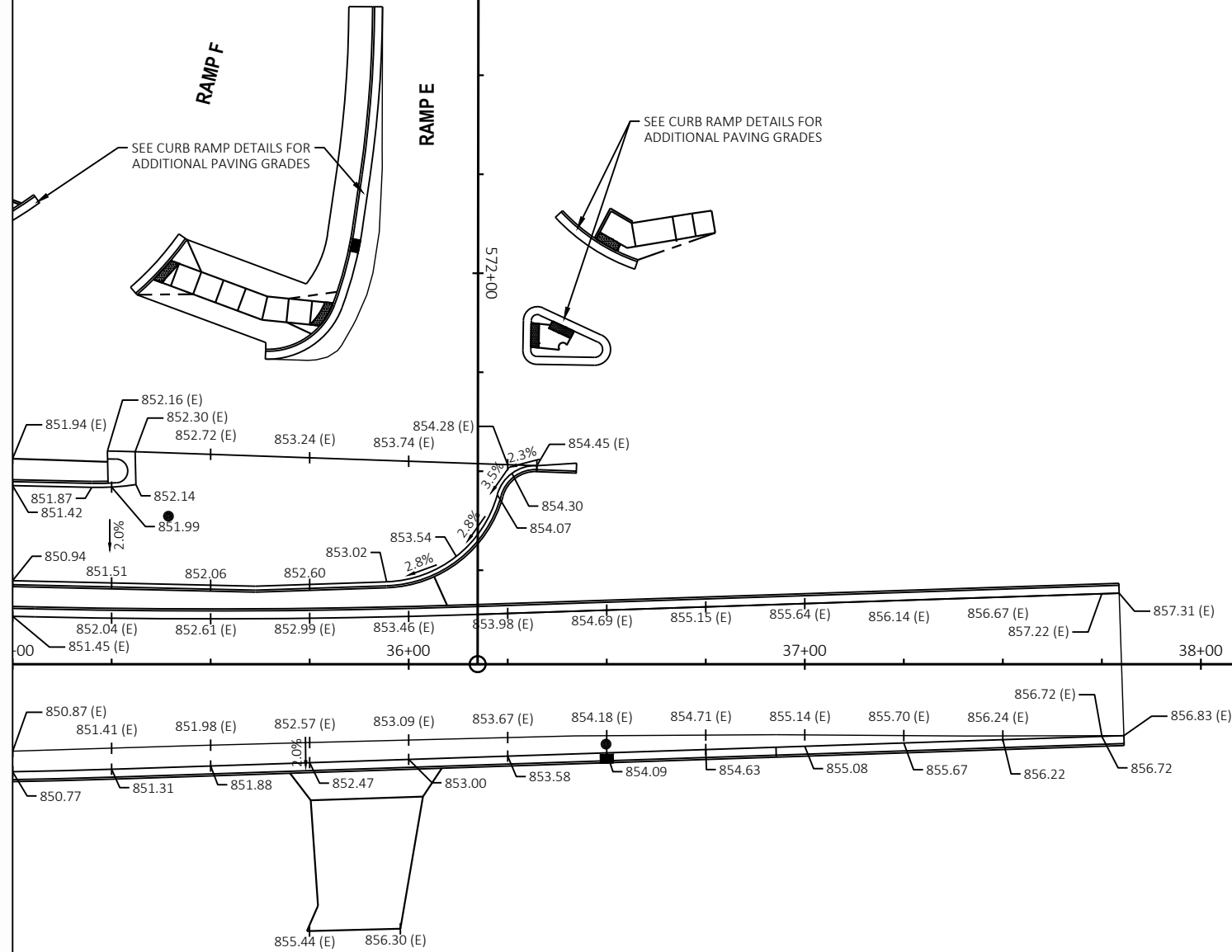
LOW POINT



NB MOORLAND ROAD (CTH O)







LEGEND

- XXX.XX ELEVATION ON PAVEMENT OR ALONG GUTTER FLANGE
- XXX.XX(E) EXISTING ELEVATION
- HP HIGH POINT
- LP LOW POINT

PROJECT NO: 1060-10-72

HWY: IH 94

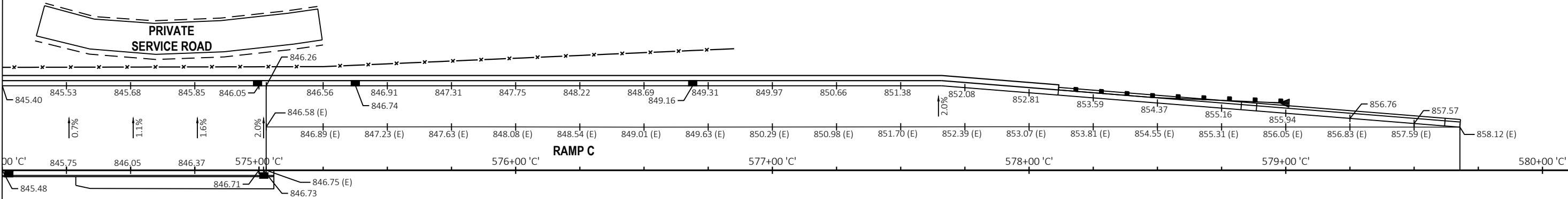
COUNTY: WAUKESHA

PAVING GRADES - MOORLAND ROAD

SHEET 36

E

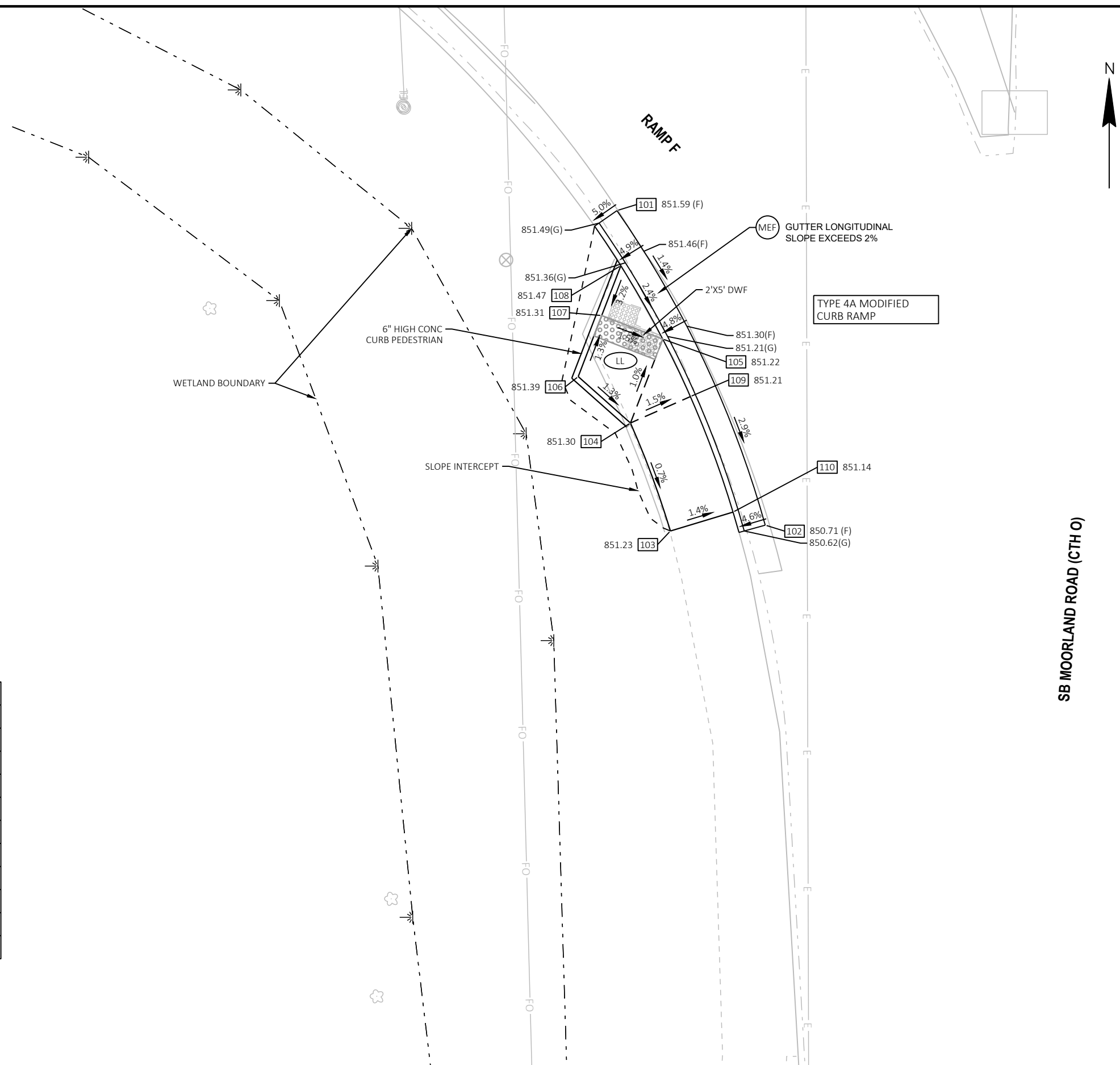
LEGEND
XXX.XX ELEVATION ON PAVEMENT OR ALONG GUTTER FLANGE
XXX.XX(E) EXISTING ELEVATION
HP HIGH POINT
LP LOW POINT



 GRADED FLARE (6:1 MAX SLOPE)

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAIL DRAWINGS.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.
4. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%.
5. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%.
6. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

CURB RAMP POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
101	35+06.82	116.51' LT	851.59	166364.62	716469.15
102	34+78.14	102.58' LT	850.71	166335.78	716482.75
103	34+77.50	111.27' LT	851.23	166335.24	716474.06
104	34+87.36	115.05' LT	851.30	166345.14	716470.39
105	34+95.09	112.18' LT	851.22	166352.84	716473.35
106	34+91.56	119.89' LT	851.39	166349.40	716465.60
107	34+97.18	117.80' LT	851.31	166355.00	716467.75
108	35+01.76	116.10' LT	851.47	166359.56	716469.51
109	34+89.84	109.59' LT	851.21	166347.57	716475.88
110	34+79.30	105.55' LT	851.14	166336.98	716479.80



LEGEND

XXX.XX SIDEWALK ELEVATION
XXX.XX(F) C&G FLANGE ELEVATION
XXX.XX(G) C&G FLOWLINE ELEVATION
XXX.XX(T) TOP OF CURB ELEVATION

LL LEVEL LANDING

100 POINT NUMBER

- - - SLOPE INTERCEPTS

DETECTABLE WARNING FIELD

MEF TECHNICAL INFEASIBILITY PRESENT
CONSTRUCTED TO MAXIMUM EXTENT FEASIBLE
SEE TECHNICAL INFEASIBILITY REPORT

P PAVED FLARE (10:1 MAX SLOPE)

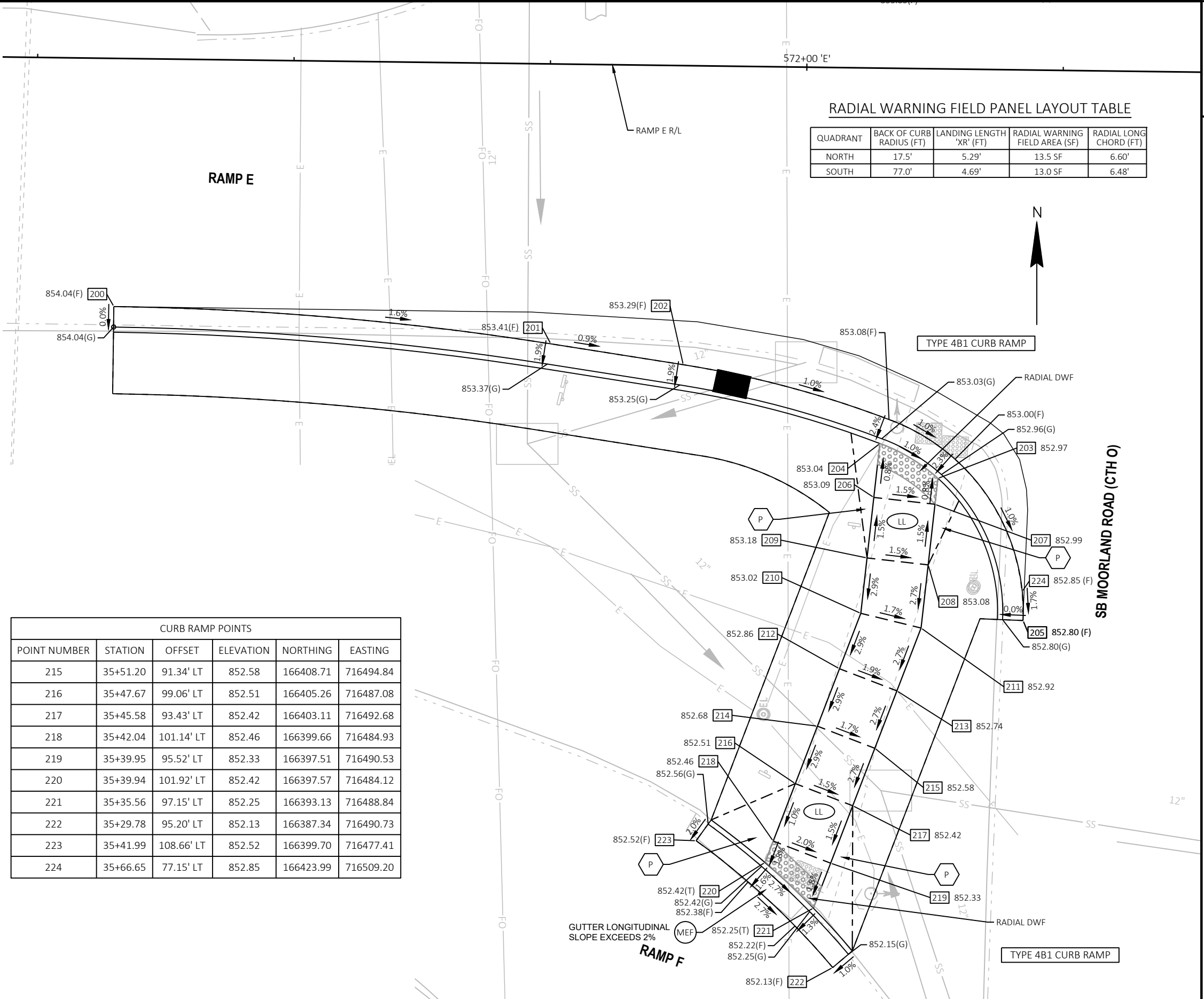
G GRADED FLARE (6:1 MAX SLOPE)

NOTES

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
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CURB RAMP POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
200	35+93.40	166.03' LT	854.04	166451.77	716420.65
201	35+90.26	123.40' LT	853.41	166448.14	716463.24
202	35+88.38	110.45' LT	853.29	166446.10	716476.15
203	35+77.58	85.50' LT	852.97	166435.02	716500.98
204	35+80.91	91.19' LT	853.04	166438.42	716495.33
205	35+63.82	77.03' LT	852.80	166421.16	716509.29
206	35+75.66	91.72' LT	853.09	166433.16	716494.74
207	35+75.05	85.75' LT	852.99	166432.49	716500.70
208	35+69.14	86.35' LT	853.08	166426.59	716500.04
209	35+69.74	92.32' LT	853.18	166427.26	716494.07
210	35+64.34	92.86' LT	853.02	166421.87	716493.47
211	35+62.98	86.97' LT	852.92	166420.43	716499.34
212	35+58.92	94.88' LT	852.86	166416.46	716491.39
213	35+56.83	89.25' LT	852.74	166414.31	716496.99
214	35+53.29	96.97' LT	852.68	166410.86	716489.24

CURB RAMP POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
215	35+51.20	91.34' LT	852.58	166408.71	716494.84
216	35+47.67	99.06' LT	852.51	166405.26	716487.08
217	35+45.58	93.43' LT	852.42	166403.11	716492.68
218	35+42.04	101.14' LT	852.46	166399.66	716484.93
219	35+39.95	95.52' LT	852.33	166397.51	716490.53
220	35+39.94	101.92' LT	852.42	166397.57	716484.12
221	35+35.56	97.15' LT	852.25	166393.13	716488.84
222	35+29.78	95.20' LT	852.13	166387.34	716490.73
223	35+41.99	108.66' LT	852.52	166399.70	716477.41
224	35+66.65	77.15' LT	852.85	166423.99	716509.20



PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

CURB RAMP DETAILS

SHEET

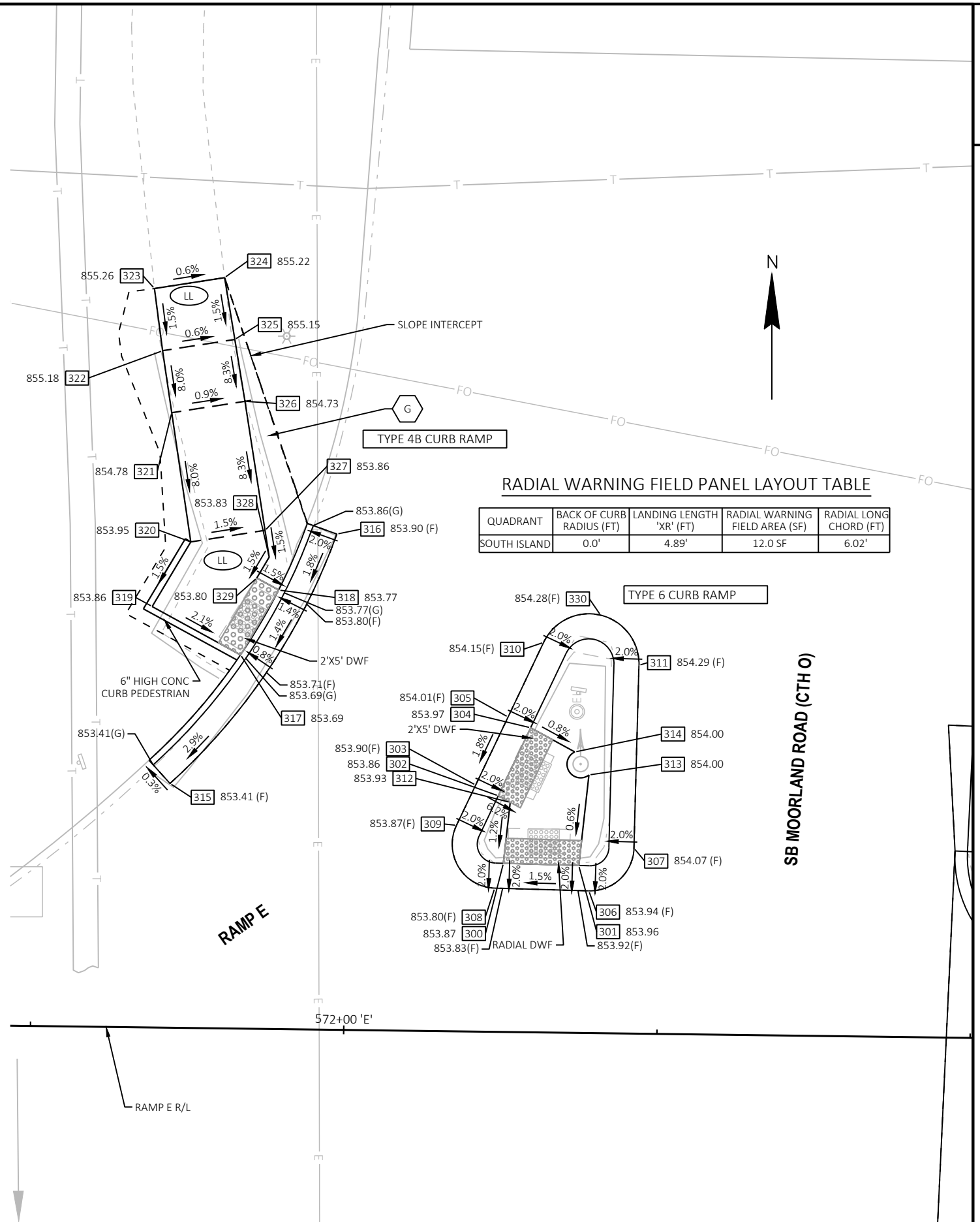
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E

 GRADED FLARE (6:1 MAX SLOPE)

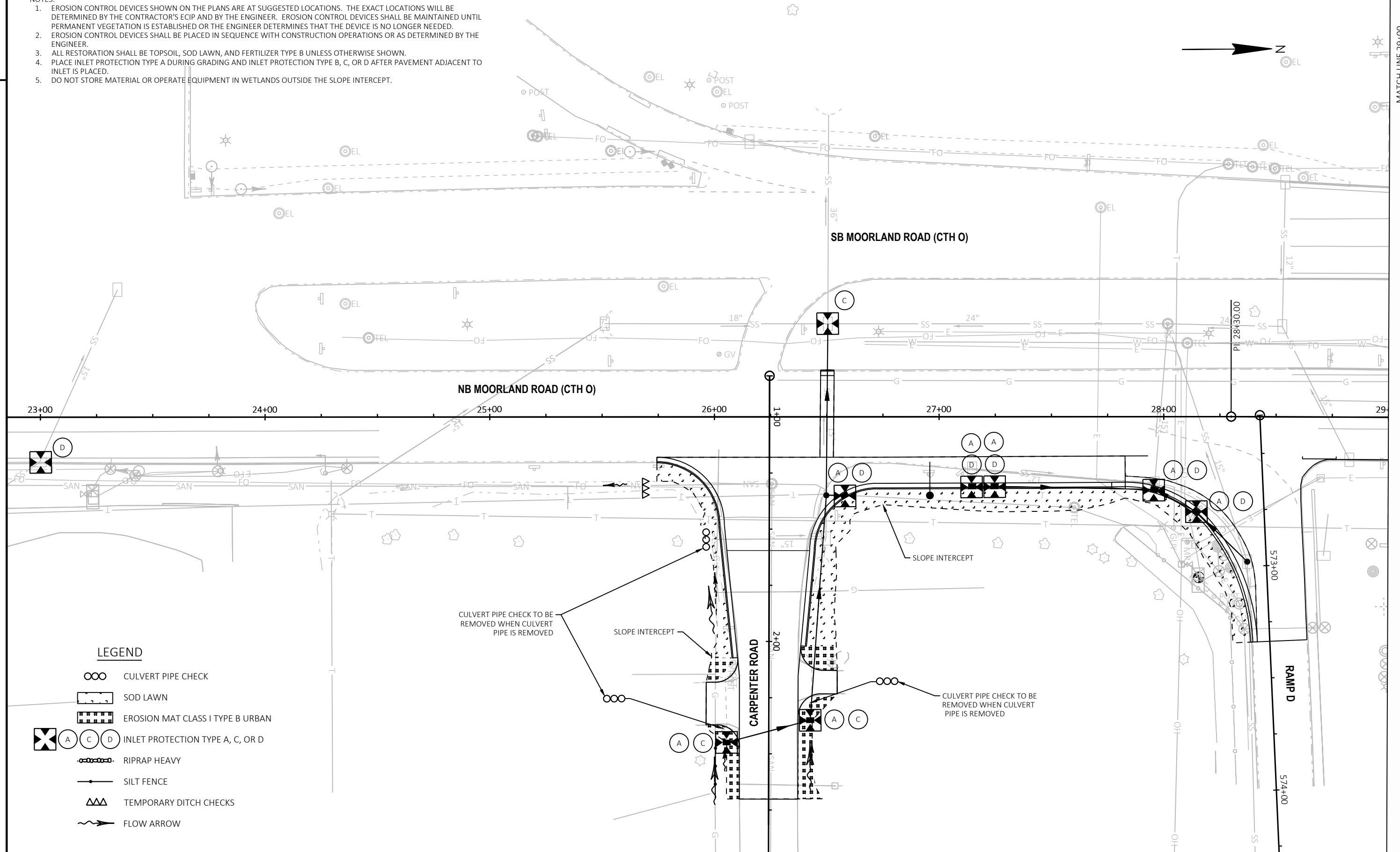
1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP CONSTRUCTION.
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CURB RAMP POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
316	36+57.07	99.74' LT	853.90	166514.67	716487.67
317	36+47.34	107.31' LT	853.69	166505.03	716479.98
318	36+52.55	104.33' LT	853.77	166510.20	716483.03
319	36+51.12	114.42' LT	853.86	166508.88	716472.92
320	36+56.31	111.39' LT	853.95	166514.04	716476.00
321	36+66.60	113.03' LT	854.78	166524.34	716474.48
322	36+71.53	113.82' LT	855.18	166529.29	716473.75
323	36+76.48	114.52' LT	855.26	166534.25	716473.11
324	36+77.42	108.94' LT	855.22	166535.12	716478.70
325	36+72.50	108.07' LT	855.15	166530.19	716479.52
326	36+67.57	107.20' LT	854.73	166525.25	716480.33
327	36+57.30	105.48' LT	853.86	166514.96	716481.93
328	36+55.16	105.12' LT	853.83	166512.82	716482.26
329	36+53.49	106.09' LT	853.80	166511.16	716481.27
330	36+50.84	78.62' LT	854.28	166508.19	716508.71



NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
2. EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, AND FERTILIZER TYPE B UNLESS OTHERWISE SHOWN.
4. PLACE INLET PROTECTION TYPE A DURING GRADING AND INLET PROTECTION TYPE B, C, OR D AFTER PAVEMENT ADJACENT TO INLET IS PLACED.
5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.



PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

EROSION CONTROL (STAGE 1)

SHEET 41

E

FILE NAME: T:\1212712\CIVIL3D\10601002\SHEET5PLAN\022001-EC-S1.DWG
LAYOUT NAME - 01

PLOT DATE: 10/28/2022 11:03 AM

PLOT BY: BLACKWOOD, JIM

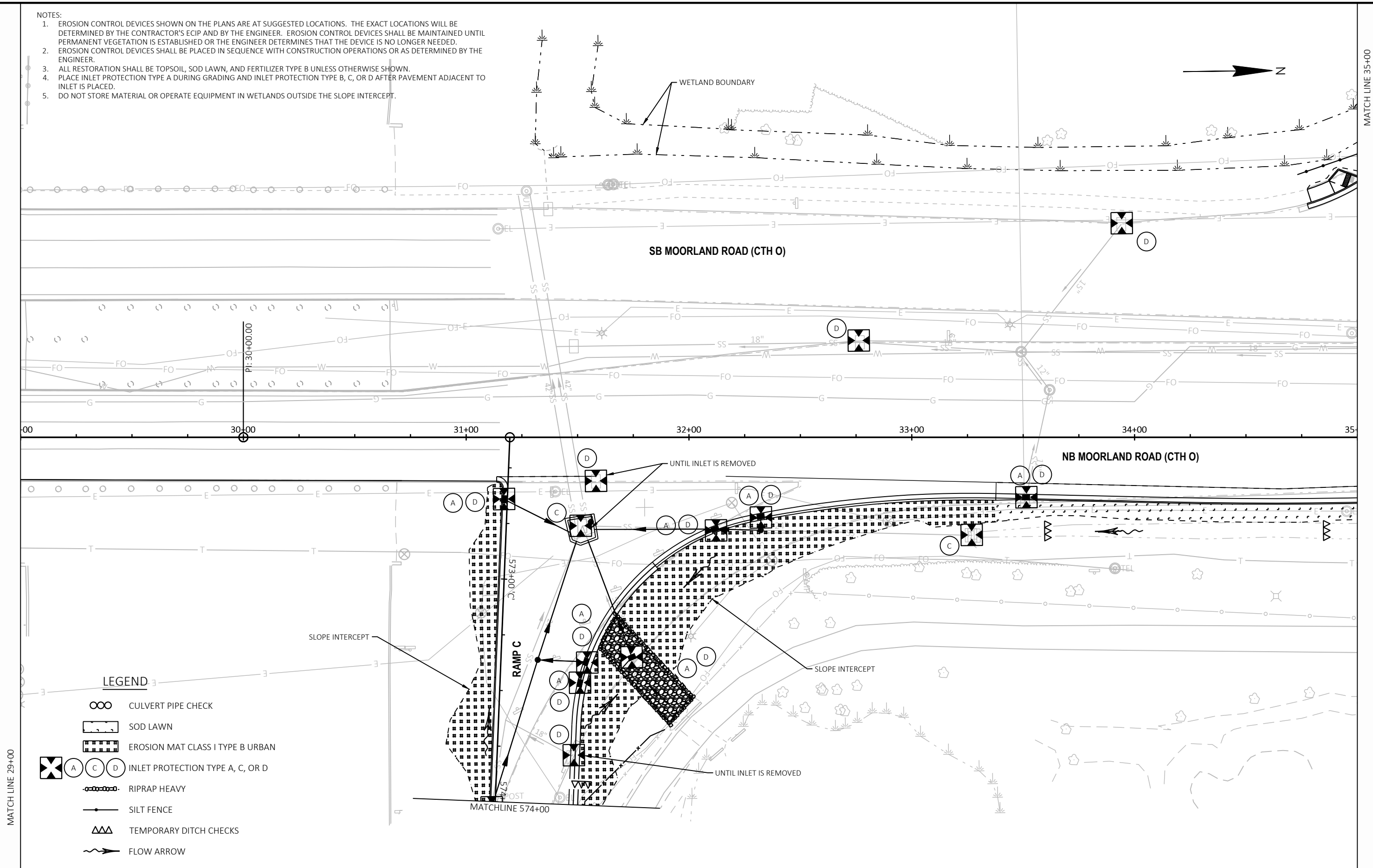
PLOT NAME:

PLOT SCALE: 1 IN=40 FT

WISDOT/CADDs SHEET 42

NOTES:

1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

EROSION CONTROL (STAGE 1)

SHEET 42

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEET5PLAN\022001-EC-S1.DWG
LAYOUT NAME - 02

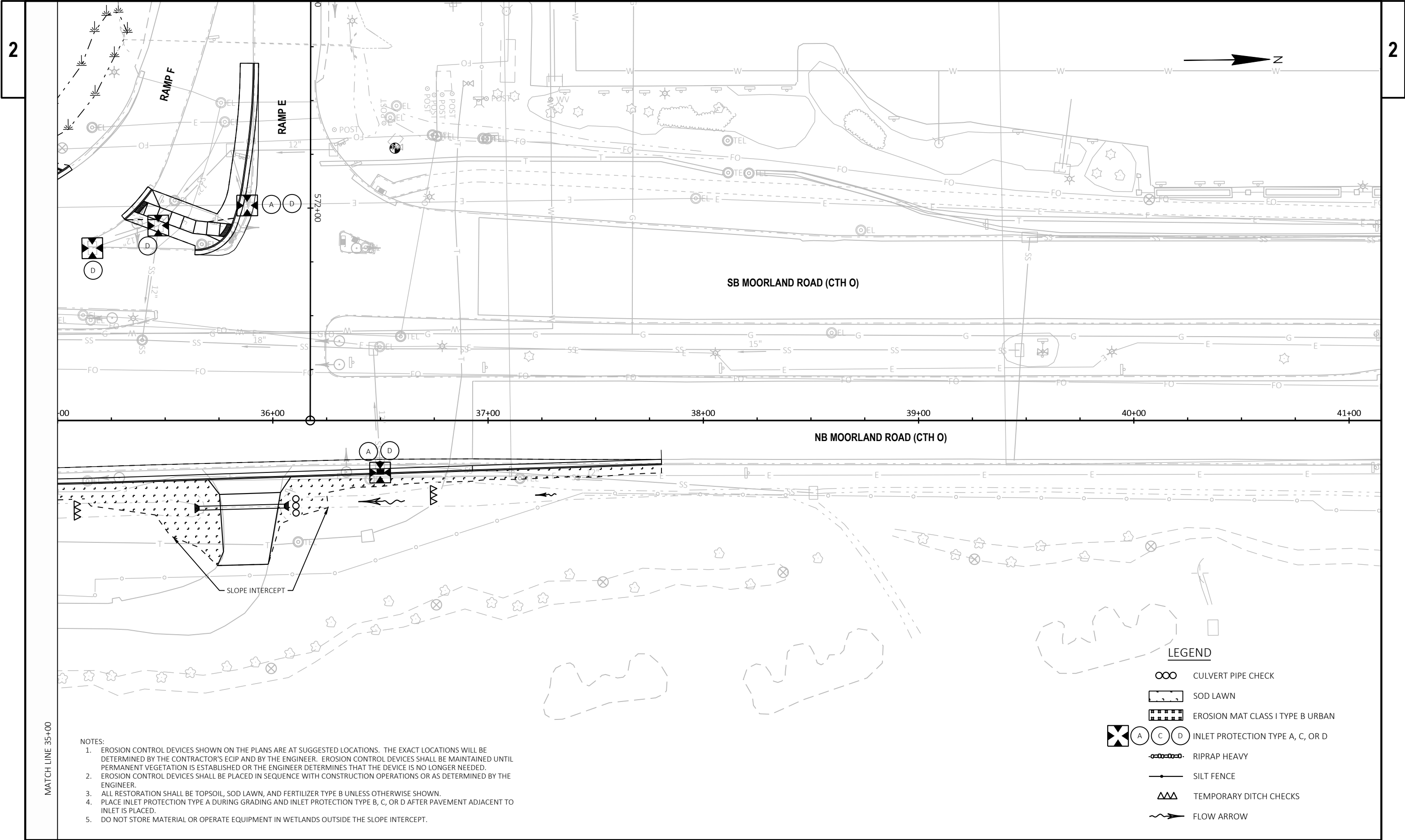
PLOT DATE : 10/28/2022 11:03 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN=40 FT

WISDOT/CADDs SHEET 42



- NOTES:
1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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 5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

- LEGEND
- ooo CULVERT PIPE CHECK
 - [SOD LAWN] SOD LAWN
 - [EROSION MAT] EROSION MAT CLASS I TYPE B URBAN
 - [X] [A] [C] [D] INLET PROTECTION TYPE A, C, OR D
 - [RIPRAP] RIPRAP HEAVY
 - [SILT FENCE] SILT FENCE
 - [DITCH CHECK] TEMPORARY DITCH CHECKS
 - [FLOW ARROW] FLOW ARROW

2

NOTES:

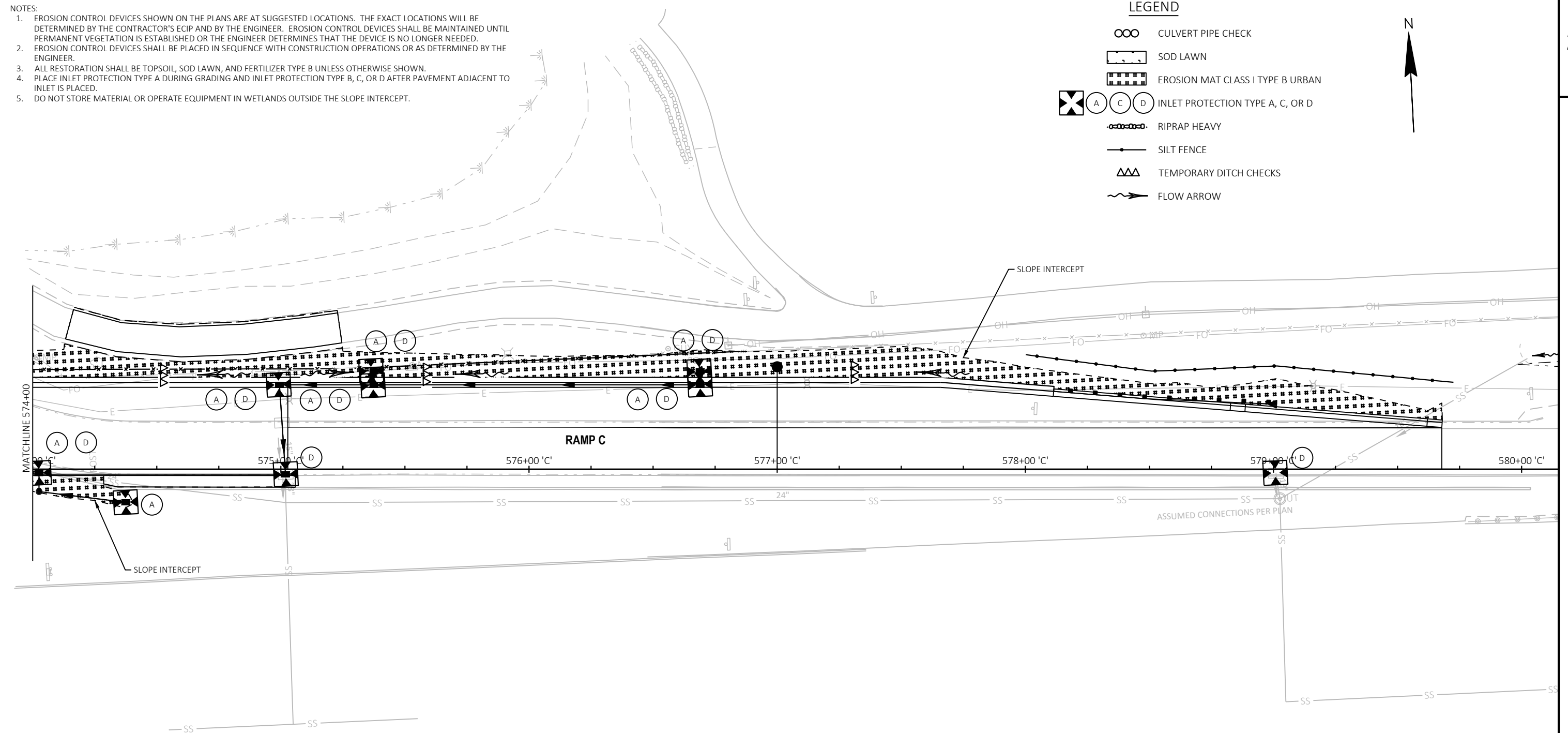
- NOTES:
1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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LEGEND

- | | |
|---|----------------------------------|
|  | CULVERT PIPE CHECK |
|  | SOD LAWN |
|  | EROSION MAT CLASS I TYPE B URBAN |
|  | INLET PROTECTION TYPE A, C, OR D |
|  | RIPRAP HEAVY |
|  | SILT FENCE |
|  | TEMPORARY DITCH CHECKS |
|  | FLOW ARROW |



2



PROJECT NO:	1060-10-72
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HWY: IH 94

COUNTY: WAUKESHA

EROSION CONTROL (STAGE 1)

SHEET	44
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E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETSPLAN\022001-EC-S1.DWG
LAYOUT NAME - 04

PLOT DATE : 10/28/2022 11:03 AM

PLOT BY : BLACKWOOD, JIM

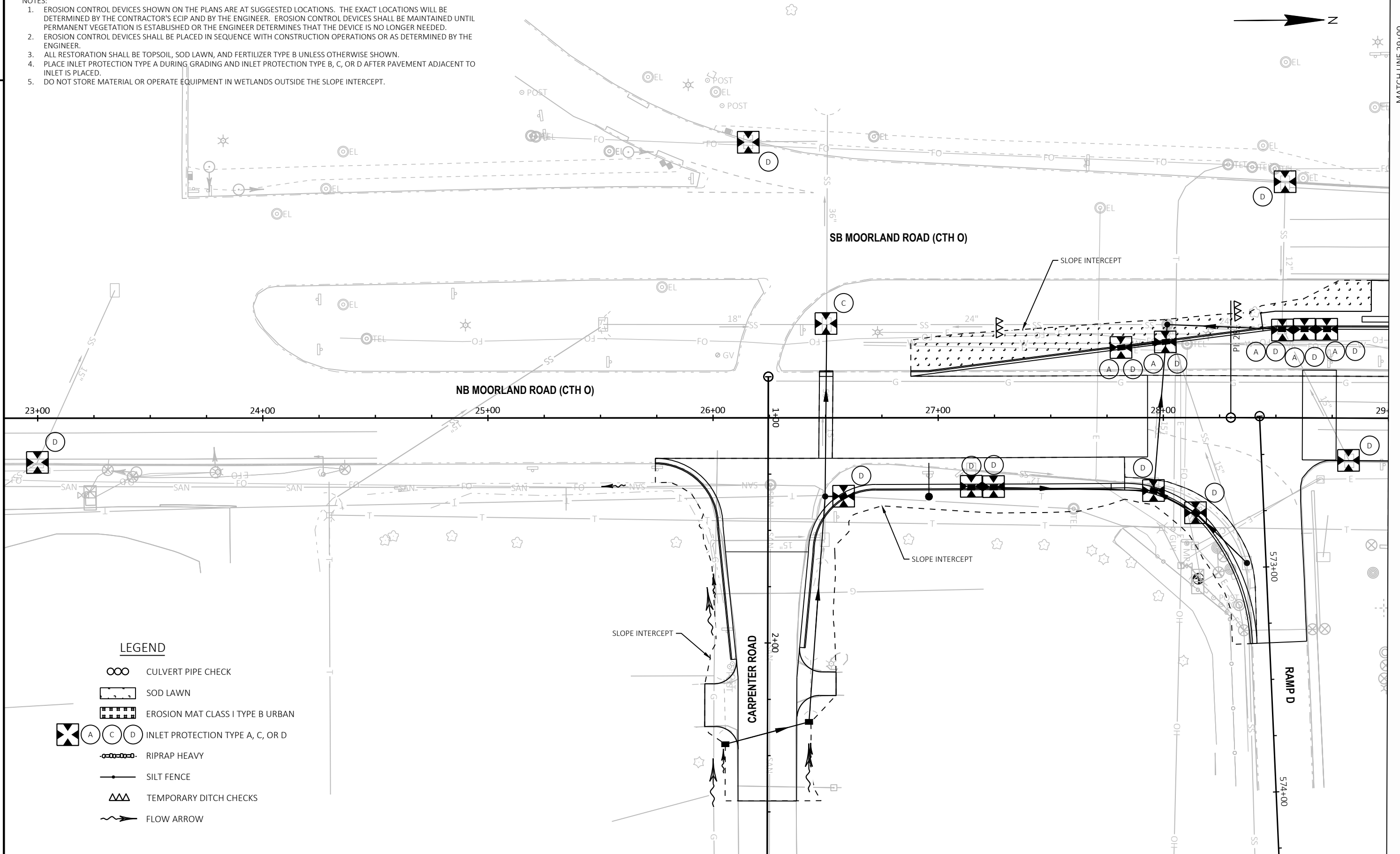
PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTES:

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5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.



LEGEND

- CULVERT PIPE CHECK
- ▨ SOD LAWN
- ▩ EROSION MAT CLASS I TYPE B URBAN
- ⊗ A ⊗ C ⊗ D INLET PROTECTION TYPE A, C, OR D
- - - RIPRAP HEAVY
- SILT FENCE
- △△△ TEMPORARY DITCH CHECKS
- ~> FLOW ARROW

PROJECT NO: 1060-10-72

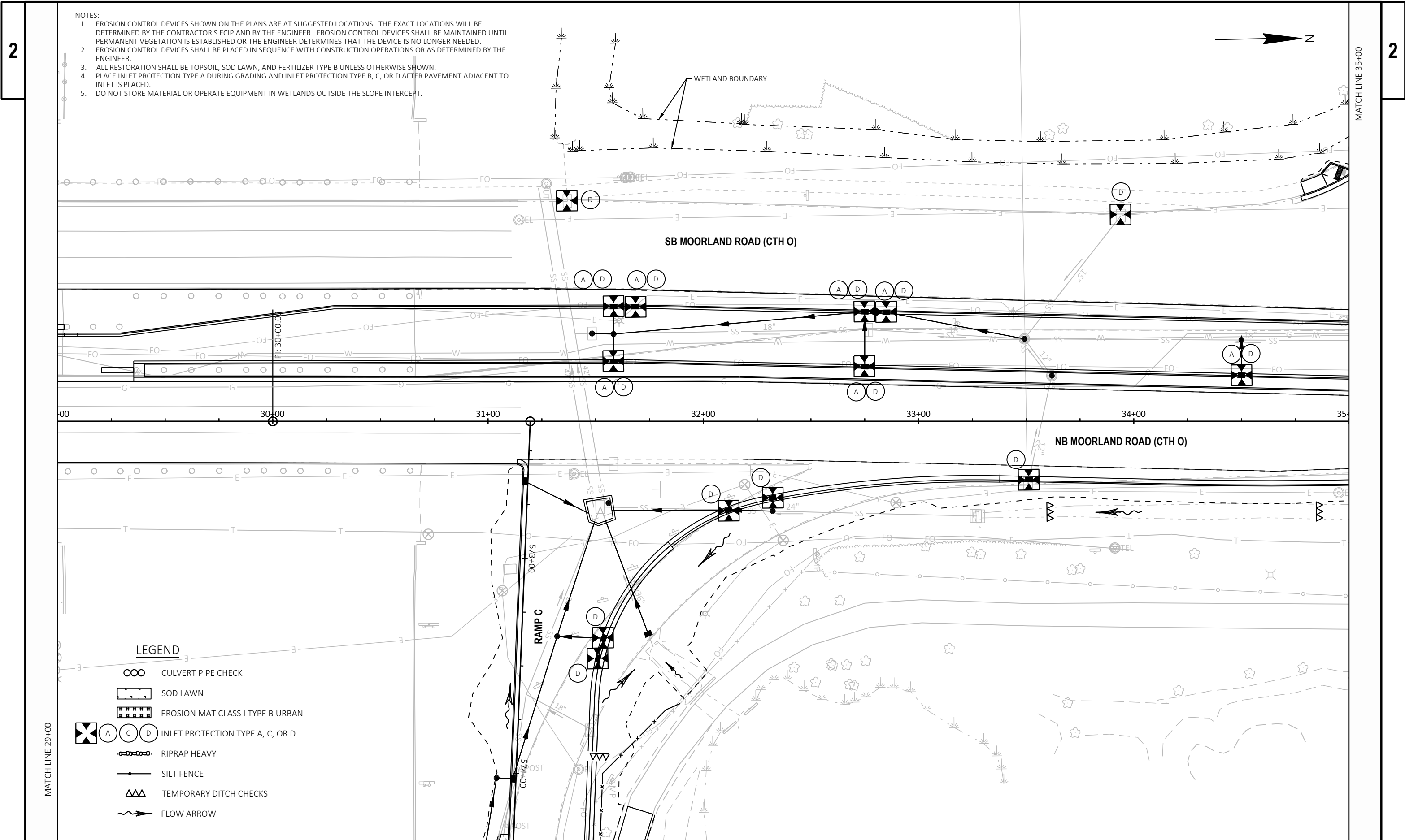
HWY: IH 94

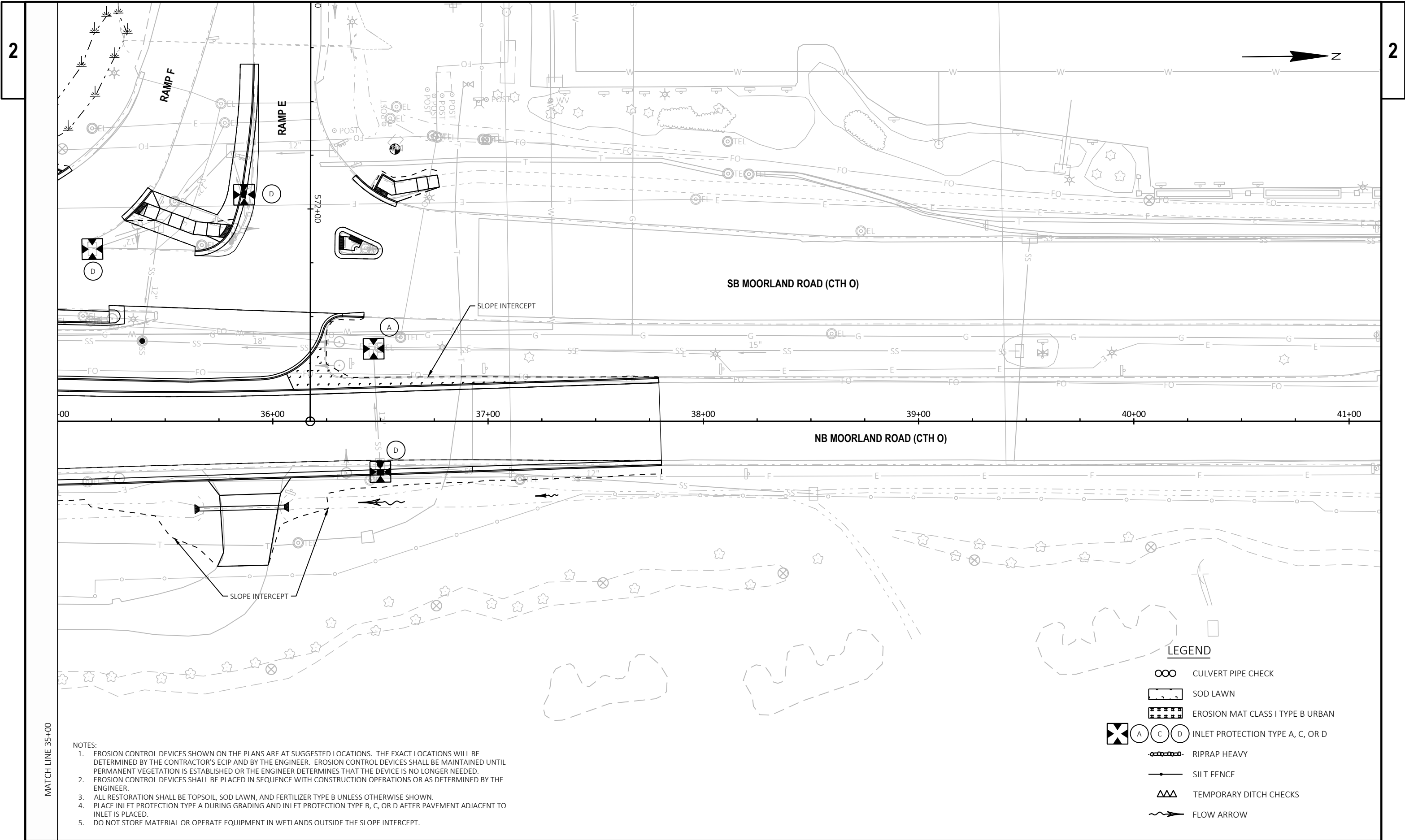
COUNTY: WAUKESHA

EROSION CONTROL (STAGE 2)

SHEET 45

E





- NOTES:
1. EROSION CONTROL DEVICES SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL DEVICES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER NEEDED.
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 5. DO NOT STORE MATERIAL OR OPERATE EQUIPMENT IN WETLANDS OUTSIDE THE SLOPE INTERCEPT.

GENERAL DRAINAGE NOTES

- 1. STATION AND OFFSET OF MANHOLES, INLETS, AND FIELD INLETS ARE GIVEN TO THE CENTER OF STRUCTURE.
- 2. STATION AND OFFSET OF ENDWALLS ARE GIVEN TO THE END OF PIPE.
- 3. PIPE LENGTHS ARE DIMENSIONED CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- 4. STORM SEWER PIPES AT ENDWALLS USING STORM SEWER PIPE CLASS III-A ARE DESIGNED SO THAT THE TOP OF THE PIPE INTERCEPTS THE SLOPE AT THE OUTFALL. IF THE CONTRACTOR ELECTS TO USE STORM SEWER PIPE REINFORCED CONCRETE REDUCE THE PIPE LENGTH BY THE "C" DIMENSION SHOWN ON SDD APRON ENDWALL FOR CULVERT PIPE OR SDD APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
- 5. RIM ELEVATIONS ARE GIVEN AT FLANGE LINE OF CURB AND GUTTER FOR CURB INLETS, TO THE CENTER OF COVER FOR MANHOLES, AND TO CENTER OF THE COVER FOR FIELD INLETS.
- 6. STRUCTURE DEPTH CALCULATIONS FOR MANHOLES AND CATCH BASINS USE A 6-INCH ADJUSTMENT. NO ADJUSTMENT IS USED IN CALCULATING STRUCTURE DEPTH OF INLETS MEDIAN 1 GRATE.
- 7. STORM SEWER PIPE REINFORCED CONCRETE PIPE CLASS COVER DEPTH FOR DETERMINING PIPE CLASS IS MEASURED FROM THE BOTTOM OF THE BASE AGGREGATE DENSE 1 1/4-INCH LAYER.
- 8. STORM SEWER PIPE CLASS III-A COVER IS MEASURED FROM THE BOTTOM OF THE SELECT CRUSHED MATERIAL LAYER. STORM SEWER PIPE CLASS III-A SHALL NOT BE USED UNLESS THERE IS A MINIMUM OF TWO FEET OF COVER ABOVE THE TOP OF PIPE.
- 9. VERIFY THE LOCATION, SIZE, AND ELEVATION OF ALL CONNECTIONS TO EXISTING DRAINAGE FACILITIES PRIOR TO ORDERING DRAINAGE STRUCTURES AND PIPES. NOTIFY THE ENGINEER OF ANY DEVIATIONS FROM THE INFORMATION SHOWN ON THE PLANS PRIOR TO INSTALLING ANY DRAINAGE PIPES OR STRUCTURES.
- 10. PROVIDE TEMPORARY POSITIVE DRAINAGE THROUGHOUT THE PROJECT DURING ALL STAGES. PROVIDING TEMPORARY DRAINAGE IS INCIDENTAL TO CONSTRUCTION UNLESS OTHERWISE SHOWN IN THE TRAFFIC CONTROL/STAGING PLANS.
- 11. SUPPORTING UTILITIES DURING STORM SEWER CONSTRUCTION IS INCIDENTAL TO STORM SEWER PIPE AND/OR STORM SEWER STRUCTURE CONSTRUCTION.
- 12. PLAN VIEW HIGHLIGHTING ALONG STORM SEWER PIPES REPRESENTS THE STORM SEWER PROFILE SHOWN IN THE PROFILE VIEW BELOW ON THE SAME STORM SEWER SHEET.
- 13. CONCRETE COLLARS FOR PIPE SHALL ONLY BE PAID FOR WHEN SHOWN IN THE PLANS. ALL OTHER CONNECTIONS BETWEEN PIPES AND STORM SEWER STRUCTURES SHALL BE INCIDENTAL TO THE STORM SEWER PIPE OR STORM SEWER STRUCTURE.

STORM SEWER LEGEND

XX
XXX.XX

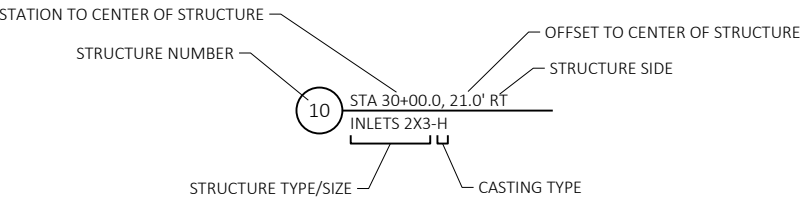
PXX

CC

RL

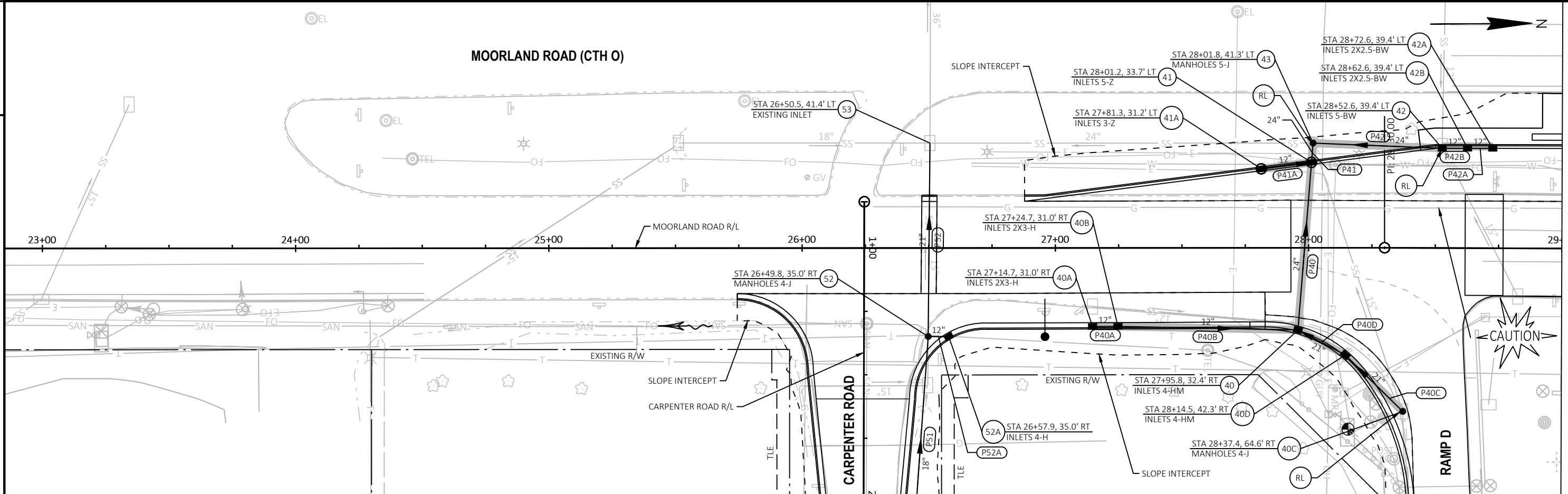
STORM SEWER STRUCTURE NUMBER IN PROFILE VIEW WITH RIM ELEVATION
STORM SEWER PIPE NUMBER
CONCRETE COLLARS FOR PIPE
RECONNECT STORM SEWER LATERAL
PIPE RUN SHOWN IN PROFILE VIEW ON CURRENT SHEET

STORM SEWER STRUCTURE ANNOTATION LEGEND

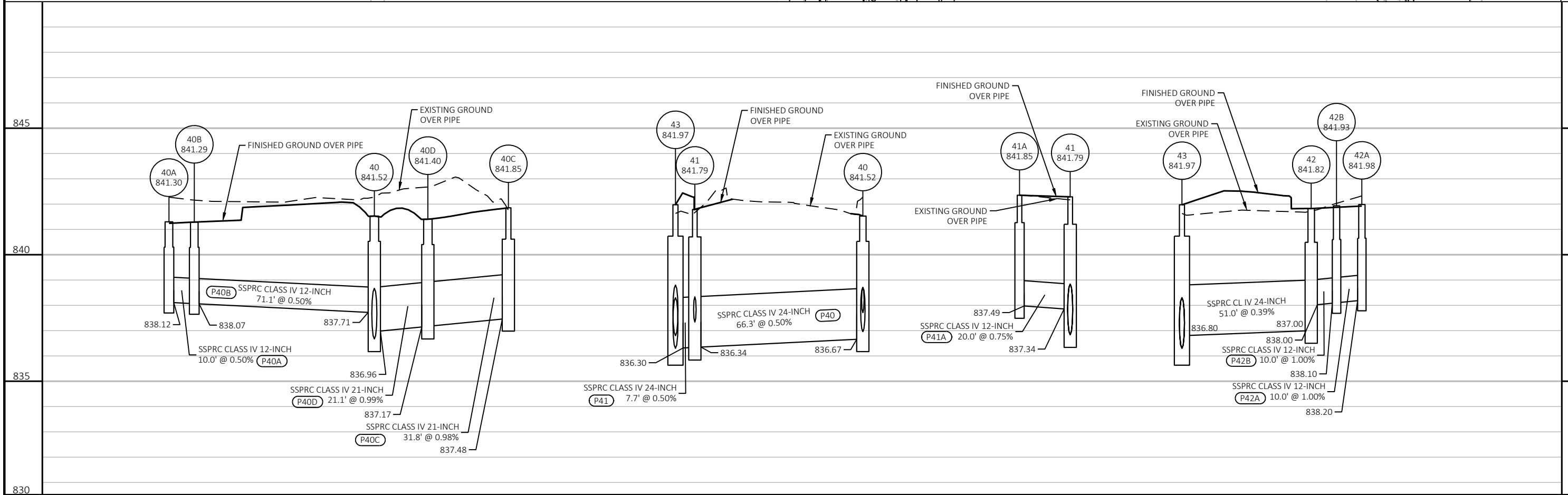


STRUCTURE TYPES	
INLETS 3	INLETS 3-FT DIAMETER
INLETS 4	INLETS 4-FT DIAMETER
INLETS 5	INLETS 5-FT DIAMETER
INLETS 2X2	INLETS 2X2-FT
INLETS 2X2.5	INLETS 2X2.5-FT
INLETS 2X3	INLETS 2X3-FT
INLETS MEDIAN 1G	INLETS MEDIAN 1 GRATE
INLETS MEDIAN 3G	INLETS MEDIAN 3 GRATE MODIFIED
MANHOLE 4	MANHOLE 4-FT DIAMETER
MANHOLE 5	MANHOLE 5-FT DIAMETER
MANHOLE 6	MANHOLE 6-FT DIAMETER
MANHOLE 3X3	MANHOLE 3X3-FT
CASTING TYPES	
B	INLET COVERS TYPE B
BW	INLET COVERS TYPE BW
H	INLET COVERS TYPE H
HM	INLET COVERS TYPE HM
J	MANHOLE COVERS TYPE J
MS	INLET COVERS TYPE MS
S	INLET COVERS TYPE S
Z	INLET COVERS TYPE Z

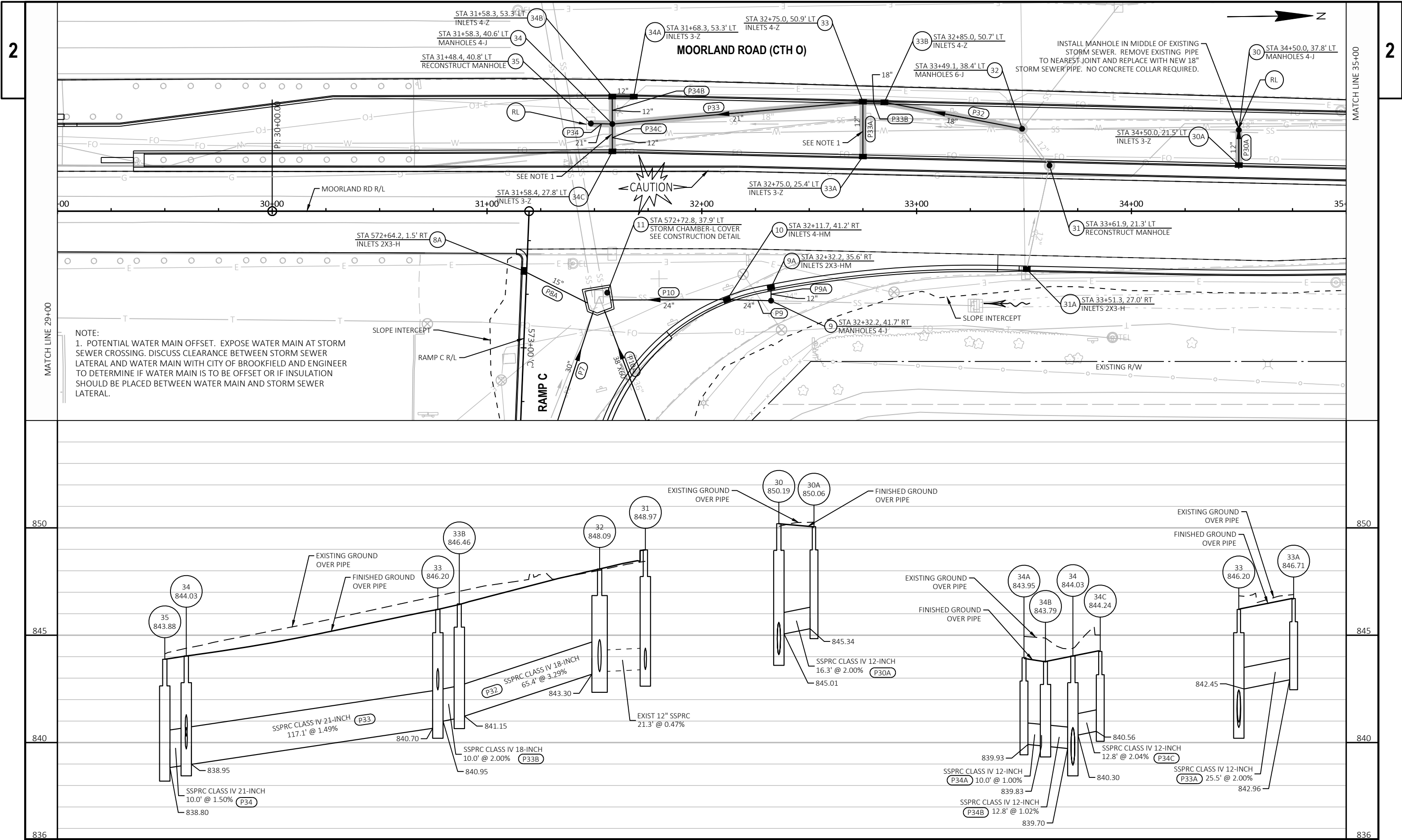
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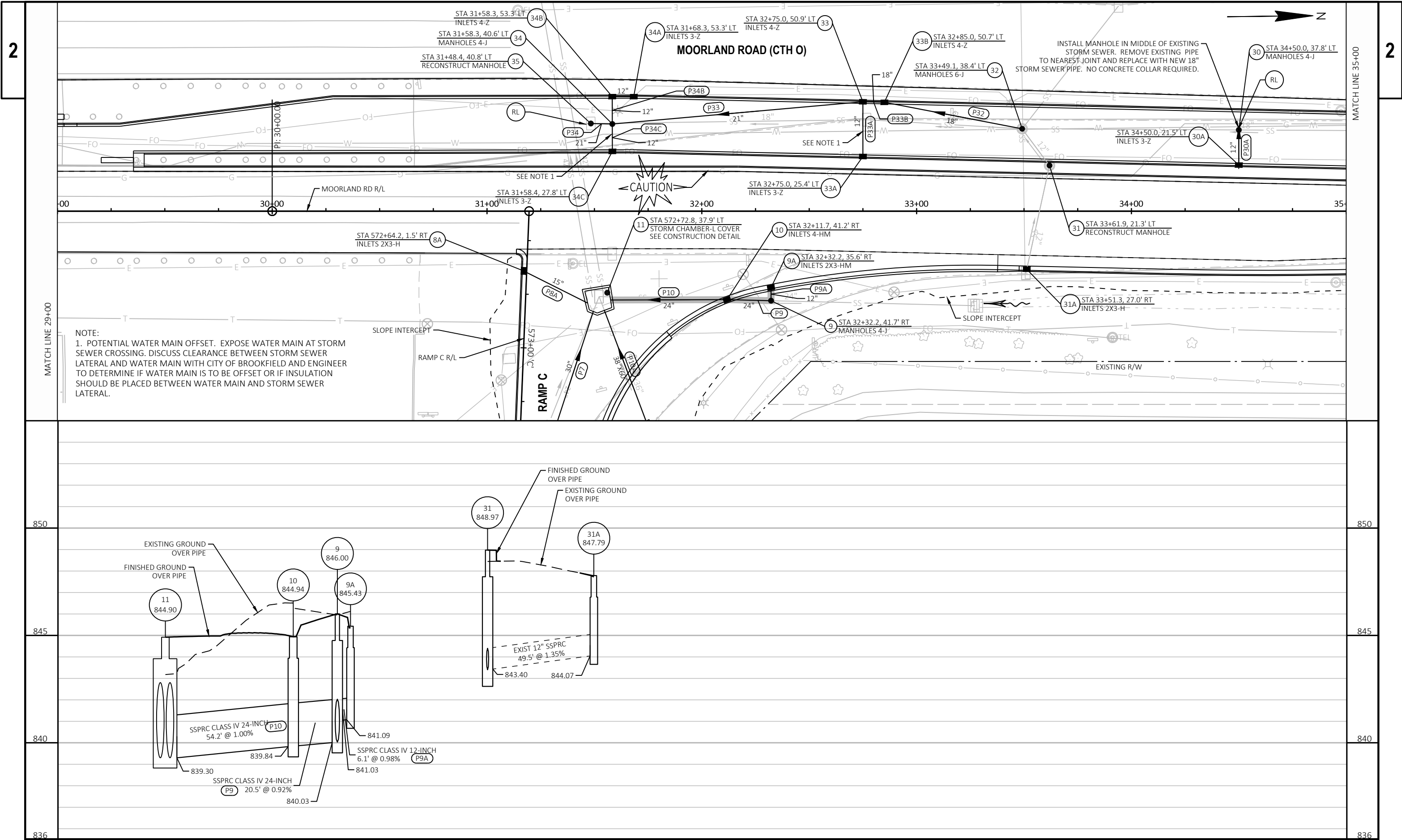


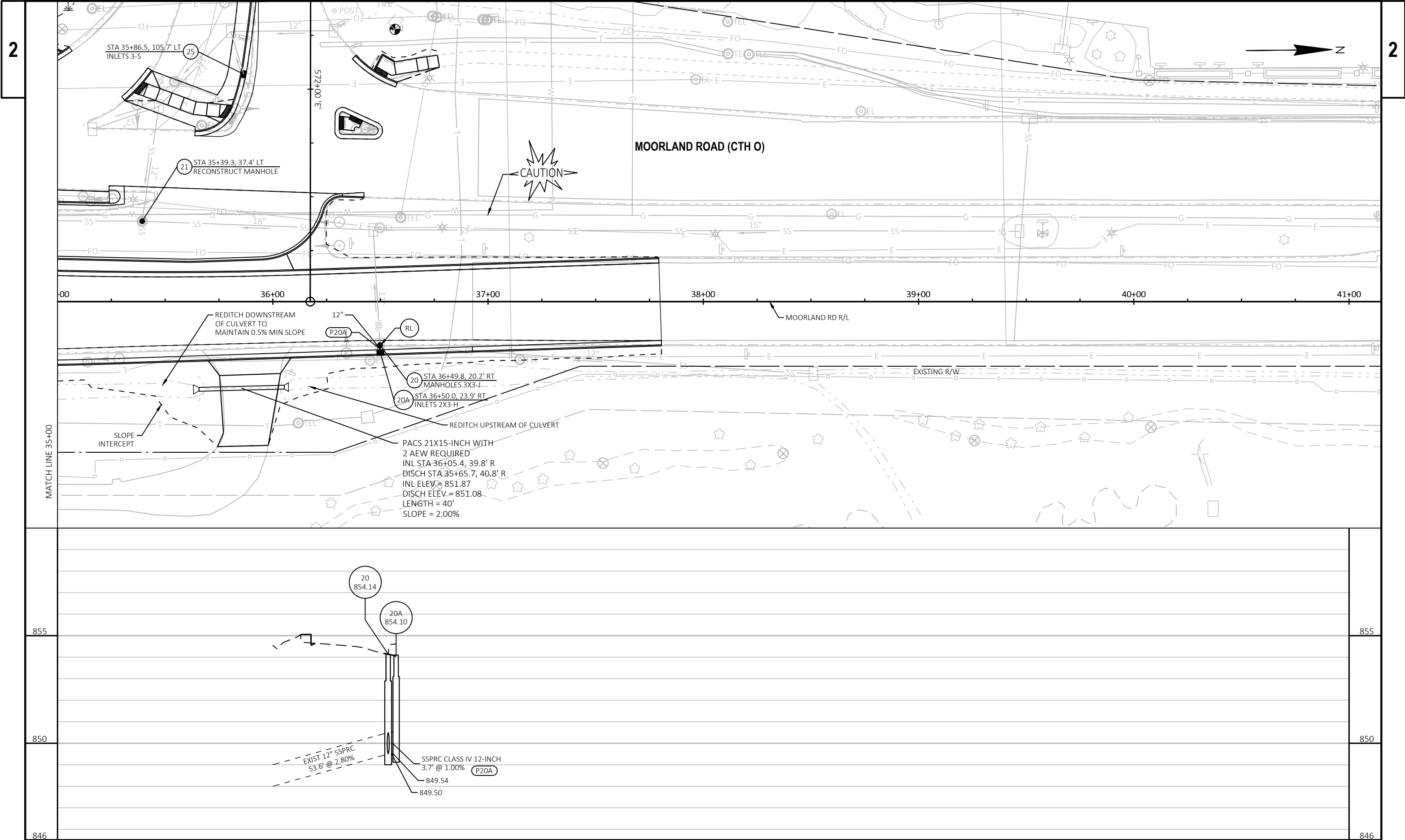
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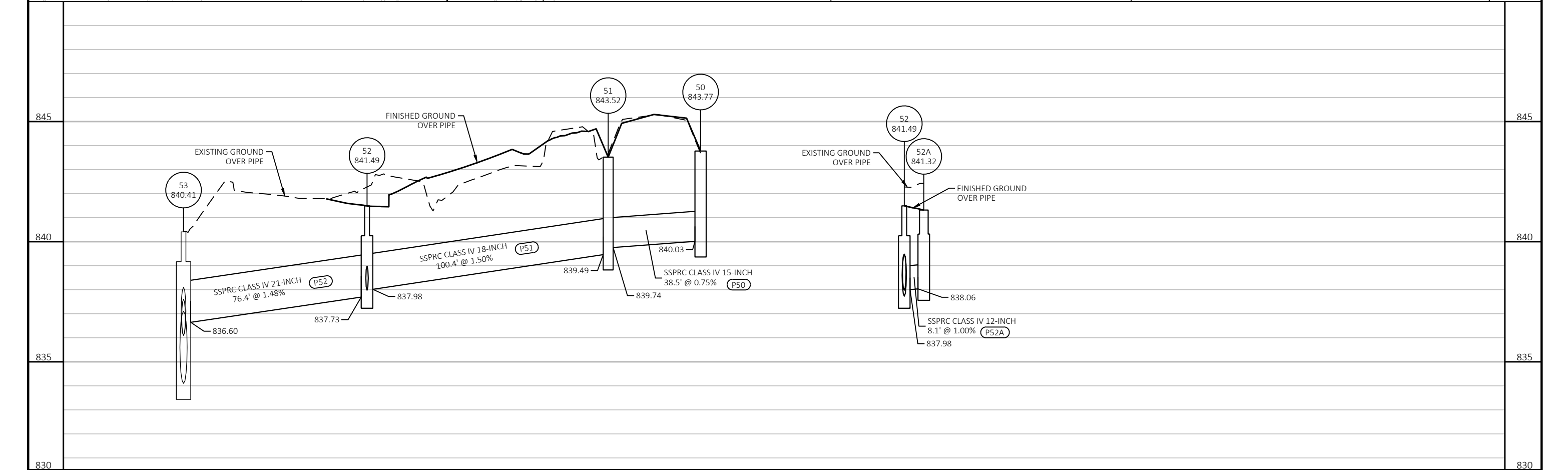
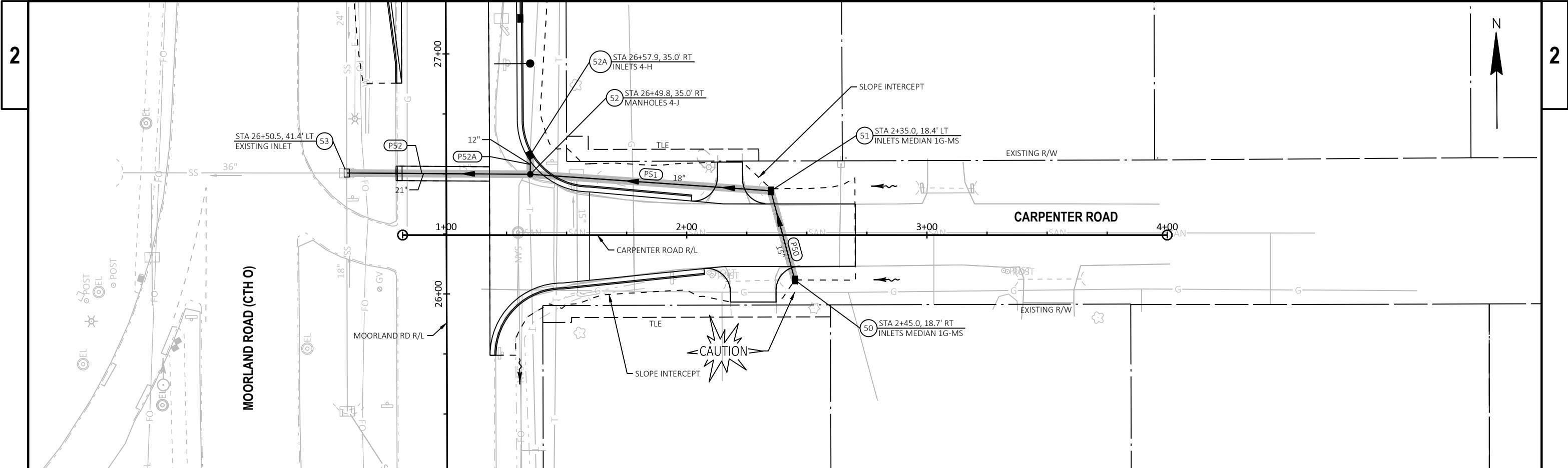


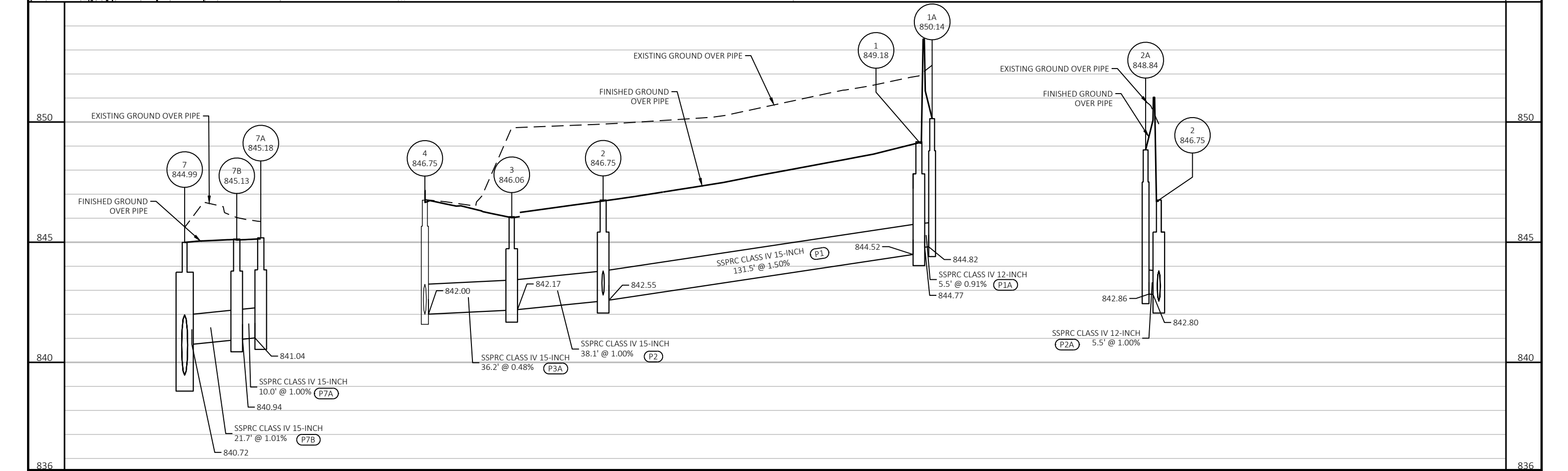
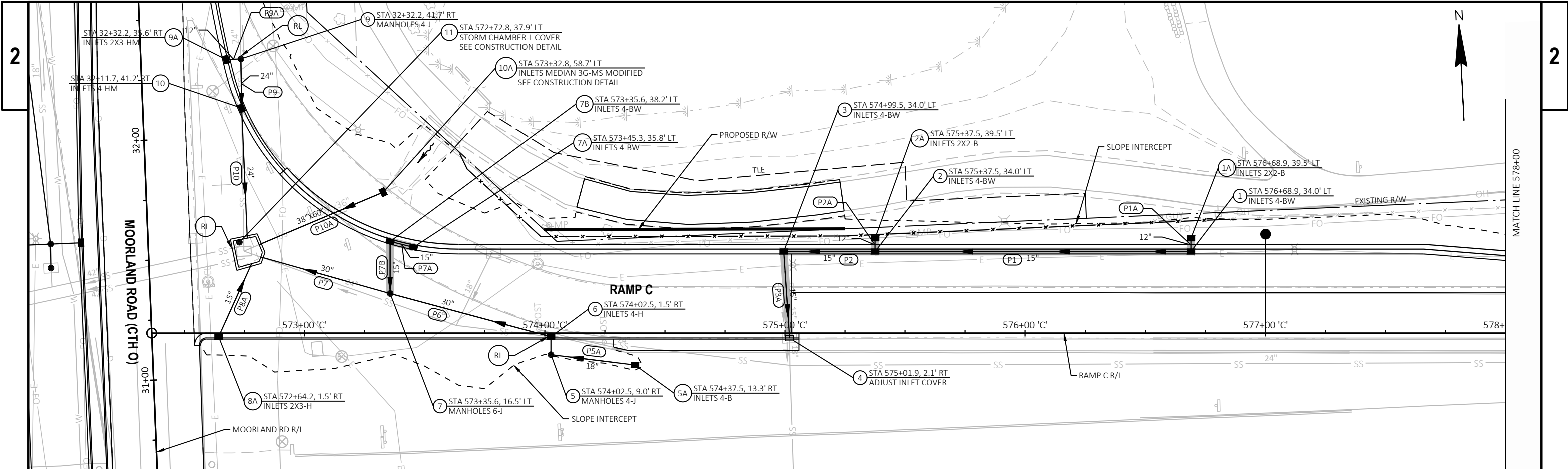
PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	STORM SEWER - MOORLAND ROAD	SHEET 49
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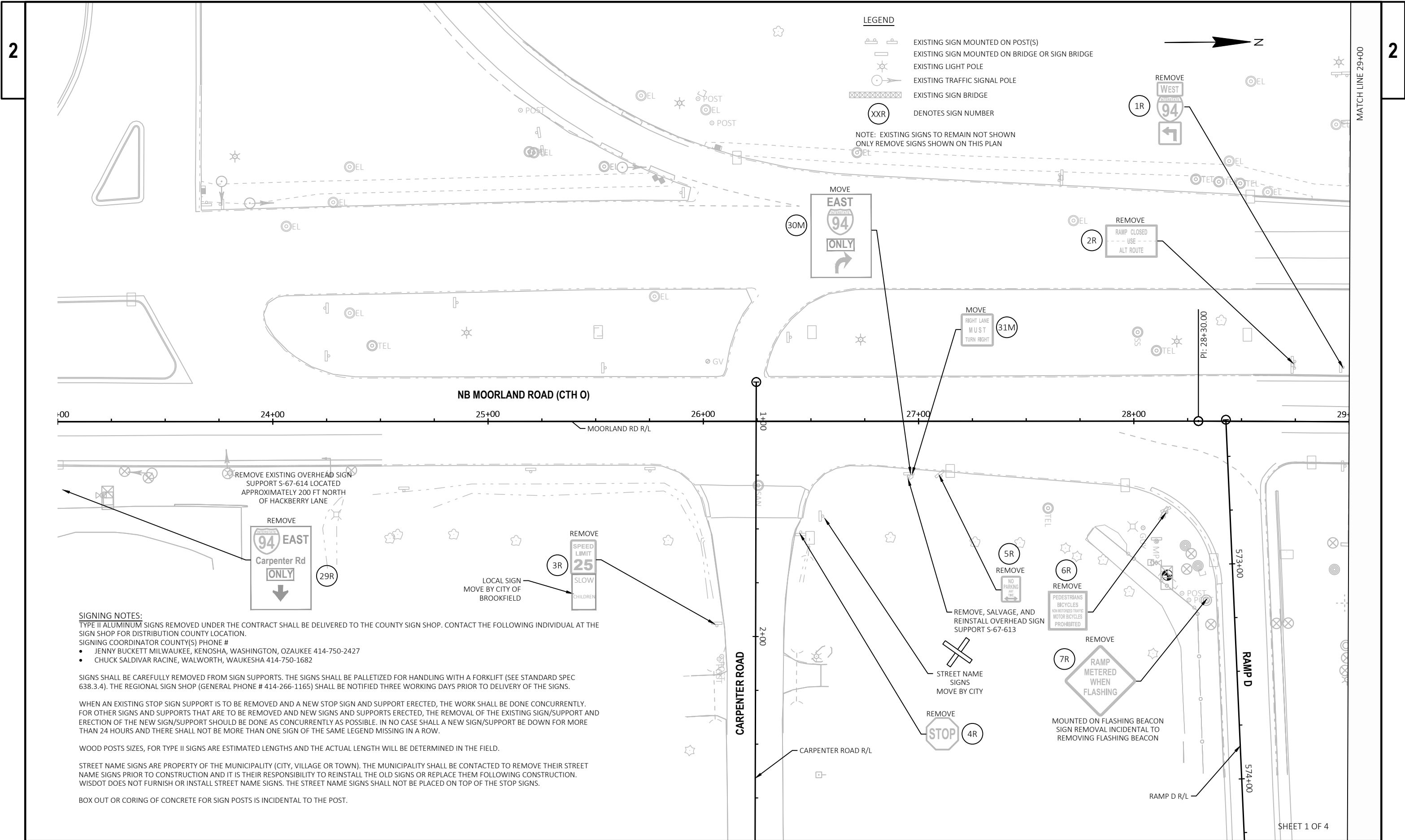


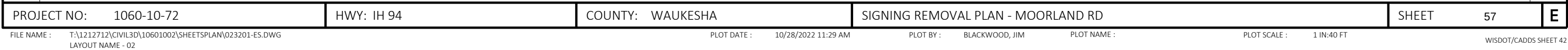






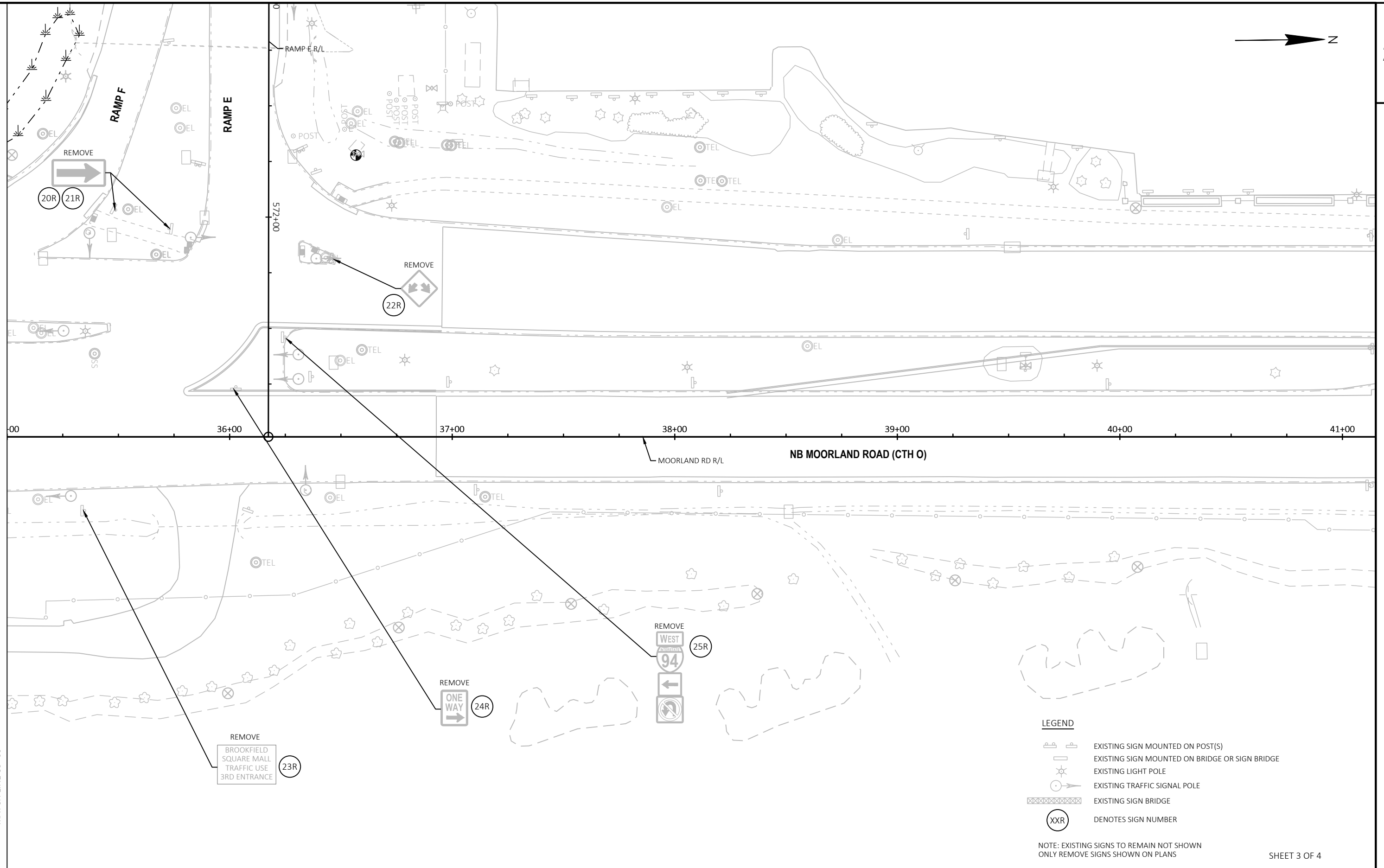






2

2 |



PROJECT NO:	1060-10-72
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HWY: IH 94

COUNTY: WAUKESHA

SIGNING REMOVAL PLAN - MOORLAND RD

SHEET 58

11

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETSPLAN\023201-ES.DWG
LAYOUT NAME - 03

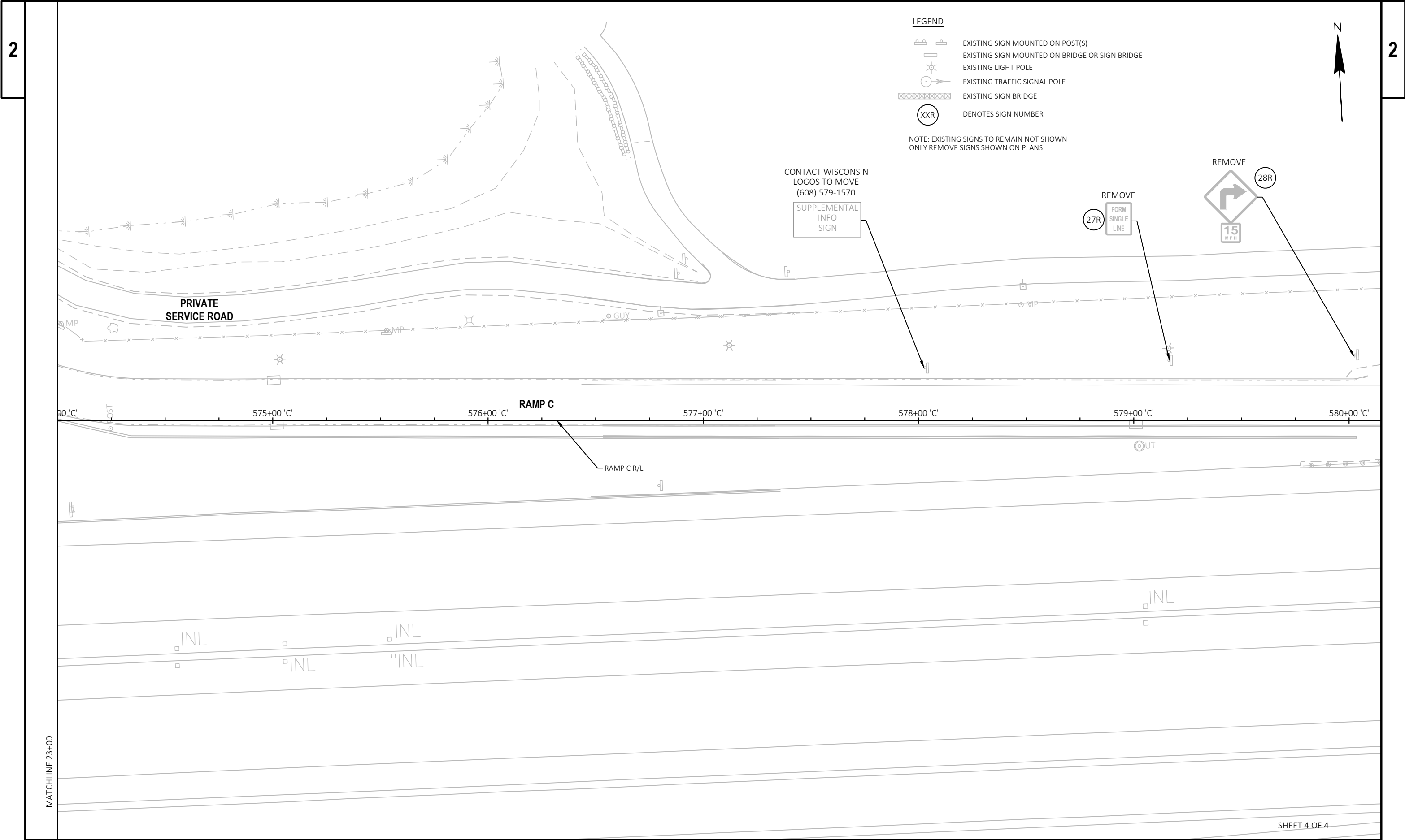
PLOT DATE : 10/28/2022 11:29 AM

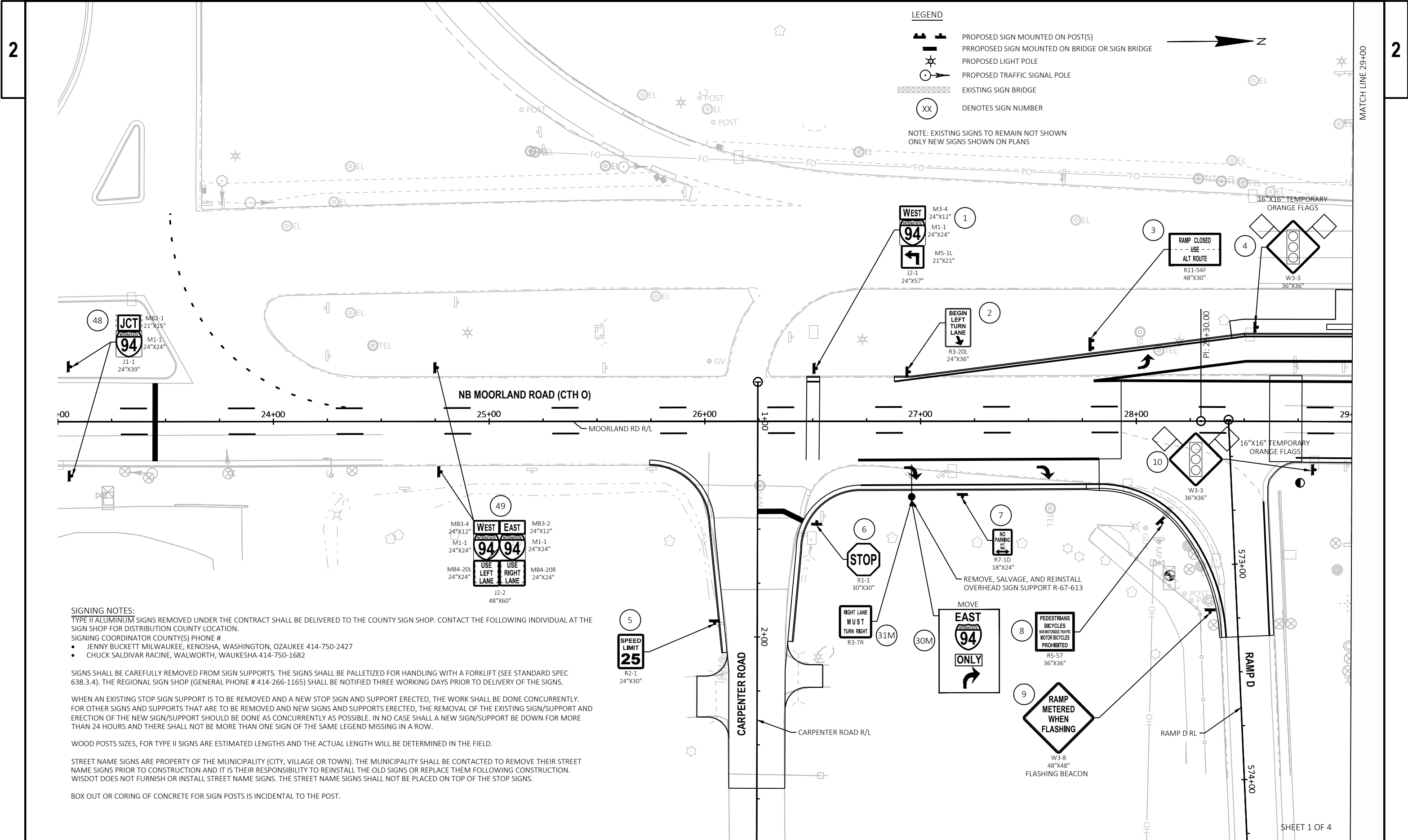
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42





SIGNING NOTES:
TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.
SIGNING COORDINATOR COUNTY(S) PHONE #
• JENNY BUCKETT MILWAUKEE, KENOSHA, WASHINGTON, OZAUKEE 414-750-2427
• CHUCK SALDIVAR RACINE, WALWORTH, WAUKESHA 414-750-1682

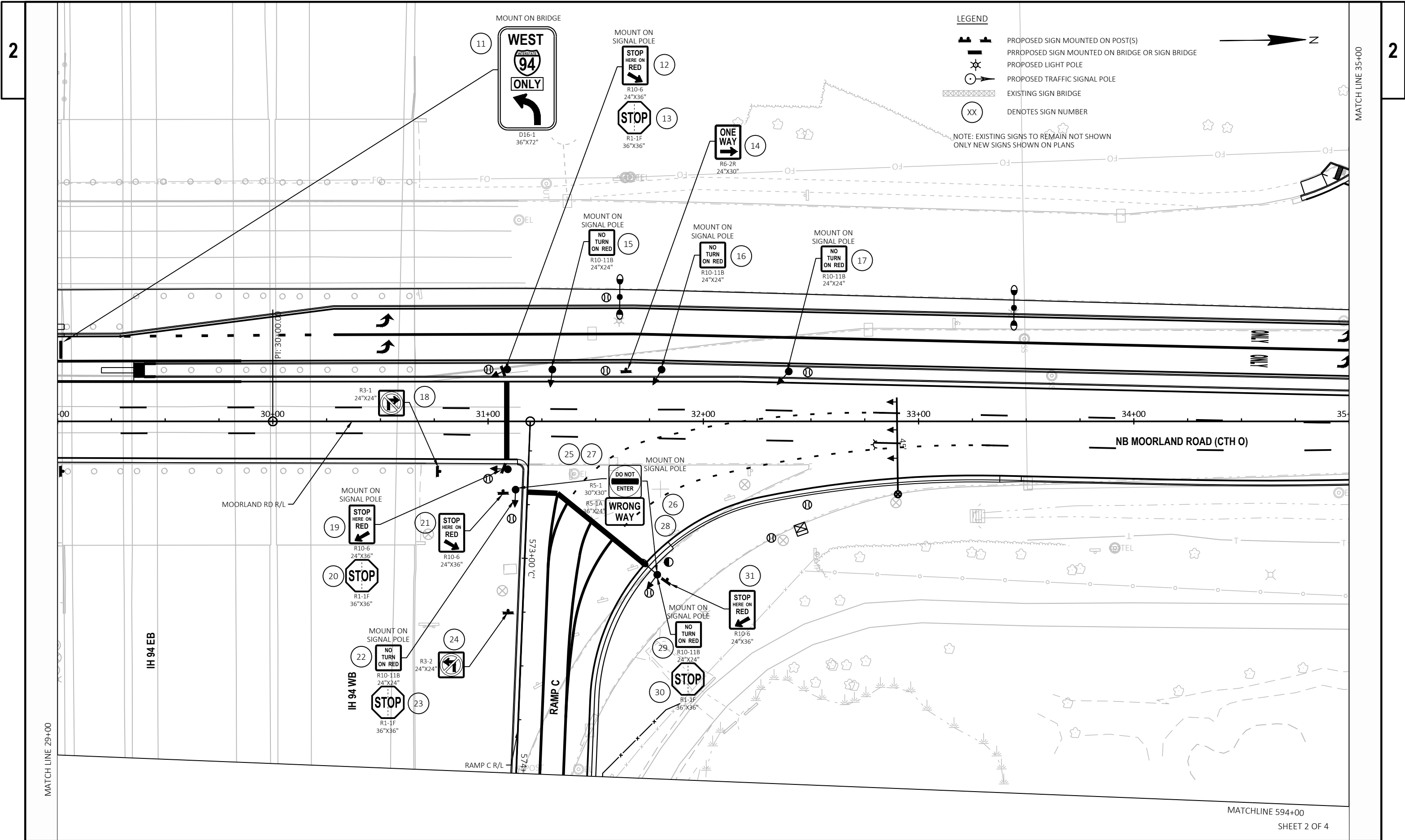
SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (GENERAL PHONE # 414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

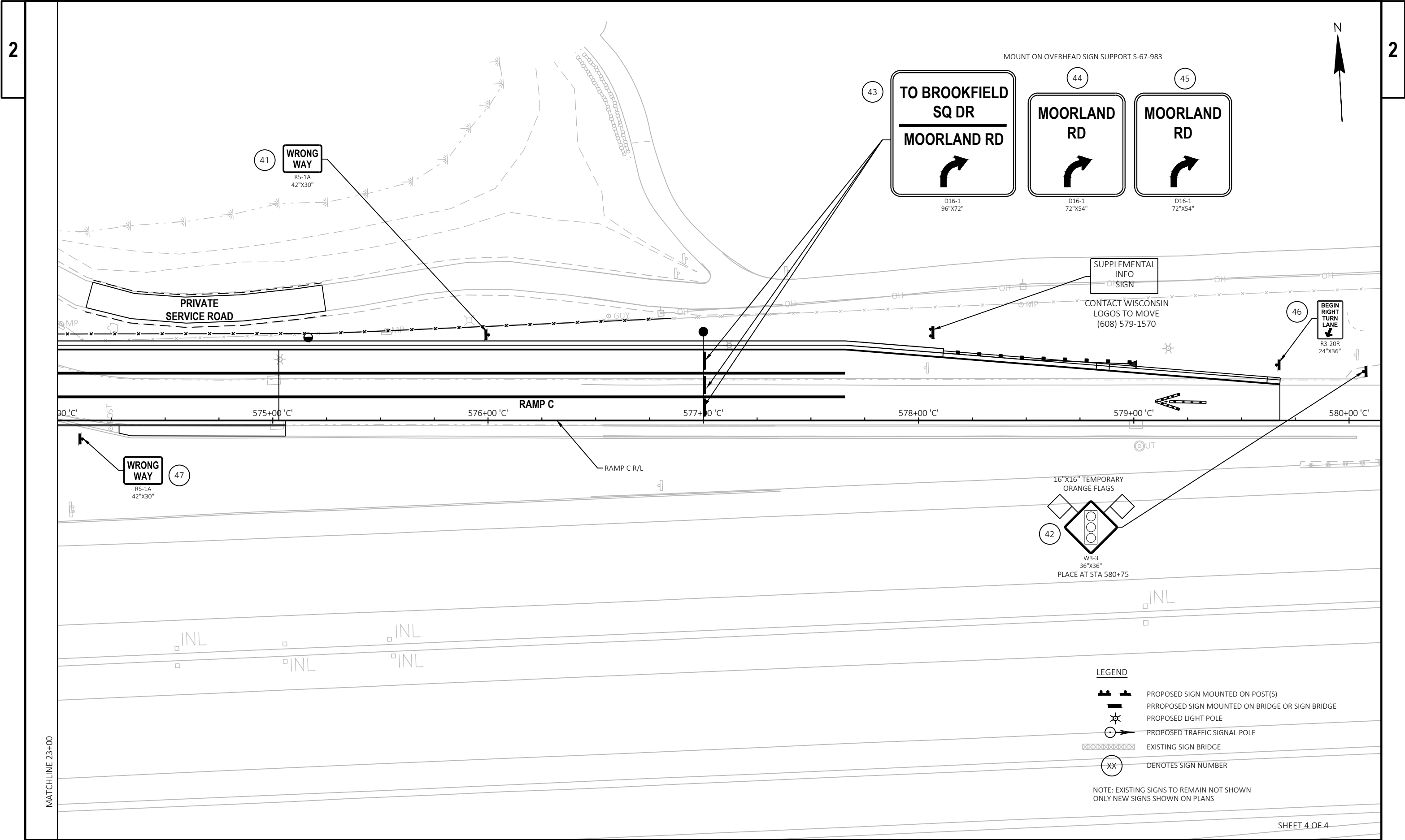
WOOD POSTS SIZES, FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

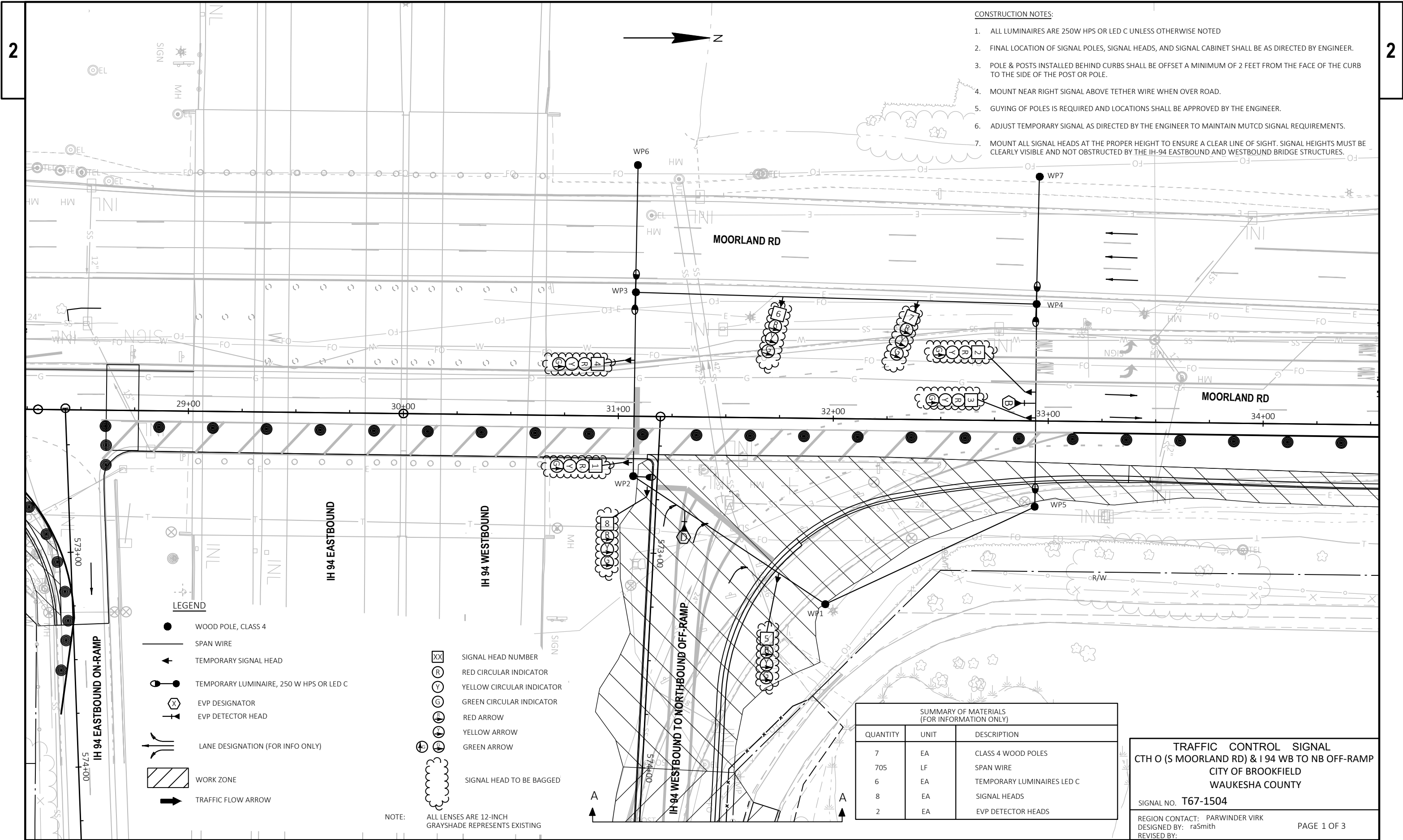
STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

BOX OUT OR CORING OF CONCRETE FOR SIGN POSTS IS INCIDENTAL TO THE POST.









- CONSTRUCTION NOTES:
1. ALL LUMINAIRES ARE 250W HPS OR LED C UNLESS OTHERWISE NOTED
 2. FINAL LOCATION OF SIGNAL POLES, SIGNAL HEADS, AND SIGNAL CABINET SHALL BE AS DIRECTED BY ENGINEER.
 3. POLE & POSTS INSTALLED BEHIND CURBS SHALL BE OFFSET A MINIMUM OF 2 FEET FROM THE FACE OF THE CURB TO THE SIDE OF THE POST OR POLE.
 4. MOUNT NEAR RIGHT SIGNAL ABOVE TETHER WIRE WHEN OVER ROAD.
 5. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
 6. ADJUST TEMPORARY SIGNAL AS DIRECTED BY THE ENGINEER TO MAINTAIN MUTCD SIGNAL REQUIREMENTS.
 7. MOUNT ALL SIGNAL HEADS AT THE PROPER HEIGHT TO ENSURE A CLEAR LINE OF SIGHT. SIGNAL HEIGHTS MUST BE CLEARLY VISIBLE AND NOT OBSTRUCTED BY THE IH-94 EASTBOUND AND WESTBOUND BRIDGE STRUCTURES.

- LEGEND
- WOOD POLE, CLASS 4
 - SPAN WIRE
 - TEMPORARY SIGNAL HEAD
 - TEMPORARY LUMINAIRE, 250 W HPS OR LED C
 - EVP DESIGNATOR
 - EVP DETECTOR HEAD
 - LANE DESIGNATION (FOR INFO ONLY)
 - WORK ZONE
 - TRAFFIC FLOW ARROW

- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- SIGNAL HEAD TO BE BAGGED

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

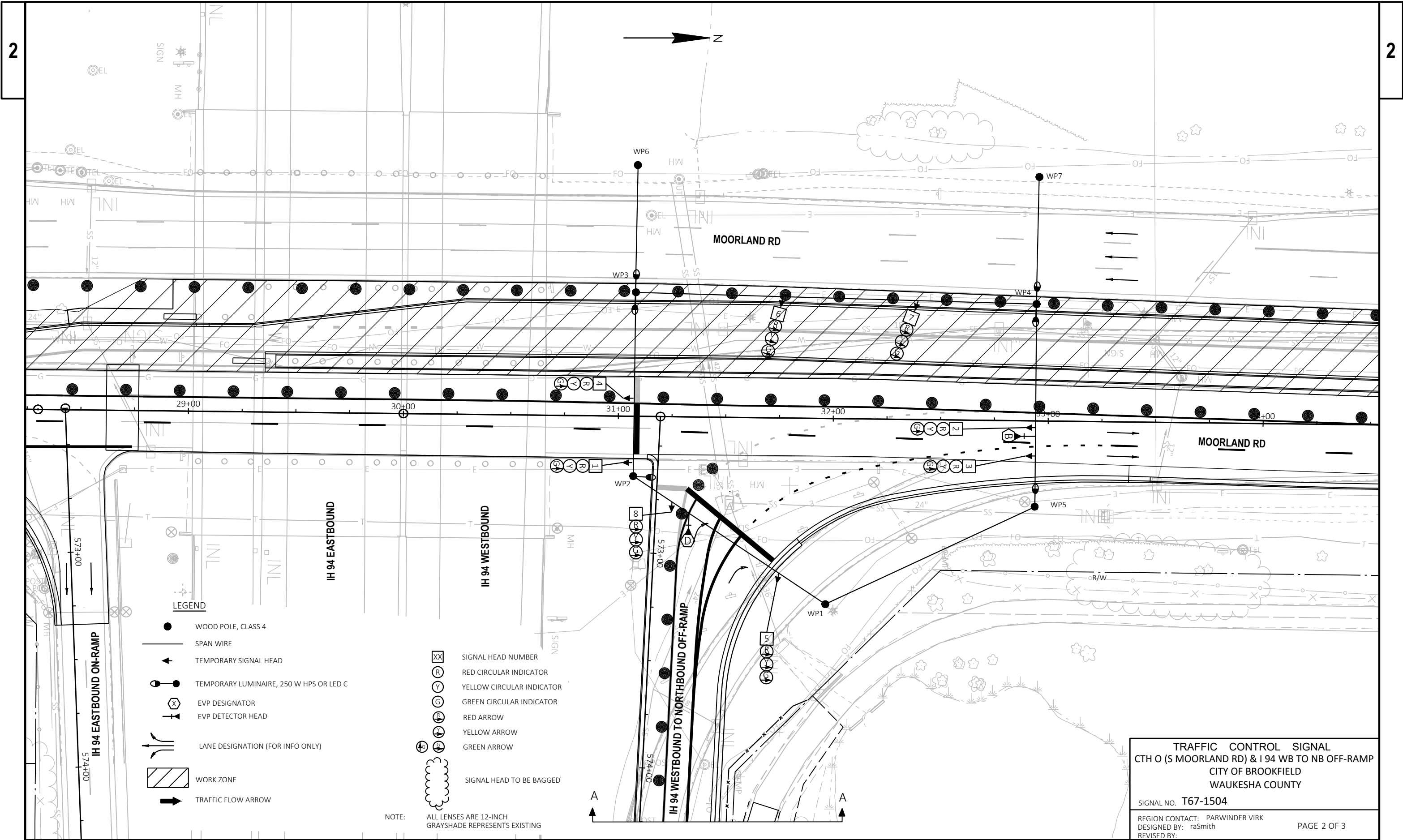
SUMMARY OF MATERIALS (FOR INFORMATION ONLY)		
QUANTITY	UNIT	DESCRIPTION
7	EA	CLASS 4 WOOD POLES
705	LF	SPAN WIRE
6	EA	TEMPORARY LUMINAIRES LED C
8	EA	SIGNAL HEADS
2	EA	EVP DETECTOR HEADS

TRAFFIC CONTROL SIGNAL
CTH 0 (S MOORLAND RD) & I 94 WB TO NB OFF-RAMP
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. T67-1504

REGION CONTACT: PARWINDER VIRK
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 3



2

2

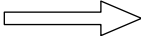
	HEAD NUMBERS	F L A S H
Ø1		
Ø2		
Ø3		
Ø4		
Ø5		
Ø6	1,2,3,4	R
Ø7		
Ø8	5,6,7,8	R
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLA		
OLB		
OLC		
OLD		

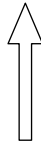
RING 1

NOT USED	NOT USED
Ø1	Ø2

NOT USED	NOT USED
Ø3	Ø4

RING 2

NOT USED	
Ø5	Ø6

NOT USED	
Ø7	Ø8

BARRIER



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2				
3				
4				
5				
6	X		MAX	X
7				
8	X		MAX	X

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	X

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS67-0053

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT

NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	B	D
MOVEMENT		
PHASE	6	8

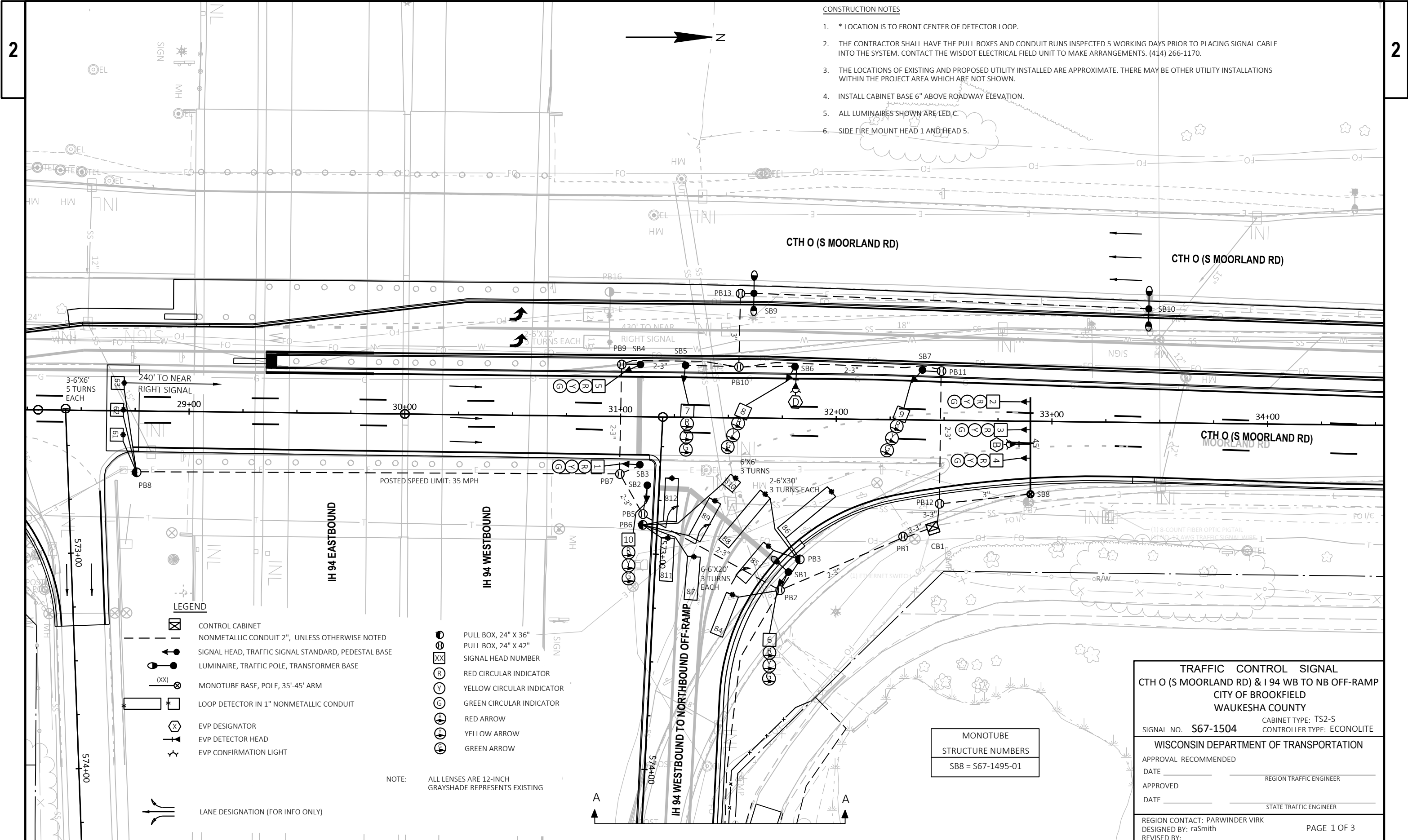
AFTER PREEMPTION SEQUENCE 6, CONTROLLER SHALL RETURN TO PHASE 6.
AFTER PREEMPTION SEQUENCE 8, CONTROLLER SHALL RETURN TO PHASE 8.

GENERAL NOTES:

1. BAG SIGNAL HEADS DURING STAGE 1 IF TEMPORARY SIGNAL IS TURNED ON BEFORE STAGE 2.

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF-RAMP
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO:	T67-1504	CABINET TYPE:	TEMP
		CONTROLLER TYPE:	ECONOLITE
DATE:	11/2022	PAGE NO.	3 OF 3



CONSTRUCTION NOTES

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLED ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
4. INSTALL CABINET BASE 6" ABOVE ROADWAY ELEVATION.
5. ALL LUMINAIRES SHOWN ARE LED.C.
6. SIDE FIRE MOUNT HEAD 1 AND HEAD 5.

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- MONOTUBE BASE, POLE, 35'-45' ARM
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- EVP CONFIRMATION LIGHT
- LANE DESIGNATION (FOR INFO ONLY)
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

MONOTUBE
STRUCTURE NUMBERS
SB8 = S67-1495-01

TRAFFIC CONTROL SIGNAL
CTH O (S MOORLAND RD) & I 94 WB TO NB OFF-RAMP
CITY OF BROOKFIELD
WAUKESHA COUNTY

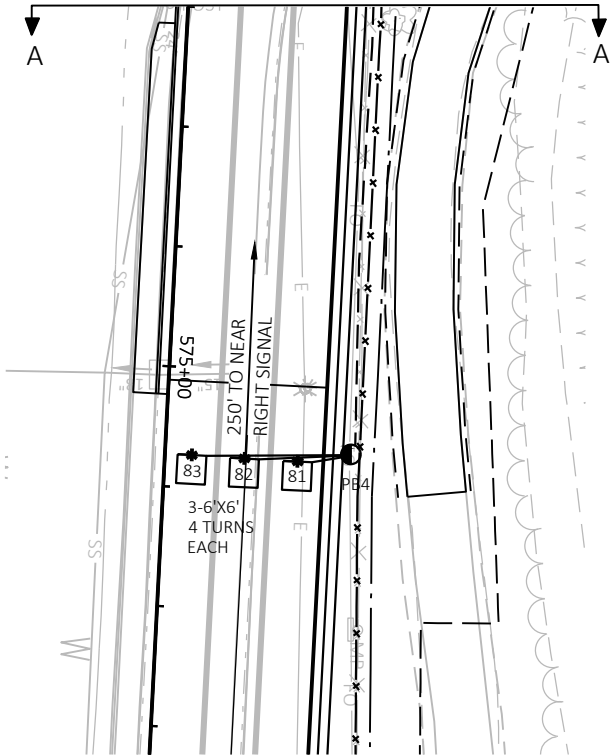
SIGNAL NO. S67-1504
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE _____ REGION TRAFFIC ENGINEER
APPROVED
DATE _____ STATE TRAFFIC ENGINEER

REGION CONTACT: PARWINDER VIRK
DESIGNED BY: raSmith
REVISED BY: _____

PAGE 1 OF 3



TRAFFIC CONTROL SIGNAL CTH O (S MOORLAND RD) & I 94 WB TO NB OFF-RAMP CITY OF BROOKFIELD WAUKESHA COUNTY	
SIGNAL NO. S67-1504	
REGION CONTACT: PARWINDER VIRK DESIGNED BY: raSmith REVISED BY:	PAGE 2 OF 3

	HEAD NUMBERS	F L A S H
Ø1		
Ø2		
Ø3		
Ø4		
Ø5		
Ø6	1,2,3,4,5	R
Ø7		
Ø8	6,7,8,9,10	R →
Ø2P		
Ø4P		
Ø6P		
Ø8P		
OLE		
OLF		
OLG		
OLH		

RING 1

NOT USED	NOT USED
Ø1	Ø2

NOT USED	NOT USED
Ø3	Ø4

RING 2

NOT USED	→
Ø5	Ø6

NOT USED	↑
Ø7	Ø8

BARRIER



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2				
3				
4				
5				
6	X		MIN	X
7				
8				X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	B	D
MOVEMENT	→	↑
PHASE	6	8

AFTER PREEMPTION SEQUENCE 6, CONTROLLER
SHALL RETURN TO PHASE 6.AFTER PREEMPTION SEQUENCE 8, CONTROLLER
SHALL RETURN TO PHASE 8.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	61	63	81	83	85	87	89	811
CALLED PHASE	6	6	8	8	8	8	8	8
CALL OPTION	X	X			X	X	X	X
DELAY TIME								
EXTENTION OPTION	X	X	X	X	X	X	X	X
EXTEND TIME			X	X				
USE ADDED INITIAL	X	X						
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	62		82	84	86	88	810	812
CALLED PHASE	6		8	8	8	8	8	8
CALL OPTION	X			X	X	X	X	X
DELAY TIME								
EXTENTION OPTION	X		X	X	X	X	X	X
EXTEND TIME			X					
USE ADDED INITIAL	X							
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29

20	18	24	22	28	26	32	30

DETECTOR INPUT	
PLAN LOOP DETECTOR*(S)	
CALLED PHASE	
CALL OPTION	
DELAY TIME	
EXTENTION OPTION	
EXTEND TIME	
USE ADDED INITIAL	
CROSS SWITCH PHASE	

DETECTOR INPUT	
PLAN LOOP DETECTOR*(S)	
CALLED PHASE	
CALL OPTION	
DELAY TIME	
EXTENTION OPTION	
EXTEND TIME	
USE ADDED INITIAL	
CROSS SWITCH PHASE	

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 67-0053

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	X
LIFT BRIDGE	
QUEUE DETECTION	

PROJECT ID:	1060-10-72
INTERSECTION:	CTH O (S MOORLAND RD) & I-94 WB TO NB OFF-RAMP

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED NEUTRAL	PED INPUT
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	7	6				RED	ORG	GRN					
SB2	7	10				RED	ORG	GRN					
SB3	7	1	RED	ORG	GRN								
SB4	7	5	RED	ORG	GRN								
SB5	7	7				RED	ORG	GRN					
SB6	7	8				RED	ORG	GRN					
SB7	7	9				RED	ORG	GRN					
SB8	7	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		4	RED	ORG	GRN								

Equipment Grounding Conductor 10 AWG Green XLP	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB2	SB1
PB5	SB2
PB6	SB3
PB8	SB4
PB9	SB5
PB10	SB7
PB11	CB1

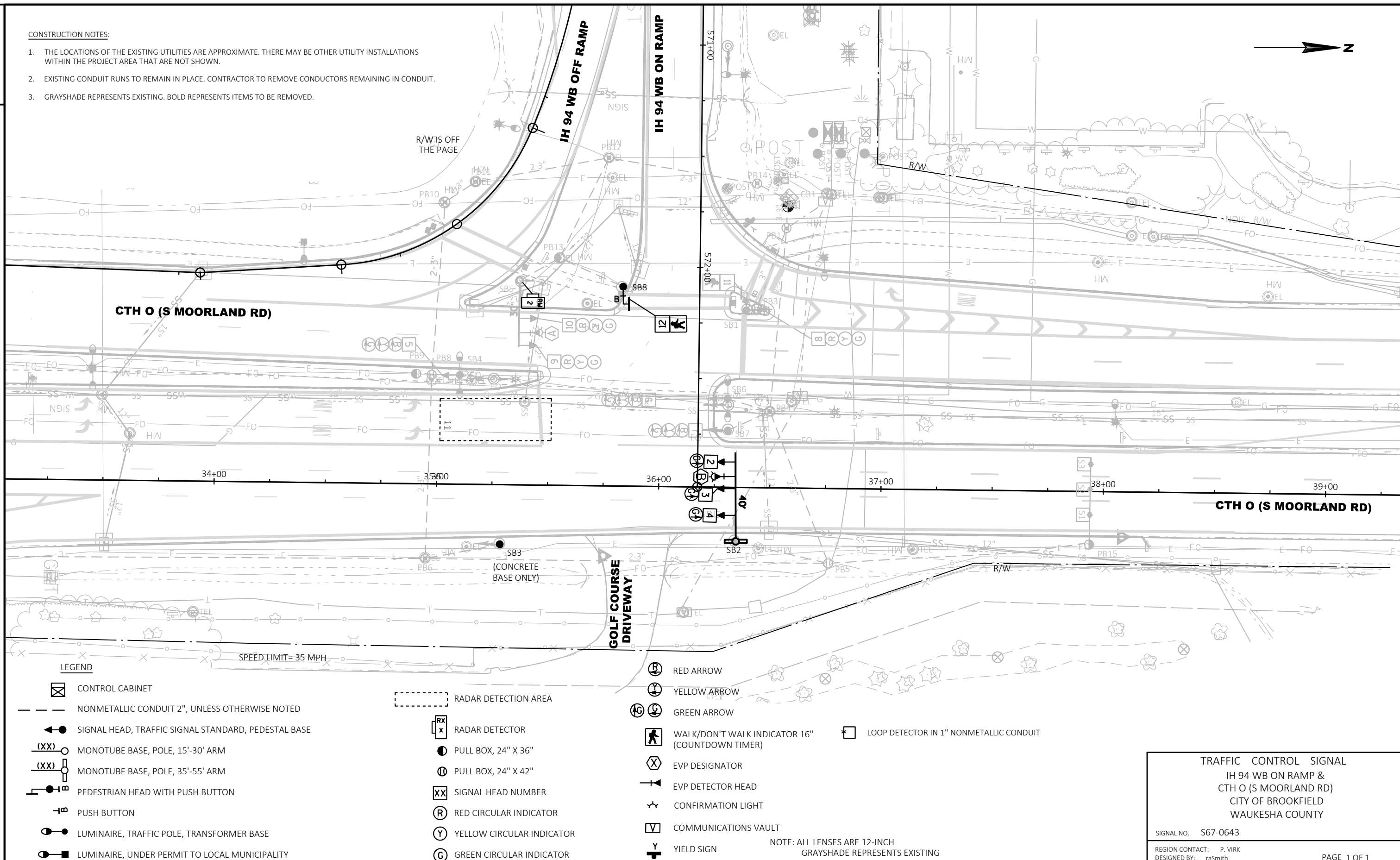
Lighting UF 2-10 AWG Grounded	
From	To
CB1	SB1
CB1	SB9
CB1	SB10

Emergency Vehicle Preemption	
From	To
CB1	HEAD B (SB8)
CB1	HEAD D (SB6)

- *Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
- *Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
- *Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.

CONSTRUCTION NOTES:

1. THE LOCATIONS OF THE EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. EXISTING CONDUIT RUNS TO REMAIN IN PLACE. CONTRACTOR TO REMOVE CONDUCTORS REMAINING IN CONDUIT.
3. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.



PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC SIGNAL REMOVAL PLAN

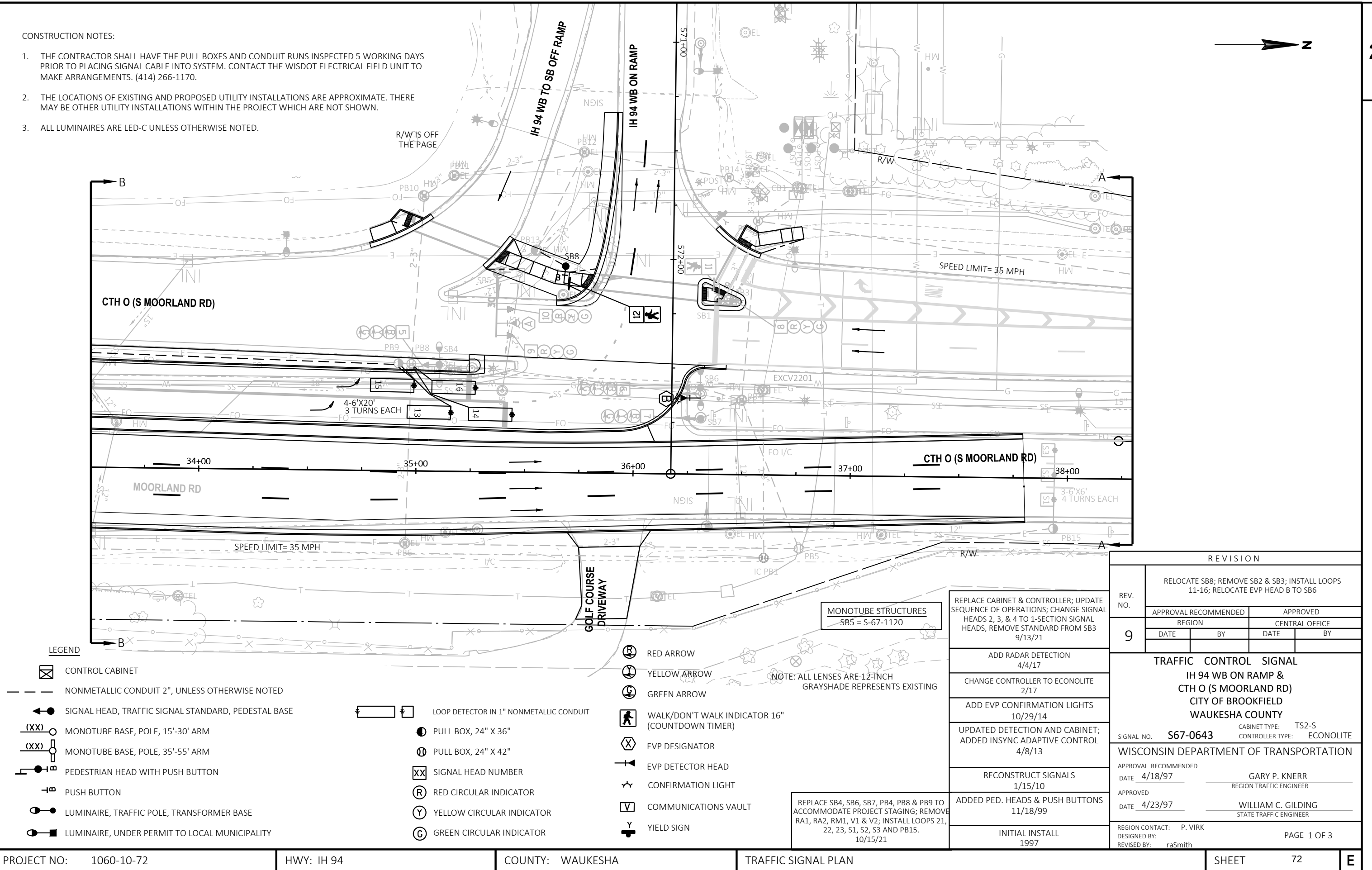
SHEET

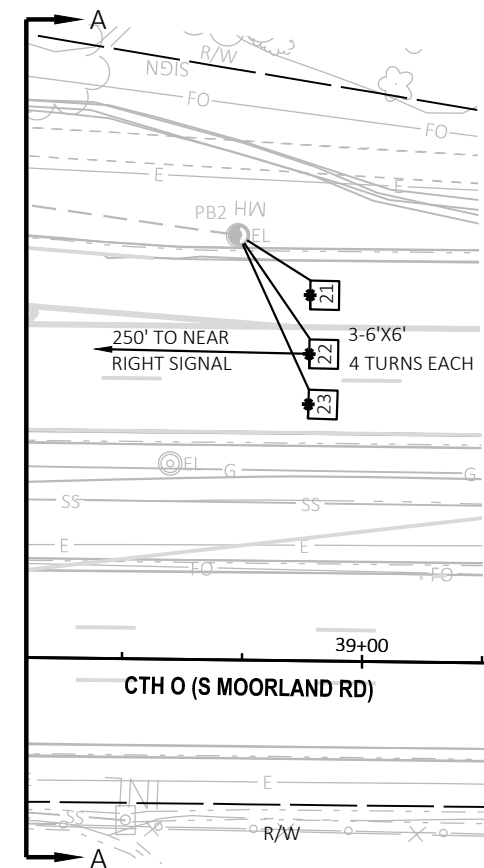
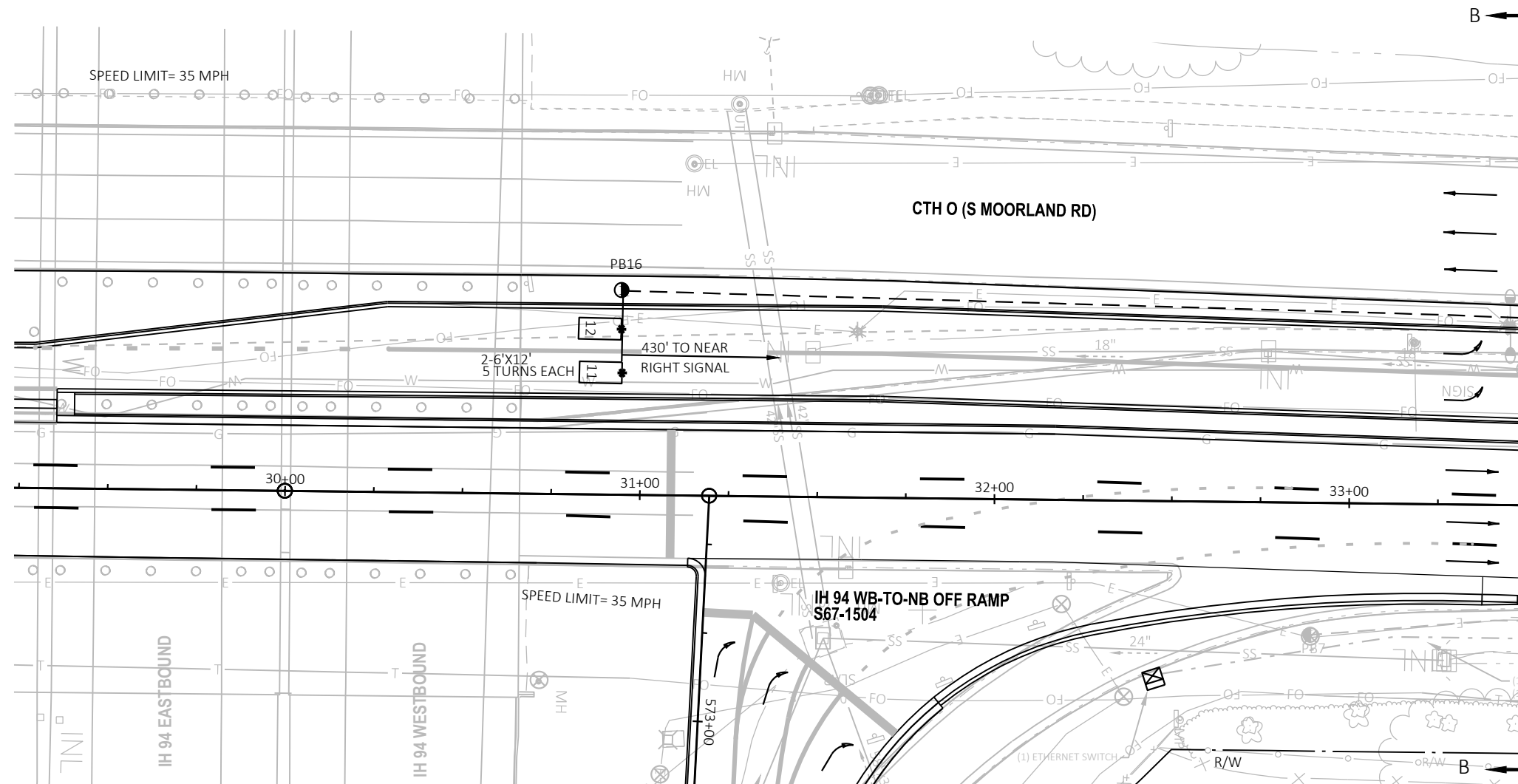
71

E

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.





TRAFFIC CONTROL SIGNAL
IH 94 WB ON RAMP &
CTH O (S MOORLAND RD)
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-0643

REGION CONTACT: P. VIRK

DESIGNED BY:

REVISED BY: raSmith

PAGE 2 OF 3

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC SIGNAL PLAN

SHEET 73

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETSP\PLAN\S67-0643_R8.DWG
LAYOUT NAME - S67-0643_R8 - S67-0643_R8_PG2

PLOT DATE : 10/29/2022 10:34 AM

PLOT BY : UTIC, ANDY

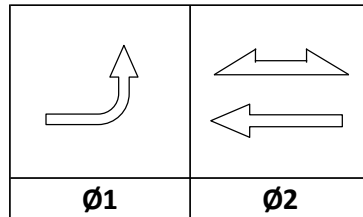
PLOT NAME :

PLOT SCALE : 1 IN:40 FT

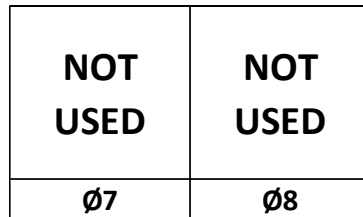
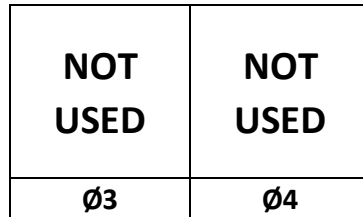
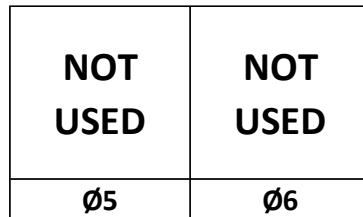
WISDOT/CADDs SHEET 42

	HEAD NUMBERS	F L A S H
Ø1	5,6,7	R
Ø2	8,9,10	R
Ø3		
Ø4		
Ø5		
Ø6		
Ø7		
Ø8		
Ø2P	11,12	
Ø4P		
Ø6P		
Ø8P		
OLE		
OLF		
OLG		
OLH		

RING 1



RING 2



BARRIER



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2	X		MIN	X
3				
4				
5				
6				
7				
8				

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B
MOVEMENT	←	↗
PHASE	2	1

AFTER PREEMPTION SEQUENCE 2 OR 1,
CONTROLLER SHALL RETURN TO PHASE 2.

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	21	23	S1	S3	11	13	15	
CALLED PHASE	2	2			1	1	1	
CALL OPTION	X	X				X	X	
DELAY TIME								
EXTENTION OPTION	X	X			X	X	X	
EXTEND TIME					X			
USE ADDED INITIAL	X	X						
CROSS SWITCH PHASE								

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	22		S2		12	14	16	
CALLED PHASE	2				1	1	1	
CALL OPTION	X					X	X	
DELAY TIME								
EXTENTION OPTION	X				X	X	X	
EXTEND TIME					X			
USE ADDED INITIAL	X							
CROSS SWITCH PHASE								

DETECTOR INPUT	17	19	21	23	25	27	29	31
PLAN LOOP DETECTOR*(S)								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

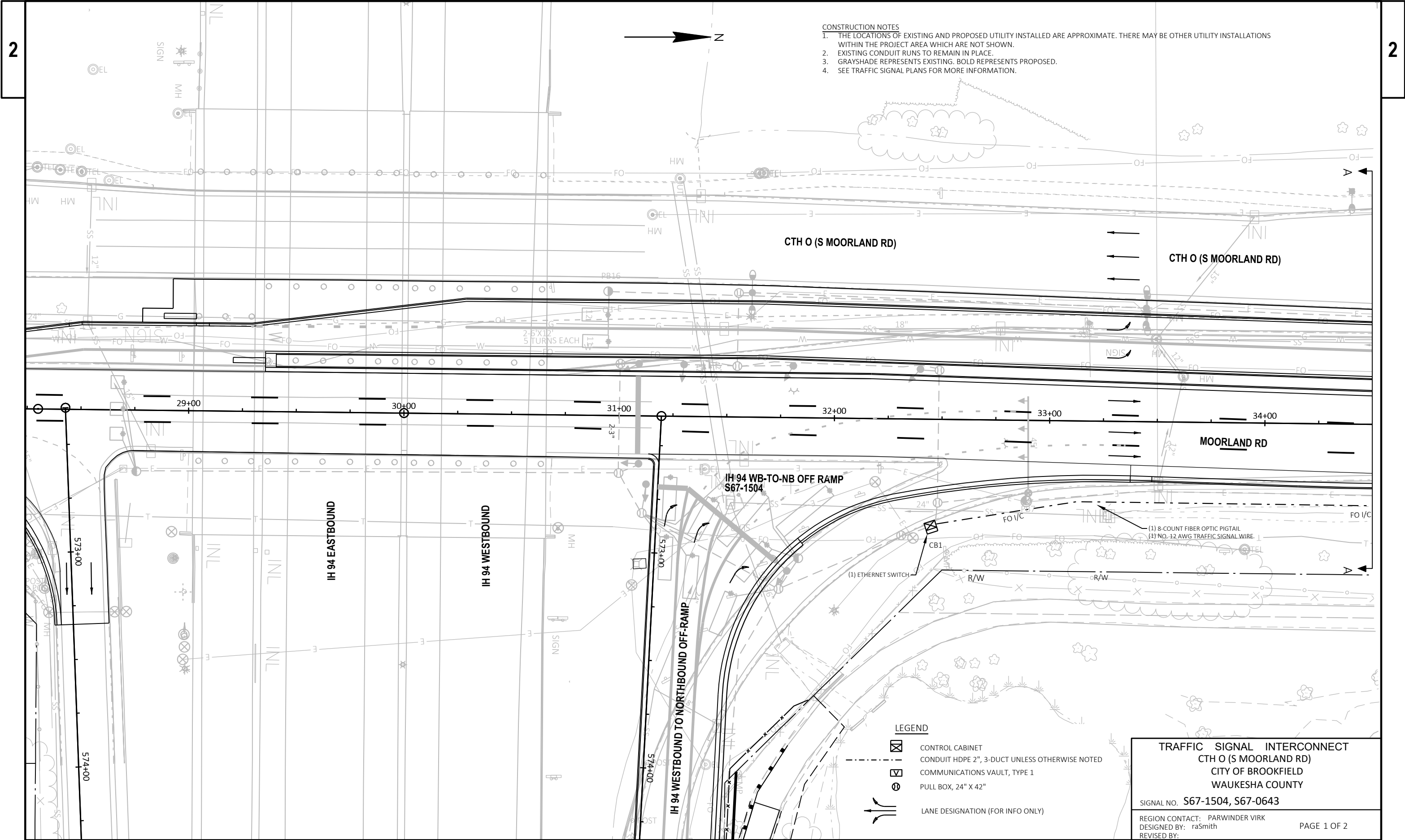
DETECTOR INPUT	18	20	22	24	26	28	30	32
PLAN LOOP DETECTOR*(S)								
CALLED PHASE								
CALL OPTION								
DELAY TIME								
EXTENTION OPTION								
EXTEND TIME								
USE ADDED INITIAL								
CROSS SWITCH PHASE								

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER	
CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 67-0053

TYPE OF LIGHTING	
BY OTHER AGENCY	X
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	X

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	X
LIFT BRIDGE	
QUEUE DETECTION	



- CONSTRUCTION NOTES
1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLED ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
 2. EXISTING CONDUIT RUNS TO REMAIN IN PLACE.
 3. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS PROPOSED.
 4. SEE TRAFFIC SIGNAL PLANS FOR MORE INFORMATION.

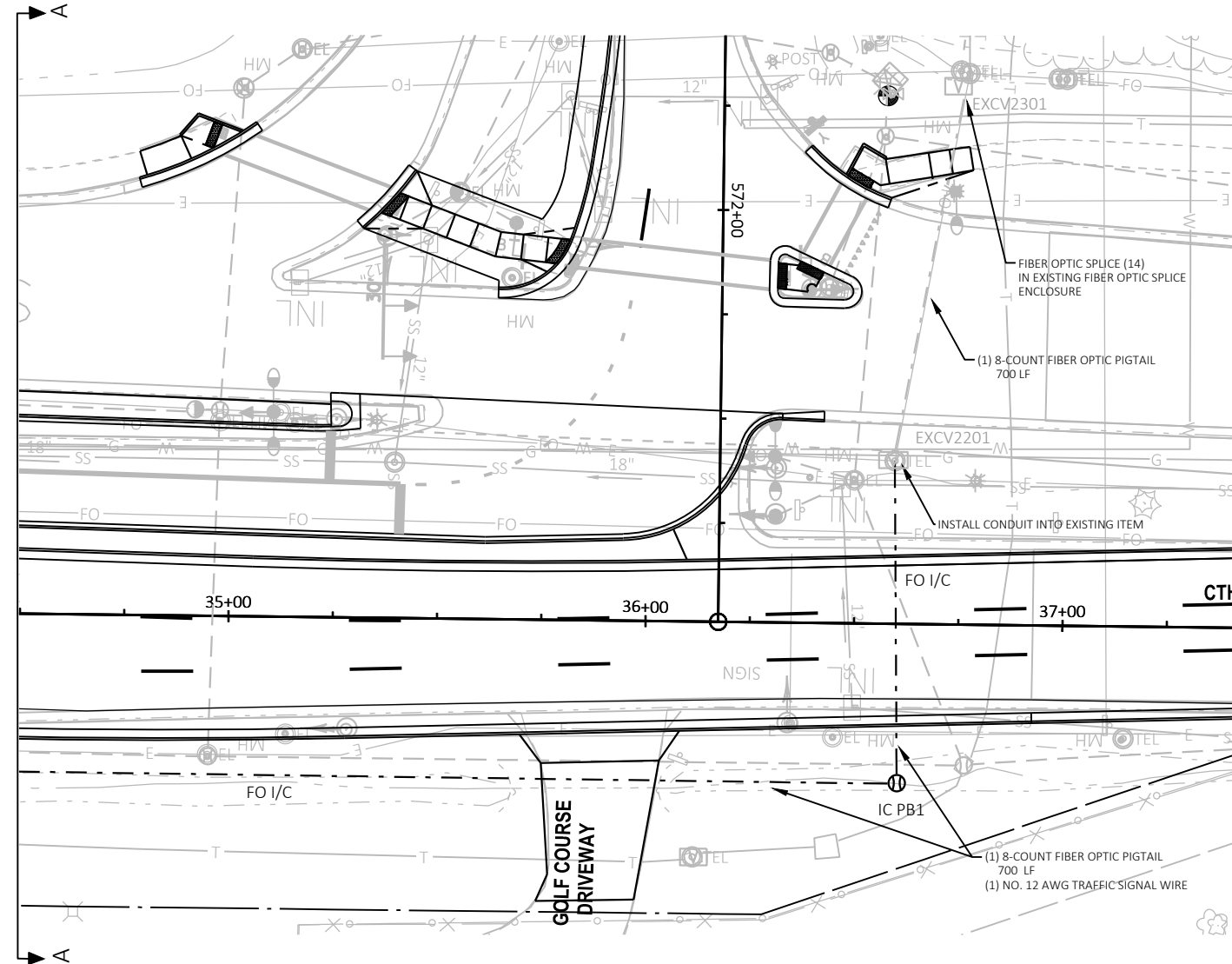
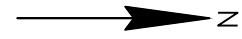
- LEGEND
- ☒ CONTROL CABINET
 - CONDUIT HDPE 2", 3-DUCT UNLESS OTHERWISE NOTED
 - ☒ COMMUNICATIONS VAULT, TYPE 1
 - ⊙ PULL BOX, 24" X 42"
 - LANE DESIGNATION (FOR INFO ONLY)

TRAFFIC SIGNAL INTERCONNECT
CTH O (S MOORLAND RD)
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-1504, S67-0643

REGION CONTACT: PARWINDER VIRK
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 2



TRAFFIC SIGNAL INTERCONNECT
CTH 0 (S MOORLAND RD)
CITY OF BROOKFIELD
WAUKESHA COUNTY

SIGNAL NO. S67-1504, S67-0643

REGION CONTACT: PARWINDER VIRK
DESIGNED BY: raSmith
REVISED BY:

PAGE 2 OF 2

PROJECT NO: 1060-10-72

HWY: IH 94

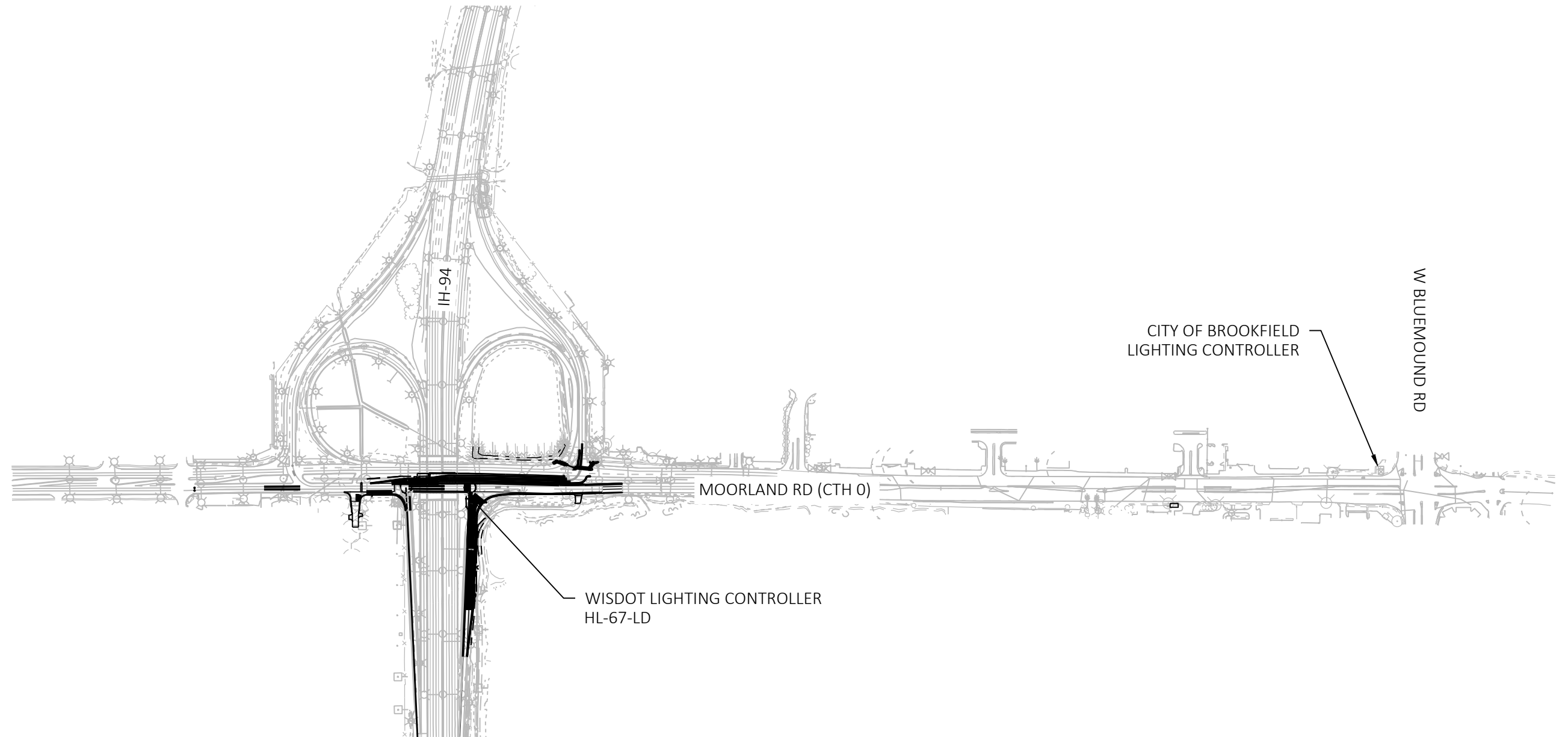
COUNTY: WAUKESHA

TRAFFIC SIGNAL INTERCONNECT PLAN

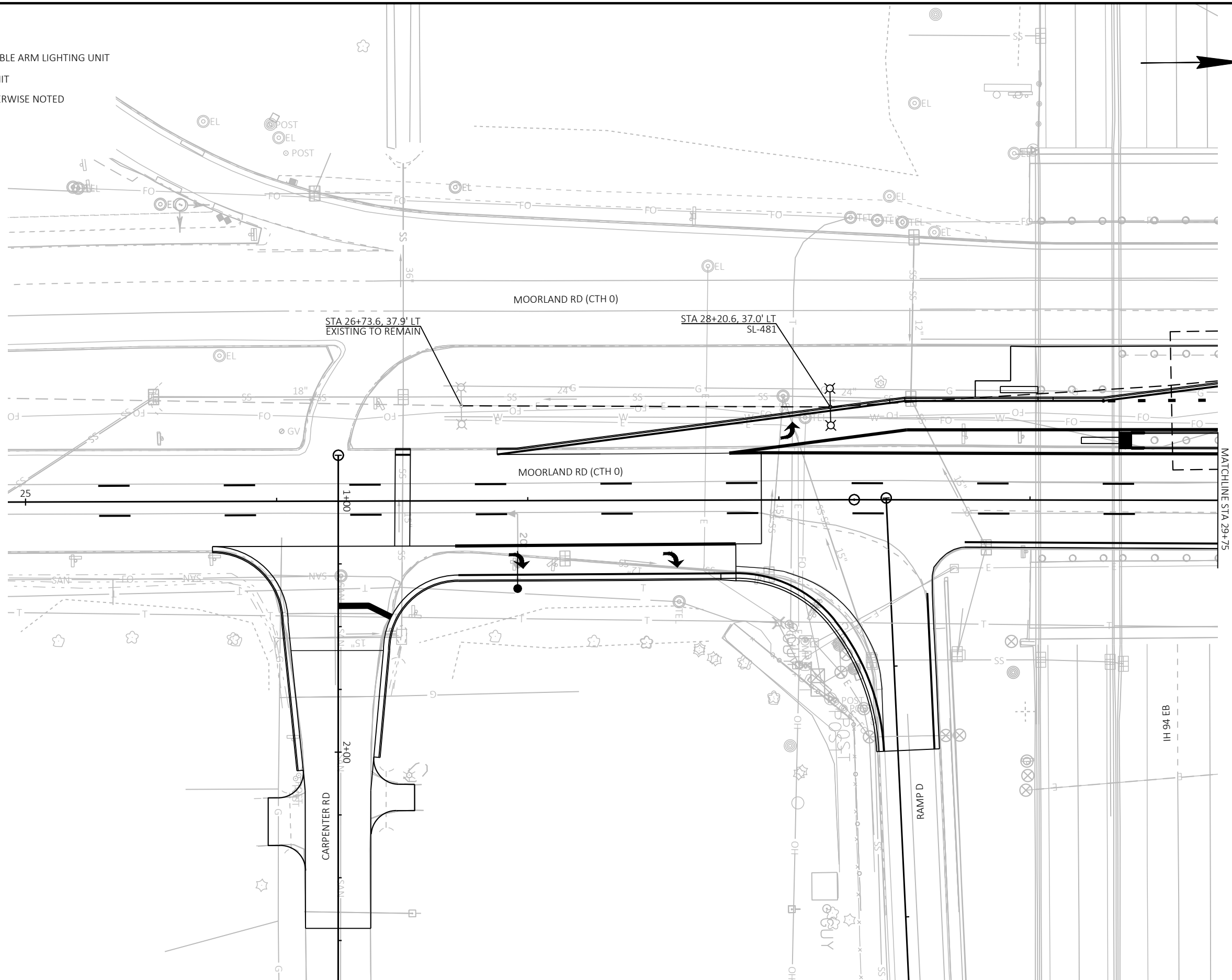
SHEET

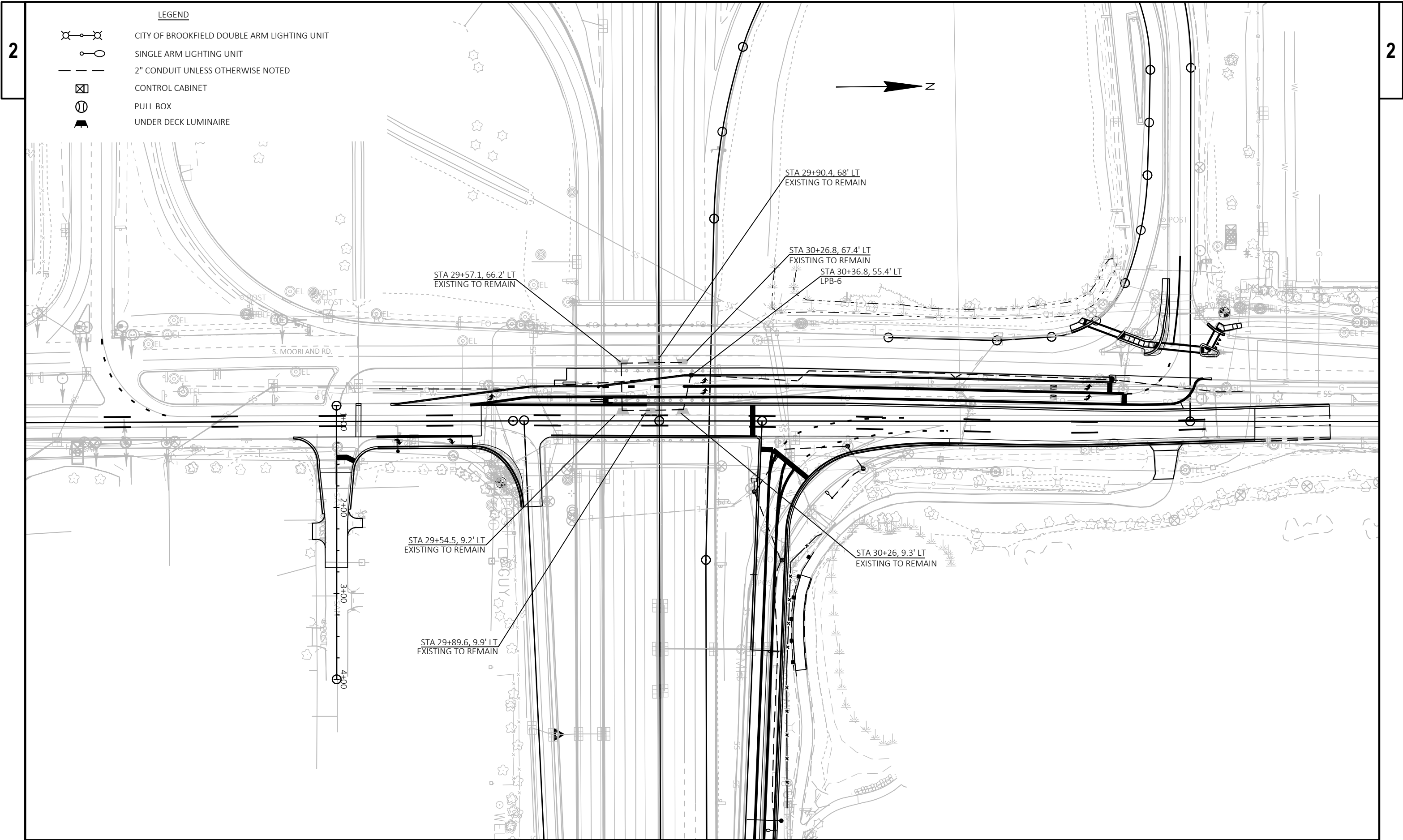
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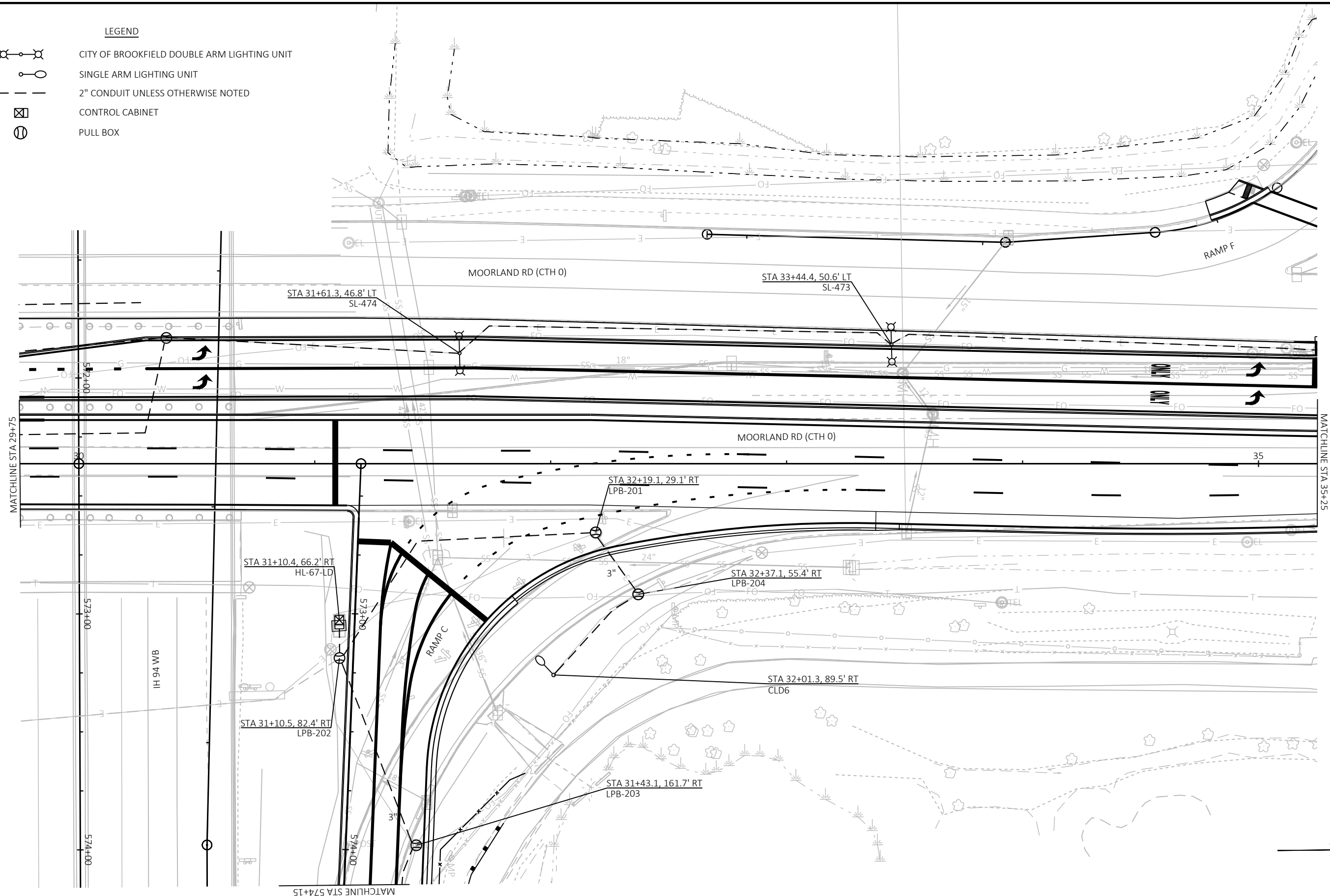
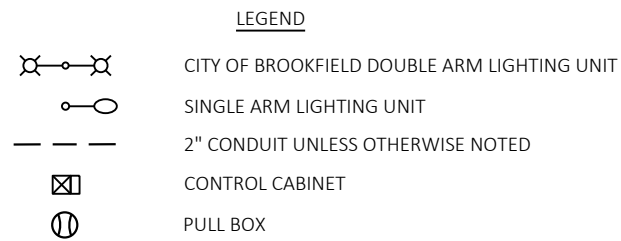
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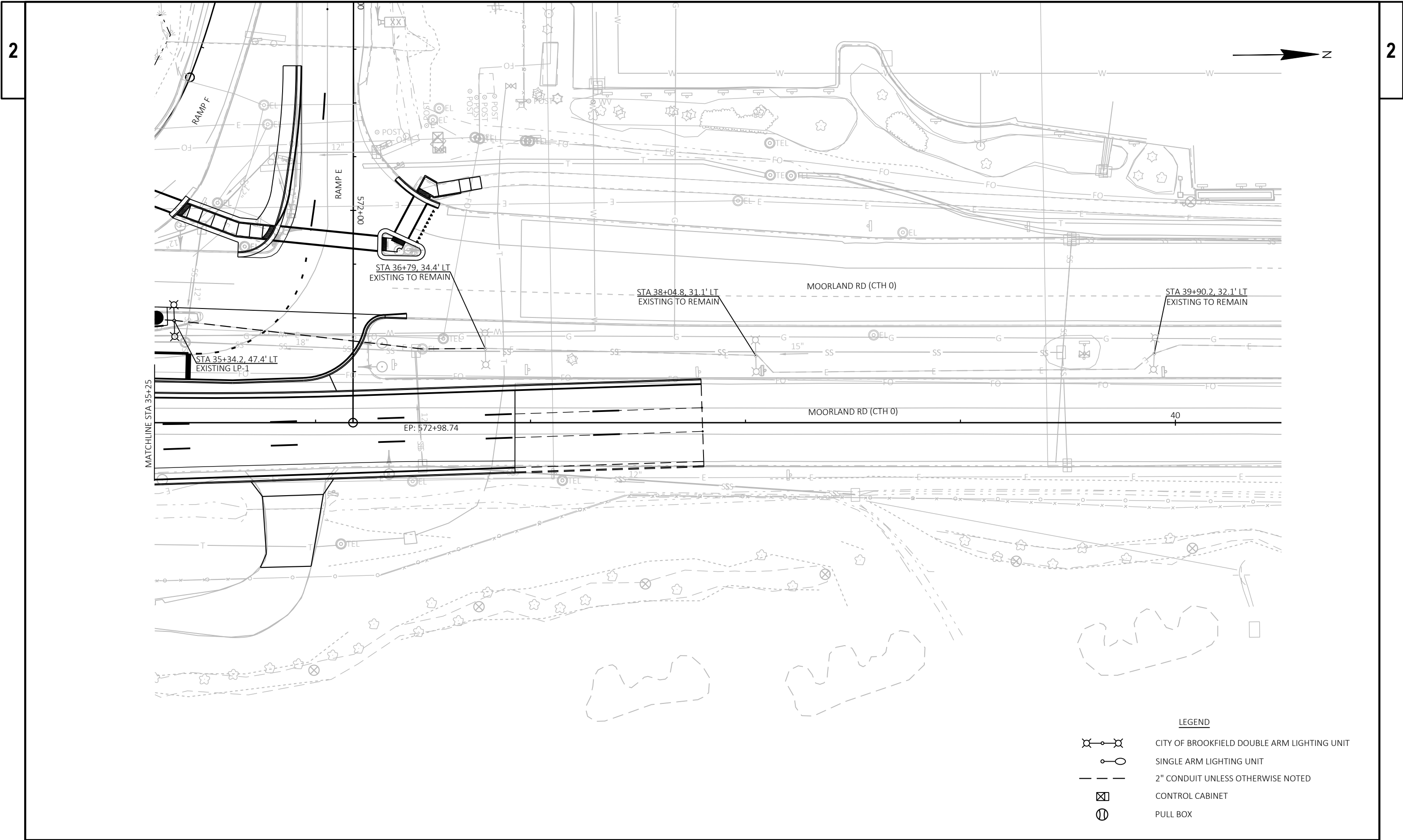


- LEGEND**
- CITY OF BROOKFIELD DOUBLE ARM LIGHTING UNIT
 - SINGLE ARM LIGHTING UNIT
 - 2" CONDUIT UNLESS OTHERWISE NOTED
 - CONTROL CABINET
 - PULL BOX



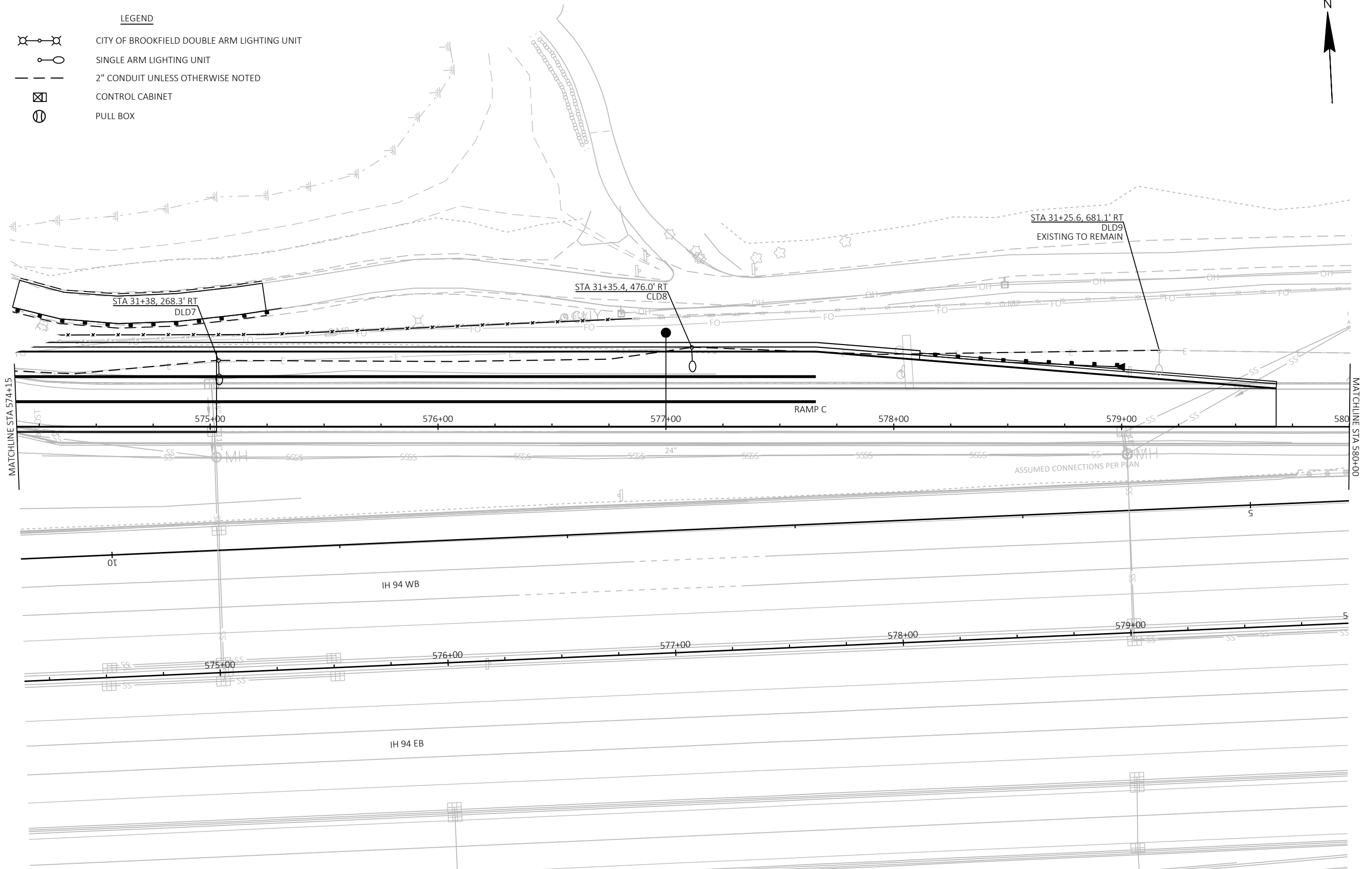




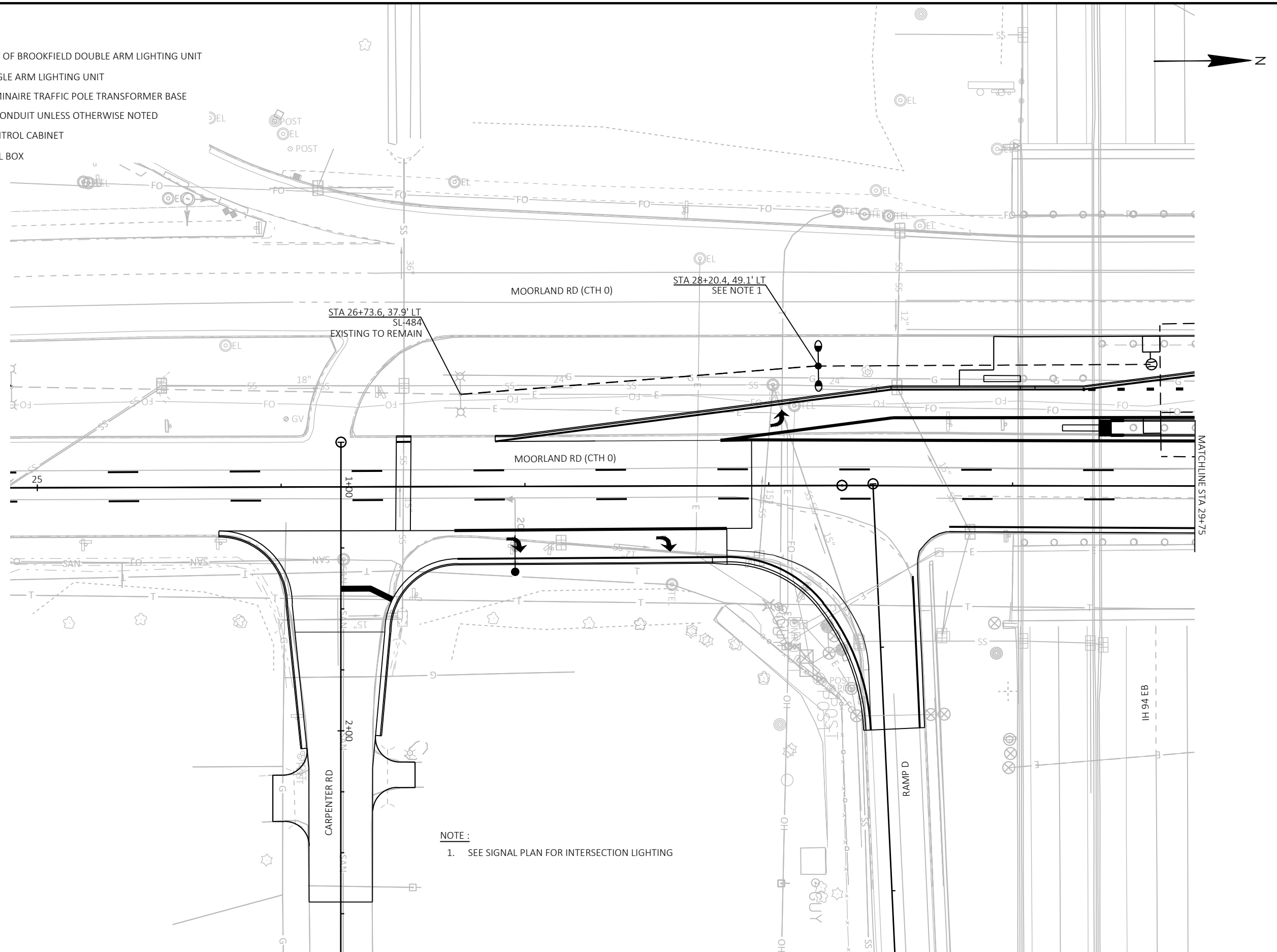


LEGEND

-  CITY OF BROOKFIELD DOUBLE ARM LIGHTING UNIT
-  SINGLE ARM LIGHTING UNIT
-  2" CONDUIT UNLESS OTHERWISE NOTED
-  CONTROL CABINET
-  PULL BOX

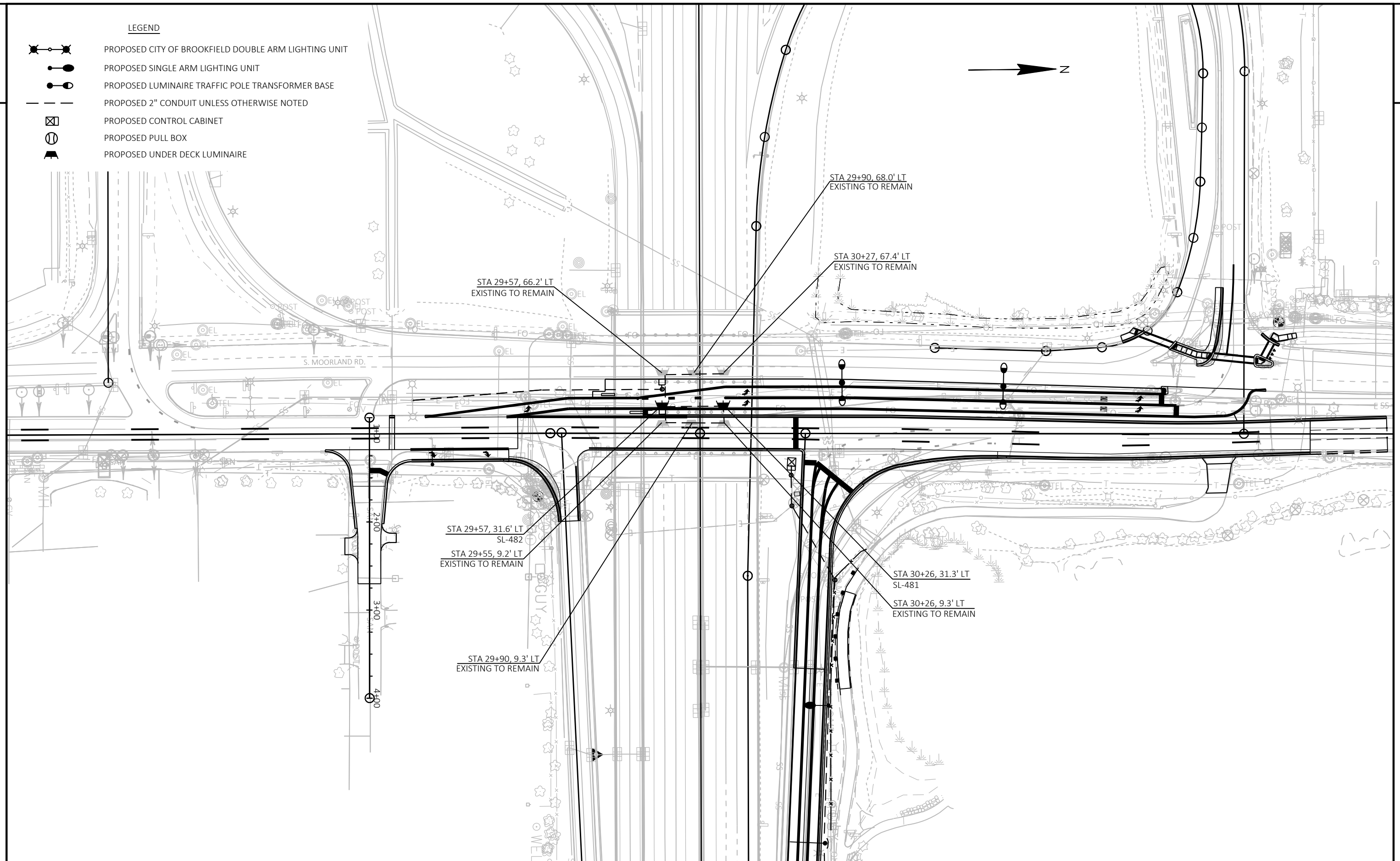


PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	LIGHTING REMOVAL	SHEET 82	E
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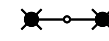
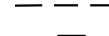


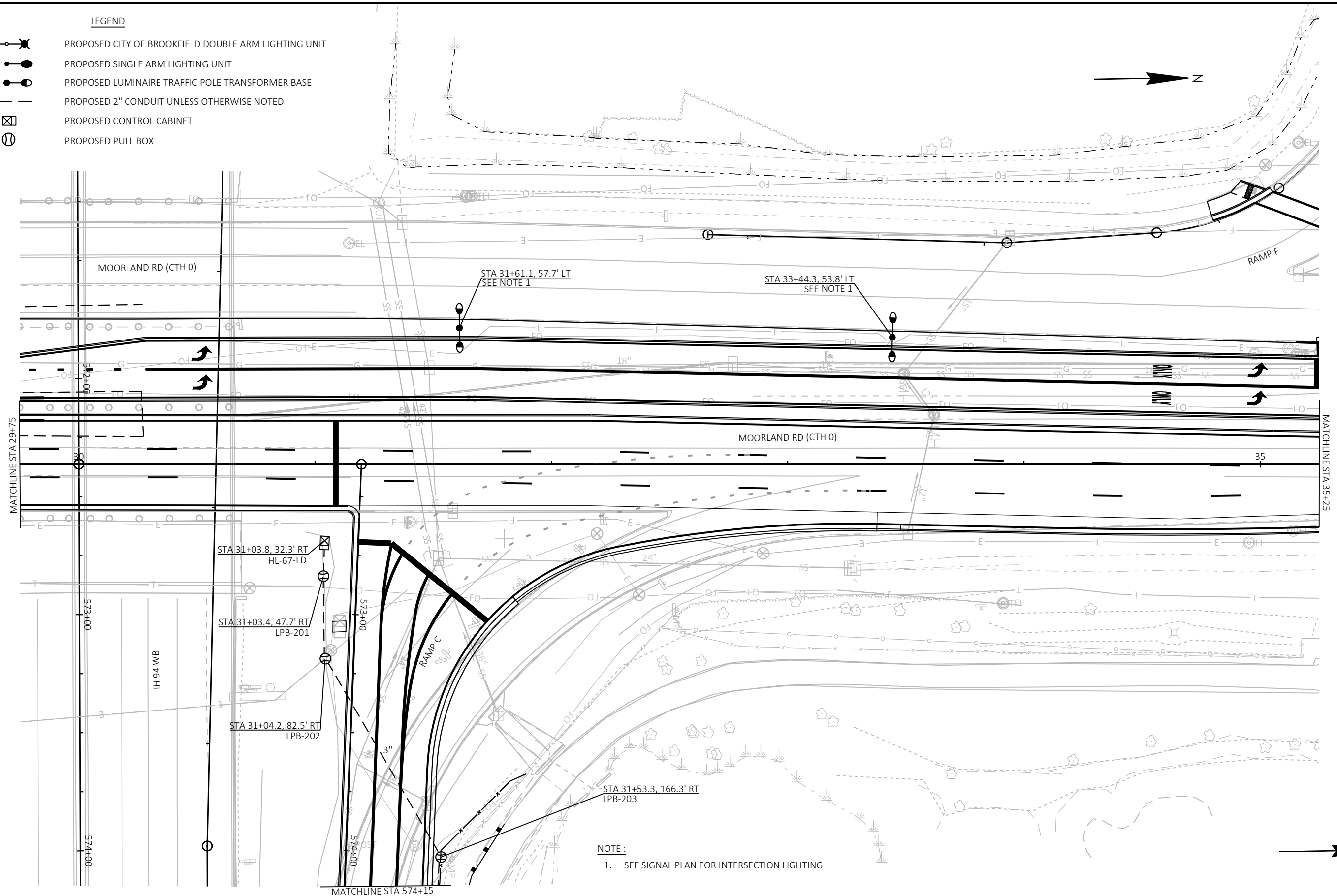
LEGEND

- PROPOSED CITY OF BROOKFIELD DOUBLE ARM LIGHTING UNIT
- PROPOSED SINGLE ARM LIGHTING UNIT
- PROPOSED LUMINAIRE TRAFFIC POLE TRANSFORMER BASE
- PROPOSED 2" CONDUIT UNLESS OTHERWISE NOTED
- PROPOSED CONTROL CABINET
- PROPOSED PULL BOX
- PROPOSED UNDER DECK LUMINAIRE



LEGEND

-  PROPOSED CITY OF BROOKFIELD DOUBLE ARM LIGHTING UNIT
-  PROPOSED SINGLE ARM LIGHTING UNIT
-  PROPOSED LUMINAIRE TRAFFIC POLE TRANSFORMER BASE
-  PROPOSED 2" CONDUIT UNLESS OTHERWISE NOTED
-  PROPOSED CONTROL CABINET
-  PROPOSED PULL BOX



PROJECT NO: 1060-10-72

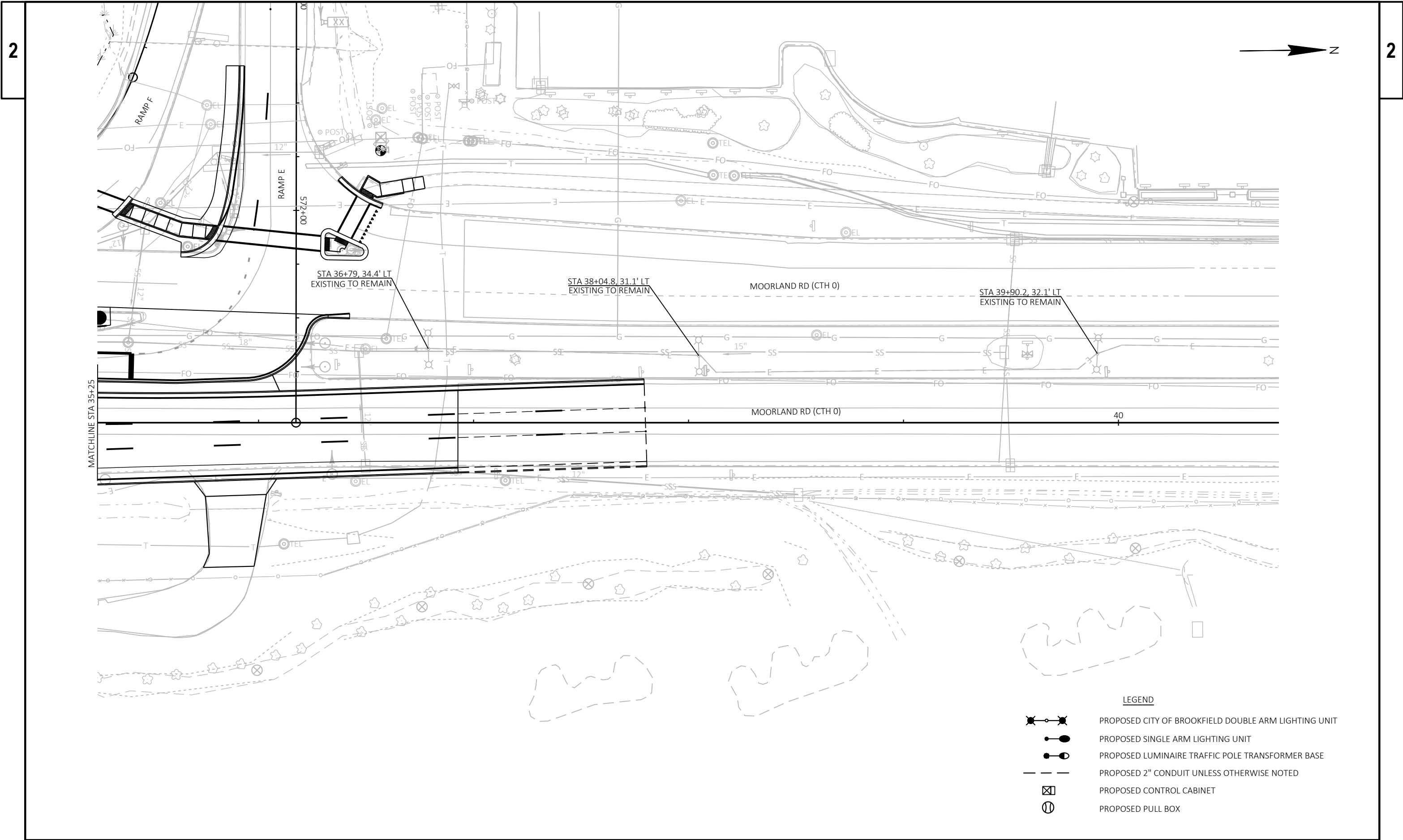
HWY: IH 94

COUNTY: WAUKESHA

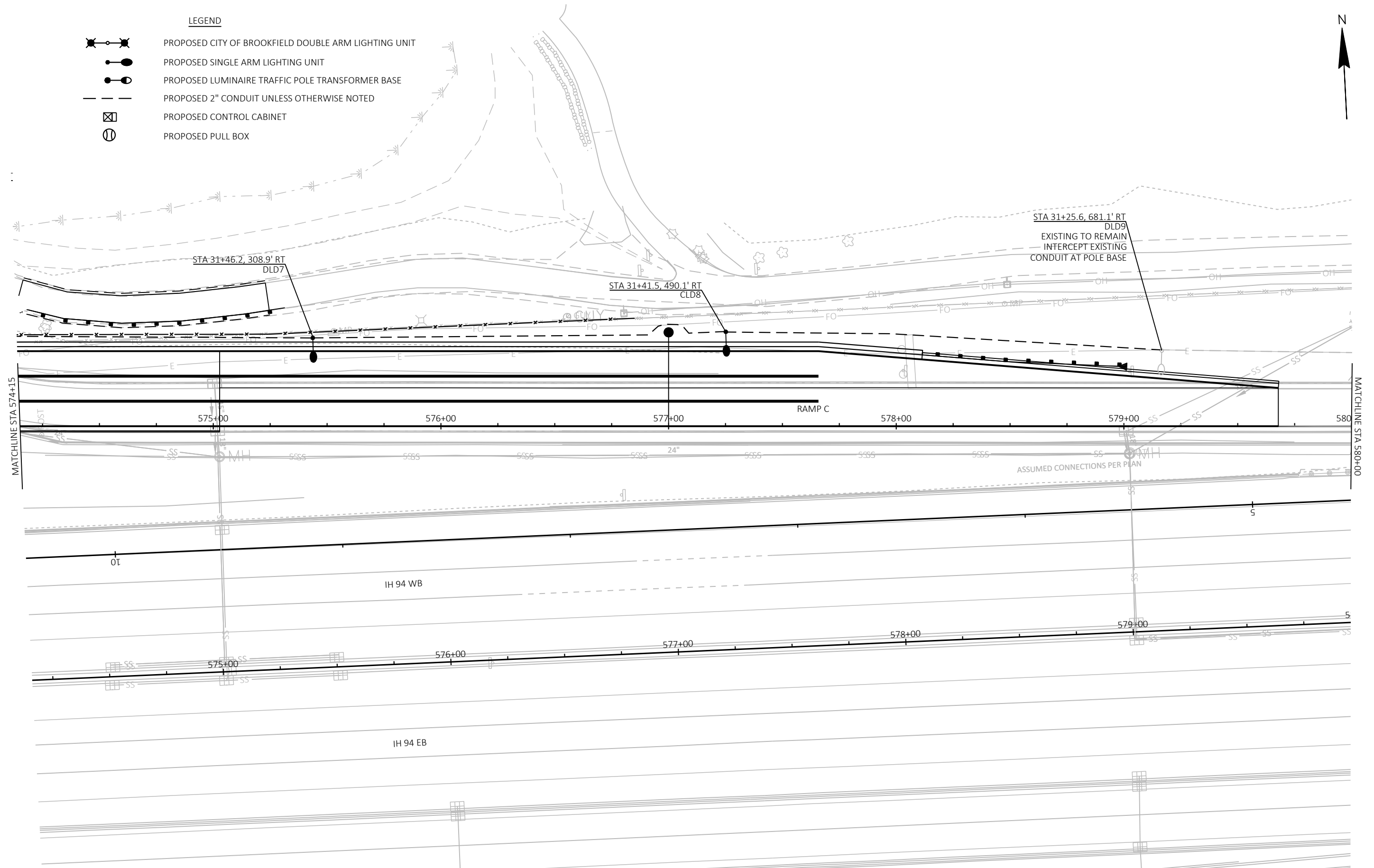
LIGHTING PROPOSED

SHEET 85

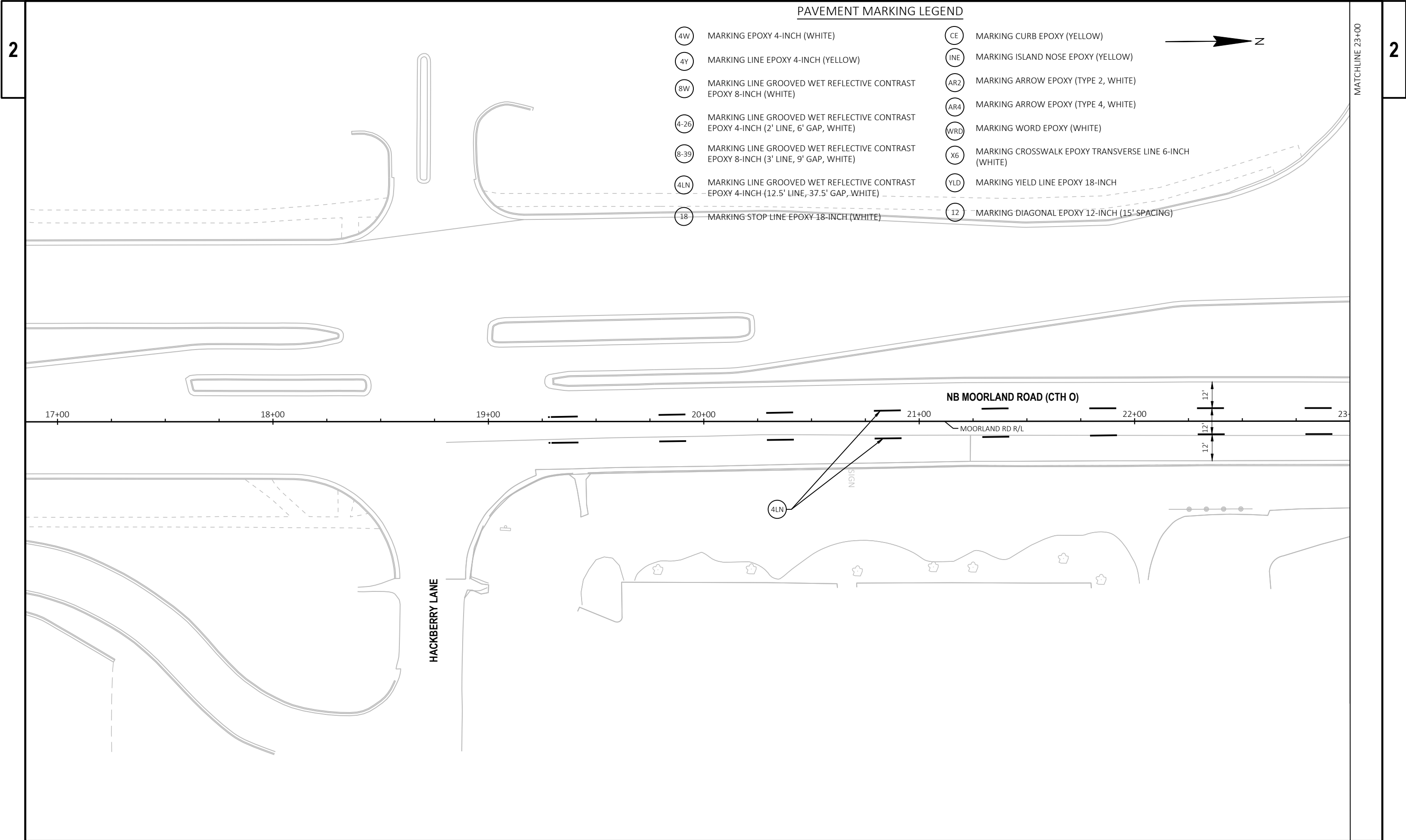
E



- LEGEND
- PROPOSED CITY OF BROOKFIELD DOUBLE ARM LIGHTING UNIT
 - PROPOSED SINGLE ARM LIGHTING UNIT
 - PROPOSED LUMINAIRE TRAFFIC POLE TRANSFORMER BASE
 - PROPOSED 2" CONDUIT UNLESS OTHERWISE NOTED
 - PROPOSED CONTROL CABINET
 - PROPOSED PULL BOX

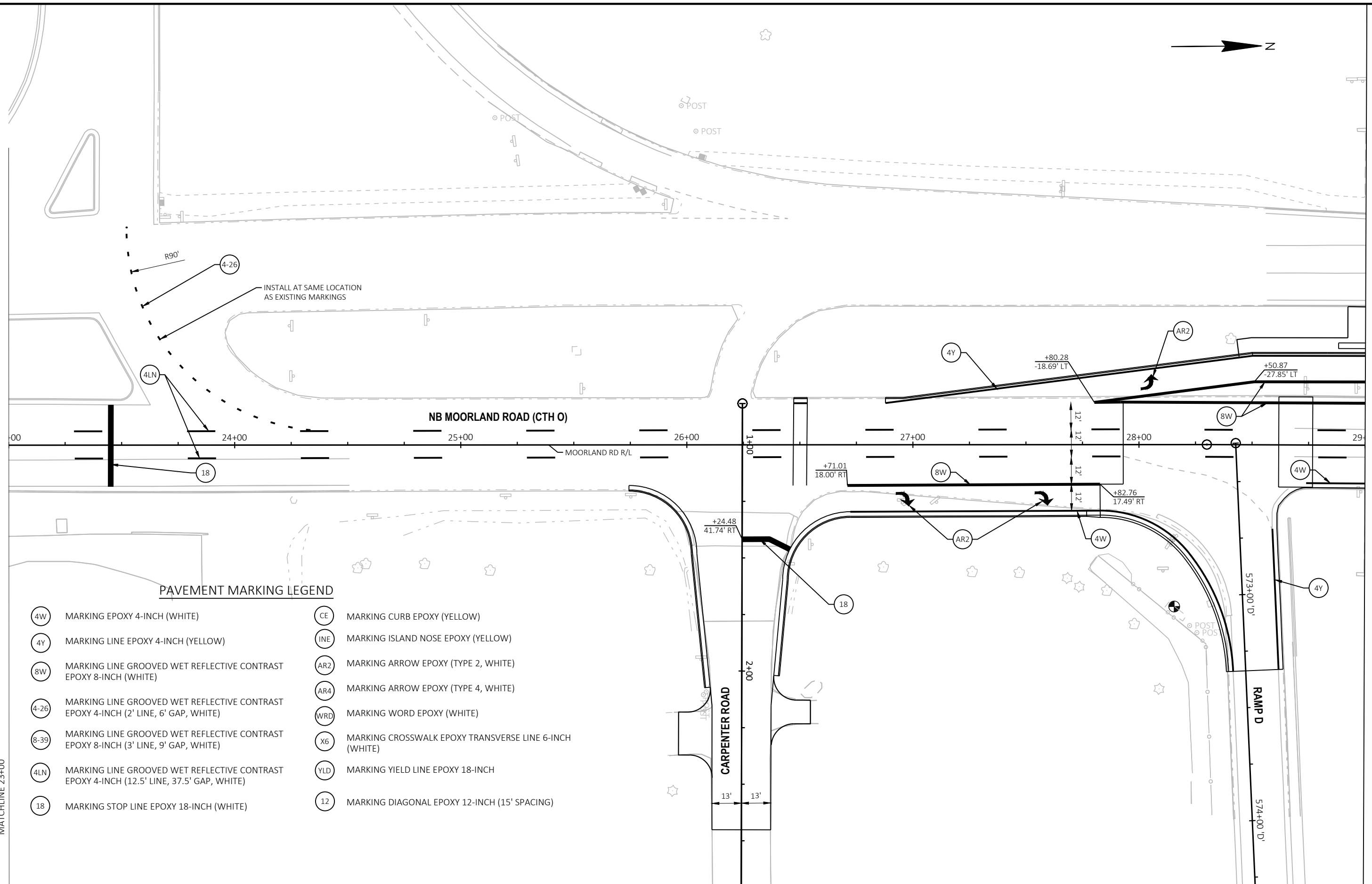


PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	LIGHTING PROPOSED	SHEET 87	E
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PAVEMENT MARKING LEGEND

- | | | | |
|--------|--|-------|--|
| (4W) | MARKING EPOXY 4-INCH (WHITE) | (CE) | MARKING CURB EPOXY (YELLOW) |
| (4Y) | MARKING LINE EPOXY 4-INCH (YELLOW) | (INE) | MARKING ISLAND NOSE EPOXY (YELLOW) |
| (8W) | MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE) | (AR2) | MARKING ARROW EPOXY (TYPE 2, WHITE) |
| (4-26) | MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (2' LINE, 6' GAP, WHITE) | (AR4) | MARKING ARROW EPOXY (TYPE 4, WHITE) |
| (8-39) | MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (3' LINE, 9' GAP, WHITE) | (WRD) | MARKING WORD EPOXY (WHITE) |
| (4LN) | MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (12.5' LINE, 37.5' GAP, WHITE) | (X6) | MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) |
| (18) | MARKING STOP LINE EPOXY 18-INCH (WHITE) | (YLD) | MARKING YIELD LINE EPOXY 18-INCH |
| | | (12) | MARKING DIAGONAL EPOXY 12-INCH (15' SPACING) |



PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	PAVEMENT MARKING - MOORLAND RD	SHEET 89	E
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PAVEMENT MARKING LEGEND

- 4W

MARKING EPOXY 4-INCH (WHITE)
- 4Y

MARKING LINE EPOXY 4-INCH (YELLOW)
- 8W

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
- 4-26

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (2' LINE, 6' GAP, WHITE)
- 8-39

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (3' LINE, 9' GAP, WHITE)
- 4LN

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (12.5' LINE, 37.5' GAP, WHITE)
- 18

MARKING STOP LINE EPOXY 18-INCH (WHITE)

CE

MARKING CURB EPOXY (YELLOW)

INE

MARKING ISLAND NOSE EPOXY (YELLOW)

AR2

MARKING ARROW EPOXY (TYPE 2, WHITE)

AR4

MARKING ARROW EPOXY (TYPE 4, WHITE)

WRD

MARKING WORD EPOXY (WHITE)

X6

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

YLD

MARKING YIELD LINE EPOXY 18-INCH

12

MARKING DIAGONAL EPOXY 12-INCH (15' SPACING)

RADIUS TABLE

POINT NUMBER	STATION	ALIGNMENT	OFFSET	RADIUS	Y	X
A	32+24.09	MOORLAND RD R/L	108.14' RT	85'R	166,079.31	716,690.52
B	33+23.56	MOORLAND RD R/L	511.04' RT	500'R	166,174.11	717,094.55
C	31+92.81	MOORLAND RD R/L	71.08' RT	51'R	166,048.46	716,653.10
D	35+36.71	MOORLAND RD R/L	130.52' RT	400'R	166,391.65	716,716.52
E	33+27.70	MOORLAND RD R/L	76.47' RT	200'R	166,183.28	716,660.05
F	31+92.81	MOORLAND RD R/L	71.08' RT	65'R	166,048.46	716,653.10
G	32+74.73	MOORLAND RD R/L	395.91' RT	400'R	166,126.61	716,978.86
H	35+35.79	MOORLAND RD R/L	153.61' RT	400'R	166,390.46	716,739.59

Z

MATCH LINE 35+00

MATCH LINE 29+00

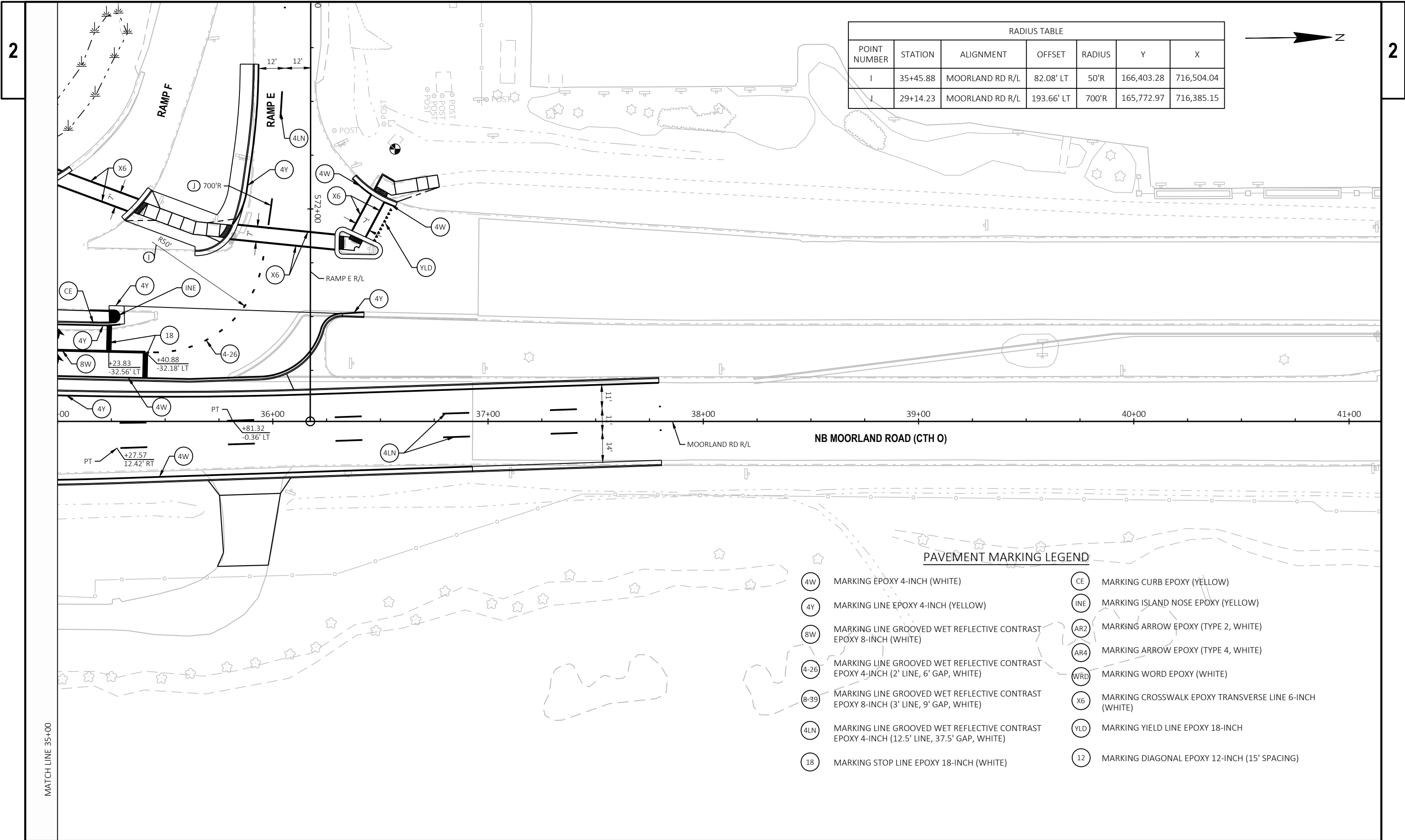
IH 94 EB

IH 94 WB

RAMP C

NB MOORLAND ROAD (CTH O)

MATCHLINE 594+00



RADIUS TABLE						
POINT NUMBER	STATION	ALIGNMENT	OFFSET	RADIUS	Y	X
I	35+45.88	MOORLAND RD R/L	82.08' LT	50'R	166,403.28	716,504.04
J	29+14.23	MOORLAND RD R/L	193.66' LT	700'R	165,772.97	716,385.15

PAVEMENT MARKING LEGEND

- (4W)

MARKING EPOXY 4-INCH (WHITE)
- (4Y)

MARKING LINE EPOXY 4-INCH (YELLOW)
- (8W)

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)
- (4-26)

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (2' LINE, 6' GAP, WHITE)
- (8-39)

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (3' LINE, 9' GAP, WHITE)
- (4LN)

MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (12.5' LINE, 37.5' GAP, WHITE)
- (18)

MARKING STOP LINE EPOXY 18-INCH (WHITE)

(CE)

MARKING CURB EPOXY (YELLOW)

(INE)

MARKING ISLAND NOSE EPOXY (YELLOW)

(AR2)

MARKING ARROW EPOXY (TYPE 2, WHITE)

(AR4)

MARKING ARROW EPOXY (TYPE 4, WHITE)

(WRD)

MARKING WORD EPOXY (WHITE)

(X6)

MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)

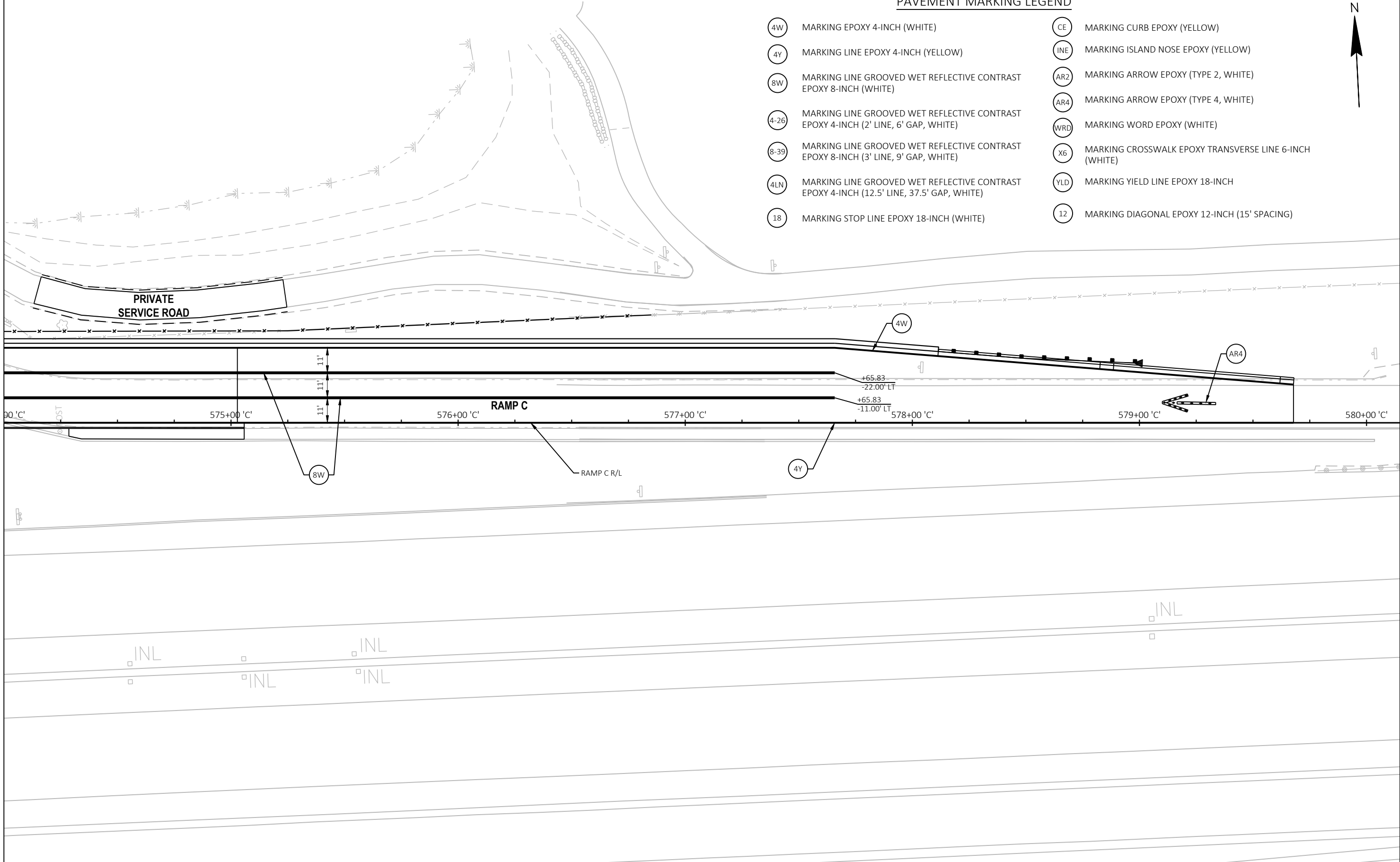
(YLD)

MARKING YIELD LINE EPOXY 18-INCH

(12)

MARKING DIAGONAL EPOXY 12-INCH (15' SPACING)

4W	MARKING EPOXY 4-INCH (WHITE)	CE	MARKING CURB EPOXY (YELLOW)
4Y	MARKING LINE EPOXY 4-INCH (YELLOW)	INE	MARKING ISLAND NOSE EPOXY (YELLOW)
8W	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (WHITE)	AR2	MARKING ARROW EPOXY (TYPE 2, WHITE)
4-26	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (2' LINE, 6' GAP, WHITE)	AR4	MARKING ARROW EPOXY (TYPE 4, WHITE)
8-39	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 8-INCH (3' LINE, 9' GAP, WHITE)	WRD	MARKING WORD EPOXY (WHITE)
4LN	MARKING LINE GROOVED WET REFLECTIVE CONTRAST EPOXY 4-INCH (12.5' LINE, 37.5' GAP, WHITE)	X6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
18	MARKING STOP LINE EPOXY 18-INCH (WHITE)	YLD	MARKING YIELD LINE EPOXY 18-INCH
		12	MARKING DIAGONAL EPOXY 12-INCH (15' SPACING)



GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL:

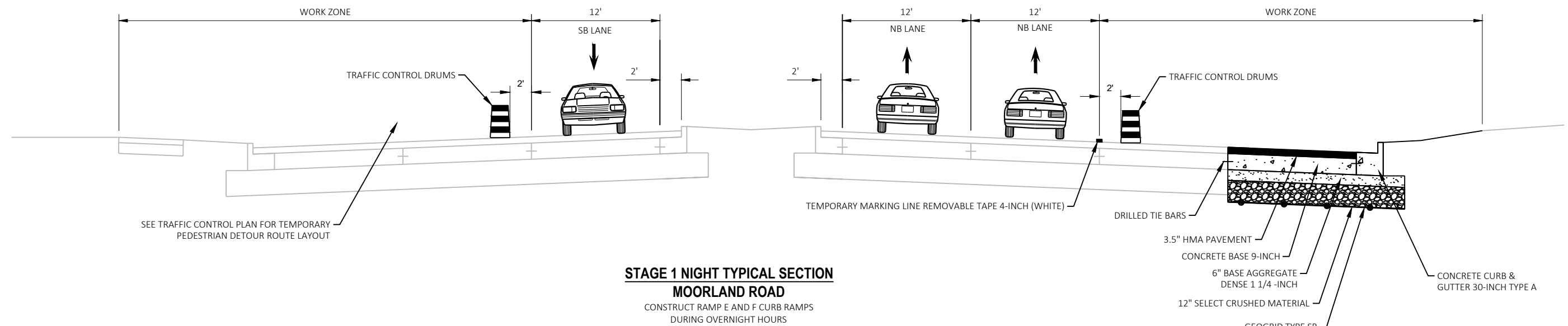
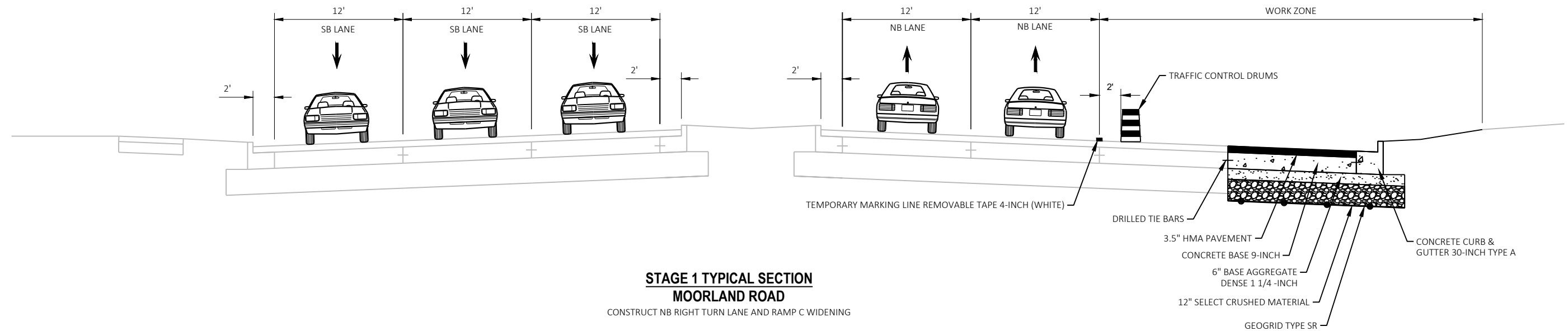
- 1. TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH WARNING LIGHTS, TYPE "C", ONE WAY LIGHTS, UNLESS OTHERWISE SHOWN.
- 2. SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION AND SPACING MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS.
- 3. SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED. THE COVERING OF TYPE II SIGNS IS INCLUDED UNDER THE BID ITEM TRAFFIC CONTROL COVERING SIGNS TYPE II.
- 4. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS REFLECTIVE ORANGE.
- 5. ALL TRAFFIC CONTROL SIGNS SHALL BE 48"X48" UNLESS OTHERWISE NOTED IN THE PLANS.
- 6. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
- 7. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 8. ADEQUATE TURNING PROVISIONS SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS.
- 9. EXISTING PAVEMENT MARKINGS TO BE REMOVED THAT WILL NOT BE REPLACED IN THE SAME LOCATION AFTER CONSTRUCTION SHALL BE REMOVED USING MARKING REMOVAL LINE WATER BLASTING. DO NOT GRIND EXISTING PAVEMENT MARKINGS THAT WILL NOT BE REPLACED AFTER CONSTRUCTION.
- 10. BARRICADE STRIPES SHALL POINT DOWNWARD IN THE DIRECTION OF TRAFFIC FLOW.
- 11. THE CONTRACTOR SHALL ENSURE ADEQUATE DRAINAGE AND AVOID ANY PONDING OR STANDING WATER DURING THE STAGED CONSTRUCTION.
- 12. TEMPORARY MARKINGS SHALL BE TEMPORARY TAPE WHEN PLACED ON NEW OR EXISTING PAVEMENT SURFACES THAT ARE TO REMAIN IN PLACE FOLLOWING CONSTRUCTION. PAINT MAY BE USED ON EXISTING PAVEMENT OR BINDER HMA LAYERS THAT ARE TO BE REMOVED OR OVERLAID IN SUBSEQUENT STAGES.

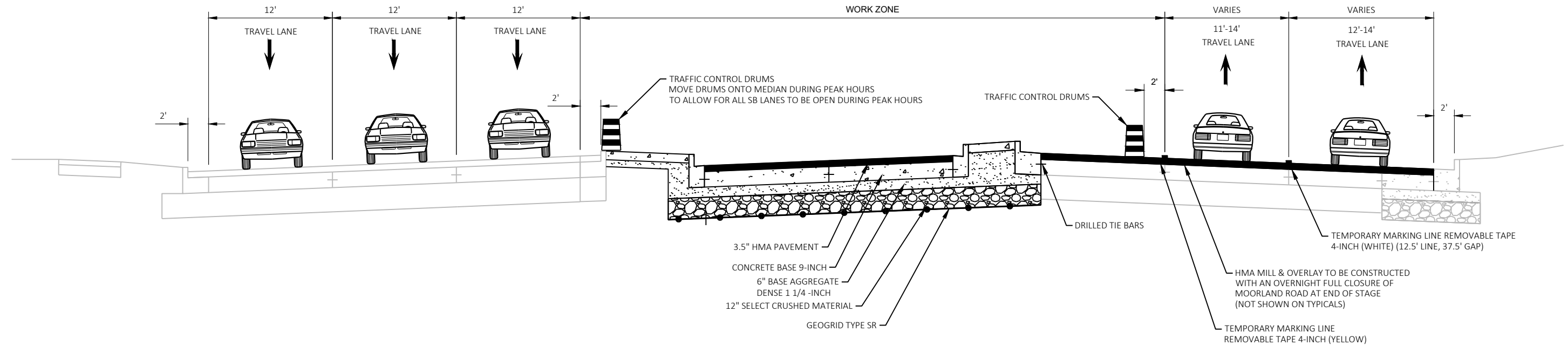
LEGEND

	WORK ZONE
	TRAFFIC CONTROL COVERING SIGNS
	TRAFFIC FLOW
	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	TRAFFIC CONTROL ARROW BOARD
	POST MOUNTED TRAFFIC CONTROL SIGNS
	TRAFFIC CONTROL SIGN MOUNTED ON TEMPORARY SUPPORT
	TRAFFIC CONTROL BARRICADE TYPE III WITH TWO TYPE A WARNING LIGHTS WITH/WITHOUT SIGN
ETSR	EXISTING SIGN TO REMAIN
	TRAFFIC CONTROL SIGNS PCMS
	PAVEMENT MARKING INSTALLED THIS STAGE
	PAVEMENT MARKING INSTALLED IN PREVIOUS STAGE
	TEMPORARY PEDESTRIAN BARRICADE
	TEMPORARY 16"X16" FLAGS (INCIDENTAL TO TRAFFIC CONTROL SIGNS)
XXXX	REMOVING PAVEMENT MARKINGS

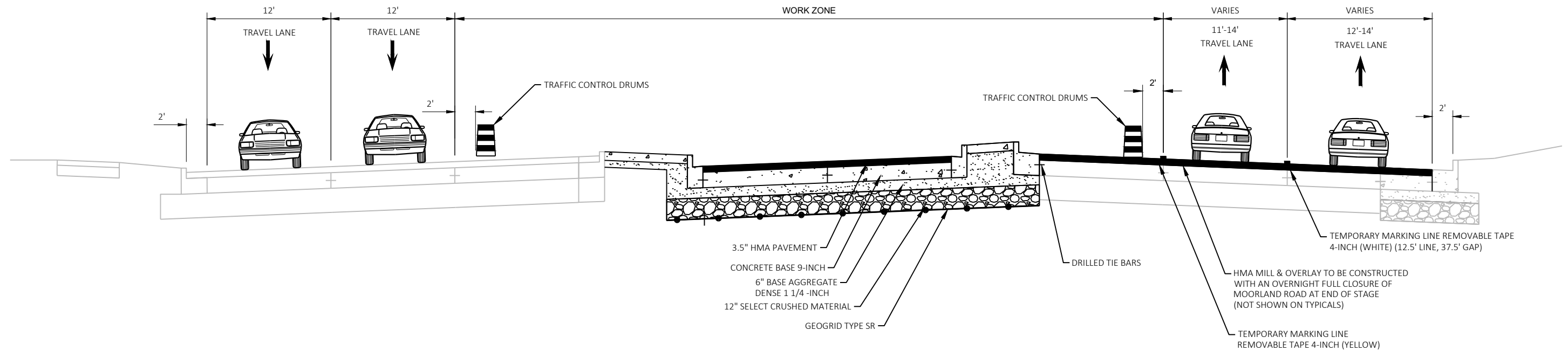
TEMPORARY PAVEMENT MARKING LEGEND

	PERMANENT PAVEMENT MARKINGS (SEE PAVEMENT MARKING PLAN)
	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 10-INCH (BLACK)
	TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) (12.5' LINE, 37.5' GAP)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) (3' SKIP, 9' GAP)
	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)





STAGE 2 PEAK TYPICAL SECTION
MOORLAND ROAD
CONSTRUCT NB LEFT TURN LANE



STAGE 2 OFF PEAK TYPICAL SECTION
MOORLAND ROAD
CONSTRUCT NB LEFT TURN LANE

SHEET 3 OF 32

PROJECT NO: 1060-10-72

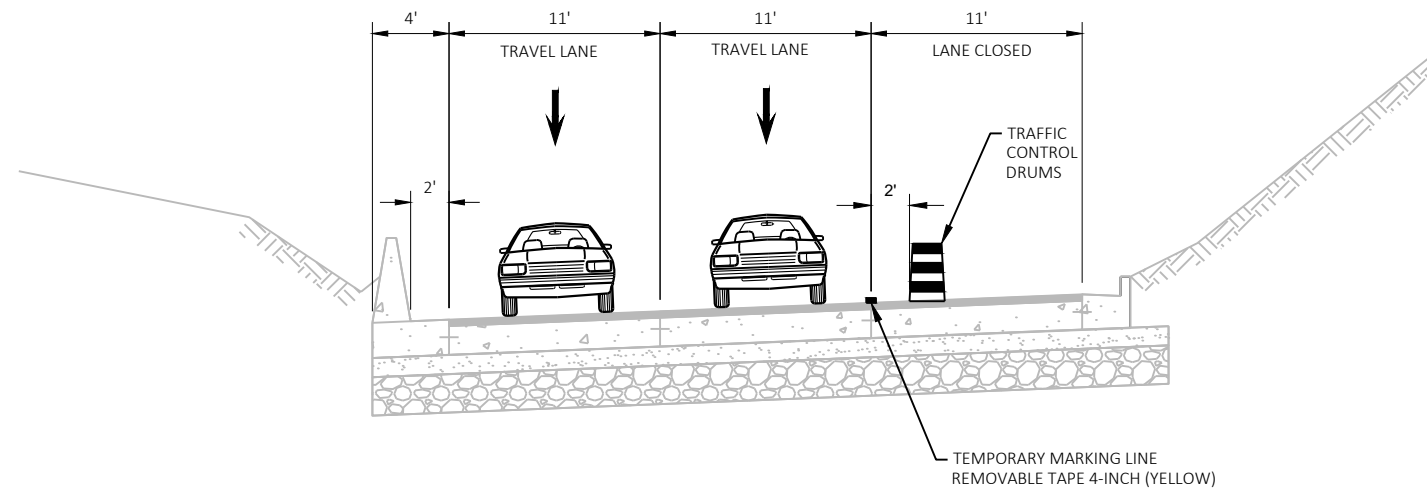
HWY: IH 94

COUNTY: WAUKESHA

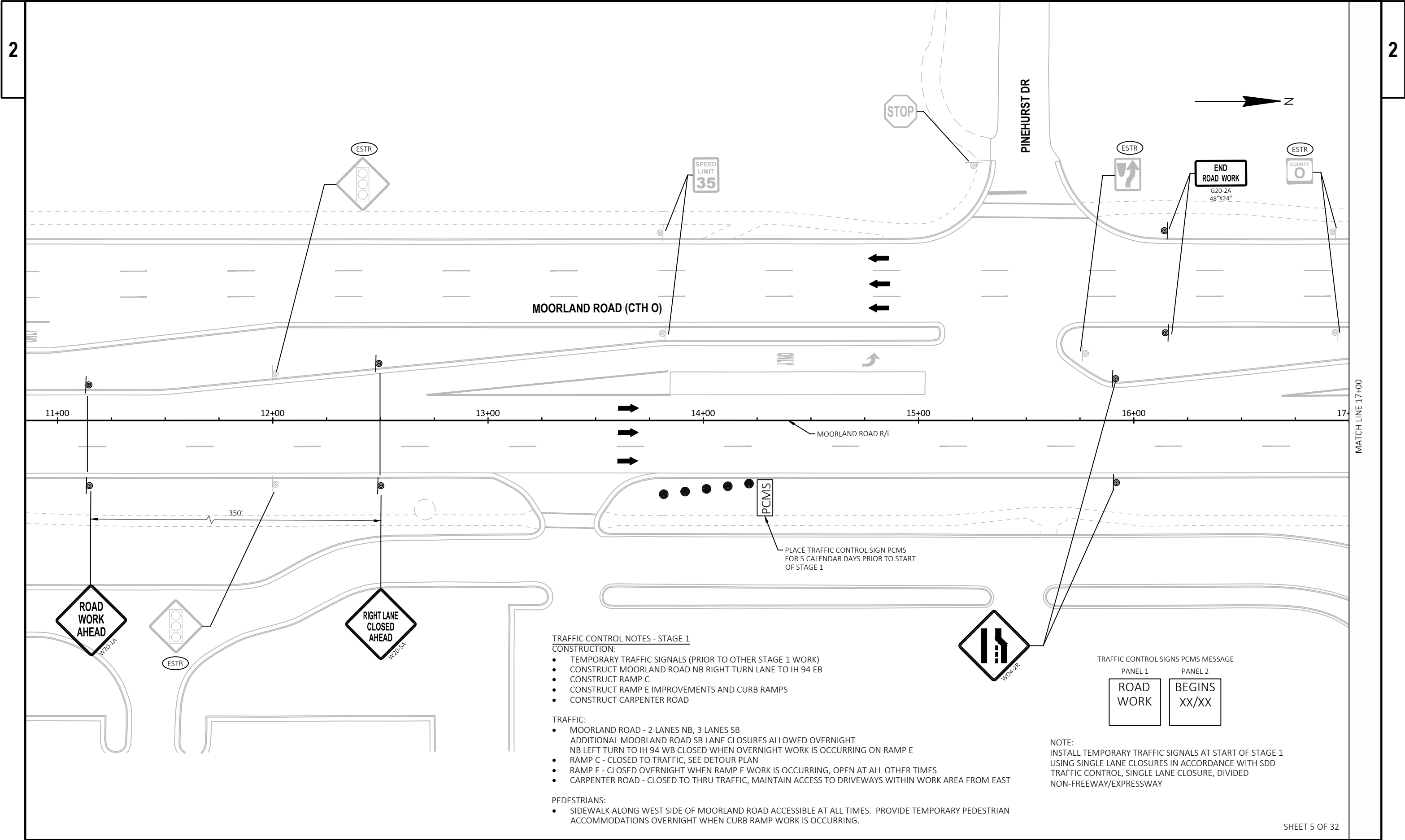
TRAFFIC CONTROL TYPICAL SECTIONS

SHEET 95

E



STAGE 2 TYPICAL SECTION
RAMP C
NO CONSTRUCTION, CLOSE SOUTHERNMOST LANE



TRAFFIC CONTROL NOTES - STAGE 1

CONSTRUCTION:

- TEMPORARY TRAFFIC SIGNALS (PRIOR TO OTHER STAGE 1 WORK)
- CONSTRUCT MOORLAND ROAD NB RIGHT TURN LANE TO IH 94 EB
- CONSTRUCT RAMP C
- CONSTRUCT RAMP E IMPROVEMENTS AND CURB RAMPS
- CONSTRUCT CARPENTER ROAD

TRAFFIC:

- MOORLAND ROAD - 2 LANES NB, 3 LANES SB
- ADDITIONAL MOORLAND ROAD SB LANE CLOSURES ALLOWED OVERNIGHT
- NB LEFT TURN TO IH 94 WB CLOSED WHEN OVERNIGHT WORK IS OCCURRING ON RAMP E
- RAMP C - CLOSED TO TRAFFIC, SEE DETOUR PLAN
- RAMP E - CLOSED OVERNIGHT WHEN RAMP E WORK IS OCCURRING, OPEN AT ALL OTHER TIMES
- CARPENTER ROAD - CLOSED TO THRU TRAFFIC, MAINTAIN ACCESS TO DRIVEWAYS WITHIN WORK AREA FROM EAST

PEDESTRIANS:

- SIDEWALK ALONG WEST SIDE OF MOORLAND ROAD ACCESSIBLE AT ALL TIMES. PROVIDE TEMPORARY PEDESTRIAN ACCOMMODATIONS OVERNIGHT WHEN CURB RAMP WORK IS OCCURRING.

TRAFFIC CONTROL SIGNS PCMS MESSAGE

PANEL 1

ROAD

WORK

PANEL 2

BEGINS

XX/XX

NOTE:

INSTALL TEMPORARY TRAFFIC SIGNALS AT START OF STAGE 1 USING SINGLE LANE CLOSURES IN ACCORDANCE WITH SDD TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC CONTROL-STAGING - STAGE 1

SHEET

97

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETS\PLAN\026101-S1.DWG
LAYOUT NAME - 01

PLOT DATE : 10/28/2022 11:43 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN=40 FT

WISDOT/CADDs SHEET 42

MATCH LINE 17+00

MATCH LINE 23+00

HACKBERRY DRIVE

MOORLAND ROAD (CTH O)

LANE
CLOSEDROAD
WORK
AHEAD

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC CONTROL-STAGING - STAGE 1

SHEET 98

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETS\PLAN\026101-S1.DWG
LAYOUT NAME - 02

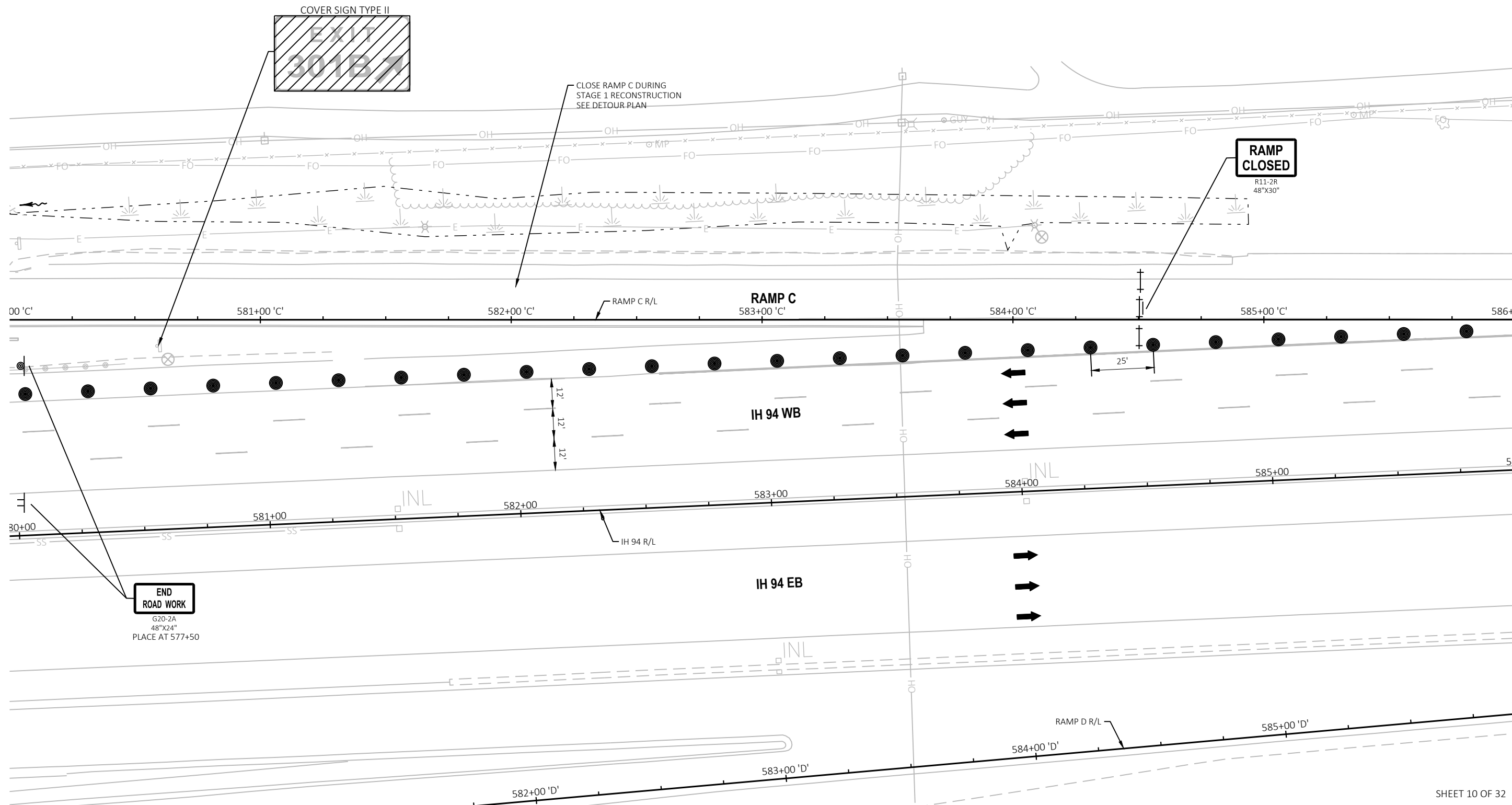
PLOT DATE : 10/28/2022 11:43 AM

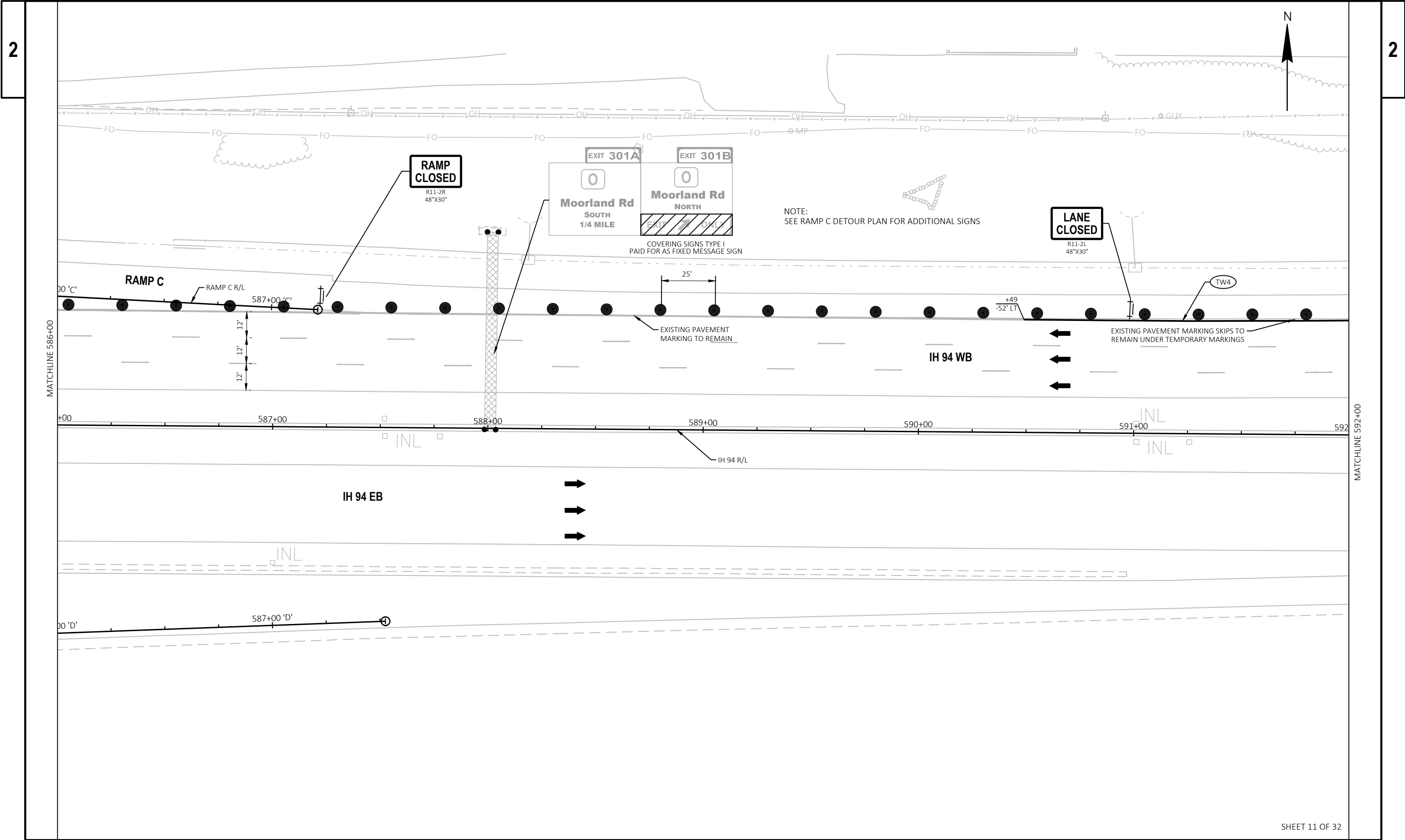
PLOT BY : BLACKWOOD, JIM

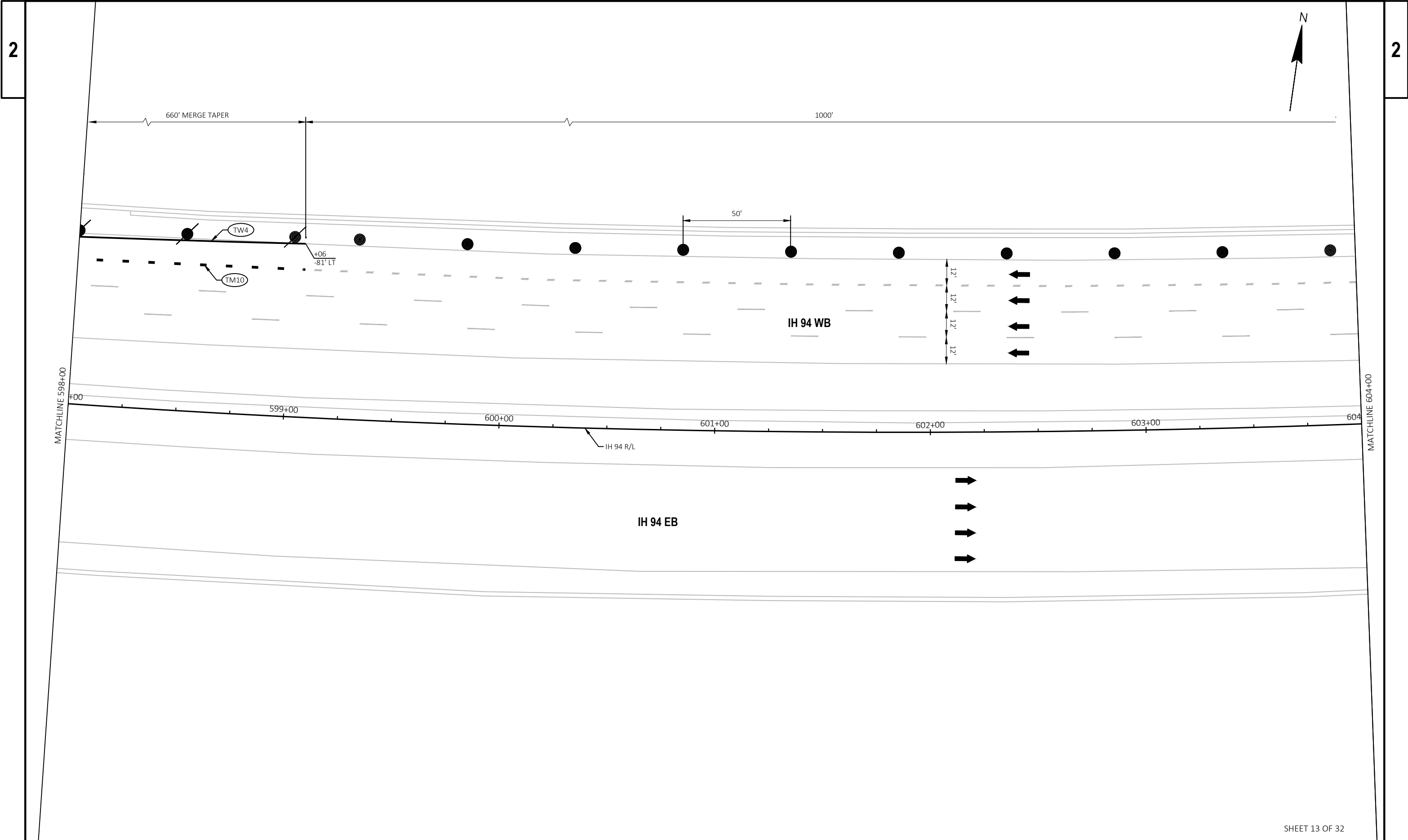
PLOT NAME :

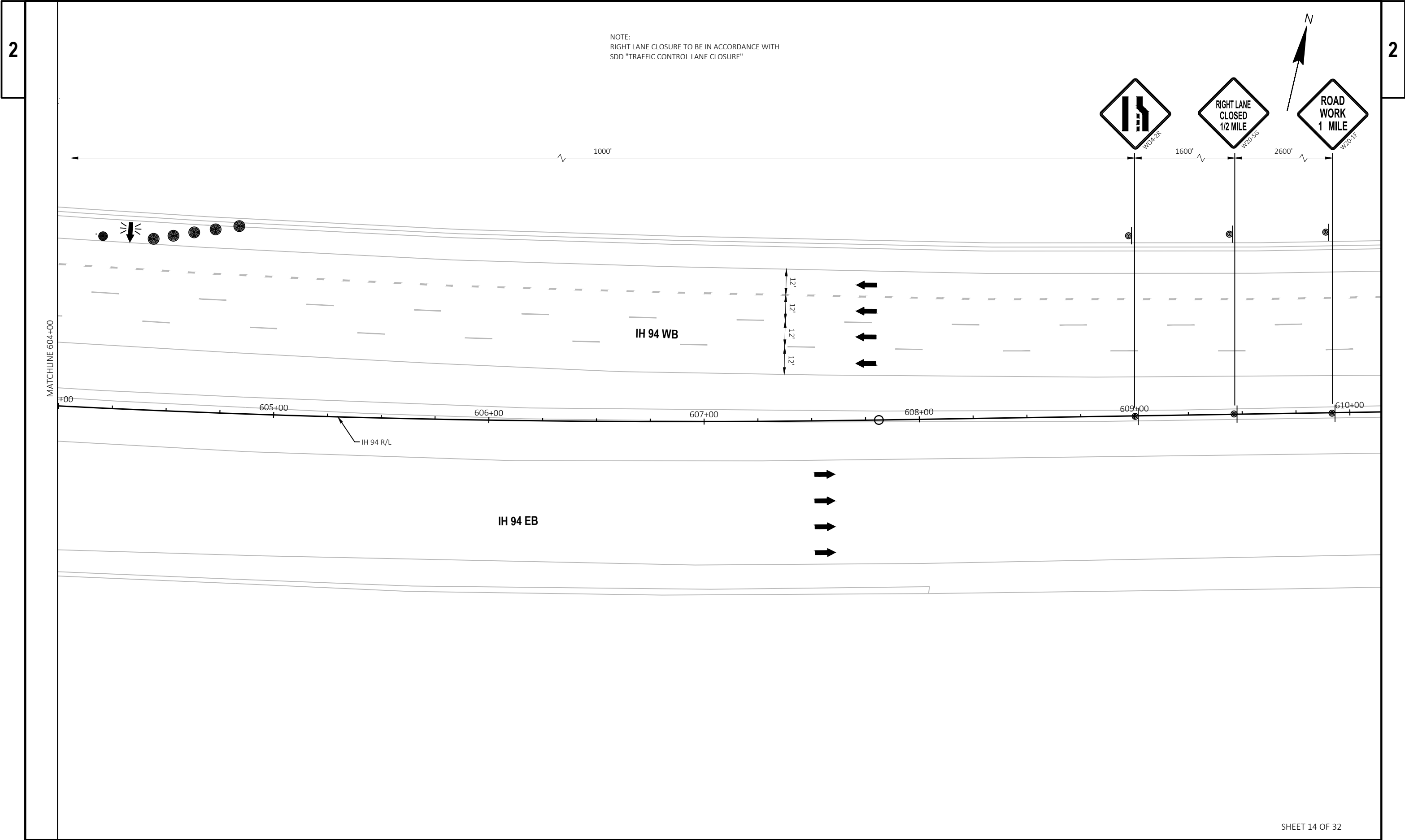
PLOT SCALE : 1 IN=40 FT

WISDOT/CADDs SHEET 42

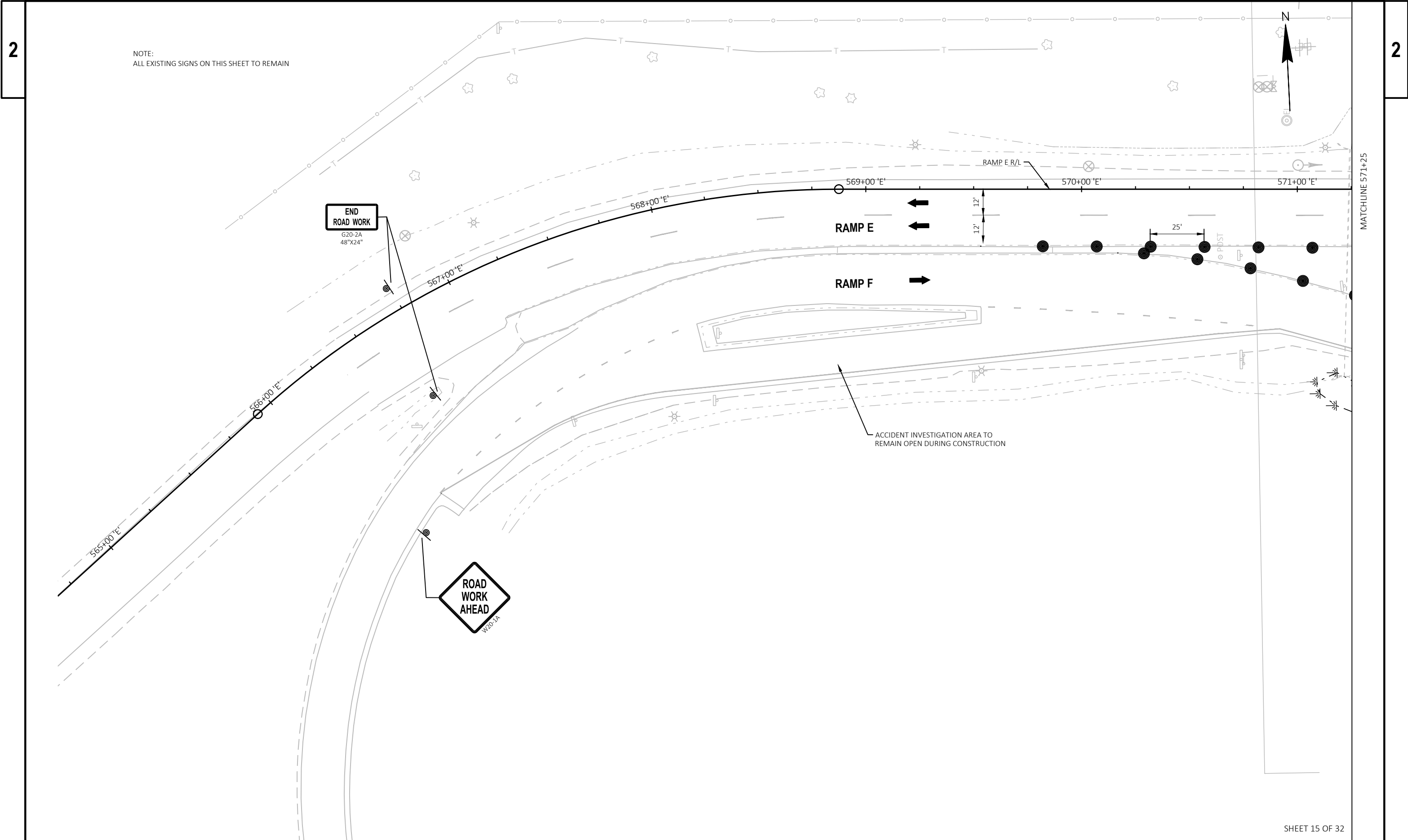


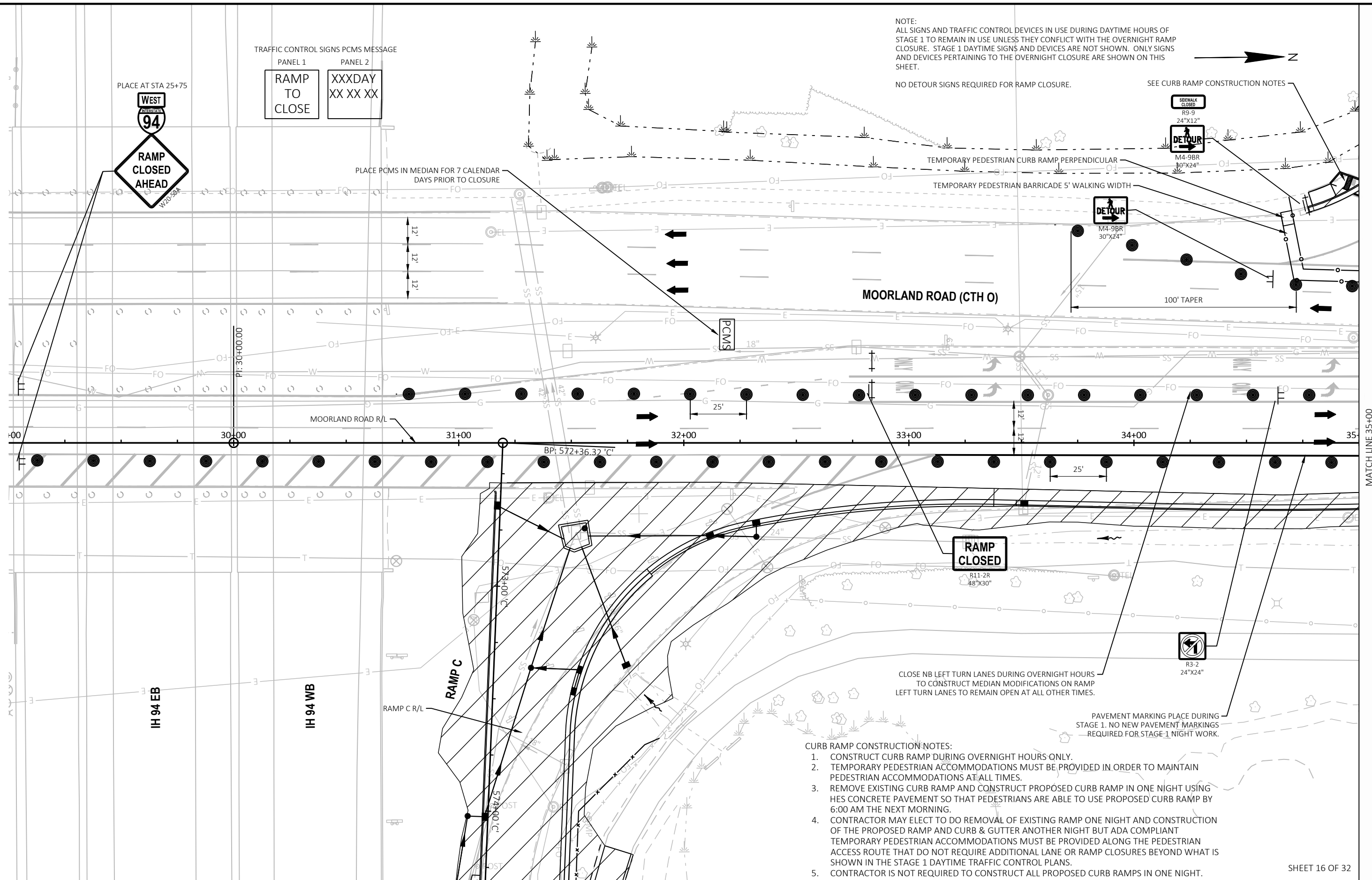






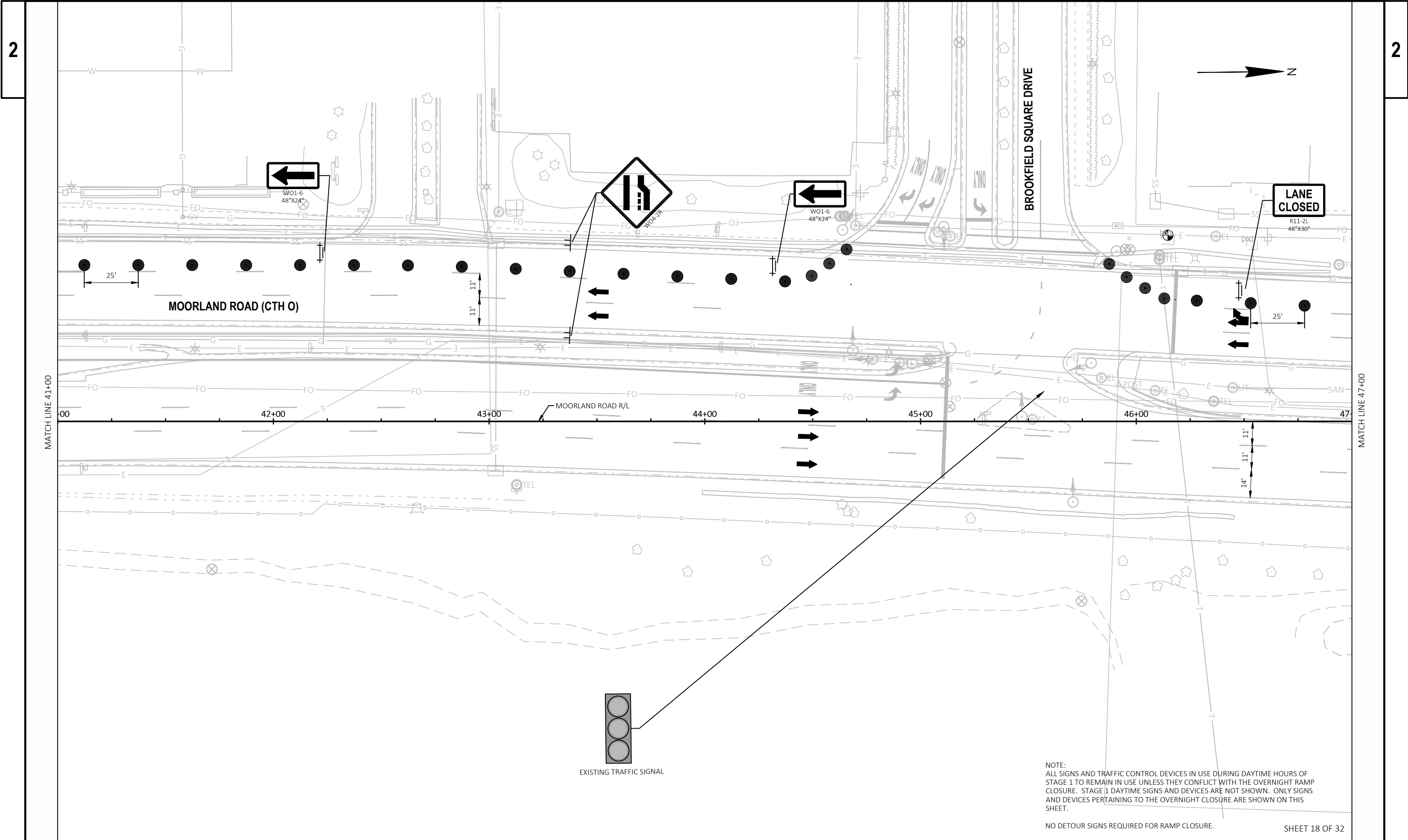
PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	TRAFFIC CONTROL-STAGING - STAGE 1	SHEET 106	E
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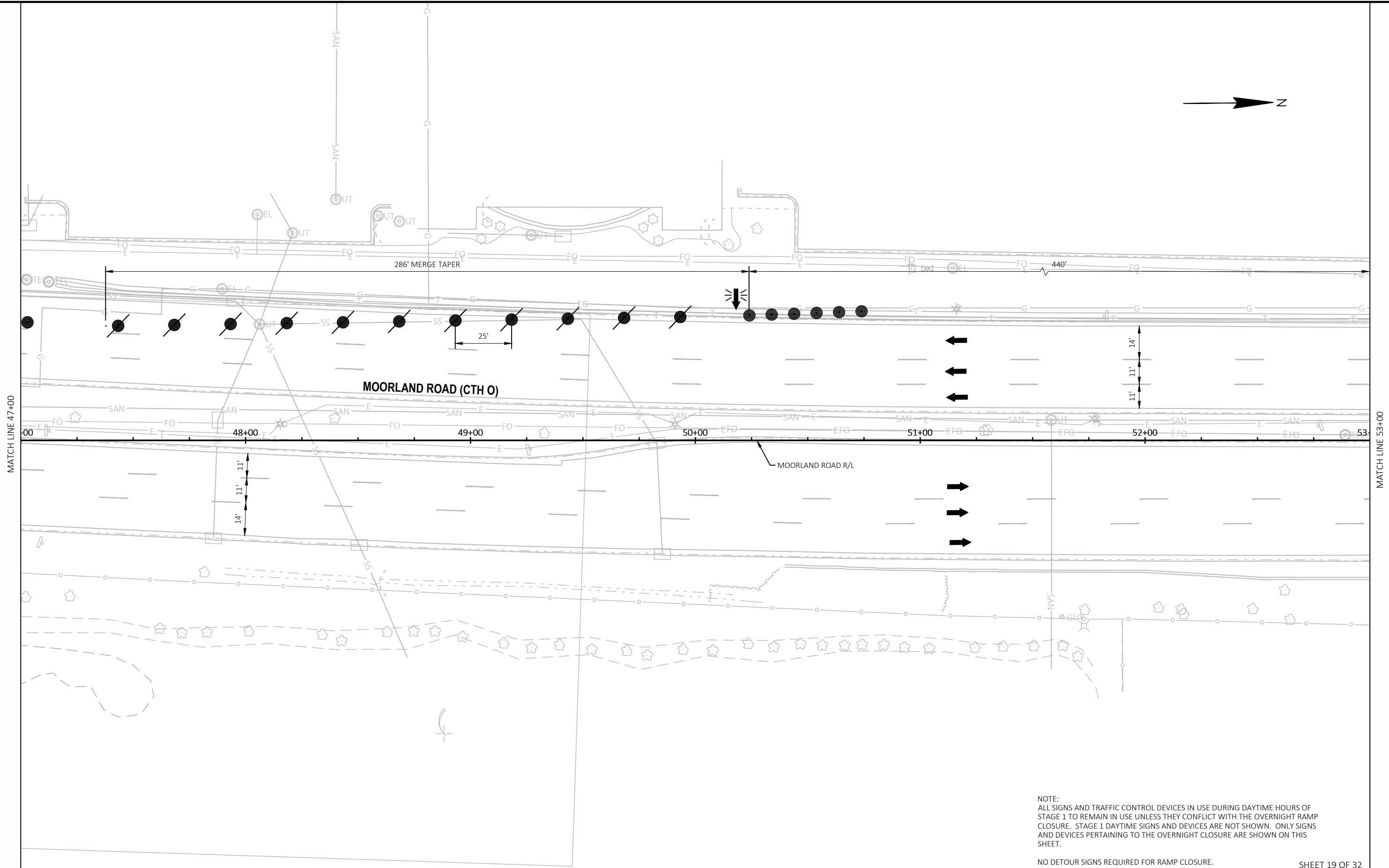


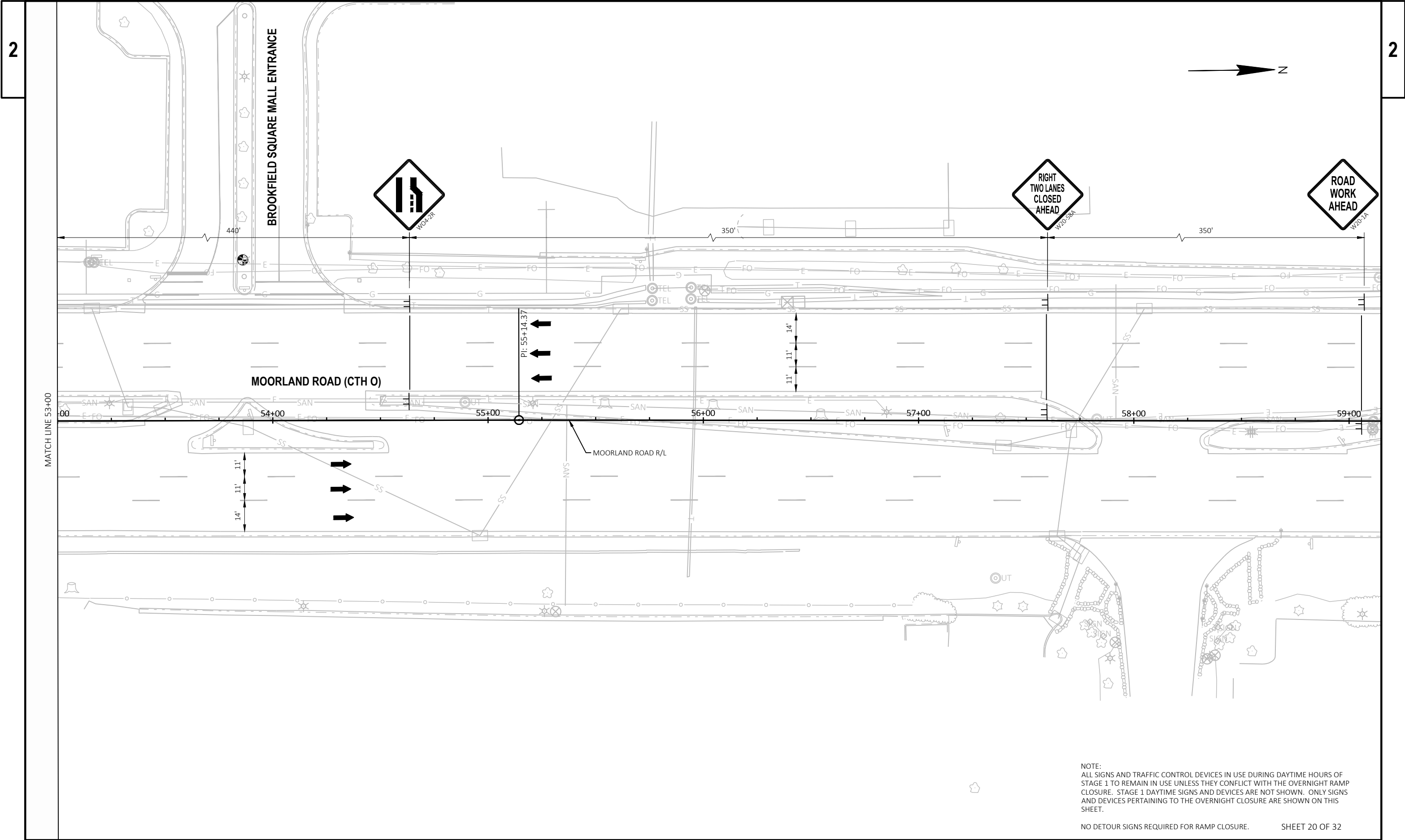


2









TRAFFIC CONTROL NOTES - STAGE 2

CONSTRUCTION:

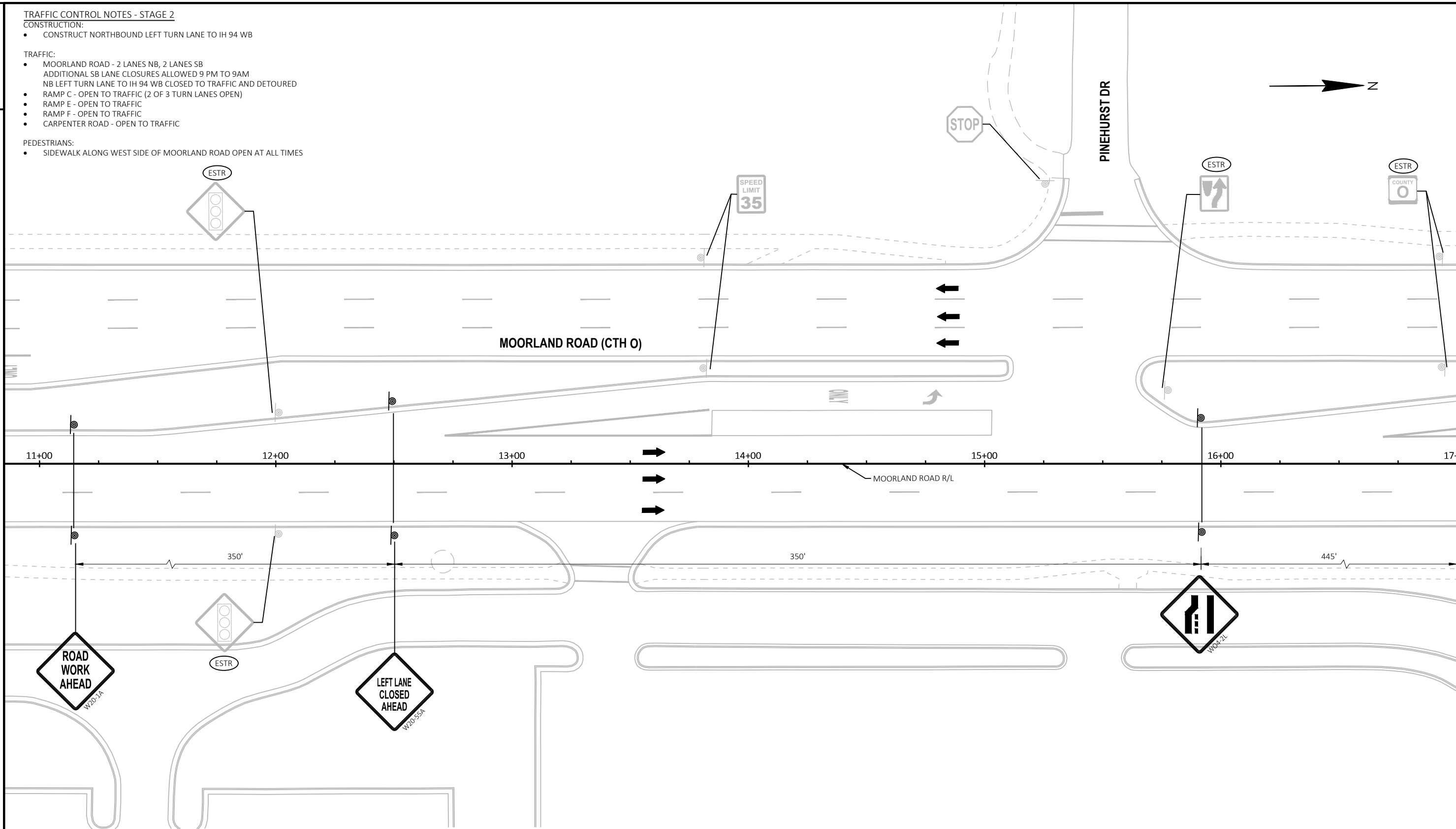
- CONSTRUCT NORTHBOUND LEFT TURN LANE TO IH 94 WB

TRAFFIC:

- MOORLAND ROAD - 2 LANES NB, 2 LANES SB
- ADDITIONAL SB LANE CLOSURES ALLOWED 9 PM TO 9 AM
- NB LEFT TURN LANE TO IH 94 WB CLOSED TO TRAFFIC AND DETOURED
- RAMP C - OPEN TO TRAFFIC (2 OF 3 TURN LANES OPEN)
- RAMP E - OPEN TO TRAFFIC
- RAMP F - OPEN TO TRAFFIC
- CARPENTER ROAD - OPEN TO TRAFFIC

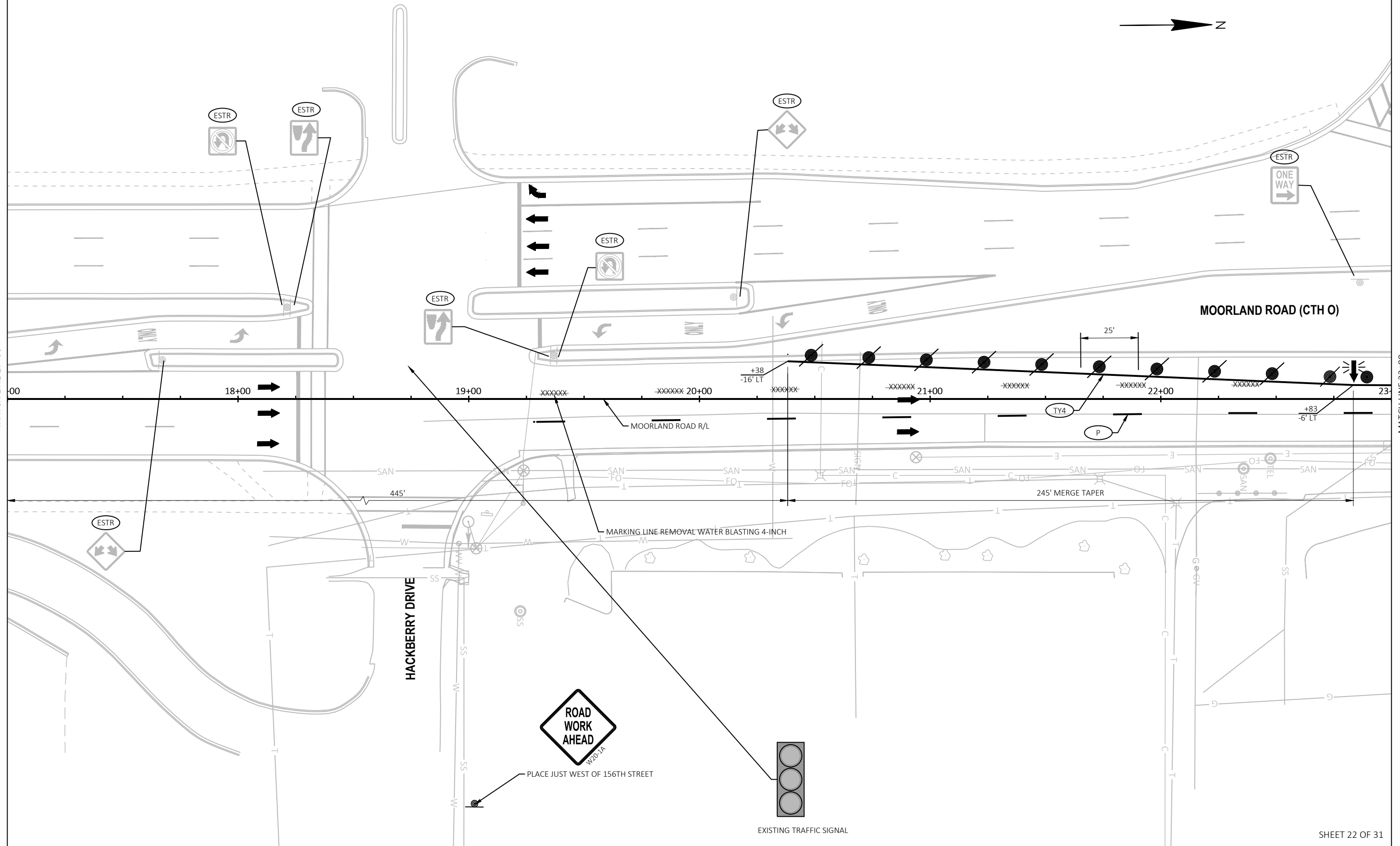
PEDESTRIANS:

- SIDEWALK ALONG WEST SIDE OF MOORLAND ROAD OPEN AT ALL TIMES



MATCH LINE 17+00

MATCH LINE 23+00



PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC CONTROL-STAGING - STAGE 2 PEAK

SHEET 114

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETS\PLAN\026103-S2.DWG
LAYOUT NAME - 02

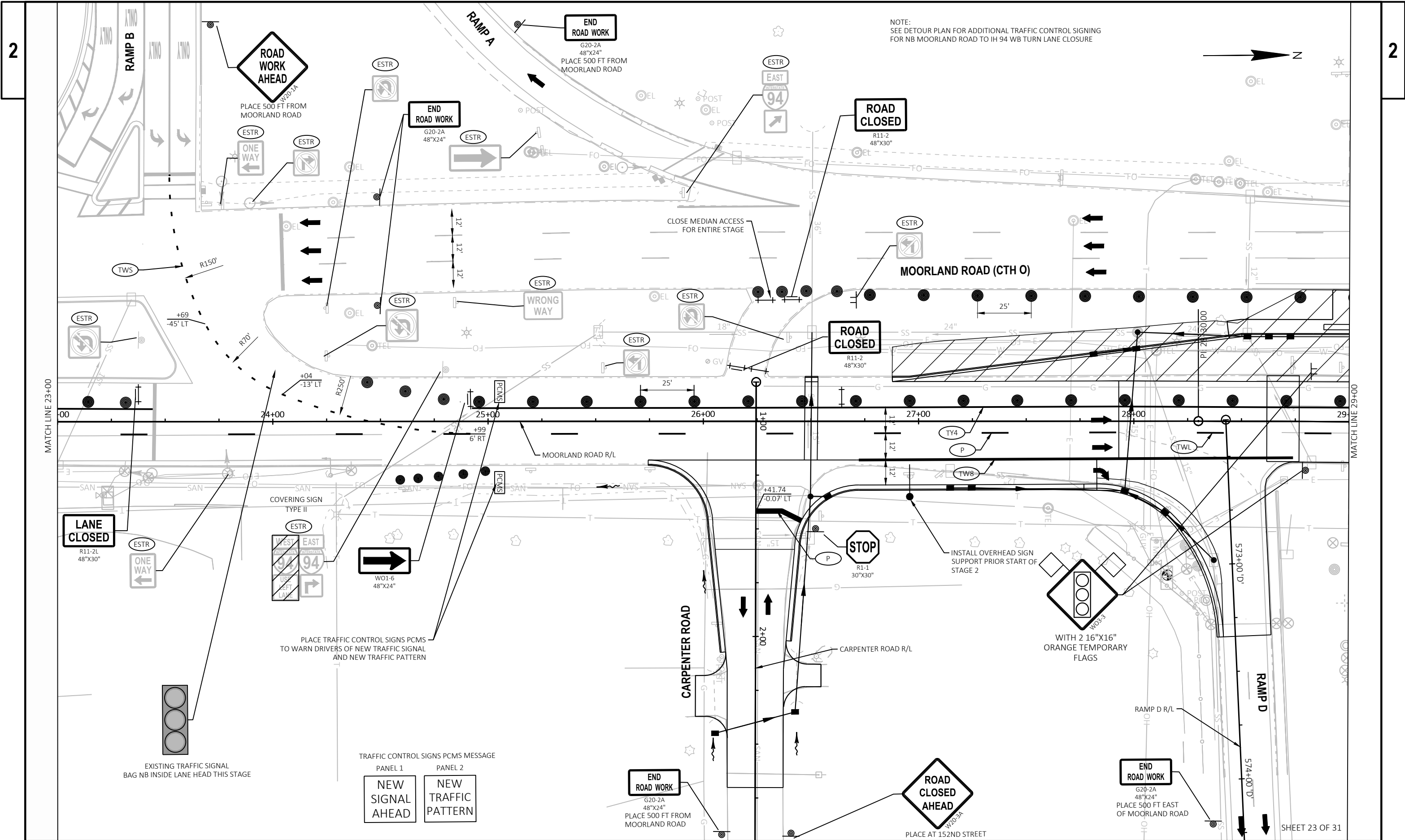
PLOT DATE : 10/28/2022 11:47 AM

PLOT BY : BLACKWOOD, JIM

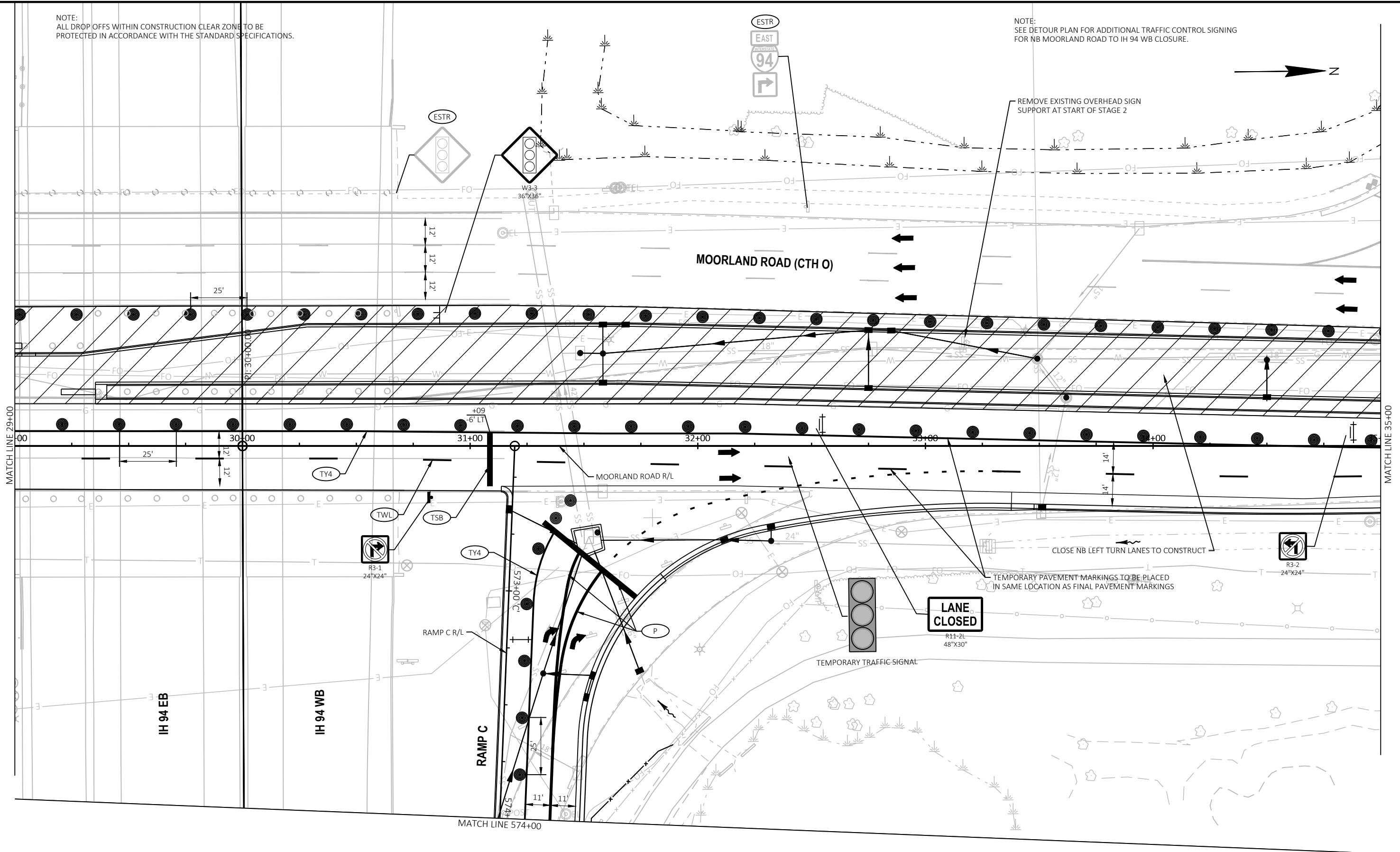
PLOT NAME :

PLOT SCALE : 1 IN=40 FT

WISDOT/CADD5 SHEET 42



NOTE:
ALL DROP OFFS WITHIN CONSTRUCTION CLEAR ZONE TO BE
PROTECTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.



SHEET 24 OF 31

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC CONTROL-STAGING - STAGE 2 PEAK

SHEET 116

E

FILE NAME: T:\1212712\CIVIL3D\10601002\SHEETSP\PLAN\026103-S2.DWG
LAYOUT NAME - 04

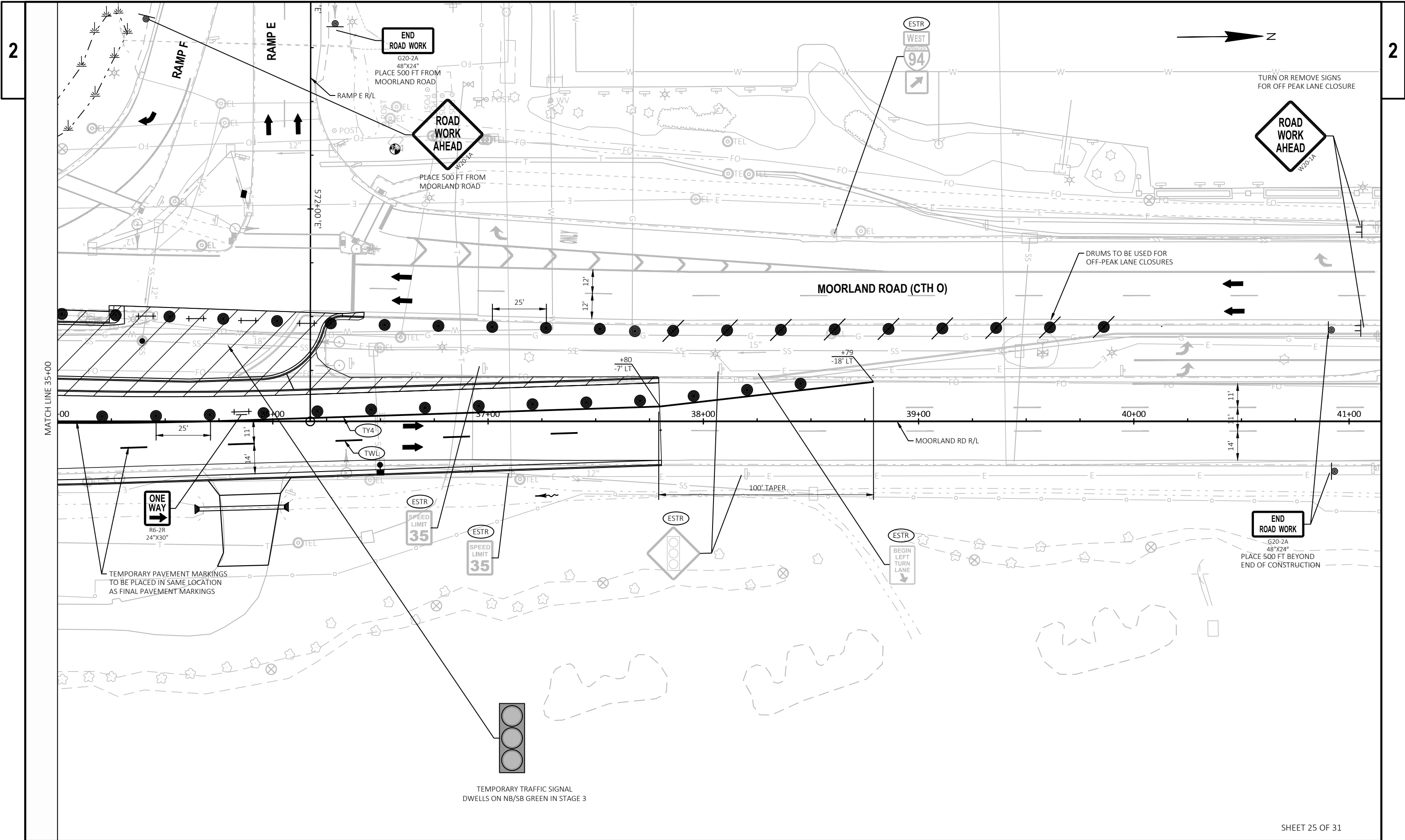
PLOT DATE: 10/28/2022 11:47 AM

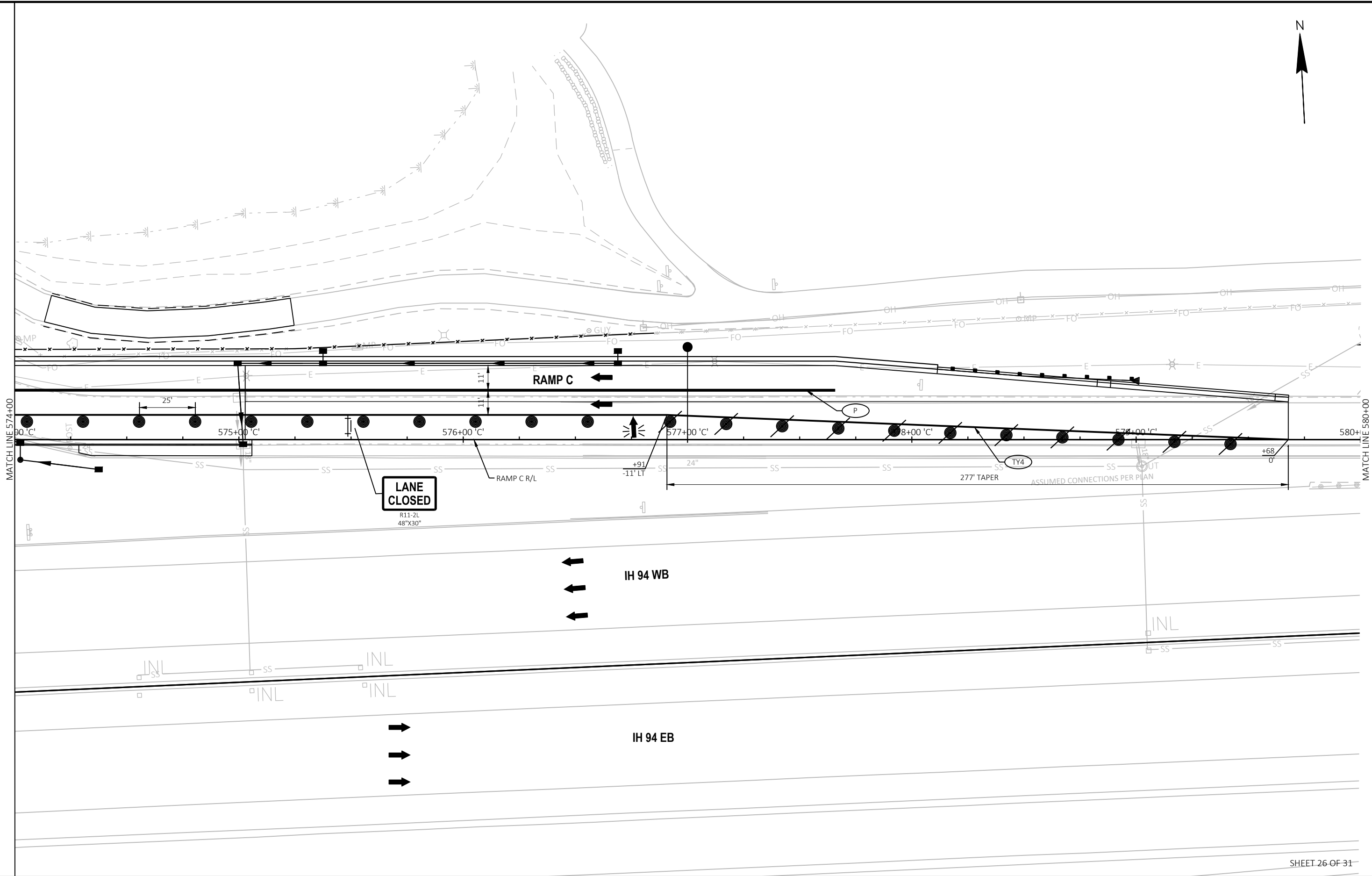
PLOT BY: BLACKWOOD, JIM

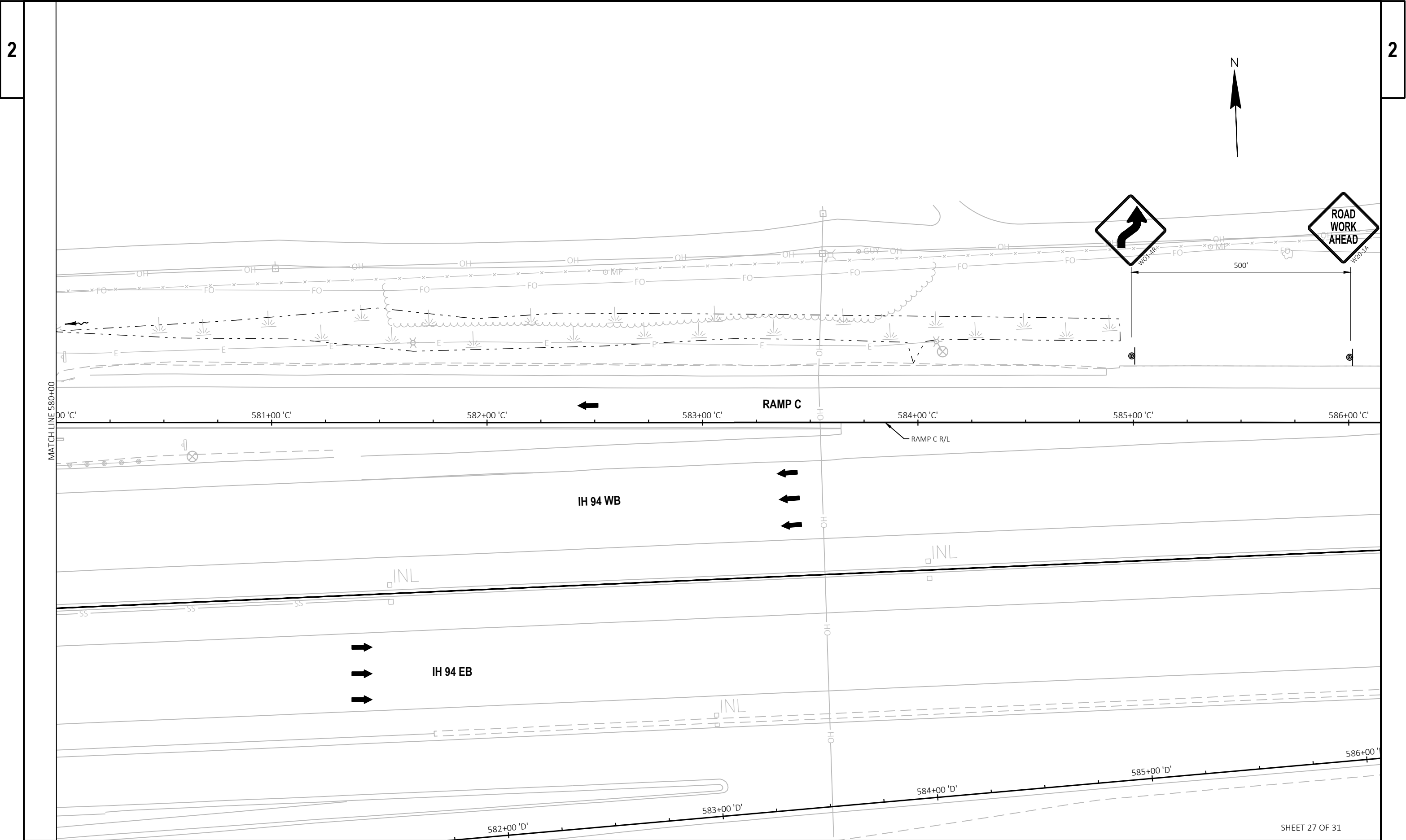
PLOT NAME:

PLOT SCALE: 1 IN=40 FT

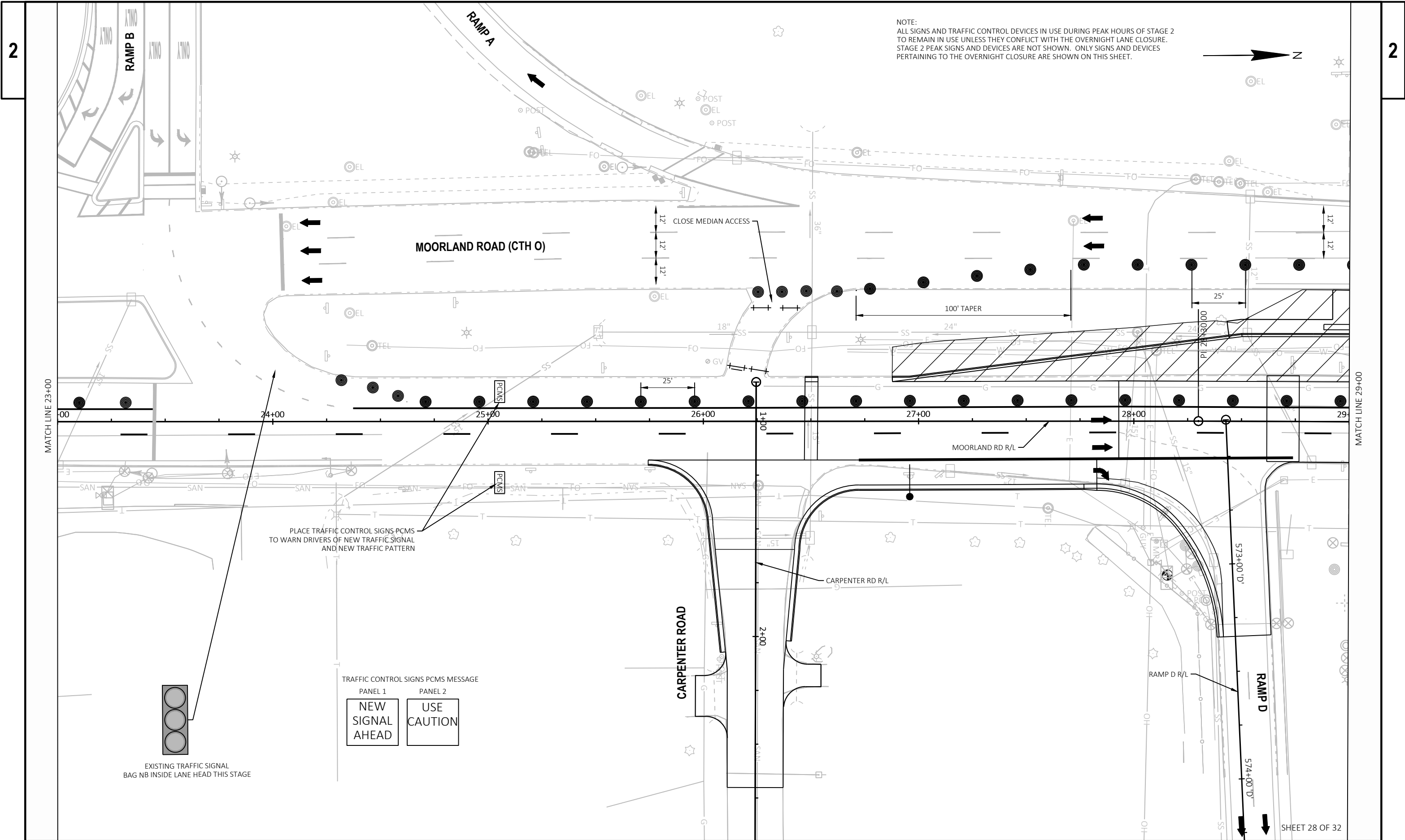
WISDOT/CADDs SHEET 42







PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	TRAFFIC CONTROL-STAGING - STAGE 2 PEAK	SHEET 119	E
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NOTE:
ALL SIGNS AND TRAFFIC CONTROL DEVICES IN USE DURING PEAK HOURS OF STAGE 2
TO REMAIN IN USE UNLESS THEY CONFLICT WITH THE OVERNIGHT LANE CLOSURE.
STAGE 2 PEAK SIGNS AND DEVICES ARE NOT SHOWN. ONLY SIGNS AND DEVICES
PERTAINING TO THE OVERNIGHT CLOSURE ARE SHOWN ON THIS SHEET.

PLACE TRAFFIC CONTROL SIGNS PCMS
TO WARN DRIVERS OF NEW TRAFFIC SIGNAL
AND NEW TRAFFIC PATTERN

TRAFFIC CONTROL SIGNS PCMS MESSAGE

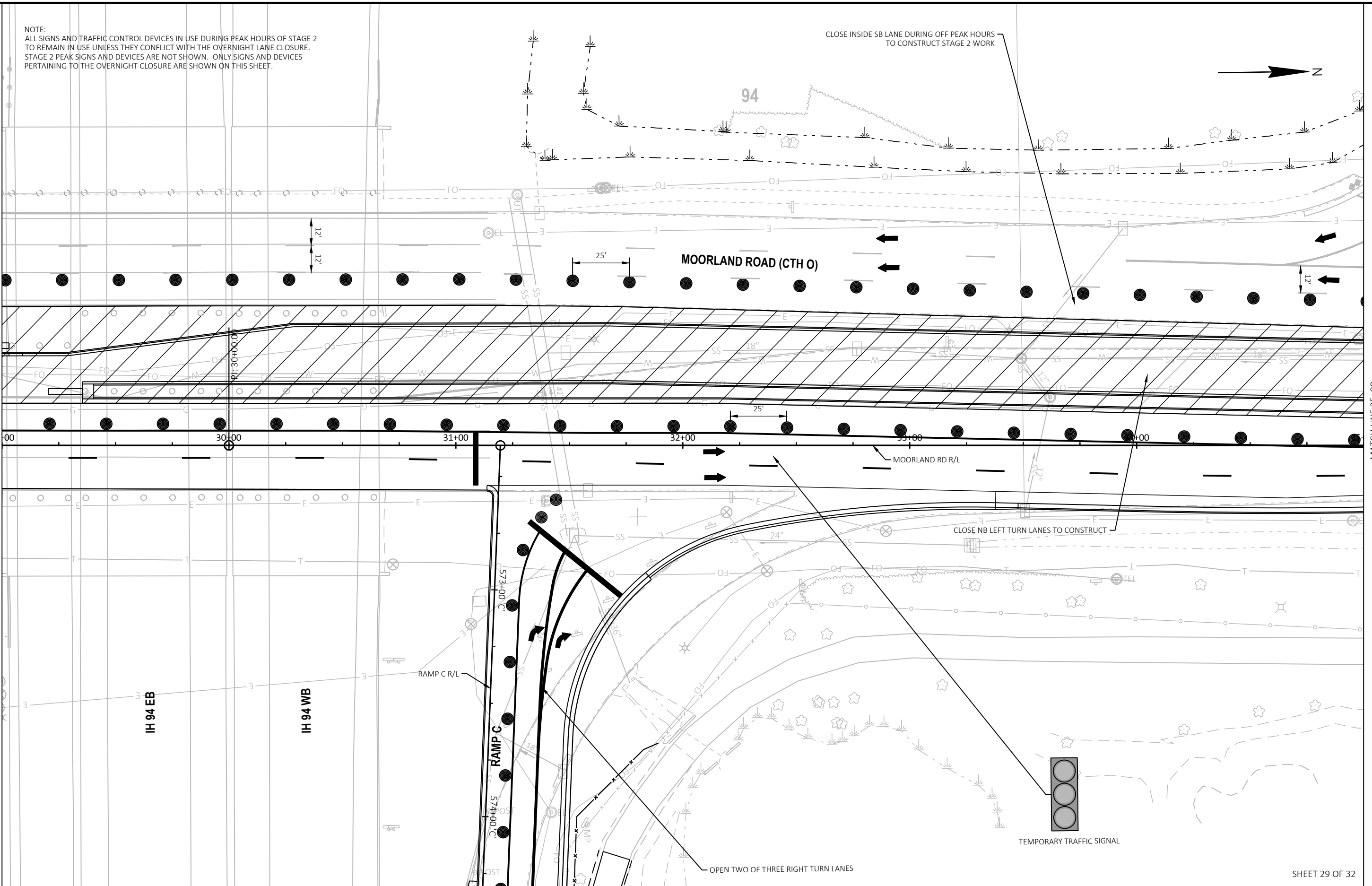
PANEL 1	PANEL 2
NEW SIGNAL AHEAD	USE CAUTION

EXISTING TRAFFIC SIGNAL
BAG NB INSIDE LANE HEAD THIS STAGE

NOTE:
ALL SIGNS AND TRAFFIC CONTROL DEVICES IN USE DURING PEAK HOURS OF STAGE 2
TO REMAIN IN USE UNLESS THEY CONFLICT WITH THE OVERNIGHT LANE CLOSURE.
STAGE 2 PEAK SIGNS AND DEVICES ARE NOT SHOWN. ONLY SIGNS AND DEVICES
PERTAINING TO THE OVERNIGHT CLOSURE ARE SHOWN ON THIS SHEET.

MATCH LINE 29+00

MATCH LINE 35+00



PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC CONTROL-STAGING STAGE 2 OFF PEAK

SHEET 121

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEET5PLAN\026104-S2 OFF PEAK.DWG
LAYOUT NAME - 04

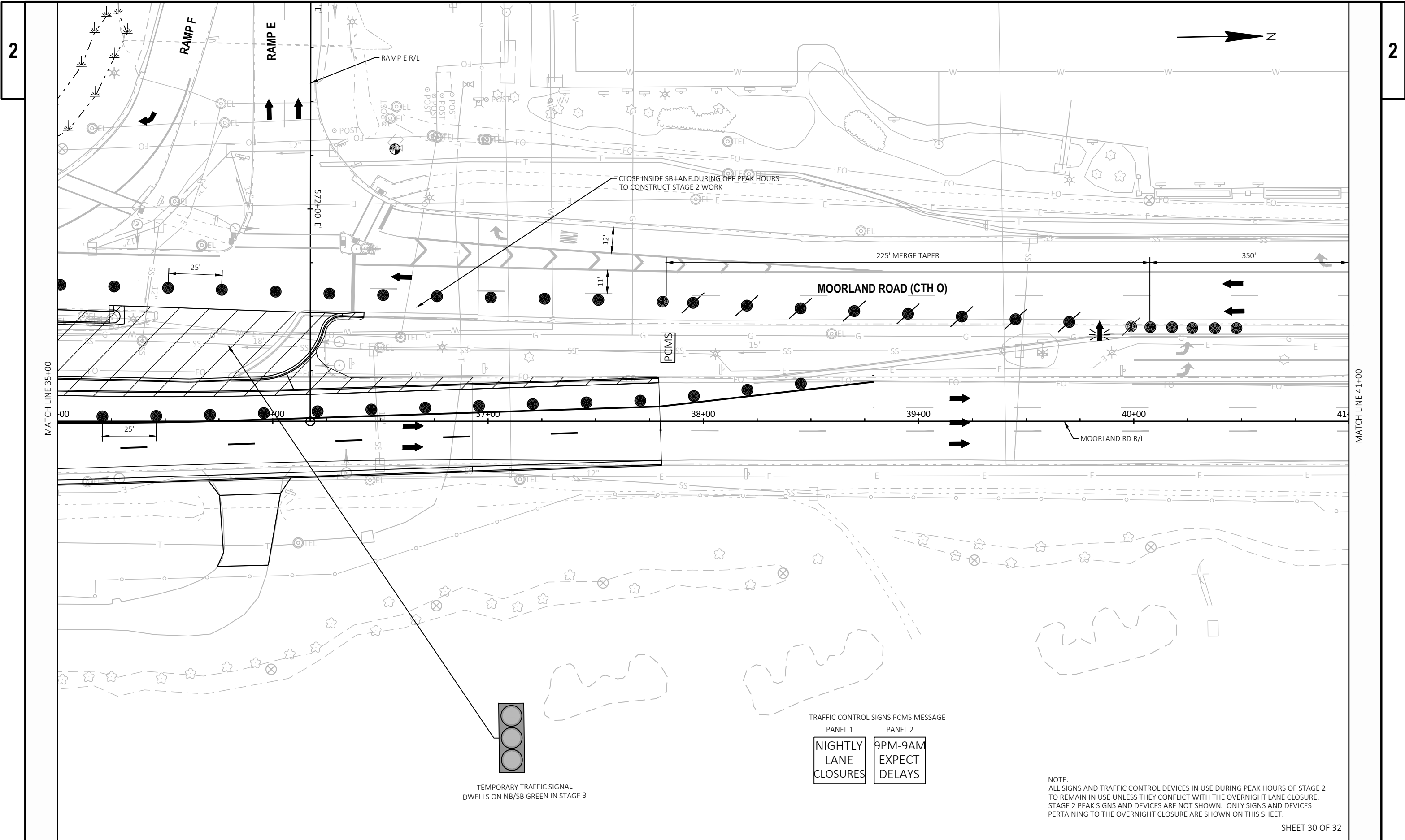
PLOT DATE : 10/28/2022 11:48 AM

PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDs SHEET 42



NOTE:
ALL SIGNS AND TRAFFIC CONTROL DEVICES IN USE DURING PEAK HOURS OF STAGE 2
TO REMAIN IN USE UNLESS THEY CONFLICT WITH THE OVERNIGHT LANE CLOSURE.
STAGE 2 PEAK SIGNS AND DEVICES ARE NOT SHOWN. ONLY SIGNS AND DEVICES
PERTAINING TO THE OVERNIGHT CLOSURE ARE SHOWN ON THIS SHEET.



W04+2L

BROOKFIELD SQUARE DRIVE



MOORLAND ROAD (CTH O)

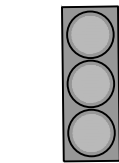


14'
11'
11'



MATCH LINE 41+00

MATCH LINE 47+00



EXISTING TRAFFIC SIGNAL

SHEET 31 OF 32

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

TRAFFIC CONTROL-STAGING STAGE 2 OFF PEAK

SHEET 123

E

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETSP\LAN\026104-S2 OFF PEAK.DWG
LAYOUT NAME - 06

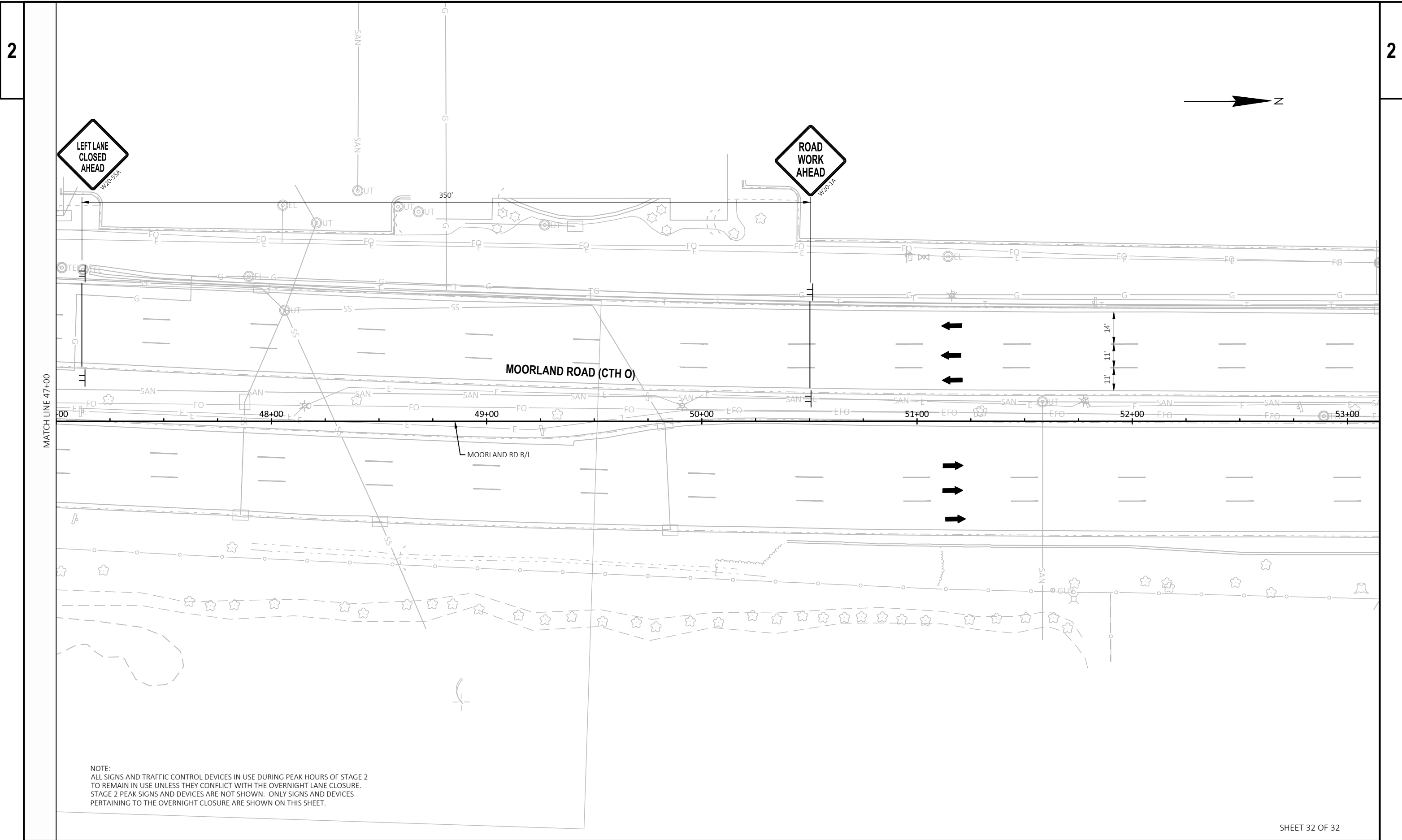
PLOT DATE : 10/28/2022 11:49 AM

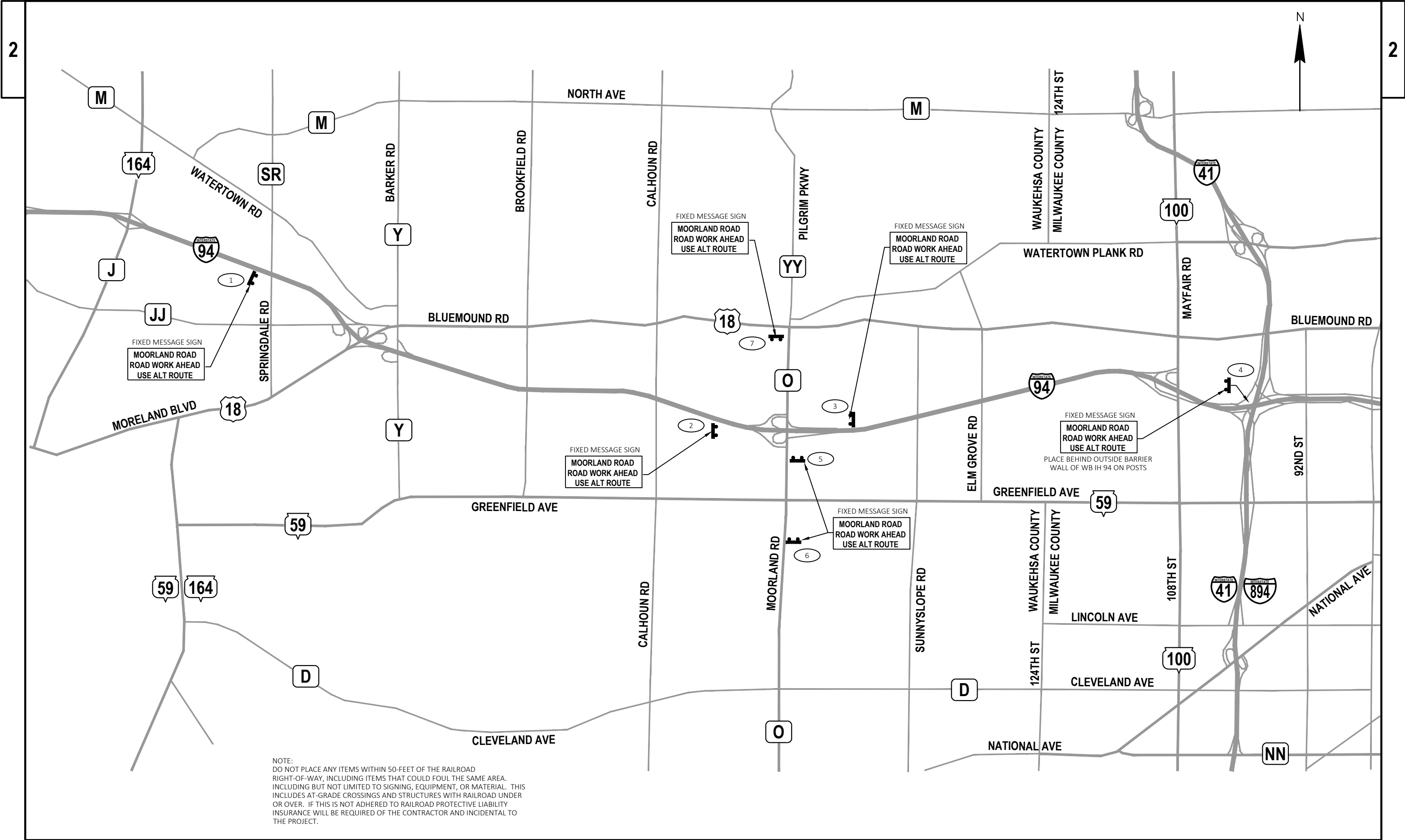
PLOT BY : BLACKWOOD, JIM

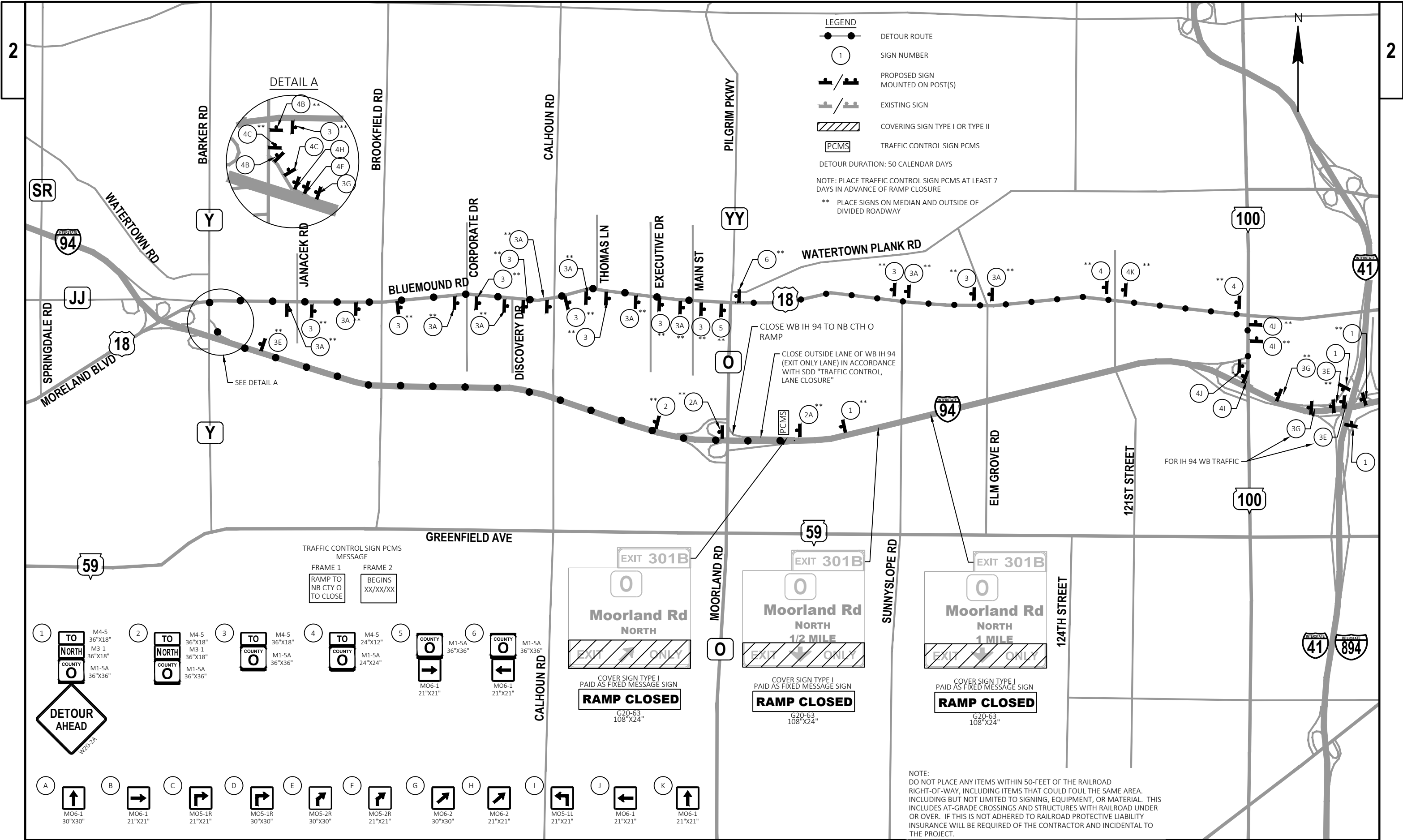
PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADDs SHEET 42







1

TO NORTH
COUNTY O

M4-5
36"x18"
M3-1
36"x18"
M1-5A
36"x36"

2

TO NORTH
COUNTY O

M4-5
36"x18"
M3-1
36"x18"
M1-5A
36"x36"

3

TO COUNTY O

M4-5
36"x18"
M3-1
36"x18"
M1-5A
36"x36"

4

TO COUNTY O

M4-5
24"x12"
M1-5A
24"x24"

5

COUNTY O

M1-5A
36"x36"

6

COUNTY O

M1-5A
36"x36"

A

MO6-1
30"x30"

B

MO6-1
21"x21"

C

MO5-1R
21"x21"

D

MO5-1R
30"x30"

E

MO5-2R
30"x30"

F

MO5-2R
21"x21"

G

MO6-2
30"x30"

H

MO6-2
21"x21"

I

MO5-1L
21"x21"

J

MO6-1
21"x21"

K

MO6-1
21"x21"



A

MO6-1
30"x30"

B

MO6-1
21"x21"

C

MO5-1R
21"x21"

D

MO5-1R
30"x30"

E

MO5-2R
30"x30"

F

MO5-2R
21"x21"

G

MO6-2
30"x30"

H

MO6-2
21"x21"

I

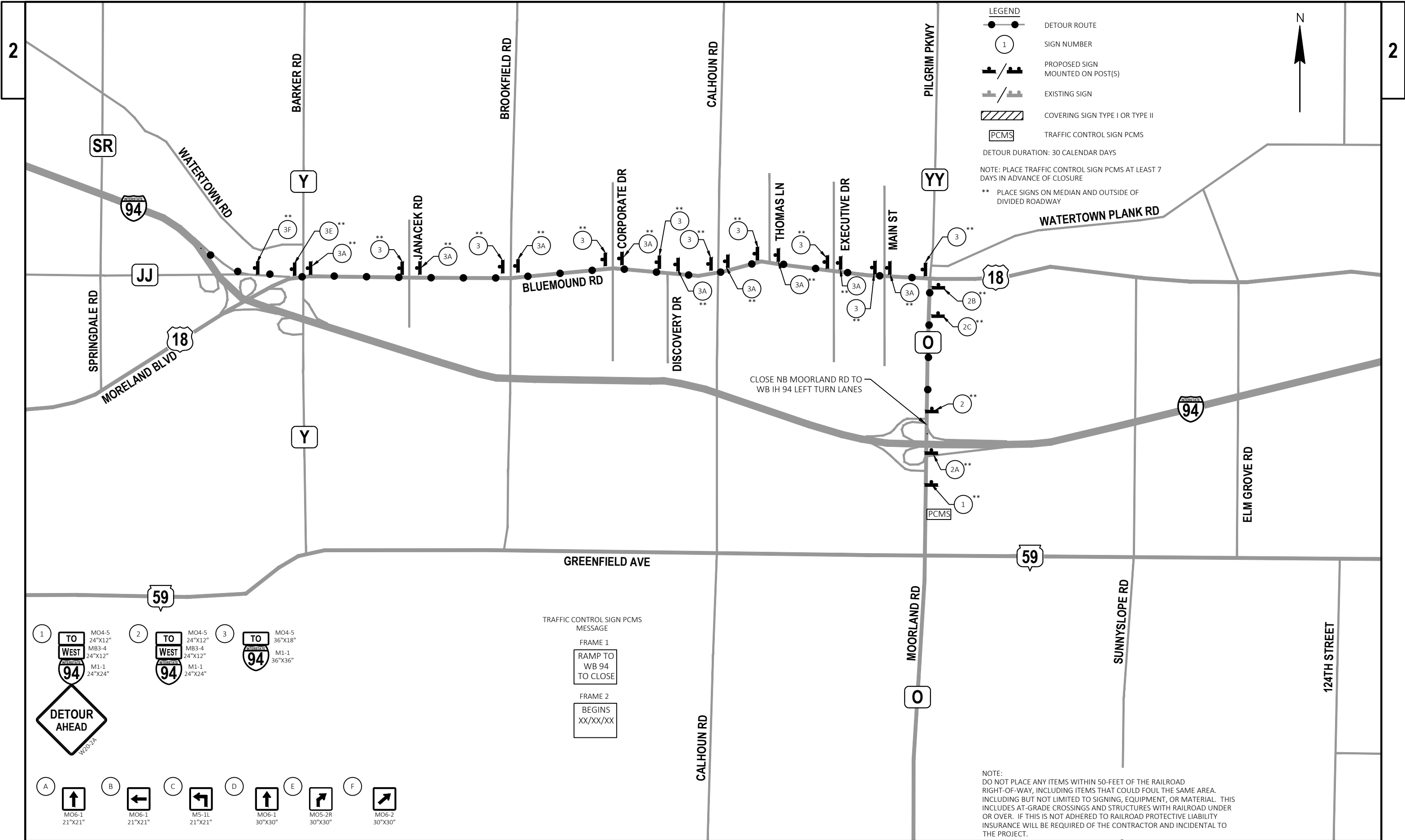
MO5-1L
21"x21"

J

MO6-1
21"x21"

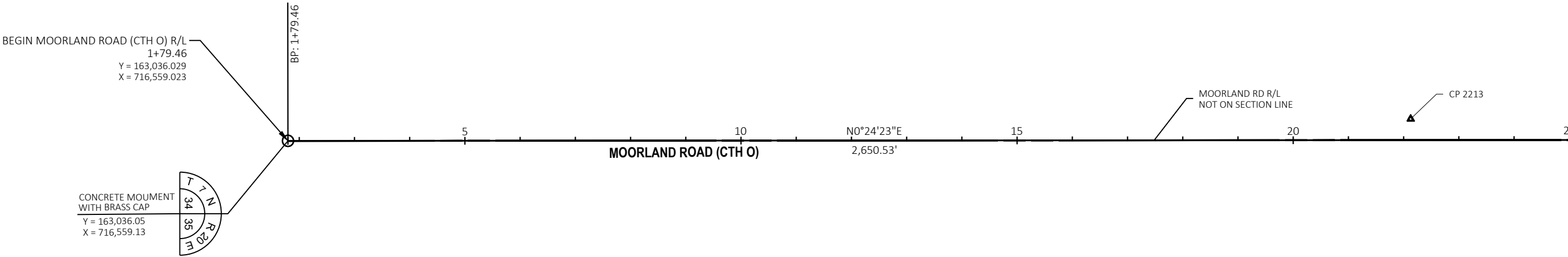
K

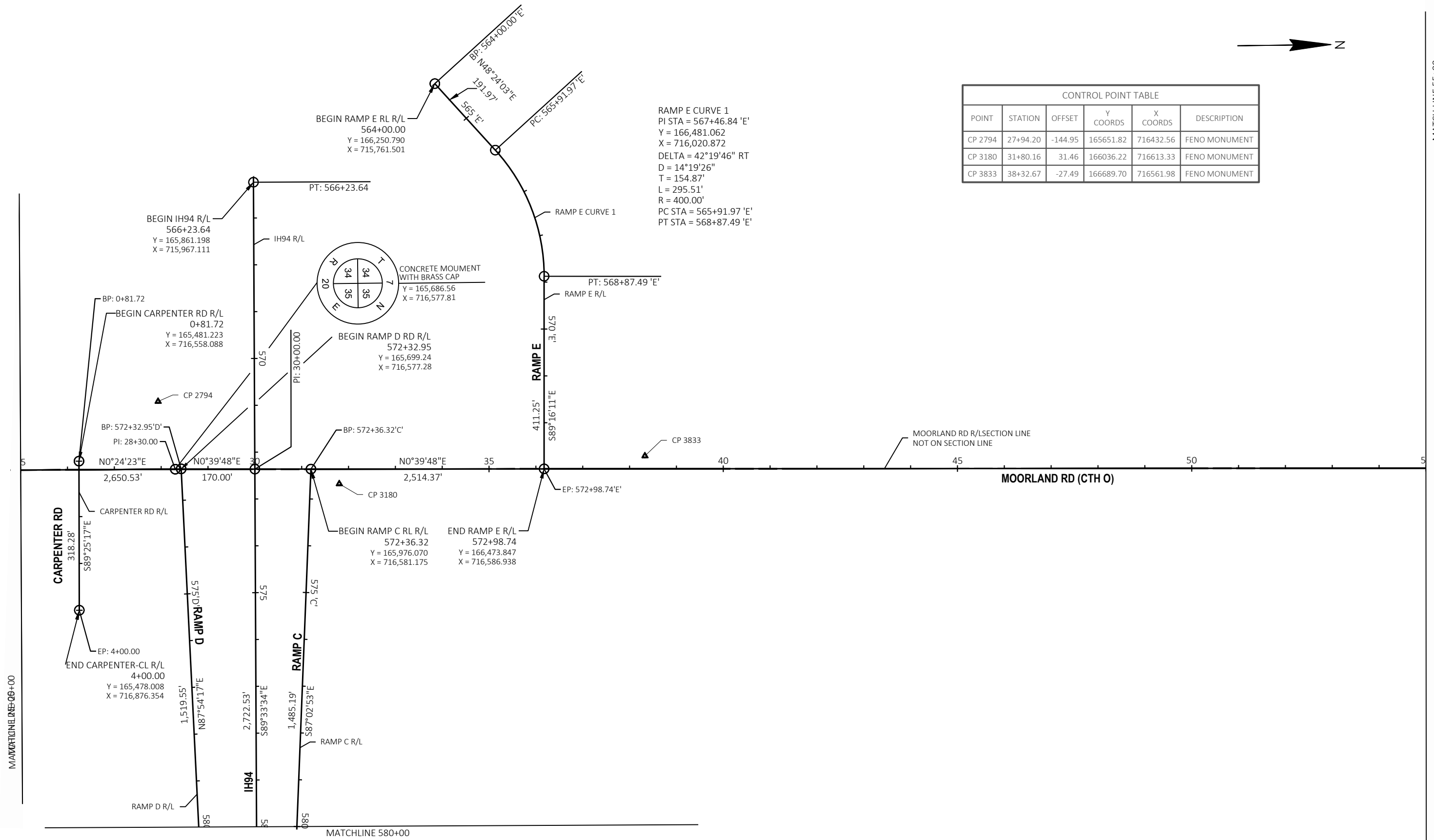
MO6-1
21"x21"



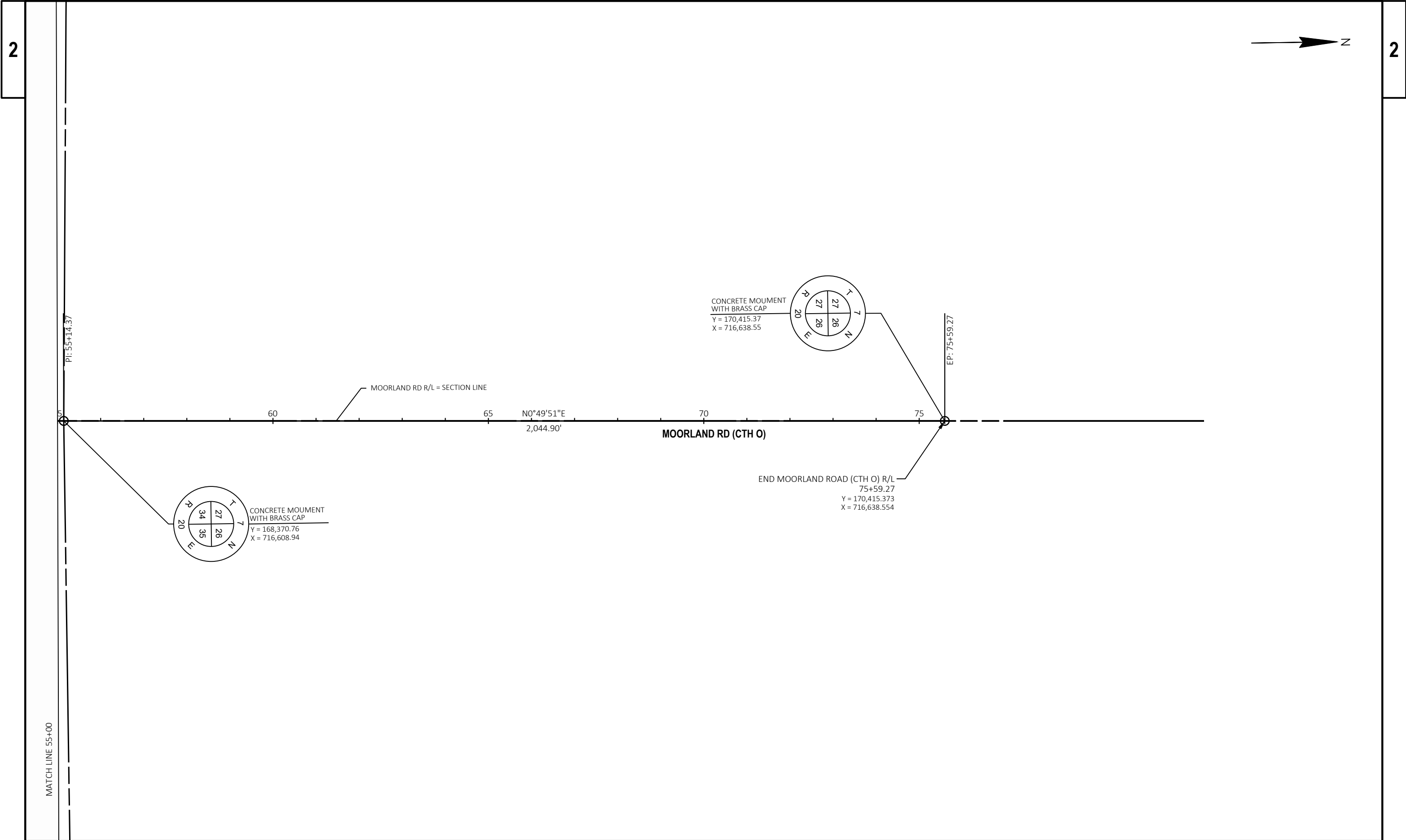


CONTROL POINT TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	DESCRIPTION
CP 2213	22+12.63	-38.22	165069.52	716535.24	FENO MONUMENT



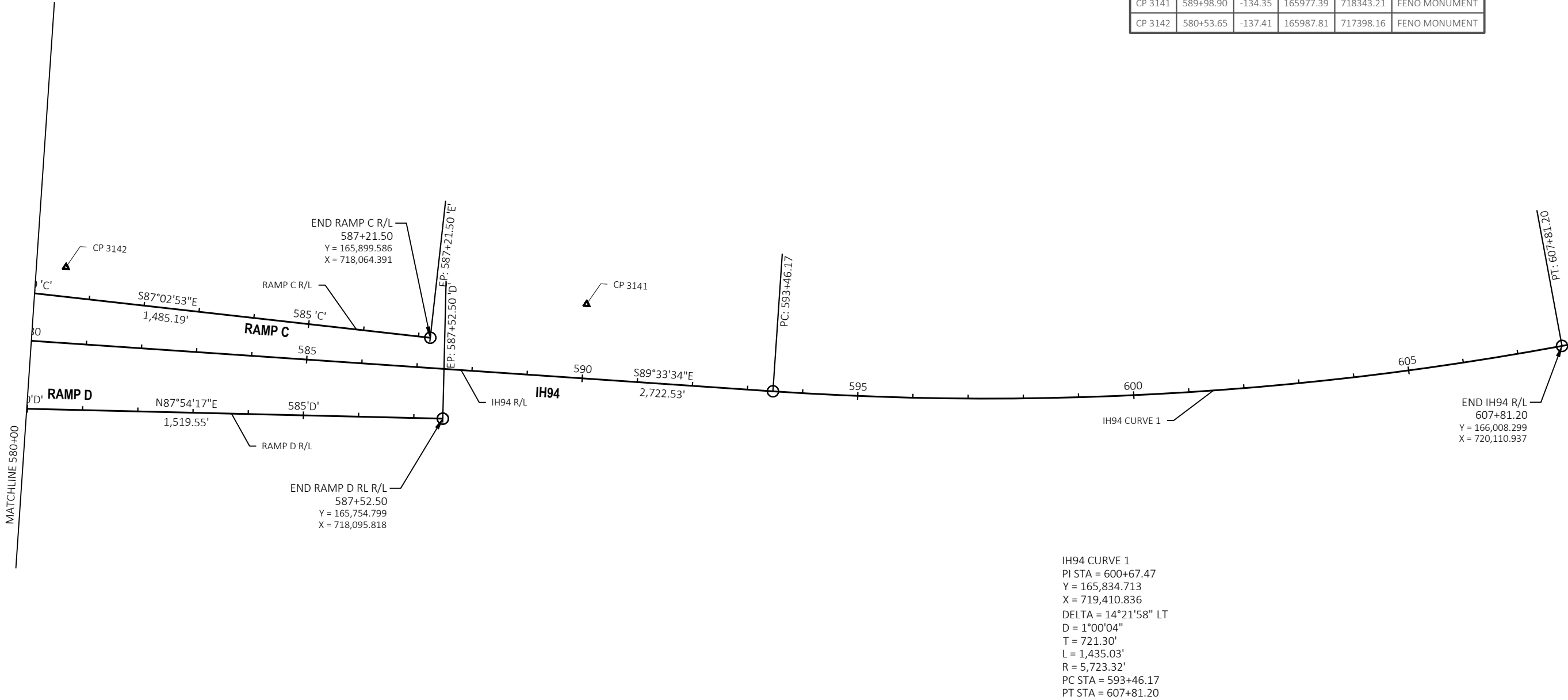


CONTROL POINT TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	DESCRIPTION
CP 2794	27+94.20	-144.95	165651.82	716432.56	FENO MONUMENT
CP 3180	31+80.16	31.46	166036.22	716613.33	FENO MONUMENT
CP 3833	38+32.67	-27.49	166689.70	716561.98	FENO MONUMENT





CONTROL POINT TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	DESCRIPTION
CP 3141	589+98.90	-134.35	165977.39	718343.21	FENO MONUMENT
CP 3142	580+53.65	-137.41	165987.81	717398.16	FENO MONUMENT



3

CLEARING AND GRUBBING

				201.0105	201.0120	201.0205	201.0220
				CLEARING	CLEARING	GRUBBING	GRUBBING
STATION	TO	STATION	LOCATION	STA	ID	STA	ID
MOORLAND RD							
		28+40	47' LT	---	10	---	10
RAMP C							
574+00	-	575+00	LT	1	---	1	---
PROJECT TOTAL				1	10	1	10

3

REMOVING SMALL PIPE CULVERTS

		203.0100	
STATION	LOCATION	EACH	SIZE/LENGTH
MOORLAND RD			
26+05	127' RT	1	15-INCH CMCP, 22 LF
26+43	119' RT	1	15-INCH CMCP, 23 LF
35+86	40' RT	1	18-INCH CMCP, 35 LF
PROJECT TOTAL		3	

ABANDONING SEWER

				204.0291.S
STATION	TO	STATION	LOCATION	CY
MOORLAND RD				
28+09	-	28+30	LT/RT	10
PROJECT TOTAL				10

REMOVING ANCILLARY STRUCTURES

		**		
		204.0195	204.0246.0001	204.0246.0002
		REMOVING	REMOVING	REMOVING
		CONCRETE	ANCILLARY	ANCILLARY
		BASES	S-67-227	S-67-614
STATION	LOCATION	EACH	EACH	EACH
MOORLAND RD				
20+69	28' RT	1	---	1
26+96	27' RT	1	---	---
33+17	47' RT	1	1	---
PROJECT TOTAL		3	1	1
**ADDITIONAL QUANTITIES SHOWN ELSEWHERE				

ALL ITEMS CATEGORY 1000 UNLESS NOTED

3

REMOVING ASPHALT ITEMS

				204.0115	204.0120
				REMOVING	REMOVING
				ASPHALTIC	ASPHALTIC
				SURFACE BUTT	SURFACE
				JOINTS	MILLING
	STATION	TO	STATION	SY	SY
MOORLAND RD					
	23+00	-	29+00	65	720
	29+00	-	35+00	---	2,445
	35+00	-	41+00	95	690
RAMP C					
	572+54	-	574+00	---	---
	574+00	-	580+00	15	865
PROJECT TOTAL				175	4,720

REMOVING CONCRETE ITEMS

				204.0100	204.0105	204.0150	204.0155
				REMOVING	REMOVING		
				CONCRETE	CONCRETE		REMOVING
				PAVEMENT	PAVEMENT	REMOVING	CONCRETE
				PAVEMENT	BUTT JOINTS	CURB & GUTTER	SIDEWALK
STATION	TO	STATION		SY	SY	LF	SY
MOORLAND RD							
23+00	-	29+00		265	---	315	---
29+00	-	35+00		1,115	---	370	15
35+00	-	41+00		615	100	495	65
RAMP C							
572+54	-	574+00		645	---	---	---
574+00	-	580+00		255	---	465	---
PROJECT TOTAL				2,895	100	1,645	80

3

REMOVING FENCE

				204.0170
STATION TO		STATION	LOCATION	LF
RAMP C				
573+65	-	576+86	LT	335
PROJECT TOTAL				335

REMOVING STORM SEWER STRUCTURES

		204.0210	204.0220	204.9060.S.0002
		REMOVING	REMOVING	REMOVING
		MANHOLES	INLETS	STORM SEWER
		EACH	EACH	CHAMBER
		EACH	EACH	EACH
MOORLAND RD				
26+50	55' RT	---	1	---
27+15	25' RT	---	1	---
27+95	32' RT	---	1	---
28+00	41' LT	1	---	---
28+36	68' RT	---	1	---
28+51	42' LT	---	1	---
31+47	44' LT	---	1	---
32+76	46' LT	---	1	---
33+48	40' LT	1	---	---
33+51	31' RT	---	1	---
33+63	23' LT	1	---	---
35+90	99' LT	---	1	---
36+51	21' RT	---	1	---
RAMP C				
575+03	20' LT	---	1	---
572+75	34' LT	---	---	1
573+38	62' LT	---	1	---
573+64	3' LT	1	---	---
573+78	36' LT	---	1	---
PROJECT TOTAL		4	13	1

REMOVING RAMP CLOSURE GATE

		204.9060.S.0001
		EACH
MOORLAND RD		
36+28	135' LT	1
PROJECT TOTAL		1

ALL ITEMS CATEGORY 1000 UNLESS NOTED

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

MISCELLANEOUS QUANTITIES

SHEET NO:

E

REMOVING STORM SEWER

				204.0245.0001	204.0245.0002	204.0245.0003	204.0245.0004	204.0245.0005
				REMOVING	REMOVING	REMOVING	REMOVING	REMOVING
				STORM SEWER	STORM SEWER	STORM SEWER	STORM SEWER	STORM SEWER
				12-INCH	15-INCH	18-INCH	24-INCH	58X36-INCH
STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF
MOORLAND RD								
26+00	-	26+49	RT	---	49	---	---	---
26+49	-	26+51	LT/RT	---	96	---	---	---
27+15	-	27+96	RT	82	---	---	---	---
28+02	-	27+96	LT/RT	---	71	---	---	---
28+02	-	28+09	LT/RT	---	22	---	---	---
28+02	-	28+53	LT/RT	---	---	---	51	---
28+30	-	28+37	RT	---	22	---	---	---
31+48	-	32+77	LT	---	---	128	---	---
32+77	-	33+49	LT	---	---	73	---	---
33+49	-	33+62	LT	21	---	---	---	---
35+86	-	35+89	LT	11	---	---	---	---
-								
RAMP C								
572+74	-	572+75	LT	---	---	---	80	---
572+75	-	573+39	LT	---	---	---	---	69
572+75	-	573+63	LT	---	---	---	94	---
573+63	-	573+78	LT	---	---	34	---	---
573+63	-	574+03	LT/RT	---	---	---	40	---
PROJECT TOTAL				114	260	235	265	69

BASE AGGREGATE ITEMS

				305.0110	305.0120	310.0110	312.0110
				BASE	BASE	BASE	SELECT
				AGGREGATE	AGGREGATE	AGGREGATE	CRUSHED
				DENSE 3/4-INCH	DENSE 1 1/4-INCH	OPEN-GRADED	MATERIAL
STATION	TO	STATION		TON	TON	TON	TON
MOORLAND RD							
23+00	-	29+00		---	395	20	715
29+00	-	35+00		---	1,385	10	1,765
35+00	-	41+00		---	560	5	605
RAMP C							
572+54	-	574+00		---	475	10	865
574+00	-	580+00		10	625	10	970
CARPENTER RD							
1+60	-	4+00		5	275	---	---
PROJECT TOTAL				15	3,715	55	4,920

**ADDITIONAL ITEMS FOUND ELSEWHERE - EARTHWORK SUMMARY

ALL ITEMS CATEGORY 1000 UNLESS NOTED

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (CY) (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (CY) (2)	AVAILABLE MATERIAL (CY) (4)	312.0110 SELECT CRUSHED MATERIAL EXPANDED EBS BACKFILL	UNEXPANDED FILL (CY)	EXPANDED FILL	MASS ORDINATE +/- (CY) (7)	WASTE (CY)
			CUT (CY) (2)	EBS EXCAVATION (CY) (3)(9)			(TONS) FACTOR 1.30		(CY) FACTOR 1.15		
DIVISION 1											
	25+74.40/37+80.56	MOORLAND ROAD STAGE 1	1,339	140	327	1,012	346	30	35	978	978
	1+50.00/2+70.16	CARPENTER ROAD	318	0	13	305	0	10	12	294	294
	572+75.00/573+33.68	RAMP D	82	0	7	75	0	0	0	75	75
	--	CURB RAMP SW QUADRANT RAMP E/F	6	0	3	3	0	0	0	3	3
	--	PORKCHOP ISLAND NW QUADRANT RAMP E/F	7	0	4	3	0	0	0	3	3
	--	CURB RAMP NW QUADRANT RAMP E/F	8	0	4	4	0	0	0	4	4
	572+75.00/579+67.82	RAMP C	2,856	170	223	2,633	420	8	9	2,624	2,624
	571+32.74/572+21.41	RAMP E	70	0	37	33	0	0	0	33	33
DIVISION 1 SUBTOTAL			4,686	310	618	4,068	766	48	55	4,013	4,013
DIVISION 2											
	26+87.87/37+79.37	MOORLAND ROAD STAGE 2	3,411	350	615	2,796	865	22	25	3,386	3,386
DIVISION 2 SUBTOTAL			3,411	350	615	2,796	865	22	25	3,386	3,386
GRAND TOTAL			8,097	660	1,233	6,864	1,630	70	81	7,399	7,399
TOTAL COMMON EXC			8,757								

** ADDITIONAL QUANTITY FOUND ELSEWHERE - BASE AGGREGATE

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION VOLUMES BASED ON GEOTECHNICAL REPORT. ACTUAL LOCATIONS TO BE DETERMINED IN FIELD BY ENGINEER. DO NOT PERFORM EBS EXCAVATION WITHOUT THE APPROVAL OF THE ENGINEER.

(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) EBS EXCAVATION TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL, ITEM 312.0110

(6) EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR

(7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(8) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

(9) EBS EXCAVATION SHALL BE REMOVED FROM THE PROJECT SITE AND SHALL NOT BE USED AS FILL. EBS IS NOT INCLUDED IN THE MASS ORDINATE.

ALL ITEMS CATEGORY 1000 UNLESS NOTED

BASE PATCHING

			390.0303 BASE PATCHING CONCRETE	390.0403 BASE PATCHING CONCRETE SHES
STATION	TO	STATION	SY	SY
MOORLAND RD				
23+00	-	29+00	---	124
29+00	-	35+00	---	---
35+00	-	41+00	---	---
UNDISTRIBUTED			236	85
PROJECT TOTAL			236	209

BARS

			416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
STATION	TO	STATION		
MOORLAND RD				
23+00	-	29+00	148	200
29+00	-	35+00	339	---
35+00	-	41+00	293	3
RAMP C				
572+54	-	574+00	2	---
574+00	-	580+00	157	---
PROJECT TOTAL			939	203

CONCRETE ITEMS

			320.0150	320.0155	416.0170	601.0405	601.0409	601.0411	601.0555	601.0600	602.0405	602.0505	602.0605	620.0300	SPV.0090.0001	SPV.0165.0001	SPV.0165.0002
			CONCRETE BASE 8 1/2-INCH SY	CONCRETE BASE 9-INCH SY	CONCRETE DRIVEWAY 7-INCH SY	CONCRETE CURB & GUTTER 18-INCH TYPE A LF	CONCRETE CURB & GUTTER 30-INCH TYPE A LF	CONCRETE CURB & GUTTER 30-INCH TYPE D LF	CONCRETE CURB & GUTTER 36-INCH TYPE A LF	CONCRETE CURB PEDESTRIAN LF	CONCRETE SIDEWALK 4-INCH SF	CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW SF	CONCRETE MEDIAN SLOPED NOSE SF	CONCRETE CURB AND GUTTER 30-INCH TYPE A HES LF	CONCRETE SIDEWALK 5-INCH HES SF	CONCRETE SAFETY ISLAND HES SF
MOORLAND RD																	
23+00	-	29+00	---	755	---	220	210	--	105	---	475	---	---	---	---	---	---
29+00	-	35+00	---	1,620	---	1,170	720	---	10	16	8,240	12	---	33	25	140	---
35+00	-	41+00	15	535	26	185	650	---	---	17	640	50	14	27	60	450	240
RAMP C																	
572+54	-	574+00	---	995	---	---	150	---	160	---	---	---	---	---	---	---	---
574+00	-	580+00	---	1,030	---	---	110	---	160	---	---	---	---	---	---	---	---
CARPENTER RD																	
1+60	-	4+00	---	---	---	---	---	95	---	---	---	---	---	---	---	---	---
PROJECT TOTAL			15	4,935	26	1,575	1,840	95	435	33	9,355	62	14	60	85	590	240

ALL ITEMS CATEGORY 1000 UNLESS NOTED

3

HMA ITEMS								
			450.4000	455.0605	460.6223	460.6224	465.0105	465.0120
			HMA COLD WEATHER PAVING		HMA PAVEMENT 3 MT 58-28 S	HMA PAVEMENT 4 MT 58-28 S	ASPHALTIC SURFACE	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
			TON	TACK COAT GAL	TON	TON	TON	TON
MOORLAND RD								
23+00	-	29+00	10	215	---	315	---	---
29+00	-	35+00	35	570	---	840	---	---
35+00	-	41+00	10	195	---	285	25	30
RAMP C								
572+54	-	574+00	---	70	---	120	---	---
574+00	-	580+00	---	145	---	260	10	---
CARPENTER RD								
1+60	-	4+00	---	100	65	45	---	15
PROJECT TOTAL			55	1,295	65	1,865	35	45

3

OVERHEAD SIGN SUPPORT					
		531.2048	531.5340	532.5340	SPV.0060.4001 REMOVE, SALVAGE, AND REINSTALL OVERHEAD SIGN SUPPORT
		FOUNDATION SINGLE-SHAFT	TRUSS CANTILEVER 2-	CHORD TYPE IV	S-67-613
		DRILLING SHAFT 48-INCH	TYPE TC-IV S-67-983	S-67-983	S-67-613
		LF	EACH	EACH	EACH
MOORLAND RD					
26+96	27' RT	---	---	---	1
CATEGORY 5001 PROJECT TOTAL		0	0	0	1
RAMP C					
577+00	41' LT	28	1	1	---
CATEGORY 5000 PROJECT TOTAL		28	1	1	0

BARRIER WALL

			210.1500	603.1242	603.1456	603.3559
			BACKFILL STRUCTURE TYPE A	CONCRETE BARRIER TYPE S42A	CONCRETE BARRIER TYPE S56C	CONCRETE BARRIER TRANSITION TYPE S42 TO S56
			TON	LF	LF	EACH
RAMP C						
572+54	-	574+00	3	106	12	1
574+00	-	580+00	78	62	350	1
PROJECT TOTAL			81	168	362	2

PIPE UNDERDRAIN 6-INCH

				612.0106
		STATION TO	STATION	LF
MOORLAND RD				
23+00	-	29+00		230
29+00	-	35+00		140
35+00	-	41+00		40
RAMP C				
572+54	-	574+00		130
574+00	-	580+00		80
PROJECT TOTAL				620

ALL ITEMS CATEGORY 1000 UNLESS NOTED

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

MISCELLANEOUS QUANTITIES

SHEET NO:

E

STORM SEWER MANHOLE AND INLET COVERS										
STRUCTURE NUMBER	611.0530 MANHOLE COVERS	611.0545 MANHOLE COVERS	611.0606	611.0610	611.0624	611.0627	611.0642	611.0651	611.0666	611.8115 ADJUSTING INLET COVERS
	TYPE J EACH	TYPE L EACH	INLET COVERS							
			TYPE B EACH	TYPE BW EACH	TYPE H EACH	TYPE HM EACH	TYPE MS EACH	TYPE S EACH	TYPE Z EACH	EACH
1A	---	---	1	---	---	---	---	---	---	---
1	---	---	---	1	---	---	---	---	---	---
2A	---	---	1	---	---	---	---	---	---	---
2	---	---	---	1	---	---	---	---	---	---
3	---	---	---	1	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	1
5A	---	---	1	---	---	---	---	---	---	---
5	1	---	---	---	---	---	---	---	---	---
6	---	---	---	---	1	---	---	---	---	---
7A	---	---	---	1	---	---	---	---	---	---
7B	---	---	---	1	---	---	---	---	---	---
7	1	---	---	---	---	---	---	---	---	---
8A	---	---	---	---	1	---	---	---	---	---
9A	---	---	---	---	---	1	---	---	---	---
9	1	---	---	---	---	---	---	---	---	---
10A	---	---	---	---	---	---	3	---	---	---
10	---	---	---	---	---	1	---	---	---	---
11	---	1	---	---	---	---	---	---	---	---
20A	---	---	---	---	1	---	---	---	---	---
20	1	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	1	---	---
30A	---	---	---	---	---	---	---	---	1	---
30	1	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---
32	1	---	---	---	---	---	---	---	---	---
33A	---	---	---	---	---	---	---	---	1	---
33B	---	---	---	---	---	---	---	---	1	---
33	---	---	---	---	---	---	---	---	1	---
34A	---	---	---	---	---	---	---	---	1	---
34B	---	---	---	---	---	---	---	---	1	---
34C	---	---	---	---	---	---	---	---	1	---
34	1	---	---	---	---	---	---	---	---	---
35	---	---	---	---	---	---	---	---	---	---
40A	---	---	---	---	1	---	---	---	---	---
40B	---	---	---	---	1	---	---	---	---	---
40C	1	---	---	---	---	---	---	---	---	---
40D	---	---	---	---	---	1	---	---	---	---
40	---	---	---	---	---	1	---	---	---	---
41A	---	---	---	---	---	---	---	---	1	---
41	---	---	---	---	---	---	---	---	1	---
42A	---	---	---	1	---	---	---	---	---	---
42B	---	---	---	1	---	---	---	---	---	---
42	---	---	---	1	---	---	---	---	---	---
43	1	---	---	---	---	---	---	---	---	---
50	---	---	---	---	---	---	1	---	---	---
51	---	---	---	---	---	---	---	---	---	---
52A	---	---	---	---	1	---	---	---	---	---
52	1	---	---	---	---	---	---	---	---	---
53	---	---	---	---	---	---	---	---	---	---
PROJECT TOTALS	10	1	3	8	6	4	4	1	9	1

ALL ITEMS CATEGORY 1000 UNLESS NOTED

STORM SEWER PIPES												
608.0412 608.0415 608.0418 608.0421 608.0424 608.0430 SPV.0090.0004												
STORM SEWER PIPE REINFORCED CONCRETE												
PIPE NUMBER	FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE (%)	CLASS IV						HORIZONTAL ELLIPTICAL CLASS HE-IV 38X60-INCH
						12-INCH LF	15-INCH LF	18-INCH LF	21-INCH LF	24-INCH LF	30-INCH LF	LF
P1A	1A	1	844.82	844.77	0.91%	5.5	---	---	---	---	---	---
P1	1	2	844.52	842.55	1.50%	---	131.5	---	---	---	---	---
P2A	2A	2	842.86	842.80	1.00%	5.5	---	---	---	---	---	---
P2	2	3	842.55	842.17	1.00%	---	38.1	---	---	---	---	---
P3	3	4	842.17	842.00	0.48%	---	36.2	---	---	---	---	---
---	4	EXIST SS	---	---	0.00%	---	---	---	---	---	---	---
P5A	5A	5	843.58	840.76	8.00%	---	---	35.3	---	---	---	---
P5	5	6	840.76	840.61	2.00%	---	---	7.5	---	---	---	---
P6	6	7	839.61	839.47	0.20%	---	---	---	---	---	69.3	---
P7A	7A	7B	841.04	840.94	1.00%	---	10.0	---	---	---	---	---
P7B	7B	7	840.94	840.72	1.01%	---	21.7	---	---	---	---	---
P7	7	11	839.47	839.30	0.30%	---	---	---	---	---	56.0	---
P8A	8A	11	840.50	839.30	3.58%	---	33.5	---	---	---	---	---
P9A	9A	9	841.09	841.03	0.98%	6.1	---	---	---	---	---	---
P9	9	10	840.03	839.84	0.92%	---	---	---	---	20.5	---	---
P10A	10A	11	839.60	839.30	0.53%	---	---	---	---	---	---	56.1
P10	10	11	839.84	839.30	1.00%	---	---	---	---	54.2	---	---
---	11	EXIST SS	---	---	---	---	---	---	---	---	---	---
P20A	20A	20	849.54	849.50	1.00%	3.7	---	---	---	---	---	---
---	20	EXIST SS	---	---	---	---	---	---	---	---	---	---
---	21	EXIST SS	---	---	---	---	---	---	---	---	---	---
---	25	EXIST SS	---	---	---	---	---	---	---	---	---	---
P30A	30A	30	845.34	845.01	2.00%	16.3	---	---	---	---	---	---
---	30	EXIST SS	---	---	---	---	---	---	---	---	---	---
---	31	EXIST SS	---	---	---	---	---	---	---	---	---	---
P32	32	33B	843.30	841.15	3.29%	---	---	65.4	---	---	---	---
P33A	33A	33	842.96	842.45	2.00%	25.5	---	---	---	---	---	---
P33B	33B	33	841.15	840.95	2.00%	---	---	10.0	---	---	---	---
P33	33	34	840.70	838.95	1.49%	---	---	---	117.1	---	---	---
P34A	34A	34B	839.93	839.83	1.00%	10.0	---	---	---	---	---	---
P34B	34B	34	839.83	839.70	1.02%	12.8	---	---	---	---	---	---
P34C	34C	34	840.56	840.30	2.04%	12.8	---	---	---	---	---	---
P34	34	35	838.95	838.80	1.50%	---	---	---	10.0	---	---	---
---	35	EXIST SS	---	---	---	---	---	---	---	---	---	---
P40A	40A	40B	838.12	838.07	0.50%	10.0	---	---	---	---	---	---
P40B	40B	40	838.07	837.71	0.50%	71.1	---	---	---	---	---	---
P40C	40C	40D	837.48	837.17	0.98%	---	---	---	31.8	---	---	---
P40D	40D	40	837.17	836.96	0.99%	---	---	---	21.1	---	---	---
P40	40	41	836.67	836.34	0.50%	---	---	---	---	66.3	---	---
P41A	41A	41	837.49	837.34	0.75%	20.0	---	---	---	---	---	---
P41	41	43	836.34	836.30	0.50%	---	---	---	---	7.7	---	---
P42A	42A	42B	838.20	838.10	1.00%	10.0	---	---	---	---	---	---
P42B	42B	42	838.10	838.00	1.00%	10.0	---	---	---	---	---	---
P42	42	43	837.00	836.80	0.39%	---	---	---	---	51.0	---	---
---	43	EXIST SS	---	---	---	---	---	---	---	---	---	---
P50	50	51	840.03	839.74	0.75%	---	38.5	---	---	---	---	---
P51	51	52	839.49	837.98	1.50%	---	---	100.4	---	---	---	---
P52A	52A	52	838.06	837.98	1.00%	8.1	---	---	---	---	---	---
P52	52	53	837.73	836.60	1.48%	---	---	---	76.4	---	---	---
---	53	EXIST SS	---	---	---	---	---	---	---	---	---	---
PROJECT TOTALS						227	310	219	256	200	125	56

1. PIPE LENGTHS ARE FROM CENTER TO CENTER OF STRUCTURES.

ALL ITEMS CATEGORY 1000 UNLESS NOTED

GUARDRAIL ITEMS

				614.2500	614.2610
				MGS THRIE	MGS
				BEAM	GUARDRAIL
				TRANSITION	TERMINAL EAT
CATEGORY	STATION	TO	STATION	LF	EACH
RAMP C					
	572+54	-	574+00	---	---
	574+00	-	580+00	40	1
PROJECT TOTAL				40	1

FENCE ITEMS

				616.0100.0001	616.0700.S	SPV.0090.0002
				FENCE WOVEN		CONSTRUCTION
				WIRE 4 FT	FENCE SAFETY	STAKING FENCE
STATION		TO	STATION	LF	LF	LF
RAMP C						
	572+54	-	574+00	50	---	50
	574+00	-	580+00	285	---	285
UNDISTRIBUTED						
				---	113	---
PROJECT TOTAL				335	113	335

CRASH CUSHIONS PERMANENT LOW MAINTENANCE

				614.0805
STATION TO		STATION	LOCATION	EACH
MOORLAND RD				
28+88	-	29+03	LT	1
29+20	-	29+35	LT	1
PROJECT TOTAL				2

WATER/DUST CONTROL

		623.0200	624.0100
		DUST CONTROL	
		SURFACE	
		TREATMENT	WATER
		SY	MGAL
MOORLAND RD, RAMP C			
	EXCAVATION	---	18
	BASE AGGREGATE COMPACTION	---	174
	DUST CONTROL	2,473	---
PROJECT TOTAL		2,473	192

ALL ITEMS CATEGORY 1000 UNLESS NOTED

RESTORATION ITEMS

			625.0100	625.0500	627.0200	628.6510	629.0210	630.0130	630.0200	630.0300	630.0500	631.0300	631.1000
			SALVAGED			SOIL STABILIZER	FERTILIZER TYPE	SEEDING	SEEDING	SEEDING			
			TOPSOIL	TOPSOIL	MULCHING	TYPE B	B	MIXTURE NO. 30	TEMPORARY	BORROW PIT	SEED WATER	SOD WATER	SOD LAWN
STATION	TO	STATION	SY	SY	SY	ACRE	CWT	LB	LB	LB	MGAL	MGAL	SY
MOORLAND RD													
23+00	-	29+00	502	---	---	--	1	---	---	---	---	12	505
29+00	-	35+00	139	---	---	--	1	---	---	---	---	4	140
35+00	-	41+00	367	---	---	--	1	---	---	---	---	9	370
RAMP C													
572+54	-	574+00	---	697	---	--	---	13	10	---	24	---	---
574+00	-	580+00	---	633	---	--	---	12	9	---	22	---	---
CARPENTER RD													
1+60	-	4+00	80	87	---	--	1	2	2	---	3	2	80
UNDISTRIBUTED													
			280	360	---	2	1	10	10	---	15	10	275
WASTE SITE													
			---	---	4,440	---	3	---	---	60	100	---	---
PROJECT TOTAL			1,368	1,777	4,440	2	8	37	31	60	164	37	1,370

EROSION CONTROL ITEMS

			606.0300	628.1104	628.1504	628.1520	628.1905	628.1910	628.2008	628.7005	628.7015	628.7020	628.7504	628.7555	628.7560	628.7570
							MOBILIZATIONS	MOBILIZATIONS	EROSION MAT	INLET	INLET	INLET	TEMPORARY	CULVERT PIPE		
			RIPRAP HEAVY	EROSION BALES	SILT FENCE	MAINTENANCE	EROSION CONTROL	EROSION CONTROL	URBAN CLASS I	PROTECTION	PROTECTION	PROTECTION	DITCH CHECKS	CHECKS	TRACKING PADS	ROCK BAGS
STATION	TO	STATION	CY	EACH	LF	LF	EACH	EACH	TYPE B SY	TYPE A EACH	TYPE C EACH	TYPE D EACH	LF	EACH	EACH	EACH
MOORLAND RD																
23+00	-	29+00	---	---	25	50	---	---	---	10	2	20	21	2	2	---
29+00	-	35+00	---	---	---	---	---	---	---	9	---	13	39	---	---	---
35+00	-	41+00	---	---	29	58	---	---	---	3	---	7	41	2	2	---
RAMP C																
572+54	-	574+00	44	---	---	---	---	---	697	6	2	12	5	---	---	---
574+00	-	580+00	---	---	173	346	---	---	633	7	---	8	16	---	---	---
CARPENTER RD																
1+60	-	4+00	---	---	---	---	---	---	87	2	2	---	---	4	---	---
WASTE SITE																
			---	---	800	1,600	---	---	---	---	---	---	---	---	---	---
UNDISTRIBUTED																
			15	50	260	515	6	4	360	10	5	15	35	2	---	50
PROJECT TOTAL			59	50	1,287	2,569	6	4	1,777	47	11	75	157	10	4	50

ALL ITEMS CATEGORY 1000 UNLESS NOTED

TYPE I & II SIGN REMOVAL

1060-10-72 IH 94

SIGN NO.	SIGN CODE	SIGN MESSAGE	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	638.2601 REMOVING SIGNS TYPE I [EA]	REMARKS / SIGN LOCATION
1R	J2-1	WEST 94 [LA]	1	1	--	--
2R	R11-54F	--	1	2	--	--
3R	R2-1	25 MPH	1	1	--	SLOW CHILDREN SIGN RETURN SIGN TO BROOKFIELD
4R	R1-1	--	1	1	--	--
5R	R7-1D	--	1	1	--	--
6R	R5-57	--	1	1	--	--
7R	R3-8	--	1	--	--	ON FLASHING BEACON
8R	J3-1	WEST 94 [LA]	1	--	--	ON SIGN SUPPORT
9R	R3-5L	--	1	--	--	ON SIGN SUPPORT
10R	R3-5L	--	1	--	--	ON SIGN SUPPORT
11R	R4-3R	--	1	1	--	--
12R	R3-1	--	1	1	--	--
13R	R4-3R	--	1	1	--	RIGHT TURN NO STOP REMOVED AS WELL
14R	W1-8	--	1	1	--	--
15R	W1-8	--	1	1	--	--
16R	W1-8	--	1	1	--	--
17R	W1-8	--	1	1	--	--
18R	W1-6	--	1	1	--	R5-1A AND W1-8 REMOVED AS WELL
19R	--	RIGHT TURN NO STOP	1	1	--	--
20R	W1-6	--	1	1	--	--
21R	W1-6	--	1	1	--	--
22R	W12-1D	--	1	1	--	--
23R	--	BROOKFIELD SQ MALL TRAFFIC USE 3RD ENTRANCE	1	2	--	--
24R	R6-2R	--	1	1	--	--
25R	J3-1	WEST 94 [LA]	1	1	--	R3-4
26R	NOT USED	--	--	--	--	--
27R	R3-58	--	1	1	--	--
28R	W1-1R	--	1	1	--	W13-1 25 MPH REMOVED AS WELL
29R	D15-1	94 WEST ONLY [DA]	--	--	1	ON SIGN SUPPORT
TOTALS			27	25	1	

ALL ITEMS CATEGORY 1000 UNLESS NOTED

3

TYPE I & II PERMANENT SIGNING

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	TYPE II SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	637.2215 SIGNS TYPE II REFLC H FOLDING [SF]	634.0618 POSTS WOOD 4"X6"X18' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W x H [FT.] x [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2101 MOVING SIGNS TYPE I [EA]
1	J2-1(2S)	--	24 x 57	9.500	--	--	1	--	--	--	-- x --	--	--
	M3-4	--	24 x 12	--	--	--	--	--	--	--	-- x --	--	--
	M1-1	IH 94	24 X 24	--	--	--	--	--	--	--	-- x --	--	--
	M5-1L	--	21 x 21	--	--	--	--	--	--	--	-- x --	--	--
2	R3-20L(2S)	--	24 x 36	6.000	--	--	1	--	--	--	-- x --	--	--
3	R11-54F(2S)	--	48 x 30	10.000	--	--	2	--	--	--	-- x --	--	--
4	W3-3(2S)	--	36 x 36	--	9.000	--	1	--	--	16"X16" TEMPORARY ORANGE FLAGS	-- x --	--	--
5	R2-1(2S)	25 MPH	24 x 30	5.000	--	--	1	--	--	--	-- x --	--	--
6	R1-1(2S)	--	30 x 30	5.180	--	--	1	--	--	--	-- x --	--	--
7	R7-1D(2S)	--	18 x 24	3.000	--	--	1	--	--	--	-- x --	--	--
8	R5-57(4)	--	36 x 36	9.000	--	--	1	--	--	--	-- x --	--	--
9	W3-8(2S)	--	48 x 48	--	16.000	--	1	--	--	ON FLASHING BEACON	-- x --	--	--
10	W3-3(2S)	--	36 x 36	--	9.000	--	1	--	--	16"X16" TEMPORARY ORANGE FLAGS	-- x --	--	--
30M	--	EAST 94 ONLY [RA]	-- x --	--	--	--	--	--	--	ON R-67-613	-- x --	--	1
31M	R3-7R	--	-- x --	--	--	--	--	1	--	ON R-67-613	-- x --	--	---
11	D16-1	WEST 94 [LA]	-- x --	--	--	--	--	--	--	ON BRIDGE PARAPET	3 x 6	18.00	--
12	R10-6(2S)	--	24 x 36	6.000	--	--	1	--	--	ON SIGNAL POLE	-- x --	--	--
13	R1-1F(2M)	--	36 x 36	--	--	7.460	--	--	--	ON SIGNAL POLE WITH SIGN 12	-- x --	--	--
14	R6-2R	--	24 x 30	5.000	--	--	1	--	--	--	-- x --	--	--
15	R10-11B(2S)	--	24 x 24	4.000	--	--	--	--	--	ON SIGNAL POLE	-- x --	--	--
16	R10-11B(2S)	--	24 x 24	4.000	--	--	--	--	--	ON SIGNAL POLE	-- x --	--	--
17	R10-11B(2S)	--	24 x 24	4.000	--	--	--	--	--	ON SIGNAL POLE	-- x --	--	--
18	R3-1(2S)	--	24 x 24	4.000	--	--	1	--	--	--	-- x --	--	--
19	R10-6(2S)	--	24 x 36	6.000	--	--	1	--	--	ON SIGNAL POLE	-- x --	--	--
20	R1-1F(2M)	--	36 x 36	--	--	7.460	--	--	--	ON SIGNAL POLE WITH SIGN 19	-- x --	--	--
21	R10-6(2S)	--	24 x 36	6.000	--	--	1	--	--	--	-- x --	--	--
22	R10-11B(2S)	--	24 x 24	4.000	--	--	--	--	--	ON SIGNAL POLE	-- x --	--	--
23	R1-1F(2M)	--	36 x 36	--	--	7.460	--	--	--	ON SIGNAL POLE WITH SIGN 22	-- x --	--	--
24	R3-2(2S)	--	24 x 24	4.000	--	--	1	--	--	--	-- x --	--	--
25	R5-1(2S)	--	30 x 30	6.250	---	--	--	--	--	ON SIGNAL POLE	-- x --	--	--
26	R5-1A(2S)	--	36 x 24	6.000	---	--	--	--	--	ON SIGNAL POLE WITH SIGN 25	-- x --	--	--
27	R5-1(2S)	--	30 x 30	6.250	---	--	--	--	--	ON SIGNAL POLE	-- x --	--	--

ALL ITEMS CATEGORY 1000 UNLESS NOTED

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

MISCELLANEOUS QUANTITIES

SHEET NO:

E

3

3

TYPE I & II PERMANENT SIGNING

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	TYPE II SIGN SIZE			637.2210	637.2230	637.2215	634.0618	638.2102	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE			637.1220	638.2101
			W	x	H	SIGNS TYPE II REFLC H	SIGNS TYPE II REFLC F	SIGNS TYPE II REFLC H FOLDING	POSTS WOOD 4"X6"X18'	MOVING SIGNS TYPE II			W	x	H	SIGNS TYPE I REFLC SH	MOVING SIGNS TYPE I
			[IN.]	x	[IN.]	[SF]	[SF]	[SF]	[EA]	[EA]			[FT.]	x	[FT.]	[SF]	[EA]
28	R5-1A(2S)	--	36	x	24	6.000	---	--	--	--	--	ON SIGNAL POLE WITH SIGN 27	--	x	--	--	--
29	R10-11B(2S)	--	24	x	24	4.000	--	--	--	--	--	ON SIGNAL POLE	--	x	--	--	--
30	R1-1F(2M)	--	30	x	30	--	--	7.460	--	--	--	ON SIGNAL POLE WITH SIGN 29	--	x	--	--	--
31	R10-6(2S)	--	24	x	36	6.000	--	--	1	--	--	--	--	x	--	--	--
32	W1-6(2S)	--	48	x	24	--	8.000	--	1	--	--	--	--	x	--	--	--
33	W1-6(2S)	--	48	x	24	--	8.000	--	1	--	--	--	--	x	--	--	--
34	R10-3ER(2S)	--	9	x	15	0.938	--	--	--	--	--	ON SIGNAL POLE	--	x	--	--	--
35	W12-1D(2S)	--	24	x	24	--	4.000	--	1	--	--	MOUNT HEIGHT 2 FEET	--	x	--	--	--
36	R10-3EL(2S)	--	9	x	15	0.938	--	--	--	--	--	ON SIGNAL POLE	--	x	--	--	--
37	R6-2R(2S)	--	24	x	30	5.000	--	--	1	--	--	--	--	x	--	--	--
38	J3-1(2S)	94 WEST [LA]	24	x	57	9.500	--	--	1	--	--	--	--	x	--	--	--
	M3-4	--	24	x	12	--	--	--	--	--	--	--	--	x	--	--	--
	M1-1	--	24	x	24	--	--	--	--	--	--	--	--	x	--	--	--
	M6-1	--	21	x	21	--	--	--	--	--	--	--	--	x	--	--	--
39	R3-4(2S)	--	24	x	24	4.000	--	--	--	--	39	--	--	x	--	--	--
40	R3-2(2M)	--	36	x	36	9.000	--	--	1	--	--	--	--	x	--	--	--
41	R5-1A(2M)	--	42	x	30	8.750	--	--	1	--	--	--	--	x	--	--	--
42	W3-3(2S)	--	36	x	36	--	9.000	--	1	--	--	16"X16" TEMPORARY ORANGE FLAGS	--	x	--	--	--
43	D16-1	TO BRKFIELD SQ MOORLAND RD	--	x	--	--	--	--	--	--	--	ON OVERHEAD SIGN SUPPORT	8	x	6	48.00	--
44	D16-1	MOORLAND RD [RA]	--	x	--	--	--	--	--	--	--	ON OVERHEAD SIGN SUPPORT	6	x	4.5	27.00	--
45	D16-1	MOORLAND RD [RA]	--	x	--	--	--	--	--	--	--	ON OVERHEAD SIGN SUPPORT	6	x	4.5	27.00	--
46	R3-20R(2S)	--	24	x	36	6.000	--	--	1	--	--	--	--	x	--	--	--
47	R5-1A(2M)	--	42	x	30	8.750	--	--	1	--	--	--	--	x	--	--	--
48	J1-1(2S)	JCT 94	24	x	39	6.500	--	--	1	--	--	--	--	x	--	--	--
	MB2-1	--	21	x	15	--	--	--	--	--	--	--	--	x	--	--	--
	M1-1	--	24	x	24	--	--	--	--	--	--	--	--	x	--	--	--
49	J2-2(2S)	94 WEST [LA] 94 EAST [RA]	48	x	60	20.000	--	--	1	--	--	--	--	x	--	--	--
	MB3-4	--	24	x	12	--	--	--	--	--	--	--	--	x	--	--	--
	M1-1	--	24	x	24	--	--	--	--	--	--	--	--	x	--	--	--
	MB4-20L	--	24	x	24	--	--	--	--	--	--	--	--	x	--	--	--
	MB3-2	--	24	x	12	--	--	--	--	--	--	--	--	x	--	--	--
	M1-1	--	24	x	24	--	--	--	--	--	--	--	--	x	--	--	--
	MB4-20R	--	24	x	24	--	--	--	--	--	--	--	--	x	--	--	--
TOTALS						208.555	63.000	29.840	30	1						120.000	1

ALL ITEMS CATEGORY 1000 UNLESS NOTED

TRAFFIC CONTROL ITEMS																								
		643.0300		643.0420		643.0705		643.0715		643.0800		643.0900		643.0910		643.0920		643.1050		643.5000	SPV.0060.0010	SPV.0060.0011	SPV.0060.0012	SPV.0060.0013
						TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL WARNING LIGHTS TYPE C		TRAFFIC CONTROL ARROW BOARDS		TRAFFIC CONTROL SIGNS		TRAFFIC COVERING SIGNS TYPE I		TRAFFIC COVERING SIGNS TYPE II		TRAFFIC CONTROL SIGNS PCMS		TRAFFIC CONTROL	TRAFFIC CONTROL LOCAL LANE CLOSURE	TRAFFIC CONTROL CLOSE-OPEN FREEWAY ENTRANCE RAMP	TRAFFIC CONTROL CLOSE-OPEN FREEWAY EXIT RAMP	SPECIAL BAGGING SIGNAL HEAD
	* DURATION	* DRUMS	* DAY	* BARRICADES	* DAY	* LIGHTS	* DAY	* LIGHTS	* DAY	* BOARDS	* DAY	* SIGNS	* DAY	* CYCLES	* EACH	* CYCLES	* EACH	* SIGNS	* DAY	* EACH	* EACH	* EACH	* EACH	* EACH
STAGE 1	57	190	10,830	39	2,223	78	4,446	24	1,368	3	171	44	2,508	---	---	1	1	1	7	---	---	---	---	1
STAGE 1 NIGHT	7	147	1,029	19	133	38	266	21	147	2	14	29	203	---	---	---	---	2	14	---	---	7	7	---
STAGE 2	62	166	10,292	14	868	28	1,736	30	1,860	3	186	39	2,418	---	---	---	---	3	186	---	30	---	---	1
ALTERNATE ROUTE PLAN		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
STAGE 1 DETOUR	57	---	---	---	---	---	---	---	---	---	---	242	13,794	1	3	---	---	1	7	---	---	---	---	---
STAGE 2 DETOUR	62	---	---	---	---	---	---	---	---	---	---	140	8,680	---	---	---	---	1	7	---	---	---	---	---
PROJECT TOTAL		---	22,151	---	3,224	---	6,448	---	3,375	---	371		27,603	---	3	---	1	---	221	1	30	7	7	2

*FOR INFORMATION ONLY

FIELD OFFICE TYPE C

LOCATION	642.5201 EACH
	1
PROJECT TOTAL	1

TRAFFIC CONTROL SIGNS FIXED MESSAGE

		643.1000	
STAGE	SIGN NUMBER	* SIGN SIZE	SF
ALTERNATE ROUTE PLAN			
	1	126' X 54'	47
	2	126' X 54'	47
	3	126' X 54'	47
	4	126' X 54'	47
	5	78' X 36'	20
	6	78' X 36'	20
	7	78' X 36'	20
STAGE 1 DETOUR			
	8	108' X 24'	18
	9	108' X 24'	18
	10	108' X 24'	18
PROJECT TOTAL			302

*FOR INFORMATION ONLY

ALL ITEMS CATEGORY 1000 UNLESS NOTED

TEMPORARY MARKING ITEMS

	643.3150	643.3250	643.3850	643.3970	
	TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY	
	MARKING LINE	MARKING LINE	MARKING STOP	MARKING	
	REMOVABLE TAPE	REMOVABLE	REMOVABLE	REMOVABLE	
	4-INCH	TAPE 8-INCH	TAPE 18-INCH	10-INCH	
	(YELLOW)	(WHITE)	(WHITE)	(BLACK)	
STAGE	LF	LF	LF	LF	LF
STAGE 1	53	2,366	---	---	660
STAGE 2	2,391	302	202	24	---
SUBTOTAL	2,444	2,668	202	24	660
PROJECT TOTAL	5,112	202	24		660

TEMPORARY PEDESTRIAN ITEMS

				644.1440	644.1601	644.1605	644.1810
				TEMPORARY	TEMPORARY	TEMPORARY	TEMPORARY
				PEDESTRIAN	PEDESTRIAN	PEDESTRIAN	PEDESTRIAN
				SURFACE	CURB RAMP	DETECTABLE	PEDESTRIAN
				MATTING		WARNING FIELD	BARRICADE
STATION	TO	STATION		SF	DAY	SF	LF
MOORLAND RD							
23+00	-	29+00		---	---	---	---
29+00	-	35+00		---	4	10	117
35+00	-	41+00		62	4	10	456
RAMP C							
572+54	-	574+00		---	---	---	---
574+00	-	580+00		---	---	---	---
PROJECT TOTAL				62	8	20	573

GEOTEXTILE/GEOGRID ITEMS

			645.0111	645.0120	645.0220	
			GEOTEXTILE	GEOTEXTILE	GEOGRID TYPE	
			TYPE DF	TYPE HR	SR	
			SCHEDULE A	TYPE HR	SR	
STATION	TO	STATION	SY	SY	SY	
MOORLAND RD						
23+00	-	29+00	130	---	1,020	
29+00	-	35+00	80	---	2,525	
35+00	-	41+00	25	---	860	
RAMP C						
572+54	-	574+00	75	116	1,240	
574+00	-	580+00	45	---	1,380	
PROJECT TOTAL			355	116	7,025	

MARKING REMOVAL ITEMS

			646.9000	646.9010	646.9110
			MARKING	MARKING	MARKING
			REMOVAL LINE	REMOVAL LINE	REMOVAL LINE
			WATER	WATER	WATER
			BLASTING	BLASTING	BLASTING 8-
			4-INCH	4-INCH	INCH
STAGE	LF	LF	LF	LF	LF
STAGE 1	225	219	202		
STAGE 2	208	292	---		
PROJECT TOTAL	433	511	202		

ALL ITEMS CATEGORY 1000 UNLESS NOTED

PAVEMENT MARKING ITEMS

			646.1020	646.1545	646.3545	646.5020	646.5120	646.6120	646.6220	646.6464	646.6468	646.7120	646.7420	646.8120	646.8220		
			MARKING LINE EPOXY 4-INCH (YELLOW)	MARKING LINE GROOVED WET (WHITE)	MARKING LINE REF CONTRAST EPOXY 4-INCH (WHITE)	MARKING LINE GROOVED WET EPOXY 8-INCH (WHITE)	MARKING ARROW EPOXY (WHITE) EACH	MARKING WORD EPOXY (WHITE) EACH	MARKING STOP LINE EPOXY 18-INCH (WHITE) LF	MARKING YIELD LINE EPOXY 18-INCH (WHITE) EACH	COLD WEATHER MARKING EPOXY 4-INCH (YELLOW) LF	COLD WEATHER MARKING EPOXY 8-INCH (WHITE) LF	MARKING DIAGONAL EPOXY 12-INCH (WHITE) LF	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF	MARKING CURB EPOXY (YELLOW) LF	MARKING ISLAND NOSE EPOXY (YELLOW) EACH	
STATION	TO	STATION															
MOORLAND RD																	
23+00	-	29+00	282	238	522	352	3	---	58	---	29	76	36	---	---	---	---
29+00	-	35+00	1,116	910	357	667	4	2	36	---	112	127	67	---	3	22	1
35+00	-	41+00	395	356	186	41	---	---	24	19	40	55	5	---	208	18	1
RAMP C																	
572+54	-	574+00	141	280	31	371	---	---	66	---	15	32	38	33	---	---	---
574+00	-	580+00	598	568	---	732	1	---	---	---	60	57	74	---	---	---	---
SUBTOTALS			2532	2352	1096	2163	8	2	184	19	256	347	220	33	211	40	2
PROJECT TOTAL			4,884		1,096	2,163	8	2	184	19	603	220	33	211	40	2	

CONSTRUCTION STAKING ITEMS

			650.4500	650.5000	650.5500	650.7000	650.9000	650.9500.0001	650.9911.0001	650.9920
					CONSTRUCTION	CONSTRUCTION	CONSTRUCTION		CONSTRUCTION	
			CONSTRUCTION		CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	STAKING	
			STAKING	CONSTRUCTION	STAKING CURB	STAKING	CONSTRUCTION	STAKING	SUPPLEMENTAL	CONSTRUCTION
			SUBGRADE	STAKING BASE	GUTTER AND	CONCRETE	STAKING CURB	SIDEWALK	CONTROL	STAKING SLOPE
STATION	TO	STATION	LF	LF	LF	LF	EACH	EACH	EACH	LF
MOORLAND RD										
23+00	-	29+00	326	---	---	326	---	---	---	326
29+00	-	35+00	600	---	---	600	1	---	---	600
35+00	-	41+00	193	---	---	193	5	---	---	193
RAMP C										
572+54	-	574+00	146	---	---	146	---	---	---	146
574+00	-	580+00	568	---	---	568	---	---	---	568
CARPENTER RD										
1+60	-	4+00	---	240	95	---	---	---	---	240
PROJECT TOTAL			1,832	240	95	1,832	6	1	1	2,072

*ADDITIONAL STAKING ITEMS SHOWN ELSEWHERE

ALL ITEMS CATEGORY 1000 UNLESS NOTED

3

RAMP CLOSURE BARRICADE RACK 2-UNIT

		662.6020.S
STATION	LOCATION	EACH
MOORLAND RD		
28+49	50' LT	1
PROJECT TOTAL		1

RAMP CLOSURE GATE

		**	
		654.0105	662.1040.S
		CONCRETE	RAMP CLOSURE
		BASES TYPE 5	GATES 40-FT
STATION	LOCATION	EACH	EACH
MOORLAND RD			
36+28	135' LT	1	1
PROJECT TOTAL		1	1
**ADDITIONAL QUANTITIES SHOWN ELSEWHERE			

SANITARY SEWER AND WATER MAIN ITEMS

		612.0902.S.5001	SPV.0060.5001	SPV.0060.5002	SPV.0060.5003
		INSULATION			
		BOARD	WATER MAIN	ADJUST	
		POLYSTYRENE	OFFSET	SANITARY SEWER	SANITARY
		2-INCH	12-INCH	MANHOLE	MANHOLE SEAL
STATION	TO STATION	SY	EACH	EACH	EACH
MOORLAND RD					
23+00	- 29+00	4	1	1	1
29+00	- 35+00	12	3	---	---
CATEGORY 8000					
PROJECT TOTAL		16	4	1	1

SAWING ITEMS

		690.0150		690.0250	
		SAWING	SAWING	SAWING	SAWING
		ASPHALT	CONCRETE	ASPHALT	CONCRETE
STATION	TO STATION	LF	LF	LF	LF
MOORLAND RD					
23+00	- 29+00	---	746		
29+00	- 35+00	---	793		
35+00	- 41+00	165	785		
RAMP C					
572+54	- 574+00	---	227		
574+00	- 580+00	24	504		
CARPENTER RD					
		55	---		
PROJECT TOTAL		244	3,055		

UTILITY LINE OPENING

		SPV.0060.0006
		EACH
UNDISTRIBUTED		15
PROJECT TOTAL		15

ALL ITEMS CATEGORY 1000 UNLESS NOTED

PROJECT NO: 1060-10-72

HWY: IH 94

COUNTY: WAUKESHA

MISCELLANEOUS QUANTITIES

SHEET NO:

E

3

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF RAMP
WAUKESHA COUNTY
CATEGORY 1500
S67-1504

STATE FURNISHED MATERIALS SUMMARY	
EACH	DESCRIPTION
1	TRAFFIC SIGNAL CONTROLLER, FULLY ACTUATED, 8 PHASE
1	TRAFFIC SIGNAL CABINET
1	ETHERNET SWITCH
1	POLES TYPE 9 SPECIAL
1	MONOTUBE ARMS 45-FT TYPE 9/10 SPEC POLE
2	EVP DETECTOR HEADS
2	EVP CONFIRMATION LIGHTS

STATE FURNISHED FOR INFORMATION ONLY				
SIGNAL BASE NO.	POLES	MONOTUBE	EVP	EVP
	TYPE 9	ARMS 45-FT	DETECTOR	CONFIRMATION
	SPECIAL EACH	TYPE 9/10 SPEC POLE EACH	HEADS EACH	LIGHTS EACH
SB6	--	--	1	1
SB8	1	1	1	1
TOTAL	1	1	2	2

COMMUNICATIONS EQUIPMENT (FOR INFORMATION ONLY)

LOCATION	ST-ST	CAT-5E-CABLE
	SINGLE MODE	
	FIBER JUMPER 4-FEET EACH	5-FEET EACH
CB1 (S67-1504)	2	2
TOTAL	2	2

STATE-FURNISHED COMM. EQUIPMENT (FOR INFORMATION ONLY)			
FROM	TO	PATCH PANEL	
		WITH FIBER OPTIC	
		CABLE PIGTAIL 8-CT EACH	LF
EXCV2201	CB1 (S67-1504)	1	700
TOTAL		1	700

CONDUIT			
		652.0225	652.0235
		CONDUIT RIGID	CONDUIT RIGID
		NONMETALLIC	NONMETALLIC
		SCHEDULE 40	SCHEDULE 40
		2-INCH	3-INCH
FROM	TO	L.F.	L.F.
CB1	PB1	--	45
CB1	PB11	--	36
PB1	PB2	--	124
PB2	SB1	9	--
PB2	PB3	17	--
PB2	PB4	207	--
PB2	PB5	--	146
PB5	SB2	14	--
PB5	PB6	--	44
PB6	SB3	10	--
PB6	PB7	224	--
PB6	PB8	--	102
PB8	SB4	9	--
PB8	PB9	--	110
PB9	SB5	25	--
PB9	SB6	26	--
PB9	PB10	--	188
PB10	SB7	9	--
PB10	PB11	--	124
PB11	SB8	--	43
PB9	PB12	--	34
PB12	SB9	6	--
SB9	SB10	183	--
EXCV2201	IC PB1	77	--
IC PB1	CB1	415	--
TOTAL		1231	996

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3

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF RAMP
WAUKESHA COUNTY
CATEGORY 1500
S67-1504

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION** ^	SIZE (FT)x(FT)	NO. OF TURNS	SDD INSTALLATION REFERENCE	652.0800	655.0700	655.0800
						CONDUIT	LOOP DETECTOR	LOOP DETECTOR
						LOOP DETECTOR L.F.	LEAD IN CABLE L.F.	WIRE L.F.
61	PB7	STA 28+70; 11' RT	6x6	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	56	427	164
62	PB7	STA 28+70; 0.5' LT	6x6	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	427	186
63	PB7	STA 28+70; 13' LT	6x6	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	427	210
81	PB4	STA 31+36; 283' RT	6x6	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	42	306	126
82	PB4	STA 31+25; 282.5' RT	6x6	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	64	306	148
83	PB4	STA 31+14; 282' RT	6x6	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	306	170
84	PB2	STA 31+53; 82' RT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	90	94	206
85	PB3	STA 31+69; 59.5' RT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	118	194
86	PB3	STA 31+98; 33.7' RT	6x30	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	118	252
87	PB5	STA 31+35; 64.5' RT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	110	172	226
88	PB3	STA 31+68; 35.2' RT	6x30	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	136	118	292
89	PB5	STA 31+44; 38.6' RT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	98	172	214
810	PB5	STA 31+54; 28.0' RT	6x6	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	172	174
811	PB5	STA 31+23; 56.1' RT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	80	172	196
812	PB5	STA 31+24; 28.4' RT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	72	172	188
TOTAL						1302	3507	2946

** LOCATION IS TO FRONT CENTER OF DETECTOR LOOP
^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

PULL BOXES

PULL BOX NO.	LOCATION^	653.0135	653.0140
		PULL BOXES STEEL	PULL BOXES STEEL
		24x36-INCH EACH	24x42-INCH EACH
PB1	STA 32+32; 54.2' RT	--	1
PB2	STA 31+75; 79.7' RT	--	1
PB3	STA 31+84; 65.4' RT	1	--
PB4	STA 31+47; 281.6' RT	1	--
PB5	STA 31+11; 45.2' RT	--	1
PB6	STA 31+00; 26.7' RT	--	1
PB7	STA 28+76; 28.5' RT	1	--
PB8	STA 31+00; 24.1' LT	--	1
PB9	STA 31+55; 23.6' LT	--	1
PB10	STA 32+49; 22.8' LT	--	1
PB11	STA 32+48; 38.8' RT	--	1
PB12	STA 31+55; 57.6' LT	--	1
TOTAL		3	9

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

CONCRETE BASES

SIGNAL BASE NO.	LOCATION^	654.0101	654.0102	654.0105	654.0120	654.0217
		CONCRETE BASES	CONCRETE BASES	CONCRETE BASES	CONCRETE BASES	CONCRETE CONTROL CABINET BASES
		TYPE 1 EACH	TYPE 2 EACH	TYPE 5 EACH	TYPE 10-SPECIAL EACH	TYPE 9 SPECIAL EACH
CB1	STA 32+46; 49.3' RT	--	--	--	--	1
SB1	STA 31+79; 71.2' RT	--	1	--	--	--
SB2	STA 31+13; 31.7' RT	1	--	--	--	--
SB3	STA 31+09; 22.2' RT	1	--	--	--	--
SB4	STA 31+09; 24.2' LT	1	--	--	--	--
SB5	STA 31+30; 24.1' LT	1	--	--	--	--
SB6	STA 31+81; 24.1' LT	--	1	--	--	--
SB7	STA 32+40; 23.2' LT	1	--	--	--	--
SB8	STA 32+90; 33.9' RT	--	--	--	1	--
SB9	STA 31+61; 57.9' LT	--	--	1	--	--
SB10	STA 33+44; 52.7' LT	--	--	1	--	--
TOTAL		5	2	2	1	1

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

3

3

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF RAMP
WAUKESHA COUNTY
CATEGORY 1500
S67-1504

TRAFFIC SIGNAL CABLE AND WIRE			
		655.0240	655.0320
		CABLE	CABLE TYPE
		TRAFFIC SIGNAL	UF 2-10 AWG
		7-14 AWG	GROUNDED
FROM	TO	L.F.	L.F.
CB1	SB1	116	116
CB1	SB2	212	--
CB1	SB3	243	--
CB1	SB4	298	--
CB1	SB5	244	--
CB1	SB6	246	--
CB1	SB7	112	--
CB1	SB8	83	--
CB1	SB9	--	272
CB1	SB10	--	484
TOTAL		1554	872

TRAFFIC SIGNAL CABLE AND WIRE		
655.0515		
ELECTRICAL WIRE		
TRAFFIC SIGNALS		
10 AWG		
FROM	TO	L.F.
CB1	SB1	116
SB1	SB2	127
SB2	SB3	72
SB3	SB4	99
SB4	SB5	119
SB5	SB6	67
SB6	SB7	164
SB7	SB8	159
SB8	CB1	83
PB1	CB1	27
PB2	SB1	22
PB5	SB2	27
PB6	SB3	23
PB8	SB4	22
PB9	SB5	38
PB10	SB7	22
PB11	CB1	24
TOTAL		1211

TRAFFIC SIGNAL CABLE AND WIRE		
655.0230		
CABLE		
TRAFFIC SIGNAL		
5-14 AWG		
FROM	TO	L.F.
SB1	HEAD 6	19
SB2	HEAD 10	19
SB3	HEAD 1	19
SB4	HEAD 5	19
SB5	HEAD 7	19
SB6	HEAD 8	19
SB7	HEAD 9	19
SB8	HEAD 2	70
SB8	HEAD 3	70
SB8	HEAD 4	70
TOTAL		343

TRAFFIC SIGNAL CABLE AND WIRE		
655.0610		
ELECTRICAL WIRE		
LIGHTING		
12 AWG		
FROM	TO	L.F.
SB1	LUMINAIRE	117
SB9	LUMINAIRES	234
SB10	LUMINAIRES	234
TOTAL		585

TRAFFIC SIGNAL EVP DETECTOR CABLE		
655.0900		
TRAFFIC SIGNAL		
EVP DETECTOR		
CABLE		
FROM	TO	L.F.
CB1	SB8 (HEAD B)	153
CB1	SB6 (HEAD D)	263
TOTAL		416

3

3

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF RAMP
WAUKESHA COUNTY
CATEGORY 1500
S67-1504

ELECTRICAL SERVICE METER BREAKER PEDESTAL	
656.0201.3001 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH	
LOCATION*	
CTH O & IH 94 WB TO NB OFF RAMP	1
TOTAL	1

* FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

POLES (STATE FURNISHED)		
SPV.0060.3000 INSTALL POLES TYPE 9 SPECIAL		
SPV.0060.3001 INSTALL MONOTUBE ARMS 45-FT TYPE 9/10 SPEC POLE		
SIGNAL BASE NO.	EACH	EACH
SB8	1	1
TOTAL	1	1

3

POLES (CONTRACTOR FURNISHED)									
	657.0100	657.0255	657.0305	657.0310	657.0322	657.0420	657.0609	657.0610	659.1125
SIGNAL BASE NO.	TRANSFORMER		TRAFFIC SIGNAL						
	BASES BREAKAWAY		POLES	POLES	POLES	STANDARDS	LUMINAIRE ARMS	LUMINAIRE ARMS	LUMINAIRES
	PEDESTAL	11 1/2-INCH	TYPE 2	TYPE 3	TYPE 5	ALUMINUM	SINGLE MEMBER	SINGLE MEMBER	UTILITY
	BASES EACH	BOLT CIRCLE EACH	EACH	EACH	ALUMINUM EACH	13-FT EACH	4-INCH CLAMP 6-FT EACH	4 1/2-INCH CLAMP 6-FT EACH	LED C EACH
SB1	--	1	--	1	--	--	1	--	1
SB2	1	--	--	--	--	1	--	--	--
SB3	1	--	--	--	--	1	--	--	--
SB4	1	--	--	--	--	1	--	--	--
SB5	1	--	--	--	--	1	--	--	--
SB6	--	1	1	--	--	--	--	--	--
SB7	1	--	--	--	--	1	--	--	--
SB9	--	1	--	--	1	--	--	1	2
SB10	--	1	--	--	1	--	--	1	2
TOTAL	5	4	1	1	2	5	1	2	5

3

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF RAMP
WAUKESHA COUNTY
CATEGORY 1500
S67-1504

3

FACES		
658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH		
SIGNAL HEAD NO.	SIGNAL BASE NO.	
1	SB3	1
2	SB8	1
3	SB8	1
4	SB8	1
5	SB4	1
6	SB1	1
7	SB5	1
8	SB6	1
9	SB7	1
10	SB2	1
TOTAL		10

LED MODULES SUMMARY (FOR INFORMATION ONLY)							
SIGNAL HEAD NO.	SIGNAL BASE NO.	LED MODULES 12-INCH RED BALL EACH	LED MODULES 12-INCH YELLOW BALL EACH	LED MODULES 12-INCH GREEN BALL EACH	LED MODULES 12-INCH RED ARROW EACH	LED MODULES 12-INCH YELLOW ARROW EACH	LED MODULES 12-INCH GREEN ARROW EACH
1	SB3	1	1	1	--	--	--
2	SB8	1	1	1	--	--	--
3	SB8	1	1	1	--	--	--
4	SB8	1	1	1	--	--	--
5	SB4	1	1	1	--	--	--
6	SB1	--	--	--	1	1	1
7	SB5	--	--	--	1	1	1
8	SB6	--	--	--	1	1	1
9	SB7	--	--	--	1	1	1
10	SB2	--	--	--	1	1	1
TOTAL		5	5	5	5	5	5

SIGNAL MOUNTING HARDWARE	
658.5070.3001 SIGNAL MOUNTING HARDWARE EACH	
LOCATION	
CTH O & IH 94 WB TO NB OFF RAMP	1
TOTAL	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS		
661.0201.3001 TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS EACH		
LOCATION		661.0300 GENERATORS DAY
CTH O & IH 94 WB TO NB OFF RAMP	1	1
TOTAL	1	1

3

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF RAMP
WAUKESHA COUNTY
CATEGORY 1500
S67-1504

TRANSPORT AND INSTALL STATE FURNISHED TRAFFIC SIGNAL CABINET	
SPV.0060.3002	
TRNSPT AND INSTALL STATE FURN TRAFFIC SIGNAL CABINET	
LOCATION	EACH
CTH O & IH 94 WB-NB OFF-RAMP	1
TOTAL	1

EVP DETECTOR HEAD INSTALLATION	
SPV.0060.3004	
TRNSPT & INSTALL STATE FURNISHED EVP DETECTOR HEADS	
LOCATION	EACH
CTH O & IH 94 WB-NB OFF RAMP	1
TOTAL	1

TRANSPORT TRAFFIC SIGNAL AND INTERSECTION LIGHTING MATERIALS	
SPV.0060.3003	
TRNSPT TRAFFIC SIGNAL & INTER LIGHTING MATERIALS	
LOCATION	EACH
CTH O & IH 94 WB-NB OFF-RAMP	1
TOTAL	1

TEMPORARY INFRARED EVP SYSTEM	
SPV.0060.3005	
TEMPORARY EMERGENCY VEHICLE PREEMPTION (EVP) SYSTEM	
LOCATION	EACH
CTH O & IH 94 WB-NB OFF-RAMP	1
TOTAL	1

3

CTH O (S MOORLAND RD) & IH 94 WB TO NB OFF RAMP
WAUKESHA COUNTY
CATEGORY 1500
S67-1504

FIELD SYSTEM INTEGRATOR		
	670.0101	670.0201
	FIELD SYSTEM INTEGRATOR	ITS DOCUMENTATION
LOCATION	EACH	EACH
1060-10-72	1	1
TOTAL	1	1

INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET	
	SPV.0060.3008 INSTALL FIBER OPTIC COMMUNICATIONS IN CABINET
LOCATION	EACH
IH 94 WB TO NB OFF RAMP & CTH O	1
TOTAL	1

COMMUNICATIONS EQUIPMENT		
	678.0501	678.0600
	COMMUNICATION SYSTEM	INSTALL ETHERNET
LOCATION	TESTING EACH	SWITCHES EACH
CB1 (S67-1504)	1	1
TOTAL	1	1

TRACER WIRE		
		655.0510
		ELECTRICAL WIRE
		TRAFFIC SIGNALS
FROM	TO	L.F.
EXCV2301	EXCV2201	101
EXCV2201	IC PB1	88
IC PB1	CB1 (S67-1504)	425
TOTAL		614

3

IH 94 WB ON RAMP & CTH O (S MOORLAND RD)
WAUKESHA COUNTY
CATEGORY 1500
S67-0643

3

REMOVING CONCRETE BASES		
SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH	SPV.0060.3006 ABANDON CONCRETE BASES EACH
SB2	--	1
SB3	1	--
SB8	1	--
TOTAL	2	1

TRAFFIC SIGNAL REMOVALS	
LOCATION	204.9060.S.3001 REMOVING TRAFFIC SIGNALS EACH
IH 94 WB ON RAMP & CTH O (S MOORLAND RD)	1
TOTAL	1

CONDUIT		
FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.
PB13	SB8	16
PB9	PB16	400
TOTAL		416

INSTALL CONDUIT INTO EXISTING ITEM (INCIDENTAL) INSTALL CONDUIT INTO EXISTING ITEM EACH	
STRUCTURE NO.	
PB8	1
PB9	1
PB13	1
TOTAL	3

PULL BOXES		
PULL BOX NO.	LOCATION^	653.0135 PULL BOXES STEEL 24x36-INCH EACH
PB16	STA 30+94; 57.7' LT	1
TOTAL		1

CONCRETE BASES		
SIGNAL BASE NO.	LOCATION^	654.0101 CONCRETE BASES TYPE 1 EACH
SB8	STA 35+68; 95' LT	1
TOTAL		1

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

3

IH 94 WB ON RAMP & CTH O (S MOORLAND RD)
WAUKESHA COUNTY
CATEGORY 1500
S67-0643

TRAFFIC DETECTOR LOOPS

LOOP NO.	HOME RUN PB	LOCATION** ^	SIZE (FT)x(FT)	NO. OF TURNS	SDD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR	655.0700 LOOP DETECTOR LEAD IN CABLE	655.0800 LOOP DETECTOR WIRE
						L.F.	L.F.	L.F.
11	PB16	STA 30+95; 34.4' LT	6x12	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	683	232
12	PB16	STA 30+95; 46.7' LT	6x12	5	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	52	683	208
13	PB9	STA 35+16; 27.0' LT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	280	190
14	PB8	STA 35+44; 26.4' LT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	92	275	208
15	PB9	STA 34+99; 39.2' LT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	280	190
16	PB8	STA 35+27; 38.6' LT	6x20	3	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	275	192
21	PB2	STA 38+88; 76' LT	6x6	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	58	246	382
22	PB2	STA 38+88; 64' LT	6x6	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	76	246	400
23	PB2	STA 38+88; 53' LT	6x6	4	9F15-4B - LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	246	420
						TOTAL	674	5636
								2422

TRAFFIC SIGNAL CABLE AND WIRE

655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG		
FROM	TO	L.F.
CB1	SB8	197
TOTAL		197

TRAFFIC SIGNAL CABLE AND WIRE

655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG		
FROM	TO	L.F.
CB1	SB8	197
SB8	SB5	51
PB13	SB8	28
TOTAL		276

TRAFFIC SIGNAL CABLE AND WIRE

655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG		
FROM	TO	L.F.
SB8	HEAD 12	15
TOTAL		15

TRAFFIC SIGNAL EVP DETECTOR CABLE

655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE		
FROM	TO	L.F.
CB1	SB6 (HEAD B)	183
TOTAL		183

3

IH 94 WB ON RAMP & CTH O (S MOORLAND RD)
WAUKESHA COUNTY
CATEGORY 1500
S67-0643

POLES (CONTRACTOR FURNISHED)			
	657.0100	657.0430	658.0500
	TRAFFIC SIGNAL STANDARDS		
	PEDESTAL	ALUMINUM	PEDESTRIAN
SIGNAL	BASES	10-FT	PUSH
BASE NO.	EACH	EACH	BUTTONS
			EACH
SB8	1	1	1
TOTAL			
	1	1	1

FACES		
		658.0416
		PEDESTRIAN
		SIGNAL FACE
SIGNAL	SIGNAL	16-INCH
HEAD NO.	BASE NO.	EACH
12	SB8	1
TOTAL		
		1

SIGNAL MOUNTING HARDWARE	
	658.5070.3002
	SIGNAL
	MOUNTING
	HARDWARE
LOCATION	EACH
IH 94 WB ON RAMP & CTH O	1
TOTAL	
	1

LED MODULES SUMMARY (FOR INFO ONLY)		
		PEDESTRIAN
		SIGNAL FACE
SIGNAL	SIGNAL	16-INCH
HEAD NO.	BASE NO.	EACH
12	SB8	1
TOTAL		
		1

LAMP, BALLAST, LED, SWITCH DISPOSAL	
	659.5000.S
	LAMP, BALLAST, LED,
	SWITCH DISPOSAL
	BY CONTRACTOR
FIXTURE TYPE	EACH
TRAFFIC SIGNAL, ONE SECTION	3
TRAFFIC SIGNAL, PEDESTRIAN	1
TOTAL	
	4

LAMP, BALLAST, LED, SWITCH DISPOSAL (FOR INFORMATION ONLY)		
	TRAFFIC	TRAFFIC
	SIGNAL,	SIGNAL,
	THREE SECTION	PEDESTRIAN
SIGNAL	EACH	EACH
BASE NO.		
SB2	3	--
SB8	--	1
TOTAL		
	3	1

REMOVE, SALVAGE, & REINSTALL EVP EQUIPMENT	
	SPV.0060.3007
	REMOVE, SALVAGE, & REINSTALL
	EVP EQUIPMENT
LOCATION	EACH
IH 94 WB ON RAMP & CTH O	1
TOTAL	
	1

3

LIGHTING REMOVAL									
				204.0195	204.9060.S.1001	204.9060.S.1002	653.0905	659.5000.S.1001	COMMENTS
				REMOVING CONCRETE BASES	REMOVING LIGHTING UNITS	REMOVING DISTRIBUTION CENTER	REMOVING PULL BOXES	LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR	
SYSTEM	DESCRIPTION	STATION	OFFSET	EACH	EACH	EACH	EACH	EACH	
CITY OF BROOKFIELD	SL-481	28+21	37.0' LT	1	1	--	--	2	CITY OF BROOKFIELD SYSTEM
	SL-474	31+61	46.8' LT	1	1	--	--	2	"
	SL-473	33+44	50.6' LT	1	1	--	--	2	"
	LPB-206	30+37	55.4' LT	--	--	--	1	--	"
HL-67-LD	HL-67-LD	31+10	66.2' RT	1	--	1	--	--	WISDOT LIGHTING SYSTEM
	LPB-201	32+19	29.1' RT	--	--	--	1	--	"
	LPB-202	31+10	82.5' RT	--	--	--	1	--	"
	LPB-203	31+43	161.7' RT	--	--	--	1	--	"
	LPB-204	32+37	55.4' RT	--	--	--	1	--	"
	CLD6	32+01	89.5' RT	1	1	--	--	1	"
	DLD7	31+38	268.3' RT	1	1	--	--	1	"
	CLD8	31+35	476.0' RT	1	1	--	--	2	"
TL-IH-67	EXISTING LP-1	35+34	47.4' LT	1	1	--	--	2	WISDOT TRAFFIC SIGNAL SYSTEM
TOTAL				8	7	1	5	12	

** ADDITIONAL QUANTITIES FOUND ELSEWHERE

ALL ITEMS CATEGORY 1100

LIGHTING CONDUIT AND WIRE

				652.0225	652.0235	655.0620
				CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	ELECTRICAL WIRE LIGHTING 8 AWG
SYSTEM	CIRCUIT	FROM	TO	LF	LF	LF
CITY OF BROOKFIELD	A/N/B/GND	SL-484	SL-483	150	--	1,200
		SL-483	LPB-6	140	--	1,120
		LPB-6	JB1	5	--	20
		JB1	SL-477	5	--	20
		SL-477	SL-476	30	--	120
		SL-476	SL-475	30	--	120
		JB1	JB2	30	--	120
		JB2	SL-480	5	--	20
		SL-480	SL-479	30	--	120
		SL-479	SL-478	30	--	120
		SL-478	SL-481	20	--	80
		SL-481	SL-482	60	--	240
		HL-67-LD	LPB-01	10	--	70
		LPB-01	LPB-02	35	--	140
HL-67-LD	C/N/D/GND	LPB-02	LPB-03	--	100	400
		LPB-03	DLD7	150	--	600
		DLD7	CLD8	185	--	740
		CLD8	DLD9	195	--	780
		TOTAL		1,110	100	6,030

ALL ITEMS CATEGORY 1100

LIGHTING PULL BOXES

653.0140

655.0615

PULL
BOXES
STEEL
24X42-INCH

ELECTRICAL
WIRE
LIGHTING
10 AWG

SYSTEM	DESCRIPTION	STATION	OFFSET	EACH	LF
HL-67-LD	LPB-201	31+03	47.7' RT	1	10
	LPB-202	31+04	82.5' RT	1	20
	LPB-203	31+53	166.3' RT	1	45
TOTAL				3	75

LIGHTING LUMINAIRE ARMS AND POLES

654.0105

655.0610

657.0255

657.0322

657.0610

659.1125

659.1215

CONCRETE
BASES
TYPE 5

ELECTRICAL
WIRE
LIGHTING
12 AWG

TRANSFORMER
BASES
BREAKAWAY
11 1/2-INCH
BOLT CIRCLE

POLES
TYPE 5
ALUMINUM

LUMINAIRE
ARMS
SINGLE
MEMBER
4 1/2-INCH
CLAMP 6-FT

LUMINAIRES
UTILITY
LED C

LUMINARES
UNDERDECK
LED C

SYSTEM	DESCRIPTION	STATION	OFFSET	EACH	LF	EACH	EACH	EACH	EACH	EACH
CITY OF BROOKFIELD	SL-481	30+26	31.3' LT	--	25	--	--	--	--	1
	SL-482	29+57	31.6' LT	--	25	--	--	--	--	1
HL-67-LD	DLD7	31+46	308.9' RT	1	117	1	1	1	1	--
	CLD8	31+42	490.1' RT	1	117	1	1	1	1	--
				2	284	2	2	2	2	2

ALL ITEMS CATEGORY 1100

LIGHTING CONTROL AND SERVICES

650.8500 654.0230 655.0640 656.0400.1001 659.2230 SPV.0060.1001 SPV.0060.1002

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (1060-10-72)	CONCRETE CONTROL CABINET BASES TYPE L30	ELECTRICAL WIRE LIGHTING 1 AWG	ELECTRICAL SERVICE MAIN LUGS ONLY METER PEDESTAL (HL-67-LD)	LIGHTING CONTROL CABINETS 240/480 30-INCH	LIGHTING SYSTEM INTEGRATOR (1060-10-72)	LIGHTING SYSTEM SURVEY (1060-10-72)
--	---	---	--	---	--	--

SYSTEM	STATION	OFFSET	EACH	EACH	LF	EACH	EACH	EACH	EACH
HL-67-LD	31+04	32.3' RT	--	1	18	--	1	--	--
	PROJECT (1060-10-72)		1	--	--	1	--	1	1
TOTAL			1	1	18	1	1	1	1

PLAQUE TEXT LIGHTING CONTROL
I94/MOORLAND
2-480 VAC WARNING (2 REQUIRED PER LOCATION; METER PEDESTAL AND CABINET DOOR)

ALL ITEMS CATEGORY 1100

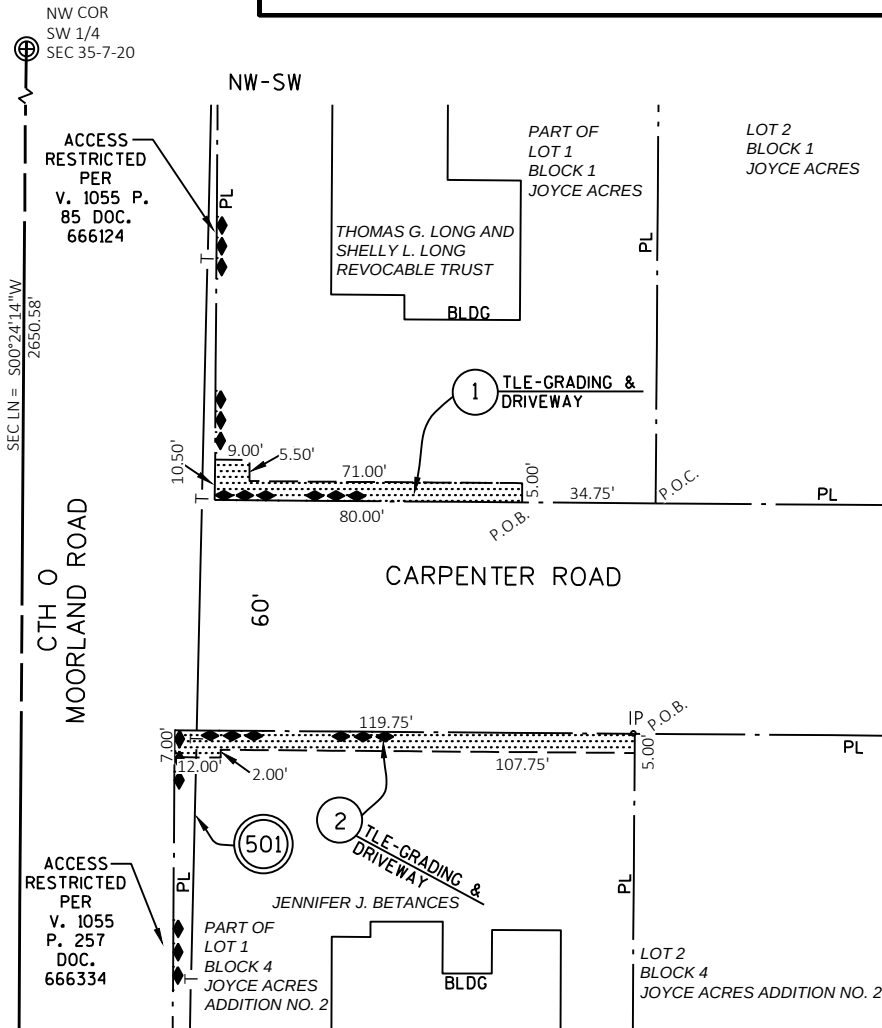
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR
REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE
DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE FOR ALL TLE'S IS FOR GRADING UNLESS
OTHERWISE NOTED.

R/W PROJECT NUMBER: 1060-10-22 SHEET NO. 4.01

TLE ACQUISITION EXHIBIT
CITY OF BROOKFIELD, MOORLAND ROAD
IH 94 EAST WEST FREEWAY, MOORLAND ROAD INTERCHANGE
I-94 / CTH O INTERCHANGE WAUKESHA COUNTY

PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 35, T7N, R20E, CITY OF
BROOKFIELD, WAUKESHA COUNTY, WISCONSIN.



- (501) AT&T WISCONSIN
NO RECORD OF EASEMENT
PARCEL 2
- (502) WE ENERGIES - ELECTRIC
NON-DESCRIPT EASEMENT
DOC.145419
PARCEL 1&2
- NON-DESCRIPT EASEMENT
DOC.222637
PARCEL 1&2

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
MOORLAND RD	T 094-3(3)	VARIES	1966
MOORLAND RD	I-94-3(3)296	VARIES	1960
CARPENTER ROAD	JOYCE ACRES	30'	1953
CARPENTER ROAD	JOYCE ACRES ADDITION NO. 2	30'	1954

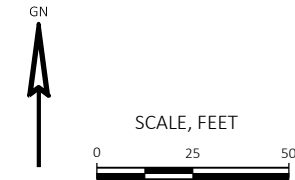
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	THOMAS G. LONG & SHELLY L. LONG REVOCABLE TRUST	TLE	450
2	JENNIFER J. BETANCES	TLE	623

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
501	AT&T WISCONSIN	RELEASE OF RIGHTS
502	WE ENERGIES - ELECTRIC	RELEASE OF RIGHTS



THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
SOUTHEAST REGION - WAUKESHA

SIGNATURE: *Robert A. Duffek* DATE: 05/16/22
PRINT NAME:

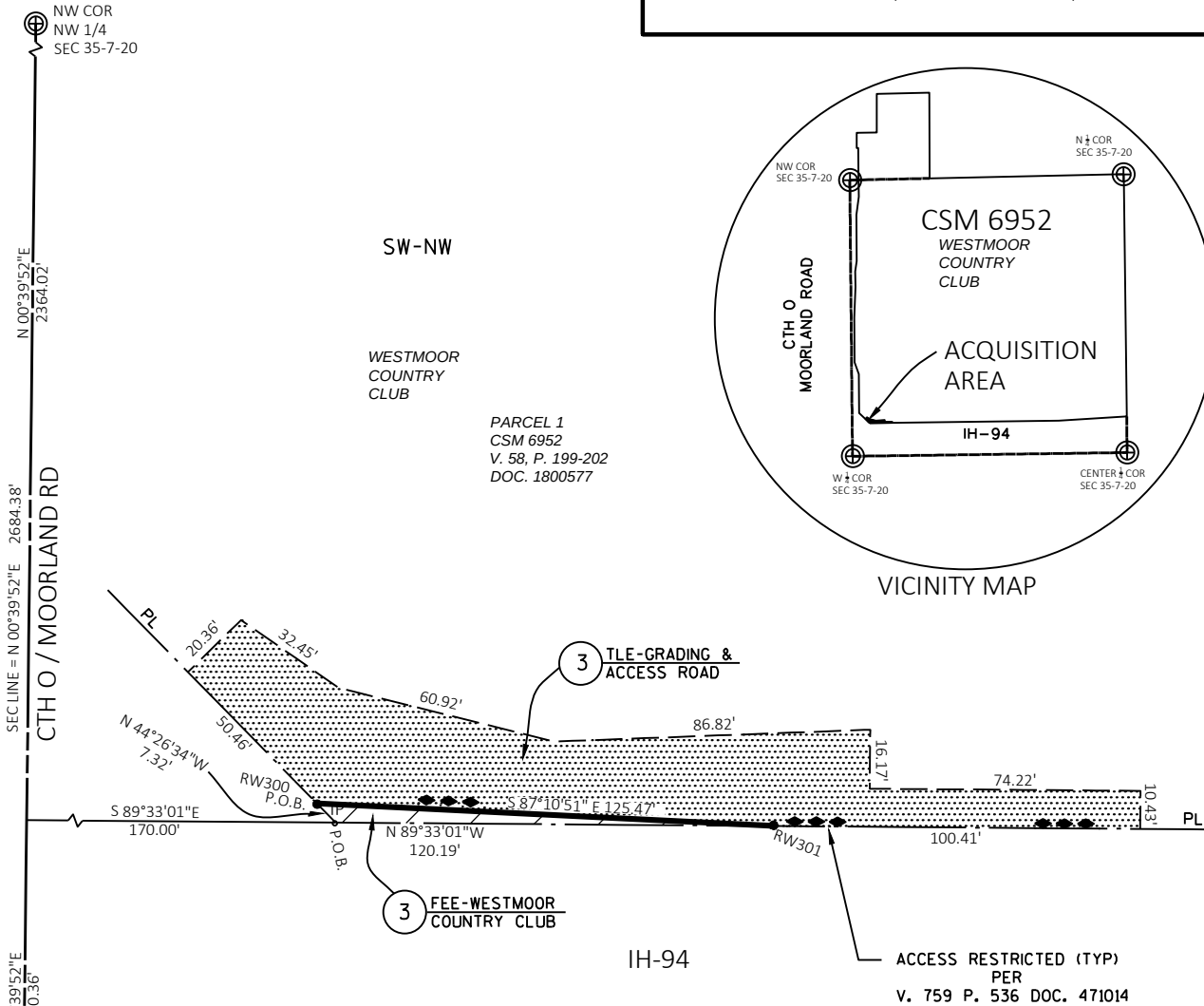
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR
REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE
DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE FOR ALL TLE'S IS FOR GRADING, UNLESS
OTHERWISE NOTED.

R/W PROJECT NUMBER: 1060-10-22 SHEET NO. 4.02

FEE & TLE ACQUISITION EXHIBIT
CITY OF BROOKFIELD, MOORLAND ROAD
IH 94 EAST WEST FREEWAY, MOORLAND ROAD INTERCHANGE
I-94 / CTH O INTERCHANGE WAUKESHA COUNTY

PART OF THE SW 1/4 OF THE NW 1/4 OF SECTION 35, T7N, R20E, CITY OF
BROOKFIELD, WAUKESHA COUNTY, WISCONSIN.



HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
IH-94	I-94-3(3)296	VARIES	1960
MOORLAND RD	I-94-3(3)296	VARIES	1960

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
3	WESTMOOR COUNTRY CLUB	TLE	5461
3	WESTMOOR COUNTRY CLUB	FEE	312

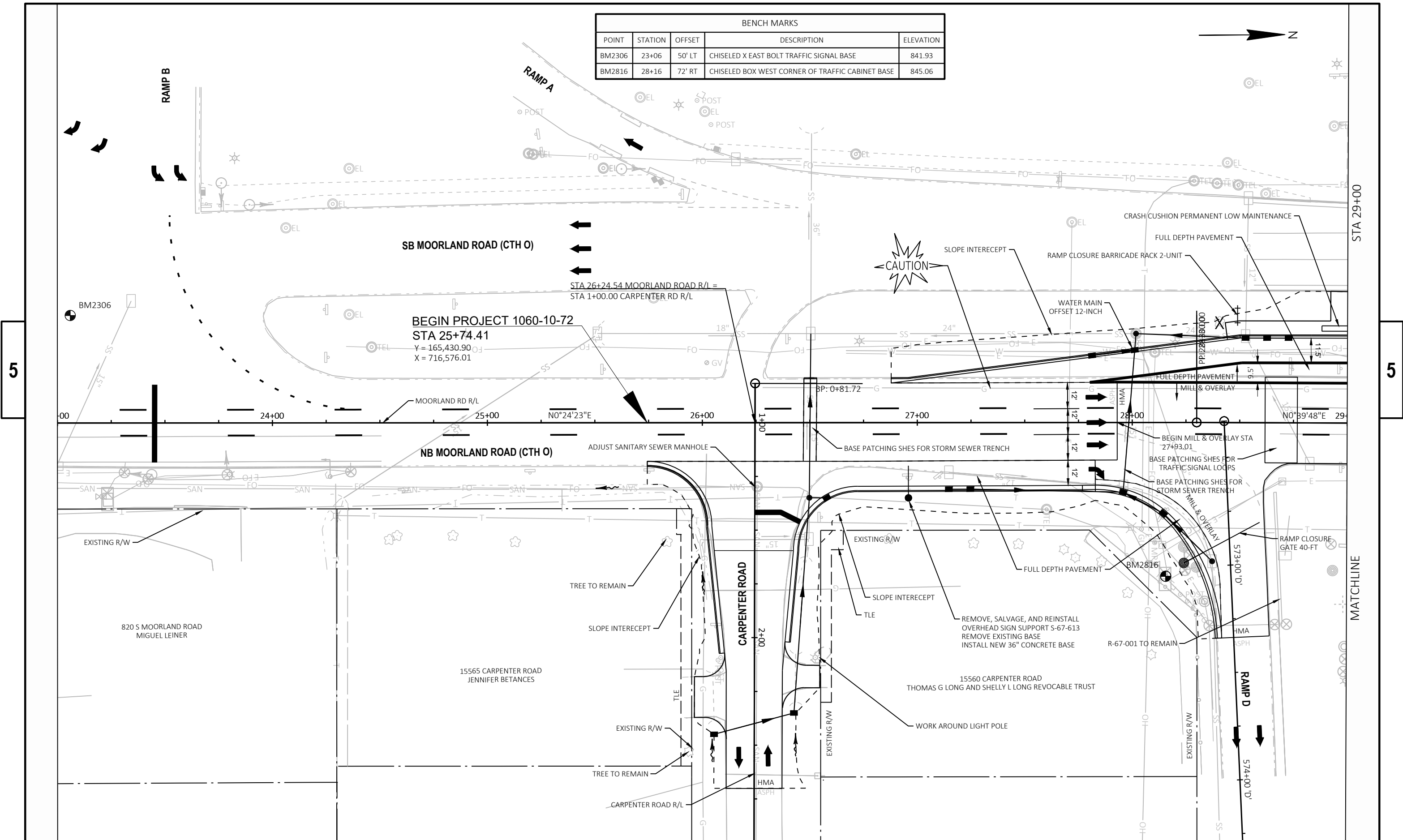
UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A		

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
SOUTHEAST REGION - WAUKESHA

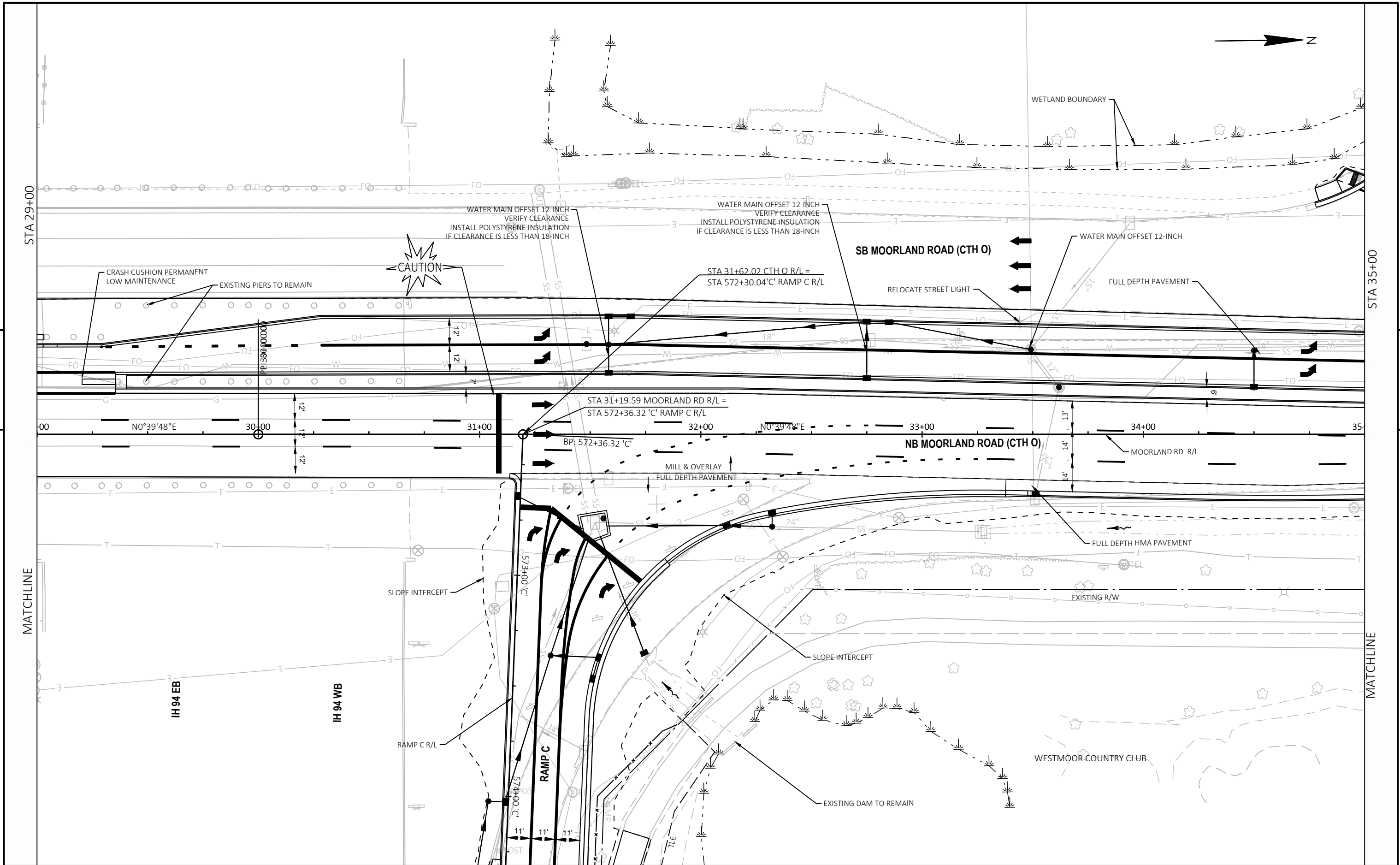
SIGNATURE: _____ DATE: _____
PRINT NAME: _____

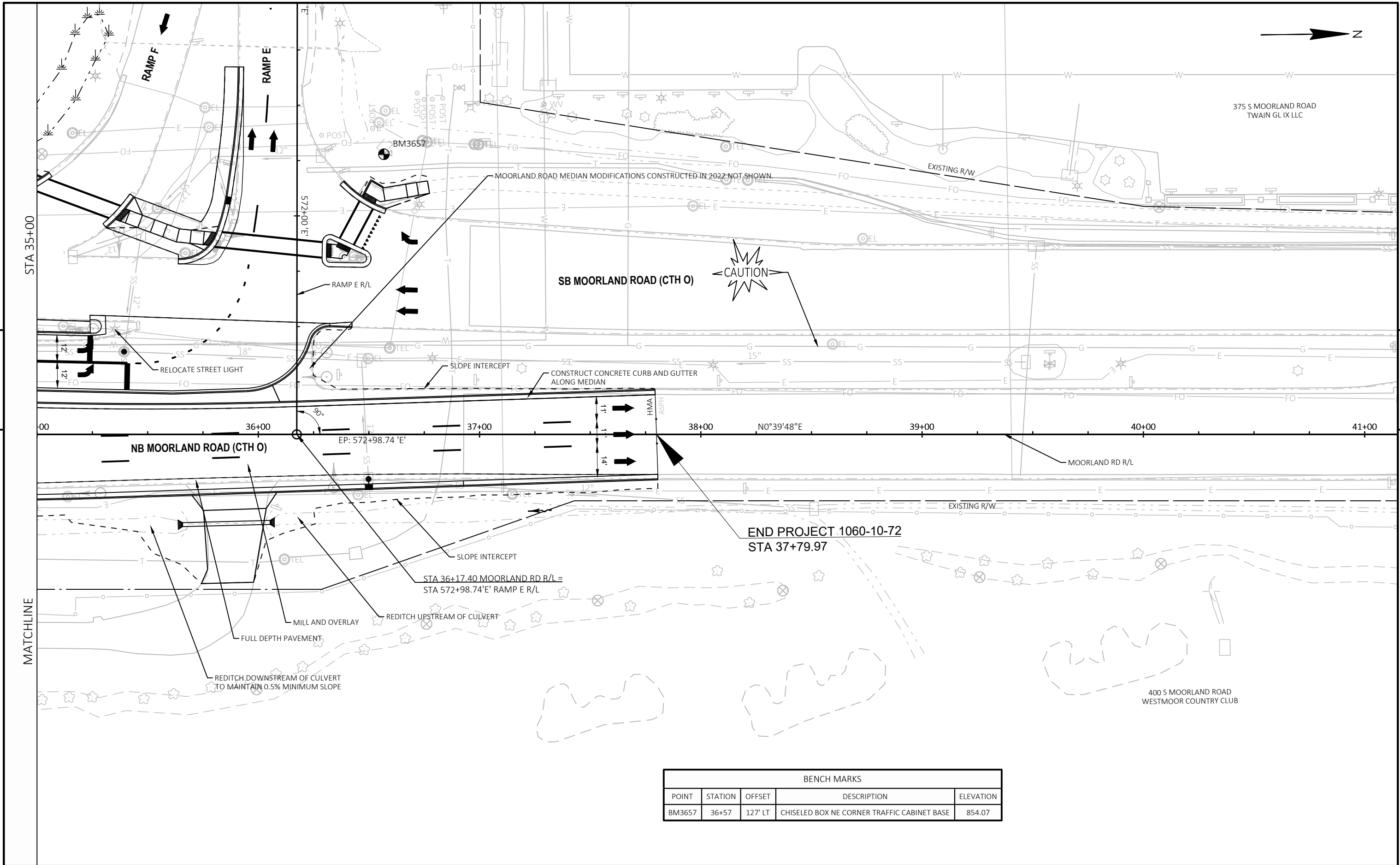
BENCH MARKS				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM2306	23+06	50' LT	CHISELED X EAST BOLT TRAFFIC SIGNAL BASE	841.93
BM2816	28+16	72' RT	CHISELED BOX WEST CORNER OF TRAFFIC CABINET BASE	845.06



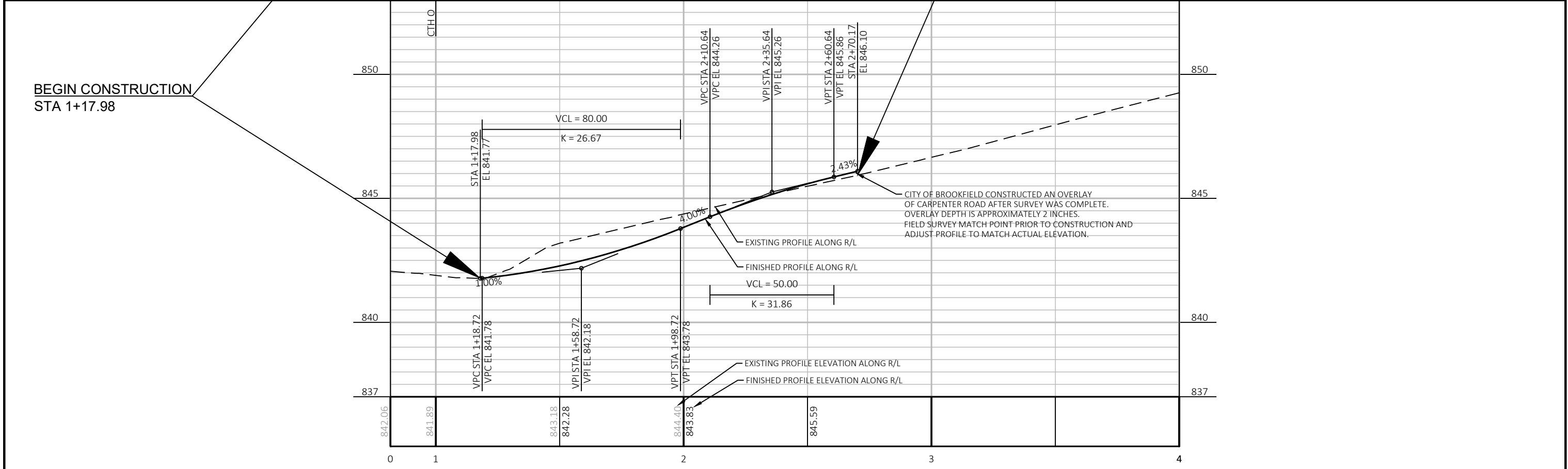
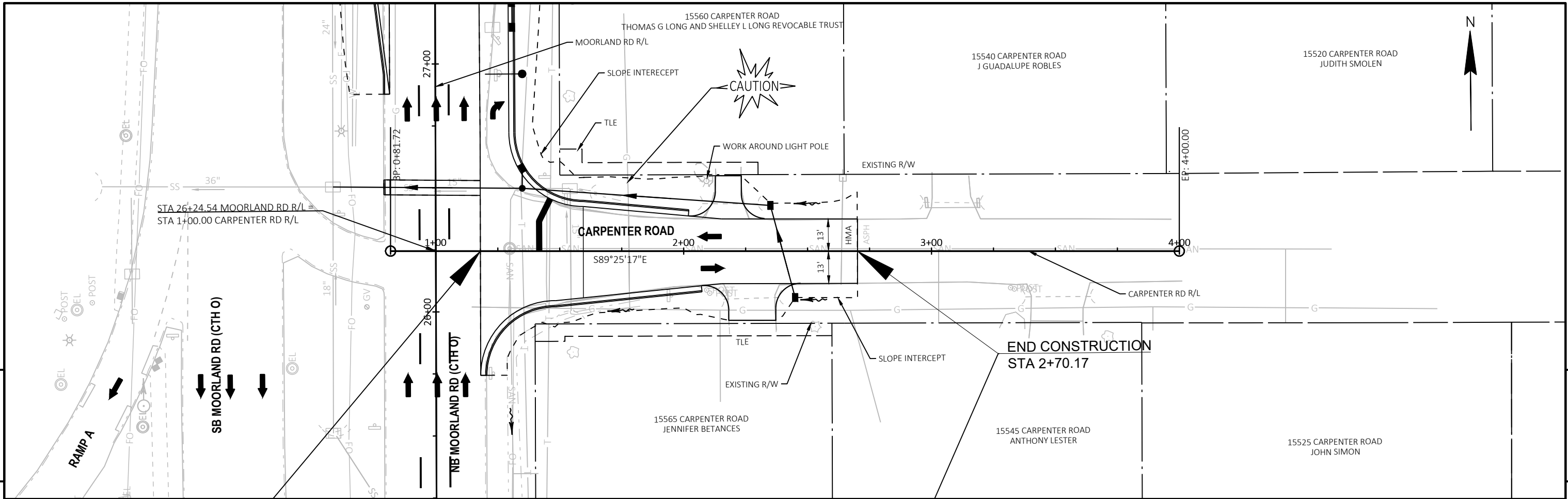
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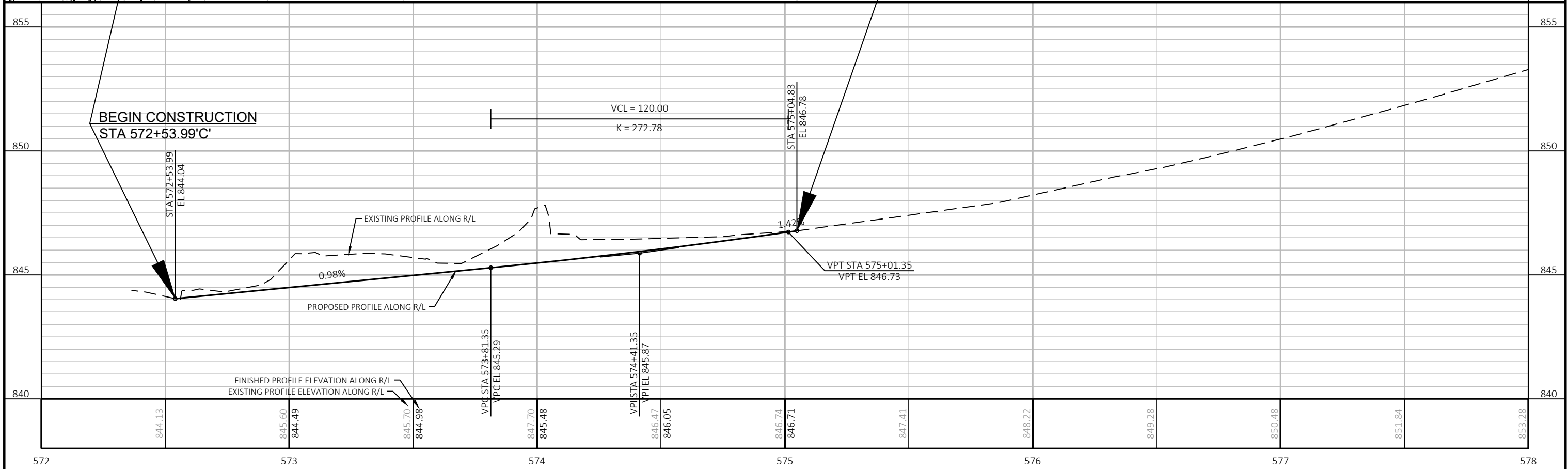
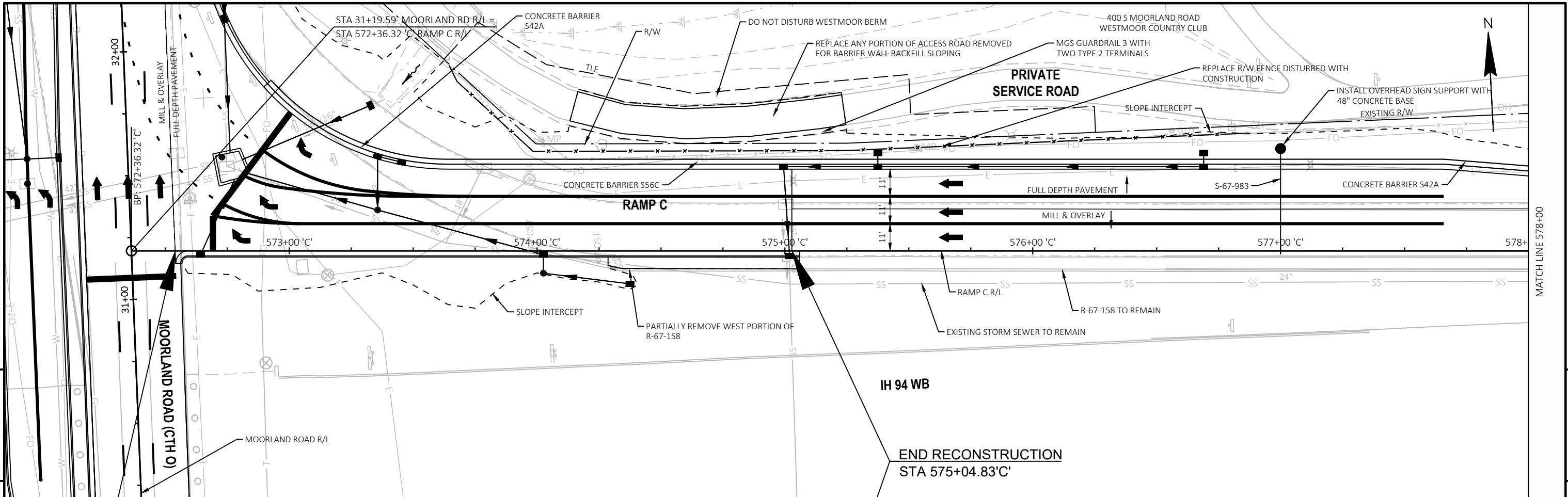
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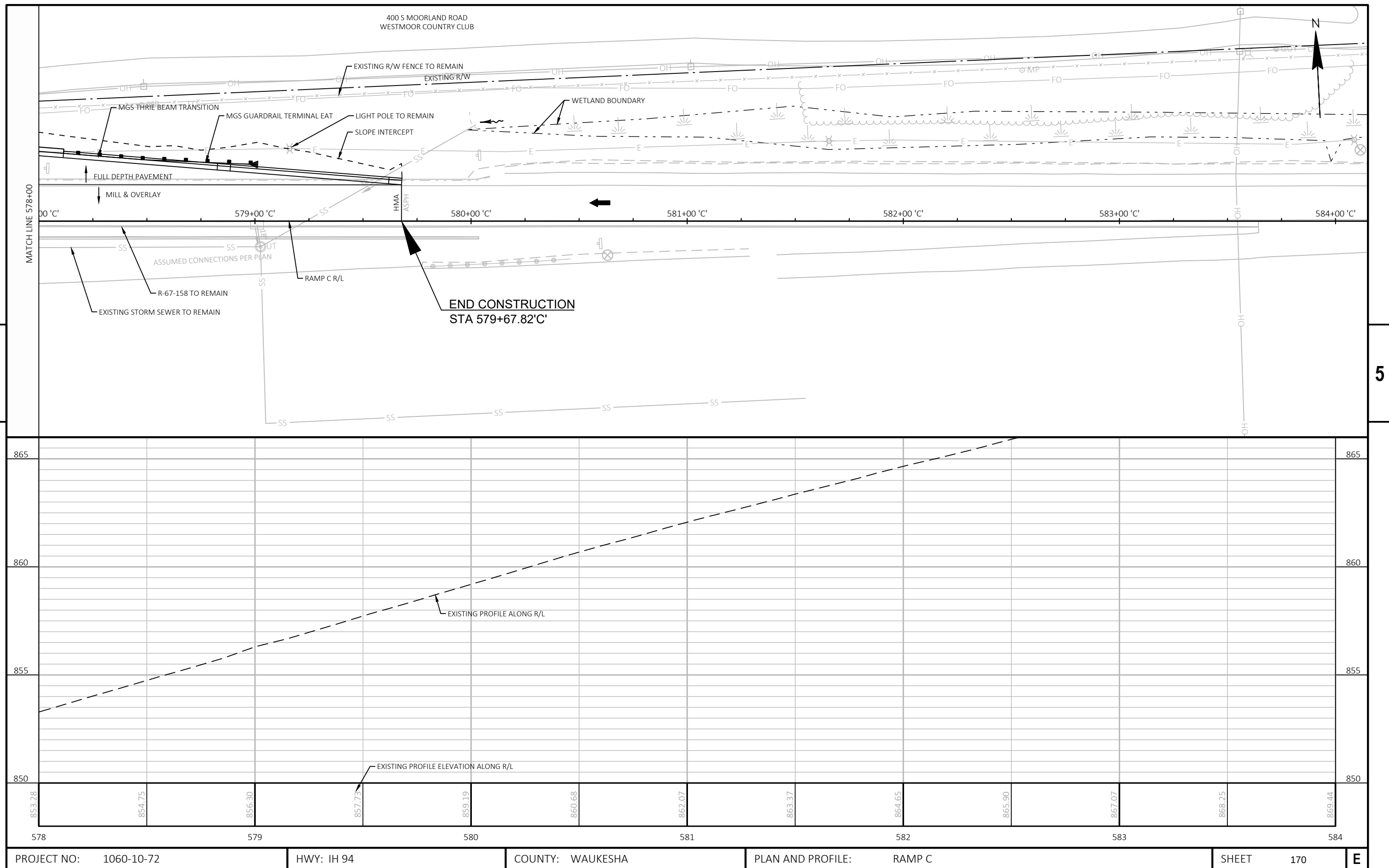


BENCH MARKS				
POINT	STATION	OFFSET	DESCRIPTION	ELEVATION
BM3657	36+57	127' LT	CHISELED BOX NE CORNER TRAFFIC CABINET BASE	854.07

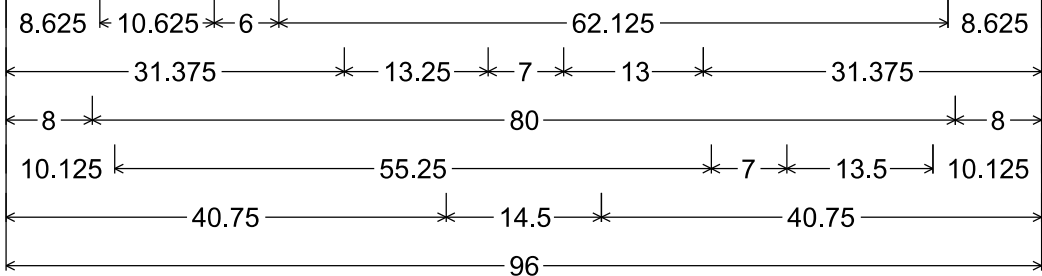
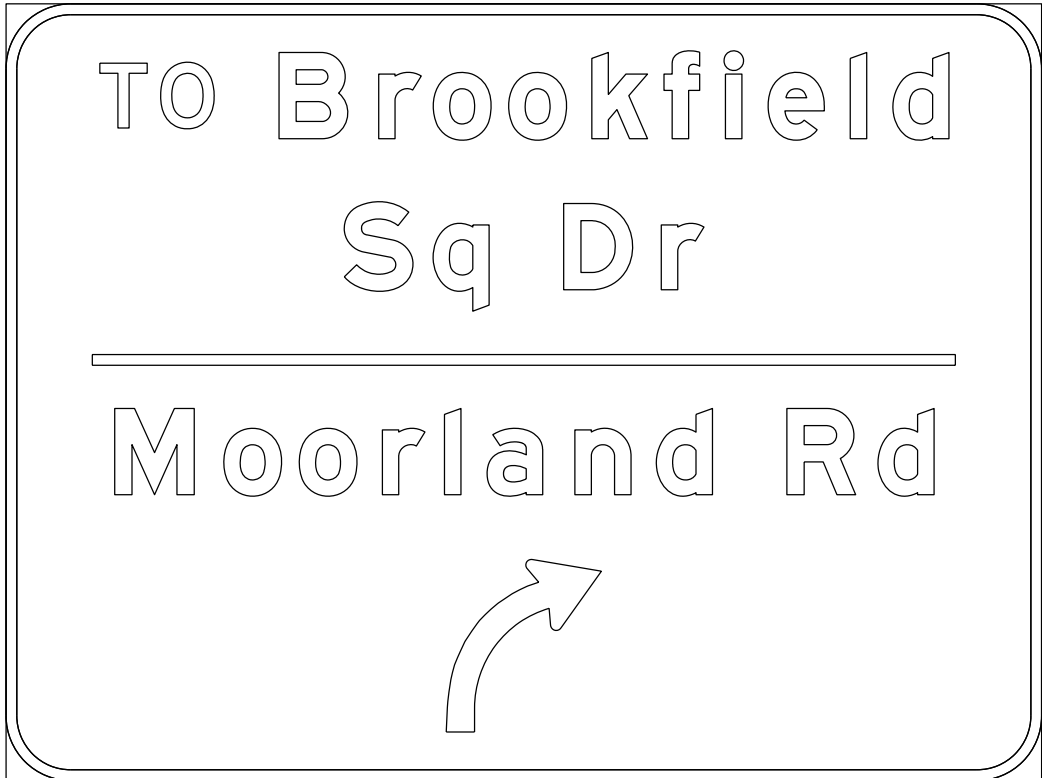




PROJECT NO:	1060-10-72	HWY:	IH 94	COUNTY:	WAUKESHA	PLAN AND PROFILE:	RAMP C	SHEET	169	E
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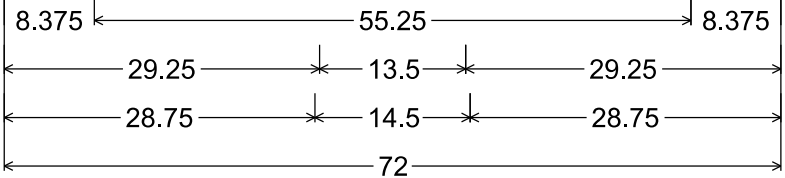
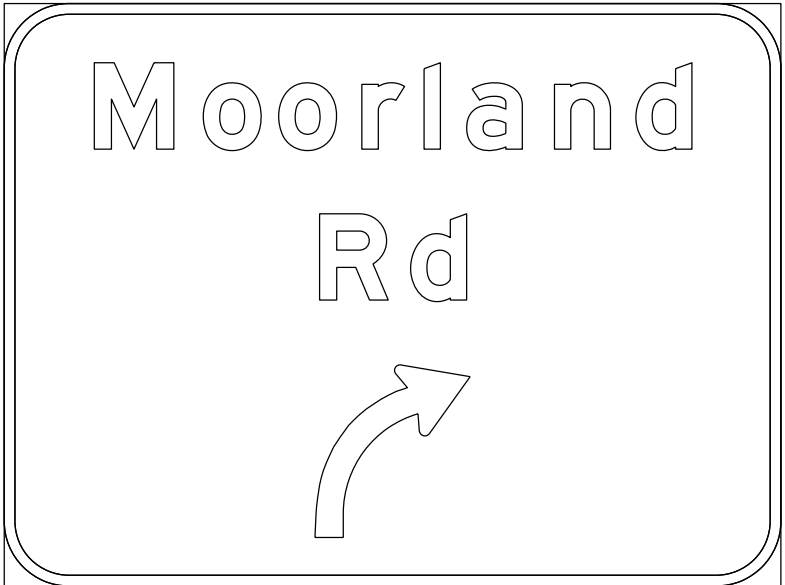


7



D16-1R; 6.000" Radius, 1.000" Border, "TO", E

S-67-983

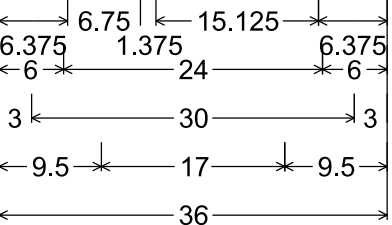
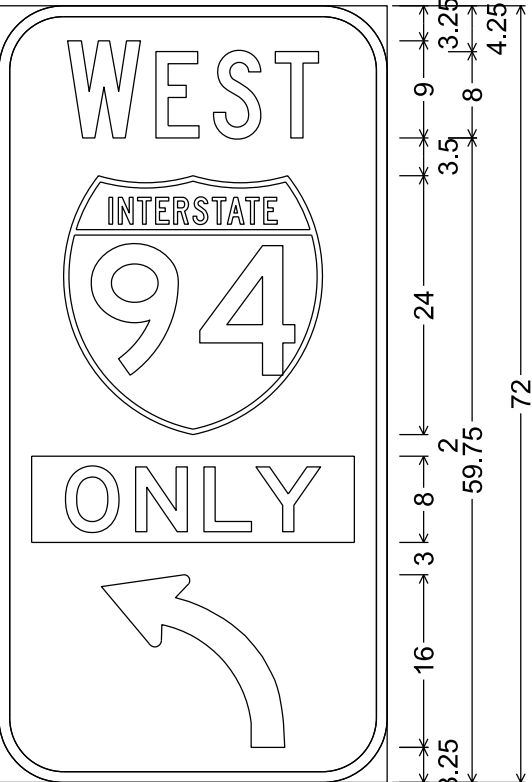


D16-1R; 6.000" Radius, 1.000" Border

S-67-983

NOTES

- 1. All Signs Type I - Type SH Reflective
- 2. Color:
Background - Green
Message - White
- 3. Message Series - E Modified except as noted
- 4. ONLY plaque on Type F Reflective sheeting with Black Non-Reflective message

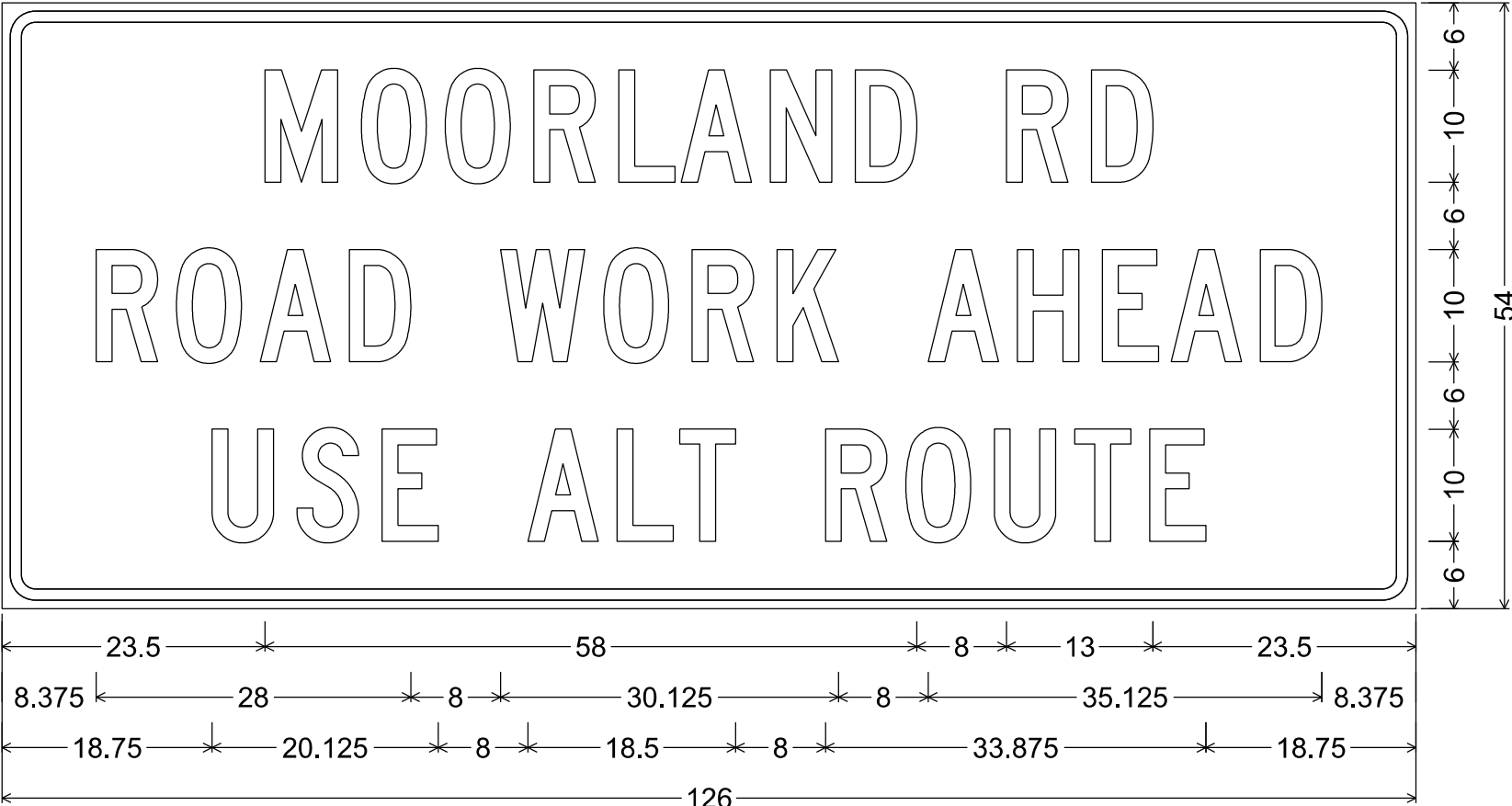


D16-1L; 6.000" Radius, 1.000" Border, "WEST", C

Bridge Mount
Moorland Rd NB@94WB RAMP

7

7

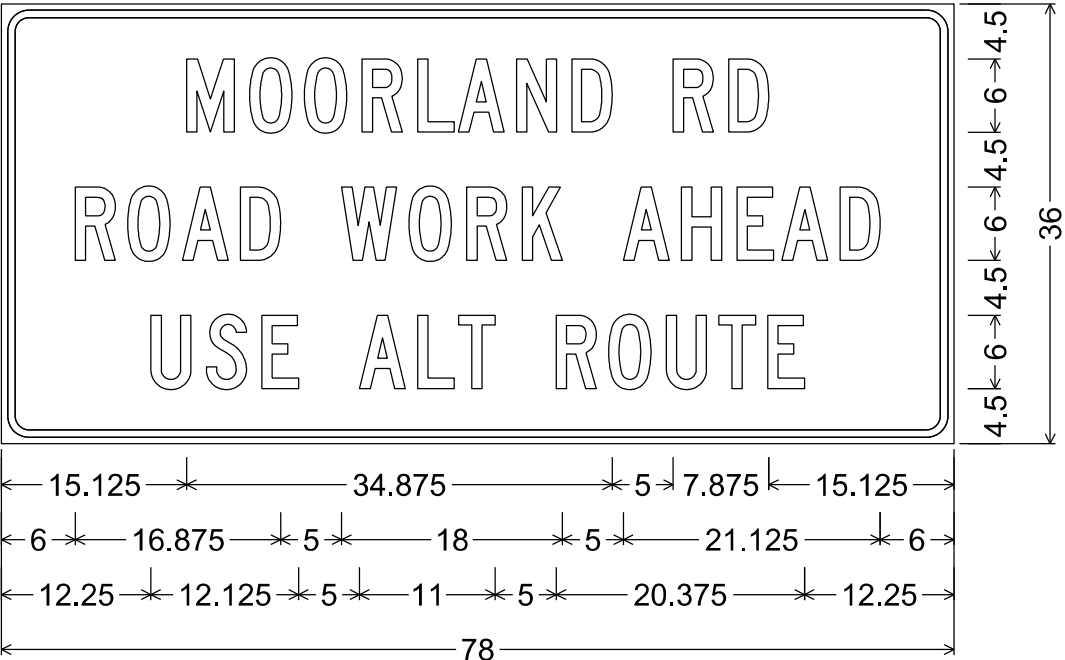


3.000" Radius, 1.000" Border, 0.750" Indent

NOTES

- 1. Fixed Message Signs Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - C

7



2.250" Radius, 0.625" Border, 0.500" Indent

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 08/20/2020
INVENTORY RATING: HS-13
OPERATING RATING: HS-21
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 180 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SURFACE REPAIRS _____ f'c = 4,000 P.S.I.

BAR STEEL REINFORCEMENT _____ fy = 60,000 P.S.I.

LIST OF DRAWINGS

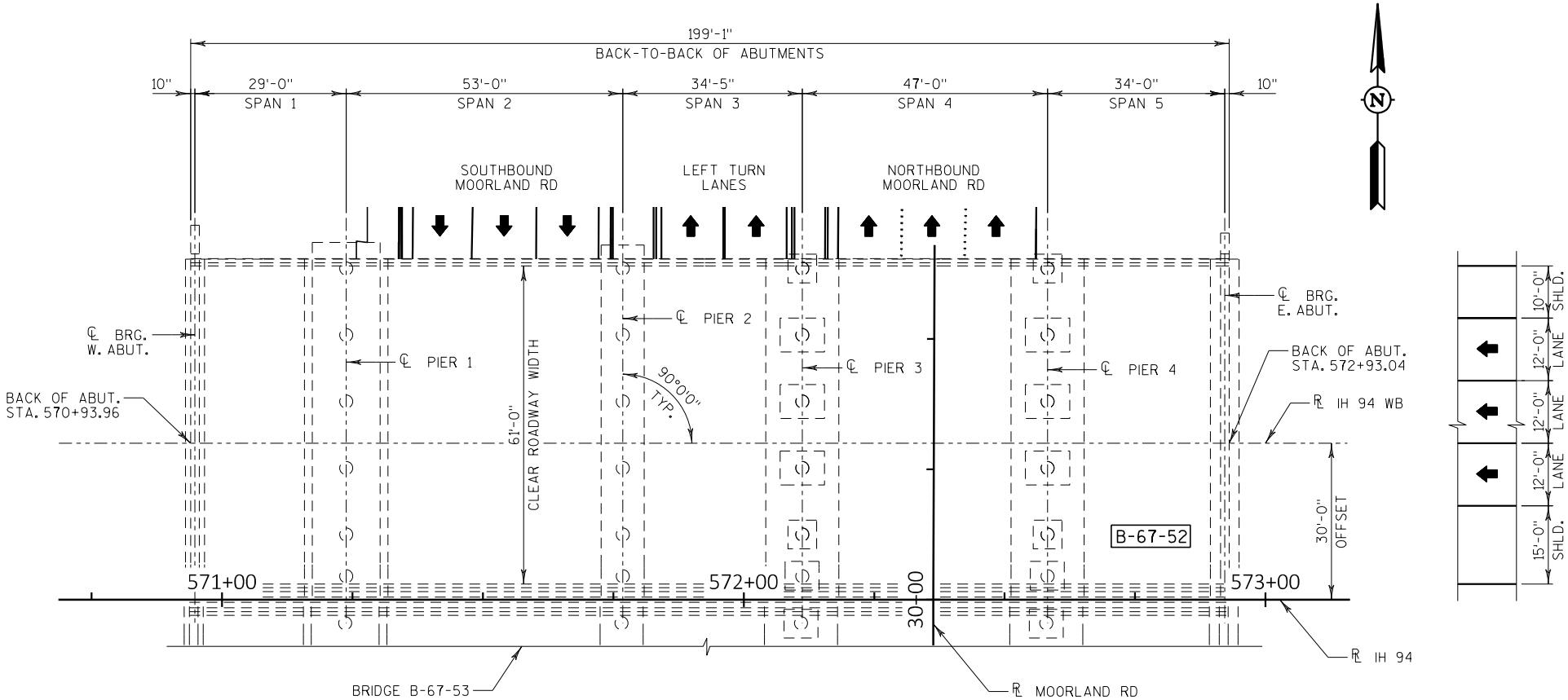
1. GENERAL PLAN
2. SECTIONS, NOTES AND QUANTITIES
3. SUPERSTRUCTURE
4. PIERS (1 OF 2)
5. PIERS (2 OF 2)

TRAFFIC VOLUME

MOORLAND ROAD	IH 94 WB
A.D.T. = 40,600 (2042)	A.D.T. = 58,500 (2020)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

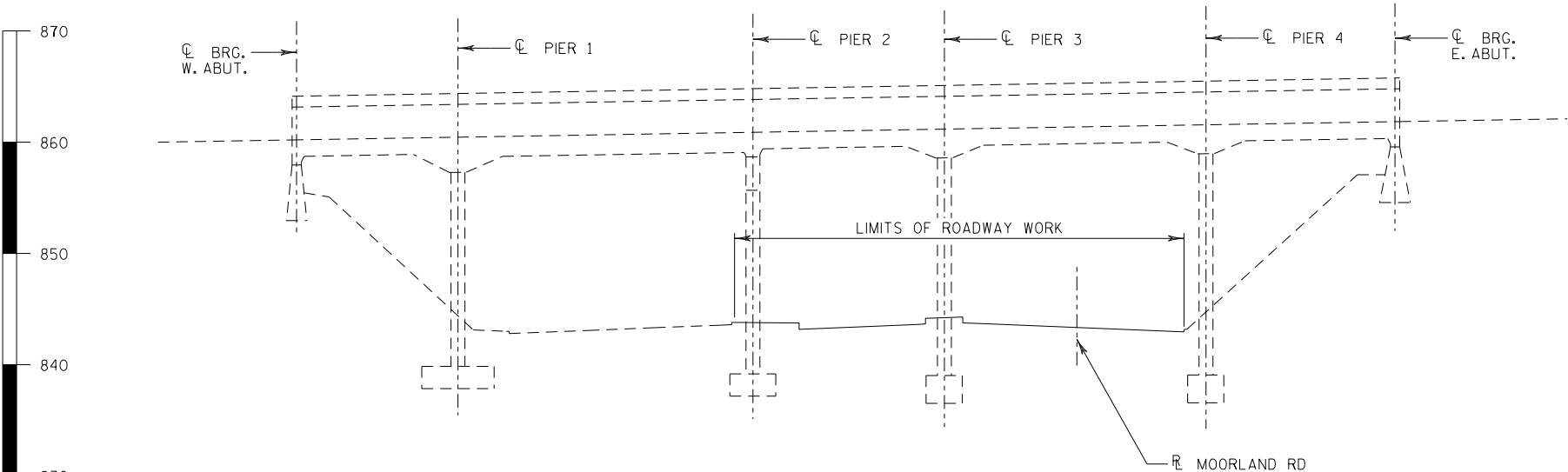
STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261
SCOTT GINAL (262) 317-3344

NO.	DATE	REVISION	BY
raSmith CREATIVITY BEYOND ENGINEERING 16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED _____		DATE _____	
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-67-52			
IH 94 WB OVER CTH O (MOORLAND ROAD)			
COUNTY	WAUKESHA	TOWN/CITY/VILLAGE	BROOKFIELD
DESIGN SPEC. _____			
DESIGNED BY	PFP	DESIGN CK'D.	SJG
DRAWN BY	PFP	PLANS CK'D.	SJG
GENERAL PLAN			SHEET 1 OF 5



PLAN

(5-SPAN HAUNCHED CONCRETE SLAB - CONCRETE REMOVAL AND REPAIR)



ELEVATION

(LOOKING NORTH)

SCOPE OF WORK

REMOVE ALL UNSOUND CONCRETE FROM THE UNDERSIDE AND EDGES OF THE EXISTING CONCRETE SLAB. REFER TO SUPERSTRUCTURE SHEET FOR APPROXIMATE LOCATIONS AND AREAS.

REPAIR ALL SPALLED AND DELAMINATED CONCRETE ON THE EXISTING PIERS. REFER TO PIER SHEETS FOR APPROXIMATE LOCATIONS AND AREAS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

"CONCRETE SURFACE REPAIR" AND "REMOVING LOOSE CONCRETE OVERHEAD" AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER IN THE FIELD.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

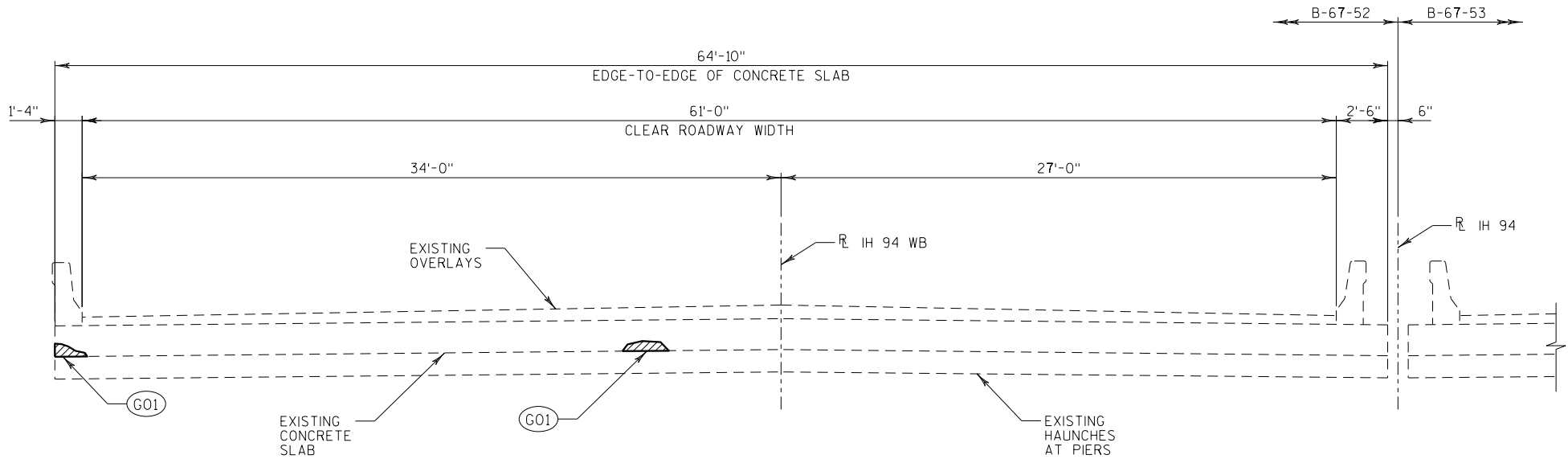
ASBESTOS-CONTAINING MATERIAL (ACM) IS ASSUMED TO BE PRESENT ON THIS BRIDGE AND HAS BEEN IDENTIFIED IN THE MERCURY VAPOR LIGHTS AFFIXED TO THE UNDERSIDE OF THE BRIDGE SLAB. CARE SHOULD BE TAKEN DURING CONCRETE REMOVAL ACTIVITIES SO AS NOT TO DISTURB THE EXISTING LIGHTING UNDER THE BRIDGE.

REFER TO ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS FOR MOORLAND ROAD (CTH O).

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	W. ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	E. ABUT.	TOTAL
509.1500	CONCRETE SURFACE REPAIR	SF			20	140	2	5		167
SPV.0165.4000	REMOVING LOOSE CONCRETE OVERHEAD	SF	420							420

ALL BID ITEMS ARE CATEGORY 2000

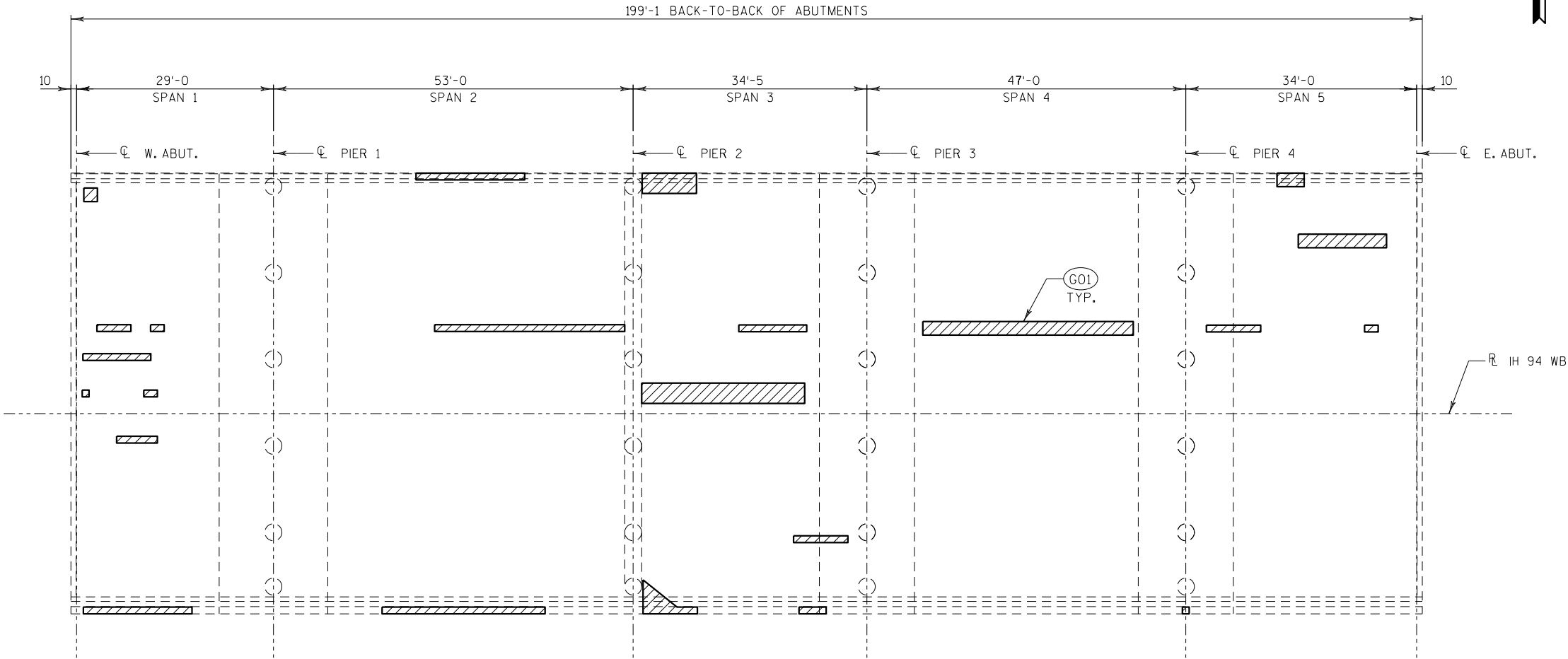


CROSS-SECTION THRU ROADWAY
(LOOKING EAST)

NOTES

G01 REMOVE UNSOUND CONCRETE FROM UNDERSIDE AND EDGES OF EXISTING CONCRETE SLAB. REFER TO SUPERSTRUCTURE SHEET FOR APPROXIMATE LOCATIONS AND AREAS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-52			
	DRAWN BY	PFP	PLANS CK'D. SJG
SECTIONS, NOTES AND QUANTITIES		SHEET 2 OF 5	



SLAB - CONCRETE REMOVAL PLAN
(BOTTOM OF SLAB SHOWN)

NOTES

"REMOVING LOOSE OVERHEAD CONCRETE" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

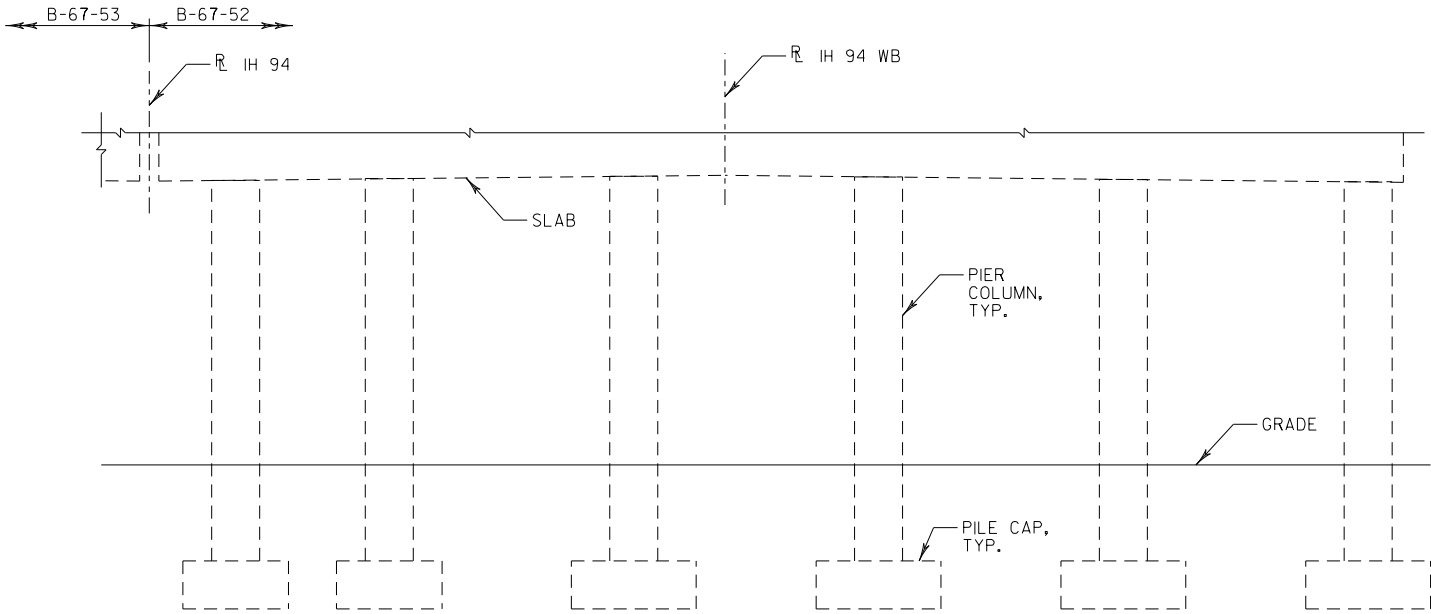
(G01) REMOVE UNSOUND CONCRETE FROM UNDERSIDE AND EDGES OF EXISTING CONCRETE SLAB. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

ESTIMATED QUANTITIES

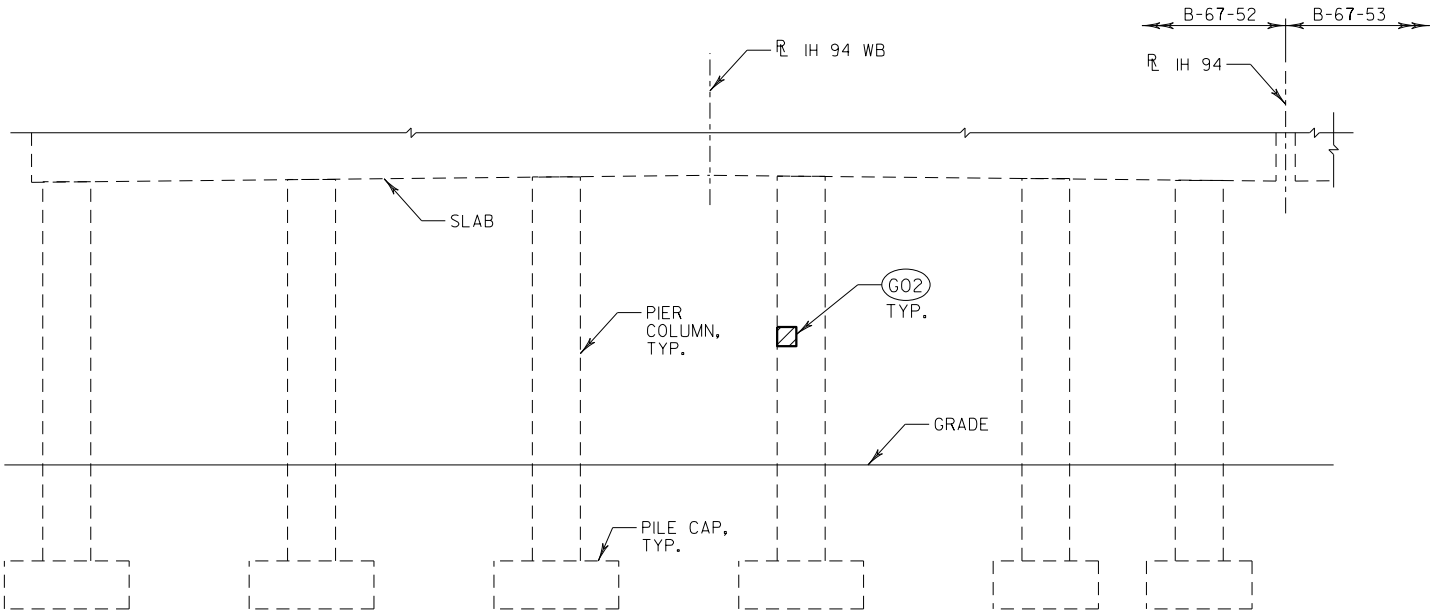
BID ITEM NUMBER	BID ITEMS	UNIT	QUANTITY
SPV.0165.4000	REMOVING LOOSE CONCRETE OVERHEAD	SF	420

ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY. TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

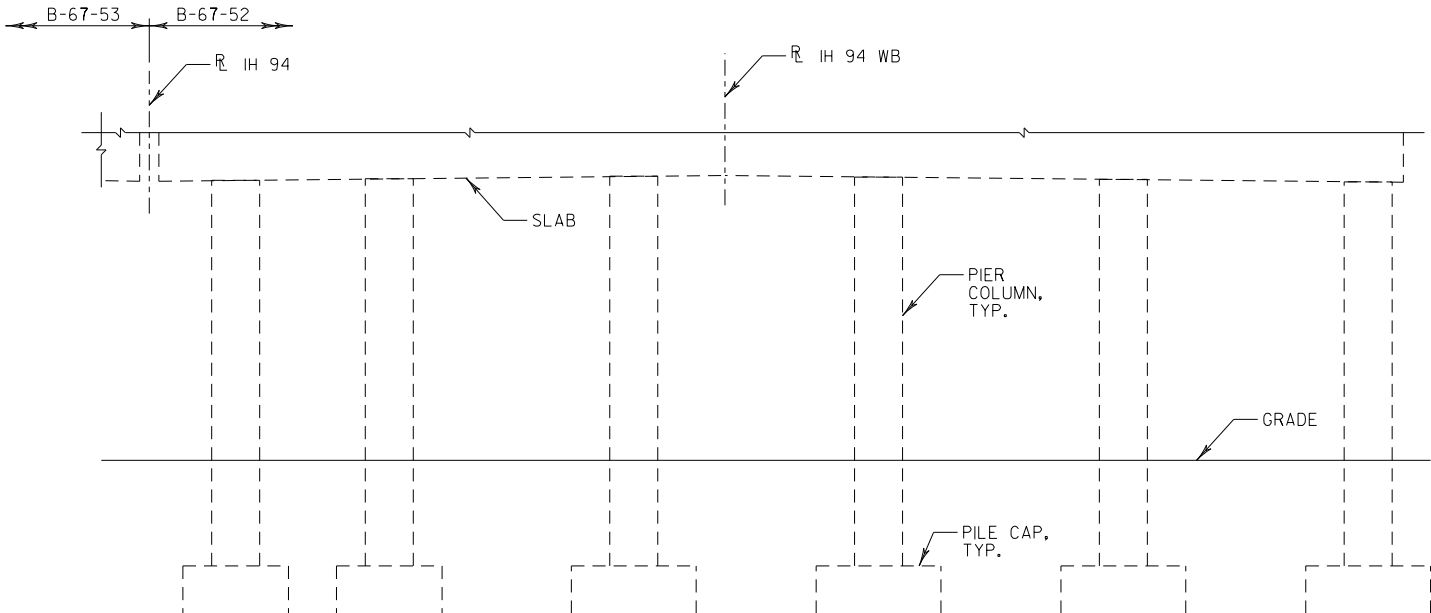
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-52			
	DRAWN BY	PFP	PLANS CK'D. SJG
SUPERSTRUCTURE 175		SHEET 3 OF 5	



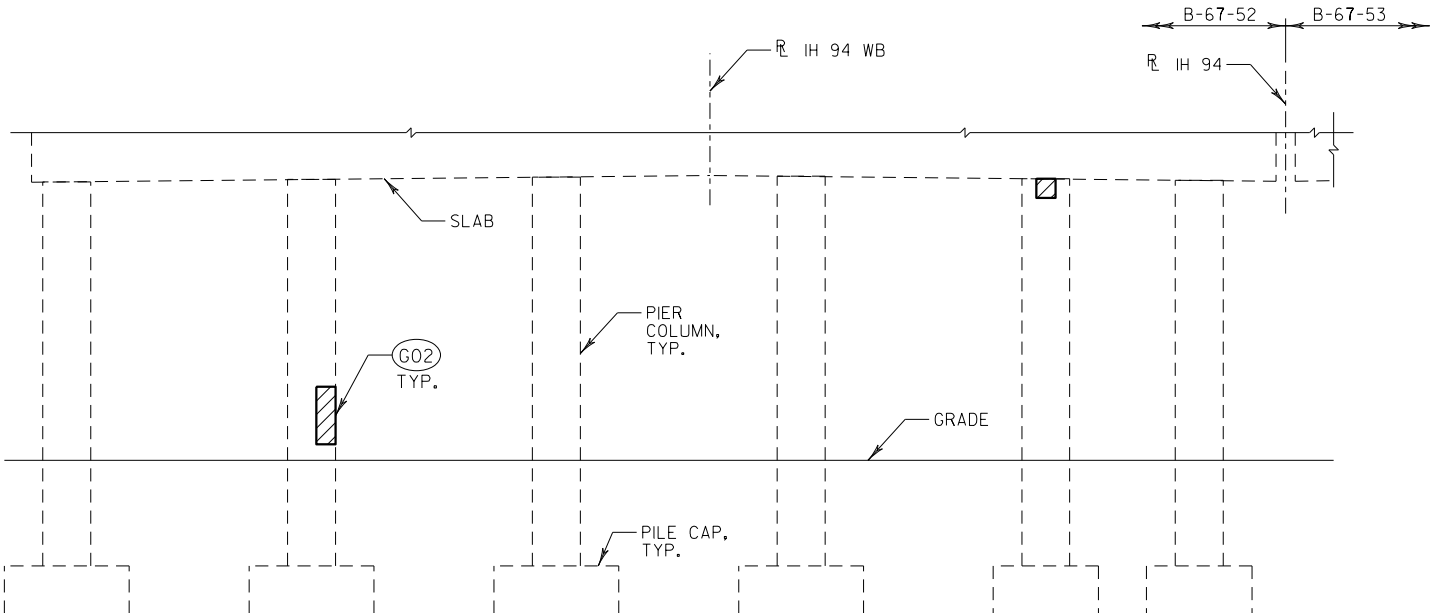
PIER 3 - CONCRETE REPAIRS
(LOOKING WEST)



PIER 3 - CONCRETE REPAIRS
(LOOKING EAST)



PIER 4 - CONCRETE REPAIRS
(LOOKING WEST)



PIER 4 - CONCRETE REPAIRS
(LOOKING EAST)

ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	PIER 3	PIER 4	QUANTITY
509.1500	CONCRETE SURFACE REPAIR	SF	2	5	7

ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY. TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

NOTES

"CONCRETE SURFACE REPAIR" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

G02

"CONCRETE SURFACE REPAIR" ON PIER COLUMNS AND PIER CAP.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-52			
DRAWN BY		PFP	PLANS CK'D. SJG
PIERS (2 OF 2)		SHEET 5 OF 5	

DESIGN DATA

LIVE LOAD:

TAKEN FROM HSI, 08/20/2020
INVENTORY RATING: HS-13
OPERATING RATING: HS-21
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 180 KIPS

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SURFACE REPAIRS _____ f'c = 4,000 P.S.I.

BAR STEEL REINFORCEMENT _____ fy = 60,000 P.S.I.

LIST OF DRAWINGS

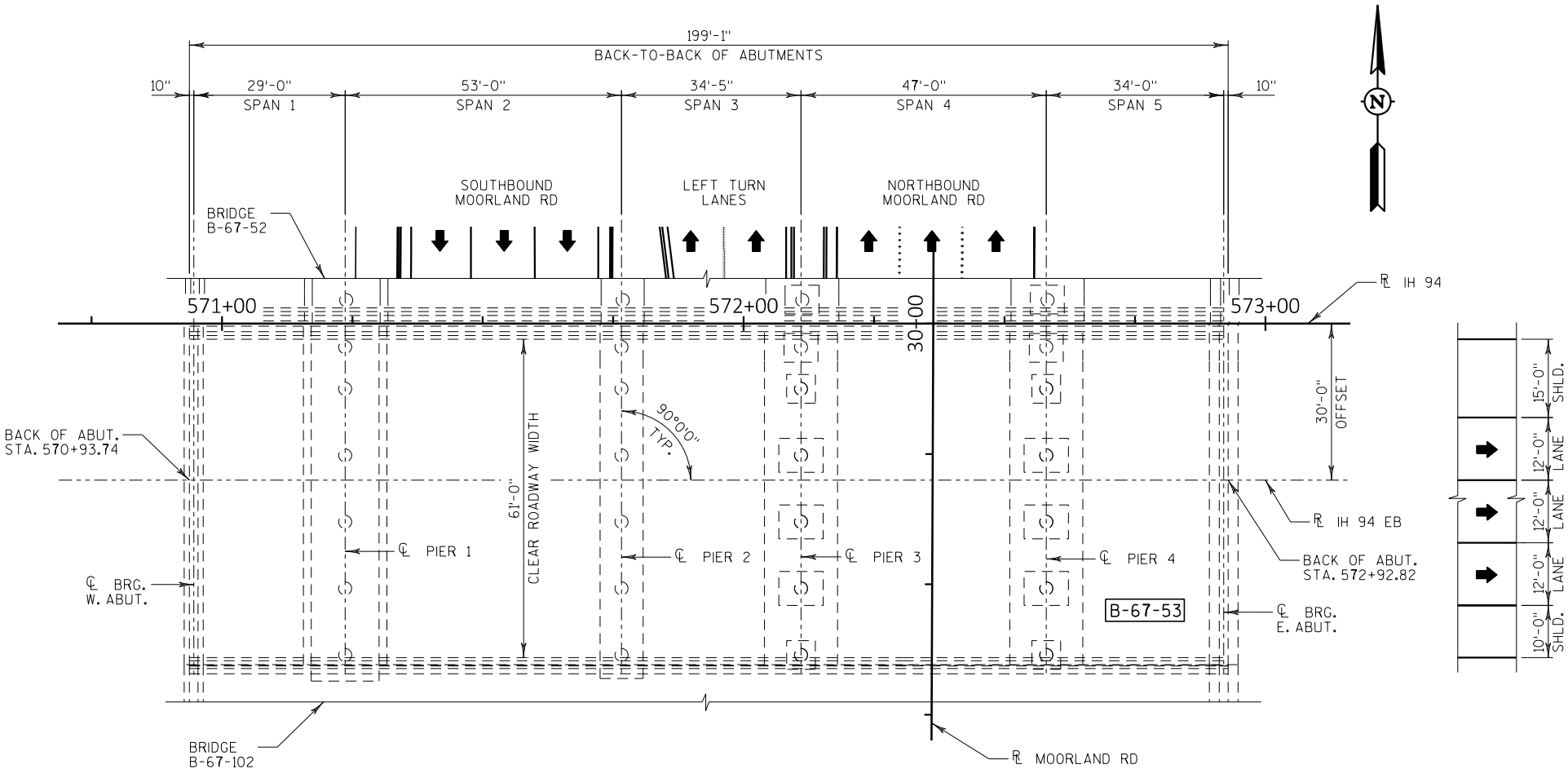
1. GENERAL PLAN
2. SECTIONS, NOTES AND QUANTITIES
3. SUPERSTRUCTURE
4. PIERS (1 OF 2)
5. PIERS (2 OF 2)

TRAFFIC VOLUME

MOORLAND ROAD	IH 94 EB
A.D.T. = 40,600 (2042)	A.D.T. = 58,500 (2020)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

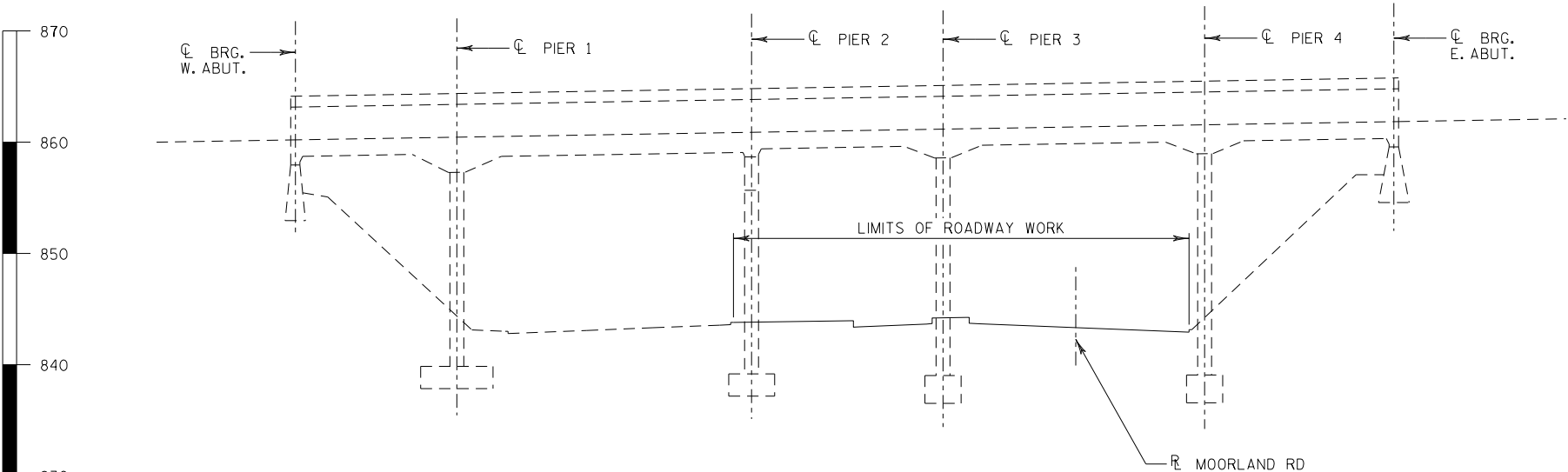
STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261
SCOTT GINAL (262) 317-3344

NO.	DATE	REVISION	BY
raSmith CREATIVITY BEYOND ENGINEERING 16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED _____		DATE _____	
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-67-53			
IH 94 EB OVER CTH O (MOORLAND ROAD)			
COUNTY	WAUKESHA	TOWN/CITY/VILLAGE	BROOKFIELD
DESIGN SPEC. _____			
DESIGNED BY	PFP	DESIGN CK'D.	SJG
DRAWN BY	PFP	PLANS CK'D.	SJG
GENERAL PLAN			SHEET 1 OF 5



PLAN

(5-SPAN HAUCHED CONCRETE SLAB - CONCRETE REMOVAL AND REPAIR)



ELEVATION

(LOOKING NORTH)

SCOPE OF WORK

REMOVE ALL UNSOUND CONCRETE FROM THE UNDERSIDE AND EDGES OF THE EXISTING CONCRETE SLAB. REFER TO SUPERSTRUCTURE SHEET FOR APPROXIMATE LOCATIONS AND AREAS.

REPAIR ALL SPALLED AND DELAMINATED CONCRETE ON THE EXISTING PIERS. REFER TO PIER SHEETS FOR APPROXIMATE LOCATIONS AND AREAS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

"CONCRETE SURFACE REPAIR" AND "REMOVING LOOSE CONCRETE OVERHEAD" AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER IN THE FIELD.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

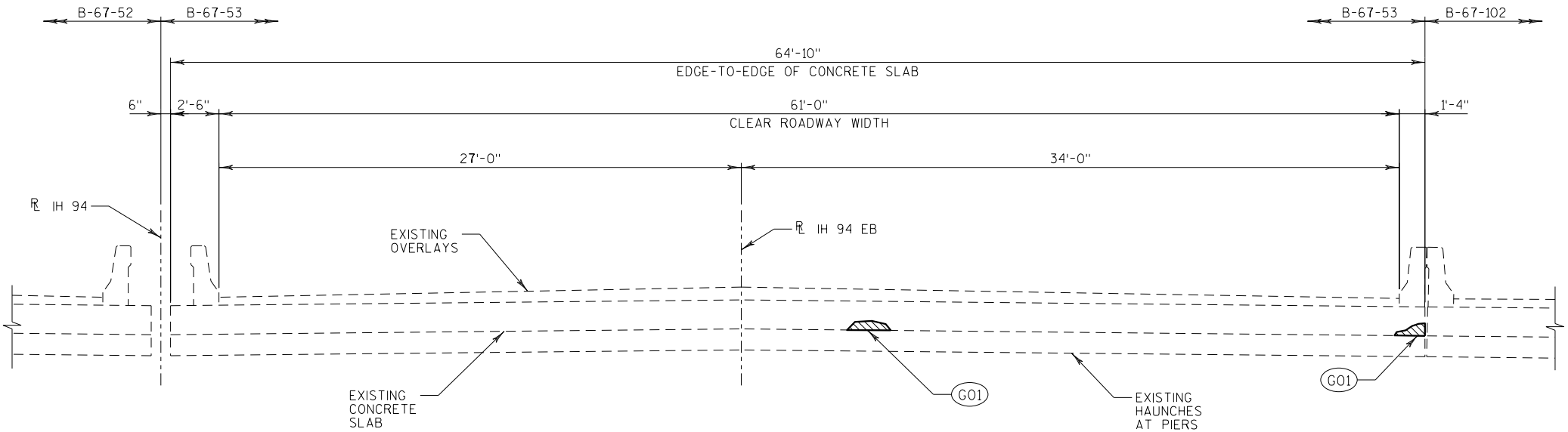
ASBESTOS-CONTAINING MATERIAL (ACM) IS ASSUMED TO BE PRESENT ON THIS BRIDGE AND HAS BEEN IDENTIFIED IN THE MERCURY VAPOR LIGHTS AFFIXED TO THE UNDERSIDE OF THE BRIDGE SLAB. CARE SHOULD BE TAKEN DURING CONCRETE REMOVAL ACTIVITIES SO AS NOT TO DISTURB THE EXISTING LIGHTING UNDER THE BRIDGE.

REFER TO ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS FOR MOORLAND ROAD (CTH O).

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	W. ABUT.	PIER 1	PIER 2	PIER 3	PIER 4	E. ABUT.	TOTAL
509.1500	CONCRETE SURFACE REPAIR	SF			12	80	10	3		105
SPV.0165.4000	REMOVING LOOSE CONCRETE OVERHEAD	SF	430							430

ALL BID ITEMS ARE CATEGORY 2001

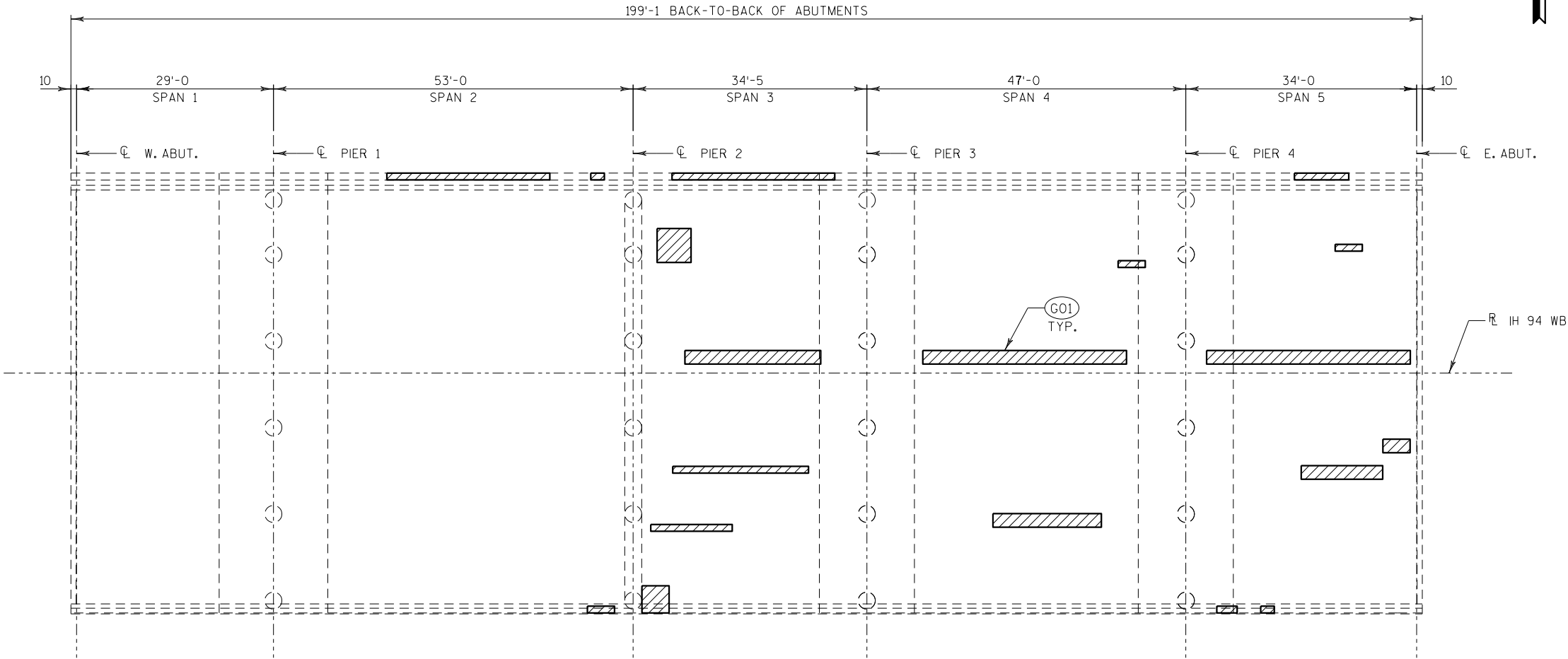


CROSS-SECTION THRU ROADWAY
(LOOKING EAST)

NOTES

G01 REMOVE UNSOUND CONCRETE FROM UNDERSIDE AND EDGES OF EXISTING CONCRETE SLAB. REFER TO SUPERSTRUCTURE SHEET FOR APPROXIMATE LOCATIONS AND AREAS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-53			
	DRAWN BY	PFP	PLANS CK'D. SJG
SECTIONS, NOTES AND QUANTITIES		SHEET 2 OF 5	



SLAB - CONCRETE REMOVAL PLAN
(BOTTOM OF SLAB SHOWN)

NOTES

"REMOVING LOOSE OVERHEAD CONCRETE" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

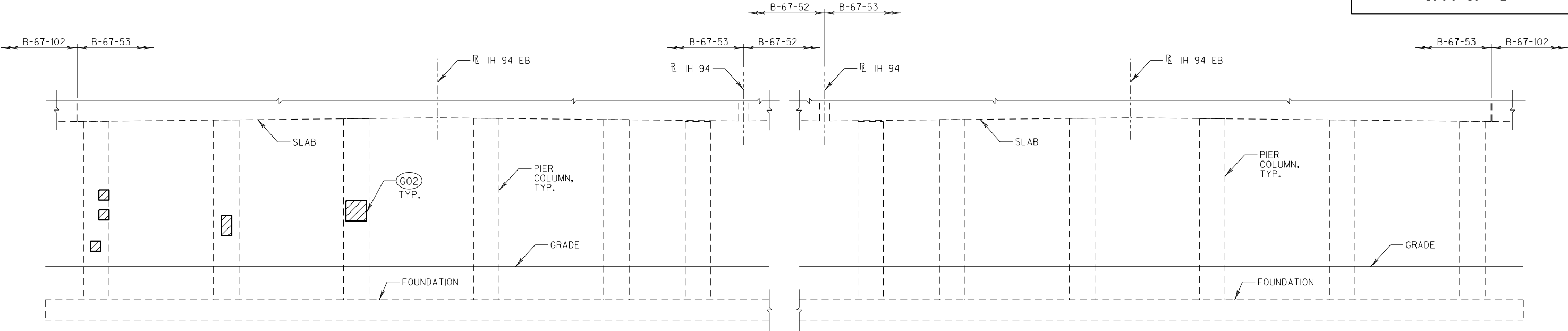
G01 REMOVE UNSOUND CONCRETE FROM UNDERSIDE AND EDGES OF EXISTING CONCRETE SLAB. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	QUANTITY
SPV.0165.4000	REMOVING LOOSE CONCRETE OVERHEAD	SF	430

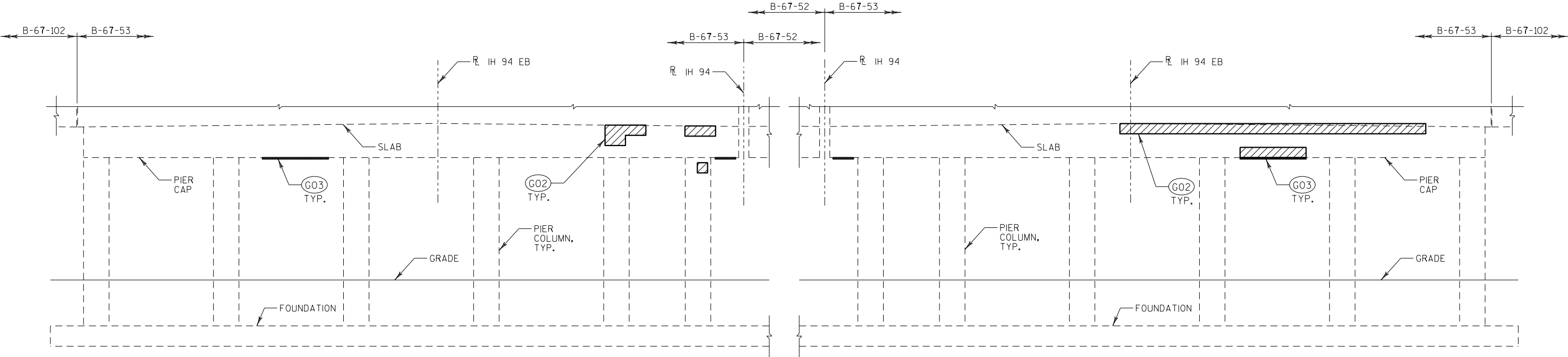
ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY. TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-53			
	DRAWN BY	PFP	PLANS CK'D. SJG
SUPERSTRUCTURE 180		SHEET 3 OF 5	



PIER 1 - CONCRETE REPAIRS
(LOOKING WEST)

PIER 1 - CONCRETE REPAIRS
(LOOKING EAST)



PIER 2 - CONCRETE REPAIRS
(LOOKING WEST)

PIER 2 - CONCRETE REPAIRS
(LOOKING EAST)

ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	PIER 1	PIER 2	QUANTITY
509.1500	CONCRETE SURFACE REPAIR	SF	12	80	92

ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY.
TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

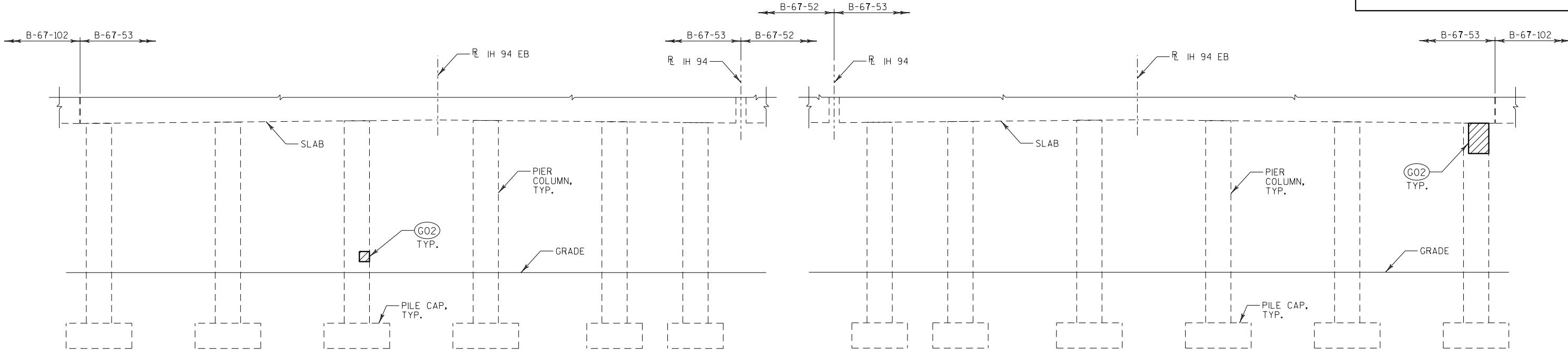
NOTES

"CONCRETE SURFACE REPAIR" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

G02 "CONCRETE SURFACE REPAIR" ON PIER COLUMNS AND PIER CAP.

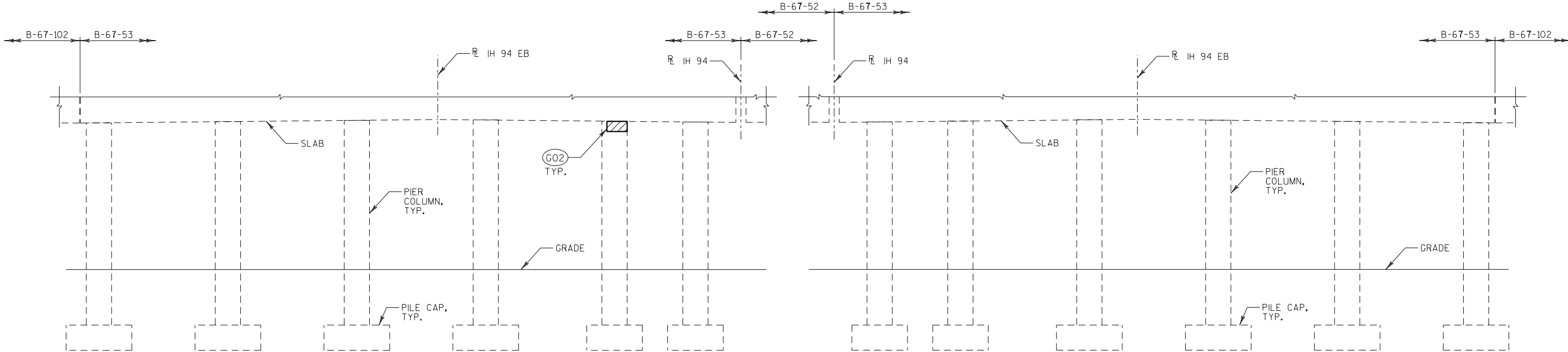
G03 "CONCRETE SURFACE REPAIR" AREA ON UNDERSIDE OF PIER CAP IS APPROXIMATELY THE WIDTH OF THE PIER CAP BY THE LENGTH SHOWN.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-53			
DRAWN BY		PFP	PLANS CK'D. SJG
PIERS (1 OF 2)		SHEET 4 OF 5	



PIER 3 - CONCRETE REPAIRS
(LOOKING WEST)

PIER 3 - CONCRETE REPAIRS
(LOOKING EAST)



PIER 4 - CONCRETE REPAIRS
(LOOKING WEST)

PIER 4 - CONCRETE REPAIRS
(LOOKING EAST)

ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	PIER 3	PIER 4	QUANTITY
509.1500	CONCRETE SURFACE REPAIR	SF	10	3	13

ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY.
TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

NOTES

"CONCRETE SURFACE REPAIR" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

"CONCRETE SURFACE REPAIR" ON PIER COLUMNS AND PIER CAP.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-53			
DRAWN BY		PFP	PLANS CK'D. SJG
PIERS (2 OF 2)		SHEET 5 OF 5	

DESIGN DATA

LIVE LOAD:
TAKEN FROM HSI, 05/01/2003
INVENTORY RATING: HS-15
OPERATING RATING: HS-46
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 200 KIPS

MATERIAL PROPERTIES:
CONCRETE MASONRY: f'c = 4,000 P.S.I.
SURFACE REPAIRS: f'c = 4,000 P.S.I.
BAR STEEL REINFORCEMENT: fy = 60,000 P.S.I.

LIST OF DRAWINGS

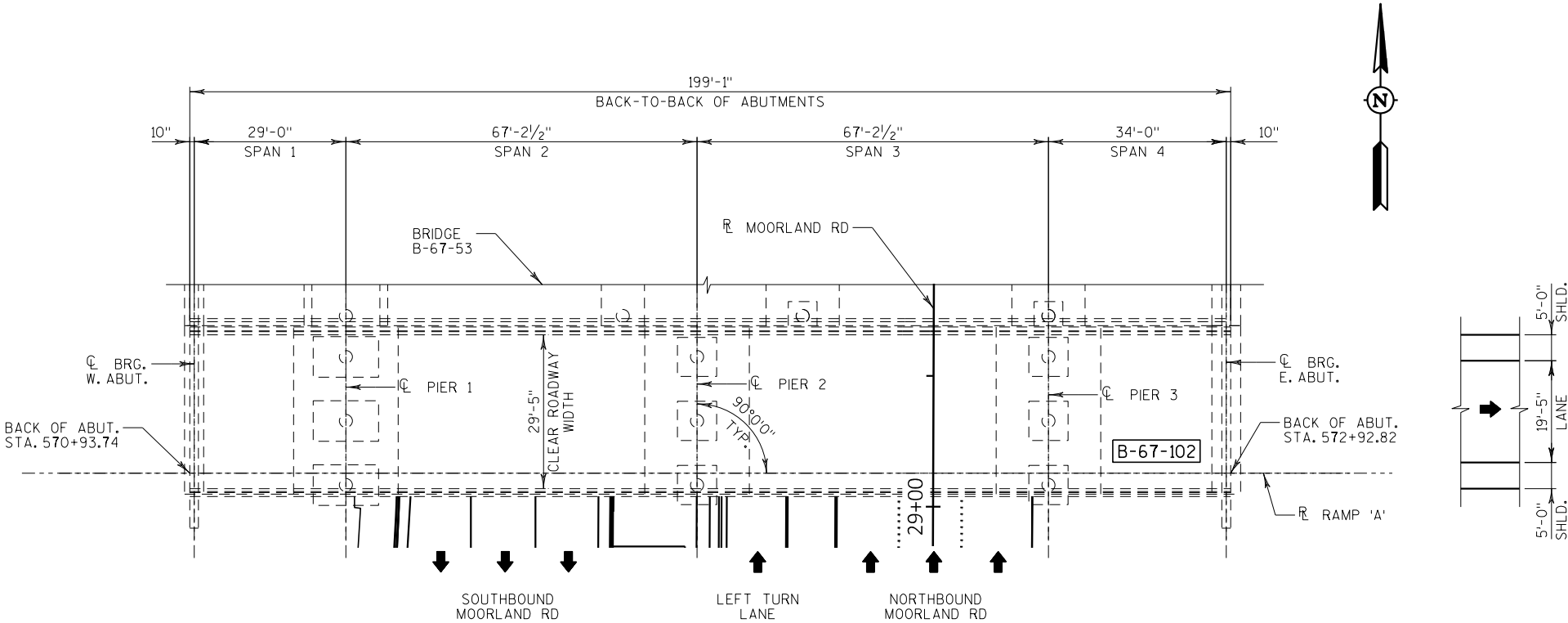
- 1. GENERAL PLAN
- 2. SECTIONS, NOTES AND QUANTITIES
- 3. SUPERSTRUCTURE
- 4. PIERS (1 OF 2)
- 5. PIERS (2 OF 2)

TRAFFIC VOLUME

MOORLAND ROAD RAMP 'A'
A.D.T. = 40,600 (2042) A.D.T. = 8,000 (2019)
R.D.S. = 40 M.P.H. R.D.S. = 70 M.P.H.

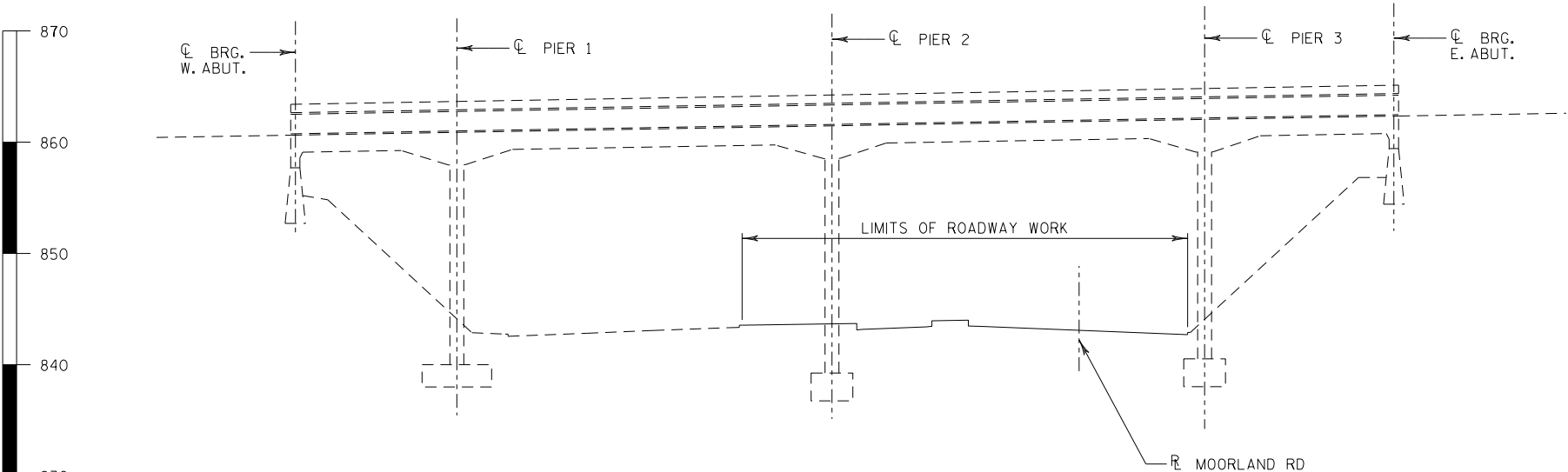
STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261
SCOTT GINAL (262) 317-3344

NO.	DATE	REVISION	BY
raSmith 16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED		DATE	
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE B-67-102			
RAMP 'A' OVER CTH O (MOORLAND ROAD)			
COUNTY	WAUKESHA	TOWN/CITY/VILLAGE	BROOKFIELD
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	PFP	DESIGN CK'D.	SJG
DRAWN BY	PFP	PLANS CK'D.	SJG
GENERAL PLAN			SHEET 1 OF 5



PLAN

(4-SPAN VOIDED HAUNCHED CONCRETE SLAB - CONCRETE REMOVAL AND REPAIR)



ELEVATION

(LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	W. ABUT.	PIER 1	PIER 2	PIER 3	E. ABUT.	TOTAL
509.1500	CONCRETE SURFACE REPAIR	SF			10				10
SPV.0165.4000	REMOVING LOOSE CONCRETE OVERHEAD	SF	50						50

ALL BID ITEMS ARE CATEGORY 2002

SCOPE OF WORK

REMOVE ALL UNSOUND CONCRETE FROM THE UNDERSIDE AND EDGES OF THE EXISTING CONCRETE SLAB. REFER TO SUPERSTRUCTURE SHEET FOR APPROXIMATE LOCATIONS AND AREAS.

REPAIR ALL SPALLED AND DELAMINATED CONCRETE ON THE EXISTING PIERS. REFER TO PIER SHEETS FOR APPROXIMATE LOCATIONS AND AREAS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

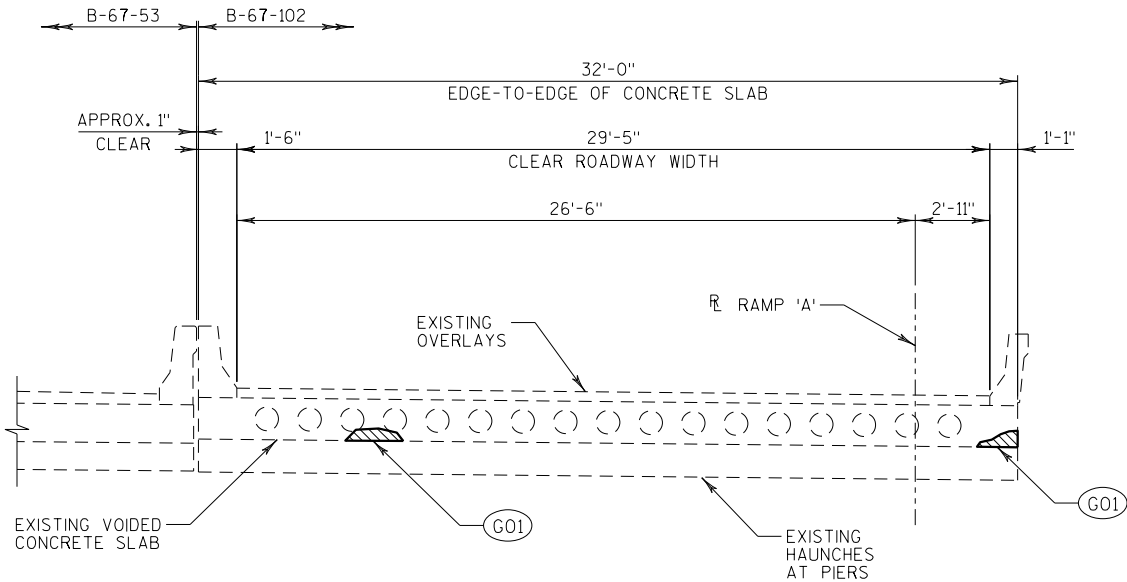
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

"CONCRETE SURFACE REPAIR" AND "REMOVING LOOSE CONCRETE OVERHEAD" AREAS ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER IN THE FIELD.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

ASBESTOS-CONTAINING MATERIAL (ACM) IS ASSUMED TO BE PRESENT ON THIS BRIDGE AND HAS BEEN IDENTIFIED IN THE MERCURY VAPOR LIGHTS AFFIXED TO THE UNDERSIDE OF THE BRIDGE SLAB. CARE SHOULD BE TAKEN DURING CONCRETE REMOVAL ACTIVITIES SO AS NOT TO DISTURB THE EXISTING LIGHTING UNDER THE BRIDGE.

REFER TO ROADWAY PLANS FOR TRAFFIC CONTROL PLANS AND STAGED CONSTRUCTION DETAILS FOR MOORLAND ROAD (CTH O).

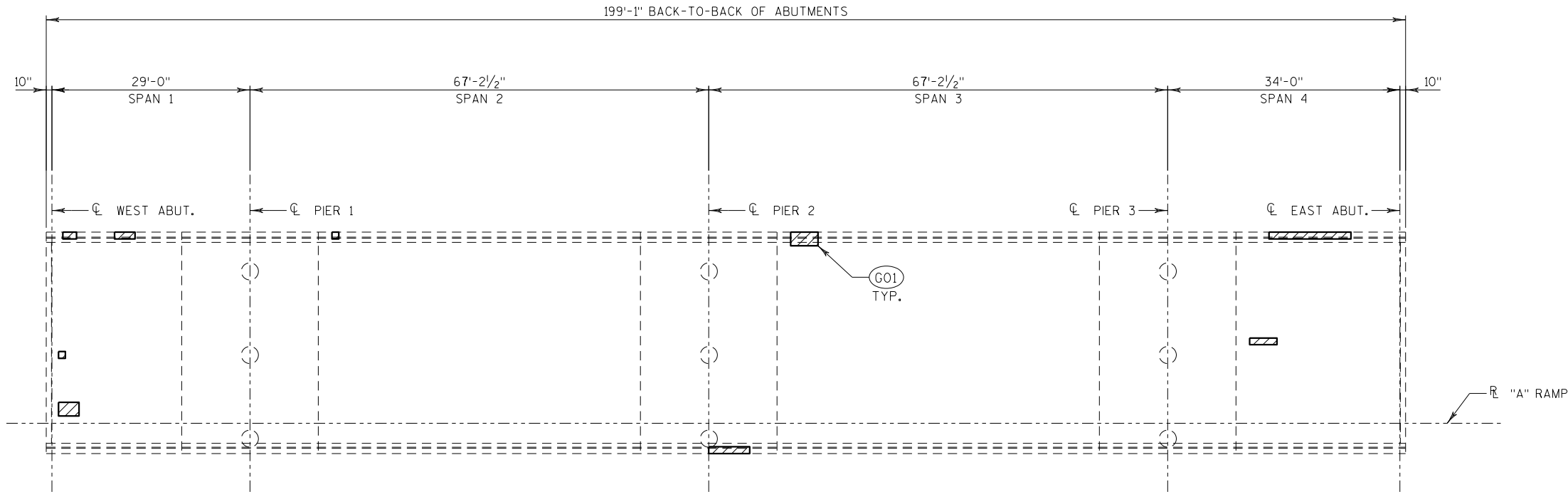


CROSS-SECTION THRU ROADWAY
(LOOKING EAST)

NOTES

G01 REMOVE UNSOUND CONCRETE FROM UNDERSIDE AND EDGES OF EXISTING CONCRETE SLAB. REFER TO SUPERSTRUCTURE SHEET FOR APPROXIMATE LOCATIONS AND AREAS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-102			
	DRAWN BY	PFP	PLANS CK'D. SJG
SECTIONS, NOTES AND QUANTITIES		SHEET 2 OF 5	



SLAB - CONCRETE REMOVAL PLAN
(BOTTOM OF SLAB SHOWN)

NOTES

"REMOVING LOOSE OVERHEAD CONCRETE" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

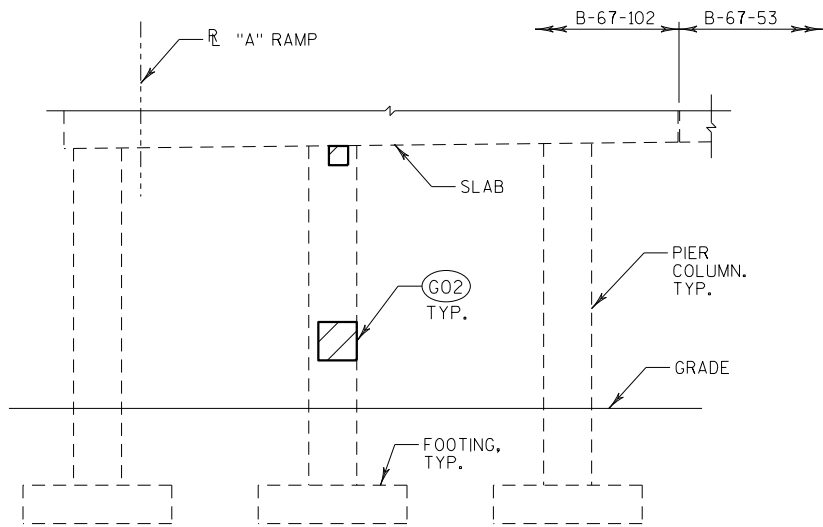
G01 REMOVE UNSOUND CONCRETE FROM UNDERSIDE AND EDGES OF EXISTING CONCRETE SLAB. ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.

ESTIMATED QUANTITIES

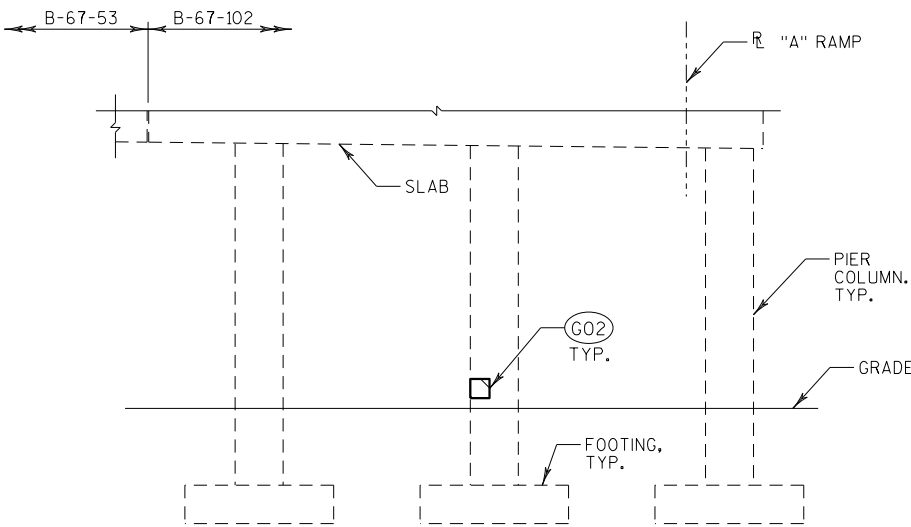
BID ITEM NUMBER	BID ITEMS	UNIT	QUANTITY
SPV.0165.4000	REMOVING LOOSE CONCRETE OVERHEAD	SF	50

ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY. TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

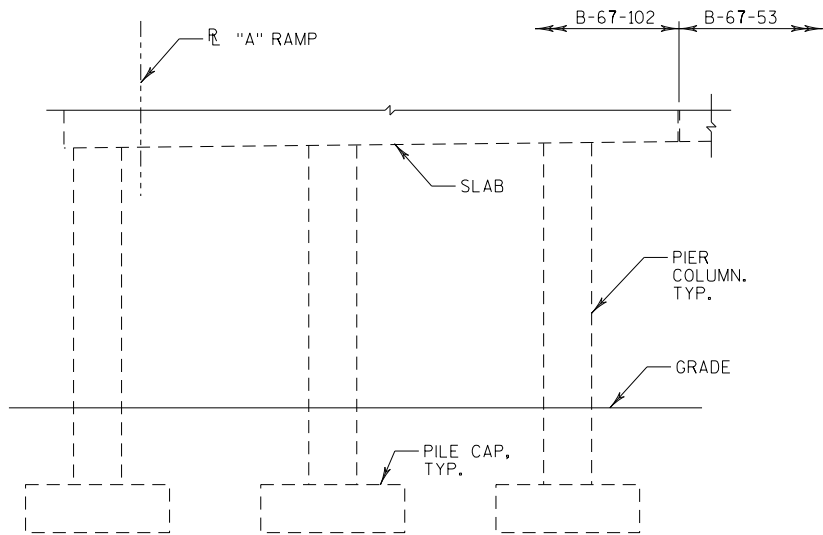
NO.	DATE	REVISION	BY		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION					
STRUCTURE B-67-102					
		DRAWN BY	PFP	PLANS CK'D.	SJG
SUPERSTRUCTURE 185			SHEET 3 OF 5		



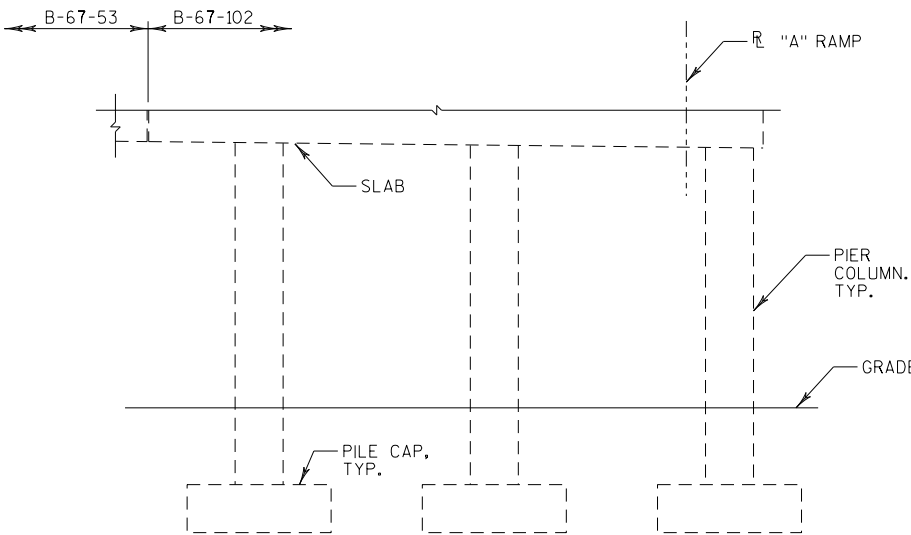
PIER 1 - CONCRETE REPAIRS
(LOOKING WEST)



PIER 1 - CONCRETE REPAIRS
(LOOKING EAST)



PIER 2 - CONCRETE REPAIRS
(LOOKING WEST)



PIER 2 - CONCRETE REPAIRS
(LOOKING EAST)

ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	PIER 1	PIER 2	QUANTITY
509.1500	CONCRETE SURFACE REPAIR	SF	10		10

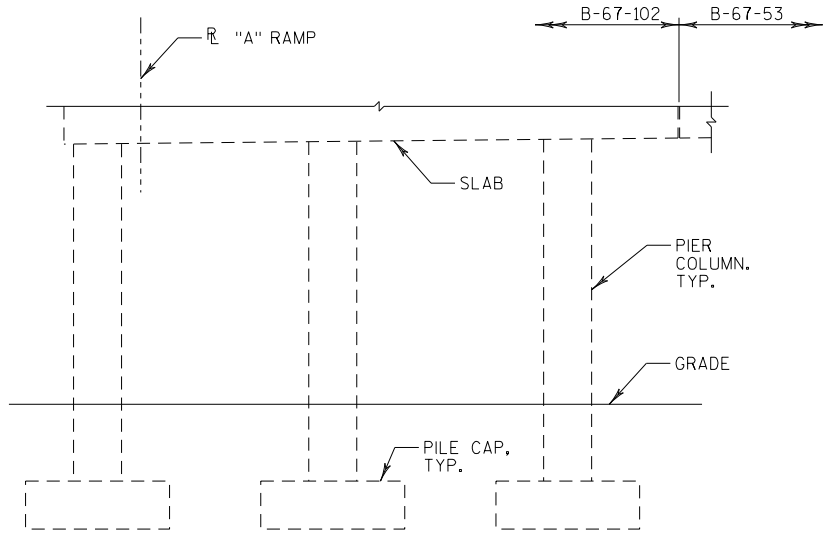
ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY.
TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

NOTES

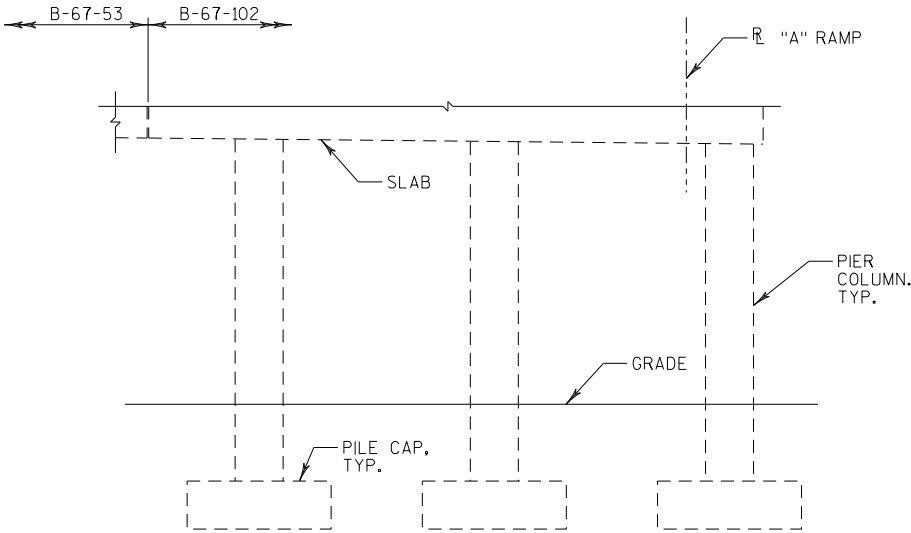
"CONCRETE SURFACE REPAIR" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

G02 "CONCRETE SURFACE REPAIR" ON PIER COLUMNS AND PIER CAP.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-102			
DRAWN BY		PFP	PLANS CK'D. SJG
PIERS (1 OF 2)		SHEET 4 OF 5	



PIER 3 - CONCRETE REPAIRS
(LOOKING WEST)



PIER 3 - CONCRETE REPAIRS
(LOOKING EAST)

ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	PIER 3	QUANTITY
509.1500	CONCRETE SURFACE REPAIR	SF	-	-

ESTIMATED QUANTITIES SHOWN IN ABOVE TABLE ARE FOR INFORMATION ONLY.
TOTAL QUANTITIES ARE SHOWN ON "SECTION, NOTES AND QUANTITIES" SHEET.

NOTES

"CONCRETE SURFACE REPAIR" AREAS AND LOCATIONS ARE APPROXIMATE AND ARE TO BE VERIFIED AND DETERMINED BY THE ENGINEER IN THE FIELD.

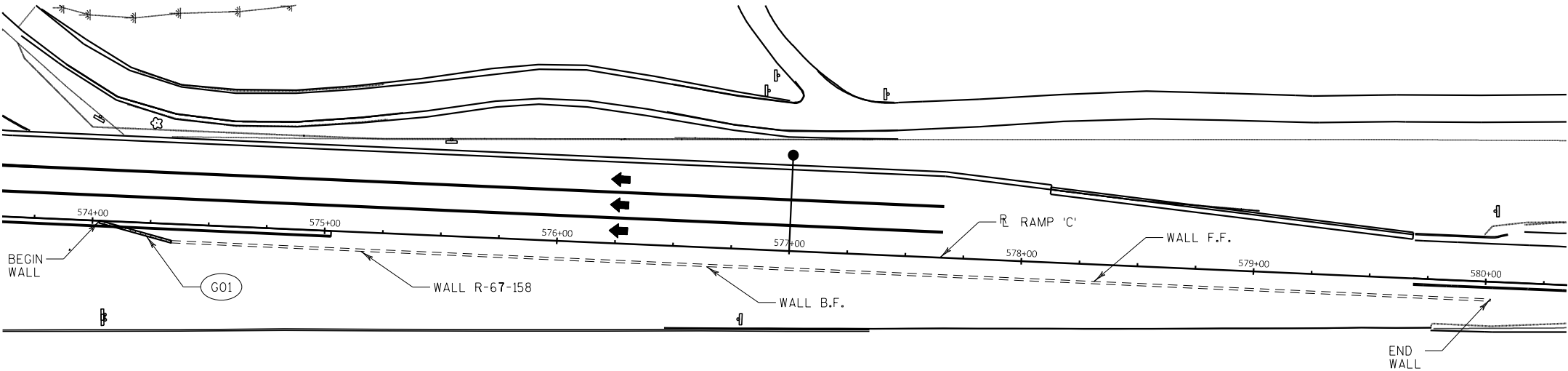
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-67-102			
DRAWN BY		PFP	PLANS CK'D. SJG
PIERS (2 OF 2)		SHEET 5 OF 5	

SCOPE OF WORK

PARTIAL REMOVAL OF EXISTING RETAINING WALL R-67-158. REMOVE WALL STEM, FOOTING, AND TIMBER PILES TO LIMITS SHOWN AND NOTED.

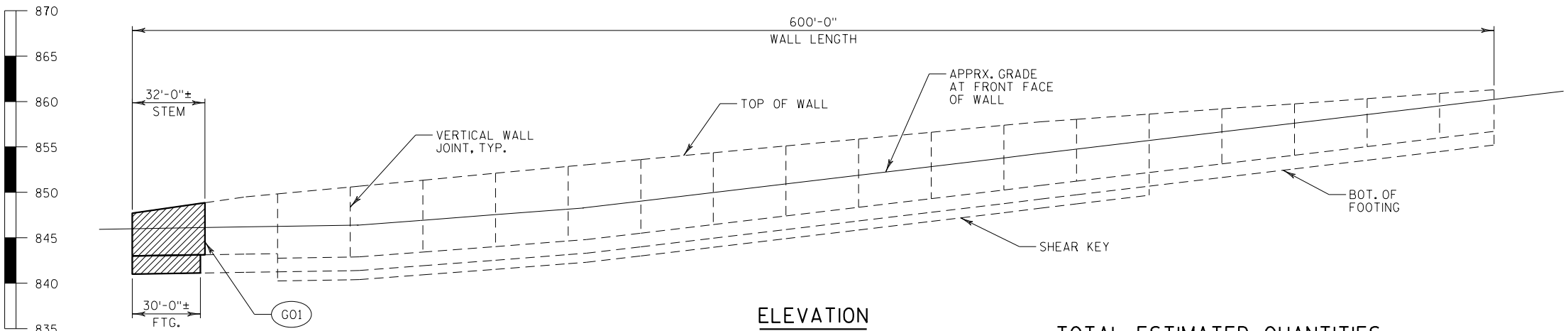
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1-INCH DEEP SAW CUT.



PLAN

(CAST-IN-PLACE CONCRETE RETAINING WALL - PARTIAL REMOVAL)



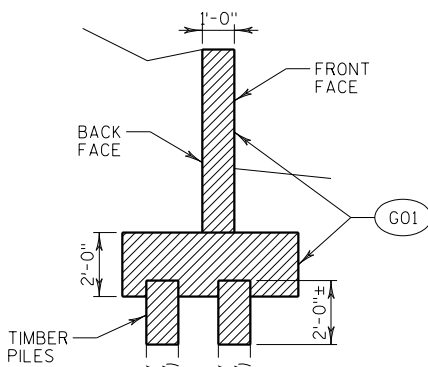
ELEVATION

(LOOKING NORTH AT BACK FACE OF WALL)

TOTAL ESTIMATED QUANTITIES

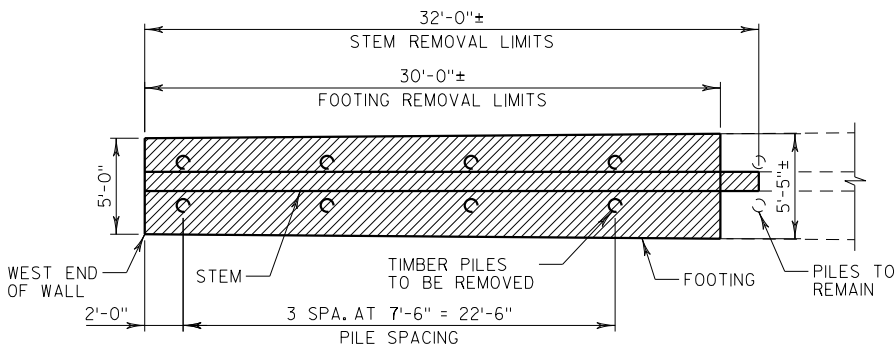
BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL
203.0220	REMOVING STRUCTURE R-67-158	EACH	1

ALL BID ITEMS ARE CATEGORY 3000



WALL SECTION

(LOOKING WEST THRU REMOVAL SECTION)



PARTIAL FOOTING PLAN

NOTES

REMOVE EXISTING CONCRETE RETAINING WALL TO LIMITS SHOWN. EASTERN LIMITS OF STEM REMOVAL TO COINCIDE WITH A VERTICAL WALL JOINT. WALL STEM AND FOOTING SHOWN TO BE REMOVED ARE TO BE REMOVED IN THEIR ENTIRETY. REMOVE TOP 2 FEET OF EXISTING TIMBER PILES.

STRUCTURE DESIGN CONTACTS:
AARON BONK (608) 261-0261
SCOTT GINAL (262) 317-3344

NO.	DATE	REVISION	BY
raSmith CREATIVITY BEYOND ENGINEERING			
16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED _____ CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE R-67-158			
IH 94 WB EXIT RAMP (RAMP 'C') TO CTH O (MOORLAND ROAD)			
COUNTY	WAUKESHA	TOWN/CITY/VILLAGE	BROOKFIELD
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	PFP	DESIGN CK'D.	SJG
DRAWN BY	PFP	PLANS CK'D.	SJG
GENERAL PLAN			SHEET 1 OF 1

DESIGN DATA

CONTRACTOR DESIGNED OVERHEAD SIGN STRUCTURES SHALL BE DESIGNED ACCORDING TO THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", 1ST EDITION AND INTERIM SPECIFICATIONS, AND THE WISDOT BRIDGE MANUAL.

STANDARD FOUNDATIONS DESIGNED ACCORDING TO THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.

DEAD LOAD: WT. OF SIGN AND SUPPORTING STRUCTURE.
ICE LOAD: 3 PSF TO ONE FACE OF SIGN & SURFACE OF MEMBERS.
WIND PRESSURE: 115 MPH (3-SEC. GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS. (700 YEAR MEAN RECURRENCE INTERVAL)

WIND COMPONENTS	NORMAL	TRANSVERSE
LOAD CASE 1:	1.00	0.00
LOAD CASE 2:	0.00	1.00
LOAD CASE 3:	0.75	0.75

LOAD COMBINATIONS	
STRENGTH I:	1.25 DC + 1.6 LL
EXTREME I (MAX DC):	1.1 DC + 1.0 W + 1.0 ICE
EXTREME I (MIN DC):	0.9 DC + 1.0 W
SERVICE I:	1.0 DC + 1.0 W
FATIGUE I:	1.0 NWG (NATURAL WIND GUST VIBRATION) 1.0 TRG (TRUCK INDUCED GUST VIBRATION) 1.0 GVW (GALLOPING - CANTILEVER ONLY)

MATERIAL PROPERTIES

CONCRETE MASONRY..... f'c = 3,500 psi

HIGH STRENGTH STEEL
REINFORCEMENT, GRADE 60..... fy = 60,000 psi

HIGH STRENGTH BOLTS - A325..... fy = 92,000 psi

ANCHOR RODS - ASTM F1554 GRADE 55..... fy = 55,000 psi

HEAVY HEX NUTS FOR ANCHOR RODS - ASTM A563A

WASHERS FOR ANCHOR RODS - ASTM F436

FOUNDATION DATA

SIGN STRUCTURE FOUNDATIONS ARE SUPPORTED ON DRILLED SHAFTS THAT HAVE BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 24° (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 750 PSF (COHESIVE SOILS) AND A UNIT WEIGHT OF 125 PCF. THE GROUND WATER TABLE FOR DESIGN IS ASSUMED TO BE AT A DEPTH OF 10'-0" BELOW THE GROUND SURFACE, ACTUAL WATER LEVEL AT SITE MAY VARY. THE REGION GEOTECHNICAL ENGINEER SHALL VISUALLY INSPECT THE SUBSURFACE SOILS DURING DRILLING OF THE SHAFT HOLE TO CONFIRM THESE PROPERTIES PRIOR TO PLACEMENT OF THE DRILLED SHAFT CONCRETE.

TOTAL ESTIMATED QUANTITIES

BID ITEM NO.	BID ITEM	UNIT	S-67-983
531.2048	DRILLING SHAFT 48-INCH	LF	28
531.5340.0001	FOUNDATION SINGLE-SHAFT TYPE TC-IV (S-67-983)	EA	1
532.5340.0001	TRUSS CANTILEVER 2-CHORD TYPE IV (S-67-983)	EA	1

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

ALTERNATE DESIGNS ARE NOT ALLOWED.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), WAUKESHA COUNTY ZONE, NAD 83 (2011). ALL STATIONS AND ELEVATIONS ARE IN US SURVEY FEET. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM NAVD 88 (2012).

ALL REINFORCING BARS ARE IN ENGLISH UNITS. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

SIGN BRIDGE ID PLAQUES SHALL BE CONSIDERED INCIDENTAL TO THE TRUSS OR MONOTUBE BID ITEMS FOR EACH APPLICABLE SIGN STRUCTURE IN THE PLAN SET. LOCATE THE ID PLAQUE ON THE FREEWAY SIDE OF THE SUPPORT COLUMN SO THAT IT CAN BE SEEN FROM THE ROADWAY. FABRICATE AND INSTALL THE ID PLAQUE IN ACCORDANCE WITH S.D.D. 12 A 4-3.

UNLESS DETAILED OTHERWISE IN THE PLANS, ALL H.S. BOLTED CONNECTIONS SHALL BE MADE WITH 3/4" DIA A325 GALVANIZED BOLTS. FIELD CONNECTIONS SHALL BE INSTALLED WITH DTI WASHERS.

WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF A TRUSS UNIT CAN BE GALVANIZED IN ONE PIECE.

WELD TEST AS PER AWS D1.1.

SEE SIGN PLATE NO. A4-6, A4-7A & A4-7B OF THE SIGN PLATE MANUAL FOR INSTRUCTIONS ON CENTERING SIGNS VERTICALLY ON THE TRUSS.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE 1/4 THE LENGTH OF THE CANTILEVER SPAN, 2'-0" DEEPER THAN THE C/L TO C/L OF CHORDS, AND SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED ON THE PLANS.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION OF THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS PER THE REQUIREMENTS IN THE STANDARD SPECIFICATIONS PRIOR TO FABRICATION OF THE STRUCTURE. CONTRACTOR SHALL SHOW SIGNS ON THE SHOP DRAWINGS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRILLING OR EXCAVATING AND MAINTAINING A STABLE AND OPEN HOLE FOR SUBSEQUENT INSTALLATION OF CONCRETE MASONRY FOR THE DRILLED SHAFTS. PARTIAL OR FULL DEPTH TEMPORARY CASING MAY BE REQUIRED TO MAINTAIN THE STABILITY OF THE EXCAVATED HOLE FOR THE SIGN SUPPORT PRIOR TO FILLING THE HOLE WITH CONCRETE. PERMANENT CASING MADE FROM STEEL OR CORRUGATED METAL PIPE MAY BE USED IN LIEU OF TEMPORARY CASING. TEMPORARY/PERMANENT CASING, IF USED, SHALL BE INCIDENTAL TO THE BID ITEM "DRILLING SHAFT (DIA)".

STRUCTURE DATA

SIGN STR	ACTUAL SIGN AREA	ACTUAL SIGN DEPTH	STANDARD TYPE
S-67-983	102 SF	6'-0"	TC-IV

STATE PROJECT NUMBER

1060-10-72

TRAFFIC VOLUME

A.D.T. (2042) = 10,100
R.D.S. = 50 MPH

LIST OF DRAWINGS

- GENERAL NOTES & DESIGN DATA
- LAYOUT S-67-983

LIST OF OSS STANDARD DESIGN DRAWINGS

- I. MONOTUBE & 2-CHORD TRUSS DETAILS 1
- II. MONOTUBE & 2-CHORD TRUSS DETAILS 2
- III. MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS
- IV. MONOTUBE & 2-CHORD TRUSS FOUNDATIONS

STRUCTURE DESIGN CONTACTS:

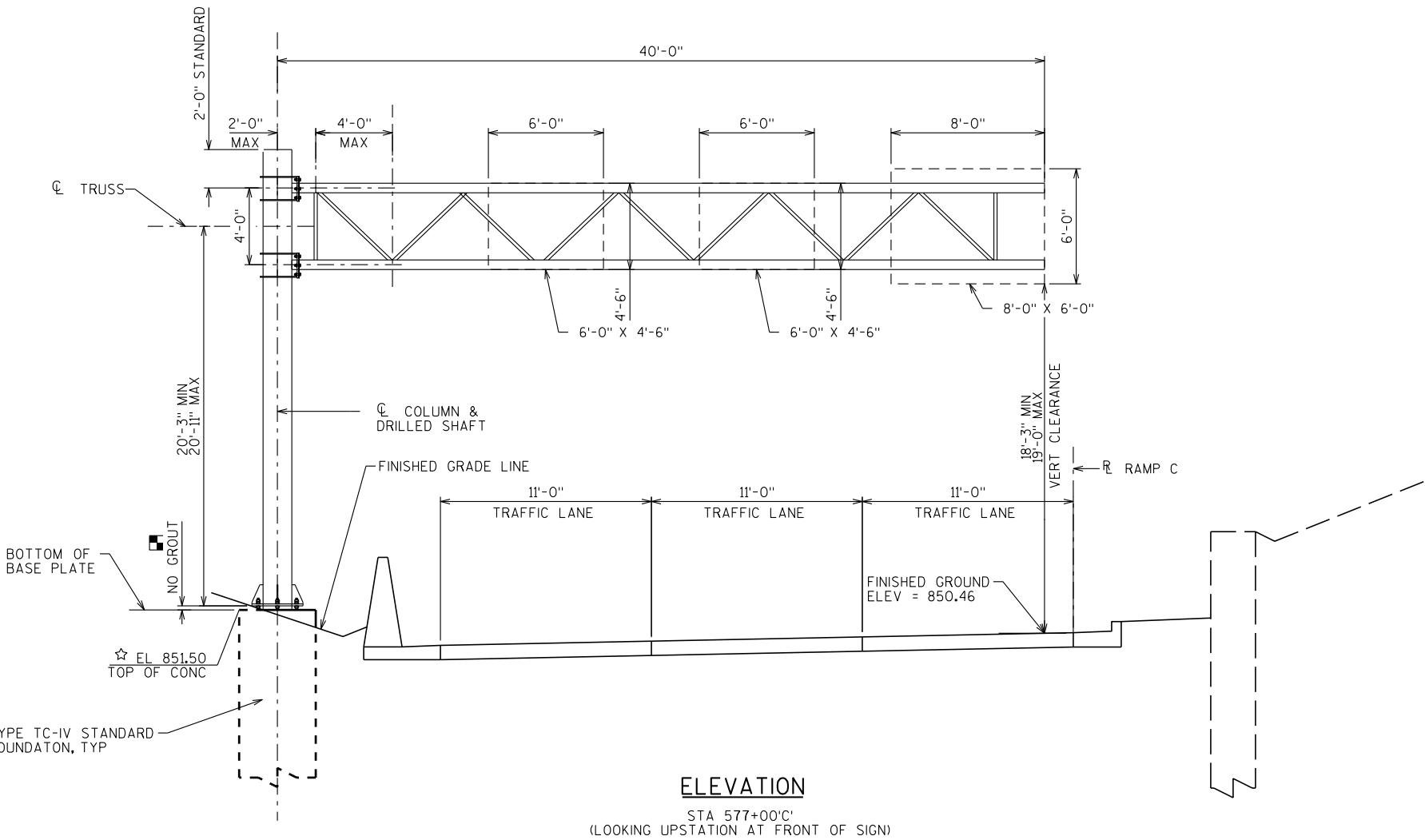
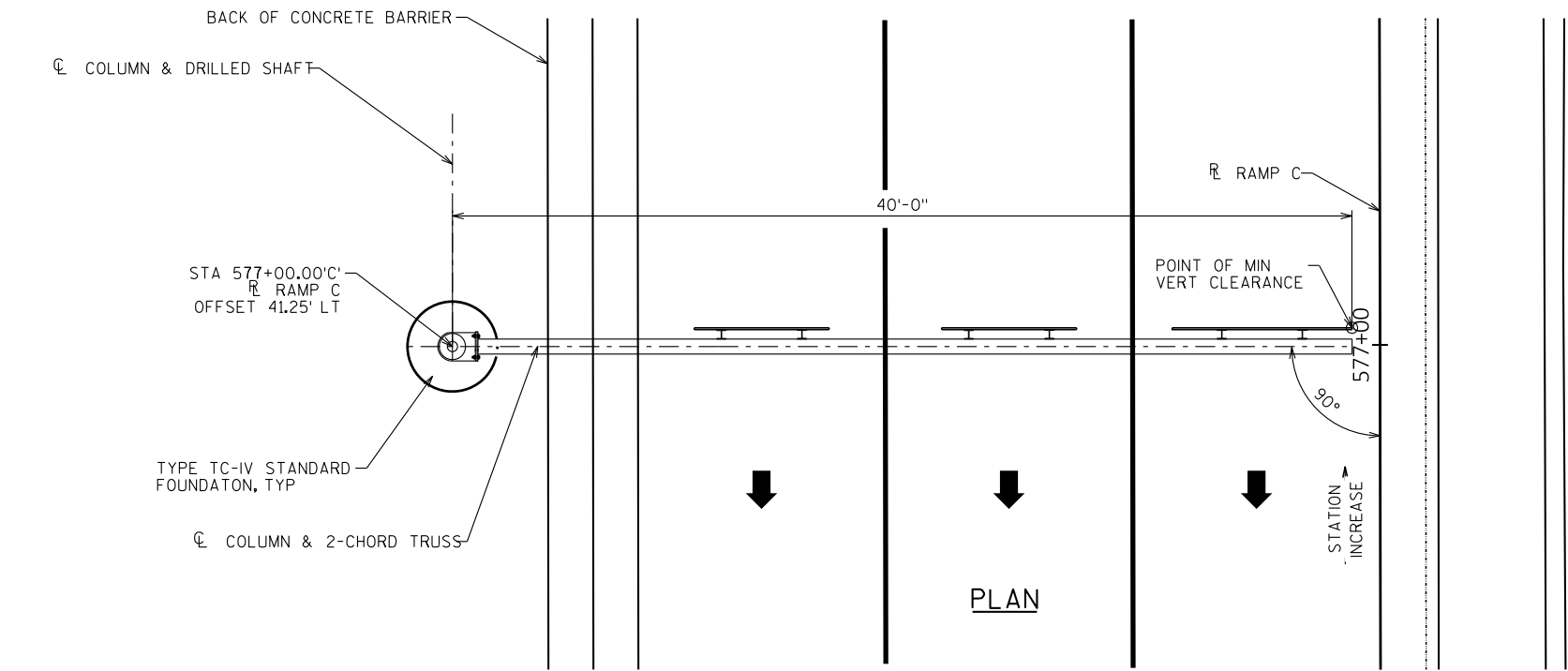
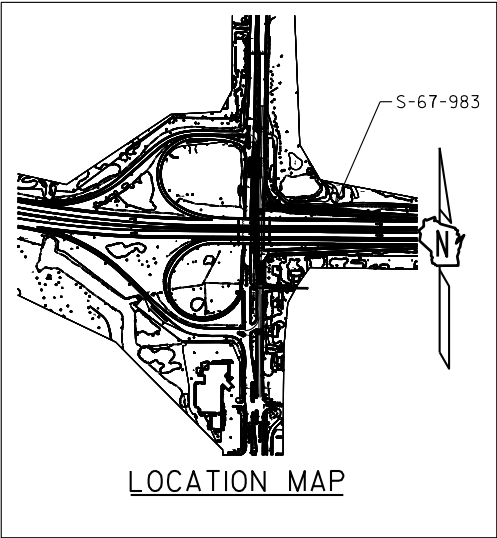
AARON BONK (608) 261-0261

THESE ARE STANDARD DESIGN PLANS, DEVELOPED AND MAINTAINED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION. THE DESIGNER CERTIFIES THAT THE DESIGN AND PLAN DETAILS CHOSEN ARE CONSISTENT WITH THE GUIDANCE PROVIDED IN THE CURRENT WISCONSIN BRIDGE MANUAL CHAPTER 39.

NO.	DATE	REVISION	BY
 BUREAU OF STRUCTURES			
ACCEPTED _____ CHIEF STRUCTURES DESIGN ENGINEER DATE _____			
MONOTUBE AND 2-CHORD TRUSS PLANS			
ENTER DESCRIPTION			
COUNTY WAUKESHA COUNTY	TOWN/CITY/VILLAGE BROOKFIELD		
DESIGN SPEC. AASHTO LRFD LTS-1 W/INTERIMS			
DESIGNED BY BOS	DESIGNED CK'D. BOS	DRAWN BY JWB	PLANS CK'D. 189
GENERAL NOTES & DESIGN DATA			SHEET 1 OF 6

I.D. XXXX-XX-XXXX

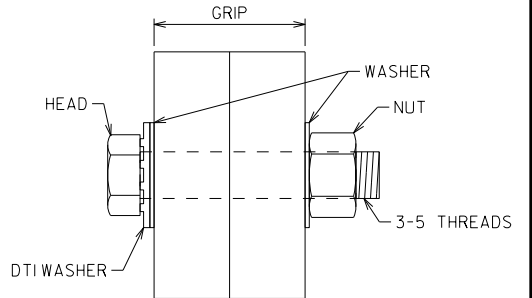
DATE: MMMM YYYY



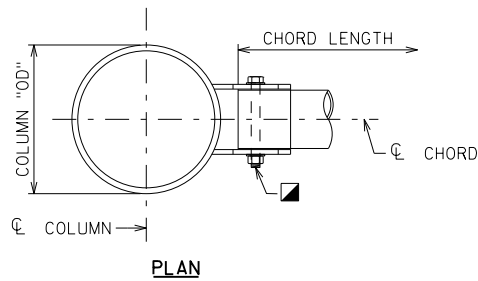
NOTE
POINT OF MIN VERTICAL CLEARANCE
STA 577+00.00, 1.25' (LT)
EL 850.46

LEGEND
☆ ELEVATIONS GIVEN ALONG CL 2-CHORD TRUSS
(XXX) SIGN NUMBERS (PERMANENT SIGNING PLAN)
■ STANDOFF DIMENSION IS ASSUMED TO BE 2 1/2", BUT IS A MAXIMUM OF 2 X ANCHOR ROD DIAMETER. SEE FOUNDATION DETAILS SHEET AND SHOP DRAWINGS FOR MORE INFORMATION.

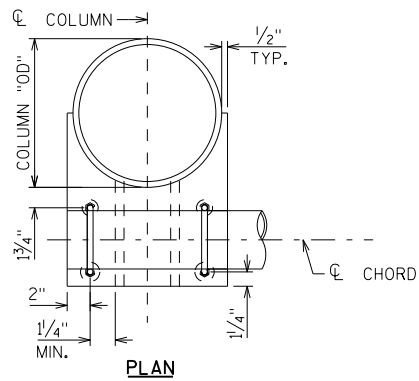
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE S-67-983			
DRAWN BY		JWB	PLANS CK'D.
GENERAL LAYOUT 190 S-67-983			SHEET 2 OF 6



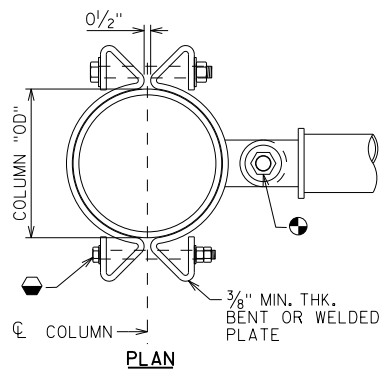
**RECOMMENDED BOLT
DETAIL WITH DTI**
NUT IS THE TURNED ELEMENT



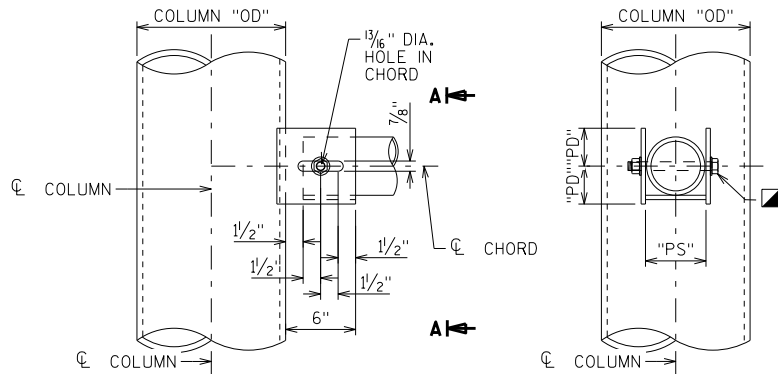
PLAN



PLAN

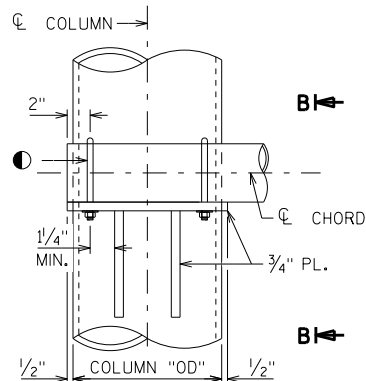


PLAN



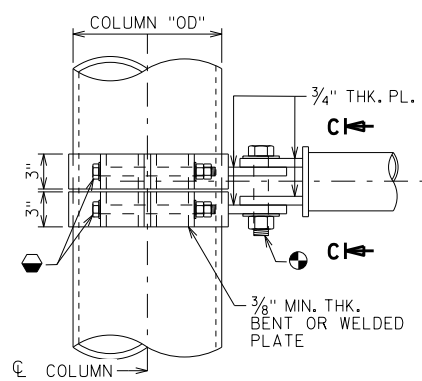
ELEVATION

SECTION A-A



ELEVATION

SECTION B-B



ELEVATION

SECTION C-C

FULL SPAN SADDLE CONNECTION

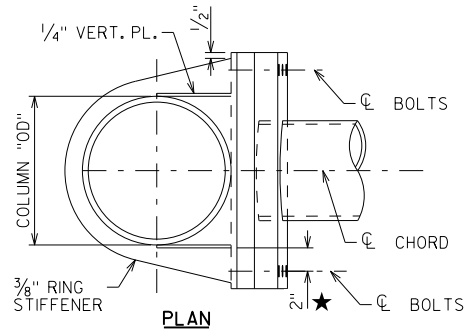
PREFERRED
3/4" GALVANIZED A325 OR A449 HEAVY HEX BOLT, NUT, WASHER
"PD" = (CHORD "OD")/2 + 3/4"
"PS" = CHORD "OD" + 3/16"

FULL SPAN STIFFENED BEARING CONNECTION

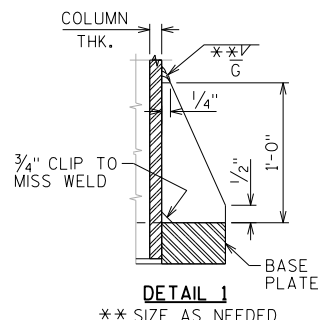
ALTERNATE 1
(2) - 1/2" MIN. GALVANIZED U-BOLT, NUT, WASHER AND LOCK WASHER

FULL SPAN CLAMP CONNECTION

ALTERNATE 2 - TAPERED COLUMNS ONLY
1/4" GALVANIZED A325 HEAVY HEX BOLT, NUT AND WASHER
1" GALVANIZED A449 HEAVY HEX BOLT, NUT AND WASHER



PLAN



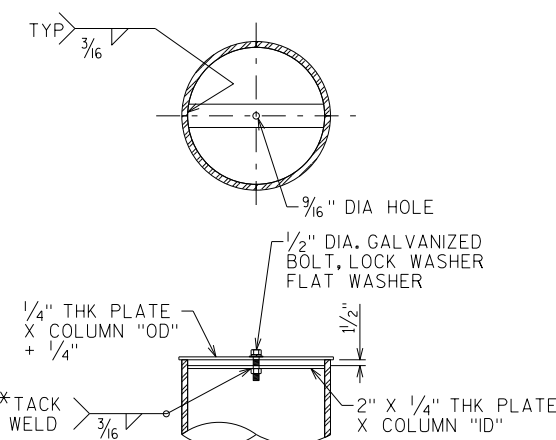
DETAIL 1

STIFFENERS AS
NEEDED BY DESIGN
SEE DETAIL 1 FOR
MINIMUM DIMENSIONS.

ANCHOR ROD, FOR
DETAILS SEE
"FOUNDATION
DETAILS" SHEETS

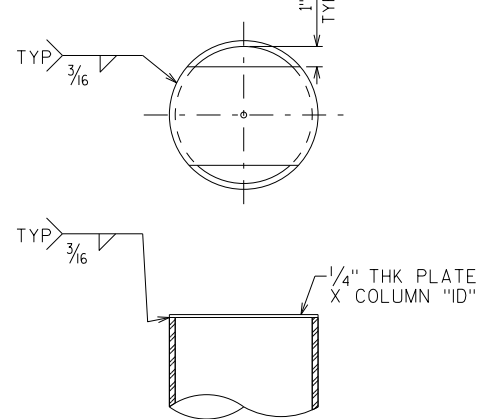
BASE PLATE & COLUMN DETAIL

LOOKING AT FRONT FACE OF STRUCTURE



COLUMN/CHORD CAP DETAIL

* PLACE TACK EVERY OTHER FLAT TO SECURE NUT OR
USE 1/2" THICK PLATE AND TAP HOLE FOR BOLT THREADS



CHORD CAP DETAIL

NOTES:
MINIMUM VALUES SHOWN
ALL CONNECTIONS ARE TO BE DESIGNED FOR
ACTUAL STRUCTURE LOADS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		MARCH 2021	
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MONOTUBE & 2-CHORD TRUSS DETAILS 1		SHEET 1 OF 4	

CANTILEVER POST TO CHORD CONNECTION

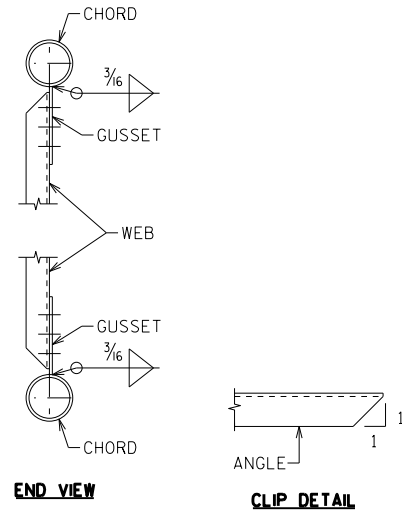
▲ MIN. CONNECTION = (6) - 1" GALVANIZED F3125 GRADE A325 BOLTS, NUT, WASHER AND DTI
★ MIN. DIMENSION MEASURED FROM EXT. FACE OF VERT. PLATE

BASE PLATE

PLAN
"BC" = POLE OD + 6"

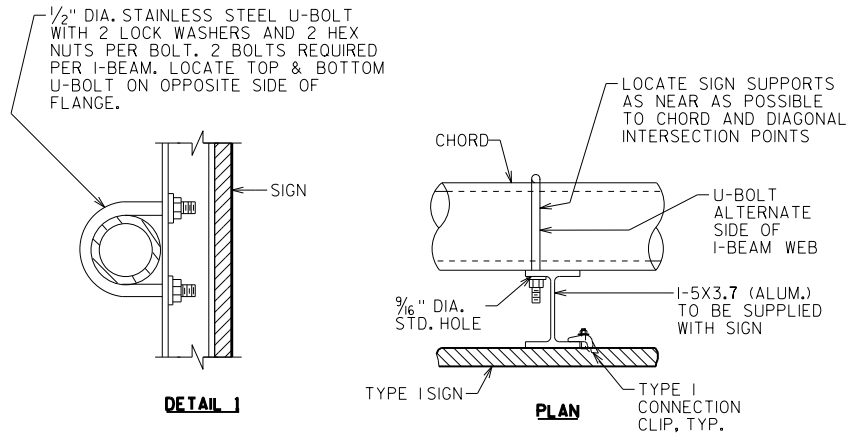
CHORD SPLICE DETAIL

"D1" = CHORD "OD" + 3"
"D2" = CHORD "OD" + 6"
"T" = BY DESIGN



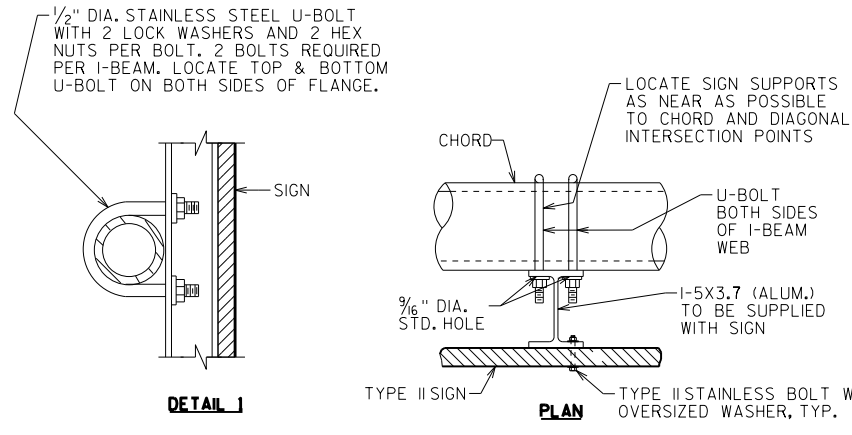
TRUSS CONNECTION DETAILS

BOLTED CONNECTIONS SHOWN, NUMBER OF BOLTS BY DESIGN
WELDED CONNECTIONS SIMILAR



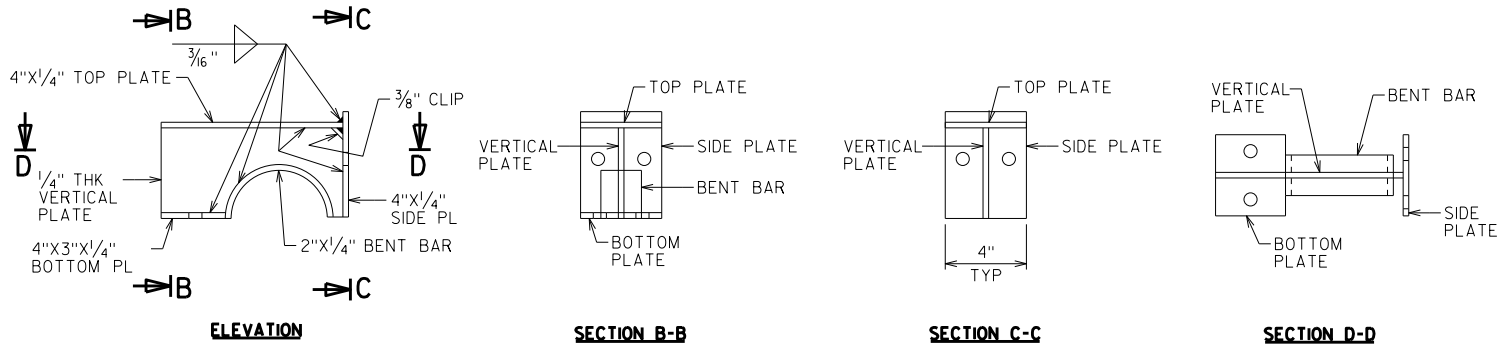
2-CHORD TRUSS SIGN CONNECTION

SEE SIGN PLATE MANUAL A4-7A FOR DETAILS
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL
HARDWARE TO BE SUPPLIED BY THE CONTRACTOR



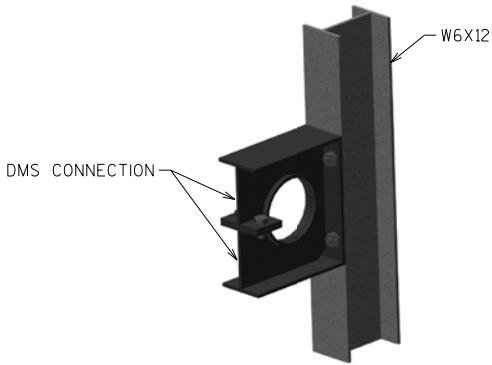
MONOTUBE SIGN CONNECTION

SEE SIGN PLATE MANUAL A4-7B FOR DETAILS
ALUMINUM I-5X3.7 I-BEAMS ARE TO BE SUPPLIED WITH THE SIGN PANEL
HARDWARE TO BE SUPPLIED BY THE CONTRACTOR



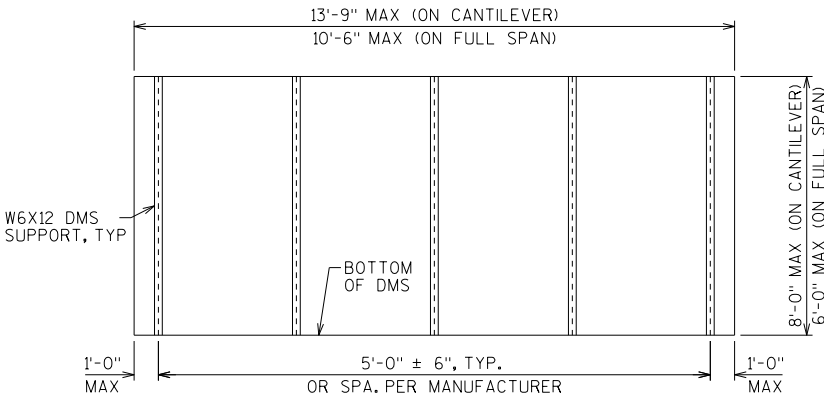
DMS WELDED PLATE CONNECTION DETAILS

TOP PLATE CLAMP SHOWN
BOTTOM PLATE CLAMP SIMILAR



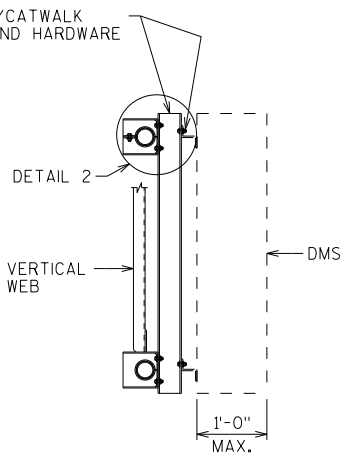
3-D VIEW DMS CONNECTION

CHORD NOT SHOWN FOR CLARITY



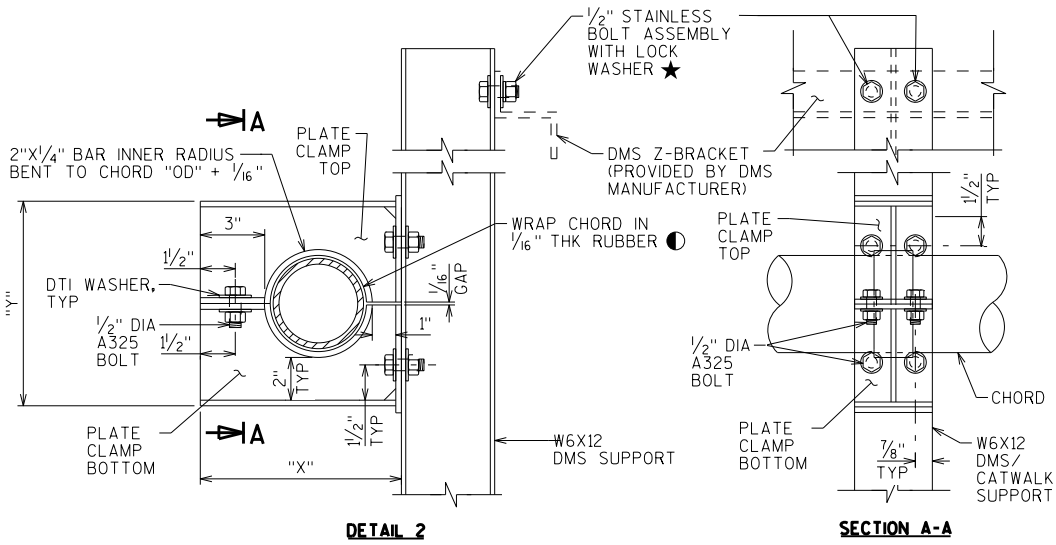
DMS MOUNTING POST SPACING DETAIL

POST SPACING MAY BE ADJUSTED AS REQUIRED IF CONFLICT WITH TRUSS IS ENCOUNTERED.



SECTION THRU TRUSS FOR DMS/CATWALK CONNECTION

★ W6X12 SUPPORTS AND HARDWARE ARE TO BE SUPPLIED BY THE CONTRACTOR. 1/2" STAINLESS BOLT, NUT, WASHER AND LOCK WASHER REQUIRED, 4 PER W6X12.

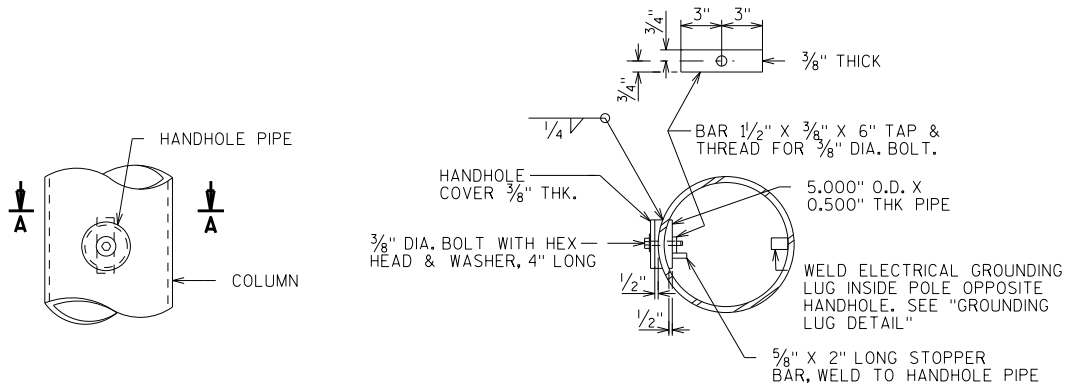


TYPICAL DMS CONNECTION

CHORD OUTER DIA	"X"	"Y"
"OD"	"OD"+4 1/16"	"OD"+5 1/16"

● NEOPRENE, GRADE 45±5, OTHERWISE MEETING THE REQUIREMENTS OF STD SPEC 506.2.6.1

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		APRIL 2021	
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MONOTUBE & 2-CHORD TRUSS DETAILS 2		SHEET II OF IV	
		192	



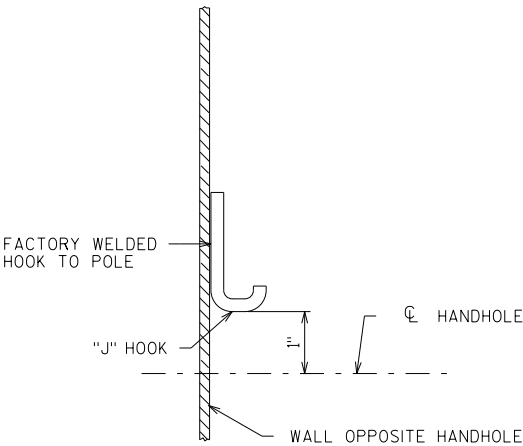
HANDHOLE DETAILS

SECTION A-A

HANDHOLE NOTES

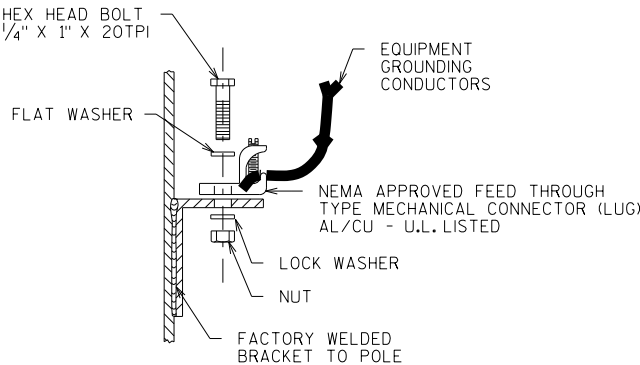
HANDHOLES SHALL BE LOCATED IN ONE COLUMN OF THE SIGN STRUCTURE IF ELECTRICALLY OPERATED DEVICES ARE INSTALLED ON/IN THE STRUCTURE. COLUMNS WITH HANDHOLES SHALL BE NEAR THE ELECTRICAL SERVICE. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE ELECTRICAL SERVICE ENTRANCE WITH THE REGION TRAFFIC SECTION PRIOR TO FABRICATION OF THE SIGN COLUMNS AND MEMBERS. CONDUIT (AS REQ'D.) SHALL BE LOCATED, PLACED AND SIZED AS SHOWN ON THE ELECTRICAL PLAN DETAIL SHEETS.

UNLESS NOTED OTHERWISE, ALL HANDHOLE ELEMENTS TO BE GALVANIZED PER THE WISDOT STANDARD SPECIFICATIONS.



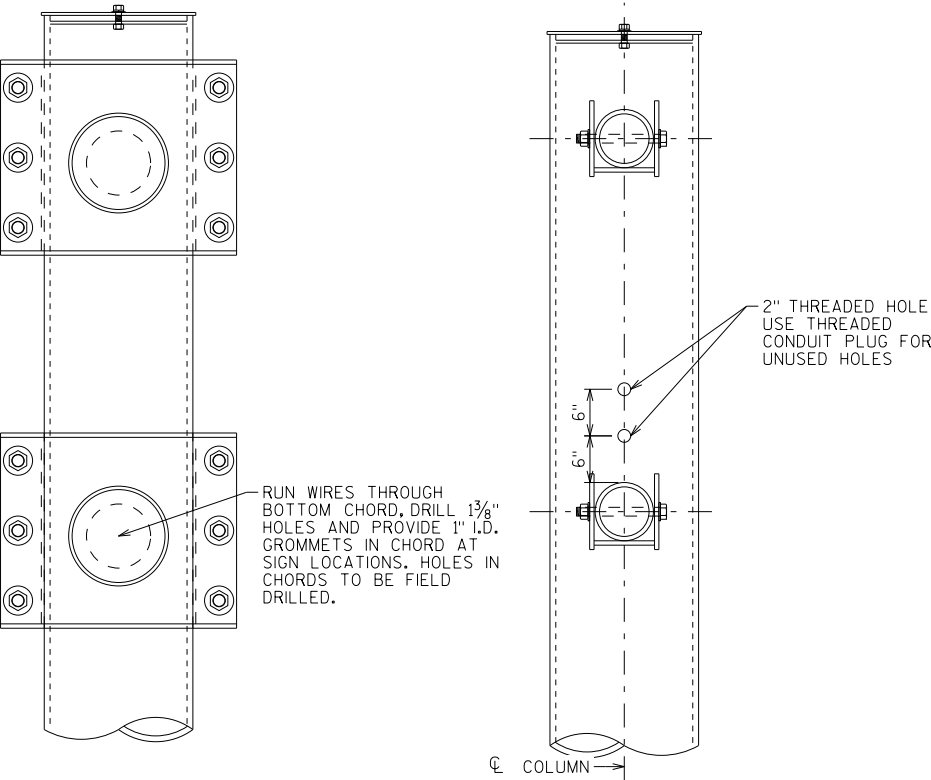
TYPICAL "J" HOOK LOCATION

THE "J" HOOK SHALL BE FACTORY WELDED TO THE INSIDE OF ALL COLUMNS CONTAINING ELECTRICAL WIRING. THE "J" HOOK SHALL BE ATTACHED ABOVE THE CENTERLINE OF THE UPPER HANDHOLE AND MOUNTED DIRECTLY OPPOSITE THE HANDHOLE AS SHOWN IN THE DRAWING.



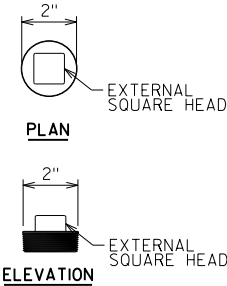
GROUNDING LUG DETAIL

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

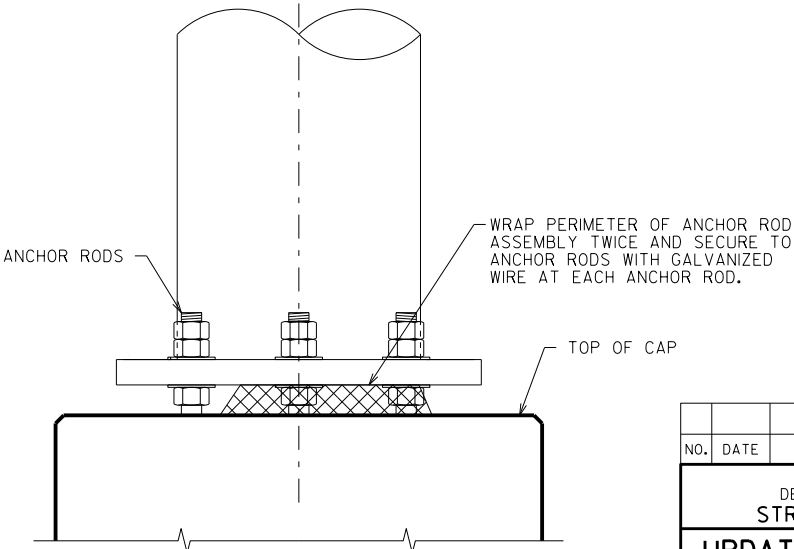


2-CHORD CANTILEVER

2-CHORD FULL SPAN
SADDLE CONNECTIONS SHOWN,
BEARING AND CLAMP
CONNECTIONS SIMILAR



CONDUIT PLUG DETAILS



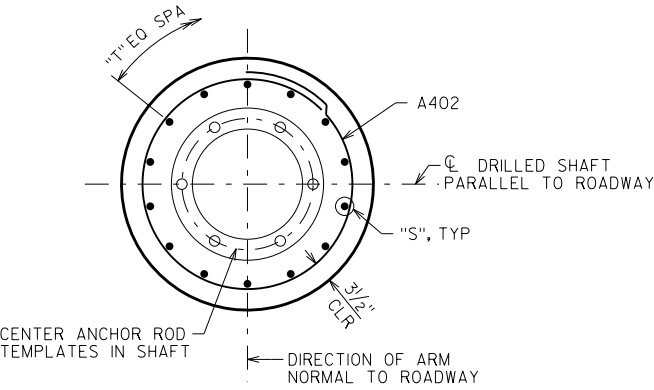
RODENT SCREEN

(ONLY REQ'D. WHEN ELECTRICAL DEVICES ARE INSTALLED)

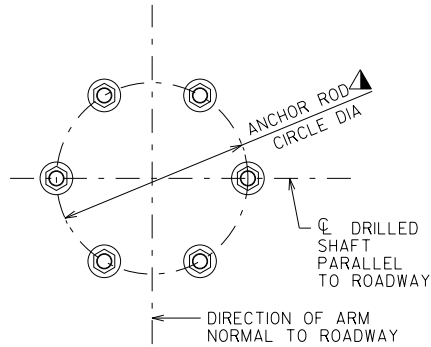
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		MARCH 2021	
DRAWN BY		BOS	PLANS CK'D. BOS
MONOTUBE & 2-CHORD TRUSS ELECTRICAL DETAILS		SHEET III OF IV	

FOUNDATION & REINFORCING DATA

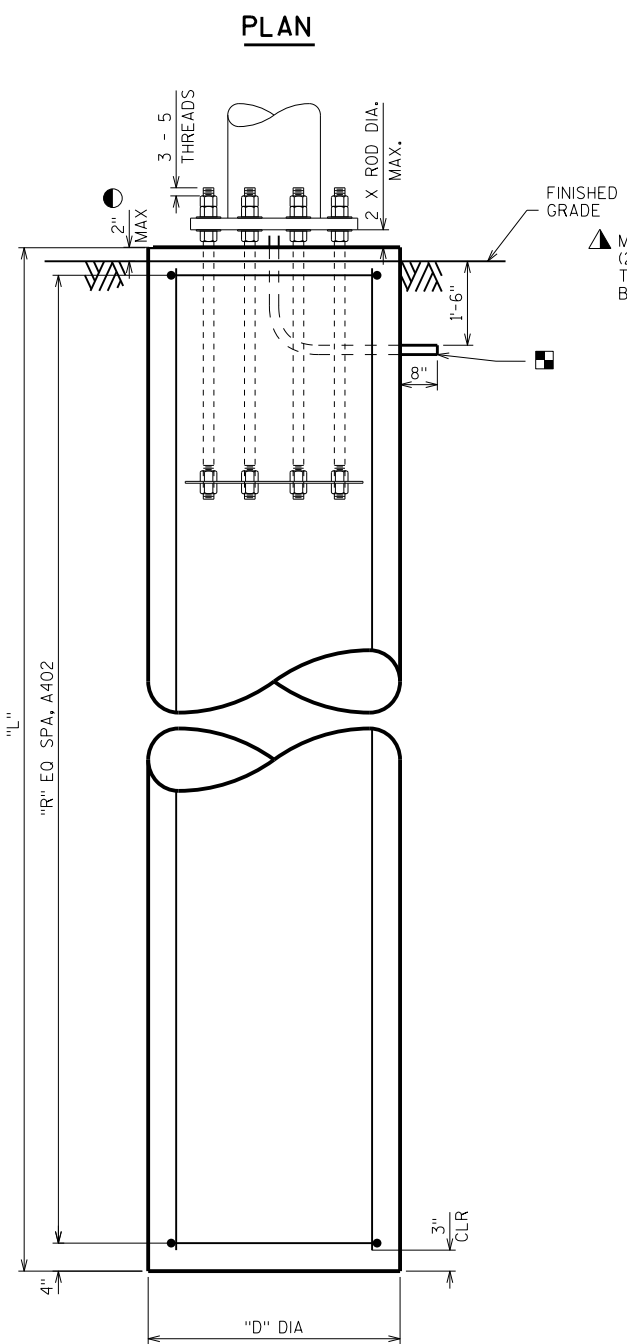
STANDARD FOUNDATION TYPE	SHAFT VARIABLES					
	"D"	"L"	"R"	"S"	"T"	"BC" MAX
MF I	2'-0"	12'-0"	12	A801	6	12"
MF II	2'-6"	13'-0"	13	A801	10	17"
MC I/MC II/TF I	2'-6"	17'-0"	17	A801	10	17"
TC I	3'-0"	18'-0"	18	A801	14	22"
TF II	3'-0"	20'-0"	20	A801	14	22"
MC III/TC II/TF III	3'-6"	18'-0"	18	A901	14	28"
MC IV/TF IV	3'-6"	23'-0"	23	A901	14	28"
TC III	4'-0"	23'-0"	23	A1001	14	34"
TC IV	4'-0"	28'-0"	28	A1001	14	34"



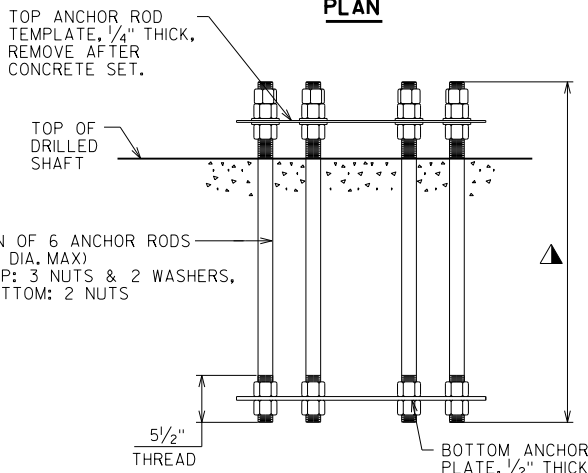
PLAN



PLAN



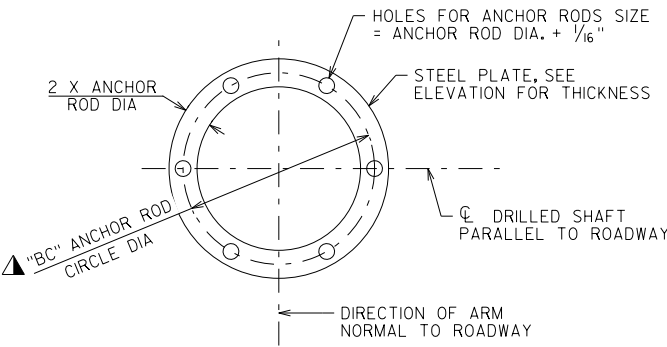
ELEVATION



ELEVATION

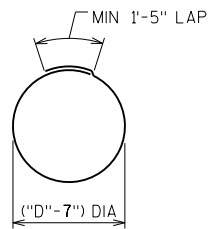
ANCHOR ROD ASSEMBLY DETAILS

ANCHOR ROD NUMBER, DIAMETER, LENGTH & ORIENTATION AS SHOWN ON FABRICATION DRAWING.



ANCHOR PLATE/TOP TEMPLATE

PLAN



A402

NOTES

- CENTER ANCHOR ROD ASSEMBLY ON DRILLED SHAFT AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE FOOTING AS DETAILED. ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURED IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHOR RODS.
- FOR OVERHEAD SIGN STRUCTURES THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE SHAFT SHALL BE POURED FLUSH WITH THE FINISHED GRADE.
- 2" DIA NONMETALLIC CONDUITS, INSTALL ONLY WITH DMS. EXTEND CONDUITS AS SHOWN AND CAP OR SEAL EACH END WITH A SUITABLE REMOVABLE PLUG. PLACE CONDUITS UNDER COLUMN ADJACENT TO THE DMS. CONDUITS INCIDENTAL TO THE FOUNDATION BID ITEMS.

ESTIMATED QUANTITIES - FOUNDATIONS

STANDARD FOUNDATION TYPE	CONCRETE MASONRY (CY)	STEEL REINFORCEMENT HS (LBS)	FOUNDATION DRILLING (LF)				
			24" DIA.	30" DIA.	36" DIA.	42" DIA.	48" DIA.
MF I	2	240	12				
MF II	3	410		13			
MC I/MC II/TF I	4	540		17			
TC I	5	780			18		
TF II	6	860			20		
MC III/TC II/TF III	7	970				18	
MC IV/TF IV	9	1,250				23	
TC III	11	1,560					23
TC IV	13	1,900					28

** QUANTITIES ARE FOR INFORMATION ONLY AND ARE BASED ON STANDARD STRUCTURE DIMENSIONS

STATE PROJECT NUMBER

STANDARD

NOTE:
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE

BILL OF BARS - STANDARD FOUNDATIONS

STANDARD FOUNDATION MF I

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		6	11'-7"			DRILLED SHAFT - VERTICAL
A402		13	5'-10"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MF II

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		10	12'-7"			DRILLED SHAFT - VERTICAL
A402		14	7'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MC I/MC II/TF I

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		10	16'-7"			DRILLED SHAFT - VERTICAL
A402		18	7'-5"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TC I

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		14	17'-7"			DRILLED SHAFT - VERTICAL
A402		19	9'-0"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TF I

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A801		14	19'-7"			DRILLED SHAFT - VERTICAL
A402		21	9'-0"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MC III/TC II/TF III

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		14	17'-7"			DRILLED SHAFT - VERTICAL
A402		19	10'-6"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION MC IV/TF IV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A901		14	22'-7"			DRILLED SHAFT - VERTICAL
A402		24	10'-6"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TC III

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	22'-7"			DRILLED SHAFT - VERTICAL
A402		24	12'-2"	X		DRILLED SHAFT - HORIZONTAL

STANDARD FOUNDATION TC IV

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A1001		14	27'-7"			DRILLED SHAFT - VERTICAL
A402		29	12'-2"	X		DRILLED SHAFT - HORIZONTAL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
UPDATED:		MARCH 2021	
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MONOTUBE & 2-CHORD TRUSS FOUNDATIONS		SHEET IV OF IV	
194			

SCALE = 1:67

DIVISION 1 - MOORLAND ROAD STAGE 1

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
25+74.40	0.00	12.17	0.15	0	0	0	0	0
26+00.00	25.60	89.61	0.33	48	0	48	0	48
26+24.48	24.48	95.32	0.00	84	0	132	0	132
26+50.00	25.52	96.83	0.00	91	0	223	0	223
26+87.87	37.87	52.05	0.00	104	0	327	0	327
27+00.00	12.13	52.56	0.00	23	0	350	0	350
27+50.00	50.00	46.45	0.00	92	0	442	0	442
28+00.00	50.00	31.02	0.00	72	0	514	0	514
28+50.00	50.00	0.00	0.00	29	0	543	0	543
29+00.00	50.00	0.00	0.00	0	0	543	0	543
29+50.00	50.00	0.00	0.00	0	0	543	0	543
30+00.00	50.00	0.00	0.00	0	0	543	0	543
30+50.00	50.00	0.00	0.00	0	0	543	0	543
31+00.00	50.00	0.00	0.00	0	0	543	0	543
31+50.00	50.00	41.91	0.00	39	0	582	0	582
32+00.00	50.00	73.21	0.03	107	0	689	0	689
32+50.00	50.00	49.35	8.74	113	8	802	9	793
33+00.00	50.00	28.57	1.59	72	10	874	21	853
33+50.00	50.00	24.56	1.60	49	3	923	24	899
34+00.00	50.00	25.15	1.59	46	3	969	28	941
34+50.00	50.00	25.66	1.17	47	3	1,016	31	985
35+00.00	50.00	27.50	1.31	49	2	1,065	33	1,032
35+50.00	50.00	32.04	0.19	55	1	1,120	35	1,086
35+87.50	37.50	46.08	0.00	54	0	1,174	35	1,140
36+00.00	12.50	34.87	0.00	19	0	1,193	35	1,159
36+50.00	50.00	25.87	0.01	56	0	1,249	35	1,215
37+00.00	50.00	20.05	0.22	43	0	1,292	35	1,258
37+50.00	50.00	14.14	0.25	32	0	1,324	35	1,290
37+79.37	29.37	11.60	0.22	14	0	1,338	35	1,304
37+80.56	1.19	11.50	0.22	1	0	1,339	35	1,305

DIVISION 1 - CARPENTER ROAD

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
1+50.00	0.00	160.01	1.39	0	0	0	0	0
2+00.00	50.00	62.86	4.47	206	5	206	6	200
2+20.00	20.00	42.26	0.00	39	2	245	8	237
2+30.00	10.00	36.22	4.14	15	1	260	9	251
2+50.00	20.00	38.63	0.06	28	2	288	12	277
2+70.16	20.16	42.34	0.10	30	0	318	12	307

DIVISION 1 - RAMP D

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
572+75.00	0.00	59.53	0.00	0	0	0	0	0
573+00.00	25.00	41.97	0.00	47	0	47	0	47
573+33.68	33.68	14.09	0.03	35	0	82	0	82

DIVISION - RAMP C RL

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
572+75.00	0.00	165.73	1.35	0	0	0	0	0
573+00.00	25.00	214.12	0.00	176	1	176	1	175
573+50.00	50.00	173.94	0.00	359	0	535	1	534
574+00.00	50.00	161.86	0.00	311	0	846	1	845
574+50.00	50.00	191.06	0.98	327	1	1,173	2	1,171
575+00.00	50.00	183.55	1.31	347	2	1,520	5	1,515
575+50.00	50.00	109.88	0.00	272	1	1,792	6	1,786
576+00.00	50.00	99.28	0.00	194	0	1,986	6	1,980
576+50.00	50.00	101.98	0.00	186	0	2,172	6	2,166
577+00.00	50.00	93.94	0.00	181	0	2,353	6	2,347
577+50.00	50.00	86.78	0.00	167	0	2,520	6	2,514
578+00.00	50.00	58.64	0.00	135	0	2,655	6	2,649
578+50.00	50.00	38.68	0.66	90	1	2,745	7	2,738
578+51.28	1.28	38.39	0.66	2	0	2,747	7	2,740
578+76.27	24.99	31.74	0.11	32	0	2,779	7	2,772
579+00.00	23.73	27.90	1.31	26	1	2,805	8	2,797
579+01.27	1.27	27.58	1.41	1	0	2,806	8	2,798
579+50.00	48.73	16.72	0.09	40	1	2,846	9	2,837
579+67.82	17.82	13.01	1.25	10	0	2,856	9	2,847

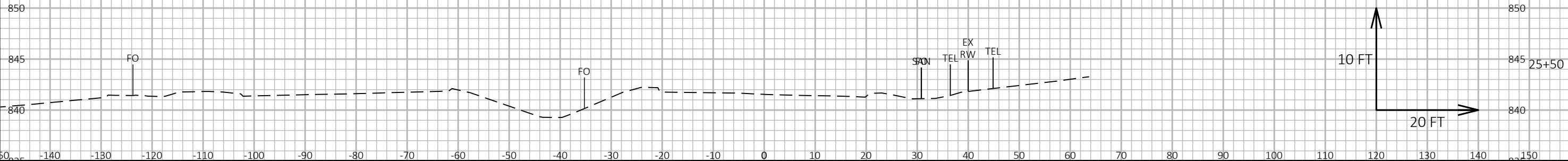
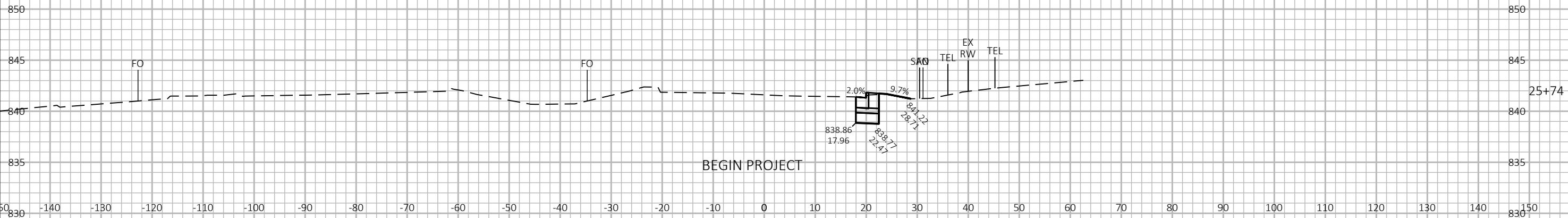
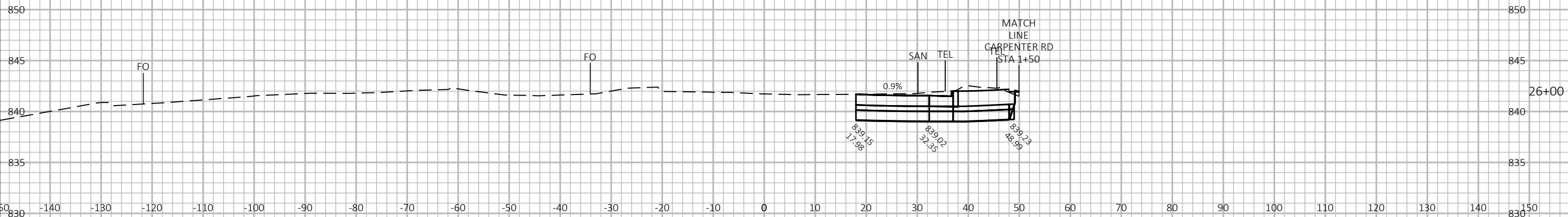
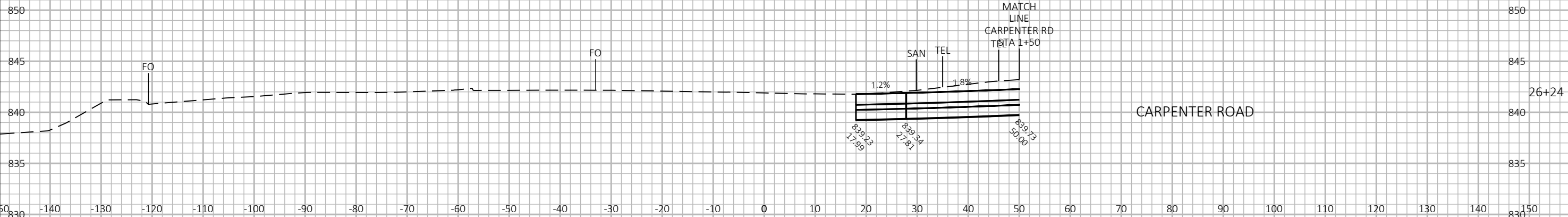
DIVISION 1 - RAMP E

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
571+32.74	0.00	12.42	0.00	0	0	0	0	0
571+50.00	17.26	13.78	0.00	8	0	8	0	8
571+75.00	25.00	19.14	0.00	15	0	23	0	23
572+00.00	25.00	30.83	0.00	23	0	46	0	46
572+21.41	21.41	28.67	0.00	24	0	70	0	70

DIVISION 2 - MOORLAND ROAD STAGE 2

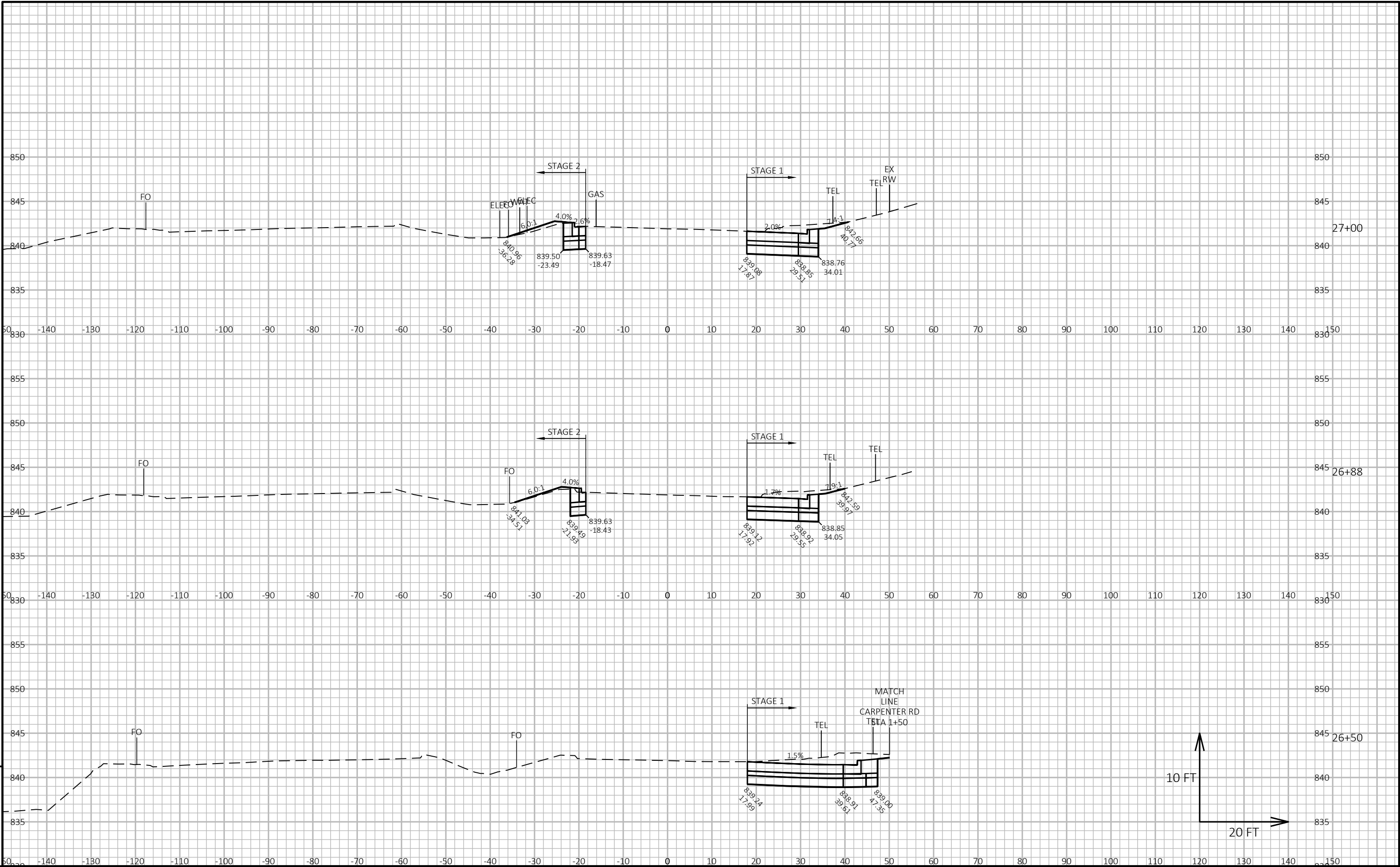
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL 1.15	MASS ORDINATE
26+87.87	0.00	9.64	1.86	0	0	0	0	0
27+00.00	12.13	14.14	3.45	5	1	5	1	4
27+50.00	50.00	31.69	6.00	42	9	47	12	36
28+00.00	50.00	47.69	3.62	73	9	120	22	98
28+50.00	50.00	65.23	0.13	105	3	225	25	200
29+00.00	50.00	87.04	0.10	141	0	366	25	341
29+50.00	50.00	101.40	0.00	174	0	540	25	515
30+00.00	50.00	111.47	0.00	197	0	737	25	712
30+50.00	50.00	128.40	0.00	222	0	959	25	934
31+00.00	50.00	130.98	0.00	240	0	1,199	25	1,174
31+50.00	50.00	124.13	0.00	236	0	1,435	25	1,410
32+00.00	50.00	120.59	0.00	227	0	1,662	25	1,637
32+50.00	50.00	111.33	0.00	215	0	1,877	25	1,852
33+00.00	50.00	103.87	0.00	199	0	2,076	25	2,051
33+50.00	50.00	98.42	0.00	187	0	2,263	25	2,238
34+00.00	50.00	96.57	0.00	181	0	2,444	25	2,419
34+50.00	50.00	97.91	0.00	180	0	2,624	25	2,599
35+00.00	50.00	103.82	0.00	187	0	2,811	25	2,786
35+50.00	50.00	117.90	0.00	205	0	3,016	25	2,991
35+87.50	37.50	115.41	0.00	162	0	3,178	25	3,153
36+00.00	12.50	112.16	0.00	53	0	3,231	25	3,206
36+50.00	50.00	14.63	0.00	117	0	3,348	25	3,323
37+00.00	50.00	12.94	0.00	26	0	3,374	25	3,349
37+50.00	50.00	12.25	0.00	23	0	3,397	25	3,372
37+79.37	29.37	12.66	0.00	14	0	3,411	25	3,386

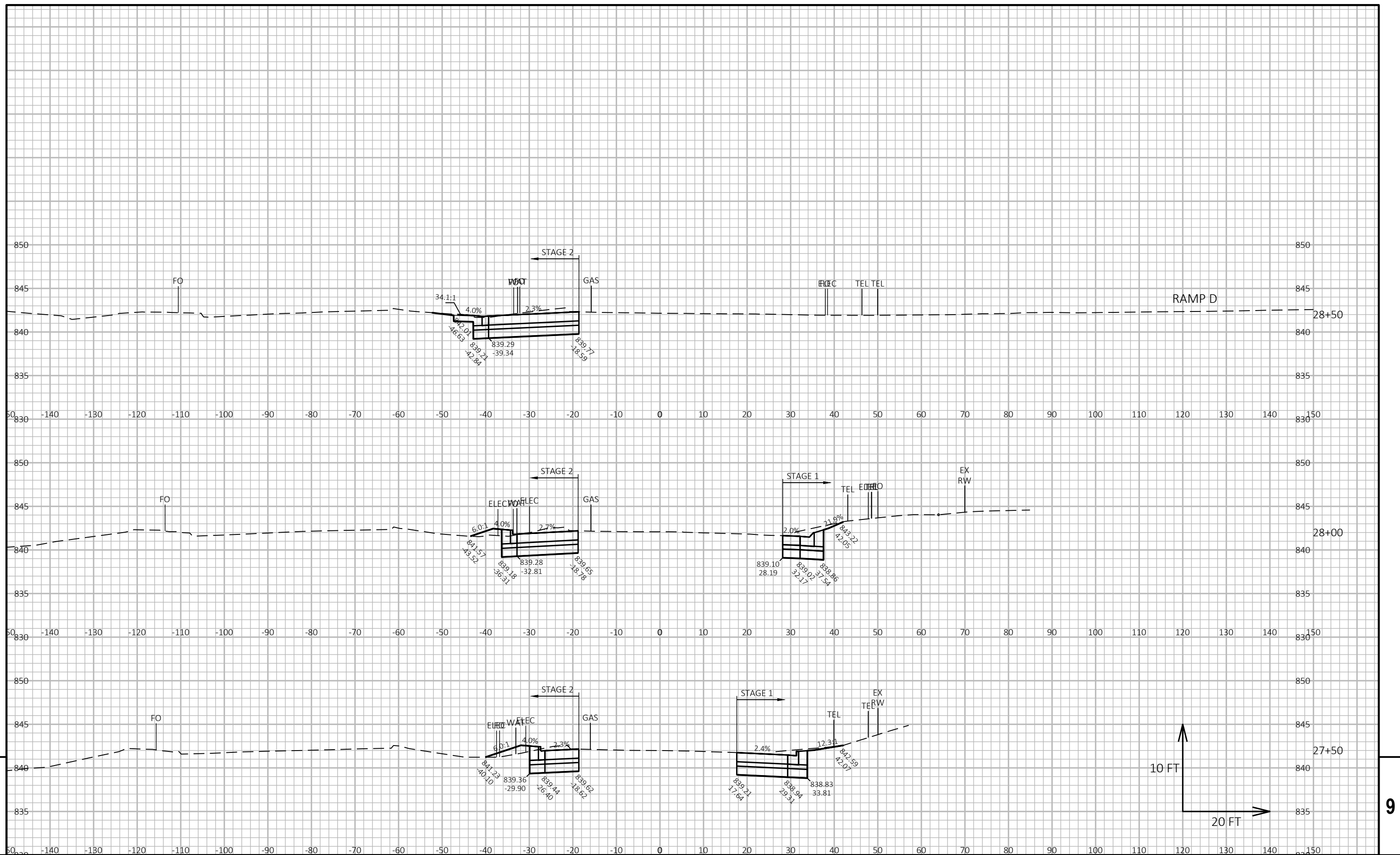
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



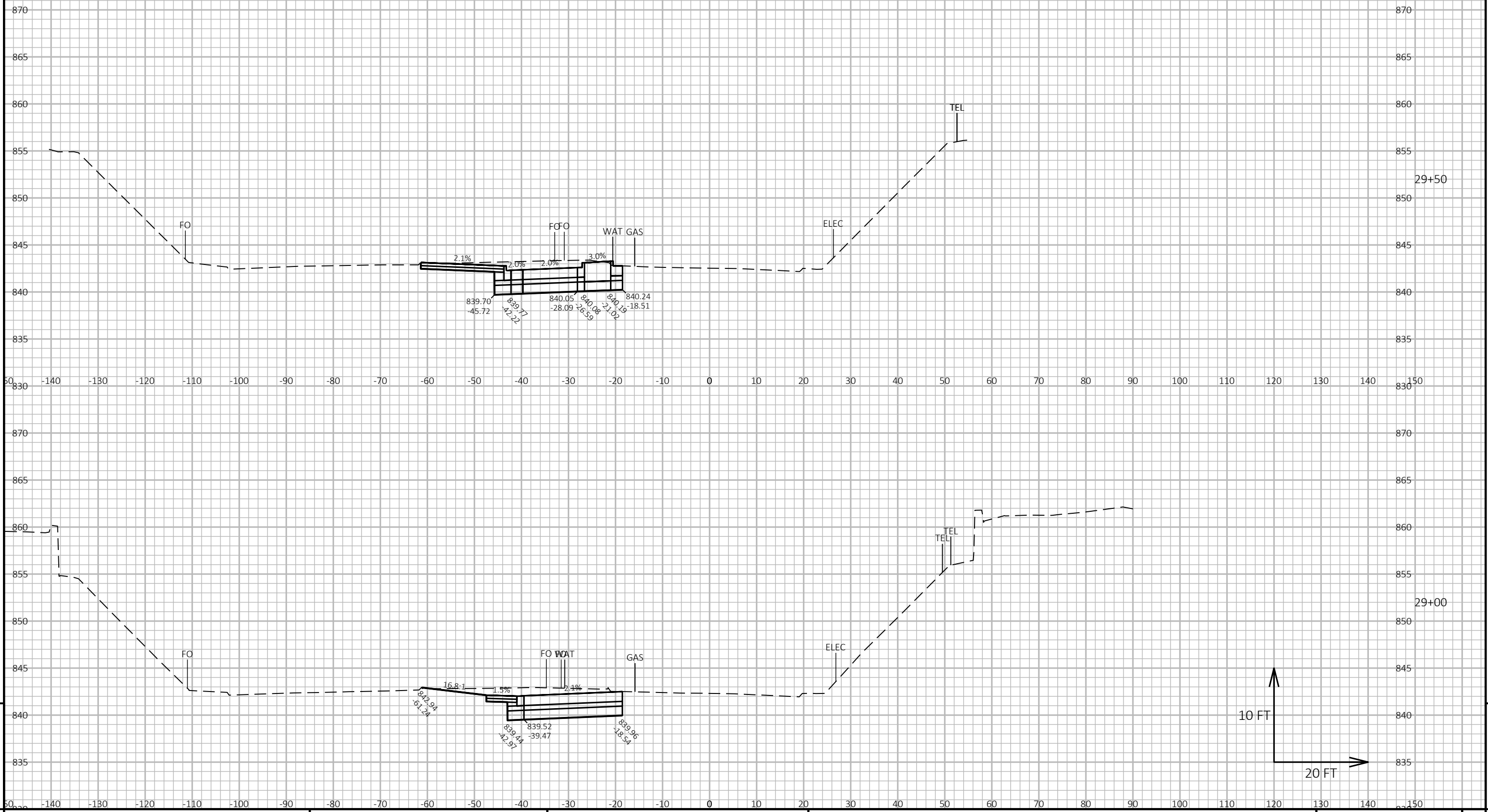
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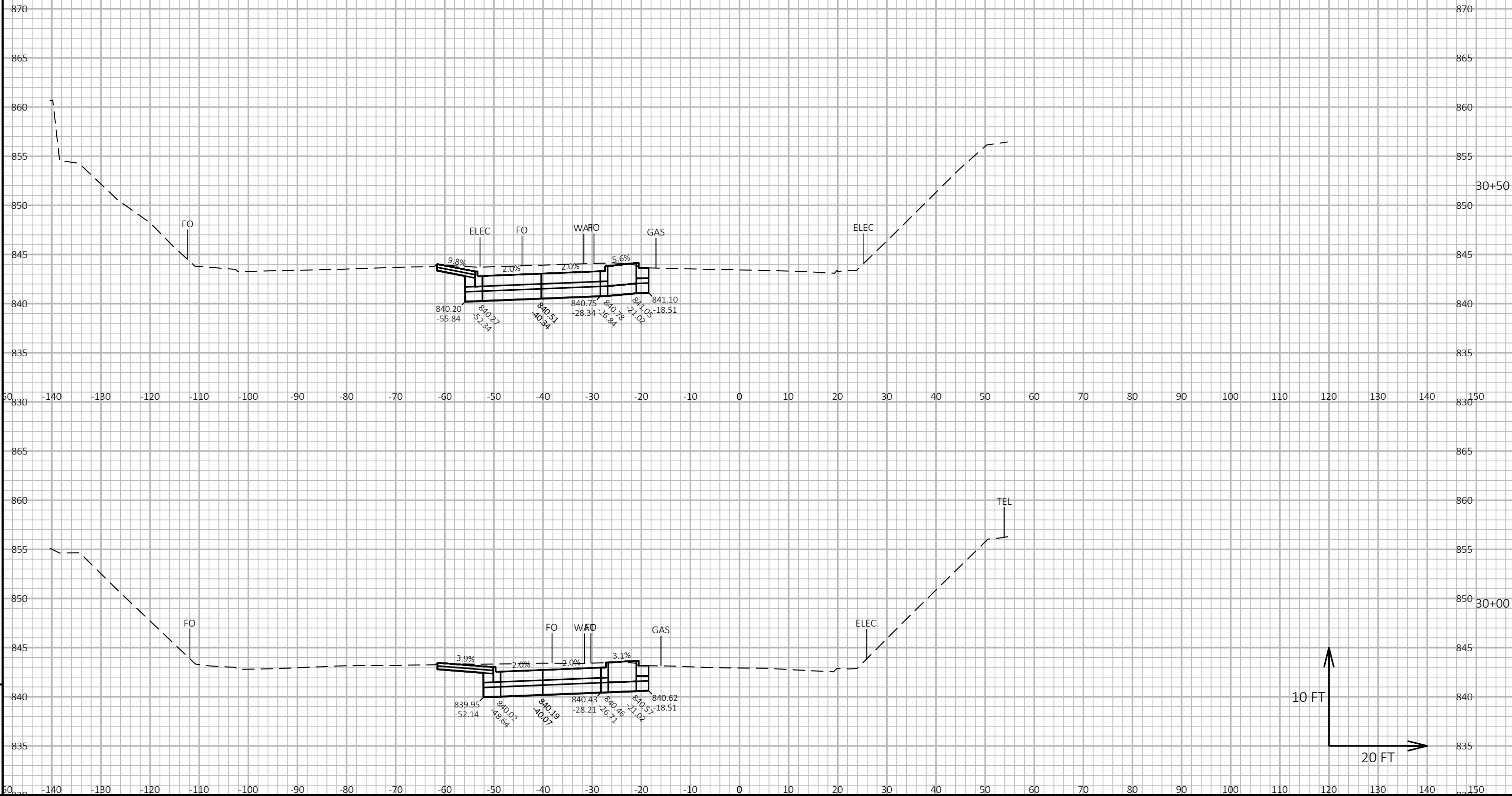


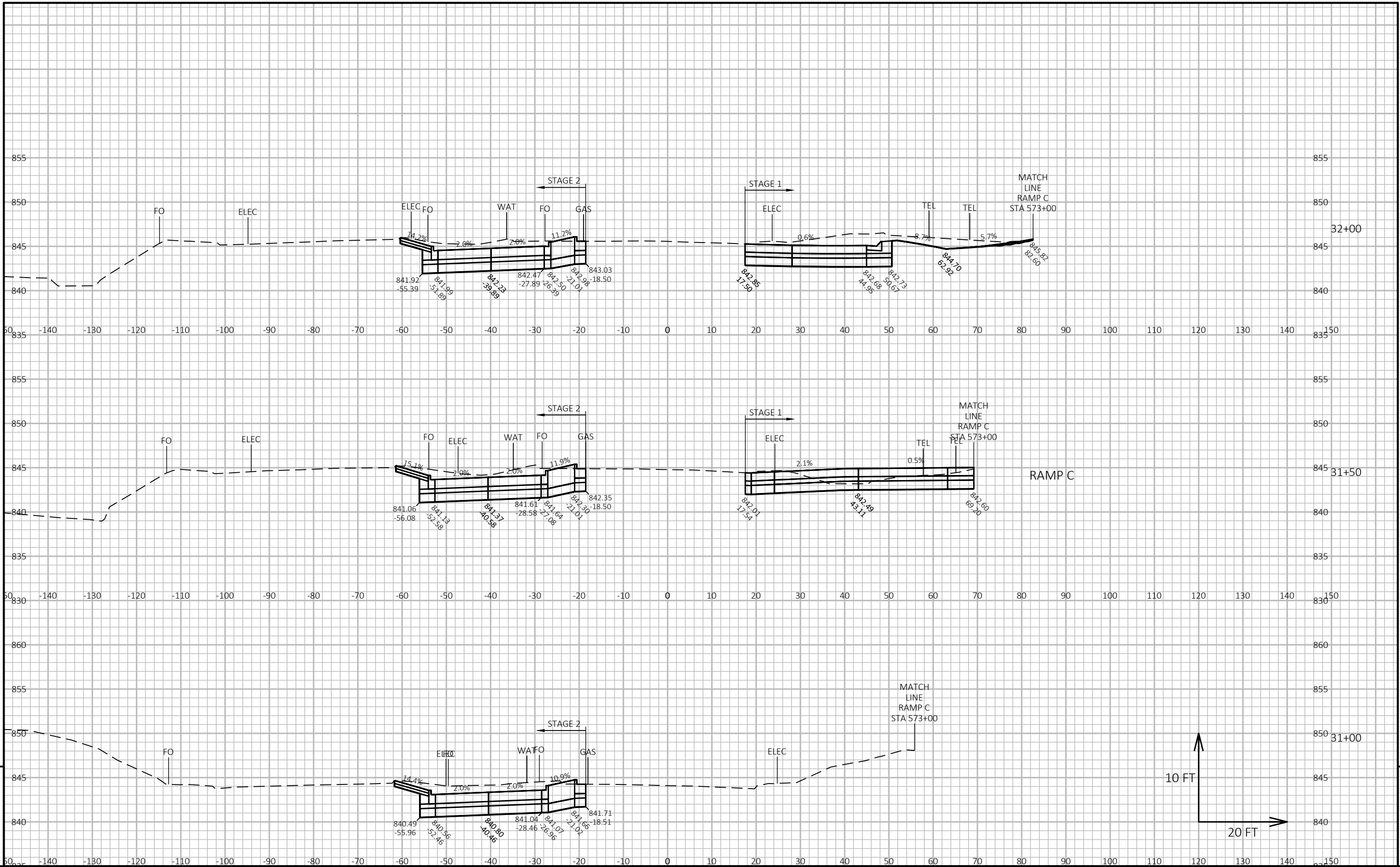


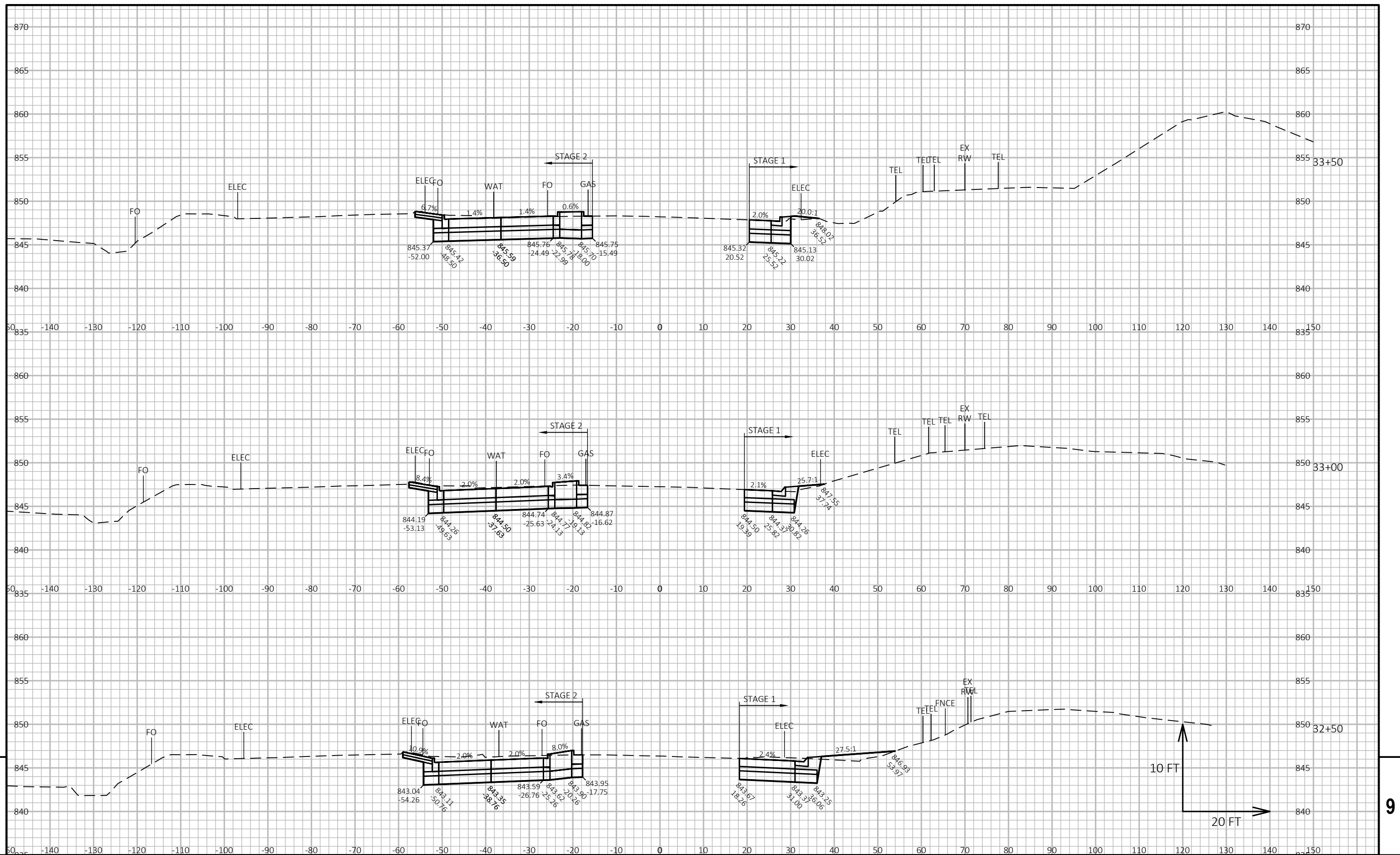
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

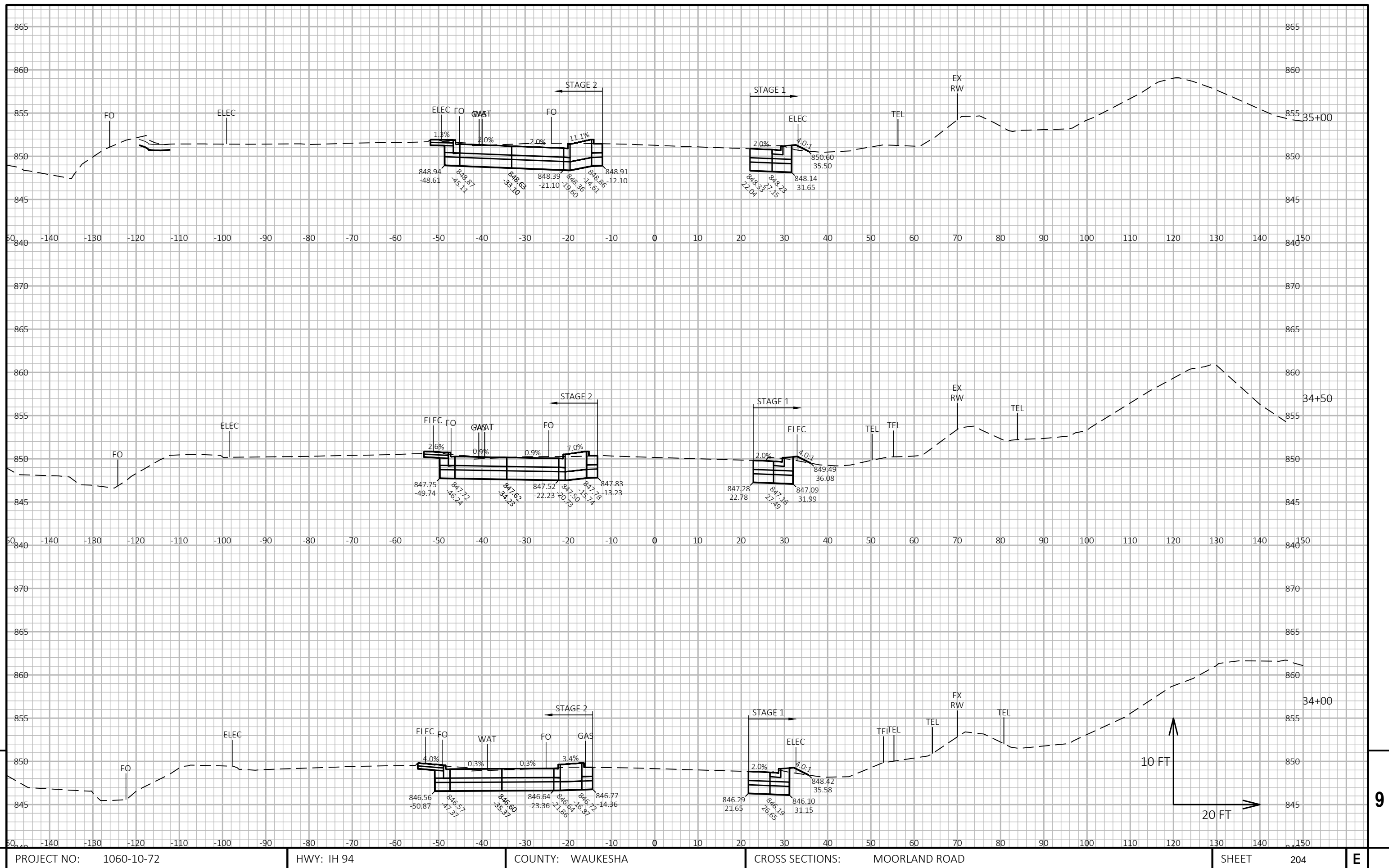


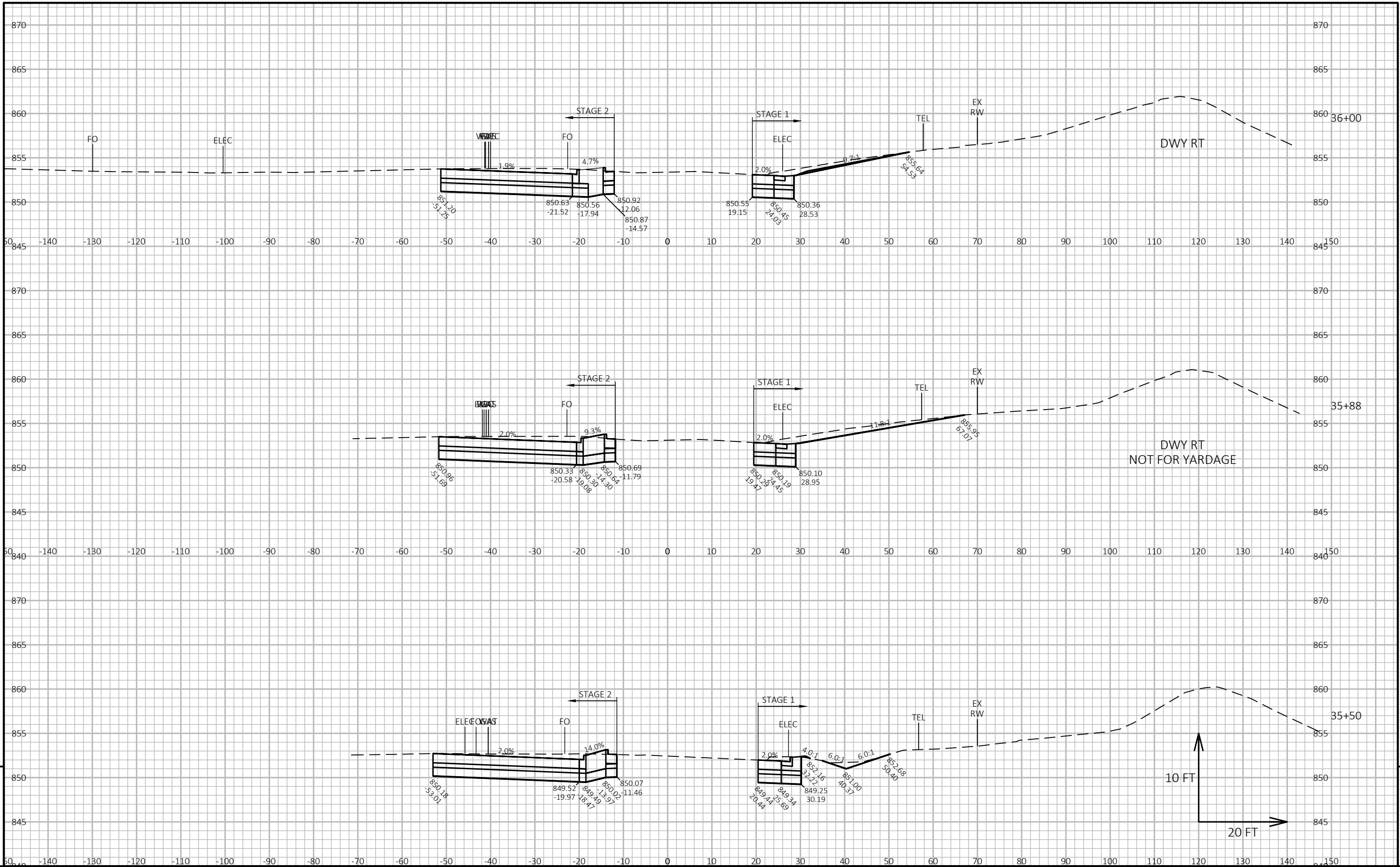
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 2

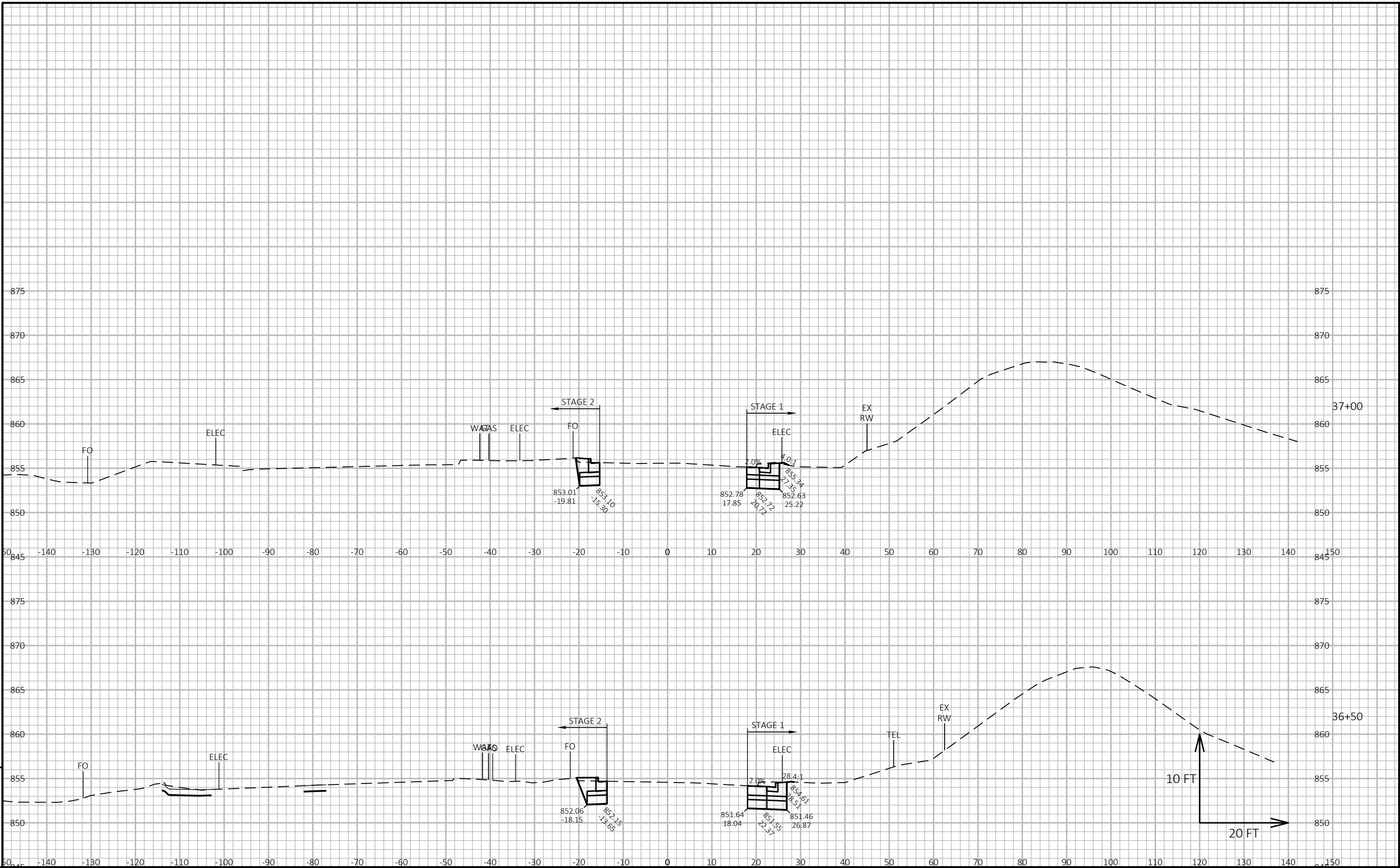


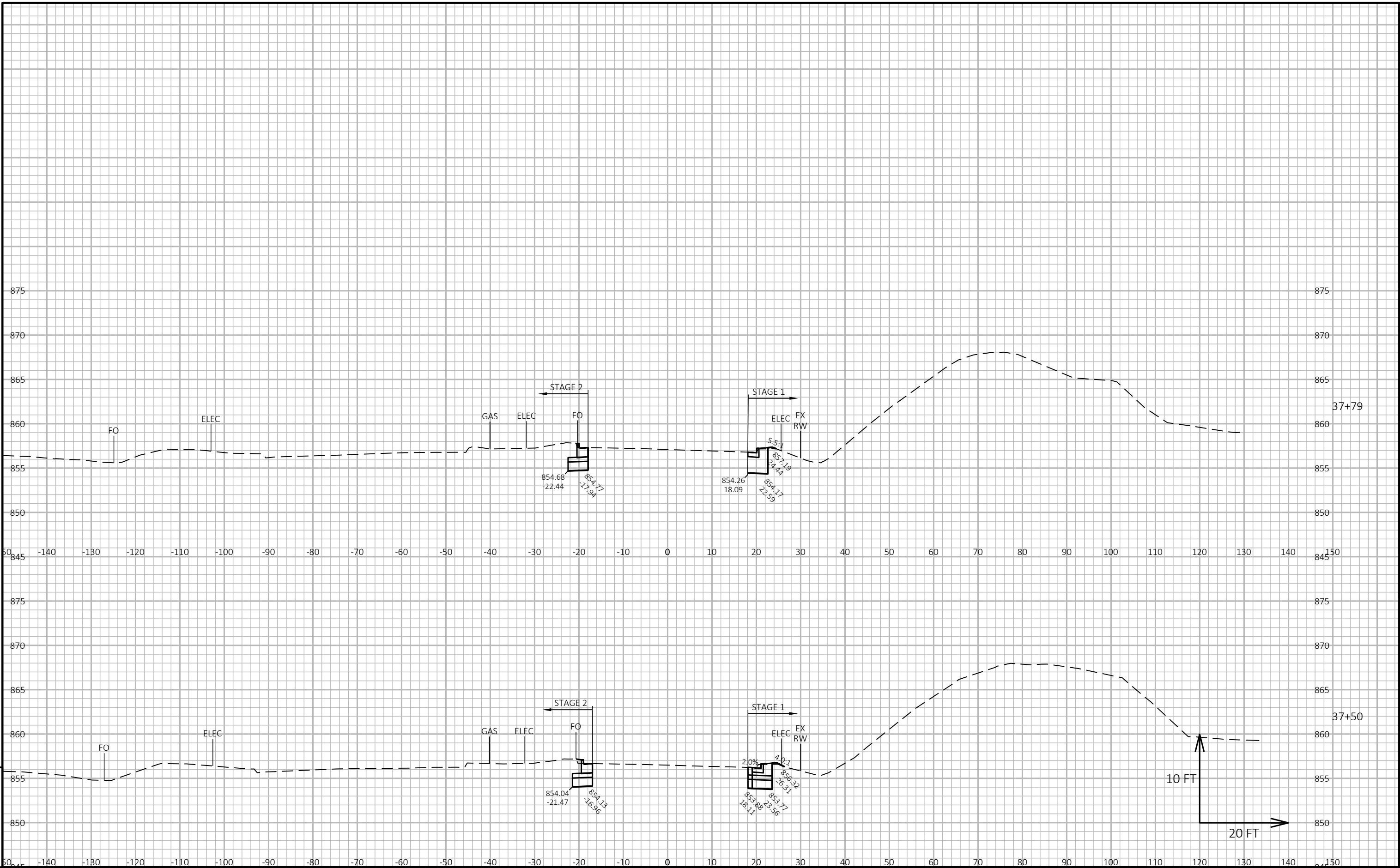


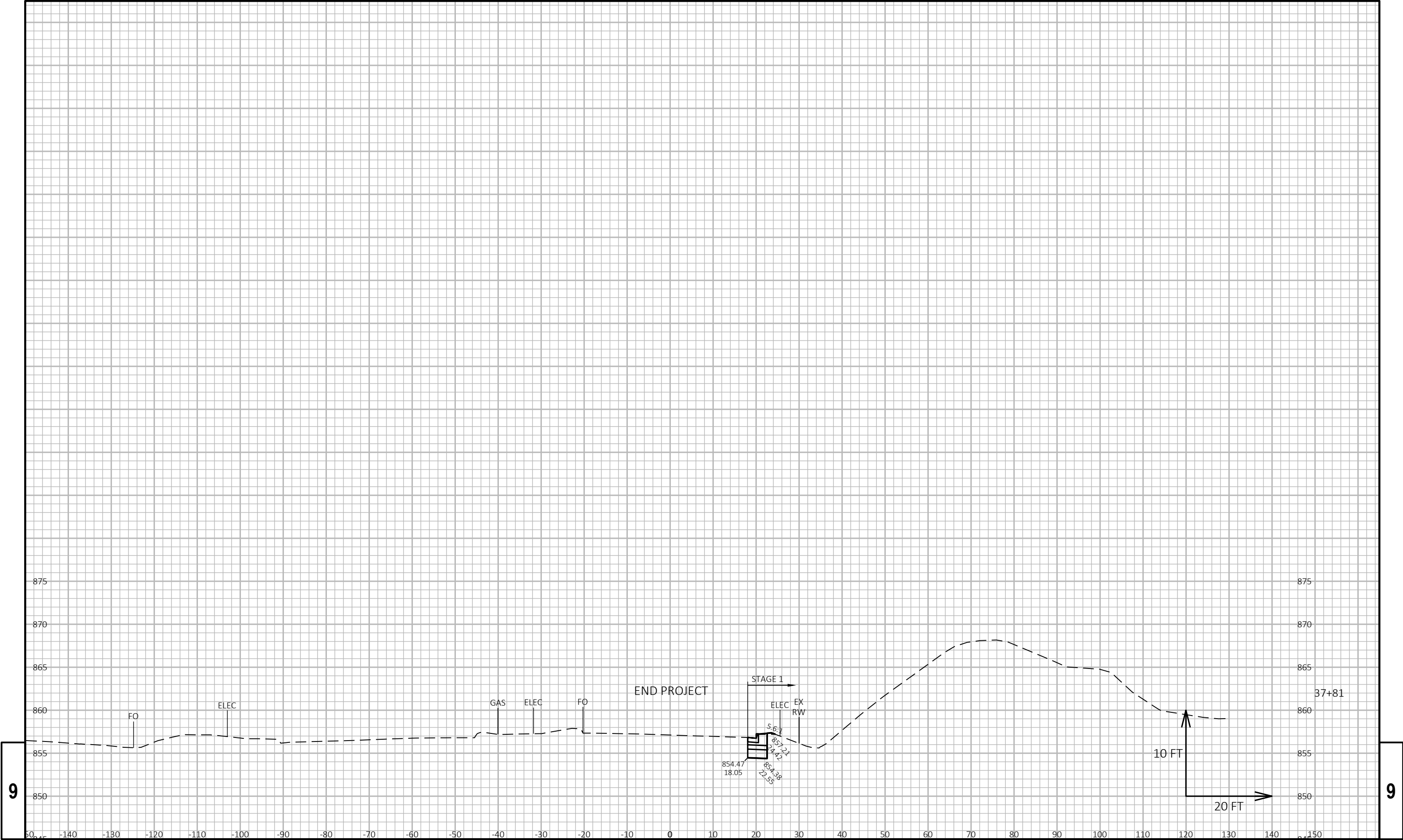






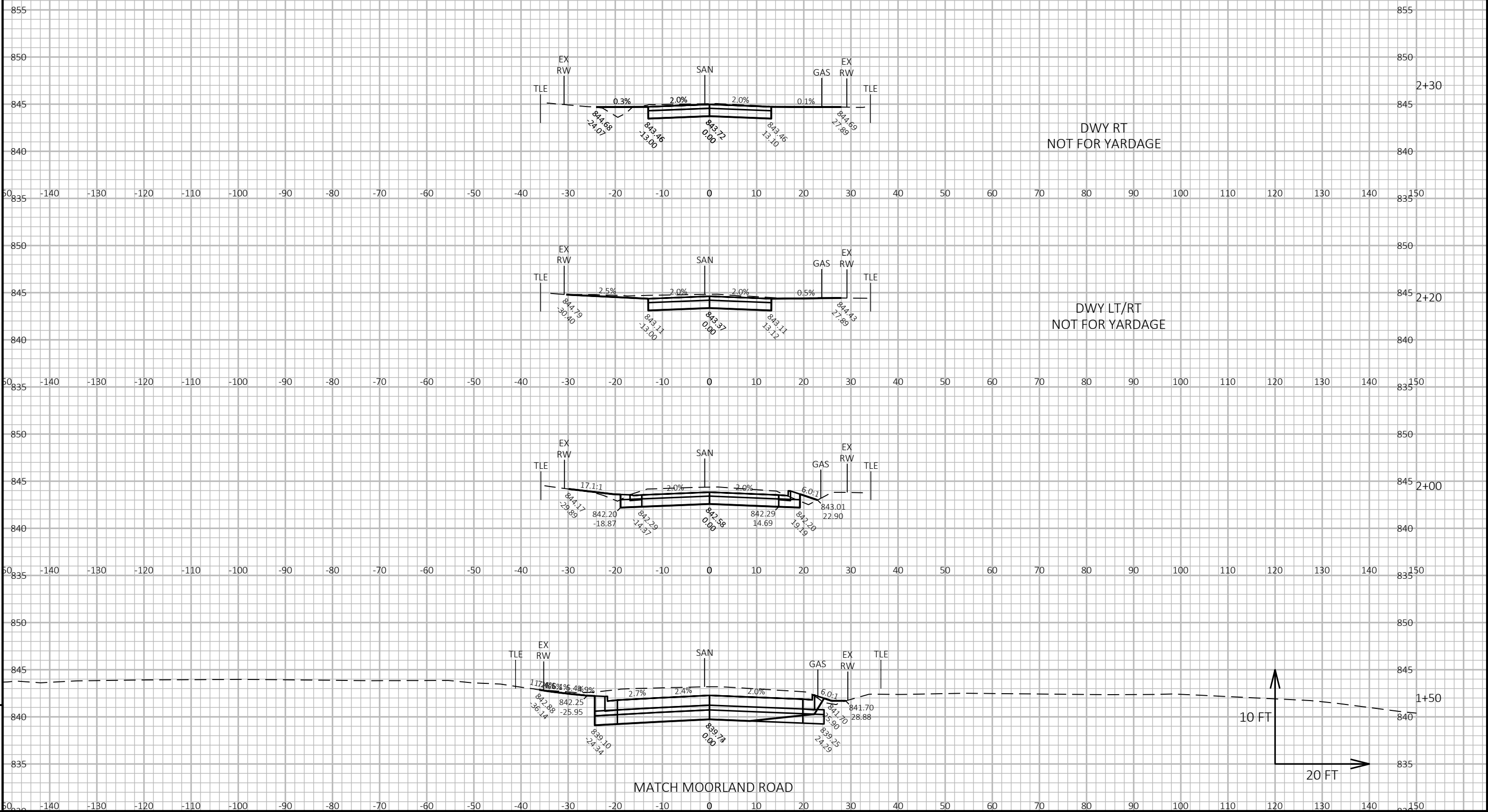




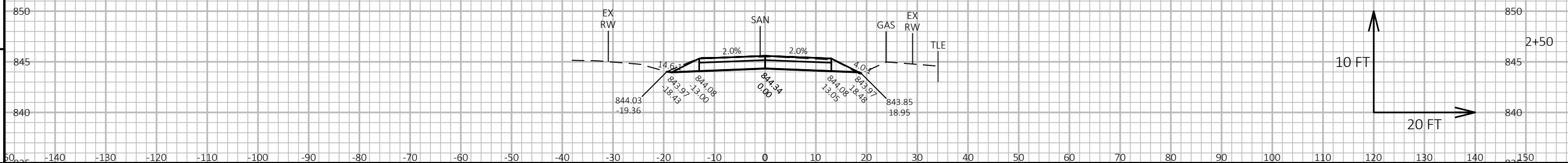
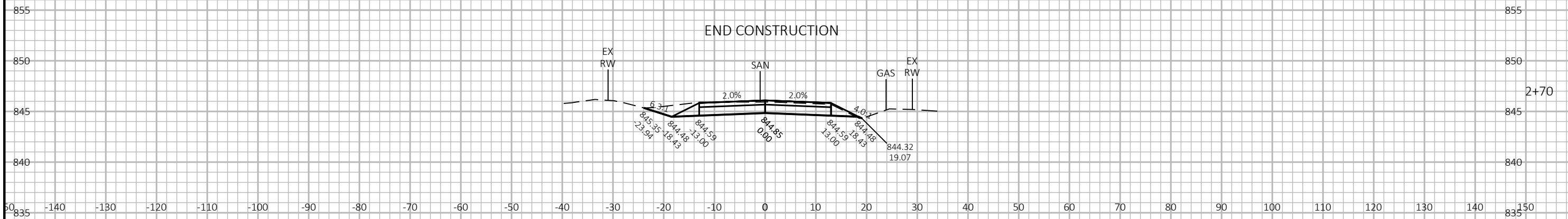
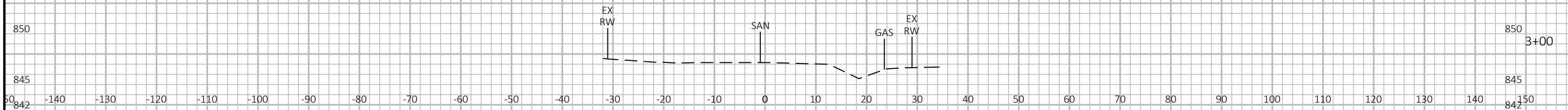


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	PROJECT NO: 1060-10-72				HWY: IH 94				COUNTY: WAUKESHA				CROSS SECTIONS: MOORLAND ROAD				SHEET 208	

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PROJECT NO:	1060-10-72
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HWY: IH 94

COUNTY: WAUKESHA

CROSS SECTIONS: CARPENTER ROAD

SHEET	210
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LAYOUT NAME - 12

PLOT DATE : 10/28/2022 12:59 PM

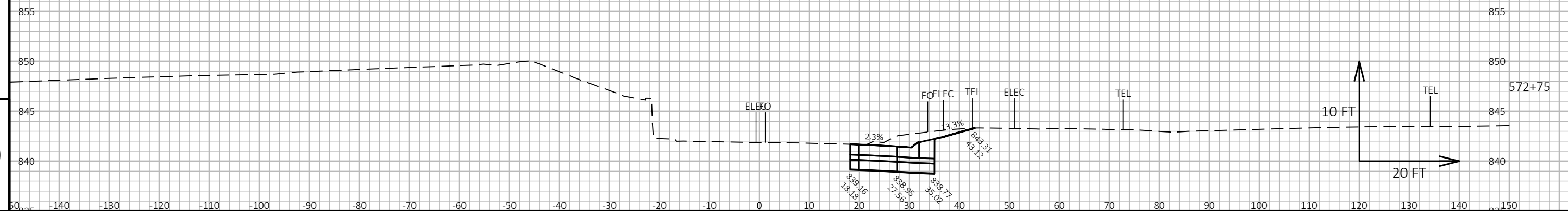
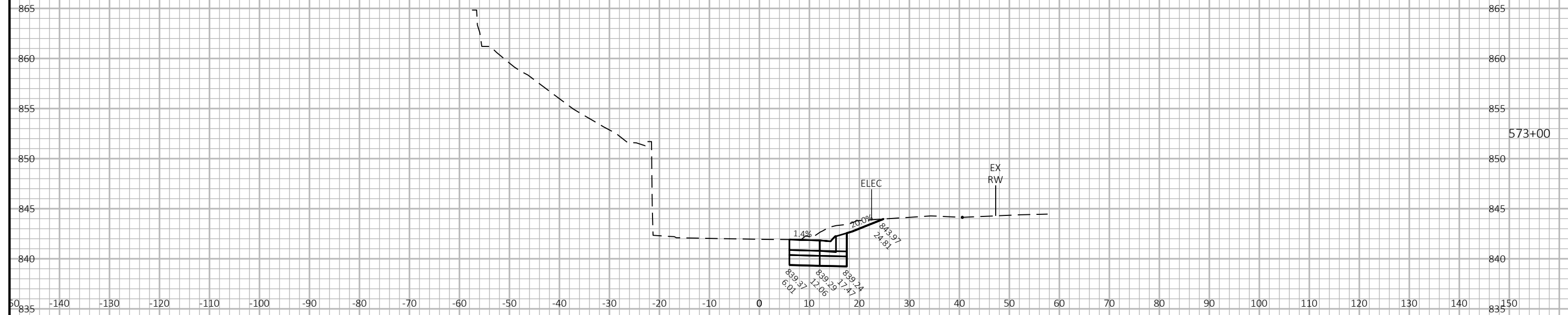
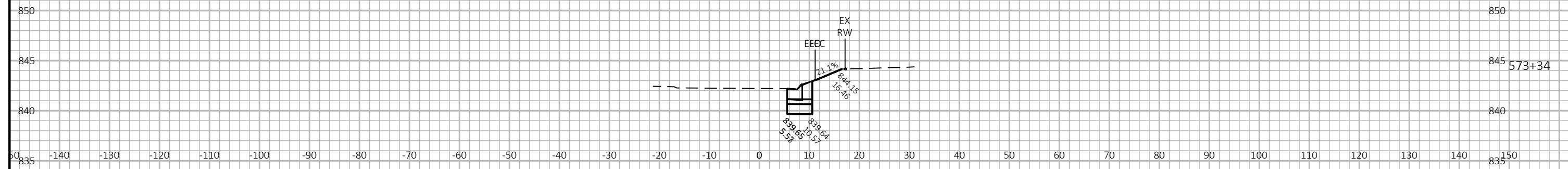
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

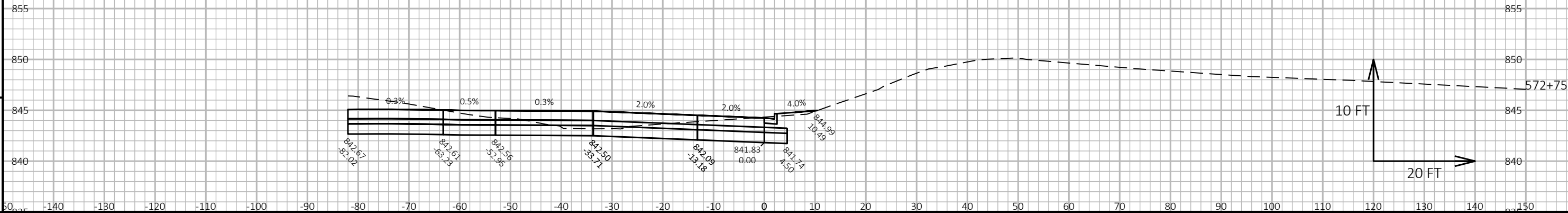
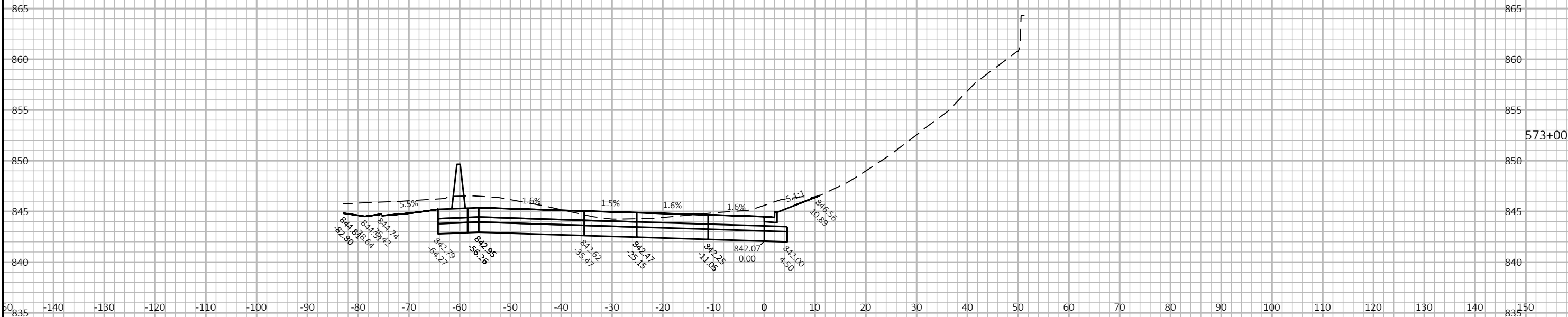
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



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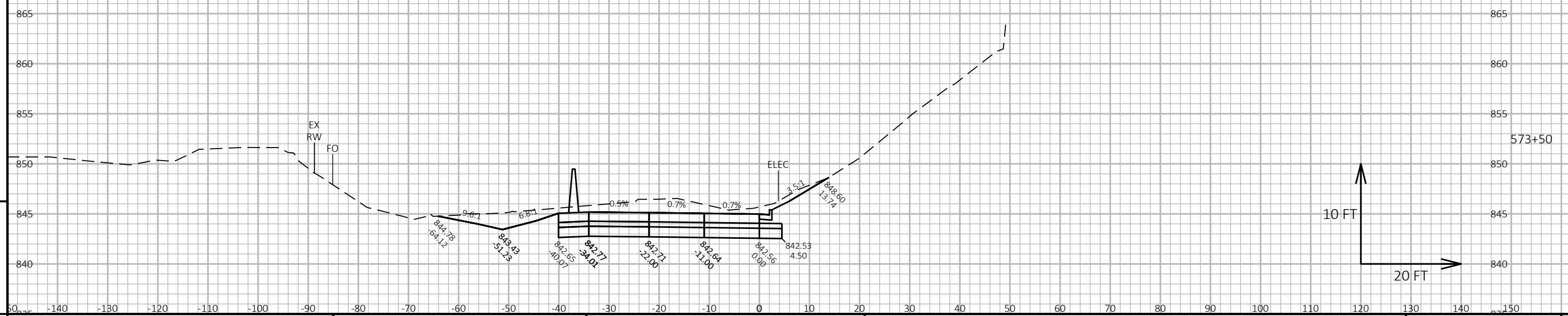
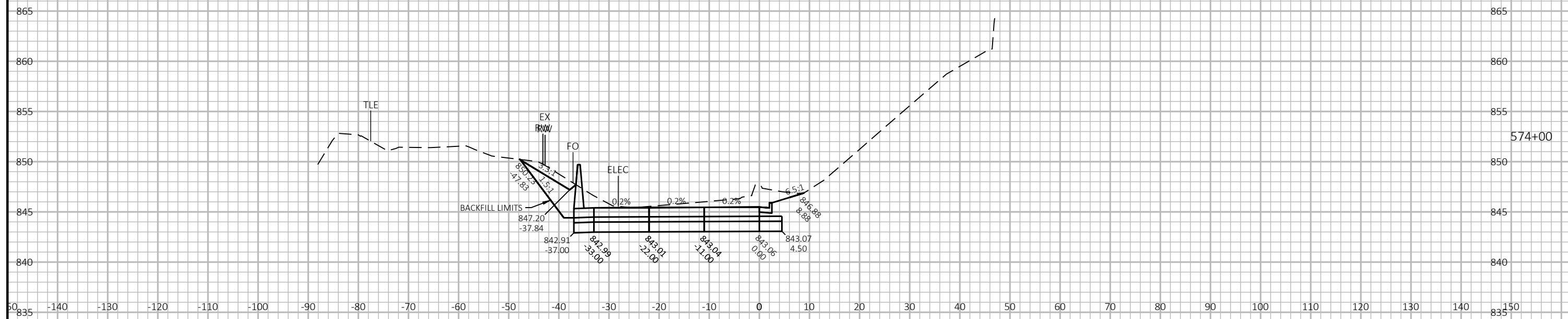
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ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	CROSS SECTIONS: RAMP C	SHEET 212	E
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ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



PROJECT NO:	1060-10-72
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HWY: IH 94

COUNTY: WAUKESHA

CROSS SECTIONS: RAMP C

SHEET	213
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I

FILE NAME : T:\1212712\CIVIL3D\10601002\SHEETSPLAN\090202-XS RAMP C.DWG
LAYOUT NAME - 02

PLOT DATE : 10/28/2022 1:00 PM

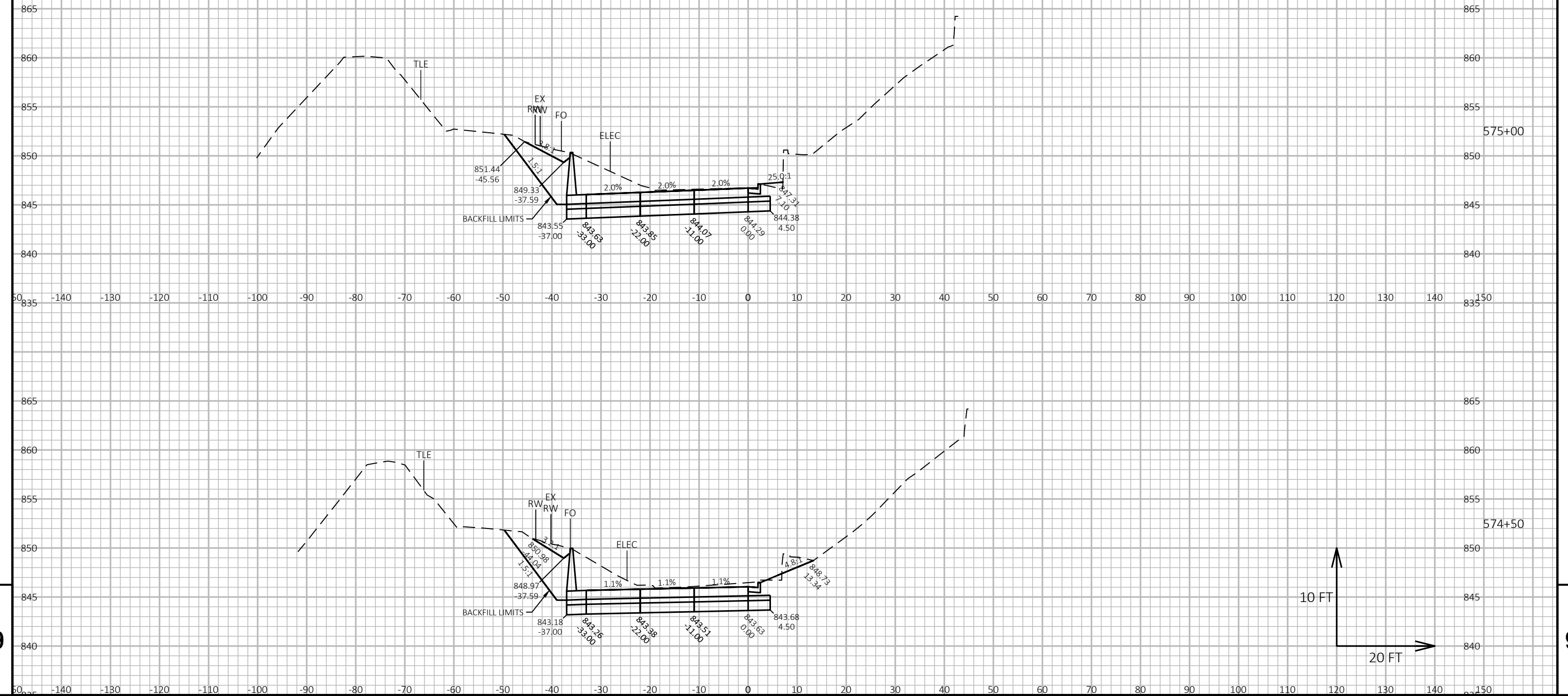
PLOT BY : BLACKWOOD, JIM

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

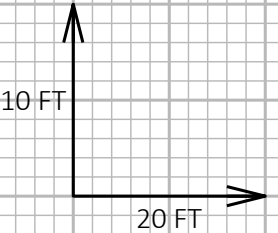
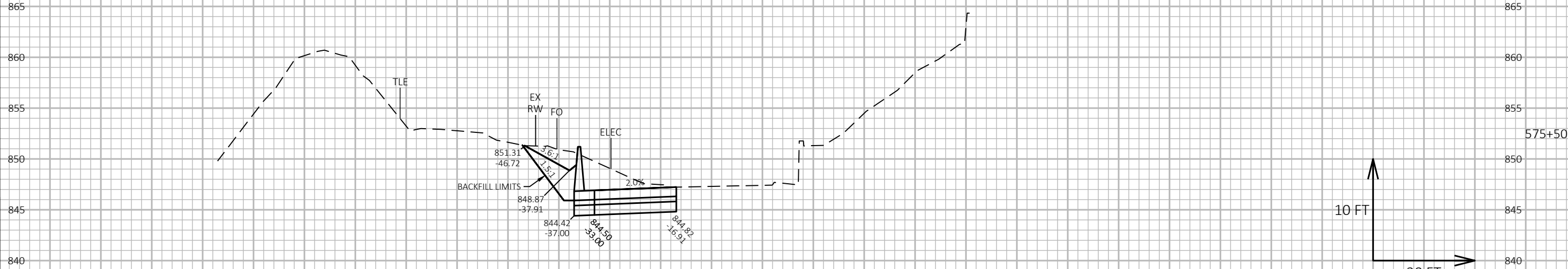
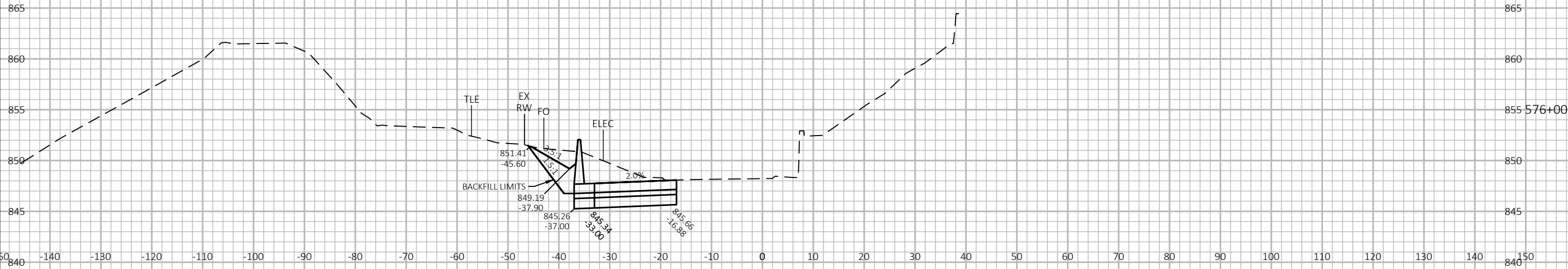
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1

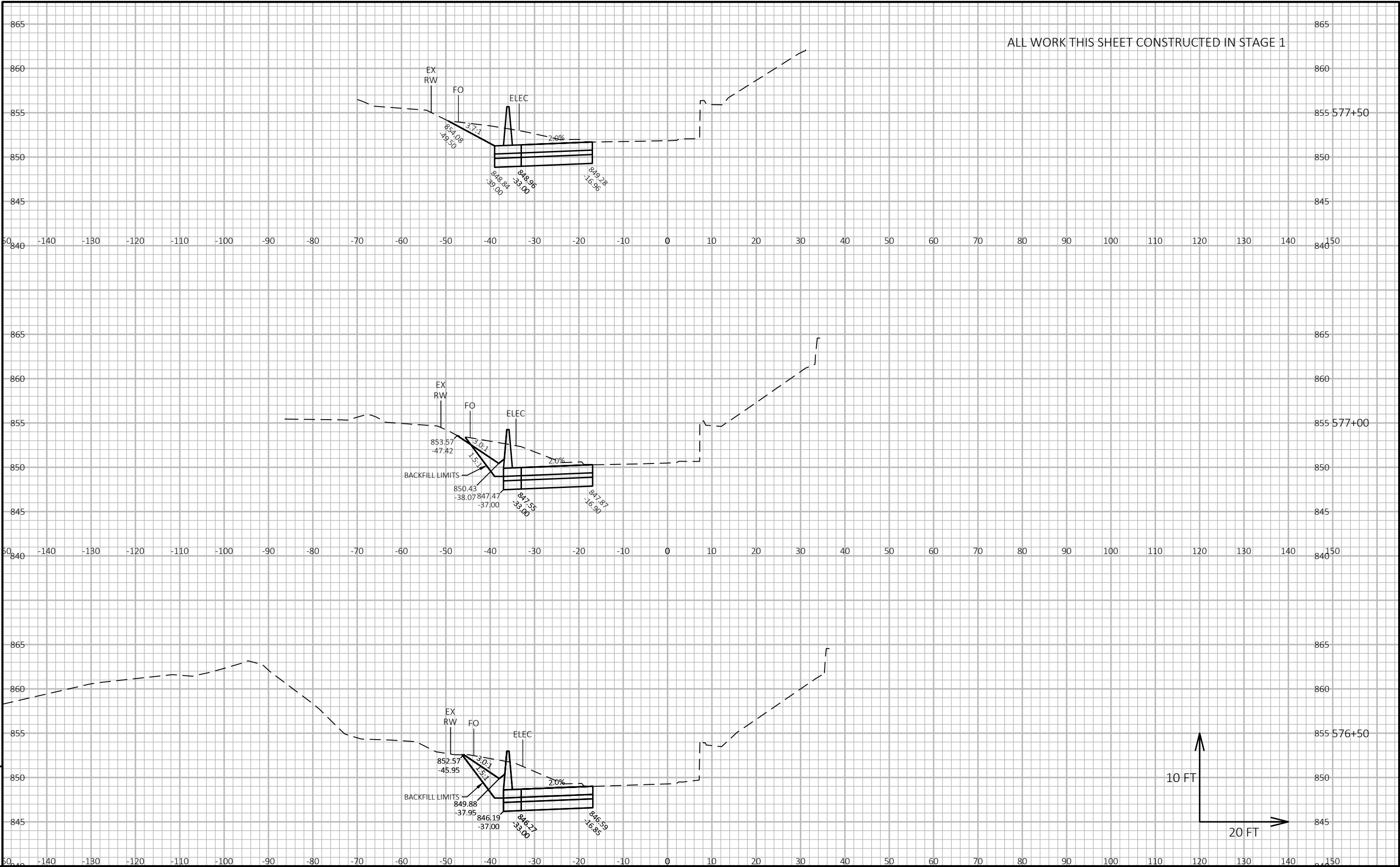


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ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



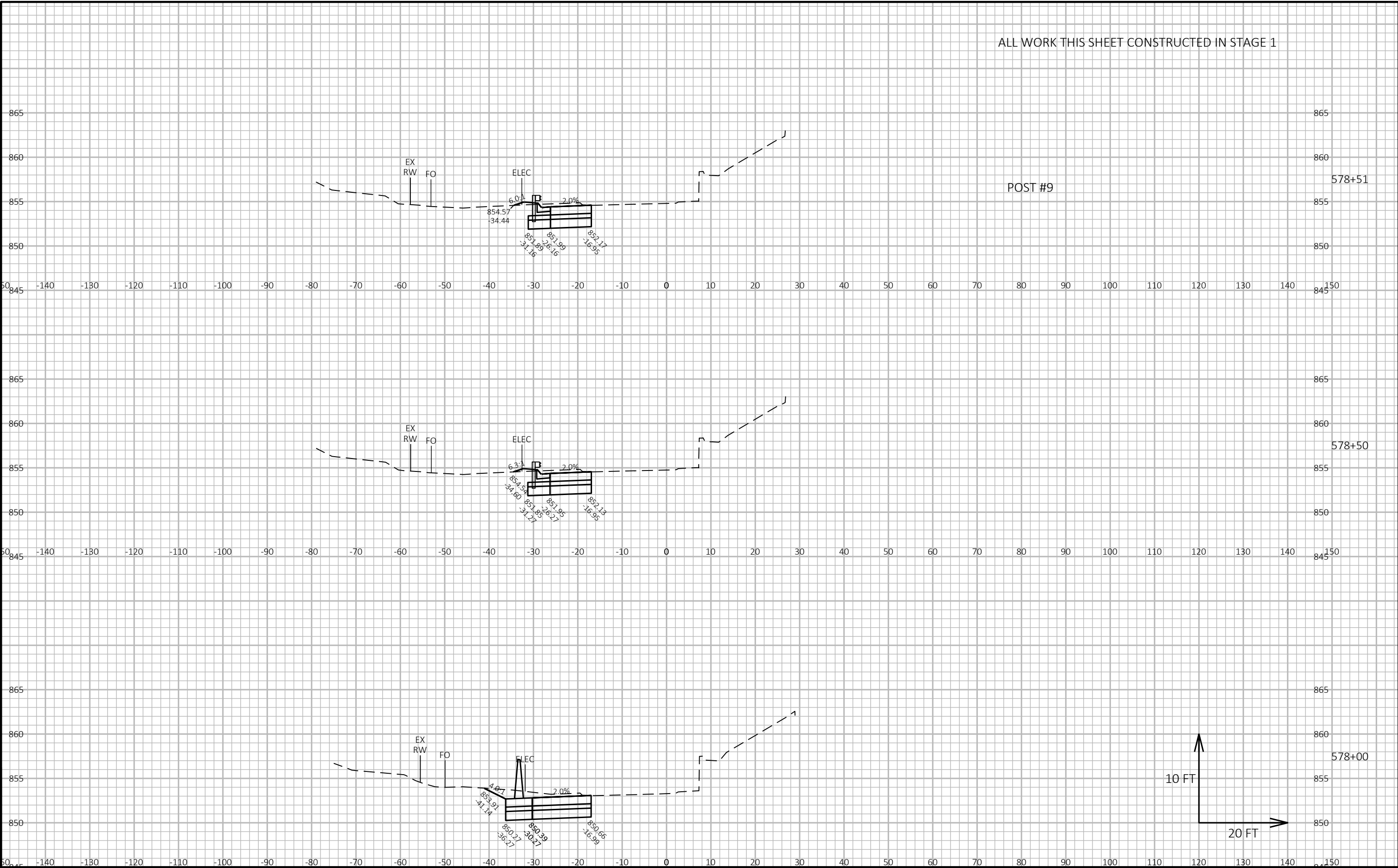


ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1

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PROJECT NO:	1060-10-72	HWY:	IH 94	COUNTY:	WAUKESHA	CROSS SECTIONS:	RAMP C	SHEET	216	E
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ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1

POST #9

578+51

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578+00

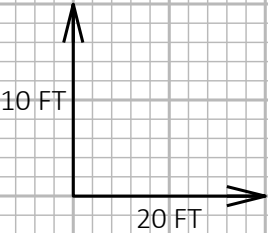
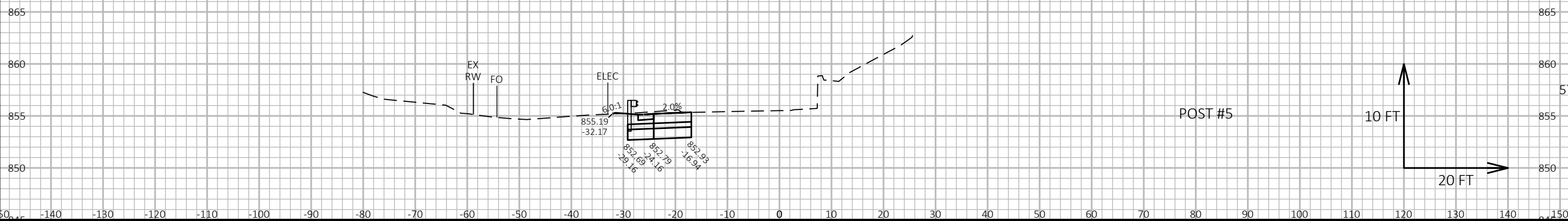
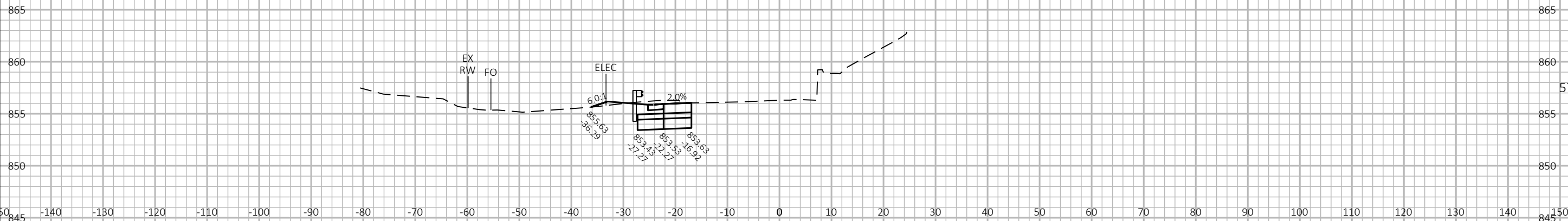
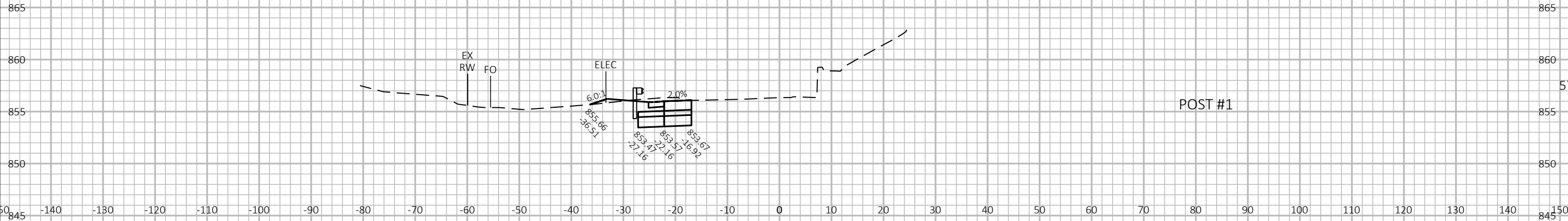
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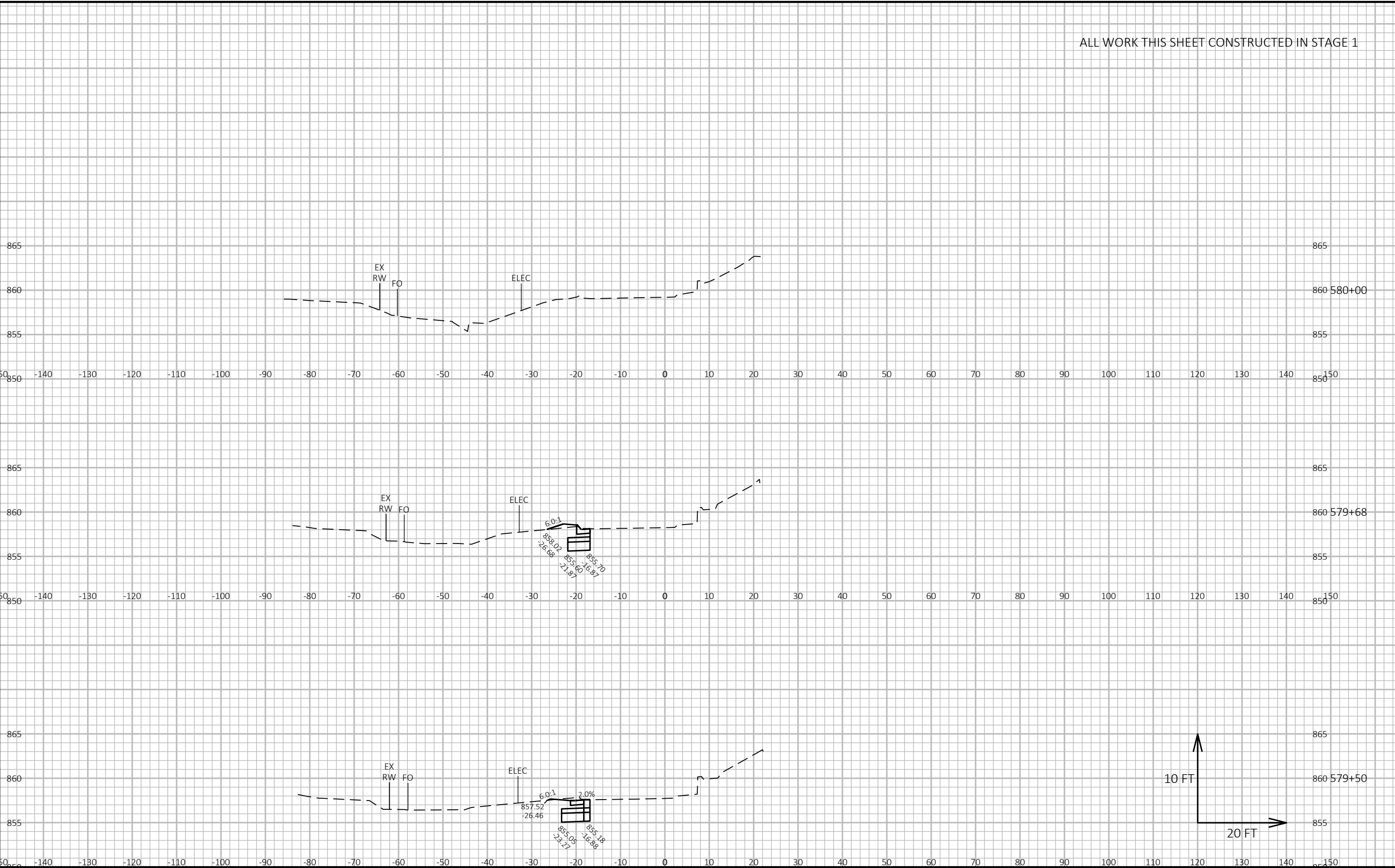
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



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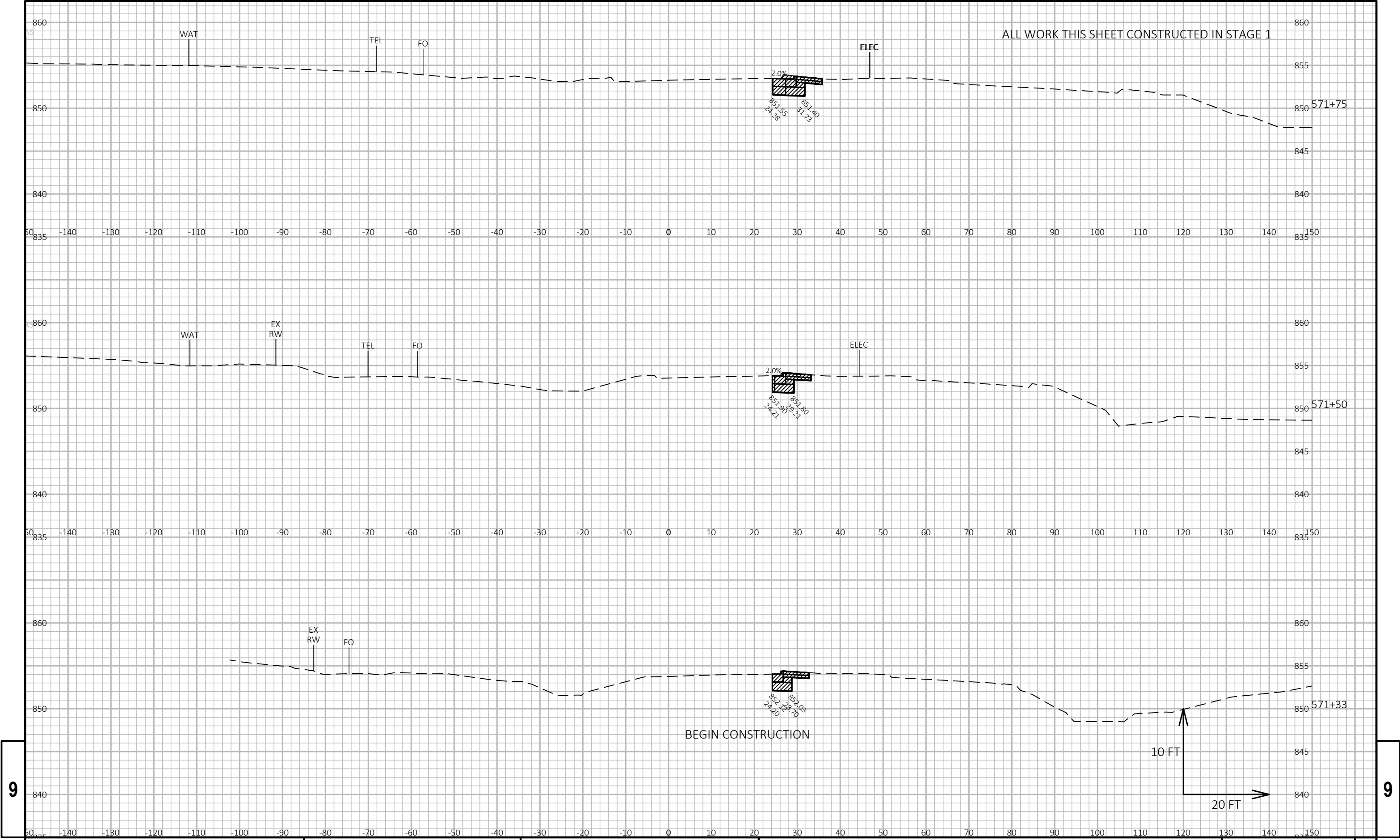
ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



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PROJECT NO: 1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	CROSS SECTIONS: RAMP C	SHEET 219	E
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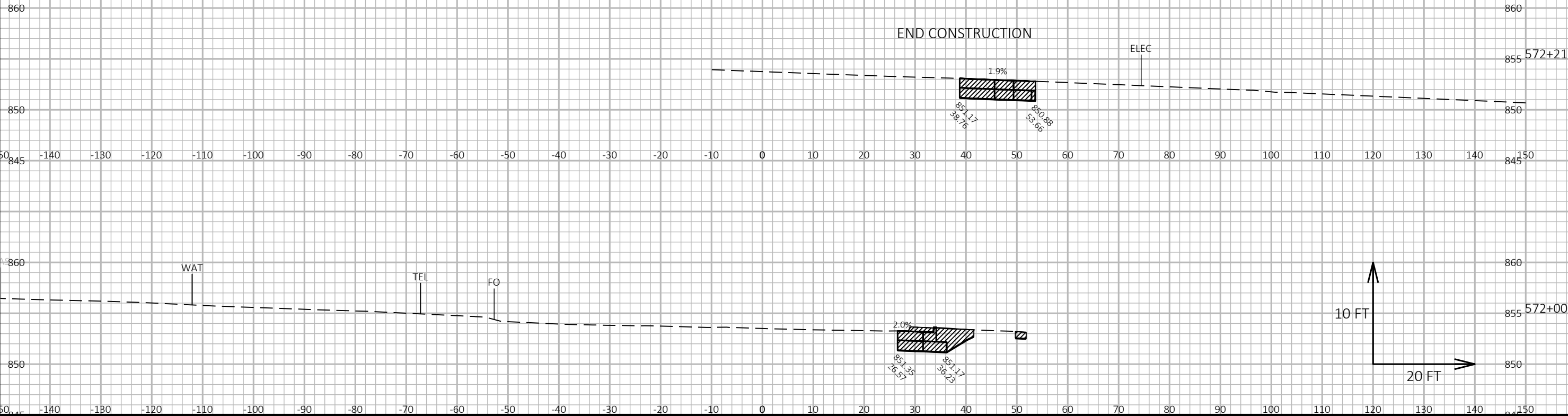


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PROJECT NO:	1060-10-72	HWY: IH 94	COUNTY: WAUKESHA	CROSS SECTIONS:	RAMP E	SHEET	220	E
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ALL WORK THIS SHEET CONSTRUCTED IN STAGE 1



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