

PROJECT ID: 5436-00-77
WITH: N/A

COUNTY: LA CROSSE

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 =



PROJECT LOCATION

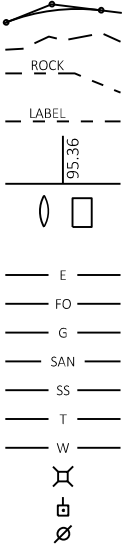
DESIGN DESIGNATION

A.A.D.T.	2026	=	1,300
A.A.D.T.	2046	=	1,590
D.H.V.		=	185
D.D.		=	60/40
T.		=	22.5%
DESIGN SPEED		=	55 MPH
ESALS		=	500,000

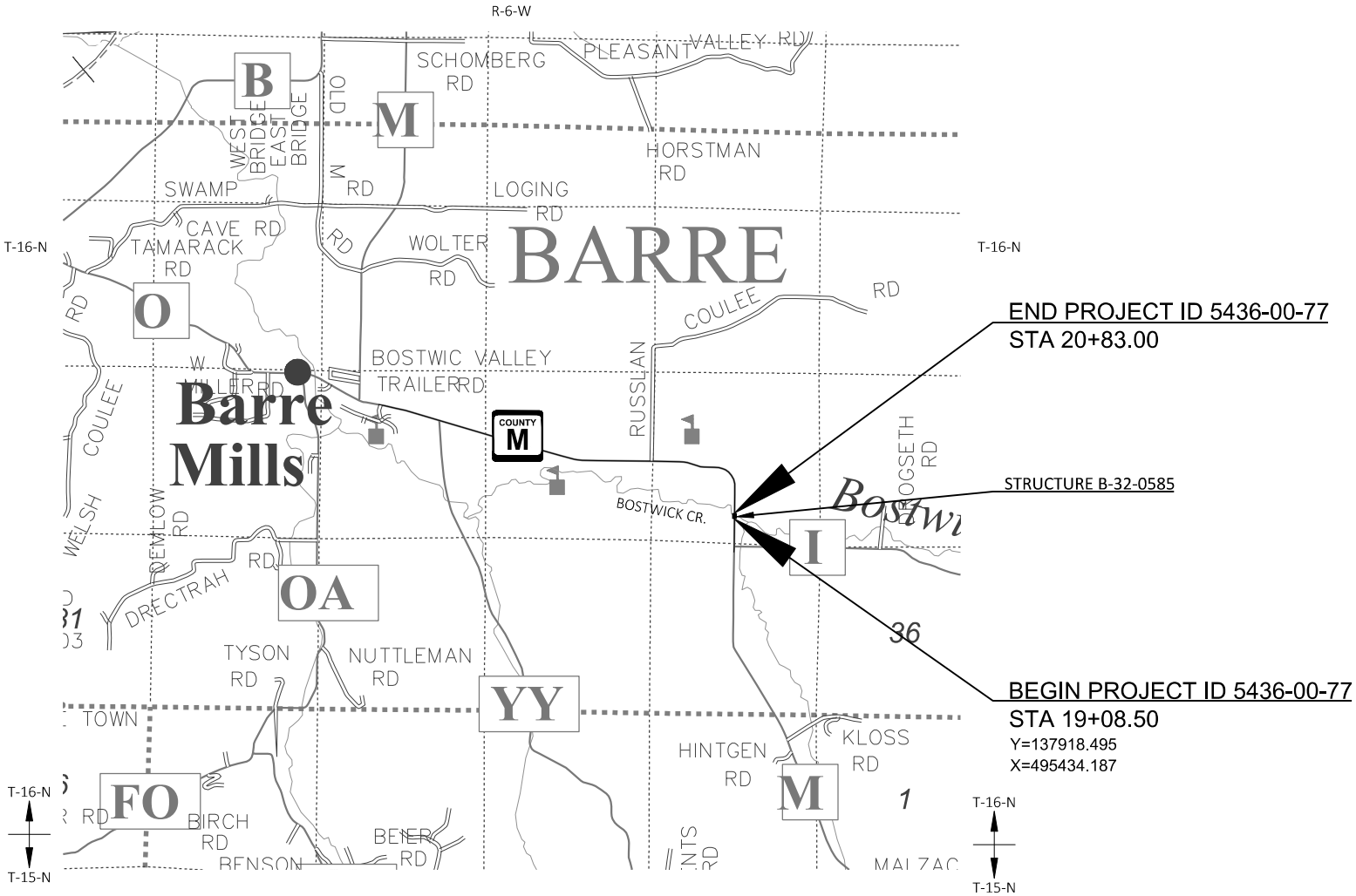
CONVENTIONAL SYMBOLS

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 = 0.033 MILES



HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), LA CROSSE 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 12B.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

CTH I - CTH YY (CTH M)

BOSTWICK CREEK BRIDGE B-32-0585

CTH M

LA CROSSE COUNTY

STATE PROJECT NUMBER

5436-00-77

60% PLANS

For Review

07/29/2024 1:03:19 PM

STATE PROJECT

5436-00-77

FEDERAL PROJECT

PROJECT

CONTRACT

ACCEPTED FOR

COUNTY of LA CROSSE

(Date) (Signature) HIGHWAY COMMISSIONER

ORIGINAL PLANS PREPARED BY



DATE: (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	CBS SQUARED, INC.
Designer	CBS SQUARED, INC.
Project Manager	
Regional Examiner	
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
DATE: (Signature)

E

GENERAL NOTES

WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

THE CONTRACTOR'S HMA PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN THE DRIVING, TURNING, PASSING OR PARKING LANE.

DISTURBED AREAS WITHIN THE RIGHT OF WAY EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, AND MULCHED OR EROSION MAT.

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

CONTROL POINT TABLE			
3/4-INCH REBAR			
POINT NO.	ELEVATION	Y	X
2	743.9500	138054.1470	495418.6920
3	743.8300	137963.5760	495450.1890

BRIGHTSPEED - COMMUNICATION

333 NORTH FRONT STREET
LA CROSSE, WI 54601
BRIAN STELPLUGH
(608) 615-4136 (OFFICE)
(608) 780-1238 (CELL)
BRIAN.STELPLUGH@LUMEN.COM

CHARTER - COMMUNICATION

1228 12TH AVE SOUTH
ONALASKA, WI 54650
CORY LENZ
(608) 783-8122 (OFFICE)
(715) 519-0079 (CELL)
CORY.LENZ@CHARTER.COM

XCEL ENERGY - ELECTRICITY DISTRIBUTION

1414 W HAMILTON AVE
EAU CLAIRE, WI 54702
JOHN KELSER
(715) 737-6020
JOHN.KELSER@XCELENERGY.COM

LA CROSSE COUNTY

JOSEPH LANGEBERG
HIGHWAY COMMISSIONER
301 CARLSON ROAD
WEST SALEM, WI 54669
(608) 786-3813 (OFFICE)
JLANGEBERG@LACROSSECOUNTY.ORG

WISCONSIN DNR

KAREN KALVELAGE
DNR LIAISON
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
(608) 406-7880
KAREN.KALVELAGE@WISCONSIN.GOV

DESIGN CONSULTANT

ROSS JOHNSON
CBS SQUARED, INC.
770 TECHNOLOGY WAY
CHIPPEWA FALLS, WI 54729
(715) 861-2236 OFFICE
(715) 579-4179 MOBILE
RJOHNSON@CBSSQUAREDINC.COM

WISDOT CONTACT (SW REGION)

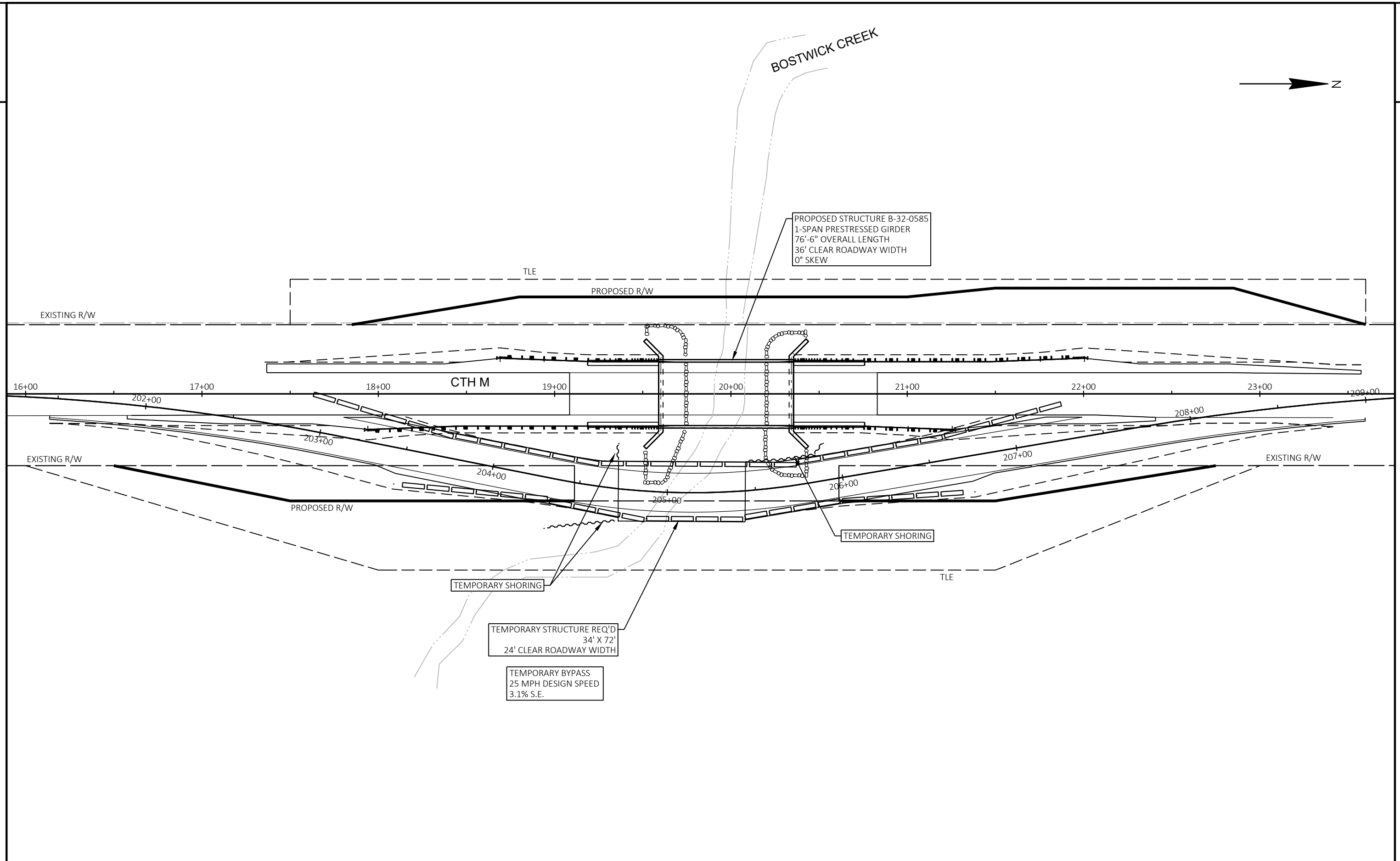
RANDY BYOM
3550 MORMON COULEE RD
LA CROSSE, WI 54601
(608) 785-9966
RANDY.BYOM@DOT.WI.GOV

RUNOFF COEFFICIENT TABLE

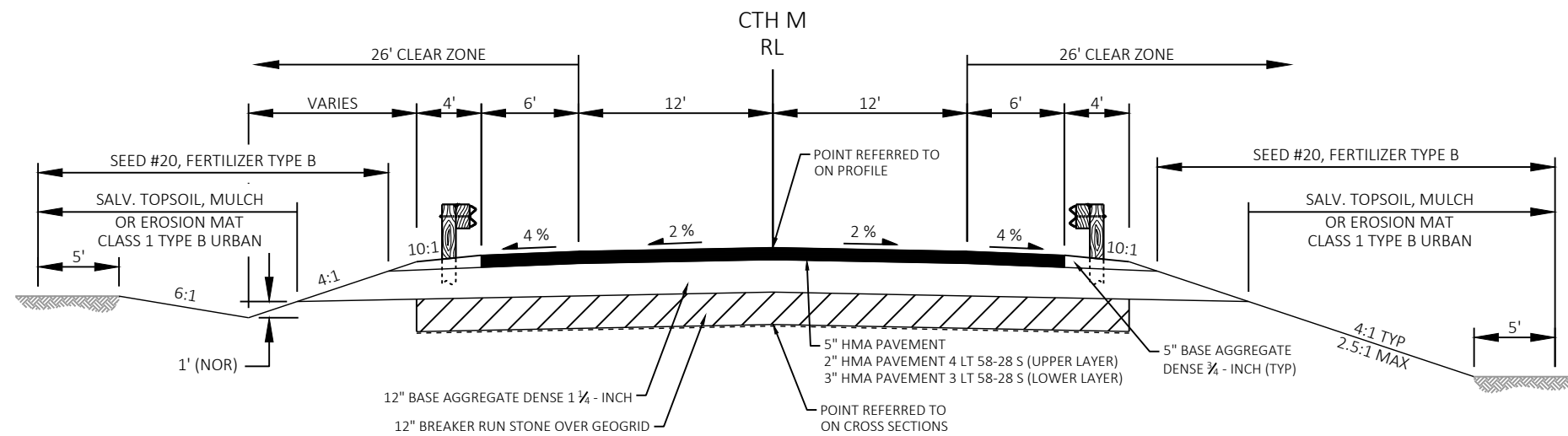
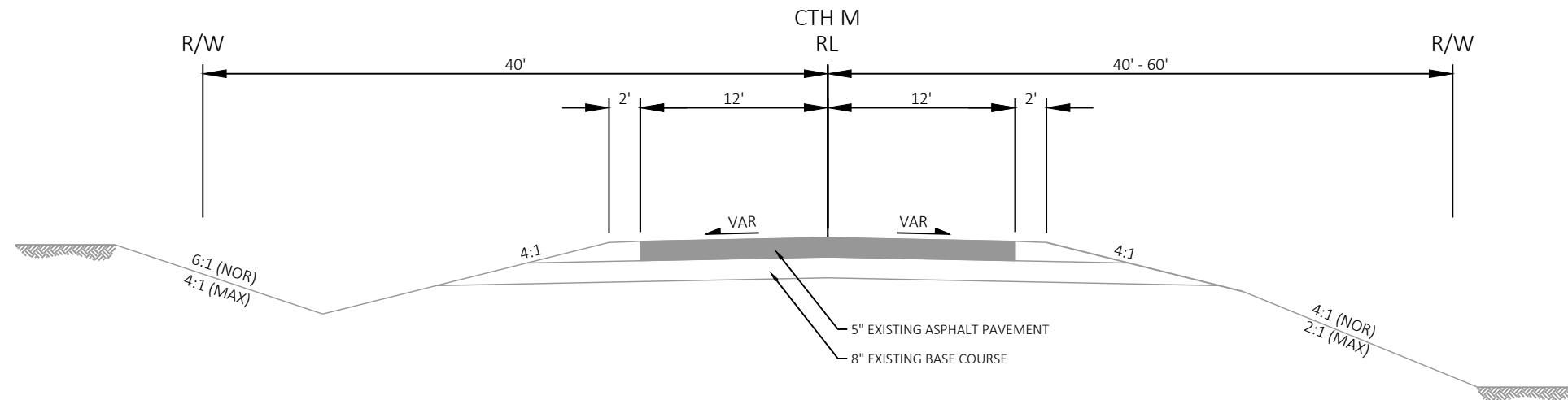
A	HYDROLOGIC SOIL GROUP											
	B C									D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26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

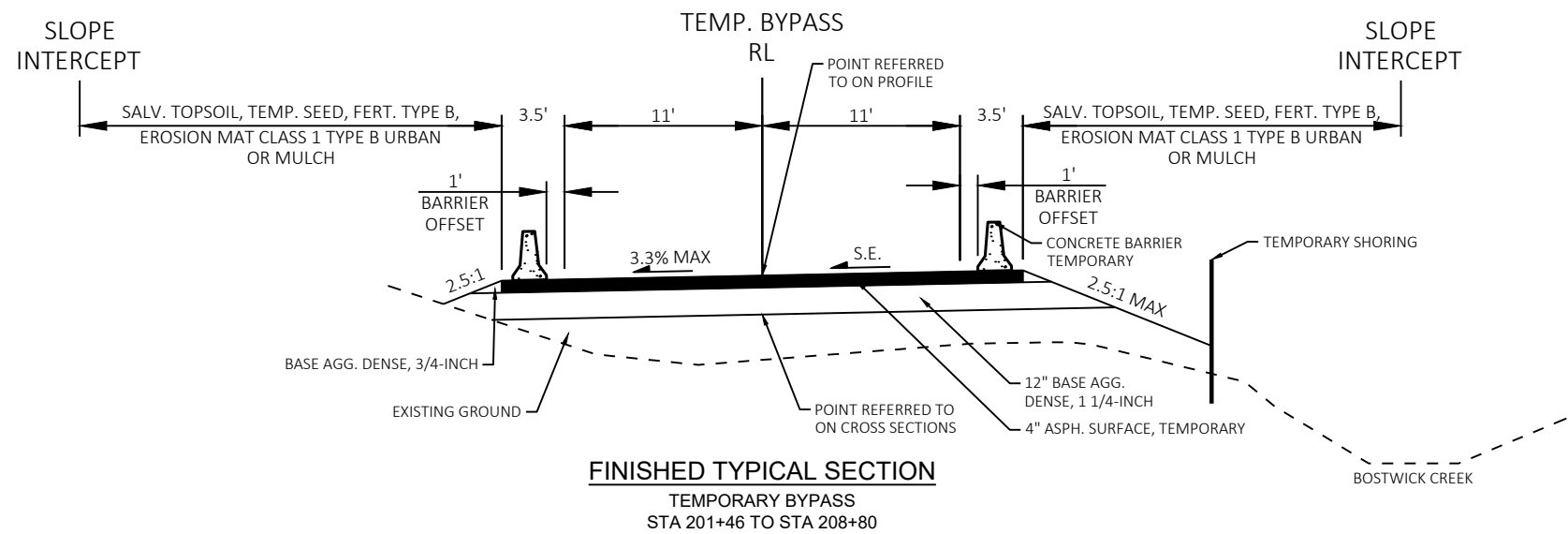
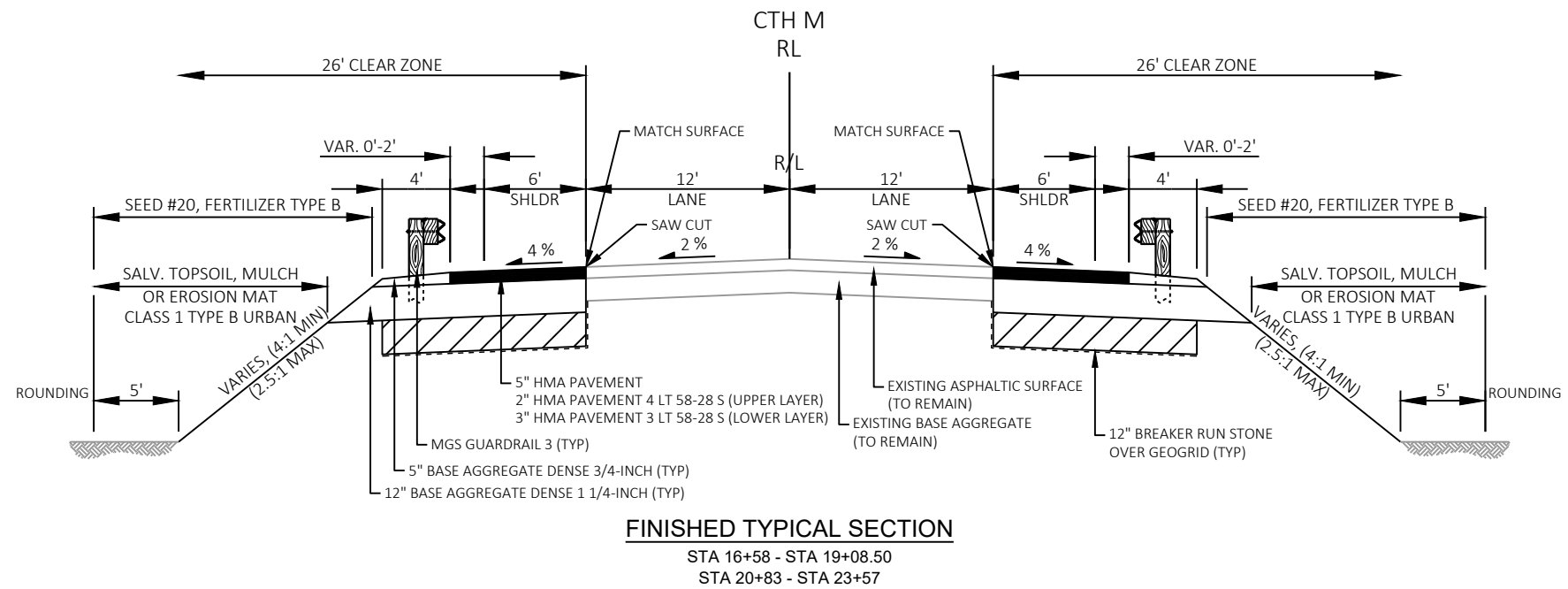
TOTAL PROJECT AREA = 2.30 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.26 ACRES

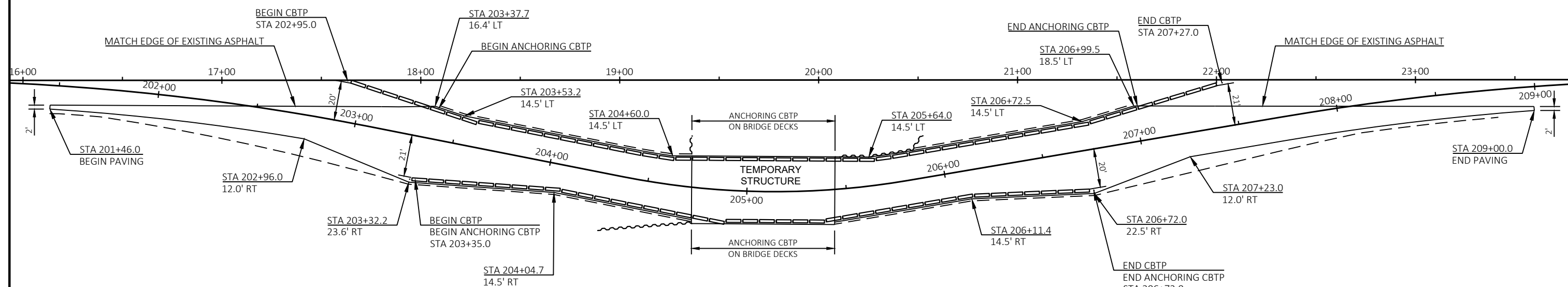
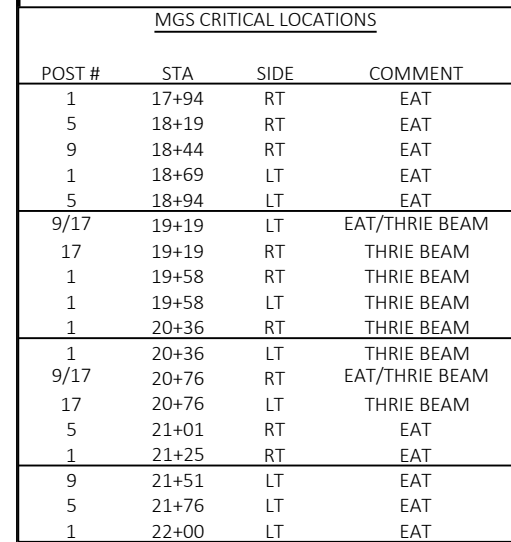




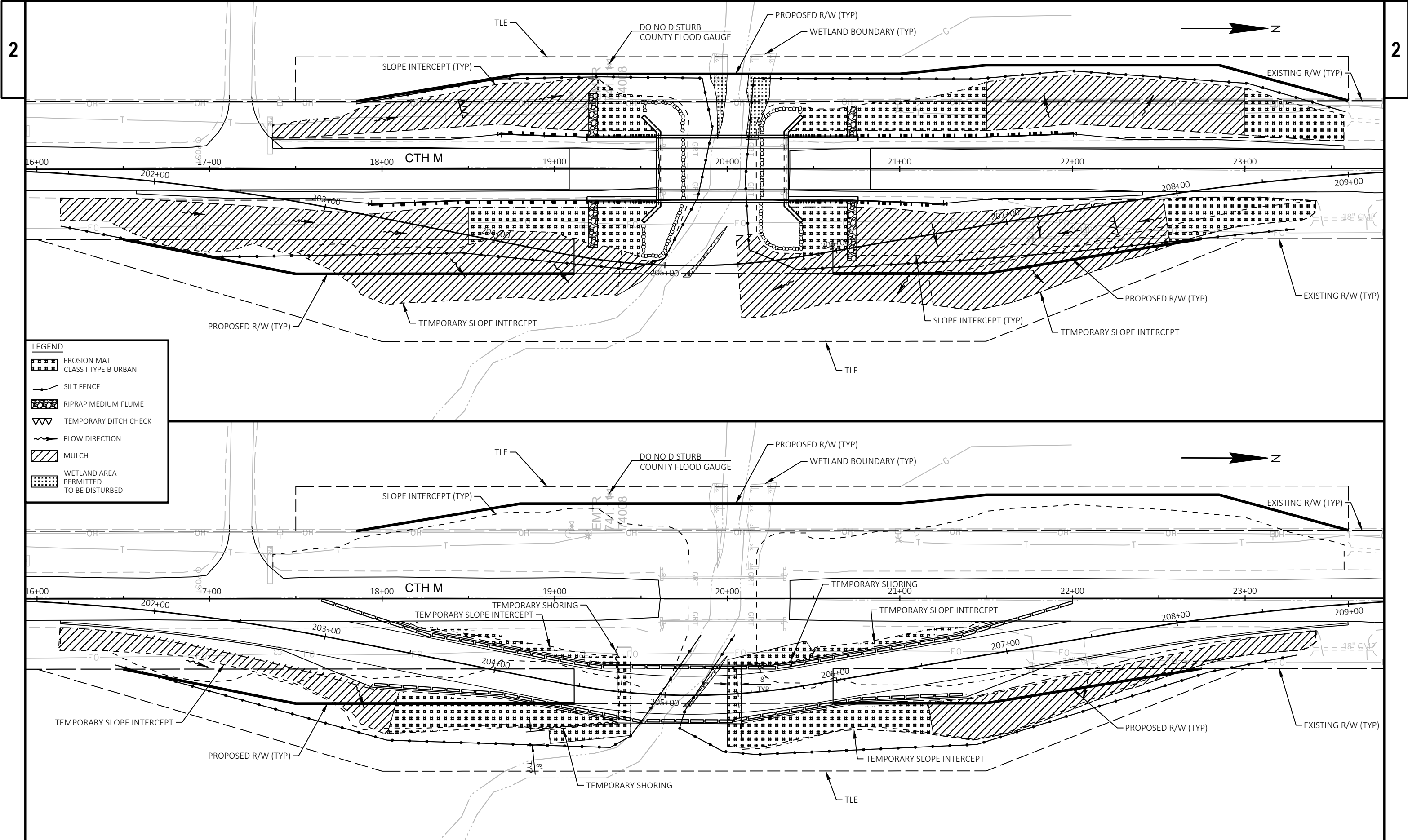
PROJECT NO: 5436-00-77	HWY: CTH M	COUNTY: LA CROSSE	PROJECT OVERVIEW	SHEET	E
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CBTP: CONCRETE BARRIER TEMPORARY PRECAST



PROJECT NO: 5436-00-77	HWY: CTH M	COUNTY: LA CROSSE	EROSION CONTROL	SHEET E
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GENERAL NOTES FOR TRAFFIC CONTROL

FOR TRAFFIC CONTROL OF STAGE 1 AND STAGE 3 OF CONSTRUCTION SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION," AND "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY."

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

A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE WORK AREAS IF WARRANTED BY CONDITIONS OR AS DIRECTED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS NOTED.

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

EXISTING AND ADVANCE WARNING TRAFFIC SIGNS MAY REQUIRE RELOCATION DURING CONSTRUCTION STAGING AND ARE INCIDENTAL TO THE CONTRACT.

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) ARE TO BE PLACED AT PLAN LOCATIONS ONE WEEK PRIOR TO THE START OF CONSTRUCTION.

TRAFFIC CONTROL SIGNS - PCMS MESSAGES			
	PRIOR TO CONSTRUCTION		
PCMS LOCATION	PHASE 1	PHASE 2	PHASE 3
	ROAD CLOSED	AT CTH I	BEGINS (DATE)
	ROAD CLOSED	AT CTH I	BEGINS (DATE)

TYPE III BARRICADE

TYPE III BARRICADE WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

TYPE A WARNING LIGHT (FLASHING)

CONCRETE BARRIER TEMPORARY PRECAST

MARKING REMOVAL LINE

WORK AREA

TEMPORARY RAISED PAVEMENT MARKER (TWO WAY REFLECTOR)

2

CONSTRUCTION STAGING OPERATIONS

STAGE 1

CONSTRUCTION OPERATIONS:

- INSTALL ADVANCED WARNING SIGNS AND DETOUR
- CONSTRUCT TEMPORARY BYPASS

TRAFFIC OPERATIONS:

- TRAFFIC WILL BE CONTROLLED BY FLAGGING OPERATIONS AND SHOULDER CLOSURES ON CTH M

STAGE 2

CONSTRUCTION OPERATIONS:

- CONSTRUCT B-32-0585
- CONSTRUCT ROADWAY APPROACHES

TRAFFIC OPERATIONS:

- BIDIRECTIONAL TRAFFIC WILL BE MAINTAINED USING THE TEMPORARY BYPASS

STAGE 3

CONSTRUCTION OPERATIONS - STAGE 3A:

- COMPLETE GUARD RAIL GRADING AND GUARD RAIL
- REMOVE THE TEMPORARY BYPASS

TRAFFIC OPERATIONS:

- TRAFFIC WILL BE CONTROLLED BY FLAGGING OPERATIONS AND SHOULDER CLOSURES ON CTH M

PROJECT NO: 5436-00-77

HWY: CTH M

COUNTY: LA CROSSE

TRAFFIC CONTROL - NOTES & LEGEND

SHEET

E

FILE NAME : P:\LACRO\21008 - CTH M (CTH O TO CTH I)\CAD\C3D\SHEETSP\LAN - BRIDGE\025100-TC.DWG
LAYOUT NAME - 00 - NOTES

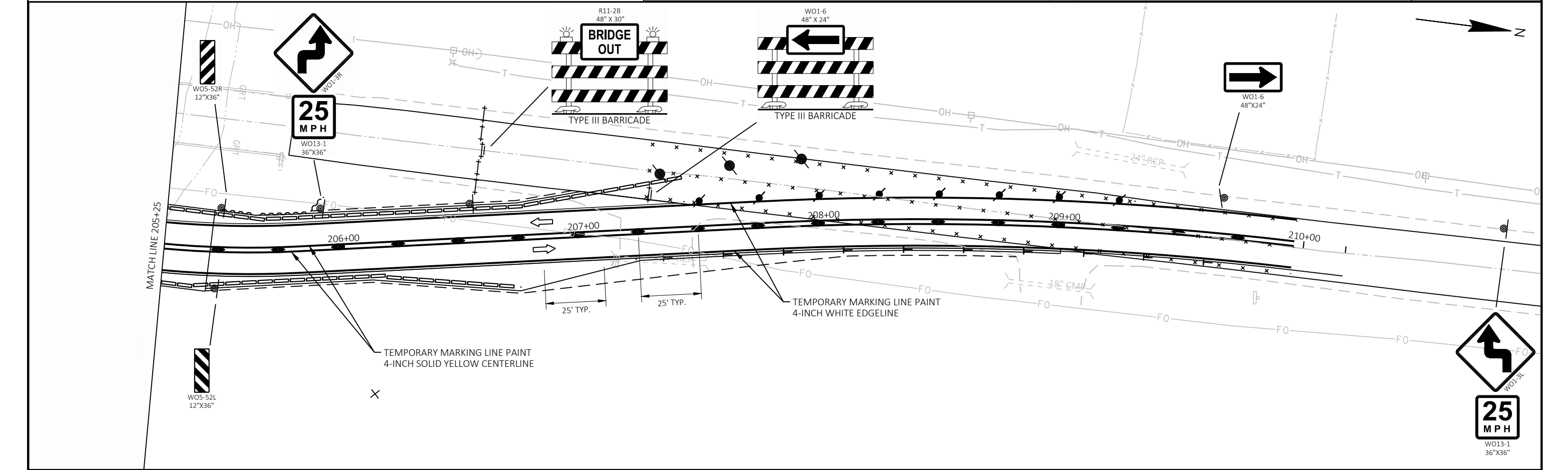
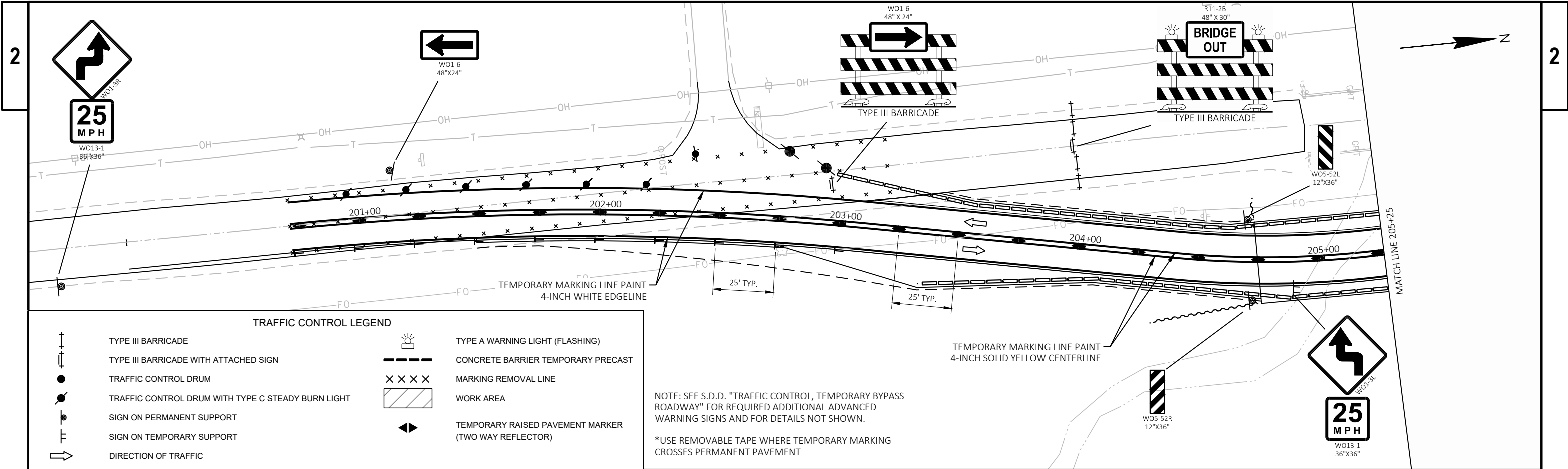
PLOT DATE : 7/16/2024 8:53 AM

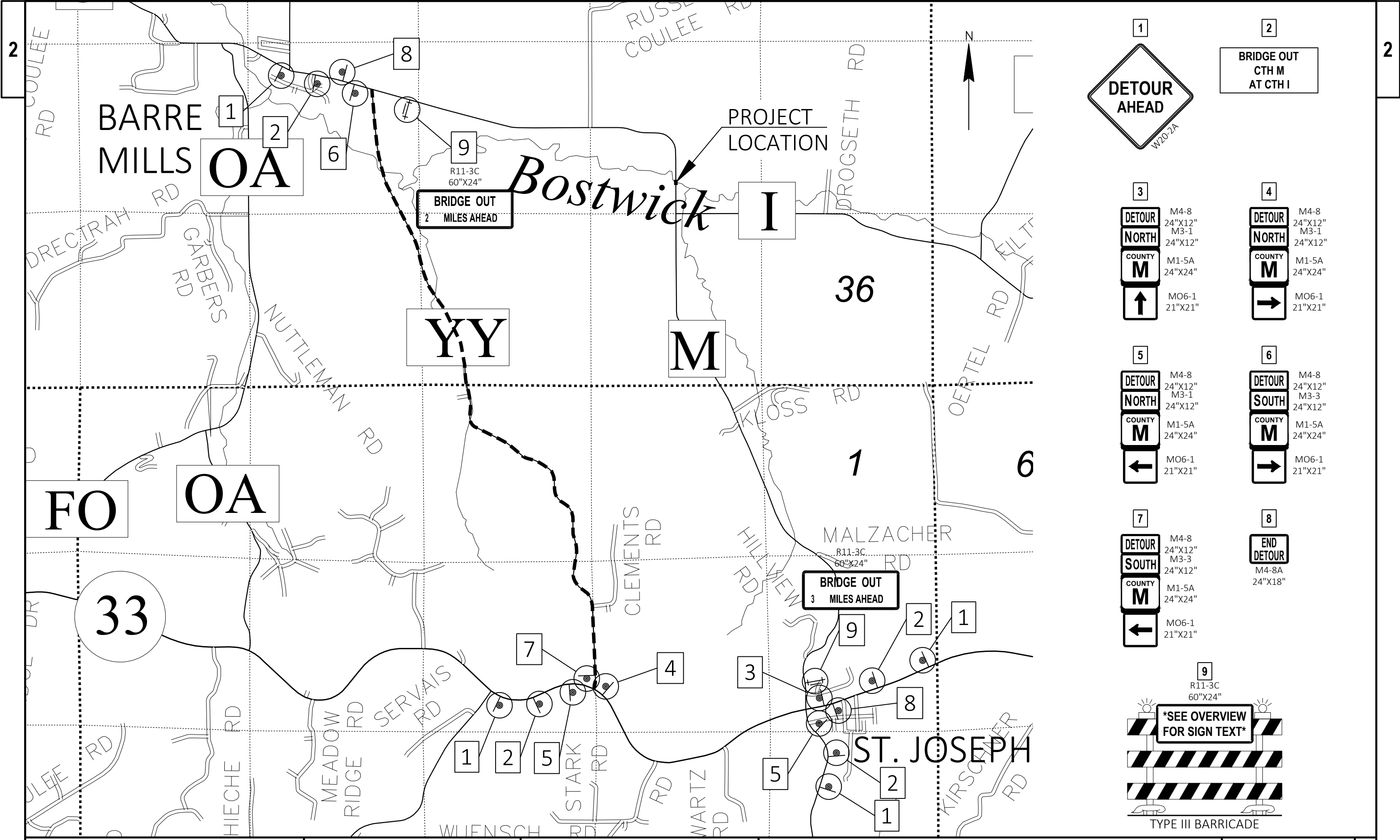
PLOT BY : CHRIS BURNS

PLOT NAME :

PLOT SCALE : #####

WISDOT/CADDs SHEET 42





1

DETOUR
AHEAD

W20-2A

2

BRIDGE OUT
CTH M
AT CTH I

3

DETOUR
NORTH

COUNTY
M

↑

M4-8
24"X12"
M3-1
24"X12"
M1-5A
24"X24"
MO6-1
21"X21"

4

DETOUR
NORTH

COUNTY
M

→

M4-8
24"X12"
M3-1
24"X12"
M1-5A
24"X24"
MO6-1
21"X21"

5

DETOUR
NORTH

COUNTY
M

←

M4-8
24"X12"
M3-1
24"X12"
M1-5A
24"X24"
MO6-1
21"X21"

6

DETOUR
SOUTH

COUNTY
M

→

M4-8
24"X12"
M3-3
24"X12"
M1-5A
24"X24"
MO6-1
21"X21"

7

DETOUR
SOUTH

COUNTY
M

←

M4-8
24"X12"
M3-3
24"X12"
M1-5A
24"X24"
MO6-1
21"X21"

8

END
DETOUR

M4-8A
24"X18"

9

R11-3C
60"X24"

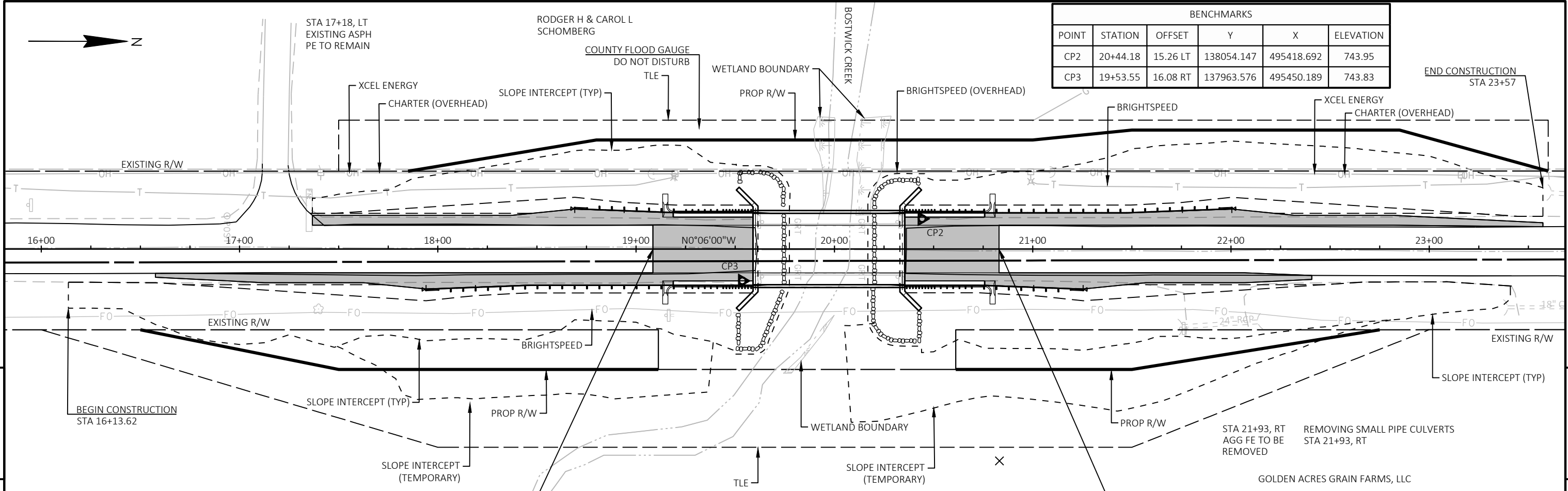
*SEE OVERVIEW
FOR SIGN TEXT*

TYPE III BARRICADE

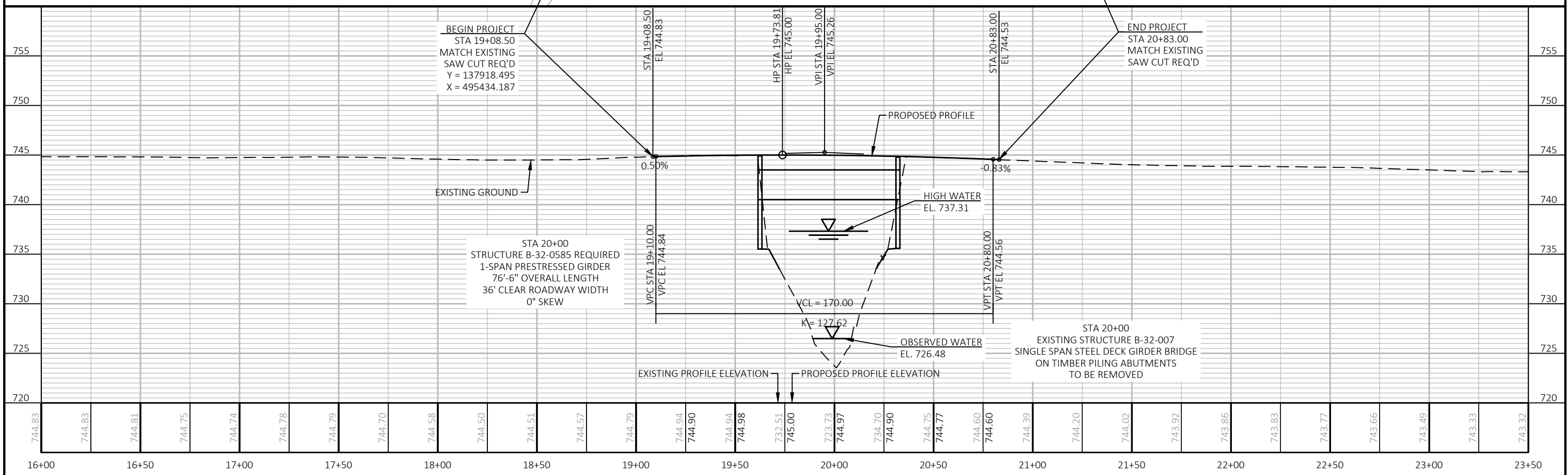
EARTHWORK SUMMARY

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	REDUCED EBS IN FILL (6)	EXPANDED EBS BACKFILL (7)	UNEXPANDED FILL	EXPANDED FILL (8)	MASS ORDINATE +/- (9)	WASTE	208.0100 BORROW	COMMENT
			CUT (2)	EBS EXCAVATION (3)			FACTOR 0.80	FACTOR 1.15		FACTOR 1.30				
DIVISION 1														
BYPASS	201+45.92/208+79.62		105	0	0	105	0	0	2,362	3,071	-2,966	0	2,966	
DIVISION 1 SUBTOTAL			105	0	0	105	0	0	2,362	3,071	-2,966	0	2,966	
DIVISION 2														
BRIDGE	16+13.62/23+57.40		2,636	448	213	2,423	358	515	711	458	1,965	1,965	0	
DIVISION 2 SUBTOTAL			2,636	448	213	2,423	358	515	711	458	1,965	1,965	0	
GRAND TOTAL			2,741	448	213	2,528	358	515	3,073	3,529	-1,001	1,965	2,966	
TOTAL COMMON EXC			3,189											

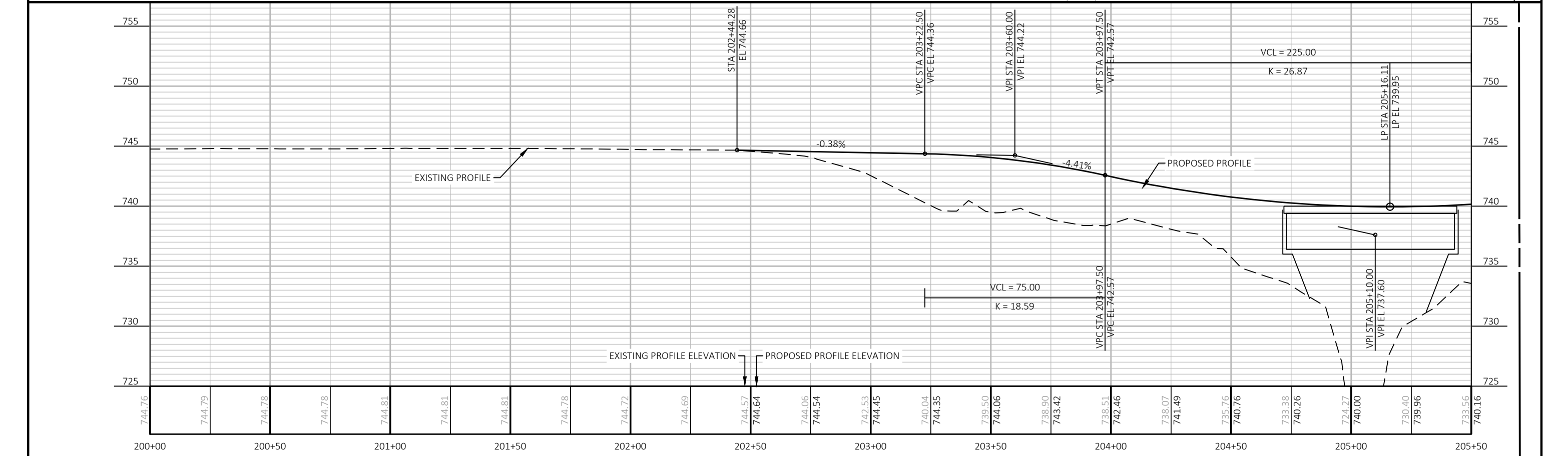
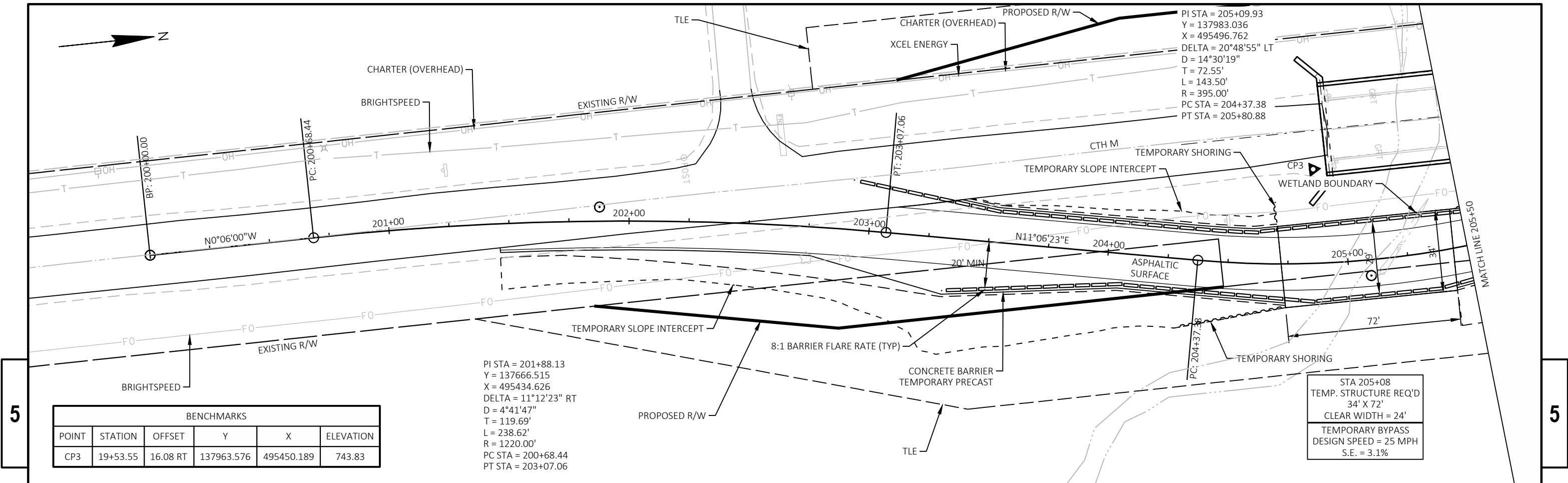
NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(6) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = .80
(7) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT BORROW MATERIAL. EBS BACKFILL FACTOR = 1.15. ITEM NUMBER 208.1100
(8) EXPANDED FILL FACTOR = 1.30
DEPENDING ON SELECTIONS: EXPANDED FILL = (UNEXPANDED FILL - REDUCED EBS) * FILL FACTOR
(9) 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.
(10) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

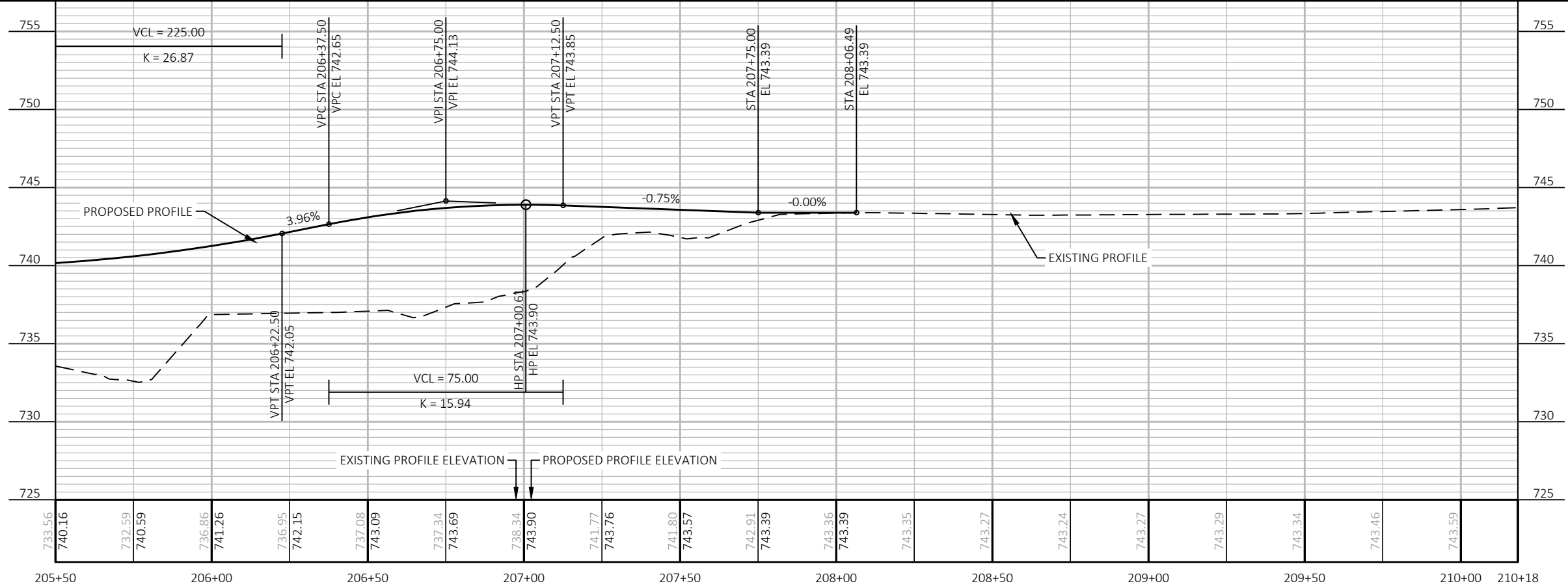
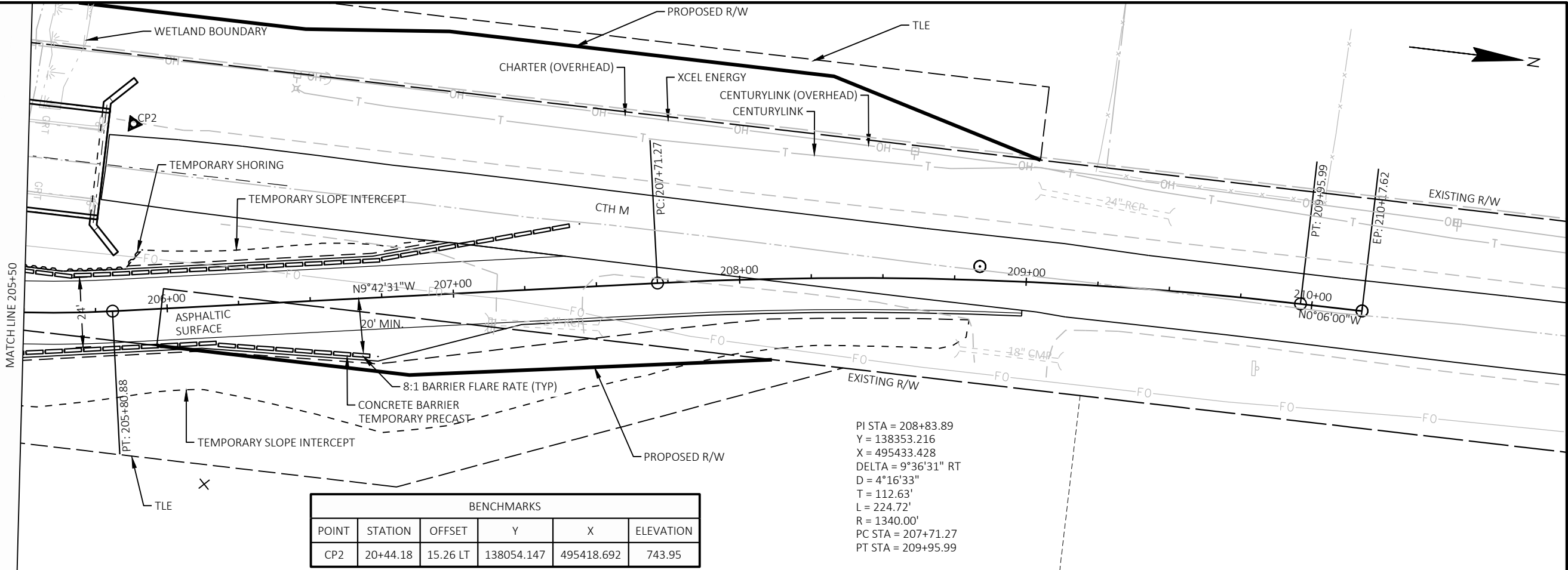


BENCHMARKS					
POINT	STATION	OFFSET	Y	X	ELEVATION
CP2	20+44.18	15.26 LT	138054.147	495418.692	743.95
CP3	19+53.55	16.08 RT	137963.576	495450.189	743.83



PROJECT NO:	5436-00-77	HWY:	CTH M	COUNTY:	LA CROSSE	PLAN AND PROFILE:	CTH M	SHEET	E
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DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF =
OPERATING RATING: RF =
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): XXX (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB $f'_c = 4,000$ PSI
ALL OTHER $f'_c = 3,500$ PSI

BAR STEEL REINFORCEMENT
GRADE 60 $f_y = 60,000$ PSI
STAINLESS, GRADE 60 $f_y = 60,000$ PSI

36-W" PRESTRESSED GIRDERS:
CONCRETE MASONRY $f'_c = 8,000$ PSI
STRANDS: 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 12 X 53 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 110 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 48'-0" LONG AT SOUTH ABUTMENT.
ESTIMATED 43'-0" LONG AT NORTH ABUTMENT.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY (REGULATORY):

$Q_{100} = 6,600$ C.F.S.
 $HW_{100} = \text{EL. } 750.56$ (RS 124)

100-YEAR FREQUENCY (DESIGN):

$Q_{100} = 3,600$ C.F.S.
 $V_{100} = 7.94$ F.P.S.
 $HW_{100} = \text{EL. } 737.98$ (RS 123)
WATERWAY AREA = 429.1 SQ. FT.
DRAINAGE AREA = 19.3 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

TRAFFIC DATA

FEATURE ON:

ADT = 3,355 (2044)
R.D.S. = 35-55 MPH

2-YEAR FREQUENCY:

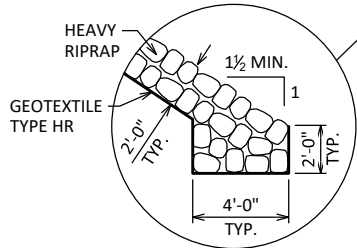
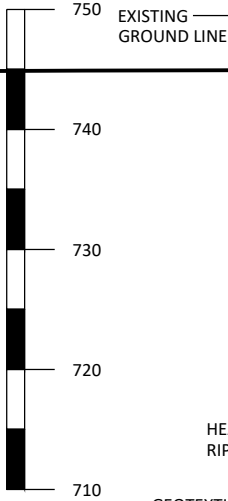
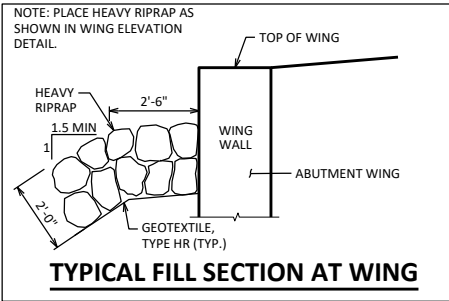
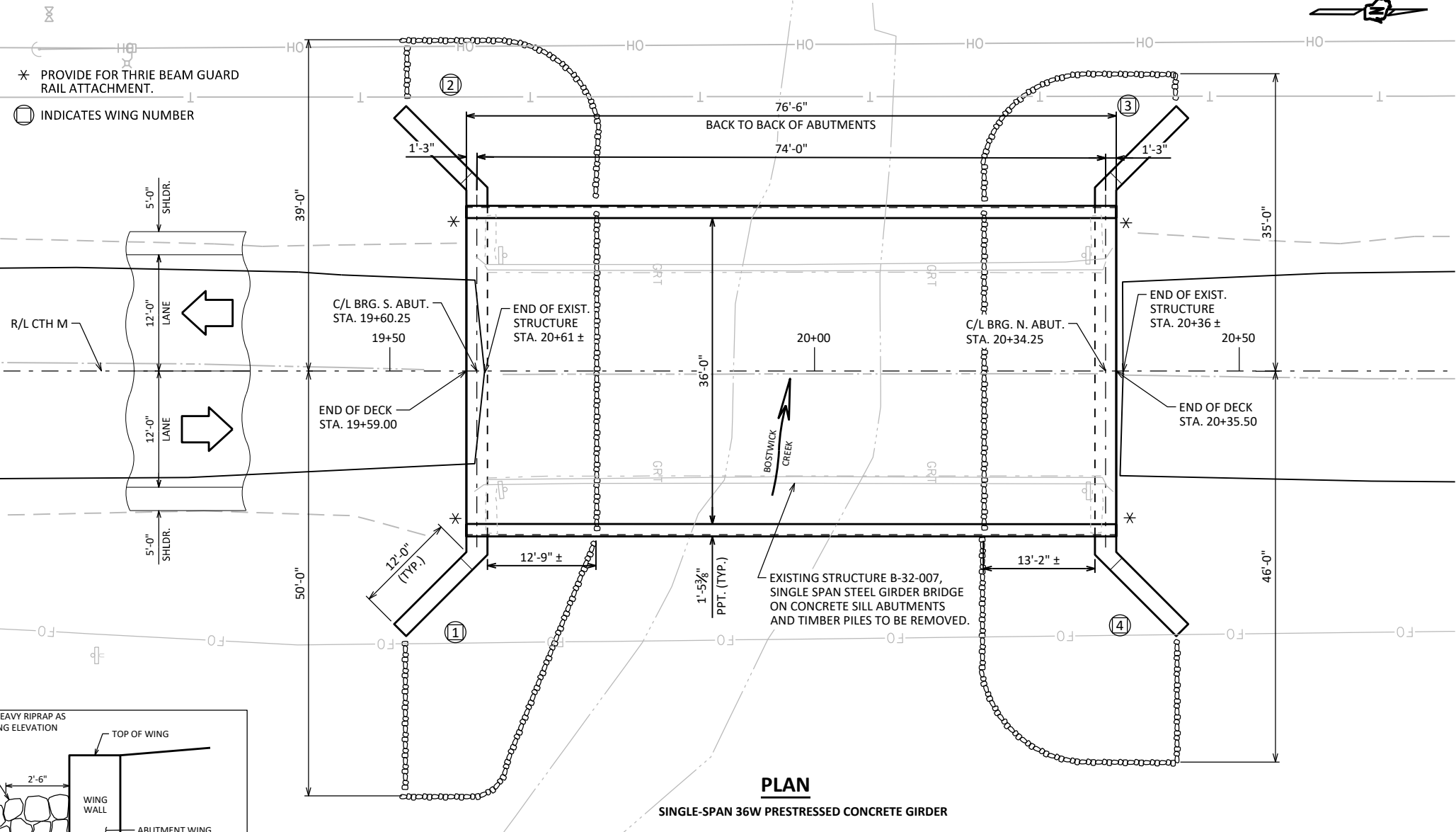
$Q_2 = 670$ C.F.S.
 $V_2 = 5.70$ F.P.S.
 $HW_2 = \text{EL. } 730.80$

5-YEAR FREQUENCY:

$Q_5 = 1,260$ C.F.S.
 $HW_5 = \text{EL. } 733.04$
WATERWAY AREA = 225 SQ. FT.

LIST OF DRAWINGS:

- GENERAL PLAN
- CROSS SECTION & QUANTITIES
- SUBSURFACE EXPLORATION



STRUCTURE DESIGN CONTACTS:
BUREAU OF STRUCTURES: AARON BONK
CONSULTANT: MATT BUCKLI

608-261-0261
608-443-0441

NO.	DATE	REVISION	BY
Mead & Hunt 2440 Deming Way Middleton, WI 53562 phone: 608-273-6380 meadhunt.com			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED _____ CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-32-585			
CTH M OVER BOSTWICK CREEK			
COUNTY	LA CROSSE	TOWN	BARRE
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATION			
DESIGNED BY	DESIGNED CK'D	DRAWN JLA	PLANS CK'D JLA
MJB			
GENERAL PLAN			SHEET 1 OF 3

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-32-585" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

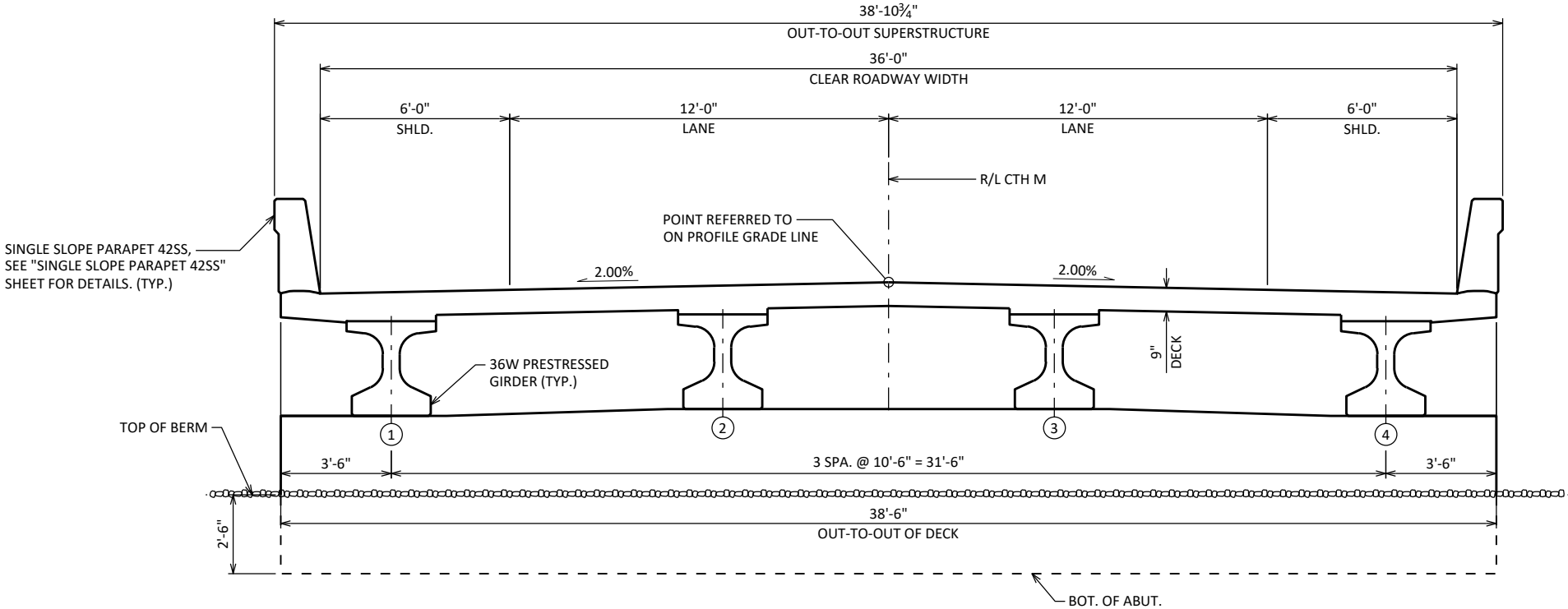
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

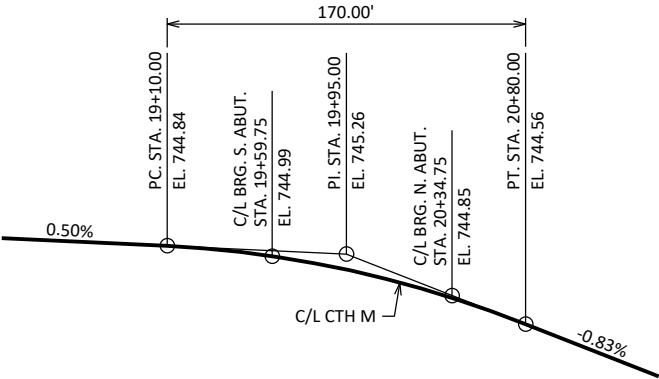
THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE "36W PRESTRESSED GIRDER DETAILS 2" SHEET.

NEW SOUTH ABUTMENT IS LOCATED ON TOP OF THE EXISTING SOUTH ABUTMENT. EXISTING ABUTMENT IS SUPPORTED ON TIMBER PILING WITH UNKNOWN CONDITION. THERE IS A POTENTIAL FOR ANY EXISTING PILING LEFT IN PLACE TO CONFLICT WITH THE NEW PILING. SEE THE ABUTMENT PLAN SHEETS FOR ALLOWABLE MOVEMENT OF PILING AND APPROXIMATE EXISTING PILE LOCATIONS.



SECTION THRU ROADWAY

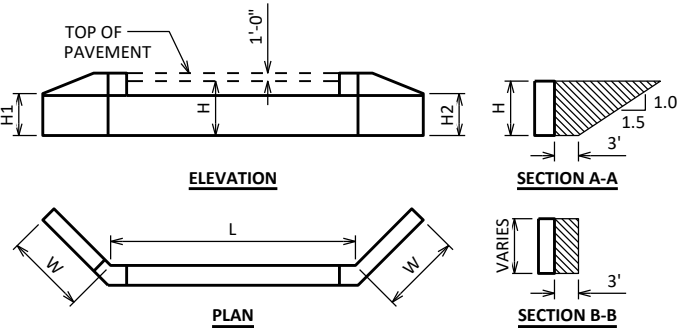
LOOKING UPSTATION
(PILING NOT SHOWN FOR CLARITY)



PROFILE GRADE LINE - CTH M

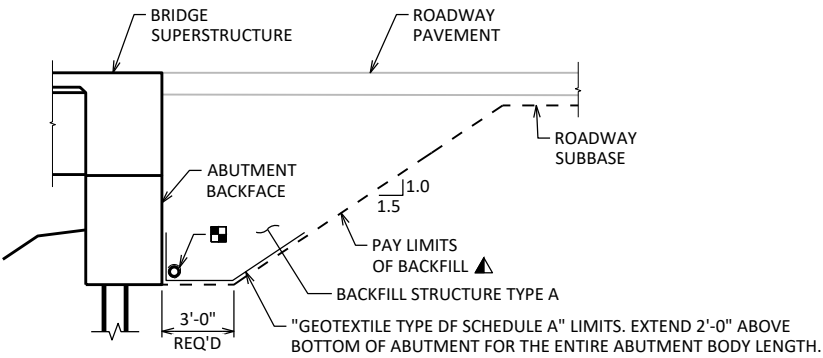
TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER	WEST ABUT.	EAST ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-32-007	EACH	-----	-----	-----	1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-32-585	EACH	-----	-----	-----	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	-----			
502.0100	CONCRETE MASONRY BRIDGES	CY				
502.3200	PROTECTIVE SURFACE TREATMENT	SY		-----	-----	
502.3210	PIGMENTED SURFACE SEALER	SY		-----	-----	
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF		-----	-----	
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	-----			
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB				
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-----			
506.4000	STEEL DIAPHRAGMS B-32-585	EACH		-----	-----	
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	-----			
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	-----			
606.0300	RIPRAP HEAVY	CY	-----			
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	-----			
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH				
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	-----			
645.0120	GEOTEXTILE TYPE HR	SY	-----			
	NON-BID ITEMS					
	FILLER	SIZE	-----	-----	-----	1/2" , 3/4"



ABUTMENT BACKFILL DIAGRAM

L = ABUTMENT BODY LENGTH AT BACKFACE (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
H1 = WING 1 HEIGHT AT TIP (FT)
H2 = WING 2 HEIGHT AT TIP (FT)
W = WING LENGTH (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
 $V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H) + (3')(0.5)(H1+H2+H+H)(W)$
 $V_{CY} = V_{CF}(EF)/27$
 $V_{TON} = V_{CY}(2.0)$



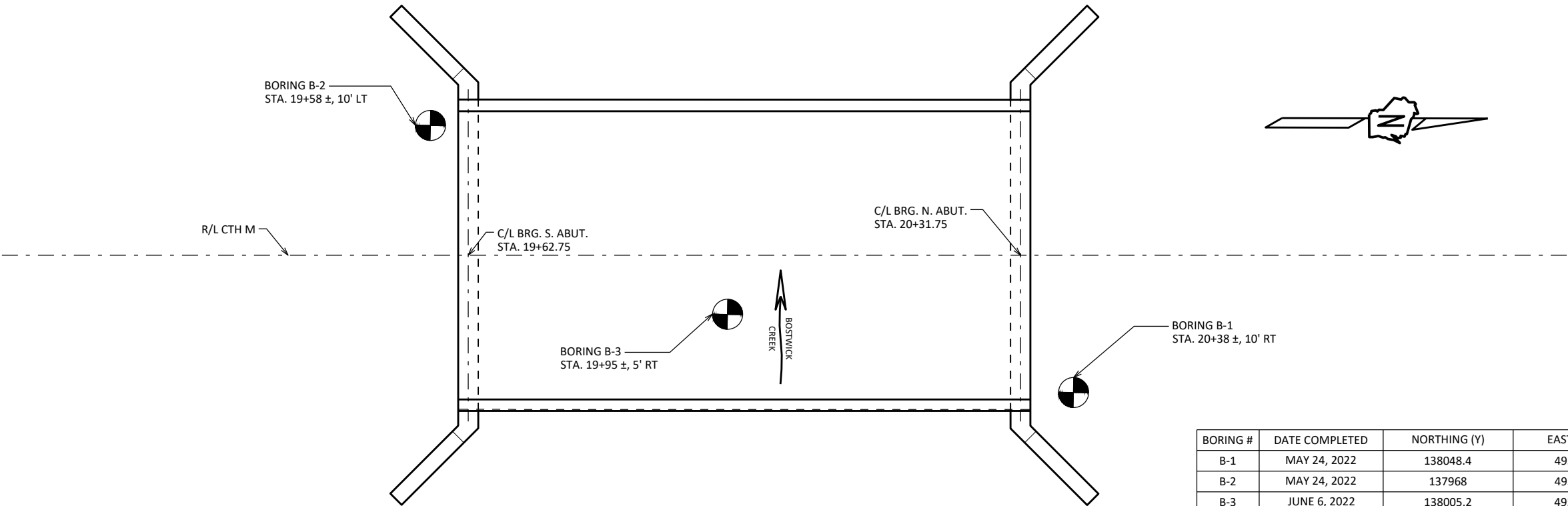
TYPICAL SECTION THRU ABUTMENT

▲ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

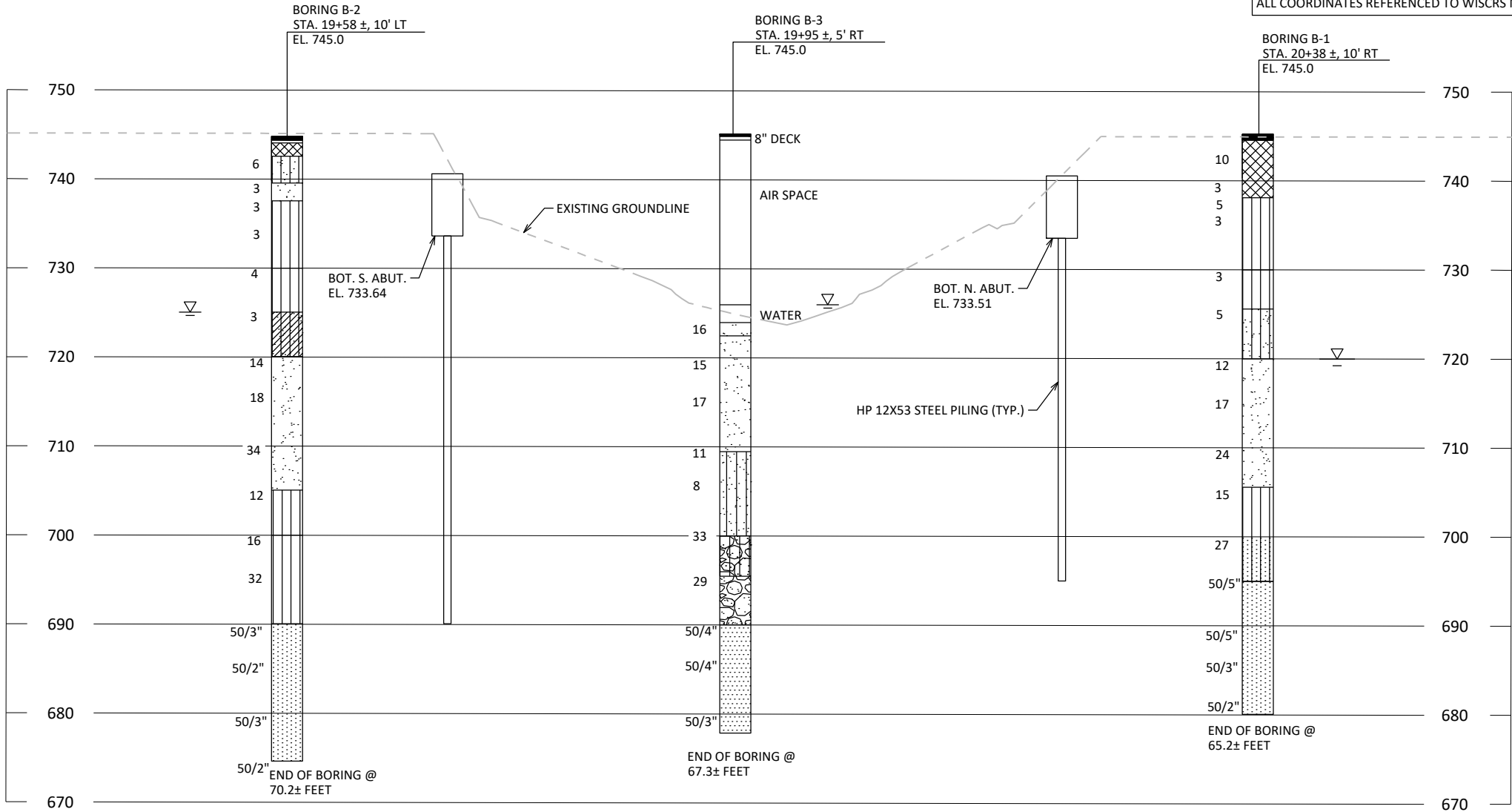
■ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-585			
DRAWN BY		MJB	PLANS CK'D JLA
CROSS SECTION & QUANTITIES		SHEET 2	

SCALE =



BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	MAY 24, 2022	138048.4	495451.1
B-2	MAY 24, 2022	137968	495417.9
B-3	JUNE 6, 2022	138005.2	495441.4
BORINGS COMPLETED BY: PROFESSIONAL SERVICE INDUSTRIES, INC.			
REPORT COMPLETED BY: PROFESSIONAL SERVICE INDUSTRIES, INC.			
ALL COORDINATES REFERENCED TO WISCRS NAD 83(1991) LA CROSSE COUNTY			



STATE PROJECT NUMBER
5436-00-77

MATERIAL SYMBOLS

ASPHALT	TOPSOIL	PEAT
CONCRETE	FILL	GRAVEL
SAND	CLAY	SILT
BOULDERS OR COBBLES	LIMESTONE	BEDROCK (UNKNOWN)
SHALE	SANDSTONE	IGNEOUS/META

LEGEND OF BORING

ST
(1) 0.25
(2) 17
F-C
COBBLE OR BOULDER
WEATHERED LIMESTONE
CORE RUN #1 - 24'-29'
REC=80%, RQD=72%

(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

▽ AT TIME OF DRILLING
▼ END OF DRILLING
▼ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-32-585			
DRAWN BY JLA		PLANS CK'D MJB	
SUBSURFACE EXPLORATION		SHEET 3	