

06-13-2025 LETTING ITEM 183

INDEX OF SHEETS

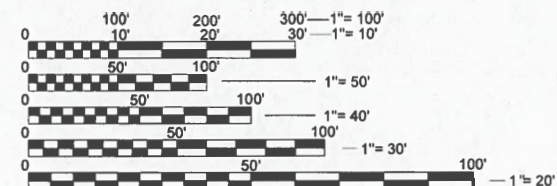
- 1 COVER SHEET
- 2 GENERAL NOTES, SUMMARY OF QUANTITIES
- 3 PLAN AND PROFILE
- 4-10 STRUCTURE PLANS
- 11-12 CROSS SECTIONS

HIGHWAY STANDARDS

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006 DECIMAL OF AN INCH AND OF A FOOT
515001-04 NAME PLATES FOR BRIDGES
630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
701901-10 TRAFFIC CONTROL DEVICES
725001-01 OBJECT AND TERMINAL MARKERS
BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 27-1 TRAFFIC BARRIER TERMINAL TYPE 5A

UTILITIES

ELECTRIC: AMEREN ILLINOIS
TELEPHONE: FRONTIER



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811



HLC PROJECT NO. 7774
CONTRACT NO. 99752

Jeremy Buening
JEREMY BUENING, P.E., S.E. DATE 3/10/2025
LICENSE EXPIRES 11/30/2025

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED SURFACE TRANSPORTATION/ BRIDGE PROGRAM

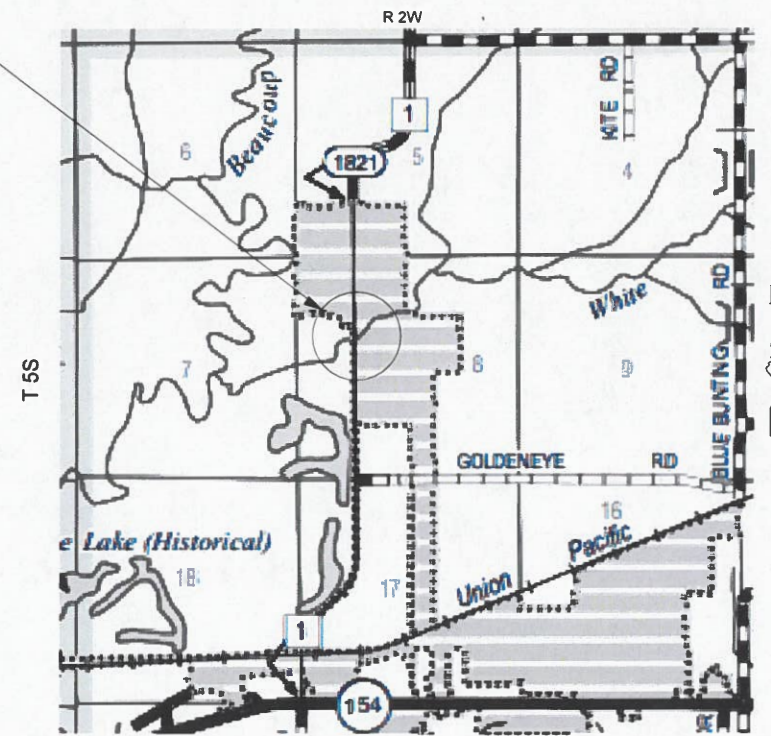
FAU 9964 (WHITE WALNUT ROAD)

PERRY COUNTY

SECTION 20-00148-00-BR

PROJECT 0JYP(394)

JOB C-99-075-24



LOCATION MAP

THE PROPOSED IMPROVEMENT CONSISTS OF REMOVAL OF EXISTING STRUCTURE AND REPLACEMENT WITH A PPC DECK BEAM BRIDGE, 60'-0" CLEAR SPAN, WITH WINGWALLS, 90° SKEW, AND OTHER MINOR COLLATERAL WORK.

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9964	20-00148-00-BR	PERRY	12	1
PICKNEYVILLE PRECINCT ROAD DISTRICT ILLINOIS CONTRACT NO. 99752				



FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR (RURAL)
2019 ADT = 600
DESIGN SPEED = 50 MPH

APPROVED March 14, 20 25

B. O'Hara
COUNTY ENGINEER

PASSED 3-19 25

[Signature]
DISTRICT ENGINEER OF
LOCAL ROADS AND STREETS

Releasing For
Bid Based on
Limited Review 3-19 25

[Signature]
ACTING DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS
5 N. COUNTRY CLUB RD
DECATUR, IL 62521
PHONE: 217-422-8544
Toll-free: 1-833-4CHASTAIN
www.chastainengineers.com

GENERAL NOTES

WHEREVER IN THE PLANS OR SPECIFICATIONS THE TERM STANDARD SPECIFICATIONS IS USED, IT SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS PREPARED BY THE DEPARTMENT OF TRANSPORTATION OF THE STATE OF ILLINOIS AND ADOPTED JANUARY 1, 2022.

EXISTING ROAD SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR.

EXCEPT WHERE DESIGNATED OTHERWISE, THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM INFORMATION FURNISHED BY THE UTILITY OWNERS & MUST BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. CONTACT J.U.I.E., PHONE 800-892-0123, AND ALL UTILITY COMPANIES PRIOR TO DIGGING.

THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION OPERATIONS.

THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PROTECT PUBLIC AND PRIVATE PROPERTY. IF AT ANY TIME THE CONTRACTOR DAMAGES OR DESTROYS PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, RESTORE SUCH PROPERTY TO A CONDITION EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE.

THE CONTRACTOR SHALL NOTIFY THE PERRY COUNTY HIGHWAY DEPARTMENT RESIDENT ENGINEER AND THE COUNTY ENGINEER 72 HOURS IN ADVANCE OF CONSTRUCTION WORK.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES AT THE TIME OF CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THEY PERFORM THEIR WORK.

GRADING SHALL BE DONE BY HAND AROUND LIGHTS POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.

THE FOLLOWING APPLICATION RATES HAVE BEEN USED IN THE CALCULATION OF THE PLAN QUANTITIES:

RIPRAP: 1.75 TONS/CU YD
AGG SHOULDERS: 2.05 TONS/CU YD
SUBBASE AGG MATERIAL: 2.05 TONS/CU YD

SUMMARY OF QUANTITIES

Pay Item	Description	Unit	Total
20200100	Earth Excavation	Cu. Yd.	38
20300100	Channel Excavation	Cu. Yd.	390
28000400	Perimeter Erosion Barrier	Foot	100
28100707	Stone Dumped Riprap, Class A4	Sq. Yd.	380
31102100	Subbase Aggregate Material, Type C 4"	Sq. Yd.	37
42000500	Portland Cement Concrete Pavement 10"	Sq. Yd.	37
48101200	Aggregate Shoulders, Type B	Ton	16
* 50100100	Removal of Existing Structures	Each	1
50200100	Structure Excavation	Cu. Yd.	122
50300225	Concrete Structures	Cu. Yd.	28.8
50400505	Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	1910
50800205	Reinforcement Bars, Epoxy Coated	Pound	3850
+ 50901050	Steel Railing, Type SM	Foot	128
51201600	Furnishing Steel Piles HP12x53	Foot	810
51202305	Driving Piles	Foot	810
51204650	Pile Shoes	Each	20
51500100	Name Plates	Each	1
59300100	Controlled Low-Strength Material	Cu. Yd.	49.2
+ 63100075	Traffic Barrier Terminal, Type 5A	Each	2
+ 63100167	Traffic Barrier Terminal, Type 1 (Special) Tangent	Each	2
63200310	Guardrail Removal	Foot	156
67100100	Mobilization	L Sum	1
+ 72501000	Terminal Marker - Direct Applied	Each	4
* X2501020	Seeding Class 2A (Special)	Acre	0.2
* X7011800	Traffic Control and Protection, Standard BLR 21	L Sum	1
* Z0013798	Construction Layout	L Sum	1

* Indicates Special Provision + SPECIALITY ITEM

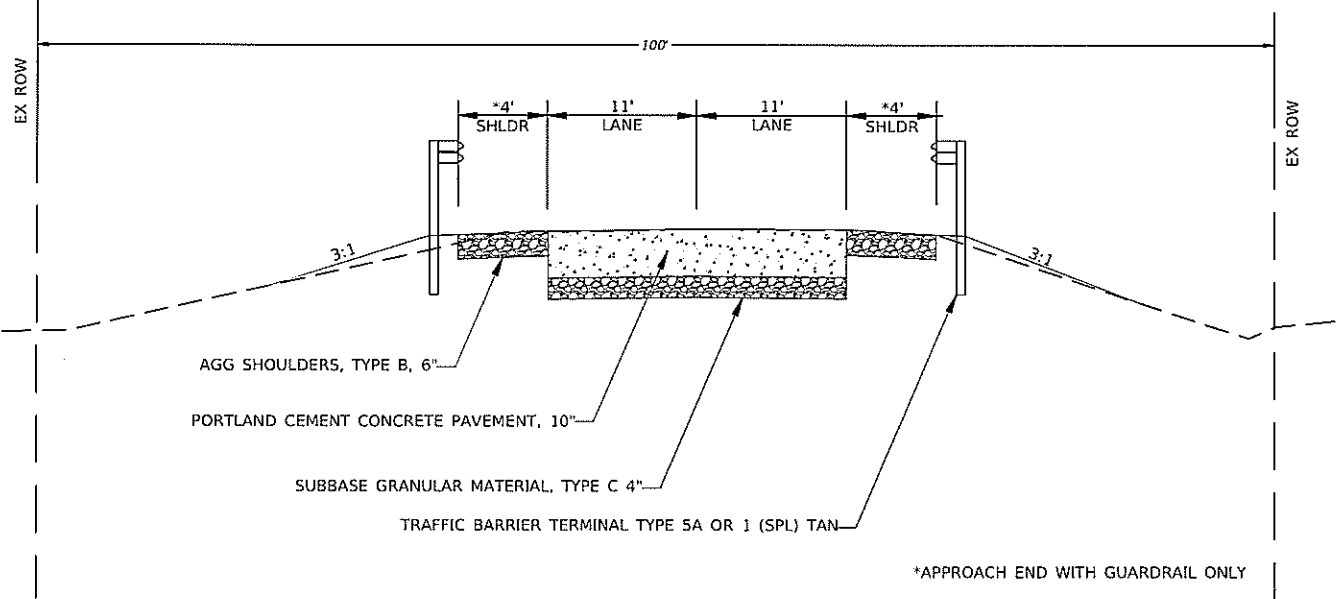
EARTHWORK SCHEDULE

LOCATION	1	2	3	4	5
	20200100 EARTH EXCAVATION (CU YD)	20300100 CHANNEL EXCAVATION (CU YD)	*EXCAVATION TO BE USED IN EMBANKMENT (ADJUSTED FOR SHRINKAGE) (COL 1 + COL 2) X 0.75 (CU YD)	*EMBANKMENT (FILL) (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
2+17.50 TO 3+82.50	38	390	321	40	281
TOTAL	38	390	321	40	281

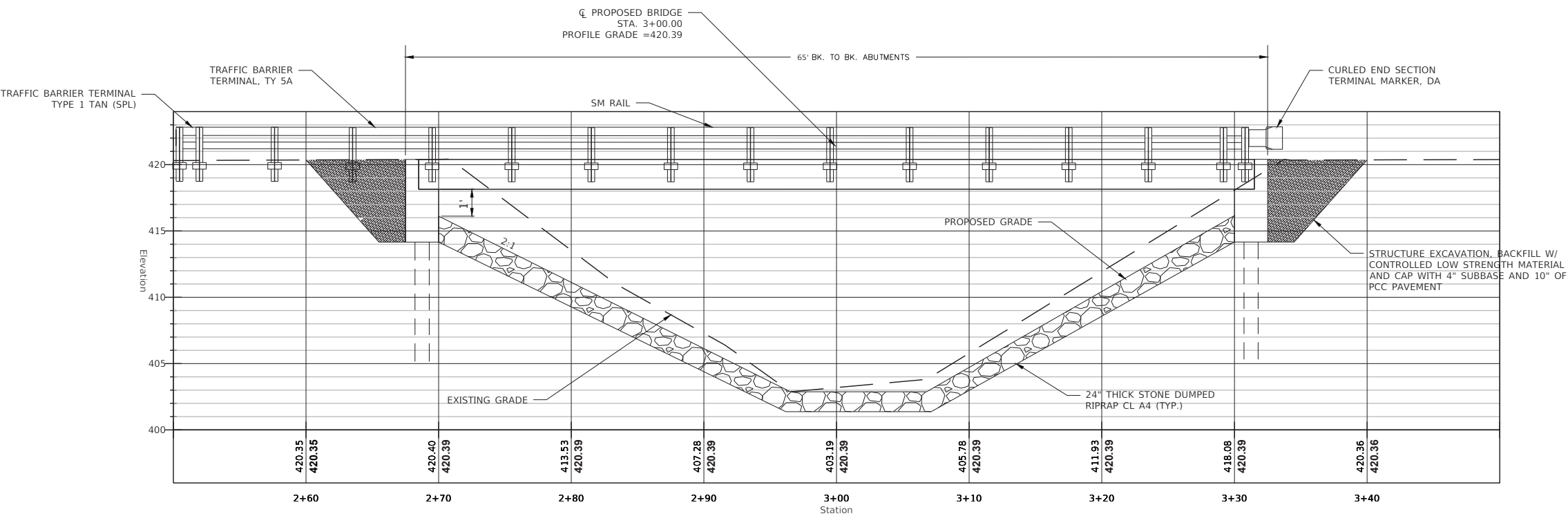
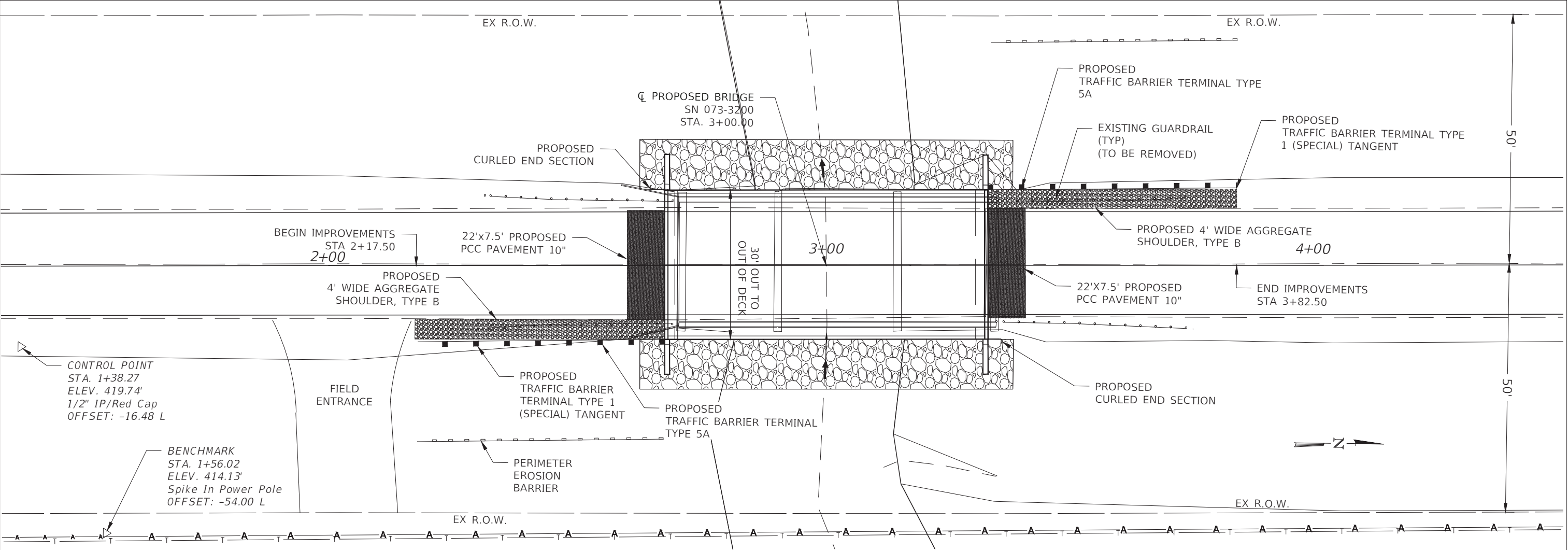
EARTH EXCAVATION SHRINKAGE FACTOR ASSUMED TO BE 25%

ITEMS MARKED WITH AN ASTERISK (*) ARE FOR INFORMATIONAL PURPOSES ONLY

CHANNEL EXCAVATION MAY BE UNSUITABLE FOR EMBANKMENT. COUNTY TO DETERMINE SUITABILITY IN THE FIELD.



TYPICAL SECTION
NOT TO SCALE



WHITE WALNUT ROAD PROFILE
HORIZ./VERT. SCALE: 1"=5'

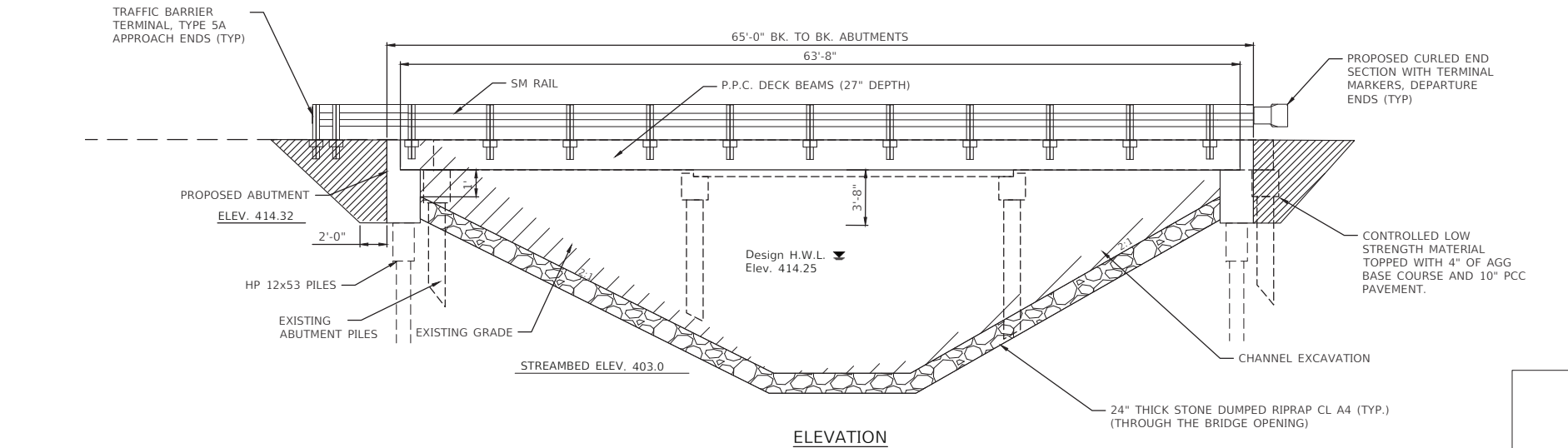
	DESIGNED: BCG	REVISED —	CHASTAIN & ASSOCIATES LLC CONSULTING ENGINEERS	DECATUR (217) 422-8544 SCHAUMBURG (773) 714-0050 ROCKFORD (815) 489-0050 PARIS (217) 422-8544 METROPOLIS 184-001397	PLAN & PROFILE WHITE WALNUT ROAD OVER WHITE WALNUT CREEK			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN: MSH	REVISED —						9964	20-00148-00-BR	PERRY	12	3
	CHECKED: JMB	REVISED —			SHEET NO. OF SHEETS STA. 2+00 TO STA. 4+00			CONTRACT NO 99752				
	DATE: 1/29/2025	REVISED —						ILLINOIS				

EXISTING STRUCTURE (SN 073-3015):
THE EXISTING STRUCTURE IS A 69'-4" THREE SPAN CONCRETE
CHANNEL BEAM BRIDGE ON TIMBER PILE ABUTMENTS AND
PRECAST PILE PIERS.

ROAD TO BE CLOSED
DURING CONSTRUCTION.

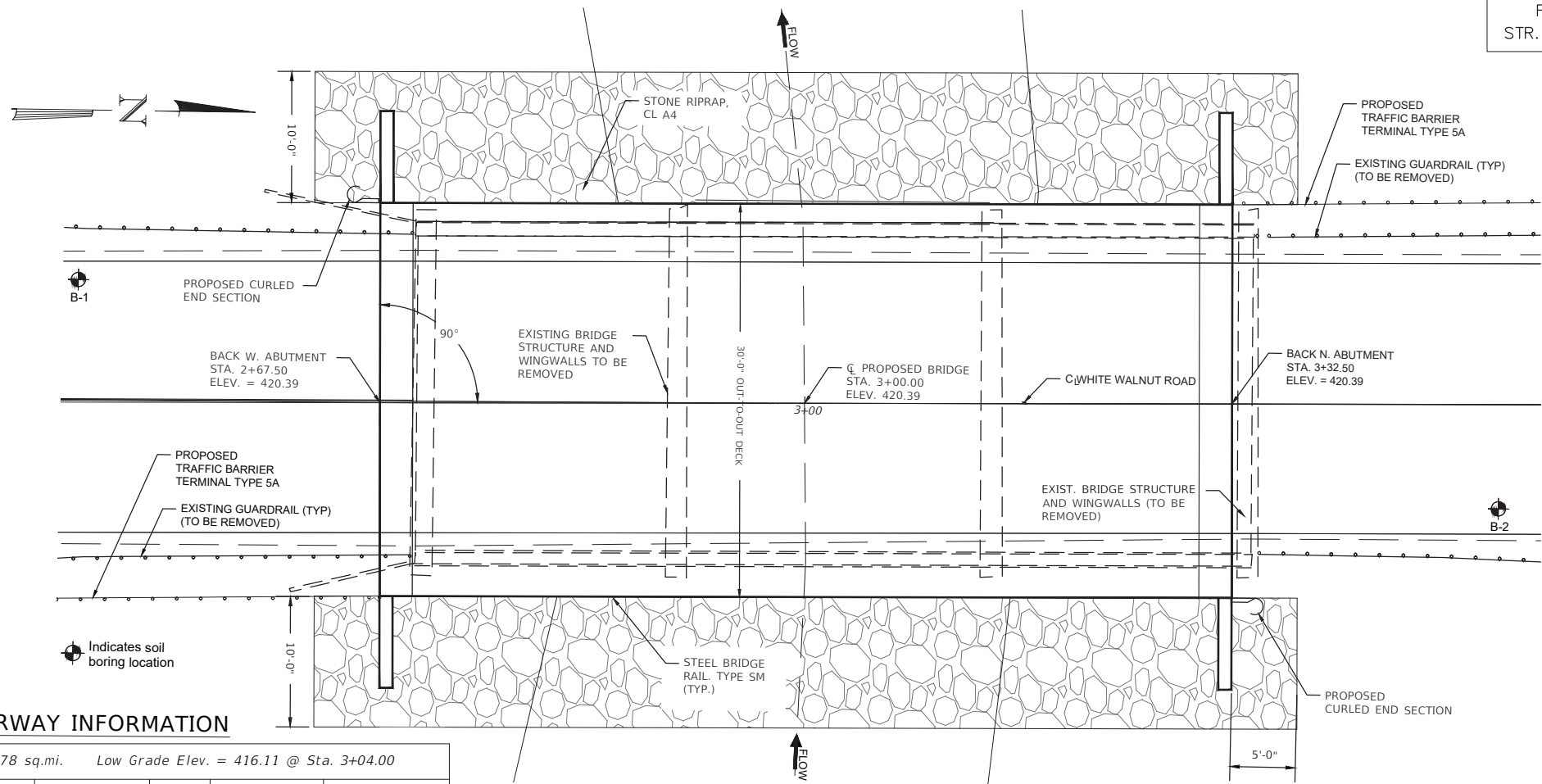
NO SALVAGE.

BENCHMARK:
BENCHMARK- SPIKE IN POWER POLE
LEFT OF STATION 1+56.02
ELEV. 414.13'



WHITE WALNUT CREEK
BUILT 20 BY
PERRY COUNTY
SEC. 20-00148-00-BR
F.A. RT. 9964 STA 3+00.00
STR. NO. 073-3200 LOADING HL-93

NAME PLATE
SEE STD. 515001



WATERWAY INFORMATION

Drainage Area = 15.78 sq.mi. Low Grade Elev. = 416.11 @ Sta. 3+04.00									
FLOOD	FREQ. (YR.)	Q (C.F.S.)	OPENING (SQ.FT.)		NAT. H.W.E.	HEAD (FT.)		HEADWATER ELEV.	
			EXIST.	PROP.		EXIST.	PROP.	EXIST.	PROP.
Design	20	3238	593.00	623.00	414.25	1.72	1.45	415.97	415.70
Base	100	4720	593.00	623.00	414.63	3.39	3.11	418.02	417.74
Overtopping									
Max. Calc	500	6430	593.00	623.00	414.94	5.54	4.91	420.48	419.85

20-Year velocity through existing bridge = 6.71 ft/s
20-Year velocity through proposed bridge = 6.71 ft/s

CHASTAIN & ASSOCIATES LLC
CONSULTING ENGINEERS

DECATUR (217) 422-8544
SCHAUMBURG (773) 714-0050
ROCKFORD (815) 489-0050
PARIS (217) 422-8544
METROPOLIS
184-001397

GENERAL PLAN AND ELEVATION
WHITE WALNUT ROAD OVER WHITE WALNUT CREEK

SHEET NO. 1 OF 7 SHEETS STA. 2+00 TO STA. 4+00

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Structures	Each	1
Concrete Structures	Cu Yd	28.8
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq Ft	1910
Reinforcement Bars, Epoxy Coated	Pound	3850
Steel Railing, Type SM	Foot	128
Furnishing Steel H-Piles, HP12x53	Foot	810
Driving Piles	Foot	810
Name Plates	Each	1
Pile Shoes	Each	20
Controlled Low-Strength Material	Cu Yd	49.2
Structure Excavation	Cu Yd	122
Terminal Marker - Direct Applied	Each	4

GENERAL NOTES:

- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- All Construction joints shall be bonded.
- See Roadway Plans for channel excavation limits and quantities.
- See special provisions for boring logs.
- Reinforcement bars designated (E) shall be epoxy coated.

LOADING HL-93

Allow 50 lb/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications, 9th Ed.

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi
 $f'_ci = 5,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " $\odot$ low-relaxation strands)
 $f'_{si} = 202,000$ psi ($\frac{1}{2}$ " $\odot$ low-relaxation strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 3
Design Spectral Acceleration at 1.0 sec (SD1) = 0.307g
Design Spectral Acceleration at 0.2 sec (SDS) = 0.718g
Soil Site Class = D

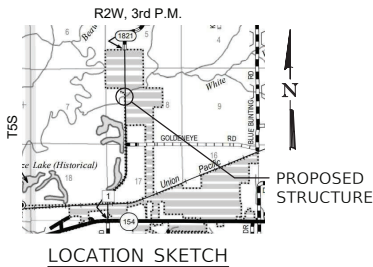
DESIGN SCOUR ELEVATION TABLE

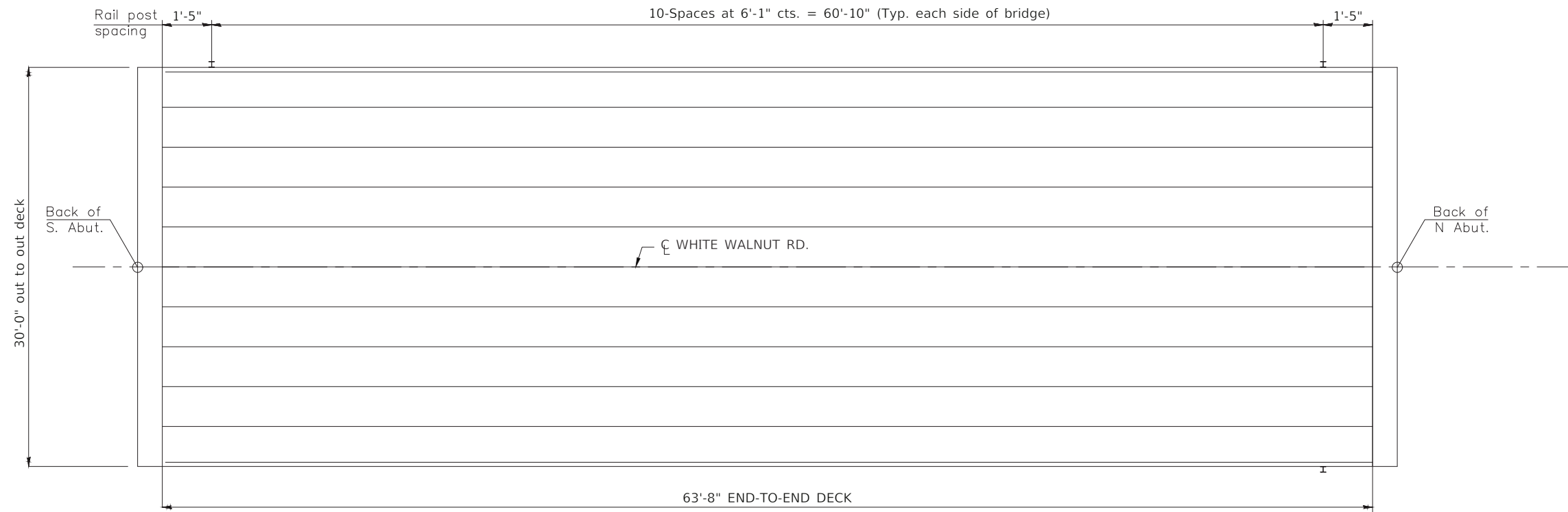
Event / Limit State	Design Scour Elevations (ft.)		
	S. Abut.	N. Abut.	Item 113
Q100	415.62	415.62	8
Q200	415.62	415.62	
Design	415.62	415.62	
Check	415.62	415.62	



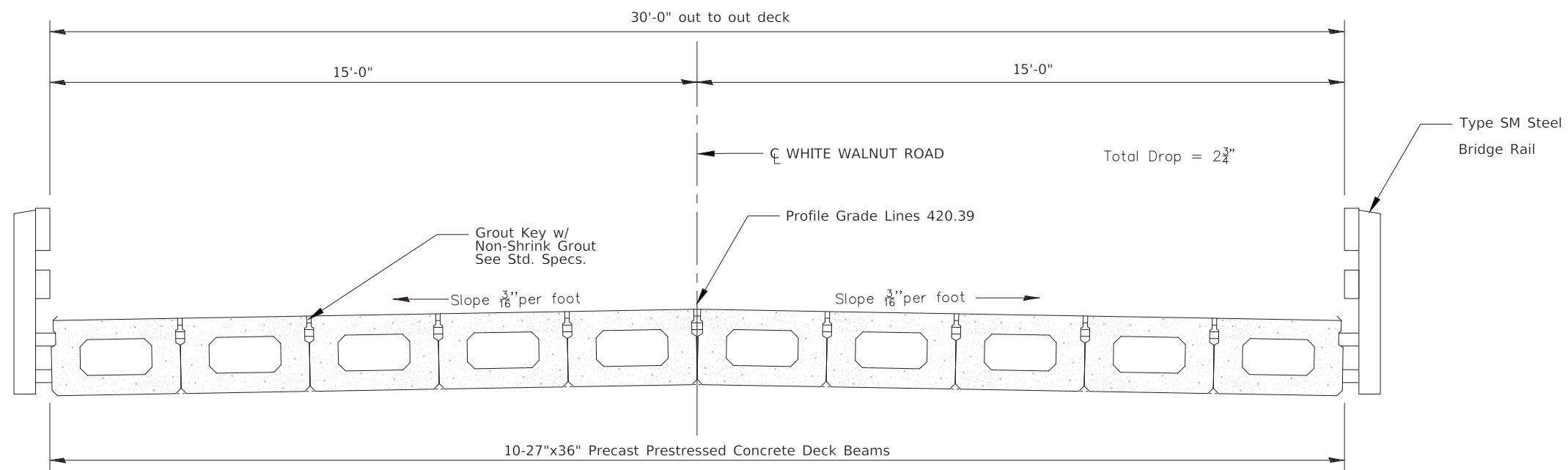
Jeremy Buening
JEREMY M. BUENING, P.E., S.E.
Expires 11/30/2026
4/2/2025
Date

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Bridge Design Specifications.





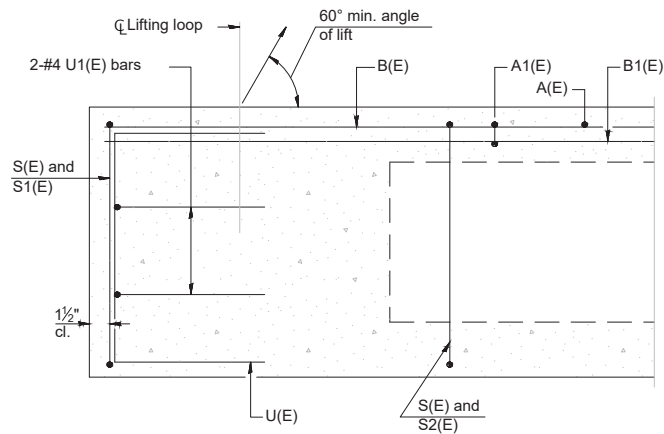
PLAN



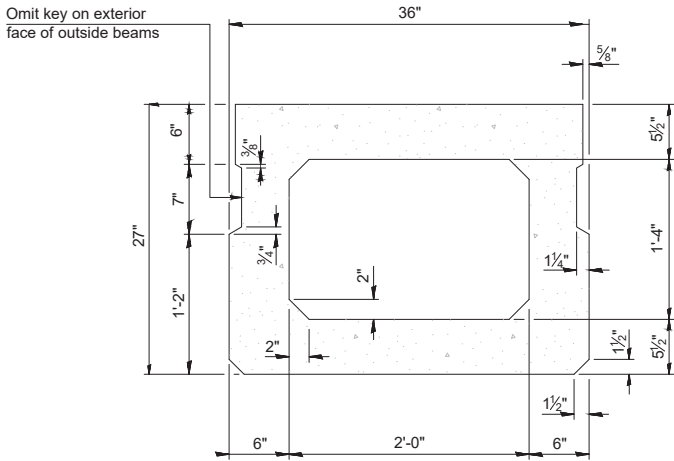
CROSS SECTION
(Looking North)

Notes:
See sheet 4 of 7 for Superstructure Details
and Bill of Material.

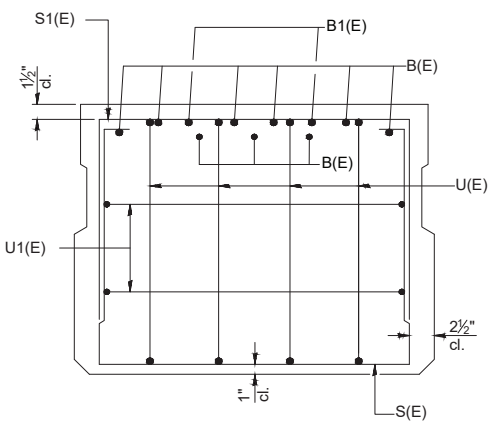
		DESIGNED: BCG	REVISED —	 CHASTAIN & ASSOCIATES LLC CONSULTING ENGINEERS	DECATUR (217) 422-8544 SCHAUMBURG (773) 714-0050 ROCKFORD (815) 489-0050 PARIS (217) 422-8544 METROPOLIS 184-001397	SUPERSTRUCTURE PLAN AND CROSS SECTION WHITE WALNUT ROAD OVER WHITE WALNUT CREEK			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN: MSH	REVISED —						9964	20-00148-00-BR	PERRY	12	6
		CHECKED: JMB	REVISED —			SHEET NO. 3 OF 7 SHEETS			CONTRACT NO 99752.				
		DATE: 1/29/2025	REVISED —			STA. 2+00 TO STA. 4+00			ILLINOIS				



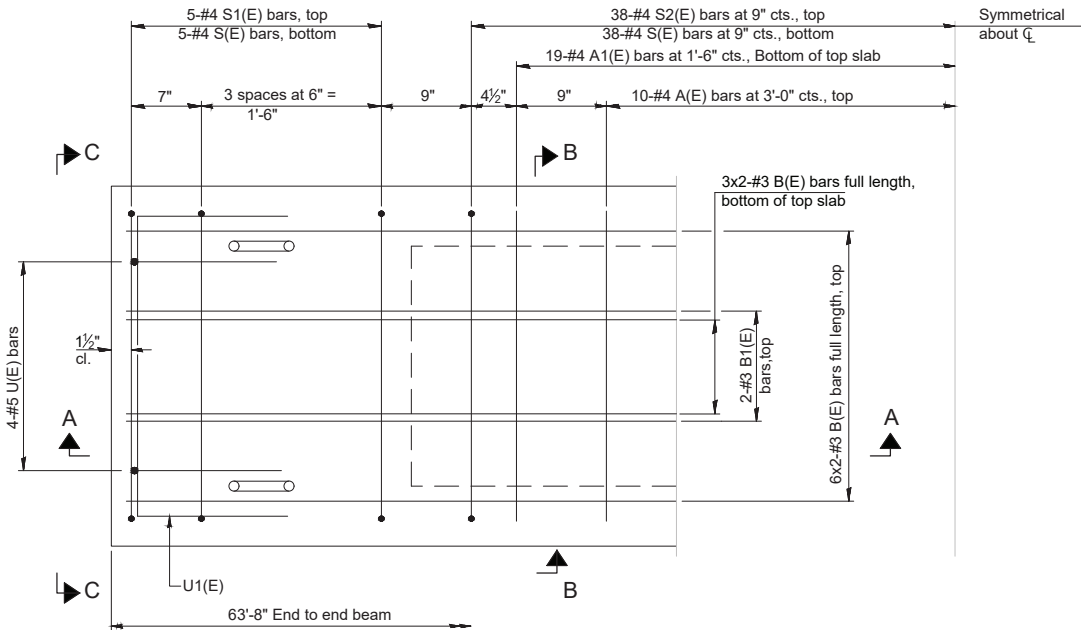
SECTION A-A



SECTION B-B
(Showing dimensions)

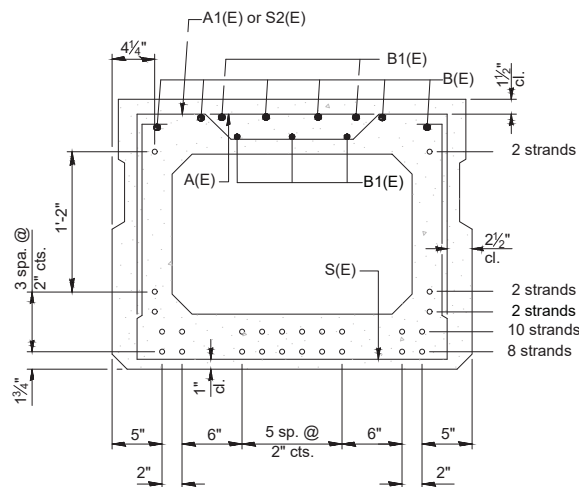


VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



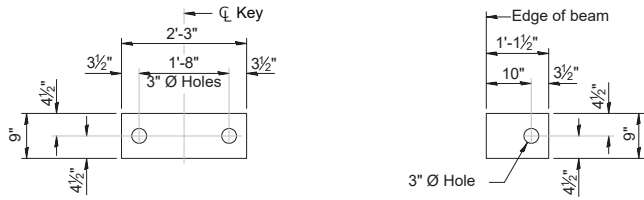
SECTION B-B
(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	20	#4	2'-7"	—
A1(E)	40	#4	2'-10"	~
B(E)	18	#3	32'-6"	—
B1(E)	4	#3	10'-0"	—
S(E)	88	#4	7'-5"	┌┐
S1(E)	10	#4	5'-11"	┌┐
S2(E)	78	#4	6'-2"	┌┐
U(E)	8	#5	4'-6"	└┘
U1(E)	4	#4	5'-0"	└┘

Note:
See sheet 5 of 7 for additional details and Bill of Material.

MINIMUM BAR LAP
#3 bar = 1'-6"

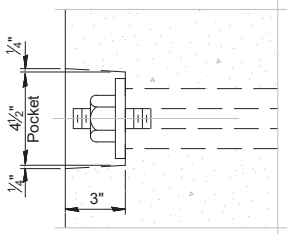


FABRIC BEARING PAD
(Interior)

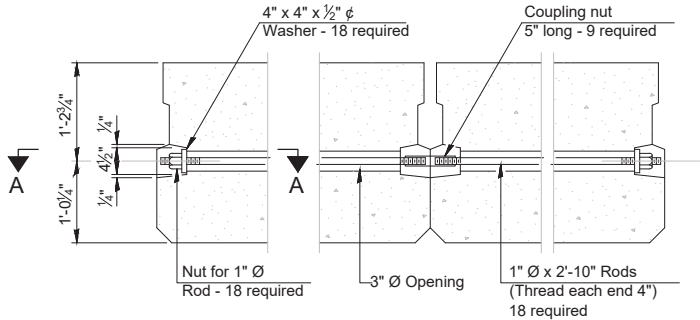
FABRIC BEARING PAD
(Exterior)

FIXED

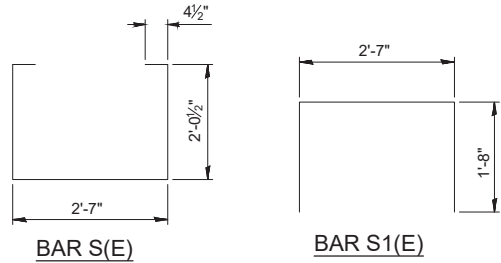
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

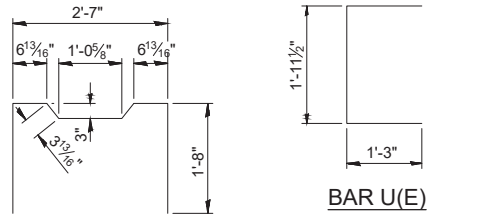


TYPICAL TRANSVERSE TIE ASSEMBLY



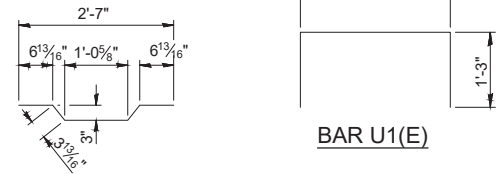
BAR S(E)

BAR S1(E)



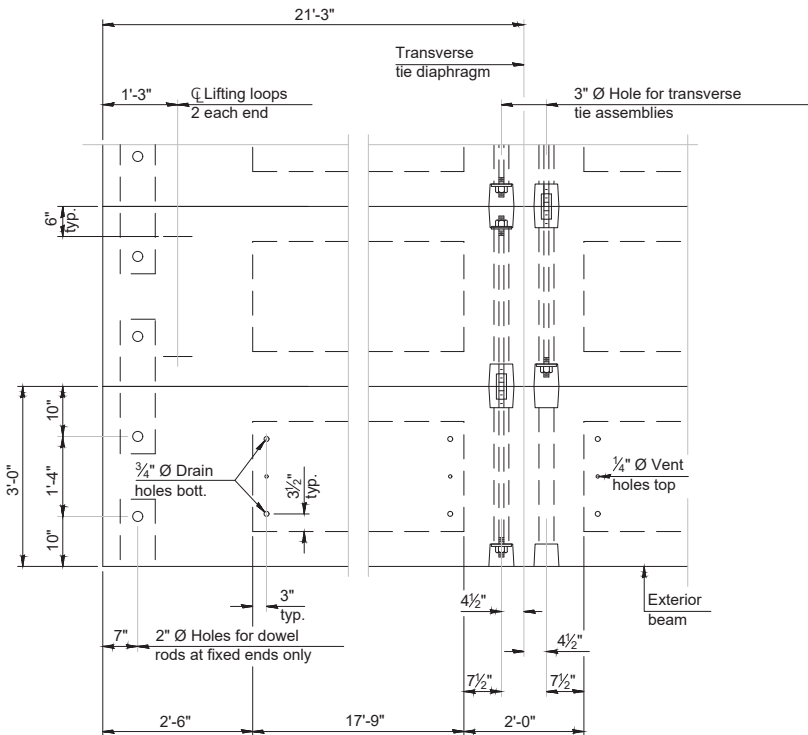
BAR S2(E)

BAR U(E)



BAR A1(E)

BAR U1(E)

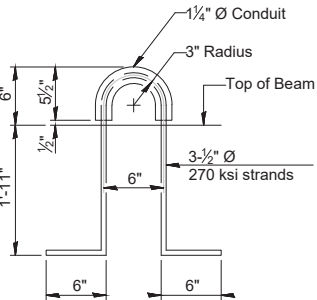


PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2 inch and the nominal cross-sectional area shall be 0.153 sq. in. The 1 inch rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place. Two 1/8 inch fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2 inch diameter lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1910
---	---------	------

DATA:

HP12x53
 Required Bearing: 418 k
 Available Resistance: 230 k
 Length: 82' North Abutment

ELEVATION

of wingwall flush
 erior beam face
 am have been

Level

15'-1"

15'-1"

Level

30-#4 v₁ (E) bars at 12" cts. Each face

3'-9" Min.

Elev 420.15

Elev 420.39

Elev 418.82

Elev 418.06

Elev 414.32

Elev 420.15

Name Plate

Optional const. joint

3-#4 h (E) bars Each Face

Construct backwall flush with top of beams after beams have been placed

10-#7 p(E) bars See Section Thru Abutment

4-#4 s(E) & s1(E) bars Each End

4-#6 bars Each End

5-#5 h(E) bars at 10" cts. Each Face

7-#5 v(E) bars at 12" cts. Each Face (See Field Cutting Diagram)

1-#5 v₂ (E) bar Each Face

7-#4 s(E) & s1(E) bars at 11" cts (Typ between piles)

7" typ.

7" typ.

3'-8 3/4"

2'-4"

2'-0" (Typ)

3"

5'-10"

1'-10"

6"

6"

4'-0"

3'-6"

**Mandatory const. joint

Elev 418.82

Fan 2-#5 h(E) bars Each face. Bend in field as required

1-#5 h(E) bars Each face. Bend in field as required

*

Type: HP12x53"
Nominal Required Bearing: 418 k
Factored Resistance Available: 230 k
Est. Length: 82' North Abutment
80' South Abutment
No. Production Piles (2 abuts): 10

(Dimensions at Rt L's)

Bar	No.	Size	Length	Shape
h(E)	64	#5	10'-9"	
h ₁ (E)	12	#4	29'-10"	
p(E)	20	#7	31'-4"	
s(E)	72	#4	11'-5"	
s1(E)	72	#4	3'-4"	
u(E)	16	#6	9'-9"	
v(E)	28	#5	9'-9"	
v ₁ (E)	120	#4	4'-2"	
v ₂ (E)	8	#5	5'-5"	
Structure Excavation			Cu. Yd.	122
Concrete Structures			Cu. Yd.	28.8
Reinforcement Bars, Epoxy Coated			Pound	3850
Furnishing Steel Piles HP12x53			Foot	810
Driving Piles			Foot	810
Controlled Low Strength Material			Cu. Yd.	49.2
Pile Shoes			Each	20

A diagram of a T-shaped cross-section. The top flange has a total width of 6 inches and a thickness of 4 inches. The stem has a width of 2 feet 2 inches and a height of 8 inches. The top flange is centered on the stem. A dashed line indicates the original rectangular shape before the corner was rounded.

Figure 10 is a section view of a wall and floor slab. The wall is 9'-9" high. The floor slab is 5'-1" thick. The wall has 7-#5 v(E) bars. A cut line is shown at 3'-8" from the top of the wall.

Order $v(E)$ full length. Cut as shown and use remainder of bars in opposite face.

A diagram of a square with a vertical side labeled $3'-2''$ and a horizontal side labeled $2'-2''$. A diagonal line is drawn from the bottom-left corner to the top-right corner, labeled $4\frac{1}{2}''$.

A diagram showing a rectangular area. The vertical dimension on the left is labeled 2'-1". The horizontal dimension at the bottom is labeled 3'-10".

10" PCC PAVE

4" AGG SUBBASE

4'-10 3/4" max

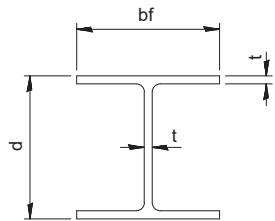
Controlled Low Strength Material

Abutment

2'-0"

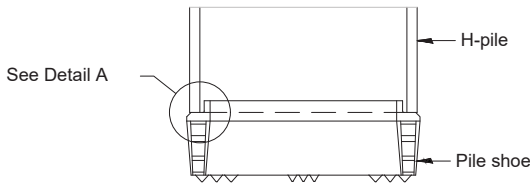
Hatched portion of wingwalls to be poured with the backwall after the deck beams have been installed and grout has cured for a minimum of 24 hours.

	DESIGNED: BCG	REVISED —		DECATUR (217) 422-8544	ABUTMENT DETAILS WHITE WALNUT ROAD OVER WHITE WALNUT CREEK	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN: MSH	REVISED —		PARIS (217) 422-8544		9964	20-00148-00-BR	PERRY	12	9
	CHECKED: JMB	REVISED —		METROPOLIS 184-001397		CONTRACT NO 99752.				
	DATE: 1/29/2025	REVISED —				SHEET NO. 6 OF 7 SHEETS	STA. 2+00 TO STA. 4+00	ILLINOIS		

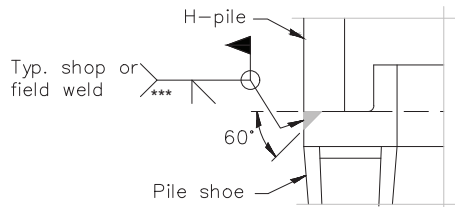


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14¼"	14⅞"	1⅜"	30"
x102	14"	14¾"	1⅞"	30"
x89	13⅞"	14¾"	⅝"	30"
x73	13⅝"	14⅝"	½"	30"
HP 12x84	12¼"	12¼"	1⅞"	24"
x74	12⅞"	12¼"	⅝"	24"
x63	12"	12⅞"	½"	24"
x53	11¾"	12"	⅞"	24"
HP 10x57	10"	10¼"	⅞"	24"
x42	9¾"	10⅞"	⅞"	24"
HP 8x36	8"	8⅞"	⅞"	18"



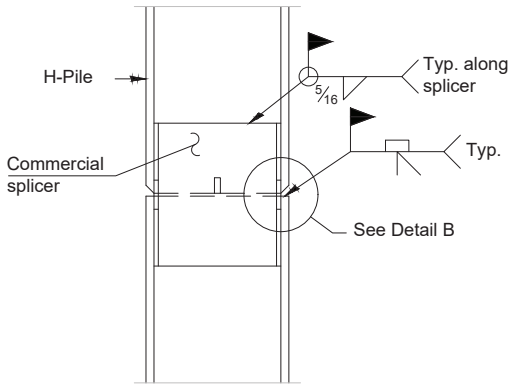
ELEVATION



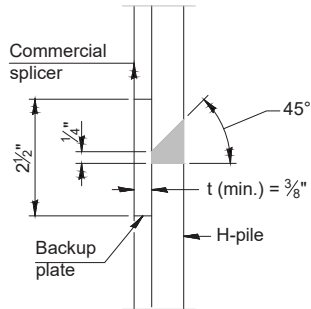
DETAIL A

SHOE ATTACHMENT

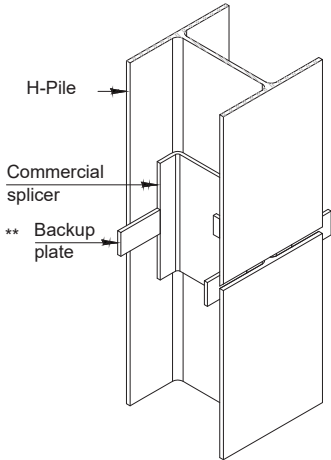
Note:
The steel H-piles shall be according to
AASHTO M270 Grade 50.



ELEVATION

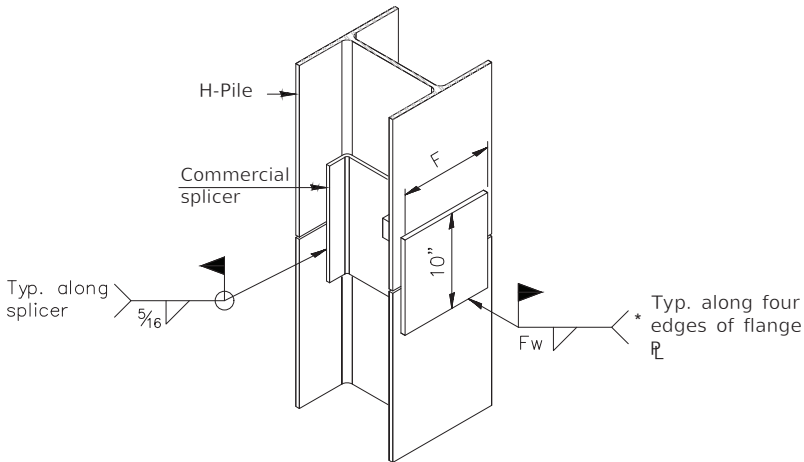


DETAIL "B"



ISOMETRIC VIEW

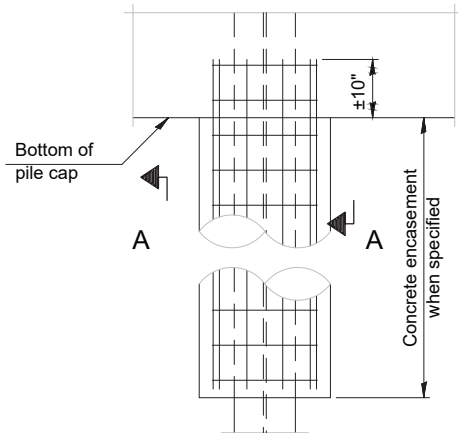
WELDED COMMERCIAL SPLICE



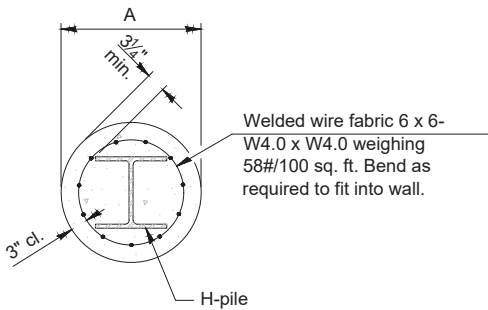
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds ¼" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (⅝" min.).

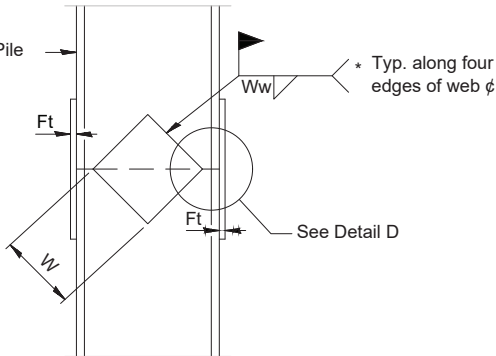


ELEVATION

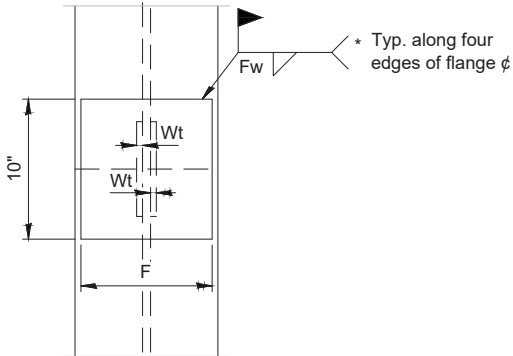


SECTION A-A

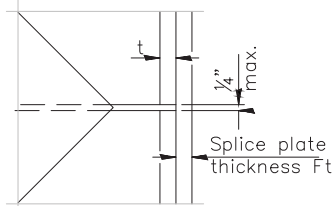
INDIVIDUAL PILE
CONCRETE ENCASEMENT
(Forms for encasement may be omitted when
soil conditions permit).



ELEVATION



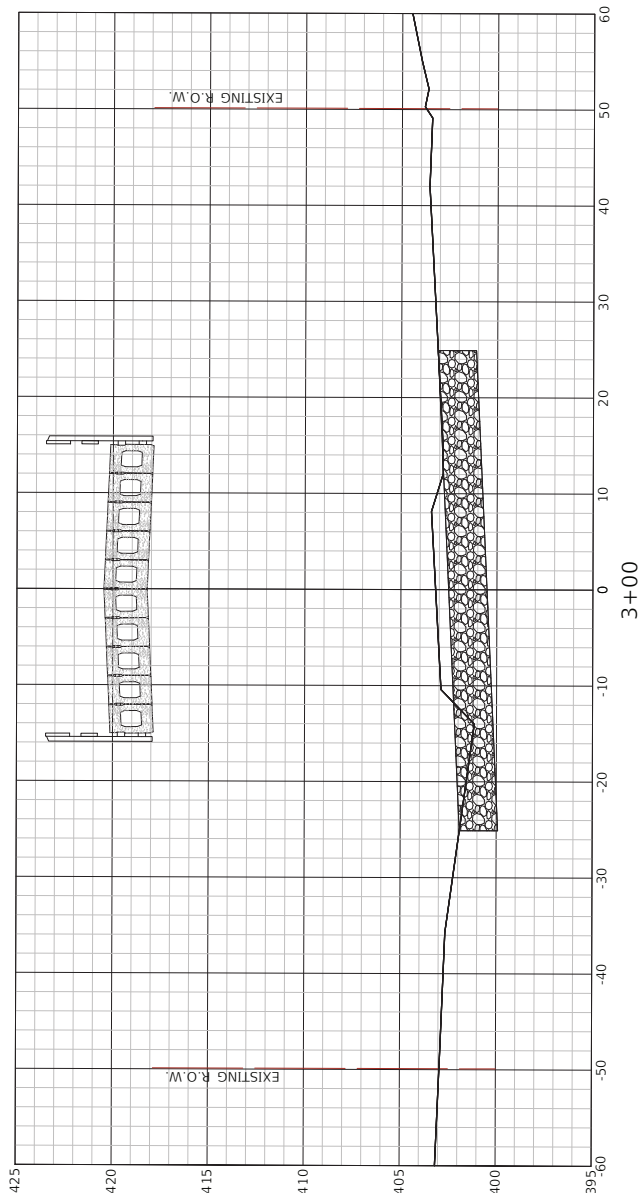
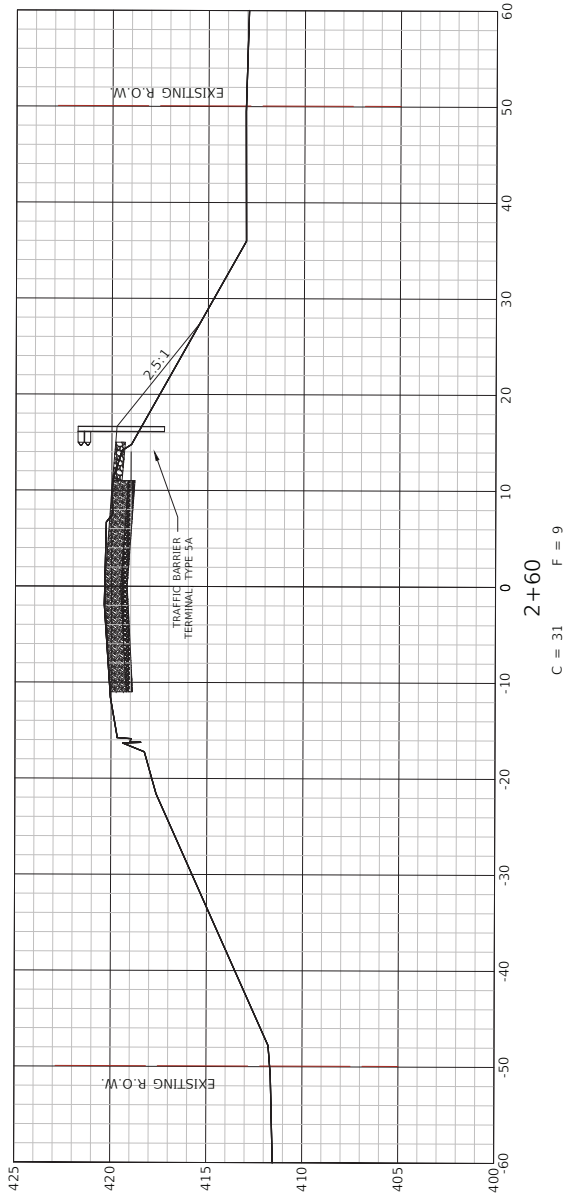
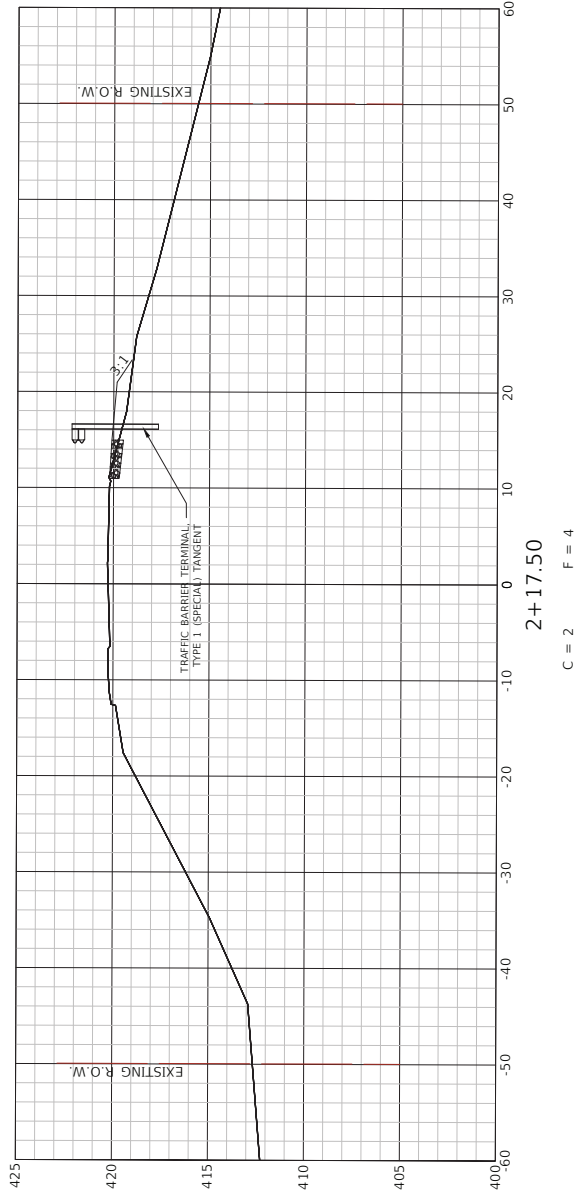
END VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12½"	1"	⅞"	7¾"	⅝"	½"
x102	12½"	⅞"	¾"	7¾"	⅝"	½"
x89	12½"	¾"	1⅞"	7¾"	⅝"	½"
x73	12½"	⅝"	⅞"	7¾"	⅝"	½"
HP 12x84	10"	⅞"	1⅞"	6½"	⅝"	½"
x74	10"	⅞"	1⅞"	6½"	⅝"	½"
x63	10"	⅝"	½"	6½"	½"	⅜"
x53	10"	⅝"	½"	6½"	½"	⅜"
HP 10x57	8"	¾"	⅞"	5¼"	½"	⅜"
x42	8"	⅝"	⅞"	5¼"	½"	⅜"
HP 8x36	7"	⅝"	⅞"	4¼"	½"	⅜"

WELDED PLATE FIELD SPLICE



		DESIGNED: BCG	REVISED —	CHASTAIN & ASSOCIATES LLC CONSULTING ENGINEERS DECATUR (217) 422-8544 SCHAUMBURG (773) 714-0050 ROCKFORD (815) 489-0050 PARIS (217) 422-8544 METROPOLIS 184-001397	CROSS SECTIONS WHITE WALNUT ROAD OVER WHITE WALNUT CREEK							F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN: MSH	REVISED —							9964	20-00148-00-BR	PERRY	12	11		
		CHECKED: JMB	REVISED —							CONTRACT NO 99752						
		DATE: 1/29/2025	REVISED —							ILLINOIS						
						SHEET NO.	OF	SHEETS	STA. 2+00	TO	STA. 4+00					

