

# SCDOT / PALMETTO RAILWAYS

South Carolina Department of Transportation

## PROPOSED PLANS FOR RICHLAND COUNTY SCDOT PROJECT ID P043072 PALMETTO RAILWAYS RAILROAD BRIDGE OVER I-77

- INDEX OF SHEETS
- COVER
  - SUMMARY OF ESTIMATED QUANTITIES
  - GENERAL NOTES
  - TRACK PROFILE AND SECTION
  - REINFORCING BENDING DETAILS
  - PLAN AND ELEVATION
  - BORING LOGS (1 OF 10)
  - BORING LOGS (2 OF 10)
  - BORING LOGS (3 OF 10)
  - BORING LOGS (4 OF 10)
  - BORING LOGS (5 OF 10)
  - BORING LOGS (6 OF 10)
  - BORING LOGS (7 OF 10)
  - BORING LOGS (8 OF 10)
  - BORING LOGS (9 OF 10)
  - BORING LOGS (10 OF 10)
  - FOUNDATION LAYOUT
  - ABUTMENT 1 PLAN AND ELEVATION
  - ABUTMENT 1 DETAILS (1 OF 4)
  - ABUTMENT 1 DETAILS (2 OF 4)
  - ABUTMENT 1 DETAILS (3 OF 4)
  - ABUTMENT 1 DETAILS (4 OF 4)
  - ABUTMENT 6 PLAN AND ELEVATION
  - ABUTMENT 6 DETAILS (1 OF 3)
  - ABUTMENT 6 DETAILS (2 OF 3)
  - ABUTMENT 6 DETAILS (3 OF 3)
  - PIER 2 PLAN AND ELEVATION
  - PIER 2 DETAILS
  - PIERS 3 AND 4 PLAN AND ELEVATION
  - PIERS 3 AND 4 DETAILS
  - PIER 5 PLAN AND ELEVATION
  - PIER 5 DETAILS
  - PLAN OF SPAN 1
  - PLAN OF SPAN 5
  - TYPICAL DECK SECTION SPANS 1 AND 5
  - FRAMING PLAN SPAN 1
  - FRAMING PLAN SPAN 5
  - PLAN OF SPAN 2
  - TYPICAL DECK SECTION SPAN 2
  - FRAMING PLAN SPAN 2
  - PLAN OF SPANS 3 AND 4
  - TYPICAL DECK SECTION SPANS 3 AND 4
  - FRAMING PLAN SPANS 3 AND 4
  - STEEL GIRDER DETAILS SPAN 1
  - STEEL GIRDER DETAILS SPAN 5
  - STRUCTURAL STEEL DETAILS SPANS 1 AND 5
  - STEEL GIRDER DETAILS SPAN 2
  - STRUCTURAL STEEL DETAILS SPAN 2
  - STEEL GIRDER DETAILS SPANS 3 AND 4
  - STRUCTURAL STEEL DETAILS SPANS 3 AND 4
  - SHOE PLATE DIMENSIONS FOR ALL BEARING COMPONENTS
  - DECK DRAINAGE DETAILS SPAN 1
  - DECK DRAINAGE DETAILS SPAN 2
  - DECK DRAINAGE DETAILS SPAN 3
  - DECK DRAINAGE DETAILS SPAN 4
  - DECK DRAINAGE DETAILS SPAN 5
  - MISC. DECK DRAINAGE DETAILS (1 OF 2)
  - MISC. DECK DRAINAGE DETAILS (2 OF 2)
  - PRECAST DECK PANEL DETAILS (1 OF 5)
  - PRECAST DECK PANEL DETAILS (2 OF 5)
  - PRECAST DECK PANEL DETAILS (3 OF 5)
  - PRECAST DECK PANEL DETAILS (4 OF 5)
  - PRECAST DECK PANEL DETAILS (5 OF 5)
  - VANDAL FENCE DETAILS (1 OF 2)
  - VANDAL FENCE DETAILS (2 OF 2)
  - FIBER REINFORCED SLOPE PROTECTION DETAILS



LAYOUT

RICHLAND COUNTY MAP

Submit Shop Plans to:  
NEEL-SCHAFFER, INC.  
1320 Main Street, Suite 510  
Columbia, SC 29201  
Telephone: (803) 929-3656 ext 7020

Approximate Location of Bridge is  
Latitude 34° - 11' - 15" N  
Longitude 80° - 58' - 56" W

	FOR CONSTRUCTION	
	INITIAL	DATE
SCDOT REVIEW		
PRECONSTRUCTION SUPPORT - ROAD		
PRECONSTRUCTION SUPPORT - STRUCTURES		
RPG - DESIGN MANAGER		
RPG - PROGRAM MANAGER		

THE INITIALS ABOVE DO NOT RELIEVE THE ENGINEER OF RECORD OF THE RESPONSIBILITY TO DESIGN THIS PROJECT IN ACCORDANCE WITH ALL APPLICABLE CRITERIA.

3 DAYS BEFORE DIGGING IN  
SOUTH CAROLINA  
**CALL 811**  
SOUTH CAROLINA 811 (SC811)  
WWW.SC811.COM  
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

NET LENGTH OF ROADWAY	0.000	MILES
NET LENGTH OF BRIDGES	0.111	MILES
NET LENGTH OF PROJECT	0.155	MILES
LENGTH OF EXCEPTIONS	0.000	MILES
GROSS LENGTH OF PROJECT	0.155	MILES

**60% PLANS - NOT FOR CONSTRUCTION**

CONSULTING ENGINEERING FIRM

1320 Main Street, Suite 510  
Columbia, SC 29201  
Telephone: 803-929-3656

ENGINEER OF RECORD

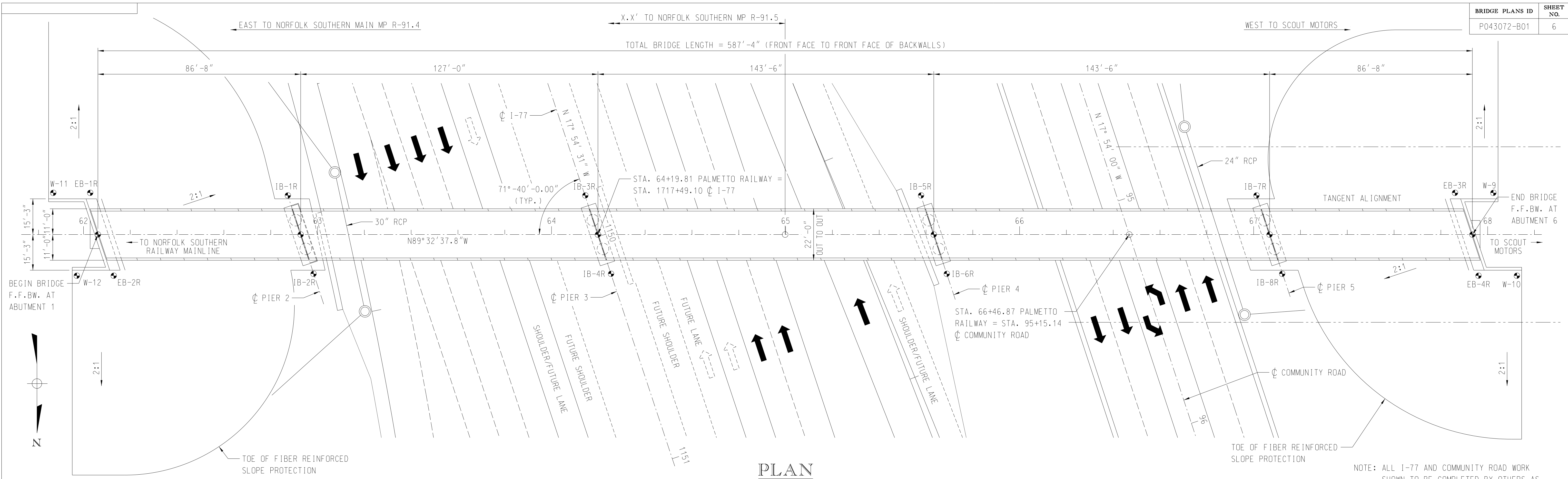
FOR CONSTRUCTION : JUSTIN THOMAS WOOD DATE

NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

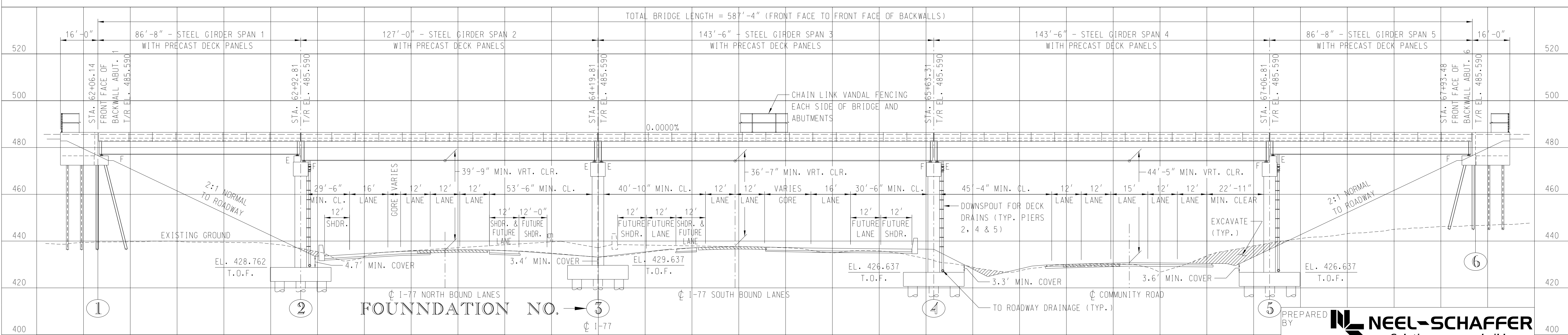
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 rroj@scdot.edu

REVIEWED	DR.	MCS	DLM	DLM	02-23	DATE

ASSET ID TBD



NOTE: ALL I-77 AND COMMUNITY ROAD WORK SHOWN TO BE COMPLETED BY OTHERS AS PART OF SCDOT PROJECT ID P042443.



**TABLE OF ELEVATIONS**

LOCATION	ABUT. 1	PIER 2		PIER 3		PIER 4		PIER 5		ABUT. 6
		BEHIND	AHEAD	BEHIND	AHEAD	BEHIND	AHEAD	BEHIND	AHEAD	
TOP OF RAIL	485.590	485.590	485.590	485.590	485.590	485.590	485.590	485.590	485.590	485.590
TOP OF BACKWALL	483.950	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	483.950
TOP OF DECK	483.950	483.950	483.950	483.950	483.950	483.950	483.950	483.950	483.950	483.950
TOP OF BEARING	476.992	476.992	474.367	474.367	474.242	474.242	474.242	476.992	476.992	476.992
TOP OF BEARING SEAT	476.429	476.429	473.762	473.762	473.637	473.637	473.637	476.429	476.429	476.429
GROUNDLINE	474.410	436.400	433.180	436.510	436.440	474.450				474.450
TOP OF PILE/SHAFT	473.429	423.762	424.637	421.637	421.637	473.429				473.429
PILE/SHAFT TIP ELEVATION										

**TABLE OF ELEVATIONS**

LOCATION	ABUT. 1	PIER 2		PIER 3		PIER 4		PIER 5		ABUT. 6
		BEHIND	AHEAD	BEHIND	AHEAD	BEHIND	AHEAD	BEHIND	AHEAD	
TOP OF RAIL	485.590	485.590	485.590	485.590	485.590	485.590	485.590	485.590	485.590	485.590
TOP OF BACKWALL	483.950	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	483.950
TOP OF DECK	483.950	483.950	483.950	483.950	483.950	483.950	483.950	483.950	483.950	483.950
TOP OF BEARING	476.992	476.992	474.367	474.367	474.242	474.242	474.242	476.992	476.992	476.992
TOP OF BEARING SEAT	476.429	476.429	473.762	473.762	473.637	473.637	473.637	476.429	476.429	476.429
GROUNDLINE	474.410	436.400	433.180	436.510	436.440	474.450				474.450
TOP OF PILE/SHAFT	473.429	423.762	424.637	421.637	421.637	473.429				473.429
PILE/SHAFT TIP ELEVATION										

REV.	BY	CHK.	DATE

PREPARED BY **NEEL-SCHAFFER**  
Solutions you can build upon

**PALMETTO RAILWAYS**

**PLAN AND ELEVATION**

**PALMETTO RAILWAYS**

**BRIDGE OVER I-77**

**REVISED**

**60 PERCENT PLANS**

**NOT FOR**

**CONSTRUCTION**

NOTES:

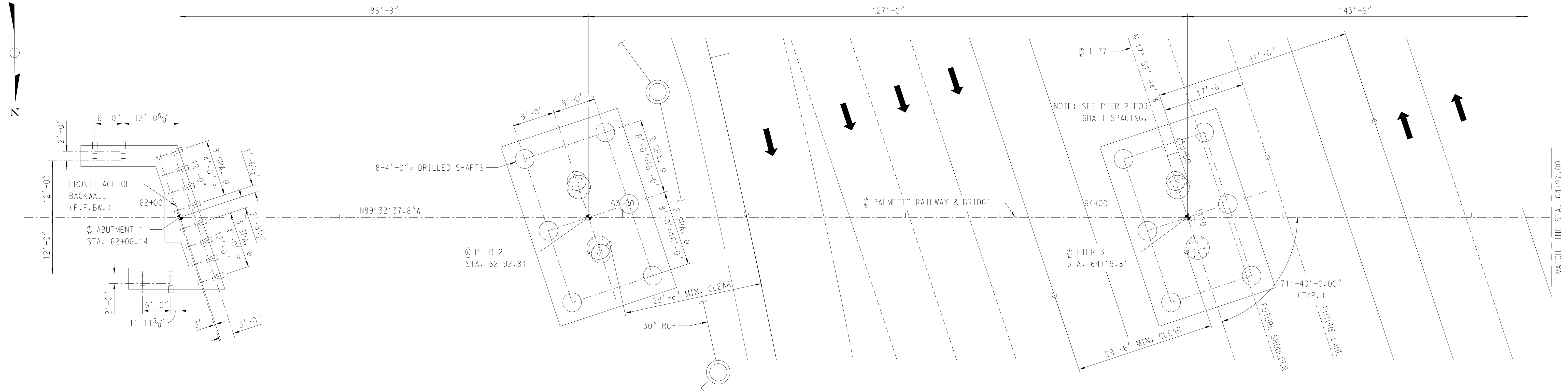
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F = FIXED BEARING

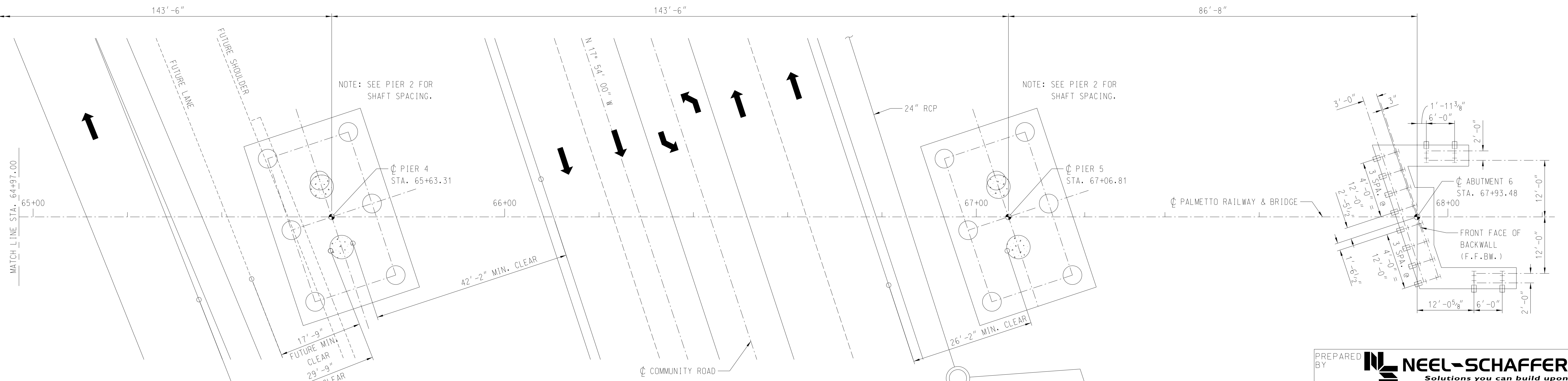
F.F.B.W. = FRONT FACE OF BACKWALL

T.O.F. = TOP OF FOOTING

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 Justin Wood



**PARTIAL FOUNDATION PLAN**  
SCALE: 1" = 10'-0"



**PARTIAL FOUNDATION PLAN**  
SCALE: 1" = 10'-0"

**LEGEND:**  
1. INDICATES PILES BATTERED 3:1:2 IN THE DIRECTION SHOWN.

**REVISED  
60 PERCENT PLANS  
NOT FOR  
CONSTRUCTION**

REV.			
REV.			
REV.			
REVIEWED			
QUAN.			
DR.	RJB	JTW	10-23
DES.	RJB	JTW	10-23
BY	CHK.	DATE	

PREPARED BY **NEEL-SCHAFFER**  
Solutions you can build upon

**PALMETTO RAILWAYS**  
**FOUNDATION LAYOUT**  
**PALMETTO RAILWAYS**  
**BRIDGE OVER I-77**  
COUNTY RICHLAND ROUTE 1-77

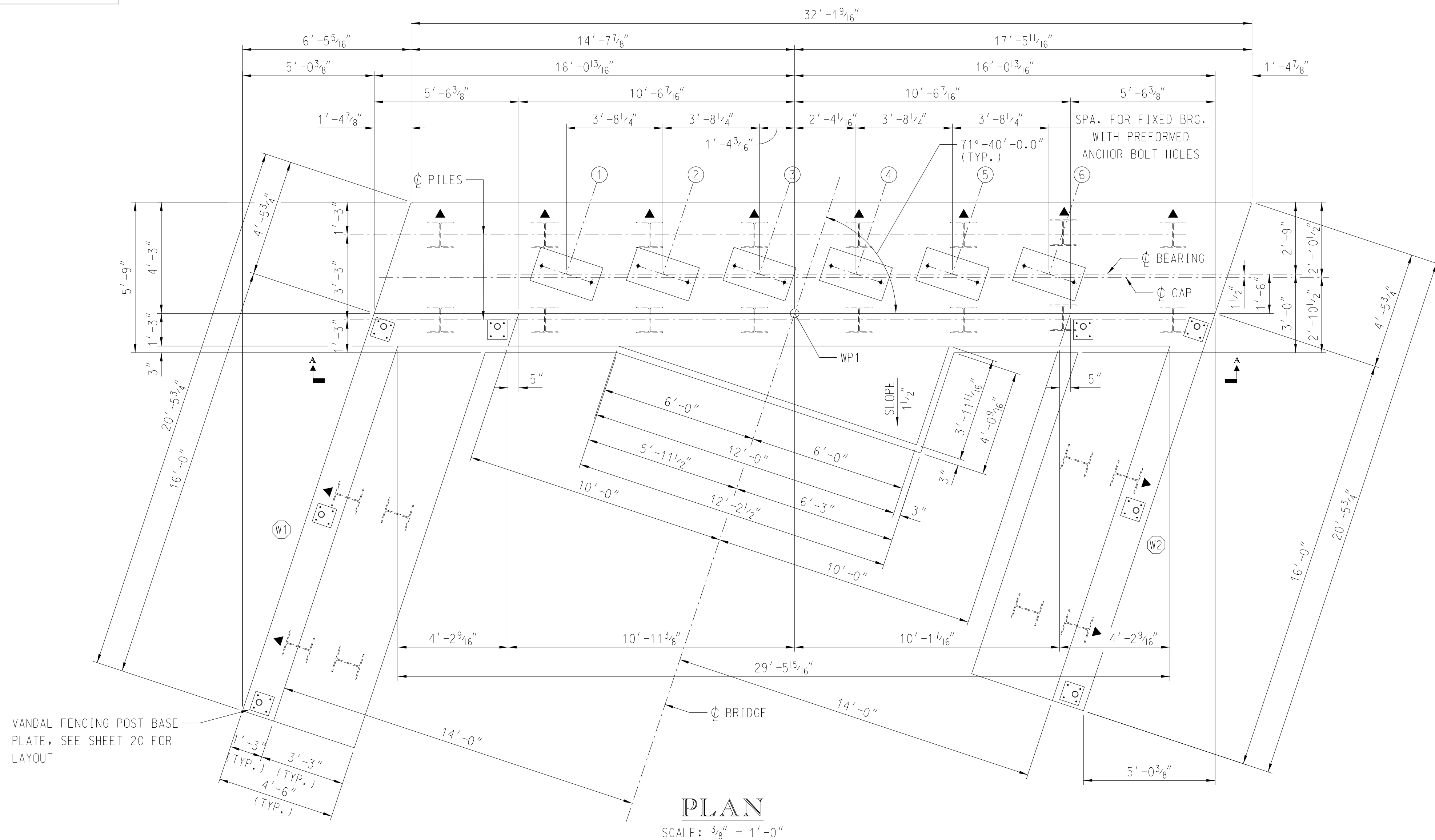
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 ranoj.bourdeux

**NOTES:**

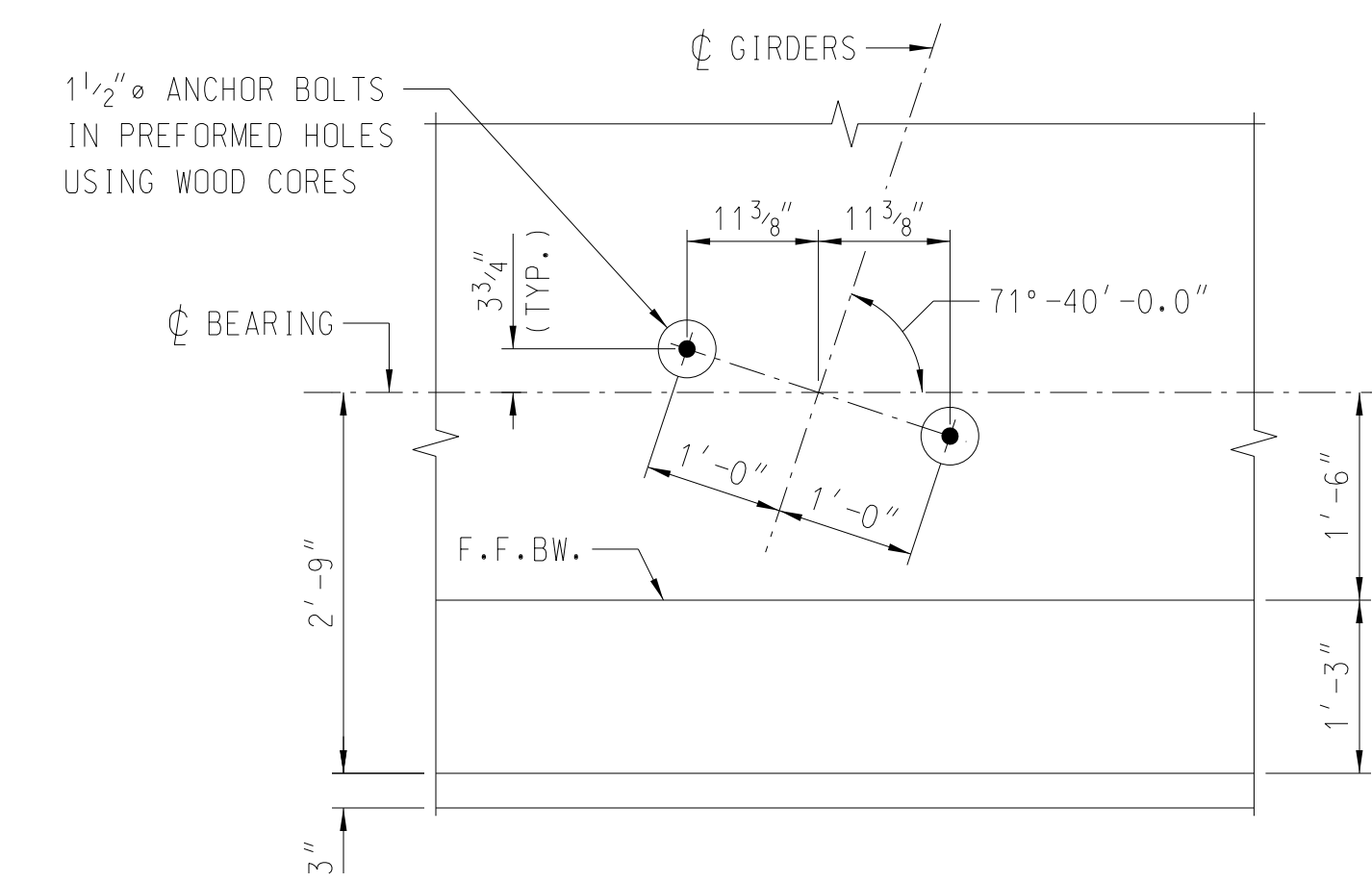
- ▲ INDICIATES DIRECTION DD 3:12 BATTER.
- FOR SECTION B-B, SEE SHEET NO. 19.
- FOR SECTION C-C, SEE SHEET NO. 20.
- FOR SECTIONS D-D AND E-E, SEE SHEET NO. 21.
- FOR WINGWALL DETAILS, SEE SHEET NO. 22.
- WP1 = STA. 62+06.14

**REINF. STEEL SCHED.**

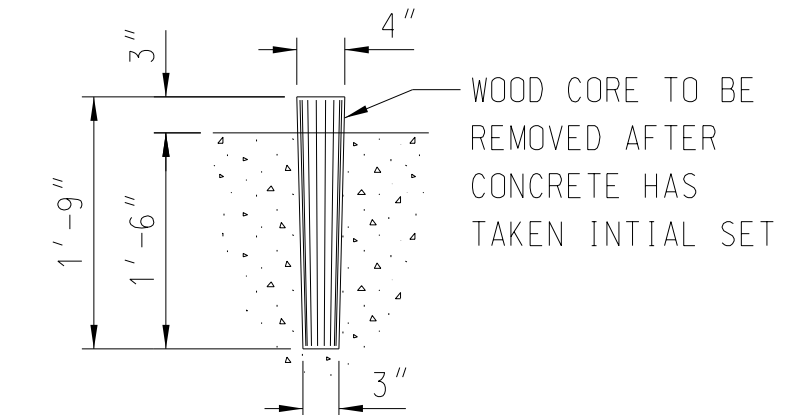
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		"A"	"B"	"C"	"D"	
XX	XX	XX	XX	XX	XX	XX



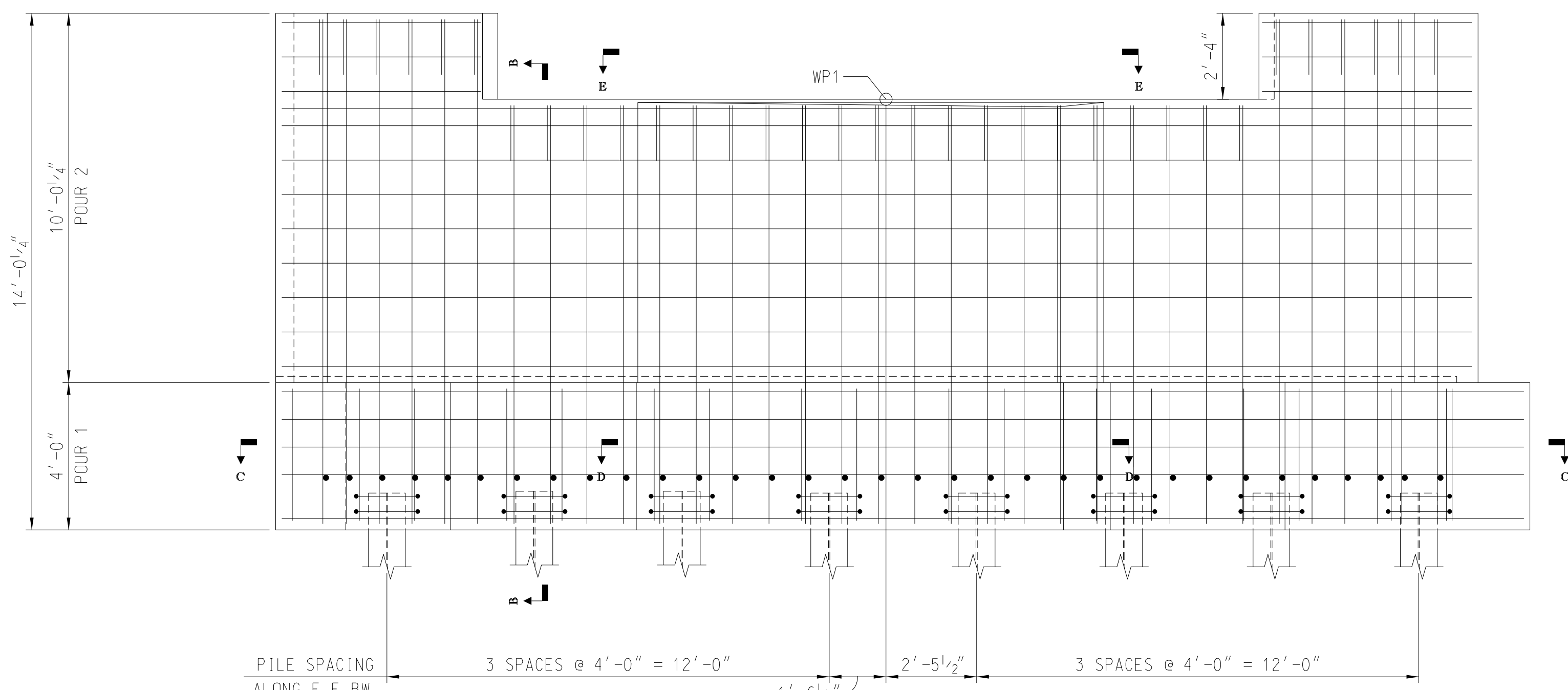
**PLAN**  
SCALE: 3/8" = 1'-0"



**ANCHOR BOLT LAYOUT**  
SCALE: 3/4" = 1'-0"



**WOODEN CORE DETAIL**  
SCALE: 3/4" = 1'-0"



**SECTION A-A**  
LOOKING IN DIRECTION OF STATIONING. WINGWALL PILES NOT SHOWN.  
SCALE: 3/8" = 1'-0"

REVISED  
60 PERCENT PLANS  
NOT FOR  
CONSTRUCTION

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PALMETTO RAILWAYS  
**ABUTMENT 1 PLAN  
AND ELEVATION  
PALMETTO RAILWAYS  
BRIDGE OVER I-77**

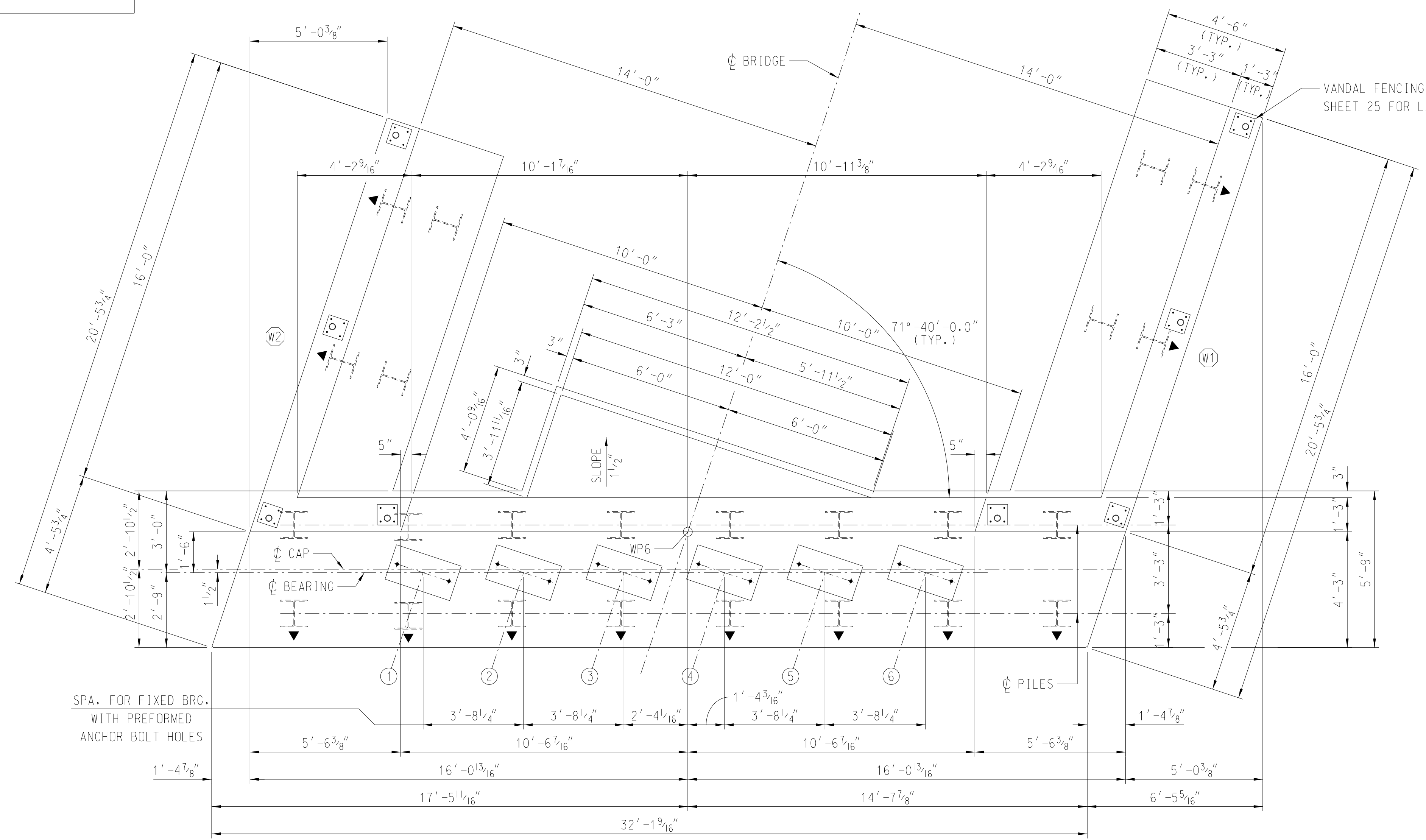
REV.	BY	CHK.	DATE	QUAN.	REVIEWED

DR. RJB	JTW	10-23	COUNTY RICHLAND	ROUTE 1-77
DES. RJB	JTW	10-23		

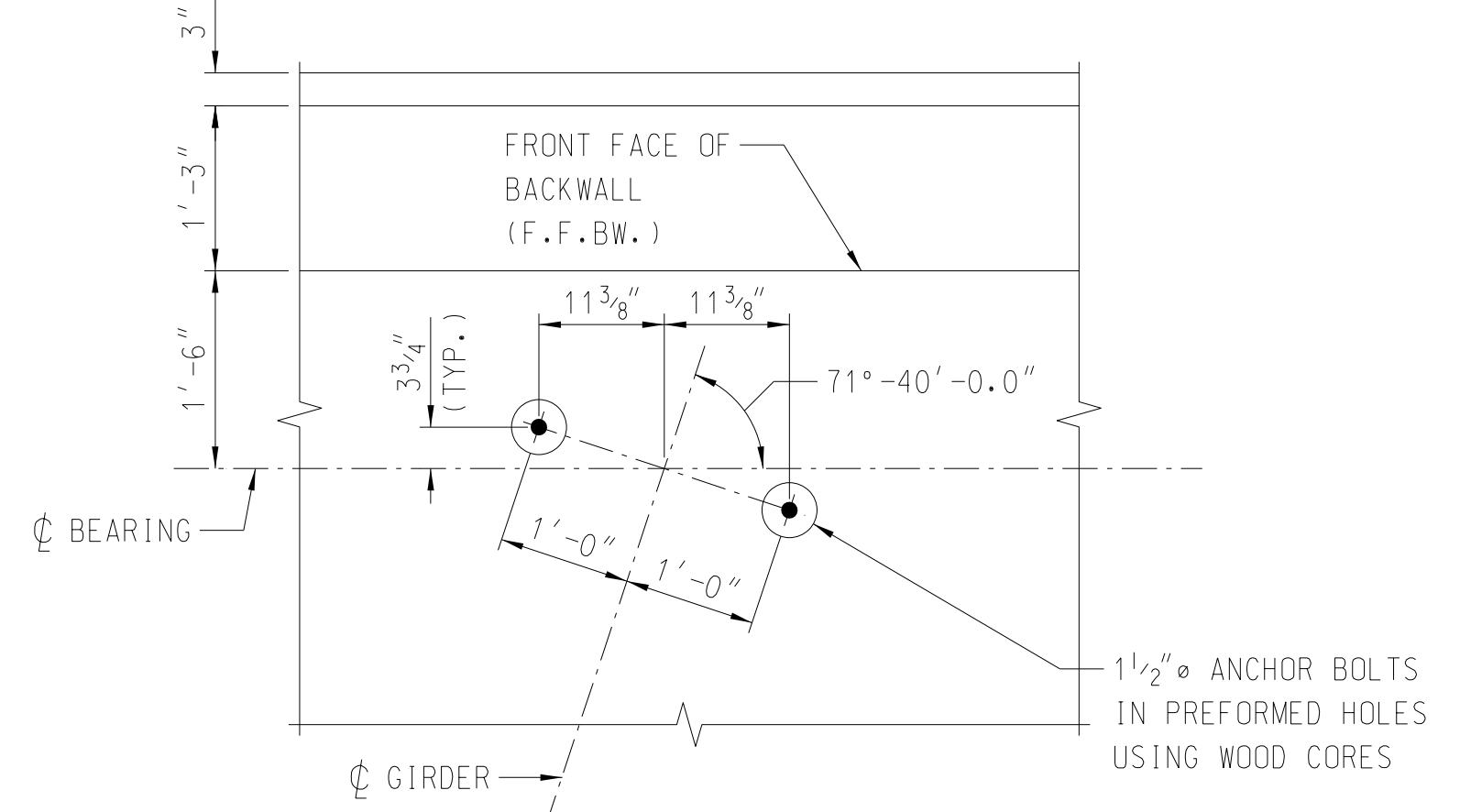
### REINF. STEEL SCHED.

MARK	NO. REQ'D	DIMENSION				LENGTH
		"A"	"B"	"C"	"D"	
XX	XX	XX	XX	XX	XX	XX
XX	XX	XX	XX	XX	XX	XX

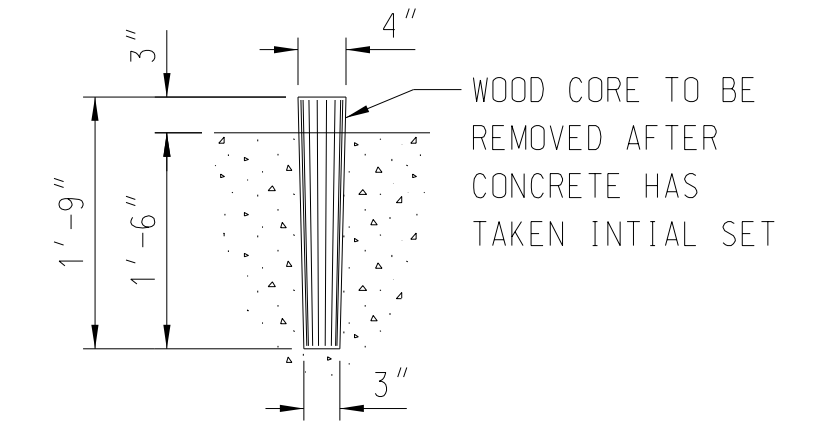
- NOTES:**
1. FOR WINGWALL W1 AND W2 DETAILS, SEE SHEET NO. 22.
  2. FOR SECTION B-B, SEE SHEET NO. 19.
  3. FOR SECTION C-C, SEE SHEET NO. 20.
  4. FOR SECTIONS D-D AND E-E, SEE SHEET NO. 21.
  5. FOR WINGWALL DETAILS, SEE SHEET NO. 22. ABUTMENTS 1 AND 6 WINGWALLS DETAILS ARE IDENTICAL.
  6. WP6 = STA. 67+93.48.



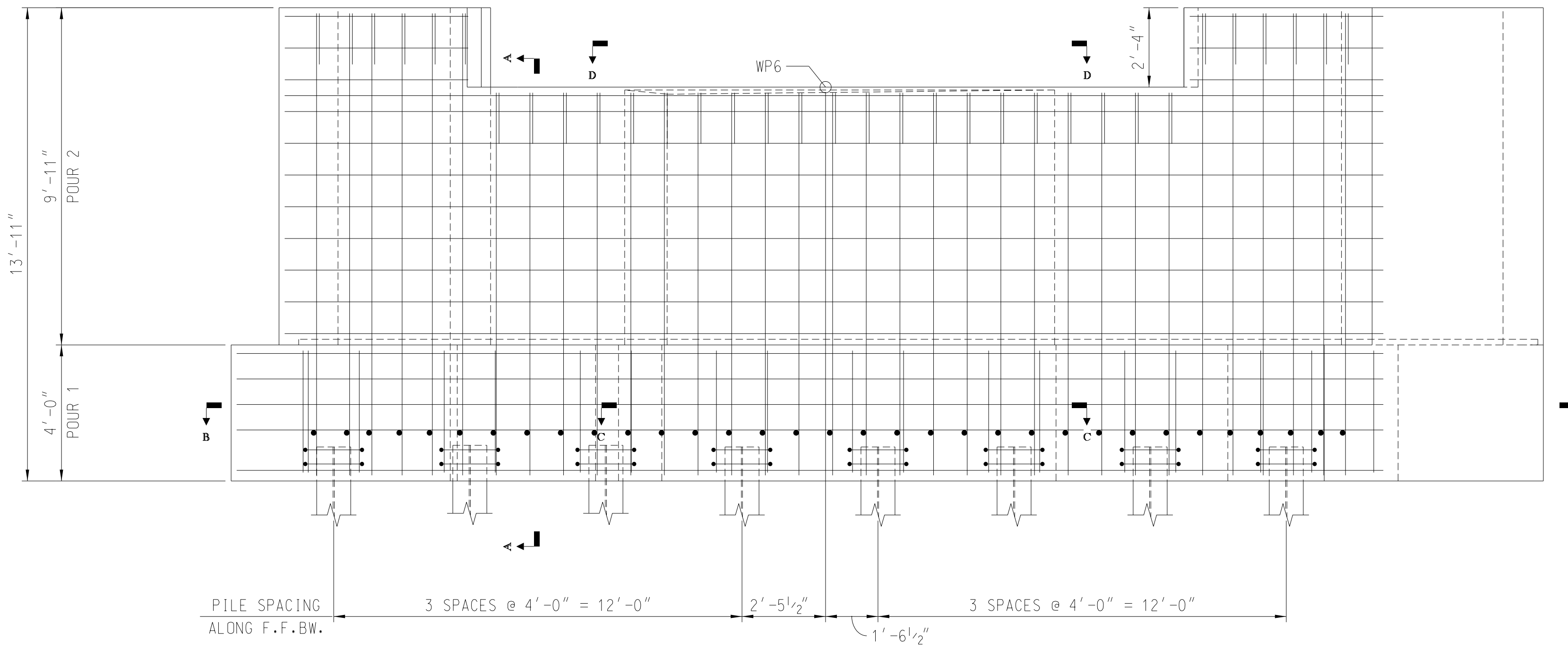
**PLAN**  
SCALE: 3/8" = 1'-0"



**ANCHOR BOLT LAYOUT**  
SCALE: 3/4" = 1'-0"



**WOODEN CORE DETAIL**  
SCALE: 3/4" = 1'-0"



**ELEVATION**  
LOOKING IN DIRECTION OF STATIONING. WINGWALL PILES NOT SHOWN.  
SCALE: 3/8" = 1'-0"

REVISED  
60 PERCENT PLANS  
NOT FOR  
CONSTRUCTION

REV.				
REV.				
REV.				
REVIEWED				
QUAN.				
DR.	RJB	JTW	10-23	COUNTY RICHLAND
DES.	RJB	JTW	10-23	
BY	CHK.	DATE		

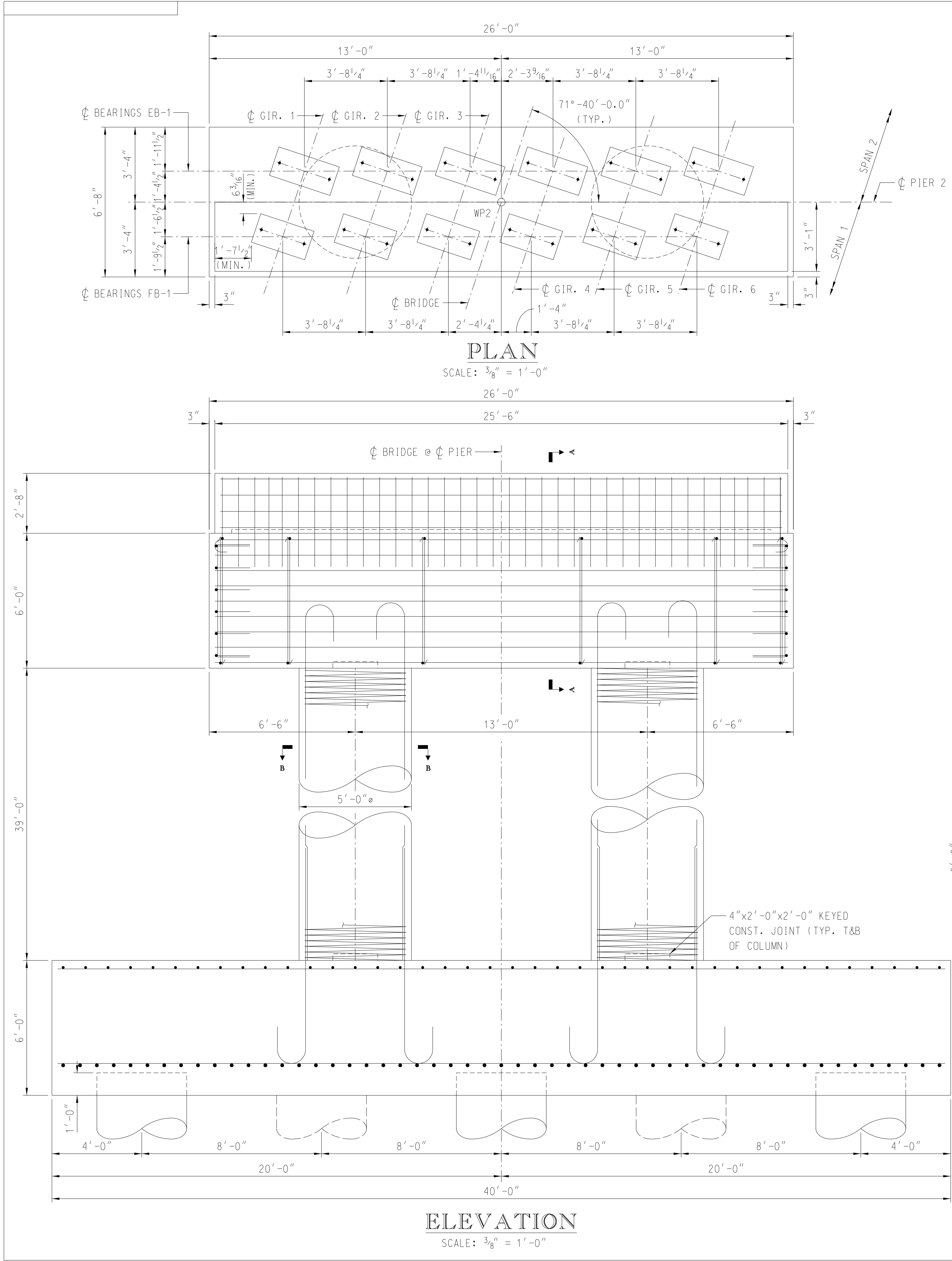
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**NEEL-SCHAFFER**  
Solutions you can build upon

**PALMETTO RAILWAYS**

**ABUTMENT 6 PLAN AND ELEVATION**

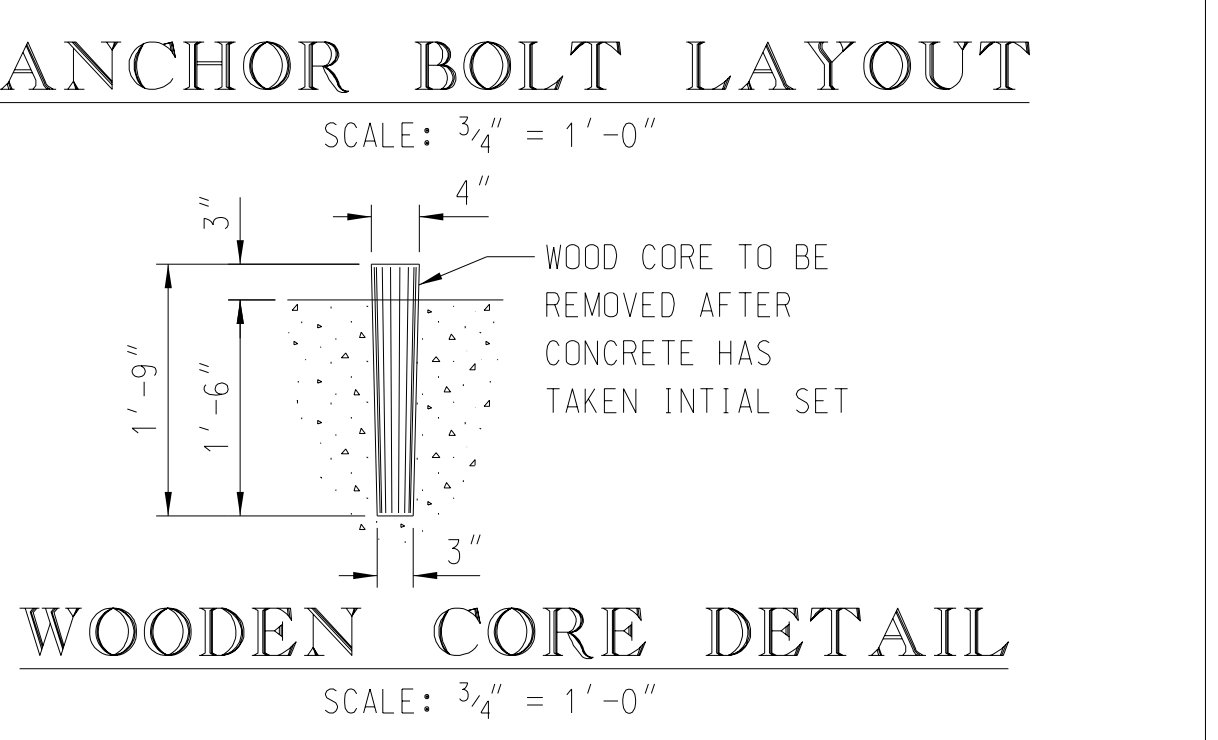
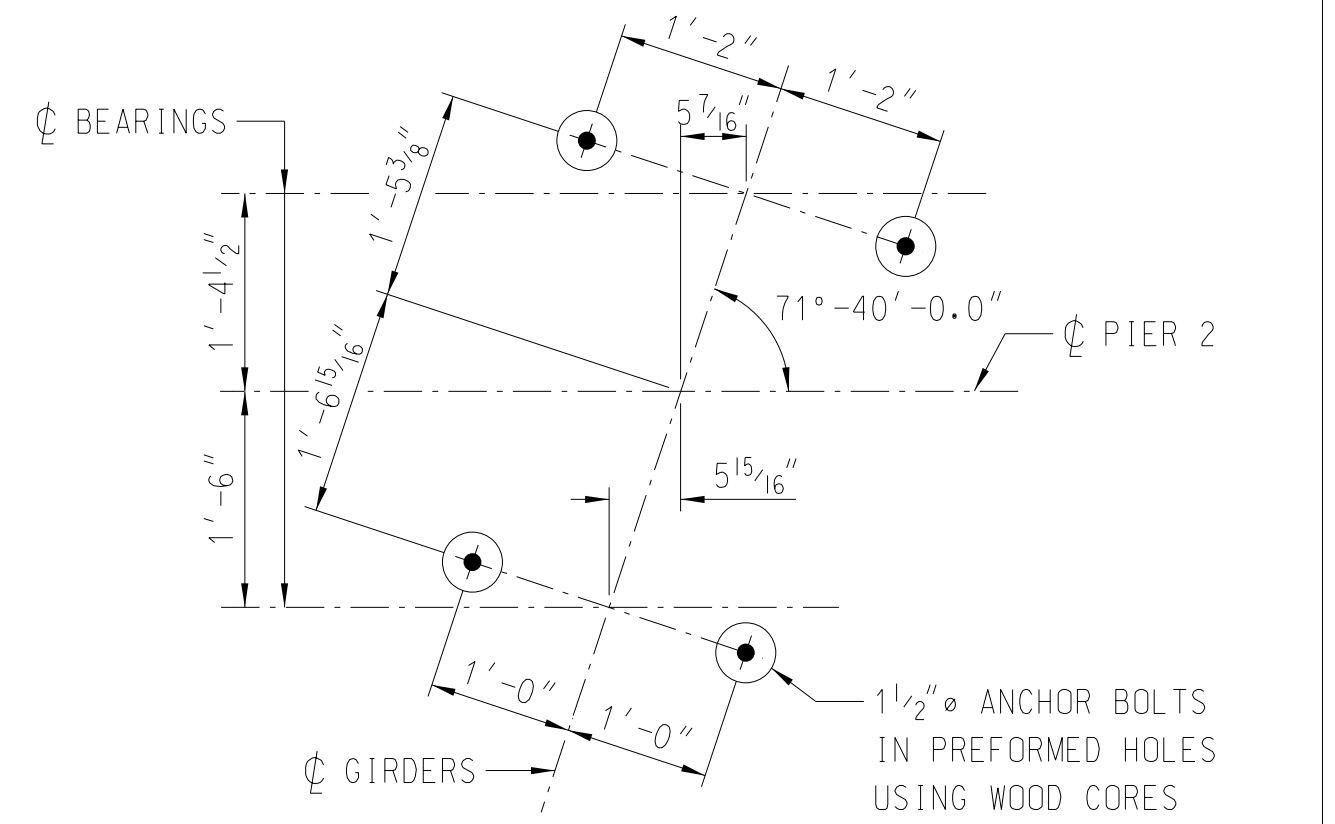
**PALMETTO RAILWAYS**

**BRIDGE OVER I-77**



**REINF. STEEL SCHED.**

MARK	NO. REQ'D	DIMENSION				LENGTH
		"A"	"B"	"C"	"D"	
XX	XX	XX	XX	XX	XX	XX
XX	XX	XX	XX	XX	XX	XX



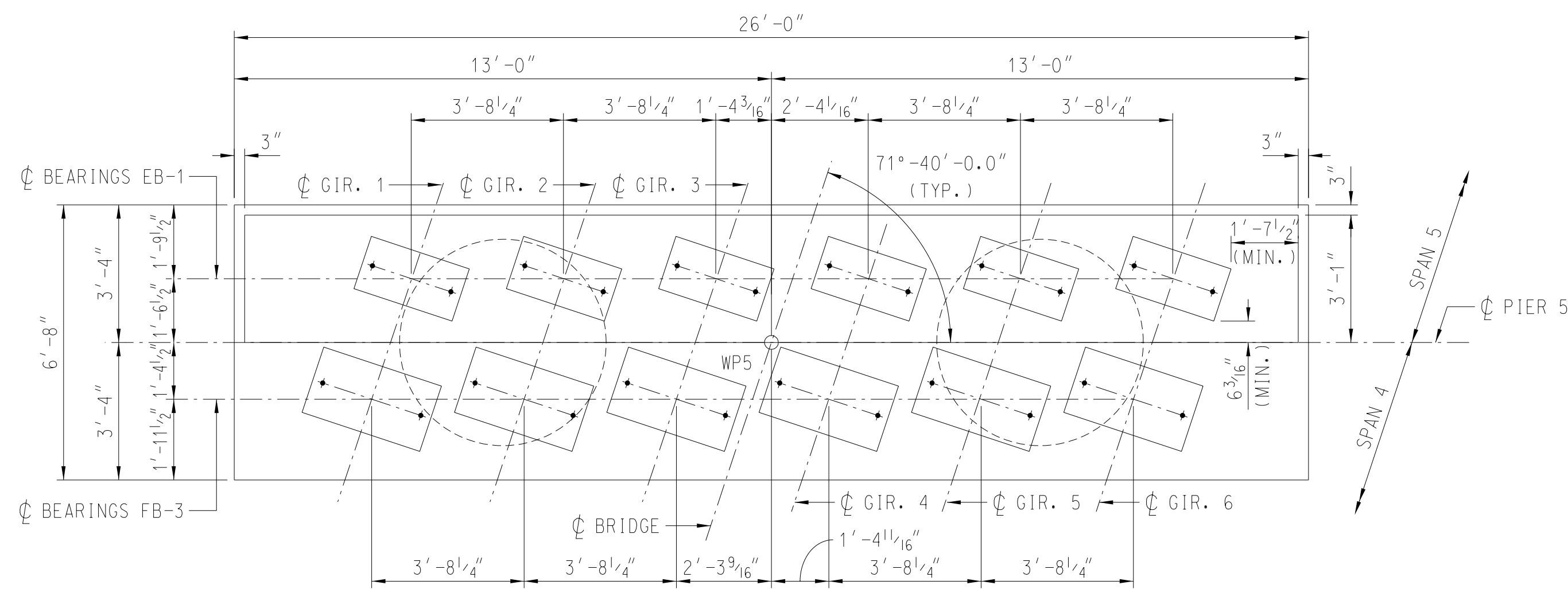
NOTES:  
 1. WP2 STATION = 62+92.81

**REVISED  
 60 PERCENT PLANS  
 NOT FOR  
 CONSTRUCTION**

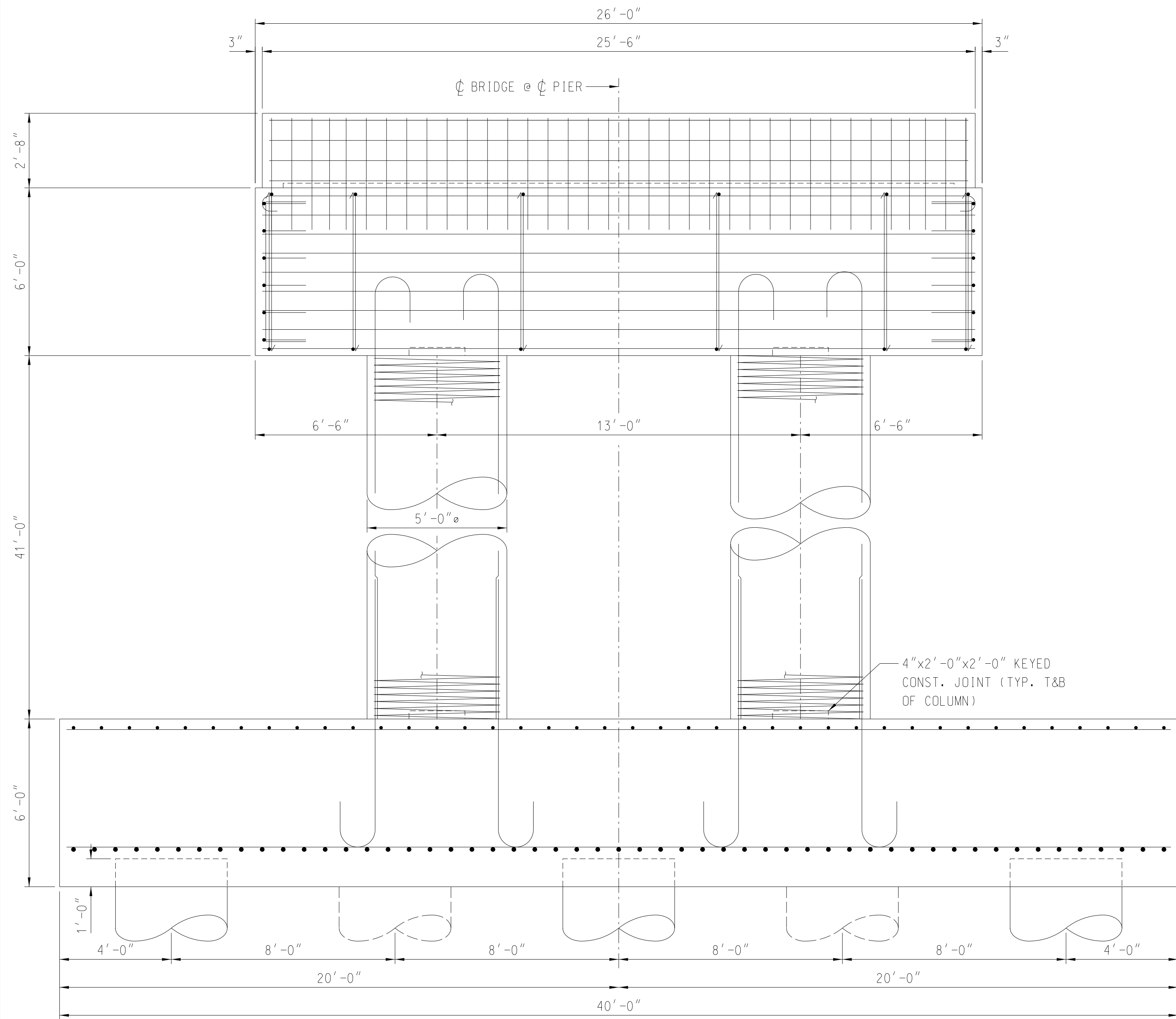
REV.				NEEL-SCHAFFER Solutions you can build upon
REV.				
REV.				
REV.				
REVIEWED				
QUAN.				
DR.	RJB	JTW	10-23	PREPARED BY: PALMETTO RAILWAYS
DES.	RJB	JTW	10-23	
BY	CHK.	DATE		
COUNTY: RICHLAND			ROUTE: 1-77	

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 rafiej@andrews.com

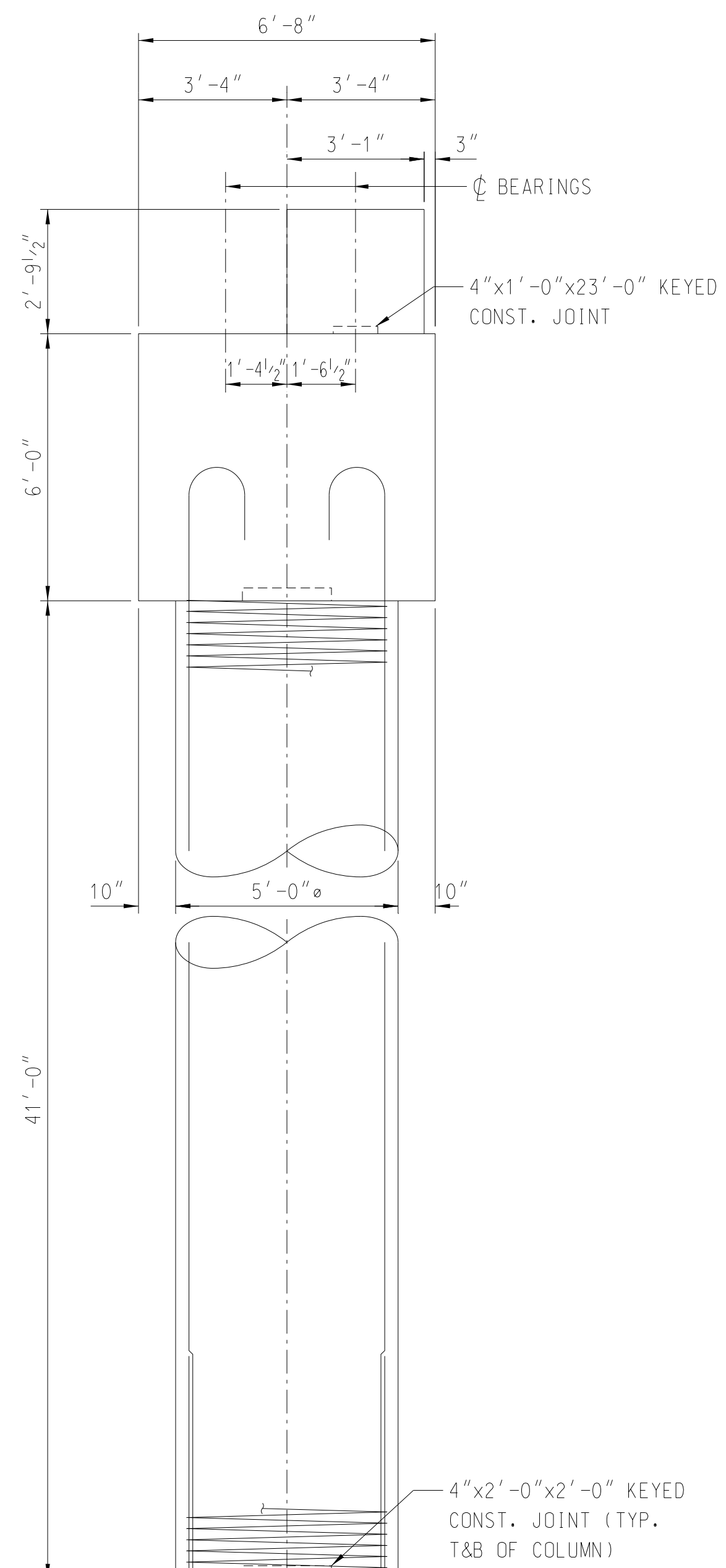




**PLAN**  
SCALE: 3/8" = 1'-0"



**ELEVATION**  
SCALE: 3/8" = 1'-0"

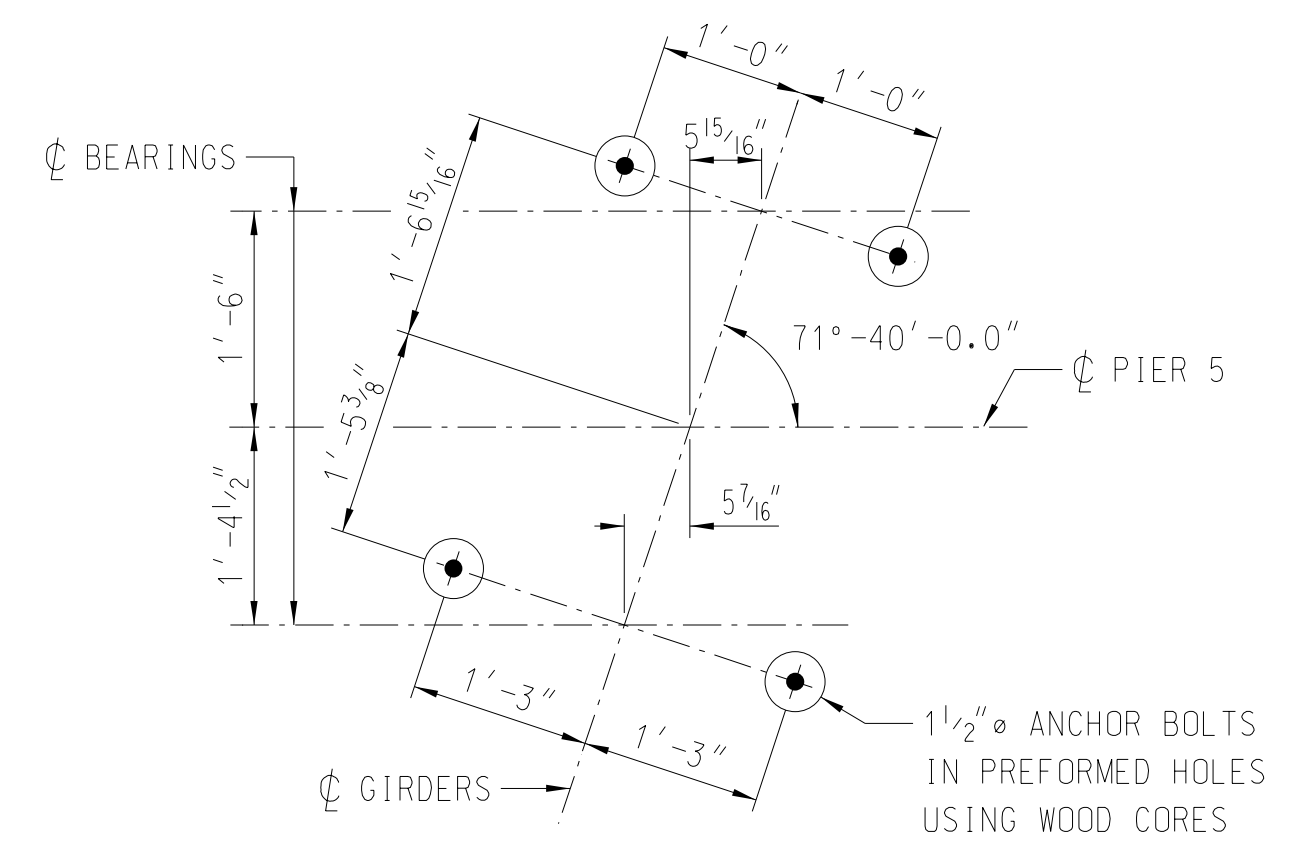


**END ELEVATION**  
SCALE: 3/8" = 1'-0"

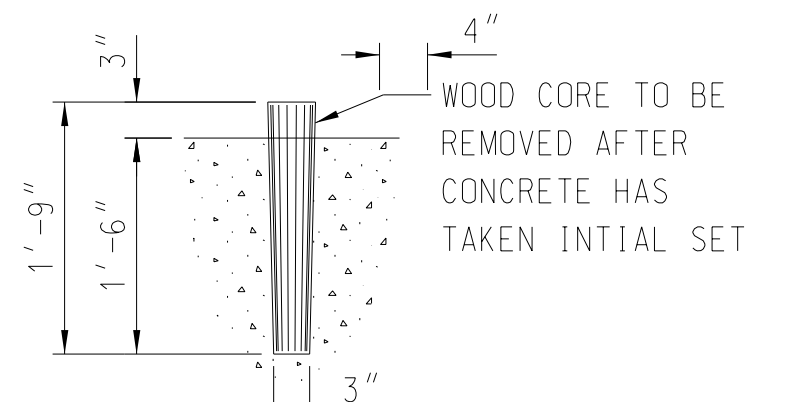
- NOTES:
- WP5 STATION = 67+06.81
  - DRILLED SHAFTS ARE 4'-0"Ø.

**REVISED  
60 PERCENT PLANS  
NOT FOR  
CONSTRUCTION**

MARK	NO. REQ'D	DIMENSION				LENGTH
		"A"	"B"	"C"	"D"	
XX	XX	XX	XX	XX	XX	XX
XX	XX	XX	XX	XX	XX	XX



**ANCHOR BOLT LAYOUT**  
SCALE: 3/4" = 1'-0"



**WOODEN CORE DETAIL**  
SCALE: 3/4" = 1'-0"

PREPARED BY **NEEL-SCHAFFER**  
Solutions you can build upon

**PALMETTO RAILWAYS**

**PIER 5 PLAN AND ELEVATION**

**PALMETTO RAILWAYS BRIDGE OVER I-77**

COUNTY	RICHLAND	ROUTE	1-77
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REV.			
REV.			
REV.			
REVIEWED			
QUAN.			
DR.	RJB	JTW	10-23
DES.	RJB	JTW	10-23
BY	CHK.	DATE	

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 ranoj.bourdeux