

# Appendix C

## Engineering Plans

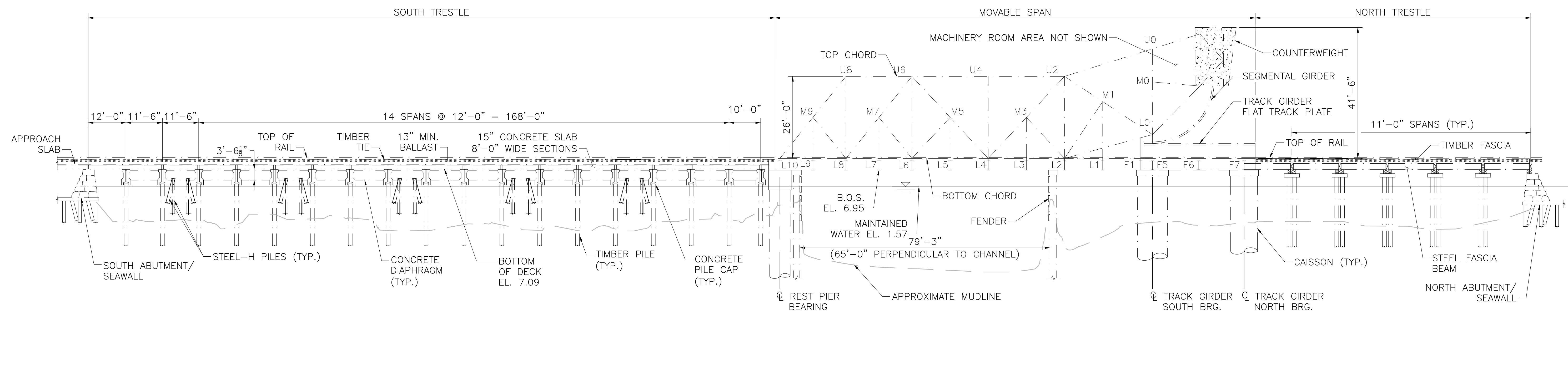
I:\Projects\4020415\_4020415\_0001\90\_CAD\_Models\_and\_Sheets\06\_S\_Structural\H32PS01\_BR\_G-37\_(Existing Bridge Plan).dwg, 11/20/2024 6:25 AM, Goulet, William R.



**EXISTING BRIDGE PLAN**  
SCALE: 1" = 30'

<b>T</b>	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY																																											
	NORTH STATION DRAW 1 BRIDGE REPLACEMENT MBTA CONTRACT NO. H32PS01																																											
<b>EXISTING BRIDGE PLAN</b>																																												
<b>stv</b>	STV Incorporated One Financial Center 3rd Floor Boston, MA 02111																																											
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<table border="1"> <thead> <tr> <th>ISSUE</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHKD.</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>04</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>03</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>02</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>01</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.	04						03						02						01						<table border="1"> <tr> <td>Manager of Design:</td> <td>"Name"</td> <td>Date:</td> </tr> <tr> <td>Horiz. SCALE: 1" = 30'</td> <td>DES. BY</td> <td>DR. BY</td> </tr> <tr> <td>Vert. SCALE: 1" = 30'</td> <td>CHK. BY</td> <td>CHK. BY</td> </tr> <tr> <td>DATE: NOV. 20, 2024</td> <td>WRG</td> <td>WRG JM</td> </tr> </table>	Manager of Design:	"Name"	Date:	Horiz. SCALE: 1" = 30'	DES. BY	DR. BY	Vert. SCALE: 1" = 30'	CHK. BY	CHK. BY	DATE: NOV. 20, 2024	WRG	WRG JM
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**EXISTING LONGITUDINAL SECTION**

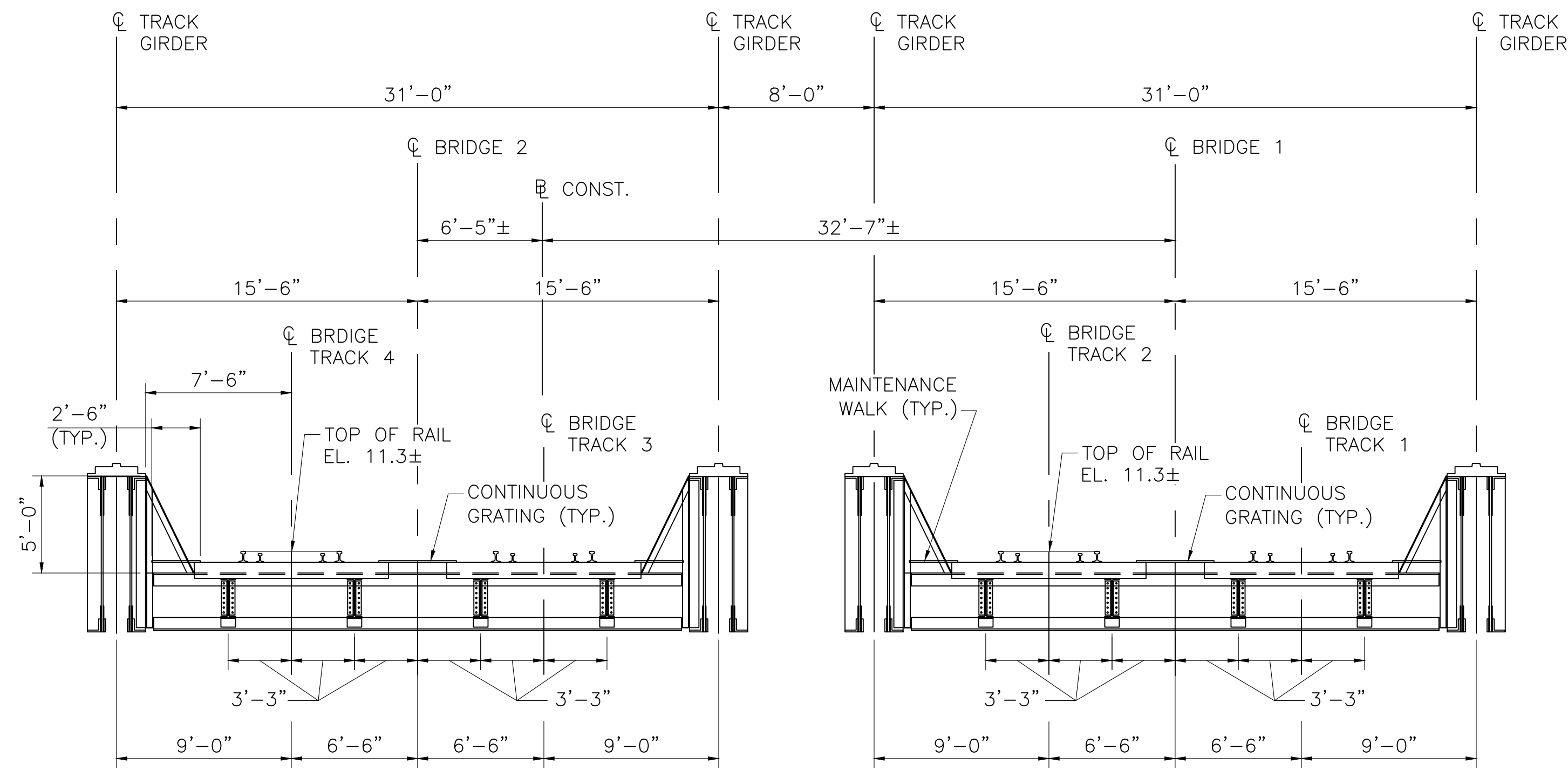
SCALE: 1/16" = 1'-0"

**NOTES:**

1. TIMBER PILES AT SOUTH TRESTLE ARE FROM ORIGINAL CONSTRUCTION AND WERE RETROFITTED DURING TRESTLE RECONSTRUCTION.
2. NORTH AND SOUTH TRESTLE SPAN LENGTHS SHOWN ARE MEASURED PERPENDICULAR TO THE PIER CENTERLINES.
3. MOVABLE SPAN EAST TRUSS SHOWN.
4. SEE SHEETS G-39 THROUGH G-41 FOR TYPICAL SECTIONS.

<b>T</b>		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
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<b>EXISTING LONGITUDINAL SECTION</b>			
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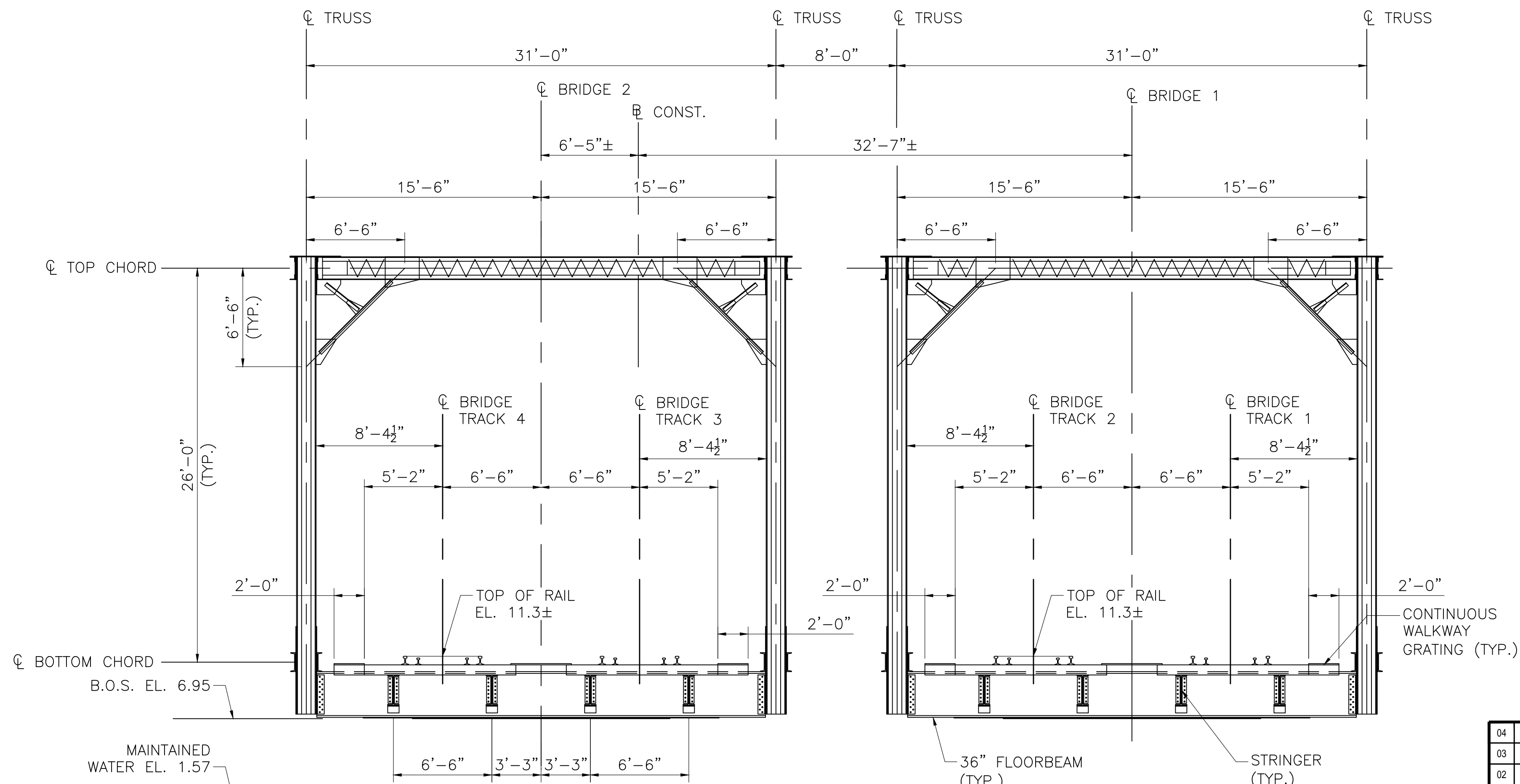
I:\Projects\4020415\4020415\_0001\90\_CAD Models and Sheets\06\_S\_Structural\H32PS01\_BR-G-39\_Existing Typical Sections 1 of 3.dwg, 11/20/2024 6:25 AM, Goulet, William R.



NOTE: MINIMUM HORIZONTAL CLEARANCE AT TRACK GIRDER = 7'-6".

**EXISTING TRACK GIRDER SECTION**

SCALE:  $\frac{3}{16}'' = 1'-0''$



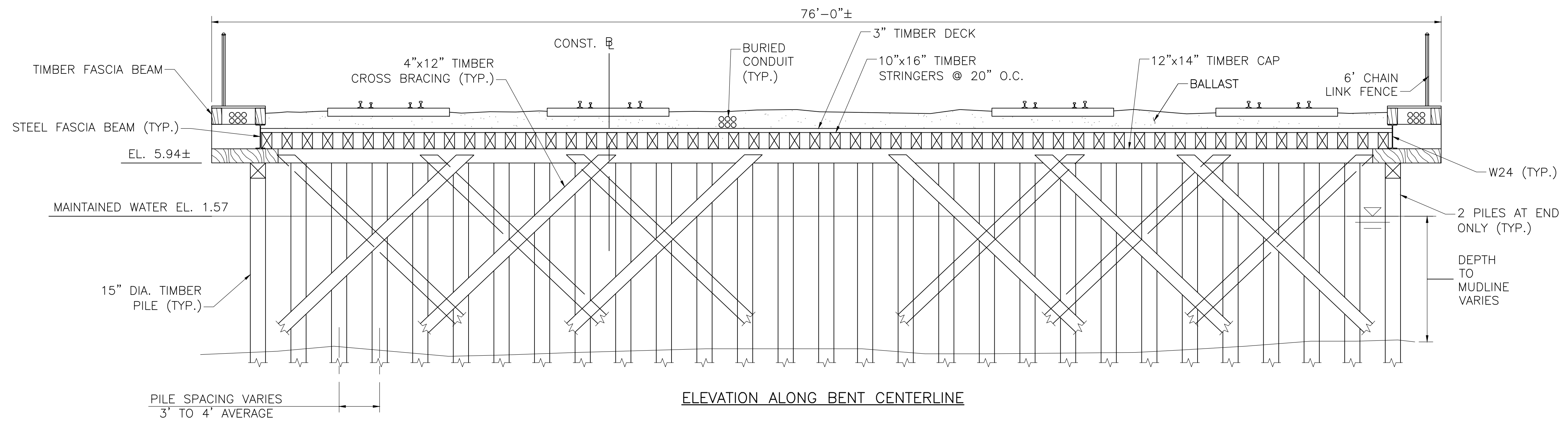
NOTE: MINIMUM HORIZONTAL CLEARANCE AT PORTAL FRAME = 7'-11".

**EXISTING BASCULE SECTION**

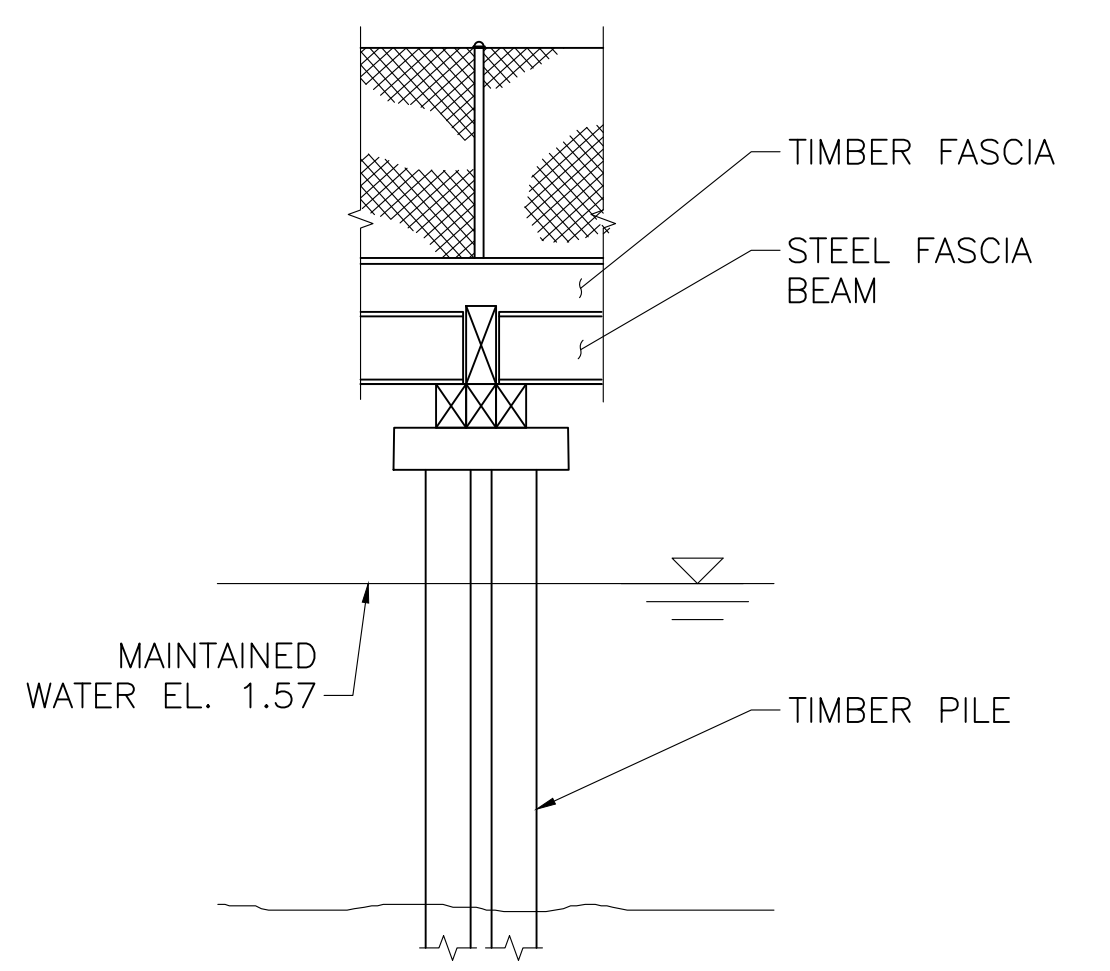
SCALE:  $\frac{3}{16}'' = 1'-0''$

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<b>EXISTING TYPICAL SECTIONS 1 OF 3</b>		
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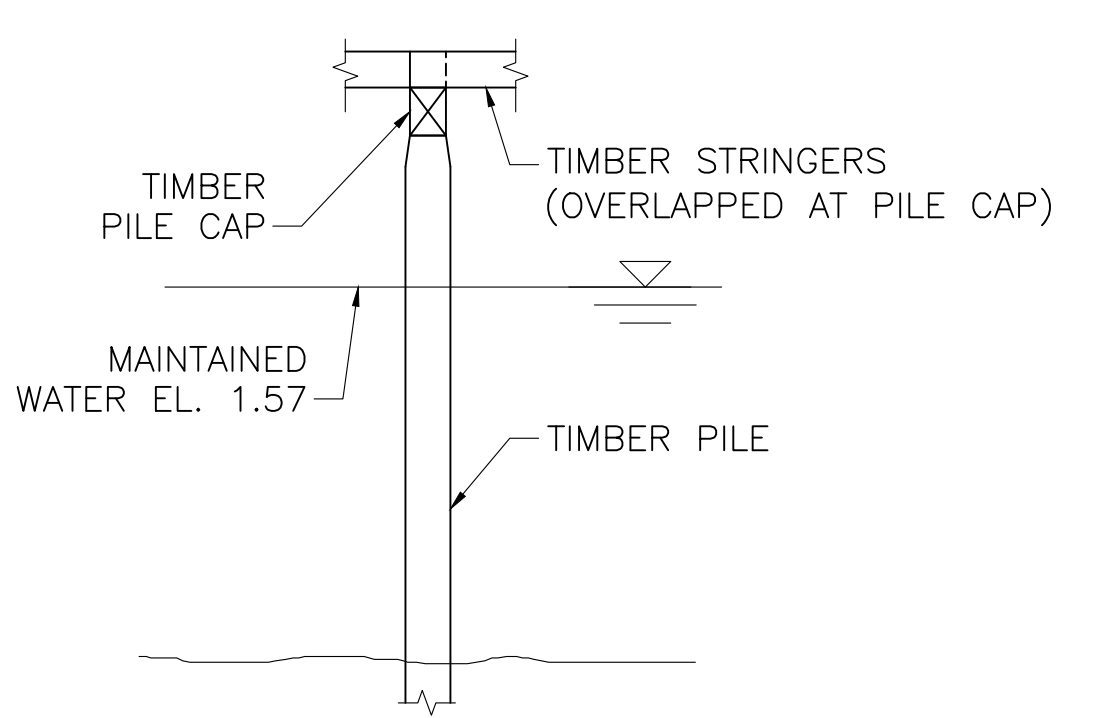
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**ELEVATION ALONG BENT CENTERLINE**  
**EXISTING NORTH TRESTLE CROSS SECTION**  
 SCALE:  $\frac{3}{16}'' = 1'-0''$



**ELEVATION AT END CAP**  
 SCALE:  $\frac{3}{16}'' = 1'-0''$



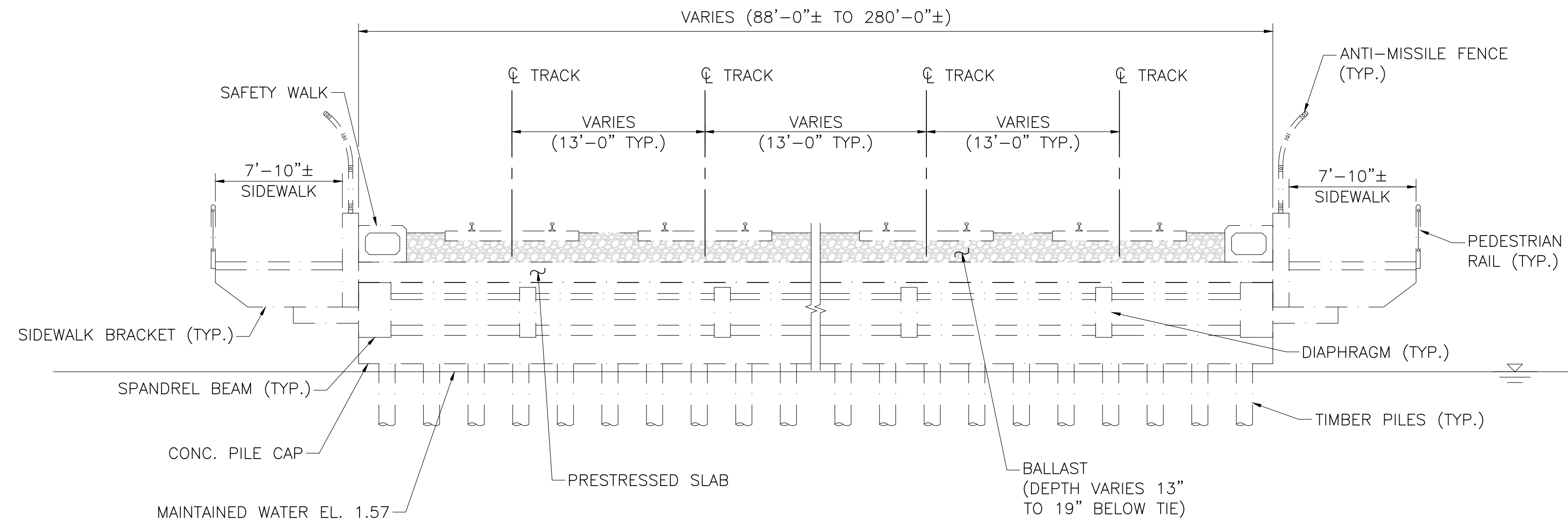
**ELEVATION AT TYPICAL PILE**  
 SCALE:  $\frac{3}{16}'' = 1'-0''$

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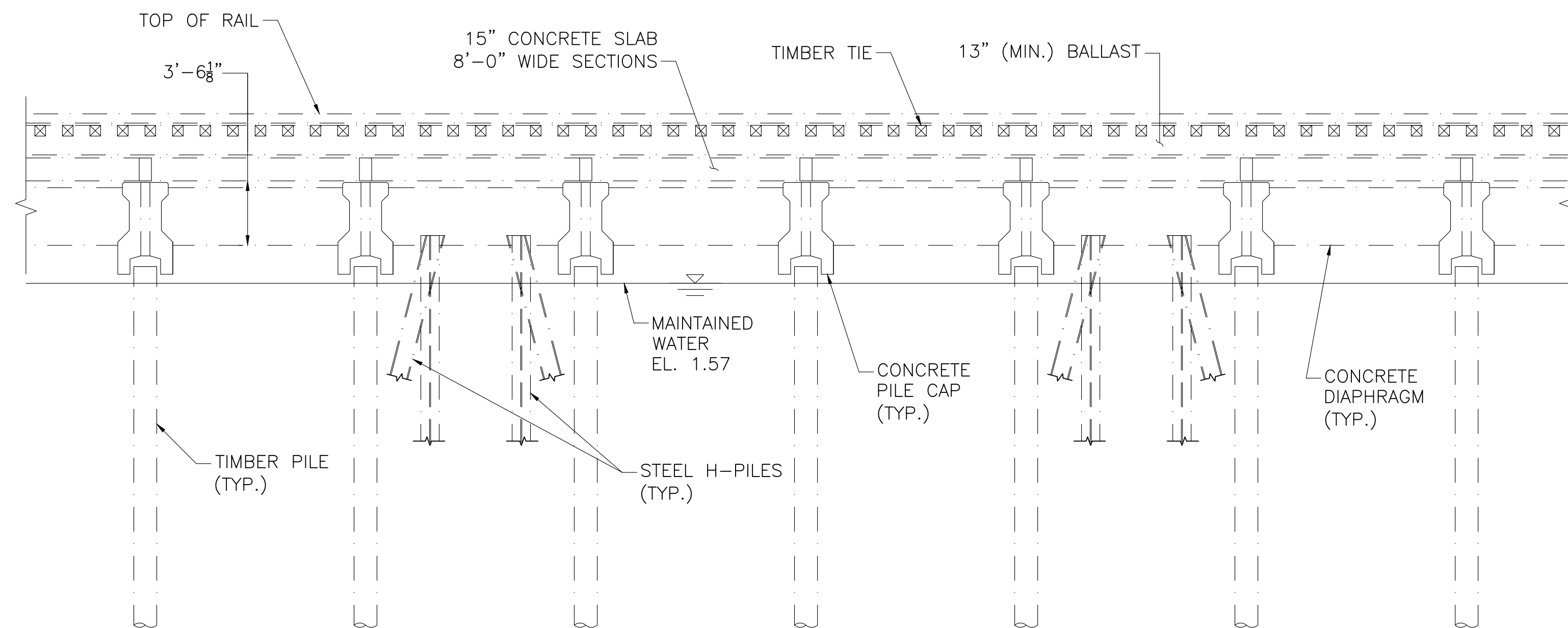
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	NORTH STATION DRAW 1 BRIDGE REPLACEMENT MBTA CONTRACT NO. H32PS01	
<b>EXISTING TYPICAL SECTIONS 2 OF 3</b>		
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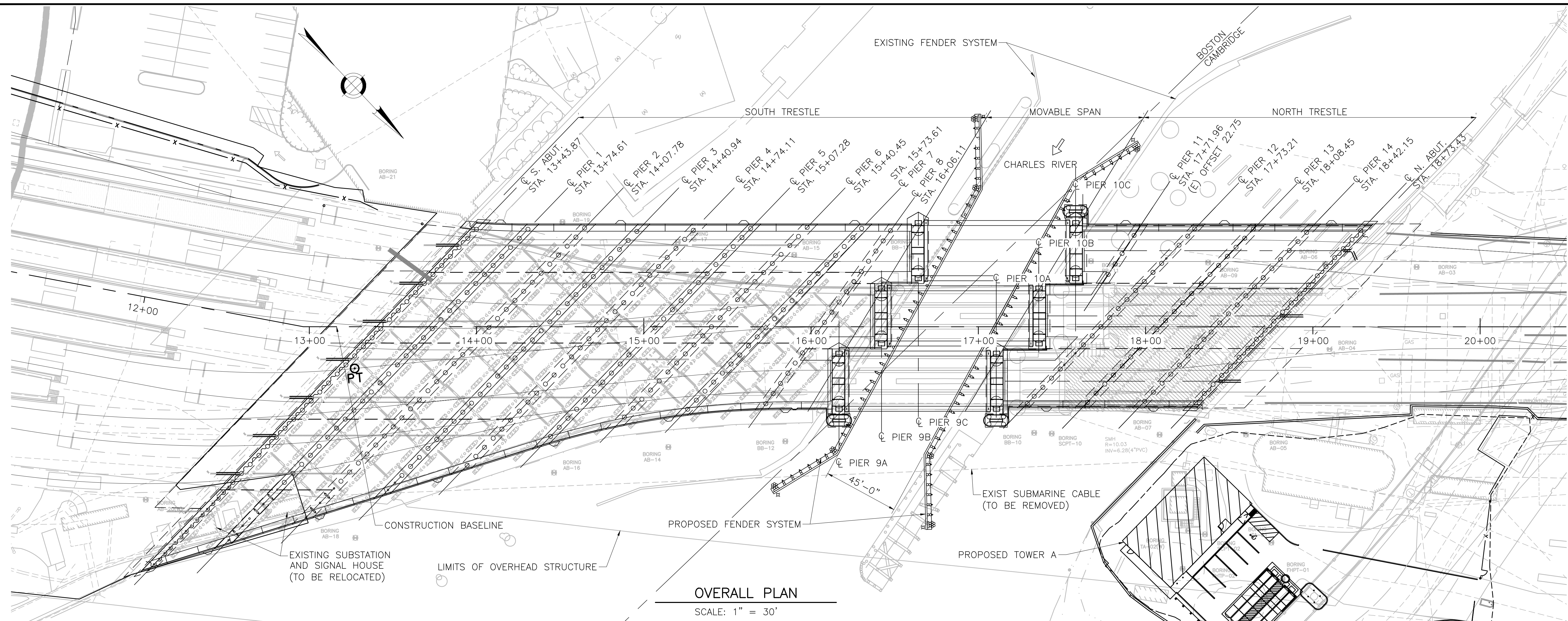
**EXISTING SOUTH TRESTLE SECTION**  
SCALE:  $\frac{3}{16}'' = 1'-0''$



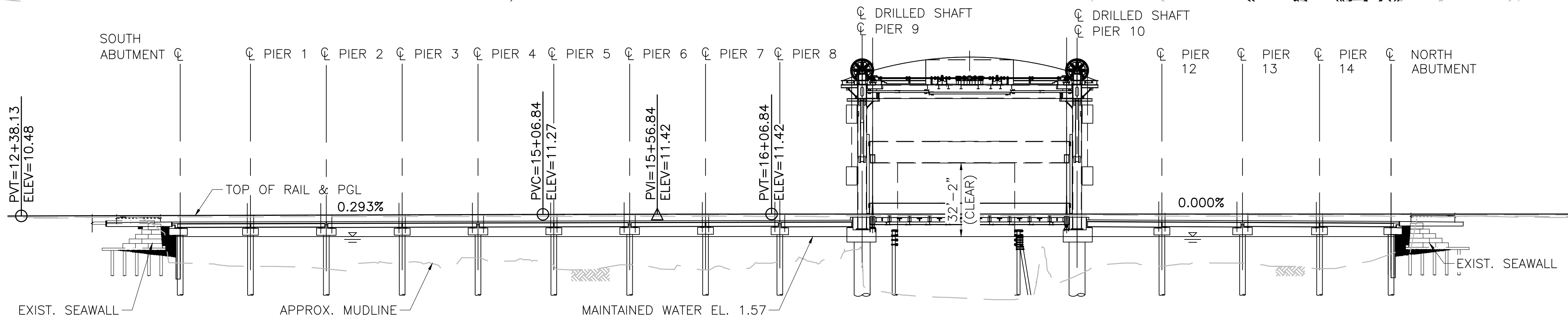
**EXISTING SOUTH TRESTLE ELEVATION**  
SCALE:  $\frac{3}{16}'' = 1'-0''$

<b>T</b>	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
	NORTH STATION DRAW 1 BRIDGE REPLACEMENT MBTA CONTRACT NO. H32PS01	
<b>EXISTING TYPICAL SECTIONS 3 OF 3</b>		
		STV Incorporated One Financial Center 3rd Floor Boston, MA 02111
Manager of Design: "Name"      Date:		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
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**OVERALL PLAN**  
SCALE: 1" = 30'

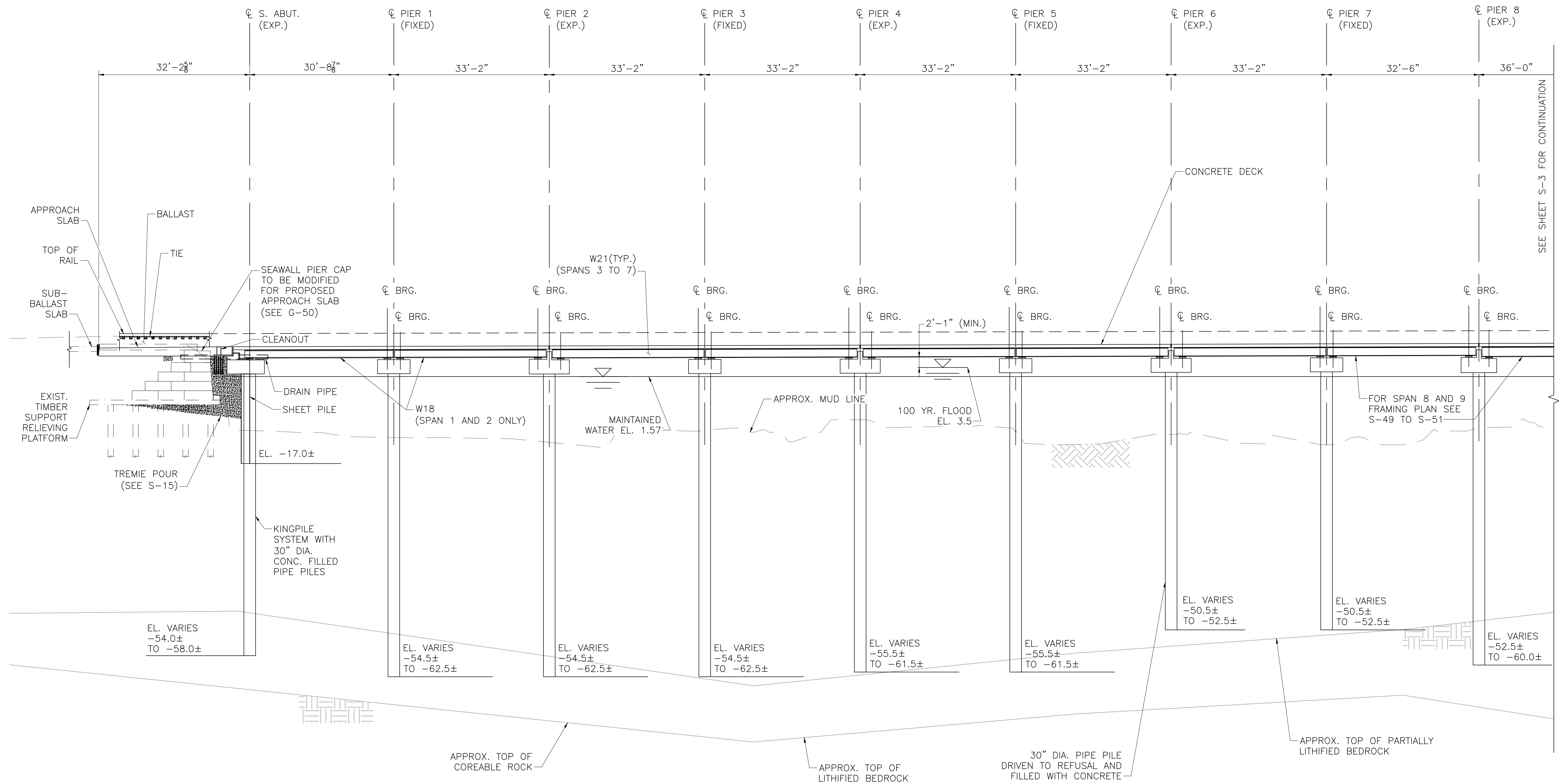


**PROFILE OVER CHARLES RIVER**  
HORIZONTAL SCALE: 1" = 30'  
VERTICAL SCALE: 1" = 30'

- NOTES:**
1. PROFILE SHOWN AT TRACK 4. TRACK PROFILES VARY, SEE TRACK SHEETS T-301 THROUGH T-310 AND T-401 THROUGH T-426 FOR PROFILE INFORMATION.
  2. FOR BORING LOCATIONS SEE SHEET G-4 AND G-5.
  3. STATIONING PROVIDED IS AT THE CONSTRUCTION BASELINE.
  4. WORK AT NORTH BANK BRIDGE LOCATION NOT SHOWN FOR CLARITY.
  5. SEE NORTH STATION DRAWINGS FOR WORK TO BE PERFORMED AT EXISTING PLATFORMS AND PROPOSED PLATFORM F.
  6. SEE CIVIL DRAWINGS C-201 AND C-202 FOR LIMITS OF DREDGING.
  7. MICROPILES UNDER OVERHEAD STRUCTURE NOT SHOWN IN PROFILE VIEW FOR CLARITY.
  8. MAINTAINED WATER ELEVATION IS 1.57'. THE LOW MAINTAINED WATER ELEVATION IS 0.07' AND THE HIGH MAINTAINED WATER ELEVATION IS 2.07'. 100 YEAR FLOOD ELEVATION IS 3.5' AND 500 YEAR FLOOD ELEVATION IS 5.17'.

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		MBTA CONTRACT NO. H32PS01																														
<b>PLAN AND ELEVATION</b>																																
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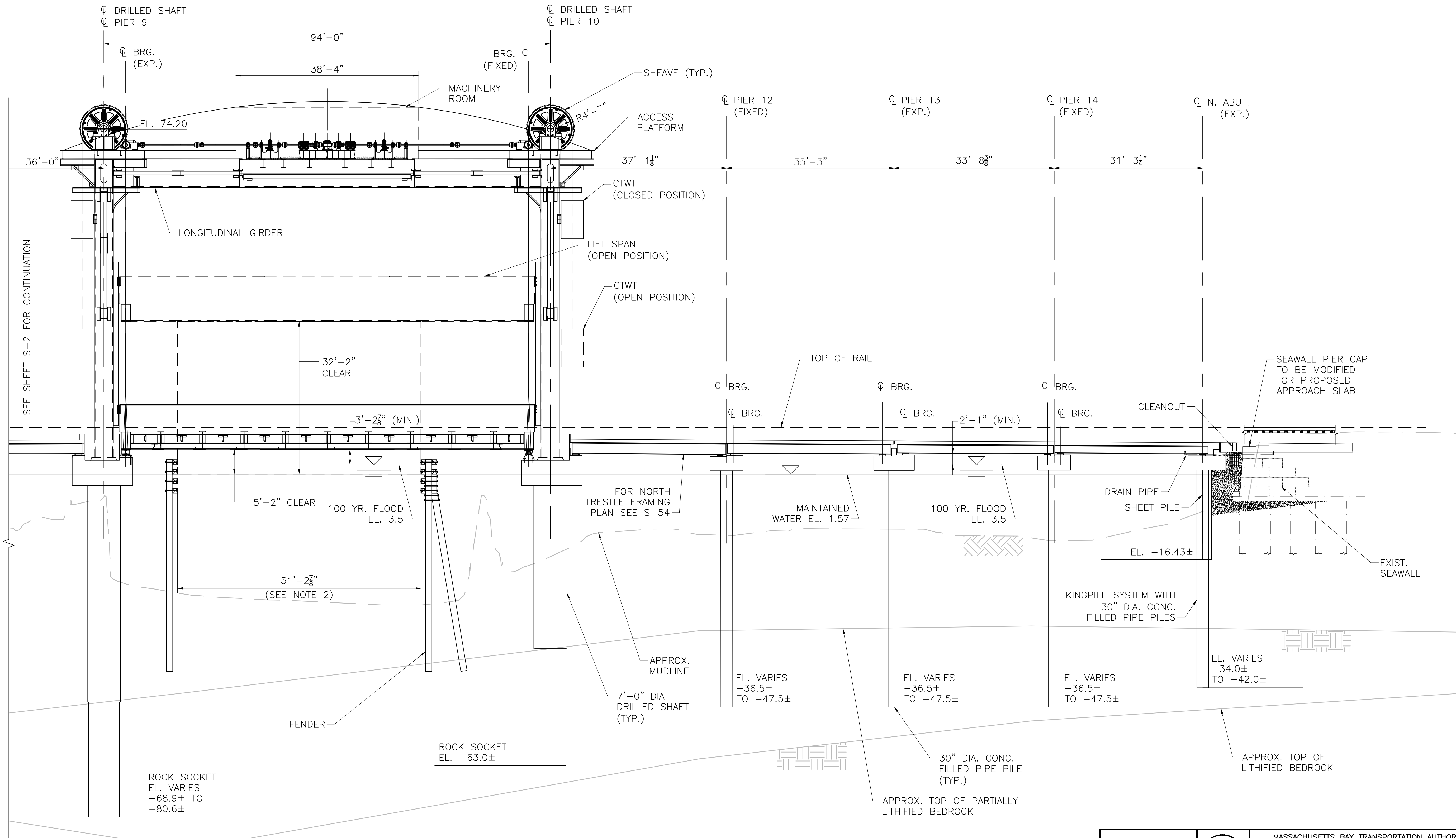
SEE SHEET S-3 FOR CONTINUATION

**LONGITUDINAL SECTION**  
SCALE: 3/32" = 1'-0"

- NOTES:**
- LONGITUDINAL SECTION SHOWN AT BASELINE OF CONSTRUCTION.
  - MAINTAINED WATER ELEVATION IS 1.57'. THE LOW MAINTAINED WATER ELEVATION IS 0.07' AND HIGH MAINTAINED WATER ELEVATION IS 2.07'.
  - ROCK PROFILE SHOWN IS BASED ON BORINGS AB-21, AB-19, AB-17, AB-15, BB-13, BB-11, AB-09, AB-06 AND AB-03(W). SEE BORING LOGS FOR TOP OF PARTIALLY LITHIFIED ROCK AND CORING ELEVATIONS FOR ALL OTHER LOCATIONS.

		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY NORTH STATION DRAW 1 BRIDGE REPLACEMENT MBTA CONTRACT NO. H32PS01	
		LONGITUDINAL SECTION 1 OF 2	
		STV Incorporated One Financial Center 3rd Floor Boston, MA 02111	
Manager of Design: "Name" Date:		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
Horiz. SCALE AS NOTED	DES. BY: KS DR. BY: SJK DATE: NOV. 20, 2024	PLAN NO. SHEET BR-S-2	ISSUE





**LONGITUDINAL SECTION**  
SCALE:  $\frac{3}{32}$ " = 1'-0"

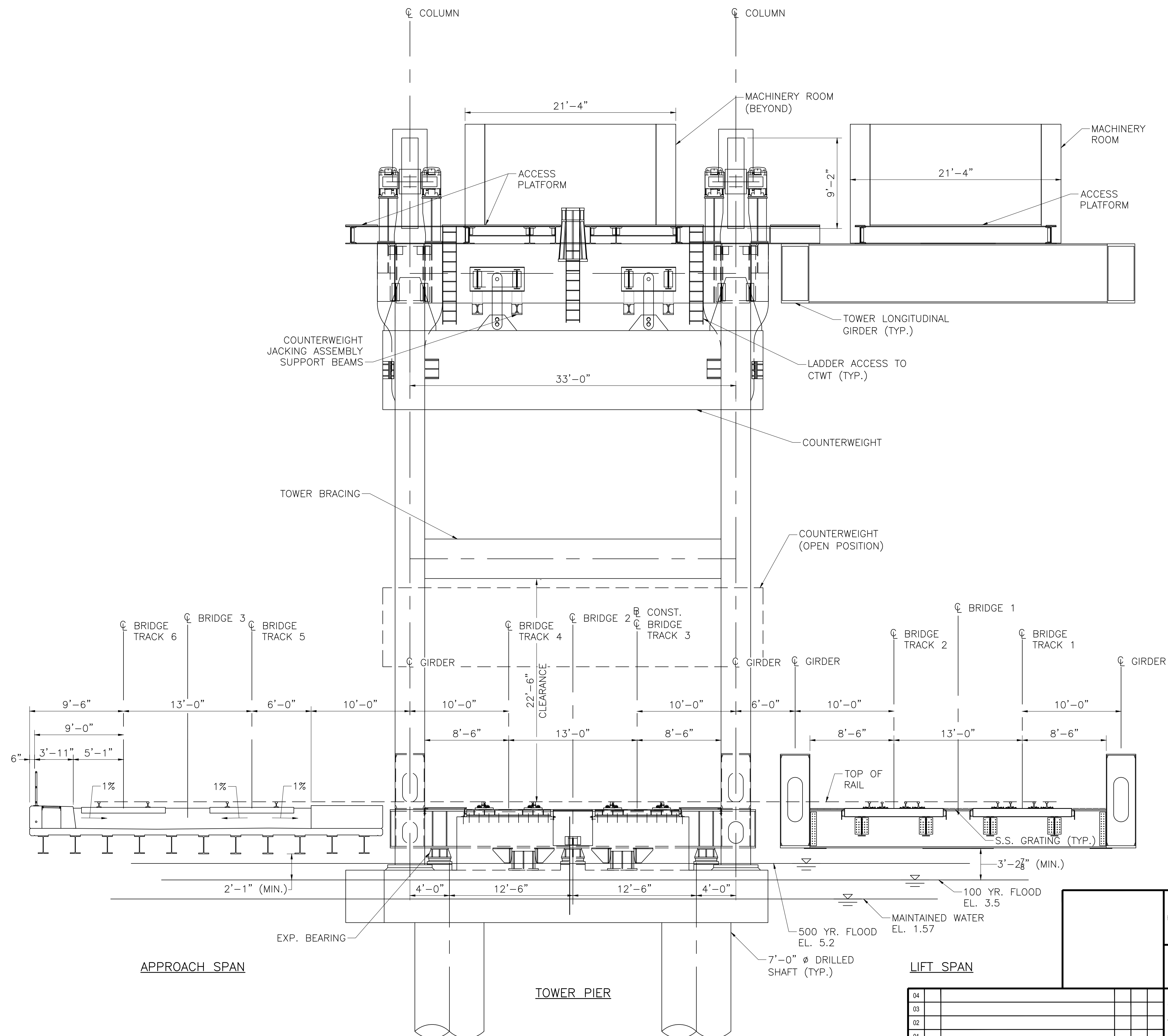
**NOTES:**

- LONGITUDINAL SECTION SHOWN AT BASELINE OF CONSTRUCTION.
- CHANNEL WIDTH IS 45'-0" MEASURED PERPENDICULAR TO THE FENDER SYSTEM.
- PIER 11 NOT SHOWN. LIMITS OF PIER 11 SUPPORT BRIDGE TRACKS 5 AND 6 ONLY AND IS BEYOND THE CONSTRUCTION BASELINE SECTION AS SHOWN.
- MAINTAINED WATER ELEVATION IS 1.57'. THE LOW MAINTAINED WATER ELEVATION IS 0.07' AND HIGH MAINTAINED WATER ELEVATION IS 2.07'.
- ROCK PROFILE SHOWN IS BASED ON BORINGS AB-21, AB-19, AB-17, AB-15, BB-13, BB-11, AB-09, AB-06 AND AB-03(W). SEE BORING LOGS FOR TOP OF LITHIFIED BEDROCK AND CORING ELEVATIONS FOR ALL OTHER LOCATIONS.
- CLADDING SYSTEM AND SUPPORTING FRAMING AT MACHINERY LEVEL NOT SHOWN FOR CLARITY.

<b>T</b>	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
	NORTH STATION DRAW 1 BRIDGE REPLACEMENT MBTA CONTRACT NO. H32PS01	
<b>LONGITUDINAL SECTION 2 OF 2</b>		
<b>stv</b>	STV Incorporated One Financial Center 3rd Floor Boston, MA 02111	
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Manager of Design: "Name"	Date:	
Horiz. SCALE AS NOTED	DES. BY: KS	DR. BY: SJK
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I:\Projects\4020415\4020415\_0001\90\_CAD Models and Sheets\06\_S\_Structural\H32PS01\_BR\_S-04\_(Transverse Section)-EA.dwg, 11/20/2024 6:27 AM, Goulet, William R.



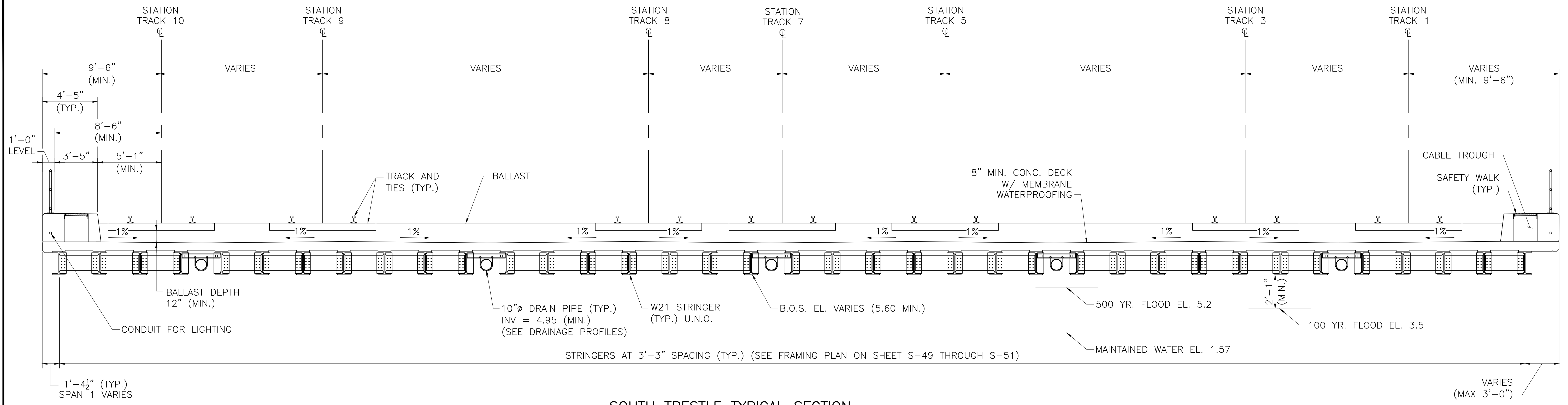
- NOTES:**
- COUNTERWEIGHT ROPE CONNECTIONS NOT SHOWN.
  - MACHINERY ROOM CLADDING SUPPORTS NOT SHOWN.
  - COUNTERWEIGHT RAILING NOT SHOWN.

**TRANSVERSE SECTION (STA. 16+42.12)**  
SCALE: 3/16" = 1'-0"

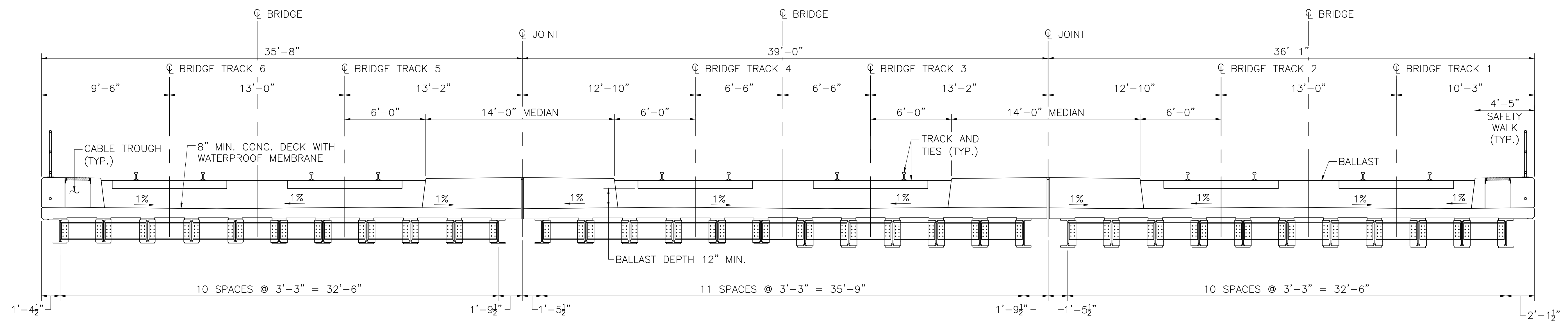
<b>T</b>	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
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<b>TRANSVERSE SECTION</b>		
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Horiz. SCALE: 3/16" = 1'-0"	DES. BY: KS	DR. BY: SJK
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DATE: NOV. 20, 2024	SHEET <b>BR-S-4</b>	

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**SOUTH TRESTLE TYPICAL SECTION**  
SCALE: 1/4" = 1'-0"

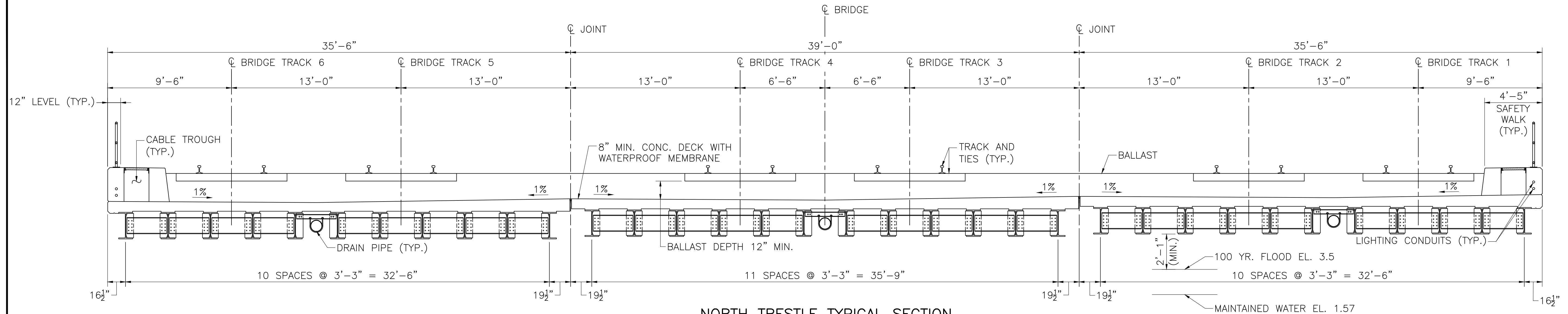


**SOUTH TRESTLE SECTION (AT LIFT SPAN)**  
SCALE: 1/4" = 1'-0"

- NOTES:**
1. TYPICAL SECTION SHOWN AT STA. 14+90±.
  2. SOUTH TRESTLE SECTION AT LIFT SPAN SHOWN AT LIFT SPAN PIER BEARING CENTERLINE.
  3. FOR ADDITIONAL DECK DETAILS SEE SHEET S-58 AND S-59.
  4. TURNOUTS NOT SHOWN FOR CLARITY.

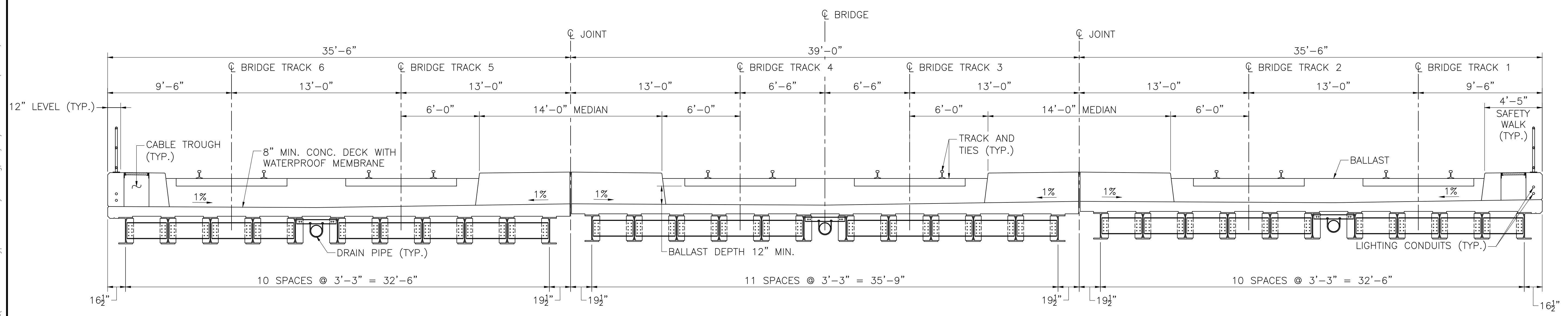
		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY NORTH STATION DRAW 1 BRIDGE REPLACEMENT MBTA CONTRACT NO. H32PS01	
		<b>SOUTH TRESTLE TYPICAL SECTIONS</b>	
04 03 02 01		STV Incorporated One Financial Center 3rd Floor Boston, MA 02111	
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DATE: NOV. 20, 2024		KS KS WRG	

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**NORTH TRESTLE TYPICAL SECTION**

SCALE: 1/4" = 1'-0"



**NORTH TRESTLE SECTION (AT LIFT SPAN)**

SCALE: 1/4" = 1'-0"

**NOTES:**

1. TYPICAL SECTION SHOWN AT STA. 18+25±.
2. TYPICAL SECTIONS MAINTAIN 1% CROSS SLOPE FOR TOP OF DECK PERPENDICULAR TO THE BEAMS. SEE SHEET S-61 AND S-62 FOR TOP OF DECK ELEVATIONS FOR EACH SPAN.
3. FOR ADDITIONAL DECK DETAILS SEE SHEET S-58 AND S-59.
4. TURNOUTS NOT SHOWN FOR CLARITY.

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<b>NORTH TRESTLE TYPICAL SECTION</b>			
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		Manager of Design: "Name" Date:	
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