



Ten Penn Center  
1801 Market Street  
Suite 2600  
Philadelphia, PA 19103  
P 215.557.0106 | F 717.763.8150

[gannettfleming.com](http://gannettfleming.com)

October 30, 2024

To: Philadelphia Art Commission  
1515 Arch Street, 13<sup>th</sup> Floor  
Philadelphia, PA 19102

Re: City of Philadelphia - Dept. of Streets | Pine Road Over SEPTA Cover Letter

Dear Commissioners:

The Gannett Fleming team has been working with the City of Philadelphia – Department of Streets to design the bridge rehabilitation project at Pine Road over SEPTA between Stanwood Street and Solly Avenue. We are seeking administrative review and approval for this submission.

Constructed in 1964, the bridge has endured decades of use and weathering, which has developed into concrete spalls, corrosion, and the need to impose a weight limitation to the bridge. To resolve existing deterioration and to extend the bridge's service life, this project will replace the bridge's superstructure including the deck, sidewalk, barriers, and beams.

The new design will maintain the bridge's intended purpose for vehicular and pedestrian traffic by incorporating full depth pavement reconstruction and sidewalk replacement. New concrete structural components will be applied to complement the existing structure, along with modernized metal railings to meet current standards.

In addition, the bridge had originally crossed over the Philadelphia Newtown & New York Railroad which required a railroad barrier for protection. That abandoned railroad bed was recently revitalized into the Fox Chase Lorimer Trail, which has eliminated the need for a railroad barrier. A PennDOT 10M style barrier will be installed continuously in place of it for improved visibility for bridge and trail users.

Gannett Fleming believes the new design will provide an improved but minimally altered appearance and requests your administrative review. We have included some design materials below for your reference.

Please reach out to me or Michael Urban, PE (Gannett Fleming Project Manager) if you have any questions.

Very truly yours,  
**GANNETT FLEMING, INC.**

A handwritten signature in blue ink that reads "Timothy Yiu".

Timothy Yiu, AIA  
Architect

cc: Mike Urban, Gannett Fleming ([murban@gfnet.com](mailto:murban@gfnet.com))



# Pine Rd over SEPTA

- ❖ Constructed in 1964
- ❖ Originally carried Pine Rd over P.N.&NY Railroad
- ❖ Newly constructed Fox Chase Lorimer Trail
- ❖ Carries vehicular and pedestrian traffic
- ❖ ADT: 8,811 vehicles/day





# Purpose and Need





# Purpose and Need





# Existing Bridge





# Proposed Bridge





# Proposed Bridge



- ❖ Superstructure Replacement
  - Replace deck/sidewalk/barriers
  - Replace concrete beams
  - Minor repairs to abutments
- ❖ Improvements
  - Remove weight and parking restriction
  - Open railing barrier across the bridge and along approaches
  - Aesthetic appearance for trail users





# Existing Bridge

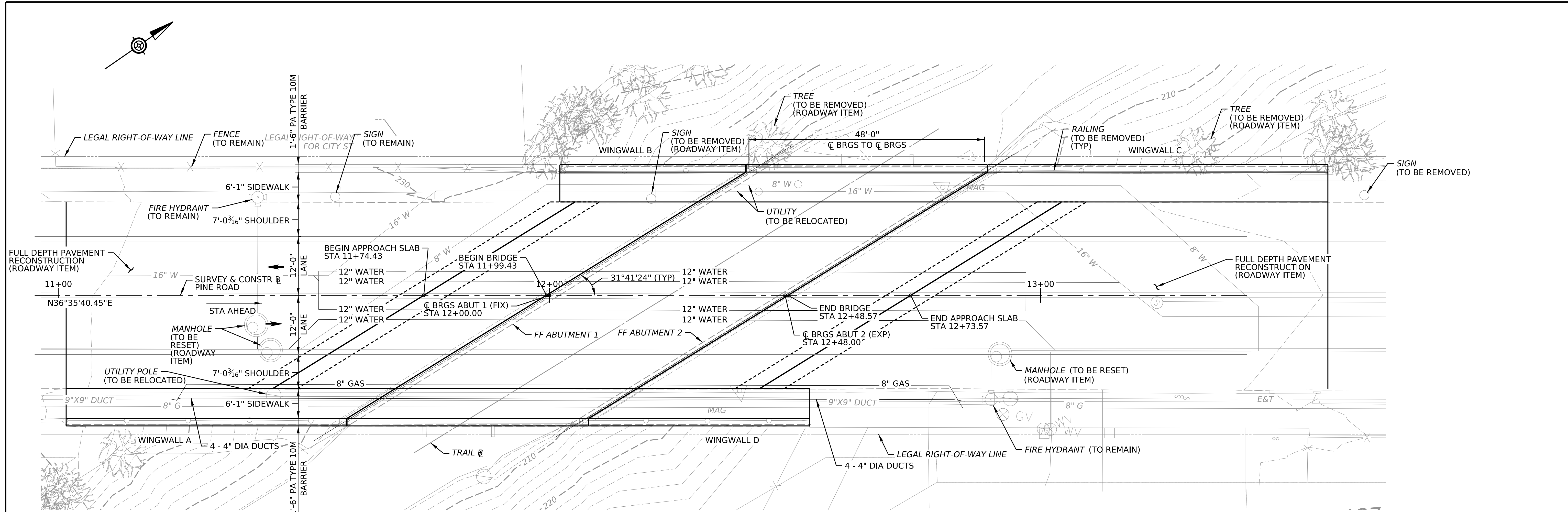




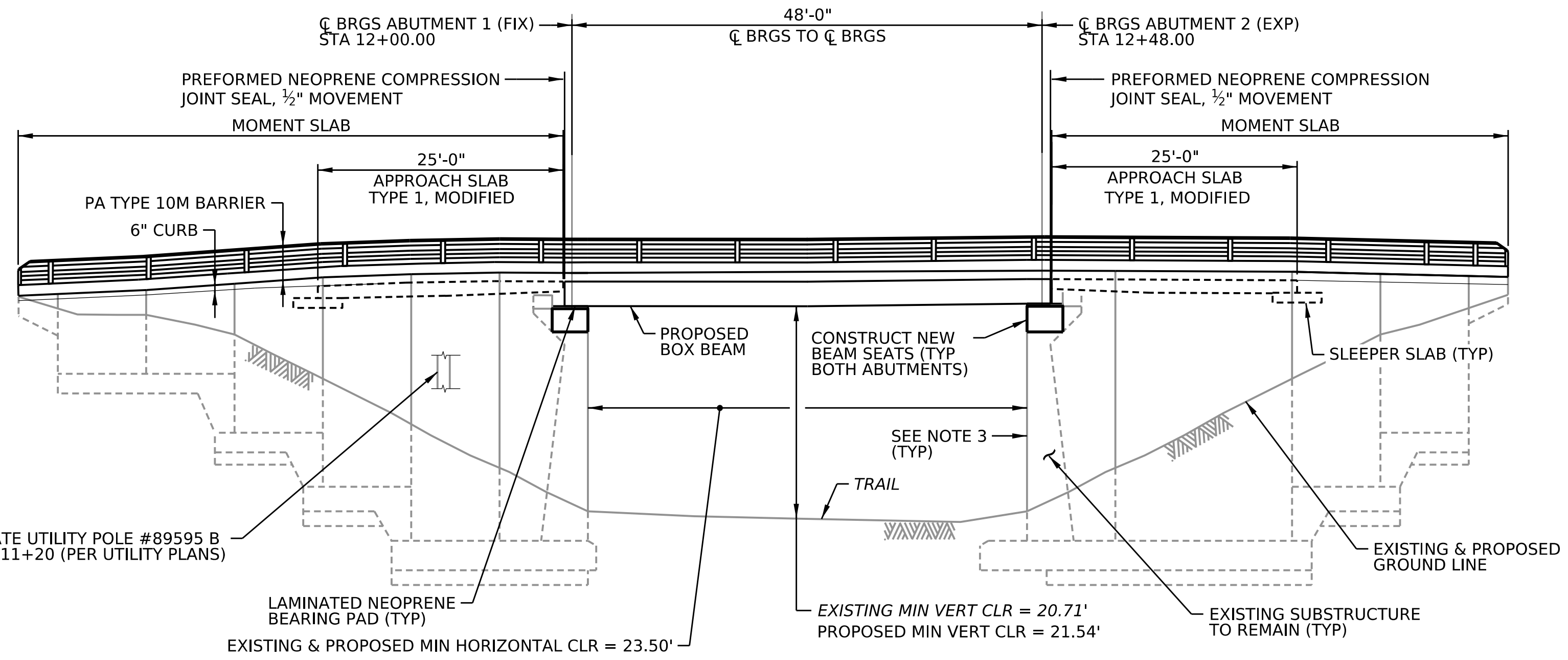
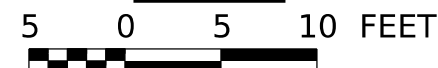


# Proposed Bridge





**PLAN**



**ELEVATION**



**HORIZONTAL CURVE DATA:**

MATCH EXISTING

**VERTICAL CURVE DATA:**

3.78% @ -1.93%

PVI STA = 11+90.00  
 EL = 231.168  
 VC = 104.00  
 MO = -0.66

**SUGGESTED REHABILITATION SCOPE OF WORK**

1. INSTALL DETOUR AND E&S MEASURES (ROADWAY ITEM).
2. REMOVE EXISTING SUPERSTRUCTURE, UTILITIES, AND BACKWALLS.
3. SAWCUT AND DEMOLISH TOP OF ABUTMENT STEMS AND EXISTING WINGWALLS.
4. PERFORM CONCRETE SUBSTRUCTURE REPAIRS.
5. CONSTRUCT NEW BEAM SEATS AT BOTH ABUTMENTS.
6. PLACE NEW LAMINATED NEOPRENE BEARING PADS AND PROPOSED PRESTRESSED SPREAD BOX BEAMS.
7. INSTALL NEW UTILITIES (SEE UTILITY PLANS).
8. PLACE CONCRETE END DIAPHRAGMS. INSTALL ABUTMENT WATERPROOFING.
9. PLACE CONCRETE DECK, SIDEWALK, AND BARRIERS.
10. PLACE SLEEPER SLABS AND TYPE 1, MODIFIED APPROACH SLABS AT BOTH APPROACHES.
11. PLACE MOMENT SLABS AT EACH CORNER OF THE BRIDGE.
12. INSTALL PA TYPE 10M BARRIERS.
13. RECONSTRUCT PAVEMENT AT APPROACHES (SEE ROADWAY PLANS).

**EXISTING STRUCTURE DATA:**

TYPE OF STRUCTURE: 1-SPAN, PRESTRESSED CONCRETE ADJACENT & SPREAD BOX BEAM  
 SPAN: 47'-7<sup>1</sup>/<sub>16</sub>"  
 SKEW: 31°41'24"  
 ROADWAY WIDTH: 38'-0<sup>1</sup>/<sub>2</sub>"

**PROPOSED STRUCTURE DATA:**

STATIONS: 12+00.00  
 TYPE OF STRUCTURE: 1-SPAN, PRESTRESSED CONCRETE SPREAD BOX BEAM  
 SPAN: 48'-0"  
 SKEW: 31°41'24"  
 ROADWAY WIDTH: 38'-0<sup>3</sup>/<sub>8</sub>"

**NOTES:**

1. FOR SUPPLEMENTAL DRAWINGS, SEE SHEET 3.
2. FOR INDEX OF DRAWINGS, SEE SHEET 4.
3. REPAIR SPALLS, DELAMINATIONS, AND CRACKS IN SUBSTRUCTURE UNITS IN ACCORDANCE WITH BC-783M AND SPECIAL PROVISIONS.
4. FOR EXISTING STRUCTURE DETAILS SEE EXISTING PLANS: B-6201, 1962.

Mark	Description	By	Chk'd	Recm'd.	Date
REVISIONS					

BMS STR ID: 67-7301-XXXX-XXXX

**CITY OF PHILADELPHIA**  
**DEPARTMENT OF STREETS**  
 BRIDGE NO. 194  
 PINE ROAD STA 12+24.00  
 OVER SEPTA  
 SINGLE SPAN COMPOSITE CONCRETE BOX BEAM BRIDGE

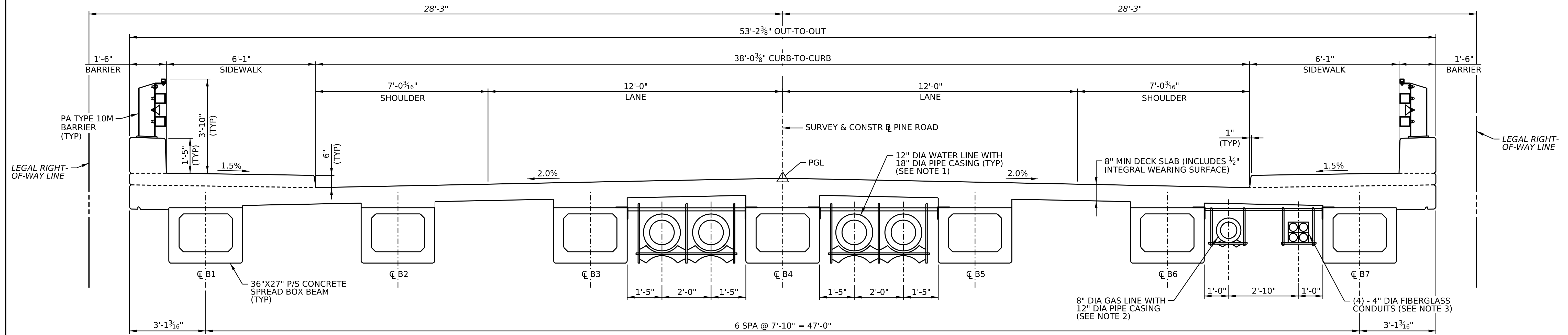
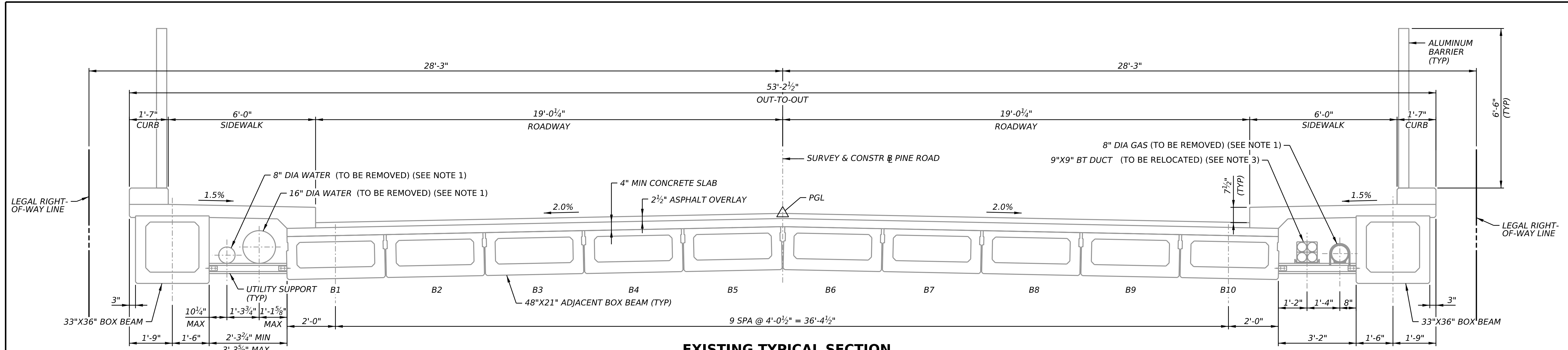
**GENERAL PLAN & ELEVATION**

SHEET 1 OF 32  
 + SUPPLEMENTAL DWGS.

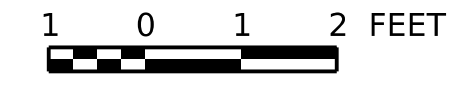
**90% SUBMISSION**

REG. PROF. ENGINEER  
 \_\_\_\_\_, 2024

PREPARED BY:  
 GANNETT FLEMING, INC.  
 1010 ADAMS AVENUE  
 AUDUBON, PA 19403-2402



**PROPOSED TYPICAL SECTION**



Mark	Description	By	Chk'd	Recm'd.	Date
REVISIONS					

BMS STR ID: 67-7301-XXXX-XXXX

**CITY OF PHILADELPHIA**  
**DEPARTMENT OF STREETS**  
 BRIDGE NO. 194  
 PINE ROAD STA 12+24.00  
 OVER SEPTA  
 SINGLE SPAN COMPOSITE CONCRETE BOX BEAM BRIDGE

**TYPICAL SECTIONS**

**NOTES:**

- FOR WATER LINE RELOCATION, SEE PHILADELPHIA WATER DEPARTMENT UTILITY PLAN AND SPECIAL PROVISIONS.
- FOR GAS LINE RELOCATION, SEE PHILADELPHIA GAS WORKS UTILITY PLAN AND SPECIAL PROVISIONS.
- FOR FIBERGLASS CONDUIT RELOCATION, SEE VERIZON UTILITY PLAN AND SPECIAL PROVISIONS.

PREPARED BY:  
 GANNETT FLEMING, INC.  
 AUDUBON, PA

90% SUBMISSION

SHEET 2 OF 32