

### Index of BT Integral Abutment Bridge Standards

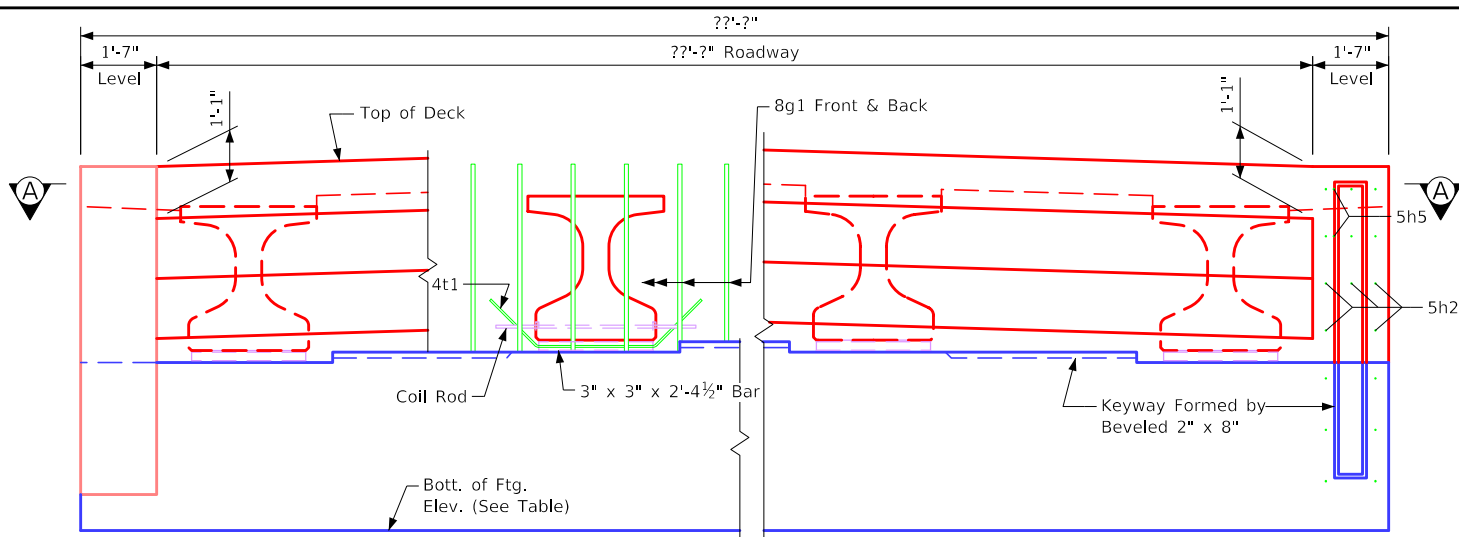
Standard	Description
100-BTI	Index of BT Integral Abutment Bridge Standards
2078-BTB	"BTB" Beams - Integral Abutment Details - 0° Skew
2079-BTB	"BTB" Beams - Integral Abutment Details - (L.A.) 0°01 - 7°30 Skew
2080-BTB	"BTB" Beams - Integral Abutment Details - (L.A.) 7°31 - 15° Skew
2081-BTB	"BTB" Beams - Integral Abutment Details - (L.A.) 15°01 - 30° Skew
2082-BTB	"BTB" Beams - Integral Abutment Details - (R.A.) 0°01 - 7°30 Skew
2083-BTB	"BTB" Beams - Integral Abutment Details - (R.A.) 7°31 - 15° Skew
2084-BTB	"BTB" Beams - Integral Abutment Details - (R.A.) 15°01 - 30° Skew
2085-BTCD	"BTC" or "BTD" Beams - Integral Abutment Details - 0° Skew
2085-BTE	"BTE" Beams - Integral Abutment Details - 0° Skew
2086-BTCD	"BTC" or "BTD" Beams - Integral Abutment Details - (L.A.) 0°01 - 7°30 Skew
2086-BTE	"BTE" Beams - Integral Abutment Details - (L.A.) 0°01 - 7°30 Skew
2087-BTCD	"BTC" or "BTD" Beams - Integral Abutment Details - (L.A.) 7°31 - 15° Skew
2087-BTE	"BTE" Beams - Integral Abutment Details - (L.A.) 7°31 - 15° Skew
2088-BTCD	"BTC" or "BTD" Beams - Integral Abutment Details - (L.A.) 15°01 - 30° Skew
2088-BTE	"BTE" Beams - Integral Abutment Details - (L.A.) 15°01 - 30° Skew
2089-BTCD	"BTC" or "BTD" Beams - Integral Abutment Details - (R.A.) 0°01 - 7°30 Skew
2089-BTE	"BTE" Beams - Integral Abutment Details - (R.A.) 0°01 - 7°30 Skew
2090-BTCD	"BTC" or "BTD" Beams - Integral Abutment Details - (R.A.) 7°31 - 15° Skew
2090-BTE	"BTE" Beams - Integral Abutment Details - (R.A.) 7°31 - 15° Skew
2091-BTCD	"BTC" or "BTD" Beams - Integral Abutment Details - (R.A.) 15°01 - 30° Skew
2091-BTE	"BTE" Beams - Integral Abutment Details - (R.A.) 15°01 - 30° Skew
4380-BTB-4	30' Roadway PPCB ("BTB" 4 Beams - Integral Abut.) Cross Section
4380-BTB-5	30' Roadway PPCB ("BTB" 5 Beams - Integral Abut.) Cross Section
4380-BTC-4	30' Roadway PPCB ("BTC" 4 Beams - Integral Abut.) Cross Section
4380-BTD-4	30' Roadway PPCB ("BTD" 4 Beams - Integral Abut.) Cross Section
4380-BTE-4	30' Roadway PPCB ("BTE" 4 Beams - Integral Abut.) Cross Section
4380-BTE-5	30' Roadway PPCB ("BTE" 5 Beams - Integral Abut.) Cross Section
4383-BTB-5	40' Roadway PPCB ("BTB" 5 Beams - Integral Abut.) Cross Section
4383-BTB-6	40' Roadway PPCB ("BTB" 6 Beams - Integral Abut.) Cross Section
4383-BTC-5	40' Roadway PPCB ("BTC" 5 Beams - Integral Abut.) Cross Section
4383-BTC-6	40' Roadway PPCB ("BTC" 6 Beams - Integral Abut.) Cross Section
4383-BTD-5	40' Roadway PPCB ("BTD" 5 Beams - Integral Abut.) Cross Section
4383-BTE-5	40' Roadway PPCB ("BTE" 5 Beams - Integral Abut.) Cross Section
4383-BTE-6	40' Roadway PPCB ("BTE" 6 Beams - Integral Abut.) Cross Section
4384-BTB-6	44' Roadway PPCB ("BTB" 6 Beams - Integral Abut.) Cross Section
4384-BTB-7	44' Roadway PPCB ("BTB" 7 Beams - Integral Abut.) Cross Section
4384-BTC-6	44' Roadway PPCB ("BTD" 6 Beams - Integral Abut.) Cross Section
4384-BTD-6	44' Roadway PPCB ("BTD" 6 Beams - Integral Abut.) Cross Section
4384-BTE-6	44' Roadway PPCB ("BTE" 6 Beams - Integral Abut.) Cross Section
4385-BTB-5	40' Roadway PPCB ("BTB" 5 Beams - Integral Abut.) Cross Section (Symm. Crown)
4385-BTB-6	40' Roadway PPCB ("BTB" 6 Beams - Integral Abut.) Cross Section (Symm. Crown)
4385-BTC-5	40' Roadway PPCB ("BTC" 5 Beams - Integral Abut.) Cross Section (Symm. Crown)
4385-BTC-6	40' Roadway PPCB ("BTC" 6 Beams - Integral Abut.) Cross Section (Symm. Crown)
4385-BTD-5	40' Roadway PPCB ("BTD" 5 Beams - Integral Abut.) Cross Section (Symm. Crown)
4385-BTE-5	40' Roadway PPCB ("BTE" 5 Beams - Integral Abut.) Cross Section (Symm. Crown)
4385-BTE-6	40' Roadway PPCB ("BTE" 6 Beams - Integral Abut.) Cross Section (Symm. Crown)
4500-BTB	"BTB" Beams - Part Plan & Longitudinal Section - 0° Skew
4501-BTB	"BTB" Beams - Part Plan & Longitudinal Section - (L.A.) 0°01 - 7°30 Skew
4502-BTB	"BTB" Beams - Part Plan & Longitudinal Section - (L.A.) 7°31 - 15° Skew
4503-BTB	"BTB" Beams - Part Plan & Longitudinal Section - (L.A.) 15°01 - 30° Skew
4504-BTB	"BTB" Beams - Part Plan & Longitudinal Section - (R.A.) 0°01 - 7°30 Skew
4505-BTB	"BTB" Beams - Part Plan & Longitudinal Section - (R.A.) 7°31 - 15° Skew
4506-BTB	"BTB" Beams - Part Plan & Longitudinal Section - (R.A.) 15°01 - 30° Skew
4507-BTCD	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - 0° Skew
4507-BTE	"BTE" Beams - Part Plan & Longitudinal Section - 0° Skew

### Index of BT Integral Abutment Bridge Standards

Standard	Description
4508-BTCD	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - (L.A.) 0°01 - 7°30 Skew
4508-BTE	"BTE" Beams - Part Plan & Longitudinal Section - (L.A.) 0°01 - 7°30 Skew
4509-BTCD	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - (L.A.) 7°31 - 15° Skew
4509-BTE	"BTE" Beams - Part Plan & Longitudinal Section - (L.A.) 7°31 - 15° Skew
4510-BTCD	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - (L.A.) 15°01 - 30° Skew
4510-BTE	"BTE" Beams - Part Plan & Longitudinal Section - (L.A.) 15°01 - 30° Skew
4511-BTCD	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - (R.A.) 0°01 - 7°30 Skew
4511-BTE	"BTE" Beams - Part Plan & Longitudinal Section - (R.A.) 0°01 - 7°30 Skew
4512-BTCD	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - (R.A.) 7°31 - 15° Skew
4512-BTE	"BTE" Beams - Part Plan & Longitudinal Section - (R.A.) 7°31 - 15° Skew
4513-BTCD	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - (R.A.) 15°01 - 30° Skew
4513-BTE	"BTE" Beams - Part Plan & Longitudinal Section - (R.A.) 15°01 - 30° Skew
4514-BTB	Integral Abut. "BTB" Beams - Bar List & Super. Details - 0° Skew
4515-BTB	Integral Abut. "BTB" Beams - Bar List & Super. Details - 0°01 - 7°30 Skew
4516-BTB	Integral Abut. "BTB" Beams - Bar List & Super. Details - 7°31 - 15° Skew
4517-BTB	Integral Abut. "BTB" Beams - Bar List & Super. Details - 15°01 - 30° Skew
4518-BTCD	Integral Abut. "BTC" or "BTD" Beams - Bar List & Super. Details - 0° Skew
4518-BTE	Integral Abut. "BTE" Beams - Bar List & Super. Details - 0° Skew
4519-BTCD	Integral Abut. "BTC" or "BTD" Beams - Bar List & Super. Details - 0°01 - 7°30 Skew
4519-BTE	Integral Abut. "BTE" Beams - Bar List & Super. Details - 0°01 - 7°30 Skew
4520-BTCD	Integral Abut. "BTC" or "BTD" Beams - Bar List & Super. Details - 7°31 - 15° Skew
4520-BTE	Integral Abut. "BTE" Beams - Bar List & Super. Details - 7°31 - 15° Skew
4521-BTCD	Integral Abut. "BTC" or "BTD" Beams - Bar List & Super. Details - 15°01 - 30° Skew
4521-BTE	Integral Abut. "BTE" Beams - Bar List & Super. Details - 15°01 - 30° Skew

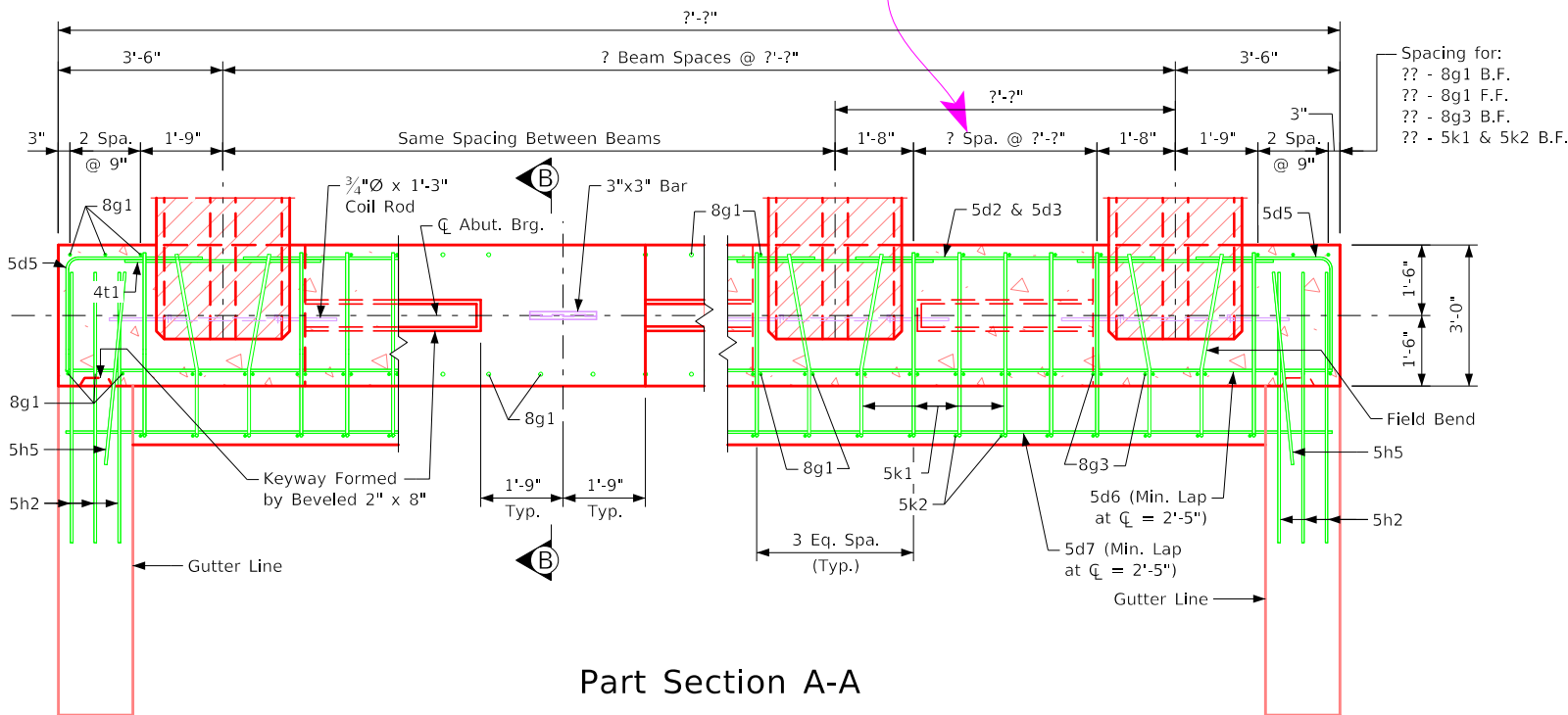
Index of BT Integral Abut. Bridge Stds

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08.  
 Revised 08-2024: Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral.  
 BTIntegralBridges.dgn - 2078-BTB - This Sheet Re-Issued 11-2023. Sheet Format Update.

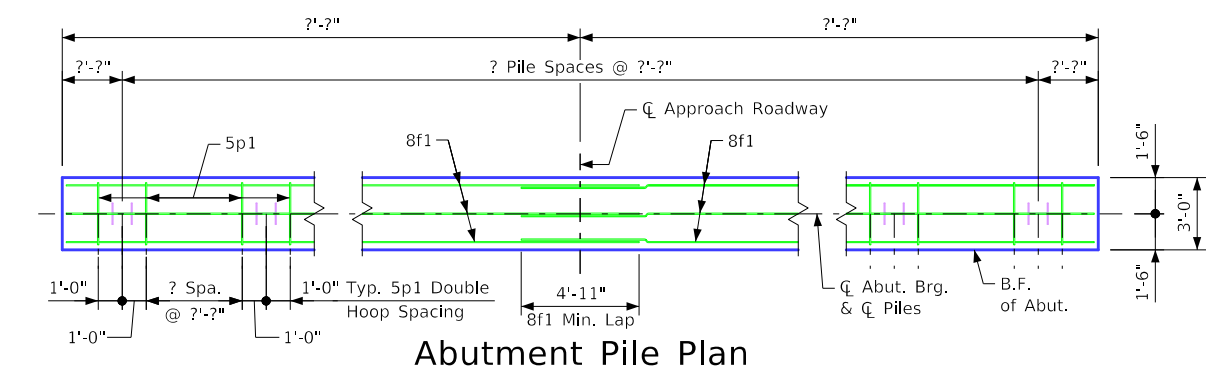


Part Rear Elevation at Abutment

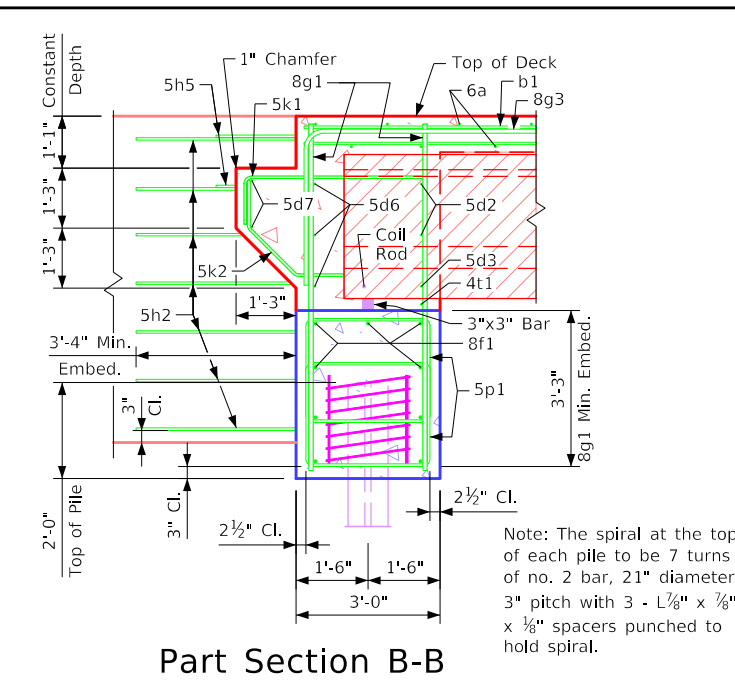
Note to Designer:  
Maximum Spacing 1'-4"



Part Section A-A



Abutment Pile Plan



Part Section B-B

Table of Abutment Elevations		
Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

Table of Abutment Steps		
Step	? Abutment	? Abutment
a	???.??	???.??

Abutment Concrete Quantity		
Location	Quantity	
? Abutment Footing		??
? Abutment Footing		??
Total (Cu. Yds.)		??



Abutment Step Diagram (Rear Elevation)

Notes: Concrete Quantities are included on the Summary Quantities sheet.  
 ?? - HP ?? x ?? steel bearing piling required at each abutment.  
 Barrier rail not shown in details.

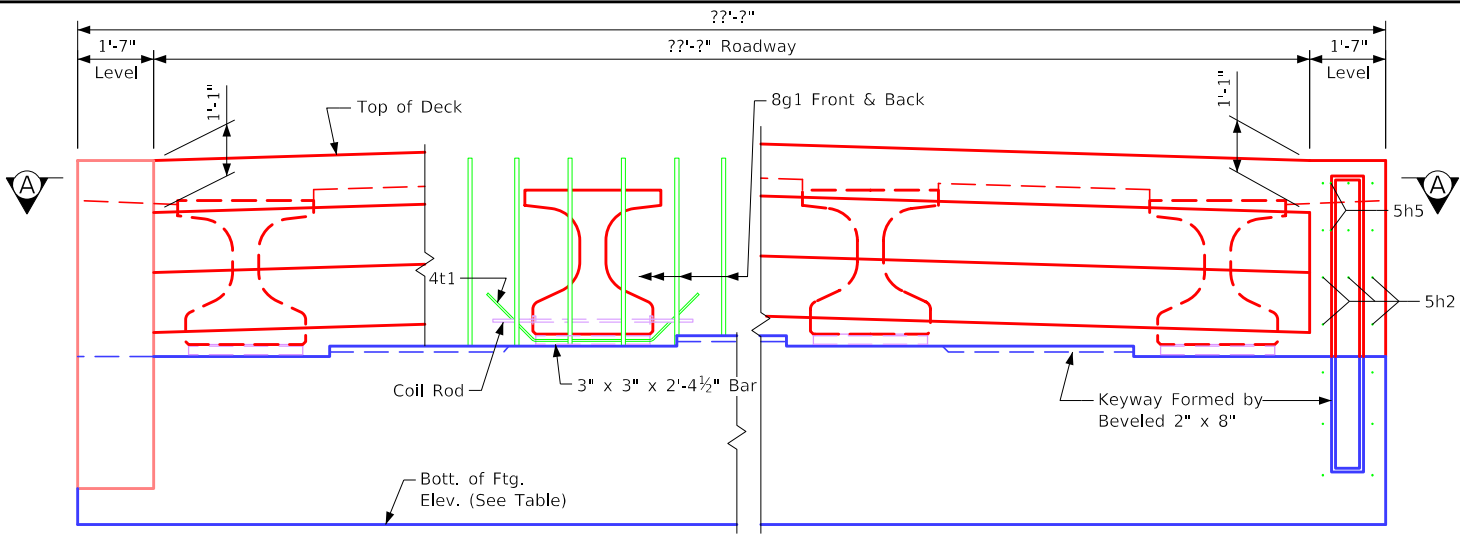
Abutment Footing Details

**Abutment Notes:**  
 Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
 If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.

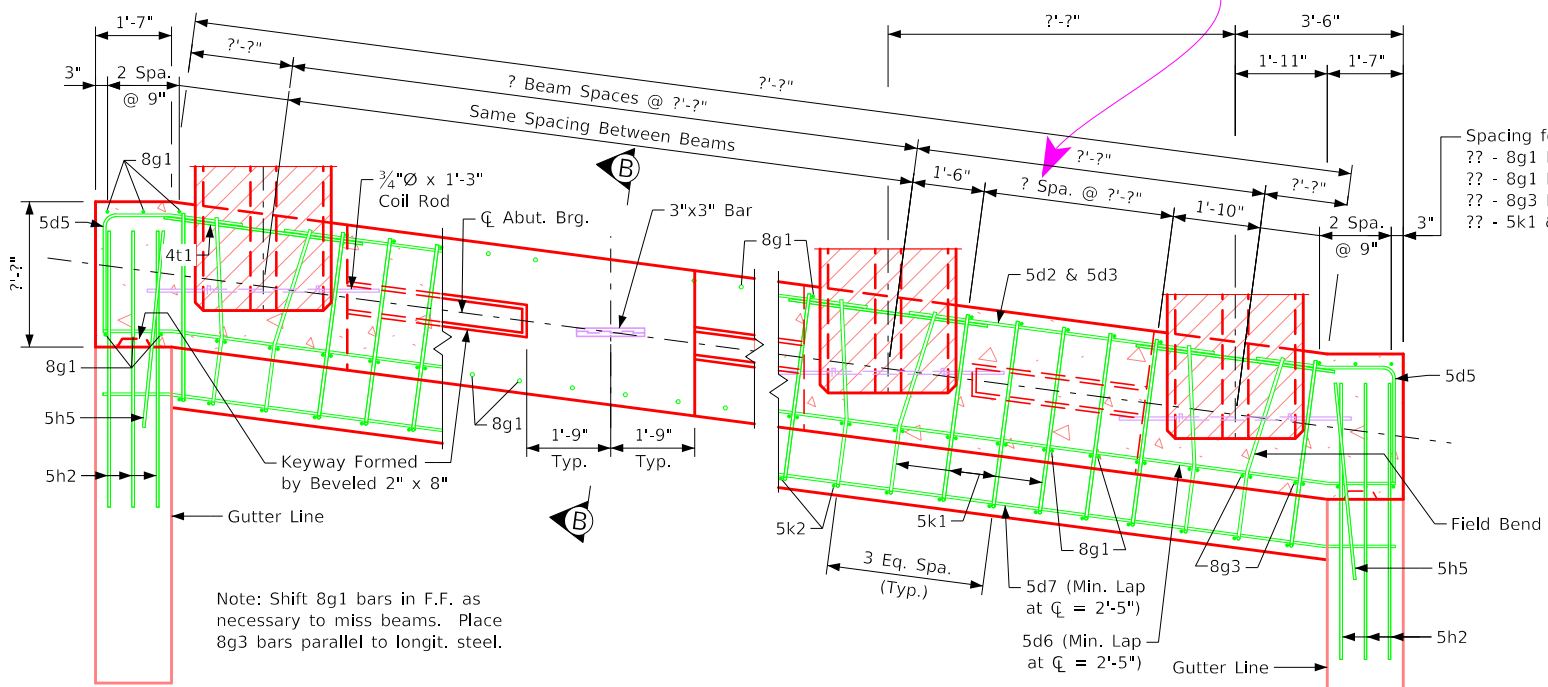
Issued 02-08. Revised 08-2024; Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral.

BTIntegralBridges.dgn - 2079-BTB - This Sheet Re-Issued 11-2023. Sheet Format Update.



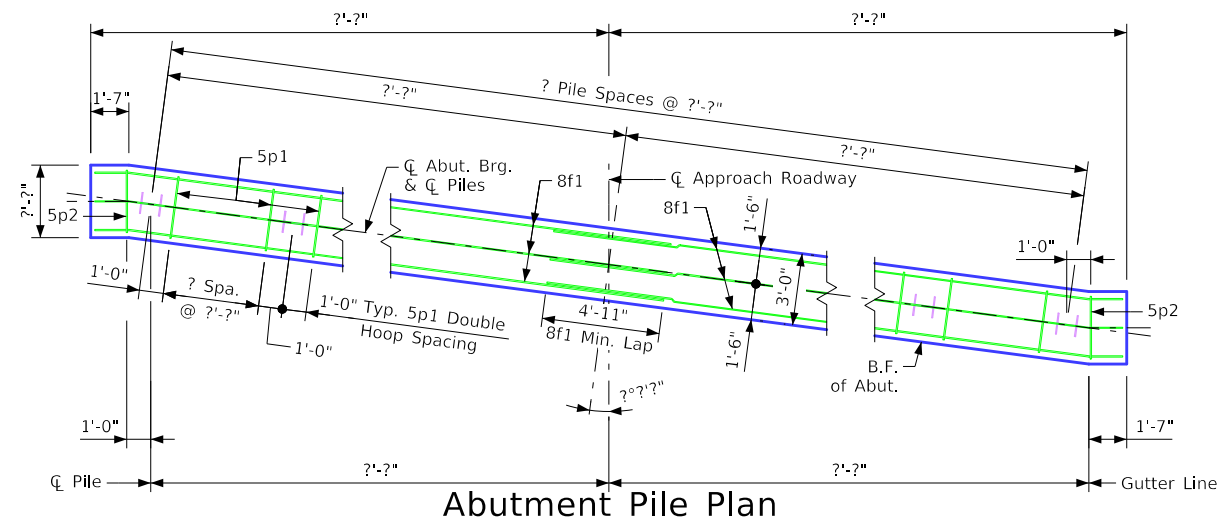
Part Rear Elevation at Abutment

Note to Designer: Maximum Spacing 1'-4".

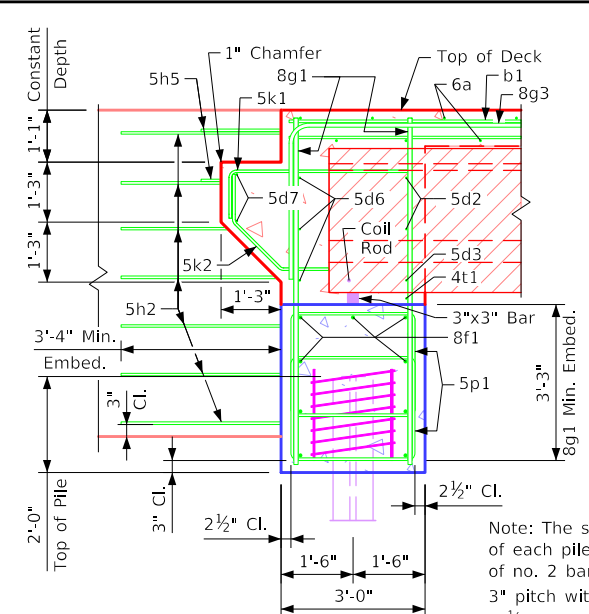


Part Section A-A

Spacing for:  
 ?? - 8g1 B.F.  
 ?? - 8g1 F.F.  
 ?? - 8g3 B.F.  
 ?? - 5k1 & 5k2 B.F.



Abutment Pile Plan



Part Section B-B

Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21" diameter, 3" pitch with 3 - L 1/8" x 1/8" x 1/8" spacers punched to hold spiral.

Table of Abutment Elevations

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

Table of Abutment Steps

Step	? Abutment	? Abutment
a	???.??	???.??

Abutment Concrete Quantity

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??



Abutment Step Diagram (Rear Elevation)

Note:  
 Concrete Quantities are included on the Summary Quantities sheet.  
 ?? - HP ?? x ?? steel bearing piling required at each abutment.  
 Barrier rail not shown in details.

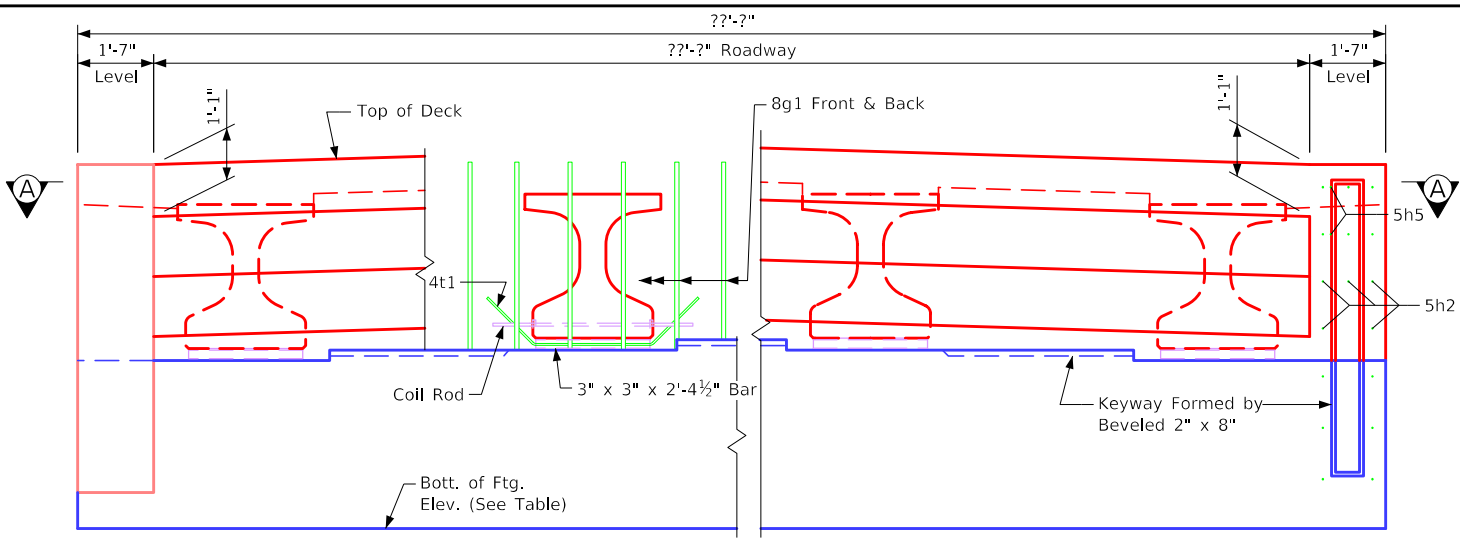
Abutment Footing Details

**Abutment Notes:**  
 Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
 If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.

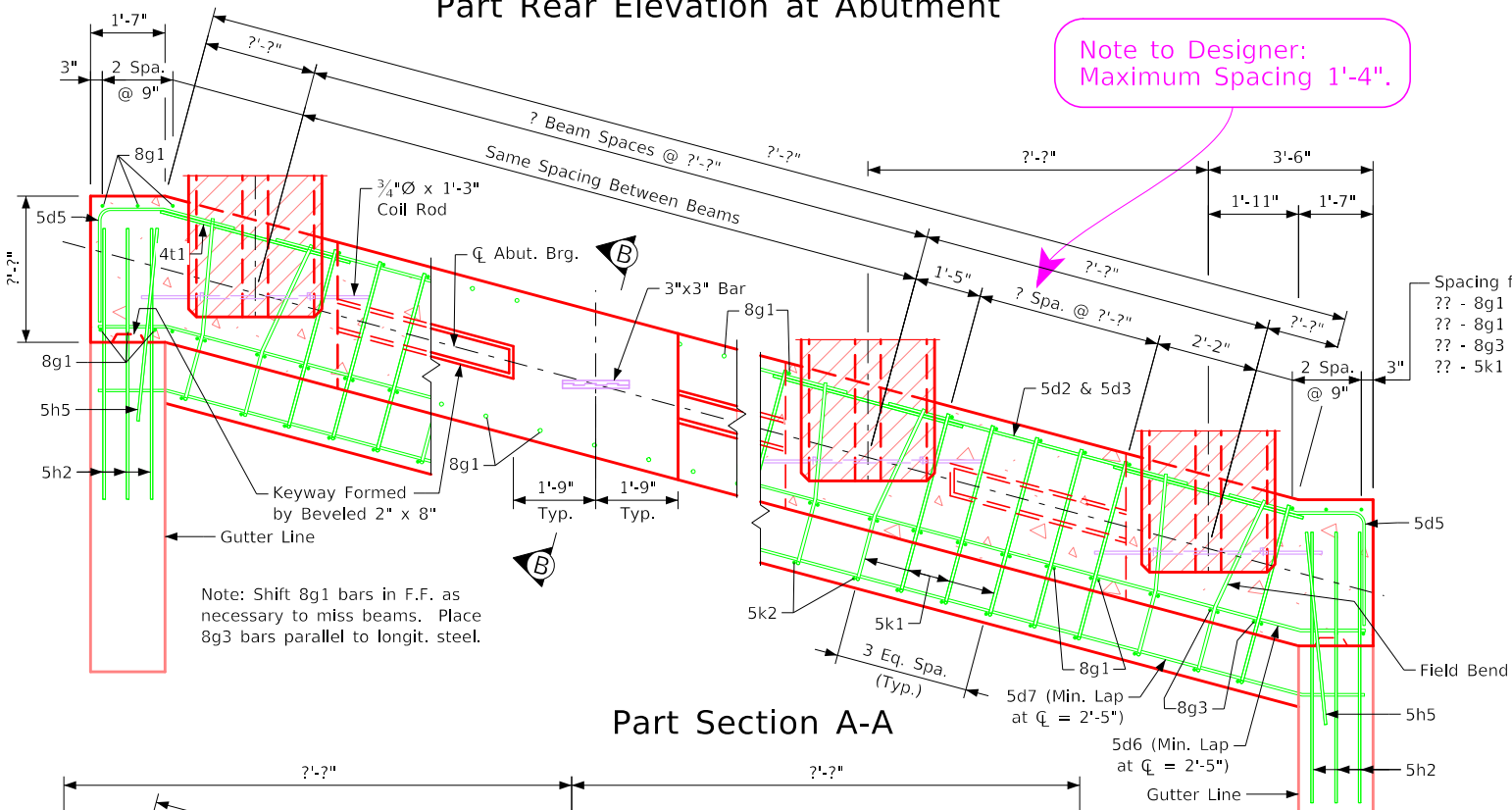
Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.

Issued 02-08. Revised 08-2024; Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral.

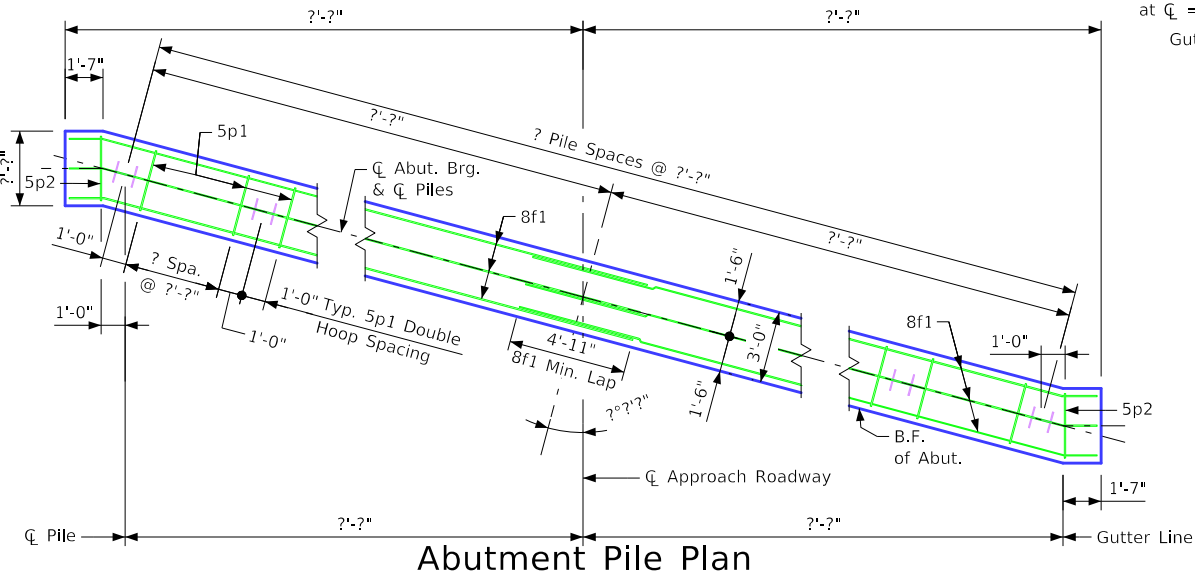
BTIntegralBridges.dgn - 2080-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.



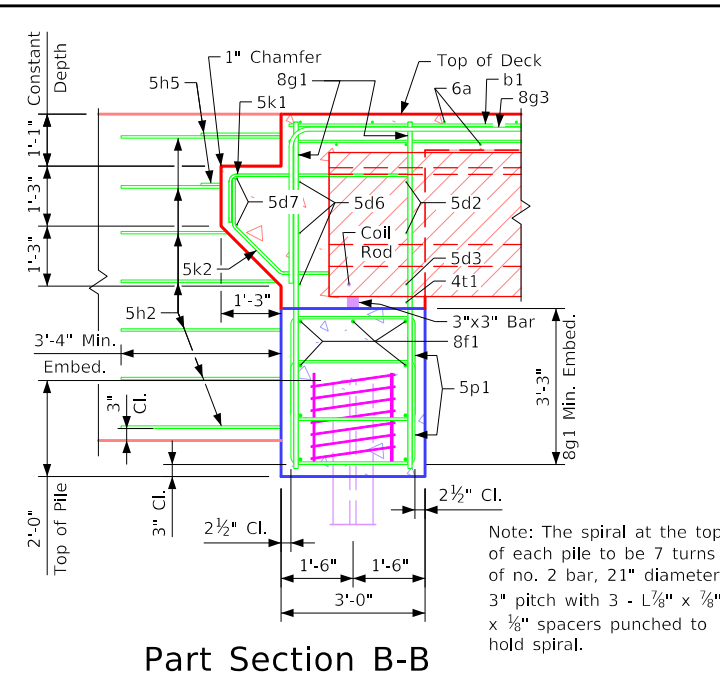
Part Rear Elevation at Abutment



Part Section A-A



Abutment Pile Plan



Part Section B-B

Table of Abutment Elevations

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

Table of Abutment Steps

Step	? Abutment	? Abutment
a	???.??	???.??

Abutment Concrete Quantity

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??



Abutment Step Diagram (Rear Elevation)

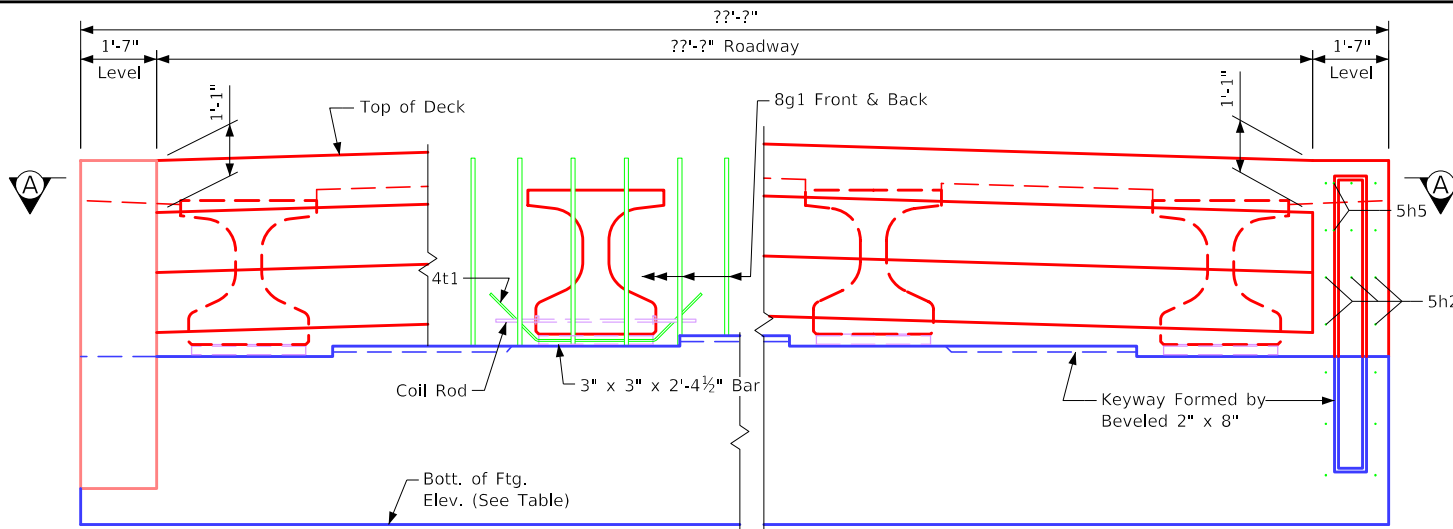
Note:  
Concrete Quantities are included on the Summary Quantities sheet.  
?? - HP ?? x ?? steel bearing piling required at each abutment.  
Barrier rail not shown in details.

Abutment Footing Details

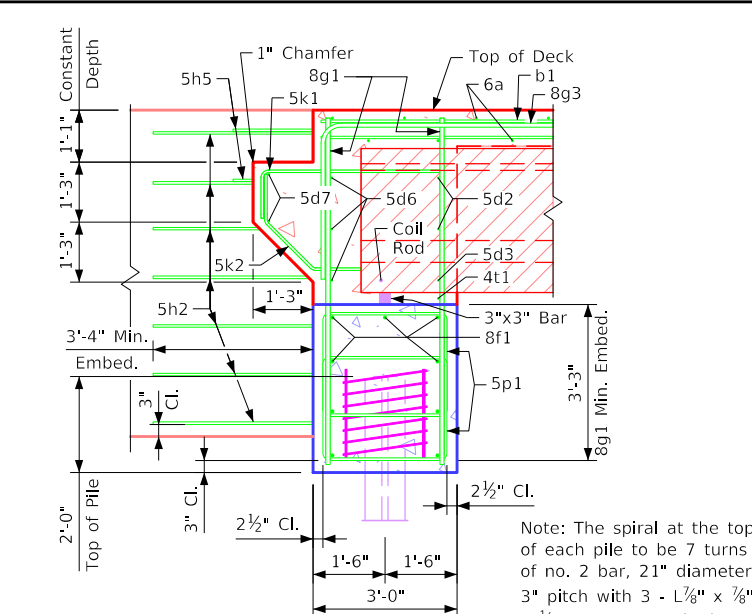
**Abutment Notes:**

Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.  
 Issued 02-08.  
 Revised 08-2024: Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral.  
 BTIntegralBridges.dgn - 2081-BTB - This Sheet Re-Issued 11-2023. Sheet Format Update.



Part Rear Elevation at Abutment



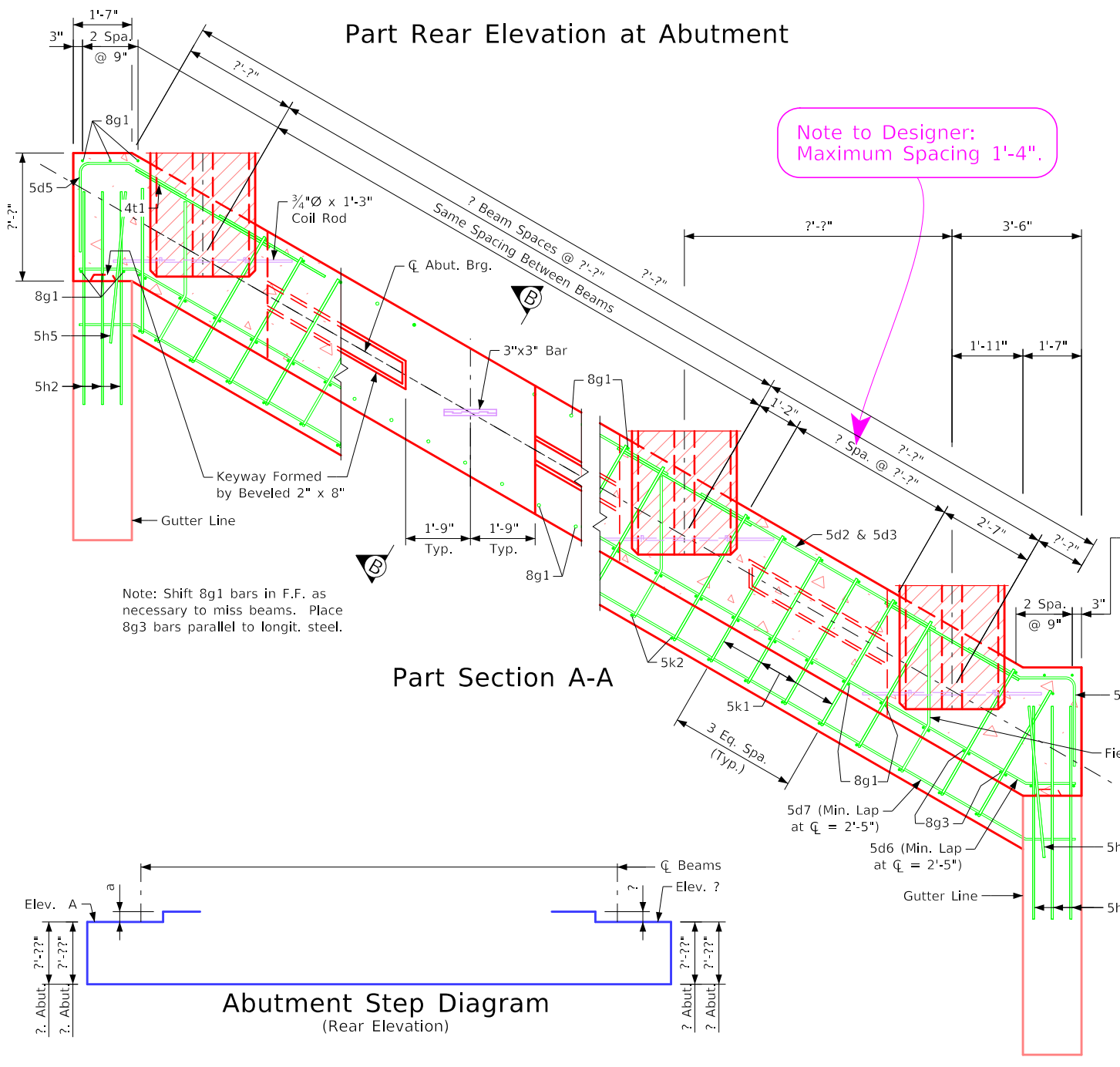
Part Section B-B

Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21" diameter, 3" pitch with 3 - L 1/8" x 1/8" x 1/8" spacers punched to hold spiral.

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

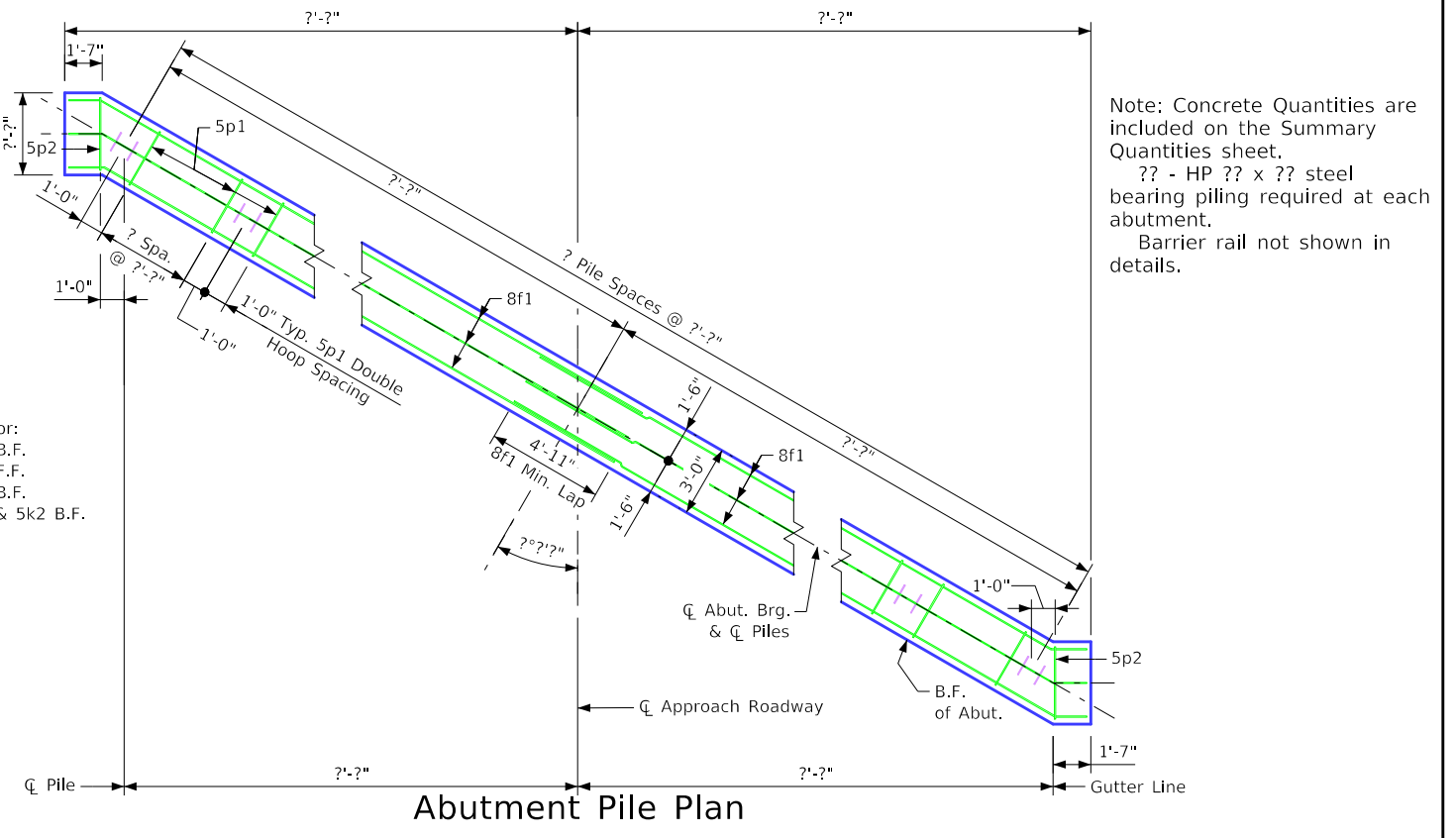
Step	? Abutment	? Abutment
a	???.??	???.??

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
<b>Total (Cu. Yds.)</b>	<b>??</b>



Part Section A-A

Note to Designer: Maximum Spacing 1'-4".



Abutment Pile Plan

Note: Concrete Quantities are included on the Summary Quantities sheet.  
 ?? - HP ?? x ?? steel bearing piling required at each abutment.  
 Barrier rail not shown in details.



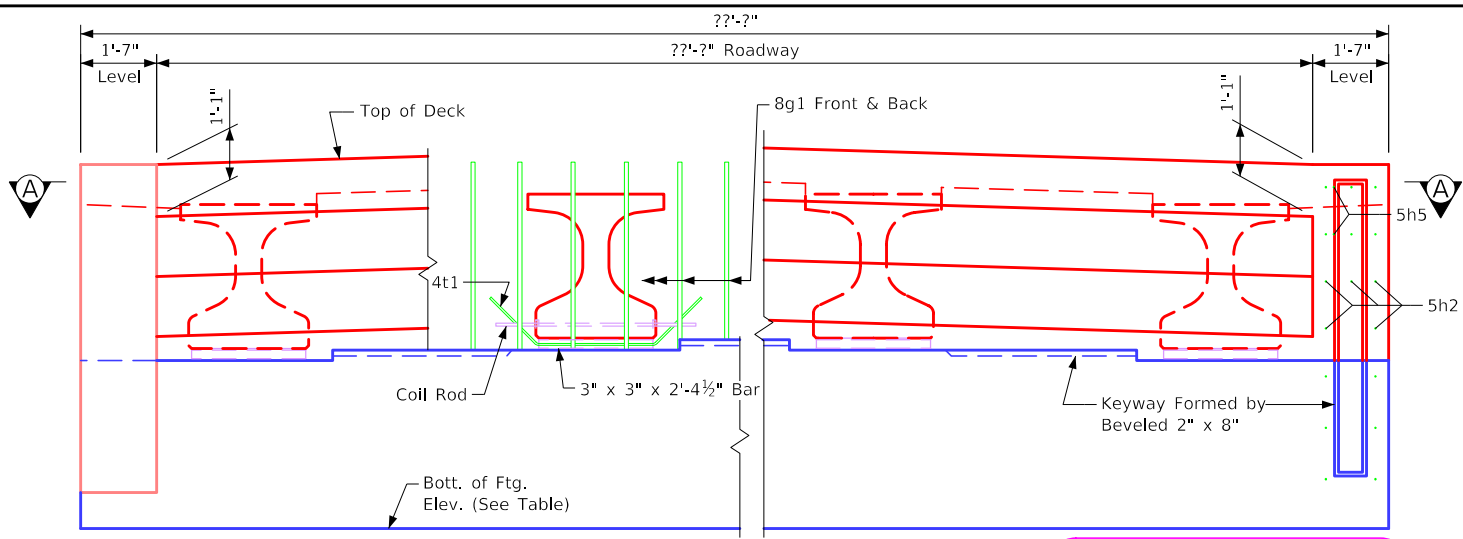
Abutment Step Diagram (Rear Elevation)

**Abutment Notes:**  
 Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
 If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.



Abutment Footing Details

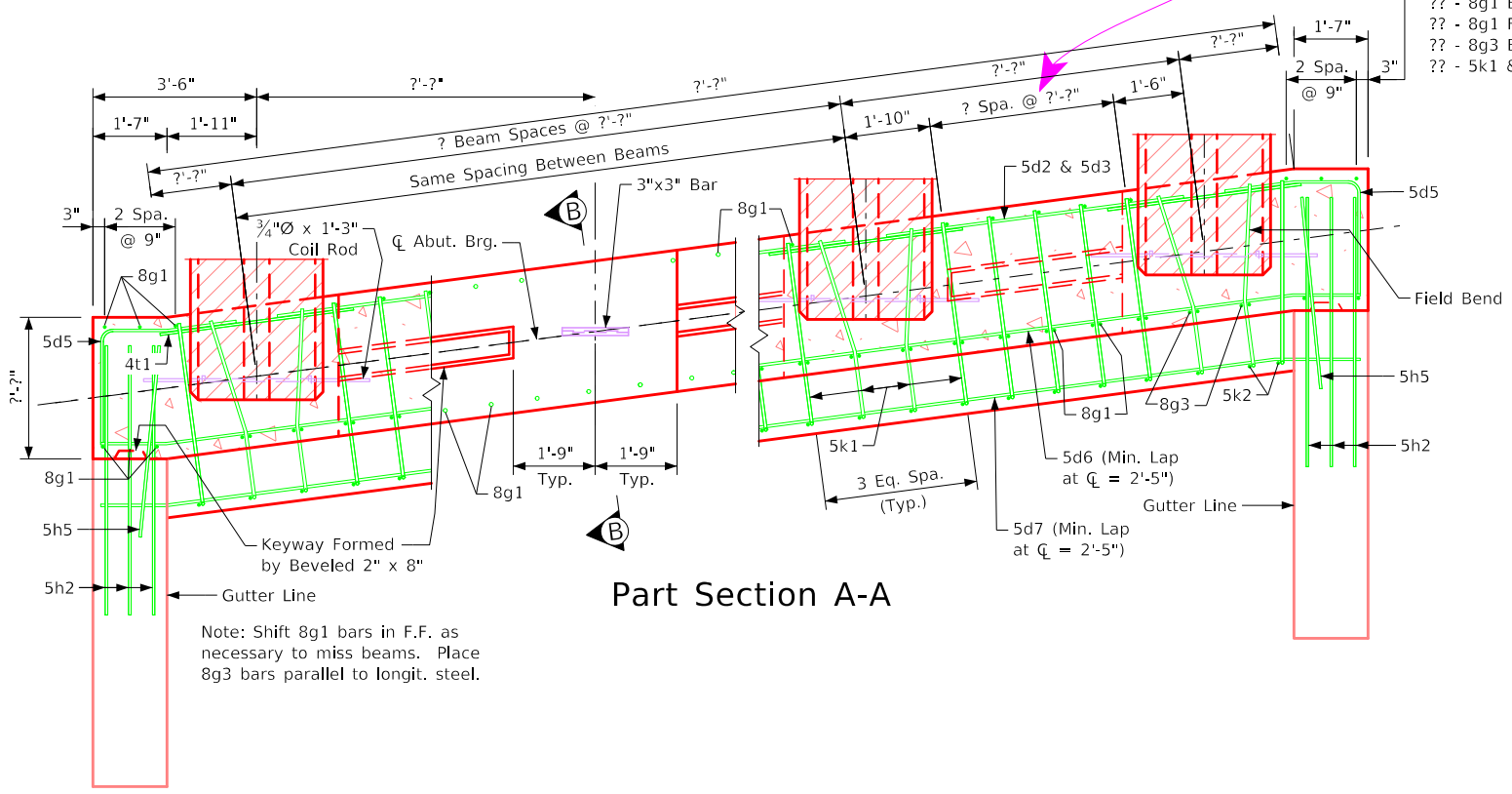
Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.  
 Issued 02-08.  
 Revised 08-2024: Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral.  
 BTIntegralBridges.dgn - 2082-BTB - This Sheet Re-Issued 11-2023. Sheet Format Update.



Part Rear Elevation at Abutment

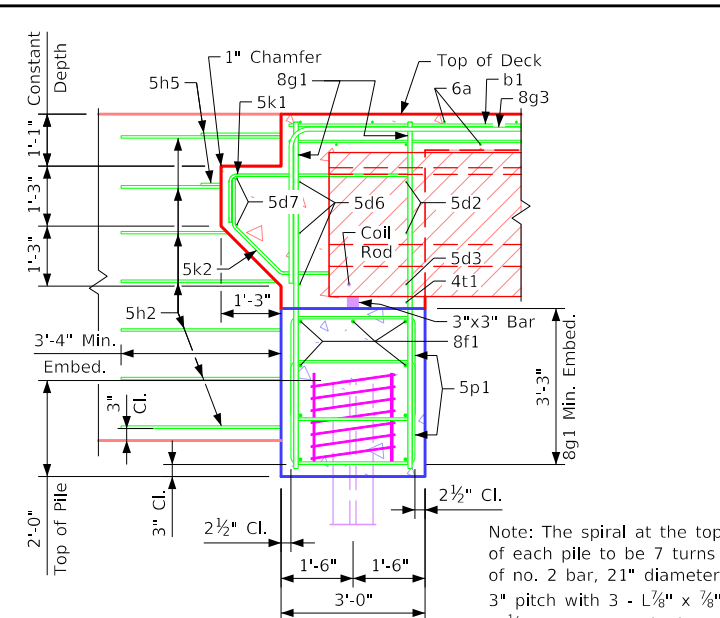
Note to Designer:  
Maximum Spacing 1'-4".

Spacing for:  
 ?? - 8g1 B.F.  
 ?? - 8g1 F.F.  
 ?? - 8g3 B.F.  
 ?? - 5k1 & 5k2 B.F.



Part Section A-A

Note: Shift 8g1 bars in F.F. as necessary to miss beams. Place 8g3 bars parallel to longit. steel.



Part Section B-B

Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21" diameter, 3" pitch with 3 - L 1/8" x 1/8" x 1/8" spacers punched to hold spiral.

Table of Abutment Elevations

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

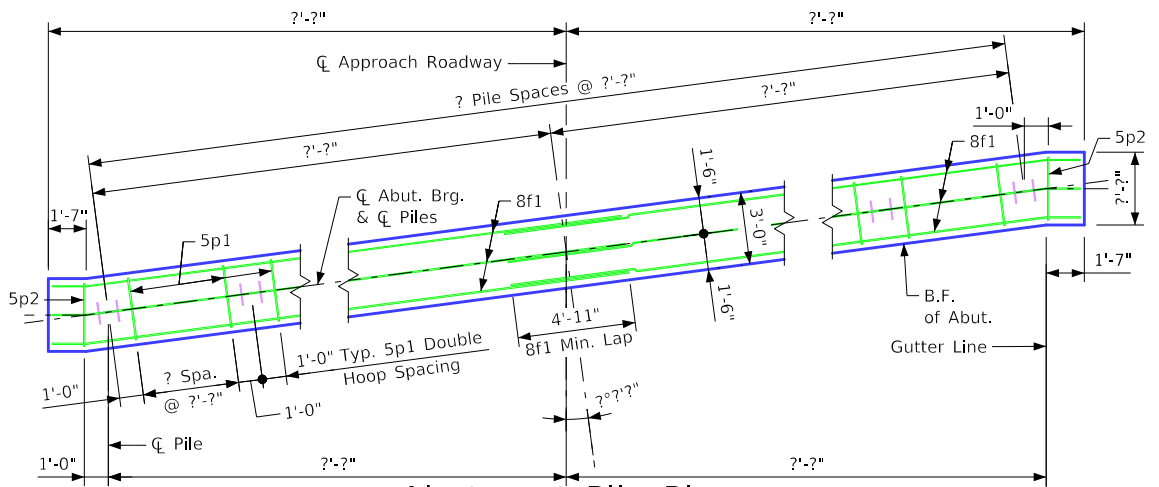
Table of Abutment Steps

Step	? Abutment	? Abutment
a	???.??	???.??

Abutment Concrete Quantity

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??

Note: Concrete Quantities are included on the Summary Quantities sheet.  
 ?? - HP ?? x ?? steel bearing piling required at each abutment.  
 Barrier rail not shown in details.



Abutment Pile Plan

Abutment Notes:

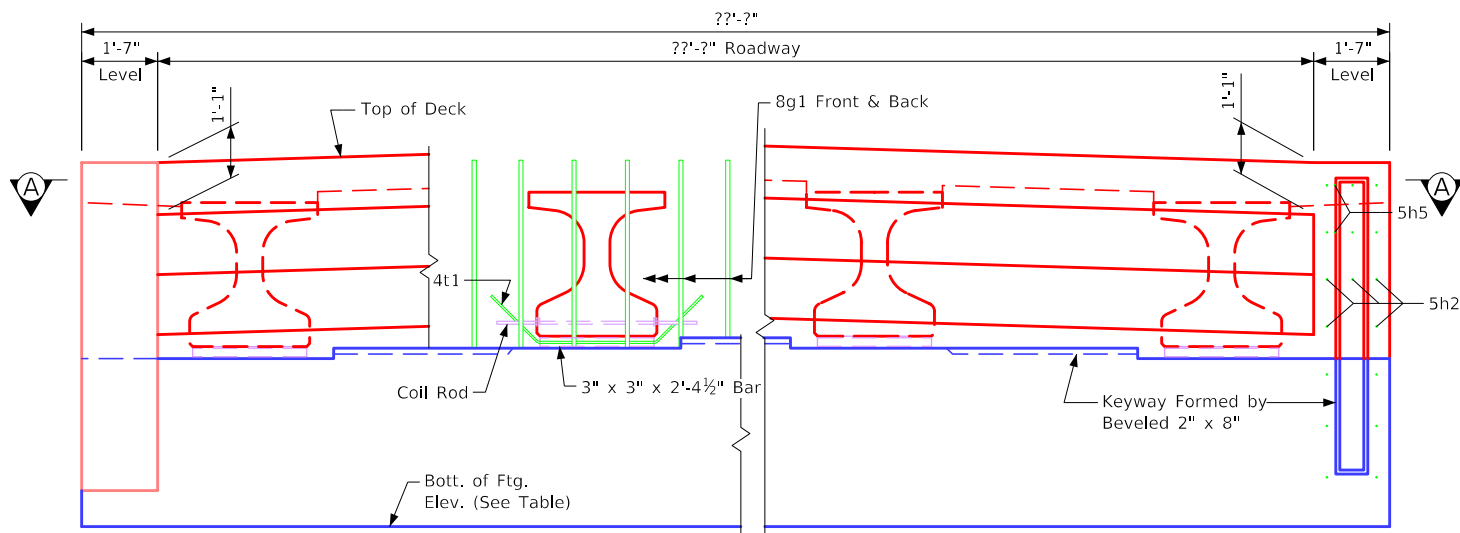
Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
 If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.

Abutment Footing Details



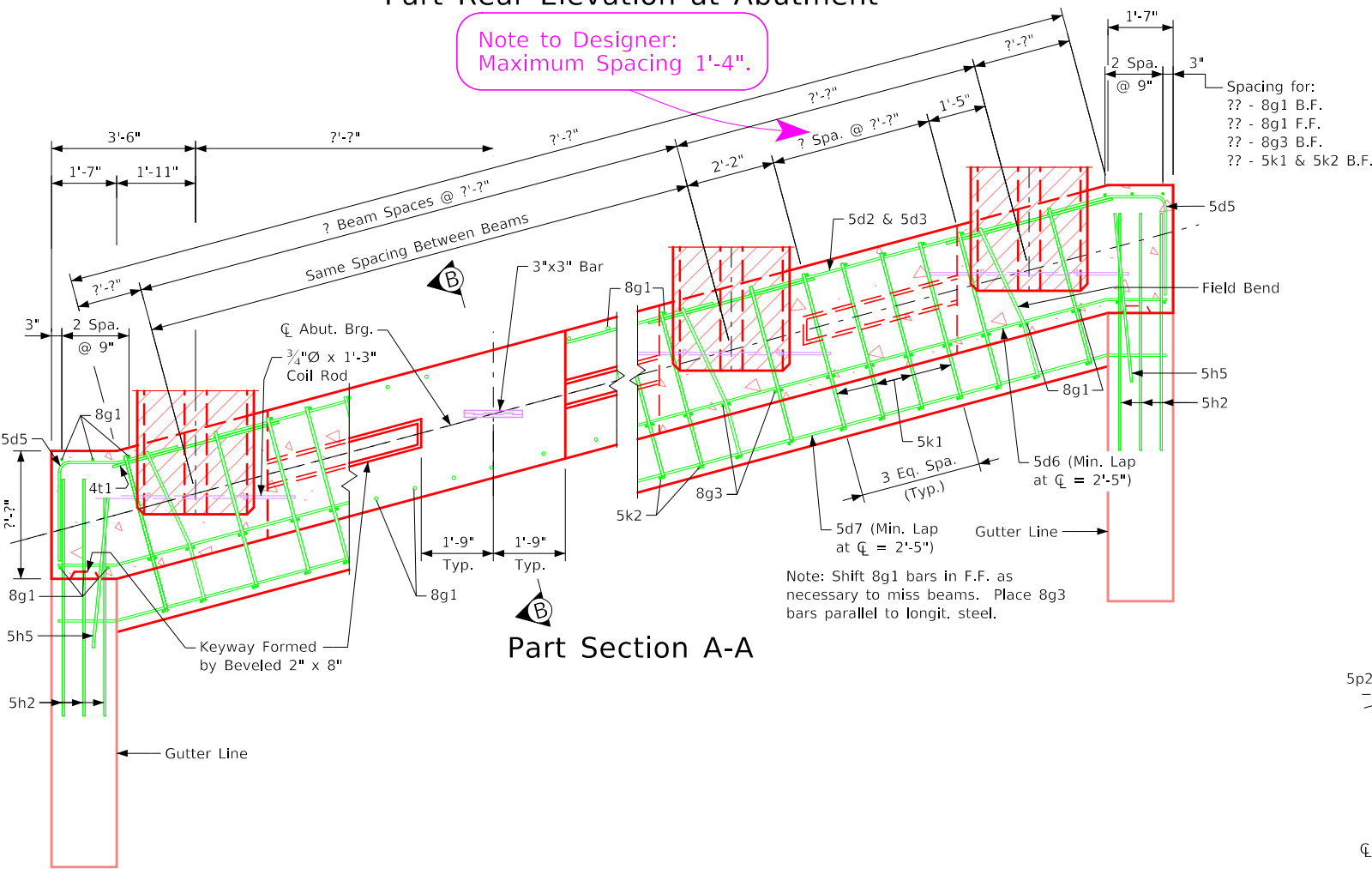
Abutment Step Diagram (Rear Elevation)

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08.  
 Revised 08-2024: Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral. BTIntegralBridges.dgn - 2083-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.

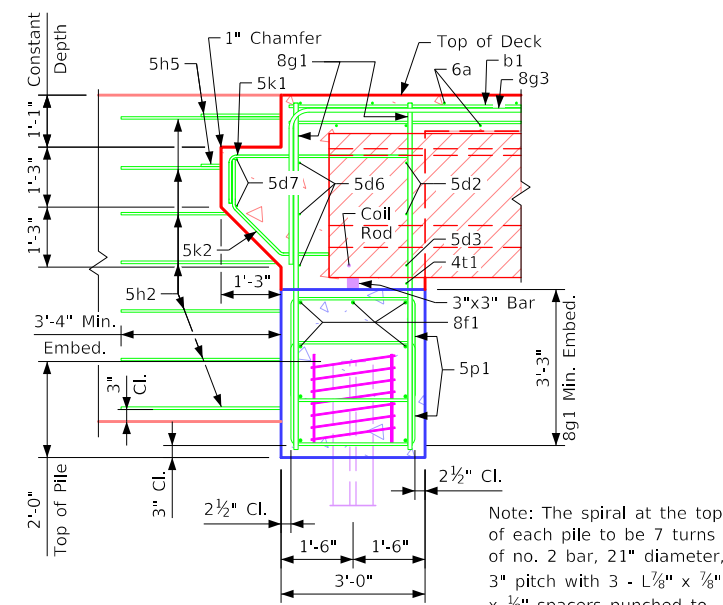


Part Rear Elevation at Abutment

Note to Designer:  
Maximum Spacing 1'-4\"/>



Part Section A-A



Part Section B-B

Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21\"/>

Table of Abutment Elevations

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

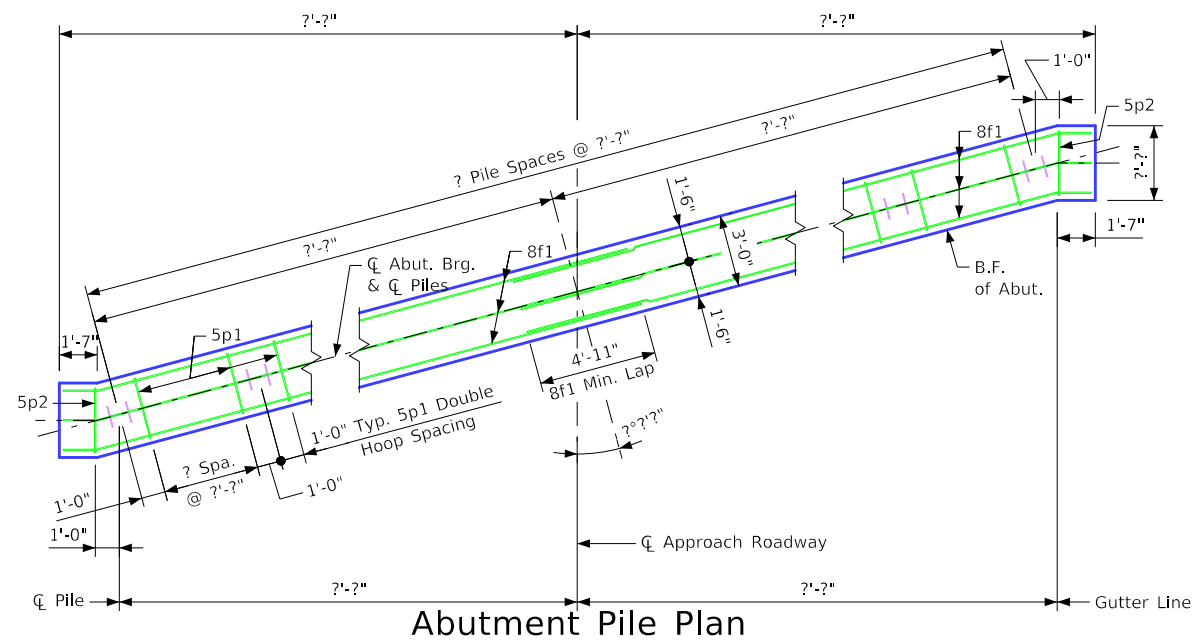
Table of Abutment Steps

Step	? Abutment	? Abutment
a	???.??	???.??

Abutment Concrete Quantity

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??

Note: Concrete Quantities are included on the Summary Quantities sheet.  
 ?? - HP ?? x ?? steel bearing piling required at each abutment.  
 Barrier rail not shown in details.



Abutment Pile Plan



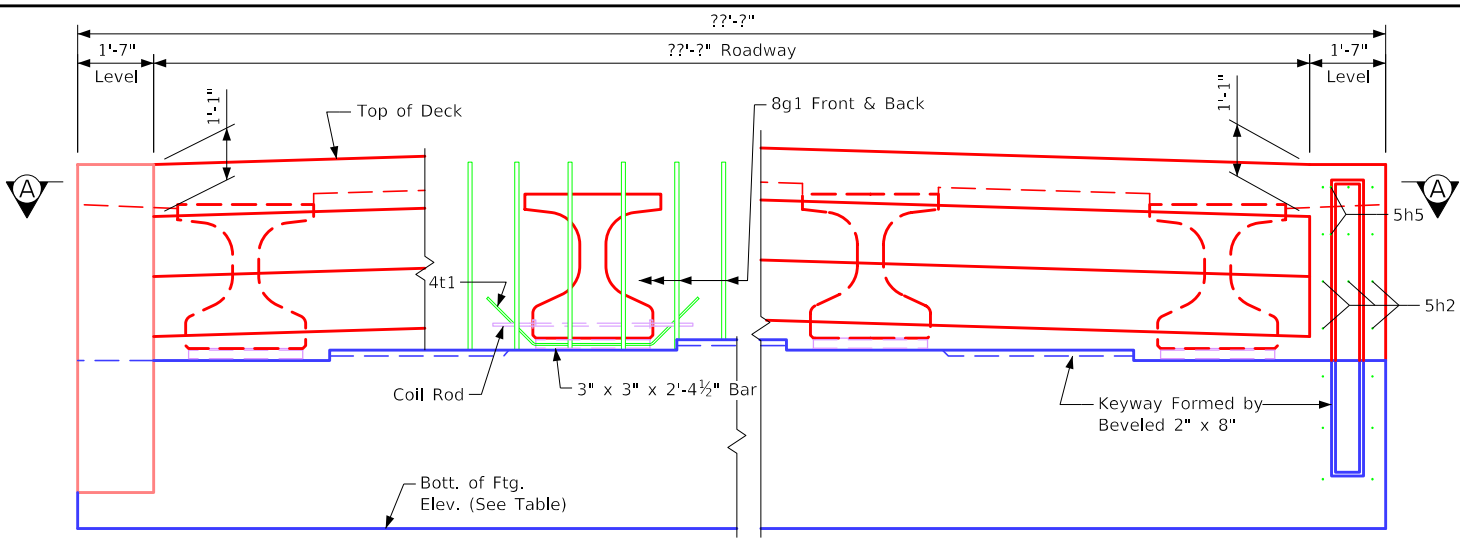
Abutment Step Diagram  
(Rear Elevation)

**Abutment Notes:**

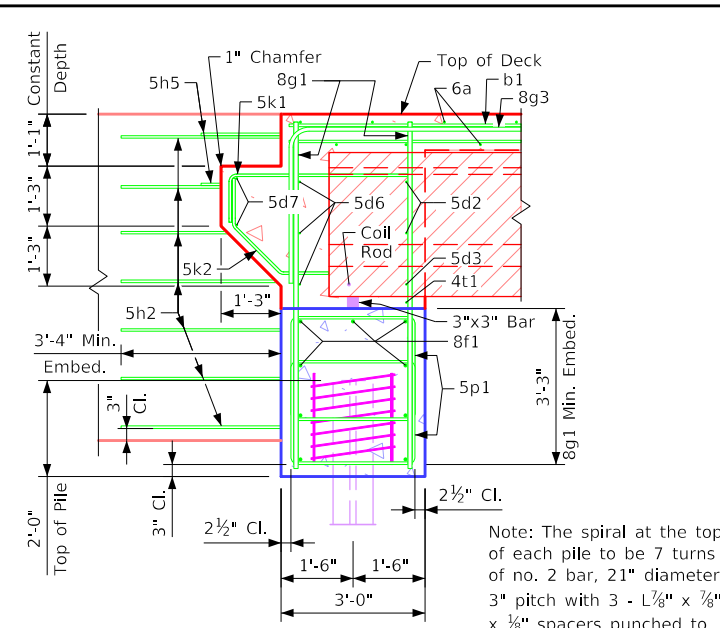
Minimum clear distance from face of concrete to near reinforcing bar is to be 2\"/>

Abutment Footing Details

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08.  
 Revised 08-2024: Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral. BTIntegralBridges.dgn - 2084-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.



Part Rear Elevation at Abutment

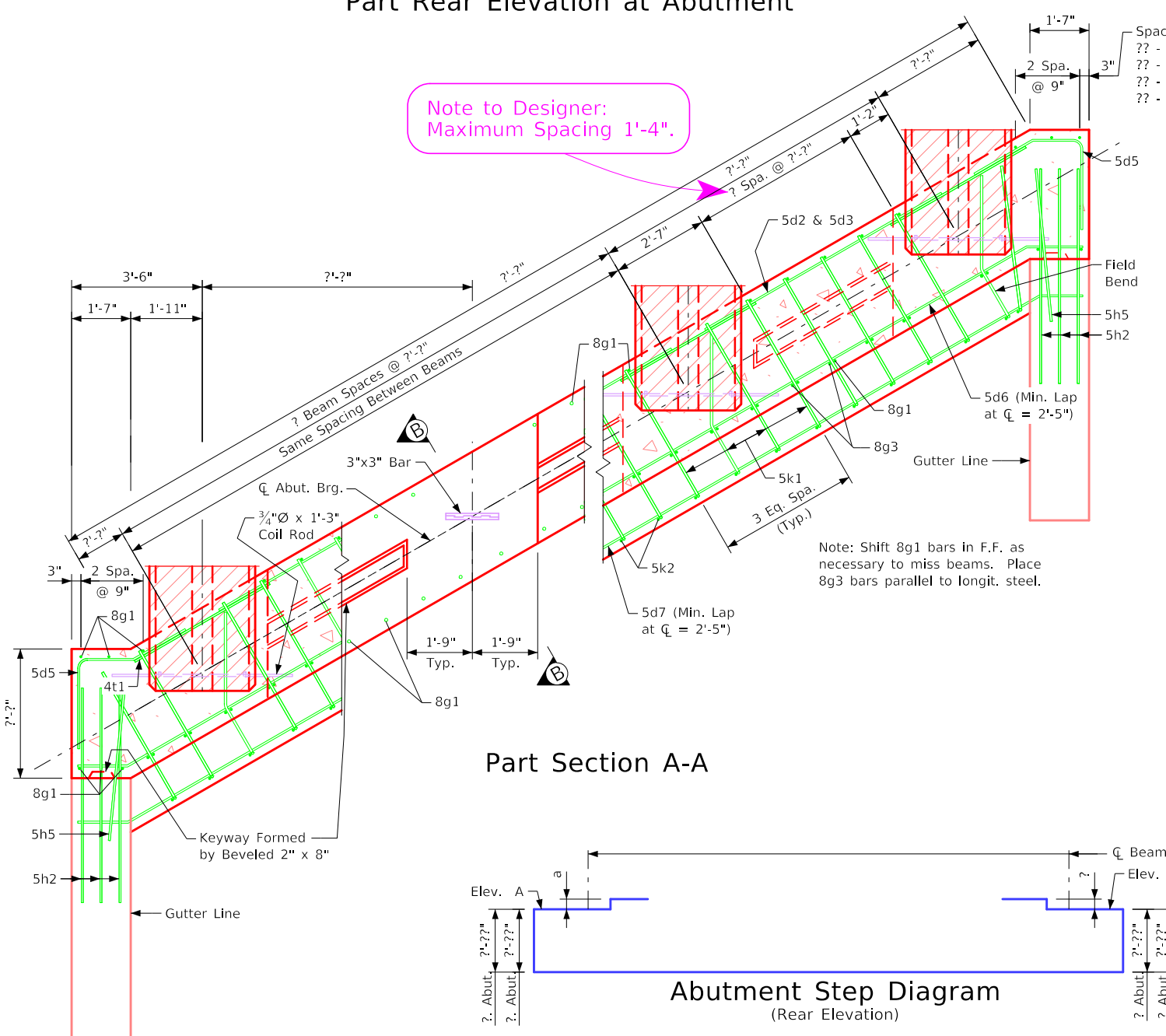


Part Section B-B

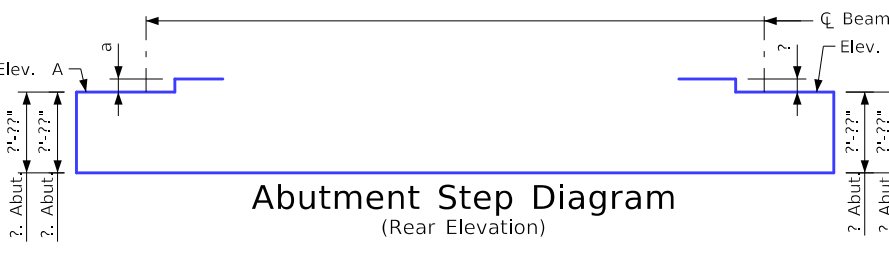
Table of Abutment Elevations		
Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

Table of Abutment Steps		
Step	? Abutment	? Abutment
a	???.??	???.??

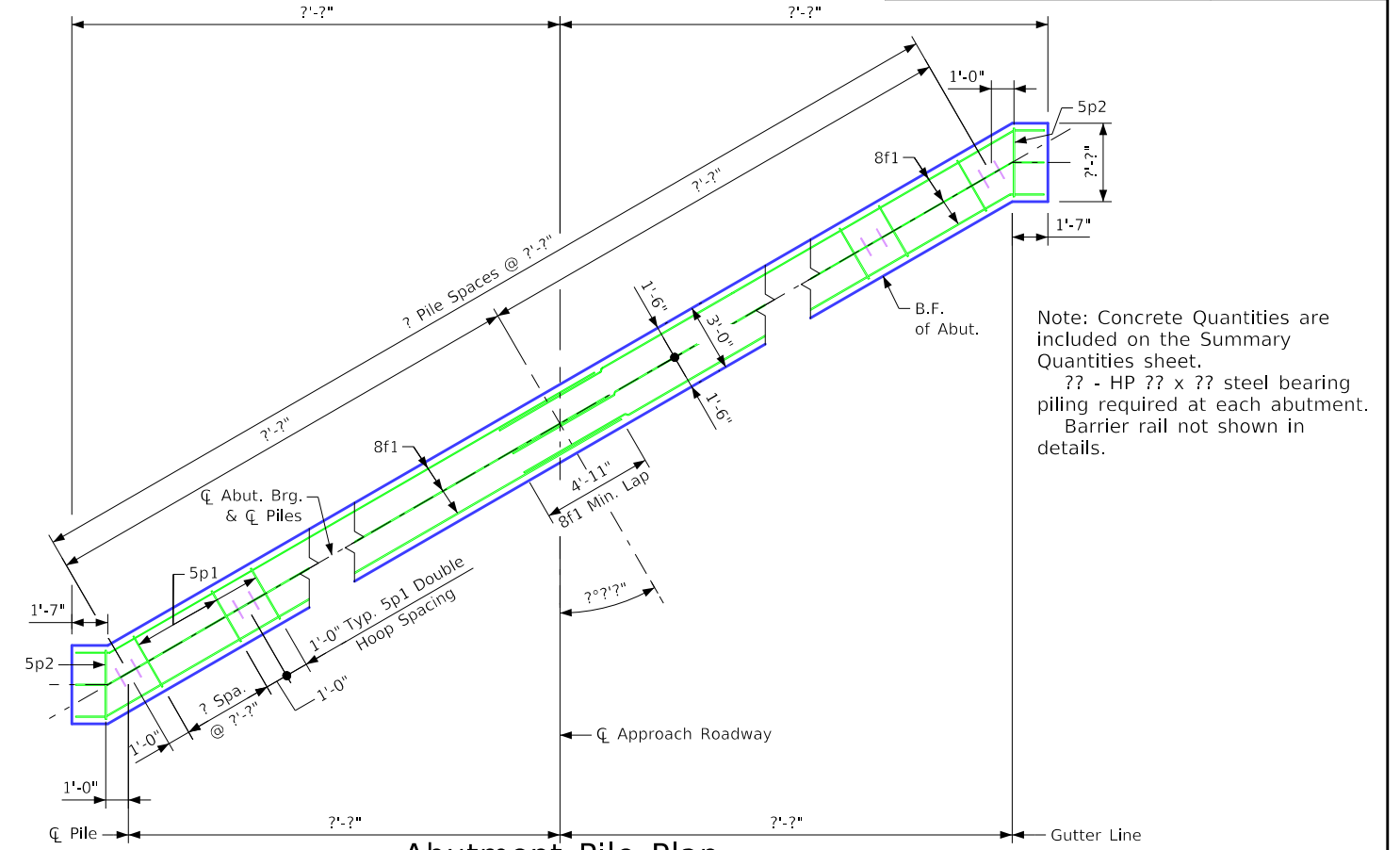
Abutment Concrete Quantity	
Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??



Part Section A-A



Abutment Step Diagram (Rear Elevation)



Abutment Pile Plan

**Abutment Notes:**  
 Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
 If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.



Abutment Footing Details

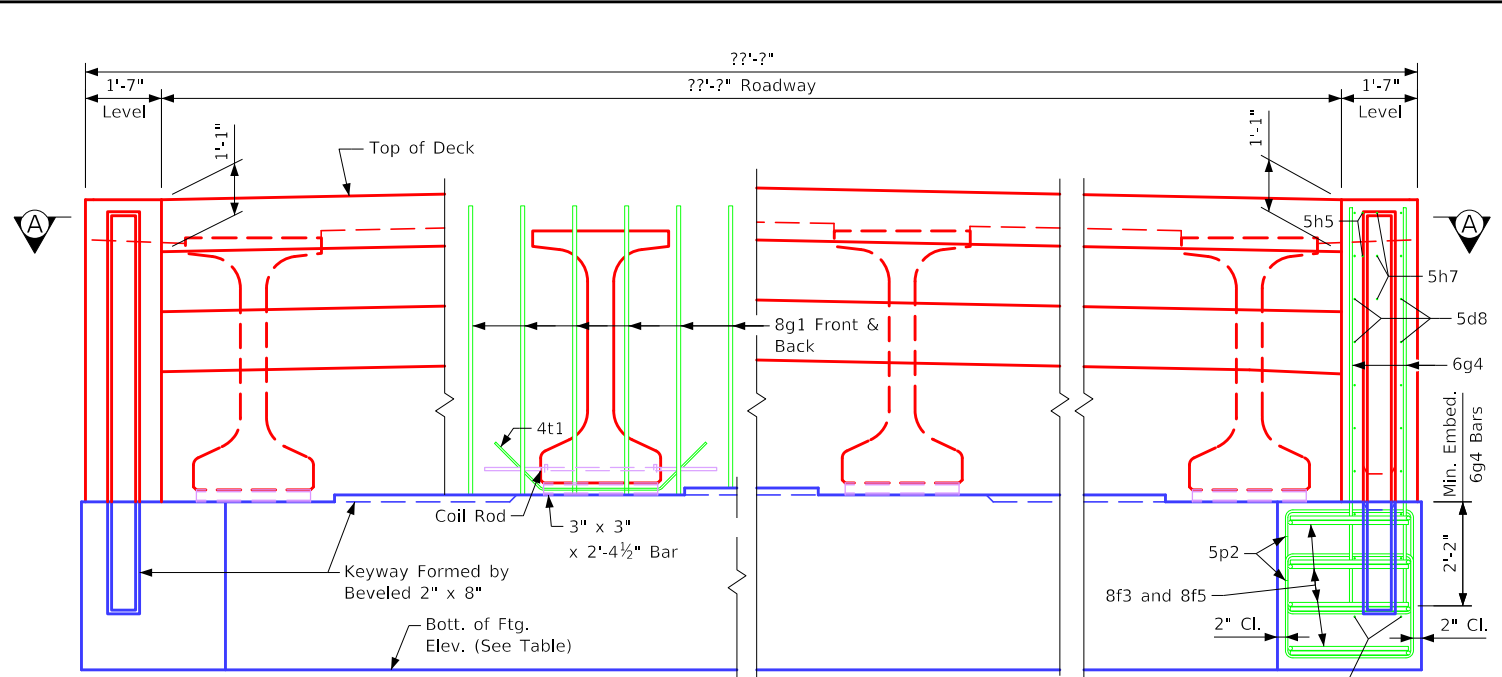






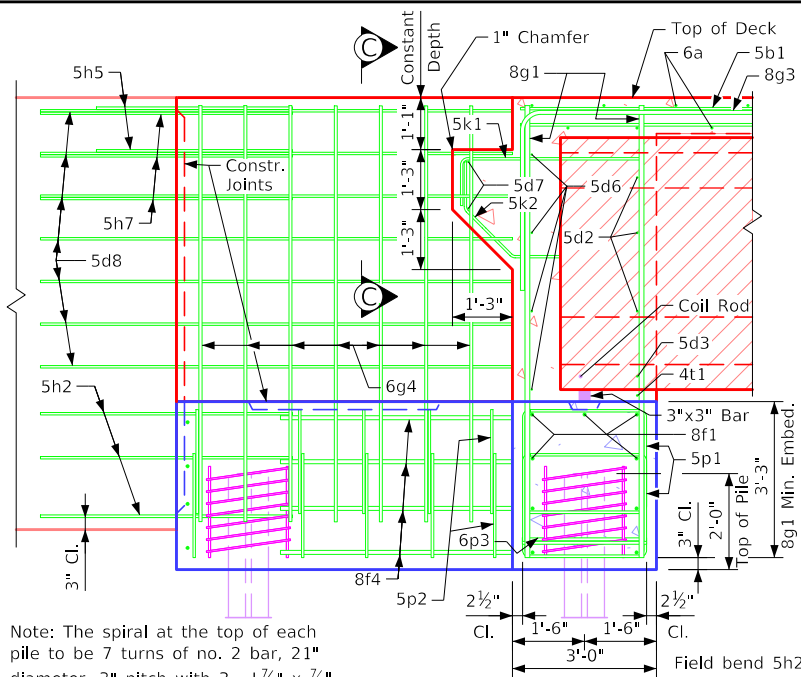


Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. Revised 08-2024; Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral. BTIntegralBridges.dgn - 2086-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.



**Part Rear Elevation at Abutment**  
(Wings not Shown)

Note to Designer:  
Maximum Spacing 1'-4".



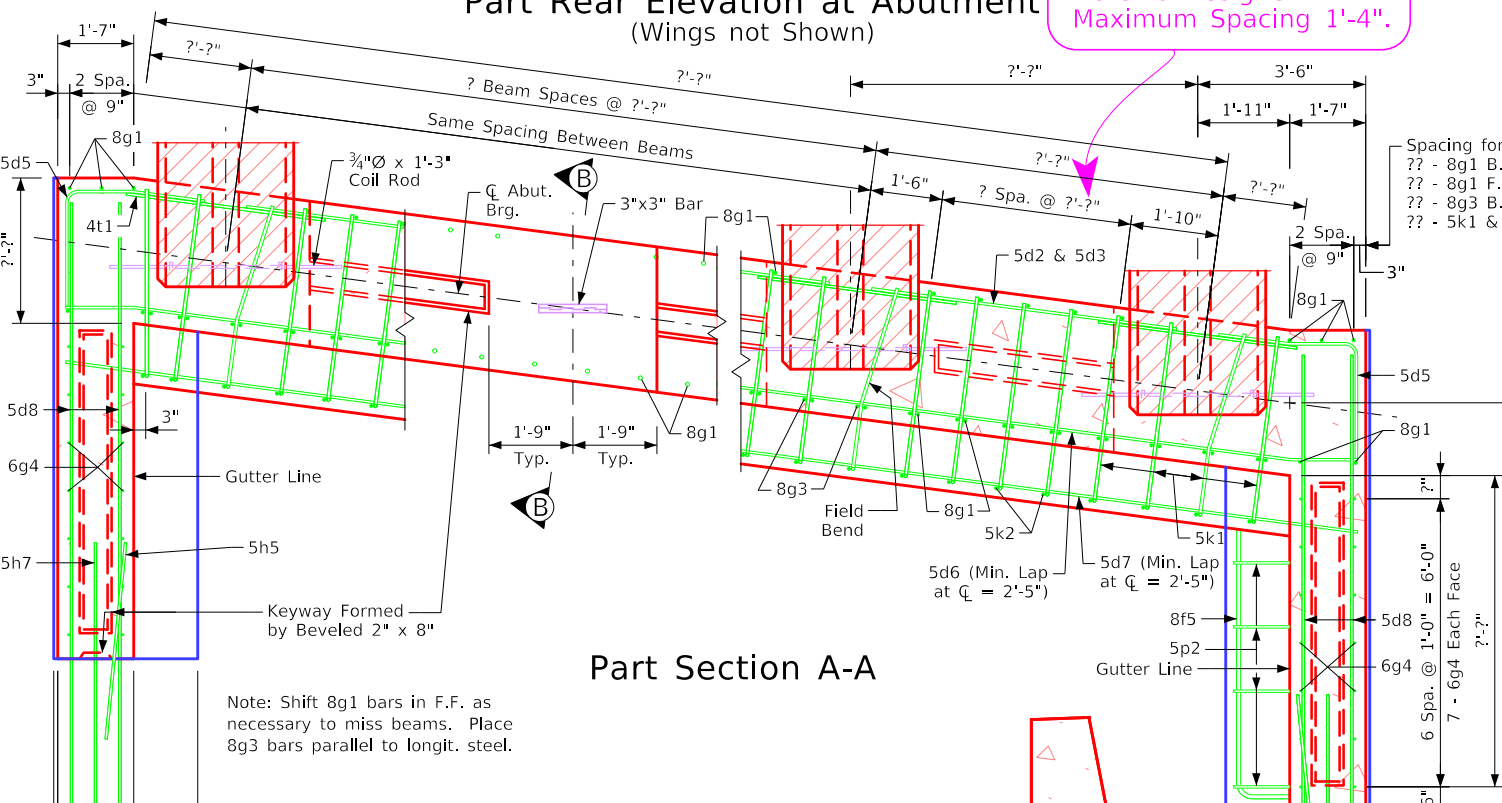
Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21" diameter, 3" pitch with 3 - L<sup>1/8</sup>" x 7/8" x 1/8" spacers punched to hold spiral.

**Part Section B-B**

Table of Abutment Elevations		
Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

Table of Abutment Steps		
Step	? Abutment	? Abutment
a	???.??	???.??

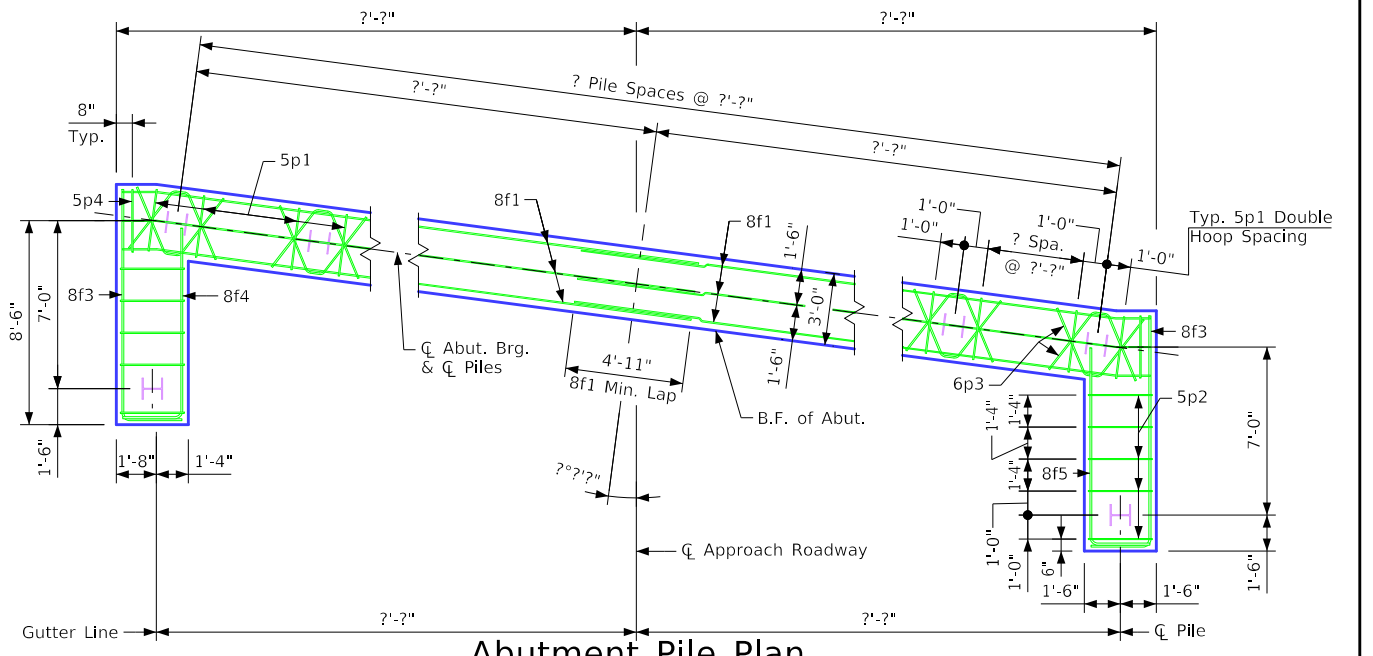
Abutment Concrete Quantity	
Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??



**Part Section A-A**

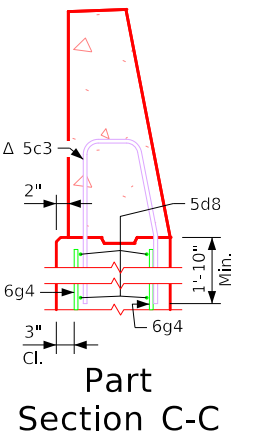
Note: Shift 8g1 bars in F.F. as necessary to miss beams. Place 8g3 bars parallel to longit. steel.

Δ Note: See Design Sheet No. ?? for details of barrier rail. Reinforcing bar 5c3 is included in Superstructure Quantities.



**Abutment Pile Plan**

Note: Concrete Quantities are included on the Summary Quantities sheet. ?? - HP ?? x ?? steel bearing piling required at each abutment. Barrier rail not shown in details.



**Part Section C-C**



**Abutment Step Diagram**  
(Rear Elevation)

Abutment Footing Details	

**Abutment Notes:**  
Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.







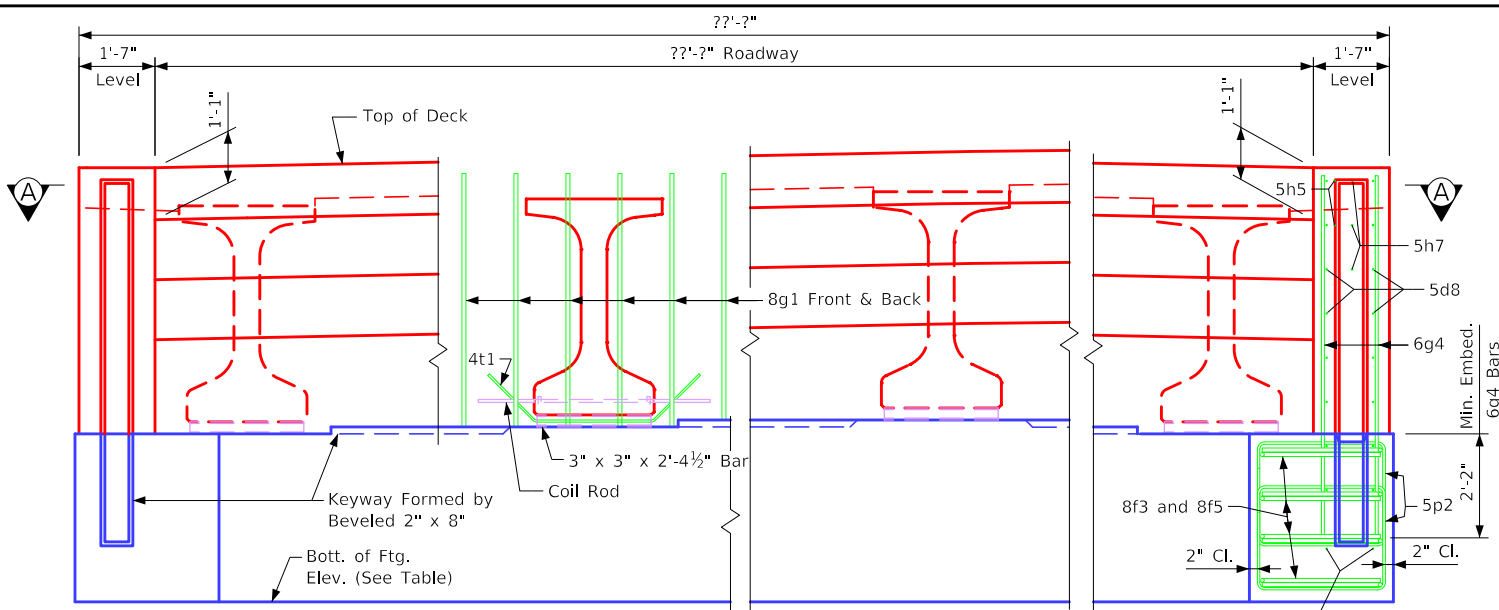




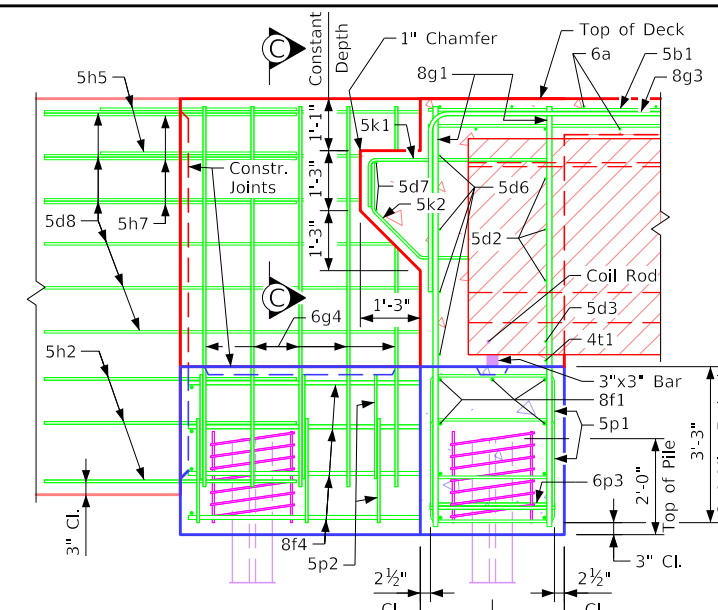
Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.

Issued 02-08. Revised 08-2024: Added missing 2'-2" vertical dim. in "Part Rear Elevation at Abutment" detail. Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral.

BTIntegralBridges.dgn - 2089-BTCD - This Sheet Re-Issued 11-2023. Sheet Format Update.



**Part Rear Elevation at Abutment**  
(Wings not Shown)



**Part Section B-B**  
(**'BTD'** Beam Shown)

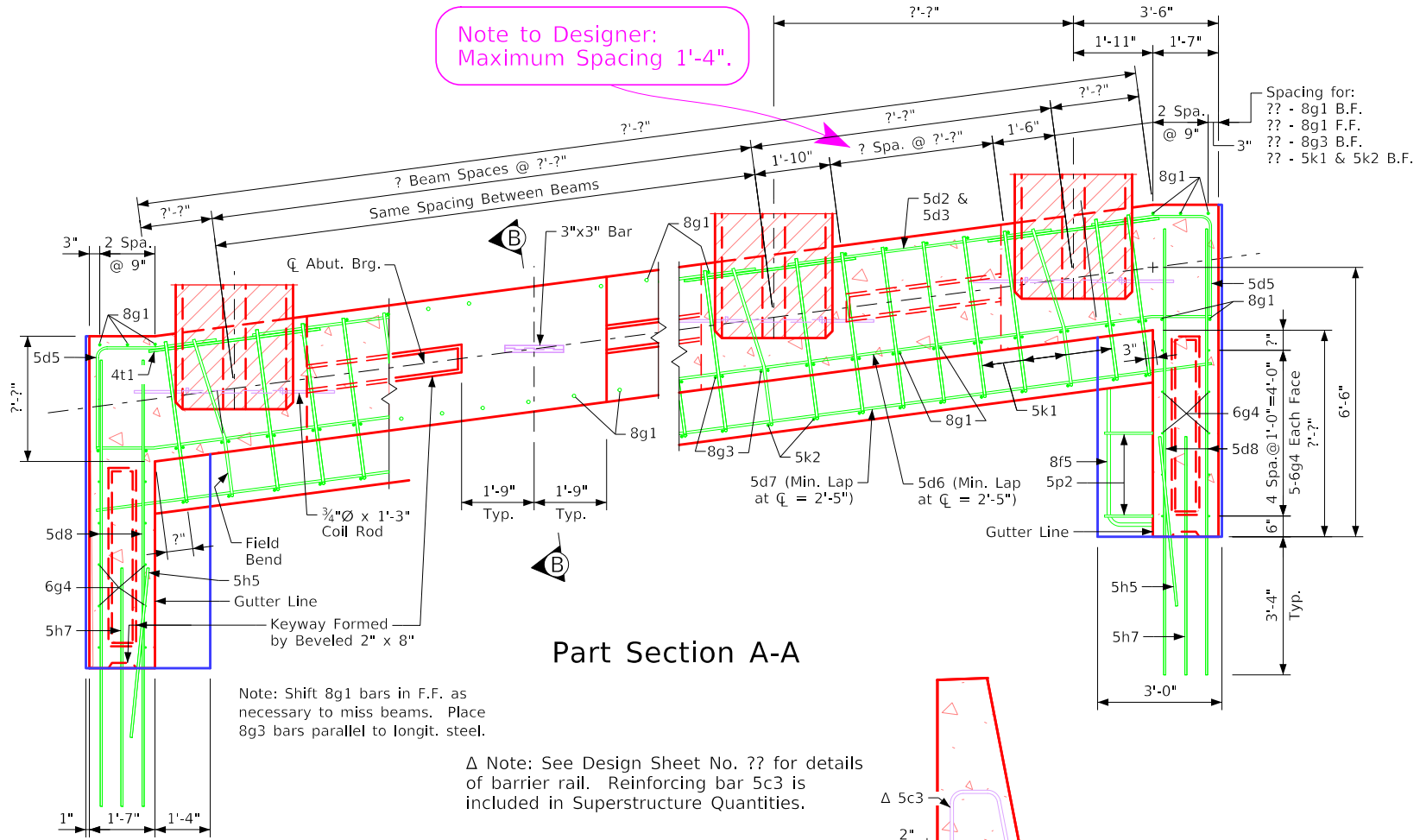
Field bend 5h2 bar as necessary to avoid pile in abutment wing.  
Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21" diameter, 3" pitch with 3 - L $\frac{3}{8}$ " x  $\frac{3}{8}$ " x  $\frac{1}{8}$ " spacers punched to hold spiral.

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

Step	? Abutment	? Abutment
a	???.??	???.??

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
<b>Total (Cu. Yds.)</b>	??

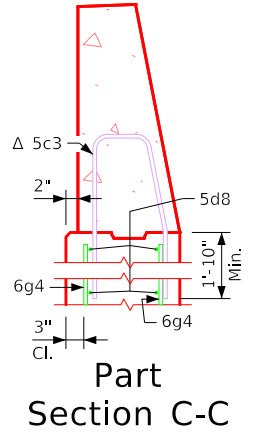
Note to Designer:  
Maximum Spacing 1'-4".



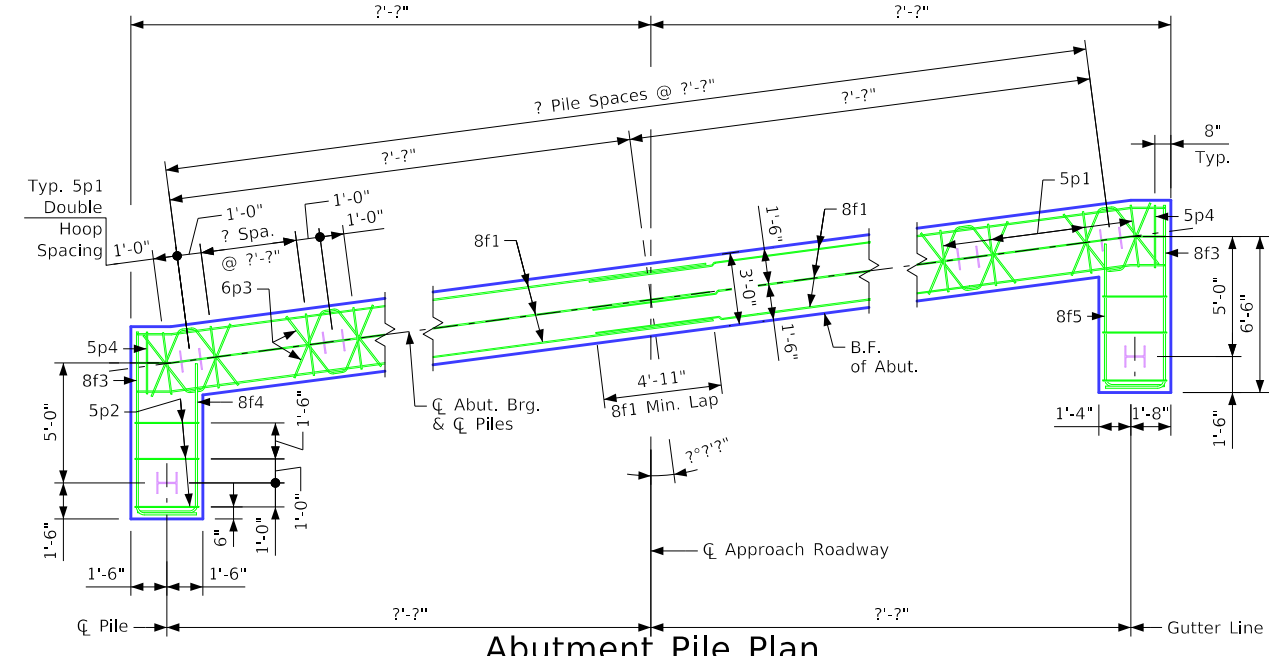
**Part Section A-A**

Note: Shift 8g1 bars in F.F. as necessary to miss beams. Place 8g3 bars parallel to longit. steel.

Δ Note: See Design Sheet No. ?? for details of barrier rail. Reinforcing bar 5c3 is included in Superstructure Quantities.



**Part Section C-C**



**Abutment Pile Plan**

Note: Concrete Quantities are included on the Summary Quantities sheet.  
?? - HP ?? x ?? steel bearing piling required at each abutment.  
Barrier rail not shown in details.

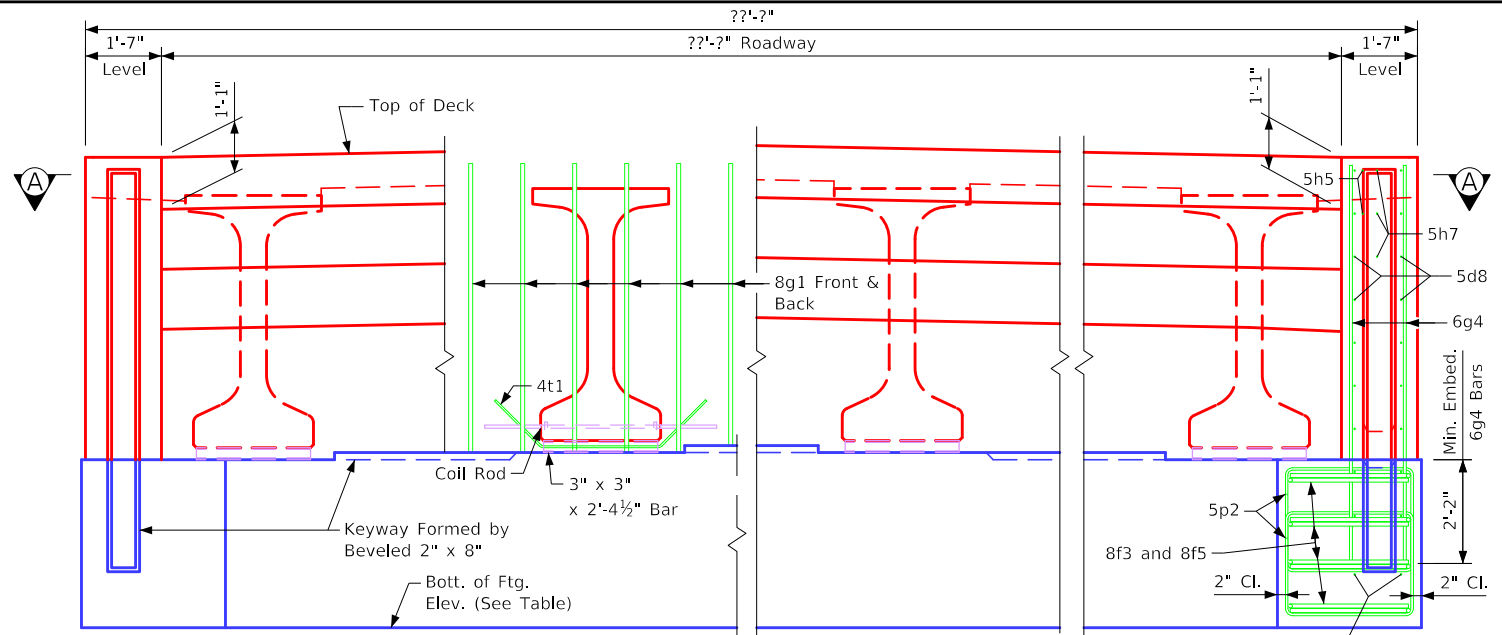


**Abutment Step Diagram**  
(Rear Elevation)

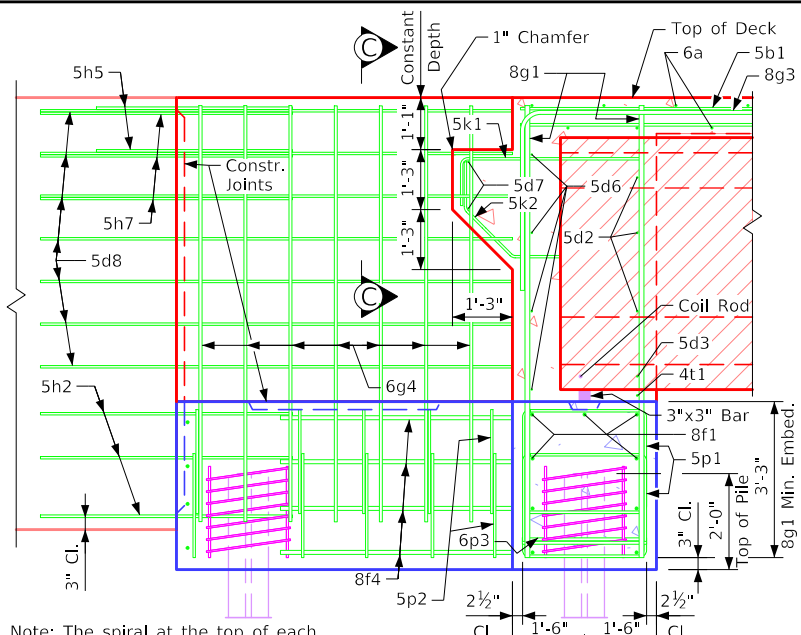


**Abutment Footing Details**

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. Revised 08-2024; Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral. BTIntegralBridges.dgn - 2089-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.



**Part Rear Elevation at Abutment**  
(Wings not Shown)

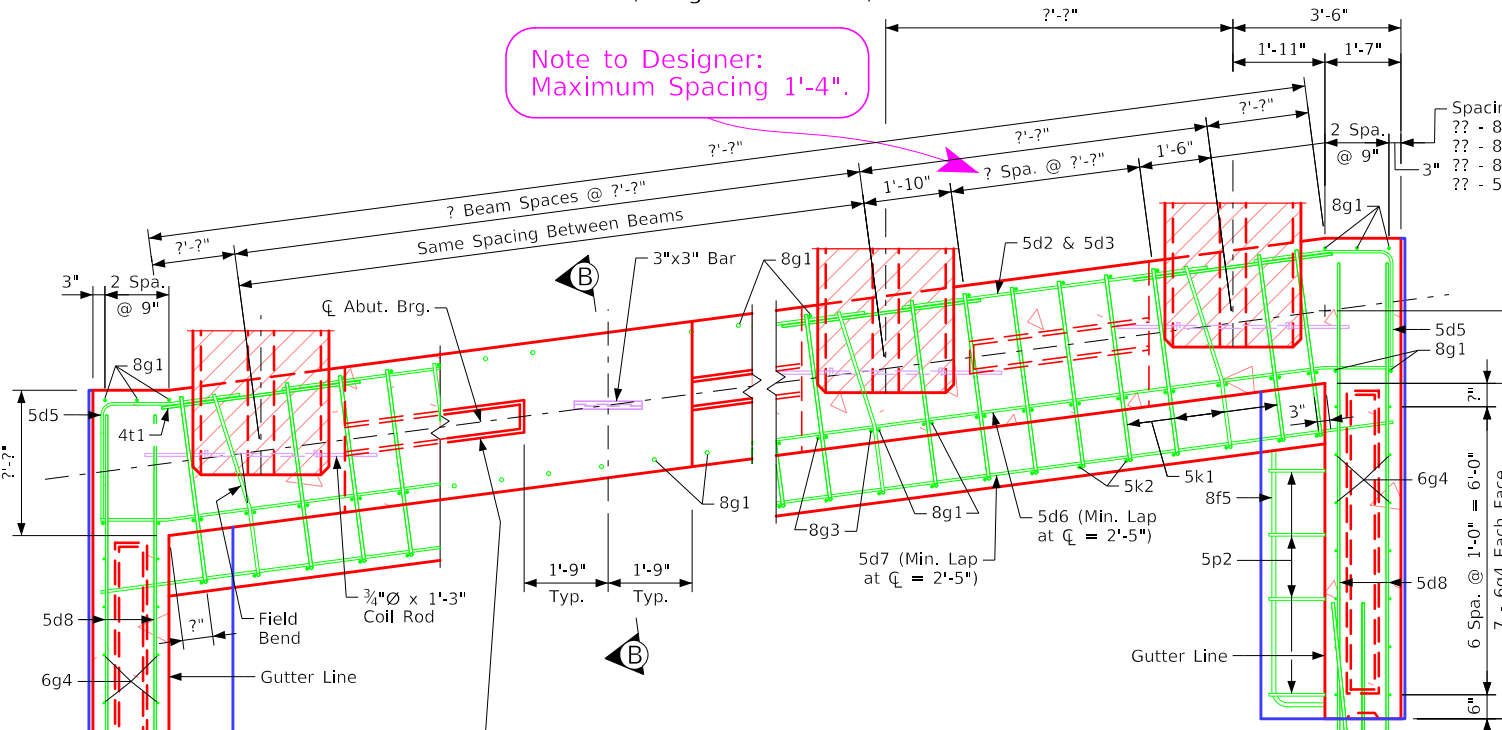


**Part Section B-B**

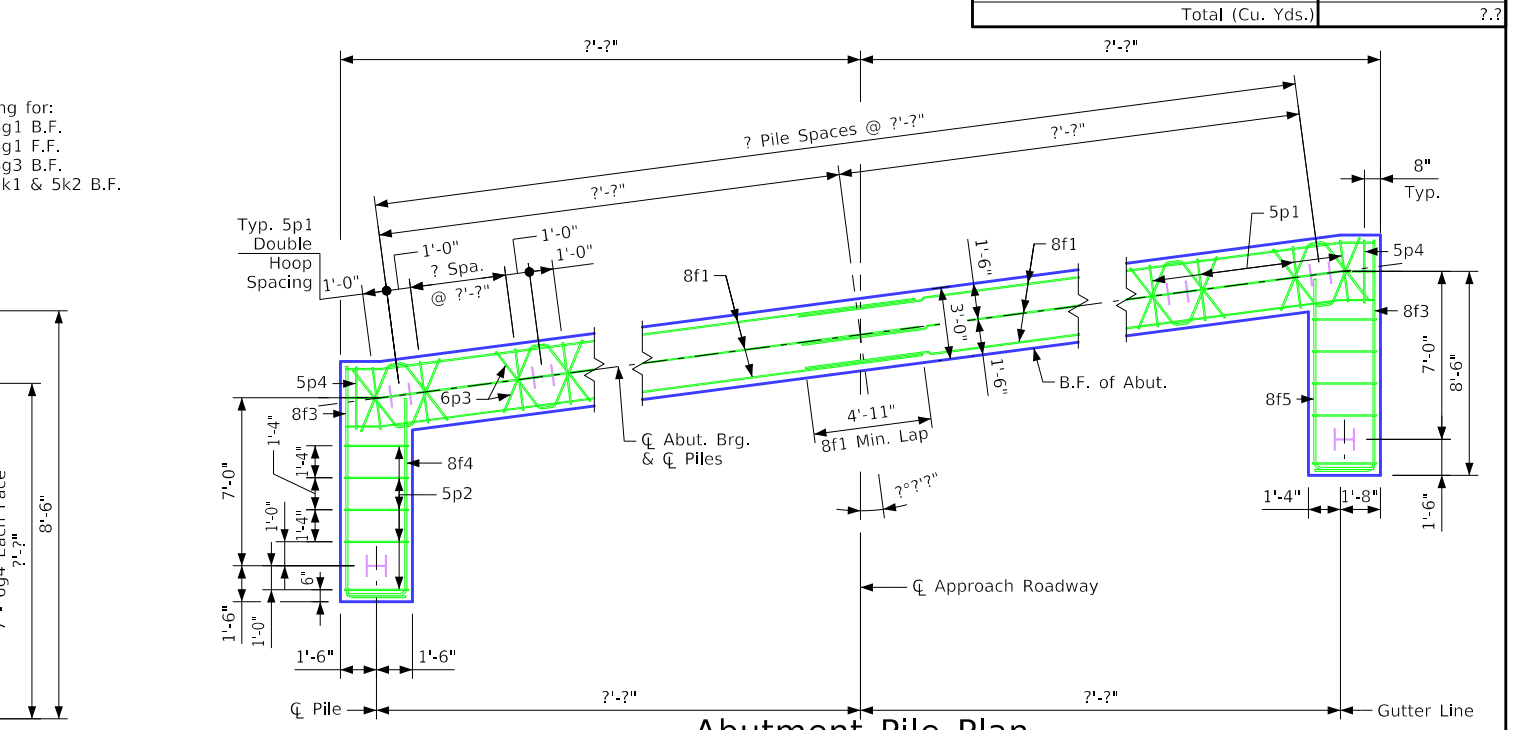
Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

Step	? Abutment	? Abutment
a	???.??	???.??

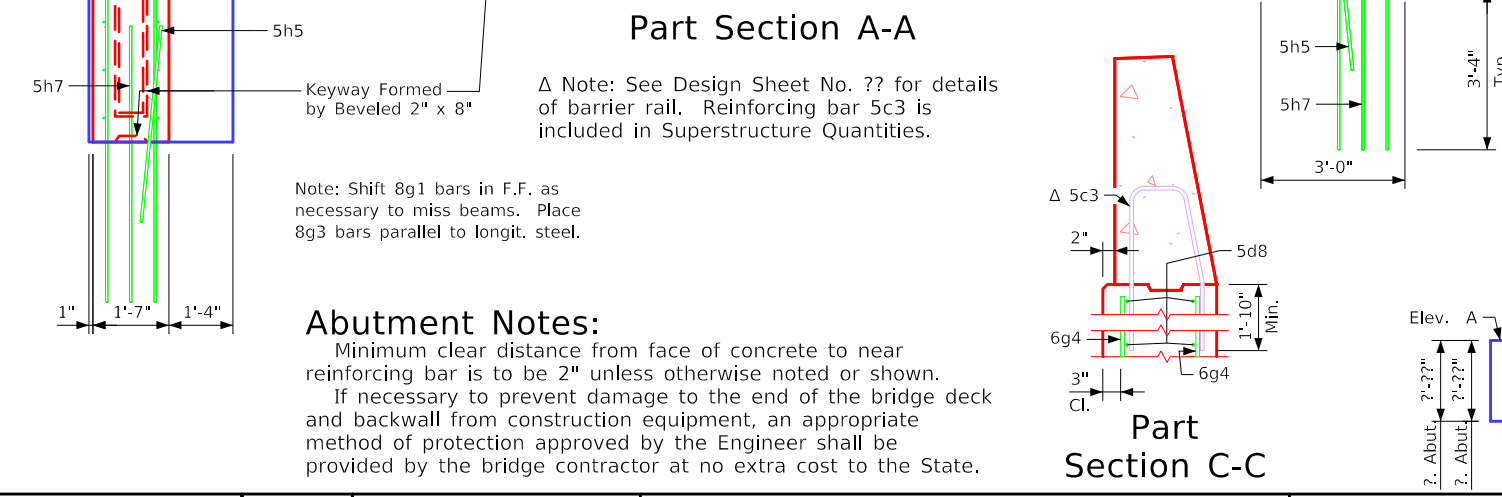
Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
<b>Total (Cu. Yds.)</b>	??



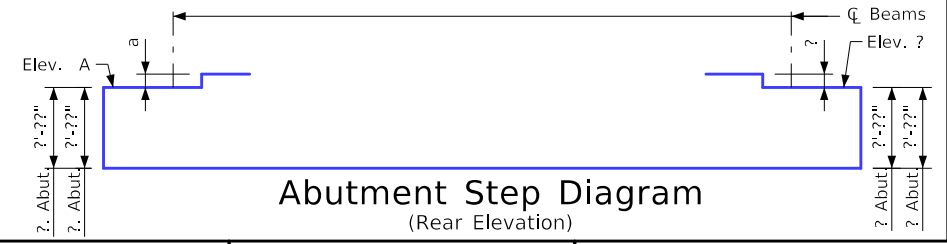
**Part Section A-A**



**Abutment Pile Plan**



**Part Section C-C**



**Abutment Step Diagram**  
(Rear Elevation)

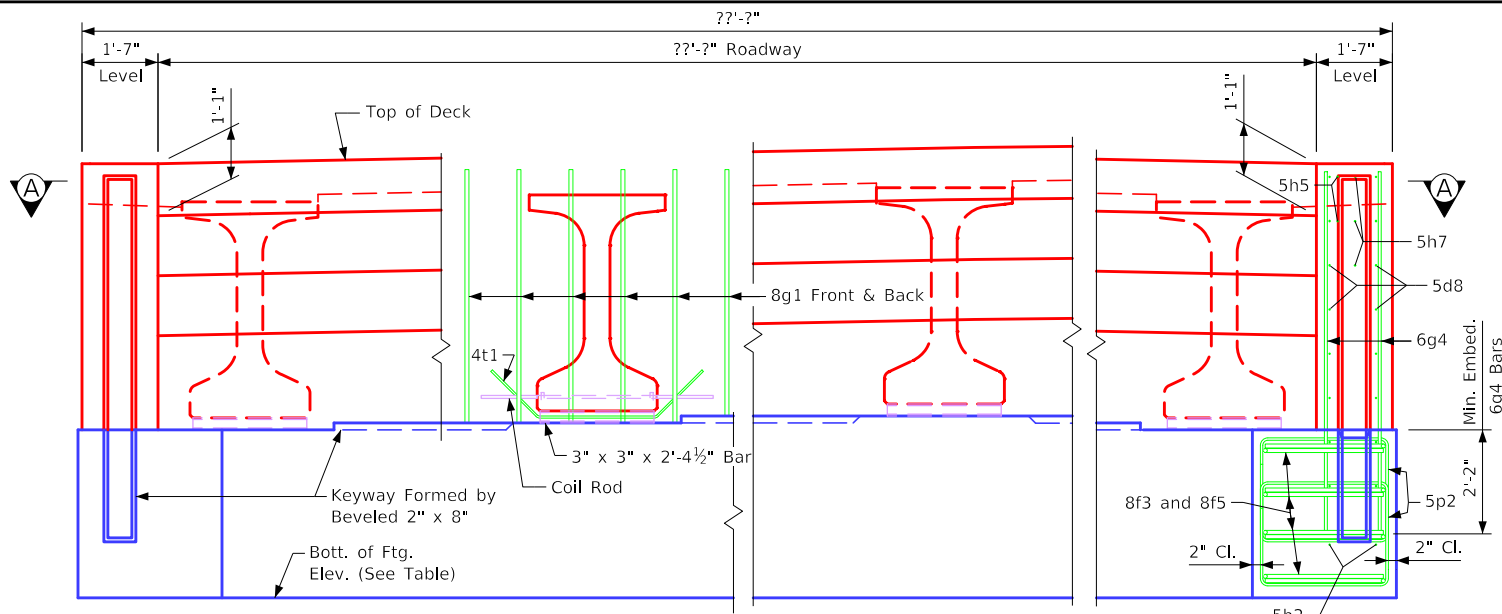


**Abutment Footing Details**

Note to Designer:  
Maximum Spacing 1'-4\"/>

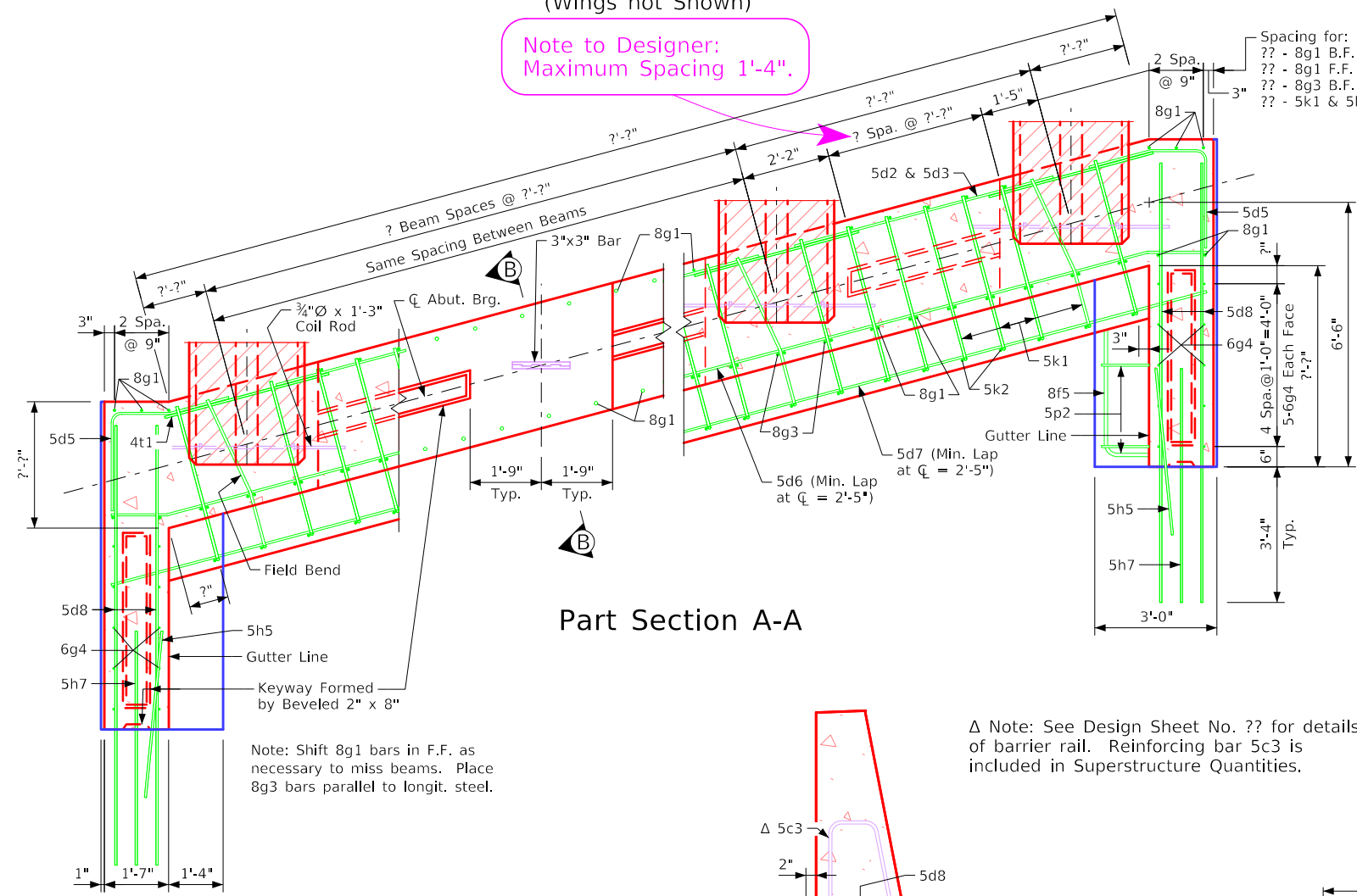
**Abutment Notes:**  
Minimum clear distance from face of concrete to near reinforcing bar is to be 2\"/>

Note: Concrete Quantities are included on the Summary Quantities sheet.  
?? - HP ?? x ?? steel bearing piling required at each abutment.  
Barrier rail not shown in details.



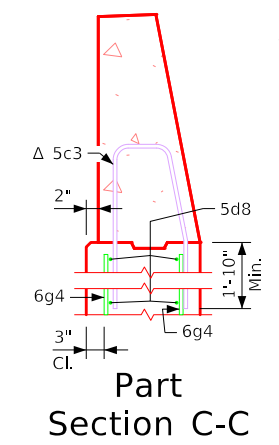
Part Rear Elevation at Abutment  
(Wings not Shown)

Note to Designer:  
Maximum Spacing 1'-4"



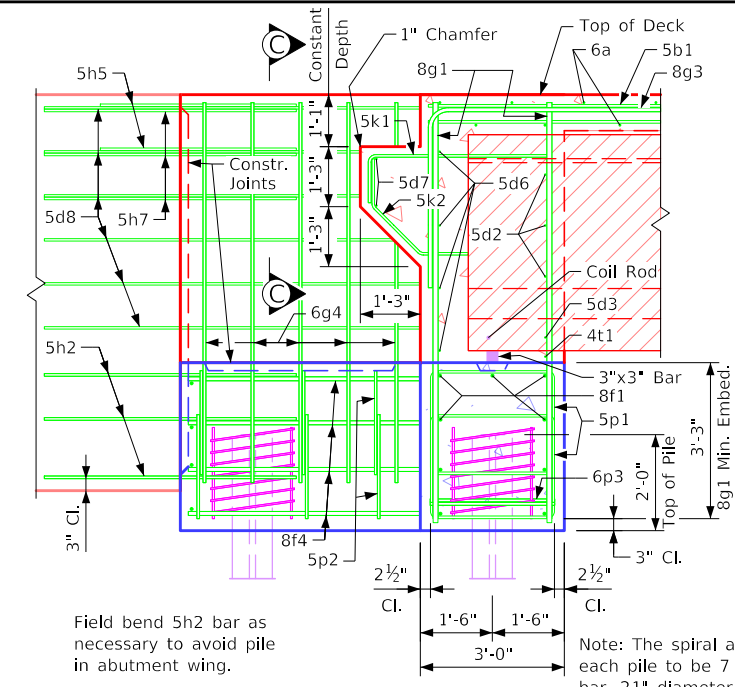
Part Section A-A

Note: Shift 8g1 bars in F.F. as necessary to miss beams. Place 8g3 bars parallel to longit. steel.



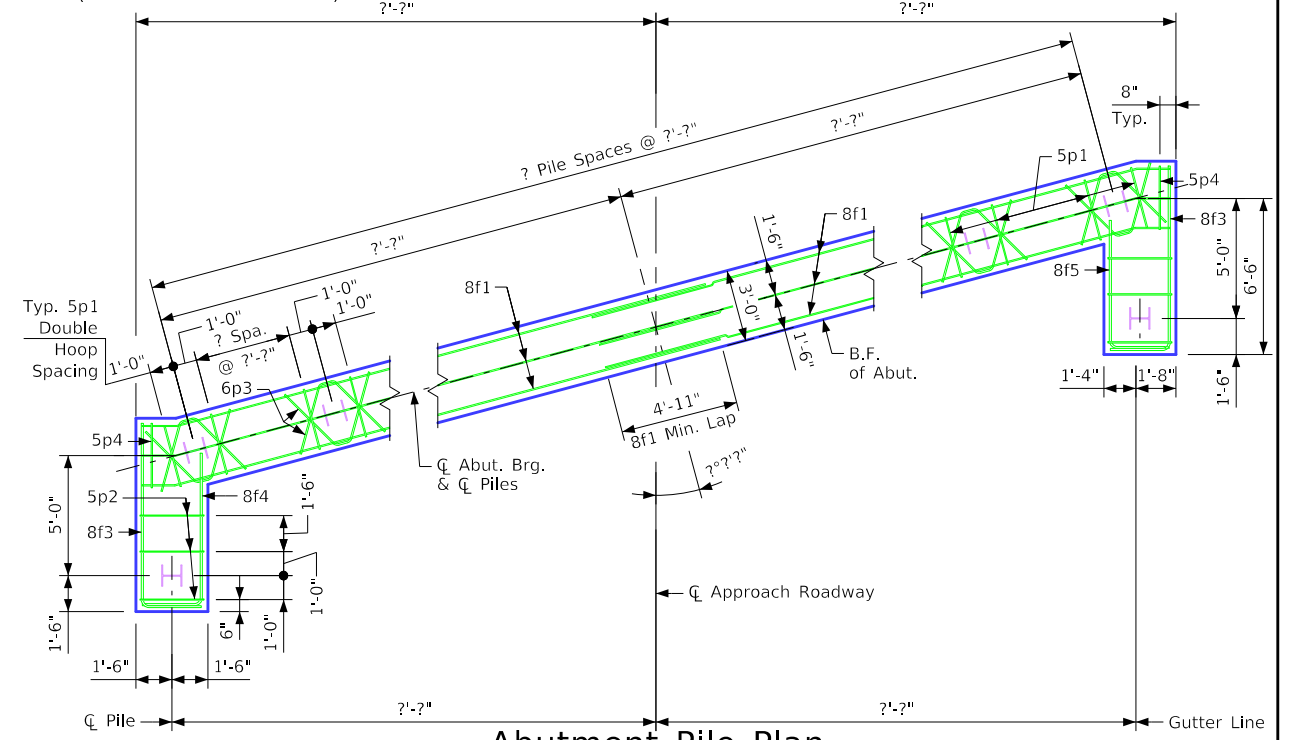
Part Section C-C

Δ Note: See Design Sheet No. ?? for details of barrier rail. Reinforcing bar 5c3 is included in Superstructure Quantities.



Part Section B-B  
('BTD' Beam Shown)

Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21\"/>

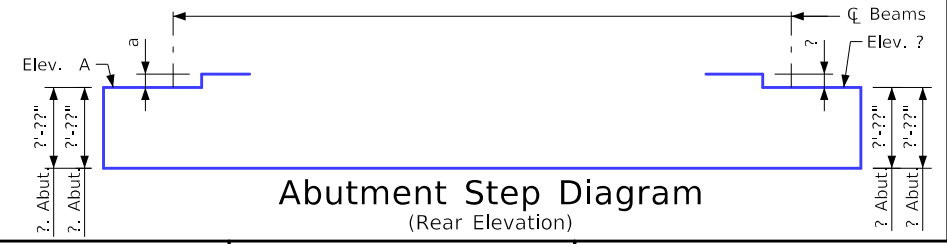


Abutment Pile Plan

Note: Concrete Quantities are included on the Summary Quantities sheet. ?? - HP ?? x ?? steel bearing piling required at each abutment. Barrier rail not shown in details.

Abutment Notes:

Minimum clear distance from face of concrete to near reinforcing bar is to be 2\"/>



Abutment Step Diagram  
(Rear Elevation)

Table of Abutment Elevations		
Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

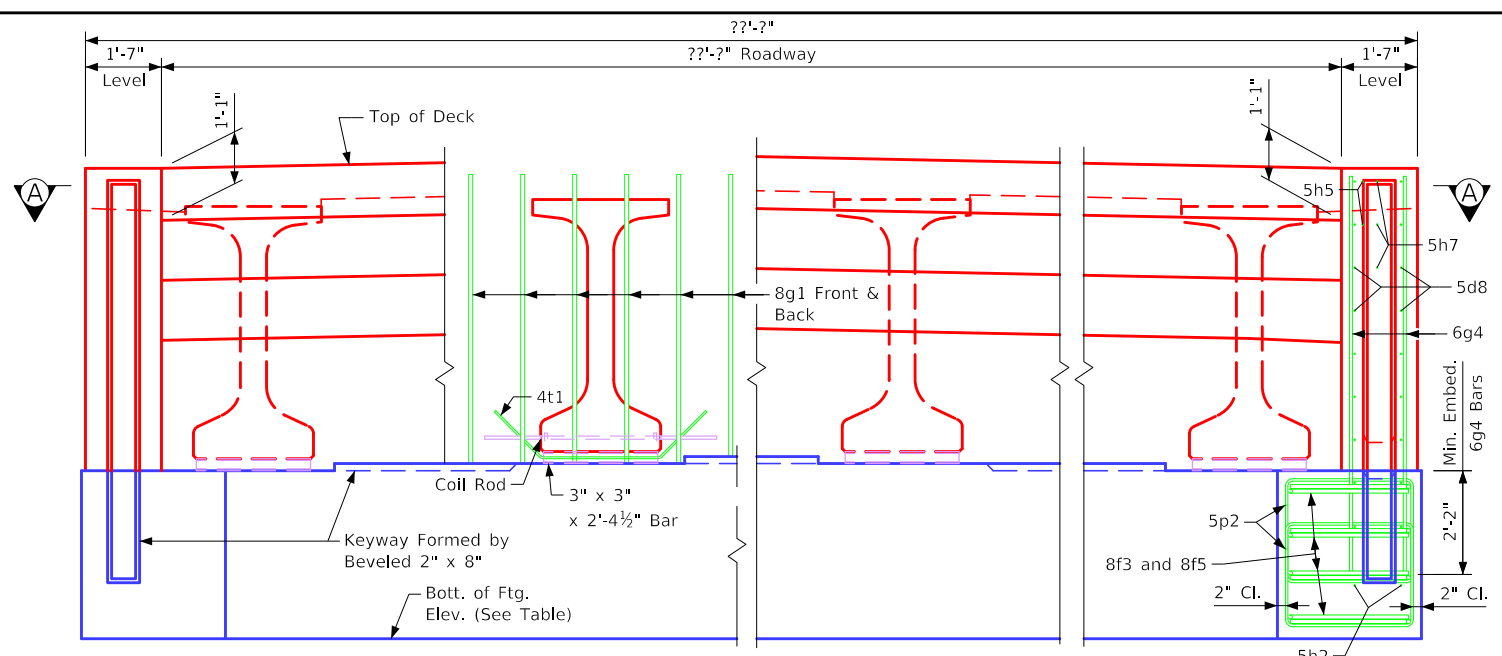
Table of Abutment Steps		
Step	? Abutment	? Abutment
a	???.??	???.??

Abutment Concrete Quantity	
Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??

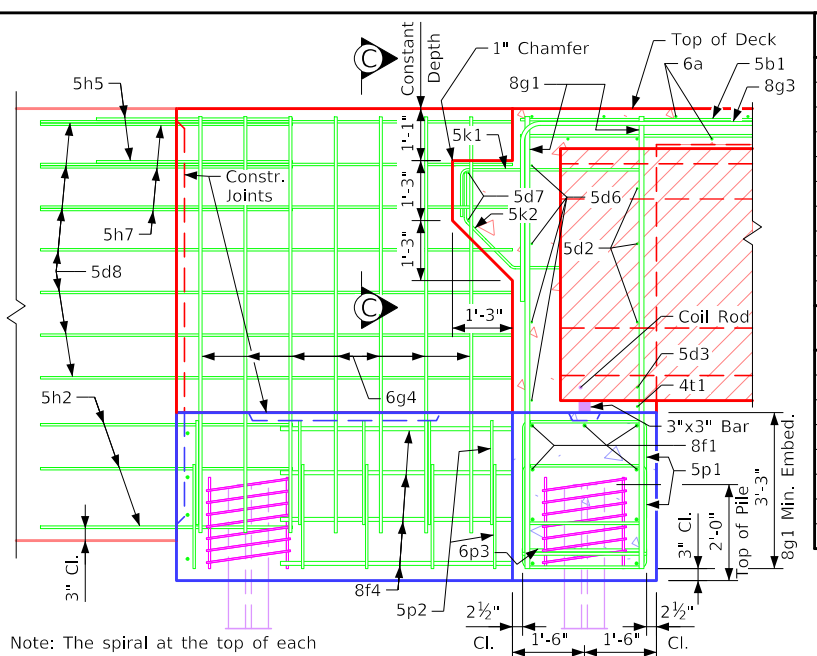
Abutment Footing Details

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. Revised 08-2024: Added missing 2'-2\"/>

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. Revised 08-2024; Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral. BTIntegralBridges.dgn - 2090-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.



Part Rear Elevation at Abutment (Wings not Shown)

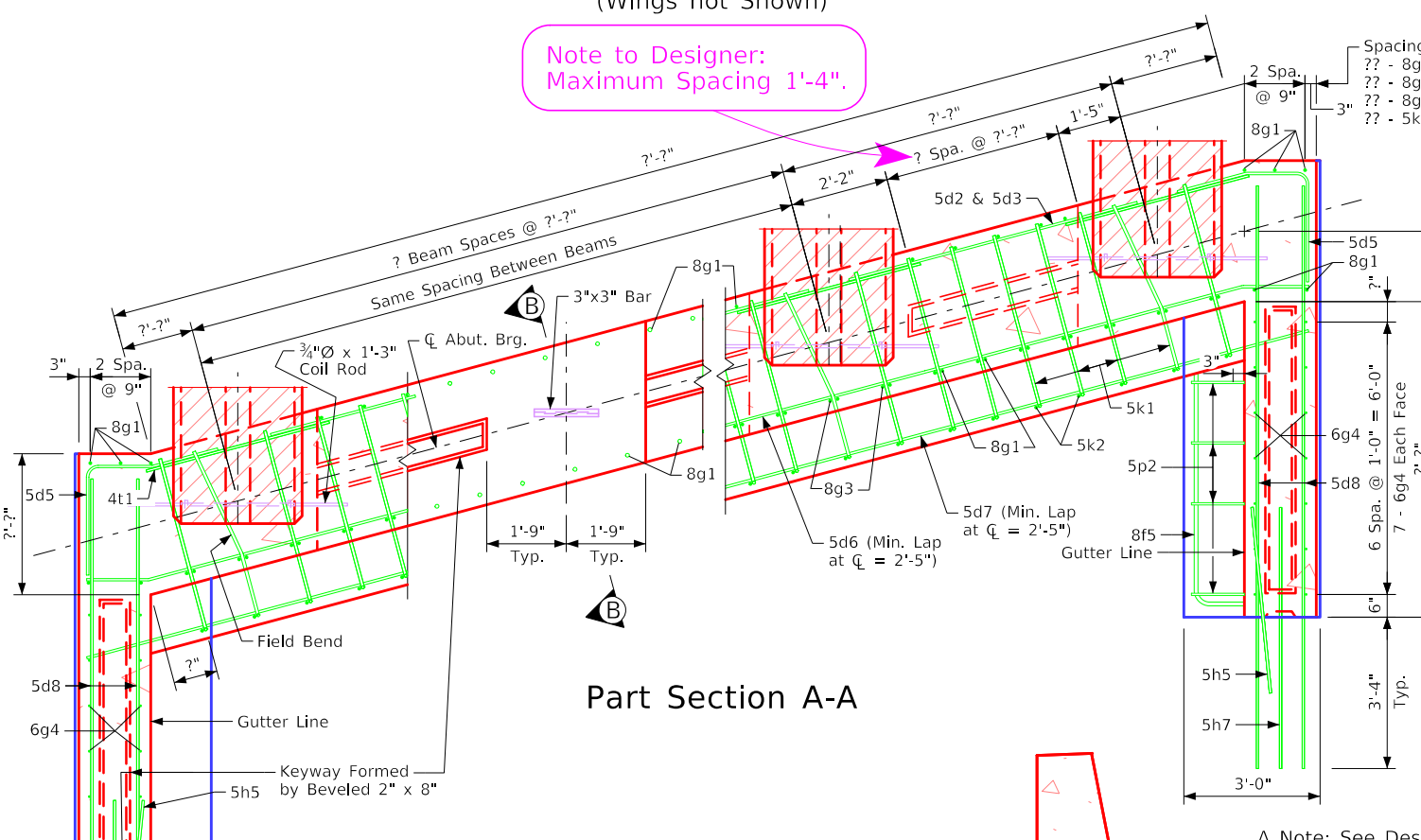


Part Section B-B

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

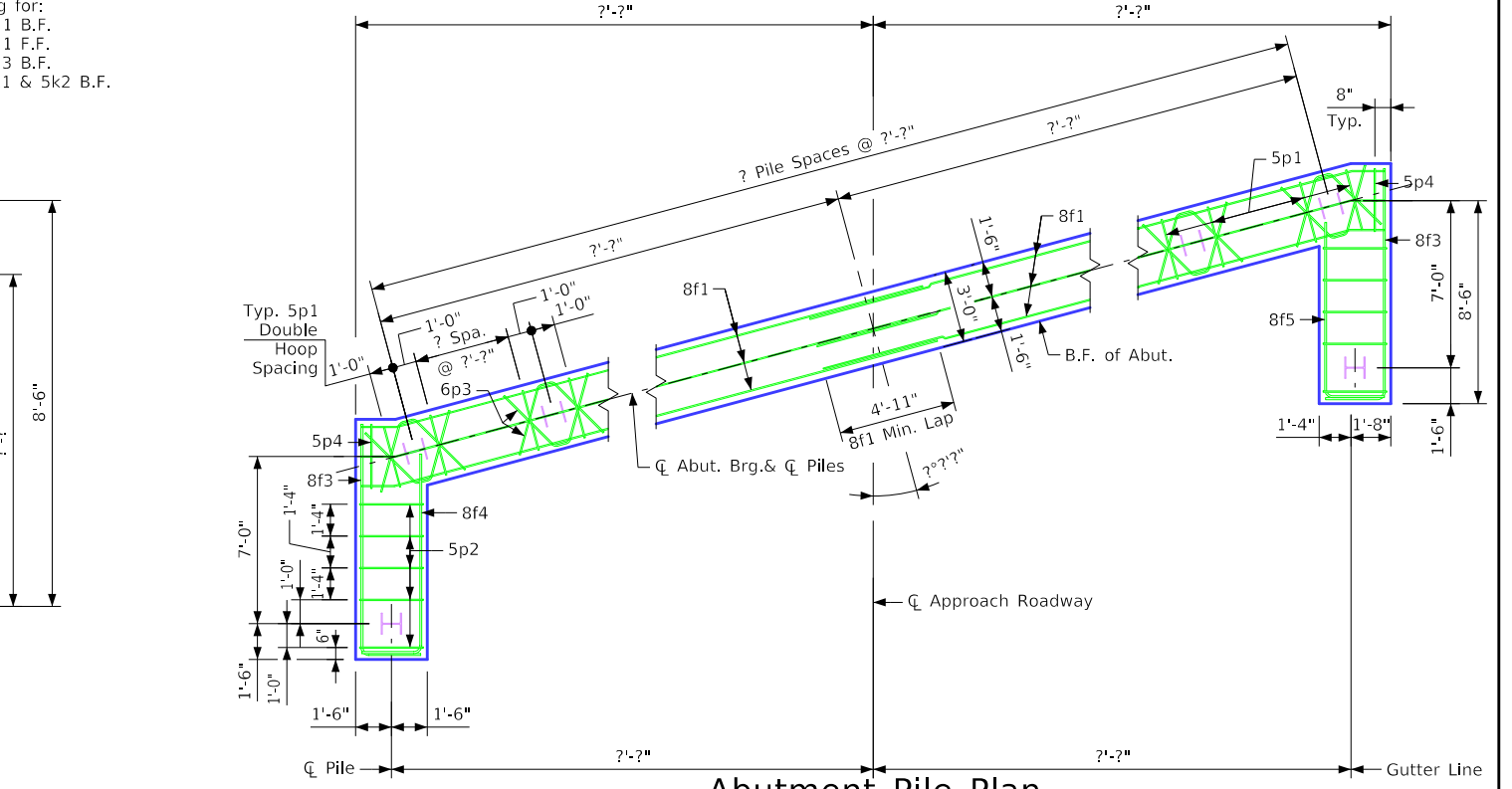
Step	? Abutment	? Abutment
a	???.??	???.??

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??



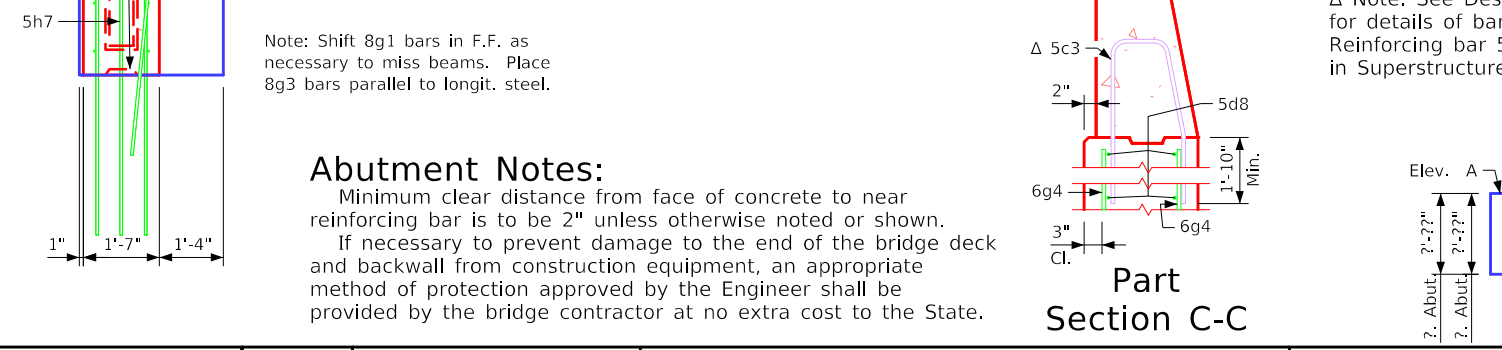
Note to Designer: Maximum Spacing 1'-4".

Part Section A-A



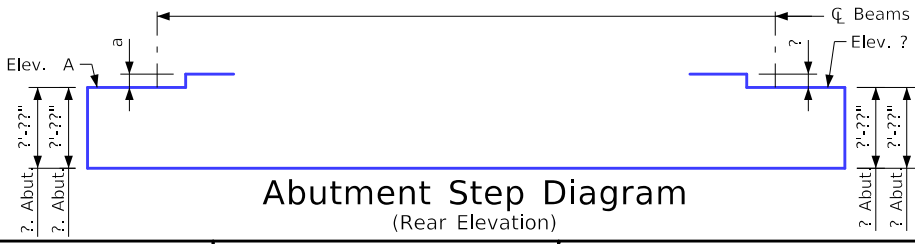
Abutment Pile Plan

Note: Concrete Quantities are included on the Summary Quantities sheet. ?? - HP ?? x ?? steel bearing piling required at each abutment. Barrier rail not shown in details.



Part Section C-C

**Abutment Notes:**  
 Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
 If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.

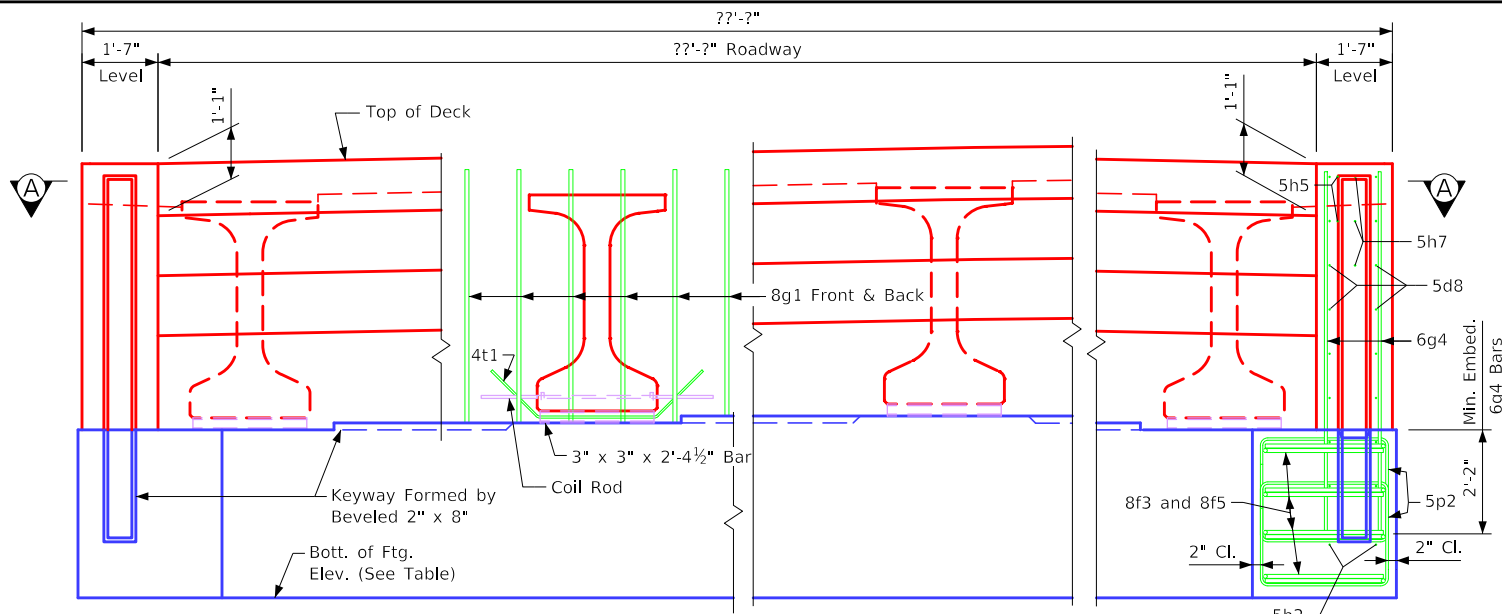


Abutment Step Diagram (Rear Elevation)

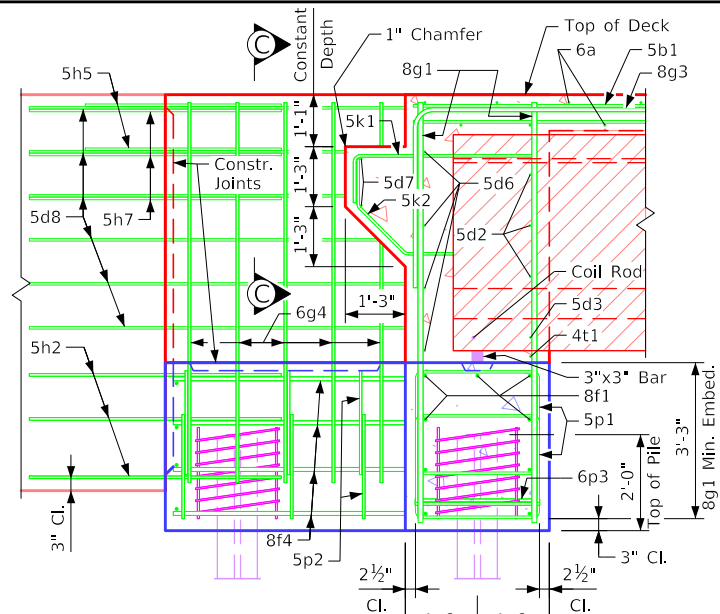


Abutment Footing Details

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.  
 Issued 02-08.  
 Revised 08-2024: Added missing 2'-2" vertical dim. in "Part Rear Elevation at Abutment" detail. Corrected sheet description skew direction, was showing as Left Ahead (L.A.) Skew. Corrected misc. detailing errors.  
 Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral.  
 BTIntegralBridges.dgn - 2091-BTCD - This Sheet Re-Issued 11-2023. Sheet Format Update.



Part Rear Elevation at Abutment  
(Wings not Shown)

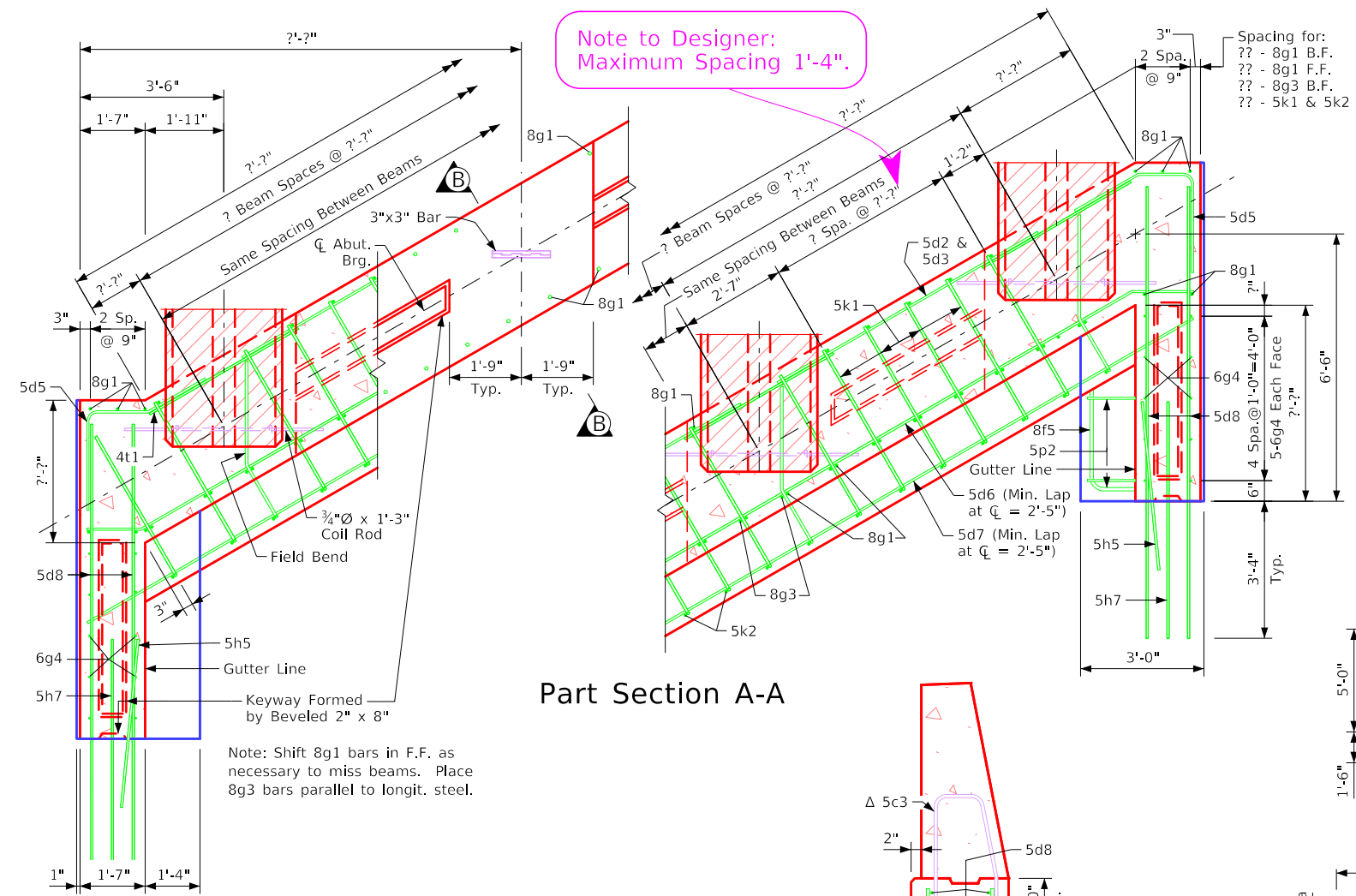


Part Section B-B  
(*'BTD'* Beam Shown)

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

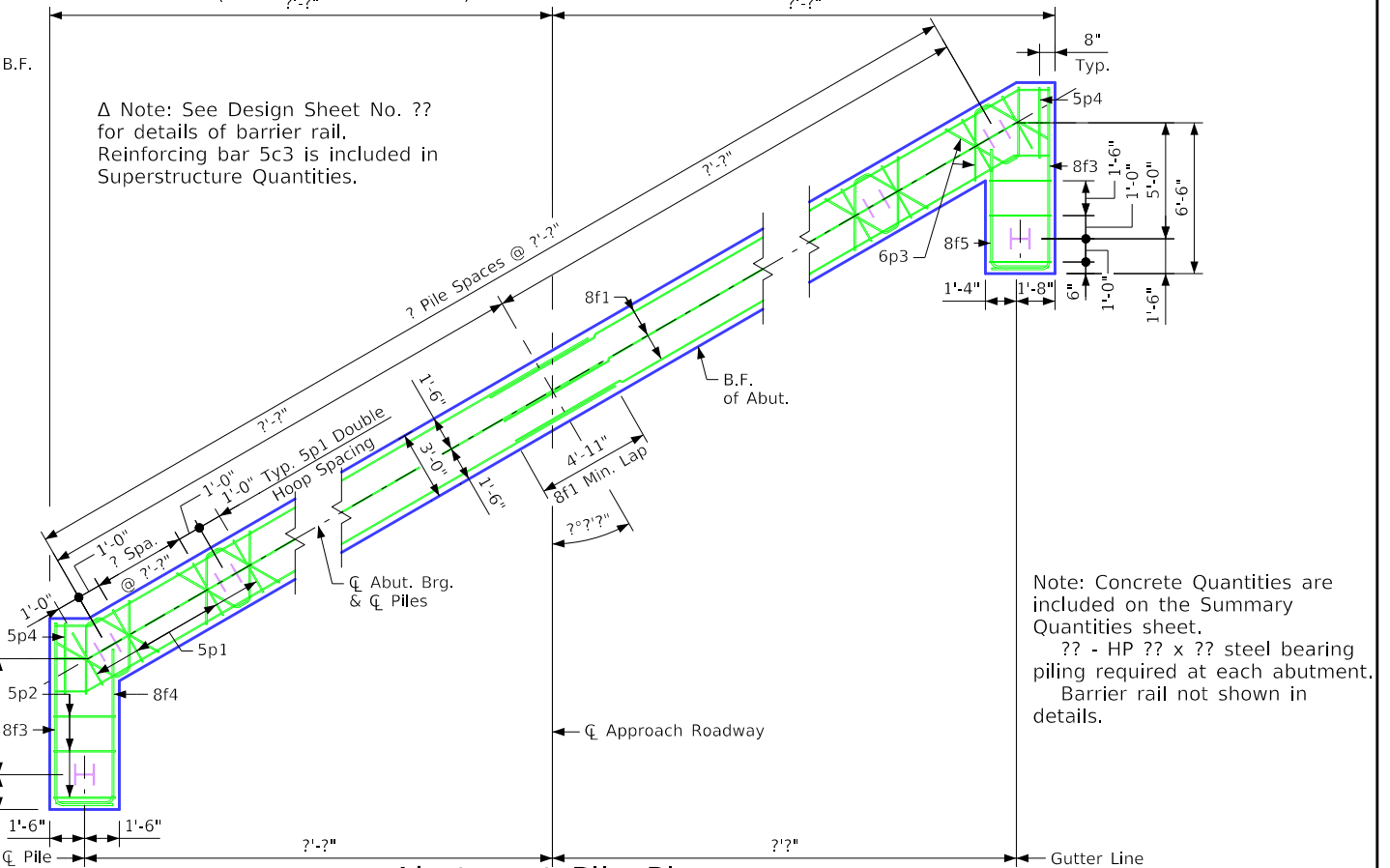
Step	? Abutment	? Abutment
a	???.??	???.??

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
Total (Cu. Yds.)	??

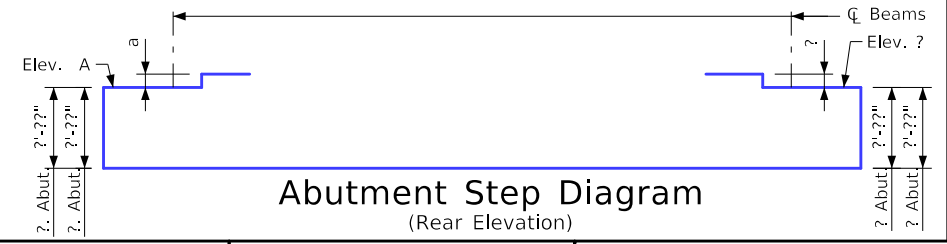


Part Section A-A

Note to Designer:  
Maximum Spacing 1'-4".



Abutment Pile Plan



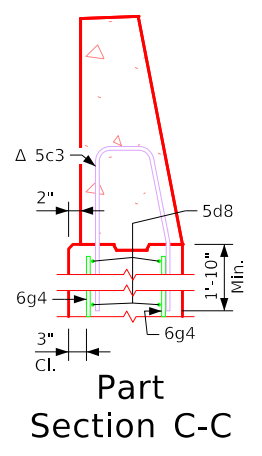
Abutment Step Diagram  
(Rear Elevation)



Abutment Footing Details

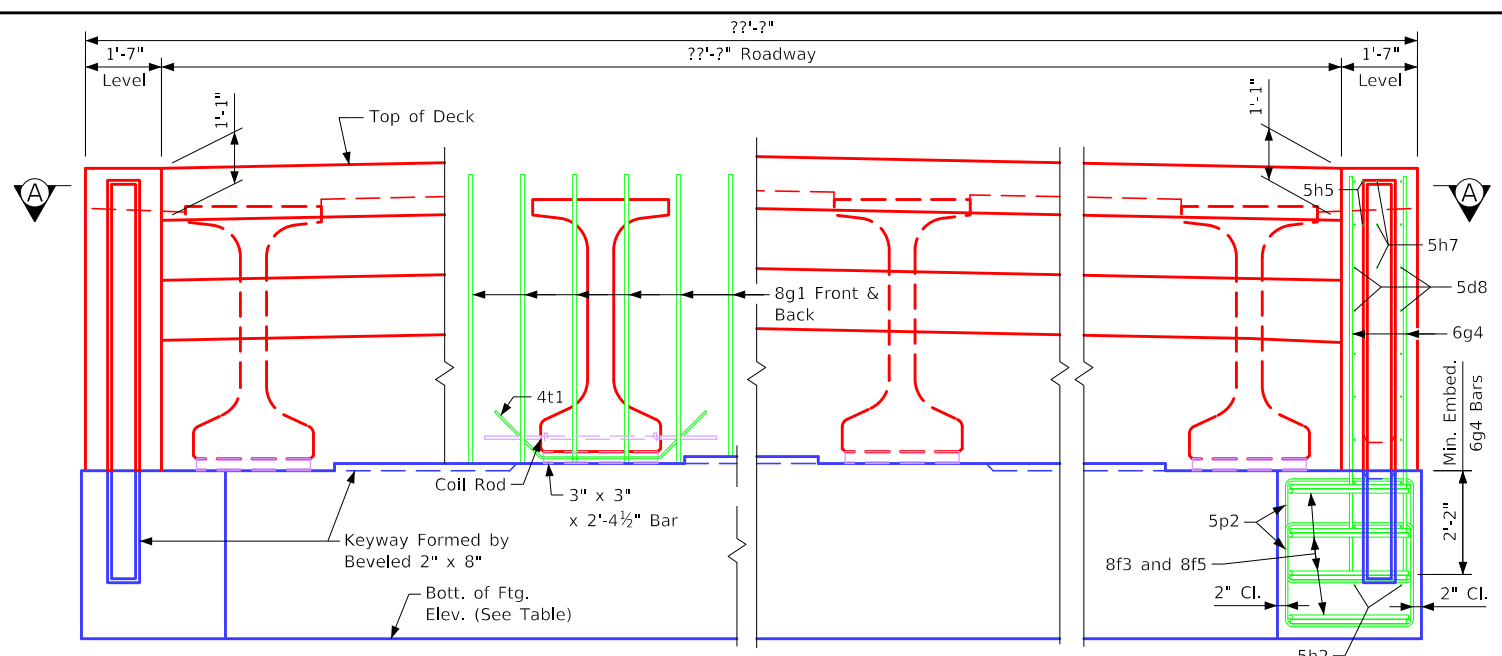
**Abutment Notes:**

Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
 If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.

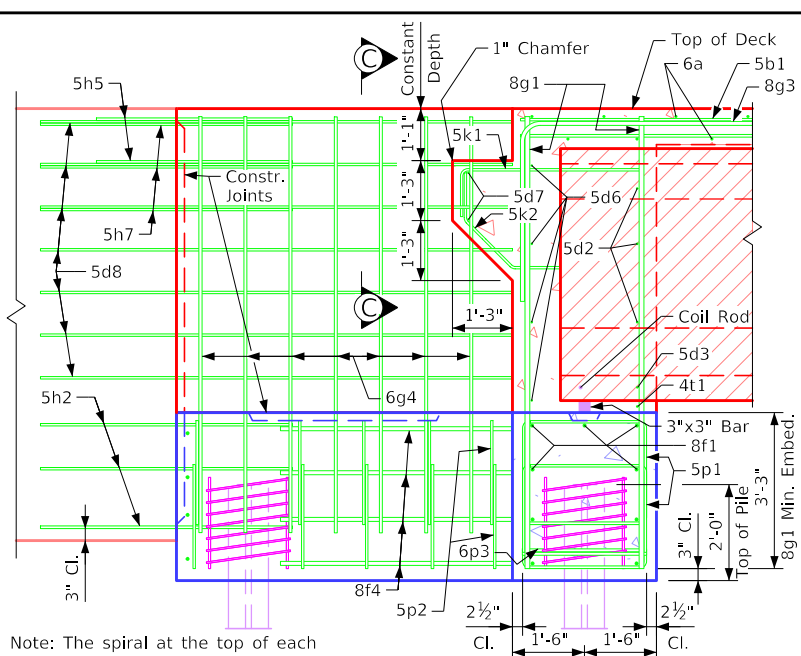


Part Section C-C

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. Revised 08-2024: Updated "Abutment Step Diagram", removed the text and numbers to make the vertical dimensions neutral. Corrected misc. detailing errors. BTIntegralBridges.dgn - 2091-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.



Part Rear Elevation at Abutment  
(Wings not shown)

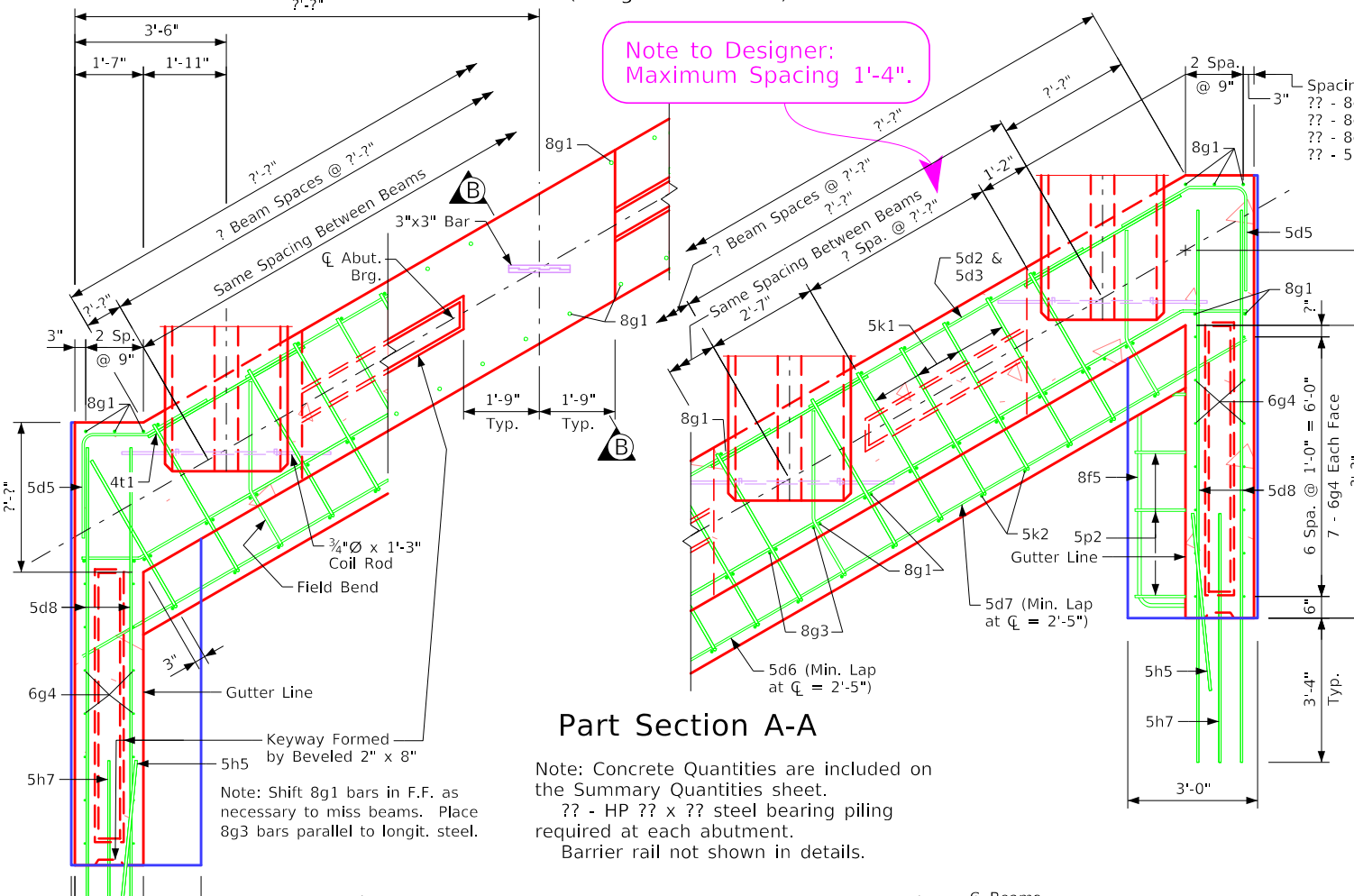


Part Section B-B  
Note: The spiral at the top of each pile to be 7 turns of no. 2 bar, 21" diameter, 3" pitch with 3 - L $\frac{7}{8}$ " x  $\frac{7}{8}$ " x  $\frac{1}{8}$ " spacers punched to hold spiral.

Point	? Abutment	? Abutment
Elev. A	???.??	???.??
Bottom Footing Elev.	???.??	???.??

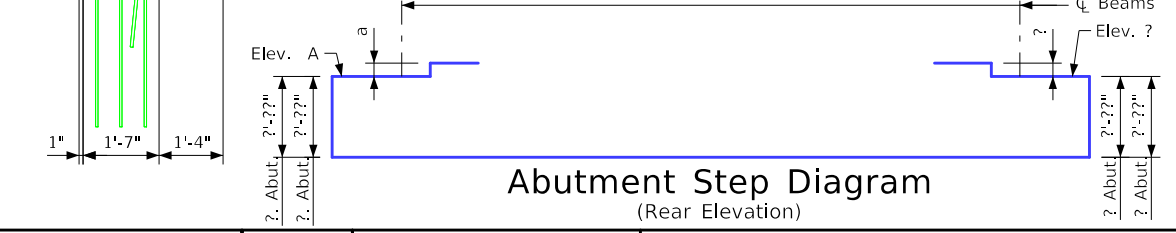
Step	? Abutment	? Abutment
a	???.??	???.??

Location	Quantity
? Abutment Footing	??
? Abutment Footing	??
<b>Total (Cu. Yds.)</b>	??



Part Section A-A

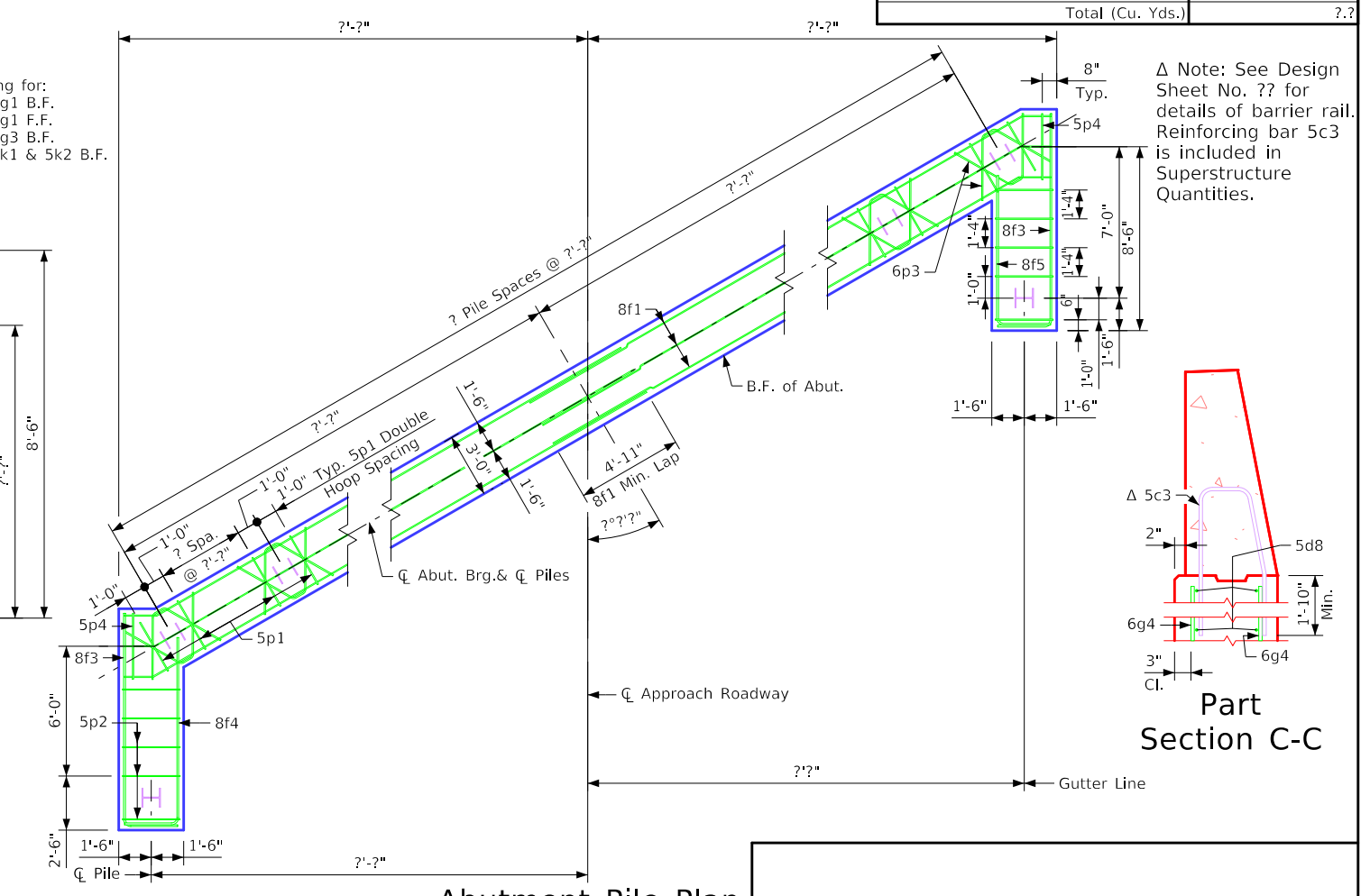
Note: Concrete Quantities are included on the Summary Quantities sheet.  
?? - HP ?? x ?? steel bearing piling required at each abutment.  
Barrier rail not shown in details.



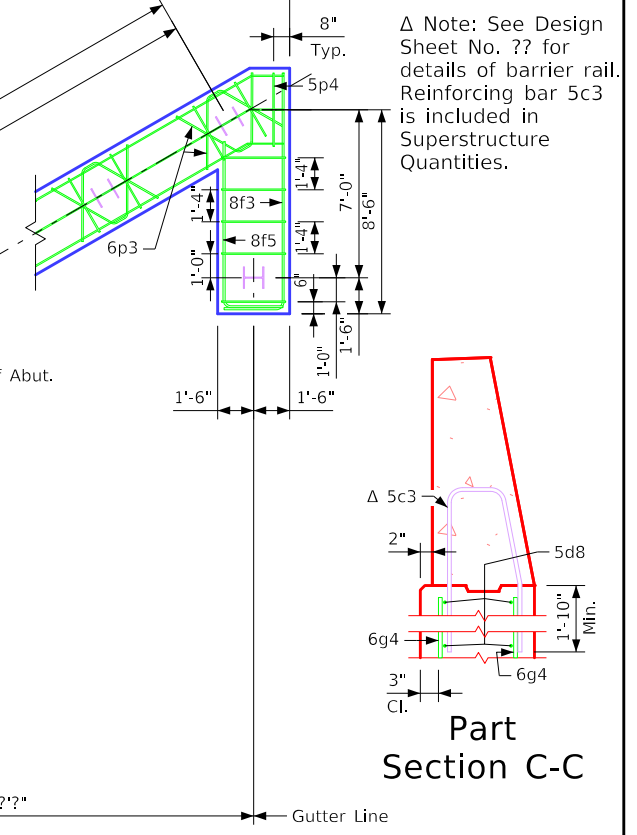
Abutment Step Diagram  
(Rear Elevation)

**Abutment Notes:**

Minimum clear distance from face of concrete to near reinforcing bar is to be 2" unless otherwise noted or shown.  
If necessary to prevent damage to the end of the bridge deck and backwall from construction equipment, an appropriate method of protection approved by the Engineer shall be provided by the bridge contractor at no extra cost to the State.



Abutment Pile Plan

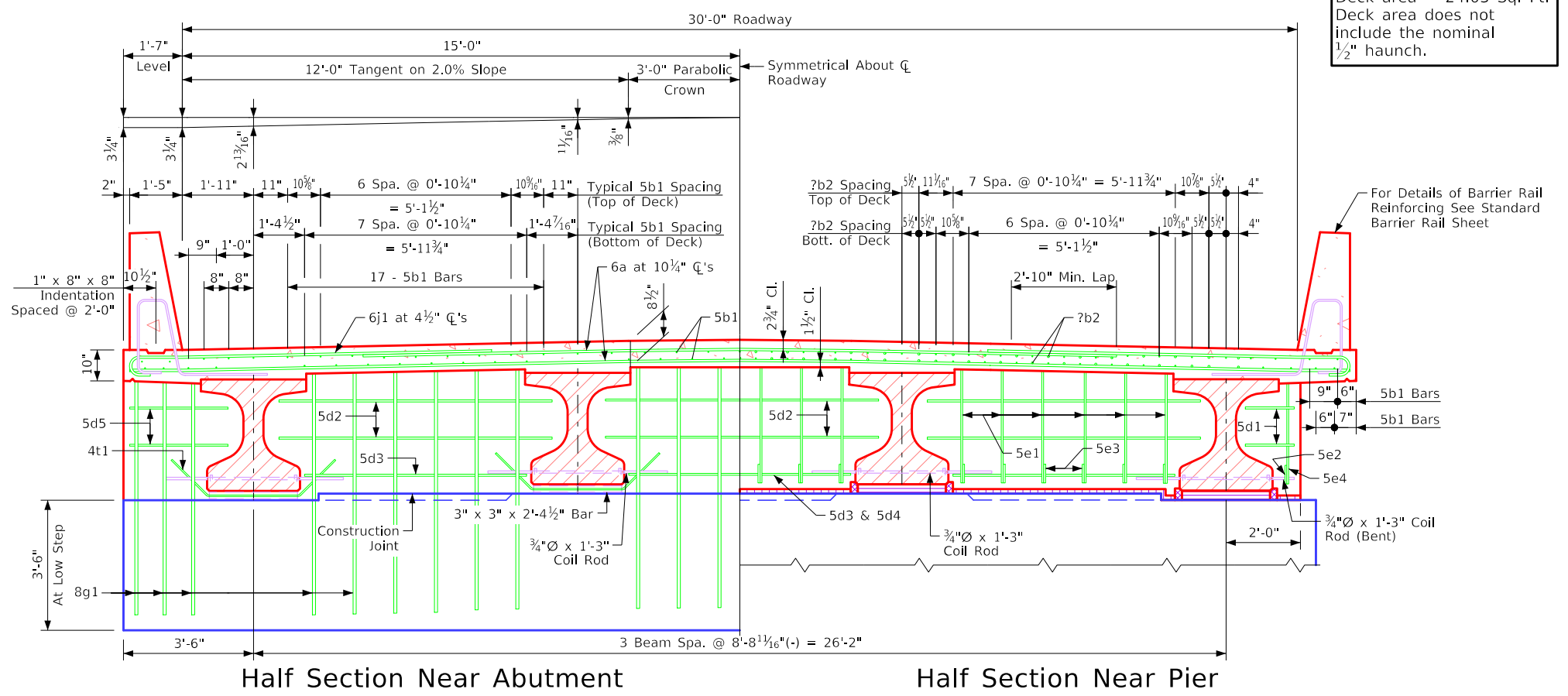


Part Section C-C

Δ Note: See Design Sheet No. ?? for details of barrier rail. Reinforcing bar 5c3 is included in Superstructure Quantities.

Table of Size "b2" Bar	
Longest Adjacent Span	BTB Beam Bar Size
30'-0"	**4
35'-0"	**4
40'-0"	**4
45'-0"	**5
50'-0"	**6
55'-0"	**6
60'-0"	**6
65'-0"	**7
70'-0"	**8
75'-0"	**8
80'-0"	**9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

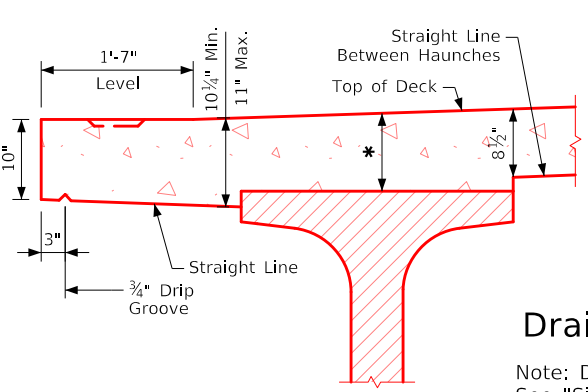
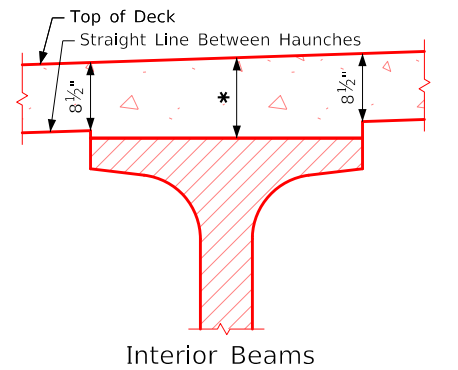
Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.



Deck area = 24.03 Sq. Ft.  
Deck area does not include the nominal 1/2" haunch.

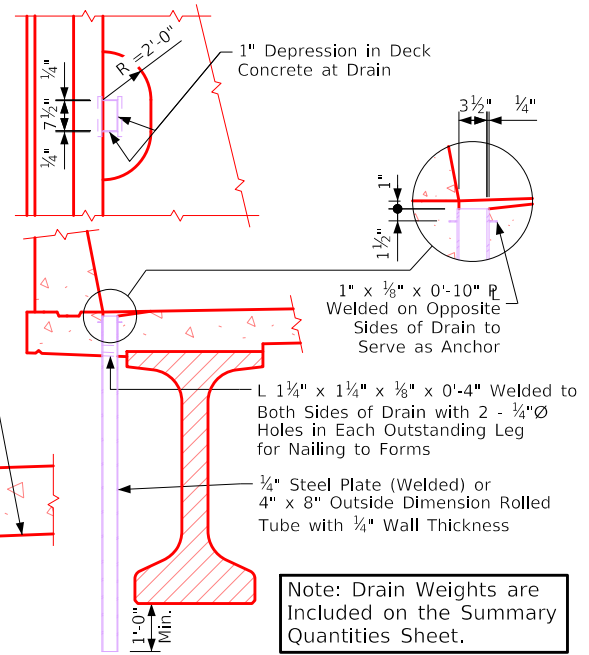
For Details of Barrier Rail Reinforcing See Standard Barrier Rail Sheet

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
\*\* Indicates 'b2' bar placed in top deck only.



### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.



### Drain Details

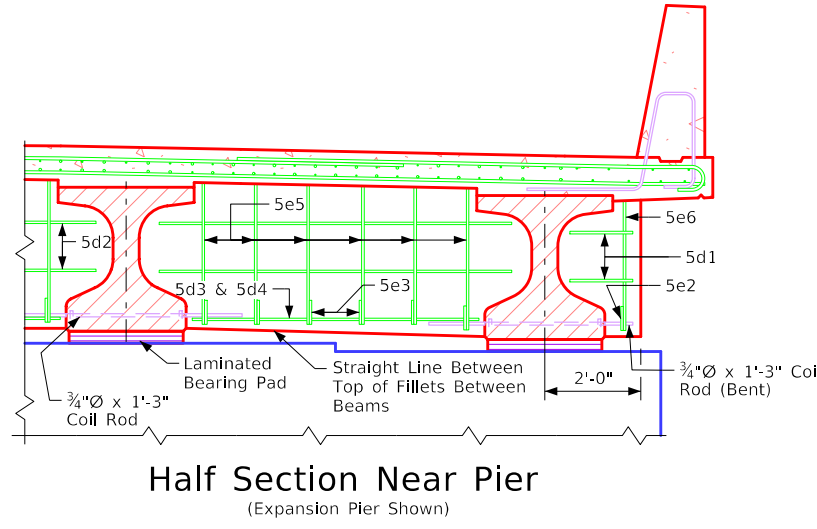
Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



### Half Section Near Pier (Expansion Pier Shown)

### Bridge Deck Cross Section

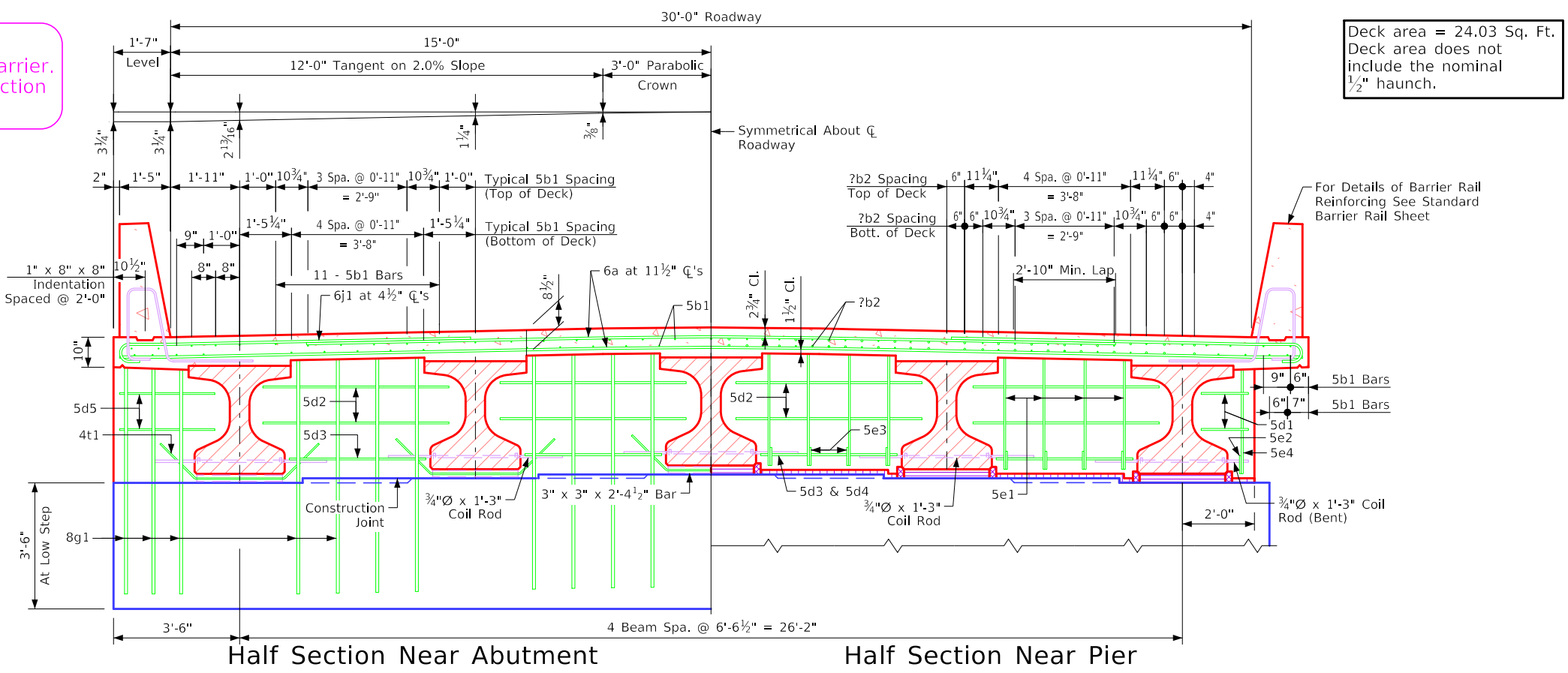
Correction 04-14: Added Referral Note to Summary Quantities Sheet for the Drain Weight. Not About Choice of Epoxy or Stainless Steel Deck to Barrier Rail Bars. Issued 02-08. BTIntegralBridges.dgn - 4380-BTB-4 - This Sheet Re-Issued 11-2023. Sheet Format Update.

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4380-BTB-5 - This Sheet Re-Issued 11-2023, Sheet Format Update.

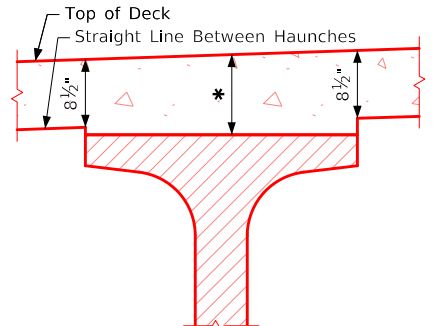
### Table of Size of "b2" Bar

Longest Adjacent Span	BTB Beam Bar Size
30'-0"	**4
35'-0"	**4
40'-0"	**4
45'-0"	**5
50'-0"	**6
55'-0"	**6
60'-0"	**6
65'-0"	**7
70'-0"	**8
75'-0"	**8
80'-0"	**9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

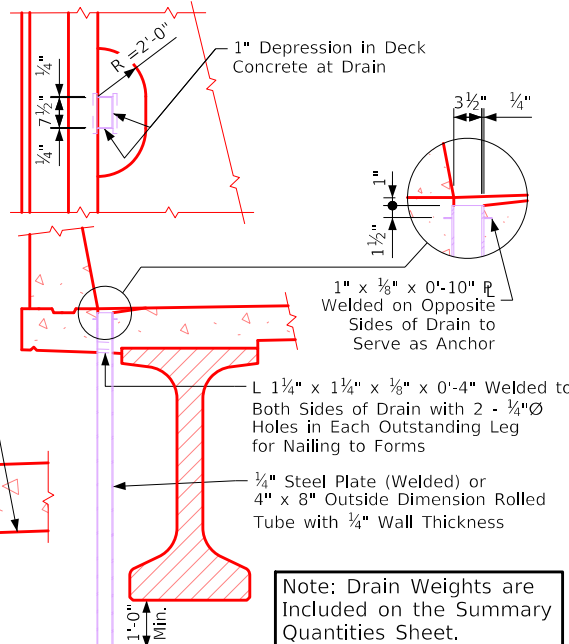
Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.



The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
\*\* Indicates 'b2' bar placed in top deck only.



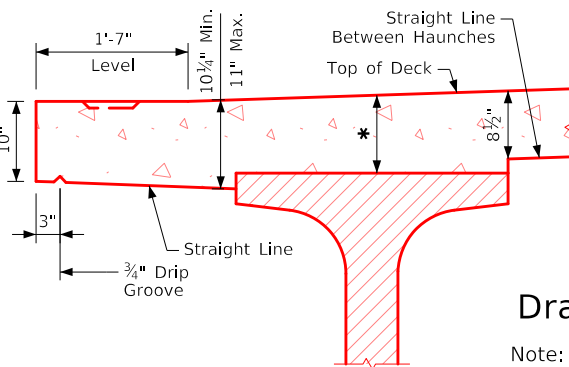
Interior Beams



### Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"



Exterior Beams

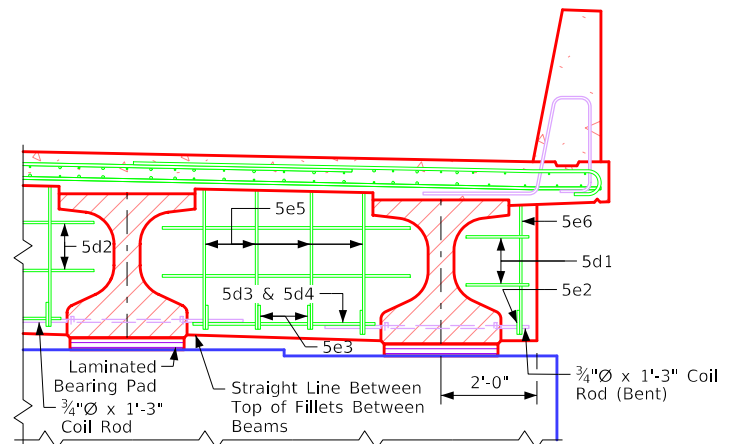
### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

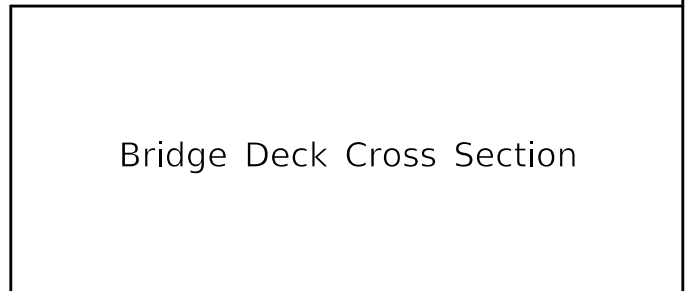
Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



Half Section Near Pier (Expansion Pier Shown)



Bridge Deck Cross Section



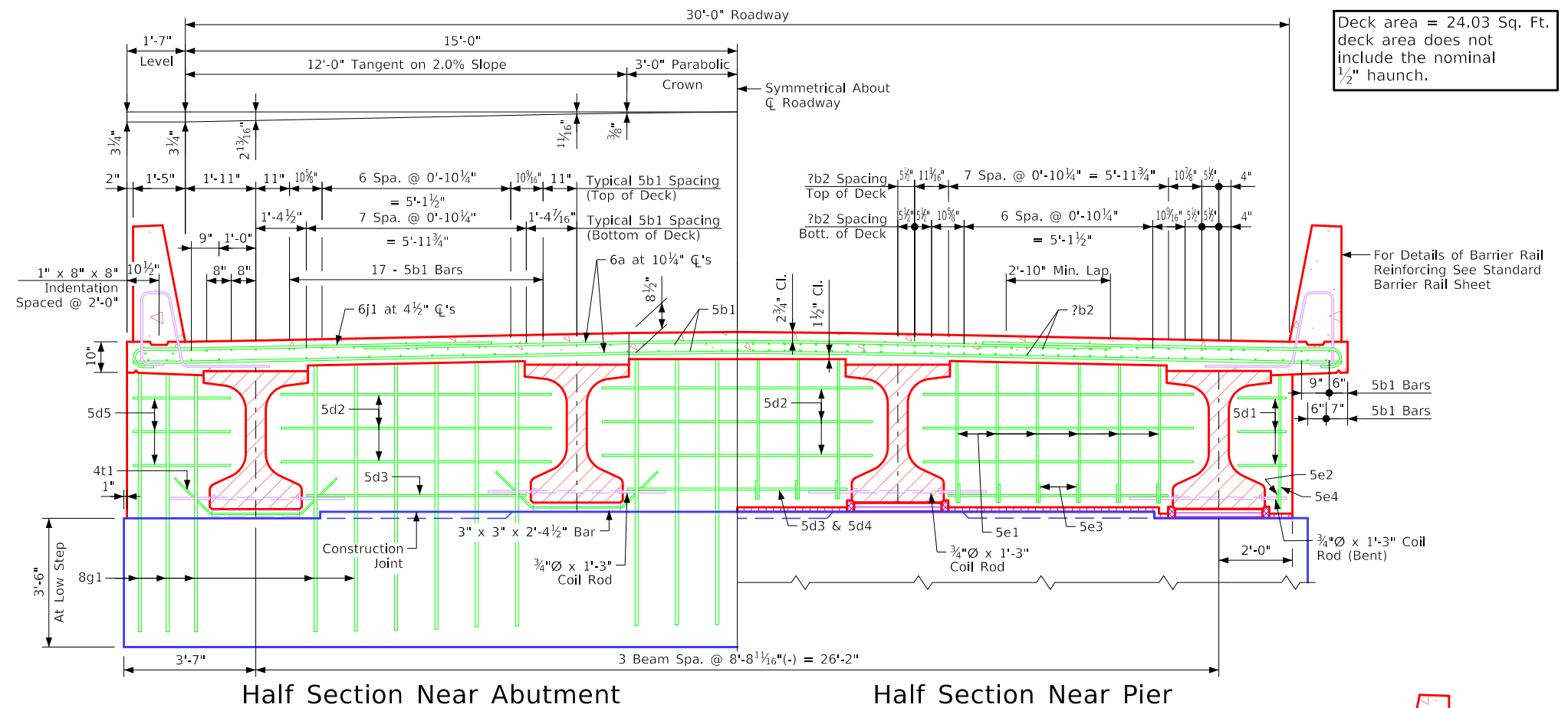
Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.  
 Issued 02-08.  
 BTIntegralBridges.dgn - 4380-BTC-4 - This Sheet Re-Issued 11-2023, Sheet Format Update.

### Table of Size of "b2" Bar

Longest Adjacent Span	BTC Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***4
50'-0"	***4
55'-0"	***4
60'-0"	***6
65'-0"	***7
70'-0"	***7
75'-0"	***8
80'-0"	***9
85'-0"	***9
90'-0"	7
95'-0"	7
100'-0"	8
105'-0"	8
110'-0"	8
115'-0"	8
120'-0"	8

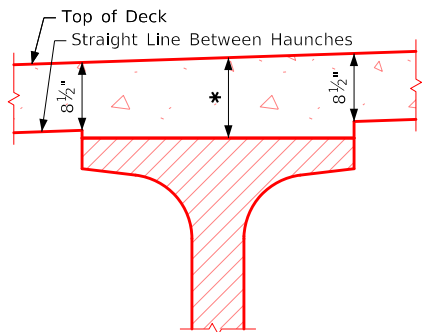
The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

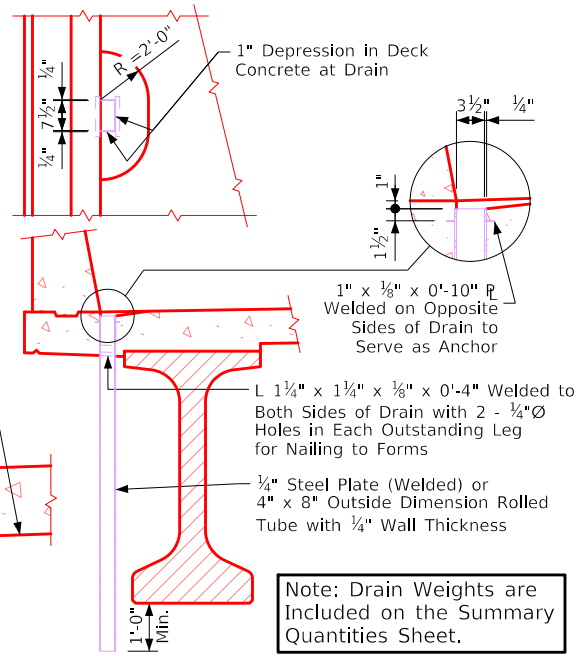


Deck area = 24.03 Sq. Ft.  
 deck area does not include the nominal 1/2" haunch.

For Details of Barrier Rail Reinforcing See Standard Barrier Rail Sheet



Interior Beams



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

#### Data for One Drain

Beam Size	BTC
Drain Weight (lbs.)	106
Drain Length (ft.)	5'-6 3/4"

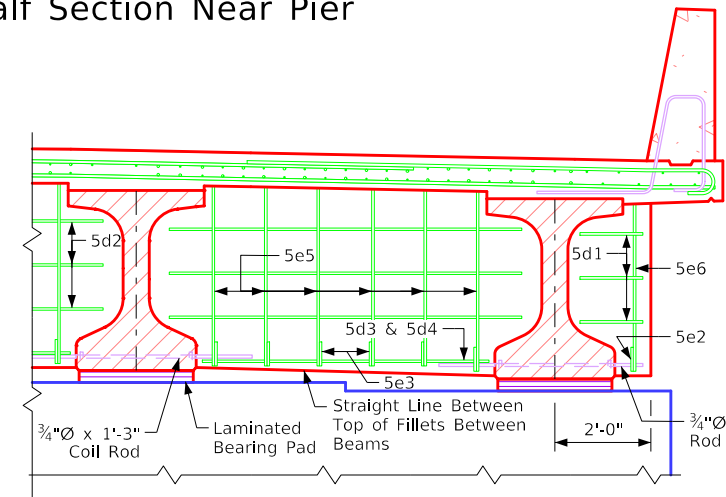
#### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

#### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestensioned Prestressed Concrete Beams".



Half Section Near Pier

(Expansion Pier Shown)

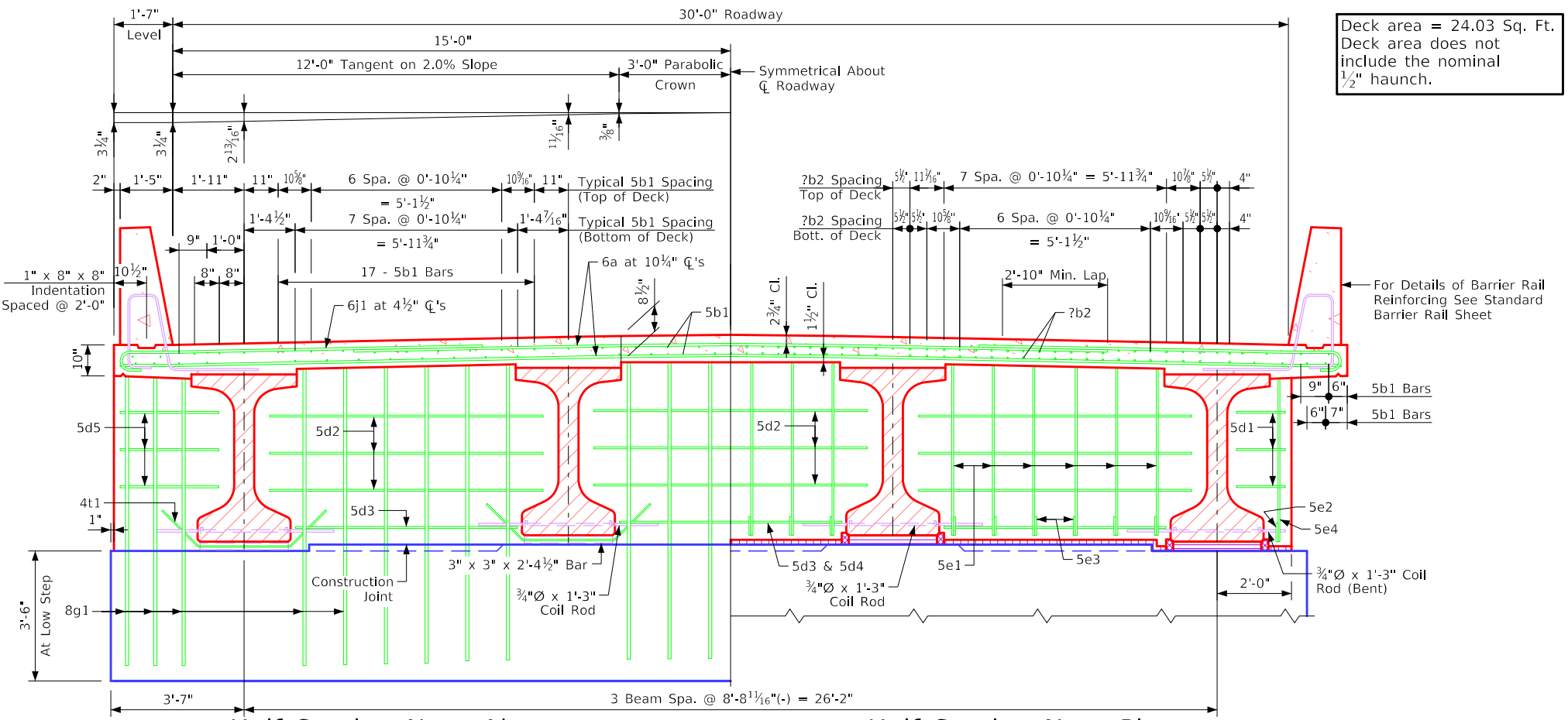
#### Bridge Deck Cross Section

### Table of Size of "b2" Bar

Longest Adjacent Span	BTD Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	**4
55'-0"	**4
60'-0"	**5
65'-0"	**6
70'-0"	**6
75'-0"	**7
80'-0"	**8
85'-0"	**8
90'-0"	**9
95'-0"	**9
100'-0"	7
105'-0"	7
110'-0"	8
115'-0"	8
120'-0"	8
125'-0"	8
130'-0"	9
135'-0"	9

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



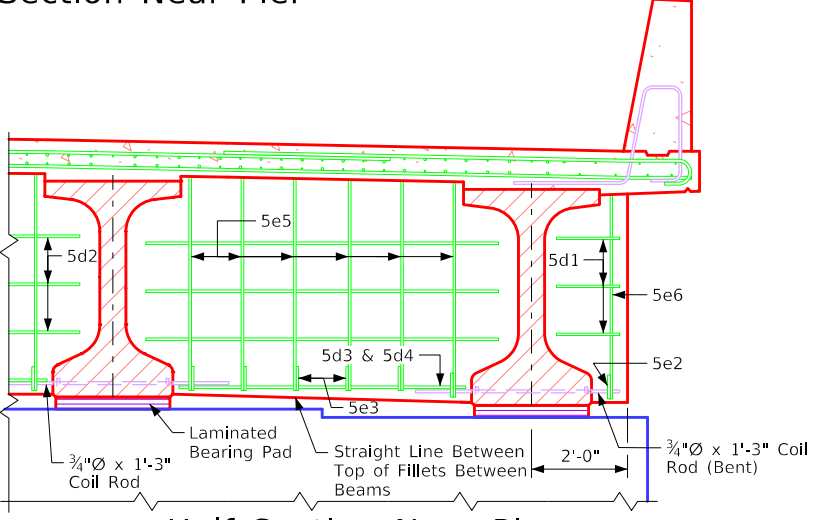
Half Section Near Abutment

Half Section Near Pier

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

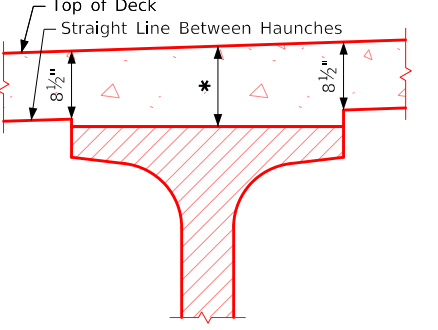
### Superstructure Notes:

- The bridge deck as shown includes  $\frac{3}{4}$ " integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and  $2\frac{3}{4}$ " clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and  $1\frac{1}{2}$ " clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestensioned Prestressed Concrete Beams".

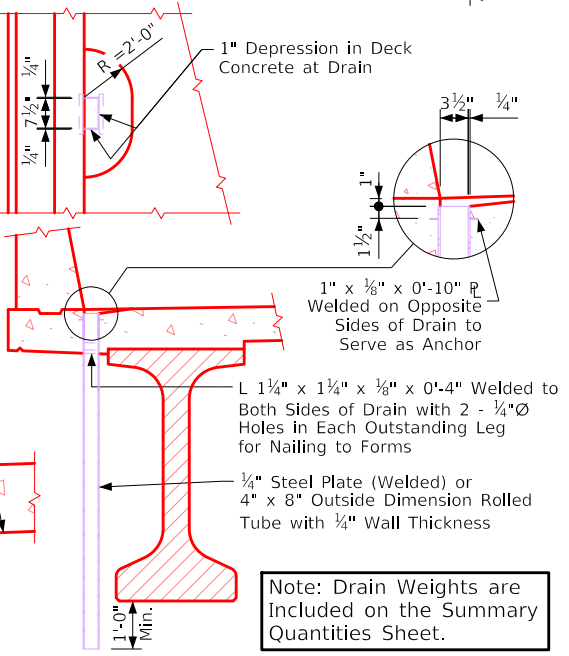


Half Section Near Pier (Expansion Pier Shown)

Bridge Deck Cross Section



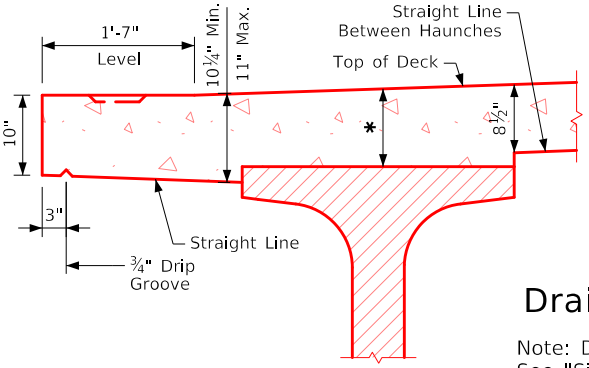
Interior Beams



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTD
Drain Weight (lbs.)	120
Drain Length (ft.)	6'-3 $\frac{3}{4}$ "



Exterior Beams

### Typical Deck and Haunch Detail

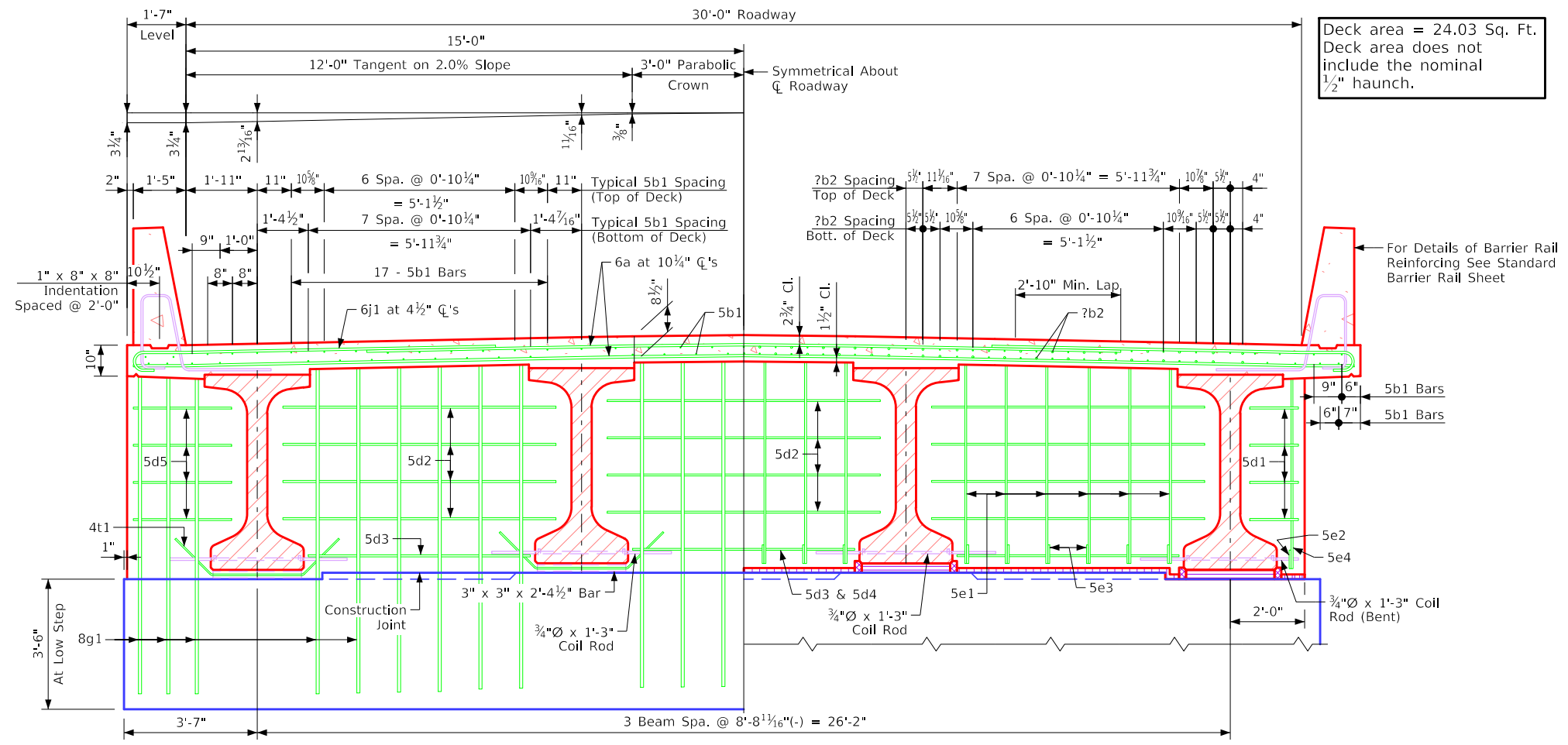
\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4380-BTE-4 - This Sheet Re-issued 11-2023. Sheet Format Update.

Table of Size of "b2" Bar	
Longest Adjacent Span	BTE Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	-----
55'-0"	-----
60'-0"	**4
65'-0"	**5
70'-0"	**6
75'-0"	**6
80'-0"	**7
85'-0"	**7
90'-0"	**8
95'-0"	**8
100'-0"	**9
105'-0"	**9
110'-0"	7
115'-0"	7
120'-0"	7
125'-0"	8
130'-0"	8
135'-0"	8
140'-0"	9
145'-0"	9
150'-0"	9
155'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.



Deck area = 24.03 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.

For Details of Barrier Rail Reinforcing See Standard Barrier Rail Sheet

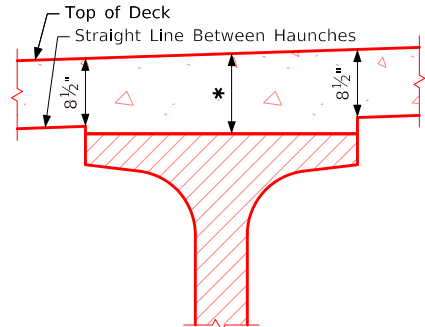
Half Section Near Abutment

Half Section Near Pier

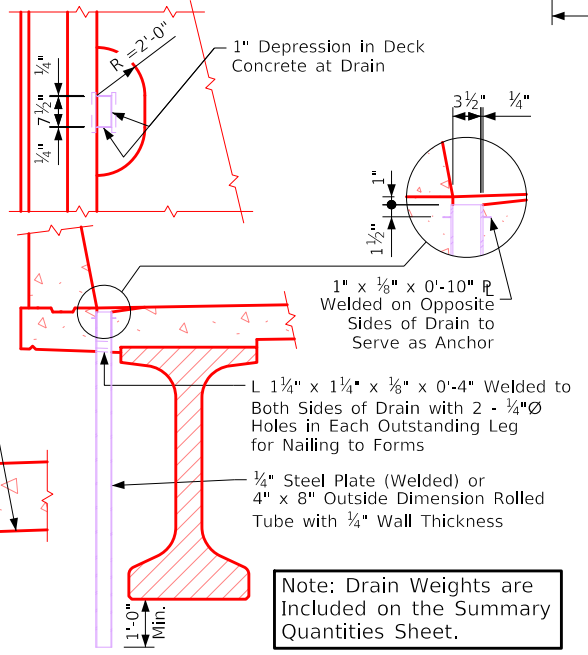
Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

**Superstructure Notes:**

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



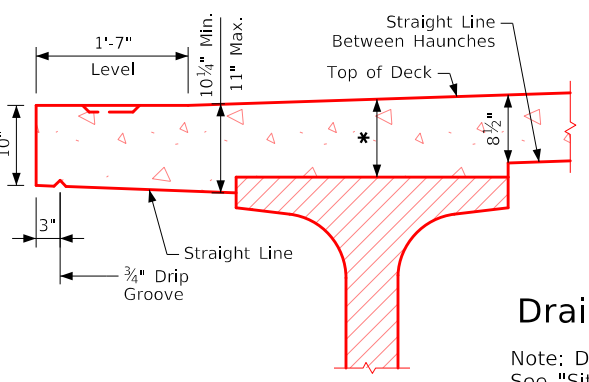
Interior Beams



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

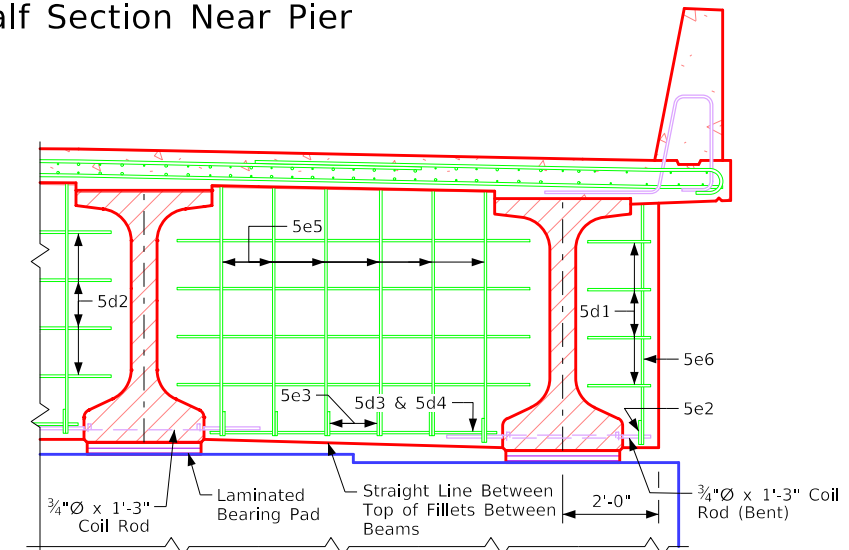
Data for One Drain	
Beam Size	BTE
Drain Weight (lbs.)	136
Drain Length (ft.)	7'-0 3/4"



Exterior Beams

**Typical Deck and Haunch Detail**

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.



Half Section Near Pier (Expansion Pier Shown)

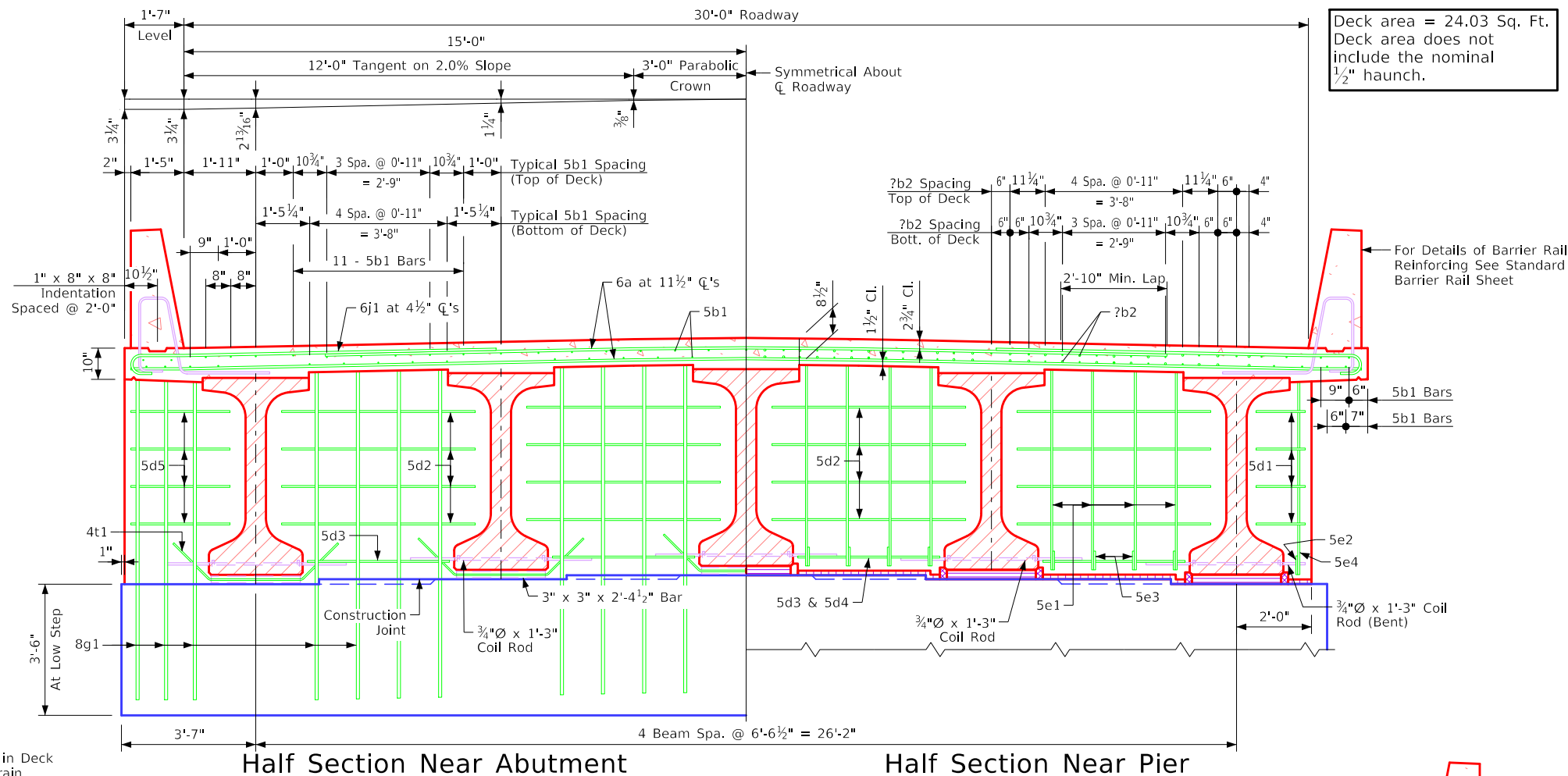
**Bridge Deck Cross Section**

### Table of Size of "b2" Bar

Longest Adjacent Span	BTE Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	-----
55'-0"	-----
60'-0"	**4
65'-0"	**5
70'-0"	**6
75'-0"	**6
80'-0"	**7
85'-0"	**7
90'-0"	**8
95'-0"	**8
100'-0"	**9
105'-0"	**9
110'-0"	7
115'-0"	7
120'-0"	7
125'-0"	8
130'-0"	8
135'-0"	8
140'-0"	9
145'-0"	9
150'-0"	9
155'-0"	9

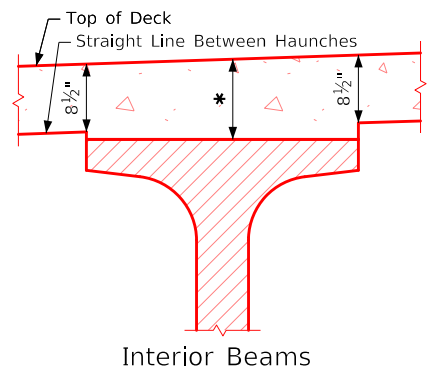
The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

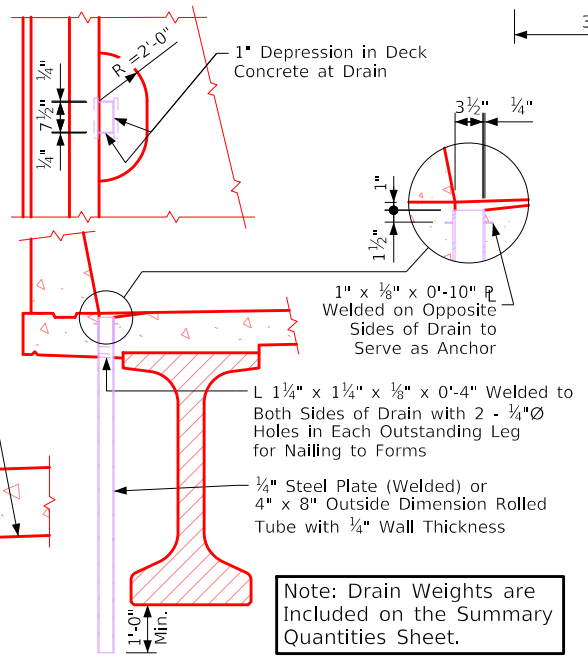


Deck area = 24.03 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.

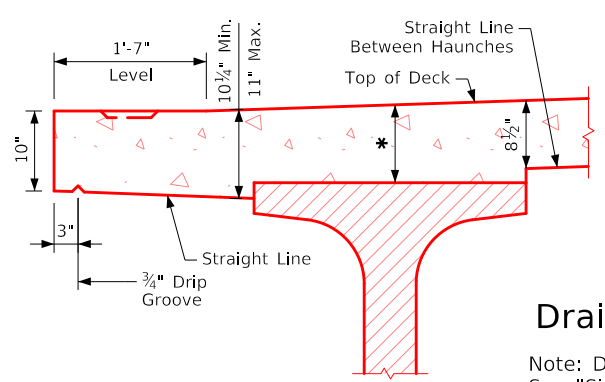
For Details of Barrier Rail Reinforcing See Standard Barrier Rail Sheet



Interior Beams



Drain Details



Exterior Beams

### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

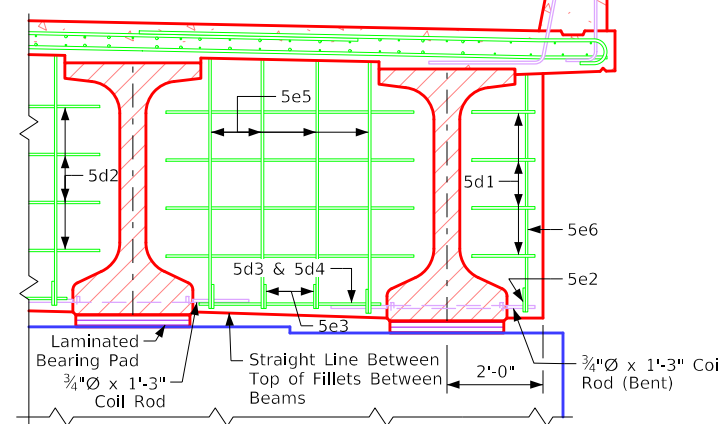
### Data for One Drain

Beam Size	BTE
Drain Weight (lbs.)	136
Drain Length (ft.)	7'-0 1/2"

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestensioned Prestressed Concrete Beams".

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.



Half Section Near Pier (Expansion Pier Shown)

### Bridge Deck Cross Section

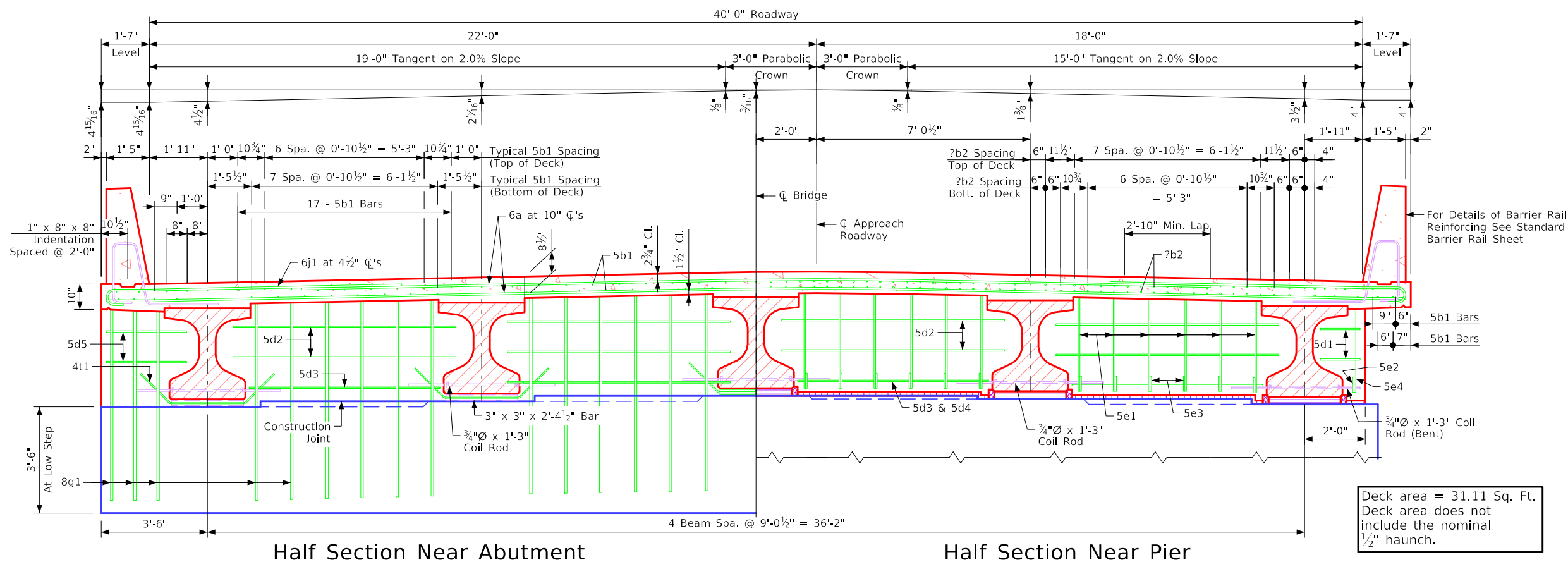
Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4380-BTE-5 - This Sheet Re-issued 11-2023. Sheet Format Update.

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4383-BTB-5 - This Sheet Re-Issued 11-2023, Sheet Format Update.

### Table of Size of "b2" Bar

Longest Adjacent Span	BTB Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***5
50'-0"	***6
55'-0"	***6
60'-0"	***6
65'-0"	***7
70'-0"	***8
75'-0"	***8
80'-0"	***9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

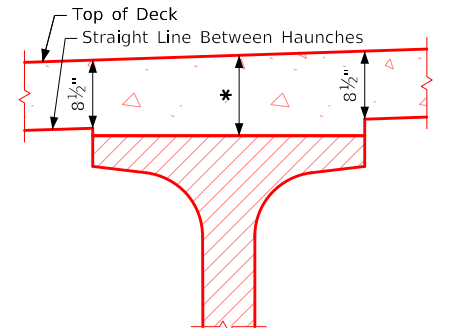
The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



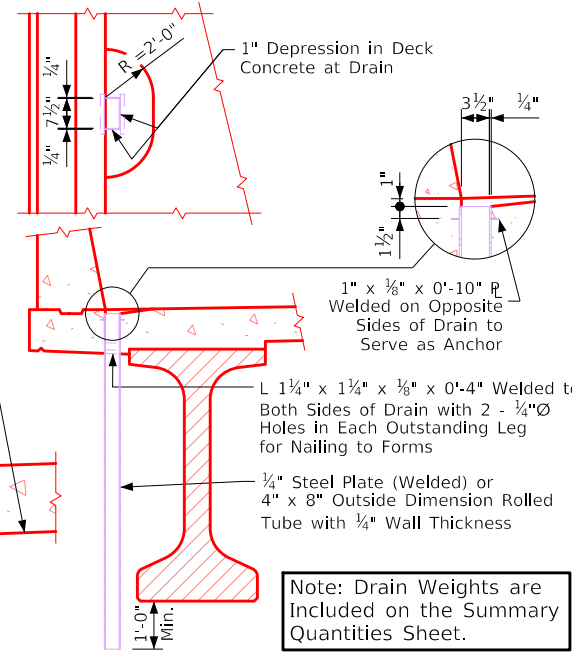
Half Section Near Abutment

Half Section Near Pier

Deck area = 31.11 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.



Interior Beams



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

#### Data for One Drain

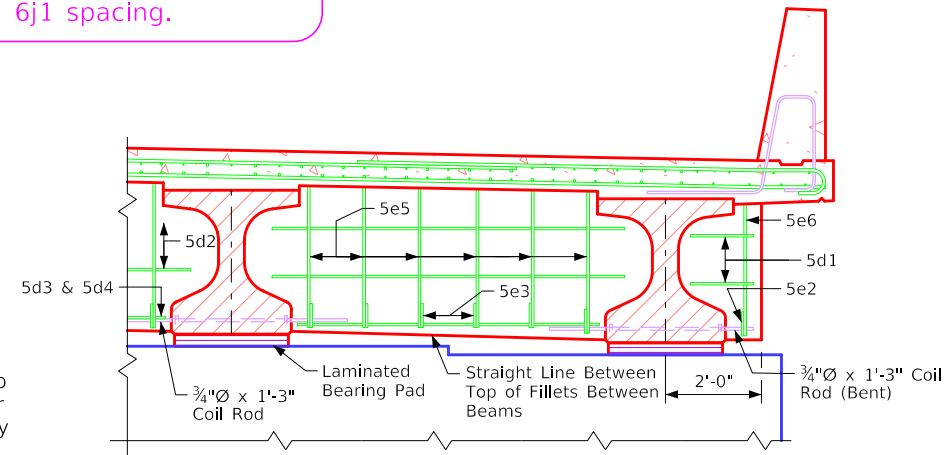
Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

#### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



Half Section Near Pier

(Expansion Pier Shown)



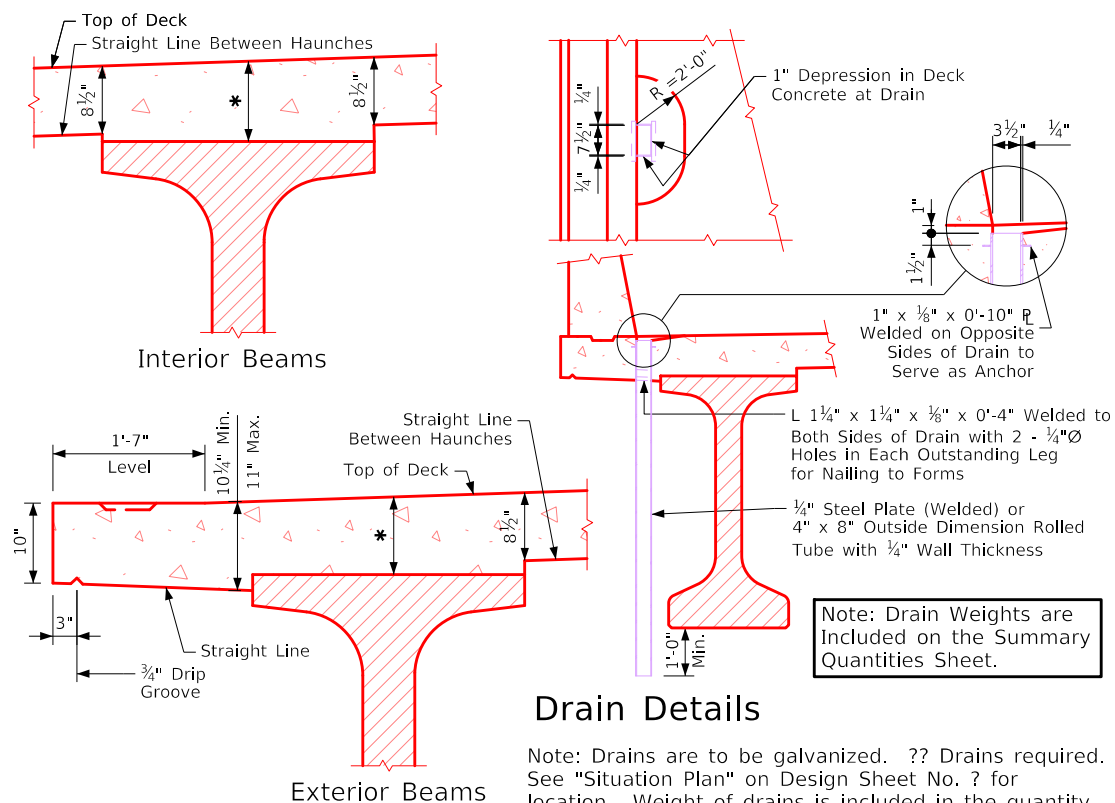
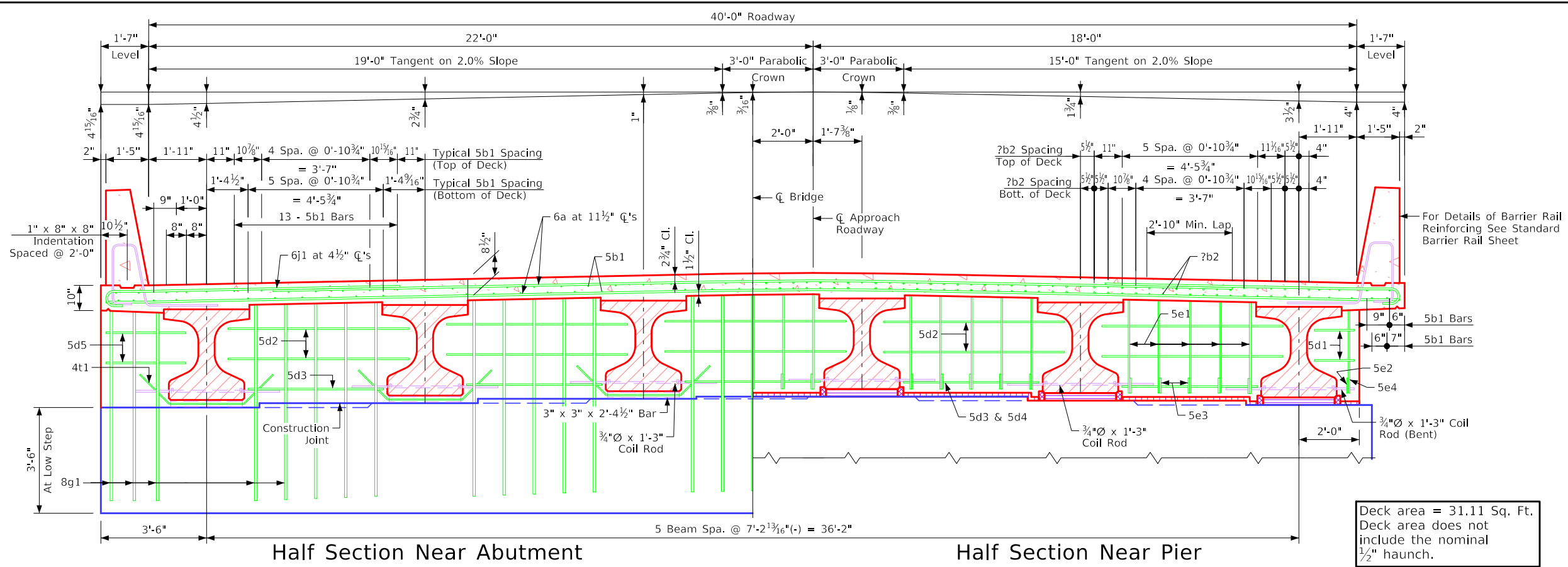
Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4383-BTB-6 - This Sheet Re-Issued 11-2023. Sheet Format Update.

### Table of Size of "b2" Bar

Longest Adjacent Span	BTB Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***5
50'-0"	***6
55'-0"	***6
60'-0"	***6
65'-0"	***7
70'-0"	***8
75'-0"	***8
80'-0"	***9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

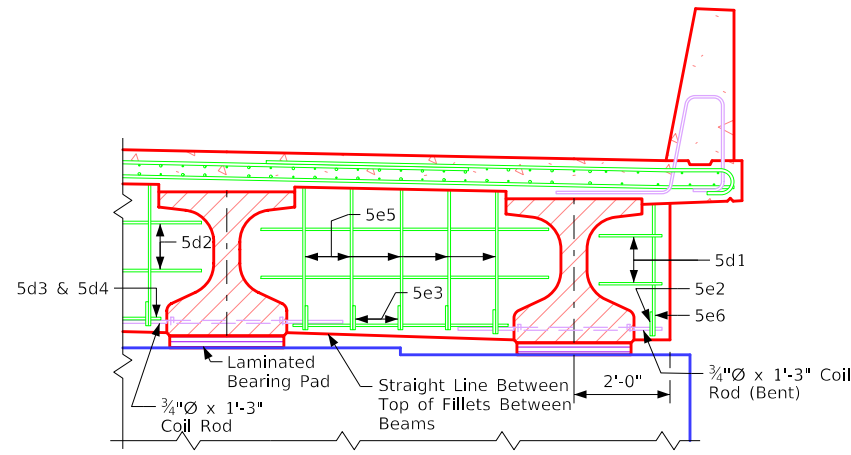


Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

### Superstructure Notes:

- The bridge deck as shown includes  $\frac{3}{4}$ " integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and  $2\frac{3}{4}$ " clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and  $1\frac{1}{2}$ " clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



Half Section Near Pier (Expansion Pier Shown)

Bridge Deck Cross Section

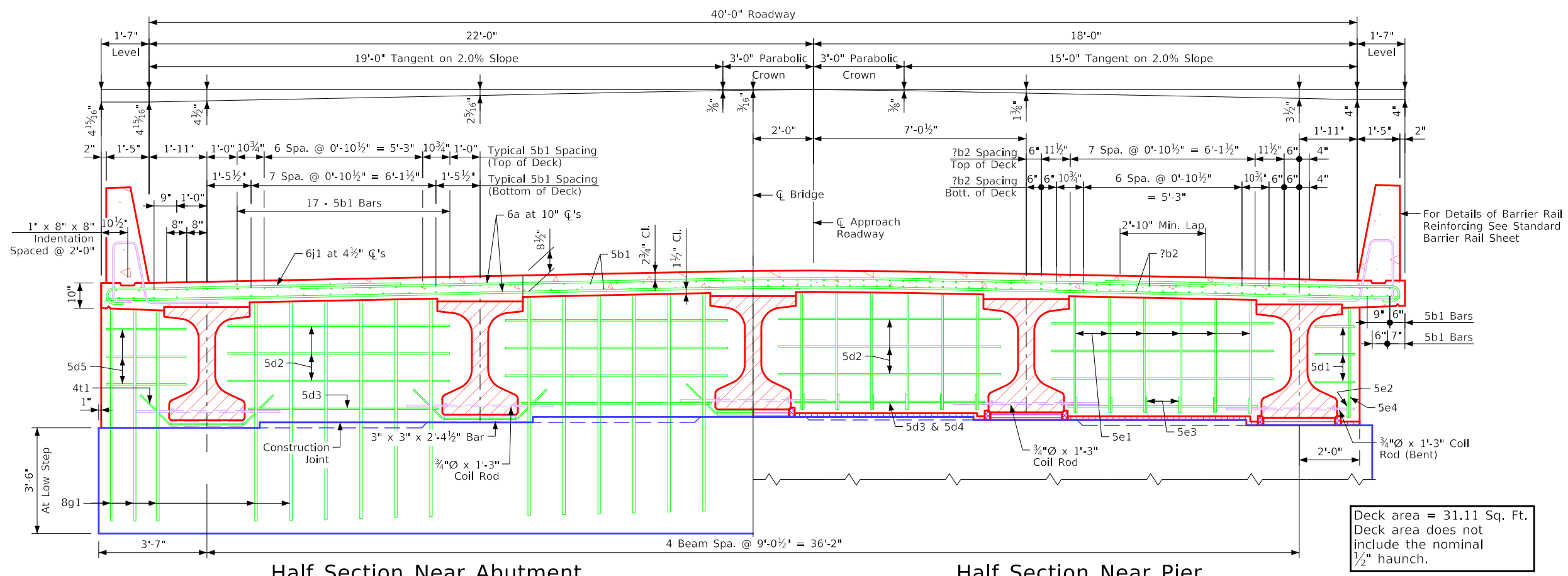
Data for One Drain	
Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4383-BTC-5 - This Sheet Re-issued 11-2023, Sheet Format Update.

### Table of Size of "b2" Bar

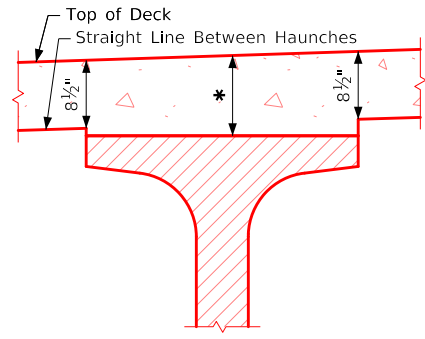
Longest Adjacent Span	BTC Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***4
50'-0"	***4
55'-0"	***4
60'-0"	***6
65'-0"	***7
70'-0"	***7
75'-0"	***8
80'-0"	***9
85'-0"	***9
90'-0"	7
95'-0"	7
100'-0"	8
105'-0"	8
110'-0"	8
115'-0"	8
120'-0"	8

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

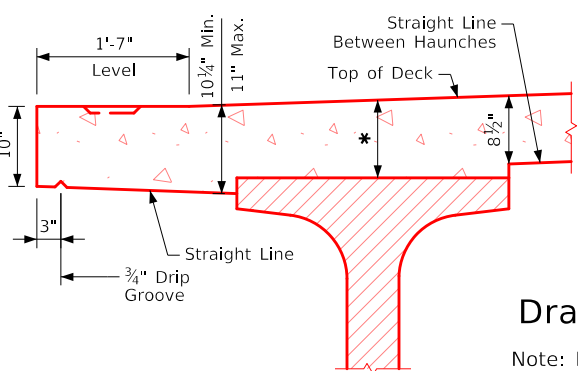


Half Section Near Abutment

Half Section Near Pier



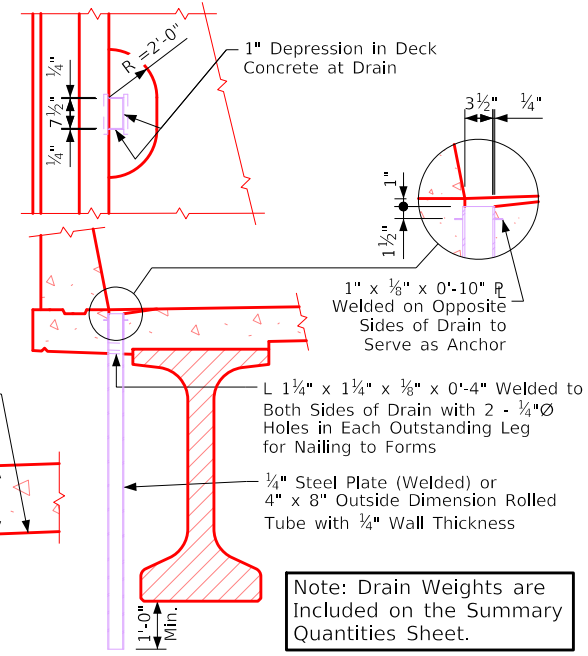
Interior Beams



Exterior Beams

### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.



### Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

### Data for One Drain

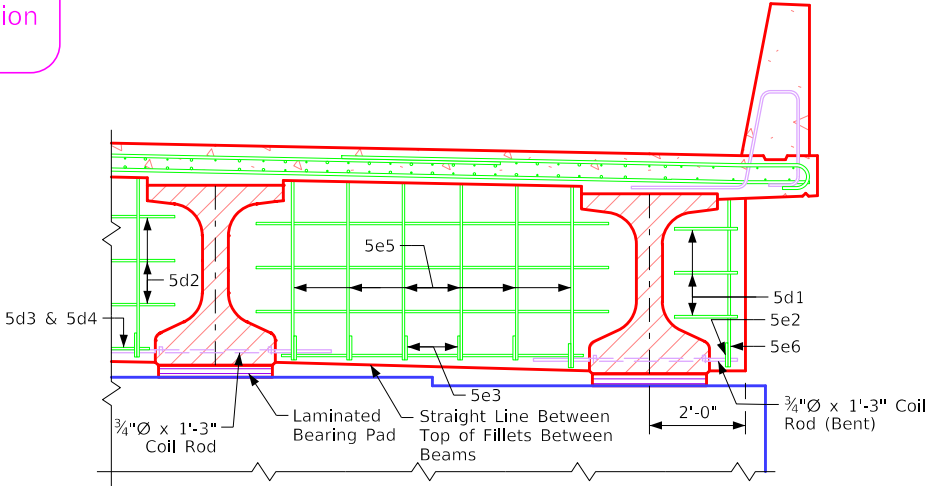
Beam Size	BTC
Drain Weight (lbs.)	106
Drain Length (ft.)	5'-6 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestressed Concrete Beams".



Half Section Near Pier (Expansion Pier Shown)

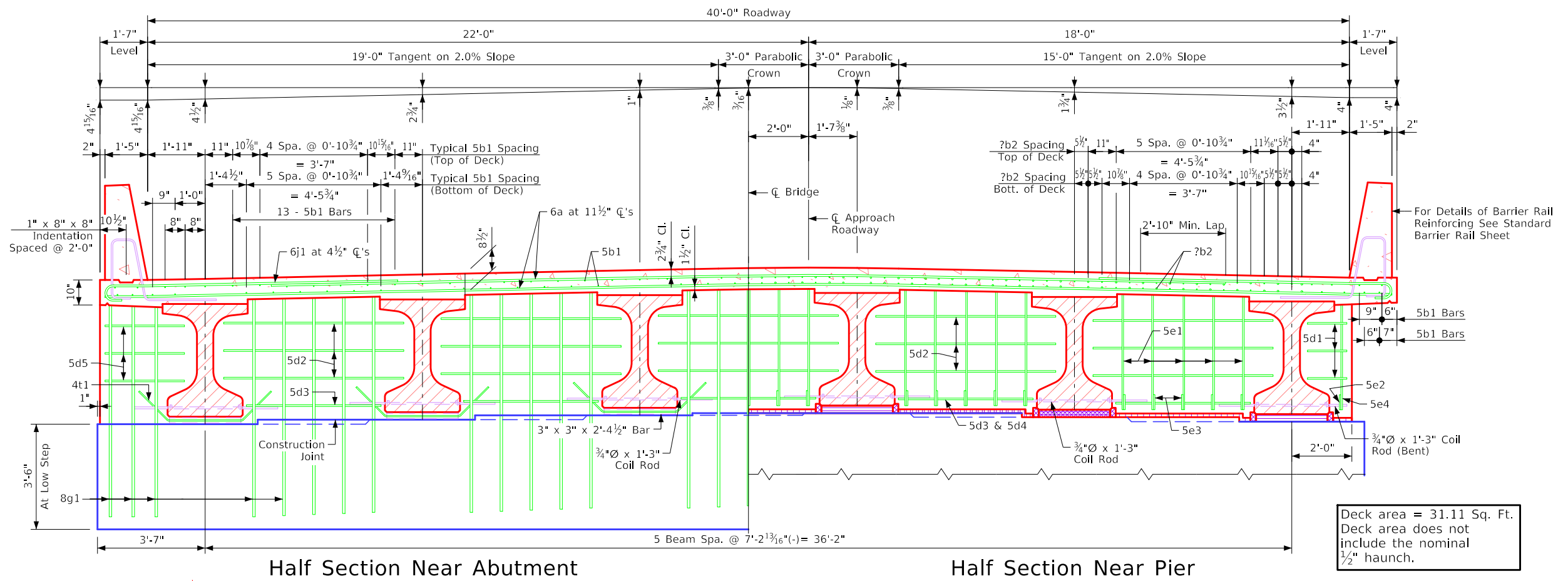


Bridge Deck Cross Section

### Table of Size of "b2" Bar

Longest Adjacent Span	BTC Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***4
50'-0"	***4
55'-0"	***4
60'-0"	***6
65'-0"	***7
70'-0"	***7
75'-0"	***8
80'-0"	***9
85'-0"	***9
90'-0"	7
95'-0"	7
100'-0"	8
105'-0"	8
110'-0"	8
115'-0"	8
120'-0"	8

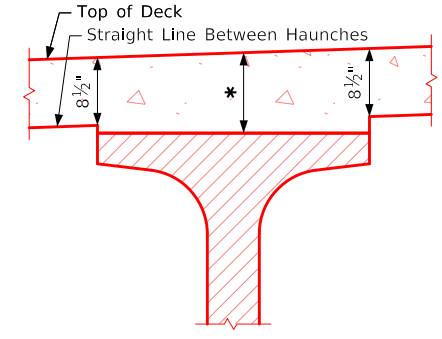
The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



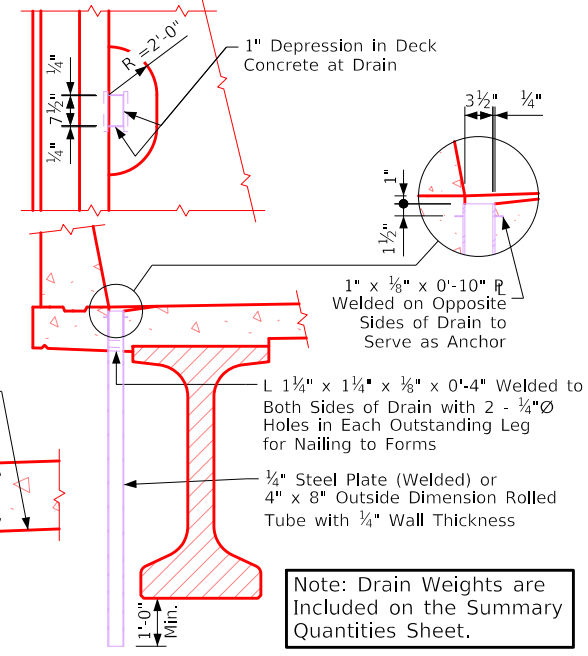
Deck area = 31.11 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.

Half Section Near Abutment

Half Section Near Pier



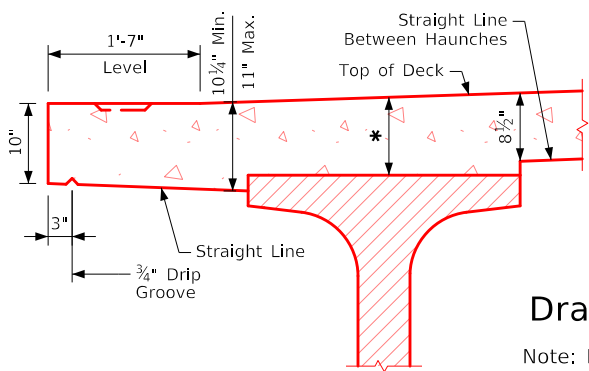
Interior Beams



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTC
Drain Weight (lbs.)	106
Drain Length (ft.)	5'-6 3/4"



Exterior Beams

### Typical Deck and Haunch Detail

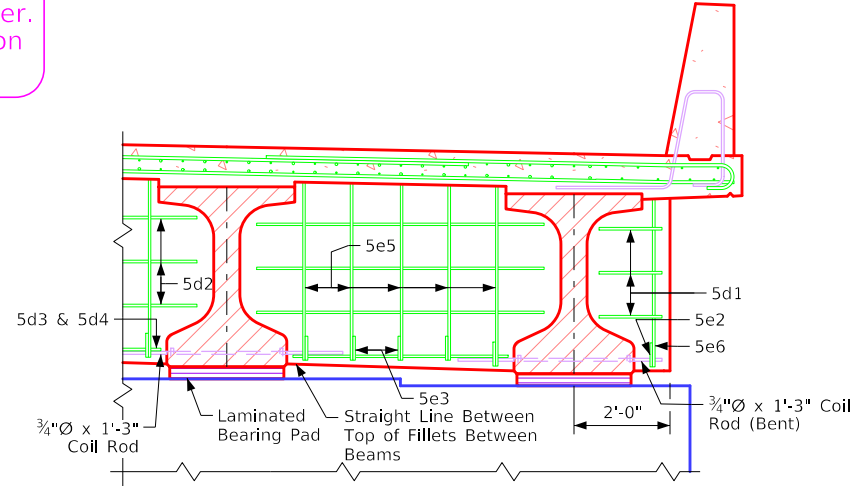
\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestressed Concrete Beams".



Half Section Near Pier (Expansion Pier Shown)

## Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4383-BTC-6 - This Sheet Re-issued 11-2023. Sheet Format Update.

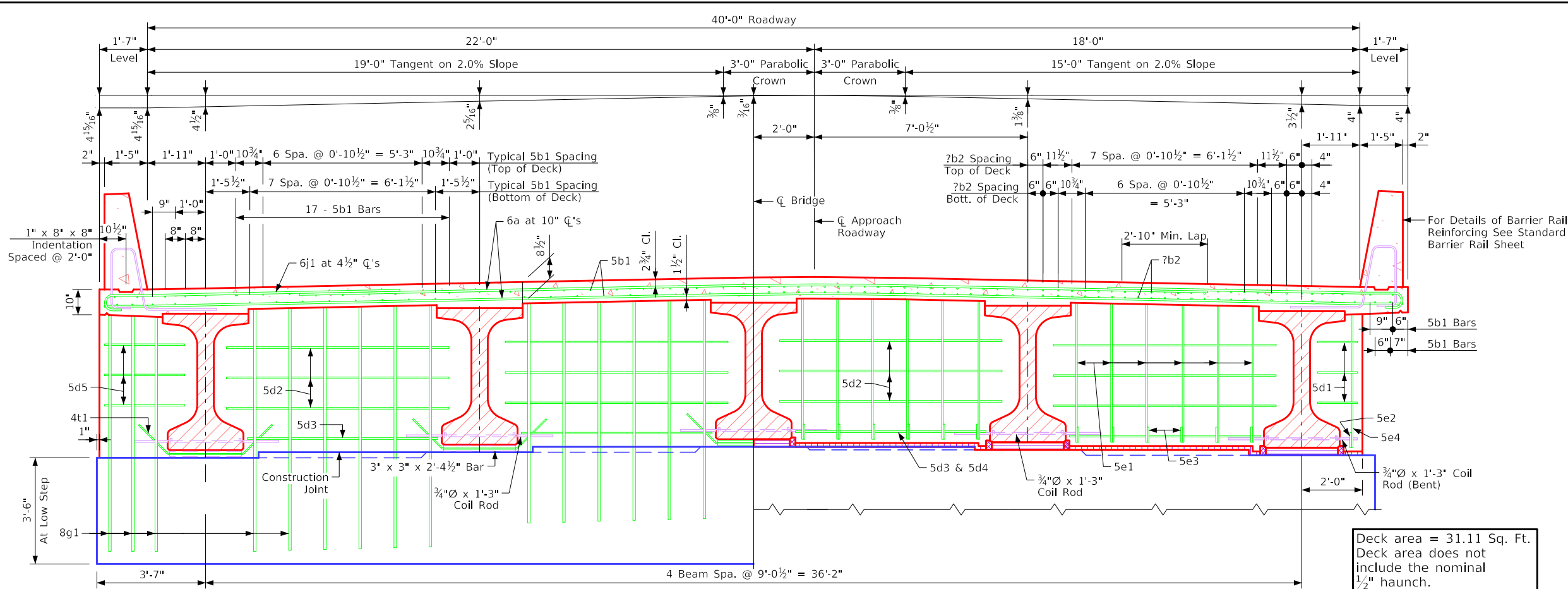


Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4383-BTD-5 - This Sheet Re-issued 11-2023. Sheet Format Update.

### Table of Size of "b2" Bar

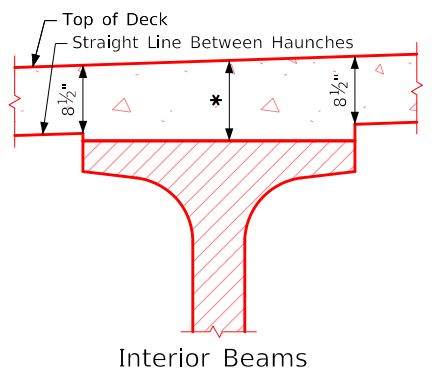
Longest Adjacent Span	BTD Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	**4
55'-0"	**4
60'-0"	**5
65'-0"	**6
70'-0"	**6
75'-0"	**7
80'-0"	**8
85'-0"	**8
90'-0"	**9
95'-0"	**9
100'-0"	7
105'-0"	7
110'-0"	8
115'-0"	8
120'-0"	8
125'-0"	8
130'-0"	9
135'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

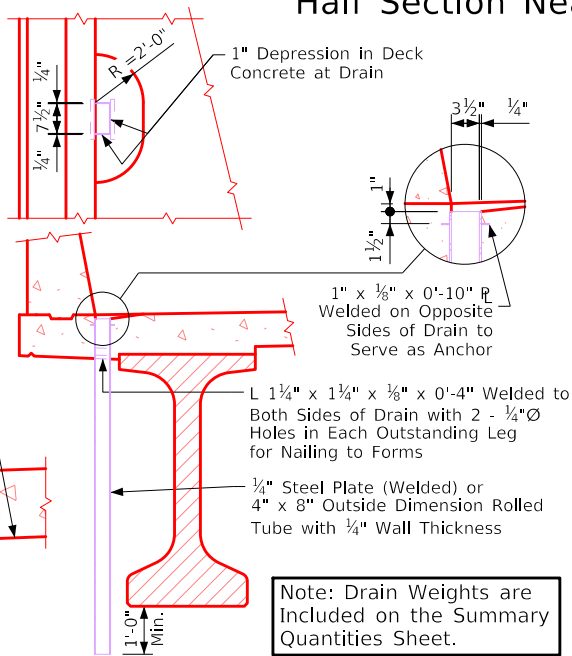


Half Section Near Abutment

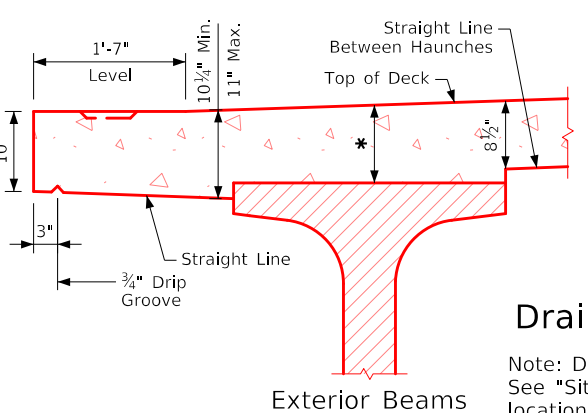
Half Section Near Pier



Interior Beams



Drain Details



Exterior Beams

### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

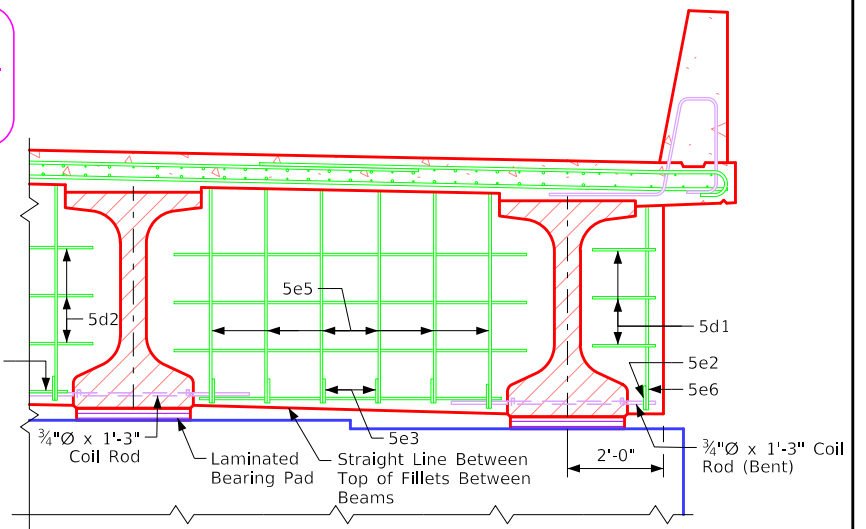
Data for One Drain	
Beam Size	BTD
Drain Weight (lbs.)	120
Drain Length (ft.)	6'-3 3/4"

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestensioned Prestressed Concrete Beams".

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.



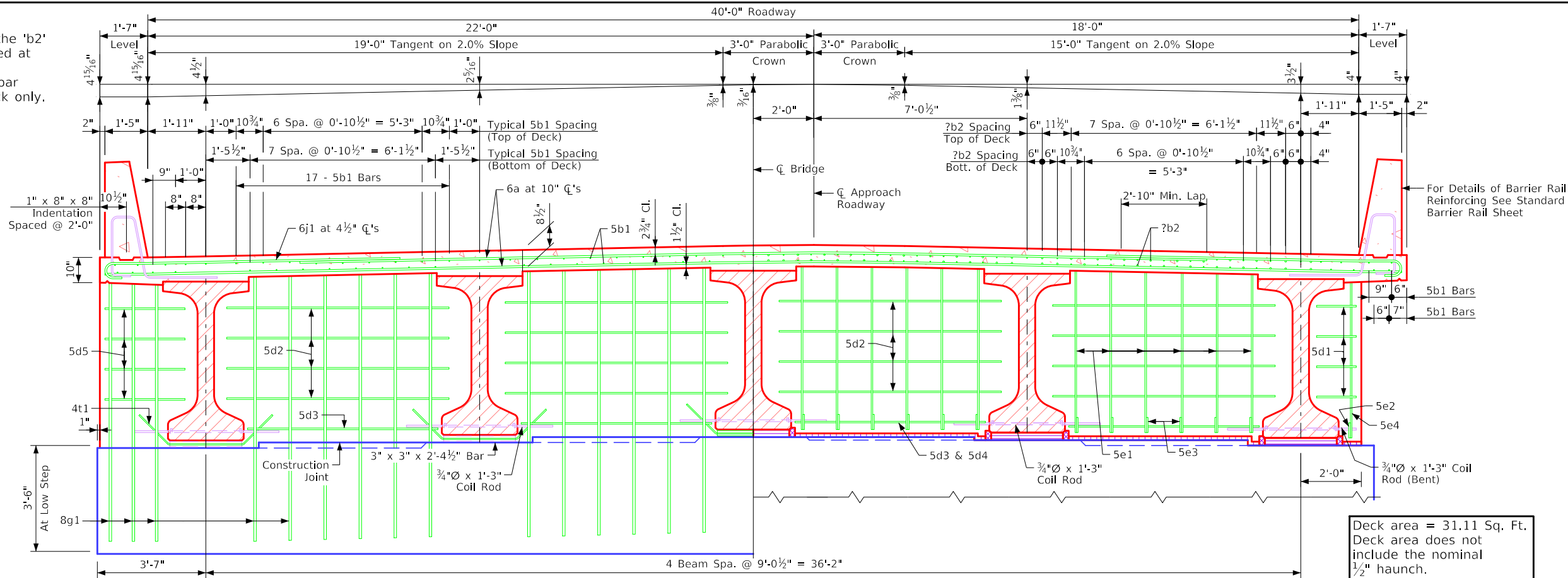
Half Section Near Pier (Expansion Pier Shown)

### Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.  
 Issued 02-08.  
 BTIntegralBridges.dgn - 4383-BTE-5 - This Sheet Re-issued 11-2023, Sheet Format Update.

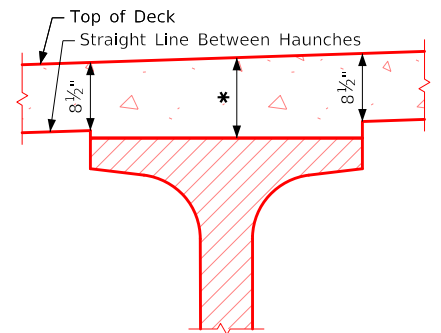
Table of Size of "b2" Bar	
Longest Adjacent Span	BTE Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	-----
55'-0"	-----
60'-0"	**4
65'-0"	**5
70'-0"	**6
75'-0"	**6
80'-0"	**7
85'-0"	**7
90'-0"	**8
95'-0"	**8
100'-0"	**9
105'-0"	**9
110'-0"	7
115'-0"	7
120'-0"	7
125'-0"	8
130'-0"	8
135'-0"	8
140'-0"	9
145'-0"	9
150'-0"	9
155'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

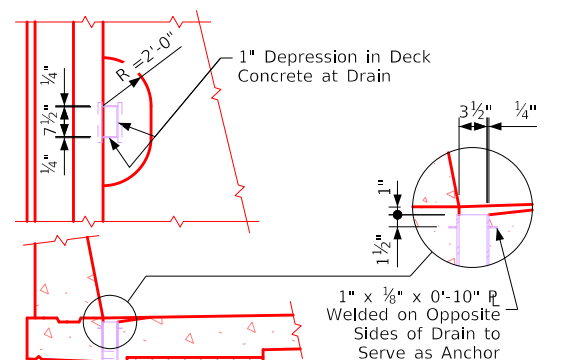


Half Section Near Abutment

Half Section Near Pier



Interior Beams



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

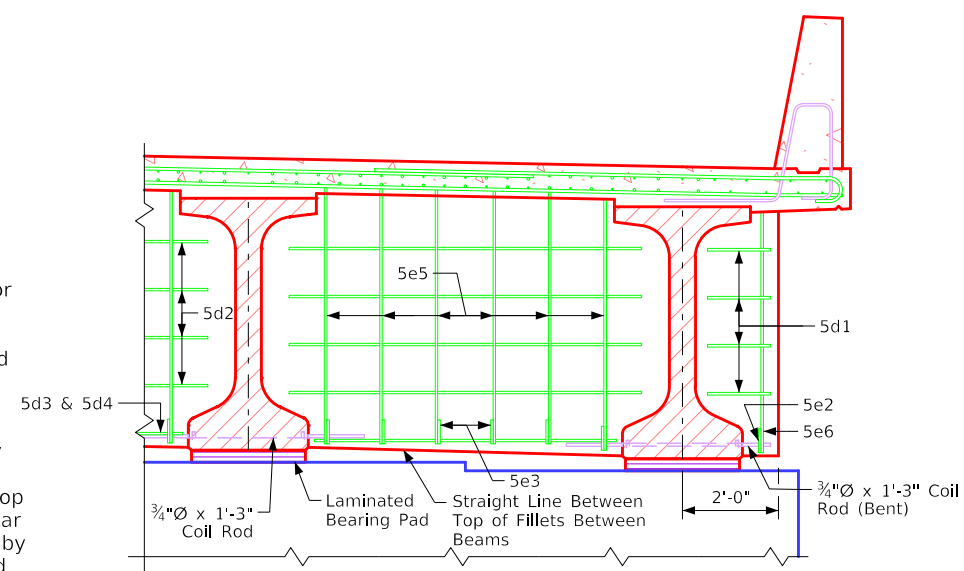
Data for One Drain	
Beam Size	BTE
Drain Weight (lbs.)	136
Drain Length (ft.)	7'-0 3/4"

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

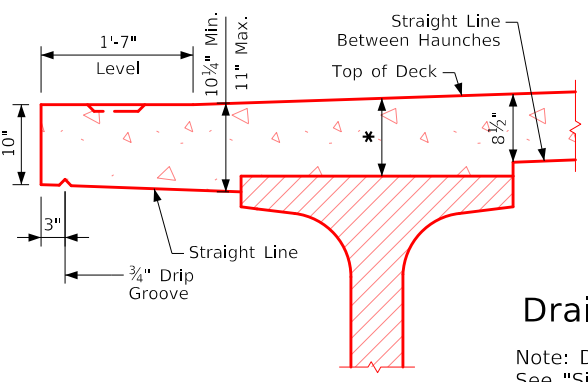
Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

**Superstructure Notes:**

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestressed Concrete Beams".



Half Section Near Pier (Expansion Pier Shown)



Typical Deck and Haunch Detail

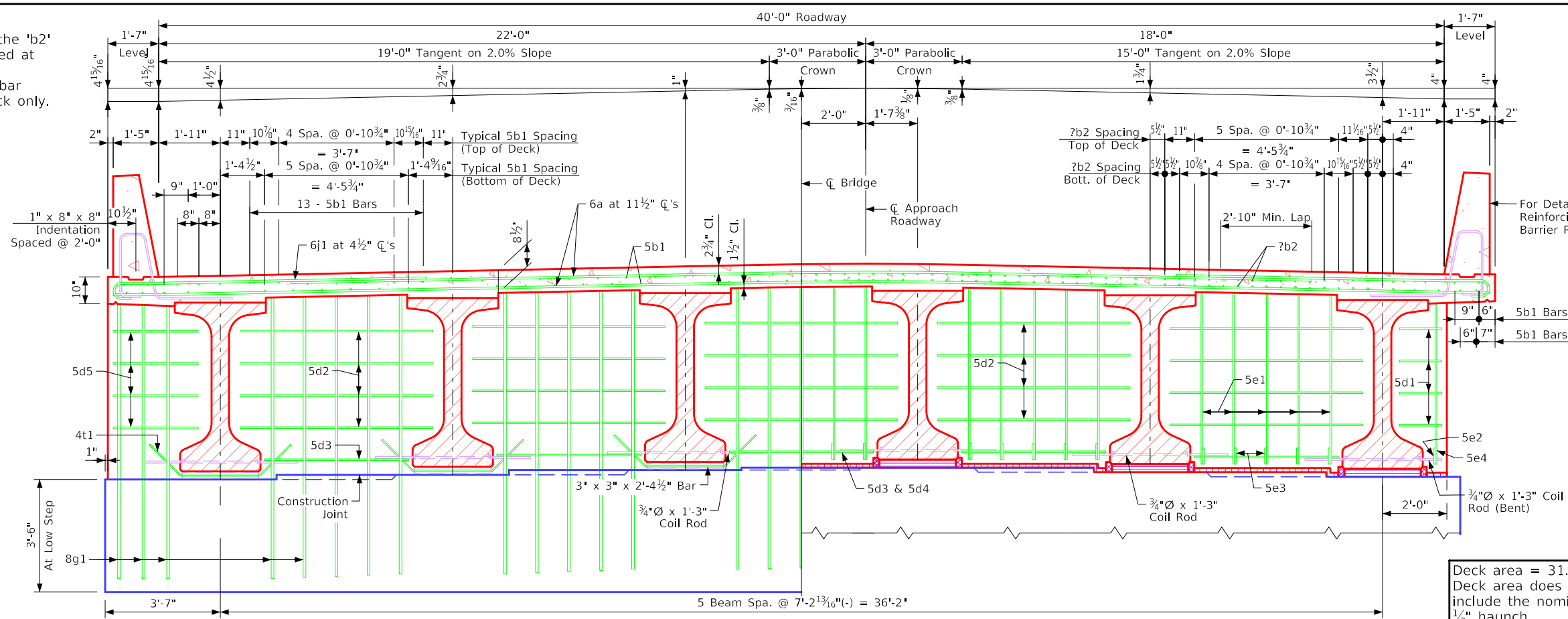
\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4380-BTE-6 - This Sheet Re-issued 11-2023. Sheet Format Update.

Table of Size of "b2" Bar	
Longest Adjacent Span	BTE Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	-----
55'-0"	-----
60'-0"	**4
65'-0"	**5
70'-0"	**6
75'-0"	**6
80'-0"	**7
85'-0"	**7
90'-0"	**8
95'-0"	**8
100'-0"	**9
105'-0"	**9
110'-0"	7
115'-0"	7
120'-0"	7
125'-0"	8
130'-0"	8
135'-0"	8
140'-0"	9
145'-0"	9
150'-0"	9
155'-0"	9

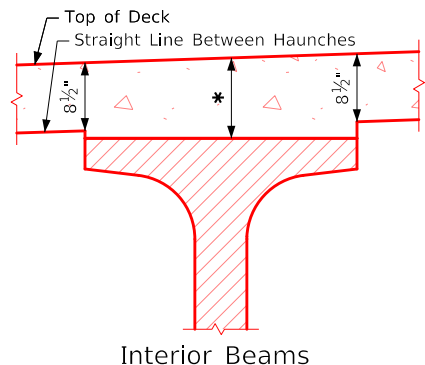
The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



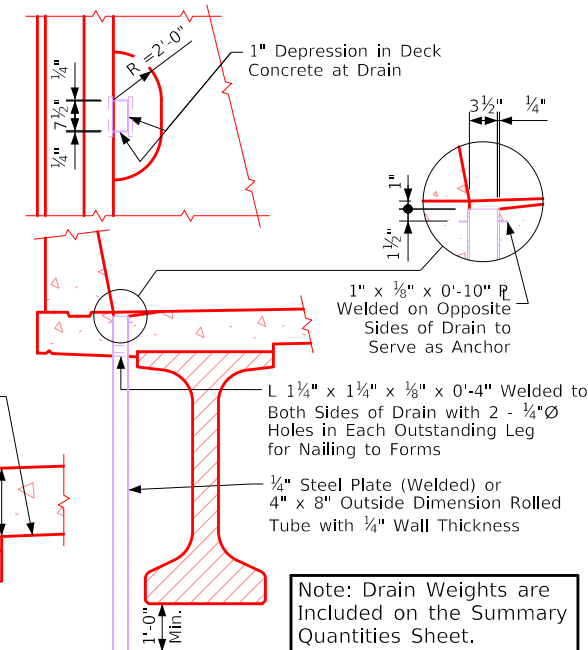
Deck area = 31.11 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.

Half Section Near Abutment

Half Section Near Pier



Interior Beams



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

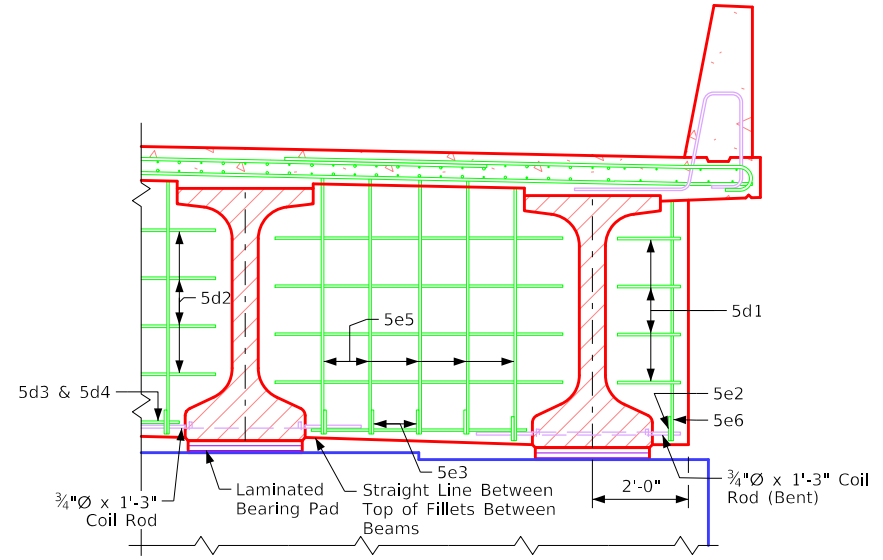
Data for One Drain	
Beam Size	BTE
Drain Weight (lbs.)	136
Drain Length (ft.)	7'-0 3/4"

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

**Superstructure Notes:**

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestressed Concrete Beams".



Half Section Near Pier (Expansion Pier Shown)

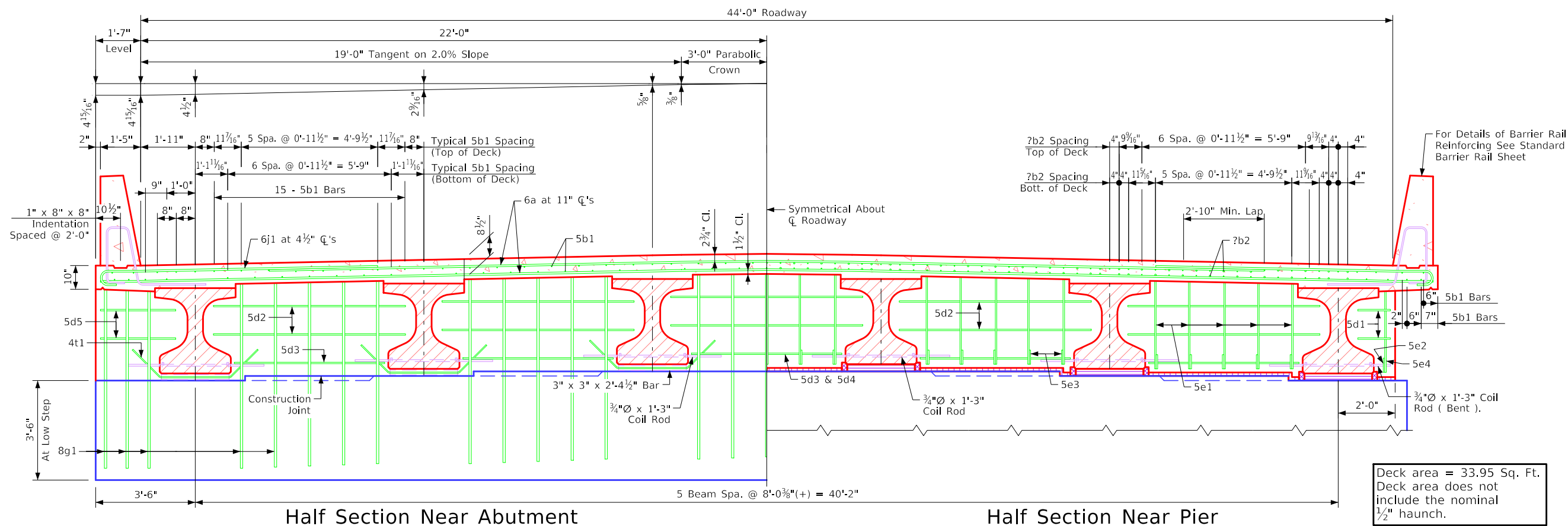


Bridge Deck Cross Section

### Table of Size of "b2" Bar

Longest Adjacent Span	BTB Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***5
50'-0"	***6
55'-0"	***6
60'-0"	***6
65'-0"	***7
70'-0"	***8
75'-0"	***8
80'-0"	***9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



Half Section Near Abutment

Half Section Near Pier

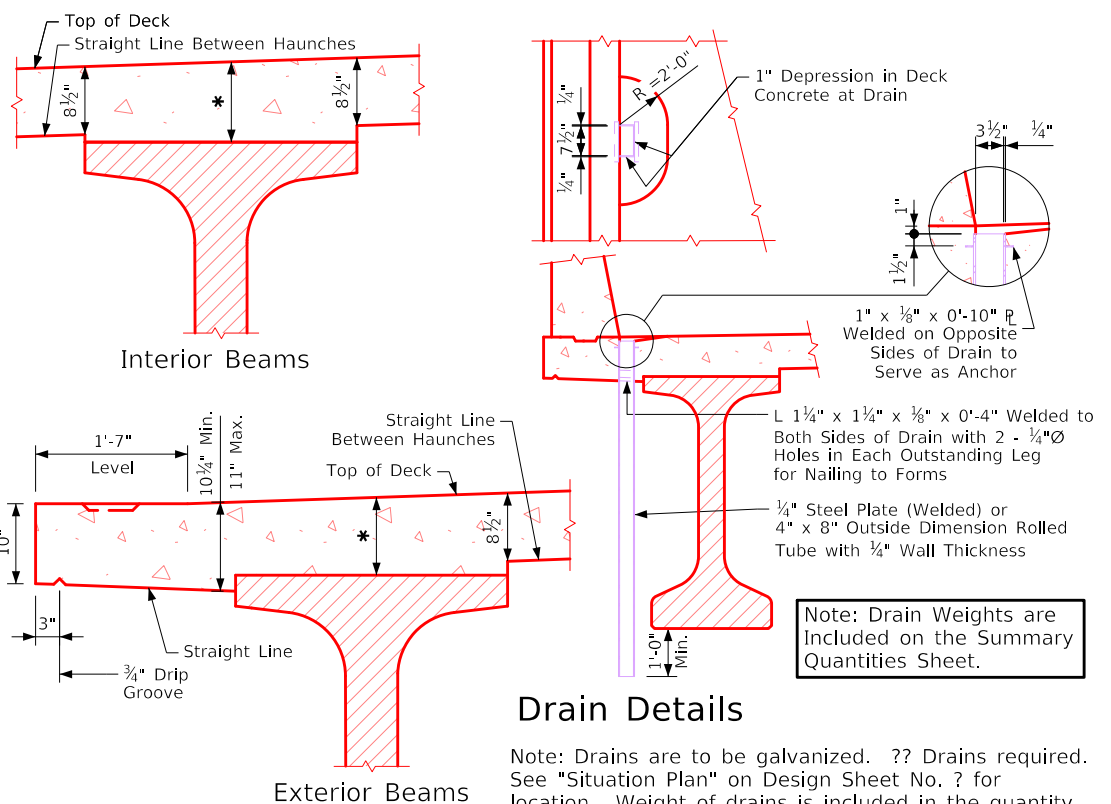
Deck area = 33.95 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



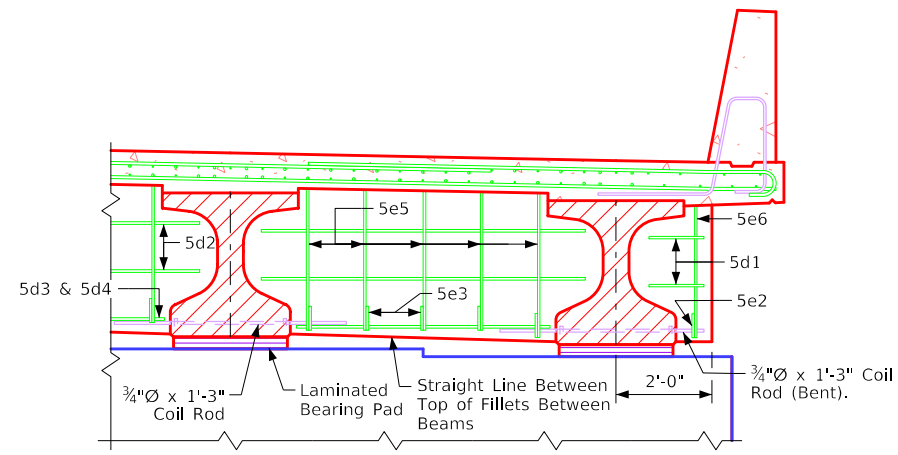
### Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"

### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.



Half Section Near Pier  
 (Expansion Pier Shown)

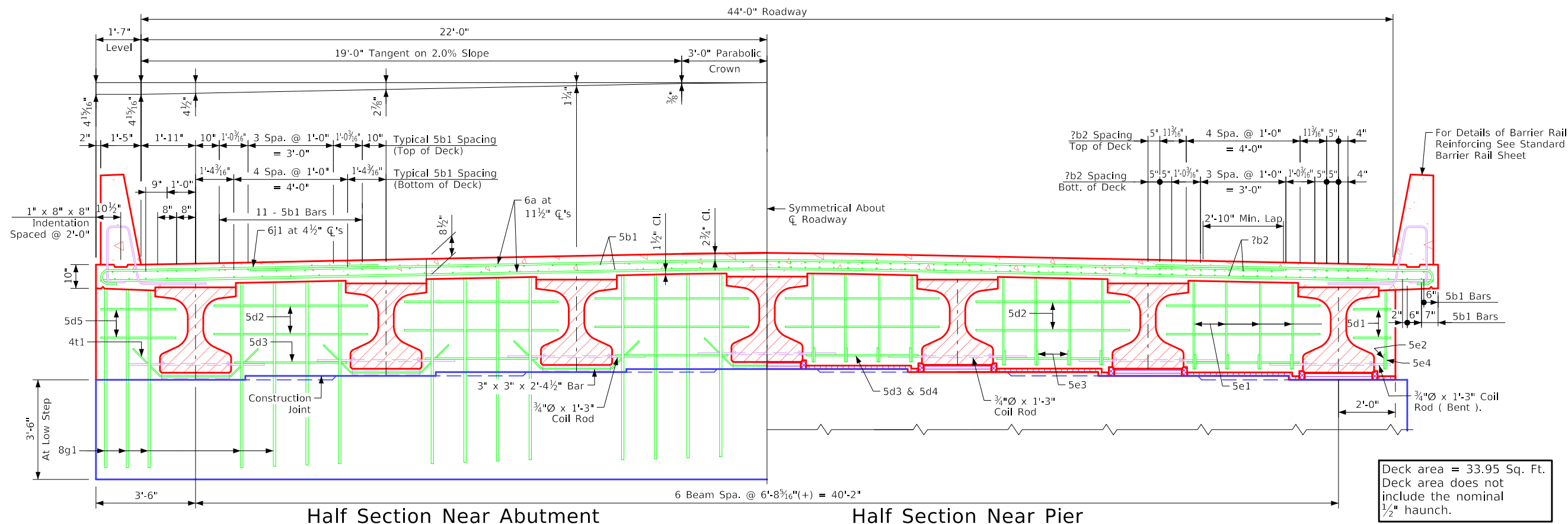
Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - This Sheet Re-Issued 11-2023. Sheet Format Update.

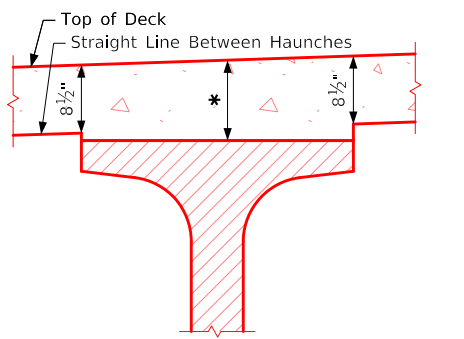
### Table of Size of "b2" Bar

Longest Adjacent Span	BTB Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***5
50'-0"	***6
55'-0"	***6
60'-0"	***6
65'-0"	***7
70'-0"	***8
75'-0"	***8
80'-0"	***9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

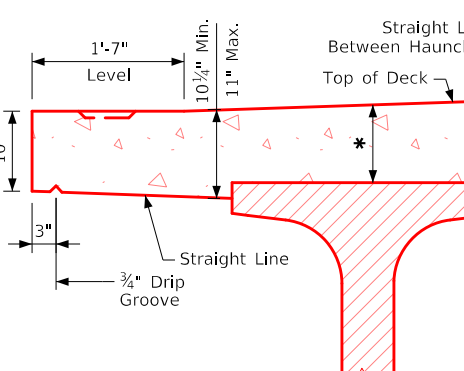
The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



Deck area = 33.95 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.



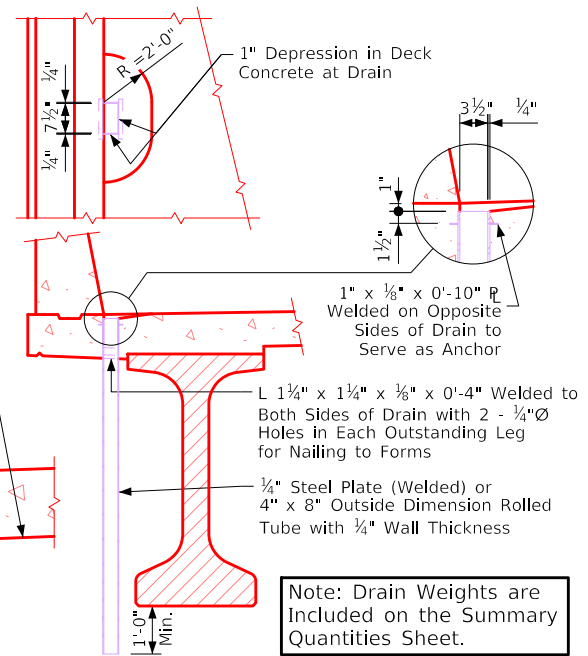
Interior Beams



Exterior Beams

### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Chamber Details" on Design Sheet No. ?.



### Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

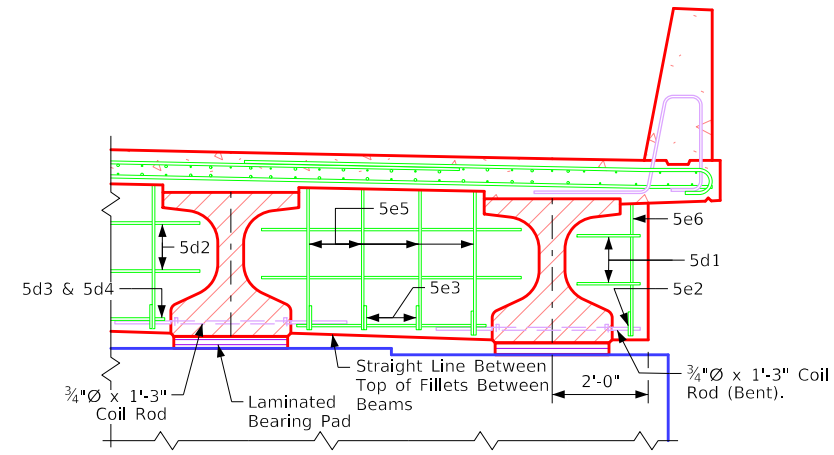
Data for One Drain	
Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



Half Section Near Pier  
 (Expansion Pier Shown)

## Bridge Deck Cross Section

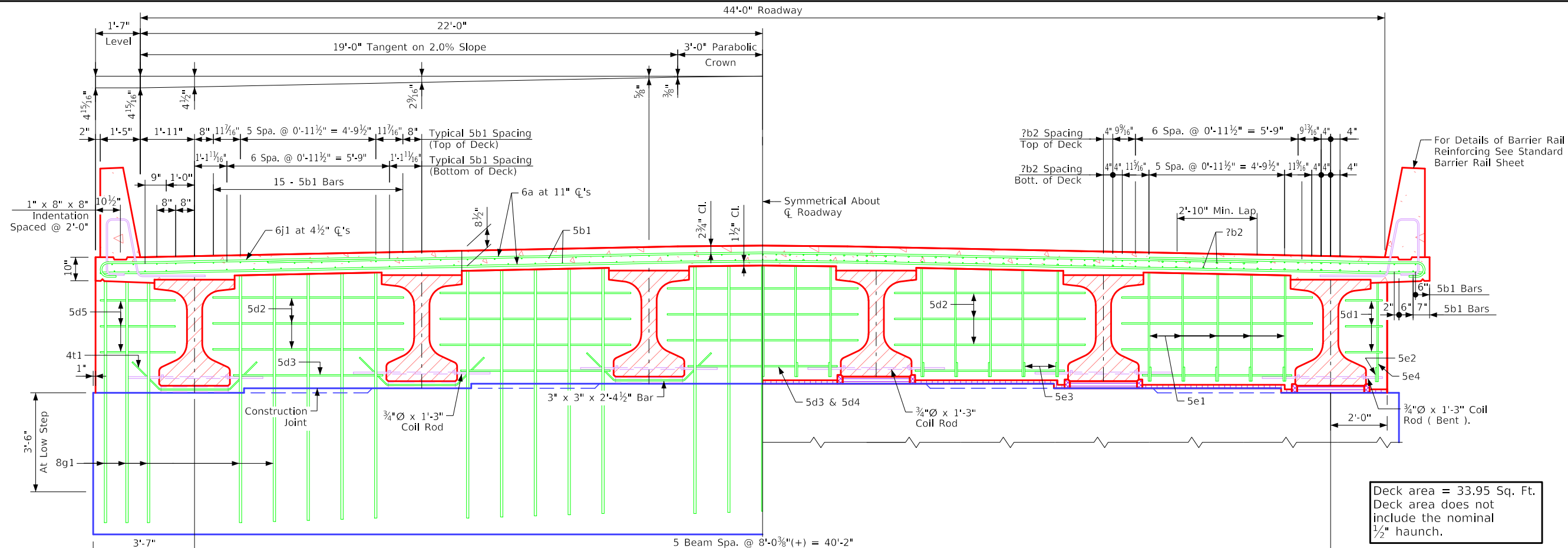
Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4384-BTB-7 - This Sheet Re-Issued 11-2023, Sheet Format Update.

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes.  
 Issued 02-08.  
 BTIntegralBridges.dgn - This Sheet Re-issued 11-2023, Sheet Format Update.

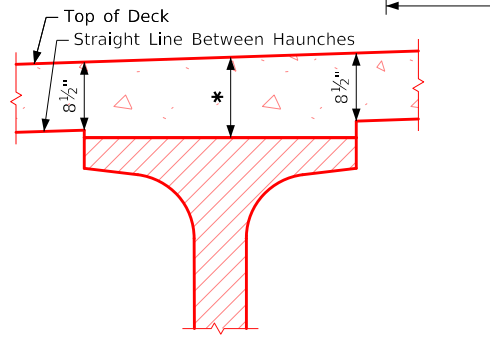
### Table of Size of "b2" Bar

Longest Adjacent Span	BTC Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***4
50'-0"	***4
55'-0"	***4
60'-0"	***6
65'-0"	***7
70'-0"	***7
75'-0"	***8
80'-0"	***9
85'-0"	***9
90'-0"	7
95'-0"	7
100'-0"	8
105'-0"	8
110'-0"	8
115'-0"	8
120'-0"	8

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



Deck area = 33.95 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.



Half Section Near Abutment

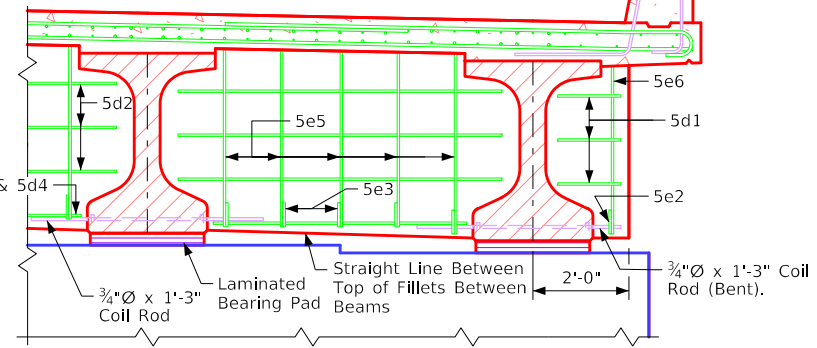
Half Section Near Pier

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

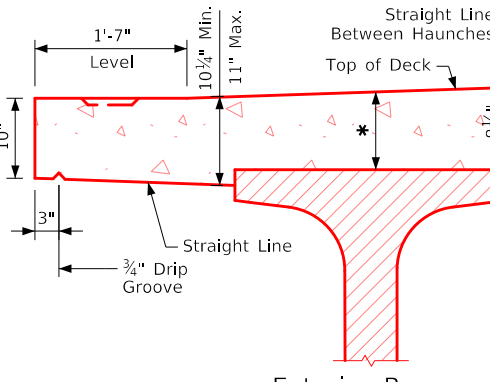
Note to Designer:  
 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

**Superstructure Notes:**

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



Half Section Near Pier  
 (Expansion Pier Shown)



Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

**Drain Details**

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTC
Drain Weight (lbs.)	106
Drain Length (ft.)	5'-6 3/4"

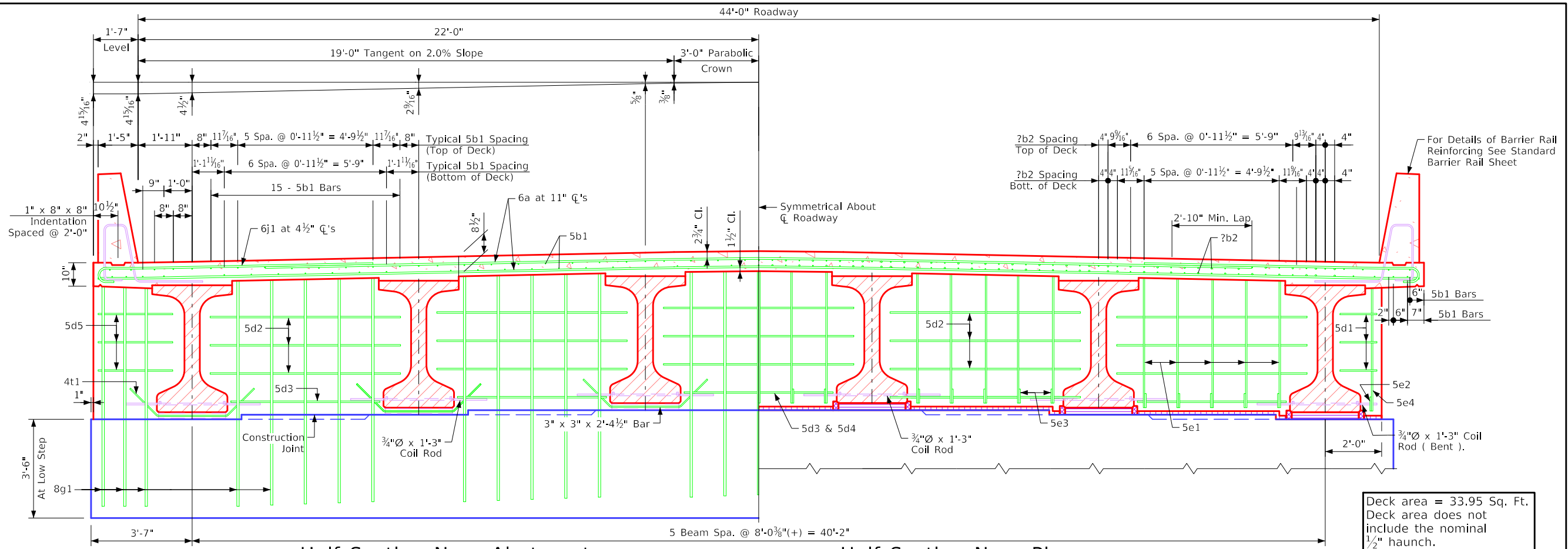


Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - This Sheet Re-Issued 11-2023. Sheet Format Update.

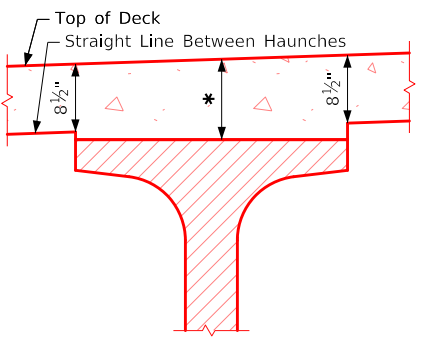
Table of Size of "b2" Bar	
Longest Adjacent Span	BTD Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	**4
55'-0"	**4
60'-0"	**5
65'-0"	**6
70'-0"	**6
75'-0"	**7
80'-0"	**8
85'-0"	**8
90'-0"	**9
95'-0"	**9
100'-0"	7
105'-0"	7
110'-0"	8
115'-0"	8
120'-0"	8
125'-0"	8
130'-0"	9
135'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

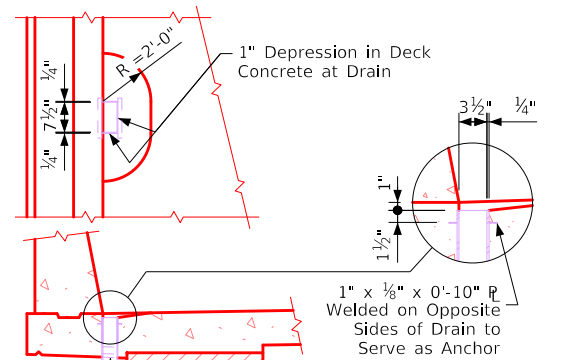


Half Section Near Abutment

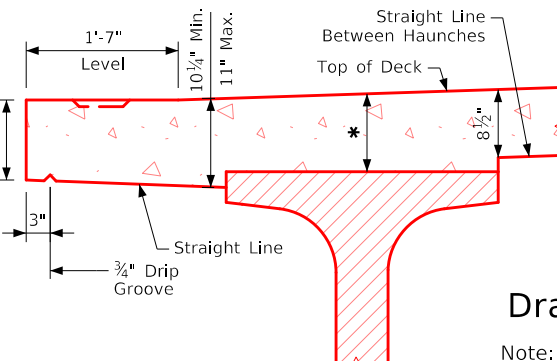
Half Section Near Pier



Interior Beams



Drain Details



Exterior Beams  
 Typical Deck and Haunch Detail

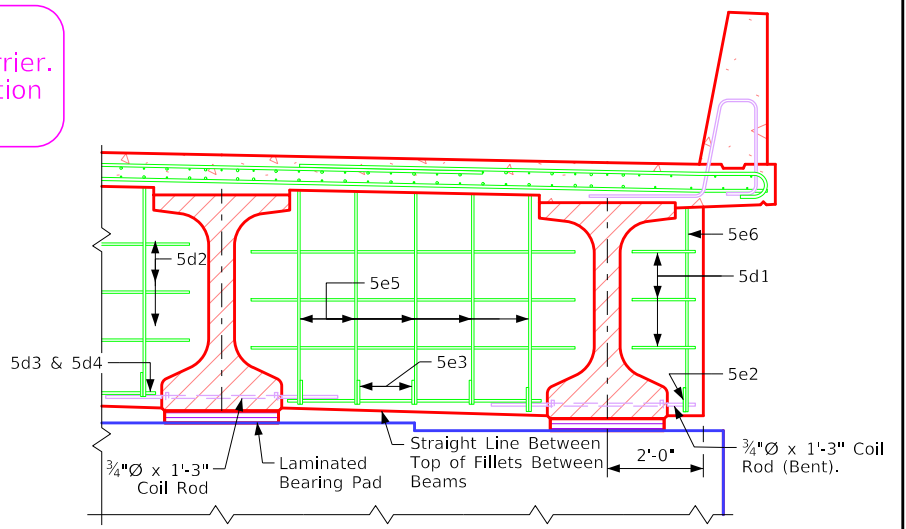
Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTD
Drain Weight (lbs.)	120
Drain Length (ft.)	6'-3 3/4"

**Superstructure Notes:**

The bridge deck as shown includes 3/4" integral wearing surface.  
 The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.  
 Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".  
 All beams are to be set vertical.  
 Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.  
 Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.  
 All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.  
 Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.  
 Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").  
 Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.  
 Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".

Note to Designer:  
 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.



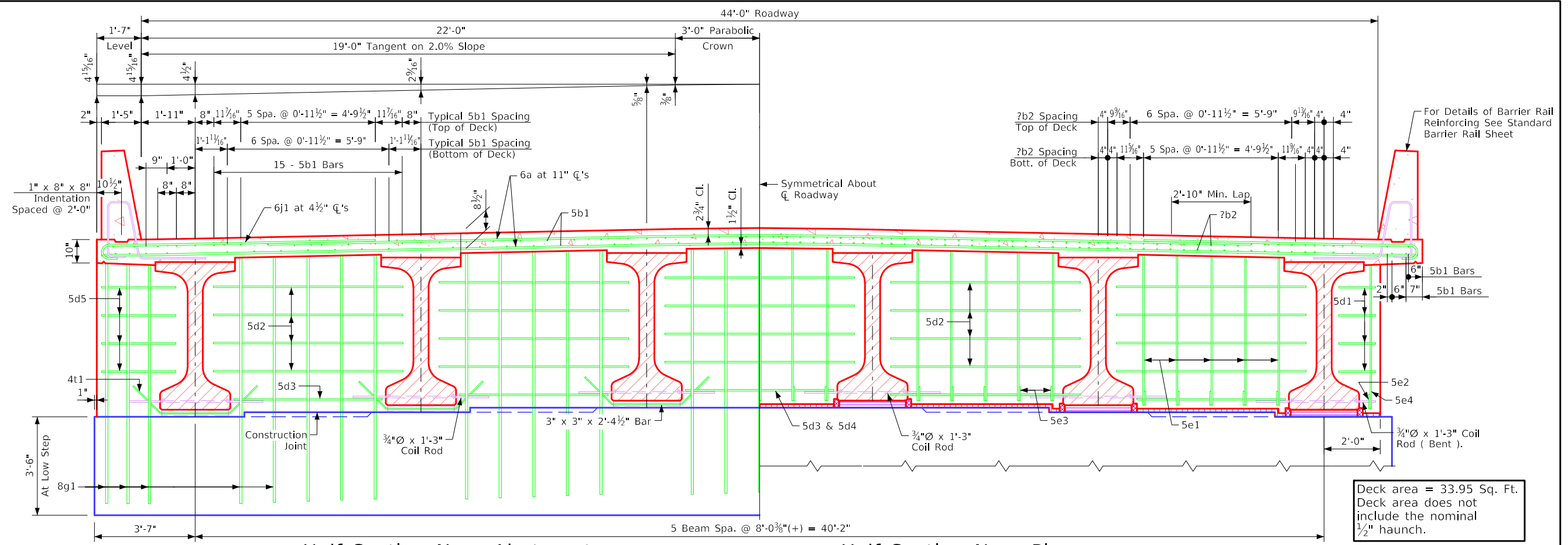
Half Section Near Pier (Expansion Pier Shown)

Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4384-BTE-6 - This Sheet Re-issued 11-2023. Sheet Format Update.

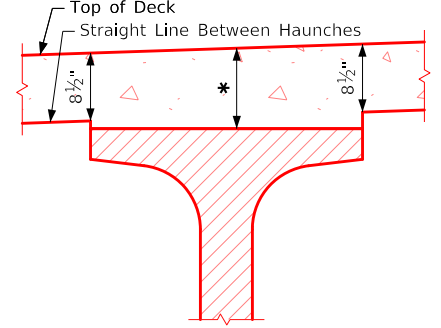
Table of Size of "b2" Bar	
Longest Adjacent Span	BTE Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	-----
55'-0"	-----
60'-0"	**4
65'-0"	**5
70'-0"	**6
75'-0"	**6
80'-0"	**7
85'-0"	**7
90'-0"	**8
95'-0"	**8
100'-0"	**9
105'-0"	**9
110'-0"	7
115'-0"	7
120'-0"	7
125'-0"	8
130'-0"	8
135'-0"	8
140'-0"	9
145'-0"	9
150'-0"	9
155'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

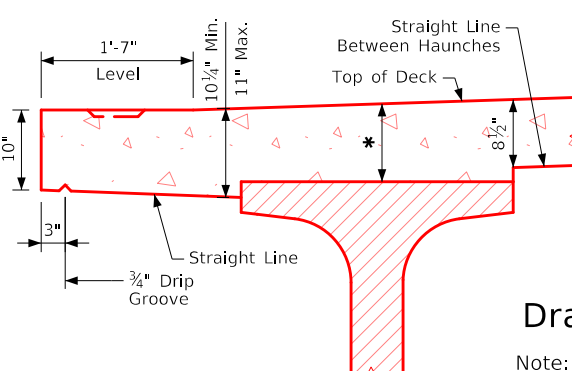


Half Section Near Abutment

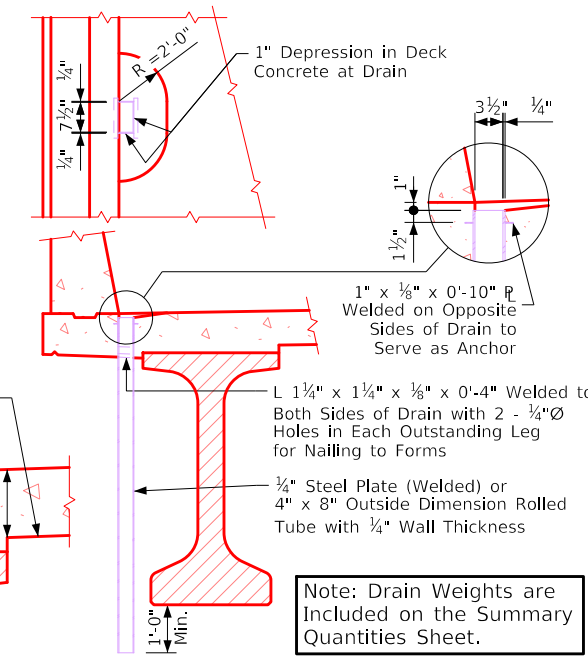
Half Section Near Pier



Interior Beams



Exterior Beams  
 Typical Deck and Haunch Detail



Drain Details

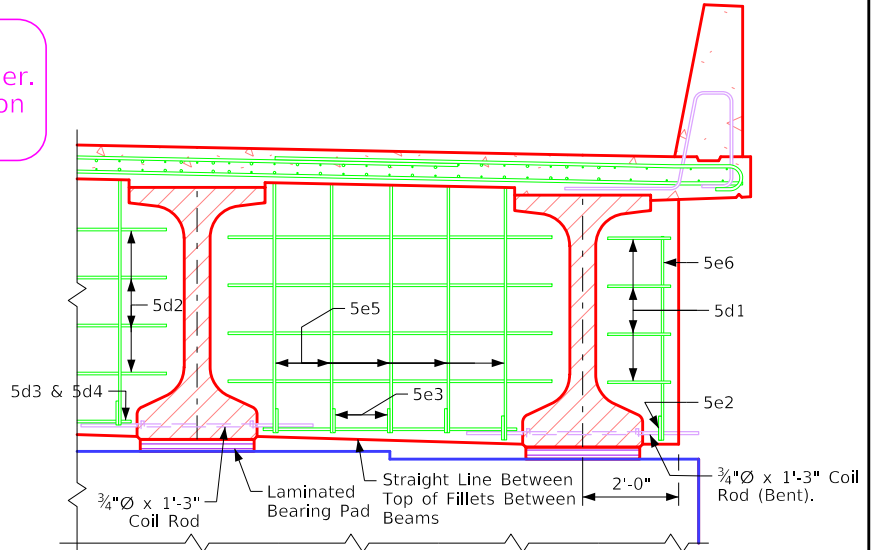
Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTE
Drain Weight (lbs.)	136
Drain Length (ft.)	7'-0 3/4"

**Superstructure Notes:**

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.



Half Section Near Pier  
 (Expansion Pier Shown)

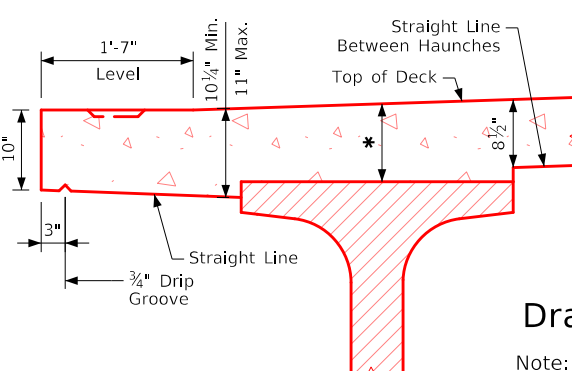
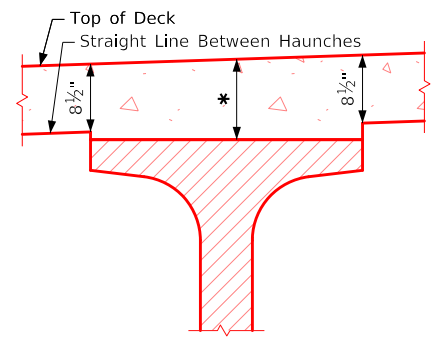
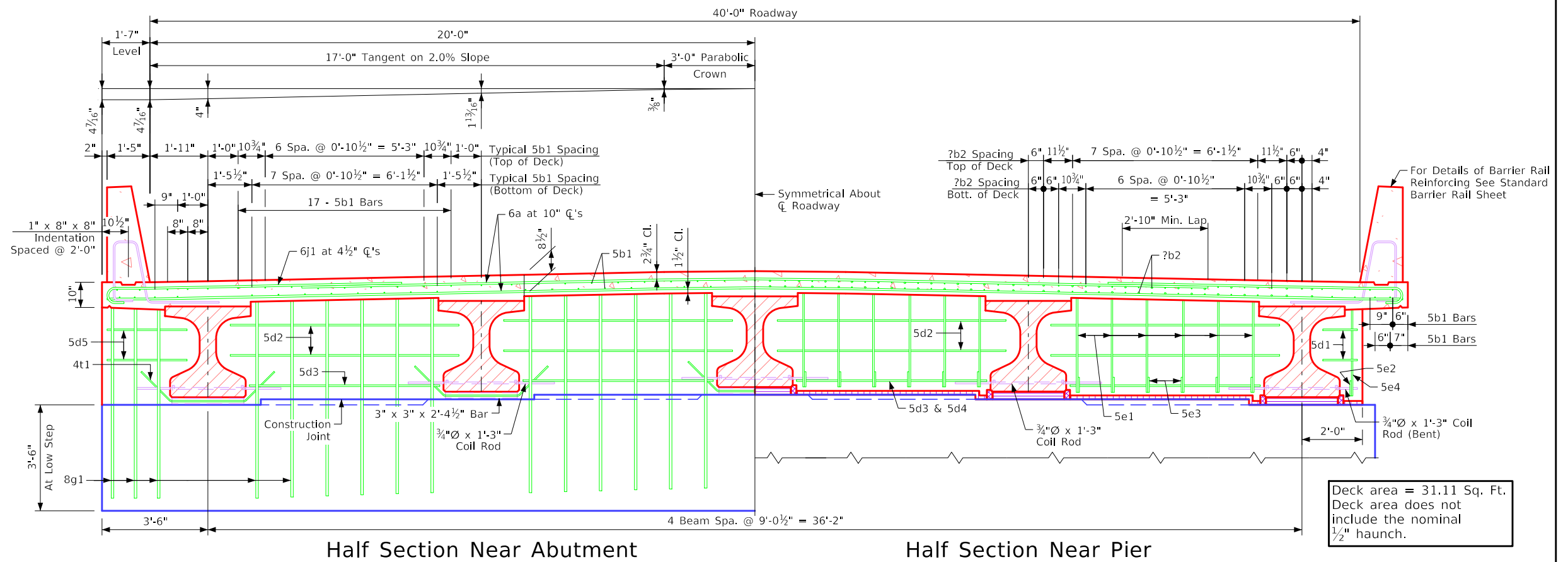
Bridge Deck Cross Section



### Table of Size of "b2" Bar

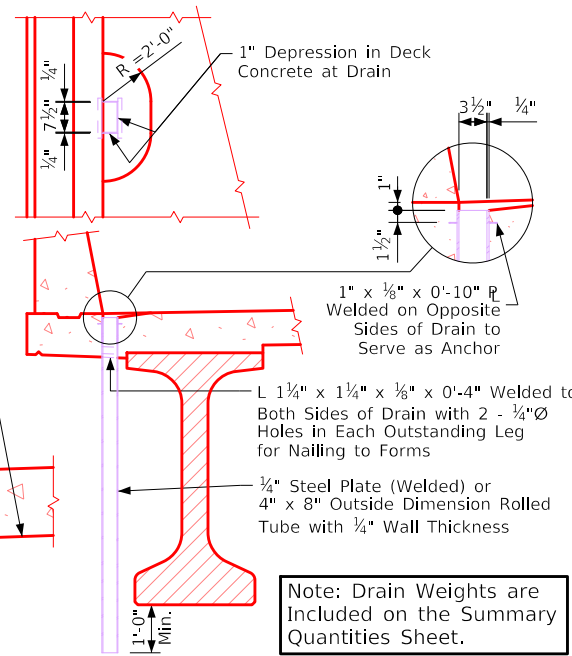
Longest Adjacent Span	BTB Beam Bar Size
30'-0"	**4
35'-0"	**4
40'-0"	**4
45'-0"	**5
50'-0"	**6
55'-0"	**6
60'-0"	**6
65'-0"	**7
70'-0"	**8
75'-0"	**8
80'-0"	**9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.



Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

### Data for One Drain

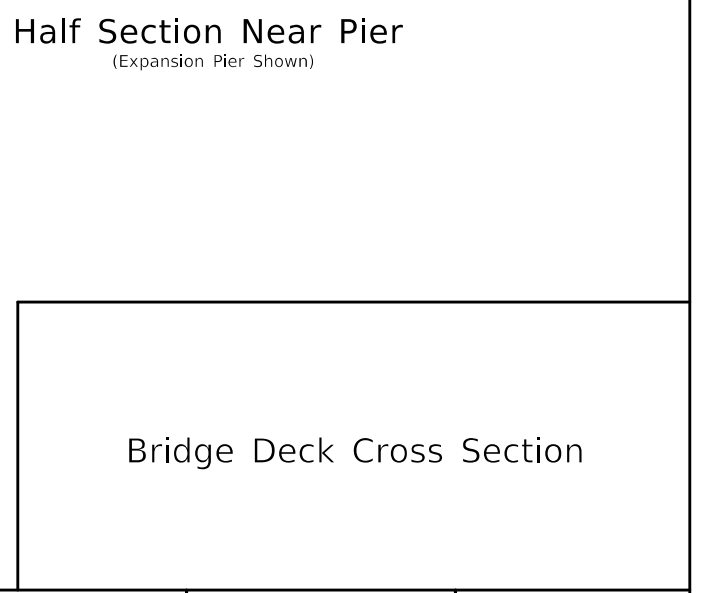
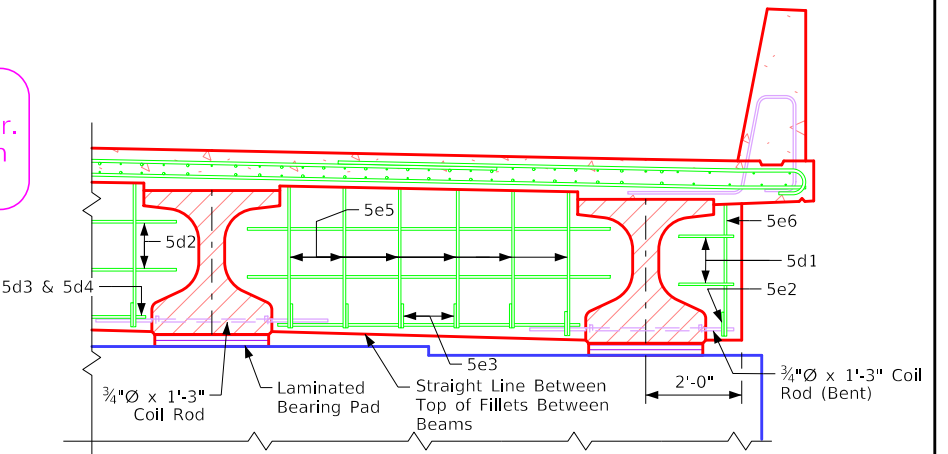
Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".

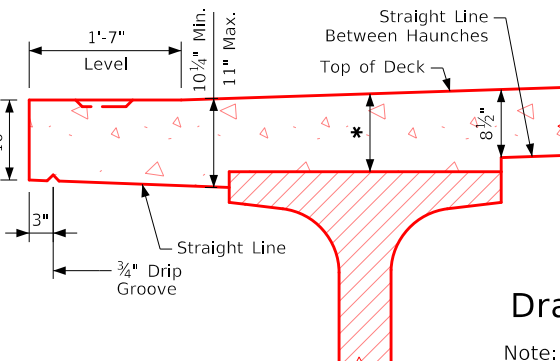
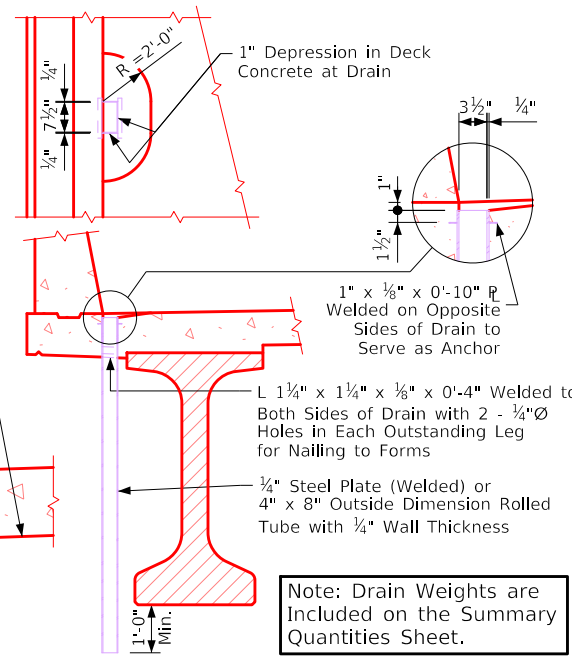
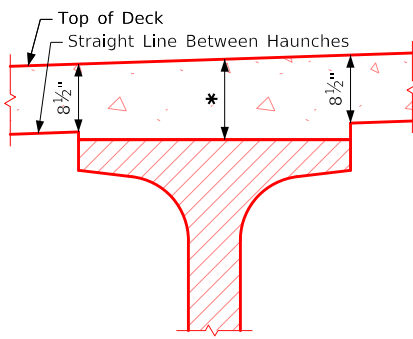
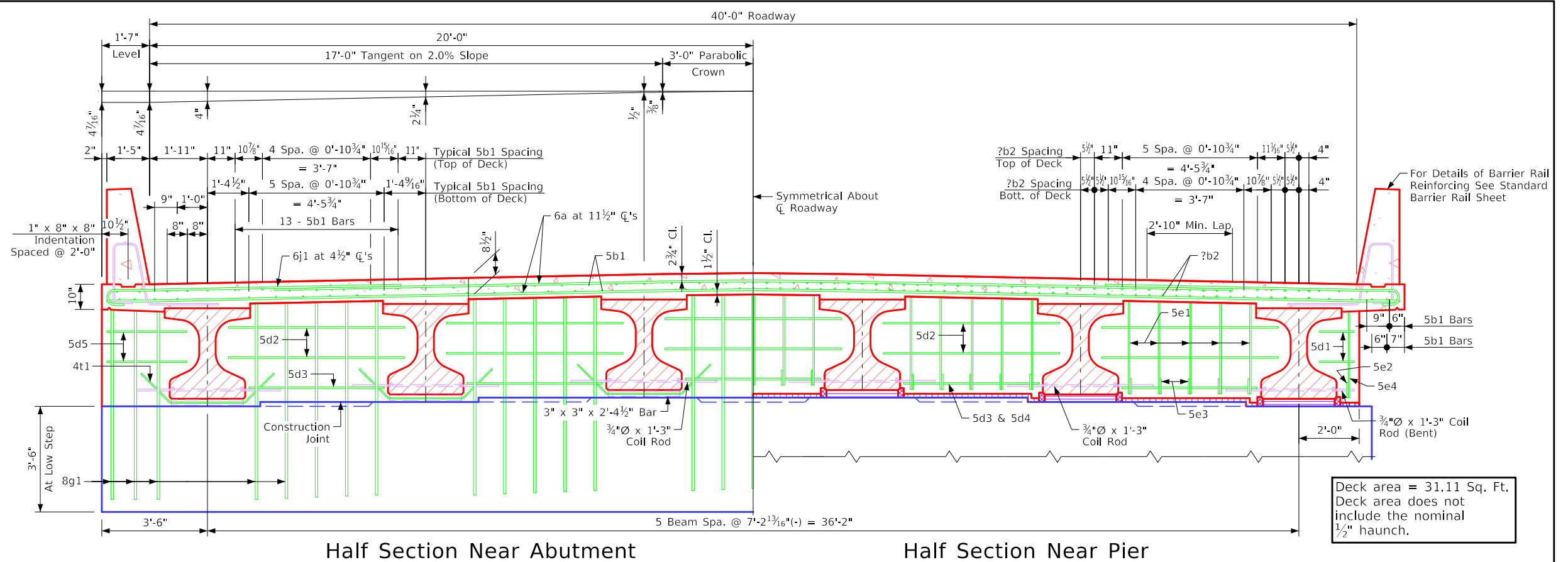


Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4385-BTD-5 - This Sheet Re-Issued 11-2023. Sheet Format Update.

### Table of Size of "b2" Bar

Longest Adjacent Span	BTB Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***5
50'-0"	***6
55'-0"	***6
60'-0"	***6
65'-0"	***7
70'-0"	***8
75'-0"	***8
80'-0"	***9
85'-0"	7
90'-0"	8
95'-0"	8
100'-0"	8
105'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

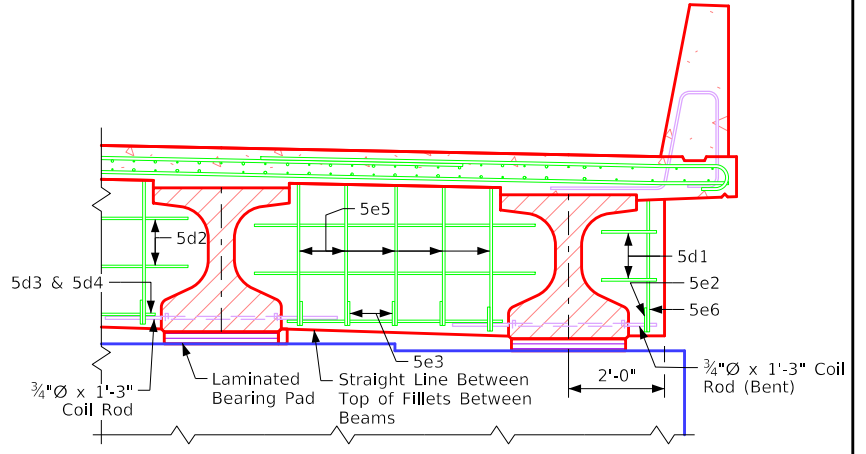
Data for One Drain	
Beam Size	BTB
Drain Weight (lbs.)	92
Drain Length (ft.)	4'-9 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



### Bridge Deck Cross Section

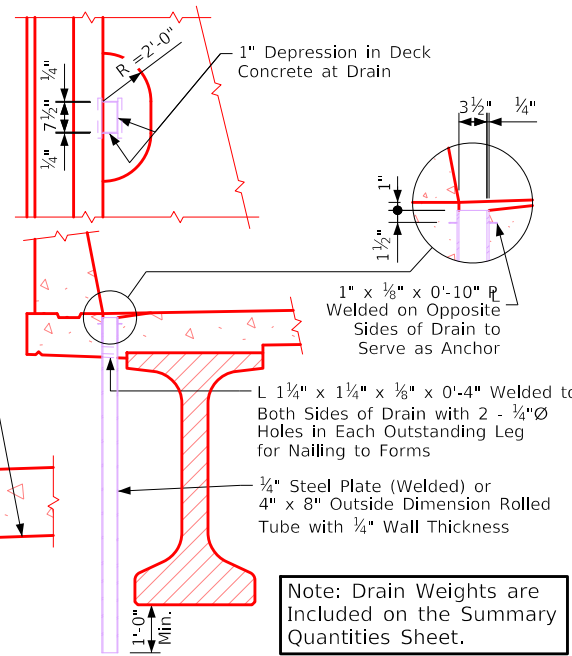
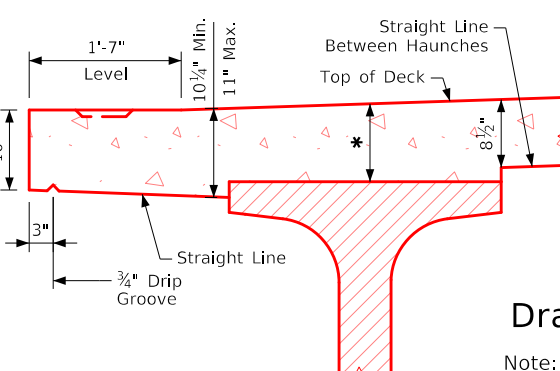
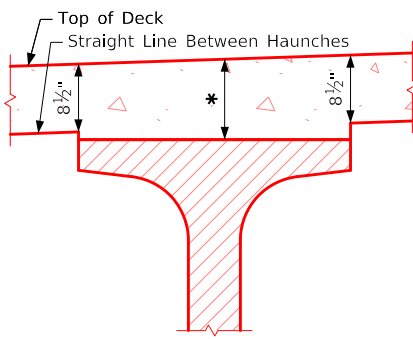
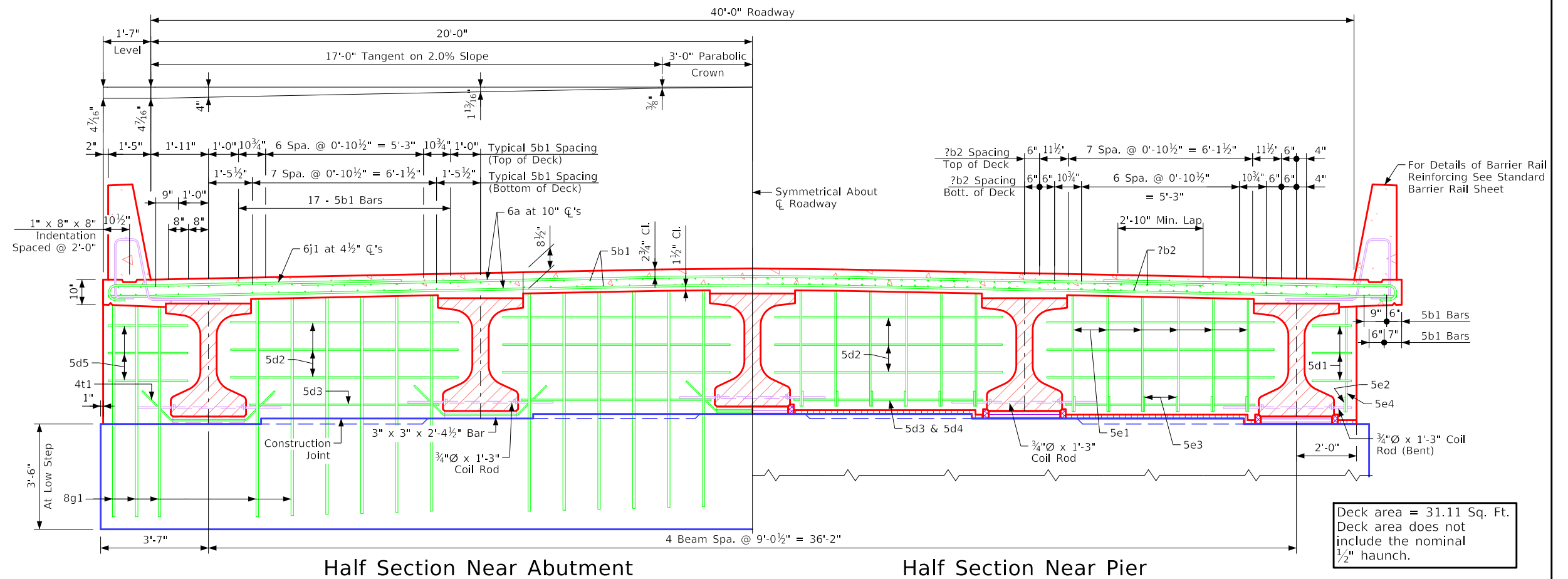
Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4385-BTB-6 - This Sheet Re-Issued 11-2023. Sheet Format Update.

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4385-BTC-5 - This Sheet Re-Issued 11-2023. Sheet Format Update.

### Table of Size of "b2" Bar

Longest Adjacent Span	BTC Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***4
50'-0"	***4
55'-0"	***4
60'-0"	***6
65'-0"	***7
70'-0"	***7
75'-0"	***8
80'-0"	***9
85'-0"	***9
90'-0"	7
95'-0"	7
100'-0"	8
105'-0"	8
110'-0"	8
115'-0"	8
120'-0"	8

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



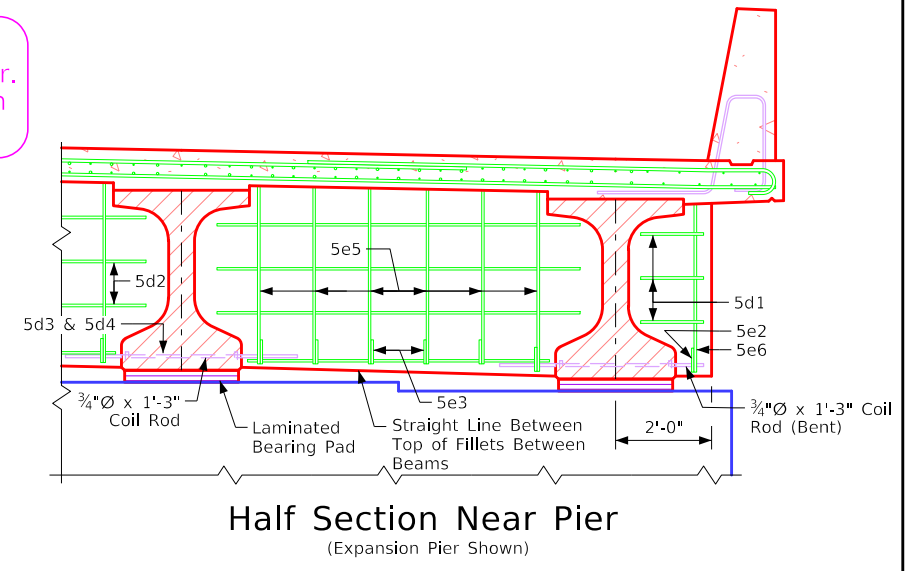
**Drain Details**  
 Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTC
Drain Weight (lbs.)	106
Drain Length (ft.)	5'-6 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

**Superstructure Notes:**  
 The bridge deck as shown includes 3/4" integral wearing surface.  
 The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.  
 Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".  
 All beams are to be set vertical.  
 Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.  
 Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.  
 All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.  
 Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.  
 Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").  
 Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.  
 Cost for bearing material is to be included in the price bid for "Prestressed Concrete Beams".

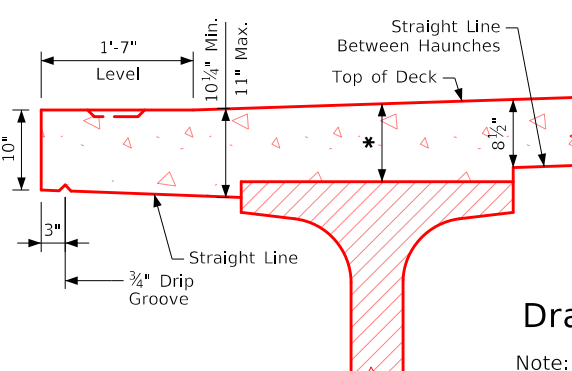
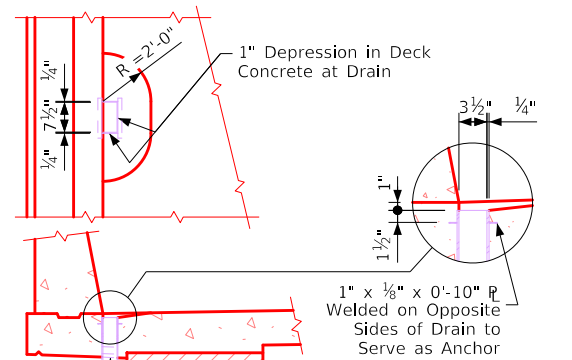
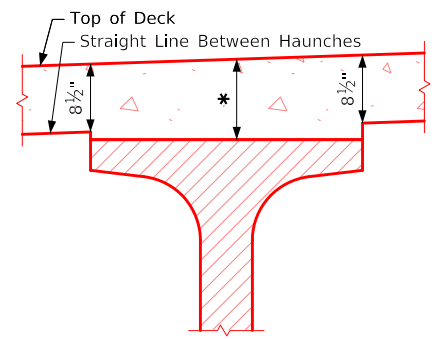
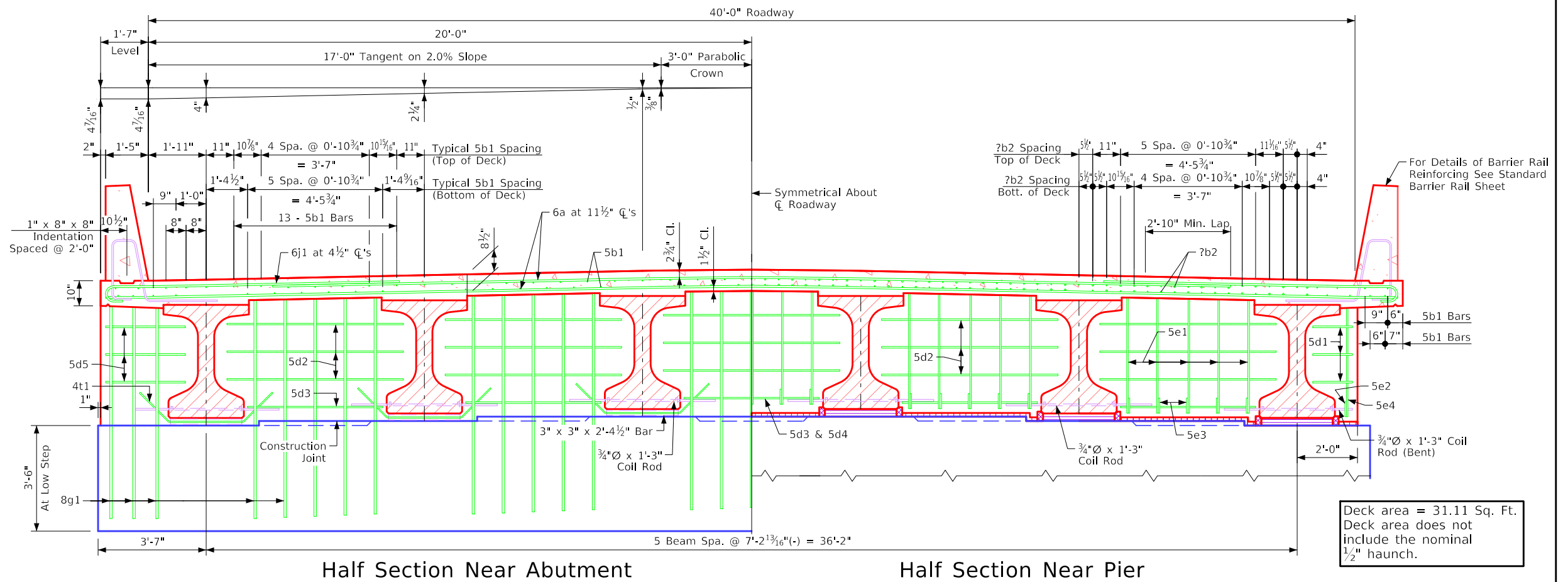


**Bridge Deck Cross Section**

### Table of Size of "b2" Bar

Longest Adjacent Span	BTC Beam Bar Size
30'-0"	***4
35'-0"	***4
40'-0"	***4
45'-0"	***4
50'-0"	***4
55'-0"	***4
60'-0"	***6
65'-0"	***7
70'-0"	***7
75'-0"	***8
80'-0"	***9
85'-0"	***9
90'-0"	7
95'-0"	7
100'-0"	8
105'-0"	8
110'-0"	8
115'-0"	8
120'-0"	8

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



**Drain Details**

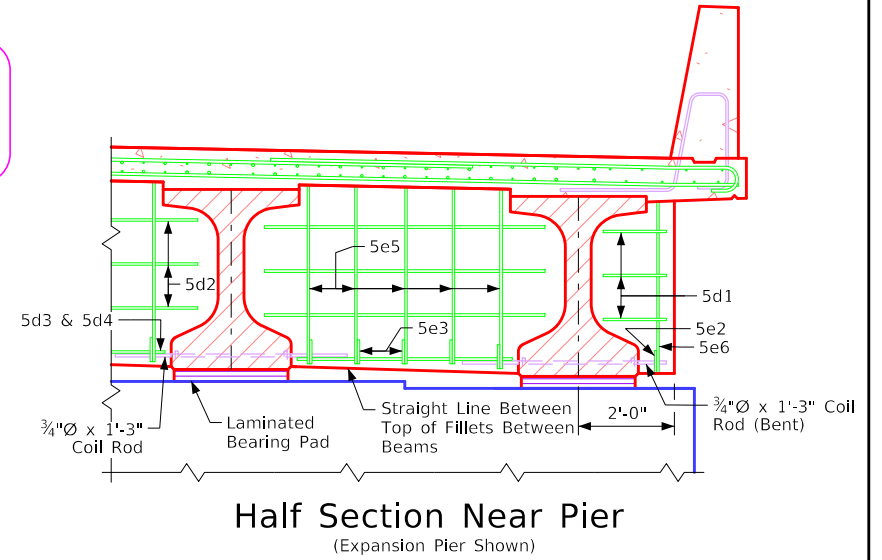
Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTC
Drain Weight (lbs.)	106
Drain Length (ft.)	5'-6 3/4"

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.



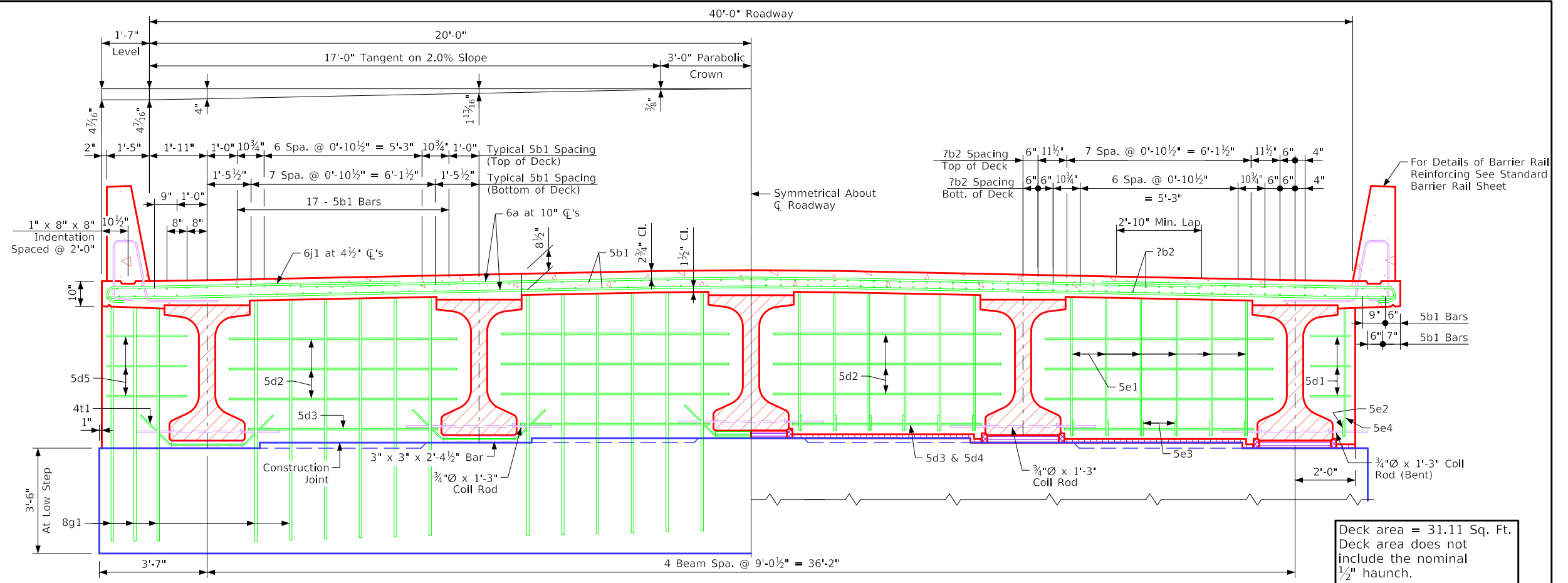
### Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4385-BTC-6 - This Sheet Re-issued 11-2023. Sheet Format Update.

### Table of Size of "b2" Bar

Longest Adjacent Span	BTD Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	**4
55'-0"	**4
60'-0"	**5
65'-0"	**6
70'-0"	**6
75'-0"	**7
80'-0"	**8
85'-0"	**8
90'-0"	**9
95'-0"	**9
100'-0"	7
105'-0"	7
110'-0"	8
115'-0"	8
120'-0"	8
125'-0"	8
130'-0"	9
135'-0"	9

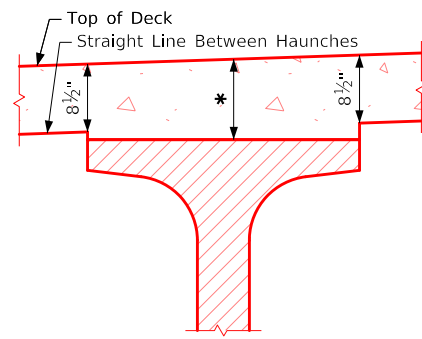
The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



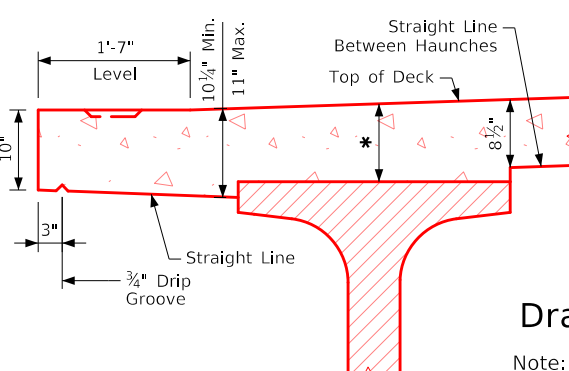
Half Section Near Abutment

Half Section Near Pier

Deck area = 31.11 Sq. Ft.  
 Deck area does not include the nominal 1/2" haunch.



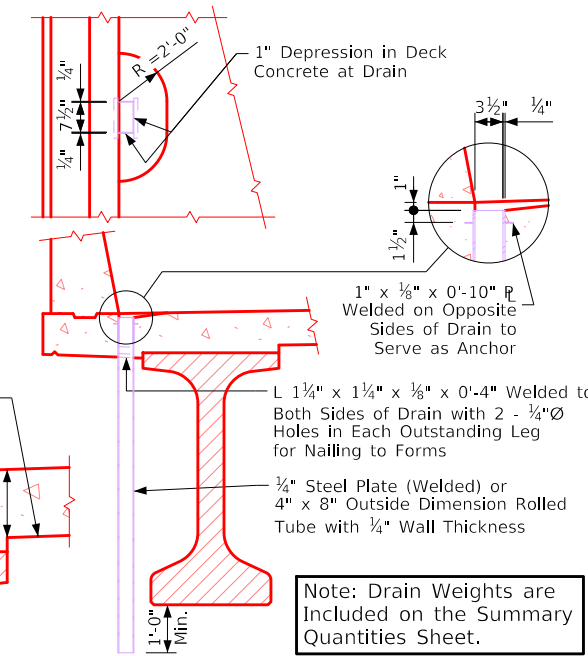
Interior Beams



Exterior Beams

### Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.



### Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

### Data for One Drain

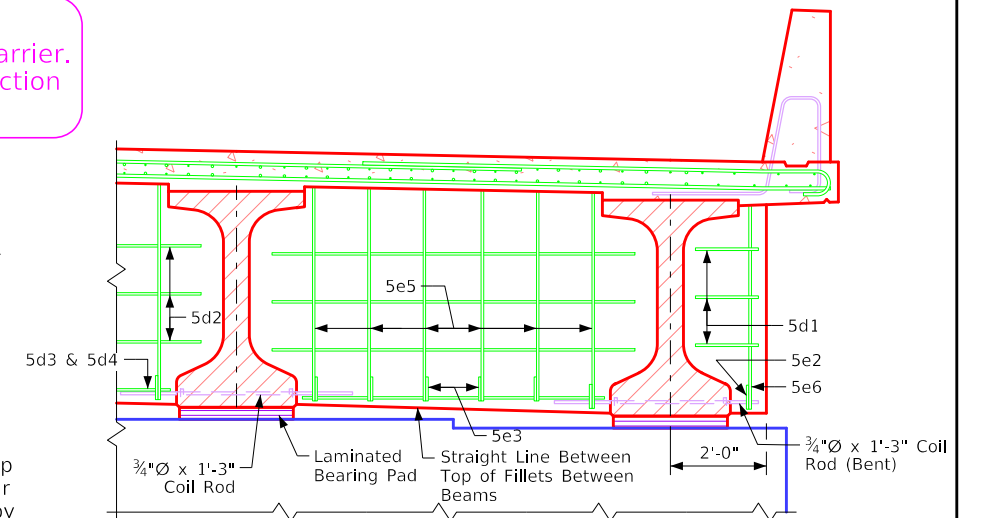
Beam Size	BTD
Drain Weight (lbs.)	120
Drain Length (ft.)	6'-3 3/4"

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

### Superstructure Notes:

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:
  - Top bar - lap midway between beams (min. lap = 2'-10").
  - Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Pretensioned Prestressed Concrete Beams".



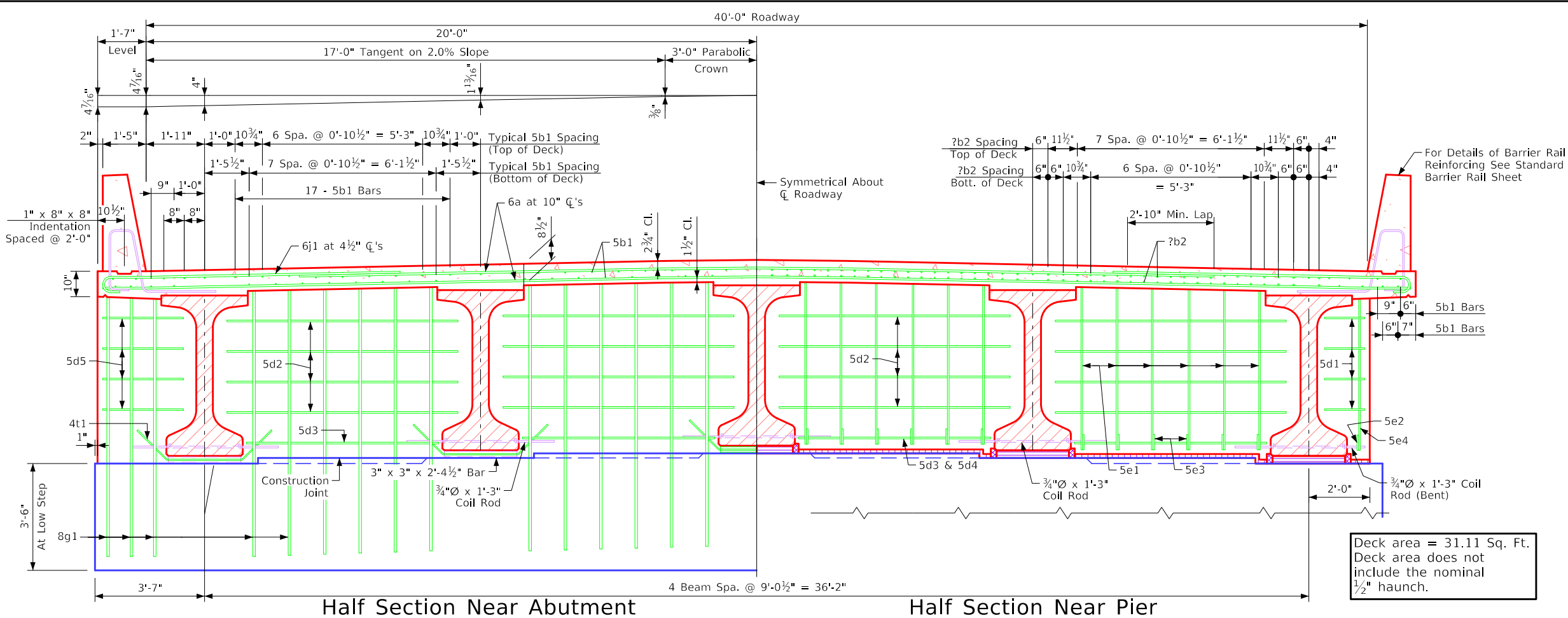
Half Section Near Pier (Expansion Pier Shown)

### Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4385-BTE-5 - This Sheet Re-issued 11-2023. Sheet Format Update.

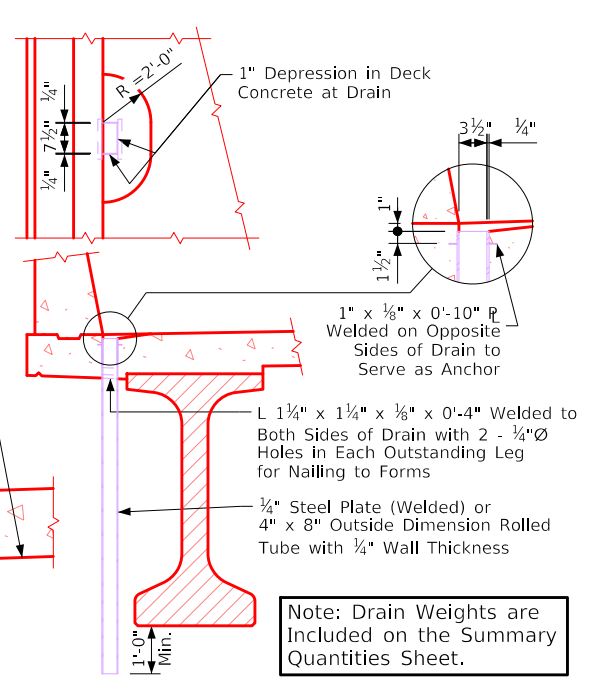
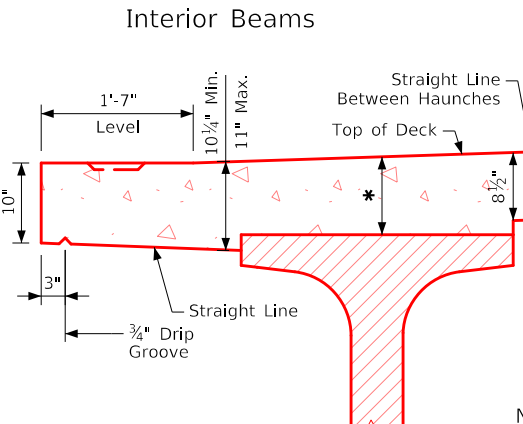
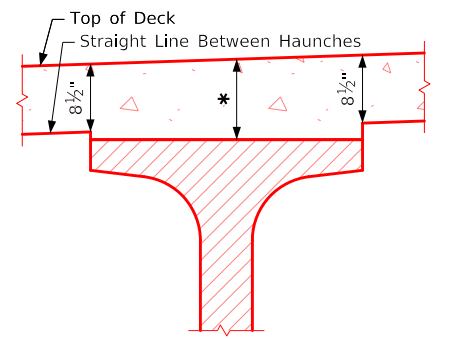
Table of Size of "b2" Bar	
Longest Adjacent Span	BTE Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	-----
55'-0"	-----
60'-0"	**4
65'-0"	**5
70'-0"	**6
75'-0"	**6
80'-0"	**7
85'-0"	**7
90'-0"	**8
95'-0"	**8
100'-0"	**9
105'-0"	**9
110'-0"	7
115'-0"	7
120'-0"	7
125'-0"	8
130'-0"	8
135'-0"	8
140'-0"	9
145'-0"	9
150'-0"	9
155'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.



Half Section Near Abutment

Half Section Near Pier



Drain Details

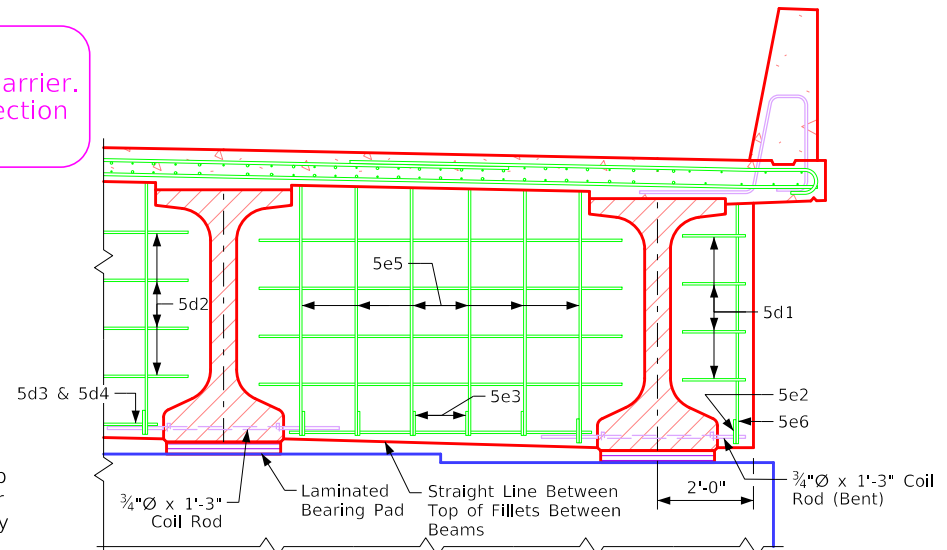
Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

Data for One Drain	
Beam Size	BTE
Drain Weight (lbs.)	136
Drain Length (ft.)	7'-0 3/4"

**Superstructure Notes:**

The bridge deck as shown includes 3/4" integral wearing surface.  
 The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.  
 Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".  
 All beams are to be set vertical.  
 Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.  
 Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.  
 All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.  
 Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.  
 Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").  
 Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.  
 Cost for bearing material is to be included in the price bid for "Prestressed Concrete Beams".

Note to Designer: 6j1 spacing shown for TL-4 barrier. See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.



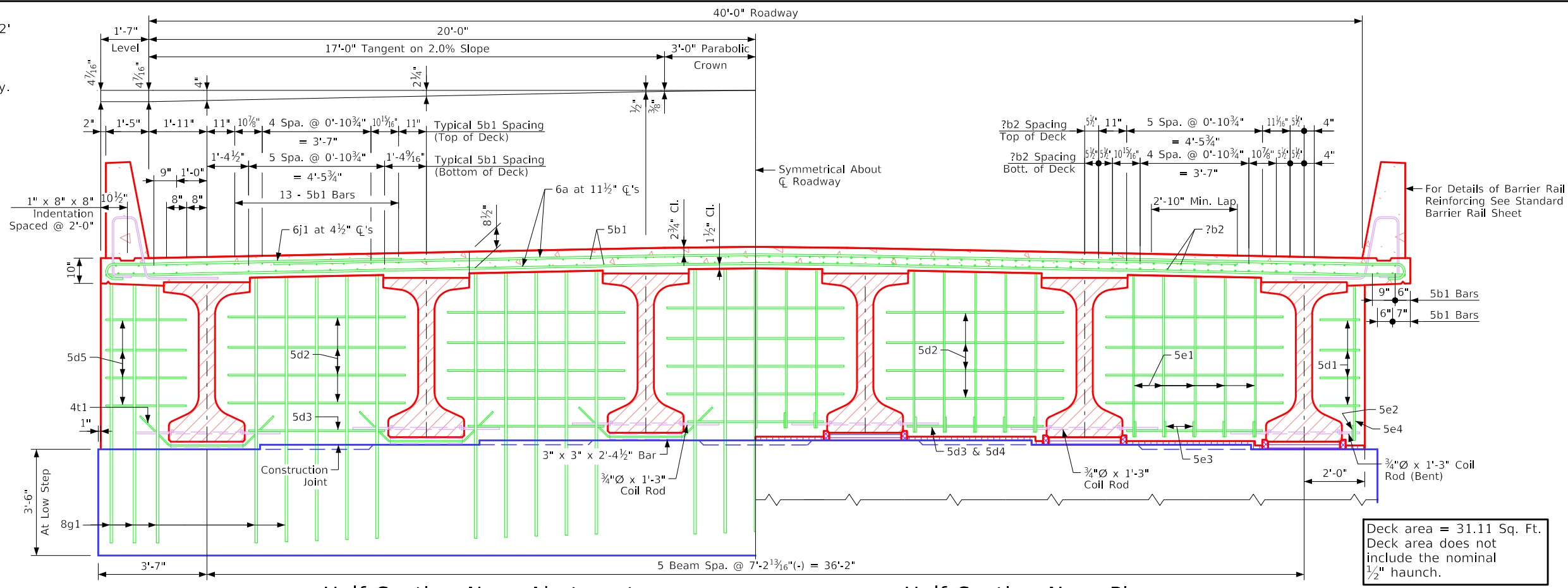
Half Section Near Pier (Expansion Pier Shown)

Bridge Deck Cross Section

Correction 04-14: Added Concrete Quantity Table & Referral Note to Summary Quantity Sheet. Removed Design Bearing Note for Abut. Piling from Abutment Notes. Issued 02-08. BTIntegralBridges.dgn - 4385-BTE-6 - This Sheet Re-issued 11-2023. Sheet Format Update.

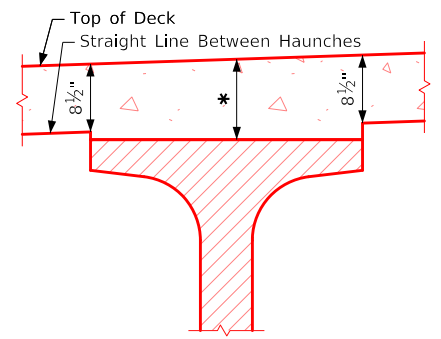
Table of Size of "b2" Bar	
Longest Adjacent Span	BTE Beam Bar Size
30'-0"	-----
35'-0"	-----
40'-0"	-----
45'-0"	-----
50'-0"	-----
55'-0"	-----
60'-0"	**4
65'-0"	**5
70'-0"	**6
75'-0"	**6
80'-0"	**7
85'-0"	**7
90'-0"	**8
95'-0"	**8
100'-0"	**9
105'-0"	**9
110'-0"	7
115'-0"	7
120'-0"	7
125'-0"	8
130'-0"	8
135'-0"	8
140'-0"	9
145'-0"	9
150'-0"	9
155'-0"	9

The midpoint of the 'b2' bar is to be placed at the  $\bar{C}$  of pier.  
 \*\* Indicates 'b2' bar placed in top deck only.

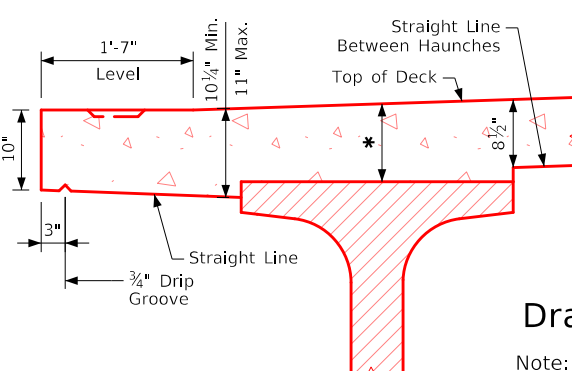


Half Section Near Abutment

Half Section Near Pier

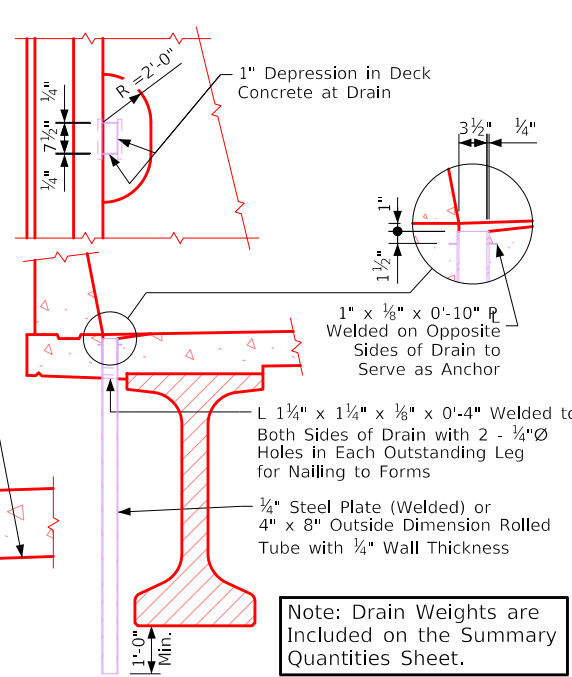


Interior Beams



Exterior Beams  
 Typical Deck and Haunch Detail

\* For Deck Thickness Over Beams See "Haunch And Camber Details" on Design Sheet No. ?.



Drain Details

Note: Drains are to be galvanized. ?? Drains required. See "Situation Plan" on Design Sheet No. ? for location. Weight of drains is included in the quantity for "Structural Steel". Weight is based on rolled tube.

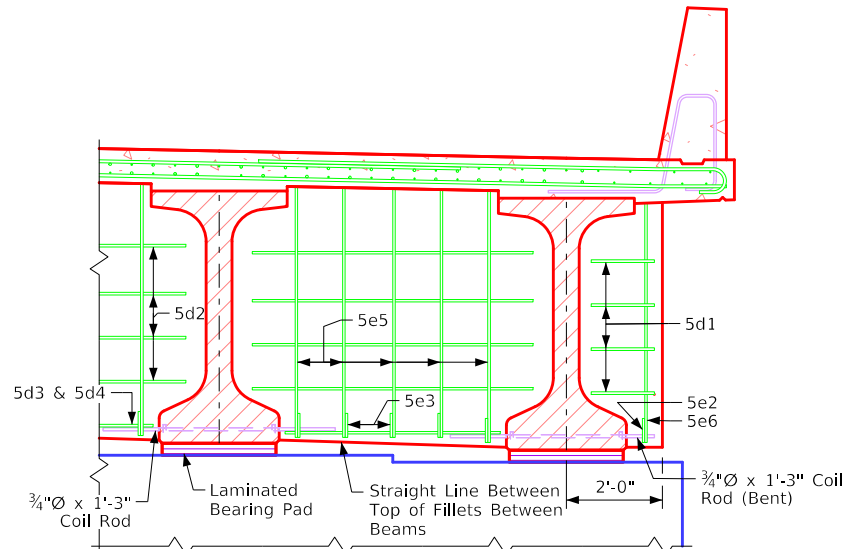
Data for One Drain	
Beam Size	BTE
Drain Weight (lbs.)	136
Drain Length (ft.)	7'-0 3/4"

Note to Designer:  
 6j1 spacing shown for TL-4 barrier.  
 See Bridge Design Manual Section 5.2 for TL-5 6j1 spacing.

Note: For details of Intermediate Diaphragm see Design Sheet No. ??.

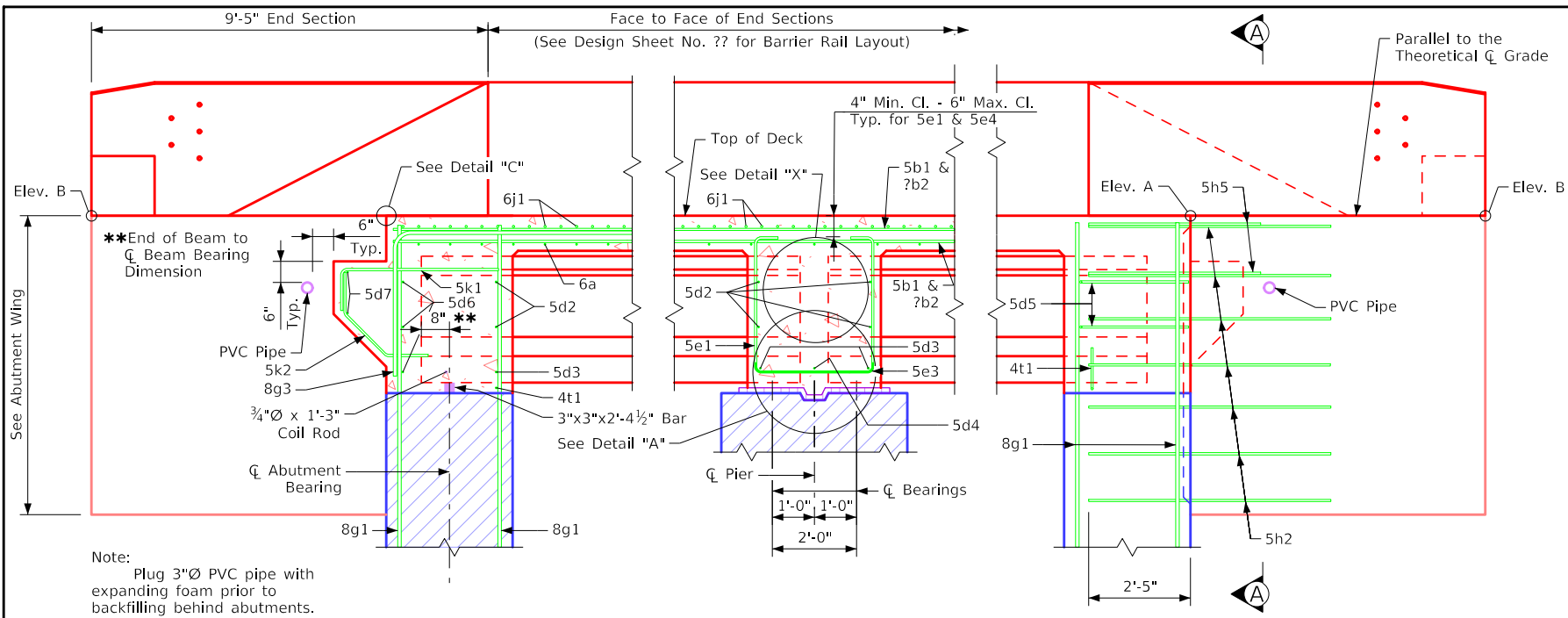
**Superstructure Notes:**

- The bridge deck as shown includes 3/4" integral wearing surface.
- The pier and abutment diaphragm concrete is to be placed monolithically with the bridge deck.
- Cost of all resilient joint filler material is to be included in the price bid for "Structural Concrete (Bridge)".
- All beams are to be set vertical.
- Forms for the deck and barrier rail are to be supported by the prestressed concrete beams.
- Clear distance from face of concrete to near reinforcing bar shall be 2" unless otherwise noted or shown.
- All deck and diaphragm reinforcing is to be wired in place and adequately supported before concrete is placed.
- Top transverse reinforcing steel is to be parallel to and 2 3/4" clear below top of deck. Bottom transverse reinforcing steel is to be parallel to and 1 1/2" clear above bottom of deck. Top and bottom reinforcing steel is to be supported by individual bar chairs spaced at not more than 3'-0" centers longitudinally and transversely, or by continuous rows of bar high chairs or deck bolsters spaced 4'-0" apart. I.M. 451.01 requirements shall apply for bar chairs, bar high chairs, and deck bolsters.
- Transverse deck reinforcing may be spliced with one lap located as follows:  
 Top bar - lap midway between beams (min. lap = 2'-10").  
 Bottom bars - lap over beams (min. lap = 3'-7").
- Payment for reinforcing bars shall be based on no splices, and no allowance shall be made for the additional length of bar required for the use of splices.
- Cost for bearing material is to be included in the price bid for "Prestressed Concrete Beams".



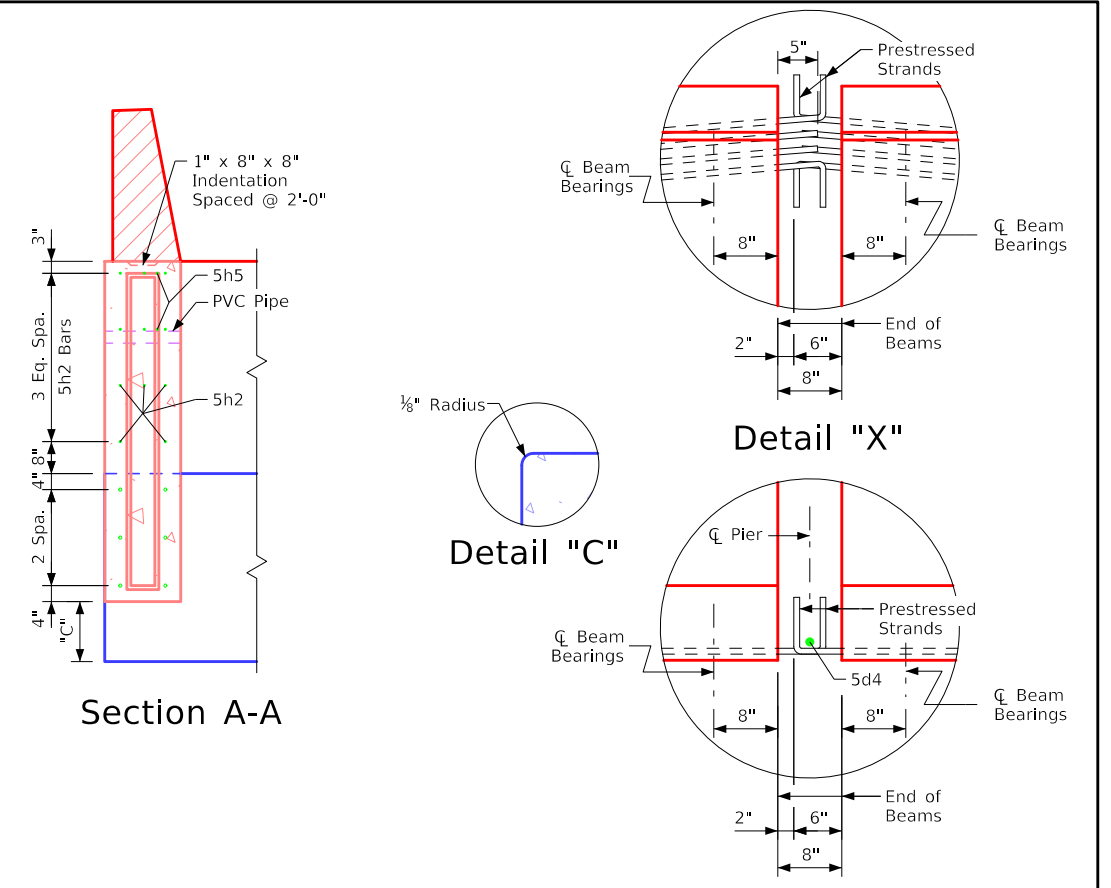
Half Section Near Pier  
 (Expansion Pier Shown)

Bridge Deck Cross Section



**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**

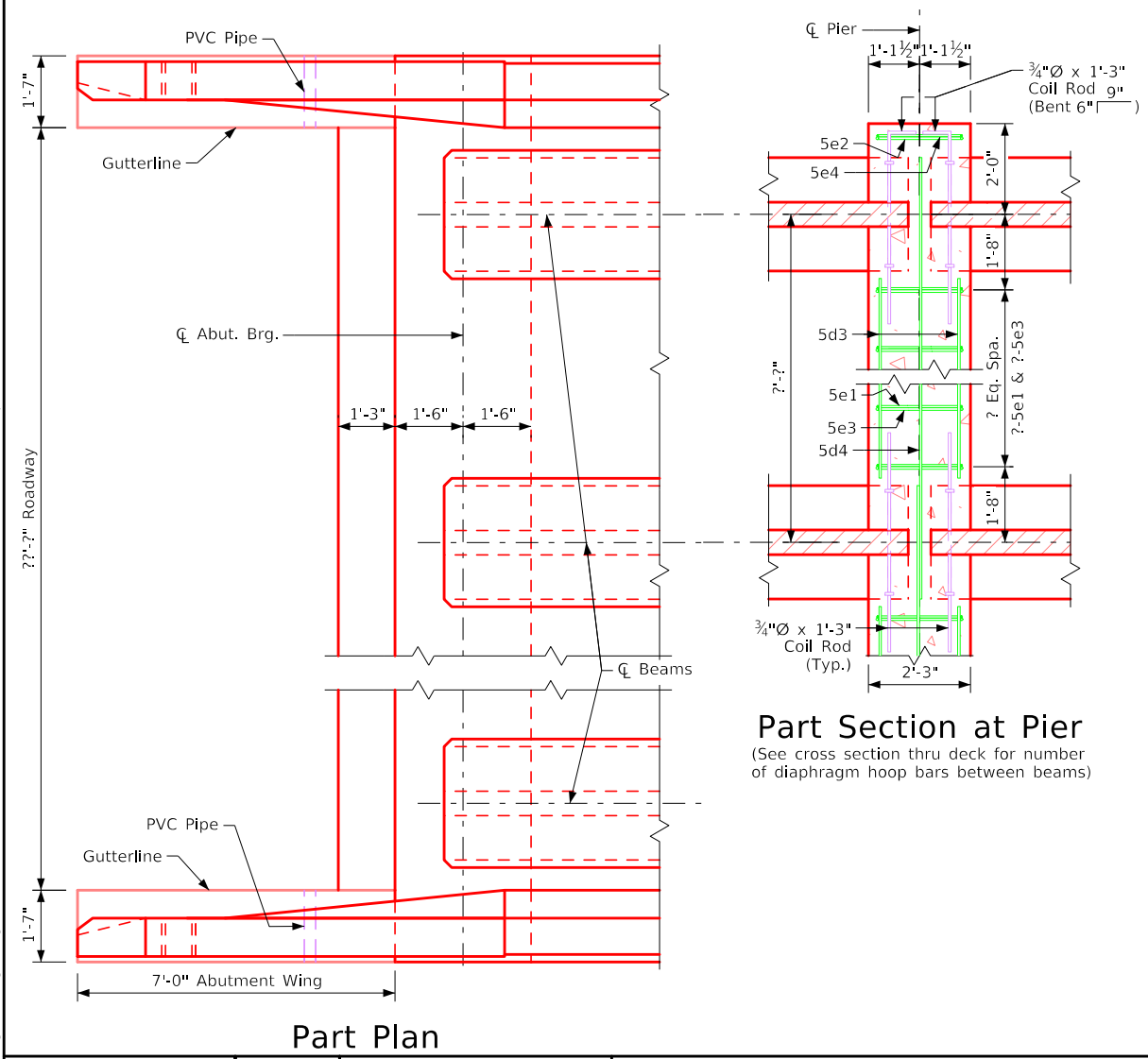


**Section A-A**

**Detail "X"**

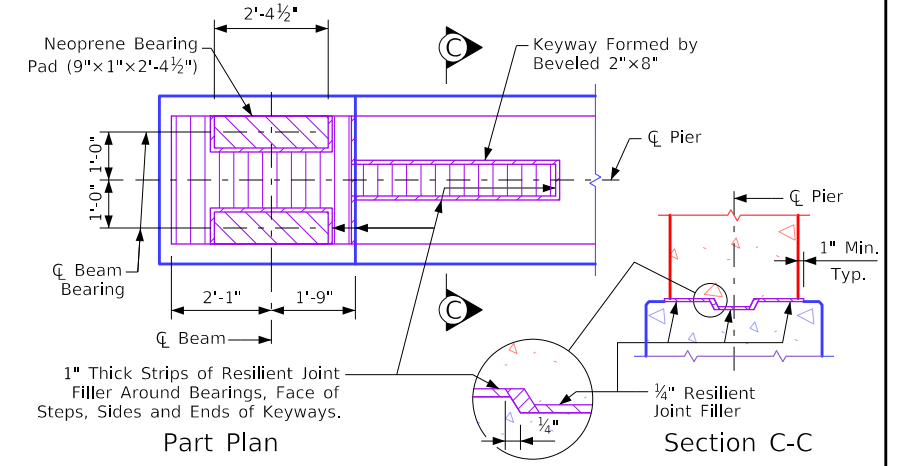
**Detail "C"**

**Detail "A"**



**Part Plan**

**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)



**Top of Fixed Pier Details**

**Part Plan**

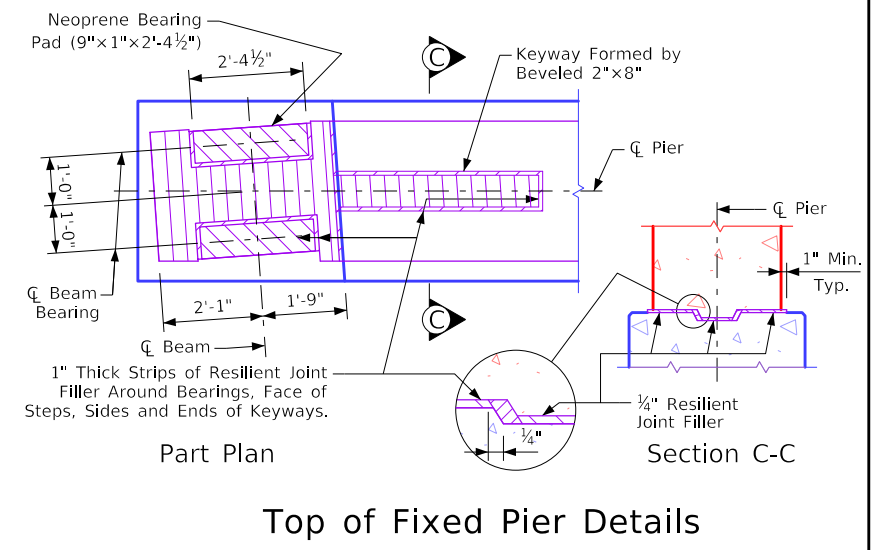
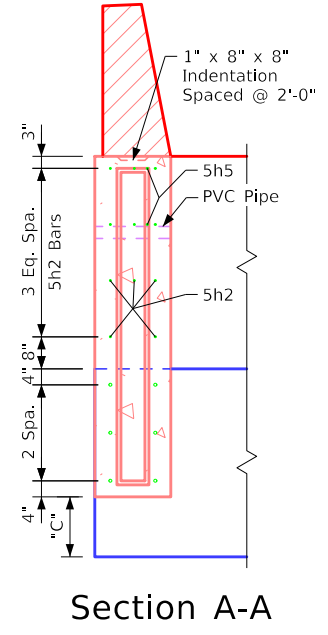
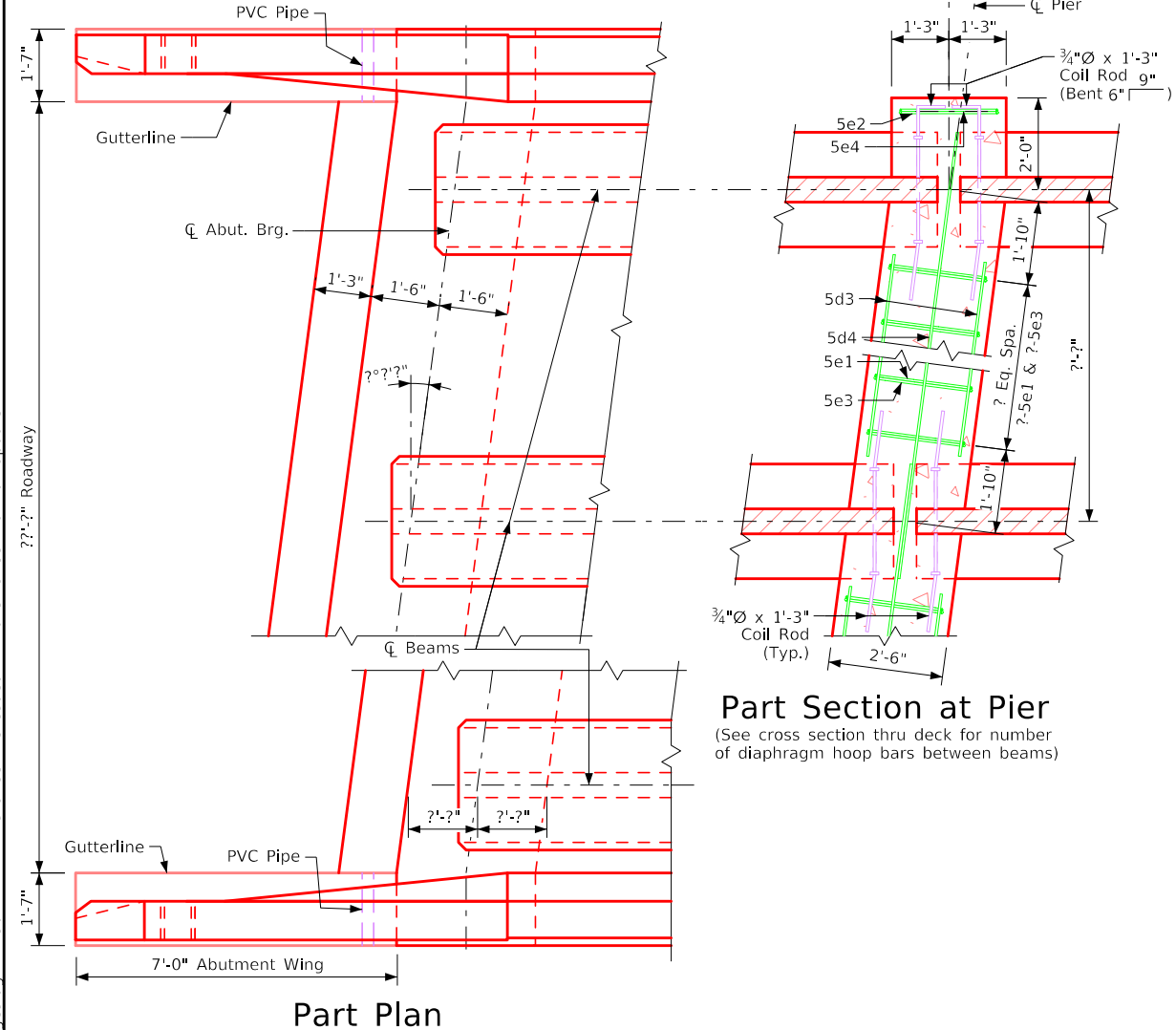
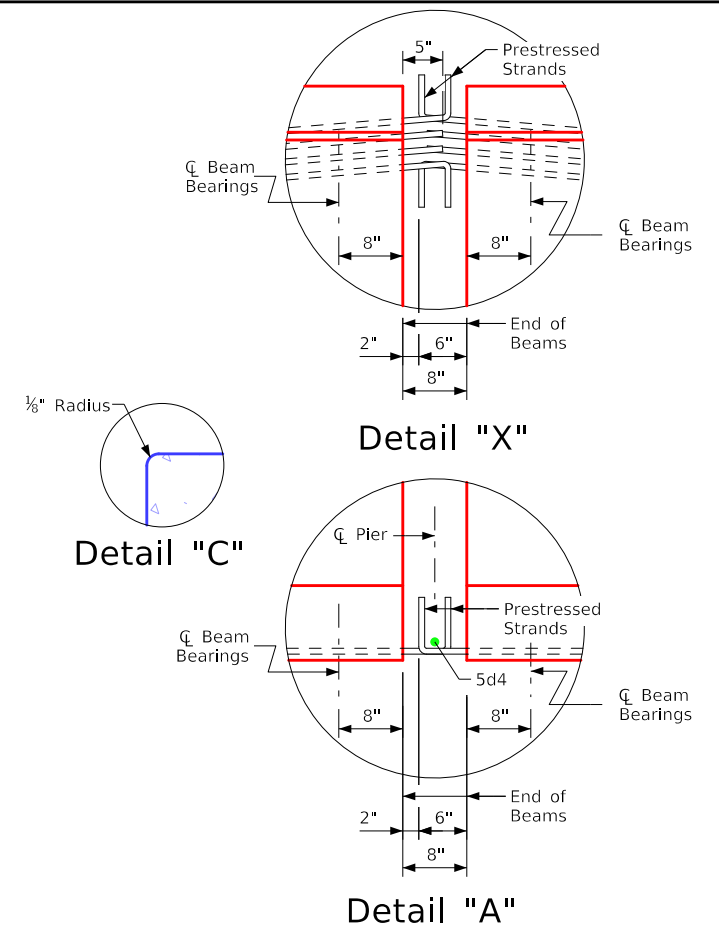
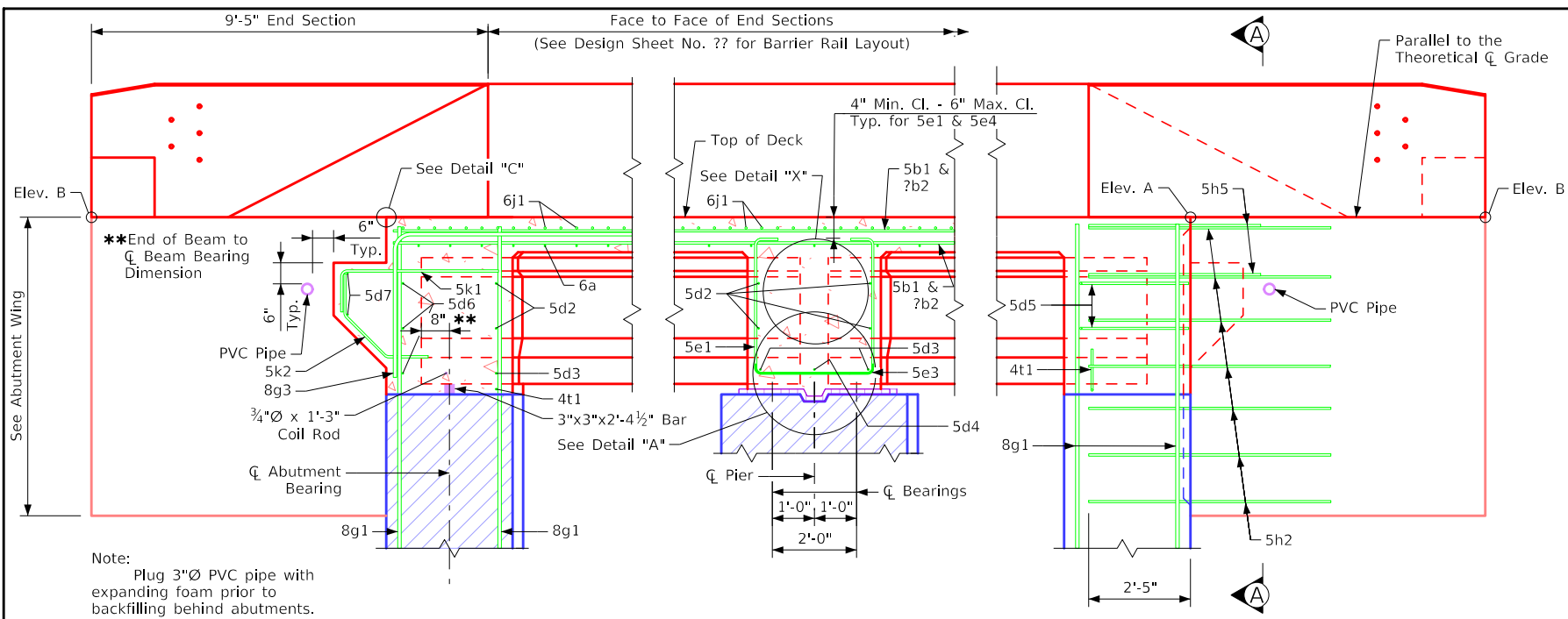
**Section C-C**

Table of Wingwall Elevations			
Location	Dim "C"	Elev. A	Elev. B
S.W. Corner	?'-7"	???.7	???.7
N.W. Corner	?'-7"	???.7	???.7
S.E. Corner	?'-7"	???.7	???.7
N.E. Corner	?'-7"	???.7	???.7

Abut. & Pier Diaphragm Details

Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4500-BTB - This Sheet Re-Issued 11-2023. Sheet Format Update.

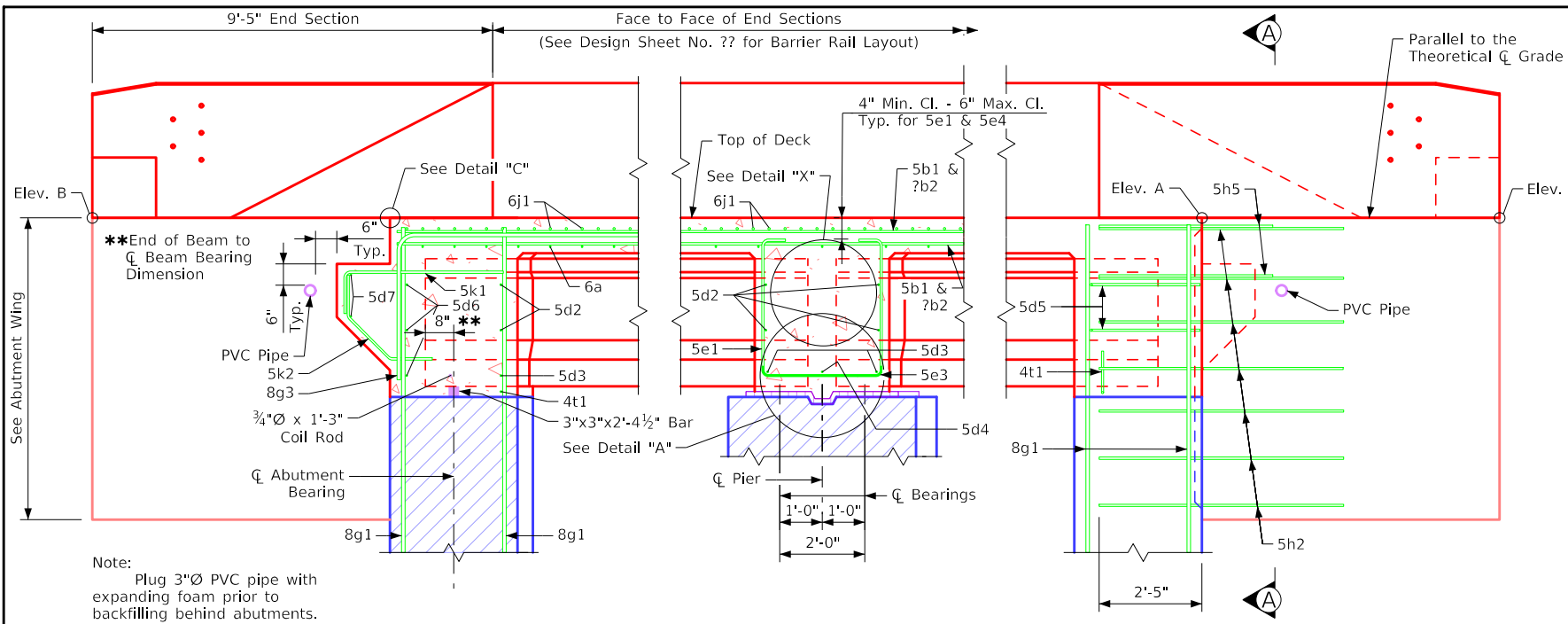




Location	Dim "C"	Elev. A	Elev. B
S.W. Corner	?'-?''	???.?	???.?
N.W. Corner	?'-?''	???.?	???.?
S.E. Corner	?'-?''	???.?	???.?
N.E. Corner	?'-?''	???.?	???.?

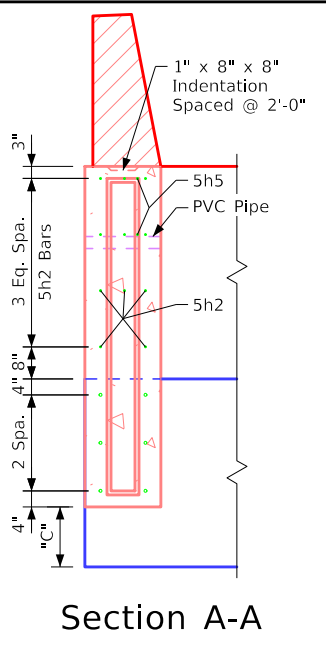
Abut. & Pier Diaphragm Details

Issued 02-08.  
 Revised 08-2024; Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4501-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.

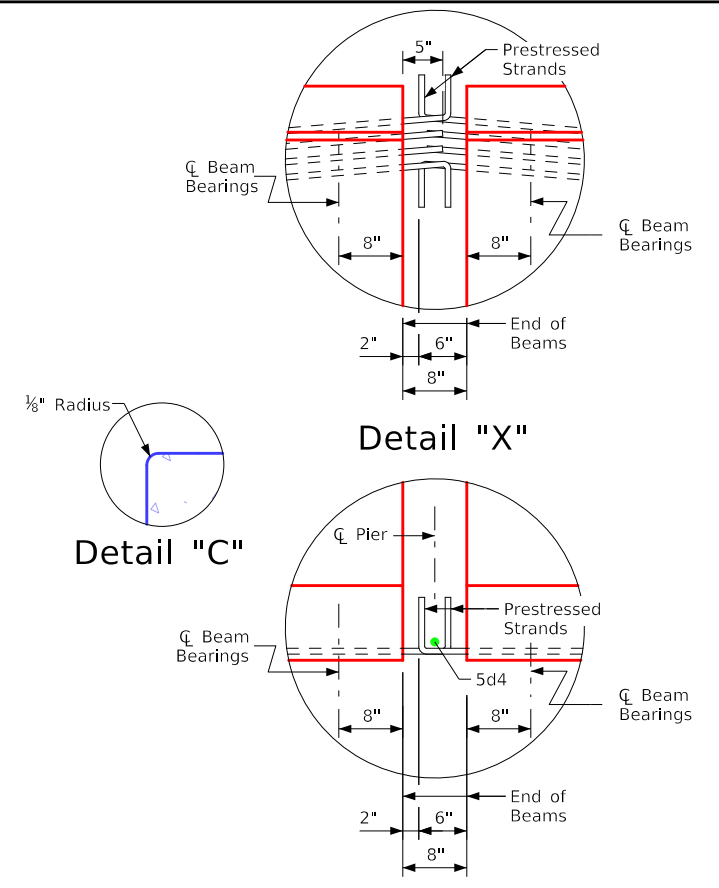


**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**



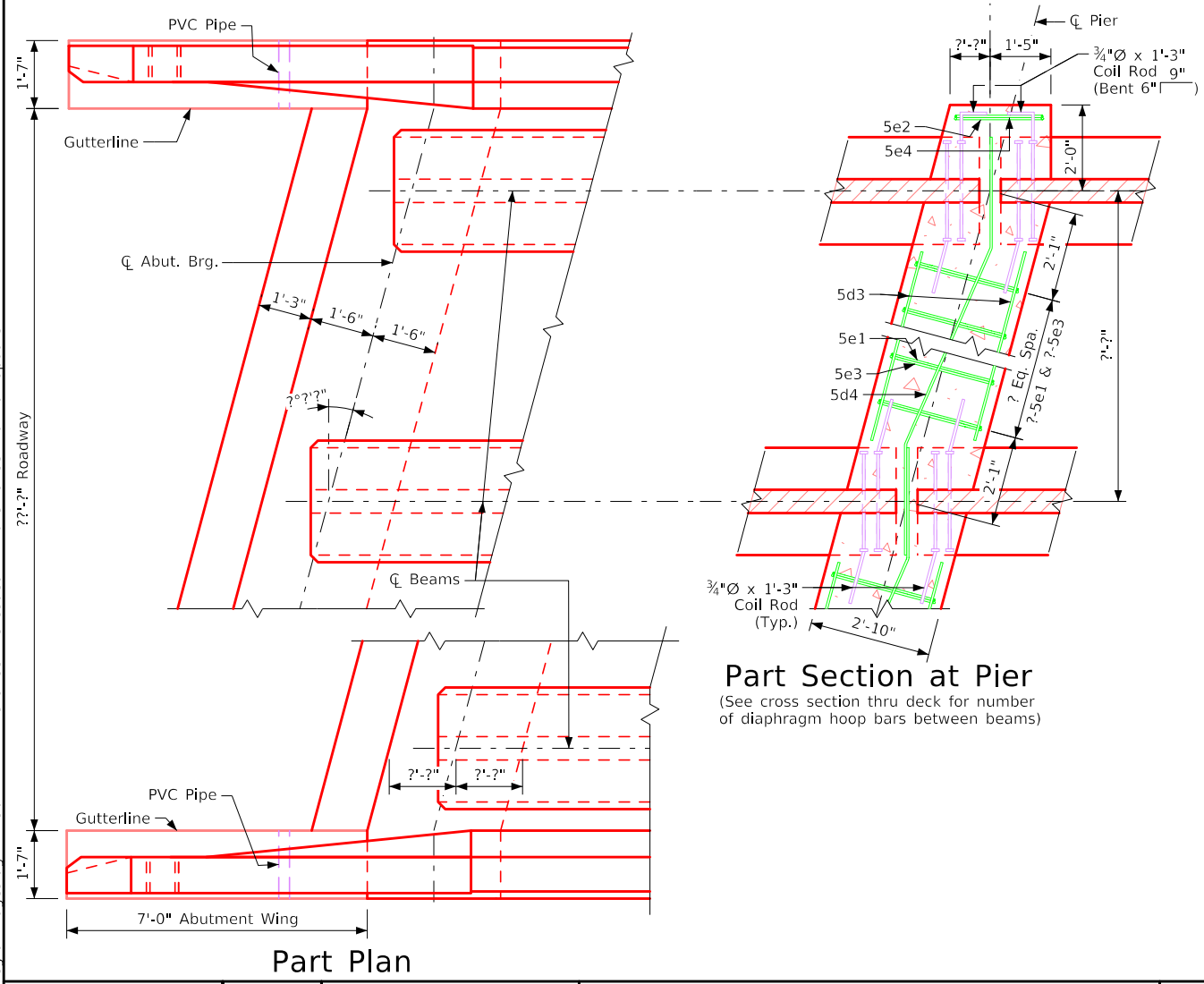
**Section A-A**



**Detail "X"**

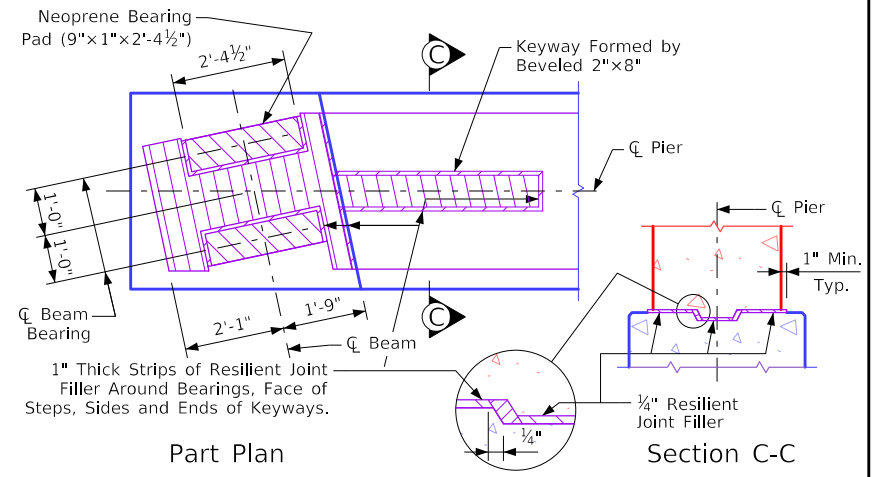
**Detail "C"**

**Detail "A"**



**Part Plan**

**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)

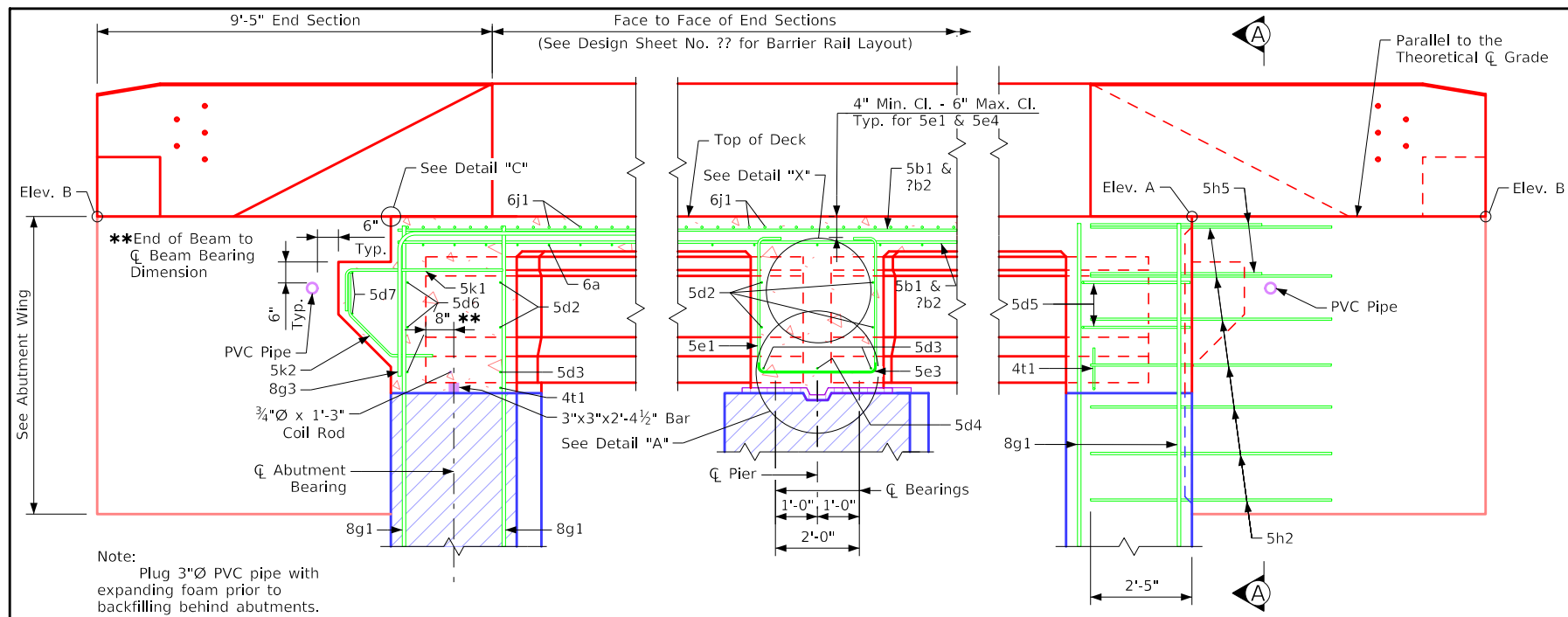


**Top of Fixed Pier Details**

Table of Wingwall Elevations			
Location	Dim "C"	Elev. A	Elev. B
S.W. Corner	?'-?''	???.?	???.?
N.W. Corner	?'-?''	???.?	???.?
S.E. Corner	?'-?''	???.?	???.?
N.E. Corner	?'-?''	???.?	???.?

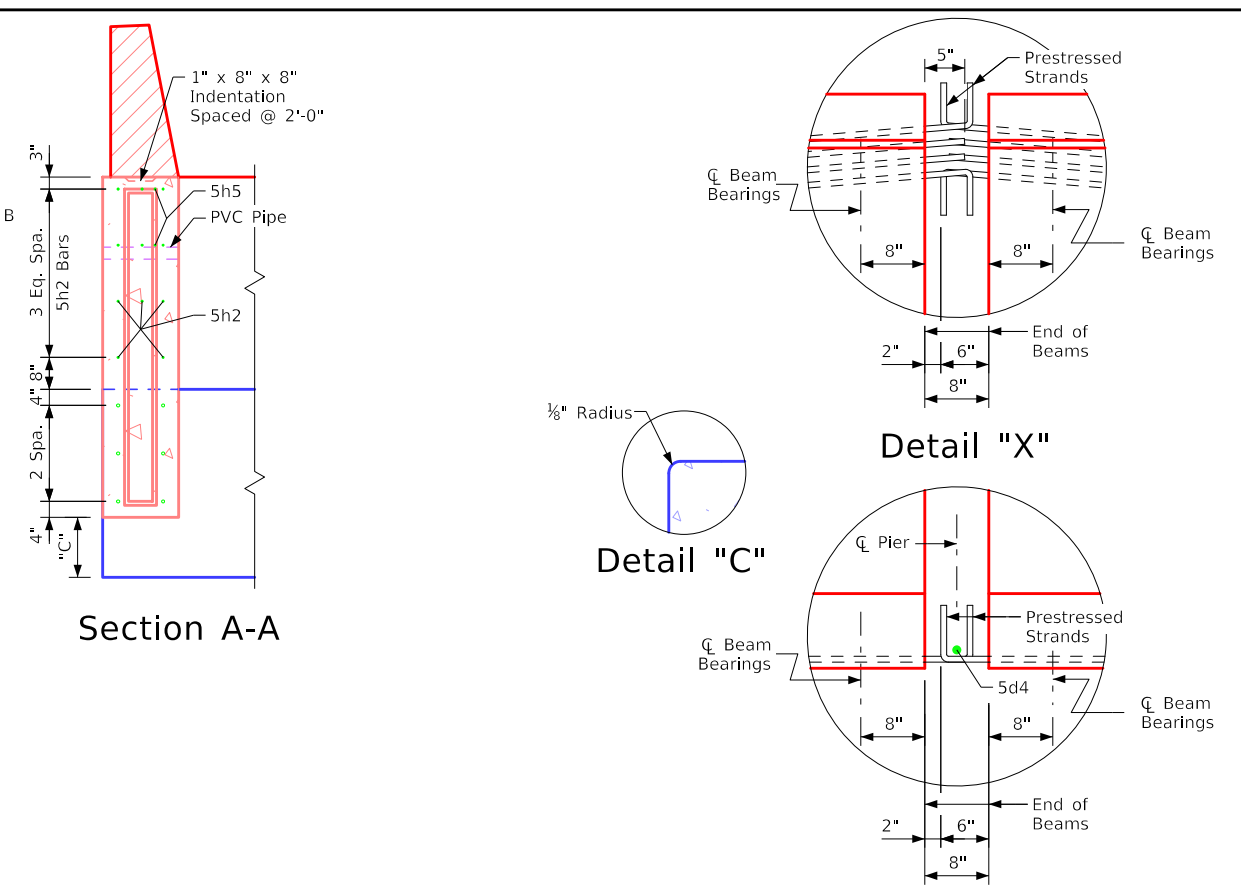
Abut. & Pier Diaphragm Details

Issued 02-08-2024; Revised 08-2024; Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4502-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.



**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**

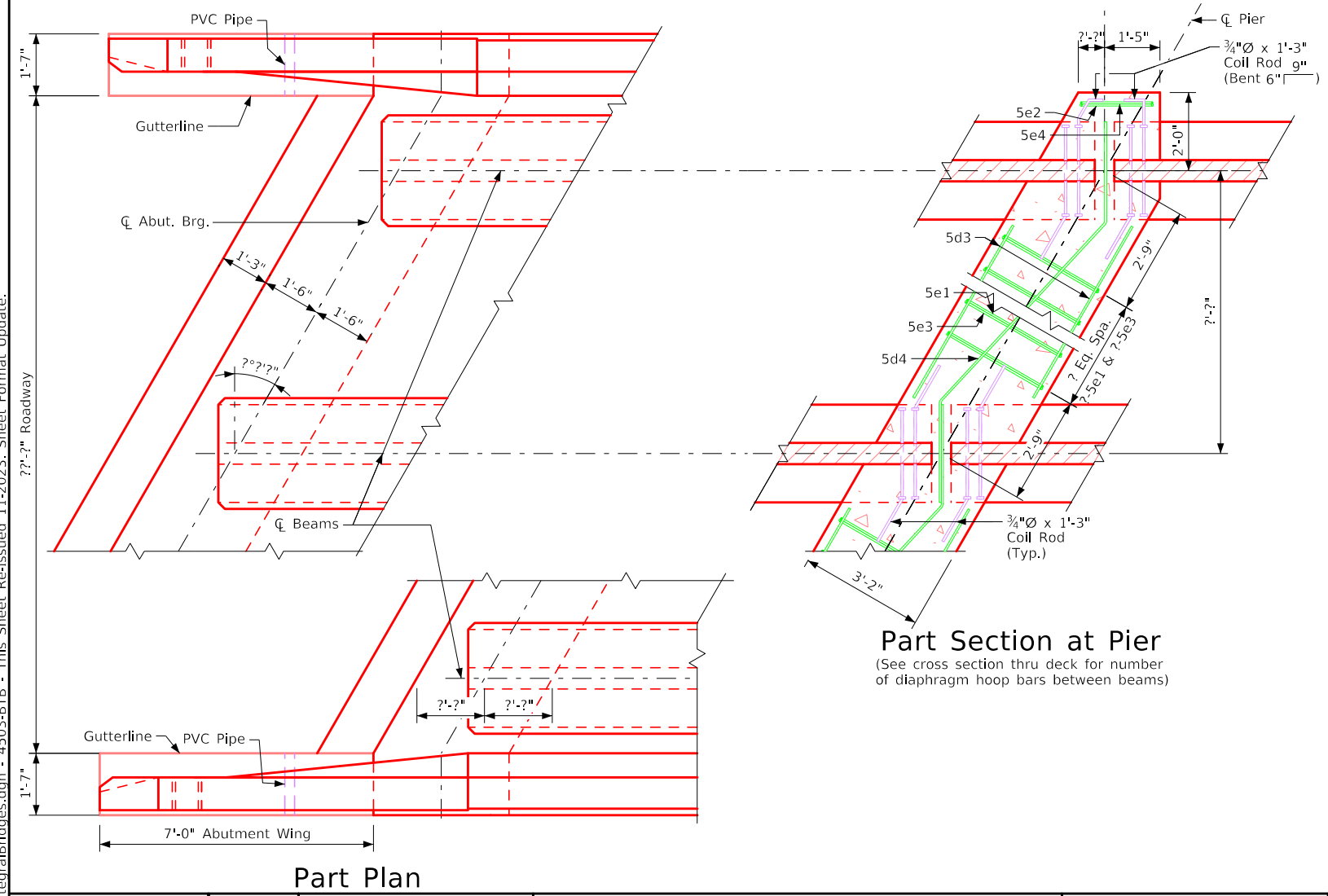


**Section A-A**

**Detail "X"**

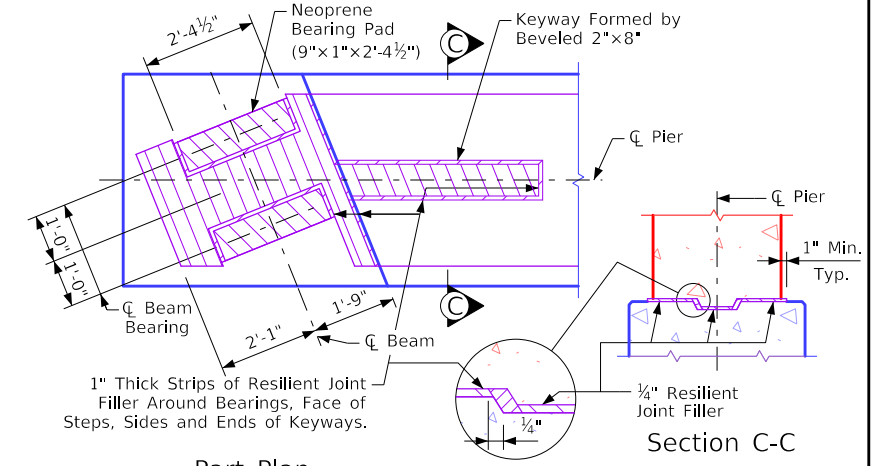
**Detail "C"**

**Detail "A"**



**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)

**Part Plan**

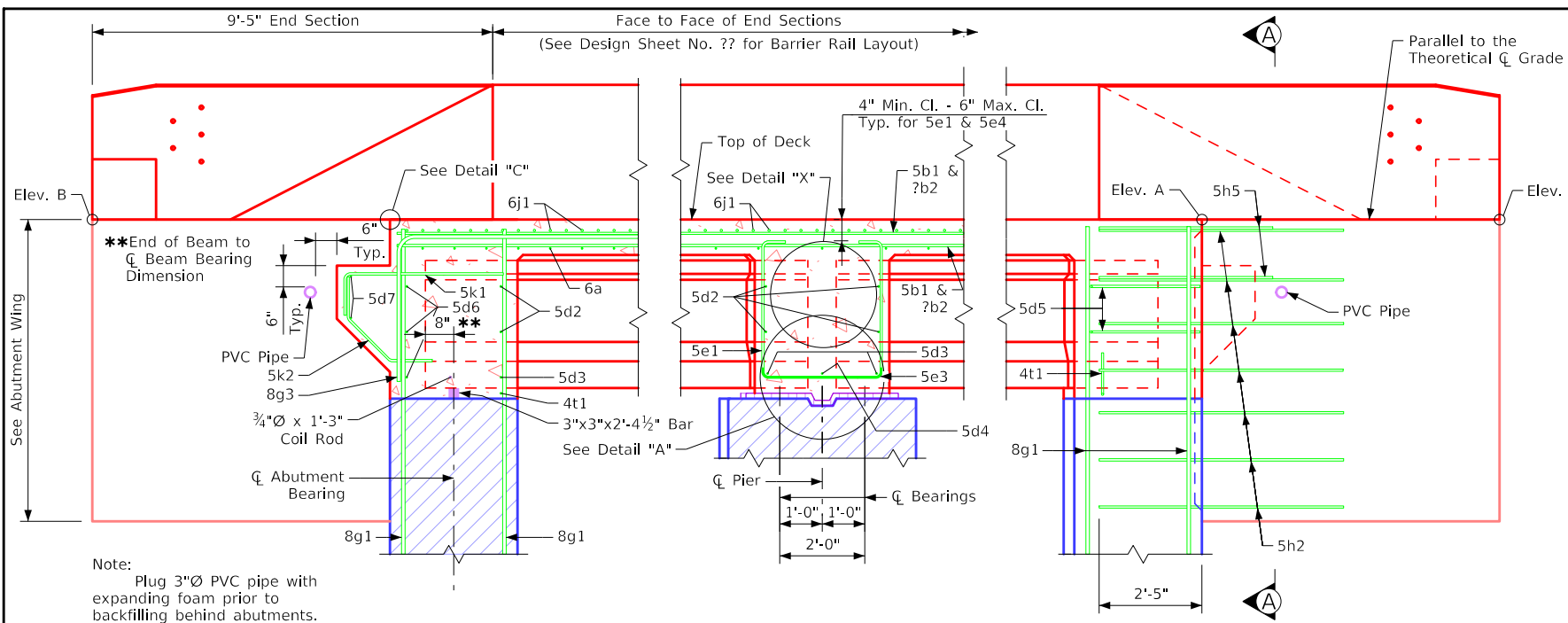


**Part Plan Top of Fixed Pier Details**

Table of Wingwall Elevations			
Location	Dim "C"	Elev. A	Elev. B
S.W. Corner	?'-?''	???.?	???.?
N.W. Corner	?'-?''	???.?	???.?
S.E. Corner	?'-?''	???.?	???.?
N.E. Corner	?'-?''	???.?	???.?

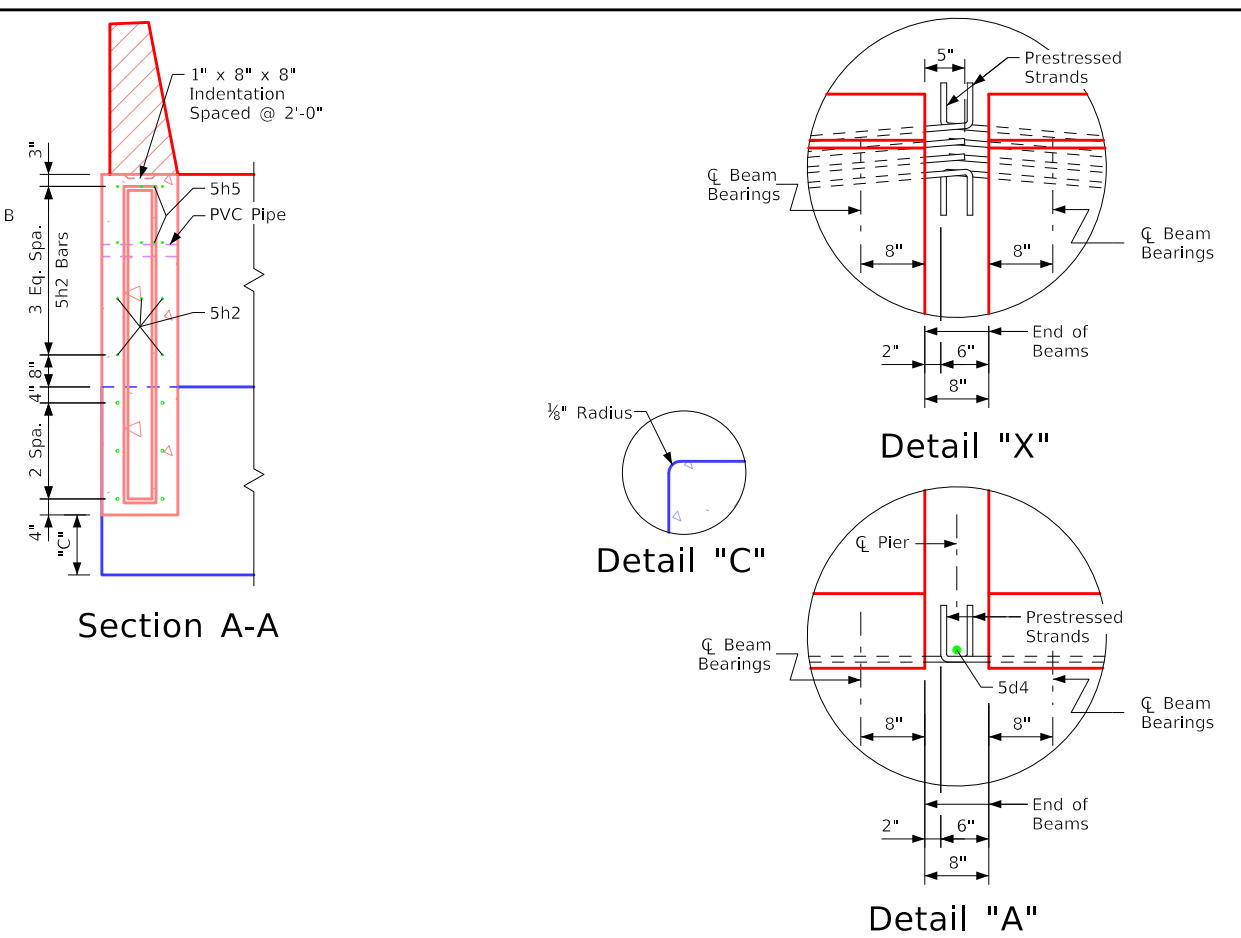
Abut. & Pier Diaphragm Details

Issued 02-08; Revised 08-2024; Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4503-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.



**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**

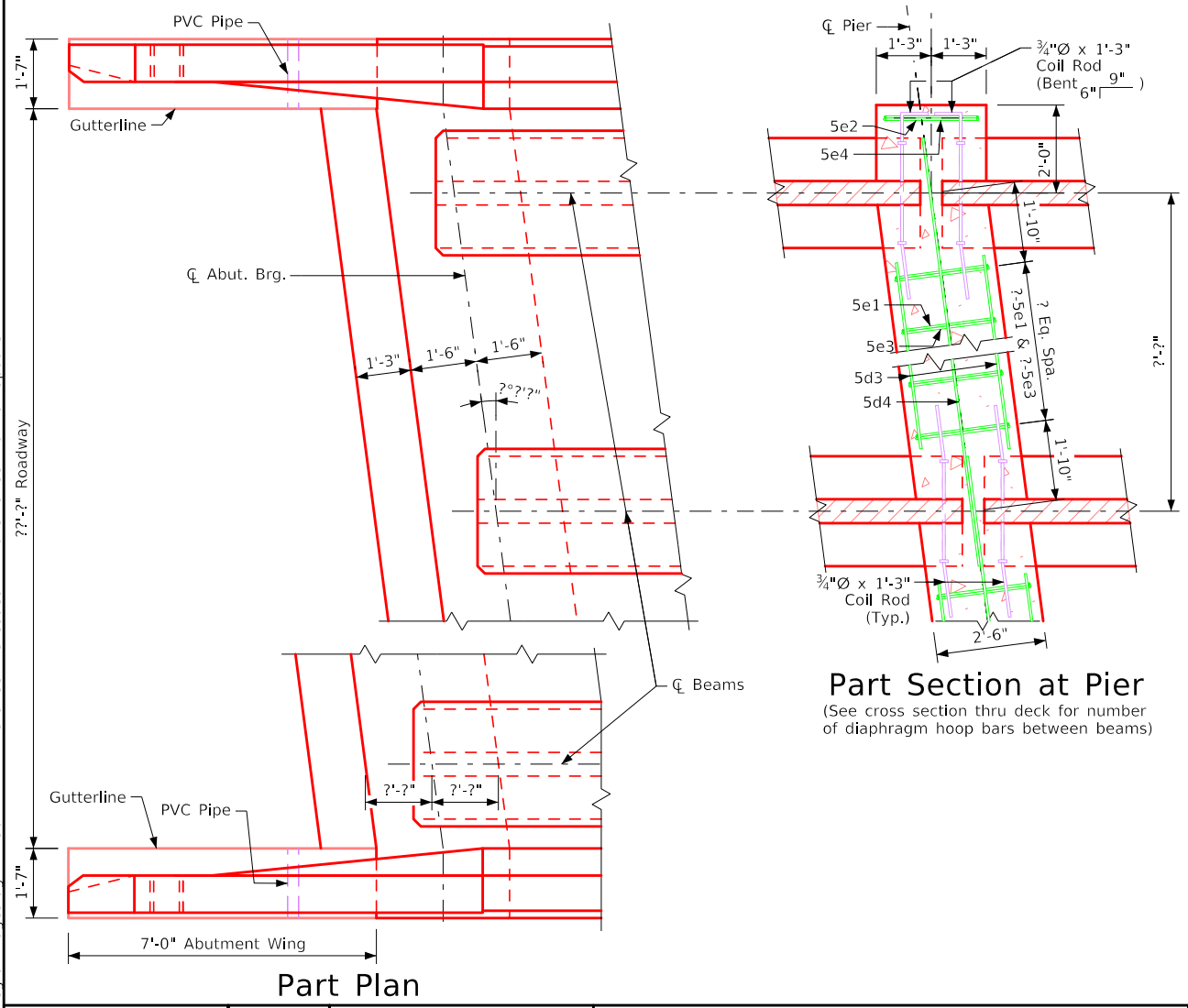


**Section A-A**

**Detail "X"**

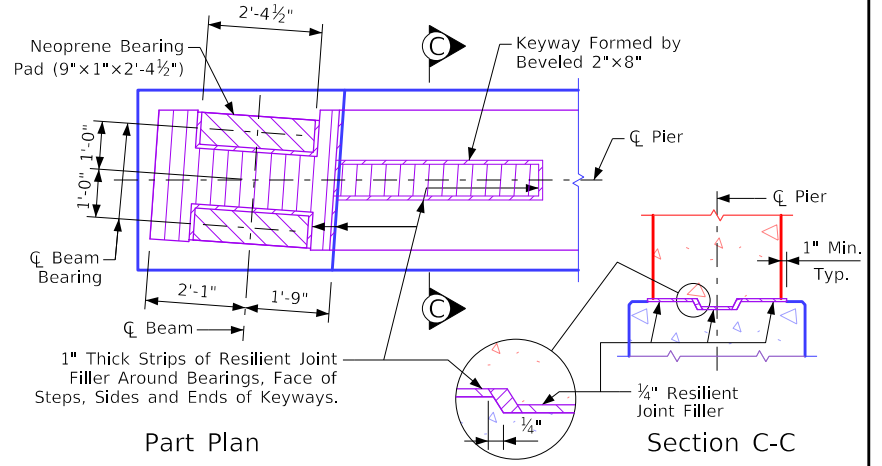
**Detail "C"**

**Detail "A"**



**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)

**Part Plan**

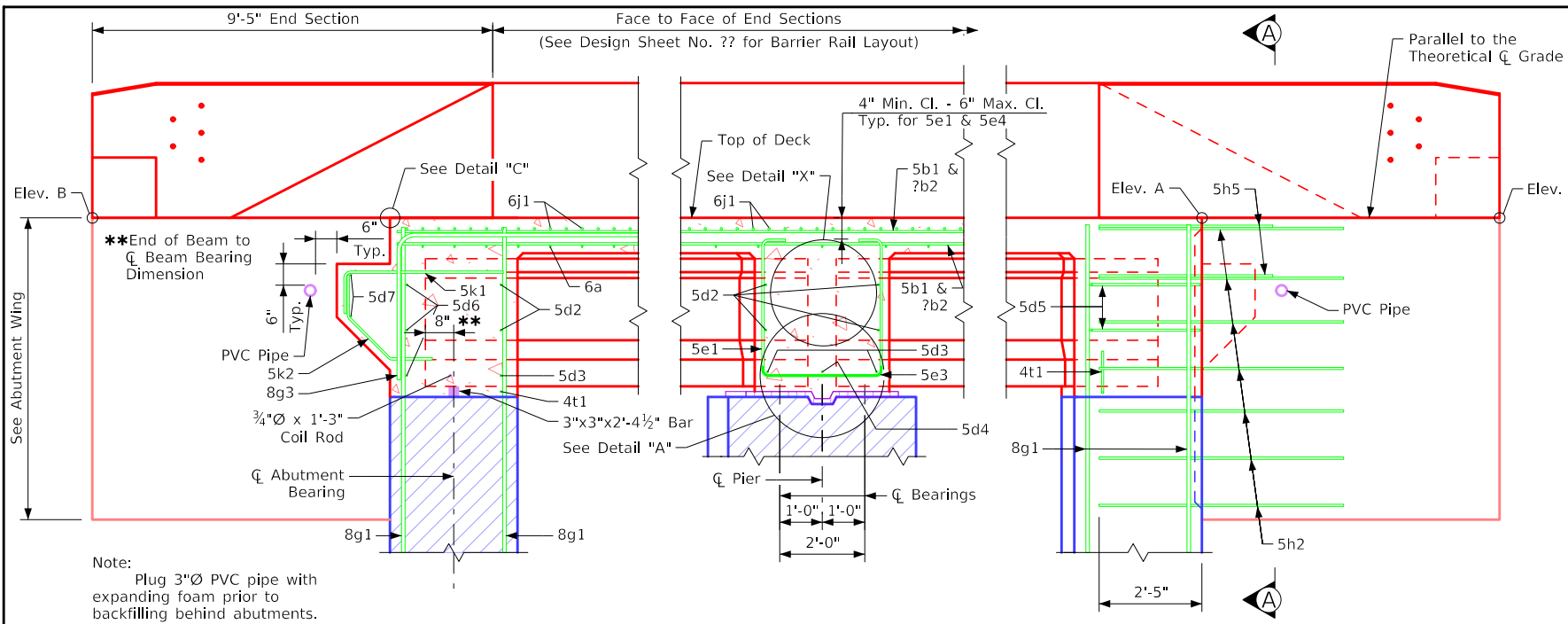


**Top of Fixed Pier Details**

Table of Wingwall Elevations			
Location	Dim. "C"	Elev. A	Elev. B
S.W. Corner	?'-?''	???.?	???.?
N.W. Corner	?'-?''	???.?	???.?
S.E. Corner	?'-?''	???.?	???.?
N.E. Corner	?'-?''	???.?	???.?

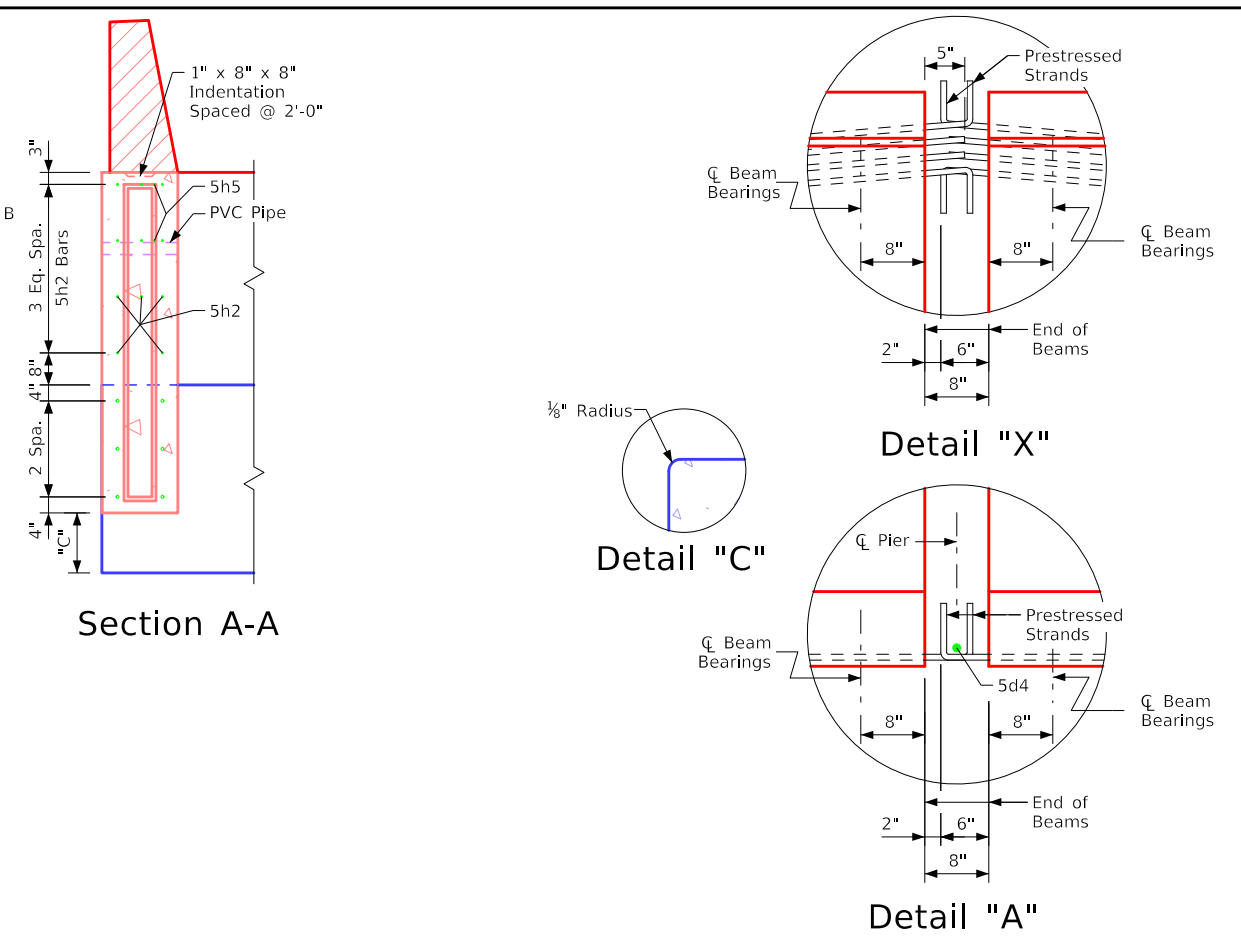
Abut. & Pier Diaphragm Details

Issued 02-08; Revised 08-2024; Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4504-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.  
 5:20:32 PM 7/30/2024 bkloss pw:\NTP\wint1.dot.int.lan:PWMain\Documents\Highway\Bridges\Standards\Bridges\BTIntegralBridges.dgn



**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**

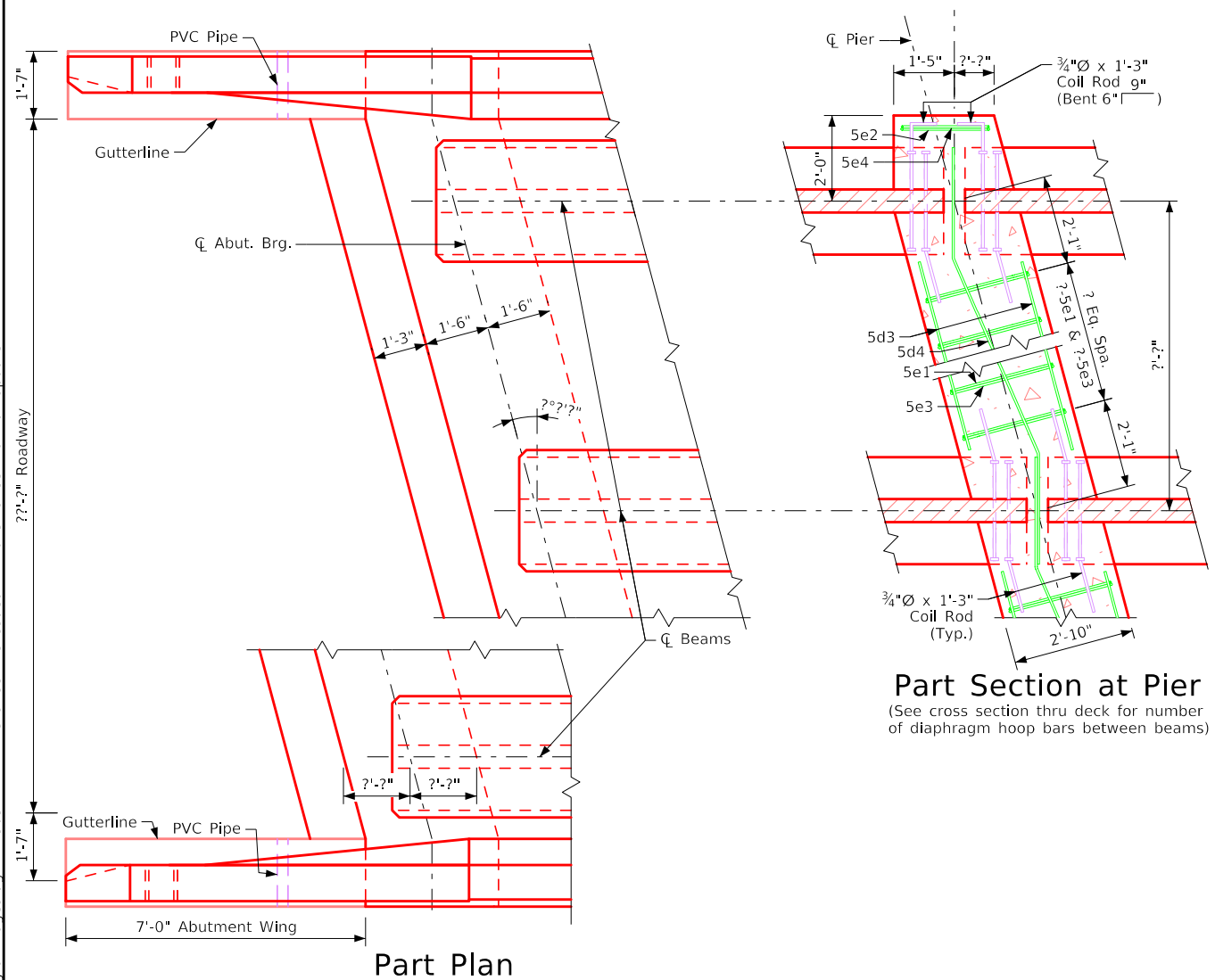


**Section A-A**

**Detail "X"**

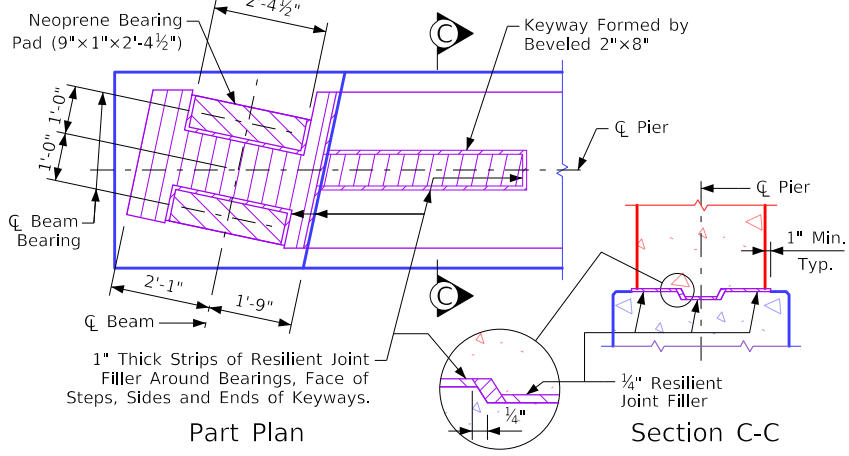
**Detail "C"**

**Detail "A"**



**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)

**Part Plan**

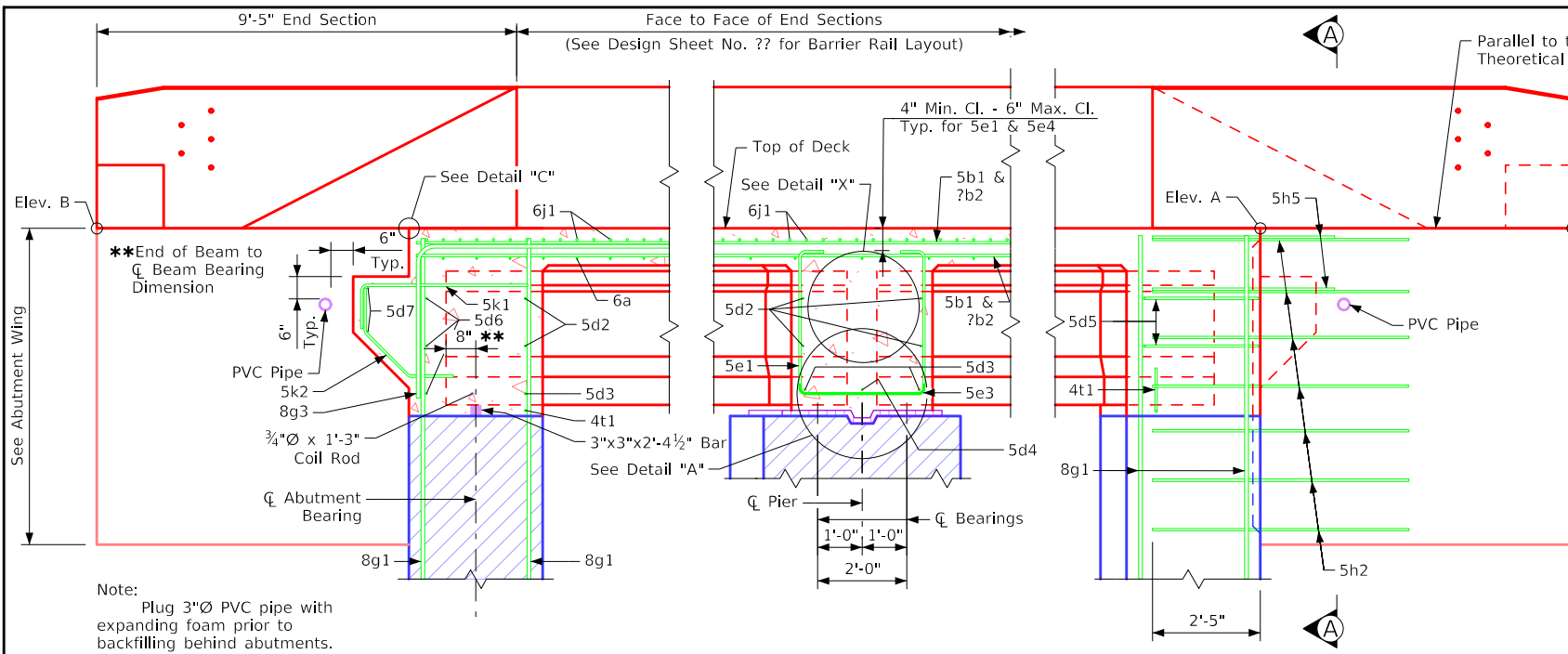


**Top of Fixed Pier Details**

Table of Wingwall Elevations			
Location	Dim "C"	Elev. A	Elev. B
S.W. Corner	2'-7"	???.?	???.?
N.W. Corner	2'-7"	???.?	???.?
S.E. Corner	2'-7"	???.?	???.?
N.E. Corner	2'-7"	???.?	???.?

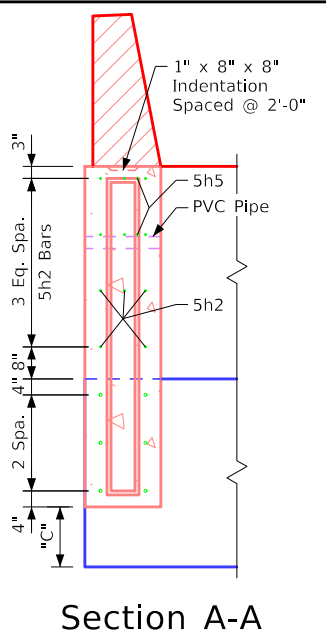
Abut. & Pier Diaphragm Details

Issued 02-08.  
 Revised 08-2024; Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4505-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.

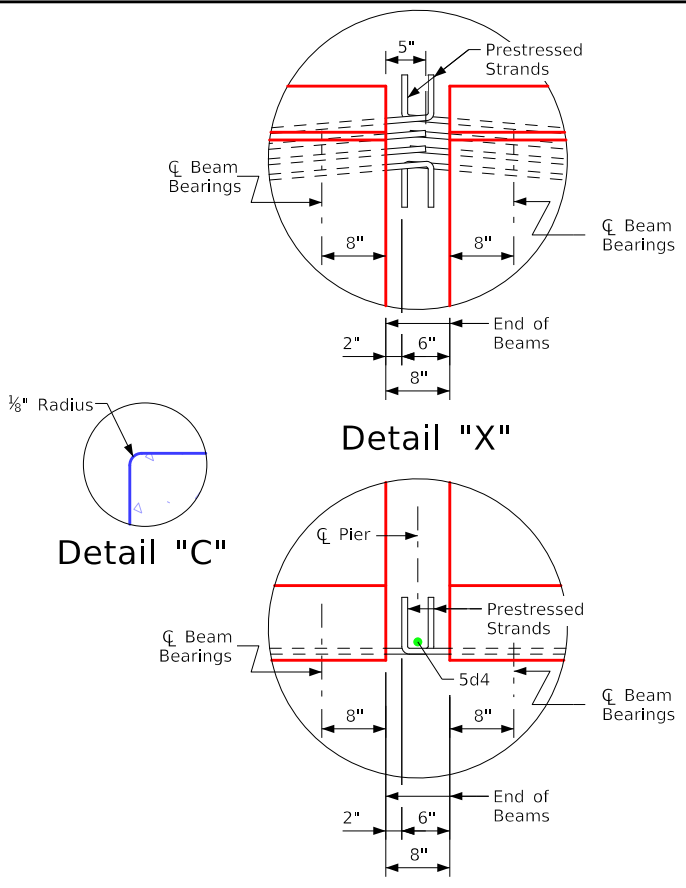


**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**



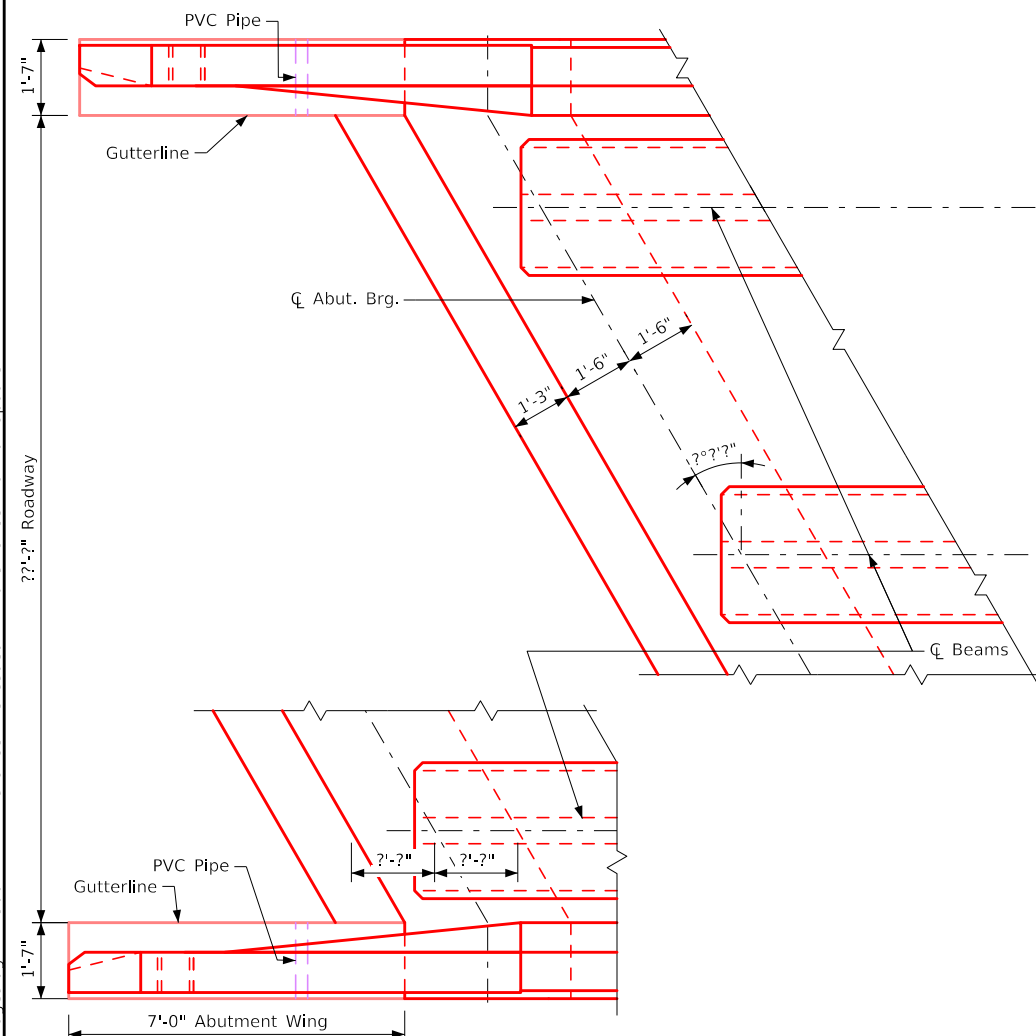
**Section A-A**



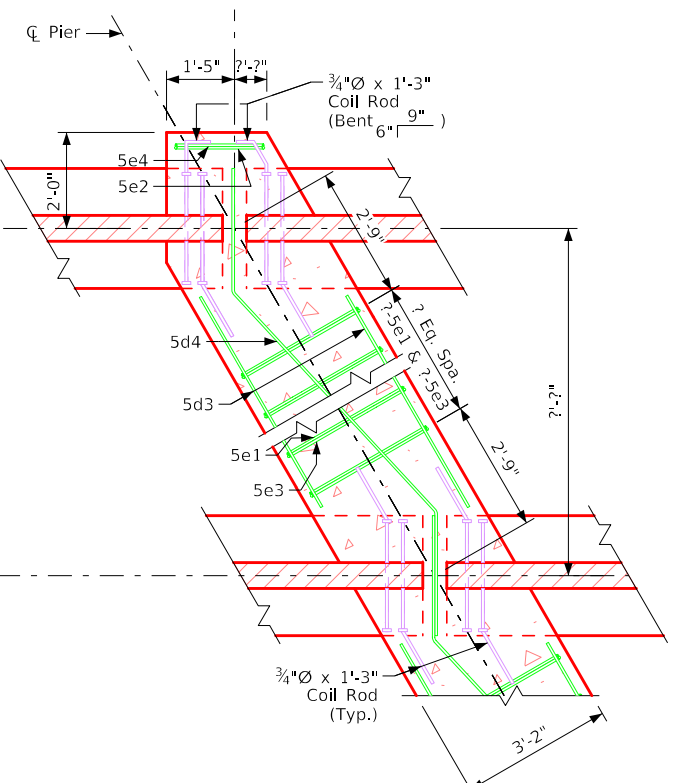
**Detail "X"**

**Detail "C"**

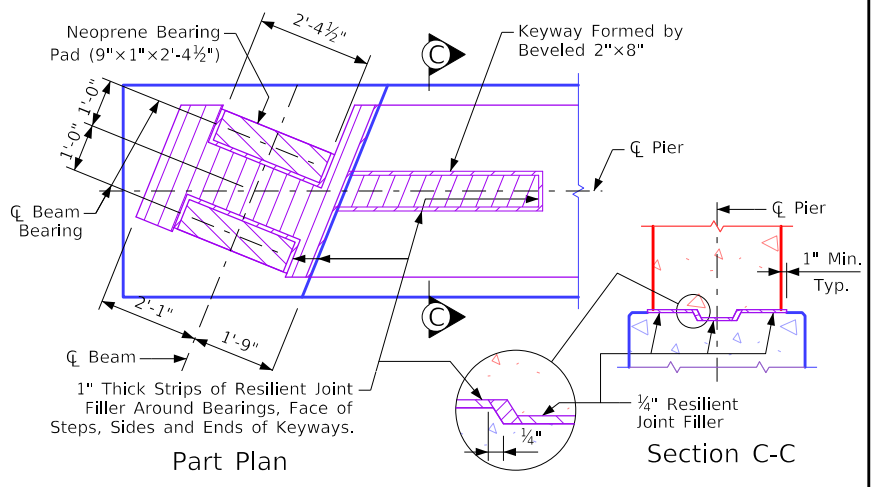
**Detail "A"**



**Part Plan**



**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)

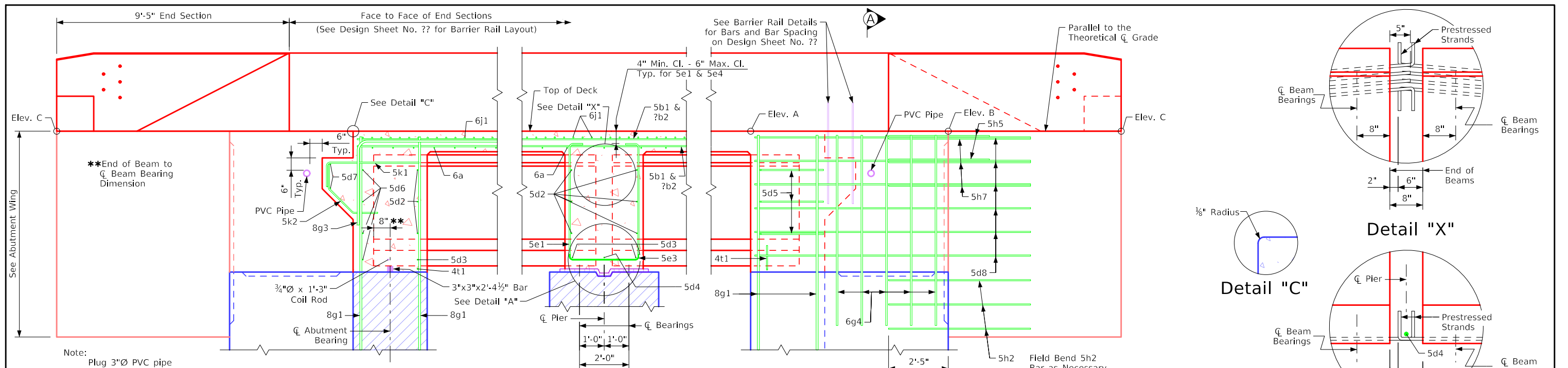


**Top of Fixed Pier Details**

Table of Wingwall Elevations			
Location	Dim "C"	Elev. A	Elev. B
S.W. Corner	??'-??"	???.??	???.??
N.W. Corner	??'-??"	???.??	???.??
S.E. Corner	??'-??"	???.??	???.??
N.E. Corner	??'-??"	???.??	???.??

Abut. & Pier Diaphragm Details

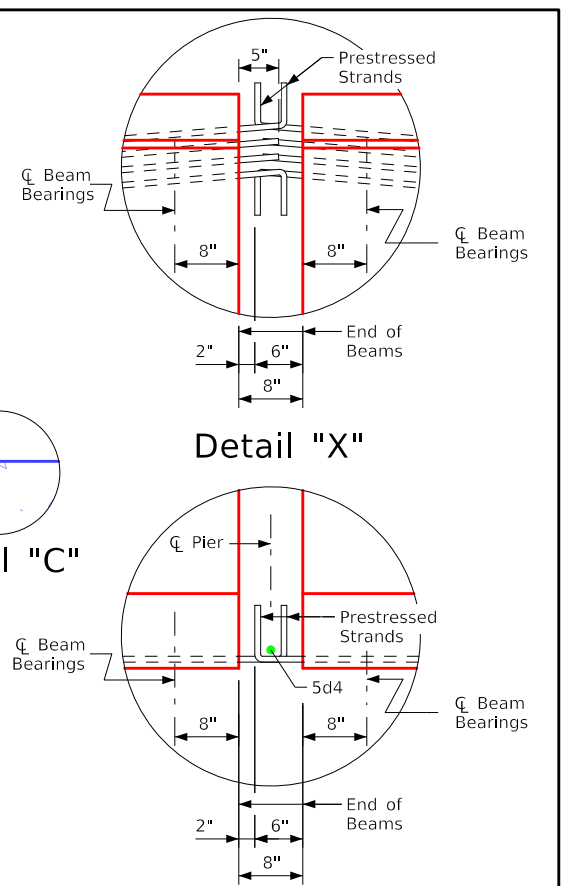
Issued 02-08-2024; Revised 08-2024; Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4506-BTB - This Sheet Re-issued 11-2023. Sheet Format Update.



**Part Longitudinal Section Near Gutter**

(For details of Intermediate Diaphragm see Design Sheet No. ??)

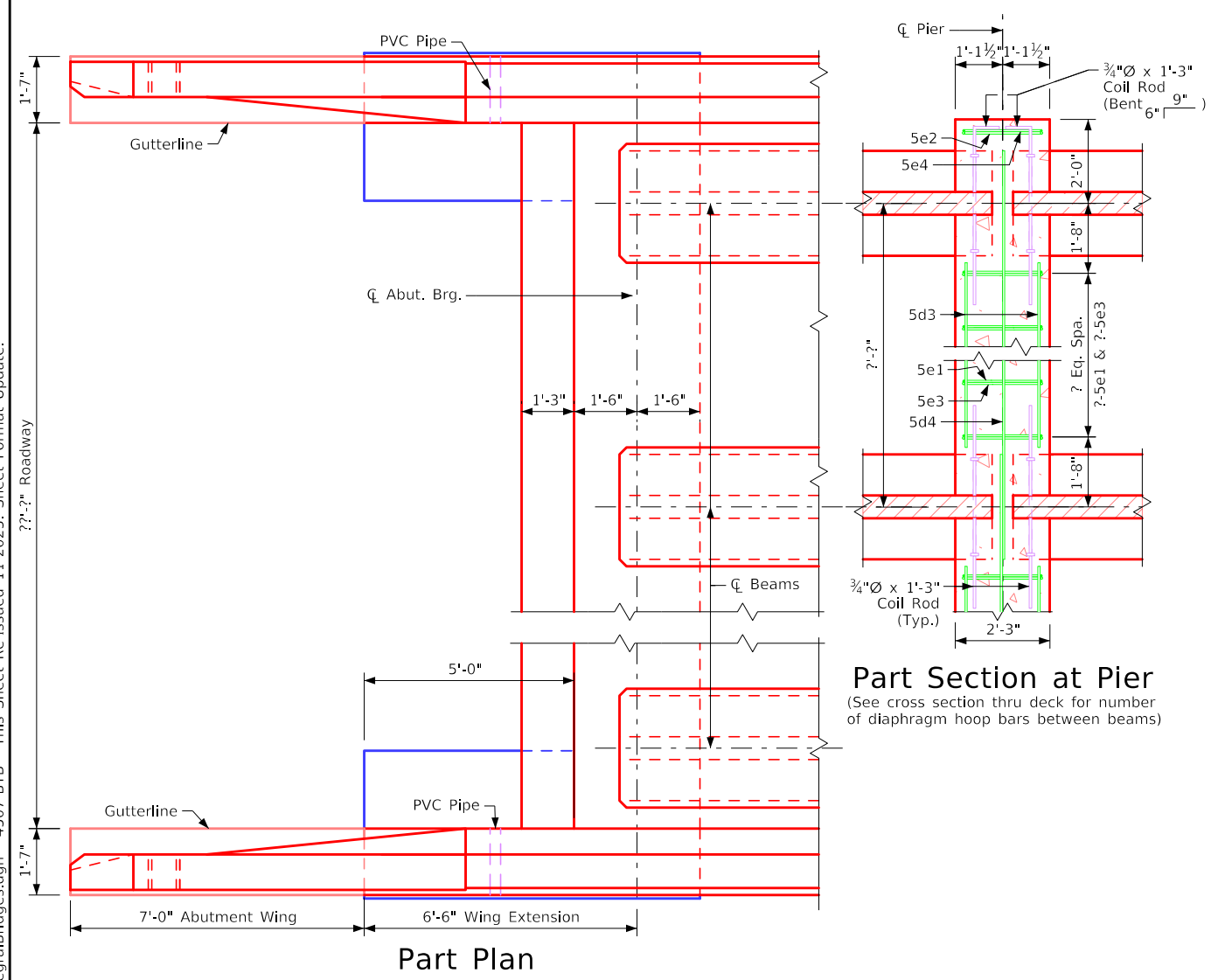
**Part End View at Abutment**



**Detail "X"**

**Detail "C"**

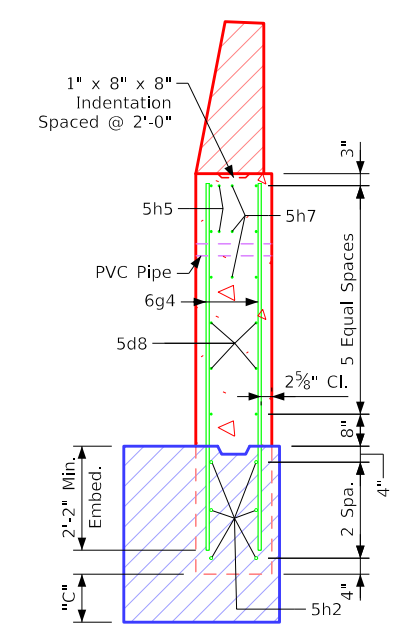
**Detail "A"**



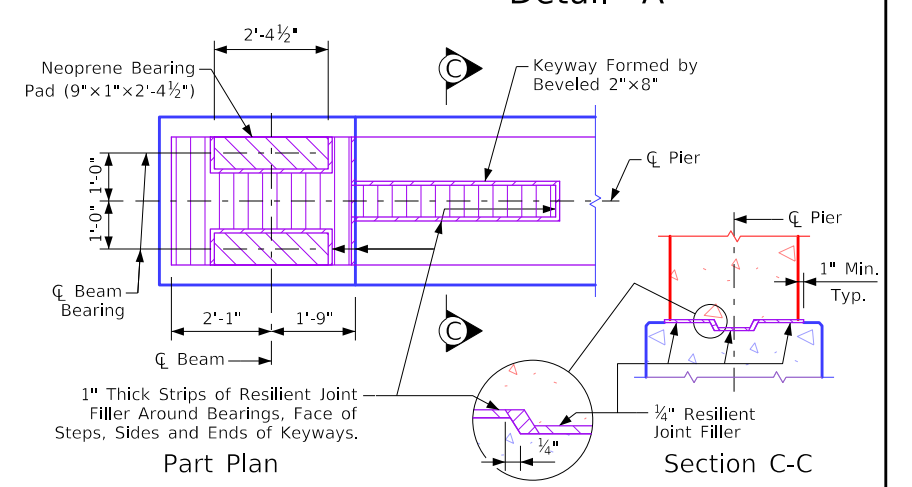
**Part Section at Pier**

(See cross section thru deck for number of diaphragm hoop bars between beams)

**Part Plan**



**Section A-A**

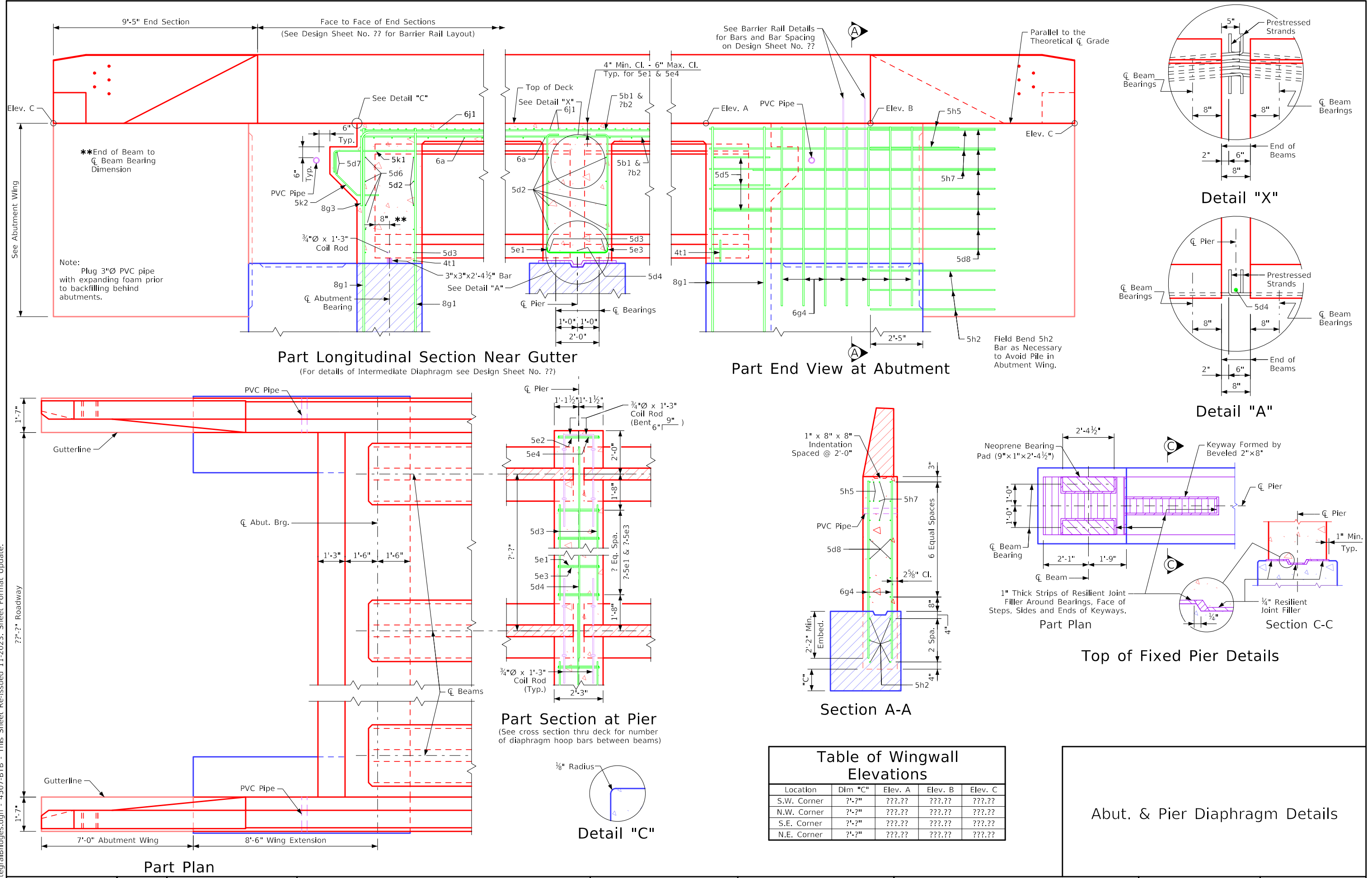


**Top of Fixed Pier Details**

Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	?'-?''	???.??	???.??	???.??
N.W. Corner	?'-?''	???.??	???.??	???.??
S.E. Corner	?'-?''	???.??	???.??	???.??
N.E. Corner	?'-?''	???.??	???.??	???.??

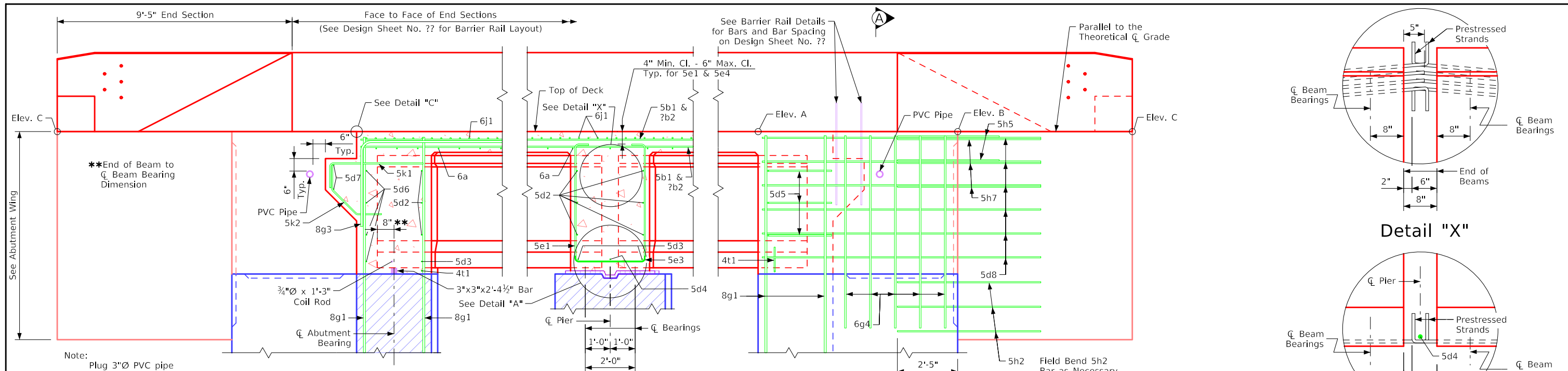
Abut. & Pier Diaphragm Details

Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4507-BTB - This Sheet Re-Issued 11-2023. Sheet Format Update.



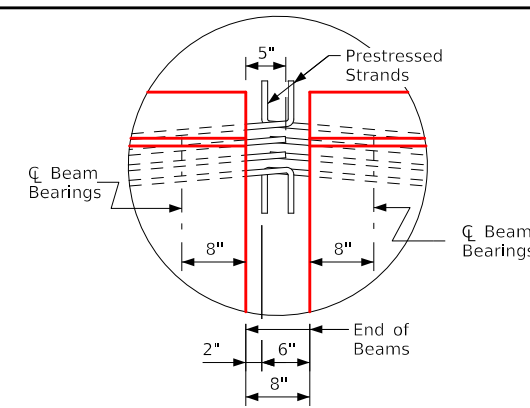
Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4507-BTB - This Sheet Re-Issued 11-2023. Sheet Format Update.



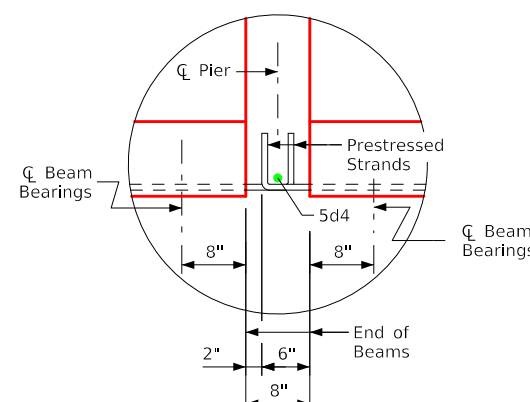


**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

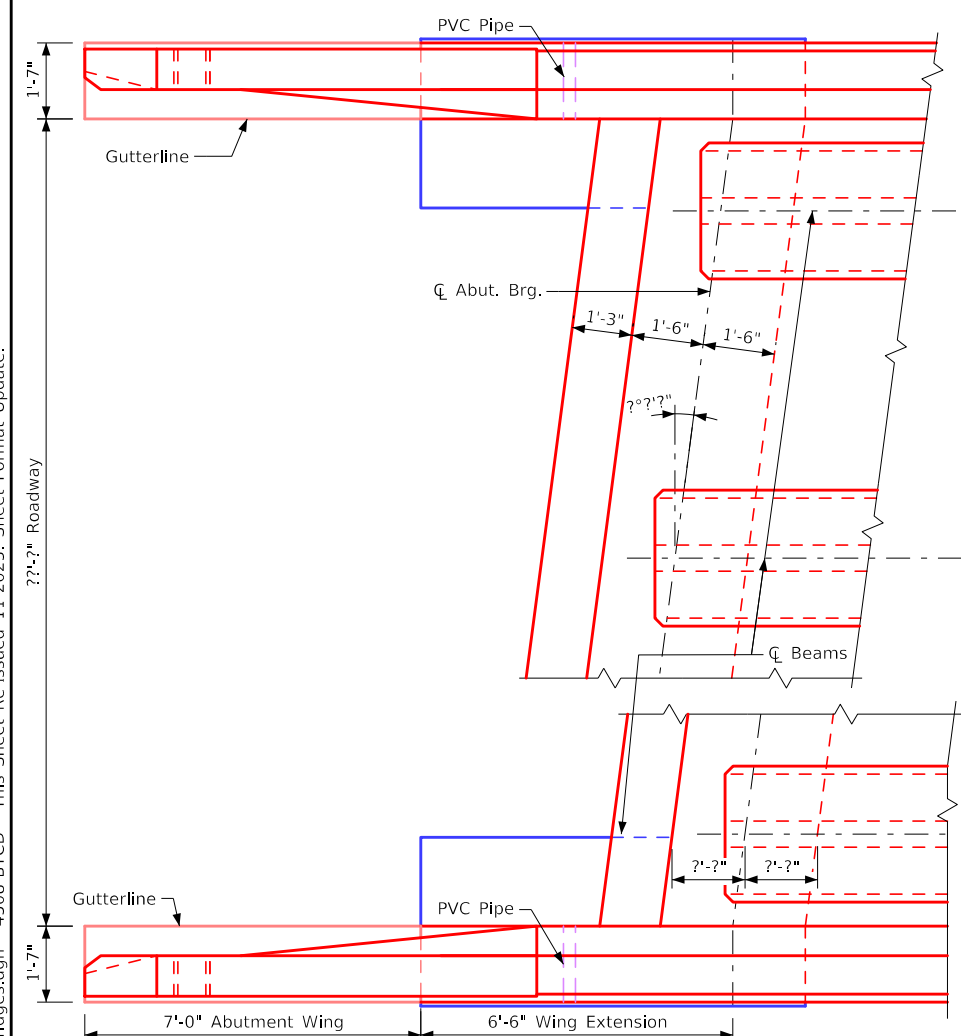
**Part End View at Abutment**



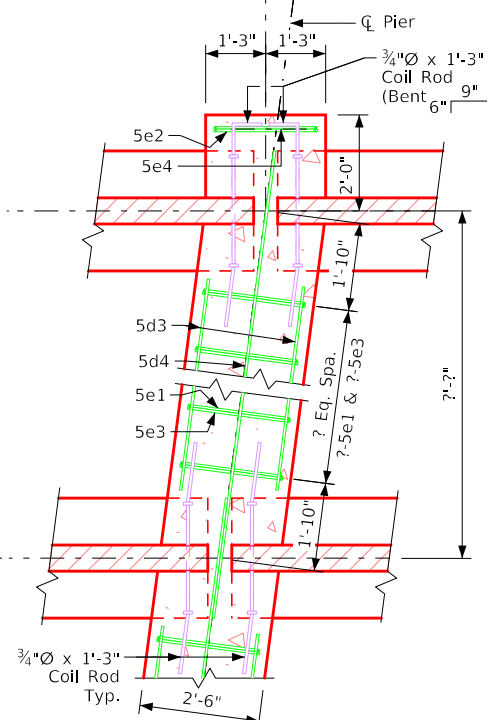
**Detail "X"**



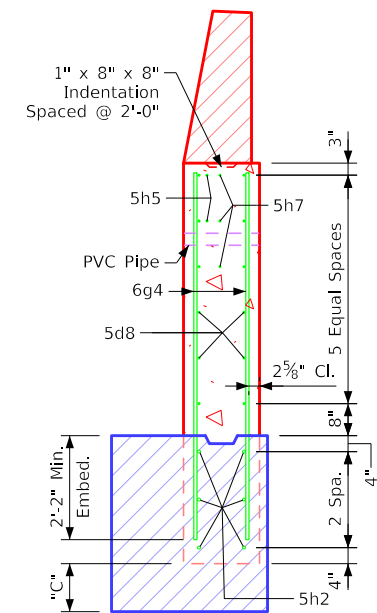
**Detail "A"**



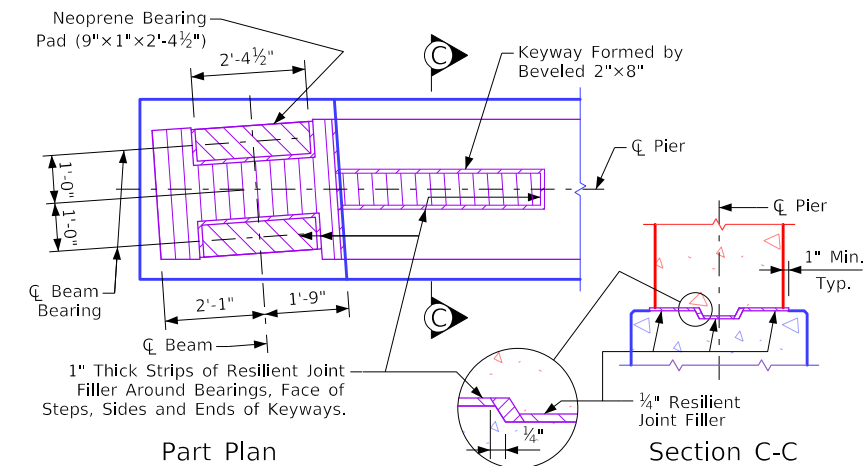
**Part Plan**



**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)

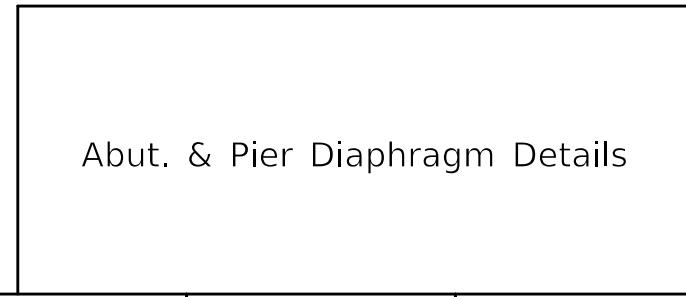


**Section A-A**

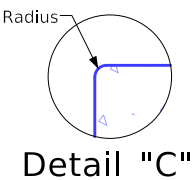


**Top of Fixed Pier Details**

Table of Wingwall Elevations				
Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	7'-7"	???.??	???.??	???.??
N.W. Corner	7'-7"	???.??	???.??	???.??
S.E. Corner	7'-7"	???.??	???.??	???.??
N.E. Corner	7'-7"	???.??	???.??	???.??

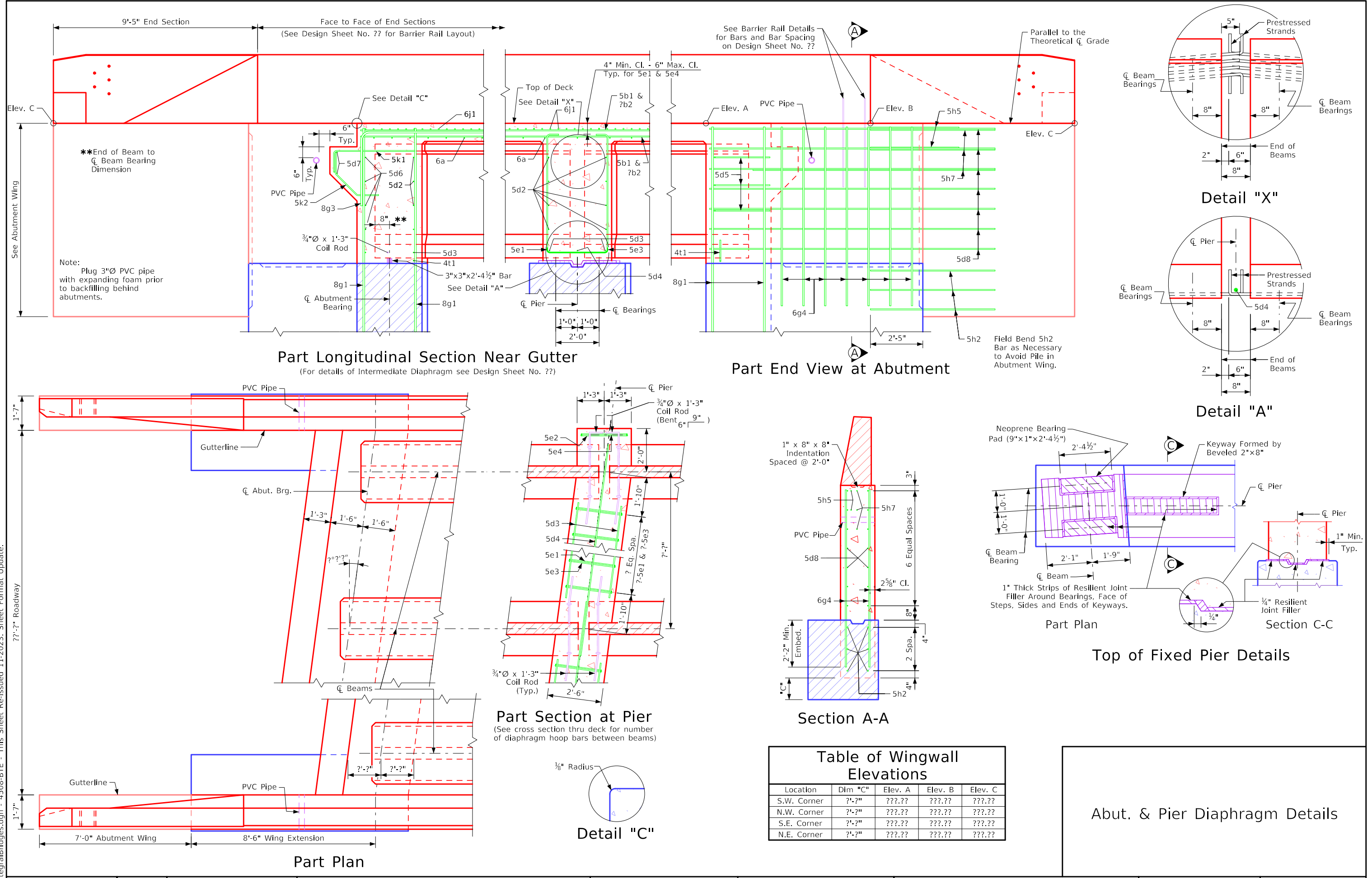


**Abut. & Pier Diaphragm Details**

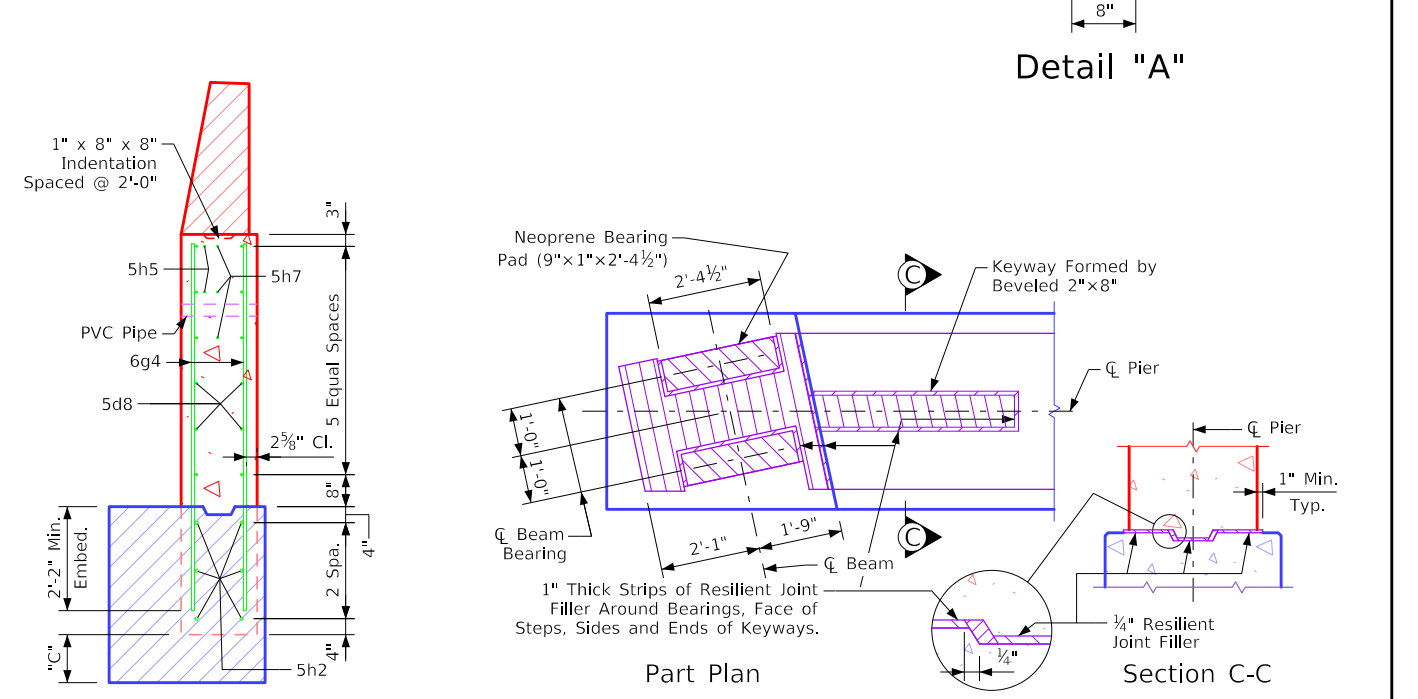
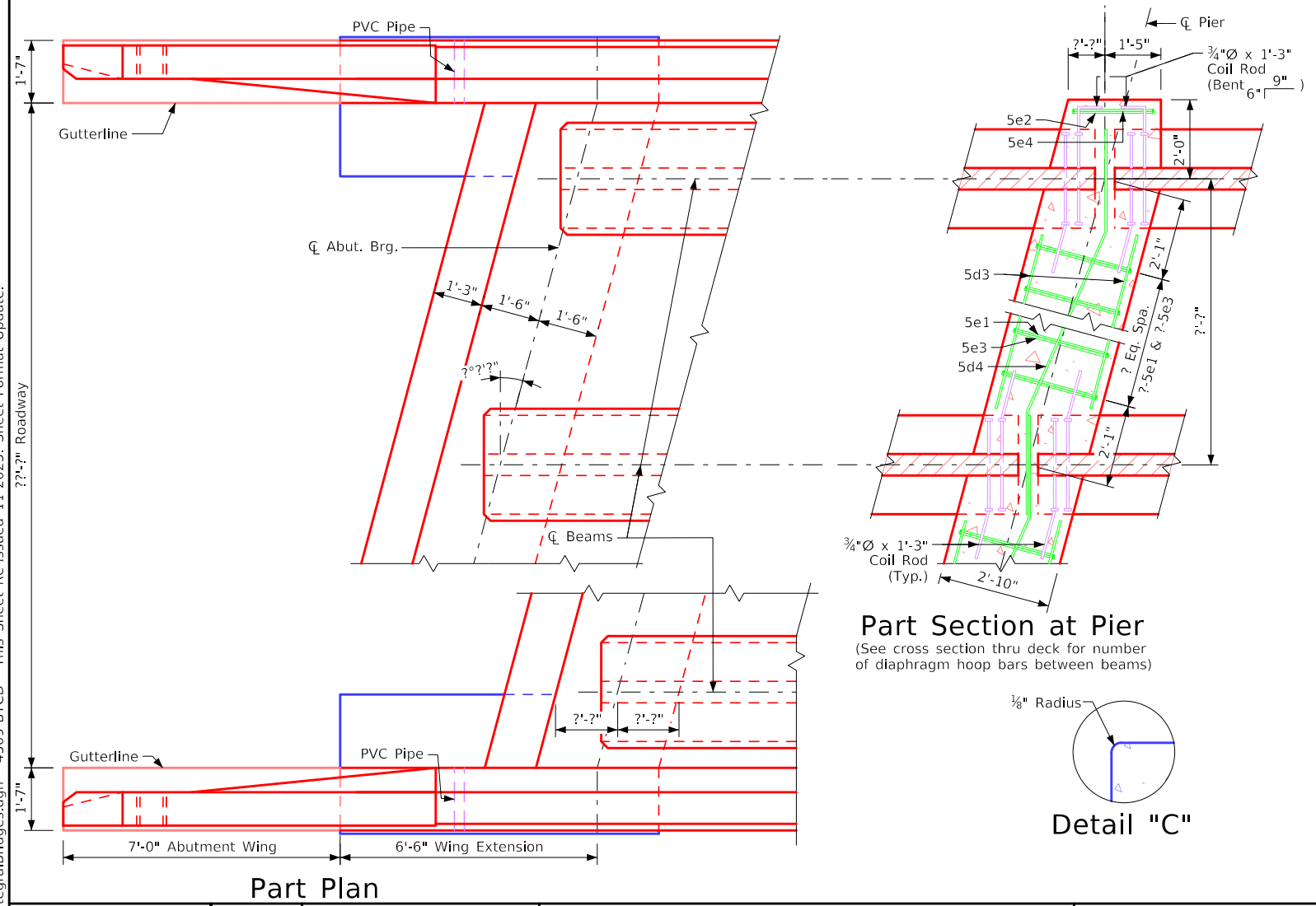
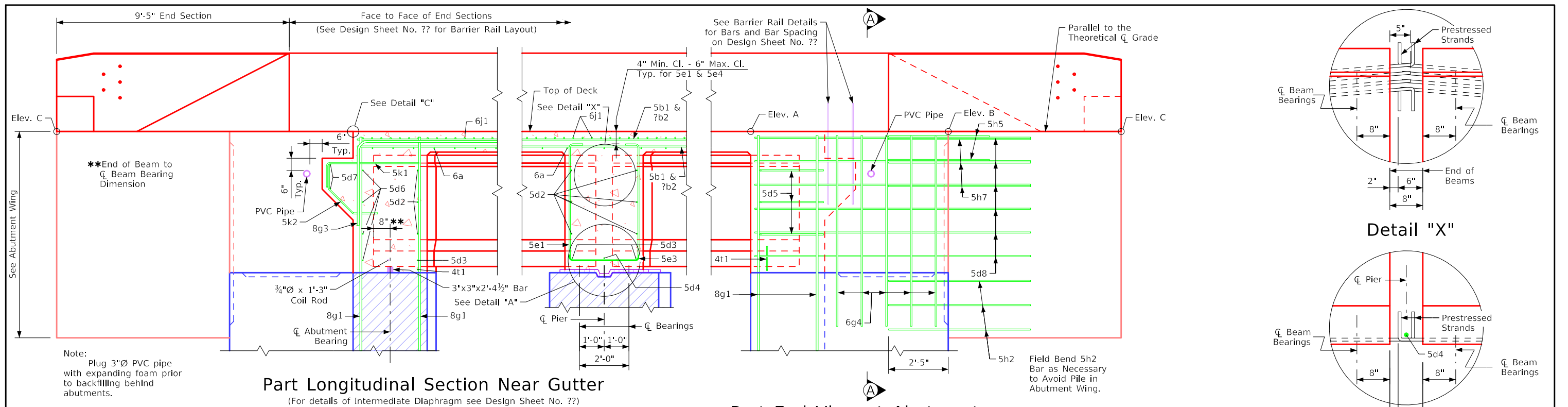


**Detail "C"**

Revised 01-12: Added Field Bend 5h4 Bar To Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4508-BTCD - This Sheet Re-issued 11-2023. Sheet Format Update.



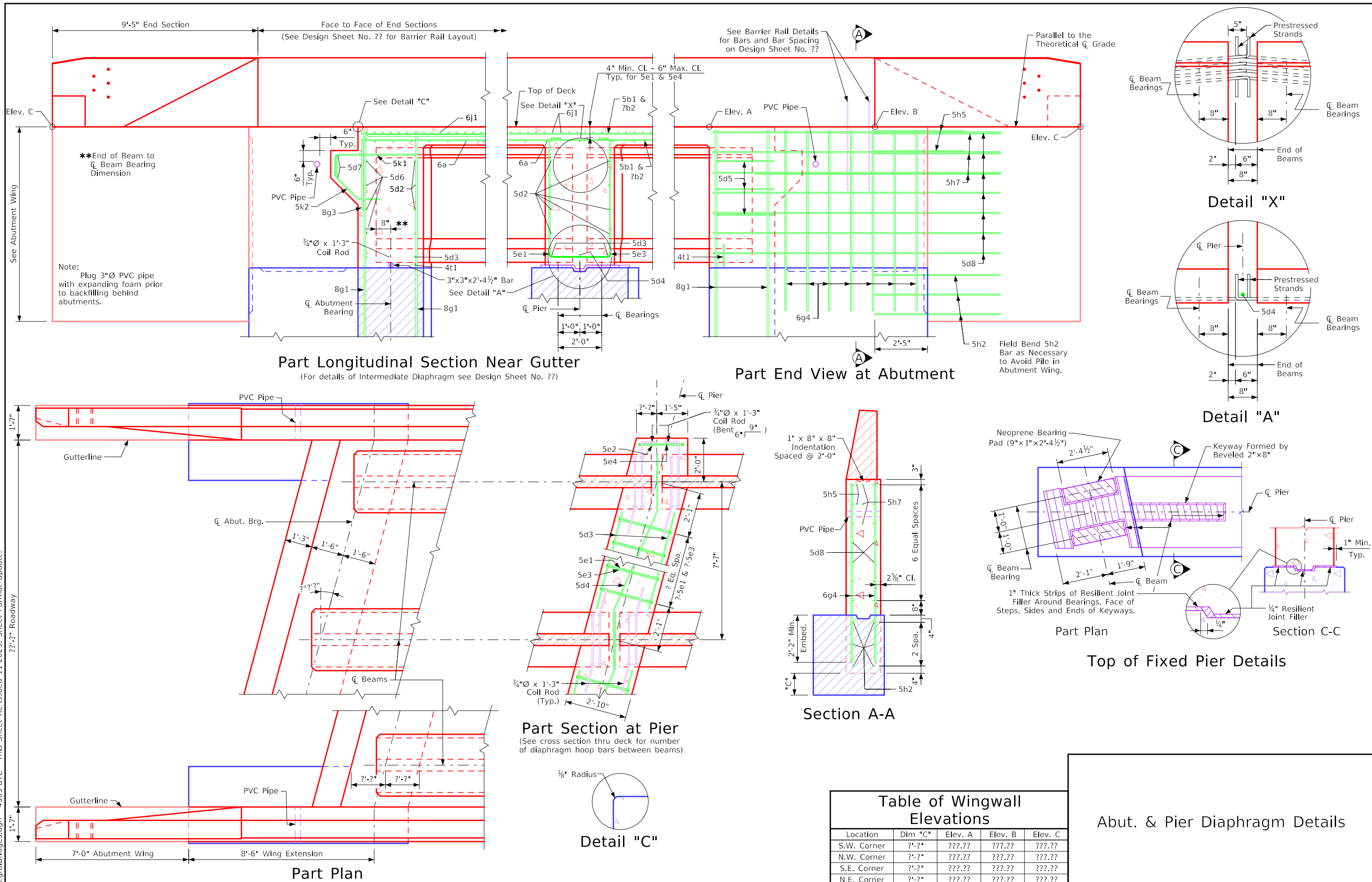
Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4508-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.



Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	7'-7"	???.??	???.??	???.??
N.W. Corner	7'-7"	???.??	???.??	???.??
S.E. Corner	7'-7"	???.??	???.??	???.??
N.E. Corner	7'-7"	???.??	???.??	???.??

Abut. & Pier Diaphragm Details

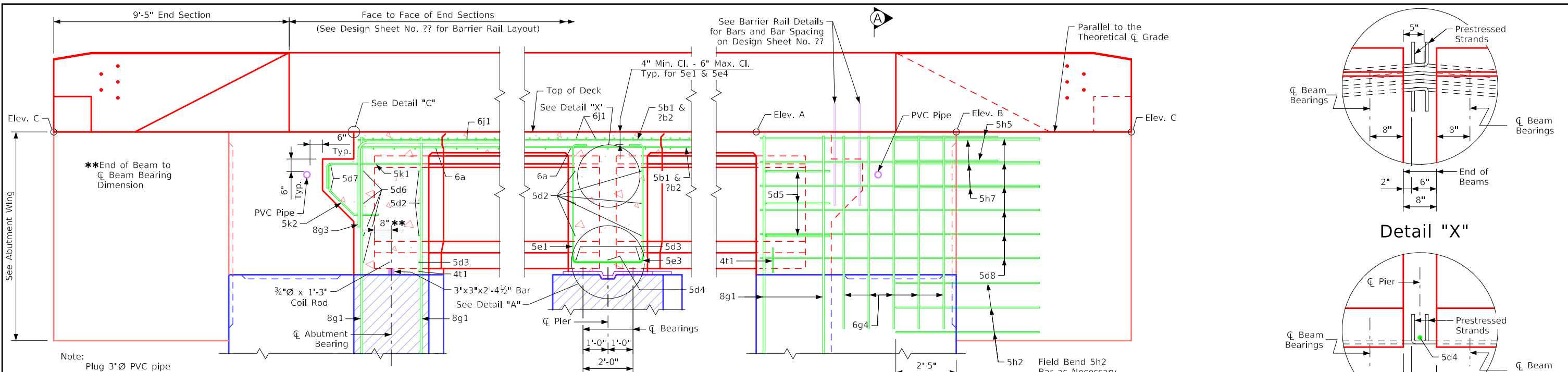
Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4509-BTCD - This Sheet Re-issued 11-2023. Sheet Format Update.



Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	7'-2"	???.??	???.??	???.??
N.W. Corner	7'-2"	???.??	???.??	???.??
S.E. Corner	7'-2"	???.??	???.??	???.??
N.E. Corner	7'-2"	???.??	???.??	???.??

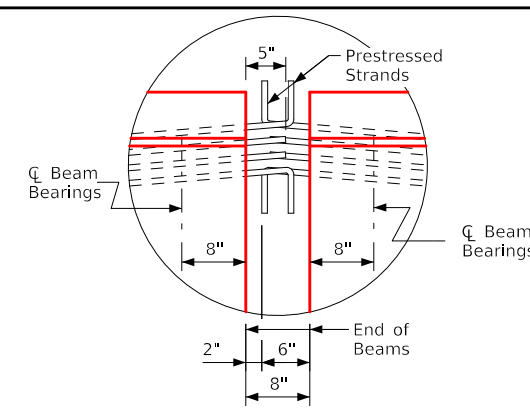
Abut. & Pier Diaphragm Details

Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4509-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.  
 7'-0" Roadway

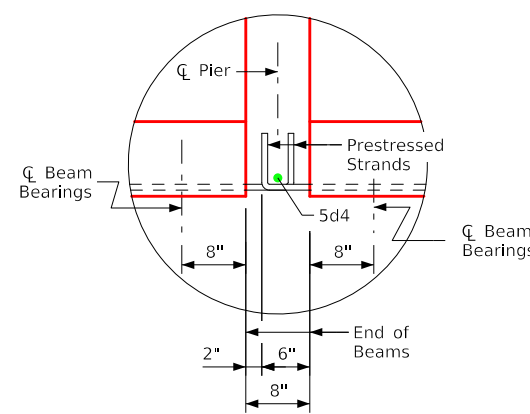


**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

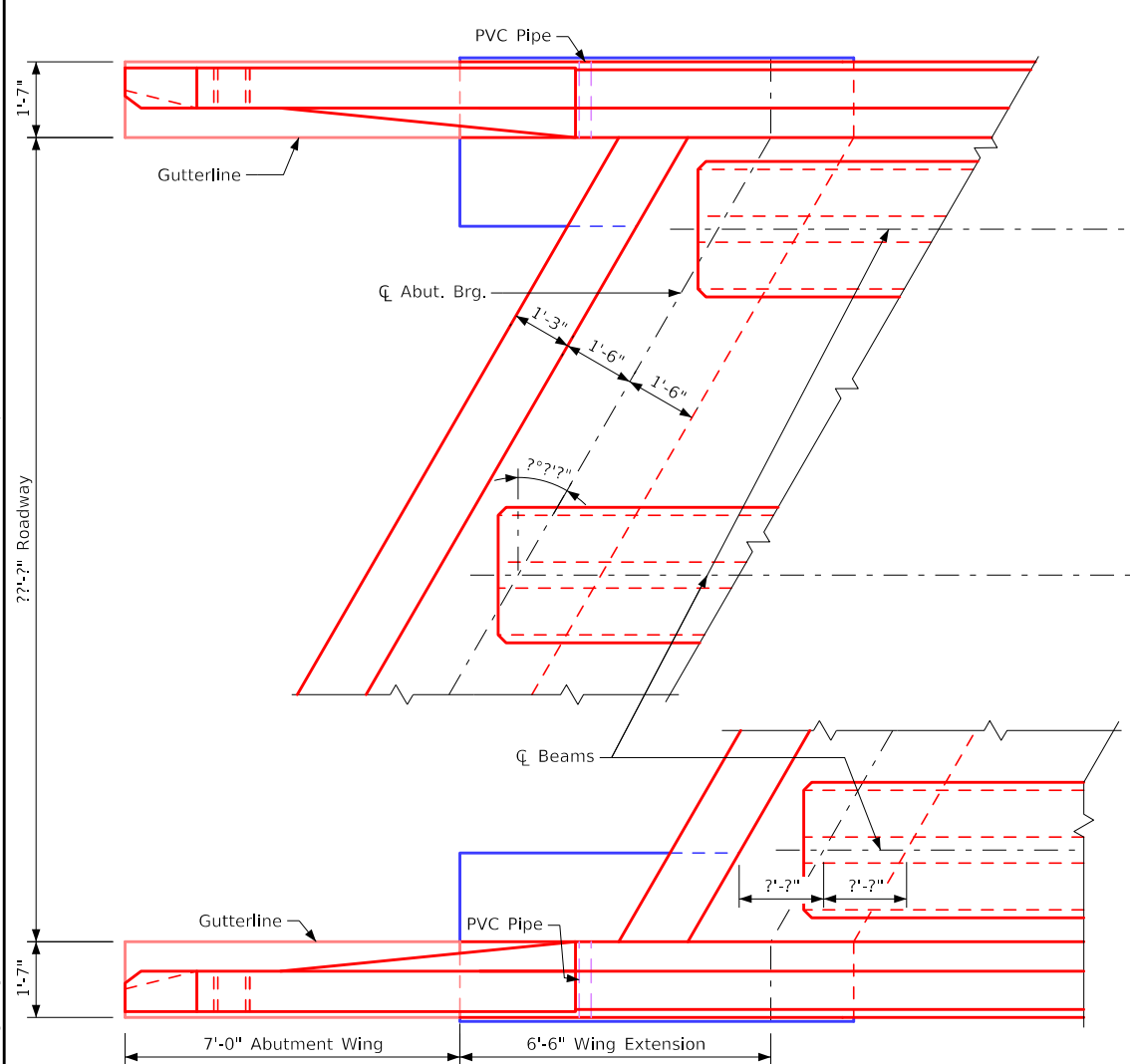
**Part End View at Abutment**



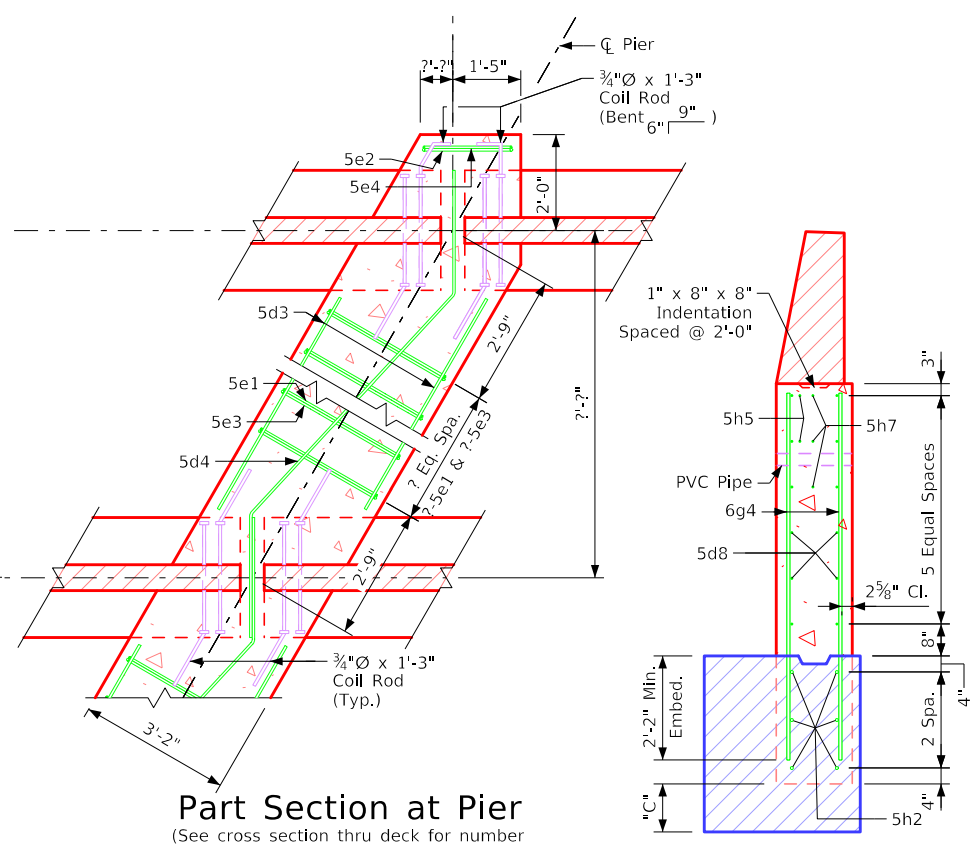
**Detail "X"**



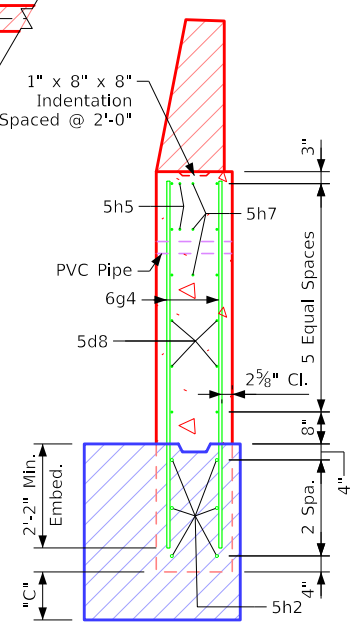
**Detail "A"**



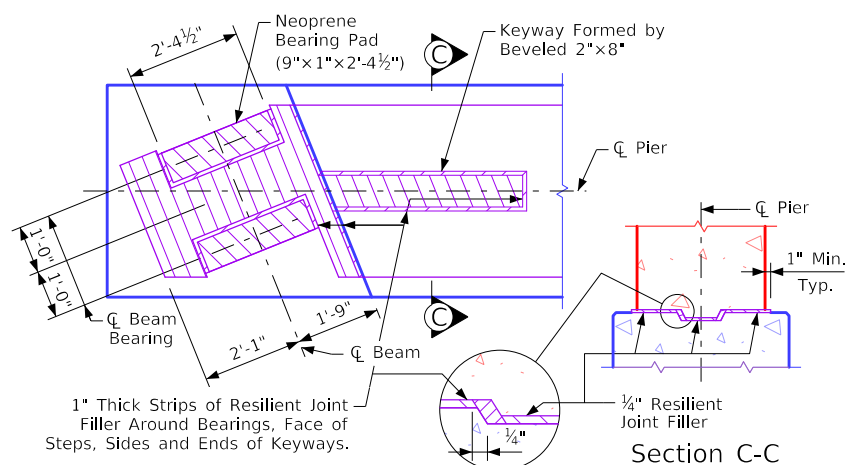
**Part Plan**



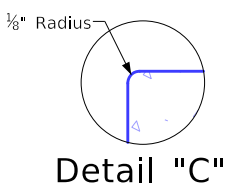
**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)



**Section A-A**



**Part Plan Top of Fixed Pier Details**

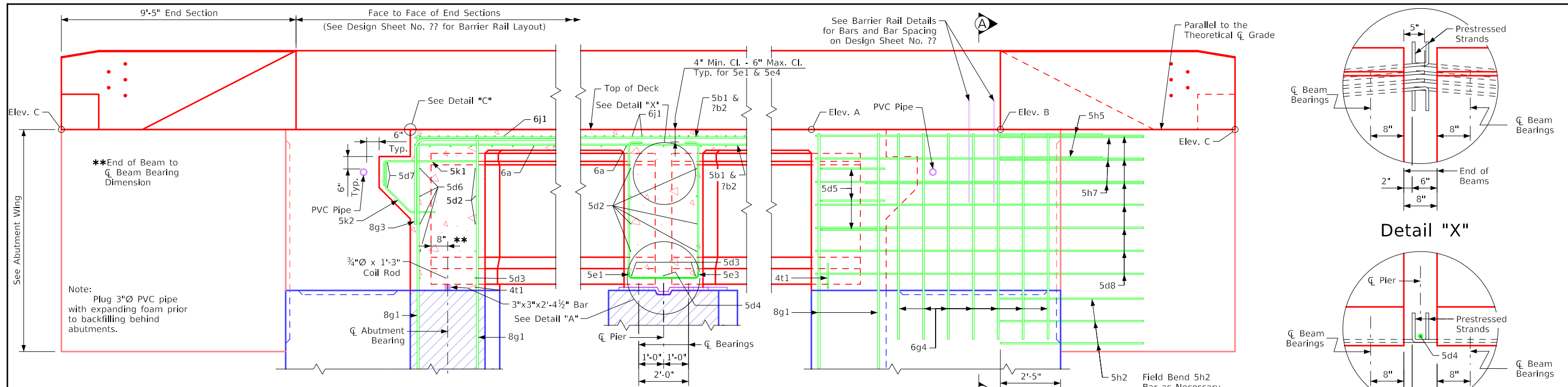


**Detail "C"**

Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??'-??"	???.??	???.??	???.??
N.W. Corner	??'-??"	???.??	???.??	???.??
S.E. Corner	??'-??"	???.??	???.??	???.??
N.E. Corner	??'-??"	???.??	???.??	???.??

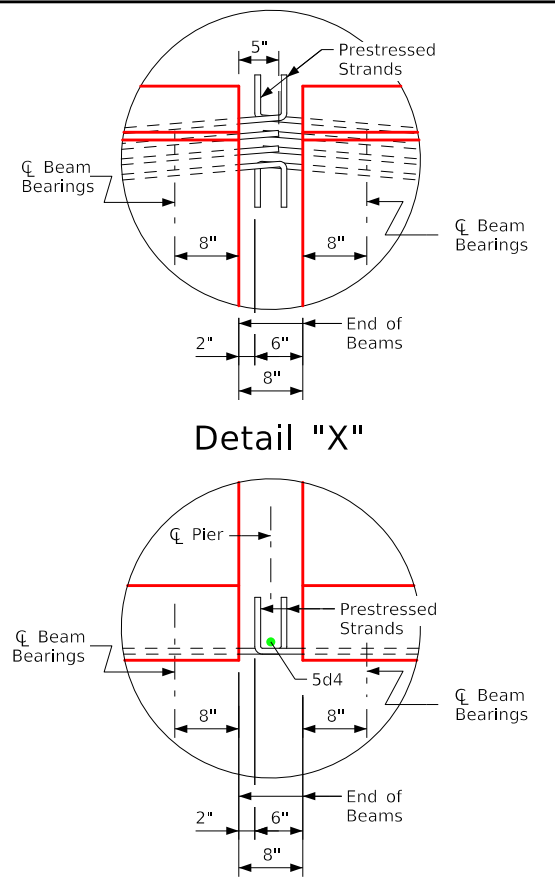
Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??'-??"	???.??	???.??	???.??
N.W. Corner	??'-??"	???.??	???.??	???.??
S.E. Corner	??'-??"	???.??	???.??	???.??
N.E. Corner	??'-??"	???.??	???.??	???.??

Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4510-BTCD - This Sheet Re-issued 11-2023. Sheet Format Update.



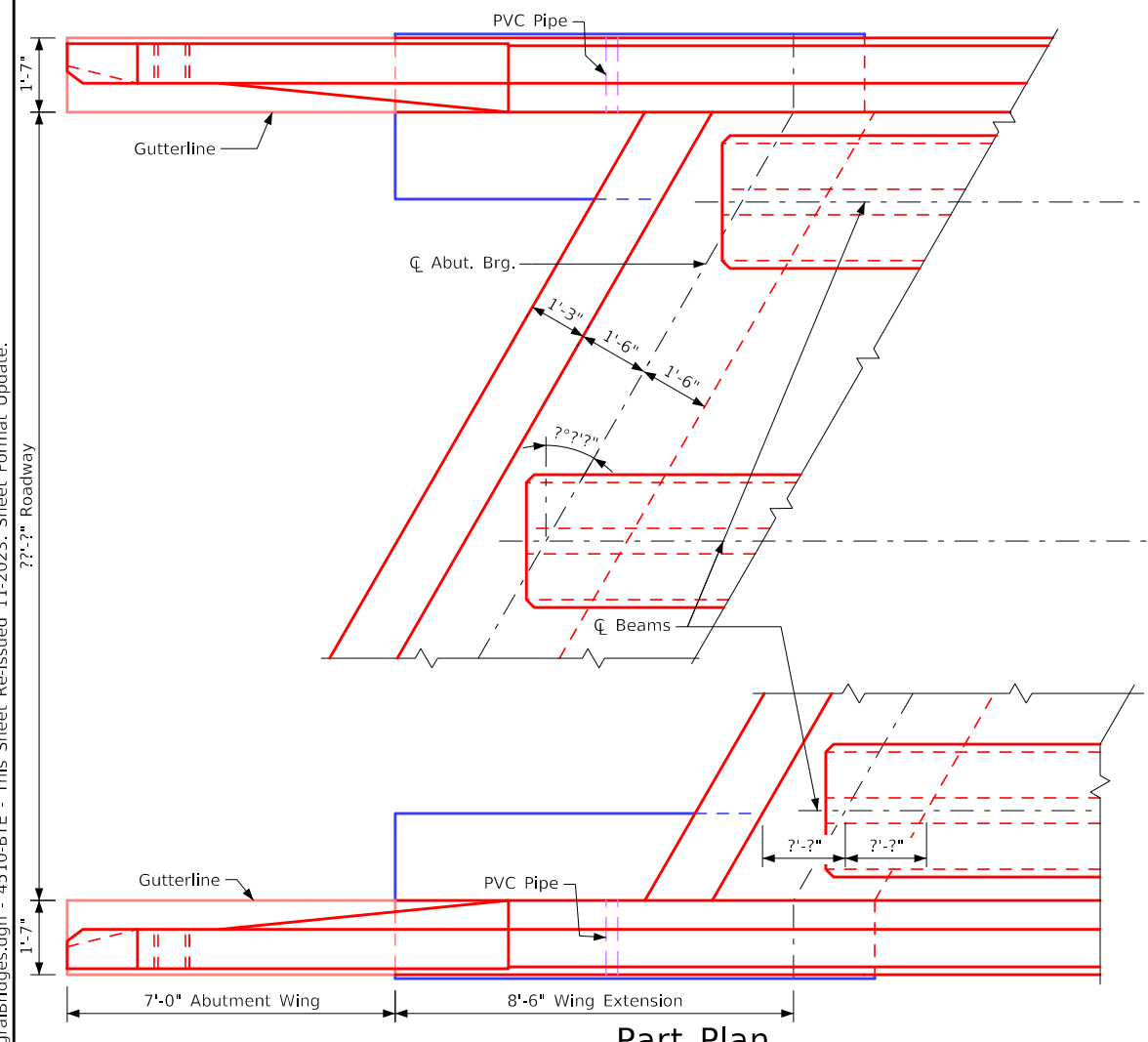
**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**

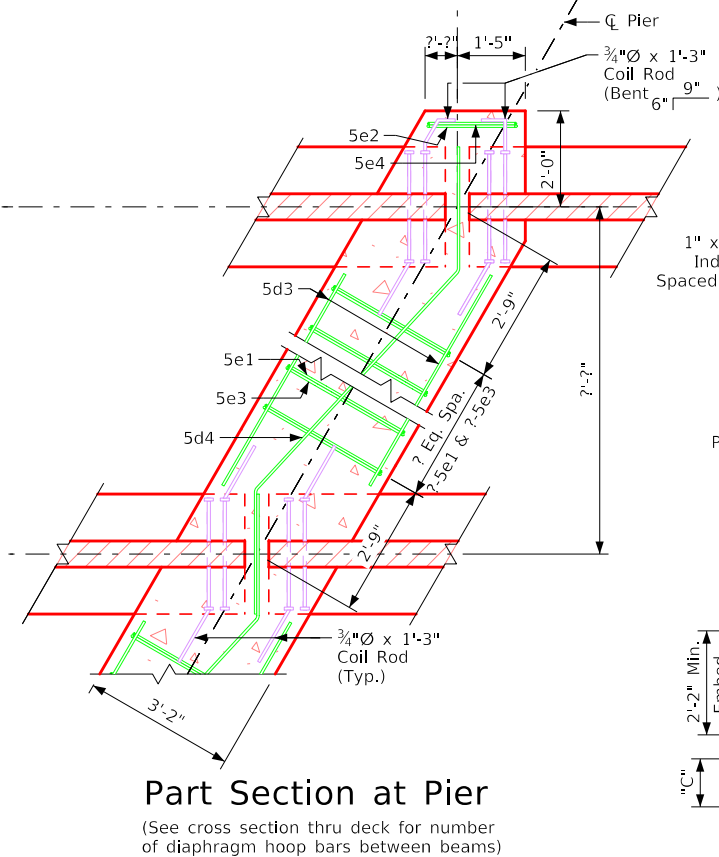


**Detail "X"**

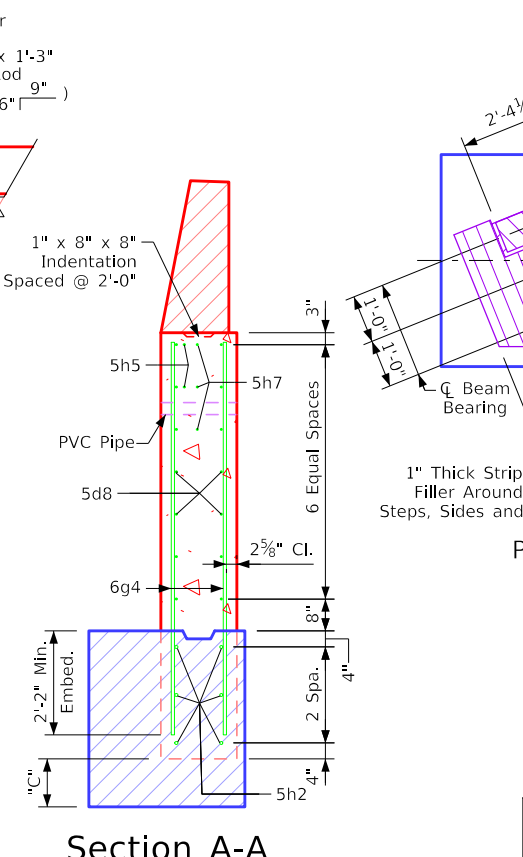
**Detail "A"**



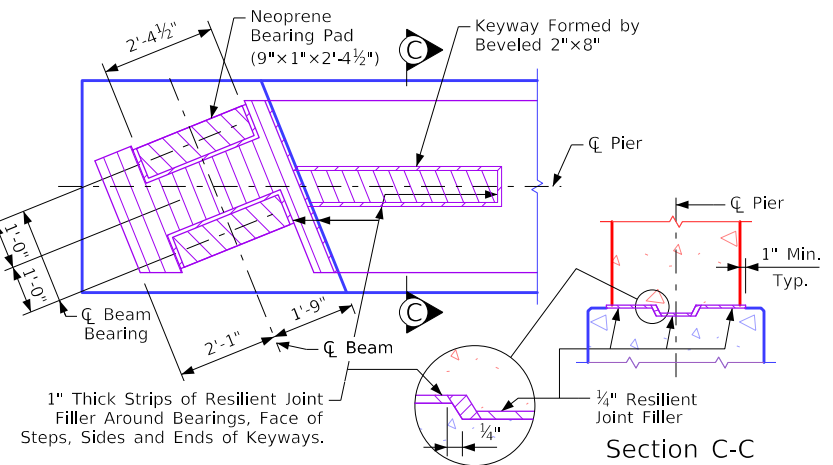
**Part Plan**



**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)



**Section A-A**

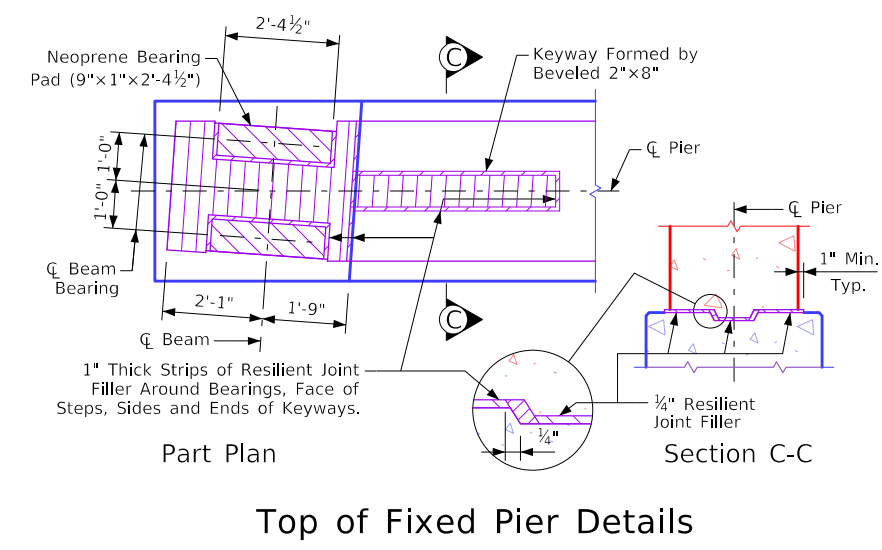
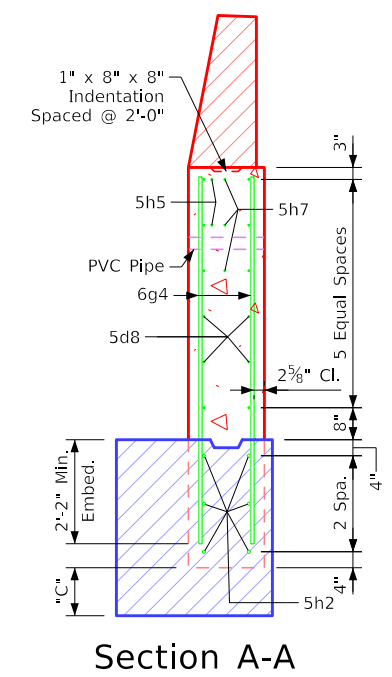
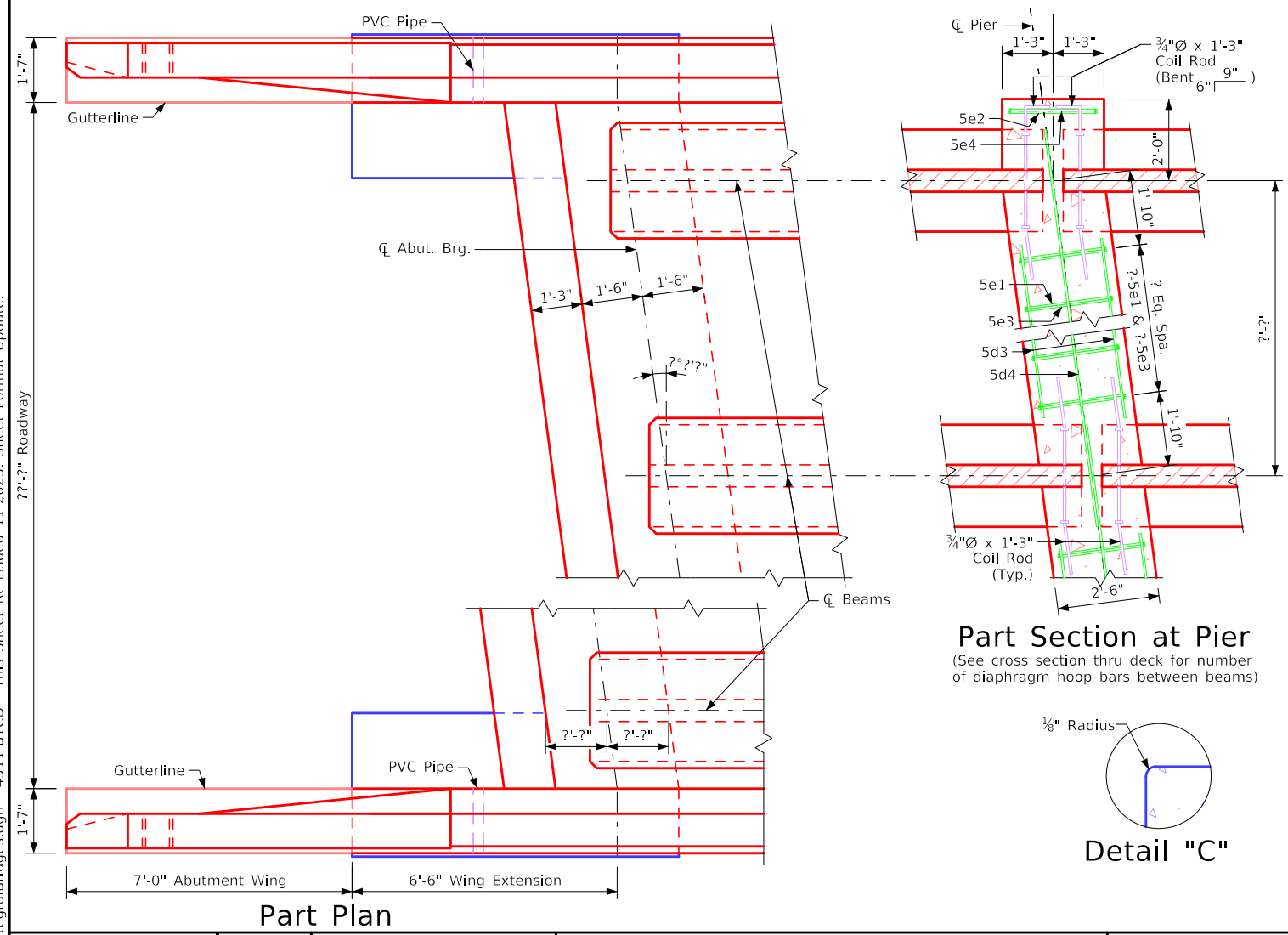
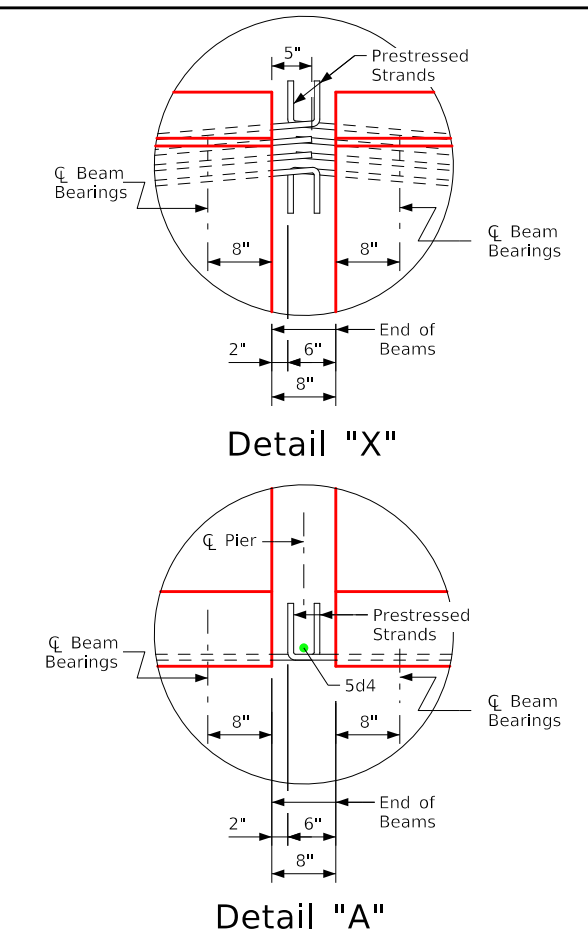
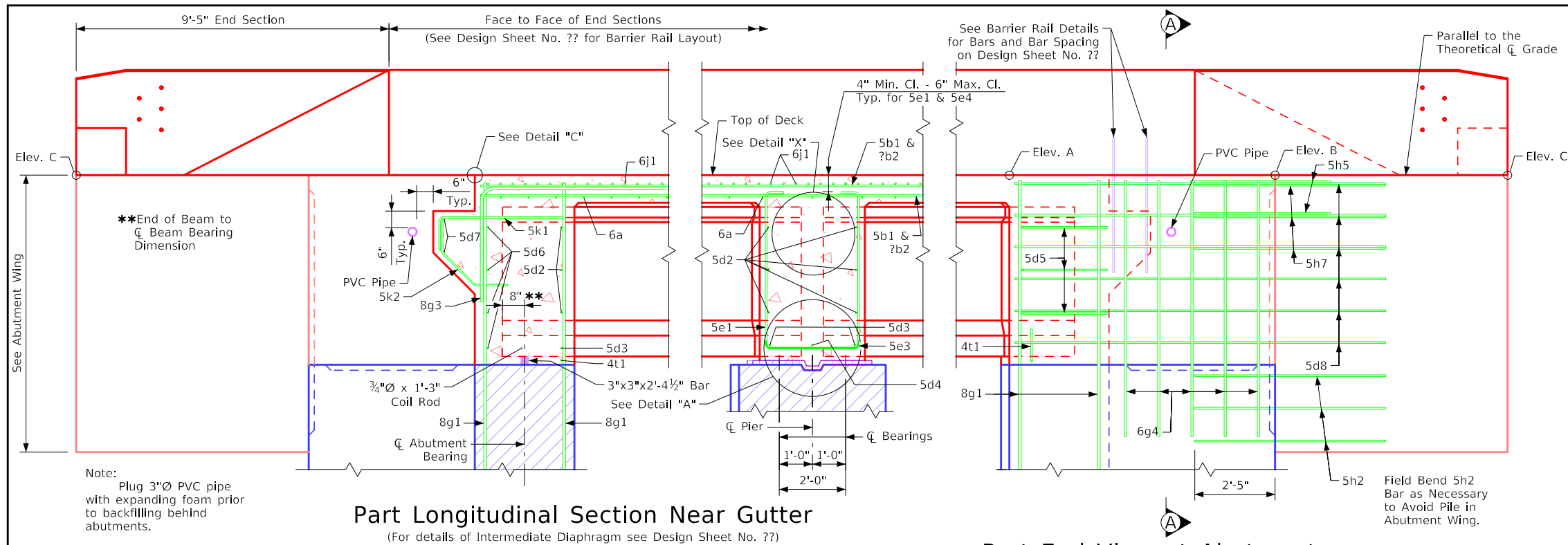


**Part Plan Top of Fixed Pier Details**

Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??'-2"	???.??	???.??	???.??
N.W. Corner	??'-2"	???.??	???.??	???.??
S.E. Corner	??'-2"	???.??	???.??	???.??
N.E. Corner	??'-2"	???.??	???.??	???.??

Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??'-2"	???.??	???.??	???.??
N.W. Corner	??'-2"	???.??	???.??	???.??
S.E. Corner	??'-2"	???.??	???.??	???.??
N.E. Corner	??'-2"	???.??	???.??	???.??

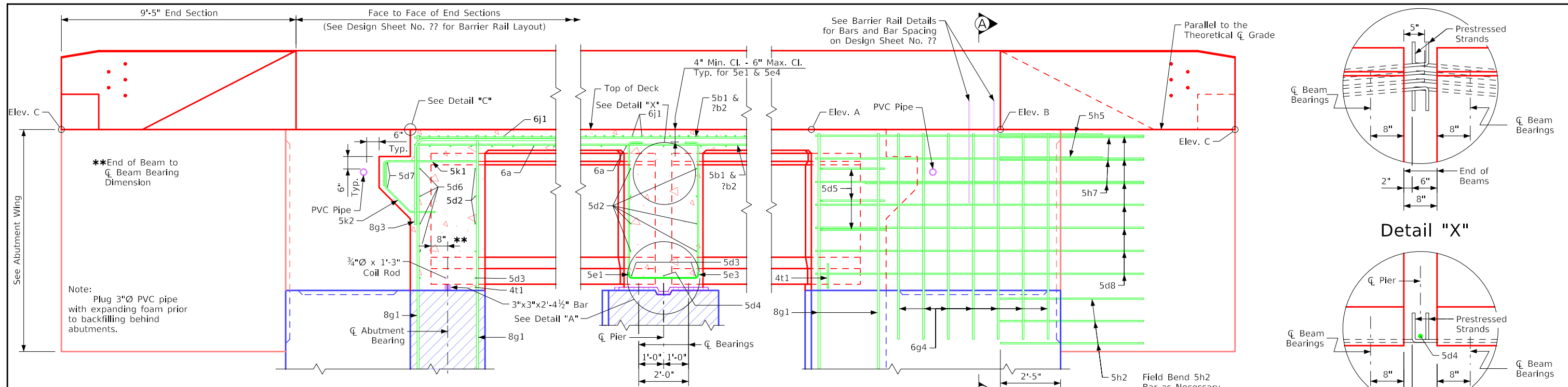
Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08:  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4510-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.  
 5:20:41 PM 7/30/2024 bkloss



Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??-??"	???.??	???.??	???.??
N.W. Corner	??-??"	???.??	???.??	???.??
S.E. Corner	??-??"	???.??	???.??	???.??
N.E. Corner	??-??"	???.??	???.??	???.??

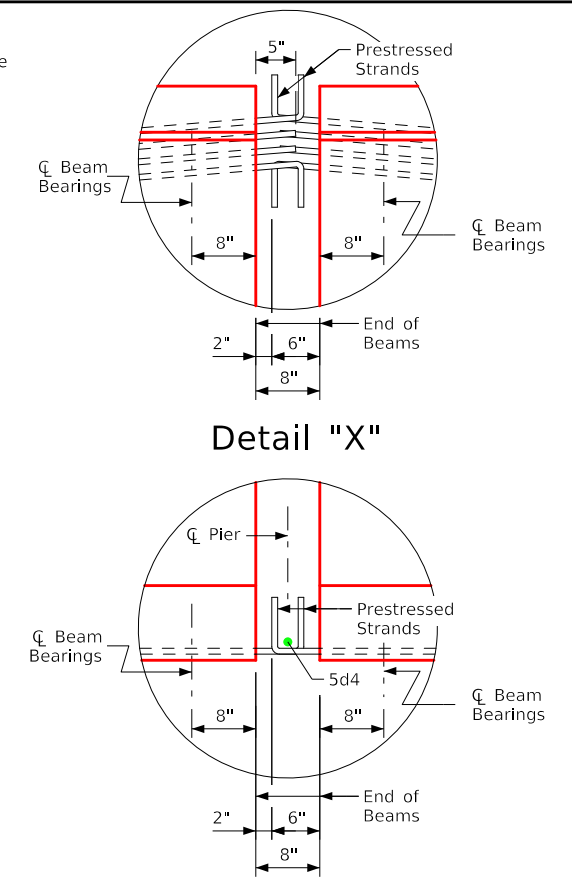
Abut. & Pier Diaphragm Details

Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08:  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4511-BTCD - This Sheet Re-Issued 11-2023. Sheet Format Update.



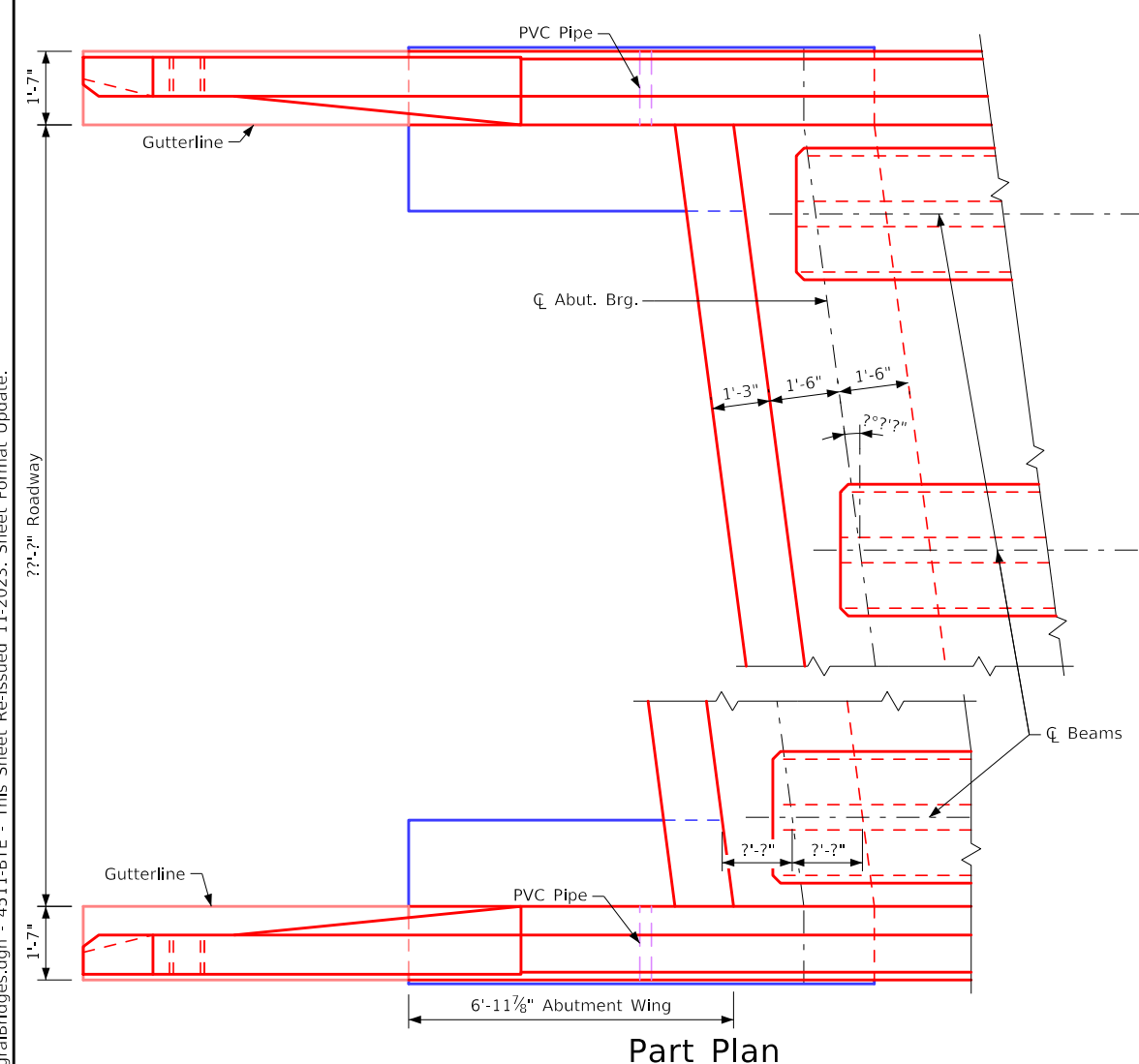
**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**



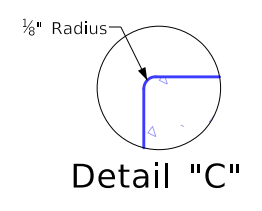
**Detail "X"**

**Detail "A"**

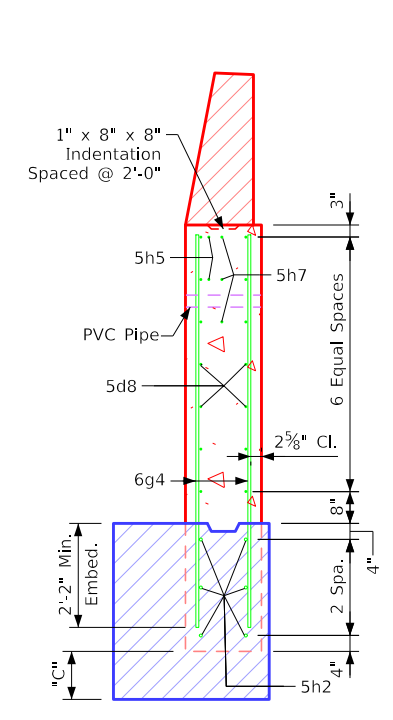


**Part Plan**

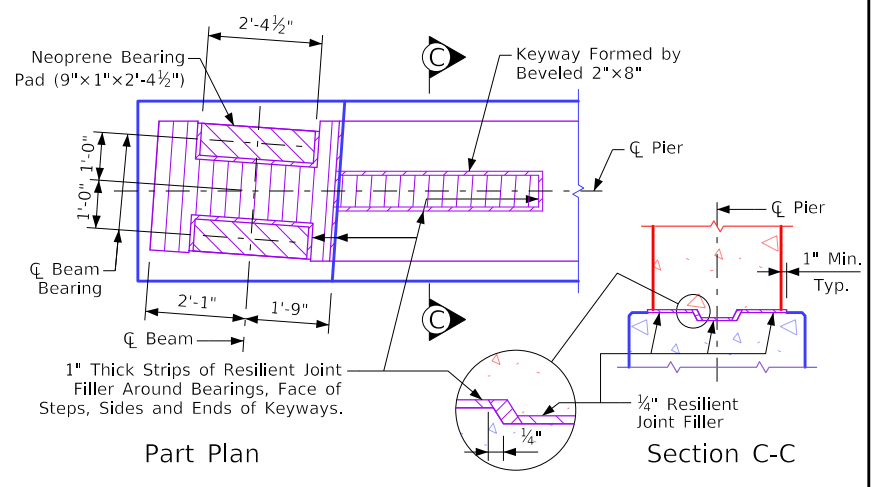
**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)



**Detail "C"**



**Section A-A**



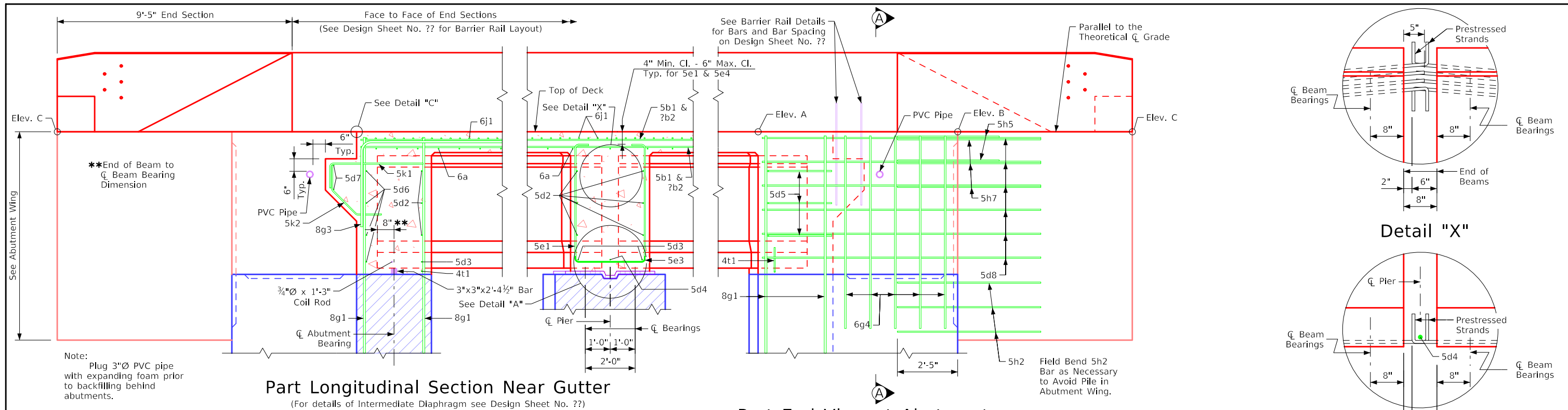
**Top of Fixed Pier Details**

Table of Wingwall Elevations				
Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??-??"	???.??	???.??	???.??
N.W. Corner	??-??"	???.??	???.??	???.??
S.E. Corner	??-??"	???.??	???.??	???.??
N.E. Corner	??-??"	???.??	???.??	???.??

Abut. & Pier Diaphragm Details

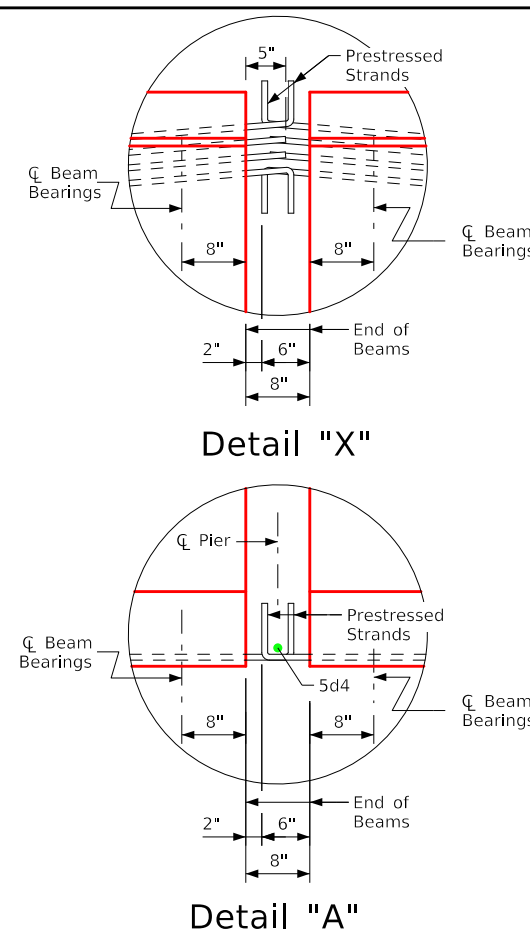
Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4511-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.





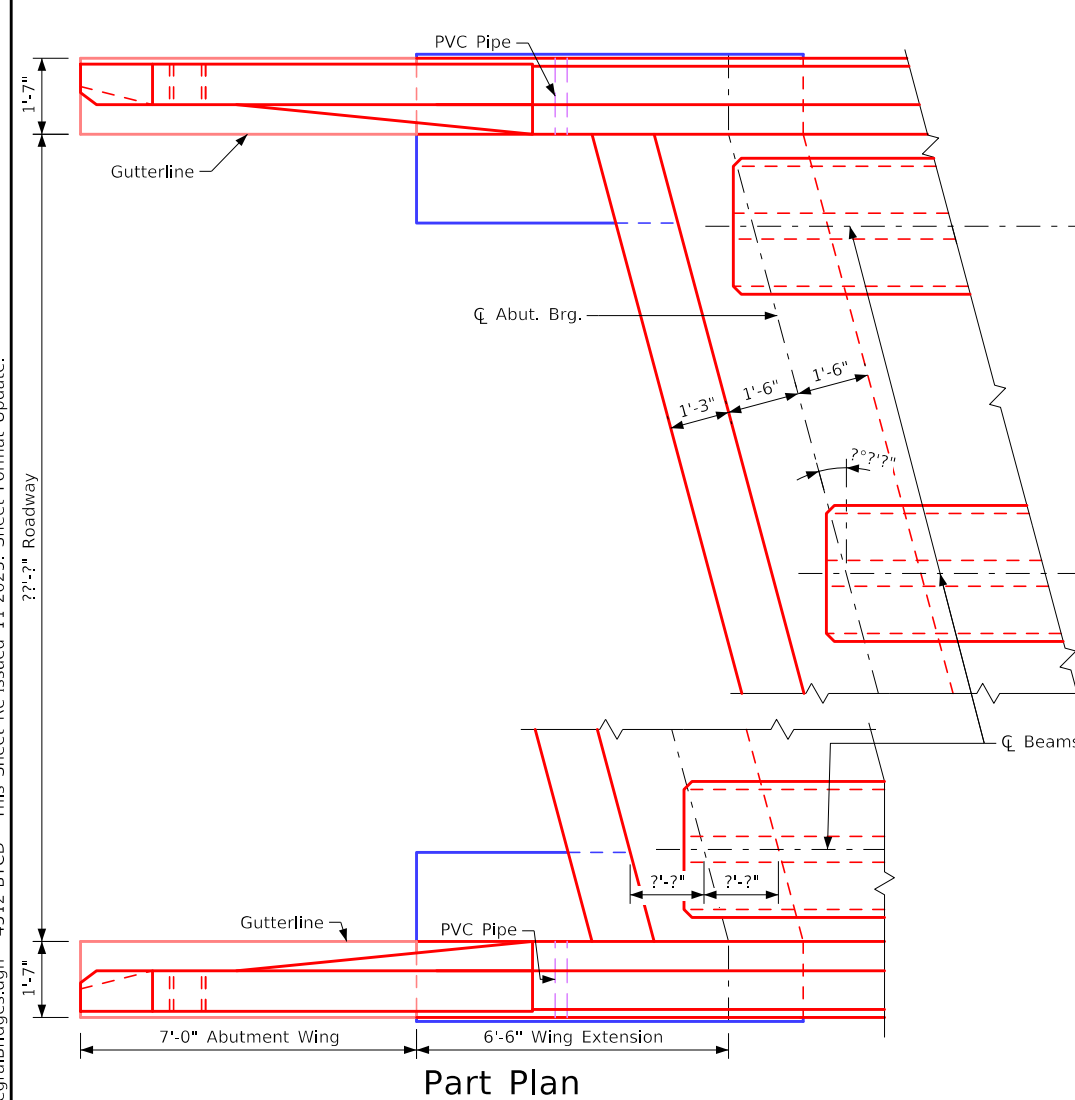
**Part Longitudinal Section Near Gutter**  
(For details of Intermediate Diaphragm see Design Sheet No. ??)

**Part End View at Abutment**

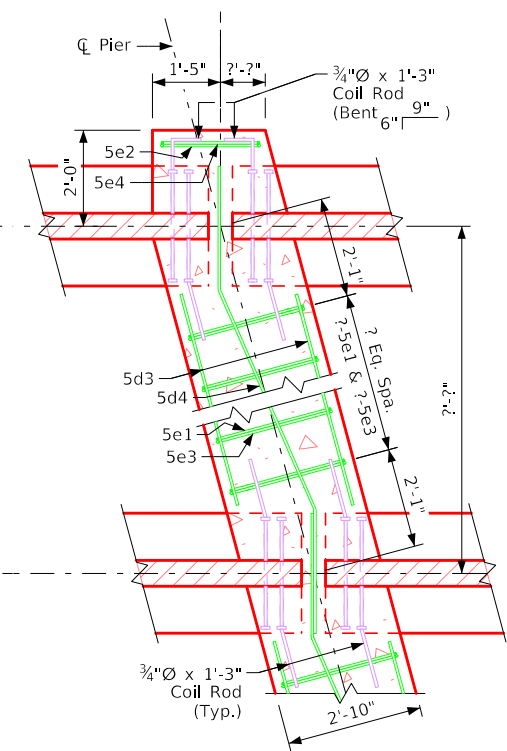


**Detail "X"**

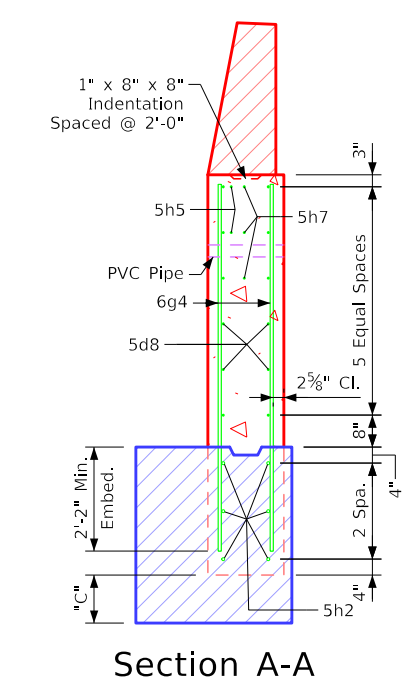
**Detail "A"**



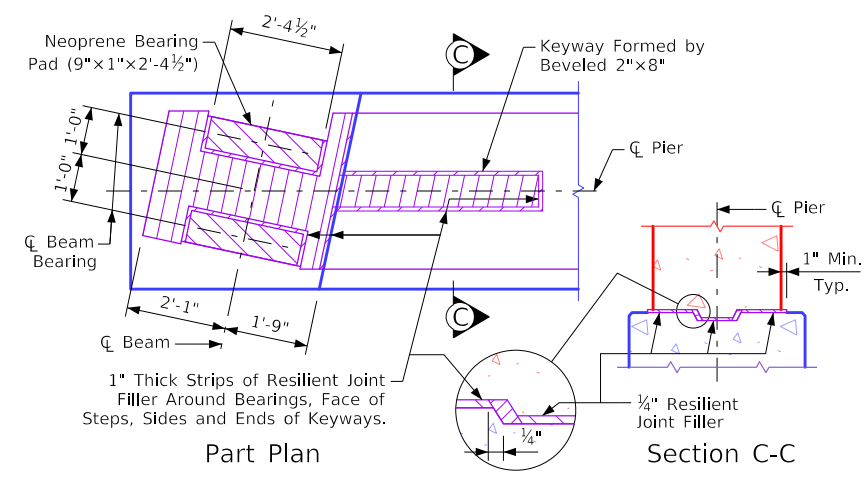
**Part Plan**



**Part Section at Pier**  
(See cross section thru deck for number of diaphragm hoop bars between beams)



**Section A-A**

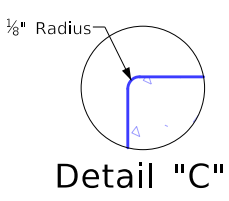
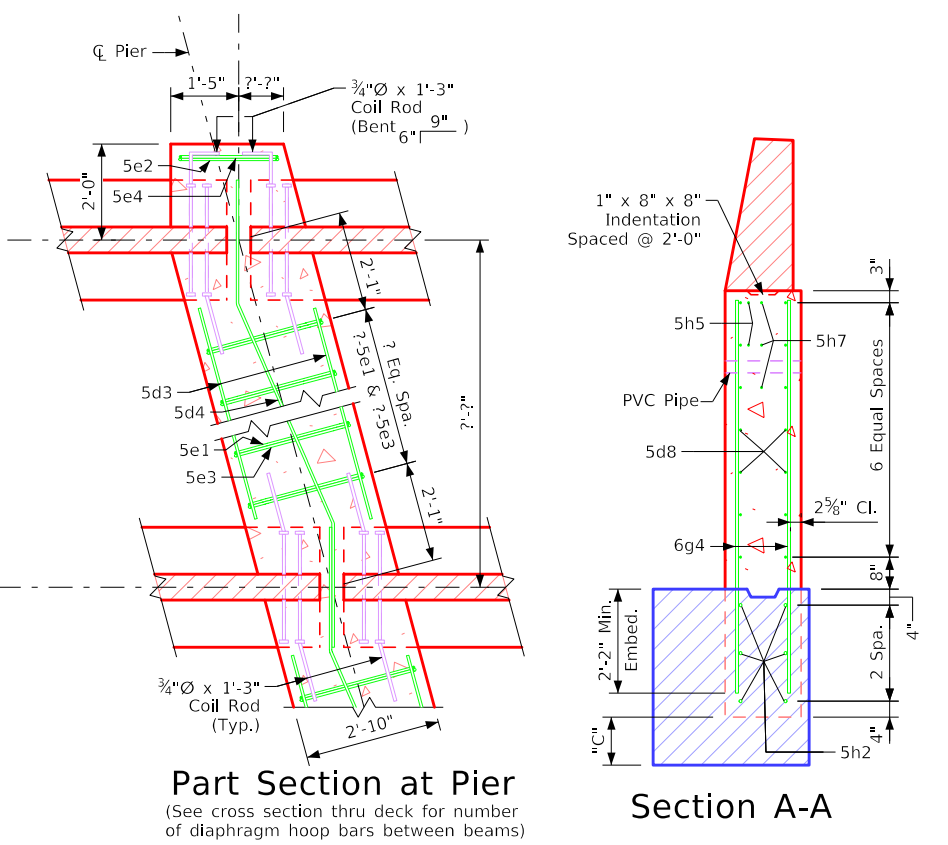
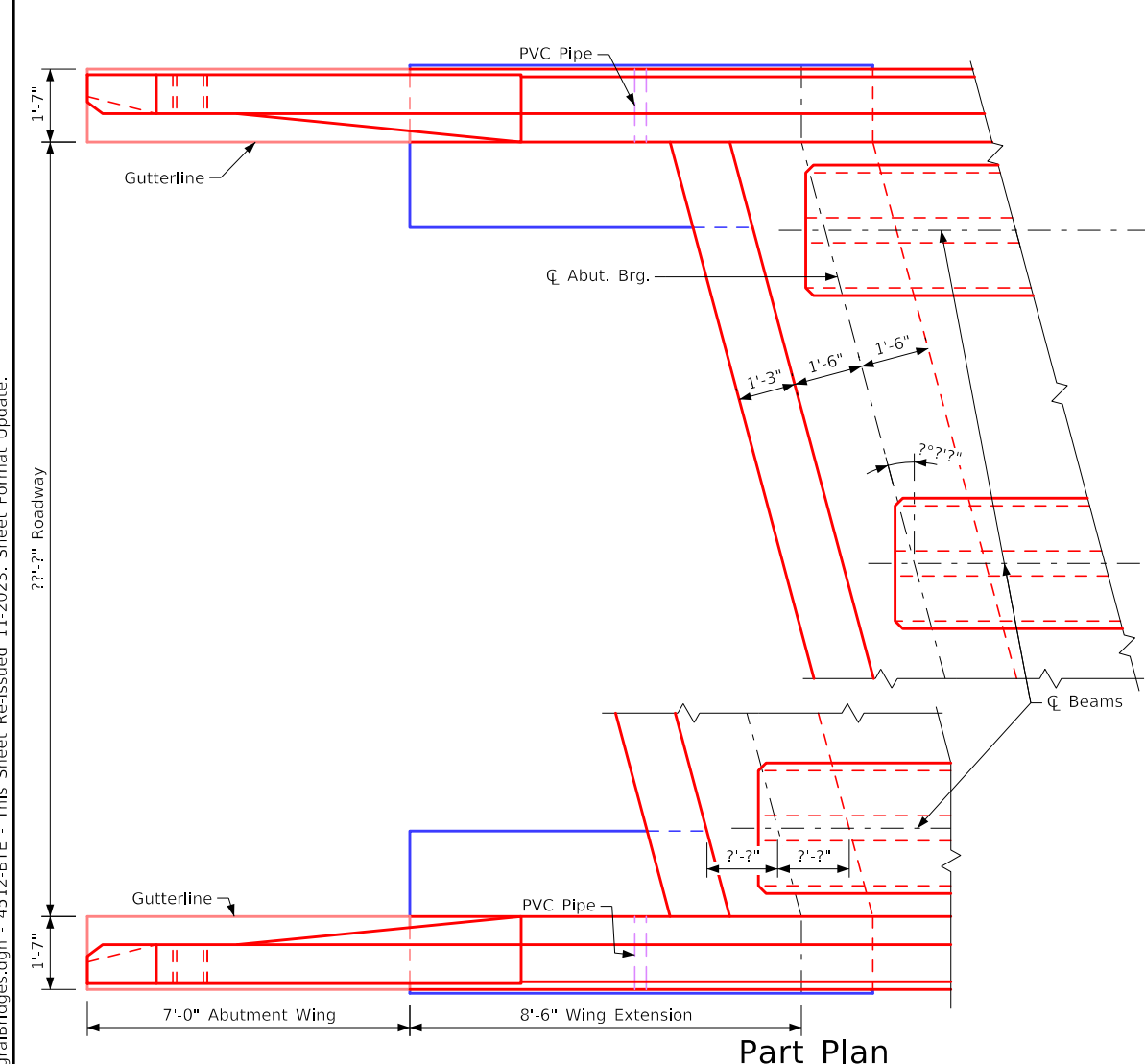
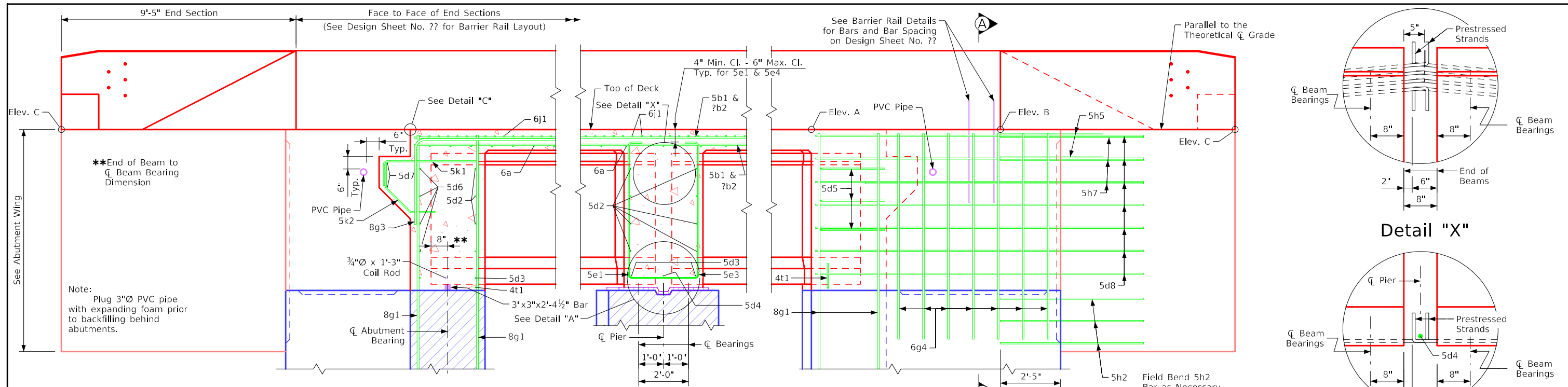


**Top of Fixed Pier Details**

Table of Wingwall Elevations				
Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	7'-7"	???.??	???.??	???.??
N.W. Corner	7'-7"	???.??	???.??	???.??
S.E. Corner	7'-7"	???.??	???.??	???.??
N.E. Corner	7'-7"	???.??	???.??	???.??

**Abut. & Pier Diaphragm Details**

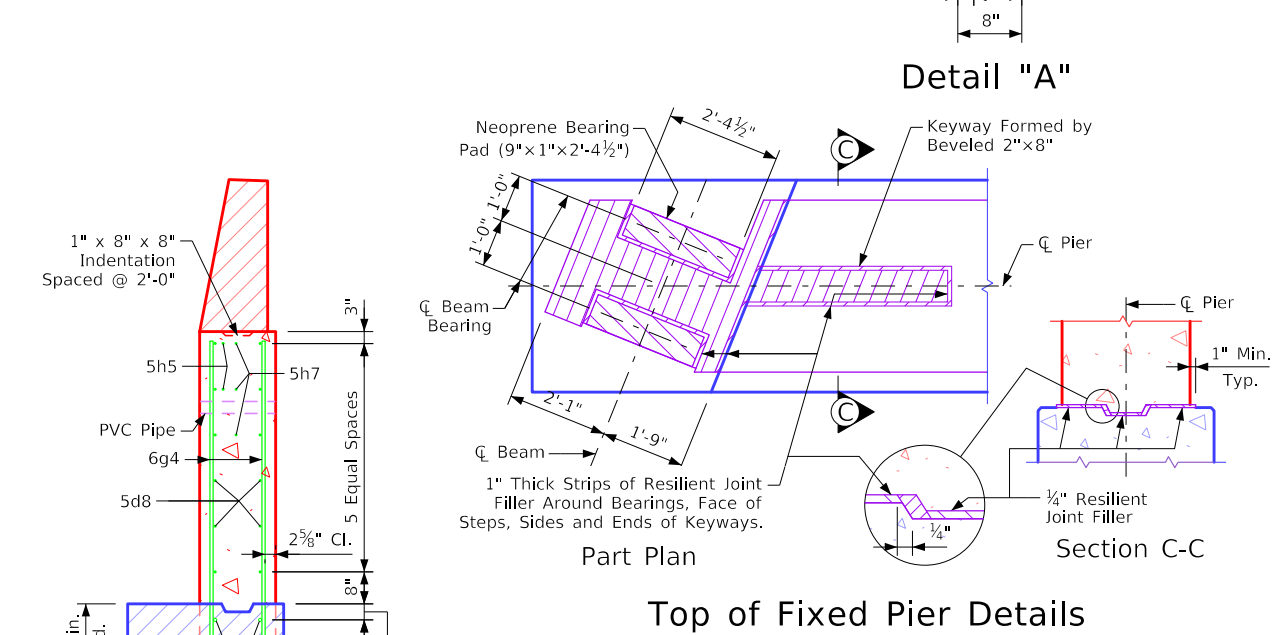
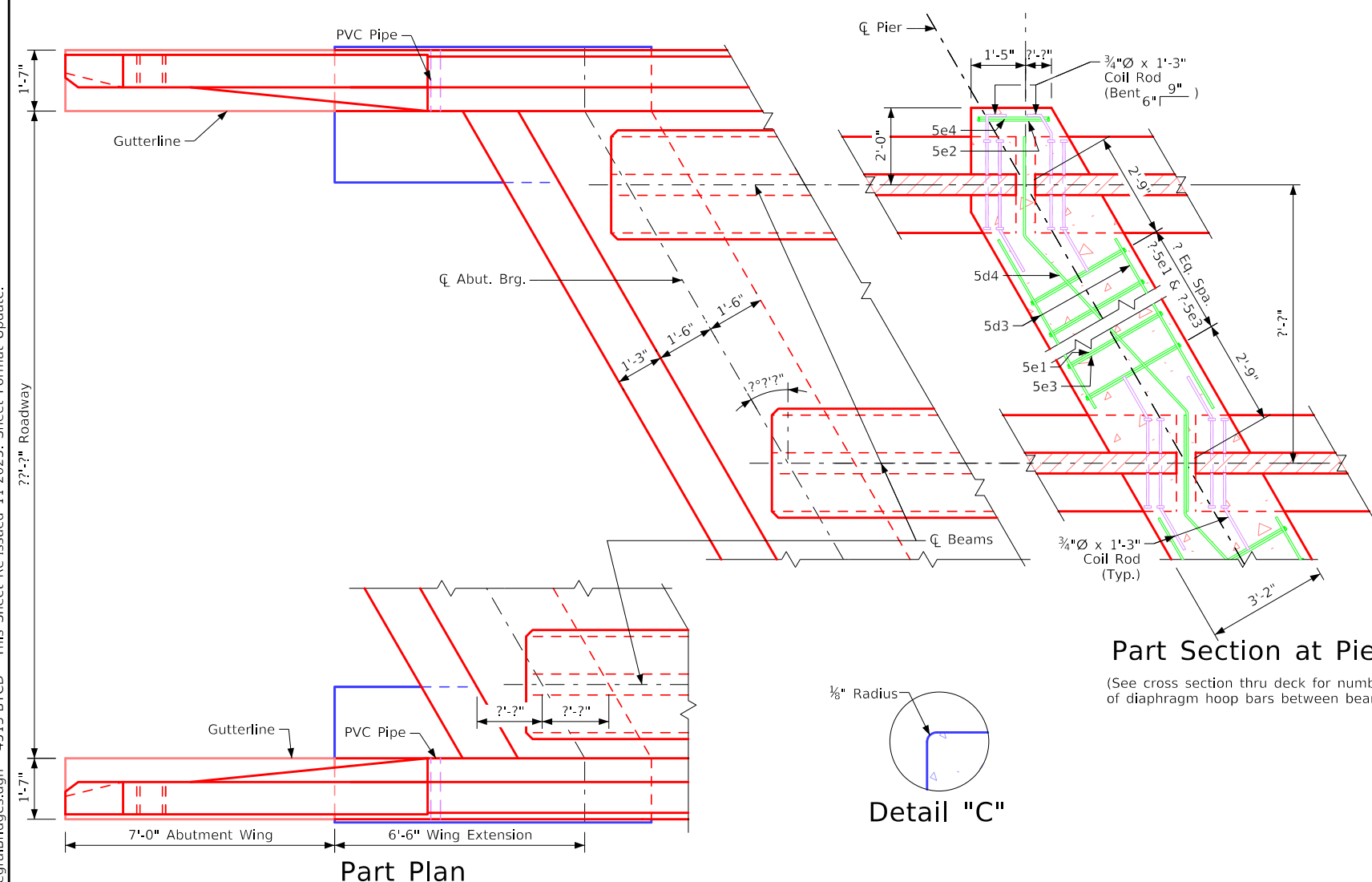
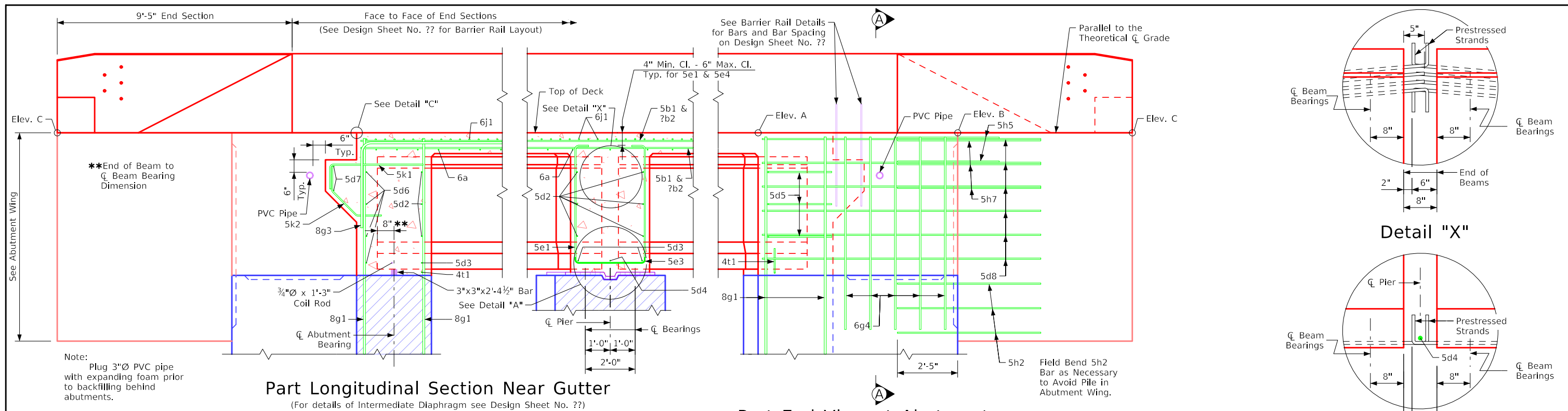
Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4512-BTCD - This Sheet Re-issued 11-2023. Sheet Format Update.  
 ??'??' Roadway



Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??'-??"	???.??	???.??	???.??
N.W. Corner	??'-??"	???.??	???.??	???.??
S.E. Corner	??'-??"	???.??	???.??	???.??
N.E. Corner	??'-??"	???.??	???.??	???.??

Abut. & Pier Diaphragm Details

Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08.  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4512-BTE - This Sheet Re-Issued 11-2023, Sheet Format Update.  
 BTIntegralBridges.dgn



Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	?'-2"	???.??	???.??	???.??
N.W. Corner	?'-2"	???.??	???.??	???.??
S.E. Corner	?'-2"	???.??	???.??	???.??
N.E. Corner	?'-2"	???.??	???.??	???.??

FILE NO.	ENGLISH	DESIGN TEAM	"BTC" or "BTD" Beams - Part Plan & Longitudinal Section - (R.A.) 15°01' - 30° Skew	Standard Sheet 4513-BTCD	COUNTY	PROJECT NUMBER	SHEET NUMBER
5:20:45 PM	7/30/2024	bkloss	pw:\NTP\int1.dot.int.lan:PWMain\Documents\Highway\Bridge\Standards\Bridges\BTIntegralBridges.dgn				

Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08:  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4513-BTCD - This Sheet Re-Issued 11-2023. Sheet Format Update.

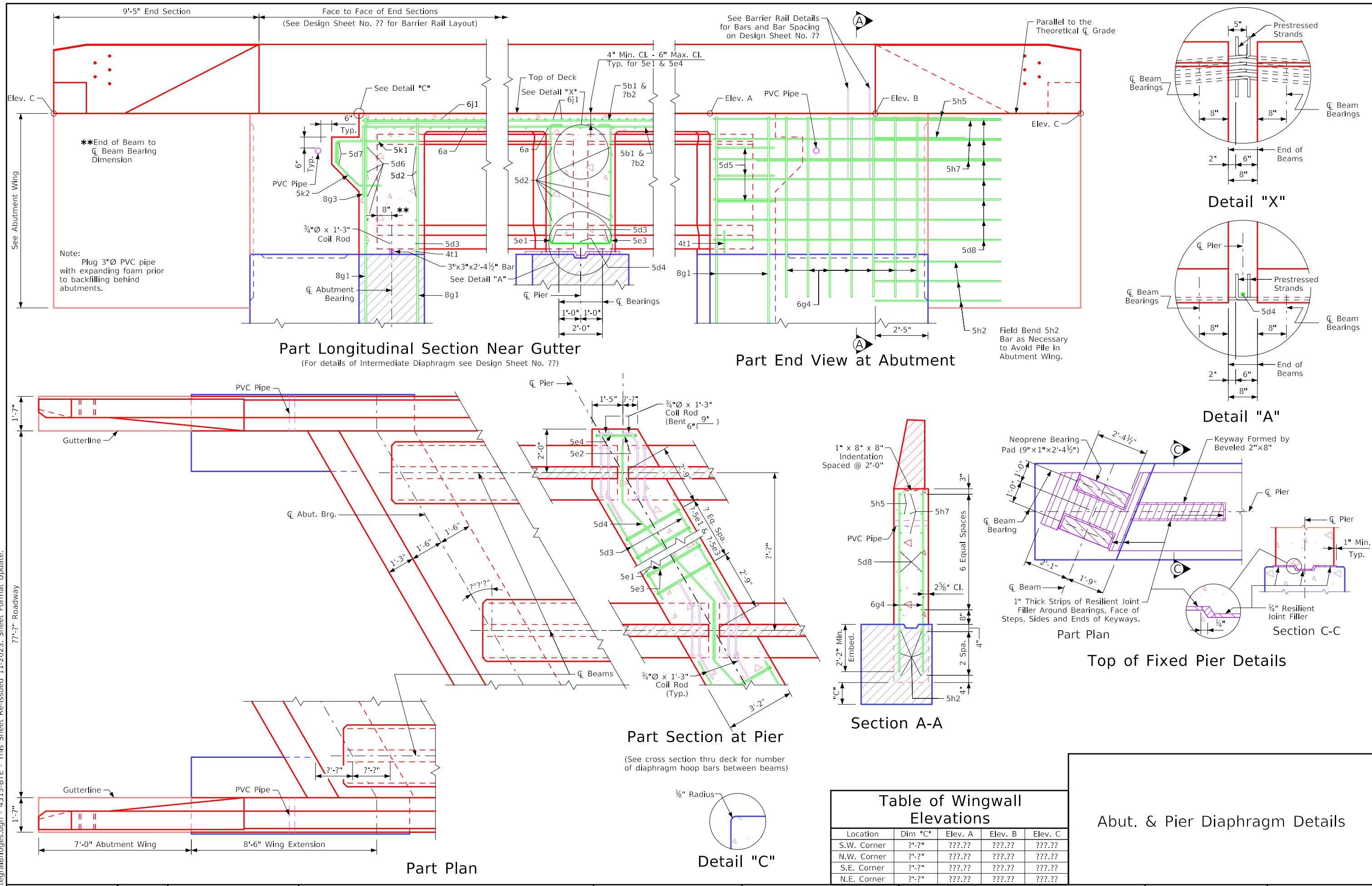
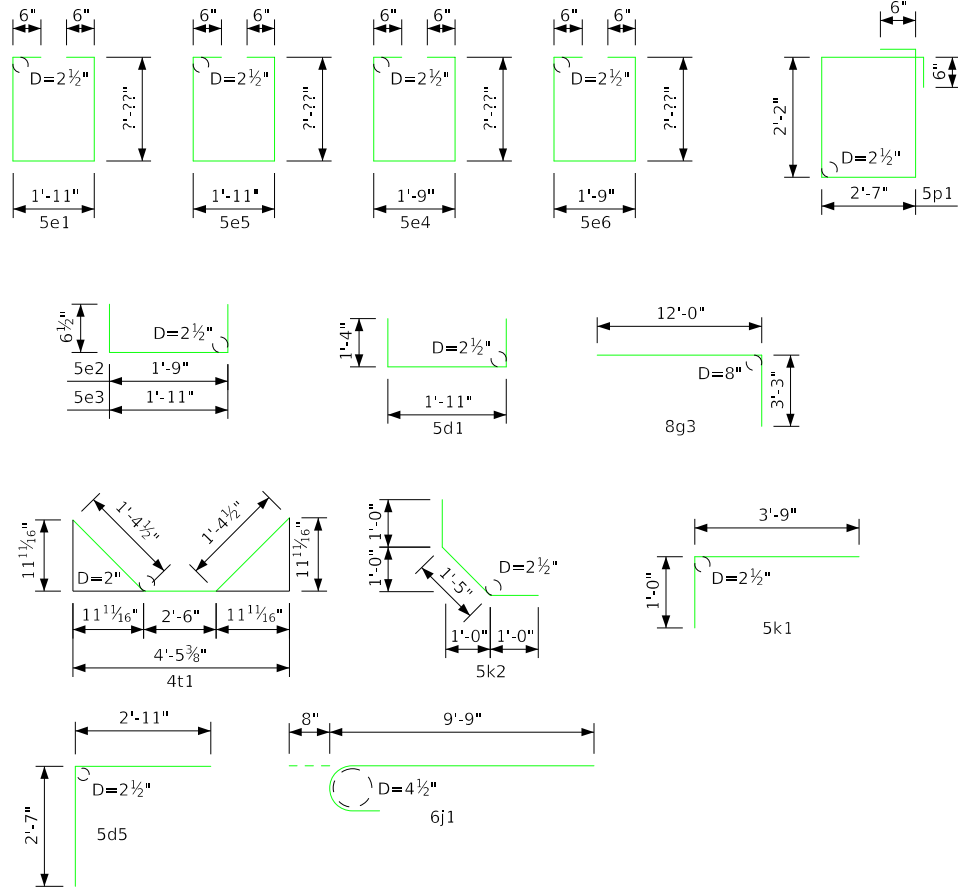


Table of Wingwall Elevations				
Location	Dim "C"	Elev. A	Elev. B	Elev. C
S.W. Corner	??'-2"	???.??	???.??	???.??
N.W. Corner	??'-2"	???.??	???.??	???.??
S.E. Corner	??'-2"	???.??	???.??	???.??
N.E. Corner	??'-2"	???.??	???.??	???.??

Abut. & Pier Diaphragm Details	
COUNTY	PROJECT NUMBER

Revised 01-12: Added Field Bend 5h4 Bar to Avoid Pile in Abutment Wing Note.  
 Issued 02-08:  
 Revised 08-2024: Corrected "Detail X" to show the proper Bulb Tee Beam details. (Was showing the Standard AASHTO Beam details).  
 BTIntegralBridges.dgn - 4513-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.  
 BTIntegralBridges.dgn - 4513-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non - Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ x $\frac{1}{8}$ x $\frac{1}{8}$ x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

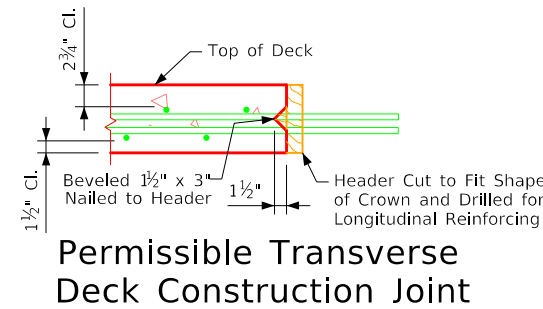
### Concrete Placement Quantities

Location	Quantity	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck, Transv. Top		??	?'-?''	???
6a2	Deck, Transv. Bott.		??	?'-?''	???
5b1	Deck Longit. Top & Bott.		??	?'-?''	???
7b2	Deck Longit. Top at Piers		??	?'-?''	???
5d1	Pier Diaph. Ends		??	4'-7''	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?''	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?''	???
5d4	Pier Diaph. Longit.		??	?'-?''	???
5d5	Abut. Diaph. Ends		8	5'-6''	46
5d6	Abut. Diaph. Longit. B.F.		12	?'-?''	???
5d7	Paving Notch Longit.		8	?'-?''	???
5e1	Pier Diaph. Hoops		??	?'-?''	???
5e2	Pier Diaph. Tie Ends		??	2'-10''	???
5e3	Pier Diaph. Ties		??	3'-0''	???
5e4	Pier Diaph. Hoops Ends		??	?'-?''	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?''	???
5e6	Pier Diaph. Hoops Exp. Pier End		??	?'-?''	???
8f1	Abut. Footing Longit. Both F.		36	?'-?''	???
8g1	Abut. Vert. Both F.		??	?'-?''	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-3''	???
5h2	Abut. To Wing Anchor		68	5'-9''	408
5h5	Abut. To Wing Anchor		8	4'-0''	33
6j1	Top of Deck Transv. (At Rail)		??	10'-5''	???
5k1	Paving Notch		??	4'-9''	???
5k2	Paving Notch		??	3'-5''	???
5p1	Abut. Hoops		??	10'-6''	???
4t1	Under Beams At Abutments		??	5'-3''	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



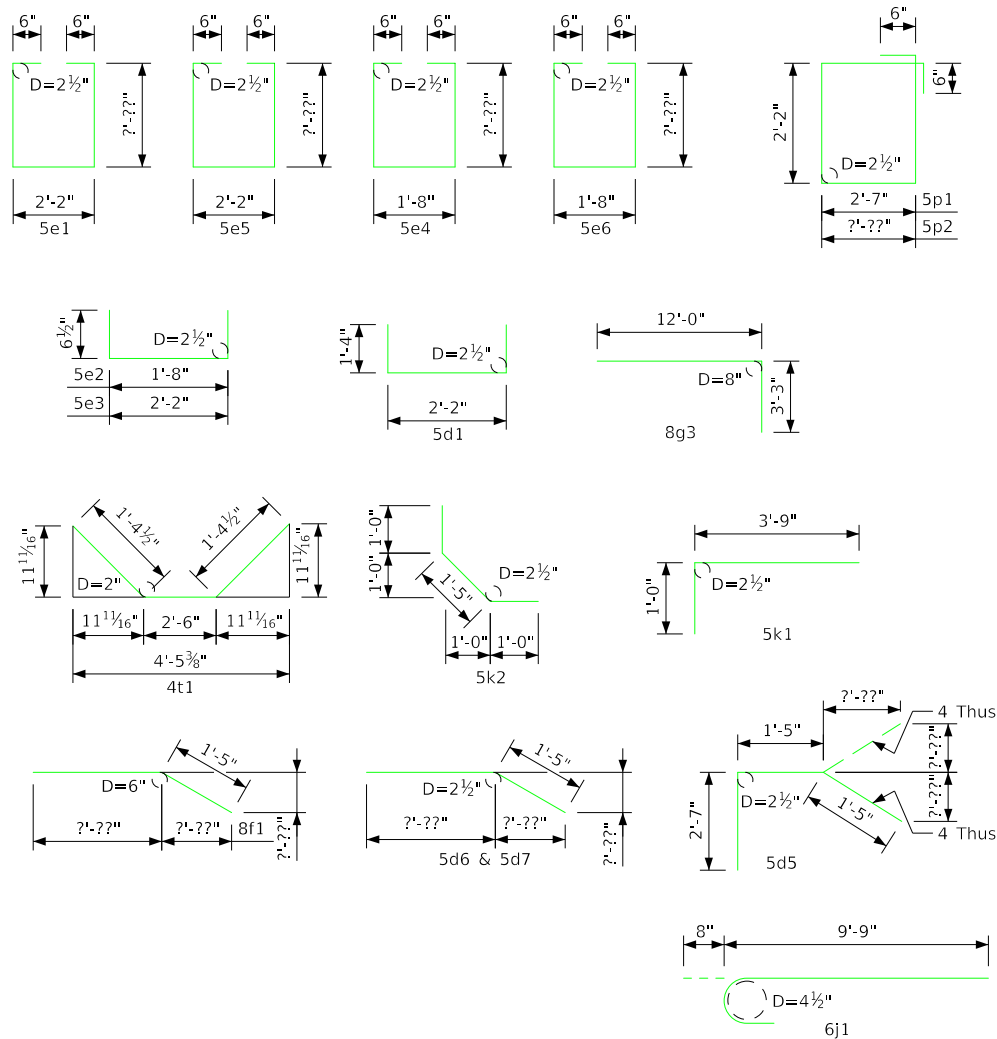
Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non-Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

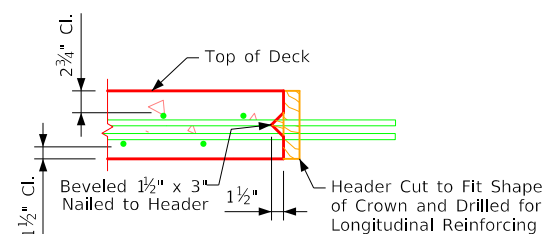
### Concrete Placement Quantities

Location	Quantity	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	?'-?"	???
6a2	Deck Transv. Bott.		??	?'-?"	???
5b1	Deck Longit. Top & Bott.		??	?'-?"	???
?b2	Deck Longit. Top at Piers		??	?'-?"	???
5d1	Pier Diaph. Ends		??	4'-10"	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d4	Pier Diaph. Longit.		??	?'-?"	???
5d5	Abut. Diaph. Ends		8	5'-5"	45
5d6	Abut. Diaph. Longit. B.F.		12	?'-?"	???
5d7	Paving Notch Longit.		8	?'-?"	???
5e1	Pier Diaph. Hoops		??	?'-?"	???
5e2	Pier Diaph. Tie Ends		??	2'-9"	???
5e3	Pier Diaph. Ties		??	3'-3"	???
5e4	Pier Diaph. Hoops Ends		??	?'-?"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	?'-?"	???
8f1	Abut. Footing Longit. Both F.		36	?'-?"	???
8g1	Abut. Vert. Both F.		??	?'-?"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-3"	???
5h2	Abut. To Wing Anchor		68	5'-9"	408
5h5	Abut. To Wing Anchor		8	4'-0"	33
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Hoops at Ends		8	?'-?"	???
4t1	Under Beams at Abutments		??	5'-3"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



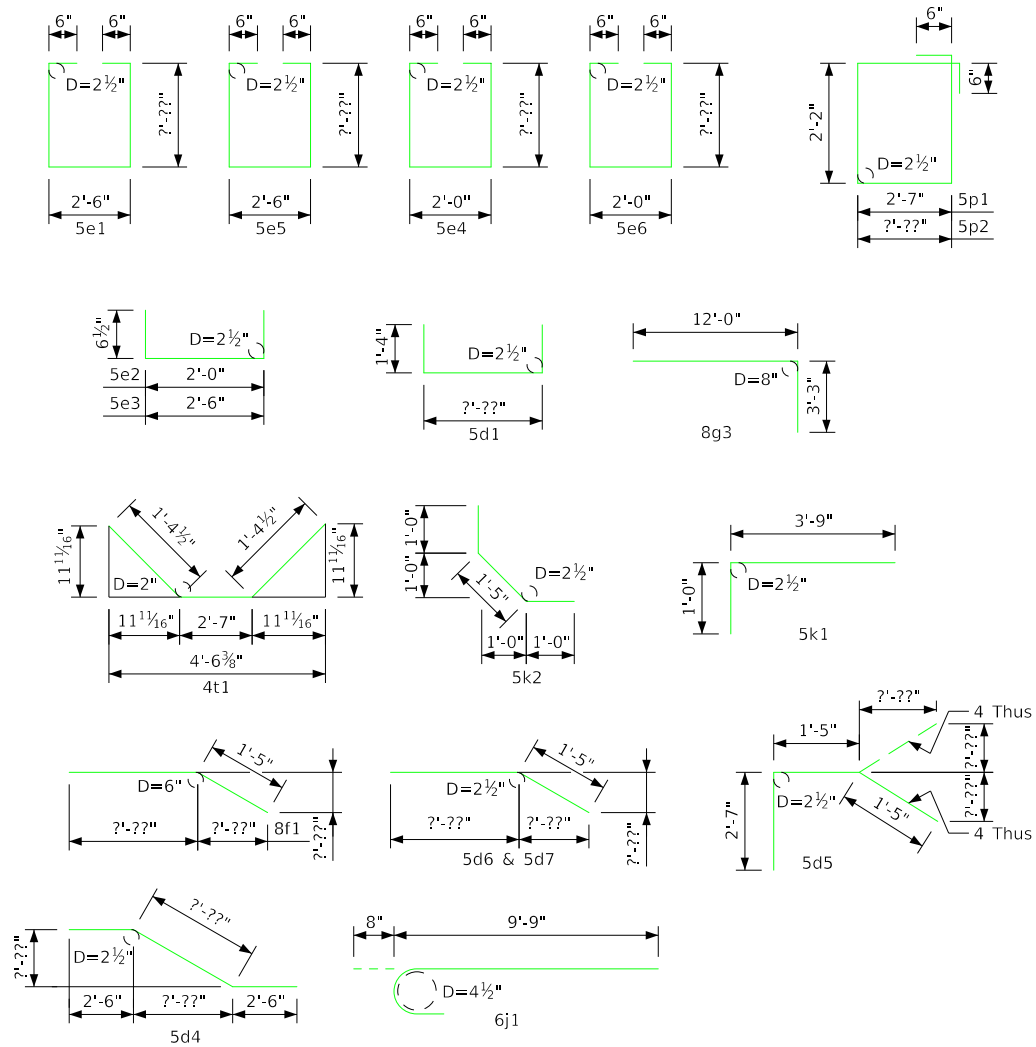
### Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non-Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

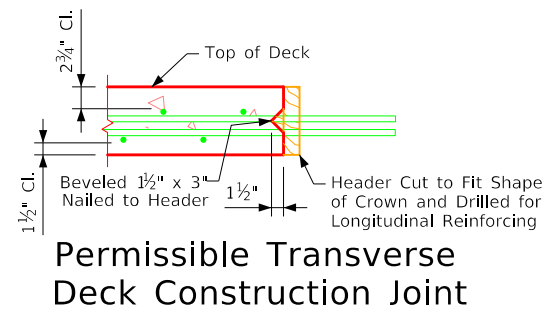
### Concrete Placement Quantities

Location	Quantity	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	?'-?"	???
6a2	Deck Transv. Bott.		??	?'-?"	???
6a3	Deck Transv. Top Ends		??	Varies	???
6a4	Deck Transv. Bott. Ends		??	Varies	???
5b1	Deck Longit. Top & Bott.		??	?'-?"	???
7b2	Deck Longit. Top at Piers		??	?'-?"	???
5d1	Pier Diaph. Ends		??	?'-?"	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d4	Pier Diaph. Longit.		??	?'-?"	???
5d5	Abut. Diaph. Ends		8	5'-5"	45
5d6	Abut. Diaph. Longit. B.F.		12	?'-?"	???
5d7	Paving Notch Longit.		8	?'-?"	???
5e1	Pier Diaph. Hoops		??	?'-?"	???
5e2	Pier Diaph. Tie Ends		??	3'-1"	???
5e3	Pier Diaph. Ties		??	3'-7"	???
5e4	Pier Diaph. Hoops Ends		??	?'-?"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?"	???
5e6	Pier Diaph. Hoops Exp. Pier End		??	?'-?"	???
8f1	Abut. Footing Longit. Both F.		36	?'-?"	???
8g1	Abut. Vert. Both F.		??	?'-?"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-3"	???
5h2	Abut. To Wing Anchor		68	5'-9"	408
5h5	Abut. To Wing Anchor		8	4'-0"	33
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Hoops at Ends		8	?'-?"	???
4t1	Under Beams at Abutments		??	5'-4"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



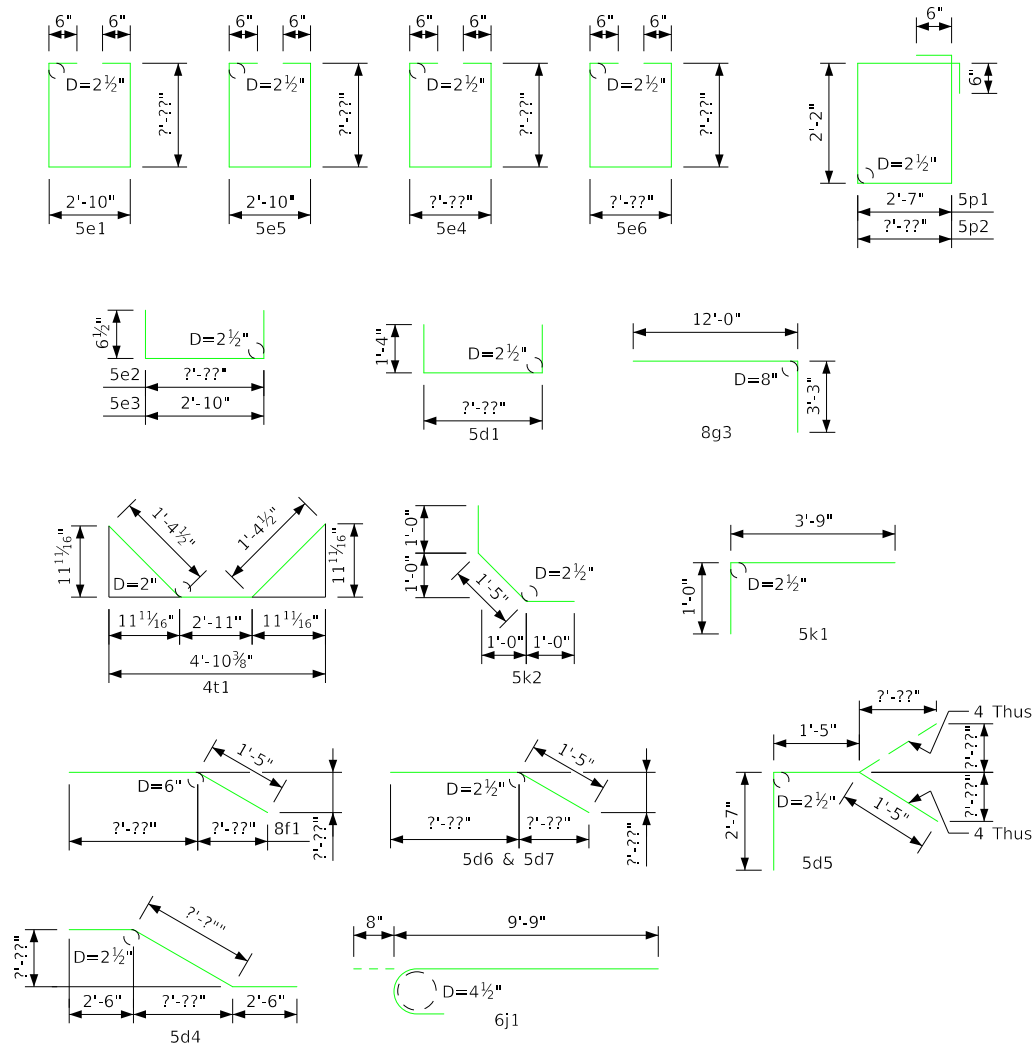
Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non-Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{7}{8}$ " x $\frac{7}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

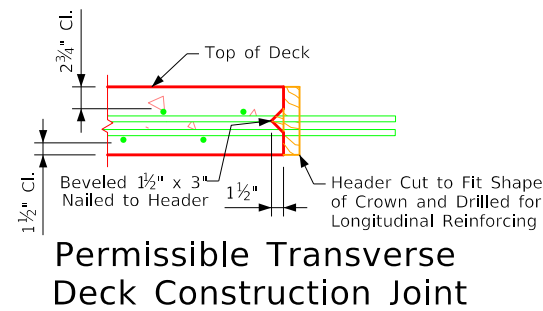
### Concrete Placement Quantities

Location	Quantity	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	?'-?"	???
6a2	Deck Transv. Bott.		??	?'-?"	???
6a3	Deck Transv. Top Ends		??	Varies	???
6a4	Deck Transv. Bott. Ends		??	Varies	???
5b1	Deck Longit. Top & Bott.		??	?'-?"	???
7b2	Deck Longit. Top at Piers		??	?'-?"	???
5d1	Pier Diaph. Ends		??	?'-?"	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d4	Pier Diaph. Longit.		??	?'-?"	???
5d5	Abut. Diaph. Ends		8	5'-5"	45
5d6	Abut. Diaph. Longit. B.F.		12	?'-?"	???
5d7	Paving Notch Longit.		8	?'-?"	???
5e1	Pier Diaph. Hoops		??	?'-?"	???
5e2	Pier Diaph. Tie Ends		??	3'-11"	???
5e3	Pier Diaph. Ties		??	?'-?"	???
5e4	Pier Diaph. Hoops Ends		??	?'-?"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	?'-?"	???
8f1	Abut. Footing Longit. Both F.		36	?'-?"	???
8g1	Abut. Vert. Both F.		??	?'-?"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-3"	???
5h2	Abut. To Wing Anchor		68	5'-9"	408
5h5	Abut. To Wing Anchor		8	4'-0"	33
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Hoops at Ends		8	?'-?"	???
4t1	Under Beams at Abutments		??	5'-8"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



Permissible Transverse Deck Construction Joint

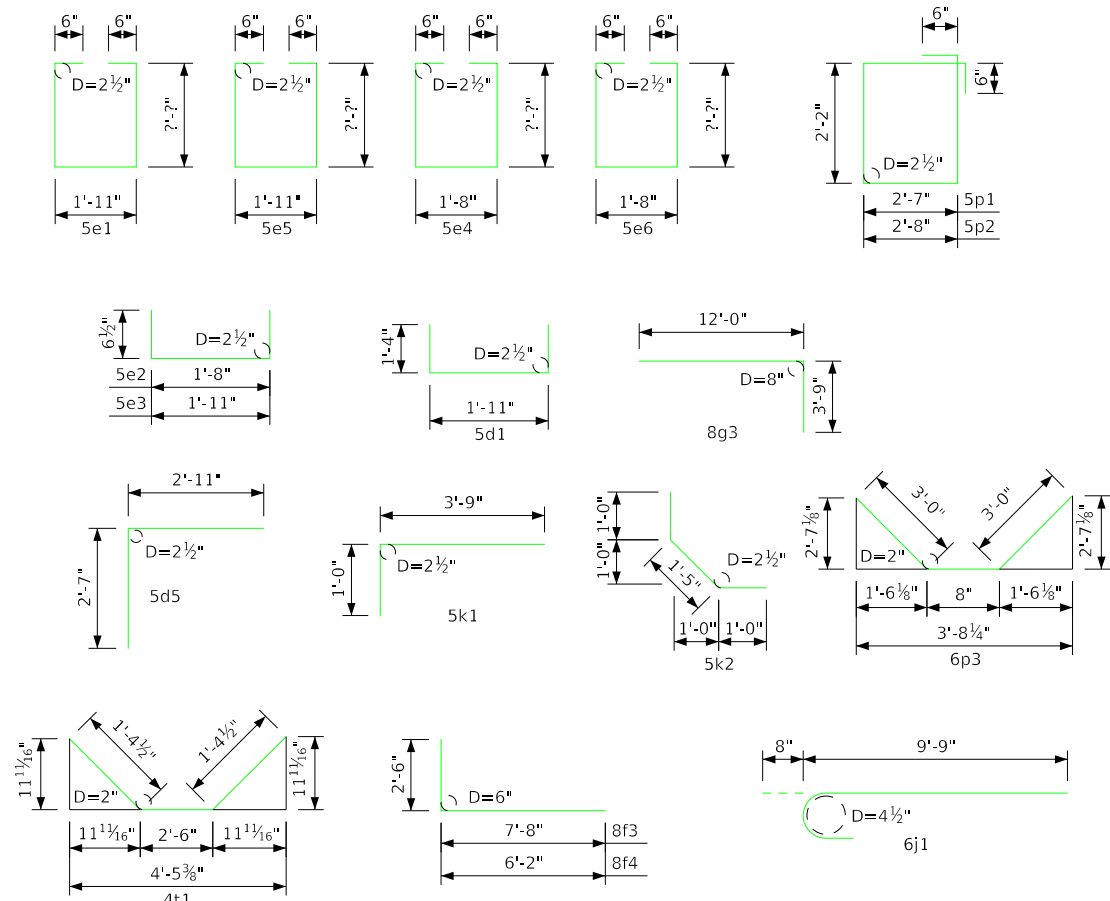
### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

Deck, Abut. & Diaph. Quantities



### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non-Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{7}{8}$ " x $\frac{7}{8}$ " x $\frac{7}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

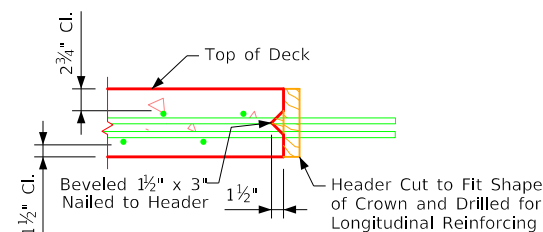
### Concrete Placement Quantities

Location	Quantity	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	?'-?"	???
6a2	Deck Transv. Bott.		??	?'-?"	???
5b1	Deck Longit. Top & Bott.		??	?'-?"	???
7b2	Deck Longit. Top at Piers		??	?'-?"	???
5d1	Pier Diaph. Ends		??	4'-7"	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d4	Pier Diaph. Longit.		??	?'-?"	???
5d5	Abut. Diaph. Ends		12	5'-6"	69
5d6	Abut. Diaph. Longit. B.F.		16	?'-?"	???
5d7	Paving Notch Longit.		8	?'-?"	???
5d8	Abut. Diaph. Wing. Longit.		48	10'-8"	534
5e1	Pier Diaph. Hoops		??	?'-?"	???
5e2	Pier Diaph. Tie Ends		??	2'-9"	???
5e3	Pier Diaph. Ties		??	3'-0"	???
5e4	Pier Diaph. Hoops Expansion Pier		??	?'-?"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	?'-?"	???
8f1	Abut. Footing Longit. Both F.		36	?'-?"	???
8f3	Abut. Extension Longit.		16	10'-2"	434
8f4	Abut. Extension Longit.		16	8'-8"	370
8g1	Abut. Vert. Both F.		??	?'-?"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
6g4	Abut. Diaph. Wing. Ext. Vert.		40	?'-?"	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		24	10'-8"	267
6p3	Abut. Bott. at Piles		??	6'-8"	???
4t1	Under Beams at Abutments		??	5'-3"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



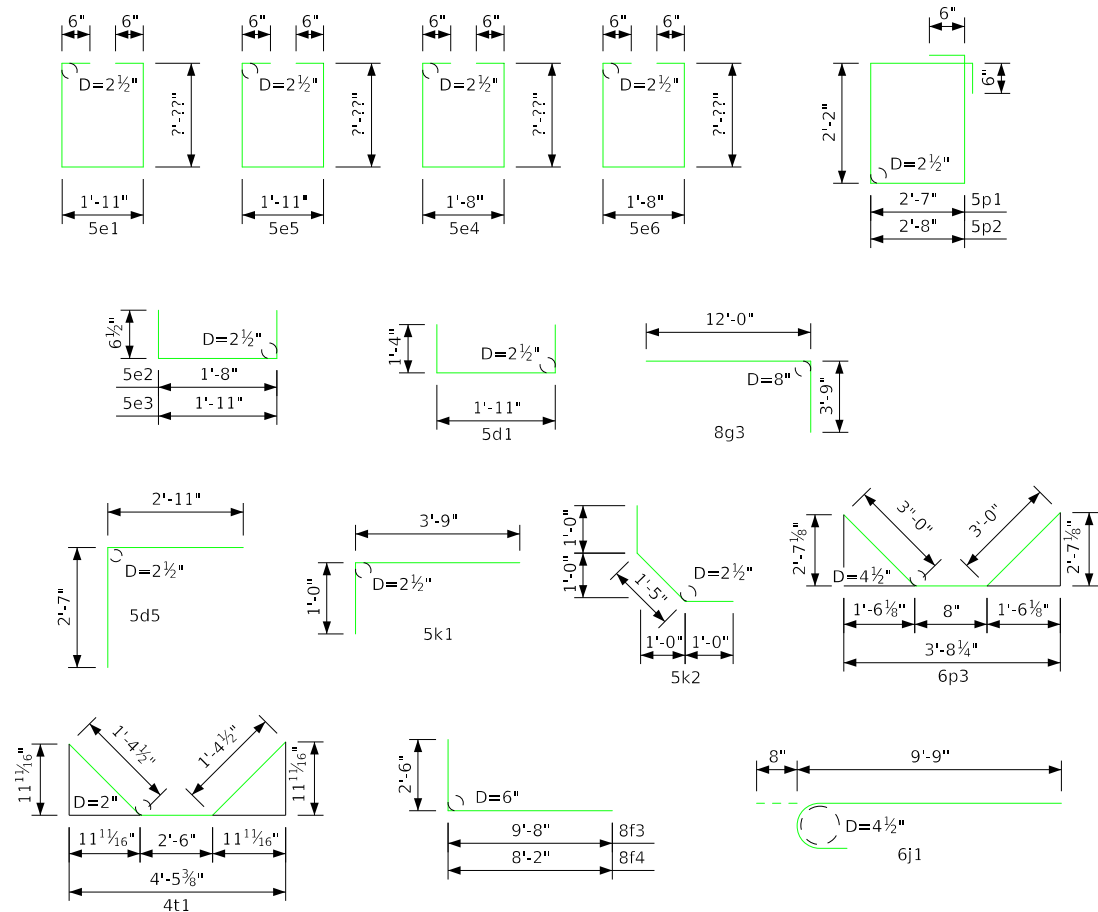
Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non-Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

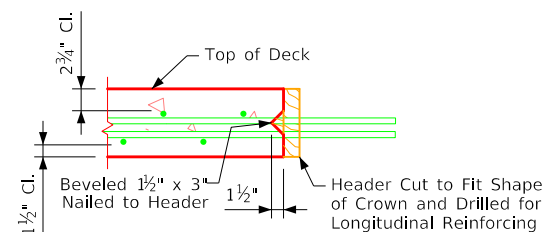
### Concrete Placement Quantities

Location	Quantity	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	?'-?"	???
6a2	Deck Transv. Bott.		??	?'-?"	???
5b1	Deck Longit. Top & Bott.		??	?'-?"	???
7b2	Deck Longit. Top at Piers		??	?'-?"	???
5d1	Pier Diaph. Ends		??	4'-7"	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?"	???
5d4	Pier Diaph. Longit.		??	?'-?"	???
5d5	Abut. Diaph. Ends		16	5'-6"	92
5d6	Abut. Diaph. Longit. B.F.		20	?'-?"	???
5d7	Paving Notch Longit.		8	?'-?"	???
5d8	Abut. Diaph. Wing Longit.		56	12'-8"	740
5e1	Pier Diaph. Hoops		??	?'-?"	???
5e2	Pier Diaph. Tie Ends		??	2'-9"	???
5e3	Pier Diaph. Ties		??	3'-0"	???
5e4	Pier Diaph. Hoops Ends		??	?'-?"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	?'-?"	???
8f1	Abut. Footing Longit. Both F.		36	?'-?"	???
8f3	Abut. Extension Longit.		16	12'-2"	520
8f4	Abut. Extension Longit.		16	10'-8"	456
8g1	Abut. Vert. Both F.		??	?'-?"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
6g4	Abut. Diaph. Wing Ext. Vert.		56	?'-?"	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		40	10'-8"	445
6p3	Abut. Bott. At Piles		??	6'-8"	???
4t1	Under Beams at Abutments		??	5'-3"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



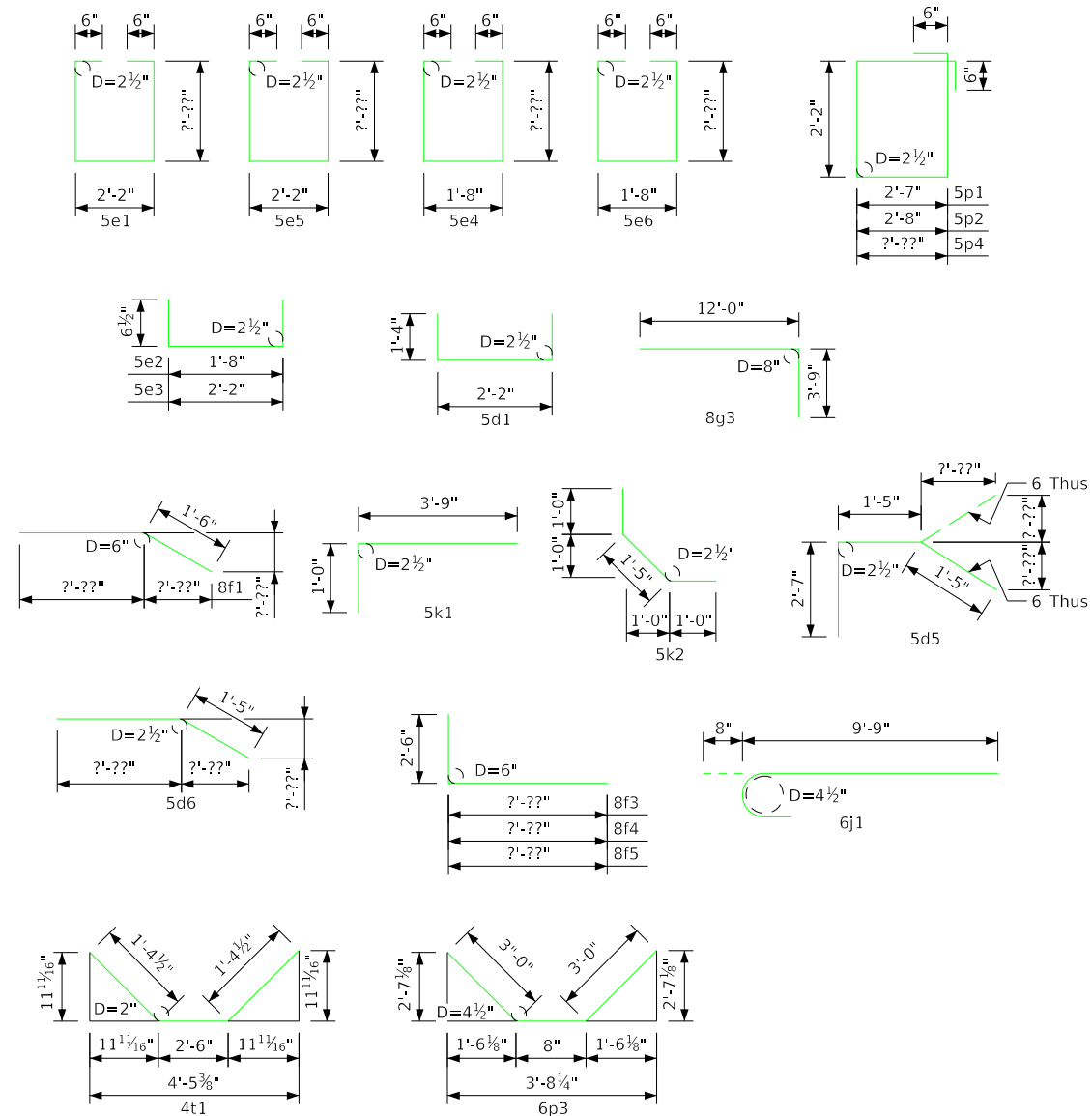
### Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

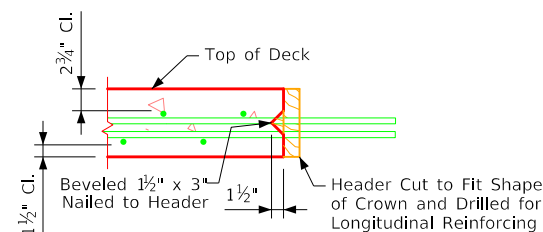
### Non - Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, 1/8" x 7/8" x 1/8" x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

### Concrete Placement Quantities

Location	Total	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.



### Permissible Transverse Deck Construction Joint

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

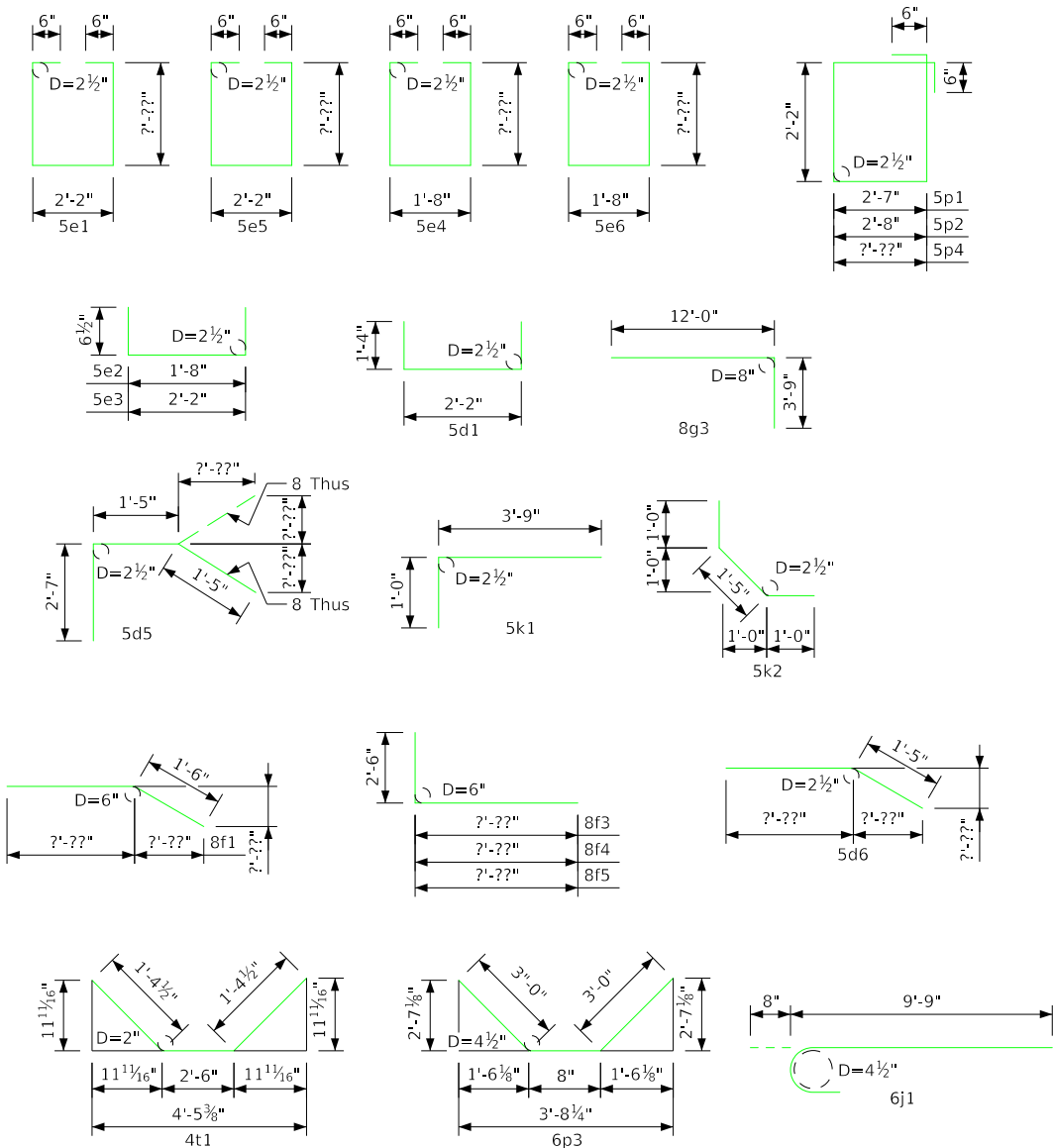
Bar	Location	Shape	No.	Length	Weight
6a1	Deck, Transv. Top		??	?'-?'	???
6a2	Deck, Transv. Bott.		??	?'-?'	???
5b1	Deck Longit. Top & Bott.		??	?'-?'	???
7b2	Deck Longit. Top at Piers		??	?'-?'	???
5d1	Pier Diaph. Ends		??	4'-10"	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?'	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?'	???
5d4	Pier Diaph. Longit.		??	?'-?'	???
5d5	Abut. Diaph. Ends		12	5'-5"	68
5d6	Abut. Diaph. Longit. B.F.		16	?'-?'	???
5d7	Paving Notch Longit.		8	?'-?'	???
5d8	Abut. Diaph. Wing Longit.		48	10'-8"	534
5e1	Pier Diaph. Hoops		??	?'-?'	???
5e2	Pier Diaph. Tie Ends		??	2'-9"	???
5e3	Pier Diaph. Ties		??	3'-3"	???
5e4	Pier Diaph. Hoops Ends		??	?'-?'	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?'	???
5e6	Pier Diaph. Hoops Expansion Pier Ends		??	?'-?'	???
8f1	Abut. Footing Longit. Both F.		36	?'-?'	???
8f3	Abut. Extension Longit.		16	?'-?'	???
8f4	Abut. Extension Longit.		8	?'-?'	???
8f5	Abut. Extension Longit.		8	?'-?'	???
8g1	Abut. Vert. Both F.		??	?'-?'	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
6g4	Abut. Diaph. Wing Ext. Vert.		40	?'-?'	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (At Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		24	10'-8"	267
6p3	Abut. Bott. At Piles		??	6'-8"	???
5p4	Abut. Hoops At Ends		8	?'-?'	???
4t1	Under Beams At Abutments		??	5'-3"	???
Epoxy Reinforcing Total Weight (lbs.)					???

### Deck, Abut. & Diaph. Quantities

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non - Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L 7/8" x 7/8" x 7/8" x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

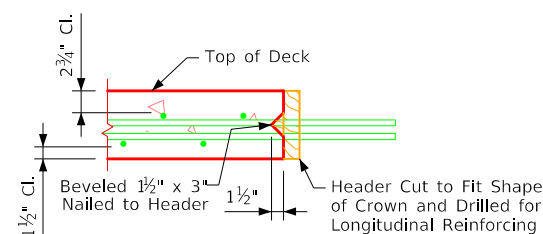
### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck, Transv. Top		??	?'-?'"	???
6a2	Deck, Transv. Bott.		??	?'-?'"	???
5b1	Deck Longit. Top & Bott.		??	?'-?'"	???
7b2	Deck Longit. Top at Piers		??	?'-?'"	???
5d1	Pier Diaph. Ends		??	4'-10"	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?'"	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?'"	???
5d4	Pier Diaph. Longit.		??	?'-?'"	???
5d5	Abut. Diaph. Ends		16	5'-5"	90
5d6	Abut. Diaph. Longit. B.F.		20	?'-?'"	???
5d7	Paving Notch Longit.		8	?'-?'"	???
5d8	Abut. Diaph. Wing Longit.		56	12'-8"	740
5e1	Pier Diaph. Hoops		??	?'-?'"	???
5e2	Pier Diaph. Tie Ends		??	?'-?'"	???
5e3	Pier Diaph. Ties		??	2'-9"	???
5e4	Pier Diaph. Hoops Ends		??	3'-3"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?'"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	?'-?'"	???
8f1	Abut. Footing Longit. Both F.		36	?'-?'"	???
8f3	Abut. Extension Longit.		16	?'-?'"	???
8f4	Abut. Extension Longit.		8	?'-?'"	???
8f5	Abut. Extension Longit.		8	?'-?'"	???
8g1	Abut. Vert. Both F.		??	?'-?'"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
8g4	Abut. Diaph. Wing Ext. Vert.		56	?'-?'"	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (At Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		40	10'-8"	445
6p3	Abut. Bott. At Piles		??	6'-8"	???
5p4	Abut. Hoops At Ends		8	?'-?'"	???
4t1	Under Beams At Abutments		??	5'-3"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???

### Concrete Placement Quantities

Location	Total
Section 1, Deck & Abut. Diaph.	??.
Section 2, Deck	??.
Section 3, Deck & Abut. Diaph.	??.
Section 4, Deck & Pier Diaph.	??.
Section 5, Deck & Pier Diaph.	??.
Total (Cu. Yds.)	??.

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.



### Permissible Transverse Deck Construction Joint

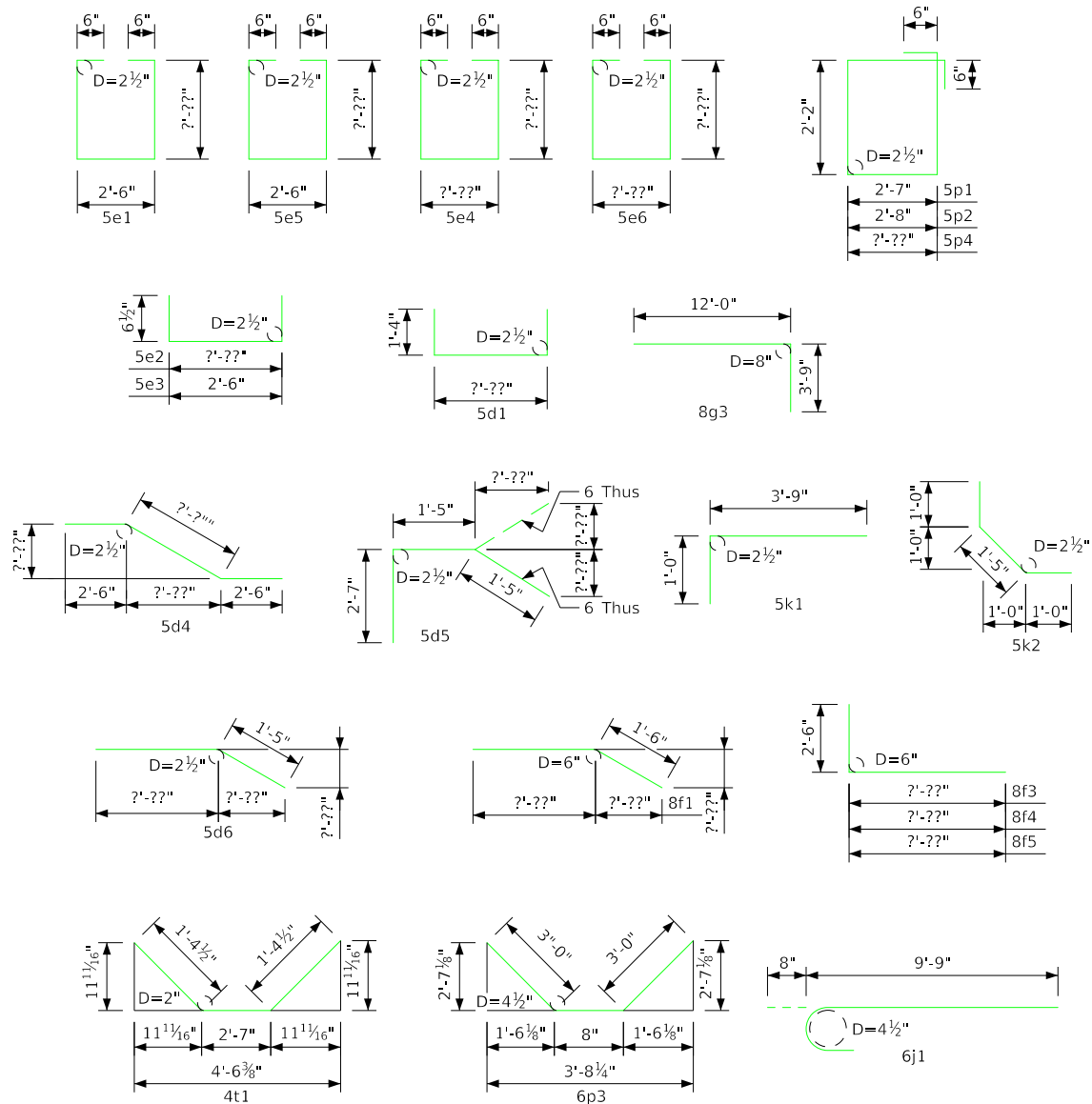
### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities

Revised 07-15: Changed Concrete Placement Note to Account for the Possible Addition of a Retarding Admixture to the Concrete. Issued 02-08. BTIntegralBridges.dgn - 4519-BTE - This Sheet Re-Issued 11-2023. Sheet Format Update.

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non - Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

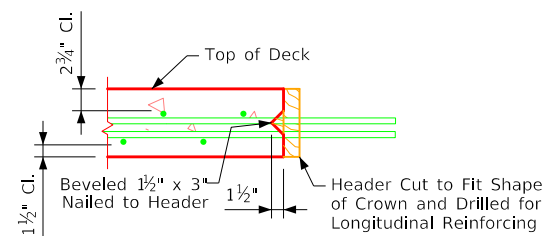
### Concrete Placement Quantities

Location	Total	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck, Transv. Top		??	??'-??"	???
6a2	Deck, Transv. Bott.		??	??'-??"	???
6a3	Deck, Transv. Top Ends		??	Varies	???
6a4	Deck, Transv. Bott. Ends		??	Varies	???
5b1	Deck Longit. Top & Bott.		??	??'-??"	???
7b2	Deck Longit. Top at Piers		??	??'-??"	???
5d1	Pier Diaph. Ends		??	??'-??"	???
5d2	Pier & Abut. Diaph. Longit.		??	??'-??"	???
5d3	Pier & Abut. Diaph. Longit.		??	??'-??"	???
5d4	Pier Diaph. Longit.		??	??'-??"	???
5d5	Abut. Diaph. Ends		12	5'-5"	68
5d6	Abut. Diaph. Longit. B.F.		16	??'-??"	???
5d7	Paving Notch Longit.		8	??'-??"	???
5d8	Abut. Diaph. Wing Longit.		48	10'-8"	534
5e1	Pier Diaph. Hoops		??	??'-??"	???
5e2	Pier Diaph. Tie Ends		??	??'-??"	???
5e3	Pier Diaph. Ties		??	3'-7"	???
5e4	Pier Diaph. Hoops Ends		??	??'-??"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	??'-??"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	??'-??"	???
8f1	Abut. Footing Longit. Both F.		36	??'-??"	???
8f3	Abut. Extension Longit.		16	??'-??"	???
8f4	Abut. Extension Longit.		8	??'-??"	???
8f5	Abut. Extension Longit.		8	??'-??"	???
8g1	Abut. Vert. Both F.		??	??'-??"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
6g4	Abut. Diaph. Wing Ext. Vert.		40	??'-??"	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (At Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		24	10'-8"	267
6p3	Abut. Bott. At Piles		??	6'-8"	???
5p4	Abut. Hoops At Ends		8	??'-??"	???
4t1	Under Beams At Abutments		??	5'-4"	???
Epoxy Reinforcing Total Weight (lbs.)					???



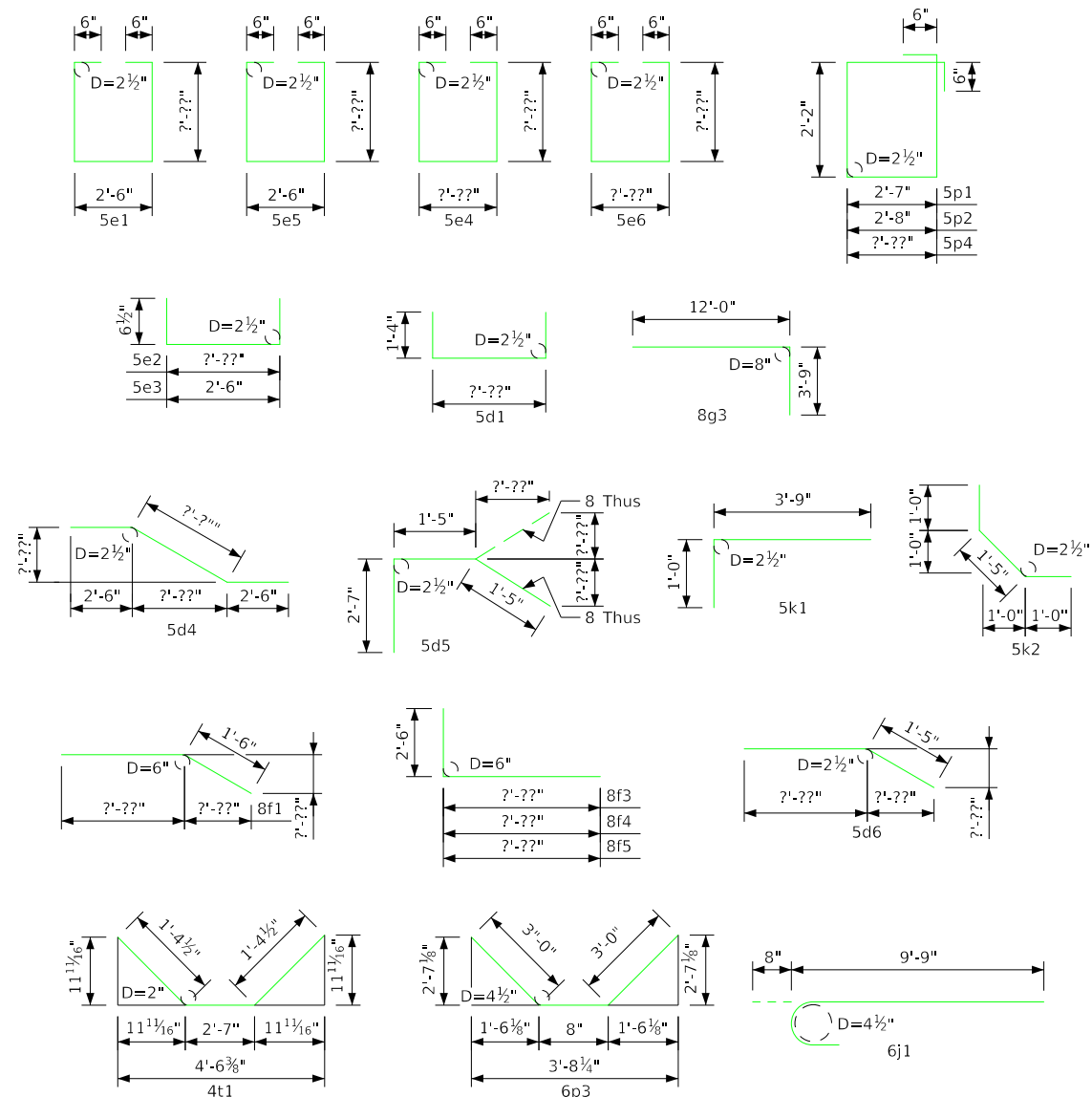
### Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non - Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

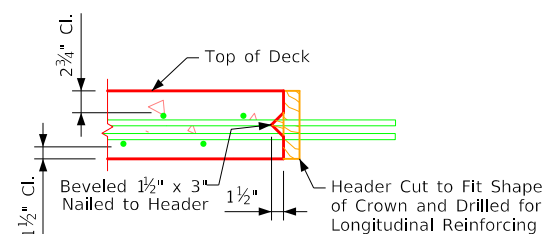
### Concrete Placement Quantities

Location	Total	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	??'-??"	???
6a2	Deck Transv. Bott.		??	??'-??"	???
6a3	Deck Transv. Top Ends		??	Varies	???
6a4	Deck Transv. Bott. Ends		??	Varies	???
5b1	Deck Longit. Top & Bott.		??	??'-??"	???
7b2	Deck Longit. Top at Piers		??	??'-??"	???
5d1	Pier Diaph. Ends		??	??'-??"	???
5d2	Pier & Abut. Diaph. Longit.		??	??'-??"	???
5d3	Pier & Abut. Diaph. Longit.		??	??'-??"	???
5d4	Pier Diaph. Longit.		??	??'-??"	???
5d5	Abut. Diaph. Ends		16	5'-5"	90
5d6	Abut. Diaph. Longit. B.F.		20	??'-??"	???
5d7	Paving Notch Longit.		8	??'-??"	???
5d8	Abut. Diaph. Wing Longit.		56	12'-8"	740
5e1	Pier Diaph. Hoops		??	??'-??"	???
5e2	Pier Diaph. Tie Ends		??	??'-??"	???
5e3	Pier Diaph. Ties		??	3'-7"	???
5e4	Pier Diaph. Hoops Ends		??	??'-??"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	??'-??"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	??'-??"	???
8f1	Abut. Footing Longit. Both F.		36	??'-??"	???
8f3	Abut. Extension Longit.		16	??'-??"	???
8f4	Abut. Extension Longit.		8	??'-??"	???
8f5	Abut. Extension Longit.		8	??'-??"	???
8g1	Abut. Vert. Both F.		??	??'-??"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
6g4	Abut. Diaph. Wing Ext. Vert.		56	??'-??"	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		40	10'-8"	445
6p3	Abut. Bott. At Piles		??	6'-8"	???
5p4	Abut. Hoops At Ends		8	??'-??"	???
4t1	Under Beams at Abutments		??	5'-4"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



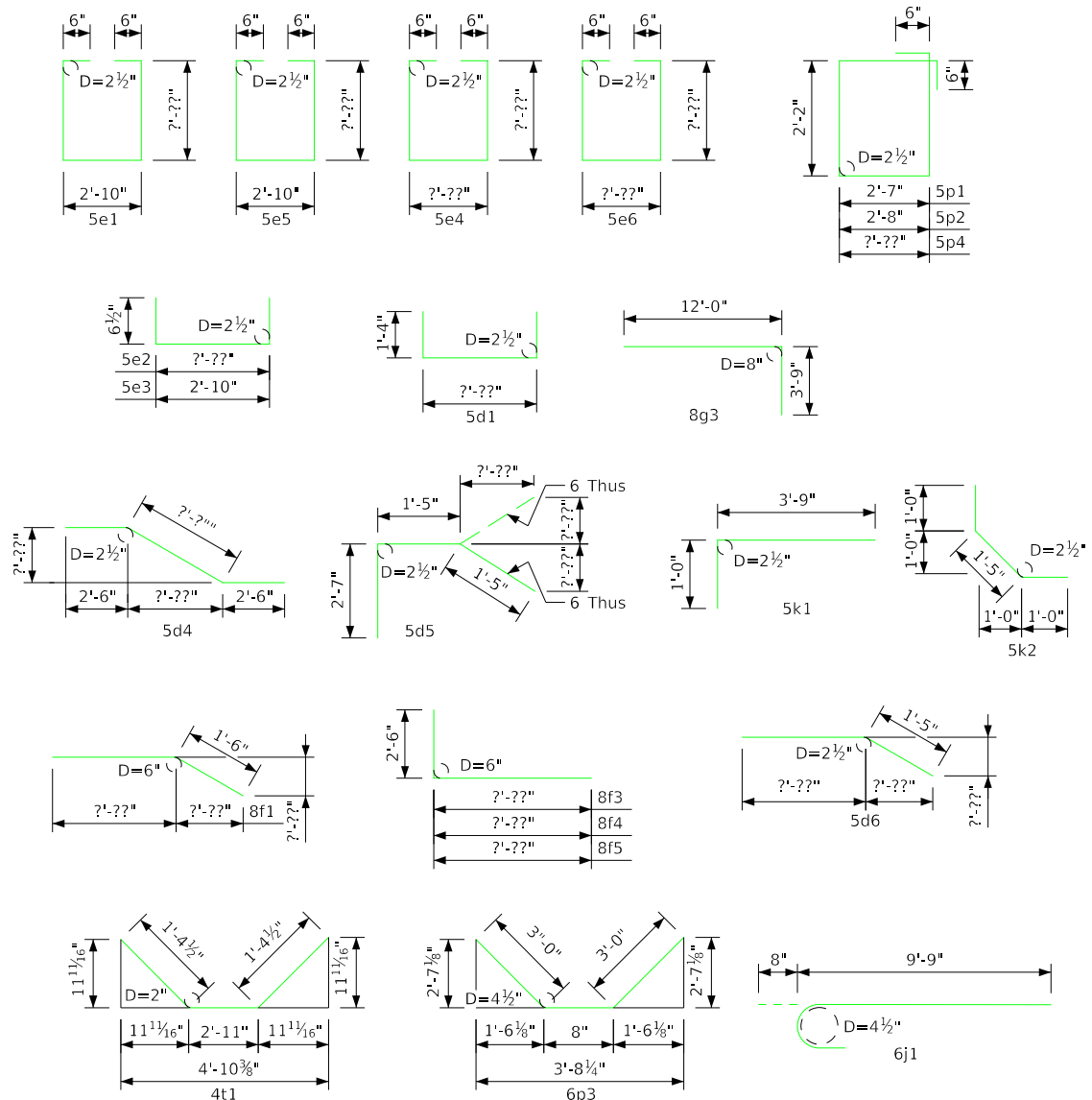
### Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non - Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ " x $\frac{1}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

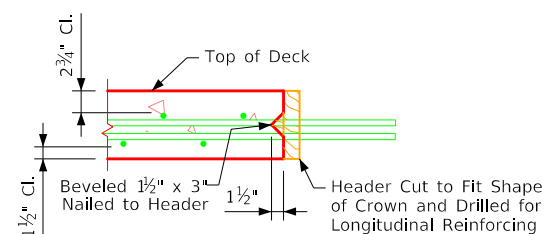
### Concrete Placement Quantities

Location	Total	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	??'-??"	???
6a2	Deck Transv. Bott.		??	??'-??"	???
6a3	Deck Transv. Top Ends		??	Varies	???
6a4	Deck Transv. Bott. Ends		??	Varies	???
5b1	Deck Longit. Top & Bott.		??	??'-??"	???
7b2	Deck Longit. Top at Piers		??	??'-??"	???
5d1	Pier Diaph. Ends		??	??'-??"	???
5d2	Pier & Abut. Diaph. Longit.		??	??'-??"	???
5d3	Pier & Abut. Diaph. Longit.		??	??'-??"	???
5d4	Pier Diaph. Longit.		??	??'-??"	???
5d5	Abut. Diaph. Ends		12	5'-5"	68
5d6	Abut. Diaph. Longit. B.F.		16	??'-??"	???
5d7	Paving Notch Longit.		8	??'-??"	???
5d8	Abut. Diaph. Wing Longit.		48	10'-8"	534
5e1	Pier Diaph. Hoops		??	??'-??"	???
5e2	Pier Diaph. Tie Ends		??	??'-??"	???
5e3	Pier Diaph. Ties		??	3'-11"	???
5e4	Pier Diaph. Hoops Ends		??	??'-??"	???
5e5	Pier Diaph. Hoops Expansion Pier		??	??'-??"	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	??'-??"	???
8f1	Abut. Footing Longit. Both F.		36	??'-??"	???
8f3	Abut. Extension Longit.		16	??'-??"	???
8f4	Abut. Extension Longit.		8	??'-??"	???
8f5	Abut. Extension Longit.		8	??'-??"	???
8g1	Abut. Vert. Both F.		??	??'-??"	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
6g4	Abut. Diaph. Wing Ext. Vert.		40	??'-??"	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		24	10'-8"	267
6p3	Abut. Bott. At Piles		??	6'-8"	???
5p4	Abut. Hoops At Ends		8	??'-??"	???
4t1	Under Beams at Abutments		??	5'-8"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



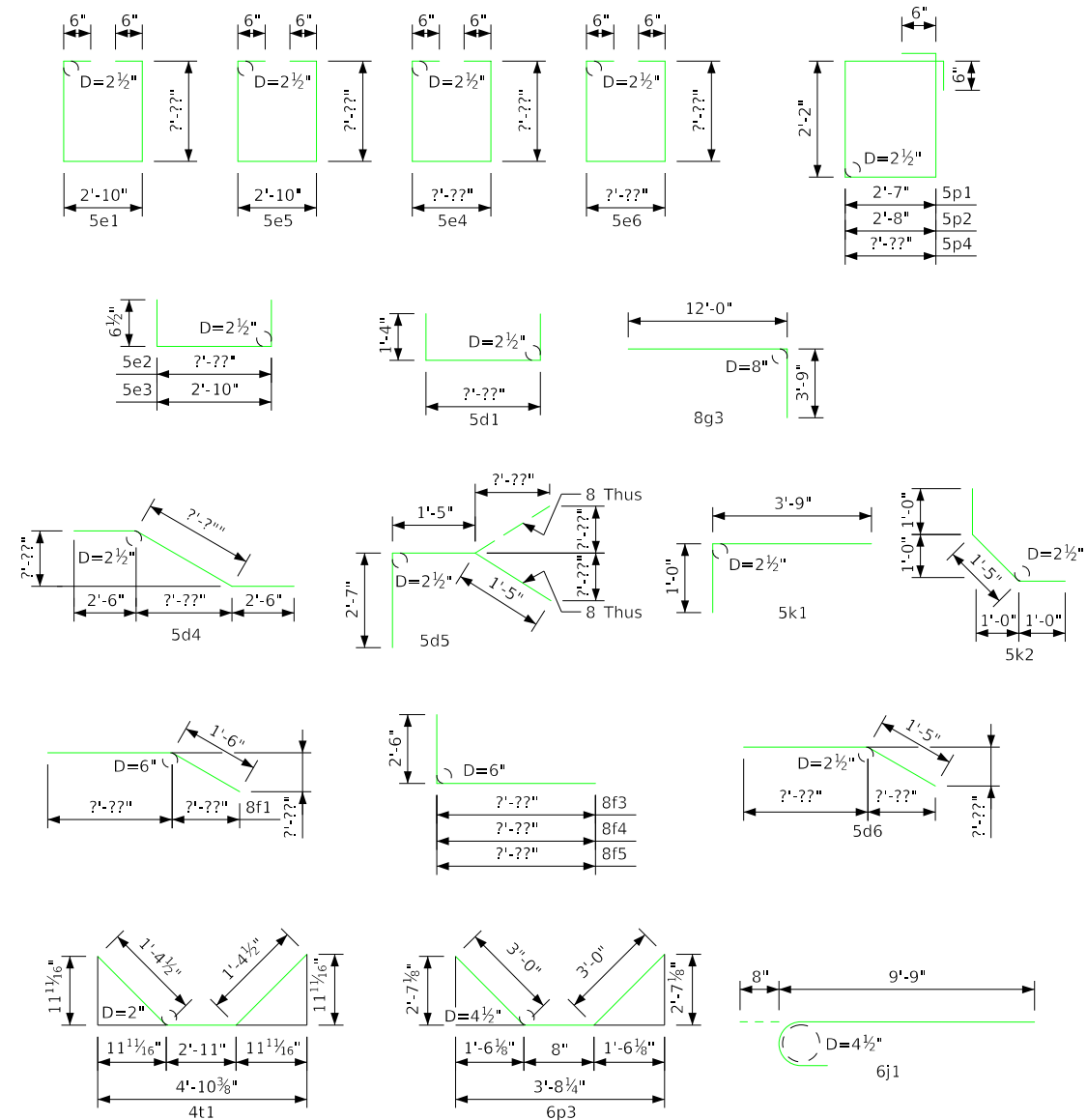
### Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities

### Bent Bar Details



Note: All dimensions are out to out. D= Pin diameter

### Non - Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
#2	Pile Spiral		??	38'-6"	???
	Spiral Spacers, L $\frac{1}{8}$ " x $\frac{7}{8}$ " x $\frac{1}{8}$ " x 0.70		??	1'-10"	???
Non-Coated Reinforcing Steel Total Weight (lbs.)					???

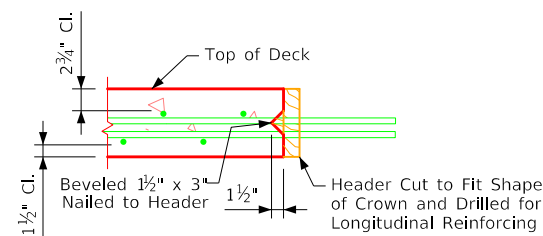
### Concrete Placement Quantities

Location	Total	
Section 1, Deck & Abut. Diaph.	???	
Section 2, Deck	???	
Section 3, Deck & Abut. Diaph.	???	
Section 4, Deck & Pier Diaph.	???	
Section 5, Deck & Pier Diaph.	???	
Total (Cu. Yds.)		???

Note: Concrete and Reinforcing Steel Quantities are included on the Summary Quantities Sheet.

### Epoxy Coated Reinforcing Steel - Deck, Abutment & Diaphragm

Bar	Location	Shape	No.	Length	Weight
6a1	Deck Transv. Top		??	?'-?'	???
6a2	Deck Transv. Bott.		??	?'-?'	???
6a3	Deck Transv. Top Ends		??	Varies	???
6a4	Deck Transv. Bott. Ends		??	Varies	???
5b1	Deck Longit. Top & Bott.		??	?'-?'	???
7b2	Deck Longit. Top at Piers		??	?'-?'	???
5d1	Pier Diaph. Ends		??	?'-?'	???
5d2	Pier & Abut. Diaph. Longit.		??	?'-?'	???
5d3	Pier & Abut. Diaph. Longit.		??	?'-?'	???
5d4	Pier Diaph. Longit.		??	?'-?'	???
5d5	Abut. Diaph. Ends		16	5'-5"	90
5d6	Abut. Diaph. Longit. B.F.		20	?'-?'	???
5d7	Paving Notch Longit.		8	?'-?'	???
5d8	Abut. Diaph. Wing Longit.		56	12'-8"	740
5e1	Pier Diaph. Hoops		??	?'-?'	???
5e2	Pier Diaph. Tie Ends		??	?'-?'	???
5e3	Pier Diaph. Ties		??	3'-11"	???
5e4	Pier Diaph. Hoops Ends		??	?'-?'	???
5e5	Pier Diaph. Hoops Expansion Pier		??	?'-?'	???
5e6	Pier Diaph. Hoops Exp. Pier Ends		??	?'-?'	???
8f1	Abut. Footing Longit. Both F.		36	?'-?'	???
8f3	Abut. Extension Longit.		16	?'-?'	???
8f4	Abut. Extension Longit.		8	?'-?'	???
8f5	Abut. Extension Longit.		8	?'-?'	???
8g1	Abut. Vert. Both F.		??	?'-?'	???
8g3	Abut. Diaph. Vert. B.F.		??	15'-9"	???
6g4	Abut. Diaph. Wing Ext. Vert.		56	?'-?'	???
5h2	Abut. To Wing Anchor		24	5'-9"	144
5h5	Abut. To Wing Anchor		8	4'-0"	33
5h7	Abut. To Wing Anchor		12	5'-9"	72
6j1	Top of Deck Transv. (at Rail)		??	10'-5"	???
5k1	Paving Notch		??	4'-9"	???
5k2	Paving Notch		??	3'-5"	???
5p1	Abut. Hoops		??	10'-6"	???
5p2	Abut. Extension Hoops		40	10'-8"	445
6p3	Abut. Bott. At Piles		??	6'-8"	???
5p4	Abut. Hoops At Ends		8	?'-?'	???
4t1	Under Beams at Abutments		??	5'-8"	???
Epoxy Reinforcing Steel Total Weight (lbs.)					???



### Permissible Transverse Deck Construction Joint

### Concrete Placement Diagram

Note: Concrete deck shall be placed in sections and sequences indicated. Alternate procedures for placing deck concrete may be submitted for approval together with a statement of the proposed method and evidence that the contractor possesses the necessary equipment and facilities to accomplish the required results. For approved alternate procedures the engineer shall determine if a retarding admixture is required to maintain plasticity of the concrete deck during placement.

### Deck, Abut. & Diaph. Quantities