

Project Summary:

May 28, 2010
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Recent Construction Highlights

Flatiron Constructors Intermountain began segment production at Cantilever 4 EB, completed all remaining drilled shafts and footings on the project, and began erecting falsework at Span 5 EB. Demolition of the existing bridge continued. The following summarizes the construction progress for the last month.



Figure 1 – EB Pier 5 Footing Excavation – May 5, 2010:
A Flatiron crew drives sheet pile around the perimeter of the EB Pier 5 footing excavation area. The removal of girders from Spans 1 and 2 of the existing bridge was required prior to beginning foundation construction at EB Pier 5 and EB Abutment 6. An existing bridge pier is adjacent to the work area.

Figure 2 – Existing Bridge Demolition – May 7, 2010:
A worker makes the final cut through a cross frame needed to remove a girder in Span 3 of the existing bridge. The girder is rigged to a 300-ton crane positioned on an access road in the rail yard. The main-span tip of Cantilever 3 EB can be seen on the right.





Figure 3 – Existing Bridge Demolition – May 10, 2010:

After removing about 75% of cross section at the mid-height of each column with a demolition hammer, two excavators push over the upper half of this existing bridge pier. The 300-ton crane used for girder removal is in the background on the left.

Figure 4 – EB Abutment 6 Drilled Shaft Construction – May 10, 2010:

A Flatiron foreman signals the crane operator to continue pulling the temporary casing from a drilled shaft at EB Abutment 6 during the shaft concrete pour. The three drilled shafts at EB Abutment 6 are 48” diameter and approximately 62’ in length.



Figure 5 – Cantilever 4 EB Segmental Construction – May 12, 2010:

The tower crane lifts the right horse of the side-span form traveler onto EB Pier Table 4. Segment E4-1W in the main-span has been cast and the main-span form traveler launched forward to make room on the pier table for the side-span traveler.

Figure 6 – EB Pier 5 Drilled Shaft Construction – May 13, 2010:

A geotechnical engineer drops a tape down the right drilled shaft at EB Pier 5 to determine if the drillers have reached the required shaft tip elevation.



Figure 7 – EB Pier 5 Drilled Shaft Construction – May 13, 2010:

Immediately following completion of drilling and acceptance of the condition of the hole by the geotechnical engineer, crews lower the reinforcing cage into the hole for the right shaft at EB Pier 5. The temporary casing can be seen extending above the seal slab at the bottom of the excavation.

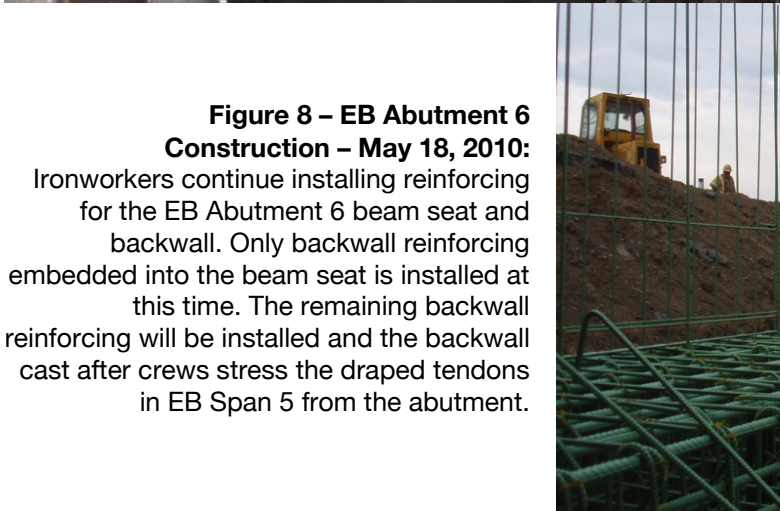


Figure 8 – EB Abutment 6 Construction – May 18, 2010:

Ironworkers continue installing reinforcing for the EB Abutment 6 beam seat and backwall. Only backwall reinforcing embedded into the beam seat is installed at this time. The remaining backwall reinforcing will be installed and the backwall cast after crews stress the draped tendons in EB Span 5 from the abutment.





Figure 9 – EB Bridge Construction – May 21, 2010:

A view of the project from EB Abutment 6 looking west shows concrete placement for Segment E4-1E and the EB Abutment 6 beam seat occurring simultaneously. Girders from the existing bridge have been removed from all spans except Spans 6 and 7 on the West end of the project.

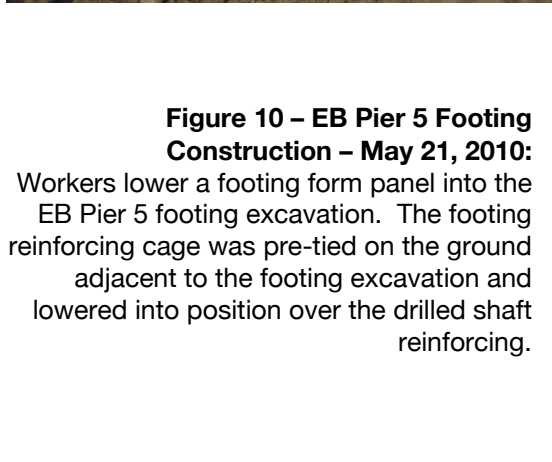


Figure 10 – EB Pier 5 Footing Construction – May 21, 2010:

Workers lower a footing form panel into the EB Pier 5 footing excavation. The footing reinforcing cage was pre-tied on the ground adjacent to the footing excavation and lowered into position over the drilled shaft reinforcing.



Figure 11 – Cantilever 4 EB Segmental Construction – May 21, 2010:

A concrete truck pulls away from the pump truck during casting of the first side-span segment (E4-1E) at Cantilever 4 EB. With both travelers assembled on Cantilever 4 EB, Flatiron plans to resume casting two segments per week.



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Figure 12 – EB Pier 5 Footing Construction – May 27, 2010:

Flatiron workers place and vibrate concrete for the EB Pier 5 footing. The thermal control plan for this mass concrete element requires the concrete delivery temperature to be less than 70° F. With daytime temperatures above 80° F, this pour began at 6:00 AM so concrete could be batched in the early morning taking advantage of cool early morning temperatures.

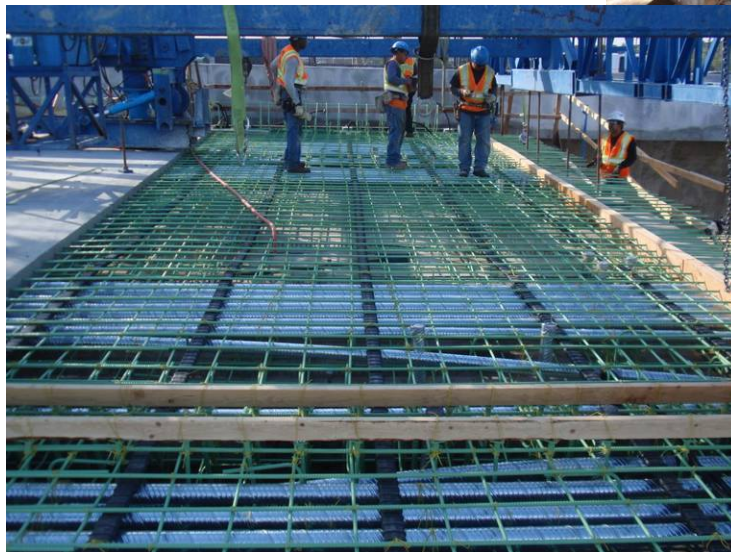


Figure 13 – Cantilever 4 EB Segmental Construction – May 27, 2010:

Ironworkers complete installation of the reinforcing and post-tensioning in the top slab of Segment E4-2E.

Figure 14 – EB Span 5 Construction – May 28, 2010:

A Flatiron crew sets beams for the falsework at EB Span 5. The top of the completed EB Abutment 6 beam seat is visible beyond the falsework. The blue storage tank on the right is used to store water pumped from the EB Pier 5 footing excavation.





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Substructure Construction	<u>To</u>		<u>Total</u>	<u>Unit</u>	<u>% Complete</u>
	<u>Date</u>				
48" Diameter Drilled Shafts (Monuments)	4	of	4	Each	100%
48" Diameter Drilled Shafts (Abutments)	14	of	14	Each	100%
60" Diameter Drilled Shafts (Pier 2 & 5)	8	of	8	Each	100%
96" Diameter Drilled Shafts (Pier 3 & 4)	8	of	8	Each	100%
Type I Footings (Pier 2 & 5)	4	of	4	Each	100%
Type II Footings (Pier 3 & 4)	4	of	4	Each	100%
3'-6" Piers (Pier 2 & 5)	3	of	4	Each	75%
7'-1" Piers (Pier 3 & 4)	4	of	4	Each	100%
Abutments	1 1/2	of	2	Each	75%

Superstructure Construction	<u>To</u>		<u>Total</u>	<u>Unit</u>	<u>% Complete</u>
	<u>Date</u>				
Westbound					
End Span CIP Westbound	2	of	2	Each	100%
Abutment Diaphragm Westbound	2	of	2	Each	100%
Pier Diaphragm Westbound	2	of	2	Each	100%
Pier Table Westbound	2	of	2	Each	100%
Cantilever 3 Segments Westbound	22	of	22	Each	100%
Cantilever 4 Segments Westbound	20	of	20	Each	100%
Closure Segments Westbound	3	of	3	Each	100%
Eastbound					
End Span CIP Eastbound	1	of	2	Each	50%
Abutment Diaphragm Eastbound	1	of	2	Each	50%
Pier Diaphragm Eastbound	1	of	2	Each	50%
Pier Table Eastbound	2	of	2	Each	100%
Cantilever 3 Segments Eastbound	22	of	22	Each	100%
Cantilever 4 Segments Eastbound	4	of	20	Each	20%
Closure Segments Eastbound	1	of	3	Each	33%



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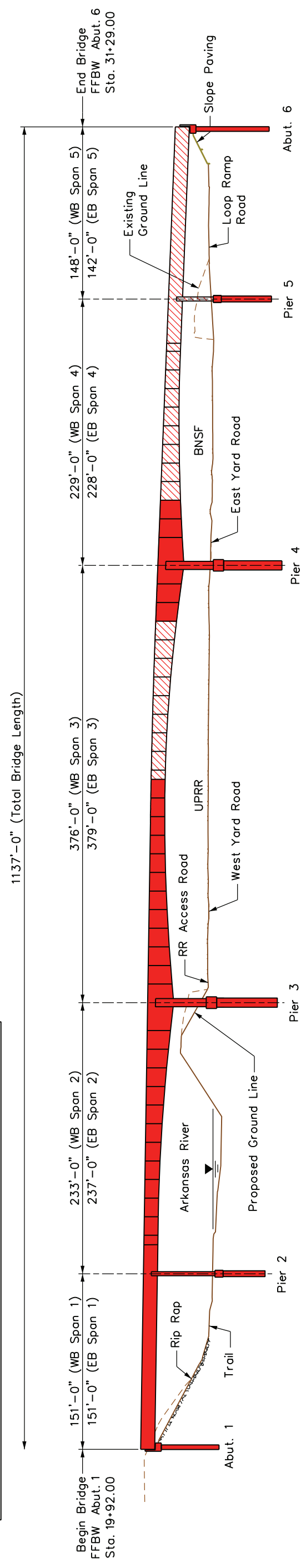
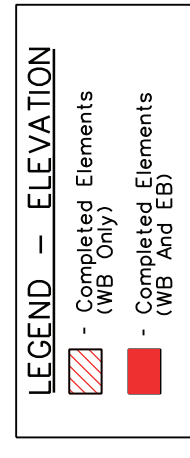
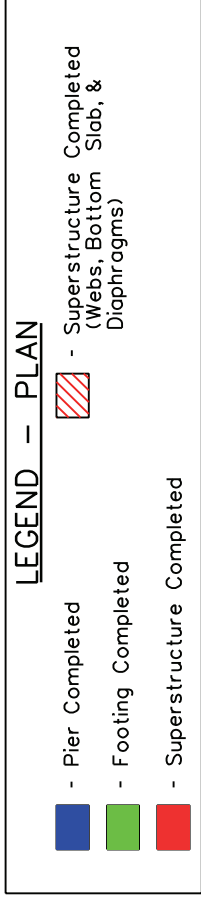
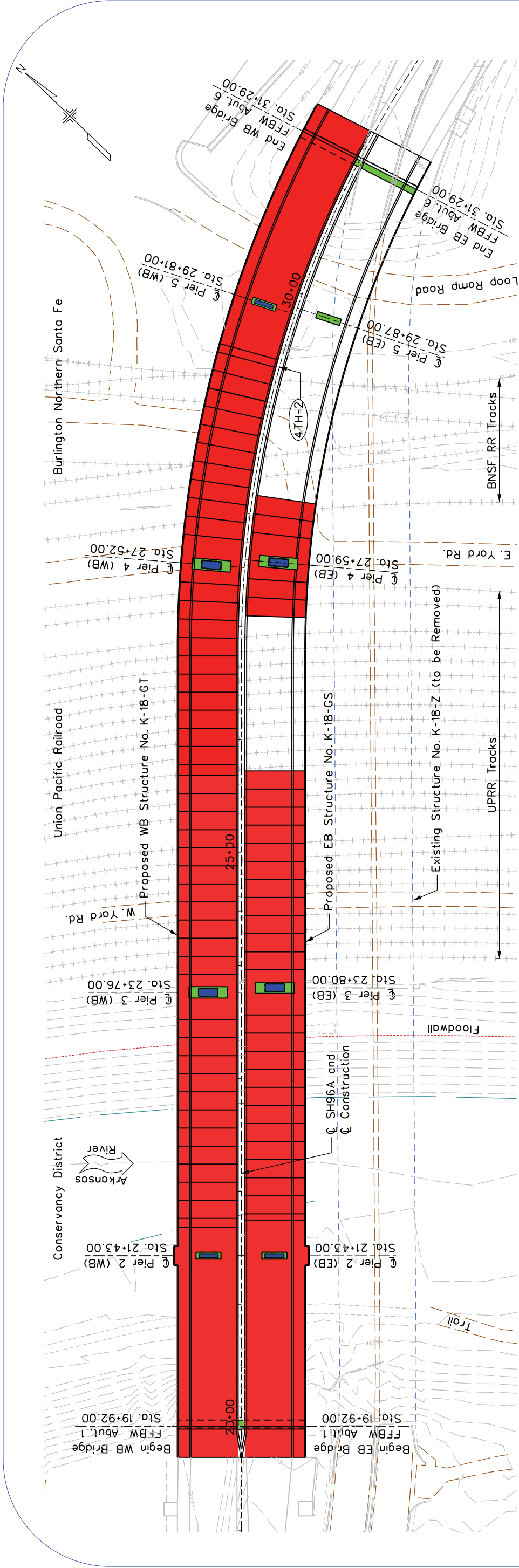
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Project Milestone Dates

Milestone Event	April 2008 Baseline Finish Date	Actual
Project Award	October 18, 2007	October 18, 2007
Notice to Proceed	November 8, 2007	November 8, 2007
Form and Pour First Segment – W3-1E	November 19, 2008	February 16, 2009
Form and Pour First Closure – Span 2 WB	May 19, 2009	August 14, 2009
W4-10E Post Tension	October 20, 2009	November 19, 2009
Span 4 WB Closure Form/Rebar/Pour	November 2, 2009	December 16, 2009
Span 3 WB Closure Form/Rebar/Pour	November 13, 2009	January 7, 2010
E3-1E Pour	February 01, 2010	December 29, 2009
Shift Traffic to New WB Structure	February 17, 2010	April 15, 2010
Bridge Demolition - Remove Bridge Deck	*April 20, 2010	May 23, 2010
Install Last Drilled Caissons – Pier 5 EB	*May 14, 2010	May 17, 2010
Form and Pour Last Segment – E4-10E	*July 27, 2010	
Form and Pour Last Closure – Span 3 EB	*October 26, 2010	
Complete Structure and Final Traffic Configuration	*December 28, 2010	

All items are based on the April 2008 Baseline Schedule, unless accompanied by an asterisk. See below for description. All dates represent the “Finish” of the activity, unless otherwise noted. Refer to the October 2009 Project Updates for previous milestone dates.

Cantilever construction continues on the eastbound bridge with both travelers in operation and ahead of schedule. The baseline schedule has changed with the traffic phasing modification for placing two lanes of traffic with pedestrians on the westbound bridge and the above dates with an asterisk (*) are based on the April 2010 Schedule. These dates reflect an accelerated schedule from the April 2008 Baseline Schedule.



ELEVATION