

Recent Construction Highlights

Flatiron Constructors Intermountain completed Span 4 WB closure segment and is currently stressing the longitudinal post-tensioning for this span. Span 3 WB closure segment will follow, and once completed, will allow for barrier construction and other finishing work to be performed on the westbound bridge prior to traffic switch. Cantilever construction is beginning on the eastbound structure at Cantilever 3. The following is a summary of the construction progress for the last month.



Figure 1 – Cantilever 4 WB Segmental Construction – November 25, 2009:

The upstation traveler has been removed in this picture of Cantilever 4 WB taken at sunrise. The cantilever tip appears to be lower than the end span portion, but the counterweights have not been removed yet.



Figure 2 – Cantilever 4 WB Segmental Construction – November 30, 2009:

The pedestrian curb formwork is advanced ahead, exposing the 40' portion of curb that was cast. Pedestrian curb will be cast using up to 120' of formwork.



Figure 3 – Cantilever 4 WB Segmental Construction – December 1, 2009:
The 50-ton crane is staged on Cantilever 3 WB to remove the wing form from the downstation traveler on Cantilever 4 WB. Once the wing and web forms were removed, the traveler was back-launched to Pier 4 for removal.

Figure 4 – Span 1 EB CIP Superstructure Construction – December 11, 2009:
After the winches are installed on the deck and engaged to the top cap beams of the falsework bents, the posts are removed using a forklift.

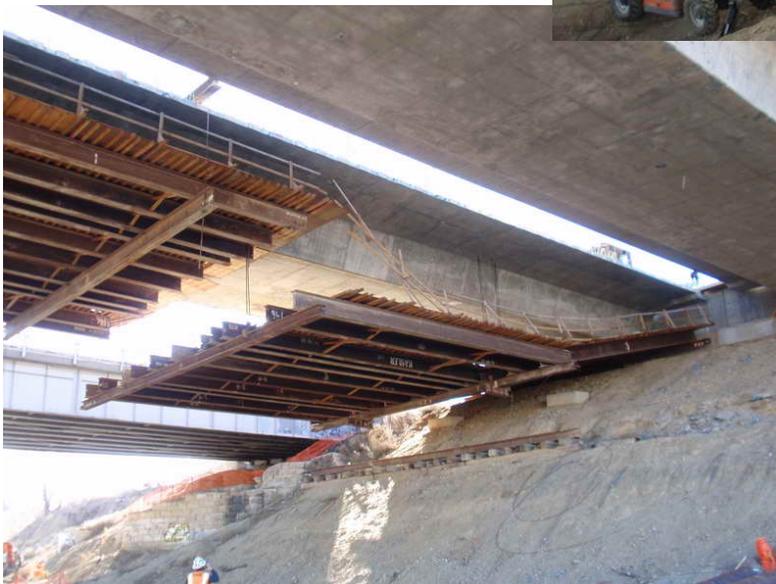


Figure 5 – Span 1 EB CIP Superstructure Construction – December 14, 2009:
The first two spans of falsework stringers are removed via the winches on the deck. The third span of stringers is supported on temporary stripping beams (below the stringer and on the deck), as seen in the photo to the left.

Figure 6 – Span 4 WB Closure Segment Construction – December 15, 2009:
Workers install the web form ties at Span 4 WB closure joint. The stability prop can be seen in the background.

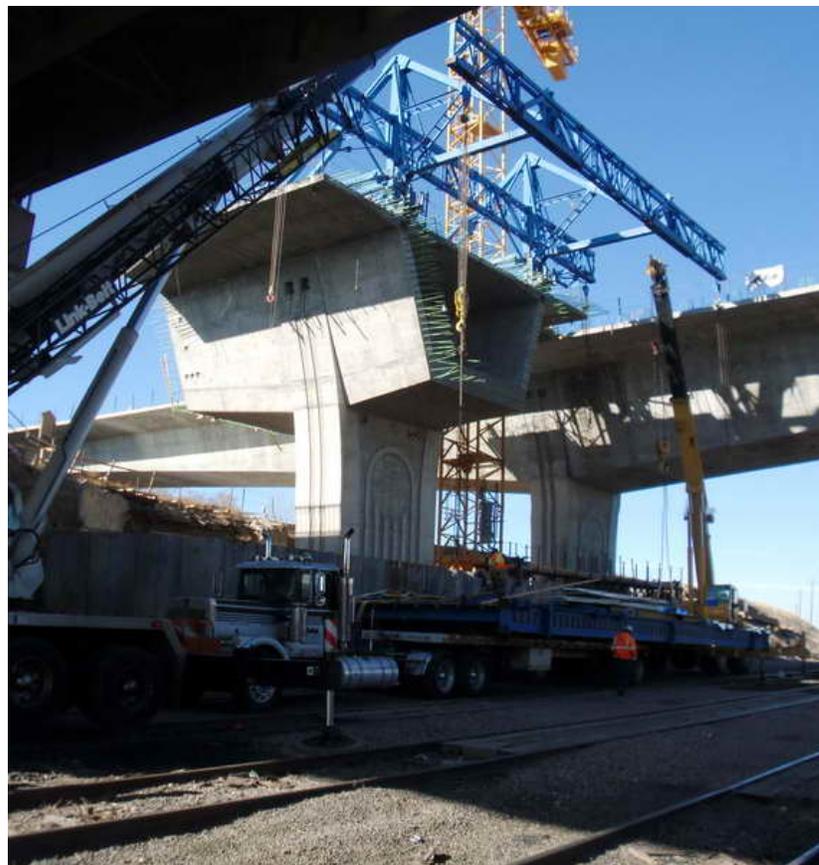


Figure 7 – Cantilever 3 EB Segmental Construction – December 15, 2009:
The form traveler crew prepares the lower deck drive for a tandem pick. Once the lower deck drive was near the bottom slab of the pier table, the chain hoists were engaged and were used to set the lower drive to the proper elevation.

Figure 8 – Span 4 WB Closure Segment Construction – December 16, 2009:
Concrete is placed and finished for the top slab of the closure segment at Span 4 WB

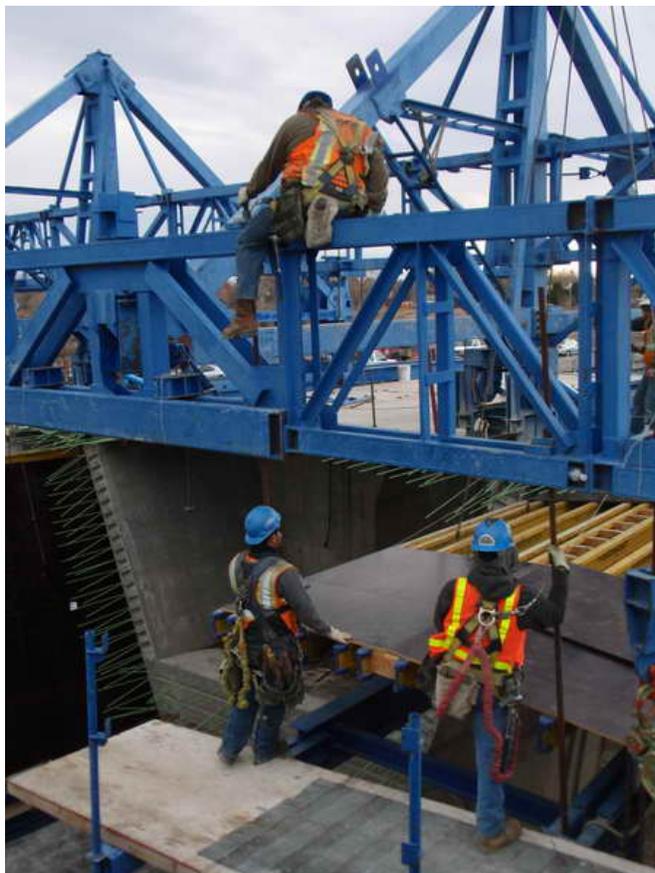


Figure 9 – Cantilever 3 EB Segmental Construction – December 16, 2009:
The form traveler crew erects the wing forms and attaches to the front transverse truss using PT bars.

Figure 10 – Span 1 EB CIP Superstructure Construction – December 17, 2009:
The second portion of the falsework removal process is complete with the lowering of the remaining three falsework spans. The pedestrian trail was closed for the falsework removal and is scheduled to be reopened upon cleanup.



Figure 11 – Span 4 WB Closure Segment Construction – December 17, 2009:
The PT crew stresses the 19-strand longitudinal draped tendons for Span 4 WB.



Figure 12 – Span 4 WB Closure Segment Construction – December 21, 2009:

This photo, looking at the north side of the bridge, shows that the formwork has been removed from the closure segment at Span 4 WB. The winches are staged in front of Pier 5 WB and will be transported to Pier Table 4 EB for falsework removal once the train in the background clears the track crossing.



Figure 13 – Span 4 WB Closure Segment Construction – December 21, 2009:
Span 4 WB, looking from the south side of the bridge.



Figure 14 – Span 4 WB Closure Segment Construction – December 21, 2009:
Forming for Segment E3-1E is nearly complete with the bulkhead installed. Reinforcing installation began today.



Figure 15 – Span 3 WB Closure Segment Construction – December 21, 2009:
The strongbacks are transported across the deck from Span 4 WB to Span 3 WB closure joint using two forklifts. Once the strongback was near the Span 3 closure segment, the 50-ton crane picked the downstation end as the forklift held the upstation end to span the gap across the closure. These beams cannot be engaged until all stressing is complete in Span 4 WB, which is anticipated tomorrow.



Project Summary:

December 21, 2009
 Day 736 of 1278

Substructure Construction	<u>To</u> <u>Date</u>		<u>Total</u>	<u>Unit</u>	<u>% Complete</u>
48" Diameter Drilled Shafts (Monuments)	3	of	4	Each	75%
48" Diameter Drilled Shafts (Abutments)	11	of	14	Each	79%
60" Diameter Drilled Shafts (Pier 2 & 5)	6	of	8	Each	75%
96" Diameter Drilled Shafts (Pier 3 & 4)	8	of	8	Each	100%
Type I Footings (Pier 2 & 5)	3	of	4	Each	75%
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>Date</u>		<u>Total</u>	<u>Unit</u>	<u>% Complete</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	2	of	3	Each	67%
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	0	of	22	Each	0%
Cantilever 4 Segments Eastbound	0	of	20	Each	0%
Closure Segments Eastbound	0	of	3	Each	0%



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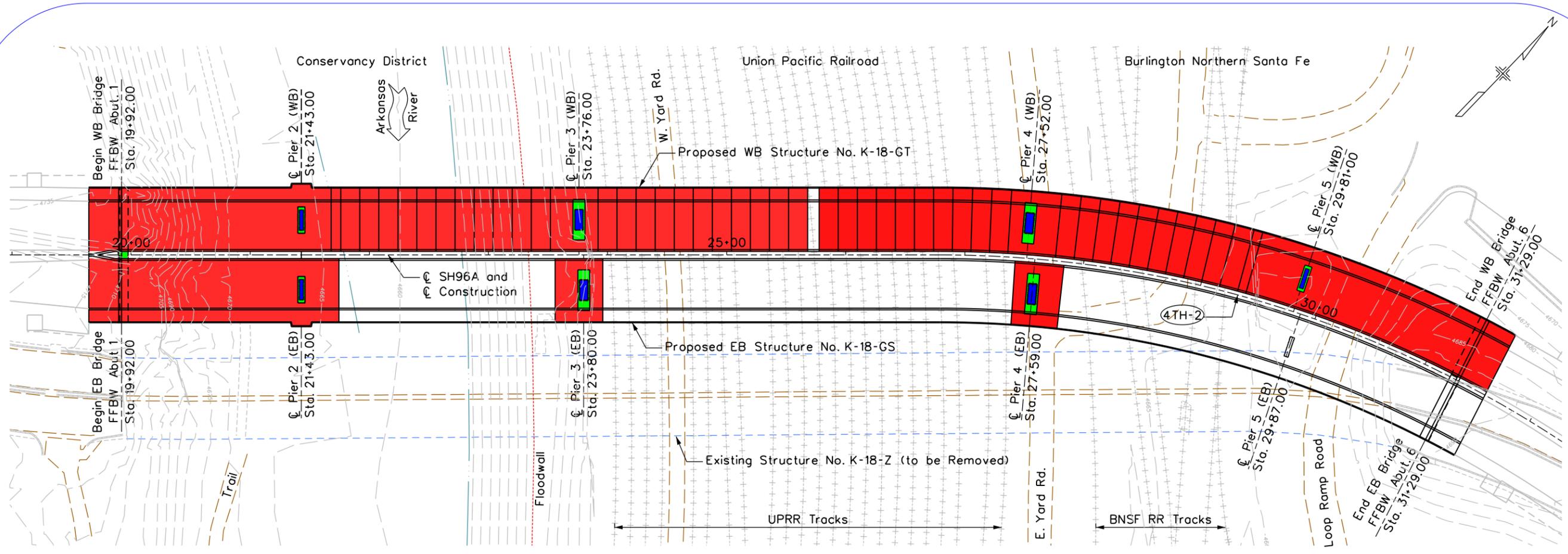
Project Milestone Dates

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 Closure Form/Rebar/Pour	November 2, 2009	December 16, 2009
E3-1E Pour	February 01, 2010	
Shift Traffic to New WB Structure	February 17, 2010	
Install Last Drilled Caissons – Abutment 6 (EB Only)	April 26, 2010	
Form and Pour Last Segment – E4-10E	October 12, 2010	
Form and Pour Last Closure – Span 3 EB	November 16, 2010	
Complete Structure and Final Traffic Configuration	March 4, 2011	

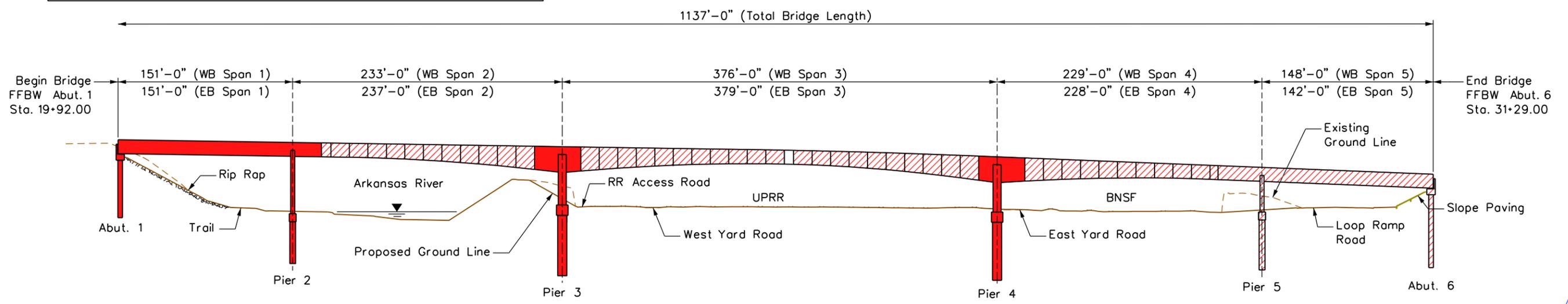
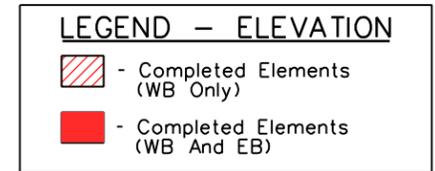
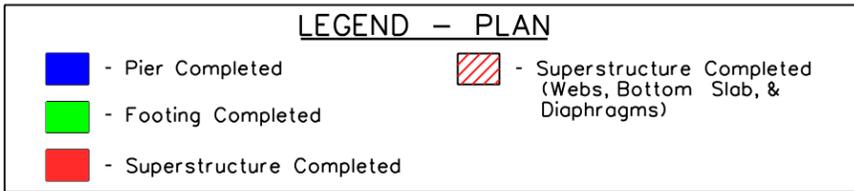
All items are based on the April 2008 Baseline Schedule. All dates represent the “Finish” of the activity, unless otherwise noted. Refer to the October 2009 Project Updates for previous milestone dates.

Cantilever construction has begun on the eastbound bridge with assembly of the main-span traveler. Although, Span 4 WB closure segment is approximately six weeks behind schedule, casting of the eastbound bridge is anticipated to be ahead of schedule by more than four weeks with the casting of Segment E3-1E anticipated for December 28, 2009.

Flatiron continues that project completion will occur within contractual requirements.



PLAN



ELEVATION

