
CONTRACT NO: 009242 FEDERAL AID NO:
CONTRACT TITLE: I-405, RENTON TO BELLEVUE WIDENING AND EXPRESS TOL
CHANGE ORDER NO: 15 PRACTICAL DESIGN WORKSHOP
PRIME CONTRACTOR: SW0256804 FLATIRON WEST, INC.-THE LANE
A JOINT VENTURE 1400 TALBOT ROAD SOUTH RENTON WA 98055-4227
(X)Ordered by Engineer under the terms of Section 1-04.4 of the Standard Specifications ( ) Change proposed by Contractor


| Signature on file | Signature on file |
| :---: | :---: |
| ${ }^{3} \mathrm{Jim}$ Slavicek (Dec 8, 2020 15:54 PST) | Robert E. Christopher III (Dec 22, 2020 14:03 PST) |
| PROJECT ENGINEER SIGNATURE | STATE CONSTRUCTION ENGINEER SIGNATURE |
| Dec 8, 2020 | Dec 22, 2020 |
| DATE | DATE |
|  | OTHER APPROVAL WHEN REQUIRED |
| Signature on file |  |
| REGIONAL ADMINISTRATOR SIGNATURE | SIGNATURE DATE |
| Dec 9, 2020 |  |
| DATE | REPRESENTING |

All work, materials, and measurements to be in accordance with the provisions of the Standard Specifications and Special Provisions for the type of construction involved.

This contract is revised as follows:
Any references to provisions of Division 1 of the Standard Specifications contained herein shall be deemed to refer to the appropriate provisions of the Request for Proposal (RFP) and other Contract Documents. Any references to Prime Contractor or Contractor contained herein shall be deemed to refer to the Design-Builder.

DESCRIPTION:
This change order incorporates practical design ideas (PDI) facilitated through the Practical Design Workshop in accordance with RFP Chapter 1: General Provisions Section 1-04.3 and 1-04.4(2).

PDI-001, PDI-002 and PDI-003 represent Design-Builder Initiated Changes (DBIC) that qualify under Item 1 within RFP Section 1-04.4(2), and are referred to hereafter as Category 1 (Cat 1) changes. The cost savings realized for each of these practical design ideas shall be shared 50-50 between WSDOT and the Design-Builder, in accordance with Section 1-04.4 (2). 3. PDI-004 represent a DBIC that qualifies under Item 3 within RFP Section 1-04.4(2), and is referred to hereafter as a Category 3 (Cat 3) change. Cost adjustments derived from this change have been negotiated. Accordingly, Section 1-04.4(2). 3 Contract Price Adjustment Split Between Parties does not apply to this category of change.
Cat 1 PDI-001 - DBIC003 - Preserve Existing Cedar Ave Bridge: This DBIC revises RFP section 2.1.1.4, instead of replacing the Cedar Ave Bridge, leave it in place. This change leaves the existing Cedar Ave Bridge (MP 3.6) in place. This change maintains I-405 minimum shoulder width of 2 ft., a buffer width between the Express Toll Lanes (ETL) and General Purpose (GP) lanes of 1 ft. , and a minimum horizontal stopping sight distance (HSSD) of 45 mph .

Cat 1 PDI-002 - DBIC004 - Cedar River Bridge Limited Widening:
This DBIC updates FLJV's ATC 039. This change protects the City of Renton's sensitive Cedar River Aquifer while providing the required additional ETL lanes on I-405. With this option, the Southbound Cedar River Bridge deck will be widened $2^{\prime}-6^{\prime \prime}$ in spans $1^{\prime}$ and 2 which does not require additional foundations.

Cat 1 PDI-003 - DBIC007 - Modified Geometry I405 NB to I-90 EB Ramp:
This DBIC modifies the geometry of the $1-405 \mathrm{NB}$ to $1-90 \mathrm{~EB}$ ramp including the additional capacity as shown in the RFP design to increase freeway operation performance and to minimize construction impacts to 1-405, 1-90, and Factoria Blvd.

This change widens the existing $405 / 35 \mathrm{~N}-\mathrm{E}$ bridge (1-405NB to $1-90 \mathrm{~EB}$ over $1-90 \mathrm{~EB}$ to Factoria), shifts the merge location of NB405 and SB405 ramps west approximately 930 feet, and alters the configuration of the 1 -90EB merge, lanes, and shoulders. The new configuration eliminates the construction of two RFP design bridges and wall $11.02 R$, and significantly minimizes impacts to the traveling public and adjacent community.
The bridges eliminated:
NB405-EB90 Ramp over existing EB 1-90 Off-Ramp to Factoria Boulevard/Richards Road
NB405-EB90 Ramp over existing Factoria Boulevard/Richards Road.
Cat 3 PDI-004 - DBIC009 - Reduce Horizontal Stopping Sight Distance:
This DBIC reduces the Design speed of the SB $1-405$ to 1-90 Off-ramp from 60 MPH to 59 MPH and consequently reduces the Horizontal Sight Distance for 325 feet. This change reduces the shoulder width resulting in reduced widening, eliminating Wall 11.52 L .

WSDOT Design Manual exhibit 1260-1 determines the design sight stopping
distance for 60 MPH design speed to be 570 feet. The design speed would be 59
MPH not 60 MPH for a 325 feet section between milepost 11.59 and milepost
11.66. The related stopping sight distance for this section of mainline roadway would be 568 feet. The shoulder buffer would be 4 feet width in some locations as opposed to 10 feet width called out in the Corridor Analysis Express Toll Lanes Design provided in Appendix 0. This design deviation holds the existing edge of pavement.

The Category 1 PDIs are based upon the approved design analyses described below:

PDI-001: Design Analysis \#9 Design Analysis associated with Flatiron-Lane CJV's ATC FLJV-005

PDI-002: Design Analysis \#10 Design Analysis associated with Flatiron-Lane CJV Shoulder Width \& Buffer Width

PDI-003: Design Analysis \#12 Design Analysis associated with Flatiron-Lane CJV Revision to Design Analysis \#6 (Turning Roadway Width, Shoulder Width, Lateral Clearance, Horizontal Stopping Sight Distance, Ramp Spacing, Reserve Area Taper, \& Reserve Area Width)
The Category 3 PDI is based upon the approved design analysis described below:
PDI-004: Design Analysis \#11 Horizontal Stopping Sight Distance
CONTRACT REQUIREMENTS:
The conformed Request for Proposal (RFP) shall be modified as follows for each Category 1 PDI:

PDI-001 - DBIC003 - Preserve Existing Cedar Ave Bridge
RFP section 2.1.1.4, Project Description, page 2.1-2, line 19, delete the word replace. Line 19, before the word "the" add the following words:
"Project to remain in place"
RFP section 2.13.1, Bridge and Structures (General), page 2.13-1, line 14, delete the bullet with the following words:
"405/17.3 (I-405 under Cedar Avenue South)"
RFP section 2.13.4.1.9, Bridge Approach Slab, page 2.13-10, line 6 after the word "carrying" delete the following words:
"Cedar Avenue and"
RFP section 2.13.4.1.9, Bridge Approach Slab, page 2.13-10, line 7 after the word "of" delete the following words:
"Mill Avenue South (roughly 18 feet) and"
RFP section 2.13.4.1.9, Bridge Approach Slab, page 2.13-10, line 8 delete the word "respectively"

PDI-002 - DBIC004 - Cedar River Bridge Limited Widening
No RFP Chapter 2 modifications are required for changing buffer width and shoulder widths.

Per Chapter 2, Section 2.20.3.3, Permanent Pavement Marking Design
Requirements, page 2.20-3, lines 36-38, A 1 -foot buffer consisting of two 8 -inch-wide stripes shall only be allowed at locations shown in the Conceptual Plans or otherwise approved by the WSDOT Engineer. This change, utilizing the 1 -foot buffer for the specific locations as identified in Design Analysis \#10, has been approved by the WSDOT Engineer.

Providing the RFP required buffer and shoulder widths, including 1-foot buffer at specific locations as approved by the WSOT Engineer, requires that only two spans of the four span Cedar River bridge be widened. The two spans that shall be widened are spans 1 and 2 , located south of the Cedar River. The southbound outside shoulder bridge barrier shall be reconstructed on spans 1 and 2 only. The northern spans, spans 3 and 4 , shall not be widened and existing bridge barrier shall remain in place. Per Section 2.13.4.1.13 bridge barrier on widened Cedar River bridge spans land 2 shall be 42 inches
in height, measured from the top of finished bridge deck. A standard WSDOT Bridge Railing Type BP-12 shall be added for fall protection to the top of existing southbound Cedar River bridge outside shoulder barrier that remains in place on northern spans 3 and 4.

PDI-003 - DBIC007 - Modified Geometry I405 NB to I-90 EB Ramp
RFP section 2.1.1.4, Project Description, page 2.1-3, lines 12 to 15 delete the bullet with the words "Reconfigure the southbound I-405 to eastbound I-90 ramp from one lane to two lanes. Realign the northbound I-405 to eastbound I-90 ramp. Part of this Work shall require constructing new bridges over the eastbound I-90 ramp to Factoria Boulevard and over Factoria Boulevard." and replace it with the following words:
"1-90 Interchange (MP 11.1):
Reconfigure the southbound 1-405 to eastbound $1-90$ ramp from one lane to two lanes.
Realign the northbound $1-405$ to eastbound $1-90$ ramp.
Widen the Existing NB/SB 1-405 lanes to EB 1-90 Ramp over existing EB 1-90
Off-Ramp to Factoria Boulevard/Richards Road (Structure No. 405/35N-E)."
RFP section 2.13.1, Bridge and Structures (General), page 2.13-1, after line 12, add a bullet with the following words:
" $405 / 35 \mathrm{~N}-\mathrm{E}$ (NB/SB405 to EB90 Ramp over EB90 Off Ramp to Factoria
Boulevard/Richards Road) "
RFP section 2.13.1, Bridge and Structures (General), page 2.13-1, lines 32 to 35, delete the following words:
"Northbound 1-405 to eastbound 1-90 ramp over existing eastbound 1-90 off-ramp (parallel to existing ramp bridge).
Northbound 1-405 to eastbound 1-90 ramp over existing Factoria Boulevard SE/Richards Road (parallel to existing bridge)"

RFP Section 2.13.4.1.11, Bridge Decks and Expansion Joints, page 2.13-11, lines 17 to 18, delete the following words:
"Northbound I-405 to eastbound I-90 ramp over existing eastbound I-90
off-ramp 17 (parallel to existing Ramp Bridge)"
PDI-004 - DBIC009 - Reduce Horizontal Stopping Sight Distance
The approved Design Analysis upon which this PDI is based does not require a revision to the contract.

The Design-Builder shall incorporate this design in accordance with RFP section 2.11.3, Design Requirements.

MEASUREMENT \& PAYMENT:
No specific unit of measure shall apply to these items. As mutually agreed for the Category 1 PDIs and Category 3 PDI as described in this change order, WSDOT will reduce the total contract amount by the lump sum savings
adjustment of $\$ 4,247,500.00$. The Design-Builder's share of mutually agreed Category 1 savings will remain as a portion of the contract amount, and equates to $\$ 1,997,500.00$.

Existing Contract Bid Item No. I "Total for Design Build Work (Under Revenue Rule 170)" shall be reduced by the amount of $\$ 4,247,500.00$.

The Contractor shall assume all responsibility for all known and unknown impacts to the work related to implementing these Category 1 and Category 3 PDI changes.

CONTRACT TIME:
There shall be no change in Contract time as a result of this change order.


