

## 1.0 General

### 1.1 Project Description

The Project is located on or near I-25 in Pueblo and includes improvements at the following segments:

➤ Bridge Enterprise

- Indiana Bridges and Roadway
- Northern Bridge and Roadway
- Mesa Bridge and Roadway
- I-25 NB over US 50C Bridge and Roadway
- US 50C over Arkansas Bridge and Roadway
- I-25 over Ilex and UPRR Bridges and Roadway

➤ Non-Bridge Enterprise (Non-BE)

- Ilex to 1st Street, Santa Fe Ave, D and Clark St. Bridges, Ramps, and Roadway

The Project Limits along I-25 are from MP 95 to MP 99 (approximately Pueblo Blvd. to 4<sup>th</sup> Street).

Each segment of work within the Project Limits is as shown in Exhibit A – Project Segment Map.

The Project Limits along US 50C are from MP 0.5 to MP 2 (approximately Alan Hamel Drive to ½ mile east of Santa Fe Ave/Santa Fe Drive intersection including Santa Fe Avenue).

The Project Limits along Northern Ave and Mesa Ave are Elm St to Berwind Ave.

The following goals have been established for the Project:

1. Build Project with minimal impacts to traveling public.
  - Project Duration
  - Project Phasing
  - Railroads
2. Technical competency/innovation, maximize the use of RAMP funding by providing AREs, and develop aesthetically pleasing regional Project features.
  - Technical Competency/Innovation
    - Maximize I-25 design speed on curve south of Ilex
    - Maximize design speed of temporary tie-in between Gruma and 1<sup>st</sup> Street
    - Minimize throw-away to future/ultimate alignments
    - Lifecycle and maintenance
  - Include Additional Requested Elements)AREs (re: Book 2, Section1) for subcategories of:
    - Roadway
    - Structures
    - Landscaping
    - Trails
  - Develop aesthetically pleasing features

3. Demonstrate a commitment to enhance the established project values.
  - Safety
  - Quality
  - Integrity
  - Communication/Teamwork

This work is located within the study limits of the I-25 New Pueblo Freeway Environmental Impact Statement that was signed August 15, 2013. The Record of Decision (ROD) for Phase 1 was issued April 17, 2014 and includes only the I-25 corridor north of the Arkansas River. As such, the Work for this Project shall not preclude anything required as part of the FEIS/ROD to ensure future implementation of the FEIS Preferred Alternative in its entirety. Care must be taken to ensure the transportation system operates acceptably at the conclusion of this Project to ensure “independent utility” or the ability for each phase of the FEIS/ROD to operate on its own and that air quality conformity will not be jeopardized. In addition, any mitigation measures needed in response to Project impacts must be implemented with the Work for this Project to be compatible with current FEIS/ROD requirements and future FEIS/ROD phases in which any associated impacts occur, rather than deferred to a later phase.

## **1.2 Basic Configuration and Temporary Configuration**

The following describes the Basic Configuration for each segment of the Work for this Project within the Right-of-Way. For the I-25 Mainline and Ramps from north of Ilex to 1<sup>st</sup> Street Segment, the Contractor shall identify and acquire the Right-of-Way. The segments are funded as either Bridge Enterprise (BE) or RAMP (non-BE) as indicated below.

### **1.2.1 Indiana Bridges and Roadway Segment (BE)**

- Rehabilitation and widening of Structures L-18-W and L-18-M
- Roadway transition to the structure including new bridge railing, guardrail and median barrier
- Construction of additional items including but not limited to: slope and ditch paving, sidewalk, signing, striping, landscaping, utility relocations
- Permanent water quality improvements

### **1.2.2 Northern Bridge and Roadway Segment (BE)**

- Rehabilitation of Structure L-18-AQ
- Roadway transition to the structure including new bridge railing and guardrail
- Construction of additional items including but not limited to: sidewalk, fencing, pedestrian railing, lighting, signing, striping, landscaping, utility relocations
- Retaining wall investigation and improvements
- Permanent water quality improvements

### **1.2.3 Mesa Bridge and Roadway Segment (BE)**

- Rehabilitation of Structure L-18-AU
- Roadway transition to the structure including new bridge railing and guardrail
- Construction of additional items including but not limited to: sidewalk, fencing, pedestrian railing, lighting, signing, striping, landscaping, utility relocations
- Permanent water quality improvements

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**1.2.4 I-25 NB over US 50C Bridge and Roadway Segment (BE)**

- Rehabilitation and widening of Structure K-18-AX to connect to parallel I-25 SB Structure K-18-AY
- Roadway transition to the structure including new bridge railing, guardrail and median barrier
- Construction of additional items including but not limited to: lighting, signing, striping, landscaping, utility relocations
- Permanent water quality improvements

**1.2.5 US 50C over Arkansas Bridge and Roadway Segment (BE)**

- Rehabilitation of Structure K-18-R
- Roadway transition to the structure including new bridge railing, guardrail and concrete glare screen on adjacent structure
- Construction of additional items including but not limited to: sidewalk, pedestrian railing, signing, striping, utility relocations
- Permanent water quality improvements

**1.2.6 I-25 over Ilex and UPRR Bridges and Roadway Segment (BE)**

- Reconstruction of Roadway and Structures K-18-CK and K-18-CL from northern limits of I-25 over US 50C Structure (M.P. 97.735) to the southern limits of I-25 Structure over Gruma Street and BNSF/UPRR RR (M.P. 98.225).
- Roadway transitions to the structures including new bridge railing, guardrail and median barrier
- Reconstruct I-25 to conform to the 6 through lane configuration including northbound auxiliary lanes, interchange lane configurations, local street lane configurations and typical sections as shown in the FEIS, Book 2, and Book 5 -Reference Documents. Outside southbound and northbound travel lanes will be continuous acceleration/deceleration lanes until future improvements are constructed.
- Construction of additional items including but not limited to: retaining walls, sidewalks, bike trails, drainage, landscaping, signage, striping, fencing, lighting, utility relocations to accommodate the Project and future corridor requirements.
- Remove existing Thomas Phelps Creek Concrete Box Culvert and restore the open channel.
- Reconstruction of D Street east of Santa Fe Avenue to connect to existing Ilex interchange northbound ramp at entrance to Runyon Field.
- Cul-de-sac Bennet Street as shown in Book 5-Reference Documents.
- Permanent water quality improvements
- Conformance to all mitigation measures identified in the FEIS/RODs completed for this Project.

**1.2.7 Ilex to 1st Street, Santa Fe Ave, D and Clark St. Bridges, Ramps, and Roadway Segment (non-BE)**

- Reconstruction of I-25 Roadway and Structures K-18-CI and K-18-CJ from M.P 98.225 to the northern limits of the proposed Structure over Gruma/Future HARP.
- Construct southbound on ramp from 1<sup>st</sup> street and northbound off ramp to 1<sup>st</sup> street as shown in Book 5 – Reference Documents.
- Roadway transitions to the structures including new bridge railing, guardrail and median barrier.

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- Reconstruct I-25 to conform to the 6 through lane configuration including northbound auxiliary lanes, interchange lane configurations, local street lane configurations and typical sections as shown in the FEIS, Book 2, and Book 5 -Reference Documents. Outside southbound and northbound travel lanes will be continuous acceleration/deceleration lanes until future improvements are constructed.
  - Identify and acquire Right-of-Way needed for construction of Segment.
  - Construct new structures and ramps to accommodate the future Alan Hamel Extension (including proposed future slip ramp) and the future extension of the Historic Arkansas River walk Park (HARP) as shown in Book 5 – Reference Documents. Coordinate with the City of Pueblo and the HARP personnel about future improvements.
  - Construct retaining walls and noise walls to accommodate Project and future corridor improvements.
  - Construction of additional items including but not limited to: retaining walls, sidewalks, drainage, landscaping, signage, striping, fencing, lighting, utility relocations to accommodate Project and future corridor requirements.
  - Cul-de-sac Clark Street at Santa Fe Avenue and reconstruct D Street west of Santa Fe Avenue as shown in the Book 5-Reference Documents.
  - Permanent water quality improvements
  - Conformance to all mitigation measures identified in the FEIS/RODs completed for this Project.

#### **1.2.7.1 Temporary Configuration**

The Temporary Configuration is defined as all work on I-25 that is required to transition from the 6 through lane configuration to the existing alignment of I-25 through Pueblo as shown in the Book 5 - Reference Drawings. The limits of the Temporary Configuration are from the northern limits of the proposed Structure over Gruma/Future HARP to the southern limits of the bridges over 1<sup>st</sup> Street.

The Temporary Configuration shall include the following:

- Roadway transition from the proposed Structure over Gruma/HARP including guardrail and median barrier
- Construction of additional items including but not limited to: lighting, signing, striping, landscaping, utility relocations
- Noise and Retaining Walls
- Permanent water quality improvements
- Conformance to all mitigation measures identified in the FEIS/ROD completed for this Project.

The Contractor is not required to conform to the drawings included in Book 5 - Reference Documents except to the extent referenced by the Basic Configuration description set forth in this Section and to the extent specifically permitted in the Contract Documents (excluding the Proposal Documents). Nonetheless, regardless of the level of completion or suitability of any portion of Book 5 - Reference Documents, the Contractor shall be solely responsible for Project design and CDOT shall have no liability or obligation as a result of design work contained in Book 5 - Reference Documents. Book 5 - Reference Documents are provided solely for Proposers' reference and are without representation or warranty by CDOT, unless specifically stated otherwise in Book 1.

Additionally, information provided in Book 5 - Reference Documents may represent differing levels of completion throughout the limits of the Project. The Contractor shall be obligated to revise this information accordingly in order to meet the requirements of the Contract Documents.

### 1.3 Additional Requested Elements

The following AREs are identified as elements of the Project that may be incorporated into the Basic Configuration as part of the Contractor's Proposal.

#### 1.3.1 Roadways

- Overlay of US 50C (Santa Fe Ave) from the north side of Spring Street to the south side of Locust Street after the completion of the Ilex and 1<sup>st</sup> Street segments:
  - 4-inch mill and 4-inch overlay
    - Top layer: 2-inches of HMA (Grading SX)(100)(PG 76-28)
    - Bottom Layer: 2-inches of HMA (Grading SX)(100)(PG 64-22)
  - ADA ramp upgrades, sidewalks, landscaping, MS4, bump-outs at Spring Street, Rush Street, C Street, Bennet Street, and Locust Street, curb and gutter improvements where they currently are not in place. Constructed per City of Pueblo design standards to provide pedestrian walk ability, connectivity, and continuity.
  - Reconstruction for dedicated left turn lane to Locust Street with median reconstruction and impact attenuator.
  - Construction of additional required overlay items including but not limited to: striping, approach pavement, transitions, saw cutting, and median work.

#### 1.3.2 Structures

- Rehabilitation of the SB I-25 Bridge over US50C (Santa Fe Ave) similar to the referenced Condition Assessment and Rehabilitation Recommendations, Level C.
  1. Superstructure
    - A. Remove and replace the concrete deck
    - B. Add shear connectors to provide composite action between the girders and the concrete deck, waterproof membrane and HMA
    - C. Install new bridge curb, bridge railing and guardrail
    - D. Construct new approach slabs with expansion joints at the ends
    - E. Sandblast, wash, and topcoat paint on all girders and diaphragms
    - F. Add bottom flange intermediate struts due to large unbraced length
  2. Substructure
    - A. Piers 2, 3, & 4:
      - i. Remove all loose and delaminated concrete from the cap and columns.
      - ii. Treat the pier caps and columns with corrosion inhibitor
      - iii. Replace broken or damaged reinforcement
      - iv. Patch – for areas with less than 2-ft of exposed corner rebars
      - v. Refer to patch & wrap details in the Substructure Repair Details sheet for areas with more than 2-ft of exposed corner rebars
      - vi. Refer to encapsulate detail in the Substructure Repair Details sheet for areas with more than 2-ft of exposed corner rebars and severe delaminated concrete

- vii. Treat all exposed concrete with concrete sealer
- B. Abutments 1 and 5:
  - i. Remove all delaminated concrete, treat the abutments with corrosion inhibitor, and patch the damaged areas
  - ii. Treat all exposed concrete with concrete sealer
  - iii. Refer to the patch details in the Substructure Repair Details sheet
- o The Contractor shall also perform the following additional rehabilitation work:
  - Transition, pave and stripe to tie back to the I-25 alignment
  - Permanent water quality as per the Contract Documents
  - Interstate lighting shall be consistent with lighting on the Replacement Bridges
  - Electric, Fiber, and Phone Utilities shall not be attached to the new bridge deck but shall be incorporated via curb conduits unless Approved by CDOT
  - Permanent water quality as per the Contract Documents
- o Typical Section:
  - 3 travel lanes (SB) - Lane widths = 12 feet
  - Outside shoulder widths = 8 feet
  - Inside shoulder widths = 8 feet
- Widen Structures K-18-CN and K-18-CO (I-25 southbound and northbound structures over 1<sup>st</sup> Street).
  - o Typical Section:
    - 2 travel lanes (NB and SB) - Lane widths = 12 feet
    - Outside shoulder widths = 10 feet
    - Inside shoulder widths = 8 feet
  - o Construction of roadway and bridge items including, but not limited to: transitions to existing alignments, approach pavement, guardrail, bridge rail, median work, striping and lighting.

### **1.3.3 Landscaping**

Provide landscaping per City of Pueblo specifications and drawings as shown in Book 5 – Reference Documents at the following locations:

- Intersection of 1<sup>st</sup> Street and NB I-25 on Ramp
- Intersection of 1<sup>st</sup> Street and SB I-25 off Ramp and erosion issues

### **1.3.4 Trails**

- Provide a concrete multi-use trail across the Iron Phoenix/UPRR property to interconnect existing trails from Ilex to the Runyon Commuter Trail (HARP).
  - o Width = 12 feet
  - o Additional trail information is included in Book 5 – Reference Documents

The Contractor shall be responsible for assessing the environmental clearance requirements of the AREs. In addition, the Contractor shall be responsible for additional environmental documentation, permits, and mitigation resulting from impacts associated with AREs. The Contractor shall provide sufficient information and data necessary to assist CDOT in its final determination of the appropriate clearance necessary for each of the AREs. The Contractor

shall also be responsible for assessing Right-of-Way issues, hazardous materials, permanent water quality, utility conflicts, third party agreements, and any other additional permits or requirements to design and construct the AREs.

AREs shall conform to all other requirements of the Contract Documents.

#### **1.4 Exhibits**

Exhibit A – Road and Bridge Segments

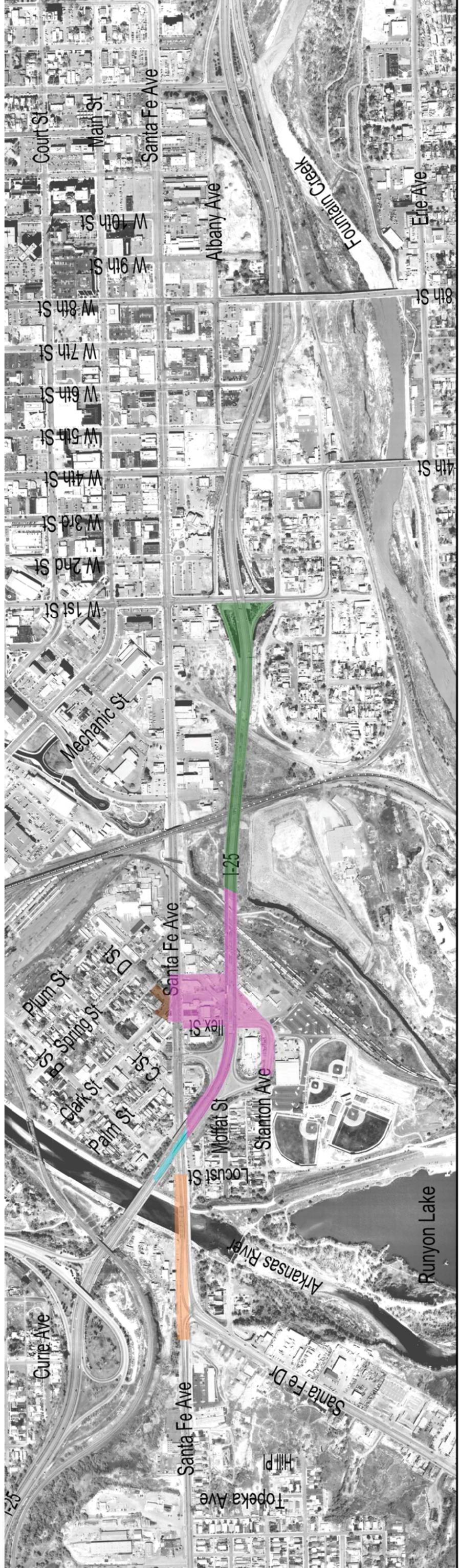
**LEGEND:**

*Projects Funded by FASTER Bridge Enterprise:*

- INDIANA BRIDGE AND ROADWAY SEGMENT
- NORTHERN BRIDGE AND ROADWAY SEGMENT
- MESA BRIDGE AND ROADWAY SEGMENT
- ILEX OVER UPRR BRIDGE AND ROADWAY SEGMENT
- US 50 BUSINESS OVER ARKANSAS BRIDGE AND ROADWAY SEGMENT
- I-25 NORTHBOUND OVER US 50 BRIDGE AND ROADWAY SEGMENT

*Projects Funded by RAI/MP:*

- 1ST ST AND I-25 OVER UPRR AND GRUMA ST BRIDGE AND ROADWAY SEGMENT
- D STREET AND CLARK STREET IMPROVEMENTS



the New Pueblo Freeway

# Road and Bridge Segments Exhibit

