

COLORADO DEPARTMENT OF TRANSPORTATION DESIGN EXCEPTION VARIANCE REQUEST		FHWA Oversight <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Project Code BR 0061-083
Project name US 6 Bridges Design Build Project		Date 10/25/2012	Project Number 18838
Type (check all that are applicable) <input checked="" type="checkbox"/> New construction <input type="checkbox"/> Restoration <input checked="" type="checkbox"/> Resurfacing <input type="checkbox"/> Rehabilitation <input type="checkbox"/> _____ <input checked="" type="checkbox"/> Reconstruction <input checked="" type="checkbox"/> Safety <input checked="" type="checkbox"/> Enhancement <input type="checkbox"/> _____ <input type="checkbox"/> _____		Revised	Region 6

Part 1 – Complete A through H for all projects.

A. Short project description (<input type="checkbox"/> see CDOT Form 463 for more detailed description) The Project generally includes improvements at the I-25/US 6 interchange, partial closure of the Bryant Street interchange, a diamond interchange at US 6/Federal Boulevard with slip ramps to Bryant Street and a braided ramp from Federal Boulevard to eastbound US 6, improvements to Federal Boulevard between 5th and 7th Avenues, conversion of 5th Avenue to two-way operation east of Federal Boulevard, reconstruction of US 6 with collector-distributor roads/auxiliary lanes from Federal Boulevard to the BNSF Railroad Bridge Structure, replacement of existing Bridge Structures on US6 at Bryant Street, South Platte River, over I25 and the BNSF RR, resurfacing of US 6 westerly to Sheridan Boulevard, upgrading impacted portions of the South Platte River Trail to current standards, and a new pedestrian bridge structure over US6 connecting Bamum Park North to Bamum Park South.	<input checked="" type="checkbox"/> AASHTO standards apply <input type="checkbox"/> 3R standards apply <input checked="" type="checkbox"/> Other: <u>CDOT Roadway Design Manual</u>
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B. Description of standard(s) reduced
 There are total of 8 design exceptions and 7 design Decisions based on the Project Basic Configuration.
 Design Decision 1 – A reduced horizontal curve design speed at US 6 at tie in with existing near Knox Court.
 Design Decision 2 – A reduced horizontal curve design speed at Entrance Ramp from Federal Blvd to WB US 6.
 Design Exception 3 – A reduced horizontal curve design speed at Federal Boulevard to EB US 6 (Braided Ramp Structure).
 Design Exception 4 – A reduced vertical curve design speed at Bryant Street to Federal Boulevard Ramp.
 Design Decision 5 – Reduced horizontal and vertical curve design speeds at EB US 6 CD Road tie into existing I-25 Flyovers.
 Design Decision 6 – A outside shoulder width reduction at WB US 6 CD Road (South of Robinson Dairy).
 Design Exception 7 – A reduced ramp design speed at SB I-25 to WB US 6 CD Road.
 Design Exception 8 – Originally a design exception was identified for the SB I-25 to EB US 6 loop ramp. After review with FHWA and project design criteria, it was determined the design meets loop ramp design criteria.
 Design Decision 9 - Inside and outside shoulder widths reduction at the existing flyover piers locations at/near US 6 over I-25.
 Design Decision 10 – A reduced inside shoulder width at/near I-25 underpass of US 6.
 Design Exception 11 – A reduced horizontal curve design speed at US 6 East of I-25.
 Design Exception 12 – A reduced ramp design speed at Northbound I-25 to EB US 6 (Entrance to US 6).
 Design Decision 13 – A profile grade 0.5% greater than the project design criteria SB I-25 south of US 6.
 Design Exception 14 – Reduced horizontal and vertical curve design speeds at Northbound I-25 to EB US 6 (Exit from I-25).
 Design Exception 15 – Reduced horizontal and vertical curve design speeds at Northbound I-25 to WB US 6 Loop Ramp.

C. Rational need for exception(s)
 Please see explanation in Design Exception Paper 1-02-13 Final attached.

D. Mitigation measures proposed (include safety discussion)
 Please see explanation in Design Exception Paper 1-02-13 Final attached.

E. Description of adjoining sections: (<input type="checkbox"/> see CDOT Form 463) Other: US 6 and I-25.	<input checked="" type="checkbox"/> same as existing project <input type="checkbox"/> same as proposed project
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F. Accident data Source: Most recent statewide accident rate (calendar year) for this functional class / facility: (per million vehicle-miles of travel) a) _____ b) _____ Latest accident rate for this highway (usually 3 years): <u>2006 to 2010</u> a) <u>270 (see attached safety assessment report)</u> b) _____	G. Cost Estimated item cost if built to full standard \$ _____ Estimated item cost with exception \$ _____ ± difference in cost: \$ _____
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H. Other (as needed)

Part 2 – Appropriate signatures required.

A. Submitted by (Project Manager) <i>John Smith</i>	Date <i>1-4-13</i>	Program Engineer Approval <i>[Signature]</i>	Date <i>01-04-2013</i>
Resident Engineer Approval <i>Matthew D. Parker</i>			Date <i>01-04-2013</i>
Required for Federal-oversight projects only Approved by (FHWA) Division Administrator <i>[Signature]</i>			Date <i>01-23-2013</i>
B. <input type="checkbox"/> Not approved <input checked="" type="checkbox"/> Approved with conditions		Conditions/comments <i>1 fol</i>	

Previous editions are obsolete and may not be used.

Distribution: Project Manager
 Program Engineer
 Resident Engineer
 HQ Records Center
 FHWA, if applicable

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