



Colorado Department of Transportation

&

Contractor

BOOK 3

APPLICABLE STANDARDS, DATA, AND REPORTS

*C-470 Tolled Express Lanes Segment 1
Design-Build Project*



C-470 TOLLED EXPRESS LANES SEGMENT 1 DESIGN-BUILD PROJECT

PROJECT: NHPP 4701-124

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APPLICABLE STANDARDS, DATA and REPORTS

Copies of reports available at CDOT.

Availability Legend

IS = Industry standard, Not supplied by CDOT

N= Not Yet Available

S = Included in RFP, Supplied by CDOT

Standard		Availability
Applies to more than one section		
CDOT	2011 Standard Specifications for Road and Bridge Construction	IS
CDOT	2012 M&S Standard Plans	IS
AASHTO	A Policy on Geometric Design of Highways and Streets	IS
FHWA	Manual on Uniform Traffic Control Devices Current Edition (MUTCD)	IS
CDOT	Project Development Manual	IS
CDOT	Construction Manual	IS
CDOT	Drafting Manual	IS
CDOT	CADD Standards	IS
CDOT	Safety Manual	IS
CDOT	Field Material Manual	IS
FHWA	Interstate Access Report	S
Section 1 General		
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Section 2 Project Management		
This section has been intentionally left blank		
Section 3 Quality		
This section has been intentionally left blank		
Section 4 Public Information		
This section has been intentionally left blank		
Section 5 Environmental		
CDOT	Revised EA Decision Document	S
CDOT	C-470 Corridor Revised Environmental Assessment Kipling Parkway to I-25 July 2015	S
CDOT	Noise Analysis and Abatement Guidelines	IS
Colorado	Senate Bill 40 (SB 40)	IS
CDOT	Impacted Black-Tailed Prairie Dog Policy	IS
CPW	CPW General Provisions	IS
CDOT	Migratory Bird Treaty Act (MBTA)	IS
CDOT	Guidelines for Senate Bill 40 Wildlife Certification	IS

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Standard		Availability
Section 6 Third Parties		
UPRR	UPRR/BNSF Joint Guidelines for Railroad Grade Separation Projects	IS
PUC	PUC Regulations	IS
CDOT	UPRR Consent to Maintain Request Exhibit	S
CDOT	BNSF Consent to Maintain Request Exhibit	S
Section 7 Utility Relocations		
This section has been intentionally left blank		
Section 8 Right-of-Way		
Federal	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970	IS
Federal	Right of Way Requirements for Design Build	IS
Colorado	Colorado Relocation Assistance and Land Acquisition Policies Act	IS
Colorado	Colorado Eminent Domain Act	IS
CDOT	Right of Way Manual	IS
OSHA	Demolition Regulations 1926.850	IS
Section 9 Survey		
CDOT	Survey Manual	IS
Section 10 Geotech Pavements		
CDOT	DRAFT Preliminary Subsurface Investigation Report C-470 Segment 1 Wadsworth Boulevard to I-25	S
CDOT	2016 ME Pavement Design Manual	IS
CDOT	FINAL C-470 Pavement Design and LCCA Report	S
Section 11 Earthwork		
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Section 12 Drainage		
CDOT	Drainage Design Manual	IS
CDOT	Bridge Design Manual, Section 16 - Hydraulics and Drainage	IS
UDFCD	Urban Storm Drainage Criteria Manual, Volumes I, II, and III	IS
CDOT	Erosion Control and Stormwater Quality Guide	IS
CDOT	2014 Interim New Development Redevelopment, as amended by CDPHE on January 8, 2015	IS
Douglas County	Douglas County Storm Drainage Design and Technical Criteria	IS
Douglas County	Grading, Erosion and Sediment Control Manual (GESC)/Drainage Erosion and Sediment Control (DESC) Manual	IS

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Jefferson Co	Storm Drainage Design & Technical Criteria	IS
Standard		Availability
FHWA	Hydraulic Design of Energy Dissipaters for Culverts and Channels, HEC-14	IS
Section 12 Drainage		
FHWA	Evaluating Scour at Bridges, HEC-18	IS
FHWA	Stream Stability at Highway Structures, HEC-20	IS
FHWA	Urban Drainage Design Manual, HEC-22	IS
FHWA	Drainage of Highway Pavements, HEC-12	IS
FHWA	Bridge Scour and Stream Instability Countermeasures, HEC-23	IS
FHWA	Design of Roadside Channels with Flexible Linings, HEC-15	IS
FHWA	Design of Riprap Revetment, HEC-11	IS
FHWA	Hydraulic Design of improved Inlets for Culverts, HEC-13	IS
FHWA	Design of Bridge Deck Drainage, HEC-21	IS
FHWA	Hydraulic Design of Highway Culverts, HDS-5	IS
CDOT	Consultant Helper: Permanent Water Quality Report, 2/21/2014	IS
Section 13 Roadways		
CDOT	Roadway Design Guide	IS
AASHTO	Roadside Design Guide	IS
CDOT	Cable Barrier Guide, June 2009	IS
AASHTO	Guide for the Development of Bicycle Facilities	IS
AASHTO	Guide for High-Occupancy Vehicle Facilities	IS
Colorado	State of Colorado, State Highway Access Code	IS
Section 14 Signing, Lighting, Signals		
CDOT	Sign Design Manual - March 31, 2015	IS
Xcel Energy	Xcel Energy Xcel Outdoor Lighting Standards	S
FHWA	Standard Highway Signs - 2004 Edition	IS
FHWA	Standard Highway Signs - 2012 Supplement	IS
CDOT	CDOT Lighting Design Guide - 2006	IS
Section 15 Structures		
CDOT	Preliminary Subsurface Investigation Report	S
AASHTO	LRFD Bridge Design Specifications, 7th Edition, and current Interim Revisions	IS
CDOT	Bridge Design Manual	IS
RTD	RTD Light Rail Design Criteria 2013	S

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CDOT	Fabrication Inspection of Pre-Stressed and Precast Concrete Products, 1/28/2015	S
CDOT	Fabrication Inspection of Structural Steel Items for CDOT Road and Bridge, 1/28/2015	S
NCHRP	NCHRP Report 402, Fatigue of Modular Bridge Expansion Joints (1997)	IS
AASHTO/NSBA	Shop Detail Drawing Review/Approval Guidelines	IS
Standard		Availability
Section 15 Structures		
CDOT	Standard Structural Worksheets Slope Paving Details	IS
FHWA	Design Manual for Permanent Ground Anchor Walls	IS
FHWA	Geotechnical Engineering Circular No. 4 - Ground Anchors and Anchored Systems	IS
FHWA	Soil Nailing Field Inspectors Manual	IS
FHWA	Manual for the Design & Construction Monitoring of Soil Nail Walls	IS
FHWA	Geotechnical Engineering Circular No. 7 - Soil Nail Walls	IS
AASHTO	Standard Specifications for Structural Supports and Highway Signs, Luminaires, and Traffic Signals, 6th Edition, and current Interim Revisions	IS
AASHTO	LRFD Guide Specifications for Design of Pedestrian Bridges 2nd edition with current interims	IS
NCHRP	12-43 Life-Cycle Cost Analysis for Bridges	IS
CDOT	Bridge Rating Manual	IS
Section 16 Maintenance of Traffic		
CDOT	2012 CDOT Region 1 Lane Closure Strategy - Third Edition	IS
CDOT	Guidelines for Developing Traffic Incident Management Plans for Work Zone	IS
CDOT	CDOT Region 1 Detour Signing and Public Notification for Exit Ramp Closures	IS
Section 17 Landscaping		
FHWA	The Roadside Use of Native Plants, August 2000 USDOT	IS
ANSI	American National Standard Institute – ANSI A300-1995, Section 5.3.3.2.	IS
Section 18 Maintenance During Construction		
CDOT	Highway Maintenance Level of Service Manual	IS
Section 19 ITS-Tolling		

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RTD	RTD Guidelines and Criteria	IS
CDOT	Concept of Operations for the C-470 Express Toll Lane Draft Version 1.2, Feb 19, 2016	S
NFPA	National Electric Code	IS
Section 20 Modifications to Standard Special Provisions		
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