



Colorado Department of Transportation

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# REFERENCE DOCUMENTS

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



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

PROJECT: NHPP 4701-124

**REFERENCE DOCUMENTS****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

**Reference Documents**

Reference Document Title	File Name	First Issued Date	Revision Date
<b>R01 - General</b>			
C-470 Reference Plan Set	18999_C-470 Reference Plan Set.pdf	9/3/2015	2/19/16
C-470 Signing Roll Plot	18999_C470 Signing Roll Plot.pdf	9/3/2015	
I-25/C-470 Signing Roll Plot	18999_I25 Signing Roll Plot_083115.pdf	9/3/2015	
I-25/C-470 Future Interchange Concept Roll Plot	18999_I25 C470 Future Concept Roll Plot Exhibit.pdf	10/16/15	
I-25/C-470 Future Interchange 3D pdf	18999_I25 C470 Future Concept 3D Exhibit.pdf	10/16/15	
C470 Traffic Noise Model Files	C470 Traffic Noise Model Files	11/17/15	2/19/16
USACE Implementation of Executive Order 11988 On Flood Plain Management	ER_1165-2-26.pdf	11/30/15	
Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects	EC_1165-2-216.pdf	11/30/15	
Work Zone Speed Limit Reduction Memo	C-470_WorkZoneSpeedLimitRed_MOU	01/15/16	
<b>R02 - Pavement and Geotech</b>			
This section has been intentionally left blank			
<b>R03 - Drainage</b>			
C-470 Preliminary Drainage Report		9/3/2015	
C-470 Preliminary Drainage Plan Sheets		9/3/2015	
HRMD Pipe 51 Contract Drawings	Pipe 51_HRMD_Final Design Plans	01/15/16	
As-Built Plans for Pipes Crossing at 1019+00 from 1996	1019+00 Pipes As-built 1996.pdf	1/15/16	
As-Built Plans for Pipes Crossing at 1019+00 from 2000	1019+00 Pipes As-built 2000.pdf	1/15/16	

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Design Plan Sheet for MP 24.950 CMP Rehabilitation Work	18999 60 Inch Temp Rehab Plan at 1353 20.pdf	02/19/2016	
<b>R04 - Structures</b>			
Structure As-Built Plans	Folder containing all of the As-Built Plan for Structures	9/3/2015	
Structure Inspection Reports	Folder containing all of the Structure Inspection Reports	9/3/2015	
Deck Repair Details Worksheet	Deck_Repair_V2_101014.pdf	11/30/15	

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<b>Reference Document Title</b>	<b>File Name</b>	<b>First Issued Date</b>	<b>Revision Date</b>
<b>R05 - ITS &amp; ETC</b>			
Existing ITS Roll Plot	ITS-ETC Reference Document 1 - Existing ITS Roll Plot.pdf	9/3/2015	11/30/15
Tolling Roll Plot	ITS-ETC Reference Document 2 - Tolling Roll Plot.pdf	9/3/2015	11/30/15
Tolling ARE Roll Plot	ITS-ETC Reference Document 3 - Tolling Roll Plot for ARE #1	11/30/15	
Existing Splice Diagrams	ITS-ETC Reference Document 4 - Existing Splice Diagrams.pdf	9/3/2015	11/30/15
CDOT ITS Details	ITS-ETC Reference Document 5 - CDOT ITS Details.pdf	9/3/2015	2/19/16
E-470 Project Plan Requirements for Lane Installations	ITS-ETC Reference Document 6 - E-470 Project Plan Requirements for Lane Installations.pdf	9/3/2015	11/30/15
E-470 Flow Chart	ITS-ETC Reference Document 7 - E-470 Flow Chart.pdf	9/3/2015	11/30/15
County Line Node Building Photos, Existing Manhole and Pull Box Photos, and Existing Device Photos	ITS-ETC Reference Document 8 - Existing MH & PB, Existing Device, and County Line Node Building Photos.pdf	9/3/2015	11/30/15
Schematic Diagram of E-470 Redundant Fiber Path	ITS-ETC Reference Document 9 - Schematic Diagram of E-470 Redundant Fiber Path.pdf	9/3/2015	11/30/15
<b>R06 - Utilities</b>			
Utility Contact List	18999UTL_UtilityContactList.pdf	9/3/2015	11/30/15
Utility Matrix	C-470 Utility Matrix_FINAL.xlsx	9/3/2015	11/30/15
Utility Conflict Plans	UtilityConflictPlans_FINAL.pdf		02/19/16
Utility Pothole Table	Pothole Table 010814 Wilson.xlsx	9/3/2015	
Utility Keymaps	Folder containing all of the Utility Key Map information	9/3/2015	
Utility Relocation Agreements	Folder containing all of the fully executed Utility Relocation Agreements	9/3/2015	02/19/19
Utility Owners	Folder containing all utility owners and associated documents for each, including as-builts, utility information sheets (UIS), draft Utility Relocation Agreements (URA) and exhibits, meeting minutes, etc.		1/19/16

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CDOT Utility Accommodation Code	CDOT Utility Accommodation Code October 30 2009.pdf	2/19/16	
<b>R08- Third Party Agreements</b>			
Existing Railroad Construction and Maintenance	Folder of Existing Railroad Construction and Maintenance Third Party Agreements	01/19/16	

**C-470 TOLLED EXPRESS LANES SEGMENT 1 DESIGN-BUILD PROJECT****PROJECT: NHPP 4701-124****REFERENCE DOCUMENTS****Reference CADD Drawings**

<b>File Name</b>	<b>Description</b>	<b>First Issued Date</b>	<b>Revision Date</b>
<b>Aerial Images</b>			
18999_Aerial MrSID.dgn	Microstation file with Aerial Images referenced	9/3/2015	
C-470_Mosaic.sid	Aerial Image File	9/3/2015	
C-470_Mosaic.sdw	Aerial Image Resource File	9/3/2015	
<b>Bridge Design Files</b>			
18999_BRDG_Model_Basic Configuration.dgn	Basic Configuration Bridge Design File	9/3/2015	
18999_BRDG_Model_Ultimate.dgn	Ultimate Configuration Bridge Design File	9/3/2015	
18999BRDG_Profile2d.dgn	Bridge Profile Reference File	9/3/2015	
<b>Drainage Design Files</b>			
18999_Drainage_Plan.dgn	Proposed Drainage Features	9/3/2015	
18999_Hydro-Basin Boundaries-Base.dgn	Basin Boundaries file	9/3/2015	
Existing Pipes at 1019+00 B Based on Const Plans 160115.dgn	Existing HRMD Pipes that Cross C-470 at Approx 1019+00 drawing in based on Construction Plans	01/19/16	
<b>Environmental</b>			
18999_ENV_100 YR_Floodplain.dgn	100 Year Floodplain	9/3/2015	
18999_ENV_Black Tailed Prairie Dog Habitat.dgn	Black Tailed Prairie Dog Habitat	9/3/2015	
18999_ENV_High Potential Hazardous Waste Site.dgn	High Potential Hazardous Waste Site	9/3/2015	
18999_ENV_Mule Deer Habitat.dgn	Mule Deer Habitat	9/3/2015	
18999_ENV_Noxious Weeds.dgn	Noxious Weeds	9/3/2015	
18999_ENV_Occupied Preble's Meadow Jumping Mouse Habitat.dgn	Occupied Preble's Meadows Jumping Mouse Habitat	9/3/2015	
18999_ENV_Parks and Rec Areas.dgn	Parks and Recreation Areas	9/3/2015	
18999_ENV_Potential Colorado Butterfly Plant and Ute Ladies Tresses Orchid Habitat.dgn	Potential Colorado Butterfly Plan and Ute Ladies Tresses Orchid Habitat	9/3/2015	
18999_ENV_Potential Preble's Meadow Jumping Mouse Habitat.dgn	Potential Preble's Meadow Jumping Mouse Habitat	9/3/2015	

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18999_ENV_Preble's Meadow Jumping Mouse Block Clearance Zone.dgn	Preble's Meadow Jumping Mouse Block Clearance Zone	9/3/2015	
18999_ENV_Raptor Nests.dgn	Raptor Nests	9/3/2015	
18999_ENV_Riparian Habitat.dgn	Riparian Habitat	9/3/2015	
18999_ENV_Wetlands.dgn	Wetlands	9/3/2015	

**Reference CADD Drawings (continued)**

<b>File Name</b>	<b>Description</b>	<b>First Issued Date</b>	<b>Revision Date</b>
<b>Roadway Design Files</b>			
18999_AlignModel 200.dgn	C-470 Alignment displayed at 200 Scale	9/3/2015	
18999_AlignModel 500.dgn	C-470 Alignment displayed at 500 Scale	9/3/2015	
18999_ARE 1 EB Extension to Wadsworth.dgn	ARE # 1 Design Files, Wadsworth to Platte Canyon	9/3/2015	
18999_Basic Configuration_Design Model.dgn	Basic Configuration Design File	9/3/2015	10/09/15
18999_Cross Sections.dgn	Cross Sections	9/3/2015	
18999_Des_Profiles.dgn	Profile Sheets File	9/3/2015	
18999_Profile Model.dgn	Profile Design File	9/3/2015	
18999_SoundWalls.dgn	Sound walls model	9/3/2015	
18999_Ult_HorizModel01.dgn	Ultimate C-470 Design File	9/3/2015	10/09/15
18999_Ult_ContourModel01.dgn	Ultimate C-470 Contour Design File	9/3/2015	
18999_I25 C470 Interchange Design.dgn	Future I-25/C470 Interchange Design File		10/16/15
18999_I25 C470 3D Design.dgn	Future I-25/C-470 Interchange Design components displayed in 3D		10/16/15
<b>ROW Files</b>			
0130602ROW Right of Way.dgn	Existing ROW File	9/3/2015	
18999_ROW Proposed.dgn	Proposed ROW File	9/3/2015	
18999SURV_Model.dgn	Section Lines, ROW Monuments, Property Pins	01/19/16	
18999ROW_Model.dgn	Existing and Proposed ROW	01/19/16	
<b>Survey Files</b>			
18999SURV_Model West 3D.dgn	Existing 3D Survey Line work- Western Portion of Project	9/3/2015	
18999SURV_Model East 3D.dgn	Existing 3D Survey Line work- Eastern Portion of Project	9/3/2015	
18999_Existing Contours.dgn	Existing Contour dgn file displayed with 5' Majors at 200 Scale	9/3/2015	

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18999_ExContours_East_40Scale.dgn	Existing Contour dgn file displayed with 5' Majors 1' Minors at 40 Scale - Eastern Portion of Survey	9/3/2015	
18999_ExContours_West_40scale.dgn	Existing Contour dgn file displayed with 5' Majors 1' Minors at 40 Scale - Western Portion of Survey	9/3/2015	
18999_EG West.dtm	Existing Survey Inroads Surface - Western Portion of Project	9/3/2015	
18999_EG East.dtm	Existing Survey Inroads Surface - Eastern Portion of Project	9/3/2015	
1110031702_SantaFe_Piers.dgn	Outline of piers at C-470 & Santa Fe	9/3/2015	
LiDAR Data for Bridges	Files hand delivered on hard drive	9/3/2015	10/16/15

### Reference CADD Drawings (continued)

File Name	Description	First Issued Date	Revision Date
<b>Traffic &amp; ITS</b>			
18999_ITS Model.dgn	ITS Design File	9/3/2015	11/30/15
18999_ITS_LiveNesting.dgn	Live Nested base for ITS Roll Plots	9/3/2015	11/30/15
18999_Signing Model.dgn	C-470 Signing Design File	9/3/2015	11/30/15
18999_ARE1_Signing Model.dgn	C-470 Signing Model with ARE#1	11/30/15	
18999_Tolling Model.dgn	Tolling Design Model	9/3/2015	11/30/15
18999_Tolling Model_ARE1.dgn	Tolling Design Model for ARE #1	11/30/15	
<b>Utilities</b>			
18999UTIL_Conflicts2D.dgn	Potential Utility Conflict Design Model	9/3/2015	
18999UTL_Model.dgn	Existing Utility Model	9/3/2015	
PH-MD REQ 20140729.dgn	Utility Pothole Reference File	9/3/2015	
<b>InRoads Files</b>			
18999_C-470_Alignments.alg	Proposed Mainline and ramps Alignment file	9/3/2015	
18999_C-470 Cross Streets.alg	Cross Street Alignments	9/3/2015	
18999_EG East.dtm	Existing ground surface for the east side of the project	9/3/2015	
18999_EG West.dtm	Existing ground surface for the west side of the project	9/3/2015	
A5 DC E470 to Quebec.dtm	Direct Connect WB E-470 to WB C-470 Ramp Surface	9/3/2015	
A5 DC SB25 to WB470.dtm	Direct Connect SB I-25 to WB C-470 Ramp Surface	9/3/2015	

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A5 NB25toWB470.dtm	Direct Connect NB I-25 to WB C-470 Ramp Surface	9/3/2015	
A5 SB25 to EB470.dtm	SB I-25 to EB E-470 Ramp Surface	9/3/2015	
A5 SB25 to WB470.dtm	SB I-25 to WB C-470 Ramp Surface	9/3/2015	
A5 Trail Reconst.dtm	Trail Reconstruction Surface at Direct Connect Ramps	9/3/2015	
C-470 Ultimate Kip to Wads.dtm	C-470 Ultimate Surface form Kipling to Wadsworth	9/3/2015	
C-470 Ultimate Wads to I-25.dtm	C-470 Ultimate Surface from Wadsworth to I-25	9/3/2015	

**Reference CADD Drawings (continued)**

<b>File Name</b>	<b>Description</b>	<b>First Issued Date</b>	<b>Revision Date</b>
<b>InRoads Files</b>			
R_Broad_EB_OFF.dtm	Broadway EB Off Ramp Surface	9/3/2015	
R_Broad_EB_ON.dtm	Broadway EB On Ramp Surface	9/3/2015	
R_Broad_WB_OFF.dtm	Broadway WB Off Ramp Surface	9/3/2015	
R_Broad_WB_ON.dtm	Broadway WB On Ramp Surface	9/3/2015	
R_Kip_EB_ON.dtm	Kipling EB On Ramp Surface	9/3/2015	
R_Kip_WB_OFF.dtm	Kipling WB Off Ramp Surface	9/3/2015	
R_Luc_EB_OFF.dtm	Lucent EB Off Ramp Surface	9/3/2015	
R_Luc_EB_ON.dtm	Lucent EB On Ramp Surface	9/3/2015	
R_Luc_WB_OFF.dtm	Lucent WB Off Ramp Surface	9/3/2015	
R_Luc_WB_ON.dtm	Lucent WB On Ramp Surface	9/3/2015	
R_QUE_EB_OFF.dtm	Quebec EB Off Ramp Surface	9/3/2015	
R_QUE_EB_ON.dtm	Quebec EB On Ramp Surface	9/3/2015	
R_QUE_WB_OFF.dtm	Quebec WB Off Ramp Surface	9/3/2015	
R_QUE_WB_ON.dtm	Quebec WB On Ramp Surface	9/3/2015	
R_SF_EB_OFF.dtm	Santa Fe EB Off Ramp Surface	9/3/2015	
R_SF_EB_ON.dtm	Santa Fe EB On Ramp Surface	9/3/2015	
R_SF_WB_OFF.dtm	Santa Fe WB Off Ramp Surface	9/3/2015	
R_SF_WB_ON.dtm	Santa Fe WB On Ramp Surface	9/3/2015	
R_Univ_EB_OFF.dtm	University EB Off Ramp Surface	9/3/2015	
R_Univ_EB_ON.dtm	University EB On Ramp Surface	9/3/2015	



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