

**Colorado Department of Transportation**  
**Structure Inspection and Inventory Report (English Units)**

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 194.274 mi

Bridge Key: F-17-JW

Inspection Date: 8/30/2011

Sufficiency Rating: 97.9 Not Eligible

Rgn/Sectn 2E/2M:	68
Trans Region 2T	02
County Code 3:	035
DOUGLAS	
Place Code 4:	45955
LONE TREE	
Rte.(On/Under)5A:	1
Signing Prefix 5B:	1
Level of Service 5C:	7
Directional Suffix 5E:	0
Feature Intersected 6:	
I 25, SH 470 ML R	
Facility Carried 7:	
RAMP TO I 25 SBND	
Alias Str No.8A:	
Prll Str No. 8P	
F-17-IT	
Location 9:	17.919947156
MID-LEVEL ABOVE JCT I-25	
Max Clr 10:	5.46
BaseHiway Net12:	0
IrsinvRout 13A	0000000000
IrssubRout No13B:	00
Latitude 16:	39d 33' 24"
Longitude 17:	104d 52' 13"
Range18A:	67 W
Township18B:	67
Section18C:	3
Detour Length 19:	0.6 mi
Toll Facility 20:	3
Custodian 21:	1
Owner 22:	1
Functional Class 26:	11
Year Built 27:	1991
Lanes on 28A:	1
Lanes Under 28B:	8
ADT 29:	1,750
Year of ADT 30:	2005
Design Load 31:	6
Apr Rdwy Width 32:	27.0 ft
Median 33:	0
Skew 34:	0.00 °
Structure Flared 35:	0
Sfty Rail 36a/b/c/d:	1   1   1   1
Rail ht36h:	36 "in"

Hist Signif 37:	5
Posting status 41:	A
Service on/un 42A/B:	6   1
Main Mat/Desgn 43A/B:	4   6
Appr Mat/Desgn 44A/B:	0   0
Main Spans Unit 45:	5
Approach Spans 46:	0
Horiz Clr 47:	27.0 ft
Max Span 48:	147.6 ft
Str Length 49:	638.2 ft
Curb Wdth L/R 50A/B:	0.0 ft   0.0 ft
Width Curb to Curb 51	27.0 ft
Width Out to Out 52:	30.5 ft
Deck Area:	19,471.9 sq. ft
Min Clr Ovr Brgd 53:	99.99
Min Undrclr Ref 54A:	H
Min Undrclr 54B:	16.7 ft
Min Lat Clrnce Ref R 55A:	H
Min Lat Undrclr R 55B:	12.0 ft
Min Lat Undrclr L 56:	4.002624765
Deck 58:	7
Super 59:	7
Sub 60:	7
Channel/Protection 61:	N
Culvert 62:	N
Oprtg Rtg Method 63:	1 LF Load Fact
Operating Rating 64:	77.1
Inv Rtg Method 65:	1
Inventory Rating 66:	46.0
Asph/Fill Thick 66T:	003 "in"
Str. Evaluation 67:	7
Deck Geometry 68:	9
Undrclr Vert/Hor 69:	6
Posting 70:	5
Waterway Adequacy 7	N
Approach Alignment 72:	8
Type of Work 75A:	
Work Done By 75B:	
Length of Improvment 76:	0.0 ft
Insp Team Indicator 90B:	RED TEAM
Inspector Name 90C:	TATALASKIT
Frequency 91:	24 months
FC Frequency 92A:	24
UW Frequency 92B:	-1
SI Frequency 92C:	-1
FC Inspection Date 93A:	8/27/2009

UW Inspection Date 93B	
SI Date 93C:	
Bridge Cost 94:	\$ 0
Roadway Cost 95:	\$ 0
Total Cost 96:	\$ 0
Year of Cost Estimate 97:	
Brdr Brgd Code/% 98A/B:	
Border Bridge Number 99:	
Defense Highway 100:	1
Parallel Structure 101:	N
Direction of Traffic 102:	1
Temporary Structure 103	
Highway System 104:	1
Fed Lands Hiway 105:	0
Year Reconstructed 106	0000
Deck Type 107:	1
Wearing Surface 108A	6
Membrane 108B:	2
Deck Protection 108C:	1
Truck ADT 109:	9 %
Trk Net 110:	1
Pier Protection 111:	#
NBIS Length 112:	Y
Scour Critical 113:	N
Scour Watch 113M:	0
Future ADT 114:	2,730
Year of Future ADT 115	2025
CDOT Str Type 120A:	SBGC
CDOT Constr Type 120B	10
Inspection Indic 122A:	
Inspection Trip 122AA	
Scheduling Status 122B	
Maintenance Patrol 123:	8
Expansion Dev/Type124	D
Brdg Rail Type/Mod 125A/B	R   1
Posting Trucks 129A/B/C	0   0   0
Str Rating Date 130:	11/13/1996
Special Equip 133:	-1
Vert Clr N/E 134A/B/C:	N   17.33   16.75
Vert Clr S/W 135A/B/C	S   17.08   16.67
Vertical Clr Date:	3/5/2008
Weight Limit Color: 139	0
Str Billing Type:	U
Userkey 1 - System:	ONSYS
Userkey 7-Update Indic	

Inspector Name: TATALASKIT

**Colorado Department of Transportation**  
**Structure Inspection and Inventory Report (English Units)**

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: **194.274 mi**

**Element Inspection Report**

Elm/En	Description	Units	Total Qty	% in 1	CS 1	% in 2	CS 2	% in 3	CS 3	% in 4	CS 4	% in 5	CS 5
26/4	Conc Deck/Coatd Bars	(SF)	19,459	100 %	19,459	0 %	0	0 %	0	0 %	0	0 %	0
102/4	Paint Stl Box Girder	(LF)	1,276	100 %	1,276	0 %	0	0 %	0	0 %	0	0 %	0
109/4	P/S Conc Open Girder	(LF)	75	100 %	75	0 %	0	0 %	0	0 %	0	0 %	0
210/4	R/Conc Pier Wall	(LF)	40	100 %	40	0 %	0	0 %	0	0 %	0	0 %	0
215/4	R/Conc Abutment	(LF)	56	100 %	56	0 %	0	0 %	0	0 %	0	0 %	0
234/4	R/Conc Cap	(LF)	106	97 %	103	3 %	3	0 %	0	0 %	0	0 %	0
300/4	Strip Seal Exp Joint	(LF)	56	64 %	36	36 %	20	0 %	0	0 %	0	0 %	0
307/4	Modular Expansion Jt	(LF)	56	100 %	56	0 %	0	0 %	0	0 %	0	0 %	0
314/4	Pot Bearing	(EA)	12	92 %	11	8 %	1	0 %	0	0 %	0	0 %	0
321/4	R/Conc Approach Slab	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0
325/4	Slope Prot/Berms	(EA)	2	50 %	1	50 %	1	0 %	0	0 %	0	0 %	0
326/4	Bridge Wingwalls	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
331/4	Conc Bridge Railing	(LF)	1,340	100 %	1,340	0 %	0	0 %	0	0 %	0	0 %	0
341/4	Substr Conc Coating	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
359/1	Soffit Smart Flag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
520/4	AppRdAlign	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0

Elem/Env	Description	Element Notes
26/4	Conc Deck/Coatd Bars	3 inches of asphalt.  Alligator cracking along centerline randomly throughout. Light to mod. random cracking with spots of raveling. Wheel lines wearing.
102/4	Paint Stl Box Girder	Inside: well painted and great welds, one indication of possible crack at Girder 2A, Diaphragm 0. Pigon Feces is present in span 1 of both Box Griders. Homeless person occupied box girders in Span 5. Remnants of a meth lab and fire in Girder 5A, and trash and debris in Girder 5B. Did not enter box girders in 2011 until box girders are cleaned out and hazardous by-products of meth lab are removed. See 08/27/2009 & 8/30/2011 Photos.  Exterior: well painted, no scrapes.
109/4	P/S Conc Open Girder	Concrete carrier beam at centerline of I-25 which supports Pier 3 looks OK. Did not cross I-25 traffic during past inspections (9/07, 08/09 & 8/11) due to heavy traffic. Bifocals can be used near structure F-17-JU.
210/4	R/Conc Pier Wall	Good condition. Typical shrinkage cracks at Piers 3 & 4.
215/4	R/Conc Abutment	Light vertical cracks in breastwall, and cracking with efflor. in backwall.  Horiz. cracking with efflor. along cold jt. of curtain walls at A1.

**Colorado Department of Transportation**  
**Structure Inspection and Inventory Report (English Units)**

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 194.274 mi

Elem/Env	Description	Element Notes
234/4	R/Conc Cap	Hairline diagonal cracks about midheight of pier caps, (shear cracks). P2 fwd. face midheight between bearing A and edge of column. P3 rear face between bearing B and edge of column. P5 rear face between bearing B and edge of column.
300/4	Strip Seal Exp Joint	Glands at far ends of approach slabs. A-6 are open 0.75 - 1.25 inches in-in of steel armor; A-1 joint is closed up and open up to 0.25 inches. Full of dirt. Spalling and potholing along jt. at A1 in ML.
307/4	Modular Expansion Jt	1 at each end, both in good condition at proper grade. Abutment 1 joint with 2 glands is open 3.875 inches i-i of steel armor at shoulders to 4.125 inches at middle. Abutment 6 (2 gland) joint is open approx. 4 inches, sand on glands espec. at shoulders. No leakage seen at either joint. Both full of dirt.
314/4	Pot Bearing	Some shredding of the teflon pad at Bearing 1A, otherwise no other deficiencies observed.
321/4	R/Conc Approach Slab	Tined Concrete Surface has a several map and longit. cracks.
325/4	Slope Prot/Berms	Concrete slope pave at #1 has horizontal cracks with minor buckling. Settled 5 inches at Abutment 1. Broken and buckled next to wings and settled 8 inches at Abutment 1. Void mentioned on previous reports below the top of slope pave along the right rear wing was filled in, but is ineffective now.  Weeds are growing from joints. See 2009 photos.  Dirt slope at Abutment 6, some minor erosion.
326/4	Bridge Wingwalls	U-type Abutment Wingwalls. Typical shrinkage cracks. Horizontal cracks along thee construction joint with efflorescence.
331/4	Conc Bridge Railing	Many vertical and shrinkage cracks, and several areas have horizontal cracks 3-4 inches below top of rail with efflorescence. See 08/27/2009 photo. Tire scuff marks.
341/4	Substr Conc Coating	Peeling at right edge and overhang near Abutment 6, see 9/27/2005 Photo.
359/1	Soffit Smart Flag	Galvanize stay-in-place forms inside boxes are starting to rust at clips. See 2009 photo. Painted S.I.P. forms between boxes. Rust stains on bottom side in Span 1, 2, & 5. Overhangs have several trans. cracks with efflorescence. Exterior edge and overhang at right side near Abutment 6 has concrete coating peeling with moderate efflorescence, probably from water ponding on deck, and seeping through expansion joints due to drains being full of sand and debris. see 08/27/2009 & 9/27/2005 PHOTOS.
520/4	AppRdAlign	Bridge traffic is West Bound 470 to South Bound 25 traffic with H.C. and V.C. Abutment 1 is at the West or S.W. end.

**Colorado Department of Transportation**  
**Structure Inspection and Inventory Report (English Units)**

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 194.274 mi

**Maintenance Activity Summary**

<b>MMS Activity</b>	<b>Description</b>	<b>Recommended</b>	<b>Status</b>	<b>Target Year</b>	<b>Est Cost</b>
364.01	Exp Jts	8/30/2011	_	2013	750

Repair and patch the spalling and potholing along strip seal at rear approach. See PHOTOS.

**354.00	Suprstr	7/25/2001	-1	2013	1000
----------	---------	-----------	----	------	------

Place locks on both entrances to box girders, after the box girders are cleaned out to keep homeless from continuing to occupy structure. Holes may need to be drilled into sliding plates and locks placed and protected to prevent locks from being cut, and gaining access to girders. Also, place a screen mesh at ends of girders at A1 to stop pigeons from getting into structure.

**352.00	Debri	8/27/2009	-1	2013	10000
----------	-------	-----------	----	------	-------

Remove remnants of meth lab in Girder 5A, and trash in Girder 5B. Also, remove pigeon feces from Span 1 girders. PPE with breathing apparatus should be used to in Girder 5A due to hazardous by-product from meth lab. See PHOTOS.

352.01	Cln & Wash	8/30/2011	_	2013	300
--------	------------	-----------	---	------	-----

Clean out scupper drains at P2 and P4.

**Colorado Department of Transportation**  
**Structure Inspection and Inventory Report (English Units)**

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 194.274 mi

**Bridge Notes**

Wear- paper coveralls and face mask when entering Box Girders.  
Span 1 access holes are 6 feet +/- above steep slope pave.  
Piegon feces in span 1 of both Box Girders. See 08/27/2009 Photo.  
Spans 2-5 access is at N.E. end, 3 feet +/- above dirt berm.  
Access doors have no lock or hasps.  
Homeless persons were occupying in Girders in fwd end of structure. Remnants of a meth lab and fire are in Girder 5A, and trash and Debris have been placed in Girder 5B. Jeff & Karen were called CDOT. Douglas-Lone Tree police were called on 08/27/2009. See 08/27/2009 Photos.  
Good parking on both sides of I-25.

**Inspection Notes**

Time: 9:55 Temperature: 80 Degrees F. Weather: Clear

**Scope:**

NBI:  Element:  Underwater:  Fracture Critical:  Other: Type: Regular NBI

Inspector: TATALASKIT

Inspection Team:

Inspection Date: 08/30/2011

Inspector

Inspector