

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

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 97.670 mi

Bridge Key: K-18-AX Inspection Date: 4/12/2010 Sufficiency Rating: 49.7 FO

Rgn/Sectn 2E/2M:	24	Hist Signif 37:	3	UW Inspection Date 93B:	
Trans Region 2T:	04	Posting status 41:	A	SI Date 93C:	
County Code 3:	101	Service on/un 42A/B:	1 1	Bridge Cost 94:	\$ 587,450
PUEBLO		Main Mat/Desgn 43A/B:	4 2	Roadway Cost 95:	\$ 58,745
Place Code 4:	62000	Aprr Mat/Desgn 44A/B:	0 0	Total Cost 96:	\$ 881,175
PUEBLO		Main Spans Unit 45:	4	Year of Cost Estimate 97:	2006
Rte.(On/Under)5A:	1	Approach Spans 46:	0	Brdr Brdg Code/% 98A/B:	
Signing Prefix 5B:	1	Horiz Clr 47:	30.0 ft	Border Bridge Number 99:	
Level of Service 5C:	1	Max Span 48:	66.0 ft	Defense Highway 100:	1
Directional Suffix 5E:	0	Str Length 49:	239.5 ft	Parallel Structure 101:	R
Feature Intersected 6:		Curb Wdth L/R 50A/B:	0.0 ft 0.0 ft	Direction of Traffic 102:	1
US 50 BUSINESS RTE.		Width Curb to Curb 51:	30.0 ft	Temporary Structure 103:	
Facility Carried 7:		Width Out to Out 52:	34.0 ft	Highway System 104:	1
I 25 ML NBND		Deck Area:	8,148.3 sq. ft	Fed Lands Hiway 105:	0
Alias Str No.8A:		Min Clr Ovr Brdg 53:	99.99	Year Reconstructed 106:	0000
		Min Undrclr Ref 54A:	H	Deck Type 107:	1
Pril Str No. 8P		Min Undrclr 54B:	15.4 ft	Wearing Surface 108A:	6
K-18-AY		Min Lat Clrnce Ref R 55A:	H	Membrane 108B:	0
Location 9:		Min Lat Undrclr R 55B:	5.0 ft	Deck Protection 108C:	0
IN PUEBLO		Min Lat Undrclr L 56:	4.002624765	Truck ADT 109:	5 %
Max Clr 10:	99.99	Deck 58:	5	Trk Net 110:	1
BaseHiway Net12:	1	Super 59:	7	Pier Protection 111:	#
IrsinvRout 13A:	000000025A	Sub 60:	5	NBIS Length 112:	Y
IrssubRout No13B:	00	Channel/Protection 61:	N	Scour Critical 113:	N
Latitude 16:	38d 15' 22"	Culvert 62:	N	Scour Watch 113M:	0
Longitude 17:	104d 36' 25"	Oprrtg Rtg Method 63:	1 LF Load Factr	Future ADT 114:	41,378
Range18A:	64 W	Operating Rating 64:	39.0	Year of Future ADT 115:	2027
Township18B:	64	Inv Rtg Method 65:	1	CDOT Str Type 120A:	CIC
Section18C:	6	Inventory Rating 66:	23.4	CDOT Constr Type 120B:	0.
Detour Length 19:	0.6 mi	Asph/Fill Thick 66T:	004 "in"	Inspection Indic 122A:	
Toll Facility 20:	3	Str. Evaluation 67:	5	Inspection Trip 122AA:	
Custodian 21:	1	Deck Geometry 68:	4	Scheduling Status 122B:	
Owner 22:	1	Undrclr Vert/Hor 69:	3	Maintenance Patrol 123:	68
Functional Class 26:	11	Posting 70:	5	Expansion Dev/Type124:	P
Year Built 27:	1958	Waterway Adequacy 7:	N	Brdg Rail Type/Mod 125A/B:	Y 0
Lanes on 28A:	2	Approach Alignment 72:	8	Posting Trucks 129A/B/C:	0 0 0
Lanes Under 28B:	4	Type of Work 75A:	34	Str Rating Date 130:	10/21/2005
ADT 29:	30,650	Work Done By 75B:	1	Special Equip 133:	-1
Year of ADT 30:	2007	Length of Improvment 76:	240.2 ft	Vert Clr N/E 134A/B/C:	E 16.83 15.42
Design Load 31:	5	Insp Team Indicator 90B:	White Team (Ric	Vert Clr S/W 135A/B/C:	W 17.08 15.83
Apr Rdwy Width 32:	38.0 ft	Inspector Name 90C:	CHURCHESK	Vertical Clr Date:	9/5/2006
Median 33:	1	Frequency 91:	24 months	Weight Limit Color: 135:	0
Skew 34:	54.00 °	FC Frequency 92A:	-1	Str Billing Type:	U
Structure Flared 35:	0	UW Frequency 92B:	-1	Userkey 1 - System:	ONSYS
Sfty Rail 36a/b/c/d:	1 1 1 1	SI Frequency 92C:	-1	Userkey 7-Update Indic:	
Rail ht36h:	37 "in"	FC Inspection Date 93A:			

Inspector Name: CHURCHESK

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

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 97.670 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
13/1	Unp Conc Deck/AC Ovl	(SF)	8,144	0 %	0	100 %	8,144	0 %	0	0 %	0	0 %	0
107/1	Paint Stl Opn Girder	(LF)	1,200	57 %	685	21 %	253	22 %	261	0 %	1	0 %	0
205/1	R/Conc Column	(EA)	9	100 %	9	0 %	0	0 %	0	0 %	0	0 %	0
215/1	R/Conc Abutment	(LF)	116	100 %	116	0 %	0	0 %	0	0 %	0	0 %	0
234/1	R/Conc Cap	(LF)	171	82 %	141	3 %	5	15 %	25	0 %	0	0 %	0
306/1	Asphaltic Plg Exp Jt	(LF)	116	78 %	91	22 %	25	0 %	0	0 %	0	0 %	0
308/1	Constr Non Exp Jt	(LF)	174	100 %	174	0 %	0	0 %	0	0 %	0	0 %	0
311/1	Moveable Bearing	(EA)	20	65 %	13	35 %	7	0 %	0	0 %	0	0 %	0
313/1	Fixed Bearing	(EA)	5	0 %	0	100 %	5	0 %	0	0 %	0	0 %	0
325/1	Slope Prot/Berms	(EA)	2	0 %	0	100 %	2	0 %	0	0 %	0	0 %	0
326/1	Bridge Wingwalls	(EA)	4	100 %	4	0 %	0	0 %	0	0 %	0	0 %	0
334/1	Metal Rail Coated	(LF)	480	100 %	480	0 %	0	0 %	0	0 %	0	0 %	0
338/1	Conc Curbs/SW	(LF)	480	0 %	0	100 %	480	0 %	0	0 %	0	0 %	0
343/1	Pole Attachment	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
359/1	Soffit Smart Flag	(EA)	1	0 %	0	0 %	0	0 %	0	100 %	1	0 %	0

Elem/Env	Description	Element Notes
13/1	Unp Conc Deck/AC Ovl	4 Inches asphalt. Slight rutting, and some raveling with trans. and longit. cracks. Some cracks have been sealed. Couple small potholes in #1 NBnd lane above Pier 3.
107/1	Paint Stl Opn Girder	R1 corrosion on ends at abutments, and portions over piers. R2 corr. on Girder 1E (top flange) at Abutment 1. Bottom flange of Gir. 2D has been repaired. Girder 2E has couple inch wide torn section from 1998 accident cut out of flange (see 5-2008 & 1998 PHOTOS) and not replaced; OK because its at the 1/3rd point, rear 1/3rd. R4 corr. of diaph. at Abutment 5 in Bay D; other diaphs. at abutments and piers have R1 to R2 corrosion. There is a bolt missing in #1 diaph. at Gir. 3E. Bottom flange of Girder 2A is bent upwards from traffic impact above #1 lane.
205/1	R/Conc Column	Minor surface cracks in most. Protected by permanent Jersey barriers.
215/1	R/Conc Abutment	Some light vert. cracks in both. Areas of light to mod. scale on Abutment 5 below Bay B. Some sand on both seats. Backwalls and caps waterstained.

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

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 97.670 mi

Elem/Env	Description	Element Notes
234/1	R/Conc Cap	Spalling with rebar exposed (about 10 % section loss) on Pier 2 both sides of Gir. 2D; about 7 ft. long by 1 ft. down by 3 inches deep. (See 5-2008 PHOTO) Top edge of Pier 3 is delaminated in Bay 3A (about 6 ft. x 1/2 ft. down). Top edge of Pier 4 is delaminated in Bays 4A & 4D (about 5 ft. x 1 ft. down). Some horiz. delam. cracks. Some shear cracks in all. Waterstains on all caps.
306/1	Asphaltic Plg Exp Jt	Asphaltic plug joints placed at both abutments. A1 joint is dishng & cracking along rear approach edge in wheel line of #2 lane. A5 joint has light D-cracking of forward approach asphalt.
308/1	Constr Non Exp Jt	Overlaid at this time.
311/1	Moveable Bearing	Pier rockers nearly vertical. Abutment rockers tipped as much as 8 deg. in expansion (1 inch per 7 inch ht. at 5D); and about 5 degrees at 1A (3/4 inch per 8 inch ht.). All have R1 corrosion.
313/1	Fixed Bearing	At Pier 3 only. R1 corrosion on all.
325/1	Slope Prot/Berms	Moderate horiz. cracks in some panels. Pulled away 1 inch at tops.
326/1	Bridge Wingwalls	Stubs at right with light vert cracks. Left wings considered 1/2 of the walls between structures. Forward left wing has diag. crack that has been repaired.
334/1	Metal Rail Coated	Galvanized Type Y rail (new about 2000). Looks good.
338/1	Conc Curbs/SW	Some trans cracks in top of both, and horiz. cracks in gutter faces. Few small spalls in gutter faces. Spall with exposed rebar on backside of curb Abut. 5 left.
343/1	Pole Attachment	Light pole on pedestal part of curb at right side of Span 1. Looks good.
359/1	Soffit Smart Flag	Trans. cracks scattered throughout with efflorescence. Trans. cracks in these bays also have rust stains; 1A, 2A, 2B, 3D and 4A. Some trans. cracks/delams. and spalls with exposed rebar in Bays 1A,1D (5-2008 PHOTO), 2D, and 3D. End haunches at piers and abutments are deteriorating. Minor delams and spalls with exposed rebar at overhangs. Some delam around light fixture in Bay 2A, and in few other areas.

Maintenance Activity Summary

MMS Activity	Description	Recommended	Status	Target Year	Est Cost
353.08	Br Dk Rpr	4/10/2002	-1	2013	500

Continue to seal cracks in asphalt deck.

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

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 97.670 mi

Maintenance Activity Summary

MMS Activity	Description	Recommended	Status	Target Year	Est Cost
352.02	Cln & Wash	4/10/2002	-1	2013	100
Remove sand that is built up on abutment seats.					
358.05	Substr	5/19/2008	-1	2013	5000
Remove and replace spalling concrete at the pier caps.					
355.02	Cln & Pnt	4/10/2002	-1	2013	2000
Clean and spot paint girders, especially left exterior girder.					
353.01	Br Dk Rpr	4/10/2002	-1	2013	500
Seal open joints in curbs.					
*353.00	Br Dk Rpr	5/19/2008	-1	2013	500
Remove delaminating concrete from bottom of deck, adjacent to the transverse cracks over traffic, both lanes of both spans.					

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

Highway Number (ON) 5D: 025A 1

Mile Post (ON)11: 97.670 mi

Bridge Notes

Utility: 2.5 Inch Ø conduit on rt. edge of deck for CDOT lighting.
Only a 30 ft. wide roadway for I-25 through Pueblo - too narrow to walk on shoulders (without a lane closure).
(TAM specifically pointed out the delamination in deck bottom to the TMII accompanying him during the 2008 inspection, he said he would take care of it)

Inspection Notes

Temperature: 70°
Time: 1:00
Weather: Mostly Cloudy

Scope:

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

Inspector: CHURCHESK

Inspection Team:

Inspection Date: 04/12/2010

Inspector

Inspector