



DEPARTMENT OF TRANSPORTATION  
Structure Maintenance & Investigations

Bridge Number : 55C0183  
Facility Carried: BELHA WAY  
Location : 50' N/O SILVERADO CYN RD  
City :  
Inspection Date : 12/14/2013

# Bridge Inspection Report

Inspection Type

Routine ☒ FC Underwater Special Other.

☒

STRUCTURE NAME: SILVERADO CANYON CREEK

## CONSTRUCTION INFORMATION

Year Built : 1963 Skew (degrees): 21  
Year Widened: N/A No. of Joints : 0  
Length (m) : 7 No. of Hinges : 0

Structure Description: Single span PC/PS concrete cored slab units (3 each) with RC open end seat abutments, all supported upon spread footings.

Span Configuration : (S) 1 @ 6.4 m (N) c/c

## SAFE LOAD CAPACITY AND RATINGS

Design Live Load: M-13.5 OR H-15  
Inventory Rating: RF=0.75 =>24.3 metric tons Calculation Method: FIELD EVAL/ENG JUDGMENT  
Operating Rating: RF=1.25 =>40.5 metric tons Calculation Method: FIELD EVAL/ENG JUDGMENT  
Permit Rating : PPPPP  
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

## DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 0.2 m br, 3.5 m, 0.2 m br (E)  
Total Width: 3.9 m Net Width: 3.5 m No. of Lanes: 1 Speed: 25 mph  
Min. Vertical Clearance: Unimpaired

Rail Code: 1000

Rail Type	Location	Length (ft)	Rail Modifications
MBBR	Right/Left	46	

## DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth trapezoidal with a cobbled bottom and with a concreted bottom through the site.

## INSPECTION COMMENTARY

### SCOPE AND ACCESS

The water in the channel is 8" deep, so all substructure elements were visually inspected.

### REVISIONS

Element type #330 was replaced by element type #337 with the same quantity.

### MISCELLANEOUS

Ten-year bridge roadway, elevation and underside photos were taken during this inspection.

### DECK AND ROADWAY

Rail and deck have no significant defects during this inspection.

INSPECTION COMMENTARY

## SUPERSTRUCTURE

There is growing vegetation at the west abutment wall and soffit between the slab units.

## SUBSTRUCTURE

No significant defects were visually seen during this inspection.

## SAFE LOAD CAPACITY

A Load Rating Summary Sheet is included with this bridge inspection report. The current rating has been assigned in accordance with SMI procedures.

ELEMENT INSPECTION RATINGS

Elem No.	Element Description	Env	Total		Qty in each Condition State				
			Qty	Units	St. 1	St. 2	St. 3	St. 4	St. 5
61	PS Conc Slab - Unprotected w/ AC Overlay	2	25	sq.m.	25	0	0	0	0
215	Reinforced Conc Abutment	2	8	m.	8	0	0	0	0
337	Metal Railing (W6X25 Posts)	2	14	m.	14	0	0	0	0

WORK RECOMMENDATIONS - NONE

Team Leader : Ashraf Shenouda  
 Report Author : Ashraf Shenouda  
 Inspected By : A.Shenouda/KD.Henderson

Ashraf Shenouda 2/10/14  
 Ashraf Shenouda (Registered Civil Engineer) (Date)



STRUCTURE INVENTORY AND APPRAISAL REPORT

## \*\*\*\*\* IDENTIFICATION \*\*\*\*\*

(1) STATE NAME- CALIFORNIA 069  
 (8) STRUCTURE NUMBER 55C0183  
 (5) INVENTORY ROUTE(ON/UNDER) - ON 140000000  
 (2) HIGHWAY AGENCY DISTRICT 12  
 (3) COUNTY CODE 059 (4) PLACE CODE 00000  
 (6) FEATURE INTERSECTED- SILVERADO CANYON CREEK  
 (7) FACILITY CARRIED- BELHA WAY  
 (9) LOCATION- 50' N/O SILVERADO CYN RD:  
 (11) MILEPOINT/KILOMETERPOINT 0  
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0  
 (13) LRS INVENTORY ROUTE & SUBROUTE  
 (16) LATITUDE 33 DEG 44 MIN 45.64 SEC  
 (17) LONGITUDE 117 DEG 35 MIN 23.22 SEC  
 (98) BORDER BRIDGE STATE CODE % SHARE %  
 (99) BORDER BRIDGE STRUCTURE NUMBER

## \*\*\*\*\* STRUCTURE TYPE AND MATERIAL \*\*\*\*\*

(43) STRUCTURE TYPE MAIN:MATERIAL- CONCRETE  
 TYPE- SLAB CODE 101  
 (44) STRUCTURE TYPE APPR:MATERIAL- OTHER/NA  
 TYPE- OTHER/NA CODE 000  
 (45) NUMBER OF SPANS IN MAIN UNIT 1  
 (46) NUMBER OF APPROACH SPANS 0  
 (107) DECK STRUCTURE TYPE- PRECAST CONC. PA CODE 2  
 (108) WEARING SURFACE / PROTECTIVE SYSTEM:  
 A) TYPE OF WEARING SURFACE- BITUMINOUS CODE 6  
 B) TYPE OF MEMBRANE- NONE CODE 0  
 C) TYPE OF DECK PROTECTION- NONE CODE 0

## \*\*\*\*\* AGE AND SERVICE \*\*\*\*\*

(27) YEAR BUILT 1963  
 (106) YEAR RECONSTRUCTED 0000  
 (42) TYPE OF SERVICE: ON- HIGHWAY 1  
 UNDER- WATERWAY 5  
 (28) LANES:ON STRUCTURE 01 UNDER STRUCTURE 00  
 (29) AVERAGE DAILY TRAFFIC 100  
 (30) YEAR OF ADT 2009 (109) TRUCK ADT 1 %  
 (19) BYPASS, DETOUR LENGTH 199 KM

## \*\*\*\*\* GEOMETRIC DATA \*\*\*\*\*

(48) LENGTH OF MAXIMUM SPAN 6.4 M  
 (49) STRUCTURE LENGTH 7.0 M  
 (50) CURB OR SIDEWALK: LEFT 0.0 M RIGHT 0.0 M  
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 3.5 M  
 (52) DECK WIDTH OUT TO OUT 3.9 M  
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 3.7 M  
 (33) BRIDGE MEDIAN- NO MEDIAN 0  
 (34) SKEW 21 DEG (35) STRUCTURE FLARED NO  
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M  
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 3.5 M  
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99.99 M  
 (54) MIN VERT UNDERCLEAR REF- NOT H/RR 0.00 M  
 (55) MIN LAT UNDERCLEAR RT REF- NOT H/RR 0.0 M  
 (56) MIN LAT UNDERCLEAR LT 0.0 M

## \*\*\*\*\* NAVIGATION DATA \*\*\*\*\*

(38) NAVIGATION CONTROL- NOT APPLICABLE CODE N  
 (111) PIER PROTECTION- CODE  
 (39) NAVIGATION VERTICAL CLEARANCE 0.0 M  
 (116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR M  
 (40) NAVIGATION HORIZONTAL CLEARANCE 0.0 M

## \*\*\*\*\* SUFFICIENCY RATING \*\*\*\*\*

SUFFICIENCY RATING = 65.1  
 STATUS FUNCTIONALLY OBSOLETE  
 HEALTH INDEX 100.0  
 PAINT CONDITION INDEX = N/A

## \*\*\*\*\* CLASSIFICATION \*\*\*\*\*

(112) NBIS BRIDGE LENGTH- YES Y  
 (104) HIGHWAY SYSTEM- NOT ON NHS 0  
 (26) FUNCTIONAL CLASS- COLLECTOR URBAN 17  
 (100) DEFENSE HIGHWAY- NOT STRAHNET 0  
 (101) PARALLEL STRUCTURE- NONE EXISTS N  
 (102) DIRECTION OF TRAFFIC- 1 LANE, 2 WAY 3  
 (103) TEMPORARY STRUCTURE-  
 (105) FED.LANDS HWY- NOT APPLICABLE 0  
 (110) DESIGNATED NATIONAL NETWORK - NOT ON NET 0  
 (20) TOLL- ON FREE ROAD 3  
 (21) MAINTAIN- COUNTY HIGHWAY AGENCY 02  
 (22) OWNER- COUNTY HIGHWAY AGENCY 02  
 (37) HISTORICAL SIGNIFICANCE- NOT ELIGIBLE 5

## \*\*\*\*\* CONDITION \*\*\*\*\*

(58) DECK 7  
 (59) SUPERSTRUCTURE 7  
 (60) SUBSTRUCTURE 7  
 (61) CHANNEL & CHANNEL PROTECTION 8  
 (62) CULVERTS N

## \*\*\*\*\* LOAD RATING AND POSTING \*\*\*\*\*

(31) DESIGN LOAD- M-13.5 OR H-15 2  
 (63) OPERATING RATING METHOD- FIELD EVAL/ENG JUD 0  
 (64) OPERATING RATING- 40.5  
 (65) INVENTORY RATING METHOD- FIELD EVAL/ENG JUD 0  
 (66) INVENTORY RATING- 24.3  
 (70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5  
 (41) STRUCTURE OPEN, POSTED OR CLOSED- A  
 DESCRIPTION- OPEN, NO RESTRICTION

## \*\*\*\*\* APPRAISAL \*\*\*\*\*

(67) STRUCTURAL EVALUATION 6  
 (68) DECK GEOMETRY 3  
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N  
 (71) WATER ADEQUACY 9  
 (72) APPROACH ROADWAY ALIGNMENT 6  
 (36) TRAFFIC SAFETY FEATURES 1000  
 (113) SCOUR CRITICAL BRIDGES 5

## \*\*\*\*\* PROPOSED IMPROVEMENTS \*\*\*\*\*

(75) TYPE OF WORK- MISC STRUCTURAL WORK CODE 38  
 (76) LENGTH OF STRUCTURE IMPROVEMENT 7 M  
 (94) BRIDGE IMPROVEMENT COST \$26,000  
 (95) ROADWAY IMPROVEMENT COST \$5,200  
 (96) TOTAL PROJECT COST \$43,680  
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 2010  
 (114) FUTURE ADT 103  
 (115) YEAR OF FUTURE ADT 2029

## \*\*\*\*\* INSPECTIONS \*\*\*\*\*

(90) INSPECTION DATE 12/13 (91) FREQUENCY 24 MO  
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE  
 A) FRACTURE CRIT DETAIL- NO MO A)  
 B) UNDERWATER INSP- NO MO B)  
 C) OTHER SPECIAL INSP- NO MO C)