



Bridge Number : 55C0174
Facility Carried: SILVERADO CANYON RD.
Location : 1.6 MI E/O SANTIAGO ROAD
City :
Inspection Date : 07/11/2011

Bridge Inspection Report

Inspection Type				
Routine	FC	Underwater	Special	Other
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STRUCTURE NAME: SILVERADO CANYON CREEK

CONSTRUCTION INFORMATION

Year Built : 1935	Skew (degrees): 36
Year Widened: N/A	No. of Joints : 0
Length (m) : 17.7	No. of Hinges : 0

Structure Description: CIP/RC deck on riveted steel floor beams on simply supported riveted steel through girders (2) on RC pedestals on RC closed end backfilled cantilever abutments on spread footings.

Span Configuration : (W) 1 @ 15.5 m (E) c/c

LOAD CAPACITY AND RATINGS

Design Live Load: M-13.5 OR H-15	
Inventory Rating: 24.5 metric tonnes	Calculation Method: LOAD FACTOR
Operating Rating: 37.2 metric tonnes	Calculation Method: LOAD FACTOR
Permit Rating : GGGGG	
Posting Load : Type 3: <u>Legal</u>	Type 3S2: <u>Legal</u> Type 3-3: <u>Legal</u>

DESCRIPTION ON STRUCTURE

Deck X-Section: (S) 0.7 m cu, 7.0 m, 0.7 m cu, 1.2 m sw (N)	
Total Width: 9.7 m	Net Width: 7.0 m No. of Lanes: 2
Rail Description: Steel plate girder	Rail Code : 0000
Min. Vertical Clearance: Unimpaired	

DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth trapezoidal with a cobbled bottom.

CONDITION TEXT

CONDITION OF STRUCTURE

The channel was dry; all elements were inspected.

There three spalls 300 mm x 75 mm x 50 mm in the top of east back wall.

There is deck hairline transverse cracks 1 m spacing, also the deck exhibits light scaling.

Freckled rust has formed on the above the deck portions of the through girders.

The steel inspection was performed on 7/22/2010 and no fractures or cracks were found.

MISCELLANEOUS

It is steel through girders so item 36a is 0 but the element is included under girder.

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
12	Concrete Deck - Bare	2	110	sq.m.	110	0	0	0	0
107	Painted Steel Open Girder/Beam	2	35	m.	0	0	35	0	0
152	Painted Steel Floor Beam	2	68	m.	68	0	0	0	0
215	Reinforced Conc Abutment	2	24	m.	24	0	0	0	0
311	Moveable Bearing (roller, sliding, etc.)	2	3	ea.	3	0	0	0	0
313	Fixed Bearing	2	3	ea.	3	0	0	0	0

WORK RECOMMENDATIONS

RecDate: 02/14/2005

EstCost:

Action : Paint-Spot Prep/Pain

StrTarget: 6 YEARS

Spot blast and paint the freckled rust portions of the through girders above the deck.

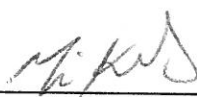
Work By: LOCAL AGENCY

DistTarget:

Status : PROPOSED

EA:

Inspected By : MT.Zaarour/A.Shenouda


 Mikhael T. Zaarour (Registered Civil Engineer)


STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0174
 (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- SILVERADO CNYN RD.
 (9) LOCATION- 1.6 MI E/O SANTIAGO ROAD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 44 MIN 44.49 SEC
 (17) LONGITUDE 117 DEG 39 MIN 00.63 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

***** STRUCTURE TYPE AND MATERIAL *****

(43) STRUCTURE TYPE MAIN:MATERIAL- STEEL
 TYPE- GIRDER & FLOORBEAM SYSTEM CODE 303
 (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- CIP CONCRETE CODE 1
 (108) WEARING SURFACE / PROTECTIVE SYSTEM:
 A) TYPE OF WEARING SURFACE- NONE CODE 0
 B) TYPE OF MEMBRANE- NONE CODE 0
 C) TYPE OF DECK PROTECTION- NONE CODE 0

***** AGE AND SERVICE *****

(27) YEAR BUILT 1935
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON- HIGHWAY-PEDESTRIAN 5
 UNDER- WATERWAY 5
 (28) LANES:ON STRUCTURE 02 UNDER STRUCTURE 00
 (29) AVERAGE DAILY TRAFFIC 2000
 (30) YEAR OF ADT 2009 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 199 KM

***** GEOMETRIC DATA *****

(48) LENGTH OF MAXIMUM SPAN 17.7 M
 (49) STRUCTURE LENGTH 17.7 M
 (50) CURB OR SIDEWALK: LEFT 0.7 M RIGHT 1.2 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 7.0 M
 (52) DECK WIDTH OUT TO OUT 9.7 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 7.0 M
 (33) BRIDGE MEDIAN- NO MEDIAN 0
 (34) SKEW 36 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 7.0 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 = 50.8
 STATUS FUNCTIONALLY OBSOLETE
 HEALTH INDEX 93.4
 PAINT CONDITION INDEX = 89.6

***** CLASSIFICATION ***** CODE

(112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- NOT ON NHS 0
 (26) FUNCTIONAL CLASS- MAJOR COLLECTOR RURAL 07
 (100) DEFENSE HIGHWAY- NOT STRAHNET 0
 (101) PARALLEL STRUCTURE- NONE EXISTS N
 (102) DIRECTION OF TRAFFIC- 2 WAY 2
 (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 ***** CODE

(58) DECK 7
 (59) SUPERSTRUCTURE 6
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 8
 (62) CULVERTS N

***** LOAD RATING AND POSTING ***** CODE

(31) DESIGN LOAD- M-13.5 OR H-15 2
 (63) OPERATING RATING METHOD- LOAD FACTOR 1
 (64) OPERATING RATING- 37.2
 (65) INVENTORY RATING METHOD- LOAD FACTOR 1
 (66) INVENTORY RATING- 24.5
 (70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5
 (41) STRUCTURE OPEN, POSTED OR CLOSED- A
 DESCRIPTION- OPEN, NO RESTRICTION

***** APPRAISAL ***** CODE

(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 0000
 (113) SCOUR CRITICAL BRIDGES 8

***** PROPOSED IMPROVEMENTS *****

(75) TYPE OF WORK- MISC STRUCTURAL WORK CODE 38
 (76) LENGTH OF STRUCTURE IMPROVEMENT 17.7 M
 (94) BRIDGE IMPROVEMENT COST \$171,000
 (95) ROADWAY IMPROVEMENT COST \$34,200
 (96) TOTAL PROJECT COST \$287,280
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 2010
 (114) FUTURE ADT 4121
 (115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****

(90) INSPECTION DATE 07/11 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL- YES 24 MO A) 07/10
 B) UNDERWATER INSP- NO MO B)
 C) OTHER SPECIAL INSP- NO MO C)