



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0125
Facility Carried: PEDESTRIAN OC
Location : 1.0 MI. S/O CHAPMAN AVE.
City :
Inspection Date : 07/07/2013

Bridge Inspection Report

Inspection Type

Routine FC Underwater Special Other

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STRUCTURE NAME: HIGHCLIFF DRIVE POC

CONSTRUCTION INFORMATION

Year Built : 1969 Skew (degrees): 20
Year Widened: N/A No. of Joints : 0
Length (m) : 49.1 No. of Hinges : 0

Structure Description: Continuous two span CIP/RC box girder (2 cells) with an RC single column bent and RC open end diaphragm abutments, all supported upon concrete piles.

Span Configuration : (S) 2 @ 24.4 m (N) c/c

SAFE LOAD CAPACITY AND RATINGS

Design Live Load: PEDESTRIAN
Inventory Rating: N/A Calculation Method: NO RATING ANALYSIS
Operating Rating: N/A Calculation Method: NO RATING ANALYSIS
Permit Rating : N/A
Posting Load : Type 3: N/A Type 3S2: N/A Type 3-3: N/A

DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 0.3 m br, 6.4 m, 0.3 m br (E)
Total Width: N/A Net Width: N/A No. of Lanes: N/A Speed: N/A mph
Min. Vertical Clearance: Unimpaired
Rail Code: NNNN Rail Description: Type 1 Railing (Other)

DESCRIPTION UNDER STRUCTURE

Facility Name	Func Class	Lanes	Horiz Clr (m)	Vert Clr (m)
NEWPORT BLVD	14	4	11.40	4.88

Channel Description: None.

INSPECTION COMMENTARY

SCOPE AND ACCESS

The entire bridge was inspected and all elements were inspected.

REVISIONS

NBI #47 (Total Horizontal Clearance under) was modified from 20.8 m to 11.4 m.

NBI #55B (Min. Lateral Under clearance R) was modified from 1.8 m to 1.5 m.

NBI #56 (Min. Lateral Under clearance L) was modified from 1.8 m to 1.2 m.

REVISIONS

Element 105 (RC Box Girder): a quantity of 2 m was moved from St. 1 to St. 2.

MISCELLANEOUS

INSPECTION COMMENTARY

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

DECK AND ROADWAY

The concrete deck exhibits:

- * transverse cracks 6 ft long 0.08 inch wide, and map cracks 0.08 inch wide and 1 foot apart within 20 ft above bent #2 due to negative moments.
- * 2 ft high vegetation was noticed at the SW corner.
- * transverse cracks 6 ft long 0.08 inch wide at the east end.

SUPERSTRUCTURE

Box girder at the ends exhibits few diagonal cracks +/- 0.04 inch wide and 2 ft apart.

SUBSTRUCTURE

No significant defects were found during this inspection

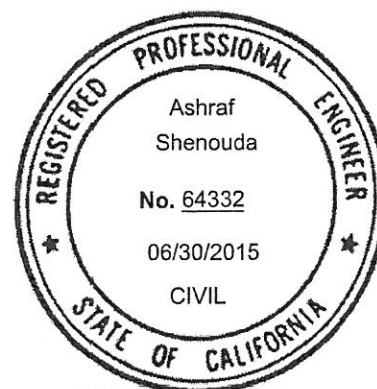
ELEMENT INSPECTION RATINGS

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	320	sq.m.	320	0	0	0	0
105	Reinforced Concrete Closed Webs/Box Girder	2	49	m.	47	2	0	0	
205	Reinforced Conc Column or Pile Extension	2	1	ea.	1	0	0	0	0
215	Reinforced Conc Abutment	2	14	m.	14	0	0	0	0
252	Cast-In-Drilled Hole Concrete Pile	2	1	ea.	1	0	0	0	0
333	Other Bridge Railing	2	108	m.	108	0	0	0	0

WORK RECOMMENDATIONS - NONE

Team Leader : Ashraf Shenouda
 Report Author : Ashraf Shenouda
 Inspected By : A. Shenouda/NN.Vo

Ashraf Shenouda 10/7/2013
 Ashraf Shenouda (Registered Civil Engineer) (Date)



STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0125
 (5) INVENTORY ROUTE (ON/UNDER)- UNDER 250000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- NEWPORT BOULEVARD
 (7) FACILITY CARRIED- PEDESTRIAN OC
 (9) LOCATION- 1.0 MI. S/O CHAPMAN AVE.
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- PART OF NET 1
 (13) LRS INVENTORY ROUTE & SUBROUTE 000000M016
 (16) LATITUDE 33 DEG 46 MIN 53.29 SEC
 (17) LONGITUDE 117 DEG 46 MIN 30.54 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN:MATERIAL- CONCRETE CONT
 TYPE- BOX BEAM OR GIRDER - MULTI CODE 205
 (44) STRUCTURE TYPE APPR:MATERIAL- OTHER/NA
 TYPE- OTHER/NA CODE 000
 (45) NUMBER OF SPANS IN MAIN UNIT 2
 (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 1969
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON- PEDESTRIAN-BICYCLE 3
 UNDER- HIGHWAY W/O PEDESTF 1
 (28) LANES:ON STRUCTURE UNDER STRUCTURE 04
 (29) AVERAGE DAILY TRAFFIC 9000
 (30) YEAR OF ADT 2011 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 2 KM

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

(48) LENGTH OF MAXIMUM SPAN 24.4 M
 (49) STRUCTURE LENGTH 49.1 M
 (50) CURB OR SIDEWALK: LEFT 0.0 M RIGHT 0.0 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB N
 (52) DECK WIDTH OUT TO OUT 7.0 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) N
 (33) BRIDGE MEDIAN- NO MEDIAN 0
 (34) SKEW 20 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 4.88 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 11.4 M
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99.99 M
 (54) MIN VERT UNDERCLEAR REF- HIGHWAY 4.87 M
 (55) MIN LAT UNDERCLEAR RT REF- HIGHWAY 1.5 M
 (56) MIN LAT UNDERCLEAR LT 1.2 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 =
 STATUS
 HEALTH INDEX .0
 PAINT CONDITION INDEX = N/A

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

(112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- NOT ON NHS 0
 (26) FUNCTIONAL CLASS- OTHER PRIN ART URBAN 14
 (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 N
 (62) CULVERTS N

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

(31) DESIGN LOAD- PEDESTRIAN 7
 (63) OPERATING RATING METHOD- NO RATING ANALYSIS 5
 (64) OPERATING RATING- .0
 (65) INVENTORY RATING METHOD- NO RATING ANALYSIS 5
 (66) INVENTORY RATING- .0
 (70) BRIDGE POSTING- EQUAL TO OR ABOVE LEGAL LOADS 5
 (41) STRUCTURE OPEN, POSTED OR CLOSED- K
 DESCRIPTION- CLOSED TO ALL TRAFFIC

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

(67) STRUCTURAL EVALUATION 6
 (68) DECK GEOMETRY *
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL 0
 (71) WATER ADEQUACY N
 (72) APPROACH ROADWAY ALIGNMENT 6
 (36) TRAFFIC SAFETY FEATURES NNNN
 (113) SCOUR CRITICAL BRIDGES N

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

(75) TYPE OF WORK- CODE
 (76) LENGTH OF STRUCTURE IMPROVEMENT M
 (94) BRIDGE IMPROVEMENT COST
 (95) ROADWAY IMPROVEMENT COST
 (96) TOTAL PROJECT COST
 (97) YEAR OF IMPROVEMENT COST ESTIMATE
 (114) FUTURE ADT 9000
 (115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****

(90) INSPECTION DATE 07/13 (91) FREQUENCY 72 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)