



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0606
Facility Carried: OSO PARKWAY
Location : 0.6 MI E/O FELIPE ROAD
City :
Inspection Date : 02/22/2011

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: ARROYO TRABUCO

CONSTRUCTION INFORMATION

Year Built : 1991	Skew (degrees): 99
Year Widened: N/A	No. of Joints : 3
Length (m) : 202.7	No. of Hinges : 1

Structure Description: Continuous 5 span CIP/PS concrete box girder (11 cells) with RC 2-column bents and RC open end seat abutments, all supported upon concrete piles (Abutment 1 has steel piles).

Span Configuration : (W) 45.7 m, 3 @ 36.6 m, 45.7 m (E) c/c

LOAD CAPACITY AND RATINGS

Design Live Load: MS-18+MOD OR HS-20+MOD

Inventory Rating: 32.6 metric tonnes

Calculation Method: NO RATING ANALYSIS

Operating Rating: 53.5 metric tonnes

Calculation Method: NO RATING ANALYSIS

Permit Rating : PPPPP

Posting Load : Type 3: Legal

Type 3S2: Legal

Type 3-3: Legal

DESCRIPTION ON STRUCTURE

Deck X-Section: (S) 0.3 m br, 1.5 m sw, 13.4 m, 1.2 m cu med, 13.4 m, 1.5 m sw, 0.3 m br (N)

Total Width: 31.7 m

Net Width: 26.8 m

No. of Lanes: 6

Rail Description: Type 26 conc.

Rail Code : 0110

Min. Vertical Clearance: Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth open wash with a cobbled streambed.

CONDITION TEXT

CONDITION OF STRUCTURE

There are transverse and longitudinal deck cracks 1 mm in size at 300 mm in spacing mostly over the supports.

There are minor spalls (50 mm x 50 mm x 15 mm) scatter over the deck.

There are 5 cracks 1 mm width and 500 mm long in the bottom of box girder at the south side in span #5.

There is water dripping from the soffit vent hole in south side of span # 1.

There are 20 mm vertical offset in the concrete railings at the east abutment.

There is 500mm deep water, all elements were inspected

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	6380	sq.m.	0	6380	0	0	0
104	P/S Conc Closed Web/Box Girder	2	203	m.	198	5	0	0	
205	Reinforced Conc Column or Pile Extension	2	8	ea.	8	0	0	0	0
215	Reinforced Conc Abutment	2	80	m.	80	0	0	0	0
225	Unpainted Steel Submerged Pile	2	1	ea.	1	0	0	0	0
227	Reinforced Conc Submerged Pile	2	1	ea.	1	0	0	0	0
300	Strip Seal Expansion Joint	2	80	m.	80	0	0	0	0
302	Compression Joint Seal	2	40	m.	40	0	0	0	0
312	Enclosed/Concealed Bearing	2	1	ea.	1	0	0	0	0
321	Reinforced Conc Approach Slab w/ or w/o AC Ovly	2	12	ea.	12	0	0	0	0
331	Reinforced Conc Bridge Railing	2	430	m.	430	0	0	0	0
358	Deck Cracking	2	1	ea.	0	0	1	0	

WORK RECOMMENDATIONS

RecDate: 02/22/2011
 Action : Drainage Issue
 Work By: LOCAL AGENCY
 Status : PROPOSED

EstCost:
 StrTarget: 2 YEARS
 DistTarget:
 EA:

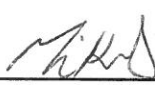
Find out from where the water getting
 into the cell. Water is not supposed to
 be in the bridge cell.

RecDate: 04/24/2006
 Action : Deck-Methacrylate
 Work By: LOCAL AGENCY
 Status : PROPOSED

EstCost:
 StrTarget: 2 YEARS
 DistTarget:
 EA:

Repair all deck spalls and coat entire
 deck with methacrylate.

Inspected By : MT.Zaarour/M.Zolfaghari


 Mikhael T. Zaarour (Registered Civil Engineer)



STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0606
 (5) INVENTORY ROUTE(ON/UNDER)- ON 140000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- ARROYO TRABUCO
 (7) FACILITY CARRIED- OSO PARKWAY
 (9) LOCATION- 0.6 MI E/O FELIPE ROAD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- PART OF NET 1
 (13) LRS INVENTORY ROUTE & SUBROUTE 000000000000
 (16) LATITUDE 33 DEG 35 MIN 06 SEC
 (17) LONGITUDE 117 DEG 38 MIN 09 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN:MATERIAL- PRSTR CONC CONT
 TYPE- BOX BEAM OR GIRDER - MULTI CODE 605
 (44) STRUCTURE TYPE APPR:MATERIAL- OTHER/NA
 TYPE- OTHER/NA CODE 000
 (45) NUMBER OF SPANS IN MAIN UNIT 5
 (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 1991
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON- HIGHWAY-PEDESTRIAN 5
 UNDER- WATERWAY 5
 (28) LANES:ON STRUCTURE 06 UNDER STRUCTURE 00
 (29) AVERAGE DAILY TRAFFIC 27000
 (30) YEAR OF ADT 2003 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 11 KM

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

(48) LENGTH OF MAXIMUM SPAN 45.7 M
 (49) STRUCTURE LENGTH 202.7 M
 (50) CURB OR SIDEWALK: LEFT 1.5 M RIGHT 1.5 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 26.8 M
 (52) DECK WIDTH OUT TO OUT 31.7 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 26.8 M
 (33) BRIDGE MEDIAN- CLOSED (NO BARRIER) 2
 (34) SKEW 99 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 13.4 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 = 81.6
 STATUS STRUCTURALLY DEFICIENT
 HEALTH INDEX 87.5
 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 4
 (59) SUPERSTRUCTURE 7
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 9
 (62) CULVERTS N

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

(31) DESIGN LOAD- MS-18+MOD OR HS-20+MOD 6
 (63) OPERATING RATING METHOD- NO RATING ANALYSIS 5
 (64) OPERATING RATING- 53.5
 (65) INVENTORY RATING METHOD- NO RATING ANALYSIS 5
 (66) INVENTORY RATING- 32.6
 (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 7
 (68) DECK GEOMETRY 7
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 9
 (72) APPROACH ROADWAY ALIGNMENT 8
 (36) TRAFFIC SAFETY FEATURES 0110
 (113) SCOUR CRITICAL BRIDGES 8

***** 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 55089
 (115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****

(90) INSPECTION DATE 02/11 (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)