



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0283
Facility Carried: BROADWAY
Location : 100' NE/O PACIFIC CST HW
City :
Inspection Date : 05/05/2010

Bridge Inspection Report

Inspection Type

Routine ☒ FC ☐ Underwater ☐ Special ☐ Other ☐

STRUCTURE NAME: SUNSET CHANNEL

CONSTRUCTION INFORMATION

Year Built : 1959 Skew (degrees): 0
Year Widened: N/A No. of Joints : 3
Length (m) : 29.3 No. of Hinges : 0

Structure Description: Simply supported 4-span CIP/RC deck slab with RC 5-column pile bents and with column pile bent abutments.

Span Configuration : (S) 4 @ 7.0 m (N) c/c

LOAD CAPACITY AND RATINGS

Design Live Load: M-13.5 OR H-15
Inventory Rating: 24.3 metric tonnes Calculation Method: NO RATING ANALYSIS
Operating Rating: 40.5 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: (W) 0.3 m br, 0.9 m sw, 8.6 m, 0.9 m sw, 0.3 m br (E)
Total Width: 11.0 m Net Width: 8.5 m No. of Lanes: 2
Rail Description: Metal Railing Rail Code : 1000
Min. Vertical Clearance: Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description: Tidal basin.

CONDITION TEXT

CONDITION OF STRUCTURE

The freeboard is about 2 meter.

The underwater inspection was done in April 2007. No defects were noted and all inspected elements were found to be in good condition

There are spalls (500mm x 200mm x 25mm) at the easterly edge of the deck over bent #3, and at easterly side of bent caps #2 and #4 with exposed rebar.


There is joint spall (1000mm x 200mm x 40mm) in the deck at northbound bent #3 with exposed rebar.

ELEMENT INSPECTION RATINGS										
F#	Elem	Element Description	Env	Total	Units	Qty in each Condition State				
				Qty		St. 1	St. 2	St. 3	St. 4	St. 5
101	38	Concrete Slab - Bare	3	240	sq.m.	0	240	0	0	0
101	205	Reinforced Conc Column or Pile Extension	4	15	ea.	15	0	0	0	0
101	215	Reinforced Conc Abutment	3	22	m.	22	0	0	0	0
101	234	Reinforced Conc Cap	3	33	m.	33	0	0	0	0
101	301	Pourable Joint Seal	3	33	m.	33	0	0	0	0

F#Elem	Element Description	Env	Total Units		Qty in each Condition State				
					Qty	St. 1	St. 2	St. 3	St. 4
101 330	Metal Bridge Railing - coated or uncoated	2	56	m.	56	0	0	0	0

WORK RECOMMENDATIONS

RecDate: 06/11/2007	EstCost:	Repair the spall (500mm x 200mm x 25mm)
Action : Deck-Patch spalls	StrTarget: 2 YEARS	at the easterly edge of the deck over
Work By: LOCAL AGENCY	DistTarget:	bent #3.
Status : PROPOSED	EA:	
 RecDate: 06/11/2007	 EstCost:	 Repair the spalls (500mm x 200mm x 25mm)
Action : Sub-Patch spalls	StrTarget: 2 YEARS	at easterly side of bent caps #2 and #4
Work By: LOCAL AGENCY	DistTarget:	with exposed rebar.
Status : PROPOSED	EA:	
 RecDate: 07/20/1995	 EstCost:	 Repair the joint spall (1000mm x 200mm x
Action : Joints-Repair/Clean	StrTarget: 2 YEARS	40mm) in the deck at northbound bent #3
Work By: LOCAL AGENCY	DistTarget:	with exposed rebar.
Status : PROPOSED	EA:	

Inspected By : A. Shenouda/MT. Zaarour


 Registered Civil Engineer


STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0283
 (5) INVENTORY ROUTE(ON/UNDER)- ON 140000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- SUNSET CHANNEL
 (7) FACILITY CARRIED- BROADWAY
 (9) LOCATION- 100' NE/O PACIFIC CST HWY
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 43 MIN 05.6 SEC
 (17) LONGITUDE 118 DEG 04 MIN 12.2 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 4
 (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 1959
 (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 2000 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 199 KM

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

(48) LENGTH OF MAXIMUM SPAN 7.0 M
 (49) STRUCTURE LENGTH 29.3 M
 (50) CURB OR SIDEWALK: LEFT 0.9 M RIGHT 0.1 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 8.5 M
 (52) DECK WIDTH OUT TO OUT 11.0 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 8.5 M
 (33) BRIDGE MEDIAN- NO MEDIAN 0
 (34) SKEW 0 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 8.5 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- NO CONTROL CODE 0
 (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 = 62.0

STATUS

HEALTH INDEX

95.1

PAINT CONDITION INDEX =

N/A

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

(112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- NOT ON NHS 0
 (26) FUNCTIONAL CLASS- LOCAL URBAN 19
 (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 6
 (59) SUPERSTRUCTURE 6
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 9
 (62) CULVERTS N

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

(31) DESIGN LOAD- M-13.5 OR H-15 2
 (63) OPERATING RATING METHOD- NO RATING ANALYSIS 5
 (64) OPERATING RATING- 40.5
 (65) INVENTORY RATING METHOD- NO RATING ANALYSIS 5
 (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 ***** CODE

(67) STRUCTURAL EVALUATION 6
 (68) DECK GEOMETRY 5
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 9
 (72) APPROACH ROADWAY ALIGNMENT 8
 (36) TRAFFIC SAFETY FEATURES 1000
 (113) SCOUR CRITICAL BRIDGES 5

***** 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 4121
 (115) YEAR OF FUTURE ADT 2029

***** INSPECTIONS *****

(90) INSPECTION DATE 05/10 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL- NO MO A)
 B) UNDERWATER INSP- YES 60 MO B) 04/07
 C) OTHER SPECIAL INSP- NO MO C)