



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0168
Facility Carried: AMAPOLA AVENUE
Location : 0.2 MI E/O ORANGE PK BLV
City :
Inspection Date : 05/06/2010

Bridge Inspection Report

Inspection Type

Routine ☒ FC ☐ Underwater ☐ Special ☐ Other ☐

STRUCTURE NAME: HANDY CREEK

CONSTRUCTION INFORMATION

Year Built : 1937 Skew (degrees): 0
Year Widened: N/A No. of Joints : 0
Length (m) : 8.5 No. of Hinges : 0

Structure Description: Simply supported two span timber stringers (19 each) and timber deck with a timber treated timber post (6 each) bent and a treated timber post (6 each) abutments, all supported upon treated timber sills. All timber treated Douglas Fir.

Span Configuration : (W) 2 @ 4.0 m (E) c/c

LOAD CAPACITY AND RATINGS

Design Live Load: OTHER OR UNKNOWN
Inventory Rating: 17.5 metric tonnes Calculation Method: ALLOWABLE STRESS
Operating Rating: 24.9 metric tonnes Calculation Method: ALLOWABLE STRESS
Permit Rating : 00000
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

DESCRIPTION ON STRUCTURE

Deck X-Section: (S) 0.1 m br, 7.2 m, 0.1 m br (N)
Total Width: 7.3 m Net Width: 7.1 m No. of Lanes: 2
Rail Description: MBGR Rail Code : 1000
Min. Vertical Clearance: Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth trapezoidal upstream, RC rectangular with a check dam downstream.

CONDITION TEXT

REVISIONS

The inventory rating was modified from 19.9 metric tonnes to 17.5 metric tonnes.
The operating rating was modified from 28.1 metric tonnes to 24.5 metric tonnes.
The permit rating was modified from GGGGG to 00000.

CONDITION OF STRUCTURE


The columns, abutments, and the bent caps have various minor splitting, cracking, or crushing.

There was 200mm of water in the channel; all elements were inspected

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 32	Timber Deck - w/ AC Overlay	2	60 sq.m.	60	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
101 111	Timber Open Girder/Beam	2	161	m.	161	0	0	0	0
101 206	Timber Column or Pile Extension	3	18	ea.	0	18	0	0	0
101 216	Timber Abutment	3	16	m.	0	16	0	0	0
101 235	Timber Cap	2	21	m.	0	21	0	0	0
101 337	Metal Railing (W6X25 Posts)	2	18	m.	18	0	0	0	0

WORK RECOMMENDATIONS - NONEInspected By : A. Shenouda/MT. Zaarour


 Registered Civil Engineer


STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0168
 (5) INVENTORY ROUTE(ON/UNDER)- ON 140000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- HANDY CREEK
 (7) FACILITY CARRIED- AMAPOLA AVENUE
 (9) LOCATION- 0.2 MI E/O ORANGE PK BLVD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 48 MIN 09 SEC
 (17) LONGITUDE 117 DEG 46 MIN 46 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN:MATERIAL- WOOD OR TIMBER
 TYPE- STRINGER/MULTI-BEAM OR GDR CODE 702
 (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- TIMBER CODE 8
 (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 1937
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON- HIGHWAY 1
 UNDER- WATERWAY 5
 (28) LANES:ON STRUCTURE 02 UNDER STRUCTURE 00
 (29) AVERAGE DAILY TRAFFIC 1000
 (30) YEAR OF ADT 2000 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 2 KM

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

(48) LENGTH OF MAXIMUM SPAN 4.0 M
 (49) STRUCTURE LENGTH 8.5 M
 (50) CURB OR SIDEWALK: LEFT 0.0 M RIGHT 0.0 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 7.1 M
 (52) DECK WIDTH OUT TO OUT 7.3 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 6.7 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 6.7 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 = 60.1
 STATUS
 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- COLLECTOR URBAN 17
 (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 7
 (60) SUBSTRUCTURE 6
 (61) CHANNEL & CHANNEL PROTECTION 8
 (62) CULVERTS N

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

(31) DESIGN LOAD- OTHER OR UNKNOWN 0
 (63) OPERATING RATING METHOD- ALLOWABLE STRESS 2
 (64) OPERATING RATING- 24.9
 (65) INVENTORY RATING METHOD- ALLOWABLE STRESS 2
 (66) INVENTORY RATING- 17.5
 (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 4
 (68) DECK GEOMETRY 4
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 8
 (72) APPROACH ROADWAY ALIGNMENT 6
 (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 2061
 (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- NO MO B)
 C) OTHER SPECIAL INSP- NO MO C)