



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0629
Facility Carried: ANTONIO PARKWAY
Location : 0.5 MI. S/O OSO PARKWAY
City :
Inspection Date : 01/31/2019

Bridge Inspection Report

Inspection Type
Routine ☒ FC ☐ Underwater ☐ Special ☐ Other ☐

STRUCTURE NAME: WILDLIFE UNDERCROSSING

CONSTRUCTION INFORMATION

Year Built : 1997 Skew (degrees): 0
Year Modified: 2008 No. of Joints : 2
Length (m) : 71.6 No. of Hinges : 0

Structure Description: Continuous three span CIP/RC box girder (seven cells) with RC three column bents, and RC open seat abutments, all supported upon 16.0 inches diameter CIDH concrete piles.

Span Configuration : (S) 68.6 feet, 95.2 feet, 68.6 feet (N)
widened (S) 27.9 feet, 29.5 feet, 68.6 feet, 95.2 feet, 68.6 feet
(N)

SAFE LOAD CAPACITY AND RATINGS

Design Live Load: MS-18+MOD OR HS-20+MOD
Inventory Rating: RF=1.00 =>32.4 metric tons Calculation Method: ASSIGNED (LFD)
Operating Rating: RF=1.67 =>54.1 metric tons Calculation Method: ASSIGNED (LFD)
Permit Rating : PPPPP
Posting Load : Type 3: Legal Type 3S2: Legal Type 3-3: Legal

DESCRIPTION ON STRUCTURE

Deck X-Section: (W) 1.6 feet br, 4.3 feet sw, 43.6 feet, 4.0 feet med, 43.6 feet, 5.0 feet sh, 4.3 feet sw, 1.6 feet br (E)

Total Width: 31.2 m Net Width: 26.6 m No. of Lanes: 4 Speed: 55 mph
Min. Vertical Clearance: Unimpaired Overlay Thickness: 0.0 inches

Rail Code: 1111

DESCRIPTION UNDER STRUCTURE

Channel Description: Natural earth canyon

NOTICE

The bridge inspection condition assessment used for this inspection is based on the American Association of State Highway and Transportation Officials (AASHTO) Bridge Element Inspection Manual 2013 as defined in Moving Ahead for Progress in the 21st Century (MAP-21) federal law. The new element inspection methodology may result in changes to related condition and appraisal ratings on the bridge without significant physical changes at the bridge.

The element condition information contained in this report represents the current condition of the bridge based on the most recent routine and special inspections. Some of the notes presented below may be from an inspection that occurred prior to the date noted in this report. Refer to the Scope and Access section of this inspection report for a description of which portions of the bridge were inspected on this date.

INSPECTION COMMENTARY

SCOPE AND ACCESS

A complete routine inspection was performed by walking on and around the bridge to inspect all visible elements of the bridge structure. Bridge deck was inspected by walking on sidewalks, shoulder and median area. Soffit and all substructure were inspected by walking underneath the bridge.

There is no need for a special equipment to inspect this structure.

INSPECTION COMMENTARY**DECK AND ROADWAY**

There are minor hairline transverse and longitudinal deck cracks at 0.02 inches wide, 2.0 feet to 4.0 feet in spacing.

SUPERSTRUCTURE

There is no notable distress observed at the time of inspection.

SUBSTRUCTURE

There is no notable distress observed at the time of inspection.

SAFE LOAD CAPACITY

The load rating for this structure is being reviewed and assigned by Design LFD-03/25/2015, SM&I Ratings Branch. A Load Rating Summary Sheet dated 03/25/2015 is on file for this structure in BIRIS.

WATERWAY

The channel was dry at the time of inspection.

ELEMENT INSPECTION RATINGS AND COMMENTARY

Elem No.	Defect /Prot	Defect	Element Description	Env	Total Qty	Units	Qty in each Condition State	St. 1	St. 2	St. 3	St. 4
16			Top Flange-RC	2	2270	sq.m	2270	0	0	0	0
(16)											
There were no significant defects noted.											
38			Slab-RC	2	200	sq.m	200	0	0	0	0
(38)											
There were no significant defects noted.											
105			Box Girder-RC	2	142	m	142	0	0	0	0
(105)											
There were no significant defects noted.											
205			Column-RC	2	13	each	13	0	0	0	0
(205)											
There were no significant defects noted.											
215			Abutment-RC	2	80	m	80	0	0	0	0
(215)											
There were no significant defects noted.											
252			Pile-CIDH	2	1	ea.	1	0	0	0	0
(252)											
The pile element is included to indicate the presence of piles on this structure. The piles were not exposed for visual inspection. No indication of pile distress was noted in any substructure element.											
302			Joint-Compression Seal	2	42	m	42	0	0	0	0
(302)											
There were no significant defects noted.											
312			Bearing-Enclosed	2	2	each	2	0	0	0	0
(312)											
There were no significant defects noted.											

ELEMENT INSPECTION RATINGS AND COMMENTARY

Elem No.	Defect /Prot	Element Description	Env	Total Qty	Units	Qty in each Condition State			
						St. 1	St. 2	St. 3	St. 4
321		Approach Slab-RC	2	478	sq.m	478	0	0	0
(321) There were no significant defects noted.									
331		Railing-RC	2	142	m	142	0	0	0
(331) There were no significant defects noted.									

WORK RECOMMENDATIONS - NONE**CHANNEL X-SECTION**

Side : Upstream

X-Section Date: 01/31/2019

Measured From : Bottom of Easterly soffit

Location	Horiz (m)	Vert (m)	Comments
Abutment 1	0.00	1.30	Face of Abutment
Bent #2	0.00	10.70	Centerline
	12.50	14.60	Thalweg
Bent #3	0.00	10.30	Centerline
Abutment #4	0.00	1.40	Face of Abutment

Team Leader : Edwin Mah

Report Author : Nelson N. Vo

Inspected By : NN.Vo/E.Mah



5/3/2019

Edwin Mah (Registered Civil Engineer) (Date)

STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0629
 (5) INVENTORY ROUTE(ON/UNDER)- ON 14000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- WILDLIFE UNDERCROSSING
 (7) FACILITY CARRIED- ANTONIO PARKWAY
 (9) LOCATION- 0.5 MI. S/O OSO PARKWAY
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- PART OF NET 1
 (13) LRS INVENTORY ROUTE & SUBROUTE 000000000000
 (16) LATITUDE 33 DEG 34 MIN 34.64 SEC
 (17) LONGITUDE 117 DEG 37 MIN 57.64 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- CONCRETE CONT
 TYPE- SLAB CODE 201
 (45) NUMBER OF SPANS IN MAIN UNIT 3
 (46) NUMBER OF APPROACH SPANS 2
 (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 1997
 (106) YEAR RECONSTRUCTED 2008
 (42) TYPE OF SERVICE: ON- HIGHWAY-PEDESTRIAN 5
 UNDER- OTHER 0
 (28) LANES:ON STRUCTURE 04 UNDER STRUCTURE 00
 (29) AVERAGE DAILY TRAFFIC 23400
 (30) YEAR OF ADT 2019 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 11 KM

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

(48) LENGTH OF MAXIMUM SPAN 29.0 M
 (49) STRUCTURE LENGTH 71.6 M
 (50) CURB OR SIDEWALK: LEFT 0.0 M RIGHT 0.0 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 26.6 M
 (52) DECK WIDTH OUT TO OUT 31.2 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 26.6 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 13.3 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 = 87.9

PAINT CONDITION INDEX = N/A

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

(112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- ROUTE ON NHS 1
 (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 7
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION N
 (62) CULVERTS N

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

(31) DESIGN LOAD- MS-18+MOD OR HS-20+MOD 6
 (63) OPERATING RATING METHOD- ASSIGNED (LFD) A
 (64) OPERATING RATING- 54.1
 (65) INVENTORY RATING METHOD- ASSIGNED (LFD) A
 (66) INVENTORY RATING- 32.4
 (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 9
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY N
 (72) APPROACH ROADWAY ALIGNMENT 8
 (36) TRAFFIC SAFETY FEATURES 1111
 (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 42329
 (115) YEAR OF FUTURE ADT 2037

***** INSPECTIONS *****

(90) INSPECTION DATE 01/19 (91) FREQUENCY 48 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)