

*California Department of Transportation
Division of Maintenance
Structure Maintenance and Investigations*

B_{ridge}

I_{nspection}

R_{ecords}

I_{nformation}

S_{ystem}

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DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0008
Facility Carried: TRABUCO CANYON RD
Location : 1.4 mi n/o Santa Margarita
City :
Inspection Date : 01/13/2003
Inspection Type

Bridge Inspection Report

Routine ☒ Group A ☐ Underwater ☐ Special ☐ Other ☐

STRUCTURE NAME: TRABUCO CREEK

CONSTRUCTION INFORMATION

Year Built : 1980 Skew (degrees): 33
Year Widened: N/A No. of Joints : 0
Length (m) : 22.3 No. of Hinges : 0

Structure Description: Simply supported 6-span PC/PS concrete deck slab units (7 each) with RC pier walls and RC open end seat abutments, all supported upon spread footings.

Span Configuration : (W) 6 @ 3.3 m (E) c/c

LOAD CAPACITY AND RATINGS

Design Live Load: MS - 18 OR HS - 20
Inventory Rating: 32.6 metric tons Calculation Method: LOAD FACTOR
Operating Rating: 53.5 metric tons Calculation Method: LOAD FACTOR
Permit Rating : PPPPP
Posting Load : Type 3 N/A Type 3S2 N/A Type 3-3 N/A

DESCRIPTION ON STRUCTURE

Deck X-Section: (S) 0.1 m br, 2 @ 3.6 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 with an RC invert through the site.

CONDITION OF STRUCTURE

There are minor chips and spalls in various locations of the deck slab.
Unsealed cracks exist in the concrete deck which are of moderate size or density. (0)
Otherwise, the structure is in good condition.

SCOUR

The stream bed has degraded approximately 1 m downstream of the structure. Grouted rip rap has been placed downstream of the structure.

MISCELLANEOUS

Rail Ratings: (New) 1000 (Old) 0000
The maximum posted speed is 35 mph.

ELEMENT INSPECTION RATINGS

F#	Element Description	Env	Total Units Qty	Qty in each Condition State				
No.				St. 1	St. 2	St. 3	St. 4	St. 5
01 39	Concrete Slab - Unprotected w/ AC Overlay	2	140 sq.m.	0	0	140	0	0
01 210	Reinforced Conc Pier Wall	2	45 m.	45	0	0	0	0
01 215	Reinforced Conc Abutment	2	18 m.	18	0	0	0	0
01 312	Enclosed/Concealed Bearing	2	7 ea.	7	0	0	0	0

F#	Element Description No.	Env	Total Units Qty		Qty in each Condition State				
					St. 1	St. 2	St. 3	St. 4	St. 5
01 321	Reinforced Conc Approach Slab w/ or w/o AC Ovly	2	4	ea.	0	4	0	0	0
01 333	Other Bridge Railing	2	42	m.	42	0	0	0	0
01 358	Deck Cracking	2	1	ea.	0	1	0	0	0

WORK RECOMMENDATIONS

RecDate: 07/08/1994

EstCost:

Patch the deck slab spalls with Set 45 or
equivalent.

Action :

StrTarget: 2 YEARS

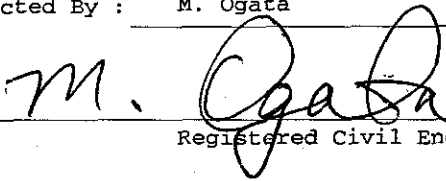
Work By: LOCAL AGENCY

DistTarget:

Status : PROPOSED

EA:

Inspected By : M. Ogata



Registered Civil Engineer

CC: TMRut, Maintenance
Orange County

STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME- CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0008
 (5) INVENTORY ROUTE(ON/UNDER)- ON 1400W4590
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED- TRABUCO CREEK
 (7) FACILITY CARRIED- TRABUCO CANYON RD
 (9) LOCATION- 1.4 mi n/o Snta Margarita
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK- NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 39 MIN 36 SEC
 (17) LONGITUDE 117 DEG 35 MIN 06 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN:MATERIAL- PRESTRESS CONC
 TYPE- SLAB CODE 501
 (44) STRUCTURE TYPE APPR:MATERIAL-
 TYPE- CODE
 (45) NUMBER OF SPANS IN MAIN UNIT 6
 (46) NUMBER OF APPROACH SPANS 0
 (107) DECK STRUCTURE TYPE- PRECAST CONC. PA CODE 2
 (108) WEARING SURFACE / PROTECTIVE SYSTEM:
 A) TYPE OF WEARING SURFACE- CONCRETE CODE 1
 B) TYPE OF MEMBRANE- NONE CODE 0
 C) TYPE OF DECK PROTECTION- NONE CODE 0

***** AGE AND SERVICE *****

(27) YEAR BUILT 1980
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON- HIGHWAY 1
 UNDER- WATERWAY 5
 (28) LANES: ON STRUCTURE 02 UNDER STRUCTURE
 (29) AVERAGE DAILY TRAFFIC 12000
 (30) YEAR OF ADT 1999 (109) TRUCK ADT 1 %
 (19) BYPASS, DETOUR LENGTH 10 KM

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

(48) LENGTH OF MAXIMUM SPAN 3.4 M
 (49) STRUCTURE LENGTH 22.3 M
 (50) CURB OR SIDEWALK: LEFT 0 M RIGHT 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) 7.3 M
 (33) BRIDGE MEDIAN- CLOSED (NO BARRIER) 2
 (34) SKEW 33 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 7.1 M
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99.99 M
 (54) MIN VERT UNDERCLEAR REF- NOT H/RR 0 M
 (55) MIN LAT UNDERCLEAR RT REF- NOT H/RR 0 M
 (56) MIN LAT UNDERCLEAR LT 0 M

***** NAVIGATION DATA *****

(38) NAVIGATION CONTROL- NOT APPLICABLE CODE N
 (111) PIER PROTECTION- NOT REQUIRED CODE 1
 (39) NAVIGATION VERTICAL CLEARANCE 0 M
 (116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR 0 M
 (40) NAVIGATION HORIZONTAL CLEARANCE 0 M

***** SUFFICIENCY RATING *****

SUFFICIENCY RATING = 55.8
 STATUS STRUCTURALLY DEFICIENT
 HEALTH INDEX 94.3
 PAINT CONDITION INDEX N/A

***** CLASSIFICATION *****

(112) NBIS BRIDGE LENGTH- YES Y
 (104) HIGHWAY SYSTEM- NOT ON NHS 0
 (26) FUNCTIONAL CLASS- MINOR ARTERIAL URBAN 16
 (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 *****

(58) DECK 4
 (59) SUPERSTRUCTURE 5
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 8
 (62) CULVERTS N

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

(31) DESIGN LOAD- MS - 18 OR HS - 20 5
 (63) OPERATING RATING METHOD- LOAD FACTOR 1
 (64) OPERATING RATING- 53.5
 (65) INVENTORY RATING METHOD- LOAD FACTOR 1
 (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 *****

(67) STRUCTURAL EVALUATION 5
 (68) DECK GEOMETRY 2
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 7
 (72) APPROACH ROADWAY ALIGNMENT 6
 (36) TRAFFIC SAFETY FEATURES 1000
 (113) SCOUR CRITICAL BRIDGES 7

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

(75) TYPE OF WORK- DECK REHABILITATION CODE 36
 (76) LENGTH OF STRUCTURE IMPROVEMENT 22.3 M
 (94) BRIDGE IMPROVEMENT COST \$81,000
 (95) ROADWAY IMPROVEMENT COST \$8,000
 (96) TOTAL PROJECT COST \$122,000
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 1999
 (114) FUTURE ADT 24000
 (115) YEAR OF FUTURE ADT 2019

***** INSPECTIONS *****

(90) INSPECTION DATE 01/03 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL- NO -1 MO A)
 B) UNDERWATER INSP- NO -1 MO B)
 C) OTHER SPECIAL INSP- NO -1 MO C)



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0008
Facility Carried: TRABUCO CANYON RD
Location : 1.4 mi n/o Santa Margarita
City :
Inspection Date : 05-JUN-01
Inspection Type

Bridge Inspection Report

Routine ☒ Group A ☐ Underwater ☐ Special ☐ Other ☐

Name : TRABUCO CREEK

CONSTRUCTION INFORMATION

Year Built : 1980 Skew (degrees): 33
Year Widened : N/A No. of Joints : 0
Length (m) : 22.3 No. of Hinges : 0

Description of Structure : Simply supported 6-span PC/PS concrete deck slab units (7 each) with RC pier walls and RC open end seat abutments, all supported upon spread footings.

Span Configuration : (W) 6 @ 3.3 m (E) c/c

LOAD CAPACITY AND RATINGS

Design Live Load : MS - 18 OR HS - 20
Inventory Rating : 32.6 metric tons Calculation Method : LOAD FACTOR
Operating Rating : 53.5 metric tons Calculation Method : LOAD FACTOR
Permit Rating : PPPPP
Posting Load : Type 3 N/A english tons Type 3S2 N/A english tons Type 3-3 N/A english tons

DESCRIPTION ON STRUCTURE

Bridge width : (S) 0.1 m br, 2 @ 3.6 m, 0.1 m br (N)
Total Width : 7.3 m Net Width : 7.10 m No. of Lanes : 2
Rail Description : MBGR Rail Code : 0000
Min. Vertical Clearance : Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description : Natural earth trapezoidal with an RC invert through the site.

CONDITION OF STRUCTURE

There are minor chips and spalls in various locations of the deck slab.

Unsealed cracks exist in the concrete deck which are of moderate size or density. (0)

Otherwise, the structure is in good condition.

SCOUR

The streambed has degraded approximately 1 m downstream of the structure. Grouted rip rap has been placed downstream of the structure.

ELEMENT LEVEL INSPECTION RATINGS

F#	Elem No.	Element Description	Env	Total Units Quantity	Qty in each Condition State				
					St. 1	St. 2	St. 3	St. 4	St. 5
01 39		Concrete Slab - Unprotected w/ AC Overlay	2	140 sq.m.	0	140	0	0	0
01 210		Reinforced Conc Pier Wall	2	45 m.	45	0	0	0	0
01 215		Reinforced Conc Abutment	2	18 m.	18	0	0	0	0
01 312		Enclosed/Concealed Bearing	2	7 ea.	7	0	0	0	0
01 321		Reinforced Conc Approach Slab w/ or w/o AC Ovly	2	4 ea.	0	4	0	0	0
01 333		Other Bridge Railing	2	42 m.	42	0	0	0	0
01 358		Deck Cracking	2	1 ea.	0	1	0	0	0

Bridge No.: 55C0008

Location: 1.4 mi n/o Santa Margarita Inspection Date: 05-JUN-01

WORK RECOMMENDATIONS

Patch the deck slab spalls with Set 45 or equivalent.

<u>Item#</u>	<u>Rec. Date</u>	<u>Work By</u>	<u>Work Id.</u>	<u>Prog. Method</u>	<u>Cost</u>
1	08-JUL-1994	County Agency	40008X94189X		

Inspected By : M. Ogata

M. Ogata
Registered Civil Engineer

CC : TMRut
Orange County

Bridge No.: 55C0008

Location: 1.4 mi n/o Snta Margarita Inspection Date: 05-JUN-01

STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME - CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0008
 (5) INVENTORY ROUTE (ON/UNDER) - ON 140 0W4590
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED - TRABUCO CREEK
 (7) FACILITY CARRIED - TRABUCO CANYON RD
 (9) LOCATION - 1.4 mi n/o Snta Margarita
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK - NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 39 MIN 36 SEC
 (17) LONGITUDE 117 DEG 35 MIN 06 SEC
 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN: MATERIAL - PRESTRESS CONC
 TYPE - SLAB CODE 5 01
 (44) STRUCTURE TYPE APPR: MATERIAL -
 TYPE - CODE
 (45) NUMBER OF SPANS IN MAIN UNIT 6
 (46) NUMBER OF APPROACH SPANS 0
 (107) DECK STRUCTURE TYPE PRECAST CONC. PANELS CODE 2
 (108) WEARING SURFACE / PROTECTIVE SYSTEM:
 A) TYPE OF WEARING SURFACE - CONCRETE CODE 1
 B) TYPE OF MEMBRANE - NONE CODE 0
 C) TYPE OF DECK PROTECTION - NONE CODE 0

***** AGE AND SERVICE *****

(27) YEAR BUILT 1980
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON - HIGHWAY 1
 UNDER - WATERWAY 5
 (28) LANES: ON STRUCTURE 02 UNDER STRUCTURE
 (29) AVERAGE DAILY TRAFFIC 12000
 (30) YEAR OF ADT 1999 (109) TRUCK ADT 1%
 (19) BYPASS, DETOUR LENGTH 10 KM

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

(48) LENGTH OF MAXIMUM SPAN 3.4 M
 (49) STRUCTURE LENGTH 22.3 M
 (50) CURB OR SIDEWALK: LEFT 0 M RIGHT 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) 7.3 M
 (33) BRIDGE MEDIAN - CLOSED (NO BARRIER) 2
 (34) SKEW 33 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 7.1 M
 (53) MIN VERT CLEAR OVER BRIDGE RDWY 99.99 M
 (54) MIN VERT UNDERCLEAR REF - NOT H/RR 0 M
 (55) MIN LAT UNDERCLEAR RT REF - NOT H/RR 0 M
 (56) MIN LAT UNDERCLEAR LT 0 M

***** NAVIGATION DATA *****

(38) NAVIGATION CONTROL - NOT APPLICABLE CODE N
 (111) PIER PROTECTION - NOT REQUIRED CODE 1
 (39) NAVIGATION VERTICAL CLEARANCE 0 M
 (116) VERT-LIFT BRIDGE NAV MIN VERT CLEAR 0 M
 (40) NAVIGATION HORIZONTAL CLEARANCE 0

***** SUFFICIENCY RATING = 69.6 *****

STATUS = FUNCTIONALLY OBSOLETE

HEALTH INDEX = 94.92

***** 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) FEDERAL LANDS HIGHWAY - NOT APPLICABLE 0
 (110) DESIGNATED NATIONAL NETWORK - NOT ON NET 0
 (20) TOLL - ON FREE ROAD 3
 (21) MAINTAIN - COUNTY HIGHWAY AGENCY 2
 (22) OWNER - COUNTY HIGHWAY AGENCY 2
 (37) HISTORICAL SIGNIFICANCE - NOT ELIGIBLE 5

***** CONDITION ***** CODE

(58) DECK 5
 (59) SUPERSTRUCTURE 6
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 8
 (62) CULVERTS N

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

(31) DESIGN LOAD - MS - 18 OR HS - 20 5
 (63) OPERATING RATING METHOD - LOAD FACTOR 1
 (64) OPERATING RATING - 53.5
 (65) INVENTORY RATING METHOD - LOAD FACTOR 1
 (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 6
 (68) DECK GEOMETRY 2
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 7
 (72) APPROACH ROADWAY ALIGNMENT 6
 (36) TRAFFIC SAFETY FEATURES 0000
 (113) SCOUR CRITICAL BRIDGES 6

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

(75) TYPE OF WORK - DECK REHABILITATION CODE 36
 (76) LENGTH OF STRUCTURE IMPROVEMENT 22.3 M
 (94) BRIDGE IMPROVEMENT COST \$81,000
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 (96) TOTAL PROJECT COST \$122,000
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 1999
 (114) FUTURE ADT 24000
 (115) YEAR OF FUTURE ADT 2019

***** INSPECTIONS *****

(90) INSPECTION DATE 06/01 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL - NO -1 MO A)
 B) UNDERWATER INSP - NO -1 MO B)
 C) OTHER SPECIAL INSP - NO -1 MO C)