
Bridge Inspection Records Information System

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State of California
Department of Transportation

**Division of Maintenance
Structures Maintenance & Investigations**


DEPARTMENT OF TRANSPORTATION
 Structure Maintenance & Investigations

 Bridge Number : 55C0174
 Facility Carried: SILVERADO CYN RD
 Location : 1.6 MI E OF SANTIAGO RD
 City :
 Inspection Date : 17-JAN-02
 Inspection Type

Bridge Inspection Report

 Routine ☐ Group A ☒ Underwater ☐ Special ☐ Other ☐
Name : SILVERADO CYN CREEK
CONSTRUCTION INFORMATION

 Year Built : 1935 Skew (degrees): 36
 Year Widened : N/A No. of Joints : 0
 Length (m) : 17.7 No. of Hinges : 0

Description of Structure : Simply supported single span riveted steel plate through girders (2 each) with RC closed end cantilever abutments, all supported on spread footings.

Span Configuration : (W) 1 @ 15.5 m (E) c/c

LOAD CAPACITY AND RATINGS

 Design Live Load : M - 13.5 OR H - 15
 Inventory Rating : 24.5 metric tons Calculation Method : LOAD FACTOR
 Operating Rating : 37.2 metric tons Calculation Method : LOAD FACTOR
 Permit Rating : GGGGG
 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) 0.7 m cu, 7.0 m, 0.7 m cu, 1.2 m sw (N)
 Total Width : 9.7 m Net Width : 7.0 m No. of Lanes : 2
 Rail Description : None. Rail Code : 1000
 Min. Vertical Clearance : Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description : Natural earth trapezoidal with a cobbled bottom.

CONDITION OF STRUCTURE

The structure is in good condition.

GROUP "A" INVESTIGATION

The structure was inspected by Mark Desrosiers and by Makoto Ogata. No distress was found.

MISCELLANEOUS

Pedestrian access beneath the structure is from the northwest quadrant.

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 12		Concrete Deck - Bare	2	110 sq.m.	110	0	0	0	0
01 107		Painted Steel Open Girder/Beam	2	35 m.	35	0	0	0	0
01 152		Painted Steel Floor Beam	2	68 m.	68	0	0	0	0
01 215		Reinforced Conc Abutment	2	24 m.	24	0	0	0	0

WORK RECOMMENDATIONS - NONE

MAY 24 2002

Bridge No.: 55C0174

Location: 1.6 MI E OF SANTIAGO RD

Inspection Date: 17-JAN-02

Inspected By : M. Ogata

M. Ogata
Registered Civil Engineer



CC : TMRut
Orange County

MAY 24 2002

Bridge No.: 55C0174

Location: 1.6 MI E OF SANTIAGO RD

Inspection Date: 17-JAN-02

STRUCTURE INVENTORY AND APPRAISAL REPORT

***** IDENTIFICATION *****

(1) STATE NAME - CALIFORNIA 069
 (8) STRUCTURE NUMBER 55C0174
 (5) INVENTORY ROUTE (ON/UNDER) - ON 140 000000
 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED - SILVERADO CYN CREEK
 (7) FACILITY CARRIED - SILVERADO CYN RD
 (9) LOCATION - 1.6 MI E OF SANTIAGO RD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK - NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 44 MIN 45 SEC
 (17) LONGITUDE 117 DEG 39 MIN 00 SEC
 (98) BORDER BRIDGE STATE CODE 1 SHARE 1
 (99) BORDER BRIDGE STRUCTURE NUMBER

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

(43) STRUCTURE TYPE MAIN: MATERIAL - STEEL
 TYPE - GIRDER & FLOORBEAM SYSTEM CODE 3 03
 (44) STRUCTURE TYPE APPR: MATERIAL -
 TYPE - CODE
 (45) NUMBER OF SPANS IN MAIN UNIT 1
 (46) NUMBER OF APPROACH SPANS 0
 (107) DECK STRUCTURE TYPE CIP CONCRETE CODE 1
 (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 1935
 (106) YEAR RECONSTRUCTED 0000
 (42) TYPE OF SERVICE: ON - HIGHWAY-PEDESTRIAN 5
 UNDER - WATERWAY 5
 (28) LANES: ON STRUCTURE 02 UNDER STRUCTURE
 (29) AVERAGE DAILY TRAFFIC 2000
 (30) YEAR OF ADT 1998 (109) TRUCK ADT 11
 (19) BYPASS, DETOUR LENGTH 199 KM

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

(48) LENGTH OF MAXIMUM SPAN 17.7 M
 (49) STRUCTURE LENGTH 17.7 M
 (50) CURB OR SIDEWALK: LEFT .7 M RIGHT 1.2 M
 (51) BRIDGE ROADWAY WIDTH CURB TO CURB 7 M
 (52) DECK WIDTH OUT TO OUT 9.7 M
 (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) 6.4 M
 (33) BRIDGE MEDIAN - CLOSED (NO BARRIER) 2
 (34) SKEW 36 DEG (35) STRUCTURE FLARED NO
 (10) INVENTORY ROUTE MIN VERT CLEAR 99.99 M
 (47) INVENTORY ROUTE TOTAL HORIZ CLEAR 7 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 = 51.8 *****

STATUS - FUNCTIONALLY OBSOLETE
 HEALTH INDEX = 100
 ***** 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 7
 (59) SUPERSTRUCTURE 7
 (60) SUBSTRUCTURE 7
 (61) CHANNEL & CHANNEL PROTECTION 8
 (62) CULVERTS N

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

(31) DESIGN LOAD - M - 13.5 OR H - 15 2
 (63) OPERATING RATING METHOD - LOAD FACTOR 1
 (64) OPERATING RATING - 37.2
 (65) INVENTORY RATING METHOD - LOAD FACTOR 1
 (66) INVENTORY RATING - 24.5
 (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 6
 (68) DECK GEOMETRY 3
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 9
 (72) APPROACH ROADWAY ALIGNMENT 6
 (36) TRAFFIC SAFETY FEATURES 1000
 (113) SCOUR CRITICAL BRIDGES 8

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

(75) TYPE OF WORK - MISC STRUCTURAL WORK CODE 38
 (76) LENGTH OF STRUCTURE IMPROVEMENT 17.7 M
 (94) BRIDGE IMPROVEMENT COST \$206,000
 (95) ROADWAY IMPROVEMENT COST \$21,000
 (96) TOTAL PROJECT COST \$309,000
 (97) YEAR OF IMPROVEMENT COST ESTIMATE 1999
 (114) FUTURE ADT 2000
 (115) YEAR OF FUTURE ADT 2015

***** INSPECTIONS *****

(90) INSPECTION DATE 05/01 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL - YES 48 MO A) 01/02
 B) UNDERWATER INSP - NO -1 MO B)
 C) OTHER SPECIAL INSP - NO -1 MO C)

MAY 24 2002



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0174
Facility Carried: SILVERADO CYN RD
Location : 1.6 MI E OF SANTIAGO RD
City :
Inspection Date : 29-MAY-01
Inspection Type

Bridge Inspection Report

Routine ☒ Group A ☐ Underwater ☐ Special ☐ Other ☐

Name : SILVERADO CYN CREEK

CONSTRUCTION INFORMATION

Year Built : 1935
Year Widened : N/A
Length (m) : 17.7

Skew (degrees): 36
No. of Joints : 0
No. of Hinges : 0

Description of Structure : Simply supported single span riveted steel plate through girders (2 each) with RC closed end cantilever abutments, all supported on spread footings.

Span Configuration : (W) 1 @ 15.5 m (E) c/c

LOAD CAPACITY AND RATINGS

Design Live Load : M - 13.5 OR H - 15

Inventory Rating : 24.5 metric tons

Operating Rating : 37.2 metric tons

Permit Rating : GGGGG

Posting Load : Type 3 N/A english tons

Calculation Method : LOAD FACTOR

Calculation Method : LOAD FACTOR

Type 3S2 N/A english tons Type 3-3 N/A english tons

DESCRIPTION ON STRUCTURE

Bridge width : (S) 0.7 m cu, 7.0 m, 0.7 m cu, 1.2 m sw (N)

Total Width : 9.7 m

Net Width : 7.0 m

Rail Description : None.

No. of Lanes : 2

Min. Vertical Clearance : Unimpaired

Rail Code : 1000

DESCRIPTION UNDER STRUCTURE

Channel Description : Natural earth trapezoidal with a cobbled bottom.

CONDITION OF STRUCTURE

The structure is in good condition.

MISCELLANEOUS

Pedestrian access beneath the structure is from the northwest quadrant.

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
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01 152		Painted Steel Floor Beam	2	68 m.	68	0	0	0	0
01 215		Reinforced Conc Abutment	2	24 m.	24	0	0	0	0

WORK RECOMMENDATIONS - NONE

Bridge No.: 55C0174

Location: 1.6 MI E OF SANTIAGO RD

Inspection Date: 29-MAY-01

Inspected By : M. Ogata

M. Ogata
Registered Civil Engineer



CC : TMRut
Orange County

Bridge No.: 55C0174

Location: 1.6 MI E OF SANTIAGO RD

Inspection Date: 29-MAY-01

STRUCTURE INVENTORY AND APPRAISAL REPORT

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 (2) HIGHWAY AGENCY DISTRICT 12
 (3) COUNTY CODE 059 (4) PLACE CODE 00000
 (6) FEATURE INTERSECTED - SILVERADO CYN CREEK
 (7) FACILITY CARRIED - SILVERADO CYN RD
 (9) LOCATION - 1.6 MI E OF SANTIAGO RD
 (11) MILEPOINT/KILOMETERPOINT 0
 (12) BASE HIGHWAY NETWORK - NOT ON NET 0
 (13) LRS INVENTORY ROUTE & SUBROUTE
 (16) LATITUDE 33 DEG 44 MIN 45 SEC
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 (98) BORDER BRIDGE STATE CODE % SHARE %
 (99) BORDER BRIDGE STRUCTURE NUMBER

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 (19) BYPASS, DETOUR LENGTH 199 KM

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***** SUFFICIENCY RATING = 51.8 *****

STATUS = FUNCTIONALLY OBSOLETE

HEALTH INDEX = 100

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 (20) TOLL - ON FREE ROAD 3
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 (59) SUPERSTRUCTURE 7
 (60) SUBSTRUCTURE 7
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***** LOAD RATING AND POSTING *****

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 (63) OPERATING RATING METHOD - LOAD FACTOR 1
 (64) OPERATING RATING - 37.2
 (65) INVENTORY RATING METHOD - LOAD FACTOR 1
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 (41) STRUCTURE OPEN, POSTED OR CLOSED - A
 DESCRIPTION - OPEN, NO RESTRICTION

***** APPRAISAL *****

(67) STRUCTURAL EVALUATION 6
 (68) DECK GEOMETRY 3
 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N
 (71) WATER ADEQUACY 9
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***** PROPOSED IMPROVEMENTS *****

(75) TYPE OF WORK - MISC STRUCTURAL WORK CODE 38
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 (114) FUTURE ADT 2000
 (115) YEAR OF FUTURE ADT 2015

***** INSPECTIONS *****

(90) INSPECTION DATE 05/01 (91) FREQUENCY 24 MO
 (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE
 A) FRACTURE CRIT DETAIL - YES 48 MO A) 04/91
 B) UNDERWATER INSP - NO -1 MO B)
 C) OTHER SPECIAL INSP - NO -1 MO C)



DEPARTMENT OF TRANSPORTATION
Structure Maintenance & Investigations

Bridge Number : 55C0174
Facility Carried: SILVERADO CYN RD
Location : 1.6 MI E OF SANTIAGO RD
City :
Inspection Date : 12-DEC-00

Bridge Inspection Report

Inspection Type
Routine ☐ Group A ☐ Underwater ☐ Special ☐ Other ☒

Name : SILVERADO CYN CREEK

CONSTRUCTION INFORMATION

Year Built : 1935 Skew (degrees): 36
Year Widened : N/A No. of Joints : 0
Length (m) : 17.7 No. of Hinges : 0

Description of Structure : Simply supported single span riveted steel plate through girders (2 each) with RC closed end cantilever abutments, all supported on spread footings.

Span Configuration : (W) 1 @ 15.5 m (E) c/c

LOAD CAPACITY AND RATINGS

Design Live Load : M - 13.5 OR H - 15
Inventory Rating : 24.5 metric tons Calculation Method : LOAD FACTOR
Operating Rating : 37.2 metric tons Calculation Method : LOAD FACTOR
Permit Rating : GGGGG
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) 0.7 m cu, 7.0 m, 0.7 m cu, 1.2 m sw (N)
Total Width : 9.7 m Net Width : 7.0 m No. of Lanes : 2
Rail Description : N Rail Code : 1000
Min. Vertical Clearance : Unimpaired

DESCRIPTION UNDER STRUCTURE

Channel Description : Natural earth with a gravel bottom.

HISTORY

Past Supplementary Bridge reports do not indicate problems pertaining to scour.

REVISIONS

The National Bridge Inventory (NBI) Item 113 code has been revised from 6 to 8.

SCOUR

This report addresses hydraulic issues only. The structure scour potential has been assessed in accordance with the FHWA Technical Advisory T5140.23, "Evaluating Scour at Bridges". The NBI Item 113 Code, "Vulnerability to Scour", has been changed to 8. The bridge is single span with no history of scour related problems.

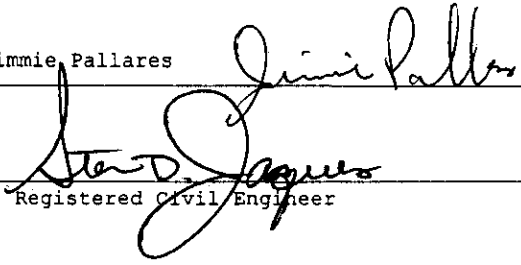
This report was generated based on an office investigation. A channel cross section was not taken at the time of this report.

MISCELLANEOUS

No as-built plans have been found in the Caltrans database. A request for as-built plans will be sent to the County of Orange.

Bridge No.: 55C0174 Location: 1.6 MI E OF SANTIAGO RD Inspection Date: 12-DEC-00

Inspected By : Jimmie Pallares


Registered Civil Engineer



CC : TMRut
Orange County
H. Ma ABME
S. Jaques, Hydraulics

Bridge Number 55C-174

TYPE OF INVESTIGATION/REPORT

BIENNIAL	<u>X</u>	DAMAGE	___
CATEGORY A	___	OTHER	___
UNDERWATER	___	OFFICE	___

Location 12 - Ora - CR
Dist.-Co.-Rte.-City

Date of Investigation July 5, 1995

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.5 miles east of Santiago Canyon Road)

CONDITION RATINGS:

Condition ratings of all bridge elements are shown on the PONTIS DATA FORM (Attachment A).

Channel & Channel Protection

8

SCOUR CRITICAL:

A scour rating of B-1 is appropriate.

CONDITION OF STRUCTURE:

There are some damage, due to traffic impact, on traffic side of plate girders. Numerous steel stiffeners on girder railing are bent and dented.

There are light vertical cracks on face of west abutment.

There is a 0.15 m x 0.60 m spall on top of backwall of east abutment.

Condition of structure is good.

PAINT CONDITION:

Code 2 - Paint is in good condition.

WORK RECOMMENDED:

Patch concrete spall on top of backwall of east abutment.

ENCROACHMENT:

One 0.20 m diameter welded steel pipe attached to outside of south plate girder.

BY M. Hadi Behrooj
G. P. Balinghasay



GPB:cd
cc: CDHarris
Orange County
WLindsey

BRIDGE NUMBER	FRAME	INSPECTION DATE
55C0174	01	070595
1 8	9	11 16

SCOUR CRITICAL	NO
CATEGORY A	YES
FRACTURE CRITICAL	NO
ELIGIBLE FOR RAIL UPGRADE	NO
UNDERWATER INSPECTION	NO

DISTRICT 12
COUNTY ORA
ROUTE
POSTMILE
NAME

[illegible]

BY: _____

Bridge No. 55C-174

Name SILVERADO CANYON CREEK (Silverado
Canyon Road, 1.5 miles east of
Santiago Canyon Road)

Location

12-Ora-CR
Dist.-Co.-Rte.-City

SUMMARY OF ENCROACHMENTS

Permit No. and Permittee	Date	Description & Location on Bridge
	Prior to 7-5-95	1 - 0.20 m diameter welded steel pipe attached to outside of south plate girder.

HBD M 30

SUPPLEMENTARY BRIDGE REPORT
DS-M19 (REV. 8/92)

Bridge Number 55C-174

Location 12 - Ora - CR
Dist.-Co.-Rte.-City

Date of Investigation April 21, 1993

TYPE OF INVESTIGATION/REPORT

BIENNIAL	<u>X</u>	DAMAGE	___
CATEGORY A	___	OTHER	___
UNDERWATER	___	OFFICE	___

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.5 miles east of Santiago Canyon Road)

CONDITION RATINGS:

Condition ratings of all bridge elements are shown on the PONTIS DATA FORM (Attachment A).

Channel & Channel Protection

8

CONDITION OF STRUCTURE:

Condition of the structure is good.

REVISIONS (corrections):

Description: Single span simply supported riveted steel through plate girders (two each) and RC deck, supported by RC pedestals and closed end backfilled RC cantilever abutments on spread footing. Four feet steel cantilever bracket and timber deck sidewalk attached to exterior of north plate girder.

Span: (W) 51' (E)

Bridge Width: (S) Steel plate girder, 2.2'cu, 23', 2.2'cu, steel plate girder, 4'sw, 0.3'CL rail (N)

Henry Ma

HM:cd

cc: INagai (2)
County of Orange



INFORMATION ONLY - NOT FOR UPDATE

BRIDGE NUMBER	FRAME	INSPECTION DATE
55C0174	01	042193
1	8	9
		11
		16

SCOUR CRITICAL	NO
CATEGORY A	YES
FRACTURE CRITICAL	NO
ELIGIBLE FOR RAIL UPGRADE	NO
UNDERWATER INSPECTION	NO

DISTRICT	12
COUNTY	ORA
ROUTE	*****
POSTMILE	*****
NAME	

[illegible]

BY:

BRIDGE REPORT

DS-M58 (REV. 1/91)

14W14

Bridge No. 55C - 174

Location 12 - Ora - CR

Dist Co Sta City

REVISED ORIGINAL REPORT

Date of Investigation April 18, 1991

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.5 miles east of Santiago Canyon Road)

Lat. 33° - 44.7'N Long. 117° - 38.9'N

Custodian County of Orange Owner County of Orange

STRUCTURAL DATA AND HISTORY

Year Built 1935 By County of Orange Contract No. Unknown

Designed by: County Plans Avail. @ County

Description: Single span simply supported riveted steel through plate girders (2 each) and RC deck, supported by RC pedestals and closed end backfilled RC cantilever abutments on spread footing. 4' steel cantilever bracket and timber deck sidewalk attached to exterior of east plate girder.

Spans (S) 51' (N)

Length 58' NBIS Bridge Length Yes Skew 36° Left

Number Of Intermediate Joints: @Hinges None @Bents None

Maximum Column/Pier Height: (Less than 20') X (20'-29') (30' & Over)

Design Live Load H15 Design Method Unknown

DESCRIPTION - ON STRUCTURE

(W) steel plate girder, 2.2'cu, 23', 2.2'cu, stl pl grd,
Bridge Width 4'sw, 0.3' CL rail (E)

Total Width 28' Net Width 23' Lanes 2 Tracks None

Median None Rail Type Steel plate girder

1000

Vert. Clearance over deck Unimpaired Appr. Rdwy. Width 21'

Deck Type 1 Wearing Surface/Prot. Sys. 100 Concrete/none

Alignment Tangent

DESCRIPTION - UNDER STRUCTURE

Roadway Section None

Clearances: Road: Vert. Horiz. Lt. ; Rt.

Lanes Tracks

Facilities Crossed Silverado Canyon (E17)

April 18, 1991

DESCRIPTION - HYDRAULICS

Channel Natural stream with gravel bottom

Navigable: Yes ☐ No ☒ Clearances: Vert. _____ Horiz. _____Pier/Abutment Protection (For Navigation) ☐

TRAFFIC INFORMATION

	DECK	YEAR	UNDER	YEAR
Average Daily Traffic & Year :	2,000	1989	N	
Average Daily Traffic (Future) :	2,000 Est	2010	N	
Average Daily Trucks (% OF ADT) :	1% Est		N	
Bypass Detour Length	99 miles		N	
Shell Route:	No		No	
Functional Classification :	09		N	
LOAD RATINGS:	Inventory	HS 15	Operating	HS 23
	Permit	GGGGG	Computation Method	Load Factor

CONDITION RATINGS:

Deck	8	Superstructure	8	Substructure	8
Channel & Channel Protection	8	Culvert	N	Widenable	No

APPRAISAL RATINGS:

Waterway Adequacy	9	Approach Roadway Alignment	6
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Date of Revisions _____

CONDITION OF STRUCTURE:

Condition of the structure is good.

PAINT CONDITION:

Code 2 - Condition of paint is good.

ENCROACHMENT:

8" welded steel pipe attached to outside of west plate girder.

Henry Ma

HM:ms

cc: INagai (2)
County of Orange

Bridge No. 55C-174
Location 12-Ora-CR
Dist. Co. Rte. City
Date of Investigation 4-18-91

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.5 miles east of Santiago Canyon Road)

CONDITION RATING:

Deck Superstructure Substructure
Channel & Channel Protection Culvert Widenable? No

TYPE OF INVESTIGATION/REPORT

BIENNIAL DAMAGE
CATEGORY A X OTHER
UNDERWATER OFFICE

CATEGORY "A" INSPECTION:

This structure is a Category "A" structure because it is a 2 girder system with no redundant members.

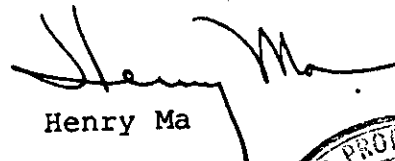
The 2 steel plate girders are built-up by riveted construction with rivet connected floor beams supporting a through RC deck.

A close-up visual inspection was performed this date by means of ladder.

Next Category "A" inspection: April, 1997

CONDITION OF STRUCTURE:

There is no visual distress and condition of the steel members is good.


Henry Ma

HM:ms
cc: INagai (2)



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DS-M19 (REV. 1/89)

Bridge No. 55C-174
Location 12-Ora-CR
Dist. Co. Rte. City
Date of Investigation 4-11-89

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.5 miles East of Santiago Canyon Road)

CONDITION RATING:

Deck 7 Superstructure 7 Substr.&Pipes 7
Channel & Channel Protection 6 Culvert N Widenable? No

TYPE OF INVESTIGATION/REPORT

BIENNIAL X DAMAGE
CATEGORY A OTHER
UNDERWATER OFFICE

CONDITION OF STRUCTURE:

Condition of the structure is good.

PAINT CONDITION:

Code 1 - Structural steel has been recently painted. Condition of paint is excellent.

REVISION:

Location: 12-Ora-CR

WORK RECOMMENDED:

None.

RECOMMENDED POSTING:

None.

SUBSTRUCTURE CODING UPDATE:

Single span structure.

2 RC closed end seated abutments on spread footing.


Henry Ma

HM:ms
cc: INagai (2)
County of Orange (2)



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DH-QS M19 (REV. 1/74)

Bridge No. 55C-174

Location 7-Ora-CR
Dist - Co - Pte - PM - City

Date of Investigation April 20, 1987

Name SILVERADO CANYON CREEK (Silverado Canyon Rd., 1.5 miles E.
of Santiago Canyon Rd.)

CONDITION RATING:

Deck	7	Superstructure	7	Substr. & Pipes	7	Overall	4
Channel & Channel Protection	6	Retaining Walls	N				

APPRAISAL RATING:

Widenable? Yes ☒ No ☐ Conditional ☐

Action Required By County Yes ☐ No ☒

PRIORITY

A - Immediate Action
B - Early Scheduling
C - Routine Maint.
O - For Record Only

REVISION:

Ratings: Inventory HS 17.8/LF
Operating HS 29.8/LF
Permit PPPPP/LF

Appraisal Rating: Overall 4
Average Daily Traffic: 1,000 (1985)

WORK DONE:

Concrete deck spalls at both abutments have been repaired.

Structural steel has been repainted 100%.

CONDITION OF STRUCTURE:

Overall condition of the structure is good.

CONDITION OF PAINT:

Code 1 - Condition of paint is excellent. Superstructure has been recently repainted.

LOAD CAPACITY:

The inventory operating and permit ratings shown were obtained through the "Frame Rate" Program using load factor (LF) method of analysis.

BRIDGE NO. 55C-174	
SHEET 2 of 2	DATE April 20, 1987

RECOMMENDED POSTING:

None

WORK RECOMMENDED:

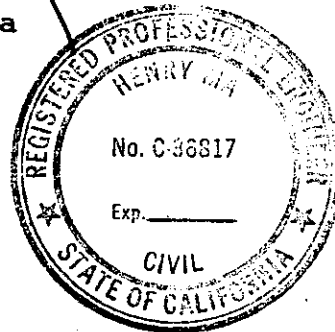
None

HM:pht

cc: INagai (2)
Orange County (2)

Henry Ma

Henry Ma



DIST 07 RCU CD RD COUNTY 55 C STRU. NO 0174 POSTMILE . RATING WITH H-FT 024.3 STRU TYPE SG CS YR ORIG CONST 35 APR. 1986

	RATING FACTOR	PT	SPAN	ULT MOM TOP IN COM	ULT MOM BOT IN COM	POS HS20 MOMENT	NEG HS20 MOMENT	POS PURP MOMENT	NEG PURP MOMENT	DEAD LOAD MOMENT	SECONDARY MOMENT
INV	0.89	0	3 *	172.0	290.9	30.5	-131.0	37.9	-149.7	-29.1	0.0
OPER	1.49	0	3 *	172.0	290.9	30.5	-131.0	37.9	-149.7	-29.1	0.0
PURP	1.02	5	3 *	429.5	164.6	183.2	-51.7	308.4	-102.8	14.6	0.0

THE NUMBER OF AXLES ON THE TRUCK THAT CAUSES THE PURPLE RATING FACTOR IS 13.
FC = 1.00 FY = 33.

- 2 SILVERADO CANYON CREEK (SILVERADO ROAD) DECK SLAB
- 3 CONT RC SLAB OV/RIVETED PLATE FLR BEAM BETWN THRU
- 4 PLATE GIRDERS - ASSUMED NO ACWS

PPPPP

* FOR FULL WIDTH OF SLAB @ $\frac{1}{2}$ BETWEEN FLOOR BEAM

HMaack 4/86

DIST 07 ROU CO RD COUNTY 55 C STRU. NO 0174 POSTMILE . RATING WT TH-FT 024.3 STRU TYPE SG CS YR ORIG CONST 35

APR. (), 1986

INFLUENCE LINE FOR CRITICAL INVENTORY RATING POINT SPAN 3 10TH POINT 0

MEM NO	LEFT	.1	.2	.3	.4	.5	.6	.7	.8	.9	RIGHT
1	0.0	0.011	0.041	0.080	0.122	0.159	0.183	0.187	0.162	0.103	0.0
2	0.0	-0.148	-0.325	-0.506	-0.670	-0.793	-0.853	-0.826	-0.690	-0.423	0.0
3	0.0	-0.427	-0.700	-0.840	-0.869	-0.812	-0.689	-0.524	-0.339	-0.157	0.0
4	0.0	0.114	0.186	0.223	0.230	0.214	0.181	0.137	0.088	0.040	0.0
5	0.0	-0.028	-0.044	-0.050	-0.049	-0.043	-0.033	-0.022	-0.011	-0.003	0.0

THE CRITICAL OPERATING RATING POINT IS THE SAME AS THE CRITICAL INVENTORY RATING POINT

INFLUENCE LINE FOR CRITICAL PURPLE RATING POINT SPAN 3 10TH POINT 5

1	0.0	0.004	0.015	0.029	0.045	0.058	0.067	0.068	0.059	0.038	0.0
2	0.0	-0.054	-0.119	-0.185	-0.245	-0.290	-0.312	-0.302	-0.252	-0.154	0.0
3	0.0	0.218	0.501	0.848	1.261	1.739	1.261	0.848	0.501	0.218	0.0
4	0.0	-0.154	-0.252	-0.302	-0.311	-0.290	-0.245	-0.185	-0.119	-0.054	0.0
5	0.0	0.037	0.059	0.068	0.067	0.058	0.044	0.029	0.015	0.004	0.0

- 2 SILVERADO CANYON CREEK (SILVERADO ROAD) DECK SLAB
- 3 CONT RC SLAB OV/RIVETED PLATE FLR BEAM BETWN THRU
- 4 PLATE GIRDERS - ASSUMED NO ACWS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DH-05 M10 (REV. 1/74)

Bridge No. 55C-174
Location 7-Ora-CR
San - Jo - San - Jo - City
Date of Investigation January 9, 1986

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.5 miles E. of
Santiago Canyon Road)
APPRAISAL RATING:

CONDITION RATING:

Deck 7 Superstructure 7 Substr. & Pipes 7 Overall 7
Channel & Channel Protection 6 Retaining Walls N

Widenable? Yes ☒ No ☐ Conditional ☐
Action Required by County Yes ☒ No ☐

PRIORITY

A - Immediate Action
B - Early Scheduling
C - Routine Maint.
O - For Record Only

This structure is classified as Local Agency Category "A" bridge, a close-up inspection was made on the above date.

WORK DONE:

Superficial painting has been applied only to the steel girders above the roadway level.

WORK NOT DONE:

The previously recommended work to repair deck spalls at both paving notches has not been done.

CONDITION OF STRUCTURE:

The overall condition of the structure is good.

CONDITION OF PAINT:

Code 4- There is peeling of paint and freckle rust spots of the girder and floor beams.

RECOMMENDED POSTING:

None

BRIDGE No. 55C-174
SHEET 2 of 2
DATE January 9, 1986

WORK RECOMMENDED:

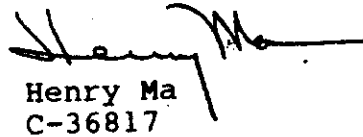
Patch deck spalls.

RECOMMENDATION:

Program for the cleaning and painting of structural steel
of this structure.

C

B


Henry Ma
C-36817

HM:pdh

cc: INagai (2)
Orange County (2)

**SUMMARY OF RATING CALCULATIONS—STRUCTURE
INVENTORY AND) OPERATING ANALYSIS**

STRUCTURE 55C-174

D/P STR. ID— CFO-114

INPUT CODING—

DATE 1/ 5/86

BY MOCK

**INVENTORY
LIVE LOAD RATING
HS20 HS14.9**

**OPERATING
LIVE LOAD RATING
HS20 HS23.1**

STRUCTURE DESCRIPTION—

**IDENTIFICATION 55C-174
TYPE SG
YEAR OF CONSTR. 1935
LENGTH 58.000 FEET
ROADWAY WIDTH 27.500 FEET
NUMBER OF SPANS 1**

LOCATION—

**DISTRICT 7
COUNTY ORA
CONSTR. RTE. CO ROAD
CONSTR. SEC. 0+ .
CONSTR. STA.
KEY RTE. B
MARKED RTE.**

MICROFILM REEL NUMBERS—

**DESIGN PLANS
COMPUTATIONS
CORRESPONDENCE**

ANALYST REMARKS—

**SILVERADO CANYON CREEK (SILVERADO CANYON RD) (COUNTY OR SV-7)
SINGLE SPAN THROUGH RIVETED PLATE GIRDER
ASSUMED NO ACWS - LIVE LOAD FOR G1 = SBM, 101 = TYP FLOOR BEAM
RATED FOR ORANGE COUNTY 12-76, REVISED RATING 4-86
RATE DECK SLAB BY FRAME ANALYSIS**

B
B
B
B
B

INVENTORY RATING SUMMARY

**MEMBER I.D. B 1
SPAN 1
CRITICAL C.P. DIST. 13.0 FEET
LIVE LOAD DESIGNATION HS20**

OPERATING RATING SUMMARY

**MEMBER I.D. B 1
SPAN 1
CRITICAL C.P. DIST. 13.0 FEET
LIVE LOAD DESIGNATION HS20**

**MEMBER CAPACITY
DL EFFECT**

	MOMENT (FOOT-KIPS)
	430.6
	145.3

**CAPACITY FOR (LL+I) 285.3
ACTUAL (LL+I) 383.1**

INVENTORY RATING HS14.89

**GGGGG
(FLOOR BEAM CONTROLS)**

**MEMBER CAPACITY
DL EFFECT**

	MOMENT (FOOT-KIPS)
	587.1
	145.3

**CAPACITY FOR (LL+I) 441.9
ACTUAL (LL+I) 383.1**

OPERATING RATING HS23.07

Mock 5/1/86

SUMMARY OF RATING CALCULATION
SPECIAL LL ANALYSIS

STRUCTURE

STRUCTURE 55C-174

D/P STR. ID— CFO-174

INPUT CODING—

DATE 1/ 5/86
BY MOCK

INVENTORY

LIVE LOAD RATING
HS20 HS14.9

OPERATING

LIVE LOAD RATING
HS20 HS23.1

SPECIAL LOAD
TRUCK TYPE GROSS TONS

VEH.SPEC 155.0
13 AXLE

STRUCTURE DESCRIPTION—

IDENTIFICATION 55C-174
TYPE SG
YEAR OF CONSTR. 1935
LENGTH 58.000 FEET
ROADWAY WIDTH 27.500 FEET
NUMBER OF SPANS 1

LOCATION—

DISTRICT 7
COUNTY ORA
CONSTR. RTE. CD ROAD
CONSTR. SEC. 0+
CONSTR. STA. .
KEY RTE. B
MARKED RTE.

MICROFILM REEL NUMBERS—

DESIGN PLANS
COMPUTATIONS
CORRESPONDENCE

ANALYST REMARKS—

SILVERADO CANYON CREEK (SILVERADO CANYON RD) (COUNTY BR SV-7)
SINGLE SPAN THROUGH RIVETED PLATE GIRDER
ASSUMED NO ACWS - LIVE LOAD FOR G1 = SBM, B1 = TYP FLOOR BEAM
RATED FOR ORANGE COUNTY 12-76, REVISED RATING 4-86
RATE DECK SLAB BY FRAME ANALYSIS

B
B
B
B
B

SPECIAL LOAD SUMMARY

TRUCK TYPE 13 AXLE
MEMBER I.D. VEH.SPEC
SPAN B 1
CRITICAL C.P. DIST. 13.0 FEET

MEMBER CAPACITY MOMENT
DL EFFECT (FOOT-KIPS)
587.1
145.3

CAPACITY FOR (LL+I) 441.9
ACTUAL (LL+I) 447.5

POSTING GROSS TONNAGE ****

$R_{F13} = 0.987 = G-13$

H mock 5/1/86

DETAIL DATA AT MOMENT CHECK POINT FOR
STRUCTURAL ST FLEXURAL MEMBER

DATE 01/05/86

D/P STRUCTURE
MEMBER I.D. **B01**
C.P. LOCATION

0-174

1.47

***** SECTION PROPERTIES IN RANGE 1 OF SPAN 1

H IN.	GROSS AREA SQ.IN.	NET AREA		IX + BEND IN**4	IX - BEND IN**4	C (BOT) IN.	SECTION		MODULUS BOTTOM + BEND IN**3	MODULUS BOTTOM - BEND IN**3
		+ BEND SQ.IN.	- BEND SQ.IN.				TOP + BEND IN**3	TOP - BEND IN**3		
30.50	34.25	32.87	34.25	4931.1	5146.3	15.75	334.2	337.1	313.1	337.8

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)	0.000	138.180	294.000	POS AREA =	0.0
Y-ORDINATE	0.000	0.000	0.000		

***** ALLOWABLE
STRESS

PSI	
INVENTORY	16500.
OPERATING	22500.
POST VEH1	0.
POST VEH2	0.
POST VEH3	0.
POST SPEC	22500.

***** MOMENT CAPACITY

TOP + BEND FT-KIPS	TOP - BEND FT-KIPS	BOTTOM + BEND FT-KIPS	BOTTOM - BEND FT-KIPS
459.6	463.5	430.6	464.5
626.7	632.1	587.1	633.4
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
626.7	632.1	587.1	633.4

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

	SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6
T 0						
E 1						
N 2						
T 3						
H 4						
5						
P 6						
O 7						
I 8						
N 9						
T 0						

***** TOTAL DL
MOMENT EFFECT

FT-KIPS
145.3

***** AVAIL. CAPAC. FOR LL+IMPACT

	TOP +BEND F-KIPS	TOP -BEND F-KIPS	BOT +BEND F-KIPS	BOT -BEND F-KIPS
INVENTORY	314.3	608.8	285.3	609.8
OPERATING	481.4	777.3	441.9	778.7
VEH. 1	0.0	0.0	0.0	0.0
VEH. 2	0.0	0.0	0.0	0.0
VEH. 3	0.0	0.0	0.0	0.0
SPECIAL	481.4	777.3	441.9	778.7

AREA
TOTALS

POS AREA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NEG AREA	0.0	0.0	0.0	0.0	0.0	0.0	0.0

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .328 FOR +BEND AND = .000 FOR -BEND)

LIVE LOAD		TRUCK LOAD		LOC. NO. 1 WHEEL FT.	DIR	LANE LOAD		LOC. CONC LOAD FT.	LOC. CONC LOAD 2 FT.	RATING FACT.	SAFE LOAD CAPACITY TONS	RATING VALUE
		LL+IMP FT-KIPS	LL FT-KIPS			LL+IMP FT-KIPS	LL FT-KIPS					
INV	HS20 +BEND	383.1	294.7	0.000		0.0	0.0	0.000		0.745		HS 14.9
	-BEND	0.0	0.0	0.000		0.0	0.0	0.000	0.000			
OPER	HS20 +BEND	383.1	294.7	0.000		0.0	0.0	0.000		1.153		HS 23.1
	-BEND	0.0	0.0	0.000		0.0	0.0	0.000	0.000			
POST VEH1	+BEND	0.0	0.0	0.000						0.000	0.0	
	-BEND	0.0	0.0	0.000								
POST VEH2	+BEND	0.0	0.0	0.000						0.000	0.0	
	-BEND	0.0	0.0	0.000								
POST VEH3	+BEND	0.0	0.0	0.000						0.000	0.0	
	-BEND	0.0	0.0	0.000								
POST SPEC	+BEND	447.5	344.2	0.000						0.987	55.0	
	-BEND	0.0	0.0	0.000								

0.987

H. Mock 5/1/86

6-13

DATE 01/05/86

DETAIL DATA AT MOM' CHECK POINT FOR
STRUCTURAL STEEL EXTRAL MEMBER

D/P STRUCTURE I.D. CFL 74
MEMBER I.D. -G01
C.P. LOCATION 1.50

***** SECTION PROPERTIES IN RANGE 4 OF SPAN 1

H IN.	GROSS AREA SQ.IN.	NET AREA + BEND SQ.IN.	BEND SQ.IN.	IX + BEND IN**4	IX - BEND IN**4	C (BOT) IN.	TOP + BEND IN**3	SECTION TOP - BEND IN**3	MODULUS BOTTOM + BEND IN**3	BOTTOM - BEND IN**3
73.50	66.72	62.09	66.72	54892.2	61017.2	39.36	1607.6	1659.9	1394.8	1660.8

***** INFLUENCE LINE (SIMPLE SPAN)

X-DIST (FT.)	0.000	25.417	50.833	POS AREA =	323.0
Y-ORDINATE	0.000	12.708	0.000		

***** ORDINATES OF AND AREAS UNDER INFLUENCE LINE (CONTINUOUS SPAN)

T 0
E 1
N 2
T 3
H 4
5
P 6
O 7
I 8
N 9
T 0

SPAN 1	SPAN 2	SPAN 3	SPAN 4	SPAN 5	SPAN 6	AREA TOTALS
POS AREA	0.0	0.0	0.0	0.0	0.0	0.0
NEG AREA	0.0	0.0	0.0	0.0	0.0	0.0

***** LIVE LOAD AND RATING CALCULATIONS (IMPACT FACTOR = .284 FOR +BEND AND = .284 FOR -BEND)

LIVE LOAD		TRUCK LOAD		LOC. NO. 1 WHEEL FT.	DIR	LANE LOAD		LOC. CONC LOAD FT.	LOC. CONC LOAD 2 FT.
		LL+IMP FT-KIPS	LL FT-KIPS			LL+IMP FT-KIPS	LL FT-KIPS		
INV	HS20 +BEND	872.0	679.0	39.898	L	599.9	467.0	25.417	0.000
	-BEND	0.0	0.0	0.000	L	0.0	0.0	0.000	0.000
OPER	HS20 +BEND	872.0	679.0	39.898	L	599.9	467.0	25.417	0.000
	-BEND	0.0	0.0	0.000	L	0.0	0.0	0.000	0.000
POST VEH1	+BEND	0.0	0.0	0.000					
	-BEND	0.0	0.0	0.000					
POST VEH2	+BEND	0.0	0.0	0.000					
	-BEND	0.0	0.0	0.000					
POST VEH3	+BEND	0.0	0.0	0.000					
	-BEND	0.0	0.0	0.000					
POST SPEC	+BEND	1256.3	978.1	45.143	L				
	-BEND	0.0	0.0	0.000	L				

***** ALLOWABLE
STRESS

PSI
INVENTORY 16500.
OPERATING 22500.
POST VEH1 0.
POST VEH2 0.
POST VEH3 0.
POST SPEC 22500.

***** TOTAL DL
MOMENT EFFECT

FT-KIPS
709.2

***** MOMENT CAPACITY

TOP + BEND FT-KIPS	TOP - BEND FT-KIPS	BOTTOM + BEND FT-KIPS	BOTTOM - BEND FT-KIPS
2210.5	2282.4	1917.8	2283.5
3014.3	3112.3	2615.2	3113.9
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
3014.3	3112.3	2615.2	3113.9

***** AVAIL. CAPAC. FOR LL+IMPACT

	TOP +BEND F-KPS	TOP -BEND F-KPS	BOT +BEND F-KPS	BOT -BEND F-KPS
INVENTORY	1501.3	2991.5	1208.7	2992.7
OPERATING	2305.1	3821.5	1906.1	3823.1
VEH. 1	0.0	0.0	0.0	0.0
VEH. 2	0.0	0.0	0.0	0.0
VEH. 3	0.0	0.0	0.0	0.0
SPECIAL	2305.1	3821.5	1906.1	3823.1

RATING
FACT. SAFE LOAD
CAPACITY
TONS RATING
VALUE

1.386	HS 27.7
2.186	HS 43.7
0.000	0.0
0.000	0.0
0.000	0.0
1.517	238.2

H Mack 5/1/86

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DH-OS M19 (REV. 1/74)

Bridge No. 55C-174
Location 7-Oran-CR
Dist - Co - Pkg - Pkg - City
Date of Investigation October 26, 1983

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.6 mile E. of

CONDITION RATING:

APPRAISAL RATING:

Deck 7 Superstructure 7 Substr. & Pipes 7 Overall 7
Channel & Channel Protection 6 Retaining Walls N

Widenable? Yes ☒ No ☐ Conditional ☐
County
Action Required by ~~ENGINEER~~ Yes ☒ No ☐

PRIORITY

A - Immediate Action
B - Early Scheduling
C - Routine Maint.
O - For Record Only

WORK DONE:

The previously recommended work to replace the timber sidewalk has been done. The deck spall repairs have not been done.

CONDITION OF STRUCTURE:

The overall condition of the structure is good.

PAINT:

Code 4 - rust on top of through girders above deck.

RECOMMENDED POSTING:

None

RECOMMENDATION:

Patch the deck spalls with Set 45 concrete.

C

E. L. Neff
E. L. Neff
C-28703

ELN:pdh
cc: DRHiggins (2)
Orange County (2)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
SUPPLEMENTARY BRIDGE REPORT
DH-05 M19 (REV. 1/74)

Bridge No. 55C-174
Location 07-Cra-CR
Dist - Co - Rte - PM - City
Date of Investigation October 19, 1981

Name SILVERADO CANYON CREEK (Silverado Canyon Road, 1.6 miles east of Santiago Road)

CONDITION RATING:

APPRAISAL RATING:

Deck 7 Superstructure 7 Substr. & Pipes 7 Overall 7
Channel & Channel Protection 6 Retaining Walls (N)

Widenable? Yes ☒ No ☐ Conditional ☐
County: Orange
Action Required by District: Yes ☒ No ☐

CONDITION OF STRUCTURE:

There is concrete deck spalling at both paving notches. Half of a timber sidewalk plank is missing and many nail heads are sticking up.

PAINT:

Code 4, rust specks throughout the girders.

RECOMMENDED POSTING:

None.

RECOMMENDATIONS:

1. Sawcut the deck spalled areas to neat lines, chip and clean, and patch with Set-45 concrete.
2. Replace missing sidewalk timber ($1\frac{1}{2}$ " x $7\frac{1}{2}$ " x 4'-3") and renail all planks.

E. L. Neff
E. L. Neff
C 28703

ELN:cd
cc: DRHiggins (2)
Orange County (2)

Bridge No. **55C-17A**

Other No. **SV-7**

P.U.C. No. _____

Location **07-090-0-02**
Dist - Co - Rte - PM - City

Date of Investigation **May 11, 1978**

SEE REVISED
ORIGINAL REPORT

Name **SILVERADO CANYON CREEK (Silverado Cyn Rd., 1.6 mi E. of Santiago Cyn Rd.)**

Lat. **33°-44.7'** Long. **117°-38.9'**

STRUCTURAL DATA AND HISTORY

Year Built **1935** By **Orange County** Contract No. **Unknown**

Date of Revisions _____

Designed by: B.D. ☐ **Orange County** Plans Avail. @ **County**

Description: **Single span 2 through riveted plate girders,
RC seated abutments supported on spread footings.**

Spans **51'**

Length **58'** Skew **36° Lt** Design LL **H-15**

Ratings: Inventory **MS 11.29** Operating **MS 16.55** Permit **00000**

DESCRIPTION - ON STRUCTURE

Bridge Width **(8) 2.3' cu, 23.0, 2.3' cu, 4' cu (H)**

Total Width **27.5** Lanes **2** Tracks **None**

Median **None** Rail Type **St. Girder (0000)**

Vert. Clearance over deck **Unimpaired** Appr. Rdwy. Width **23'**

Wearing Surface **None** Deck Seal **None**

Alignment **Tangent**

DESCRIPTION - UNDER STRUCTURE

Roadway Section **None**

Clearances: Vert. _____ Horiz. _____ Lt. _____ Rt. _____

Lanes _____ Tracks _____ Pumpplant: None ☐ See Br. No. _____

Facilities Crossed **Silverado Canyon Creek**

cc: _____

Bridge No. 55C-174
Date May 11, 1978

DESCRIPTION - HYDRAULICS

Channel Natural

Navigable: Yes ☐ No ☒ Clearances: Vert. _____ Horiz. _____

MAINTENANCE

Custodian County Owner County

ORIGINAL
CONDITION RATING

Deck	<u>7</u>
Superstructure	<u>7</u>
Substructure & Pipes	<u>7</u>
Channel & Channel Protection	<u>6</u>
Retaining Walls	<u>---</u>
Approach Rdwy. Alignment	<u>6</u>
Estimated Remaining Life	<u>20</u>

ORIGINAL
APPRAISAL

Overall	<u>7</u>
Deck Geometry	<u>3</u>
Underclearances	Vert. <u>---</u>
	Horiz. <u>---</u>
Safe Load Capacity	<u>5</u>
Waterway Adequacy	<u>6</u>
Approach Rdwy. Alignment	<u>9</u>

Widenable? Yes ☐ No ☒ Conditional ☐

AVERAGE DAILY TRAFFIC:

EXCESS EXISTING LENGTH:

ENCROACHMENTS:

PAINT:

CONDITION OF STRUCTURE:

LOAD CAPACITY:

County
Action Required by ENGINEER: Yes ☐ No ☒

1000 • (1978)

99

8" steel water line attached to south side.

Code 4 - Rust specks throughout.

The structure is in good condition.

Calculated by Office of Structures rating section.

J. R. Martin

Original signed by

By C. E. Broussard

CXB:mb
cc: Dist. 07 Local Ass't
Orange (2)