EXHIBIT M

BRIDGE INSPECTION REPORT

PREPARED FOR: FLORIDA DEPARTMENT OF TRANSPORTATION

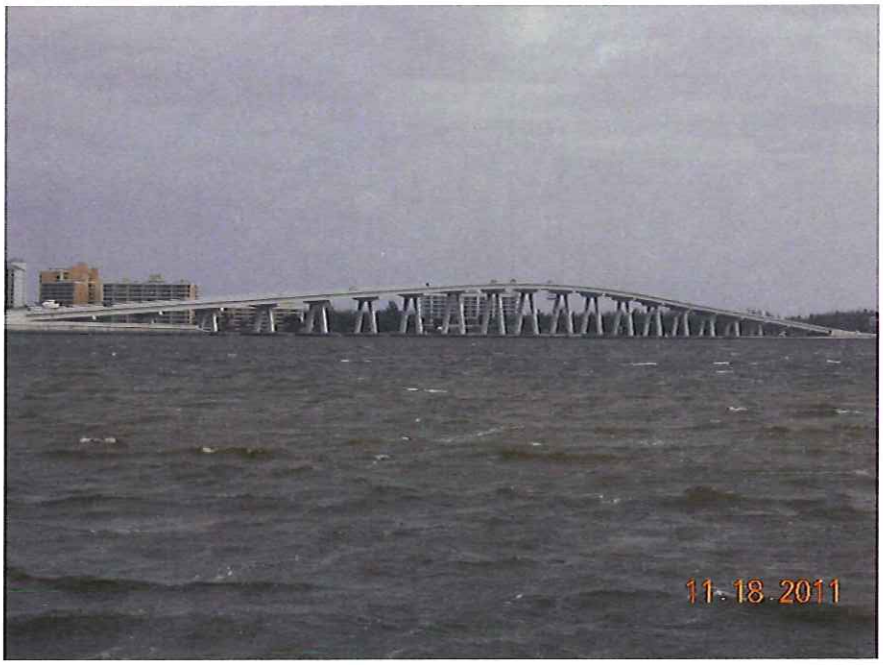
BRIDGE OWNER: LEE COUNTY

INSPECTED BY: VOLKERT

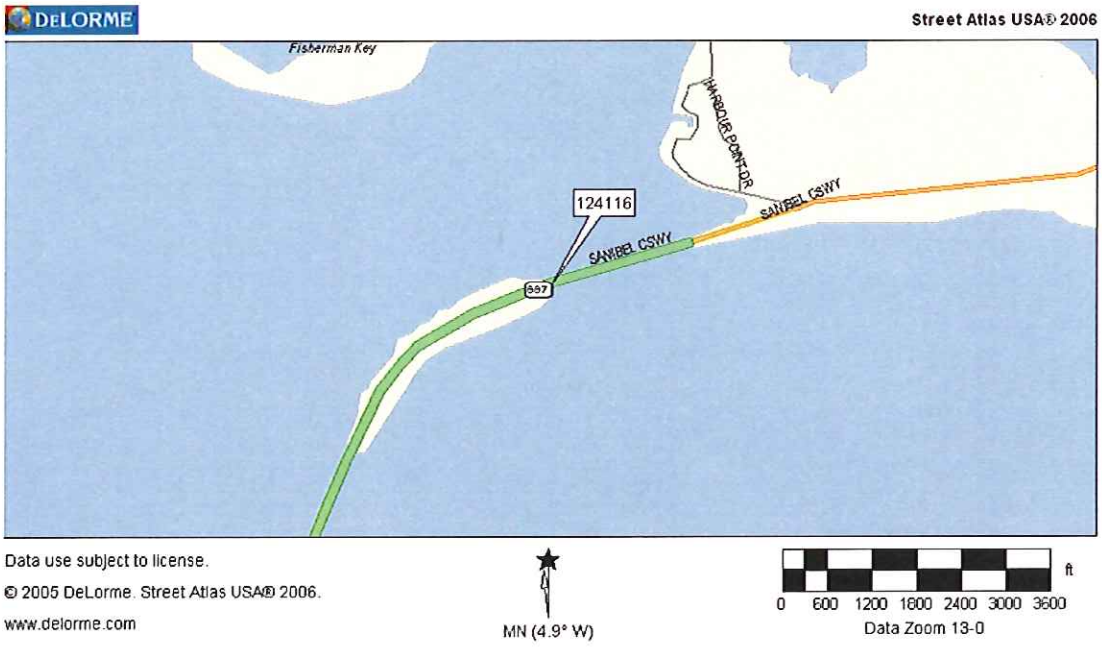
BRIDGE NO. 124116 **CONTENTS OF REPORT** **INSPECTION DATE:** 11/18/2011

- Pontis Report
- CIDR
- Scour Elevation (Profile)
- * Addendum (Element Notes & Photos/Sketches)
- U/W Inspection Report
- * Fracture Critical Data
- * Load Rating Analysis Summary

*This section is not included in this report.



STRUCTURE A SANIBEL CAUSEWAY OVER SAN CARLOS BAY **1ST STRUCTURE SOUTH OF TOLL PLAZA**



FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BY:	VOLKERT, INC.	STRUCTURE NAME:	STRUCTURE A SANIBEL CAUSEV
OWNER:	2 County Hwy Agency	YEAR BUILT:	2007
MAINTAINED BY:	2 County Hwy Agency	SECTION NO.:	12 000 000
STRUCTURE TYPE:	6 P/S Conc Continuous - 02 Stringer/Girder	MP:	0
LOCATION:	1ST STRUC S OF TOLL PLAZA	ROUTE:	00867
SERVICE TYPE ON:	1 Highway	FACILITY CARRIED:	CR-867
SERV TYPE UND:	5 Waterway	FEATURE INTERSECTED:	SAN CARLOS BAY

☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/18/2011 UNDERWATER: 10/24/2011

SUFFICIENCY RATING: 79.0

HEALTH INDEX: 98.94

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BY: VOLKERT, INC.
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous - 02 Stringer/Girder
LOCATION: 1ST STRUC S OF TOLL PLAZA
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE A SANIBEL CAUSEWAY
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

☐ THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
☐ THIS BRIDGE IS SCOUR CRITICAL
☐ THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/18/2011 UNDERWATER: 10/24/2011

SMART FLAGS:
None

OVERALL NBI RATINGS:
DECK: 8 Very Good
SUPERSTRUCTURE: 7 Good
SUBSTRUCTURE: 7 Good
PERF. RATING: Good
CHANNEL: 7 Minor Damage
CULVERT: N N/A (NBI)
SUFF. RATING: 79.0
HEALTH INDEX: 98.94

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
Eorgan, Steve - Bridge Inspector (CBI#00362) (lead)	CE
Bibelhauser, Anthony - Bridge Inspector (CBI #00359)	
Hoogland, Keith - Bridge Inspector/Diver (CBI#00341) (lead)	
Tumaniszwili, Alex P. - Diver/Inspector	
Young, Ryan C. - Diver/Inspector	

REVIEWING BRIDGE INSPECTION SUPERVISOR:
Rucks, Edward - CBI (#00273) — ER

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:
Teal, Daniel - PROJECT MANAGER (PE # 42097)
VOLKERT, INC.
3409 W. LEMON STREET STE 1
CERTIFICATE OF AUTHORIZATION NO 4641
TAMPA, FL 33609

DANIEL BOWERS TEAL LICENSE No. 42097 JAN 05 2012 STATE OF FLORIDA PROFESSIONAL ENGINEER

SIGNATURE:
DATE:

This report contains information relating to the physical security of a structure and depictions of the structure. This information is confidential and exempt from public inspection pursuant to sections 119.071(3)(a) and 119.071(3)(b), Florida Statutes. Only the cover page of this report may be inspected and copied.

All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 129408 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface and underside of the deck have few repaired areas, there are few spalls/delaminations in the deck surface or underside and the only cracking is superficial or surface map cracking. The combined distressed area is 2% or less of the deck area.	129408 sf.

ELEMENT INSPECTION NOTES:

Note: Two 4-1/2in. diameter fiberglass conduits are attached to hangers anchored to the underside of Bay 3 in all spans. The type of hanger anchorage is unknown.

CS1: There is a light accumulation of debris in the shoulder areas.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 345 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	345 lf.

ELEMENT INSPECTION NOTES:

Note: Joints are present at Abutments 1 and 22 and Piers 4, 7, 10, 13, 16 and 19.

CS1: The joints have light dirt and debris in the shoulder areas and are functioning as intended - DECREASED.

CORRECTIVE ACTION TAKEN:
Most of the dirt and debris within the joints has been removed.

All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 334/4 Metal Rail Coated **6005 lf.** **ELEM CATEGORY:** Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	5999 lf.
2	There is little or no active corrosion. Surface corrosion has formed or is forming. Protective coating may have minor areas of deterioration.	6 lf.

ELEMENT INSPECTION NOTES:

Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS1: There are several tire marks on the barriers.

CS2: There are several areas of impact scrapes to the left bridge rail up to 8ft long at the following locations - NEW. Refer to Photo 1. REPAIR ALL

Span 4, near Pier 5
Span 5, at 1/2 and 3/4 points
Span 6, at 1/4, 1/2 and 3/4 points
Span 12, near Pier 12
Span 13, at 1/4 point
Span 14, near Pier 15
Span 16, near at Pier 17
Span 18, at 1/2 point

All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 109/4 P/S Conc Open Girder 12010 lf. **ELEM CATEGORY:** Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	12006 lf.
2	Minor cracks and spalls may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	4 lf.

ELEMENT INSPECTION NOTES:

CS1: The beams have diagonal web cracks up to 4ft. long x typically less than 1/64in. wide at the bearing areas, extending up and away from the supports.

The east face of the bottom flange of Beam 14-4 has a 20in. long x 1/64in. wide vertical/diagonal crack over the bearing at Pier 14. Beam 16-4 at Pier 16 has similar cracking - INCREASE.

The left top flange of Beam 17-4 has longitudinal hairline cracking, some with efflorescence, up to 1/64in. wide near Pier 18.

CS2: There are minor spalls with no exposed steel in the bottom flanges of the following beams:
Beam 15-1, east face 7-1/2ft. from Pier 16, 6in. x 2in. x 1/2in.
Beam 15-3, east face at 25-1/2ft. from Pier 16, 4in. x 4in. x 1in.
Beam 15-4, west face 60ft. from Pier 15, 16in. x 4in. x 1in.

All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 397/4 Drain. Syst Metal **20 ea.** **ELEM CATEGORY:** Superstructure

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion and the paint system is sound and functioning as intended to protect the metal surface. Drainage system is functioning as intended.	19 ea.
2	There is little or no active corrosion. Surface corrosion rust has formed or is forming. The paint system may be chalking, peeling, curling or showing other early evidence of paint system distress but there is no exposure of metal. Drainage system is functioning as intended, there may be evidence of minor restrictions of flow.	1 ea.

ELEMENT INSPECTION NOTES:

CS2: The anchor hardware for the scupper down pipe attached to the inside face of Beam 8-1 at the 2/3 point is loose - NEW. Refer to Photo 2. REPAIR

CORRECTIVE ACTION TAKEN:
The scupper down pipes have been properly shimmed.

All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 310/4 Elastomeric Bearing 168 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	168 ea.

All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 563/4 Acc Ladd & Plat **16 ea.** **ELEM CATEGORY:** Movable

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion, and the paint system is sound and functioning as intended to protect the metal surface.	16 ea.

ELEMENT INSPECTION NOTES:

Note: The quantity includes eight ladders and eight platforms including the two fender access walkways.

ELEMENT/ENV: 580/4 Navigational Lights **1 ea.** **ELEM CATEGORY:** Movable

CONDITION STATE (3)	DESCRIPTION	QUANTITY
2	There is some evidence of corrosion, lights may be burned out, lens may be broken.	1 ea.

ELEMENT INSPECTION NOTES:

Note: The element includes six fender lights, two clearance at centerline of channel gauge lights and two swing lights at centerline of channel attached to the deck fascias with unknown anchors. Refer to Photo 3.

CS2: The hinges for top access cover on the southeast and northwest fender lights are broken - NEW. Refer to Photo 4. REPAIR

All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 205/4 R/Conc Column **40 ea.** **ELEM CATEGORY:** Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	40 ea.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile **224 ea.** **ELEM CATEGORY:** Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	220 ea.
2	Minor cracks, spalls and scaling may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	4 ea.

ELEMENT INSPECTION NOTES:

Note: Quantity field verified by underwater inspectors.

The following was noted by the underwater inspectors;
CS2: The northesast corner of Pile 10-13 has a 7ft6in x 18in x 2in spall with no exposed steel 11ft below the footing.
The northeast corner of Pile 4-1 has a 16in. x 6in. x 2in. spall with no exposed steel, 5ft. below the footing.
The northwest corner of Pile 11-17 has a 5ft. 6in. x 10in. x 2in. spall with no exposed steel, just below the footing.
The northeast corner of Pile 17-10 has a 13ft. x 12in. x 3in. spall with no exposed steel, 24in. below the footing.

All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	70 lf.

ELEMENT INSPECTION NOTES:

CS1: There is minor horizontal cracking to the top outside faces of both cheek walls at the cold joint of Abutment 1 - NEW.

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 17 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	8 ea.

All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 17 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Minor cracks, spalls and scaling may be present but there is no exposed reinforcing or surface evidence of rebar corrosion.	9 ea.

ELEMENT INSPECTION NOTES:

NOTE: Quantity change due to footings 19, 20 and 21 no longer being exposed.

CS1: The following was noted by the underwater inspection:
There are several corner scrapes up to 6in H x 5ft W x 3/4in D.
The footing have concrete formed sides that have vertical cracks with no corrosion bleedout up to 1/16in wide x full height. Several cracks have efflorescence.

CS2: The top northwest corner of footing 4 has a 24in x 12in x 2in spall with no exposed steel.

The top east corner of footing 9 near center point has a 30in x 9in x 2in spall with no exposed steel (Previously noted as a delamination).

The top northeast corner of footing 10 has a spall with no exposed steel 24in x 8in x 1in previously noted as a spall/delamination on the northwest corner of footing 10.

The top northeast corner of footing 16 has a spall with no exposed steel 15in x 12in x 1in. Previously noted as a spall/delamination on the northwest corner.

The following was noted by the underwater inspection:
Footing 5, southeast corner 18in below top of footing - spall with no exposed steel, 9in H x 9in W x 2in D - NEW.
Footing 8, southeast corner 10in below top of footing - spall with no exposed steel, 12in H x 6in W x 2in D - NEW.
Footing 10, northeast corner at top of footing - intermittent spall with no exposed steel, 28in H x 9in W x 2in D - NEW.
Footing 12, southwest corner 20in below top of footing, spall with no exposed steel, 6in x H 8in W x 2-1/2in D.
Footing 13, southeast corner 15in below top of footing, spall with no exposed steel, 12in H x 6in W x 1in D.
Footing 17, northeast and southeast corners 20in below top footing, spall with no exposed steel, 12in H x 12in W x 2in D.

All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 234/4 R/Conc Cap **862 lf.** **ELEM CATEGORY:** Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	862 lf.

ELEMENT/ENV: 298/4 Pile Jacket Bare **2 ea.** **ELEM CATEGORY:** Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	2 ea.

ELEMENT INSPECTION NOTES:

NOTE: This element is for the Pile Jackets installed on Piling 11-8 and 11-15.

ELEMENT/ENV: 387/4 P/S Fender/Dolphin **588 lf.** **ELEM CATEGORY:** Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	588 lf.

ELEMENT INSPECTION NOTES:

Note: The quantity includes the three rectangular dolphins at the southeast corner of the fender and the three rectangular dolphins at the northwest corner of the fender.

CS3: The south fender starting at the 1st single plumb pile (12th cluster) from the west for the next 13 piles (55ft long), the steel driving tips are exposed up to 30in to 3ft height - NEW. Refer to Photo 5 and Diagram 1. REPAIR

All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 396/4 Other Abut Slope Pro 2500 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	2404 sf.
2	There may be minor deterioration, random open joints, cracking and weathering. Mortar in joints may show minor deterioration.	12 sf.
3	Moderate to major deterioration and cracking. Major deterioration of joints. Minor settlement may be present.	84 sf.

ELEMENT INSPECTION NOTES:

Note: This element includes rock rubble rip rap and concrete block mats.

CS1: The rock inside the concrete block mats has settled up to 6in in several location - NEW.

CS2: There are 6 displaced concrete rip rap bags on the south slope protection under the structure.

CS3: The rock inside the concrete block mat on the north slope protection 8ft adjacent to the seawall cap has settled up to 16in and has undermined the slope in a 4ft x 3ft area - NEW. Refer to Photo 6. REPAIR

There is a 20ft x 4ft x 1ft of settlement to the concrete block mat on the southwest corner of footing 18 - NEW. Refer to Photo 7. REPAIR

All Elements

UNIT: Structure Unit 1 CHANNEL

ELEMENT/ENV: 290/4 Channel | **1 ea.** | **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Bank protection is in need of minor repairs, bank may be beginning to slump, minor stream bed movement may be evident or debris may be present.	1 ea.

ELEMENT INSPECTION NOTES:

Note: The bulkheads were evaluated under this element as channel bank protection.

CS2: Some channel measurements have a 3ft. or greater change since the previous inspection. Reason for change may be due to the strong current altering the channel bottom.

The following was noted by the underwater inspectors:
There is scattered timber debris from the previous fender system along the new fender system.
At Bents 4 through 17, the groundline slopes upward up to 4ft. going away from the piling, on one or more sides. Several piling have minimal marine growth on the lower 4in. to 6in. - INCREASE.

CORRECTIVE ACTION TAKEN:
The north channel bulkhead cap has been repaired.

All Elements

UNIT: Structure Unit 1 MISCELLANEOUS

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

ELEMENT INSPECTION NOTES:
Note: The approach slabs are not visible due to an overlay of asphalt.

ELEMENT/ENV: 478/4 MSE Walls 120 lf. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:
Note: The MSE walls were measured back 30ft. at each corner of the structure.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/8/07, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations (left is west).

This structure replaces bascule Bridge No. 124043.

Access to the bridge underside requires a boat with a 60ft. lift or an under bridge inspection vehicle with a lane shift traffic control setup.

Power boat used for groundline measurements and substructure inspection.

INSPECTION NOTES: WNFP 11/18/2011

Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 13:52:56

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 8/8/07 results still govern.

Note: Element 298, Pile Jacket Bare, has been added to this report.

PHOTO 1: 334 METAL RAIL COATED

Impact scrapes on bridge railing Span 4 left near Pier 5.

REPAIR RECOMMENDATION:
Repair impact scrapes to left bridge railing up to 8ft long in Spans 4, 5, 6, 12, 13, 14, 16 and 18.

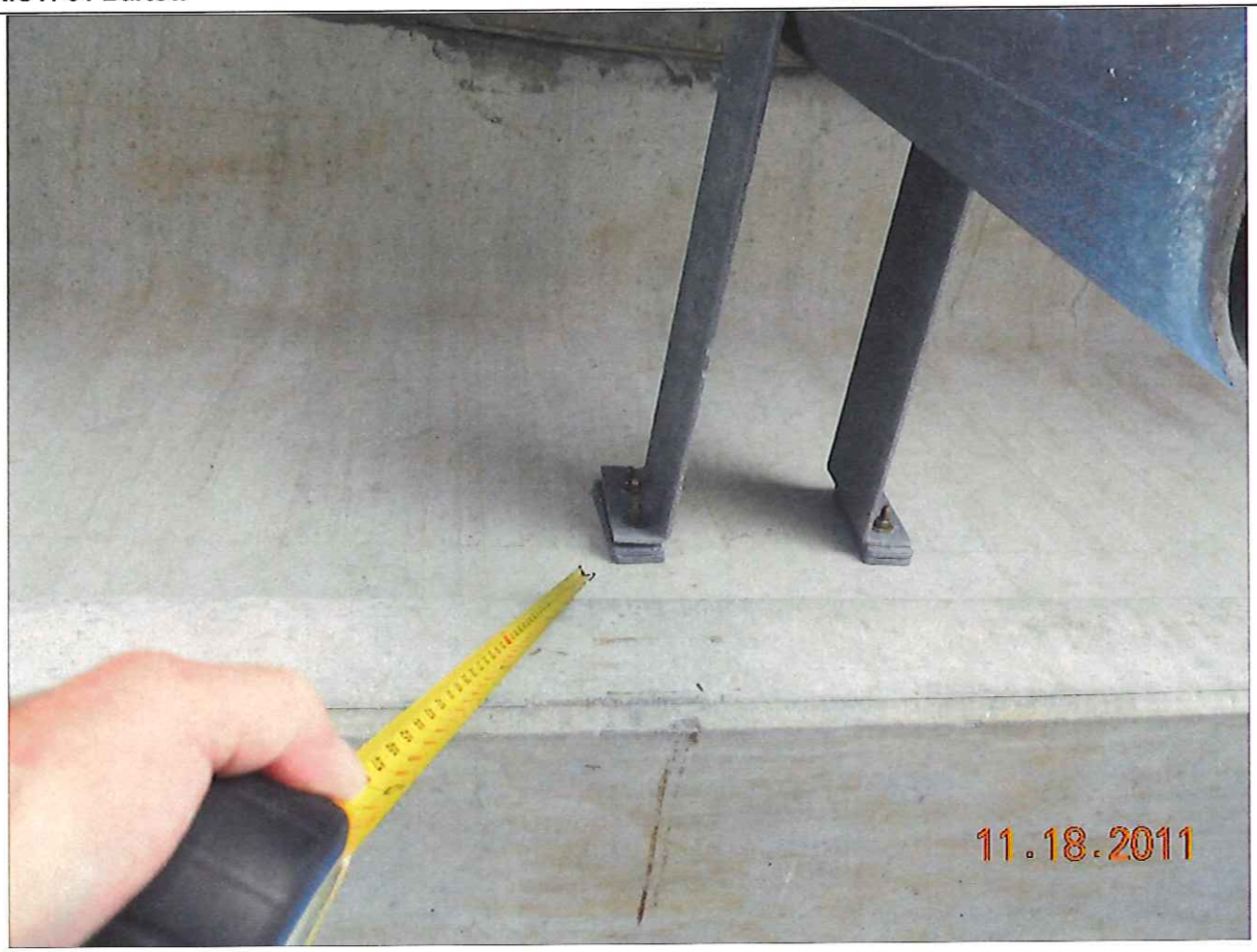


PHOTO 2: 397 DRAIN SYST METAL

Loose anchor hardware for scupper down pipe attached to inside face of Beam 8-1.

REPAIR RECOMMENDATION:
Repair loose anchor hardware for scupper down pipe attached to Beam 8-1 at the 2/3 point.

PHOTO 3: 580 NAVIGATIONAL LIGHTS

Center span navigational swing lights attached to bridge fascias.

REPAIR RECOMMENDATION:
None

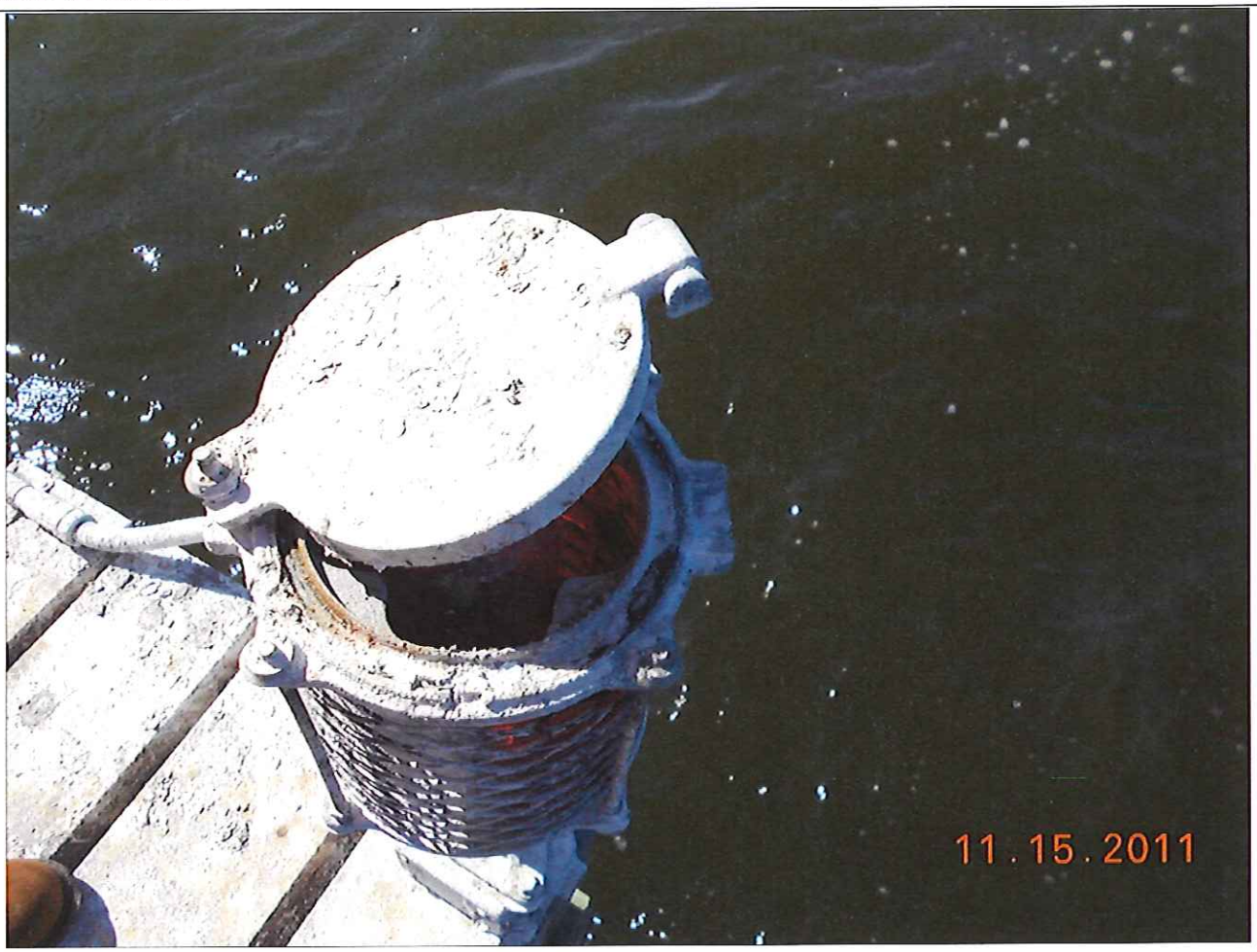


PHOTO 4: 580 NAVIGATIONAL LIGHTS

Broken access cover plate hinge for the northwest fender light.

REPAIR RECOMMENDATION:
Repair 2 broken access cover plate hinges for the southeast and northwest fender lights.

PHOTO 5: 387 P/S FENDER/DOLPHIN

Area of exposed driving tips on the southwest fender top side (from 12th cluster from west to 25th cluster).

REPAIR RECOMMENDATION:
Install 55lf of scour protection for south fender piling starting at 12th cluster from west for next 13 pilings.

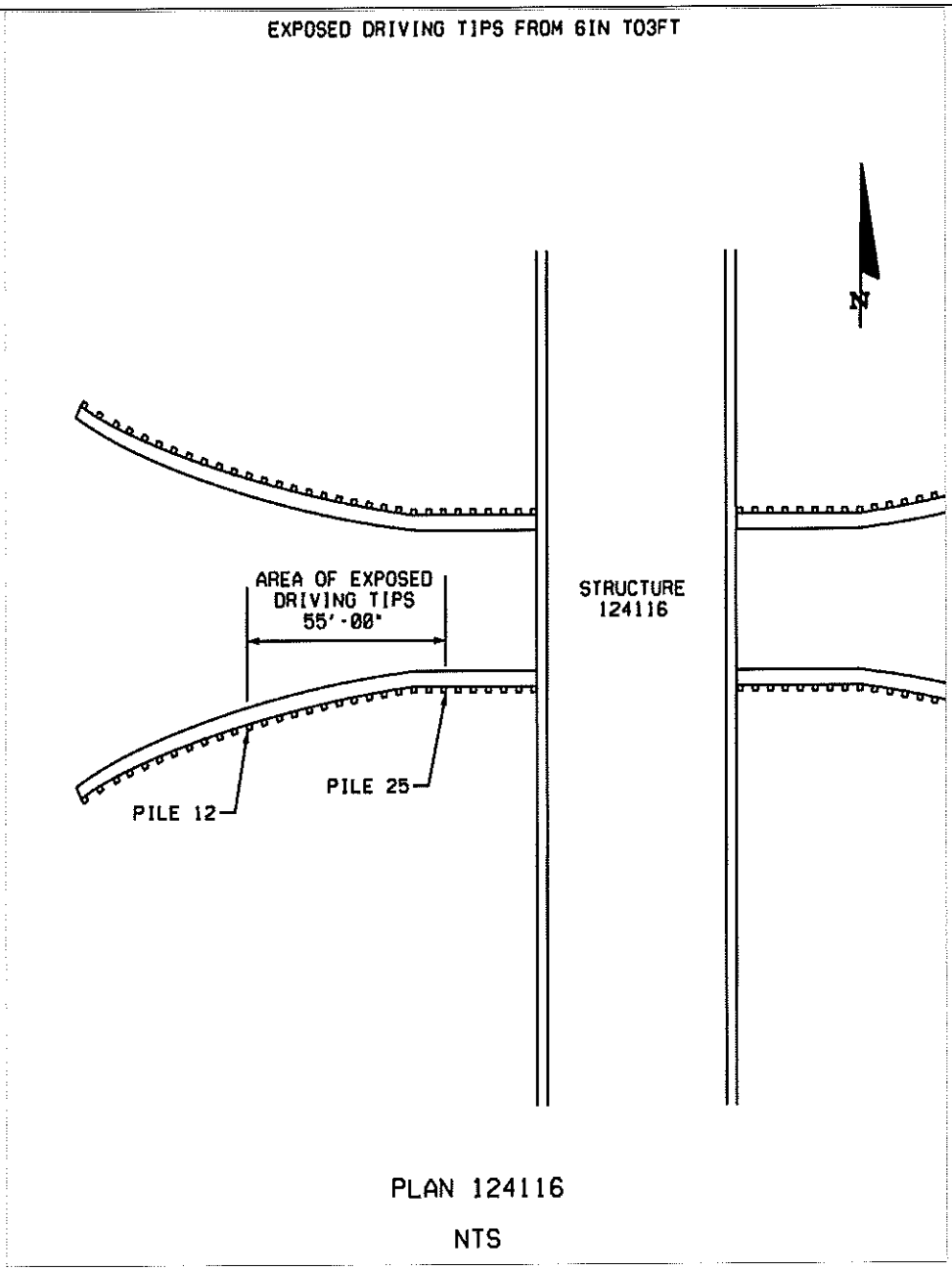


DIAGRAM 1: 387 P/S FENDER/DOLPHIN

Piles with exposed driving tips.

REPAIR RECOMMENDATION:
Refer to Photo 5.

PHOTO 6: 396 OTHER ABUT SLOPE PRO

Settled rock fill with undermining to the concrete block mat 8ft south of the southeast corner of Pier 18.

REPAIR RECOMMENDATION:
Fill and stabilize loss fill and undermining to the concrete block mats 8ft south of the southeast corner of Pier 18.

PHOTO 7: 396 OTHER ABUT SLOPE PRO

Settled slope and erosion of the concrete block mat on the southwest corner at footing 18.

REPAIR RECOMMENDATION:
Fill and stabilize 20ft x 4ft area of settlement and erosion to the slope on the southwest corner at footing 18.

Description

Structure Unit Identification

Bridge/Unit Key: 124116 1
Structure Name: STRUCTURE A SANIBEL CAUSEWAY
Description:
Type: M Main

Roadway Identification:

NBI Structure No (8) 124116
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR-867
Mile Point (11) 0
Latitude (16) 026d28'56" Long (17) 082d01'03"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19690 Year (30) 2011
Future ADT (114) 20675 Year (115) 2031
Truck % ADT (109) 7
Detour Length (19) 99 mi
Detour Speed -1 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☒

Roadway Clearances

Vertical (10) 99.99 ft Appr. Road (32) 40
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☒
Transit Route ☒

Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 1ST STRUC S OF TOLL PLAZA
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99)
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Geometrics

Spans in Main Unit (45) 21
Approach Spans (46) 0
Length of Max Span (48) 144.2 ft
Structure Length (49) 3002.5 ft
Total Length 3042.5 ft
Deck Area 129408 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106) 0
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 9-No Speed Red No Curve
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) 8 Stable Above Footing

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 70 ft
Nav Horizontal Clr (40) 111.2 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 2 In-Place, Functioning

NBI Condition Rating

Sufficiency Rating 79
Health Index 98.94
Structural Eval (67) 7 Above Min Criteria
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 8/8/2007 Initials RS
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 3 LRFR Load & Res. Fact
Operating rating (64) 60.9 tons Alternate -1
Inventory Type (65) 3 LRFR Load & Res. Fact
Inventory Rating (66) 47.7 tons Alternate -1
Alt Meth -1

Schedule

Current Inspection

Inspection Date: 11/18/2011
Inspector: KNVOLSE-P - Steve Eorgan
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☒

Next Inspection Date Scheduled

NBI: 11/18/2013
Element: 11/18/2013
Fracture Critical:
Underwater: 11/18/2013
Other/Special:

Schedule Cont.

Inspection Types Performed NBI ☒ Element ☒ Fracture Critical ☐ Underwater ☒ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)		Last Date (93)
Fracture Critical	☐	mos		
Underwater	☒	24 mos		10/24/2011
Other Special	☐	mos		
NBI		24 mos	(91)	11/18/2011 (90)

Inspection Resources

Crew Hours	20
Flagger Hours	8
Helper Hours	0
Snooper Hours	6
Special Crew Hours	18
Special Equip Hours	0

Custom

General Bridge Information

Parallel Bridge Seq	0000
Channel Depth	26.499 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	Navigation lights only
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124043
2nd Previous Structure	
Replacement Structure	

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft	Single Unit Truck 2 Axles	-1 tons
L-Rating Origination	Design Plans	Single Unit Truck 3 Axles	-1 tons
Load Rating Date	08/08/2007	Single Unit Truck 4 Axles	-1 tons
Method Calculation	AASHTO formula	Combination Unit Truck 3 Axles	-1 tons
Load Dist. Factor	0.982	Combination Unit Truck 4 Axles	-1 tons
Impact Factor	1	Combination Unit Truck 5 Axles	-1 tons
Design Method	LRFD (Load & Res Factor)	Truck Trailer 5 Axles	-1 tons
Design Measure	English	Posting Weight	99 tons
Recommend SU Posting	99 tons	Actual SU Posting	99 tons
Recommend C Posting	99 tons	Actual C Posting	99 tons
Recommend ST Posting	99 tons	Actual ST Posting	99 tons
Gov FB Span	0 ft	FL 120 Long Gov Span	110 tons
Gov FB Spacing	0 ft	FL 120 Trans	-1 tons
FB HS20 Rating	0 tons	Single Axle Trans	-1 tons
FB SU4 Rating	0 tons	Tandem Axle Trans	-1 tons
FB Present	N	Wing Span	-1 ft
FB INV Rating Factor	0	Web to Web Span	-1 ft
FB OPR Rating Factor	0	HS20 OPR Rating Max Span	-1 tons
FB FL 120	0 tons	FL120 Long Max Span	110 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records	Scour Recommended I	No recommendation
Foundation Type	Foundation details	Scour Recommended II	No recommendation
Mode of Flow	Tidal	Scour Recommended III	No recommendation
Rating Scour Eval	Low Risk - High	Scour Elevation	999 ft
Highest Scour Eval	No phase completed	Action Elevation	999 ft
		Storm Frequency	100

Condition

NBI Rating

Channel (61)	7 Minor Damage	Culvert (62)	N N/A (NBI)
Deck (58)	8 Very Good	Waterway (71)	8 Equal Desirable
Superstructure (59)	7 Good	Unrepaired Spalls	-1 sq.ft.
Substructure (60)	7 Good	Review Required	☒

Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	12/4	Bare Concrete Deck	129408	100.	0	.	0	.	0	.	0	.	129408 sf.

Notes Note: Two 4-1/2in. diameter fiberglass conduits are attached to hangers anchored to the underside of Bay 3 in all spans. The type of hanger anchorage is unknown.

CS1: There is a light accumulation of debris in the shoulder areas.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	300/4	Strip Seal Exp Joint	345	100.	0	.	0	.	0	.	0	.	345 lf.

Notes Note: Joints are present at Abutments 1 and 22 and Piers 4, 7, 10, 13, 16 and 19.

CS1: The joints have light dirt and debris in the shoulder areas and are functioning as intended - DECREASED.

CORRECTIVE ACTION TAKEN:
Most of the dirt and debris within the joints has been removed.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	334/4	Metal Rail Coated	5999	99.9	6	.1	0	.	0	.	0	.	6005 lf.

Notes Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS1: There are several tire marks on the barriers.

CS2: There are several areas of impact scrapes to the left bridge rail up to 8ft long at the following locations - NEW. Refer to Photo 1. REPAIR ALL

Span 4, near Pier 5
Span 5, at 1/2 and 3/4 points
Span 6, at 1/4, 1/2 and 3/4 points
Span 12, near Pier 12
Span 13, at 1/4 point
Span 14, near Pier 15
Span 16, near at Pier 17
Span 18, at 1/2 point

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	109/4	P/S Conc Open Girder	12006	99.97	4	.	0	.	0	.	0	.	12010 lf.

Notes CS1: The beams have diagonal web cracks up to 4ft. long x typically less than 1/64in. wide at the bearing areas, extending up and away from the supports.

The east face of the bottom flange of Beam 14-4 has a 20in. long x 1/64in. wide vertical/diagonal crack over the bearing at Pier 14. Beam 16-4 at Pier 16 has similar cracking - INCREASE.

The left top flange of Beam 17-4 has longitudinal hairline cracking, some with efflorescence, up to 1/64in. wide near Pier 18.

CS2: There are minor spalls with no exposed steel in the bottom flanges of the following beams:
Beam 15-1, east face 7-1/2ft. from Pier 16, 6in. x 2in. x 1/2in.
Beam 15-3, east face at 25-1/2ft. from Pier 16, 4in. x 4in. x 1in.
Beam 15-4, west face 60ft. from Pier 15, 16in. x 4in. x 1in.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	397/4	Drain. Syst Metal	19	95.	1	5.	0	.	0	.	0	.	20 ea.

Notes CS2: The anchor hardware for the scupper down pipe attached to the inside face of Beam 8-1 at the 2/3 point is loose - NEW. Refer to Photo 2. REPAIR

CORRECTIVE ACTION TAKEN:
The scupper down pipes have been properly shimmed.

Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	310/4	Elastomeric Bearing	168	100.	0	.	0	.	0	.	0	.	168 ea.

Notes

Structur	563/4	Acc Ladd & Plat	16	100.	0	.	0	.	0	.	0	.	16 ea.

Notes Note: The quantity includes eight ladders and eight platforms including the two fender access walkways.

Structur	580/4	Navigational Lights	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes Note: The element includes six fender lights, two clearance at centerline of channel gauge lights and two swing lights at centerline of channel attached to the deck fascias with unknown anchors. Refer to Photo 3.

CS2: The hinges for top access cover on the southeast and northwest fender lights are broken - NEW. Refer to Photo 4. REPAIR

Structur	205/4	R/Conc Column	40	100.	0	.	0	.	0	.	0	.	40 ea.

Notes

Structur	207/4	P/S Conc Holl Pile	220	98.21	4	1.79	0	.	0	.	0	.	224 ea.

Notes Note: Quantity field verified by underwater inspectors.

The following was noted by the underwater inspectors;
CS2: The northesast corner of Pile 10-13 has a 7ft6in x 18in x 2in spall with no exposed steel 11ft below the footing.
The northeast corner of Pile 4-1 has a 16in. x 6in. x 2in. spall with no exposed steel, 5ft. below the footing.
The northwest corner of Pile 11-17 has a 5ft. 6in. x 10in. x 2in. spall with no exposed steel, just below the footing.
The northeast corner of Pile 17-10 has a 13ft. x 12in. x 3in. spall with no exposed steel, 24in. below the footing.

Structur	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	70 lf.

Notes CS1: There is minor horizontal cracking to the top outside faces of both cheek walls at the cold joint of Abutment 1 - NEW.

Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	220/4	R/C Sub Pile Cap/Ftg	8	47.06	9	52.94	0	.	0	.	0	.	17 ea.

Notes NOTE: Quantity change due to footings 19, 20 and 21 no longer being exposed.

CS1: The following was noted by the underwater inspection:
There are several corner scrapes up to 6in H x 5ft W x 3/4in D.
The footing have concrete formed sides that have vertical cracks with no corrosion bleedout up to 1/16in wide x full height. Several cracks have efflorescence.

CS2: The top northwest corner of footing 4 has a 24in x 12in x 2in spall with no exposed steel.

The top east corner of footing 9 near center point has a 30in x 9in x 2in spall with no exposed steel (Previously noted as a delamination).

The top northeast corner of footing 10 has a spall with no exposed steel 24in x 8in x 1in previously noted as a spall/delamination on the northwest corner of footing 10.

The top northeast corner of footing 16 has a spall with no exposed steel 15in x 12in x 1in. Previously noted as a spall/delamination on the northwest corner.

The following was noted by the underwater inspection:
Footing 5, southeast corner 18in below top of footing - spall with no exposed steel, 9in H x 9in W x 2in D - NEW.
Footing 8, southeast corner 10in below top of footing - spall with no exposed steel, 12in H x 6in W x 2in D - NEW.
Footing 10, northeast corner at top of footing - intermittent spall with no exposed steel, 28in H x 9in W x 2in D - NEW.
Footing 12, southwest corner 20in below top of footing, spall with no exposed steel, 6in x H 8in W x 2-1/2in D.
Footing 13, southeast corner 15in below top of footing, spall with no exposed steel, 12in H x 6in W x 1in D.
Footing 17, northeast and southeast corners 20in below top footing, spall with no exposed steel, 12in H x 12in W x 2in D.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	234/4	R/Conc Cap	862	100.	0	.	0	.	0	.	0	.	862 lf.

Notes

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	298/4	Pile Jacket Bare	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes NOTE: This element is for the Pile Jackets installed on Piling 11-8 and 11-15.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	387/4	P/S Fender/Dolphin	588	100.	0	.	0	.	0	.	0	.	588 lf.

Notes Note: The quantity includes the three rectangular dolphins at the southeast corner of the fender and the three rectangular dolphins at the northwest corner of the fender.

CS3: The south fender starting at the 1st single plumb pile (12th cluster) from the west for the next 13 piles (55ft long), the steel driving tips are exposed up to 30in to 3ft height - NEW. Refer to Photo 5 and Diagram 1. REPAIR

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	396/4	Other Abut Slope Pro	2404	96.16	12	.48	84	3.36	0	.	0	.	2500 sf.

Notes Note: This element includes rock rubble rip rap and concrete block mats.

CS1: The rock inside the concrete block mats has settled up to 6in in several location - NEW.

CS2: There are 6 displaced concrete rip rap bags on the south slope protection under the structure.

CS3: The rock inside the concrete block mat on the north slope protection 8ft adjacent to the seawall cap has settled up to 16in and has undermined the slope in a 4ft x 3ft area - NEW. Refer to Photo 6. REPAIR

There is a 20ft x 4ft x 1ft of settlement to the concrete block mat on the southwest corner of footing 18 - NEW. Refer to Photo 7. REPAIR

Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	290/4	Channel	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes Note: The bulkheads were evaluated under this element as channel bank protection.

CS2: Some channel measurements have a 3ft. or greater change since the previous inspection. Reason for change may be due to the strong current altering the channel bottom.

The following was noted by the underwater inspectors:
There is scattered timber debris from the previous fender system along the new fender system.
At Bents 4 through 17, the groundline slopes upward up to 4ft. going away from the piling, on one or more sides. Several piling have minimal marine growth on the lower 4in. to 6in. - INCREASE.

CORRECTIVE ACTION TAKEN:
The north channel bulkhead cap has been repaired.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes Note: The approach slabs are not visible due to an overlay of asphalt.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	120 lf.

Notes Note: The MSE walls were measured back 30ft. at each corner of the structure.

Total Number of Elements: 19

Inspection Information

Inspection Date: 11.18.2011 **Type:** Regular NBI

Inspector: KNVOLSE-P - Steve Eorgan

Inspection Notes: Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 13:52:56

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 8/8/07 results still govern.

Note: Element 298, Pile Jacket Bare, has been added to this report.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/8/07, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations (left is west).

This structure replaces bascule Bridge No. 124043.

Access to the bridge underside requires a boat with a 60ft. lift or an under bridge inspection vehicle with a lane shift traffic control setup.

Power boat used for groundline measurements and substructure inspection.

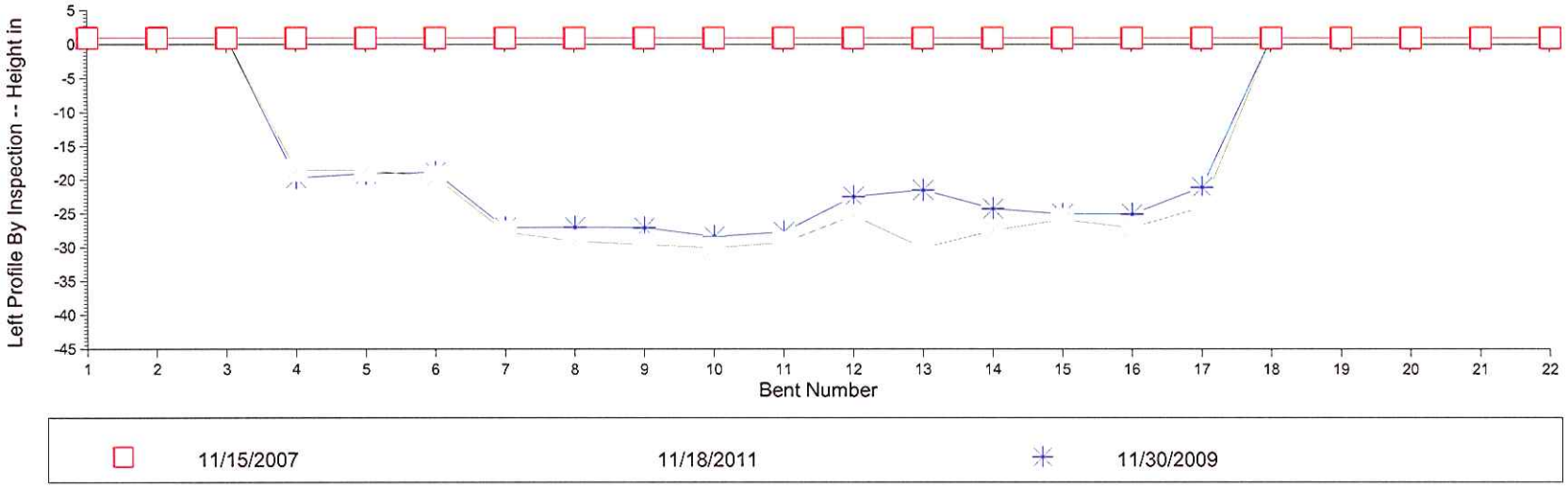
FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM

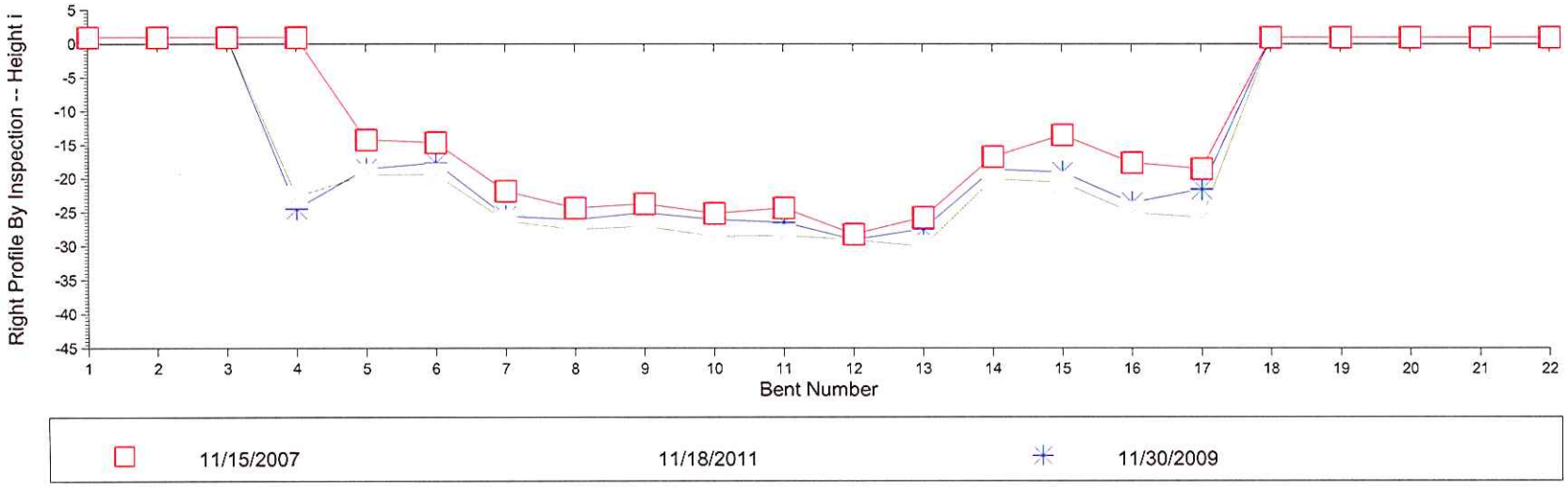
Bridge Profile Report

REPORT ID: INVT016

Structure #: 124116

DATE PRINTED: 12/28/2011





Profile Data - Numerical Summary

Inspection Date and Key: 11/18/2011 WNFP

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	-1
4	18.5	22.6
5	18.5	19.4
6	19.5	19.3
7	27.6	26.2
8	29	27.5
9	29.5	27
10	30	28.5
11	29.2	28.4
12	25.2	29
13	30	30
14	27.4	20
15	25.8	20.5
16	27	25
17	24	25.7
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

(All Heights Are In Feet)

Air Temp:

Profile Notes:

Measurements referenced from the top of the footing.
Waterline at top of footing 4 = 4ft.
Note: Bents 1 to 3 and 18 to 22 are on dry land.

Inspection Date and Key: 11/30/2009 ESCS

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	-1
4	19.6	24.4

Profile Data - Numerical Summary

Inspection Date and Key: 11/30/2009 ESCS

Bent #	Left Height	Right Height
5	19	18.5
6	18.8	17.6
7	27	25.5
8	26.9	26
9	27	25
10	28.3	26
11	27.6	26.4
12	22.4	29
13	21.4	27.4
14	24.2	18.6
15	25	19
16	25	23.5
17	21	21.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

(All Heights Are In Feet)

Air Temp: 1

Profile Notes:

Measurements referenced from the top of the footers.
Waterline = 2.5ft.
Note: A value of -1 indicates that location was out of the water during this inspection.

Inspection Date and Key: 11/15/2007 GPFO

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	-1
4	-1	-1
5	-1	14.2
6	-1	14.6
7	-1	21.8
8	-1	24.3

Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 GPFO

Bent #	Left Height	Right Height
9	-1	23.7
10	-1	25.1
11	-1	24.3
12	-1	28.2
13	-1	25.7
14	-1	16.7
15	-1	13.5
16	-1	17.6
17	-1	18.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

(All Heights Are In Feet)

Air Temp:

Profile Notes:

Measurements referenced to top of pier 4 footer.
Waterline: 3.0ft

No left side measurements taken due to ongoing demolition.
Bents 1 - 4 and 18 - 22 are on dryland.

BOLT Underwater Services, Inc
7930 62ND STREET NORTH, PINELLAS PARK, FL 33781

Routine Underwater Bridge Inspection Report for VOLKERT, INC.

NBI Structure No. (8): **124116 (Structure A / Sanibel)** Underwater Date (93): 10/24/11

Structure/Roadway Identification:

District (2):	01
County (3):	Lee
Feature Intersected (6):	San Carlos Bay
Facility Carried (7):	CR 867

Underwater Inspection Details:

Special Crew Hours:	18.0
Max. Depth:	28ft.
Type of Dive Insp.:	SCUBA
Type of Boat Used:	21ft.
Water Type/Marine Growth:	Salt-Tidal / Barnacles - Oysters

Previous Inspection:

Lead Diver:	C.B.I. No.:	Inspection Date:
Hays, Stephen F.	00438	10/07/2009

Inspection Personnel:

Field Personnel:	Title	C.B.I. No.:	Duty:	Signature:
Hoogland, Keith S.	C.B.I. Diver-Inspector	00341/Lead	Dive	KLN
Tumaniszwili, Alex P.	Diver-Inspector		Dive	
Young, Ryan C.	Diver-Inspector		Tend	

PILING/COLUMNS
ELEMENT: 207 HLW CORE **291**: ea.

NOTE: Pile quantity was incorrect on the previous topside report, quantity was field verified.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	287	Do Nothing
CS-2	4	Do Nothing

Pile 4-1: Northeast corner 5ft. below footing, spall, no exposed steel, 16in. H x 6in. W x 2in. D.
Pile 10-13: Northeast corner 11ft. below footing, intermittent spall, no exposed steel, 7ft. 6in. H x 18in. W x 2in. D – *NEW.*
Pile 11-17: Northwest corner below footing, spall, no exposed steel, 5ft. 6in. H x 10in. W x 2in. D.
Pile 17-10: Northwest corner 24in. below footing, intermittent spall, no exposed steel, 13ft. H x 12in. W x 3in. D (entire pile length).

NOTE: Piles 6-1, 6-8, 6-15, 7-1, 7-2, 7-15, 11-7, 11-14, 11-20, 11-21, 13-7, 13-21, 14-5, 14-6, 14-7, 14-10, 14-11, 14-12, 14-17 through 21, 15-3, 15-4, 15-8 through 15-11 and all deficiencies were cleaned.

SUBMERGED FOOTING
ELEMENT: 220 R/CONCRETE **14**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	8	Do Nothing

There are several corner scrapes up to 6in. H x 5ft. W x ¾in. D.
The footing have concrete formed sides that have vertical cracks with no corrosion bleedout up to 1/16in. wide x full height. Several cracks have efflorescence.

CS-2 6 Do Nothing

Footing	Location	Type	Comment	Size
5	Southeast corner 18in. below top of footing	Spall	No exposed steel	9in. H x 9in. W x 2in. D - *NEW*
8	Southeast corner 10in. below top of footing	Spall	No exposed steel	12in. H x 6in. W x 2in. D - *NEW*
10	Northeast corner at top of footing	Intermittent Spall	No exposed steel	28in. H x 9in. W x 2in. D - *NEW*
12	Southwest corner 20in. below top of footing	Spall	No exposed steel	6in. H x 8in. W x 2½in. D.
13	Southeast corner 15in. below top of footing	Spall	No exposed steel	12in. H x 6in. W x 1in. D.
17	Northeast and southeast corners 20in. below top of footing	Spall	No exposed steel	12in. H x 12in. W x 2in. D

NOTE: Footing 4 and 6 and all deficiencies were cleaned.

CHANNEL
ELEMENT: 290 **1**: ea.

NOTE: The bulkheads were evaluated under this element as channel bank protection.

Condition State:	QTY:	Recommended Feasible Action:
CS-2	**1**	**Do Nothing**

There is scattered timber debris from the previous fender system along the new fender system.

On Bents 4 through 17, the groundline slopes upward going away from the piling up to 4ft. high on one or more sides. Several piling had minimal marine growth on the bottom 4in. to 6in. – *INCREASE.*

North Seawall: 1st panel west of the angle break on the west joint, 7ft. below the cap, spall with no steel, 6ft. H x 8in. W x 4in. D (extends to the groundline) – *NEW.*

JACKETS
ELEMENT: 298 PILE JACKET BARE **2**: ea.

NOTE: Piles 11-8 and 11-15 have Jackets from the footing to the groundline approximately 5ft. in diameter due to damage during old bridge removal.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**2**	**Do Nothing**

FENDER SYSTEM
ELEMENT: 387 P/S CONCRETE **588 lf.**

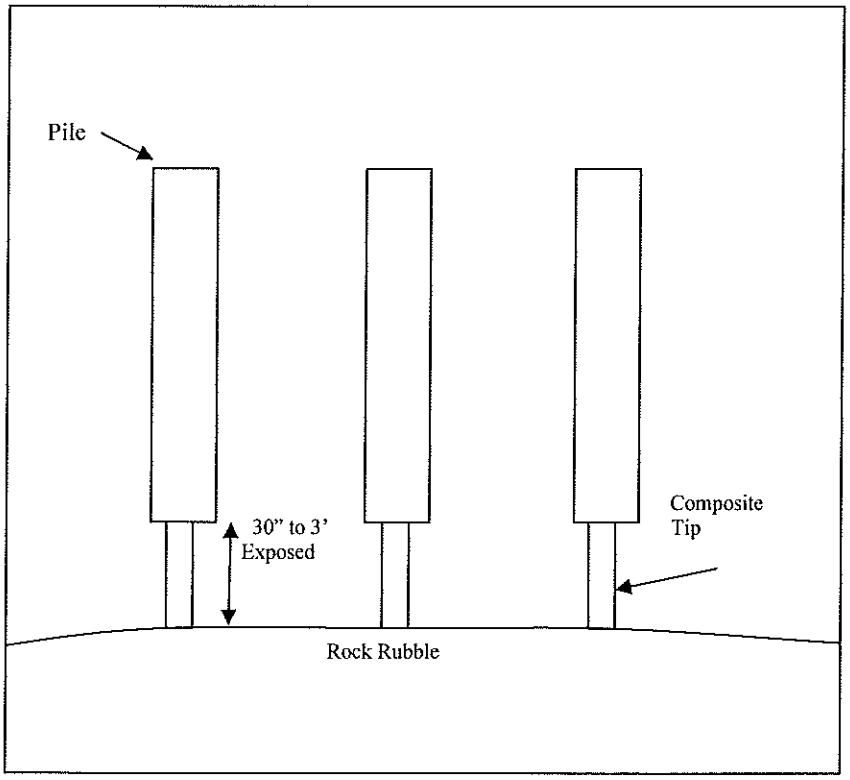
NOTE: Quantity includes three rectangular dolphins at the southeast corner of the fender and three rectangular dolphins at the northwest corner of the fender. The lower wales are composite.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**533**	**Do Nothing**
CS-3	**55**	**REPAIR**

The south fender starting at the 1st single plumb pile (12th cluster) from the west, for the next 13 piles (55ft. long), the steel driving tips are exposed up to 30in. to 3ft. high – *NEW.*

INSPECTION NOTES: Divers inspected two hundred ninety-one 30in. piling in Bents 5 through 17, eighteen 30in. concrete piling in Bent 4, Jackets, Footing, Fender System and Channel.
STRUCTURE NOTES: Structure inventoried south to north

Fender Pile Sketch



Not to Scale