Shaw® Shaw Environmental & Infrastructure, Inc.

ASBESTOS SURVEY REPORT FOR RENOVATION

Bridge No. 150049
SR 679 – Pinellas Bayway Structure E Bridge
over Boca Ciega Bay
St. Petersburg, Pinellas County, Florida

Contract No. BDJ73
Financial Management No. 410775-1-C2-01

Shaw Project 134845

February 2009

Submitted to:

Florida Department of Transportation
District 7
MS7-500, MP&D
11201 North McKinley Drive
Tampa, Florida 33612-6456

Submitted by:

Shaw Environmental & Infrastructure, Inc.
725 US Highway 301 South
Tampa, Florida 33619-4349

ASBESTOS SURVEY TITLE SHEET

Facility Name: Bridge 150049
SR 679 – Pinellas Bayway Structure E Bridge

Address/Location: over Boca Ciega Bay

City, County, State: St. Petersburg, Pinellas County, Florida

Owner Agency: Florida Department of Transportation District 7

Date of Survey: January 21, 2009

Consultant: Shaw Environmental & Infrastructure, Inc.

Consultant Address: 725 US Highway 301 South

City, State, Zip Code: Tampa, Florida 33619-4349

Telephone Number: 813-626-2336

James T. Hanskat

James T. Hanskat, PE, LAC
Licensed Asbestos Consultant, AX-0000031

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS

Surfacing Materials

SAS – acoustical/sprayed surfacing material
SAT – acoustical/troweled surfacing material
SFP – fireproofing/structural

Thermal Materials

TPI – pipe insulation
TPC – pipe cover
TPE – pipe elbow/joint
TPM – pipe mastic

Miscellaneous Materials

MAS – mastic/adhesive
MBB – vinyl baseboard
MBP – bearing pad
MCA – carpet adhesive
MCK – caulk/sealant
MCM – cementitious material/patch
MCT – ceiling tile
MDI – duct insulation
MDM – duct mastic
MEJ – expansion joint
MFD – fire door
MFT – floor tile
MGS – gasket
MJC – joint compound
MMB – moisture barrier (felt)
MPC – “popcorn” textured ceiling finish
MPL – plaster
MRP – railing pads
MSI – sink insulation
MST – stucco
MSV – sheet vinyl/flooring
MTC – cementitious/Transite-type conduit/pipe
MTP – cementitious/Transite-type panel
MVD – vibration damper
MVP – vibration pads
MWB – wallboard
MWG – window glazing
MWP – wallpaper/covering

Roofing Materials

RBU – built-up roofing
RAS – asphalt shingle
RFT – tarpaper and felt
RRM – rolled membrane
RFM – flashing mastic
RTP – Transite-type panel/shingle

SECTION 1

SURVEY SUMMARY FORMS

ASBESTOS SURVEY OVERVIEW

The Florida Department of Transportation (FDOT) District 7 will be renovating Bridge 150049, the SR 679 – Pinellas Bayway Structure E Bridge, located over Boca Ciega Bay, St. Petersburg, Pinellas County, Florida, and requested that an asbestos survey be performed to determine the presence, if any, of suspect asbestos-containing material (ACM). The survey follows the Asbestos Hazard Emergency Response Act (AHERA) protocol for compliance under the National Emission Standards for Hazardous Air Pollutants (NESHAP).

Mr. William Zukauskas of Shaw Environmental & Infrastructure, Inc. (Shaw) performed the asbestos survey on January 21, 2009 to determine the location, extent, and condition of ACM, if any.

During the asbestos survey, samples of the following materials were collected to determine asbestos content: concrete, mastic, lightweight concrete patching, tarpaper, expansion joint material, bearing pads, vinyl floor tile, caulk, vinyl baseboard, wall plaster, wallboard and joint compound, paint, tar, vibration damper, and brake shoes.

Samples of suspect materials were submitted for analysis to an independent laboratory certified by the National Voluntary Laboratory Accreditation Program (NVLAP). Additionally, as per FDOT requirements, a quality control/quality assurance (QA/QC) sample was collected and submitted for analysis to a second NVLAP-certified laboratory.

The laboratory analysis of the samples collected during this survey did not detect any asbestos. No asbestos-containing building materials (ACBMs) were identified during the survey. Renovation or demolition can proceed without any engineering controls. The use of wet demolition methods is recommended.

Homogeneous area HA 30 (brake shoes on lift equipment) was assumed to be ACM because of its inaccessibility. Since this material is Category I nonfriable, it is not considered to be regulated asbestos-containing material (RACM). However, during demolition or renovation activities that will impact the brake unit, the brake shoes should be removed intact, using wet methods to minimize the potential for fiber release.

ASBESTOS SURVEY REPORT – FORM 1

BRIDGE IDENTIFICATION

County: Pinellas County, Florida
Agency: Florida Department of Transportation District 7
Facility/Bridge Name: SR 679 – Pinellas Bayway Structure E Bridge
Bridge No.: 150049
Address and/or Geographic Location: over Boca Ciega Bay, St. Petersburg, FL
Bridge Asbestos Contact Person: Jose P. Garcia Telephone Number: 813-744-6050
FDOT Contact: Jose P. Garcia Telephone Number: 813-744-6050

SURVEY IDENTIFICATION

Date of Survey: January 21, 2009 Date of Report: February 25, 2009
Contract No.: BDJ73
FM No.: 410775-1-C2-01
Consultant's Name: James T. Hanskat, PE, LAC License No.: AX-0000031
Name of Firm: Shaw Environmental & Infrastructure, Inc.
Address: 725 US Highway 301 South, Tampa, Florida 33619-4349
Telephone Number: 813-626-2336

BRIDGE INFORMATION

Year of Construction: Bridge 150049 - 1961
Renovation Dates: Bridge 150049 - Unknown
Bridge Documents/Drawings Available/Consulted:

Types: Plans	☒Yes	☐No	Location	file
Specifications	☐Yes	☐No	Location	
Other	☐Yes	☐No	Location	
Asbestos Documents	☐Yes	☐No	Location	
	☐Yes	☐No	Location	
	☐Yes	☐No	Location	

STRUCTURAL DATA

Vertical Support: concrete Horizontal: concrete
Decking: concrete and metal
Span: 2 lanes Gaskets: NA
Bearing Pads: rubber Railings: concrete and metal

If applicable:
Roof: concrete
Floors: vinyl floor tile and mastic Ceilings: plaster on concrete
Exterior Walls: poured concrete Partition Walls: plaster on concrete
HVAC System: ☒Yes ☐No Type: window unit

ASBESTOS SURVEY AND ASSESSMENT – FORM 2

Bridge Name: Bridge 150049, SR 679 – Pinellas Bayway Structure E Bridge, over Boca Ciega Bay Contract No.: BDJ73
Date of Survey: January 21, 2009 Agency: Florida Department of Transportation District 7
Consultant: Shaw Environmental & Infrastructure, Inc. FDOT Contact Person: Jose P. Garcia

Sample No.	Material Description	Homo-geneous Area No.	Area Description	Quantity (Total for HA)	Friable Y/N	Asbestos Type & % or PACM	Condition G/F/P	Damage Potential H/M/L	Hazard Assess-ment 0-7	Response Priority 1-8	Response Cost	Air Mon Cost	Replace Cost
1.1	CONCRETE	1	BRIDGE DECK AND COLUMNS	58,012 SF	N	NAD	G	L	0	8	0	0	0
1.2	CONCRETE	1	BRIDGE DECK AND COLUMNS	58,012 SF	N	NAD	G	L	0	8	0	0	0
1.3	CONCRETE	1	BRIDGE DECK AND COLUMNS	58,012 SF	N	NAD	G	L	0	8	0	0	0
2.1	CONCRETE	2	RAILS AND BEAMS	11,472 SF	N	NAD	G	L	0	8	0	0	0
2.2	CONCRETE	2	RAILS AND BEAMS	11,472 SF	N	NAD	G	L	0	8	0	0	0
2.3	CONCRETE	2	RAILS AND BEAMS	11,472 SF	N	NAD	G	L	0	8	0	0	0
3.1	CONCRETE	3	CURB	8,604 SF	N	NAD	G	L	0	8	0	0	0
3.2	CONCRETE	3	CURB	8,604 SF	N	NAD	G	L	0	8	0	0	0
3.3	CONCRETE	3	CURB	8,604 SF	N	NAD	G	L	0	8	0	0	0
4.1	CONCRETE	4	SEAWALL	12,000 SF	N	NAD	G	L	0	8	0	0	0
4.2	CONCRETE	4	SEAWALL	12,000 SF	N	NAD	G	L	0	8	0	0	0
4.3	CONCRETE	4	SEAWALL	12,000 SF	N	NAD	G	L	0	8	0	0	0
5.1	CONCRETE	5	ABUTMENT WALLS	10,900 SF	N	NAD	G	L	0	8	0	0	0

COMMENTS/NOTES:

Y - Yes
N - No
G - Good
F - Fair
P - Poor
H - High
M - Medium
L - Low
NA - Not Applicable

NAD - No Asbestos Detected
LF - Linear feet
SF - Square feet
CAT I – Category I
CAT II – Category II
PC – Point Count Analysis
Trace – Less than 1%

chry. - chrysotile
amo. - amosite
trem. - tremolite
cro. - crocidolite

1. All quantities given in square feet unless otherwise indicated.

2. All costs provided assume one mobilization.

3. Shaded and bold text indicates Asbestos-Containing Material (ACM) or Presumed Asbestos-Containing Material (PACM).

Subtotals	0	0	0
Consultant Fees	See Form 2 Page 6		
O & M Costs	See Form 2 Page 6		
TOTAL	See Form 2 Page 6		

ASBESTOS SURVEY AND ASSESSMENT – FORM 2

Bridge Name: Bridge 150049, SR 679 – Pinellas Bayway Structure E Bridge, over Boca Ciega Bay Contract No.: BDJ73
Date of Survey: January 21, 2009 Agency: Florida Department of Transportation District 7
Consultant: Shaw Environmental & Infrastructure, Inc. FDOT Contact Person: Jose P. Garcia

Sample No.	Material Description	Homo-geneous Area No.	Area Description	Quantity (Total for HA)	Friable Y/N	Asbestos Type & % or PACM	Condition G/F/P	Damage Potential H/M/L	Hazard Assess-ment 0-7	Response Priority 1-8	Response Cost	Air Mon Cost	Replace Cost
5.2	CONCRETE	5	ABUTMENT WALLS	10,900 SF	N	NAD	G	L	0	8	0	0	0
5.3	CONCRETE	5	ABUTMENT WALLS	10,900 SF	N	NAD	G	L	0	8	0	0	0
6.1	BLACK MASTIC	6	UNDER ROAD REFLECTORS	20 SF	N	NAD	G	L	0	8	0	0	0
6.2 QA/QC	BLACK MASTIC	6	UNDER ROAD REFLECTORS	20 SF	N	NAD	G	L	0	8	0	0	0
7.1	GRAY MASTIC	7	UNDER RAILING REFLECTORS	8 SF	N	NAD	G	L	0	8	0	0	0
7.2 QA/QC	GRAY MASTIC	7	UNDER RAILING REFLECTORS	8 SF	N	NAD	G	L	0	8	0	0	0
8.1	BLACK MASTIC	8	PATCHES ON WEST SIDEWALK	4 SF	N	NAD	G	L	0	8	0	0	0
9.1	GRAY MASTIC	9	PATCHES ON WEST SIDEWALK	4 SF	N	<1%	G	L	0	8	0	0	0
10.1	CONCRETE	10	REPLACEMENT RAIL POSTS	200 SF	N	NAD	G	L	0	8	0	0	0
10.2	CONCRETE	10	REPLACEMENT RAIL POSTS	200 SF	N	NAD	G	L	0	8	0	0	0
10.3	CONCRETE	10	REPLACEMENT RAIL POSTS	200 SF	N	NAD	G	L	0	8	0	0	0
11.1	LIGHTWEIGHT CONCRETE PATCHING	11	ON RAILS AND BRIDGE DECK	180 SF	N	NAD	G	L	0	8	0	0	0
11.2	LIGHTWEIGHT CONCRETE PATCHING	11	ON RAILS AND BRIDGE DECK	180 SF	N	NAD	G	L	0	8	0	0	0

COMMENTS/NOTES:

Y - Yes
N - No
G - Good
F - Fair
P - Poor
H - High
M - Medium
L - Low
NA - Not Applicable

NAD - No Asbestos Detected
LF - Linear feet
SF - Square feet
CAT I – Category I
CAT II – Category II
PC – Point Count Analysis
Trace – Less than 1%

chry. - chrysotile
amo. - amosite
trem. - tremolite
cro. - crocidolite

1. All quantities given in square feet unless otherwise indicated.

2. All costs provided assume one mobilization.

3. Shaded and bold text indicates Asbestos-Containing Material (ACM) or Presumed Asbestos-Containing Material (PACM).

Subtotals	0	0	0
Consultant Fees	See Form 2 Page 6		
O & M Costs	See Form 2 Page 6		
TOTAL	See Form 2 Page 6		

ASBESTOS SURVEY AND ASSESSMENT – FORM 2

Bridge Name: Bridge 150049, SR 679 – Pinellas Bayway Structure E Bridge, over Boca Ciega Bay Contract No.: BDJ73
Date of Survey: January 21, 2009 Agency: Florida Department of Transportation District 7
Consultant: Shaw Environmental & Infrastructure, Inc. FDOT Contact Person: Jose P. Garcia

Sample No.	Material Description	Homo-geneous Area No.	Area Description	Quantity (Total for HA)	Friable Y/N	Asbestos Type & % or PACM	Condition G/F/P	Damage Potential H/M/L	Hazard Assess-ment 0-7	Response Priority 1-8	Response Cost	Air Mon Cost	Replace Cost
11.3	LIGHTWEIGHT CONCRETE PATCHING	11	ON RAILS AND BRIDGE DECK	180 SF	N	NAD	G	L	0	8	0	0	0
12.1	BLACK TARPAPER	12	AT RAIL POSTS	768 SF	N	NAD	G	L	0	8	0	0	0
12.2	BLACK TARPAPER	12	AT RAIL POSTS	768 SF	N	NAD	G	L	0	8	0	0	0
12.3	BLACK TARPAPER	12	AT RAIL POSTS	768 SF	N	NAD	G	L	0	8	0	0	0
13.1	BLACK AND GRAY EXPANSION JOINT MATERIAL	13	BETWEEN DECK SECTIONS	76 SF	N	NAD	G	L	0	8	0	0	0
13.2	BLACK AND GRAY EXPANSION JOINT MATERIAL	13	BETWEEN DECK SECTIONS	76 SF	N	NAD	G	L	0	8	0	0	0
13.3	BLACK AND GRAY EXPANSION JOINT MATERIAL	13	BETWEEN DECK SECTIONS	76 SF	N	NAD	G	L	0	8	0	0	0
14.1	DARK GRAY CONCRETE PATCH	14	ON WEST SIDEWALK	40 SF	N	NAD	G	L	0	8	0	0	0
15.1	LIGHT GRAY CONCRETE	15	POURED ON ABUTMENT WALL NORTH END	450 SF	N	NAD	G	L	0	8	0	0	0
15.2	LIGHT GRAY CONCRETE	15	POURED ON ABUTMENT WALL NORTH END	450 SF	N	NAD	G	L	0	8	0	0	0
15.3	LIGHT GRAY CONCRETE	15	POURED ON ABUTMENT WALL NORTH END	450 SF	N	NAD	G	L	0	8	0	0	0
16.1	DARK GRAY CONCRETE	16	POURED ON ABUTMENT WALL NORTH END	200 SF	N	NAD	G	L	0	8	0	0	0
16.2	DARK GRAY CONCRETE	16	POURED ON ABUTMENT WALL NORTH END	200 SF	N	NAD	G	L	0	8	0	0	0

COMMENTS/NOTES:

Y - Yes
N - No
G - Good
F - Fair
P - Poor
H - High
M - Medium
L - Low
NA - Not Applicable

NAD - No Asbestos Detected
LF - Linear feet
SF - Square feet
CAT I – Category I
CAT II – Category II
PC – Point Count Analysis
Trace – Less than 1%

chry. - chrysotile
amo. - amosite
trem. - tremolite
cro. - crocidolite

1. All quantities given in square feet unless otherwise indicated.

2. All costs provided assume one mobilization.

3. Shaded and bold text indicates Asbestos-Containing Material (ACM) or Presumed Asbestos-Containing Material (PACM).

Subtotals	0	0	0
Consultant Fees	See Form 2 Page 6		
O & M Costs	See Form 2 Page 6		
TOTAL	See Form 2 Page 6		

ASBESTOS SURVEY AND ASSESSMENT – FORM 2

Bridge Name: Bridge 150049, SR 679 – Pinellas Bayway Structure E Bridge, over Boca Ciega Bay Contract No.: BDJ73
Date of Survey: January 21, 2009 Agency: Florida Department of Transportation District 7
Consultant: Shaw Environmental & Infrastructure, Inc. FDOT Contact Person: Jose P. Garcia

Sample No.	Material Description	Homo-geneous Area No.	Area Description	Quantity (Total for HA)	Friable Y/N	Asbestos Type & % or PACM	Condition G/F/P	Damage Potential H/M/L	Hazard Assess-ment 0-7	Response Priority 1-8	Response Cost	Air Mon Cost	Replace Cost
16.3	DARK GRAY CONCRETE	16	POURED ON ABUTMENT WALL NORTH END	200 SF	N	NAD	G	L	0	8	0	0	0
17.1	BLACK RUBBER BEARING PADS	17	UNDER SUPPORT POSTS AND AT BRIDGE ENDS	120 SF	N	NAD	G	L	0	8	0	0	0
17.2	BLACK RUBBER BEARING PADS	17	UNDER SUPPORT POSTS AND AT BRIDGE ENDS	120 SF	N	NAD	G	L	0	8	0	0	0
17.3	BLACK RUBBER BEARING PADS	17	UNDER SUPPORT POSTS AND AT BRIDGE ENDS	120 SF	N	NAD	G	L	0	8	0	0	0
18.1	BROWN CONCRETE	18	PATCH ON SIDEWALKS NW AND SE SIDES	4 SF	N	NAD	G	L	0	8	0	0	0
19.1	1'X 1' TAN VINYL FLOOR TILE WITH TAN MASTIC	19	TENDER HOUSE AT BRIDGE LEVEL	144 SF	N	NAD	G	L	0	8	0	0	0
19.2	1'X 1' TAN VINYL FLOOR TILE WITH TAN MASTIC	19	TENDER HOUSE AT BRIDGE LEVEL	144 SF	N	NAD	G	L	0	8	0	0	0
19.3	1'X 1' TAN VINYL FLOOR TILE WITH TAN MASTIC	19	TENDER HOUSE AT BRIDGE LEVEL	144 SF	N	NAD	G	L	0	8	0	0	0
20.1	GRAY CAULK	20	TENDER HOUSE EXTERIOR AND INTERIOR OF METAL WINDOW FRAMES	28 SF	N	NAD	G	L	0	8	0	0	0
21.1	4" TAN VINYL BASEBOARD WITH TAN MASTIC	21	TENDER HOUSE BRIDGE LEVEL	18 SF	N	NAD	G	L	0	8	0	0	0
22.1	PLASTER	22	TENDER HOUSE INTERIOR WALLS AND CEILINGS	560 SF	N	NAD	G	L	0	8	0	0	0
22.2	PLASTER	22	TENDER HOUSE INTERIOR WALLS AND CEILINGS	560 SF	N	NAD	G	L	0	8	0	0	0
22.3	PLASTER	22	TENDER HOUSE INTERIOR WALLS AND CEILINGS	560 SF	N	NAD	G	L	0	8	0	0	0

COMMENTS/NOTES:

Y - Yes
N - No
G - Good
F - Fair
P - Poor
H - High
M - Medium
L - Low
NA - Not Applicable

NAD - No Asbestos Detected
LF - Linear feet
SF - Square feet
CAT I – Category I
CAT II – Category II
PC – Point Count Analysis
Trace – Less than 1%

chry. - chrysotile
amo. - amosite
trem. - tremolite
cro. - crocidolite

1. All quantities given in square feet unless otherwise indicated.

2. All costs provided assume one mobilization.

3. Shaded and bold text indicates Asbestos-Containing Material (ACM) or Presumed Asbestos-Containing Material (PACM).

Subtotals	0	0	0
Consultant Fees	See Form 2 Page 6		
O & M Costs	See Form 2 Page 6		
TOTAL	See Form 2 Page 6		

ASBESTOS SURVEY AND ASSESSMENT – FORM 2

Bridge Name: Bridge 150049, SR 679 – Pinellas Bayway Structure E Bridge, over Boca Ciega Bay Contract No.: BDJ73
Date of Survey: January 21, 2009 Agency: Florida Department of Transportation District 7
Consultant: Shaw Environmental & Infrastructure, Inc. FDOT Contact Person: Jose P. Garcia

Sample No.	Material Description	Homo-geneous Area No.	Area Description	Quantity (Total for HA)	Friable Y/N	Asbestos Type & % or PACM	Condition G/F/P	Damage Potential H/M/L	Hazard Assess-ment 0-7	Response Priority 1-8	Response Cost	Air Mon Cost	Replace Cost
23.1	WALLBOARD AND JOINT COMPOUND	23	TENDER HOUSE 2ND LEVEL RESTROOM	72 SF	N	NAD	G	L	0	8	0	0	0
24.1	YELLOW PAINT	24	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
24.2	YELLOW PAINT	24	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
24.3	YELLOW PAINT	24	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
24.4 QA/QC	YELLOW PAINT	24	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
25.1	WHITE PAINT	25	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
25.2	WHITE PAINT	25	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
25.3	WHITE PAINT	25	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
25.4 QA/QC	WHITE PAINT	25	ROAD STRIPES	1,434 SF	N	NAD	G	L	0	8	0	0	0
26.1	LIGHT GRAY CONCRETE	26	LIP AROUND MAN WAY ON SE SIDE OF BRIDGE	8 SF	N	NAD	G	L	0	8	0	0	0
27.1	BLACK TAR	27	AT LIGHT POST BY SIDEWALK ON SE SIDE	1 SF	N	NAD	G	L	0	8	0	0	0
28.1	BLACK VIBRATION DAMPERS	28	AT NORTH AND SOUTH BRIDGE ENDS	456 SF	N	NAD	G	L	0	8	0	0	0
28.2	BLACK VIBRATION DAMPERS	28	AT NORTH AND SOUTH BRIDGE ENDS	456 SF	N	NAD	G	L	0	8	0	0	0

COMMENTS/NOTES:

Y - Yes
N - No
G - Good
F - Fair
P - Poor
H - High
M - Medium
L - Low
NA - Not Applicable

NAD - No Asbestos Detected
LF - Linear feet
SF - Square feet
CAT I – Category I
CAT II – Category II
PC – Point Count Analysis
Trace – Less than 1%

chry. - chrysotile
amo. - amosite
trem. - tremolite
cro. - crocidolite

1. All quantities given in square feet unless otherwise indicated.

2. All costs provided assume one mobilization.

3. Shaded and bold text indicates Asbestos-Containing Material (ACM) or Presumed Asbestos-Containing Material (PACM).

Subtotals	0	0	0
Consultant Fees	See Form 2 Page 6		
O & M Costs	See Form 2 Page 6		
TOTAL	See Form 2 Page 6		

ASBESTOS SURVEY AND ASSESSMENT – FORM 2

Bridge Name: Bridge 150049, SR 679 – Pinellas Bayway Structure E Bridge, over Boca Ciega Bay Contract No.: BDJ73
Date of Survey: January 21, 2009 Agency: Florida Department of Transportation District 7
Consultant: Shaw Environmental & Infrastructure, Inc. FDOT Contact Person: Jose P. Garcia

Sample No.	Material Description	Homo-geneous Area No.	Area Description	Quantity (Total for HA)	Friable Y/N	Asbestos Type & % or PACM	Condition G/F/P	Damage Potential H/M/L	Hazard Assess-ment 0-7	Response Priority 1-8	Response Cost	Air Mon Cost	Replace Cost
28.3	BLACK VIBRATION DAMPERS	28	AT NORTH AND SOUTH BRIDGE ENDS	456 SF	N	NAD	G	L	0	8	0	0	0
29.1	CONCRETE	29	PILINGS/PIERS AT WOOD FENDERS	7,040 SF	N	NAD	G	L	0	8	0	0	0
29.2	CONCRETE	29	PILINGS/PIERS AT WOOD FENDERS	7,040 SF	N	NAD	G	L	0	8	0	0	0
29.3	CONCRETE	29	PILINGS/PIERS AT WOOD FENDERS	7,040 SF	N	NAD	G	L	0	8	0	0	0
ASSUMED	**BRAKE SHOES**	**30**	**ON BRIDGE LIFT EQUIPMENT**	**4 SF**	**N**	**ASSUMED ACM**	**G**	**L**	**1**	**7**	**0**	**0**	**0**
											0	0	0
											0	0	0
											0	0	0
											0	0	0
											0	0	0
											0	0	0
											0	0	0
											0	0	0

COMMENTS/NOTES:

Y - Yes
N - No
G - Good
F - Fair
P - Poor
H - High
M - Medium
L - Low
NA - Not Applicable

NAD - No Asbestos Detected
LF - Linear feet
SF - Square feet
CAT I – Category I
CAT II – Category II
PC – Point Count Analysis
Trace – Less than 1%

chry. - chrysotile
amo. - amosite
trem. - tremolite
cro. - crocidolite

1. All quantities given in square feet unless otherwise indicated.

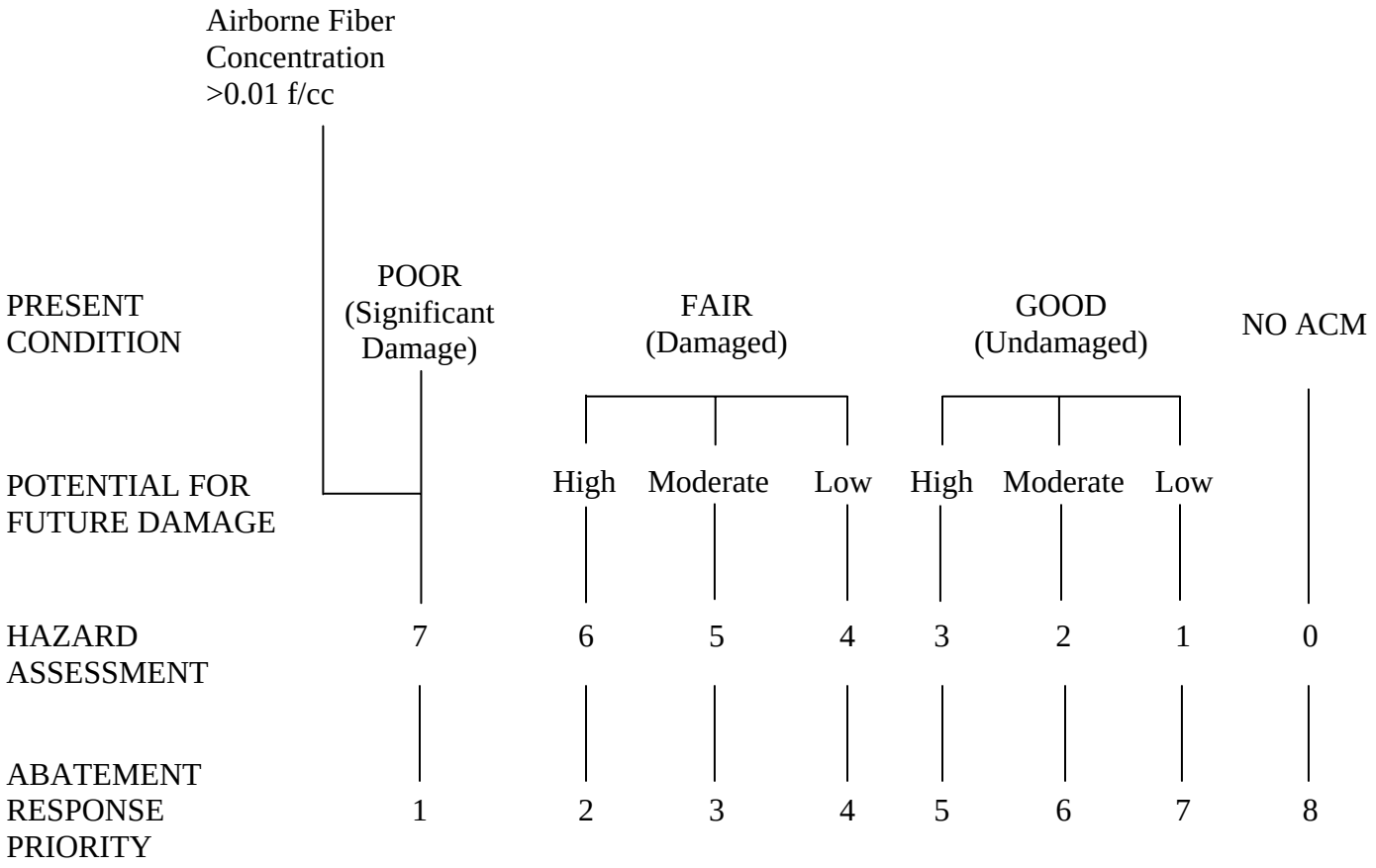
2. All costs provided assume one mobilization.

3. Shaded and bold text indicates Asbestos-Containing Material (ACM) or Presumed Asbestos-Containing Material (PACM).

Subtotals	0	0	0
Consultant Fees	0		
O & M Costs	0		
TOTAL	0.00		

ASBESTOS HAZARD ASSESSMENT DECISION TREE

MATERIAL



Because people tend to equate a “1” with top priority, the assessment numbers are reversed to establish the response priority.

ASBESTOS SURVEY REPORT – FORM 3

PERSONNEL SUMMARY

Facility/Bridge Name: SR 679 – Pinellas Bayway Structure E Bridge over Boca Ciega Bay
Bridge No.: Bridge 150049

Date of Survey: January 21, 2009

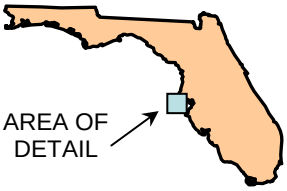
Name and Address	Task Performed	License or Certificate
James T. Hanskat, PE, LAC	Asbestos Consultant	AX-0000031
Shaw Environmental & Infrastructure, Inc. 725 US Highway 301 South Tampa, Florida 33619-4349	Asbestos Business	ZA-317
William Zukauskas Shaw Environmental & Infrastructure, Inc. 9143 Philips Highway, Suite 400 Jacksonville, Florida 32256-7460	Asbestos Inspector Asbestos Management Planner	080422-0197 080423-0217
EMSL Analytical, Inc. (EMSL) 5125 Adanson Street, Suite 900 Orlando, FL 32804	Bulk Analysis	NVLAP No. 101151-0
International Asbestos Testing Laboratory (IATL) 9000 Commerce Parkway, Suite B Mt. Laurel, New Jersey 08054	Quality Assurance	NVLAP No. 101165-0

SECTION 2

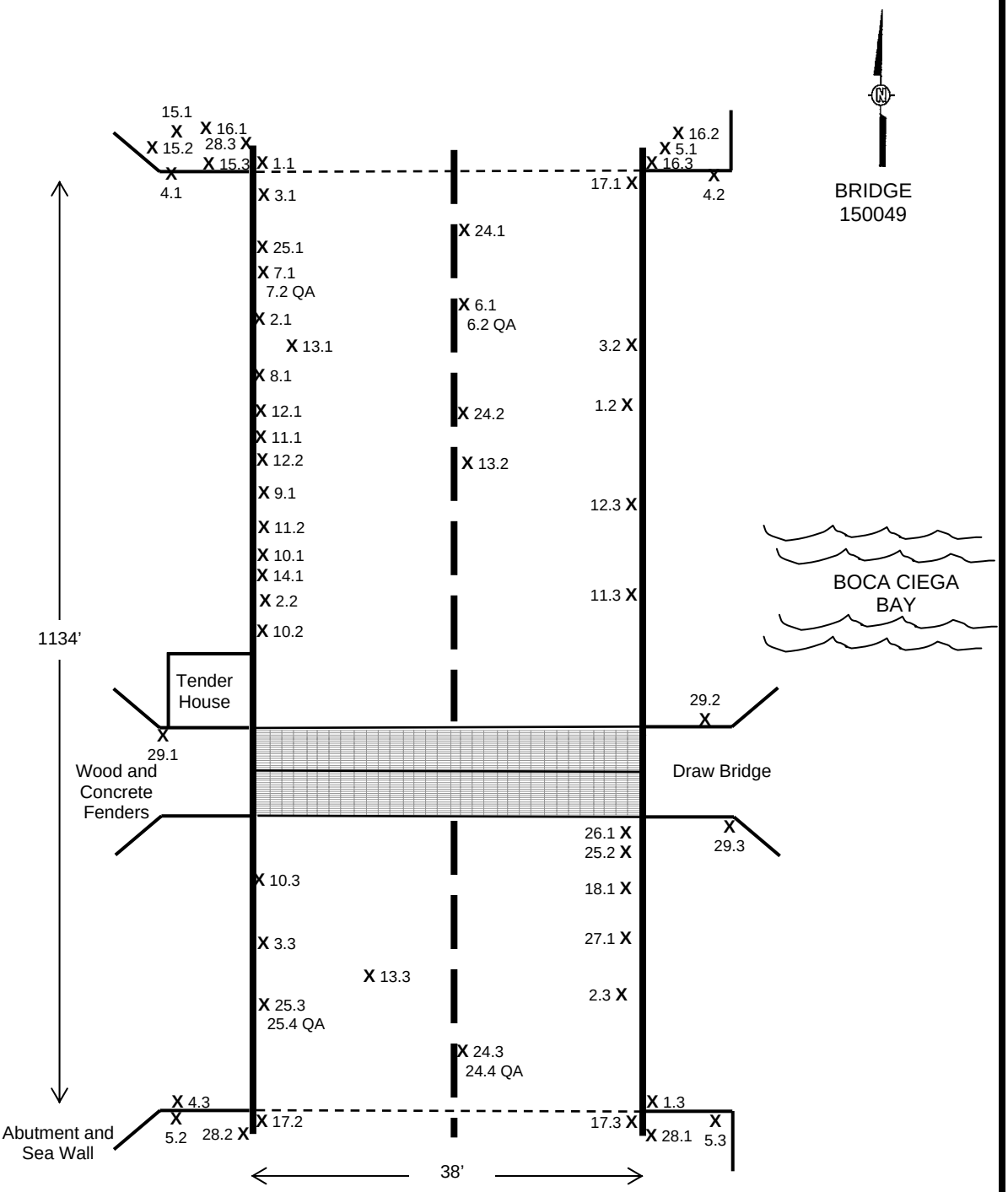
BRIDGE DIAGRAM(S)

Legend

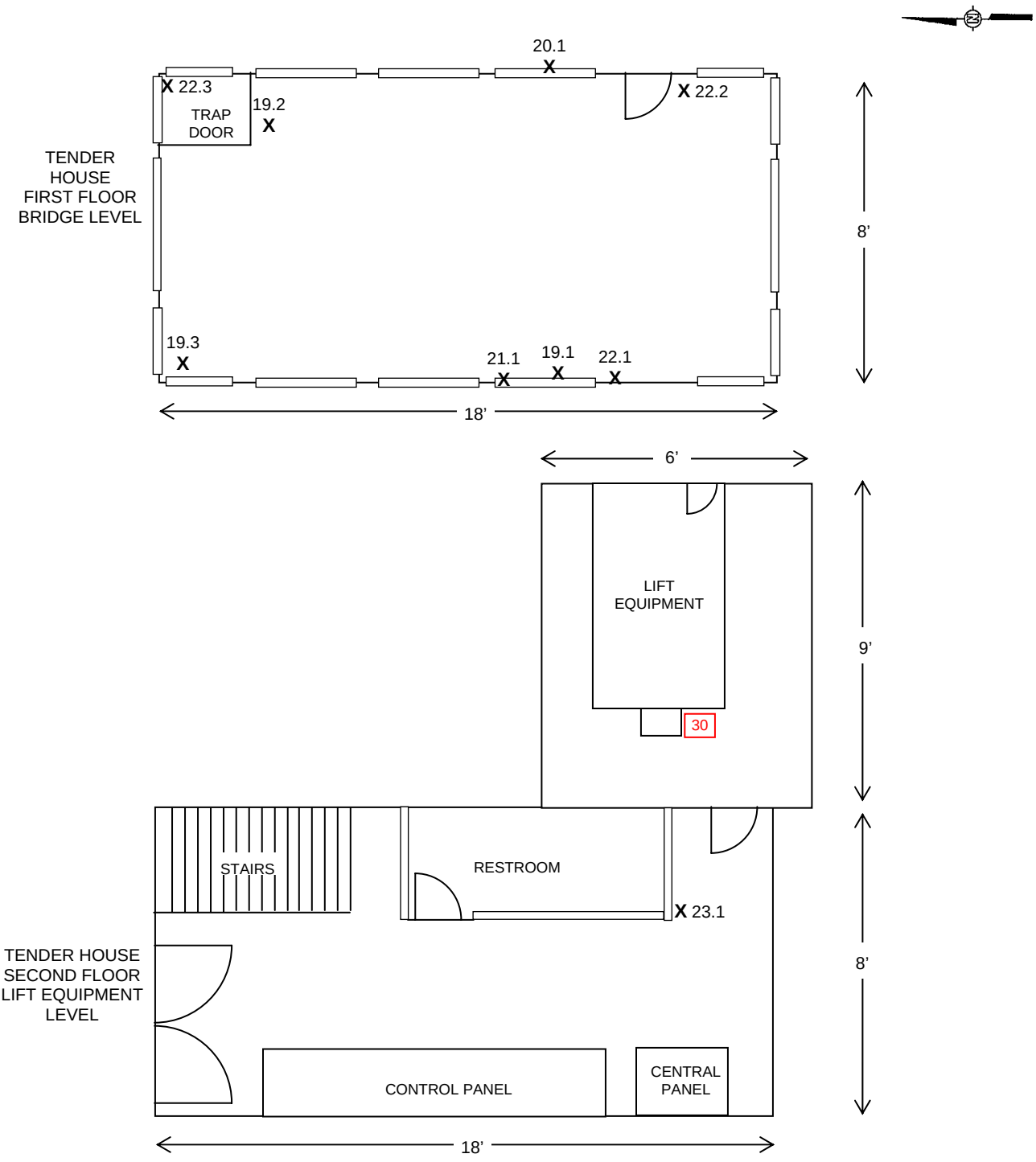
Not To Scale



Prepared by **Shaw Environmental & Infrastructure, Inc.**	Survey Date January 21, 2009 Project No. **Error! Reference source not found.**	Bridge 150049 SR 679 – Pinellas Bayway Structure E Bridge over Boca Ciega Bay St. Petersburg, Pinellas County, FL	**Figure 1** **Site Location Map**



Legend **Not To Scale** X Sampling Location X QA – Quality Assurance/Quality Control Sampling Location			
Prepared by **Shaw Environmental & Infrastructure, Inc.**	Survey Date January 21, 2009 Project No. **Error! Reference source not found.**	Bridge 150049 SR 679 – Pinellas Bayway Structure E Bridge over Boca Ciega Bay St. Petersburg, Pinellas County, FL	**Figure 2** **Sample Location Map Bridge Structure E**



Legend **Not To Scale**	**X** Sampling Location **X** QA – Quality Assurance/Quality Control Sampling Location	30	Assumed ACM – HA 30 Brake Shoes in Lift Equipment

Prepared by **Shaw Environmental & Infrastructure, Inc.**	Survey Date January 21, 2009 Project No. **Error! Reference source not found.**	Bridge 150049 SR 679 – Pinellas Bayway Structure E Bridge over Boca Ciega Bay St. Petersburg, Pinellas County, FL	**Figure 3** **Sample Location Map Tender House**

SECTION 3

PHOTOGRAPHS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

PHOTO 1 – 01/21/09
BRIDGE 150049 - SR 679 – PINELLAS BAYWAY STRUCTURE E BRIDGE
OVER BOCA CIEGA BAY, ST. PETERSBURG, PINELLAS COUNTY, FL

PHOTO 2 – 01/21/09
BRIDGE 150049 - SR 679 – PINELLAS BAYWAY STRUCTURE E BRIDGE
TENDER HOUSE

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

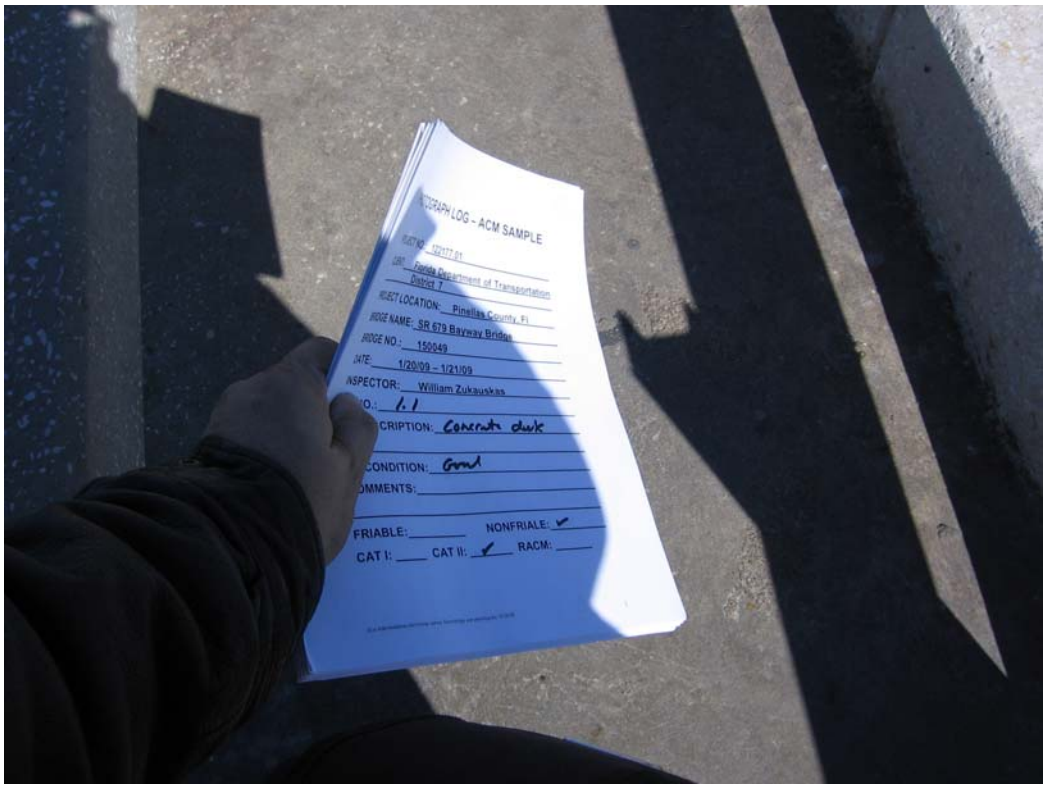


PHOTO 3 – 01/21/09 – SAMPLE 1.1 – HA 1
CONCRETE
BRIDGE DECK AND COLUMNS

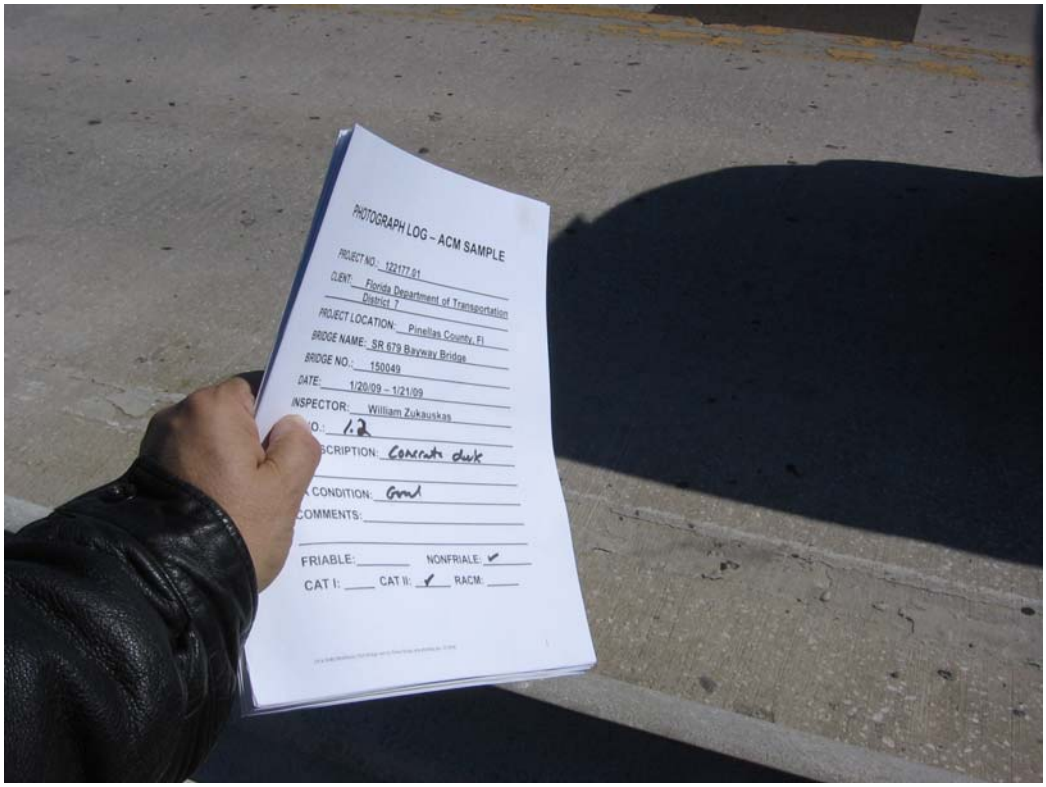


PHOTO 4 – 01/21/09 – SAMPLE 1.2 – HA 1
CONCRETE
BRIDGE DECK AND COLUMNS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

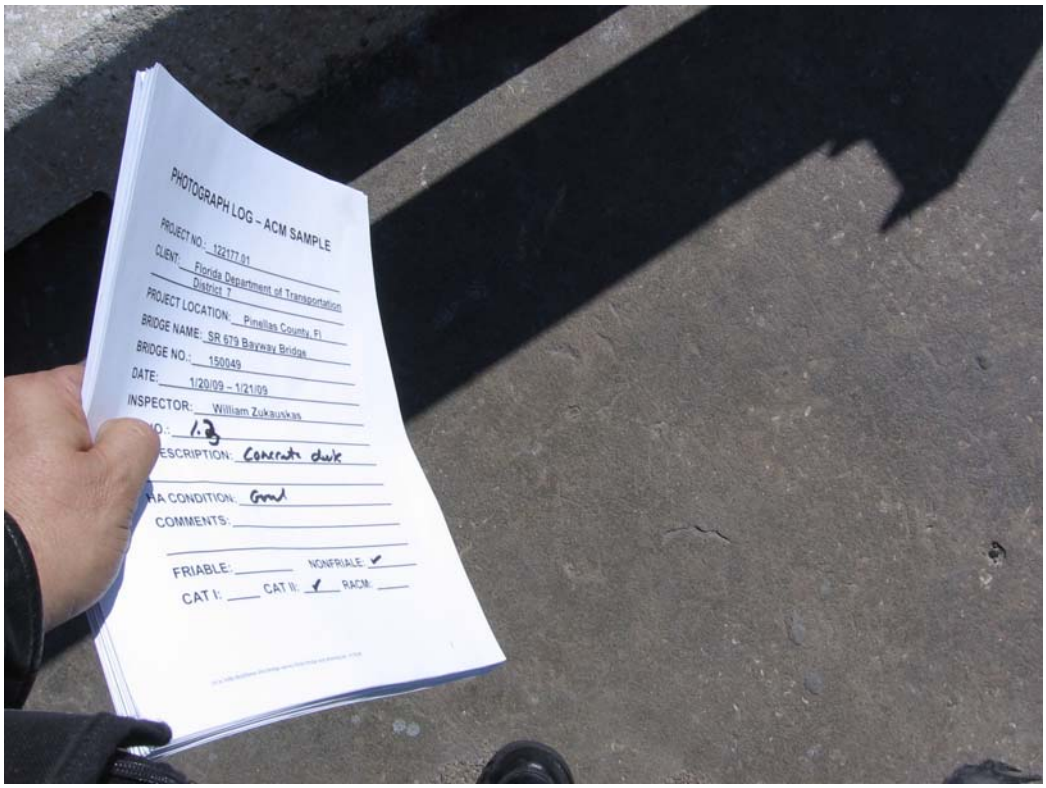


PHOTO 5 – 01/21/09 – SAMPLE 1.3 – HA 1
CONCRETE
BRIDGE DECK AND COLUMNS

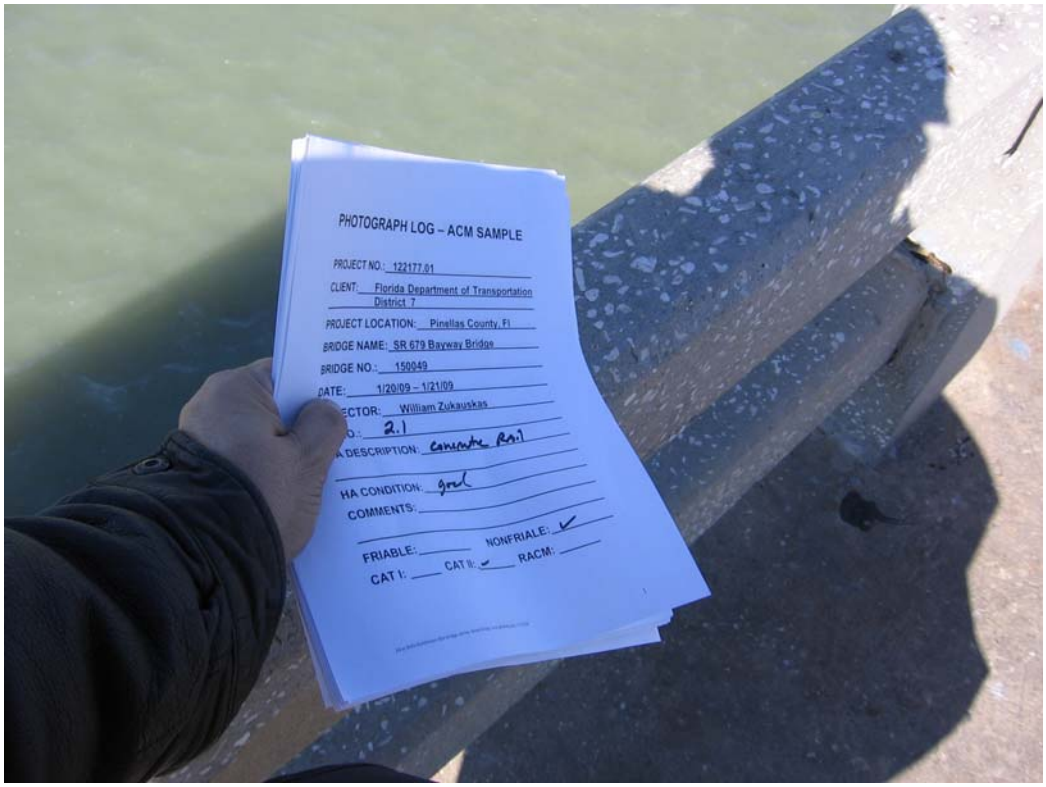


PHOTO 6 – 01/21/09 – SAMPLE 2.1 – HA 2
CONCRETE
RAILS AND BEAMS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

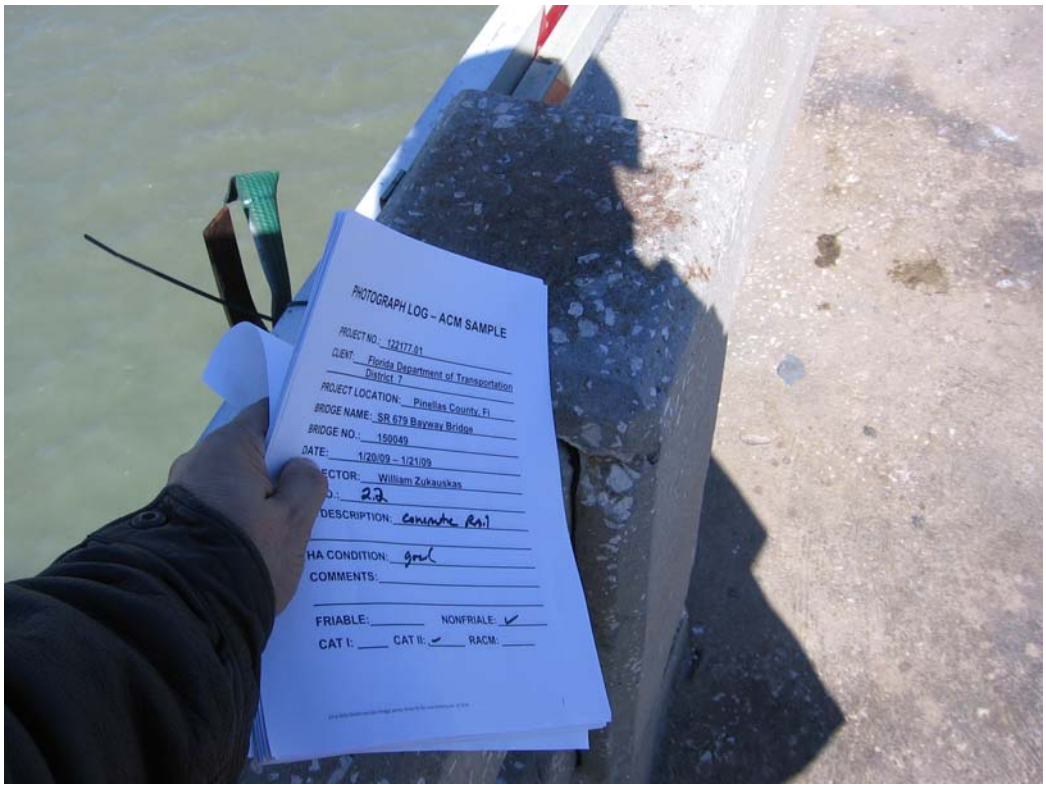


PHOTO 7 – 01/21/09 – SAMPLE 2.2 – HA 2
CONCRETE
RAILS AND BEAMS

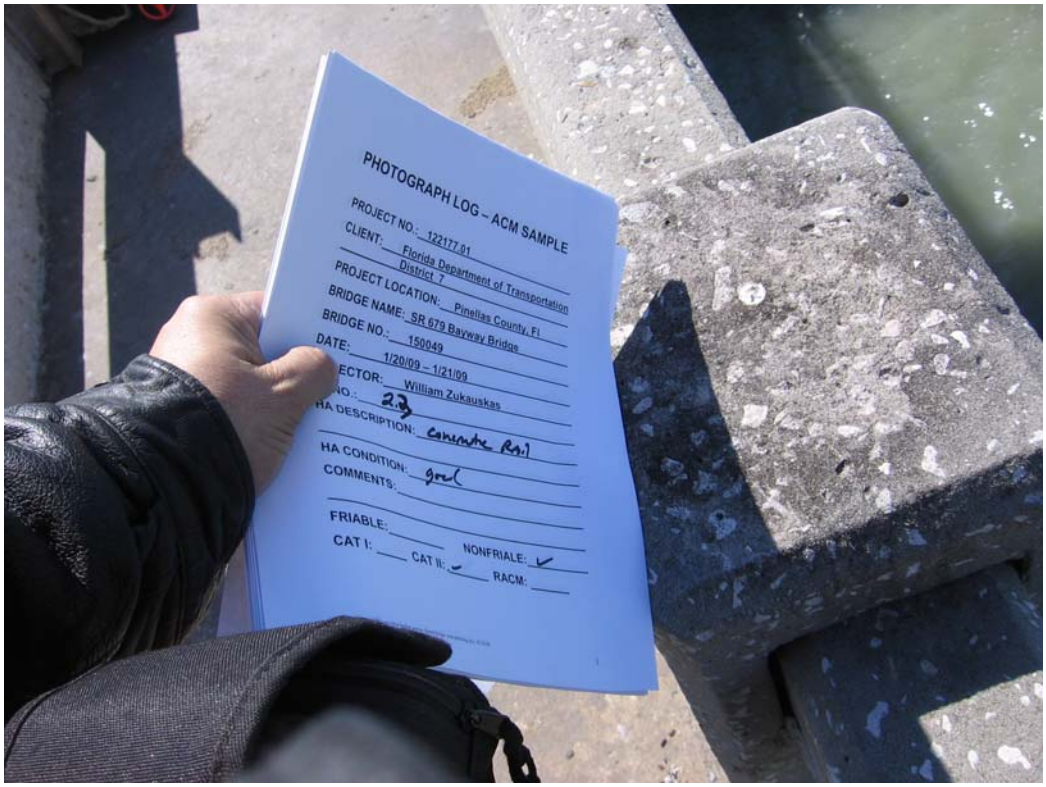


PHOTO 8 – 01/21/09 – SAMPLE 2.3 – HA 2
CONCRETE
RAILS AND BEAMS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

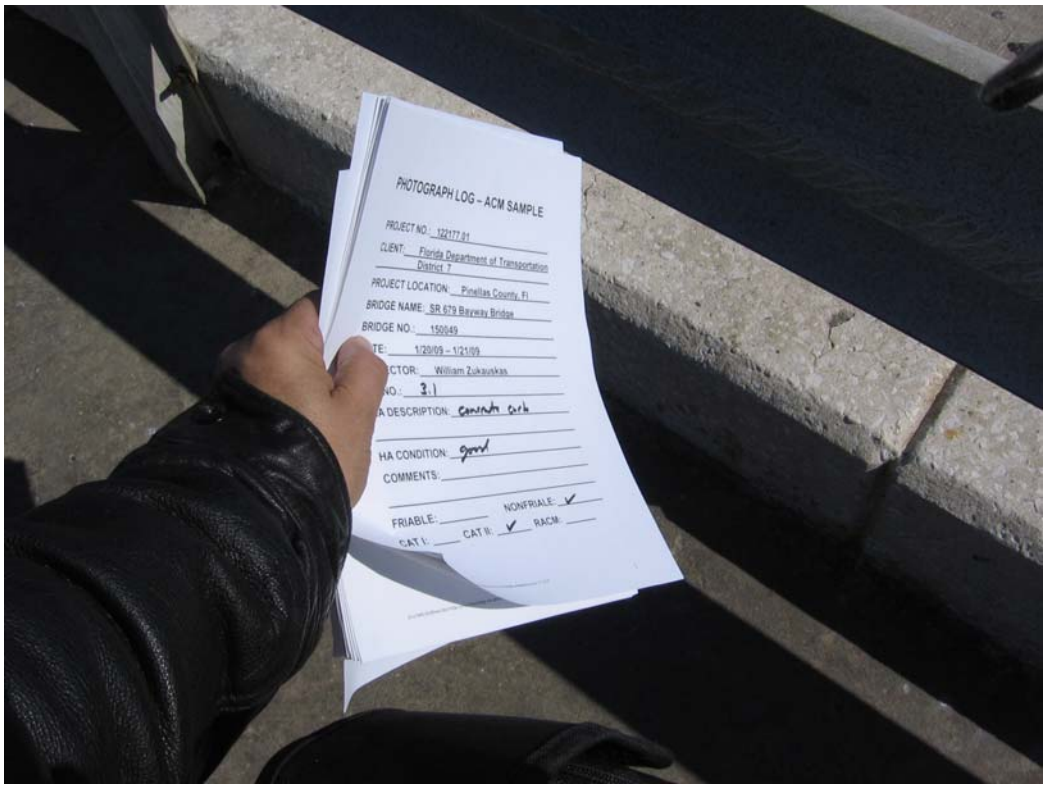


PHOTO 9 – 01/21/09 – SAMPLE 3.1 – HA 3
CONCRETE
CURB

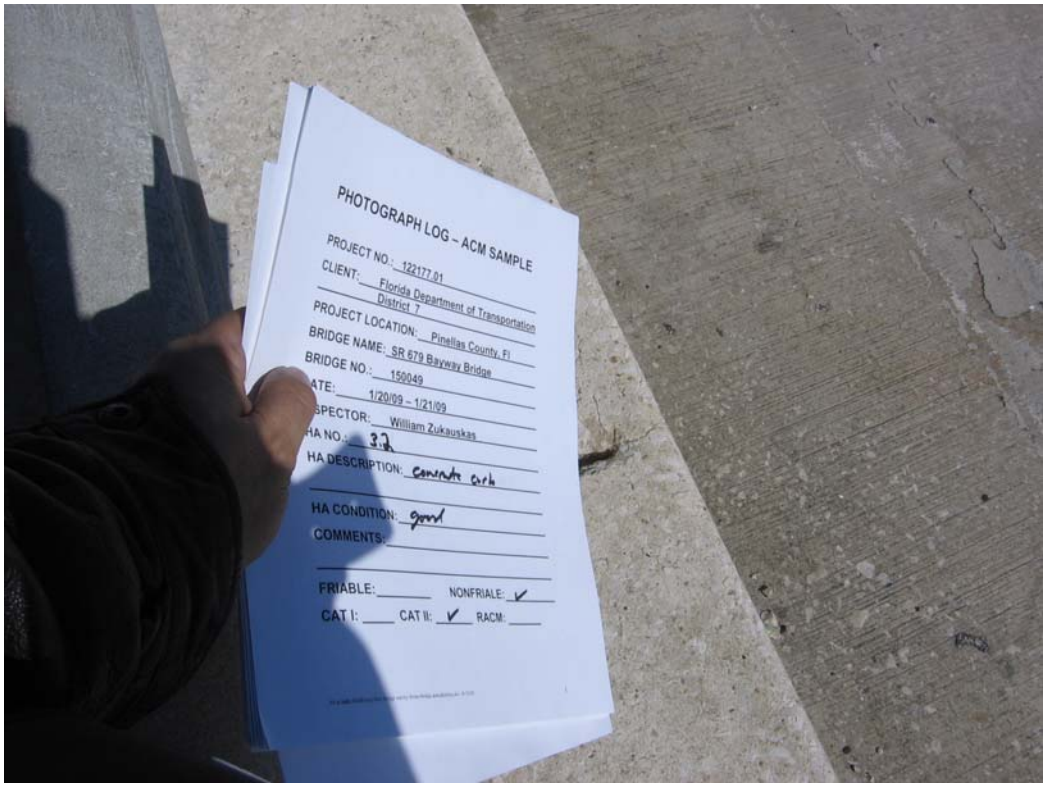


PHOTO 10 – 01/21/09 – SAMPLE 3.2 – HA 3
CONCRETE
CURB

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

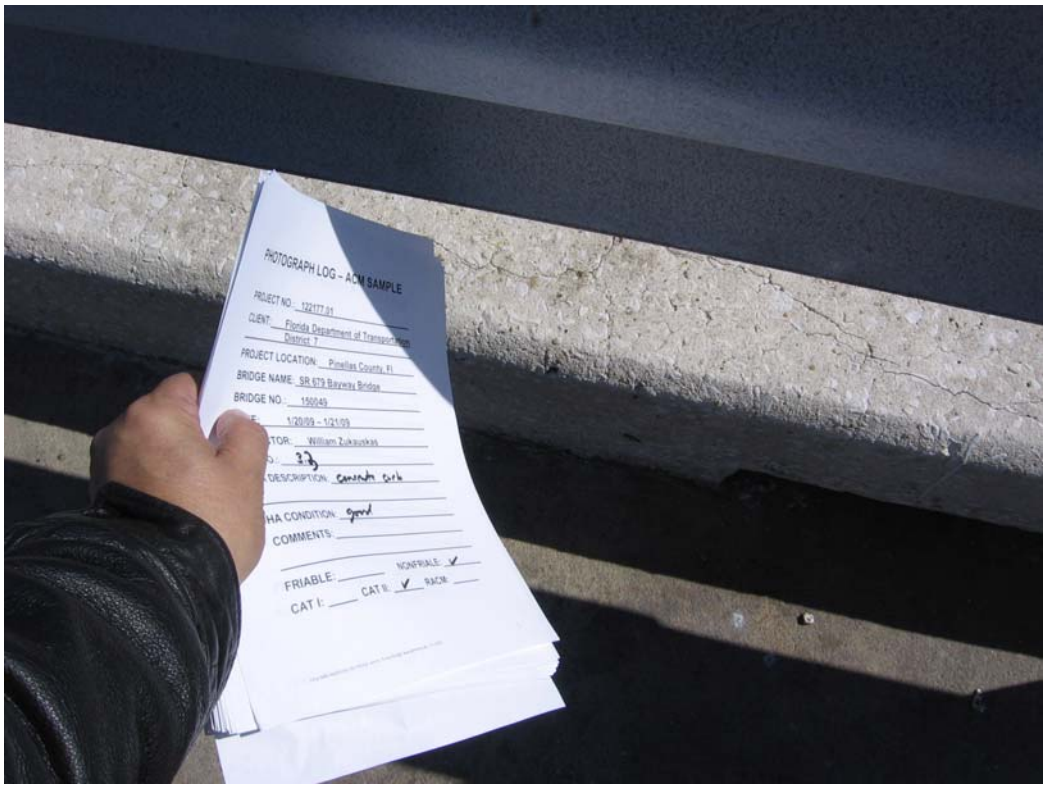


PHOTO 11 – 01/21/09 – SAMPLE 3.3 – HA 3
CONCRETE
CURB

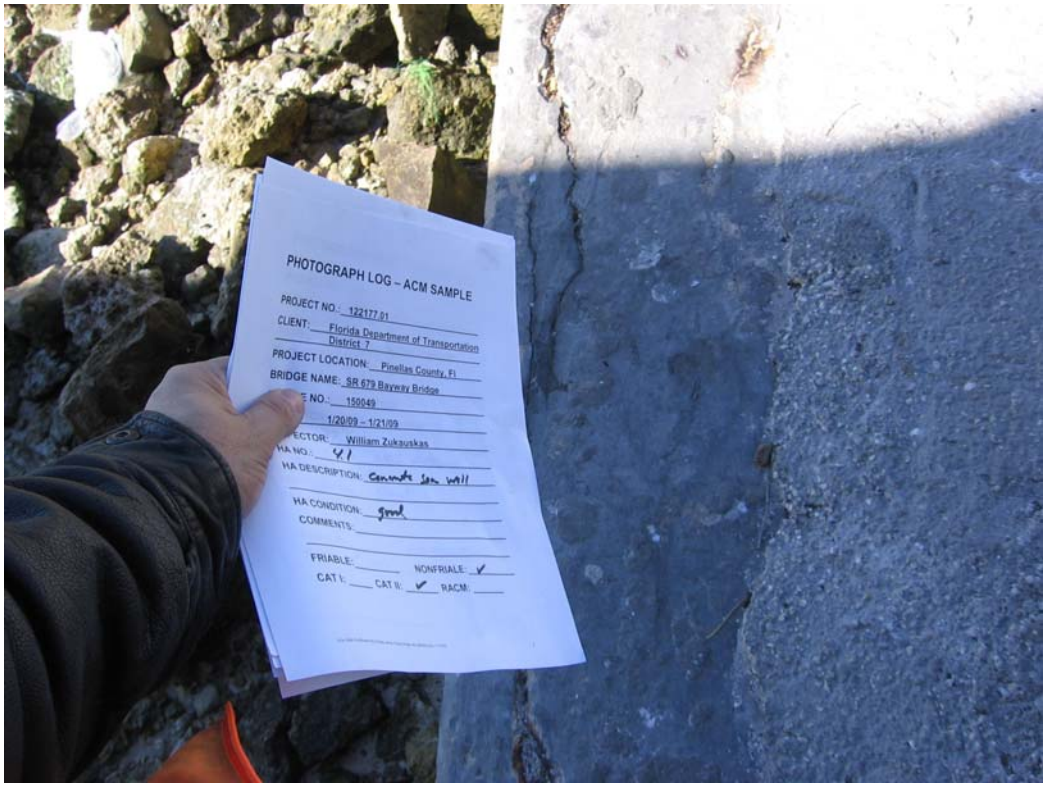


PHOTO 12 – 01/21/09 – SAMPLE 4.1 – HA 4
CONCRETE
SEAWALL

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

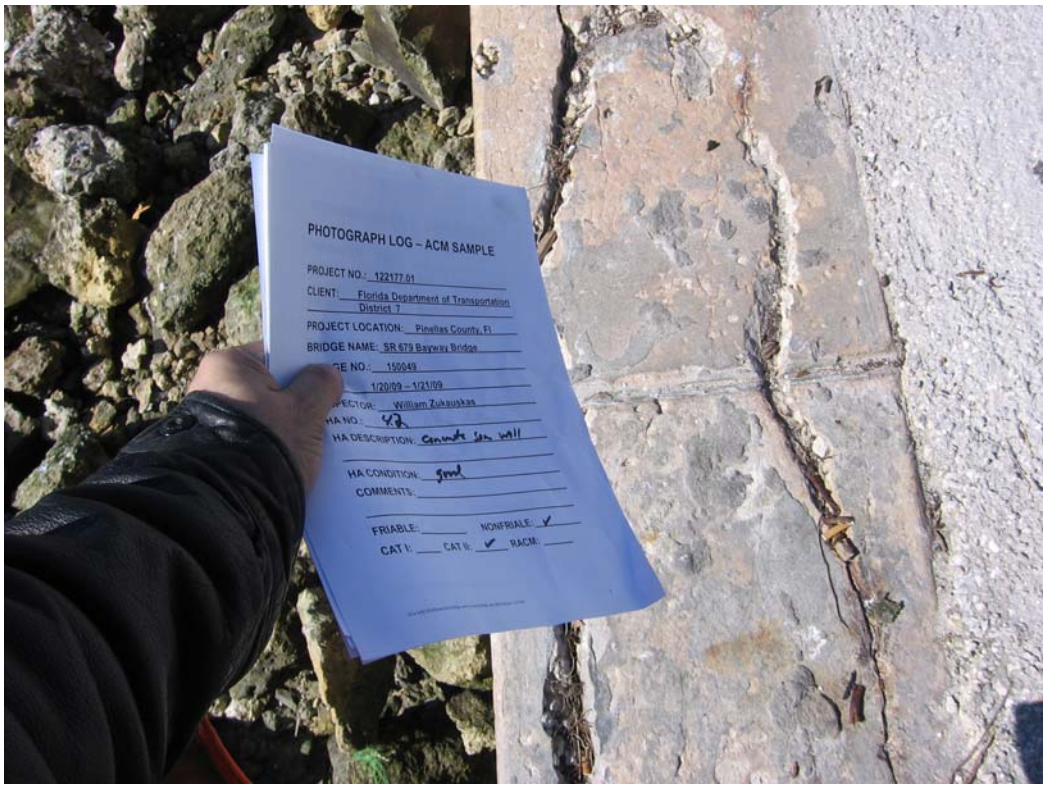


PHOTO 13 – 01/21/09 – SAMPLE 4.2 – HA 4
CONCRETE
SEAWALL

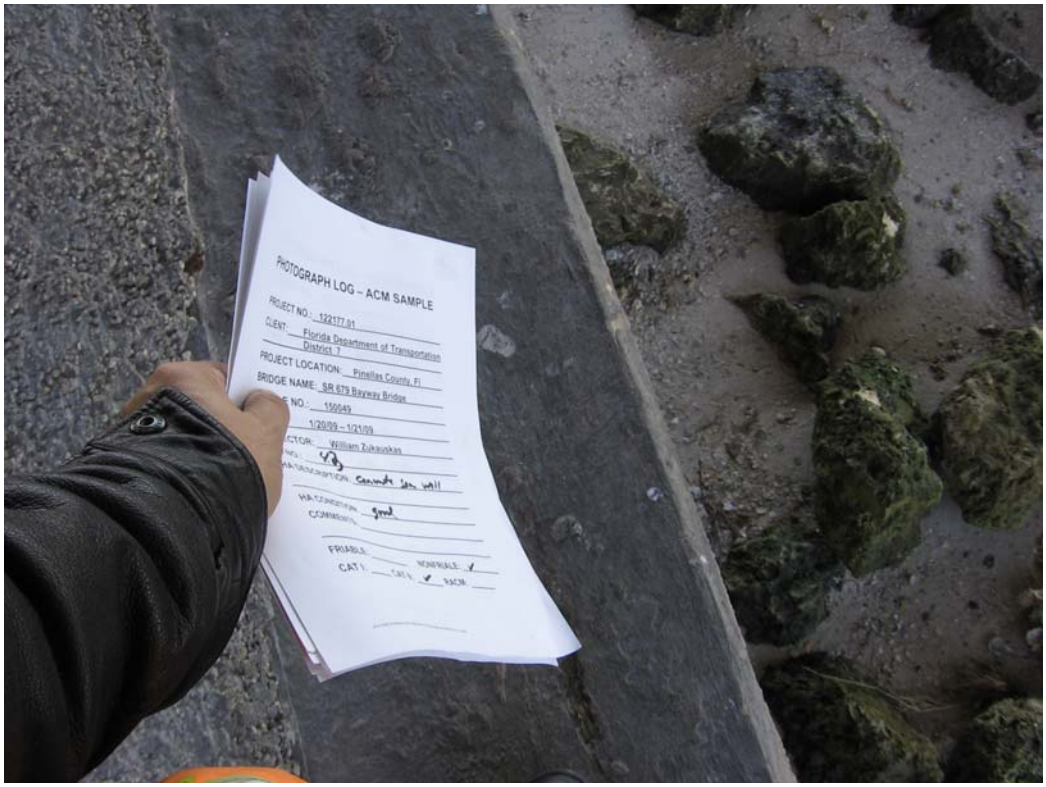


PHOTO 14 – 01/21/09 – SAMPLE 4.3 – HA 4
CONCRETE
SEAWALL

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

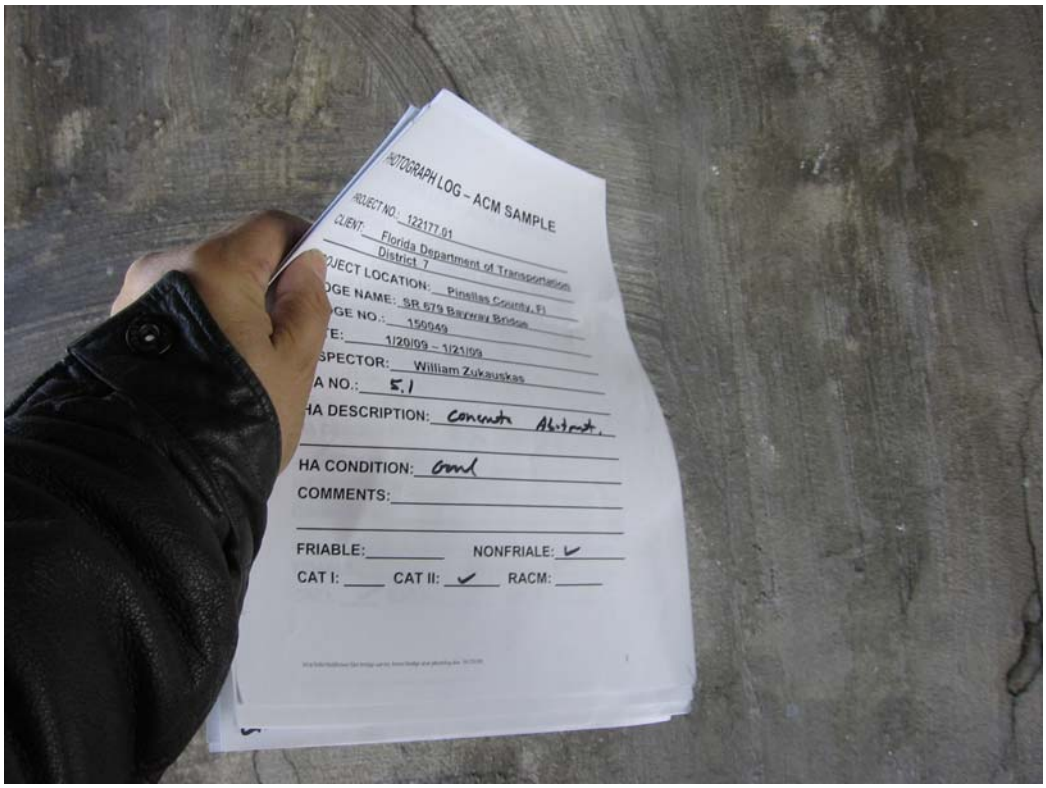


PHOTO 15 – 01/21/09 – SAMPLE 5.1 – HA 5
CONCRETE
ABUTMENT WALLS

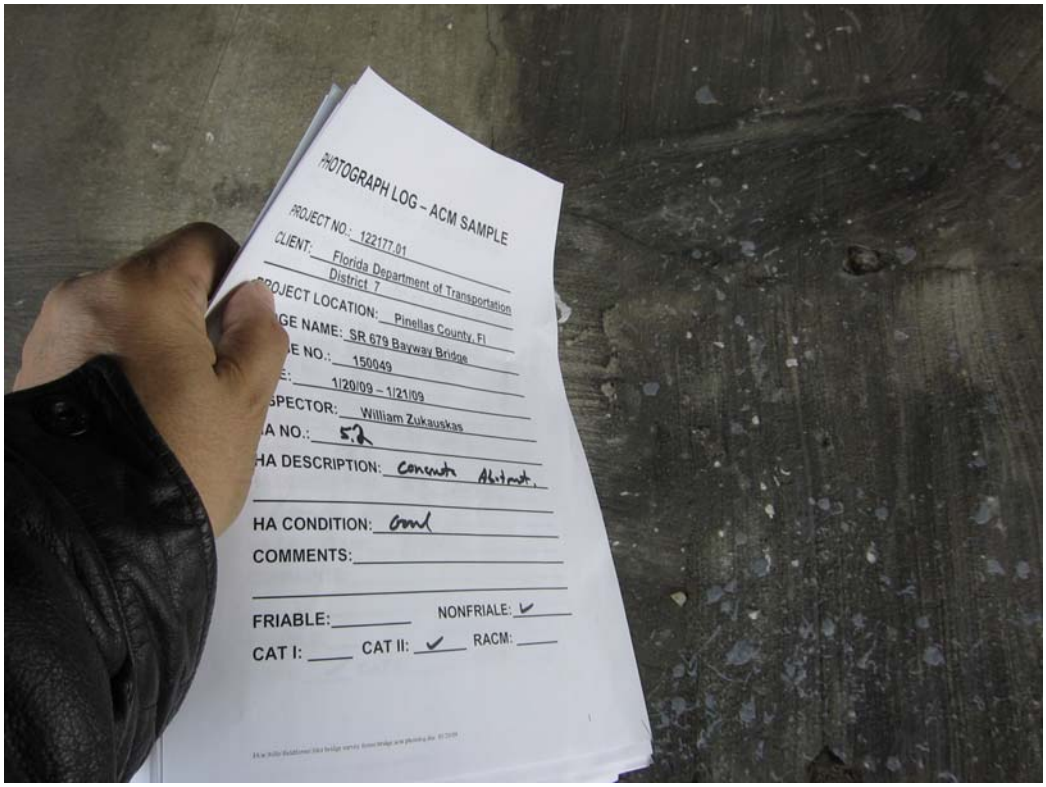


PHOTO 16 – 01/21/09 – SAMPLE 5.2 – HA 5
CONCRETE
ABUTMENT WALLS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

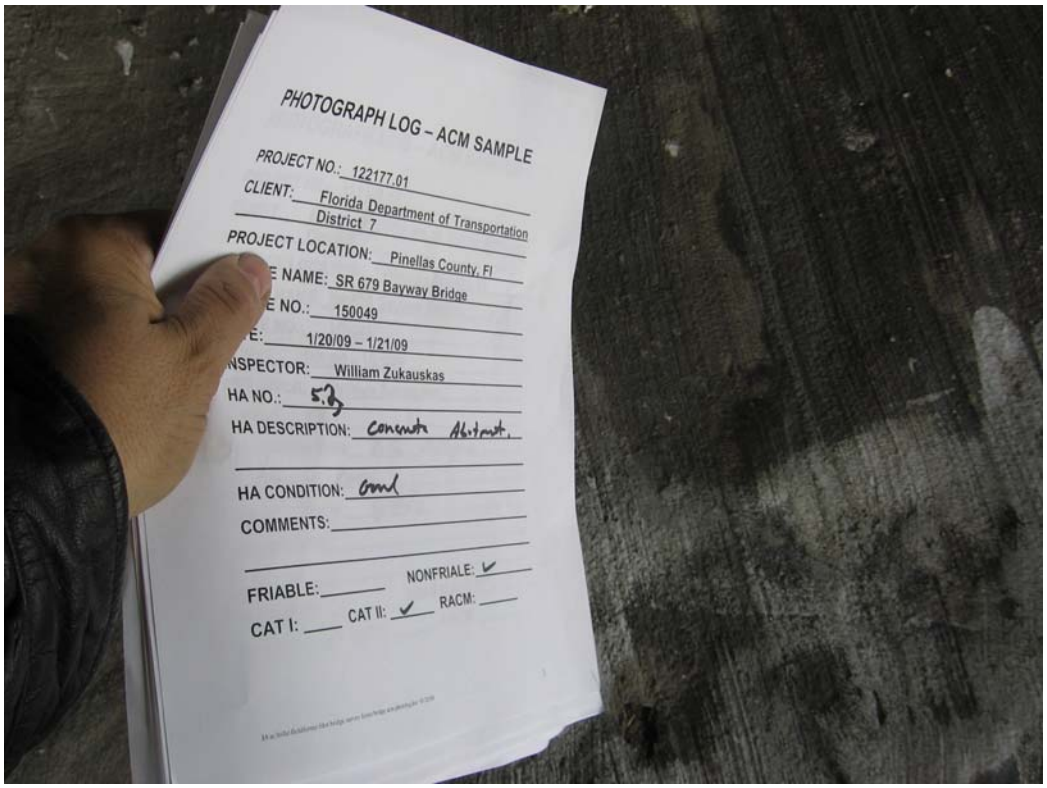


PHOTO 17 – 01/21/09 – SAMPLE 5.3 – HA 5
CONCRETE
ABUTMENT WALLS

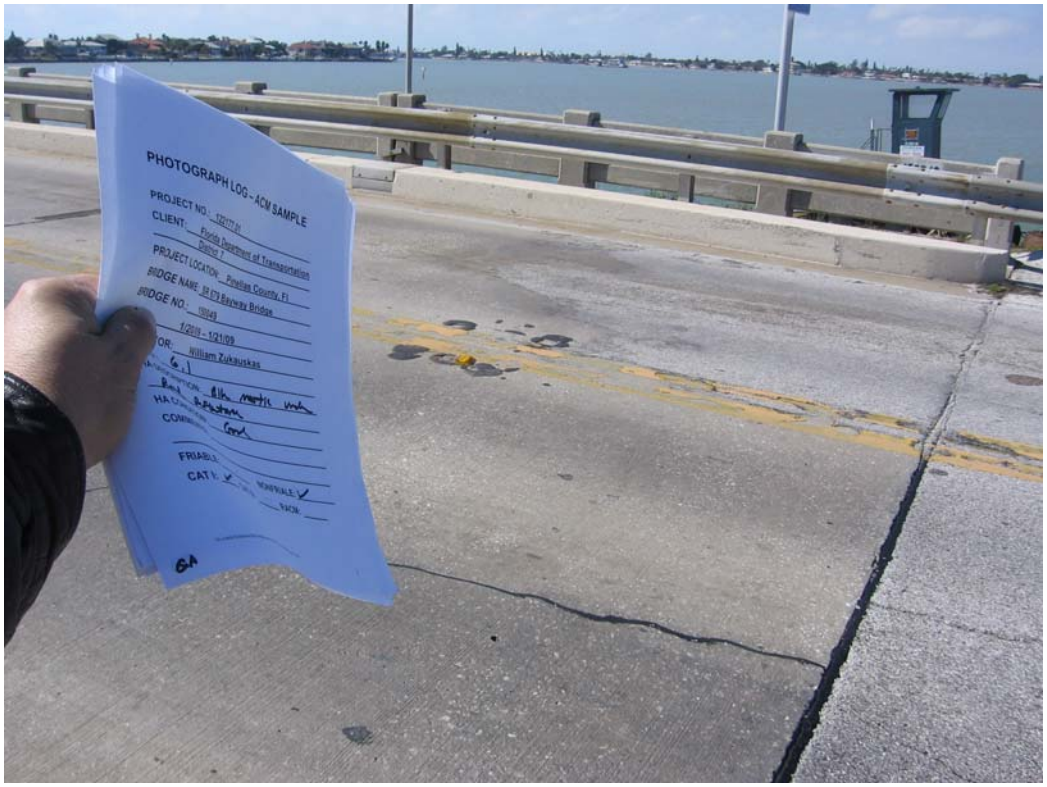


PHOTO 18 – 01/21/09 – SAMPLE 6.1 – HA 6
BLACK MASTIC
UNDER ROAD REFLECTORS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

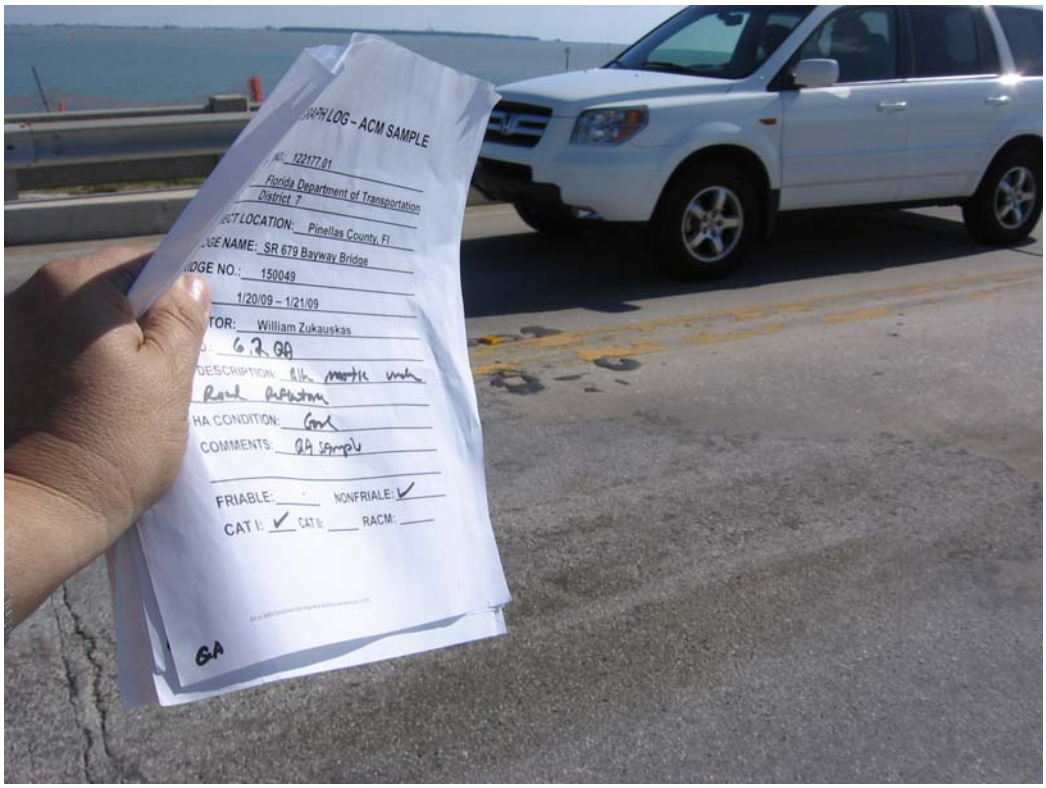


PHOTO 19 – 01/21/09 – SAMPLE 6.2 QA/QC – HA 6
BLACK MASTIC
UNDER ROAD REFLECTORS

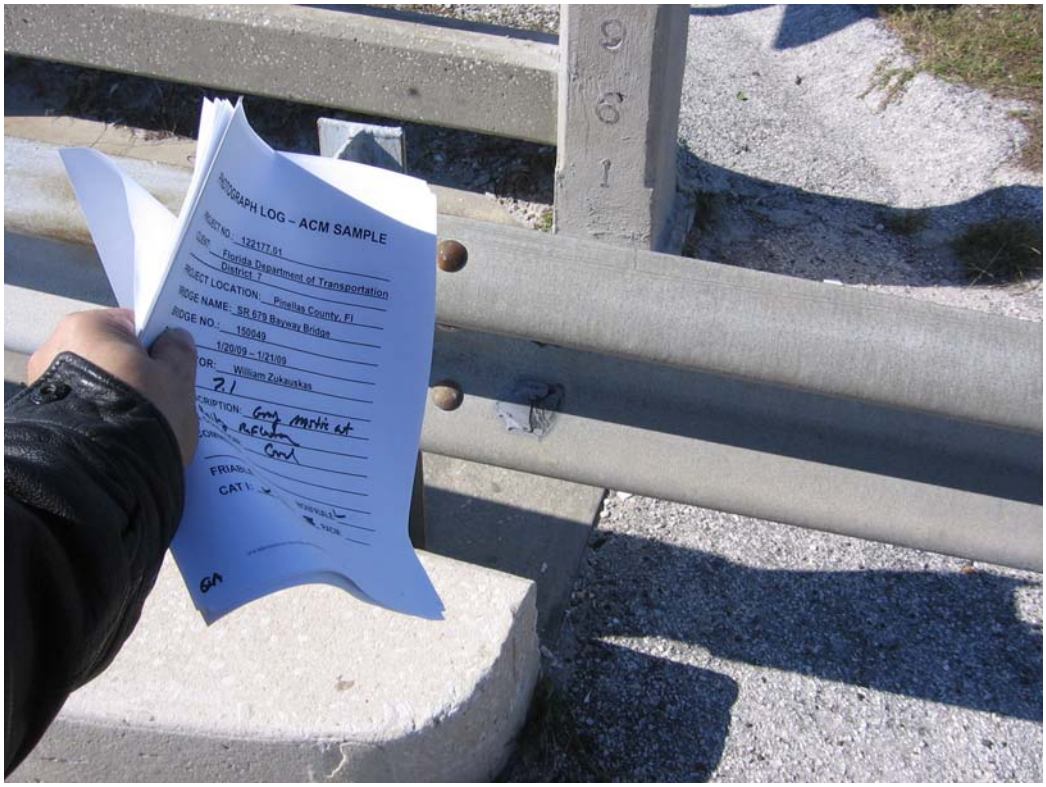


PHOTO 20 – 01/21/09 – SAMPLE 7.1 – HA 7
GRAY MASTIC
UNDER RAILING REFLECTORS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

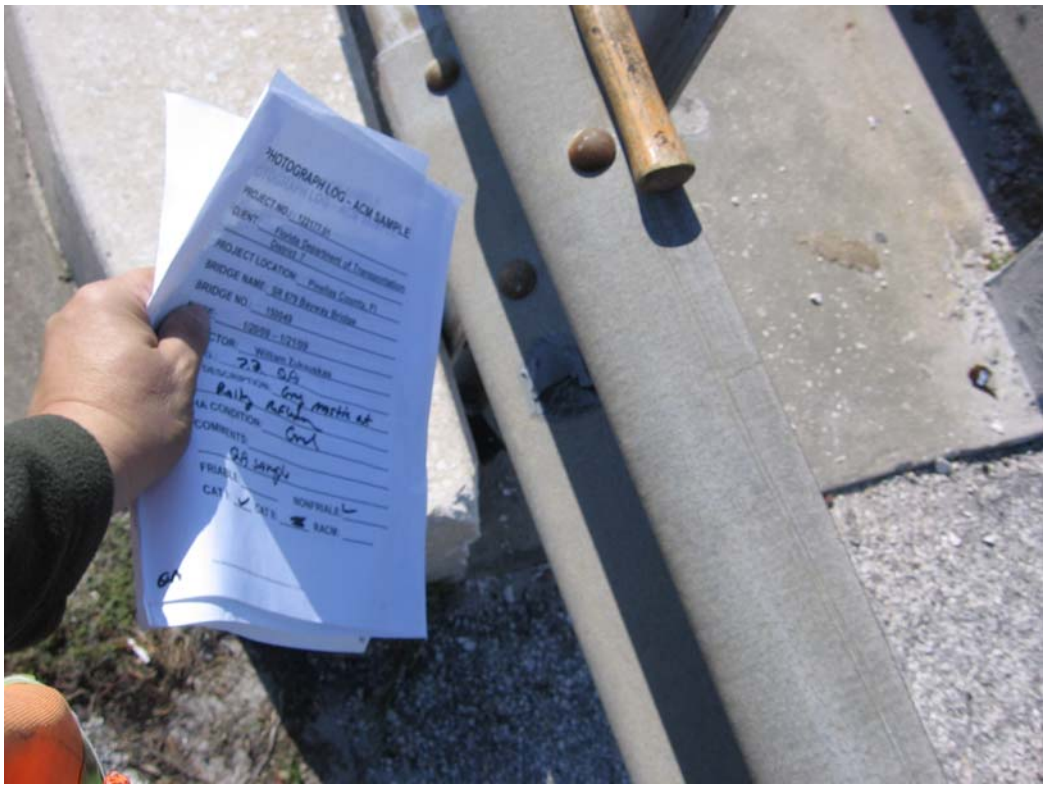


PHOTO 21 – 01/21/09 – SAMPLE 7.2 QA/QC – HA 7
GRAY MASTIC
UNDER RAILING REFLECTORS

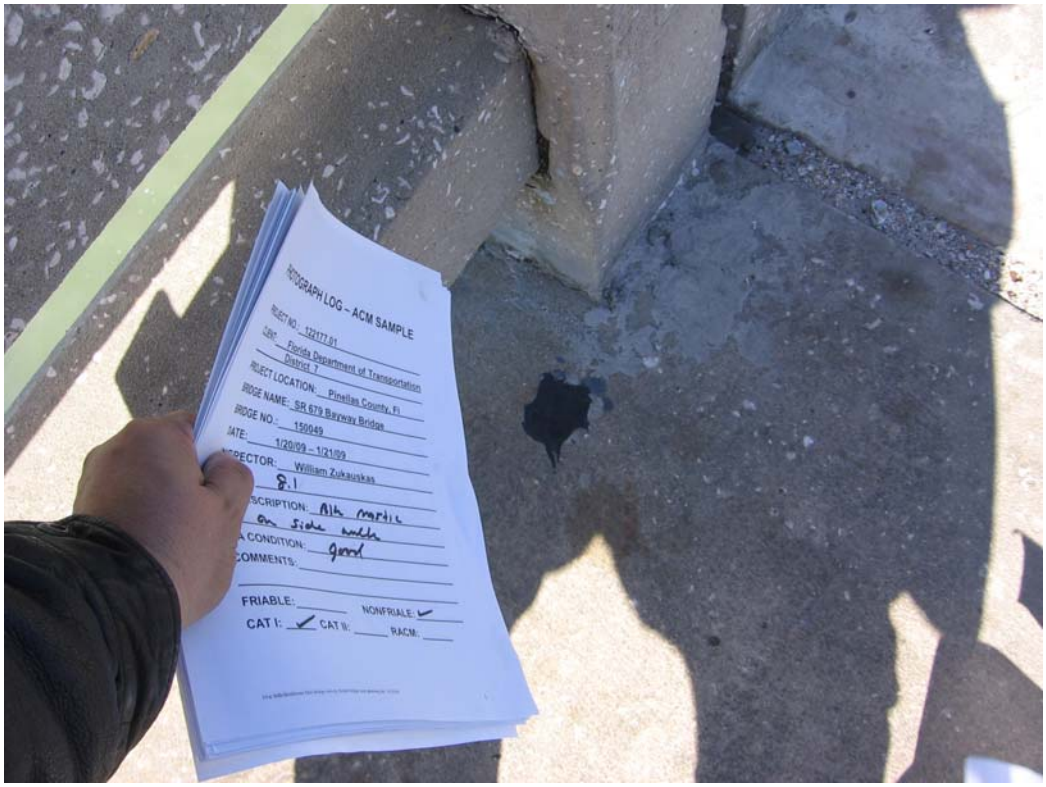


PHOTO 22 – 01/21/09 – SAMPLE 8.1 – HA 8
BLACK MASTIC
PATCHES ON WEST SIDEWALK

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

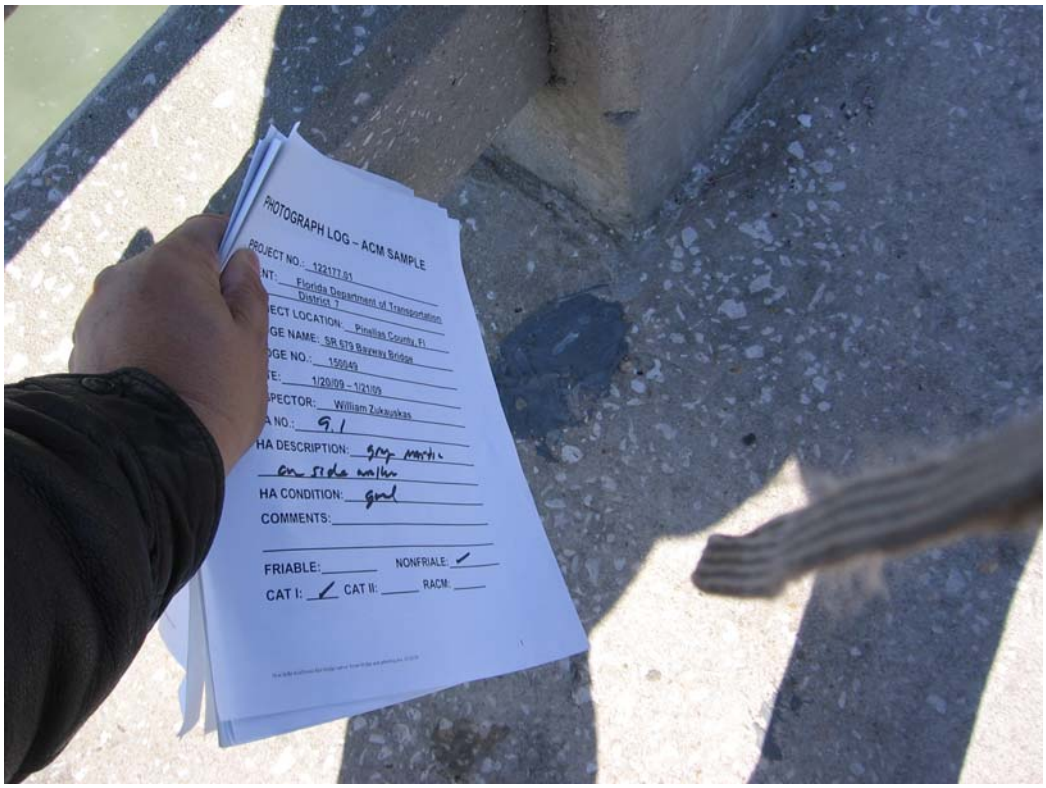


PHOTO 23 – 01/21/09 – SAMPLE 9.1 – HA 9
GRAY MASTIC
PATCHES ON WEST SIDEWALK

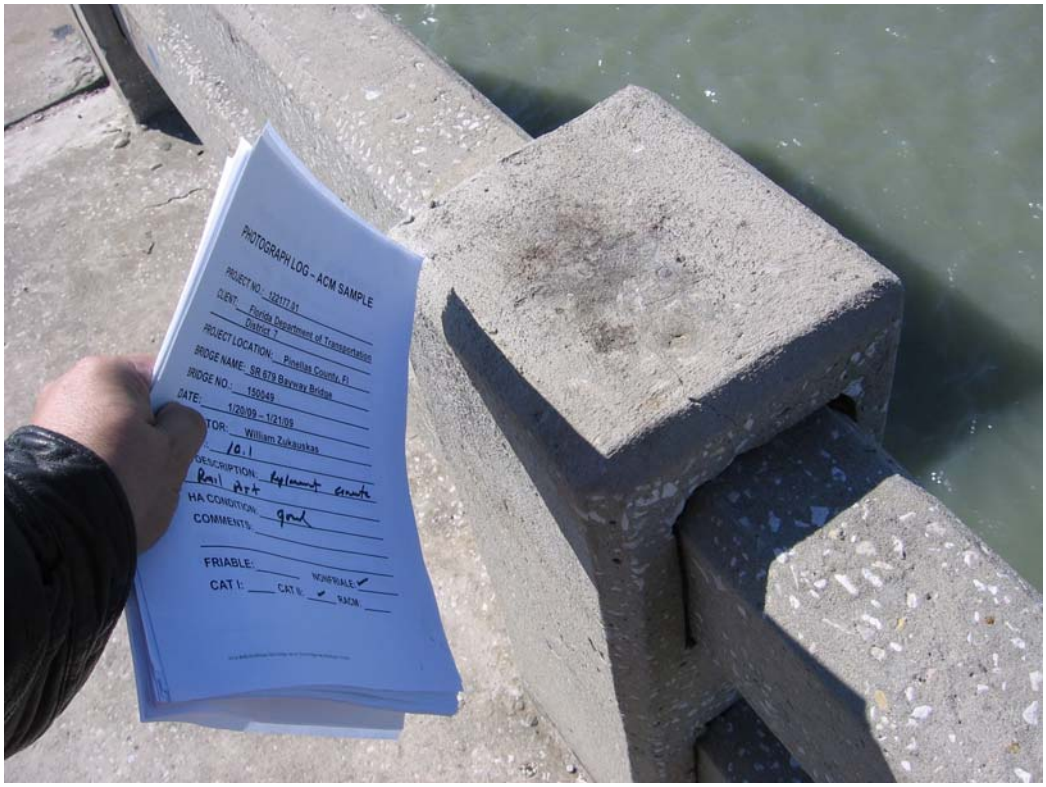


PHOTO 24 – 01/21/09 – SAMPLE 10.1 – HA 10
CONCRETE
REPLACEMENT RAIL POSTS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

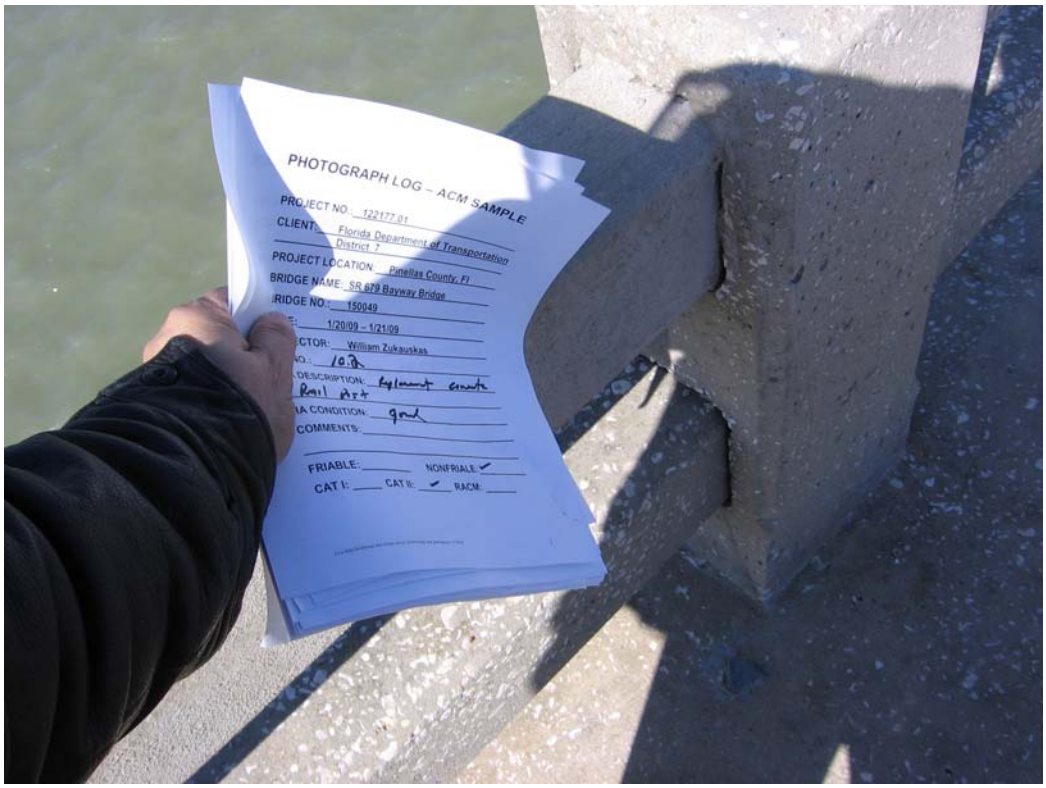


PHOTO 25 – 01/21/09 – SAMPLE 10.2 – HA 10
CONCRETE
REPLACEMENT RAIL POSTS

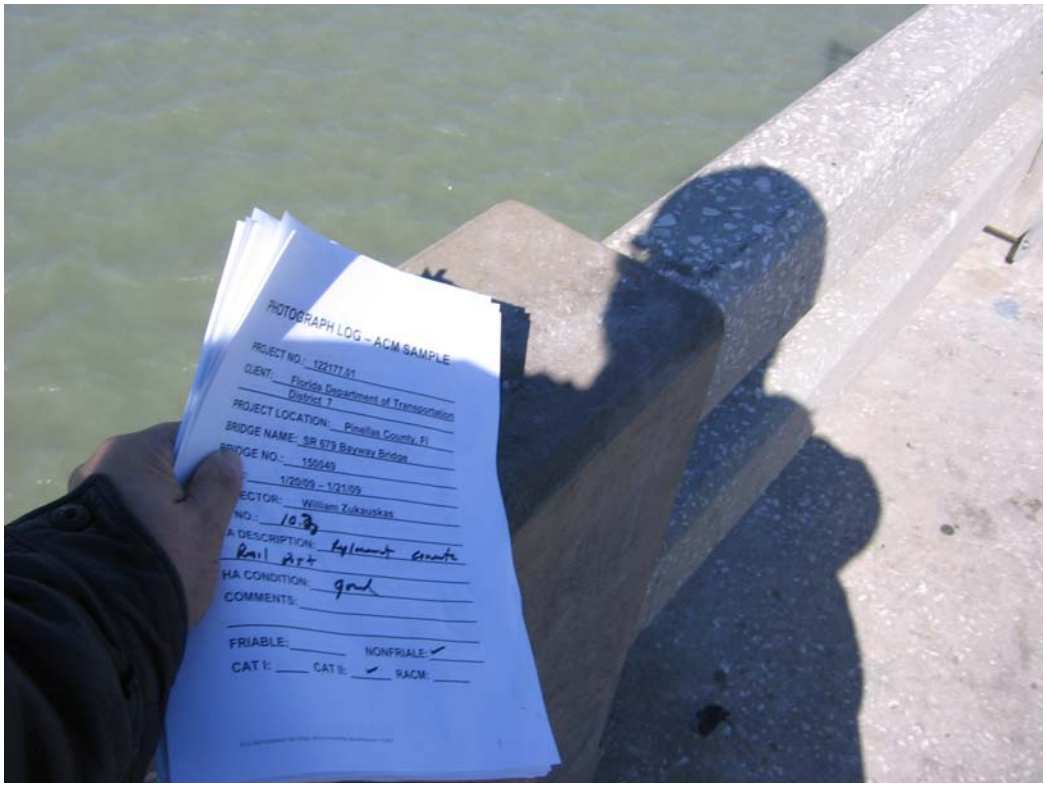


PHOTO 26 – 01/21/09 – SAMPLE 10.3 – HA 10
CONCRETE
REPLACEMENT RAIL POSTS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

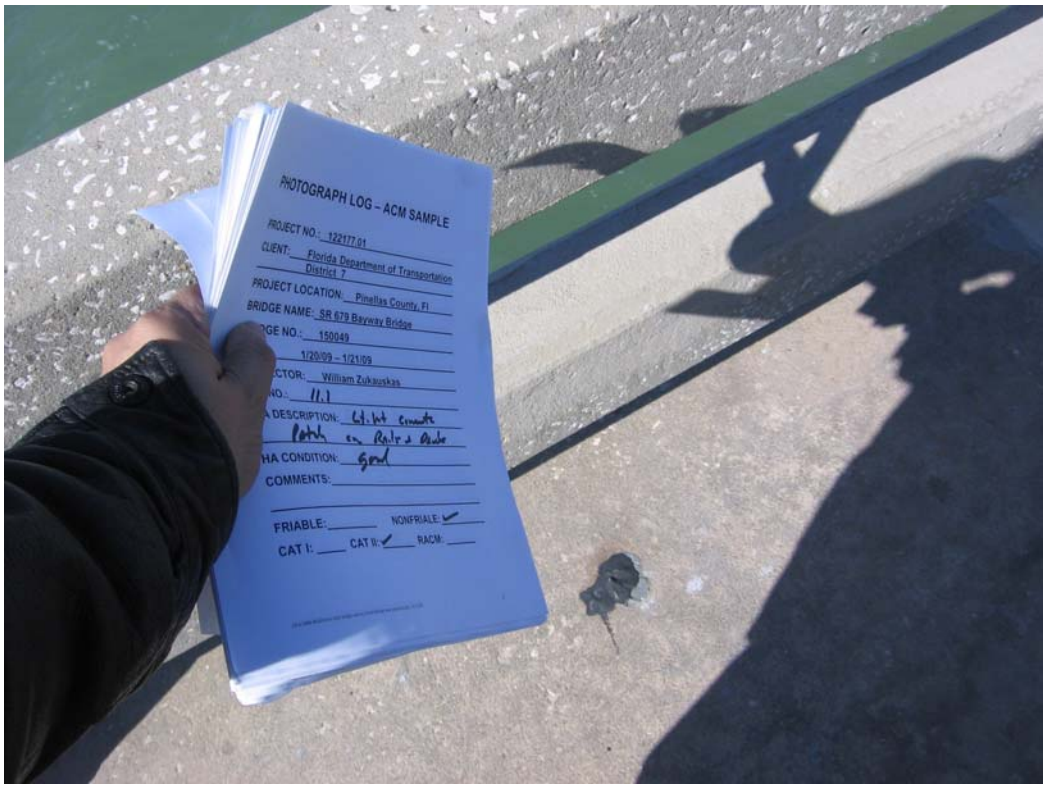


PHOTO 27 – 01/21/09 – SAMPLE 11.1 – HA 11
LIGHTWEIGHT CONCRETE PATCHING
ON RAILS AND BRIDGE DECK

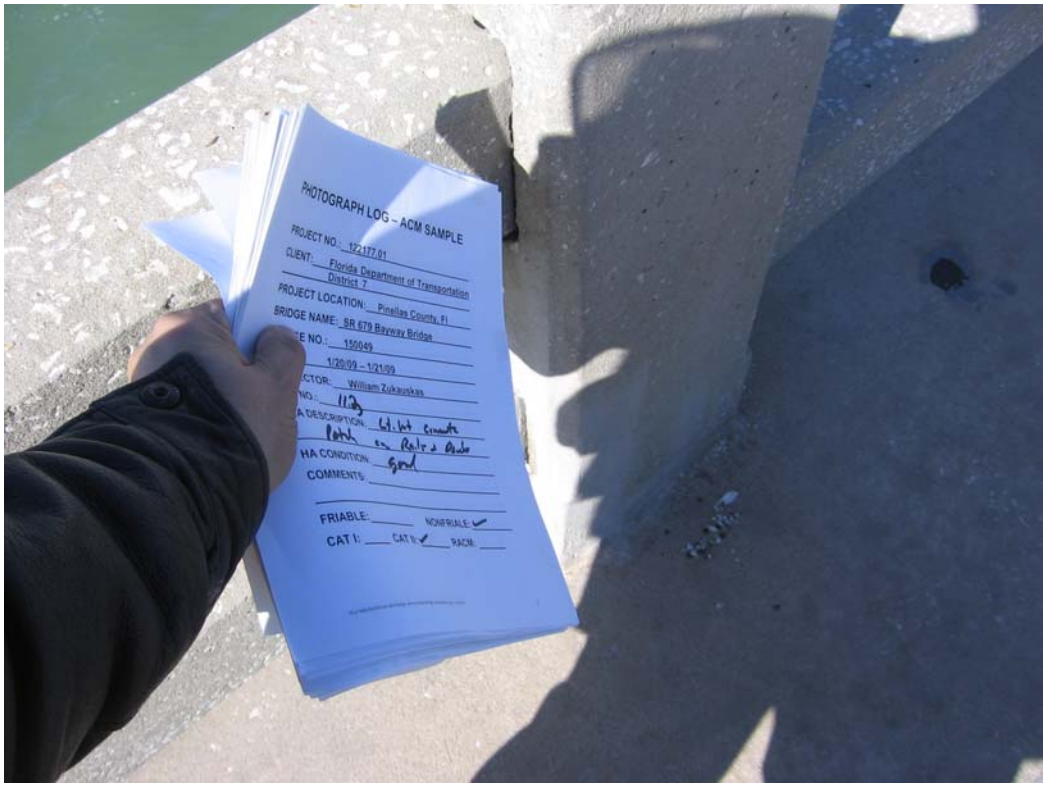


PHOTO 28 – 01/21/09 – SAMPLE 11.2 – HA 11
LIGHTWEIGHT CONCRETE PATCHING
ON RAILS AND BRIDGE DECK

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

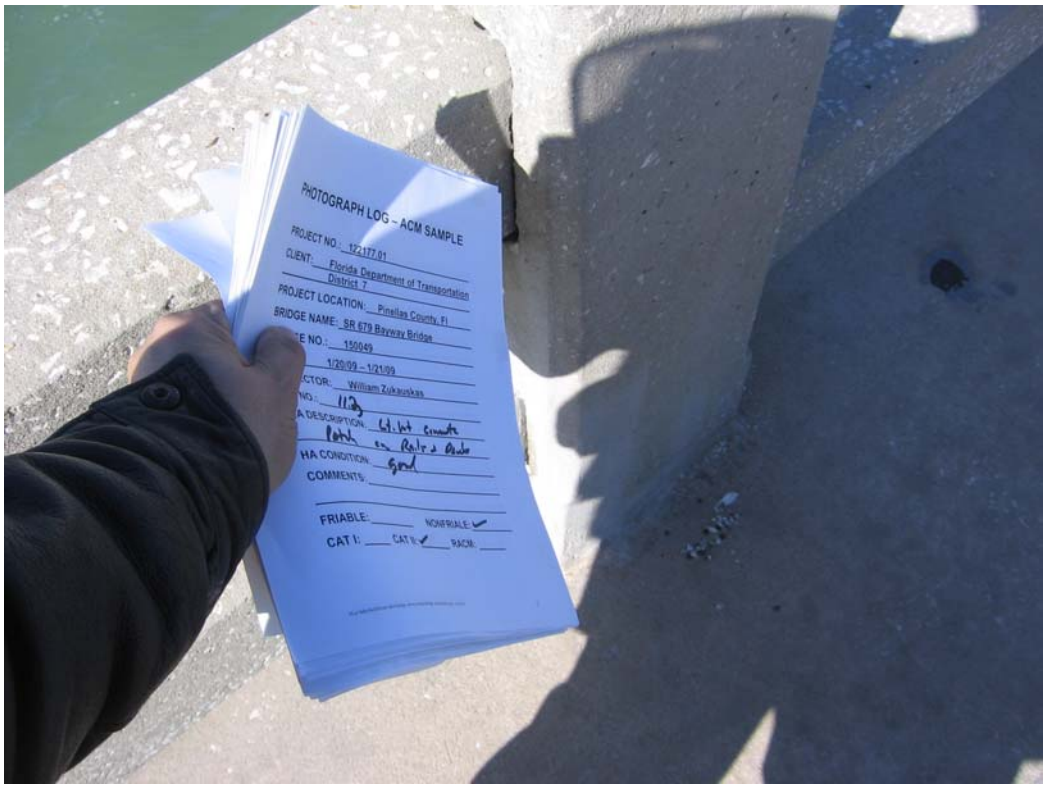


PHOTO 29 – 01/21/09 – SAMPLE 11.3 – HA 11
LIGHTWEIGHT CONCRETE PATCHING
ON RAILS AND BRIDGE DECK

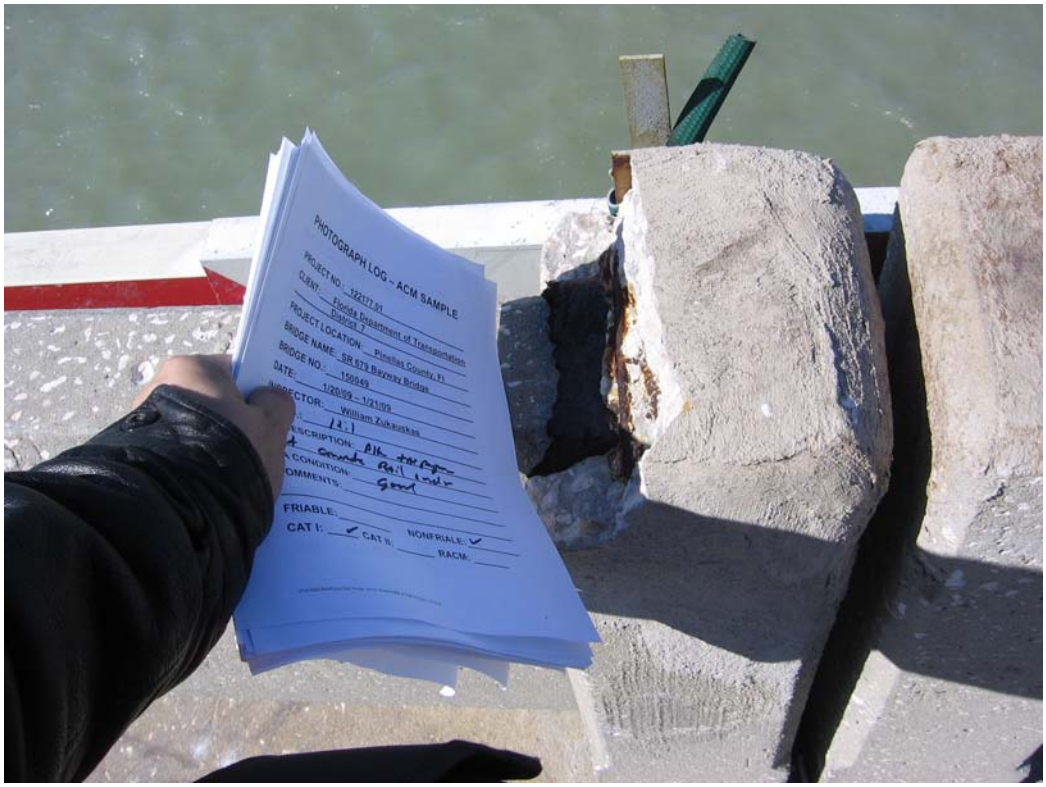


PHOTO 30 – 01/21/09 – SAMPLE 12.1 – HA 12
BLACK TARPAPER
AT RAIL POSTS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

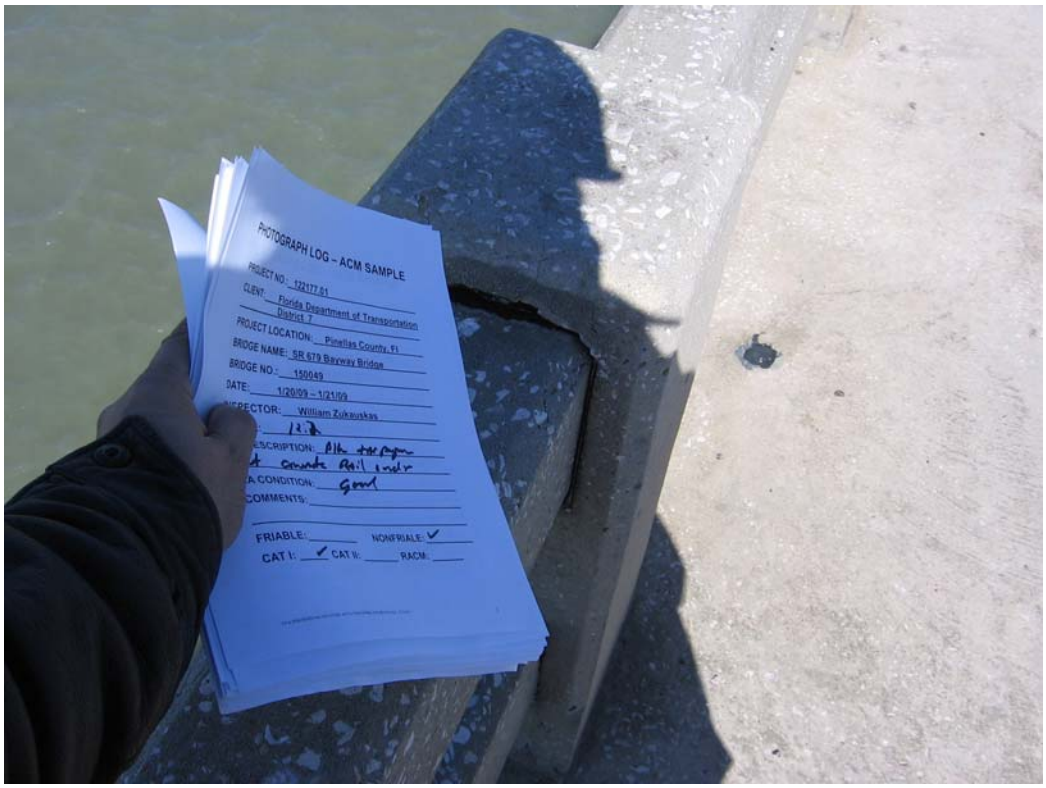


PHOTO 31 – 01/21/09 – SAMPLE 12.2 – HA 12
BLACK TARPAPER
AT RAIL POSTS

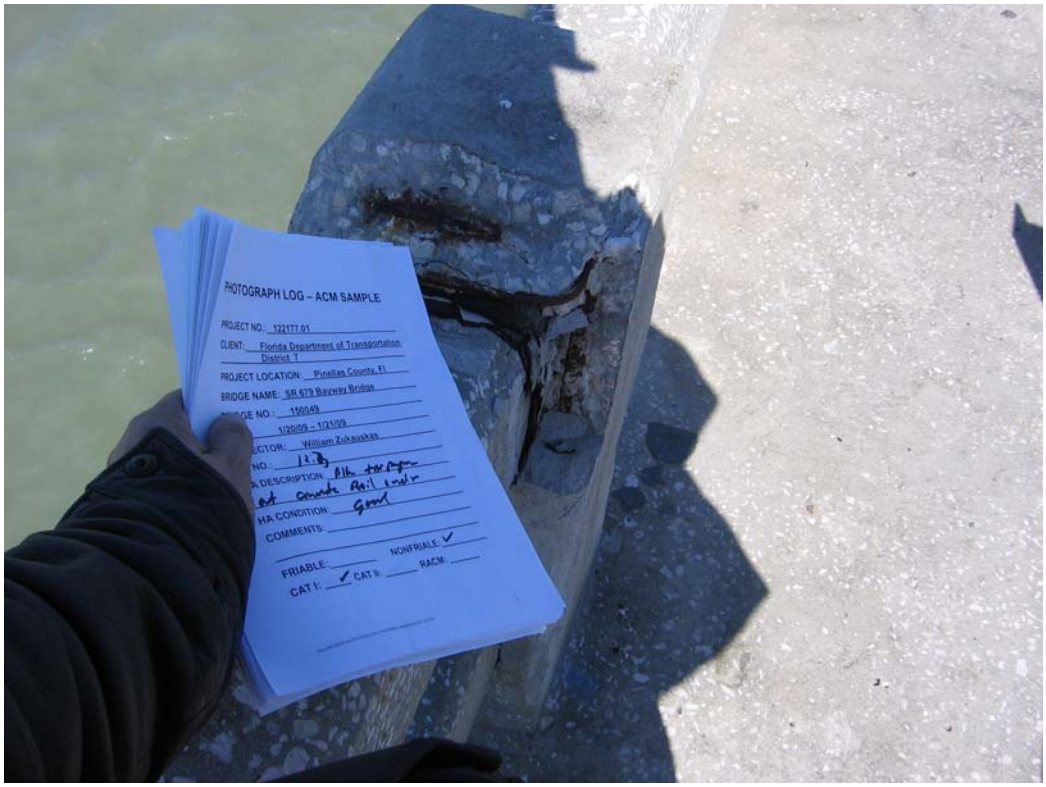


PHOTO 32 – 01/21/09 – SAMPLE 12.3 – HA 12
BLACK TARPAPER
AT RAIL POSTS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

PHOTO 33 – 01/21/09 – SAMPLE 13.1 – HA 13
BLACK AND GRAY EXPANSION JOINT MATERIAL
BETWEEN DECK SECTIONS

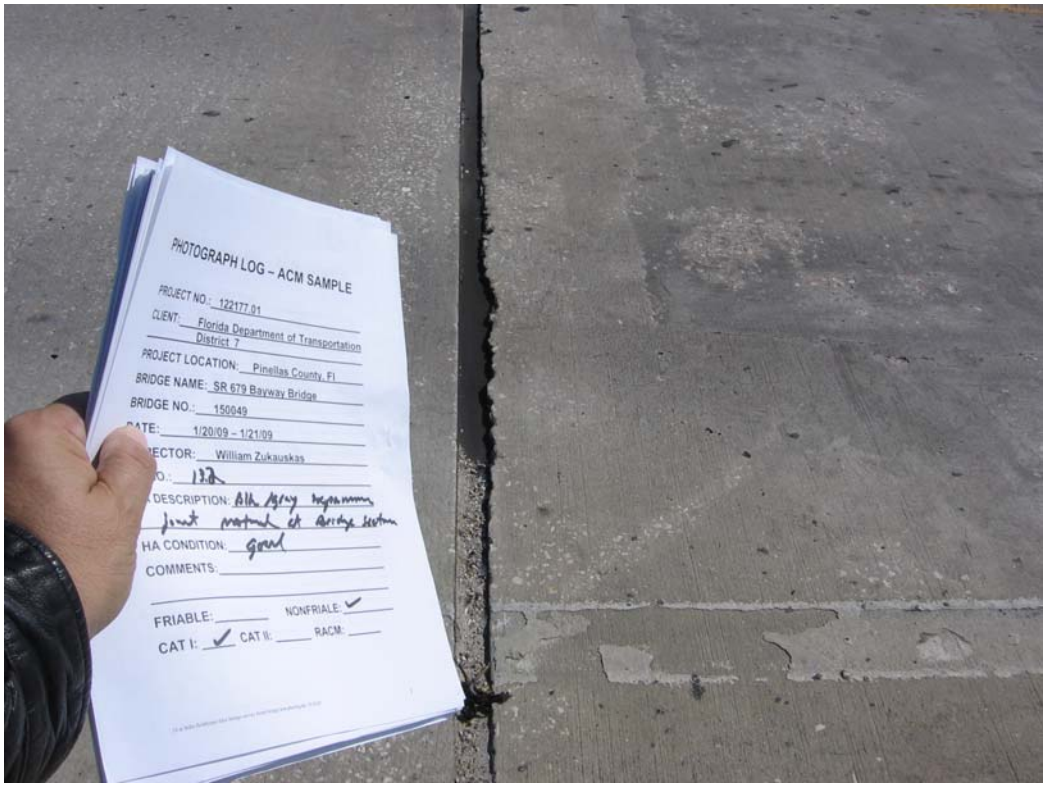


PHOTO 34 – 01/21/09 – SAMPLE 13.2 – HA 13
BLACK AND GRAY EXPANSION JOINT MATERIAL
BETWEEN DECK SECTIONS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

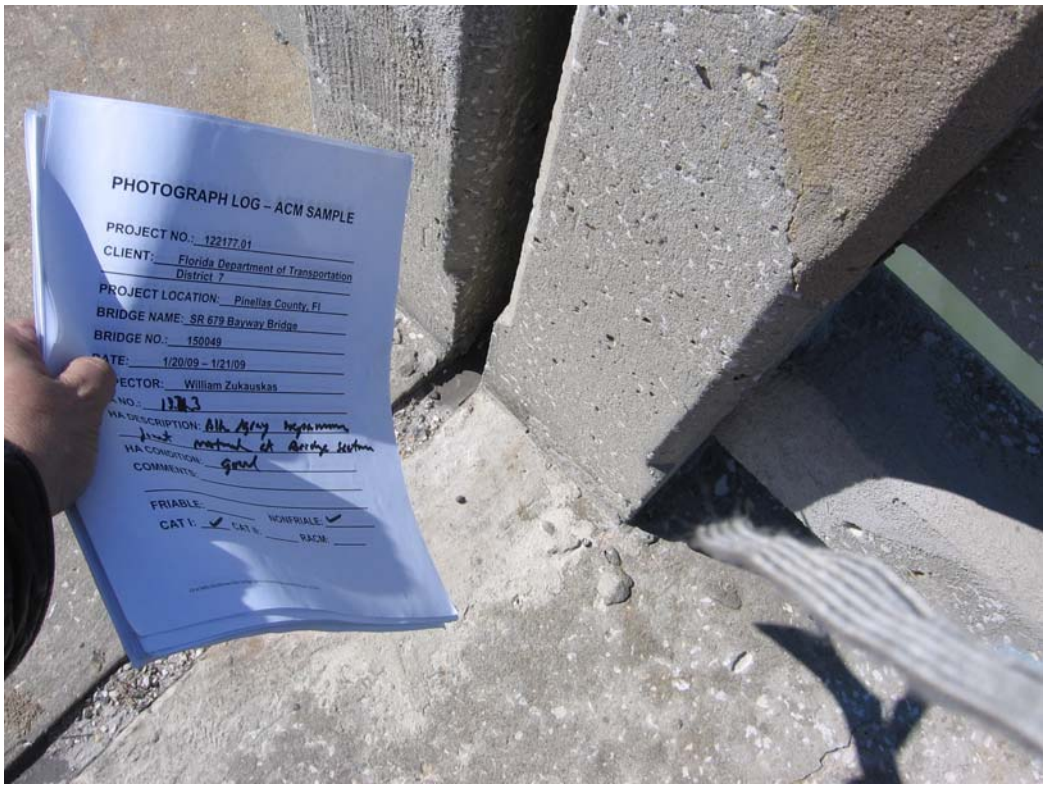


PHOTO 35 – 01/21/09 – SAMPLE 13.3 – HA 13
BLACK AND GRAY EXPANSION JOINT MATERIAL
BETWEEN DECK SECTIONS

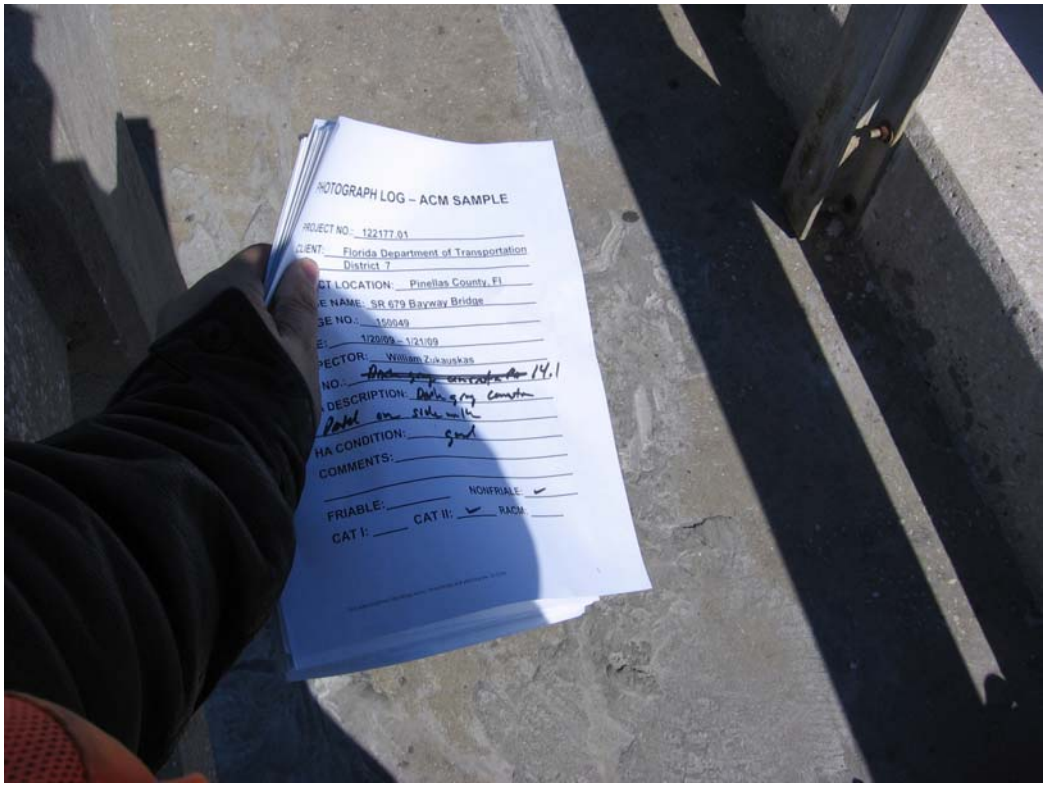


PHOTO 36 – 01/21/09 – SAMPLE 14.1 – HA 14
DARK GRAY CONCRETE PATCH
ON WEST SIDEWALK

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

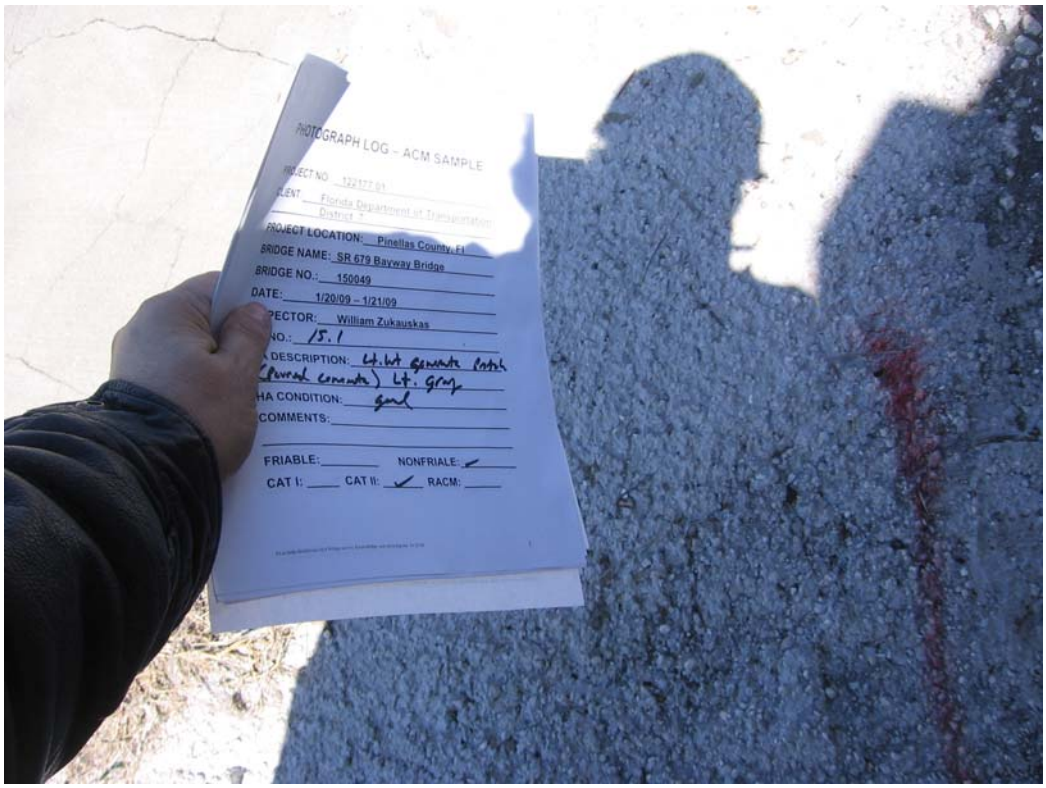


PHOTO 37 – 01/21/09 – SAMPLE 15.1 – HA 15
LIGHT GRAY CONCRETE
POURED ON ABUTMENT WALL NORTH END

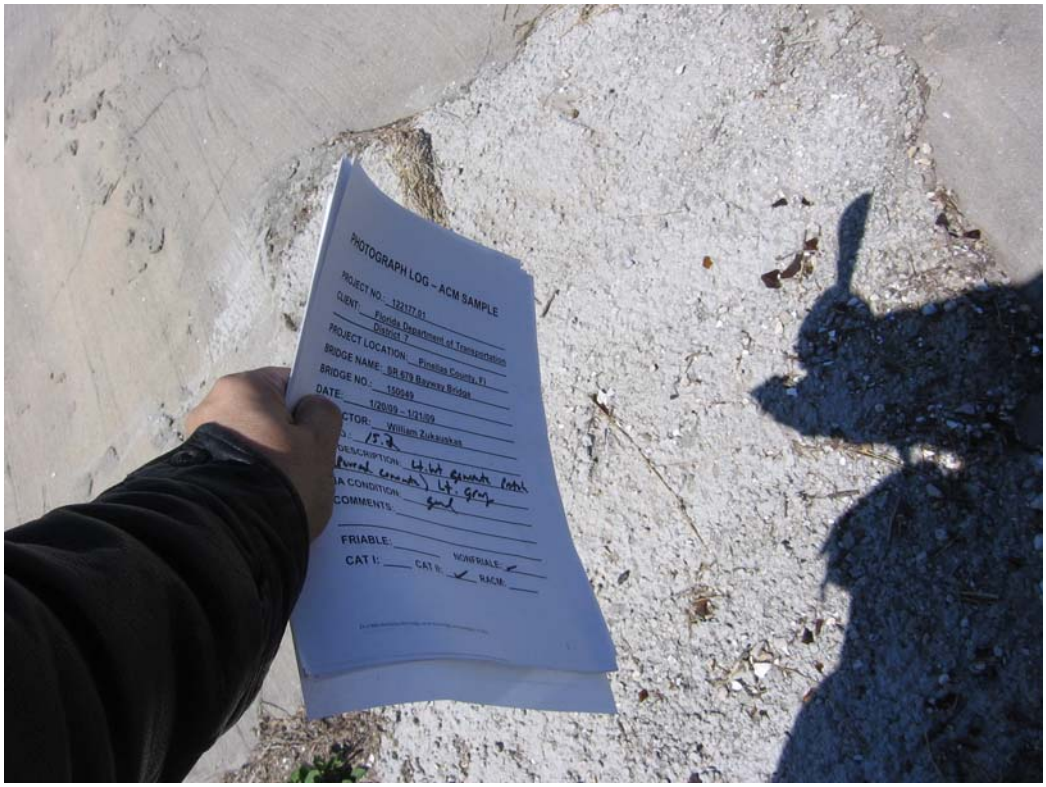


PHOTO 38 – 01/21/09 – SAMPLE 15.2 – HA 15
LIGHT GRAY CONCRETE
POURED ON ABUTMENT WALL NORTH END

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

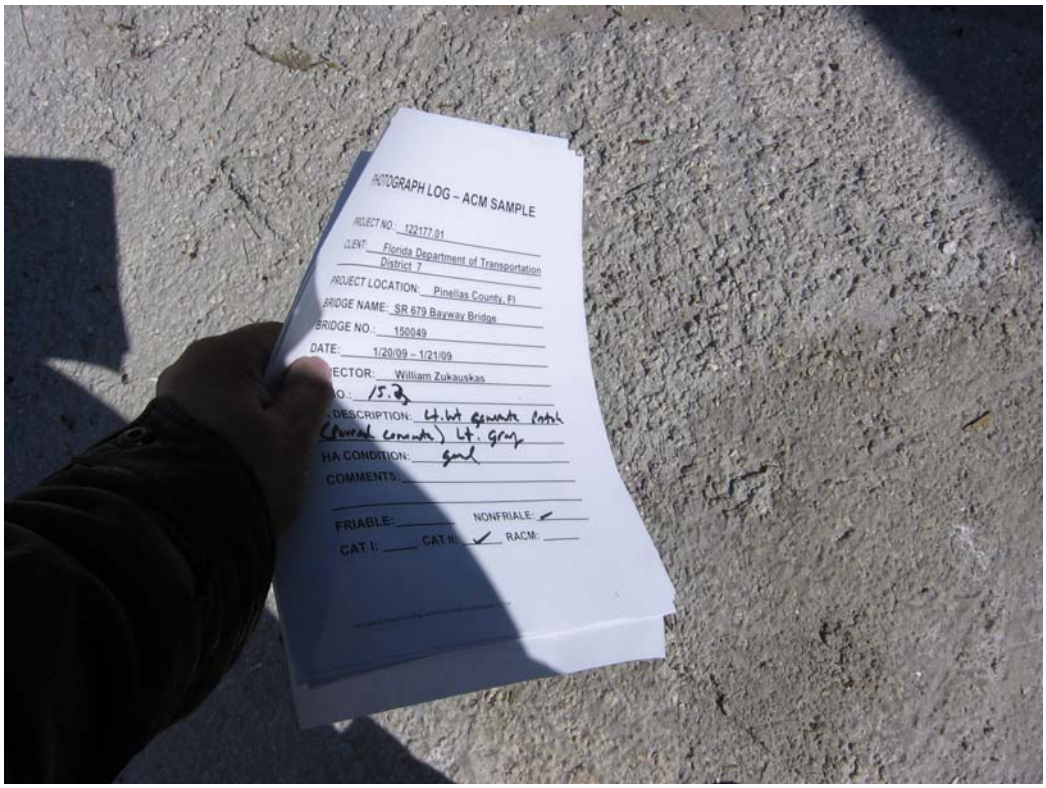


PHOTO 39 – 01/21/09 – SAMPLE 15.3 – HA 15
LIGHT GRAY CONCRETE
POURED ON ABUTMENT WALL NORTH END

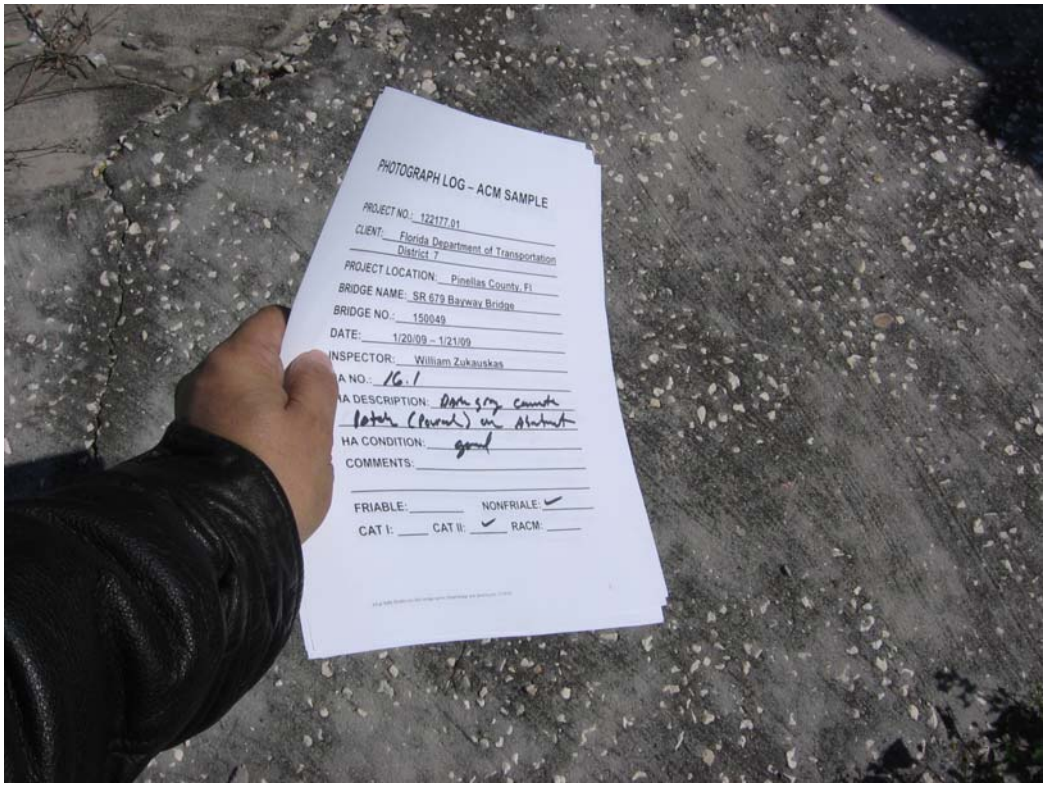


PHOTO 40 – 01/21/09 – SAMPLE 16.1 – HA 16
DARK GRAY CONCRETE
POURED ON ABUTMENT WALL NORTH END

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

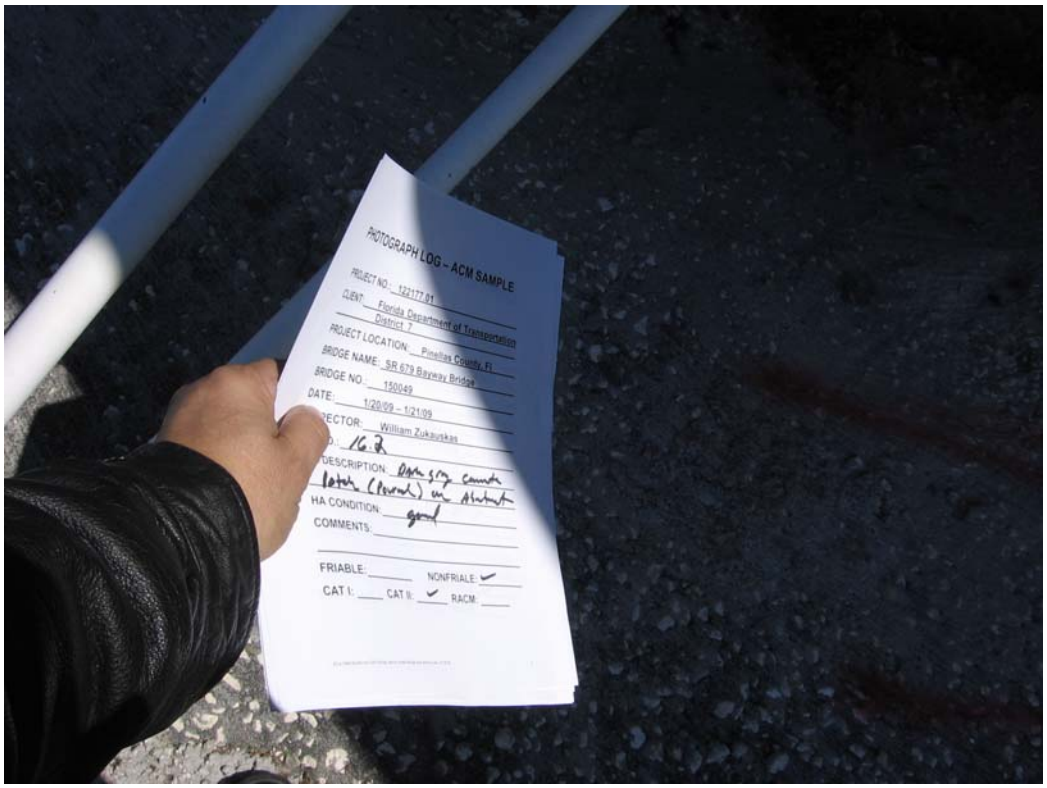


PHOTO 41 – 01/21/09 – SAMPLE 16.2 – HA 16
DARK GRAY CONCRETE
POURED ON ABUTMENT WALL NORTH END

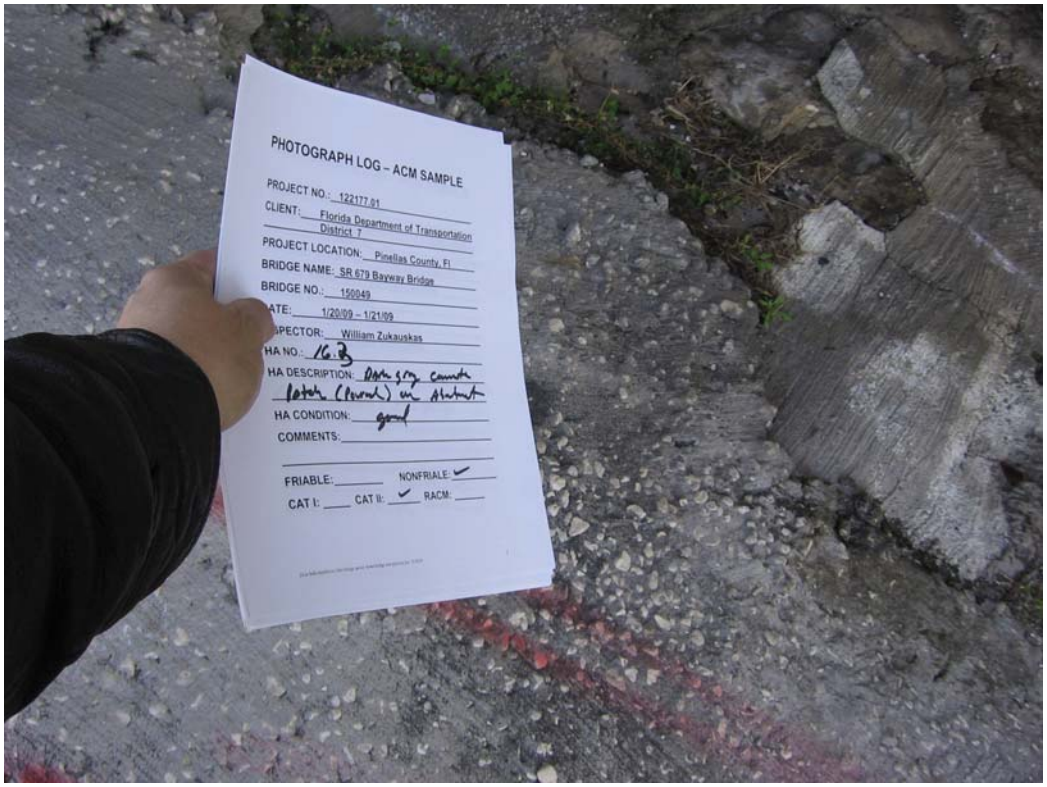


PHOTO 42 – 01/21/09 – SAMPLE 16.3 – HA 16
DARK GRAY CONCRETE
POURED ON ABUTMENT WALL NORTH END

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

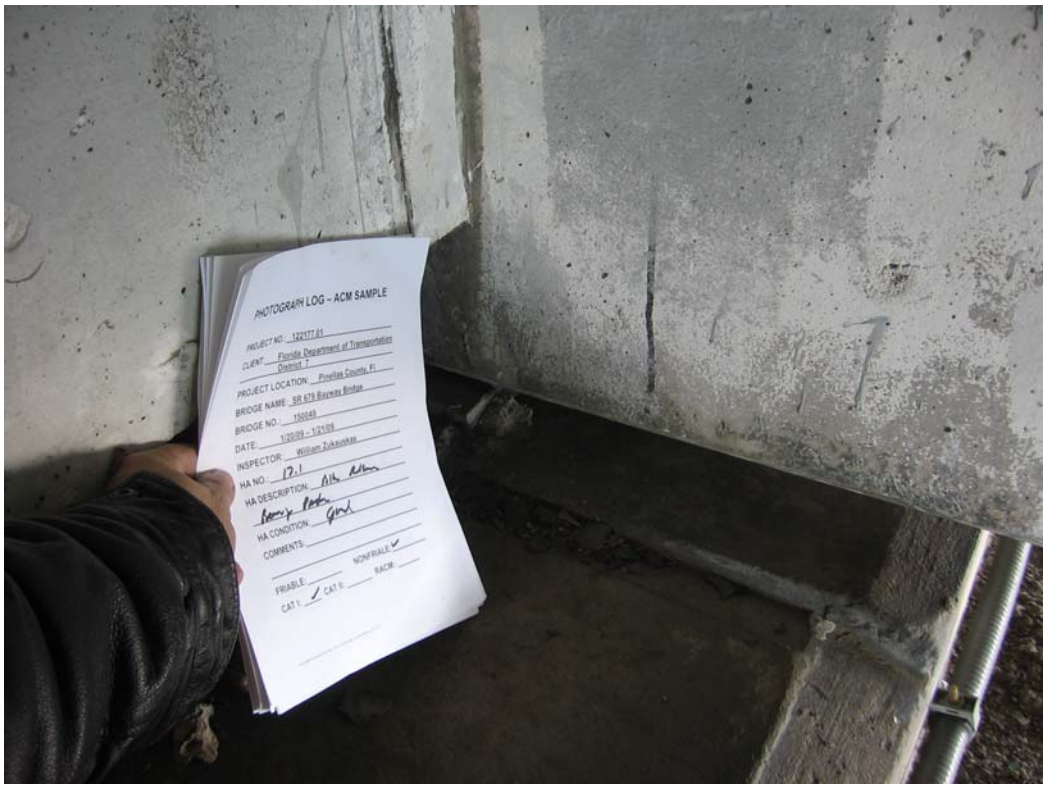


PHOTO 43 – 01/21/09 – SAMPLE 17.1 – HA 17
BLACK RUBBER BEARING PADS
UNDER SUPPORT POSTS AND AT BRIDGE ENDS

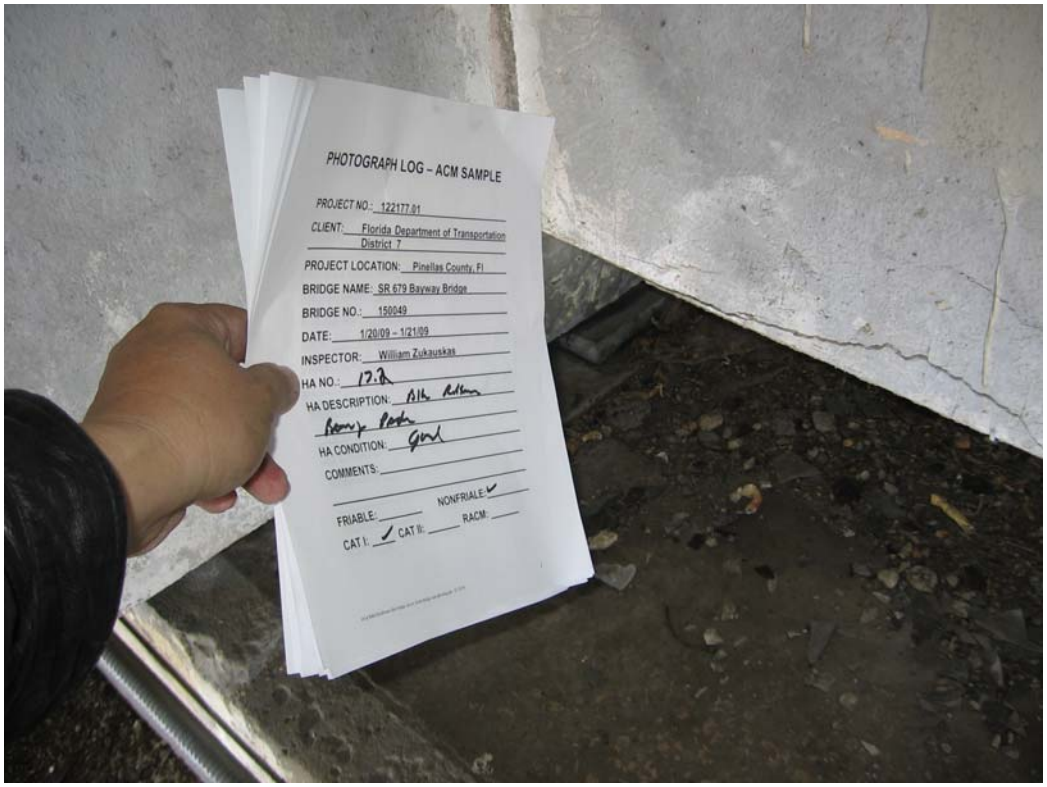


PHOTO 44 – 01/21/09 – SAMPLE 17.2 – HA 17
BLACK RUBBER BEARING PADS
UNDER SUPPORT POSTS AND AT BRIDGE ENDS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

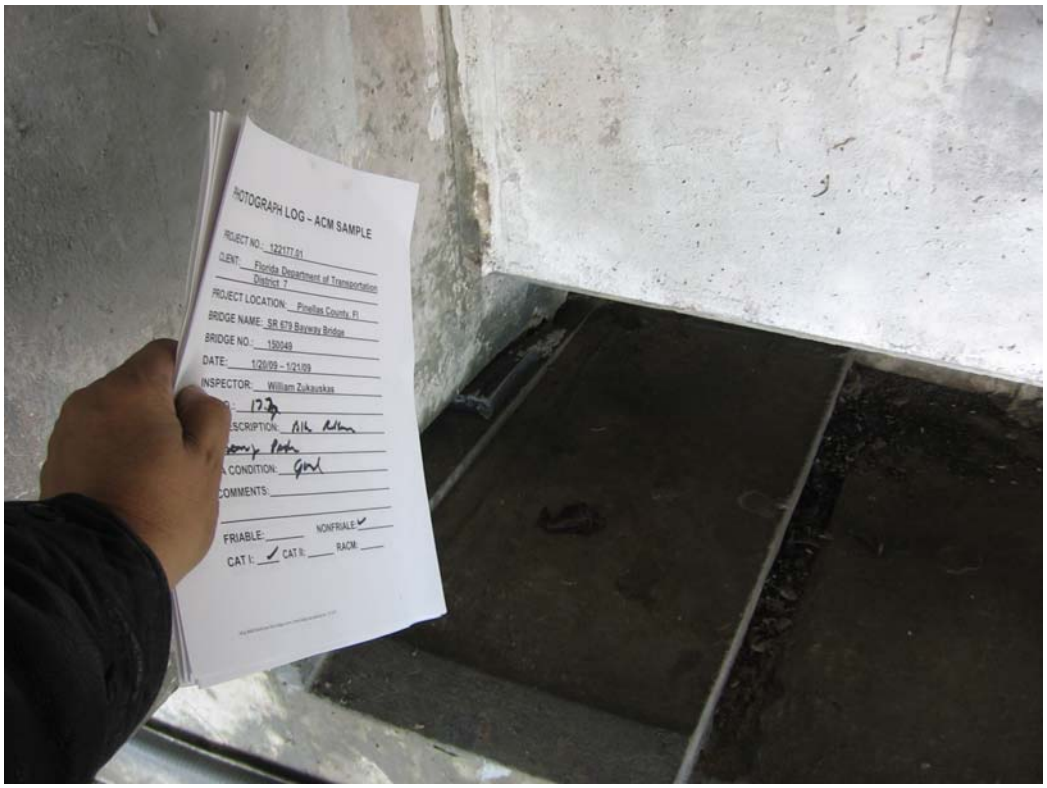


PHOTO 45 – 01/21/09 – SAMPLE 17.3 – HA 17
BLACK RUBBER BEARING PADS
UNDER SUPPORT POSTS AND AT BRIDGE ENDS

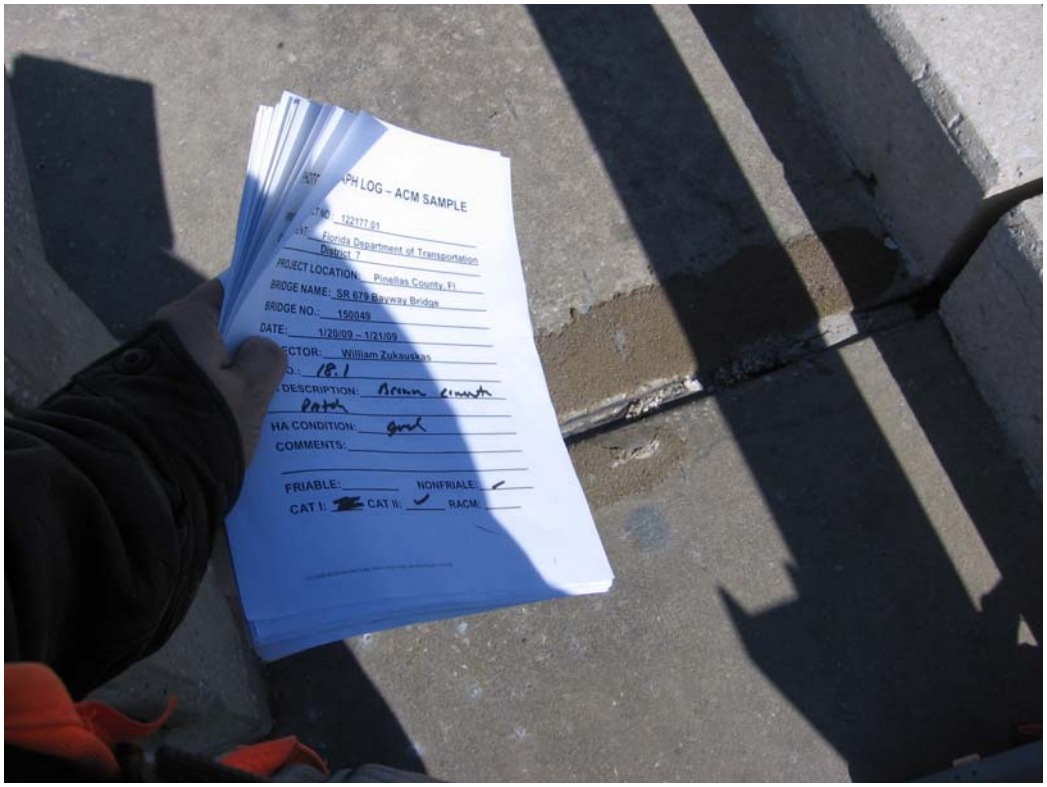


PHOTO 46 – 01/21/09 – SAMPLE 18.1 – HA 18
BROWN CONCRETE
PATCH ON SIDEWALKS NW AND SE SIDES

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

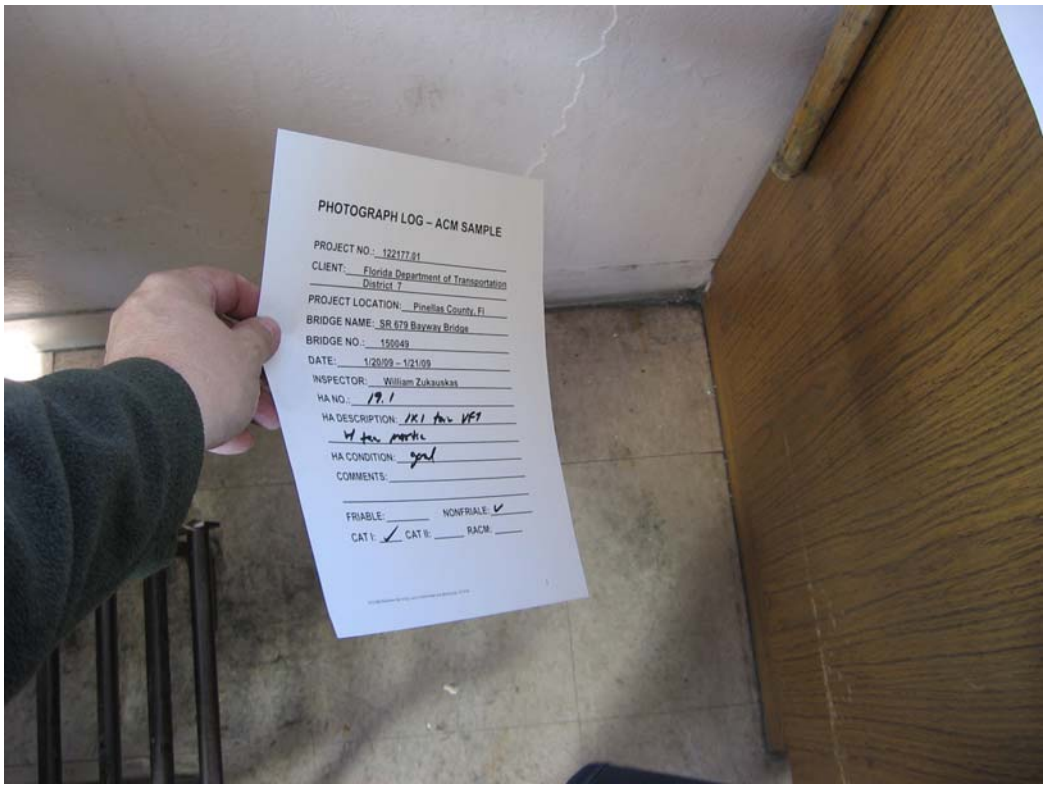


PHOTO 47 – 01/21/09 – SAMPLE 19.1 – HA 19
1'X 1' TAN VINYL FLOOR TILE WITH TAN MASTIC
TENDER HOUSE AT BRIDGE LEVEL

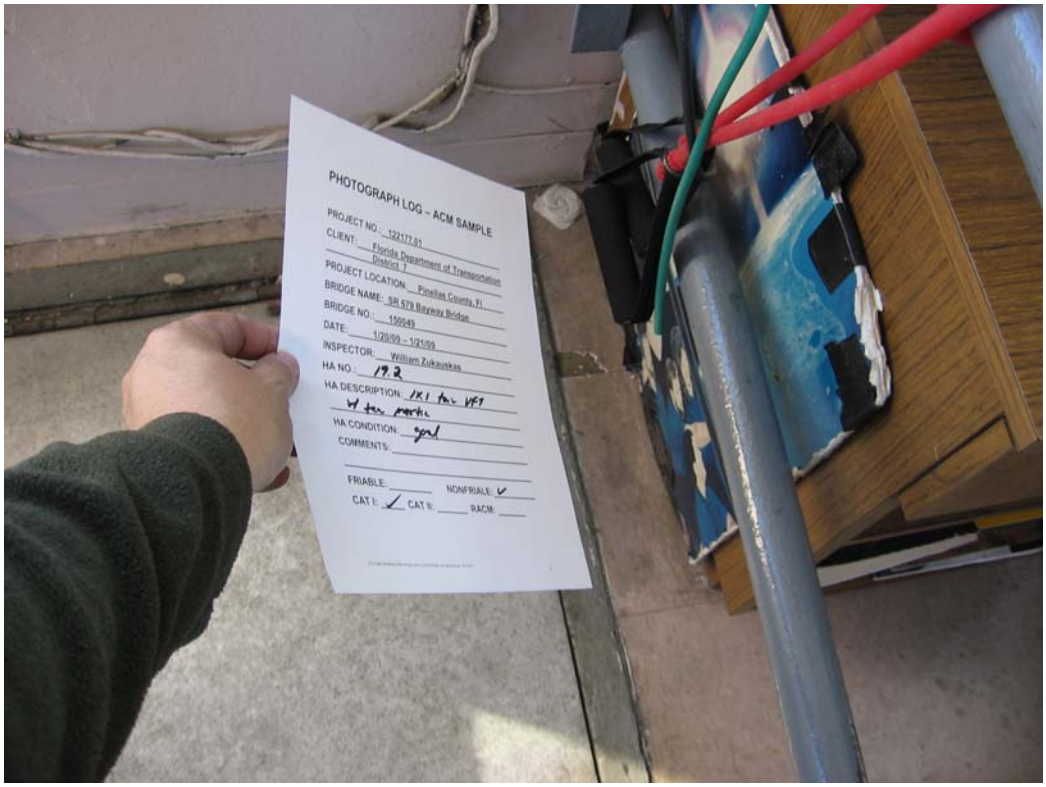


PHOTO 48 – 01/21/09 – SAMPLE 19.2 – HA 19
1'X 1' TAN VINYL FLOOR TILE WITH TAN MASTIC
TENDER HOUSE AT BRIDGE LEVEL

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

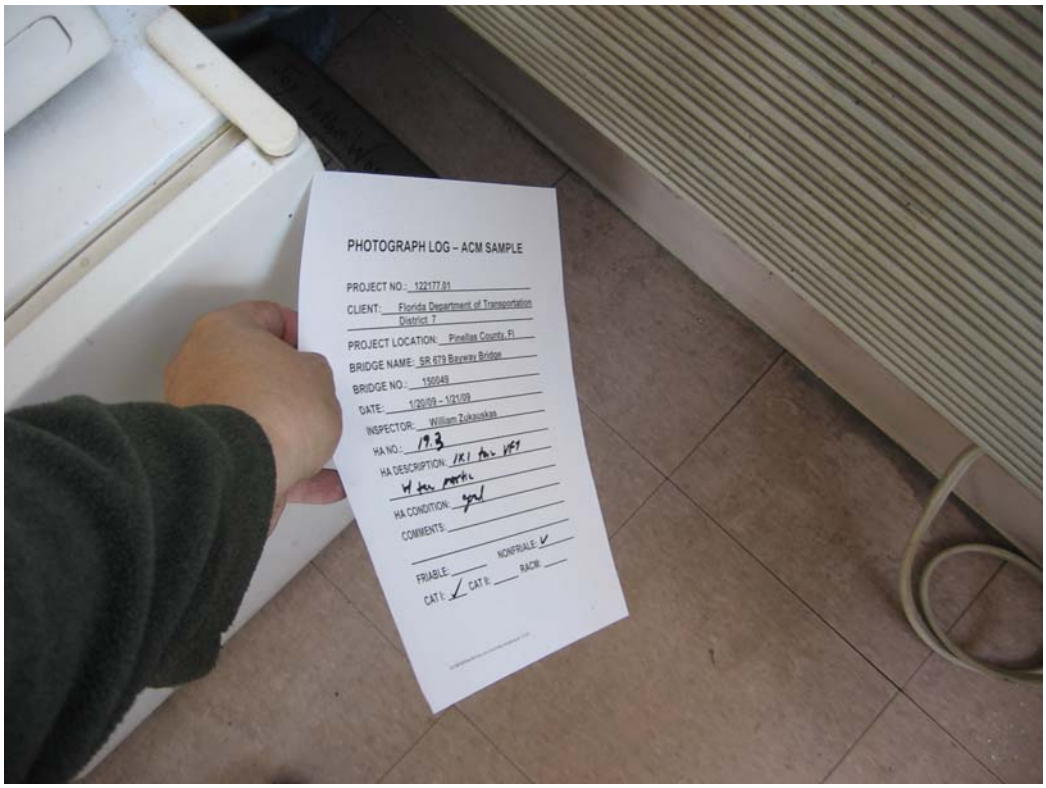


PHOTO 49 – 01/21/09 – SAMPLE 19.3 – HA 19
1'X 1' TAN VINYL FLOOR TILE WITH TAN MASTIC
TENDER HOUSE AT BRIDGE LEVEL

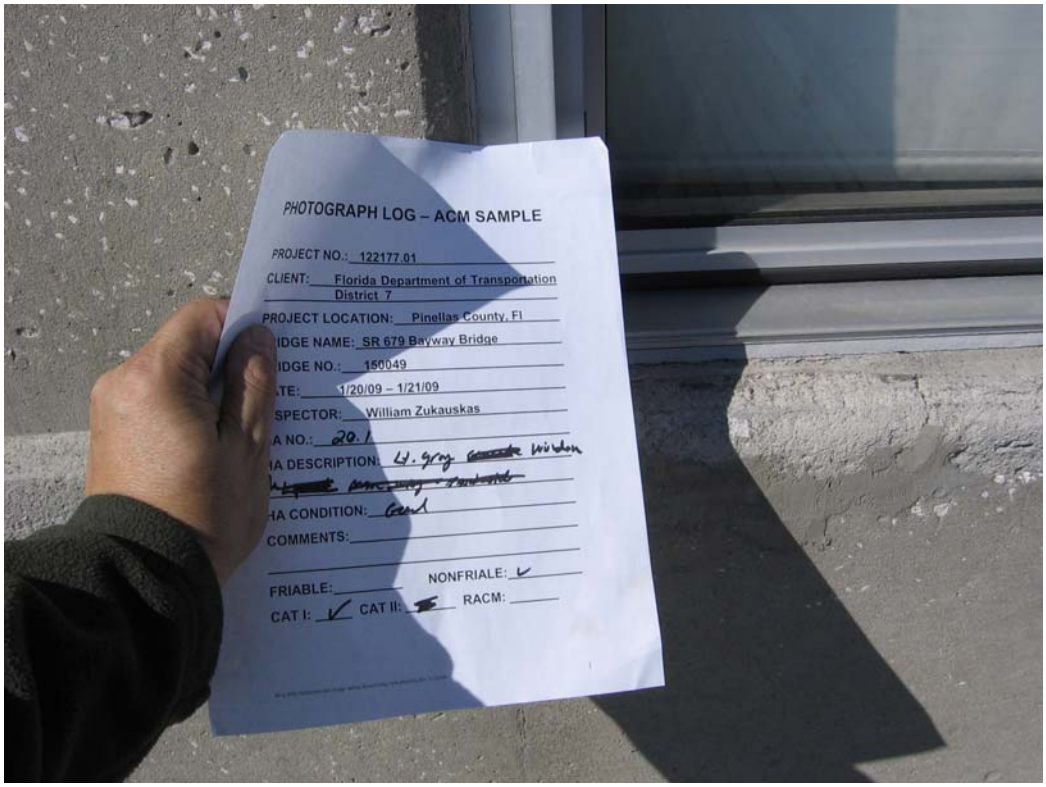


PHOTO 50 – 01/21/09 – SAMPLE 20.1 – HA 20
GRAY CAULK
TENDER HOUSE EXTERIOR AND INTERIOR OF METAL WINDOW FRAMES

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

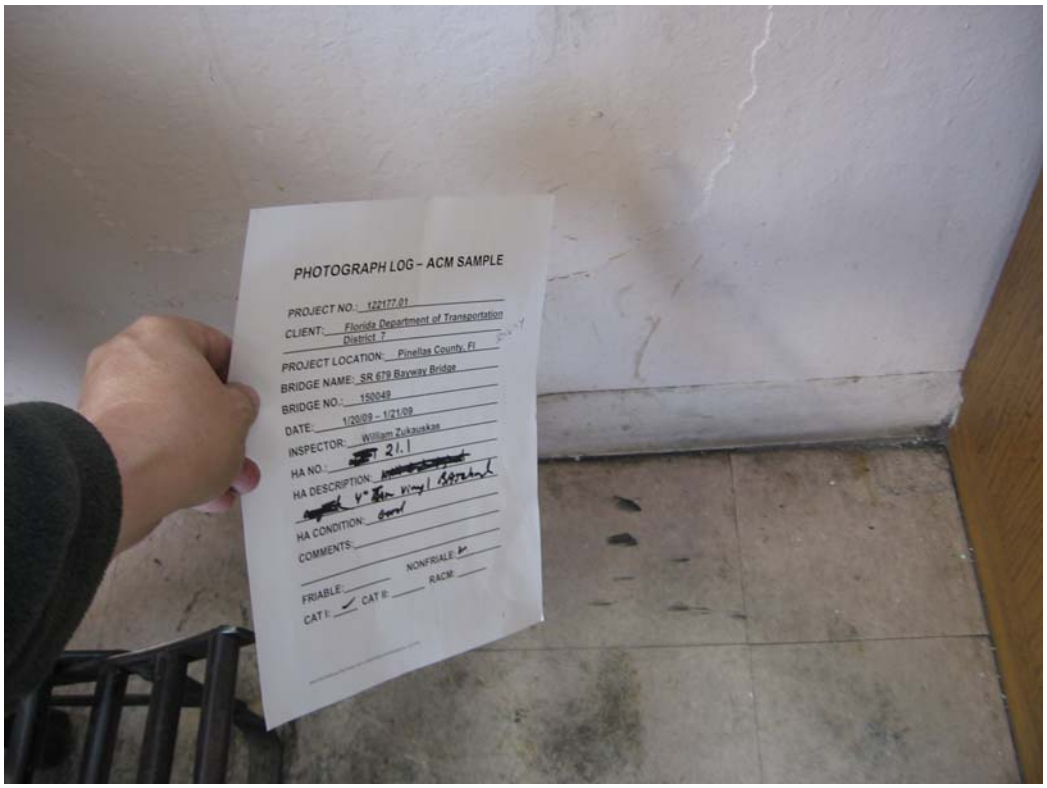


PHOTO 51 – 01/21/09 – SAMPLE 21.1 – HA 21
4" TAN VINYL BASEBOARD WITH TAN MASTIC
TENDER HOUSE BRIDGE LEVEL

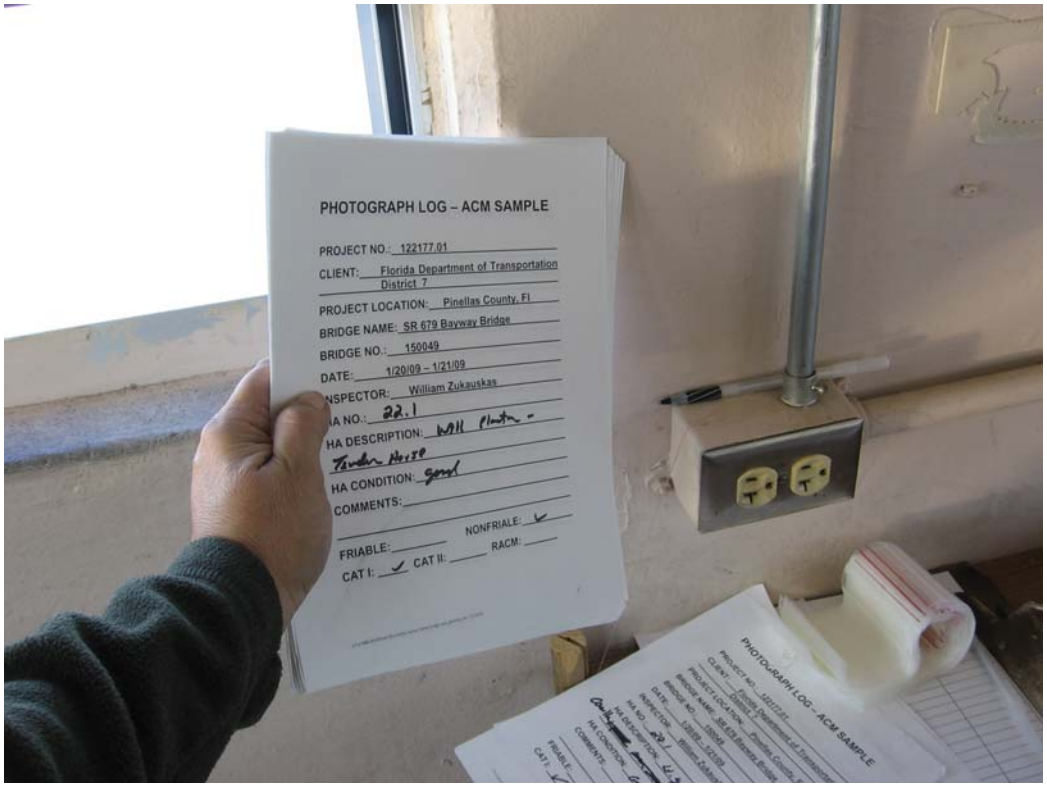


PHOTO 52 – 01/21/09 – SAMPLE 22.1 – HA 22
PLASTER
TENDER HOUSE INTERIOR WALLS AND CEILINGS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

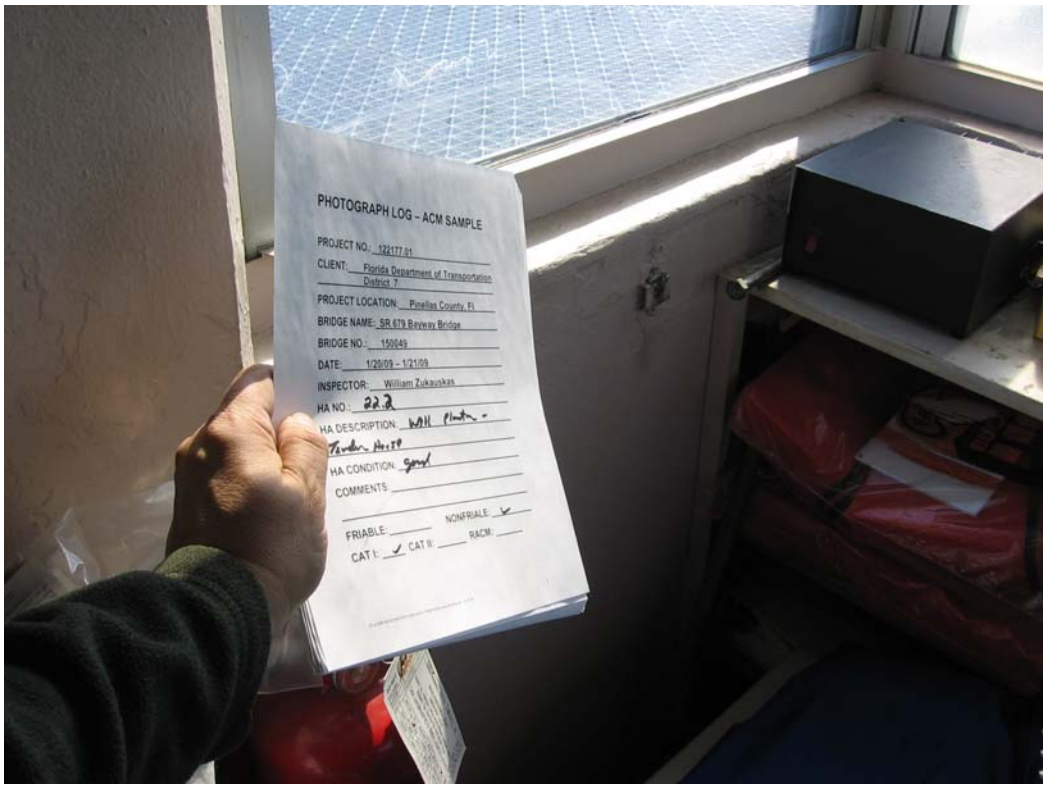


PHOTO 53 – 01/21/09 – SAMPLE 22.2 – HA 22
PLASTER
TENDER HOUSE INTERIOR WALLS AND CEILINGS

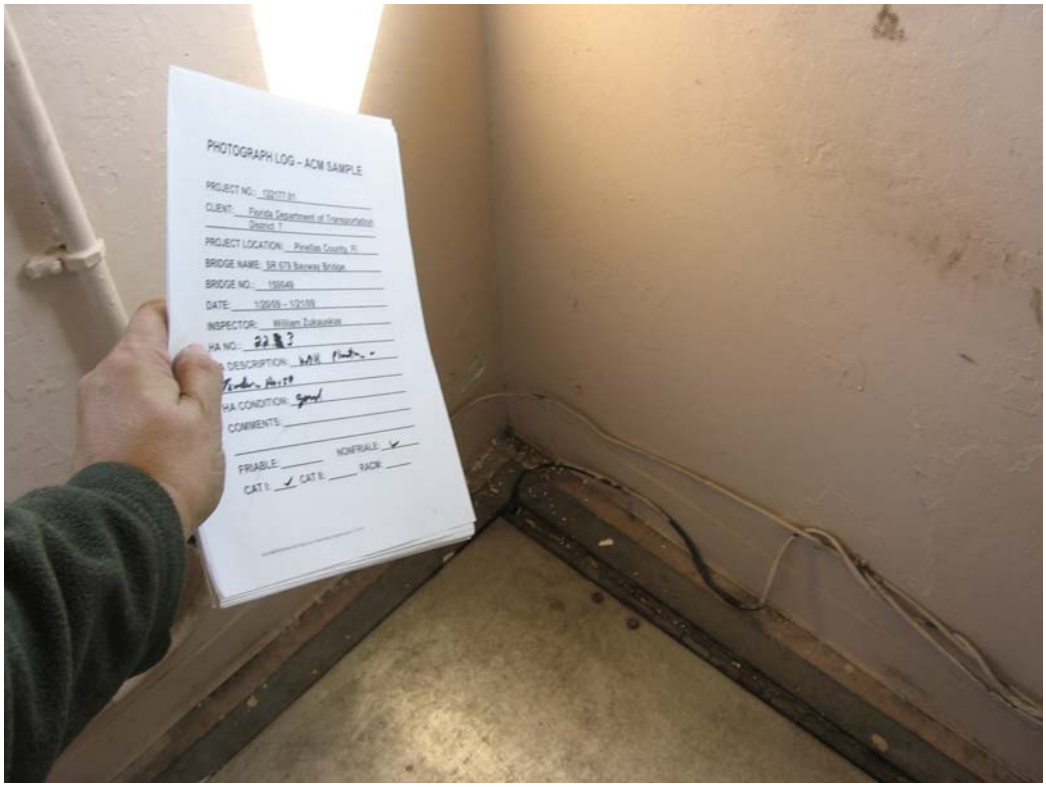


PHOTO 54 – 01/21/09 – SAMPLE 22.3 – HA 22
PLASTER
TENDER HOUSE INTERIOR WALLS AND CEILINGS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

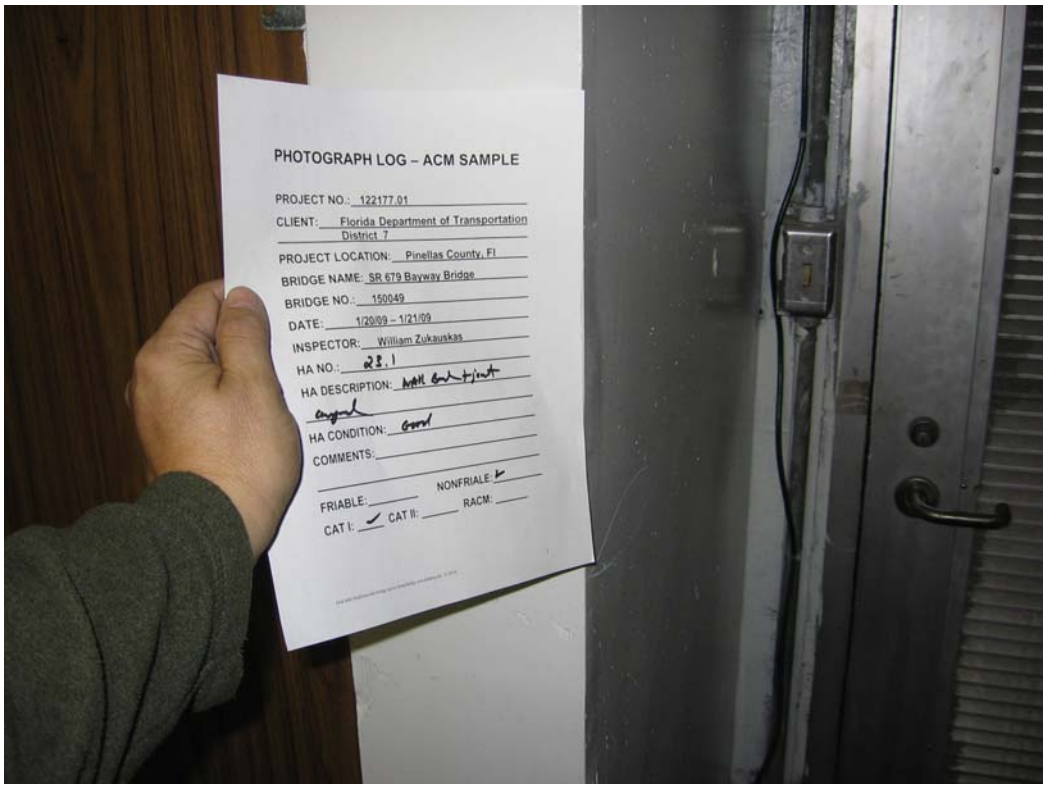


PHOTO 55 – 01/21/09 – SAMPLE 23.1 – HA 23
WALLBOARD AND JOINT COMPOUND
TENDER HOUSE 2ND LEVEL RESTROOM

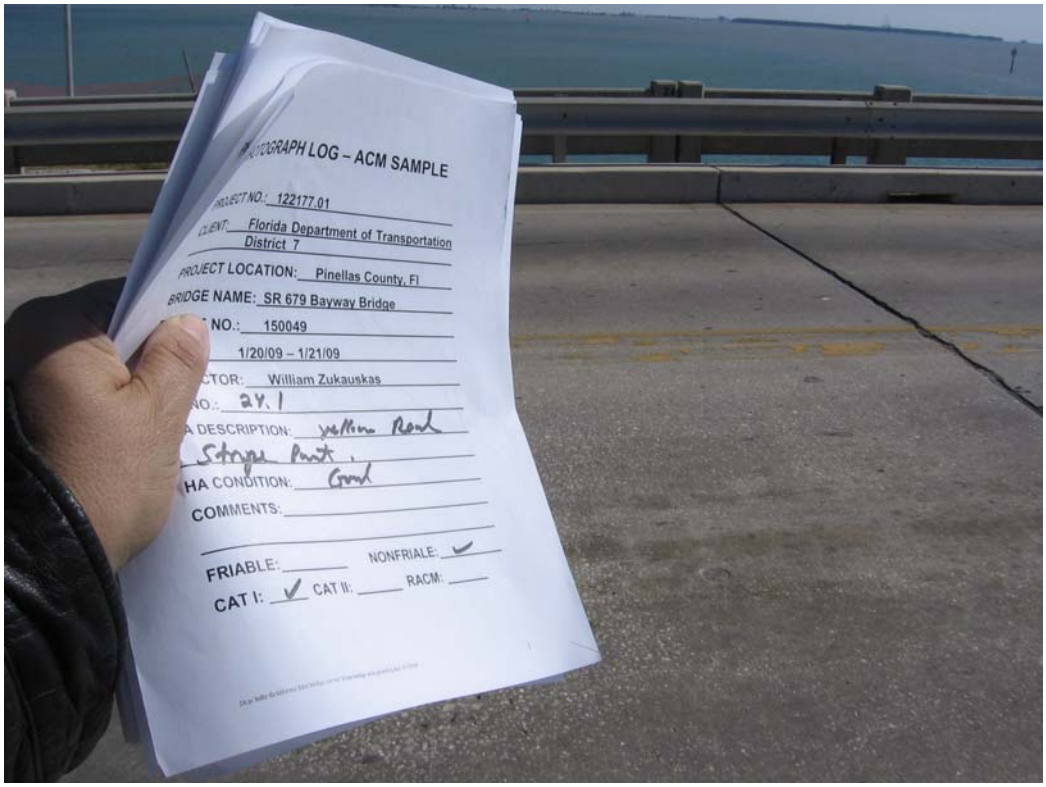


PHOTO 56 – 01/21/09 – SAMPLE 24.1 – HA 24
YELLOW PAINT
ROAD STRIPES

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

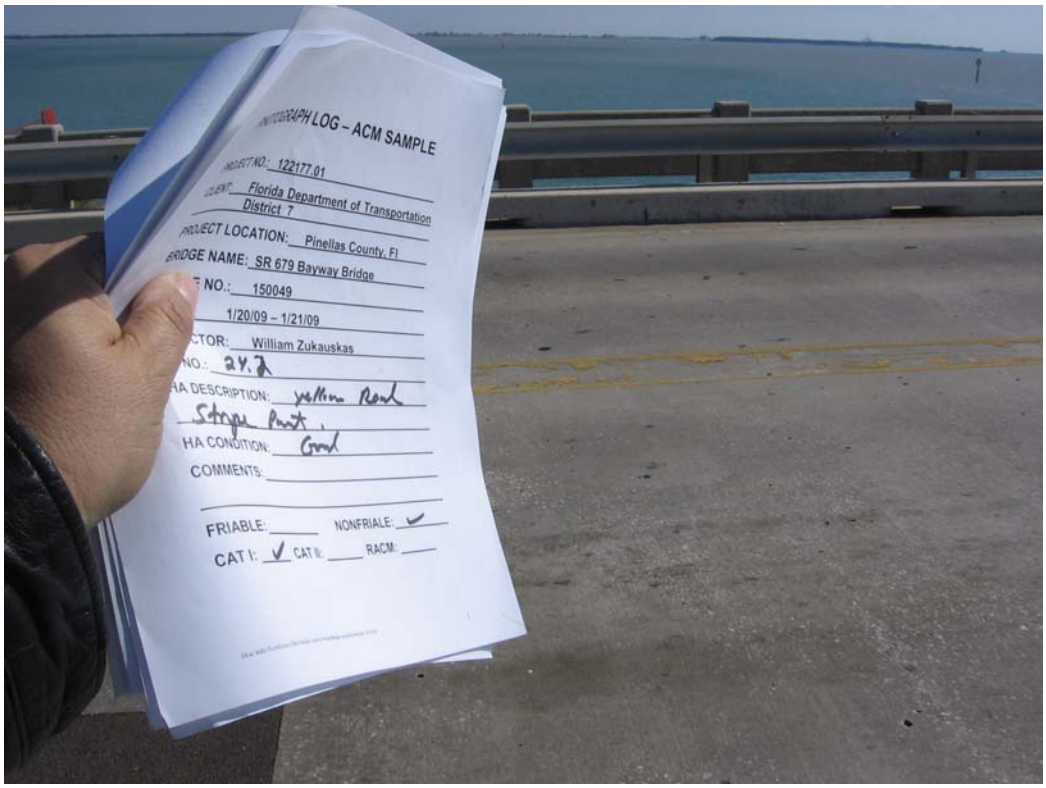


PHOTO 57 – 01/21/09 – SAMPLE 24.2 – HA 24
YELLOW PAINT
ROAD STRIPES

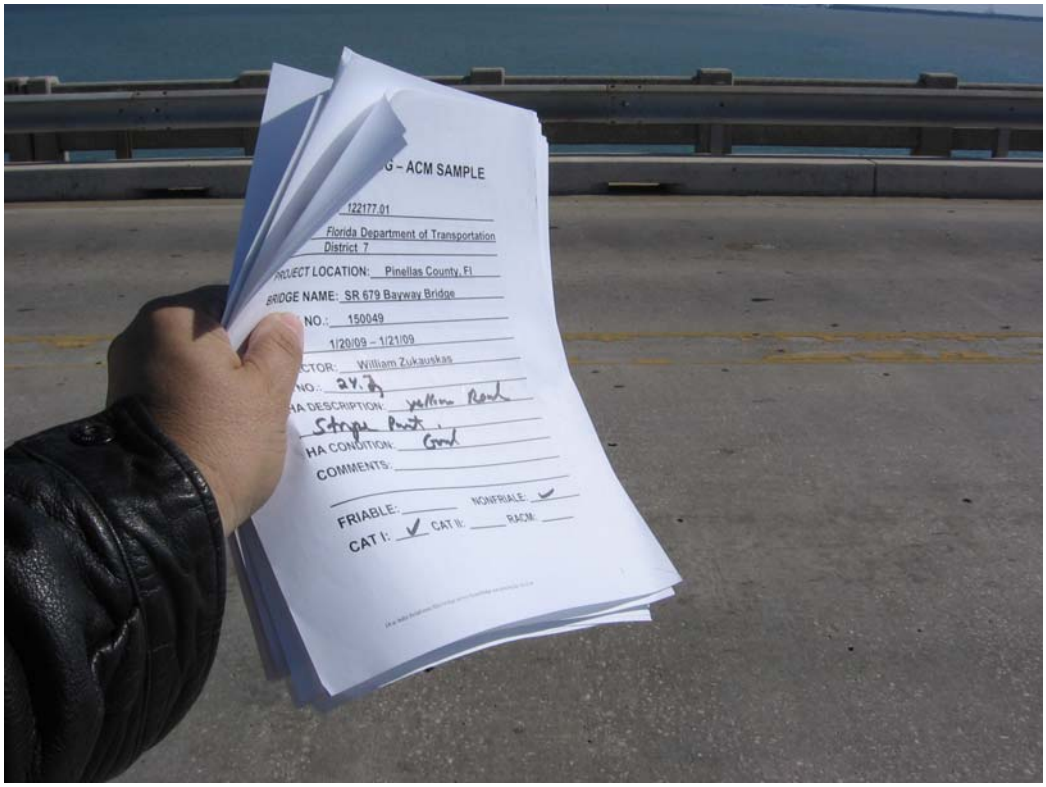


PHOTO 58 – 01/21/09 – SAMPLE 24.3 – HA 24
YELLOW PAINT
ROAD STRIPES

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

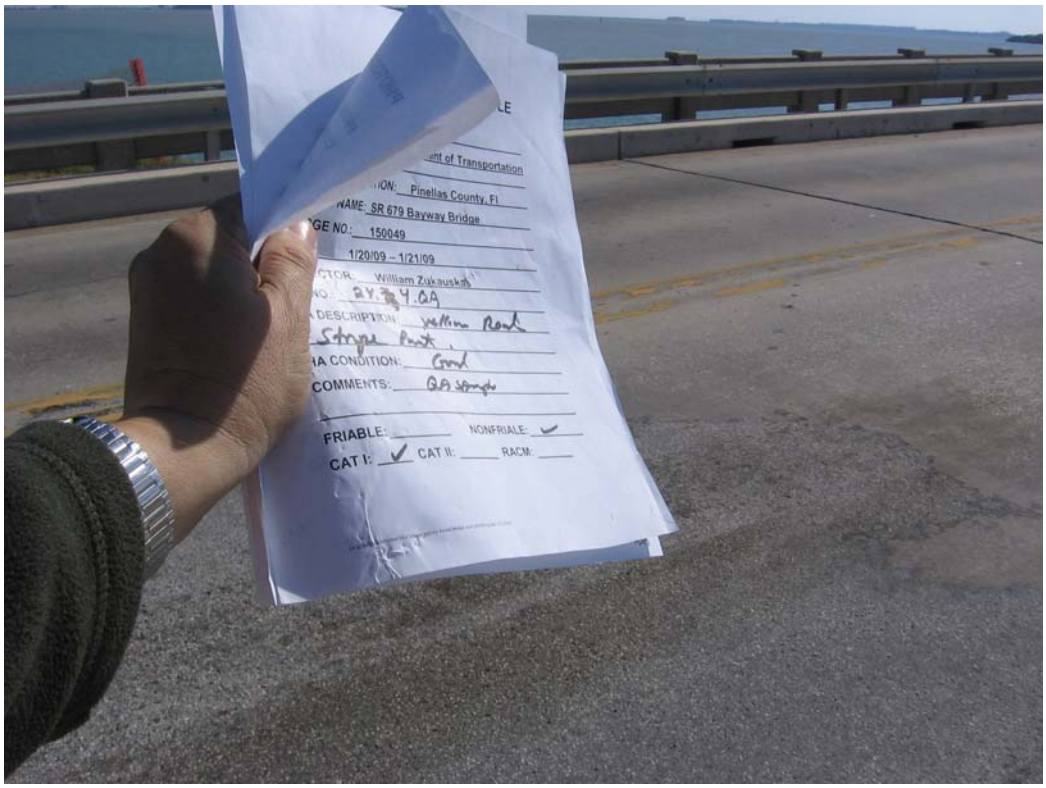


PHOTO 59 – 01/21/09 – SAMPLE 24.4 QA/QC – HA 24
YELLOW PAINT
ROAD STRIPES

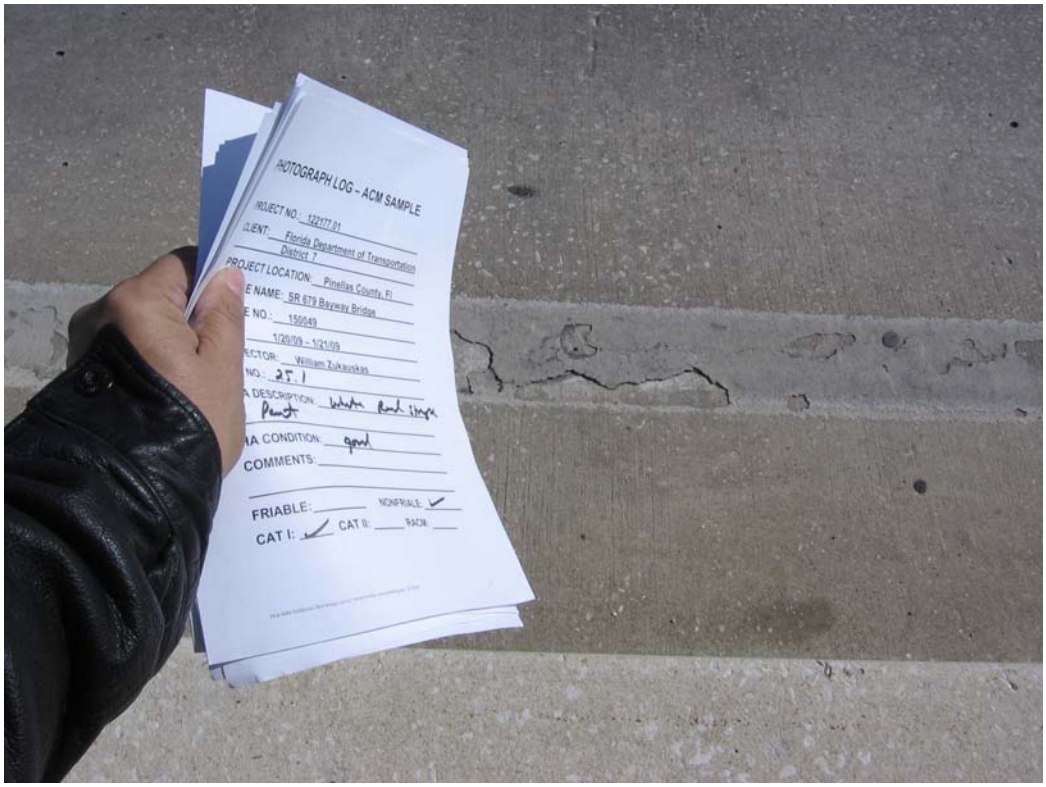


PHOTO 60 – 01/21/09 – SAMPLE 25.1 – HA 25
WHITE PAINT
ROAD STRIPES

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

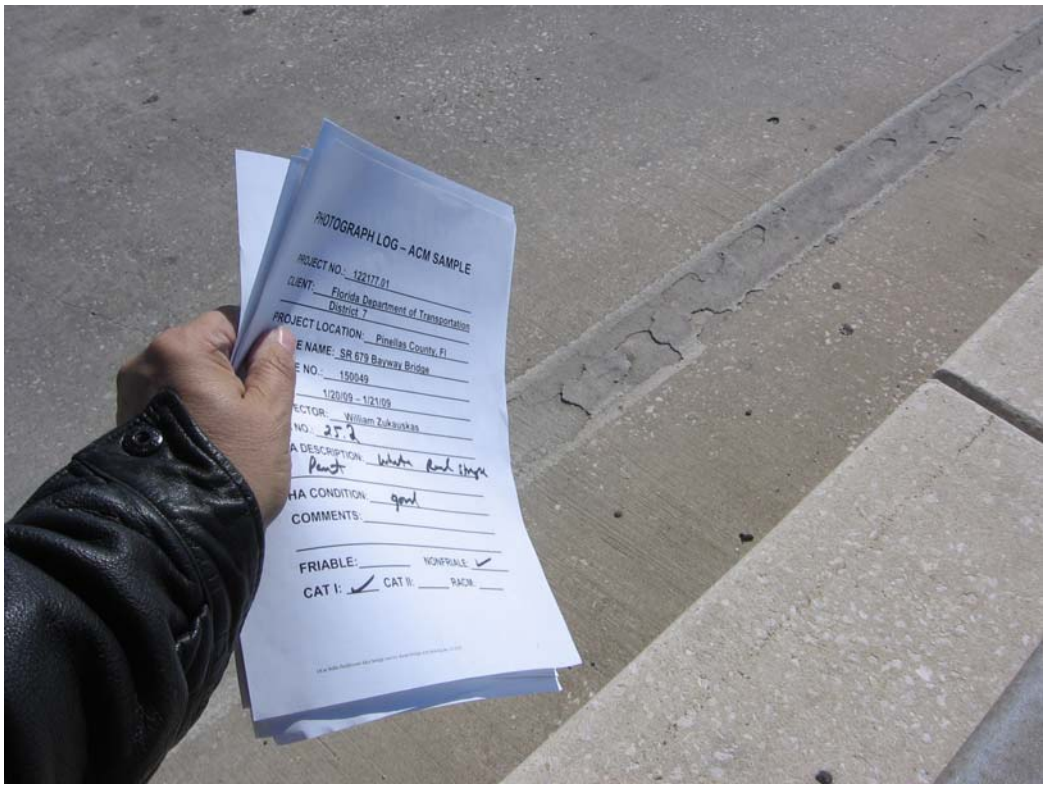


PHOTO 61 – 01/21/09 – SAMPLE 25.2 – HA 25
WHITE PAINT
ROAD STRIPES

PHOTO 62 – 01/21/09 – SAMPLE 25.3 – HA 25
WHITE PAINT
ROAD STRIPES

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

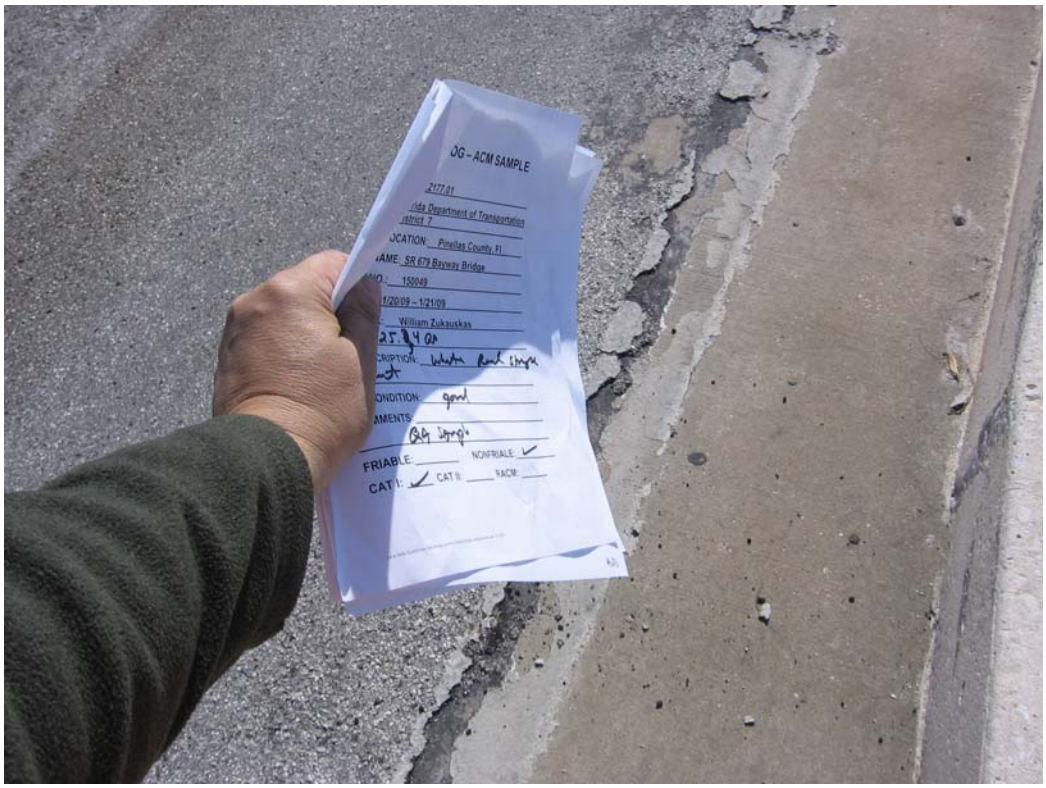


PHOTO 63 – 01/21/09 – SAMPLE 25.4 QA/QC – HA 25
WHITE PAINT
ROAD STRIPES

PHOTO 64 – 01/21/09 – SAMPLE 26.1 – HA 26
LIGHT GRAY CONCRETE
LIP AROUND MAN WAY ON SE SIDE OF BRIDGE

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

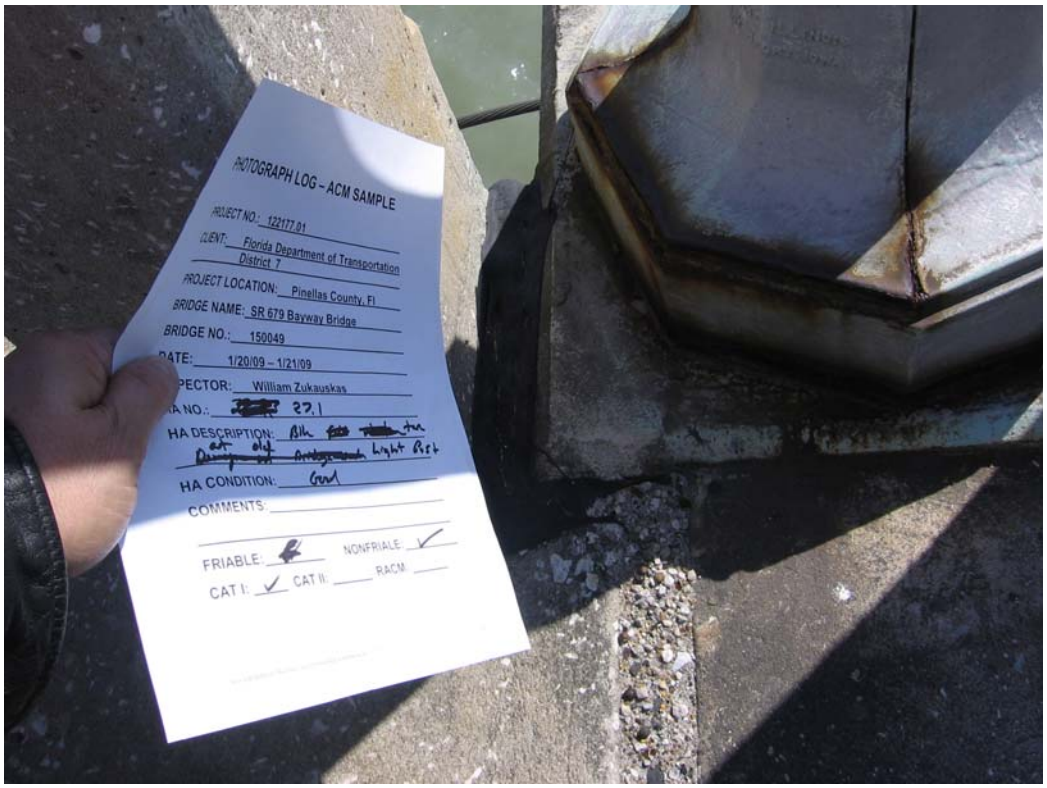


PHOTO 65 – 01/21/09 – SAMPLE 27.1 – HA 27
BLACK TAR
AT LIGHT POST BY SIDEWALK ON SE SIDE

PHOTO 66 – 01/21/09 – SAMPLE 28.1 – HA 28
BLACK VIBRATION DAMPERS
AT NORTH AND SOUTH BRIDGE ENDS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

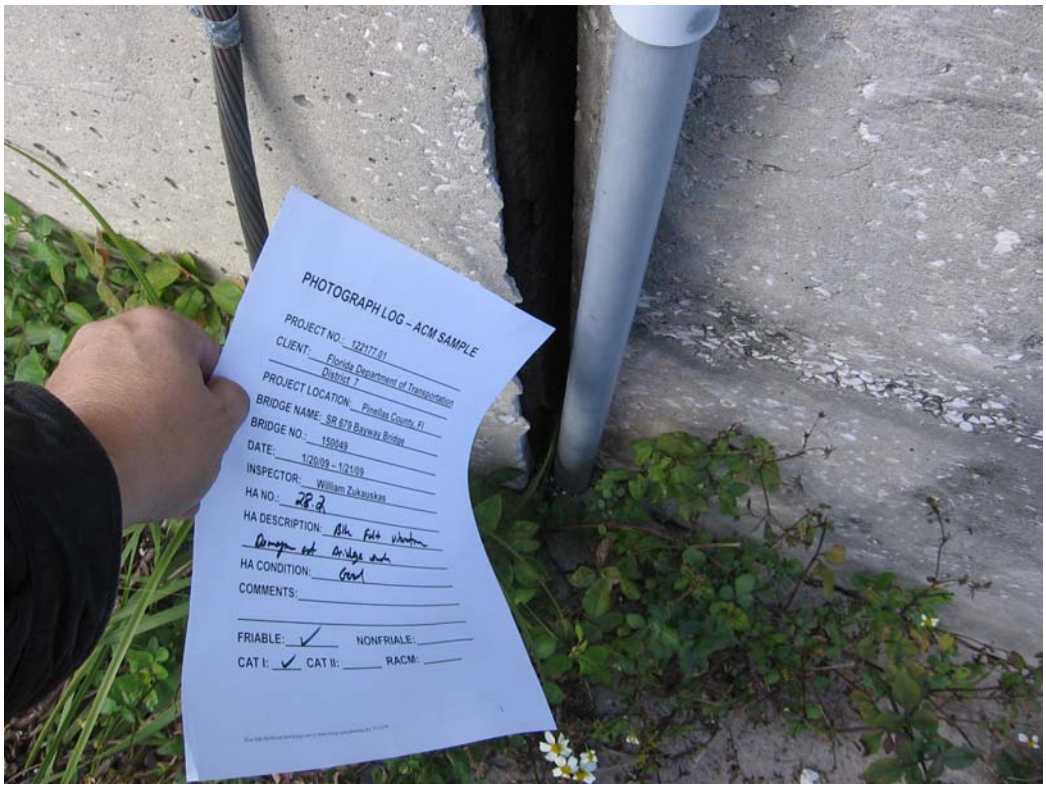


PHOTO 67 – 01/21/09 – SAMPLE 28.2 – HA 28
BLACK VIBRATION DAMPERS
AT NORTH AND SOUTH BRIDGE ENDS

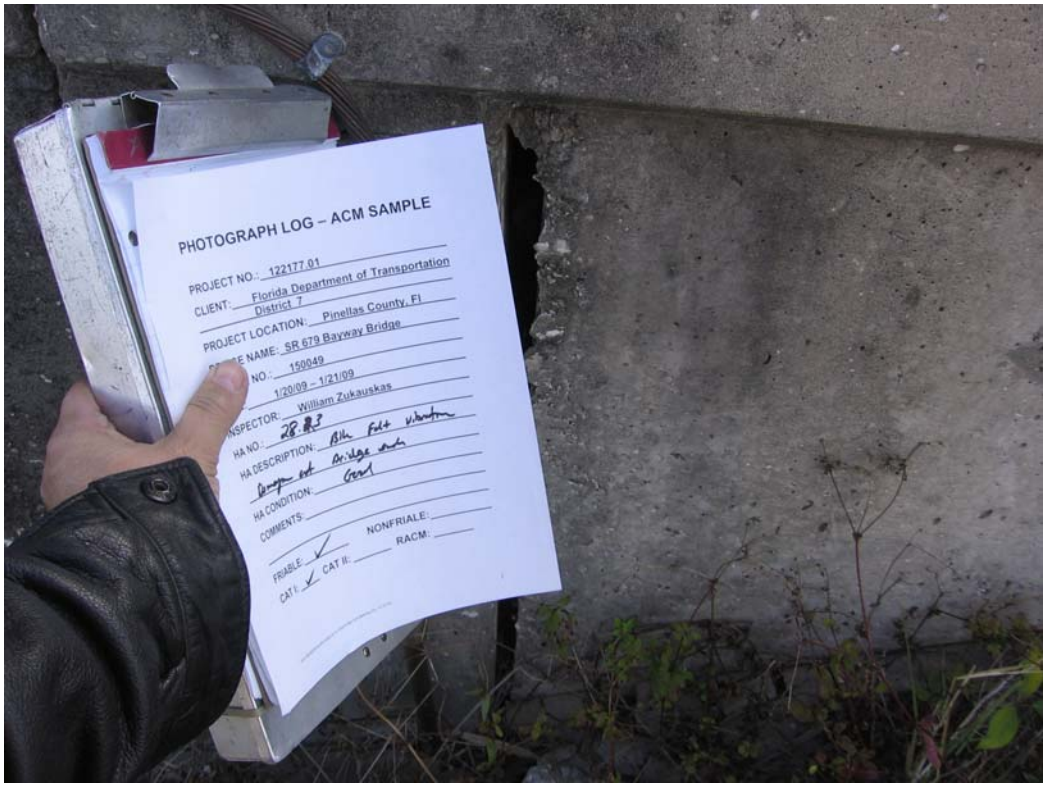


PHOTO 68 – 01/21/09 – SAMPLE 28.3 – HA 28
BLACK VIBRATION DAMPERS
AT NORTH AND SOUTH BRIDGE ENDS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

PHOTO 69 – 01/21/09 – SAMPLE 29.1 – HA 29
CONCRETE
PILINGS/PIERS AT WOOD FENDERS

PHOTO 70 – 01/21/09 – SAMPLE 29.2 – HA 29
CONCRETE
PILINGS/PIERS AT WOOD FENDERS

BRIDGE 150049
ASBESTOS SURVEY PHOTO LOG

PHOTO 71 – 01/21/09 – SAMPLE 29.3 – HA 29
CONCRETE
PILINGS/PIERS AT WOOD FENDERS

PHOTO 72 – 01/21/09 – SAMPLE ASSUMED – HA 30
BRAKE SHOES
ON BRIDGE LIFT EQUIPMENT

SECTION 4

LABORATORY ANALYTICAL DATA AND CHAIN OF CUSTODY FORM(S)

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256
Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Location**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
150049-1.1 *040902165-0001*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-1.2 *040902165-0002*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-1.3 *040902165-0003*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-2.1 *040902165-0004*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-2.2 *040902165-0005*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-2.3 *040902165-0006*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-3.1 *040902165-0007*		White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256

Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Location	Appearance	% Fibrous	% Non-Fibrous	% Type
150049-3.2 *040902165-0008*		White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-3.3 *040902165-0009*		White/Beige Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-4.1 *040902165-0010*		Brown/Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-4.2 *040902165-0011*		Brown/Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-4.3 *040902165-0012*		Brown/Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-5.1 *040902165-0013*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-5.2 *040902165-0014*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256
Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Location	Appearance	% Fibrous	% Non-Fibrous	% Type
150049-5.3 *040902165-0015*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-6.1 *040902165-0016*		Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-7.1 *040902165-0017*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-8.1 *040902165-0018*		Gray Non-Fibrous Heterogeneous	20% Wollastonite	80% Non-fibrous (other)	None Detected
150049-9.1 *040902165-0019*		Gray Non-Fibrous Heterogeneous	SUGGEST TEM	100% Non-fibrous (other)	<1% Chrysotile
150049-10.1 *040902165-0020*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-10.2 *040902165-0021*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256
Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	Location	Appearance	% Fibrous		% Non-Fibrous	% Type
150049-10.3 *040902165-0022*		Gray/White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-11.1 *040902165-0023*		Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-11.2 *040902165-0024*		Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-11.3 *040902165-0025*		Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-12.1 *040902165-0026*		Black Fibrous Heterogeneous	35%	Cellulose	65% Non-fibrous (other)	None Detected
150049-12.2 *040902165-0027*		Black Fibrous Heterogeneous	40%	Cellulose	60% Non-fibrous (other)	None Detected
150049-12.3 *040902165-0028*		Black Fibrous Heterogeneous	35%	Cellulose	65% Non-fibrous (other)	None Detected

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256
Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Location	Appearance	% Fibrous	% Non-Fibrous	% Type
150049-13.1 *040902165-0029*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-13.2 *040902165-0030*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-13.3 *040902165-0031*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-14.1 *040902165-0032*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-15.1 *040902165-0033*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-15.2 *040902165-0034*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-15.3 *040902165-0035*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256

Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Location	Appearance	% Fibrous	% Non-Fibrous	% Type
150049-16.1 *040902165-0036*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-16.2 *040902165-0037*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-16.3 *040902165-0038*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-17.1 *040902165-0039*		Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-17.2 *040902165-0040*		Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-17.3 *040902165-0041*		Black Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-18.1 *040902165-0042*		Brown Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256

Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Location**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
150049-19.1 TILE *040902165-0043*		Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-19.1 MASTIC *040902165-0043A*		Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-19.2 TILE *040902165-0044*		Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-19.2 MASTIC *040902165-0044A*		Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-19.3 TILE *040902165-0045*		Tan Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-19.3 MASTIC *040902165-0045A*		Yellow Non-Fibrous Heterogeneous	<1% Cellulose	100% Non-fibrous (other)	**None Detected**
150049-20.1 *040902165-0046*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256
Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Location**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
150049-21.1 BASE *040902165-0047*		Gray Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-21.1 MASTIC *040902165-0047A*		Yellow Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-22.1 *040902165-0048*		White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-22.2 *040902165-0048A*		White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-22.3 *040902165-0049*		White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**
150049-23.1 DRYWALL *040902165-0050*		Brown/White Fibrous Heterogeneous	40% Cellulose	60% Non-fibrous (other)	**None Detected**
150049-23.1 JOINT COMPOUND *040902165-0050A*		White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	**None Detected**

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256
Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos			Asbestos
Sample	Location	Appearance	% Fibrous		% Non-Fibrous	% Type
150049-24.1 *040902165-0051*		Orange Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-25.1 *040902165-0052*		Gray/White Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-26.1 *040902165-0053*		Gray Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-27.1 *040902165-0054*		Black Non-Fibrous Heterogeneous			100% Non-fibrous (other)	None Detected
150049-28.1 *040902165-0055*		Brown/Black Fibrous Heterogeneous	75%	Cellulose	25% Non-fibrous (other)	None Detected
150049-28.2 *040902165-0056*		Brown/Black Fibrous Heterogeneous	70%	Cellulose	30% Non-fibrous (other)	None Detected
150049-28.3 *040902165-0057*		Brown/Black Fibrous Heterogeneous	70%	Cellulose	30% Non-fibrous (other)	None Detected

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. The limit of detection as stated in the method is 1%. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
Analysis performed by EMSL Westmont (NVLAP #101048-0), NY ELAP 10872

EMSL Analytical, Inc.
107 Haddon Ave., Westmont, NJ 08108
Phone: (856) 858-4800 Fax: (856) 858-4960 Email: westmontasblab@EMSL.com

Attn: **Bill Zukauskas**
Shaw Environmental, Inc.
9143 Phillips Highway
Suite 400
Jacksonville, FL 32256
Fax: (904) 636-9356 Phone: (904) 636-9360
Project: **122177.01 BRIDGE 150049**

Customer ID: SHAE77
Customer PO:
Received: 01/23/09 9:10 AM
EMSL Order: 040902165

EMSL Proj:
Analysis Date: 1/29/2009
Report Date: 1/29/2009

Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Location	Appearance	% Fibrous	% Non-Fibrous	% Type
150049-29.1 *040902165-0058*		White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-29.2 *040902165-0059*		White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-29.3 *040902165-0060*		White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-24.2 *040902165-0061*		Orange Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-24.3 *040902165-0062*		Orange Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-25.2 *040902165-0063*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected
150049-25.3 *040902165-0064*		Gray/White Non-Fibrous Heterogeneous		100% Non-fibrous (other)	None Detected

Analyst(s)

Erica Valent (51)
Kevin Pang (19)

Stephen Siegel, CIH, Laboratory Manager
or other approved signatory

THIS IS THE LAST PAGE OF THE REPORT.

040902165

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
Suite 900
5125 Adanson St
Orlando, FL 32804
Phone: (407) 599-5887
Fax: (407) 599-9063
http://www.emsl.com

040902165

Please print all information legibly.

Positive Stop

Company:	Shaw Environmental	Bill To:	Shaw Environmental
Address1:	9143 Philips Highway	Address1:	9143 Philips Highway
Address2:	Suite 400	Address2:	Suite 400
City,State:	Jacksonville, Florida	City,State:	Jacksonville, Florida
Zip/Post Code:	32256	Zip/Post Code:	32256
Country:	USA	Country:	USA
Contact Name:	Bill Zukauskas	Attn:	Bill Zukauskas
Phone:	904-509-9662	Phone:	904-509-9662
Fax:	904-367-6001	Fax:	904-367-6001
Email:	william.zukauskas@shawgrp.com	Email:	william.zukauskas@shawgrp.com
EMSL Rep:		P.O. Number:	
Project Name/Number:	122177.01		Bridge 150049

MATRIX			TURNAROUND			
☐ Air	☐ Soil	☐ Micro-Vac	☐ 3 Hours	☐ 6 Hours	☐ Same Day or 12 Hours*	☐ 24 Hours (1 day)
☒ Bulk	☐ Drinking Water		☐ 48 Hours (2 days)	☐ 72 Hours (3 days)	☐ 96 Hours (4 days)	☒ 120 Hours (5 days)
☐ Wipe	☐ Wastewater		☐ 144+ hours (6-10 days)			

TEM AIR, 3 hours, 6 hours, Please call ahead to schedule. There is a premium charge for 3-hour tat, please call 1-800-220-3675 for price prior to sending samples. You will be asked to sign an authorization form for this service.

***12 hours (must arrive by 11:00a.m. Mon -Fri.), Please Refer to Price Quote**

61 Samples

PCM - Air	TEM Air	TEM WATER
☐ NIOSH 7400(A) Issue 2: August 1994	☐ AHERA 40 CFR, Part 763 Subpart E	☐ EPA 100.1
☐ OSHA w/TWA	☐ NIOSH 7402	☐ EPA 100.2
☐ Other:	☐ EPA Level II	☐ NYS 198.2
PLM - Bulk	**TEM BULK**	**TEM Microvac/Wipe**
☒ EPA 600/R-93/116	☐ Drop Mount (Qualitative)	☐ ASTM-D 5755-95 (quantative method)
☐ EPA Point Count	☐ Chatfield SOP - 1988-02	☐ Wipe Qualitative
☐ NY Stratified Point Count	☐ TEM NOB (Gravimetric) NYS 198.4	
☐ PLM NOB (Gravimetric) NYS	☐ EMSL Standard Addition:	**XRD**

RECEIVED
2004 APR 23 AM 9:16
EMSL ANALYTICAL INC

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC

040902165

#Resistance Strip

Page 1 of 5

Chain of Custody

Asbestos Lab Services

040902165

EMSL Analytical, Inc.
Suite 900
5125 Adanson St
Orlando, FL 32804
Phone: (407) 599-5887
Fax: (407) 599-9063
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 150049 - 1.1 - 150049 - 29.3

Total Samples #: 61

Relinquished: [signature] Date: 1/22/09 Time: 1700

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: DM-UPS-9107 Date: _____ Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
150049 - 1.1	Concrete deck + column	
150049 - 1.2	↓	
150049 - 1.3	↓	
150049 - 2.1	Rails + posts	
150049 - 2.2	↓	
150049 - 2.3	↓	
150049 - 3.1	Concrete curb	
150049 - 3.2	↓	
150049 - 3.3	↓	
150049 - 4.1	concrete seawall	
150049 - 4.2	↓	
150049 - 4.3	↓	
150049 - 5.1	concrete Abutment walls	
150049 - 5.2	↓	

RECEIVED
EMSL
WESTMONT, NJ
09 JAN 23 AM 9:16

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

040902165

Page 2 of 5

Chain of Custody

Asbestos Lab Services

040902165

EMSL Analytical, Inc.
Suite 900
5125 Adanson St
Orlando, FL 32804
Phone: (407) 599-5887
Fax: (407) 599-9063
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 150049-1.1 - 150049-29.3

Total Samples #: 61

Relinquished: [signature] Date: 11/22/05 Time: 1300

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: _____ Date: _____ Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
150049- 5.3	Concrete Abutment wall	
150049- 6.1	Blk mastic on Road Reflector	
150049- 7.1	Gray Mastic on Rail Reflector	
150049- 8.1	Blk Mastic Patches on sidewalk	
150049- 9.1	Gray Mastic Patches on sidewalk	
150049- 10.1	Replacement concrete Rail Post	
150049- 10.2	↓	
150049- 10.3	↓	
150049- 11.1	Lt. Wt. Concrete Patch on Rails + Deck	
150049- 11.2	↓	
150049- 11.3	↓	
150049- 12.1	Blk Mastic at Rail Post	
150049- 12.2	↓	
150049- 12.3	↓	

RECEIVED
EMSL
WESTMONT, NJ
06 JAN 23 AM 8:16

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

040902165

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
Suite 900
5125 Adanson St
Orlando, FL 32804
Phone: (407) 599-5887
Fax: (407) 599-9063
http://www.emsl.com

Please print all information legibly.

Client Sample # (s) 150049 - 1.1 - 150049 - 29.3

Total Samples #: 61

Relinquished: Bill Johnson Date: 1/22/09 Time: 1700

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: _____ Date: _____ Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
150049 - 13.1	Blk/gray expansion joint material	
150049 - 13.2	↓	
150049 - 13.3	↓	
150049 - 14.1	Dark gray Lt. Wt. Concrete Patch on sidewalk	
150049 - 15.1	Lt. gray Poured concrete Patch	
150049 - 15.2	↓	
150049 - 15.3	↓	
150049 - 16.1	Dark gray Poured concrete Patch	
150049 - 16.2	↓	
150049 - 16.3	↓	
150049 - 17.1	Blk Rubber bearing Pads	
150049 - 17.2	↓	
150049 - 17.3	↓	
150049 - 18.1	Brown concrete Patch on sidewalk	

040902165

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
Suite 900
5125 Adanson St
Orlando, FL 32804
Phone: (407) 599-5887
Fax: (407) 599-9063
http://www.emsl.com

040902165

Please print all information legibly.

Client Sample # (s) 150049-1.1 - 150049-29.3

Total Samples #: 81

Relinquished: [signature] Date: 1/22/05 Time: 1200

Received: _____ Date: _____ Time: _____

Relinquished: _____ Date: _____ Time: _____

Received: _____ Date: _____ Time: _____

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
150049-19.1	1X1 tan VFT w/ Tan mastic	
150049-19.2	↓	
150049-19.3	↓	
150049-20.1	Gray window + door frame caulk	
150049-21.1	4" tan vinyl Baseboard w/ Tan mastic	
150049-22.1	WALL Plaster	
150049-22.2	↓	
150049-22.3	↓	
150049-23.1	Wall Board + joint compound	
150049-24.1	yellow paint	
150049-25.1	White paint	
150049-26.1	Lt. gray concrete Lip at MANWAY	
150049-27.1	Blk tar Patch at SE Light Post	
150049-28.1	Blk vibration Damper	

See Last Page

09 JAN 23 AM 9:16
RECEIVED
EMSL
ANALYTICAL INC.

SAMPLES ACCEPTED FOR ANALYSIS BY EMSL ANALYTICAL INC.

040902165

Page 5 of 5

Chain of Custody

Asbestos Lab Services

EMSL Analytical, Inc.
Suite 900
5125 Adanson St
Orlando, FL 32804
Phone: (407) 599-5887
Fax: (407) 599-9063
http://www.emsl.com

Please print all information legibly.

0409021 of 5

Client Sample # (s) 150049 - 1.1 - 150049 - 29.3

Total Samples #: 61

Relinquished: [signature] Date: 1/22/09 Time: 1700

Received: Date: Time:

Relinquished: Date: Time:

Received: Date: Time:

SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME (if applicable)
150049 - 28.2	Blue vibration damper	
150049 - 28.3	↓	
150049 - 29.1	Concrete piers at wood foundation	
150049 - 29.2	↓	
150049 - 29.3	↓	
150049 - 29.2	yellow paint	
150049 - 29.3	↓	
150049 - 25.2	white paint	
150049 - 25.3	↓	

09 JAN 23 AM 9:16
RECEIVED
EMSL
WAYNE, NJ

FOR ANALYSIS BY
EMSL ANALYTICAL INC.

QUALITY ASSURANCE SAMPLING

Quality assurance (QA) sampling was performed in accordance with the State of Florida Asbestos Survey Procedure Manual. Four QA samples (samples No. 6.2, No. 7.2, No. 24.4, and No. 25.4) were collected next to samples No. 6.1, No. 7.1, No. 24.3, and No. 25.3, respectively. None of these samples were found to contain asbestos.

IATL International Asbestos Testing Laboratories
9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: Shaw E & I
9143 Phillips HighwaySuite 400
Jacksonville FL 32256-7460

Report Date: 1/30/2009
Project: Bridge 150049
Project No.: 122177.01

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 3509725 **Description / Location:** Black Tar
Client No.: 150049-6.2QA

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 3509726 **Description / Location:** Grey/Black Rubber
Client No.: 150049-7.2QA

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 3509727 **Description / Location:** Yellow/Orange Paint
Client No.: 150049-24.4QA

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 3509728 **Description / Location:** Black/White Non Fibrous
Client No.: 150049-25.4QA

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

NIST-NVLAP No. 101165-0 **NY-DOH No. 11021** **AIHA Lab No. 100188**

Analysis Method: EPA 600/R-93/116

Comments: (PC) Indicates Stratified Point Count Method performed. Method not performed unless stated. Quantification at <0.25% by volume is possible with this method. (PC-Trace) represents this limit of quantitation. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed. Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, negative PLM results cannot be guaranteed. Electron Microscopy can be used as a confirming technique. Regulatory Limit is based upon the sample matrix.

Analysis Performed By: B. Hargrove **Approved By:**

Date: 1/30/2009

Frank E. Ehrenfeld, III

International Asbestos Testing Laboratories
9000 Commerce Parkway, Suite B
Mt. Laurel, New Jersey 08054

Tel. 856 231-9449
Fax 856 231-9818

- Chain of Custody -

Client: Shaw
9143 Philips Hwy
Jax, Fl. 32256

Project Name: Bridge 150049
Project No.: 122177.01

Phone: 904 503 9662
FAX:

Contact: Bill Zehler
Pager: 904 503 5662

Special Instructions:

Type:

Asbestos		Lead		Other
[X] Air	[ ] Soil	[ ] Air	[ ] Soil	
[ ] Bulk	[ ] Dust	[ ] Bulk	[ ] Paint	
[ ] Water	[ ] Other	[ ] Water	[ ] Other	

Analysis Method:

[ ] PCM : NIOSH 7400	[X] PLM : Bulk Asbestos EPA 600	[ ] TEM : AHERA
[ ] PCM : OSHA	[ ] PLM : Point Counting 198.1	[ ] TEM : NIOSH 7402
[ ] PCM : Other	[ ] PLM : NOB via 198.1 (PLM only)	[ ] TEM : EPA Level II
	[ ] If <1% by PLM, to TEM via 198.4	[ ] TEM : Microvac / Wipe
[ ] AAS : NIOSH 7082 (Air)	to meet NYSDOH requirements **	[ ] TEM : Asbestos in Water
[ ] AAS : Lead in Drinking Water	(**call to confirm TAT)	[ ] TEM : Bulk Analysis
[ ] AAS : Lead in Paint ASTM D3335-85a		[ ] TEM : NOB 198.4
[ ] AAS : Lead Dust/Wipe		[ ] TEM : Other
[ ] AAS : Other Metals / Soil		[ ] Total Dust : NIOSH 0500

Turnaround Time: **FAX:** _____ (date / time) **Verbals:** _____ (date / time)

[ ] 10 Day [X] 5 Day [ ] 3 Day [ ] 2 Day [ ] 1 Day [ ] 6 hour [ ] RUSH

Preliminary FAX/Verbal Results Requested by: _____

Sample Numbers: 3509725 150049-6.2 QA, 3509726 150049-7.2 QA, 3509727 150049-24.4 QA

Client #(s): _____ (start) - _____ (end) IATL#(s): _____ (start) - 3509728 (end) Total: 4

150049-25.4 QA

Chain of Custody:

Relinquished: [signature]
Received:
Sample Log-in: [signature]
Sample Prep:
Analyzed: [signature] 1-30-09
QA/QC Review:

Date: 1/22/09 Time: [illegible]
Date: Time:
Date: Time:
Date: Time:
Date: Time:
Date: Time:

RECEIVED JAN 23 2009

Archived/Released: _____ QA/QC InterLAB Use: _____ Date: _____ Time: _____

SECTION 5

CREDENTIALS FOR CONSULTANT, INSPECTOR, AND LABORATORY

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

(850) 487-1395

SHAW ENVIRONMENTAL INC
OWNER: SHAW ENVIRONMENTAL & INFRASTRUCTURE INC
9143 PHILIPS HIGHWAY
SUITE 400
JACKSONVILLE FL 32256-7460

STATE OF FLORIDA AC# 3477509
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ZA317 10/09/07 078068584

ASBESTOS BUSINESS ORGANIZATION
SHAW ENVIRONMENTAL INC
OWNER: SHAW ENVIRONMENTAL & INFRA

IS LICENSED under the provisions of Ch.469 FS.
Expiration date: NOV 30, 2009 L07100902694

DETACH HERE

AC# 3477509

STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

SEQ# L07100902694

DATE	BATCH NUMBER	LICENSE NBR
10/09/2007	078068584	ZA317

The ASBESTOS BUSINESS ORGANIZATION
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2009

SHAW ENVIRONMENTAL INC
OWNER: SHAW ENVIRONMENTAL & INFRASTRUCTURE INC
8021 PHILIPS HIGHWAY
SUITE 12
JACKSONVILLE FL 32256-7460

CHARLIE CRIST
GOVERNOR

HOLLY BENSON
SECRETARY

DISPLAY AS REQUIRED BY LAW

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

(850) 487-1395

HANSKAT, JAMES THOMAS
1820 SE 7TH ST
POMPANO BEACH FL 33060

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto **www.myfloridalicense.com**. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!

STATE OF FLORIDA AC# 4136235
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

AX0000031 11/09/08 088110510

ASBESTOS CONSULTANT
HANSKAT, JAMES THOMAS

IS LICENSED under the provisions of Ch.469 FS.
Expiration date: NOV 30, 2010 L08110900055

DETACH HERE

AC# 4136235

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

SEQ# L08110900055

DATE	BATCH NUMBER	LICENSE NBR
11/09/2008	088110510	AX0000031

The ASBESTOS CONSULTANT
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2010

HANSKAT, JAMES THOMAS
1820 SE 7TH ST
POMPANO BEACH FL 33060

CHARLIE CRIST
GOVERNOR

DISPLAY AS REQUIRED BY LAW

CHARLES W. DRAGO
SECRETARY

UNIVERSITY OF FLORIDA

TREEO CENTER

Center for Training, Research and Education for Environmental Occupations certifies

William B Zukauskas

Shaw, 4193 Philips Highway Suite 400, Jacksonville, FL 32256

has successfully met certificate requirements for the

Asbestos Refresher: Inspector

FBPR Asbestos Licensing Unit: Provider #0000995; Course #FL49-0004731

(Reaccreditation for Inspector under TSCA Title II/AHERA)

Conducted

04/29/2008

Certificate #: 080422-0197
CEUs: .4
EPA accreditation expires: 04/29/2009
Principal Instructor: Brian Duchene, PE

FBPR LAC: #0000995; Course #0004731
FBPE PDHs (#0004040): 4.0
ABIH: CM Points 0.5
FBPR ARCH: #1790 (0000995); Course #AR.04.318B (0007372); Hrs 5.0 (Intermediate)

William T. Engel, Jr., Ph.D.
Director

University of Florida TREEO Center • 3900 SW 63rd Boulevard • Gainesville, FL 32608-3800 • 352-392-9570 • www.treeo.ufl.edu

UNIVERSITY OF FLORIDA

TREEO CENTER

Center for Training, Research and Education for Environmental Occupations certifies

William B Zukauskas

Shaw, 4193 Philips Highway Suite 400, Jacksonville, FL 32256

Having passed a 25-question examination with a score of 70% or higher, has successfully met certificate requirements for the

Asbestos Refresher: Management Planner

FBPR Asbestos Licensing Unit: Provider #0000995; #FL49-0004732

(Reaccreditation for Management Planner Under TSCA Title II/AHERA)

conducted

04/29/2008

Certificate #: 080423-0217
CEUs: .35
EPA accreditation expires: 04/29/2009
Principal Instructor: Russell E. Stauffer, P.E

FBPR LAC: #0000995; Course #0004732
FBPE PDHs (#0004040): 3.5
FBPR CILB: #0000995; Full Day INS/MP Ref Only; Course #0003511; Hrs: 8.0 (General)
ABIH: CM Pts 1.0; Full Day Inspector/MP Ref
FBPR ARCH: #1790; Full Day INS/MP Ref; Course #AR.04.318A (0007371); Hours: 8.0 (Intermediate)

William T. Engel, Jr., Ph.D.
Director

University of Florida TREEO Center • 3900 SW 63rd Boulevard • Gainesville, FL 32608-3800 • 352-392-9570 • www.treeo.ufl.edu

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101151-0

EMSL Analytical, Inc.

Orlando, FL

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated 18 June 2005).

2008-07-01 through 2009-06-30
Effective dates

Sally L. Bruce
For the National Institute of Standards and Technology

NVLAP-01C (REV. 2006-09-13)

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
5125 Adanson Street, Suite 900
Orlando, FL 32804
Dr. Blanca Cortes
Phone: 407-599-5887 Fax: 407-599-9063
E-Mail: bcortes@emsl.com
URL: http://www.emsl.com

BULK ASBESTOS FIBER ANALYSIS (PLM) **NVLAP LAB CODE 101151-0**

NVLAP Code	*Designation / Description*
18/A01	EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

2008-07-01 through 2009-06-30
Effective dates

For the National Institute of Standards and Technology

NVLAP-01S (REV. 2005-05-19)

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101165-0

International Asbestos Testing Laboratories

Mt. Laurel, NJ

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

BULK ASBESTOS FIBER ANALYSIS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated 18 June 2005).

2008-07-01 through 2009-06-30

Effective dates

Sally S. Bruce

For the National Institute of Standards and Technology

NVLAP-01C (REV. 2006-09-13)

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

International Asbestos Testing Laboratories
9000 Commerce Parkway
Suite B
Mt. Laurel, NJ 08054
Mr. Frank E. Ehrenfeld, III
Phone: 856-231-9449 Fax: 856-231-9818
E-Mail: frankehrenfeld@iatl.com
URL: http://www.iatl.com

BULK ASBESTOS FIBER ANALYSIS (PLM) **NVLAP LAB CODE 101165-0**

NVLAP Code	*Designation / Description*
18/A01	EPA-600/M4-82-020: Interim Method for the Determination of Asbestos in Bulk Insulation Samples

2008-07-01 through 2009-06-30
Effective dates

Sally S. Bruce
For the National Institute of Standards and Technology

NVLAP-01S (REV. 2005-05-19)

SECTION 6

ASBESTOS OPERATIONS AND MAINTENANCE (O&M) PLAN AND RESPONSE ACTION

O & M PLAN AND RESPONSE ACTION
FOR
BRIDGE 150049
SR 679 – PINELLAS BAYWAY STRUCTURE E BRIDGE
OVER BOCA CIEGA BAY
ST. PETERSBURG, PINELLAS COUNTY, FL
TO BE RENOVATED

Any regulated asbestos-containing material (RACM), must be abated in accordance with 40 CFR, Subpart M, Part 61.145, as stated in abatement specifications required by Chapter 255, FS and OSHA Standard 1926.58 for the construction industry, prior to demolition or renovation. RACM is identified as follows:

- Friable ACM
- Category I nonfriable ACM that has become friable
- Category I nonfriable ACM that will be or has been subject to sanding, grinding, cutting, or abrading
- Category II nonfriable ACM that has a high probability of becoming, or has become, crumbled, pulverized, or reduced to powder by the forces expected to act on such material

No regulated asbestos-containing materials were found at Bridge 150049, SR 679 – Pinellas Bayway Structure E Bridge, in the areas identified by the client for inspection. Renovation or demolition can proceed without any asbestos containment engineering controls. No O & M or response actions are required.

This report is the result of a limited investigation of the referenced bridge, and every attempt has been made to discover and inventory all asbestos-containing building materials (ACBM) in the structure. However, due to the limited and nondestructive nature of the inspection, it is possible that other concealed and inaccessible suspect materials may exist. Should any additional suspect ACM be uncovered during renovation or demolition which are not listed in this report, then those materials should be sampled and submitted for analysis.

End of Work Plan

DISCLAIMER

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

This report is the result of an extensive investigation of the above-referenced structures using state of the art techniques, and every attempt has been made to discover and inventory all ACBM in the structures. However, due to the limited and nondestructive nature of the investigation, there is no guarantee that all ACBM within the structures has been identified. Should any additional suspect materials be uncovered during a renovation or demolition that are not listed in this survey, then those materials should be sampled and submitted for analysis.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.