

# Building Envelope Consultants, Ltd.

Architects • Engineers • Roof Consultants

Detroit, MI  
Chicago, IL  
Denver, CO  
Tiburon, CA  
St. Louis, MO  
Indianapolis, IN  
Kansas City, MO  
Minneapolis, MN  
HQ: Waukesha, WI

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## Addendum #1

Project: SB860 – Administration Building – Roof Replacement  
Project Number: 20210256  
Date: March 24, 2025

**Notice to all Plan Holders/Bidders:**

The following modifications, additions, deletions, clarifications and/or information are now part of the Contract Documents and shall be fully binding. This addendum must be acknowledged as part of the Bid Form.

**Item #1 (attendance sheet):**

See the attached attendance sheet from the pre-bid meeting held on March 20, 2025.

**Item #2 (asbestos report):**

Attached is a copy of the asbestos report.

**Item #3 (Existing Building Plans):**

The structural plans from the construction of the building are available. If you would like a copy emailed, please send a request to [info@building-envelope.net](mailto:info@building-envelope.net). In the subject line note "Administration Building Original Plans".

**Item #4 (Bid date):**

The bid date has been extended to April 3, 2025, 2:00 p.m. EST.

**Item #5 (Clarified Detail):**

Notes have been added to detail 1 on A3.0 (see the attached). Reuse the existing copper counter flashing below the coping stones to cover the specified termination bar.

**Item #6 (Revised Roof Plan):**

Delete note 18 located on the south wall (west end) of roof area A. See the revised section of the roof plan (attached).

End of Addendum No. 1

The following questions/answers were stated at the pre-bid meeting held on site on March 20, 2025:

- **Question:** Is it required to raise any low units?  
**Answer:** Any low units that are lower than 8" must be raised to 8" per manufacturer warranty standards and any non-functional roof top curbs, or equipment will be considered for removal and coordinated with IU Personnel and staff.
- **Question:** Can we use the existing copper counter flashing under the stone coping to cover the specified anchor bar? This would act as a counter flashing and may be required by manufacturers?  
**Answer:** See item #5 above.
- **Question:** Where are is the set-up location?  
**Answer:** The proposed set-up/storage location is listed 2 on A0.0. Final location will be established at the pre-construction meeting.
- **Question?** What is the deck thickness as it relates to the anchor attachment?  
**Answer:** See item 3 above.

The following topics were discussed at the on-site, pre-bid meeting held March 20, 2025:

- Project requirements, system description, warranty requirements, and IU procedural requirements.
- Please email any other related questions to Tom Laufenberg at [Toml@building-envelope.net](mailto:Toml@building-envelope.net) or [Andyb@building-envelope.net](mailto:Andyb@building-envelope.net).
- IU contacts are as follows Brian Klaum, Mike Huff, and Eric Bucholtz. Their contact information is on the attached sign in sheet.
- Please be aware that notes 17 and 18 on A1.1 applies to the alternate bid #2.

Name	Company	Phone #	Email
Keith Shelly	Bennett & Brosseau		George
Alonzo Patino	Windward Roofing	773-573-4303	apatino@windwardroofing.com
Nelson Smiley	Foster Contracting Inc	317-464-7597	<a href="mailto:nelson@fostercontracting.net">nelson@fostercontracting.net</a>
Tony Sagrati	Korellis	219-713-9807	tsagrati@korellis.com
Ken Hoy	Slatile Roofing	574-233-7485	<a href="mailto:ken.hoy@slatiles.com">ken.hoy@slatiles.com</a>
Tim Brooker	DCG Roofing Solutions	847-274-6817	<a href="mailto:tbrooker@dcgroofing.com">tbrooker@dcgroofing.com</a>
Jerry Dollahan	Slatile		<a href="mailto:jerry.dollahan@slatiles.com">jerry.dollahan@slatiles.com</a>
Eric Bucholtz	IUSB	574-520-4680	<a href="mailto:ebucholt@iu.edu">ebucholt@iu.edu</a>
Brian Klaum	IU	317-946-4530	<a href="mailto:bdklaum@iu.edu">bdklaum@iu.edu</a>
Andy Barriento	BEC	317-432-1727	<a href="mailto:andyb@building-envelope.net">andyb@building-envelope.net</a>
Doug Ruffner	Applied Fabricators	317-701-0936	druffner@appliedfabricators.com
Mike Huff	IU	574-520-4319	<a href="mailto:huffmike@iu.edu">huffmike@iu.edu</a>
Aaron Hoover(not present)	IU	574-520-4319	aahoover@usb.edu

# **PROJECT REPORT**

**Asbestos Survey  
Administration Building - Roofing  
Indiana University South Bend  
1700 W. Mishawaka Avenue  
South Bend, IN 46615**

*Submitted To:*

**Ms. Jami L. Bennett-Hammon  
Asbestos Project Coordinator  
Office of Environmental, Health & Safety Management  
Indiana University  
1514 E. 3<sup>rd</sup> Street  
Bloomington, IN 47401**

*Project Number:*

**15.1300.4.1**

*Dates Inspected:*

**December 1 & 3, 2015**

*Prepared By:*

**Amereco Engineering  
204 E. Jefferson Street  
Valparaiso, IN 46383  
(219) 531-0531**



# AMERECO, INC.

204 E. JEFFERSON ST. • VALPARAISO, IN 46383 • OFFICE 219.531.0531 • FAX 219.464.0464

February 22, 2016

Ms. Jami L. Bennett – Hammon  
Asbestos Project Coordinator  
Office of Environmental, Health & Safety Management  
Indiana University  
1514 E. 3<sup>rd</sup> Street  
Bloomington, IN 47401

**Re: Asbestos Roofing Survey  
Indiana University South Bend  
Administration Building  
Project No. 15.1300.4.1**

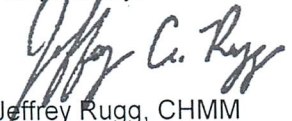
Dear Ms. Bennett-Hammon:

Thank you for the opportunity to provide you and Indiana University with this service. Attached please find the report associated with the asbestos roofing survey completed at the above captioned location. This survey was conducted on December 1<sup>st</sup> and 3<sup>rd</sup>, 2015, by John Blosky and Zachary Heine, Indiana Department of Environmental Management Licensed Asbestos Inspectors, License Numbers: 198701061 and 196831037, respectively. All sampling and analyses were performed in accordance with all applicable local, state, and federal rules and regulations.

Please be advised that asbestos containing materials were not identified during the asbestos roofing survey. Please refer to the inspection result forms in the attachment portion of the report for all findings.

Please call if you have any questions or if additional assistance can be provided.

Respectfully,

  
Jeffrey Rugg, CHMM  
Senior Environmental Manager

  
Zachary Heine, CHMM  
Director of Operations

Attachments



# Table of Contents

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## Attachments

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## 1. Background

Amerco performed this asbestos survey to determine the location, condition and quantity of accessible asbestos-containing materials associated with the roofing system. The survey was performed in accordance with the Indiana Department of Environmental Management (IDEM), the US Environmental Protection Agency (EPA) rules and regulations, specifically, the National Emission Standard for Hazardous Air Pollutants (NESHAP) and the requirements established by the Occupational Safety and Health Act (OSHA).

Bulk samples were collected of the suspect asbestos containing materials (ACMs) identified in association with the roofing system at Indiana University South Bend's Administration Building. Site plans are attached with the building location, sample locations and identification of asbestos containing roofing components. All samples were analyzed for asbestos fiber content by polarized light microscopy (PLM) (EPA-600/M4-82-020). By EPA and OSHA definition, materials containing greater than 1% asbestos content are defined as asbestos containing material (ACM).

## 2. Inspection

On December 1 and 3, 2015, Amerco was on-site to perform the asbestos survey. All accessible ACMs were categorized into separate homogeneous materials and sampled accordingly. A homogeneous sample area is defined by the U.S. Environmental Protection Agency (EPA) as an area of surfacing material, thermal insulation, or miscellaneous material that is uniform in color and texture (Asbestos Hazard Emergency Response Act [AHERA] 40 CFR 763 Subpart E). A total of twenty-seven (27) suspect asbestos samples were collected by John Blosky, License No. 198701061 and Zachary Heine, License No. 196831037.

Bulk samples were collected from suspect asbestos containing materials according to the sampling methods described in the AHERA, 40 CFR 763.86. For surfacing materials (SURF), samples were collected from each homogeneous area as follows: three (3) samples collected from materials <1,000 SF, five (5) samples from materials >1,000 and seven (7) samples were collected from materials >5,000 SF. For thermal system insulation (TSI), a minimum of six (6) bulk samples were collected from each homogeneous material. This included a minimum of three (3) samples for each different fitting, if identified, (elbow, tee, valve, etc). Samples of miscellaneous building materials (MISC) and suspect non-friable materials were collected to sufficiently determine the presence or absence of asbestos. For materials identified as "none detect" a minimum of three (3) samples were collected and analyzed, unless there was a very small quantity of the material.

To avoid disturbing the material more than necessary and potentially cause the release of asbestos fibers, the inspector performed bulk sampling of suspect materials in accordance with generally accepted procedures outlined by the EPA. Each sample was collected and placed in a clean, sealable container and labeled with a unique sample identification number. The sample number was recorded on a Bulk Sample Log Form and on the sample container to permit easy identification of the sampled material. Supplemental information was also recorded on the Bulk Sample Log Form, including date of inspection, a brief description, location of the sample, quantity, and type (matrix) of material sampled.

The bulk samples were analyzed for asbestos content by polarized-light microscopy (PLM). This analytical method, which EPA and OSHA currently recommend for the determination of asbestos in bulk samples of friable materials, can be used for qualitative identification of six morphologically different types of asbestos fibers: chrysotile, amosite, crocidolite, anthrophyllite, tremolite, and actinolite asbestos. The method specifies that the asbestos content in a bulk sample shall be estimated and reported as a finite percentage within the range of 0 to 100. Minute quantities of asbestos in bulk samples may be reported as "trace" or less than 1 percent (<1%). The analytical method determines the asbestos percentage by means of the visual estimation technique.

### 3. Findings

The following tables depict the asbestos containing building materials identified, in association with the roofing system, at the subject site:

<b>Table 3.1 – Summary of Asbestos Containing Built-up Roofing</b>				
<b>Homogenous Material</b>			<b>EPA Category</b>	<b>Friability</b>
<b>Roof ID</b>	<b>Building Material</b>	<b>Description of Material</b>		
No Asbestos Containing Roofing Materials Identified				

Please refer to the site plans found in Appendix A of this report for additional information on the location of the asbestos containing roofing. Additionally, please refer to the Roof Core Location Map for the location of all roof coring activities conducted onsite. For additional information regarding the contents of each roof core and the samples collected, please refer to the Asbestos Inspection Results – Roof Cores, in tabular format, found in Appendix C.

### 4. Conclusion

Based on the results of the asbestos survey, asbestos containing roofing materials were not identified. No further actions are required and the roofing materials may be removed and/or replaced as needed.

### 5. Report Limitations

Amerco made a diligent effort to inspect all areas of the roofing system that may contain asbestos. However, demolition activities may uncover suspect ACMs that were previously inaccessible. In the event that ACMs are uncovered during demolition, such materials should be documented and handled accordingly.

The sampling and analyses were performed in accordance with all applicable state and federal rules and regulations governing asbestos inspections in public and commercial buildings. Quality control criteria specific to the analytical method have been met. All QA/QC documentation will remain on file for future reference.



# Appendix A



SITE LOCATION MAP  
SCALE: NTS



TITLE: SITE LOCATION MAP		
PROJECT # 15.1300.4.1	SHEET: <b>1</b>	
DRAWN BY: STRAVIS		
REVIEWED BY: JBLOSKY		
SCALE: NTS		
NO.	DATE	ISSUED FOR

**INDIANA UNIVERSITY SOUTH BEND  
ADMINISTRATIVE BUILDING  
1700 W MISHAWAKA AVE.  
SOUTH BEND, IN 46615**



**AMERECO, INC.**

CONSULTING ENGINEERS-PROJECT MANAGERS  
204 E. JEFFERSON STREET  
VALPARAISO, IN 46383 219-531-0531



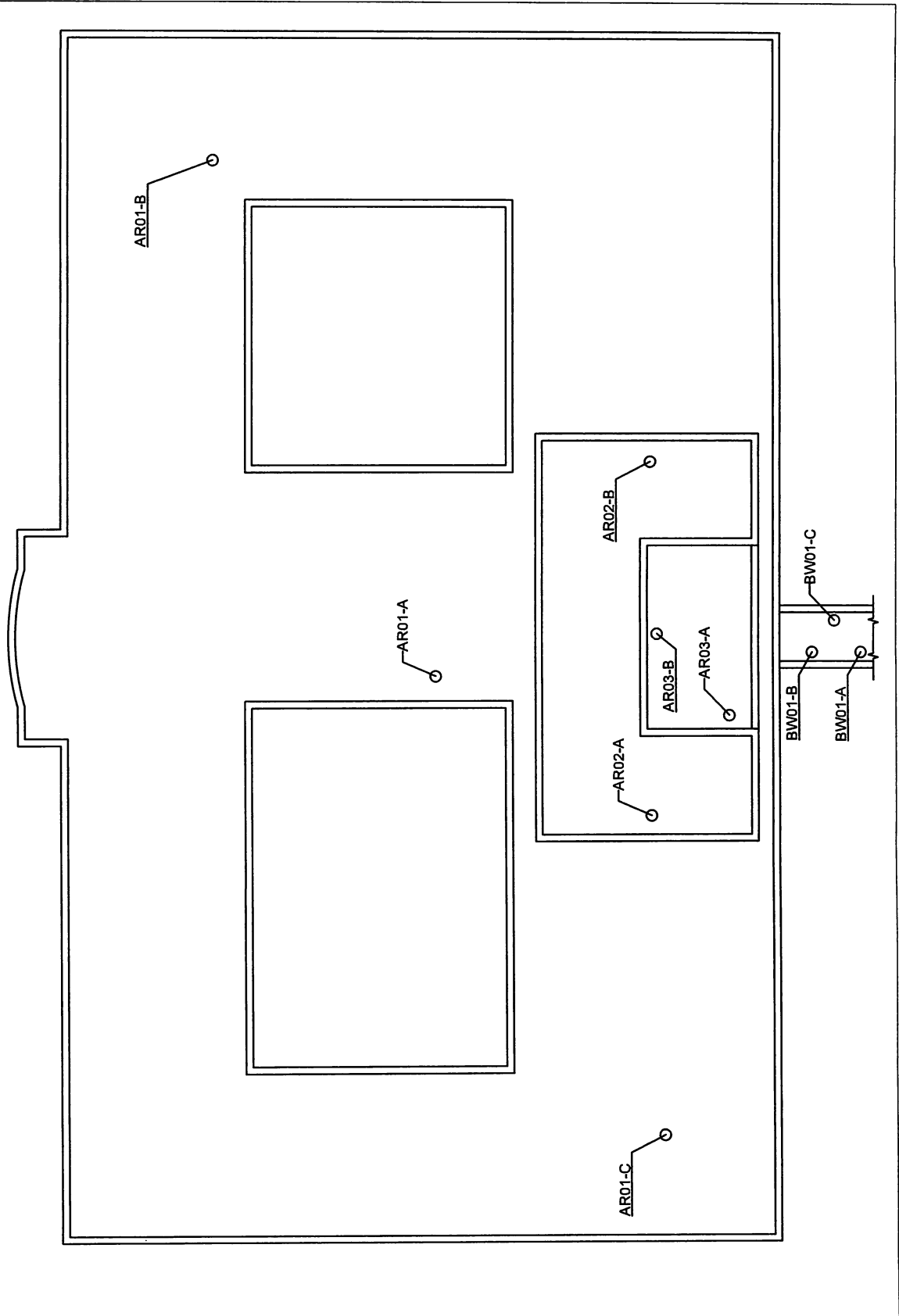
ROOF CORE LOCATION MAP  
SCALE: 1" = 35'

**KEY**

ARXX-X: Admin Roof Core Sample Location

BWXX-X: Breezeway Roof Core Sample Location



TITLE: ROOF CORE LOCATION MAP				
PROJECT #: 15 1300.4.1	SHEET:			
DRAWN BY: JWS	<b>2</b>			
REVIEWED BY:				
SCALE: 1" = 35'	NO.	DATE	ISSUED FOR	

**INDIANA UNIVERSITY SOUTH BEND  
ADMINISTRATIVE BUILDING  
1700 W MISHAWAKA AVE.  
SOUTH BEND, IN 46615**



**AMERECO, INC.**  
CONSULTING ENGINEERS-PROJECT MANAGERS  
204 E. JEFFERSON STREET  
VALPARAISO, IN 46383 219-531-0531

# Appendix B

# Asbestos Licensure



Indiana Dept. of Environmental Management

**John T. Blosky**

Asbestos Project Designer License #: 190823109

Effective: 01/03/2016      Expiration: 01/03/2017  
Birth Date: 07/09/1963      Gender: M  
Height: 6-02      Eye Color: Blue  
Weight: 208      Hair Color: Brown



Indiana Dept. of Environmental Management

**John T. Blosky**

Asbestos Management Planner License #: 198701061

Effective: 11/17/2015      Expiration: 11/17/2016  
Birth Date: 07/09/1963      Gender: M  
Height: 6-02      Eye Color: Blue  
Weight: 208      Hair Color: Brown



Indiana Dept. of Environmental Management

**John T. Blosky**

Asbestos Inspector License #: 198701061

Effective: 12/04/2015      Expiration: 12/04/2016  
Birth Date: 07/09/1963      Gender: M  
Height: 6-02      Eye Color: Blue  
Weight: 208      Hair Color: Brown



Indiana Dept. of Environmental Management

**Jeffrey A. Rugg**

Asbestos Inspector License #: 194722076

Effective: 09/24/2015      Expiration: 09/24/2016  
Birth Date: 10/08/1979      Gender: M  
Height: 6-01      Eye Color: BRO  
Weight: 235      Hair Color: BRO



Indiana Dept. of Environmental Management

**Zachary K. Heine**

Asbestos Management Planner License #: 192519018

Effective: 03/11/2015      Expiration: 03/11/2016  
Birth Date: 07/01/1983      Gender: M  
Height: 6-05      Eye Color: BRO  
Weight: 250      Hair Color: BLK



Indiana Dept. of Environmental Management

**Zachary K. Heine**

Asbestos Inspector License #: 196831037

Effective: 05/07/2015      Expiration: 05/07/2016  
Birth Date: 07/01/1983      Gender: M  
Height: 6-05      Eye Color: BRO  
Weight: 250      Hair Color: BLK

# Appendix C

Asbestos Inspection Results - Roof Cores  
 Indiana University South Bend  
 Administration Building - Roofing

Core ID	Homogenous Material		EPA Category	Friability	Asbestos Content	Samples Collected	
	Depth	Description of Material				ID	Result
AAR01-A	1/4"	Built-up Roofing	X	NF	No	AR01-A	ND
	1/2"	Yellow Fiberglass	X	NF	No	NS	NA
	1"	Built-up Roofing	X	NF	No	AR02-A	ND
	1"	Brown Insulation	X	NF	No	AR03-A	ND
AAR01-B	1/4"	Built-up Roofing	X	NF	No	AR04-A	ND
	NA	Duplicate of AR01-A	X	NF	No	AR06-A	ND
	1/4"	Built-up Roofing	X	NF	No	AR01-B	ND
	1/2"	Yellow Insulation	X	NF	No	NS	NA
	1"	Built-up Roofing	X	NF	No	AR02-B	ND
	1"	Brown Insulation	X	NF	No	AR03-B	ND
AAR01-C	1/4"	Built-up Roofing	X	NF	No	AR04-B	ND
	1/4"	Built-up Roofing	X	NF	No	AR01-C	ND
	1/2"	Yellow Fiberglass	X	NF	No	NS	NA
	1"	Built-up Roofing	X	NF	No	AR02-C	ND
AAR02-A	1"	Brown Insulation	X	NF	No	AR03-C	ND
	1/4"	Built-up Roofing	X	NF	No	AR04-C	ND
	1/8"	EPDM	X	NF	No	NS	NA
	1/2"	Yellow Insulation	X	NF	No	NS	NA
AAR02-B	1/2"	Built-up Roofing	X	NF	No	AR05-A	ND
	1/4"	Brown Insulation	X	NF	No	NS	NA
	1/8"	EPDM	X	NF	No	NS	NA
	1/2"	Yellow Insulation	X	NF	No	NS	NA
AAR03-A	1/2"	Built-up Roofing	X	NF	No	AR05-B	ND
	1/4"	Brown Insulation	X	NF	No	NS	NA
	1/16"	EPDM - Rubber	X	NF	No	NS	NA
	2"	Yellow Foam	X	NF	No	NS	NA
AAR03-B	1/16"	EPDM - Rubber	X	NF	No	NS	NA
	2"	Yellow Foam	X	NF	No	NS	NA

**Notes:**  
 ND = None Detected  
 NA = Not Analyzed (Stop Positive or not a Suspect Material)  
 NS = No Sample, Not a Suspect Asbestos Containing Material

**ASBESTOS Assessment Category:** 1 = Damaged or significantly damaged TSI ACBM, 2 = Damaged friable surfacing ACBM, 3 = Significantly damaged friable surfacing ACBM, 4 = Damaged or significantly damaged friable miscellaneous ACBM, 5 = ACBM with potential for damage, 6 = ACBM with potential for significant damage, 7 = Any remaining friable ACBM or friable suspected ACBM, X = Not applicable (material is non-ACBM or nonfriable surfacing or miscellaneous material)

**Asbestos Inspection Results - Roof Cores**  
**Indiana University South Bend**  
**Breezeway Between Admin and University Center**

Core ID	Homogenous Material		EPA Category	Friability	Asbestos Content	Samples Collected	
	Depth	Description of Material				ID	Result
BW01-A	1/16"	EPDM	X	NF	No	NS	NA
	1.5"	Yellow Foam	X	NF	No	NS	NA
	1/2"	Built-up Roofing with Gravel	X	NF	No	BR01-A	ND
	1/16"	Tan Insulation Board	X	NF	No	BR012-A	ND
BW01-B	1/16"	EPDM	X	NF	No	NS	NA
	1.5"	Yellow Foam	X	NF	No	NS	NA
	1/2"	Built-up Roofing with Gravel	X	NF	No	BR01-B	ND
	1/16"	Tan Insulation Board	X	NF	No	BR012-B	ND
BW01-C	1/16"	EPDM	X	NF	No	NS	NA
	1.5"	Yellow Foam	X	NF	No	NS	NA
	1/2"	Built-up Roofing with Gravel	X	NF	No	BR01-C	ND
	1/16"	Tan Insulation Board	X	NF	No	BR012-C	ND

ND = None Detected

**Notes:** NA = Not Analyzed (Stop Positive or not a Suspect Material)  
NS = No Sample, Not a Suspect Asbestos Containing Material

**AHERA Assessment Category:** 1 = Damaged or significantly damaged TSI ACBM, 2 = Damaged friable surfacing ACBM, 3 = Significantly damaged friable surfacing ACBM, 4 = Damaged or significantly damaged friable miscellaneous ACBM, 5 = ACBM with potential for damage, 6 = ACBM with potential for significant damage, 7 = Any remaining friable ACBM or friable suspected ACBM, X = Not applicable (material is non-ACBM or nonfriable surfacing or miscellaneous material)



# Appendix D

# Appendix E

**ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY**

Method: EPA-600/M4-82-020

Amereco Inc  
 204 E Jefferson St.  
 Valparaiso, IN 46383  
 Phone: (219) 531-0531  
 Fax: (219) 464 0464

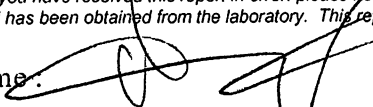
Reference:	PO#121115.3/15.13004.1	Date Received:	12/11/2015
Location:	Administration Roof South Bend, IN	Date Analyzed:	12/17/2015
Batch No.:	322199	Date Reported:	12/17/2015
Customer No.:	118	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
322199001	AR01-A-Membrane	ND	Binder 99-100%
322199002	AR01-B-Membrane	ND	Binder 99-100%
322199003	AR01-C-Membrane	ND	Binder 99-100%
322199004	AR01-A-Tar	ND	Binder 99-100%
322199005	AR01-B-Tar	ND	Binder 99-100%
322199006	AR01-C-Tar	ND	Binder 99-100%
322199007	AR01-A-Insulation	ND	Glass 99-100%
322199008	AR01-B-Insulation	ND	Glass 99-100%
322199009	AR01-C-Insulation	ND	Glass 99-100%
322199010	AR02-A	ND	Binder 99-100%
322199011	AR02-B	ND	Binder 99-100%
322199012	AR02-C	ND	Binder 99-100%
322199013	AR03-A	ND	Glass 99-100%
322199014	AR03-B	ND	Glass 99-100%
322199015	AR03-C	ND	Glass 99-100%
322199016	AR04-A	ND	Binder 99-100%
322199017	AR04-B	ND	Binder 99-100%
322199018	AR04-C	ND	Binder 99-100%

ND = Asbestos Not Detected (Not Present)    NA = Not Analyzed    NS = Not Submitted  
 Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

*The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This report remains property of STAT Analysis until payment is received in full (see invoice).*

Analyzed by Name:   
 Henry Robateau / Microscopist



**Analysis Corporation**

2242 West Harrison St., Suite 200, Chicago, IL 60612-3766

Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com



NVLAP Lab Code 101202-0

**ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY**

Method: EPA-600/M4-82-020

Amereco Inc  
204 E Jefferson St.  
Valparaiso, IN 46383  
Phone: (219) 531-0531  
Fax: (219) 464 0464

Reference: PO#121115.3/15.13004.1 Date Received: 12/11/2015  
Location: Administration Roof South Bend, IN Date Analyzed: 12/17/2015  
Batch No.: 322199 Date Reported: 12/17/2015  
Customer No.: 118 Turn Around Time: 5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
322199019	AR05-A	ND	Binder 99-100%
322199020	AR05-B	ND	Binder 99-100%
322199021	AR06-A	ND	Binder 99-100%

ND = Asbestos Not Detected (Not Present) NA = Not Analyzed NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This report remains property of STAT Analysis until payment is received in full (see invoice).

Analyzed by Name :

Henry Robateau / Microscopist

Date: 12/17/2015





**ASBESTOS ANALYSIS BY POLARIZED LIGHT MICROSCOPY**

Method: EPA-600/M4-82-020

Amereco Inc  
 204 E Jefferson St.  
 Valparaiso, IN 46383  
 Phone: (219) 531-0531  
 Fax: (219) 464 0464

Reference:	PO#121115.4/15.13002.1	Date Received:	12/11/2015
Location:	Breezeway Roof South Bend, IN	Date Analyzed:	12/17/2015
Batch No.:	322200	Date Reported:	12/17/2015
Customer No.:	118	Turn Around Time:	5 Days

Laboratory Sample	Customer Sample Number	Asbestos Components (%)	Non-Asbestos Components (%)
322200001	BR01-A	ND	Cellulose 80-85% Binder 15-20%
322200002	BR01-B	ND	Cellulose 80-85% Binder 15-20%
322200003	BR01-C	ND	Cellulose 80-85% Binder 15-20%
322200004	BR02-A	ND	Cellulose 95-99% Binder 1-5%
322200005	BR02-B	ND	Cellulose 95-99% Binder 1-5%
322200006	BR02-C	ND	Cellulose 95-99% Binder 1-5%

ND = Asbestos Not Detected (Not Present)    NA = Not Analyzed    NS = Not Submitted

Components of inhomogeneous samples are analyzed per our Standard Operating Procedure, or per customer request.

The use of the NVLAP logo does not imply endorsement by NVLAP or any agency of the US Government.

*The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This report remains property of STAT Analysis until payment is received in full (see invoice).*

Analyzed by Name:   
 Henry Robateau, Microscopist

**STAT** Analysis Corporation

2255 W. Harrison, Suite B, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386  
 e-mail address: STATinfo@STATAnalysis.com AIHA accredited 10248 NVLAP accredited 101202-0



**CHAIN OF CUSTODY RECORD** Page: 1 of 1

Client: Amereco Inc.  
 Street Address: 204 E. Jefferson St  
 City, State, Zip: Valparaiso, IN 46383  
 Phone: 219-531-0531  
 Fax: 219-464-0464  
 e-mail/Alt Fax: labresults@amerecoeng.com  
 Project Name: Breeze-way Roof  
 Project Number: 15.1300.2.1  
 Project Location: South Bend, IN  
 Project Manager: Z. Heine  
 P.O. Number: 12115.4

Turn Around: Immediate:  4 Hrs:  8 Hrs:  12 Hrs:  1-Day:  48 Hrs:  72 Hrs:  5 Days:   
 Date Due: \_\_\_\_\_ Time Due: \_\_\_\_\_

**OFFICE USE ONLY BELOW:**  
 Batch No: **322200**  
 Samples Acceptable: Yes:  No:   
 Checked by (Initial/Date): [Signature] 12/15/15  
 QC by (Initial/Date): [Signature] 12/15/15  
 Reported By (Initial/Date/Time/Method): [Signature] 12/15/15

Relinquished by: [Signature] Date/Time: 12/11/15 3:41  
 Received by: [Signature] Date/Time: 12/11/15 11:41  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Client Sample Number/Description/HA # - ID	Date Taken	Time		Rate (lpm)	Volume (Liters)	Area Wiped (ft <sup>2</sup> )	Laboratory Sample No.	Comments												
		On	Off					PCM Asbestos	PLM Asbestos (Bulk)	PLM Point Count	TEM Air Asbestos	TEM Bulk Asbestos	TEM Gravimetric Asb	TEM Microvac Asb.	TEM Water	Other:				
BR01-A	12/31/15																			
BR01-B																				
BR01-C																				
BR02-A																				
BR02-B																				
BR02-C																				

Comments: N/A Stop when a positive result is indicated for each Monitoring Area Only analyze for and report the following:



**ALTERNATE BID #2:** EXISTING STONE COPING CAP, RAKE AND RE-SEAL VERTICAL AND HORIZONTAL JOINTS IN CAP. REFER TO ADJACENT DETAIL FOR FURTHER CLARIFICATION.

**FUTURE PROJECT** TO INCLUDE THE REMOVAL AND RESETTING OF THE COPING STONES WITH NEW THROUGH-WALL FLASHING AND COUNTER FLASHING.

EXISTING COPPER THROUGH-WALL FLASHING OR **FUTURE PROJECT** TO INCLUDE NEW THROUGH-WALL FLASHING AND COUNTER FLASHING.

EXISTING COPPER COUNTER FLASHING OR **FUTURE PROJECT** TO INCLUDE NEW COUNTER FLASHING.

SECURE TOP EDGE OF FLASHING USING AN ALUMINUM TERMINATION BAR (WITH LIP) SECURED 12-INCHES O.C., MAX., AND WITHIN 2-INCHES OF EACH END. PRIOR TO TERMINATION BAR INSTALLATION, INSTALL MANUFACTURERS RECOMMENDED SEALANT BEHIND FLASHING WHERE TERMINATION BAR WILL BE PLACED. SEAL TOP EDGE OF FLASHING AND TERMINATION BAR AFTER INSTALLATION.

3/4-INCH PLYWOOD MECHANICALLY ATTACHED TO EXISTING WALL WITH PROPER SUBSTRATE FASTENERS - 24-INCHES O.C. EACH WAY STAGGER ROWS

EPDM FLASHING MEMBRANE, FULLY ADHERED TO CURB

FASTENERS AND 2-INCH PLATES, 12-INCHES O.C. MAX.

REINFORCED PERIMETER FASTENING STRIP WITH FACTORY-LAMINATED SEAM TAPE. PRIME EPDM MEMBRANE PRIOR TO APPLICATION TO REINFORCED FASTENING STRIP.

EPDM ROOFING MEMBRANE

COVER BOARD - 1/2-INCH THICK

SPECIFIED POLYISOCYANURATE INSULATION

EXISTING STRUCTURAL DECK

UNDERLAYMENT

8" MINIMUM

4" MIN.

APPROX. 1/2"

1-1/2" MIN.

SEALANT DEPTH: WHEN JOINT WIDTH IS LESS THAN OR EQUAL TO 1/2-INCH, SEALANT DEPTH SHALL BE 1/4-INCH. WHEN JOINT WIDTH IS BETWEEN 1/2-INCH AND 1-INCH, SEALANT DEPTH SHALL EQUAL ONE-HALF THE JOINT WIDTH. WHEN JOINT WIDTH IS BETWEEN 1-INCH AND 2-INCHES, SEALANT DEPTH SHALL EQUAL 1/2-INCH.

EXISTING STONE COPING - BOTH SIDES OF JOINT. PREPARE SURFACES ADJACENT TO JOINT AS REQ'D BY SEALANT MANUFACTURER. PRIME SURFACES IF REQUIRED BY SEALANT MANUFACTURER.

SEALANT

COMPRESSIBLE BACKER ROD

EXISTING COPING JOINT - REMOVE EXISTING SEALANT AND OTHER REPAIR MATERIALS PRIOR TO INSTALLATION OF NEW MATERIALS.

**STONE COPING SEALANT JOINT RAKE AND RE-SEAL DETAIL (ALTERNATE BID #2)**

FOR USE WHERE VERTICAL AND HORIZONTAL STONE COPING JOINTS ARE TO BE RE-SEALED.

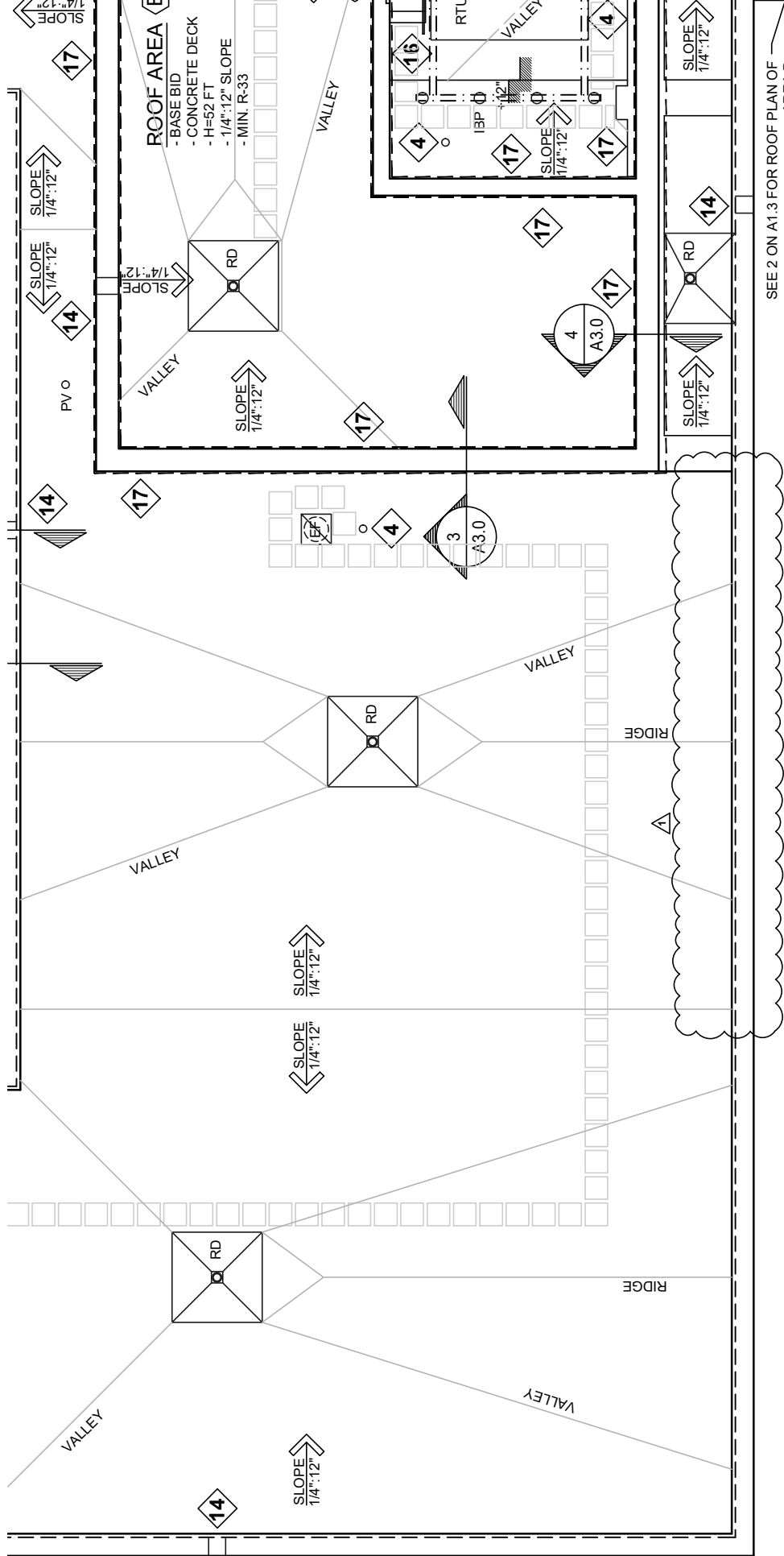
**NOTE:** PRIOR TO INSTALLATION OF NEW FLASHING AND COUNTERFLASHING, INSPECT EXISTING WALLS FOR THE PRESENCE OF MASONRY WEEPS AND OTHER WALL DRAINAGE MECHANISMS. DO NOT COVER WEEPS, OR IMPEDE THE ABILITY OF MOISTURE TO EXIT WALL SYSTEMS.

**NOTE:** INSTALL INSIDE AND OUTSIDE FLASHING CORNERS FOLLOWING THE RECOMMENDATIONS AND REQUIREMENTS OF THE ROOFING MEMBRANE MANUFACTURER. PROVIDE "I-JOINT COVERS" AT THE BASE OF THE CURB AT FLASHING PIECE INTERSECTIONS.

**NOTE:** AT ROOF CURB WALL FLASHING HEIGHTS GREATER THAN 24-INCHES, PROVIDE INTERMEDIATE SECUREMENT PER THE REQUIREMENTS AND RECOMMENDATIONS OF THE EPDM ROOFING MEMBRANE MANUFACTURER.

**1 PARAPET WALL FLASHING**

SCALE: NO SCALE



SEE 2 ON A1.3 FOR ROOF PLAN OF AREA D

# 1 ROOF PLAN

SCALE: none