DEMOLITION ASBESTOS SURVEY REPORT

Biscayne Village Pump Station
10800 Key Haven Boulevard
Jacksonville, Florida

GLE Project No.: 19112-00180

Prepared for:

Mr. Samuel Ramirez, PE
JEA Project Engineering and Construction
Wastewater Plants and Pumping Stations
21 West Church Street, Tower 4
Jacksonville, Florida 32202

June 2019

Prepared by:

8659 Baypine Road, Suite 306
Jacksonville, Florida 32256
904-296-1880 • Fax 904-296-1860

June 17, 2019

Mr. Samuel Ramirez, PE
JEA Project Engineering and Construction
Wastewater Plants and Pumping Stations
21 West Church Street, Tower 4
Jacksonville, Florida 32202

RE: Demolition Asbestos Survey Report
Biscayne Village Pump Station
10800 Key Haven Boulevard
Jacksonville, Florida

GLE Project No.: 19112-00180

Dear Mr. Ramirez:

GLE Associates, Inc. (GLE) performed a demolition survey for asbestos-containing materials (ACM) on May 31, 2019, at the Biscayne Village Pump Station, located in Jacksonville, Florida. The survey was performed by Mr. Johnny Ciucevich with GLE. This report outlines the sampling and testing procedures, and presents the results along with our conclusions and recommendations.

GLE appreciates the opportunity to serve as your consultant on this project. If you should have any questions, or if we can be of further service, please do not hesitate to call.

Sincerely,
GLE Associates, Inc.

John E. Ciucevich III
Senior Project Manager

Robert B. Greene, PE, PG, CIH, LEED AP
President
Florida LAC# EA 0000009

JEC/MBC/RBG/lr

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1.0 INTRODUCTION

1.1 INTRODUCTION

The purpose of this demolition survey was to identify accessible asbestos-containing materials (ACMs) and their general locations within Biscayne Village Pump Station, located at 10800 Key Haven Boulevard in Jacksonville, Florida. The survey was conducted pursuant to National Emission Standards for Hazardous Air Pollutants (NESHAP, 40 CFR 61) requirements, associated with the scheduled demolition plans. The survey was performed on May 31, 2019, by Mr. Johnny Ciucevich, an Environmental Protection Agency/Asbestos Hazard Emergency Response Act (EPA/AHERA) accredited inspector. The scope of this survey did not include demolition of any building components, evaluation of architectural plans, or the quantification of materials for abatement purposes, or removal cost estimating.

1.2 FACILITY DESCRIPTION

A summary of the facility investigated is outlined in the table below.

Facility Type:	Commercial
Construction Date:	Unknown
Number of Floors:	Two
Exterior	
Floor Support:	Concrete Slab on Grade
Wall Support:	Concrete Block (CMU)
Exterior Finish:	Paint, Brick
Roof System Type:	Built Up (Modified Bitumen)
Interior	
Wall Substrate:	Concrete
Wall Finishes:	Paint
Floor Finishes:	Ceramic Tile
Ceiling System:	Concrete
Ceiling Finishes:	Paint

2.0 RESULTS

2.1 ASBESTOS SURVEY PROCEDURES

The survey was performed by visually observing accessible areas within the scope of work. An EPA/AHERA accredited inspector performed the visual observations (refer to Appendix B for personnel qualifications).

After the overall visual survey was completed, representative sampling areas were determined. The surveyor delineated homogeneous areas of suspect materials and samples of each material were obtained, in general accordance with regulations as established by the Occupational Safety and Health Administration (OSHA) and NESHAP. The field surveyor determined sample locations based on previous experience. Both friable and non-friable materials were sampled. A friable material is one that can be crushed when dry by normal hand pressure. This survey did not include the demolition of building components to access suspect material.

After completion of the fieldwork, the samples were delivered to GLE's National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory for analysis. The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining, in general accordance with EPA-600/R-93/116. Utilizing this procedure, the various asbestos minerals (chrysotile, amosite, crocidolite, actinolite, tremolite, and anthophyllite) can be determined. The percentages of asbestos minerals in the samples were visually determined by the microscopist. Please note that the EPA designates all materials containing greater than one percent asbestos as an "asbestos-containing material" (ACM).

Regulated Asbestos-Containing Material (RACM) is defined as (a) Friable asbestos materials, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

Category I and Category II non-friable ACM, as defined by the EPA:

- Category I non-friable ACM means asbestos-containing packings, gaskets, resilient floor covering, asphalt roofing products, and pliable sealants and mastics that are in good condition and not friable, containing more than one percent asbestos, as determined using the method specified in Appendix E, Subpart E, 40 CFR Part 763, Section 1, PLM.
- Category II non-friable ACM means any material, excluding Category I non-friable ACM, containing more than one percent asbestos as determined using the methods specified in Appendix E, Subpart E, 40 CFR Part 763 Section 1, PLM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

2.2 IDENTIFIED SUSPECT ASBESTOS-CONTAINING MATERIALS

A total of 18 samples of suspect building materials were collected from the facility during the survey, representing six different identified homogeneous areas. The results of the laboratory analyses are included in Appendix A, and approximate sample locations are indicated on the Asbestos Sample Location Plan in Appendix C.

A summary of the homogenous sampling areas of suspect ACM determined to be present is outlined in the following table.

TABLE 2.2-1: SUMMARY OF HOMOGENEOUS SAMPLING AREAS BISCAYNE VILLAGE PUMP STATION – JACKSONVILLE, FLORIDA							
HA #	**HOMOGENEOUS MATERIAL DESCRIPTION**	**HOMOGENEOUS MATERIAL LOCATION**	**FRIABILITY (F /NF)**	**% ASBESTOS***	**# OF SAMPLES COLLECTED**	**APPROXIMATE QUANTITY**	**ACM CATEGORY**
M-01	Gray Ceramic Tile Grout	Bathroom	NF	ND	3	NIS	NA
TSI-01	White Pipe Insulation	Emergency Generator Room	F	ND	3	NIS	NA
M-02	Red Gasket	Dry Side	NF	ND	3	NIS	NA
RBU-01	Black Built Up Roofing	Roof	NF	ND	3	NIS	NA
RF-01	Black Roof Flashing	Parapet Walls	NF	ND	3	NIS	NA
RF-02	Black Roof Flashing	Vents	NF	ND	3	NIS	NA

ASBESTOS CONTENT Expressed as percent	* = The facility owner has the option of point-counting by Polarized Light Microscopy (PLM) those RACM whose asbestos content is less than 10% in order to more accurately determine the asbestos content therein.				
	PC = Results based on Point-Count analysis	TEM NOB = Transmission Electron Microscopy of Non-Friable Organically Bound Material			
FRIABILITY	F = Friable Material	NF = Non-Friable Material			
ACM CATEGORY	RACM = Regulated ACM	CAT I = Category I non-friable ACM	CAT II = Category II non-friable ACM		
ABBREVIATIONS:	NA = Not Applicable	ND = None Detected	NIS = Not in Scope	C = Chrysotile	A = Amosite
	HA = Homogeneous Area	SF = Square Feet	LF = Linear Feet	CF = Cubic Feet	

3.0 CONCLUSIONS AND RECOMMENDATIONS

No asbestos-containing materials were identified in the scope of this survey.

4.0 LIMITATIONS AND CONDITIONS

As a result of previous renovations, there may be hidden materials, such as floor tile, sheet vinyl flooring, insulation, etc. These materials may be found in various areas hidden under existing flooring materials or in wall cavities. Any materials found during construction activities, either not addressed in this survey report, or similar to the ACM identified in this survey report should be assumed to be ACM until sampling and analysis documents otherwise.

Because of the hidden nature of many building components (i.e. within mechanical chases), it may be impossible to determine if all of the suspect building materials have been located and subsequently tested. Destructive testing in some instances is not a viable option. We cannot, therefore, guarantee that all potential ACM has been located. For the same reasons, estimates of quantities and/or conditions are subject to readily apparent situations, and our findings reflect this condition. We do warrant, however, that the investigations and methodology reflect our best efforts based upon the prevailing standard of care in the environmental industry.

The information contained in this report was prepared based upon specific parameters and regulations in force at the time of this report. The information herein is only for the specific use of the client and GLE. GLE accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, unless prior written authorization has been obtained from GLE.

APPENDIX A
Analytical Results and Chain of Custody

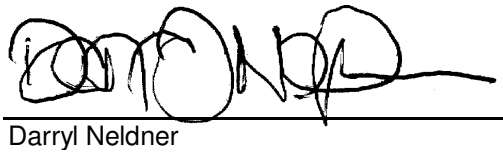
SUMMARY OF BULK SAMPLE ANALYSIS

JEA; Biscayne Village Pump Station

19112-00180

Sample	Sample Type	Fiber Type	
M-01A	Gray Ceramic Tile Grout	100%	Quartz, Calcite, Clay, Mica
M-01B	Gray Ceramic Tile Grout	100%	Quartz, Calcite, Clay, Mica
M-01C-QC	Gray Ceramic Tile Grout	100%	Quartz, Calcite, Clay, Mica
TSI-01A	White Pipe Insulation	100%	Quartz, Calcite, Clay, Mica
TSI-01B	White Pipe Insulation	100%	Quartz, Calcite, Clay, Mica
TSI-01C	White Pipe Insulation	100%	Quartz, Calcite, Clay, Mica
M-02A	Red Gasket	100%	Polymer, Quartz, Calcite, Clay, Mica
M-02B	Red Gasket	100%	Polymer, Quartz, Calcite, Clay, Mica
M-02C	Red Gasket	100%	Polymer, Quartz, Calcite, Clay, Mica
RBU-01A	Black Built Up Roofing	100%	Bitumen, Quartz, Calcite, Mica
RBU-01B	Black Built Up Roofing	100%	Bitumen, Quartz, Calcite, Mica
RBU-01C	Black Built Up Roofing	100%	Bitumen, Quartz, Calcite, Mica
RF-01A-QC	Black Roof Flashing	100%	Bitumen, Quartz, Calcite, Mica
RF-01B	Black Roof Flashing	100%	Bitumen, Quartz, Calcite, Mica
RF-01C	Black Roof Flashing	100%	Bitumen, Quartz, Calcite, Mica
RF-02A	Black Roof Flashing	100%	Bitumen, Quartz, Calcite, Mica

Analyst / Approved Signatory:



Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA 600/M4-82-020, EPA 600/R-93/116, and NIOSH Method 9002.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 6/6/2019

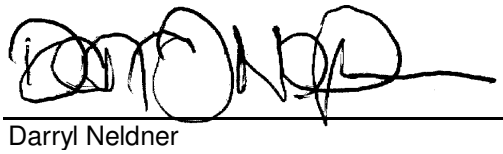
SUMMARY OF BULK SAMPLE ANALYSIS

JEA; Biscayne Village Pump Station

19112-00180

Sample	Sample Type	Fiber Type	
RF-02B	Black Roof Flashing	100%	Bitumen, Quartz, Calcite, Mica
RF-02C	Black Roof Flashing	100%	Bitumen, Quartz, Calcite, Mica

Analyst / Approved Signatory:



Darryl Neldner

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Analysis performed by GLE Associates, Inc. NVLAP Code 102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

Report Date: 6/6/2019

CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM

GLE Associates, Inc.
8659 Baypine Road, Suite 306
Jacksonville, FL 32256
PHONE: (904) 296-1880 FAX: (904) 296-1860

CLIENT:	JEA
PROJECT #:	19112-00180
LAB:	2470
PROJECT:	Biscayne Village Pump Station
LABORATORY SENT TO:	GLE
DATE:	5-31-19

SAMPLE INFORMATION

SAMPLE #	DESCRIPTION	SAMPLE #	DESCRIPTION
MD1A-C	Gray Ceramic Tile Grout		
TSI01A-C	White Pipe Insulation		
MD2A-C	Red Gasket		
RBU01A-C	Black Built Up Roofing		
RF01A-C	Black Roof Flashing		
RF02A-C	Black Roof Flashing		

IMPORTANT: TOTAL NUMBER OF SAMPLES SUBMITTED	18
IMPORTANT: POSITIVE STOP ANALYSIS	Yes
IMPORTANT: E-MAIL RESULTS TO	Jciucevich + Jelliott

NOTE:

Turnaround time starts at receipt by lab and does not include weekend or holidays.

Select Turnaround Time

☐ 3 hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☐ 3 Day ☒ 4 Day

REPORT RESULTS TO THE ADDRESS ABOVE

CHAIN OF CUSTODY: GLE ASSOCIATES, INC.		CHAIN OF CUSTODY: LABORATORY	
PACKAGED BY:	Johnny Ciucevich	SAMPLES RECEIVED BY:	
DATE PACKAGED:	5-31-19	DATE:	6/5/19
METHOD OF TRANSMITTAL:	Fed Ex	TIME:	
TRANSMITTED BY:		CONDITION OF PACKAGED SAMPLES:	

CHAIN OF CUSTODY: RETURNED TO GLE ASSOCIATES, INC.	
RECEIVED BY:	DATE:
INVENTORIED BY:	DATE:
REPACKAGED AND SEALED BY:	DATE:

PAGE: OF

APPENDIX B
Personnel and Laboratory Certifications

RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT

THE ASBESTOS BUSINESS ORGANIZATION HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 469, FLORIDA STATUTES

GLE ASSOCIATES INC

ROBERT BLAIR GREENE
5405 CYPRESS CENTER DRIVE
SUITE 110
TAMPA FL 33609

LICENSE NUMBER: ZA0000034

EXPIRATION DATE: NOVEMBER 30, 2019

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RICK SCOTT, GOVERNOR

JONATHAN ZACHEM, SECRETARY

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT

THE ASBESTOS CONSULTANT - ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 469, FLORIDA STATUTES

GREENE, ROBERT BLAIR

GLE ASSOCIATES INC
5405 CYPRESS CENTER DR
SUITE 110
TAMPA FL 33609

LICENSE NUMBER: EA0000009

EXPIRATION DATE: NOVEMBER 30, 2020

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AIR ANALYTICS

certifies that

John Ciucevich

**has attended and satisfactorily completed training on 8/23/18,
and passed an examination covering the content of the
asbestos accreditation under Section 206 of TSCA, 15 U.S.C. 2646**

AHERA Facility Inspector Recertification Training Course

**In accordance with U.S.E.P.A. 40 C.F.R. 763 and in testimony whereof,
we do confer this certificate at Oviedo, Florida, August 23, 2018.
Certificate expires 8/23/19.**

Edward A. Nuñez, CIH, LAC
Course Director

Certificate # AA082318IR01
ID # 9848

Florida DBPR Course Provider # 0001209, Florida DBPR Training Course #0002790
Air Analytics LLC - 2582 Connection Point, Suite 1000, Oviedo, Florida 32765, 407/359-1974

United States Department of Commerce
National Institute of Standards and Technology

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 102003-0

GLE Associates, Inc.

Tampa, FL

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

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 January 2009).

2019-04-01 through 2020-03-31

Effective Dates

DEPARTMENT OF COMMERCE * UNITED STATES OF AMERICA *

For the National Voluntary Laboratory Accreditation Program

National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

GLE Associates, Inc.
5405 Cypress Center Drive
Suite 110
Tampa, FL 33609
Mr. Darryl S. Neldner
Phone: 813-241-8350 x247 Fax: 813-241-8737
Email: dneldner@gleassociates.com
http://www.gleassociates.com

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 102003-0

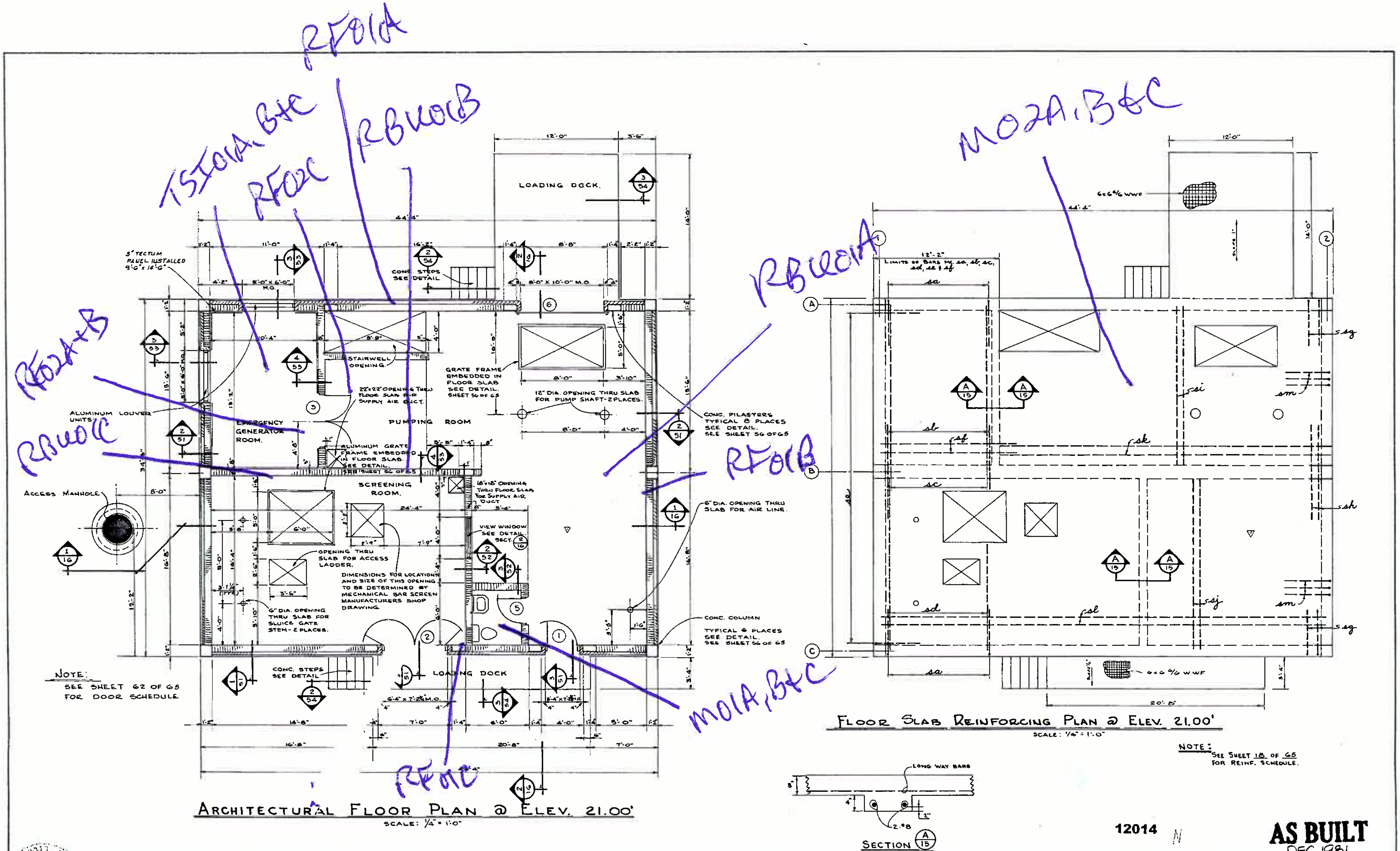
Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

For the National Voluntary Laboratory Accreditation Program

Effective 2019-04-01 through 2020-03-31

APPENDIX C
Asbestos Sample Location Plan



CITY OF JACKSONVILLE, FLORIDA

SEWERAGE IMPROVEMENT PROGRAM
SEWAGE PUMPING STATION
NORTH DISTRICT PART I

WAITZ & FRYE CONSULTING ENGINEERS, INC.

SVERDRUP & PARCEL AND ASSOCIATES, INC. — GENERAL CONSULTANT

BISCAYNE VILLAGE PUMPING STATION
STRUCTURAL FLOOR PLAN

CONTR. NO. JS-41.1

SHEET NO. 15 OF 65