

RFP

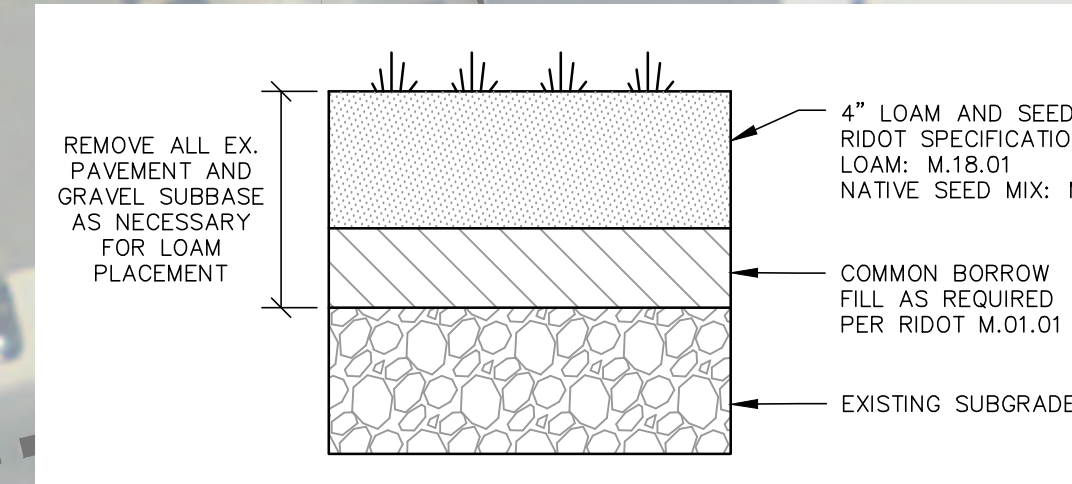
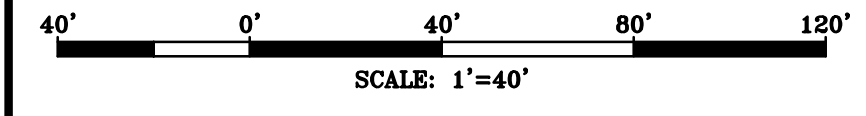
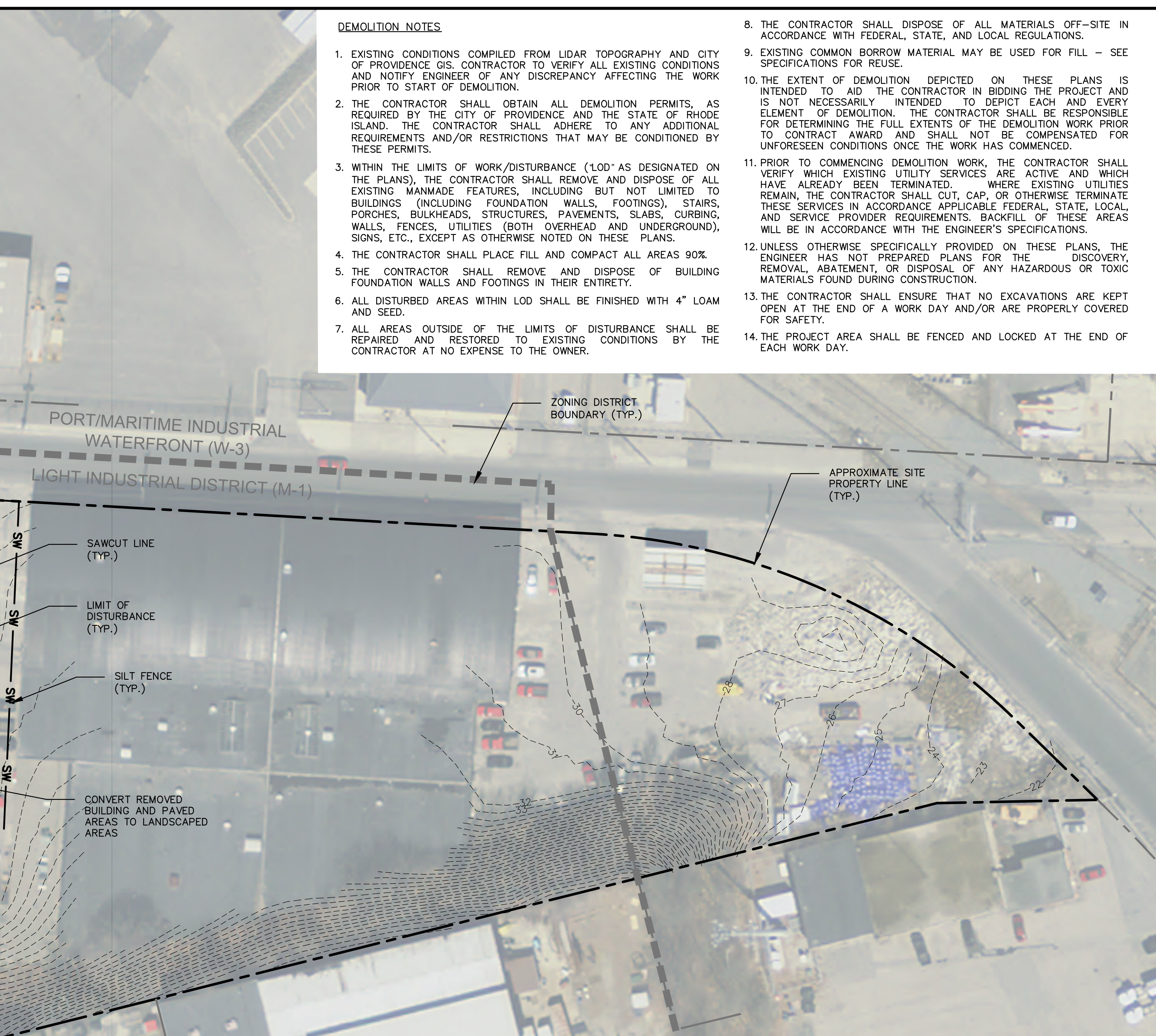
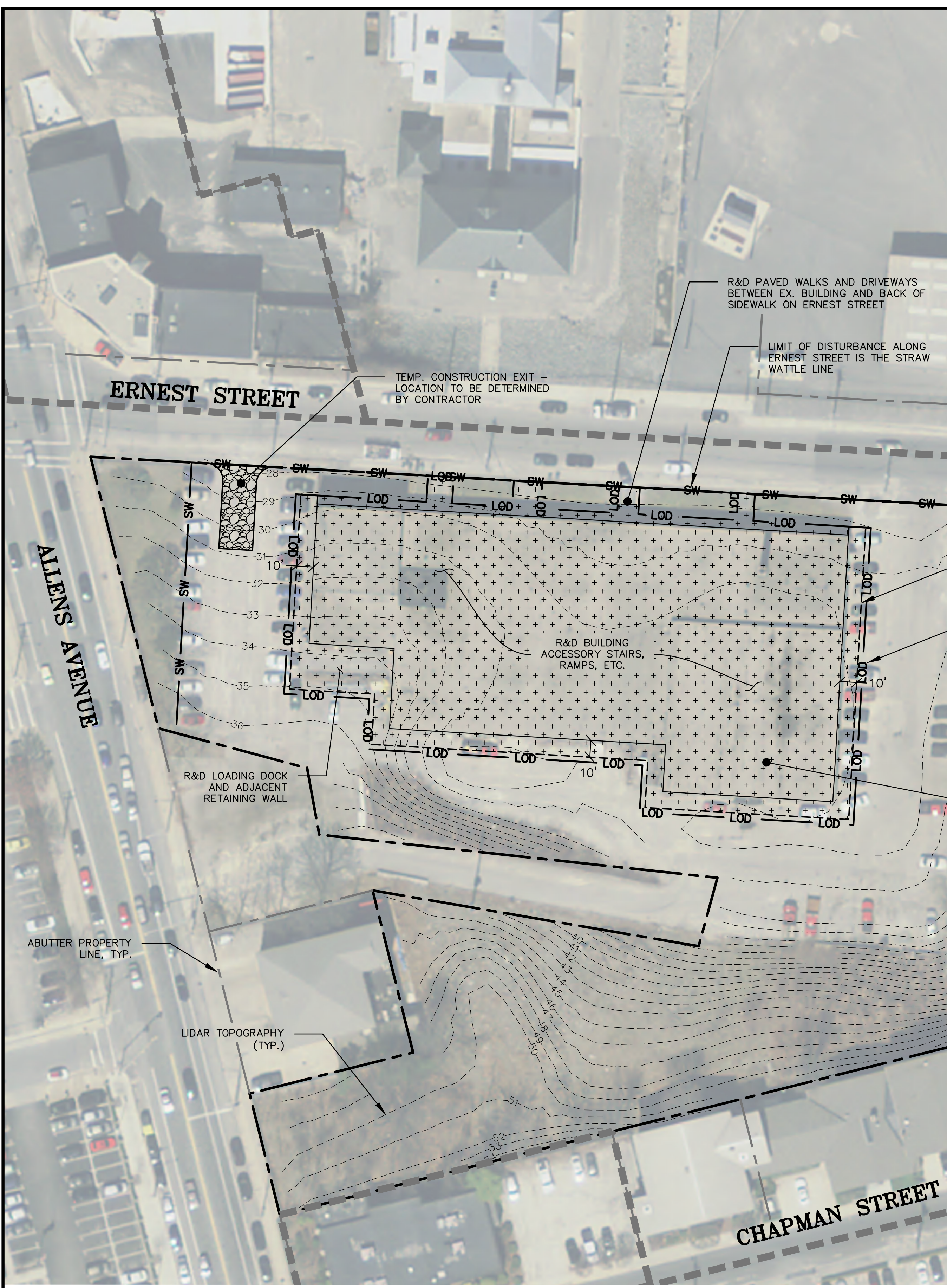
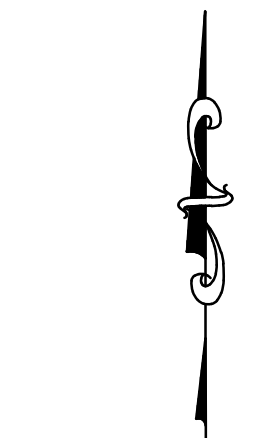
**DEMOLITION OF CITY OF PROVIDENCE FACILITY LOCATED AT 60 ERNEST
STREET – DEPARTMENT OF PUBLIC PROPERTY.**

ADDENDUM 3

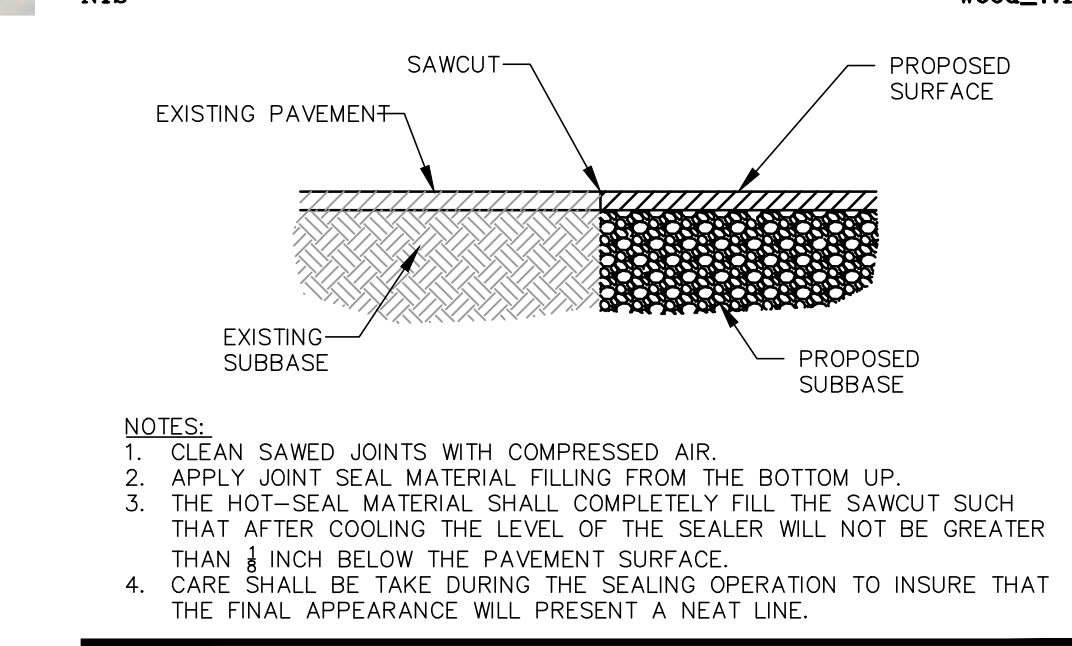
This Addendum includes:

1. Demolition Drawings
2. Demolition Specifications
3. Pre-bid Conference Agenda
4. Sign-In Sheets for Pre-Bid Conference

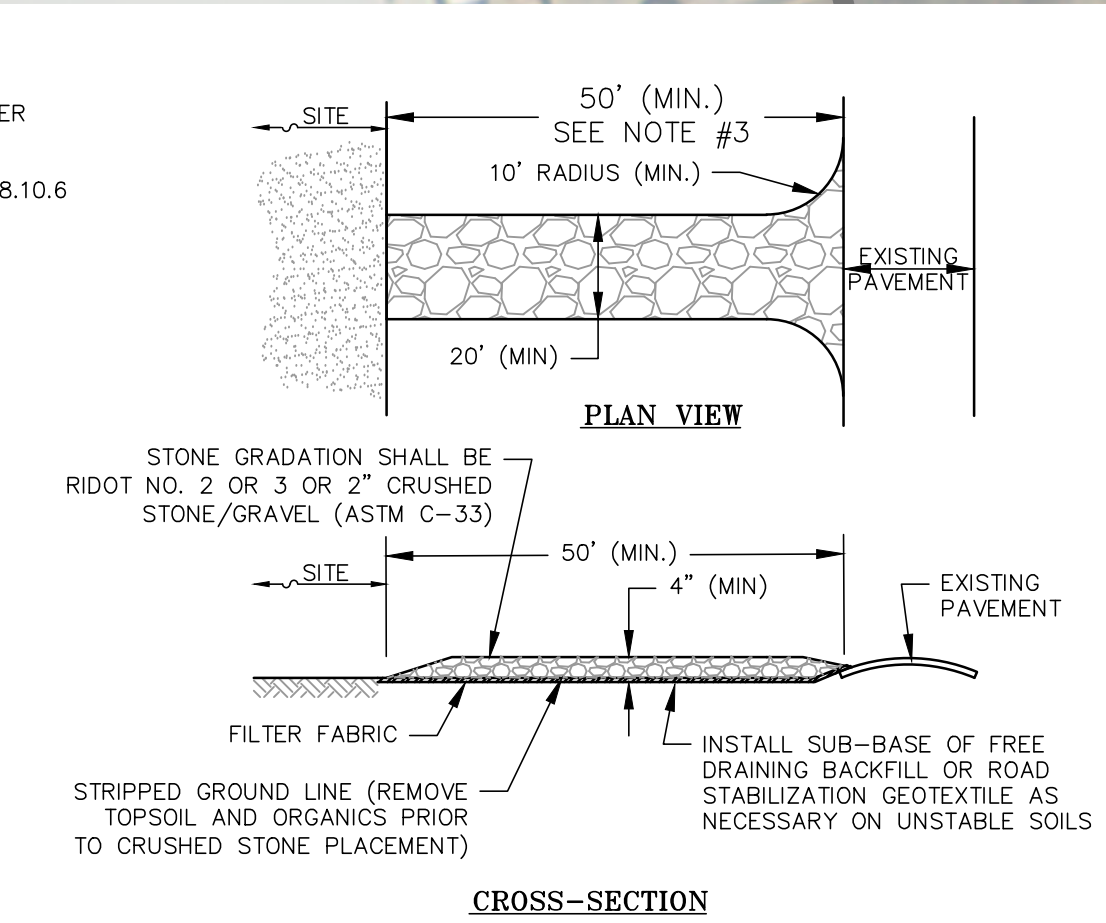
- ### DEMOLITION NOTES
- EXISTING CONDITIONS COMPILED FROM LIDAR TOPOGRAPHY AND CITY OF PROVIDENCE GIS. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCY AFFECTING THE WORK PRIOR TO START OF DEMOLITION.
 - THE CONTRACTOR SHALL OBTAIN ALL DEMOLITION PERMITS, AS REQUIRED BY THE CITY OF PROVIDENCE AND THE STATE OF RHODE ISLAND. THE CONTRACTOR SHALL ADHERE TO ANY ADDITIONAL REQUIREMENTS AND/OR RESTRICTIONS THAT MAY BE CONDITIONED BY THESE PERMITS.
 - WITHIN THE LIMITS OF WORK/DISTURBANCE (LOD) AS DESIGNATED ON THE PLANS, THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING MANMADE FEATURES, INCLUDING BUT NOT LIMITED TO BUILDINGS (INCLUDING FOUNDATION WALLS, FOOTINGS), STAIRS, PORCHES, BULKHEADS, STRUCTURES, PAVEMENTS, SLABS, CURBING, WALLS, FENCES, UTILITIES (BOTH OVERHEAD AND UNDERGROUND), SIGNS, ETC., EXCEPT AS OTHERWISE NOTED ON THESE PLANS.
 - THE CONTRACTOR SHALL PLACE FILL AND COMPACT ALL AREAS 90%.
 - THE CONTRACTOR SHALL REMOVE AND DISPOSE OF BUILDING FOUNDATION WALLS AND FOOTINGS IN THEIR ENTIRETY.
 - ALL DISTURBED AREAS WITHIN LOD SHALL BE FINISHED WITH 4" LOAM AND SEED.
 - ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL BE REPAIRED AND RESTORED TO EXISTING CONDITIONS BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
 - THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
 - EXISTING COMMON BORROW MATERIAL MAY BE USED FOR FILL - SEE SPECIFICATIONS FOR REUSE.
 - THE EXTENT OF DEMOLITION DEPICTED ON THESE PLANS IS INTENDED TO AID THE CONTRACTOR IN BIDDING THE PROJECT AND IS NOT NECESSARILY INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENTS OF THE DEMOLITION WORK PRIOR TO CONTRACT AWARD AND SHALL NOT BE COMPENSATED FOR UNFORESEEN CONDITIONS ONCE THE WORK HAS COMMENCED.
 - PRIOR TO COMMENCING DEMOLITION WORK, THE CONTRACTOR SHALL VERIFY WHICH EXISTING UTILITY SERVICES ARE ACTIVE AND WHICH HAVE ALREADY BEEN TERMINATED. WHERE EXISTING UTILITIES REMAIN, THE CONTRACTOR SHALL CUT, CAP, OR OTHERWISE TERMINATE THESE SERVICES IN ACCORDANCE APPLICABLE FEDERAL, STATE, LOCAL, AND SERVICE PROVIDER REQUIREMENTS. BACKFILL OF THESE AREAS WILL BE IN ACCORDANCE WITH THE ENGINEER'S SPECIFICATIONS.
 - UNLESS OTHERWISE SPECIFICALLY PROVIDED ON THESE PLANS, THE ENGINEER HAS NOT PREPARED PLANS FOR THE DISCOVERY, REMOVAL, ABATEMENT, OR DISPOSAL OF ANY HAZARDOUS OR TOXIC MATERIALS FOUND DURING CONSTRUCTION.
 - THE CONTRACTOR SHALL ENSURE THAT NO EXCAVATIONS ARE KEPT OPEN AT THE END OF A WORK DAY AND/OR ARE PROPERLY COVERED FOR SAFETY.
 - THE PROJECT AREA SHALL BE FENCED AND LOCKED AT THE END OF EACH WORK DAY.



PAVEMENT TO LANDSCAPE CONVERSION
NTS wood_7.19



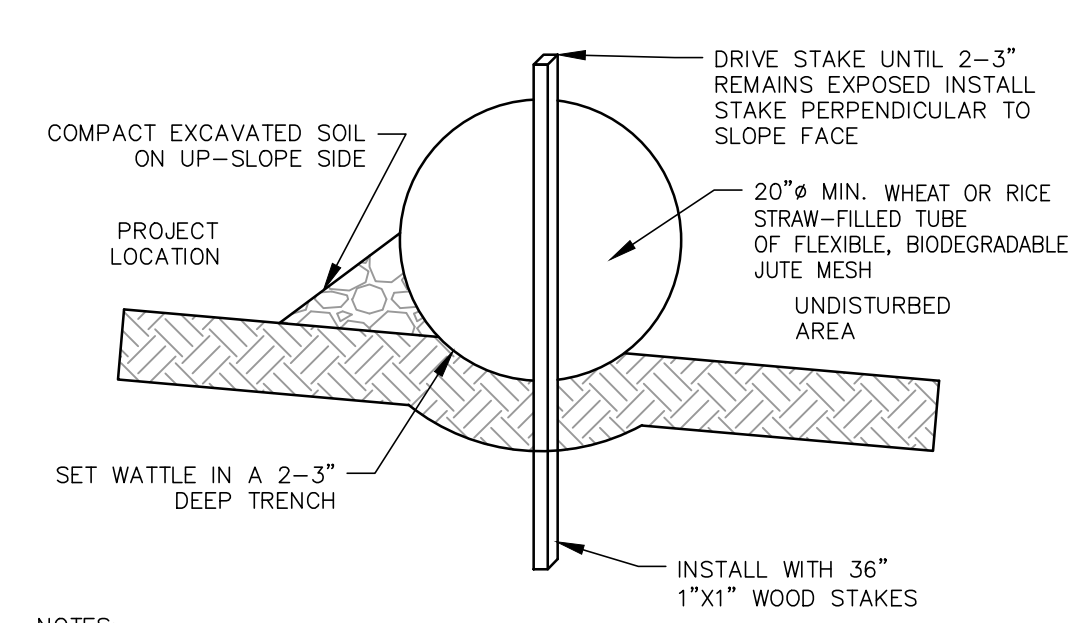
PAVEMENT SAWCUT
NTS wood_7.10



- NOTES:**
- ENTRANCE WIDTH SHALL BE TWENTY (20) FEET WIDE MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND. REPAIR ANY MEASURES USED TO TRAP SEDIMENT AS NEEDED. IMMEDIATELY REMOVE ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVED SURFACES. ROADS ADJACENT TO A CONSTRUCTION SITE SHALL BE LEFT CLEAN AT THE END OF EACH DAY.
 - 50 FEET MINIMUM WHERE THE SOILS ARE SANDS OR GRAVELS OR 100 FEET MINIMUM WHERE SOILS ARE CLAYS OR SILTS. EXPECT WHERE THE TRAVELED LENGTH IS LESS THAN 50 OR 100 FEET RESPECTIVELY.

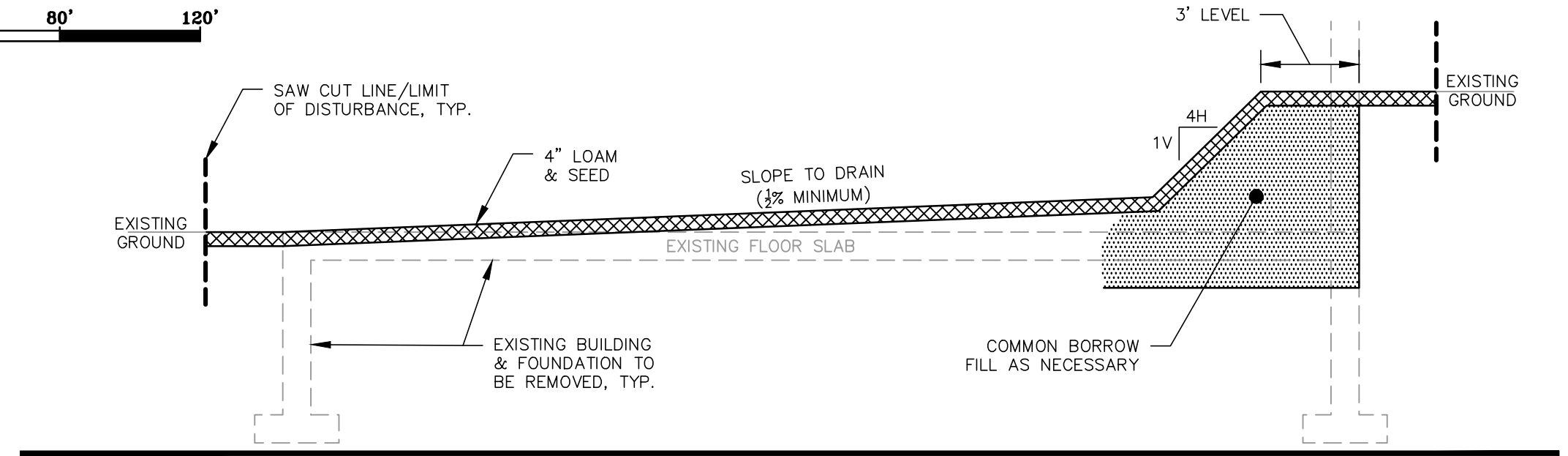
TEMPORARY CONSTRUCTION EXIT
NTS wood_9.16

SLOPE STEEPNESS	MAXIMUM LENGTH (FT)
2:1	25
3:1	50
4:1	75
5:1 OR FLATTER	100



- NOTES:**
- BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" DEEP X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHALL BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
 - PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT THE SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UP-HILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
 - SECURE THE WATTLE WITH 18-24" STAKES EVERY 3-4' WITH A STAKE ON EACH END. STAKES SHALL BE DRIVEN THROUGH THE MIDDLE OF THE WATTLES LEAVING AT LEAST SAMPLE LINE 2-3" OF STAKE EXTENDING ABOVE. THE WATTLE STAKES SHALL BE DRIVEN PERPENDICULAR TO SLOPE FACE.
 - MAX. DRAINAGE AREA ≤ 0.25 ACRES/100 LINEAR FEET.

STRAW WATTLE
NTS wood_9.13



TYP. BUILDING DEMOLITION SECTION
NTS wood

SEAL:

REVISION	DATE	DESCRIPTION

StudioJAED
42 WEYBOSSET STREET, SUITE 403
PROVIDENCE, RI 02903

PROJECT:
PROVIDENCE DPW BUILDING DEMOLITION
ALLENS AVENUE
PROVIDENCE, RI

TITLE:
SITE DEMOLITION PLAN

ISSUED FOR: -
DATE: OCTOBER 18, 2019
SCALE: 1" = 40'
DRAWN BY: MJW
CHECKED BY: CNB
PROJECT NO: 3653190051

SECTION 00 01 10
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- B. 00 31 00 - Available Project Information

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- B. 01 35 53 - Security Procedures
- C. 01 40 00 - Quality Requirements
- D. 01 42 16 - Definitions
- E. 01 50 00 - Temporary Facilities and Controls
- F. 01 57 13 - Temporary Erosion and Sediment Control
- G. 01 60 00 - Product Requirements
- H. 01 70 00 - Execution and Closeout Requirements
- I. 01 78 00 - Closeout Submittals

2.02 DIVISION 02 -- EXISTING CONDITIONS

- A. 02 41 00 - Demolition
- B. 02 65 00 - Underground Storage Tank Removal

2.03 DIVISION 31 -- EARTHWORK

- A. 31 10 00 - Site Clearing
- B. 31 22 00 - Grading
- C. 31 23 16 - Excavation
- D. 31 23 23 - Fill
- E. 31 31 16 - Termite Control

2.04 DIVISION 32 -- EXTERIOR IMPROVEMENTS

- A. 32 92 19 - Seeding

END OF SECTION 00 01 10

SECTION 00 31 00
AVAILABLE PROJECT INFORMATION

PART 1 GENERAL

1.01 EXISTING CONDITIONS

- A. Certain information relating to existing surface and subsurface conditions and structures is available to bidders as follows:
 - 1. Asbestos report and abatement plan

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION 00 31 00

e m e r y

Environmental Associates

*PO Box – E * Pawtucket, RI 02861 * Office (401)-727-4941 *
Email: emeryenvironmental@icloud.com*

ASBESTOS ABATEMENT SPECIFICATION

PROJECT LOCATION:

32-60 ERNEST STREET
PROVIDENCE, RI 02905

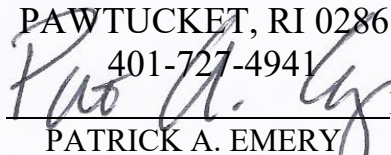
CLIENT:

MR. PHILIP R. CONTE, AIA, NCARB
PRESIDENT
STUDIO JAED
42 WEYBOSSET STREET
SUITE 403
PROVIDENCE, RI 02903
401-648-0884

REPORT PREPARED BY:

EMERY ENVIRONMENTAL ASSOCIATES
P.O. BOX - E
PAWTUCKET, RI 02861

401-727-4941



DATE: 10-7-2019

PATRICK A. EMERY

RIDOH: ASB. PROJECT DESIGNER – AD00505

EEA PROJECT #: 190915-A

Environmental Consulting and Mitigation Contractors
Lead Paint * Asbestos * Mold * Indoor Air Quality

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ABATEMENT APPLICATION FORMS***

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APPENDIX – C: ASBESTOS CONSULTANT LICENSURE

APPENDIX – D: ASBESTOS TESTING LABORATORY LICENSURE

APPENDIX – E: ASBESTOS PROJECT DRAWING(S)

APPENDIX – A:

*ASBESTOS ABATEMENT SPECIFICATION /
RIDOH ASB-16, ASB-16A & ASB-16B ASBESTOS
ABATEMENT APPLICATION FORMS*

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

1. Building Owner's Name:

CITY OF PROVIDENCE

3. Building Owner's Mailing Address and Telephone Number:

Street: 25 DORRANCE STREET

2. Application Prepared By:

PATRICK A. EMERY

City/Town: PROVIDENCE, RI

Zip: 02908

R.I. Certification No. AAC-505 PD

Telephone No: _____
(Area Code, No., Ext.)

Telephone No.: (401)-641-0074
(Area Code, No., Ext.)

4. Person to be contacted regarding this application:

Name: MR. PATRICK EMERY

Telephone No.: 401-641-0074
(Area Code, No., Ext.)

5. Location where abatement work will be performed:

Name: (if applicable) CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING

Street: 32-60 ERNEST STREET

City/Town: PROVIDENCE ZIP: 02905

6. Is this application being submitted in response to a "Notice of Requirement to Submit an Asbestos Abatement Plan"?

() YES (X) NO

If yes, what is the due date for submittal of Abatement Plan? _____
(Mo.) (Day) (Yr.)

Evaluation Number on the Notice: _____

7. Contractor who will be performing abatement work (if selected):

Name: TO BE SELECTED R.I. License No.: LAC- _____

8. Estimated Starting Date of Abatement Work: 11 1 2019
(Month) (Day) (Year)

9. Estimated Completion Date of Abatement Work: 1 15 2020
(Month) (Day) (Year)

10. Type of Asbestos Abatement: (Check all that apply)

- Removal Enclosure
 Encapsulation Demolition
 Operations and Maintenance Only
 Other: (Specify) AWP

11. Type of Building: School
 Privately Owned Building
 Publicly Owned Building
 Residence
 Other: (Specify) _____

12. Building Access: Public Access ($\geq 25\%$ of Building Area)
 Limited Public Access (< 25 % of Building Area)
 No Public Access

13. Bulk Sample Collection and Analysis:

A. Person collecting bulk samples:

Name: PATRICK A. EMERY R.I. Certification No.: AI00505

B. Sampling Methodology:

- EPA AHERA Sampling Requirements (40 CFR 763.86).
 EPA's Asbestos Containing Material in School Buildings: A Guidance Document (EPA-450/2-78-014) or
Guidance for Controlling Asbestos Containing Materials - 1985 Edition (EPA-560/5-85-024).
 Other (Specify) _____

C. Laboratory performing the analysis of the bulk samples:

Name: EMSL ANALYTICAL, INC. R.I. Certification No.: PLM00139

D. Analytical Methodology:

- EPA Interim Method for the Determination of Asbestos in Bulk Insulation Samples (PLM method only).
 Other (Specify) _____

14. Pre-Abatement Air Sample Collection and Analysis: **NOT APPLICABLE**

A. Person collecting pre-abatement air samples:

Name: _____ Affiliation: _____

B. Laboratory performing analysis of pre-abatement air samples:

Name: _____ R.I. Certification No.: _____

C. Methodology used in the collection and analysis of pre-abatement samples:

() NIOSH Method 7400 (Most Current Revision)

() OSHA 29 CFR 1926.58 - Appendix A & B

() Other (Specify) _____

15. A. Indicate how the regulated asbestos containing material (RACM) will be removed from the abatement site. If a hauler or broker will be used to transport the RACM to a disposal site, they must also be identified.

TO BE PROVIDED BY CONTRACTOR

B. Provide the name and location of the authorized asbestos waste facility to which the removed material will be transferred for disposal (if known).

TO BE PROVIDED BY CONTRACTOR

16. Person designated as compliance monitor for abatement work. **(NOT REQUIRED)**

Name: MR. PATRICK EMERY

Affiliation: EMERY ENVIRONMENTAL ASSOCIATES

17. In-Process & Clearance Air Sampling: **(SEE ATTACHMENT NO. 1)**

A. Describe on an attachment the type, number and location of air samples that will be collected outside the work area during the abatement project.

B. Describe on an attachment the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (0.01 fibers per cubic centimeter) is exceeded outside the work area during the abatement project.

C. Describe on an attachment the type, number and location of air samples that will be collected as part of the final clearance testing.

D. Describe on an attachment the plan of action to be followed if the Indoor Non-Occupational Air Exposure Standard for Asbestos (0.01 fibers per cubic centimeter) is exceeded during final clearance testing.

18. A separate and fully completed Form ASB-16A must be submitted for each area to be abated. List below the entry in Item 1 from each attached ASB-16A.

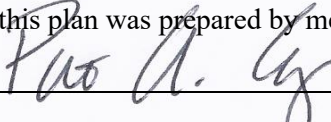
- CONTROL AREA - A / *60A ERNEST STREET / INTERIOR – FIRST FLOOR
- CONTROL AREA - A / *60A ERNEST STREET / INTERIOR – FIRST FLOOR / BID ALTERNATE #1
- CONTROL AREA - B / *60A ERNEST STREET / INTERIOR – SECOND FLOOR
- CONTROL AREA - B / *60A ERNEST STREET / INTERIOR – SECOND FLOOR / BID ALTERNATE #2
- CONTROL AREA - C / *60B ERNEST STREET / INTERIOR – FIRST FLOOR
- CONTROL AREA - C / *60B ERNEST STREET / INTERIOR – FIRST FLOOR / BID ALTERNATE #3
- CONTROL AREA - D / *50 ERNEST STREET / INTERIOR – FIRST FLOOR
- CONTROL AREA - E / *34A ERNEST STREET / INTERIOR – FIRST FLOOR
- CONTROL AREA - F / *34B ERNEST STREET / INTERIOR – FIRST FLOOR
- CONTROL AREA - G / *32 ERNEST STREET / INTERIOR – FIRST FLOOR
- CONTROL AREA - G / *32 ERNEST STREET / INTERIOR – FIRST FLOOR / BID ALTERNATE #4
- CONTROL AREA - H / *32 - 60 ERNEST STREET / EXTERIOR ROOF AREA(S) - A,B & C & CANOPY ROOF'S
- CONTROL AREA - I / *32 - 60 ERNEST STREET / EXTERIOR – NORTH, EAST, SOUTH & WEST ELEVATIONS
- [FIRST AND SECOND FLOOR AREA(S)]

NOTE: SEE PROJECT DRAWINGS – ATTACHED / APPENDIX – E

**ADDRESS OF ASBESTOS CONTROL AREA SHALL BE DEFINED BY THE ATTACHED PROJECT DRAWINGS AND NOT BY ADDRESS DEFINED BY THE USPS.*

CONSULTANT CERTIFICATION

19. I certify that this plan was prepared by me and I am responsible for its content.

Signature:  Date: 10 / 7 / 2019
 (Month) (Day) (Year)

Affiliation: Emery Environmental Associates

20. ASBESTOS ABATEMENT PLAN APPLICATION FEE:

- Operations & Maintenance Only \$ 75
- Up to One (1) NESHAP Unit \$ 75
- Between One (1) & Ten (10) NESHAP Units \$ 300
- Between Ten (10) & Fifty (50) NESHAP Units \$ 600
- Over Fifty (50) NESHAP Units \$ 900
- AMENDMENT FEE \$ 150

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
60A ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - A / 60A ERNEST STREET; PROVIDENCE, RI 02905 / INTERIOR (FIRST FLOOR)
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA2

APPENDIX - E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
60A ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - A / 60A ERNEST STREET; PROVIDENCE, RI 02905 / INTERIOR (FIRST FLOOR)
BID ALTERNATE #1 / (SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (**NOTE:** All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA2

APPENDIX - E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: *CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING*
60A ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - B / 60A ERNEST STREET; PROVIDENCE, RI 02905 / INTERIOR (SECOND FLOOR)
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (**NOTE:** All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA3

APPENDIX - E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
60A ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - B / 60A ERNEST STREET; PROVIDENCE, RI 02905 / INTERIOR (SECOND FLOOR)
BID ALTERNATE #2 / (SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (**NOTE:** All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA2

APPENDIX - E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
60B ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - C / 60B ERNEST STREET / INTERIOR – FIRST FLOOR
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA4
APPENDIX – E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #-3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
60B ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - C / 60B ERNEST STREET; PROVIDENCE, RI 02905 / INTERIOR (FIRST FLOOR)
BID ALTERNATE #3 / (SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA4

APPENDIX - E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #-3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: *CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING*
50 ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - D / 50 ERNEST STREET / INTERIOR – FIRST FLOOR
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA5
APPENDIX – E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #-3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: *CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING*
34A ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - E / 34A ERNEST STREET / INTERIOR – FIRST FLOOR
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA6
APPENDIX – E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #-3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
34B ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - F / 34B ERNEST STREET / INTERIOR – FIRST FLOOR
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA1 & EEA6
APPENDIX – E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #-3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
32 ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - G / 32 ERNEST STREET / INTERIOR – FIRST FLOOR
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS: EEA-1 & EEA7
APPENDIX – E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #3

(4) **PROPOSED REMEDIES:** (Cont.)

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
32 ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - G / 32 ERNEST STREET; PROVIDENCE, RI 02905 / INTERIOR (FIRST FLOOR)
BID ALTERNATE #4 / (SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS: EEA-1 & EEA7

APPENDIX - E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #3

(4) **PROPOSED REMEDIES:** (Cont.)

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.6 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #5 (ATTACHED)**

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING
32-60 ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - H / 32 - 60 ERNEST STREET / EXTERIOR ROOF AREA(S) - A,B & C
(SEE ATTACHMENT-2 & ATTACHED DRAWING FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWING EEA8

APPENDIX - E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

YES NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): _____

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): **THE ASBESTOS CONTRACTOR SHALL BE REQUIRED TO ABATE ALL ASBESTOS and PRESUMED ASBESTOS CONTAINING MATERIALS AS DEFINED WITHIN APPENDIX – 2 OF THE ATTACHED SPECIFICATION. ALL ASBESTOS REMOVAL OPERATIONS MUST BE CONDUCTED IN ACCORDANCE WITH THE WORK REQUIREMENTS OF SECTION 1.14.8 OF THE CURRENT RIDOH ASBESTOS CONTROL REGULATIONS [216-RICR-50-15-1], IN ADDITION TO ALL APPLICABLE WORK REQUIREMENTS AS DEFINED WITHIN ATTACHMENTS #1 - #6 (ATTACHED)**

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

YES NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

E) Will any **accessible** RACM remain in this area after abatement?

YES NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Health

Division of Occupational & Radiological Health

APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: *CITY OF PROVIDENCE - DEPARTMENT OF PUBLIC WORKS BUILDING*
32-60 ERNEST STREET; PROVIDENCE, RI 02905

INSTRUCTIONS: All items on this form must be addressed. All references to attachments must be clearly identified. All attachments must be marked with the specific item numbers on this form to which they pertain.

(1) Area Location/Identification (Room Name / No., Evaluation Number, etc.):

CONTROL AREA - I / EXTERIOR – ELEVATIONS (NORTH, EAST, SOUTH AND WEST)
(SEE ATTACHMENT-2 & ATTACHED DRAWINGS FOR EXACT LOCATIONS)

(2) Attach a description of each type (e.g. pipe, ceiling, etc.) of regulated asbestos containing material (RACM) in this area, including condition, location, quantity and asbestos content. Attach a copy of the laboratory report(s) for all samples. (NOTE: All laboratory reports must include the name of the building(s) and the location(s) of the sample(s)).

SEE ATTACHMENT # - 2

(3) Attach a current scale drawing of this area, showing direction of North and East, which has been clearly annotated to show the type, location and quantity of all RACM in this area. This drawing must include a legend which acts as a guide to the scale, symbols and nomenclature used in the drawing. If a master plan or multiple drawings are provided, indicate the specific location(s) and drawing number(s) which depict this area. If the location of the decontamination chamber is known, it should be so indicated on the appropriate drawing(s).

SEE PROJECT DRAWINGS EEA-1, EEA2, EEA3, EEA4, EEA5, EEA6 & EEA7
APPENDIX – E (ATTACHED)

(4) **PROPOSED REMEDIES:**

A) Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

SEE ATTACHMENT #-3

(4) **PROPOSED REMEDIES: (Cont.)**

B) Will any portion of this area be abated by use of B.8 work procedures?

() YES (X) NO

If Yes, indicate below which RACM in this area will be abated by use of the following B.8 work procedures:

B.8.2 & B.8.3 (REMOVAL): _____

B.8.2 & B.8.4 (ENCAPSULATION): _____

B.8.2 & B.8.5 (ENCLOSURE): _____

B.8.6 (DEMOLITION): _____

B.8.7 (GLOVEBAG): _____

B.8.8 (ASPHALT ROOFING): _____

C) Are you requesting any waivers to the above selected B.8 procedures for any of the abatement activities in this area?

(X) YES () NO

If Yes, attach a detailed description of the waivers requested you are proposing to utilize. All items must be keyed to the specific section(s) of the regulations for which waivers are requested.

SEE ATTACHMENT #4 (WAIVER CLEARANCE AIR TESTING)

D) Are you proposing alternative procedures under B.11 for any of the abatement activities in this area?

(X) YES () NO

If Yes, attach a detailed description of the alternative procedures requested you are proposing to utilize. Alternate procedures must include a justification for not following specific section(s) of the regulations and be as protective of public health.

SEE ATTACHEMENT #7 (AWP)

E) Will any **accessible** RACM remain in this area after abatement?

() YES (X) NO

If Yes, attach a description of the RACM that will remain and the details of the on-going Operations and Maintenance Plan that will be implemented in accordance with C.1.2(b).

AGENCY USE ONLY

ATTACHMENT NO.- 1

IN-PROCESS AIR MONITORING / ASBESTOS CONTROL AREAS – A, B, C, D, E, F, G, H & I:

During the scheduled abatement operations, the building owner's asbestos consultant will collect air sample(s) outside the asbestos control area, periodically for the duration of the asbestos removal project. The compliance air samples shall be collected at random locations adjacent to the control areas (i.e., control area barriers or where the project representative determines, during the performance of the project.

If there is a deviation in proper procedures on the part of the asbestos abatement contractor during the set-up, the removal of the final clean up, the selected project monitor shall be notified immediately. These deviations include inadequate on-site paperwork, deviations in outlined work procedures, or if compliance air sampling outside the work area indicate fiber concentrations in excess of 0.01 f/cc, the on-site project monitor shall determine the extent of the contamination, and the asbestos abatement contractor shall be responsible for extending containment / control area to include the containment and initiating the cleanup.

CLEARANCE AIR MONITORING REQUIREMENTS /VISUAL INSPECTION REQUIREMENTS: ASBESTOS CONTROL AREAS – A, B, C, D, E, F, G, H & I:

A final visual inspection of each SEPARATE asbestos control area(s) to determine completion of removal of asbestos materials as defined by Attachment #2 of this specification shall be required prior to the completion of the project. Final visual inspection shall include all horizontal and vertical surfaces within each interior asbestos abatement work area(s). In addition, the building owner's asbestos consultant shall review all personal air sample results collected during the performance of the project. Upon a review of the air sample results and visual inspection(s) - the building owner's asbestos consultant shall determine the following:

If the personal air sample results are below 0.1 f/cc (TWA) as determined by an eight-hour time weighted average, and the ambient air samples are below 0.01f/cc (as applicable) **and the area has been cleaned of all ACM / PACM asbestos containing building materials and visually inspected and approved by a RIDOH licensed asbestos inspector**, the area will be considered a non-hazard and the control area barriers may be torn down and occupied by personnel without protective equipment as required by 29 CFR 1926.1101.

However, If the personal air samples are determined to be in excess of 0.1 f/cc (TWA), or the area is determined to contain asbestos debris by a RIDOH licensed asbestos inspector, the contractor shall be required to continue restricted access to the area, re-clean the area via. wet methods and HEPA vacuuming. This process shall be repeated until the air is visually clean of all ACM debris.

NOTE: Based on these requirements (Attachment #1), the asbestos contractor shall be required to submit OSHA personal air sample results (as collected in compliance with OSHA 29CFR1926.1101 and analyzed by a RIDOH certified laboratory), directly to the building owner (City of Providence) and Emery Environmental Associates for review, prior to a request for final visual inspection(s).

ATTACHMENT NO.-2 CHART OF ACM:

***NOTE: THE SELECTED ASBESTOS CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL ASBESTOS QUANTITIES, AS REPORTED FOR EACH ASBESTOS CONTROL AREA AS DEFINED BY THIS SPECIFICATION - PRIOR TO SIGNING THE PROJECT CONTRACT AND START OF THE PROJECT. NO CHANGE ORDERS WILL BE APPROVED FOR DISCREPANCIES ASSOCIATED WITH THE REPORTED QUANTITIES.**

CONTROL AREA – A 60A ERNEST STREET; PROVIDENCE, RI			
LOCATION	ACM QUANTITY	TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.	ASBESTOS CONTENT
<i>First Floor - Rooms: #125, #126, #130, #131, #131A, #132, #133, #134, #135, #137, #139,</i>	<i>*2,356 Square Feet</i>	■ - Vinyl Flooring System & All Associated Glues / Mastic.	<i>2 -5% Chrysotile</i>
<i>First Floor - Rooms: #125, #126, #130, #131, #131A, #132, #133, #134, #135, #136, #137, #138, #139.</i>	<i>*337 Square Feet</i>	❖ - Vinyl Cove Molding & Associated Glue / Mastic.	<i>2% Chrysotile</i>

CONTROL AREA – A / BID ALTERNATE #1 60A ERNEST STREET; PROVIDENCE, RI			
LOCATION	ACM QUANTITY	TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.	ASBESTOS CONTENT
<i>First Floor - Rooms: #128 & #129</i>	<i>*60 Square Feet</i>	⊗ - Ceramic / Stone Floor and Wall Tile & All Associated Grout, Glue, Mastic and Flooring Paper @ Wall and Floor Surface Areas.	<i>PACM</i>



CONTROL AREA – B 60A ERNEST STREET; PROVIDENCE, RI			
LOCATION	ACM QUANTITY	TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.	ASBESTOS CONTENT
<i>Second Floor - Rooms: #200, #201 + Closets, #202 + Closets, #203 + Closets.</i>	<i>*1,973 Square Feet</i>	<i>■ - Vinyl Flooring System & All Associated Glues / Mastic.</i>	<i>2 - 5% Chrysotile</i>
<i>Second Floor - Rooms: #200, #201 + Closets, #202 + Closets, #203 + Closets.</i>	<i>*184 Square Feet</i>	<i>❖ - Vinyl Cove Molding & Associated Glue / Mastic.</i>	<i>2% Chrysotile</i>
<i>Second Floor - Rooms # #204, #305, #206 & #207</i>	<i>100 Linear Feet</i>	<i>▶ - Thermal Pipe Insulation enclosed within wall, floor and ceiling surface area(s).</i>	<i>30% Chrysotile</i>

CONTROL AREA – B / BID ALTERNATE #2 60A ERNEST STREET; PROVIDENCE, RI			
LOCATION	ACM QUANTITY	TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.	ASBESTOS CONTENT
<i>First Floor - Rooms: #204, #305, #206 & #207</i>	<i>*775 Square Feet</i>	<i>⊗ - Ceramic / Stone Floor and Wall Tile & All Associated Grout, Glue, Mastic and Flooring Paper @ Wall and Floor Surface Areas.</i>	<i>PACM</i>

CONTROL AREA – C 60B ERNEST STREET; PROVIDENCE, RI			
LOCATION	ACM QUANTITY	TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.	ASBESTOS CONTENT
<i>First Floor - Room #120</i>	<i>*4 Linear Feet</i>	<i>↻ - Accessible Thermal Pipe Insulation.</i>	<i>30% Chrysotile</i>

**CONTROL AREA – C / BID ALTERNATE #3
 60B ERNEST STREET; PROVIDENCE, RI**

<i>LOCATION</i>	<i>ACM QUANTITY</i>	<i>TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.</i>	<i>ASBESTOS CONTENT</i>
<i>First Floor - Rooms: #123 & #124</i>	<i>*146 Square Feet</i>	<i>✘ - Ceramic / Stone Floor and Wall Tile & All Associated Grout, Glue, Mastic and Flooring Paper @ Wall and Floor Surface Areas.</i>	<i>PACM</i>

**CONTROL AREA – D
 50 ERNEST STREET; PROVIDENCE, RI**

<i>LOCATION</i>	<i>ACM QUANTITY</i>	<i>TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.</i>	<i>ASBESTOS CONTENT</i>
<i>First Floor - Room #117, #118 & #119</i>	<i>*466 Linear Feet</i>	<i>↔ - Accessible Thermal Pipe Insulation.</i>	<i>30% Chrysotile</i>
<i>First Floor - Room #119</i>	<i>*36 Square Feet</i>	<i>◆ - Asbestos Cement Board - Applied @ Ceiling Area</i>	<i>18% Chrysotile</i>

**CONTROL AREA – E
 34A ERNEST STREET; PROVIDENCE, RI**

<i>LOCATION</i>	<i>ACM QUANTITY</i>	<i>TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.</i>	<i>ASBESTOS CONTENT</i>
<i>First Floor - Room #115 & #116</i>	<i>*90 Linear Feet</i>	<i>↔ - Accessible Thermal Pipe Insulation.</i>	<i>30% Chrysotile</i>

**CONTROL AREA – F
 34B ERNEST STREET; PROVIDENCE, RI**

<i>LOCATION</i>	<i>ACM QUANTITY</i>	<i>TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.</i>	<i>ASBESTOS CONTENT</i>
<i>First Floor - Room #113</i>	<i>*126 Linear Feet</i>	<i>↔ - Accessible Thermal Pipe Insulation.</i>	<i>30% Chrysotile</i>



CONTROL AREA – G
32 ERNEST STREET; PROVIDENCE, RI

<i>LOCATION</i>	<i>ACM QUANTITY</i>	<i>TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.</i>	<i>ASBESTOS CONTENT</i>
<i>First Floor - Rooms #100, #101, #102, #104, #105, #106, #107, #108, #109, #110, #111, #112.</i>	<i>*1,251 Linear Feet</i>	<i>↔ - Accessible Thermal Pipe Insulation.</i>	<i>30% Chrysotile</i>
<i>First Floor - Rooms #108 & #111</i>	<i>*50 Linear Feet</i>	<i>▶ - Thermal Pipe Insulation enclosed within wall, floor and ceiling surface area(s).</i>	<i>30% Chrysotile</i>

CONTROL AREA – G / BID ALTERNATE #4
60B ERNEST STREET; PROVIDENCE, RI

<i>LOCATION</i>	<i>ACM QUANTITY</i>	<i>TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.</i>	<i>ASBESTOS CONTENT</i>
<i>First Floor - Rooms: #123 & #124</i>	<i>*146 Square Feet</i>	<i>⊗ - Ceramic / Stone Floor and Wall Tile & All Associated Grout, Glue, Mastic and Flooring Paper @ Wall and Floor Surface Areas.</i>	<i>PACM</i>



CONTROL AREA – H EXTERIOR - ROOF AREA			
LOCATION	ACM QUANTITY	TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.	ASBESTOS CONTENT
<i>Exterior – Roof Area - A</i>	<i>*27,245 Square Feet</i>	<i>♪- All Roofing Material abated down to and including roof tar at Roof Deck (Concrete & Wood) and disposed of as ACBM.</i>	<i>10% Chrysotile</i>
<i>Exterior – Roof Area - B</i>	<i>*9,999 Square Feet</i>	<i>♪- All Roofing Material abated down to and including roof tar at Roof Deck (Concrete & Wood) and disposed of as ACBM.</i>	<i>10% Chrysotile</i>
<i>Exterior – Roof Area - C</i>	<i>*2,550 Square Feet</i>	<i>♪- All Roofing Material abated down to and including roof tar at Roof Deck (Concrete & Wood) and disposed of as ACBM.</i>	<i>10% Chrysotile</i>
<i>Exterior - Canopy Roof Areas @ Building Entrances</i>	<i>*400 Square Feet</i>	<i>♪- All Roofing Material abated down to and including roof tar at Roof Deck (Concrete & Wood) and disposed of as ACBM.</i>	<i>PACM</i>

CONTROL AREA – I / AWP (ATTACHMENT #7)			
LOCATION	ACM QUANTITY	TYPE / DESCRIPTION OF ACM MATERIAL TO BE REMOVED.	ASBESTOS CONTENT
<i>Exterior – First and Second Floor Areas @ South, East, North and West Elevations.</i>	<i>*3,512 Square Feet</i>	<i>●*●*- Removal shall include ALL Steel - Fixed, Awning / Casement Window(s) and ALL Glass Block within existing rough openings. Removal shall also include ANY / ALL Caulk @ Window & Door Frames @ Masonry Rough Opening(s) (after each window and door frames is removed).</i>	<i>3 - 5% Chrysotile</i>
<i>Exterior – Throughout Structure @ Covered Walkway / Canopy Roof Area.</i>	<i>*150 Square Feet</i>	<i>◆ - Cement Board “Transite”</i>	<i>18% Chrysotile</i>
<i>Exterior @ Soil Perimeter of Structure.</i>	<i>*300 Square Feet</i>	<i>Soil</i>	<i>PACM</i>

SYMBOL LEGEND / ADDITIONAL WORK REQUIRMENTS:

■ - The contracted asbestos contractor is responsible for the complete removal of any/all interior ACM/PACM floor covering materials (including all layers of vinyl flooring, plywood subflooring down to original concrete, as defined within Attachment #2 of this specification. All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable).

❖ - The contracted asbestos contractor is responsible for the complete removal of any/all interior vinyl cove molding materials and associated glue - mastic, as defined within Attachment #2 of this specification. All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable).

▶ - The contracted asbestos contractor is responsible for the complete removal of any/all enclosed asbestos thermal pipe insulation within wall, floor and ceiling surface area(s), as defined within Attachment #2 of this specification. All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable).

↻ - The contracted asbestos contractor is responsible for the complete removal of any/all accessible asbestos thermal pipe insulation within the structure as defined within Attachment #2 of this specification. All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable).

◆ - The contracted asbestos contractor is responsible for the complete removal of any/all cement board (“Transite”) as applied within the interior and exterior of the structure. Removal shall include material as applied to ceiling surface areas and Exterior canopy roof areas, as defined within Attachment #2 of this specification. All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #5 & #7 of this specification (as applicable).

◆*◆* The contracted asbestos contractor is responsible for the complete removal of any/all METAL window sash (“Fixed”, “awning” and/or “casement”) throughout the structure (First Floor, Second Floor). All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #7 of this specification (as applicable).

◆*◆* The contracted asbestos contractor is responsible for the complete removal of any/all windows / doors frame(s) as installed within masonry rough window opening(s) throughout the structure (First Floor and Second Floor). Work shall include the removal of any/all existing caulk as applied within the remaining rough opening(s). All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachment #7 of this specification (as applicable).

♣ - The contracted asbestos contractor is responsible for the complete removal of any/all roofing material down to the existing concrete and wood substrate deck throughout of the structure. Removal shall include roofing materials, as defined within Attachment #2 and Attachment #6 of this specification. All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #6 of this specification (as applicable).

✕ - The existing ceramic / stone floor and wall tiles and all associated grouts, glues and paper underlayment is assumed / presumed to contain asbestos. These materials will be sampled to determine if the building materials are ACM / ACBM prior to the start of the asbestos response action.

For the purpose of the bidding process. Each bidding contractor shall provide the owner with a separate fee schedule / proposal for each Alternate asbestos control area and the quantity of PACM material(s) as defined within Attachment #2 at the following asbestos control area(s):

- Asbestos Control Area – A / Bid Alternate #1
- Asbestos Control Area – B / Bid Alternate #2
- Asbestos Control Area – C / Bid Alternate #3
- Asbestos Control Area – G / Bid Alternate #4

If the materials are determined to contain regulated asbestos, the contracted asbestos contractor is responsible for the complete removal of any/all ceramic / stone tile and all associated grouts, glues and associated paper down to the existing concrete substrate throughout each defined area of the structure. All work must be conducted using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable).

ATTACHMENT NO.-3

INTERIM AND ON-GOING OPERATIONS AND MAINTENANCE PROGRAM:

The building owner representatives, maintenance personnel, building staff, outside contracting personnel, and other building occupants have been or will be made aware of the presence, amount, location, and condition, of the asbestos-containing building materials within this area of the building. These people have been or will be educated and advised not to disturb the asbestos-containing materials due to the potential health effects if asbestos fibers become airborne.

EMPLOYEE NOTIFICATIONS:

The building owner as well as outside contractors have been or will be notified as to the presence of asbestos containing building materials within the interior areas of **(32-60 Ernest Street; Providence, RI)**. All outside contractor(s) will sign a document stating that he has been made aware of the presence and location of the asbestos-containing materials within this area. Also, the building owner representative(s) are responsible for presenting information to the building occupants of any asbestos abatement activities being conducted. This will be accomplished by posting memo's and/or posting of caution / warning signs at all the entrances to the building during such activities.

ACCIDENTAL DISTURBANCE OF ASBESTOS-CONTAINING MATERIALS:

The building owner was, [at the time of the inspection] made aware of the presence of asbestos materials within the interior and exterior areas of **(32-60 Ernest Street; Providence, RI)**. Due to the presence of the asbestos-containing materials. The building owner will institute the following procedures in an event of an accidental asbestos fiber release within the building prior to the start of the asbestos abatement project.

If an asbestos-containing material becomes disturbed within the criteria of a minor fiber release (less than 10 linear feet of 25 square feet of ACBM), a trained " R.I. Competent Person" may perform the cleanup, removal, encapsulation, or enclosure abatement activities utilizing spot removal/repair techniques. During these spot abatement techniques, access to the area shall be restricted to only those trained individuals, signs shall be posted, and HVAC (if applicable) shall be shut down and locked out. If a major fiber release occurs(greater than 10 linear feet or 25 square feet of ACM), the clean-up, removal, encapsulation, or enclosure abatement activities must be completed by a RI Department of Health (RIDOH) certified asbestos abatement contractor. Regardless of the amount of asbestos to be abated, the affected area must be isolated and entry to the area restricted to only those trained/ certified personnel.

EMPLOYEE TRAINING:

Any employee of the company, firm, agency, or other organization as well as any outside contractor employed by the building owner who, as a consequence of their work activities, disturbs asbestos-containing building materials must be properly trained and certified by the R.I. Department of Health as a "R.I. Competent Person" in accordance with the R.I. Rules and Regulations for Asbestos Control.

ATTACHMENT NO.- 4

REQUESTED WAIVERS

CLEARANCE AIR TESTING:

INTERIOR - ASBESTOS CONTROL AREA'S: A, B, C, D, E, F & G:

Based on the scheduled demolition of the structure the (as defined by Appendix – 2 of this specification). The building owner requests a waiver of clearance air testing as required by section 1.14.2 P of the current RIDOH asbestos control regulations [216-RICR-50-15-1]. In lieu of clearance air testing, results of OSHA personnel air sampling as collected by the asbestos contractor during the asbestos mitigation work operations will be used in lieu of clearance area air sampling. Please refer to Attachment – 1, of this project specification for specific sampling criteria's and standards to be used for project completion.

CLEARANCE AIR TESTING:

EXTERIOR: ASBESTOS CONTROL AREA'S: H & I:

Based on the “open style” of abatement being conducted during the exterior window system abatement and roof abatement procedures, in association with the non-friable nature of the asbestos containing materials being abated. Results of OSHA personnel air sampling collected by the asbestos contractor during the asbestos mitigation work operations will be used in lieu of clearance area air sampling as required by section 1.14.2 P of the current RIDOH asbestos control regulations [216-RICR-50-15-1]. Please refer to Attachment – 1, of this project specification for specific sampling criteria's and standards to be used for project completion. Please refer to Attachments – #1 - #6 and Attachment #7 (AWP) *as applicable...* as of the enclosed Emery Environmental Associates project specification for specific sampling criteria's and standards to be used for project completion.

ATTACHMENT NO.- 5

SPECIFIC WORK REQUIREMENTS:

During the asbestos mitigation operations the selected asbestos contractor shall be responsible for the work to be conducted in accordance with **all** applicable asbestos control regulations: USEPA – AHERA 40 CFR 763, USEPA – NESHAP 40 CFR Part 61, US OSHA 29 CFR 1926.1101 & US OSHA 29 CFR 1910.1001 and the RIDOH Asbestos Control Regulation [216-RICR-50-15-1]. The building owner (City of Providence) and/or Emery Environmental Associates will stop the work at any time violations of any asbestos control regulations are observed. In addition to the above referenced asbestos control regulations, the selected asbestos contractor shall be required to comply with the following additional work requirements.

ASBESTOS CONTROL AREAS – A, B, C, D, E, F & G:

PROJECT SUBMITTALS: Prior to the start of any asbestos work operations, the selected asbestos contractor shall be required to submit copies of the following items for review and approval. **NOTE:** *Additional submittals not requested at this time may be required for submittal and approval in the future.* No asbestos work operations may begin on site until the following items are submitted and approved in writing by the building owner (City of Providence) and/or Emery Environmental Associates.

1. *Copy of RIDOH 10-day written start work notification for this project,*
2. *Copies of the written notification(s) to the City of Providence, RI police and fire departments,*
3. *Copy of contractor's current insurance certificate,*
4. *Copy of contractor's current written health and safety program,*
5. *Copy of contractor's current written asbestos respirator program,*
6. *Copies of MSDS sheet for the polyethylene sheeting, proposed for use,*
7. *Copies of MSDS sheet for the duct tape, proposed for use,*
8. *Copies of MSDS sheet for the final spray encapsulant, proposed for use,*
9. *Copies of MSDS sheet for duct tape, proposed for use,*
10. *Copies of MSDS sheet for protective suits, proposed for use,*
11. *Copy of manufactures efficiency report for each "HEPA vacuum system" proposed for use*
12. *Copies of licensure for the waste landfill, proposed for use,*
13. *Copies of RIDOH Asbestos licensure, training certification, medical information, fit test, First Aid / CPR card(s), for each worker proposed for use on the project site,*
14. *Copies of RIDOH certification for laboratory used to analyze the contractors daily OSHA personal air samples.*

MOVABLE OBJECTS: It is the responsibility of the asbestos contractor to wet clean, HEPA vacuum and remove all moveable non-asbestos objects from EACH work area prior to the start of any asbestos mitigation operations.

COVERING OF POUROUS NON-ASBESTOS BUILDING MATERIALS: The asbestos contractor shall be responsible for the covering of all materials and objects within each work area that is **not** scheduled for asbestos abatement and cannot be wet cleaned at the completion of the planned asbestos mitigation work, with one layer of six-mil polyethylene sheeting. All items scheduled to be covered within each work area must be first pre-cleaned using wet-methods and HEPA vacuumed to a dust free condition prior to covering. All items not covered and not decontaminated at the completion of the work shall be considered asbestos contaminated and must be cleaned or disposed of as an asbestos containing building material.

NEGATIVE PRESSURE CONTAINMENT REQUIREMENTS: The asbestos abatement contractor shall set-up and maintain negative pressure ventilation units with HEPA filtration, in sufficient number, dependent upon the abatement areas, to provide one (1) work-place air change every fifteen minutes. These units shall operate continuously (24 hours per day) from the time of barrier construction through the time of successful final visual inspection by the building owners selected consultant.

Local exhaust filtered air will be evacuated to the outside of the building at all times away from public access areas and building ventilation intake vents. HEPA filters will be leak proof and the ventilation unit will maintain a minimum pressure differential of -0.02 inches of water column relative to the adjacent areas of the building. Documentation of negative pressure shall be monitored by a manometer with printed reading. A printed reading of the containment pressure reading / "log" documented on a daily basis. The reading shall be dated and referenced to the project location and control area. The manometer readings shall be printed signed by the project supervisor and forwarded to the building owner (City of Providence) and/or Emery Environmental Associates, on a daily basis. If the printed readings indicate adequate negative pressure has not been maintained. The asbestos contractor shall increase the number of units until proper negative pressure can be established. **NOTE:** If the opening (exterior door, window, skylight, vent, etc.) used to exhaust air from the containment area or interior area of the structure - to the ambient air at the exterior of the structure requires the installation / erection of ridged barriers (i.e. plywood) or any other security measures to protect the structure - as determined applicable by the general contractor or the owner, it shall be the responsibility of the asbestos contractor to provide these security controls at no additional cost to the general contractor, building owners representative or the building owner.

LOCKOUT / TAG OUT: The asbestos contractor shall be responsible for the lock-out / tag-out of any and all gas or electric service and/or equipment operating within the asbestos control area(s). (This shall include electric service within wall and ceiling surface areas, generators, boiler system equipment, hot water heaters, etc.) In addition, the asbestos contractor shall be responsible for the isolation and lock-out / tag-out of all electrical service(s) within the asbestos control area(s).

SMOKE DETECTOR / FIRE DETECTOR PROTECTION DURING WORK OPERATIONS: The selected asbestos contractor shall be responsible for the protection and covering of all fire system alarms, fire system detector(s) and smoke detectors within the area of renovation / during the performance of the project (as applicable by the requirements of this project). Protection must be conducted using methods approved by current RI fire codes.

■ - **REMOVAL OF ACM / PACM FLOORING MATERIALS:** The selected asbestos contractor shall be responsible for the complete removal of **all** existing flooring materials [including but not limited to: carpeting, plywood, vinyl floor tile, vinyl sheet flooring, floor leveler (regardless of thickness) and any/all associated glue (mastic) as installed within the asbestos control area(s) of the structure (down to the original wood floor planking or concrete substrate), as **defined by Attachment #2** of this specification. Floor covering removal must be done using work practices as defined by, the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable) and section 1.14.6 of the current RIDOH asbestos control regulation [216-RICR-50-15-1] - prior to the successful completion of the project. NOTE: The asbestos contractor shall also be responsible for the removal of any material enclosing an ACM/PACM flooring material scheduled for demolition. This shall include but not limited to cabinetry and/or free-standing walls.

❖ - **REMOVAL OF ACM / PACM VINYL WALL COVE MOLDING MATERIALS:** The selected asbestos contractor shall be responsible for the complete removal of **all** existing vinyl cove molding materials and any/all associated glue (mastic) as installed within the asbestos control area(s) of the structure, as **defined by Attachment #2** of this specification. Removal must be done using work practices as defined by, the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable) and section 1.14.6 of the current RIDOH asbestos control regulation [216-RICR-50-15-1] - prior to the successful completion of the project.

✘ - **REMOVAL OF ACM / PACM CERAMIC / STONE WALL AND FLOOR TILE MATERIALS:** **As defined by Alternate Bids #1 - #4:** The selected asbestos contractor shall be responsible for the complete removal of **any / all** existing ceramic floor and wall tile and/or stone flooring materials [including but not limited to: ceramic tiles, stone tile, grouts, glues and floor leveler (regardless of thickness) as installed within the asbestos control area(s) of the structure as **defined by Attachment #2** of this specification. Floor covering removal must be done using work practices as defined by the corresponding ASB-16A forms and Attachments #1 - #5 of this specification (as applicable) and section 1.14.6 of the current RIDOH asbestos control regulation [216-RICR-50-15-1] - prior to the successful completion of the project.

▶ / ⇄ - **REMOVAL OF THERMAL PIPE SYSTEM INSULATION (TSI) MATERIALS:** The selected asbestos contractor shall be responsible for the complete removal of **any/all** existing ENCLOSED AND ACCESSIBLE thermal pipe insulation (TSI) materials within each defined asbestos control area and as defined by Attachment #2 of this specification. NOTE: Enclosed TSI shall be defined as any wall, floor or ceiling surface area determined to be used a “wet wall” at a sink, toilet or heating system (heater / radiator). The TSI should be assumed to be present at a wall, floor and/or ceiling area throughout each asbestos control area. The asbestos contractor shall be responsible for any/all required access (i.e. removal of wall, floor, ceiling surface area) and to abate the enclosed TSI. Any debris (plaster / CMU block) generated by access to the pipe(s) may be disposed of as non-asbestos material as long as the material is not determined by EEA to be contaminated due to improper demolition work operation(s) and the general debris as generated is covered with polyethylene prior to the start of the asbestos response action work.



CONTRACTOR RESPONSIBILITY REGARDING SUPPLY OF ELECTRICAL POWER TO THE REGULATED WORK AREA(S). The selected asbestos contractor shall be responsible for the supply of electricity / electric power as required to complete any/all asbestos mitigation operations at each defined asbestos control area. The owner shall provide the asbestos contractor with a power supply source and the selected asbestos contractor shall be responsible for routing power from the supplied source to the asbestos work area using the contractor's own electric cords. **In addition, the asbestos contractor shall be responsible for the configuration and supply of at least three (3) additional and separate electric cords to each asbestos control area for the purpose of project oversight (in-process air testing, lighting, etc.) during and at the completion of any/all asbestos mitigation work operations. These cords shall be installed to locations as directed by the on-site asbestos project monitor. All cords routed to each asbestos control area and used for the work associated with the asbestos abatement or project air testing must be directly connected to a GFCI and shall be always maintained to be in dry, clean and dust free condition.**

CONTRACTOR RESPONSIBILITY REGARDING SUPPLY OF WATER TO THE REGULATED WORK AREA(S). The selected asbestos contractor shall be responsible for the supply of water as required to complete any/all asbestos mitigation operations at each defined asbestos control area. The owner shall provide the asbestos contractor with a source of water, the selected asbestos contractor shall be responsible for routing water from the supplied source to the asbestos work area using the contractor's own water hose.

ATTACHMENT NO.- 6

SPECIFIC WORK REQUIREMENTS:

During the asbestos mitigation operations the selected asbestos contractor shall be responsible for the work to be conducted in accordance with **all** applicable asbestos control regulations: USEPA – AHERA 40 CFR 763, USEPA – NESHAP 40 CFR Part 61, US OSHA 29 CFR 1926.1101 & US OSHA 29 CFR 1910.1001 and the RIDOH Asbestos Control Regulation [216-RICR-50-15-1]. The building owner (City of Providence) and/or Emery Environmental Associates will stop the work at any time violations of any asbestos control regulations are observed. In addition to the above referenced asbestos control regulations, the selected asbestos contractor shall be required to comply with the following additional work requirements.

ASBESTOS CONTROL AREA - H:

PROJECT SUBMITTALS: Prior to the start of any asbestos work operations, the selected asbestos contractor shall be required to submit copies of the following items for review and approval. **NOTE:** *Additional submittals not requested at this time may be required for submittal and approval in the future.* No asbestos work operations may begin on site until the following items are submitted and approved in writing by the building owner (City of Providence) and/or Emery Environmental Associates.

1. *Copy of RIDOH 10-day written start work notification for this project,*
2. *Copies of the written notification(s) to the City of Providence, RI police and fire departments,*
3. *Copy of contractor's current insurance certificate,*
4. *Copy of contractor's current written health and safety program,*
5. *Copy of contractor's current written asbestos respirator program,*
6. *Copies of MSDS sheet for the polyethylene sheeting, proposed for use,*
7. *Copies of MSDS sheet for the duct tape, proposed for use,*
8. *Copies of MSDS sheet for the final spray encapsulant, proposed for use,*
9. *Copies of MSDS sheet for duct tape, proposed for use,*
10. *Copies of MSDS sheet for protective suits, proposed for use,*
11. *Copy of manufactures efficiency report for each "HEPA vacuum system" proposed for use*
12. *Copies of licensure for the waste landfill, proposed for use,*
13. *Copies of RIDOH Asbestos licensure, training certification, medical information, fit test, First Aid / CPR card(s), for each worker proposed for use on the project site,*
14. *Copies of RIDOH certification for laboratory used to analyze the contractors daily OSHA personal air samples.*

MOVABLE OBJECTS: It is the responsibility of the asbestos contractor to wet clean, HEPA vacuum and remove all moveable non-asbestos objects from the work area prior to the start of any asbestos mitigation operations.

♣ – **EXTERIOR ROOF MATERIAL REMOVAL:** During the roof removal operations, the asbestos contractor shall be responsible for the removal and disposal of **any/all** ACM and PACM materials as installed on Roof – A, Roof-B & Roof – C areas of the structure. Based on testing data to date and the design of this specification, **Exterior Roof Material Removal:** shall be defined as roof mastic, built up tar roof, roof insulation board and tar / mastic as applied to roof deck throughout each roof area. The ACM / PACM items are identified in Attachment – 2 of this specification. The contractor must also conduct all work in accordance with the current work requirements as defined by section 1.14.8 of the RIDOH asbestos control regulation [216-RICR-50-15-1] and all additional requirements of USEPA – NESHAP 40 CFR Part 61, US OSHA 29 CFR 1926.1101 & US OSHA 29 CFR 1910.1001. At the completion of each shift, all removed ACM / PACM roofing materials must be containerized at the roof area in two layers of six-mil polyethylene sheeting (i.e. disposal bags) or drums and transported to grade through a dust tight Shute or the waste must lowered to grade in large scale pans that are covered with plywood or six-mil polyethylene sheeting to eliminate any visible emissions during transport via. a crane.

All ACBM roofing materials must be disposed of in a lined dumpster in compliance with current EPA asbestos disposal regulations. [NOTE: All ACBM waste loaded in the lined dumpster(s) must be transported to the dumpster with the release of **NO** visible emissions. Based on this requirement the selected asbestos contractor will be required to submit a work plan that will explain what engineering controls will be used to prevent the release of **NO** visible emissions.] In addition, All waste dumpster(s) must be covered at the end of the day and access to the dumpster must be prohibited with the erection of a fence (around the entire dumpster) and a locking gate. Access to the dumpster must be limited to the asbestos contractor, the building owner and the asbestos project monitor. A copy of the key must be given to the building owner and Emery Environmental Assoc., at the start of work and for the duration of the project.

All roofing materials must be treated as an ACBM and removed down to and including the roof deck. The method of removal of asbestos tar / asbestos mastic from the concrete or wood roof deck (as applicable) must be done in a manner that creates **NO** visible emissions to the environment. This can be achieved by:

- 1). Grinding the roof deck substrate using a hand grinder, wet methods and using equipment that is directly connected to an operating HEPA vacuum – with no visible emissions,
- 2). Bead blast the roof deck substrate using wet methods and equipment that is directly connected to an operating HEPA vacuum – with no visible emissions,
- 3). Chemical stripping,

NOTE: Any/all media used to remove tar/mastic from the existing roof deck must be treated and disposed of as an ACBM.

Please note – removal by demolition (chipping the roof substrate or open demolition) shall only be allowed with written approval by the owner (City of Providence) and in association with a separate AWP designed by Emery Environmental Associates and approved by the RIDOH. NOTE: No change orders will be received or approved based on the denial of a regulatory agency for planned asbestos response action work outside what is approved for a removal method by this specification. ***This shall include removal by demolition.***

NOTE - 1: During the work operations, the asbestos contractor shall establish a watering system that can be directed at the area(s) of removal and must ensure compliance with all requirements of the current USEPA / NESHAP regulation 49 CFR Part 61, regarding visible emissions. In addition, the selected asbestos contractor shall be responsible for compliance with RIDEM regulation #5 (fugitive dust) and RIDEM regulation #24 (Lead Paint).

NOTE - 2: The selected asbestos contractor shall be responsible for the work to be conducted in accordance with **all** applicable asbestos control regulations: USEPA – NESHAP 40 CFR Part 61, US OSHA 29 CFR 1926.1101, US OSHA 29 CFR 1910.1001 and the RIDOH Asbestos Control Regulation [R 23-24.5-ASB]. The building owner and/or the selected asbestos consultant (Emery Environmental Associates) will stop the work at any time violations of any asbestos control regulations are observed.

NOTE – 3: ACM WASTE CONTAINERIZATION: The selected asbestos contractor shall be responsible for the wetting and containerization of all ACM/PACM waste at the point of waste generation (i.e. point of removal). At no time shall the asbestos contractor be allowed to open remove and drop ACM waste from a height of 6 feet or greater before the waste is containerized (i.e. double bagged, barreled or wrapped in two layers of polyethylene sheeting and wrapped to an airtight condition). At no time shall any ACM/PACM waste be dropped through a dust tight Shute that has not been bagged or barreled first. And at no time shall waste be allowed to be placed in an open dumpster without the waste being containerized first (i.e. double bagged, barreled or wrapped in two layers of polyethylene sheeting and wrapped to an airtight condition). NOTE: It shall be the asbestos contractor’s responsibility to submit a plan as to how waste will be moved from the roof area to grade. This plan must be approved by the building owner prior to the commencement of asbestos removal work operations.

NOTE- 4: The existing roof area of the structure is potentially structural unsafe and in areas it may not be safe to conduct the asbestos response action. The selected asbestos contractor shall be responsible for compliance with all current OSHA regulations as it applies to fall hazards associated with ladders and roofing material removal work operations (in addition to all applicable OSHA, EPA and RIDOH asbestos control work operations). The asbestos contractor shall survey and determine the condition of the structures roof area prior to allowing worker(s) / employees to access the roof area. If the roof area is determined to be unsafe for occupancy / removal it shall be the asbestos contractor responsibility to generate a work plan than will accomplish the removal of the asbestos materials prior to razing of the structure.

NOTE – 5: ACCESS TO THE WORK AREA (ROOF AREA): Access to each roof area for the purpose of initiating or completion of an asbestos response action (as defined by Attachment #2 of this specification) shall be the sole responsibility of the asbestos contractor and shall not be the responsibility of the building owner (The City of Providence) and/or Emery Environmental Associates.

NOTE - 6: FALL PROTECTION / OSHA COMPLIANCE: It shall be the sole responsibility of the asbestos contractor to comply with all applicable requirements for OSHA as it pertains to fall protection, use of ladders / scaffolding and lifts, as required to complete any/all asbestos response actions (as defined by Attachment #2 of this specification). It shall NOT be the responsibility of the building owner (City of Providence) and/or Emery Environmental Associates to comply with any/all applicable OSHA safety requirements as it pertains to the performance of any asbestos response actions as defined by Attachment #2 of this specification.

LEAD PAINT / RIDEM: The selected asbestos contractor shall be required to comply with all notification and work requirements of the current RIDEM lead control regulation No – 24.

LEAD PAINT /OSHA: All workers coming into contact with interior and exterior painted surfaces shall be required to comply with all worker protection requirements of the current OSHA lead regulation 29 CFR 1926.62.

FINAL CLEANING: The selected contractor shall be responsible for the complete cleaning of all surface areas within the asbestos control area using wet methods and HEPA vacuuming prior to the completion of the project. At the completion of a final visual inspection by the building owner’s asbestos consultant, the asbestos contractor shall apply a coating of encapsulating agent to any porous surfaces that have been stripped of Category I Nonfriable ACM to securely seal any residual fibers that may be present. The encapsulating agent should be chosen to be compatible with subsequent coverings, as required by section 1.14.8 I. of the current RIDOH asbestos control regulation [216-RICR-50-15-1].

CONTRACTORS RESPONSIBILITY REGARDING SUPPLY OF ELECTRICAL POWER TO THE REGULATED WORK AREA(S). The selected asbestos contractor shall be responsible for the supply of electricity / electric power as required to complete any/all asbestos mitigation operations the defined asbestos control areas. The owner shall provide the asbestos contractor with a power supply source and the selected asbestos contractor shall be responsible for routing power from the supplied source to the asbestos work area using the contractor’s own electric cords. **In addition, the asbestos contractor shall be responsible for the configuration and supply of at least three (3) additional and separate electric cords to the asbestos control area for the purpose of project oversight (in-process air testing, lighting, etc.) during and at the completion of any/all asbestos mitigation work operations. These cords shall be installed to locations as directed by the on-site asbestos project monitor. All cords routed to each asbestos control area and used for the work associated with the asbestos abatement or project air testing must be directly connected to a GFCI and shall be always maintained to be in dry, clean and dust free condition.**

CONTRACTORS RESPONSIBILITY REGARDING SUPPLY OF WATER TO THE REGULATED WORK AREA(S). The selected asbestos contractor shall be responsible for the supply of water as required to complete any/all asbestos mitigation operations at each defined asbestos control area. The owner shall provide the asbestos contractor with a source of water, the selected asbestos contractor shall be responsible for routing water from the supplied source to the asbestos work area using the contractor’s own water hose.

ATTACHMENT NO.- 7

AWP / ALTERNATE WORK PROCEDURE – EXTERIOR / ASBESTOS CONTROL AREA - I

During the asbestos mitigation operations the selected asbestos contractor shall be responsible for the work to be conducted in accordance with **all** applicable asbestos control regulations: USEPA – AHERA 40 CFR 763, USEPA – NESHAP 40 CFR Part 61, US OSHA 29 CFR 1926.1101 & US OSHA 29 CFR 1910.1001 and the RIDOH Asbestos Control Regulation [R 23-24.5-ASB]. The building owner (The City of Providence) and/or Emery Environmental Associates will stop the work at any time violations of any asbestos control regulations are observed. In addition to the above referenced asbestos control regulations, the selected asbestos contractor shall be required to comply with the following AWP.

●*●* - **ASBESTOS CONTROL AREA - I / EXTERIOR WINDOW SYSTEM REMOVAL:**
◆ - **ASBESTOS CONTROL AREA – I / EXTERIOR ASBESTOS CEMENT BOARD @ CEILING / ROOF AREA:**

- 1). **REMOVAL OF EXISTING WINDOW SASH,**
- 2). **REMOVAL IF EXISTING GLASS BLOCK AT ROUGH OPENINGS,**
- 3). **REMOVAL OF CAULK AT WINDOW AND DOOR ROUGH OPENINGS (MASONRY),**
- 4). **REMOVAL OF EXISTING ACM / PACM CAULK / CONTAMINATION AT GROUND AND SOIL AREA(S) AROUND PERIMETER OF STRUCRURE**

The SELECTED asbestos contractor shall be responsible for the complete removal of any/all existing window system (window / window and door frame – fixed, casement or awning) AND any caulk as applied around window and door frames within masonry rough openings throughout the structure (AS APPLICABLE). At the completion of work the selected asbestos contractor shall be responsible for the cleaning and removal of any existing all ACM/ PACM glazing and caulk debris at the exterior (asphalt / soil apron) / perimeter around the structure:

☛☛☛ **EXTERIOR WINDOW , DOOR & WINDOW FRAMES REMOVAL:** The asbestos contractor shall be responsible for the complete removal of all exterior window components and all associated window / door frame caulk from around each window and door frame (as defined by the asbestos abatement specification, attached EEA project blueprints during the asbestos mitigation operations.

During abatement operations, the asbestos contractor shall be responsible for the removal and disposal of any/all window & door frame caulk and **all** associated window components as an ACBM.

All work **must** be conducted from the exterior of the structure, and in accordance with all applicable requirements of section 1.14.8 of the current RIDOH asbestos control regulation in addition to all applicable requirements of current OSHA, NESHAP and USEPA / AHERA regulations. All work must be conducted without creating a visible emission. Each masonry rough opening must be free of all window materials, framing and associated caulking materials prior to the successful completion of the project. The contractor shall protect the interior of the structure from contamination associated with the planned asbestos response action work. Critical barriers shall be installed in accordance with the applicable requirements of Attachment #7 of this specification, section 1.14.6 D. 1 & 2 and section 1.14.8 A. of the current RIDOH Asbestos Control Regulation [216-RICR-50-15-1].

All asbestos materials must be disposed of in a lined dumpster in compliance with current EPA asbestos disposal regulations. All waste dumpster(s) must be covered at the end of the day and access to the dumpster must be prohibited with the erection of a fence (around the entire dumpster) and a locking gate. Access to the dumpster must be limited to the asbestos contractor, general contractor and asbestos project monitor. A copy of the key must be given to the building owner and their representative at the start of work and for the duration of the project.

All work must only be conducted while the area is unoccupied.

The asbestos contractor's supervisor and workers shall be required to don PPE for atmospheres at or above the OSHA PEL for asbestos and collect OSHA personal air sampling on the work force during the work operations (as defined within Attachment #1 of this specification). Worker decontamination shall be done in accordance with all applicable work requirements as defined by OSHA 29CFR1926.1101.

NOTE - 1: Any / all workers conducting removal of window glazing or caulk materials should also assume the material and any paint applied to glazing or caulk materials contains Lead and should conduct the work in compliance with all applicable requirements of OSHA; 29 CFR 1926.62.

1). Prior to the start of any removal work at each window, the selected asbestos contractor shall be responsible for the installation of two (2) layers of 6 mil polyethylene sheeting at any opening on the interior side of any / all window opening scheduled to be removed. The polyethylene sheeting shall be installed in a manner that continues the critical barrier seal when the window is being removed. The critical barriers shall be secured and must maintain an airtight enclosure for the work area until the work is complete.

- 2). The selected asbestos contractor must establish a work decontamination system adjacent to the defined work area, and must be erected and used in compliance with section 1.14.8 D. of the current RIDOH asbestos control regulation [216-RICR-50-15-1], and all workers conducting removal, cleaning or material containerization work must be done using PPE for atmospheres at or above the OSHA PEL for asbestos.

- 3). The asbestos contractor must cover and isolate all windows with two (2) layers of six (6) mil polyethylene sheeting and seal these critical barriers to an airtight condition with waterproof tape. This requirement shall be conducted to restrict ambient asbestos fibers / dust from entering the interior of the structure,

- 4). The asbestos contractor must erect vinyl barricade tape marked with “DANGER ASBESTOS HAZARD” and used in association with printed “Danger Asbestos” OSHA warning signage posted along the area of demarcation. These warning signs shall be installed in accordance with the requirements of section 1.14.8 E. of the current RIDOH Asbestos Control Regulation [216-RICR-50-15-1]. This barrier shall be used to establish a regulated work area that prohibits non-asbestos trained workers and the general public who are not donning PPE for atmospheres at or above the OSHA PEL for asbestos exposures.

- 5). The asbestos contractor must establish ground cover directly under and at least 10 additional feet contiguous on either side of the area of the planned area planned for asbestos removal work, using a minimum of two (2) layers of six (6) mil polyethylene sheeting and installed in a manner that successfully collects any mishandled ACM caulking / glazing materials generated by the ACM caulk removal work operation and also restricts additional contamination to the ground surface area,

- 6). Window removal must be done in a controlled manner. At no time shall the asbestos contractor be allowed to free drop ACM/PACM materials from the area of waste generation (area of removal) to grade.

- 7). The asbestos contractor (i.e. work force) must containerize the ACM material at the point of generation. All removed ACM / PACM building materials must be containerized at the exterior area within two layers of six-mil polyethylene sheeting (i.e. disposal bags) and sealed to an airtight condition **or** may be disposed in an open dumpster that is positioned adjacent to the work area and lined with 2 layers of six mil polyethylene sheeting. At no time shall waste material be allowed to accumulate. No open or un-containerized ACM waste will be allowed to be transported through the interior of the structure, public road or the property at any time.

- 8). Assuming no staging will be erected as part of the contract work by the owner or general contractor. The asbestos contractor shall be required to provide their own access to all areas requiring window or door removal, as defined by this “Alternate Work Practice” - as part of the contract fee with no change order to the owner. In addition, the asbestos contractor shall be responsible for providing a man lift (worker boom lift) and a trained operator for any/all inspections as required by the owner’s representative to complete the work as defined by this “Alternate Work Practice”. The lift, operator and operation of the man lift / worker boom lift (by the asbestos contractor) shall be provided at no charge to the owner or the owners asbestos consultant.

9). All waste materials generated during the work operation on a daily basis must be containerized in two layers of six-mil polyethylene sheeting, properly labeled and sealed to an airtight condition and disposed of as an ACBM and in compliance with all current USDOT, OSHA, NESHAP and EPA asbestos disposal regulations. Also, the ground surface area at the perimeter of each elevation (side of building) contains both asphalt and exposed soil. As defined by this specification, all ground surface areas must be visually clean of any/all ACM debris from dislodged paint chips, caulk from door / window frames, glass block and from the window sash(s) (as defined by Attachment #2 of this project specification) on a daily basis. Any/all cleaning or removal work must be done by RIDOH accredited asbestos workers /supervisor using HEPA vacuuming and wet methods.

10). At the completion of asbestos removal work by the asbestos contractor - a final inspection to document all removal of ACM/PACM materials by the asbestos contractor has been completed, this visual inspection must be documented by the building owners asbestos consultant prior to the installation of new window system (and /or the completion of the project) NOTE: At no time shall the asbestos contractor initiate step #11 until step #10 of this AWP has been achieved,

NOTE: At the completion of each window removal as defined by attached project drawings (of this specification), the selected asbestos contractor shall conduct the work as defined by work operations (1) – (10) of this AWP. At no time shall the asbestos contractor conduct removal of soil as determined by step (11) of this AWP, until all window(s) have been removed on the applicable North, South, East or West elevations – at the First Floor or Second Floor areas.

11). Upon completion of applicable window, window frame and door frame removal at each elevation has been completed (as defined by this specification and after the area(s) have been documented clean by a RIDOH asbestos inspector, the selected asbestos contractor shall begin to conduct a thorough final cleaning of the perimeter ground / soil area of the structure. **The asbestos contractor shall be required to remove at least 2” of exposed soil from the base of the foundation and extended at least two (2) feet from the structure (or when applicable to a distance where no visible ACM caulk, ACM glazing or presumed lead paint chips can be observed at the time of the final visual inspection).** NOTE: **This work requirement shall be limited to only areas where wood sash is being removed.** Any/all cleaning or removal work must be done by RIDOH accredited asbestos workers /supervisor using HEPA vacuuming and wet methods. To ensure the exposed soil around the structure has been properly mitigated (at the completion of the project),

ASBESTOS CONTROL AREA – I / EXTERIOR CEMENT BOARD CEILING / ROOF AREA:

◆- **ASBESTOS CEMENT BOARD ABATEMENT:** The asbestos contractor shall be responsible for the complete removal of all exterior “Transite” cement board components as installed at each canopy roof covered walkway, refer to the attached EEA project blueprints during the asbestos mitigation operations.

During abatement operations, the asbestos contractor shall be responsible for the removal and disposal of any/all cement wallboard material(S) as an ACM.

All work **must** be conducted from the exterior of the structure, and in accordance with all applicable requirements of section 1.14.8 of the current RIDOH asbestos control regulation in addition to all applicable requirements of current OSHA, NESHAP and USEPA / AHERA regulations. All work must be conducted without creating a visible emission. Each canopy roof covered walkway must be free of all cement board material prior to the successful completion of the project. The contractor shall protect the interior of the structure from contamination associated with the planned asbestos response action work. Critical barriers shall be installed in accordance with the applicable requirements of Attachment #7 of this specification, section 1.14.6 D. 1 & 2 and section 1.14.8 A. of the current RIDOH Asbestos Control Regulation [216-RICR-50-15-1].

All asbestos materials must be disposed of in a lined dumpster in compliance with current EPA asbestos disposal regulations. All waste dumpster(s) must be covered at the end of the day and access to the dumpster must be prohibited with the erection of a fence (around the entire dumpster) and a locking gate. Access to the dumpster must be limited to the asbestos contractor, general contractor and asbestos project monitor. A copy of the key must be given to the building owner and their representative at the start of work and for the duration of the project.

All work must only be conducted while the area is unoccupied.

The asbestos contractor’s supervisor and workers shall be required to don PPE for atmospheres at or above the OSHA PEL for asbestos and collect OSHA personal air sampling on the work force during the work operations (as defined within Attachment #1 of this specification). Worker decontamination shall be done in accordance with all applicable work requirements as defined by OSHA 29CFR1926.1101.

NOTE - 1: Any / all workers conducting the removal of the ACM cement board should also assume the paint applied to cement board to contain Lead and should conduct the work in compliance with all applicable requirements of OSHA; 29 CFR 1926.62.

1). Prior to the start of any removal work at each window, the selected asbestos contractor shall be responsible for the installation of two (2) layers of 6 mil polyethylene sheeting at any opening on the interior side of any / all window opening scheduled to be removed. The polyethylene sheeting shall be installed in a manner that continues the critical barrier seal when the window is being removed. The critical barriers shall be secured and must maintain an airtight enclosure for the work area until the work is complete.

- 2). The selected asbestos contractor must establish a work decontamination system adjacent to the defined work area, and must be erected and used in compliance with section 1.14.8 D. of the current RIDOH asbestos control regulation [216-RICR-50-15-1], and all workers conducting removal, cleaning or material containerization work must be done using PPE for atmospheres at or above the OSHA PEL for asbestos.
- 3). The asbestos contractor must erect vinyl barricade tape marked with “DANGER ASBESTOS HAZARD” and used in association with printed “Danger Asbestos” OSHA warning signage posted along the area of demarcation. These warning signs shall be installed in accordance with the requirements of section 1.14.8 E. of the current RIDOH Asbestos Control Regulation [216-RICR-50-15-1]. This barrier shall be used to establish a regulated work area that prohibits non-asbestos trained workers and the general public who are not donning PPE for atmospheres at or above the OSHA PEL for asbestos exposures.
- 4). The asbestos contractor must establish ground cover directly under and at least 10 additional feet contiguous on either side of the area of the planned area of removal work operation using a minimum of two (2) layers of six (6) mil polyethylene sheeting and installed in a manner that successfully collects any mishandled ACM caulking / glazing materials generated by the ACM caulk removal work operation and also restricts additional contamination to the ground surface area,
- 5). Window removal must be done in a controlled manner. At no time shall the asbestos contractor be allowed to free drop ACM/PACM materials from the area of waste generation (area of removal) to grade.
- 6). The asbestos contractor (i.e. work force) must containerize the ACM material at the point of generation. All removed ACM / PACM building materials must be containerized at the exterior area within two layers of six-mil polyethylene sheeting (i.e. disposal bags) and sealed to an airtight condition **or** may be disposed in an open dumpster that is positioned adjacent to the work area and lined with 2 layers of six mil polyethylene sheeting. At no time shall waste material be allowed to accumulate. No open or un-containerized ACM waste will be allowed to be transported through the interior of the structure, public road or the property at any time.
- 7). Assuming no staging will be erected as part of the contract work by the owner or general contractor. The asbestos contractor shall be required to provide their own access to all areas requiring removal, as defined by this “Alternate Work Practice” - as part of the contract fee with no change order to the owner.
- 8). All waste materials generated during the work operation on a daily basis must be containerized in two layers of six-mil polyethylene sheeting, properly labeled and sealed to an airtight condition and disposed of as an ACBM and in compliance with all current USDOT, OSHA, NESHAP and EPA asbestos disposal regulations. Also, the ground surface area at the perimeter of each elevation (side of building) contains both asphalt and exposed soil. As defined by this specification, all ground surface areas must be visually clean of any/all ACM debris from dislodged paint chips, caulk from door / window frames, glass block and from the window sash(s) (as defined by Attachment #2 of this project specification) on a daily basis. Any/all cleaning or removal work must be done by RIDOH accredited asbestos workers /supervisor using HEPA vacuuming and wet methods.

9). At the completion of asbestos removal work by the asbestos contractor - a final inspection to document all removal of ACM/PACM materials by the asbestos contractor has been completed, this visual inspection must be documented by the building owners asbestos consultant prior to the removal of engineering controls (and /or the completion of the project).

ADDITIONAL WORK REQUIREMENTS:

LEAD PAINT / RIDEM: The selected asbestos contractor shall be required to comply with all notification and work requirements of the current RIDEM lead control regulation No – 24.

LEAD PAINT /OSHA: All workers coming into contact with interior and exterior painted surfaces shall be required to comply with all worker protection requirements of the current OSHA lead regulation 29 CFR 1926.62.

ELECTRICTY SUPPLY / SERVICE FOR SITE / WORK OPERATIONS: During the performance of the asbestos abatement operations, the asbestos contractor shall be responsible for providing any/all electricity as required for the performance of the contracted asbestos abatement operations.

☛☛☛ - WINDOW SASH / GLASS BLOCK AT WINDOW ROUGH OPENING(S): The contracted asbestos contractor is responsible for the removal of any/all metal / steel window sash and/or glass block within the structure (fixed, casement or awning). All work must be conducted using the corresponding ASB-16A forms and the AWP (Attachment #7) of this specification (as applicable).

☛☛☛ - WINDOW OR DOOR FRAME(S) / CAULK REMOVAL WITHIN ALL MASONRY ROUGH OPENINGS: The contracted asbestos contractor is responsible for the removal of any/all metal window frames and associated caulk as applied within ANY/ALL masonry rough openings (doors and windows). Removal shall include all steel framing and any/all caulk materials as applied within the rough opening. All work must be conducted using the corresponding ASB-16A forms and the AWP (Attachment #7) of this specification (as applicable).

ATTACHMENT NO.- 8

PHOTOGRAPH:



Photograph – 1: Photo depicts the typical condition of the structure as located at 32-60 Ernest Street; Providence, RI.

ATTACHMENT NO.- 8

PHOTOGRAPH:



Photograph – 2: Photo depicts the typical condition of asbestos thermal pipe insulation throughout the structure located at 32-60 Ernest Street; Providence, RI.

ATTACHMENT NO.- 8



Photograph – 3: Photo depicts the typical condition and installation of asbestos and presumed asbestos window materials thermal the structure located at 32-60 Ernest Street; Providence, RI.

ATTACHMENT NO.- 8



Photograph – 4: Photo depicts the typical condition and application of asbestos vinyl flooring, vinyl cove molding and AMC/PACM window system within the structure located at 32-60 Ernest Street; Providence, RI.

ATTACHMENT NO.- 8



Photograph – 5: Photo depicts the typical condition of the roof area located at 32-60 Ernest Street; Providence, RI.

SPECIFICATION END

APPENDIX – B:

ANALYTICAL SAMPLE RESULTS



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131907113

Customer ID: EMER53

Customer PO:

Project ID:

Attention: Patrick Emery
Emery Environmental Associates
PO BOX E
Pawtucket, RI 02861

Phone: (401) 727-4941

Fax: (401) 724-0926

Received Date: 09/19/2019 8:30 AM

Analysis Date: 09/21/2019

Collected Date: 09/18/2019

Project: 60 Ernest Street., Providence, RI./ 190915-A

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
190915 131907113-0001	EXT. ROOF- A/ HOLE #1 - ROOF TAR (TOP LAYER)	Black Non-Fibrous Homogeneous	HA: 1-1	100% Non-fibrous (Other)	None Detected
190915 131907113-0002	EXT. ROOF- A/ HOLE #3 - ROOF TAR (TOP LAYER)	Black Non-Fibrous Homogeneous	HA: 1-2	100% Non-fibrous (Other)	None Detected
190915 131907113-0003	EXT. ROOF- A/ HOLE #4 - ROOF TAR (TOP LAYER)	Black Non-Fibrous Homogeneous	HA: 1-3	100% Non-fibrous (Other)	None Detected
190915 131907113-0004	EXT. ROOF- B/ HOLE #5 - ROOF TAR (TOP LAYER)	Black Non-Fibrous Homogeneous	HA: 1-4	100% Non-fibrous (Other)	None Detected
190915 131907113-0005	EXT. ROOF- A/ HOLE #1 - ROOF TAR PAPER "BLACK" TOP LAYER	Black Fibrous Homogeneous	HA: 2-1	80% Cellulose 20% Non-fibrous (Other)	None Detected
190915 131907113-0006	EXT. ROOF- A/ HOLE #3 - ROOF TAR PAPER "BLACK" TOP LAYER	Black Fibrous Homogeneous	HA: 2-2	80% Cellulose 20% Non-fibrous (Other)	None Detected
190915 131907113-0007	EXT. ROOF- A/ HOLE #4 - ROOF TAR PAPER "BLACK" TOP LAYER	Black Fibrous Homogeneous	HA: 2-3	80% Cellulose 20% Non-fibrous (Other)	None Detected
190915 131907113-0008	EXT. ROOF- B/ HOLE #5 - ROOF TAR PAPER "BLACK" TOP LAYER	Black Fibrous Homogeneous	HA: 2-4	80% Cellulose 20% Non-fibrous (Other)	None Detected
190915 131907113-0009	EXT. ROOF- A/ HOLE #1 - ROOF TAR (2ND LAYER)	Black Non-Fibrous Homogeneous	HA: 3-1	100% Non-fibrous (Other)	None Detected
190915 131907113-0010	EXT. ROOF- A/ HOLE #3 - ROOF TAR (2ND LAYER)	Black Non-Fibrous Homogeneous	HA: 3-2	100% Non-fibrous (Other)	None Detected

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EMSL Order: 131907113
Customer ID: EMER53
Customer PO:
Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
190915 131907113-0011	ROOF- A/ HOLE #4 - ROOF TAR (2ND LAYER)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 3-3		
190915 131907113-0012	ROOF- B/ HOLE #5 - ROOF TAR (2ND LAYER)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 3-4		
190915 131907113-0013	ROOF- A/ HOLE #1 - ROOF TAR PAPER "BLACK" (2ND LAYER)	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
			HA: 4-1		
190915 131907113-0014	ROOF- A/ HOLE #3 - ROOF TAR PAPER "BLACK" (2ND LAYER)	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
			HA: 4-2		
190915 131907113-0015	ROOF- A/ HOLE #4 - ROOF TAR PAPER "BLACK" (2ND LAYER)	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
			HA: 4-3		
190915 131907113-0016	ROOF- B/ HOLE #5 - ROOF TAR PAPER "BLACK" (2ND LAYER)	Black Fibrous Homogeneous	80% Cellulose	20% Non-fibrous (Other)	None Detected
			HA: 4-4		
190915 131907113-0017	EXT. ROOF- A/ HOLE #1 - ROOF TAR MASTIC @ CONCRETE DECK= "BLACK"	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
			HA: 5-1		
190915 131907113-0018	EXT. ROOF- A/ HOLE #3 - ROOF TAR MASTIC @ CONCRETE DECK= "BLACK"				Positive Stop (Not Analyzed)
			HA: 5-2		
190915 131907113-0019	EXT. ROOF- A/ HOLE #4 - ROOF TAR MASTIC @ CONCRETE DECK= "BLACK"				Positive Stop (Not Analyzed)
			HA: 5-3		
190915 131907113-0020	EXT. ROOF- A/ HOLE #1 - CONCRETE ROOF DECK- "WHITE"	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 6-1		
190915 131907113-0021	EXT. ROOF- A/ HOLE #3 - CONCRETE ROOF DECK- "WHITE"	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 6-2		
190915 131907113-0022	EXT. ROOF- A/ HOLE #4 - CONCRETE ROOF DECK- "WHITE"	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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EMSL Order: 131907113
Customer ID: EMER53
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Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HA: 6-3					
190915 131907113-0023	1ST FLOOR/ #115 - WINDOW GLAZING "GREY" @ METAL AWNING WINDOW	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 7-1					
190915 131907113-0024	1ST FLOOR/ #113 - WINDOW GLAZING "GREY" @ METAL AWNING WINDOW	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 7-2					
190915 131907113-0025	1ST FLOOR/ #131 - WINDOW GLAZING "GREY" @ METAL AWNING WINDOW	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 7-3					
190915 131907113-0026	2ND FLOOR/ #201 - WINDOW GLAZING "GREY" @ METAL AWNING WINDOW	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 7-4					
190915 131907113-0027	2ND FLOOR/ #205 - WINDOW GLAZING "GREY" @ METAL AWNING WINDOW	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 7-5					
190915 131907113-0028	1ST FLOOR/ #117 - THERMAL PIPE INSULATION	Gray/Tan Fibrous Homogeneous	50% Cellulose	20% Non-fibrous (Other)	30% Chrysotile
HA: 8-1					
190915 131907113-0029	EXTERIOR @ 1ST FLOOR/ #130 - CAULK @ GLASS BLOCK	Gray Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
HA: 9-1					
190915 131907113-0030	1ST FLOOR/ #131 - 12"x12" VCT "WHITE W/ BROWN"	Brown/White Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
HA: 10-1					
190915 131907113-0031	1ST FLOOR/ #137 - 12"x12" VCT "WHITE W/ BROWN"				Positive Stop (Not Analyzed)
HA: 10-2					
190915 131907113-0032	1ST FLOOR/ #131 - GLUE @ HALO	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 11-1					
190915 131907113-0033	1ST FLOOR/ #137 - GLUE @ HALO	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
HA: 11-2					
190915 131907113-0034	1ST FLOOR/ #131 - FLOORING PAPER "BLACK" @ HALO	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
HA: 12-1					
190915 131907113-0035	1ST FLOOR/ #137 - FLOORING PAPER "BLACK" @ HALO	Black Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
HA: 12-2					

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EMSL Order: 131907113
Customer ID: EMER53
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Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
190915 131907113-0036	2ND FLOOR/ #201 - 9"x9" VCT- "BLACK"	Black Non-Fibrous Homogeneous	HA: 16-1	98% Non-fibrous (Other)	2% Chrysotile
190915 131907113-0037	2ND FLOOR/ #201 - 9"x9" VCT- "BLACK"		HA: 16-2		Positive Stop (Not Analyzed)
190915 131907113-0038	2ND FLOOR/ #201 - GLUE @ 9"x9" VCT (HA16)	Black Non-Fibrous Homogeneous	HA: 17-1	100% Non-fibrous (Other)	None Detected
190915 131907113-0039	2ND FLOOR/ #201 - GLUE @ 9"x9" VCT (HA16)	Black Non-Fibrous Homogeneous	HA: 17-2	100% Non-fibrous (Other)	None Detected
190915 131907113-0040	2ND FLOOR/ #203 - 9"x9" VCT- "PINK"	Pink Non-Fibrous Homogeneous	HA: 18-1	95% Non-fibrous (Other)	5% Chrysotile
190915 131907113-0041	2ND FLOOR/ #203 - 9"x9" VCT- "PINK"		HA: 18-2		Positive Stop (Not Analyzed)
190915 131907113-0042	2ND FLOOR/ #203 - GLUE @ 9"x9" VCT (HA18)	Black Non-Fibrous Homogeneous	HA: 19-1	100% Non-fibrous (Other)	None Detected
190915 131907113-0043	2ND FLOOR/ #203 - GLUE @ 9"x9" VCT (HA18)	Black Non-Fibrous Homogeneous	HA: 19-2	100% Non-fibrous (Other)	None Detected
190915 131907113-0044	2ND FLOOR/ #200 - 9"x9" VCT "MAROON/RED"	Brown/Red Non-Fibrous Homogeneous	HA: 20-1	98% Non-fibrous (Other)	2% Chrysotile
190915 131907113-0045	2ND FLOOR/ #202 - 9"x9" VCT "MAROON/RED"		HA: 20-2		Positive Stop (Not Analyzed)
190915 131907113-0046	2ND FLOOR/ #200 - GLUE @ 9"x9" VCT (HA20)	Black Non-Fibrous Homogeneous	HA: 21-1	100% Non-fibrous (Other)	None Detected
190915 131907113-0047	2ND FLOOR/ #202 - GLUE @ 9"x9" VCT (HA20)	Black Non-Fibrous Homogeneous	HA: 21-2	100% Non-fibrous (Other)	None Detected
190915 131907113-0048	2ND FLOOR/ #201 - SKIM PLASTER WHITE	White Non-Fibrous Homogeneous	HA: 22-1	100% Non-fibrous (Other)	None Detected
190915 131907113-0049	2ND FLOOR/ #202 - SKIM PLASTER WHITE	White Non-Fibrous Homogeneous	HA: 22-2	100% Non-fibrous (Other)	None Detected

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EMSL Order: 131907113
Customer ID: EMER53
Customer PO:
Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
190915 131907113-0050	2ND FLOOR/ #204 - SKIM PLASTER WHITE	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 22-3		
190915 131907113-0051	2ND FLOOR/ #201 - BASE PLASTER GREY	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
			HA: 23-1		
190915 131907113-0052	2ND FLOOR/ #202 - BASE PLASTER GREY	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
			HA: 23-2		
190915 131907113-0053	2ND FLOOR/ #204 - BASE PLASTER GREY	Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
			HA: 23-3		
190915 131907113-0054	2ND FLOOR/ #201 - 6" VINYL COVE "BLACK" (MOLDING)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 24-1		
190915 131907113-0055	2ND FLOOR/ #201 - 6" VINYL COVE "BLACK" (MOLDING)	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 24-2		
190915 131907113-0056	2ND FLOOR/ #201 - GLUE @ VINYL COVE MOLDING "BROWN" (HA24)	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
			HA: 25-1		
190915 131907113-0057	2ND FLOOR/ #201 - GLUE @ VINYL COVE MOLDING "BROWN" (HA24)				Positive Stop (Not Analyzed)
			HA: 25-2		
190915 131907113-0058	2ND FLOOR/ #203 - 6" VINYL COVE MOLDING "BROWN"	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 26-1		
190915 131907113-0059	2ND FLOOR/ #200 - 6" VINYL COVE MOLDING "BROWN"	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 26-2		
190915 131907113-0060	1ST FLOOR/ #131 - 6" VINYL COVE MOLDING "BROWN"	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 26-3		
190915 131907113-0061	1ST FLOOR/ #134 - 6" VINYL COVE MOLDING "BROWN"	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
			HA: 26-4		
190915 131907113-0062	2ND FLOOR/ #203 - GLUE @ VINYL COVE MOLDING "BROWN" (HA26)	Brown Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
			HA: 27-1		
190915 131907113-0063	2ND FLOOR/ #200 - GLUE @ VINYL COVE MOLDING "BROWN" (HA26)				Positive Stop (Not Analyzed)

Initial report from: 09/21/2019 19:20:04



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131907113
Customer ID: EMER53
Customer PO:
Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
HA: 27-2					
190915 <small>131907113-0064</small>	1ST FLOOR/ #131 - GLUE @ VINYL COVE MOLDING "BROWN (HA26)				Positive Stop (Not Analyzed)
HA: 27-3					
190915 <small>131907113-0065</small>	1ST FLOOR/ #134 - GLUE @ VINYL COVE MOLDING "BROWN (HA26)				Positive Stop (Not Analyzed)
HA: 27-4					
190915 <small>131907113-0066</small>	1ST FLOOR/ #134 - 2'x4' CEILING TILE PANEL	Gray/White Fibrous Homogeneous	60% Cellulose 20% Min. Wool	20% Non-fibrous (Other)	None Detected
HA: 28-1					
190915 <small>131907113-0067</small>	1ST FLOOR/ #137 - 2'x4' CEILING TILE PANEL	Gray/White Fibrous Homogeneous	60% Cellulose 20% Min. Wool	20% Non-fibrous (Other)	None Detected
HA: 28-2					
190915 <small>131907113-0068</small>	1ST FLOOR/ #131 - 2'x4' CEILING TILE PANEL	Gray/White Fibrous Homogeneous	60% Cellulose 20% Min. Wool	20% Non-fibrous (Other)	None Detected
HA: 28-3					

Analyst(s)

Kevin Pine (58)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 09/21/2019 19:20:04



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131907113

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company: Emery Environmental Associates		EMSL-Bill to: <input type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: PO Box - E		<i>Third Party Billing requires written authorization from third party</i>	
City: Pawtucket	State/Province: RI	Zip/Postal Code: 02861	Country: USA
Report To (Name): Patrick Emery		Telephone #: 401-641-0074	
Email Address: emeryenvironmental@verizon.net		Fax #:	Purchase Order:
Project Name/Number: SEE BELOW		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken:		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* - Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<p>PLM - Bulk (reporting limit)</p> <p><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)</p> <p><input type="checkbox"/> PLM EPA NOB (<1%) CALL FIRST</p> <p>Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p>Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p><input type="checkbox"/> NIOSH 9002 (<1%)</p> <p><input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)</p> <p><input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)</p> <p><input type="checkbox"/> OSHA ID-191 Modified</p> <p><input type="checkbox"/> Standard Addition Method</p>	<p>TEM - Bulk</p> <p><input type="checkbox"/> TEM EPA NOB - EPA 600/R-93/116 Section 2.5.5.1</p> <p><input type="checkbox"/> NY ELAP Method 198.4 (TEM)</p> <p><input type="checkbox"/> Chatfield Protocol (semi-quantitative)</p> <p><input type="checkbox"/> TEM % by Mass - EPA 600/R-93/116 Section 2.5.5.2</p> <p><input type="checkbox"/> TEM Qualitative via Filtration Prep Technique</p> <p><input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique</p> <p style="text-align: center;">Other</p> <p><input type="checkbox"/></p>
--	--

Check For Positive Stop - Clearly Identify Homogenous Group Date Sampled: 9/16/19

Samplers Name: PATRICK EMERY Samplers Signature: Patrick Emery

Sample #	HA #	Sample Location	Material Description
190915	1.1	EXT. ROOF - A / HOLE # 1	ROOF TAR (TOP LAYER)
190915	1.2	EXT. ROOF - A / HOLE # 3	↓
190915	1.3	EXT. ROOF - A / HOLE # 4	
190915	1.4	EXT. ROOF - B / HOLE # 5	
190915	2.1	EXT. ROOF - A / HOLE # 1	
190915	2.2	EXT. ROOF - A / HOLE # 3	
190915	2.3	EXT. ROOF - A / HOLE # 4	↓
190915	2.4	EXT. ROOF - B / HOLE # 5	
190915	3.1	EXT. ROOF - A / HOLE # 1	ROOF TAR (2ND LAYER)
190915	3.2	EXT. ROOF - A / HOLE # 3	↓

Client Sample # (s): 190915 HA 1-1 - 190915 HA 30-1 Total # of Samples: 70

Relinquished (Client): Patrick Emery Date: 9/18/19 Time:

Received (Lab): Date: Time:

Comments/Special Instructions:
PH 190915-A
PROJECT: 60 ERNEST STREET; PROVIDENCE, RI



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

**Asbestos Bulk Building Material
Chain of Custody**

EMSL Order Number (Lab Use Only):

131907113

EMSL ANALYTICAL, INC.
200 LEGGATE STREET
LINCOLN, RHODE ISLAND 02865
PHONE (401) 222-7777
FAX (401) 222-7777

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
190915	3.3	Roof-A / HOLE # 4	↓
190915	3.4	Roof-B / HOLE # 5	
190915	4.1	Roof-A / HOLE # 1	ROOF TAR PAPER "BLACK" (2ND LAYER) ↓
190915	4.2	Roof-A / HOLE # 3	
190915	4.3	Roof-A / HOLE # 4	
190915	4.4	Roof-B / HOLE # 5	
190915	5.1	Ext. Roof-A / HOLE # 1	ROOF TAR-MASTIC @ CONCRETE DECK = "BLACK" ↓
190915	5.2	Ext. Roof-A / HOLE # 3	
190915	5.3	Ext. Roof-A / HOLE # 4	
190915	6.1	Ext. Roof-A / HOLE # 1	CONCRETE ROOF DECK- "WHITE" ↓
190915	6.2	Ext. Roof-A / HOLE # 3	
190915	6.3	Ext. Roof-A / HOLE # 4	
190915	7.1	1 st FLOOR / # 115	WINDOW GLAZING "GREY" @ METAL ANNING WINDOW ↓
190915	7.2	1 st FLOOR / # 113	
190915	7.3	1 st FLOOR / # 131	
190915	7.4	2 nd FLOOR / # 201	
190915	7.5	2 nd FLOOR / # 205	
190915	8.1	1 st FLOOR / # 117	THERMAL PIPE INSULATION
190915	9.1	EXTERIOR @ 1 st FLOOR / # 130	
190915	10.1	1 st FLOOR / # 131	CAULK @ GLASS BLOCK 12" x 12" VCT "WHITE w/ BROWN" ↓
190915	10.2	1 st FLOOR / # 137	
190915	11.1	1 st FLOOR / # 131	GLUE @ HAITO ↓
190915	11.2	1 st FLOOR / # 137	
190915	12.1	1 st FLOOR / # 131	FLOORING PAPER "BLACK" @ HAITO

*Comments/Special Instructions:

P# 190915-A
PROJECT: 60 ERNEST STREET; PROVIDENCE, RI

REC'D 8:30
EMSL-BOSTON SEP 19 2019



EMSL ANALYTICAL, INC.
LABORATORY PRODUCTS TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131907113

EMSL ANALYTICAL, INC.
200 TOWN FLD BLDG
CINNABAR RD
PHONE (800) 221-1111
FAX (603) 221-1111

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
190915	12.2	1 st Floor / # 137	↓
	13.1	NOT SUBMITTED	
	13.2	↓	
	13.3		
	13.4		
	13.5		
	14.1		
	14.2		
	14.3		
	14.4		
	14.5		
	15.1		
	15.2		
	15.3	↓	
190915	16.1	9th FLOOR 2 ND FLOOR / # 201	9"x9" VCT - "BLACK"
190915	16.2	2 ND FLOOR / # 201	↓
190915	17.1	2 ND FLOOR / # 201	GLUE @ 9"x9" VCT (HA16)
190915	17.2	2 ND FLOOR / # 201	↓
190915	18.1	2 ND FLOOR / # 203	9"x9" VCT - "PINK"
190915	18.2	2 ND FLOOR / # 203	↓
190915	19.1	2 ND FLOOR / # 203	GLUE @ 9"x9" VCT (HA18)
190915	19.2	2 ND FLOOR / # 203	↓
190915	20.1	2 ND FLOOR / # 200	9"x9" VCT "MAROON/RED"
190915	20.2	2 ND FLOOR / # 202	↓

*Comments/Special Instructions:

P# 190915-A
PROJECT: 60 ERNEST STREET; PROVIDENCE, RI

REC'D 8:30
EMSL-BOSTON SEP 19 2019



EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131907113

EMSL ANALYTICAL, INC.
2011 WASHINGTON STREET
CINCINNATI, OH 45202
PHONE: (513) 221-1100
Fax: (513) 221-1101

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
190915	21.1	2 ND FLOOR / # 200	GLUE @ 9"x9" VCT (HA20)
190915	21.2	2 ND FLOOR / # 202	↓
190915	22.1	2 ND FLOOR / # 201	SKIM PLASTER - WHITE
190915	22.2	2 ND FLOOR / # 202	↓
190915	22.3	2 ND FLOOR / # 204	↓
190915	23.1	2 ND FLOOR / # 201	BASE PLASTER - GREY
190915	23.2	2 ND FLOOR / # 202	↓
190915	23.3	2 ND FLOOR / # 204	↓
190915	24.1	2 ND FLOOR / # 201	6" VINYL COVER "BLACK"
190915	24.2	2 ND FLOOR / # 201	↓ (MOLDING)
190915	25.1	2 ND FLOOR / # 201	GLUE @ VINYL COVE MOLDING
190915	25.2	2 ND FLOOR / # 201	"BROWN" (HA24)
190915	26.1	2 ND FLOOR / # 203	6" VINYL COVE MOLDING =
190915	26.2	2 ND FLOOR / # 200	"BROWN" style="text-align: center;">↓
190915	26.3	1 ST FLOOR / # 131	
190915	26.4	1 ST FLOOR / # 134	↓
190915	27.1	2 ND FLOOR / # 203	GLUE @ VINYL COVE MOLDING
190915	27.2	2 ND FLOOR / # 200	"BROWN" (HA26) style="text-align: center;">↓
190915	27.3	1 ST FLOOR / # 131	
190915	27.4	1 ST FLOOR / # 134	
190915	28.1	1 ST FLOOR / # 134	2'X4' CEILING TILE
190915	28.2	1 ST FLOOR / # 137	PANEL style="text-align: center;">↓
190915	28.3	1 ST FLOOR / # 131	↓

*Comments/Special Instructions:

P# 190915-A
PROJECT: 60 ERNEST STREET; PROVIDENCE, RI

REC'D 8:30
EMSL-BOSTON SEP 19 2019



EMSL Analytical, Inc.

5 Constitution Way, Unit A, Woburn, MA 01801

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Attn: Patrick Emery
Emery Environmental Associates
PO BOX E
Pawtucket, RI 02861
Fax: (401) 724-0926 Phone: (401) 727-4941
Project: 60 Ernest Street., Providence, RI./ 190915-A

Customer ID: EMER53
Customer PO:
Received: 09/19/19 8:30 AM
EMSL Order: 131907113
EMSL Proj ID:
Cust COC ID
Project Type: Standard

Confirmation of Samples Received

Shipping Tracking Number:

Cust Sample	EMSL Order ID	Test	Received Date	TAT	Due Date
190915	131907113-0001	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0002	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0003	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0004	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0005	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0006	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0007	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0008	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0009	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0010	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0011	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0012	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0013	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0014	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM



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190915	131907113-0015	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0016	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0017	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0018	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0019	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0020	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0021	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0022	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0023	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0024	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0025	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0026	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0027	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0028	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM



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Pawtucket, RI 02861
Fax: (401) 724-0926 Phone: (401) 727-4941
Project: 60 Ernest Street., Providence, RI./ 190915-A

Customer ID: EMER53
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Received: 09/19/19 8:30 AM
EMSL Order: 131907113
EMSL Proj ID:
Cust COC ID
Project Type: Standard

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190915	131907113-0029	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0030	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0031	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0032	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0033	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0034	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0035	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0036	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0037	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0038	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0039	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0040	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0041	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0042	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM



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Cust Sample	EMSL Order ID	Test	Received Date	TAT	Due Date
190915	131907113-0043	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0044	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0045	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0046	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0047	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0048	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0049	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0050	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0051	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0052	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0053	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0054	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0055	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0056	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM



EMSL Analytical, Inc.

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Pawtucket, RI 02861
Fax: (401) 724-0926 Phone: (401) 727-4941
Project: 60 Ernest Street., Providence, RI./ 190915-A

Customer ID: EMER53
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Cust COC ID
Project Type: Standard

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Cust Sample	EMSL Order ID	Test	Received Date	TAT	Due Date
190915	131907113-0057	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0058	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0059	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0060	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0061	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0062	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0063	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0064	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0065	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0066	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0067	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM
190915	131907113-0068	PLM	9/19/2019 8:30:00 AM	48 Hour	9/23/2019 8:30:00 AM



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com> / bostonlab@emsl.com

EMSL Order: 131907566

Customer ID: EMER53

Customer PO:

Project ID:

Attention: Patrick Emery
Emery Environmental Associates
PO BOX E
Pawtucket, RI 02861

Phone: (401) 727-4941

Fax: (401) 724-0926

Received Date: 10/03/2019 9:50 AM

Analysis Date: 10/04/2019

Collected Date: 09/24/2019

Project: 190915-A/ 60 Ernest Street; Providence, RI

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
190915-7.6 <small>131907566-0001</small>	1st Floor/#100 - Window Glazing @ Metal Window	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-29.2 <small>131907566-0002</small>	1st Floor/#100 - Textured Plaster - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-29.3 <small>131907566-0003</small>	1st Floor/#115 - Textured Plaster - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-29.4 <small>131907566-0004</small>	1st Floor/#102 - Textured Plaster - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-29.5 <small>131907566-0005</small>	1st Floor/#104 - Textured Plaster - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-30.2 <small>131907566-0006</small>	1st Floor/#100 - Base Plaster - Gray @ Metal Screen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-30.3 <small>131907566-0007</small>	1st Floor/#115 - Base Plaster - Gray @ Metal Screen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-30.4 <small>131907566-0008</small>	1st Floor/#102 - Base Plaster - Gray @ Metal Screen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-30.5 <small>131907566-0009</small>	1st Floor/#104 - Base Plaster - Gray @ Metal Screen	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-31.1 <small>131907566-0010</small>	Ext./1st Floor @ #128 - Caulk @ Metal Window/Door Frame (Masonry Opening)	Gray Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
190915-31.2 <small>131907566-0011</small>	Ext./1st Floor @ #130 - Caulk @ Metal Window/Door Frame (Masonry Opening)				Positive Stop (Not Analyzed)
190915-31.3 <small>131907566-0012</small>	Ext./1st Floor @ #126 - Caulk @ Metal Window/Door Frame (Masonry Opening)				Positive Stop (Not Analyzed)
190915-31.4 <small>131907566-0013</small>	Ext./1st Floor @ #122 - Caulk @ Metal Window/Door Frame (Masonry Opening)				Positive Stop (Not Analyzed)
190915-31.5 <small>131907566-0014</small>	Ext./1st Floor @ #10 (Debris) - Caulk @ Metal Window/Door Frame (Masonry Opening)				Positive Stop (Not Analyzed)

Initial report from: 10/04/2019 13:07:29



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

<http://www.EMSL.com/bostonlab@emsl.com>

EMSL Order: 131907566
Customer ID: EMER53
Customer PO:
Project ID:

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

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
190915-31.6 131907566-0015	Ext./2nd Floor @ #201 - Caulk @ Metal Window/Door Frame (Masonry Opening)				Positive Stop (Not Analyzed)
190915-32.1 131907566-0016	1st Floor/#106 - VCT - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-32.2 131907566-0017	1st Floor/#106 - VCT - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-33.1 131907566-0018	1st Floor/#106 - Glue @ VCT (HA32) - Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-33.2 131907566-0019	1st Floor/#106 - Glue @ VCT (HA32) - Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-34.1 131907566-0020	1st Floor/#110 - Smooth Skim Plaster - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-34.2 131907566-0021	1st Floor/#112 - Smooth Skim Plaster - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-34.3 131907566-0022	1st Floor/#110 - Smooth Skim Plaster - White	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
190915-35.1 131907566-0023	1st Floor/#110 - Base Plaster - Gray	Gray Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
190915-35.2 131907566-0024	1st Floor/#112 - Base Plaster - Gray	Gray Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
190915-35.3 131907566-0025	1st Floor/#110 - Base Plaster - Gray	Gray Non-Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
190915-36.1 131907566-0026	Ext./ #117 - Mastic Paper "Black" @ Copper Wall Flushing	Brown/Black Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
190915-37.1 131907566-0027	Ext./Canopy @ #120 - Mastic Paper "Black" @ Copper Wall Flushing	Gray Fibrous Homogeneous		82% Non-fibrous (Other)	18% Chrysotile

Analyst(s)

John McCarthy (22)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, Maine Bulk Asbestos LB-0039

Initial report from: 10/04/2019 13:07:29

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (Lab Use Only):

131907566

EMSL Analytical, Inc.
200 Water Street, Suite 200
Providence, RI 02903
Phone: (401) 271-2200
Fax: (401) 271-2201

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Company: EMERY ENVIRONMENTAL ASSOC.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different <small>If Bill to is Different note instructions in Comments**</small>	
Street: PO BOX - E		<i>Third Party Billing requires written authorization from third party</i>	
City: PAWTUCKET	State/Province: RI	Zip/Postal Code: 02861	Country: USA
Report To (Name): PATRICK EMERY		Telephone #: 401-641-0074	
Email Address: emeryenvironmental@verizon.net		Fax #: N/A	Purchase Order:
Project Name/Number: SEE BELOW		Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email	
U.S. State Samples Taken:		CT Samples: <input type="checkbox"/> Commercial/Taxable <input type="checkbox"/> Residential/Tax Exempt	

Turnaround Time (TAT) Options* – Please Check

3 Hour
 6 Hour
 24 Hour
 48 Hour
 72 Hour
 96 Hour
 1 Week
 2 Week

*For TEM Air 3 hr through 6 hr, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<p>PLM - Bulk (reporting limit)</p> <p><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)</p> <p><input type="checkbox"/> PLM EPA NOB (<1%)</p> <p>Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p>Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)</p> <p><input type="checkbox"/> NIOSH 9002 (<1%)</p> <p><input type="checkbox"/> NY ELAP Method 198.1 (friable in NY)</p> <p><input type="checkbox"/> NY ELAP Method 198.6 NOB (non-friable-NY)</p> <p><input type="checkbox"/> OSHA ID-191 Modified</p> <p><input type="checkbox"/> Standard Addition Method</p>	<p>TEM - Bulk</p> <p><input type="checkbox"/> TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1</p> <p><input type="checkbox"/> NY ELAP Method 198.4 (TEM)</p> <p><input type="checkbox"/> Chatfield Protocol (semi-quantitative)</p> <p><input type="checkbox"/> TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2</p> <p><input type="checkbox"/> TEM Qualitative via Filtration Prep Technique</p> <p><input type="checkbox"/> TEM Qualitative via Drop Mount Prep Technique</p> <p style="text-align: center;">Other</p> <p><input type="checkbox"/></p>
---	--

Check For Positive Stop – Clearly Identify Homogenous Group Date Sampled: 9/24/19

Samplers Name: PATRICK EMERY Samplers Signature: *Patrick Emery*

Sample #	HA #	Sample Location	Material Description
190915	7.6	1 st Floor / #100	WINDOW GLAZING e METAL WINDOW
190915	29.2	1 st Floor / #100	↓ BASE PUNKER - Gray e METAL SCREEN ↓
190915	29.3	1 st Floor / #115	
190915	29.4	1 st Floor / #102	
190915	29.5	1 st Floor / #104	
190915	30.2	1 st Floor / #100	
190915	30.3	1 st Floor / #115	
190915	30.4	1 st Floor / #102	
190915	30.5	1 st Floor / #104	

Client Sample # (s): 190915-HA 7.6 - 190915-HA	Total # of Samples:
Relinquished (Client): <i>Patrick Emery</i>	Date: 10/3/19
Received (Lab):	Date:
Comments/Special Instructions: PA 190915-A 60 ERNEST STREET; PROVIDENCE, RI	

REC'D RIBS 0950
EMSL-BOSTON OCT 03 2019

DMS BCY



**Asbestos Bulk Building Material
Chain of Custody**

EMSL Order Number (Lab Use Only):

131907566

EMSL ANALYTICAL, INC.
20015011
CLINTON HILL AVENUE
PHOENIX, ARIZONA
85024

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
190915	31.1	EXT. / 1 st Floor @ #128	CAULK @ METAL WINDOW /
190915	31.2	EXT. / 1 st Floor @ #130	DOOR FRAME (MASONRY
190915	31.3	EXT. / 1 st Floor @ #126	OPENING)
190915	31.4	EXT. / 1 st Floor @ #122	
190915	31.5	EXT. / 1 st Floor #10 (DEBRIS)	
190915	31.6	EXT. / 2 nd Floor @ #201	
190915	32.1	1 st Floor / #106	VCT - "WHITE"
190915	32.2	1 st Floor / #106	↓
190915	33.1	1 st Floor / #106	GLUE @ VCT (HA32) =
190915	33.2	1 st Floor / #106	"BLACK" ↓
190915	34.1	1 st Floor / #110	SMOOTH SKIM PLASTER -
190915	34.2	1 st Floor / #112	"WHITE" ↓
190915	34.3	1 st Floor / #110	
190915	35.1	1 st Floor / #110	BASE PLASTER - "GREY"
190915	35.2	1 st Floor / #112	
190915	35.3	1 st Floor / #110	
190915	36.1	EXT. / #117	MASTIC PAPER "BLACK" @ COPPER WALL FLASHING
190915	37.1	EXT. / CANOPY @ #120	CEMENT BOARD - GREY W/ HOLES

*Comments/Special Instructions:

P# 190915-A
PROJECT: 60 ERNEST STREET; PROVIDENCE, RI

REC'D RTHS 0950
EMSL-BOSTON OCT 03 2019
Duch 15/7



EMSL Analytical, Inc.

5 Constitution Way, Unit A, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: bostonlab@emsl.com

Attn: Patrick Emery
Emery Environmental Associates
PO BOX E
Pawtucket, RI 02861
Fax: (401) 724-0926 Phone: (401) 727-4941
Project: 190915-A/ 60 Ernest Street; Providence, RI

Customer ID: EMER53
Customer PO:
Received: 10/03/19 9:50 AM
EMSL Order: 131907566
EMSL Proj ID:
Cust COC ID
Project Type: Standard

Confirmation of Samples Received

Shipping Tracking Number:

Cust Sample	EMSL Order ID	Test	Received Date	TAT	Due Date
190915-7.6	131907566-0001	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-29.2	131907566-0002	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-29.3	131907566-0003	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-29.4	131907566-0004	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-29.5	131907566-0005	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-30.2	131907566-0006	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-30.3	131907566-0007	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-30.4	131907566-0008	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-30.5	131907566-0009	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-31.1	131907566-0010	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-31.2	131907566-0011	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-31.3	131907566-0012	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-31.4	131907566-0013	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-31.5	131907566-0014	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM



EMSL Analytical, Inc.

5 Constitution Way, Unit A, Woburn, MA 01801

Phone: (781) 933-8411 Fax: (781) 933-8412 Email: bostonlab@emsl.com

Attn: Patrick Emery
Emery Environmental Associates
PO BOX E
Pawtucket, RI 02861
Fax: (401) 724-0926 Phone: (401) 727-4941
Project: 190915-A/ 60 Ernest Street; Providence, RI

Customer ID: EMER53
Customer PO:
Received: 10/03/19 9:50 AM
EMSL Order: 131907566
EMSL Proj ID:
Cust COC ID
Project Type: Standard

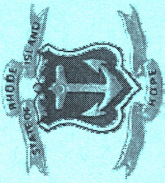
Confirmation of Samples Received

Shipping Tracking Number:

Cust Sample	EMSL Order ID	Test	Received Date	TAT	Due Date
190915-31.6	131907566-0015	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-32.1	131907566-0016	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-32.2	131907566-0017	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-33.1	131907566-0018	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-33.2	131907566-0019	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-34.1	131907566-0020	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-34.2	131907566-0021	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-34.3	131907566-0022	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-35.1	131907566-0023	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-35.2	131907566-0024	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-35.3	131907566-0025	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-36.1	131907566-0026	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM
190915-37.1	131907566-0027	PLM	10/3/2019 9:50:00 AM	24 Hour	10/4/2019 9:50:00 AM

APPENDIX – C:

ASBESTOS PROJECT CONSULTANT LICENSURE



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH
CENTER FOR HEALTHY HOMES & ENVIRONMENT – ASBESTOS PROGRAM

ASBESTOS CONSULTANT CERTIFICATION

Pursuant to the Asbestos Abatement Act, Chapter 24.5 of Title 23 of the Rhode Island General Laws, and Regulation 216-RICR-50-15-1 – Asbestos Control, this license is hereby issued as designated below. This license is subject to all applicable rules, regulations, orders and notices of the Department of Health now or hereafter in effect and to any conditions delineated below.

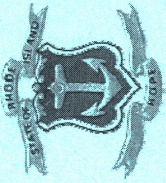
Certificate Holder: PATRICK A EMERY
Address: EMERY ENVIRONMENTAL ASSOCIATES
PO BOX E
PAWTUCKET RI 02861

Certification Number: AMP00505
Type of Certification: Asbestos Management Planner
Expiration Date: 04/30/2020

Except as specifically provided otherwise in this Certificate, Certificate holders shall conduct their program in accordance with statements, procedures and representations contained in their application, including any attachments. Regulation 216-RICR-50-15-1 - Asbestos Control shall govern unless the statements, representations and procedures in the Certificate Holder's application and documentation are more restrictive than the regulations.

Raquel Barrera

Raquel Barrera
Sr. Community Program Liaison Worker
Healthy Homes and Environment



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH
CENTER FOR HEALTHY HOMES & ENVIRONMENT – ASBESTOS PROGRAM

ASBESTOS CONSULTANT CERTIFICATION

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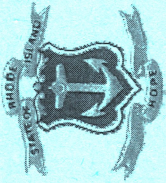
Certificate Holder: PATRICK A EMERY
Address: EMERY ENVIRONMENTAL ASSOCIATES
PO BOX E
PAWTUCKET RI 02861

Certification Number: AI00505
Type of Certification: Asbestos Inspector
Expiration Date: 04/30/2020

Except as specifically provided otherwise in this Certificate, Certificate holders shall conduct their program in accordance with statements, procedures and representations contained in their application, including any attachments. Regulation 216-RICR-50-15-1 - Asbestos Control shall govern unless the statements, representations and procedures in the Certificate Holder's application and documentation are more restrictive than the regulations.

Raquel Barrera

Raquel Barrera
Sr. Community Program Liaison Worker
Healthy Homes and Environment



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH
CENTER FOR HEALTHY HOMES & ENVIRONMENT – ASBESTOS PROGRAM

ASBESTOS CONSULTANT CERTIFICATION

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Certificate Holder: PATRICK A EMERY
Address: EMERY ENVIRONMENTAL ASSOCIATES
PO BOX E
PAWTUCKET RI 02861

Certification Number: APD00505
Type of Certification: Asbestos Project Designer
Expiration Date: 04/30/2020

Except as specifically provided otherwise in this Certificate, Certificate holders shall conduct their program in accordance with statements, procedures and representations contained in their application, including any attachments. Regulation 216-RICR-50-15-1 - Asbestos Control shall govern unless the statements, representations and procedures in the Certificate Holder's application and documentation are more restrictive than the regulations.

Raquel Barrera

Raquel Barrera
Sr. Community Program Liaison Worker
Healthy Homes and Environment

APPENDIX – D:

ASBESTOS TESTING LABORATORY LICENSURE



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH
CENTER FOR HEALTH HOMES & ENVIRONMENT – ASBESTOS PROGRAM

ASBESTOS ANALYTICAL SERVICES CERTIFICATION

Pursuant to the Asbestos Abatement Act, Chapter 24.5 of Title 23 of the General Laws of Rhode Island, and Regulation 216-RICR-50-15-1 - Asbestos Control, this Certificate is hereby issued as designated below. This Certificate is subject to all applicable rules, regulations, orders and notices of the Department of Health now or hereafter in effect and to any conditions delineated below.

Certificate Holder: EMSL ANALYTICAL INC
Address: 5 CONSTITUTION WAY UNIT A
WOBURN MA 01801

Certification Number: PCM00139
Expiration Date: 04/30/2020
Type of Certification: Analytical Service - PCM

Except as specifically provided otherwise in this Certificate, Certificate Holders shall conduct their program in accordance with statements, procedures and representations contained in their application, including any attachments. Regulation 216-RICR-50-15-1 - Asbestos Control shall govern unless the statements and procedures in the Certificate Holder's application and documentation are more restrictive than the Regulation.

Raquel Barrera

Raquel Barrera
Sr. Community Program Liaison Worker
Healthy Homes and Environment



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH
CENTER FOR HEALTH HOMES & ENVIRONMENT – ASBESTOS PROGRAM

ASBESTOS ANALYTICAL SERVICES CERTIFICATION

Pursuant to the Asbestos Abatement Act, Chapter 24.5 of Title 23 of the General Laws of Rhode Island, and Regulation 216-RICR-50-15-1 - Asbestos Control, this Certificate is hereby issued as designated below. This Certificate is subject to all applicable rules, regulations, orders and notices of the Department of Health now or hereafter in effect and to any conditions delineated below.

Certificate Holder: EMSL ANALYTICAL INC
Address: 5 CONSTITUTION WAY UNIT A
WOBURN MA 01801

Certification Number: PLM00139
Expiration Date: 04/30/2020
Type of Certification: Analytical Service - PLM

Except as specifically provided otherwise in this Certificate, Certificate Holders shall conduct their program in accordance with statements, procedures and representations contained in their application, including any attachments. Regulation 216-RICR-50-15-1 - Asbestos Control shall govern unless the statements and procedures in the Certificate Holder's application and documentation are more restrictive than the Regulation.

Raquel Barrera

Raquel Barrera
Sr. Community Program Liaison Worker
Healthy Homes and Environment



State of Rhode Island and Providence Plantations
DEPARTMENT OF HEALTH
CENTER FOR HEALTH HOMES & ENVIRONMENT – ASBESTOS PROGRAM

ASBESTOS ANALYTICAL SERVICES CERTIFICATION

Pursuant to the Asbestos Abatement Act, Chapter 24.5 of Title 23 of the General Laws of Rhode Island, and Regulation 216-RICR-50-15-1 - Asbestos Control, this Certificate is hereby issued as designated below. This Certificate is subject to all applicable rules, regulations, orders and notices of the Department of Health now or hereafter in effect and to any conditions delineated below.

Certificate Holder: EMSL ANALYTICAL INC
Address: 5 CONSTITUTION WAY UNIT A
WOBURN MA 01801

Certification Number: TEM00139
Expiration Date: 04/30/2020
Type of Certification: Analytical Service - TEM

Except as specifically provided otherwise in this Certificate, Certificate Holders shall conduct their program in accordance with statements, procedures and representations contained in their application, including any attachments. Regulation 216-RICR-50-15-1 - Asbestos Control shall govern unless the statements and procedures in the Certificate Holder's application and documentation are more restrictive than the Regulation.

Raquel Barrera

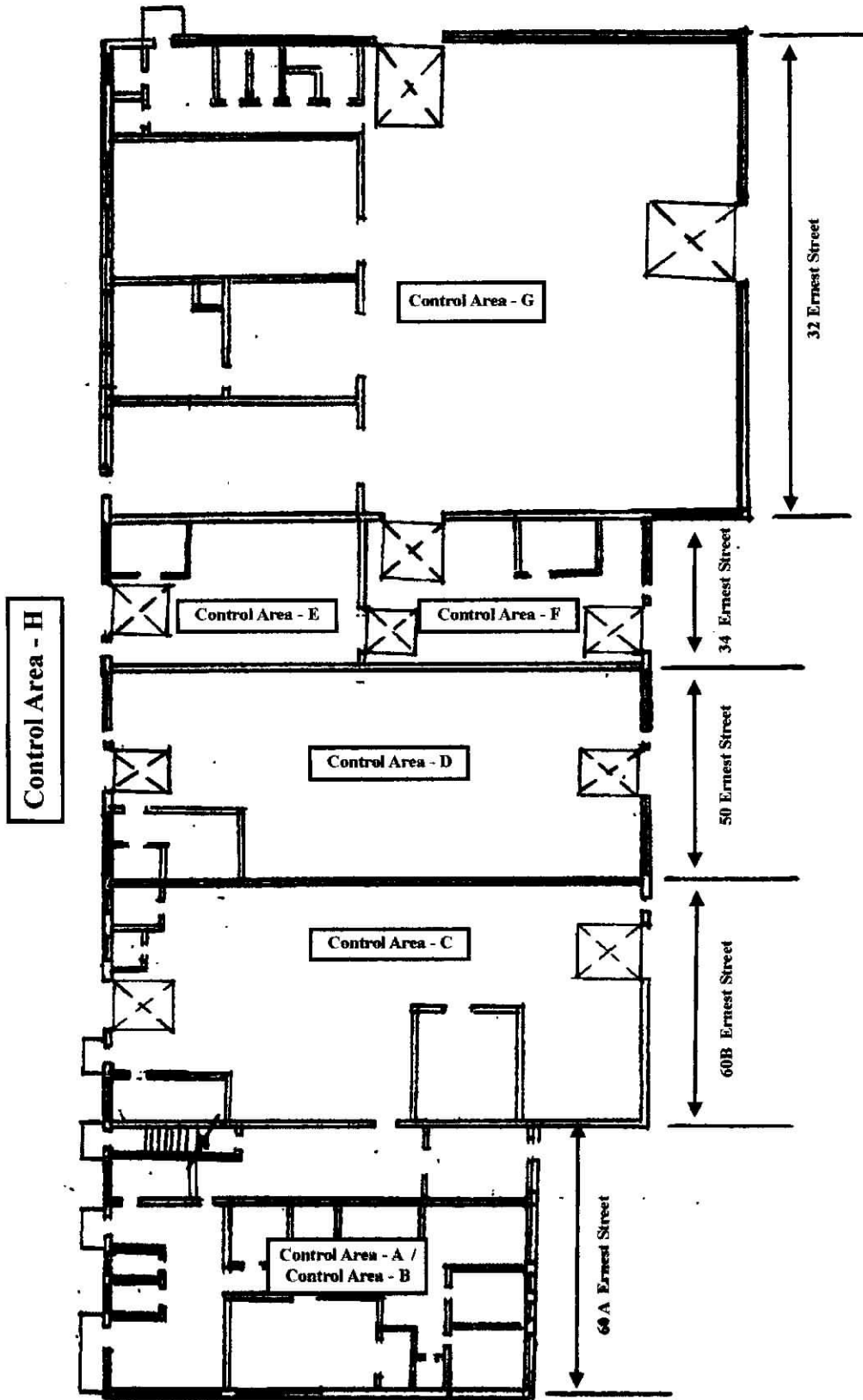
Raquel Barrera
Sr. Community Program Liaison Worker
Healthy Homes and Environment

APPENDIX – E:

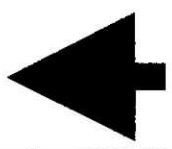
ASBESTOS PROJECT DRAWING(S)

PW 190915-A

Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification



Building Site Plan
No Scale



DWG. DATE: 10.15.19

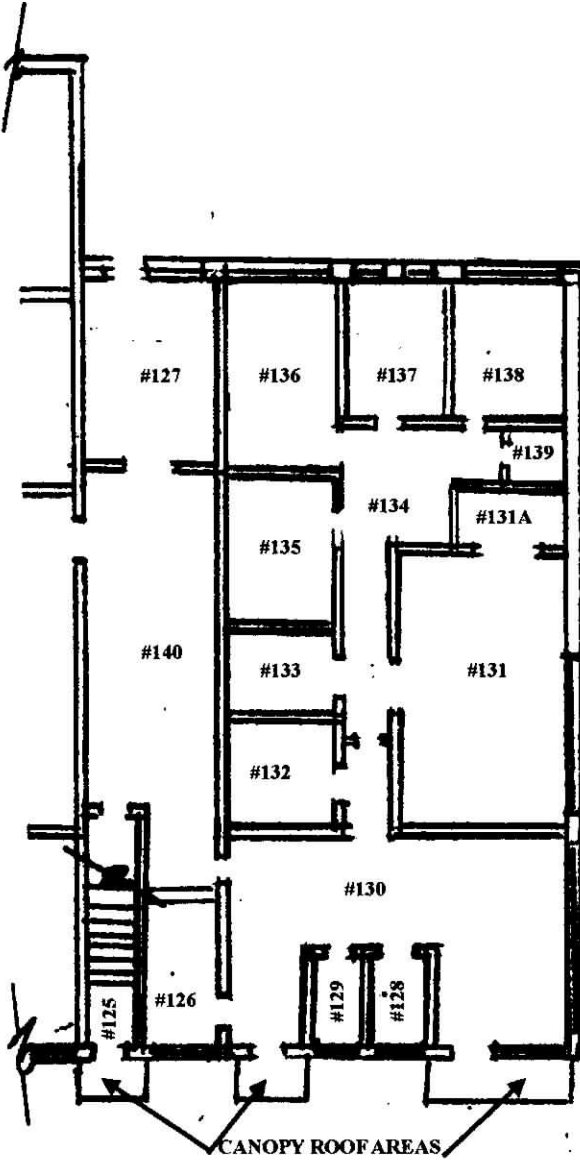
EEA1

PN 190915-A

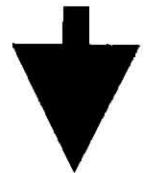
Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification

e m e r y
Environmental Associates

REFER TO PROJECT
DRAWING EEA9 FOR SCOPE
OF WORK REQUIREMENTS
ASSOCIATED WITH THE
PLANNED ASBESTOS
RESPONSE ACTION(S) AT
EACH DEFINED ASBESTOS
CONTROL AREA.



**First Floor Plan
60A Ernest Street
Control Areas - A & I**



DWG. DATE: 10.15.19

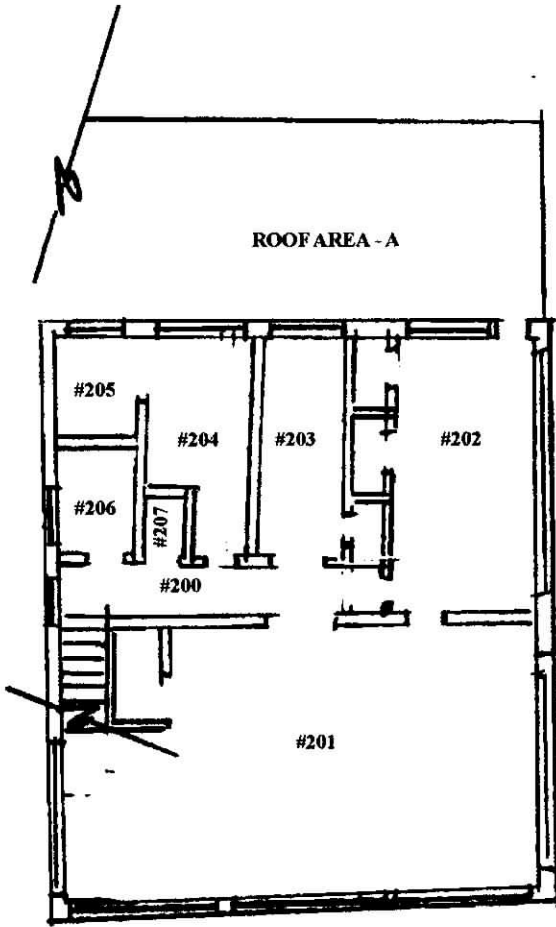
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P# 190915-A

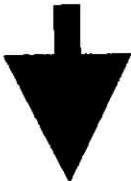
Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification

e m e r y
Environmental Associates

REFER TO PROJECT
DRAWING EEA9 FOR SCOPE
OF WORK REQUIREMENTS
ASSOCIATED WITH THE
PLANNED ASBESTOS
RESPONSE ACTION(S) AT
EACH DEFINED ASBESTOS
CONTROL AREA.



**Second Floor Plan
60A Ernest Street
Control Areas - B & I**



DWG. DATE: 10.15.19

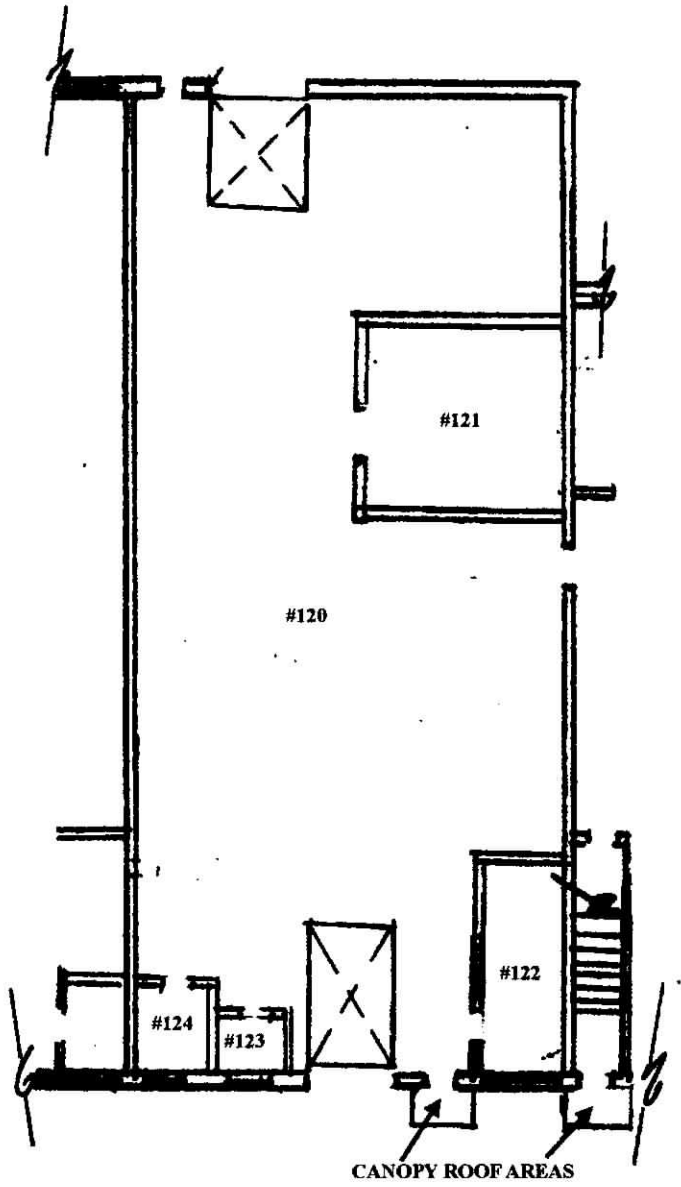
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FW 190915-A

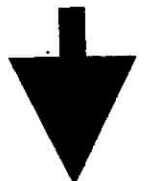
Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification

e m e r y
Environmental Associates

REFER TO PROJECT
DRAWING EEA9 FOR SCOPE
OF WORK REQUIREMENTS
ASSOCIATED WITH THE
PLANNED ASBESTOS
RESPONSE ACTION(S) AT
EACH DEFINED ASBESTOS
CONTROL AREA.



**First Floor Plan
60B Ernest Street
Control Areas - C & I**



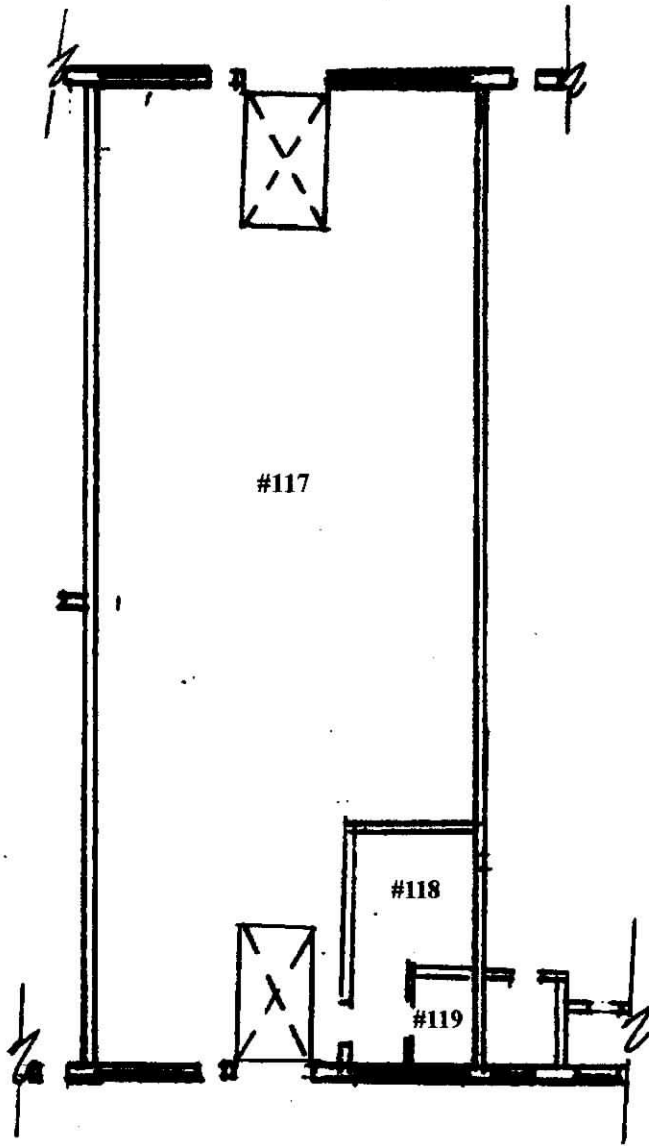
DWG. DATE: 10.15.19

EEA4

PW 190915-A

Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification

e m e r y
Environmental Associates



REFER TO PROJECT
DRAWING EEA9 FOR SCOPE
OF WORK REQUIREMENTS
ASSOCIATED WITH THE
PLANNED ASBESTOS
RESPONSE ACTION(S) AT
EACH DEFINED ASBESTOS
CONTROL AREA.

**First Floor Plan
50 Ernest Street
Control Areas - D & I**



DWG. DATE: 10.15.19

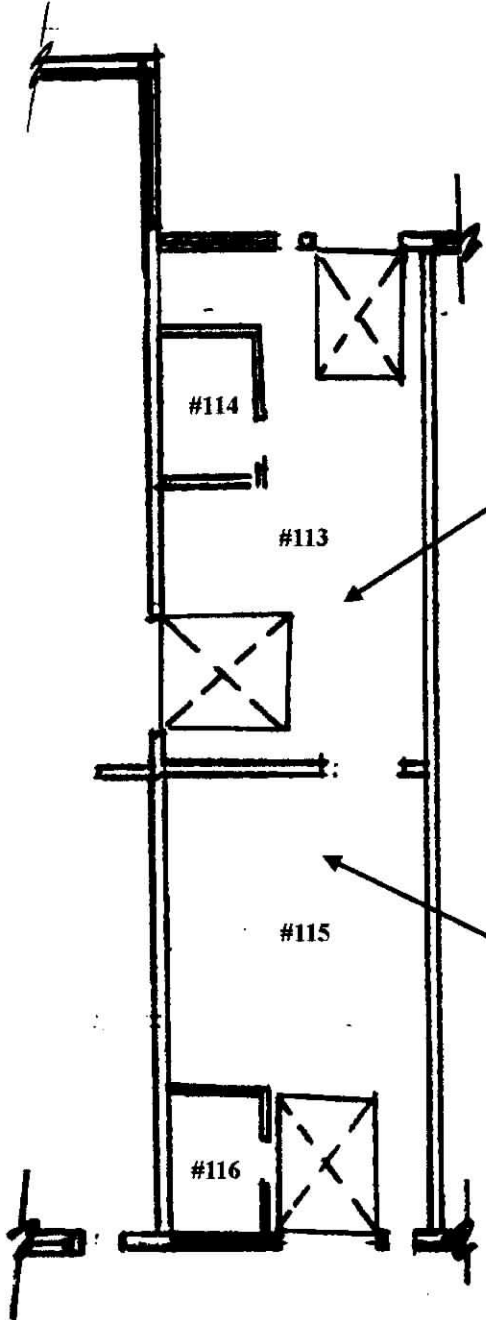
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PW 190915-A

Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification

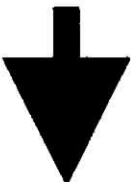


REFER TO PROJECT
DRAWING EEA9 FOR SCOPE
OF WORK REQUIREMENTS
ASSOCIATED WITH THE
PLANNED ASBESTOS
RESPONSE ACTION(S) AT
EACH DEFINED ASBESTOS
CONTROL AREA.



**First Floor Plan
34B Ernest Street
Control Areas - F & I**

**First Floor Plan
34A Ernest Street
Control Areas - E & I**



DWG. DATE: 10.15.19

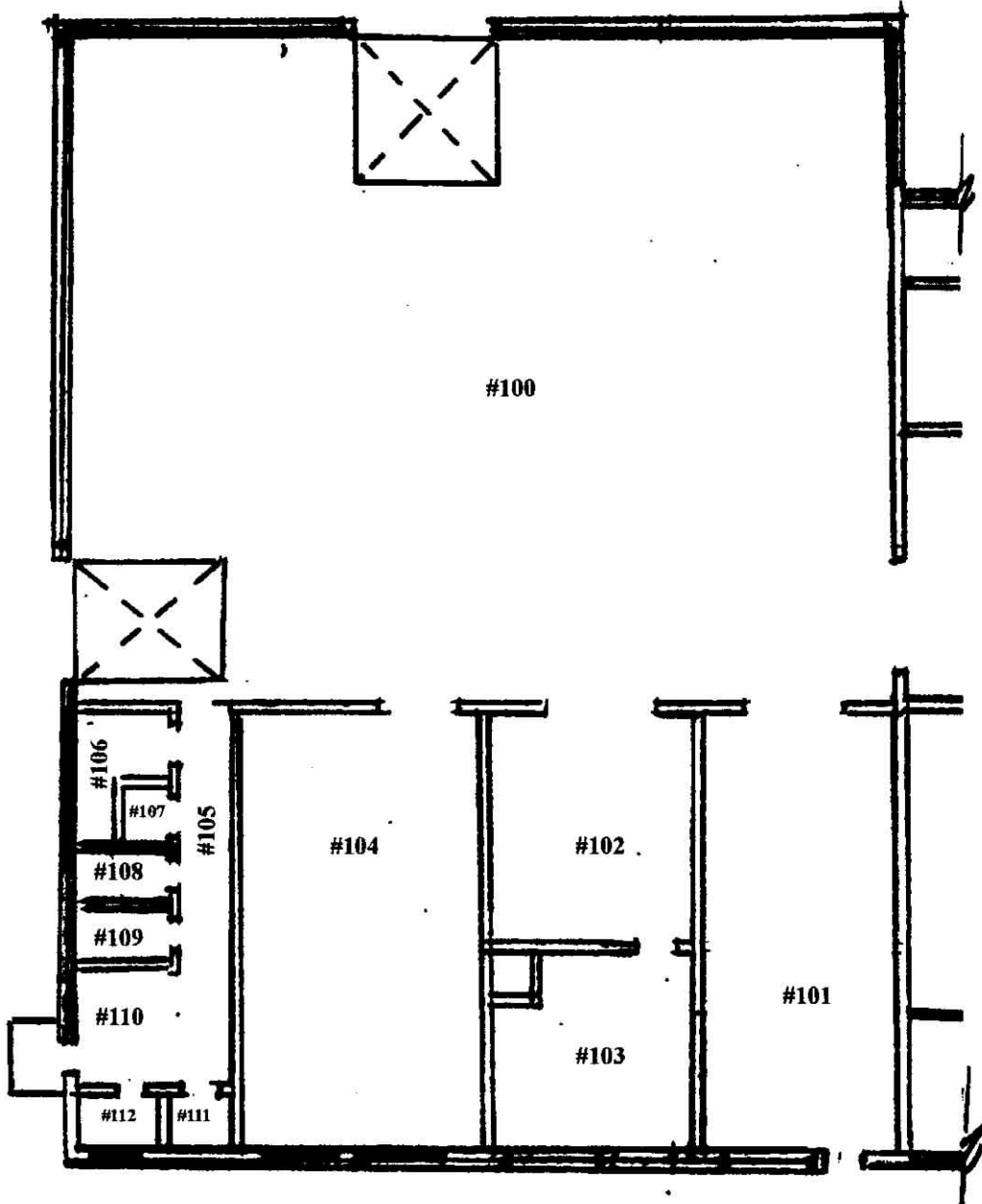
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P# 190915-A

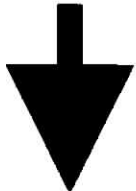
Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification

e m e r y
Environmental Associates

REFER TO PROJECT
DRAWING EEA9 FOR SCOPE
OF WORK REQUIREMENTS
ASSOCIATED WITH THE
PLANNED ASBESTOS
RESPONSE ACTION(S) AT
EACH DEFINED ASBESTOS
CONTROL AREA.



**First Floor Plan
32 Ernest Street
Control Areas - G & I**

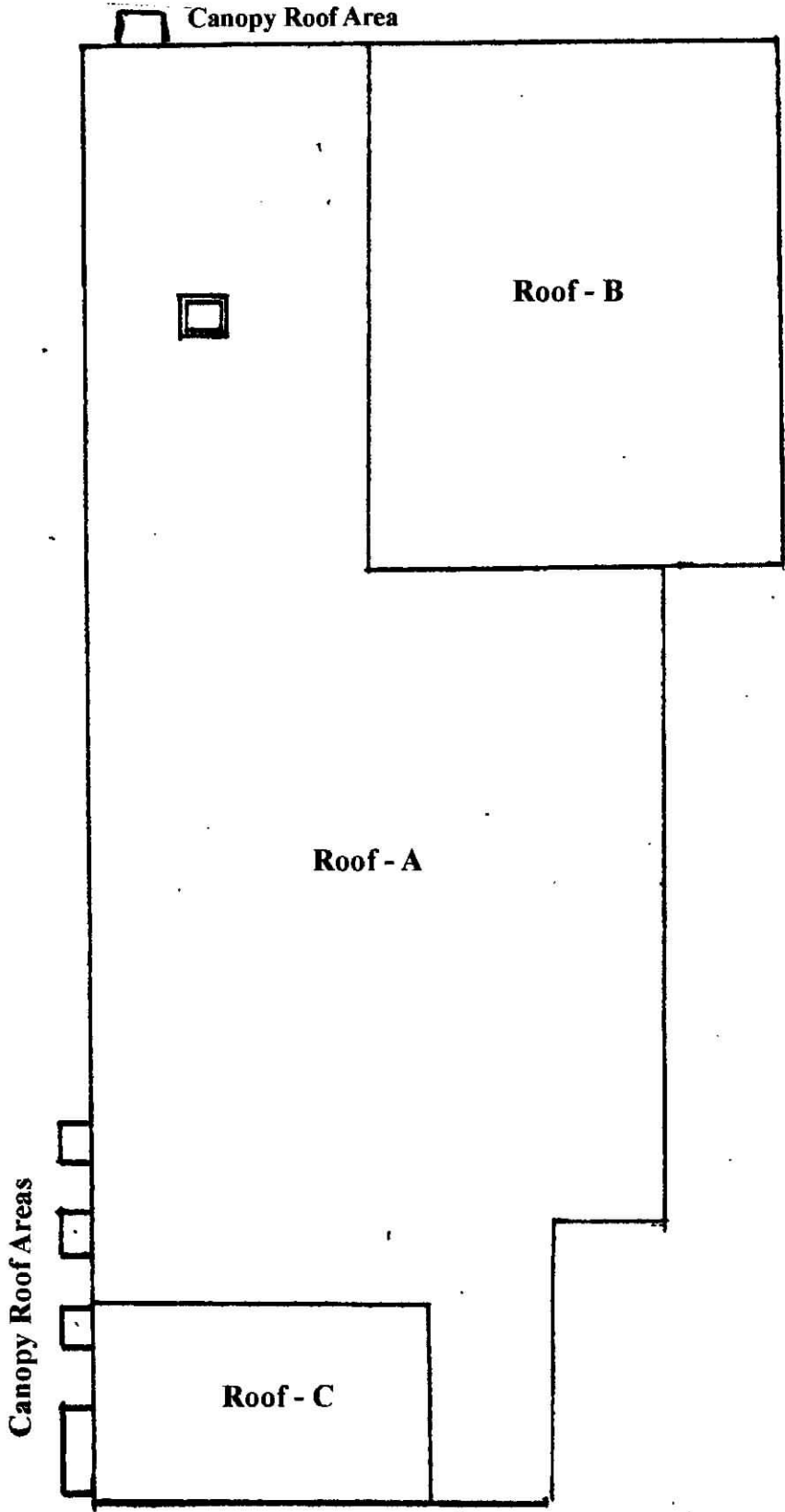


DWG. DATE: 10.15.19

EEA7

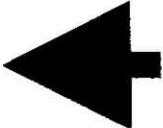
PN 190915-A

Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification



REFER TO PROJECT
DRAWING EEA9 FOR SCOPE
OF WORK REQUIREMENTS
ASSOCIATED WITH THE
PLANNED ASBESTOS
RESPONSE ACTION(S) AT
EACH DEFINED ASBESTOS
CONTROL AREA.

Exterior Roof Plan
32-60 Ernest Street
Control Area - H



DWG. DATE: 10.15.19

EEA8

PW 190915-A

Providence DPW / 32-60 Ernest Street; Providence, RI
Asbestos Abatement Specification

e m e r y
Environmental Associates

**PROJECT NOTE:
REFER TO ATTACHMENTS
#1 - #7 AND APPLICABLE ASB-16
FORM(S) ASSOCIATED WITH
EACH SEPARATE ASBESTOS
CONTROL AREA, WITHIN THE
ATTACHED ASBESTOS
SPECIFICATION - FOR PROJECT
SCOPE OF WORK AND WORK
REQUIREMENTS FOR EACH
SEPARATE ASBESTOS CONTROL
AREA.**

DWG. DATE: 10.15.19

EEA9

SECTION 01 30 00
ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Site mobilization meeting.
- C. Progress meetings.
- D. Construction progress schedule.
- E. Coordination drawings.
- F. Submittals for review, information, and project closeout.
- G. Number of copies of submittals.
- H. Submittal procedures.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRECONSTRUCTION MEETING

- A. Owner will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Owner.
 - 2. Architect.
 - 3. Contractor.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties to Contract, OMB and Architect.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- D. StudioJAED will record minutes and distribute copies after meeting to participants and those affected by decisions made.

3.02 SITE MOBILIZATION MEETING

- A. Owner will schedule a meeting at the Project site prior to Contractor occupancy.
- B. Attendance Required:
 - 1. Contractor.
 - 2. Owner.
 - 3. Architect.
 - 4. Contractor's Superintendent.
 - 5. Contractor's Project Manager.
 - 6. Major Subcontractors.
- C. Agenda:
 - 1. Use of premises by Owner and Contractor.
 - 2. Owner's requirements and occupancy prior to completion.
 - 3. Construction facilities and controls provided by Contractor and Owner.
 - 4. Security and housekeeping procedures.
 - 5. Schedules.

- 6. Application for payment procedures.
- 7. Procedures for maintaining record documents.
- 8. Requirements for start-up of equipment.
- D. StudioJAED will record minutes and distribute copies after meeting to participants and those affected by decisions made.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum bi-monthly intervals.
- B. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, and Architect, as appropriate to agenda topics for each meeting.
- C. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress.
 - 3. Field observations, problems, and decisions.
 - 4. Identification of problems that impede, or will impede, planned progress.
 - 5. Review of submittals schedule and status of submittals.
 - 6. Maintenance of progress schedule.
 - 7. Corrective measures to regain projected schedules.
 - 8. Planned progress during succeeding work period.
 - 9. Maintenance of quality and work standards.
 - 10. Effect of proposed changes on progress schedule and coordination.
 - 11. Other business relating to Work.
- D. StudioJAED will record minutes and distribute copies after meeting to participants and those affected by decisions made.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.04 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 10 days after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- C. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
 - 1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- D. Within 10 days after joint review, submit complete schedule.
- E. Submit updated schedule with each Application for Payment.

3.05 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 - 1. Product data.
 - 2. Shop drawings.
 - 3. Samples for selection.
 - 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.

- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 78 00 - Closeout Submittals.

3.06 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 - 1. Design data.
 - 2. Certificates.
 - 3. Test reports.
 - 4. Inspection reports.
 - 5. Manufacturer's instructions.
 - 6. Manufacturer's field reports.
 - 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for Owner. No action will be taken.

3.07 SUBMITTALS FOR PROJECT CLOSEOUT

- A. When the following are specified in individual sections, submit them at project closeout:
 - 1. Project record documents.
 - 2. Operation and maintenance data.
 - 3. Warranties.
 - 4. Bonds.
 - 5. Other types as indicated.
- B. Submit for Owner's benefit during and after project completion.

3.08 NUMBER OF COPIES OF SUBMITTALS

- A. Electronic Documents: Submit one electronic copy in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible files will be rejected.
- B. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
 - 1. After review, produce duplicates.
 - 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.09 SUBMITTAL PROCEDURES

- A. Submittals to be electronic.
- B. Transmit each submittal with approved form.
- C. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- D. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- E. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- F. Schedule submittals to expedite the Project, and coordinate submission of related items.
- G. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- H. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- I. Provide space for Contractor and Architect review stamps.
- J. When revised for resubmission, identify all changes made since previous submission.
- K. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

L. Submittals not requested will not be recognized or processed.

END OF SECTION 01 30 00

SECTION 01 35 53
SECURITY PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Security measures including entry control.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 - Summary: use of premises.
- B. Section 01 50 00 - Temporary Facilities and Controls: Temporary lighting, site fence, and barriers and enclosures.

1.03 SECURITY PROGRAM

- A. Protect Work, existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
- B. Initiate program in coordination with Owner's existing security procedures at project mobilization.
- C. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.

1.04 ENTRY CONTROL

- A. Restrict entrance of persons and vehicles into Project site and existing facilities.
- B. Allow entrance only to authorized persons with proper identification.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 35 53

SECTION 01 40 00
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. References and standards.
- B. Control of installation.
- C. Tolerances.
- D. Testing and inspection services.
- E. Manufacturers' field services.

1.02 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

PART 3 EXECUTION

2.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

2.02 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

2.03 TESTING AND INSPECTION

- A. See individual specification sections for testing required.
- B. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect.
- C. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

2.04 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment and operation as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

2.05 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.
- B. If, in the opinion of Architect, it is not practical to remove and replace the Work, Architect will direct an appropriate remedy or adjust payment.

END OF SECTION 01 40 00

SECTION 01 42 16
DEFINITIONS

PART 1 GENERAL

1.01 SUMMARY

- A. This section supplements the definitions contained in the General Conditions.
- B. Other definitions are included in individual specification sections.

1.02 DEFINITIONS

- A. Furnish: To supply, deliver, unload, and inspect for damage.
- B. Install: To unpack, assemble, erect, apply, place, finish, cure, protect, clean, start up, and make ready for use.
- C. Product: Material, machinery, components, equipment, fixtures, and systems forming the work result. Not materials or equipment used for preparation, fabrication, conveying, or erection and not incorporated into the work result. Products may be new, never before used, or re-used materials or equipment.
- D. Project Manual: The book-sized volume that includes the procurement requirements (if any), the contracting requirements, and the specifications.
- E. Provide: To furnish and install.
- F. Supply: Same as Furnish.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 42 16

SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary telecommunications services.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Vehicular access and parking.
- G. Waste removal facilities and services.

1.02 TEMPORARY UTILITIES - SEE SECTION 01 51 00

- A. Owner will provide the following:
 - 1. Electrical power and metering, consisting of connection to existing facilities.
 - 2. Water supply, consisting of connection to existing facilities.

1.03 TELECOMMUNICATIONS SERVICES

- A. Provide, maintain, and pay for telecommunications services to field office at time of project mobilization.

1.04 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. Maintain daily in clean and sanitary condition.

1.05 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.
- C. Traffic Controls: Coordinate with the Owner.

1.06 FENCING

- A. Provide 6 foot high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.07 EXTERIOR ENCLOSURES

- A. Provide temporary insulated weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.08 INTERIOR ENCLOSURES

- A. Provide temporary partitions as indicated to separate work areas from Owner-occupied areas, to prevent penetration of dust and moisture into Owner-occupied areas, and to prevent damage to existing materials and equipment.
- B. Construction: Framing, plywood and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:

1.09 SECURITY

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

1.10 VEHICULAR ACCESS AND PARKING

- A. Coordinate access and haul routes with governing authorities and Owner.
- B. Provide and maintain access to fire hydrants, free of obstructions.
- C. Provide means of removing mud from vehicle wheels before entering streets.

1.11 WASTE REMOVAL

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site daily.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.12 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION 01 50 00

SECTION 01 57 13
TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Prevention of erosion due to construction activities.
- B. Prevention of sedimentation of waterways, open drainage ways, and storm and sanitary sewers due to construction activities.
- C. Restoration of areas eroded due to insufficient preventive measures.
- D. Compensation of Owner for fines levied by authorities having jurisdiction due to non-compliance by Contractor.

1.02 PERFORMANCE REQUIREMENTS

- A. Comply with requirements of EPA (NPDES) for erosion and sedimentation control, as specified by the NPDES, for Phases I and II, and in compliance with requirements of Construction General Permit (CGP), whether the project is required by law to comply or not.
- B. Also comply with all more stringent requirements of State of Rhode Island Erosion and Sedimentation Control Manual.
- C. Develop and follow an Erosion and Sedimentation Prevention Plan and submit periodic inspection reports.
- D. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained; furnish all documentation required to obtain applicable permits.
- E. Timing: Put preventive measures in place as soon as possible after disturbance of surface cover and before precipitation occurs.
- F. Storm Water Runoff: Control increased storm water runoff due to disturbance of surface cover due to construction activities for this project.
 - 1. Prevent runoff into storm and sanitary sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
 - 2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 25 years.
- G. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
 - 1. Control movement of sediment and soil from temporary stockpiles of soil.
 - 2. Prevent development of ruts due to equipment and vehicular traffic.
 - 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- H. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
 - 1. Prevent windblown soil from leaving the project site.
 - 2. Prevent tracking of mud onto public roads outside site.
 - 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
 - 4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- I. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
 - 1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.

2. If sediment basins are used as temporary preventive measures, pump dry and remove deposited sediment after each storm.
- J. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments; comply with requirements of authorities having jurisdiction.
- K. Open Water: Prevent standing water that could become stagnant.
- L. Maintenance: Maintain temporary preventive measures until permanent measures have been established.

1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Erosion and Sedimentation Control Plan:
1. Include:
 - a. Site plan identifying soils and vegetation, existing erosion problems, and areas vulnerable to erosion due to topography, soils, vegetation, or drainage.
 - b. Site plan showing grading; new improvements; temporary roads, traffic accesses, and other temporary construction; and proposed preventive measures.
 - c. Where extensive areas of soil will be disturbed, include storm water flow and volume calculations, soil loss predictions, and proposed preventive measures.
 - d. Schedule of temporary preventive measures, in relation to ground disturbing activities.
 - e. Other information required by law.
 - f. Format required by law is acceptable, provided any additional information specified is also included.
 2. Obtain the approval of the Plan by authorities having jurisdiction.
 3. Obtain the approval of the Plan by Owner.
- C. Inspection Reports: Submit report of each inspection; identify each preventive measure, indicate condition, and specify maintenance or repair required and accomplished.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 EXAMINATION

- A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.

3.02 PREPARATION

- A. Schedule work so that soil surfaces are left exposed for the minimum amount of time.

3.03 SCOPE OF PREVENTIVE MEASURES

- A. In all cases, if permanent erosion resistant measures have been installed temporary preventive measures are not required.
- B. Construction Entrances: Traffic-bearing aggregate surface.
1. Width: As required; 20 feet, minimum.
 2. Length: 50 feet, minimum.
 3. Provide at each construction entrance from public right-of-way.
 4. Where necessary to prevent tracking of mud onto right-of-way, provide wheel washing area out of direct traffic lane, with drain into sediment trap or basin.
- C. Linear Sediment Barriers: Made of silt fences.
1. Provide linear sediment barriers:
 - a. Along downhill perimeter edge of disturbed areas, including soil stockpiles.
 2. Space sediment barriers with the following maximum slope length upslope from barrier:

- a. Slope of Less Than 2 Percent: 100 feet.
 - b. Slope Between 2 and 5 Percent: 75 feet.
 - c. Slope Between 5 and 10 Percent: 50 feet.
 - d. Slope Between 10 and 20 Percent: 25 feet.
 - e. Slope Over 20 Percent: 15 feet.
- D. Storm Drain Curb Inlet Sediment Trap: Protect each curb inlet using one of the following measures:
- 1. Filter fabric wrapped around hollow concrete blocks blocking entire inlet face area; use one piece of fabric wrapped at least 1-1/2 times around concrete blocks and secured to prevent dislodging; orient cores of blocks so runoff passes into inlet.
 - 2. Straw bale row blocking entire inlet face area; anchor into pavement.
- E. Storm Drain Drop Inlet Sediment Traps: As detailed on drawings.
- F. Temporary Splash Pads: Stone aggregate over filter fabric; size to suit application; provide at downspout outlets and storm water outlets.
- G. Soil Stockpiles: Protect using one of the following measures:
- 1. Cover with polyethylene film, secured by placing soil on outer edges.
 - 2. Cover with mulch at least 4 inches thickness of pine needles, sawdust, bark, wood chips, or shredded leaves, or 6 inches of straw or hay.
- H. Mulching: Use only for areas that may be subjected to erosion for less than 6 months.
- I. Temporary Seeding: Use where temporary vegetated cover is required.

3.04 INSTALLATION

- A. Traffic-Bearing Aggregate Surface:
- 1. Excavate minimum of 6 inches.
 - 2. Place geotextile fabric full width and length, with minimum 12 inch overlap at joints.
 - 3. Place and compact at least 6 inches of 1 1/2 to 3 1/2 inch diameter stone.
- B. Silt Fences:
- 1. Store and handle fabric in accordance with ASTM D4873/D4873M.
 - 2. Where slope gradient is less than 3:1 or barriers will be in place less than 6 months, use nominal 16 inch high barriers with minimum 36 inch long posts spaced at 6 feet maximum, with fabric embedded at least 4 inches in ground.
 - 3. Where slope gradient is steeper than 3:1 or barriers will be in place over 6 months, use nominal 28 inch high barriers, minimum 48 inch long posts spaced at 6 feet maximum, with fabric embedded at least 6 inches in ground.
 - 4. Where slope gradient is steeper than 3:1 and vertical height of slope between barriers is more than 20 feet, use nominal 32 inch high barriers with woven wire reinforcement and steel posts spaced at 4 feet maximum, with fabric embedded at least 6 inches in ground.
 - 5. Install with top of fabric at nominal height and embedment as specified.
 - 6. Do not splice fabric width; minimize splices in fabric length; splice at post only, overlapping at least 18 inches, with extra post.
 - 7. Wherever runoff will flow around end of barrier or over the top, provide temporary splash pad or other outlet protection; at such outlets in the run of the barrier, make barrier not more than 12 inches high with post spacing not more than 4 feet.
- C. Straw Bale Rows:
- 1. Install bales in continuous rows with ends butting tightly, with one bale at each end of row turned uphill.
 - 2. Install bales so that bindings are not in contact with the ground.
 - 3. Embed bales at least 4 inches in the ground.
 - 4. Anchor bales with at least two stakes per bale, driven at least 18 inches into the ground; drive first stake in each bale toward the previously placed bale to force bales together.
 - 5. Fill gaps between ends of bales with loose straw wedged tightly.
 - 6. Place soil excavated for trench against bales on the upslope side of the row, compacted.

- D. Temporary Seeding:
1. When hydraulic seeder is used, seedbed preparation is not required.
 2. When surface soil has been sealed by rainfall or consists of smooth undisturbed cut slopes, and conventional or manual seeding is to be used, prepare seedbed by scarifying sufficiently to allow seed to lodge and germinate.
 3. If temporary mulching was used on planting area but not removed, apply nitrogen fertilizer at 1 pound per 1000 sq ft.
 4. On soils of very low fertility, apply 10-10-10 fertilizer at rate of 12 to 16 pounds per 1000 sq ft.
 5. Incorporate fertilizer into soil before seeding.
 6. Apply seed uniformly; if using drill or cultipacker seeders place seed 1/2 to 1 inch deep.
 7. Irrigate as required to thoroughly wet soil to depth that will ensure germination, without causing runoff or erosion.
 8. Repeat irrigation as required until grass is established.

3.05 MAINTENANCE

- A. Inspect preventive measures weekly, within 24 hours after the end of any storm that produces 0.5 inches or more rainfall at the project site, and daily during prolonged rainfall.
- B. Repair deficiencies immediately.
- C. Silt Fences:
1. Promptly replace fabric that deteriorates unless need for fence has passed.
 2. Remove silt deposits that exceed one-third of the height of the fence.
 3. Repair fences that are undercut by runoff or otherwise damaged, whether by runoff or other causes.
- D. Straw Bale Rows:
1. Promptly replace bales that fall apart or otherwise deteriorate unless need has passed.
 2. Remove silt deposits that exceed one-half of the height of the bales.
 3. Repair bale rows that are undercut by runoff or otherwise damaged, whether by runoff or other causes.
- E. Clean out temporary sediment control structures weekly and relocate soil on site.
- F. Place sediment in appropriate locations on site; do not remove from site.

3.06 CLEAN UP

- A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by Architect.
- B. Clean out temporary sediment control structures that are to remain as permanent measures.
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

END OF SECTION 01 57 13

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Transportation, handling, storage and protection.
- B. Product option requirements.
- C. Substitution limitations and procedures.

1.02 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 PRODUCTS

2.01 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Where all other criteria are met, Contractor shall give preference to products that:
 - 1. If used on interior, have lower emissions, as defined in Section 01 61 16.
 - 2. If wet-applied, have lower VOC content, as defined in Section 01 61 16.
 - 3. Have a published GreenScreen Chemical Hazard Analysis.

2.02 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period. Comply with requirements specified in this section.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension that may subsequently become apparent.

- D. Substitution Submittal Procedure:
 - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. The Architect will notify Contractor in writing of decision to accept or reject request.

3.02 TRANSPORTATION AND HANDLING

- A. Package products for shipment in manner to prevent damage; for equipment, package to avoid loss of factory calibration.
- B. If special precautions are required, attach instructions prominently and legibly on outside of packaging.
- C. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- D. Transport and handle products in accordance with manufacturer's instructions.
- E. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- F. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- G. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- H. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Protect products from damage or deterioration due to construction operations, weather, precipitation, humidity, temperature, sunlight and ultraviolet light, dirt, dust, and other contaminants.
- G. Comply with manufacturer's warranty conditions, if any.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Prevent contact with material that may cause corrosion, discoloration, or staining.
- J. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- K. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION 01 60 00

SECTION 01 70 00
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Cutting and patching.
- C. Cleaning and protection.
- D. Starting of systems and equipment.
- E. Demonstration and instruction of Owner personnel.
- F. Closeout procedures, except payment procedures.
- G. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

- A. Section 01 10 00 - Summary: Limitations on working in existing building; continued occupancy; work sequence; identification of salvaged and relocated materials.
- B. Section 01 30 00 - Administrative Requirements: Submittals procedures.
- C. Section 01 40 00 - Quality Requirements: Testing and inspection procedures.
- D. Section 07 84 00 - Firestopping.

1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration that affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.
 - 5. Work of Owner or separate Contractor.

1.04 PROJECT CONDITIONS

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- C. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- D. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into adjacent building areas, into atmosphere and over adjacent property.
- E. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- F. Pest Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
- G. Rodent Control: Provide methods, means, and facilities to prevent rodents from accessing or invading premises.
- H. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.05 COORDINATION

- A. See Section 01 10 00 for occupancy-related requirements.
- B. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- C. Notify affected utility companies and comply with their requirements.
- D. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- E. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- G. Coordinate completion and clean-up of work of separate sections.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.04 CUTTING AND PATCHING

- A. Whenever possible, execute the work by methods that avoid cutting or patching.
- B. Perform whatever cutting and patching is necessary to:
 - 1. Complete the work.
 - 2. Fit products together to integrate with other work.
 - 3. Provide openings for penetration of mechanical, electrical, and other services.
 - 4. Match work that has been cut to adjacent work.
 - 5. Repair areas adjacent to cuts to required condition.
 - 6. Repair new work damaged by subsequent work.
 - 7. Remove samples of installed work for testing when requested.
 - 8. Remove and replace defective and non-conforming work.
- C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 84 00, to full thickness of the penetrated element.
- I. Patching:
 - 1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
 - 2. Match color, texture, and appearance.
 - 3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.05 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.06 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.07 SYSTEM STARTUP

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- D. Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.08 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- B. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of Owner's personnel.

3.09 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.
- B. Testing, adjusting, and balancing HVAC systems: See Section 23 05 93.

3.10 FINAL CLEANING

- A. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- B. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.
- C. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- D. Replace filters of operating equipment.
- E. Clean debris from roofs, gutters, downspouts, and drainage systems.
- F. Clean site; sweep paved areas, rake clean landscaped surfaces.
- G. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.11 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
- B. Notify Architect when work is considered ready for Substantial Completion.
- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's review.

- D. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Owner-occupied areas.
- E. Notify Architect when work is considered finally complete.
- F. Complete items of work determined by Architect's final inspection.
- G. Provided completed documentation as follows:
 - 1. Consent to Surety of Final Payment
 - 2. Certificate of Substantial Completion
 - 3. Contractor Satisfaction of Debt and Claims
 - 4. Release of Liens for the Contractor, his Subcontractors, and his Suppliers

3.12 MAINTENANCE

- A. Provide service and maintenance of components indicated in specification sections.
- B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than one year from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
- C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
- D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
- E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION 01 70 00

SECTION 01 78 00
CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

1.02 RELATED REQUIREMENTS

- A. Section 01 30 00 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Section 01 70 00 - Execution and Closeout Requirements: Contract closeout procedures.
- C. Individual Product Sections: Specific requirements for operation and maintenance data.
- D. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return one copy with comments.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.

- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail.
 - 2. Details not on original Contract drawings.

3.02 OPERATION AND MAINTENANCE DATA

- A. Source Data: For each product or system, list names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES

- A. For Each Product, Applied Material, and Finish:
 - 1. Product data, with catalog number, size, composition, and color and texture designations.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.

3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS

- A. For Each Item of Equipment and Each System:
 - 1. Description of unit or system, and component parts.
 - 2. Identify function, normal operating characteristics, and limiting conditions.
 - 3. Include performance curves, with engineering data and tests.
 - 4. Complete nomenclature and model number of replaceable parts.
- B. Where additional instructions are required, beyond the manufacturer's standard printed instructions, have instructions prepared by personnel experienced in the operation and maintenance of the specific products.
- C. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- D. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- E. Provide servicing and lubrication schedule, and list of lubricants required.
- F. Include manufacturer's printed operation and maintenance instructions.
- G. Include sequence of operation by controls manufacturer.
- H. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- I. Additional Requirements: As specified in individual product specification sections.

3.05 ASSEMBLY OF OPERATION AND MAINTENANCE MANUALS

- A. Assemble operation and maintenance data into durable manuals for Owner's personnel use, with data arranged in the same sequence as, and identified by, the specification sections.
- B. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
- F. Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include all volumes Tables of Contents in each volume, with the current volume clearly identified.
- G. Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment.
- H. Text: Manufacturer's printed data, or typewritten data on 20 pound paper.
- I. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- J. Arrangement of Contents: Organize each volume in parts as follows:
 - 1. Project Directory.
 - 2. Table of Contents, of all volumes, and of this volume.
 - 3. Operation and Maintenance Data: Arranged by system, then by product category.
 - a. Source data.
 - b. Operation and maintenance data.
 - c. Field quality control data.
 - d. Photocopies of warranties and bonds.

3.06 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within 10 days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 by 11 inch three D side ring binders with durable plastic covers.
- F. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.

- H. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

END OF SECTION 01 78 00

**SECTION 02 41 00
DEMOLITION**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Building demolition .
- B. Selective demolition of built site elements.
- C. Selective demolition of building elements for alteration purposes.
- D. Abandonment in place of existing utilities and utility structures.
- E. Legal disposal of demolished items.

1.02 REFERENCE STANDARDS

- A. 29 CFR 1926 - U.S. Occupational Safety and Health Standards.
- B. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations.

1.03 SUBMITTALS

- A. See Section 01 33 00 - Administrative Requirements, for submittal procedures.
- B. Project Record Documents: Accurately record actual locations of capped and active utilities and subsurface construction.

1.04 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: Company specializing in the type of work required.
 - 1. Minimum of 10 years of documented experience.

1.05 PROJECT CONDITIONS

- A. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

PART 3 EXECUTION

2.01 SCOPE

- A. As indicated on Drawings and herein specified.
 - 1. Remove the entire building designated as noted on drawings.
 - 2. Remove associated site improvements as shown on the drawings.
 - 3. Remove all other paving and curbs within site boundaries.
 - 4. Remove foundation walls and footings in their entirety.
 - 5. Remove concrete slabs on grade as indicated on drawings.
 - 6. Remove underground tanks.
 - 7. Remove manholes and manhole covers, curb inlets and catch basins.
 - 8. Remove fences and gates.
- B. Fill excavations, open pits, and holes in ground areas generated as result of removals, using specified fill; compact fill as required so that required rough grade elevations do not subside within one year after completion.

2.02 GENERAL PROCEDURES AND PROJECT CONDITIONS

- A. Comply with other requirements specified in Section 01 70 00 Execution and Closeout Requirements.
- B. Comply with applicable codes and regulations for demolition operations and safety of the public.
 - 1. Obtain required permits.
 - 2. Comply with applicable requirements of NFPA 241.
 - 3. Use of explosives is not permitted.
 - 4. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.

5. Provide, erect, and maintain temporary dust proof partitions/wall assembly barriers and security devices.
 6. Use adequate physical barriers and wall assemblies to prevent access to areas that could be hazardous to workers or the public.
 7. Conduct operations to minimize effects on and interference with adjacent construction and occupants.
 8. Do not close or obstruct means of egress corridors, roadways or sidewalks without permit.
 9. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
- C. Do not begin removal until receipt of notification to proceed from Owner.
 - D. Do not begin removal until built elements to be salvaged or relocated have been removed.
 - E. Protect existing structures and other elements that are not to be removed.
 1. Prevent movement or settlement of adjacent structures.
 2. Stop work immediately if adjacent structures appear to be in danger.
 - F. Minimize production of dust due to demolition operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
 - G. If hazardous materials are discovered during removal operations, stop work and notify Architect and Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
 - H. Perform demolition in a manner that maximizes salvage and recycling of materials.
 1. Comply with requirements of Section 01 74 19 - Waste Management.
 2. Dismantle existing construction and separate materials.
 3. Set aside reusable, recyclable, and salvageable materials; store and deliver to collection point or point of reuse.

2.03 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without permission from the Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without permission from the Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. No unused underground piping may be abandoned in place.
- H. Remove exposed piping, valves, meters, equipment, supports, and foundations of disconnected and abandoned utilities.
- I. Prepare building demolition areas by disconnecting and capping utilities outside the demolition zone; identify and mark utilities to be subsequently reconnected, in same manner as other utilities to remain.

2.04 DEMOLITION

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 1. Verify that construction and utility arrangements are as indicated.
 2. Report discrepancies to Architect before disturbing existing installation.

3. Beginning of demolition work constitutes acceptance of existing conditions that would be apparent upon examination prior to starting demolition.
- B. Remove existing work as indicated and as required to accomplish new work.
 1. At areas of demolition and transition, remove materials and finishes including, but not limited to, rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
 2. Remove items indicated on drawings and notes.
- C. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove existing systems and equipment.
 1. Verify that abandoned services serve only abandoned facilities before removal.
 2. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification.

2.05 EXISTING SUBSURFACE CONDITIONS

- A. Verify existing pavement material and respective thicknesses during pre-bid inspection. Obtain written authorization from the Owner before conducting test hole explorations of existing pavements within the project site. Conditions existing during prebid inspections will not be altered or modified.

2.06 EXISTING PAVEMENTS

- A. Demolish existing pavements to limits indicated. Neatly cut existing bituminous concrete pavement to straight, smooth and sharp edges perpendicular to pavement surface

2.07 EXISTING WALKS

- A. Demolish existing walks to the nearest joint to limits indicated on the contract documents.

2.08 EXISTING CURBING

- A. Demolish existing curbing to the nearest joint to limits indicated on the contract documents.

2.09 MISCELLANEOUS

- A. Demolish additional miscellaneous existing site improvements indicated, specified and required to construct project.

2.10 EXISTING UNDERGROUND UTILITY DEMOLITION

- A. Excavate and expose existing underground utilities and related structures designated for, or as required to implement, removals. For excavation operations refer to Section 31 20 00 -
- B. Excavating, Filling and Grading. Remove existing utility structure castings. Backfill excavations, upon completion of utility demolition operations. For backfill operations refer to Section 31 20 00 - Excavation, Filling and Grading.

2.11 EXISTING SITE IMPROVEMENTS DEMOLITION

- A. Existing Subsurface Conditions: Verify existing pavement materials and respective thicknesses during pre-bid inspection. Obtain written authorization from the Owner before conducting test hole explorations of existing pavements within the project site. Conditions existing during prebid inspections will not be altered or modified.
- B. Existing Pavements: Demolish existing pavements to limits indicated. Neatly cut existing bituminous concrete pavement to straight, smooth and sharp edges perpendicular to pavement surface.
- C. Existing Walks: Demolish existing walks to the nearest joint to limits indicated on the contract documents.
- D. Existing Curbing: Demolish existing curbing to the nearest joint to limits indicated on the contract documents.
- E. Miscellaneous: Demolish additional miscellaneous existing site improvements indicated, specified and required to construct project.

2.12 REMOVE DEBRIS, AND TRASH FROM SITE.

- A. Remove from site all materials not to be reused on site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.
- D. See Section 01 78 39 Construction Waste Management and Disposal.

END OF SECTION 02 41 00

SECTION 02 65 00
UNDERGROUND STORAGE TANK REMOVAL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Removal and disposal of underground storage tanks and connected piping.
- B. Cleaning and vapor freeing of tanks.
- C. Fuel removal.
- D. Temporary containment of excavated soil.
- E. Testing soils for contamination.
- F. Disposal of contaminated soil.
- G. Water disposal.
- H. Providing reports required by regulatory agencies.
- I. Backfilling.

1.02 RELATED REQUIREMENTS

- A. Section 01 70 00 - Execution and Closeout Requirements: Dewatering of excavations and water control.
- B. Section 31 22 00 - Grading: Soil removal from surface of site.
- C. Section 31 23 23 - Fill: Fill materials, filling, and compacting.

1.03 REFERENCE STANDARDS

- A. API RP 1604 - Closure of Underground Petroleum Storage Tanks.
- B. API PUBL 1628 - Guide to the Assessment and Remediation of Underground Petroleum Releases.
- C. 29 CFR 1910 - Occupational Safety and Health Standards.
- D. 29 CFR 1910.38 - Emergency action plans.
- E. 40 CFR 280 - Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks.
- F. COE EM-385-1-1 - Safety and Health Requirements Manual.
- G. EPA SW-846 - Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.
- H. EPA 600-4-790-20 - Methods for Chemical Analysis of Water and Wastes.

1.04 SUBMITTALS

- A. See Section 01 33 00 - Administrative Requirements, for submittal procedures.
- B. Site Safety and Health Plan: Describe safety and health plan and procedures as related to underground tank removal and pipe removal, and as related to operations associated with petroleum contaminated soils and water.
- C. Excavation and Material Handling Plan: Describe methods, means, equipment, sequence of operations and schedule to be employed in excavation, transport, handling, and stockpiling of soil during underground tank removal.
 - 1. Submit to Architect fifteen days before beginning tank removal work.
 - 2. Include a material handling plan that describes phases of dealing with the contaminated soil and water as it relates to the proposed tank and piping removal.
 - 3. Include methods of excavating, a material handling plan for the contaminated material, soil testing requirements, safety precautions and requirements, and water pumping and collection requirements.
- D. Field Sampling and Laboratory Testing Plan: Describe field sampling methods and quality control procedures.

1. Identify laboratory and laboratory methods to be used for contamination testing.
 2. Sample reports shall show sample identification for location, date, time, sample method, contamination level, name of individual sampler, identification of laboratory, and quality control procedures.
- E. Tank and Piping Removal and Disposal Plan: Describe methods, means, sequence of operations, and schedule to be employed in the testing, pumping, cleaning, de-vaporizing, inspecting, removal, and disposal of underground storage tanks and piping.
- F. Spill and Discharge Control Plan: Describe procedures and plan related to potential spills and discharge of contaminated soils and water.
- G. Reports:
1. Identification of tanks removed and disposed of, including site map showing location of tank and piping.
 2. Starting and ending dates of reporting period.
 3. Closure report. Incorporate reports, records, and data into a single binder with the title "SITE ASSESSMENT REPORT" on the cover of the binder.
 4. Laboratory testing reports, including location of soil excavated and associated OVA/FID (organic vapor analyzer/flame ionization device) readings, and sampling and test results for:
 - a. TPH (total petroleum hydrocarbons).
 - b. BTEX (benzene, toluene, ethylbenzene, and xylene).
 - c. TCLP (toxicity characteristic leaching procedure); if BTEX indicates gasoline, then provide TCLP.
 5. Cumulative quantities of soil excavated, beginning with start date for each tank and associated piping.
- H. Record Documents:
1. Building permit, inspection permits, and other permits required for underground tank removal.
 2. Results of excavation, including sketch showing location of underground storage tank, sampling locations, and extent of excavation.
 3. Tank disposal paperwork, such as copy of UST Notification Form and method of conditioning tank for disposal.
 4. Contaminated soil disposal paperwork, such as laboratory testing reports.
 5. Contaminated water disposal paperwork, such as laboratory testing results.

1.05 QUALITY ASSURANCE

- A. Perform work in accordance with local, state, and federal regulations and 40 CFR 280.
- B. Qualifications: Prior to start of work, submit documentation of recent experience and resumes of personnel working on the project.
1. Data shall indicate that tank removal contractor, subcontractors, and personnel employed on the project have been engaged in removal, transportation, and disposal of underground tanks and associated piping, are familiar with and shall abide with the following:
 - a. API RP 1604.
 - b. 40 CFR 280 and State and local regulations and procedures.
 - c. Use of equipment and procedures for testing and vapor-freeing tanks.
 - d. Handling and disposal of types of wastes encountered in underground tank and pipe removal including disposal of underground tanks and associated piping.
 - e. Excavation, testing, and disposal of petroleum contaminated soils, liquids, and sludge.
 - f. Provide documentation that tank removers are certified if locality of project has this requirement.
 2. Furnish the name and qualifications of the proposed Site Safety and Health Officer, based on education, training, and work experience.

- C. References: Furnish data proving experience on at least three prior projects that included types of activities similar to those in this project. Provide project titles, dates of projects, owners of projects, point of contact for each project, and phone numbers of each point of contact.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PREPARATION FOR TANK REMOVAL AND DISPOSAL

- A. Site Safety And Health Plan (SSHP): Furnish safety, health, and accident prevention provisions and develop a Site Safety and Health Plan (SSHP).
 - 1. The SSHP shall incorporate the requirements of 29 CFR 1910 and COE EM-385-1-1.
 - 2. Site work shall not start until the SSHP is approved by the Architect.
- B. Site Safety And Health Officer: Identify an individual to serve as the Site Safety and Health Officer (SSHO) who is a Certified Industrial Hygienist (CIH).
 - 1. The SSSH CIH shall report problems and concerns regarding health and safety to the Architect.
 - 2. The SSSH CIH shall have a working knowledge of local and Federal occupational safety and health regulations, and shall provide training to Contractor employees in air monitoring practices and techniques.
 - 3. The SSSH CIH shall also provide day to day industrial hygiene support, including air monitoring, training, and daily site safety inspections.
 - 4. The SSSH CIH shall be trained in the use of the monitoring and sampling equipment, interpretation of data required to implement the SSHP, and to administer the elements of the SSHP.
 - 5. The SSSH CIH shall remain on site during project operations and may be assigned other duties, such as project foreman or quality control manager.
- C. Spill And Discharge Control Plan: Develop, implement, and maintain a comprehensive spill and discharge control plan.
 - 1. The plan shall provide contingency measures for potential spills and discharges from handling and transportation of contaminated soils and water.
 - 2. A possible source of guidance for assessment and remediation is API PUBL 1628.
- D. Exclusion Zone (EZ) And Contamination Reduction Zone (CRZ): Do not permit personnel not directly involved with the project to enter work zones, called the EZ and CRZ.
 - 1. The EZ shall be an area around the tank a minimum of 10 feet from the limits of the tank excavation.
 - 2. At the perimeter of the EZ, establish a CRZ.
 - 3. The Contractor's site office, parking area, and other support facilities shall be located outside the EZ and CRZ.
 - 4. Clearly mark and post the boundaries of the EZ and CRZ.
 - 5. Include a site map, outlining the extent of work zones and location of support facilities, in the SSHP.
- E. Training: Provide health and safety training in accordance with 29 CFR 1910 prior to starting work.
 - 1. On-Site Training: Prior to starting on-site work, a health and safety training class shall be held by the SSSH CIH to discuss the implementation of the SSHP.
 - 2. Notify the Architect 24 hours prior to beginning the training class.
- F. Personnel Protection: Furnish appropriate personal safety equipment and protective clothing to personnel.
 - 1. Ensure that safety equipment and protective clothing is kept clean and well maintained.
- G. Decontamination: Decontaminate or properly dispose of personal protective equipment and clothing worn in contaminated areas at the end of the work day.
 - 1. The SSSH CIH shall be responsible for ensuring that personal protective clothing and equipment are decontaminated before being reissued.

- H. First Aid And Emergency Response Equipment And Procedures: Provide appropriate emergency first aid equipment for treatment of exposure to site physical and chemical hazards.
 - 1. Provide and post a list of emergency phone numbers and points of contact for fire, hospital, police, ambulance, and other necessary contacts.
 - 2. Provide and post a route map detailing the directions to the nearest medical facility.
- I. Ignition Sources: Do not permit ignition sources in the EZ and CRZ.
- J. Waste Disposal: The SSHP shall detail the practices and procedures to be utilized to dispose of wastes. Upon completion of the project, certify that equipment and materials were properly decontaminated prior to being removed from the site.
- K. Emergency Response Requirements: Furnish emergency response and contingency plan in accordance with 29 CFR 1910.38.
 - 1. In an emergency, take action to remove or minimize the cause of the emergency, alert the Architect, and institute necessary measures to prevent repetition of the emergency.
 - 2. Equip site-support vehicles with route maps providing directions to the medical treatment facility.
- L. Unforeseen Hazards: Notify the Architect of any unforeseen hazard or condition that becomes evident during work.

3.02 TANK CLEANING

- A. Fuel Removal:
 - 1. All possible fuel will be pumped or otherwise removed from the tank by Owner.
 - 2. Dispose of remaining fuel emulsions in accordance with applicable local, state, and federal regulations.

3.03 TEMPORARY CONTAINMENT OF EXCAVATED SOIL

- A. Provide temporary containment area near the excavated area.

3.04 EXCAVATION

- A. Provide Architect with written documentation, no later than 30 days before work begins, that proper state or local authorities have been notified.
- B. Notify Architect at least 48 hours prior to start of tank removal work.
 - 1. Stage operations to minimize the time that tank excavation is open and the time that contaminated soil is exposed to the weather.
 - 2. Provide protection measures around the excavation area to prevent water runoff and to contain the soil within the excavation area.
- C. Excavation: Excavate as required to remove tanks and piping.
 - 1. Place soil removed from the excavation in a temporary containment area.
 - 2. Collect and temporarily store water runoff from stockpiled soils.
- D. Excavation Methods: Select methods and equipment to remove soil to minimize disturbance to areas beyond the limits of the excavation area.
 - 1. Material that becomes contaminated as a result of Contractor's operations shall be removed and disposed of at no additional cost to Owner.
 - 2. Where excavation extends into groundwater levels, dewatering methods shall be employed on a localized basis to facilitate excavation operations, as specified in Section 01 70 00.

3.05 TESTING

- A. Stockpiled Soils: Soils with OVA/FID readings of 10 ppm or greater shall be further sampled and tested.
 - 1. Test for TPH and for BTEX in accordance with EPA SW-846 and EPA 600-4-790-20.
 - 2. Test for toxicity characteristic leaching procedure (TCLP) for lead if leaded gasoline was stored in or near the underground tank being removed.

3. For TPH, provide a minimum of one test for every 100 cubic yards.
4. For BTEX and TCLP, provide one test for every 100 cubic yards.
5. Soils that contain 50 ppm or more TPH, 10 ppm or more BTEX or have TCLP reading of 10 ppm lead or virgin petroleum products are considered contaminated materials.
6. Soils that test at levels less than the above may be used as clean fill.
7. Furnish results to Architect within 24 hours after the results are obtained.

3.06 WATER DISPOSAL

- A. Dewatering will be permitted only with approval of Architect.
- B. Store and test water generated during removal of tanks and piping.
 1. If contaminated, transport and dispose of water in an EPA approved disposal site in accordance with federal, state, and local requirements.
 2. Non-contaminated water may be disposed of on-site.

3.07 DISPOSAL OF UNDERGROUND TANKS, ANCHORS, SLABS, AND ASSOCIATED PIPING

- A. Preparation: API RP 1604. Remove the fill pipe, gage pipe, vapor recovery truck connection, submersible pumps, and drop tube.
 1. Cap or remove non-product piping, except vent piping.
 2. Plug tank openings so that vapors will exit through vent piping during the vapor-freeing process.
- B. Purging: Remove flammable vapors in accordance with API RP 1604. Tanks shall be certified as "vapor free" prior to further work.
- C. Cleaning and Testing: Clean tank and perform atmosphere testing in accordance with API RP 1604.
 1. Distribution (product delivery) piping shall be cleaned and removed or the piping shall be cleaned, filled with concrete, and abandoned in place.
 2. Test the tank atmosphere and the excavation area for flammable or combustible vapor concentrations, with a combustible gas indicator until the tank is removed from the excavation and from the site.
- D. Tank Removal and Disposal:
 1. Plug or cap accessible holes. One plug shall have a minimum 1/8 inch vent hole.
 2. Remove tank from the excavation, place it on a level surface and render it useless in accordance with API RP 1604.
 3. Provide warning labels on tank if tank contained leaded fuels, as follows:
 - a. "TANK HAS CONTAINED LEADED GASOLINE -- NOT VAPOR FREE -- NOT SUITABLE FOR STORAGE OF FOOD OR LIQUIDS INTENDED FOR HUMAN OR ANIMAL CONSUMPTION -- DATE OF REMOVAL: MONTH/DAY/YEAR"
 4. Transport and dispose of tank at an EPA approved disposal site in accordance with federal, state, and local regulations.

3.08 CLOSURE REPORT (SITE ASSESSMENT REPORT)

- A. Provide Architect a Site Assessment Report in a single binder notebook that contains the full collection of reports relating to this work, including but not limited to, records, starting and ending dates of reporting period, inspections, documentation, and data as follows:
 1. Complete UST Notification Form (within 30 days of closure).
 2. Description of work, including removal procedures, number of tanks removed, identification of tanks removed and disposed of, cubic yards of excavated soil, location of disposal sites, and dates of excavation.
 3. Site plan, including location of tanks and piping, limits of excavation, sampling points, results of excavation, and depths.
 4. Laboratory testing reports, copies of data and test results from testing laboratory.
 5. Tank disposal paperwork, contaminated soil disposal paperwork, and contaminated water disposal paperwork.
 6. Certifications required by implementing agency.

7. Building permit, inspection permits, and other permits required for underground tank removal, notifications, and inspection reports.
8. Cumulative quantities of soil excavated, beginning with start date for each tank and associated piping.

3.09 SPILLS OF CONTAMINATED SOILS

- A. Use appropriate vehicles and operating practices to prevent spillage or leakage of contaminated materials from occurring during operations. Inspect vehicles leaving the area of contamination to ensure that no contaminated materials adhere to the wheels or undercarriage.

3.10 BACKFILLING

- A. Provide backfill, compaction, grading, and seeding in accordance with 31 23 23.

END OF SECTION 02 65 00

SECTION 31 10 00
SITE CLEARING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Clearing and protection of vegetation.
- B. Removal of existing debris.

1.02 RELATED REQUIREMENTS

- A. Section 31 22 00 - Grading: Topsoil removal.
- B. Section 31 22 00 - Grading: Fill material for filling holes, pits, and excavations generated as a result of removal operations.

1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Fill Material: As specified in Section 31 22 00 - Grading

PART 3 EXECUTION

3.01 SITE CLEARING

- A. Minimize production of dust due to clearing operations; do not use water if that will result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.

3.02 VEGETATION

- A. Scope: Remove trees, shrubs, and brush, in areas to be covered by paving.
- B. Do not begin clearing until vegetation to be relocated has been removed.
- C. Do not remove or damage vegetation beyond the following limits:
 - 1. 10 feet each side of surface walkways.
- D. In areas where vegetation must be removed but no construction will occur other than previous paving, remove vegetation with minimum disturbance of the subsoil.
- E. Vegetation Removed: Do not burn, bury, landfill, or leave on site, except as indicated.
- F. Restoration: If vegetation outside removal limits or within specified protective fences is damaged or destroyed due to subsequent construction operations, replace at no cost to Owner.

3.03 DEBRIS

- A. Remove debris, junk, and trash from site.
- B. Leave site in clean condition, ready for subsequent work.
- C. Clean up spillage and wind-blown debris from public and private lands.

END OF SECTION 31 10 00

SECTION 31 22 00

GRADING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Removal of topsoil.
- B. Rough grading for site structures and building pads.
- C. Finish grading.

1.02 RELATED REQUIREMENTS

- A. Section 31 23 16 - Excavation.
- B. Section 31 23 23 - Fill: Filling and compaction.
- C. Section 31 23 16.13 - Trenching: Trenching and backfilling for utilities.

1.03 SUBMITTALS

- A. Project Record Documents: Accurately record actual locations of utilities remaining by horizontal dimensions, elevations or inverts, and slope gradients.

1.04 QUALITY ASSURANCE

- A. Perform Work in accordance with State of Rhode Island, Highway Department standards.
 - 1. Maintain one copy on site.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Topsoil: Topsoil excavated on-site.
 - 1. Graded.
 - 2. Free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds and foreign matter.
- B. Other Fill Materials: See Section 31 23 23 - Fill.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that survey bench mark and intended elevations for the Work are as indicated.
- B. Verify the absence of standing or ponding water.

3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Stake and flag locations of known utilities.
- C. Locate, identify, and protect from damage above- and below-grade utilities to remain.
- D. Provide temporary means and methods to remove all standing or ponding water from areas prior to grading.
- E. Protect site features to remain, including but not limited to bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs, from damage by grading equipment and vehicular traffic.
- F. Protect plants, lawns, rock outcroppings, and other features to remain as a portion of final landscaping.

3.03 ROUGH GRADING

- A. Remove topsoil from areas to be further excavated, re-landscaped, or re-graded, without mixing with foreign materials.
- B. Do not remove topsoil when wet.
- C. Remove subsoil from areas to be further excavated, re-landscaped, or re-graded.

- D. Do not remove wet subsoil, unless it is subsequently processed to obtain optimum moisture content.
- E. When excavating through roots, perform work by hand and cut roots with sharp axe.
- F. Stability: Replace damaged or displaced subsoil to same requirements as for specified fill.
- G. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack surface water control.

3.04 SOIL REMOVAL

- A. Stockpile excavated topsoil on site.
- B. Stockpiles: Use areas designated on site; pile depth not to exceed 8 feet; protect from erosion.

3.05 FINISH GRADING

- A. Before Finish Grading:
 - 1. Verify building and trench backfilling have been inspected.
 - 2. Verify subgrade has been contoured and compacted.
- B. Remove debris, roots, branches, stones, in excess of 1/2 inch in size. Remove soil contaminated with petroleum products.
- C. In areas where vehicles or equipment have compacted soil, scarify surface to depth of 3 inches.
- D. Place topsoil where required to level finish grade.
- E. Place topsoil to the following compacted thicknesses:
 - 1. Areas to be Seeded with Grass: 6 inches.
- F. Place topsoil during dry weather.
- G. Remove roots, weeds, rocks, and foreign material while spreading.
- H. Near plants spread topsoil manually to prevent damage.
- I. Fine grade topsoil to eliminate uneven areas and low spots. Maintain profiles and contour of subgrade.
- J. Lightly compact placed topsoil.
- K. Maintain stability of topsoil during inclement weather. Replace topsoil in areas where surface water has eroded thickness below specifications.

3.06 REPAIR AND RESTORATION

- A. Existing Facilities, Utilities, and Site Features to Remain: If damaged due to this work, repair or replace to original condition.
- B. Other Existing Vegetation to Remain: If damaged due to this work, replace with vegetation of equivalent species and size.

3.07 FIELD QUALITY CONTROL

- A. See Section 31 23 23 - Fill for compaction density testing.

3.08 CLEANING

- A. Remove unused stockpiled topsoil. Grade stockpile area to prevent standing water.

END OF SECTION 31 22 00

SECTION 31 23 16
EXCAVATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Trenching for utilities outside the building to utility main connections.

1.02 RELATED REQUIREMENTS

- A. Section 01 70 00 - Execution and Closeout Requirements
- B. Section 31 22 00 - Grading: Soil removal from surface of site.
- C. Section 31 22 00 - Grading: Grading.
- D. Section 31 23 23 - Fill: Fill materials, filling, and compacting.
- E. Section 31 23 16.13 - Trenching: Excavating for utility trenches to utility main connections.

1.03 PROJECT CONDITIONS

- A. Verify that survey bench mark and intended elevations for the Work are as indicated.
- B. Protect plants, lawns, rock outcroppings, and other features to remain.
- C. Protect permanent structures and underground utilities from excavating equipment and vehicular traffic.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that survey bench mark and intended elevations for the work are as indicated.

3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. See Section 31 22 00 Grading for additional requirements.
- C. Locate, identify, and protect utilities that remain and protect from damage.
- D. Grade top perimeter of excavation to prevent surface water from draining into excavation. Provide temporary means and methods, as required, to maintain surface water diversion until no longer needed, or as directed by Architect.

3.03 EXCAVATING

- A. Underpin adjacent structures that could be damaged by excavating work.
- B. Excavate to accommodate new structures and construction operations.
- C. Notify Architect of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- D. Slope banks of excavations deeper than 4 feet to angle of repose or less until shored.
- E. Do not interfere with 45 degree bearing splay of foundations.
- F. Cut utility trenches wide enough to allow inspection of installed utilities.
- G. Hand trim excavations. Remove loose matter.
- H. Remove lumped subsoil, boulders, and rock up to 1/3 cu yd measured by volume.
- I. Correct areas that are over-excavated and load-bearing surfaces that are disturbed; see Section 31 23 23 - Fill.
- J. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- K. Remove excavated material that is unsuitable for re-use from site.
- L. Stockpile excavated material to be re-used in area designated on site in accordance with Section 31 22 00 Grading.

M. Remove excess excavated material from site.

3.04 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection and testing.
- B. Provide for visual inspection of load-bearing excavated surfaces before placement of foundations.

3.05 PROTECTION

- A. Divert surface flow from rains or water discharges from the excavation.
- B. Prevent displacement of banks and keep loose soil from falling into excavation; maintain soil stability.
- C. Protect open excavations from rainfall, runoff, freezing groundwater, or excessive drying so as to maintain foundation subgrade in satisfactory, undisturbed condition.
- D. Protect bottom of excavations and soil adjacent to and beneath foundation from freezing.
- E. Keep excavations free of standing water and completely free of water during concrete placement.

END OF SECTION 31 23 16

SECTION 31 23 23

FILL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Backfilling and compacting for utilities outside the building to utility main connections.

1.02 RELATED REQUIREMENTS

- A. Section 31 22 00 - Grading: Removal and handling of soil to be re-used.
- B. Section 31 22 00 - Grading: Site grading.
- C. Section 31 23 16 - Excavation: Removal and handling of soil to be re-used.
- D. Section 31 23 16.13 - Trenching: Excavating for utility trenches outside the building to utility main connections.

1.03 DEFINITIONS

- A. Finish Grade Elevations: Match existing and/or as indicated on site/civil drawings.

1.04 REFERENCE STANDARDS

- A. AASHTO T 180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18 in.) Drop.
- B. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³)).
- C. ASTM D1556/D1556M - Standard Test Method for Density and Unit Weight of Soil in Place by Sand-Cone Method.
- D. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN m/m³)).
- E. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
- F. ASTM D 2922 - Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- G. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.05 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Compaction Density Test Reports.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. When necessary, store materials on site in advance of need.

PART 2 PRODUCTS

2.01 FILL MATERIALS

- A. General Fill: Subsoil excavated on-site.
 - 1. Graded.
 - 2. Free of lumps larger than 3 inches, rocks larger than 2 inches, and debris.
- B. Granular Fill: Coarse aggregate, conforming to State of Rhode Island Highway Department standard.
- C. Sand: Conforming to State of Rhode Island Highway Department standard.
- D. Topsoil: See Section 31 22 00 - Grading.

2.02 SOURCE QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for testing and analysis of soil material.
- B. If tests indicate materials do not meet specified requirements, change material and retest.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Identify required lines, levels, contours, and datum locations.
- B. See Section 31 22 00 - Grading for additional requirements.
- C. Verify areas to be filled are not compromised with surface or ground water.

3.02 PREPARATION

- A. Scarify subgrade surface to a depth of 6 inches to identify soft spots.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with general fill.
- C. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- D. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.

3.03 FILLING

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Employ a placement method that does not disturb or damage other work.
- C. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen or spongy subgrade surfaces.
- D. Maintain optimum moisture content of fill materials to attain required compaction density.
- E. Slope grade away from building minimum 2 inches in 10 ft, unless noted otherwise. Make gradual grade changes. Blend slope into level areas.
- F. Correct areas that are over-excavated.
 - 1. Other areas: Use general fill, flush to required elevation, compacted to minimum 97 percent of maximum dry density.
- G. Compaction Density Unless Otherwise Specified or Indicated:
- H. Reshape and re-compact fills subjected to vehicular traffic.
- I. Maintain temporary means and methods, as required, to remove all water while fill is being placed as required, or until directed by the Architect. Remove and replace soils deemed unsuitable by classification and which are excessively moist due to lack of dewatering or surface water control.

3.04 FILL AT SPECIFIC LOCATIONS

- A. Over Buried Utility Piping, Conduits, and Duct Bank in Trenches :
 - 1. Cover with general fill.
 - 2. Fill up to subgrade elevation.
 - 3. Compact in maximum 8 inch lifts to 95 percent of maximum dry density.
- B. Under Pavers Set on Sand Leveling Bed:
 - 1. Use granular fill.
 - 2. Fill up to bottom of sand leveling bed.
 - 3. Compact to 95 percent of maximum dry density.
 - 4. See unit pavers section for leveling bed placement.

3.05 FIELD QUALITY CONTROL

- A. See Section 01 40 00 - Quality Requirements, for general requirements for field inspection and testing.

- B. Perform compaction density testing on compacted fill in accordance with ASTM D1556, ASTM D2167, ASTM D2922, or ASTM D3017.
- C. Evaluate results in relation to compaction curve determined by testing uncompacted material in accordance with ASTM D698 ("standard Proctor"), ASTM D1557 ("modified Proctor"), or AASHTO T 180.
- D. If tests indicate work does not meet specified requirements, remove work, replace and retest.

3.06 CLEANING

- A. See Section 01 74 19 - Construction Waste Management and Disposal, for additional requirements.
- B. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.
- C. Leave borrow areas in a clean and neat condition. Grade to prevent standing surface water.

END OF SECTION 31 23 23

Demolition of City of Providence Facility Located at 60 Ernest Street

MANDATORY PRE-BID CONFERENCE:
 Wednesday, October 23, 2019 at 60 Ernest Street

SIGN IN SHEET

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