### State of Rhode Island And Providence Plantations 3/3/11 ADDENDUM NUMBER FOUR

### RFQ # 7448230

TITLE: ARRA-CHAFEE HALL FIRE PROTECTION UPGRADES - URI

Closing Date and Time: 3/17/11 at 1:45 PM (Note Change)

Per the issuance of this <u>ADDENDUM #4 (73 pages, including the cover sheet)</u> the following change(s) are noted:

The time period for asking questions on this Solicitation has been extended to 3/9/11 at 3:30 PM local prevailing time.

Questions concerning this solicitation may be emailed to the Division of Purchases to construction@purchasing.ri.gov.

Bid Closing Date and Time has been extended:

From: 3/8/11 at 1:45 PM To: 3/17/11 at 1:45 PM

X Specification Change /Addition / Clarification

#### DOCUMENT 00900 - ADDENDA AND MODIFICATIONS #4

#### PART 1 – GENERAL

- 1.01 This document dated March 1<sup>st</sup>, 2011, 6 pages plus attachments, is issued as the fourth Addendum to the Contract Documents and becomes a part of the Project Manual.
- 1.02 Bid Date (please refer to addendum cover page)

#### 1.03 ACM Remediation Plan

An Asbestos containing materials remediation plan for "URI – Chafee Hall" is attached herewith. This work is to be included as part of the base bid.

#### 1.04 <u>Meeting Minutes</u>

See Pre-bid Meeting minutes dated 2/17/11 attached, 5 pages, including question answers fielded during that meeting.

#### 1.05 Questions

The following questions were received:

A. Can we revisit the site with sub-contractors, and be able to enter the Lecture Halls and Projection Room?

Answer: The Chafee building is open to the public and is available to revisit during normal business hours. Coordination of access to Lecture Halls and the Projection Room should be handled through Peter Scalora, available at (401) 230-4401.

B. After looking through the Armstrong catalogue, the moldings shown in the Wall Section of the catalogue do not match those drawn. Who is the manufacturer of the trim moldings shown? If they are custom made extrusions, where do we purchase from? For custom shapes I believe we would need a large quantity of each shape to have extrusions made, and that could be costly.

Answer: The custom aluminum extrusions shown on the wall section details are hereby revised to standard aluminum "C" channels. Refer to specification and drawing changes issued in this addendum for material, size and application.

#### C. DRAWING MD1.0 SECOND FLOOR DEMO PLAN

IT SAY'S THAT DUCTWORK, DIFFUSERS, DAMPERS & HANGERS SHALL BE REMOVED THE ONLY DUCTWORK ON THIS DRAWING STATES THAT IT SHALL REMAIN AND BE REUSED, WHERE IS THE DEMO PLANS?

Answer: There are no mechanical demolition plans for the lecture hall areas. At the time of the design the existing condition mechanical drawings were not available and the ductwork is

not accessible. The scale of the work to be done should be essentially the same as the existing conditions of items to be removed. Contractors should base their bid on the quantity of the new ductwork as indicated on the plans.

### D. DRAWING M1.1 THERE ARE SYMBOLS ON THE DUCTWORK THAT SAY CONNECT TO EXHISTING

DO THEY WANT ALL THE DUCTWORK, GRILLES & HANGERS REMOVED AFTER THIS SYMBOL?

Answer: The mechanical demolition scope of work should include ductwork, diffusers, hangers, and supports completely. The only existing ductwork to remain and be reused is as indicated on the plan. The existing ductwork shall be removed back to the sound-attenuators. All of the new ductwork shall originate at the sound attenuators.

### E. DRAWING M1.1A IT SHOW'S THE SAME DUCTWORK LAYOUT ON DRAWING M1.1, IS THIS NEW DUCTWORK? AND IS IT ALL INTERNALLY LINED?

Answer: The HVAC system is the same for both drawing M1.1 and M1.1A. The only differences are some Architectural features in each Lecture Hall. The ductwork reflected on M1.1A and M1.1 is new and shall originate at the sound-attenuator for each area.

There is no note on the drawing calling for the installation of internal duct sound-lining to be installed in the new ductwork. The ductwork shall be connected to each of the sound-attenuators and internal sound-lining will not be connected. The only other lining called for on the drawing is for the linear diffuser boxes to be lined/insulated.

# F. DRAWING M1.2 UNDER KEY NOTES #1 RELOCATE EXHISTING AC UNIT AND EXTEND PIPING. IS THIS PIPING CHILLWATER, REFRIGERATION? WHAT SIZE AND WHERE DOES IT GET RELOCATED TO?

Answer: There are A/C units in the stairway that need to be moved to clear the new doors. These are ceiling supported, stand-alone, A/C refrigerant units with no ductwork attached. The units shall be moved to clear the new door swing. The ACR piping shall be disconnected, refrigerant collected, and be reconnected as the units are moved.

#### G. HOW MANY UNITS ARE THERE?

Answer: There are a total of three units located in the stairway that have to be moved.

H. Alternate #2/A2.2A notes to include the projection walls (Types B + D). Are we to include the sloped ceiling as noted in Alternate #2/A5.1A, 5.2A and 5.3A? Alternate #3/A2.2A notes to include the GWB ceilings (sloped), soffits (along side walls) and framing. The soffits along the side walls noted on Details 5/A5.2A and 3+8/A5.3A are not clouded for either alternate. Should they be in the Base Bid? Please clarify.

Answer: Alternate #2 includes the sloped ceiling at the front of each lecture hall and the side soffits at each lecture hall as indicated on 1/A2.2A. Base bid ceilings are shown on 1/A2.2. Soffits at side walls are not included in the base bid.

I. Does this infill occur in all Lecture Halls? Details 4/A5.1A and 1/A5.2A show this in-fill at the Large Lecture Hall. However, Details 2, 4+7/A5.2A and Details 2, 5+7/A5.3A do not show the in-fill for all other Lecture Halls. They show only the Type D partition starting at the slope without floor in-fill. Please advise.

Answer: Projection hood floor and wall infill occurs at all (4) lecture halls as indicated on 1/A1.4A and 17A3.1A. Refer to both 16 and 17/A3.1A for infill requirements.

J. What is the required rating for the fire alarm riser cable?

Answer: The requirements are in Section 16720 - 2.05-F.

K. Concrete Guard Walls at Lecture Halls: Drawing A1.4A notes that the concrete guard walls are to be removed. Drawing A3.1A has the typical Detail 7/A3.1A for the AWP application to the existing wall. This shows the walls to remain. Please advise.

Answer: Lecture Hall Guard Walls are to remain. Only the wood caps are to be removed. The only section of concrete guard wall to be removed is an 8'-0" +/- section at the upper balcony as indicated on drawing A1.4A.

L. ACT removal in the Lecture Halls: Is there a GWB ceiling above all 1x1 ACT that is to be removed?

Answer: The exact construction of the lecture hall ceilings is unknown.

M. Construction notes on M1.0, M 1.1 and M1.1A all indicated that the existing pneumatic thermostats and control conductors(pneumatic tubing) shall be removed and then reinstalled in new locations, however in the temperature control sequence of operations on M3.0, Letter D states that the intent is for the systems operation to be verified and monitored via the campus BMS. With the existing thermostats and system, this is not possible as pneumatic devices are not capable of being monitored via the BMS DDC system. Can you offer a little clarification?

Answer: The respective thermostats and associated pneumatic tubing shall be moved to the new locations and be reconnected. The contractors can disregard the notes regarding the Building Mgt System (BMS) or any centralized controls.

N. Is there any sort of mechanical bidders list available?

Answer: There is not a mechanical bidders list.

O. Can each floor incorporate an addressable class A signal module powered and supervised by the amplifier in lieu of having an amplifier with back up amplifier per floor and stairwell. The amplifier would feed all these modules on one pair of 2 hour rated white and blue cable. These would be wired class A. The modules would only activate if the devices on that floor or floor above or floor below activate or if a programmable button is pressed to page. This would be accomplished through programming.

Answer: The riser diagram provided in the fire alarm bid documents is conceptual in nature and intends to be non-proprietary. The final configuration of the speakers and amplifiers must satisfy the Rhode Island Uniform Fire Code in order to provide floor by floor notification, required color coding, 2-hour fire resistance rated cable requirements for vertical runs and also provide the necessary back-up amplifiers for each amplifier installed. Each manufacturer may be able to satisfy these requirements by different installation methods. The arrangement shown on the conceptual riser is one means of satisfying all of these requirements. The final arrangement must also be approved by the manufacturer and UL.

#### 1.06 Specification Changes

A. In the Table of Contents, add the following section heading:

09215 Gypsum Veneer Plaster

B. All provisions in **Document 00200 Instructions to Bidders** in conflict with Addendum #1 are superseded by that Addendum. In addition:

Delete 3.1.1 and replace with-

**"3.1.1** Plans and specifications are available for download from the RI Division of Purchases website at <a href="www.purchasing.ri.gov">www.purchasing.ri.gov</a>. No deposit is required."

Delete 3.1.2 in its entirety.

Change the paragraph number of 3.1.3 to be 3.1.2.

Delete 3.1.4 and replace with-

**"3.1.3** Copies of the Bidding Documents are made available on the above terms, only through the website of the RI Division of Purchases, for the purpose of obtaining Bids on the Work. No license or grant of use is conferred by issuance of copies of the Bidding Documents."

Delete 3.4.1 and replace with-

"3.4.1 Addenda instructions will be posted on the RI Purchasing website. Addenda which include new documents can be downloaded from the website. Bidders are responsible for checking for addenda." In 4.3.3, change the words "be returned unopened" to "not be considered".

C. Replace **Document 00410 Bid Form** with the updated form dated 3/1/11, 3 pages, attached.

#### D. Revise **Document 00520 Agreement Form** as follows:

In paragraph 3.3, delete the date "Sept. 2, 2011" and replace with the following-

"Substantial Completion of the Work for the Lecture Halls, Lobby, and Access to the Lecture Halls and 1<sup>st</sup> Floor low-rise east of main corridor wall by September 2, 2011, and Substantial Completion of the Work in the High Rise and 2<sup>nd</sup> floor low-rise by October 7, 2011. All punchlist and work to achieve Final Completion after these dates will be accomplished on 3<sup>rd</sup> shift."

E. In **Document 00700 General Conditions**, revise as follows:

#### Add the following sentence to 11.1.3 after the first sentence in that paragraph-

"The certificates of insurance to be provided shall include the owner as an additional insured. The "owner" shall be described on the policy as follows: "The Rhode Island Board of Governors for Higher Education, the University of Rhode Island, and the State of Rhode Island"."

#### F. In **Section 01100 Summary**, change the following:

In paragraph 1.02 A, change "00500" to "00520".

Add the following sentence to subparagraph 1.05 D-

"3. Contractor to provide written notification on Fire Sprinkler and Alarm System Impairment Notification Form following this section as Attachment B."

Append the attached "Fire Sprinkler and Alarm System Impairment Notification Form", one page, to this Section 01100 as "Exhibit B".

#### G. In **Section 01200 Price and Payment Provisions**, revise the following:

Replace the header to 1.02 with-

"1.02 CASH ALLOWANCE PROVISIONS"

In 1.02 A, add the word "cash" before the word "allowance".

In 1.02 B, add the word "cash" before the word "allowance".

Add the following subparagraph to 1.02:

"F. Schedule of Cash Allowances - None."

#### H. Revise **Section 02225 Demolition** as follows:

Add the following subparagraph to 1.03-

"C. Current lead paint regulations applicable in the State of RI."

Add the following subparagraph to 3.02-

"E. Assume that all existing original paint contains lead. Take appropriate precautions in accordance with RI regulations when working with painted surfaces. Include all costs of working with existing lead-painted surfaces and properly disposing of demolition debris in the Base Bid."

#### I. Revise **Section 05500 Metal Fabrications** as follows:

In paragraph 2.04, delete subparagraph C and replace with the following –

"C. Aluminum Channel: Provide aluminum pieces as detailed that are not a standard part of the wall panel assembly by Armstrong. Square-corner C channels shall be by Argyle Industries, Inc. or equal. 160 Meister Ave. Branchburg, NJ 08876, 800-320-6461. <a href="https://www.argylein.com">www.argylein.com</a>. Refer to details for sizes."

#### J. Add new section:

Section 09215 Gypsum Veneer Plaster, 2 pages dated 3/1/11, attached.

#### K. Revise Section 09511 Suspended Acoustical Ceilings as follows:

In 2.01 D.4, change "microperforated" to be "extra microperforated".

#### L. Revise **Section 09850 Acoustical Panels** as follows:

In 3.05 A.8, change "Ekos Wall System – Ekos Maple (MP)" to "Custom Veneer Walls, Maple".

- In 3.05 A.9, change "Ekos Wall System Ekos Maple (MP)" to "Custom Veneer Walls, Maple".
- M. Revise Section 09900 Paints and Coatings, as follows:
- In 1.03 C.2, add the following words to the end of the sentence before the period "and cut ends of obsolete guardrail pickets at stair."

#### 1.07 Drawing Changes

A. Replace Drawings D1.0 and A2.0 with new sheets D1.0 and A2.0 dated 03/01/11 issued as part of this addendum.

B. Add new sheets to the Base Bid for demolition work in the low-rise issued as part of this addendum as follows:

D1.1B	Low Rise First Floor Interior Demolition Plan	Dated 03/01/11
E1.1B	Electrical Demolition Plan	Dated 03/01/11
M1.1B	First Floor Ductwork Demolition Plan	Dated 03/01/11
M1.2B	First Floor Piping Demolition Plan	Dated 03/01/11
P1.0B	Basement Floor Plan-Plumbing Demolition	Dated 03/01/11
P1.1B	First Floor Plan-Plumbing Demolition	Dated 03/01/11

- C. Add information regarding the top of wall closure to Drawing A1.1 per the attached sketch SKA-#1 dated 02/25/11. This work is a part of the Base Bid.
- D. Revise details on Drawing A3.1 and A3.1A per the attached sketches SKA-#2 and SKA-#3 dated 02/25/11. These describe changes to the aluminum wall panel trim. This work is part of the Base Bid when described on A3.1, and part of alternate work if found on A3.1A.
- E. Original building construction details are offered in the attached sketch of Section C Stair B to clarify the existing assembly detail of the stair rail posts to be demolished. There are steel strap anchors embedded in the concrete, concealed by parging material, to which the post base is welded. The work includes cutting the post base from the embedded anchor and repairing the parging as necessary to achieve a finished look in conjunction with the new rail system.

#### **END OF DOCUMENT 00900**

#### RHODE ISLAND DEPARTMENT OF HEALTH

#### NOTARIZED CERTIFICATION OF ASBESTOS ABATEMENT PLAN

Facility:	University of Rho	ode Island – Chafee	Hall		
Address:	Kingston Campu	s			
City/Town	n: Kingston	Zip: <b>02</b>	2881 Am	endment Phase No	:
Abatemen	nt Plan Written By:	Daniel J. Simas	Cer	tification No: AAC	C-567-PD
Summary	of specific waivers	/variances being requ	iested: see atta	ichment #4	
Type of A	sbestos Abatement	<ul><li>(X) Removal</li><li>( ) Demolition</li><li>( ) Other (specify)</li></ul>	( ) Glovebag	` ′ -	
_	n being submitted in an Asbestos Abater	n response to a Notice ment Plan? ( )			Requirement
-	dicate Notice/Build r: To Be Selected	ling Evaluation No(s Lic	s): cense No: LAC	]-	
Estimated	Starting Date: 3/18	/11			
	t <b>ement Sampling</b> ples Collected By:	Information Charles E. Prescott	: III	Certification No: A	AAC-642-IS
Bulk Samj	ples Analyzed By:	RI Analytical Labo	ratories Inc.	Certification No: A	AAL-008C3
Air Sampl	es Analyzed By:	RI Analytical Labo	ratories	Certification No: A	AAL-008C3
	e Air Sampling I				
Air Sampl	es to be Collected I	By: RIAL Personi	nel		
Air Sampl	es to be Analyzed I	By: RIAL		Certification No:	AAL-008C3
		CERTIFIC	ATION		
the RI Asbeabatement/maspecification state regulation	estos Control Act and nanagement activities as prescribed in this pla	ent plan is prepared and Parts A and C of the performed in conjunction (when approved) and abatement/management attractor.	RI Rules and I on with this plate the most current	Regulations for Asbes an must be in comp t revision of all applic	itos Control; all liance with the able federal and
Cer	tified by:	Building Owner or Agent)	Title:		_
	(Signature of B	of Certifier)	Date:		_
Sub	Typed/Printed Name) escribed and sworn befo	of Certifier) ore me this da	y of	, 20	_
		My (			
AF	(Notary Public) FIX NOTARY SEAL	HERE			

#### **Department of Health**

#### Office of Occupational & Radiological Health

#### APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

<ol> <li>Building Owner's Name:</li> <li>University of Rhode Island</li> </ol>	3. Building Owner's Mailing Address and Telephone Number:
2. Application Prepared By:	Street: 177 Plains Road
Daniel J. Simas	City/Town: Kingston
	Zip: <b>02881</b>
RI certification No: AAC-567-PD	Telephone No.: 401-874-2591
	(Area Code, No., Ext.)
Telephone No: 401-737-8500 ext 121 (Area code, No., Ext.)	<ol><li>Person to be contacted regarding this application:</li></ol>
	Name: David Welsh
	Telephone No: <b>401-874-5500</b> (Area Code, No., Ext.)
<ul> <li>5. Location where abatement work will be personance (if applicable): URI – Chafee Hall</li> <li>Street: Kingston Campus</li> <li>City/Town: Kingston</li> </ul>	Zip: <b>02881</b>
6. Is this application being submitted in res Asbestos Abatement plan"? ( ) Yes	sponse to a "Notice of Requirement to Submit an (X) No
If Yes, what is the due date for submittal of A	batement plan?
Evaluation Number on the Notice:	(Mo.) (Day) (Yr.)
7. Contractor who will be performing abatem	nent work (if selected):
7. Contractor who will be performing abatem Name: <b>To be selected</b>	nent work (if selected):  R.I. License No.: LAC-

8. Estimated Starting Date of	Abatement Work	03 (Month)	<b>18</b> (Day)	<b>2011</b> (Year)
9. Estimated Completion Date	e of Abatement Work:	12 (Month)	31 (Day)	<b>2011</b> (Year)
10. Type of Asbestos Abateme	nt: (Chec	k all that	apply)	
(X) Removal		( ) End	closure	
( ) Encapsulation		( ) Der	molition	
<ul><li>( ) Operations and Mainte</li><li>( ) Other (Specify):</li></ul>	nance Only			
11. Type of Building:	( ) School ( ) Privately ( ( <b>X</b> ) Publicly O ( ) Residence ( ) Other (Spe	wned Buil	ding	
12. Building Access:	( ) Public Acc (X) Limited Pu ( ) No Public	ıblic Acces		lding Area) % of Building Area)
13. Bulk Sample Collection and A). Person collecting bulk	•			
Name: Charles E. Prescott	III RI	Certificati	on No.:	AAC-642-IS
B). Sampling Methodolog (X) EPA AHERA Sar	gy: npling requirements [40	CFR 763.	86].	
Document (EPA-405/	Containing Material (2-78-014) or Guidance (EPA-560-5-85-024)	for Contr		
( ) Other (Specify) _				
C). Laboratory performing	g the analysis of the bull	c samples		
Name: RI Analytical	Laboratories RI Certi	fication No	o.: <b>AAL</b>	-008C3
D). Analytical Methodolo	gy:			
(X) EPA Interim Me Samples [PLM method	thod for the Determinated only].	ation of A	sbestos	in Bulk Insulation
( ) Other (Specify)				

14. Pre-Abatement Air Sample Collect	ion and Analysis:
A). Person collecting pre-abateme	ent air samples:
Name: RIAL Personnel	Affiliation: RIAL
B). Laboratory performing analys Name: <b>RIAL</b>	sis of pre-abatement air samples. RI Certification No.: <b>AAL-008C3</b>
C). Methodology used in the colle	ection and analysis of pre-abatement samples:
(X) NIOSH Method 7400 [Me	ost Current Revision]
( ) OSHA 29 CFR 1926.1101	– Appendix A & B
( ) Other (Specify)	
	pestos containing material (RACM) will be removed nauler or broker will be used to transport the RACM so be identified.
To be determined	
	of the authorized asbestos waste facility to which the sferred for disposal (if known).
To be determined	
	,
16. Person designated as compliance	monitor for abatement work. [NOT REQUIRED]
Name:RI Analytical	Personnel
Affiliation:RIA	<b>A</b> L

- 17. In-Process & Clearance Air Sampling: See Attachment #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 fiber per cubic centimeter) is exceed 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.

Area 1 – 1<sup>st</sup> Floor Low Rise

Area 2 - Large Auditorium

Area 3 - Small Auditoriums

Area 4 – Basement Area

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

Signature:

Affiliation: RI Analytical Laboratories, Inc

20. ASBESTOS ABATEMENT PLAN APPLICATION FEE:

( ) Operation & Maintenance Only5 75( ) Up to One (1) NESHAP Unit75

( ) Between One (1) & Ten (10) NESHAP Units \$ 300

( ) Between Ten (10) & Fifty (50) NESHAP Units \$600

( ) Over Fifty (50) NESHAP Units \$ 900

(X) RI State Agency Waived Application Fee

#### Department of Health

### Office of Occupational & Radiological Health APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

#### SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: Chafee Hall, University of Rhode Island Kingston Campus

<u>INSTRUCTIONS:</u> 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.):

#### Area 1 – 1<sup>st</sup> Floor Low Rise

(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).

#### Refer to 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. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

#### Refer to Attached Building Drawing

- (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).

(4) PR	OPOSED REMEDIES (co	ont.):	
B). Wil	ll any portion of this area (X) Yes ( ) No	be abated by use of B.8 work pr	rocedures?
	If Yes, indicate below v B.8 work procedures:	which RACM in this area will be	e abated by use of the following
	B.8.2 & B.8.3	[REMOVAL]	12x12 Floor Tile; Spray-on Fireproofing; Ceiling Tiles; Sheetrock/Joint Compound; Pipe Insulation
	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	[ASP. ROOFING]	
	you requesting any waive vities in this area?	ers to the above selected B.8 pr	ocedure for any of the abatement
	( <b>X</b> ) Yes ( ) No		
	•	description of the waivers reque be keyed to the specific section	
	you proposing alternativarea?	e procedures under B.11 for a	ny of the abatement activities in
	( ) Yes (X) No		
	proposing to utilize. Al	description of the alternate proceedures must include regulations and be as protective	e a justification for not following
E). Wil	l any RACM remain in th	is area after abatement?	
	( ) Yes ( <b>X</b> ) No	( ) Beyond scope of inspectio	n
	going Operations and M	ion of the RACM that will rema faintenance Plan that will be im Attachment 4	

#### Department of Health

# Office of Occupational & Radiological Health APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

#### SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: Chafee Hall, University of Rhode Island Kingston Campus

<u>INSTRUCTIONS:</u> 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.

(5) Area Location/Identification

(Room Name/No., Evaluation Number, etc.):

#### Area 2 - Large Auditorium

(6) 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).

#### Refer to Attachment #2

(7) 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. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

#### Refer to Attached Building Drawing

- (8) PROPOSED REMEDIES:
- F). Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2 (b).

(4) PRO	POSED REMEDIES (co	nt.):	
G). Wil	any portion of this area by (X) Yes ( ) No	be abated by use of B.8 work pr	rocedures?
	If Yes, indicate below w B.8 work procedures:	which RACM in this area will be	e abated by use of the following
	B.8.2 & B.8.3	[REMOVAL]	Popcorn Ceiling; 1x1 Ceiling Tiles; Sheetrock/Joint
	B.8.2 & B.8.4	[ENCAPSULATION]	Compound
	B.8.2 & B.8.5	[ENCLOSURE]	
	B.8.6	[DEMOLITION]	
	B.8.7	[GLOVEBAG]	
	B.8.8	[ASP. ROOFING]	
,	vities in this area?  ( ) Yes (X) No  If yes, attach a detailed of	rs to the above selected B.8 products to the above selected B.8 products to the specific section of the specific section (	* * -
•	you proposing alternative area?	e procedures under B.11 for a	ny of the abatement activities in
	( ) Yes (X) No		
	proposing to utilize. Alt	description of the alternate procedures must include regulations and be as protective	a justification for not following
J). Will	any RACM remain in thi	s area after abatement?	
	( ) Yes ( ) No	(X) Beyond scope of inspection	on
	going Operations and M	on of the RACM that will rema aintenance Plan that will be im <b>Attachment 4</b>	

#### Department of Health

# Office of Occupational & Radiological Health APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

#### SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: Chafee Hall, University of Rhode Island Kingston Campus

<u>INSTRUCTIONS</u>: 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.

(9) Area Location/Identification

(Room Name/No., Evaluation Number, etc.):

#### Area 3 - Small Auditoriums/South Entrance

(10) 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).

#### Refer to Attachment #2

(11) 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. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

#### Refer to Attached Building Drawing

- (12) PROPOSED REMEDIES:
- K). Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2 (b).

(4) PRC	POSED REMEDIES (co	nt.):	
L). Will	any portion of this area b	e abated by use of B.8 work pr	ocedures?
	If Yes, indicate below w B.8 work procedures:	hich RACM in this area will be	e abated by use of the following
	B.8.2 & B.8.3	[REMOVAL]	Popcorn Ceiling; 1x1 Ceiling Tiles; Sheetrock/Joint
	B.8.2 & B.8.4	[ENCAPSULATION]	Compound; 2x1 Ceiling Tiles
	B.8.2 & B.8.5	[ENCLOSURE]	
	B.8.6	[DEMOLITION]	
	B.8.7	[GLOVEBAG]	
	B.8.8	[ASP. ROOFING]	
,	you requesting any waive rities in this area?	rs to the above selected B.8 pro	ocedure for any of the abatement
	( ) Yes (X) No		
	• '	lescription of the waivers reque be keyed to the specific section(	
	you proposing alternative area?	e procedures under B.11 for an	ny of the abatement activities in
	( ) Yes ( <b>X</b> ) No		
	proposing to utilize. Alt	lescription of the alternate procedures must include regulations and be as protective	a justification for not following
O). Will	any RACM remain in thi	s area after abatement?	
	( ) Yes ( ) No	(X) Beyond scope of inspection	on
	going Operations and M	on of the RACM that will rema aintenance Plan that will be imp <b>Attachment 4</b>	

#### Department of Health

# Office of Occupational & Radiological Health APPLICATION FOR APPROVAL OF AN ASBESTOS ABATEMENT PLAN

#### SUPPLEMENTAL INFORMATION: AREA DESCRIPTION AND PROPOSED REMEDY

BUILDING LOCATION: Chafee Hall, University of Rhode Island Kingston Campus

<u>INSTRUCTIONS:</u> 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.

(13) Area Location/Identification

(Room Name/No., Evaluation Number, etc.):

#### Area 4 - Basement Area

(14) 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).

#### Refer to Attachment #2

(15) 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. The location of the decontamination chamber must also be so indicated on the appropriate drawing(s).

#### Refer to Attached Building Drawing

- (16) PROPOSED REMEDIES:
- P). Attach a description of the interim Operations and Maintenance Plan that will be implemented in accordance with C.1.2 (b).

(4) PR	OPOSED REMEDIES (co	ont.):	
Q). Wi	ll any portion of this area (X) Yes ( ) No	be abated by use of B.8 work pr	rocedures?
	If Yes, indicate below v B.8 work procedures:	which RACM in this area will b	e abated by use of the following
	B.8.2 & B.8.3	[REMOVAL]	Spray-on Fireproofing
	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	[ASP. ROOFING]	
	you requesting any waivovities in this area?	ers to the above selected B.8 pr	ocedure for any of the abatement
	( ) Yes (X) No		
	•	description of the waivers requebe keyed to the specific section	ested you are proposing to (s) of the regulations for which
	you proposing alternativarea?	re procedures under B.11 for a	ny of the abatement activities in
	( ) Yes ( <b>X</b> ) No		
	proposing to utilize. Al	description of the alternate procedures must include regulations and be as protective	e a justification for not following
T). Wil	l any RACM remain in th	is area after abatement?	
	( <b>X</b> ) Yes ( ) No	( ) Beyond scope of inspection	on
	going Operations and M	ion of the RACM that will rema laintenance Plan that will be ime Attachment 4	

#### **ATTACHMENT #1**

#### In Process and Clearance Air Sampling

- A. RI Analytical will be on site for part time monitoring and will collect one compliance air sample outside the containment area daily for the duration of asbestos removal operations inside this building. The sample will be collected outside the decontamination unit.
- B. Any deviation in proper procedures on the part of the contractor shall be reported to the building owner. This includes inadequate paperwork on site, disagreement and/or any deviation from previously outlined work procedures, or if compliance samples in the work area vicinity exceed 0.01 f/cc. The contractor's work shall then be stopped, without repercussion to the building owner or the project-monitoring firm until any conflicts and/or problems have been resolved.
- C. After the interior areas have passed the consultant's visual inspection, he or his authorized representative will collect:

Area 1 – 5 PCM Clearance Air Samples

Area 2 – 4 PCM Clearance Air Samples

Area 3 – 7 PCM Clearance Air Samples

Area 4 - 2 PCM Clearance Air Samples

D. If clearance monitoring after clean-up results in fiber concentrations in excess of the RI rules and regulation clearance air requirements, the project area shall be wet-cleaned, misted with water, and encapsulated with a liquid encapsulant. A period of no less than 24 hours shall elapse before the next set of clearance air samples can be collected. The sampling process shall be repeated until a satisfactory clearance air level is attained.

The asbestos contractor is held responsible for any costs associated with the re-cleaning and re-sampling of an area should clearance air samples exceed 0.01 f/cc.

#### **ATTACHMENT #2**

#### ASB-16A-2

Description of Asbestos Containing Material

1<sup>st</sup> Floor Chafee Hall Sample Results – Collected 12/17/10

		man cample recours	Ooncoled 12	
Sample #	Description	Location	Quantity	% Asbestos
01	12x12 Black Floor Tile	Throughout Research Area	13,500 sf	1-5% Chrysotile
*06A-C	2x2 Ceiling Tile	Throughout	15,050 sf	Possibly Contaminated
*07A-C	Sheetrock	Throughout	~35,000 sf	due to overspray
*09A-C	Tinted Spray-on Fireproofing	On Ceiling Deck, Columns Throughout	16,000 sf	5-15% Chrysotile 5-15% Amosite
*010A-C	TSI Fittings	Above Drop Ceiling	~1,500 lf	Possibly Contaminated
	Fiberglass Lines	Throughout	1,300 11	due to overspray
*022	2x2 Sheetrock Ceiling Tile	Room 144	450 sf	Possibly Contaminated due to overspray
028	Spray-on Fireproofing	Mechanical Room Deck	~500 sf (Work Area)	5-15% Amosite
029	Spray-on Fireproofing	Room 125 Wall Void	See 09A-C	5-15% Amosite

Auditorium Sample Results - Collected 2/3/11

0					
Sample #	Description	Location	Quantity	% Asbestos	
01A-B	Popcorn Ceiling	Auditorium Ceilings	4,700 sf	1-5% Chrysotile	
02A-C	1x1 Ceiling Tile	Auditorium Ceilings	7,300 sf	1-5% Amosite	
04	Sheetrock	Auditorium Ceiling	12,000 sf	Contamination by Joint Compound	
05	Joint Compound	Auditorium Ceiling	12,000 SI	1-5% Chrysotile	

Additional Sampling - Collected 2/16/11

Sample #	Description	Location	Quantity	% Asbestos
09	2x1 Ceiling Tile	Auditorium South Entrance	550 sf	1-5% Chrysotile

It is the contractors responsibility to verify all quantities.

### ATTACHMENT #2 (Cont.)

Laboratory Analysis Reports:

- 1. Bulk Sampling Results
- 2. Pre-Abatement Air Sampling Results



#### CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division) Attn: Mr. Chad Prescott 41 Illinois Avenue Warwick, RI 02888 Date Received: 12/20/2010 Date Reported: 12/23/2010 Work Order #: 1012-24973

Site Location: PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

Enclosed please find your sample(s) analysis results for asbestos content. The six asbestos types include amosite, chrysotile, crocidolite, anthophyllite, tremolite, and actinolite.

METHODOLOGY: Polarized Light Microscopy (PLM) as suggested by EPA/600/R-93/116, July 1993 edition.

If the samples are found to be inhomogeneous, individual components will be analyzed separately. If individual components cannot be separated, the samples will be homogenized and a single result will be provided for the entire sample.

Sample results pertain only to items tested. The report must not be reproduced except in full with permission of R.I. Analytical. Samples submitted for analysis will be retained for three months for your future reference.

Our laboratory maintains NVLAP accreditation for bulk asbestos fiber analysis NVLAP lab code 101440-0.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government.

If you have any questions regarding this report, or if we may be of further assistance, please contact us.

Approved b

Data Reporting



R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

NO. DESCRIPTION  Ol: 12X12 BLACK FT  PLM Fiber Analysis  Asbestos  Chrysotile  Non-fibrous  95-99  Sample Color  Black	12/23/2010 EDN 12/23/2010 EDN 12/23/2010 EDN 12/23/2010 EDN 12/23/2010 EDN
Asbestos POSITIVE  Chrysotile 1-5 %  Non-fibrous 95-99 %	12/23/2010 EDN 12/23/2010 EDN
Chrysotile 1-5 % Non-fibrous 95-99 %	12/23/2010 EDN 12/23/2010 EDN
Non-fibrous 95-99 %	12/23/2010 EDN
	<del>_</del> .
Sample Color Black	12/23/2010 EDN
002 02: MASTIC TO 01 PLM Fiber Analysis	
Asbestos NEGATIVE	12/23/2010 EDN
Non-fibrous 100 %	12/23/2010 EDN
Sample Color Black	12/23/2010 EDN
003 03: 12 X 12 BLACK PLM Fiber Analysis	
Asbestos NEGATIVE	12/23/2010 EDN
Non-fibrous 100 %	12/23/2010 EDN
Sample Color Black	12/23/2010 EDN
004 04: MASTIC TO 03 PLM Fiber Analysis	
Asbestos NEGATIVE	12/23/2010 EDN
Non-fibrous 100 %	12/23/2010 EDN
Sample Color Yellow	12/23/2010 EDN
005 05: BLACK CB W/ADH. PLM Fiber Analysis	
Asbestos NEGATIVE	12/23/2010 EDN
Non-fibrous 100 %	12/23/2010 EDN
Sample Color Black	12/23/2010 EDN
006 06A: 2 X 2 CT PLM Fiber Analysis	
Asbestos NEGATIVE	12/23/2010 EDN
Glass Fiber 5-15 %	12/23/2010 EDN
Non-fibrous 85-95 %	12/23/2010 EDN
Sample Color Gray	12/23/2010 EDN
06B: 2 X 2 CT PLM Fiber Analysis	
Asbestos NEGATIVE	12/23/2010 EDN
Glass Fiber 5-15 %	12/23/2010 EDN
Non-fibrous 85-95 %	12/23/2010 EDN
Sample Color Gray	12/23/2010 EDN

R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

	MPLE SAMPLE		SAMPL	Æ	DATE	
NO	. DESCRIPTION	PARAMETER	RESUL	TS / UNITS	ANALYZED	ANALYST
800	06C: 2 X 2 CT	PLM Fiber Analysis				
		Asbestos	NEGATI	VE	12/23/2010	EDN
		Glass Fiber	5-15	%	12/23/2010	EDN
		Non-fibrous	85-95	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
009	07A: SHEETROCK	PLM Fiber Analysis				·
		Asbestos	NEGATIV	Æ	12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
010	07B: SHEETROCK	PLM Fiber Analysis				
		Asbestos	NEGATIV	Œ	12/23/2010	EDN
		Glass Fiber	1-5	%	12/23/2010	EDN
		Non-fibrous	95-99	%	12/23/2010	EDN
		Sample Color	White		12/23/2010	EDN
011	07C: SHEETROCK	PLM Fiber Analysis		<del></del>		
		Asbestos	NEGATIV	E	12/23/2010	EDN
		Glass Fiber	1-5	%	12/23/2010	EDN
		Non-fibrous	95-99	%	12/23/2010	EDN
		Sample Color	White		12/23/2010	EDN
012	08A: JOINT COMPOUND	PLM Fiber Analysis				<del></del>
		Asbestos	NEGATIVI	3	12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	White		12/23/2010	EDN
013	08B: JOINT COMPOUND	PLM Fiber Analysis				
		Asbestos	NEGATIVE	3	12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	White		12/23/2010	EDN
14	08C: JOINT COMPOUND	PLM Fiber Analysis				
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	White		12/23/2010	EDN

R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

	MPLE SAMPLE		SAMPLE RESULTS / UNITS		DATE	
NO.	. DESCRIPTION	PARAMETER			ANALYZED ANALYS	
015	09A: TINTED SPRAY-ON	PLM Fiber Analysis				
		Asbestos	POSITIV	E	12/23/2010	EDN
		Chrysotile	5-15	%	12/23/2010	EDN
		Amosite	5-15	%	12/23/2010	EDN
		Glass Fiber	35-45	%	12/23/2010	EDN
	•	Non-fibrous	25-35	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
016	09B: TINTED SPRAY-ON	PLM Fiber Analysis				
	+ STOP TO 09A					
017	09C: TINTED SPRAY-ON	PLM Fiber Analysis				
	+ STOP TO 09A					
018	010A: PIPE FITTINGS	PLM Fiber Analysis				
		Asbestos	NEGATIV	Œ	12/23/2010	EDN
		Glass Fiber	15-25	%	12/23/2010	EDN
		Non-fibrous	75-85	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
019	010B: PIPE FITTINGS	PLM Fiber Analysis				
		Asbestos	NEGATIV	E	12/23/2010	EDN
		Glass Fiber	5-15	%	12/23/2010	EDN
		Non-fibrous	85-95	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
20	010C: PIPE FITTINGS	PLM Fiber Analysis	<del></del>			· · · · · · · · · · · ·
		Asbestos	NEGATIVI	3	12/23/2010	EDN
		Glass Fiber	5-15	%	12/23/2010	EDN
		Non-fibrous	85-95	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
21	011: GREY CB W/ ADHESIVE	PLM Fiber Analysis				<del></del>
		Asbestos	NEGATIVE	3	12/23/2010	EDN
		Non-fibrous	100	0/0	12/23/2010	EDN
		Sample Color	Gгау		12/23/2010	EDN

R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

SAN NO.	MPLE SAMPLE DESCRIPTION	PARAMETER	SAMPLE RESULTS	/ UNITS	DATE ANALYZED	ANALYST
022	012: BLACK FT	PLM Fiber Analysis		7 01 (110	THIRD PELD	ANADISI
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Black		12/23/2010	EDN
023	013: MASTIC TO 012	PLM Fiber Analysis		-		
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Yellow		12/23/2010	EDN
024	014A: 9 X 9 BLACK FT	PLM Fiber Analysis				<del></del>
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Black		12/23/2010	EDN
025	014B: 9 X 9 BLACK FT	PLM Fiber Analysis		· · · · · · · · · · · · · · · · · · ·		
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Black		12/23/2010	EDN
026	014C: 9 X 9 BLACK FT	PLM Fiber Analysis			· · · · · · · · · · · · · · · · · · ·	
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Black		12/23/2010	EDN
027	015A: MASTIC TO 014A	PLM Fiber Analysis				
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Yellow		12/23/2010	EDN
028	015B: MASTIC TO 014B	PLM Fiber Analysis				<del></del> -
		Asbestos	NEGATIVE		12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Yellow		12/23/2010	EDN
)29	015C: MASTIC TO 014C	PLM Fiber Analysis				
		Asbestos	NEGATIVE		12/23/2010	EDN
	•	Non-fibrous	100	%	12/23/2010	EDN
	•	Sample Color	Yellow		12/23/2010	EDN

R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

SAN NO.	IPLE SAMPLE DESCRIPTION	PARAMETER	SAMPLE RESULTS / UNIT	DATE S ANALYZED	ANALYST
030	016A: 12 X 12 BLACK W/SPECKS	PLM Fiber Analysis	<u></u>		
		Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Black	12/23/2010	EDN
031	016B: 12 X 12 BLACK W/ SPECKS	PLM Fiber Analysis			· · · · · · · · · · · · · · · · · · ·
		Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Black	12/23/2010	EDN
032	016C: 12 X 12 BLACK W/ SPECKS	PLM Fiber Analysis			<del></del>
		Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Black	12/23/2010	EDN
)33	017A: MASTIC TO 016A	PLM Fiber Analysis			
		Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Yellow	12/23/2010	EDN
34	017B: MASTIC TO 016B	PLM Fiber Analysis			
		Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Yellow	12/23/2010	EDN
35	017C: MASTIC TO 016C	PLM Fiber Analysis			
		Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Yellow	12/23/2010	EDN
6	018: FLOOR SKIM	PLM Fiber Analysis			
	,	Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Gray	12/23/2010	EDN
7	019: CONCRETE	PLM Fiber Analysis			
		Asbestos	NEGATIVE	12/23/2010	EDN
		Non-fibrous	100 %	12/23/2010	EDN
		Sample Color	Gray	12/23/2010	EDN

R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

SAI NO	MPLE SAMPLE DESCRIPTION	PARAMETER	SAMPLE RESULTS / UNITS		DATE ANALYZED	ANALYST
038	020: 12 X 12 RED FT	PLM Fiber Analysis				
		Asbestos	NEGATI	VE	12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Red		12/23/2010	EDN
039	021: BLACK MASTIC TO 020	PLM Fiber Analysis				<del></del>
		Asbestos	ΝEGATΓ	VE	12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Black		12/23/2010	EDN
040	022: 2 X 2 SHEETROCK CT	PLM Fiber Analysis				<del></del>
		Asbestos	NEGATIN	Æ	12/23/2010	EDN
		Glass Fiber	1-5	%	12/23/2010	EDN
		Non-fibrous	95-99	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
041	023: SINK ANTI-CONDENSATE	PLM Fiber Analysis				
		Asbestos	NEGATIV	E	12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
	•	Sample Color	Black		12/23/2010	EDN
042	024A: END CAP	PLM Fiber Analysis				
		Asbestos	NEGATIV.	E	12/23/2010	EDN
		Glass Fiber	5-15	%	12/23/2010	EDN
		Non-fibrous	95-99	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN.
43	024B: END CAP	PLM Fiber Analysis				<del></del>
		Asbestos	NEGATIVE	3	12/23/2010	EDN
		Glass Fiber	5-15	%	12/23/2010	EDN
		Non-fibrous	95-99	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
14	024C: END CAP	PLM Fiber Analysis	<del>-</del>		<del></del>	
		Asbestos	NEGATIVE	,	12/23/2010	EDN
		Glass Fiber	5-15	%	12/23/2010	EDN
		Non-fibrous	85-95	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN

R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

	SA NO	MPLE SAMPLE DESCRIPTION	PARAMETER	SAMPLE RESULTS / UNITS		DATE ANALYZED	ANIATACOT
Asbestos   NEGATIVE   12/23/2010   EDN	045	025A: PIPE FITTINGS MR	PLM Fiber Analysis	1000		ANALIZED	ANALYST
Glass Fiber   5-15			•	NEGAT	IVE	12/23/2010	EDM
Non-fibrous   S5-95			Glass Fiber	5-15	%		
Sample Color   Gray   12/23/2010   EDN	•		Non-fibrous	85-95	%		
			Sample Color	Gray			
Asbestos   NEGATIVE   12/23/2010   EDN	046	025B: PIPE FITTINGS MR	PLM Fiber Analysis				<del></del>
Glass Fiber   5-15				NEGATI	VE	12/23/2010	FDN
Non-fibrous			Glass Fiber	5-15	%		
Sample Color   Gray   12/23/2010   EDN			Non-fibrous	85-95	%		
Asbestos NEGATIVE 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN O48 026: VIBRATION CLOTH PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O48 027: DUCT JACKET PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O49 027: DUCT JACKET PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O49 028: SPRAY-ON MR PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O49 028: SPRAY-ON MR PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O49 028: SPRAY-ON MR PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O49 028: SPRAY-ON MR PLM Fiber Analysis Asbestos POSITIVE 12/23/2010 EDN O49 028: SPRAY-ON MR PLM Fiber Analysis Asbestos POSITIVE 12/23/2010 EDN O49 028: SPRAY-ON MR PLM Fiber Analysis Asbestos POSITIVE 12/23/2010 EDN O49 028: SPRAY-ON MR PLM Fiber Analysis O40 028: SPRAY-ON MR PLM Fiber O40 040 040 040 040 040 040 040 040 040			Sample Color	Gray			
Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN O48 026: VIBRATION CLOTH PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O50 PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN O50 PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN O50 PLM Fiber Analysis Asbestos POSITIVE 12/23/2010 EDN O50 PLM Fiber Analysis PLM Fiber Anal	047	025C: PIPE FITTINGS MR	PLM Fiber Analysis				
Glass Fiber   5-15   %   12/23/2010   EDN			Asbestos	NEGATI	VE	12/23/2010	EDN
Non-fibrous   85-95   %   12/23/2010   EDN			Glass Fiber	5-15	%	12/23/2010	
Sample Color   Gray   12/23/2010   EDN			Non-fibrous	85-95	%	12/23/2010	
Asbestos NEGATIVE 12/23/2010 EDN  Glass Fiber 5-15 % 12/23/2010 EDN  Non-fibrous 85-95 % 12/23/2010 EDN  Sample Color Black 12/23/2010 EDN  O27: DUCT JACKET PLM Fiber Analysis  Asbestos NEGATIVE 12/23/2010 EDN  Glass Fiber 5-15 % 12/23/2010 EDN  Non-fibrous 85-95 % 12/23/2010 EDN  Non-fibrous 85-95 % 12/23/2010 EDN  Sample Color Gray 12/23/2010 EDN  Sample Color Gray 12/23/2010 EDN  Asbestos POSITIVE 12/23/2010 EDN  Amosite 5-15 % 12/23/2010 EDN  Glass Fiber 5-15 % 12/23/2010 EDN  Amosite 5-15 % 12/23/2010 EDN  Glass Fiber 5-15 % 12/23/2010 EDN  Non-fibrous 70-90 % 12/23/2010 EDN  Non-fibrous 70-90 % 12/23/2010 EDN			Sample Color	Gray			
Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Black 12/23/2010 EDN  O27: DUCT JACKET PLM Fiber Analysis  Asbestos NEGATIVE 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN  O28: SPRAY-ON MR PLM Fiber Analysis  Asbestos POSITIVE 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN OGlass FIBER 5-15 % 12/23/2010 EDN	048	026: VIBRATION CLOTH	PLM Fiber Analysis				
Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Black 12/23/2010 EDN  Output Jacket PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN  Output Jacket PLM Fiber Analysis Asbestos NEGATIVE 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Output Jacket			Asbestos	NEGATIV	Æ	12/23/2010	EDN
Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Black 12/23/2010 EDN O27: DUCT JACKET  PLM Fiber Analysis  Asbestos NEGATIVE 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN O28: SPRAY-ON MR  PLM Fiber Analysis Asbestos POSITIVE 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN			Glass Fiber	5-15	%	12/23/2010	
DATE   DUCT JACKET   PLM Fiber Analysis   Asbestos   NEGATIVE   12/23/2010   EDN			Non-fibrous	85-95	%	12/23/2010	
Asbestos NEGATIVE 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN  50 028: SPRAY-ON MR  PLM Fiber Analysis Asbestos POSITIVE 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN  Sample Color Gray 12/23/2010 EDN Offibrous 70-90 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN		·	Sample Color	Black		12/23/2010	EDN
Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN  50 028: SPRAY-ON MR PLM Fiber Analysis  Asbestos POSITIVE 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN	049	027: DUCT JACKET	PLM Fiber Analysis				
Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN  50 028: SPRAY-ON MR PLM Fiber Analysis  Asbestos POSITIVE 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN			Asbestos	NEGATIV	E	12/23/2010	EDN
Non-fibrous 85-95 % 12/23/2010 EDN Sample Color Gray 12/23/2010 EDN  50 028: SPRAY-ON MR PLM Fiber Analysis  Asbestos POSITIVE 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN			Glass Fiber	5-15	%	12/23/2010	EDN
DA DE SPRAY-ON MR PLM Fiber Analysis  Asbestos POSITIVE 12/23/2010 EDN  Amosite 5-15 % 12/23/2010 EDN  Glass Fiber 5-15 % 12/23/2010 EDN  Non-fibrous 70-90 % 12/23/2010 EDN			Non-fibrous	85-95	%	12/23/2010	
Asbestos POSITIVE 12/23/2010 EDN Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN			Sample Color	Gray		12/23/2010	EDN
Amosite 5-15 % 12/23/2010 EDN  Glass Fiber 5-15 % 12/23/2010 EDN  Non-fibrous 70-90 % 12/23/2010 EDN	50	028: SPRAY-ON MR	PLM Fiber Analysis				<del>-</del> -
Amosite 5-15 % 12/23/2010 EDN Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN			Asbestos	POSITIVE		12/23/2010	EDN
Glass Fiber 5-15 % 12/23/2010 EDN Non-fibrous 70-90 % 12/23/2010 EDN			Amosite	5-15	%	12/23/2010	
Non-fibrous 70-90 % 12/23/2010 EDN			Glass Fiber	5-15	%	12/23/2010	EDN
Sample Color Gray 12/23/2010 EDN			Non-fibrous	70-90	%	12/23/2010	
			Sample Color	Gray		12/23/2010	EDN

R.I. Analytical (EAM Division) Date Received: 12/20/2010 Work Order #: 1012-24973

Site Location:PROJECT # 100858 URI - CHAFEE HALL 1ST FLOOR RESEARCH WING

METHOD: EPA/600/R-93-116

SAMP NO.	LE SAMPLE DESCRIPTION	PARAMETER	SAMPL RESULT	E FS / UNITS	DATE ANALYZED	ANALYST
051	029: SPRAY-ON WV	PLM Fiber Analysis				
		Asbestos	POSITIVE	E	12/23/2010	EDN
		Amosite	5-15	%	12/23/2010	EDN
		Glass Fiber	5-15	%	12/23/2010	EDN
		Non-fibrous	70-90	%	12/23/2010	EDN
		Sample Color	Gray		12/23/2010	EDN
052	030: COUNTER TOP	PLM Fiber Analysis				
		Asbestos	NEGATIV	Ē	12/23/2010	EDN
		Non-fibrous	100	%	12/23/2010	EDN
		Sample Color	Black		12/23/2010	EDN

Project# 100858 URI - Chafee Hall 1st Floor Research Wing



#### CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division) Attn: Mr. Chad Prescott 41 Illinois Avenue Warwick, RI 02888 Date Received: 2/4/2011 Date Reported: 2/8/2011 Work Order #: 1102-01997

Site Location:PROJECT #100858 CHAFEE 1ST FL. URI ADDITIONAL SAMPLING

Enclosed please find your sample(s) analysis results for asbestos content. The six asbestos types include amosite, chrysotile, crocidolite, anthophyllite, tremolite, and actinolite.

METHODOLOGY: Polarized Light Microscopy (PLM) as suggested by EPA/600/R-93/116, July 1993 edition.

If the samples are found to be inhomogeneous, individual components will be analyzed separately. If individual components cannot be separated, the samples will be homogenized and a single result will be provided for the entire sample.

Sample results pertain only to items tested. The report must not be reproduced except in full with permission of R.I. Analytical. Samples submitted for analysis will be retained for three months for your future reference.

Our laboratory maintains NVLAP accreditation for bulk asbestos fiber analysis NVLAP lab code 101440-0.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government.

If you have any questions regarding this report, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting



R.I. Analytical (EAM Division)
Date Received: 2/4/2011
Work Order #: 1102-01997

Site Location:PROJECT #100858 CHAFEE 1ST FL. URI ADDITIONAL SAMPLING

SAMPLE SAMPLE				SAMPLE		
NO	. DESCRIPTION	PARAMETER	RESUL	TS / UNITS	ANALYZED	ANALYS
001	#1 BEAM	PLM Fiber Analysis				
		Asbestos	NEGATI	IVE .	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	75-85	%	2/8/2011	EVH
		Sample Color	Green		2/8/2011	EVH
002	#2 DEBRIS ON WALL	PLM Fiber Analysis				
		Asbestos	POSITIV	E	2/8/2011	EVH
		Chrysotile	5-15	%	2/8/2011	EVH
		Amosite	5-15	%	2/8/2011	EVH
		Non-fibrous	70-90	%	2/8/2011	EVH
		Sample Color	Gray		2/8/2011	EVH-
003	#3 BEAM	PLM Fiber Analysis				
		Asbestos	NEGATIN	VE	2/8/2011	EVH
		Cellulose	15-25	%	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	70-90	%	2/8/2011	EVH
	_	Sample Color	Green		2/8/2011	EVH
004	#4 BEAM	PLM Fiber Analysis				
		Asbestos	NEGATIV	E	2/8/2011	ÉVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	75-85	%	2/8/2011	EVH
		Sample Color	Green		2/8/2011	EVH
05	#5 DEBRIS ON CT	PLM Fiber Analysis			<del></del>	
		Asbestos	POSITIVE		2/8/2011	EVH
		Amosite	15-25	%	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	50-70	%	2/8/2011	EVH
_		Sample Color	Gray		2/8/2011	EVH
06	#6 STRUCTURAL BEAM	PLM Fiber Analysis	77.61	<del></del>		
		Asbestos	POSITIVE		2/8/2011	EVH
	•	Amosite	15-25	%	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	50-70	%	2/8/2011	EVH
		Sample Color	Gray		2/8/2011	EVH

R.I. Analytical (EAM Division) Date Received: 2/4/2011 Work Order #: 1102-01997

Site Location:PROJECT #100858 CHAFEE 1ST FL. URI ADDITIONAL SAMPLING

SAMPLE SAMPLE NO. DESCRIPTION	PARAMETER	SAMPI RESUL	LE LTS / UNITS	DATE ANALYZED	ANALYST
007 #7 BEAM	PLM Fiber Analysis		- CINID	THAT LOED	20100131
	Asbestos	NEGATI	VE	2/8/2011	EVH
	Cellulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
008 #8 BEAM	PLM Fiber Analysis				<del></del>
	Asbestos	NEGATI	VE	2/8/2011	EVH
	Cellulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
009 #9 BEAM	PLM Fiber Analysis			· · · · · · · · · · · · · · · · · · ·	
	Asbestos	NEGATIV	Œ	2/8/2011	EVH
	Cellulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
010 #10 BEAM	PLM Fiber Analysis				<del></del>
	Asbestos	NEGATIV	E	2/8/2011	EVH
	Cellulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
#11 OVERSPRAY ON ELECTRIC	PLM Fiber Analysis	<u> </u>			<del></del>
	Asbestos	POSITIVE		2/8/2011	EVH
	Amosite	1-5	%	2/8/2011	EVH
	Glass Fiber	15-25	0/0	2/8/2011	EVH
	Non-fibrous	70-84	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH

R.I. Analytical (EAM Division) Date Received: 2/4/2011 Work Order #: 1102-01997

Site Location:PROJECT #100858 CHAFEE 1ST FL. URI ADDITIONAL SAMPLING

SAMPLE SAMPLE		SAMPLE	Ξ	DATE	
NO. DESCRIPTION	PARAMETER	RESULT	S/UNITS	ANALYZED	ANALYST
012 #12 BEAM	PLM Fiber Analysis			-	
	Asbestos	NEGATIV.	E	2/8/2011	EVH
	Cellulose	15-25	%.	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
#13 OVERSPRAY ON PIPE	PLM Fiber Analysis				<del></del>
	Asbestos	NEGATIVE	Ξ	2/8/2011	EVH
	Cellulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
14 #14 BEAM	PLM Fiber Analysis				
	Asbestos	NEGATIVE	3	2/8/2011	EVH
	Celiulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
5 #15 OVERSPRAY ON ELECTRICAL	PLM Fiber Analysis				<del></del>
	Asbestos	NEGATIVE		2/8/2011	EVH
	Cellulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH
#16 BEAM	PLM Fiber Analysis		<del></del>		
	Asbestos	NEGATIVE		2/8/2011	EVH
	Cellulose	15-25	%	2/8/2011	EVH
	Glass Fiber	15-25	%	2/8/2011	EVH
	Non-fibrous	50-70	%	2/8/2011	EVH
	Sample Color	Green		2/8/2011	EVH

R.I. Analytical (EAM Division) Date Received: 2/4/2011 Work Order #: 1102-01997

Site Location:PROJECT #100858 CHAFEE 1ST FL. URI ADDITIONAL SAMPLING

METHOD: EPA/600/R-93-116

	AMPLE SAMPLE SAMPLE		LE	DATE		
NO.	DESCRIPTION	PARAMETER	RESUL	TS / UNITS	ANALYZED	ANALYST
017	#17 BEAM	PLM Fiber Analysis		*		
		Asbestos	NEGATI	VE	2/8/2011	EVH
		Cellulose	15-25	%	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	50-70	%	2/8/2011	EVH
		Sample Color	Green		2/8/2011	EVH
018	#18 BEAM	PLM Fiber Analysis	·		<del></del>	<del></del>
		Asbestos	NEGATI	VE	2/8/2011	EVH
		Cellulose	15-25	%	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	50-70	%	2/8/2011	EVH
		Sample Color	Green		2/8/2011	EVH
019	#19 OVERSPRAY ON PIPE	PLM Fiber Analysis				<del></del>
		Asbestos	NEGATIV	Ē	2/8/2011	EVH
		Cellulose	15-25	%	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	50-70	%	2/8/2011	EVH
<del>_</del> .		Sample Color	Green		2/8/2011	EVH
20	#20 WALL MATERIAL	PLM Fiber Analysis				<del></del>
		Asbestos	NEGATIV	E	2/8/2011	EVH
		Cellulose	1-5	%	2/8/2011	EVH
		Glass Fiber	1-5	%	2/8/2011	EVH
		Non-fibrous	90-98	%	2/8/2011	EVH
		Sample Color	White		2/8/2011	EVH
21	#21 WALL MATERIAL	PLM Fiber Analysis	·	<del></del>		<del></del>
		Asbestos	NEGATIVE		2/8/2011	EVH
		Cellulose	1-5	%	2/8/2011	EVH
		Glass Fiber	1-5	%	2/8/2011	EVH
		Non-fibrous	90-98	%	2/8/2011	EVH
		Sample Color	White		2/8/2011	EVH

R.I. Analytical (EAM Division)
Date Received: 2/4/2011
Work Order #: 1102-01997

Site Location:PROJECT #100858 CHAFEE 1ST FL. URI ADDITIONAL SAMPLING

METHOD: EPA/600/R-93-116

SAME			SAMPL	SAMPLE RESULTS / UNITS		
NO.	DESCRIPTION	PARAMETER	RESUL			ANALYST
022	#22 SPRAY-ON IN WALL VOID	PLM Fiber Analysis				<del></del> .
		Asbestos	POSITIVI	Ξ	2/8/2011	EVH
		Amosite	15-25	%	2/8/2011	EVH
		Glass Fiber	15-25	%	2/8/2011	EVH
		Non-fibrous	50-70	%	2/8/2011	EVH
		Sample Color	Gray		2/8/2011	EVH
023	#23 SHEETROCK	PLM Fiber Analysis				
		Asbestos	NEGATIV	E	2/8/2011	EVH
		Celluiose	1-5	%	2/8/2011	EVH
		Glass Fiber	1-5	%	2/8/2011	EVH
		Non-fibrous	90-98	%	2/8/2011	EVH
		Sample Color	Gray		2/8/2011	EVH

Project #100858 Chafee 1st Floor URI Additional Sampling



#### CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division) Attn: Mr. Chad Prescott 41 Illinois Avenue Warwick, RI 02888 **Date Received:** 2/4/2011 **Date Reported:** 2/8/2011 **Work Order #:** 1102-01995

Site Location: PROJECT #110062 CHAFEE HALL - URI AUDITORIUM

Enclosed please find your sample(s) analysis results for asbestos content. The six asbestos types include amosite, chrysotile, crocidolite, anthophyllite, tremolite, and actinolite.

METHODOLOGY: Polarized Light Microscopy (PLM) as suggested by EPA/600/R-93/116, July 1993 edition.

If the samples are found to be inhomogeneous, individual components will be analyzed separately. If individual components cannot be separated, the samples will be homogenized and a single result will be provided for the entire sample.

Sample results pertain only to items tested. The report must not be reproduced except in full with permission of R.I. Analytical. Samples submitted for analysis will be retained for three months for your future reference.

Our laboratory maintains NVLAP accreditation for bulk asbestos fiber analysis NVLAP lab code 101440-0.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government.

If you have any questions regarding this report, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting



R.I. Analytical (EAM Division) Date Received: 2/4/2011 Work Order #: 1102-01995

Site Location:PROJECT #110062 CHAFEE HALL - URI AUDITORIUM

METHOD: EPA/600/R-93-116

SAM			SAMPLE	2	DATE	
NO.	DESCRIPTION	PARAMETER	RESULT	S / UNITS	ANALYZED	ANALYST
001	01A POPCORN CEILING	PLM Fiber Analysis				
		Asbestos	POSITIVE		2/8/2011	EVH
		Chrysotile	1-5	%	2/8/2011	EVH
		Non-fibrous	95-99	%	2/8/201 I	EVH
		Sample Color	White		2/8/2011	EVH
002	01B POPCORN CEILING	PLM Fiber Analysis				
		Asbestos	POSITIVE		2/8/2011	EVH
		Chrysotile	1-5	%	2/8/2011	EVH
		Non-fibrous	95-99	%	2/8/2011	EVH
		Sample Color	White		2/8/2011	EVH
003	02A 1 X 1 CT	PLM Fiber Analysis				
		Asbestos	POSITIVE		2/8/2011	EVH
		Amosite	1-5	%	2/8/2011	EVH
		Non-fibrous	95-99	%	2/8/2011	EVH
		Sample Color	Gray		2/8/2011	EVH
004	02B 1 X 1 CT	PLM Fiber Analysis				
		Asbestos	POSITIVE		2/8/2011	EVH
		Amosite	1-5	%	2/8/2011	EVH
		Non-fibrous	95-99	%	2/8/2011	EVH
		Sample Color	Gray		2/8/2011	EVH
05	03A GLUE DAB	PLM Fiber Analysis				
		Asbestos	NEGATIVE	Z.	2/8/2011	EVH
		Non-fibrous	100	%	2/8/2011	EVH
		Sample Color	Brown		2/8/2011	EVH
06	03B GLUE DAB	PLM Fiber Analysis				
		Asbestos	NEGATIVE		2/8/2011	EVH
		Non-fibrous	100	%	2/8/2011	EVH
		Sample Color	Brown		2/8/2011	EVH
07	04 SHEETROCK	PLM Fiber Analysis				
		Asbestos	NEGATIVE		2/8/2011	EVH
		Cellulose	1-5	%	2/8/2011	EVH
		Glass Fiber	1-5	%	2/8/2011	EVH
		Non-fibrous	90-98	%	2/8/2011	EVH
		Sample Color	White		2/8/2011	EVH

R.I. Analytical (EAM Division) Date Received: 2/4/2011 Work Order #: 1102-01995

Site Location:PROJECT #110062 CHAFEE HALL - URI AUDITORIUM

METHOD: EPA/600/R-93-116

SAMPLE SAMPLE			SAMPLE		DATE	
NO.	DESCRIPTION	PARAMETER	METER RESULTS	S / UNITS	ANALYZED	ANALYST
800	05 JOINT COMPOUND	PLM Fiber Analysis				<del></del>
		Asbestos	POSITIVE		2/8/2011	EVH
		Chrysotile	1-5	%	2/8/2011	EVH
		Non-fibrous	95-99	%	2/8/2011	EVH
		Sample Color	Beige		2/8/2011	EVH
				,,		

Project # 110062 Chafee Hall - URI Auditorium



#### CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division) Attn: Mr. Chad Prescott 41 Illinois Avenue Warwick, RI 02888 Date Received: 2/4/2011
Date Reported: 2/8/2011
Work Order #: 1102-01991

Site Location:PROJECT #110062 CHAFEE HALL - URI FIRE UPGRADE

Enclosed please find your sample(s) analysis results for asbestos content. The six asbestos types include amosite, chrysotile, crocidolite, anthophyllite, tremolite, and actinolite.

METHODOLOGY: Polarized Light Microscopy (PLM) as suggested by EPA/600/R-93/116, July 1993 edition.

If the samples are found to be inhomogeneous, individual components will be analyzed separately. If individual components cannot be separated, the samples will be homogenized and a single result will be provided for the entire sample.

Sample results pertain only to items tested. The report must not be reproduced except in full with permission of R.I. Analytical. Samples submitted for analysis will be retained for three months for your future reference.

Our laboratory maintains NVLAP accreditation for bulk asbestos fiber analysis NVLAP lab code 101440-0.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government.

If you have any questions regarding this report, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting

R.I. Analytical (EAM Division) Date Received: 2/4/2011 Work Order #: 1102-01991

Site Location:PROJECT #110062 CHAFEE HALL - URI FIRE UPGRADE

METHOD: EPA/600/R-93-116

	MPLE SAMPLE		SAMPL	E	DATE	
NO.	DESCRIPTION	PARAMETER	RESUL	TS / UNITS	ANALYZED	ANALYST
001	2-1 SPRAY-ON	PLM Fiber Analysis				
		Asbestos	NEGATIV	VE	2/8/2011	EDN
		Cellulose	15-25	%	2/8/2011	EDN
		Glass Fiber	15-25	%	2/8/2011	EDN
		Non-fibrous	50-70	%	2/8/2011	EDN
		Sample Color	Green		2/8/2011	EDN
002	2-2 SPRAY-ON	PLM Fiber Analysis	····		-	
		Asbestos	NEGATIV	Æ	2/8/2011	EDN
		Cellulose	15-25	%	2/8/2011	EDN
		Glass Fiber	15-25	%	2/8/2011	EDN
		Non-fibrous	50-70	%	2/8/2011	EDN
		Sample Color	Green		2/8/2011	EDN
003	2-3 SPRAY-ON	PLM Fiber Analysis		<del></del>		
		Asbestos	NEGATIV	E	2/8/2011	EDN
		Cellulose	15-25	%	2/8/2011	EDN
		Glass Fiber	15-25	%	2/8/2011	EDN
		Non-fibrous	50-70	%	2/8/2011	EDN
		Sample Color	Green		2/8/2011	EDN
04	4-1 SHEETROCK	PLM Fiber Analysis				·
		Asbestos	NEGATIVI	Е	2/8/2011	EDN
		Cellulose	1-5	%	2/8/2011	EDN
		Glass Fiber	1-5	%	2/8/2011	EDN
		Non-fibrous	90-98	%	2/8/2011	EDN
		Sample Color	Gray		2/8/2011	EDN
niect#	110062					

Project #110062 Chafee Hall-URI Fire Upgrade



#### CERTIFICATE OF ANALYSIS

R.I. Analytical (EAM Division) Attn: Mr. Chad Prescott 41 Illinois Avenue Warwick, RI 02888 **Date Received:** 2/16/2011 **Date Reported:** 2/17/2011 **Work Order #:** 1102-02737

Site Location: PROJECT #110062 CHAFEE HALL - URI HIGH RISE

Enclosed please find your sample(s) analysis results for asbestos content. The six asbestos types include amosite, chrysotile, crocidolite, anthophyllite, tremolite, and actinolite.

METHODOLOGY: Polarized Light Microscopy (PLM) as suggested by EPA/600/R-93/116, July 1993 edition.

If the samples are found to be inhomogeneous, individual components will be analyzed separately. If individual components cannot be separated, the samples will be homogenized and a single result will be provided for the entire sample.

Sample results pertain only to items tested. The report must not be reproduced except in full with permission of R.I. Analytical. Samples submitted for analysis will be retained for three months for your future reference.

Our laboratory maintains NVLAP accreditation for bulk asbestos fiber analysis NVLAP lab code 101440-0.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government.

If you have any questions regarding this report, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting



R.I. Analytical (EAM Division) Date Received: 2/16/2011 Work Order #: 1102-02737

Site Location:PROJECT #110062 CHAFEE HALL - URI HIGH RISE

#### METHOD: EPA/600/R-93-116

SAM	IPLE SAMPLE		SAMPLI	E	DATE	
NO.	DESCRIPTION	PARAMETER	RESULT	S / UNITS	ANALYZED	ANALYST
001	01 PIPE FITTING	PLM Fiber Analysis		•		
		Asbestos	NEGATIV	E	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	75-85	%	2/16/2011	EDN
		Sample Color	Gray		2/16/2011	EDN
002	02 SPRAY-ON	PLM Fiber Analysis				
		Asbestos	NEGATIV	E	2/16/2011	EDN
		Cellulose	15-25	%	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	50-70	%	2/16/2011	EDN
		Sample Color	Green		2/16/2011	EDN
003	03 OVERSPRAY	PLM Fiber Analysis				
		Asbestos	NEGATIV	E	2/16/2011	EDN
		Cellulose	15-25	%	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	50-70	%	2/16/2011	EDN
		Sample Color	Green		2/16/2011	EDN
004	04 SPRAY-ON	PLM Fiber Analysis				
		Asbestos	NEGATIVI	Ε	2/16/2011	EDN
		Cellulose	15-25	%	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	50-70	%	2/16/2011	EDN
		Sample Color	Green		2/16/2011	EDN
005	05 OVERSPRAY	PLM Fiber Analysis	<del></del>			
		Asbestos	NEGATIVE	3	2/16/2011	EDN
		Cellulose	15-25	%	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	50-70	%	2/16/2011	EDN
		Sample Color	Green		2/16/2011	EDN
006	06 SPRAY-ON	PLM Fiber Analysis		· · · · · · · · · · · · · · · · · · ·		<del></del>
		Asbestos	NEGATIVE	E	2/16/2011	EDN
		Cellulose	15-25	%	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	50-70	%	2/16/2011	EDN
		Sample Color	Green		2/16/2011	EDN

R.I. Analytical (EAM Division) Date Received: 2/16/2011 Work Order #: 1102-02737

Site Location:PROJECT #110062 CHAFEE HALL - URI HIGH RISE

METHOD: EPA/600/R-93-116

SAMPLE SAMPLE			SAMPLE		DATE	
NO.	DESCRIPTION	PARAMETER	RESULT	FS / UNITS	ANALYZED	ANALYST
007	07 SPRAY-ON	PLM Fiber Analysis				
		Asbestos	NEGATIV	Æ	2/16/2011	EDN
		Cellulose	15-25	%	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	50-70	%	2/16/2011	EDN
		Sample Color	Green		2/16/2011	EDN
800	08 OVERSPRAY	PLM Fiber Analysis				
		Asbestos	NEGATIV	Œ	2/16/2011	EDN
		Cellulose	15-25	%	2/16/2011	EDN
		Glass Fiber	15-25	%	2/16/2011	EDN
		Non-fibrous	50-70	%	2/16/2011	EDN
		Sample Color	Gray		2/16/2011	EDN
009	09 2 X 1 CT	PLM Fiber Analysis				
		Asbestos	POSITIVE		2/16/2011	EDN
		Chrysotile	1-5	%	2/16/2011	EDN
		Glass Fiber	40-60	%	2/16/2011	EDN
		Non-fibrous	35-60	%	2/16/2011	EDN
		Sample Color	Gray		2/16/2011	EDN
010	010 CEILING	PLM Fiber Analysis				
		Asbestos	NEGATIV	Е	2/16/2011	EDN
		Non-fibrous	100	%	2/16/2011	EDN
		Sample Color	White		2/16/2011	EDN

Project #110062 Chafee Hall-URI High Rise, 2nd Floor & Auditorium Additional Sampling

#### **ATTACHMENT #3**

#### **Interim Operations & Maintenance Plan**

The contractors, maintenance personnel and staff associated with Chafee Hall are aware of the presence and location of ACBM within the above stated areas. They have been instructed not to disturb the material due to the potential health hazards if fibers become airborne.

#### 1. Notification

All building occupants, also any contractors entering the building and/or premises to perform work, shall be notified of the presence and location of asbestos-containing material(s) and cautioned regarding disturbance of the material(s). Also, the building occupants must be notified regarding the occurrence of asbestos abatement activities. If an emergency fiber release occurs, the following procedures shall be initiated.

#### 2. Fiber Release Episodes

#### A. Minor Release Episode

If a minor fiber release episode occurs (release of less than 10 linear feet or 25 square feet of material), trained maintenance staff may perform the cleaning. Access to the area shall be restricted during clean-up. All debris shall be thoroughly wetted using amended water and placed in labeled, double six-mil polyethylene bags. The area shall then be cleaned using HEPA filtered vacuums and/or wet cleaning methods. Damaged material must be cleaned and repaired with non-asbestos-containing material. The area shall then be evaluated to decide if further action is necessary.

#### B. Major Release Episode

If a major fiber release episode occurs (falling or dislodging of more than 10 linear feet or 25 square feet of ACBM), the cleaning must be carried out and directed by persons accredited to conduct and design response actions. After such an episode, the area shall be immediately restricted and entry to the area prevented. Warning signs shall be posted to caution people other than those qualified to deal with the problem. Air handling units in the area shall be shut down to prevent the spread of fibers beyond the problem area. A response action shall be designed and carried out by qualified personnel.

#### 3. Training

Any employee who, because of their work, may disturb asbestos- containing material shall be trained and certified as a Competent Person as described by the R.I. Rules and Regulations for Asbestos Control. The program coordinator shall ensure that the procedures described above to protect the building occupants shall be followed for any operations and maintenance activities disturbing or involving ACBM.

#### **ATTACHMENT #4**

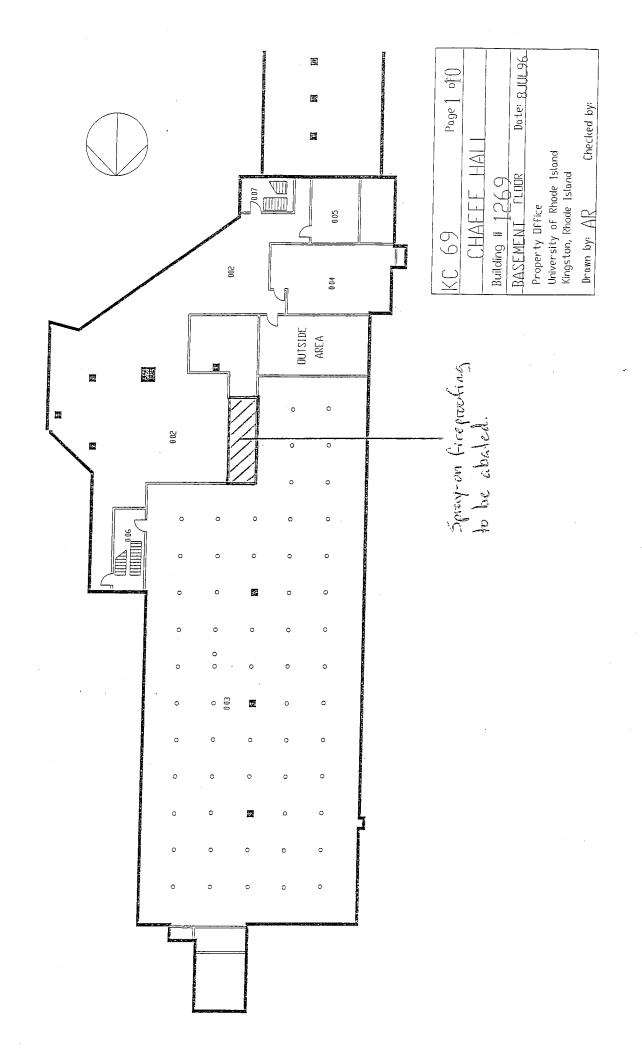
#### Scope of Work / Description of Waivers

All proper OSHA, federal, state, and local safety regulations shall be followed.

All materials will be removed utilizing B8.2 and B8.3 work procedures.

RI Analytical requests a waiver on signage through out the entire building; instead signage shall be placed in the immediate work area. All immediate entrances to the abatement areas will be marked with the appropriate signage and only accessed by the contractors associated with the project.

Pre-abatement air samples have not been collected at this time. Samples will be collected prior to abatement activities and forward to the RI DOH.



fax 401.861.5588

## **URI Chafee Hall Fire Code Upgrades University of Rhode Island, Kingston, RI**

#### PRE-BID WALKTHROUGH NOTES:

Date: February 17, 2011, 10:00 AM at the Gallanti Lounge

Present: Peter Scalora, Phaedra Caouette, Dennis Veader, OCP/Gilbane; Tim LaRose, Hughes

Associates; Nate Ginsburg, Schane Tallardy; Brewster Thornton Group Architects, BTGA;

Various General Contractors (refer to sign-in sheet)

Prepared by: Schane M. Tallardy Distribution: Addendum #4

The following agenda was reviewed by Peter Scalora

- □ Project Name: Chafee Hall Fire Code Upgrades
- □ URI Staff/OCP Project Manager
  - o Peter Scalora URI Project Manager, Gilbane Building Company
  - o Will Dvorak URI Associate Dean of Arts and Sciences
  - o Dennis Veader URI Construction Inspector, Gilbane Building Company
  - o Phaedra Caouette URI Project Coordinator, Gilbane Building Company
- □ Architect/Engineering Firms
  - o Tim LaRose Prime, Engineer of Record, Hughes Associates (HAI)
  - Nate Ginsburg Principal-in-Charget, Brewster Thornton Group Architects (BTGA)
  - o Schane Tallardy Project Manager, Brewster Thornton Group Architects
- □ Agenda
  - o Review of Bid Requirements, Project Scope, Alternates
  - o Building Walk through
  - Questions and Answers

#### □ Bid Procedure

- o Bid Due 3/1/11 @ 1:45pm DOA in Providence, addendum#2 will extend the bid date, please see State Purchasing website.
- Not a Mandatory Pre-Bid, Sign-in please
- o Docs available online, and for review at HAI and URI OCP
- Questions should be directed to John O'Hara, Division of Purchases, due Thursday 2/24/11.
   Copy Tim LaRose at HAI to speed answer process.
- □ Bid Form 00410 complete in totality (fill in all spaces), Dollars, Alts, Breakouts, Unit Prices, License #, Addenda, Signature.
- □ Schedule and LD's Completion by 9/2/11(Superseded please see revised bid form)
  - o LD's will be reduced to \$250/day, not a penalty, encouragement to complete on time. (Superseded please see revised bid form)

#### New Sections in the URI Project Manual

- □ Section 00710 American Recovery and Reinvestment Act requires reporting man-hours by classification weekly, prevailing wage tracking different for State and Fed, track and report ARRA prevailing wages by Federal standard. ARRA requirements also include the "Buy American" standards and Buy America Act as outlined in section 1605 of the Federal Standards.
- □ Section 00720 URI Sexual Harassment Policy
- □ Section 00730 URI Safety Manual
- □ Section 00760 URI Water System Regulations/Policies (including the University Flow Test Requirements)
- □ "Public" copy of all bids > \$1MM, RIGL Section 37-2-18 (P.L. 122)
- □ RI Regs added Title 37 13-3.1, Apprenticeship Ratios set forth by Department of Labor & Training
- □ Within Section 01100 Summary of Work
  - Occupied Building, coordination weekly with URI Office of Capital Projects
  - 1.05 Site Use and Attachment A, Work hours are 5pm to 7am 7 days, except Lecture Halls are 24/7 from 5/21/thru 9/1, no elevator use, protect URI buildings and material.
- □ Section 01200, Allowances

- General \$250k
- Signage \$10k
- Projector Room AV removed, stored and returned for \$20k
- □ Section 01200, Price and Payments
  - o 100% P&P bond
  - o Prevailing Wage Rates online
  - Monthly Reqs include Certified Payrolls, Lien Waiver, Schedule Update and Material Status Report
- ☐ Minority Business Enterprise Participation Early Contact with MBE Officer
- □ Addendum #1 will include:
  - o Meeting notes from Pre-bid
  - o Questions/Answers from Pre-bid and up through 2/24
  - o Reduction of LD amount (Superseded please see Addendum #4)
  - Add demolition drawings for the first floor of the low rise, Refer to Section 01100, Attachment A, reference to another project.
  - Add ACM remediation plan for: 1. first floor of the low rise, all spray-on fire-proofing on beams, and overspray on walls, ceiling tile, pipe and conduit is contaminated and will be completely removed; 2. All lecture hall ceilings; and 3. Projection room floor tile. (Superseded please see Addendum #4)
    - Added acoustic separation at lecture hall adjoining walls. Detail and approx. linear footage will be provided
    - New bid form

The following items were reviewed by Tim LaRose.

- ☐ Technical Overview of Project- goal of the project is to bring the building into code compliance.
  - O Addition of complete sprinkler system to the complex and modification of the standpipes within the high-rise.
  - o Complete fire alarm replacement
  - o Addition of fire fighter command center

- o Miscellaneous life safety upgrades throughout
- General Contractor will be responsible for picking up and paying for the building permit. All State Fire Marshal and State Building Office approvals have been obtained and HAI will provide the appropriate letters necessary to pull permits.
- □ Call for inspections to Building Code Commission Office
- □ Also inspections by HAI, URI Alarms, State Fire Marshal (SFM)
- □ Pre-test by HAI
- □ Final Test with SFM

The following items were reviewed by Nate Ginsburg;

- □ Architectural Scope
  - o All base bid work is in support of the fire code upgrade work, this includes ceiling replacement, fire door installation and handrail modifications
- □ Concurrent Project: the demolition scope for the first floor low rise was reviewed and noted to be included in the upcoming addendum
- □ Alternates were reviewed:
  - Alt #1 Lobby Finishes
  - Alt #2 Front Projection
  - Alt #3 Lecture Hall Finishes

Following the pre-bid introduction Dennis Veader led a walkthrough of the building.

The following questions were fielded during the walk through:

- 1. Q: If the majority of the work is scheduled to occur during third shift off hours how should inspections be handled? A: It is expected that all inspections will need to take place during normal business hours to accommodate the inspectors. General Contractor shall be responsible for scheduling inspections and making sure that areas are open and available for viewing as required. The Owner understands this requirement.
- 2. **Q: How should the work specific to the existing elevators be coordinated?** A: The University currently has a contract with Otis Elevators to handle inspections and maintenance. It is expected that the successful contractor will hire Otis under separate contract for all necessary work related to this project. Refer to the Project Manual for specific requirements.

- 3. **Q: Is Builder's Risk insurance still required to be carried by the Contractor?** A: No modifications have been made to the requirements. Please refer to the Project Manual for specific requirements.
- 4. **Q: What is the required rating for the fire alarm riser cable?** A: Question will be addressed in later addendum.
- 5. Q: Are we to include the AWP-6 that is noted (in dashed area) on the front and side elevations of each hall along with AWP-7? Or are only the AWP-7 to be included in Alternate #2, and all the AWP-6 to be included in the work of Alternate #3? Please clarify. A: AWP-7 is only included as part of alternate #2 and all of the AWP-6 shown on the alternate drawings is to be included as part of alternate #3.

#### **DOCUMENT 00410 - BID FORM**

То:	Department of Administration Division of Purchases One Capitol Hill, Providence, RI 02908		
Project:	Chaffee Hall Fire Code Upgrades University of Rhode Island, Kingston Campus		
Submitted (include actel. & FAX and license if applicab	dress, nos., no.		
and : Tho	ng examined the Place of The Work and all matters referred to in the Instrument the Contract Documents prepared by Hughes Associates, Inc. (Prime) was not on Group Architects LLP for the above mentioned project, we, the under to enter into a Contract to perform the Work for the Sum of:	ith Brewste	er
• We lead to the sum of the sum o	en, and numerication in the above Bid sum as follows:  Contingency Allowance, \$250,000 Signage Allowance 10,000 Equipment Relocation/Storage 20,000 Total Allowances \$280,000 ave included the required Bid security as required by the Invitation to Bid and the American Bid and an additional "public copy" as required 00 – Instructions to Bidders.  Inderstand that this project contains funding through the American Recover avestments Act of 2009 and agree to comply with all applicable terms and ined in Document 00710 – Supplemental General Conditions – ARRA. Within the American Recover and the documentation in accordance with URI's requests.	in the above Bid Sum. by Documery and conditions	of the
Our	ERNATES proposals to modify the above Bid as identified by numbered Alternatives on 01200 in Division 1 of the Specifications are as follows:	specified ir	1
	Alternate #1 – Lobby Finishes Add	\$	)
0027 Chafa	Add( Alternate #2 – Front Projection (including required \$5,000 contingency a	llowance)	,

0927 Chafee Hall
BID FORM
00410-1

10

	Aud	(Ψ	/
	Alternate #3 – Lecture Hall Finishes		
	Add	(\$	)
3.	BREAK OUT PRICES		
	For the purposes of proper capitalization of building costs, please process for the following work items, all of which are included in the Ba		of the bid
	First Floor Low-Rise demolition as described on Sheets D1.1B, E1.1 and P1.1B -	1B, M1.1B, M1.2B	s, P1.0B,
		(\$	)
	Sprinkler and Alarm Systems in low-rise first floor area -		
		(\$	)
	Lecture Hall Acoustic Separation Wall Extensions –	(Ψ	/
	(\$	) for 85 LF	of wall.
1	ACCEPTANCE		

٨ ٨٨

This offer shall be open to acceptance and is irrevocable for ninety days from the bid closing date. If this bid is accepted by the Owner within the time period stated above, we will:

- Execute the Agreement subject to compliance with required State regulatory agency approvals as described in Document 00200 Instructions to Bidders.
- Furnish the required bonds in compliance with amended provisions of the Instructions to Bidders.
- Commence work within seven days after receipt of a Purchase Order from URI Purchasing.

If this bid is accepted within the time stated, and we fail to commence the Work, or we fail to provide the required Bonds, the security deposit shall be forfeited as damages to the Owner by reason of our failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

In the event our bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

#### 5. **CONTRACT TIME**

If this Bid is accepted, we will achieve Substantial Completion of the Work for the Lecture Halls, Lobby, and Access to the Lecture Halls and 1<sup>st</sup> Floor low-rise east of main corridor wall by September 2, 2011, and Substantial Completion of the Work in the High Rise and 2<sup>nd</sup> floor lowrise by October 7, 2011. All punchlist and work to achieve Final Completion after these dates will be accomplished on 3<sup>rd</sup> shift. We have included all premium time or additional staffing required to accommodate this schedule.

0927 Chafee Hall **BID FORM** 

#### Liquidated Damages, Time is of the Essence:

If we fail to achieve certification of Substantial Completion at the expiration of the agreed upon Contract Time indicated above, we acknowledge that we will be assessed Liquidated Damages for each calendar day the project continues to be in default of Substantial Completion, as follows:

#### \$ 1,000.00 per calendar day.

6.	REQUIREMENT FOR LICENSE NUMBER
	In compliance with the requirements of Rhode Island General Law, Section 5-65-23, my Rhode Island license number for the work to be performed by this firm as prime contractor is:
	LICENSE NUMBER:
7.	ADDENDA The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.
	Addendum No. 1, dated
	Addendum No. 2, dated
	Addendum No. 3, dated
	Addendum No. 4, dated
8.	BID FORM SIGNATURE(S)
	(Bidder's name)
	By:
	Title:
	Corporate Seal:

#### **END OF DOCUMENT**

0927 Chafee Hall **BID FORM** 

00410-3

#### **SECTION 09215**

#### **GYPSUM VENEER PLASTER**

#### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

A. Gypsum veneer plaster on masonry, concrete, and gypsum wallboard assemblies. See interior elevation drawings for locations of veneer plaster overlay.

#### 1.02 RELATED REQUIREMENTS

#### 1.03 REFERENCE STANDARDS

- A. ASTM C 587 Standard Specification for Gypsum Veneer Plaster; 2004.
- B. ASTM C 843 Standard Specification for Application of Gypsum Veneer Plaster; 1999 (Reapproved 2006).

#### 1.04 SUBMITTALS

- A. See Section 01300 Administrative Requirements, for submittals procedures.
- B. Product Data: Provide data on veneer plaster products.
- C. LEED Submittal: Documentation of recycled content and location of manufacture.

#### 1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing the work of this section with minimum seven years of experience.

#### 1.06 FIELD CONDITIONS

A. Do not apply veneer plaster when substrate or ambient air temperature is less than 50 degrees F nor more than 80 degrees F; for 24 hours prior to, during operations and after, until building heating system can maintain the above minimum temperature.

#### **PART 2 PRODUCTS**

#### 2.01 MANUFACTURERS

- A. Gypsum Veneer Plaster:
  - 1. Georgia-Pacific Gypsum LLC: www.gp.com/gypsum.
  - 2. National Gypsum Company: www.nationalgypsum.com.
  - 3. USG: www.usg.com.
  - 4. Substitutions: See Section 01600 Product Requirements.

#### 2.02 MATERIALS

A. Gypsum Veneer Plaster: ASTM C 587, mixed in accordance with manufacturer's instructions.

#### PART 3 EXECUTION

#### 3.01 EXAMINATION

- A. Verify that substrates are ready to receive work.
- B. Verify masonry mortar joints are cut flush; verify surface is ready to receive work of this section. Verify no bituminous or water repellent coatings exist on masonry surface.
- C. Verify concrete surfaces are flat, honeycombs are filled flush, and surface is ready to receive work of this section. Verify no bituminous, water repellent, or form release agents exist on concrete surfaces.

- D. Verify gypsum board substrate is flat, joints are taped and sanded, and surface is ready to receive work of this Section. Verify joint and surface perimeter accessories are in place.
- E. Verify gypsum plaster base is flat, smooth and surface is ready to receive work. Verify joint and surface perimeter accessories are in place.

#### 3.02 PREPARATION

- A. Clean surfaces of dust or loose matter.
- B. Remove projections greater than 1/8 inch and fill depressions greater than 1/4 inch with latex filler.

#### 3.03 INSTALLATION - VENEER PLASTER

- A. Install gypsum veneer plaster in accordance with ASTM C 843 and manufacturer's instructions.
- B. Dampen masonry surfaces without leaving visible water on surface, to minimize suction from veneer plaster materials. Install veneer plaster immediately after dampening.
- C. At all interior walls noted on elevations as receiving plaster: Apply single coat to a thickness of 1/8 inch.
- D. Finish surface to flat, smooth, hard trowel finish.

#### 3.04 TOLERANCES

A. Maximum Variation From Specified Thickness: Plus or minus 1/64 inch.

#### 3.05 PROTECTION

A. Do not permit traffic near unprotected finished surfaces.

#### **END OF SECTION**



#### Attachment B

DIVISION OF ADMINISTRATION AND FINANCE



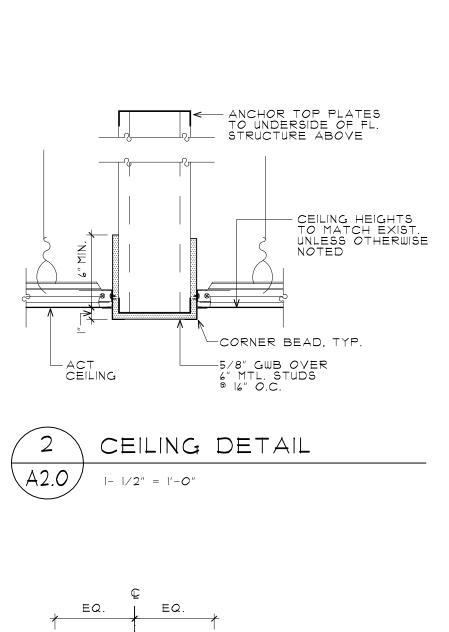
#### OFFICE OF CAPITAL PROJECTS

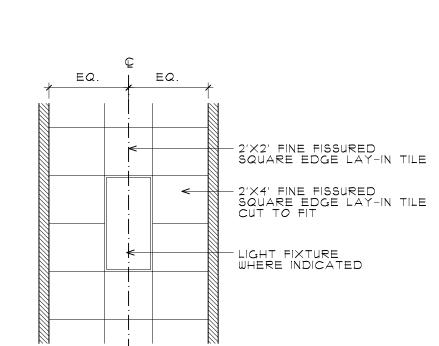
Sherman Building, 523 Plains Road, Kingston, RI 02881 USA p: 401.874.2725 f: 401.874.5599

Fire Sprinkler and Alarm System Impairment Notification Form
o: URI Office of Capital Projects
Date
Start of Planned Impairment:  End of Planned Impairment:  Building occupied during impairment:  Any hot work to be performed:  Yes:  No:  No:
Description of Work to be performed:
JRI Manager of Alarms, Mike Suriani, can also be directly contacted at 401-639-2268.
Contractor supervisory personnel shall remain in the building for the entire duration of the impairment.
Name:
Company:

ATTACHMENT C – SUMMARY 01100

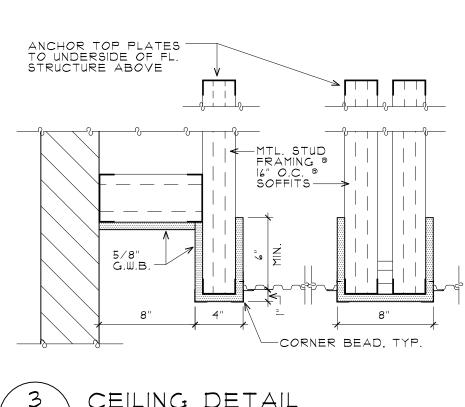
Phone:



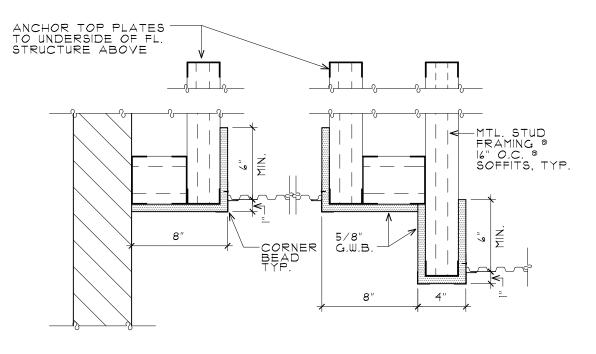


CEILING TYPE A

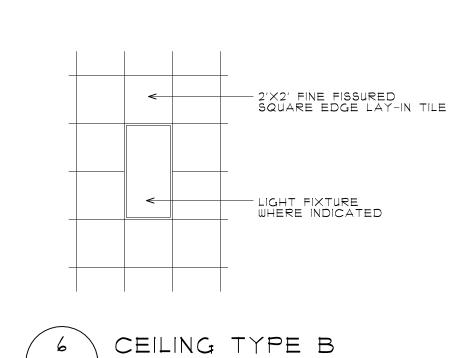
A2.0 |/4" = |'-0"



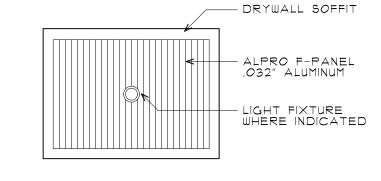








A2.0 |/4" = |'-0"

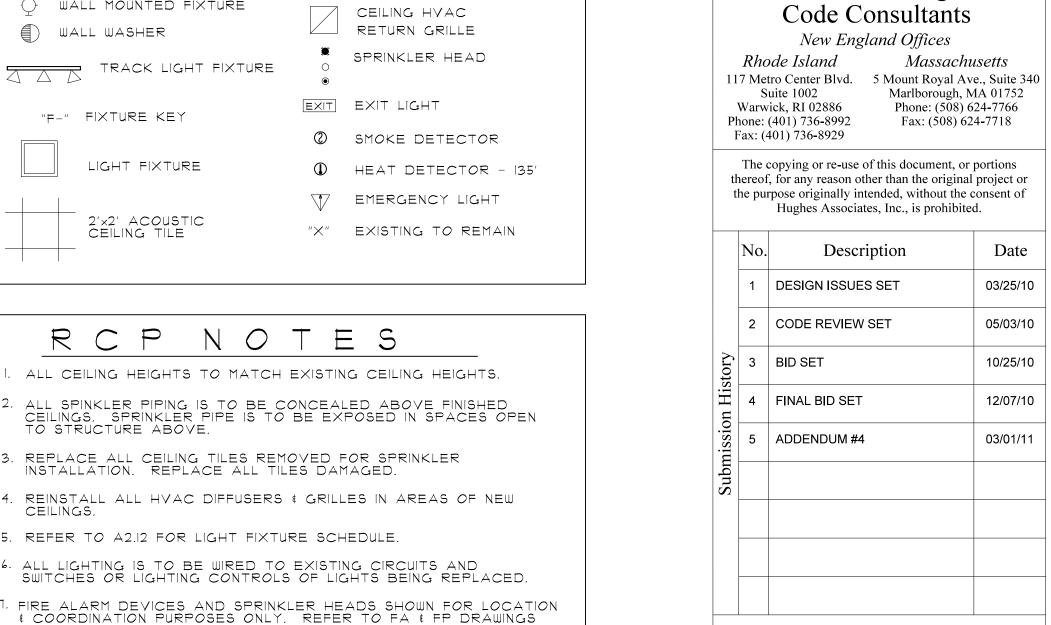








- ALL CEILING HEIGHTS TO MATCH EXISTING CEILING HEIGHTS.
- ALL SPINKLER PIPING IS TO BE CONCEALED ABOVE FINISHED CEILINGS. SPRINKLER PIPE IS TO BE EXPOSED IN SPACES OPEN TO STRUCTURE ABOVE.
- 3. REPLACE ALL CEILING TILES REMOVED FOR SPRINKLER INSTALLATION. REPLACE ALL TILES DAMAGED.
- 4. REINSTALL ALL HVAC DIFFUSERS & GRILLES IN AREAS OF NEW CEILINGS.
- 5. REFER TO A2.12 FOR LIGHT FIXTURE SCHEDULE.
- T. FIRE ALARM DEVICES AND SPRINKLER HEADS SHOWN FOR LOCATION & COORDINATION PURPOSES ONLY. REFER TO FA & FP DRAWINGS FOR COMPLETE SYSTEMS.



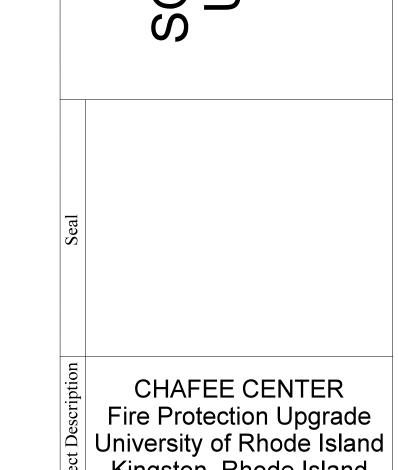


HAI PROJECT NO. 1TJL06918.036

Hughes Associates, Inc.

Fire Protection Engineers

Providence, R I O 2 9 O 3
Tel: 401 . 861 . 1600
Fax: 401 . 861 . 5588

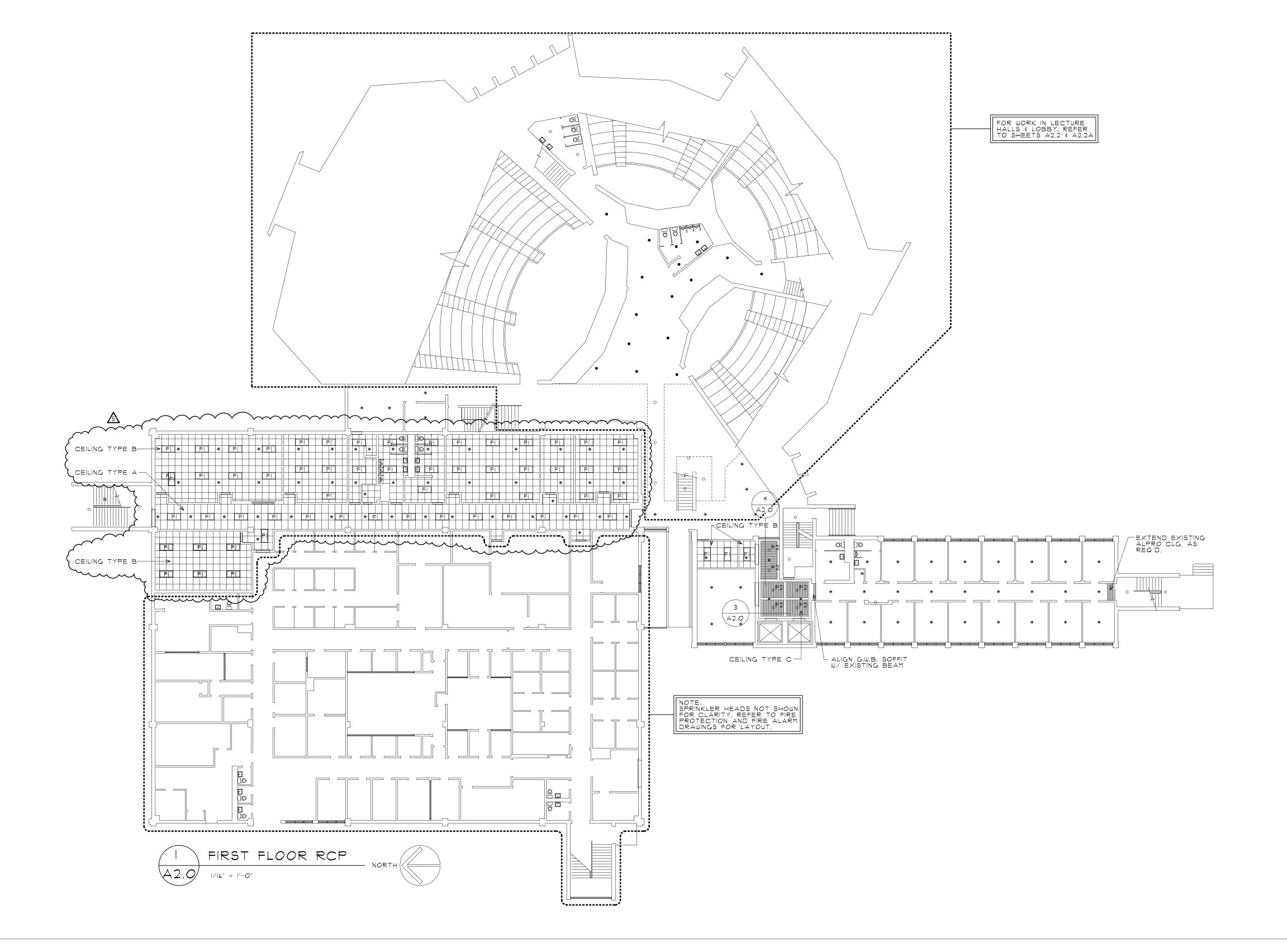


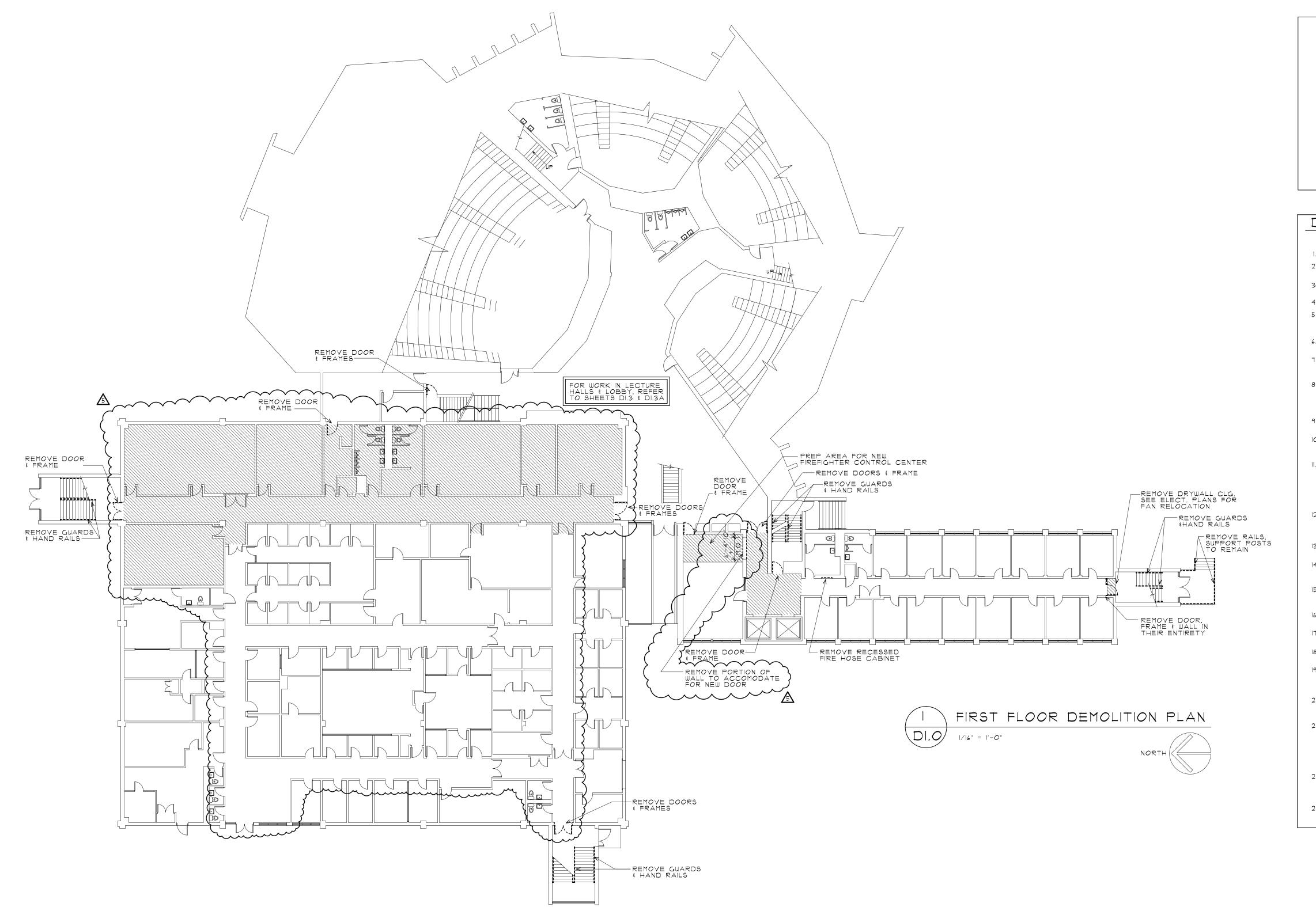
Kingston, Rhode Island Scale: AS NOTED Drawn: RGT Design: NJG

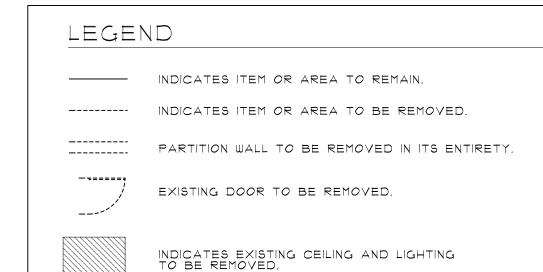
Review: NJG

FIRST FLOOR REFLECTED CEILING PLAN

A2.0







### DEMOLITION NOTES

- I. - - INDICATES ITEM OR AREA TO BE REMOVED.
- . PROTECT ALL AREAS ADJACENT TO OR AFFECTED BY WORK DURING CONSTRUCTION. PROVIDE DUST CONTAINMENT FOR ALL WORK AREAS.
- 3. CLEAN WORK AREA AND AREAS AFFECTED BY CUTTING AND PATCHING OPERATIONS. 4. SEE DEMOLITION DRAWINGS FOR SPECIFIC NOTES.
- 5. CAP ALL ABANDONED PLUMBING LINES AND ELECTRICAL OUTLETS.
  SEE PLUMBING, MECHANICAL, FIRE PROTECTION & ELECTRICAL DRAWINGS
  FOR ADDITIONAL DEMOLITION WORK. 6. ALL PORTIONS OF THE BUILDING TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE UNLESS DIRECTED OTHERWISE.
- PRECAUTIONS AND TEMPORARY SHORING SHALL BE PLACED TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE THROUGHOUT DEMOLITION AND MASONRY WORK.
- 8. CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE AND ANY OTHER AUTHORITIES HAVING JURISDICTION PRIOR TO THE START OF DEMOLITION. COMPLY WITH GOVERNING CODES AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO COMPLETE THE WORK.
- 9. PROVIDE WEATHER-TIGHT TEMPORARY PROTECTION FOR ALL OPENINGS IN EXTERIOR WALLS, ROOF, AND AT WINDOWS AND DOORS.
- IO. SHOULD UNANTICIPATED SUSPECTED HAZARDOUS MATERIALS BE ENCOUNTERED, CONTRACTOR SHALL NOTIFY OWNER & ARCHITECT IMMEDIATELY FOR DIRECTION.
- PROVIDE CUTTING AND PATCHING WORK TO PROPERLY COMPLETE THE WORK OF THE PROJECT, COMPLYING WITH PROJECT REQUIREMENTS FOR: a) STRUCTURAL WORK; b) MECHANICAL/ELECTRICAL SYSTEMS; c) VISUAL REQUIREMENTS, INCLUDING DETAILING AND TOLERANCES; d) OPERATIONAL AND SAFETY LIMITATIONS e) FIRE RESISTANCE RATINGS; f) INSPECTION, PREPARATION AND PERFORMANCE; g) CLEANING.
- 12. DO NOT CUT AND PATCH IN A MANNER THAT WOULD RESULT IN A FAILURE OF THE WORK TO PERFORM AS INTENDED, DECREASE ENERGY PERFORMANCE, INCREASE MAINTENANCE, DECREASE OPERATION LIFE, OR DECREASE SAFETY PERFORMANCE.
- 13. MATCH EXISTING MATERIALS FOR CUTTING AND PATCHING WORK WITH NEW MATERIALS CONFORMING TO PROJECT REQUIREMENTS.
- 14. INSPECT CONDITIONS PRIOR TO WORK TO IDENTIFY SCOPE AND TYPE OF WORK REQUIRED. NOTIFY OWNER OF WORK REQUIRING INTERRUPTION TO BUILDING SERVICES OR OWNER'S OPERATIONS.
- CUTTING: USE CUTTING TOOLS, NOT CHOPPING TOOLS, MAKE NEAT HOLES, MINIMIZE DAMAGE TO ADJACENT WORK, INSPECT FOR CONCEALED UTILITIES AND STRUCTURE BEFORE CUTTING.
- I6. PATCHING: MAKE PATCHES, SEAMS, AND JOINTS DURABLE AND INCONSPICUOUS. 17. REFER TO NEW WORK SHEETS FOR RELEVANT DIMENSIONS AND ADDITIONAL NOTES WHERE APPLICABLE.
- 18. REVIEW UNIQUE EXISTING CONDITIONS FOUND IN THE FIELD DURING DEMOLITION W/ ARCHITECT OR ENGINEER.
- 20. VERIFY WITH OWNER BEFORE STARTING WORK WHICH ITEMS ARE TO BE SALVAGED FOR THEIR USE OR REINSTALLATION. CAREFULLY REMOVE AND STORE SUCH ITEMS AS DIRECTED BY OWNER.
- . FOUNDATIONS INDICATED FOR DEMO MUST BE REMOVED COMPLETELY AT AREAS OF FOUNDATION DEMOLITION. THE CONTRACTOR SHALL MAKE ACCOMMODATION FOR TEMPORARY STRUCTURAL SUPPORT TO MAINTAIN THE INTEGRITY OF THE EXCAVATION DURING THE WORK AS NECESSARY. PROVIDE ADEQUATE SECURITY AGAINST ACCIDENTAL TRESPASS. PROTECT EDGE OF EXCAVATION TO PREVENT FALLS.
- 2. PROTECT ADJACENT AREAS AND STRUCTURES TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY AREAS OR SURFACES WHICH ARE DAMAGED BY THE CONTRACTOR OR ANY OF HIS SUBCONTRACTORS DURING DEMOLITION.
- 23. ALL EXISTING HVAC GRILLES & DIFFUSERS ARE TO BE STOCKPILED FOR RE-INSTALLATION.



Hughes Associates, Inc. Fire Protection Engineers Code Consultants

New England Offices Rhode Island Massachusetts 17 Metro Center Blvd. 5 Mount Royal Ave., Suite 340 Marlborough, MA 01752 Suite 1002 Phone: (508) 624-7766 Warwick, RI 02886 Fax: (508) 624-7718 Phone: (401) 736-8992 Fax: (401) 736-8929

The copying or re-use of this document, or portions thereof, for any reason other than the original project or the purpose originally intended, without the consent of Hughes Associates, Inc., is prohibited.

No.	Description	Date	
1	DESIGN ISSUES SET	03/25/10	
2	CODE REVIEW SET	05/03/10	
3	BID SET	10/25/10	
4	FINAL BID SET	12/07/10	
5	ADDENDUM #4	03/01/11	



ARCHITECTS 150 Chestnut Street Providence, R I 0 2 9 0 3 Tel: 401 . 861 . 1600 Fax 401 . 861 . 5588

# Kingst

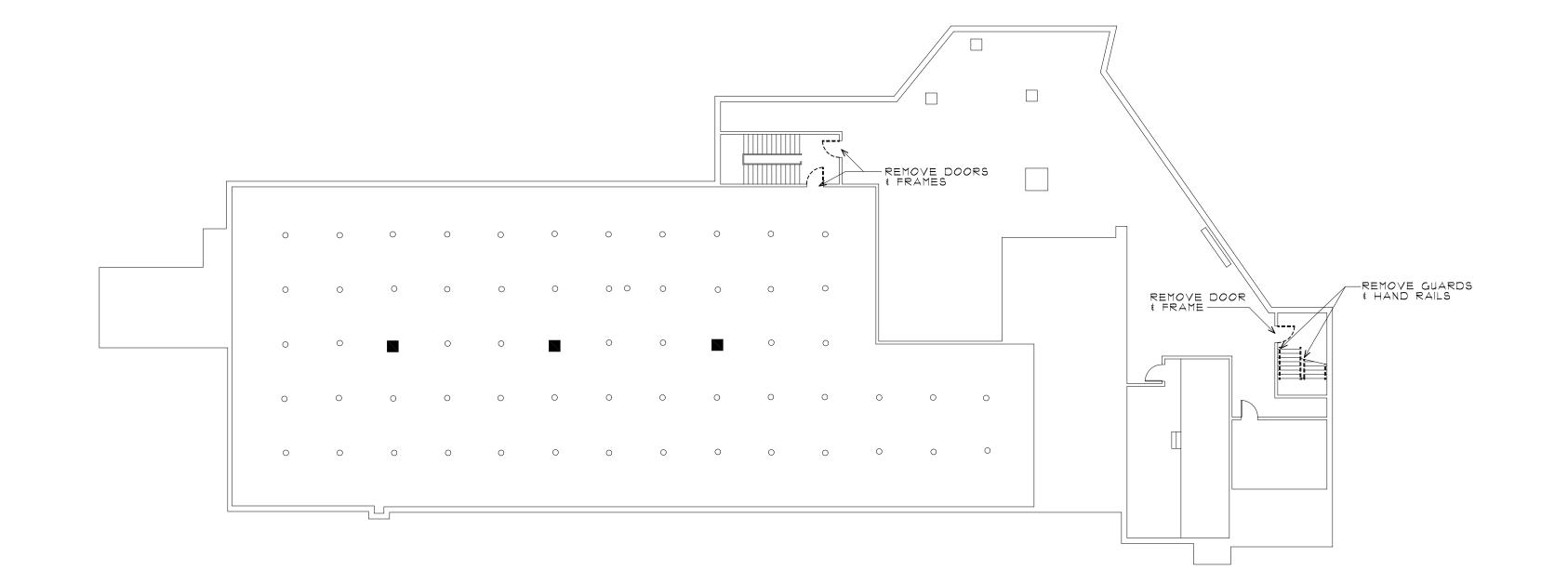
CHAFEE CENTER Fire Protection Upgrade University of Rhode Island Kingston, Rhode Island

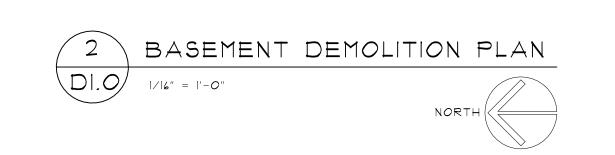
Scale: AS NOTED Drawn: RGT Design: NJG

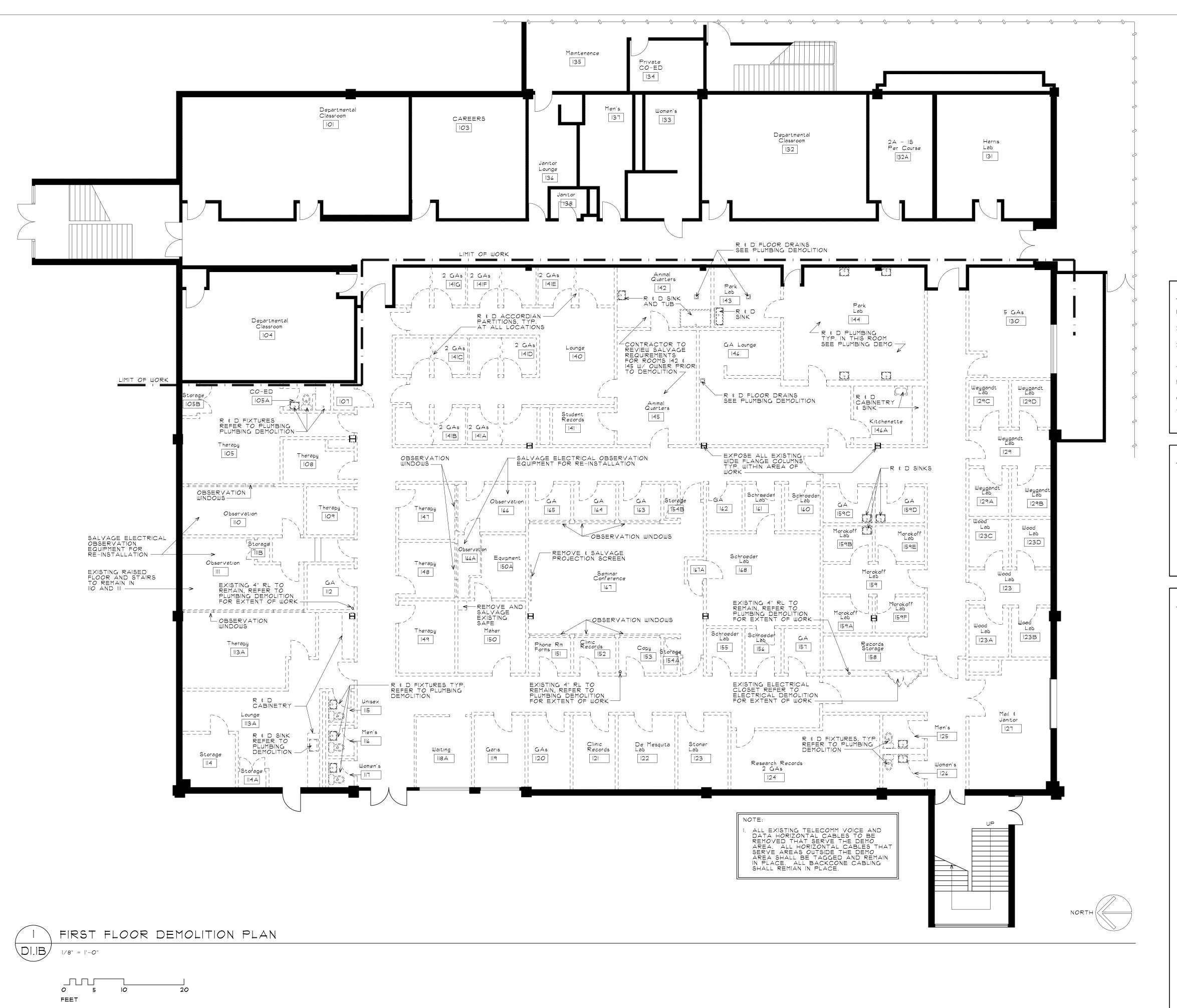
Review: NJG BASEMENT & FIRST FLOOR

D1.0

**DEMOLITION PLANS** 









Hughes Associates, Inc. Fire Protection Engineers Code Consultants

New England Offices Rhode Island Massachusetts 117 Metro Center Blvd. 5 Mount Royal Ave., Suite 340 Suite 1002 Marlborough, MA 01752 Warwick, RI 02886 Phone: (508) 624-7766 Fax: (508) 624-7718 Phone: (401) 736-8992

The copying or re-use of this document, or portions thereof, for any reason other than the original project or the purpose originally intended, without the consent of Hughes Associates, Inc., is prohibited.

Fax: (401) 736-8929

	No.	Description	Date
	1	DESIGN ISSUES SET	03/25/10
	2	CODE REVIEW SET	05/03/10
tory	3	BID SET	10/25/10
Submission History	4	FINAL BID SET	12/07/10
iissio	5	ADDENDUM #4	03/01/11
Subn			



ARCHITECTS 150 Chestnut Street Providence, R I 0 2 9 0 3 Tel: 401 . 861 . 1600 Fax 401 , 861 , 5588

田田

回るる

SCI SCI SSI ISI

NIV.

sland

ston

King

TYPICAL DEMOLITION NOTES

EXISTING DOOR TO BE REMOVED.

DEMOLITION PLAN NOTES

UNLESS INDICATED OTHERWISE, ALL FLOORING, WALLS AND CEILINGS WITHIN LIMIT OF WORK TO BE DEMOLISHED

REFER TO MEP DEMOLITION DRAWINGS FOR ALL OTHER REQUIRED DEMOLITION WORK

COORDINATE DEMOLITION WITH OWNER AND ARCHITECT TO IDENTIFY ALL MATERIALS, EQUIPMENT AND FURNISHINGS TO BE SALVAGED AND STORED FOR FUTURE USE.

ROOM NAMES AND NUMBERS INDICATE EXISTING USE, REFER TO ALO FOR NEW ROOM NAMES AND NUMBERS

CONTRACTOR TO PROVIDE ALL REQUIRED WORK ZONE SIGNAGE AND BARRIERS TO ENSURE A SECURE WORK ZONE.

INDICATES EXISTING WALL TO REMAIN.

INDICATES ITEM OR AREA TO REMAIN.

INDICATES ITEM OR AREA TO BE REMOVED.

PARTITION WALL TO BE REMOVED IN ITS ENTIRETY.

ALL EXISTING A/V AND OBSERVATION EQUIPMENT IS TO BE SALVAGED AND STORED FOR REUSE AND REINSTALLATION.

DEMOLITION LEGEND

REMOVE AND DISPOSE OF ALL EXISTING OBSERVATION

#### GENERAL:

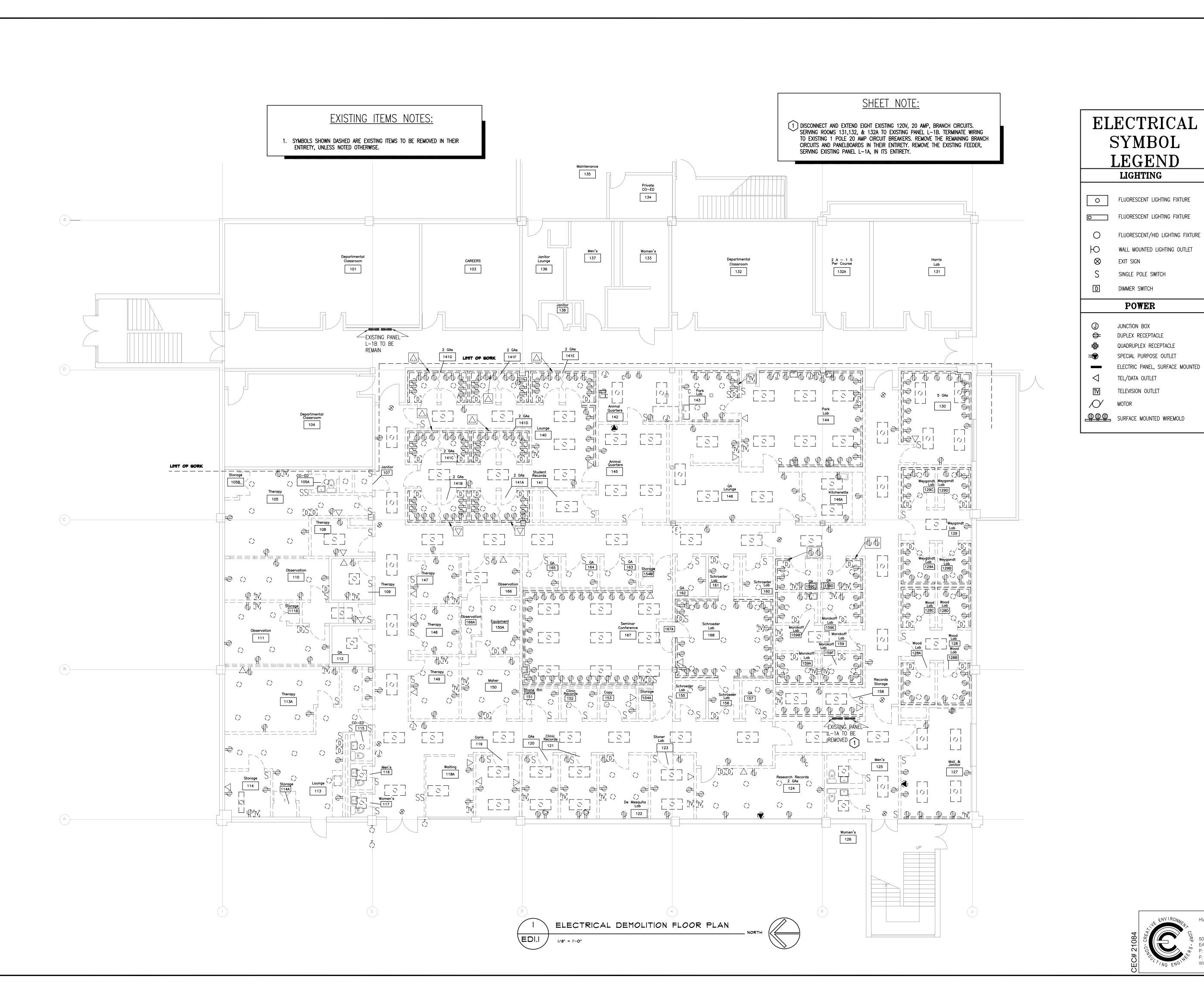
- REFER TO DEMOLITION LEGEND FOR WORK INDICATORS.
- H. CHAL SIENCE SITY OF AND PROTECT ALL AREAS ADJACENT TO OR AFFECTED BY WORK DURING CONSTRUCTION. PROVIDE DUST CONTAINMENT FOR ALL WORK AREAS.
- CLEAN WORK AREA AND AREAS AFFECTED BY CUTTING AND PATCHING OPERATIONS.
- 4. SEE DEMOLITION DRAWINGS FOR NOTES SPECIFIC TO EACH TRADE.
- CAP ALL ABANDONED PLUMBING LINES AND ELECTRICAL OUTLETS. SEE PLUMBING, MECHANICAL, FIRE PROTECTION & ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION WORK.
- 6. ALL PORTIONS OF THE BUILDING TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE UNLESS DIRECTED OTHERWISE.
- PRECAUTIONS AND TEMPORARY SHORING SHALL BE PLACED TO MAINTAIN THE INTEGRITY OF THE EXISTING STRUCTURE THROUGHOUT DEMOLITION AND MASONRY WORK.
- CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE AND ANY OTHER AUTHORITIES HAVING JURISDICTION PRIOR TO THE START OF DEMOLITION. COMPLY WITH GOVERNING CODES AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO COMPLETE THE WORK.
- PROVIDE WEATHER-TIGHT TEMPORARY PROTECTION FOR ALL OPENINGS IN EXTERIOR WALLS, ROOF, AND AT WINDOWS AND DOORS.
- SHOULD UNANTICIPATED SUSPECTED HAZARDOUS MATERIALS BE ENCOUNTERED, CONTRACTOR SHALL NOTIFY OWNER & ARCHITECT IMMEDIATELY FOR DIRECTION.
- PROVIDE CUTTING AND PATCHING WORK TO PROPERLY COMPLETE THE WORK OF THE PROJECT, COMPLYING WITH PROJECT REQUIREMENTS FOR: a) STRUCTURAL WORK; b) MECHANICAL/ELECTRICAL SYSTEMS; c) VISUAL REQUIREMENTS, INCLUDING DETAILING AND TOLERANCES; d) OPERATIONAL AND SAFETY LIMITATIONS e) FIRE RESISTANCE RATINGS; f) INSPECTION, PREPARATION AND PERFORMANCE; g) CLEANING.
- 12. DO NOT CUT AND PATCH IN A MANNER THAT WOULD RESULT IN A FAILURE OF THE WORK TO PERFORM AS INTENDED, DECREASE ENERGY PERFORMANCE, INCREASE MAINTENANCE, DECREASE OPERATION LIFE, OR DECREASE SAFETY PERFORMANCE.
- 13. MATCH EXISTING MATERIALS FOR CUTTING AND PATCHING WORK WITH NEW MATERIALS CONFORMING TO PROJECT REQUIREMENTS.
- 14. INSPECT CONDITIONS PRIOR TO WORK TO IDENTIFY SCOPE AND TYPE OF WORK REQUIRED. NOTIFY OWNER OF WORK REQUIRING INTERRUPTION TO BUILDING SERVICES OR OWNER'S OPERATIONS.
- CUTTING: USE CUTTING TOOLS, NOT CHOPPING TOOLS. MAKE NEAT HOLES. MINIMIZE DAMAGE TO ADJACENT WORK. INSPECT FOR CONCEALED UTILITIES AND STRUCTURE BEFORE CUTTING.
- PATCHING: MAKE PATCHES, SEAMS, AND JOINTS DURABLE AND INCONSPICUOUS.
- 17. REFER TO NEW WORK SHEETS FOR RELEVANT DIMENSIONS AND ADDITIONAL NOTES WHERE APPLICABLE.
- REVIEW UNIQUE EXISTING CONDITIONS FOUND IN THE FIELD DURING DEMOLITION  $\mathbb{W}/$  ARCHITECT OR ENGINEER.
- 19. CONTRACTOR TO ARRANGE FOR DISCONNECT AND CAPPING OF UTILITIES AS REQUIRED. PROTECT UTILITIES TO REMAIN.

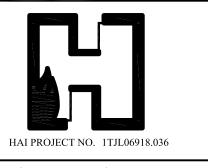
  VERIFY LOCATION AND STATUS OF UTILITIES BEFORE
- BEGINNING DEMOLITION WORK. 20. VERIFY WITH OWNER BEFORE STARTING WORK WHICH ITEMS ARE TO BE SALVAGED FOR THEIR USE OR REINSTALLATION. CAREFULLY REMOVE AND STORE SUCH ITEMS AS DIRECTED BY OWNER.
- 21. AT MASONRY WALLS INDICATED FOR DEMO
  THE CONTRACTOR SHALL MAKE ACCOMMODATION FOR
  TEMPORARY STRUCTURAL SUPPORT TO MAINTAIN
  THE INTEGRITY OF THE BUILDING DURING THE WORK AS
  NECESSARY, PROVIDE ADEQUATE SECURITY AGAINST ACCIDENTAL
  TRESPASS.
- PROTECT ADJACENT AREAS AND STRUCTURES TO REMAIN. CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY AREAS OR SURFACES WHICH ARE DAMAGED BY THE CONTRACTOR OR ANY OF HIS SUBCONTRACTORS DURING DEMOLITION.

CHAFEE CENTER Fire Protection Upgrade University of Rhode Island Kingston, Rhode Island

Scale: AS NOTED Drawn: RGT Design: NJG Review: NJG

LOW RISE FIRST FLOOR INTERIOR DEMOLITION PLAN





Hughes Associates, Inc.
Fire Protection Engineers
Code Consultants

New England Offices

Rhode Island
Massachusetts

 Rhode Island
 Massachusetts

 117 Metro Center Blvd.
 5 Mount Royal Ave., Suite 34

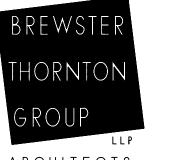
 Suite 1002
 Marlborough, MA 01752

 Warwick, RI 02886
 Phone: (508) 624-7766

 Phone: (401) 736-8992
 Fax: (508) 624-7718

The copying or re-use of this document, or portions thereof, for any reason other than the original project or the purpose originally intended, without the consent of Hughes Associates, Inc., is prohibited.

Submission History	No.	Description	Date
	1	DESIGN ISSUES SET	03/25/10
	2	CODE REVIEW SET	05/03/10
	3	BID SET	10/25/10
	4	FINAL BID SET	12/07/10
	5	ADDENDUM #4	03/01/11



A R O H I T E O T S 160 Ohestnut Street Providence, R I O 2 9 O 3 Tel: 401.861.1600 Fax: 401.861.6688

SOCIAL SCIENCE CENTER
UNIVERSITY OF RHODE
ISLAND
Kingston, Rhode Island

CHAFEE CENTER
Fire Protection Upgrade
niversity of Rhode Island

Fire Protection Upgrade
University of Rhode Island
Kingston, Rhode Island

Scale: AS NOTED

Drawn: WMS

Design: WMS

Review: PDS

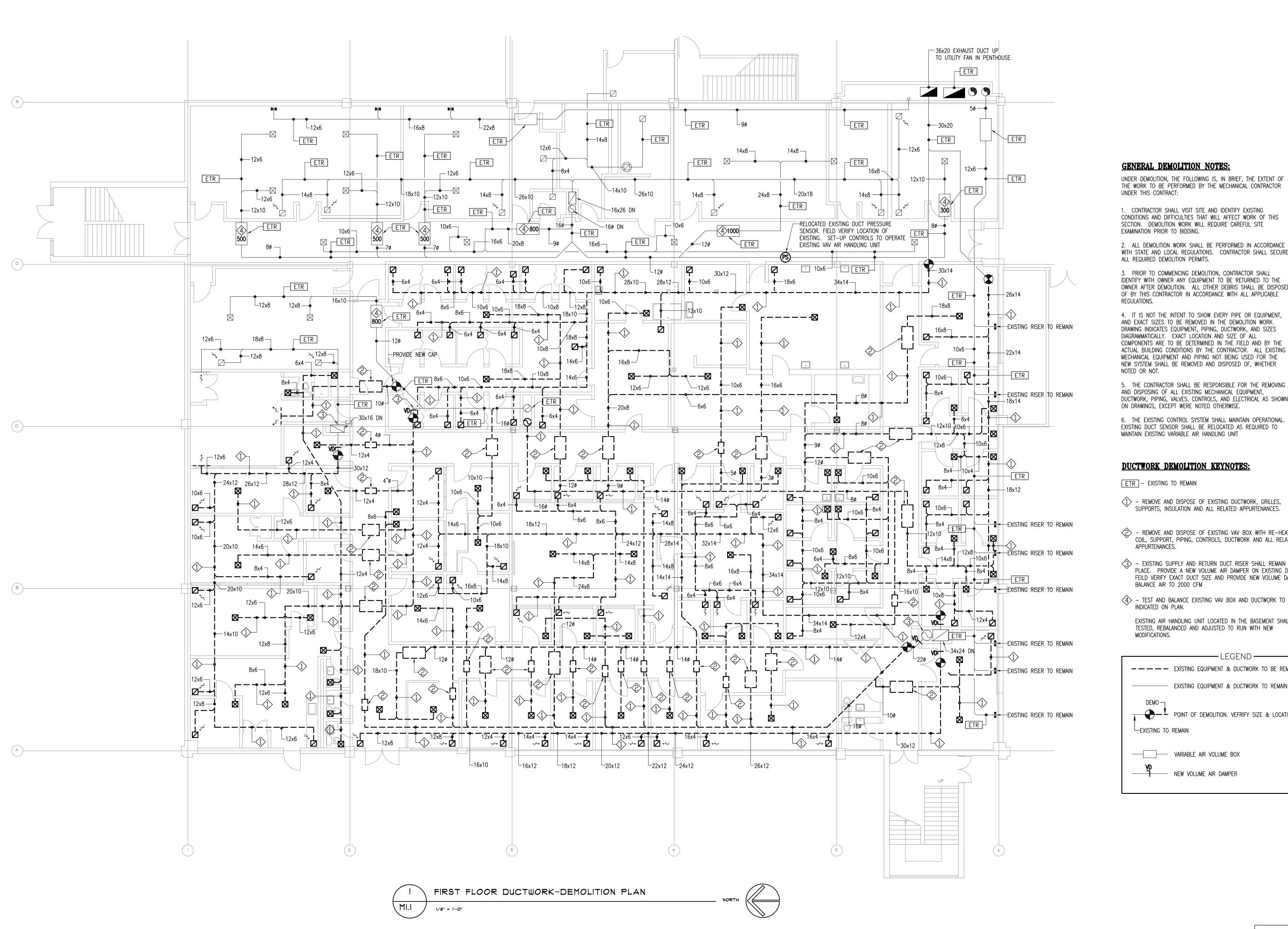
HVAC • ELECTRICAL • PLUMBING • FIRE PROTECTION •

50 OFFICE PARKWAY EAST PROVIDENCE, RI 02914

WWW.CEC-ENGINEERING.COM

P: 401.438.7733 F: 401.438.7620 ELECTRICAL DEMOLITION FLOOR PLAN

E1.1B





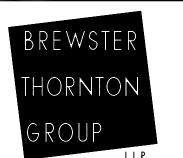
Hughes Associates, Inc. Fire Protection Engineers Code Consultants

New England Offices Rhode Island Massachusetts 17 Metro Center Blvd. 5 Mount Royal Ave., Suite 34 Marlborough, MA 01752 Phone: (508) 624-7766 Suite 1002 Warwick, RI 02886 Phone: (401) 736-8992 Fax: (508) 624-7718

The copying or re-use of this document, or portions thereof, for any reason other than the original project or the purpose originally intended, without the consent of Hughes Associates, Inc., is prohibited.

Fax: (401) 736-8929

	No.	. Description	Date
	1	DESIGN ISSUES SET	03/25/10
	2	CODE REVIEW SET	05/03/10
tory	3	BID SET	10/25/10
n His	4	FINAL BID SET	12/07/10
Submission History	5	ADDENDUM #4	03/01/11
Subn			
Sul			



AROHITEOTS 160 Ohestnut Street Providence, R I 0 2 9 0 3 Tel: 401 . 861 . 1600 Fax: 401 . 861 . 5588

6. THE EXISTING CONTROL SYSTEM SHALL MAINTAIN OPERATIONAL. EXISTING DUCT SENSOR SHALL BE RELOCATED AS REQUIRED TO MAINTAIN EXISTING VARIABLE AIR HANDLING UNIT

DUCTWORK, PIPING, VALVES, CONTROLS, AND ELECTRICAL AS SHOWN

#### **DUCTWORK DEMOLITION KEYNOTES:**

**GENERAL DEMOLITION NOTES:** 

UNDER THIS CONTRACT:

EXAMINATION PRIOR TO BIDDING.

UNDER DEMOLITION, THE FOLLOWING IS, IN BRIEF, THE EXTENT OF THE WORK TO BE PERFORMED BY THE MECHANICAL CONTRACTOR

WITH STATE AND LOCAL REGULATIONS. CONTRACTOR SHALL SECURE

IDENTIFY WITH OWNER ANY EQUIPMENT TO BE RETURNED TO THE

AND EXACT SIZES TO BE REMOVED IN THE DEMOLITION WORK.

DRAWING INDICATES EQUIPMENT, PIPING, DUCTWORK, AND SIZES DIAGRAMMATICALLY. EXACT LOCATION AND SIZE OF ALL

COMPONENTS ARE TO BE DETERMINED IN THE FIELD AND BY THE ACTUAL BUILDING CONDITIONS BY THE CONTRACTOR. ALL EXISTING MECHANICAL EQUIPMENT AND PIPING NOT BEING USED FOR THE

AND DISPOSING OF ALL EXISTING MECHANICAL EQUIPMENT,

OWNER AFTER DEMOLITION. ALL OTHER DEBRIS SHALL BE DISPOSED

1. CONTRACTOR SHALL VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT WORK OF THIS

SECTION. DEMOLITION WORK WILL REQUIRE CAREFUL SITE

ETR - EXISTING TO REMAIN

NOTED OR NOT.

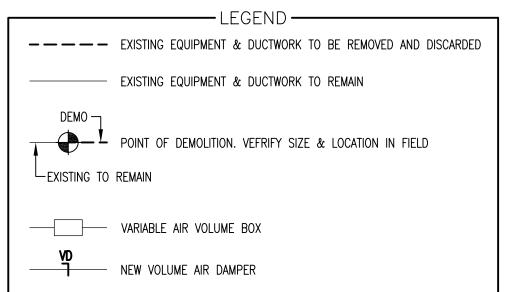
- REMOVE AND DISPOSE OF EXISTING DUCTWORK, GRILLES, SUPPORTS, INSULATION AND ALL RELATED APPURTENANCES.

2 - REMOVE AND DISPOSE OF EXISTING VAV BOX WITH RE-HEAT COIL, SUPPORT, PIPING, CONTROLS, DUCTWORK AND ALL RELATED APPURTENANCES.

3> - EXISTING SUPPLY AND RETURN DUCT RISER SHALL REMAIN IN PLACE. PROVIDE A NEW VOLUME AIR DAMPER ON EXISTING DUCT. FEILD VERIFY EXACT DUCT SIZE AND PROVIDE NEW VOLUME DAMPER. BALANCE AIR TO 2000 CFM

- TEST AND BALANCE EXISTING VAV BOX AND DUCTWORK TO CFM INDICATED ON PLAN.

EXISTING AIR HANDLING UNIT LOCATED IN THE BASEMENT SHALL BE TESTED, REBALANCED AND ADJUSTED TO RUN WITH NEW MODIFICATIONS.



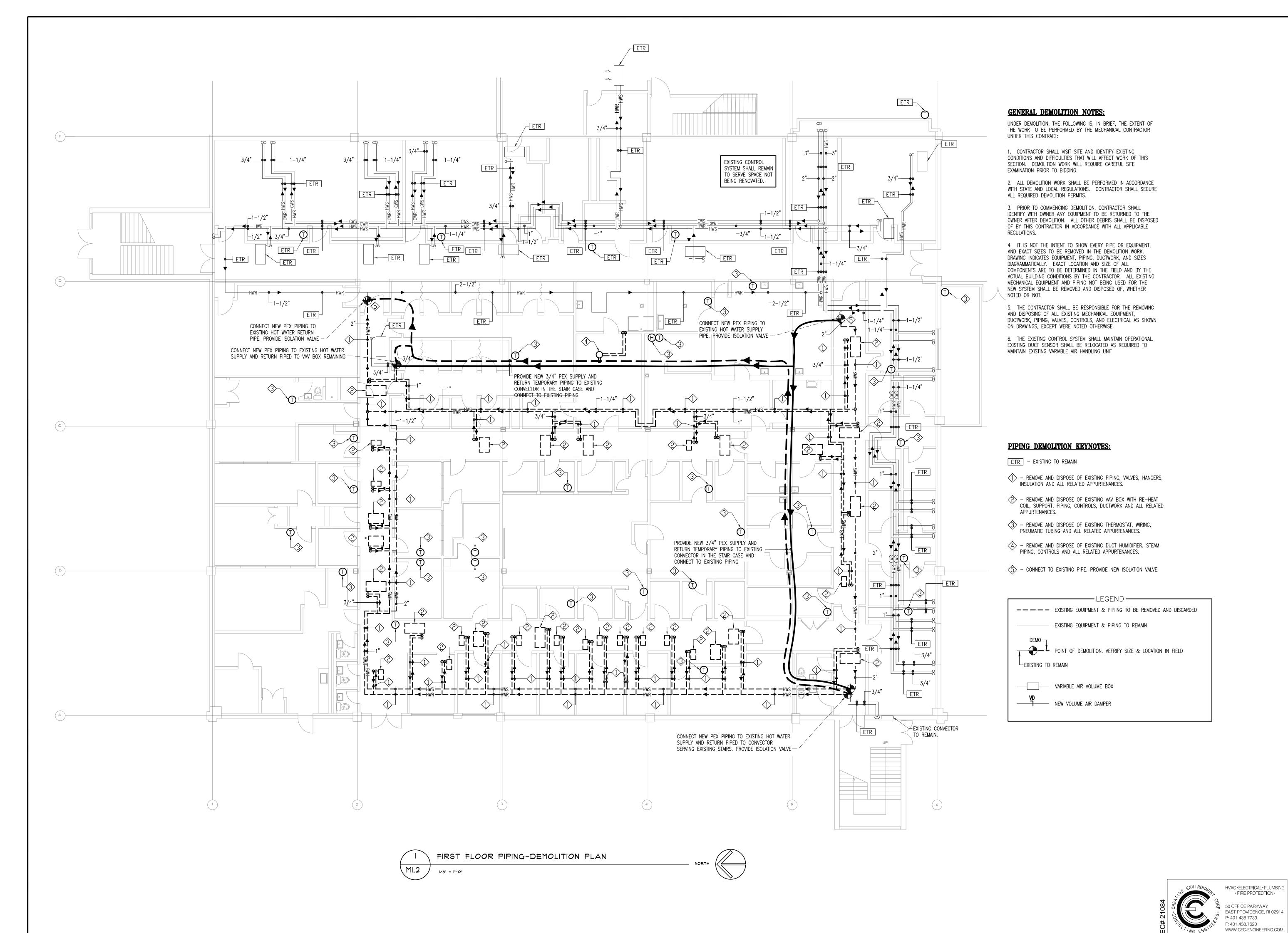
sland

CHAFEE CENTER Fire Protection Upgrade University of Rhode Island Kingston, Rhode Island

Scale: AS NOTED Drawn: GAA Design: GAA Review: RCN

> FIRST FLOOR DUCTWORK **DEMOLITION PLAN**







Hughes Associates, Inc. Fire Protection Engineers Code Consultants

New England Offices

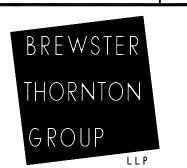
Rhode Island
Massachusetts

117 Metro Center Blvd.
Suite 1002
Warwick, RI 02886
Phone: (401) 736-8992
Marlborough, MA 01752
Phone: (508) 624-7768
Fax: (508) 624-7718

The copying or re-use of this document, or portions thereof, for any reason other than the original project or the purpose originally intended, without the consent of Hughes Associates, Inc., is prohibited.

Fax: (401) 736-8929

Submission History	No.	Description	Date
	1	DESIGN ISSUES SET	03/25/10
	2	CODE REVIEW SET	05/03/10
	3	BID SET	10/25/10
	4	FINAL BID SET	12/07/10
	5	ADDENDUM #4	03/01/11



AROHITEOTS
160 Ohestnut Street
Providence, RI
O 2 9 O 3
Tel: 401.861.1600
Fax 401.861.5688

option CHAFEE CENTER

CHAFEE CENTER
Fire Protection Upgrade
University of Rhode Island
Kingston, Rhode Island

Scale: AS NOTED

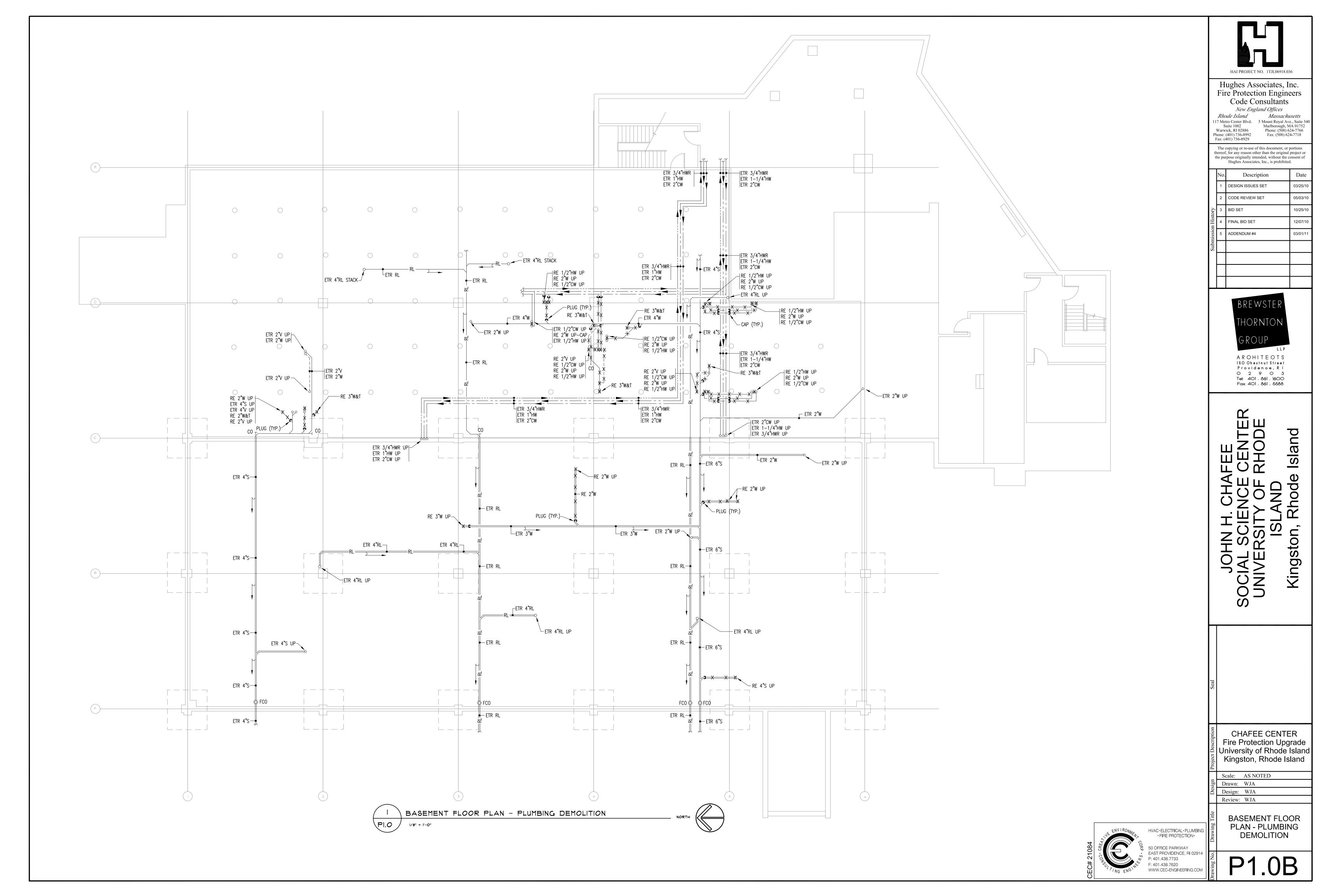
Drawn: GAA

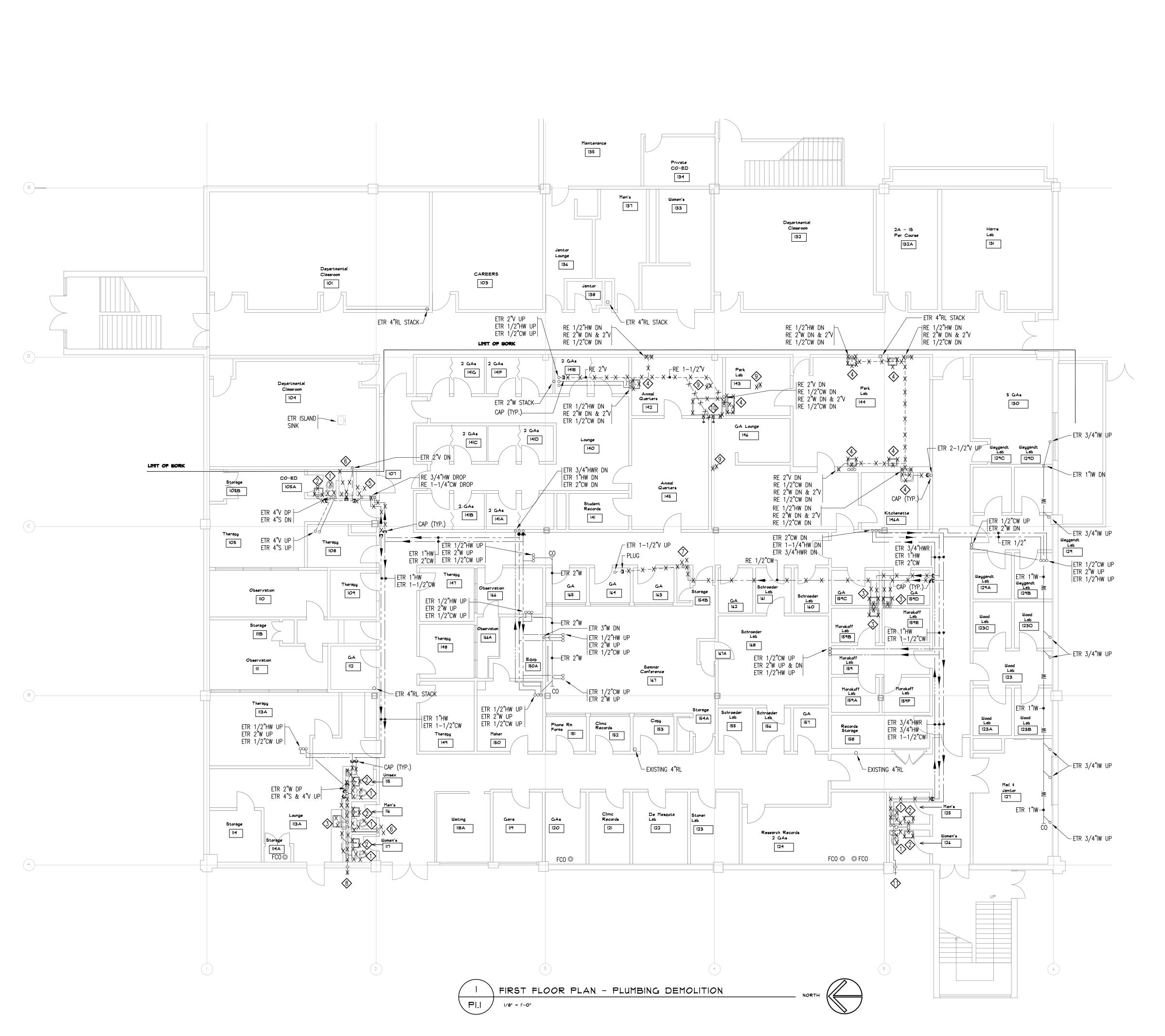
Design: GAA

Review: RCN

FIRST FLOOR PIPING DEMOLITION PLAN

M1.2B





#### GENERAL DEMOLITION NOTES:

1. THE CONTRACTOR RESPONSIBLE FOR THE DEMOLITION OF THE EXISTING PLUMBING FIXTURES AND PIPING SHALL BE REQUIRED TO VISIT THE PROJECT SITE TO FAMILIARIZE THEMSELVES WITH THE FULL EXTENT OF WORK REQUIRED. VERIFY FIXTURE TYPES, QUANTITIES AND LOCATIONS. VERIFY WALL, CEILING AND FLOOR CONSTRUCTION. VERIFY AS MUCH OF THE EXISTING PIPING SYSTEM AS POSSIBLE. THIS FIELD VISIT SHALL BE CONDUCTED DURING THE BID PROCESS. BIDS SHALL BE BASED ON INFORMATION GATHERED DURING THIS VISIT.

2. REMOVE ALL PLUMBING FIXTURES STORE ALL FIXTURES IN A LOCATION DESIGNATED BY THE OWNER. COORDINATE THE LOCATION WITH THE OWNER. REMOVALS SHALL INCLUDE ANY SANITARY WASTE & VENT PIPING, HOT & COLD WATER PIPING, VALVES AND HANGERS INDICATED ON THE DRAWINGS. THIS CONTRACTOR SHALL REVIEW ALL REQUIRED POINTS OF RECONNECTION TO EXISTING WATER & SANITARY SYSTEM ABOVE & BELOW THE SLAB UNDER THE SCOPE OF NEW PLUMBING WORK AND SHALL MINIMIZE ANY NEW WORK BELOW THE EXISTING SLAB AT ALL TIMES. REMOVE ANY EXISTING PLUMBING WATER AND/OR WASTE PIPE FOUND TO BE ABANDONED. REFER TO RENOVATION DRAWINGS FOR NEW PLUMBING WORK.

3. ALL REMOVED PLUMBING FIXTURES SHALL BECOME THE PROPERTY OF THE OWNER. VERIFY WITH OWNER AS TO WHICH FIXTURES ARE TO BE STORED AND WHICH FIXTURES ARE TO BE DISPOSED OF.

4. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAW CUTTING, CORING AND PATCHING REQUIRED FOR THE INSTALLATION OF NEW WORK, AND FOR THE REMOVAL OF EXISTING WORK. COORDINATE EXTENT OF THE LIMIT OF WORK BEFORE BIDS ARE ISSUED.

5. THE SITE SHALL BE LEFT BROOM CLEAN AND ALL DEBRIS SHALL BE REMOVED FROM THE SITE.

**6.** ALL PIPING RENDERED OBSOLETE SHALL BE REMOVED AND CAPPED BACK AT THE NEAREST LIVE MAIN. DO NOT LEAVE ANY "DEAD—ENDED" SANITARY PIPING.

7. REMOVE EXISTING HANGERS AND SUPPORTS ASSOCIATED WITH PIPING THAT HAS BEEN REMOVED.

#### DEMOLITION KEYED NOTES

- DISCONNECT AND REMOVE EXISTING WATER CLOSET AND ASSOCIATED SANITARY, VENT AND COLD WATER. CUT BACK SANITARY TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND PLUG AS REQUIRED. CUT BACK ASSOCIATED COLD WATER AND VENT TO ACTIVE MAINS, ABOVE CEILING, AND CAP AS
- DISCONNECT AND REMOVE EXISTING LAVATORY AND ASSOCIATED WASTE, VENT, HOT AND COLD WATER. CUT BACK WASTE TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT, HOT AND COLD WATER TO ACTIVE MAINS, ABOVE CEILING, AND CAP AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING SINK AND ASSOCIATED WASTE, VENT, HOT AND COLD WATER. CUT BACK WASTE TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT, HOT AND COLD WATER TO ACTIVE MAINS, ABOVE CEILING, AND CAP AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING SINK AND ASSOCIATED WASTE, VENT, HOT AND COLD WATER. CUT BACK WASTE, HOT AND COLD WATER TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND CAP/PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT ACTIVE MAIN, ABOVE CEILING, AND CAP AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING SERVICE SINK AND ASSOCIATED WASTE, VENT, HOT AND COLD WATER. CUT BACK WASTE TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT, HOT AND COLD WATER TO ACTIVE MAINS, ABOVE CEILING, AND CAP AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING SHOWER AND ASSOCIATED WASTE, VENT, HOT AND COLD WATER. CUT BACK WASTE AND VENT TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT, HOT AND COLD WATER TO ACTIVE MAINS, ABOVE CEILING, AND CAP AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING DRINKING FOUNTAIN AND ASSOCIATED WASTE, VENT, AND COLD WATER. CUT BACK WASTE TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT AND COLD WATER TO ACTIVE MAINS, ABOVE CEILING, AND CAP AS REQUIRED.
- REMOVE EXISTING WALL HYDRANT AND ASSOCIATED COLD WATER LINE BACK TO ACTIVE MAIN, AND CAP AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING FLOOR DRAIN AND ASSOCIATED WASTE AND VENT. CUT BACK WASTE PIPING TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT TO ACTIVE MAIN, ABOVE CEILING, AND CAP AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING CAGE WASHER AND ASSOCIATED WASTE, VENT, HOT AND COLD WATER. CUT BACK WASTE, HOT AND COLD WATER TO BELOW FLOOR SLAB, WITHIN 24" OF ACTIVE MAIN, AND CAP/PLUG AS REQUIRED. CUT BACK ASSOCIATED VENT ACTIVE MAIN, ABOVE CEILING, AND CAP AS REQUIRED.
- EXISTING WALL HYDRANT TO REMAIN. CAP ASSOCIATED 3/4" CW LINE FOR RE-CONNECTION SEE NEW WORK PLANS.



Hughes Associates, Inc. Fire Protection Engineers Code Consultants

 New England Offices

 Rhode Island
 Massachusetts

 17 Metro Center Blvd.
 5 Mount Royal Ave., Suite 3 

 Suite 1002
 Marlborough, MA 01752

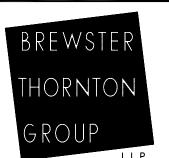
 Warwick, RI 02886
 Phone: (508) 624-7766

 Phone: (401) 736-8992
 Fax: (508) 624-7718

The copying or re-use of this document, or portions thereof, for any reason other than the original project or the purpose originally intended, without the consent of Hughes Associates, Inc., is prohibited.

Fax: (401) 736-8929

No.	Description	Date
1	DESIGN ISSUES SET	03/25/10
2	CODE REVIEW SET	05/03/10
3	BID SET	10/25/10
4	FINAL BID SET	12/07/10
5	ADDENDUM #4	03/01/11



A R C H I T E C T S
150 Chestnut Street
Providence, R I
0 2 9 0 3
Tel: 401 . 861 . 1600

# 0 2 9 0 3 Tel: 401 . 861 . 1600 Fax: 401 . 861 . 5588

CIAL SCIENCE CENTER JNIVERSITY OF RHODE ISLAND Kingston, Rhode Island

CHAFEE CENTER
Fire Protection Upgrade
University of Rhode Island

Kingston, Rhode Island

Scale: AS NOTED
Drawn: WJA
Design: WJA
Review: RCN

HVAC •ELECTRICAL • PLUMBING

WWW.CEC-ENGINEERING.COM

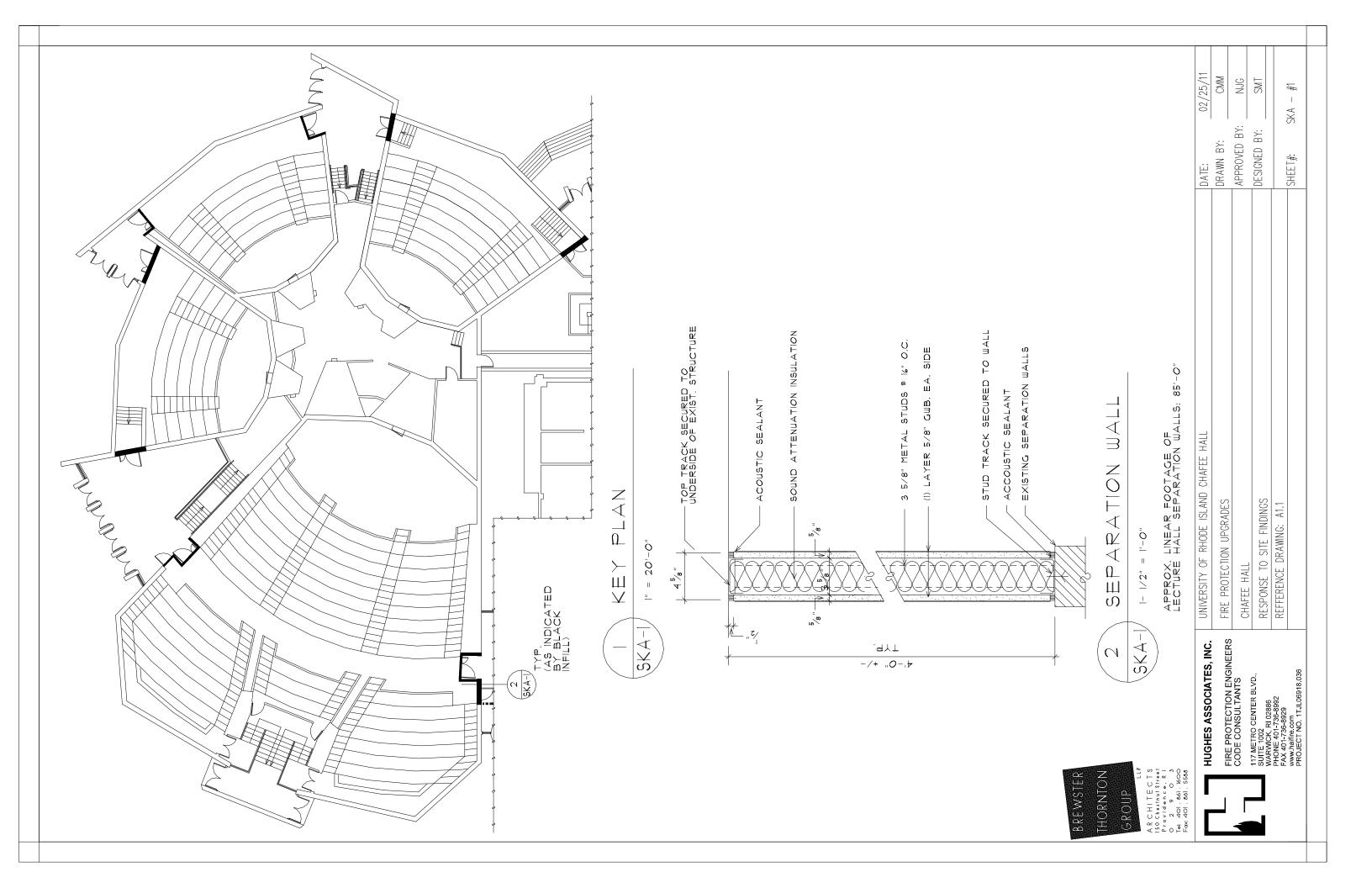
50 OFFICE PARKWAY EAST PROVIDENCE, RI 02914

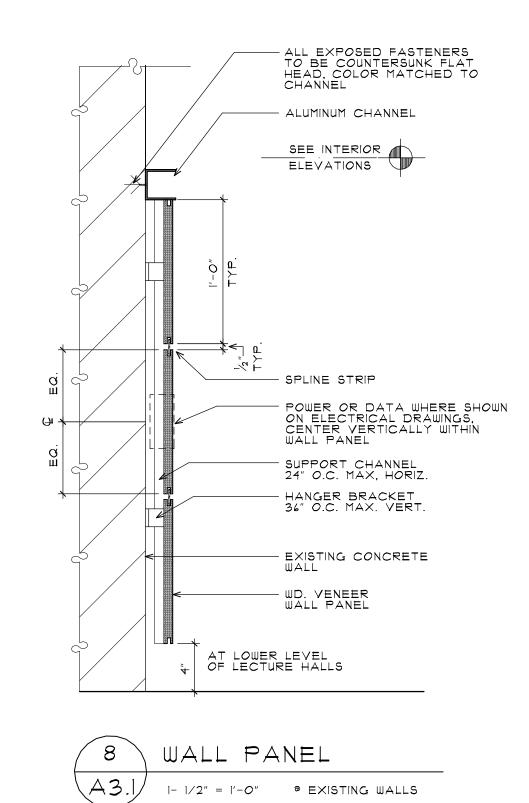
P: 401.438.7733 F: 401.438.7620

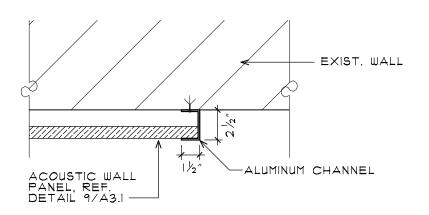
• FIRE PROTECTION•

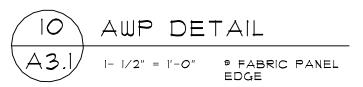
FIRST FLOOR PLAN -PLUMBING DEMOLITION

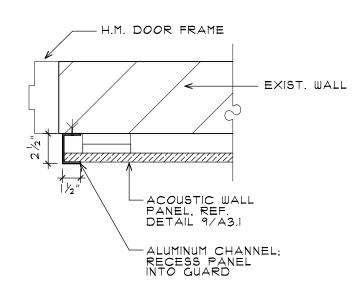
P1.1B



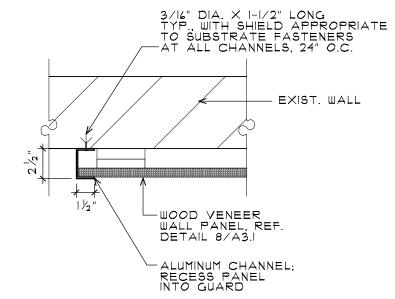






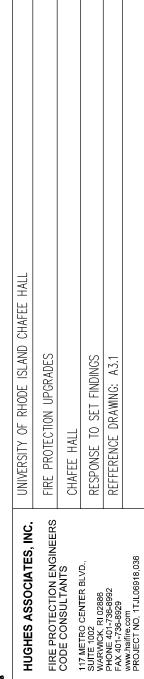






1	12	AWP DETAIL (WOOD)
l	(A3.1)	-  /2" =  '-0"





NJG

ВХ:

APPROVED DESIGNED 1

ВҮ.

DATE: DRAWN B

02/

#2

SKA

SHEET#:

