

December 4, 2012

Mr. Mike Rogalski  
Ram-Tech Engineers  
2495 Main Street, Suite 435  
Buffalo, New York 14214

**Re: Lead-based Paint Inspection Report  
Buffalo VA Steam Risers  
3495 Bailey Avenue  
Buffalo, New York 14215**

Dear Mr. Rogalski:

At your request, Sienna Environmental Technologies performed a Lead-based Paint Inspection of the Steam Risers located at the Buffalo VA in Buffalo, New York. The inspection was performed in accordance with HUD Guidelines by Mark Beyer, an EPA certified Lead Inspector and Risk Assessor.

If you have any questions, or if we can be of assistance in any other way, please do not hesitate to call. Thank you for the opportunity to be of service to Ram-Tech Engineers.

Sincerely,  
Sienna Environmental Technologies, LLC



John Pusztay  
Environmental Department Manager



**Lead-based Paint Inspection**

**OF**

**Buffalo VA Steam Risers  
3495 Bailey Avenue  
Buffalo, New York 14215**

**PREPARED FOR:**

**Ram-Tech Engineers  
2495 Main Street, Suite 435  
Buffalo, New York 14214**

**CONDITIONS AS OF:**

**December 4, 2012**



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## **Lead-based Paint Inspection**

### **1.0 Introduction**

Sienna Environmental Technologies performed an investigation of the Buffalo VA Steam Risers, located at 3495 Bailey Avenue in Buffalo, New York, for the presence of surfaces covered with lead-based paint (LBP) or a lead-based coating prior to renovations. The inspection was conducted on November 19, 2012 and December 4, 2012.

The inspection was further limited to renovation areas.

Sienna Environmental Technologies was charged with:

1. measuring lead concentrations on suspect building materials using an X-ray fluorescence spectrum analyzer (XRF)
2. summary report of all surfaces tested

### **2.0 Methodology**

Sienna Environmental Technologies used a RMD LPA-1 Spectrum Analyzer (Refer to Section 2.5 for additional information) to test painted or coated surfaces throughout the building. Representative surfaces/components were tested in a manner designed to adequately represent the different components, substrates, types of paint, construction and paint history. Various federal, state and local laws, rules, regulations and guidelines may be applicable to this project as it relates to lead-based paint/coatings (LBP) including but not limited to:

1. Lead-based Paint Renovation, Repair and Painting Regulation Rule (40 CFR Part 745.8 Subpart E (EPA))
2. Lead Safe Housing Rule (HUD 24 CFR Part 35)
3. Guidelines for the Evaluation and Control of Lead-based Paint Hazards in Housing (US Department of Housing and Urban Development (HUD))
4. Occupational Safety and Health Administration (OSHA 29 CFR 1910 and 1926)
5. New York State Education Department (NYSED)
6. State of New York codes and laws
7. All local codes
8. All federal codes
9. US-DOT 49 CFR

The most recent edition of any relevant regulation, standard, document, or code shall be applicable to the work. Where conflict among the requirements exists, the most stringent requirements are generally applicable.



### **3.0 Inspection Report**

HUD and certain EPA standards apply to "lead based paint" which is any paint or coating which contain lead at or above 1.0 mg/cm<sup>2</sup> or 0.5 percent by weight. Analysis indicated that the following components have a lead content equal to or greater than the HUD/EPA standard for lead-based paint:

- Green Paint on Walls in Sub Basement
- White Paint on Walls in Sub Basement
- Salmon Paint on Walls in Sub Basement
- Yellow Glazed Block in Basement
- Yellow Paint on Stair Tread Noses in Stairwells

Surfaces that were analyzed as less than 0.5 percent lead by weight or in measurable amounts but less than 1.0 mg/cm<sup>2</sup> is a consideration for the purposes of complying with OSHA regulations and are listed in Section 2.5. Please see the following section for details.

### **4.0 OSHA Regulations**

On May 4, 1993, OSHA promulgated the Lead Exposure in Construction Rule (29 CFR Part 1926.62). This regulation applies to all construction activities involving potential lead exposures. This regulation applies when lead is present in any detectable amount and is not limited to HUD's definition of lead paint based. Surface abrading and demolition activities may release lead from unpainted materials which contain lead such as unpainted ceramic tile and porcelain. Although these items do not meet HUD's definition of lead based paint and need not be included in disclosure under the Lead Disclosure Rule (Refer to section 2.6), they may have been included in 2.3 above.



## 5.0 XRF Spectrum Analyzer Report and Instrument Information

Buffalo VA Steam Pipe Riser Project

RMD LPA1 Serial Number- 2945

Date of last re-sourcing- 3/19/2012

Inspection performed by:

A handwritten signature in black ink, appearing to read 'Mark Beyer', written over a horizontal line.

Mark Beyer

# SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam pipe riser project-

Inspection Date: 11/19/12  
 Report Date: 11/19/2012  
 Abatement Level: 1.0  
 Report No. 11/19/12 12:49  
 Total Readings: 83  
 Job Started: 11/19/12 12:49  
 Job Finished: 11/19/12 16:26

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1		CALIBRATION								0.7	TC
2		CALIBRATION								0.7	TC
3		CALIBRATION								0.8	TC
4	001 sub 1		A	drain		Lft pipe	I	Steel	black	-0.1	QM
5	001 sub 1		B	sprinkler pi		Lft	I	Steel	red	-0.1	QM
6	001 sub 1		D	hot h20 pipe		Rgt insulation	I	fiberglass	white	0.0	QM
7	001 sub 1		C	dr. pipe han		Rgt	I	Steel	yellow	-0.1	QM
8	001 sub 1		C	sprink pipe		Rgt coupling	I	Steel	red	0.0	QM
9	001 sub 1		A	conduit		Rgt	I	Steel	white	-0.1	QM
10	002 sub 2		C	vac pipe		Lft hanger	I	Steel	brown	0.0	QM
11	002 sub 2		B	steam pipe		Lft insul	I	fiberglass	yellow	0.3	QM
12	002 sub 2		B	steam pipe		Lft regulator	I	Steel	white	0.0	QM
13	003 sub 3		B	cond. pipe		Lft hanger	I	Steel	Green	-0.1	QM
14	004 sub 4		B	Wall	U	Lft	I	Concrete	Green	2.9	QM
15	004 sub 4		D	Wall	U	Lft	I	Concrete	Green	2.1	QM
16	004 sub 4		D	cond pipe		Lft insulation	I	fiberglass	Orange	-0.1	QM
17	004 sub 4		D	conduit		Lft hanger	I	Steel	green	-0.2	QM
18	004 sub 4		D	conduit		Lft	I	Steel	yellow	-1.7	QM
19	004 sub 4		B	fire supp		Lft control box	I	Steel	red	0.0	QM
20	004 sub 4		B	switch box		Lft	I	Steel	gray	-0.1	Std
21	004 sub 4		D	conduit rack		Lft	I	Steel	black	-0.1	QM
22	004 sub 4		D	fire suppress		Lft pipe	I	Steel	red	0.2	QM
23	004 sub 4		B	Wall	U	Rgt	I	Concrete	white	5.2	QM
24	004 sub 4		B	Door		Rgt U Rgt	I	Steel	gray	-0.1	QM
25	004 sub 4		B	Door		Rgt Rgt jamb	I	Steel	gray	0.0	QM
26	004 sub 4		B	Wall	U	Lft	I	Concrete	salmon	4.7	QM
27	004 sub 4		D	Wall	U	Lft	I	Concrete	salmon	3.9	QM
28	005 sub 5		D	ceiling		Lft	I	Concrete	tan	0.4	QM
29	005 sub 5		D	light fixtur		Lft	I	Steel	white	0.0	QM
30	005 sub 5		D	gas line		Lft conduit	I	Steel	yellow	0.1	QM
31	006 sub 6		A	Wall	U	Ctr	I	Plaster	gray	0.0	QM
32	006 sub 6		C	Wall	U	Ctr	I	Plaster	gray	0.0	QM
33	006 sub 6		C	ceiling		Ctr	I	Concrete	tan	-0.2	Std
34	006 sub 6		C	ceiling		Ctr	P	Concrete	yellow	0.1	Std
35	006 sub 6		A	elev door		Ctr	P	Steel	tan	-0.2	QM
36	007 sub 6		D	18" drain pi"	"	Lft" "	"	"I" "Steel	" "black	"-0.1	QM
37	007 sub 7		D	Wall	U	Lft	I	Plaster	gray	0.0	QM
38	007 sub 7		D	ceiling		Lft	I	Concrete	yellow	0.3	QM
39	008 b1		D	Stairs		Rgt Treads	I	Concrete	red	-0.1	QM
40	008 b1		D	Wall	U	Rgt	I	Concrete	yellow	-0.1	QM
41	008 b1		D	Stairs		Lft pan	I	Steel	yellow	0.0	QM
42	008 b1		D	Stairs		Lft Stringers	I	Steel	yellow	-0.1	QM
43	008 b1		B	sprinkler		Lft	I	Steel	red	0.2	QM
44	008 b1		C	Door		Lft U Rgt	I	Steel	tan	-0.1	QM
45	008 b1		C	Door		Lft Rgt jamb	I	Steel	tan	-0.2	QM
46	008 b1		C	Stairs		Lft cage	I	Steel	yellow	-0.2	QM
47	008 b1		B	Stairs		Lft handrail	I	wood	Stain	-0.2	QM



# SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam pipe riser project-

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
48	008	b1	B	floor		Lft	I	Concrete	red	-0.1	QM
49	009	b2 stairwel	B	floor		Lft	I	Concrete	brown	-0.3	QM
50	009	b2 stairwel	B	Stairs		Lft Treads	I	Concrete	brown	0.2	QM
51	009	b2 stairwel	B	Stairs		Lft Stringers	I	Steel	brown	-0.2	QM
52	009	b2 stairwel	B	Stairs		Lft cage	I	Steel	yellow	0.1	QM
53	009	b2 stairwel	B	Stairs		Lft Railing	I	wood	Stain	-0.2	QM
54	009	b2 stairwel	B	sprinklers		Lft	I	Steel	red	-0.3	QM
55	009	b2 stairwel	B	Stairs		Rgt pan	I	Steel	tan	-0.1	QM
56	009	b2 stairwel	B	radiator		Rgt cover	I	Steel	tan	0.3	QM
57	009	b2 stairwel	B	exhaust		Rgt pipe	I	transite	tan	-0.2	QM
58	010	b2	A	ceiling		Lft tile	I	Fiberboard	white	-0.1	QM
59	010	b2	A	Wall		U Lft	I	Plaster	gray	0.3	QM
60	010	b2	C	Wall		U Lft	I	Plaster	gray	0.2	QM
61	010	b2	C	stairwell		Lft door	I	Steel	gray	-0.1	QM
62	010	b2	C	stairwell		Lft doorjamb	I	Steel	gray	-0.1	QM
63	010	b2	C	Wall		L Lft	I	glazeblock	yellow	3.2	QM
64	010	b2	A	steel chase		Lft	I	Steel	white	-0.1	QM
65	010	b2	C	Wall		U Lft	I	Plaster	blue	0.0	QM
66	010	b2	C	gaspipe		Lft	I	Steel	black	-0.3	QM
67	011	b3	C	floor		Lft	I	Concrete	brown	-0.2	QM
68	011	b3	C	sprinkler		Ctr pipe	I	Steel	red	0.0	QM
69	011	b3	A	radiator		Rgt cover	I	Steel	tan	-0.1	QM
70	011	b3	A	Stairs		Rgt pan	I	Steel	tan	-0.2	QM
71	011	b3	A	Stairs		Rgt cage	I	Steel	tan	0.0	QM
72	011	b3	A	Stairs		Rgt Stringers	I	Steel	tan	-0.2	QM
73	011	b3	A	Stairs		Rgt hand rail	I	wood	Stain	0.1	QM
74	012	b4	B	ceiling		Rgt tile	I	fiberboard	white	0.0	QM
75	012	b4	B	Wall		U Rgt	I	Plaster	tan	0.2	QM
76		CALIBRATION								0.7	TC
77	012	b4	B	Door		Rgt Header	I	Steel	Cream	-0.1	QM
78	012	b4	B	vent		Rgt diffuser	I	Steel	white	0.0	QM
79	012	b4	C	Wall		U Rgt	I	drywall	cream	0.0	QM
80	012	b4	C	ceiling		Rgt tile	I	fiberboard	white	0.2	QM
81	012	b4	C	gaspipe		Rgt	I	Steel	black	0.0	QM
82		CALIBRATION								0.8	TC
83		CALIBRATION								0.9	TC

----- End of Readings -----

**SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam pipe riser project-**

Inspection Date: 11/19/12  
 Report Date: 11/19/2012  
 Abatement Level: 1.0  
 Report No. 11/19/12 12:49  
 Total Readings: 83 Actionable: 6  
 Job Started: 11/19/12 12:49  
 Job Finished: 11/19/12 16:26

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
Interior Room 004 sub 4									
014	B	Wall	U Lft		I	Concrete	Green	2.9	QM
026	B	Wall	U Lft		I	Concrete	salmon	4.7	QM
023	B	Wall	U Rgt		I	Concrete	white	5.2	QM
015	D	Wall	U Lft		I	Concrete	Green	2.1	QM
027	D	Wall	U Lft		I	Concrete	salmon	3.9	QM
Interior Room 010 b2									
063	C	Wall	L Lft		I	glazeblock	yellow	3.2	QM
----- End of Readings -----									

# DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam pipe riser project-

Inspection Date: 11/19/12  
 Report Date: 11/19/2012  
 Abatement Level: 1.0  
 Report No. 11/19/12 12:49  
 Total Readings: 83  
 Job Started: 11/19/12 12:49  
 Job Finished: 11/19/12 16:26

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
"Interior Room 007 sub 7									
036	D	18" drain pi"	" Lft"	"	"	"I"	"Steel	" "black	"-0.1 QM
Interior Room 001 sub 1									
004	A	drain	Lft	pipe	I	Steel	black	-0.1	QM
009	A	conduit	Rgt		I	Steel	white	-0.1	QM
005	B	sprinkler pi	Lft		I	Steel	red	-0.1	QM
007	C	dr. pipe han	Rgt		I	Steel	yellow	-0.1	QM
008	C	sprink pipe	Rgt	coupling	I	Steel	red	0.0	QM
006	D	hot h2o pipe	Rgt	insulation	I	fiberglass	white	0.0	QM
Comment: switch box above elec rm door									
Interior Room 002 sub 2									
011	B	steam pipe	Lft	insul	I	fiberglass	yellow	0.3	QM
012	B	steam pipe	Lft	regulator	I	Steel	white	0.0	QM
010	C	vac pipe	Lft	hanger	I	Steel	brown	0.0	QM
Interior Room 003 sub 3									
013	B	cond. pipe	Lft	hanger	I	Steel	Green	-0.1	QM
Interior Room 004 sub 4									
019	B	fire supp	Lft	control box	I	Steel	red	0.0	QM
020	B	switch box	Lft		I	Steel	gray	-0.1	Std
014	B	Wall	U Lft		I	Concrete	Green	2.9	QM
026	B	Wall	U Lft		I	Concrete	salmon	4.7	QM
023	B	Wall	U Rgt		I	Concrete	white	5.2	QM
025	B	Door	Rgt	Rgt jamb	I	Steel	gray	0.0	QM
024	B	Door	Rgt	U Rgt	I	Steel	gray	-0.1	QM
016	D	cond pipe	Lft	insulation	I	fiberglass	Orange	-0.1	QM
017	D	conduit	Lft	hanger	I	Steel	green	-0.2	QM
018	D	conduit	Lft		I	Steel	yellow	-1.7	QM
021	D	conduit rack	Lft		I	Steel	black	-0.1	QM
022	D	fire suppres	Lft	pipe	I	Steel	red	0.2	QM
015	D	Wall	U Lft		I	Concrete	Green	2.1	QM
027	D	Wall	U Lft		I	Concrete	salmon	3.9	QM
Interior Room 005 sub 5									
028	D	ceiling	Lft		I	Concrete	tan	0.4	QM
029	D	light fixtur	Lft		I	Steel	white	0.0	QM
030	D	gas line	Lft	conduit	I	Steel	yellow	0.1	QM
Interior Room 006 sub 6									
035	A	elev door	Ctr		P	Steel	tan	-0.2	QM
031	A	Wall	U Ctr		I	Plaster	gray	0.0	QM
033	C	ceiling	Ctr		I	Concrete	tan	-0.2	Std
034	C	ceiling	Ctr		P	Concrete	yellow	0.1	Std
032	C	Wall	U Ctr		I	Plaster	gray	0.0	QM
Interior Room 007 sub 7									
038	D	ceiling	Lft		I	Concrete	yellow	0.3	QM

# SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Inspection Date: 12/04/12  
 Report Date: 12/4/2012  
 Abatement Level: 1.0  
 Report No. 12/04/12 09:27  
 Total Readings: 156  
 Job Started: 12/04/12 09:27  
 Job Finished: 12/04/12 14:40

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
1		CALIBRATION								0.9	TC
2		CALIBRATION								0.8	TC
3		CALIBRATION								0.8	TC
4	001	1st awing	A	starwelll do	Lft jamb		I	Steel	white	0.0	QM
5	001	1st awing	A	starwelll do	Lft uright		I	Steel	white	0.3	QM
6	001	1st awing	A	Soffit	Lft		I	Plaster	white	-0.2	Std
7	001	1st awing	A	Ceiling	Lft tile		I	Fiberboard	white	0.0	QM
8	001	1st awing	C	Wall	U Lft		I	Plaster	white	0.4	Std
9	001	1st awing	A	mechrm door	Ctr jamb		I	Steel	white	0.4	QM
10	001	1st awing	A	mechrm door	Ctr uleft		I	Wood	stain	-0.2	QM
11	001	1st awing	A	conduit	Ctr		I	Steel	white	0.3	QM
12	001	1st awing	A	ceilingtile	Ctr grid		I	Steel	white	0.1	QM
13	001	1st awing	A	Wall	U Rgt		I	Dry wall	beige	0.0	QM
14	001	1st awing	A	ceiling	Rgt tile		I	Fiberboard	white	0.0	QM
15	001	1st awing	A	ceilingtile	Rgt grid		I	Steel	white	0.2	QM
16	001	1st awing	A	speaker	Rgt		I	Steel	beige	0.2	QM
17	001	1st awing	A	light	Rgt housing		I	vinyl	white	0.1	QM
18	001	1st awing	A	Door	Rgt Lft jamb		I	Steel	cream	-0.1	QM
19	001	1st awing	A	Door	Rgt U Rgt		I	Steel	cream	0.2	QM
20	002	1st bwing	A	Door	Lft U Rgt		I	Wood	stain	-0.2	QM
21	002	1st bwing	A	Door	Lft Lft jamb		I	Steel	white	-0.2	QM
22	002	1st bwing	A	soffitt	Lft		I	Steel	white	0.4	QM
23	002	1st bwing	A	ceilingtile	Lft		I	Fiberboard	white	0.0	QM
24	003	1st dwing	B	ceilingtile	Lft grid		I	Steel	white	0.1	Std
25	002	1st bwing	A	ceilingtile	Rgt grid		I	Steel	white	0.1	QM
26	002	1st bwing	A	ceilingtile	Rgt		I	Fiberboard	white	0.0	QM
27	002	1st bwing	A	Wall	U Rgt		I	wallpaper	beige	0.3	QM
28	003	1st dwing	C	ceilingtile	Lft		I	Fiberboard	white	0.0	QM
29	003	1st dwing	C	ceilingtile	Lft grid		I	Steel	white	0.1	QM
30	003	1st dwing	C	Wall	U Lft		I	Plaster	white	0.2	QM
31	003	1st dwing	B	Wall	U Rgt		I	Dry wall	blue	0.1	QM
32	003	1st dwing	B	soffitt	Ctr		I	Steel	white	0.4	QM
33	003	1st dwing	B	Door	Ctr Rgt jamb		I	Steel	white	0.0	QM
34	003	1st dwing	B	Door	Ctr U Rgt		I	Steel	white	0.1	QM
35	004	1st cwing	C	Wall	U Lft		I	Plaster	lt blue	-0.1	QM
36	004	1st cwing	C	Ceiling	Lft tile		I	Fiberboard	white	0.0	QM
37	004	1st cwing	C	ceilingtile	Lft grid		I	Steel	white	0.2	QM
38	004	1st cwing	C	pipe insul	Lft		I	Fiberglass	white	0.4	QM
39	005	2nd cwing	C	Wall	U Lft		I	Plaster	cream	0.3	QM
40	005	2nd cwing	C	Ceiling	Lft tile		I	Fiberboard	white	0.3	QM
41	005	2nd cwing	C	Ceiling	Lft grid		I	Steel	white	0.3	QM
42	005	2nd cwing	D	Door	Lft Rgt jamb		I	Steel	cream	0.3	Std
43	006	2nd bwing	C	Door	Lft Rgt jamb		I	Steel	lt blue	0.1	QM
44	006	2nd bwing	C	Wall	U Lft		I	Plaster	lt blue	0.2	QM
45	006	2nd bwing	C	Soffit	Lft		I	Steel	white	0.4	QM
46	006	2nd bwing	C	Ceiling	Lft tile		I	Fiberboard	white	-0.1	QM
47	006	2nd bwing	C	Ceilingtile	Lft grid		I	Steel	white	0.3	QM

# SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm²)	Mode
48	006	2nd bwing	C	blackpipe		Lft	I	Steel	black	0.2	QM
49	006	2nd bwing	C	pipehanger		Lft	I	Steel	black	0.4	QM
50	007	2nd dwing	A	Wall	U	Rgt	I	Plaster	white	0.3	QM
51	007	2nd dwing	B	Wall	U	Rgt	I	Plaster	blue	0.3	QM
52	007	2nd dwing	A	Soffit		Rgt	I	Steel	white	0.0	QM
53	007	2nd dwing	A	Ceiling		Rgt tile	I	Fiberboard	white	0.1	QM
54	007	2nd dwing	A	Ceilingtile		Rgt grid	I	Steel	white	0.3	QM
55	007	2nd dwing	A	speaker		Rgt	I	Steel	gray	-0.1	QM
56	008	3rd awing	B	Wall	U	Lft	I	Plaster	white	0.0	QM
57	008	3rd awing	B	Ceiling		Lft tile	I	Fiberboard	white	-0.1	QM
58	008	3rd awing	B	Ceilingtile		Lft grid	I	Steel	white	0.2	QM
59	008	3rd awing	B	speaker		Lft	I	Steel	beige	0.3	QM
60	008	3rd awing	D	Soffit		Rgt	I	Steel	white	-0.1	QM
61	008	3rd awing	A	Wall	U	Rgt	I	Dry wall	blue	-0.1	QM
62	009	3rd bwing	C	Wall	U	Rgt	I	wallpaper	purple	0.4	QM
63	009	3rd bwing	C	Wall	U	Rgt	I	Plaster	cream	0.3	QM
64	009	3rd bwing	B	Soffit		Rgt	I	Steel	white	0.5	QM
65	009	3rd bwing	B	Ceilingtile		Rgt	I	Fiberboard	white	0.2	Std
66	009	3rd bwing	B	Ceilingtile		Rgt grid	I	Steel	white	0.1	QM
67	010	3rd dwing	C	Wall	U	Ctr	I	Plaster	cream	0.5	QM
68	010	3rd dwing	C	Soffit		Ctr	I	Steel	white	0.2	QM
69	010	3rd dwing	C	Ceilingtile		Ctr grid	I	Steel	white	0.4	QM
70	010	3rd dwing	C	Ceilingtile		Ctr	I	Fiberboard	white	0.0	QM
71	011	4th bwing	C	Door		Lft Lft jamb	I	Steel	lt blue	0.1	QM
72	011	4th bwing	C	Ceiling		Lft tile	I	Fiberboard	white	0.0	QM
73	011	4th bwing	C	Ceilingtile		Lft grid	I	Steel	white	0.2	QM
74	011	4th bwing	C	Wall	U	Lft	I	Plaster	lt blue	0.4	QM
75	011	4th bwing	A	ceilingvent		Lft diffuser	I	Steel	white	0.0	QM
76	012	4th cwing	A	Wall	U	Rgt	I	Dry wall	blue	-0.1	QM
77	012	4th cwing	A	Ceilingtile		Rgt	I	Fiberboard	white	0.0	QM
78	012	4th cwing	A	Ceilingtile		Rgt grid	I	Steel	white	0.3	QM
79	012	4th cwing	A	pipe		Rgt hanger	I	Steel	green	0.4	QM
80	012	4th cwing	A	blackpipe		Rgt	I	Steel	black	-0.1	QM
81	012	4th cwing	A	Door		Rgt Header	I	Steel	cream	0.0	QM
82	012	4th cwing	A	Wall	U	Rgt	I	Dry wall	lt blue	-0.2	QM
83	012	4th cwing	A	Soffit		Rgt	I	Steel	white	0.4	QM
84	012	4th cwing	B	Ceilingtile		Rgt grid	I	Steel	white	-0.1	QM
85	012	4th cwing	B	Wall	U	Rgt	I	Dry wall	lt gray	0.1	QM
86	012	4th cwing	B	Ceilingtile		Rgt	I	Fiberboard	white	-0.1	QM
87	012	4th cwing	B	blackpipe		Rgt	I	Steel	black	0.3	QM
88	012	4th cwing	B	pipeclamp		Rgt	I	Steel	orange	0.5	QM
89		CALIBRATION								0.9	TC
90		CALIBRATION								0.9	TC
91		CALIBRATION								0.9	TC
92	013	5th cwing	A	Wall	U	Rgt	I	Dry wall	cream	0.0	QM
93	013	5th cwing	A	Ceiling		Rgt tile	I	Fiberboard	white	0.1	QM
94	013	5th cwing	A	Ceilingtile		Rgt grid	I	Steel	white	0.0	QM
95	013	5th cwing	A	Door		Rgt Header	I	Steel	cream	0.0	QM
96	013	5th cwing	A	pipe insul		Rgt	I	Fiberglass	white	0.1	QM
97	013	5th cwing	A	Ceiling		Ctr	I	Dry wall	white	0.1	Std
98	014	6th dwing	B	Wall	U	Ctr	I	Plaster	cream	0.2	QM
99	014	6th dwing	B	sprinkler		Ctr pipe	I	Steel	black	0.5	QM
100	014	6th dwing	B	Ceilingtile		Ctr	I	Fiberboard	white	0.0	QM
101	014	6th dwing	B	Ceilingtile		Ctr grid	I	Steel	white	0.0	QM
102	014	6th dwing	B	Door		Ctr Header	I	Steel	beige	0.0	QM

# SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
103	015	7th dwing	B	Wall	U	Ctr	I	Plaster	white	0.3	QM
104	015	7th dwing	B	Door		Ctr Header	I	Steel	white	-0.2	QM
105	015	7th dwing	B	Door		Ctr U Rgt	I	Steel	white	0.4	QM
106	015	7th dwing	B	Ceilingtile		Ctr	I	Fiberboard	white	-0.2	QM
107	015	7th dwing	B	Ceilingtile		Ctr grid	I	Steel	white	0.1	QM
108	015	7th dwing	B	sprinkler		Ctr pipe	I	Steel	black	-0.1	QM
109	016	7th awing	B	Wall	U	Ctr	I	wallpaper	green	0.3	QM
110	016	7th awing	B	Ceilingtile		Ctr	I	Fiberboard	white	0.0	QM
111	016	7th awing	B	Ceilingtile		Ctr grid	I	Steel	white	-0.1	QM
112	016	7th awing	B	exit sign		Ctr	I	Steel	black	-0.1	QM
113	016	7th awing	B	Door		Ctr Header	I	Steel	white	-0.1	QM
114	016	7th awing	B	Door		Ctr U Rgt	I	Steel	white	0.1	QM
115	017	8th awing	B	Wall	U	Lft	I	Plaster	white	-0.1	QM
116	017	8th awing	D	Wall	U	Lft	I	Plaster	white	-0.1	QM
117	017	8th awing	D	Soffit		Rgt	I	Steel	white	0.6	QM
118	017	8th awing	D	Ceilingtile		Rgt	I	Fiberboard	white	-0.3	QM
119	017	8th awing	D	Ceilingtile		Rgt grid	I	Steel	white	0.1	QM
120	017	8th awing	B	Door		Rgt Header	I	Steel	white	0.2	QM
121	017	8th awing	B	ceilingvent		Rgt diffuser	I	Steel	white	0.0	QM
122	018	9th awing	B	Ceilingtile		Rgt	I	Fiberboard	white	0.0	QM
123	018	9th awing	B	Ceilingtile		Rgt grid	I	Steel	white	0.1	QM
124	018	9th awing	B	Wall	U	Lft	I	Plaster	beige	0.3	QM
125	018	9th awing	B	exit sign		Lft	I	Steel	black	-0.1	QM
126	018	9th awing	D	Wall	U	Rgt	I	Dry wall	beige	0.0	QM
127	018	9th awing	D	speaker		Rgt	I	Steel	beige	0.1	QM
128	018	9th awing	A	Door		Lft Header	I	Steel	beige	0.0	QM
129	018	9th awing	A	Door		Lft U Rgt	I	Steel	beige	0.4	QM
130	019	stairwell 1	A	Wall	U	Ctr	I	Dry wall	white	0.0	QM
131	019	stairwell 1	C	Wall	U	Rgt	I	Concrete	white	0.0	QM
132	019	stairwell 1	C	Stairs		Rgt Treads	I	Concrete	brown	-0.1	QM
133	019	stairwell 1	C	Stairs		Rgt tread nose	I	Steel	yellow	2.1	QM
134	019	stairwell 1	C	Stairs		Rgt Risers	I	Steel	brown	0.1	Std
135	019	stairwell 1	C	Stairs		Rgt Stringers	I	Steel	brown	0.0	QM
136	019	stairwell 1	C	Window		Rgt Sash	I	Steel	black	-0.3	QM
137	019	stairwell 1	A	radiator		Rgt cover	I	Steel	cream	0.2	QM
138	019	stairwell 1	A	handrail		Ctr	I	Wood	stain	0.0	QM
139	019	stairwell 1	A	chase access		Ctr panel	I	Steel	cream	0.2	QM
140	019	stairwell 1	C	Door		Ctr Header	I	Steel	beige	0.1	QM
141	019	stairwell 1	C	Door		Ctr U Rgt	I	Steel	beige	0.2	QM
142	019	stairwell 1	C	sprinkler pi		Ctr	I	Steel	red	0.1	QM
143	020	stairwell 5	A	Wall	U	Ctr	I	Concrete	cream	0.2	QM
144	020	stairwell 5	C	chase cage		Ctr	I	Steel	cream	-0.3	QM
145	020	stairwell 5	C	Stairs		Ctr pan	I	Steel	cream	-0.1	QM
146	020	stairwell 5	C	Stairs		Ctr Treads	I	Concrete	brown	0.1	QM
147	020	stairwell 5	C	Stairs		Ctr tread nose	I	Steel	yellow	0.3	QM
148	020	stairwell 5	C	handrail		Ctr	I	Wood	stain	-0.2	QM
149	020	stairwell 5	C	sprinklerpip		Ctr	I	Steel	red	0.1	QM
150	020	stairwell 5	C	chase access		Ctr panel	I	Steel	cream	0.0	QM
151	020	stairwell 5	C	Door		Ctr Header	I	Steel	white	0.1	QM
152	020	stairwell 5	C	Door		Ctr U Rgt	I	Steel	beige	0.2	QM
153	020	stairwell 5	D	radiator		Ctr cover	I	Steel	cream	0.0	QM
154		CALIBRATION								0.9	TC
155		CALIBRATION								1.0	TC
156		CALIBRATION								1.0	TC

---- End of Readings ----

SEQUENTIAL REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Read No.	Rm No.	Room Name	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
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# SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Inspection Date: 12/04/12  
Report Date: 12/4/2012  
Abatement Level: 1.0  
Report No. 12/04/12 09:27  
Total Readings: 156 Actionable: 1  
Job Started: 12/04/12 09:27  
Job Finished: 12/04/12 14:40

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
Interior Room 019 stairwell 1									
133	C	Stairs	Rgt	tread nose	I	Steel	yellow	2.1	QM
Calibration Readings									
----- End of Readings -----									



# DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Inspection Date: 12/04/12  
 Report Date: 12/4/2012  
 Abatement Level: 1.0  
 Report No. 12/04/12 09:27  
 Total Readings: 156  
 Job Started: 12/04/12 09:27  
 Job Finished: 12/04/12 14:40

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
Interior Room 001 1st awing									
004	A	starwell11 do	Lft	jamb	I	Steel	white	0.0	QM
005	A	starwell11 do	Lft	uright	I	Steel	white	0.3	QM
009	A	mechrm door	Ctr	jamb	I	Steel	white	0.4	QM
010	A	mechrm door	Ctr	uleft	I	Wood	stain	-0.2	QM
011	A	conduit	Ctr		I	Steel	white	0.3	QM
012	A	ceilingtile	Ctr	grid	I	Steel	white	0.1	QM
014	A	ceiling	Rgt	tile	I	Fiberboard	white	0.0	QM
015	A	ceilingtile	Rgt	grid	I	Steel	white	0.2	QM
016	A	speaker	Rgt		I	Steel	beige	0.2	QM
017	A	light	Rgt	housing	I	vinyl	white	0.1	QM
013	A	Wall	U Rgt		I	Dry wall	beige	0.0	QM
007	A	Ceiling	Lft	tile	I	Fiberboard	white	0.0	QM
006	A	Soffit	Lft		I	Plaster	white	-0.2	Std
018	A	Door	Rgt	Lft jamb	I	Steel	cream	-0.1	QM
019	A	Door	Rgt	U Rgt	I	Steel	cream	0.2	QM
008	C	Wall	U Lft		I	Plaster	white	0.4	Std
Comment: surgery area, limited access									
Interior Room 002 1st bwing									
022	A	soffitt	Lft		I	Steel	white	0.4	QM
023	A	ceilingtile	Lft		I	Fiberboard	white	0.0	QM
025	A	ceilingtile	Rgt	grid	I	Steel	white	0.1	QM
026	A	ceilingtile	Rgt		I	Fiberboard	white	0.0	QM
027	A	Wall	U Rgt		I	wallpaper	beige	0.3	QM
021	A	Door	Lft	Lft jamb	I	Steel	white	-0.2	QM
020	A	Door	Lft	U Rgt	I	Wood	stain	-0.2	QM
Interior Room 003 1st dwing									
024	B	ceilingtile	Lft	grid	I	Steel	white	0.1	Std
032	B	soffitt	Ctr		I	Steel	white	0.4	QM
031	B	Wall	U Rgt		I	Dry wall	blue	0.1	QM
033	B	Door	Ctr	Rgt jamb	I	Steel	white	0.0	QM
034	B	Door	Ctr	U Rgt	I	Steel	white	0.1	QM
028	C	ceilingtile	Lft		I	Fiberboard	white	0.0	QM
029	C	ceilingtile	Lft	grid	I	Steel	white	0.1	QM
030	C	Wall	U Lft		I	Plaster	white	0.2	QM
Interior Room 004 1st cwing									
037	C	ceilingtile	Lft	grid	I	Steel	white	0.2	QM
038	C	pipe insul	Lft		I	Fiberglass	white	0.4	QM
035	C	Wall	U Lft		I	Plaster	lt blue	-0.1	QM
036	C	Ceiling	Lft	tile	I	Fiberboard	white	0.0	QM
Interior Room 005 2nd cwing									
039	C	Wall	U Lft		I	Plaster	cream	0.3	QM
040	C	Ceiling	Lft	tile	I	Fiberboard	white	0.3	QM
041	C	Ceiling	Lft	grid	I	Steel	white	0.3	QM
042	D	Door	Lft	Rgt jamb	I	Steel	cream	0.3	Std

# DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
Interior Room 006 2nd bwing									
047	C	Ceilingtile	Lft	grid	I	Steel	white	0.3	QM
048	C	blackpipe	Lft		I	Steel	black	0.2	QM
049	C	pipehanger	Lft		I	Steel	black	0.4	QM
044	C	Wall	U Lft		I	Plaster	lt blue	0.2	QM
046	C	Ceiling	Lft	tile	I	Fiberboard	white	-0.1	QM
045	C	Soffit	Lft		I	Steel	white	0.4	QM
043	C	Door	Lft	Rgt jamb	I	Steel	lt blue	0.1	QM
Interior Room 007 2nd dwing									
054	A	Ceilingtile	Rgt	grid	I	Steel	white	0.3	QM
055	A	speaker	Rgt		I	Steel	gray	-0.1	QM
050	A	Wall	U Rgt		I	Plaster	white	0.3	QM
053	A	Ceiling	Rgt	tile	I	Fiberboard	white	0.1	QM
052	A	Soffit	Rgt		I	Steel	white	0.0	QM
051	B	Wall	U Rgt		I	Plaster	blue	0.3	QM
Interior Room 008 3rd awing									
061	A	Wall	U Rgt		I	Dry wall	blue	-0.1	QM
058	B	Ceilingtile	Lft	grid	I	Steel	white	0.2	QM
059	B	speaker	Lft		I	Steel	beige	0.3	QM
056	B	Wall	U Lft		I	Plaster	white	0.0	QM
057	B	Ceiling	Lft	tile	I	Fiberboard	white	-0.1	QM
060	D	Soffit	Rgt		I	Steel	white	-0.1	QM
Interior Room 009 3rd bwing									
065	B	Ceilingtile	Rgt		I	Fiberboard	white	0.2	Std
066	B	Ceilingtile	Rgt	grid	I	Steel	white	0.1	QM
064	B	Soffit	Rgt		I	Steel	white	0.5	QM
062	C	Wall	U Rgt		I	wallpaper	purple	0.4	QM
063	C	Wall	U Rgt		I	Plaster	cream	0.3	QM
Interior Room 010 3rd dwing									
069	C	Ceilingtile	Ctr	grid	I	Steel	white	0.4	QM
070	C	Ceilingtile	Ctr		I	Fiberboard	white	0.0	QM
067	C	Wall	U Ctr		I	Plaster	cream	0.5	QM
068	C	Soffit	Ctr		I	Steel	white	0.2	QM
Interior Room 011 4th bwing									
075	A	ceilingvent	Lft	diffuser	I	Steel	white	0.0	QM
073	C	Ceilingtile	Lft	grid	I	Steel	white	0.2	QM
074	C	Wall	U Lft		I	Plaster	lt blue	0.4	QM
072	C	Ceiling	Lft	tile	I	Fiberboard	white	0.0	QM
071	C	Door	Lft	Lft jamb	I	Steel	lt blue	0.1	QM
Interior Room 012 4th cwing									
077	A	Ceilingtile	Rgt		I	Fiberboard	white	0.0	QM
078	A	Ceilingtile	Rgt	grid	I	Steel	white	0.3	QM
079	A	pipe	Rgt	hanger	I	Steel	green	0.4	QM
080	A	blackpipe	Rgt		I	Steel	black	-0.1	QM
076	A	Wall	U Rgt		I	Dry wall	blue	-0.1	QM
082	A	Wall	U Rgt		I	Dry wall	lt blue	-0.2	QM
083	A	Soffit	Rgt		I	Steel	white	0.4	QM
081	A	Door	Rgt	Header	I	Steel	cream	0.0	QM
084	B	Ceilingtile	Rgt	grid	I	Steel	white	-0.1	QM
086	B	Ceilingtile	Rgt		I	Fiberboard	white	-0.1	QM
087	B	blackpipe	Rgt		I	Steel	black	0.3	QM

# DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
088	B	pipeclamp	Rgt		I	Steel	orange	0.5	QM
085	B	Wall	U Rgt		I	Dry wall	lt gray	0.1	QM
Interior Room 013 5th cwing									
094	A	Ceilingtile	Rgt	grid	I	Steel	white	0.0	QM
096	A	pipe insul	Rgt		I	Fiberglass	white	0.1	QM
092	A	Wall	U Rgt		I	Dry wall	cream	0.0	QM
097	A	Ceiling	Ctr		I	Dry wall	white	0.1	Std
093	A	Ceiling	Rgt	tile	I	Fiberboard	white	0.1	QM
095	A	Door	Rgt	Header	I	Steel	cream	0.0	QM
Interior Room 014 6th dwing									
099	B	sprinkler	Ctr	pipe	I	Steel	black	0.5	QM
100	B	Ceilingtile	Ctr		I	Fiberboard	white	0.0	QM
101	B	Ceilingtile	Ctr	grid	I	Steel	white	0.0	QM
098	B	Wall	U Ctr		I	Plaster	cream	0.2	QM
102	B	Door	Ctr	Header	I	Steel	beige	0.0	QM
Interior Room 015 7th dwing									
106	B	Ceilingtile	Ctr		I	Fiberboard	white	-0.2	QM
107	B	Ceilingtile	Ctr	grid	I	Steel	white	0.1	QM
108	B	sprinkler	Ctr	pipe	I	Steel	black	-0.1	QM
103	B	Wall	U Ctr		I	Plaster	white	0.3	QM
104	B	Door	Ctr	Header	I	Steel	white	-0.2	QM
105	B	Door	Ctr	U Rgt	I	Steel	white	0.4	QM
Interior Room 016 7th awing									
110	B	Ceilingtile	Ctr		I	Fiberboard	white	0.0	QM
111	B	Ceilingtile	Ctr	grid	I	Steel	white	-0.1	QM
112	B	exit sign	Ctr		I	Steel	black	-0.1	QM
109	B	Wall	U Ctr		I	wallpaper	green	0.3	QM
113	B	Door	Ctr	Header	I	Steel	white	-0.1	QM
114	B	Door	Ctr	U Rgt	I	Steel	white	0.1	QM
Interior Room 017 8th awing									
121	B	ceilingvent	Rgt	diffuser	I	Steel	white	0.0	QM
115	B	Wall	U Lft		I	Plaster	white	-0.1	QM
120	B	Door	Rgt	Header	I	Steel	white	0.2	QM
118	D	Ceilingtile	Rgt		I	Fiberboard	white	-0.3	QM
119	D	Ceilingtile	Rgt	grid	I	Steel	white	0.1	QM
116	D	Wall	U Lft		I	Plaster	white	-0.1	QM
117	D	Soffit	Rgt		I	Steel	white	0.6	QM
Interior Room 018 9th awing									
128	A	Door	Lft	Header	I	Steel	beige	0.0	QM
129	A	Door	Lft	U Rgt	I	Steel	beige	0.4	QM
125	B	exit sign	Lft		I	Steel	black	-0.1	QM
122	B	Ceilingtile	Rgt		I	Fiberboard	white	0.0	QM
123	B	Ceilingtile	Rgt	grid	I	Steel	white	0.1	QM
124	B	Wall	U Lft		I	Plaster	beige	0.3	QM
127	D	speaker	Rgt		I	Steel	beige	0.1	QM
126	D	Wall	U Rgt		I	Dry wall	beige	0.0	QM
Interior Room 019 stairwell 1									
138	A	handrail	Ctr		I	Wood	stain	0.0	QM
139	A	chase access	Ctr	panel	I	Steel	cream	0.2	QM
137	A	radiator	Rgt	cover	I	Steel	cream	0.2	QM

# DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Buffalo VA steam riser project

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm <sup>2</sup> )	Mode
130	A	Wall	U Ctr		I	Dry wall	white	0.0	QM
142	C	sprinkler pi	Ctr		I	Steel	red	0.1	QM
131	C	Wall	U Rgt		I	Concrete	white	0.0	QM
136	C	Window	Rgt	Sash	I	Steel	black	-0.3	QM
140	C	Door	Ctr	Header	I	Steel	beige	0.1	QM
141	C	Door	Ctr	U Rgt	I	Steel	beige	0.2	QM
133	C	Stairs	Rgt	tread nose	I	Steel	yellow	2.1	QM
135	C	Stairs	Rgt	Stringers	I	Steel	brown	0.0	QM
132	C	Stairs	Rgt	Treads	I	Concrete	brown	-0.1	QM
134	C	Stairs	Rgt	Risers	I	Steel	brown	0.1	Std
Interior Room 020 stairwell 5									
143	A	Wall	U Ctr		I	Concrete	cream	0.2	QM
144	C	chase cage	Ctr		I	Steel	cream	-0.3	QM
148	C	handrail	Ctr		I	Wood	stain	-0.2	QM
149	C	sprinklerpip	Ctr		I	Steel	red	0.1	QM
150	C	chase access	Ctr	panel	I	Steel	cream	0.0	QM
151	C	Door	Ctr	Header	I	Steel	white	0.1	QM
152	C	Door	Ctr	U Rgt	I	Steel	beige	0.2	QM
145	C	Stairs	Ctr	pan	I	Steel	cream	-0.1	QM
147	C	Stairs	Ctr	tread nose	I	Steel	yellow	0.3	QM
146	C	Stairs	Ctr	Treads	I	Concrete	brown	0.1	QM
153	D	radiator	Ctr	cover	I	Steel	cream	0.0	QM
Calibration Readings									
001								0.9	TC
002								0.8	TC
003								0.8	TC
089								0.9	TC
090								0.9	TC
091								0.9	TC
154								0.9	TC
155								1.0	TC
156								1.0	TC

----- End of Readings -----

# Performance Characteristic Sheet

EFFECTIVE DATE: October 24, 2000

EDITION NO.: 4

## MANUFACTURER AND MODEL:

Make: Radiation Monitoring Devices

Model: LPA-1

Source:  $^{57}\text{Co}$

Note: This sheet supersedes all previous sheets for the XRF instrument of the make, model, and source shown above for instruments sold or serviced after June 26, 1995. For other instruments, see prior editions.

## FIELD OPERATION GUIDANCE

### OPERATING PARAMETERS

Quick mode or nominal 30-second standard mode readings.

### XRF CALIBRATION CHECK LIMITS

0.7 to 1.3 mg/cm<sup>2</sup> (inclusive)

### SUBSTRATE CORRECTION:

For XRF results below 4.0 mg/cm<sup>2</sup>, substrate correction is recommended for:

Metal using 30-second standard mode readings.

None using quick mode readings.

Substrate correction is not needed for:

Brick, Concrete, Drywall, Plaster, and Wood using 30-second standard mode readings

Brick, Concrete, Drywall, Metal, Plaster, and Wood using quick mode readings

### THRESHOLDS:

30-SECOND STANDARD MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm <sup>2</sup> )
Results corrected for substrate bias on metal substrate only	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	0.9
	Plaster	1.0
	Wood	1.0

QUICK MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm <sup>2</sup> )
Readings not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

## BACKGROUND INFORMATION

### EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (HUD Guidelines). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted on approximately 150 test locations in July 1995. The instrument that performed testing in September had a new source installed in June 1995 with 12 mCi initial strength.

### OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

### XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest  $1.0 \text{ mg/cm}^2$  in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the  $1.02 \text{ mg/cm}^2$  film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

### SUBSTRATE CORRECTION VALUE COMPUTATION

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest  $1.0 \text{ mg/cm}^2$  for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to  $1.0 \text{ mg/cm}^2$  at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest  $1 \text{ mg/cm}^2$ . Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.

Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.

For each substrate type (the  $1.02 \text{ mg/cm}^2$  NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):

$$\text{Correction value} = (1\text{st} + 2\text{nd} + 3\text{rd} + 4\text{th} + 5\text{th} + 6\text{th Reading}) / 6 - 1.02 \text{ mg/cm}^2$$

Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

### EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use either 15-second readings or 60-second readings.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

#### **BIAS AND PRECISION:**

Do not use these bias and precision data to correct for substrate bias. These bias and precision data were computed without substrate correction from samples with reported laboratory results less than 4.0 mg/cm<sup>2</sup> lead. The data which were used to determine the bias and precision estimates given in the table below have the following properties. During the July 1995 testing, there were 15 test locations with a laboratory-reported result equal to or greater than 4.0 mg/cm<sup>2</sup> lead. Of these, one 30-second standard mode reading was less than 1.0 mg/cm<sup>2</sup> and none of the quick mode readings were less than 1.0 mg/cm<sup>2</sup>. The instrument that tested in July is representative of instruments sold or serviced after June 26, 1995. These data are for illustrative purposes only. Actual bias must be determined on the site. Results provided above already account for bias and precision. Bias and precision ranges are provided to show the variability found between machines of the same model.

30-SECOND STANDARD MODE READING MEASURED AT	SUBSTRATE	BIAS (mg/cm <sup>2</sup> )	PRECISION* (mg/cm <sup>2</sup> )
0.0 mg/cm <sup>2</sup>	Brick	0.0	0.1
	Concrete	0.0	0.1
	Drywall	0.1	0.1
	Metal	0.3	0.1
	Plaster	0.1	0.1
	Wood	0.0	0.1
0.5 mg/cm <sup>2</sup>	Brick	0.0	0.2
	Concrete	0.0	0.2
	Drywall	0.0	0.2
	Metal	0.2	0.2
	Plaster	0.0	0.2
	Wood	0.0	0.2
1.0 mg/cm <sup>2</sup>	Brick	0.0	0.3
	Concrete	0.0	0.3
	Drywall	0.0	0.3
	Metal	0.2	0.3
	Plaster	0.0	0.3
	Wood	0.0	0.3
2.0 mg/cm <sup>2</sup>	Brick	-0.1	0.4
	Concrete	-0.1	0.4
	Drywall	-0.1	0.4
	Metal	0.1	0.4
	Plaster	-0.1	0.4
	Wood	-0.1	0.4

\* Precision at 1 standard deviation.

#### CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than the upper boundary of the inconclusive range, and negative if they are less than the lower boundary of the inconclusive range, or inconclusive if in between. The inconclusive range includes both its upper and lower bounds. Earlier editions of this *XRF Performance Characteristics Sheet* did not include both bounds of the inconclusive range as "inconclusive." While this edition of the Performance Characteristics Sheet uses a different system, the specific XRF readings that are considered positive, negative, or inconclusive for a given XRF model and substrate remain unchanged, so previous inspection results are not affected.

#### DOCUMENTATION:

An EPA document titled *Methodology for XRF Performance Characteristic Sheet* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD. A HUD document titled *A Nonparametric Method for Estimating the 5th and 95th Percentile Curves of Variable-Time XRF Readings Based on Monotone Regression* provides supplemental information on the methodology for variable-time XRF instruments. A copy of this document can be obtained from the HUD lead web site, [www.hud.gov/lea](http://www.hud.gov/lea).

This edition of the XRF Performance Characteristic Sheet was developed by QuanTech, Inc., under a contract from the U.S. Department of Housing and Urban Development (HUD). HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.





## 6.0 Disclosure Requirements

If the subject property of this report is target housing, the owner has certain responsibilities under the Lead Disclosure Rule when the property is being sold or leased, or when a lease is being renewed with revisions. In general, lead disclosure is required in these circumstances, except that disclosure does not have to be made when the target housing is being leased if the inspection has found that it is lead-based paint free.

*Per 40 CFR Part 745 Target housing* means any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing) or any 0-bedroom dwelling.

Results of this inspection must be provided to new lessees (tenants) and prospective buyers of this property under Federal law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must be provided by the owner to prospective buyers and it must be made available to prospective tenants and to renewing tenants if they have not been provided the information previously. The inspector's plain language summary of the report must be provided to the client (e.g., property owner or manager) when the complete report is provided. The landlord (lessor) or seller is also required to distribute an educational pamphlet approved by the U.S. Environmental Protection Agency and include the Lead Warning Statement in the leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards. Complete disclosure requires the landlord/sellers and renters/buyers (and their agents) to sign and date acknowledgement that the required information and materials were provided and received. Also, prospective buyers must be provided the opportunity to have their own lead based paint inspection, lead hazard screen or risk assessment performed before the purchase agreement is signed; the standard period is 10 days, but this period may be changed or waived by agreement between the seller and prospective buyer. EPA regulations require the inspector to keep the inspection report for at least 3 years. (See section IV of chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing for further details; see [www.hud.gov/lead](http://www.hud.gov/lead).)



## **Appendix A    General Conditions of Survey**

1. Sienna Environmental Technologies neither accepts nor implies any liability for the implementation of remediation activities occurring from the results of this report.
2. This Inspection was limited to those areas accessible to the inspector. Sienna Environmental Technologies neither accepts nor implies any liability for materials that may be present between walls, floors or interstitial areas not readily accessible to the inspectors.
3. The results of the laboratory analytical reports that may be contained herein are the product of the knowledge, experience and expertise of the laboratory retained to perform such services. Sienna Environmental Technologies neither accepts nor implies any liability for the sample analysis reports.
4. This report is based on the condition and contents present at the site on the day of the survey. Sienna Environmental Technologies is not liable for materials, chemicals or other substances of concern that may have been removed from the site, cleaned or disposed of prior to the inspection date or subsequent to that date.
5. An inspection relies heavily upon identification of homogeneous areas, with sampling and laboratory analysis then determined by the quantity of surfaces identified, generally accepted inspection protocols, regulatory requirements, and the inspector's or risk assessor's judgment. Specific sample locations are determined with the objective of selecting representative samples. As with any type of sampling, the possibility of obtaining a false positive or false negative does exist, is inherent in the sampling process, and can at times result from the fact that both lead and asbestos fibers are not always uniformly distributed throughout suspect surfaces or materials. Although Sienna Environmental Technologies attempts to minimize the risk of a false positive or false negative result through a comprehensive inspection protocol, the possibility does exist, and could only be completely eliminated through testing and analysis of 100% of each suspect surface, which of course is not practical.



## **Appendix B   Certifications and Licenses**

# United States Environmental Protection Agency

This is to certify that

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226



New York

This certification is valid from the date of issuance and expires

November 20, 2015

NY-599-4

Certification #

November 06, 2012


Issued On




*Michelle Price*

Michelle Price, Chief

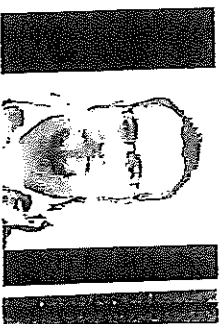
Lead, Heavy Metals, and Inorganics Branch

Certification No NY-R-120606-1	
Date of Birth 04/26/1980	Expiration Date 04/24/2015
Address 7005 Revere Dr. Derby, NY 14047	
Badge Holder's Name Mark A. Beyer	
Badge Holder's Signature 	

If found, drop in any mailbox  
Postmaster: Please return to:  
US EPA  
1200 Pennsylvania Ave, NW  
(MC-740407)  
Washington, DC 20460  
or call 1-800-424-LEAD



New York  
RISK ASSESSOR

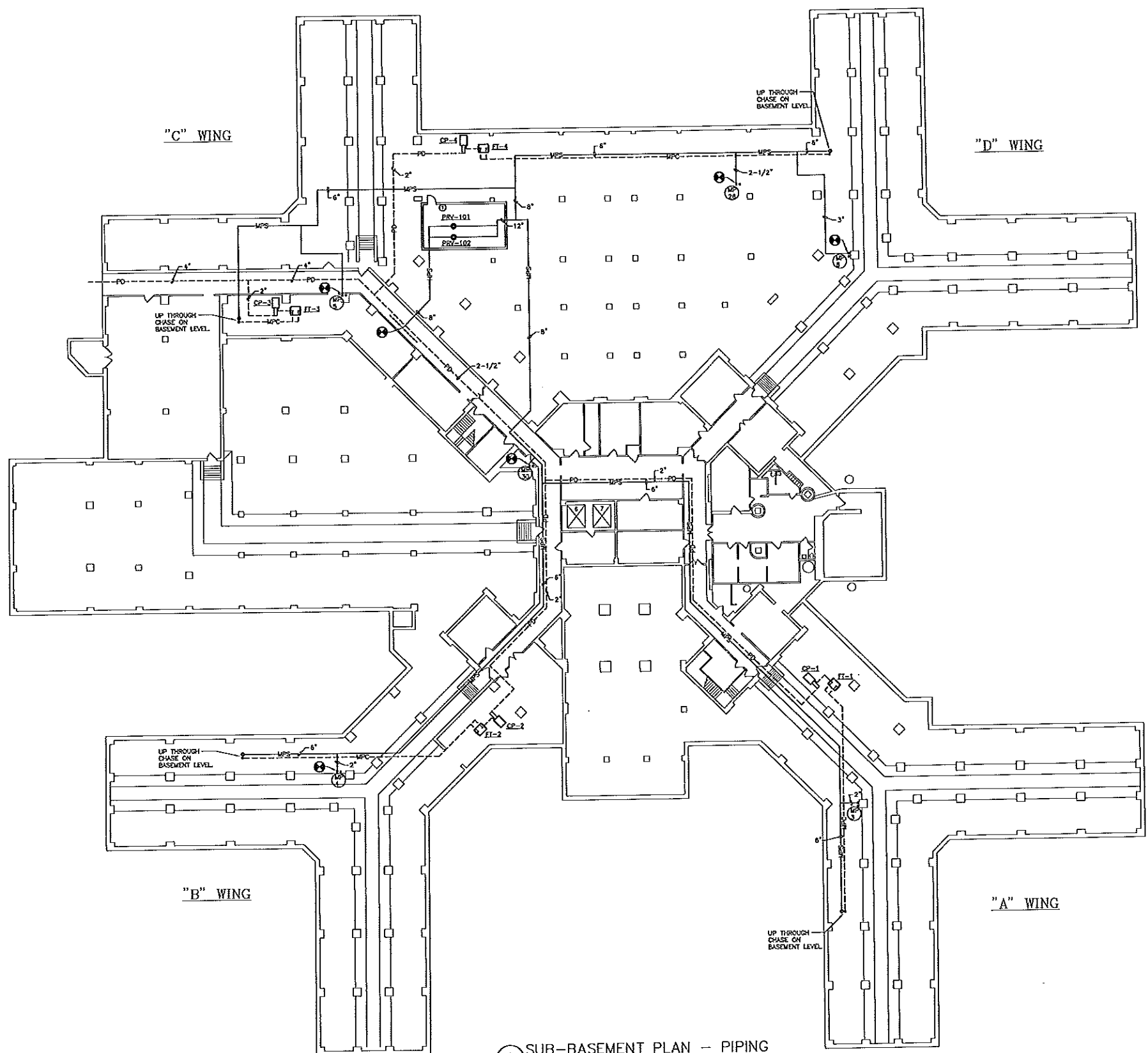


Certified Lead-Base di  
Paint Professional



## **Appendix C Floor Plans**

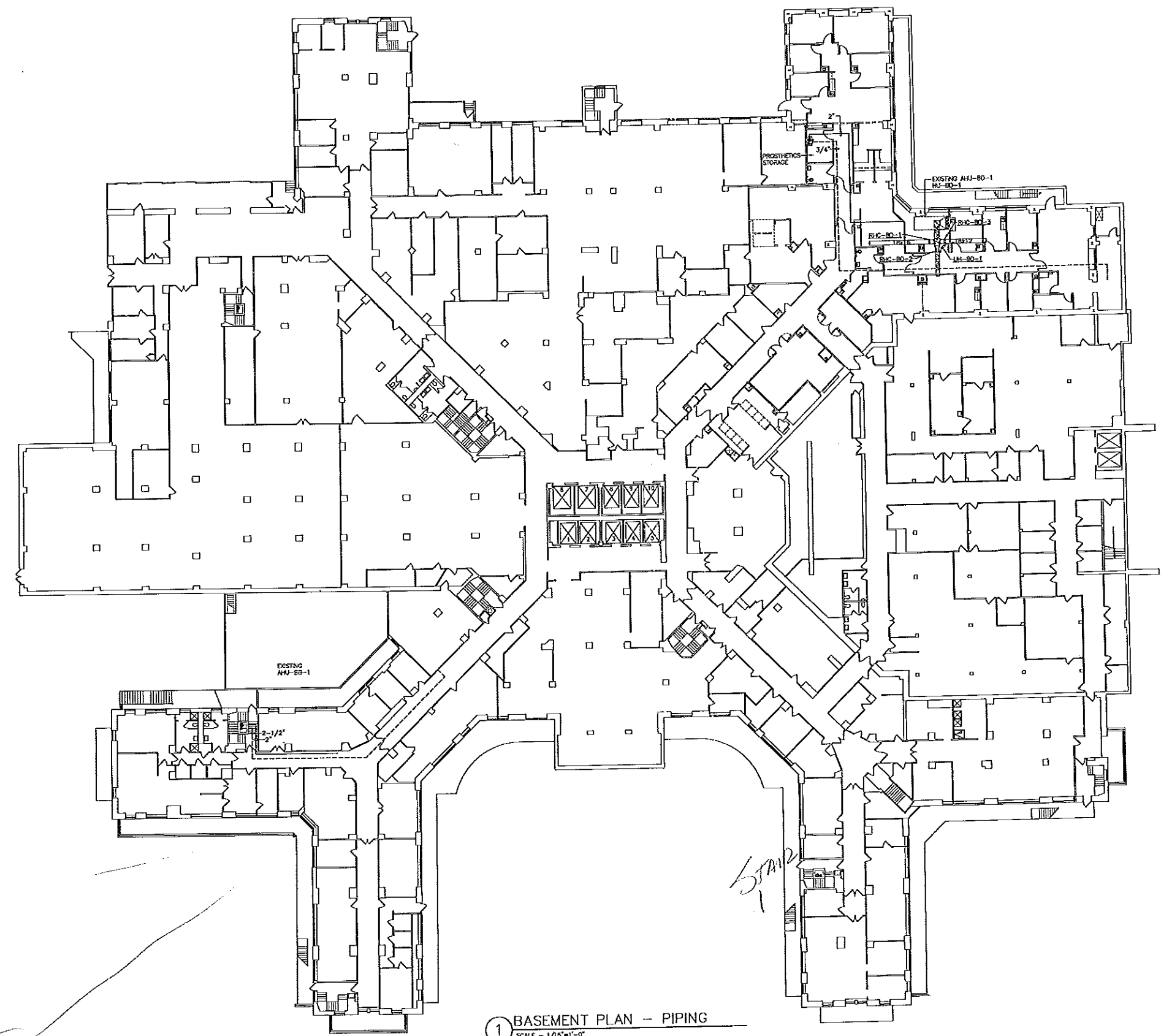
one eighth inch = one foot  
 one quarter inch = one foot  
 three eighths inch = one foot  
 one half inch = one foot  
 three quarters inch = one foot  
 one inch = one foot  
 one and one half inches = one foot  
 two inches = one foot  
 three inches = one foot



1 SUB-BASEMENT PLAN -- PIPING  
 SCALE - 1/16"=1'-0"

CONSULTANTS:  		ARCHITECT/ENGINEERS: <b>RAM-TECH ENGINEERS</b> Buffalo, NY • Buffalo, NY • Philadelphia, PA RAM-TECH Engineers of Buffalo, P.C. phone 716-833-7716 fax 716-833-6379 www.ram-tech-engineers.com		Drawing Title: SUB-BASEMENT PLAN HVAC PIPING Approved Project Director: YAPACUS PLANNING AND ENGINEERING		Project Title: REPLACE STEAM RISERS Location: YAMC BUFFALO, NY Date: 10/24/12		Project Number: 628-11-08 Building Number: 1 Drawing Number: H100 Des: d--		Office of Construction and Facilities Management	
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one eighth inch = one foot  
 one quarter inch = one foot  
 three eighths inch = one foot  
 one half inch = one foot  
 three quarters inch = one foot  
 one inch = one foot  
 one and one half inches = one foot  
 three inches = one foot



1 BASEMENT PLAN - PIPING  
 SCALE - 1/16"=1'-0"

Scale: AS NOTED

CONSULTANTS:  		ARCHITECT/ENGINEERS:  RAM-TECH Engineers of Buffalo, P.C. phone 716-833-7718 fax 716-833-5372 www.ram-tech-engineers.com		Existing Title - BASEMENT PLAN HVAC PIPING Approved Project Director - VAPORICS PLANNING AND ENGINEERING	Project Title REPLACE STEAM RISERS Location VAMC BUFFALO, NY Date 10/24/12	Project Number 629-B-08 Building Number 1 Drawing Number H101 Dwg - d -	Office of Construction and Facilities Management
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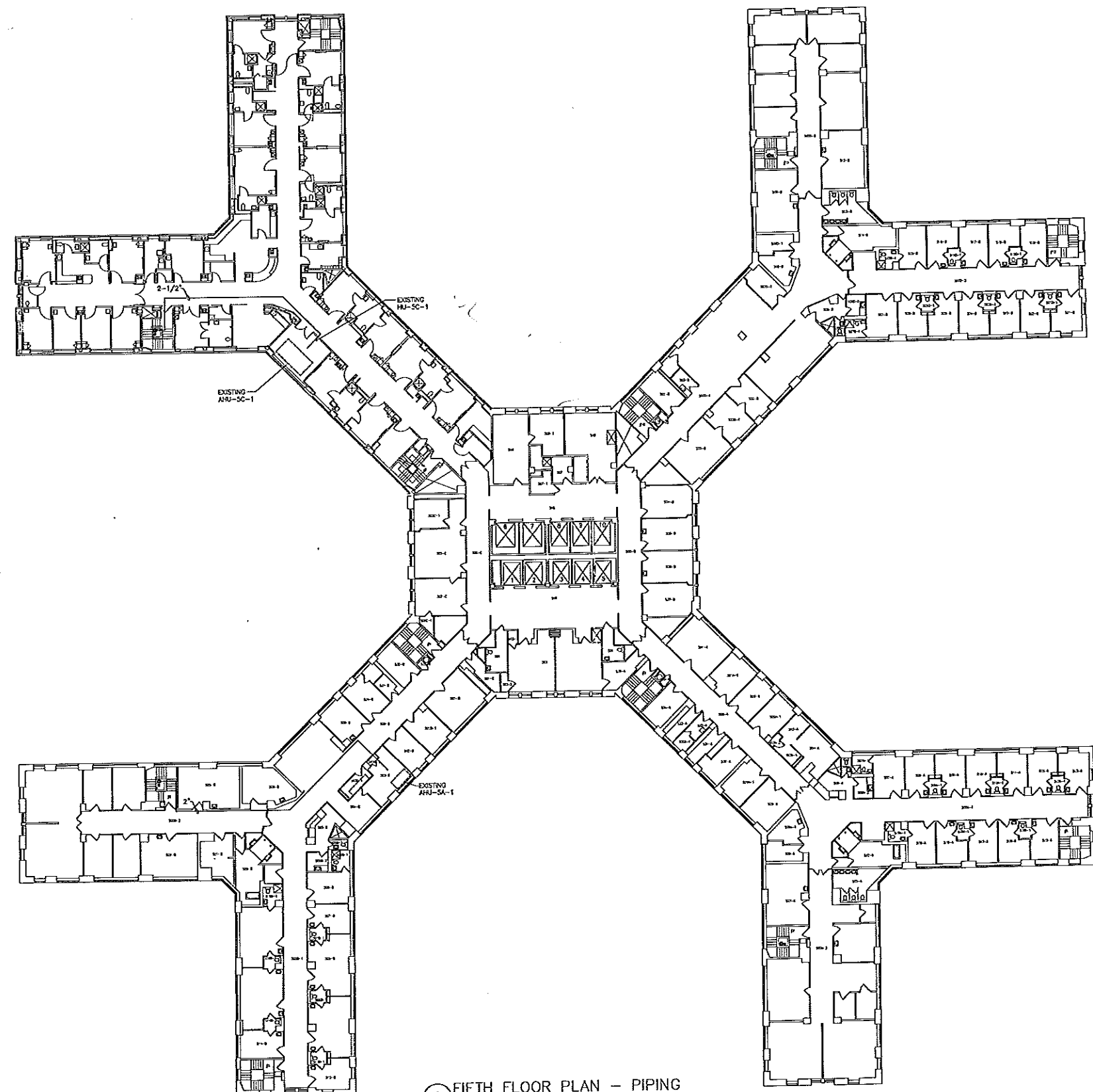






one eighth inch = one foot  
 one quarter inch = one foot  
 three eighths inch = one foot  
 one half inch = one foot  
 three quarters inch = one foot  
 one inch = one foot  
 one and one half inches = one foot  
 three inches = one foot

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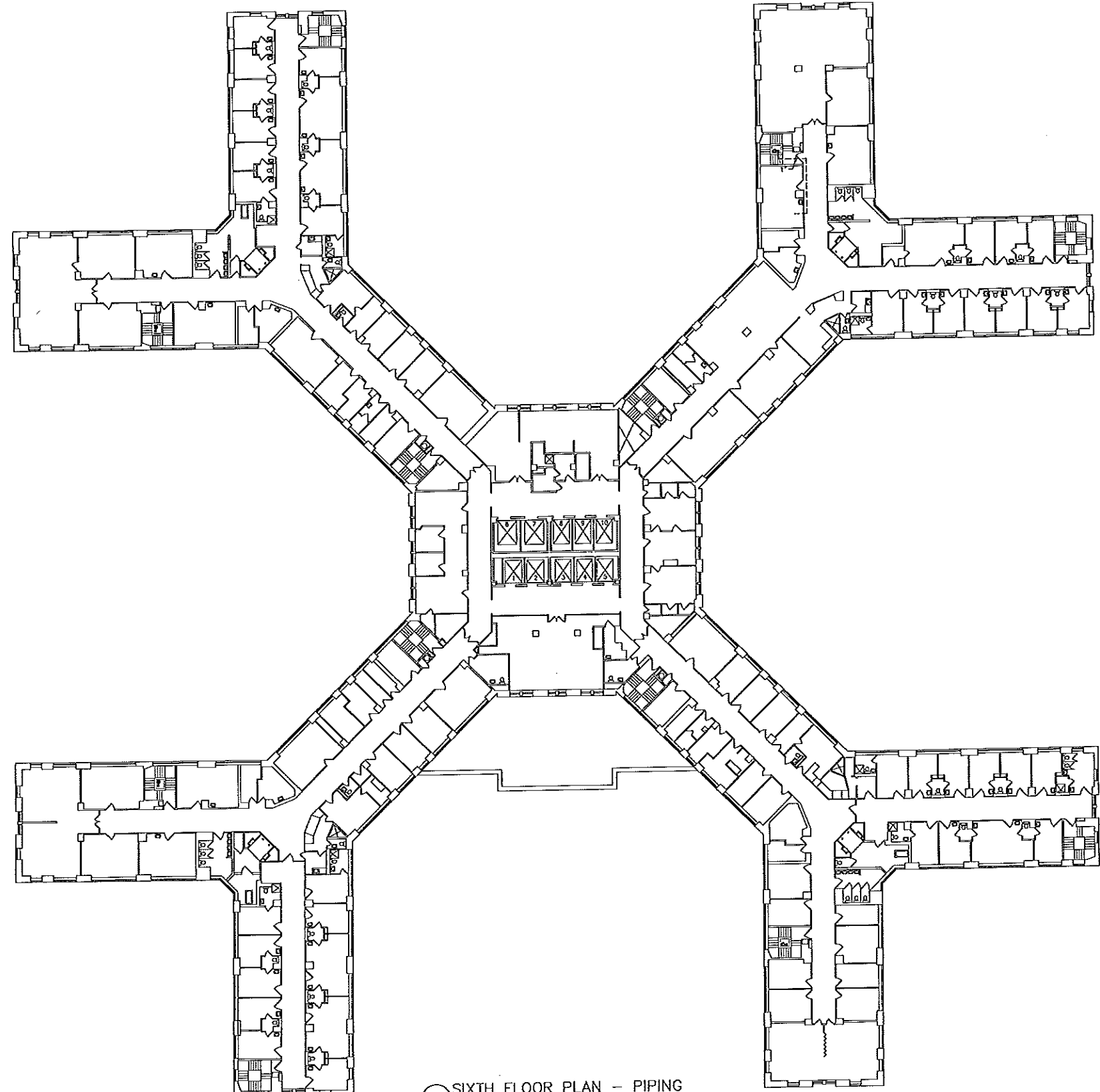


1 FIFTH FLOOR PLAN - PIPING  
 SCALE - 1/16"=1'-0"

CONSULTANTS:  		ARCHITECT/ENGINEERS: <b>RAM-TECH ENGINEERS</b> <small>Buffalo, NY • Buffalo, NY • Philadelphia, PA</small> <b>RAM-TECH Engineers of Buffalo, P.C.</b> <small>Phone: 716-833-7716 Fax: 716-833-5073 www.ram-tech-engineers.com</small>		Drawing Title: <b>FIFTH FLOOR PLAN HVAC PIPING</b> Approved Project Director: <b>VAPACUS PLANNING AND ENGINEERING</b>		Project Title: <b>REPLACE STEAM RISERS</b> Location: <b>VAMC BUFFALO, NY</b> Date: <b>10/24/12</b>		Project Number: <b>628-B-88</b> Building Number: <b>1</b> Drawing Number: <b>H106</b> Desig: <b>d--</b>		Office of Construction and Facilities Management 	
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Scale AS NOTED

one eighth inch = one foot  
 one quarter inch = one foot  
 three eighths inch = one foot  
 one half inch = one foot  
 three quarters inch = one foot  
 one inch = one foot  
 one and one half inches = one foot  
 three inches = one foot

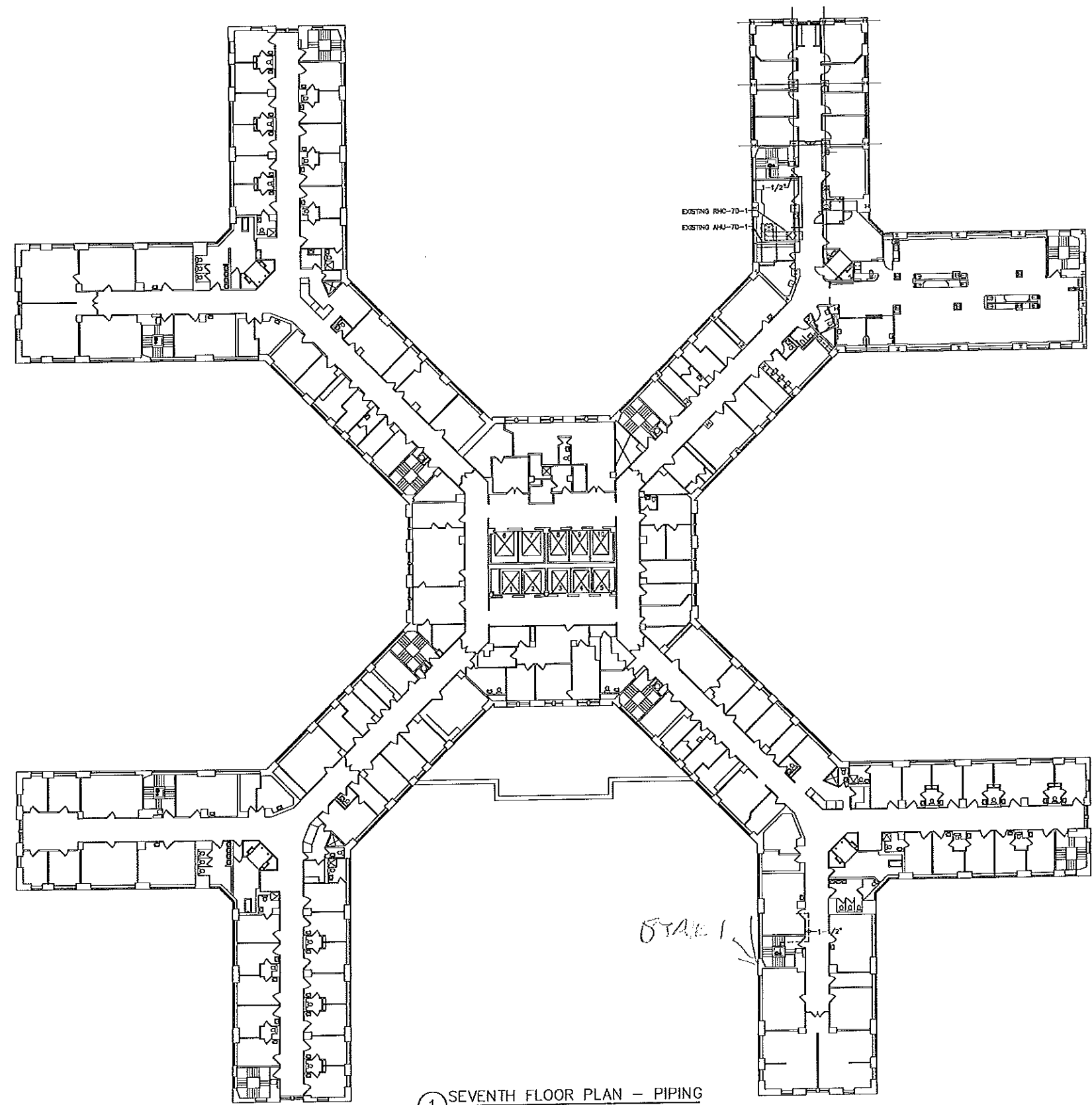


1 SIXTH FLOOR PLAN - PIPING  
 SCALE - 1/16"=1'-0"

1

CONSULTANTS:  		ARCHITECT/ENGINEERS: <b>RAM-TECH ENGINEERS</b> Syracuse, NY • Buffalo, NY • Philadelphia, PA <b>RAM-TECH Engineers</b> of Buffalo, P.C. phone: 716-833-7716 fax: 716-833-6373 www.ramtechengr.com		Drawing Title: SIXTH FLOOR PLAN HVAC PIPING Approved Project Director: VAPAKOS PLANNING AND ENGINEERING		Project Title: REPLACE STEAM RISERS Location: VAMCO BUFFALO, NY Date: 10/24/12		Project Number: 628-11-119 Building Number: 1 Drawing Number: H107 Day - d -		Office of Construction and Facilities Management	
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one eighth inch = one foot  
one quarter inch = one foot  
three eighths inch = one foot  
one half inch = one foot  
three quarters inch = one foot  
one inch = one foot  
one and one half inches = one foot  
two inches = one foot  
three inches = one foot

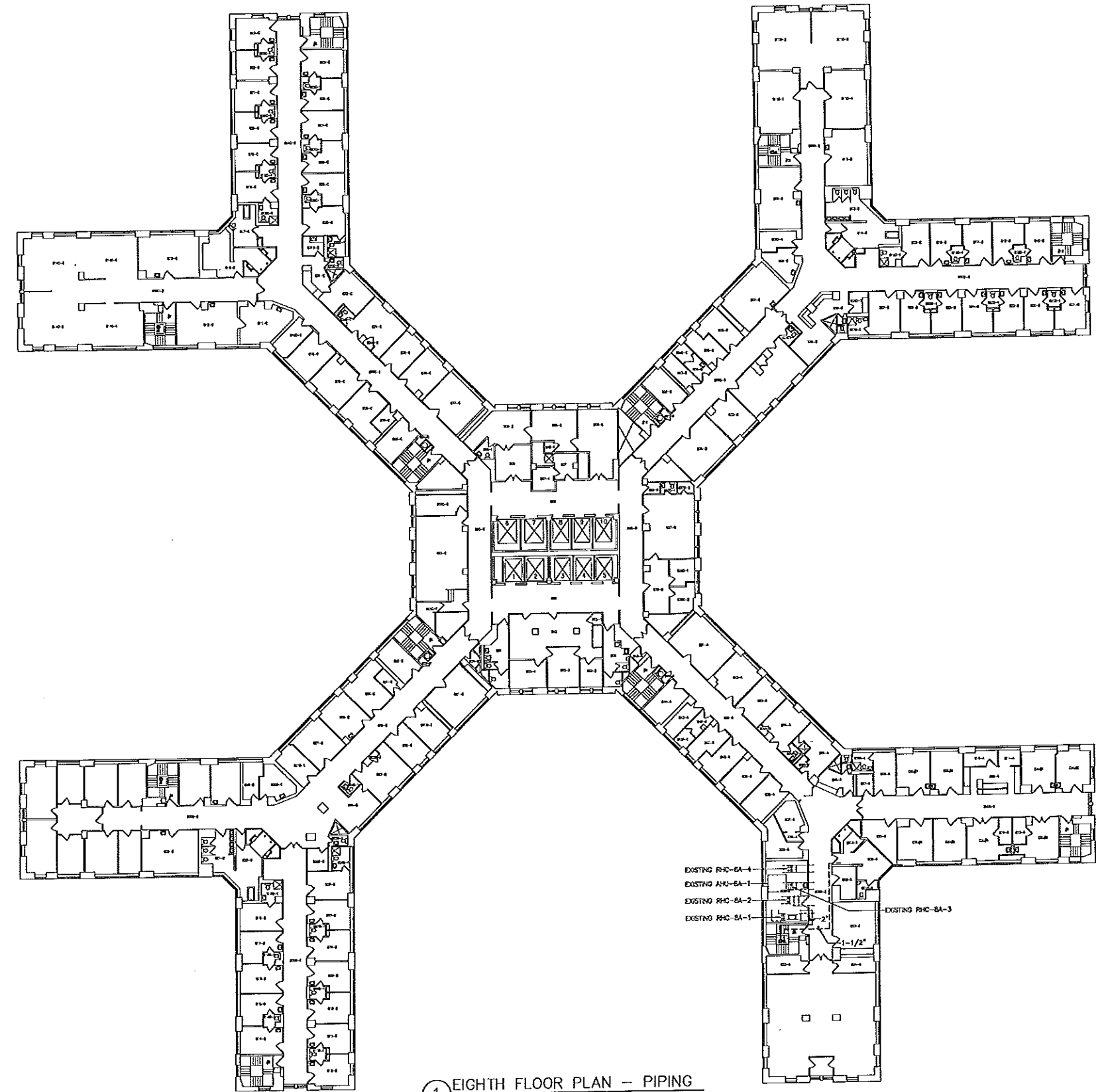


1 SEVENTH FLOOR PLAN - PIPING  
SCALE - 1/16"=1'-0"

CONSULTANTS:		ARCHITECT/ENGINEERS: <b>RAM-TECH ENGINEERS</b> Syracuse, NY • Buffalo, NY • Philadelphia, PA RAM-TECH Engineers of Buffalo, P.C. phone 716-833-7716 fax 716-833-8373 www.ramtecheng.com		Drawing Title: SEVENTH FLOOR PLAN HVAC PIPING Approved Project Director: VARANOS PLANNING AND ENGINEERING		Project Title: REPLACE STEAM RISERS Location: VAMC BUFFALO, NY Date: 10/24/02 Checked: MDR Drawn: MMH		Project Number: 628-11-09 Building Number: 1 Drawing Number: H108 Day - d - -		Office of Construction and Facilities Management	
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Scale AS NOTED

one eighth inch = one foot  
 one quarter inch = one foot  
 one half inch = one foot  
 three quarters inch = one foot  
 one inch = one foot  
 one and one half inches = one foot  
 three inches = one foot



1 EIGHTH FLOOR PLAN - PIPING  
 SCALE - 1/16"=1'-0"

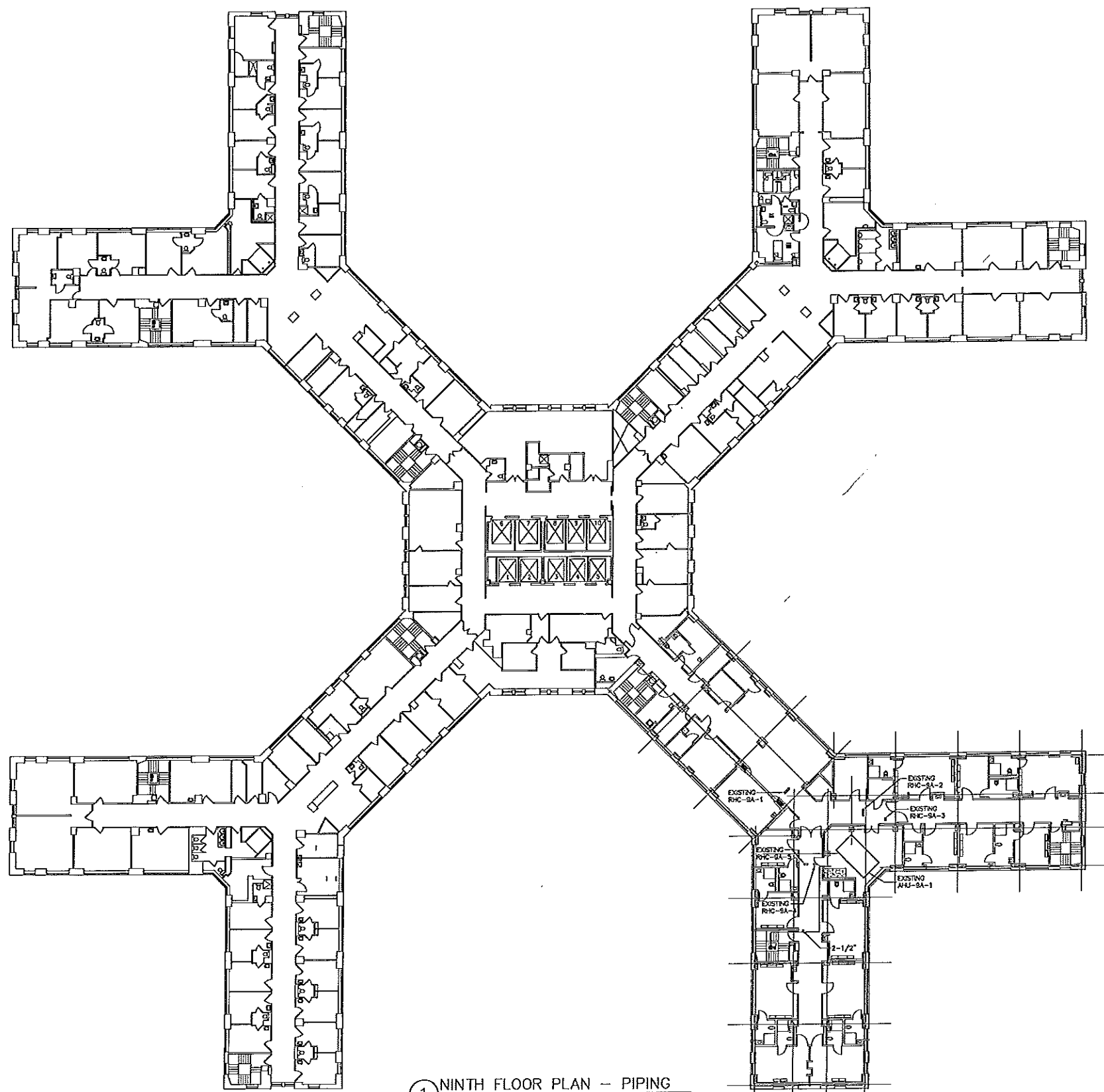
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CONSULTANTS:  		ARCHITECT/ENGINEERS:  RAM-TECH Engineers of Buffalo, P.C. Phone: 716-533-7716 Fax: 716-533-6373 www.ramtecheng.com		Drawing Title: EIGHTH FLOOR PLAN HVAC PIPING Approved Project Director: VAPAKIS PLANNING AND ENGINEERING		Project Title: REPLACE STEAM RISERS Location: VAMC BUFFALO, NY Date: 10/24/12 Checked: MDH Drawn: MMW		Project Number: 628-B-103 Building Number: 1 Drawing Number: H109 Dwg. - d -		Office of Construction and Facilities Management 	
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Scale: AS NOTED



one eighth inch = one foot  
 one quarter inch = one foot  
 three sixteenths inch = one foot  
 one half inch = one foot  
 three eighths inch = one foot  
 one inch = one foot  
 one and one half inches = one foot  
 three inches = one foot

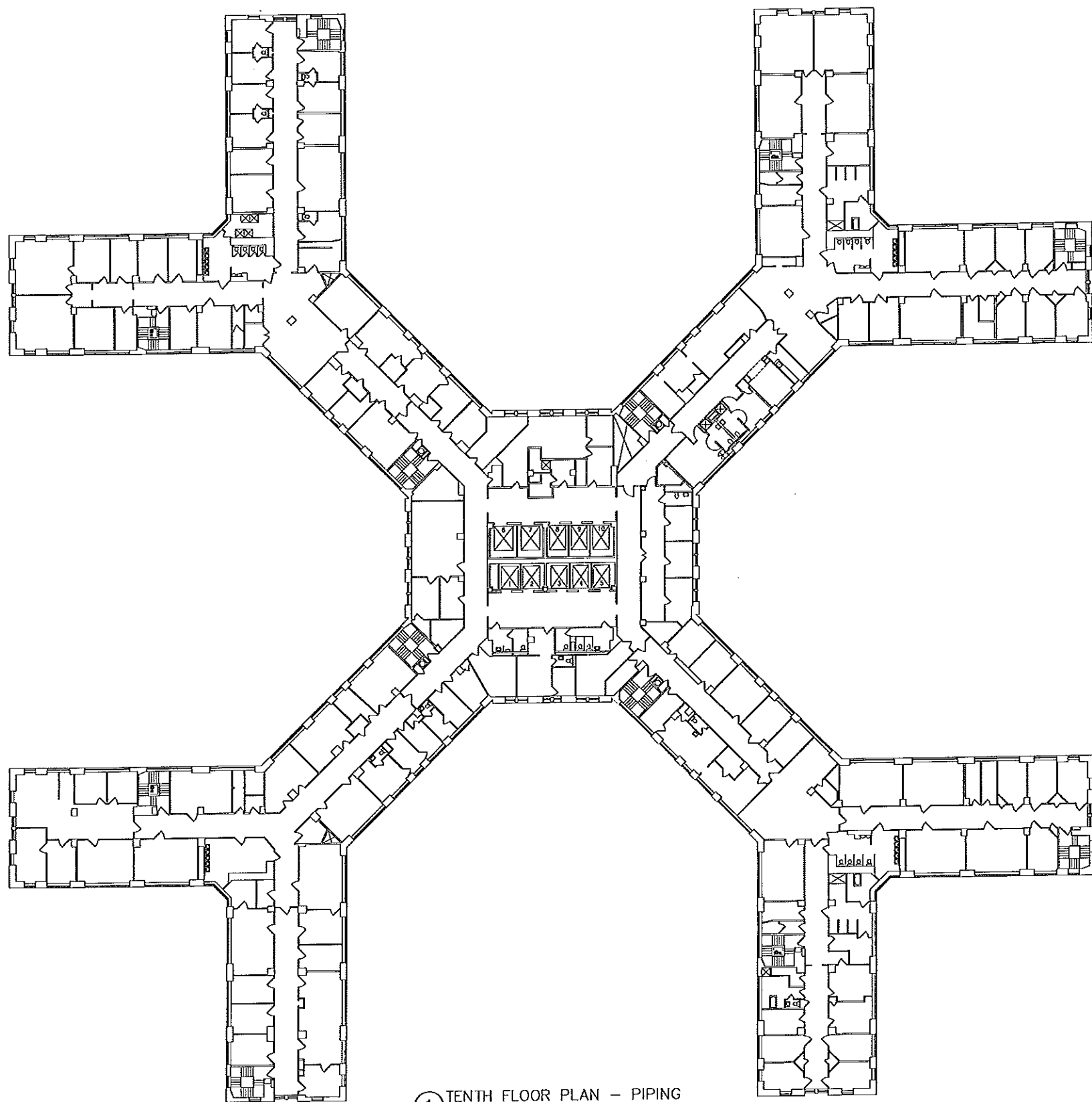


1 NINTH FLOOR PLAN -- PIPING  
 SCALE - 1/16"=1'-0"

CONSULTANTS:  		ARCHITECT/ENGINEERS:  RAM-TECH Engineers of Buffalo, P.C. Phone: 716.833.7718 Fax: 716.833.4073 www.ram-tech.org		Drawing Title: NINTH FLOOR PLAN HVAC PIPING Approved Project Director: VAPAKOS PLANNING AND ENGINEERING		Project Title: REPLACE STEAM RISERS Location: VAMCO BUFFALO, NY Date: 10/24/12		Project Number: 529-15-08 Building Number: 1 Drawing Number: H110 Day: d --		Office of Construction and Facilities Management 	
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one eighth inch = one foot  
one quarter inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one inch = one foot  
one and one half inches = one foot  
two inches = one foot  
three inches = one foot

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1 TENTH FLOOR PLAN - PIPING  
SCALE - 1/8"=1'-0"

CONSULTANTS:		ARCHITECT/ENGINEERS:		Drawing Title:		Project Title:		Project Number:		Office of Construction and Facilities Management	
		 RAM-TECH Engineers of Buffalo, P.C. phone: 716-332-7715 fax: 716-332-9072 www.ramtechengineers.com		TENTH FLOOR PLAN HVAC PIPING		REPLACE STEAM RISERS		620-11-100			
				Approved Project Director:		Location: VAMC BUFFALO, NY		Building Number: 1			
Date:				VAP/ACS PLANNING AND ENGINEERING		Date: 10/24/12		Checked: MDR		Drawing Number: H111	
								Drawn: MDN		Dwg. -- of --	

Scale: AS NOTED