

W O O L L E Y

A R C H I T E C T S

M O R R I S

FIRE ALARM
PORTION OF
STUDY
SEPT-2004

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FIRE ALARM

While there are existing smoke, thermal, and rate of rise detectors in the subject dormitories, manual intervention is currently required to initiate an alarm. The proposed fire alarm system, in conformance with current fire and ADA codes, will be based on supervised addressable equipment.

Each dormitory will have its own system, including central fire alarm panel, remote annunciator panel at building entrance, initiating devices such as smoke detectors and thermal detectors, fire rated sound system, and signaling devices. Interfaces will be included to monitor elevators, smoke batches, sprinkler flow and temper switches. The system will also include manual pull stations in exist ways, stairway smoke hatch connection, visual alarms, door holders on smoke doors in egress paths, and duct detectors.

The fire alarm systems in Scales, Waterbury and Funnelle Halls are 15 to 20 years old and should be replaced immediately. The systems in Oneida, Cayuga, Onondaga and Seneca Halls are 12 years old and should be replaced in 2-3 years. The systems in Lonis, Mackin and Moreland Halls are 8 years old and should be replaced with 5 years and before the year 2010.

Any building slated to undergo significant interior renovations prior to 2010 should defer fire alarm work until such renovations occur.

COST ESTIMATE

Cost estimates have been formatted in both building-by-building and system-by-system summaries, followed by more specific breakdowns by individual buildings. It should be noted that costs indicated are for construction only; refer to supplemental SUNY Oswego analysis for overall projects costs.

PAGE 3

- ASME A17.1 - 2003 – Elevator Code
- ANSI/NFPA 70 - 2002 - National Electric Code

Proposed New Elevator and New Shaft

- Building Code of New York State – Alterations (Chapter K6)

Alterations include the reconfiguration of space, the addition or elimination of any door or window, the reconfiguration or extension of any system, or the installation of any additional equipment. Alterations shall comply with the provisions of Chapter K5 for renovations as well as the provisions of Chapter K6.

- ICC/ANSI A117.1-1998

Section 407, Elevators, states that elevators required to be accessible shall comply with Section 407.2.

- ASME A17.1 - 2003 – Elevator Code
- ANSI/NFPA 70 - 2002 - National Electric Code

ASBESTOS

Asbestos related work shall be performed in accordance with New York State Industrial Code Rule 56, 40 CFR 61, and 29 CFR 1926. Contractor's who disturb asbestos must maintain a current license pursuant to New York State Department of Labor and Department of Environmental Conservation. All asbestos related work must be completed by workers who have a valid NYS asbestos handling or supervisor certificate pursuant to Industrial Code Rule 56.

- Building Code of New York State

The (10) dormitories are classified under the **Residential Group R-2 in the New York State Building Code**. Section 310.1 of the code under classification R-2 states: Residential occupancies containing more than two dwelling units where the occupants are primarily permanent in nature, including: Apartment houses, Boarding Houses (Non transient), Convents, Dormitories, Fraternities and Sororities, Monasteries, Vacation Time share properties, Hotels (Non transient), and Motels (Non transient).

Section 907 – Fire Alarm and Detection Systems, covers what is required for fire alarm systems under various occupancy classifications.

Section 907.2.9.1 Student Housing: An approved automatic fire detection system shall be installed in all Group R-2 occupancies used as dormitories, fraternities, sororities and similar student housing. Automatic fire detection shall be provided in common spaces outside of dwelling units and sleeping units including but not limited to recreation rooms, lounges, dining rooms, laundry rooms, mechanical equipment rooms and storage rooms; automatic fire detection shall not be required in corridors or exits. Required smoke alarms in dwelling units and sleeping units shall be interconnected with the fire alarm system in accordance with NFPA 72, Section 3-8.1.4.

Section 907.2.10.1.2 Groups R-2, R-3, R-4 and I-1: Single or Multiple station smoke alarms shall be installed and maintained in Groups R-2, R-3, R-4 and I-1, regardless of occupant load at all the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
2. In each room used for sleeping purposes.

3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level, provided that the lower level is less than one full story below the lower level.

Section 907.3.1 Manual Fire Alarm Boxes location: Manual fire alarm boxes shall be located not more than 5 feet from the entrance to each exit. Additional manual fire alarm boxes shall be located so that travel distance to the nearest box does not exceed 200 feet.

Section 907.9.1.1 Public and Common Areas: Visible alarm notification appliances shall be provided in public and common areas.

Section 907.9.1.3 Visible Alarms Group R-2: In Group R-2 occupancies required by section 907 to have a fire alarm system, all dwelling units shall be provided with the capability to support visible alarm notification appliances in accordance with ICC/ANSI a117.1.

Section 907.9.2 Audible Alarms: Audible alarm notification appliances shall be provided and shall sound a distinctive sound that is not to be used for any purpose other than that of a fire alarm. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupied space within the building. The minimum sound pressure levels shall be: 70 dBA in occupancies Group R and Group I-1; 90 dBA in mechanical equipment rooms; and 60 dBA in all other occupancies. The maximum sound pressure level for audible alarm notification appliances shall be 120 dBA at the minimum hearing distance from the audible appliance. Where the average ambient noise is great than 105 dBA, visible alarm notification appliances shall be provided in accordance with NFPA 72 and audible alarm notification appliances shall not be required.

FIRE ALARM (2004 STUDY COSTS REVIEW)

	DELTA	LU/WOM	ADJUST
	FIRE ALARM EST	+ACM FIRE ALARM EST	ACM REDUCED TS/DA
ONEIDA	\$ 313,000	\$ 405,000 → 200,000	\$ 513,000
CAYUGA	\$ 319,000	\$ 405,000 → 200,000	\$ 519,000
ONONDAGA	\$ 381,000	\$ 812,900 → 300,000	\$ 681,000
SENECA	\$ 376,000	\$ 812,500 → 300,000	\$ 676,000
FUNNELL	\$ 366,000	\$ 22,500	\$ 388,500
SCALES	\$ 193,000	\$ 2,500	\$ 195,500
WATERBURY	\$ 201,000	\$ 2,500	\$ 203,500
LOUIS	\$ 79,000	\$ 2,500	\$ 81,500
WACKIN	\$ 140,000	\$ 2,500	\$ 142,500
MORELAND	\$ 88,000	\$ 2,500	\$ 90,500
	<u>\$ 2,456,000</u>	<u>\$ 1,035,000</u>	
		-1,456 removal	\$ 3,491,000
		INCLUDES CONTINGENCY	

DASNY PLANNING # HATED DOLLARS
\$ 2,375,000

SAY 3,500,000

CONSTRUCTION COSTS

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE

9/30/04

		ROOF WORK	EXTERIOR FAÇADE	WINDOWS	ELEVATORS	ASBESTOS ABATEMENT	FIRE ALARM
ONEIDA HALL		\$240,000	\$452,000	\$657,000	\$106,000	\$637,000	\$313,000
CAYUGA HALL		\$248,000	\$472,000	\$617,000	\$106,000	\$625,000	\$319,000
ONONDAGA HALL		\$34,000	\$518,000	\$729,000	\$1,077,000	\$1,136,000	\$381,000
SENECA HALL		\$164,000	\$518,000	\$716,000	\$1,077,000	\$1,137,000	\$376,000
FUNNELLE HALL		\$121,000	\$154,000	\$590,000	\$692,000	\$66,000	\$366,000
SCALES HALL		\$169,000	\$116,000	\$442,000	N/A	\$105,000	\$193,000
WATERBURY HALL		\$169,000	\$153,000	\$450,000	N/A	\$101,000	\$201,000
LONIS HALL		\$90,000	\$87,000	\$216,000	N/A	\$68,000	\$79,000
MACKIN HALL		\$140,000	\$131,000	\$753,000	N/A	\$71,000	\$140,000
MORELAND HALL		\$108,000	\$95,000	\$232,000	N/A	\$73,000	\$88,000
SUB-TOTAL		\$1,483,000	\$2,696,000	\$5,402,000	\$3,058,000	\$4,019,000	\$2,456,000
GENERAL CONDITIONS	5%	\$74,000	\$135,000	\$270,000	\$153,000	INCLUDED	INCLUDED
SUB-TOTAL		\$1,557,000	\$2,831,000	\$5,672,000	\$3,211,000		
OVERHEAD AND PROFIT	7%	\$109,000	\$198,000	\$397,000	\$225,000	INCLUDED	INCLUDED
SUB-TOTAL		\$1,666,000	\$3,029,000	\$6,069,000	\$3,436,000		
CONTINGENCY	15%	\$250,000	\$454,000	\$910,000	\$515,000	INCLUDED	INCLUDED
TOTAL		\$1,916,000	\$3,483,000	\$6,979,000	\$3,951,000	\$4,019,000	\$2,456,000

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE

9/30/04

PROJECT SUMMARY

	TOTAL COST
ONEIDA HALL	\$2,830,000
CAYUGA HALL	\$2,808,000
ONONDAGA HALL	\$4,563,000
SENECA HALL	\$4,711,000
FUNNELLE HALL	\$2,443,000
SCALES HALL	\$1,236,000
WATERBURY HALL	\$1,300,000
LONIS HALL	\$655,000
MACKIN HALL	\$1,534,000
MORELAND HALL	\$723,000
TOTAL - PROJECT	\$22,803,000

NOTES TO ESTIMATE:

1. ESTIMATED COSTS BASED ON EARLY 2005 BIDS. ADD 4% PER YEAR AFTER MID-POINT 2005
2. ESTIMATE BASED ON SINGLE PRIME GENERAL CONTRACTOR BID.
3. ELEVATOR PRICING PER QUOTATION FROM ELEVATOR SUPPLIER.
4. FIRE ALARM TO BE BID AS SEPARATE PRIME CONTRACT. ESTIMATE INCLUDES MARKUPS.



Sent Via Email

October 5, 2004

Amanda Oberlender
 Woolley Morris Architects
 313 Willow Street
 Syracuse, NY 13203

Dear Ms. Oberlender:

Our office has reviewed the cost differences between Delta's cost estimate and DASNY's projected costs.

The cost without any asbestos abatement related work appears to be below the DASNY Estimate. (See below)

Building Name	Delta Estimate	DASNY
Mackin Hall	\$105,402.00	None Provided
Moreland Hall	\$60,080.00	\$80,850.00
Lonis Hall	\$56,190.00	\$88,784.00
Seneca Hall	\$259,339.00	\$419,507.00
Cayuga Hall	\$232,297.00	\$288,948.00
Onondaga Hall	\$264,031.00	\$419,507.00
Oneida Hall	\$206,598.00	\$288,750.00
Waterbury Hall	\$149,101.00	\$158,026.00
Scales Hall	\$146,936.00	\$158,026.00
Funnelle Hall	\$212,326.00	\$314,504.00
Total	\$1,692,300.00	\$2,374,928.00

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The cost increases above the DASNY estimate when asbestos abatement related work is included in the estimate. (See below)

Building Name	Delta Est.	Asbestos Related	Total	DASNY	
Mackin Hall	\$105,402.00	\$34,430.00	\$139,832.00	None	2,500
Provided					
Moreland Hall	\$60,080.00	\$27,599.00	\$87,679.00	\$80,850.00	2,500
Lonis Hall	\$56,190.00	\$23,155.00	\$79,345.00	\$88,784.00	2,500
Seneca Hall	\$259,339.00	\$116,380.00	\$375,719.00	\$419,507.00	812,500
Cayuga Hall	\$232,297.00	\$86,515.00	\$318,812.00	\$288,948.00	405,000
Onondaga Hall	\$264,031.00	\$116,875.00	\$380,906.00	\$419,507.00	812,500
Oneida Hall	\$206,598.00	\$106,425.00	\$313,023.00	\$288,750.00	405,000
Waterbury Hall	\$149,101.00	\$52,085.00	\$201,186.00	\$158,026.00	2,500
Scales Hall	\$146,936.00	\$46,365.00	\$193,301.00	\$158,026.00	2,500

? Problem

Funnelle Hall	\$212,326.00	\$153,615.00	\$365,941.00	\$314,504.00	22,500
Total	\$1,692,300.00	\$763,445.00	\$2,455,745.00	\$2,374,928.00	

Taking into consideration man power, wage increase, cost of living, etc., the costs relating to the work associated with asbestos abatement is the main driving force behind the increase of cost to the project above the DASNY estimate.

Please contact Anthony Paniccia at 607-231-6610 if you have any questions or comments.

Respectfully,

DELTA ENGINEERS, P.C.

Anthony R. Paniccia, PE, JD
Project Manager

Cc: Shawn Birchard, File

Subject: 200412 SUNY Oswego-FA Cost Comparison

From: "Amanda Oberlender" <oberlender@woolleymorris.com>

Date: Tue, 5 Oct 2004 15:49:17 -0400

To: "Tom Simmonds" <simmonds@Oswego.EDU>, "Allen Bradberry" <bradberr@Oswego.EDU>

CC: "Jamie Williams" <williams@woolleymorris.com>, "Rick Morris" <morris@woolleymorris.com>

Tom,

Attached is a letter from Delta Engineers addressing the cost comparison issue between Delta's cost estimate and DASNY's projected costs.

Sincerely,

Amanda Oberlender
Woolley Morris Architects P.C.
Tel: (315) 426-9871
Fax: (315) 426-9874

ONEIDA HALL

may need to be abated to accommodate the elevator door frame demolition.

Elevators—New Shaft Option:

The asbestos floor tile and mastic in the basement hallway in front of the new shaft location must be abated to accommodate new walls. If there were asbestos foundation waterproofing below grade at the new elevator shaft location, it would need to be abated to facilitate the new elevator shaft foundation. The white spray-on acoustical ceiling in the rooms in front of the new shaft locations on the typical floors must be abated to accommodate new walls.

Fire Alarm Systems:

The white asbestos spray-on acoustical ceiling must be abated in some rooms (including corridors, dorm rooms and stairwells) that will require fire alarm system component replacement and that may require new raceways. In addition, the transite ceilings and walls in some basement rooms may require abatement to facilitate the fire alarm system upgrade. Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

• Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Windows, Elevator, and Fire Alarm Scopes.
2. For the Elevator scope, it is recommended that if partial abatement is required in a room, then the entire room be abated.
3. For the Fire Alarm Scope, it is recommended that only the required minimum amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system. Whenever possible, it is recommended that raceways and fire alarm system components be attached to non-asbestos containing walls and ceilings.

FIRE ALARM

• System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Oneida Hall.

The existing fire alarm system was observed throughout Oneida Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

• Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Edwards
- Model #: 6500 Series
- Age: 12+ years old
- Type: Zoned System (20 Zones)

ONEIDA HALL

- Monitored by: University Police

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells and in elevator lobbies. No smoke detectors in corridors.
- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 10-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.
- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow & Tamper Switch: Flow & tamper switches monitoring sprinkler.
- Smoke Release: Smoke releases are located in top off all stairwells.
- Standpipes: Flow & tamper switches are present and monitoring standpipe system.
- Elevator: Connected to FACP.
- HVAC System: Duct detectors are present for fan shutdown.
- Door Hold: Door holders close partition door upon alarm.

DRAWINGS

See Drawings FA-36-1A, FA-36-1B, and FA-36-1C for fire alarm existing conditions for Oneida Hall.

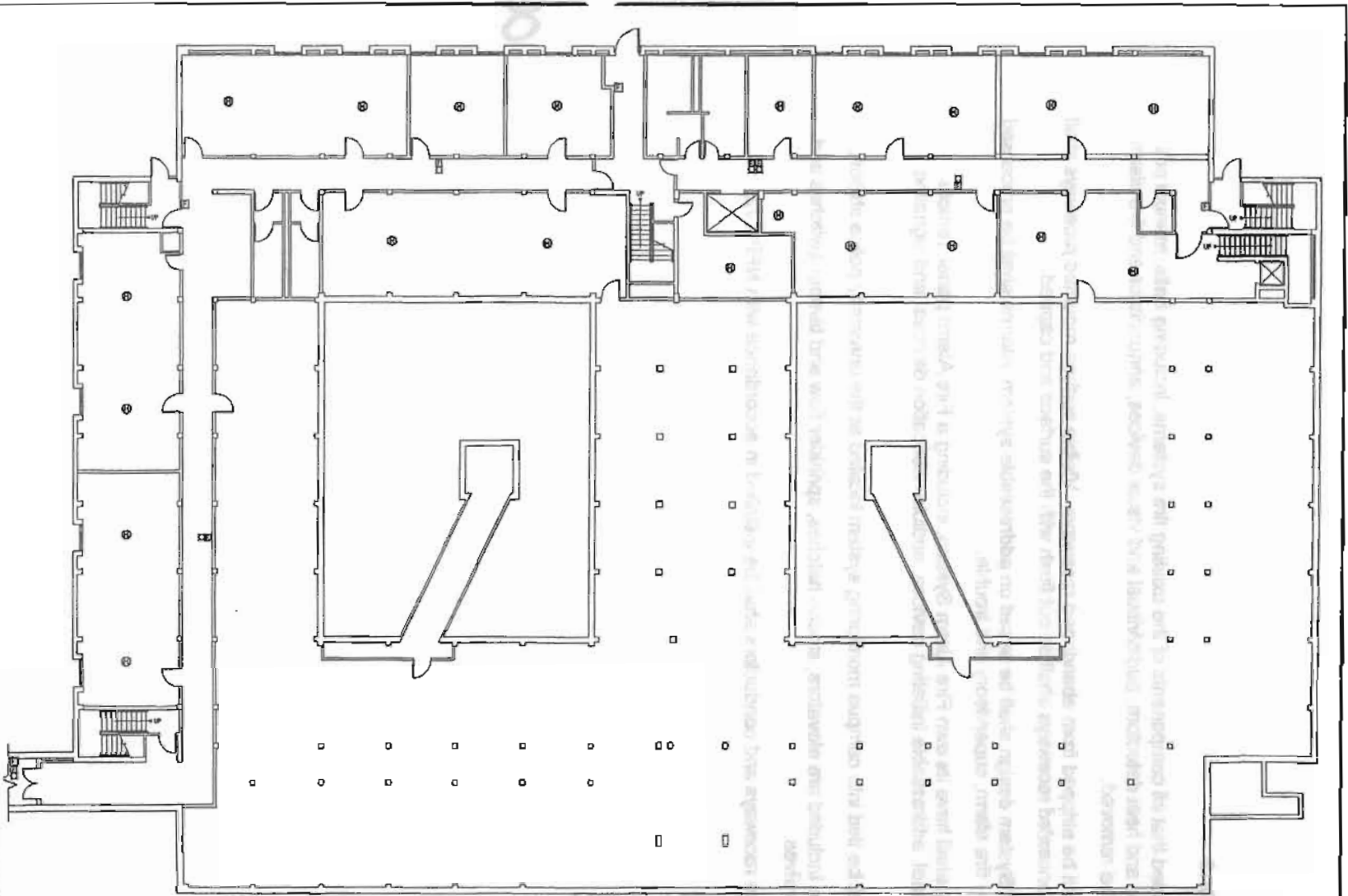
Conclusions

1. The FACP is an old zoned system. Based on DASNY guidelines that all college dormitories shall be addressable systems by 2010 this system should be replaced in the next 2-3 years.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next 2-3 years.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not present.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

ONEIDA HALL

- Recommendations

7. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
8. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
9. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
10. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
11. The FACP shall be tied into campus monitoring system located at the university police station.
12. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
13. New fire system raceways and conductors shall be installed in accordance with NFPA 72.



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FA-36-1A

BASEMENT FLOOR PLAN

SCALE: NONE



ASBESTOS NOTE:
 AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 58 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACEWAYS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILINGS. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
[FCP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[FAS]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[AB]	ALARM BELL

COLLEGE ARCHITECTS

OSWEGO
STATE UNIVERSITY OF NEW YORK

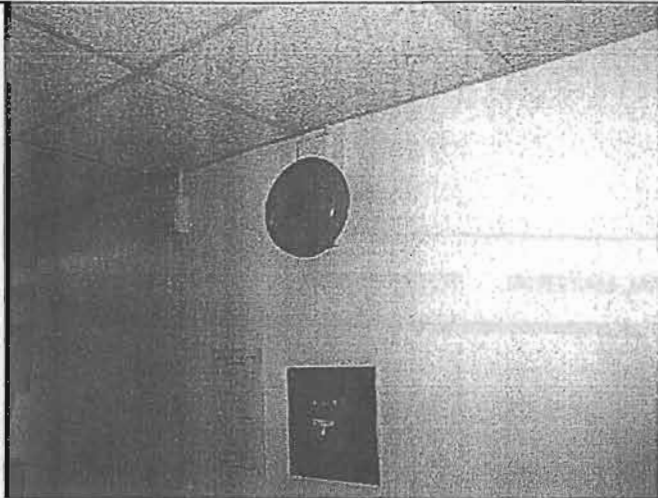
FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ONEIDA HALL
BASEMENT PLAN

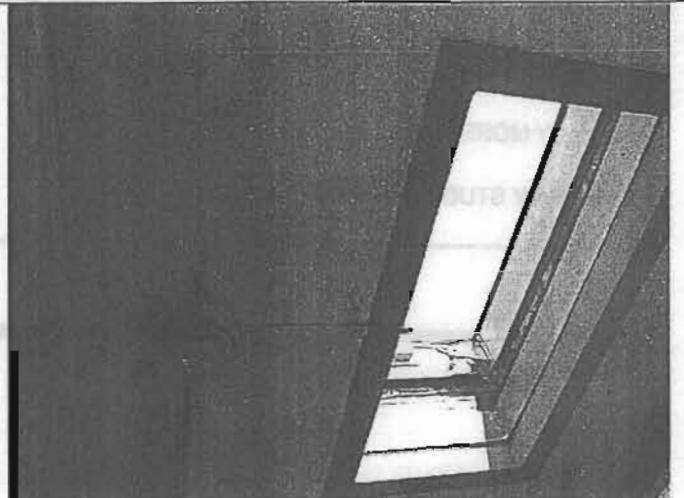
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 PREPARED BY: _____
 CHECKED BY: _____
 DRAWN BY: _____

MORRIS ARCHITECTS
 Klappe, Hahn & Hyatt
 STRUCTURAL ENGINEERS - LICENSED PROFESSIONAL ENGINEERS
 DELTA ENGINEERS, P.C.
 ENGINEERS & ARCHITECTS
 LU ENGINEERS
 Civil and Environmental

FA-36-1A



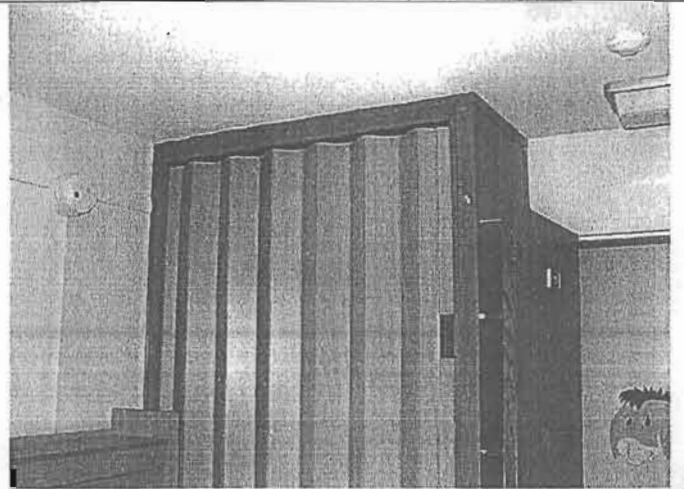
Hallway-Bell and Pull Station



Smoke Hatch at Top of Stairs

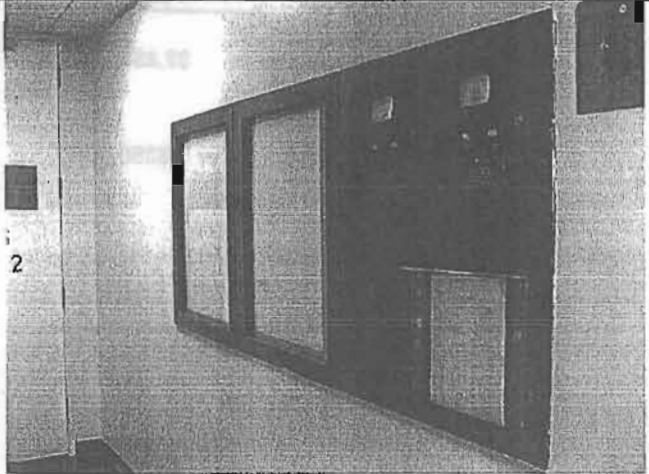


Hallway - Bell, PS, and Smoke D.

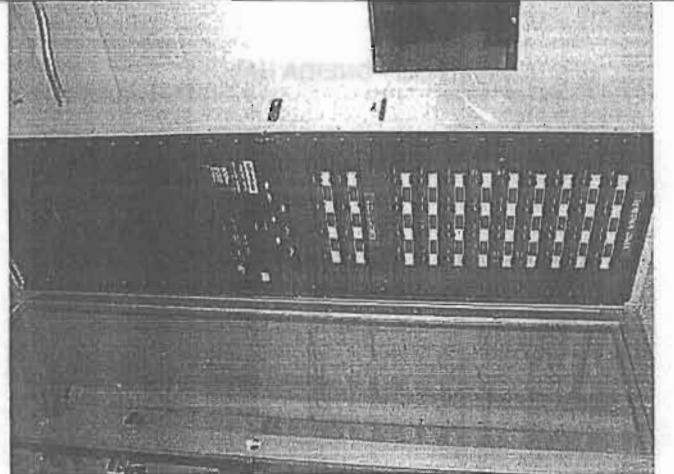


Typical Bedroom - Heat and Smoke Detectors

DE



Annunciator Panel



Fire Alarm Control Panel

WOOLLEY
ARCHITECTS



FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ISSUE	DATE
Feasibility Study-Final	9/30/04
© WOOLLEY MORRIS ARCHITECTS, PC	

ONIEDA HALL
FIRE ALARM PICTURES

FA-36-2A

MORRIS



Klepper, Hahn & Hyatt
ARCHITECTS



STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - ONEIDA HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$142,000	\$98,000	\$240,000
EXTERIOR FAÇADE		\$186,000	\$265,000	\$452,000
WINDOWS		\$438,000	\$219,000	\$657,000
ELEVATOR		\$64,000	\$43,000	\$108,000
SUB-TOTAL		\$830,000	\$625,000	\$1,455,000
GENERAL CONDITIONS	5%			\$73,000
SUB-TOTAL				\$1,528,000
OVERHEAD AND PROFIT	7%			\$107,000
SUB-TOTAL				\$1,635,000
CONTINGENCY	15%			\$245,000
SUB-TOTAL				\$1,880,000
ASBESTOS ABATEMENT				\$637,000
FIRE ALARM				\$313,000
TOTAL - ONEIDA HALL				\$2,830,000
ELEVATOR - ALTERNATE OPTION #2			ADD	\$250,000

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RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - ONEIDA HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
ASBESTOS ABATEMENT						
<u>WINDOWS (Temporary Protection provided by others)</u>						
Abate "A" windows	210 EA	\$240.00	\$50,400	\$360.00	\$75,600	\$126,000
Abate "B" windows	68 EA	240.00	16,320	360.00	24,480	40,800
Abate "C" windows	2 EA	240.00	480	360.00	720	1,200
Abate "D" windows	10 EA	320.00	3,200	480.00	4,800	8,000
Abate "E" windows	20 EA	480.00	9,600	720.00	14,400	24,000
Abate "F" windows	2 EA	400.00	800	600.00	1,200	2,000
Abate "G" windows	3 EA	800.00	2,400	1,200.00	3,600	6,000
Abate "H" windows	5 EA	400.00	2,000	600.00	3,000	5,000
Abate "J" windows	1 EA	400.00	400	600.00	600	1,000
<u>ELEVATORS (Existing Shaft Option)</u>						
Basement Lobby: Elevator door and frame	1 EA	600.00	600	900.00	900	1,500
First Floor Lobby: Elevator door and frame	1 EA	600.00	600	900.00	900	1,500
Second, Third and Fourth Floor Lobbies: Elevator door, frames and asbestos spray-on acoustical ceiling plaster	3 EA	2,000.00	6,000	3,000.00	9,000	15,000
<u>FIRE ALARM SYSTEM</u>						
All Floors: Asbestos ceilings (full ceiling removal corridors + 800 "minor" locations)	1 EA	160,000.00	160,000	240,000.00	240,000	400,000
All Floors: Floor tile / mastic (assume 10 "minor" locations)	1 EA	2,000.00	2,000	3,000.00	3,000	5,000
TOTAL - ASBESTOS ABATEMENT			254,800		382,200	637,000
TOTAL - ASBESTOS ABATEMENT SAY			\$255,000		\$382,000	\$637,000

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STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - ONEIDA HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
<u>DEMOLITION</u>						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	31 EA	0.00	0	13.19	409	409
Detection devices	591 EA	0.00	0	16.32	9,645	9,645
Wire	12 CLF	0.00	0	7.41	89	89
<u>INSTALLATION</u>						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	1 EA	330.00	330	350.88	351	681
Smoke detectors	185 EA	165.00	30,525	64.60	11,951	42,476
Smoke detector with sounder base	228 EA	220.00	50,160	64.60	14,729	64,889
Heat detectors	10 EA	148.50	1,485	61.20	612	2,097
Duct detectors	4 EA	313.50	1,254	120.36	481	1,735
Pull stations	30 EA	74.80	2,244	53.04	1,591	3,835
Audio/visual alarm	52 EA	137.50	7,150	72.76	3,784	10,934
Visual alarm	16 EA	52.25	836	57.80	925	1,761
Conduit	800 LF	0.64	512	3.14	2,512	3,024
Wire	8 CLF	191.40	1,531	68.00	544	2,075
Elevator connection	1 EA	165.00	165	660.00	660	845
Door holders	20 EA	85.25	1,705	102.00	2,040	3,745
Corridor ceiling replacement	14,500 SF	4.00	58,000	3.15	45,675	103,675
Ceiling texture replacement / miscellaneous locations	1,250 LF	1.00	1,250	1.20	1,500	2,750
TOTAL - FIRE ALARM			212,037	100,986	313,023	
TOTAL - FIRE ALARM SAY			\$212,000	\$101,000	\$313,000	

OE

CAYUGA HALL

rooms in front of the new shaft location on the first, second, third and fourth floors must be abated to accommodate new walls.

Fire Alarm Systems:

The white asbestos spray-on acoustical ceiling must be abated in some rooms (including corridors, dorm rooms and stairwells) that will require fire alarm system component replacement and that may require new raceways. In addition, the transite ceilings and walls in some basement rooms may require abatement to facilitate the fire alarm system upgrade. Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

• Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Windows, Elevator, and Fire Alarm Scopes.
2. For the Elevator scope, it is recommended that if partial abatement is required in a room, then the entire room be abated.
3. For the Fire Alarm Scope, it is recommended that only the required minimum amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system. Whenever possible, it is recommended that raceways and fire alarm system components be attached to non-asbestos containing walls and ceilings.

CAYUGA HALL

FIRE ALARM

• System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Cayuga Hall.

The existing fire alarm system was observed throughout Cayuga Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

• Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Edwards
- Model #: 6500 Series
- Age: 12+ years old
- Type: Zoned System (20 Zones)
- Monitored by: University Police

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells, in corridors and in elevator lobbies.

CAYUGA HALL

- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 6-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.
- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow & Tamper Switch: Flow & tamper switches monitoring sprinkler.
- Smoke Release: Smoke releases are located in top off all stairwells.
- Standpipes: Flow & tamper switches are present and monitoring standpipe system.
- Elevator: Connected to FACP.
- HVAC System: Duct detectors are present for fan shutdown.
- Door Hold: Door holders close partition door upon alarm.

DRAWINGS

- See Drawings FA-33-1A, FA-33-1B, and FA-33-1C for fire alarm existing conditions for Cayuga Hall.

Conclusions

1. The FACP is an old zoned system. Based on DASNY guidelines that all college dormitories shall be addressable systems by 2010 this system should be replaced in the next 2-3 years.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next 2-3 years.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

Recommendations

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.

ONEIDA HALL

2. Option #2: New Elevator in New Shaft (See Drawings E-36-2A through E-36-2D)

Add a new shaft and elevator outside the building. To accommodate this, some modifications to the interior of the building will be required.

The above listed drawings depict only a conceptual implementation of this option. Upon completion of the new shaft and elevator the existing elevator can be removed. Abandoned elevator shaft can be utilized for other functions.

Execution of this option can occur while the building is occupied.

ASBESTOS

• System Description

The Windows, Elevators, and Fire Alarm Scopes will impact asbestos containing materials.

• Observations

Windows:

Window units contain an asbestos cement backer board on bottom panels. In addition, a non-accessible frame caulk exists between the frame of the window and the building. This caulk must be assumed asbestos containing. A brownish grey window frame caulk between the exterior frame and the building of the courtyards is less than 1% asbestos. However, only one sample of the caulk was collected and analyzed.

Elevators—Existing Shaft Option:

Elevator doors (shaft and cart doors) were non-accessible and may contain asbestos insulation. White asbestos spray-on acoustical ceiling exists in the lobby in front of the existing elevator shafts on the second, third, and fourth floors.

Elevators—New Shaft Option:

Asbestos floor tile and mastic exist in the basement hallway in front of the new shaft location. There may be an asbestos foundation waterproofing below grade at the new elevator shaft location. White asbestos spray-on acoustical ceiling exists in the rooms in front of the new shaft location on the typical floors.

Fire Alarm Systems:

White asbestos spray-on acoustical ceilings exist in some rooms (including dorm rooms, corridors, and stairwells) that will require fire alarm system component replacement. In addition, asbestos transite ceilings exist in some basement rooms on the walls and ceilings that will require fire alarm system component replacement. Asbestos containing floor tile and mastic exist in rooms and corridors that will require fire alarm system component replacement.

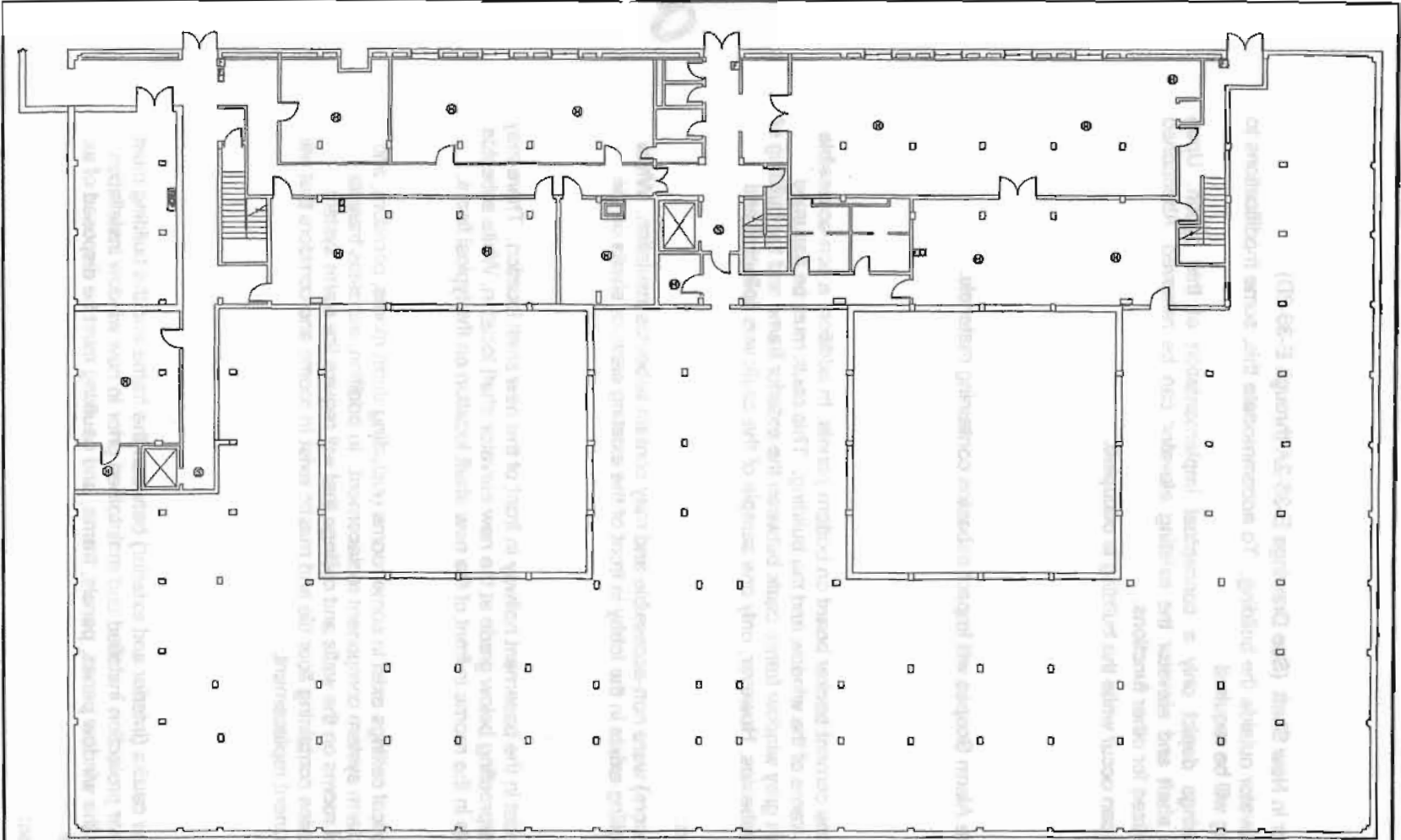
• Conclusions

Windows:

The window units and all window caulks (interior and exterior) between the frame and the building must be abated and temporary weather protection installed and maintained prior to new window installation. All materials removed including the window panes, panels, frame, and caulking must be disposed of as an asbestos containing material.

Elevators—Existing Shaft Option:

The elevator doors must be abated to accommodate the new elevators. The white asbestos spray-on acoustical ceiling in the lobby in front of the existing elevator shafts on the second, third, and fourth floors



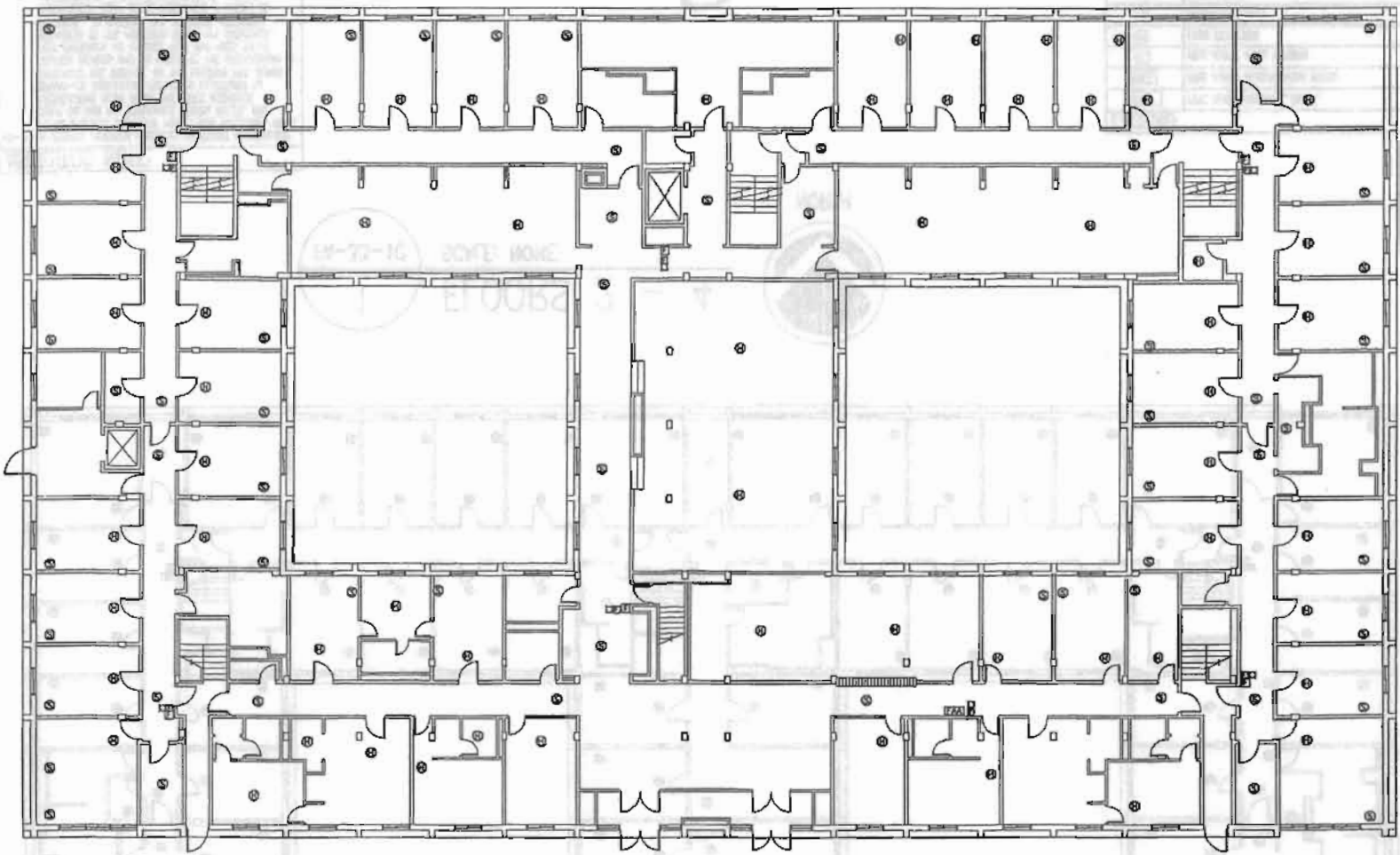
1

BASEMENT FLOOR PLAN
 FA-33-1A SCALE: NONE



ASBESTOS NOTE:
 AR-F1 A NYSOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACERAYS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILING. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MISC AS NECESSARY TO FACILITATE RACERAYS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[FAS]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[AB]	ALARM BELL



1
FIRST FLOOR PLAN
FA-33-1B
SCALE: NONE
NORTH

ASBESTOS NOTE:
 AR-11 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 50 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACEWAYS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILINGS. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MISTIC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
[FCP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

OK

ARCHITECTS

WOLLEY

MORRIS

WOLLEY MORRIS ARCHITECTS
 STATE UNIVERSITY OF NEW YORK
OSWEGO

FEASIBILITY STUDY
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS

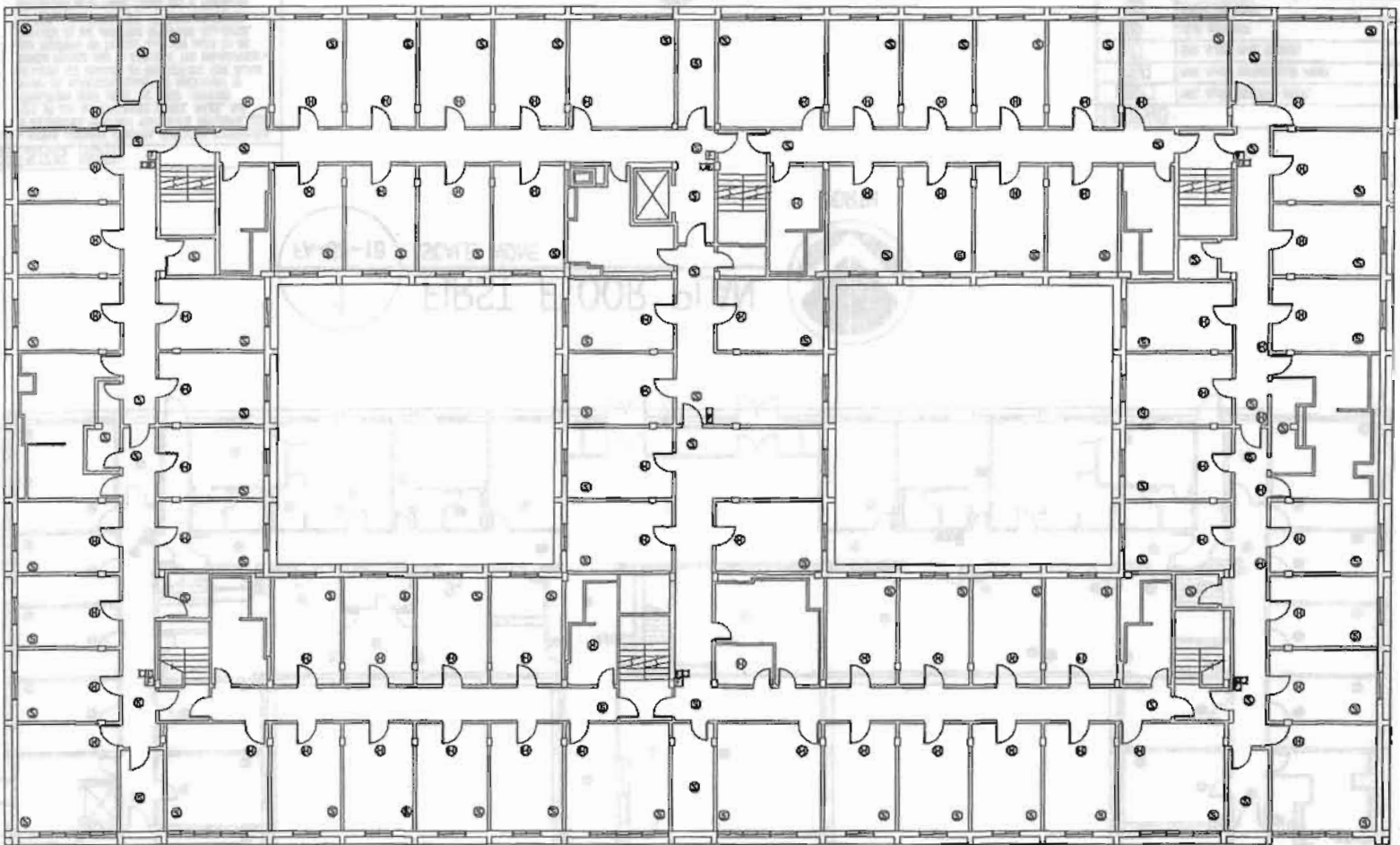
Klepper, Hahn & Hyatt
 STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS
 CIVIL ENGINEERS

DELTA ENGINEERS, P.C.
 ENGINEERS • ARCHITECTS

LU ENGINEERS
 Civil and Environmental

FA-33-1B
 FIRST FLOOR PLAN

DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____



1 FLOORS 2 - 4
 FA-33-1C SCALE: NONE

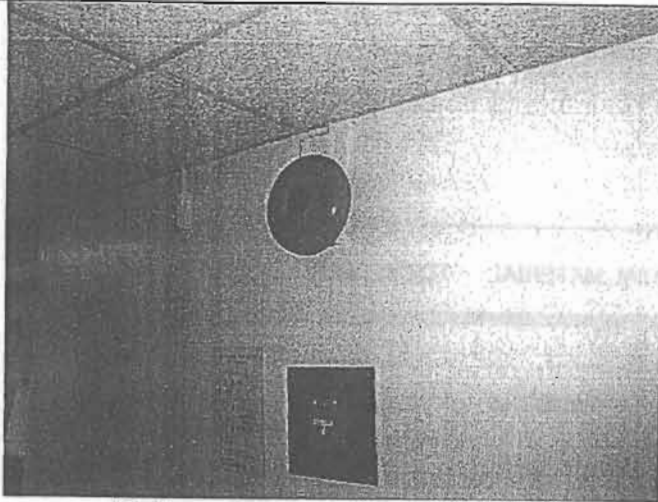


ASBESTOS NOTE:
 MR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACEWAYS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILINGS. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MISC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

COLLEGE ARCHITECTS
 OSWEGO STATE UNIVERSITY OF NEW YORK
 FEASIBILITY STUDY FOR RESIDENCE HALLS BUILDING SHELL & FIRE ALARM SYSTEM IMPROVEMENTS
 CAYUGA HALL FLOORS 2 - 4
 FA-33-1C
 ISSUE: _____ DATE: _____
 PROJECT STATUS: _____
 © WOOLLEY MORRIS ARCHITECTS P.C.
 Klepper, Hahn & Hyatt STRUCTURAL ENGINEERS - LICENSED ARCHITECTS NEW YORK
 DELTA ENGINEERS P.C. ENGINEERS & ARCHITECTS
 LU ENGINEERS Civil and Environmental
 MORRIS ARCHITECTS

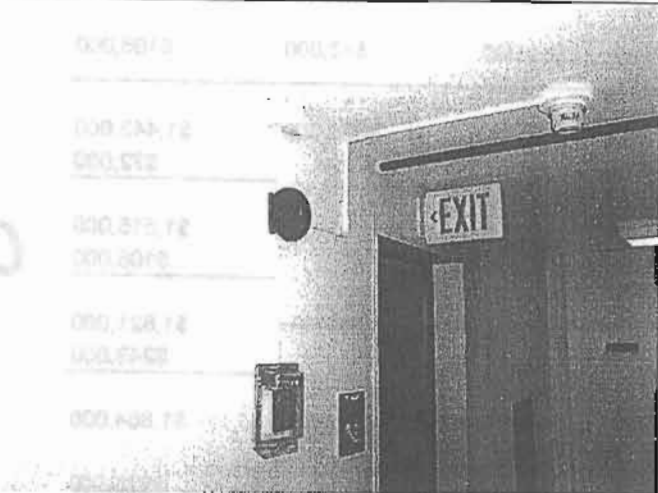
CA



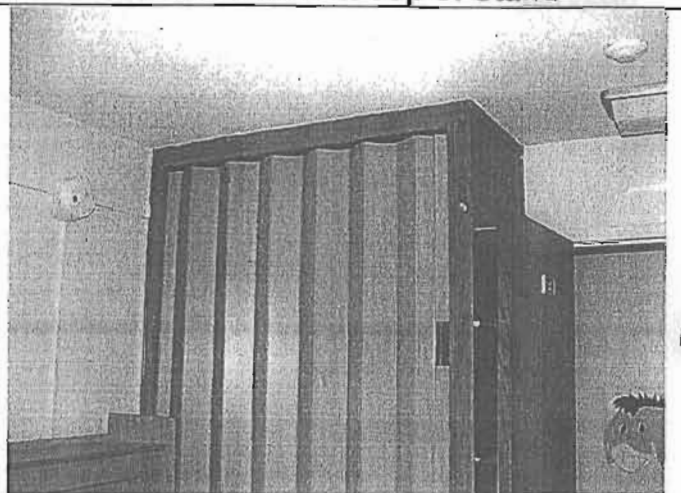
Hallway-Bell and Pull Station



Smoke Hatch at Top of Stairs

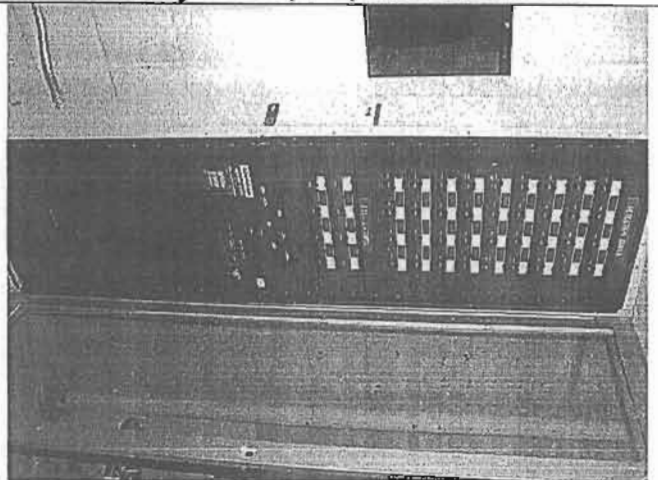


Hallway - Bell, PS, and Smoke D.

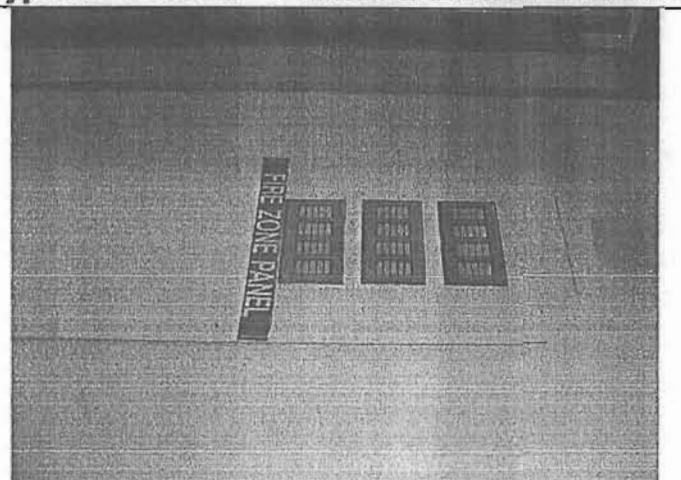


Typical Bedroom - Heat and Smoke Detectors

CA



Fire Alarm Control Panel



Annunciator Panel

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - CAYUGA HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$147,000	\$101,000	\$248,000
EXTERIOR FAÇADE		\$195,000	\$278,000	\$472,000
WINDOWS		\$408,000	\$209,000	\$617,000
ELEVATOR		\$64,000	\$43,000	\$108,000
SUB-TOTAL		\$814,000	\$631,000	\$1,443,000
GENERAL CONDITIONS	5%			\$72,000
SUB-TOTAL				\$1,515,000
OVERHEAD AND PROFIT	7%			\$108,000
SUB-TOTAL				\$1,621,000
CONTINGENCY	15%			\$243,000
SUB-TOTAL				\$1,864,000
ASBESTOS ABATEMENT				\$625,000
FIRE ALARM				\$319,000
TOTAL - CAYUGA HALL				\$2,808,000
ELEVATOR - ALTERNATE OPTION #2			ADD	\$248,000

CA

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - CAYUGA HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
ASBESTOS ABATEMENT						
<u>WINDOWS (Temporary Protection provided by others)</u>						
Abate "A" windows	230 EA	\$240.00	\$55,200	\$360.00	\$82,800	\$138,000
Abate "B" windows	44 EA	400.00	17,600	600.00	26,400	44,000
Abate "C" windows	7 EA	240.00	1,680	360.00	2,520	4,200
Abate "D" windows	4 EA	320.00	1,280	480.00	1,920	3,200
Abate "E" windows	4 EA	480.00	1,920	720.00	2,880	4,800
Abate "F" windows	2 EA	800.00	1,600	1,200.00	2,400	4,000
Abate "G" windows	2 EA	400.00	800	600.00	1,200	2,000
Abate "H" windows	2 EA	400.00	800	600.00	1,200	2,000
Abate "J" windows	1 EA	400.00	400	600.00	600	1,000
Abate "K" windows	2 EA	440.00	880	660.00	1,320	2,200
<u>ELEVATORS (Existing Shaft Option)</u>						
Basement Lobby: Elevator door and frame	1 EA	600.00	600	900.00	900	1,500
First and Second Floor Lobbies: Elevator doors and frames	2 EA	600.00	1,200	900.00	1,800	3,000
Third and Fourth Floor Lobbies: Elevator doors, frames and asbestos spray-on acoustical ceiling plaster and contaminated ACT	2 EA	2,000.00	4,000	3,000.00	6,000	10,000
<u>FIRE ALARM SYSTEM</u>						
All Floors: Asbestos ceilings (full ceiling removal corridors + 800 "minor" locations)	1 EA	160,000.00	160,000	240,000.00	240,000	400,000
All Floors: Floor tile / mastic (assume 10 "minor" locations)	1 EA	2,000.00	2,000	3,000.00	3,000	5,000
TOTAL - ASBESTOS ABATEMENT			249,960		374,940	624,900
TOTAL - ASBESTOS ABATEMENT SAY			\$250,000		\$375,000	\$625,000

AD

CA

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
<u>DEMOLITION</u>						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	31 EA	0.00	0	13.19	409	409
Detection devices	672 EA	0.00	0	16.32	10,967	10,967
Wire	14 CLF	0.00	0	7.41	104	104
<u>INSTALLATION</u>						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	1 EA	330.00	330	350.88	351	681
Smoke detectors	225 EA	165.00	37,125	64.60	14,535	51,660
Smoke detector with sounder base	248 EA	220.00	54,560	64.60	16,021	70,581
Heat detectors	12 EA	148.50	1,782	61.20	734	2,516
Duct detectors	4 EA	313.50	1,254	120.36	481	1,735
Pull stations	54 EA	74.80	4,039	53.04	2,864	6,903
Audio/visual alarm	57 EA	137.50	7,838	72.76	4,147	11,985
Visual alarm	32 EA	52.25	1,672	57.80	1,850	3,522
Conduit	1,300 LF	0.64	832	3.14	4,082	4,914
Wire	13 CLF	191.40	2,488	68.00	884	3,372
Elevator connection	1 EA	165.00	165	580.00	680	845
Door holders	20 EA	85.25	1,705	102.00	2,040	3,745
Corridor ceiling replacement	11,700 SF	4.00	46,800	3.15	36,855	83,655
Ceiling texture replacement / miscellaneous locations	1,300 LF	1.00	1,300	1.20	1,560	2,860
TOTAL - FIRE ALARM			216,780		102,032	318,812
TOTAL - FIRE ALARM - SAY			\$217,000		\$102,000	\$319,000

CA

ONONDAGA HALL

FIRE ALARM

• System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Onondaga Hall.

The existing fire alarm system was observed throughout Onondaga Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

• Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Edwards
- Model #: 6500 Series
- Age: 12+ years old
- Type: Zoned System (20 Zones)
- Monitored by: University Police

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells, in corridors and in elevator lobbies.
- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 6-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.
- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow & Tamper Switch: Flow & tamper switches monitoring sprinkler.
- Smoke Release: Smoke releases are located in top off all stairwells.
- Standpipes: Flow & tamper switches are present and monitoring standpipe system.
- Elevator: Connected to FACP.
- HVAC System: Duct detectors are present for fan shutdown.
- Door Hold: Door holders close partition door upon alarm.

DRAWINGS

- See Drawings FA-34-1A, FA-34-1B, and FA-34-1C for fire alarm existing conditions for Onondaga Hall.

ONONDAGA HALL

- Conclusions

1. The FACP is an old zoned system. Based on DASNY guidelines that all college dormitories shall be addressable systems by 2010 this system should be replaced in the next 2-3 years.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next 2-3 years.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

- Recommendations

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
3. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

CAYUGA HALL

3. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

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06

The window units and all window casings (interior and exterior) between the frame and the building must be sealed and temporary weather protection installed and maintained prior to new window installation. All materials removed including the window frame, panel, trim, and caulking must be disposed as an asbestos containing material.

Elevators—Existing Shaft Option:

The elevator hoist must be sealed to accommodate the new elevator. Asbestos floor tile and panels in the hoistway must be sealed to accommodate the elevator door frame installation. A partition to the hoistway shaft walls must be sealed to accommodate the partition wall installation.

Elevators—New Shaft Option:

Asbestos mudded flange or asbestos pipe wrap in the basement room in front of the new shaft location must be sealed to accommodate new walls. If there were asbestos locations within the existing floor grade at the new elevator shaft location, it would need to be sealed to include the new elevator shaft location. Asbestos floor tile in the room in front of the new shaft location on the first floor must be sealed to accommodate new walls. White asbestos spray-on acoustical ceiling in the room in front of the new shaft location on the first floor must be sealed to include new walls.

Fire Alarm Systems:

The white asbestos spray-on acoustical ceiling must be sealed in some rooms including common areas, rooms and stairwells that will require the alarm system component replacement and that may require new raceways. In addition, the partition ceiling and walls in some basement rooms may require sealing. Seal the hoistway fire alarm system. Asbestos floor tile and mastic that will be located by the new shaft location running between rooms must be sealed.

Recommendations:

1. A specific contractor in accordance with New York State Industrial Code R. 13.05 and all applicable codes rules and regulations must state asbestos containing materials exposed by the Windows, Elevator and Fire Alarm Scope.
2. For the Elevator scope, it is recommended that a sealed statement is required for a work area that the entire room be sealed.
3. For the Fire Alarm Scope, it is recommended that only the required minimum amount of asbestos containing material be sealed to accommodate the removal of the existing fire alarm system and the installation of the new fire alarm system. Whenever possible, it is recommended that raceways and fire alarm system components be allowed to run in asbestos containing walls and ceilings.

ONONDAGA HALL

location. Asbestos floor tile exists in the room in front of the new shaft locations on the first floor. White asbestos spray-on acoustical ceilings exist in the rooms in front of the new shaft locations on the typical floors.

Fire Alarm Systems:

White asbestos spray-on acoustical ceilings exist in some rooms (including dorm rooms, corridors, and stairwells) that will require fire alarm system component replacement. In addition, asbestos transite ceilings exist in some basement rooms on the walls and ceilings that will require fire alarm system component replacement. Asbestos containing floor tile and mastic exist in rooms and corridors that will require fire alarm system component replacement.

• Conclusions

Windows:

The window units and all window caulks (interior and exterior) between the frame and the building must be abated and temporary weather protection installed and maintained prior to new window installation. All materials removed including the window panes, panels, frame, and caulking must be disposed of as an asbestos containing material.

Elevators—Existing Shaft Option:

The elevator doors must be abated to accommodate the new elevators. Asbestos floor tile and mastic in the basement elevator lobby must be abated to accommodate the elevator door frame demolition. A portion of the penthouse exterior walls must be abated to accommodate the penthouse wall demolition.

Elevators—New Shaft Option:

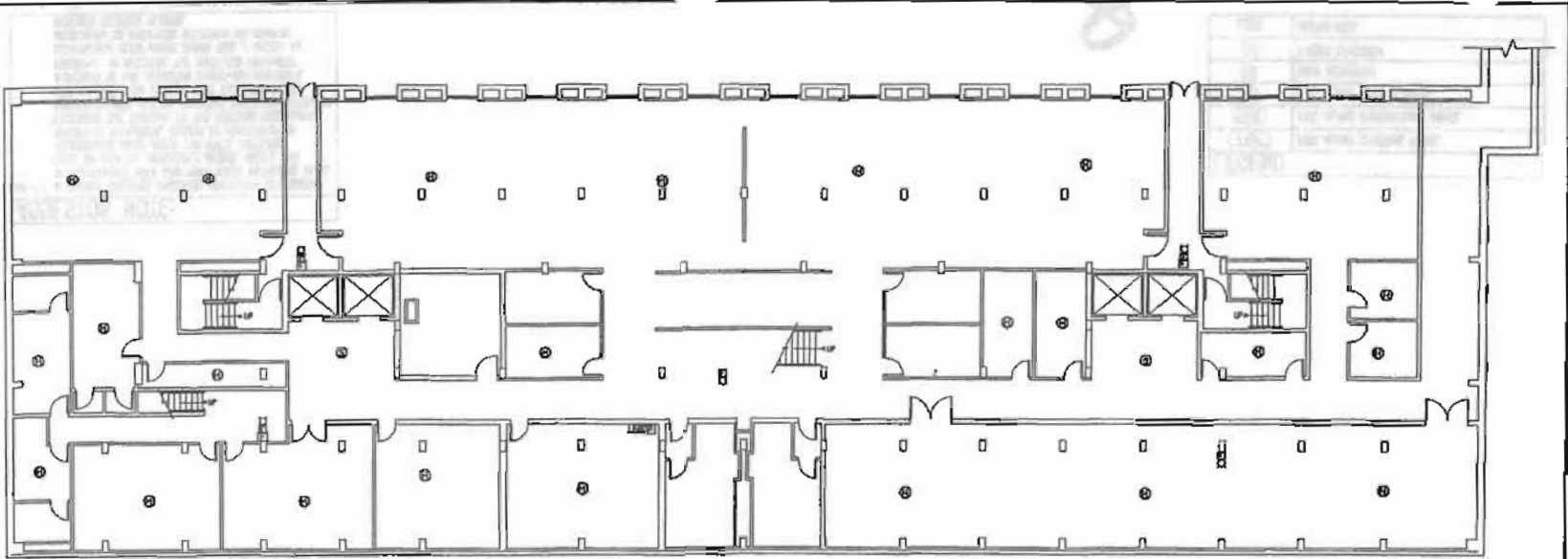
Asbestos mudded fittings on fiberglass pipe wrap in the basement room in front of the new shaft location must be abated to accommodate new walls. If there were asbestos foundation waterproofing below grade at the new elevator shaft location, it would need to be abated to facilitate the new elevator shaft foundation. Asbestos floor tile in the room in front of the new shaft locations on the first floor must be abated to accommodate new walls. White asbestos spray-on acoustical ceiling in the rooms in front of the new shaft locations on the typical floors must be abated to facilitate new walls.

Fire Alarm Systems:

The white asbestos spray-on acoustical ceiling must be abated in some rooms (including corridors, dorm rooms and stairwells) that will require fire alarm system component replacement and that may require new raceways. In addition, the transite ceilings and walls in some basement rooms may require abatement to facilitate the fire alarm system upgrade. Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

• Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Windows, Elevator, and Fire Alarm Scopes.
2. For the Elevator scope, it is recommended that if partial abatement is required in a room, then the entire room be abated.
3. For the Fire Alarm Scope, it is recommended that only the required minimum amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system. Whenever possible, it is recommended that raceways and fire alarm system components be attached to non-asbestos containing walls and ceilings.



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FA-34-1A

BASEMENT FLOOR PLAN

SCALE: NONE



NORTH

ASBESTOS NOTE:
 AN-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACINGS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILING. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACINGS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
FACP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM ANNUNCIATOR PANEL
F	FIRE ALARM PULL STATION
H	HEAT DETECTOR
S	SMOKE DETECTOR
CB	ALARM BELL

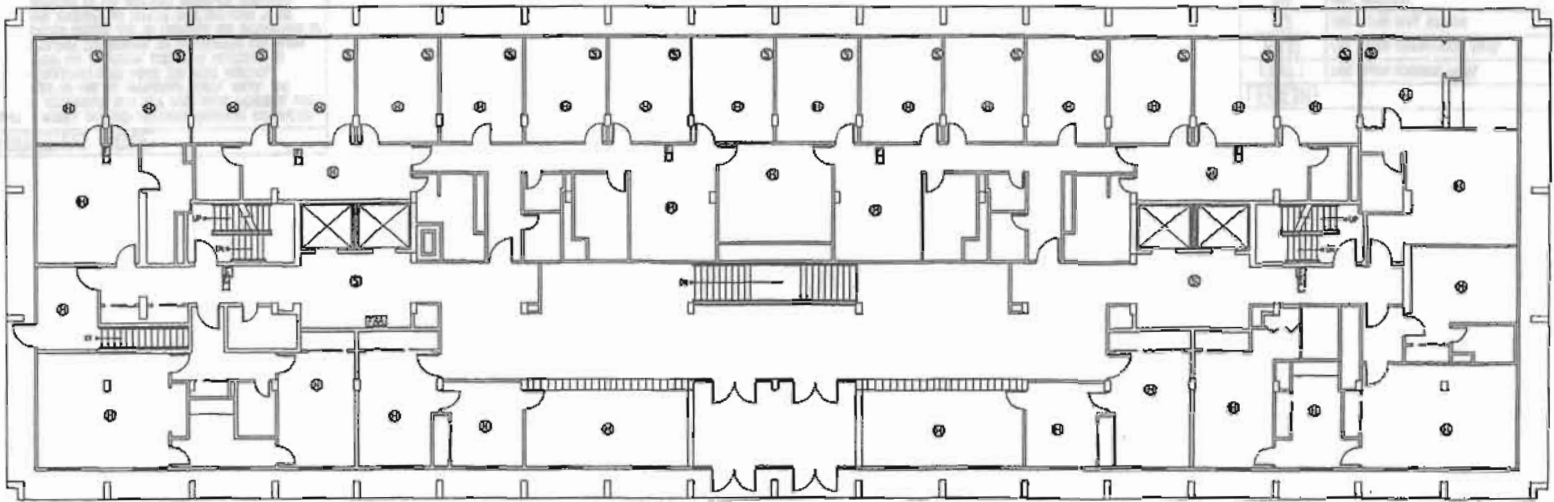
ARCHITECTS
 WOLLELY
 KLEPPER, HAHN & HYATT
 STATE UNIVERSITY OF NEW YORK
OSWEGO
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS
 FEASIBILITY STUDY
 ONONDAGA HALL
 BASEMENT PLAN
 FA-34-1A
 WOLLELY MORRIS ARCHITECTS P.C.
 STATE
 FEASIBILITY STUDY - FINAL
 DATE

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OSWEGO
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 & FIRE ALARM SYSTEM IMPROVEMENTS
 FEASIBILITY STUDY
 ONONDAGA HALL
 BASEMENT PLAN
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 & FIRE ALARM SYSTEM IMPROVEMENTS
 FEASIBILITY STUDY
 ONONDAGA HALL
 BASEMENT PLAN
 FA-34-1A

66



1
FA-34-1B

FIRST FLOOR PLAN

SCALE: NONE



NORTH

ASBESTOS NOTE:

NR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 60 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACEMIS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILING. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACEMIS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND

[TACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

COLLEGE

ARCHITECTS



FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

DATE: _____
REVISION: _____

MORRIS



Klopper, Hahn & Hyatt
STRUCTURAL ENGINEERS - LICENSED ARCHITECTS
GENERAL CONTRACTORS

DELTA ENGINEERS, P.C.
ENGINEERS • ARCHITECTS

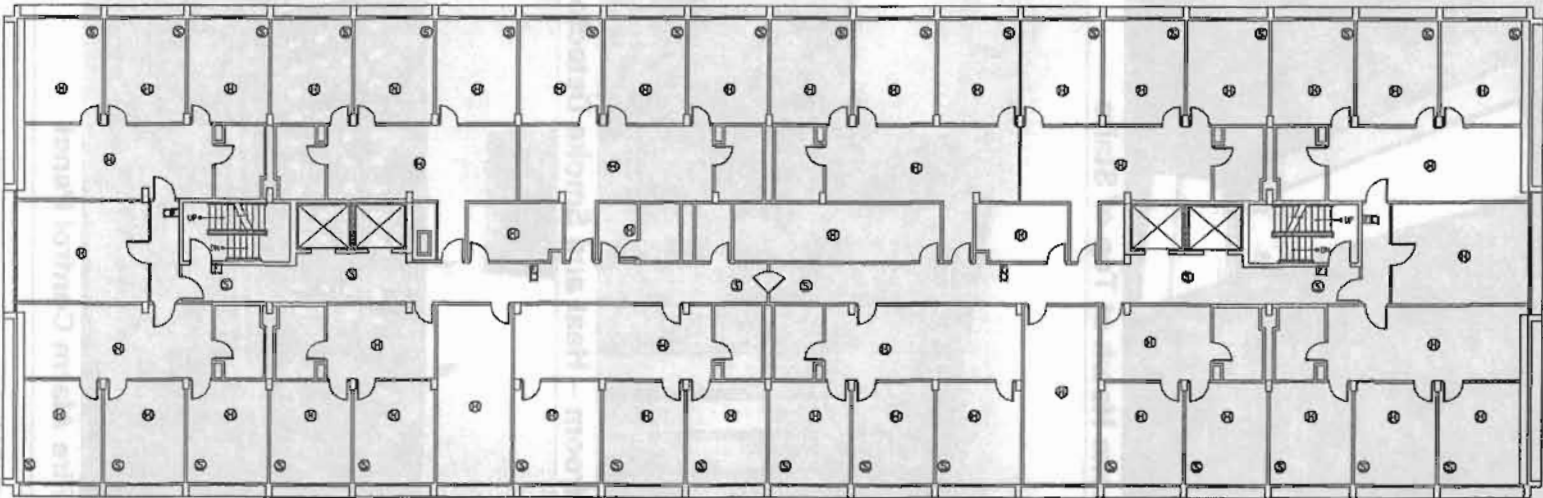


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Civil and Environmental

FA-34-1B

ONONDAGA HALL
FIRST FLOOR PLAN

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FA-34-1C

FLOORS 2 - 10
SCALE: NONE



ASBESTOS NOTE:
 AH-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACKINGS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILINGS. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACKWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

WOOLLETT



FEASIBILITY STUDY
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS

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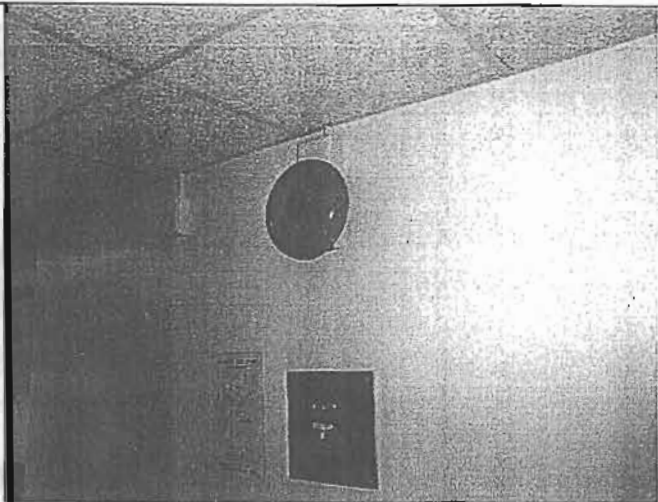


FA-34-1C

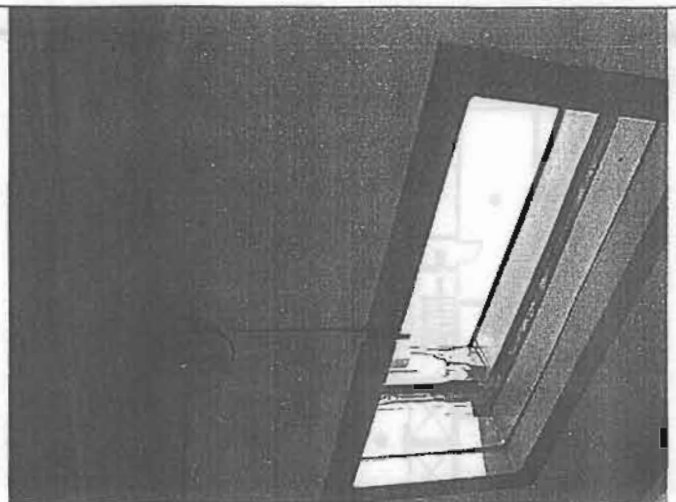
ONONDAGA HALL
 FLOORS 2 - 10

SCALE	DATE
FEASIBILITY STUDY - FINAL	
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Hallway-Bell and Pull Station

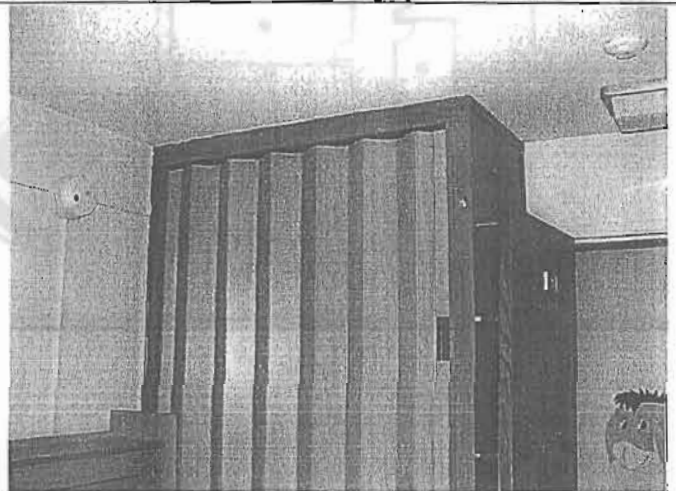


Smoke Hatch at Top of Stairs

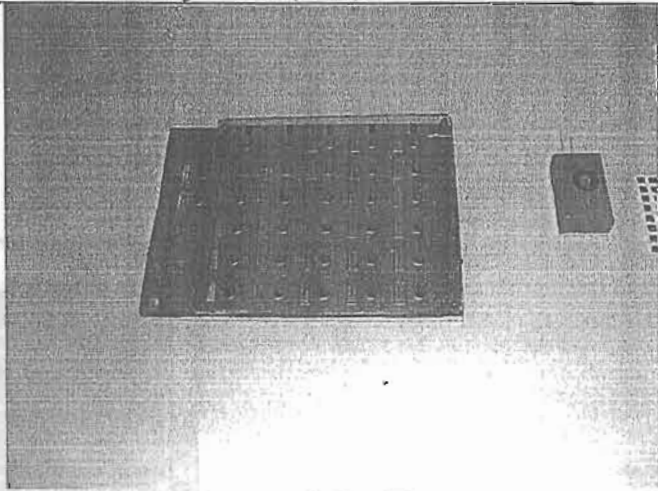
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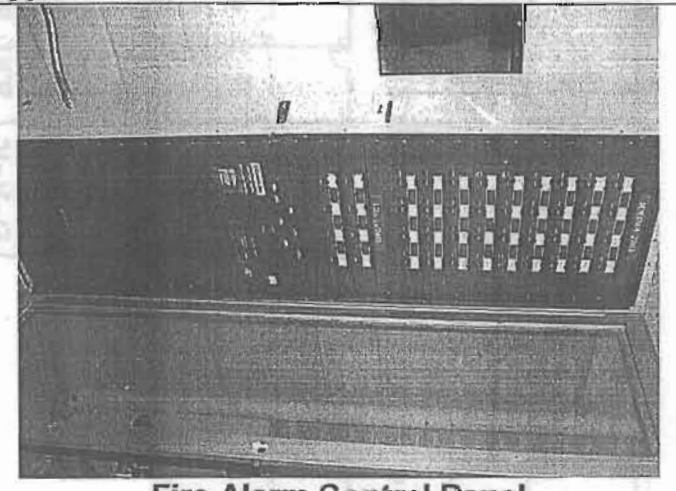
Hallway - Bell, PS, and Smoke D.



Typical Bedroom - Heat and Smoke Detectors



Annunciator Panel



Fire Alarm Control Panel

WOOLLEY



FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ISSUE	DATE
Feasibility Study-Final	9/30/04
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ONONDAGA HALL
FIRE ALARM PICTURES

FA-34-2A

MORRIS ARCHITECTS



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STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - ONONDAGA HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$18,000	\$15,000	\$34,000
EXTERIOR FAÇADE		\$215,000	\$304,000	\$518,000
WINDOWS		\$451,000	\$278,000	\$729,000
ELEVATORS		\$728,000	\$349,000	\$1,077,000
SUB-TOTAL		\$1,412,000	\$946,000	\$2,358,000
GENERAL CONDITIONS	5%			\$118,000
SUB-TOTAL				\$2,476,000
OVERHEAD AND PROFIT	7%			\$173,000
SUB-TOTAL				\$2,649,000
CONTINGENCY	15%			\$397,000
SUB-TOTAL				\$3,046,000
ASBESTOS ABATEMENT				\$1,136,000
FIRE ALARM				\$381,000
TOTAL - ONONDAGA HALL				\$4,563,000
ELEVATORS - ALTERNATE OPTION #2			DEDUCT	(\$165,000)

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - ONONDAGA HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
ASBESTOS ABATEMENT						
<u>WINDOWS (Temporary Protection provided by others)</u>						
Abate "A" windows	324 EA	\$240.00	\$77,760	\$360.00	\$116,640	\$194,400
Abate "B" windows	18 EA	800.00	14,400	1,200.00	21,600	36,000
Abate "C" windows	50 EA	240.00	12,000	360.00	18,000	30,000
Abate "D" windows	2 EA	800.00	1,600	1,200.00	2,400	4,000
Abate "E" windows	2 EA	800.00	1,600	1,200.00	2,400	4,000
Abate "F" windows	3 EA	320.00	960	480.00	1,440	2,400
Abate "G" windows	1 EA	320.00	320	480.00	480	800
<u>ELEVATORS (Existing Shaft Option)</u>						
Basement Lobby: Elevator door and frame, floor tile / mastic	1 EA	1,200.00	1,200	1,800.00	1,800	3,000
First Floor Lobby: Elevator door and frame	1 EA	600.00	600	900.00	900	1,500
Typical Floor Lobby: Floor tile / mastic and elevator doors and frames	9 EA	2,000.00	18,000	3,000.00	27,000	45,000
Penthouse: Metal panel walls	1 EA	800.00	800	1,200.00	1,200	2,000
<u>FIRE ALARM SYSTEM</u>						
All Floors: Asbestos ceilings (full ceiling removal corridors + 2,000 "minor" locations)	1 EA	320,000.00	320,000	480,000.00	480,000	800,000
All Floors: Floor tile / mastic (assume 25 "minor" locations)	1 EA	5,000.00	5,000	7,500.00	7,500	12,500
TOTAL - ASBESTOS ABATEMENT			454,240		681,360	1,135,600
TOTAL - ASBESTOS ABATEMENT SAY			\$454,000		\$681,000	\$1,138,000

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RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

SENeca HALL

WOOLLEY MORRIS ARCHITECTS

Conclusions

FEASIBILITY ESTIMATE - ONONDAGA HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
<u>DEMOLITION</u>						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	43 EA	0.00	0	13.19	567	567
Detection devices	823 EA	0.00	0	16.32	13,431	13,431
Wire	16 CLF	0.00	0	7.41	119	119
<u>INSTALLATION</u>						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	1 EA	330.00	330	350.88	351	681
Smoke detectors	291 EA	165.00	48,015	64.60	18,799	66,814
Smoke detector with sounder base	273 EA	220.00	60,060	64.60	17,636	77,696
Heat detectors	12 EA	148.50	1,782	61.20	734	2,516
Duct detectors	4 EA	313.50	1,254	120.36	481	1,735
Pull stations	24 EA	74.80	1,795	53.04	1,273	3,068
Audio/visual alarm	67 EA	137.50	9,213	72.76	4,875	14,088
Visual alarm	104 EA	52.25	5,434	57.80	6,011	11,445
Conduit	1,400 LF	0.64	896	3.14	4,396	5,292
Wire	14 CLF	191.40	2,680	68.00	952	3,632
Elevator connection	1 EA	165.00	165	680.00	680	845
Door holders	20 EA	85.25	1,705	102.00	2,040	3,745
Corridor ceiling replacement	15,700 SF	4.00	62,800	3.15	49,455	112,255
Ceiling texture replacement / miscellaneous locations	2,100 LF	1.00	2,100	1.20	2,520	4,620
TOTAL - FIRE ALARM			253,119	127,788	380,907	
TOTAL - FIRE ALARM SAY			\$253,000	\$128,000	\$381,000	

OG

SENECA HALL

- Conclusions

Roof:

The asbestos containing black flashing tar located on the counter flashing and sporadically on the stone caps must be abated to facilitate the stone cap repair and counter flashing removal.

Windows:

The window units and all window caulks (interior and exterior) between the frame and the building must be abated and temporary weather protection installed and maintained prior to new window installation. All materials removed including the window panes, panels, frame, and caulking must be disposed of as an asbestos containing material.

Elevators—Existing Shaft Option:

The elevator doors must be abated to accommodate the new elevators. Asbestos floor tile and mastic in the basement and typical floor elevator lobbies must be abated to accommodate the elevator door frame demolition. A portion of the penthouse exterior walls must be abated to accommodate the penthouse wall demolition.

Elevators—New Shaft Option:

Asbestos mudded fittings on fiberglass pipe wrap in the basement room in front of the new shaft location must be abated to accommodate new walls. Asbestos floor tile in the rooms in front of the new shaft locations on the first and typical floors must be abated to accommodate new walls. If there were asbestos foundation waterproofing below grade at the new elevator shaft location, it would need to be abated to facilitate the new elevator shaft foundation. White asbestos spray-on acoustical ceilings in the rooms in front of the new shaft location on the typical floors must be abated to accommodate new walls.

Fire Alarm Systems:

The white asbestos spray-on acoustical ceiling must be abated in some rooms (including corridors, dorm rooms and stairwells) that will require fire alarm system component replacement and that may require new raceways. In addition, the transite ceilings and walls in some basement rooms may require abatement to facilitate the fire alarm system upgrade. Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

- Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Roof, Windows, Elevator, and Fire Alarm Scopes.
2. For the Elevator scope, it is recommended that if partial abatement is required in a room, then the entire room be abated.
3. For the Fire Alarm Scope, it is recommended that only the required minimum amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system. Whenever possible, it is recommended that raceways and fire alarm system components be attached to non-asbestos containing walls and ceilings.

FIRE ALARM

- System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the

SE

SENECA HALL

review of existing record drawings, and addresses the condition of the existing fire alarm system at Seneca Hall.

The existing fire alarm system was observed throughout Seneca Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

• Observations

FIRE ALARM CONTROL PANEL (FACP)

- **Manufacturer:** Edwards
- **Model #:** 6500 Series
- **Age:** 12+ years old
- **Type:** Zoned System (20 Zones)
- **Monitored by:** University Police

INITIATING DEVICES

- **Smoke Detectors:** Located at top of stairwells, in corridors and in elevator lobbies.
- **Local Smoke Detectors with sounder:** Located in each sleeping unit.
- **Heat Detectors:** All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- **Pull Stations:** Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- **Alarm Bells:** 6-Inch vibrating bells are located in corridors and mechanical rooms.
- **Audio/Visual Units:** Bathrooms only.
- **Visual Units:** None.

SYSTEMS MONITORED

- **Sprinkler Flow & Tamper Switch:** Flow & tamper switches monitoring sprinkler.
- **Smoke Release:** Smoke releases are located in top off all stairwells.
- **Standpipes:** Flow & tamper switches are present and monitoring standpipe system.
- **Elevator:** Connected to FACP.
- **HVAC System:** Duct detectors are present for fan shutdown.
- **Door Hold:** Door holders close partition door upon alarm.

DRAWINGS

- See Drawings FA-32-1A, FA-32-1B, and FA-32-1C for fire alarm existing conditions for Seneca Hall.

• Conclusions

1. The FACP is an old zoned system. Based on DASNY guidelines that all college dormitories shall be addressable systems by 2010 this system should be replaced in the next 2-3 years.

SENECA HALL

2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next 2-3 years.
 3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
 4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
 5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
 6. Visual notification devices are not present except in bathrooms. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.
- Recommendations
 1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
 2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
 3. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
 4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
 5. The FACP shall be tied into campus monitoring system located at the university police station.
 6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
 7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

SENECA HALL

Replacing the elevators in this fashion means that one pair of elevators is in service at all times allowing the building to remain occupied during construction.

2. Option #2: New Elevators in New Shaft (See Drawings E-32-2A through E-32-2D):

Add a new shaft containing a pair of new elevators outside the building. To accommodate this some modifications to the interior of the building will be required. Upon completion the four existing elevators can be decommissioned and removed. Abandoned elevator shafts can be utilized for other functions.

The above listed drawings depict only a conceptual implementation of this option.

Execution of this option can occur while the building is occupied.

ASBESTOS

- System Description

The Roof, Windows, Elevators, and Fire Alarm Scopes will impact asbestos containing materials.

- Observations

Roof:

The existing counter flashing was not replaced when the roof was upgraded. There is asbestos containing black flashing tar located on the counter flashing and sporadically on the stone caps.

Windows:

Window units contain an asbestos cement backer board on bottom panels. In addition, a non-accessible frame caulk exists between the frame of the window and the building. This caulk must be assumed asbestos containing. A brown asbestos window glazing between the window pane and frame exist on "B" type window. A brown asbestos caulk exists between the window frame and façade panel of the "A" type windows.

Elevators—Existing Shaft Option:

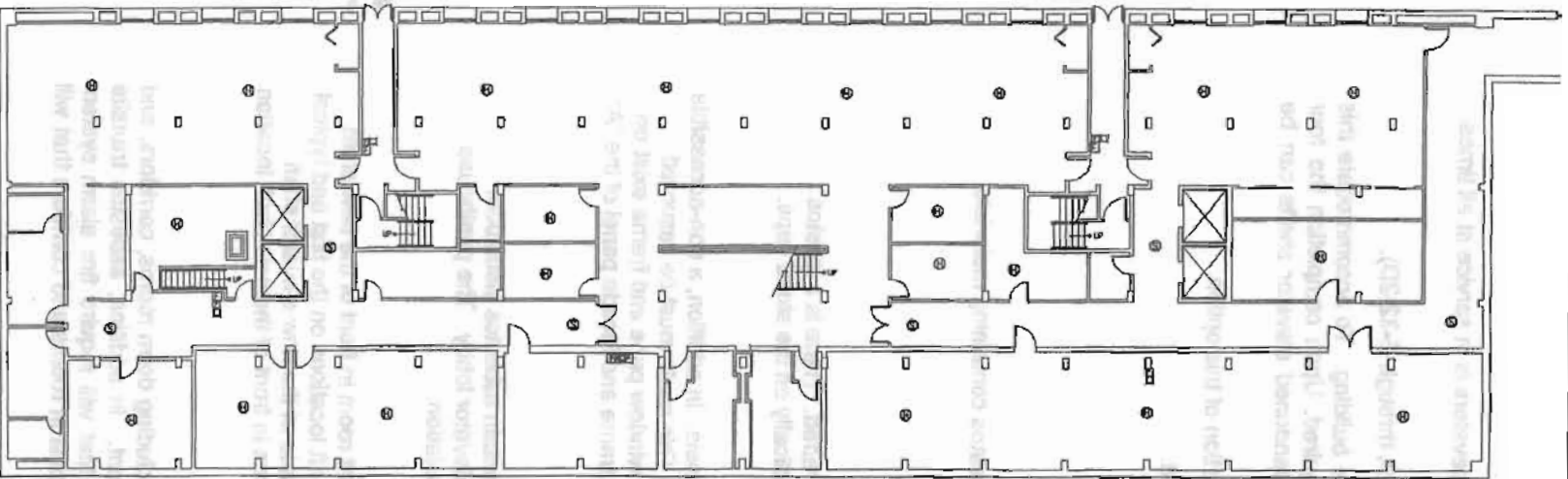
Elevator doors (shaft and cart doors) were non-accessible and may contain asbestos insulation. Asbestos floor tile and mastic exist in the basement and typical floor elevator lobby. The penthouse exterior walls are a thick metal panel, which may contain asbestos insulation.

Elevators—New Shaft Option:

Asbestos mudded fittings on fiberglass pipe wrap exist in the basement room in front of the new shaft location. Asbestos floor tile exists in the rooms in front of the new shaft locations on the first and typical floors. There may be an asbestos foundation waterproofing below grade at the new elevator shaft location. White asbestos spray-on acoustical ceilings exist in the rooms in front of the new shaft location on the typical floors.

Fire Alarm Systems:

White asbestos spray-on acoustical ceilings exist in some rooms (including dorm rooms, corridors, and stairwells) that will require fire alarm system component replacement. In addition, asbestos transite ceilings exist in some basement rooms on the walls and ceilings that will require fire alarm system component replacement. Asbestos containing floor tile and mastic exist in rooms and corridors that will require fire alarm system component replacement.



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FA-32-1A

BASEMENT FLOOR PLAN

SCALE: NONE

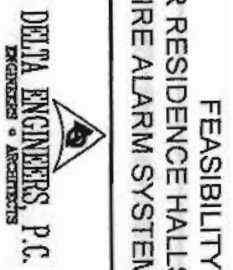


NORTH

ASBESTOS NOTE:
AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 58 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACoustICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RECEIVERS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACoustICAL CEILINGS. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

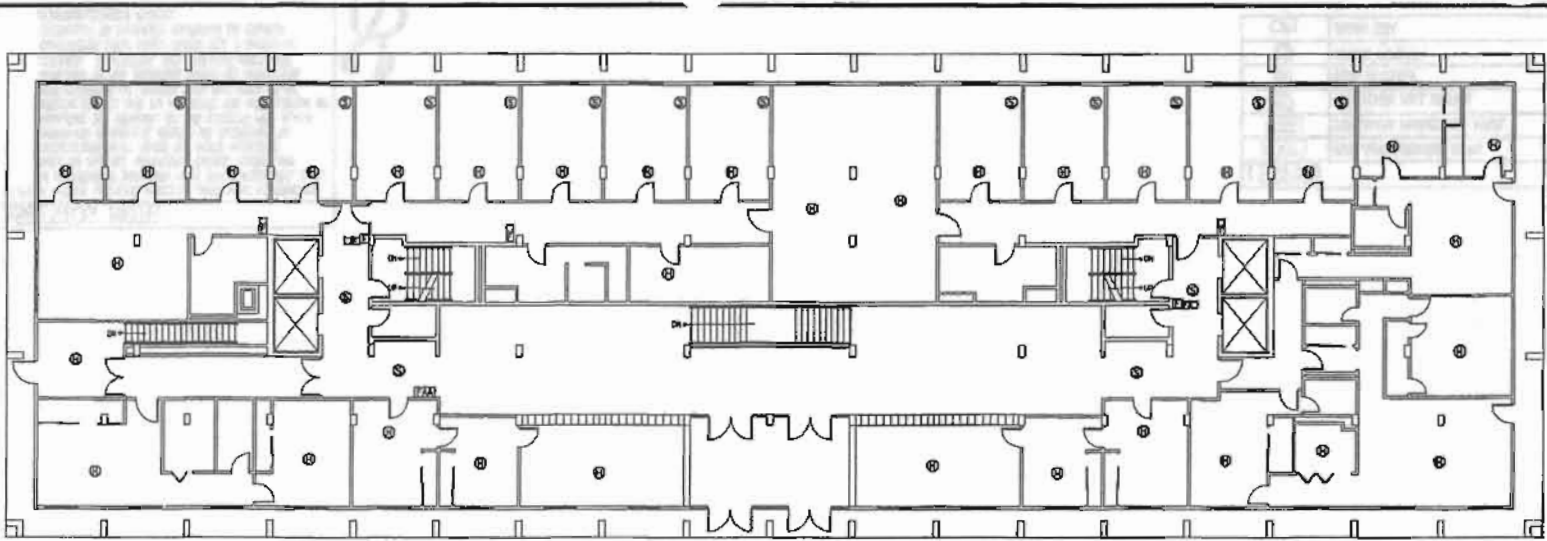
LEGEND	
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[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[A]	ALARM BELL

W O O L L E Y
M O R R I S
A R C H I T E C T S



SENeca HALL
BASEMENT PLAN
FA-32-1A

DATE	
DESIGN	
PROJECT STUDY - FINAL	
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FA-32-1B

FIRST FLOOR PLAN

SCALE: NONE



NORTH

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LEGEND	
[FA-CP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
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[S]	SMOKE DETECTOR
[CB]	ALARM BELL

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& FIRE ALARM SYSTEM IMPROVEMENTS

SENeca HALL
FIRST FLOOR PLAN
FA-32-1B

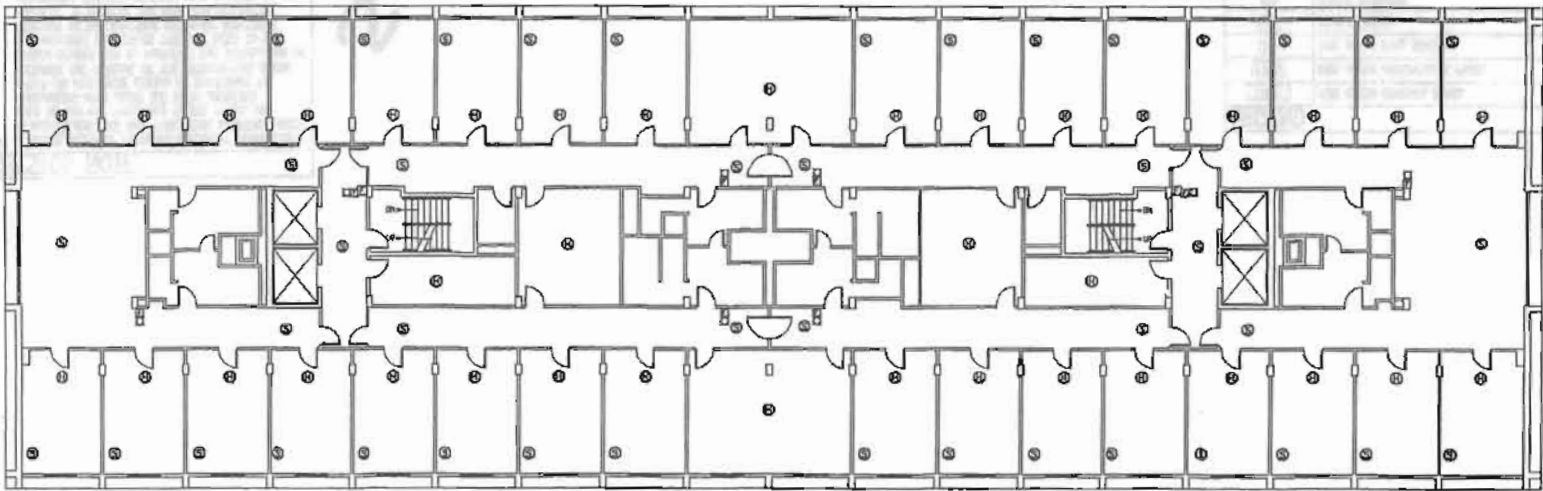
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1
FA-32-1C

FLOORS 2 - 10

SCALE: NONE



ASBESTOS NOTE:
 NR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 58 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RECESSED OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILING. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RECESSED OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
[TRCP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM INDICATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

ARCHITECTS

WOOLLEY

Klepper, Hahn & Hyatt
STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS
NEW YORK

OSWEGO
STATE UNIVERSITY OF NEW YORK

FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

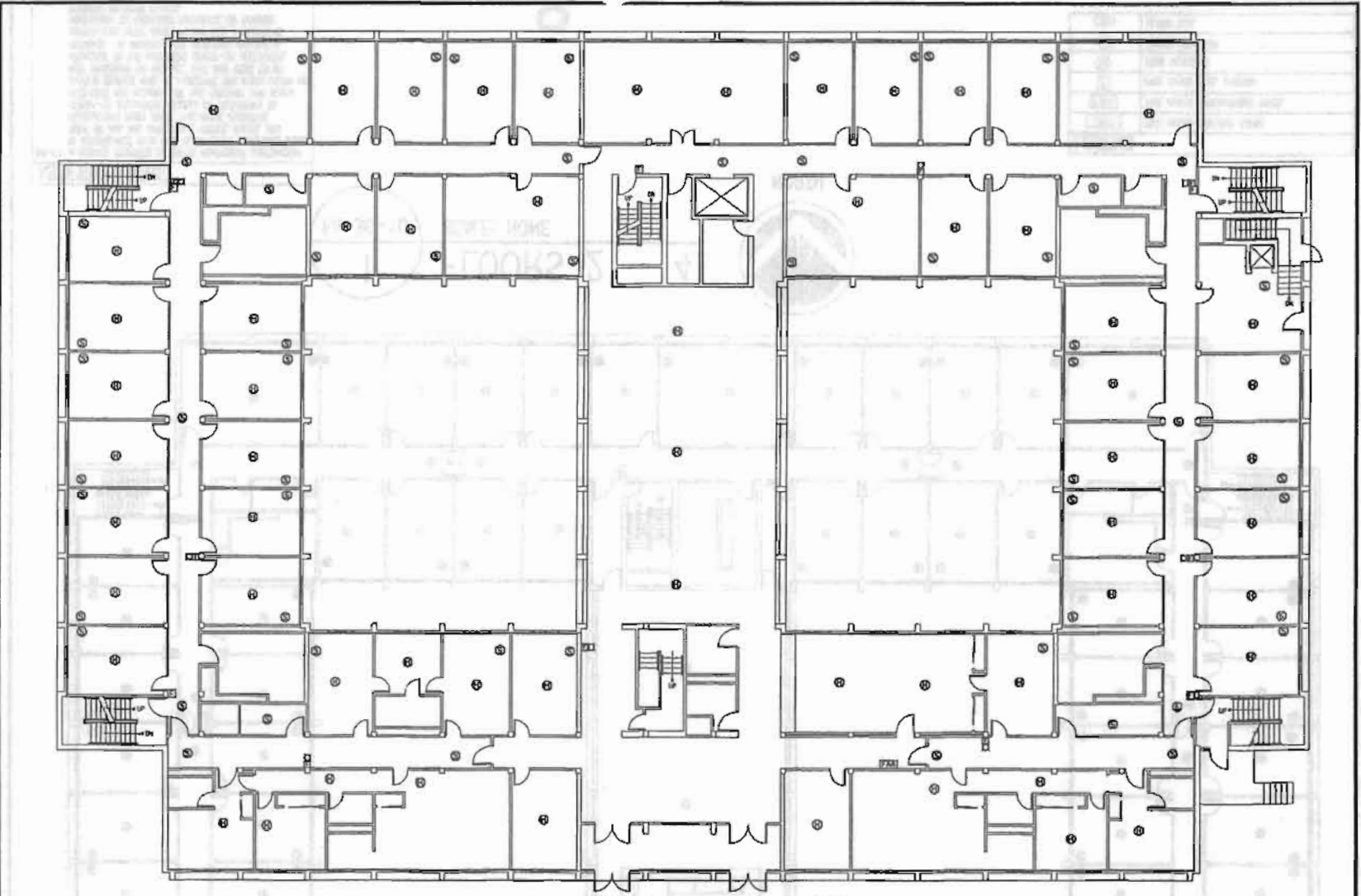
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Civil and Environmental

SENECA HALL
FLOORS 2 - 10

FA-32-1C

DATE	1/27/09
DESIGNER	WOOLLEY MORRIS ARCHITECTS P.C.
PROJECT	SENeca HALL
SCALE	AS SHOWN



1 FIRST FLOOR PLAN
FA-36-1B SCALE: NONE



ASBESTOS NOTE:
 AR-11 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 98 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE WHITE ASBESTOS SPRAY-ON ACoustICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACEMAYS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACoustICAL CEILINGS. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACEMAYS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[FAPS]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

WOOLLEY ARCHITECTS

OSWEGO
STATE UNIVERSITY OF NEW YORK

FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ONEIDA HALL
FIRST FLOOR PLAN
FA-36-1B

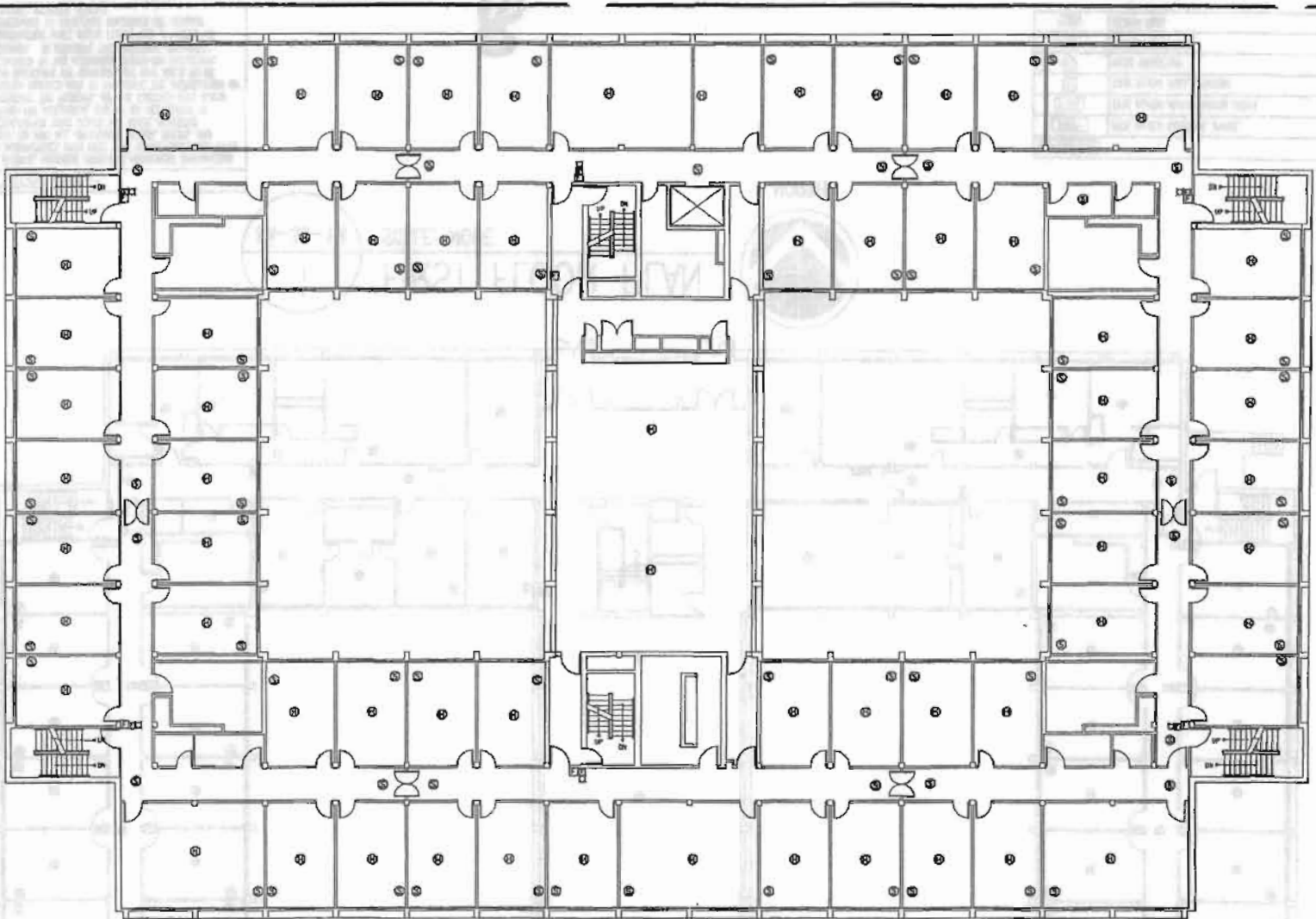


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ARCHITECTS


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ENGINEERS & ARCHITECTS

IU ENGINEERS
Civil and Environmental

FA-36-1B



1
FLOORS 2 - 4
FA-36-1C
SCALE: NONE


 NORTH

ASBESTOS NOTE:
 AR-11 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 261 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST APPLY THE WHITE ASBESTOS SPRAY-ON ACOUSTICAL CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACERBIS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE ASBESTOS SPRAY-ON ACOUSTICAL CEILINGS. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACERBIS OR CONDUIT RUNNING BETWEEN FLOORS.

LEGEND	
FCP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM ANNUNCIATOR PANEL
F	FIRE ALARM PULL STATION
H	HEAT DETECTOR
S	SMOKE DETECTOR
CB	ALARM BELL

OE

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FOR RESIDENCE HALLS BUILDING SHELL & FIRE ALARM SYSTEM IMPROVEMENTS

FEASIBILITY STUDY

ONEIDA HALL
FLOORS 2 - 4

ARCHITECTS

WOLLEY ARCHITECTS

WOLLEY

DATE _____

REVISION _____

NO. _____

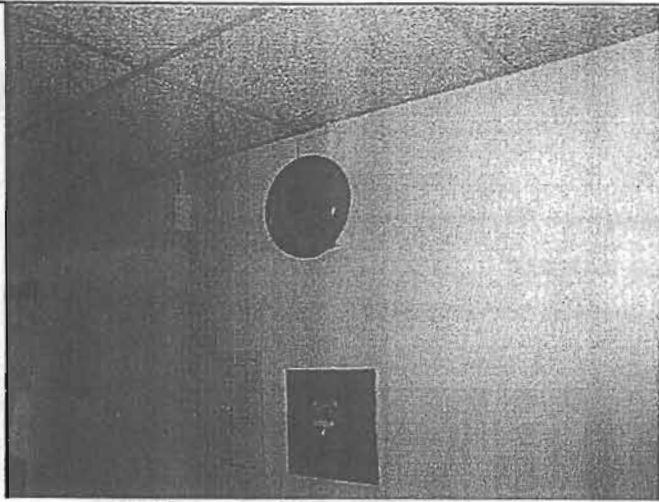
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KLIEPPER, HAHN & HYATT
STRUCTURAL ENGINEERS - LICENSED PROFESSIONALS SINCE 1988

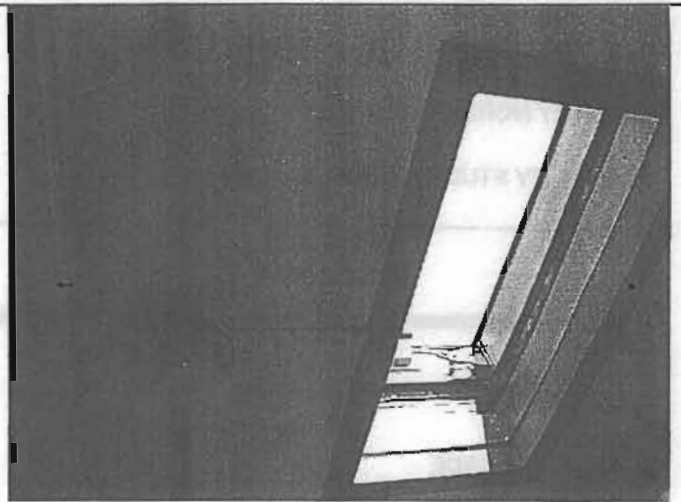
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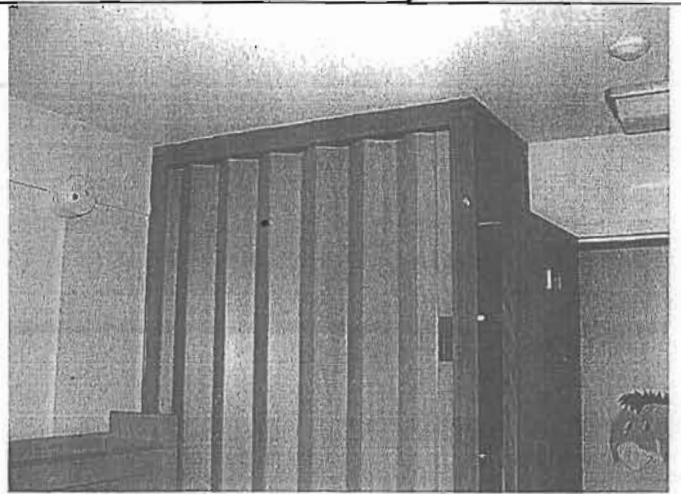
Hallway-Bell and Pull Station



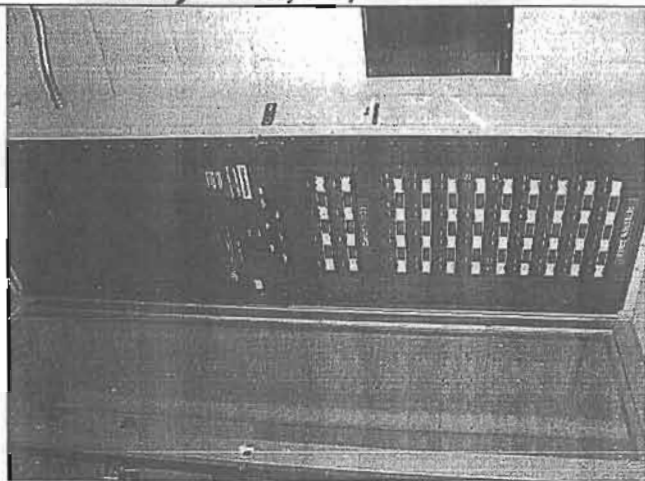
Smoke Hatch at Top of Stairs



Hallway - Bell, PS, and Smoke D.



Typical Bedroom - Heat and Smoke Detectors



Fire Alarm Control Panel

SE

WOOLLEY

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MORRIS



FEASIBILITY STUDY FOR RESIDENCE HALLS BUILDING SHELL & FIRE ALARM SYSTEM IMPROVEMENTS

ISSUE	DATE
Feasibility Study-Final	9/30/04
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SENECA HALL FIRE ALARM PICTURES

FA-32-2A



Klepper, Hahn & Hyatt STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS



STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - SENECA HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$94,000	\$70,000	\$164,000
EXTERIOR FAÇADE		\$215,000	\$304,000	\$518,000
WINDOWS		\$443,000	\$274,000	\$716,000
ELEVATORS		\$728,000	\$349,000	\$1,077,000
SUB-TOTAL		\$1,480,000	\$997,000	\$2,475,000
GENERAL CONDITIONS	5%			\$124,000
SUB-TOTAL				\$2,599,000
OVERHEAD AND PROFIT	7%			\$182,000
SUB-TOTAL				\$2,781,000
CONTINGENCY	15%			\$417,000
SUB-TOTAL				\$3,198,000
ASBESTOS ABATEMENT				\$1,137,000
FIRE ALARM				\$376,000
TOTAL - SENECA HALL				\$4,711,000
ELEVATORS - ALTERNATE OPTION #2			DEDUCT	(\$149,000)

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WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - SENECA HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
ASBESTOS ABATEMENT						
ROOF						
Abate black flashing tar	1 EA	\$800.00	\$800	\$1,200.00	\$1,200	\$2,000
WINDOWS (Temporary Protection provided by others)						
Abate "A" windows	324 EA	240.00	77,760	360.00	116,640	194,400
Abate "B" windows	18 EA	800.00	14,400	1,200.00	21,600	36,000
Abate "C" windows	48 EA	240.00	11,520	360.00	17,280	28,800
Abate "D" windows	2 EA	800.00	1,600	1,200.00	2,400	4,000
Abate "E" windows	2 EA	800.00	1,600	1,200.00	2,400	4,000
Abate "F" windows	3 EA	320.00	960	480.00	1,440	2,400
Abate "G" windows	2 EA	320.00	640	480.00	960	1,600
ELEVATORS (Existing Shaft Option)						
Basement Lobby: Elevator door and frame, floor tile / mastic	1 EA	1,200.00	1,200	1,800.00	1,800	3,000
First Floor Lobby: Elevator door and frame	1 EA	600.00	600	900.00	900	1,500
Typical Floor Lobby: Floor tile /mastic and elevated doors and frames	9 EA	2,000.00	18,000	3,000.00	27,000	45,000
Penthouse: Metal panel walls	1 EA	800.00	800	1,200.00	1,200	2,000
FIRE ALARM SYSTEM						
All Floors: Asbestos ceilings (full ceiling removal corridors + 2,000 "minor" locations)	1 EA	320,000.00	320,000	480,000.00	480,000	800,000
All Floors: Floor tile / mastic (assume 25 "minor" locations)	1 EA	5,000.00	5,000	7,500.00	7,500	12,500
TOTAL - ASBESTOS ABATEMENT			454,880		682,320	1,137,200
TOTAL - ASBESTOS ABATEMENT SAY			\$455,000		\$682,000	\$1,137,000

SE

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - SENECA HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
<u>DEMOLITION</u>						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	81 EA	0.00	0	13.19	1,068	1,068
Detection devices	876 EA	0.00	0	16.32	14,296	14,296
Wire	18 CLF	0.00	0	7.41	133	133
<u>INSTALLATION</u>						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	1 EA	330.00	330	350.88	351	681
Smoke detectors	218 EA	165.00	35,970	64.60	14,083	50,053
Smoke detector with sounder base	302 EA	220.00	66,440	64.60	19,509	85,949
Heat detectors	12 EA	148.50	1,782	61.20	734	2,516
Duct detectors	4 EA	313.50	1,254	120.36	481	1,735
Pull stations	26 EA	74.80	1,945	53.04	1,379	3,324
Audio/visual alarm	67 EA	137.50	9,213	72.76	4,875	14,088
Visual alarm	118 EA	52.25	6,166	57.80	6,820	12,986
Conduit	1,500 LF	0.64	960	3.14	4,710	5,670
Wire	15 CLF	191.40	2,871	68.00	1,020	3,891
Elevator connection	1 EA	165.00	165	680.00	680	845
Door holders	20 EA	85.25	1,705	102.00	2,040	3,745
Corridor ceiling replacement	15,800 SF	4.00	63,200	3.15	49,770	112,970
Ceiling texture replacement / miscellaneous locations	1,550 LF	1.00	1,550	1.20	1,860	3,410
TOTAL - FIRE ALARM			248,441		127,277	375,718
TOTAL - FIRE ALARM		.SAY	\$248,000		\$127,000	\$375,000

FUNNELLE HALL

elevator lobby must be abated to accommodate the elevator door frame demolition. Asbestos containing floor tiles in the basement and typical floor elevator lobbies must be abated to accommodate the elevator door frame demolition. The brown asbestos door frame caulk between the door frame and building inside and outside of the penthouse door to the roof must be abated to accommodate the penthouse wall demolition.

Elevators—New Shaft Option:

Fiberglass pipe wrap and asbestos mudded fittings in the basement room in front of the new elevator shaft location must be abated to accommodate new walls. The grey asbestos door glazing in the basement door adjacent to the room in front of the new elevator shaft location may need to be abated. The asbestos containing floor tile in the room in front of the new elevator shaft location on the basement, first and typical floors must be abated to accommodate new walls. The asbestos containing fire doors located in the room in front of the new elevator shaft location, and on the basement and first floors must be abated to accommodate the new elevators. The non-accessible exterior foundation waterproofing below grade at the new elevator shaft location may need to be abated to accommodate the new elevator shaft foundation.

Fire Alarm Systems:

The asbestos transite ceilings in some basement rooms that will be impacted by the fire alarm system component replacement or new raceway attachments must be abated. Asbestos floor tile and mastic or transite ceilings that will be impacted by raceways or conduit running between floors must be abated.

• Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Facade, Windows, Elevator, and Fire Alarm Scopes.
2. For the Elevator scope, it is recommended that if partial abatement is required in a room, then the entire room be abated.
3. For the Fire Alarm Scope, it is recommended that only the required minimum amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system. Whenever possible, it is recommended that raceways and fire alarm system components be attached to non-asbestos containing walls and ceilings.
4. It is recommended that work occurring around the wood fire doors in corridors and on dorm rooms be done in a manner to avoid disturbing the asbestos insulation contained within.

FIRE ALARM

• System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Funnelle Hall.

The existing fire alarm system was observed throughout Funnelle Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

FUNNELLE HALL

FUNNELLE HALL

- **Observations**

FIRE ALARM CONTROL PANEL (FACP)

- **Manufacturer:** Edwards
- **Model #:** 5700 Series
- **Age:** 15+ years old
- **Type:** Zoned System (20 Zones)
- **Monitored by:** University Police

INITIATING DEVICES

- **Smoke Detectors:** Located at top of stairwells and in corridors (except basement and first floors).
- **Local Smoke Detectors with sounder:** Located in each sleeping unit.
- **Heat Detectors:** All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- **Pull Stations:** Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- **Alarm Bells:** 10-inch vibrating bells are located in corridors and mechanical rooms.
- **Audio/Visual Units:** Located in bathrooms and some sleeping areas on 2nd floor to meet ADA requirements.
- **Visual Units:** Located in second floor corridors to meet ADA requirements.

SYSTEMS MONITORED

- **Sprinkler Flow Switch:** Flow switch monitoring sprinkler.
- **Smoke Release:** Smoke releases are located in stairwells (Typical of 2).
- **Standpipes:** Flow switch is present and monitoring standpipe system.

SYSTEMS NOT MONITORED

- **Elevator:** Not connected.
- **HVAC System:** No duct detectors present for fan shutdown.
- **Door Hold:** No door holders present as required by code.

DRAWINGS

- See Drawings FA-48-1A, FA-48-1B, and FA-48-1C for fire alarm existing conditions for Funnelle Hall.

- **Conclusions**

1. The FACP is an old and outdated zoned system. It has reached its useful life and should be replaced in the next year.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next year.

FUNNELLE HALL

3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present except in areas designated as ADA. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

• Recommendations

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
3. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System,- including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

FUNNELLE HALL

ASBESTOS

- System Description

The Facade, Windows, Elevators, and Fire Alarm Scopes will impact asbestos containing materials.

- Observations

Facade:

A grey caulk exists between the coping stones.

Windows:

A light grey asbestos window glazing exists between the window / door pane glass and the frame of the Type "H" and "J" door systems.

Elevators—Existing Shaft Option:

Elevator doors (shaft and cart doors) were non-accessible and may contain asbestos insulation. Asbestos containing black glue exists under the wood paneling on the basement and first floor elevator lobbies. Asbestos containing transite ceilings exist in the basement elevator lobbies. Asbestos containing floor tiles exist in the basement and typical floor elevator lobbies. A brown asbestos door frame caulk exists between the door frame and building (inside and outside) of the penthouse door to the roof.

Elevators—New Shaft Option:

Fiberglass pipe wrap and asbestos mudded fittings exist in the basement room in front of the new elevator shaft location. A grey asbestos door glazing exists in the basement door adjacent to the room in front of the new elevator shaft location. Asbestos containing floor tiles exist in the room in front of the new elevator shaft location on all floors. Asbestos containing fire doors exist in corridors, in dorm rooms and in the room in front of the new elevator shaft location on all floors. A non-accessible exterior foundation waterproofing may exist below grade at the new elevator shaft location.

Fire Alarm Systems:

Asbestos transite ceilings exist in some basement rooms that will require fire alarm system component replacement. Asbestos containing floor tile and mastic exist in rooms and corridors that will require fire alarm system component replacement.

- Conclusions

Facade:

The grey caulk between the coping stones must be abated to accommodate the coping stone repair.

Windows:

The type "H" and "J" door systems must be abated. The type "H" and "J" door systems must be disposed of as an asbestos containing material. Temporary weather protection must be installed and maintained prior to new window installation.

Elevators—Existing Shaft Option:

The elevator doors must be abated to accommodate the new elevators. The asbestos containing black glue under the wood paneling on the basement and first floor elevator lobbies must be abated to accommodate the elevator door frame demolition. Asbestos containing transite ceiling in the basement

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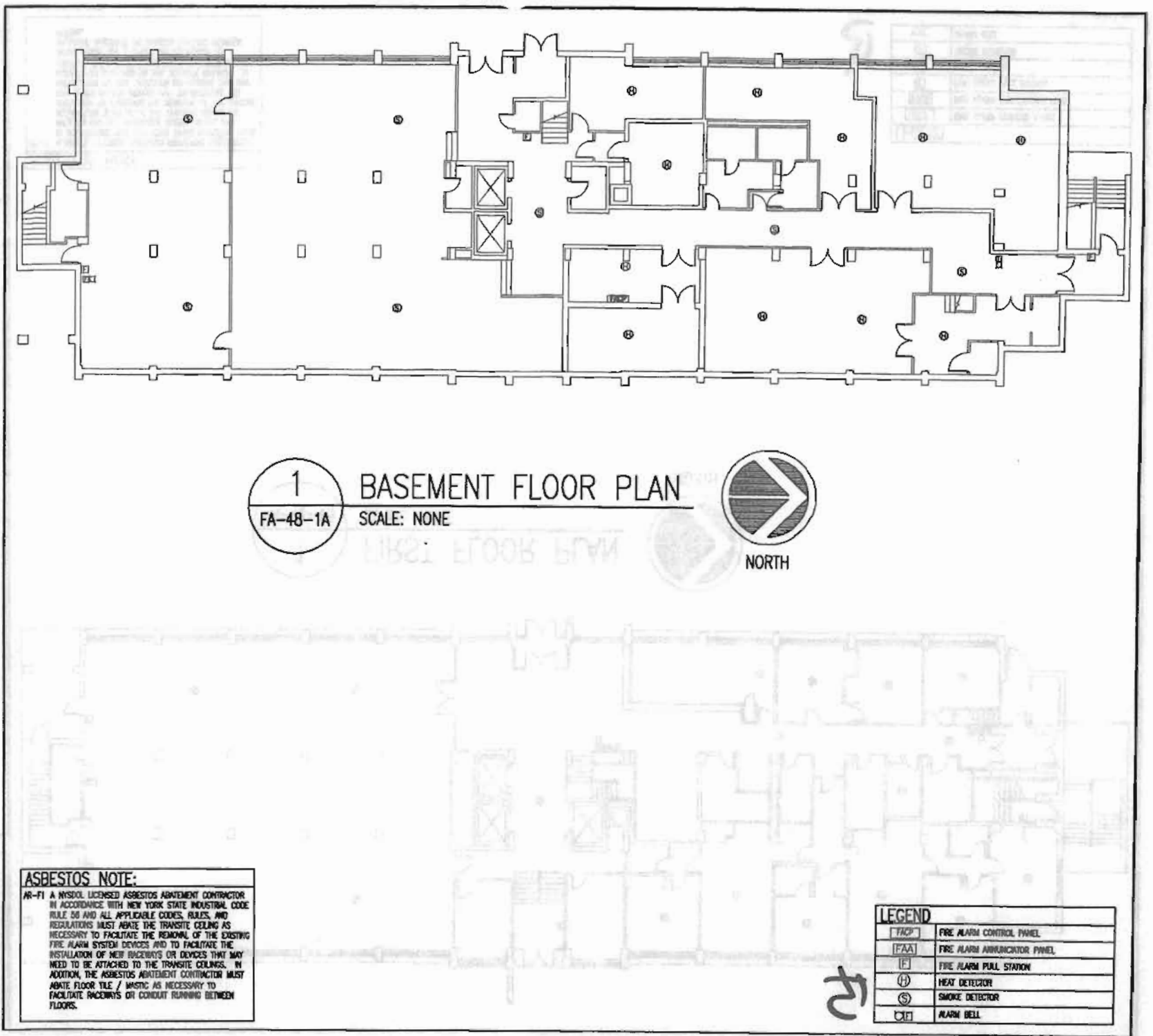
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FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS



1 BASEMENT FLOOR PLAN
FA-48-1A SCALE: NONE
NORTH

ASBESTOS NOTE:
AR-F1 A NYSOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE TRANSITE CEILING AS NECESSARY TO FACILITATE THE REMOVAL OF THE EXISTING FIRE ALARM SYSTEM DEVICES AND TO FACILITATE THE INSTALLATION OF NEW RACEWAYS OR DEVICES THAT MAY NEED TO BE ATTACHED TO THE TRANSITE CEILING. IN ADDITION, THE ASBESTOS ABATEMENT CONTRACTOR MUST ABATE FLOOR TILE / MANSIC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

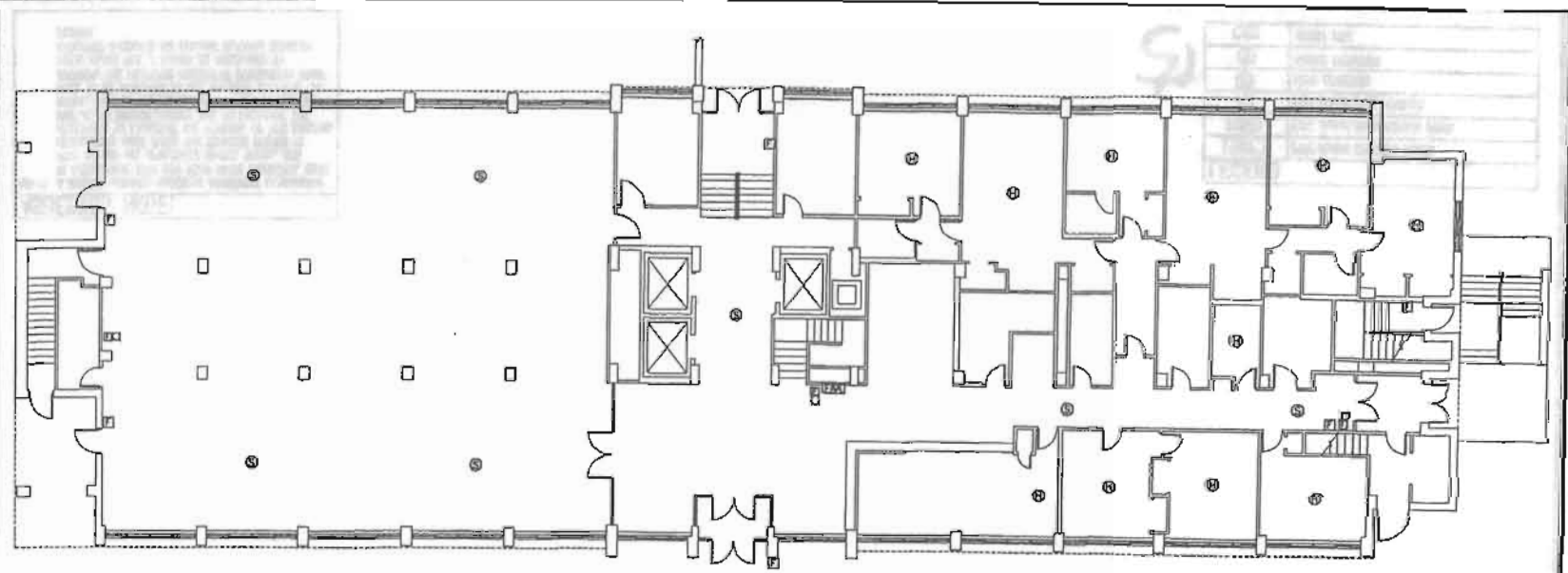
LEGEND	
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[E]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[AB]	ALARM BELL

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SCALE	DATE
FEASIBILITY STUDY - FINAL	
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FUNNELLE HALL
BASEMENT PLAN

FA-48-1A



1
FA-48-1B

FIRST FLOOR PLAN

SCALE: NONE



NORTH

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LEGEND	
[FCP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[FAS]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[AB]	ALARM BELL

42

ARCHITECTS

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& FIRE ALARM SYSTEM IMPROVEMENTS

FEASIBILITY STUDY

FUNNELLE HALL
FIRST FLOOR PLAN

FA-48-1B

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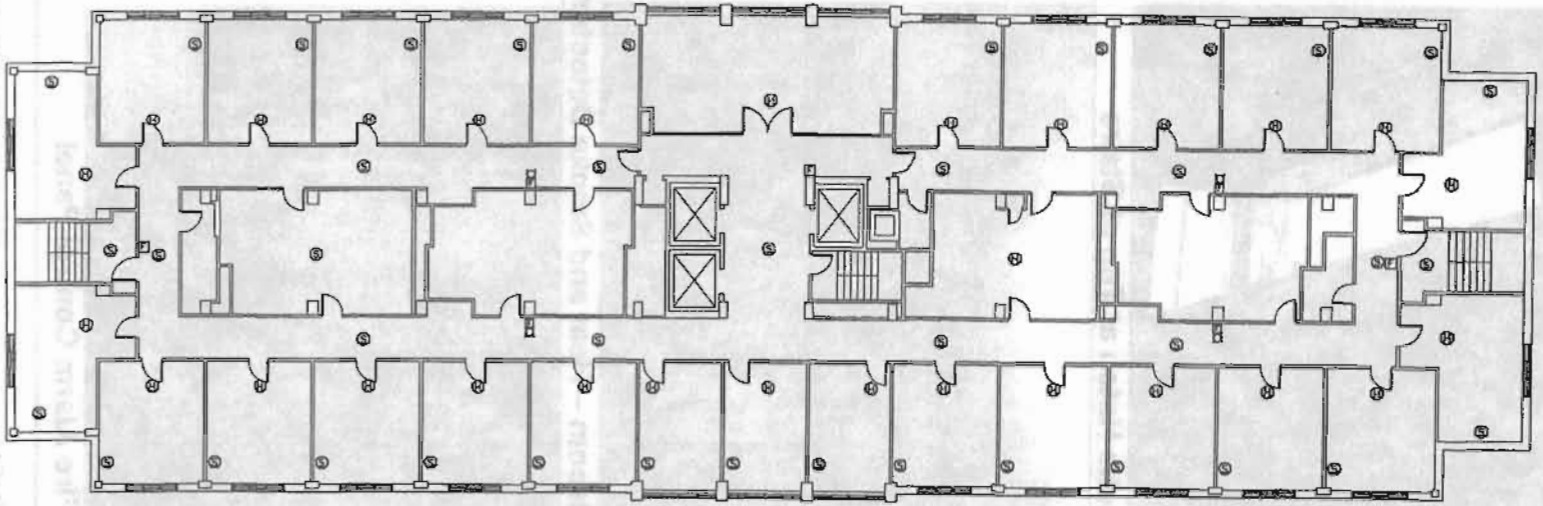
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MORRIS

DATE

VERSION



1
FA-48-1C

FLOORS 2 - 9
SCALE: NONE



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LEGEND	
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[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

FD

WOLLETT ARCHITECTS



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& FIRE ALARM SYSTEM IMPROVEMENTS

FEASIBILITY STUDY

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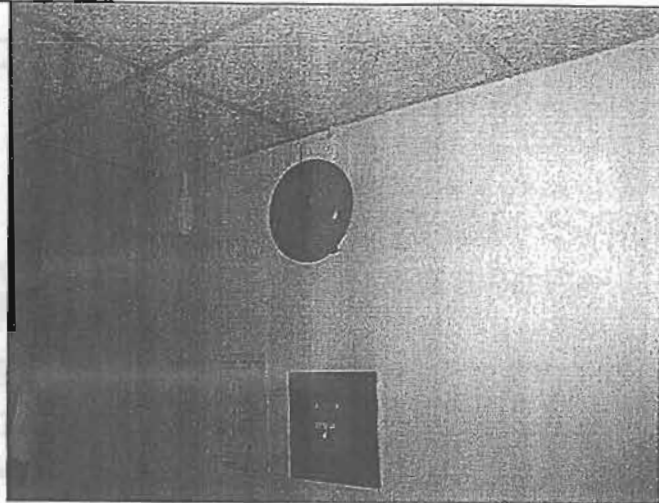


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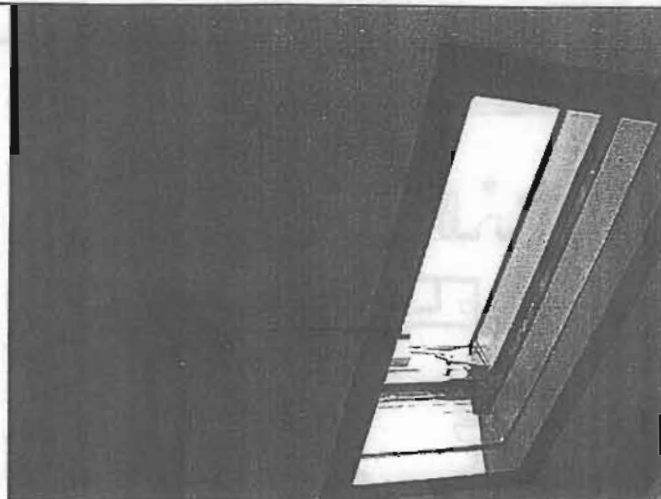
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PROJECT: _____
SHEET: _____

FUNNELLE HALL
FLOORS 2 - 9

FA-48-1C



Hallway-Bell and Pull Station

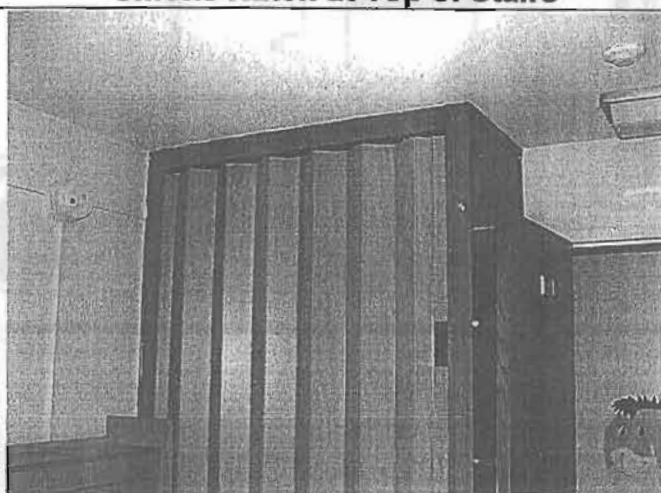


Smoke Hatch at Top of Stairs

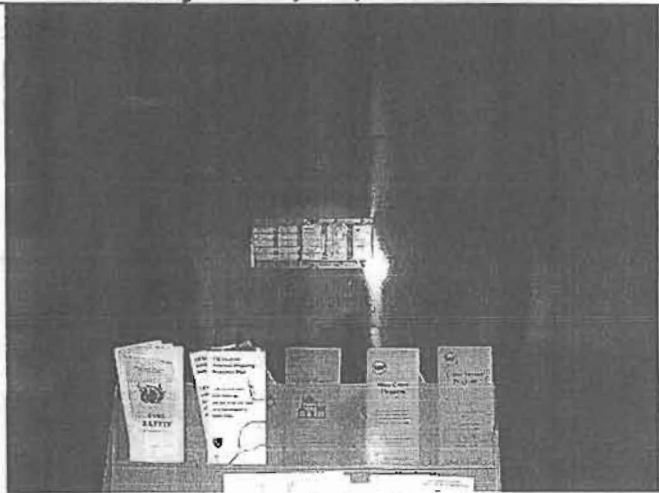
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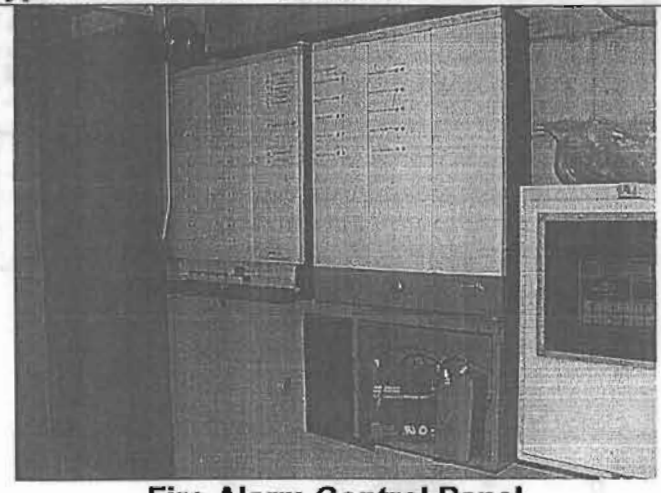
Hallway - Bell, PS, and Smoke D.



Typical Bedroom - Heat and Smoke Detectors



Annunciator Panel



Fire Alarm Control Panel

WOOLLEY
ARCHITECTS

OSWEGO
STATE UNIVERSITY OF NEW YORK

FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ISSUE	DATE
Feasibility Study-Final	9/30/04
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FUNNELLE HALL
FIRE ALARM PICTURES

MORRIS



Klepper, Hahn & Hyatt
STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS
NEW YORK

DELTA ENGINEERS, P.C.
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Civil and Environmental

FA-48-2A

01-84-29

DESIGNED BY
UNIVERSITY OF
OSWEGO

FOR THE
STATE UNIVERSITY OF
OSWEGO

BY
DELTA ENGINEERS, P.C.

DATE
9/30/04

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - FUNNELLE HALL

9/30/04

S U M M A R Y	TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK	\$72,000	\$50,000	\$121,000
EXTERIOR FAÇADE	\$57,000	\$98,000	\$154,000
WINDOWS	\$371,000	\$220,000	\$590,000
ELEVATORS	\$491,000	\$202,000	\$692,000
SUB-TOTAL			\$991,000
GENERAL CONDITIONS	5%		\$78,000
SUB-TOTAL			\$1,635,000
OVERHEAD AND PROFIT	7%		\$114,000
SUB-TOTAL			\$1,749,000
CONTINGENCY	15%		\$262,000
SUB-TOTAL			\$2,011,000
ASBESTOS ABATEMENT			\$66,000
FIRE ALARM			\$366,000
TOTAL - FUNNELLE HALL			\$2,443,000
ELEVATOR - ALTERNATE OPTION #2		ADD	\$64,000
ELEVATOR - ALTERNATE OPTION #3		ADD	\$182,000

FU

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - FUNNELLE HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
ASBESTOS ABATEMENT						
FACADE						
Greyc caulk between coping stones	1 EA	\$400.00	\$400	\$600.00	\$600	\$1,000
WINDOWS (Temporary Protection provided by others)						
Door system abatement (Type H and J)	2 EA	2,000.00	4,000	3,000.00	6,000	10,000
ELEVATORS (Existing Shaft Option)						
Basement Lobby: Elevator door, frame, wood glue, floor tile / mastic and transite ceiling	1 EA	2,400.00	2,400	3,600.00	3,600	6,000
First Floor Lobby: Elevator door, frame and wood glue	1 EA	800.00	800	1,200.00	1,200	2,000
Typical Floor Lobby: Elevator doors, frames, wood glue and floor tile / mastic	8 EA	1,200.00	9,600	1,800.00	14,400	24,000
Penthouse: brown door frame caulk	1 EA	200.00	200	300.00	300	500
FIRE ALARM SYSTEM						
All Floors: Asbestos transite ceilings (assume 25 "minor" attachment/ abatement locations)	1 EA	5,000.00	5,000	7,500.00	7,500	12,500
All Floors: Floor tile / mastic (assume 20 "minor" locations)	1 EA	4,000.00	4,000	6,000.00	6,000	10,000
TOTAL - ASBESTOS ABATEMENT			26,400		39,600	66,000
TOTAL - ASBESTOS ABATEMENT		SAY	\$26,000		\$40,000	\$66,000

FU

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - FUNNELLE HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
<u>DEMOLITION</u>						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	37 EA	0.00	0	13.19	488	488
Detection devices	576 EA	0.00	0	16.32	9,400	9,400
Wire	12 CLF	0.00	0	7.41	89	89
<u>INSTALLATION</u>						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	1 EA	330.00	330	350.88	351	681
Smoke detectors	195 EA	165.00	32,175	64.60	12,597	44,772
Smoke detector with sounder base	216 EA	220.00	47,520	64.60	13,954	61,474
Heat detectors	12 EA	148.50	1,782	61.20	734	2,516
Duct detectors	4 EA	313.50	1,254	120.36	481	1,735
Pull stations	34 EA	74.80	2,543	53.04	1,803	4,346
Audio/visual alarm	47 EA	137.50	6,463	72.76	3,420	9,883
Visual alarm	38 EA	52.25	1,986	57.80	2,196	4,182
Conduit	1,400 LF	0.64	896	3.14	4,396	5,292
Wire	14 CLF	191.40	2,680	68.00	952	3,632
Elevator connection	1 EA	165.00	165	680.00	680	845
Smoke damper connection	2 EA	104.50	209	340.00	680	889
Door holders	20 EA	85.25	1,705	102.00	2,040	3,745
Corridor ceiling replacement	21,100 SF	4.00	84,400	3.15	66,465	150,865
Ceiling texture replacement / miscellaneous locations	1,250 LF	1.00	1,250	1.20	1,500	2,750
TOTAL - FIRE ALARM			240,248		125,694	365,942
TOTAL - FIRE ALARM SAY			\$240,000		\$126,000	\$366,000

FU

SCALES HALL

matching fluoropolymer finish. (See Drawing W-45-2A).

7. Provide closed cell backer rod and sealant system throughout.

ASBESTOS

• System Description

The Façade, Windows and Fire Alarm Scopes will impact asbestos containing materials.

• Observations

Façade:

There are nine vertical expansion joints that contain a grey asbestos containing caulk.

Windows:

All windows (frame caulk) and doors (frame caulk) of this building are asbestos containing. Even windows that have been replaced have a grey asbestos frame caulk residue on the brick adjacent to the replacement window(s).

Fire Alarm Systems:

Raceways or conduit running between floors may impact asbestos containing floor tile / mastic.

• Conclusions

Façade:

The nine vertical building expansion joints that contain a grey asbestos containing caulk must be abated to facilitate the building expansion joint repair.

Windows:

The window and door units, including all caulks and glazing (interior and exterior) must be removed and temporary weather protection installed and maintained prior to new window or door installation. All materials removed, including the doors, window panes, frame and caulking, must be disposed of as an asbestos containing material.

Fire Alarm Systems:

Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

• Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Façade, Window and Fire Alarm Scopes.
2. For the Fire Alarm Scope, it is recommended that only the minimum required amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system.

SCALES HALL

FIRE ALARM

- System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Scales Hall.

The existing fire alarm system was observed throughout Scales Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

- Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Simplex
- Model #: 2001 Series
- Age: 20 years old
- Type: Zoned System (8 Zones)
- Monitored by: University Police

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells and in corridors outside sleeping units.
- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 6-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.
- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow Switch: Flow switch monitoring sprinkler.
- Smoke Release: Smoke releases are located in stairwells (Typical of 3).
- Door Hold: Door holders close partition door upon alarm.

SYSTEMS NOT MONITORED

- Elevator: N/A.
- HVAC System: No duct detectors present for fan shutdown.
- Standpipes: N/A.

SCALES HALL

DRAWINGS

See Drawings FA-45-1A, FA-45-1B, and FA-45-1C for fire alarm existing conditions for Scales Hall.

- **Conclusions**

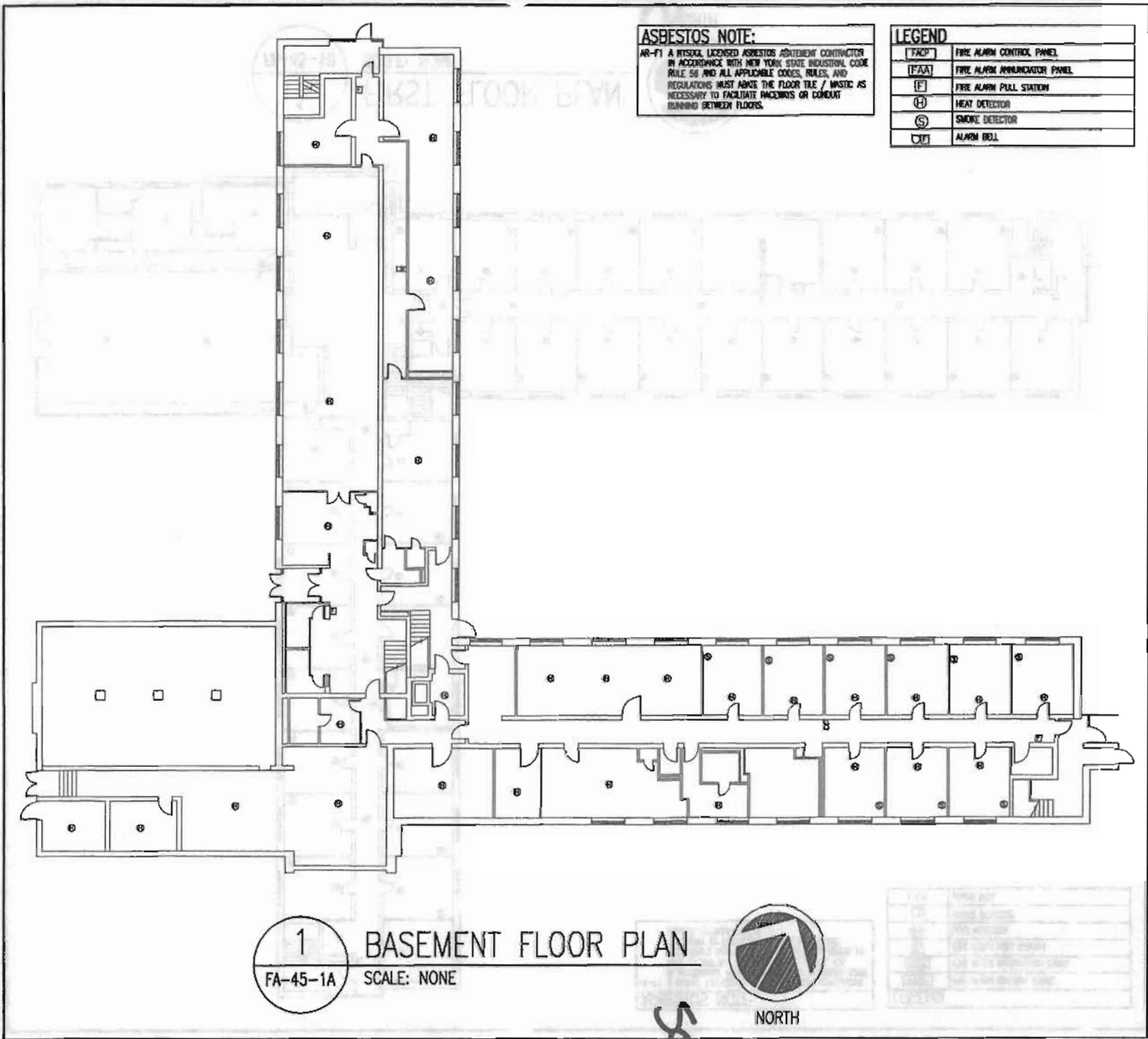
1. The FACP is an old and outdated zoned system. It has reached its useful life and should be replaced in the next year.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next year.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

- **Recommendations**

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
3. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[A]	ALARM BELL

ASBESTOS NOTE:
 AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 50 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.



1 BASEMENT FLOOR PLAN
 FA-45-1A SCALE: NONE



NORTH

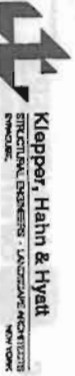
WOOLLEY

ARCHITECTS

MORRIS



FEASIBILITY STUDY
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS

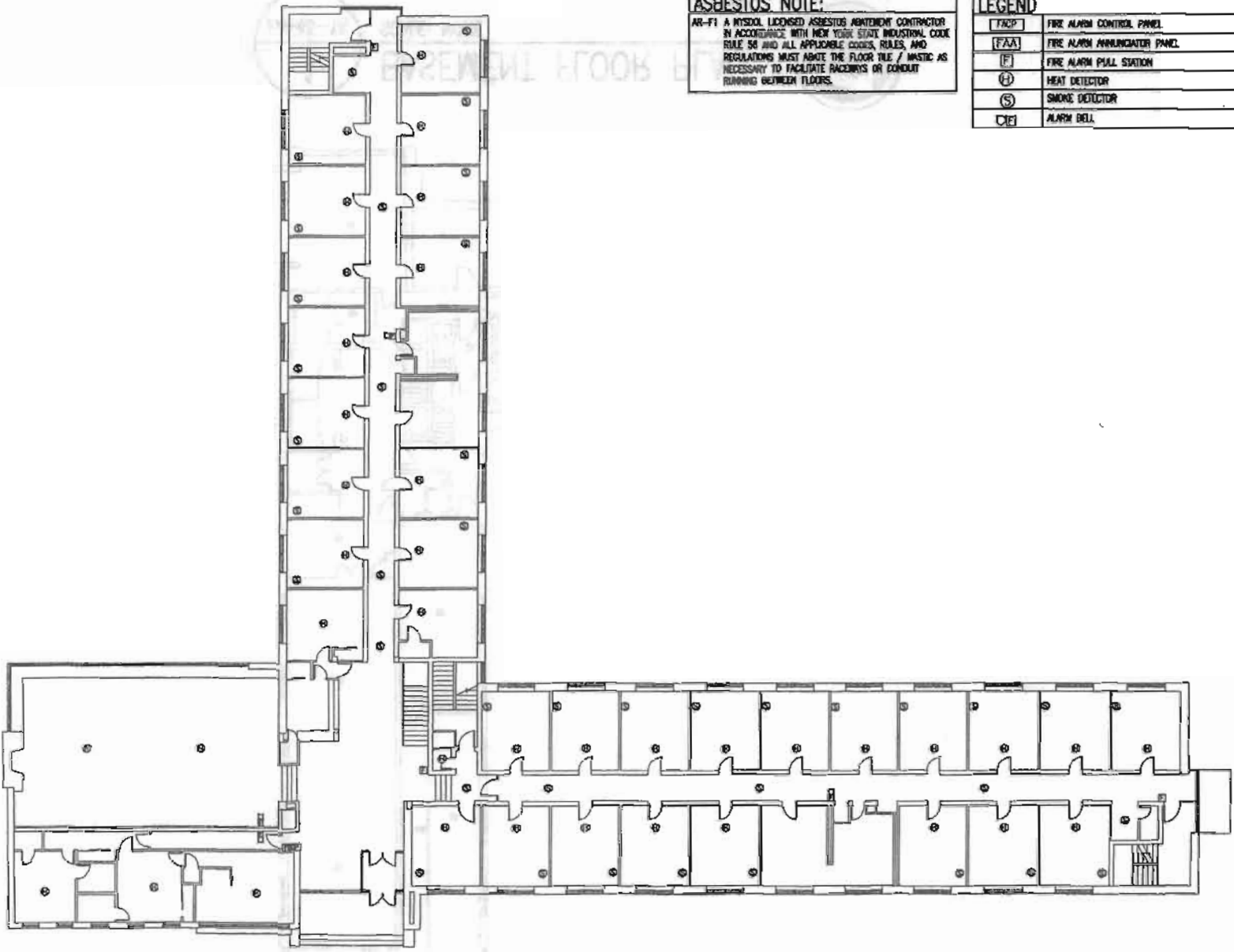


SCALES HALL
 BASEMENT PLAN
 FA-45-1A

ISSUE	DATE
FEASIBILITY STUDY - FINAL	8/20/14
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LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[DB]	ALARM BELL

ASBESTOS NOTE:
 AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 58 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.



1 FIRST FLOOR PLAN
 FA-45-1B SCALE: NONE



W O O L L E Y ARCHITECTS

OSWEGO FOR RESIDENCE HALLS BUILDING SHELL & FIRE ALARM SYSTEM IMPROVEMENTS

FEASIBILITY STUDY

STATE UNIVERSITY OF NEW YORK

KLIEPPER, HAHN & HYATT STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS ARCHITECTS

DELTA ENGINEERS, P.C. ENGINEERS & ARCHITECTS

LU ENGINEERS CIVIL and ENVIRONMENTAL

SCALE: NONE
 FEASIBILITY STUDY - FINAL
 DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____

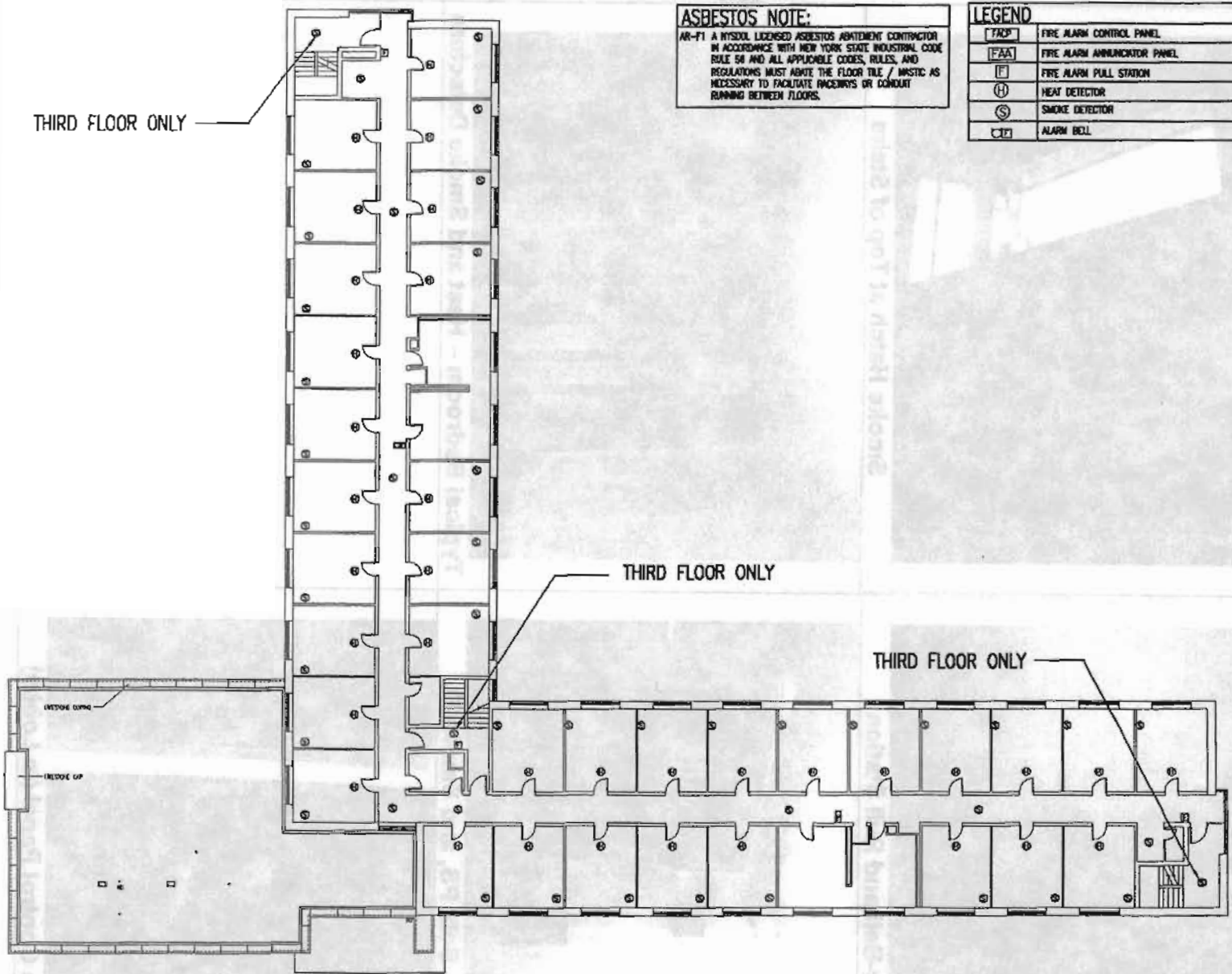
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SCALES HALL
 FIRST FLOOR PLAN

FA-45-1B

LEGEND	
[FCP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[CB]	ALARM BELL

ASBESTOS NOTE:
 AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 501 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACENWAYS OR CONDUIT RUNNING BETWEEN FLOORS.



NORTH

1
FA-45-1C

2ND & 3RD FLOOR PLAN
SCALE: NONE

3

THIRD FLOOR ONLY

THIRD FLOOR ONLY

THIRD FLOOR ONLY

WINDY CORNER
INDOOR CUP

COLLETT MORRIS ARCHITECTS

Klopper, Hahn & Hyatt
STRUCTURAL ENGINEERS - LICENSED PROFESSIONALS
NEW YORK

DELTA ENGINEERS, P.C.
ENGINEERS & ARCHITECTS

LU ENGINEERS
Civil and Environmental

OSWEGO
STATE UNIVERSITY OF NEW YORK

FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

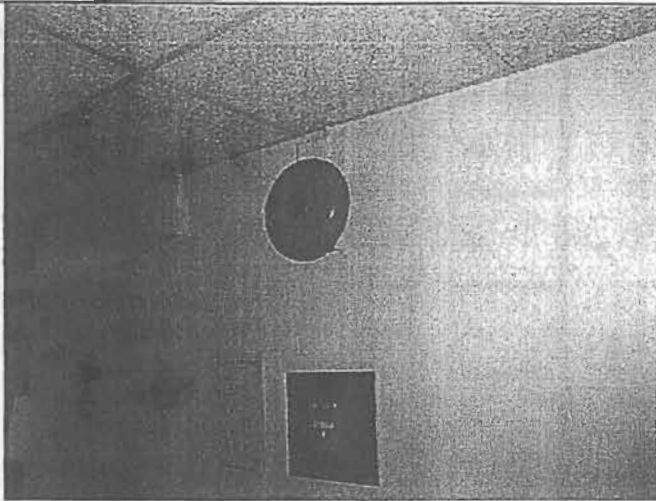
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PROJECT: FEASIBILITY STUDY - FINAL
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DATE: [blank]

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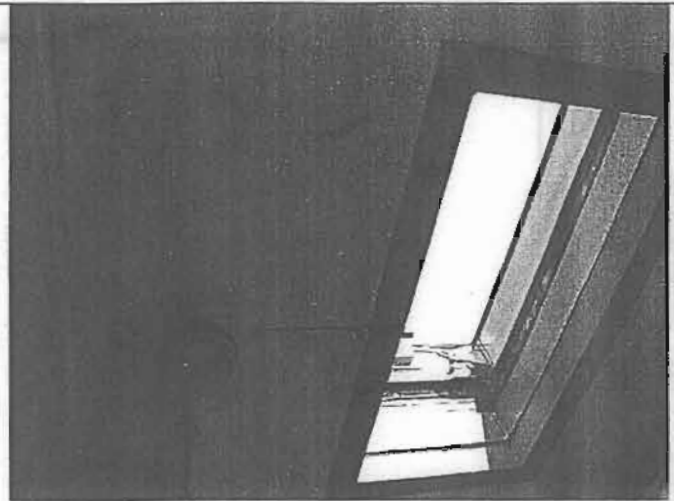
2ND & 3RD FLR PLAN

SCALES HALL

FA-45-1C



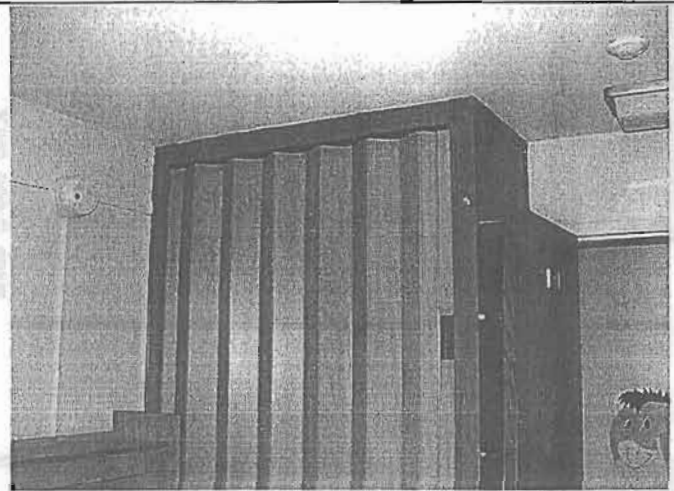
Hallway-Bell and Pull Station



Smoke Hatch at Top of Stairs

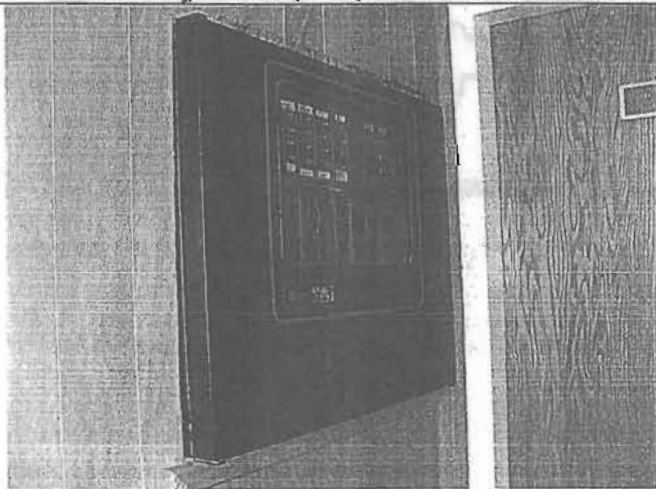


Hallway - Bell, PS, and Smoke D.



Typical Bedroom - Heat and Smoke Detectors

SC



Fire Alarm Control Panel (In Lobby)



WOOLLEY



FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ISSUE	DATE
Feasibility Study-Final	9/30/04

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SCALES HALL
FIRE ALARM PICTURES

FA-45-2A

ARCHITECTS

MORRIS



Klepper, Hahn & Hyatt
STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS
SYRACUSE, NY



LU ENGINEERS
Civil and Environmental

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - SCALES HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$96,000	\$73,000	\$169,000
EXTERIOR FAÇADE		\$34,000	\$82,000	\$116,000
WINDOWS		\$318,000	\$124,000	\$442,000
SUB-TOTAL		\$448,000	\$279,000	\$727,000
GENERAL CONDITIONS	5%			\$36,000
SUB-TOTAL				\$763,000
OVERHEAD AND PROFIT	7%			\$53,000
SUB-TOTAL				\$816,000
CONTINGENCY	15%			\$122,000
SUB-TOTAL				\$938,000
ASBESTOS ABATEMENT				\$105,000
FIRE ALARM				\$193,000
TOTAL - SCALES HALL				\$1,236,000

SC

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - SCALES HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
Abate "S" window including lintel, sill and frame caulk residue on brick, if present	1 EA	800.00	800	1,200.00	1,200	2,000
Abate "T" window including lintel, sill and frame caulk residue on brick, if present	1 EA	320.00	320	480.00	480	800
FIRE ALARM SYSTEM						
All Floors: Floor tile / mastic (assume 5 "minor" locations)	1 EA	1,000.00	1,000	1,500.00	1,500	2,500
TOTAL - ASBESTOS ABATEMENT			42,160		63,240	105,400
TOTAL - ASBESTOS ABATEMENT			\$42,000	SAY	\$63,000	\$105,000

SC

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - SCALES HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
<u>DEMOLITION</u>						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	10 EA	0.00	0	13.19	132	132
Detection devices	292 EA	0.00	0	16.32	4,765	4,765
Wire	6 CLF	0.00	0	7.41	44	44
<u>INSTALLATION</u>						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	1 EA	330.00	330	350.88	351	681
Smoke detectors	132 EA	165.00	21,780	64.60	8,527	30,307
Smoke detector with sounder base	112 EA	220.00	24,640	64.60	7,235	31,875
Heat detectors	8 EA	148.50	1,188	61.20	490	1,678
Duct detectors	2 EA	313.50	627	120.36	241	868
Pull stations	14 EA	74.80	1,047	53.04	743	1,790
Audio/visual alarm	16 EA	137.50	2,200	72.76	1,164	3,364
Visual alarm	30 EA	52.25	1,568	57.80	1,734	3,302
Conduit	1,100 LF	0.64	704	3.14	3,454	4,158
Wire	11 CLF	191.40	2,105	68.00	748	2,853
Smoke damper connection	2 EA	104.50	209	340.00	680	889
Door holders	10 EA	85.25	853	102.00	1,020	1,873
Corridor ceiling replacement	6,300 SF	4.00	25,200	3.15	19,845	45,045
Ceiling texture replacement / miscellaneous locations	600 LF	1.00	600	1.20	720	1,320
TOTAL - FIRE ALARM			137,941		55,361	193,302
TOTAL - FIRE ALARM SAY			\$138,000		\$55,000	\$193,000

Sc

AW

WATERBURY HALL

asbestos containing material.

Fire Alarm Systems:

Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

• Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Roof, Façade, Window and Fire Alarm Scopes.
2. For the Fire Alarm Scope, it is recommended that only the minimum required amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system.

FIRE ALARM

• System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Waterbury Hall.

The existing fire alarm system was observed throughout Waterbury Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

• Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Simplex
- Model #: 2001 Series
- Age: 20 years old
- Type: Zoned System (8 Zones)
- Monitored by: University Police

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells and in corridors outside sleeping units.
- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 8-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.

WATERBURY HALL

- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow Switch: Flow switch monitoring sprinkler.
- Smoke Release: Smoke releases are located in stairwells (Typical of 3).
- Door Hold: Door holders close partition door upon alarm.

SYSTEMS NOT MONITORED

- Elevator: N/A.
- HVAC System: No duct detectors present for fan shutdown.
- Standpipes: N/A.

DRAWINGS

See Drawings FA-44-1A, FA-44-1B, and FA-44-1C for fire alarm existing conditions for Waterbury Hall.

• Conclusions

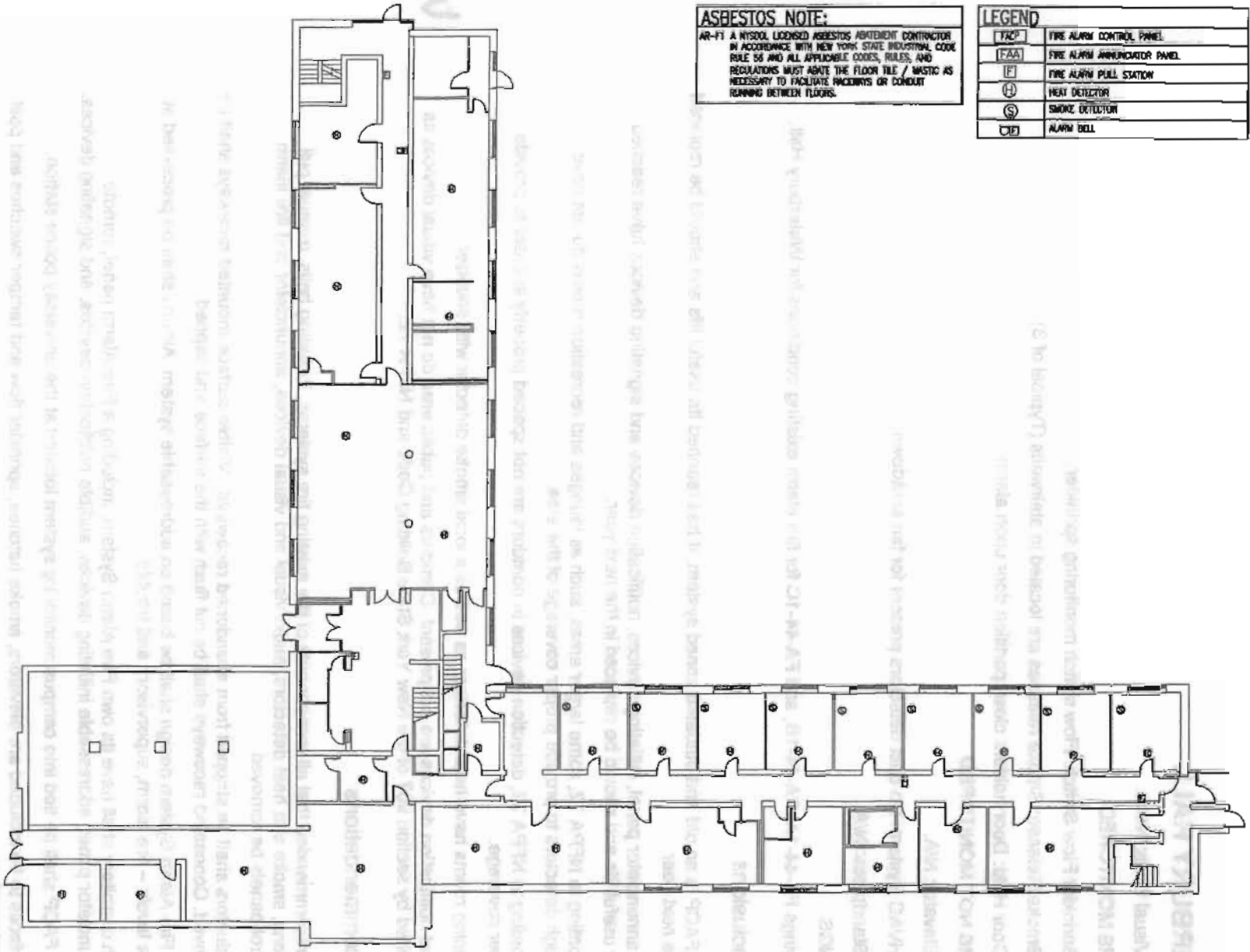
1. The FACP is an old and outdated zoned system. It has reached its useful life and should be replaced in the next year.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next year.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

• Recommendations

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
3. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

LEGEND	
FACP	FIRE ALARM CONTROL PANEL
FASP	FIRE ALARM ANNUNCIATOR PANEL
FPS	FIRE ALARM PULL STATION
H	HEAT DETECTOR
S	SMOKE DETECTOR
CB	ALARM BELL

ASBESTOS NOTE:
 AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE PACKOUTS OR CONDUIT RUNNING BETWEEN FLOORS.



1 BASEMENT FLOOR PLAN
 FA-44-1A SCALE: NONE

COLLEGE



FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS

FEASIBILITY STUDY

ARCHITECTS
 MORRIS



Klepper, Hahn & Hyatt
 STRUCTURAL ENGINEERS - LICENSED PROFESSIONAL ENGINEERS



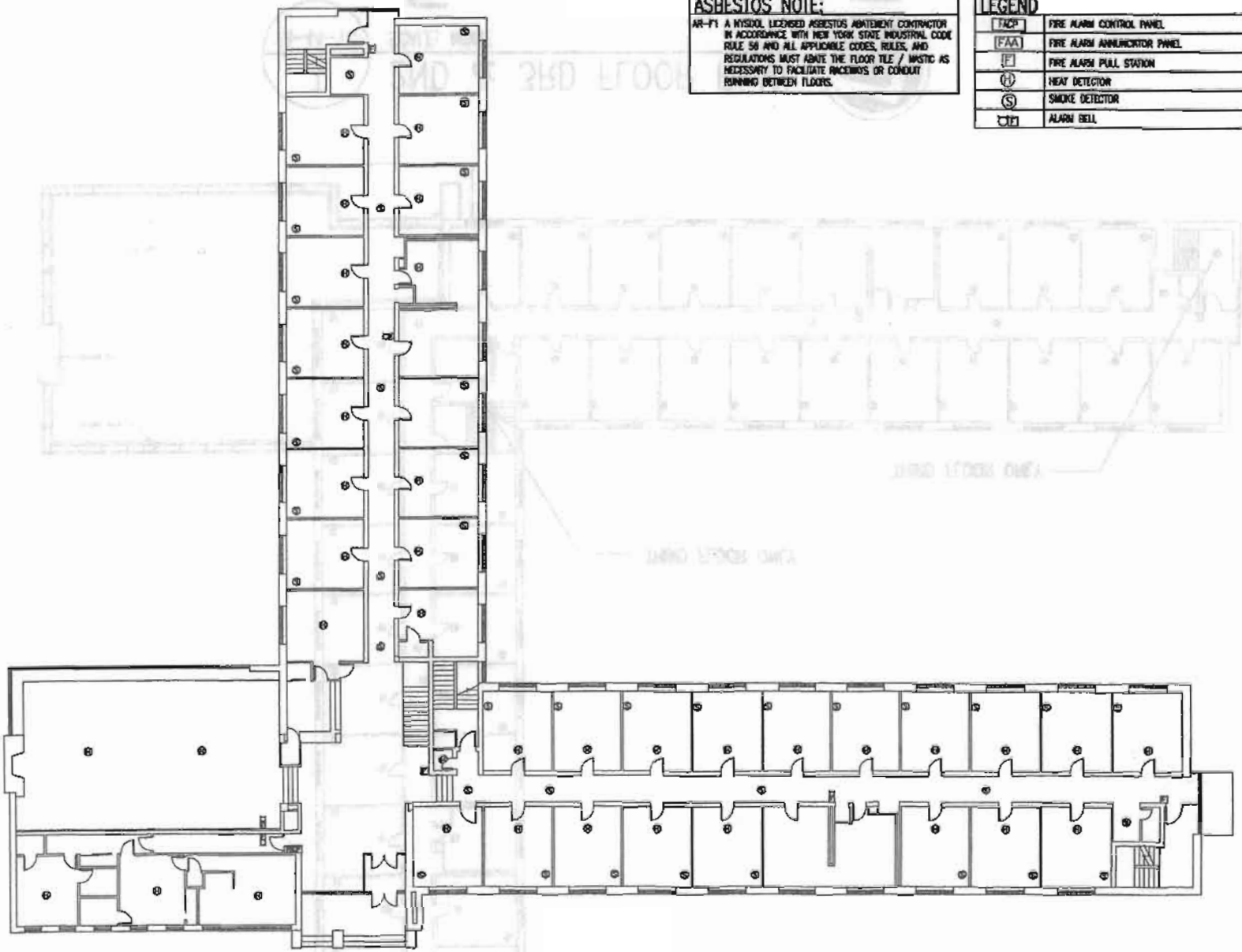
DELTA ENGINEERS, P.C.
 ENGINEERS • ARCHITECTS

FA-44-1A
 WATERBURY HALL
 BASEMENT PLAN

REVISION	DATE
FEASIBILITY STUDY - FINAL	
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LEGEND	
FACP	FIRE ALARM CONTROL PANEL
FAPA	FIRE ALARM ANNUNCIATOR PANEL
FPS	FIRE ALARM PULL STATION
HD	HEAT DETECTOR
SD	SMOKE DETECTOR
CB	ALARM BELL

ASBESTOS NOTE:
 AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACKWAYS OR CONDUIT RUNNING BETWEEN FLOORS.



1 FIRST FLOOR PLAN
 FA-44-1B SCALE: NONE



COLLEGE ARCHITECTS

OSWEGO
 STATE UNIVERSITY OF NEW YORK

FEASIBILITY STUDY
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS

WATERBURY HALL
 FIRST FLOOR PLAN

FA-44-1B

MORRIS ARCHITECTS

Klepper, Hahn & Hyatt
 STRUCTURAL ENGINEERING • LANDSCAPE ARCHITECTURE
 400 N. W. 10th Ave., Suite 1000, Ft. Lauderdale, FL 33304

DELTA ENGINEERS, P.C.
 ENGINEERS • ARCHITECTS
 1000 N. W. 10th Ave., Suite 1000, Ft. Lauderdale, FL 33304

LU ENGINEERS
 Civil and Environmental
 1000 N. W. 10th Ave., Suite 1000, Ft. Lauderdale, FL 33304

DATE: _____

WORK: _____

DESIGNER: _____

CHECKER: _____

DATE: _____

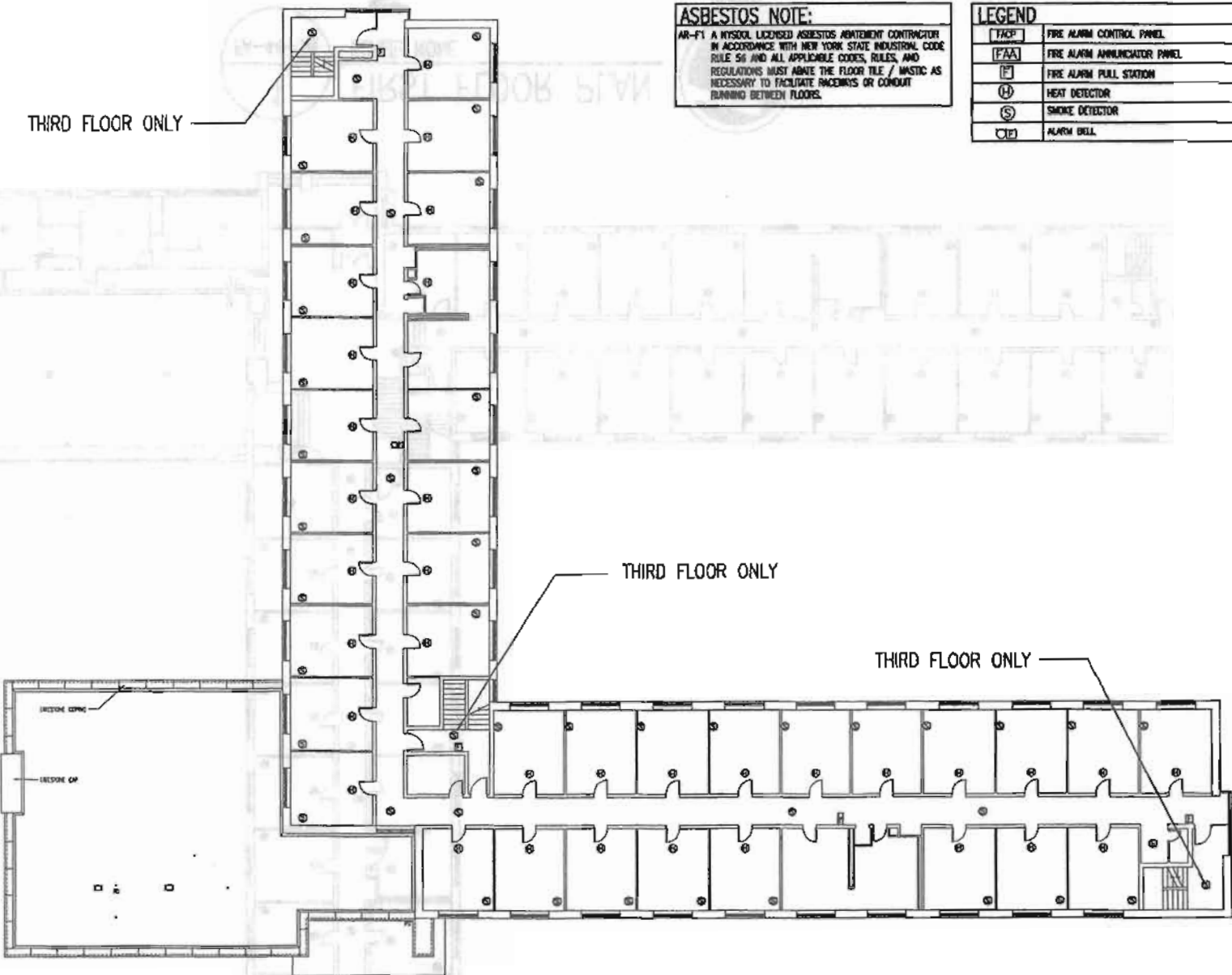
WORK: _____

DESIGNER: _____

CHECKER: _____

LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[A]	ALARM BELL

ASBESTOS NOTE:
 AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 50 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACEWAYS OR CONDUIT RUNNING BETWEEN FLOORS.



1 2ND & 3RD FLOOR PLAN
 FA-44-1C SCALE: NONE



NORTH

WA

O O L L E Y

A R C H I T E C T S



FEASIBILITY STUDY
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS

M O R R I S



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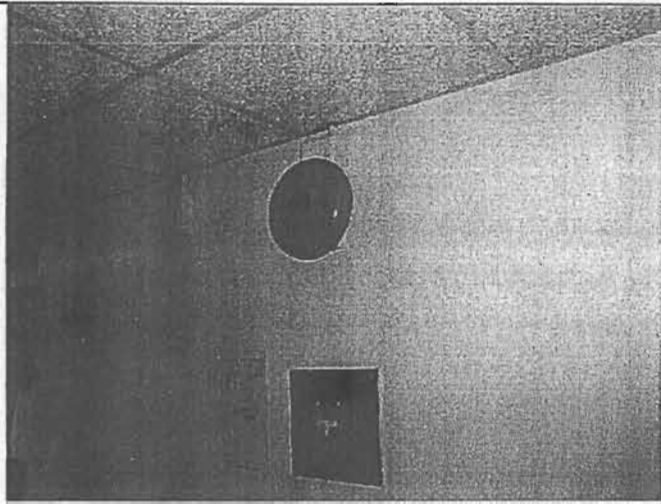


LU ENGINEERS
 CIVIL and Environmental

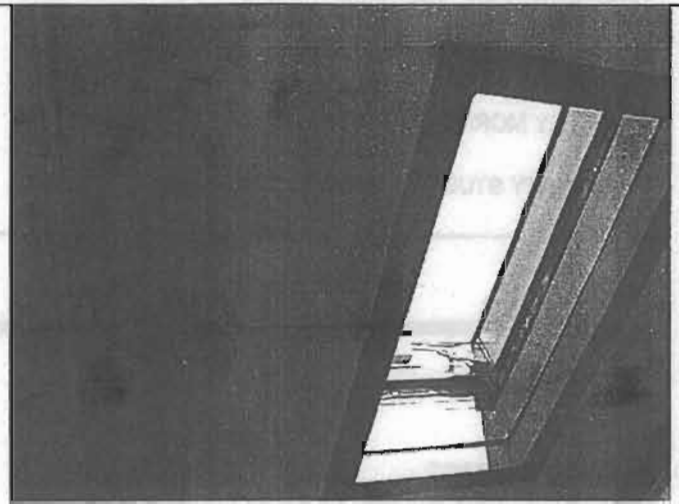
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 REVISIONS: _____
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WATERBURY HALL
 2ND & 3RD FLR PLAN

FA-44-1C



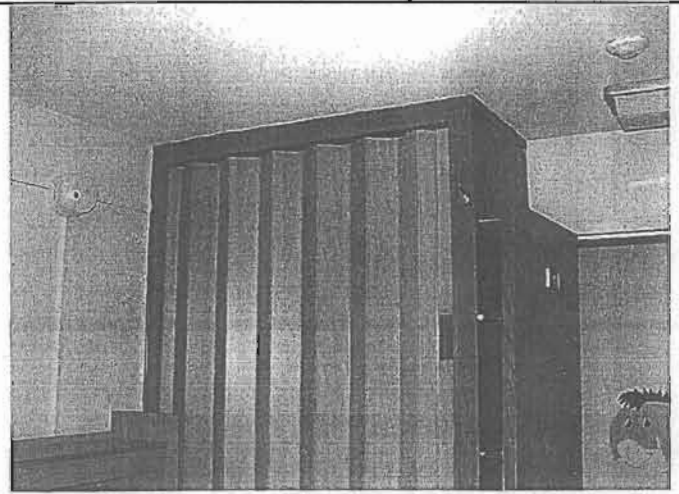
Hallway-Bell and Pull Station



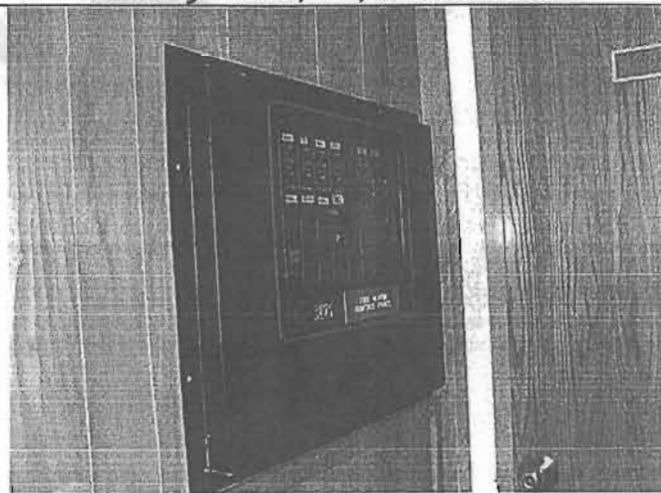
Smoke Hatch at Top of Stairs



Hallway – Bell, PS, and Smoke D.



Typical Bedroom – Heat and Smoke Detectors



Fire Alarm Control Panel (in Lobby)

WA

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ARCHITECTS

MORRIS



FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS



ISSUE	DATE
Feasibility Study-Final	9/30/04
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WATERBURY HALL	
FIRE ALARM PICTURES	

FA-44-2A

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - WATERBURY HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$96,000	\$73,000	\$169,000
EXTERIOR FAÇADE		\$50,000	\$103,000	\$153,000
WINDOWS		\$325,000	\$125,000	\$450,000
SUB-TOTAL		\$471,000	\$301,000	\$772,000
GENERAL CONDITIONS	5%			\$39,000
SUB-TOTAL				\$811,000
OVERHEAD AND PROFIT	7%			\$57,000
SUB-TOTAL				\$868,000
CONTINGENCY	15%			\$130,000
SUB-TOTAL				\$998,000
ASBESTOS ABATEMENT				\$101,000
FIRE ALARM				\$201,000
TOTAL - WATERBURY HALL				\$1,300,000

WA

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - WATERBURY HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
Abate "R" window including lintel, sill and frame caulk residue on brick, if present	1 EA	1,200.00	1,200	1,800.00	1,800	3,000
Abate "S" window including lintel, sill and frame caulk residue on brick, if present	1 EA	800.00	800	1,200.00	1,200	2,000
Abate "T" window including lintel, sill and frame caulk residue on brick, if present	1 EA	320.00	320	480.00	480	800
Abate "V" window including lintel, sill and frame caulk residue on brick, if present	1 EA	200.00	200	300.00	300	500
FIRE ALARM SYSTEM						
All Floors: Floor tile / mastic (assume 5 "minor" locations)	1 EA	1,000.00	1,000	1,500.00	1,500	2,500
TOTAL - ASBESTOS ABATEMENT			40,300		60,450	100,750
TOTAL - ASBESTOS ABATEMENT			SAY \$40,000		\$60,000	\$101,000

AW

WA

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - WATERBURY HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
DEMOLITION						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	12 EA	0.00	0	13.19	158	158
Detection devices	285 EA	0.00	0	16.32	4,651	4,651
Wire	6 CLF	0.00	0	7.41	44	44
INSTALLATION						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	1 EA	330.00	330	350.88	351	681
Smoke detectors	136 EA	165.00	22,440	64.60	8,786	31,226
Smoke detector with sounder base	114 EA	220.00	25,080	64.60	7,364	32,444
Heat detectors	8 EA	148.50	1,188	61.20	490	1,678
Duct detectors	2 EA	313.50	627	120.35	241	868
Pull stations	15 EA	74.80	1,122	53.04	795	1,918
Audio/visual alarm	16 EA	137.50	2,200	72.76	1,164	3,364
Visual alarm	30 EA	52.25	1,568	57.80	1,734	3,302
Conduit	1,200 LF	0.64	768	3.14	3,768	4,536
Wire	12 CLF	191.40	2,297	68.00	816	3,113
Smoke damper connection	2 EA	104.50	209	340.00	680	889
Door holders	10 EA	85.25	853	102.00	1,020	1,873
Corridor ceiling replacement	7,100 SF	4.00	28,400	3.15	22,365	50,765
Ceiling texture replacement / miscellaneous locations	600 LF	1.00	600	1.20	720	1,320
TOTAL - FIRE ALARM			142,572	58,616	201,188	
TOTAL - FIRE ALARM SAY			\$143,000	\$59,000	\$201,000	

AU

WA

LONIS HALL

ASBESTOS

- System Description

The Window and Fire Alarm Scopes will impact asbestos containing materials.

- Observations

Windows:

All windows (glazing and frame caulk) and doors (glazing and frame caulk) of this building are asbestos containing.

Fire Alarm Systems:

Asbestos floor tile and mastic may be impacted by raceways or conduit running between floors.

- Conclusions

Windows:

The window and door units, including all caulks and glazing (interior and exterior) must be abated and temporary weather protection installed and maintained prior to new window or door installation. Window abatement must include the removal and disposal of the caulks present on the lintels or sills. All materials removed, including the doors, window panes, frame and caulking, must be disposed of as an asbestos containing material.

Fire Alarm Systems:

Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

- Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Window and Fire Alarm Scopes.
2. For the Fire Alarm Scope, it is recommended that only the minimum required amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system.

FIRE ALARM

- System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Lonis Hall.

The existing fire alarm system was observed throughout Lonis Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

LONIS HALL

- Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Simplex Model #: 4120
- Age: 8 years old
- Type: Addressable panel with conventional devices
- Monitored by: University Police
- Located in Mackin Hall, monitors Lonis, Mackin and Moreland Halls.

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells.
- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 10-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.
- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow Switch: Flow switch monitoring sprinkler in Mackin Hall kitchen.
- Smoke Release: Smoke releases are located in stairwells (2 in Lonis, 1 in Moreland).

SYSTEMS NOT MONITORED

- Elevator: N/A.
- HVAC System: No duct detectors present for fan shutdown.
- Door Hold: No door holders present as required by code.
- Standpipes: Flow switch is present and monitoring standpipe system.

DRAWINGS

- See Drawings FA-15B-1A, FA-15B-1B, FA-15B-1C, and FA-15B-1D for fire alarm existing conditions for Lonis Hall.

- Conclusions

1. The FACP (Located in Mackin Hall) is an older addressable system that is monitoring conventional zoned devices. This current panel is not being used to its potential because it is monitoring zoned devices. Upgrading initiating devices would be difficult as new addressable systems and devices utilize 4 wires while the current system utilizes 6 wires. Based on DASNY guidelines that all college dormitories shall be addressable systems by 2010 this system should be replaced in the next 5 years..

6

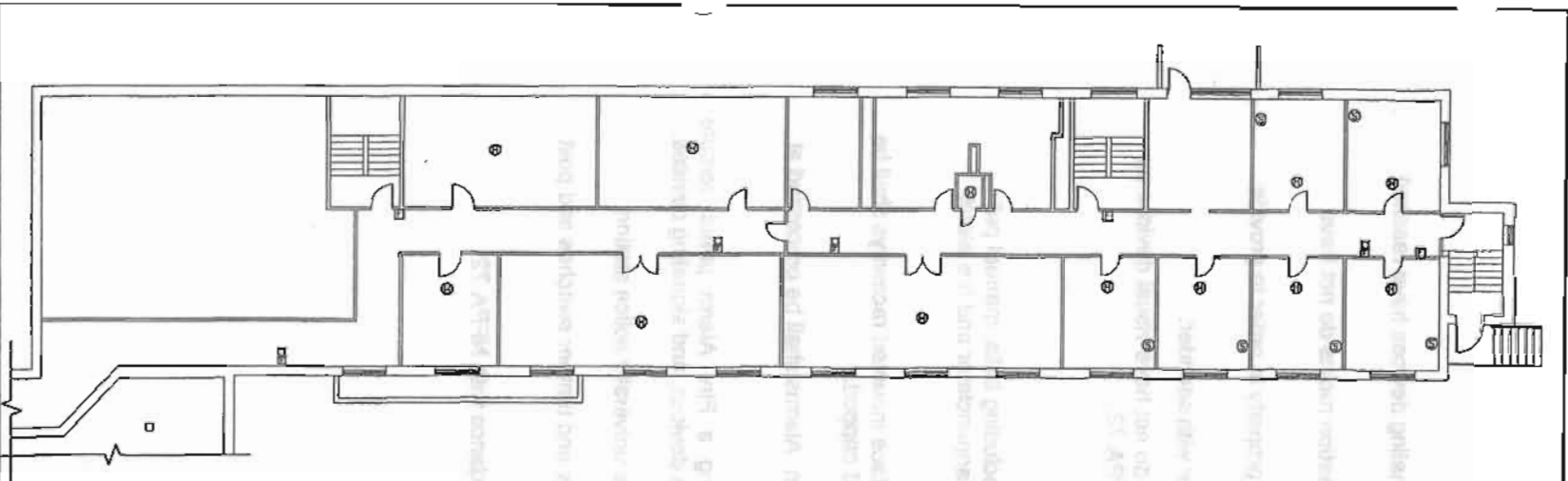
LONIS HALL

2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next 5 years.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

- Recommendations

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
3. The Fire Alarm System design shall be based on addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

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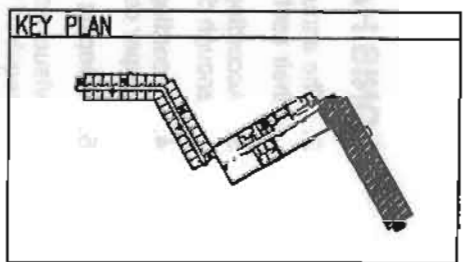


1
GROUND FLOOR PLAN
 FA-15B-1A SCALE: NONE



LEGEND	
FCP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM ANNUNCIATOR PANEL
F	FIRE ALARM PULL STATION
⊕	HEAT DETECTOR
⊙	SMOKE DETECTOR
☐	ALARM BELL

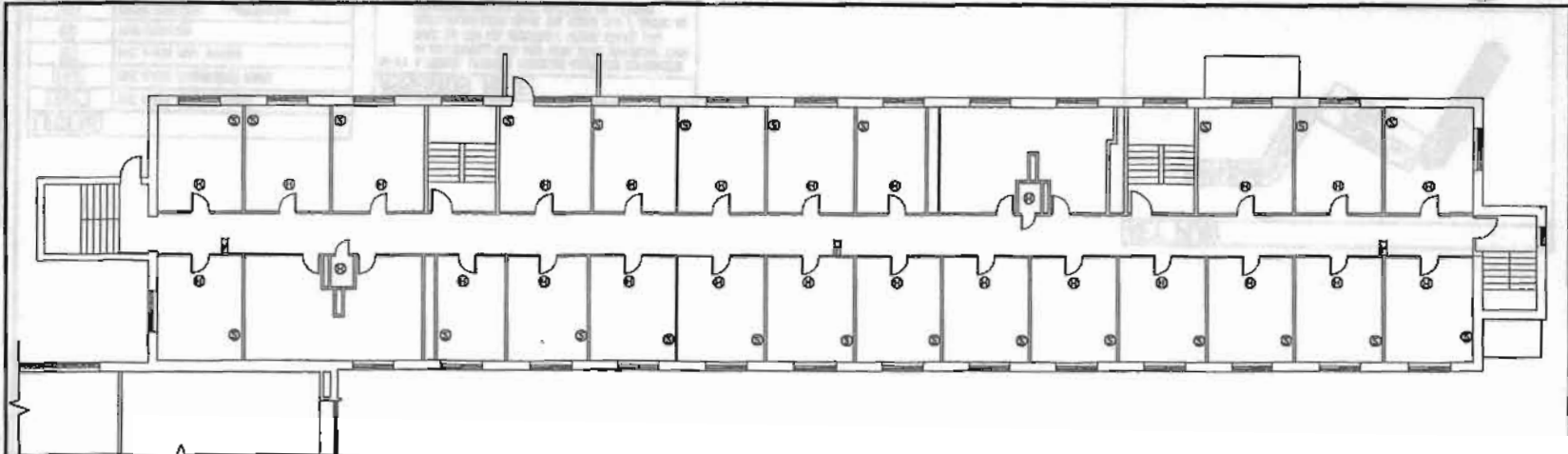
ASBESTOS NOTE:
 MR-11 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE REWORKS OR CONDUIT RUNNING BETWEEN FLOORS.



ISSUE	DATE
FEASIBILITY STUDY - FINAL	
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 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS
 FEASIBILITY STUDY
 LONIS HALL
 GROUND FLR PLAN
 FA-15B-1A

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 CIVIL AND ENVIRONMENTAL



1 FIRST FLOOR PLAN
FA-15B-1B SCALE: NONE

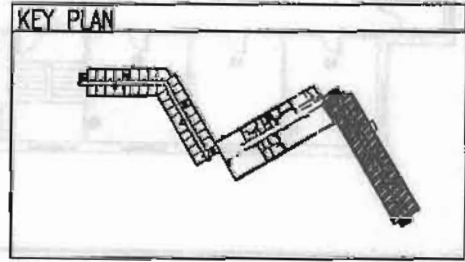


2 SECOND FLOOR PLAN



LEGEND	
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	ALARM BELL

ASBESTOS NOTE:
AR-F1 A NYSOAL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 58 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE REPAIRS OR CONDUIT RUNNING BETWEEN FLOORS.



DATE: _____
DRAWN BY: _____
CHECKED BY: _____
DATE: _____

LOUIS HALL
FIRST FLOOR PLAN

M O R R I S



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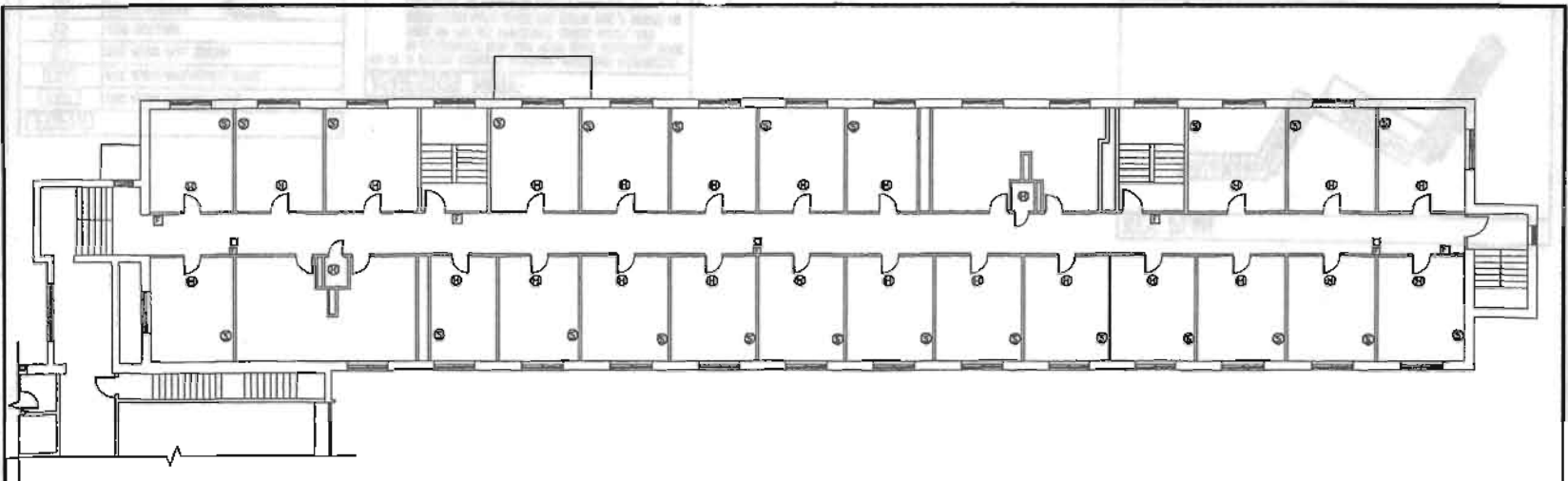
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FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS



1
FA-15B-1C

SECOND FLOOR PLAN

SCALE: NONE

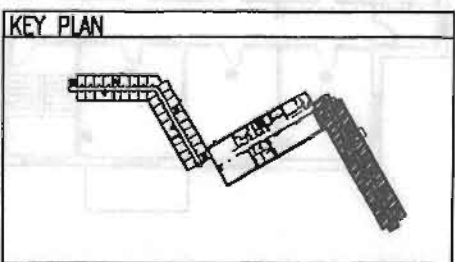


NORTH

1
FA-15B-1C

FIRST FLOOR PLAN

SCALE: NONE

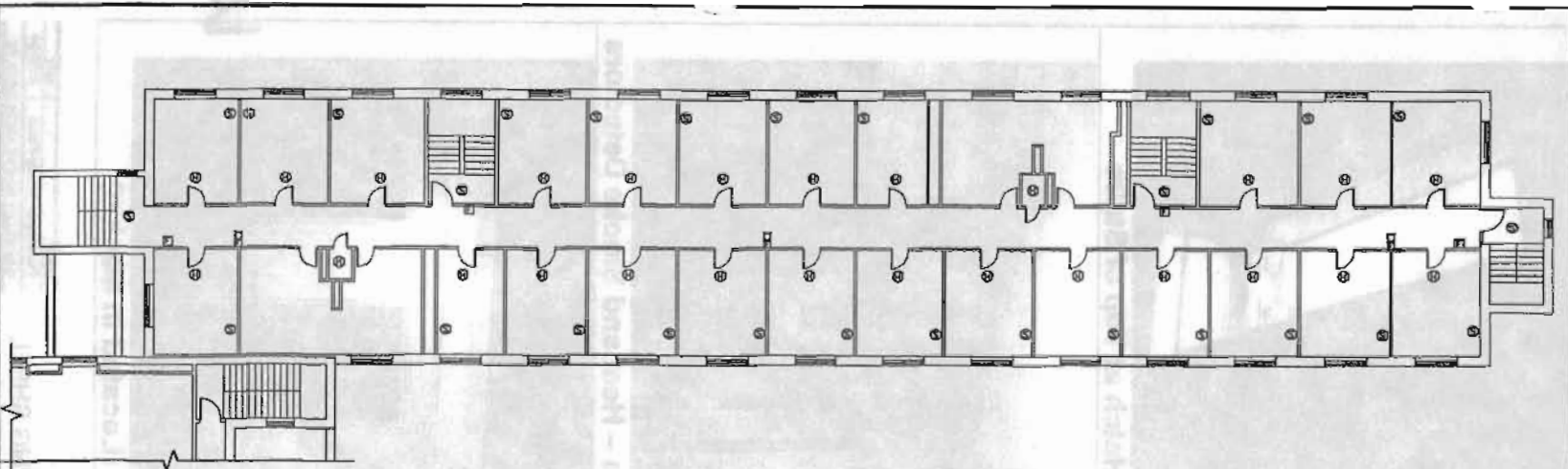


LEGEND	
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	ALARM BELL

ASBESTOS NOTE:
AR-51 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR
IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE
RULE 59 AND ALL APPLICABLE CODES, RULES, AND
REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS
NECESSARY TO FACILITATE RACEWAYS OR CONDUIT
RUNNING BETWEEN FLOORS.

ISSUE
PREPARED BY: J. MORRIS
DATE: 10/15/03
DRAWN BY: J. MORRIS
DATE: 10/15/03
CHECKED BY: J. MORRIS
DATE: 10/15/03
APPROVED BY: J. MORRIS
DATE: 10/15/03
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LOUIS HALL
SECOND FLOOR PLAN



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FA-15B-1D

THIRD FLOOR PLAN

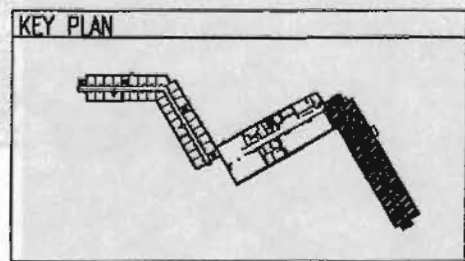
SCALE: NONE



NORTH

LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[FAS]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[AB]	ALARM BELL

ASBESTOS NOTE:
AR-F1 A NYS/DOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACKWAYS OR CONDUIT RUNNING BETWEEN FLOORS.



FEASIBILITY STUDY

FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS



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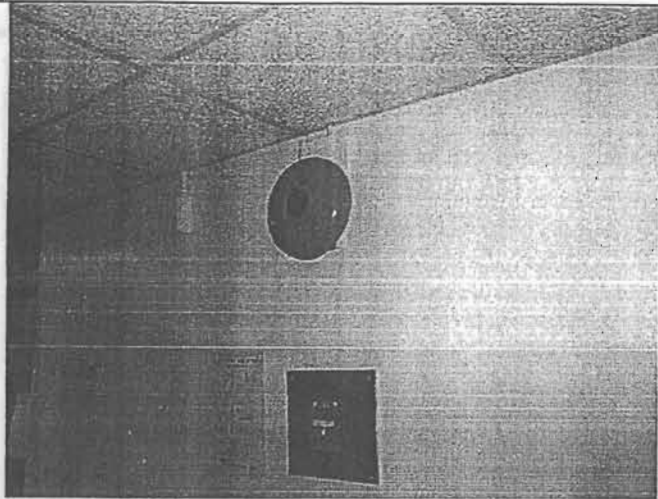


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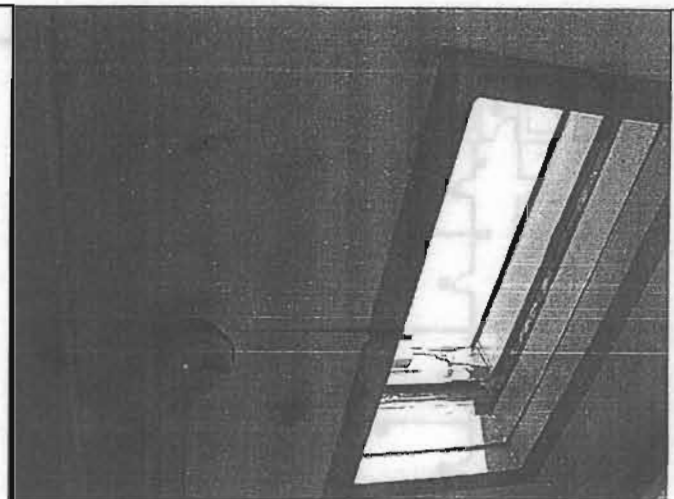
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THIRD FLOOR PLAN

FA-15B-1D



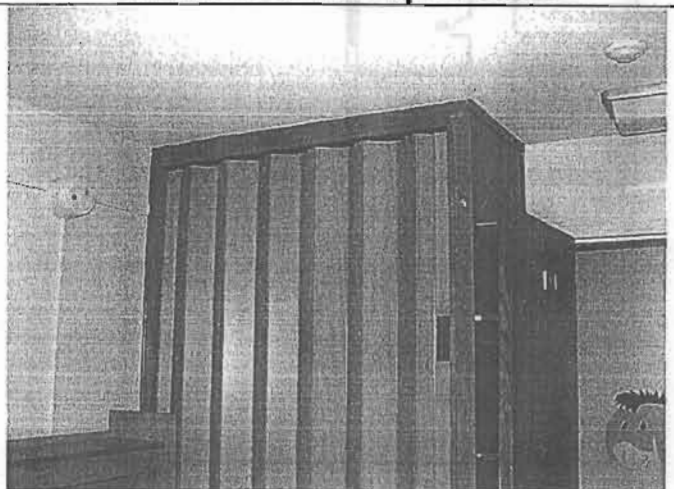
Hallway-Bell and Pull Station



Smoke Hatch at Top of Stairs



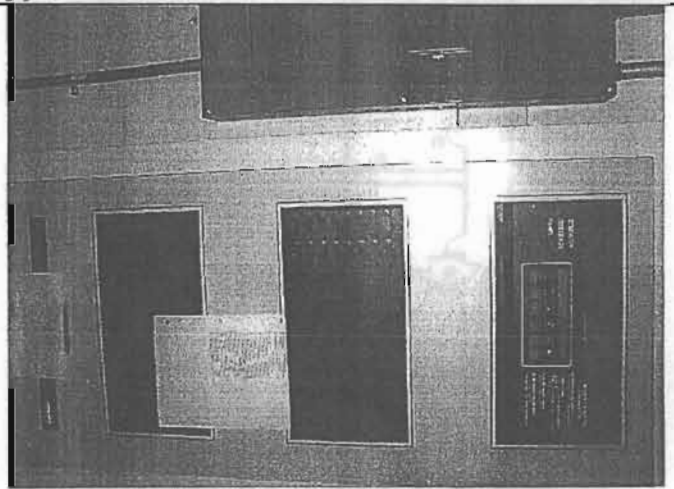
Hallway – Bell, PS, and Smoke D.



Typical Bedroom – Heat and Smoke Detectors



Annunciator Panel (Located in Mackin)



FACP (Located in Mackin)

W

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FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ISSUE	DATE
Feasibility Study-Final	9/30/04
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LONIS HALL
FIRE ALARM PICTURES
FA-15B-2A

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STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - LONIS HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$53,000	\$36,000	\$90,000
EXTERIOR FAÇADE		\$24,000	\$63,000	\$87,000
WINDOWS		\$150,000	\$66,000	\$216,000
SUB-TOTAL		\$227,000	\$165,000	\$393,000
GENERAL CONDITIONS	5%			\$20,000
SUB-TOTAL				\$413,000
OVERHEAD AND PROFIT	7%			\$29,000
SUB-TOTAL				\$442,000
CONTINGENCY	15%			\$66,000
SUB-TOTAL				\$508,000
ASBESTOS ABATEMENT				\$68,000
FIRE ALARM				\$79,000
TOTAL - LONIS HALL				\$655,000

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LO

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - LONIS HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
ASBESTOS ABATEMENT						
<u>WINDOWS (Temporary Protection provided by others)</u>						
Abate "A" windows including lintel and sill caulk, if present	97 EA	\$200.00	\$19,400	\$300.00	\$29,100	\$48,500
Abate "B" windows including lintel and sill caulk, if present	6 EA	200.00	1,200	300.00	1,800	3,000
Abate "C" windows including lintel and sill caulk, if present	1 EA	400.00	400	600.00	600	1,000
Abate "D" windows including lintel and sill caulk, if present	1 EA	1,600.00	1,600	2,400.00	2,400	4,000
Abate "E" windows including lintel and sill caulk, if present	1 EA	2,000.00	2,000	3,000.00	3,000	5,000
Abate "F" windows including lintel and sill caulk, if present	2 EA	480.00	960	720.00	1,440	2,400
Abate "G" windows including lintel and sill caulk, if present	2 EA	320.00	640	480.00	960	1,600
<u>FIRE ALARM SYSTEM</u>						
All Floors: Floor tile / mastic (assume 5 "minor" locations)	1 EA	1,000.00	1,000	1,500.00	1,500	2,500
TOTAL - ASBESTOS ABATEMENT			27,200		40,800	68,000
TOTAL - ASBESTOS ABATEMENT SAY			\$27,000		\$41,000	\$68,000

21

LO

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - LONIS HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
DEMOLITION						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	13 EA	0.00	0	13.19	171	171
Detection devices	187 EA	0.00	0	16.32	3,052	3,052
Wire	4 CLF	0.00	0	7.41	30	30
INSTALLATION						
Smoke detectors	63 EA	165.00	10,395	64.60	4,070	14,465
Smoke detector with sounder base	77 EA	220.00	16,940	64.60	4,974	21,914
Heat detectors	8 EA	148.50	1,188	61.20	490	1,678
Duct detectors	2 EA	313.50	627	120.36	241	868
Pull stations	15 EA	74.80	1,122	53.04	796	1,918
Audio/visual alarm	13 EA	137.50	1,788	72.76	946	2,734
Visual alarm	20 EA	52.25	1,045	57.80	1,156	2,201
Conduit	600 LF	0.64	384	3.14	1,884	2,268
Wire	6 CLF	191.40	1,148	68.00	408	1,556
Smoke damper connection	1 EA	104.50	105	340.00	340	445
Door holders	10 EA	85.25	853	102.00	1,020	1,873
Corridor ceiling replacement	3,100 SF	4.00	12,400	3.15	9,765	22,165
Ceiling texture replacement / miscellaneous locations	450 LF	1.00	450	1.20	540	990
TOTAL - FIRE ALARM			48,445		30,903	79,348
TOTAL - FIRE ALARM SAY			\$48,000		\$31,000	\$79,000

LO

MACKIN HALL

containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system.

FIRE ALARM

• System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Mackin Hall.

The existing fire alarm system was observed throughout Mackin Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

• Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Simplex Model #: 4120
- Age: 8 years old
- Type: Addressable panel with conventional devices
- Monitored by: University Police

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells.
- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 10-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.
- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow Switch: Flow switch monitoring sprinkler in kitchen.
- Smoke Release: Smoke releases are located in stairwells (2 in Lonis, 1 in Moreland).

SYSTEMS NOT MONITORED

- Elevator: N/A.
- HVAC System: No duct detectors present for fan shutdown.
- Door Hold: No door holders present as required by code.
- Standpipes: Flow switch is present and monitoring standpipe system.

MACKIN HALL

DRAWINGS

- See Drawings FA-15-1A, FA-15-1B, FA-15-1C, and FA-15-1D for fire alarm existing conditions for Mackin Hall.

• Conclusions

1. The FACP is an older addressable system that is monitoring conventional zoned devices. This current panel is not being used to its potential because it is monitoring zoned devices. Upgrading initiating devices would be difficult as new addressable systems and devices utilize 4 wires while the current system utilizes 6 wires. Based on DASNY guidelines that all college dormitories shall be addressable systems by 2010 this system should be replaced in the next 5 years.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next 5 years.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

• Recommendations

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
3. The Fire Alarm System design shall be based on an addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

MACKIN HALL

- Observations

Roof:

Asbestos containing roof leaders exist in lounge 1C above the drop acoustical ceiling tile. The asbestos packing around the roof leaders is damaged and may be sitting on the acoustical ceiling tile. In addition, asbestos pipe wrap and mudded fitting are located above the drop ceiling in lounge 1C. There are asbestos pipe wrap and mudded fittings on the pipes feeding the 8 radiators in lounge 1C. There is an asbestos floor tile and mastic in the lounge. The bathroom adjacent to lounge 1C also contains asbestos floor tile and mastic and may have additional asbestos containing roof drain leader and asbestos pipe wrap above a hard non-asbestos plaster ceiling.

The east lower truck dock roof has not been replaced with EPDM and is assumed to contain asbestos.

Windows:

All windows (glazing and frame caulk) and doors (glazing and frame caulk) of this building are asbestos containing.

Fire Alarm Systems:

Raceways or conduit running between floors may impact asbestos containing floor tile / mastic.

- Conclusions

Roof:

The asbestos containing roof leaders, asbestos contaminated acoustical ceiling tile, pipe wrap and fittings, and floor tile in lounge 1C must be abated to facilitate the roof repair and installation of new roof drains. The asbestos containing roof leaders, asbestos contaminated hard plaster ceiling, pipe wrap and fittings, and floor tile in the bathroom adjacent to lounge 1C may need to be abated to facilitate the roof repair. (See Drawing A-15-1A).

The east lower truck dock roof must be abated to facilitate the roof repair.

Windows:

The windows and door units, including all caulks and glazing (interior and exterior) must be abated and temporary weather protection installed and maintained prior to new window or door installation. Window abatement must include the removal and disposal of the caulks present on the lintels or sills. All materials removed, including the doors, window panes, frame and caulking, must be disposed of as an asbestos containing material.

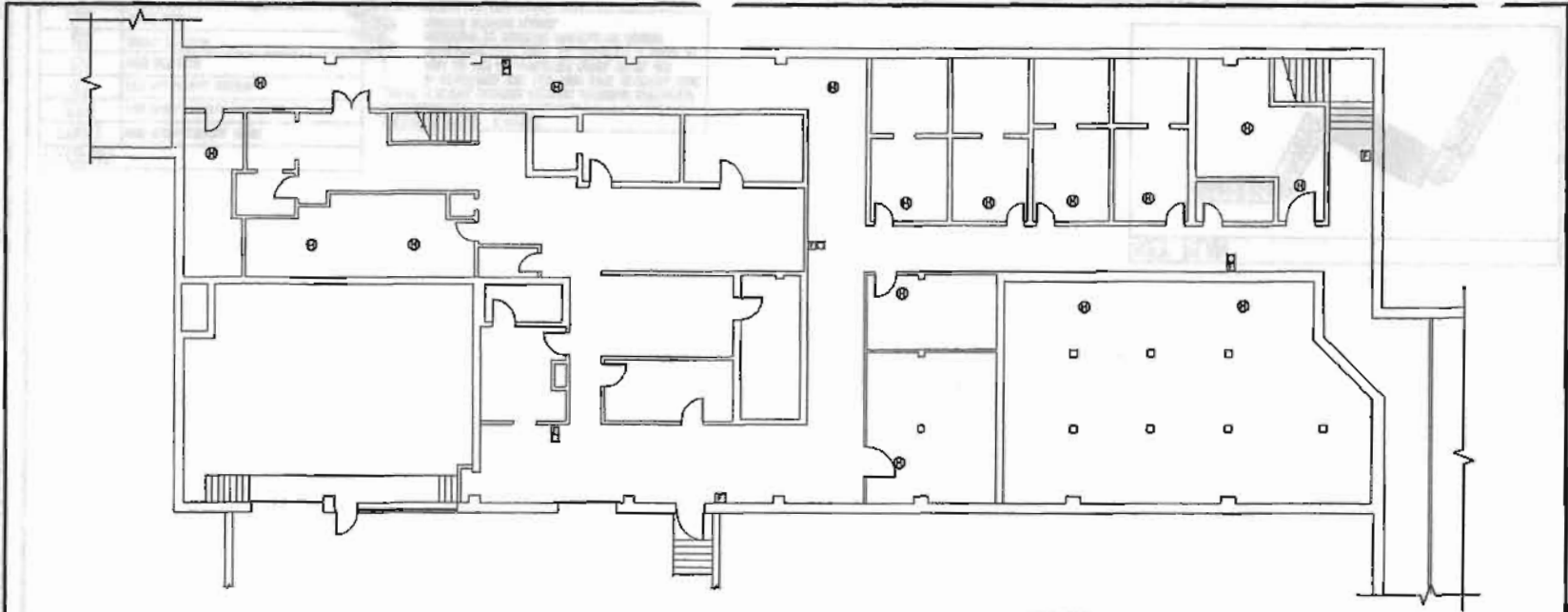
Fire Alarm Systems:

Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

- Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Roof, Windows and Fire Alarm Scopes.
2. For the Roof scope, it is recommended that if partial abatement is required in a room, then the entire room be abated.
3. For the Fire Alarm Scope, it is recommended that only the minimum required amount of asbestos

MA



1
FA-15-1A

BASEMENT FLOOR PLAN

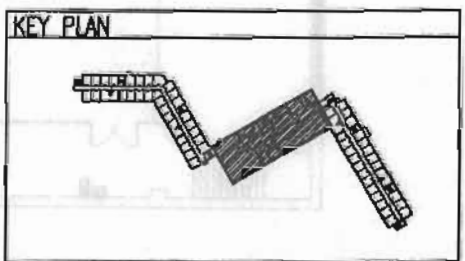
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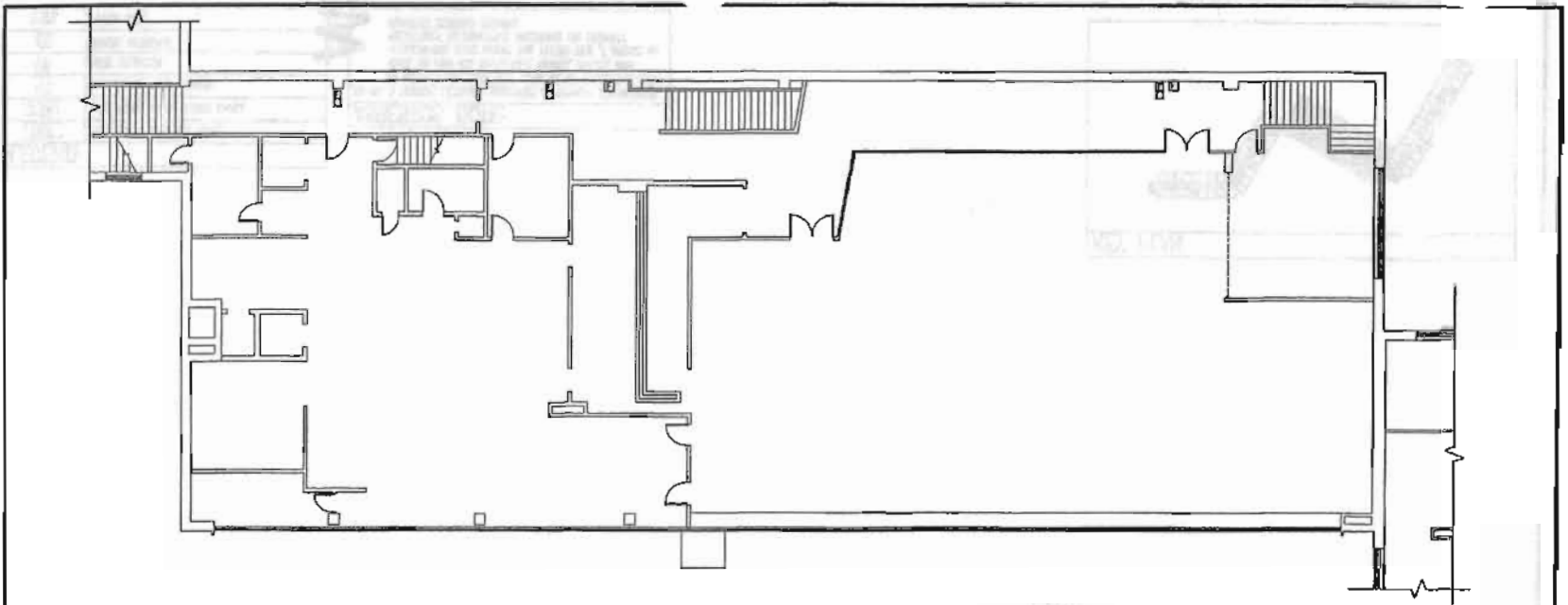
LEGEND

	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	ALARM BELL

ASBESTOS NOTE:
 AS-FI & NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR
 IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE
 RULE 56 AND ALL APPLICABLE CODES, RULES, AND
 REGULATIONS MUST ABATE THE FLOOR TILE / MISC. AS
 NECESSARY TO FACILITATE RACKWAYS OR CONDUIT
 PLANNING BETWEEN FLOORS.



MACKIN HALL
 BASEMENT FLR PLAN
 FA-15-1A
 WOLLETT MORRIS ARCHITECTS P.C.
 ARCHITECTS
 100 LLEY
 STATE UNIVERSITY OF NEW YORK
 OSWEGO
 FEASIBILITY STUDY
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS
 KLAEPFER, HAHN & HYATT
 STRUCTURAL ENGINEERS - LICENSED ARCHITECTS
 NEW YORK
 DELTA ENGINEERS, P.C.
 ENGINEERS & ARCHITECTS
 LU ENGINEERS
 CIVIL and Environmental



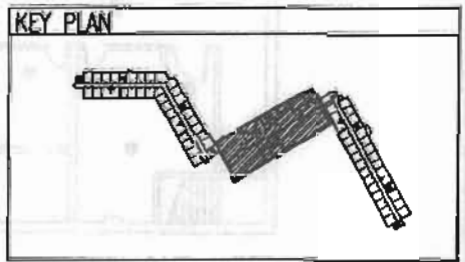
1
FA-15-1B

GROUND FLOOR PLAN

SCALE: NONE



NORTH



LEGEND

	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	ALARM BELL

ASBESTOS NOTE:
AR-F1 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 59 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST REMOVE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE PACKWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

ARCHITECTS
MORRIS

OSWEGO
STATE UNIVERSITY OF NEW YORK

FEASIBILITY STUDY
& FIRE ALARM SYSTEM IMPROVEMENTS

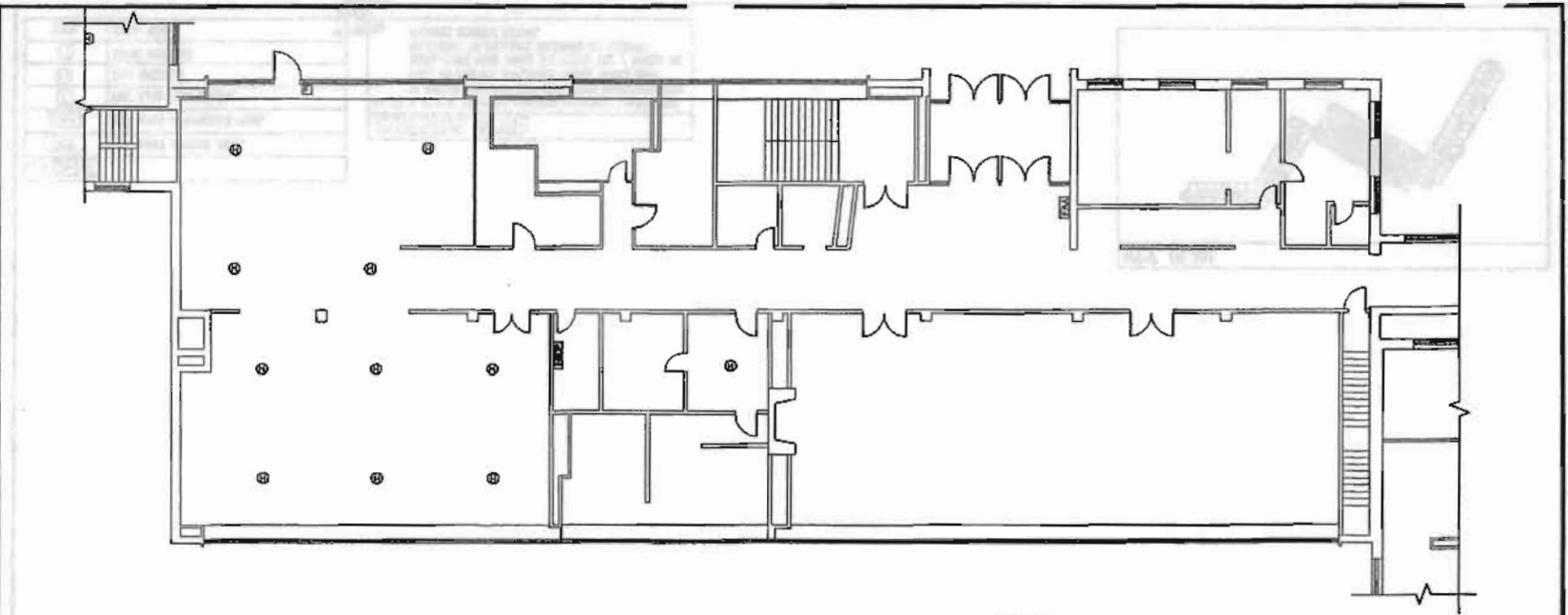
MACKIN HALL
GROUND FLR PLAN
FA-15-1B

Klepper, Hahn & Hyatt
STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS
PLANNERS

DELTA ENGINEERS, P.C.
ENGINEERS • ARCHITECTS

LU ENGINEERS
CIVIL AND ENVIRONMENTAL

DATE: _____
DRAWN BY: _____
CHECKED BY: _____
DATE: _____
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1
FIRST FLOOR PLAN

FA-15-1C
SCALE: NONE

ARCHITECTS
 WOOLLEY MORRIS ARCHITECTS
 STATE UNIVERSITY OF NEW YORK
 OSWEGO

Klepper, Hahn & Hyatt
 STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS
 NEW YORK

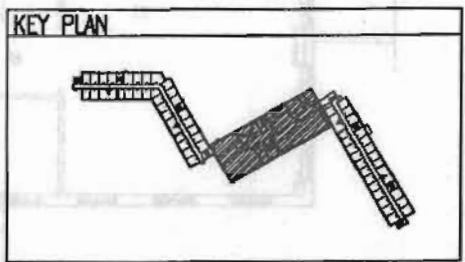
DELTA ENGINEERS, P.C.
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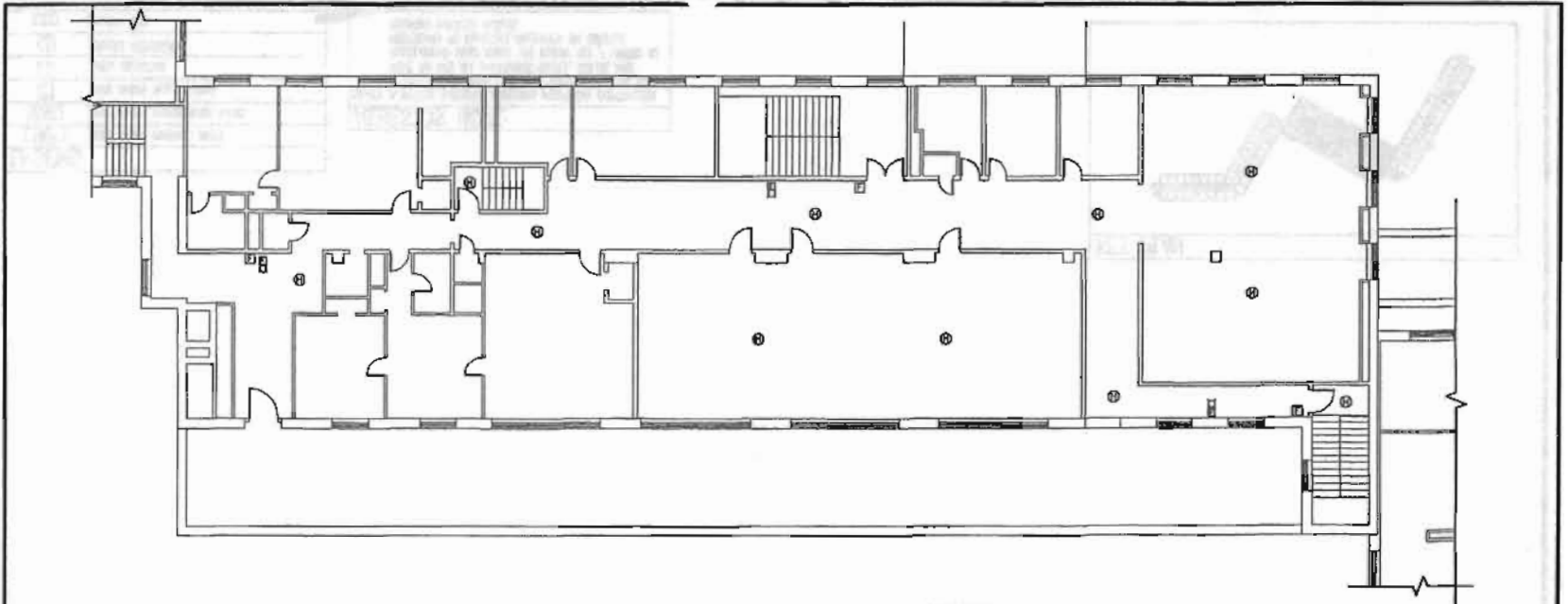
MACKIN HALL
 FIRST FLOOR PLAN
 FA-15-1C

LEGEND	
[FCP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[P]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[B]	ALARM BELL

ASBESTOS NOTE:
 AR-F1 A NYS/DOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE REG. 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACKWAYS OR CONDUIT RUNNING BETWEEN FLOORS.



ISSUE
 FEASIBILITY STUDY - FINAL
 DATE
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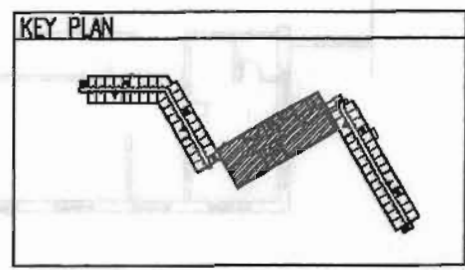
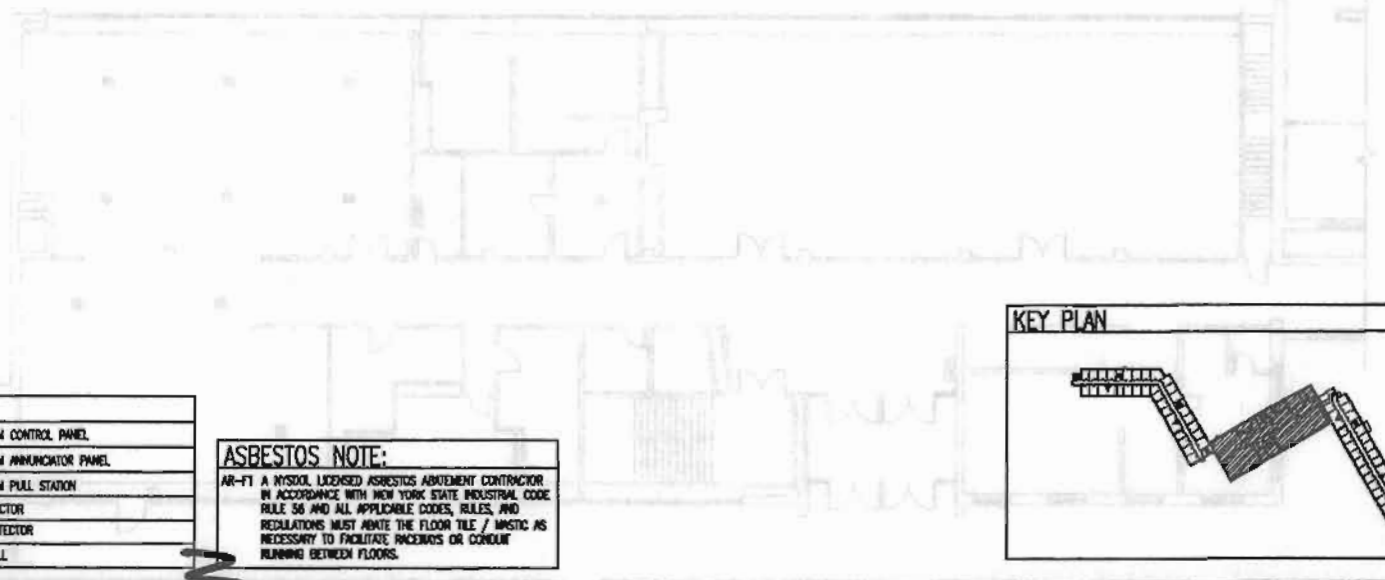
1
FA-15-1D

SECOND FLOOR PLAN

SCALE: NONE



NORTH



LEGEND

	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	ALARM BELL

ASBESTOS NOTE:
 AN-11 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST REMOVE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE PACKWAYS OR CONDUIT RUNNING BETWEEN FLOORS.

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FEASIBILITY STUDY
 FOR RESIDENCE HALLS BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS

MORRIS



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 NEW YORK

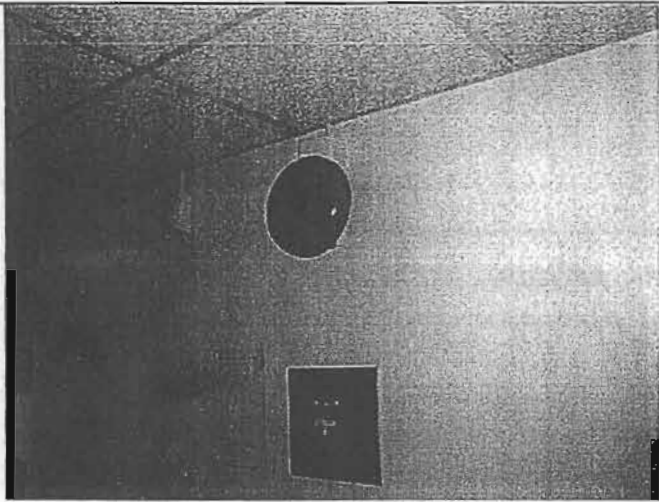
DELTA ENGINEERS, P.C.
 ENGINEERS & ARCHITECTS

LU ENGINEERS
 Civil and Environmental

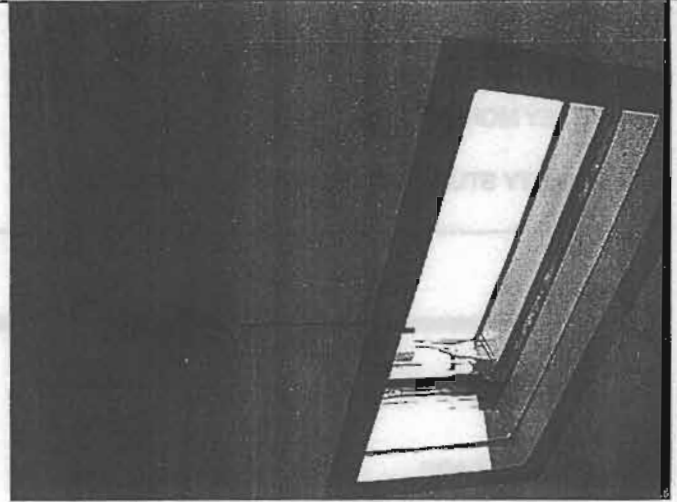
FA-15-1D

MACKIN HALL
 SECOND FLR PLAN

SCALE	DATE
FEASIBILITY STUDY - FINAL	
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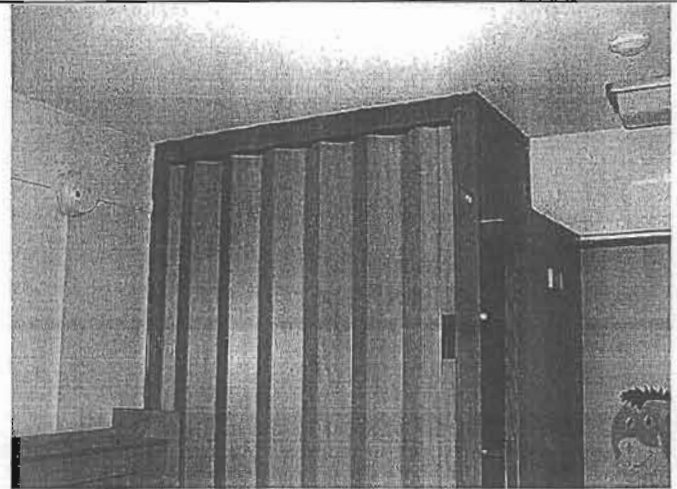
Hallway-Bell and Pull Station



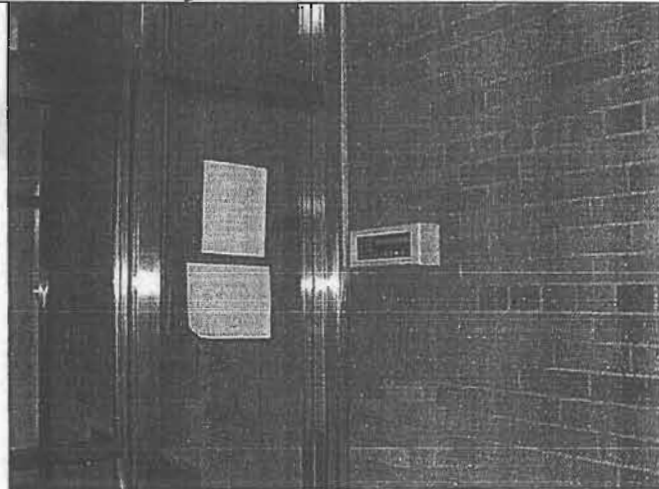
Smoke Hatch at Top of Stairs



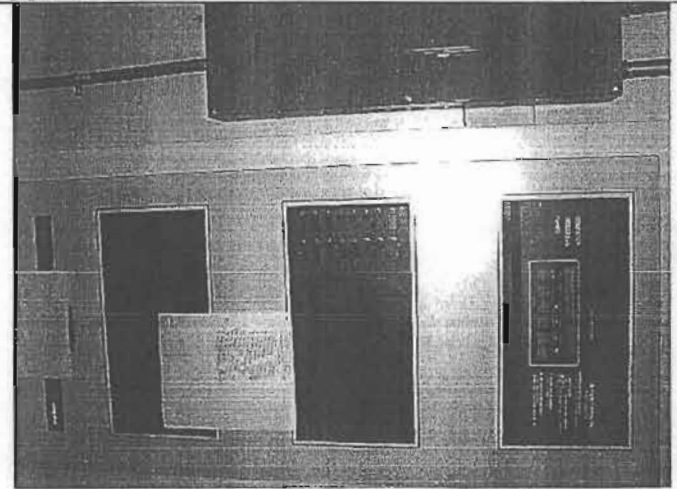
Hallway - Bell, PS, and Smoke D.



Typical Bedroom - Heat and Smoke Detectors



Annunciator Panel



Fire Alarm Control Panel

MA

WOOLLEY ARCHITECTS

OSWEGO STATE UNIVERSITY OF NY

FEASIBILITY STUDY FOR RESIDENCE HALLS BUILDING SHELL & FIRE ALARM SYSTEM IMPROVEMENTS

ISSUE: Feasibility Study-Final DATE: 9/30/04 © WOOLLEY MORRIS ARCHITECTS, P.C. MACKIN HALL FIRE ALARM PICTURES

MORRIS

Klepper, Hahn & Hyatt STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS - ENVIRONMENTAL

DELTA ENGINEERS, P.C. ENGINEERS & ARCHITECTS

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FA-15-2A

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - MACKIN HALL

9/30/04

SUMMARY		TOTAL MATERIAL	TOTAL LABOR	TOTAL COST
ROOF WORK		\$83,000	\$57,000	\$140,000
EXTERIOR FAÇADE		\$48,000	\$83,000	\$131,000
WINDOWS		\$596,000	\$158,000	\$753,000
SUB-TOTAL		\$727,000	\$298,000	\$1,024,000
GENERAL CONDITIONS	5%			\$51,000
SUB-TOTAL				\$1,075,000
OVERHEAD AND PROFIT	7%			\$75,000
SUB-TOTAL				\$1,150,000
CONTINGENCY	15%			\$173,000
SUB-TOTAL				\$1,323,000
ASBESTOS ABATEMENT				\$71,000
FIRE ALARM				\$140,000
TOTAL - MACKIN HALL				\$1,534,000

MA

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - MACKIN HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
Abate "O" windows including lintel and sill caulk, if present	1 EA	1,600.00	1,600	2,400.00	2,400	4,000
Abate "P" windows including lintel and sill caulk, if present	1 EA	1,800.00	1,800	2,700.00	2,700	4,500
Abate "R" windows including lintel and sill caulk, if present	1 EA	480.00	480	720.00	720	1,200
Abate "S" windows including lintel and sill caulk, if present	1 EA	600.00	600	900.00	900	1,500
Abate "T" windows including lintel and sill caulk, if present	1 EA	480.00	480	720.00	720	1,200
Abate "U" windows including lintel and sill caulk, if present	2 EA	240.00	480	360.00	720	1,200
FIRE ALARM SYSTEM						
All Floors: Floor tile / mastic (assume 5 "minor" locations)	1 EA	1,000.00	1,000	1,500.00	1,500	2,500
TOTAL - ASBESTOS ABATEMENT			28,500		42,750	71,250
TOTAL - ASBESTOS ABATEMENT SAY			\$29,000		\$43,000	\$71,000

MA

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - MACKIN HALL

9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM						
<u>DEMOLITION</u>						
FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
FAA	1 EA	0.00	0	340.00	340	340
Notification devices	12 EA	0.00	0	13.19	158	158
Detection devices	46 EA	0.00	0	16.32	751	751
Wire	2 CLF	0.00	0	7.41	15	15
<u>INSTALLATION</u>						
FACP	1 EA	54,890.00	54,890	2,448.00	2,448	57,338
FAA	3 EA	330.00	990	350.88	1,053	2,043
Smoke detectors	127 EA	165.00	20,955	64.80	8,204	29,159
Heat detectors	4 EA	148.50	594	61.20	245	839
Pull stations	13 EA	74.80	972	53.04	690	1,662
Audio/visual alarm	22 EA	137.50	3,025	72.76	1,601	4,626
Visual alarm	15 EA	52.25	784	57.80	867	1,651
Conduit	600 LF	0.64	384	3.14	1,884	2,268
Wire	6 CLF	191.40	1,148	68.00	408	1,556
Smoke damper connection	1 EA	104.50	105	340.00	340	445
Door holders	10 EA	85.25	853	102.00	1,020	1,873
Corridor ceiling replacement	4,800 SF	4.00	19,200	3.15	15,120	34,320
Ceiling texture replacement / miscellaneous locations	50 LF	1.00	50	1.20	60	110
TOTAL - FIRE ALARM			103,950		35,884	139,834
TOTAL - FIRE ALARM SAY			\$104,000		\$36,000	\$140,000

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MORELAND HALL

FIRE ALARM

- System Description

This section of the report summarizes the findings of a field inspection of the existing conditions, the review of existing record drawings, and addresses the condition of the existing fire alarm system at Moreland Hall.

The existing fire alarm system was observed throughout Moreland Hall to determine the condition of the existing system as well as determine what work may need to be done in the future to bring the fire alarm system into proper working order or up to current code.

- Observations

FIRE ALARM CONTROL PANEL (FACP)

- Manufacturer: Simplex Model #: 4120
- Age: 8 years old
- Type: Addressable panel with conventional devices
- Monitored by: University Police
- Located in Mackin Hall, monitors Lonis, Mackin and Moreland Halls.

INITIATING DEVICES

- Smoke Detectors: Located at top of stairwells.
- Local Smoke Detectors with sounder: Located in each sleeping unit.
- Heat Detectors: All areas except corridors and stairwells, including sleeping units, recreation areas, lounge areas, laundry rooms, storage areas, mechanical rooms, electrical rooms and kitchens.
- Pull Stations: Not located within 5 feet of entrance to all exits.

NOTIFICATION DEVICES

- Alarm Bells: 10-inch vibrating bells are located in corridors and mechanical rooms.
- Audio/Visual Units: None.
- Visual Units: None.

SYSTEMS MONITORED

- Sprinkler Flow Switch: Flow switch monitoring sprinkler in Mackin Hall Kitchen.
- Smoke Release: Smoke releases are located in stairwells (2 in Lonis, 1 in Moreland).

SYSTEMS NOT MONITORED

- Elevator: N/A.
- HVAC System: No duct detectors present for fan shutdown.
- Door Hold: No door holders present as required by code.
- Standpipes: Flow switch is present and monitoring standpipe system.

DRAWINGS

MO

MORELAND HALL

- See Drawings FA-15A-1A, FA-15A-1B, and FA-15A-1C for fire alarm existing conditions for Moreland Hall.

• Conclusions

1. The FACP (Located in Mackin Hall) is an older addressable system that is monitoring conventional zoned devices. This current panel is not being used to its potential because it is monitoring zoned devices. Upgrading initiating devices would be difficult as new addressable systems and devices utilize 4 wires while the current system utilizes 6 wires. Therefore the current FACP should be replaced in the next 5 years.
2. The annunciator panel, initiating devices, notification devices and signaling devices have reached their useful life and should be replaced in the next 5 years.
3. According to NFPA 72, some larger areas, such as lounges and recreation rooms do not have enough detectors to provide proper coverage of the area.
4. According to NFPA 72, detection devices in corridors are not spaced properly in order to provide proper coverage.
5. Sleeping rooms have heat detectors as well as a local smoke detector with sounder.
6. Visual notification devices are not present. Corridors and public area do not have visual devices as required by section 907 of the New York State Building Code and NFPA 72.

• Recommendations

1. It is recommended that all components of the existing fire systems, including bells, manual pull stations, smoke and heat detectors, audio/visual and visual devices, annunciator and fire alarm control panels be removed.
2. Conductors shall be stripped from abandoned raceways. Visible surface mounted raceways shall be removed. Concealed raceways shall be cut flush with the surface and capped.
3. The Fire Alarm System design shall be based on an addressable system. Alarms shall be processed at three levels – fire alarm, supervisory and trouble.
4. Each dormitory shall have its own Fire Alarm System, including a Fire Alarm panel, remote annunciator panel, addressable initiating devices, audible notification devices, and signaling devices.
5. The FACP shall be tied into the campus monitoring system located at the university police station.
6. Interfaces to be included are elevators, smoke hatches, sprinkler flow and tamper switches and post indicator valves.
7. New fire system raceways and conductors shall be installed in accordance with NFPA 72.

MO

MORELAND HALL

5. Provide double hungs, including mulled multiple units, with horizontal sash muntins to match original steel units at punched openings. (See Drawing W-15A-2A).
6. Provide combination fixed and operable sash to match original steel units at horizontal strip window locations. (See Drawing W-15A-2A).
7. Provide new aluminum entrance storefronts at exterior and interior entry vestibules.
8. Install miscellaneous hollow metal doors and frames, with painted finish to match window replacements. (See Drawing W-15A-2A).
9. Provide closed cell backer rod and sealant system at window frame/masonry opening joints throughout.

ASBESTOS

- System Description

The Window and Fire Alarm Scopes will impact asbestos containing materials.

- Observations

Windows:

All windows (glazing and frame caulk) and doors (glazing and frame caulk) of this building are asbestos containing.

Fire Alarm Systems:

Raceways or conduit running between floors may impact asbestos containing floor tile / mastic.

- Conclusions

Windows:

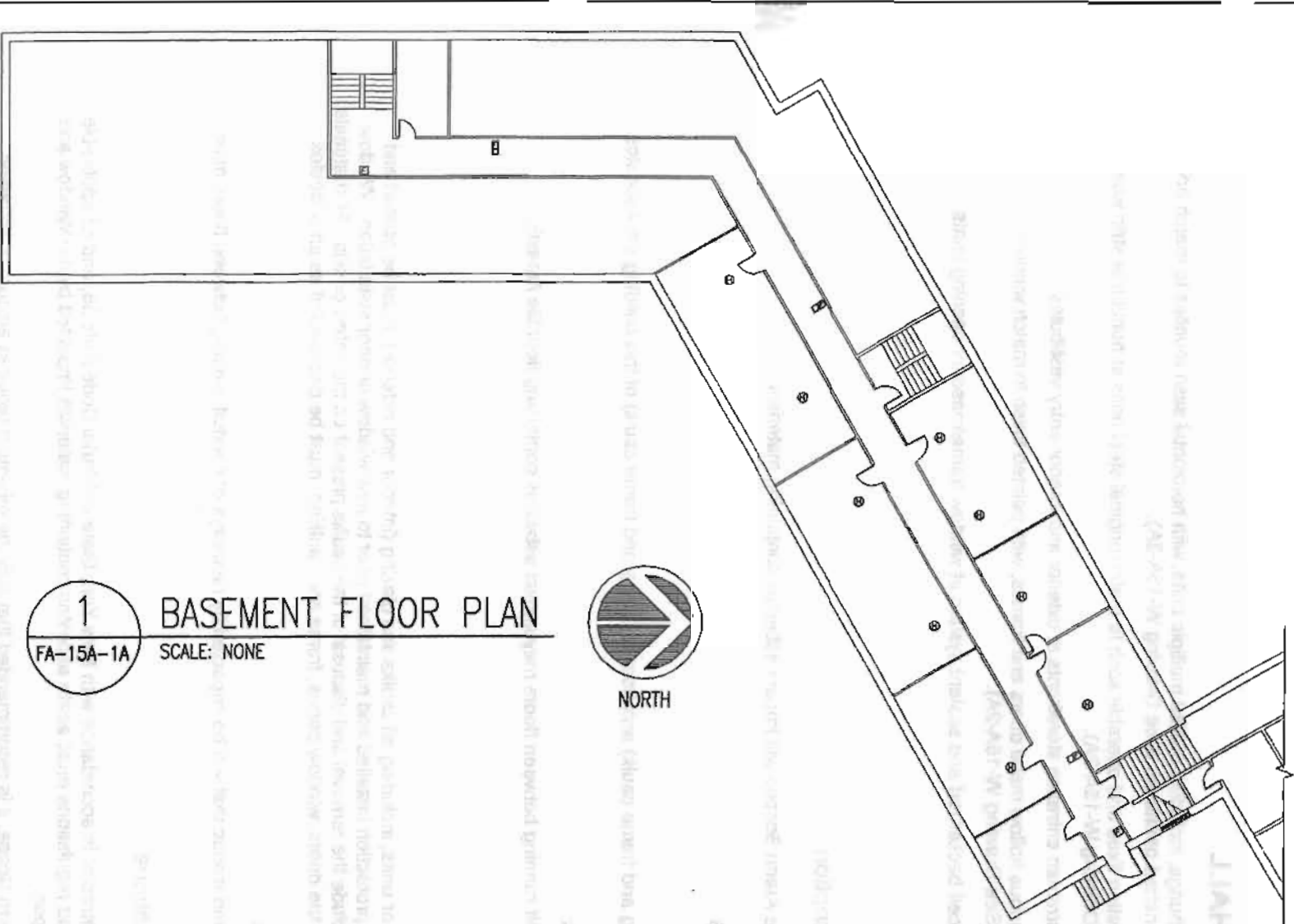
The window and door units, including all caulks and glazing (interior and exterior), must be abated and temporary weather protection installed and maintained prior to new window or door installation. Window abatement must include the removal and disposal of the caulks present on the lintels or sills. All materials removed, including the doors, window panes, frame and caulking, must be disposed of as an asbestos containing material.

Fire Alarm Systems:

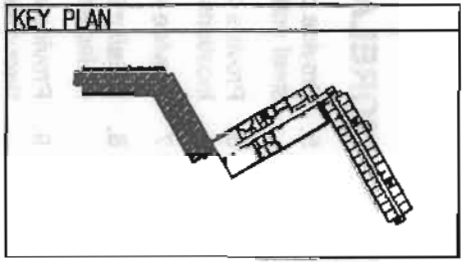
Asbestos floor tile and mastic that will be impacted by raceways or conduit running between floors must be abated.

- Recommendations

1. A reputable contractor in accordance with New York State Industrial Code Rule 56, and all applicable codes, rules, and regulations must abate asbestos containing materials impacted by the Window and Fire Alarm Scopes.
2. For the Fire Alarm Scope, it is recommended that only the minimum required amount of asbestos containing materials be abated to accommodate the removal of the existing fire alarm system and the installation on the new fire alarm system.



1 BASEMENT FLOOR PLAN
FA-15A-1A SCALE: NONE



LEGEND	
[FACP]	FIRE ALARM CONTROL PANEL
[FAA]	FIRE ALARM ANNUNCIATOR PANEL
[F]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[B]	ALARM BELL

ASBESTOS NOTE:
AR-11 A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RERIGS OR CONDUIT RUNNING BETWEEN FLOORS.

WOLLEY ARCHITECTS

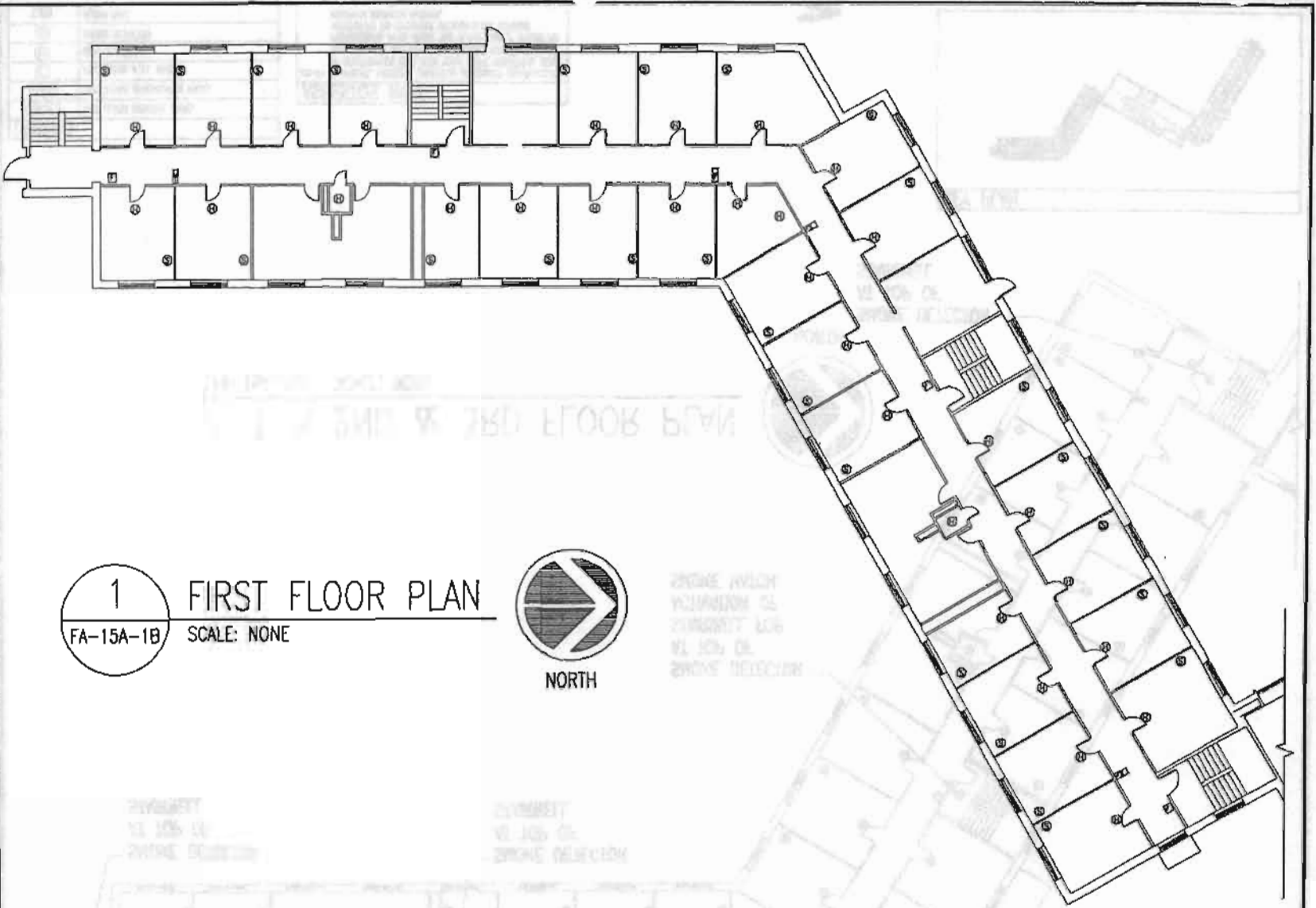


FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

ARCHITECTS
Klepper, Hahn & Hyatt
STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS
ARCHITECTS
DELTA ENGINEERS, P.C.
ENGINEERS & ARCHITECTS
LU ENGINEERS
Civil and Environmental
FA-15A-1A
MORELAND HALL
BASEMENT FLR PLAN

NO.	REVISION	DATE
1	FEASIBILITY STUDY FINAL	

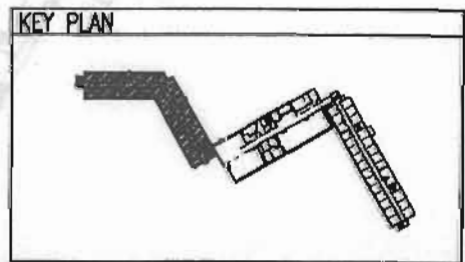
NO



1
FA-15A-1B

FIRST FLOOR PLAN

SCALE: NONE



LEGEND	
	FIRE ALARM CONTROL PANEL
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM PULL STATION
	HEAT DETECTOR
	SMOKE DETECTOR
	ALARM BELL

ASBESTOS NOTE:
AR-F1 A NYSOOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 56 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST ABATE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE RACINGS OR CONDUIT RUNNING BETWEEN FLOORS.

WOOLLEY

ARCHITECTS



FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

MORRIS ARCHITECTS



Klepper, Hahn & Hyatt
STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS
PLANNERS



DELTA ENGINEERS, P.C.
ENGINEERS • ARCHITECTS

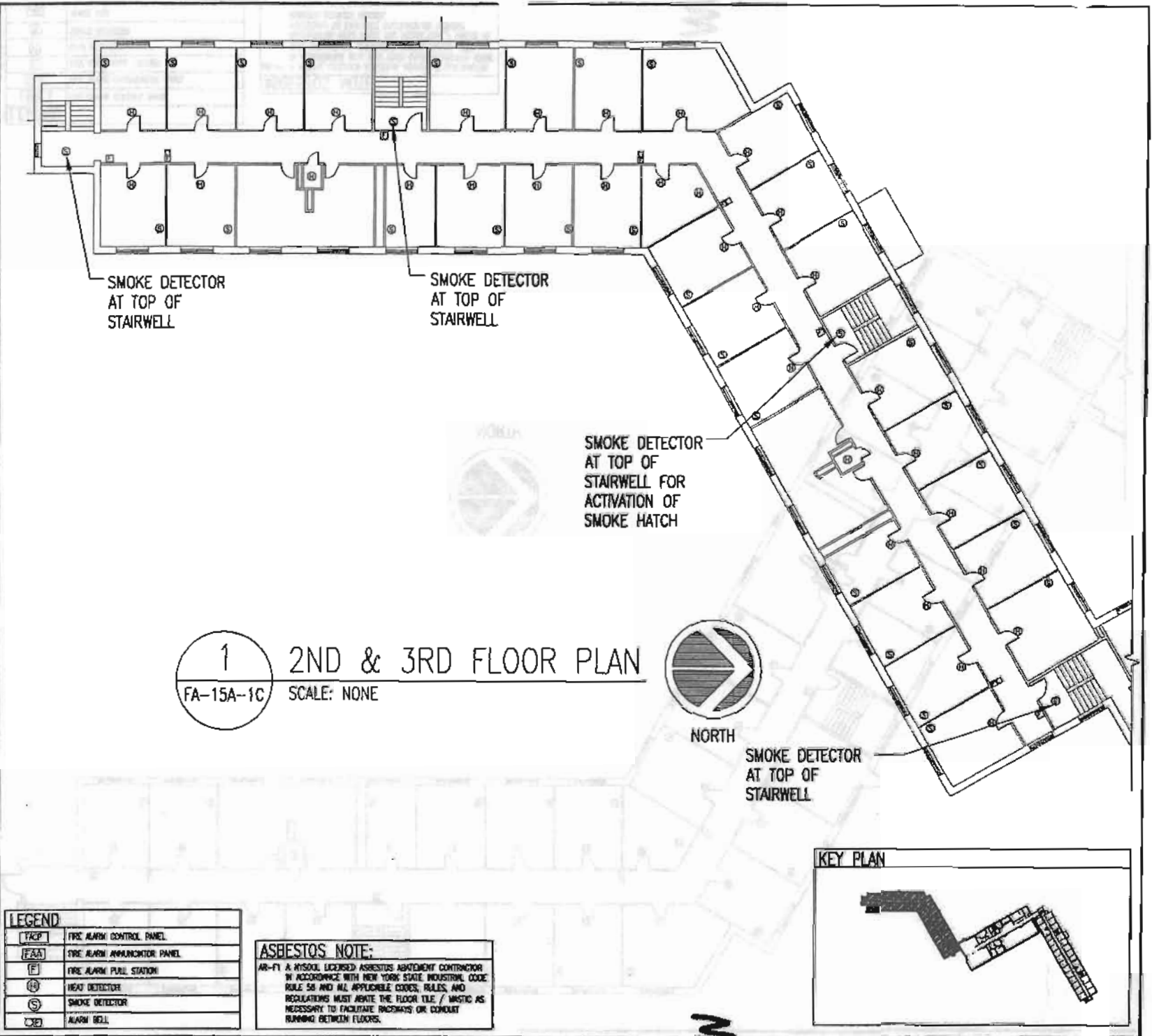


LU ENGINEERS
CMA and Environmental

DATE	
REVISION	
DESIGNED BY	
CHECKED BY	
DATE	

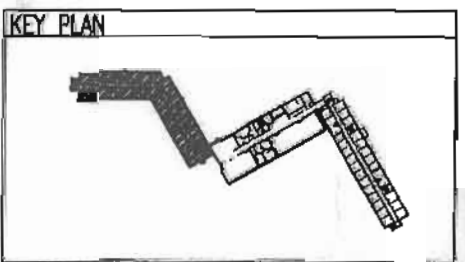
MORELAND HALL
FIRST FLOOR PLAN

FA-15A-1B

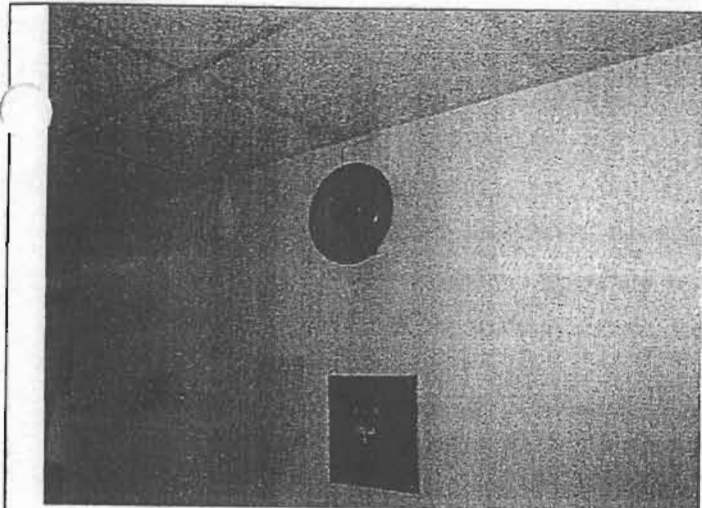


LEGEND	
[KCP]	FIRE ALARM CONTROL PANEL
[FAP]	FIRE ALARM ANNUNCIATOR PANEL
[P]	FIRE ALARM PULL STATION
[H]	HEAT DETECTOR
[S]	SMOKE DETECTOR
[B]	ALARM BELL

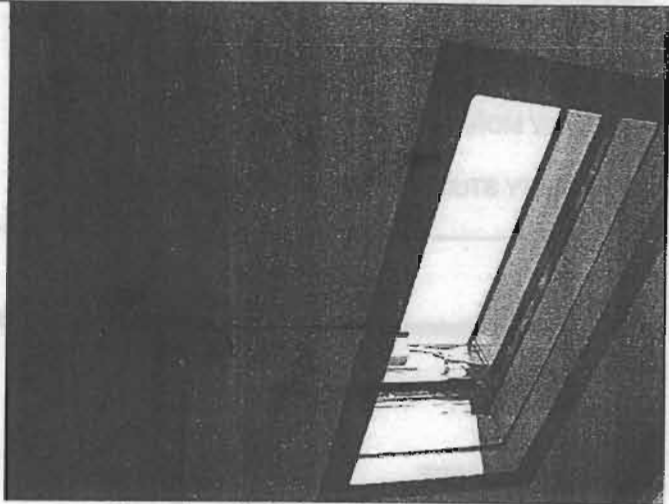
ASBESTOS NOTE:
 AN-FY A NYSDOL LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH NEW YORK STATE INDUSTRIAL CODE RULE 58 AND ALL APPLICABLE CODES, RULES, AND REGULATIONS MUST REMOVE THE FLOOR TILE / MASTIC AS NECESSARY TO FACILITATE WORKMANS OR CONDUIT RUNNING BETWEEN FLOORS.



NO



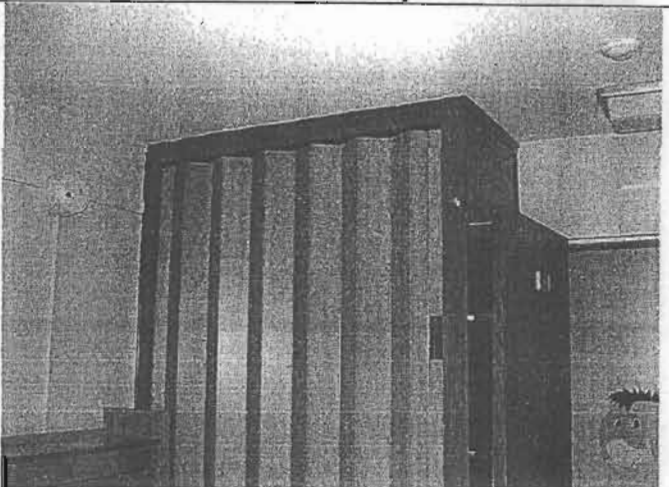
Hallway-Bell and Pull Station



Smoke Hatch at Top of Stairs



Hallway - Bell, PS, and Smoke D.

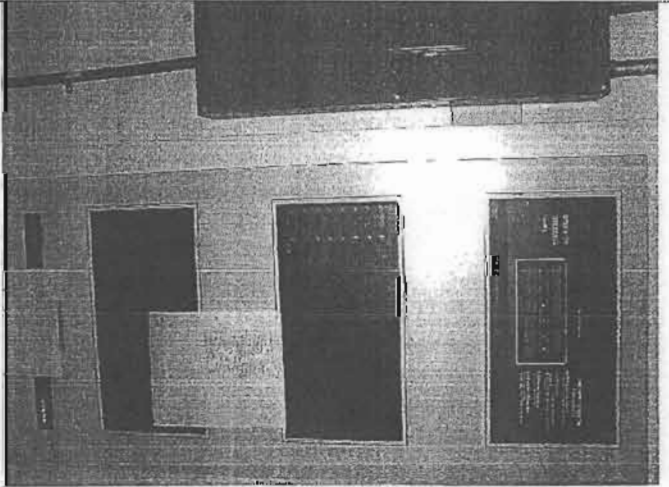


Typical Bedroom - Heat and Smoke Detectors

Mo



Annunciator Panel (Located in Mackin)



FACP (Located in Mackin)

WOOLLEY
ARCHITECTS
MORRIS

OSWEGO
STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS

FEASIBILITY STUDY
FOR RESIDENCE HALLS BUILDING SHELL
& FIRE ALARM SYSTEM IMPROVEMENTS

Klepper, Hahn & Hyatt
STRUCTURAL ENGINEERS - LANDSCAPE ARCHITECTS

DELTA ENGINEERS, P.C.
ENGINEERS & ARCHITECTS

LU ENGINEERS
Civil and Environmental

ISSUE	DATE
Feasibility Study-Final	9/30/04
BY WOOLLEY MORRIS ARCHITECTS, P.C.	
MORELAND HALL	
FIRE ALARM PICTURES	
FA-15A-2A	

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY STUDY - MORELAND HALL

9/30/04

SUMMARY

TOTAL MATERIAL

TOTAL LABOR

TOTAL COST

ROOF WORK

\$64,000

\$44,000

\$108,000

EXTERIOR FAÇADE

\$26,000

\$69,000

\$95,000

WINDOWS

\$160,000

\$72,000

\$232,000

SUB-TOTAL

\$250,000

\$185,000

\$435,000

GENERAL CONDITIONS 5%

\$22,000

SUB-TOTAL

\$457,000

OVERHEAD AND PROFIT 7%

\$32,000

SUB-TOTAL

\$489,000

CONTINGENCY 15%

\$73,000

SUB-TOTAL

\$562,000

ASBESTOS ABATEMENT

\$73,000

FIRE ALARM

\$88,000

TOTAL - MORELAND HALL

\$723,000

MD

FA-15A-SA
 MORELAND HALL
 STATE UNIVERSITY OF NEW YORK AT OSWEGO

FEASIBILITY STUDY
 FOR RESIDENCE HALL BUILDING SHELL
 & FIRE ALARM SYSTEM IMPROVEMENTS
 WOLLEY MORRIS ARCHITECTS
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OSWEGO
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STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - MORELAND HALL

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - MORELAND HALL 9/30/04

DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
		UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
ASBESTOS ABATEMENT						
<u>WINDOWS (Temporary Protection provided by others)</u>						
Abate "A" windows including lintel and sill caulk, if present	113 EA	\$200.00	\$22,600	\$300.00	\$33,900	\$56,500
Abate "B" windows including lintel and sill caulk, if present	2 EA	200.00	400	300.00	600	1,000
Abate "C" windows including lintel and sill caulk, if present	2 EA	1,600.00	3,200	2,400.00	4,800	8,000
Abate "D" windows including lintel and sill caulk, if present	2 EA	600.00	1,200	900.00	1,800	3,000
Abate "E" windows including lintel and sill caulk, if present	2 EA	320.00	640	480.00	960	1,600
<u>FIRE ALARM SYSTEM</u>						
All Floors: Floor tile / mastic (assume 5 "minor" locations)	1 EA	1,000.00	1,000	1,500.00	1,500	2,500
TOTAL - ASBESTOS ABATEMENT			29,040		43,560	72,600
TOTAL - ASBESTOS ABATEMENT		SAY	\$29,000		\$44,000	\$73,000

MO

RESIDENCE HALL BUILDINGS SHELL AND SAFETY IMPROVEMENTS STUDY

04-85

STATE UNIVERSITY OF NEW YORK AT OSWEGO

WOOLLEY MORRIS ARCHITECTS

FEASIBILITY ESTIMATE - MORELAND HALL

9/30/04

TOTAL	DESCRIPTION	QUANTITY	MATERIAL		LABOR		TOTAL
			UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	
FIRE ALARM							
DEMOLITION							
	FACP	1 EA	\$0.00	\$0	\$680.00	\$680	\$680
	FAA	1 EA	0.00	0	340.00	340	340
	Notification devices	15 EA	0.00	0	13.19	198	198
	Detection devices	215 EA	0.00	0	16.32	3,509	3,509
	Wire	6 CLF	0.00	0	7.41	44	44
INSTALLATION							
	Smoke detectors	72 EA	165.00	11,880	64.60	4,651	16,531
	Smoke detector with sounder base	85 EA	220.00	18,700	64.60	5,491	24,191
	Heat detectors	4 EA	148.50	594	61.20	245	839
	Pull stations	15 EA	74.80	1,122	53.04	796	1,918
	Audio/visual alarm	15 EA	137.50	2,063	72.76	1,091	3,154
	Visual alarm	19 EA	52.25	993	57.80	1,098	2,091
	Conduit	600 LF	0.64	384	3.14	1,884	2,268
	Wire	6 CLF	191.40	1,148	68.00	408	1,556
	Smoke damper connection	2 EA	104.50	209	340.00	680	889
	Door holders	10 EA	85.25	853	102.00	1,020	1,873
	Corridor ceiling replacement	3,700 SF	4.00	14,800	3.15	11,655	26,455
	Ceiling texture replacement / miscellaneous locations	520 LF	1.00	520	1.20	624	1,144
	TOTAL - FIRE ALARM			53,266		34,414	87,680
	TOTAL - FIRE ALARM SAY			\$53,000		\$34,000	\$88,000

MO