

**FACILITY AUDIT REPORT**

**DERBY HALL**

**#025**

**JANUARY 1997**

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**EXECUTIVE SUMMARY AND PROJECT LIST FOR  
DERBY HALL**

Derby Hall was completed in 1906 and was occupied by the Chemistry Department. The original structure was two stories with a basement and consisted of what is now the south half of the present building. There was one major addition in 1930, consisting of the north half of the building. There were two minor additions, one of which was removed in 1930 and the other was eliminated during the 1994 renovation. A complete renovation of the building was finished in 1994. This renovation included new mechanical, electrical, HVAC, windows, ceilings, floor finishes and a partial new roof. Overall, the building is in good condition, however, there are three significant projects that will require attention. The sixty five year old copper roof will need to be replaced within the next five years, the new dampers for the air handlers are malfunctioning and need to be replaced and the exterior walls should be cleaned and sealed.

**PROPOSED MAINTENANCE PROJECTS**

<b>A. Corrective Maintenance Projects:</b>		<b>Control No.</b>
Replace the dampers for air handlers.	\$ 44,000	3260
<b>SUB-TOTAL</b> .....	<b>\$ 444,000</b>	
<b>B. Building Improvement/Addition Projects:</b>		
Clean and seal the exterior walls.	\$ 51,000	3261
<b>SUB-TOTAL</b> .....	<b>\$ 51,000</b>	
<b>C. Building Component Replacements expected within the next 5 to 10 years:</b>		
Replace the copper roof section	\$ 500,000	3249
<b>SUB-TOTAL</b> .....	<b>\$ 428,000</b>	
<b>TOTAL COST FOR ALL PROJECTS</b> .....	<b>\$ 923,000</b>	

GENERAL BUILDING INFORMATION

DERBY HALL #025

BUILDING ADDRESS: 154 NORTH OVAL DRIVE

GROSS SQ. FT.: 106,555

NET ASSIGNABLE SQ. FT.: 74,187

MECHANICAL/CUSTODIAL AREA SQ. FT.: 6,545

YEAR OF CONSTRUCTION: 1906

YEARS OF ADDITIONS: 1930

YEAR OF LAST RENOVATION: 1994

NUMBER OF STORIES/BASEMENT: 3 WITH BASEMENT

AIR CONDITIONING (Percentage): 90

CURRENT USE: GEOGRAPHY, SOC.& BEHAVIORAL SC., POLI SC. AND COMMUNICATION

TYPE OF CONSTRUCTION: REINFORCED CONCRETE AND LOAD BEARING BRICK WALLS

ESTIMATED REPLACEMENT COST (ERC): 16,543,000\*

WHEELCHAIR ACCESSIBILITY: ACCESS IS AT THE WEST ELEVATOR ENTRANCE AT GROUND LEVEL WITH ACCESS TO THE REST OF THE BUILDING.

OVERALL BUILDING CONDITION: SATISFACTORY \*\*

NUMBER OF EXIT STAIRWAYS: TWO

NUMBER OF EXITS: FIVE

AREA SHOP RESPONSIBILITY: NORTH SHOP

\* Replacement Cost assigned June 1995 by The Office of University Resource Planning & Institutional Analysis.

\*\* The Office of University Resource Planning & Institutional Analysis C-1 Report Condition Code.

**BUILDING SYSTEMS INFORMATION**

DERBY HALL # 025

**HEATING:**

Source STEAM FROM POWER PLANT CONVERTED TO HOT WATER  
Type Heating System HOT WATER  
Main Steam Feed (Line size, valve location) 2@HPS, IN ROOM 010M  
Building Htg. Water (line size, valve location) 2@ IN ROOM 010M

**VENTILATION SYSTEM:**

OUTSIDE AIR TO THE AIR HANDLING UNITS, AND ROOM EXHAUST

**COOLING:**

BLDG % 90 Chillers CHILLED WATER  
Window Units NONE Thru-the-wall NONE Direct exp. units 2

**HVAC CONTROL SYSTEM:**

PNEUMATIC AND ELECTRIC / DDC

**ELECTRIC:** Source Size(KVA) Primary/Secondary Switchgear & Main Disc. (Rm)

1. <u>PGN9/PGS5</u>	<u>500</u>	<u>13,200/480/277</u>	<u>170M</u>
2. <u>PGN9/PGS5</u>	<u>750</u>	<u>13,200/208/120</u>	<u>170M</u>

**PLUMBING SERVICES:**

Water (size, valve location) 4@ , ROOM 010M  
Gas (size, valve location) NONE  
Domestic Hot Water (size, valve location) 1 1/2@ , ROOM 010M  
Compressed Air (size, location) 1@ IN ROOM 010M

**SEWERS:**

Storm 1 @ 8@ , 8 @ 4@ Sanitary 1 @ 6@  
Combined Storm/San. NONE

**METERS:**

Gas (size, location) NONE  
Water (size, location) 4@ , ROOM 010M  
Electric (size, location) 500 AMPS AND 2000 AMPS IN 0170M

**ALARM SYSTEMS:**

Fire Alarm, Main Panel Room 010M, Remote Panel Location Room WEST ENT.  
 Fire Pump @ 1200GPM, Pump Location, Room 010M  
 Sprinklers, Valve Location Room 010M, [ ]100%, [ ]Partial,  Limited  
 Horns/Strobes,  Bells in  Halls, [ ] Rooms  
[ ] Other Alarms NONE

**ELEVATORS:**

Number ONE Type (passenger, freight) PASSENGER 3000#  
Manufacturer PLNGR Size 76x74

**EMERGENCY GENERATOR:** Size NONE Location N/A

**ASBESTOS SURVEY (1986):** FOUND IN CEILING PLASTER. REMOVED IN 1994

## DERBY HALL NARRATIVE

### HISTORY

Derby Hall was completed in 1906 and was occupied by the Chemistry Department. This was the third Chemistry building. The two earlier buildings were destroyed by fire. The new building was damaged by fire six months after it was occupied. This led to the construction of a small storage facility on the north side of the building, in 1908. The addition was a fireproof storeroom for the volatile chemicals. This addition was torn down when the building was enlarged in 1930. The 1930 addition added a 3-story structure to the north of the building and a third story to the original building, with a court yard area in the center. The new building was occupied by the Departments of English, Classics, German and Romance Languages and Phonetics. At this time the University Bookstore was also housed in the basement of Derby Hall. In 1938, a one floor area, known as the little theater, was built in the basement below the court yard. There was a small addition on the east side, in 1962, to create an entrance for the bookstore. This entrance was removed in the 1994 renovations. The 1994 renovation included the mechanical, electrical, HVAC systems, new windows, partial new roof, new offices and classrooms configurations, new floor coverings and new wall finishes. The building is now occupied by the Geography Department, the College of Social and Behavioral Sciences, the Political Science Department and the Communication Department.

A review of the work orders indicated that there are a normal number of emergency and maintenance calls to the building. There are three major projects identified for this building. There are also some minor projects recommended in this report that will enhance the building's appearance.

In an interview with the building coordinator, it was learned that the occupants are basically satisfied with the overall condition and performance of the building.

Occupancy of the building reported by The Office of University Resource Planning & Institutional Analysis in the C-1 Building Space Assignment Report, dated June 1996, lists a net assignable area of 74,187 SF. Building use by room category is 56% offices, 20% classrooms, 15% laboratories and 9% mechanical/custodial.

### PRIMARY SYSTEMS

Derby Hall is built on individual perimeter and interior footings with poured in place concrete walls on the north side of the building. The three story building has mainly load bearing masonry walls as well as some reinforced concrete and steel columns. There are steel trusses to support the wood deck of the roof. The floors are poured-in-place concrete with concrete joists. There are no indications of problems with the basic structure of the building.

The exterior consists of brick with limestone lintels and sills at the windows of the original building. There are decorative limestone carvings at the top of the exterior walls. The exterior of the building is in good condition but needs to be cleaned and sealed. There is some ivy that should be removed from the north side of the building.

The section of the roof that is copper was installed in 1930 and is at the end of its useful life. This section of the roof should be replaced in the next five years. The asphalt shingle section of the roof was replaced in the recent

renovation and is in good condition except for some missing and loose shingles. There were some leaks noted in the valley of the copper roof on the east side, next to the roof hatch. The gutter area at the exterior of the roof is composed of a felt material covered by a waterproofing compound. The limestone coping is showing signs of deterioration and needs to be repaired and recaulked. The roof in the court yard area has a metal deck with three inch sloping concrete and a membrane cover.

The building has aluminum, double pane, single hung and awning style windows that were installed during the 1994 renovation. There are three fixed, octagonal windows on the south side and two on the north side of the building. The windows were installed over the existing wood sills and some of the windows need to be caulked on the interior. The exterior doors were replaced during the recent renovation and are in good condition.

## **SECONDARY SYSTEMS**

The interior partitions are composed of masonry walls with painted plaster surfaces. There are metal stud and drywall partitions in the newly created office and classroom areas. The wall and floor surfaces are in good condition except in a few areas noted in the corridors that need to be repainted. There are holes in the interior wall of the mechanical room, 010M, that need to be plugged to maintain the fire rating of this wall.

The ceilings have some peeling paint in the east and west stair wells and there are some stained ceiling tiles in the basement faculty conference room and in room 3016. For the remainder, the ceilings are in good condition.

The primary floor covering in the building is carpeting with vinyl tiles in storage areas, classrooms, labs and in the faculty conference room. The mechanical rooms have concrete floors with a clear sealant coat. The restrooms have ceramic tile floors. The floor coverings are in good condition.

The domestic hot and cold water systems and the restroom fixtures were replaced in the recent renovation and are in good condition.

The light fixtures are in good condition, however, the diffusers and some vents should be cleaned. The ceiling tiles and the light fixtures in the basement corridor, on the west side, appears to be sagging. This should be investigated to prevent a collapse of the light fixtures and the ceiling tiles.

## **SERVICE SYSTEMS**

The building has one elevator that is functioning well and meets ADA standards.

All of the major service systems were replaced during the 1994 renovation and are in good condition. However, the dampers for the air handlers are not closing properly and have led to frozen coils during the winter season. It is recommended that the dampers be replaced.

The building is cooled by seven air handling units of various sizes and two five ton A.C. units. The chilled water for the cooling coils comes from chillers located in Dulles Hall. An additional chiller will be installed in Dulles Hall this spring to add cooling capacity to the existing three chillers. These chillers supply not only Dulles Hall and Derby Hall but also University Hall and Bricker Hall.

Derby Hall has a perimeter, radiant panel, hot water heating system. Hot water is supplied by a steam converter located in the mechanical room at Derby Hall, with steam supplied by the power plant. There were no problems noted nor any complaints received from the occupants regarding the heat supplied by the radiant panels. Heat to various areas is controlled by thermostats where one thermostat controls several rooms. This can lead to hot areas if the thermostat is located in an unoccupied room.

Because of the recent renovation, the service systems are all in good condition.

Exhaust fans remove air from restrooms and common areas. There is one fume hood located in a first floor lab that is directly vented through the roof.

Derby Hall has a Powers digital control system and is monitored by the Department of Physical Facilities.

### **ELECTRIC**

The electrical power to the building is provided by one 500 KVA transformer, with primary voltage of 13,200 and secondary voltage of 480/277 and a second 750 KVA transformer with primary voltage of 13,200 and secondary voltage of 208/120. There were no electrical overload conditions observed or mentioned by the building occupants. The transformers and switchgear are located in room 010M.

The building has 40 watt fluorescent light fixtures throughout the building. Incandescent lighting is used for accent lighting at the entrances and in the faculty lounge area. No problems were noted with the building electrical distribution system. There were an adequate number of convenience outlets in the building.

### **SAFETY STANDARDS**

Emergency lights and lighted exit signs are provided by battery powered lights. There is no emergency generator. Derby Hall is equipped with a manual fire alarm system and portable fire extinguishers. The building is equipped with alarms, strobe lights as well as smoke detectors at the elevator and in the ducts. There are standpipes in the stairways and there are fire hose cabinets, with hoses, on every floor. There are limited areas on each floor that have sprinkler protection.

An automatic door opener has been installed at the west entrance which gives direct access to the elevator. This elevator then gives wheelchair access to the other floors.

Several rooms are secured by card access, but none are remotely alarmed.

### **ASBESTOS**

The Ohio Board of Regents Facilities Asbestos Inspection and Risk Assessment Program's report: Inventory of Friable Asbestos Containing Material in Buildings of the Ohio State University (Main and Branch Campuses) and the Recommendations for Corrective Action by PEI Associates, Sept. 1986 identifies asbestos containing materials in ceiling plaster and in block lagging. During prerenovation, \$1,491,108 was spent to remove asbestos-containing materials. However, not all hard plaster was removed and some asbestos may still be in the

building.

#### **BUILDING PERIMETER**

The sidewalks on the south and west side have cracks that need to be repaired. The black top sidewalks on the south, north and west sides of the building need to be resurfaced. The concrete steps on the south, east and north side of the building need to be resealed and leveled. There are broken tiles at the south entrance that need to be replaced. The bricks in the steps leading to the east entrance and some bricks in the east plaza are damaged and need to be replaced. There are cracks in the concrete bench walls at the west entrances that need to be repaired. There are some bare spots in the lawn area at the southeast corner of the building that should be repaired. Also, ivy should be removed from the north wall.

Entrances to the building are well lighted. Area and street lighting appear to be distributed properly. There are building signs at the North Oval Drive and on the building.

**Maintenance Projects (Less than \$5000)**

1. Repair roof leaks near east roof hatch.  
Work order # 01-5064-250481-73
2. Install railing along attic walkway to the roof hatch.  
Work order # 01-5064-250483-61
3. Repaint section of wall in basement near faculty lounge.  
Work order # 01-5064-250484-65
4. Repair/repaint surfaces in the east and west stairwells.  
Work order # 01-5064-250487-65
5. Replace stained ceiling tiles in rooms 0020 and 3016.  
Work order # 01-5064-250489-65
6. Repaint walls in room 3016A.  
Work order # 01-5064-250490-65
7. Level light fixture in west basement corridor.  
Work order # 01-5064-250491-65
8. Seal gutters in northeast corner of court yard.  
Work order # 01-5064-250493-65
9. Remove ivy from the north wall.  
Work order # 01-5063-022359-55

Control # 3262

- Caulk interior windows on the west side.
- Clean diffusers and vents throughout the building.
- Recaulk seams in parapet cap.
- install a backflow preventer.

**BUILDING EVALUATION SUMMARY**

**I. BUILDING INFORMATION**

FAC # 025 FACILITY NAME: DERBY HALL  
 DATE: 1/97 INSPECTOR: AJR  
 YEAR CONSTRUCTED: 1906  
 GROSS SQ FT: 106,555 NET SQ FT: 74,187  
 REPLACEMENT COST \$ 16,543,000 \*

**II. COMPONENT RATING**

COMPONENT	BUILDING COMPONENT PERCENTAGE OF TOTAL COST **	BUILDING COMPONENT REPLACEMENT COST	BUILDING COMPONENT CONDITION VALUE MULTIPLIER	BUILDING COMPONENT CURRENT VALUE
Foundation	8.21	1,358,413	0.79	1,071,722
Columns and Beams	7.46	1,234,921	0.79	974,293
Exterior Walls	10.15	1,679,492	0.75	1,265,311
Ext. Windows & Doors	3.73	617,460	0.97	596,937
Roofing & Flashing	6.72	1,111,429	0.78	864,517
Partitions & Doors	11.12	1,840,032	0.91	1,672,539
Wall Finishes	2.84	469,270	0.94	439,591
Floor Finishes	5.23	864,445	0.95	818,422
Ceilings & Finishes	5.87	970,648	0.95	925,441
Conveying	1.87	308,730	0.80	247,004
Plumbing	5.23	864,445	0.97	835,712
Heating	7.17	1,185,524	0.97	1,146,120
Cooling and Vent.	8.21	1,358,413	0.95	1,295,146
Elect. Serv. & Dist.	1.42	234,635	0.95	222,143
Lighting and Power	9.41	1,556,000	0.91	1,421,283
Safety Standards	5.37	889,143	0.95	841,806
TOTALS	100.00	16,543,000	0.88	14,637,989

**II. BUILDING RATING SUMMARY**

Overall Building Rating = 88%

\* Replacement Cost assigned June 1995 by The Office of University Resource Planning & Institutional Analysis without the furnishings and fixed equipment allocation.

\*\* Percent allocation of each building component is calculated from The Means Standard Construction Cost data for College Classroom Buildings.

**FOUNDATIONS**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

	N/A	Sat	Att
<b>a. Footings:</b>			
Interior Footings/Piers <u>SPREAD FOOTERS</u>	[ ]	[X]	[ ]
Interior Footings/Bearing Walls _____	[ ]	[X]	[ ]
Perimeter Footings <u>SPREAD</u>	[ ]	[X]	[ ]
Grade Beams _____	[x]	[ ]	[ ]
Piles _____	[X]	[ ]	[ ]
Caisson _____	[X]	[ ]	[ ]
<b>b. Foundation Wall Materials:</b>			
Concrete Cast-in-place <u>1930 ADDITION</u>	[ ]	[X]	[ ]
Concrete Block _____	[X]	[ ]	[ ]
Stone _____	[X]	[ ]	[ ]
Brick <u>ORIGINAL BUILDING</u>	[ ]	[X]	[ ]
Other _____	[X]	[ ]	[ ]
<b>c. Waterproofing and Underdrain:</b>			
Coating _____	[X]	[ ]	[ ]
Membrane _____	[X]	[ ]	[ ]
Board _____	[X]	[ ]	[ ]
Drain Tile _____	[X]	[ ]	[ ]
<b>d. Ground/Basement Floor Slab:</b>			
Plain _____	[X]	[ ]	[ ]
Reinforced _____	[ ]	[X]	[ ]
<b>e. Special Substructures:</b> _____	[X]	[ ]	[ ]

**B. COMMENTS:**

1 NO PROBLEMS WERE OBSERVED WITH THE FOUNDATION.

**C. COMPONENT RATING:**    (\$ 1,358,400)    ( 79 %) = \$ 1,071,700  
                                  Possible    Condition    Component  
                                  Value        Value Multiplier    Value





**EXTERIOR WINDOWS & DOORS**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

**a. Window materials:**

	N/A	Sat	Att
Wood _____	[X]	[ ]	[ ]
Steel _____	[X]	[ ]	[ ]
Alum <u>INSTALLED OVER OLD WOOD FRAMES</u>	[ ]	[ ]	[X]
PVC _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**b. Windows type & number:**

Single Hung <u>158</u>	[ ]	[X]	[ ]
Double Hung _____	[X]	[ ]	[ ]
Casement _____	[X]	[ ]	[ ]
Pivoted <u>84</u>	[ ]	[X]	[ ]
Sliding _____	[X]	[ ]	[ ]
Fixed <u>5 OCTAGON</u>	[ ]	[X]	[ ]
Other _____	[X]	[ ]	[ ]

**c. Window glazing:**

Single pane _____	[X]	[ ]	[ ]
Double pane <u>[ ]5/8@ [X]1@ [ ]Seals Broken</u>	[ ]	[X]	[ ]

**d. Window Wall and/or Store Front:**

Store Front _____	[X]	[ ]	[ ]
Vestibule _____	[X]	[ ]	[ ]
Single pane _____	[ ]	[X]	[ ]
Double pane _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**e. Door Materials:**

Wood _____	[X]	[ ]	[ ]
Steel <u>AT ELEVATOR ENTRANCE</u>	[ ]	[X]	[ ]
Alum <u>AT ALL OTHER ENTRANCES</u>	[ ]	[X]	[ ]
Other _____	[X]	[ ]	[ ]

**f. Doors type & number:**

Vestibule Double _____	[X]	[ ]	[ ]
Double <u>5</u>	[ ]	[X]	[ ]
Exit <u>1</u>	[ ]	[X]	[ ]
Stair Exit <u>1</u>	[ ]	[X]	[ ]
Garage _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**g. Hardware:**

Automatic Opener _____	[ ]	[X]	[ ]
Push Bar Openers wt Closures _____	[ ]	[X]	[ ]
Weather Stripping _____	[ ]	[X]	[ ]
Key Cards _____	[X]	[ ]	[ ]

**B. COMMENTS:**

THE WINDOWS AND DOORS WERE ALL REPLACED IN THE 1994 RENOVATION. THERE IS AIR PENETRATION AT SOME WINDOWS THAT SHOULD BE CAULKED ON THE INTERIOR

**C. COMPONENT RATING:**    (\$ 617,500 )    ( 97 %) = \$ 596,900  
                                  Possible            Condition            Component  
                                  Value            Value Multiplier    Value



**PARTITIONS & DOORS**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

**a. Partition Framing:**

	N/A	Sat	Att
Concrete Block _____	[X]	[ ]	[ ]
Clay Tile Block <u>IN THE 1906 BUILDING</u>	[ ]	[X]	[ ]
Masonry <u>IN THE 1906 BUILDING</u>	[ ]	[X]	[ ]
Wood Stud _____	[X]	[ ]	[ ]
Metal Stud <u>IN THE NEW CONSTRUCTION</u>	[ ]	[X]	[ ]
Other _____	[X]	[ ]	[ ]

**c. Special partitions and Walls:**

Demountable _____	[X]	[ ]	[ ]
Toilet <u>METAL PARTITIONS</u>	[ ]	[X]	[ ]
Screen Walls _____	[X]	[ ]	[ ]
Glass Storefront _____	[X]	[ ]	[ ]
Fence Cage _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**d. Wall Material:**

Plaster <u>WALL LEAKS IN CORRIDOR AND STAIRWELL</u>	[ ]	[ ]	[X]
Drywall _____	[ ]	[X]	[ ]
Glass _____	[X]	[ ]	[ ]
Wood Paneling _____	[X]	[ ]	[ ]
Composite Paneling _____	[X]	[ ]	[ ]
Steel Panels _____	[X]	[ ]	[ ]
Tile/Glazed _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**e. Interior Doors & Frames:**

Met Door/Met Frame <u>MECHANICAL ROOMS</u>	[ ]	[X]	[ ]
Wood Door/Wood Frame _____	[X]	[ ]	[ ]
Wood Door/Metal Frame <u>THROUGHOUT</u>	[ ]	[X]	[ ]
Firedoors <u>AT STAIRWELLS</u>	[ ]	[X]	[ ]
Glazing <u>LIMITED</u>	[ ]	[X]	[ ]
Roll-up _____	[X]	[ ]	[ ]
Sliding _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**f. Hardware:**

Door [ ]Knobs [X]Levers _____	[ ]	[X]	[ ]
Door Closures _____	[ ]	[X]	[ ]
Kick/Push Plates _____	[ ]	[X]	[ ]
Security & Detection <u>LOCAL</u>	[ ]	[X]	[ ]
Automatic Openers <u>AT WEST ENTRANCE</u>	[ ]	[X]	[ ]
Fire Door Magnets _____	[ ]	[X]	[ ]
Other _____	[X]	[ ]	[ ]

**B. COMMENTS:**

THE PARTITIONS AND DOORS ARE NEW SINCE THE 1994 RENOVATIONS AND ARE IN GOOD CONDITION EXCEPT FOR SOME WATER DAMAGE IN THE BASEMENT CORRIDOR AND THE EAST STAIR WELL.

**C. COMPONENT RATING:** (\$ 1,840,000) ( 91 %) = \$ 1,672,500  
 Possible Condition Component  
 Value Value Multiplier Value

**WALL FINISHES**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

**a. Wall Finishes:**

	<u>N/A</u>	<u>Sat</u>	<u>Att</u>
Paint _____	[ ]	[ ]	[X]
Vinyl Wall Coverings _____	[X]	[ ]	[ ]
Paneling Prefinished _____	[X]	[ ]	[ ]
Cork _____	[X]	[ ]	[ ]
Wallpaper _____	[X]	[ ]	[ ]
Ceramic Tile <u>IN RESTROOMS</u> _____	[ ]	[X]	[ ]
Marble _____	[X]	[ ]	[ ]
Stone _____	[X]	[ ]	[ ]
Trim & Wainscot _____	[X]	[ ]	[ ]
Glass _____	[X]	[ ]	[ ]
Other <u>TERRAZZO AT ENTRANCES</u> _____	[ ]	[X]	[ ]

**B. COMMENTS**

THE WALL FINISHES ARE IN GOOD CONDITION EXCEPT FOR A SMALL AREA AT THE ELEVATOR STOPS , IN THE STAIRWELLS AND IN THE BASEMENT CORRIDOR.

**C. COMPONENT RATING:**    (\$ 469,300 )    ( 94 %) = \$ 439,600  
                                  Possible            Condition            Component  
                                  Value            Value Multiplier    Value



**CEILINGS AND FINISHES**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

<b>a. System Type:</b>	N/A	Sat	Att
Exposed <u>IN MECHANICAL ROOMS</u>	[ ]	[X]	[ ]
Applied to Structure _____	[X]	[ ]	[ ]
Suspended Stud _____	[X]	[ ]	[ ]
Suspended Steel Grid _____	[X]	[ ]	[ ]
Suspended Aluminum Grid <u>THROUGHOUT</u>	[ ]	[X]	[ ]
2x4 Lay-in _____	[ ]	[X]	[ ]
2x2 Lay-in _____	[X]	[ ]	[ ]
Concealed Spline _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**b. Materials:**

Drywall <u>AT EAST/WEST STAIR LANDINGS</u>	[ ]	[X]	[ ]
Plaster <u>IN STAIRWELLS</u>	[ ]	[X]	[ ]
Mineral Fiber Board <u>SOME STAINED TILES</u>	[ ]	[ ]	[X]
Fiberglas Board _____	[X]	[ ]	[ ]
Metal Tile _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**c. Finishes:**

Paint <u>PAINTE PEELING IN WEST STAIRWELL</u>	[ ]	[ ]	[X]
Prefinished <u>[X]Paint [ ]vinyl [ ]Fabric</u>	[ ]	[ ]	[X]
Other _____	[X]	[ ]	[ ]

**d. Openings & Inserts:**

Air Distribution _____	[ ]	[X]	[ ]
Lighting Fixtures _____	[ ]	[X]	[ ]
Access Panels _____	[ ]	[X]	[ ]
Sprinklers <u>LIMITED</u>	[ ]	[X]	[ ]
Smoke Detectors <u>LIMITED</u>	[ ]	[X]	[ ]
Speakers _____	[X]	[ ]	[ ]
Skylights _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**B. COMMENTS:**

THERE ARE SOME STAINED CEILING TILES ON THE THIRD FLOOR AND IN THE FACULTY CONFERENCE ROOM. THE WEST STAIRWELL HAS SOME PEELING PAINT.

**C. COMPONENT RATING:** (\$ 970,600) ( 95 %) = \$ 925,400  
                                     Possible            Condition            Component  
                                     Value            Multiplier        Value

CONVEYING

FAC # 025

DATE JAN.97

INSPECTOR: AJR

A. SYSTEM DESCRIPTION

a. Elevators:

	N/A	Sat	Att
Manufacturer <u>PLNGR</u>			
Number <u>1</u>	[ ]	[X]	[ ]
Type <u>PASSENGER</u>	[ ]	[X]	[ ]
Speed <u>100 FPM</u>	[ ]	[X]	[ ]
Capacity (lbs) <u>3,000</u>	[ ]	[X]	[ ]
Dimensions <u>74@ X 76@</u>	[ ]	[X]	[ ]
Door Operation:			
Center	[X]	[ ]	[ ]
To Side	[ ]	[X]	[ ]

b. Elevators:

Manufacturer			
Number _____	[X]	[ ]	[ ]
Type _____	[X]	[ ]	[ ]
Speed _____	[X]	[ ]	[ ]
Capacity (lbs) _____	[X]	[ ]	[ ]
Dimensions _____	[X]	[ ]	[ ]
Door Operation:			
Center _____	[X]	[ ]	[ ]
To Side _____	[X]	[ ]	[ ]

c. Lifts and Hoists:

Number _____	[X]	[ ]	[ ]
Type _____	[X]	[ ]	[ ]

d. Conveyors:

Number _____	[X]	[ ]	[ ]
Type _____	[X]	[ ]	[ ]

B. COMMENTS:

THE ELEVATOR IS IN GOOD CONDITION.

C. COMPONENT RATING:   (\$ 308,700 )   ( 80 %) = \$ 247,000

Possible	Condition	Component
Value	Value Multiplier	Value

**MECHANICAL/PLUMBING DOMESTIC**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

**a. Services Available:**

	N/A	Sat	Att
Cold Water _____	[ ]	[X]	[ ]
Backflow Valve _____	[ ]	[ ]	[X]
Hot Water _____	[ ]	[X]	[ ]
Natural Gas _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**b. Piping & Fittings:**

Cast Iron _____	[ ]	[X]	[ ]
Copper Pipe _____	[ ]	[X]	[ ]
Copper Tubing _____	[X]	[ ]	[ ]
Steel STANDPIPES _____	[ ]	[X]	[ ]
Galv. Steel FOR DHW AND DCW _____	[ ]	[X]	[ ]
Other _____	[X]	[ ]	[ ]

**c. Water Heaters:**

Gas _____	[X]	[ ]	[ ]
Steam Converter/Tank _____	[X]	[ ]	[ ]
Steam Instantaneous _____	[ ]	[X]	[ ]
Central Hot Water _____	[X]	[ ]	[ ]

**d. Drainage:**

Storm Drains <u>4@, 4@, 8@ AND 8@</u>	[ ]	[X]	[ ]
Sanitary Drainage <u>6@</u>	[ ]	[X]	[ ]
Floor Drains _____	[ ]	[X]	[ ]

**e. Fixtures: Number**

Water Closets <u>32</u>	[ ]	[X]	[ ]
Urinals <u>8</u>	[ ]	[X]	[ ]
Lavatory Sinks <u>14</u>	[ ]	[X]	[ ]
Kitchen Sinks _____	[X]	[ ]	[ ]
Service Sinks <u>4</u>	[ ]	[X]	[ ]
Showers _____	[X]	[ ]	[ ]
Electric Water Coolers <u>4</u>	[ ]	[X]	[ ]

**f. Sprinkler Systems:**

[X]Wet [ ]Dry LIMITED AREAS ON ALL FLOORS	[ ]	[X]	[ ]
Halon _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**g. Standpipe Systems:**

[X]Wet [ ]Dry _____	[ ]	[X]	[ ]
Fire Hose Valves [ ]2.5@ [X]1.25@	[ ]	[X]	[ ]

**d. Underground Tanks**

Fuel Oil Tank _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**B. COMMENTS:**

THE PLUMBING SYSTEM IS IN GOOD CONDITION BUT LACKS A BACKFLOW VALVE.

**C. COMPONENT RATING:** (\$ 864,400 ) ( 97 % ) = \$ 835,700  
 Possible Condition Component  
 Value Value Multiplier Value

**MECHANICAL/PLUMBING LABS**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

**a. Services Available:**

	N/A	Sat	Att
Cold Water _____	[ ]	[X]	[ ]
Backflow Valve _____	[ ]	[ ]	[X]
Hot Water _____	[ ]	[X]	[ ]
Acid Waste _____	[ ]	[X]	[ ]
Oxygen _____	[X]	[ ]	[ ]
Natural Gas _____	[X]	[ ]	[ ]
Vacuum _____	[X]	[ ]	[ ]
Distilled Water _____	[X]	[ ]	[ ]
Compressed Air _____	[X]	[ ]	[ ]
Steam _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**b. Piping & Fittings:**

Cast Iron _____	[X]	[ ]	[ ]
Duriron Pipe _____	[ ]	[X]	[ ]
Copper Pipe _____	[ ]	[X]	[ ]
Plastic/PVC/CPVC _____	[ ]	[X]	[ ]
Steel <u>STEAM</u> _____	[X]	[ ]	[ ]
Galv. Steel _____	[X]	[ ]	[ ]
Glass _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**c. Lab Water Heaters:**

Gas _____	[X]	[ ]	[ ]
Steam Converter/Tank _____	[X]	[ ]	[ ]
Steam Instantaneous _____	[X]	[ ]	[ ]
Central Hot Water _____	[ ]	[X]	[ ]

**d. Underground Tanks**

Neutralization Tank _____	[ ]	[X]	[ ]
Other _____	[X]	[ ]	[ ]

**e. Lab Fixtures:**

Lab Sinks _____	[ ]	[X]	[ ]
Emergency Showers _____	[X]	[ ]	[ ]
Eye Wash _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**B. COMMENTS:**

ONE LAB ON THE FIRST FLOOR.

**C. COMPONENT RATING:** (\$           ) (       %) = \$  
                                     Possible      Condition      Component  
                                     Value          Value Multiplier      Value

**MECHANICAL/HEATING**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

	N/A	Sat	Att
<b>a. Heat Source:</b>			
Central Plant Steam _____	[ ]	[X]	[ ]
Central Plant Hot Water _____	[X]	[ ]	[ ]
Boilers: Type _____	[X]	[ ]	[ ]
Size _____	[X]	[ ]	[ ]
Furnace/s: Type _____	[X]	[ ]	[ ]
Size _____	[X]	[ ]	[ ]
Heat Pump/s: Type _____	[X]	[ ]	[ ]
Size _____	[X]	[ ]	[ ]
<b>b. Building Heating System Type:</b>			
Steam _____	[X]	[ ]	[ ]
Hot Water _____	[ ]	[X]	[ ]
Warm Air _____	[X]	[ ]	[ ]
<b>c. Air Handling Units:</b>			
Multizone [ ]Preheat [ ]Heating [ ]Reheat _____	[X]	[ ]	[ ]
Dual Duct [ ]Preheat [ ]Heating [ ]Reheat _____	[X]	[ ]	[ ]
Make-up Air [ ]Preheat [ ]Heating [ ]Reheat _____	[X]	[ ]	[ ]
Variable Volume Air [ ]Preheat [ ]Heating [ ]Reheat _____	[ ]	[X]	[ ]
Constant Volume Air [ ]Preheat [ ]Heating [ ]Reheat _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]
<b>d. Air Filters:</b>			
35% Prefilter [ ]Multi [ ]DDAHU [ ]MUAHU [X]VAVAHU [ ]CAV _____	[ ]	[X]	[ ]
85% Bagfilter [ ]Multi [ ]DDAHU [ ]MUAHU [ ]VAVAHU [ ]CAV _____	[X]	[ ]	[ ]
Postfilter [ ]Multi [ ]DDAHU [ ]MUAHU [ ]VAVAHU [ ]CAV _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]
<b>e. Space Heating Equipment:</b>			
Radiant panels _____	[ ]	[X]	[ ]
Convectors _____	[X]	[ ]	[ ]
Unit Heaters <u>IN MECHANICAL SPACES AND AT ENTRANCES</u> _____	[ ]	[X]	[ ]
Reheat Coils _____	[X]	[ ]	[ ]
VAV Boxes _____	[ ]	[X]	[ ]
CAV Boxes _____	[X]	[ ]	[ ]
DD Boxes _____	[X]	[ ]	[ ]
Fan Coil _____	[ ]	[ ]	[ ]
Other <u>CABINET HEATERS IN STAIRWELLS</u> _____	[ ]	[X]	[ ]
<b>f. Control Type:</b>			
[X]Pneu [X] Electric [ ]DDC [X] DDC Upgrade _____	[ ]	[X]	[ ]

**B. COMMENTS:**

THE RADIANT PANELS ARE ALL NEW SINCE THE 1994 RENOVATION AND THE ONLY OBSERVATION RELATED TO HEATING WAS SOME COLD AIR INFILTRATION ON WINDY, WINTER DAYS.

**C. COMPONENT RATING:**    (\$ 1,185,500)    ( 97 %) = \$ 1,146,100  
                                  Possible            Condition            Component  
                                  Value            Value Multiplier    Value



ELECTRICAL/SERVICE & DISTRIBUTION

FAC # 025

DATE JAN.97

INSPECTOR: AJR

A. SYSTEM DESCRIPTION

a. Service:

Substation: [ ]Buckeye, [X]McCracken Power Plant [ ]AEP

Primary Voltage: [X]13,200 Volts, [ ]4,160 Volts

Switch Gear Circuit No.: PGN9/PGS3

Transformer:

Manufacturer	Type	KVA	Secondary Voltages	Room #
GEN. ELEC.	SILICONE	750	208/120	0170
SQUARE-D	SILICONE	500	480/277	0170

b. Distribution System: Room 0010 Room

1. Motor Control Center (MCC) Room 0170 Room

Panelboard [X]Fused, [ ]Circuit Breakers

Voltage [X]480/3, [ ]277/3, [ ]208/3, [ ]240/1

Amperage [ ]1200A, [X]800A, [ ]600A, [ ]400A, [ ]200A

2. Lighting Room 0170 Room

Panelboard [X]Fused, [ ]Circuit Breakers

Voltage [ ]480/3, [ ]277/3, [X]208/3, [ ]240/1

Amperage [X]1200A [ ]250A, [X]200A, [ ]150A, [ ]100A

3. Building Power Room 0170 Room

Panelboard [X]Fused, [ ]Circuit Breakers

Voltage [ ]480/3, [ ]277/3, [X]208/3, [ ]240/1

Amperage [X]1200, [ ]250A, [X]200A, [ ]150A, [ ]100A

4. Isolated Ground Power (IGP) Room Room

Panelboard [ ]Fused, [ ]Circuit Breakers

Voltage [ ]480/3, [ ]277/3, [ ]208/3, [ ]240/1

Amperage [ ]400A, [ ]250A, [ ]200A, [ ]150A, [ ]100A

c. Conduit and Wire:

Conduit: [X]Steel, [ ]Aluminum, [ ]PVC, [X]Flexible [ ]MIT

Conductors: [X]Copper, [ ]Aluminum,

Wire: [ ]PVC, [ ]Romex, [ ]Armored Cable(BX)

d. Emergency System:

[ ]Battery backup Room

[ ]Emergency Panel Room

[ ]UPS Room

e. Emergency Generator:

Manufacturer NONE [ ]Diesel [ ]Gasoline [ ]NG

Size N/A KVA, N/A Volts, Location, Room # N/A

B. COMMENTS:

THE ELECTRIC SERVICE WAS ADEQUATE FOR THE POWER DEMANDS AND THE OCCUPANTS HAD NO PROBLEMS WITH CONVENIENCE OUTLETS.

C. COMPONENT RATING: (\$ 234,600 ) ( 95 % ) = \$ 222,100
Possible Condition Component
Value Value Multiplier Value

**ELECTRICAL/LIGHTING & POWER**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

<b>a. Lighting (lamp type):</b>	N/A	Sat	Att
Fluor 40 watt _____	[ ]	[X]	[ ]
Fluor 32 watt _____	[X]	[ ]	[ ]
Fluor Can _____	[X]	[ ]	[ ]
Incandescent <u>AT ENTRANCES</u>	[ ]	[X]	[ ]
HID [ ]Mercury [X]HPS [X]Metal Halide <u>OUTSIDE AT ENT.</u>	[ ]	[X]	[ ]
Low Voltage (12V) _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**b. Lighting Levels**

Halls _____	[ ]	[X]	[ ]
Rooms _____	[ ]	[X]	[ ]
Mechanical Rooms _____	[ ]	[X]	[ ]

**c. Fixture Condition**

Fixtures _____	[ ]	[X]	[ ]
Bulbs _____	[ ]	[X]	[ ]
Fixture Lens _____	[ ]	[X]	[ ]

**d. Receptacles & Switches:**

Wall Outlet _____	[ ]	[X]	[ ]
IGP Wall Outlet _____	[X]	[ ]	[ ]
GFIC Breakers _____	[X]	[ ]	[ ]
Switches _____	[ ]	[X]	[ ]
Cover Plates _____	[ ]	[X]	[ ]

**c. Special:**

Lightning Protection _____	[X]	[ ]	[ ]
UPS _____	[X]	[ ]	[ ]
Communication [X]Clock [ ]Public Address [X]Bells	[ ]	[X]	[ ]
Alarm [X]Fire [ ]Security	[ ]	[X]	[ ]
Telecommunication [X]Phones [X]Data [ ]Cable TV	[ ]	[X]	[ ]
Data Systems _____	[ ]	[X]	[ ]
Fiber Optics _____	[ ]	[X]	[ ]

**B. COMMENTS:**

THE LIGHTING SYSTEM WAS REPLACED DURING THE 1994 RENOVATION AND IS IN GOOD CONDITION.

**C. COMPONENT RATING:** (\$ 1,556,000) ( 91 %) = \$ 1,421,300  
 Possible Condition Component  
 Value Value Multiplier Value

**SAFETY STANDARDS**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

<b>a. Exits:</b>	<u>N/A</u>	<u>Sat</u>	<u>Att</u>
Stair Construction:			
concrete _____	[ ]	[X]	[ ]
steel _____	[X]	[ ]	[ ]
wood _____	[X]	[ ]	[ ]
Number of Exit Stairs <u>2</u>	[ ]	[X]	[ ]
Number of Other Exits <u>3</u>	[ ]	[X]	[ ]

**b. Fire Rating:**

Construction Type: [ ]IA/B [X]IIA/B [ ]IIC [ ]IIIA [ ]IIIB [ ]IV [ ]V A/B  
 Building Height: 63 ft., 3 + BASEMENT stories

**c. Extinguishing Systems:**

Portable _____	[ ]	[X]	[ ]
Standpipe _____	[ ]	[X]	[ ]
Hose Cabinets _____	[ ]	[X]	[ ]
Sprinklers <u>IN 14 LOCATIONS THROUGHOUT THE BUILDING</u>	[ ]	[X]	[ ]
Gas Suppression _____	[X]	[ ]	[ ]
Other _____	[X]	[ ]	[ ]

**d. Detection & Alarm Systems:**

Pull Stations _____	[ ]	[X]	[ ]
Bells _____	[ ]	[X]	[ ]
Horns <u>IN CORRIDORS</u>	[ ]	[X]	[ ]
Strobes <u>IN CORRIDORS</u>	[ ]	[X]	[ ]
Annunciator Panel <u>AT WEST ENTRANCE</u>	[ ]	[X]	[ ]
Smoke Detectors:			
Halls _____	[X]	[ ]	[ ]
Elevators _____	[ ]	[X]	[ ]
Rooms _____	[X]	[ ]	[ ]
Equip Rooms _____	[ ]	[X]	[ ]
Ducts _____	[ ]	[X]	[ ]

**e. Lighting Systems:**

Exit Signs [X]BATTERY [ ]EMC _____	[ ]	[X]	[ ]
Exit Lighting [X]BATTERY [ ]EMC _____	[ ]	[X]	[ ]
Emergency Lighting [X]BATTERY [ ]EMC _____	[ ]	[X]	[ ]
Emergency Generator <u>NONE</u>	[X]	[ ]	[ ]

**f. Lightning Protection:** \_\_\_\_\_ [X] [ ] [ ]

**B. COMMENTS:**

EXIT LIGHTING IS PROVIDED BY BATTERY POWERED EXIT LIGHTS.

**C. COMPONENT RATING:** (\$ 889,100 ) ( 95 % ) = \$ 841,800  
                                     Possible            Condition            Component  
                                     Value            Value Multiplier    Value

**BUILDING PERIMETER EVALUATION**

FAC # 025

DATE JAN.97

INSPECTOR: AJR

**A. SYSTEM DESCRIPTION**

**a. Building Access:**

	N/A	Sat	Att
Driveway _____	[X]	[ ]	[ ]
Loading Dock <u>CRACKS IN BLACKTOP AND RETAINING WALL</u>	[X]	[ ]	[X]
Sidewalks			
Front <u>SOUTH SIDE HAS CRACKS</u>	[ ]	[ ]	[X]
Side <u>WEST SIDE HAS CRACKS</u>	[ ]	[ ]	[X]
Rear <u>CRACKS IN NORTH SIDE WALK</u>	[ ]	[ ]	[X]
Steps			
Front <u>SOME SETTLEMENT CRACKS</u>	[ ]	[ ]	[X]
Side <u>EAST SIDE HAS CRACKS</u>	[ ]	[ ]	[X]
Rear <u>NORTH SIDE HAS SETTLEMENT CRACKS</u>	[ ]	[ ]	[X]
Ramp _____	[X]	[ ]	[ ]

**b. Lawn and Landscaping:**

Lawn <u>SOUTH SIDE HAS BARE SPOTS</u>	[ ]	[ ]	[X]
Shrubs <u>IVY ON NORTH SHOULD BE REMOVED</u>	[ ]	[ ]	[X]
Trees _____	[ ]	[X]	[ ]
Undesirable Insect _____	[X]	[ ]	[ ]
Bedding Material _____	[ ]	[X]	[ ]
Watering System _____	[X]	[ ]	[ ]
Pedestrian Barrier <input type="checkbox"/> WOOD POSTS <input type="checkbox"/> STEEL POSTS	[X]	[ ]	[ ]

**c. General Site Information:**

Signage <u>ON BUILDING AND AT NORTH OVAL DRIVE</u>	[ ]	[X]	[ ]
Address Identification <u>ON SIGN</u>	[ ]	[X]	[ ]
Security Lights _____	[ ]	[X]	[ ]
Street Lights _____	[ ]	[X]	[ ]
Drainage _____	[ ]	[X]	[ ]
Storm Drains _____	[ ]	[X]	[ ]

**B. COMMENTS:**

THE WALKS AND BLACK-TOP AREAS AROUND THE BUILDING ARE IN NEED OF ATTENTION, AS WELL AS THE STEPS

The Ohio State University  
Department of Physical Facilities  
**BUILDING AUDIT METHODOLOGY**

1. BUILDING AUDIT PROGRAM OBJECTIVE

To provide a building-by-building inventory, including maintenance deficiencies that currently exist, for the 172 OSU buildings that the Department of Physical Facilities is budgetary responsible. These audits will be used to establish repair and renovation projects, budget cost estimates for these projects, and overall levels of required maintenance funding.

2. BUILDING AUDIT APPROACH

A five-step procedure is used to meet the program objectives:

1. Collect Historical and Inventory Data on each building.
2. Interview Building Occupants.
3. Perform a Building Inspection.
4. Complete Building Evaluation Forms.
5. Issue Written Report.

3. DATA ORGANIZATION

The data collected is stored by hard copy with field notes in a building file established for each building. The report data is being stored in a database program that allows retrieval of specific data as it is needed. The "Building Evaluation" forms contain ratings for the condition of each building component and a description of any deficiencies for those components. The "Building Information" sheets provide data on the utilities to the buildings and the type of systems in each building.

4. COST ESTIMATES

Costs are for budgeting purposes only and are based on The Means Standard Construction Cost data, auditor experience, industry sources and OSU project cost data. Costs are reported current to the year of the audit. The building component values assigned in the "Building Evaluation" forms are not cost estimates. These values are calculated from the replacement cost provided by The Office of Campus Planning and space Utilization for each OSU building. This building replacement cost is allocated to each building component to provide an estimated value for each component. Project cost estimates will exceed the building component values in most situations because of tear-out, handling and site limitations that occur in building component replacement projects.

5. DATA USAGE

Repair and Renovation Projects: provided to assist in the budgeting process for the Department of Physical Facilities.

Building Evaluation: provided to give a numerical rating for each building on campus quantifying its percentage of deficiency.

6. LIMITATIONS

- (1) All inspections are visual and do not include physical tests,

instrumentation or metering measurements, sampling, or monitoring.

(2) Only random typical offices or laboratories are entered. Typical spaces are deemed to be representative of average conditions throughout each building.

(3) The scope of the analysis does not include complete OSHA, energy, or physical impaired access study. Buildings and components are inspected for condition and general safety requirements rather than specialized code conformance.

(4) It is assumed that the buildings inspected were approved by the State of Ohio Division of Factory and Building Inspection at the time of construction. The recommendations listed in the reports are not an attempt to bring these existing buildings up to present day code standards. Rather, the intent is to eliminate obvious problems and to upgrade the buildings in a reasonable manner in regard to occupant safety.

(5) Cost estimates are in current year dollars and include contractor mark-ups, construction administration costs, and architectural/engineering costs where applicable. Escalation factors must be applied for future work. Combining of projects should serve to decrease costs. These estimates are strictly for purposes of budgeting, and final pricing will be required when the specific scope of work for the project is defined.

(6) The building inspections are defined to include the following:

(a) Includes general repainting and redecorating, wholesale replacement of building and system components. on going maintenance, replacement and renovation projects are not included.

(b) Includes exterior building walls and attached items.

(c) Includes the first step up at all entries. Ramps outside the buildings are included; the steps and walks up to the ramps are not included.

(d) Blinds, drapes, light bulbs, and movable furniture are not included.

(e) Fixed equipment inside the buildings that is installed and maintained by a specific academic department or using agency is not included.

(f) Utility lines supplying the buildings are not included.

(g) The program needs of the using department are assumed to be satisfied. No consideration has been given to anticipate any changes in current occupant space needs.

## ABBREVIATIONS

A/C.....	AIR CONDITIONING
AHU.....	AIR HANDLING UNIT
ATT.....	ATTENTION
BLDG.....	BUILDING
BUR.....	BUILT UP ROOF
CAV.....	CONSTANT AIR VOLUME
COND.....	CONDENSATE WATER
CIP.....	CAST IN PLACE
DDAHU.....	DUAL DUCT AIR HANDLING UNIT
DDHV.....	DUAL DUCT HIGH VELOCITY
DHWH.....	DOMESTIC HOT WATER HEATER
DHWR.....	DOMESTIC HOT WATER RETURN
DHWS.....	DOMESTIC HOT WATER SUPPLY
DHWT.....	DOMESTIC HOT WATER TANK
DX.....	DIRECT EXPANSION AIR CONDITIONER
EMC.....	EMERGENCY CIRCUIT
EWC.....	ELECTRIC WATER COOLER
FPM.....	FEET PER MINUTE
GPM.....	GALLONS PER MINUTE
HID.....	HIGH INTENSITY DISCHARGE LIGHT
HPS.....	HIGH PRESSURE STEAM (125 PSI)
HVAC.....	HEATING, VENTILATING AND AIR CONDITIONING
KV.....	KILOVOLTS
KVA.....	KILOVOLTS AMPS
KW.....	KILOWATTS
LC.....	LIQUID COOLED
LF.....	LINEAL FEET
LPS.....	LOW PRESSURE STEAM (15 PSI)
MPS.....	MEDIUM PRESSURE STEAM (50 PSI)
MZCV.....	MULTIZONE CONSTANT VOLUME AIR HANDLING
N/A.....	NOT APPLICABLE
PSI.....	POUNDS PER SQUARE INCH
RM.....	ROOM
RTU.....	ROOF TOP UNIT (HEATING OR A/C)
SAT.....	SATISFACTORY
SF.....	SQUARE FEET
S/P.....	STAND PIPE
SR.....	STEAM RETURN LINE
SS.....	STEAM SUPPLY LINE
SY.....	SQUARE YARDS
T&G.....	TONGUE AND GROVE
TR.....	TERMINAL REHEAT
V.....	VOLTS
VAV.....	VARIABLE AIR VOLUME

**APPENDIX**  
Reduced Scale Building Floor Plans  
C-1 Building Space Assingnments