Best Bang for Your Buck  The Re-Use of Ohio and Miller Halls

Fort Valley State University

Miller Hall 1960

Ohio Hall 1938
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<th>The Design Team</th>
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<td><strong>Architects</strong></td>
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<td><strong>IT &amp; A/V</strong></td>
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<td>J&amp;A Engineering</td>
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Ohio Hall Existing Conditions
Ohio Hall Existing Conditions

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The Task ..........

- Insert energy efficient systems
- Address the building envelope
- Accommodate new programs
- Achieve ADA /Code Compliance
- Maintain historic features
- Bring new vitality to old spaces
Ohio Hall
The Program
ADA and Code Compliance

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Ohio Hall
Building Envelope

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Ohio Hall  Maintain Historic Features

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Ohio Hall  Revitalized Spaces

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Miller Hall
The Program
ADA and Code Compliance

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Miller Hall
Energy Study

Construction Investment

vs

Energy Payback

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Miller Hall
Revitalized Spaces

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Miller Hall
Revitalized Spaces
Best Bang for Your Buck

Ohio Hall Renovation $160/sq ft

New Dorm Construction
- Stick Built $100-150/sq ft
- Institutional Grade $200-250/sq ft

Miller Hall Renovation $108/sq ft
New Classrm Construction $191-215/sf ft
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Ohio Hall
Refurbished Windows $164,000
New Windows $187,000

Miller Hall
Refurbished Windows $72,000
New Windows $187,000
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Ohio Hall and Miller Halls

Variable Refrigerant Flow System  $40/sf

4-Pipe System  $48/sf
Best Bang for Your Buck

Ohio
Refurbish Quarry Tile $26,290
New Solid Surface Tile $30,156
Issues in Renovating Older Buildings in General and Using Ohio and Miller Halls at Fort Valley State as examples
Outline of this discussion

• Site – Alternative uses for the land

• Building Envelope
  – Foundation and moisture
  – Floors, walls and structural frame
  – Roof

• Abatement of Asbestos and lead

• Interior Finishes
  – Floors
  – Walls
  – Ceilings
  – Trim
  – Window and Doors

• MEP

• Life Safety ADA and other code issues

• Davis Bacon Act
Structure – Foundation & Moisture

From the outside
Structure – Foundation & Moisture

From the inside
Structure – Roof and Walls
Structure – Roof and Walls
Structure – Roof and Walls
Roof - Slate
Roof - Metal
Exterior Sheet metal

Sand and wash with a good de-glosser.
Prime with recommended Primer
2 coats of aliphatic urethane.
1 coat of clear aliphatic urethane.
Mercer Admin was installed Fall 1999
Cost = $2.25/SF
Exterior Wood

Wash with a good de-glosser. Prime with oil based primer 2 coats of 100% acrylic house paint Should last 8-10 Years with touch up only Cost depends on many factors.
Exterior Brick

Tuck point part or all if necessary. Wash with light pressure washer to brush clean with Prosoco type Masonry cleaner. Two coats of 100% acrylic clear sealer. Cost for two coats of sealer only = $0.40/sf
St. Joe was still working after 10 years
Hay House absolutely stopped the leaks
Exterior Stucco

Brick: Clean and pressure wash. Cut out and fill cracks with Urethane. 2 coats of elastomeric coating.

Christ Church has been on 25 years.
Exterior Stucco

Brick: Clean and pressure wash. Cut out and fill cracks with Urethane. 2 coats of elastomeric coating
Christ Church has been on 25 years
Abatement of Asbestos and lead

Prices vary quite a large amount on lead abatement. Dannenburg Bldg in Macon the prices varied from $30,000 to $250,000.
Remove flaking paint and encapsulate for walls, ceilings and trim.
Interior Finishes - Floors
Interior Finishes - Floors

Interior Finishes - Floors

Floors - Wood

• Sand and Refinish floors 
  $1.50 to $3.00 /SF

• You can sand a floor about 3 times

• If the floor can’t be sanded you can hand scrape.

• Most floors we have seen have been sanded 1 time

• Old floors are a full 1” and so can be sanded more

• Engineered wood floors over underlayment can work well.
Floors - Tile

Removed VCT with hydrochloric acid. Then flooded the floor with mineral spirits and scrubbed with a wire brush. Finally used a floor machine with an open sanding disk.

Cleaned quarry tile floors at Ohio Hall
Interior Finishes - Walls

Patch Plaster $1.50 /SF Avg to Bad condition
New Plaster $3.00 / SF

GWP on furring:
- Furring strips $1.10 per lf
- Gyp board installed $1.00 per sf

Assume 1lf/sf of wall for furring strip
so total cost around $2.10 per sf
Interior Finishes – Windows
Removed Broken Panes and glazing. Removed the rest of the glazing and figured we would break 1/3rd of glass. Used hand tools. Reglazed all windows and painted with oil based paint. Cost averaged 1 man-hr per pane. So assume $25/hr at 3 panes per window = $75 per window.
Interior Finishes – Trim & Doors

Issues with doors and hardware.
Mechanical Electrical Plumbing

Cost of various HVAC systems..
Life Safety and ADA beyond my pay grade.

Davis-Bacon increases costs in two ways:
Initial rate difference
Workers slow down.
Reuse Benefits to FVSU

Ohio
- Maximum number of beds
- Historic Honors Dorm
- Student and Alumni Satisfaction

Miller
- High Tech Quality Classrooms
- Revitalized Lecture Hall
- Student Commons
- Quality Faculty Offices
- Faculty and Alumni Satisfaction

Furthered the Goals of the FVSU Master Plan
Ohio Hall

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Value
Historic Preservation
Sustainability
FVSU Satisfaction