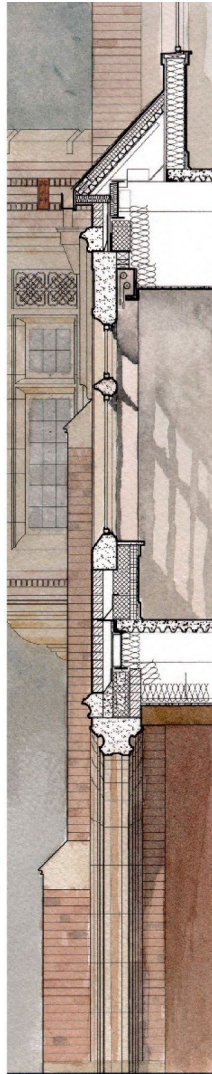


ELEVATION DETAIL



TYPICAL WALL SECTION

Association of University Architects

2003 Case Study Awards Program

Weinstein Hall

“To LEED or not LEED”



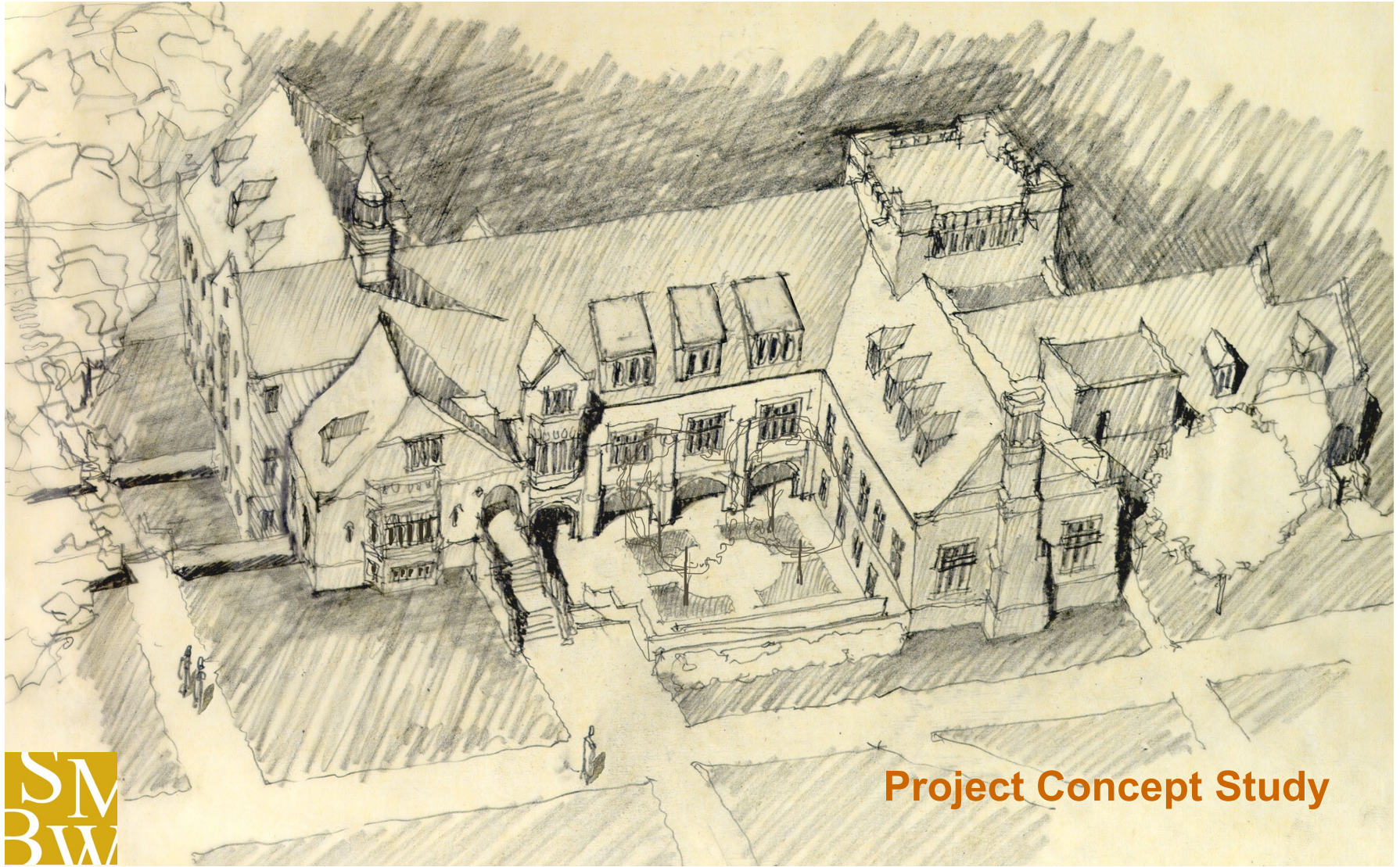
WEINSTEIN HALL
UNIVERSITY OF RICHMOND





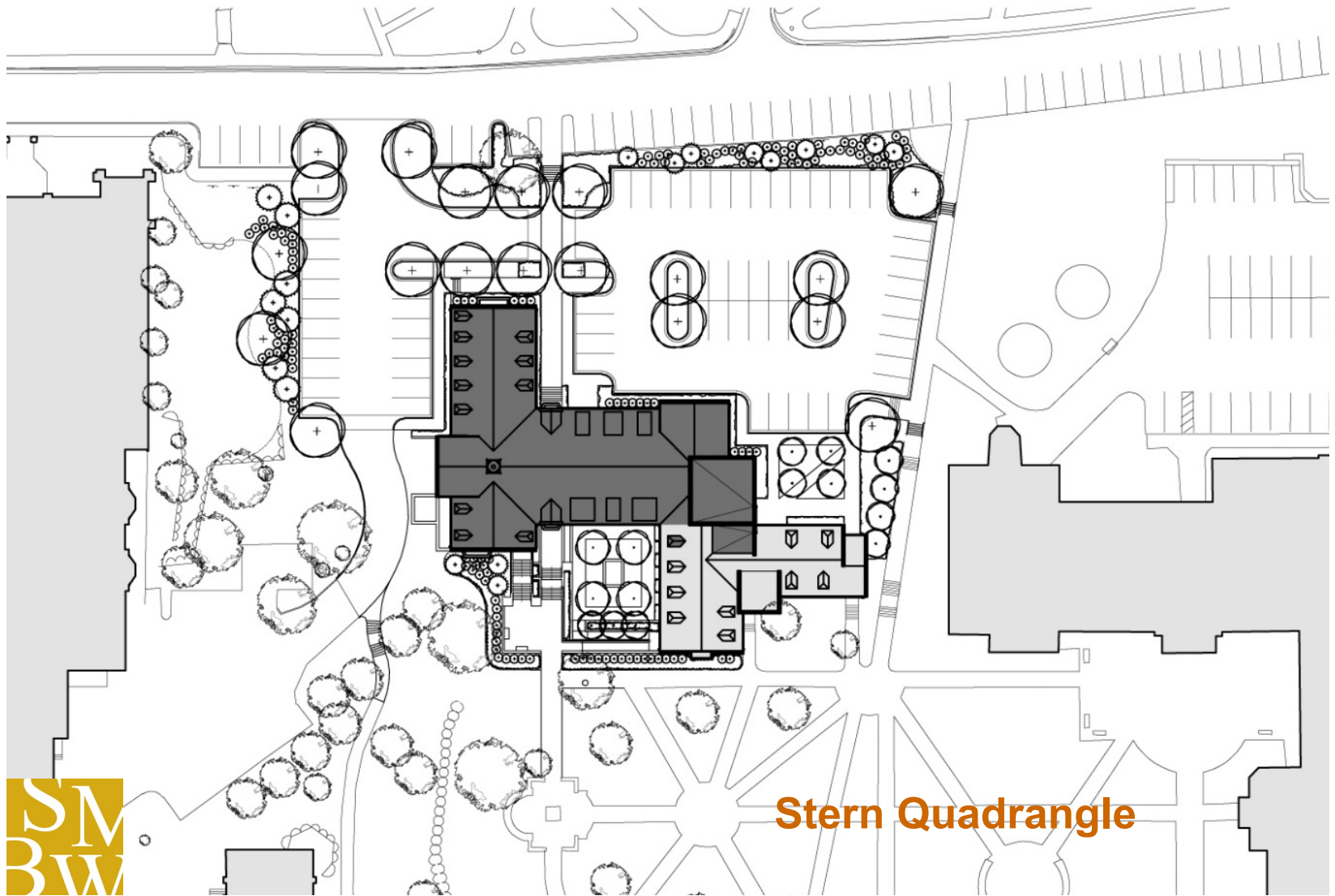
LEED™

LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN



SM
BW

Project Concept Study

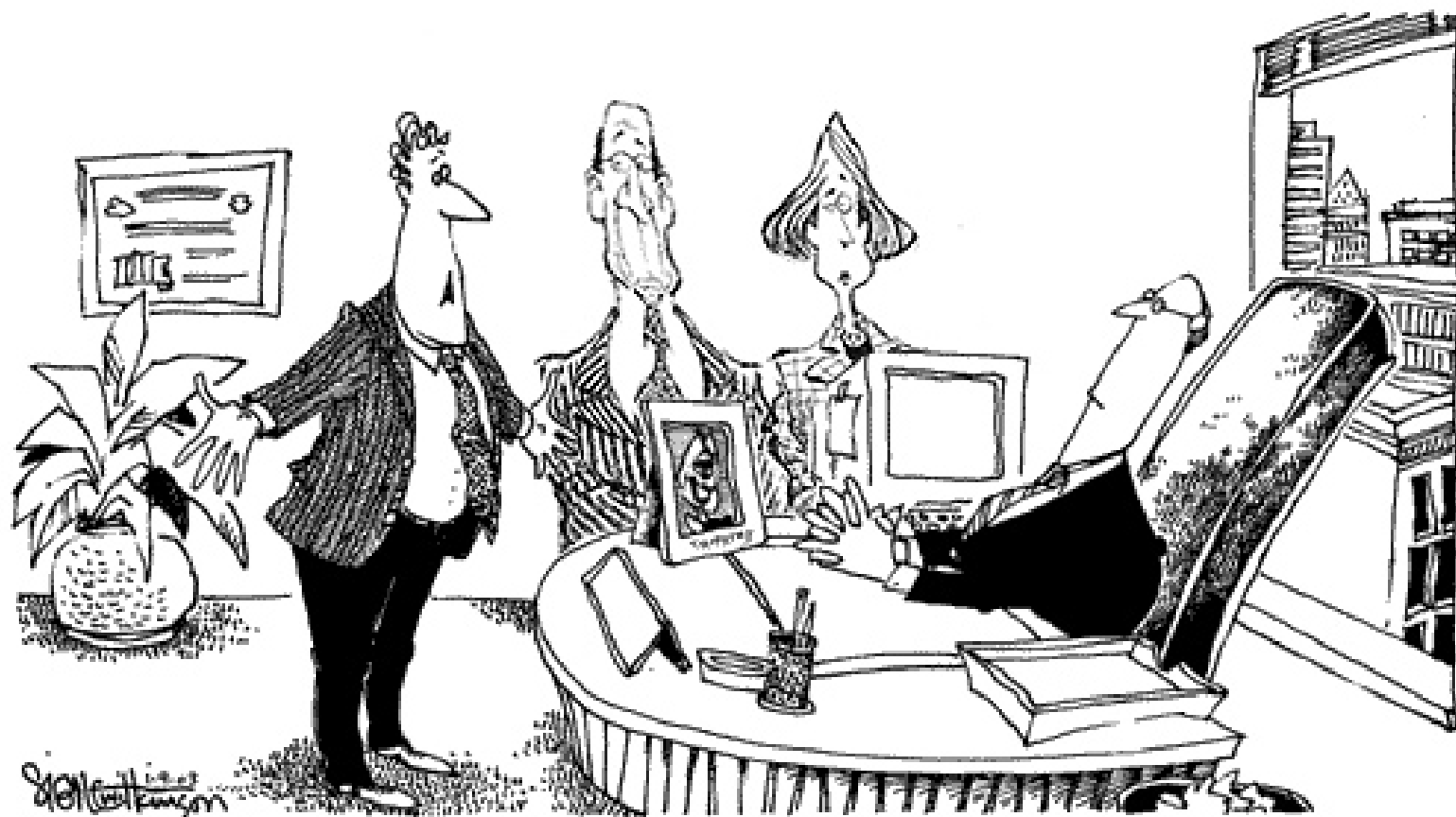


Stern Quadrangle



Project Data:

Year Completed:	2003 (projected)
Original Building Size:	14,000 s.f.
New Building Size:	52,000 s.f.
Professional of Record:	SMBW Architects
Builder:	Conquest, Moncure & Dunn
Construction Cost:	\$9,000,000
Project Cost:	\$12,000,000
Project Delivery:	Construction Manager at Risk







Benefits of Green Building

Environmental Benefits

- Reduce the impacts of natural resource consumption

Economic Benefits

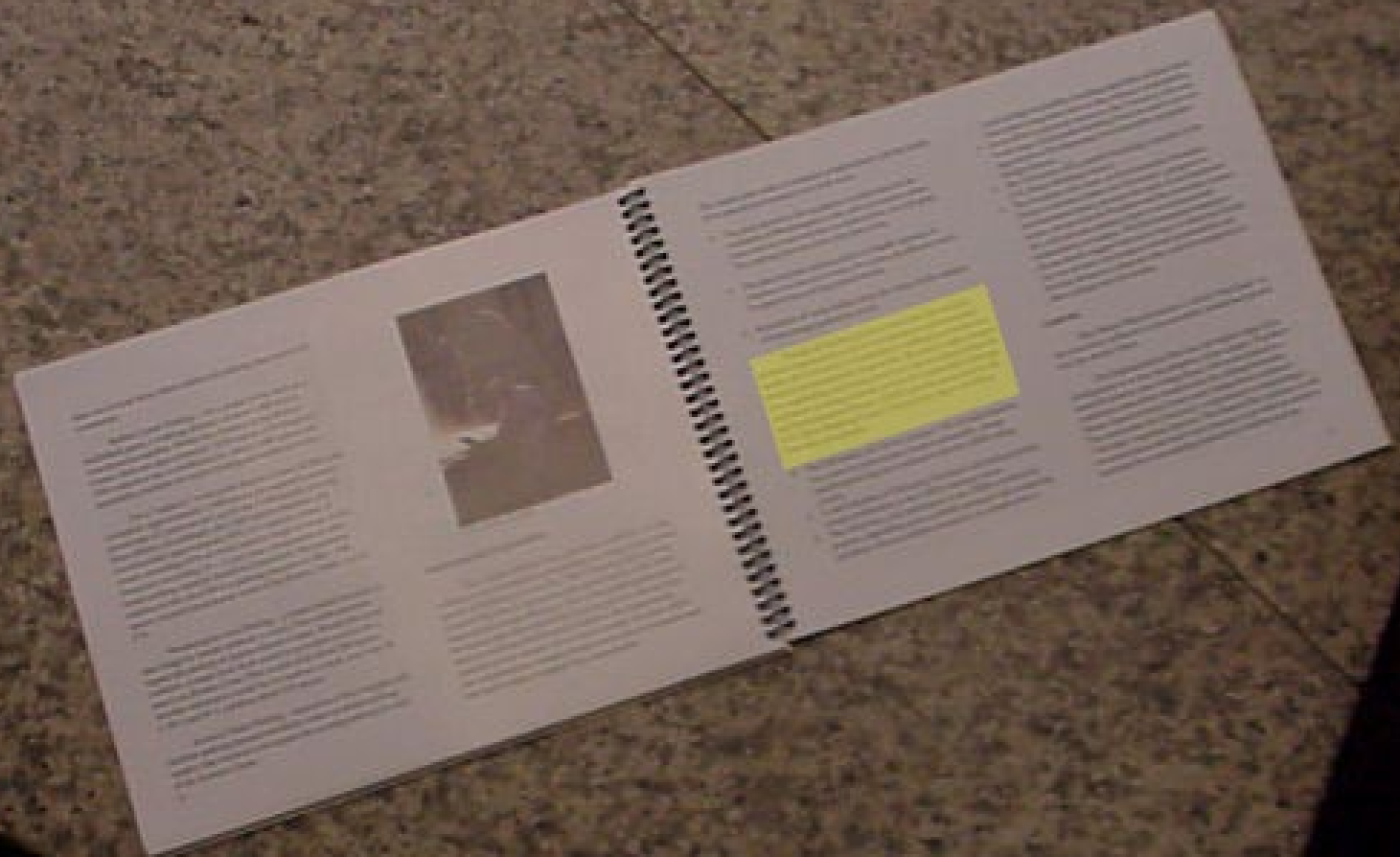
- Improve the bottom line

Health and Safety Benefits

- Enhance occupant comfort and health

Community Benefits

- Minimize strain on local infrastructures and improve quality of life









The Five Environmental Categories of LEED:

- 1) Sustainable Sites**
- 2) Water Efficiency**
- 3) Energy & Atmosphere**
- 4) Materials & Resources**
- 5) Indoor Environmental Quality**

**Plus an additional category:
Innovation & Design Process**









Sustainable Sites

- 1) Erosion Control**
- 2) Alternative-Fuel Refueling Stations**
- 3) No New Parking & Preferred Parking For Carpools**
- 4) Stormwater Management**



Water Efficiency

1) No Landscape Irrigation



Energy & Atmosphere

- 1) Building Commissioning**
- 2) CFC Reduction in HVAC&R Equipment**
- 3) Reduce Ozone Depletion**



Materials & Resources

- 1) Building Reuse**
- 2) Construction Waste Management**



Indoor Environmental Quality

- 1) Minimum IAQ Performance**
- 2) Carbon Dioxide Monitoring**
- 3) Construction IAQ Management Plan**
- 4) Low VOC Paints**
- 5) Low VOC Carpets**
- 6) Indoor Chemical & Pollutant Source Control**
- 7) Controllability of Systems: Perimeter**
- 8) Controllability of Systems: Non-perimeter**
- 9) Views of Outside**



Innovation & Design Process

1) LEED Accredited Professional







Rejected Credits:

- Building Reuse
- Daylighting
- Construction IAQ Management Plan
(prior to occupancy)



Accepted Credits:

- Reduced Site Disturbance
- Resource Reuse
- Locally Harvested Materials
- Low VOC Composite Wood
- Paperless Submission



LEED Expenses:

• Registration Fee	\$750
• Certification Fee	\$1,500
• Engineering Fees (LEED compliance)	\$15,000
• Alternative Refueling Stations	\$5,000
• Low VOC Paints	\$5,000
• Low VOC Carpet	\$5,000
• Low VOC Composite Wood	\$2,000
• Additional Administrative Expense	<u>\$20,000</u>
Total	\$53,250





Lessons Learned:

- LEED can be challenging to achieve with Collegiate Gothic architecture
- Join a support group
- Learn to speak “engineering”
- Only hire engineers that have experience/commitment regarding LEED