

Labs21 Conference

**New Labs in Old Buildings:
Adaptive Re-use of Historic Properties
for Laboratory Facilities**



Triangle Biotechnology Center

Durham Central Park



Case Study Brief

- Adaptive Re-use
- Certified Historic Renovation
- Community Investment Strategy
- Urban Revitalization
- Multi-tenant R & D Facility Planning
- Lab Design, Construction, Commissioning and Operation



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[SCIENTIFIC PROPERTIES]

Adaptive Re-use: Key Issues

- **Site selection** – access, security, environmental conditions, parking, exhaust stack positioning
- **Building selection** - construction types, floor loading, roof loading, column spacing, ceiling height, accessibility



Certified Historic Renovation

- National Register of Historic Places
- Secretary of the Interior Standards
- State Historic Preservation Office
- National Park Service Review
- Schedule and Budget Issues



Project Timeline

May-July 2001: Documents & Permitting

August: Structural steel, thin slab mezzanine & roof platform

September: Acid Waste Grid & Central Utility Spine

October-November: General construction

December: Start-up, commissioning & delivery



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Laboratory Design

Central Utility Spine

Acid Waste Grid

Mechanical

Electrical

Data

Laboratory Furniture

Common Lab

Standby Electrical

Power



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Office Design

- Historic character**
- Open, column-free space**
- Power-Data Grid**
- Day lighting**
- Interior glazing**
- Common Areas**



Safety and Security

**24/7 Mission Critical
Facilities**

**Digital Security &
Access Control**

CCTV

**Safety Showers /
Eyewashes**

**Flammable / Ventilated
Storage**

ADA Compliance



Sustainability

Adaptive re-use

Construction materials salvage

Erosion control

Natural lighting

High-efficiency lighting



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Why Historic Preservation and Adaptive Re-use?

- Green
- Economically advantageous?
Probably not - but can be competitive
- Limited greenfield site availability
- Appealing to users as corporate citizenship opportunities
- Architecturally unique and stimulating



Future Directions?

- LEED Certification
- Transit Oriented Development
- Public/Private Partnership
- Community Re-investment

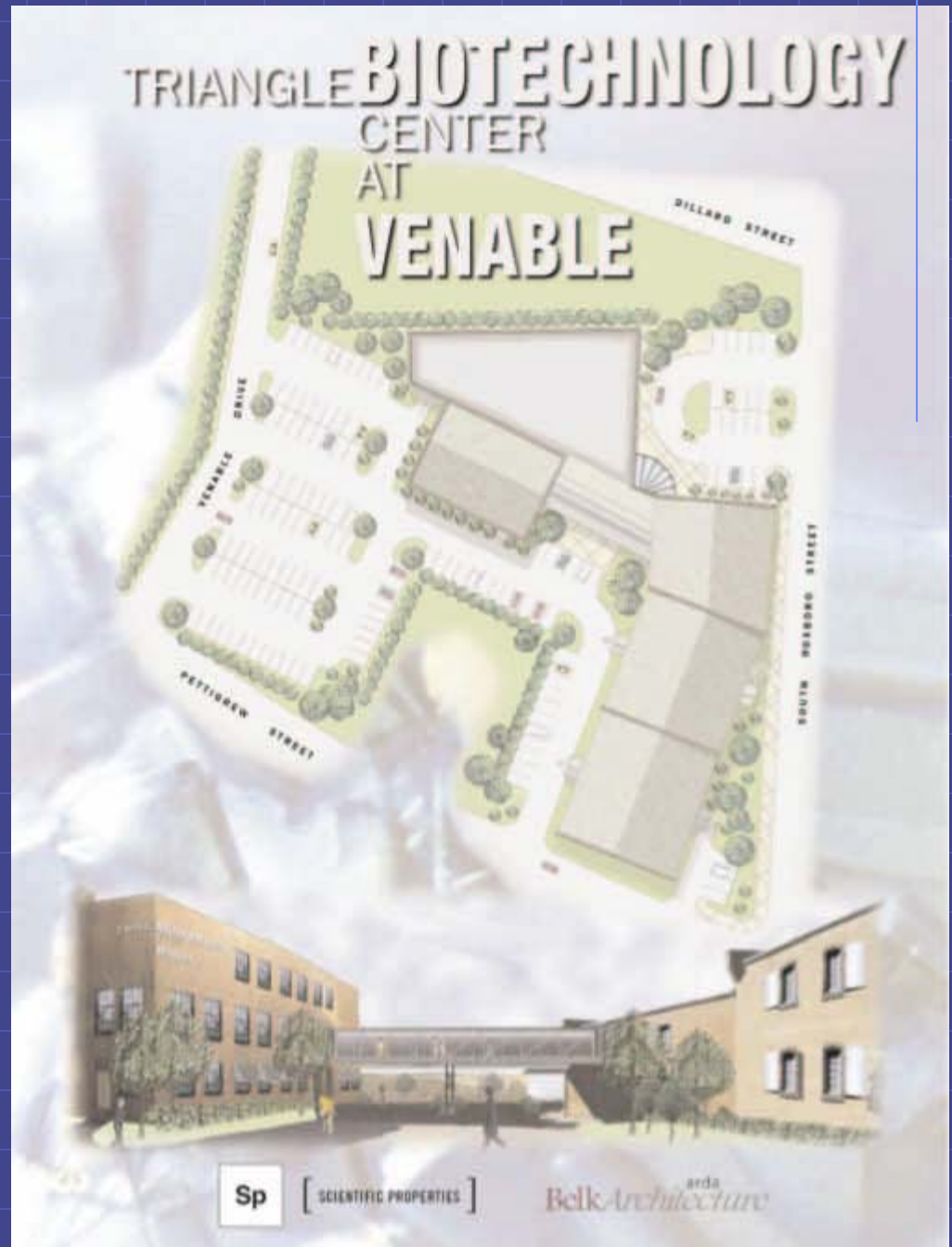


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Design Brief

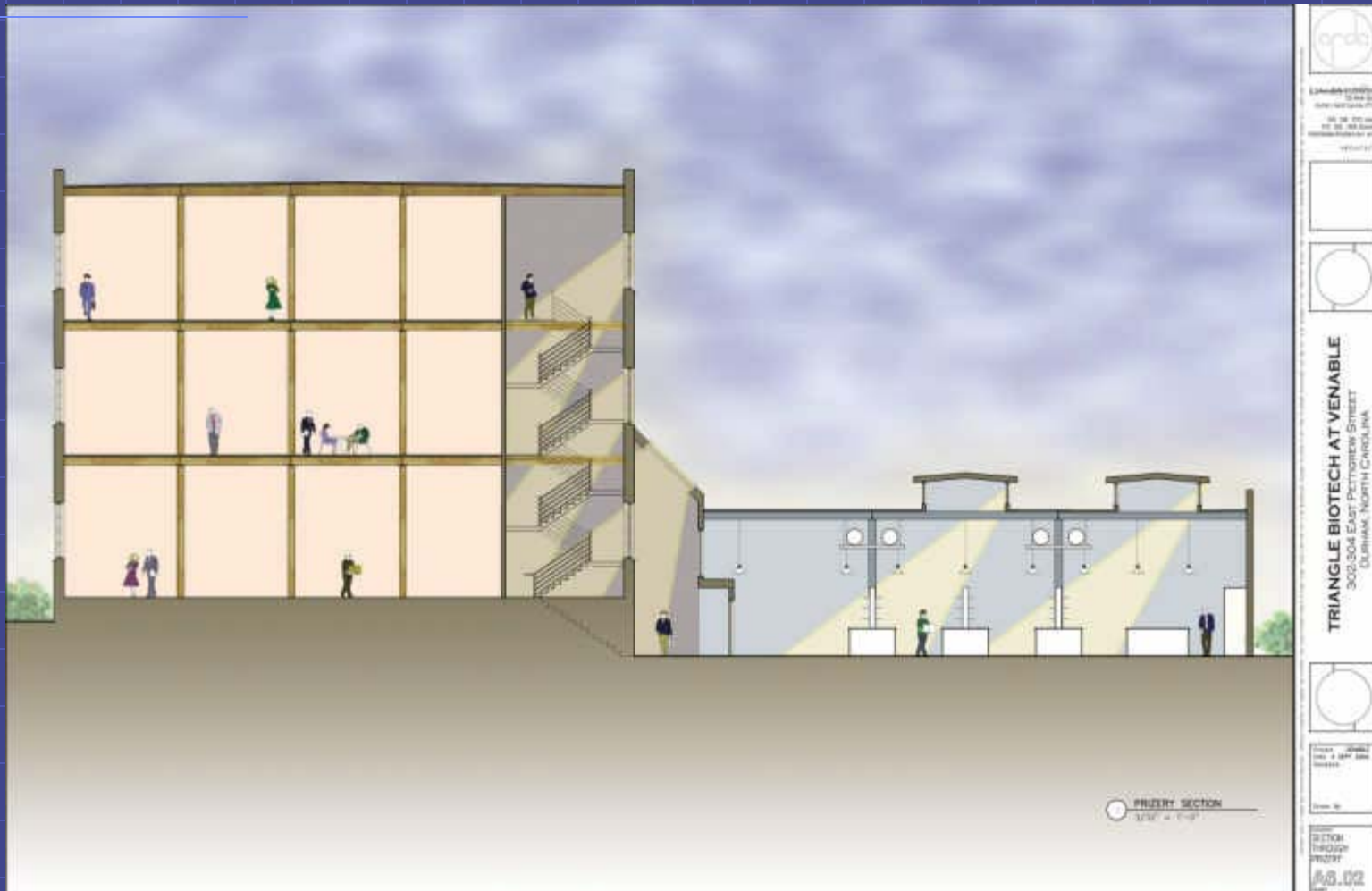
100,000 SF R&D
Urban Renewal
Multi-tenant design
LEED compliant
Transit Oriented
Adaptive Re-use
Certified Historic
Renovation



Triangle Biotechnology Center Venable



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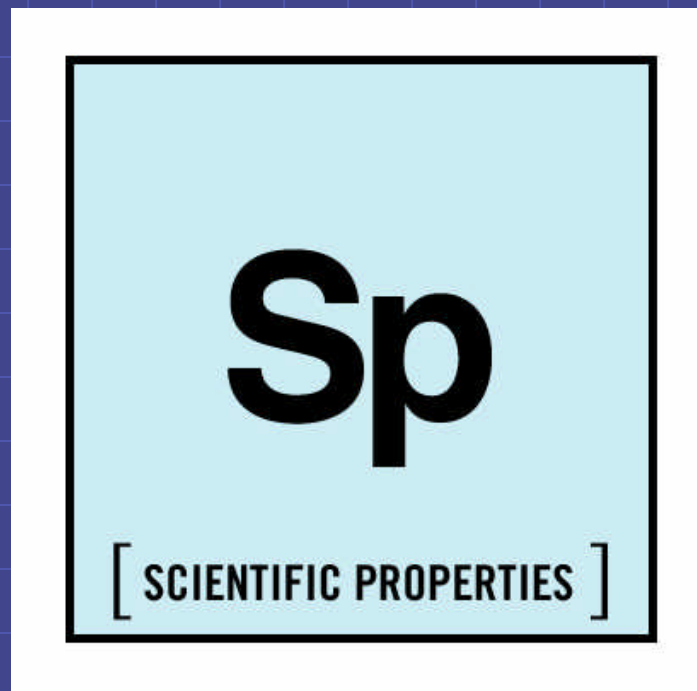
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