North Cityfront Plaza: Hotel/Condominium Tower

Arch 573
High-Rise & Habitat Studio
Fall 2014
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Project

- Mixed-use skyscraper on Chicago River
  - Condominiums
  - Hotel
  - Retail
  - Restaurant
  - Sky Lobbies/Atria
  - Parking
  - Services
Challenges & Opportunities

- New Public/Private Relationships
- Social Spaces—sense of community
- Transportation—horizontal and vertical
- Program/Form expression
- Advances in building systems and technology
- Systems Integration
- Work with experienced professionals
- Tall Buildings add substance/excitement to portfolio

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Tall Buildings Contribute to Urban Habitat

- Iconic Expression/Landmark
- Multi-Functional
- Multiple Urban Scales
  - Pedestrian (base)
  - Urban (shaft)
  - City (top)
- Locate near Transportation Hubs & Nodes
  - Reduces congestion
  - Increases travel/living efficiencies
- Vertical Density—uses less land area
- Efficient design & building systems integration
  - Promotes sustainable development

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Streeterville

• Neighborhood in Near North Side of Chicago
• Bounded by
  • Chicago River (south)
  • Magnificent Mile (west)
  • Lake Michigan (north and east)
• Reclaimed landfill and sandbar
• Mixed-uses—
  Hotels, restaurants, professional offices,
  residential high-rises, universities,
  medical centers, cultural venues

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Site

North Cityfront Plaza

- North Bank of Chicago River
- South of NBC Tower
- West of Chicago Sheraton Hotel
- North Water Street and N. Columbus Dr.
- Navy Pier to east
- Miracle Mile to north
Design Process

I Analysis
- Site & Physical Context
- Climate & Environment
- Parking & Transit
- Historical Background
- Precedents & Program
- Building Systems & Integration

II Conceptual/Schematic Design
- Massing models (styrene cutter)
- Drawings & Diagrams
- Form & Structure
- Vertical Program

III Design Development
- Vertical Transportation
- Space Utilization
- Systems Integration/Cladding

IV Presentations (mid-term/final)
- Drawings & Models

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Systems Integration

- Structure
- Vertical Circulation
- Mechanical
- Cladding and Curtain Walls
- Sustainable Technologies

Texts:
- Bachman, *Integrated Buildings* (recommended)

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Partnership/Consultants

- Solomon Cordwell Buenz, Chicago
- Martin Wolff, FAIA, Design Principal/Senior VP
  - LEED certified
  - Broad experience with building types
  - Award-winning projects
- Mark Frisch, FAIA LEED AP BP+C, Technical Design Principal
  - 26 years experience
  - LEED Certified
  - Award-winning projects

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Requirements

• Field trip to Chicago
  • Firm visit
  • Site visit
• Reviews
  • Pin-ups
  • Mid-term at SCB
  • Final
• Design Explorations
  • Models
  • Sketches
  • Drawings
  • Details

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Mixed-use Tower: Corina Boeckeler/Nikola Topalov. High-Rise & Habitat

FA 2010 Graduate Design Awards AIA Chicago Award Nominee