



171 17th Street, at the Atlantic Station® Development

The Atlantic Station® project is one of the nation's largest and most highly publicized mixed-use urban redevelopments. The 138 acre site, a remediated brownfield, is the former home of the Atlantic Steel plant. Upon completion, the Atlantic Station® project will feature 12 million square feet of residences, offices, retail, hotels, and restaurants as well as 11 acres of open space, creating a vibrant live, work and play community.

Situated at the crossroads of two of the region's most traveled interstates, I-75 and I-85, the Atlantic Station® development is a model for smart growth. The central location, the thoughtful site design, and the incorporation of alternative transportation modes foster a pedestrian-oriented environment that benefits the region by promoting a methodology for improving Atlanta's travel patterns.

All 138 acres of the Atlantic Station® site are developed according to environmentally sound principles and serve as a campus upon which future buildings can expand upon those principles. To document environmental achievements, the master development and 171 17th Street have used LEED™ (Leadership in Energy and Environmental Design), a green building rating system developed by the U.S. Green Building Council.

The landmark 171 17th Street office tower is the first major commercial development on this site. To demonstrate a commitment to sustainability, the building owner of 171 17th Street decided to pursue LEED™ certification. Guided by the project's LEED™ consultant, the owner chose to participate in the LEED™ Core and Shell Pilot Program.

In order to achieve LEED™ Core and Shell certification, a building needs to meet requirements for sustainable design, construction and operation. Requirements include prerequisites and selectable credits in six categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality and Innovation & Design Process.



Illustration by Dan Harmon

Building Statistics:

Location: Atlanta, Georgia

Completion Date: April 2004

Size: 536, 909 gross square feet

Footprint: 25, 408 square feet

Construction: Class A Office

Building Type: Commercial

Site Area: .66 acres

Unbuilt Area: .13 acres



Sustainable Sites

Mitigating Atlanta's sprawl through smart growth

From 1988 to 1998, nearly 190,000 acres of forest in the Atlanta region were cleared. Atlanta's rapid expansion has created subdivisions, strip malls, shopping centers and highways where green space, forests and farmland once stood. As a result, Atlanta has evolved into the least dense U.S. metropolitan area with 1,366 persons per square mile.

In contrast, 171 17th Street's prominent intown site was part of an underutilized industrial property. By redeveloping the former steel mill site, 171 17th Street and the Atlantic Station® project mitigate the impact of development occurring throughout the region. 171 17th Street helps to preserve natural and man-made resources by capitalizing on existing infrastructure in an established urban area.

Reducing Atlanta's heat island effect

As Atlanta's countryside is transformed into asphalt roads and parking lots, tar roofs, and other dark heat absorbing materials, Atlanta's weather is becoming hotter for longer periods of times. Urban areas generate and trap heat, resulting in heat islands that range from 2-10 degrees hotter than surrounding rural areas. Heat islands disrupt the natural weather systems and result in higher levels of pollution and ozone that negatively impact plants, animals and humans.

171 17th Street utilizes a white heat-reflecting roof that helps alleviate this effect. The building's parking is underground, part of a garage that is shared by the entire Atlantic Station® development.

Improving connectivity through alternative transportation

At 34 miles per day, Atlantans drive more than residents of any other city in the nation. To reduce the burden on the currently congested interstates and improve the air quality within Midtown and the city of Atlanta, the Atlantic Station® development adopted several alternative transportation strategies.

A fleet of electric shuttles, recharged by induction chargers located on-site, will serve the entire Atlantic Station® master development and connect to the Arts Center MARTA station, part of Atlanta's public transit system. The entire Atlantic Station® development shares a 7,000 space parking garage. This pooled parking concept allowed for a reduction in the number of parking spaces per square foot of development. Preferred van and carpool spaces are provided.

Guiding sustainable development

Tenants who wish to further the building's sustainable mission can pursue LEED™ for Commercial Interiors by using the building's Tenant Design and Construction Guidelines. The guidelines were developed to help tenants adopt green building principles and design and build sustainable interior environments. They are a means to coordinate the building owner's sustainable design initiatives with similar actions undertaken by the tenants.

Remediating an urban brownfield

The Atlantic Station® development, for which 171 17th Street is a key component, was formerly the site of Atlantic Steel. The century-old plant produced steel for decades, but by the 1980's operations slowed and finally ceased altogether. In 1998, the property was purchased by Jacoby Development. Years of intense industrial use had resulted in the site being contaminated. A \$10 million restoration of the site required the removal of 12,000 truckloads of soil. Today, the Atlantic Station® project is the largest urban brownfield redevelopment in the United States. 171 17th Street is the first office building to be completed at this site.



Plan by TVS

The Atlantic Station® master development



The Epstein Group, Inc.

The Arts Center MARTA Station

Water Efficiency

The project features several strategies for water conservation that resulted in a water use reduction of 37%. The bathroom lavatory faucets use only .5 gallons per minute, instead of the typical 2 gallons per minute, and the urinals are half-gallon per flush, half the usual amount.

The landscaping incorporates native plant material that is well adapted to the climate and soil of the region. Native plants generally require less fertilizer, fewer pesticides, and less supplemental irrigation. As a result, 171 17th Street is able to rely on temporary hand watering until the plantings have become established, and will forego a permanent irrigation system.

Energy & Atmosphere

Atmospheric protection is achieved through the building's HVAC equipment and drinking fountains, which use HFC refrigerant rather than ozone-depleting CFCs or HCFCs. A planned central energy plant serving the entire Atlantic Station® project will also contain no CFCs or HCFCs. The building exceeds the stringent ASHRAE 90.1-2001 code due to its energy-efficient curtainwall, white roof, and optimized mechanical systems. The operation of the systems was verified through a commissioning process.

Materials & Resources

Over 28% of the value of architectural products is comprised of recycled materials. The building incorporates recycled steel and wallboard with recaptured gypsum. The concrete contains flyash, a by-product of coal-fired power plants. The concrete, acoustical panel ceiling, and aluminum curtain wall each incorporate a large percentage of the recycled material. The majority of the building products were manufactured in Georgia and neighboring states, using materials that were salvaged, recycled, or harvested in the region.

Indoor Air Quality

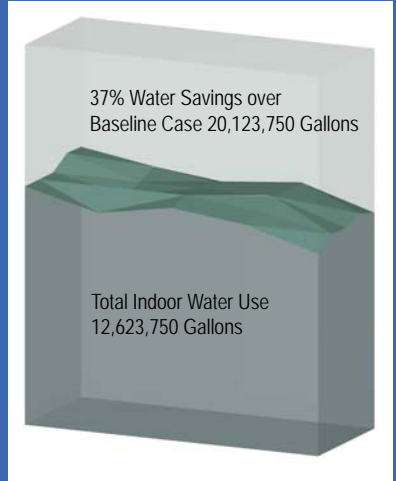
Occupant comfort and well-being is attended to not only through daylit interiors and direct views to the outside, but also through low-emitting materials and indoor pollutant source control. Interior paints, adhesive and sealants comply with strict environmental standards.

Permanent walk-off grates at the building's main entrances will reduce the dust and dirt entering the building. A "No Smoking" policy will be maintained for the entire building.



Fred Gherlich Photography

171 17th Street sits at the west side of the 17th Street Bridge, a new multi-modal link connecting Midtown Atlanta with the Atlantic Station® development. The bridge features, at its southern edge, a 22-foot-sidewalk under a shade canopy and, at its northern edge, a 30-foot sidewalk to the north that allows for a future light rail line. In addition, there are bike lanes in each direction. The 17th Street bridge is a vital link, bridging the divide created by Interstates 75/85.



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Indoor water savings



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Steel with recycled content



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Walk-off mats at main entrance

Innovation in Design

The LEED™ process

One significant outcome was that the building doubled the LEED™ Core and Shell requirements for both recycled content and local/regional materials. The design and construction team collaborated on specifying, purchasing, and documenting environmentally sound materials. Recycled content and local sourcing were verified with product representatives and tracked through detailed monthly spreadsheets.

The project benefited from the involvement of a LEED™ Consultant with LEED™ Accredited Professionals. The LEED™ consultant managed the entire design and construction team's efforts towards the building's LEED™ Core and Shell certification.

Comprehensive transportation plan

Because Atlanta had consistently failed to meet federal Clean Air Act requirements, the city was restricted from initiating certain types of transportation construction projects. As a result, the Atlantic Station® developers formed a public/private partnership with the local government and the EPA. Through the U.S. EPA's Project XL program, regulatory flexibility was granted in exchange for the developer's employing innovative strategies to test better, cost-effective ways of achieving environmental and public health goals. The entire Atlantic Station® site was classified by the EPA as a Transportation Control Measure (TCM), a TCM is a transportation project that demonstrates an air quality benefit.

As part of Project XL, the Atlantic Station® project developed a comprehensive transportation plan in which 171 17th Street is an active participant. The plan, ASAP+ (Atlantic Station® Access+mobility Program), establishes a goal and a process for reducing single occupancy vehicle trips by 25% during a five year period.

The process for achieving goal includes alternative transportation services, informational tools, and incentives. Services offered by the Atlantic Station® project include a shuttle linking the site with the Arts Center MARTA Station, a van pool program, a ride-sharing assistance program, guaranteed rides through 1-87-RIDEFIND, bicycle storage facilities, and special event shuttles.

Informational tools include ASAP+ Access Guides, travel information, and kiosks. Incentives for using alternative transportation include transit pass discounts, preferred parking for carpools, shared parking, monthly drawings for prizes, discounts for walkers/bikers, and promotions for movie-goers who use alternative forms of transportation.



Fred Gherlich Photography

Design and Construction Team

Owner / Developer

Atlantic Office Associates
A joint venture between
AIG Global Real Estate
Investment Corp. &
Jacoby Development, Inc.

Architect

Smallwood, Reynolds,
Stewart, Stewart and Associates

Development Manager

Atlantic Capital Properties

LEED™ Consultant

The Epsten Group, Inc.

Site Documentation Support

Southface Energy Institute

General Contractor

Hardin Construction

MEP/Commissioning Agent

Jordan & Skala

Structural Engineer

Stanley D. Lindsey & Associates

Brochure design and text

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The Midtown skyline rises above the 171 17th Street construction site.

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