

Building Statistics Part 1

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Construction Management Option

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Constitution Center

400 7th Street SE, Washington, DC 20024

General Building Data

Building Name:

Constitution Center

Location and Site:

400 7th St SE Washington, DC 20024

Building Occupant Name:

None at the current time

Occupancy/Function Type:

Class A Office Space

Size:

1,500,000-SF base building renovation, 600,000-SF parking garage

Number of Stories Above Grade / Total Levels:

Three-level underground parking garage, 10 stories + Pent House

Project Delivery Method:

Design/Bid/Build

Dates of Construction:

Start Date: 7/02/07

Completion Date: NE Quadrant 5/1/2009, NW Quadrant 7/1/2009, SW Quadrant 9/1/2009, SE Quadrant 11/1/2009

Actual Cost information:

The project cost is a guaranteed maximum price (GMP) contract between James G. Davis Construction and David Nassif Associates at \$246 million, which includes cost of work, general conditions, insurance, fee, etc.

Primary Project Team:

Owner/Developer David Nassif Associates

General Contractor James G. Davis Construction Corporation

<http://www.davisconstruction.com/>

Owners Representative Kramer Consulting <http://www.kramerconsultingpc.com/>

Architect SmithGroup, Inc. <http://www.smithgroup.com/>

MEP Engineer SmithGroup, Inc. <http://www.smithgroup.com/>

Civil Engineer Wiles Mensch Corporation <http://www.wmcorporation.org/>

Structural Engineer SK&A <http://www.skaengineers.com/>

Construction Financing Aareal Bank <http://www.aareal-bank.com/>

Mechanical Subcontractor Pierce Associates, Inc.

<http://www.pierceassociates.com/>

Electrical Subcontractor JE Richards <http://www.jerichards.com/>

Curtainwall Subcontractor Enclose Corporation

Architecture

Design and Functional Components:

Constitution Center is a renovation of an existing building, located a few blocks south of the National Mall, originally constructed in 1976. It was originally occupied by the Department of Transportation (DOT). The building takes up an entire city block, with 3 levels of parking below grade, which is approximately 15 acres in size. Additionally, there are 10 levels above grade with a penthouse for MEP equipment. There is an open, landscaped courtyard (approximately 1 acre in size) at the center of the site with a decorative fountain. The building is not yet leased, but is designed as offices for a potential government tenant, with Level IV security rating. Constitution Center is striving to attain LEED Gold Certification.

Major national model codes:

ICC International Building Code – 2000
District of Columbia Construction Codes Supplement – 2003
District of Columbia Existing Building Code Supplement – 2003
District of Columbia Municipal Regulations Title 11 – 2003
ICC International Mechanical Code – 2000
ICC International Plumbing Code – 2000
NFPA National Electric Code – 1996
ICC International Energy Conservation Code - 2000

Zoning Information:

The zoning for Constitution Center is per DC zoning Code Title 11. This means that it is a part of the C-3-C classification, which “permits matter-of-right development for major business and employment centers of medium/high density development.”¹ The map below shows how the District of Columbia is zoned. The photo shows that Constitution Center is on the 10th map of DC and is in the C-3-C zone which is classified as “high Bulk major business and employment.”²



Historical requirements:

A historical Requirement that Washington, DC has is that the buildings cannot be any taller than the Capitol Building. Constitution Center was designed with the addition of the pent house to include the MEP equipment; therefore they had to insure that they met this historical requirement.

Building envelope:

The envelope of Constitution Center consists of 4 key aspects: precast panels, stone, spandrel glass, and metal panels. The precast panels are found at all four corners of the building. They are used to frame the spandrel glass, which is found on both the exterior envelope of the building and the interior curtain walls which are open to the courtyard. The curtainwall is blast resistant throughout and floor two is designed to be the most resistant. Additionally it is designed with an air barrier system which is to keep out moisture. The stone is located around the first level of the building, creating a boarder for the spandrel glass located at the storefront entrances. Finally the roof is a regular built-up roofing system and metal panels are used on the pent house level in order to conceal the MEP equipment. There is also an auditorium added to the building which consists of stone and double curved metal wall panels and a standing seam metal roof.

Work Cited

1. "Summary of Zoning Districts." DC Office of Zoning. 27 Aug. 2008 <<http://dcoz.dc.gov/info/districts.shtm>>.
2. "Zoning Map." Office of Zoning - Information. 28 Aug. 2008 <http://dcoz.dc.gov/info/map/zmap10_pdf.shtm>.