



# MID-ATLANTIC DATA CENTER 5 ASHBURN, VIRGINIA

LINDSAY HAGEMANN | CONSTRUCTION MANAGEMENT

## PROJECT TEAM

OWNER: DUPONT FABROS TECHNOLOGY  
CM: HOLDER CONSTRUCTION COMPANY  
ARCHITECT: DONNALLY VUJCIC ASSOCIATES, LLC  
MEP ENGINEER: CCG FACILITIES INTEGRATION, INC.  
STRUCTURAL ENGINEER: RATHGEBER/GOSS ASSOCIATES  
CIVIL ENGINEER: RINKER DESIGN ASSOCIATES, PC  
FIRE ENGINEER: EBL FIRE ENGINEERING

## PROJECT OVERVIEW

FUNCTION: DATA CENTER  
SIZE: 360,000 SF TOTAL  
180,000 SF RAISED FLOOR  
23,000 SF OFFICE SPACE  
HEIGHT: 2 STORIES  
CONSTRUCTION: 2 PHASES  
REDUNDANCY: N+2  
CONSTRUCTION DATES: FEB. 1, 2008-MARCH 2009  
DELIVERY METHOD: CM @ RISK W/ COST + FEE  
PURSUING LEED GOLD CERTIFICATION

## STRUCTURAL SYSTEM

FOUNDATION: CAST-IN-PLACE 30"x30" PIERS,  
FOOTINGS, & FOUNDATION WALLS  
48" AND 60" DIAMETER DRILLED CAISSONS  
FRAMING: PRECAST CONCRETE SHEAR WALLS, COLUMNS,  
& SPANDREL BEAMS  
FACADE: TEX-COTE APPLIED ON THE PRECAST CONCRETE  
GLAZED ALUMINUM CURTAIN WALL SYSTEM  
FOR THE OFFICE FACADE  
ROOF: PRECAST CONCRETE DOUBLE-TEES WITH 3"  
CONCRETE SLAB AND TPO MEMBRANE ROOF

## MECHANICAL SYSTEM

(2) 9,900-11,535 CFM AHU'S IN  
OFFICE AREA  
*\*EQUIPMENT PER PHASE*  
(3) 14,400-23,000 CFM AHU'S  
IN CHILLER PLANT  
(8) 1080 TON CHILLERS  
(8) 3240 GPM COOLING TOWERS  
(1) 500,000 GAL THERMAL  
ENERGY STORAGE TANK  
(240) 18,000 CFM COMPUTER ROOM  
AIR CONDITIONING UNITS  
(2) 50,000 GAL UNDERGROUND  
DIESEL STORAGE TANKS

## ELECTRICAL SYSTEM

34.5 KV TOTAL UTILITY POWER  
36.4 MW TOTAL CRITICAL LOAD  
*\*EQUIPMENT PER PHASE*  
(8) 600 V PAD-MOUNTED TRANSFORMERS  
W/ INTEGRAL VFI  
(16) 2500 KW ENGINE-GENERATORS  
(16) UPS SYSTEMS  
(8) MOTOR CONTROL CENTERS

