

## PROJECT TEAM

OWNER MINSHALL STEWART PROPERTIES  
 CONSTRUCTION MANAGER APPIAN REALTY ADVISORS  
 ARCHITECT FOX ARCHITECTS  
 CIVIL ENGINEER VIKA  
 STRUCTURAL ENGINEER RATHGEBER/GOSS ASSOCIATES  
 MEP ENGINEER META ENGINEERS  
 GENERAL CONTRACTOR JAMES G. DAVIS CONSTRUCTION

## PROJECT SPECIFICATIONS

BUILDING FUNCTION CLASS A OFFICE BUILDING  
 CONSTRUCTION TYPE OCCUPIED RENOVATION  
 BUILDING SIZE 173,551 SQFT (33,691 SQFT NEW)  
 NUMBER OF STORIES ABOVE 11 STORIES (8 EXISTING, 3 NEW)  
 NUMBER OF STORIES BELOW 3 STORIES BELOW GRADE PARKING  
 CONSTRUCTION DATES FEBRUARY '07 TO MARCH '11  
 PROJECT DELIVERY METHOD CM AGENT WITH GC  
 BUILDING COST \$15,500,000

## ARCHITECTURE



2175 K STREET NW IS LOCATED ON THE NORTH SIDE OF K STREET AT 22ND STREET AND WASHINGTON CIRCLE. THE EIGHT-STORY STRUCTURE WAS BUILT IN 1981. CURRENTLY, IT IS 108,000 GROSS SQUARE FEET. THROUGH THE USE OF TRANSFER DEVELOPMENT RIGHTS, THE BUILDING WILL BE INCREASED IN HEIGHT BY THREE FLOORS. THIS VERTICAL ADDITION WILL INCREASE THE EXISTING GROSS SQUARE FOOTAGE BY 37,500 SQUARE FEET.

THE NEW 22ND AND K STREET FAÇADES WILL BE A UNITIZED GLASS AND METAL CURTAIN WALL SYSTEM. A STATE-OF-THE-ART SOLAR LOUVER SYSTEM WILL SCREEN THE EXISTING FAÇADE AND PROVIDES PASSIVE SOLAR SHADING TO THE NEW FAÇADE; WHILE SIMULTANEOUSLY KNITTING THE ENTIRE BUILDING TOGETHER. A NEW GLASS CORNER OVERLOOKING WASHINGTON CIRCLE SPANS FLOORS 2 THROUGH 11, BLENDING THE NEW AND THE OLD SYSTEMS TOGETHER.

## STRUCTURE

THE FOUNDATION CONSISTS OF EXISTING 48"x48"x24" FOOTERS, SEVERAL OF WHICH UNDERWENT MINOR EXPANSIONS TO SUPPORT THE NEW LOADS IMPOSED BY THE ADDITIONAL STRUCTURE ABOVE. THE EXISTING BUILDING CONSISTS OF CAST IN PLACE CONCRETE. WHEREAS THE NEW STRUCTURE IS STRUCTURAL STEEL WITH LIGHTWEIGHT SLAB ON DECK. SEVERAL COLUMNS WITHIN THE EXISTING BUILDING WERE REINFORCED WITH STEEL JACKETS OR CARBON FIBER TO SUPPORT THE ADDITIONAL LOADS IMPOSED BY THE NEW STEEL STRUCTURE.



## MECHANICAL

THE MECHANICAL SYSTEM FOR THIS PROJECT CONSISTS OF A MAIN COOLING TOWER THAT SERVICES A SELF CONTAINED UNIT ON EACH FLOOR USED FOR THE CONDITIONING OF THE TENANT SPACES. TO CONDITION THE CORE OF THE BUILDING, A CLOSED LOOP WITH VAV'S WAS UTILIZED. THE NEW FLOORS, 9 THROUGH 11, AND EXISTING LEVEL 8 WILL BE CONTROLLED BY A NEW BAS SYSTEM. THE EXISTING FLOORS, B1 THROUGH 7, WILL BE CONTROLLED BY THE EXISTING PNEUMATIC SYSTEM. AS TENANT FLOORS TURNOVER, THE OWNER WILL UPGRADE THE ENTIRE BUILDING TO RUN OFF OF THE NEW BAS SYSTEM.

## ELECTRICAL

THE ELECTRICAL SERVICE FOR THE NEW CONSTRUCTION ENTERS AT 2,000A AND IS DISTRIBUTED ON A 208Y/120V SYSTEM. THE EXISTING BUILDING HAS TWO 6,000A FEEDS. THE EXISTING SWITCHGEAR WAS REPLACED WITH NEW SWITCHGEAR THAT HAS THE CAPACITY TO FEED PANELS ON LEVELS B3 THROUGH 11. A NEW BACKUP GENERATOR WAS INSTALLED TO SERVICE THE WHOLE BUILDING.

## LIGHTING

THE LIGHTING IS OPERATED ON A 120V SYSTEM AND USES ENERGY EFFICIENT FLUORESCENT LAMPS WITH ELECTRONIC BALLASTS. THE BASE BUILDING DID NOT INCLUDE COMMON AREAS ON THE NEW FLOORS. LIGHTING DESIGN AND INSTALLATION WILL BE PART OF THE TENANT FIT OUT.

## SUSTAINABILITY

THIS BUILDING IS TRYING TO OBTAIN LEED EB. TO HELP IN THIS MATTER, A PASSIVE SOLAR SHADING SYSTEM WAS IMPLEMENTED. ANOTHER SUSTAINABLE FEATURE TO THIS PROJECT IS THE USE OF A GREEN ROOF. SUCH A ROOF IS BEING INSTALLED ON A PORTION OF THE NINTH FLOOR.

