

APM

CLIENT

Protestant Episcopal
Cathedral Foundation
Joe Smolskis
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ARCHITECT

SmithGroup Incorporated
Mr. Coke Florance
202.974.4517

GENERAL CONTRACTOR

James G. Davis Construction
Corporation
Mr. Bill Moyer
301.881.2990

\$35.4 MILLION
MASTER BUDGET

18 MONTHS OF CONSTRUCTION

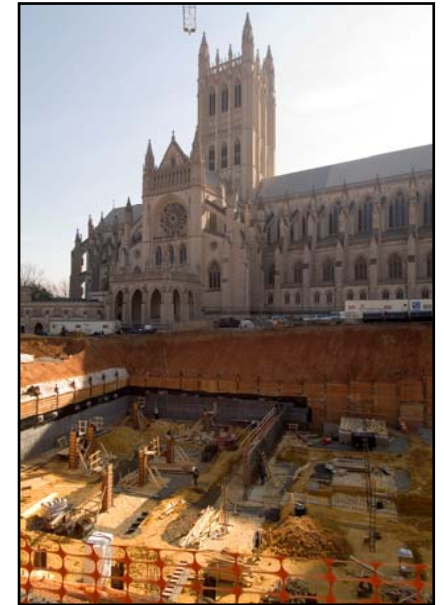
207,000SF
UNDERGROUND PARKING
GARAGE, DEPRESSED BUS
LANE, GARAGE ELEVATORS AND
LOBBY ACCESS



Washington National Cathedral North Lawn Underground Parking Garage, Depressed Bus Lane, and Cathedral Renovations Washington, D.C.

This project consisted of the construction of below grade car and bus garages adjacent to the historic National Cathedral. The bus garage consists of slip ramps off Wisconsin Avenue leading to 18 bus parking spaces below grade. The car garage has ramp access to Wisconsin Avenue and is 4 levels with 427 parking spaces. Access is provided by two glass elevators at the North Lawn, so as to not inhibit the site lines of the Cathedral. The project also included an extensive site development program that included the relocation of over two dozen specimen trees, relocation of primary electric services serving several buildings on the Close, the construction of stone walls and brick walks, restoration of the Close, as well as the infrastructure needed to support the new facility.

- APM was selected by the National Cathedral at the completion of the Design Development Document Phase and immediately faced a severe overage of the Owner's mandated budget. Collaborating with the Architect and Contractor, APM managed an initial value-engineering exercise to reduce the construction cost by \$3.0 million. APM then developed an a la carte value engineering list to reduce the construction cost by an additional \$1.6 million.
- The Cathedral is open year round, holds daily and weekend services several times each day, and schedules numerous special services through the year. Due to the extremely high volume of buses, cars, and nearly 700,000 visitors and worshippers annually in addition to staff and students, the planning and coordination of pedestrian traffic patterns and the development of an interim traffic plan was critical in regards to both functionality and safety. APM took the lead to assess the existing occupancy conditions and developed a traffic and signage plan so both the Owner and the Contractor could cohabitate onsite in harmony.



Underground Parking Garage
Construction

APM



Washington National Cathedral North Lawn Underground Parking Garage, Depressed Bus Lane, and Cathedral Renovations con't.

- As the project was funded by five separate groups and committees under the National Cathedral's umbrella, APM created a master budget to manage and track all hard and soft cost for each subproject: car garage, bus garage, and work in the Cathedral. APM effectively managed three separate, distinct master budgets in one grand master budget. APM reviewed each design team member's contract as part of the master budget reconciliation to ensure a full, coordinated, and complemented design scope.
- The underground parking garage and bus depot utilizes an intensive green roof system to take advantage of all the environmental benefits and to support the variety of activities that occurs on the Close, while concealing the massive structures to allow the Cathedral's architecture to dominate the site.
- There were three main utilities (gas, electric, and water) running along Wisconsin Avenue, NW in the public right-of-way, and three main utilities running across the site that conflicted with the bus and car garage construction. All these utilities needed to be relocated prior to the start of the project. This was a very time consuming task to design, permit, schedule, and physically relocate all the utilities in order to meet the schedule requirements and probably presented the most difficult challenge for APM to coordinate.



One of the largest Intensive Green Roofs in the metropolitan area

"In my 37 years of leadership and management experience, the APM team serves as a shining example of "how to do it"."

- Major General (Ret.) Stephen T. Rippe, USA,
Executive Vice President and Chief Operating Officer
Protestant Episcopal Cathedral Foundation



Rendering by SmithGroup Incorporated