NATIONAL LAW ENFORCEMENT MUSEUM

WASHINGTON DC

ANYA GODIGAMUWE | MECHANICAL | WWW.TINYURL.COM/NLEM2015 | DR. STEPHEN TREADO, ADVISOR



PROJECT TEAM

OWNER: National Law Enforcement Officers' Memorial

Fund

ARCHITECT: Davis Buckley Architects & Planners

MEP: Loring Consulting Engineers
CIVIL: A. Morton Thomas & Associates
STRUCTURAL: Spiegel, Zamecnik & Shah
CONSTRUCTION Manager: Clark Construction
ACOUSTIC Consultant: Shen Milsom Wake
LIGHTING Consultant: Claude R. Engle

LANDSCAPE: Urban Tree + Soils DELIVERY: Design-Bid-Build

COST: \$50 Million
SCHEDULE: 28 Months

CONSTRUCTION: June 2014-September 2016

MECHANICAL

SYSTEM: Chilled Water Cooling with Electric Heat; Air Handling Units per Zone with Plenum Return; Auxiliary Fan-Coil Units for Supplementary Spaces like Café and Research Center

COOLING: Three Modular Chillers with VFDs in Central Plant, Two Cooling Towers at East Mechanical Room, Free Cooling with Heat Exchanger when applicable HEATING: Electric Heat at Air Handling Units and Variable Air Volume Boxes

ARCHITECTURE

FAÇADE: Glass and Steel Curtain Wall with Aluminum Metal Panels

BUILDING: 54,000 GSF including Entry Pavilions, Two Floors Below Grade of Museum Space including Exhibit Space, Theater, Offices, Café, Gift Shop, and Research Center and Another Floor for the Central Plant

ENERGY EFFICIENCY: Use of Daylighting, Heat Recovery, Free Cooling

LIGHTING/ELECTRICAL

ELECTRICAL: The Central Plant Contains Two 13.2 kV Feeders to Two 1500kVA Dry Type Transformers; 480/277V to Lighting, 208/120V to Others;

CONTROLS: Power Monitoring System (PMS) used for General Illumination, Display Lighting, Plug Loads and HVAC Components

LIGHTING: Exhibit Spaces use LEDs & PAR Lamps, Theater uses LEDs, PAR Lamps, and Halogen Lamps; Other Spaces use LEDs and Fluorescents

STRUCTURAL

MECHANICAL LEVEL: 8" Reinforced Concrete Slabs,

Concrete Columns & Beams

PAVILION: Glass and Tube Steel Façade with Curved Roof of

the Same Material

BELOW GRADE: 8" One Way Slabs with 18-24" Walls also

Functioning as Retaining Walls

CENTRAL PLANT: Minimum 4'-0" Reinforced Slab on Grade with 24" Walls