





CMGC RFQ SCOPE NARRATIVE LEGISLATIVE PLAZA BUILDING, WAR MEMORIAL PLAZA AND MOTLOW TUNNEL REPAIRS

January 2023 SBC #529/045-01-2022

515 Main Street Phone: 615.242.4004 Nashville, TN 37207 www.eoa-architects.com 1206 Buchanan St. Phone: 615.385.9600 Nashville, Tennessee 37208 www.centricarchitecture.com

INTRODUCTION

The team of EOA Architects and Centric Architecture are working with the State of Tennessee Real Estate Asset Management (STREAM) to prepare design and construction documents for the renovation of the existing Legislative Plaza State Office Building, War Memorial Plaza and Motlow Tunnel in downtown Nashville, Tennessee.

The proposed Scope of Work includes converting the former office level of Legislative Plaza into a new conference center, a new home for veterans groups currently officing in the War Memorial Building, a new home for the State War Museum, and an area for a new Capitol Visitor Center with new direct exterior access from Sixth Avenue North. In addition, the building needs all new mechanical, plumbing and electrical (MEP) systems throughout including the two levels of subterranean parking.

Also included in the Scope of Work are known deferred maintenance work on Legislative Plaza, the redevelopment and improvements to the War Memorial Plaza (the roof of the Legislative Plaza office building) along with the waterproofing of conditions at the southern end of the Motlow Tunnel between the Capitol and Martin Luther King Jr Boulevard (formerly Charlotte Avenue.)

ARCHITECTURAL – LEGISLATIVE PLAZA OFFICE BUILDING

The Legislative Plaza (LP) building currently has 3 interior floors: two levels of below-grade heated parking, and one level of existing office space (at the top) immediately below the exterior plaza, AKA the War Memorial Plaza. The assumptions of this exercise are that the office level will be gutted to make way for conversion to a multi-purpose space for State Conference Center and a public Visitor Center and War Museum.

The three floors of the building--currently the office level, upper parking, and lower parking--will be referred to as Level 1 (office level), Level 2 (upper parking), and Level 3 (lower parking) in this narrative.

CSI Format Division Specifics:

Division 00: Procurement and Contracting Requirements

- For Staging, assume that a portion of the top level of the garage/LP building can be used for staging, but not for parking.
- Note that the project is not providing budget for temporary parking for State employees while the garage is under construction.
- The State building inspectors will have ultimate jurisdiction, rather than the Metro inspectors, in situations where there are disagreements between jurisdictions, however standard practice is for Metro inspectors to provide inspection services for the work.
- The project is not pursuing LEED certification, but needs to be designed to meet the State's HPBr (High Performance Building requirements). Sustainability, efficiency, cleanliness, and waste management (don't landfill anything that could be sold, re-used, or recycled) will all be important during construction.
- A Performance and Payment Bond will be required as part of the final construction cost.

Division 1: General Requirements

- Multiple Contracts: Low voltage cabling will be performed by a separate owner contractor.
 Any furniture or audio/visual procurement and installation will be performed by a separate owner contractor.
- Retainage (5%) is not released until Substantial Completion is obtained and is then reduced to 2-percent until Final Completion is obtained.
- The memorials on the War Memorial Plaza shall remain on the plaza, although there is a possibility that some will need to move within the plaza as part of the new design.

Division 2: Existing Conditions

- Demolition:
 - The architecture of Levels 2 and 3 (currently called lower and upper parking levels) will remain as they are for the most part.
 - The current office level (Level 1) will need to be entirely gutted to allow for conversion to support space for State employees and the general public visiting the War Museum and Capitol Visitor Center. This will include removal of all finishes, metal stud and drywall work, ceilings, ductwork, unused conduit and piping, and even existing topping slabs, floor levelling compounds, etc. to get down to original concrete building structure.
 - Existing single glazed storefront walls and doors at West side of former West committee rooms and cafeteria shall be replaced with insulated glass and doors.
 - Demolition of a portion of the War Memorial Plaza will be required to create a new paver-topped ADA ramp down to the ground floor doors of War Memorial.
 - Demolition of select security measures in the area of the main entrance.

- Demolition of the office level exits on the east side to either side of the monumental stairs and adjacent planters is needed to develop new public entrances.
- Demolition of select areas of the War memorial Plaza is required for four new proposed small skylights.
- o Remove the existing pavers, fountains and the raised planters adjoining them.
- Remove a portion of the existing concrete sidewalk along the west side of 6th
 Avenue North to create a new school bus pull-off between the intersections with
 Charlotte Avenue and Deaderick Street.
- There are Asbestos Containing Materials in the LP building and these materials should all be abated (by the State) prior to start of construction.
- Any sitework would be assumed to be associated with new utility work, sidewalk/curb rework, or modifications to the LP rooftop. There is no general sitework anticipated unless it's associated with curb cuts for bus drop offs for visiting school children on the east side of the building, or utility work that requires disturbance due to accessing underground utilities. It is assumed that existing sidewalks could need to be re-done after construction work, but that can be determined in the future.

Division 3: Concrete

- The existing building is cast-in-place, post-tensioned, one and two-way pan joist system.
- Water damage in the garage structure will require repair to exposed reinforcing with typical epoxy repair systems
- Repair surface cracking in the floor slab (Levels 2 and 3).
- Remove cracked terrazzo-topped concrete at monumental stair to War Memorial Building and replace with matching terrazzo.
- Rework the narrow steps and adjacent planters on the east side of the Legislative Plaza's monumental steps to create concrete ramps and entry buildings at the two new public entries.
- Provide a new ADA ramp from War Memorial Plaza down to ground floor door at the War Memorial State Office Building using a concrete structure dressed with granite cheek walls and pavers. Provide similar bronze railing systems at ramp.

Division 4: Masonry

- Some minor selective CMU patching and altering will be necessary with MEP systems rework and parking configuration alterations.
- Construct two new public entries beside the east monumental plaza steps with granite clad bases and limestone clad upper levels.
- All exterior granite wall panels to remain are to be cleaned.

Division 5: Metals

- There is no structural steel anticipated as part of the Legislative Plaza remodel other than
 miscellaneous steel, and anything that might be required to support the new skylights or the
 new east public entries.
- Any interior partition framing will be light gauge cold-formed metal framing.
- Expansion Joints: Replace all existing traffic-rated control joints and covers. Assume floor covers are rated (1 hr). Assume an allowance of 400 LF 1" traffic rated EJ covers; wall conditions will simply be backer-rod & sealant. There has been differential settlement between areas at Level 2, so adjust steel expansion joint edge plates as needed
- Provide bronze Roman grilles over the glazed openings of the two new entry buildings.
- Provide metal decking and steel roof beams as needed to support new potential concrete tile roofing on the new public entries to either side of the east monumental stair

Division 6: Wood and Plastics

- All construction will be non-combustible.
- Assume casework on the project will be present as needed with scope TBD

Division 7: Thermal & Moisture Protection

- Budget for traffic coating typical at all existing remaining parking areas on Levels 2 and 3.
- Repair water infiltration in exterior wall and ceiling at sporadic locations to be identified in Documents
- Provide terra cotta tile roofs on the two new entry buildings with bronze perimeter gutters and downspouts (connect to storm water systems in the street). Match type, material and color of those similar shingles on the War Memorial building's colonnade roof (could be concrete, could be terra cotta).
- All joints between remaining wall panels will receive new backer rods and sealant.
- The waterproofing on the roof of Legislative Plaza/War Memorial Plaza is approximately two-thirds though it's warranty period and will likely be damaged replacing the paver system under this project. We recommend replacing it with new hot-applied rubberized asphalt roofing equal to American Hydrotech Monolithic Membrane System 6125-FR, including protection layer, drainage composite insulation and root barrier where applicable.
- Replace all roof/area drains under the War Memorial Plaza.

Division 8: Openings

- Assume 150 new HM doors, frames, and hardware sets
- Mortise locks to be electrified with card readers for each exterior door.
- Provide four flush (4) linear skylights in the plaza level.
- Provide bronze colored aluminum storefront window systems and entry doors with insulated glass and Bronze Roman grilles in the new entry buildings at the east monumental stairs.

Division 9: Finishes

- Budget for new paint throughout interior of existing parking levels 2 and 3 of the garage due to the newly uncovered nature of the existing concrete.
- See also note for traffic coatings in Division 7
- Repair drywall at remaining walls where there has been water damage.
- Budget for new elevator cab wall panels, floors, and ceiling in all elevators (3 in LP garage).
- Any new interior partitions are to be light gauge metal stud partitions, typically 3-5/8", with 5/8" Type X gyp board both sides up to deck above.
- All paint is to be low-, or no-, VOC, typical per the State's HPBr.
- Provide new carpet tiles, rubber base, and 2' x 2' tegular edge suspended acoustical tile
 ceilings throughout the office level of Legislative Plaza and occupied offices in the upper
 parking level. Provide scrubbable, humidity control suspended ceiling panels and
 aluminum grid in the kitchen area for the Dining area.
- Provide an allowance of 1,000 sf for plaster repairs.
- Repaint all previously painted remaining surfaces and all new gypsum board.

Division 10: Specialties

• Fire extinguisher cabinets are to be white enameled steel, typical. Provide surface mounted in the garage and semi-recessed cabinets in the occupied spaces.

Division 11: Equipment

- Provide a new guard booth at existing garage entry.
- Refurbish the existing garage security barrier plates to be fully functional.

Division 12: Furnishings

 There is no Furnishings scope anticipated at this time. Any furniture procurement and installation will be performed by a separate owner contractor.

Division 13: Special Construction

N/A

Division 14: Conveying Systems

- Remaining existing escalators will need cleaning and deferred maintenance repairs.
 Concerns include that there is no way to clean the treads except by individually removing each tread, cleaning them and then reinstalling them. Additionally, if someone touches the metal, they get an electric shock and no one has been able to repair this problem.
- Replace the existing elevator cab finishes and all related equipment. Note that we understand there is water in the pits of at least 3 elevators, resulting in rusting/shorting equipment. Replace sump pumps as needed.
- The existing elevators at the southern end of Motlow Tunnel will be replaced with new accessible elevators.

Division 21: Fire Suppression

- The existing two lower levels of parking are currently protected by an automatic wet pipe sprinkler system with designed densities for Ordinary Hazard Group 1. There are four (4) existing wet sprinkler system risers with control valves located on the east side of the upper parking level, two risers serve each parking level. The fire sprinkler system risers are supplied by an 8-inch service header with backflow prevention. The existing wet sprinkler systems that serve the garage will be demolished and replace with new dry sprinkler systems. The offices located on the north side of the upper parking level will need to remain as a wet pipe sprinkler system.
- The existing main office floor is currently unsprinklered. The current building requires a 100% fully sprinklered system. A new manual wet standpipe system shall be installed, and the top-level sprinkler system shall be served from a 6-inch combination standpipe system. No fire pump is required. Each floor of the parking garage shall have separate sprinkler zones served from the combination standpipes.
- The Museum and Visitors Center area shall be covered with a water mist fire suppression system equivalent to Victaulic Vortex. Large nitrogen tanks to be located on upper level of garage

Division 22: Plumbing

- The existing plumbing systems and piping are mostly original to the 1972 building. The plumbing systems scope of work is to replace all the existing water heaters, pumps, plumbing fixtures, domestic water piping, irrigation water, sanitary waste and vent and storm drains and piping to provide a 40-year plus life expectancy of all plumbing systems. The existing roof drains, fountain drains and associated piping shall be replaced as required based on the optional system layout for the new plaza landscaping.
- The existing 4-inch domestic water serving Legislative Plaza that's fed from the subbasement of War Memorial serves the Legislative Plaza Building and War Memorial Building will be demolished and capped at the Reduce Pressure Backflow Preventers (RPBPs). A new 4-inch water tap shall connect to the existing water main in Charlotte Avenue / MLK. The new 4-inch water service entrance and new 3" water meter shall be located at the north side of the upper parking deck. Downstream of the water meter a pair of 3-inch Reduce Pressure Backflow Preventers (RPBPs) piped in parallel to serve the

Legislative Plaza. All the existing domestic water piping throughout the existing building shall be demolished and new piping will serve the entire renovated building.

Division 25: Mechanical

- All existing systems and materials are to be removed, including units, ductwork, piping, fans, and controls
- New air handling systems, similar to existing in concept, are to be provided.
- The existing chilled water system shall be separated from the chilled water system in the War Memorial Building basement. New sub-metering shall be provided by NDES for separate chilled water consumption for the Legislative Plaza Building
- The existing steam and pumped condensate piping that extends from the War Memorial building to the Legislative Plaza Garage shall be replaced. New steam piping shall include the north mechanical room and will extend to a new two stage pressure reducing station (PRS). The incoming steam pressure of 65 psi shall be reduced to 5 psi. Downstream of the PRS, the steam lines will be routed to a new shell and tube heat exchanger that will provide hot water for building heating. A new condensate return unit will also be provided to pump condensate back to NDES
- A new native BACnet energy management system will offer control and monitoring of air handlers, fans, terminal boxes, pumps, etc. A new portable laptop featuring the control system front-end will be provided as part of the control system. The controls software package shall include a fully adjustable graphical representation of the entire HVAC system in the facility complete with monitoring points and user defined set points

Division 26: Electrical

- The electrical systems at the Legislative Plaza Building and Motlow Tunnel shall consist of, but are not limited to, the replacing the existing 3000 Amp, 480/277 volt switchgear, removing some 480/277 Volt and 120/208 Volt panelboards, and providing new 480/277 volt and 120/208 volt panelboards located in the Legislative Plaza Building, HVAC electrical disconnects, starters and VFDs, replacement of interior lighting, emergency egress lighting and exit signs, new receptacle and general power to match the new parking garage floor plans, and new fire alarm system. Exterior lighting on the courtyards will be replaced with new LED fixtures. Limited emergency power shall be provided through a separate ATS from an emergency generator serving the War Memorial Building for required emergency systems such as Required Emergency Systems (Life Safety) and some Optional Standby Systems (Communications, Data, AV, and Security systems).
- In addition, there will be some interface with the War Memorial Building emergency generator provided under a separate project. Refer to War Memorial section for additional information.

Division 32: Exterior Improvements

- The entirety of the exterior plaza will be refinished with a new pedestal paver system and/or new granite pavers.
- The plaza will include new planters to include of the following sizes and types: (12) raised pre-cast planters 20" tall x 24" wide) with a 5' diameter, (4) raised pre-cast planters (24" tall x 24" wide) with a 10' diameter, (3) raised pre-cast planters (30" tall x 24" wide with a 12' diameter. (3) raised pre-cast planters (6" x 6" curb) with 20' diameter, and (3) raised pre-cast planters (6" x 6" curb) with a 12' diameter. Planters will contain a mix of 1/3rd new shrubs (24"x24" @ 30" o.c.), ornamental grasses (3 gallon @ 18" o.c.) and ground covers (1 gallon @ 12" o.c.).
- The plaza will include a lawn area consisting of synthetic turf over pedestal pavers. The lawn area will be 80' diameter.

- The plaza will include an in-ground fountain that will contain approximately 20' water jets that will be flush with the pavers. This feature will need its own drainage system, pumps, filters and controls. The in-ground water feature will be 60' diameter.
- The plaza will contain circular steel frame benches (20" height) with composite seating elements. These benches will be affixed to the plaza sub-slab.
- The plaza will contain rectilinear steel frame benches (20" height) with composite wood seating elements. These benches will be affixed to the plaza sub-slab.
- There will be some 18" above plaza grade raised turf areas
- Assume all new trees at existing magnolias, and removal of half of the existing Willow Oaks
- Plan for possibility of removal and reinstallation of all existing memorials on the plaza.
- Plan for demolition of the existing irrigation system and the installation of a new irrigation system on a 2" line. Existing backflow preventor and meter can be re-used.
- The existing paving at the plaza at the employee entrance at the corner of 6th Avenue North and Union should be removed and replaced with new pavers to match the new pavers on the main plaza level. The existing barriers along the street should be removed and replaced with new stainless steel security bollards spaced at 6' o.c. One (1) new 4" canopy trees should be planted in this plaza within a 36" tall x 36" diameter pre-cast planter.
- Repave the area of the new school bus pull over along 6th Avenue North near the
 intersection with Charlotte Avenue with a new concrete curb at the edge of the raised
 concrete sidewalk, a new reinforced concrete parking surface for the buses and repairs to
 the asphalt paving as needed.

ARCHITECTURAL – MOTLOW TUNNEL REPAIRS

- The below-grade structure of the entrance building to the Motlow Tunnel appears to have been poured directly against the rock face of below-grade cuts. This condition has leaked for many years.
- New scope of work is to demolish the existing walls and structure back far enough to recreate the below-grade structure in a water-tight installation.
- Demolish and construct new concrete shafts for the two LP/Motlow Tunnel elevators and waterproofing. Relocate/protect the two existing escalators as needed to implement the Work.
- Repair water infiltration in both of granite steps down from Carmack Plaza to Charlotte Ave.
- Replace missing sealant between granite steps and granite/limestone beneath Carmack Plaza