

Capital Budget Request

| Supplement Address Life, Health, Safety, Accessibility and Code Compliance | |
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| Overview | |
| Agency | Virginia Polytechnic Institute and State University (208) |
| Project Code | 18478 |
| Project Title | Address Life, Health, Safety, Accessibility and Code Compliance |
| Project Type | Improvements-Life Safety Code |
| Biennium | 2022-2024 |
| Budget Round | Initial Bill |
| Bill Version | Regular Session |
| Request Type | Previously Approved |
| Project Location | Roanoke Area |
| Facility/Campus | Blacksburg Main Campus |
| Source of Request | Agency Request |
| Infrastructure Element | Accessibility |
| Contains O & M costs? No | |
| Contains significant technology costs? No | |
| Contains significant energy costs? No | |
| Possible that project will be used by other than a state or local governmental entity, or for research under sponsored programs (higher education)? No | |
| Agency Narrative | |
| <p>Agency Description</p> <p>Executive Summary:</p> <p>The university's health, safety, and accessibility initiative for the campus is a high priority and an ongoing effort to better serve the students, faculty, staff, and citizens of the Commonwealth. This request is for \$7.3 million of supplement funding to complete a project previously authorized for construction.</p> <p>Chapter 1289 of the 2020 General Assembly, Item C-33 included funding for the Address Life, Health, Safety, Accessibility and Code Compliance project (208-18478), and \$3.1 million was approved for this initiative. The current funding amount is sufficient to complete only a portion of the scope of work. The university is underway and moving forward with construction on a subset of the project scope. This request is for supplement funding to complete the outstanding portions of the originally requested project scope.</p> <p>Project Description:</p> <p>The North Academic District of the Blacksburg campus includes 25 Educational and General buildings with 2.4 million gross square feet that are used by nearly 40,000 people on a daily basis. The pathways that connect and provide mobility in this area are the most heavily trafficked pedestrian pathways in the entire campus. At present, the district is the center of daytime activity and population density. This intensity will increase in 2024 with the scheduled completion of a Multi-Modal Transportation Facility that will direct and focus daily commuter activity to circulator hub in lower part of the north area of campus.</p> <p>However, because of significant elevation variances across the North Academic District, the existing pathways that connect the entire district are not sufficiently accessible to accommodate common mobility needs. The university has identified approximately 2,500 linear feet of pathways and dedicated rest-points to improve with rerouting, surfacing, lifts, ramps, and bridges; establish a system of accessible and connecting pathways; and ensure safe and appropriate service for all members and visitors of the campus. The university is underway to make improvements to a portion of the scope by applying the existing funds to install enclosed elevators at critical elevation choke points. The project will include the installation of interconnected accessible pathways in the North Academic District (illustrated in the attached chart) that are approximately 2,500 feet long and 10 feet wide (25,000 square feet of surface area plus 10,000 square feet of rest-points) and</p> | |

manage the various elevation changes on the site. This requested supplement funding will provide resources to complete an entire accessible pathway system in the north area.

The following facilities will be positively impacted as a result of this project: Hitt Hall, Bishop Favrao Hall, the Multi-Modal Transportation Facility, Derring Hall, Cowgill Hall, Burchard Hall, G. Burke Johnston, Burruss Hall, Pamplin Hall, Williams Hall, Holden Hall, Norris Hall, Patton Hall, Randolph Hall, Kelly Hall, Hancock Hall, and McBryde Hall.

Justification

Program Description:

Virginia Tech is a land grant-university with a three-part mission: instruction, research, and outreach. Under this mission, activities occurring on campus should take place in a healthy, safe, and accessible environment and should ensure compliance with all applicable federal and state requirements. The campus is comprised of several millions of square feet distributed across hundreds of buildings that are used by tens of thousands of students, faculty, staff, and visitors on a daily basis. Ensuring the safety, health, and accessibility of the campus environment is critical to the long-term success of the university and its service to the Commonwealth.

Funding Plan:

The scope of this project is entirely Educational and General facilities: thus, the funding plan calls for 100 percent General Fund support for this \$7.3 million supplement. This supplement will increase the total appropriation to \$10.4 million from \$3.1 million.

Options Considered:

The campus physical improvements required to establish an appropriate mobility system in the North Academic District of campus exceed the university's operating budget funding capacity or Maintenance Reserve funding. Thus, capital funding is necessary to complete the scope. Permanently deferring or delaying this project to a future biennium is not an option because of the growing backlog of campus safety and accessibility projects and barriers to service for students, faculty, and staff.

Methodology

Cost Explanation and Methodology:

A. Methods Used to Estimate Costs:

The costs are based on internal estimates developed by university staff based on historical comparables of on-campus work. The costing analysis utilized past and current compliance projects that provided accessibility improvements and upgrades around campus. The project is planned to utilize the traditional Design, Bid, Build delivery method. Project costs are estimated to a mid-point of construction in 2025 using 4.25 percent escalation in accordance with the instructions for developing the Six-Year Capital Outlay Plan and the rate utilized in the most recent CR-1 Project Planning form (as of July 2021).

On a total project cost basis, inclusive of design and construction, the unit costs are \$209 per surface area square foot. The unit construction costs of the project are \$142 per surface area square foot.

B. The proposed costs include the following critical consideration to ensure the project fully meets the needs of the program and the university:

- 1) These projects represent improvements to pedestrian pathways in congested areas of campus. This will necessitate the installation of temporary routes to maintain pedestrian flow while implementing the new work. The contractor will be required to manage these additional communications.
- 2) These improvements to the public way will require an analysis of building egress to ensure that safe egress is maintained in the event of an emergency. The costs associated with the design efforts will be represented in the soft costs for the project.
- 3) Extending power through existing occupied buildings will require work to be performed during off hours thus increasing the construction costs.
- 4) Derring Hall contains hazardous materials. Routing power through Derring will incur additional costs related to abatement. The required inspection of the abatement will be carried in the soft costs as it will be performed by third party inspections.
- 5) The project will increase the impervious surface area requiring nutrient management expenses.

Funding Request

| Phase | Year | Subject | Fund | Amount |
|--------------|------|--------------------------------|----------------------|-------------|
| Full Funding | 2023 | 2322 - Construction, Buildings | 01000 - General Fund | \$7,300,000 |

Total | \$7,300,000

Project Costs

| Cost Type | Requested Funding |
|--|--------------------|
| Acquisition Cost | \$0 |
| Building & Built-in Equipment | \$4,973,586 |
| Sitework & Utility Construction | \$0 |
| Construction Cost Total | \$4,973,586 |
| DESIGN & RELATED SERVICE ITEMS | |
| A/E Basic Services | \$739,572 |
| A/E Reimbursables | \$0 |
| Specialty Consultants (Food Service, Acoustics, etc.) | \$34,318 |
| CM Design Phase Services | \$34,318 |
| Subsurface Investigations (Geotech, Soil Borings) | \$0 |
| Land Survey | \$0 |
| Archeological Survey | \$0 |
| Hazmat Survey & Design | \$0 |
| Value Engineering Services | \$0 |
| Cost Estimating Services | \$34,318 |
| Other Design & Related Services | \$0 |
| Design & Related Services Total | \$842,526 |
| INSPECTION & TESTING SERVICE ITEMS | |
| Project Inspection Services (inhouse or consultant) | \$179,696 |
| Project Testing Services (conc., steel, roofing, etc.) | \$0 |
| Inspection & Testing Services Total | \$179,696 |
| PROJECT MANAGEMENT & OTHER COST ITEMS | |
| Project Management (inhouse or consultant) | \$298,533 |
| Work By Owner | \$49,736 |
| BCOM Services | \$11,439 |
| Advertisements | \$4,974 |
| Printing & Reproduction | \$0 |
| Moving & Relocation Expenses | \$0 |
| A/V Cabling | \$0 |
| IT Cabling | \$0 |
| Telephone Cabling | \$0 |
| A/V Equipment | \$0 |
| IT Equipment | \$230,277 |
| Telephone Equipment | \$0 |
| Signage | \$0 |
| Demolition | \$0 |
| Hazardous Material Abatement | \$0 |
| Utility Connection Fees | \$0 |
| Utility Relocations | \$230,277 |
| Commissioning | \$0 |
| Miscellaneous Other Costs | \$230,277 |
| Project Management & Other Costs Total | \$1,055,513 |
| Furnishings & Movable Equipment | \$0 |
| Construction Contingency | \$248,679 |
| TOTAL PROJECT COST | \$7,300,000 |

| Size and Scope | | | |
|--------------------|-------------------|--------|---------------|
| Cost Type | Unit of Measure | Units | Cost Per Unit |
| Acquisition Cost | | 0 | \$0 |
| Construction Cost | Surface Area Sqft | 35,000 | \$142 |
| Total Project Cost | Surface Area Sqft | 35,000 | \$209 |

| Supporting Documents | | | | |
|--|-----------|---------------|-------------|--|
| File Name | File Size | Uploaded By | Upload Date | Comment |
| HECO-2 ADA Code Compliance 7.2021.pdf | 480,080 | Cassidy Limer | 9/17/2021 | |
| LHS-Add. Funds Presentation 9.2021.pdf | 208,218 | Rob Mann | 9/23/2021 | |
| 07-CR-1 Life Health Safety 9.2021.xlsx | 579,623 | Rob Mann | 9/23/2021 | |
| Draft Certification Letter from VT (208-LHSCC).pdf | 58,385 | Rob Mann | 9/23/2021 | Draft Certification Letter from VT to Commonwealth of Virginia Officials (Six-PAC) 9.23.2021 |
| 2021-09-21 Green Links Layout REVISED 4.pdf | 1,493,131 | Rob Mann | 9/23/2021 | GreenLink Accessibility Chart |

| Workflow History | | | | | | |
|------------------|------------|----------|------------|----------|------------------------------|---------------------------|
| User Name | Claimed | | Submitted | | Step Name | Submit Action |
| Cassidy Limer | 09/15/2021 | 11:24 AM | 09/15/2021 | 11:24 AM | Enter Capital Budget Request | Continue Working |
| Cassidy Limer | 09/15/2021 | 11:24 AM | 09/17/2021 | 04:49 PM | Continue Drafting | Continue Working |
| Rob Mann | 09/17/2021 | 04:49 PM | 09/17/2021 | 05:42 PM | Continue Drafting | Continue Working |
| Rob Mann | 09/17/2021 | 05:42 PM | 09/17/2021 | 05:43 PM | Continue Drafting | Continue Working |
| Rob Mann | 09/20/2021 | 11:32 AM | 09/20/2021 | 11:34 AM | Continue Drafting | Continue Working |
| Rob Mann | 09/20/2021 | 11:41 AM | 09/20/2021 | 11:41 AM | Continue Drafting | Continue Working |
| Rob Mann | 09/20/2021 | 02:51 PM | 09/20/2021 | 02:55 PM | Continue Drafting | Continue Working |
| Cassidy Limer | 09/21/2021 | 04:14 PM | 09/21/2021 | 04:59 PM | Continue Drafting | Continue Working |
| Cassidy Limer | 09/21/2021 | 10:28 PM | 09/22/2021 | 09:57 PM | Continue Drafting | Continue Working |
| Cassidy Limer | 09/23/2021 | 08:44 AM | 09/23/2021 | 08:44 AM | Continue Drafting | Submit for Agency Review |
| Rob Mann | 09/23/2021 | 11:02 AM | 09/23/2021 | 11:48 AM | Agency Review Step 1 | Ready for DPB Bulk Submit |
| Rob Mann | 09/23/2021 | 02:33 PM | 09/23/2021 | 02:51 PM | Ready for DPB Submission | Continue Review |
| Rob Mann | 09/23/2021 | 04:22 PM | 09/23/2021 | 04:37 PM | Ready for DPB Submission | Continue Review |
| Rob Mann | 09/23/2021 | 04:44 PM | 09/23/2021 | 04:44 PM | Ready for DPB Submission | Submit to DPB |
| | | | | | DPB Review | |