3.2 Capital Projects

Summarized below are the needed facility and infrastructure projects for the next five and ten year periods followed by a description/justification for each project. Total project budgets include design fees, construction costs, and equipment purchase in 2012 dollars.

TABLE 3.1 Capital Project Budgets*

<table>
<thead>
<tr>
<th>Project</th>
<th>5 Year Program</th>
<th>Post 5 Year Program</th>
<th>Total Project Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.V. Truitt Replacement</td>
<td>$1,150,000 (P)</td>
<td>$6,150,000 (C)</td>
<td>$14,650,000</td>
</tr>
<tr>
<td></td>
<td>$7,350,000 (C,E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information &amp; Communications Services</td>
<td>$1,586,000 (P)</td>
<td>$10,752,000 (C)</td>
<td>$13,839,000</td>
</tr>
<tr>
<td>Building</td>
<td>$1,500,000 (E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mansueti Laboratory Renovation</td>
<td></td>
<td>$650,000 (P)</td>
<td>$6,100,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$4,750,000 (C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$700,000 (E)</td>
<td></td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
<td></td>
<td><strong>$34,589,000</strong></td>
</tr>
</tbody>
</table>

1. R.V. Truitt Replacement

* Information for Table 3.1 was obtained from UMCES Capital Budget Information System (C.B.I.S 2012).

The R.V. Truitt Laboratory, originally constructed in 1973, was closed in March 2008 due to safety and structural concerns. This closure resulted in a reduction of 7,771 NASF at CBL and caused 8 faculty research laboratories to be relocated. The new project’s primary purpose is to replace the existing R.V. Truitt Laboratory (13,911 GSF) on CBL’s campus. The scope of work proposed in this program includes the relocation of key shared mechanical components to a support building, the Chiller Enclosure (“CE” #473), and its renovation, the demolition of the existing Truitt facility and the construction of a new seawater laboratory.

The re-designed Chiller Enclosure will house the multiple shared mechanical systems which are currently supported through Truitt. This design should incorporate new technologies and equipment and work to reduce the overall carbon footprint of the facility.

At a minimum, the project must meet the LEED Silver certification for new construction. The new facility shall incorporate the latest technologies in thermal efficiency including high efficiency fluorescent lighting, thermal pane glass, variable speed air supply and exhaust systems and an automated building energy management system.

The proposed building must fit into the architectural character and scale of Solomons, a historic town on the Chesapeake Bay. The Solomons Master Plan (“SMP”) should be reviewed by the consultant as a part of the design process. Partial planning funds have been approved for fiscal year 2013.
The scope of work proposed in this program includes the relocation of key shared mechanical components to a support building, the Chiller Enclosure ("CE" #473), and its renovation, the demolition of the existing Truitt facility and the construction of a new seawater laboratory.
2. Information And Communications Services Building

This program plans the construction of an 8,720 NASF Information and Communications Services Building (ICS). This facility will provide space for library and information retrieval services, a supporting computer center and an Interactive Video Conference Center that are vital to modern research and education needs that rely on library and support services.

The project will provide adequate space for the library collection and information technologies needed to support the research and instructional programs of the campus. It will improve access to instructional and research materials to meet the routine demands of staff, faculty, students and visitors. It will also allocate space designed to support the information retrieval oriented computer facilities and Interactive Video needs.

One of the central themes in UMCES activities involves interdisciplinary research directed toward answering large-scale environmental problems. This theme demands improved facilities, and one of the most critical issues that has been identified at CBL concerns library and information retrieval capabilities. The space available for the library, computerized information retrieval services, campus computer center, and interactive video conferencing has become inadequate to meet the routine demands of staff, faculty, students and visitors. On the basis of current growth, it seems likely that the library collection will increase in 10 years to over 77,000 volumes per 2012 SGAP and within 20 years to over 80,000 volumes. The current library shelves are over 99% full and there is no space available in its present location for additional shelving.

In general the design solution should address, but not be limited to, the following:

- A suitable design solution that responds to the surrounding environment.
- Integration of on-site and off-site pedestrian circulation and separation of vehicular and pedestrian traffic.
- Development of the surrounding outdoor as an amenity and as an integral part of the building.
- Energy efficient and sensitive design for 12-month climate control for the building, as well as safety and functional flexibility.
- Parking, service, fire apparatus, accessibility for people with disabilities in accordance with ADAAG regulations, and utility requirements.
Suggested program includes:

- Library with compacted shelving (3 rooms) and day-to-day access to periodicals.

- Study Space for reading and work areas adjacent to library and IT functions.

- Project Rooms - 2 small conference rooms, each programmed with a smart wall.

- Studio for Science - project room with high-density computer access and smart wall. The room needs to have direct access to daylight and noise control to increase collaboration.

- IT Center to serve the whole campus with network and data support.

- GIS Room situated between IT center and library functions.

- Computer Teaching Lab for 18-20 people with desktop and laptop stations.

- Print Center to serve the whole campus and housed within the IT center at ICS.

- Mobile Interactive video stations - Smaller mobile IVNs allow for flexibility in space use and maximise collaboration with other UMCES campuses.

- Visitor Reception Area - Flexible lobby space to receive casual visitors or meeting area for scheduled tours.

- Administration & Staff Offices to include director’s office and support staff, IT and Library Support offices.
The proposed location of the new Information and Communications Services Building takes advantage of a central site on the CBL campus that is located near all of the buildings of the campus. By proposing a courtyard in front of the building that opens to Williams and Charles Streets, the building is set up to capture the attention of a visitor coming down Charles Street.

The central location makes the Library and IT resources easily available to researchers on campus. The building is sited to have views southeast to the water and to the northeast part of the campus which has the visitor's center and the Research Fleet Operations Building.
The proposed location of the new Information and Communications Services Building for OPTION B suggests a major renovation of the existing Mansueti Laboratory building along with an addition parallel to Charles street to provide the required program space.

The central location makes the Library and IT resources easily available to researchers on campus.
OPTION C offers the most views into the Patuxent River and has strong adjacencies with RFO and the Truitt Replacement building. This location is not ideal due to its distance from the other major laboratory buildings.