All Agency Project Request

2013 - 2015 Biennium

Agency	Institution	Building No.	Building Name
University of Wisconsin	Milwaukee	285-0B-1937	SANDBURG HALL

Project No. 14C1X

Project Title Sandburg Hall Ext Envelope Repr

Project Intent

This project repairs the exterior masonry envelope for Sandburg Hall North, South, and West Towers to reduce moisture infiltration, allow normal expansion and contraction of building materials and assemblies, and eliminate a serious life safety issue.

Project Description

Project work includes removing damaged concrete materials and patching with mortar, sealing all concrete cracks, coating ~59,000 SF of spandrel beams with elastomeric materials, applying migrating corrosion inhibitor to ~130,500 SF of masonry surfaces, removing and replacing all failed sealants, and providing swing stage scaffolding access to all project areas. Each elevation will be fully inspected from a swing stage scaffold. All damaged concrete materials will be removed and patched to prevent spalled concrete materials from falling. All concrete cracks will be sealed with a hydrophobic polyurethane chemical grout (HPCG), epoxy injection, hydraulic cement, or sealant as appropriate to the extent and configuration of the damage. All horizontal cast-in-place concrete spandrel beams below the exterior windows at each floor level will be coated with an elastomeric material to prevent water infiltration into the edges of repaired areas. All remaining concrete surfaces will be treated with a liquid applied surface penetrating migrating corrosion inhibitor to prevent new concrete spalling from rebar corrosion.

Project Justification

A recently completed exterior envelope condition assessment documented various areas of defects and damage to the three oldest towers. Surface voids or bug holes are present in virtually all the cast-in-place concrete of the facility. These pockets can allow moisture to collect leading over time to surface deterioration and other damage of the concrete. Numerous cracks exist in the cast-in-place concrete frame of all three towers. Most of these cracks are in the horizontal cast-in-place concrete spandrel beams below the windows at each floor level and are the result of long term deflection, or creep. These cracks allow water to penetrate the beam. Concrete surface spalls are present on all three towers. These spalls occur at two primary locations: at the window sill portion of the horizontal cast-in-place concrete spandrel beams and at areas where steel reinforcing bar was placed too close to the outside face of the concrete and was not given appropriate cover. Unsealed horizontal cold floor joints between concrete pours are present at each floor level and allow water to infiltrate the wall surface. Other minor anomalies occur around the facility and include: excessively eroded concrete surfaces; failing sealants; rust stains indicating possible future spalls; and efflorescence indicating excessive water infiltration. Extensive repair work has been done previously to the damaged concrete around the facility. Some areas of repair have spalled or cracked and are again in need of repair.

A/E Consultant Requirements

☑ A/E Selection Required?

Consultants should have specific expertise and experience in the design and coordination of exterior masonry envelope repair and restoration as part of a design team. Work includes site surveys, acquiring field data, and verifying as-built conditions to assure accurate development of design and bidding documents, and production of necessary design and bidding documents. Consultants should indicate specific projects from past experience (including size, cost, and completion date) in their letter of interest and when known, include proposed consulting partners and specialty consultants.

Commissioning

- ☑ Level 1
- ☐ Level 2

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Project Budget

Construction Cost:		$710,000
Haz Mats:		$0
Construction Total:		$710,000
Contingency:	15%	$106,500
A/E Design Fees:	8%	$56,800
DFD Mgmt Fees:	4%	$32,700
Equipment/Other:		$0
		$906,000

Funding Source(s)

	Total
GFSB - []	$0
PRSB - Facilities Maintenance & Renovation [T550]	$906,000
Agency/Institution Cash []	$0
Gifts	$0
Grants	$0
Building Trust Funds [BTF]	$0
Other Funding Source	$0
	$906,000

Project Schedule

SBC Approval:	04/2014
A/E Selection:	05/2014
Bid Opening:	03/2015
Construction Start:	05/2015
Substantial Completion:	09/2016
Project Close Out:	12/2016

Project Contact

Contact Name: Kurt Young Binter

Email: <younbin@uwm.edu>

Telephone: (414) 229-2361 x

Project Scope Consideration Checklist

	Y	N
1. Will the building or area impacted by the project be occupied during construction? If yes, explain how the occupants will be accommodated during construction.	☑	☐
All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.		
2. Is the project an extension of another authorized project? If so, provide the project #...	☐	☑
3. Are hazardous materials involved? If yes, what materials are involved and how will they be handled?	☐	☑
Hazardous materials abatement is not anticipated on this project. Comprehensive building survey inventory data is not available on Wisconsin's Asbestos & Lead Management System (WALMS) <http://walms.doa.state.wi.us/>.		
4. Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent?	☐	☑
5. Will the project impact the heating plant, primary electrical system, or utility capacities supplying the building? If yes, to what extent?	☐	☑
6. Are other projects or work occurring within this project's work area? If yes, provide the project # and/or description of the other work in the project scope.	☐	☑
7. Have you identified the WEPA designation of the project...Type I, Type II, or Type III?	☑	☐
Type III.		

8. Is the facility listed on a historic register (federal or state), or is the facility listed by the Wisconsin Historical Society as a building of potential historic significance? If yes, describe here. ☐ ☑

9. Are there any other issues affecting the cost or status of this project? ☐ ☑

10. Will the construction work be limited to a particular season or window of opportunity? If yes, explain the limitations and provide proposed solution. ☑ ☐

    Project work is seasonal. Preferred project work schedule should be limited to late spring, summer, and/or early fall months if possible.

11. Will the project improve, decrease, or increase the function and costs of facilities operational and maintenance budget and the work load? If yes, to what extent? ☑ ☐

    Completion of this project will decrease operational maintenance costs.

12. Are there known code or health and safety concerns? If yes, identify and indicate if the correction or compliance measure was included in the budget estimate, or indicate plans for correcting the issue(s). ☐ ☑

13. Are there potential energy or water usages reduction grants, rebates, or incentives for which the project may qualify (i.e. Focus on Energy <http://www.focusonenergy.com> or the local utility provider)? If yes, describe here. ☐ ☑

14. If this is an energy project, indicate and describe the simple payback on state funding sources in years and the expected energy reduction here. ☐ ☑