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Building Name Institution **Building No.** Agency 285-0B-9950 University of Wisconsin Milwaukee Multi-Building

Project No. 16H3A **Project Title** Multi-Building Parking Structure Repairs

(EMS/Kenilworth/Lubar/Pavilion/Sandburg)

Project Intent

This project provides investigation and research, pre-design, and design services to complete concrete and miscellaneous repairs to five (5) parking structures (Engineering & Mathematical Science, Kenilworth, Lubar Hall, Pavilion, and Sandburg Hall) to mitigate safety and structural concerns. The parking structures will be evaluated to identify deficiencies, develop design solution alternatives, and recommend appropriate corrective measures.

Project Description

Project work includes sealing and caulking concrete cracks; patching spalled concrete surfaces; repairing concrete topping slabs and membranes, plaster cracks, insulated walls, wall finishes, and wall sealants; rebar remediation; restoring joint protection systems; replacing waterproof membrane under planters; tuck pointing masonry walls; repainting walls, doors and door frames, and hand railings. The project work anticipated for each structure is outlined below:

ENGINEERING & MATHEMATICAL SCIENCE: Seal/caulk approximately 550 LF of concrete cracks in the; ground slab, ceilings, joists, beams and curb/wall joint. Patch approximately 100 SF of concrete spalls in the; ground slab, ceilings, stair ceiling, joists, beams, curbs, walls, floor/wall joint, stairwell step, and columns with corbels. Miscellaneous repairs include; 15 LF of exposed rebar remediation in two (2) locations, plaster crack repairs in the stairwell, minor stairwell wall insulation/finish repairs, minor wall sealant repairs, replacement of one curb stop and repainting 1200 LF of stair handrail system.

KENILWORTH: Seal/caulk approximately 90 LF of concrete cracks in the walls, ceilings and floor. Patch approximately 520 SF of concrete spalls in the ceilings, walls, floors, columns and beams. Miscellaneous work includes; repairing 245 SF of uneven floor topping slab, replacing/repairing 775 SF of slab membrane top coating, restoring damaged joint protection system, repairing 60 LF of masonry wall cracks, repairing 150 SF of insulated wall system damage, repainting 40 LF of stairwell handrail and the frame of one metal service door, and minor damage repair to one section of drywall.

LUBAR HALL: Seal/caulk approximately 740 LF of concrete cracks in the walls, ceilings and slab-on-grade. Repair/replace waterproofing membrane under planters in plaza and 1,600 SF of water-damaged plaster in the parking level below. Repair 240 SF of plaster cracks in the parking structure ceiling.

PAVILION: Seal/caulk approximately 565 LF of concrete cracks in the slab-on-grade, columns, beams (near movement joints), and walls. Patch approximately 230 SF of concrete spalls in the column top and bases, wall/column interface, ceilings, beams (near movement joints), beams within span, and wall edges. Miscellaneous work includes; repairs to 24,800 SF of floor topping membrane, repair to 850 SF of concrete floor top coat, application of approximately 880 LF of expansion joint sealant, repainting 45 LF of handrail, repainting two metal service doors and frames, masonry wall tuck-pointing/crack repair and touch-up painting of wall concrete and masonry where repaired.

SANDBURG HALL: Seal/caulk approximately 2,810 LF of concrete cracks in the slab-on-grade, top and bottom of waffle slabs, and joist/slab interfaces. Patch approximately 725 SF of concrete spalls in slab-on-grade, top and bottom of waffle slabs, columns, walls, joists, flat ceilings and beams. Miscellaneous work includes; repairs to 2,210 SF of concrete floor top coat system, repairs to 3,810 SF of floor water protection membrane system, treatment of 55 SF of slab separation, concrete and remediation repairs to 300 LF of exposed rebar, stairwell concrete repairs, minor plaster repairs, patching joint sealant system at beams, masonry repairs, repainting of stairwell railings and installation of a stairwell enclosure storefront.

Project Justification

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Completing this project mitigates further risk and damage to the structures, protective systems, and ancillary parking structure components. Repairing these items diminishes the safety risk posed to vehicles or other property stored within the structures. UW-Milwaukee Facility Services inspects the structures in the spring and fall each year (and on demand) to remove loose concrete and reduce damage risk, but as degrading conditions go untreated the ability to control the risk to vehicles and property is becoming untenable.

A/E Consultant Requirements

A/E Selection Required?

Consultants should have specific expertise and experience in the design and coordination of parking structure concrete and masonry repairs, concrete top coating and water protection systems, rebar remediation and expansion joint repairs 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. Consultants will verify, document questions and concerns, and fully understand repair recommendations noted in the structural study completed (14E5G) at the beginning of the design process. Any significant departure from the study scope of repairs will need to be approved by DFD and campus project contacts before detailed design work commences.

The consultant will verify project scope, schedule, and budget estimates, and recommend modifications as required to complete the specified project intent. The consultant will prepare a pre-design document to establish an appropriate project scope, budget, and schedule prior to the university seeking authority to construct from the Board of Regents and State Building Commission.

Project Budget			FundingSource(s)	<u>Total</u>
Construction Cost:		\$	GFSB - []	\$0
Haz Mats:		\$	PRSB - Facilities Maintenance & Renovation [T550]	\$1,065,000
Construction Total:		\$	Agency/Institution Cash [AGF0]	\$0
Contingency:	15%	\$	Gifts	\$0
A/E Design Fees:	8%	\$	Grants	\$0
DFD Mgmt Fees:	4%	\$	Building Trust Funds [BTF]	\$0
Other:		\$	Other Funding Source	\$0
		\$1,065,000		\$1,065,000

Project Schedule

Project Contact

Contact Name: Jay Gilboy SBC Approval: 04/2017

A/E Selection: 10/2016 Email: <gilboy@uw,.edu>

Telephone: (414) 750-1267 x Bid Opening: 06/2017

Construction Start: 07/2017 Substantial Completion: 09/2018

Project Close Out: 12/2018

Project Scope Consideration Checklist

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Commissioning

Level 1

Level 2

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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 #	✓
	Anticipated scope of work completyed under 14E5G study.	
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.	
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 projectType 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.	

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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.	