

District: City of Lowell
 School Name: Dr. An Wang Middle School
 Henry J. Robinson Middle School
 John J. Shaughnessy Elementary School
 S. Christa McAuliffe Elementary School
 Recommended Category: Project Funding Agreement
 Date: February 22, 2023

Recommendation

That the Executive Director be authorized to enter into a Project Funding Agreement with the City of Lowell for a roof and boiler replacement project at the Dr. An Wang Middle School, a roof and window/door replacement project at the Henry J. Robinson Middle School, a boiler replacement project at the John J. Shaughnessy Elementary School and a roof replacement project at the S. Christa McAuliffe Elementary School.

District Info	
District Name	City of Lowell
Elementary School(s)	1 (PK) 10 (PK-4) 2 (PK-8) 1 (PK-12) 2 (K-5) 1 (K-7) 1 (2-7)
Middle School(s)	5 (5-8) 1 (6-8)
High School(s)	3 (9-12)

School Info				
School Name	Dr. An Wang Middle School	Henry J. Robinson Middle School	John J. Shaughnessy Elementary School	S. Christa McAuliffe Elementary School
Type of School	Middle School	Middle School	Elementary School	Elementary School
Grades Served	5-8	5-8	PK-4	PK-4
Year Opened	1992	1969	1991	1993
Existing Square Footage	93,800	99,000	63,918	63,600
Additions	N/A	N/A	N/A	N/A
Building Issues	Roof Boilers	Roof Windows/Doors	Boilers	Roof
2022-2023 Enrollment	659	603	479	480

MSBA Votes	
Invitation to Participate in the Accelerated Repair Program	October 27, 2021

Project Funding Agreement Authorization	On March 1, 2023 Board agenda
Reimbursement Rate	78.95%

Consultants	
Owner’s Project Manager (the “OPM”)	Arcadis U.S., Inc.
Designer	edm Architecture and Engineering, PC

Discussion

The OPM and Designer conducted a feasibility analysis of each facility and developed Schematic Designs including proposed scopes of work, schedules, and estimated budgets. The District’s Designer, edm Architecture and Engineering, PC, recommends a roof and boiler replacement project at the Dr. An Wang Middle School, a roof and windows/doors replacement project at the Henry J. Robinson Middle School, a boiler replacement project at the John J. Shaughnessy Elementary School, and a roof replacement project at the S. Christa McAuliffe Elementary School. The Designer has confirmed that the roof, window and door, and boiler replacement projects will be in compliance with the MSBA’s sustainability requirements.

MSBA staff reviewed the consultants’ existing conditions analyses and proposed schedules that were provided by the District. Also, MSBA staff discussed the scopes and budgets for the projects with the District and its consultants.

At the Dr. An Wang Middle School, the District has provided a Total Project Budget of \$5,707,748, which includes a construction cost of \$4,719,154. Construction costs include:

- \$2,540,490 (\$49.86/sf) for the installation of Polyvinyl Chloride (“PVC”) roof (\$757,310 is ineligible due to the \$35/sf roofing cost cap on roof replacements);
- \$778,537 for associated roof demolition and hazardous material abatement;
- \$378,078 for roof wood blocking and flashing;
- and \$156,831 for miscellaneous roof work and accessories.

- \$646,729 for the installation of three 2,500 MBH each, gas fired condensing boilers;
- \$75,293 for associated boiler demolition and hazardous material abatement;
- and \$143,196 for miscellaneous HVAC and electrical work.

At the Henry J. Robinson Middle School, the District has provided a Total Project Budget of \$10,375,558, which includes a construction cost of \$9,054,886. Construction costs include:

- \$2,979,667 (\$49.67/sf) for the installation of Polyvinyl Chloride (“PVC”) roof (\$880,087 is ineligible due to the \$35/sf roofing cost cap on roof replacements);

- \$1,009,242 for associated roof demolition and hazardous material abatement;
- \$515,943 for roof wood blocking and flashing;
- and \$217,912 for miscellaneous roof work and accessories.

- \$3,194,868 (\$365.92/sf) for window systems and associated demolition;
- \$154,036 for windows and doors hazardous material abatement;
- \$144,640 for door installation and associated demolition;
- \$88,010 for louver installation and associated demolition;
- \$131,547 for security hardware at exterior doors;
- \$122,921 for window blockings and sealants;
- \$80,314 for interior window sills;
- and \$269,452 for window and door gypsum board assemblies, painting, and roller shades.

- \$146,334 for accessibility compliance upgrades resulting from the estimated cost of the base scope exceeding 30% of the full and fair cash value of the building (ineligible for reimbursement).

At the John J. Shaughnessy Elementary School, the District has provided a Total Project Budget of \$1,225,175, which includes a construction cost of \$703,563. Construction costs include:

- \$486,657 for the installation of three 1,000 MBH, gas fired condensing boilers;
- \$69,490 for associated boiler demolition and hazardous material abatement;
- and \$147,416 for miscellaneous HVAC and electrical work.

At the S. Christa McAuliffe Elementary School, the District has provided a Total Project Budget of \$4,046,649, which includes a construction cost of \$3,175,576. Construction costs include:

- \$1,715,955 (\$49.17/sf) for the installation of Polyvinyl Chloride (“PVC”) roof (\$494,455 is ineligible due to the \$35/sf roofing cost cap on roof replacements);
- \$172,944 (\$91.99/sf) for the installation of Standing Seam Metal roof (\$107,144 is ineligible due to the \$35/sf roofing cost cap on roof replacements);
- \$554,184 for associated roof demolition and hazardous material abatement;
- \$486,517 for roof wood blocking and flashing;
- \$150,833 for miscellaneous roof work and accessories;
- and \$95,143 for accessibility compliance upgrades resulting from the estimated cost of the base scope exceeding 30% of the full and fair cash value of the building (ineligible for reimbursement).

MSBA staff recommends the Estimated Total Facilities Grants and the Maximum Total Facilities Grants set forth in the table below subject to MSBA approval and audit:

Project Funding Agreement	Dr. An Wang Middle School	Henry J. Robinson Middle School	John J. Shaughnessy Elementary School	S. Christa McAuliffe Elementary School
Enrollment	659	603	479	480
Total Square Feet	93,800	99,000	63,918	63,600
Project Budget ¹	\$5,444,567	\$9,873,446	\$1,184,076	\$3,868,528
Scope Exclusions/Ineligible Costs ²	\$757,310	\$1,039,682	\$230,513	\$893,926
Estimated Basis of Total Facilities Grant	\$4,687,257	\$8,833,764	\$953,563	\$2,974,602
Reimbursement Rate	78.95%	78.95%	78.95%	78.95%
Estimated Maximum Total Facilities Grant ³	\$3,700,590	\$6,974,257	\$752,838	\$2,348,448
Project Contingencies⁴				
Potentially eligible owner's and construction contingencies	\$263,181	\$502,111	\$41,098	\$178,121
Potential Additional Grant Funds for Eligible Owner's and Construction Contingency Expenditures ⁵	\$217,901	\$441,565	\$35,178	\$123,942
	\$172,033	\$348,616	\$27,773	\$97,852
Total Project Budget				
	\$5,707,748	\$10,375,558	\$1,225,175	\$4,046,649
Maximum Total Facilities Grant⁶				
	\$3,872,623	\$7,322,873	\$780,611	\$2,446,300

¹ Does not include Owner's or Construction Contingencies.

² Scope exclusions/ineligible costs include roof replacement costs in excess of \$35.00/sf cap for the Dr. An Wang Middle School, Henry J. Robinson Middle School, and S. Christa McAuliffe Elementary School; ADA required upgrades and a proportion of the soft costs for construction costs exceeding 30% of the assessed value of the building for the Henry J. Robinson Middle School and S. Christa McAuliffe Elementary School; and soft costs that exceed 20% of the construction budget cap for the John J. Shaughnessy Elementary School and S. Christa McAuliffe Elementary School.

³ The "Estimated Maximum Total Facilities Grant" is calculated by applying the reimbursement rate to the "Estimated Basis of Total Facilities Grant". It does not include any grant funds for potentially eligible Owner's or Construction Contingency Expenditures and is subject to MSBA review and audit.

⁴ Includes eligible and ineligible Owner's and Construction Contingency.

⁵ The "Potential Additional Grant Funds for Eligible Owner's and Construction Contingency Expenditures" is calculated by applying the reimbursement rate to the "Potentially Eligible Owner's and Construction Contingencies."

⁶ Includes maximum possible Owner's and Construction Contingency grant funds, the final amount of which, if any, shall be determined by the MSBA in accordance with its policies for the determination of eligibility. The MSBA does not anticipate that the District will expend all of its contingency funds on expenses that are eligible for MSBA reimbursement.