

District: Whittier Regional Vocational Technical School District
School Name: Whittier Regional Vocational Technical High School
Category: Project Scope and Budget Agreement
Date: January 27, 2010

Recommendation

That the Executive Director be authorized to enter into a Project Scope and Budget Agreement and Project Funding Agreement with The Whittier Regional Vocational Technical School District for the proposed roof replacement project at the Whittier Regional Vocational Technical High School.

Background

In 2009, the Whittier Regional Vocational Technical School District submitted an SOI for the Whittier Regional Vocational Technical High School. The existing high school was constructed in 1972, serves grades 9-12 and is located in Haverhill on a 29 acre parcel of land. There is one educational building on campus with total square footage of 365,000 square feet. The total enrollment is approximately 1,100 students. Certain areas of the building are open to the public for services provided through the schools vocational technical programs. The school also operates an Adult Evening School program with approximately 500 students and staff, and the building operates educational programs for eleven months of the year.

The 1983 roof is 144,900 SF and has been a major issue for the school for the past 10 years. There are currently 12 different areas where rain tarps and buckets are suspended from the ceiling and configured to direct the water into a nearby sink or drain to minimize water damage. Water leaks have occurred in classrooms, vocational areas and the gymnasium, which disrupts delivery of the curriculum by limiting access to educational spaces. The District has attempted multiple repairs to the roof, but as one area is fixed, another area will start to leak.

Existing Conditions

The District selected its Designer, Gale Associates, to conduct its study. According to Gale's December 2009 study, the existing EPDM single-ply loose-laid and fully adhered roofing system was installed over 3 different types of decking and was applied in 1983. Extensive areas of moisture were reported and observed throughout the building during the interior leak audit. Numerous deficiencies were observed throughout the entire existing roofing system including failure of the roofing seams and flashings, widespread ponding, adhesion loss between membrane and insulation board, damaged masonry joints, cracked sloped clerestory glazing, and damaged skylight domes. The test cuts revealed rusted fasteners, saturated insulation and standing water under the insulation on the concrete roof areas, all indicating failures in the roof system.

Based on this information and the age/condition of the existing roof system, Gale's study has concluded that the roof has reached the end of its useful service life, and should be removed and replaced in its entirety.

Proposed Scope

The proposed scope of work includes complete removal of the existing ballasted and fully adhered low sloped roofing materials down to the existing structural concrete, wood plank, or metal deck and the installation of a fully adhered single-ply thermoplastic PVC roof membrane with tapered insulation. Additional scope includes the replacement of existing drains, installation of cladding masonry walls at designed sloped skylight transitions, the removal and replacement of sloped glazing perimeter sealants, cracked /broken sloped glazing, domed skylights and clerestory windows as specified, some interior painting, vinyl asbestos tile removal, and the installation of roof access ladders in select locations.

The Whittier Regional Vocational Technical School District has requested an extension of the 120-day deadline to acquire local approval for the appropriation of funds for the proposed project. The District is composed of eight (8) member cities and towns and requests an extension of 34 days, to June 30, 2010, in order to accommodate city council and town meeting schedules.

Conclusion

Based on an evaluation of the information submitted by the District and its consultant, MSBA staff agrees with the District's recommendation to remove and replace the existing roof with a new PVC roofing system at the Whittier Vocational Regional Technical High School.

The District anticipates starting the project in June, 2010 with an estimated completion in September of 2010. The total cost of the project is estimated to be \$3,204,485 and the recommended MSBA grant would be approximately \$2,120,728 based on a reimbursement rate of 66.18 %. These amounts are subject to adjustments based on the bid results and an audit of the costs incurred.

Whittier Reg. Voc. Tech. HS Roof = 144,900 square feet	District's Proposed Total Project Budget	Basis of Total Facilities Grant
Total Project Budget:	\$3,294,627	\$3,204,485
Project Cost per square foot	\$22.74/sf	\$22.12/sf
Total Construction Budget	\$2,678,865	\$2,658,723
Construction Contingency	\$127,565	\$127,565
Construction Cost per square foot*	\$18.49/sf	\$18.35/sf
Reimbursement Rate		66.18%
Total Facilities Grant		\$2,120,728

* Does not include Construction Contingency