

Harrisonburg High School Cost Analysis

Harrisonburg City Public Schools

6-Dec-17

SCOPE OF WORK

1. Design and build a new 1,200 students high school
2. Total site acreage = 60 acres
3. Total buildable site acreage = 45 acres
4. Size of new high school = 205,586 gsf with STEM/CTE and collaboration spaces
5. Site may require retaining walls, possible sound walls, mass rock excavation, undercut and replacement of uncontrolled fills, junk removal
6. Offsite road improvements or turning movements are included as an Add Alternate
7. Building cost includes utilization of deep foundations/piles at \$4.00/gsf to compensate for poor soil conditions
8. Building cost includes thickened, reinforced slab-on-grade to compensate for poor soil conditions

ASSUMPTIONS

1. Multi-story high school
2. 27 months construction
3. Reasonable sustainable design included in required architectural and engineering design services, but LEED Certification is not included
4. Coordination of Owner provided technology design included in required architectural and engineering design services
5. Site development costs are high due to poor soils, rock (Karst), and uncontrolled fills and materials which were dumped there over time

2018 CONSTRUCTION COSTS	Budget Size	Unit Cost	Construction Cost
Site Development	45 acres	\$261,794.67/acre	\$11,780,760
New Building	187,955 gsf	\$249.75/gsf	\$46,942,077
16 Additional Classrooms	17,631 gsf	\$249.75/gsf	\$4,403,372
Approximate Hard Construction Cost (if bid in 2018):			\$63,126,209
5% Project Construction Contingency			\$3,156,310
Approximate Hard Construction Cost with Project Construction Contingency:			\$66,282,519
<i>Assume 4.5% construction escalation costs per year</i>			
<i>If Bid in 2019 (includes 4.5% escalation for one year):</i>			
			\$69,265,233
<i>If Bid in 2020 (includes 4.5% escalation for two years):</i>			
			\$72,382,168
<i>If Bid in 2021 (includes 4.5% escalation for three years):</i>			
			\$75,639,366

Square Feet per Student at 0.9 Utilization Factor for 1,200 Students (1,333 students): 154 sf

SUB-TOTAL HARD COSTS	
Approximate Hard Construction Cost	\$63,126,209
Sub-Total Approximate Hard Construction Cost:	\$63,126,209
SUB-TOTAL SOFT COSTS	
5% Project Construction Contingency	
Architect/Engineer Basic Professional Services	
Geotechnical / Special Inspections / Testing	
Roofing Consultant	
Interior Design for Furniture Coordination and Management	
Commissioning	
Furniture	
Computers / Wiring / Security / Telephones	
Sub-Total Approximate Soft Costs:	\$12,809,164
PROBABLE TOTAL BASE BID HARD AND SOFT COSTS IF BID IN 2018:	\$75,935,373

ADD ALTERNATES - NOT INCLUDED IN PROBABLE TOTAL BASE BID HARD AND SOFT COSTS	
ADD ALTERNATE #1 - FOOTBALL/SOCCER STADIUM:	\$5,920,919
ADD ALTERNATE #2 - GEOTHERMAL HEAT PUMP HVAC SYSTEM:	\$5,974,560
ADD ALTERNATE #3 - AUXILIARY GYMNASIUM:	\$1,548,800
ADD ALTERNATE #4 - SIGNALIZATION AT ACCESS ROAD:	\$126,500
ADD ALTERNATE #5 - SECOND ACCESS ROAD AND ENTRANCE:	\$526,470

PLEASE NOTE THAT ALL COSTS ESTIMATED HEREWITH REPRESENT A CONCEPTUAL COST ANALYSIS BASED UPON RECENT SCHOOL COSTS IN THE REGION. THESE COST ESTIMATES CANNOT BE GUARANTEED OR WARRANTED AND NO SUCH CLAIM IS BEING MADE HEREWITH. THESE COSTS ARE FOR PLANNING PURPOSES ONLY AND CONTINGENCIES ARE HIGHLY RECOMMENDED FOR PLANNING STAGES. MANY THINGS CAN AFFECT THE OVERALL COST OF CONSTRUCTION - THE STATE OF THE ECONOMY (LOCAL, REGIONAL OR NATIONAL), THE AVAILABILITY OF MATERIALS AND LABOR, THE TIME OF YEAR A PROJECT IS BID, THE COST OF ENERGY, ETC.