



STEM Building Features

Medically Fragile Features (EMHS, OHS, & VPHS)	<ul style="list-style-type: none"> - Approx. 2,800 SF Suite - 2 Classrooms with (65"O Monitor and Pathway for 2nd Monitor - 2 Restrooms with Changing Counters - Teaching Wall with 4 movable marker boards - Fixed Teacher Desk with Technology Control - Quiet & Testing Rooms - Kitchen with Stove, Refrigerator, Sink, Dishwasher, Microwave, Washer/Dryer - Closet & Shelves - Storage Room
General Classroom Features (CHS, EMHS, OHS, & VPHS)	<ul style="list-style-type: none"> - 1,200 SF minimum with 40 Student Stations - Teaching Wall with Built-in Casework, 2 mounted monitors (65") & 4 movable marker boards - Fixed Teacher Desk with Technology Control - Movable Student Desks - Whiteboard Wall - Trackable Wall Surface - <u>Include Pathways for Multiple Monitor Locations</u>
Chemistry Lab Features (CHS, EMHS, OHS, & VPHS)	<ul style="list-style-type: none"> - 2,200 minimum 40 Student Stations - Teaching Wall with Built-in Casework, 2 mounted monitors (65") & 4 movable marker boards - Fixed Demonstration Table with Sink and Gas Connection - Fume Hood - Fixed Teacher Desk with Technology Control - Lockable & Glass Front Casework - Shower / Eye Wash - 15"H x 15"W x 24"D Cubbies; 40 Total - Movable Peninsulas & Student Desks - <u>Perimeter Sinks & Countertops</u>
Science Lab Features (CHS, EMHS, OHS, & VPHS)	<ul style="list-style-type: none"> - 1,500 SF minimum with 40 Student Stations - Teaching Wall with Built-in Casework, 2 mounted monitors (65") & 4 movable marker boards - Fixed Demonstration Table with Sink - Fixed Teacher Desk with Technology Control - Glass Front Casework - Wardrobe Style Cabinets with Solid Front - 15"H x 15"W x 24"D Cubbies; 20 Total - Movable Student Chairs & Tables - Perimeter Sinks & Countertops - <u>Gas Connections at Each Sink</u>
Lab Prep Room Features (CHS, EMHS, OHS, & VPHS)	<ul style="list-style-type: none"> - Wardrobe Style Cabinets with Glass Front - Movable Table - Glass Front Casework - Sink - Refrigerator - Dishwasher - Flammable Cabinet (Chemistry Labs) - Autoclave (Chemistry Labs)



ORANGE UNIFIED SCHOOL DISTRICT

Measure S Bond Program

Program Highlights Summary



December 31, 2018



Measure S Bond Program Project Highlights Summary

December 31, 2018

	Canyon High School	El Modena High School	Orange High School	Villa Park High School
Measure S Bond Allocation	\$72 million	\$72 million	\$72 million	\$72 million
Project	Science Center	Science Center	Science Center	Science Center
95% Construction Documents Estimate - Science Centers	\$69.5m	\$40.75m	\$52.4m	\$45.2m
Estimated Allocation Balance	\$2.5m	\$31.25m	\$19.6m	\$26.8m
Total Square Feet New Construction	76,378	43,988	43,200	47,136
Architect	gkkworks/CANNON DESIGN	Harley Ellis Devereaux (HED)	Lionakis	LPA
Construction Manager	Gafcon	Arcadis	Balfour Beatty	Cordoba
95% Construction Documents Total Construction Cost Estimate*	\$42,973,718	\$25,862,000	\$28,215,163	\$20,601,227
STEM Building Construction Cost per Square Foot*	\$563	\$588	\$653	\$437
Total Infrastructure, Site & STEM Building Cost per Square Foot*	\$910	\$927	\$1,213	\$959
*Based Upon Unit Price 95% Construction Documents Estimates with Escalation				
Key Components				
Student Services	Yes	No	No	No
Parking Improvements	Yes	Yes	Yes	Yes
Circulation and Traffic Flow Improvements	Yes	No	Yes	Yes
Food Services Improvements	Yes	No	Yes	No
Utility Relocation & Infrastructure Upgrades	Yes	Yes	Yes	Yes
Chemistry Labs	4	4	4	4
General Science Labs	8	8	8	8
Lab Preparation Rooms (1 Prep Room per 4 Labs)	3	3	3	3
Total Labs	12	12	12	12
Total General Classrooms	12	2	1	2
Total Medically Fragile Classrooms	0	2	2	2
Total New Labs & Classrooms	24	16	15	16
Number of Added Parking Stalls	100	0	11	2
Interim Modular Housing - Classrooms	No	No	5	9 Classrooms + 1 Restroom
Kitchen	Yes	No	No	No
Project Objectives	<ul style="list-style-type: none"> - Create New 21st Century Learning Environments for STEM Curriculum - Replace Classrooms in Portables with new facilities - Improve Safety and Security (campus access & supervision) - Increase Parking Quantity - Improve Drop-off and Site Circulation - Improve Curb Appeal - Facilities Standardization 	<ul style="list-style-type: none"> - Build state of the art Science Facility, Medically Fragile Facility Suite, and Multipurpose Classrooms - Create New Facility with minimal disruption of existing campus - Enhance and Complete Student Quad - Update Utilities to support the New Science Center - Facilities Standardization 	<ul style="list-style-type: none"> - Address aging utility infrastructure - Replace aging Science labs - Improve Medically Fragile facilities - Minimize interim housing costs - Facilities Standardization 	<ul style="list-style-type: none"> - Build Science Center with 12 Labs, 2 Multi-purpose Classrooms and Medically Fragile Facility Suite - Create a Southern California 'science' Landscape that Promotes Teaching as an Enhancement to the Existing Quad - Address Aging Utility Infrastructure - Facilities Standardization
Project Features	<ul style="list-style-type: none"> - New STEM Building - New MPR Entry & Renovation - New Student Services - 100 Additional Parking Stalls - New Drop-Off & Parking Circulation Lanes - New Food Service - Relocate and Combine Counseling, Student Services & Administration - Improved Pedestrian & Traffic Safety - Direct Observation of Parking and Entrance from Student Services - Controlled Access to Campus - Drop-off Improvements - Landscape and Lighting in Parking Areas - Secure Quad - Technology & Utility Upgrades - Relocate Campus MDF (Main Distribution Frame) - New Electrical service - New Gas service - New Communications/Data Backbone 	<ul style="list-style-type: none"> - New STEM Building - Landscape and Lighting in Central Quad - Technology & Utility Upgrades - Relocate Campus MDF (Main Distribution Frame) - New Electrical Service - New Gas Service - New Fire Lanes - New Fire Water Loop & Fire Hydrants 	<ul style="list-style-type: none"> - New STEM Building - Relocate 5 Existing Portable Buildings - New Medical Fragile Bus Drop-Off - New Bus Drop-Off - Temporary Bus Drop-Off - New Snack Bar & Outdoor Dining Area - New Utility & Food Service Yard - New Fire Lanes 	<ul style="list-style-type: none"> - New STEM Building - 250 Lockers - 2 Staff Copy/Work Rooms - New Driveway Entry - Colored Concrete Paving - Stormwater Bioretention Basin - Clear Blue Glazing - Durable Base Concrete Blocks - Deep Overhang - Sustainable Vertical Building Fins - Expanded Electrical Service - New student drop off at east - Landscaping that promotes teaching and learning opportunities - Traffic circulation improvements on Taft Ave. and the campus pick-up and drop-off lanes at the north end and in front of Bldg 100/200 will be enhanced for better efficiency, less congestion and safety
Project Scope	<ul style="list-style-type: none"> - Remodel existing Administration Building to new Food Services 12,915 SF - Provide new vehicular access and service yard adjacent to new Food Services - Demolish existing Food Services and service yard - Renovate exterior of existing Multi-purpose Building in area of demolished Food Services and create a new entry to the existing Multi-purpose Building - Modernize 2 restrooms in the band building - Modify student parking, site access and student drop-off - Renovate the existing quad - Replace and upgrade campus power and effected utility services - Provide a new 61,160 SF STEM building inclusive of 4 Chemistry labs, 8 Science labs, 12 classrooms, student services, and restrooms - Review and resolve site accessibility to new and renovated facilities - Provide new fire alarm head end - Relocate MDF to new STEM building 	<p>This construction type II-B, fully sprinklered, two-story steel frame project consists of the construction of a new Science Lab Building, with a major secondary use, on the existing El Modena High School campus. The new building will be a two story structure and consist of 12 labs, with correspondingly sized restrooms, building services and elevator. The building will also house a Medically Fragile Suite and two classrooms and site utility connections and path of travel accessibility improvements.</p>	<p>Increment 1 (Summer 2018)</p> <ul style="list-style-type: none"> a) Demolish 4 Portable Classroom Buildings (Completed Dec 2017) b) Site Utility & Infrastructure Upgrades to Service the New STEM Building and Future Facilities c) New Central Utility/Service Hub d) New Trash Enclosure e) Replace Existing Snack Shack Building <p>Increment 2 (Winter 2019 to Summer 2020)</p> <ul style="list-style-type: none"> a) Relocate 5 Portable Classroom Buildings b) Relocate Bus Drop-Off c) STEM Building, approx. 43,200 square feet d) New Panther Pavilion Plaza e) New Outdoor Dining Area 	<p>The proposed project includes:</p> <ul style="list-style-type: none"> - Demolition of Existing Classroom Building 300, and - Construction of the following facilities: <ul style="list-style-type: none"> • New "Science Center" to house chemistry, wet lab, general and specialty classrooms and support spaces. • Nine (9) new standard classroom portables along with one (1) restroom portable, interim during construction <p>Site Upgrades including extension of utilities to serve the new building and portables, accessibility, landscaping, rework of staff parking along east part of site to include bus drop off, as well as rework of parking and parking access to the north of the existing classroom building 100/200.</p>