

**MEASURE "TT" GENERAL OBLIGATION
BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT
AUDIT REPORT
For the Fiscal Year Ended
June 30, 2017**

DRAFT

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

For the Fiscal Year Ended June 30, 2017

Table of Contents

FINANCIAL SECTION

Page

Introduction and Citizens' Oversight Committee Member Listing.....	1
Independent Auditors' Report.....	2
Financial Statements:	
Balance Sheet	4
Statement of Revenues, Expenditures, and Changes in Fund Balance.....	5
Notes to Financial Statements	7

OTHER INDEPENDENT AUDITORS' REPORTS

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i>	12
Independent Auditors' Report on Performance	14

FINDINGS AND RECOMMENDATIONS

Current Year Audit Findings and Recommendations.....	16
Summary Schedule of Prior Audit Findings.....	17

Financial Section

DRAFT

MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF PASADENA UNIFIED SCHOOL DISTRICT

Introduction and Citizens' Oversight Committee Member Listing June 30, 2017

Pasadena Unified School District (the "District") consists of four high schools, one continuation school, three middle schools, twenty elementary schools, and three charter schools supported by a District Office and a service center facility. The District serves approximately 20,000 students.

On November 4, 2008, the voters of the Pasadena Unified School District approved by more than 55% Measure "TT", authorizing the issuance and sale of \$350,000,000 of general obligation bonds. On September 17, 2009, the District issued Series 2009A of the Election of 2008 General Obligation bonds in the amount of \$125,000,000. On July 3, 2012, the District issued Series 2012 in the amount of \$125,000,000. On May 25, 2016, the District issued Series 2016 in the amount of \$100,000,000. The bonds were issued to finance the construction and modernization of school facilities and to pay costs of issuance of the bonds.

The passage of Proposition 39 in November 2000 amended the California Constitution to include accountability provisions. Specifically, the District must conduct an annual independent performance audit to ensure that funds have been expended only on the specific projects listed as well as an annual, independent financial audit of the proceeds from the sale of the bonds until all of the proceeds have been expended for facilities projects.

Upon passage of Proposition 39, an accompanying piece of legislation, AB1908 (Chapter 44, Statutes of 2000), was also enacted, which amended the Education Code to establish additional procedures which must be followed if a District seeks approval of a bond Proposition pursuant to the 55% majority authorized in Proposition 39 including formation, composition and purpose of the Citizens' Bond Oversight Committee, and authorization for injunctive relief against the improper expenditure of bond revenues.

The Citizens' Bond Oversight Committee was comprised of the following members as of June 30, 2017:

Name	Title	Representation
Clifton Cates, III	Chairperson	Business Representative
Diana Verdugo	Member	Active in Senior Citizen's Organization
Camile Dudley	Member	Active in Senior Citizen's Organization
Gretchen Vance	Member	Parent/Guardian of Child in District/Active in PTA
Mikala Rahn	Member	Business Representative/ Parent/ Guardian of Child in District/ Active in PTA
Quincy Hocutt	Member	At large community member
Steven Cole	Member	Parent/ Guardian of Child in District/ Active in PTA
Willie Ordonez	Member	Parent/ Guardian of Child in District
Glen De Veer	Member	Parent/ Guardian of Child in District/ Active in PTA
Francis Boland	Member	Parent/ Guardian of Child in District/ Active in PTA
Jen Wang	Member	Parent/ Guardian of Child in District
Mike Mohit	Member	Business Representative/ Parent/ Guardian of Child in District
James V. Vitale	Member	Active in Senior Citizens' Organization

INDEPENDENT AUDITORS' REPORT

The Board of Education and the
Citizens' Bond Oversight Committee
Pasadena Unified School District
Pasadena, California

Report on the Financial Statements

We have audited the accompanying financial statements of the Measure "TT" General Obligation Bond Building Fund of Pasadena Unified School District, as of and for the fiscal year ended June 30, 2017, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Measure "TT" General Obligation Bond Building Fund of Pasadena Unified School District, as of June 30, 2017, and the changes in financial position thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

We have previously audited the Measure "TT" General Obligation Bond Building Fund of Pasadena Unified School District's June 30, 2016 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 4, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the Measure "TT" General Obligation Bond Building Fund and do not purport to, and do not, present fairly the financial position of the Pasadena Unified School District, as of June 30, 2017, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated _____, 2017, on our consideration of the District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control over financial reporting and compliance.

Murrieta, California
_____, 2017

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

Balance Sheet

June 30, 2017

	<u>2016-2017</u>	<u>2015-2016</u>
ASSETS		
Cash	\$ 114,828,138	\$ 147,113,565
Accounts receivable	<u>627,941</u>	<u>255,522</u>
Total assets	<u><u>\$ 115,456,079</u></u>	<u><u>\$ 147,369,087</u></u>
LIABILITIES AND FUND BALANCE		
Liabilities		
Accounts payable and accrued liabilit	\$ 3,480,945	\$ 4,862,181
Fund Balance		
Restricted for capital projects	<u>111,975,134</u>	<u>142,506,906</u>
Total liabilities and fund balance	<u><u>\$ 115,456,079</u></u>	<u><u>\$ 147,369,087</u></u>

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

*Statement of Revenues, Expenditures, and Changes in Fund Balance
For the Fiscal Year Ended June 30, 2017*

	<u>2016-2017</u>	<u>2015-2016</u>
REVENUES		
Interest earnings	\$ 1,437,167	\$ 585,580
Other local revenue	<u>4,485</u>	<u>1,525,000</u>
Total Revenues	<u>1,441,652</u>	<u>2,110,580</u>
EXPENDITURES		
Current:		
Classified salaries	663,558	512,751
Employee benefits	285,746	202,495
Books and supplies		
Materials and supplies	275,770	160,306
Computer, software and peripheral	80	57,881
Food	500	-
Non-capital equipment	111,388	265,513
Services and other operating expenditures		
Mileage and car allowances	1,126	976
Travel and conferences	6,720	9,680
Rentals and leases	358	3,684
Repairs	130,908	77,463
Copier lease and repair	2,000	4,843
Sales & use tax expense	7	-
Contracted services	881,137	57,242
Printing	-	1,427
Legal and audit services	553,218	365,825
Computer/technology related services	4,303	19,732
Consultants	42,000	14,752
Other charges	819	780
Postage	231	224
Capital outlay:		
Surveying costs	59,315	39,907
Hazard waste removal	33,264	56,693
Moving expense	47,521	34,222
Other costs - site	221,358	-
Architect and engineering fees	4,923,255	2,620,335
DSA fees	169,179	65,901
Energy analysis/preliminary tests	340,272	275,436
Other planning costs	486,158	234,187
Owner's representative	813,273	663,967
Main construction contractor	18,792,858	22,107,326
Other construction costs	1,413,171	6,742,587
Hazard waste removal	44,900	-
Interim housing	938,698	420,395
Construction tests	(77,795)	176,081
Inspections	498,859	942,393
Equipment	191,372	546,870
Computers & other computer hardware	117,897	-
Debt Service:		
Bond issuance costs	<u>-</u>	<u>570,000</u>
Total Expenditures	<u>31,973,424</u>	<u>37,251,874</u>

The notes to financial statements are an integral part of this statement.

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

*Statement of Revenues, Expenditures, and Changes in Fund Balance (continued)
For the Fiscal Year Ended June 30, 2017*

Excess (Deficiency) of Revenues Over (Under) Expenditures	(30,531,772)	(35,141,294)
OTHER FINANCING SOURCES (USES)		
Premium on bond issuance	-	325,000
Proceeds from bond issuance	-	100,000,000
Total Other Financing Sources	-	100,325,000
Net Change in Fund Balance	(30,531,772)	65,183,706
Fund Balance, July 1, 2015	142,506,906	77,323,200
Fund Balance, June 30, 2016	\$ 111,975,134	\$ 142,506,906

MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF PASADENA UNIFIED SCHOOL DISTRICT

Notes to Financial Statements

June 30, 2017

NOTE 1 – SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

On November 4, 2008, the District voters authorized \$350,000,000 in General Obligation Bonds (Measure "TT") for the purpose of financing the modernization and construction of school facilities within the District. The measure required a minimum 55% vote for passage. In response, an advisory committee to the District's Governing Board and Superintendent, the Citizens' Bond Oversight Committee, was established. The Committee's oversight goals include ensuring compliance with conditions of Measure "TT".

The Bond proceeds are accounted for in the District's Building Fund (21.1), where they are expended for the approved projects. The statements presented are for the individual Measure "TT" General Obligation Bond Building Fund and are not intended to be a complete presentation of the District's financial position or results of operations.

B. Basis of Accounting

The Measure "TT" General Obligation Bond Building Fund is a governmental fund reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, revenues are recognized when measurable and available. The District considers all revenues reported in the governmental funds to be available if the revenues are collected within 60 days after year-end. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on general long-term debt, claims and judgments, and compensated absences, which are recognized as expenditures to the extent they have matured. Capital asset acquisitions are reported as expenditures in governmental funds. Proceeds of general long-term debt and financing from capital leases are reported as other financing sources.

C. Budgets and Budgetary Accounting

Annual budgets are adopted on a basis consistent with generally accepted accounting principles for all government funds. By state law, the District's governing board must adopt a budget no later than July 1. A public hearing must be conducted to receive comments prior to adoption. The District's governing board satisfied these requirements.

These budgets are revised by the District's governing board during the year to give consideration to unanticipated income and expenditures.

Formal budgetary integration was employed as a management control device during the year for all budgeted funds. The District employs budget control by minor object and by individual appropriation accounts. Expenditures cannot legally exceed appropriations by major object account.

D. Encumbrances

Encumbrance accounting is used in all budgeted funds to reserve portions of applicable appropriations for which commitments have been made. Encumbrances are recorded for purchase orders, contracts, and other commitments when they are written. Encumbrances are liquidated when the commitments are paid. All encumbrances are liquidated as of June 30.

MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF PASADENA UNIFIED SCHOOL DISTRICT

Notes to Financial Statements

June 30, 2017

NOTE 1 – SIGNIFICANT ACCOUNTING POLICIES (continued)

E. Fund Balances

The fund balance for governmental funds is reported in classifications based on the extent to which the government is bound to honor constraints on the specific purposes for which amounts in those funds can be spent.

Nonspendable: Fund balance is reported as nonspendable when the resources cannot be spent because they are either in a nonspendable form or legally or contractually required to be maintained intact. Resources in nonspendable form include inventories and prepaid assets.

Restricted: Fund balance is reported as restricted when the constraints placed on the use of resources are either externally imposed by creditors, grantors, contributors, or laws or regulations of other governments; or imposed by law through constitutional provision or by enabling legislation.

Committed: The District's highest decision-making level of authority rests with the District's Board. Fund balance is reported as committed when the Board passes a resolution that places specified constraints on how resources may be used. The Board can modify or rescind a commitment of resources through passage of a new resolution.

Assigned: Resources that are constrained by the District's intent to use them for a specific purpose, but are neither restricted nor committed, are reported as assigned fund balance. Intent may be expressed by either the Board, committees (such as budget or finance), or officials to which the Board has delegated authority.

Unassigned: Unassigned fund balance represents fund balance that has not been restricted, committed, or assigned and may be utilized by the District for any purpose. When expenditures are incurred, and both restricted and unrestricted resources are available, it is the District's policy to use restricted resources first, then unrestricted resources in the order of committed, assigned, and then unassigned, as they are needed.

F. Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

NOTE 2 – CASH

Pooled Funds

In accordance with Education Code Section 41001, the District maintains all of its cash from the bond proceeds in the County Treasury. The County pools and invests the cash. These pooled funds are carried at cost which approximates fair value. Interest earned is deposited annually to participating funds. Any investment losses are proportionately shared by all funds in the pool.

MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF PASADENA UNIFIED SCHOOL DISTRICT

Notes to Financial Statements

June 30, 2017

NOTE 2 – CASH (continued)

Pooled Funds (continued)

Because the District's deposits are maintained in a recognized pooled investment fund under the care of a third party and the District's share of the pool does not consist of specific, identifiable investment securities owned by the District, no disclosure of the individual deposits and investments or related custodial credit risk classifications is required.

In accordance with applicable state laws, the County Treasurer may invest in derivative securities with the State of California. However, at June 30, 2017, the County Treasurer has represented that the Pooled Investment Fund contained no derivatives or other investments with similar risk profiles.

NOTE 3 – ACCOUNTS RECEIVABLE

The total accounts receivable at June 30, 2017, in the amount of \$627,941 is due from the Los Angeles County Treasurer for interest earnings.

NOTE 4 – MEASURE "TT" GENERAL OBLIGATION BONDS

Series 2009A

On September 17, 2009, the District issued \$125,000,000 of Series 2009A General Obligation Bonds. The bonds are general obligations of the District. The County is obligated to levy ad valorem taxes upon all property within the District for the payment of interest on and principal of the bonds. The County records the collection of taxes and payments of bond principal and interest in a separate fund, which is not reported here. The bonds were issued to finance the construction and modernization of school facilities and to pay costs of issuance of the bonds.

The bonds were issued as: \$40,320,000 tax-exempt current interest serial bonds with stated interest rates ranging between 2.5% and 5% and fully maturing on August 1, 2022, and \$84,680,000 in Federally taxable Build America Bonds Capital Appreciation Bonds with stated interest rates ranging between 6.076% and 7.193%, and fully maturing on August 1, 2034. The Build America Bonds program was created by the American Recovery and Reinvestment Act to assist state and local governments in financing capital projects at lower borrowing costs and to stimulate the economy and create jobs. It authorizes state and local governments to issue taxable bonds to finance any capital expenditures for which they could otherwise issue tax-exempt governmental bonds. Pursuant to the Recovery Act, the District expects to receive a cash subsidy payment from the United States Treasury equal to 35% of the interest payable on the Bonds on or about each interest payment date. The cash payment does not constitute a full faith and credit guarantee of the United States Government, but is required to be paid by the Treasury under the Recovery Act. The District is obligated to deposit any cash subsidy payments it receives into the debt service fund for the Bonds.

Series 2012

On July 3, 2012, the District issued \$125,000,000 of Series 2012 General Obligation Bonds. The bonds were issued as current interest serial bonds with stated interest rates ranging between 0.4% and 5.0% and fully maturing on May 1, 2037.

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

Notes to Financial Statements

June 30, 2017

NOTE 4 – MEASURE "TT" GENERAL OBLIGATION BONDS (continued)

Series 2016

On May 25, 2016, the District issued \$100,000,000 of Series 2016 General Obligation Bonds. The bonds were issued as current interest serial bonds with stated interest rates ranging between 2.0% and 5.0% and fully maturing on August 1, 2036.

2016 Refunding

On May 25, 2016, the District issued Series 2016 A and B refunding bonds in the amounts of \$11,025,000 and \$78,470,000, respectively. The proceeds were used to advance refund certain of the District's 2009 A-1 and 2009 A-2 bonds.

A summary of outstanding general obligation bonds that have been issued to date follows:

Series	Issue Date	Maturity Date	Interest Rate	Original Issue	Balance, July 1, 2016	Additions	Deductions	Balance, June 30, 2017
2009 A-1	9/17/2009	8/1/2022	2.5%-5.0%	\$ 40,320,000	\$ 9,565,000	\$ -	\$ 1,960,000	\$ 7,605,000
2009 A-2	9/17/2009	8/1/2034	6.076%-7.193%	84,680,000	-	-	-	-
2012	7/3/2012	5/1/2037	0.4%-5.0%	125,000,000	110,205,000	-	3,005,000	107,200,000
2016	5/25/2016	8/1/2036	2.0-5.0%	100,000,000	100,000,000	-	-	100,000,000
2016 Ref. A	5/25/2016	8/1/2022	1.25%-4.0%	11,025,000	11,025,000	-	195,000	10,830,000
2016 Ref. B	5/25/2016	8/1/2034	4.0%-5.0%	78,470,000	78,470,000	-	-	78,470,000
				<u>\$ 439,495,000</u>	<u>\$ 309,265,000</u>	<u>\$ -</u>	<u>\$ 5,160,000</u>	<u>\$ 304,105,000</u>

The requirements to amortize outstanding general obligation bonds are as follows:

Fiscal Year	Principal	Interest	Total
2017-2018	\$ 7,565,000	\$ 25,069,514	\$ 32,634,514
2018-2019	8,540,000	19,800,695	28,340,695
2019-2020	8,455,000	21,446,534	29,901,534
2020-2021	6,845,000	12,176,843	19,021,843
2021-2022	7,305,000	11,900,781	19,205,781
2022-2027	50,365,000	53,334,219	103,699,219
2027-2032	85,795,000	36,998,244	122,793,244
2032-2037	129,235,000	13,877,337	143,112,337
Total	<u>\$ 304,105,000</u>	<u>\$ 194,604,167</u>	<u>\$ 498,709,167</u>

NOTE 5 – COMMITMENTS AND CONTINGENCIES

A. Litigation

The District is involved in litigation at various stages. In the opinion of legal counsel, the District does not anticipate that the outcome of any of the litigation will have a material impact on the financial statements.

B. Construction Commitments

At June 30, 2017, the District had commitments with respect to unfinished capital projects of approximately \$70.7 million to be paid from Measure "TT" General Obligation Bonds, detailed as follows:

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

Notes to Financial Statements

June 30, 2017

NOTE 5 – COMMITMENTS AND CONTINGENCIES (continued)

Measure TT Projects	Remaining Construction Commitment
Altadena Elementary School - Modernization	\$ 17,460
Blair High School - Modernization of Main Building	19,725,958
Burbank Elementary School - Lunch Shelter/Renovation	90,424
Career Technical - Career Technical Projects	25,660
Don Benito Elementary School - New Administration Building	194,338
Don Benito Elementary School - HVAC	90,264
Elliot Middle School - Auditorium/Cafe Modernization	2,760,768
Field Elementary School - Modernization	21,542
Franklin Elementary School - Modernize Café/MPR/Windows	5,273
Hamilton Elementary School - Modernization MPR/Café	13,791
Jackson Elementary School - Modernize of MPR/Cafe/Admin	810,391
Jefferson Elementary School - Modernization	176,441
Jefferson Elementary School - New Child Care Center	66,194
John Muir High School - Building D Accessibility	21,509
John Muir High School - Black Box Theater Project	396,035
John Muir High School - Culinary Arts Project	23,354
John Muir High School - Modernization, Abatement & Kitchen	19,020,409
Linfa Vista Elementary School - Modernization	112,461
Longfellow Elementary School - New Kitchen Bldg/Lunch Shelter/Auditorium	469,276
Madison Elementary School - Modernization	217,437
Marshall Fundamental Secondary School - Old Gym Renovation	2,278
Marshall Fundamental Secondary School - Sports Complex	223,372
McKinley Elementary School - Phase I New Construction	1,040
McKinley Elementary School - Phase II Modernization	1,283,472
Norma Coombs Alternative - New CR Wing & Admin Bldg	6,555,809
Pasadena High School - Campus Appearance/Identity	26,071
Pasadena High School - Campus Upgrds/Restrooms Upgrades	251,717
Pasadena High School - ADA Upgrade (DSA)	87,057
Pasadena High School - Modernize Gymnasium Complex	12,756,201
Pasadena High School - Kitchen Project	159,741
Rose City High School - Rose City Modification	238,103
Roosevelt Elementary School - Multi-purpose Facility	135,407
San Rafael Elementary School - Modernization	174,230
Sierra Madre Elementary School (Lower) - Phase II - HVAC Auditorium Upgrades	218,122
Sierra Madre Middle School (Upper) - New MS Campus	90,383
Washington Accelerated Elementary School - New Classroom/MPR Bldg	3,768,692
Washington Accelerated Elementary School - New Child Care Center	97,128
Washington Middle School - New Constr. & Mod.	225,220
Willard Elementary School - Kinder and Pre-K Complex	142,670
Total	<u>\$ 70,695,698</u>

Other Independent Auditors' Reports

DRAFT

**INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN
AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE
WITH *GOVERNMENT AUDITING STANDARDS***

The Board of Education and the
Citizens' Bond Oversight Committee
Pasadena Unified School District
Pasadena, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Measure "TT" General Obligation Bond Building Fund of Pasadena Unified School District as of and for the year ended June 30, 2017, and the related notes to the financial statements, and have issued our report thereon dated _____, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Pasadena Unified School District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Pasadena Unified School District's internal control. Accordingly, we do not express an opinion on the effectiveness of the Pasadena Unified School District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the District's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Pasadena Unified School District's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Murrieta, California
_____, 2017

INDEPENDENT AUDITORS' REPORT ON PERFORMANCE

The Board of Education and the
Citizens' Bond Oversight Committee
Pasadena Unified School District
Pasadena, California

We have examined the Pasadena Unified School District's (the "District") compliance with the performance requirements for the Proposition 39 Measure "TT" General Obligation Bond for the fiscal year ended June 30, 2017, under the applicable provisions of Section 1(b)(3)(C) of Article XIII A of the California Constitution and Proposition 39 as they apply to the Bonds and the net proceeds thereof. Management is responsible for the District's compliance with those requirements. Our responsibility is to express an opinion on the District's compliance based on our examination.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Objectives

The objectives of the examination of compliance applicable to the District are to determine with reasonable assurance that:

- The expenditures charged to the Pasadena Unified School District Building Fund (21.1) are documented.
- Expenditures charged to the Building Fund have been made in accordance with the bond project list approved by the voters through the approval of Measure "TT".
- Any discrepancies or weaknesses in internal controls are noted and recommendations for improvement are provided.
- The District Board and the Citizens' Bond Oversight Committee are provided with a performance audit report as required under the requirements of the California Constitution and Proposition 39.

Scope of the Audit

The scope of our performance audit covered the fiscal period from July 1, 2016 to June 30, 2017. The expenditures tested included all object and project codes associated with the bond projects. Expenditures incurred subsequent to June 30, 2017, were not reviewed or included within the scope of our audit or in this report.

Procedures Performed

We obtained the general ledger and the project expenditure reports prepared by the District for the fiscal year ended June 30, 2017, for the Measure "TT" General Obligation Building Fund. Within the fiscal year audited, we obtained the actual invoices and other supporting documentation for expenditures to ensure compliance with the requirements of Proposition 39 and Measure "TT" with regards to the approved bond projects list. We performed the following procedures:

To meet our objectives, audit tests were performed and included, but were not limited to the following:

- We verified that bond funds were deposited in the District's name and invested in accordance with applicable legal requirements.
- We tested approximately \$21.2 million in bond fund invoices paid. This includes testing payments for validity, allowability, and accuracy. Expenditures sampled in our test included salaries and payments made to subcontractors and other vendors.
- We reviewed the approved project listing as set out in the Measure "TT" election documents.
- We visited construction sites at Washington Elementary and Pasadena High schools to ensure that expenditures made corresponded with the actual work performed at the site.
- We verified that funds from the Building Fund (21.1) were expended for the construction, reconstruction, acquisition, furnishing and equipping of District facilities constituting the authorized bond projects, and we verified that funds held in the Building Fund (21.1) were not used for salaries of school administrators or other operating expenses of the District.
- We reviewed a sample of projects to ensure that proper bidding procedures were followed pursuant to Public Contract Code Section 22032.
- We verified whether or not the District exceeded change order limitations in excess of 10% pursuant to Public Contract Code Section 20118.

Our audit of compliance made for the purpose set forth in the preceding paragraph would not necessarily disclose all instances of noncompliance.

In our opinion, the District complied with the compliance requirements for the Measure "TT" General Obligation Bond proceeds listed and tested above.

This report is intended for the information of the Board of Education, management and the Citizens' Bond Oversight Committee; however, this report is a matter of public record.

Murrieta, California
_____, 2017

Findings and Recommendations

DRAFT

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

Current Year Audit Findings and Recommendations

June 30, 2017

There were no findings or recommendations in 2016-17.

DRAFT

**MEASURE "TT" GENERAL OBLIGATION BOND BUILDING FUND OF
PASADENA UNIFIED SCHOOL DISTRICT**

Summary Schedule of Prior Audit Findings

For the Fiscal Year Ended June 30, 2017

Original Finding No.	Finding	Recommendation	Current Status
<i>Finding 2016-1: Change Orders</i>	<p>Public Contract Code (PCC) 20118.4 states that the governing board of a school district may approve a change or alteration without the formality of securing bids if the cost so agreed upon does not exceed ten percent of the original contract price.</p> <p>The Board entered into a contract with Mallcraft, Inc. to modernize the multi-purpose room at Field Elementary for \$1,467,000. Subsequently, the Board approved three change orders totaling \$435,782, which is greater than ten percent of the original contract price.</p>	<p>We recommend the Board comply with PCC 20118.4 in seeking bids for change orders in excess of ten percent of the original contract price.</p>	<p>Implemented.</p>

**REPORT OF THE CITIZENS' OVERSIGHT COMMITTEE
TO THE BOARD OF EDUCATION OF THE PASADENA UNIFIED
SCHOOL DISTRICT FOR THE FISCAL YEAR ENDED JUNE 30, 2017**

[date]

Submission of Annual Report

The Citizens' Oversight Committee of the Pasadena Unified School District hereby submits to the Board of Education this report for the fiscal year July 1, 2016 through June 30, 2107, as required by section 3.3 of the Committee's Bylaws.

The Committee's Duties

The Committee's mandatory duties are defined by the California Constitution, the California Education Code, and the Committee's bylaws. Under the Constitution and the Education Code, the purpose of the Committee is to inform the public whether the bond proceeds are used only for the "construction, reconstruction, rehabilitation, or replacement of school facilities . . . and not for any other purpose, including teacher and administrator salaries and other school operating expenses."¹ The bylaws specifically require that the Committee's annual report contain a statement whether the District is in compliance with those laws and a summary of the Committee's activities for the reporting year.² The bylaws also permit the Committee to review the District's management of bond proceeds and to make recommendations to improve efficiency and minimize costs.³

Summary of the Committee's Findings

During the past fiscal year, there have been several material violations by the District⁴ of the law governing the expenditure of bond proceeds. In particular, bond proceeds have been spent on legal fees, staff salaries, consultant compensation, and other activities that are unrelated to school construction and rehabilitation. Despite repeated objections by the Committee, these deficiencies have not been corrected. Three other major deficiencies have made it unnecessarily difficult for the Committee, the Board, and the public to determine whether TT funds are being spent legally and wisely. First, the Committee has been unable to obtain from the District all of the information that the Committee needs to perform its oversight function. Second, the reporting of Proposition TT expenditures by the District is incomplete, confusing, and frequently inaccurate.

¹ California Constitution, Art XIII A, sec. 1(b)(3); Education Code sec. 15278(b).

² Bylaws, sec. 3.3.

³ Bylaws, sec. 4.1(c)

⁴ The [Pasadena Unified School] District is the governmental entity legally responsible for the management of Proposition TT funds. Actual management is exercised by the Facilities Department of the District. Unless otherwise noted, all references in this report to "the District" can be read as references to the Facilities Department.

Third, the process for the budgeting of Proposition TT expenditures is haphazard and incoherent. This report addresses each of those subjects in turn and offers specific recommendations for correcting these deficiencies.

Impermissible Expenditures of TT Funds

In fiscal year 2016-2017, the District spent \$66,151 on legal fees related to surplus property disposition and \$21,246 on general administrative expenses of the Facilities Department, a total of \$87,397. In the opinion of the Committee, neither type of expense is eligible for payment out of TT funds.⁵ Note that \$87,397 to which the Committee takes exception is for 2016-2017 only. Legal fees related to property disposition for fiscal year 2015-2016 were \$38,398, and Facilities general administrative expenses were \$23,485, a total of \$61,883. The Committee has no idea what were the amounts of such legal fees in years before then.

Equally, if not more, problematic is the payment of Facilities Department staff compensation out of TT funds. According to information provided to the Committee by the District, 100% of the compensation of seven Facilities Department employees was charged to TT funds. Charging TT funds with a commensurate portion of employee compensation for work done on TT matters can be legitimate. However, it is improper to charge TT funds with 100% of staff compensation when it is clear that not all of those employees spent all of their time working on TT matters.⁶

Eighty-five percent of the compensation of the Director of Facilities was charged to TT funds and the Committee presumes, but does not know, that this was done in prior years. As previously noted, the California Constitution prohibits the use of school construction bond proceeds to pay “administrator salaries.” Is the Director of Facilities not an administrator? If he is not, who is the administrator of that Department? Does the Department operate without an administrator?

How much TT money are we talking about? Who knows? It is impossible to quantify the total amount of improper charges because, despite the Committee’s request, the District has failed to provide the Committee with any allocations between the TT and non-TT work performed by each employee. Furthermore, as in the case of legal fees, the Committee has no idea what were the amounts improperly charged to TT funds in prior fiscal years.

⁵ Since the close of the fiscal year, the Director of Facilities advised the Committee that legal fees attributable to the “7-11 Committee” would no longer be charged to TT and that the \$63,068, charged in 2016-2017 would be restored. Whether the former representation is accurate the Committee does not know. As of November 15, 2017, no such amounts have been restored.

⁶ In October, 2017 one employee listed her various functions: “Construction Specialist, Athletic Field HS and MS Manager, Civic Center Permits Supervisor, Energy Conservation Manager, IPM Coordinator, LCP Tracker Manager, Muir Ranch Administrator, School Garden Designed/Builder, School Garden Student Intern Supervisor, and Volunteer Coordinator for Landscape Beautification Projects.”

In addition, the District charged other expenses like travel and conferences, office-related repairs, and copier leases to TT funds. Although the amounts involved were small, the principle is the same. TT funds are restricted funds and are not allowed to be used for prohibited expenses like “school operating expenses.”

In objecting to the use of TT funds to pay certain legal fees and 100% of employee compensation, the Committee provided its analysis to the District and supported its conclusions with the opinions of the Committee’s legal counsel. The District never provided the Committee with any substantive justification of its position and failed to take any corrective action. In essence, the District simply ignored the Committee—and continues to do so.

Various excuses have been offered for the District’s conduct. One is that the impermissible expenditures were mere bookkeeping errors, putting expenses into “the wrong bucket.” No, spending TT funds on unqualified activities was not a bookkeeping error. It was the use of funds for a prohibited purpose, a substantive legal violation. The practice cannot be justified by how it is booked, and a violation cannot be reversed by booking the payments in some other manner. It can be corrected only by restoring to the TT fund money that should not have been charged to it in the first place. To discourage this kind of conduct in the future, the Board needs to adopt clear, comprehensive written standards for the expenditure of TT funds and insist that the District adhere to them.

Another excuse is that any errors were trivial in relation to the \$350 million total bond issue. Is this assertion even true? Once again, who knows the total amount of impermissible expenditures? The District has not provided the information necessary to do so either for the 2016-2017 year or prior years. The total amount of expenses improperly charged to the TT fund since its inception undoubtedly runs into hundreds of thousands of dollars, not a trivial amount by most people’s standards, even if it is a small percentage of the total bond proceeds.

A more fundamental problem is that the law says that the District may not spend *any* TT funds on certain things. It matters not whether the amounts impermissibly spent were large or small in relation to the total bond issue. The same response applies to another excuse: “we have a job to do; let’s not get bogged down with all these technicalities.” The law is not a mere technicality. Compliance is not optional. The Committee appreciates that general funds are scarce, but when it comes to spending TT money, that fact is irrelevant. TT funds are restricted funds that cannot be used to cover shortfalls in other funding sources.

The Committee’s Difficulty in Obtaining Critical Information from the District

The Committee needs certain information in order to perform its oversight function. First and foremost, it needs to know about *all* proposed expenditures of TT funds before the appropriation requests are approved by the Board and before the money

is spent. The Facilities Department usually provides to the Committee Board Reports⁷ that end in the suffix “F” but not other Board Reports. Sometimes those non-F Board Reports call for the expenditure of TT funds, and the Committee learns of them only by chance. Sometimes the District does not even provide the Committee with “F” Board Reports.

The Committee needs basic information about the past, present, and future status of all TT projects in order to understand and report the Big Picture: how is the District managing the funds that the public entrusted to it for school construction, rehabilitation, and repair. Sometimes the Committee needs information about a particular project, either to address a potential problem with that project or to serve a broader purpose. For example, in May 2017 the Committee requested specific information about Norma Coombs in order to test the numbers in the April 2017 “spend-out plan.” **Exhibit** The Committee wanted to provide the District with an opportunity to explain how its current budget numbers are derived. To date, neither the data nor an explanation of how the numbers were derived has been offered, except for the dismissive remark, “We have a process.” It is an unacceptable budgeting practice to not be able to explain the source of a budget.

In the case of “dual purpose” expenditures, those properly allocable partly but not entirely to TT funds, the Committee—and, we believe, the Board—need a reasonable, fact-based allocation between the two portions. Prime examples of dual-purpose expenditures are legal fees and employee and consultant compensation. The District should provide the necessary information voluntarily in response to the Committee’s requests. The Committee should not be compelled to have to file a Public Records Act request to obtain the information necessary to perform its oversight function, as the Committee was compelled to do this past summer. **Exhibit**

While some of the Committee’s questions require the District to consult its records and respond with data, other questions can frequently be answered by a knowledgeable member of the Facilities Department. In practice, this means the Director of Facilities. Unfortunately, the Director no longer regularly attends Committee meetings, as he did up until 2017. Instead he has sent a staff member who, while fully cooperative, frequently cannot answer the substantive questions posed to him—other than to say, “please put your request in writing.” Barring a legitimate need to be elsewhere, the Director of Facilities needs to attend all Committee meetings in person.

Lack of Transparent Reporting of the Use of TT Funds

Meaningful reporting of the expenditure of TT funds is essential in order for the public to see how those funds are being spent, what they are getting for their tax dollars, and whether they can trust the District with their money. The public and the Board need

⁷ “Board Reports” are the title of documents that are used by the District to request Board approval of proposed TT expenditures and commitments.

to be able to see, clearly and in one place, essential information about the financial and physical status of *all* TT-funded projects. With this information the Board and the public can see what was originally planned, what has actually happened, and what remains to be done. The report must account for all TT funds. It must account for all TT projects, whether in progress, completed, or abandoned. It is especially important that for each TT project, the Board and the public be able to compare amounts spent or obligated to date with the work actually done to date. If, for example, amounts spent and obligated to date are 75% of the total budgeted amount for a particular project but the job is only 40% completed, trouble is brewing. Unless the project is scaled back or abandoned, the budget will be exceeded. If, on the other hand, amounts spent and obligated are 75% of the total budgeted amount and the job is 70% completed, there is probably little to worry about. And it goes almost without saying that the report should be accurate.

To date no single report by the District provides this essential information in one, clear executive summary. The District's "budget status reports," which are discussed in detail below, do not compare amounts budgeted, committed, and spent with what is happening on the ground. Thus, an interested person (including a Board member) cannot determine whether a project is on track or on trouble. He cannot determine how much more money is needed to complete the project or when it is likely to be completed. He cannot estimate what TT funds will remain for other projects after the project is completed.

Since the beginning of 2017, the Committee has strongly urged the District to produce and update on a regular basis an executive summary of all TT-funded projects that would include the following basic information—in one place, in easily understandable format, and juxtaposed to permit comparison:

- The original budgeted amount, as approved by the Board
- The current budgeted amount Board, as approved by the Board
- The amount of TT funds committed to date
- The amount of TT funds spent to date
- Percentage of project completion
- Estimated date of completion
- Estimated remaining total cost of completion
- The variance between budgeted amount of estimated total cost of completion
- Identification of the contractor(s) and architects

Much more detailed information would still be available to everyone, but these few key pieces of information would answer the vast majority of questions the public is likely to ask and that the Board needs to be able to answer. Unfortunately, such a report still does not exist, nor has the District committed to produce one. The Committee has offered to prepare the report, but it has been unable to obtain from the District all of the information it needs to do so. All of the information needed either already exists or is

readily available to the District. The Committee has given the District a workable template. It would take little time to fill in the blanks each month.

The TT Budgeting Process

The Committee's role in the TT budgeting process is a limited one: to make sure that TT funds are spent as promised in the original ballot proposition and as required by law. Otherwise, TT budgeting is the responsibility of the District and, ultimately, the Board. It is the Board which is responsible for setting priorities, allocating funds among eligible projects, and insuring that its decisions are properly implemented by the District. However, in addition to performing its principal mission, the Committee is authorized to review the District's efforts to "maximize bond proceeds" by reducing costs, incorporating efficiencies, and promoting efficiencies.⁸ It is with that objective that the Committee offers its comments on the existing TT budgeting process.

In the Committee's opinion, the present TT budgeting process is unstructured, chaotic, and incoherent. Proper oversight is difficult at best and sometimes impossible. Although the consequences of these deficiencies are impossible to quantify, they almost certainly result in avoidable inefficiencies and unnecessary waste of public funds.

The Facilities Master Plan is supposed to establish priorities for school construction projects. The Plan, originally adopted in 2008, was supposed to have been updated every _____ years, but it has not been formally updated since 2012. It is difficult to budget without knowing what the budget is supposed to achieve.

The Board of Education approves updated budgets for the District on a regular basis, but those budgets do not contain sufficient detail to see on which projects in which order TT funds are going to be spent or whether proposed expenditures are consistent with previously approved budgets. The District periodically issues (in varying formats) "budget reports," but they suffer from several serious defects. The principal defect is their failure to match money spent or committed against actual achievement on the ground so that one can tell quickly where each TT project stands and where it is headed. A second major defect is that the budget reports do not account for all TT projects. A third major defect is that these critical documents are not available to the public. The February 15, 2017 report is the only one that has been posted. **Exhibit**

The budget reports are defective in other ways as well. For example, in the budget status report of February 15, 2017, the column entitled "% of Budget Spent" gives a misleading picture of the true cost of a project. What matters is not simply dollars spent as a percentage of the total budget but dollars spent *and committed to be spent* as a percentage of the total budget.

⁸ Bylaws, sec. 4.1©.

Another problem is that the budget reports lists projects that are not really projects and that may not be properly chargeable to TT. One example in the February 2017 report is Career Technical Education Projects,” for which \$11.4 million has been budgeted, \$2.7 million has been committed, and \$8.7 million remains. Career technical education refers to a series of academic and technical courses designed to prepare students for careers in professional and technical fields.⁹ On its face Career Technical Education does not seem to involve the construction, renovation, or repair of a school. If, perhaps, TT funds are used to construct or repair the physical facilities necessary to teach the courses—for example, renovation of a machine shop to facilitate the teaching of shop mechanics—that would be legitimate, but the cost of the teachers, whether from within or without the District, or teacher training would not be.

In addition to the basic issue of legality, the inclusion of Career Technical Education in a TT budget distorts the budget and impugns its accuracy. Is it likely that the full amount budgeted will ever be spent? If so, on what? If not, where will the balance be spent? A budget item like Career Technical Education becomes an unallocated “pot of money,” a dark pool which can be shifted to some other project which needs more money. Squirreling unallocated money away in what appears to be a TT project construction account is hardly transparent budgeting. In construction, legitimate reserves are essential, but reserves should be clearly denominated as such, reasonable in amount, and approved by the Board.

The foregoing defects naturally cause the reader to question the reliability of the budget reports. It only makes matters worse that some published budget reports contain gross errors and omissions. For example, the February 15 report shows a total TT budget of \$343.8 million, which is close to the \$350 million total bond proceeds, but the budget report entirely omits Blair Middle School, which cost about \$14 million. The omission of a major project from a report that purports to account for all TT funds does not give one much confidence in the report. Matters have not improved since the close of the fiscal year. The Measure TT budget as of September 7, 2017 shows a current budget of \$418.6 million, a strange bit of optimism given that the total bond proceeds are \$350 million plus a small amount of interest income. The Committee questions whether anyone checks these reports before they are published. Whether or not that happens, gross errors like this call into question the accuracy of the other data contained in these reports.

In addition to its budget reports, the District issues various “spending plans,” which are intended to show how remaining TT funds should be spent.¹⁰ The principal problem with these spending plans is that they do not show how the numbers shown on them were derived. Those numbers have changed frequently in the last few months

⁹ On the District’s website, CTE courses are defined as “a sequence of courses (which may include technical learning experiences) that provides individuals with the challenging academic and technical knowledge and skills the individuals need to prepare for further education and for careers in emerging and established professions and may lead to technical skill proficiency, a credential, a certificate, or a degree.”

¹⁰ Since April 2007, the District has issued _____ versions of its spending plan.

without explanation. Of course, needs change over time, but necessary changes should be clearly identified, quantified, and explained.

The Essence of the Problem

When it comes to the use and management of TT funds, oversight of the Facilities Department by the Board and the Committee has been and remains ineffective. The TT school bond construction program is a vast 10-year project that involves the expenditure of more than \$350 million on up to 27 schools. Effective oversight requires knowledge, commitment, time, and persistence, all of which the District possesses. The same cannot be said for the Board or the Committee. The Board has 7 part-time members, who have numerous responsibilities in addition to monitoring TT. The Committee has a maximum of 15 part-time unpaid volunteers, who do the best they can with limited resources but who have no power to do anything.

Even with such limitations, the Board and the Committee could probably provide adequate oversight—if the District cooperated in good faith. However, the Facilities Department resists effective oversight by the Committee—for the most part successfully given the District’s two great advantages. First is its control of information, which it exercises in several fashions. It fails to provide all the information that the Committee needs while it offers to provide reams of information that is neither useful nor desired. It dribbles out important information piecemeal so that it is difficult for the Committee to see the big TT picture. (It does so for the Board as well.) It promises to deliver but then does not.

But the District’s greater advantage is its knowledge that the Committee has no real power—no power to compel the production of information, no power to compel any action. Thus, the Facilities Department can slow-walk its responses to the Committee’s requests for information or ignore them entirely. The Department can ignore any findings or recommendations by the Committee that the Department does not like in the knowledge that unless the Board becomes involved—which the Board rarely does—the District can continue doing whatever it wants with TT funds. It is reasonable to assume that the Board and the public wish TT funds to be spent as promised in the original ballot measure and as required by law. If this is the goal, there appear to be only two possible solutions: the District can cooperate with the Committee or the Board can begin to give serious consideration to the Committee’s findings and recommendations and implement the ones it deems meritorious. At least the Board has the power to do so.

Recommendations

The following recommendations by the Committee, if adopted by the Board and implemented in good faith by the District, would largely remedy the numerous problems identified in this report.

- Reforms to facilitate the review of specific TT expenditures

- All proposed expenditures of TT funds should be submitted to the Committee before they are submitted to the Board. This is the modus operandi of the Los Angeles Unified School District.
- The Committee (and the Facilities Committee of the Board) should be given adequate time to review the proposed expenditures.
- Proposed dual-purpose expenditures should state a reasonable, fact-based allocation between TT and non-TT funds.
- All proposed TT expenditures that are disapproved by the Committee but nevertheless desired by the District should receive special scrutiny by the Board. If the Committee's disapproval is supported by the opinion of its independent counsel, then at the very least the District should obtain the opinion of its counsel before the Board makes a final decision.
- Reforms to prevent or correct impermissible expenditure of TT funds
 - The Board should adopt clear, comprehensive standards for the expenditure of TT funds and insist that the District adhere to them or explain why it is not doing so. The Committee has already adopted such detailed standards. The Board is not obligated to adopt them wholesale, but at least they are a good template for what the standards should cover.
 - The District should appoint an employee who is entirely independent of the Facilities Department as an internal auditor of the expenditure of TT funds to insure that all such expenditures comply with the law and have been approved by the Board.
 - If the Board concludes that TT funds have been improperly spent, then the District should be required to reimburse the TT account within 30 days of the Board's finding.
- Reforms to insure that the Committee receives the information necessary to perform its oversight function
 - The Board should direct the District to respond promptly and in good faith to all reasonable requests for information by the Committee.
 - If the District cannot comply, then the District should advise the Committee in writing why it cannot and suggest an alternative means of giving the Committee what it needs.
 - Absent special circumstances, the Director of Facilities should be required to attend all Committee meetings for their duration.
- Reforms to insure that the public is kept currently apprised of the status of TT projects and the TT fund

- The Board should direct the District to prepare an overall summary of the status of TT projects similar to the report recommended by the COC.
- All-important reports, such as project status, budget status, spend-out plans, should be revised no less often than quarterly, but preferably monthly, and posted on both the District's and the COC's website.
- Reforms to improve the budgeting process. **Kim, help.**
 - Monthly budget reports should be prepared and issued by personnel under the control of the Finance organization of the PUSD, not by the Facilities Department, which should solely be responsible for design and construction, not for the reporting of its performance.
 - The Facilities Committee of the PUSD should be restructured to include a Finance representative, and a standing agenda item must be a review of the status of the budget expenditures and construction progress.

Major accomplishments and Failures of the Committee during the Fiscal Year

The most significant accomplishment of the Committee during the past fiscal year has been the increased scope and intensity of its oversight of the expenditure of TT funds, as summarized in the preceding pages of this report. In addition, the Committee, with the assistance of the District, has arranged for a verbatim transcript of every Committee meeting so that anyone can determine exactly what was said and done without having to rely on meeting minutes, which are but a summary. The Committee also adopted detailed standards for the expenditure of TT funds, standards which it applies in recommending approval or disapproval of proposed TT expenditures.¹¹ The Committee has referred several legal issues to its independent counsel for advice and has received counsel's opinions, on which the Committee has relied in making its findings and recommendations. Finally, the Committee has made it a policy to post in a timely fashion *all* significant documents on its website, including the following: meeting agendas, documents, minutes, and transcripts; all recommendations and reports to the District and the Board; all governing legal standards; and all requests for information. The Committee believes that the public deserves no less.

Honest self-evaluation is next to impossible, but the Committee nonetheless has attempted to grade itself in the following areas:

- In exercising vigorous oversight of the expenditure of TT funds: A-
- In publicizing its oversight activities to the Board and the public: B

¹¹ The Committee sought the District's input in drafting these standards, but the District declined to participate saying that the law is an adequate guide.

- In persuading the District to provide necessary information to the Committee: C-
- In persuading the District to improve the budgeting process: D
- In preventing impermissible TT expenditures: D-
- In causing the correction of impermissible TT expenditures: F

The low grades in the last four categories are not for want of effort. Rather, they reflect the reality that the Committee has no power to compel anything. Its only power is the power of publicity. To achieve results, the Committee must rely on Board action, District cooperation, and public involvement.

Review of the Independent Financial and Performance Audits

The California Constitution requires that the District conduct an independent annual performance audit “to ensure that the [school construction bond] funds have been expended only on the specific projects listed.”¹² The Constitution also requires an independent annual financial audit “of the proceeds from the sale of bonds until all of those proceeds have been expended for the school facilities projects.”¹³ The purpose of the financial audit is to review the District’s financial statements of the TT fund to see whether they present fairly, in all material respects, the financial position of the fund and to note changes in financial position from the preceding year. The purpose of the performance audit is to determine whether TT funds were spent in accordance with governing law. The Education Code permits the Committee, as part of its oversight function, to review these audits,¹⁴ as do the Committee’s bylaws.¹⁵

The Committee has reviewed this year’s undated draft audit reports, which were first provided to the Committee on November 30, 2017. The Committee stresses that these are *draft* reports containing unsigned draft opinions. No one knows whether or how the drafts will change. It is indisputable, however, that as of the date of this writing, *no* opinions have been rendered. The following comments are based on the assumption that the final audit reports will be identical to the draft received on November 30 (henceforth, the “Draft Audit”).

The Draft Audit contains an unqualified opinion on the accuracy of financial statements of the TT fund.¹⁶ However, this opinion contains a critical qualification that calls into question the reliability of the financial statements to which the opinion pertains. It specifically disclaims any opinion on the effectiveness of the District’s internal

¹² Constitution, Art XIII A, sec. 1(b)(3)(C).

¹³ Constitution, Art. XIII A, sec. 1(b)(3)(D).

¹⁴ Educ. Code sec. 15278(c)(1)-(2).

¹⁵ Bylaws, sec. 4.1(a).

¹⁶ “In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Measure ‘TT’ General Obligation Bond Building Fund of Pasadena Unified School District, as of June 30, 2017, and the changes in financial position thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.” Draft Audit, p. 2.

financial control system. It considers the District's internal controls only in so far as they are "relevant to the entity's preparation and fair presentation of the financial statements in order to design procedures that are appropriate in the circumstances, *but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.*"¹⁷

The meaning of this tortured, oxymoronic language is unclear. The Committee reads it to mean that the auditor has considered the District's internal controls for booking the expenditures and accruals as they appear on its financials, *i.e.*, to determine whether the numbers track from initial recording to final financial statements, but not to determine whether such the expenses and accruals should have been booked that way in the first place.

Whatever the foregoing disclaimer means, it is difficult to reconcile with the requirements of the applicable Government Auditing Standards, which govern the instant audits.¹⁸

4.19 When providing an opinion or a disclaimer on financial statements, auditors should also report on internal control over financial reporting and on compliance with provisions of laws, regulations, contracts, or other agreements that have a material effect on the financial statements. Auditors reports on internal control and compliance, regardless of whether or not they identify internal control deficiencies or instances of noncompliance. [footnotes omitted]

4.20 Auditors should include either in the same or in in separate report(s) a description of the scope of the auditors' testing of internal control over financial reporting and of compliance with provisions of laws, regulations, contracts, or grant agreements. Auditors should also state in the reports whether the tests they performed provided sufficient, appropriate evidence to support opinions on the effectiveness of internal control and a compliance with provisions of laws, regulations, contracts, or grant agreements.

The Board of Education and the public are, of course, free to interpret the meaning of the auditor's disclaimer and to determine whether it meets the applicable auditing standards, but it seems to the Committee that if an entity's internal financial controls are

¹⁷ Draft Audit, "Auditor's Responsibility," pp. 2, 12,

¹⁸ There is no dispute over this assertion, which the Draft Audit acknowledges. *Id.*

inadequate to insure both consistent *and accurate* reporting of financial data, then the resulting financial statements are of dubious value. They certainly cannot be held out as proof of compliance with the law.¹⁹

No such ambiguity exists when it comes to the Draft Audit’s disclaimer of any opinion on the District’s compliance with the law:

As part of obtaining reasonable assurance about whether Pasadena Unified School District’s financial statements are free of material misstatements, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. *However, in providing an opinion of compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion.*” . . . (italics added for emphasis)²⁰

How the Audit Report reconciles this statement with sections 4.19 and 4.20 of Government Auditing Standards the Committee cannot fathom.

As previously noted, the law prohibits the use of school construction bond funds for “administrator salaries and other school operating expenses.”²¹ Before rendering the opinion that is part of the performance audit, the auditor stated that “. . . we verified that funds held in the Building Fund (21.1) [the TT construction fund] were not used for salaries or school administrators or *other operating expenses* of the District.”²² It is therefore amusing to see that the Statement of Revenues, Expenditures, and Changes in Fund Balance, which is an integral part of the District’s financials blessed by the auditor, contains a category entitled “Services and *other operating expenditures*.” These expenditures include such items as travel and conferences, repairs, and copier lease and repairs.²³ At least the District deserves credit for candor.

This report has previously raised the issue whether the Chief of Facilities, 85% of whose compensation is charged to TT, is an “administrator.” (If he is not, then there is no administrator in the Facilities Department—or, more precisely, there is only 15% of a person). The Audit Report simply concludes, with no discussion or analysis, that no TT

¹⁹ For the purpose of illustration, assume that the District were to spend \$600,000 on replacing the roof of a school. The new roof has an estimated life of 25 years. The cost is erroneously recorded as a repair expense in a particular sub-account. This expense is ultimately combined with all other such expenses to produce one composite line item—“Repairs”—on the income statement. The District’s internal controls insured that all of the repair numbers were charged to the correct repair sub-accounts and that they all added up properly. The problem, however, is that the expenditure should not have been classified as an expense to begin with.

²⁰ Draft Audit, p. 13.

²¹ California Constitution, Art XIII A, sec. 1(b)(3); Education Code sec. 15278(b).

²² Audit Report, p. 15. Italics added for emphasis.

²³ As is the case with legal services, whether other items like repairs, contracted services, and consultants were also operating expenses cannot be determined without knowing the *purpose* of those expenditures.

funds were used for “salaries of school administrators.” The Draft Audit also says nothing about the propriety of charging 100% of the compensation of 7 Facilities Department employees to the TT fund.

In conclusion, while some of the issues raised in the forgoing critique of the Draft Audit are subject to reasonable differences of opinion, there remain other significant, problematic issues that are either sidestepped by broad disclaimer or simply ignored. Thus, the Audit Report and the opinions contained in it can hardly be held up as a clean bill of health for the TT funds managed by the District. The Board should demand more of the District’s auditor. A good start would be to insist that the auditor either comply with the applicable Government Auditing Standards or explain clearly why, notwithstanding its disclaimers, it thinks that it has done so.

ANALYSIS OF BOARD REPORTS 1253 through 1263					Date: 12-13-17
Board Report Item	DESCRIPTION	TT COSTS	Argument FOR Approval	Argument AGAINST Approval	COC RECOMMENDATION
These Board Reports were not sent to the COC, but were found in the agenda listing for the Board meeting of Dec. 14, 2017, held one week before the COC meeting					
1253-F	This BR is to upgrade the heating and cooling plant for Longfellow Elementary	\$2,176,000	"The aging central plant at Longfellow is failing."	The August Spend-Out plan (and November) had this project at # 15 (second tier) at a cost of \$1.3 million, not \$2.2 million). The BR does not mention how the increase will affect the spend out plan.	discussion required
1254-F	This BR is for a change order at John Muir High for the auditorium and kitchen renovation projects.	\$180,000	The new contract total is \$21.8 million, which is lower than the original bid amount. The additional \$180,000 cost is for revisions to the storm drain system, & something unforeseen about the fire water line to the campus.	Were not "needs analyses" performed to help foresee unseen conditions regarding the fire water line. Unable to determine how this fits within the November spend-out plan.	discussion required
1255-F	This BR asks for an extension of full time project inspector on the Pasadena High School Gymnasium modernization project.	\$99,360	Project Inspectors are required.	There is no explanation of why an extension of the inspector is required. There is no determination as to whether this fits within the existing budget for this # 2 priority project.	discussion required
1256-F	This BR confirms the resignation of five previous members of the COC. They are: Walker, Romero, Commons, Morisseau-Phillips, and Cross	\$0	This is to confirm the noted resignations.	none	Approval
1257-F	This BR was to seek Board Acceptance of the Annual Audit report on Measure TT expenditures. This report currently exists in draft form	\$11,000	None. Review of this report by the COC is provided for by law. This "acceptance" vote was put forward to the Board BEFORE the COC was given a chance to review the audit.	The audit exists in draft and has not been reviewed or commented upon by the COC.	This BR was pulled from the Board agenda for the Dec. 14 meeting.
1258-F	This BR is to continue the lease of the Linda Vista Elementary site to All Saints for kindergarten space .	\$0	This is a facilities permit agreement between PUSD and Linda Vista Children's center to allow usage of PUSD property. It provides \$61,000 annually to the PUSD.	none.	Approval

ANALYSIS OF BOARD REPORTS 1253 through 1263					Date: 12-13-17
Board Report Item	DESCRIPTION	TT COSTS	Argument FOR Approval	Argument AGAINST Approval	COC RECOMMENDATION
These Board Reports were not sent to the COC, but were found in the agenda listing for the Board meeting of Dec. 14, 2017, held one week before the COC meeting					
1259-F	This BR is to pay Swift Lee to provide master plan services to prepare a "Facilities Assessment and Master Plan summary" TEMPLATE. This template is in preparation for the NEXT bond fund request.	\$255,000 from Measure Y	The PUSD does require a Facilities Master Plan.	This is proposed to be expended from the "Y" account. COC independent counsel has opined that spending TT money for study of a project that can not be completed with TT funds is not permissible- Does that apply to "Y"? Several months ago, it was stated that a certain project would consume the last of the "Y" funds - how much money remains in "Y" - should those construction funds be transferred to TT to fund needy projects?	discussion required
1260-F	This BR is for an addendum to the site usage agreement between the District and the City for usage of the Linda Visa School park	\$0	Clarifies usage agreement between the City and the District	None	Approval (Pulled from Agenda) mp
1261-F	This BR extends the current lease for the former Edison Elementary School for usage by the Renaissance Academy	\$0	Provides \$105,000 to the district for a six month lease.	None	Approval
1262-F	This BR is to approve the Frostig Center to rent parking spaces at Pasadena High School	\$0	The spaces are generally unused by PHS and this brings \$1,000 a month to the District in rental fees.	None. Note that this agreement was worked out on voluntary time by an employee charging 100% of their working time to Measure TT	Approval
1263-F	This BR is to change the schedule of dates for a Memorandum of Understanding between the District and "Young and Healthy" for usage of facilities at the Hodges Children's Center/Peoria Place.	\$0	This continues an existing agreement and requires the lessee to pay \$30,000 for building improvement and to provide health care services to the students of PUSD.	None.	Approval

**BOARD OF EDUCATION
PASADENA UNIFIED SCHOOL DISTRICT
PASADENA, CALIFORNIA**

Topic: APPROVAL OF THE PROPOSAL WITH SOUTHLAND ENERGY FOR THE
LONGFELLOW ES CENTRAL PLANT IMPLEMENTATION

Recommendation: The Governing Board of the Pasadena Unified School District approves the Longfellow ES Central Plant Implementation proposal with Southland Energy in the amount not to exceed \$2,176,000.00

District Priority/Strategy: To ensure a clean, safe, and orderly environment that supports learning.

I. BACKGROUND

The current aging central plant at Longfellow Elementary school is failing. Southland Energy has designed a new system to meet the current needs. The design will provide improvements of the central cooling plant consisting of one (1) new 160 ton chiller, one (1) new cooling tower, two (2) new boilers and all associated pumps and ancillary equipment. The controls for the central cooling and heating plant will be completely replaced with a system that is consistent with the District's current standard. The design also include the provision for future addition of the second chiller for redundancy (backup). With a new, efficient central plant, the school will be able to have proper HVAC for a safe and comfortable learning environment while being energy efficient and meeting current California Building Codes. The new central plant is expected to use approximately half of the energy of the existing central plant.

II. STAFF ANALYSIS

Staff recommends approving the proposal with Southland Energy for the upgrade of the Central Plant at Longfellow ES.

The Facilities Committee vetted this Board Report at the December 14, 2017 meeting.

Attachment: Proposal for Longfellow Elementary School Central Plant Implementation

III. FISCAL IMPACT

The contractual services are estimated to cost approximately \$ 2,176,000 (not-to-exceed) these funds are available in the Measure TT-Longfellow account.

**Pasadena Unified School District
Board of Education Agenda: December 14, 2017
Prepared by: Nelson M. Cayabyab, Chief Facilities Officer**

Funding code: 21.1 - 95146.0 - 00000 - 85000 - 6275 - 0380000

Originator: Nelson M. Cayabyab, Chief Facilities Officer

DRAFT



Rev 1. November 22, 2017

Nelson Cayabyab
Pasadena Unified School District
740 W. Woodbury Rd.
Altadena, CA 91001

Re: Proposal for Longfellow Elementary School Central Plant Implementation

Dear Nelson,

Southland Energy is pleased to present our proposal to the Pasadena Unified School District (PUSD) for Longfellow Elementary School Central Plant Implementation. Our team of engineers has worked with the District to design a new Central Plant to replace the existing, failing Central Plant. The scope of work in this proposal reflects our current understanding of PUSD's goals as discussed in our continuous meetings as well as our site walks.

Southland Energy, a division of Southland Industries, can compete the following scope work for a total price of **Two Million, one hundred seventy-six thousand dollars (\$2,176,000)**.

We look forward to working with the Pasadena Unified School District on this important project. Please contact me if you have any questions about this proposal.

Sincerely,

Jennie Lee
Southland Energy/Envisco
7421 Oranewood Ave
Garden Grove, CA 92841
(714)943-0150 Mobile
jlee@enviseco.com



Exhibit A – Scope of Work (“Work”)

BASIS OF SCOPE OF WORK AND PRICE

The scope of work for this proposal includes the narrative in this document, the referenced attached drawings, and the referenced attached Energy Management and Control System scope of work documents. Where differences occur between the narrative in this document and the referenced drawings, the narrative in this document will govern.

Drawings:

- 1) Sheet A100 - Central Plant Demolition Plan, dated 4/13/17
- 2) Sheet A200 - Central Plant Reconstruction Plan, dated 4/13/17
- 3) Sheet A201 - Central Plant Chiller Weather Cover Plan, dated 4/13/17
- 4) Mechanical drawings including sheets M-1, M-2, M-3, M-3.1, M-4, M-5, M-6 and M-7, labelled “70% Check-Set Drawings for Review Only”, dated 07/06/17.
- 5) Electrical drawings including sheets E0.01, E0.02, E1.01, ED2.01 and E2.01, labelled “70% Drawings For Review Only”, dated 7/12/17.
- 6) Structural drawings including sheets S-001, S-111, S-112, S-501, S-701, S-702, labelled “70% Check-Set Drawings For Review Only”, dated 7/17/17.

EMCS Written Scope of Work:

- 1) “Scope of Work for Energy Management and Control System (EMCS)” Rev. 3 , dated 11/22/17 .
- 2) “EMCS Points List For: Chilled Water and Hot Water Plant Upgrade”, Rev. 1 , dated 11/22/17 .

Definitions:

OWNER: Pasadena Unified School District (PUSD)
CONTRACTOR: Southland Industries

SCOPE OF WORK

- 1) Demolition
 - a) General
 - i) Remove the south wall of the mechanical yard between the west wall of Building B (Kindergarten) and the west wall of the mechanical yard. The existing west and north walls of the mechanical yard, and the existing chain link screen on top of these walls will remain.
 - ii) Remove the existing doors, hinges and hardware for the mechanical yard and save for reuse in the new mechanical yard wall.
 - iii) Demolish the concrete equipment foundations for the packaged chiller plant, boilers, HHW pumps, HHW chemical pot feeder, and HHW expansion tank.
 - iv) Demolish the entire existing concrete floor inside the mechanical yard.
 - v) Demolish the existing concrete walk and landscaping south of the existing block wall to a point approximately 15 feet south of the existing south wall of the mechanical yard (roughly even with the south wall of Building B (Kindergarten building)).

- vi) Remove the existing chain link fencing and gate surrounding the existing water pressure regulator station outside the west wall of Building B. The existing water pressure regulator station will remain.
- vii) Disconnect and remove existing irrigation piping and sprinkler heads in landscaped areas removed as part of this project. Cap existing piping to remain.
- b) Mechanical and Plumbing
 - i) Disconnect and safe-off mechanical and plumbing systems prior to demolition.
 - ii) Remove one (1) existing packaged chiller including all equipment and components inside the enclosure, two (2) existing boilers, and two (2) existing HHW pumps.
 - iii) Recover the refrigerant from the existing packaged chiller and recycle in accordance with code requirements.
 - iv) Remove the existing CHW and HHW piping within the mechanical yard including related supports. Points of disconnect will be within the mechanical yard.
 - v) Remove the existing HHW expansion tank, HHW air separator, and HHW chemical pot feeder.
 - vi) Remove the existing natural gas piping within the mechanical yard including related supports.
 - vii) Remove the following existing aboveground cold water (CW) piping in the mechanical yard:
 - (1) CW piping to the CHW make-up water system.
 - (2) CW piping to the HHW make-up water system.
 - (3) CW piping to the cooling tower make-up water system.
 - (4) CW piping to existing trap-primers.
 - viii) Remove the existing plumbing floor drains and floor sinks in the mechanical yard and the connected underground waste and vent piping.
 - (1) Remove underground waste piping between the removed drains and the main waste line. The main waste line will remain for reuse with the new drains.
 - (2) Vent piping will be disconnected aboveground outside the exterior of the west wall of Building B within the mechanical yard. The remaining vent piping will be reused with the new mechanical yard drains.
 - ix) Remove one (1) existing storm drain catch basin in the existing mechanical yard. The remaining storm drain piping will be reused with the new mechanical yard storm drain receptor.
- c) Electrical
 - i) Safe-off and disconnect electrical systems for the mechanical yard equipment prior to demolition.
 - ii) Remove starters and aboveground conduit to two (2) HHW pumps in the mechanical yard. Remove conductors from the HHW pumps back to the existing circuit breakers in distribution panel "DP2" in the Building B electrical room. The existing HHW pump circuit breakers in panel "DP2" will remain.
 - iii) Remove aboveground conduit to the existing packaged chiller plant (MES-1) in the mechanical yard. Remove conductors from the packaged chiller back to the existing circuit breaker in distribution panel "DP2". Remove the existing 600A circuit breaker for MES-1 in panel "DP2".



- iv) Remove aboveground conduit and conductors to the two (2) existing boilers within the mechanical yard.
 - v) Remove aboveground conduit and conductors for 120V circuits to the mechanical systems and EMCS equipment within the mechanical yard. The aboveground 120V conduit and conductors to the existing irrigation controls and service outlet on the west wall of Building B will remain.
 - vi) The existing underground conduit for the two (2) HHW pumps and packaged chiller plant MES-1 will be demolished from the existing mechanical yard to a point approximately 15 feet south of the existing south wall of the mechanical yard (roughly even with the south wall of Building B). The remaining underground conduit for the HHW pumps will be abandoned in place. The remaining two (2) 3-inch underground conduits back to distribution panel "DP2" will remain for reuse with the new conductors for the new chiller plant.
- d) EMCS
Refer to the attached scope of work document "Scope of Work for Energy Management and Control System (EMCS)" Rev.2, dated 7/21/17.
- 2) New Work
- a) Mechanical/HVAC
The following scope of work is specifically included in this proposal.
- i) Furnish and install one (1) new 160-ton water-cooled Multistack chillers on a new concrete foundation. Each chiller will have a BACnet IP communication interface.
 - ii) Furnish and install a new BAC cooling tower (CT) with one (1) cell. Each cell has one (1) fan and is rated for one (1) of the new chillers. Provide new concrete footings and structural steel to support the new CT.
 - iii) Furnish and install two (2) new chilled water (CHW) pumps on new concrete pads.
 - iv) Furnish and install two (2) new condenser water (CDW) pumps on new concrete pads.
 - v) Furnish and install two (2) new heating hot water (HHW) pumps on new concrete pads.
 - vi) Furnish and install two (2) new Lochinvar Power-Fin HHW boilers on new concrete pads. Each boiler is rated for outdoor service, 1,500MBTUH input and 1,275MBTUH output, and has a modulating burner with 5:1 turndown. Each boiler has one (1) small dedicated in-line circulating pump.
 - vii) Furnish and install a total of eight (8) new VFDs for the new CHW pumps, CDW pumps, HHW pumps and CT fans. Each VFD will have a BACnet MSTP communication interface.
 - viii) Furnish and install new flue for each boiler.
 - ix) Furnish and install new CHW and HHW piping within the mechanical yard including valves, fittings, hangers and accessories. Points of connection to the CHW and HHW piping serving the buildings are within the mechanical yard.
 - x) Furnish and install new CDW piping within the mechanical yard including valves, fittings, hangers and accessories. The CDW piping will be painted.
 - xi) Furnish and install Title 24 compliant thermal insulation for the new CHW and HHW piping.



- xii) Mechanical piping systems will utilize Victaulic couplings for carbon steel piping and Propress/T-Drill for copper piping.
 - xiii) Startup and water flow testing/verification for new equipment in the central plant by a third party Test and Balance company.
 - xiv) Provide chemical treatment for the CHW and HHW systems to place them back into service.
 - xv) Provide chemical treatment equipment for CDW system. Chemicals and service will be provided for one (1) year after initial chemical charge.
- b) Plumbing
- The following scope of work is specifically included in this proposal.
- i) Furnish and install new plumbing fixtures, drains, and equipment for the central plant as indicated in the drawings.
 - ii) Furnish and install new plumbing piping and accessories for the new central plant as indicated in the drawings, including:
 - (1) Sanitary waste and vent.
 - (2) Storm drain.
 - (3) Domestic cold water.
 - (4) Natural gas to the new boilers.
 - iii) Piping system for copper piping is Propress/T-drill.
- c) Electrical
- The following scope of work is specifically included in this proposal.
- i) Supply and install a new 600AT Square D circuit breaker in existing distribution panel "DP2".
 - ii) Supply and install new underground 3" PVC feeder conduits to new distribution panel "MSY" from intercepted existing underground 3" conduits. The point of connection will be at a point approximately 15 feet south of the existing south wall of the mechanical yard (roughly even with the south wall of Building B).
 - iii) Supply and install new "MSY" feeder conductors in existing and new conduits thru existing Man Hole to distribution board "DP2".
 - iv) Supply and install new 277/480V, 600A Panel "MSY".
 - v) Supply and install new 15 KW Mini Power Zone equipment with 120/208V panel "LM" including 18 circuits w/4 spares.
 - vi) Provide underground power feeders and connections for chiller WC-1.
 - vii) Provide underground power feeders for (2) 30AS/25AF 3R disconnects and connections to B1 & B2.
 - viii) Provide underground power feeders for CDP-1A, CDP-1B, CHP-1A, CHP-1B, HP-1A, HP-1B, and one (1) fan motor for CT-1.
 - ix) Provide conduit, supports, wiring and connections with one (1) 120V circuits to Cooling Tower level controls.
 - x) Provide conduit, supports, wiring and connections with one (1) 120V circuits to Cooling Tower control valves.
 - xi) Provide conduit, supports, wiring and connections with one (1) 120V circuits to Chiller control valves.
 - xii) Provide (2) dedicated 120V circuits to new Energy Management and Control System.



- xiii) Supply and install (2) surface mounted duplex service outlets with (1) circuit.
- xiv) Supply and install (3) type "A" LED fixtures with Hubbell controls and power circuit.
- xv) Provide terminations, energize and test.
- xvi) Electrical permit and inspections.
- d) EMCS
Refer to the attached scope of work document "Scope of Work for Energy Management and Control System (EMCS)" Rev. 3 , dated 11/22/17 , and "EMCS Points List For: Chilled Water and Hot Water Plant Upgrade", Rev. 1 , dated 11/22/17 .
- e) General Construction
The following scope of work is specifically included in this proposal.
 - i) Patch and paint the wall of Building B at the location where the existing mechanical yard south wall was removed (approximately 8-feet high by 8-inches wide). Stucco finish and paint will match the existing adjacent surfaces.
 - ii) Install new 8-foot high block wall to enclose the mechanical yard area.
 - iii) Install 6'-0" x 7'-0" door frame in new block wall. Re-install existing doors in new frame.
 - iv) Install new chain link fence with slats on top of the new block wall (approximately 6'-6" tall). The new chain link fence and slats will match the existing.
 - v) Apply stucco to the south and west sides of the new block wall to match the existing south wall. Stucco will only be applied to one side of the block wall.
 - vi) Paint the new stucco on the new block wall to match the color of the existing west exterior wall of Building B.
 - vii) Install new 6" slab on grade concrete floor in the mechanical yard.
 - viii) Install new concrete equipment foundations and housekeeping pads for two (2) chillers, six (6) pumps, and two (2) boilers.
 - ix) Install a new roof (canopy) to protect the new chillers from rain. The roof will consist of standing seam metal roofing over structural steel decking, with tubular steel support beams and columns. The roof will be pitched to a gutter and downspout.

COMMERCIAL TERMS

- 1) This proposal is based on construction completion not later than August 31 2018.
- 2) This proposal is based on the contract terms and conditions in Southland's Owner-Contractor Agreement, version v.02.12 (attached). This proposal is subject to negotiation of mutually acceptable contract terms and conditions, and payment terms and conditions.
- 3) Contractor shall not be subject to any consequential damages provisions.
- 4) Proposal includes 12-month warranty beginning on date of substantial completion.
- 5) Payment Bond and/or Performance Bond will be written on standard CHUBB Group of Insurance Companies Form 15-02-0009 (Rev. 11-99) Payment Bond and Form 15-02-0001 (Rev. 11-99) Performance Bond.

CLARIFICATIONS

- 1) All DSA fees will be paid for by PUSD.
- 2) This proposal is based on performing all demolition and construction work when school is out during the 2018 summer break. We expect the 2018 summer break will start in the first two weeks of June and will provide a period of ten (10) continuous weeks for demolition,



- construction and start-up work, and all central plant systems will be out-of-service during that period.
- 3) This proposal includes supervision, taxes, freight, insurance, and required wage rates.
 - 4) The work will be performed during non-holiday weekdays from 7AM to 4PM.
 - 5) All Ethernet drops for the new central plant shall be provided by PUSD.
 - 6) Water for flushing and filling new and modified systems will be provided by and paid for by PUSD. Water used for flushing piping systems will be flushed to drain within buildings and drained to grade at exterior piping distribution locations.
 - 7) This proposal is based on excavation and removal of clean, uncontaminated soil. Costs for testing, remediation, or other treatments of undisclosed or unknown soil problems are the responsibility of PUSD.
 - 8) This proposal is based on use of an existing suitable and serviceable underground controls conduit between Building A and Building B (Kindergarten) for new control wiring for the new CHW and HHW DP sensors, and the CHW minimum flow bypass valve. Costs are not included to run new conduit between Building A and Building B or the central plant.
 - 9) This proposal is based on re-use of the two (2) existing 3-inch underground conduits between the mechanical yard and panel "DP2" in Building B for the new line-side feeders to new panel "MSY". We have assumed that these conduits are in serviceable condition. Costs are not included to install new conduit runs between new panel "MSY" and panel "DP2".
 - 10) We have assumed that the existing underground sanitary-waste piping and storm drain piping that will interface with the new work in this project is in serviceable condition and suitable for connection to the new work. Costs are not included to install new main sanitary-waste piping or main storm drain piping.

EXCLUSIONS

The following exclusions are applicable to the scope of this proposal and all associated pricing provided:

- 1) All DSA fees.
- 2) Costs for DSA Construction Project Inspector.
- 3) Painting of mural to replace the existing mural.
- 4) Permit fees and plan check costs.
- 5) Special Test & Balance scope items:
 - a) Sound level testing
 - b) Vibration testing
 - c) Test or balance of existing systems outside of the central plant mechanical yard.
- 6) Soils testing.
- 7) Sub-surface drainage, perimeter drainage, planter drainage.
- 8) Radon and methane systems and components.
- 9) Water and gas utility meters and utility side piping.
- 10) All work associated with fire/life safety including fire sprinklers, wet/dry standpipes, fire pumps, jockey pumps, fire water tanks, FM200 systems, fire alarm, interfaces and interlocks with fire alarm system and emergency communication systems, fire extinguishers, dry standpipe, wet standpipe, hose cabinets, fire department connections.
- 11) Acoustical caulking.



- 12) Site environmental studies, public review process or third party acoustical analysis.
- 13) Lead paint and other recognized hazardous waste inspection, testing and removal in soils or existing structures.
- 14) Temporary plumbing, power, heating, cooling and ventilation.
- 15) Rock excavation, dewatering and excess spoils export for below grade installations.
- 16) Contractor will not be responsible for "unknown" site conditions. Any issues and related costs resulting from discovery of conditions not readily identifiable by visual site inspection of existing conditions without any destructive testing will be addressed upon discovery.
- 17) Overtime labor and associated costs.
- 18) Conduit and wiring for fire alarm, security and voice/data systems.
- 19) Painting of conduits.
- 20) Landscaping.
- 21) Sound testing, acoustical design, sound level modeling, site wind analysis.
- 22) Upgrades to structural systems for code compliance.
- 23) ADA compliance work or upgrades.
- 24) Upgrades to existing mechanical, plumbing, electrical, and fire protection systems for code compliance.
- 25) Hazardous material identification, testing or analysis.
- 26) Building Information Modeling (BIM) and coordination.
- 27) Labor and costs associated with closing out any existing open DSA projects.
- 28) Filtration of storm water.
- 29) Commissioning or re-work of existing EMCS controllers.

PASADENA UNIFIED SCHOOL DISTRICT**Longfellow Elementary School – Central Plant Upgrade****Scope of Work for Energy Management and Control System (EMCS)**

This Scope of Work and referenced documents is intended to define the work required to provide a complete and fully functional control system for the new central CHW and HHW plants at Longfellow Elementary School (LES). It is the intent of this Scope of Work (SOW) that the EMCS Subcontractor is responsible for all materials, equipment, labor, sub trades and services required for providing a complete and fully functional system, and for meeting the intent and all performance criteria stated in this Scope of Work. The EMCS Subcontractor is fully responsible for each and every item of cost and expense necessary to complete all Work required by this Scope of Work.

1) General Requirements and Clarifications for EMCS / Controls Work

- a) The EMCS subcontractor shall provide a system that utilizes the latest hardware, firmware and software unless otherwise explicitly stated in this Scope of Work (SOW).
- b) The EMCS subcontractor shall design, furnish, configure and install the new EMCS in compliance with Pasadena Unified School District's (PUSD) standards and expectations. PUSD's EMCS standard is Schneider Electric SmartStruxure system.
- c) The EMCS subcontractor shall design and build the EMCS for this project. The EMCS subcontractor shall produce detailed design and construction drawings, equipment schedules, bills-of-material (BOMs) and equipment data sheet packages for submittal to Southland and the PUSD for approval.
- d) The new EMCS controllers and networks in this SOW shall integrate directly (without gateways) with the existing EMCS at Longfellow Elementary School (LES) and the PUSD's EMCS front-end software.
- e) The EMCS subcontractor shall provide all required equipment and devices necessary to monitor and control the systems and equipment described in this SOW, including, but not limited to controllers, input and output modules, enclosures, sensors, transmitters, transducers, relays, switches, actuators and control valves unless otherwise explicitly stated in this SOW.
- f) The EMCS subcontractor shall provide all required database set-up, networks, programming, graphics, schedules, trending, reports, start-up, and commissioning necessary to monitor and control the systems and equipment described in this SOW unless otherwise explicitly stated in this SOW.
- g) The EMCS Subcontractor shall perform the Work to install and remove all physical components of the EMCS and control systems described in this SOW unless otherwise explicitly stated in this SOW. This includes, but is not limited to, controllers, panels, enclosures, power supplies, sensors, thermostats, transmitters, actuators, control devices, conduit, raceways, wire, cable, and wiring terminations.
- h) Southland's Electrical Subcontractor (ES) will disconnect and remove existing 120VAC power connected to EMCS panels and devices in the mechanical yard.
- i) Southland's ES will provide all required 120VAC power for the new central plant EMCS installation.
- j) The existing mechanical yard concrete floor will be removed and replaced by Southland in this project. As a result, new EMCS conduits for the central plant shall be run below ground (buried) beneath the new concrete floor to the maximum extent that is practical.

- k) Conduit/Raceway Requirements.
 - i) Below grade direct-buried conduit shall be rigid nonmetallic schedule 40 PVC. PVC conduit shall not pass through concrete or be exposed above-grade.
 - ii) Above-ground conduit in the mechanical yard and all exterior locations shall be rigid galvanized steel (RGS), and all related raceway components (e.g. pull-boxes, junction boxes, enclosures) shall be NEMA 3R or better.
 - iii) PVC-Coated RGS conduit and fittings shall be used for connections of RGS conduit at below-ground PVC conduit, and where RGS conduit passes through new poured concrete.
 - iv) Provide 4" x 4" wireway/gutter for the new central plant controller enclosure for termination of field conduits and storage of wiring service loops.
 - v) Connection of raceways to end devices shall be with SealTite flexible liquid-tight conduit (FLTC). The maximum length of FLTC shall be 36".
 - vi) Conduit in exposed interior locations shall be Electrical Metallic Tubing (EMT) with compression type fittings.
 - vii) End devices shall not be used as raceways for wiring to other devices.
- l) Mechanical installation of the following components is excluded from the EMCS subcontractor's scope of work: Instruments and wells in water piping; control valves; instrument connections to water piping; water flow meters in piping; water tubing to differential pressure sensors.
- m) Sequences of operation will be provided by Southland unless otherwise explicitly stated in this SOW.
- n) The EMCS subcontractor shall remove all existing EMCS database elements related to the removal of existing systems, controllers, points and networks.
- o) Ethernet drops will be provided by the PUSD. The EMCS Subcontractor shall provide raceways for the required Ethernet drops.

2) **Central Plant Upgrade –Scope of Work**

- a) Overview
The existing central plant has a packaged chiller plant, two HHW boilers and two existing HHW pumps. All existing central plant equipment will be removed and new CHW and HHW plants will be installed. The existing south wall of the mechanical yard will be removed and rebuilt further south to increase the size of the mechanical yard. The existing concrete floor in the mechanical yard will be removed and replaced with a new concrete floor.
- b) Demolition
 - i) Safe off existing EMCS devices, network and related control power in preparation for demolition of the central plant.
 - ii) Remove existing controls related conduits/raceways, conductors, panels, controllers and devices. Remove conduits and wire from devices, control panels, control valves, controlled equipment and motor starters back to the source panel.
 - iii) Remove the existing EMCS controllers from the enclosures in the mechanical yard and in the packaged chiller plant. Return the controllers to the PUSD.
 - iv) Remove the existing EMCS controller enclosures.
 - v) Remove the raceway with the EMCS network back to the wall of the Kindergarten Building and cap the conduit weather tight.

- vi) Modify the existing EMCS network wiring to maintain the integrity of the existing EMCS network as needed for operation of all remaining network connected devices during construction.
- c) New EMCS for New Central CHW and HHW Plant
 - i) Provide monitoring and control for the new chillers, CHW pumps, cooling towers, CDW pumps, boilers and HHW pumps including all physical and networked points shown in the attached points list titled “Pasadena USD - Longfellow Elementary Central Plant Upgrade, EMCS Points List For: Chilled Water & Hot Water Plant Upgrade”, Rev. 1, dated ~~7/15/17~~ 11/22/17.
 - ii) Controllers and Input/Output (I/O) Devices
 - (1) Provide all new controller hardware to control and monitor the new central plant with the following capabilities and features:
 - (a) Network Controller (NC)
 - (b) Communication with the existing controllers at LES and the PUSD’s front-end server via the PUSD’s existing Ethernet network at LES.
 - (c) Communicate with the two new chillers via BACnet IP interface.
 - (d) The NC shall communicate with the new VFDs via BACNet MS/TP interface.
 - (e) Hardware required for connecting/integrating the I/O defined in the points list into the central plant controller.
 - (f) The controller shall have the capacity for the addition of I/O modules beyond the requirement for this central plant project.
 - (2) I/O Module/Hardware Requirements
 - (a) All output points shall be equipped with Hand-Off-Auto (HOA) switches.
 - (b) Provide spare, unused I/O including at least 2 AI, 2 AO, 2 DI and 2 DO.
 - ~~(c) The layout of hardwired points and number of I/O modules shall support the redundant design approach for the central plant systems, e.g. the failure of one I/O module shall not prevent automatic operation of the CHW system and the ability of the system to produce CHW. Some examples include:~~
 - ~~(i) If both chiller enable points or both chiller CHW isolation valve commands are on a single I/O module that fails, the chiller plant could not operate.~~
 - ~~(ii) If both CDW pump enable points or both CT fan speed commands are on a single I/O module that fails, the chiller plant could not operate.~~
 - ~~(iii) If both boiler enable points or both HHW pump speed commands are on a single I/O module that fails, the HHW plant could not operate.~~
 - iii) New Remote CHW Differential Pressure (DP) Transmitter
Provide new remote CHW DP transmitters for measuring the CHW distribution system DP at a location in Building A near the end of the distribution piping (near mechanical room #18 at southwest corner of Building A).
 - iv) New Remote HHW Differential Pressure (DP) Transmitter
Provide new remote HHW DP transmitters for measuring the HHW distribution system DP at a location in Building A near the end of the distribution piping (near mechanical room #18 at southwest corner of Building A).
 - v) The CHW flowmeters shall be electromagnetic, flanged, inline type, manufactured by Siemens, model SITRANS F M, MAG 5100W. Mount transmitter/display on wall or stand near chiller. Provide remote mounting hardware and cables for transmitter/display.

- vi) The HHW flowmeter shall be an 4-inch electromagnetic, flanged, inline type, manufactured by Siemens, model SITRANS F M, MAG 3100 HT. The flowmeter shall be configured for operating temperatures of at least 220°F. Mount transmitter/display on wall or stand near chiller. Provide remote mounting hardware and cables for transmitter/display.
 - vii) All new CHW temperature sensor/transmitters shall be manufactured by ACI with RTD sensor, 3-point match calibrated transmitter, NEMA-4X enclosure and machined stainless steel immersion well.
 - viii) All new CHW and HHW differential pressure sensor/transmitters shall be manufactured by Veris and include 3-valve manifold, LCD display and NIST calibration.
 - ~~viii)~~ix) Provide a boiler HHW return temperature control valve for each boiler as indicated in the HHW piping diagram. Each valve shall be a 2.5 inch globe valve or characterized ball valve with linear flow characteristic and modulating actuator. Provide programming in the new central plant EMCS controls for control of each valve. Southland will provide the sequence of operation for the valves.
- d) Central Plant Programming
- The EMCS Subcontractor shall provide new programming to operate the new CHW and HHW plants as described herein and modify existing programming for existing equipment at LES as required for the central plant control.
- i) CHW Plant
- Install new programming for control of the CHW plant as specified in the new sequence of operation (SOO) provided by Southland. The 100% SOO will be provided shortly after the submittal of the project plans to DSA. The goals of the new SOO will be to operate the CHW plant unit in a safe manner that continuously meets the operational requirements of the CHW plant, enhances reliable operation of the plant, and minimizes the plant's energy consumption. The SOO will include control and monitoring of the chillers, variable speed CHW pumps, variable speed CDW pumps, variable speed cooling towers (CT), and monitoring of the HVAC equipment in the buildings. The primary elements of the chiller plant SOO include:
- (1) CHW Plant Start-Up Control – Implement control strategies that reduce the amount of electrical demand created during CHW plant start-up conditions. This primarily involves controlling the amount of load (via CHW flow) that the chillers are attempting to serve during start-up.
 - (2) Equipment Lead/Lag Rotation: Rotate the lead and lag designations for the ~~chillers, CT cells,~~ CHW pumps and CDW pumps to promote distributed operating hours.
 - (3) ~~Chiller Sequencing — Determine and operate the number of chillers that are appropriate for the CHW load and will help minimize the kW/ton for the entire CHW plant.~~
 - (4) CHW Supply Temperature Set-Point Reset – Reset the CHWST set-point up during periods of reduced CHW load, as indicated by feedback from the HVAC systems in the buildings, to reduce the electrical demand on the operating chillers. Reset the CHWST set-point down during periods of increasing CHW load.
 - (5) Variable Speed CHW Pump Control - ~~Stage the CHW pumps up and down based on the number of chillers required to operate.~~ The pump speed will be

controlled to satisfy the remote differential pressure (DP) requirements and the minimum CHW flow requirements for the chillers.

- (6) Chiller Minimum CHW Flow Control – Control a new CHW minimum flow bypass valve to ensure each chiller operates at or above its minimum flow requirement.
 - (7) CHW DP Set-Point - Establish new CHW DP set-points and reset the CHW DP set-point based on feedback from the HVAC systems in the buildings and CHW plant operation to reduce CHW pump energy use.
 - (8) CHW Plant Outside Air Temperature (OAT) Lockout – The existing control program utilizes an OAT to shutdown chiller operation when the OAT falls below an OAT set-point. Provide new programming for an OAT lockout/enable.
 - (9) Variable CDW Flow and CDW Pump Control - Reduce and vary the flow through each online chiller and cooling tower to reduce CDW pump power and the kW/ton for the CHW plant during operation.
 - (10) ~~Cooling Tower Staging – Enable and disable cooling towers to support the CHW plant load and reduce the overall kW/ton of the plant during operation.~~
 - (11) CDWST Set-Point Reset - Reset the CDWST set-point to reduce the kW/ton for the CHW plant during operation.
 - (12) CHW Plant Alarm Lockout Reset - If the CHW plant becomes Locked-out and unable to run automatically due coincident equipment alarms, then the control program will attempt to automatically reset the alarms and restart the CHW plant. An example is when all CHW pumps, or all cooling tower fans have coincident alarms and the plant cannot operate.
 - (13) Chiller Maintenance Mode - The control program shall include a maintenance mode for each chiller. If the maintenance mode input for a chiller is on, the control program shall Lock-out that chiller, the same as if the chiller's enable point is commanded to OFF by the Building Operator in the EMCS.
 - (14) Warnings and Alarms - The EMCS will monitor the alarm and fault outputs from the chillers, pump VFDs, and cooling tower VFDs. All alarms and faults shall be indicated at the Operator's Workstation terminal. Alarms and faults will be used to determine if equipment is available to run or not. The following is a preliminary list of alarms to include. Additional specific alarms may defined within the sequence.
 - (a) Chiller alarm/fault outputs.
 - (b) All VFD alarms and faults.
 - (c) Communication failure for all chillers and VFDs.
 - (d) Failure of instruments (i.e. temperature sensors, DP sensors, flow meters, etc.).
 - (e) Equipment run or off proof failures.
 - (f) Cooling tower vibration switches.
 - (g) High CHW supply temperature.
 - (h) High CDW supply temperature.
 - (i) Low CDW supply temperature.
 - (j) Low chiller plant efficiency.
- ii) HHW Plant
- Install new programming for control of the HHW plant as specified in the new SOO provided by Southland. The 100% SOO will be provided shortly after the submittal of the project plans to DSA. The goals of the new SOO will be to operate the HHW plant unit in a safe manner that continuously meets the operational requirements of the HHW plant, enhances reliable operation of the plant, and minimizes the plant's

energy consumption. The SOO will include control and monitoring of the boilers, variable speed HHW pumps, and monitoring of the HVAC equipment in the buildings. The primary elements of the HHW plant SOO include:

- (1) HHW Plant Start-Up Control – Implement control strategies that reduce the amount of heating system demand created during HHW plant start-up conditions. This primarily involves controlling the amount of load (via HHW flow) that the boilers are attempting to serve during start-up.
- (2) Equipment Lead/Lag Rotation: Rotate the lead and lag designations for the boilers and HHW pumps to promote distributed operating hours.
- (3) Boiler Sequencing – Determine and operate the number of boilers that are appropriate for the HHW load and will help minimize energy use for HHW plant.
- (4) HHW Supply Temperature Set-Point Reset – Reset the HHWST set-point down during periods of reduced CHW load, as indicated by feedback from the HVAC systems in the buildings, to reduce the demand on the operating boilers. Reset the HHWST set-point up during periods of increasing HHW load.
- (5) Variable Speed HHW Pump Control - Stage the HHW pumps up and down based on the number of boilers required to operate. The pump speed will be controlled to satisfy the remote DP requirements.
- (6) HHW DP Set-Point - Establish new HHW DP set-points and reset the HHW DP set-point based on feedback from the HVAC systems in the buildings and HHW plant operation to reduce HHW pump energy use.
- ~~(7)~~ HHW Plant Outside Air Temperature (OAT) Lockout – The existing control program utilizes an OAT to shutdown HHW system operation when the OAT rises above an OAT set-point. Provide new programming for an OAT lockout/enable.
- ~~(7)~~(8) HHW Boiler Return Temperature Control Valve (BRTCV) – The EMCS shall modulate the BRTCV to maintain the boiler return temperature at the minimum set-point.
- ~~(8)~~(9) HHW Plant Alarm Lockout Reset - If the HHW plant becomes Locked-out and unable to run automatically due coincident equipment alarms, then the control program will attempt to automatically reset the alarms and restart the HHW plant. An example is when both HHW pump VFDs have coincident alarms and the HHW plant cannot operate.
- ~~(9)~~(10) Boiler Maintenance Mode - The control program shall include a maintenance mode for each boiler. If the maintenance mode input for a boiler is on, the control program shall Lock-out that boiler, the same as if the boiler's enable point is commanded to OFF by the Building Operator in the EMCS.
- ~~(10)~~(11) Warnings and Alarms - The EMCS will monitor the alarm and fault outputs from the boilers and pump VFDs. All alarms and faults shall be indicated at the Operator's Workstation terminal. Alarms and faults will be used to determine if equipment is available to run or not. The following is a preliminary list of alarms to include. Additional specific alarms may defined within the sequence.
 - (a) Boiler alarm/fault outputs.
 - (b) All VFD alarms and faults.
 - (c) Communication failure for all VFDs.
 - (d) Failure of instruments (i.e. temperature sensors, DP sensors, flow meters, etc.).

- (e) Equipment run or off proof failures.
 - (f) Low HHW supply temperature.
 - (g) High HHW supply temperature.
 - (h) Low chiller plant efficiency.
- e) CHW System Calculations, Trending and Reports
- The EMCS will continuously monitor and calculate numerous parameters for the CHW and CDW systems, display the values on the operator workstation graphics, and trend/store the data for later use. The following is a preliminary list of the data to be calculated, collected, displayed and stored.
- i) CHW flow for each chiller, total primary CHW flow, estimated secondary CHW flow, CHW load (tons) for each chiller, total plant CHW load, CHW delta T for each chiller, power input (kW) for each chiller, total chiller power input (kW), efficiency for each chiller (kW/ton), total CHW plant power input, total CHW plant efficiency (kW/ton), power input to each CHWP and CDWP, and power input to each CT fan.
 - ii) All chiller and chiller compressor points available through the chiller communication interfaces.
 - iii) Enable and speed for each CHWP, CDWP and CT fan, CHW system differential pressure, and chiller isolation valve positions.
- f) CHW System Graphics
- The EMCS shall have a set of graphical representations displaying the status of key system points of control and equipment status. The following is a preliminary list.
- i) Chiller Plant Graphic – This graphic will display the key operating points of each chiller given above and provide access to the Master plant enable/disable point. This graphic will also display an overview of the alarm status of the plant by changing the appearance of plant graphic objects to reflect any alarm state detected by the EMCS.
 - ii) Chiller Plant Control Graphic – This graphic will provide the operator with a single point of access to all key chiller plant control variables and set points such as, but not limited to:
 - (1) Plant chilled water leaving temperature set point
 - (2) Chiller Enable/Disable points.
 - (3) All flow set points for each chiller.
 - (4) System DPs.
 - (5) All equipment operating constraint set points for each chiller and cooling tower.
 - (6) Plant staging set points.
 - iii) Chilled Water System Graphic – This graphic shall provide a representation of the chilled water distribution system with its key operating parameters such as total flow, supply water temperature, return water temperature.
 - iv) Individual Chiller Graphics – Show all points available through the chiller communication gateways.
 - v) VFD Graphics - Show all points available through the VFD communication gateways.
 - vi) The graphics shall have links to one another and other related graphics for ease of navigation.
- g) HHW System Graphics, Calculations, Trending, and Reports
- Provide graphics, calculations, trending, and reports for the HHW system similar to those described for the CHW system.

POINTS LIST

“Pasadena USD - Longfellow Elementary Central Plant Upgrade, EMCS Points List For: Chilled Water & Hot Water Plant Upgrade”, Rev. 1.0, dated 11/22/17 ~~7/15/17~~ is attached. Four (4) pages total.

Pasadena USD - Longfellow Elementary Central Plant Upgrade

EMCS Points List For: Chilled Water & Hot Water Plant Upgrade

Date: 11/22/17 Rev. 1

Hardwired Point Totals by Type ==>						23	23	13	16		
						HARDWIRED POINTS					
ITEM #	SYSTEM	EQUIPMENT NAME / ID	END DEVICE TYPE	DEVICE TAG	DESCRIPTION	AI	DI	AO	DO	Comments	
1	CHW	WC-1	CHILLER	-	Chiller communication interface	N/A	N/A	N/A	N/A	BACnet IP. Map all available points.	
2	CHW	WC-1	CHILLER	-	Chiller Enable	-	-	-	1		
3	CHW	WC-1	CHILLER	-	Chiller Alarm	-	1	-	-		
4	CHW	WC-1	CHILLER	-	Chiller Run Status	-	1	-	-		
5	CHW	WC-1	CHILLER	-	Chiller CHW Supply Temp Set-point	-	-	1	-		
6	CHW	WC-1	TT	-	Chiller CHW Supply Temperature	1	-	-	-	CHW temperature transmitters shall be match calibrated	
7	CHW	WC-1	TT	-	Chiller CHW Return Temperature	1	-	-	-	CHW temperature transmitters shall be match calibrated	
8	CDW	WC-1	TT	-	Chiller CDW Supply Temperature	1	-	-	-	Use transmitter	
9	CDW	WC-1	TT	-	Chiller CDW Return Temperature	1	-	-	-	Use transmitter	
10	CHW	WC-1	FT	-	Chiller CHW Flow	1	-	-	-	Use 5 inch Siemens Sitrans flanged in-line magnetic flow meter.	
12	CHW	WC-1	CV	-	Chiller CHW isolation valve	-	-	-	1	5 inch, Bray, 2-position butterfly valve with series 70 actuator.	
13	CDW	WC-1	CV	-	Chiller CDW isolation valve	-	-	-	1	6 inch, Bray, 2-position butterfly valve with series 70 actuator.	
14	CHW	WC-2	CHILLER	-	Chiller communication interface	N/A	N/A	N/A	N/A	BACnet IP. Map all available points.	
15	CHW	WC-2	CHILLER	-	Chiller Enable	-	-	-	0		
16	CHW	WC-2	CHILLER	-	Chiller Alarm	-	0	-	-		
17	CHW	WC-2	CHILLER	-	Chiller Run Status	-	0	-	-		
18	CHW	WC-2	CHILLER	-	Chiller CHW Supply Temp Set-point	-	-	0	-		
19	CHW	WC-2	TT	-	Chiller CHW Supply Temperature	0	-	-	-	CHW temperature transmitters shall be match calibrated	
20	CHW	WC-2	TT	-	Chiller CHW Return Temperature	0	-	-	-	CHW temperature transmitters shall be match calibrated	
21	CDW	WC-2	TT	-	Chiller CDW Supply Temperature	0	-	-	-	Use transmitter	
22	CDW	WC-2	TT	-	Chiller CDW Return Temperature	0	-	-	-	Use transmitter	
23	CHW	WC-2	FT	-	Chiller CHW Flow	0	-	-	-	Use 5 inch Siemens Sitrans flanged in-line magnetic flow meter.	
24	CHW	WC-2	CV	-	Chiller CHW isolation valve	-	-	-	0	5 inch, Bray, 2-position butterfly valve with series 70 actuator.	
25	CDW	WC-2	CV	-	Chiller CDW isolation valve	-	-	-	0	6 inch, Bray, 2-position butterfly valve with series 70 actuator.	
26	CHW	N/A	CV	-	CHW bypass valve	-	-	1	-	Assume 2.5 inch modulating control valve with linear flow characteristic. For maintaining minimum flow through chillers.	
27	CHW	N/A	DPTE	-	CHW end of line differential pressure	1	-	-	-	Veris DP transmitter with 3-valve manifold. Wire DPT back to the central plant controller.	
28	CHW	N/A	TT	-	Common CHW Supply Temperature	1	-	-	-	CHW temperature transmitters shall be match calibrated	
29	CHW	N/A	TT	-	Common CHW Return Temperature	1	-	-	-	CHW temperature transmitters shall be match calibrated	
30	CHW	CHP-1A	VFD	-	CHW pump VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
31	CHW	CHP-1A	VFD		Pump Enable	-	-	-	1		
32	CHW	CHP-1A	VFD		Pump Alarm	-	1	-	-		
33	CHW	CHP-1A	VFD		Pump Run Status	-	1	-	-		
34	CHW	CHP-1A	VFD		Pump Speed Command	-	-	1	-		

Pasadena USD - Longfellow Elementary Central Plant Upgrade

EMCS Points List For: Chilled Water & Hot Water Plant Upgrade

Date: 11/22/17 Rev. 1

Hardwired Point Totals by Type ==>						23	23	13	16		
						HARDWIRED POINTS					
ITEM #	SYSTEM	EQUIPMENT NAME / ID	END DEVICE TYPE	DEVICE TAG	DESCRIPTION	AI	DI	AO	DO	Comments	
35	CHW	CHP-1B	VFD	-	CHW pump VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
36	CHW	CHP-1B	VFD		Pump Enable	-	-	-	1		
37	CHW	CHP-1B	VFD		Pump Alarm	-	1	-	-		
38	CHW	CHP-1B	VFD		Pump Run Status	-	1	-	-		
39	CHW	CHP-1B	VFD		Pump Speed Command	-	-	1	-		
40	CDW	CDP-1	VFD	-	CDW pump VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
41	CDW	CDP-1	VFD	-	Pump Enable	-	-	-	1		
42	CDW	CDP-1	VFD	-	Pump Alarm	-	1	-	-		
43	CDW	CDP-1	VFD	-	Pump Run Status	-	1	-	-		
44	CDW	CDP-1	VFD	-	Pump Speed Command	-	-	1	-		
45	CDW	CDP-2	VFD	-	CDW pump VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
46	CDW	CDP-2	VFD	-	Pump Enable	-	-	-	1		
47	CDW	CDP-2	VFD	-	Pump Alarm	-	1	-	-		
48	CDW	CDP-2	VFD	-	Pump Run Status	-	1	-	-		
49	CDW	CDP-2	VFD	-	Pump Speed Command	-	-	1	-		
50	CDW	CT-1(A)	VFD	-	CT fan VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
51	CDW	CT-1(A)	VFD	-	Pump Enable	-	-	-	1		
52	CDW	CT-1(A)	VFD	-	Pump Alarm	-	1	-	-		
53	CDW	CT-1(A)	VFD	-	Pump Run Status	-	1	-	-		
54	CDW	CT-1(A)	VFD	-	Pump Speed Command	-	-	1	-		
55	CDW	CT-2(B)	VFD	-	CT fan VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
56	CDW	CT-2(B)	VFD	-	Pump Enable	-	-	-	0		
57	CDW	CT-2(B)	VFD	-	Pump Alarm	-	0	-	-		
58	CDW	CT-2(B)	VFD	-	Pump Run Status	-	0	-	-		
59	CDW	CT-2(B)	VFD	-	Pump Speed Command	-	-	0	-		
60	CDW	CT-1	TT	-	Cooling tower supply temperature	1	-	-	-	Use transmitter	
61	CDW	CT-2	TT	-	Cooling tower supply temperature	0	-	-	-	Use transmitter	
62	CDW	N/A	TT	-	Common CDW supply temperature	1	-	-	-	Use transmitter	
63	CDW	N/A	TT	-	Common CDW return temperature	1	-	-	-	Use transmitter	
64	CDW	CT-1(A)	VS	-	Cooling tower vibration switch	-	1	-	-	Vibration switch provided by CT manufacturer.	
65	CDW	CT-1(B)	VS	-	Cooling tower vibration switch	-	0	-	-	Vibration switch provided by CT manufacturer.	
66	CDW	CT-1(A)	CV	-	Cooling tower CDW return isolation valve	-	-	-	1	6 inch, Bray, 2-position butterfly valve with series 70 actuator.	
67	CDW	CT-1(A)	CV	-	Cooling tower CDW supply isolation valve	-	-	-	1	6 inch, Bray, 2-position butterfly valve with series 70 actuator.	
68	CDW	CT-1(B)	CV	-	Cooling tower CDW return isolation valve	-	-	-	0	6 inch, Bray, 2 position butterfly valve with series 70 actuator.	
69	CDW	CT-1(B)	CV	-	Cooling tower CDW supply isolation valve	-	-	-	0	6 inch, Bray, 2 position butterfly valve with series 70 actuator.	

Pasadena USD - Longfellow Elementary Central Plant Upgrade

EMCS Points List For: Chilled Water & Hot Water Plant Upgrade

Date: 11/22/17 Rev. 1

Hardwired Point Totals by Type ==>						23	23	13	16		
						HARDWIRED POINTS					
ITEM #	SYSTEM	EQUIPMENT NAME / ID	END DEVICE TYPE	DEVICE TAG	DESCRIPTION	AI	DI	AO	DO	Comments	
70	HHW	B-1	BOILER	-	Boiler Enable	-	-	-	1		
71	HHW	B-1	BOILER	-	Boiler Alarm	-	1	-	-		
72	HHW	B-1	BOILER	-	Boiler Run Status	-	1	-	-		
73	HHW	B-1	BOILER	-	Boiler HHW Supply Temp Set-point	-	-	1	-		
74	HHW	B-1	TT	-	Boiler HHW Supply Temperature	1	-	-	-		
75	HHW	B-1	TT	-	Boiler HHW Return Temperature	1	-	-	-		
76	HHW	B-1	PUMP	-	Boiler pump start/stop	-	-	-	1	Check. May be controlled by boiler.	
77	HHW	B-1	CS	-	Boiler pump run status	-	1	-	-	Pump status current switch	
78	HHW	B-1	CV	-	Boiler return temperature control valve	-	-	1	-	For maintaining minimum boiler return temperature.	
79	HHW	B-2	BOILER	-	Boiler Enable	-	-	-	1		
80	HHW	B-2	BOILER	-	Boiler Alarm	-	1	-	-		
81	HHW	B-2	BOILER	-	Boiler Run Status	-	1	-	-		
82	HHW	B-2	BOILER	-	Boiler HHW Supply Temp Set-point	-	-	1	-		
83	HHW	B-2	TT	-	Boiler HHW Supply Temperature	1	-	-	-		
84	HHW	B-2	TT	-	Boiler HHW Return Temperature	1	-	-	-		
85	HHW	B-2	PUMP	-	Boiler pump start/stop	-	-	-	1	Check. May be controlled by boiler.	
86	HHW	B-2	CS	-	Boiler pump run status	-	1	-	-	Pump status current switch	
87	HHW	B-2	CV	-	Boiler return temperature control valve	-	-	1	-	For maintaining minimum boiler return temperature.	
88	HHW	HP-1	VFD	-	HHW pump VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
89	HHW	HP-1	VFD	-	Pump Enable	-	-	-	1		
90	HHW	HP-1	VFD	-	Pump Alarm	-	1	-	-		
91	HHW	HP-1	VFD	-	Pump Run Status	-	1	-	-		
92	HHW	HP-1	VFD	-	Pump Speed Command	-	-	1	-		
93	HHW	HP-2	VFD	-	HHW pump VFD communication interface	N/A	N/A	N/A	N/A	BACnet MS-TP. Map all available points.	
94	HHW	HP-2	VFD	-	Pump Enable	-	-	-	1		
95	HHW	HP-2	VFD	-	Pump Alarm	-	1	-	-		
96	HHW	HP-2	VFD	-	Pump Run Status	-	1	-	-		
97	HHW	HP-2	VFD	-	Pump Speed Command	-	-	1	-		
98	HHW	N/A	FT		Common HHW Flow Meter	1	-	-	-		
99	HHW	N/A	TT	-	Common Primary HHW Supply Temperature	1	-	-	-		
100	HHW	N/A	TT	-	Common Primary HHW Return Temperature	1	-	-	-		
101	HHW	N/A	TT	-	Common Secondary HHW Supply Temp	1	-	-	-		
102	HHW	N/A	TT	-	Common Secondary HHW Return Temp	1	-	-	-		
103	HHW	N/A	DPT	-	HHW end of line differential pressure	1	-	-	-	Veris DP transmitter with 3-valve manifold. Wire DPT back to the central plant controller.	

Pasadena USD - Longfellow Elementary Central Plant Upgrade

EMCS Points List For: Chilled Water & Hot Water Plant Upgrade

Date: 11/22/17 Rev. 1

						Hardwired Point Totals by Type ==>				23	23	13	16
						HARDWIRED POINTS							
ITEM #	SYSTEM	EQUIPMENT NAME / ID	END DEVICE TYPE	DEVICE TAG	DESCRIPTION	AI	DI	AO	DO	Comments			
104	ALL	N/A	OAT	-	Outside air temperature	1	-	-	-				
105	ALL	N/A	OARH	-	Outside air relative humidity	1	-	-	-				

**BOARD OF EDUCATION
PASADENA UNIFIED SCHOOL DISTRICT
PASADENA, CALIFORNIA**

Topic: APPROVAL OF THE CHANGE ORDER NO. 2 WITH CONTRACTOR, THE NAZERIAN GROUP AT JOHN MUIR HIGH SCHOOL FOR THE AUDITORIUM MODERNIZATION, KITCHEN RENOVATION AND BLEACHER REPLACEMENT PROJECT.

RECOMMENDATION: The Governing Board of the Pasadena Unified School District approves the Change Order No. 2 with the Nazerian Group for the John Muir High School Auditorium & Kitchen Renovation and Bleacher Replacement project in the amount not to exceed \$179,631.28.

District Priority/Strategy: To ensure a clean, safe, and orderly environment that supports learning.

I. BACKGROUND

Muir High School features a great and large auditorium that holds a lot of history. A renovation of the Auditorium will revive all of its features and will bring all the technology up to date in order to support the Academic and Performing Arts Program. On July 28, 2016, the Governing Board of the Pasadena Unified School District authorized the Award of PUSD Bid# 11-15/16 for the Muir HS-Auditorium & Kitchen renovation and bleacher replacement to The Nazerian Group in the amount of \$23,777,123. The previous change order decreased the contract amount to \$21,662,043.00. This Change Order No. 2 will bring the new contract value to \$21,841,674.28, approximately 9% lower than the original bid amount.

II. STAFF ANALYSIS

Change Order 2 includes items that were discovered as unforeseen conditions such as the existing fire water line serving the campus, and some demolition to accommodate new structural steel. This change order also includes revisions to the storm drain system to convert from a mechanical system (using a pump) to a gravity system which will reduce the maintenance tremendously.

The Facilities Committee vetted this Board Report on December 14, 2017.

Attachments: Change Order No. 2

III. FISCAL IMPACT

Funds in an amount not to exceed \$179,631.28 are available in the Measure TT-John Muir HS Auditorium & Kitchen renovation and bleacher replacement project account.

Pasadena Unified School District

Board of Education Agenda: December 14, 2017

Prepared by: Nelson M. Cayabyab, Chief Facilities Officer

Funding code: 21.1-95051.0-00000-85000-6270-0820000

DRAFT

Originator: Nelson M. Cayabyab, Chief Facilities Officer

December 14, 2017

CHANGE ORDER

OWNER	<input checked="" type="checkbox"/>	N. Cayabyab, Pasadena Unified School District
ARCHITECT	<input checked="" type="checkbox"/>	R. Hensley, WLC Architects, Inc.
CONTRACTOR	<input checked="" type="checkbox"/>	V. Nazerian, The Nazerian Group
DSA FIELD ENGINEER	<input checked="" type="checkbox"/>	A. Tran, Division of the State Architect
IOR	<input checked="" type="checkbox"/>	G. Hankins, Knowland Construction Services
OTHER	<input checked="" type="checkbox"/>	N. Piccini, WLC Architects, Inc.
OTHER	<input checked="" type="checkbox"/>	DSA Coordinator, WLC Architects, Inc.

Page 1 of 2

PROJECT: Muir High School Modernization
(name, address) 1905 Lincoln Avenue
Pasadena, CA 91103

PROJECT CHANGE ORDER NUMBER: 2

DATE: November 15, 2017

ARCHITECT'S PROJECT NO: 0913900.54

TO CONTRACTOR: The Nazerian Group
(name, address) 16218 Ventura Boulevard, Suite 7
Encino, CA 91436

CONTRACT DATE: August 15, 2017

CONTRACT FOR: Modernization

DSA APPLICATION NO.: 03-115534

DSA FILE NO.: 19-H19

The Contract is changed as follows:

		Days	Cost
2.1	Description: Provide credit for the deletion of the cast stone at entry of Auditorium. Refer to attached COP 6, Exhibits 2.1A and 2.1B Requested By: District Reason: Value Engineering	0	\$ (65,000.00)
2.2	Description: Revise door hardware. Refer to attached COP 7, Exhibits 2.2A through 2.2C. Requested By: District Reason: To accommodate current District standards		2,954.49
2.3	Description: Install two 4 inch PVC conduits from underground vault and encase in concrete at the Mustang Café to Building E. Refer to attached COP 10, Exhibits 2.3A and 2.3B. Requested By: District Reason: Unforeseen condition discovered during demolition.		7,443.23
2.4	Description: Remove demolition associated with the installation of the new steel columns and beams at the Dressing Room located at the back stage of Building B. Refer to attached COP 13, Exhibits 2.4A and 2.4B. Requested By: Design Team Reason: Information missing from the construction documents.		48,296.54
2.5	Description: Replace damaged existing fire sprinkler pipes at the Cafeteria. Refer to attached COP 16, Exhibits 2.5A and 2.5B. Requested By: District Reason: Unforeseen condition discovered during demolition.		53,620.76
2.6	Description: Install FRP panels in lieu of scheduled paint at the Kitchen Refer to attached COP 21, Exhibits 2.6A and 2.6B. Requested By: District Reason: District's preference.		18,329.85
2.7	Description: Revise storm drain routing at the Mustang Café adjacent to Building B. Refer to attached COP 22R2, Exhibits 2.7A, 2.7B, 2.7C, 2.7D, and 2.7E. Requested By: District Reason: Unforeseen condition discovered during demolition.		113,986.41

Total Cost of This Change Order:**\$ 179,631.28**

PROJECT:
(name, address)

Muir High School Modernization
1905 Lincoln Avenue
Pasadena, CA 91103

PROJECT CHANGE ORDER NUMBER: 2

DATE: November 15, 2017

ARCHITECT'S PROJECT NO: 0913900.54

Not valid until signed by the Owner, Architect and Contractor.


The original Contract Sum was	\$ 23,777,123.00
Net change by previously authorized Change Orders	\$ (2,115,080.00)
The Contract Sum prior to this Change Order was	21,662,043.00
The Contract Sum will be increased by this Change Order in the amount of	179,631.28
	21,841,674.28

The Contract Time will be unchanged by zero days.

The date of Substantial Completion as of the date of this Change Order therefore is April 2018.

NOTE: This summary does not reflect changes in the Contract Sum, Contract Time or Guaranteed Maximum Price which have been authorized by Construction Change Directive.

Architect:



ROBERT J. HENSLEY
WLC Architects, Inc.
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730

Date: November 15, 2017



Contractor:

VARTAN NAZERIAN
The Nazerian Group
16218 Ventura Boulevard, Suite 7
Encino, CA 91436

Date: _____

Owner:

NELSON CAYABYAB
Pasadena Unified School District
740 West Woodbury Road
Pasadena, CA 91103

Date: _____



THE NAZERIAN GROUP
16218 Ventura Blvd suite #7
Encino, CA 91436
Lic# 787-198

Change Order Proposal

Client: Pasadena Unified school district

Project: Muir HS - Auditorium & Kitchen Renovation and Bleacher Replacement

☒ 03-115534 M

☐ 03-115819 K

☐ 03-116700 B

Proposal No: 006

Date: 3/6/2017

To: **WLC Architects**

Date Response Is Required:

From: **The Nazerian Group**

Purchase Order No.:

The following is an itemized quotation in accordance with the requirements set forth in the General Conditions of the contract regarding proposed changes to the contract documents.

Scope: Delete entire section of cast stone work at entry to auditorium, including but not limited to demo, construction, repairs and related work

Contractor Costs:

(Provide Detailed Backup)

Item	Material	Labor	Equipment	Misc.
Credit - Cast Stone				

TOTALS
-\$65,000.00

A.	TOTAL SUBCONTRACTOR COSTS:	\$0.00
B.	MARK-UP OF SUBCONTRACTOR COSTS (15% max.):	\$0.00
	GENERAL CONTRACTOR MARK-UP OF SUBCONTRACTOR COSTS (6% max.):	\$0.00
C.	General Contractor's Material:	\$0.00
D.	General Contractor's Sales Tax:	\$0.00
E.	General Contractor's Labor:	\$0.00
F.	General Contractor's Equipment:	\$0.00
G.	General Contractor's Direct Expenses (C+D+E+F):	-\$65,000.00
H.	Overhead & Profit:	\$0.00
I.	GENERAL CONTRACTOR TOTAL (G+H):	-\$65,000.00
J.	SUB-TOTAL (A+B+I):	-\$65,000.00
K.	Insurance Rate:	2.00% \$0.00
L.	Bond Rate:	1.50% \$0.00
TOTAL PROPOSED CHANGE TO THE CONTRACT (J+K+L):		-\$65,000.00
Total Added Days Duration Anticipated:		0

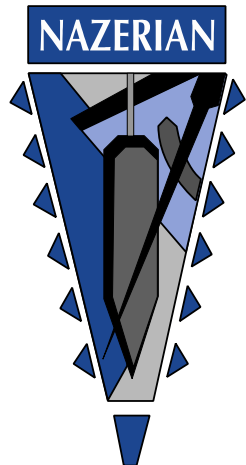
Issued by Contractor:	<u>GREG TOROSYAN</u>	Greg Torosyan, Project Manager	3/6/2017
	Signature	Name and Title (Printed)	Date
Approved by:			
	Signature	Name and Title (Printed)	Date

Exhibit 2.1A

T H E

NAZERIAN

G R O U P



1 6 2 1 8

V E N T U R A

B L V D.

S U I T E # 7

E N C I N O

C A L I F O R N I A

9 1 4 3 6

PH 818.990.5115

FX 818.986.1448

LIC # 787-198

INFO@NAZERIAN.NET

WWW.NAZERIAN.NET

March 15, 2017

Pasadena Unified School District

351 S. Hudson Ave.
Pasadena, CA 91109

WLC Construction Services, Inc.

8163 Rochester Ave., Suite 101
Rancho Cucamonga, CA 91730

Attn: Konni Wong

SUBJECT: Credit for Cast Stone Scope Deletion

Muir HS – Auditorium & Kitchen Renovation and Bleacher Replacement – Bid No. 11-15/16

Dear Ms. Wong,

In regards to COP #006, for the above referenced project, a credit is being provided to delete the entire section of cast stone work at entry to the auditorium.

At the time of bid, estimates were based on the provided bid documents which lacked detail and direction related to this scope, particularly structural elements. DSA required the removal of this portion of work and treated it as a deferred approval, with requirements of further engineering.

Subcontractors were unable to justify the extent of this scope at the time of bid. The Nazerian Group estimated that this scope would cost \$25,000.00. Per the Schedule of Values provided, the listed amount for this scope is \$25,000.00. Addendum 2, General Conditions, Paragraph 2. Schedule of Values, "The District may, in its sole discretion, utilize the costs listed in the Schedule of Values as the true costs of items to be deducted from the Contract Price through credit or deductive Change Order."

Inclusive of demolition, bond, insurance, and Overhead & Profit, the total value for this scope is \$38,325.00. The Nazerian Group, in its fairness has decided to provide an additional credit, which brings our total credit to delete the Cast Stone scope to \$65,000.00.

If there are any questions, or further clarification required, please do not hesitate to contact me.

Respectfully submitted,

Exhibit 2.1B

VARTAN NAZERIAN

Vartan Nazerian
President



THE NAZERIAN GROUP
16218 Ventura Blvd suite #7
Encino, CA 91436
Lic# 787-198

Change Order Proposal

Client: Pasadena Unified school district

Project: Muir HS - Auditorium & Kitchen Renovation and Bleacher Replacement

☒ 03-115534 M

☐ 03-115819 K

☐ 03-116700 B

Proposal No: 007

Date: 3/6/2017

To: **WLC Architects**
From: **The Nazerian Group**

Date Response Is Required:

Purchase Order No.:

The following is an itemized quotation in accordance with the requirements set forth in the General Conditions of the contract regarding proposed changes to the contract documents.

Scope: Changes per the Returned Hardware Submittals dated 2/13/17, "Furnish as Corrected."

Contractor Costs:

(Provide Detailed Backup)

Item	Material	Labor	Equipment	Misc.
Advanced Door Assemblies Change	\$2,107.00	\$45.00		\$190.00

TOTALS
\$2,342.00

A.	TOTAL SUBCONTRACTOR COSTS:		\$2,342.00
B.	MARK-UP OF SUBCONTRACTOR COSTS (15% max.):		\$351.00
	GENERAL CONTRACTOR MARK-UP OF SUBCONTRACTOR COSTS (6% max.):		161.58
C.	General Contractor's Material:	\$0.00	
D.	General Contractor's Sales Tax:	\$0.00	
E.	General Contractor's Labor:	\$0.00	
F.	General Contractor's Equipment:	\$0.00	
G.	General Contractor's Direct Expenses (C+D+E+F):	\$0.00	
H.	Overhead & Profit:	\$0.00	
I.	GENERAL CONTRACTOR TOTAL (G+H):		\$0.00
J.	SUB-TOTAL (A+B+I):		\$2,854.58
K.	Insurance Rate:	2.00%	\$57.09
L.	Bond Rate:	1.50%	\$42.82
TOTAL PROPOSED CHANGE TO THE CONTRACT (J+K+L):			\$2,954.49
Total Added Days Duration Anticipated:			0

Issued by Contractor:	<u>GREG TOROSYAN</u>	Greg Torosyan, Project Manager	3/6/2017
	Signature	Name and Title (Printed)	Date
Approved by:			
	Signature	Name and Title (Printed)	Date

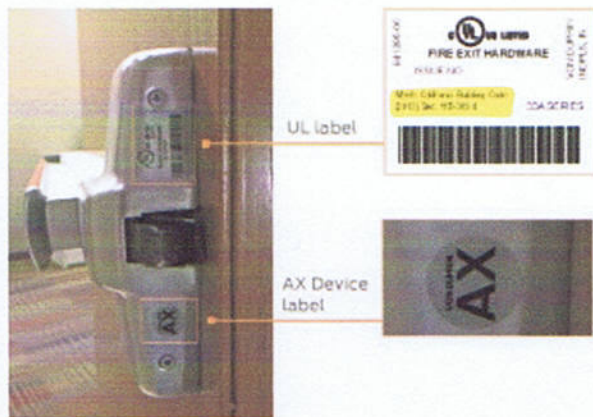
Exhibit 2.2A

Mechanical options

ADD BOTH

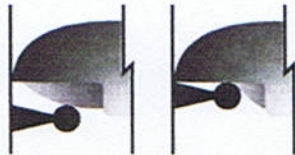
AX Accessible device

The AX device is a UL-certified exit device designed to meet the progressive requirements of the California Building Code for accessible openings. This device meets the 5 lbs of operating force requirement called for in chapter 11B-309.4. The AX device also exceeds ANSI/BHMA requirements. Available devices include: AX98/99, AX98/99-F, AX98/9949LBL, AX98/9949-F LBL, AX98/9949-F LBLAFL. Additionally, all AX devices will be shipped with a new UL label clearly stating "Meets California building Code (2013) Sec. 11B-309.4" and an "AX" identifier label on device center case. See images below for reference.



XP Extra performance

For increased security the XP98/99 Rim exit device has a static load force resistance of more than 2,000 pounds, twice that of standard rim exit devices. The two-piece latch bolt forms a 90° latch-to-strike contact. The "smart" latch changes shape when subjected to external forces. This design enables the exit door to withstand an external attack and remain secure. Additionally, the patented latch bolt design provides a greater, longer-lasting latch bolt to strike contact which is not easily affected by the twisting motion of a weakened frame, resulting in an opening that will remain strong.



With a door loaded to 250 pounds, XP98/99 requires less than 40 pounds of pressure to open, 25% less than the safety code requires.

XP98/99 is available for panic or fire exit hardware applications. Dimensions, finishes and trim options are equal to the standard 98/99 series rim exit device.

Note: The 909 strike is to be used for all applications. The exception occurs with the use of fire rated double door applications, in this instance the 954 strike is required.

PA Pushpad armor

Built to absorb impact, the pushpad armor stands up to the wear and tear of demanding high-traffic areas. This composite accessory provides added support, while protecting the pushpad on the hinge side of the device. Available for 33A/35A and 98/99 series exit devices. See images below for reference.

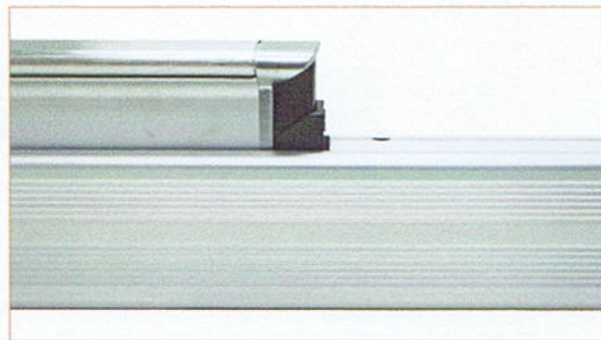
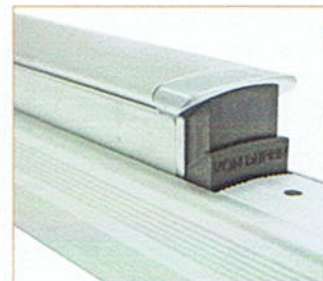


Exhibit 2.2C



THE NAZERIAN GROUP
16218 Ventura Blvd suite #7
Encino, CA 91436
Lic# 787-198

Change Order Proposal

Client: Pasadena Unified school district

Project: Muir HS - Auditorium & Kitchen Renovation and Bleacher Replacement

☒ 03-115534 M

☐ 03-115819 K

☐ 03-116700 B

Proposal No: 010

Date: 05/01/2017

To: WLC Architects	Date Response Is Required:
From: The Nazerian Group	Purchase Order No.:

The following is an itemized quotation in accordance with the requirements set forth in the General Conditions of the contract regarding proposed changes to the contract documents.

Scope: Install 2 4 " PVC Conduits underground from Pull Box from Mustang Café to Building E. Encase in concrete (approx 75 Inft each run)

Contractor Costs:

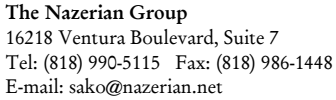
(Provide Detailed Backup)

Item	Material	Labor	Equipment	Misc.	TOTALS
Sub:					\$0.00
GC: The Nazerian Group					\$6,253.50

A.	TOTAL SUBCONTRACTOR COSTS:	\$0.00
B.	MARK-UP OF SUBCONTRACTOR COSTS (15% max.):	\$0.00
	GENERAL CONTRACTOR MARK-UP OF SUBCONTRACTOR COSTS (6% max.):	\$0.00
C.	General Contractor's Material:	\$0.00
D.	General Contractor's Sales Tax:	\$0.00
E.	General Contractor's Labor:	\$0.00
F.	General Contractor's Equipment:	\$0.00
G.	General Contractor's Direct Expenses (C+D+E+F):	\$6,253.50
H.	Overhead & Profit:	\$938.03
I.	GENERAL CONTRACTOR TOTAL (G+H):	\$7,191.53
J.	SUB-TOTAL (A+B+I):	\$7,191.53
K.	Insurance Rate:	2.00% \$143.83
L.	Bond Rate:	1.50% \$107.87
	TOTAL PROPOSED CHANGE TO THE CONTRACT (J+K+L):	\$7,443.23
	Total Added Days Duration Anticipated:	0

Issued by Contractor:	<u><i>Sako Djabourian</i></u>	Sako Djabourian, Accountant	5/1/2017
	Signature	Name and Title (Printed)	Date
Approved by:	_____	_____	_____
	Signature	Name and Title (Printed)	Date

Exhibit 2.3A



PROPOSAL NO. 5117
DATE May 1, 2017
Re:

TO: Pasadena Unified School District

Exhibit 2.3B



THE NAZERIAN GROUP
16218 Ventura Blvd suite #7
Encino, CA 91436
Lic# 787-198

Change Order Proposal

Client: Pasadena Unified school district

Project: Muir HS - Auditorium & Kitchen Renovation and Bleacher Replacement

☒ 03-115534 M

☐ 03-115819 K

☐ 03-116700 B

Proposal No: 013

Date: 05/16/2017

To: WLC Architects

Date Response Is Required:

From: The Nazerian Group

Purchase Order No.:

The following is an itemized quotation in accordance with the requirements set forth in the General Conditions of the contract regarding proposed changes to the contract documents.

Scope: Various additional demolition and disposal at men's and women's restroom and associated area. Demolition of plaster on concrete columns, wood cabinets, black iron ceiling, roll up door, and demolition of plaster wall outside of restrooms.
NOTE: For partial demolition only; referencing PR #4.

Contractor Costs:

(Provide Detailed Backup)

Item	Material	Labor	Equipment	Misc.
Sub: Karcher Environmental Inc.				
GC:				

TOTALS
\$38,280.00

A.	TOTAL SUBCONTRACTOR COSTS:	\$38,280.00
B.	MARK-UP OF SUBCONTRACTOR COSTS (15% max.):	\$5,742.00
	GENERAL CONTRACTOR MARK-UP OF SUBCONTRACTOR COSTS (6% max.):	\$2,641.32
C.	General Contractor's Material:	\$0.00
D.	General Contractor's Sales Tax:	\$0.00
E.	General Contractor's Labor:	\$0.00
F.	General Contractor's Equipment:	\$0.00
G.	General Contractor's Direct Expenses (C+D+E+F):	\$0.00
H.	Overhead & Profit:	\$0.00
I.	GENERAL CONTRACTOR TOTAL (G+H):	\$0.00
J.	SUB-TOTAL (A+B+I):	\$46,663.32
K.	Insurance Rate:	2.00% \$933.27
L.	Bond Rate:	1.50% \$699.95
TOTAL PROPOSED CHANGE TO THE CONTRACT (J+K+L):		\$48,296.54
Total Added Days Duration Anticipated:		0

Issued by Contractor:

Sako Djabourian

Sako Djabourian, Accountant

5/16/2017

Signature

Name and Title (Printed)

Date

Approved by:

Signature

Name and Title (Printed)

Date

Exhibit 2.4A



Date: May 16, 2017

Sent via email - greg@nazerian.net

Attn: Greg Torosyan
Nazerian Group
16218 Ventura Blvd, Suite 7
Encino, CA 91436

Re: Change Order Request #6
Muir HS

Please make the following change to our contract:

Price Adjustment: \$38,280.00

Schedule Adjustment: 10 days

Scope: Demolition and disposal of the following:
Plaster and black iron ceiling: 412 sq. ft in men's and women's restrooms as well as an adjacent area outside the mens
Plaster on concrete columns roughly 3'x20'h. 10 ea.
Wood cabinet demo with contents. 80lfx8'h
Black iron ceiling only demo. 25'x60' with 18 ea 4' light fixtures.
20'x11'h roll up door.
Plaster wall demo outside restrooms 6'x11' 2 ea.

Exclusions/Assumptions: All applicable terms, conditions, exclusions, and assumptions from our original contract for this project are assumed to apply to this change order request .

Sincerely,

Joe DeLosSantos

Exhibit 2.4B



THE NAZERIAN GROUP
16218 Ventura Blvd suite #7
Encino, CA 91436
Lic# 787-198

Change Order Proposal

Client: Pasadena Unified school district

Project: Muir HS - Auditorium & Kitchen Renovation and Bleacher Replacement

☒ 03-115534 M

☒ 03-115819 K

☒ 03-116700 B

Proposal No: 016

Date: 07/10/2017

To: WLC Architects	Date Response Is Required:
From: The Nazerian Group	Purchase Order No.:

The following is an itemized quotation in accordance with the requirements set forth in the General Conditions of the contract regarding proposed changes to the contract documents.

Scope: Replace Fire Sprinkler piping per CCD07 and Main Runners per RFI 077/077R1

Contractor Costs:

(Provide Detailed Backup)

Item	Material	Labor	Equipment	Misc.
Sub: Apex Fire Protection				
GC:				

TOTALS
\$42,500.00

A.	TOTAL SUBCONTRACTOR COSTS:	\$42,500.00
B.	MARK-UP OF SUBCONTRACTOR COSTS (15% max.):	\$6,375.00
	GENERAL CONTRACTOR MARK-UP OF SUBCONTRACTOR COSTS (6% max.):	\$2,932.50
C.	General Contractor's Material:	\$0.00
D.	General Contractor's Sales Tax:	\$0.00
E.	General Contractor's Labor:	\$0.00
F.	General Contractor's Equipment:	\$0.00
G.	General Contractor's Direct Expenses (C+D+E+F):	\$0.00
H.	Overhead & Profit:	\$0.00
I.	GENERAL CONTRACTOR TOTAL (G+H):	\$0.00
J.	SUB-TOTAL (A+B+I):	\$51,807.50
K.	Insurance Rate:	2.00% \$1,036.15
L.	Bond Rate:	1.50% \$777.11
TOTAL PROPOSED CHANGE TO THE CONTRACT (J+K+L):		\$53,620.76
Total Added Days Duration Anticipated:		0

Issued by Contractor:	<u>Cynthia Sarkissian</u>	Cynthia Sarkissian, PC	7/10/2017
	Signature	Name and Title (Printed)	Date
Approved by:			
	Signature	Name and Title (Printed)	Date

Exhibit 2.5A



Apex Fire Protection

DIR #1000006088 LIC # 830028

2155 VERDUGO BLVD. # 220 MONTROSE, CA 91020

Tel (818)957-3400 apexfireinc@yahoo.com Fax (818)957-3404

COP #001

PROJECT: MUIR HS AUDITORIUM & KITCHEN RENOVATION AND BLEACHER REPLACEMENT

APPL: (03-115534) (03-115819) (03-116700)

LOCATION: 1905 N LINCOLN AVE PASADENACA, 91104

DATE: 07.07.17

We here by propose to install all work Per CCD 007 and RFI 077 for the project reference above, our price is based on plans and specifications provided (**WLC ARC.**), also assumption has been made that existing water supply is adequate.

SCOPE OF WORK:

1. Replace Fire Sprinkler piping per CCD 007 and replace Main Runners per RFI 077/077R1

EXCLUSIONS:

Any water or fire service fees, any electrical wiring or 24 hour monitoring system, smoke detectors, any painting of pipe, any fire extinguisher, any drywall, concrete and stucco painting or patching, any plan deficiencies or Structural Engineering., any over time work, any fire pumps or reservoirs "Water Tank", any kitchen equipment foam system, welding of grease duct nipples or specialty hanging devices, any in rack sprinklers, any fire watch, any dry chemicals or special hazards, site work fire Hydrants, water meter fees, *any Bounding fees.*

Unless noted otherwise:

We propose hereby to furnish material and labor(the price of this project is based on prevailing wage), complete in accordance with above specifications for the sum of:

PRICE:

\$42,500.00

**NOTE: THIS PRICE INCLUDED ALL TAX AND PERMIT FEES.*

NOTE:

** The price of this project is based on prevailing wage.*

This price is valid for 30 days from the date of the proposal.

ZARE BABAYAN

Exhibit 2.5B



THE NAZERIAN GROUP
16218 Ventura Blvd suite #7
Encino, CA 91436
Lic# 787-198

Change Order Proposal

Client: Pasadena Unified school district

Project: Muir HS - Auditorium & Kitchen Renovation and Bleacher Replacement

☐ 03-115534 M

☒ 03-115819 K

☐ 03-116700 B

Proposal No: 021

Date: 9/4/2017

To: WLC Architects	Date Response Is Required:
From: The Nazerian Group	Purchase Order No.:

The following is an itemized quotation in accordance with the requirements set forth in the General Conditions of the contract regarding proposed changes to the contract documents.

Scope: Install FRP panels in kitchen areas as specified. Delete final paint coat

Contractor Costs:

(Provide Detailed Backup)

Item	Material	Labor	Equipment	Misc.	TOTALS
Sub:					\$0.00
GC: The Nazerian Group					\$15,400.00

A.	TOTAL SUBCONTRACTOR COSTS:	\$0.00
B.	MARK-UP OF SUBCONTRACTOR COSTS (15% max.):	\$0.00
	GENERAL CONTRACTOR MARK-UP OF SUBCONTRACTOR COSTS (6% max.):	\$0.00
C.	General Contractor's Material:	\$0.00
D.	General Contractor's Sales Tax:	\$0.00
E.	General Contractor's Labor:	\$0.00
F.	General Contractor's Equipment:	\$0.00
G.	General Contractor's Direct Expenses (C+D+E+F):	\$15,400.00
H.	Overhead & Profit:	\$2,310.00
I.	GENERAL CONTRACTOR TOTAL (G+H):	\$17,710.00
J.	SUB-TOTAL (A+B+I):	\$17,710.00
K.	Insurance Rate:	2.00% \$354.20
L.	Bond Rate:	1.50% \$265.65
TOTAL PROPOSED CHANGE TO THE CONTRACT (J+K+L):		\$18,329.85
Total Added Days Duration Anticipated:		0

Issued by Contractor:	<u>Greg Torosyan</u>	Greg Torosyan, PM	9/4/2017
	Signature	Name and Title (Printed)	Date
Approved by:			
	Signature	Name and Title (Printed)	Date

Exhibit 2.6A



The Nazerian Group
16218 Ventura Boulevard, Suite 7
Tel: (818) 990-5115 Fax: (818) 986-1448
E-mail: cynthia@nazerian.net

PROPOSAL

PROPOSAL NO. 9417
DATE September 4, 2017
Re: **Muir HS AK&B**

TO: Pasadena Unified School District

ATTN: Konni Wong, WLC Arch.
PROJECT: **Muir HS AK&B**

JOB DESCRIPTION					
We propose to furnish all labor, material, and equipment to do the following.					
Install FRP panels in Kitchen areas as specified. Delete final paint coat.					
ITEM	QTY	UNIT	DESCRIPTION	LINE ITEM	LINE TOTAL
1.00	1,100.00	sqft	FRP panels, includes installation	\$15.00	\$16,500.00
2.00	1,100.00	sqft	Deduct for paint	(\$1.00)	-\$1,100.00
Sub-Total					\$15,400.00
Overhead and Profit				15.00%	\$2,310.00
TOTAL					\$17,710.00

Exhibit 2.6B



THE NAZERIAN GROUP
16218 Ventura Blvd suite #7
Encino, CA 91436
Lic# 787-198

Change Order Proposal

Client: Pasadena Unified school district

Project: Muir HS - Auditorium & Kitchen Renovation and Bleacher Replacement

☐ 03-115534 M

☒ 03-115819 K

☐ 03-116700 B

Proposal No: 022R2

Date: 10/12/2017

To: WLC Architects	Date Response Is Required:
From: The Nazarian Group	Purchase Order No.:

The following is an itemized quotation in accordance with the requirements set forth in the General Conditions of the contract regarding proposed changes to the contract documents.

Scope: Storm Drain Revisions

Contractor Costs:

(Provide Detailed Backup)

Item	Material	Labor	Equipment	Misc.	TOTALS
Sub:					\$0.00
GC: The Nazarian Group					\$95,766.78

A.	TOTAL SUBCONTRACTOR COSTS:		\$0.00
B.	MARK-UP OF SUBCONTRACTOR COSTS (15% max.):		\$0.00
	GENERAL CONTRACTOR MARK-UP OF SUBCONTRACTOR COSTS (6% max.):		\$0.00
C.	General Contractor's Material:	\$0.00	
D.	General Contractor's Sales Tax:	\$0.00	
E.	General Contractor's Labor:	\$0.00	
F.	General Contractor's Equipment:	\$0.00	
G.	General Contractor's Direct Expenses (C+D+E+F):		\$95,766.78
H.	Overhead & Profit:		\$14,365.02
I.	GENERAL CONTRACTOR TOTAL (G+H):		\$110,131.80
J.	SUB-TOTAL (A+B+I):		\$110,131.80
K.	Insurance Rate:	2.00%	\$2,202.64
L.	Bond Rate:	1.50%	\$1,651.98
TOTAL PROPOSED CHANGE TO THE CONTRACT (J+K+L):			\$113,986.41
Total Added Days Duration Anticipated:			0

Issued by Contractor:	<u>Greg Torosyan</u>	Greg Torosyan, PM	10/12/2017
	Signature	Name and Title (Printed)	Date
Approved by:			
	Signature	Name and Title (Printed)	Date

Exhibit 2.7A



The Nazerian Group
 16218 Ventura Boulevard, Suite 7
 Tel: (818) 990-5115 Fax: (818) 986-1448
 E-mail: cynthia@nazerian.net

PROPOSAL

PROPOSAL NO. 9417R2
 DATE October 12, 2017
 Re: Muir HS AK&B

TO: Pasadena Unified School District

ATTN: Konni Wong, WLC Arch.
PROJECT: Muir HS AK&B

JOB DESCRIPTION					
We propose to furnish all labor, material, and equipment to do the following.					
Storm drain revisions					
ITEM	QTY	UNIT	DESCRIPTION	LINE ITEM	LINE TOTAL
1.00	700.00	In. ft.	Sawcut - concrete and asphalt	\$1.50	\$1,050.00
2.00	500.00	sq. ft	Remove and replace concrete - Cafeteria	\$15.00	\$7,500.00
3.00	1,000.00	sq. ft.	Remove and replace asphalt - Parking lot	\$6.00	\$6,000.00
4.00	350.00	tons	Haul excess dirt	\$40.00	\$14,000.00
5.00	350.00	tons	Sand import	\$18.00	\$6,300.00
6.00	200.00	In. ft.	18" SDR piping	\$16.00	\$3,200.00
7.00	250.00	In. ft.	24" SDR piping	\$19.00	\$4,750.00
8.00	60.00	In. ft.	12" SDR piping	\$13.00	\$780.00
9.00	1.00	EA	Manhole	\$6,500.00	\$6,500.00
10.00	2.00	EA	Catch basin	\$2,500.00	\$5,000.00
11.00	100.00	In. ft.	Trenching and backfilling - Inside Cafeteria - 5' wide / 4' deep varies	\$110.00	\$11,000.00
12.00	250.00	In. ft.	Trenching and backfilling - Parking Lot - 24" line - up to 9' deep / 4' wide	\$150.00	\$37,500.00
13.00	60.00	In. ft.	Trenching and backfilling - Parking Lot - 12" line - up to 4' deep / 3' wide	\$60.00	\$3,600.00
14.00	200.00	HRS	Labor	\$95.00	\$19,000.00
15.00	1.00	EA	Credit fot pump	(\$13,233.22)	-\$13,233.22
16.00	1.00	EA	Credit for Vault	(\$14,900.00)	-\$14,900.00
17.00	24.00	HRS	Credit to install pump	(\$95.00)	-\$2,280.00
Sub-Total					\$95,766.78
Overhead and Profit				15.00%	\$14,365.02
TOTAL					\$110,131.80

Exhibit 2.7B



SOUTHERN CALIFORNIA DIVISION
14221 SAN BERNARDINO AVE.
FONTANA, CA 92335
PH (909) 350-4111 FAX (909) 350-0654

TO: THE NAZERIA GROUP
ATTN: GREG TOROSYAN

PASADENA, CA
JOHN MUIR HIGH SCHOOL MODERNIZATION

QUOTATION

Quote #: EG091417A
Customer ID:
Bid Date: 09-14-17

Quoted By:
Ship Via:

ITEM:	QUANTITY:	PART:	DESCRIPTION:	PRICE EACH:	EXTENDED:
1	1		5' X 10'-6" X 6.9' PRECAST VAULT PRICE INCLUDES: 36" X 60" ALUMINUM ACCESS HATCH- THD -H-20 OCCASIONAL OFF-STREET TRAFFIC -DOUBLE DOOR 7-PIPE OPENINGS/CAST IN 12" X 12" SUMP W/ GRATE ALUM. LADDER WITH LADDER UP JOINT SEALANT DELIVERY CRANE TRUCK - 1 HOUR OFF-LOAD/ TRUCK * EXCLUDES: HARDWARE, COATING, LINING, SLOPING	\$14,990.00	\$14,990.00

NOTE: THE ABOVE (\$) DO NOT INCLUDE ANY SPECIAL LININGS OR COATINGS.

ANY MODIFICATIONS MAY RESULT IN A PRICE CHANGE.

ANY NON-STANDARD PRODUCTS MAY REQUIRE A 30-50 % DEPOSIT PRIOR TO SUBMITTALS WITH THE REMAINING BALANCE DUE PRIOR TO MANUFACTURING.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT THERE IS PROPER ACCESS FOR JENSEN'S BOOM TRUCK TO SET THE MATERIAL. IF JENSEN IS UNABLE TO SET, JENSEN WILL OFF LOAD THE MATERIAL AND THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING OTHER MEANS/EQUIPMENT TO SET.

THE ABOVE ITEMS ARE QUOTED AS BEING DELIVERED IN 2 FULL TRUCKLOAD(S). THERE WILL BE ADDITIONAL CHARGES FOR EXTRA / PARTIAL LOADS AND EXCESSIVE BOOM / STANDBY TIME.

ADDITIONAL CRANE TIME AFTER 1ST HOUR WILL BE BILLED AT \$185.00 PER HOUR. IF NOT SET AT TIME OF DELIVERY PRODUCT AND FREIGHT WILL BE SUBJECT TO SALES TAX.

PLEASE NOTE: ANY ORDER OVER \$10,000 PAID WITH CREDIT CARD WILL BE SUBJECTED TO A SURCHARGE OF 3%.

THANK YOU FOR THE OPPORTUNITY IN PROVIDING YOU THIS QUOTE.
LOOKING FORWARD TO YOUR BUSINESS.

QUOTE TOTAL: **\$14,990.00**

ALL ORDERS ARE SUBJECT TO CREDIT APPROVAL AND ACCEPTANCE BY SELLER.

IF JENSEN PRECAST DOES NOT SET PRODUCT AT TIME OF DELIVERY, SALES TAX WILL BE CHARGED.

DELIVERY TRIPS, SETTING TIME, OR MATERIALS NOT NOTED ABOVE WILL BE BILLED ACCORDINGLY.

OFFER TO SELL SUBJECT TO JENSEN PRECAST'S COMPANY POLICIES, TERMS AND CONDITIONS.
PLEASE REFER TO WWW.JENSENPRECAST.COM/SOUTHERNCALIFORNIA/SUPPORT/TERMS.HTM FOR COMPLETE TERMS AND CONDITIONS
WHICH ARE HEREBY INCORPORATED INTO THIS DOCUMENT BY REFERENCE.

QUOTATION IS VALID FOR 30 DAYS. THANK YOU FOR CHOOSING JENSEN PRECAST!

Exhibit 2.7C



SOUTHERN CALIFORNIA DIVISION
14221 SAN BERNARDINO AVE.
FONTANA, CA 92335
PH (909) 350-4111 FAX (909) 350-0654

TO: THE NAZERIA GROUP
ATTN: GREG TOROSYAN

PASADENA, CA
JOHN MUIR HIGH SCHOOL MODERNIZATION

QUOTATION

Quote #: EG091417A
Customer ID:
Bid Date: 09-14-17

Quoted By:
Ship Via:

ITEM:	QUANTITY:	PART:	DESCRIPTION:	PRICE EACH:	EXTENDED:
BY CUSTOMER			BY JENSEN PRECAST		
CUSTOMER PO					

Exhibit 2.7D

weil aquatronics

Engineered Pumps and Hydronic Equipment

115 East Palmer Avenue, Unit C
Glendale, CA 91205-3186
1-800-74-PUMPS (800-747-8677)
818-244-5582 Fax: 818-247-0083
E-Mail: info@weilaquatronics.com
website: www.weilaquatronics.com

RFB
September 12, 2017

QUOTATION

JOB NAME: **John Muir High School Modernization, Pasadena – R1**

We propose to furnish the following equipment at the prices, terms and conditions named herein, subject (in the event of your acceptance) to approval at the principal office of the equipment manufacturers:

ITEM 55 SIMPLEX PUMP

- 1 - HOMA AMX646-330/15.3P/C submersible heavy duty non-clog pump, 1100 GPM at 25 ft. TDH, with 6" ANSI discharge flange, and 15.3 HP, 1160 RPM, 460/3/60 motor, and with 30 ft. power and sensor cables.
- 1 - HOMA AutoCoupling 6" slide rail removal system with 20 ft. stainless steel lifting cable (guide pipes by others).
- 1 - UL labelled NEMA 3R (outdoor) lockable door-in-door deadfront simplex control panel with disconnect, contactor, running light, TOA selector switch, moisture sensor relay, thermal terminals, float failure detection system, audible high water alarm, alarm dome light, and dry contacts for remote annunciation.
- 3 - UL listed float switches with 30 ft. cables.

Price FOB factory, full freight allowed to jobsite.....\$13,233.22 (850#)

Approximate delivery after receipt of order and approved submittals: 4-6 weeks

Basin and cover by others.

High water alarm is local. If a remote alarm panel is desired add \$250.00.

Notes

- **If START-UP and/or owner's training are required, ADD \$125 per hour, \$500 min. per trip.**
- **Specifications not available for review; prices above are subject to change.**
- **Seismic testing, calculations, or certification are by others.**
- **Control panels are short-circuit rated for 10KA, higher ratings available at extra cost.**
- Any electrical junction box installed inside sump must be rated NEMA 6 or warranty is void.
- Unless otherwise noted, this equipment is not suitable for hazardous locations.
- This quotation is valid for 60 days and in the meantime may be changed.
- Power cables to be run in a separate conduit apart from the intrinsically-safe circuits per the NEC.
- Unloading, installation, external piping, wiring, etc., by others.
- Subject to Weil Aquatronics *Conditions and Terms of sale*.
- **State and local taxes are not included.**

\\EgnyteDrive\weilaquatronics\Shared\WPWin\JOB QUOTES-SPECS-SUBMITTALS\John Muir High School Modernization, Pasadena\John Muir High School Modernization, Pasadena_R1.quo.docx

Exhibit 2.7E

**BOARD OF EDUCATION
PASADENA UNIFIED SCHOOL DISTRICT
PASADENA, CALIFORNIA**

Topic: APPROVAL OF INSPECTION SERVICES INCREASE PROPOSAL WITH PRIEST CONSTRUCTION SERVICES, INC. FOR THE EXTENSION OF THE PASADENA HIGH SCHOOL GYMNASIUM MODERNIZATION PROJECT.

RECOMMENDATION: The Governing Board of the Pasadena Unified School District approves the increase proposal with Priest Construction Services' for Project Inspector at the Pasadena High School Gymnasium Modernization Project in the amount not to exceed \$99,360.00

District Priority/Strategy: To ensure a clean, safe, and orderly environment that supports learning.

I. BACKGROUND

Project Inspector is needed for the Pasadena High School Gymnasium Modernization Project. Priest Construction Services has provided a proposal for a full-time qualified DSA Project Inspector to provide inspection services for the project.

II. STAFF ANALYSIS

Project Inspection services are required for the Pasadena High School Gymnasium Modernization Project. District staff recommends approving the Priest Construction Services proposal for extension of services for Project Inspection Services in the amount of \$99,360.00 through the completion of the project.

This Board Report was vetted by the Facilities Committee on December 14, 2017.

Attachment: Priest Construction Services Proposal

III. FISCAL IMPACT

Funds in an amount not to exceed \$99,360.00

Pasadena Unified School District
Board of Education Agenda: December 14, 2017
Prepared by: Nelson Cayabyab, Chief Facilities Officer

Fund Code: 21.1-95075.0-00000-85000-6285-084000

Originator: Nelson Cayabyab, Chief Facilities Officer

PRIEST CONSTRUCTION SERVICES, INC.

November 7, 2017

George Kwitter
Project Manager
Pasadena Unified School District
740 W. Woodbury Road
Pasadena, CA 91103

SUBJECT: Extended proposal for completion of DSA Inspection Services
at Pasadena High School Gymnasium, A# 03-115817.

We propose to complete our Inspection Services on or about June 18, 2018. We will continue our service for the same rate, \$69.00 per hour. From October 9, 2017 we estimate 36 weeks x 5 days x 8 hours per day (1,440 hours) at \$69.00 for a total of \$99,360.00.

Please call if you require any clarification.

Regards,



William Priest, President

**BOARD OF EDUCATION
PASADENA UNIFIED SCHOOL DISTRICT
PASADENA, CALIFORNIA**

Topic: APPROVAL OF CITIZEN'S OVERSIGHT COMMITTEE RESIGNATIONS

RECOMMENDATION: The Governing Board of the Pasadena Unified School District accepts the resignations offered by members of the Citizens' Oversight committee.

District Priority/Strategy: To ensure a clean, safe, and orderly environment that supports learning.

I. BACKGROUND

The voters of the District approved Measure TT, a Proposition 39 General Obligation bond on November 4, 2008. Proposition 39 requires a Citizens Oversight Committee to oversee bond activities. The COC Bylaws state that the Committee shall consist of between 9 and 15 members.

II. STAFF ANALYSIS

During the last twelve months five members of the Measure TT Committee have resigned. Staff recommends that the Board of Education hereby confirms that the Following individuals ceased being members of the Citizens' Oversight Committee effective on the dates shown below. If the Board accepts the resignation the Committee would stand at 13 members.

Derek Walker: April 30, 2017

Christopher Romero: April 30, 2017

Geoffrey Commons: May 18, 2017

Joelle Morisseau-Phillips: September 19, 2017 and

Leslie Cross: October 4, 2017

The Facilities Committee vetted this Board Report on December 14, 2017.

III. FISCAL IMPACT

N/A

Pasadena Unified School District
Board of Education Agenda: December 14, 2017.
Prepared by: Nelson Cayabyab, Chief Facilities Officer

Funding code: N/A

Originated by: Nelson Cayabyab, Chief Facilities Officer

Construction Status Report December 2017

School	Resource Code	Project's Scope of Work	Progress/issues Dec 2017	Project Phase	Date in Phase	Schd. compl. Date actual phase	December Report Expected date completion total project	Expected date completion total project	% of compl. Dec'17	Project Mgr.	Architect	Contractor	Inspector
Blair HS	95056.0	Modernization of the existing main building.	Completed: Curb along perimeter walls Steel framing for roof parapets On going: Installation of MEP ducts and pipes. Steel Structures for additions Interior walls layout & framing Instalation of underground utilities	CONSTRUCTION	4/4/17	11/21/18	11/21/18	typically 3-4 months after construction completion	32%	Anson & Kris	GKK	Pinner Construction	Ned Kachikian
John Muir HS	95183.0	KLRNS TV & Black Box Studio	Training & commissioning	CONSTRUCTION	6/10/16	6/5/17	6/5/17	typically 3-4 months after construction completion	100%	George K.	PJHM	The Nazerian Group	Knowland Construction Inspections
John Muir HS	95051.0	The project consists of: New theatrical equipment, stage rigging New architectural upgrades at the auditorium and cafeteria. Brand new kitchen equipment and serving lines. Exterior improvements, a new amphitheater is designated to allow outdoor assembly/gathering area opened up from the cafeteria. Fire alarm upgrade throughout the campus Bleachers replacement at the gym.	Completed: Installation of storm sewer line under Cafeteria On going: Concrete site work at Amphitheater Storm sewer lines and inlets MEPs at cafeteria and auditorium Fire alarm campus wide Site utilities	CONSTRUCTION	9/19/16	3/18/18	3/18/18	typically 3-4 months after construction completion	75%	George K.	WLC	The Nazerian Group	Knowland Construction Inspections
Norma Coombs ES	95133.0	New admin building and classrooms (4)	Completed: Foundation slab Structural steel framing Canopy foundations and columns Interior Steel Columns On going: Building framing Rough plumbing Rough electrical (installing boxes) Chilled water piping trenching	CONSTRUCTION	6/17/17	12/29/18	12/29/18	typically 3-4 months after construction completion	25%	Anson, Kris & Sam	Flewelling & Moody	Shenk Development	Donald B. Blayne
Pasadena HS	95075.0	Modernize the existing gym and locker rooms.	Completed: Floor slab at Girl's Lockers room On going: Boys Locker rooms slab rebar and concrete Framing @ Girls Locker room Gym Electrical, Fire sprinklers and ceiling Insulation HVAC @ Gym and Girls Locker room	CONSTRUCTION	11/28/16	5/27/18 Estimated completion: Gym End of Feb 2018 Locker rooms May 2018	5/27/18 Estimated completion: Gym End of Feb 2018 Locker rooms May 2018	typically 3-4 months after construction completion	45%	George K.	F & M	The Nazerian Group	PRIEST Construction Services
Washington ES	95045.0	Modernization •New 10,000 SF Multipurpose & Kitchen Building •New 19,000 SF Classroom Building (13 classrooms) •Associated site work and Playground improvements	Pending gas installation by City of Pasadena Completed: MPR finishes, plaster & stucco Access ramp between MPR and Classroom Bldg. Tile Placement in Classroom Bldg's roof On going: Classroom Building interior ceilings Classroom Building Exterior finishes Concrete site work & fences	CONSTRUCTION	11/3/14	MPR Mid February 2017, Classroom Building late February 2018	July 2018	typically 3-4 months after construction completion	91.0%	Anson & Kris	LPA	G2K	Ned Kachikian

Blair High School - Modernization of Main Building (95056.0) (BLA HS Science Lab & Main Bldg/HVAC)

WARNING: (2) Unposted Changes

Summary Status

Description	Budgeted	Committed	Expended
Soft Cost	4,697,530	4,029,304	3,224,434
Hard Cost	23,322,940	21,753,921	7,528,660
Contingency	-	-	-
Total	28,020,471	25,783,225	10,753,094
Budgeted Hard Cost 83.2%			

Budget Status

Initial Amount	12,058,297
Approved Changes	387,891
Pending Changes	15,574,283
Total	28,020,471
Budgeted Contingency 0.0%	

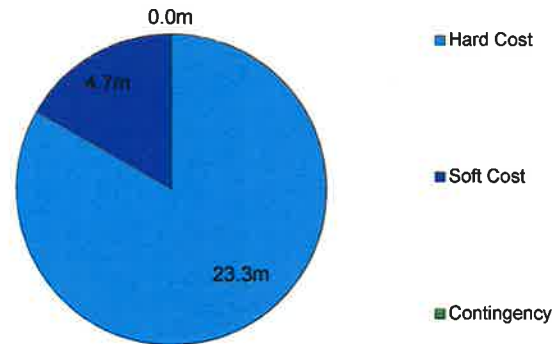
Committed Status

Initial Contracted AMT	24,866,853
Contract Changes	916,372 3.6%
Total	25,783,225
Budget Committed 92.0%	

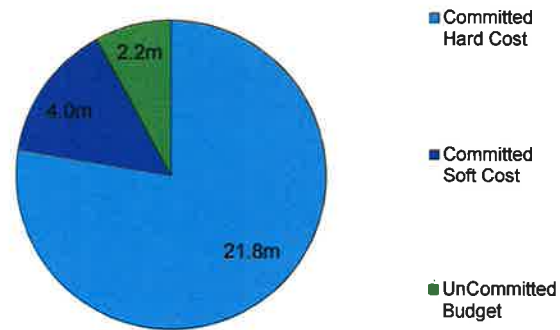
Expenditure Status

Paid	8,952,076
In Process for PMT	1,801,018
Total	10,753,094
Budget Expended 38.4%	

Budget Summary



Committed Summary



Status of Main Construction Contract

Contract	Initial AMT	Current AMT	% Chng	Work in Place	% Cmpl	NTP Date	NOC Date
PINNER CONSTRUCTION PO 82726	20,239,000	20,388,361	0.7%	6,191,059	30.4%	04/04/2017	

John Muir High School - Modernization, Abatement & Kitchen (95051.0) (JMUIR HS Acad Recon)

Summary Status

Description	Budgeted	Committed	Expended
Soft Cost	4,568,746	4,341,485	3,420,566
Hard Cost	25,803,626	23,372,295	10,030,196
Contingency	-	-	-
Total	30,372,372	27,713,780	13,450,762
Budgeted Hard Cost 85.0%			

Budget Status

Initial Amount	15,738,144
Approved Changes	14,634,228
Pending Changes	-
Total	30,372,372
Budgeted Contingency 0.0%	

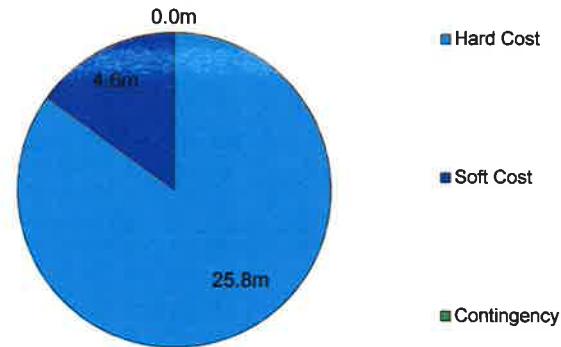
Committed Status

Initial Contracted AMT	29,105,105
Contract Changes	(1,391,326) -5.0%
Total	27,713,780
Budget Committed 91.2%	

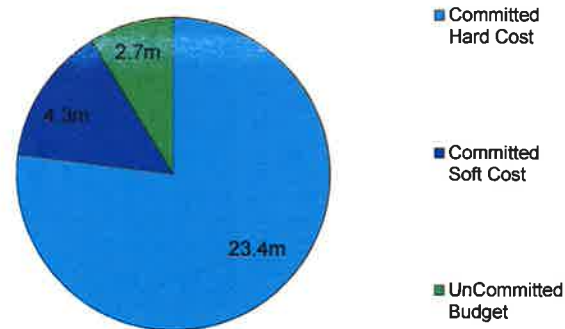
Expenditure Status

Paid	11,304,899
In Process for PMT	1,725,369
District Held Retentions	415,997
Construction Withholds	4,497
Total	13,450,762
Budget Expended 44.3%	

Budget Summary



Committed Summary



Status of Main Construction Contract

Contract	Initial AMT	Current AMT	% Chng	Work in Place	% Cmpl	NTP Date	NOC Date
NAZERIAN GROUP PO 80871R	23,777,123	21,662,043	-8.9%	8,319,945	38.4%	09/19/2016	

Norma Coombs Alternative - New CR Wing & Admin Bldg (95133.0) (NOR COO ALT WING/ADMIN)

WARNING: (2) Unposted Changes

Summary Status

Description	Budgeted	Committed	Expended
Soft Cost	1,531,002	1,478,988	1,381,226
Hard Cost	7,593,047	7,192,349	2,426,629
Contingency	-	-	-
Total	9,124,049	8,671,336	3,807,855
Budgeted Hard Cost 83.2%			

Budget Status

Initial Amount	4,036,238
Approved Changes	109,823
Pending Changes	4,977,988
Total	9,124,049
Budgeted Contingency 0.0%	

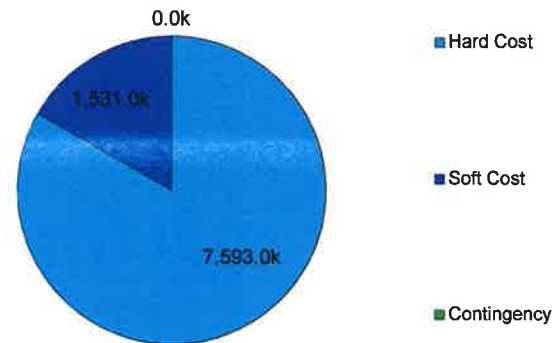
Committed Status

Initial Contracted AMT	8,483,400
Contract Changes	187,936 2.2%
Total	8,671,336
Budget Committed 95.0%	

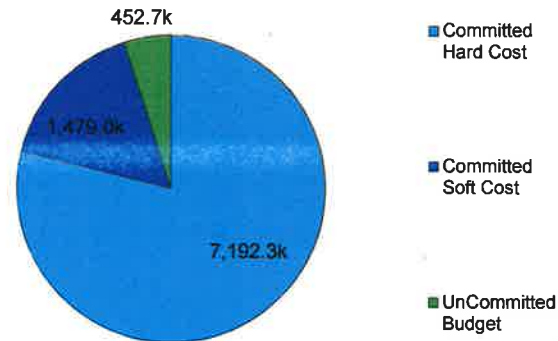
Expenditure Status

Paid	3,202,080
In Process for PMT	505,965
District Held Retentions	99,811
Total	3,807,855
Budget Expended 41.7%	

Budget Summary



Committed Summary



Status of Main Construction Contract

Contract	Initial AMT	Current AMT	% Chng	Work in Place	% Cmpl	NTP Date	NOC Date
SHENK DEVELOPERS. PO 83567	6,593,000	6,593,000	0.0%	1,884,218	28.6%	07/18/2017	

Pasadena High School - Modernize Gymnasium Complex (95075.0) (PHS GYM MOD)

WARNING: (2) Unposted Changes

Summary Status

Description	Budgeted	Committed	Expended
Soft Cost	2,447,035	2,629,360	2,213,068
Hard Cost	15,638,711	13,977,667	3,429,144
Contingency	-	-	-
Total	18,085,746	16,607,027	5,642,212
Budgeted Hard Cost 86.5%			

Budget Status

Initial Amount	15,805,291
Approved Changes	(14,044)
Pending Changes	2,294,499
Total	18,085,746
Budgeted Contingency 0.0%	

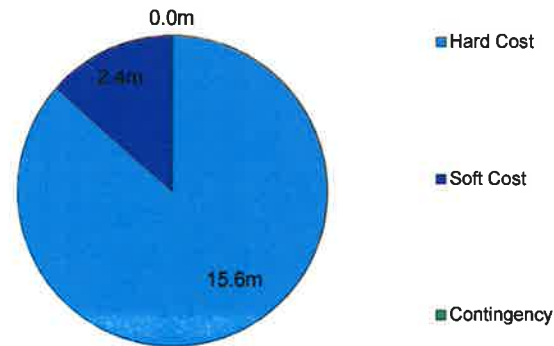
Committed Status

Initial Contracted AMT	16,048,177
Contract Changes	558,850 3.4%
Total	16,607,027
Budget Committed 91.8%	

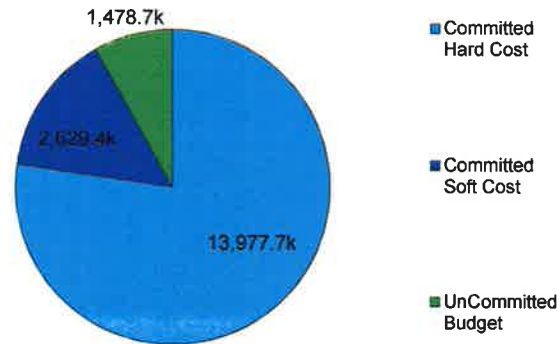
Expenditure Status

Paid	5,038,869
In Process for PMT	440,913
District Held Retentions	162,430
Total	5,642,212
Budget Expended 31.2%	

Budget Summary



Committed Summary



Status of Main Construction Contract

Contract	Initial AMT	Current AMT	% Chng	Work in Place	% Cmpl	NTP Date	NOC Date
NAZERIAN GROUP PO 81378R	13,797,123	13,797,123	0.0%	3,248,599	23.5%	11/28/2016	

Washington Accelerated Elementary School - New Classroom/MPR Bldg (95045.0) (WASH ES MPR)

WARNING: (2) Unposted Changes

Summary Status

Description	Budgeted	Committed	Expended
Soft Cost	5,242,042	3,258,174	3,039,439
Hard Cost	16,778,571	16,285,731	14,239,372
Contingency	-	-	-
Total	22,020,613	19,543,905	17,278,811
Budgeted Hard Cost 76.2%			

Budget Status

Initial Amount	15,862,128
Approved Changes	1,600,000
Pending Changes	4,558,486
Total	22,020,613
Budgeted Contingency 0.0%	

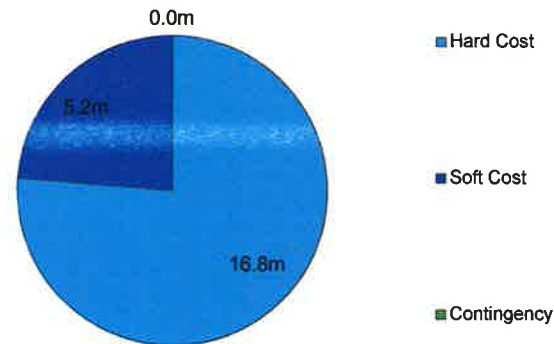
Committed Status

Initial Contracted AMT	18,048,046	
Contract Changes	1,495,859	7.7%
Unencumbered Contract AMT	0	
Total	19,543,905	
Budget Committed 88.8%		

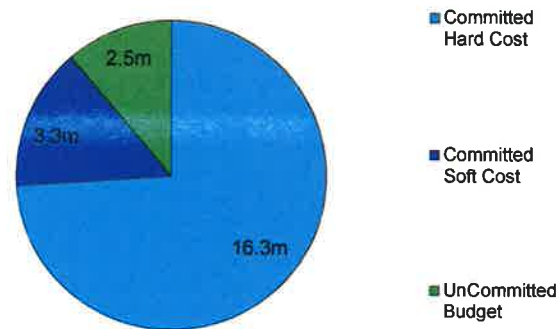
Expenditure Status

Paid	17,041,273
In Process for PMT	43,766
Construction Withholds	193,772
Total	17,278,811
Budget Expended 78.5%	

Budget Summary



Committed Summary



Status of Main Construction Contract

Contract	Initial AMT	Current AMT	% Chng	Work in Place	% Cmpl	NTP Date	NOC Date
G2K CONSTRUCTION PO 71992R1	14,439,000	15,814,436	9.5%	13,947,152	88.2%	09/12/2014	



Pasadena Unified School District

Facilities Department Active Projects

12/20/2017



Pasadena Unified School District

Project list

[Blair HS](#)
[John Muir HS](#)
[Pasadena HS](#)
[Washington ES](#)
[Norma Coombs ES](#)

Blair HS

School Modernization

Steel structure for
addition on the
SE façade.

Parapet wall framing
at roof top

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Steel structure for
addition on the
SE façade.

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Welding steel beams
at cafeteria

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

3rd floor framing

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

3rd floor framing

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

2nd floor framing

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Restroom utilities
have been installed.
New wall curbs
already poured

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Parapet wall framing
at roof top

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School
Modernization

New Platforms on
roof for HVAC units

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Parapet framing and
prep work for roof
insulation

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Perimeter parapet
curbs already poured

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Underground utility
installation

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Blair HS

School Modernization

Underground utility
installation

Nov 15 – Dec 20, 2017

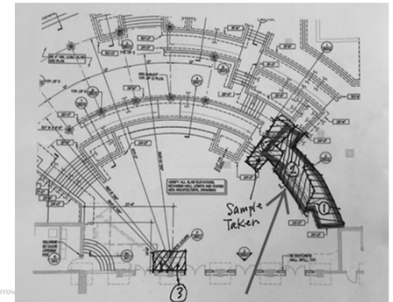


[Return to projects list](#)

John Muir HS

1st concrete pour at
amphitheater

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

1st concrete pour at
amphitheater

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

1st concrete pour at
amphitheater

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

1st concrete pour at amphitheater

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Rebar installation for retaining wall at amphitheater

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Forming E retaining wall at amphitheater

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Forming E retaining wall at amphitheater

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Concrete pouring



Nov 15 – Dec 20, 2017

[Return to projects list](#)

John Muir HS

East side of amphitheater retaining wall already poured

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

East side of amphitheater retaining wall already poured

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

West side of amphitheater retaining wall already poured, forms pending to be removed

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Trench for new amphitheater storm drain under cafeteria floor

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

New amphitheater storm pipes already installed under cafeteria floor

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Finishing slab over storm water drain at cafeteria

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Pipes already in place for new storm drain in amphitheater floor

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Trenching for new storm drain along parking lot

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Placement of inlet structure for new storm drain on parking lot

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

Inlet structures for new storm drain on parking lot

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

New cold storage area in Kitchen

Nov 15 – Dec 20, 2017

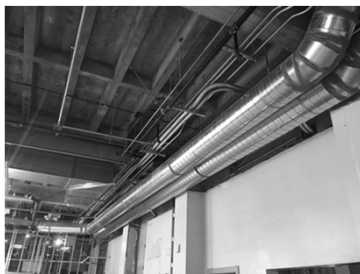


[Return to projects list](#)

John Muir HS

AC ducts partially installed in Kitchen

Nov 15 – Dec 20, 2017



[Return to projects list](#)

John Muir HS

AC ducts partially installed in Kitchen

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Washington ES

Classroom Building
View from SW

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

South view of
Classroom Building

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

East view of Classroom
Building

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Courtyard N of
Classroom Building

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

View of NW courtyard
(under construction)

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



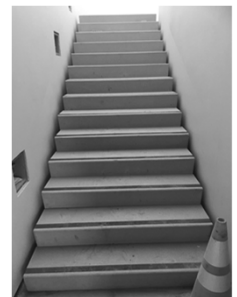
[Return to projects list](#)

Washington ES

E stairway (under construction)

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Installation of data lines
in Classroom Building

Nov 15 – Dec 20, 2017

WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

AC ducts and ceiling
grid for acoustical
panels already installed

Nov 15 – Dec 20, 2017

WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Forming of concrete
benches on N side of
Classroom Building

Nov 15 – Dec 20, 2017

WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Concrete benches on
W side of Classroom
Building

Nov 15 – Dec 20, 2017

WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Creative Movement
Classroom (101) with
AC ducts and light
fixtures already
installed

WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



Nov 15 – Dec 20, 2017

[Return to projects list](#)

Washington ES

MPR West View

Nov 15 – Dec 20, 2017

WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

S Fence columns
installation

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Water Main control
valves

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Ramp joining
Classroom Building
with MPR

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Ramp joining
Classroom Building
with MPR

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Washington ES

Ramp S of MPR

Nov 15 – Dec 20, 2017

 WASHINGTON ELEMENTARY STEM MAGNET
Science, Technology, Engineering and Mathematics



[Return to projects list](#)

Pasadena HS Modernization

Gym
AC Duct installation

Nov 15 – Dec 20, 2017

 PASADENA HIGH SCHOOL
Home of the Bulldogs



[Return to projects list](#)

Pasadena HS Modernization

Gym
AC Duct installation

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Gym
AC Duct installation

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Boys Locker Room
rebar already installed
for new floor slab

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Boys Locker Room
Installation of ties for
new ceiling

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Girls Locker Room
prepping for floor slab
pouring

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Girls Locker Room
floor slab pouring

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Girls Locker Room
floor slab already poured

Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Girls Locker Room

Prepping floor for
new walls in
bathroom area,
columns already
installed



Nov 15 – Dec 20, 2017



[Return to projects list](#)

Pasadena HS Modernization

Girls Locker Room
anchor bolts already
in place for new
walls in bathroom
area

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
SE view

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
Inside view

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
Roof sheathing partially
installed

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
columns for S Canopy
already installed

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
Inside framing

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
Inside view

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
Detail of column and
floor slab connection

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Admin Building
Restroom piping
work in progress

Nov 15 – Dec 20, 2017

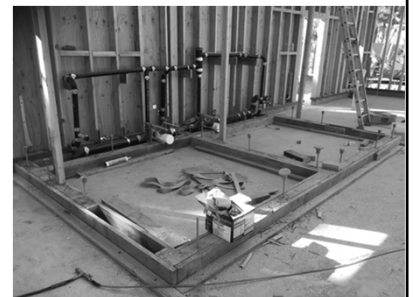


[Return to projects list](#)

N Coombs ES Modernization

Admin Building
Restroom utility work
in progress
Curb for new walls
already poured

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Classroom Building
E façade

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Classroom Building
W façade

Canopy columns already in place

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Classroom Building
Framing

Nov 15 – Dec 20, 2017



[Return to projects list](#)

N Coombs ES Modernization

Classroom Building
N façade framing

Nov 15 – Dec 20, 2017



[Return to projects list](#)