



# FACILITY CONDITION ASSESSMENT

*Palm ES* | February 2022



## Executive Summary

Palm ES is located at 7601 Dixie Dr in Austin, Texas. The oldest building is 33 years old (at time of 2020 assessment). It comprises 79,082 gross square feet.

The findings contained within this report are the result of an assessment of building systems and the conditions found on the site at the time of the visit. The assessment was performed by building professionals experienced in disciplines including architecture, mechanical, plumbing and electrical. The total current deficiencies for this site, in 2020 construction cost dollars, are estimated at \$7,712,718. A ten-year need was developed to provide an understanding of the current need as well as the projected needs in the near future. For Palm ES the ten-year need is \$17,025,513.

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined to calculate a Facility Condition Assessment (FCA) score. A 5-year FCA was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCA calculation. The Palm ES facility has a 5-year FCA score of 56.88%.

## Summary of Findings

The table below summarizes the condition findings at Palm ES

Table 1: Facility Condition by Building

Number	Building Name	Current Deficiencies	5-Year Life Cycle Cost	Yrs 6-10 Life Cycle Cost	Total 5 Yr Need (Yr 1-5 + Current Defs)	Total 10 Yr Need (Yr 1-10 + Current Defs)	Replacement Cost	5-Year FCA
<b>Exterior Site</b>								
	Exterior Site	\$1,396,963	\$181,220	\$364,163	\$1,578,183	\$1,942,346	\$0	
<b>Permanent Building(s)</b>								
171A	Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.	\$6,168,601	\$3,131,406	\$5,222,293	\$9,300,007	\$14,522,300	\$22,369,600	58.43%
171B	Stand-Alone Classroom Building	\$147,155	\$172,378	\$241,335	\$319,533	\$560,868	\$3,600,140	91.12%
<b>Sub Total for Permanent Building(s):</b>		<b>\$6,315,755</b>	<b>\$3,303,784</b>	<b>\$5,463,628</b>	<b>\$9,619,539</b>	<b>\$15,083,167</b>	<b>\$25,969,740</b>	
<b>Total for Site:</b>		<b>\$7,712,718</b>	<b>\$3,485,004</b>	<b>\$5,827,791</b>	<b>\$11,197,722</b>	<b>\$17,025,513</b>	<b>\$25,969,740</b>	<b>56.88%</b>

## Approach and Methodology

A facility condition assessment evaluates each building's overall condition. Two components of the facility condition assessment are combined to total the cost for facility need. The two components of the facility condition assessment are current deficiencies and life cycle forecast.

**Current Deficiencies:** Deficiencies are items in need of repair or replacement as a result of being broken, obsolete, or beyond useful life. The existing deficiencies that currently require correction are identified and assigned a priority. An example of a current deficiency might include a broken lighting fixture or an inoperable roof top air conditioning unit.

**Life Cycle Forecast:** Life cycle analysis evaluates the ages of a building's systems to forecast system replacement as they reach the end of serviceable life. An example of a life cycle system replacement is a roof with a 20-year life that has been in place for 15 years and may require replacement in five years.

All members of the survey team recorded existing conditions, identified problems and deficiencies, and documented corrective action and quantities. The team took digital photos at each site to better identify significant deficiencies.

## Facility Deficiency Priority Levels

Deficiencies were ranked according to five priority levels, with Priority 1 items being the most critical to address:

**Priority 1 – Mission Critical Concerns:** Deficiencies or conditions that may directly affect the site's ability to remain open or deliver the educational curriculum. These deficiencies typically relate to building safety, code compliance, severely damaged or failing building components, and other items that require near-term correction. An example of a Priority 1 deficiency is a fire alarm system replacement.

**Priority 2 - Indirect Impact to Educational Mission:** Items that may progress to a Priority 1 item if not addressed in the near term. Examples of Priority 2 deficiencies include inadequate roofing that could cause deterioration of integral building systems, and conditions affecting building envelopes, such as roof and window replacements.

**Priority 3 - Short-Term Conditions:** Deficiencies that are necessary to the site's mission but may not require immediate attention. These items should be considered necessary improvements required to maximize facility efficiency and usefulness. Examples of Priority 3 items include site improvements and plumbing deficiencies.

**Priority 4 - Long-Term Requirements:** Items or systems that may be considered improvements to the instructional environment. The improvements may be aesthetic or provide greater functionality. Examples include cabinets, finishes, paving, removal of abandoned equipment, and educational accommodations associated with special programs.

**Priority 5 - Enhancements:** Deficiencies aesthetic in nature or considered enhancements. Typical deficiencies in this priority include repainting, replacing carpet, improved signage, or other improvements to the facility environment.

The following table summarizes this site's current deficiencies by building system and priority.

Table 2: System by Priority (Site & Permanent Buildings)

System	Priority					Total	% of Total
	1	2	3	4	5		
Site	\$0	\$0	\$0	\$0	\$1,390,508	\$1,390,508	18.03 %
Roofing	\$1,931,447	\$0	\$0	\$0	\$0	\$1,931,447	25.04 %
Structural	\$6,455	\$0	\$0	\$0	\$0	\$6,455	0.08 %
Exterior	\$0	\$91,064	\$0	\$0	\$56,602	\$147,666	1.91 %
Interior	\$0	\$0	\$37,512	\$400,375	\$0	\$437,887	5.68 %
Mechanical	\$0	\$1,027,358	\$49,910	\$0	\$73,786	\$1,151,054	14.92 %
Electrical	\$0	\$119,174	\$11,799	\$0	\$0	\$130,973	1.70 %
Plumbing	\$0	\$0	\$226,646	\$140,824	\$0	\$367,469	4.76 %
Fire and Life Safety	\$823,861	\$0	\$0	\$0	\$0	\$823,861	10.68 %
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Specialties	\$0	\$0	\$0	\$0	\$0	\$0	0.00 %
Crawlspace	\$0	\$0	\$0	\$0	\$1,325,398	\$1,325,398	17.18 %
<b>Total:</b>	\$2,761,762	\$1,237,595	\$325,868	\$541,198	\$2,846,294	\$7,712,718	

The building systems at the site with the most need include:

Roofing	-	\$1,931,447
Site	-	\$1,390,508
Mechanical	-	\$1,151,054

The chart below represents the building systems and associated deficiency costs.

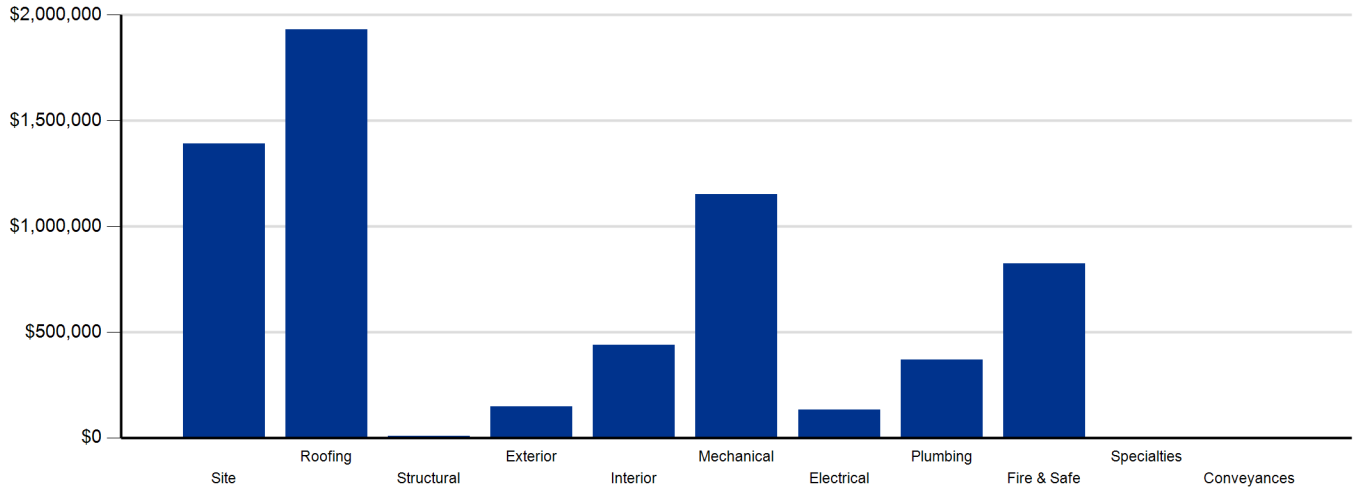


Figure 1: System Deficiencies

## Life Cycle Capital Renewal Forecast

During the facility condition assessment, assessors inspected all major building systems. If an assessor identified a need for immediate replacement, a deficiency was created with the item's repair costs. The identified deficiency contributes to the facility's total current repair costs.

However, capital planning scenarios span multiple years, as opposed to being constrained to immediate repairs. Construction projects may begin several years after the initial facility condition assessment. Therefore, in addition to the current year repair costs, it is necessary to forecast the facility's future costs using a ten-year life cycle renewal forecast model.

Life cycle renewal is the projection of future building system costs based upon each individual system's expected serviceable life. Building systems and components age over time, eventually break down, reach the end of their useful lives, and may require replacement. While an item may be in good condition now, it might reach the end of its life before a planned construction project occurs.

The following tables show current deficiencies and the subsequent ten-year life cycle capital renewal projections. The projections outline costs for major building systems in which a component is expected to reach the end of its useful life and require capital funding for replacement.

Table 3a: Capital Renewal Forecast (Yrs 1-5)

System	Life Cycle Capital Renewal Projections					Total 1-5
	Year 1 2023	Year 2 2024	Year 3 2025	Year 4 2026	Year 5 2027	
Site	\$0	\$0	\$0	\$130,973	\$50,247	\$181,220
Roofing	\$0	\$0	\$0	\$0	\$0	\$0
Exterior	\$0	\$0	\$180,406	\$0	\$0	\$180,406
Interior	\$0	\$0	\$0	\$43,121	\$715,695	\$758,816
Mechanical	\$0	\$0	\$14,381	\$1,297,514	\$571,489	\$1,883,384
Electrical	\$0	\$0	\$0	\$1,803	\$80,903	\$82,706
Plumbing	\$0	\$0	\$2,684	\$72,979	\$322,809	\$398,472
Fire and Life Safety	\$0	\$0	\$0	\$0	\$0	\$0
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$0	\$0	\$0
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$197,471</b>	<b>\$1,546,390</b>	<b>\$1,741,143</b>	<b>\$3,485,004</b>

Table 3b: Capital Renewal Forecast (Yrs 6-10)

System	Life Cycle Capital Renewal Projections						Total 6-10	Total 1-10
	Total 1-5	Year 6 2028	Year 7 2029	Year 8 2030	Year 9 2031	Year 10 2032		
Site	\$181,220	\$67,044	\$0	\$227,731	\$0	\$0	\$294,775	\$475,995
Roofing	\$0	\$0	\$0	\$0	\$0	\$22,831	\$22,831	\$22,831
Exterior	\$180,406	\$0	\$0	\$0	\$0	\$43,082	\$43,082	\$223,488
Interior	\$758,816	\$279,464	\$0	\$44,200	\$501,343	\$346,040	\$1,171,047	\$1,929,863
Mechanical	\$1,883,384	\$0	\$0	\$1,299	\$0	\$95,502	\$96,801	\$1,980,185
Electrical	\$82,706	\$0	\$0	\$231,236	\$0	\$1,253,351	\$1,484,587	\$1,567,293
Plumbing	\$398,472	\$0	\$0	\$0	\$0	\$2,405,777	\$2,405,777	\$2,804,249
Fire and Life Safety	\$0	\$132,433	\$0	\$182,020	\$0	\$0	\$314,453	\$314,453
Conveyances	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Specialties	\$0	\$0	\$0	\$360,877	\$0	\$0	\$360,877	\$360,877
Crawlspace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$3,485,004</b>	<b>\$478,941</b>	<b>\$0</b>	<b>\$1,047,363</b>	<b>\$501,343</b>	<b>\$4,166,583</b>	<b>\$6,194,230</b>	<b>\$9,679,234</b>

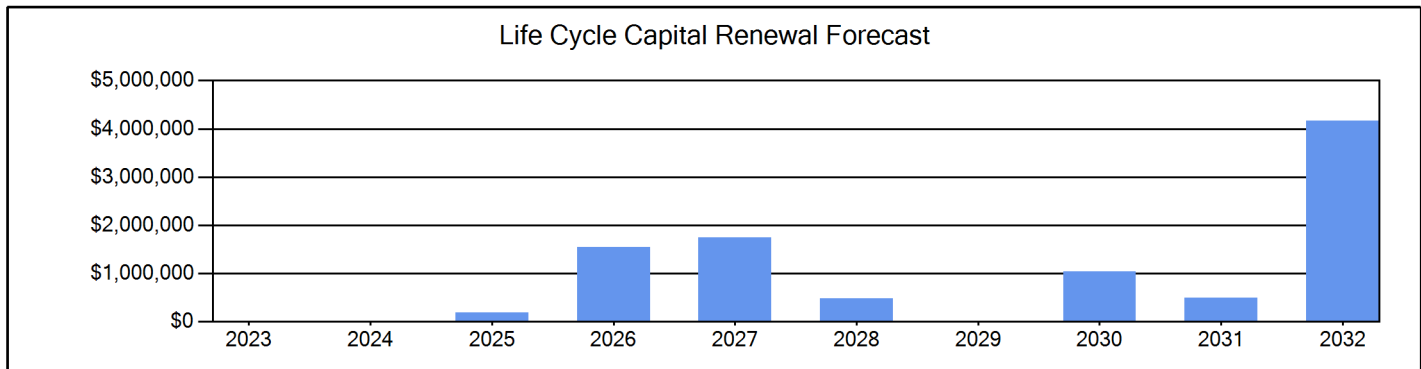


Figure 2: Ten Year Capital Renewal Forecast

## Facility Condition Assessment Score

The Facility Condition Assessment Score (FCAS) is used throughout the facility condition assessment industry as a general indicator of a building’s health. The FCAS is used to benchmark the relative condition of a group of sites. The FCAS is derived by dividing the total repair cost, site-related repairs, by the total replacement cost and subtracting it from 100. A facility with a lower FCAS percentage has more need, or higher priority, than a facility with a lower FCAS. It should be noted that costs in the New Construction category are not included in the FCAS calculation.

$$FCAS = 100 - (\text{Total Repair Cost} / \text{Replacement Cost})$$

For master planning purposes, the total current deficiencies and the first five years of projected life cycle needs were combined. This provides an understanding of the current needs of a facility as well as the projected needs in the near future. A 5-year FCAS was calculated by dividing the 5-year need by the total replacement cost. Costs associated with new construction are not included in the FCAS calculation.

- Very Unsatisfactory (0-35)
- Unsatisfactory (36-50)
- Average (51-65)
- Satisfactory (66-80)
- Very Satisfactory (81-100)

Financial modeling has shown that over a 30-year period, it is more cost effective to replace than repair sites with a FCAS of 35 percent or greater. This is due to efficiency gains with facilities that are more modern and the value of the building at the end of the analysis period. It is important to note that the FCAS at which a facility should be considered for replacement is typically debated and adjusted based on property owners and facility managers approach to facility management. Of course, FCAS is not the only factor used to identify buildings that need renovation, replacement, or even closure. Historical significance, enrollment trends, community sentiment, and the availability of capital are additional factors that are analyzed when making campus facility decisions.

The replacement value represents the estimated cost of replacing the current building with another building of like size, based on today’s estimated cost of construction in the Austin area. The estimated replacement cost for this facility is \$25,969,740. For planning purposes, the total 5-year need at the Palm ES is \$11,197,722 (Life Cycle Years 1-5 plus the FCA deficiency cost). The Palm ES facility has a 5-year FCA of 56.88%.

5-Year Need vs. Replacement

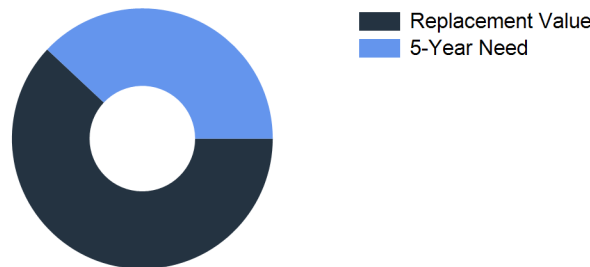


Figure 3: 5-Year FCA



**Palm ES - Deficiency Summary**

**Site Level Deficiencies**

**Site**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
<b>PROGRAM DEFICIENCIES</b>	ADA Compliance	499,590	EACH	5	\$644,952	1979
<b>Note:</b> Site/Exterior Improvements Estimated Construction Cost for Site Plan Area C \$ 15,599.88 Estimated Construction Cost for Site Plan Area D \$ 8,645.98 Estimated Construction Cost Subtotal for Site/Exterior Improvements Excluding Division 1 \$ 24,245.85 Interior Improvements Estimated Construction Cost for Floor Plan Area 4 (Building A) \$ 17,575.06 Estimated Construction Cost for Floor Plan Area 5 (Building A) \$ 85,331.42 Estimated Construction Cost for Floor Plan Area 6 (Building A) (x3 locations) \$ 262,961.60 Estimated Construction Cost for Floor Plan Area 7 (Building B) \$ 30,625.23 Estimated Construction Cost for Floor Plan Area 8 (Building A) \$ 5,864.10 Estimated Construction Cost for Floor Plan Area 9 (Building A) \$ 12,600.44 Estimated Construction Cost for Floor Plan Area 10 (Building A) \$ 60,386.27 Estimated Construction Cost Subtotal for Interior Improvements Excluding Division 1 \$ 475,344.11 Total Estimated Construction Cost Subtotal for Program Deficiency Improvements \$ 499,589.96						
<b>Location:</b> AISD ADA REPORT						
<b>PUBLIC DEFICIENCIES</b>	ADA Compliance	230,911	EACH	5	\$396,470	1978
<b>Note:</b> Site/Exterior Improvements Estimated Construction Cost for Site Plan Area A \$20,123.23 Estimated Construction Cost for Site Plan Area B \$ 17,468.85 Estimated Construction Cost Subtotal for Site/Exterior Improvements Excluding Division 1 \$ 37,592.08 Interior Improvements Estimated Construction Cost for Floor Plan Area 1 (Building A) \$ 7,128.36 Estimated Construction Cost for Floor Plan Area 2 (Building A) \$ 117,209.60 Estimated Construction Cost for Floor Plan Area 3 (Building A) \$ 68,981.14 Estimated Construction Cost Subtotal for Interior Improvements Excluding Division 1 \$ 193,319.10 Total Estimated Construction Cost Subtotal for Public Deficiency Improvements \$ 230,911.18						
<b>Location:</b> AISD ADA REPORT						
<b>TAS ACCESSIBILITY DEFICIENCIES</b>	ADA Compliance	203,314	EACH	5	\$349,086	1980
<b>Note:</b> Interior Improvements Estimated Construction Cost for Floor Plan Area 11 (Building A) \$ 59,951.40 Estimated Construction Cost for Floor Plan Area 12 (Building A) \$ 31,973.45 Estimated Construction Cost for Floor Plan Area 13 (Building A) \$ 59,951.40 Estimated Construction Cost for Floor Plan Area 14 (Building B) \$ 7,929.96 Estimated Construction Cost for Floor Plan Area 15 (Building A) \$ 43,508.04 Estimated Construction Cost Subtotal for TAS Improvements Excluding Division 1 \$ 203,314.24 Total Estimated Construction Cost Subtotal for TAS Deficiency Improvements \$203,314.24						
<b>Location:</b> AISD ADA REPORT						
		<b>Sub Total for System</b>	<b>3 items</b>		<b>\$1,390,508</b>	

**Structural**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Structural Study Recommended	Deferred Maintenance	1	Job	1	\$6,455	6590
<b>Note:</b> Structural study to detail scope of work based on the 2017 crawlspace deficiencies provided by AISD						
		<b>Sub Total for System</b>	<b>1 items</b>		<b>\$6,455</b>	
		<b>Sub Total for School and Site Level</b>	<b>4 items</b>		<b>\$1,396,963</b>	

**Building: 171A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.**

**Roofing**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
AISD ROOFING P3	Capital Renewal	1,927,065	EACH	1	\$1,927,023	1986
AISD ROOFING P4	Capital Renewal	4,084	EACH	1	\$4,084	1988
AISD ROOFING P5	Capital Renewal	340	EACH	1	\$340	1990
		<b>Sub Total for System</b>	<b>3 items</b>		<b>\$1,931,447</b>	

**Exterior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Aluminum Storefront Exterior Door Replacement	Capital Renewal	8	Door	2	\$31,752	2000
Metal Exterior Door Replacement	Capital Renewal	16	Door	2	\$59,312	1999

**Exterior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Exterior Cleaning	Deferred Maintenance	14,615	SF Wall	5	\$56,602	2604
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$147,666</b>	

**Interior**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Interior Door Replacement <b>Note:</b> 12 hallway doors need repair, 2 in kitchen and 6 in various classrooms <b>Location:</b> Throughout building	Capital Renewal	20	Door	3	\$37,512	933
Acoustical Ceiling Tile Replacement <b>Note:</b> 30% of tile building wide needs to be replaced. <b>Location:</b> Building wide	Capital Renewal	20,435	SF	4	\$69,004	931
Acoustical Ceiling Tile Replacement	Capital Renewal	67,437	SF	4	\$227,718	2002
Interior Fiberglass Panels Repair or Replacement	Capital Renewal	13,624	SF Wall	4	\$103,653	2003
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$437,887</b>	

**Mechanical**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Air Handler HVAC Component Replacement <b>Note:</b> Existing air conditioning unit can not maintain the room temperature. Four (4) temporary spot coolers added to space. Two (2) in the library and one (1) in each room. <b>Location:</b> Rooms 142/143/Library	Capital Renewal	4	Ea.	2	\$455,426	974
Ductwork Replacement (SF Basis) <b>Note:</b> All ducwork and associated registers, grilles, dampers is considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Building wide	Capital Renewal	68,118	SF	2	\$538,980	975
Circulation Pump Replacement <b>Note:</b> Pump is broken and beyond useful life. Needs to be replaced. <b>Location:</b> Mechanical Room	Capital Renewal	1	Ea.	3	\$14,381	973
Duct Damper Replacement <b>Note:</b> All Dampers are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Building wide	Deferred Maintenance	60	Ea.	3	\$8,864	978
Make Up Air Equipment Replacement <b>Note:</b> Dedicated Outside Air Unit (DOAU) split system DX unit. Condensing unit outside and air handling unit above ceiling. Equipment uses R-22 refrigerant and is obsolete. <b>Location:</b> Above ceiling	Capital Renewal	3	Ea.	3	\$26,665	972
Duct Grill Replacement <b>Note:</b> All grilles are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Building Wide	Deferred Maintenance	240	Ea.	5	\$23,733	977
Duct Register Replacement <b>Note:</b> All registers are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Building Wide	Deferred Maintenance	120	Ea.	5	\$50,053	976
<b>Sub Total for System</b>		<b>7</b>	<b>items</b>		<b>\$1,118,102</b>	

**Electrical**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Distribution Panel Replacement	Capital Renewal	1	Ea.	2	\$16,905	1993
Electrical Transformer Replacement <b>Note:</b> Age <b>Location:</b> Electrical Room 150	Capital Renewal	1	Ea.	2	\$9,908	941
Electrical Transformer Replacement <b>Note:</b> Age <b>Location:</b> Electrica Room 120	Capital Renewal	1	Ea.	2	\$5,519	942

**Electrical**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Panelboard Replacement <b>Note:</b> Corroded PPB2 and PPB <b>Location:</b> Room 113	Capital Renewal	2	Ea.	2	\$10,999	943
Panelboard Replacement <b>Note:</b> Age <b>Location:</b> Stage	Capital Renewal	1	Ea.	2	\$5,500	944
Panelboard Replacement <b>Note:</b> Age/DPPB3 <b>Location:</b> Storage room	Capital Renewal	1	Ea.	2	\$5,500	945
Panelboard Replacement <b>Note:</b> Age/PPB5 <b>Location:</b> Storage Room	Capital Renewal	1	Ea.	2	\$2,782	946
Panelboard Replacement <b>Note:</b> Age/PPB4 <b>Location:</b> Storage Room	Capital Renewal	1	Ea.	2	\$5,500	947
Panelboard Replacement <b>Note:</b> Age/PPC <b>Location:</b> Electrical Room 120	Capital Renewal	1	Ea.	2	\$2,782	948
Panelboard Replacement <b>Note:</b> Age/ppa1 <b>Location:</b> Electrical room 150	Capital Renewal	1	Ea.	2	\$5,500	949
Panelboard Replacement <b>Note:</b> Age/PPA2 <b>Location:</b> Electrical Room 150	Capital Renewal	1	Ea.	2	\$2,782	951
Panelboard Replacement <b>Note:</b> Age/DPPB2 <b>Location:</b> Cafe storage	Capital Renewal	1	Ea.	2	\$9,372	954
Panelboard Replacement <b>Note:</b> Age/DPPA2 <b>Location:</b> Electrical room 150	Capital Renewal	1	Ea.	2	\$6,688	955
Panelboard Replacement <b>Note:</b> Age/LPA <b>Location:</b> Electrical Room 150	Capital Renewal	1	Ea.	2	\$9,372	956
Panelboard Replacement <b>Note:</b> Age/DPPA1 <b>Location:</b> Electrical Room 150	Capital Renewal	1	Ea.	2	\$6,688	957
Panelboard Replacement <b>Note:</b> Age/LPC <b>Location:</b> Electrical Room 120	Capital Renewal	1	Ea.	2	\$6,688	958
Panelboard Replacement <b>Note:</b> Age/DPPC <b>Location:</b> Electrical Room 120	Capital Renewal	1	Ea.	2	\$6,688	959
H.I.D. Lighting Replacement <b>Note:</b> age <b>Location:</b> Gym	Capital Renewal	20	Ea.	3	\$11,799	962
<b>Sub Total for System</b>		<b>18</b>	<b>items</b>		<b>\$130,973</b>	

**Plumbing**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Gas Water Heater Replacement <b>Note:</b> Unit is beyond useful life and needs to be replaced. <b>Location:</b> Mechanical Room	Capital Renewal	1	Ea.	3	\$6,384	965
Toilet Replacement <b>Note:</b> All plumbing fixtures are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Throughout building	Capital Renewal	43	Ea.	3	\$217,554	969

**Plumbing**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Urinal Replacement	Capital Renewal	2	Ea.	3	\$2,708	970
<b>Note:</b> All plumbing fixtures are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Gym Restroom 164						
Custodial Mop Or Service Sink Replacement	Capital Renewal	6	Ea.	4	\$4,775	968
<b>Note:</b> All plumbing fixtures are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Janitors closet						
Non-Refrigerated Drinking Fountain Replacement	Capital Renewal	6	Ea.	4	\$14,303	971
<b>Note:</b> All plumbing fixtures are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Hallways						
Replace classroom lavatory	Capital Renewal	39	Ea.	4	\$100,015	966
<b>Note:</b> All plumbing fixtures are considered original to the building construction date and Unit is beyond useful life and beyond useful life and needs to be replaced. <b>Location:</b> Throughout the classrooms						
Restroom Lavatories Plumbing Fixtures Replacement	Capital Renewal	8	Ea.	4	\$21,730	967
<b>Note:</b> All plumbing fixtures are considered original to the building construction and beyond useful life and needs to be replaced. <b>Location:</b> Throughout the building						
<b>Sub Total for System</b>		<b>7</b>	<b>items</b>		<b>\$367,469</b>	

**Fire and Life Safety**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Fire Sprinkler System Replacement (SF Basis)	Capital Renewal	68,118	SF	1	\$709,658	979
<b>Note:</b> Missing <b>Location:</b> Building Wide						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$709,658</b>	

**Crawlspace**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	154,103	Ea.	5	\$181,048	6591
<b>Note:</b> SOIL/DRAINAGE BELOW BUILDING - improve drainage - 1 LS						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	171,485	Ea.	5	\$201,469	6592
<b>Note:</b> CRAWL SPACE ACCESS/VENTILATION - improve ventilation - 30800 SF						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	139,192	Ea.	5	\$163,530	6593
<b>Note:</b> CRAWL SPACE ACCESS/VENTILATION - update door hatches - 1 IS						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	23,633	Ea.	5	\$27,765	6594
<b>Note:</b> STANDARD FOUNDATIONS - Repair honeycombing and forming - 850 LF						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	125,273	Ea.	5	\$147,177	6595
<b>Note:</b> CRAWL SPACE, EXPOSED PIPES - Repair water leaks, cracked pipes, rusted hanger and pipe insulation - 1 IS						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	342,970	Ea.	5	\$402,939	6596
<b>Note:</b> CRAWL SPACE, SPRAY FIREPROOFING - update fireproofing - 30800 SF						
CRAWL SPACE DEFICIENCIES - Estimate and Info by AISD	Deferred Maintenance	171,485	Ea.	5	\$201,469	6597
<b>Note:</b> CRAWL SPACE, INSULATION - update insulation - 30800 SF						
<b>Sub Total for System</b>		<b>7</b>	<b>items</b>		<b>\$1,325,398</b>	
<b>Sub Total for Building 171A - Main building includes Administration Offices, Classrooms, Cafeteria, &amp; Gym.</b>		<b>50</b>	<b>items</b>		<b>\$6,168,601</b>	

**Building: 171B - Stand-Alone Classroom Building**
**Mechanical**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Heat Pump HVAC Component Replacement	Capital Renewal	1	Ea.	2	\$24,044	2005
Heat Pump HVAC Component Replacement	Capital Renewal	1	Ea.	2	\$8,908	2006
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>		<b>\$32,952</b>	

**Fire and Life Safety**

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Fire Sprinkler System Replacement (SF Basis)	Capital Renewal	10,962	SF	1	\$114,203	927
<b>Note:</b> Missing						
<b>Location:</b> Building Wide						
	<b>Sub Total for System</b>	<b>1</b>	<b>items</b>		<b>\$114,203</b>	
	<b>Sub Total for Building 171B - Stand-Alone Classroom Building</b>	<b>3</b>	<b>items</b>		<b>\$147,155</b>	
	<b>Total for Campus</b>	<b>57</b>	<b>items</b>		<b>\$7,712,718</b>	

## Palm ES - Life Cycle Summary Yrs 1-10

### Site Level Life Cycle Items

#### Site

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fences and Gates	Fencing - Chain Link (4 Ft)	2,775	LF	\$130,973	4
Roadway Pavement	Concrete Driveways	4,025	SF	\$50,247	5
Playfield Areas	ES Playgrounds	3	Ea.	\$67,044	6
Parking Lot Pavement	Concrete	85	CAR	\$209,607	8
Pedestrian Pavement	Sidewalks - Concrete	1,600	SF	\$18,124	8
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>	<b>\$475,993</b>	

#### Roofing

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Canopy Roofing	Steel panels	450	SF	\$22,831	10
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$22,831</b>	

#### Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Parking Lot Lighting	Pole Lighting	8	Ea.	\$46,557	8
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$46,557</b>	
<b>Sub Total for Building -</b>		<b>7</b>	<b>items</b>	<b>\$545,381</b>	

### Building: 171A - Main building includes Administration Offices, Classrooms, Cafeteria, & Gym.

#### Exterior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Operating Windows	Aluminum - Windows per SF	1,809	SF	\$180,406	3
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$180,406</b>	

#### Interior

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Carpeting	Carpet	3,406	SF	\$43,121	4
Acoustical Suspended Ceilings	Ceilings - Acoustical Grid System	67,437	SF	\$280,824	5
Wall Painting and Coating	Painting/Staining (Bldg SF)	47,683	SF	\$213,664	5
Interior Door Supplementary Components	Door Hardware	149	Door	\$221,207	5
Interior Swinging Doors	Wooden Door	149	Door	\$279,464	6
Compartments and Cubicles	Toilet Partitions	4	Stall	\$8,066	8
Resilient Flooring	Vinyl Composition Tile Flooring	61,306	SF	\$501,343	9
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	67,437	SF	\$227,718	10
Wall Coverings	FRP Wall Finish	13,624	SF Wall	\$103,653	10
Wood Flooring	Wood Flooring - All Types	681	SF	\$14,669	10
<b>Sub Total for System</b>		<b>10</b>	<b>items</b>	<b>\$1,893,728</b>	

#### Mechanical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Facility Hydronic Distribution	Pump- 25HP (Ea.)	1	Ea.	\$14,381	3
Decentralized Cooling	Heat Pump (10 Ton)	51	Ea.	\$1,226,253	4
<b>Note:</b> Water Source					
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	68,118	SF	\$105,402	5
Facility Hydronic Distribution	2-Pipe System (Cold)	68,118	SF	\$121,806	5
Facility Hydronic Distribution	2-Pipe Water System (Hot)	68,118	SF	\$289,776	5
Facility Hydronic Distribution	Pump - 5HP	1	Ea.	\$6,850	5
Exhaust Air	Kitchen Exhaust Hoods	2	Ea.	\$22,383	5
Decentralized Heating Equipment	Unit Heater Electric (5 KW)	1	Ea.	\$1,299	8
Facility Hydronic Distribution	Pump - 5HP	1	Ea.	\$6,850	10
Facility Hydronic Distribution	Pump- 25HP (Ea.)	1	Ea.	\$14,381	10
Exhaust Air	Roof Exhaust Fan - Large	1	Ea.	\$8,036	10
<b>Sub Total for System</b>		<b>11</b>	<b>items</b>	<b>\$1,817,419</b>	

#### Electrical

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Building Mounted Fixtures (Ea.)	2	Ea.	\$1,803	4

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Power Distribution	Power Wiring	68,118	SF	\$80,903	5
Electrical Service	Transformer (225 KVA)	1	Ea.	\$18,241	8
Power Distribution	Distribution Panels (400 Amps)	1	Ea.	\$16,905	8
Power Distribution	Distribution Panel (1600 Amps)	1	Ea.	\$25,176	8
Power Distribution	Distribution Panel (1600 Amps)	1	Ea.	\$25,176	8
Power Distribution	Panelboard - 120/208 225A	1	Ea.	\$5,500	8
Power Distribution	Panelboard - 120/208 100A	1	Ea.	\$2,782	8
Power Distribution	Panelboard - 277/480 225A	1	Ea.	\$9,372	8
Audio-Video Systems	PA Communications No Head Unit (Bldg SF)	68,118	SF	\$48,219	8
Distributed Systems	Public Address System Head End Unit	1	Ea.	\$7,307	8
Lighting Fixtures	Light Fixtures (Bldg SF)	68,118	SF	\$1,249,185	10
<b>Sub Total for System</b>		<b>12</b>	<b>items</b>	<b>\$1,490,569</b>	

**Plumbing**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Plumbing Fixtures	Refrigerated Drinking Fountain	1	Ea.	\$2,202	4
Domestic Water Piping	Domestic Water Piping System (Bldg.SF)	68,118	SF	\$244,798	5
Sanitary Sewerage Piping	Sanitary Sewer Piping	68,118	SF	\$75,627	5
Domestic Water Equipment	Water Heater - Gas - 100 Gallon	1	Ea.	\$6,384	10
Domestic Water Equipment	Gas Piping System (BldgSF)	68,118	SF	\$2,362,010	10
Plumbing Fixtures	Non-Refrigerated Drinking Fountain	6	Ea.	\$14,303	10
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>	<b>\$2,705,323</b>	

**Fire and Life Safety**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	68,118	SF	\$108,159	6
Fire Detection and Alarm	Fire Alarm Panel	1	Ea.	\$6,868	6
Security System Component	Security Alarm System	68,118	SF	\$156,789	8
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>	<b>\$271,815</b>	

**Specialties**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Casework	Fixed Cabinetry	41	Room	\$360,877	8
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$360,877</b>	
<b>Sub Total for Building 171A - Main building includes Administration Offices, Classrooms, Cafeteria, &amp; Gym.</b>		<b>44</b>	<b>items</b>	<b>\$8,720,136</b>	

**Building: 171B - Stand-Alone Classroom Building**
**Exterior**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Exterior Operating Windows	Aluminum - Windows per SF	432	SF	\$43,082	10
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>	<b>\$43,082</b>	

**Interior**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Acoustical Suspended Ceilings	Ceilings - Acoustical Tiles	10,633	SF	\$35,905	8
Suspended Plaster and	Painted ceilings	110	SF	\$229	8
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>	<b>\$36,134</b>	

**Mechanical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Decentralized Cooling	Heat Pump (3 Ton)	8	Ea.	\$71,261	4
	<b>Note:</b> Water Source				
Heating System Supplementary Components	Controls - Electronic (Bldg.SF)	10,962	SF	\$16,962	5
Facility Hydronic Distribution	Pump - 5HP	1	Ea.	\$6,850	5
Exhaust Air	Interior Ceiling Exhaust Fan	3	Ea.	\$1,460	5
Facility Hydronic Distribution	2-Pipe System (Cold)	10,962	SF	\$19,602	10
Facility Hydronic Distribution	2-Pipe Water System (Hot)	10,962	SF	\$46,633	10
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>	<b>\$162,768</b>	

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Electrical Service	Transformer (225 KVA)	1	Ea.	\$18,241	8
Audio-Video Systems	PA Communications No Head Unit (Bldg SF)	10,962	SF	\$7,760	8

**Electrical**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Lighting Fixtures	Canopy Mounted Fixtures (Ea.)	2	Ea.	\$4,166	10
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>	<b>\$30,167</b>	

**Plumbing**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Domestic Water Equipment	Water Heater - Electric - 40 gallon	1	Ea.	\$2,684	3
Plumbing Fixtures	Restroom Lavatory	9	Ea.	\$24,447	4
Plumbing Fixtures	Sink - Service / Mop Sink	1	Ea.	\$796	4
Plumbing Fixtures	Toilets	9	Ea.	\$45,534	4
Plumbing Fixtures	Non-Refrigerated Drinking Fountain	1	Ea.	\$2,384	5
Plumbing Fixtures	Classroom Lavatory	9	Ea.	\$23,080	10
<b>Sub Total for System</b>		<b>6</b>	<b>items</b>	<b>\$98,925</b>	

**Fire and Life Safety**

Uniformat Description	LC Type Description	Qty	UoM	Repair Cost	Remaining Life
Fire Detection and Alarm	Fire Alarm	10,962	SF	\$17,406	6
Security System Component	Security Alarm System	10,962	SF	\$25,231	8
<b>Note:</b> Unit in main building					
<b>Sub Total for System</b>		<b>2</b>	<b>items</b>	<b>\$42,637</b>	
<b>Sub Total for Building 171B - Stand-Alone Classroom Building</b>		<b>20</b>	<b>items</b>	<b>\$413,713</b>	
<b>Total for: Palm ES</b>		<b>71</b>	<b>items</b>	<b>\$9,679,231</b>	



## Supporting Photos

### General Site Photos



Typical electrical distribution panels



Stage sound system



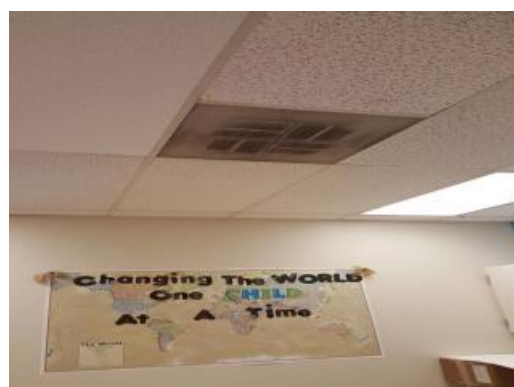
Typical accoustical ceiling



Covered Walkway to School Entrance



HVAC Condensing unit



Worn vent



Corroding water heater pipes



Drinking fountain not working