Anderson High School Site Summary

Address	8403 Mesa Drive Austin, TX 78759
Number of Permanent Campus Facilities	5
Original Year of Construction	1973
Total Campus Building Area (combined)	338,434 SF

Introduction

The Anderson High School campus is located at 8403 Mesa Drive in Austin, Texas. Anderson High School was established in 1973, and consists of two primary buildings along with three additional campus buildings. These permanent campus buildings include the Main School Building (BLDG-009A), the Gymnasiums, Theater, Band Halls, Cafeteria, and Art Building (BLDG-009B), the Library (BLDG-009C), the Science Classroom Building (BLDG-009D) and the Applied Technology Building (BLDG-009E).

Meeting Log		Revision Log		
Date	**Meeting**	**Revision**	**Date**	**Summary of Content**
6/16/16	Interview	00	9/18/16	Draft Issue
6/22-24/16 and 6/27/16	Assessment	01	11/17/16	Added comments from PM Craig Estes as indicated on email dated 10/31/16. See pages 3, 6, 7, 13, 17, 18, 32, and 37.
10/17/16	Cluster Meeting	02	12/13/16	Added comments from Drew Johnson as indicated on email dated 11/30/16. See pages 4 and 15.
10/17/16	Follow-Up	03	1/6/17	Added comments from Principal Sammi Harrison as indicated on email dated 11/16/16. See pages 2-4, 6, 8, and 15.
10/20/16	Follow-Up			

Main School Building – BLDG-009A

Building Purpose	Administration, Classrooms
Building Area	169,439 SF
Inspection Date	June 22-24 and 27, 2016
Inspection Conditions	93°F - Hot and sunny
Facility Condition Index	

System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a brick façade. The building is three stories in height and has two open-air atriums. The soffit covered halls and staircases are open-air. Where the second floor extends over the first floor, the soffit lintels on the cantilevered overhangs were rusted. Expansion joints at the pea gravel surfaced concrete sidewalk adjacent to the building walls were deteriorated.	Good
	Exterior Windows	The windows are aluminum metal framed and single pane glass. They were observed to be in good condition.	Good
	Exterior Doors	There are many double exterior metal doors throughout the building connecting air-conditioned – corridors to non-conditioned corridors. The exterior doors were observed to be in average condition due to age and high usage. Door thresholds were observed to be deteriorated or there were no thresholds at all. Principal Sammi Harrison reported the doors have rust all over exterior sides and have multiple layers of paint in varying shades of blue that are peeling and chipped.	Average
Roofing	The roof of this building is in three sections, south, middle, and north. The south and north roof areas consist of a single ply membrane. The middle roof area over the administration area is built-up asphalt with a granular topping. The		Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	entire parapet wall has new flashing. Some bubbling and cracking were observed in the south roof area and it was in average condition. The middle roof area was observed to be in good condition. The north roof area was also observed to be in good condition. The middle roof area drain was rusted and appeared to be leaking into room 320. In addition, ceiling staining was observed in the open two-story area of the 2nd floor counselor offices.		
Interior Construction	Interior Walls	The interior partitions original to the building are predominately constructed of CMU (concrete masonry unit) that are painted with glazed tile on the lower portion of the wall. The administration offices and the library had painted gypsum board construction, CMU, or brick walls. Principal Sammi Harrison reported the front office has asbestos panels and wall spaces are not able to be utilized.	Good
	Interior Doors	The interior partitions appeared to be in average condition as instances of minor cracking and chipping were observed throughout all wall surfaces. In the cafeteria near the stage area, the wall was observed to be cracked and broken in two large areas. The interior doors consist of wood doors with vision lites in a metal frame (90%) and metal doors with vision lites in a metal frame (10%). The interior doors and frames were observed to be in good condition with typical signs of wear and use.	Good
	Interior Specialties	Metal lockers in non-conditioned corridors are in good condition. The outdoor courtyard metal lockers located near the staircases are faded and peeling due to exposure to sun and rain.	Good
Stairs	Exterior Stairs	The exterior stairs are concrete, in non-conditioned space but covered from the elements by a soffit. They are located in the center of the building on the east and west ends of both atriums. The stairs are in good condition, with painted non-slip paint, solid gypsum board sided pony walls, and sturdy handrails.	Good
	Interior Stairs	The interior stairs are located in air-conditioned spaces on the north and south ends of the building. They are typically Metal frame and pans with poured concrete treads. They have solid paneled gypsum board pony walls and metal handrails.	Good
Interior Finishes	Interior Wall Finishes	The interior wall finishes are predominately painted gypsum board in administration and classrooms	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		(80%), brick wall surface in corridors (10%), CMU at exit stairway walls (5%), and ceramic tile wall finish in restrooms (5%). Some teachers have customized their wall finishes to represent their curriculum. The brick, CMU, and ceramic tile wall finishes were observed to be in good condition. The painted gypsum board wall finishes varied throughout the building.	
	Interior Floor Finishes	The interior floor finishes is VCT (vinyl composite tile). There is carpet in the counselors' and administration areas. There is ceramic tile in the restrooms and there is concrete in the electrical/mechanical rooms, halls, and staircases. They all appeared to be in good condition. Principal Sammi Harrison reported due to excessive moisture in the buildings the baseboards are peeling.	Good
	Interior Ceiling Finishes	The interior ceilings are acoustical tile. There are gypsum board ceilings in the restrooms, and 2nd floor counselors' area. The remaining ceiling is 12x12 acoustical perforated tiles in the 3rd floor south corridors. Craig Estes, from AISD Project Management, reported that 25% of the ceiling is new. The interior ceiling finishes appeared to be in average condition. The acoustical tiles and grid are old, sagging, and dirty. The grid is dirty and rusted on the 2nd and 3rd floors. The gypsum board ceiling in the 2nd floor counselors' area has water stains around some of the light fixtures.	Average
Conveying	The building is outfitted with a hydraulic 3-story elevator on the southeast corner of the center administration section. The machine room, housing the elevators hydraulic sump, pump, and PLC are under the stairs southeast of the elevator car. The last documented inspection was in October of 2015. The elevator and all associated equipment appear to be in operable condition. The elevator was sent to the 3rd floor and back down successfully. The emergency stop and communication equipment were not tested. The conveying equipment appears to be in good condition. It was reported the elevator becomes trapped between floors typically two times per month. Facility occupants stated it has confined mobility impaired students in the car until maintenance can resolve the issue. It was reported that the system was reconditioned in 2014.		Good
Plumbing	Plumbing Fixtures	The facility contains multiple plumbing applications that service three levels, consisting of: public restrooms, staff restrooms, culinary classrooms, janitorial closets with service sinks, and chemistry	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		classrooms with laboratory sinks. The building's fixtures are serviced by various vertical EWHs/GWHs (electric/gas water heaters) ranging from 150-200 MBH and larger horizontal boilers ranging from 1,800-2,500 MBH. Many of the heat generating and cooling systems are not original to this building and are possibly fed from Building B's boiler/chiller mechanical room. The building's restrooms typically consist of metal wall/floor mounted washstands with stainless steel sinks mounted in composite plastic countertops, vitreous china floor/wall mounted toilets, and wall mounted urinals. The restroom fixtures throughout the facility are equipped with manual push metering faucets and manual flush valves. The restroom fixtures in this building are typically aged, but all in good working condition. This building has the following deficiencies: service closets contain old janitorial sinks that are ergonomically inefficient (scheduled to be replaced with floor style sinks/mop basins), restroom stalls are missing privacy doors, and toilet lids are loose.	
	Domestic Water Distribution	As mentioned above, this building is assumed to be serviced predominately by the main mechanical room located in Building B; however, the culinary classroom 132 is equipped with a 40-gallon capacity vertical EWH. All of the domestic distribution water piping observed in this build and the aforementioned domestic water distribution equipment was observed to be in good condition.	Good
	Other Plumbing	The roof drains accessed on this facility predominantly were all designed with an interior type drainage system. In addition, all roof drains observed were equipped with carbon steel dome type covers. The drains accessed were in good working conditions; however, some had corrosion present on the dome type cover.	Good
Mechanical/HVAC	This building has multiple HVAC (heating, ventilating, and air conditioning) applications. The majority of the mechanical equipment assets consist of modular make-up AHUs (air handling units), packaged heat pump/air conditioning systems, and indoor AHUs. Many of the packaged HVAC units are all roof top mounted systems while the indoor AHUs are supported by Building B's large centrifugal water chiller system. Fifteen (15) HVAC systems were assessed on the roof top/mid-level roof top.		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		These systems have capacities that range from 1,500-8,000 CFM (cubic feet per minute). The assessed roof top HVAC system's refrigeration capacities range from 3- to 250-TON and were installed within the last ten years. Ten EFs (exhaust fans) were assessed and the majority of the units were installed within the last ten years. Eighteen (18) indoor AHUs were assessed throughout the three level building. These AHUs range from 7,000-8,000 CFM and service multiple areas on their respected floor levels. The HVAC system is in average condition and has multiple deficiencies from the roof top down to the first level. Roof top mounted industrial centrifugal EFs-4, -5, and -10 were all found to have minor deficiencies. EF-4's discharge ductwork support is deformed; this ductwork support deformation is causing the discharge ductwork to sag. The sag in the discharge piping is causing the expansion joint to flex and could be possibly causing additional stress on the drive train. It was also noticed that the EF-4 had excessive noise and vibration. EF-5 and -10 both appear to be in a good operating condition, but both of their expansion joints have golf ball size holes in them from excessive wear and should be replaced. An unmarked small EF was also noticed to be in poor condition, missing hardware from housing and to have excessive corrosion damage. Only one packaged air condition unit, AISD Barcode- SC016727, was observed to have been potentially charged with outdated refrigerant type, R-22 in the year 2005. Building level three has three AHUs -11, -13, and -14 that are extremely aged and have excessive wear and tear. During the pre-facility condition assessment interview with Anderson High School staff, it was noted that the 3rd-floor level AHUs tend to run inconsistently hot/cold during all seasons. Building level two has two indoor AHUs-7 and -9 that are both generating excessive noise/vibration. It appears that the excessive noise/vibration is being generated from the drive train. Building level one AHU-3 is extremely aged and has excessive wear to exterior shell, and there are tears in the expansion joint material. The HVAC system is assessed to be in an average condition. Principal Sammi Harrison reported chronic HVAC issues on the 2nd and 3rd floors.	
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was observed to be in good condition, but there are areas where fire alarm end devices are aged past their design service life. The facility reported that the fire alarm system did not function with the VOIP (Voice Over Internet Protocol) telephone system.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Fire Protection/ Suppression	The building is predominately serviced by a dry standpipe system routed throughout the facility. Some rooms, such as dry storage or janitorial, are equipped with wet standpipe systems (automatic). The building is also protected by portable fire extinguishers that are stationed throughout the building. All portable fire extinguishers observed were inspected within the last year.	Good
Electrical	Electrical Distribution	The electrical distribution for this building consists mainly of 1,200-amp original switchboards and various sized transformers feeding subpanels in electrical rooms throughout the three floors. The electrical distribution equipment is in average condition. The majority of the equipment observed in average condition is due to age, as the transformers, panelboards, and switchboards in this category appear to be original to building construction. It should be noted that the majority of the panelboards and transformers are outside of their expected design service life expectancy and were documented as having ten years of design service life remaining. Panelboards LA3 and TP3A are missing a breaker leaving a void in panel assembly. A spare breaker or breaker space cover should be installed to fill the void as this is a life safety hazard. The enclosure latch was defective on numerous panels observed in both average condition.	Average
	Lighting	Numerous exterior fixtures are currently under construction and being replaced. The existing fixtures are HID (high-intensity discharge) style fixtures and observed to be in good condition. Throughout the interior areas of the building, it appeared that all damaged lighting is currently being replaced. The replacement lighting to be installed is reported to be LED (light-emitting diode) luminaires. The existing interior lighting is mainly fluorescent with screw type fixtures in closets and small rooms. The fixtures were observed to be in good condition. There are exit signs at every exit and at the end of the corridors on all three floors; however various signs were not illuminated.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Communications & Security	There is a Gemini security system currently installed along with security/monitoring cameras. There were no damaged security panels or cameras observed. There are door frame-mount proximity card readers for access into the building through exterior doors. The facility reported that certain exterior doors will not completely close or lock. Multiple communication closets exist housing network switches, hubs, and routers, in a rack style configuration. The equipment was observed to be in good condition. Previous reports indicate the VOIP telephones are a recent upgrade. Principal Sammi Harrison reported administrators' radio capacity is weak throughout the campus and inadequate security camera coverage to monitor entrances and corridors for safety.	Good

Exterior System Deficiency Examples

Exterior Walls

Exterior Doors

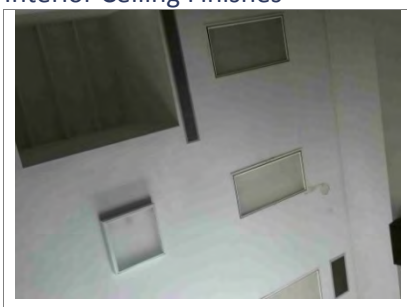
Roofing Deficiency Examples

Interior Construction Deficiency Examples

Interior Specialties

Interior Finishes Deficiency Examples

Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures

Mechanical/HVAC System Deficiency Examples

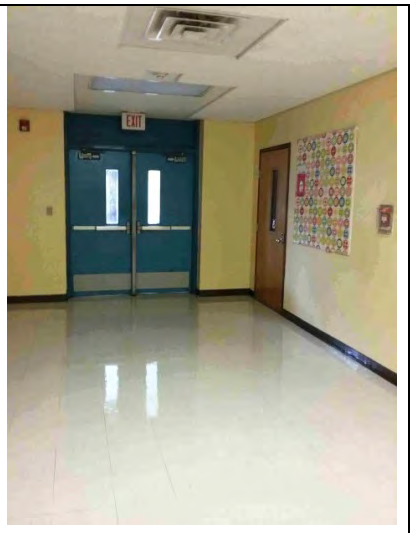
Electrical System Deficiency Examples

Electrical Distribution





Lighting



Gymnasiums, Theater, Band Halls, Cafeteria, Art Building – BLDG-009B

Building Purpose	Gymnasiums ,Theater, Band Halls, Cafeteria, and Art
Building Area	127,453 SF
Inspection Date	June 22-24 and 27, 2016
Inspection Conditions	93°F - Hot and sunny
Facility Condition Index	

System Deficiency Overview

The following table provides a summary of the conditions and deficiencies found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The exterior of the building consists of a brick façade. The building is constructed on one level but because of the three gymnasiums, theater, and cafeteria, the building has two-story tall spaces in these areas. The big and small gymnasiums contain large louvers in the outside walls from a previous venting system which show outside daylight through them. . Investigate the ability to remove the vents and fill the void with adjacent wall material to match existing. Expansion joints at the pea gravel surfaced concrete sidewalk adjacent to the building walls were deteriorated. Steel lintels above brick openings along walkway from theater to art wing are rusted...	Good
	Exterior Windows	Windows are metal framed and are in good condition.	Good
	Exterior Doors	The exterior doors were observed to be in average condition due to age and high usage. Door thresholds were observed to be deteriorated.	Average
Roofing	The roof of this building contains approximately 14 different roof sections. Most roof areas are a single ply membrane system of differing ages. Some roofs have skylights or former roof hatches. The theater roof area is a steep sloping standing seam metal roof. Area of immediate concern is the roof under the cooling tower where the tower is continually dripping onto the roof. This could be causing the leak into the enclosed loading dock area where the roof deck and bar joists are rusting. Also, the roof area on the southwest corner of the big gymnasium where		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	there appears to be ponding, and has discolored insulation from the gymnasium below. Staff indicated this roof area leaks down the wall onto the bleachers. Leaks were reported over the exit doors of the small gymnasium. In addition, stained ceiling tiles were observed over the weight room The theater, band halls, cafeteria, and dance gymnasium roof areas are newer.		
Interior Construction	Interior Walls	The interior wall finishes are predominately painted gypsum board in theater, band halls and classrooms, CMU at the gymnasium and locker rooms, and ceramic tile wall finish in restrooms. The CMU, gypsum board, and ceramic tile wall finishes were observed to be in good condition.	Good
	Interior Doors	The interior doors consist of wood doors with vision lites in a metal frame and metal doors with vision lites in a metal frame The interior doors and frames were observed to be in good condition with typical signs of wear and use.	Good
	Interior Specialties	The lockers in the male and female athletic locker rooms are vented metal lockers. They are in good condition with some lockers bent and scraped. Band hall lockers are large wooden lockers and are in very good condition. Principal Sammi Harrison and the CAC have concerns regarding damaged (rusted, bent, and inoperable) lockers in the locker room.	Good
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finishes are predominately painted gypsum board in theater, band halls, and classrooms CMU at the gymnasium, and locker rooms and ceramic tile wall finish in restrooms. The CMU, gypsum board, and ceramic tile wall finishes were observed to be in good condition. The wall	Good
	Interior Floor Finishes	The floor I finishes vary with wood floor in the gymnasiums, carpet in the theater area, ceramic tile in the restrooms/locker rooms, and vinyl tile in cafeteria, kitchen, and classrooms. They were all observed to be in good condition.	Good
	Interior Ceiling Finishes	The ceiling finishes are acoustical tile in cafeteria/kitchen and art classrooms that are currently under construction. New areas such as the renovated art wing, theater and band rooms are in good condition. Craig Estes, from AISD Project Management reported that 75% of the ceiling is new. Locker rooms and weight room areas appeared to show	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		wear and stains from roof leaks. They were observed to be in poor condition. Several of the ceilings are open to the roof structure because they are gymnasiums. The big gymnasium insulation shows signs of heavy staining from roof leaks. The remainder of the building are gypsum board ceilings in the restrooms and locker/shower areas. They appeared to be in average condition.	
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The facility contains multiple plumbing applications that service one level, consisting of: public restrooms, staff restrooms, janitorial closets with service sinks, locker rooms equipped with multi-unit type showers, and a commercial kitchen for cafeteria. It should be noted that during the building assessment the commercial kitchen was being completely renovated. Many of the kitchen plumbing fixtures are to be replaced. The building's fixtures are serviced by various vertical EWHs/GWHs ranging from 150-200 MBH and larger horizontal boilers ranging from 1,800-2,500 MBH. Many of the heat generating and cooling systems are original to this building's boiler/chiller main mechanical room, with the exception of an outdoor 120-TON chiller located on northwest corner of BLDG-009B's cafeteria. The building's restrooms typically consist of metal wall/floor mounted washstands with stainless steel sinks mounted in composite plastic countertops, vitreous china floor/wall mounted toilets, and wall mounted urinals. The restroom fixtures throughout the facility are equipped with manual push metering faucets and manual flush valves. The restroom fixtures in this building are typically aged, but all in good condition. This building has the following deficiencies: service closets contain old and out of date janitorial sinks (scheduled to be replaced with floor style sinks/mop basins), and the aged and out of date multi-unit type showers in the female/male restrooms are to be replaced with single/private showers.	Good
	Domestic Water Distribution	The Domestic Water Distribution system is predominately located in the main mechanical room. Six large vertical commercial GWHs were observed in the main mechanical room with input capacities ranging from 200 MBH to 500 MBH. The domestic water distribution piping original to this	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		building appears to service the majority of the campus to include the commercial kitchen. It was noted during the facility interview that the kitchen crawl space contained a carbon distribution water pipe that was severely corroded. During this assessment, no crawl spaces were observed or assessed and it could not be confirmed whether this distribution water pipe was actually corroded. Two notable deficiencies were observed in Building B's boiler/chiller main mechanical room and were generated from two vertical GWHs both with the rated capacity of 99-gallon and an input rating of 200 MBH. The deficiencies are as follows: Vertical water heaters (AISD [Austin Independent School District] Barcode - SC019313 and SC019312) both have small leaks from their make-up water valve/piping causing some corrosion of the water heaters exterior shell and associated distribution piping. The Domestic Water Distribution system is in average condition.	
	Other Plumbing	The roof drains accessed on this facility predominantly were all designed with an interior type drainage system. In addition, all roof drains observed were equipped with carbon steel dome type covers. The drains accessed were in good condition; however, some had corrosion present on the dome type cover.	Good
Mechanical/ HVAC	This building has multiple HVAC applications. The majority of the mechanical equipment assets consist of packaged and split heat pump/air conditioning systems, and indoor AHUs. Many of the packaged and split HVAC units are either roof top mounted systems or can be found on the exterior ground level of the building. This building is also serviced by an outdoor 20-130-TON air-cooled scroll chiller and two indoor 120-500-TON centrifugal water chiller systems. The indoor centrifugal systems are also connected to one double cell roof top mounted cooling tower with an estimated nominal tonnage capacity of 1,000. Eight HVAC systems were assessed on the roof top. The assessed roof top HVAC systems' refrigeration capacities range from 3- to 60-TON. Twelve (12) HVAC systems were assessed on the first floor of the building exterior with refrigeration capacities ranging from 5- to 10-TON. One roof top AHU and 12 indoor AHUs were assessed throughout the building. These AHUs range from 2500-3000 CFM and service multiple areas. During the pre-facility condition assessment interview, the staff mentioned the following mechanical issues with this particular building. The heating and cooling in the band area of this building is inconsistent regardless of the weather. AHUs 16 and 17 were stated by staff as needing to be completely replaced. Currently		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		there is extremely poor ventilation throughout the male/female locker rooms. Outdoor air-cooled scroll chiller has been reported to have consistent operational problems. The HVAC system has multiple deficiencies observed on the roof top, third, second, and first floor level. Three of the assessed roof top packaged units appeared to have been originally charged with R-22, AISD Barcodes- SC004932, SC016729, and SC0049749. The 11 HVAC systems assessed on the first floor of the building exterior have all appeared to have similar deficiencies such as; general aging of equipment, distribution piping and enclosure corrosion and one indoor AHU (IU-T7) was determined to be inoperable. All 12 HVAC systems were observed to be charged with outdated R-22 refrigerant. It was also observed that the chiller unit located on the roof of Building B has discharge piping that is extremely corroded. The HVAC system was observed to be in average condition based off the aforementioned deficiencies at the time of the assessment.	
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was observed to be in good condition. The facility reported that the fire alarm system did not function with the VOIP telephone system. Facility should consider an upgrade.	Good
	Fire Protection/ Suppression	The building is not equipped with a fire sprinkler/suppression system; however, it is serviced by a dry stand pipe system that is routed throughout the facility. The building is also protected by portable fire extinguishers that are stationed throughout the building. All portable fire extinguishers observed were inspected within the last year.	N/A
Electrical	Electrical Distribution	The electrical service (utility transformer and service entrance for the facility) appears to be located on the east side of the complex and feeds a main mechanical room. Inside the main mechanical room is a 480/277VAC, 4000A switchboard that appears to feed numerous subpanels throughout the complex. The majority of the equipment was observed to be in average condition due to age, as the transformers, panelboards, and switchboards in this category appeared to be the original equipment. The majority of the panelboards and transformers outside of their life expectancy were documented as having ten years left. It has been noted by the facility staff that circuits in the	Average

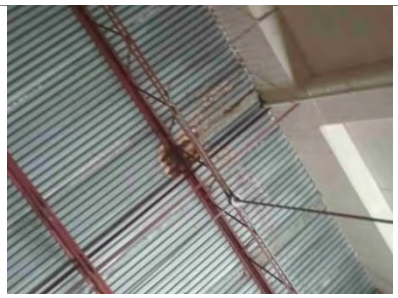
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		theatre and cafeteria trip regularly. Staff also indicated that hand dryer units are not able to be installed in restrooms due to panelboard capacity. It was reported that additional capacity was provided by lighting revisions within the cafeteria in the summer of 2016. Hand dryers are planned for installation within the cafeteria lobby and theater lobby restrooms.	
	Lighting	The exterior lighting is in average to good condition. Numerous exterior fixtures are currently under construction and being replaced. There are numerous sections in Building B consisting of different fixtures and styles (theater, three gymnasiums, band hall, kitchen, cafeteria, locker rooms, and classrooms). Throughout the interior areas of the building, it appeared that all damaged lighting is currently being replaced. The replacement lighting to be installed is reported to be LED luminaires. The existing interior lighting is mainly fluorescent. The theater is equipped with a specially designed lighting panel to support the stage functions. There are exit signs at every exit; however, various signs were not illuminated.	Average
	Communications & Security	There is a Gemini security system currently installed along with security/monitoring cameras. There were no damaged security panels or cameras observed. There are door frame-mount proximity card readers for access into the building through exterior doors. The facility reported that certain exterior doors will not completely close or lock. Multiple communication closets have housing network switches, hubs, and routers, in a rack style configuration. The equipment was observed to be in good condition. Previous reports indicate the VOIP telephones are a recent upgrade.	Good

Exterior System Deficiency Examples

Exterior Walls

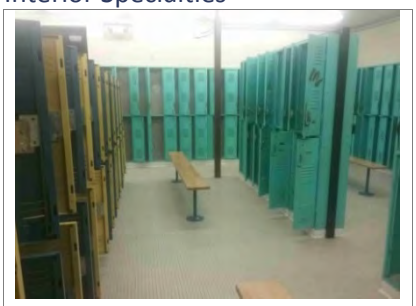


Roofing Deficiency Examples

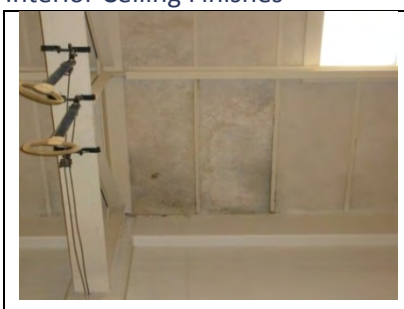

Interior Construction Deficiency Examples

Interior Specialties



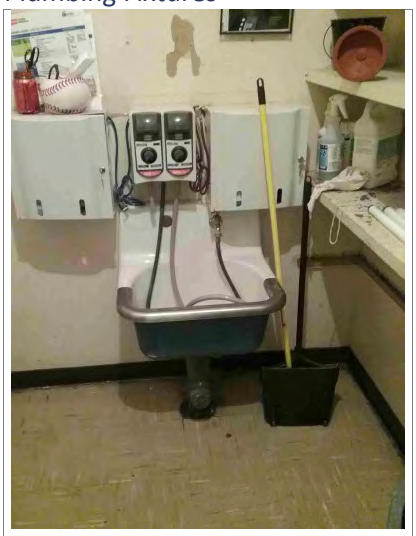
Interior Finishes Deficiency Examples

Interior Ceiling Finishes

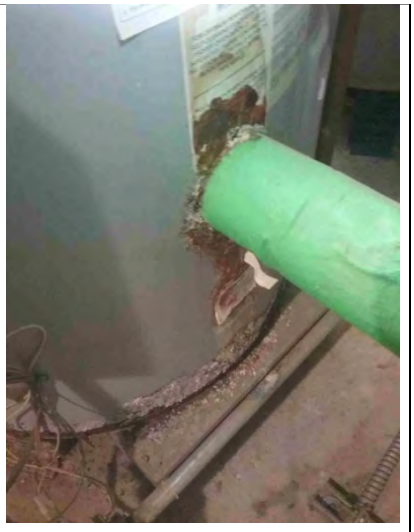



Plumbing System Deficiency Examples

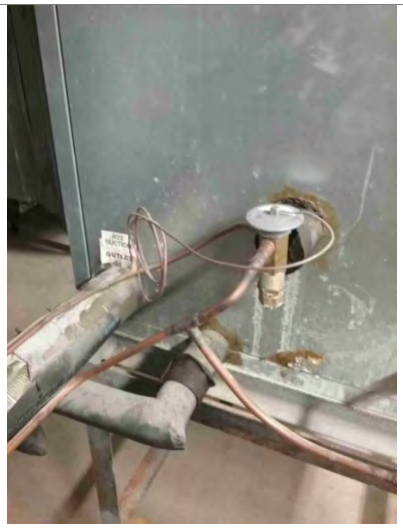
Plumbing Fixtures

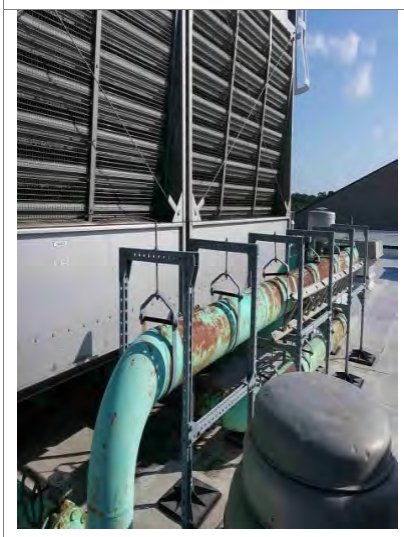


Domestic Water Distribution



Mechanical/HVAC System Deficiency Examples

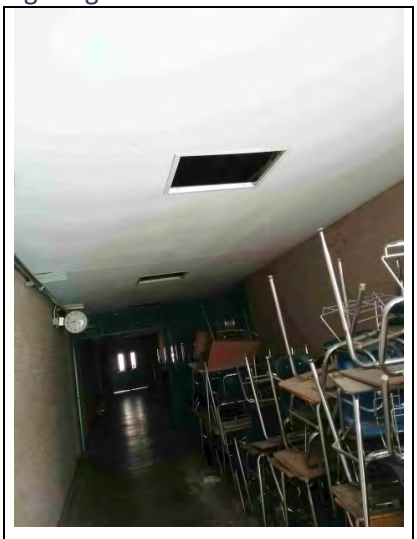






Electrical System Deficiency Examples

Electrical Distribution

Lighting



Library Building – BLDG-009C

Building Purpose	Library
Building Area	17,096 SF
Inspection Date	June 22-24 and 27, 2016
Inspection Conditions	93°F - Hot and sunny
Facility Condition Index	

System Deficiency Overview

The following table provides a summary of the conditions and deficiencies found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The library building was built in 2000 and is brick façade, with metal siding at the gable end area. This exterior was observed to be in good condition.	Good
	Exterior Windows	The exterior windows are metal in metal frames and appeared to be in good condition.	Good
	Exterior Doors	Doors are metal in a metal frame and are in good condition.	Good
Roofing	Roof is a steep sloping standing seam metal roof and appears to be in good condition.		Good
Interior Construction	Interior Walls	The interior walls are painted gypsum board and ceramic tile in the restrooms. They are in good condition.	Good
	Interior Doors	Interior doors are wooden doors in metal frames with side lites. They were observed to be in good condition,	Good
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finishes are painted gypsum board and ceramic tile in the restrooms and appeared to be in good condition.	Good
	Interior Floor Finishes	The interior floor finishes are carpet in the main library, which is in good condition. 5% of the flooring is vinyl tile in the lobby and 5% ceramic tile in the	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		restrooms. They are in good condition. The carpet in the library area is dirty in spots.	
	Interior Ceiling Finishes	The ceiling finishes are acoustical tile (90%) and gypsum board tile in the restrooms.	Excellent
Plumbing	Plumbing Fixtures	The facility has two main restrooms that contain the majority of the plumbing fixtures in this building. The remainder of the plumbing fixtures are generated from the sinks in the librarian/staff breakrooms. The plumbing fixtures throughout the facility were observed to be aged but in good condition.	Good
	Domestic Water Distribution	This facility does not have any major domestic water equipment. The facility is assumed to be fed from an outside source. All the observed plumbing distribution piping was appeared to be in good condition.	Good
	Other Plumbing	The roof drains accessed on this facility predominantly were all designed with an interior type drainage system. In addition, all roof drains observed were equipped with carbon steel dome type covers. The drains accessed were in good working condition; however, some had corrosion present on the dome type cover.	Good
Mechanical/ HVAC	This building has multiple HVAC applications. The majority of the mechanical equipment assets consist of packaged and split heat pump/air conditioning systems, and indoor AHUs. Many of the packaged and split HVAC units are located on the adjacent roof of BLDG-009A and feed into the units located in BLDG-009C's mechanical room attic. Sixteen (16) HVAC systems were assessed on the roof top. The assessed roof top HVAC system's refrigeration capacities range from 3- to 12-TON. Three of the roof top AHUs had an extremely weathered enclosure and no nameplate data because of the age and excessive wear and tear of unit. The remaining split packaged 3 -to 12-TON units were all installed around 1999. These units were all observed to be utilizing outdated R22 refrigerant and to be reaching the end of their projected design service life. The indoor AHUs assessed in the mechanical room attic range from 2500-3000 CFM and utilize R22 refrigerant. The maintenance team and staff reported that the HVAC system servicing the building has had operational issues during cold and hot seasons. This system was observed to be average.		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Fire Protection	Fire Alarm	The building has a fire alarm system that consists of alarm and signaling devices such as horns/annunciators, strobes, horn/strobe combinations, pull stations, and detectors. The fire alarm system is controlled by the Silent Knight control panel. The fire alarm system was observed to be in good condition.	Good
	Fire Protection/ Suppression	The building is not equipped with a fire sprinkler/suppression system. It is serviced by portable fire extinguishers that are stationed throughout the building. All portable fire extinguishers observed were inspected within the last year.	Good
Electrical	Electrical Distribution	The four electrical panelboards feeding the building's electric power are located in the attic area. There is one 480/277VAC 600A panel, two 208/120VAC 225A panels, and one 208/120VAC 600A panel. All panels were observed to be in good condition. Two 480VAC/208120VAC transformers are located on the exterior roof of the Library. Light corrosion was observed on the housing likely due to the exterior location.	Good
	Lighting	Exterior lighting consists of wall mount fixtures surrounding the building and recessed can fixtures at the entry way and exterior corridor. The lighting was observed in good condition. Interior lighting consists of mainly fluorescent fixtures. There were a small number of incandescent fixtures illuminating closets and mechanical rooms. The lighting was observed to be in good condition.	Good
	Communications & Security	The communication equipment consisted of a single rack housing servers, hubs, switches and other networking equipment in a networking room. A Gemini security system is installed with a keypad. Security/Monitoring cameras are installed throughout the building. The equipment was observed to be in good condition.	Good

Interior Finishes System Deficiency Overview

Interior Floor Finishes

Mechanical/HVAC System Deficiency Examples

Electrical

Electrical Distribution

LC Anderson Science Building – BLDG-009D

Building Purpose	Science Classrooms
Building Area	9,946 SF
Inspection Date	June 22,23,27, and 2016
Inspection Conditions	93°F - Hot and sunny
Facility Condition Index	

System Deficiency Overview

The following table provides a summary of the conditions and deficiencies found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	The science building was built in 2011 and consists of brick façade.	Excellent
	Exterior Windows	Exterior windows are metal framed and in a high placement in the walls. They were observed to be in excellent condition.	Excellent
	Exterior Doors	Two sets of exterior doors at each end of the building are double metal doors in metal frames. They were observed to be in excellent condition.	Excellent
Roofing	The roof is a single ply membrane and appears to be without ponding or tearing. This roof appeared to be in good condition.		Good
Interior Construction	Interior Walls	The walls in the corridors are CMU and the classrooms are gypsum board. Walls appeared to be in excellent condition.	Excellent
	Interior Doors	The interior doors are wood with a lite in metal frames. They were in excellent condition.	Excellent
	Interior Specialties	System not present.	NA
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The wall finishes consist of painted CMU, gypsum board, and ceramic tile in the restrooms. The corridor has a nice periodic chart painted on the wall. They were all observed to be in excellent condition.	Excellent
	Interior Floor Finishes	The floor finishes are 90% vinyl tile and 10% ceramic tile in the restrooms. They were in excellent condition.	Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The ceiling finishes are 90% acoustical tile and 10% gypsum board in the restrooms. They were in excellent condition.	Excellent
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	This facility was built in 2011 and the plumbing system consists of public restrooms, staff restrooms, janitorial closets with service sinks, and safety showers. All of the plumbing fixtures and associated piping are appeared to be in excellent condition.	Excellent
	Domestic Water Distribution	The domestic water distribution system for this building is in excellent condition. All observed heat generating equipment, such as pulse gas operated boilers/hot water transfer pumps are in excellent working condition. All associated piping observed was in excellent operating condition.	Excellent
	Other Plumbing	Other plumbing assets such as, sanitary waste and rain water applications were not located and therefore not assessed. Reference roofing system assessment for information in regards to roofing drains.	N/A
Mechanical/HVAC	This building has multiple HVAC applications. The majority of the mechanical equipment assets consist of roof top packaged air-conditioning systems/AHUs, EFs, and a couple of split-system heat pumps. Six HVAC systems were assessed on the roof top. The assessed roof top HVAC system's refrigeration capacities range from 5- to 40-TON. These packaged RTUs (roof top units) and split-system heat pumps range from 2,500-12,000 CFM and service multiple areas. This HVAC system has a rating of excellent. There were no deficiencies observed and there were no comments from any of the staff or maintenance team in regards to any ongoing deficiencies.		Excellent
Fire Protection	Fire Alarm	The building has a Silent Knight fire alarm system consisting of alarms, detectors, pull stations, and strobes. Additionally, this building comes with a Fire Alarm Annunciator that is electronic with a keypad.	Excellent
	Fire Protection/ Suppression	This is the only facility on campus that is protected by a fire suppression sprinkler system. The system appeared to be in excellent working condition.	Excellent
Electrical	Electrical Distribution	The electrical distribution primary equipment for this building is housed in an electrical room on the west side in the center of the corridor. A 30KVA and 45KVA feed multiple panelboards that distribute power throughout the building. Lighting contactors for exterior lights are also housed in this electrical room.	Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Lighting	Exterior lighting consisted of recessed can fixtures at the parking lot entrance and wall mount fixtures surrounding the perimeter. All appeared acceptable as previous notes indicate the building was constructed in 2011. Interior lighting consisted of mainly fluorescent in the classroom and corridor setting. There were a small number of incandescent fixtures illuminating closets and mechanical rooms.	Excellent
	Communications & Security	The communication equipment consists of a single rack housing servers, hubs, switches and other networking equipment in a networking room. A Gemini security system is installed with a keypad. Security/Monitoring cameras are installed throughout the building.	Excellent

New High Tech Building – BLDG-009E

Building Purpose	High Tech Classrooms and Shop
Building Area	14,500 SF
Inspection Date	June 22-24 and 27, 2016
Inspection Conditions	93°F - Hot and sunny
Facility Condition Index	

System Deficiency Overview

The following table provides a summary of the conditions and deficiencies found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Exterior	Exterior Walls	This building was built approximately in 2014 and has a brick façade. It was in excellent condition.	Excellent
	Exterior Windows	The windows are in a metal frame and are mostly at the entrance. They appeared to be in excellent condition.	Excellent
	Exterior Doors	Exterior doors are metal in metal frames in a storefront configuration. They were in excellent condition.	Excellent
Roofing	The roof is a single ply membrane with no ponding. It was observed to be in excellent condition.		Excellent
Interior Construction	Interior Walls	The interior walls are 100% painted gypsum board. It is in excellent condition.	Excellent
	Interior Doors	The interior doors are wood with lite in a metal frame. They were in excellent condition.	Excellent
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	System not present.	N/A
Interior Finishes	Interior Wall Finishes	The interior wall finishes are 90% painted gypsum board and 10% ceramic tile in the restrooms. They were observed to be in excellent condition.	Excellent
	Interior Floor Finishes	The interior floor finishes are 50% vinyl tile throughout of the building, 30% concrete in the workshops, and 20% anti-static tile in computer labs. They were in excellent condition.	Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Ceiling Finishes	The interior ceilings are 90% vinyl tile in the classrooms and lobby, 5% gypsum board in the restrooms and 5% open ceiling to the roof deck. They were in excellent condition.	Excellent
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	This facility was built in 2014 and the plumbing system consists of public restrooms, staff restrooms, janitorial closets with service sinks, and safety showers. All of the plumbing fixtures and associated piping appeared to be in excellent condition.	Excellent
	Domestic Water Distribution	The domestic water distribution system for this building is in excellent condition. All observed heat generating equipment, such as pulse gas operated boiler/hot water transfer pumps are in excellent working condition. All associated piping observed was in excellent operating condition.	Excellent
	Other Plumbing	Other plumbing assets such as, sanitary waste and rain water applications were not located and therefore not assessed. Reference roofing system assessment for information in regards to roofing drains.	N/A
Mechanical/ HVAC	This building has multiple HVAC applications. The majority of the mechanical equipment assets consist of roof top packaged AHUs (air-conditioning units), EFs, and a couple of split-system heat pumps. Six HVAC systems were assessed on the roof top. The assessed roof top HVAC system's refrigeration capacities range from 5- to 40-TON. These packaged RTUs and split-system heat pumps range from 2500-12000 CFM and service multiple areas. This HVAC system has a rating of excellent. There were no deficiencies observed and there were no comments from any of the staff or maintenance team in regards to any ongoing deficiencies.		Excellent
Fire Protection	Fire Alarm	The building has a Silent Knight fire alarm system consisting of alarms, detectors, pull stations, an intercom, and strobes. Additionally, this building comes with a Fire Alarm Annunciator that is electronic. All equipment was installed within the past year.	Excellent
	Fire Protection/ Suppression	This is the only facility on campus that is protected by a fire suppression sprinkler system. This system appeared to be in excellent working condition.	Excellent
Electrical	Electrical Distribution	The electrical distribution appears to be a single feed into a transformer that is mounted at the ceiling elevation of the machinery room. The size was not verified but it feeds a Siemens 208/120VAC 3ph 4w	Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		250A panel. This panel is assumed to distribute power throughout the building accordingly and was installed within the past year.	
	Lighting	The lighting in the machine and woodworking room appears to be hanging fluorescent fixtures and lamps. It could not be determined if the classroom lighting was fluorescent or LED (light-emitting diode) lamps in the flush mounted fixtures. All lighting was observed to be in excellent condition.	Excellent
	Communications & Security	The communication devices are located in an unmarked room southeast of the front entrance. A single rack exists housing servers, hubs, switches and other networking equipment. A Gemini security system is installed with a keypad south of the front entrance. Security/Monitoring cameras are installed throughout the building. The installation has been within the past year.	Excellent

Anderson High School Campus Summary of Recommendations

This document is based on current conditions observed during fieldwork and provides recommendations for corrective actions by each discipline. The following recommendations provide a summary of the findings.

Campus Recommendations

Plumbing

1. Recommend replacing old janitorial sinks that are located in service closets with more ergonomically efficient floor style sinks/mop basins.
2. Tighten or replace toilet seats that are damaged through the facility.
3. Continue preventative maintenance on aged plumbing fixtures throughout facility.

Mechanical/HVAC

1. Begin to forecast and plan either conversion or replacement of equipment that uses R-22 refrigerant. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment obsolete.

Electrical

1. Verify all EXIT signs are in operable condition.

Main School Building Recommendations

Exterior

1. Repair and repaint lintels at building cantilever areas throughout this building.

Roofing

1. Replace south wing roof of this building in the next few years, it is bubbling and cracking.

Interior Finishes

1. Repaint corridors on second and third floors. Replace ceiling grid and tiles on second and third floors.
2. Repair roof drain leak in room 320.

Electrical

1. Address panels that have breakers missing and install a breaker space cover or spare breaker to fill void. This is a life-safety issue.
2. Develop a phased program for replacing panels that are beyond their expected design service life.
3. The conveying equipment needs additional testing to determine causes for undesired stops.
4. Assess the fire alarm system as it relates to the VOIP telephone system.

Mechanical/HVAC

1. Repair EF-4's discharge pipe support in order to avoid excessive sag in pipe.
2. Investigate excessive noise for EF-4.
3. EF-5 and -10 need to have expansion joints replaced
4. AHUs 3, 11, 13, and 14 are extremely old units. Continue to perform preventive maintenance checks and services on equipment; replace when possible.
5. AHUs 7 and 8 are both generating excessive noise/vibrations. Continue to perform preventive maintenance checks and services on equipment; replace when possible.

Gymnasiums, Theater, Band Halls, Cafeteria, Art Building Recommendations

Exterior

1. Replace expansion joint r where the sidewalks meet the brick façade.
2. Repair or repaint rusty lintels at brick walkway from theater to art wing. .
3. Repair or replace Exterior door need thresholds to prevent water infiltration.
4. Investigate removal of non -functioning louvers in both gymnasium areas and replace it with CMU to match adjacent wall materials. This will help with energy savings.

Roofing

1. Repair or replace roof over the big gymnasium area and weight room areas.
2. Repair or replace roof at cooling tower. . Water dripping from cooling unit on to roof.

Interior Construction

1. Renovate the locker areas. Replace flooring, ceiling grid, and tile.
2. Repair or replace lockers in locker room areas (requested by Principal Sammi Harrison).

Interior Finishes

1. Renovate the locker room areas. They have poor ceiling tile, grid, and flooring.

Plumbing

1. Recommend replacing old janitorial sinks that are located in service closets with more ergonomically efficient floor style sinks/mop basins.
2. Replace multi-unit type showers in female/male restrooms with single/private showers.
3. Conduct maintenance on the vertical GWHs in the main mechanical room that appear to have leaks in their feed water lines.
4. Conduct preventative maintenance on aged plumbing fixtures throughout facility.
5. Repair or replace all damaged or missing piping insulation on the exterior HVAC system units as needed.
6. Recommend replacing privacy doors on restroom stalls that do not have doors attached any longer.
7. Investigate leaks within the male restrooms and coaching office (requested by Principal Sammi Harrison).

Mechanical/HVAC

1. It is recommended that tracking and planning for either the conversion or replacement of equipment that uses R-22 refrigerant is started. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment obsolete.
2. Conduct further assessment on heating and cooling in band area and determine if HVAC units need to be replaced.
3. Replace HVAC system in male/female locker room.
4. A full assessment on condition of outdoor chiller system should be conducted, because it has been reported to operate inconsistently.
5. The roof top chiller unit discharge piping is corroded and should be repaired or replaced if the integrity of the pipe is compromised due to excessive oxidation.
6. Conduct all preventive maintenance checks and services on equipment.
7. Improve ventilation within the male and female locker rooms.

Electrical

1. Replace panels that are out of date.
2. Assess loads that are causing breaker trips. Determine if additional or new panels need to be installed.

Library Recommendations

Interior Finishes

1. Replace or clean carpet in main library area.

Mechanical/HVAC

1. Forecast and plan either conversion or replacement of equipment that uses R-22 refrigerant. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment obsolete.
2. Conduct assessment for all HVAC systems associated with this building. All HVAC systems observed have reached their lifecycle and are no longer running efficiently.

Electrical

1. Consider recoating the enclosures, especially the exterior enclosures on the roof.

LC Anderson Science Building Recommendations

Exterior

1. None, building built in 2011.

New High Tech Building Recommendations

Exterior

1. None, building built in 2014.

Anderson High School Planned Future Improvements

The following are any known planned and funded improvements scheduled to take place at this campus in the future. Their scope and schedule are subject to change.

2017 Bond Planned Improvements from PM Craig Estes on 10/31/16.

- Summer 2017.
  - Replace AHUs servicing the classroom wings, administration, and locker rooms.
  - Replace roof under the cooling tower on BLDG-009B.
  - Replace eight package AHUs (AHU-3,-11,-13,-14,-19,-20,-21,-22), chiller unit 2, and the cooling tower in BLDG-009B.

CRAWL SPACE – Anderson HS – Main School Building (009-A)

Building Purpose	Administrative and Classrooms
Inspection Date	September 20, 2016, Morning
Inspection Conditions	80° - Sunny & Dry

Crawl Space System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Soil, Drainage, Ventilation & Access	Soil Below Building, Site Drainage in Crawl Space	The soil under the building was generally dry and flat. A drainage pit exists near the center of the crawl space. There was saturated soil at the perimeter of the crawl space. Soil/Drainage deficiencies: • Saturated soil around perimeter of crawl space due to water infiltration	Average
	Soil Retainers	N/A – The building does not contain soil retainers	N/A
	Areaways/Ventilation	The crawl space is ventilated by one areaway located on the west corner of the crawl space. The crawl space was very humid. The wall in the areaway well had mild honeycombing towards the bottom of the wall. Areaway/ventilation deficiencies: • Poor ventilation • Honeycombing on areaway concrete wall	Average
	Access Hatches	Access to the utilities tunnel is located in two different locations. One is in the main mechanical room in Building B. The other is through a floor hatch in the mechanical room near the Building A admin area. No deficiencies found.	Good
Exposed Structure	Exposed Columns & Tops of Foundations	All observed columns and tops of foundations appeared in good condition. No deficiencies observed. Column/Foundation deficiencies: • No deficiencies observed	Good
	Exposed Faces of	Cast-in-place perimeter walls are approximately 5 ft. high. All	Good

	Perimeter Walls / Beams	observed perimeter walls appeared in good condition. No deficiencies observed.	
	Exposed Portions of Interior Floor Beams Above	Suspended cast-in-place interior floor beams spanned in one direction over columns. All observed interior floor beams appeared in good condition.	Good
	Underside of Suspended Floor Slabs Above	The slab system generally consisted of cast-in-place pan joists, except the slab above the pipes that ran from the utilities tunnel is a cast-in-place flat slab. The flat slab section ran from the crawl space opening on the north side to the end of the crawl space on the south side of the building. Honeycombing was observed on the pan joists. Slab deficiencies: • Honeycombing in pan joists	Average
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	Many suspended pipes were present in the crawl space. Some deficiencies observed include rusted pipe hangers and rusted cast iron pipes. Few pipes had missing insulation. Pipe deficiencies: • Rusted cast iron pipes • Rusted pipe hangers • Missing pipe insulation • Broken pipe	Average
	Exposed Ductwork	Observed ductwork appeared in good condition.	Good
	MEP Equipment	N/A – No MEP equipment was present in the crawl space areas observed.	N/A
	Spray Fireproofing/ Insulation	N/A – No spray fireproofing or insulation was present in the crawl space areas observed.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Saturated soil at perimeter

Honeycombing in areaway

Exposed Structure

Honeycombing in pan joist diaphragm

Pipes, Ducts, Equipment & Fireproofing

Rusted pipe hanger

Rusted cast iron pipes

Missing/degraded pipe insulation

 Broken pipe		

CRAWL SPACE – Anderson HS – Additional Building (009-B)

Building Purpose	Classrooms, Band Hall, Cafeteria, Theater, Gym
Inspection Date	September 20, 2016, Morning
Inspection Conditions	80° - Sunny & Dry

Crawl Space System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Soil, Drainage, Ventilation & Access	Soil Below Building, Site Drainage in Crawl Space	The soil in the crawl space was damp and did not appear to slope to the drainage pit. The drainage pit had standing water below the pipe exit level. Soil/Drainage deficiencies: • Ineffective grading to drainage system • Damp soils, water infiltration	Average
	Soil Retainers	N/A – No soil retainers are located around the crawl space	N/A
	Areaways/Ventilation	The crawl space is ventilated by one areaway located at the end of the crawl space. Condensation on pipes and slab indicate poor ventilation. Areaway/ventilation deficiencies: • Poor ventilation	Average
	Access Hatches	The crawl space was accessed through the utilities tunnel. The plans show a floor access hatch in the kitchen storage room but this hatch was not observed.	Good
Exposed Structure	Exposed Columns & Tops of Foundations	Observed columns and tops of foundations appeared in good condition. Some columns were covered with sonotube carton forms and could not be observed. No deficiencies observed.	Good
	Exposed Faces of Perimeter Walls / Beams	Perimeter beams are all grade beams approximately 4 ft. deep. All observed perimeter beams seemed to be in good condition.	Good

	Exposed Portions of Interior Floor Beams Above	Suspended interior beams spanned between the columns. All observed perimeter beams were in good condition.	Good
	Underside of Suspended Floor Slabs Above	The floor system consists of a flat slab supported by perimeter and interior beams. The slab appeared in good condition.	Good
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	The crawl space was very congested with pipes. Few pipes were beginning to show signs on corrosion. Pipe deficiencies: • Slightly rusted pipes • Degraded pipe insulation	Average
	Exposed Ductwork	N/A – No exposed ductwork was present in the crawl space areas observed.	N/A
	MEP Equipment	MEP equipment observed seemed to be in good condition. No deficiencies observed.	Good
	Spray Fireproofing/ Insulation	N/A – No spray fireproofing or insulation was present in the crawl space areas observed.	N/A

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

Condensation under slab

Standing water in drainage pit

Pipes, Ducts, Equipment & Fireproofing

 Slightly rusted Pipe		

Anderson HS – Campus Summary of Crawl Space Recommendations

This document is based on current conditions observed during fieldwork and provides recommendations for corrective actions by each discipline. The following recommendations provide a summary of the findings.

Main School Building (BLDG-009A) Recommendations

Soil, Drainage, Ventilation & Access

1. Re-grade in the crawl space to improve drainage.
2. Improve ventilation.
3. Re-grade site around building perimeter to ensure positive drainage away from foundation

Pipes, Ducts, Equipment & Fireproofing

1. Clean corroded cast iron pipes & protect from further corrosion or replace
2. Replace heavily corroded hangers/supports
3. Replace degraded/moldy pipe insulation

Additional Building (BLDG-009B) Recommendations

Soil, Drainage, Ventilation & Access

1. Improve drainage in the crawl space.
2. Improve ventilation

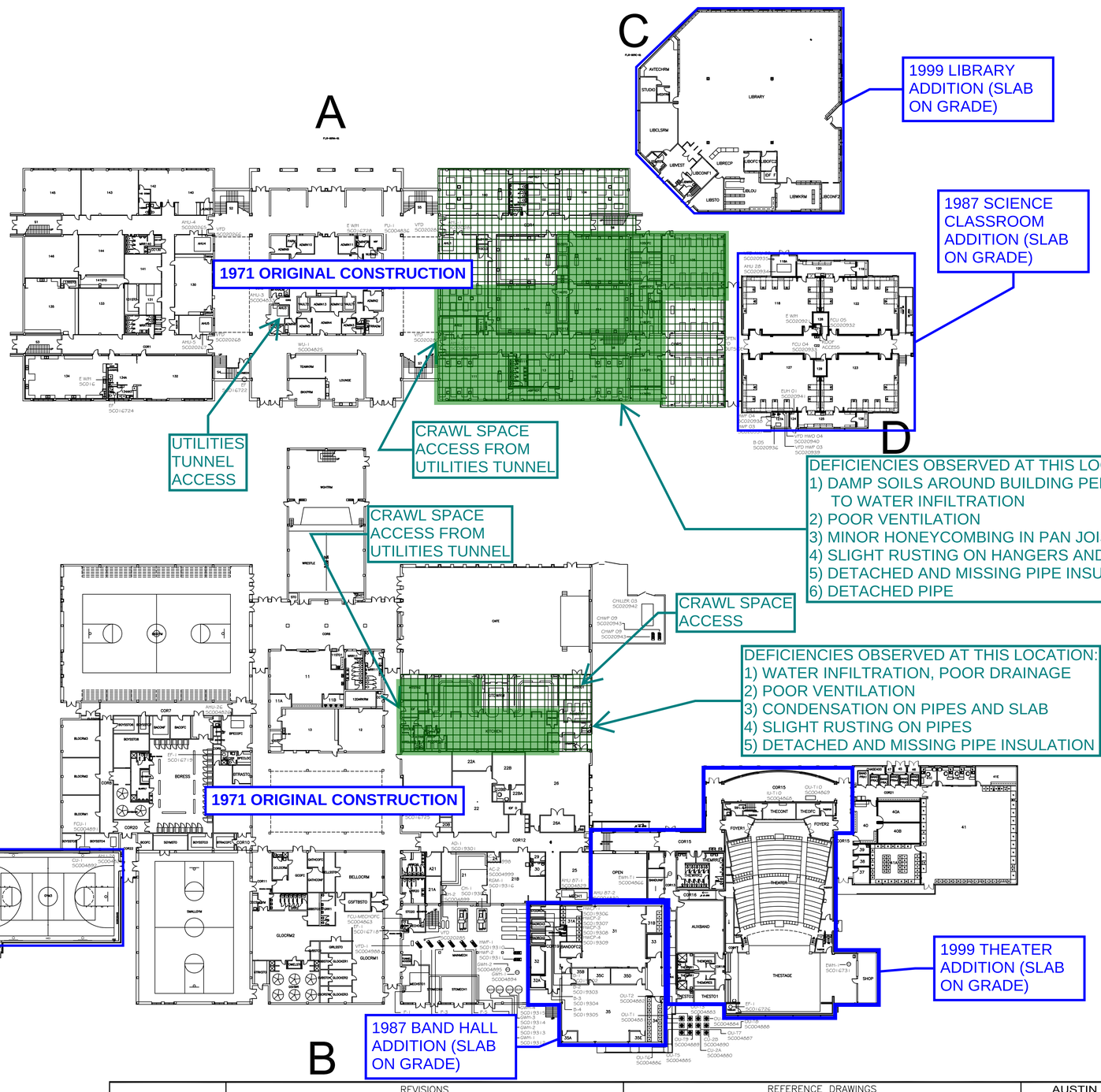
Pipes, Ducts, Equipment & Fireproofing

1. Clean corroded cast iron pipes & protect from further corrosion or replace
2. Replace degraded/moldy pipe insulation

DRAFT

APPROXIMATE LIMITS OF CRAWLSPACE OBSERVED DURING SITE VISIT

APPROXIMATE LIMITS OF CRAWLSPACE PER AVAILABLE PLANS AND SITE OBSERVATIONS



NORTH

REVISIONS				
MARK	DESCRIPTION	BY	DATE	APPR

REFERENCE DRAWINGS

APPROVALS				
	DRAWN	CHECKED	APPROVED	
BY	J.R.			
DATE	10/20/11			

AUSTIN I.S.D.
DEPARTMENT OF CONSTRUCTION MANAGEMENT

ANDERSON HIGH SCHOOL

8403 Mesa Dr. AUSTIN, TX

FLOOR PLAN
FIRST FLOOR

SCALE	SIZE	DRAWING NUMBER	SHEET	REV.
1" = 40'	D	009-01.DWG	1 OF 3	0

Anderson High School Site Summary

Site/Civil Assessment

Address	8403 Mesa Drive Austin, TX 78759
Number of Permanent Campus Facilities	4
Original Year of Construction	1973
Total Campus Area	39 Acres
Data Collection Method	Desktop, Site Visit
Site Visit/Assessor	12/20/2016 / B. Faust

Introduction

The Anderson HS campus is located at 8403 Mesa Drive in Austin, Texas. Anderson HS was established in 1973 and consists of four buildings which include building A as the main building, building B includes the kitchen, cafeteria, gymnasium and theater, building C is the library, and building D is classrooms.

The site includes tennis courts, track and field, baseball, and softball fields.

Revision Log		
Revision	Date	Summary of Content
00	9/27/16	Draft Issue
01	12/13/16	Added comments from Drew Johnson as indicated on email dated 11/30/16 and comments from PM Craig Estes as indicated on email dated 10/31/16. See pages 2-3, 5, and 7.
02	1/6/17	Added comments from Principal Sammi Harrison as indicated on email dated 11/16/16. See pages 2-3 and 6.
03	3/10/17	2nd Draft Issue

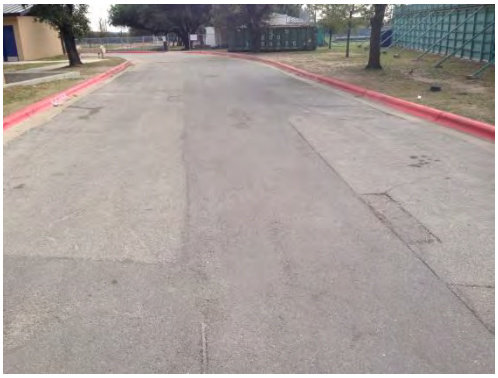
Development Information

Watershed	Shoal Creek
Total Impervious Cover	37%
Allowable Impervious Cover	100%
Barton Spring Recharge Zone	No

"Data from AISD District Wide Impervious Cover Simplified 12-1-16" spreadsheet, Prepared by Fayez Kazi/Civilitude, on December 1, 2016.

Parking and Drives

Parking and Drives	Configuration	Size (SF)
R1, west/drop off/visitor	8 CB 1 HC	13,700
R2, east/service	-	30,050
P1, southwest/student	427 CB 10 HC	180,000
P2, north/staff	105 CB 12 HC	73,000
Student Parking	Yes(P1)	
Parent Drop Off	Yes(R1)	-
Bus Drop-Off Area	Yes(R1)	-
Loading Dock	Yes	450



HC – Accessible Parking, CB – Combined Parking

System Deficiency Overview

The following table provides a summary of the systems and their respective conditions found by each discipline. Refer to the AISD_FCA_Anderson_HS_Site_Civil_Exhibit for additional information.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Site Improvements	Roadways	The roadway in front of the school, R1, is asphalt with concrete curb. This roadway is in poor condition. The asphalt is showing signs of alligator cracking and rutting. There are potholes needing repair. It was reported by the staff that	R1: Poor

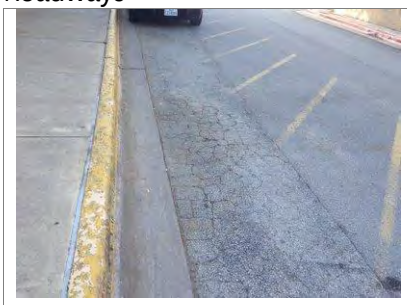
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		the front drive has limited visibility due to street parking. The roadway that is off Cima Serena Drive, north of the track, R2, is in average condition. This asphalt roadway runs along the track to the large student lot near the tennis courts. There are some patches in need of repair. There are various locations of longitudinal cracking. Roadway Deficiencies: · R1 alligator cracking and pothole · Longitudinal cracking and patches in need of repair in R2.	R2: Average Overall: Average
	Parking Lots	There is a large asphalt student parking lot, P1, which is located near the tennis courts. This parking lot is in poor condition. This lot has some large open longitudinal cracks and more severe block cracking and potholes at the entrances. The staff parking on the northern side of the campus, P2, is an asphalt lot containing a group of portables. This parking lot is in average condition. These portables have taken about 80 parking spots as a result P2 has limited parking. There is a portion on the eastside of the lot that has cracked pavement. There is wood that needs to be removed from the trench drain leading to the parking lot exit. Principal Sammi Harrison reported that the parking lots are too small for the students and staff. Parking Lot Deficiencies: · Longitudinal cracking · Block cracking and potholes · Wood to be removed from trench drain	P1: Poor P2: Average Overall: Poor
	Pedestrian Paving	The concrete sidewalks around the school are in average condition. There are various worn path locations around and between buildings. The sidewalk in between P2 and Cima Serena Dr. has areas of heaving due to tree roots. The same sidewalk is sunk in around the curb inlet located adjacent to the parking lot exit. On the south side of P2, there is a concrete ramp that is cracked where it meets the asphalt. There is a set of stairs next to a loading area on the northeast side of the school that has a broken handrail. Pedestrian Paving Deficiencies: · Worn path · Uneven concrete sidewalk · Cracked concrete ramp · Broken handrail	Average
	Site Development	The site development is in poor condition. The door to the Performing Arts Center does not shut completely on its own and is often left open. It was reported that the door on the northwest side of the campus has a gap at the	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		bottom, which allows water to get into the building. On the southeast side of the school near the corner of the P1 lot, the door to the storage area is bent and damaged. PM Craig Estes reported the site drainage issue at the front of the new Applied Technology Building is currently being addressed with new inlets and storm drainage lines. Site Development Deficiencies: · Door doesn't shut completely · Gap under door, allows water into building · Damaged door	
	Site Drainage	The site drainage is in average condition. There is an area up against Building A adjacent to the student parking lot that has sand bags placed to prevent water from entering the side of the building. The downspouts do not tie into an underground system. Site Drainage Deficiencies: · Water into building · Downspouts do not tie into an underground system.	Average
	Courtyards	The courtyards are in poor condition. There are areas with drainage issues in the two large courtyards that have turf. It was reported that when it rains, water sits underneath the turf causing it to float. In addition to the drainage issues in the courtyards, a crawlspace lid was observed to be broken into. There is a grate in the southern large courtyard that is covered with stone pieces. In the same courtyard, there is broken brick on the ledge of a wall. Two smaller courtyards are located between the front buildings. The one that is to the left of the main entrance has a drain that is blocked with mesh and the one to the right needs cleaning. Courtyard Deficiencies: · Water under turf · Crawl space lid broken · Covered grate · Broken brick on ledge of wall · Drain blocked with mesh · Clean small courtyard	Poor
	Landscaping	There are some overgrown bushes and vines growing up the side of the building into the gutters and onto the roof. The landscaping is in average condition. The fields are irrigated manually. They have had issues where a leak prevents other areas from getting watered. There is a broken lid to irrigation in the front of the school near the entrance of R1. Landscaping Deficiencies:	Average

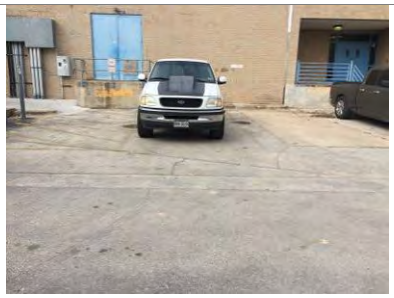
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		· Overgrown vines · Irrigation system issues. · Broken lid	
Site Utilities	Water Supply	A water valve, near the R1 drop off entrance, leaks and has rusted so the wheel cannot move. The water supply system is in average condition. Water Supply Deficiencies: · Rusted water valve	Average
	Sanitary Sewer	Did not locate the Fiberglass Grease Sampling Enclosure.	Good
	Storm Sewer	There is an underground drainage system that collects storm water via area inlets or curbs inlets. The storm sewer system is in average condition. It was reported by AISD Construction Management that storm water drainage into the 100-wing was fixed in 2015. Principal Sammi Harrison reported that there is poor water drainage at the gymnasium and the athletic corridor entrance. Water leaks into the gymnasium during heavy rains.	Average
	Detention Pond	There is detention in the northeast corner of the property with a collapsed grate. Also, there is detention at the southeast side of the tennis courts and the outlet needs debris cleared. The detention ponds are in average condition. Detention Pond Deficiencies: · Outfall grate collapsed · Outlet needs cleaning out	Average
	Other Site Mech Utilities	System not present.	N/A

Site Improvement Deficiency Examples

Roadways



R1 asphalt cracking



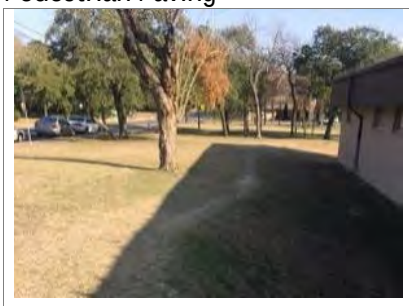
R2 utility trench patches

R1 alligator cracking

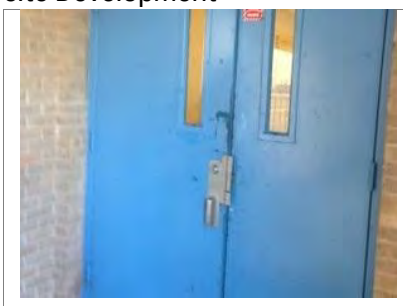
Parking Lots

		
Longitudinal cracking P1	Potholes/cracking P1 entrance	P2 lot cracking

Pedestrian Paving

		
Worn path	Storm drain curb inlet at P2	Cracked concrete ramp

Site Development

		
Door doesn't shut	Gap at the bottom of door	Damaged door

Site Drainage

		
Sandbags along wall where water goes in	Downspouts do not tie to underdrain	Downspouts do not tie to underdrain

Courtyard

		
Locks broken on crawlspace lid	Stones covering drain	Brick wall broken

Landscaping

	
Overgrown vines	Broken lid

Site Utilities Deficiency Examples

Water Supply


Rusted water valve

Detention Pond

Outfall grate collapsed

Play Fields

Areas presented in table are approximate.

Playfields	Count	Size (SF)
Basketball Courts	1	2,300
Tennis Courts	8	56,000
Soccer/Multi-Purpose Field	1	100,000
Baseball/ Softball Field	1 1	108,000 37,000
Bleacher Seating	N/A	-
Track	1	400 m
Green Space	N/A	-
Football Field	N/A	-
Playscapes	N/A	-

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Playfields	Basketball Courts	The basketball court is concrete and is in average condition. Rims and backboards are rusted and need to be replaced. There are some locations minor cracks throughout the court. Basketball Court Deficiencies: · Deteriorated rims and backboards · Minor cracks	Average
	Tennis Courts	There are eight tennis courts and an extra area for practice. There is just minor cracking and seems to have been repainted recently. There is spalling at the base of the fence posts. Also there is an area where the concrete has exposed rebar just outside the fence. The tennis courts are in average condition. Tennis Court Deficiencies: · Spalling at fence post base · Exposed rebar	Average
	Soccer/Football Field	The field within the track does not have adequate lighting. There is no potable water on the field, so the teams use coolers to supply drinking water. A shed at the south end of the field has holes in the roof. It was reported that there is no convenient access for emergency vehicles or trainers to access the sports fields.	Poor

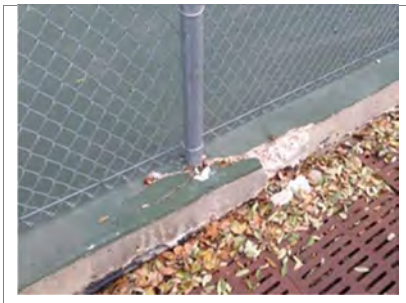
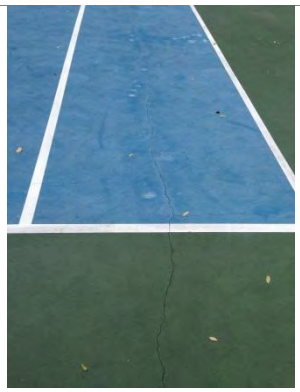
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Principal Sammi Harrison reported that the football field has several dirt areas throughout the field. The field condition was also reported to cause injuries. Soccer/Football Field Deficiencies: · No adequate lighting · No potable drinking water · No emergency vehicle/ trainer access · Holes in roof of shed	
	Baseball/Softball Field	The baseball field is in good condition. The grass is well maintained. The dugout benches could not be seen for proper assessment. The softball field is in poor condition. The dugout benches had vegetation and loose gravel at the base. There are two locations on the fence that are broken. Baseball/Softball Field Deficiencies: · Vegetation and debris in dugout · Broken fence	Baseball: Good Softball: Poor Overall: Good
	Track	The track surface is in good condition. It was reported by AISD Construction Management that the track was replaced in 2015.	Good

Playfield Deficiency Examples

Basketball Court

Deteriorated rim and backboard

Tennis Courts

		
Spalling at fence post base	Exposed rebar	Minor cracking

Soccer Field/Multi-Purpose Field


Holes in roof of shed

Baseball/Softball Field

	
Vegetation and debris in dugout	Broken fence in outfield

Summary of Recommendations

This document is based on information provided by staff during interview, site visit and additional desktop measurements using Google Earth. This document provides recommendations for corrective actions. The following recommendations provide a summary of the findings.

Site/Civil Recommendations

Roadways

1. Patch and repair cracking/potholes then mill and overlay.
2. Repair patches for utilities.

Parking Lots

1. Patch and repair prior to mill and overlay.
2. Remove wood pieces from drain.

Pedestrian Paving

1. Add sidewalk in locations where path is worn by student traffic.
2. Fix uneven concrete from tree root.
3. Repair concrete ramp.
4. Replace broken handrail.

Site Development

1. Repair door to shut correctly.
2. Repair concrete under door.
3. Replace damaged door.

Site Drainage

1. Find solution for water collecting under turf.
2. Regrade along building to keep water away from the building.

Courtyard

1. Crawlspace needs more secure lock.
2. Find better solution for rocks covering grate.
3. Repair brick on the wall ledge.
4. Replace inlet grate
5. Clean courtyard

Landscape

1. Cut back or determine if vines need to be removed.
2. Irrigation system could be more useful if zoned.

Water Supply

1. Fix/replace rusted water valve.
2. Replace broken lid to irrigation box.
3. Address irrigation system issue

Sanitary Sewer

1. Install Fiberglass Grease Sampling Enclosure if not located.

Storm Sewer

1. Confirm updates to the storm sewer infrastructure and grading from 2015 have solved flooding issues previously reported.

Detention Pond

1. Fix or replace collapsed outfall grate.
2. Outlet needs to be cleaned out.

Basketball Courts

1. Replace rims and backboards
2. Seal minor cracks

Tennis Courts

1. Repair spalling concrete at fence post bases.
2. Patch exposed rebar in concrete.

Soccer/Football Field

1. Add lighting to field.
2. Find solution for bringing potable water to the field for athletes.
3. Put in a proper entrance for emergency and trainer vehicles
4. Repair shed roofing.

Baseball/Softball Field

1. Clean out vegetation and debris in dugout.
2. Fix broken fence locations around perimeter.

DRAFT

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0 25 50 100 150
Feet

Legend

- (1) Recommended Improvements
- Drainage Improvement
- Pavement Improvement
- Sidewalk Improvement

NOTES:

1. STUDENT LOT P1WITH SEVERE CRACKING, POTHOLES NEED REPAIR AND LOT NEEDS RESURFACING
2. UTILITY TRENCH PATCHES R2
3. FRONT DROP OFF R1, ALLIGATOR CRACKING
4. UTILITY TRENCH NEEDS WOOD PIECES CLEANED OUT
5. ADD SIDEWALK
6. CONCRETE SIDEWALK REPAIR
7. HANDRAIL NEEDED
8. RUSTED WATER VALVE
9. BROKEN HAND RAIL
10. TURF IN COURTYARD FLOATS
11. SANDBAGS, WATER GOES INTO THE BUILDING
12. TRENCH NEEDS BACKFILL
13. OUTLET OF DETENTION POND NEEDS CLEAN OUT
14. TENNIS COURT, SPALLING AT FENCE POSTS
15. EXPOSED REBAR IN CONCRETE
16. NOT ADEQUATE LIGHTING ON FIELD, NO POTABLE DRINKING WATER
17. HOLES IN ROOF OF SOCCER SHED
18. MESH COVERED DRAIN AND NEEDS CLEANING
19. COLLAPSED GRATE AT OUTFALL
20. DOOR DOESN'T SHUT COMPLETELY
21. GAP UNDER DOOR
22. DOOR TO STORAGE ROOM DAMAGED
23. LIMITED VISIBILITY DUE TO STREET PARKING
24. BROKEN FENCE IN SOFTBALL OUTFIELD
25. DEBRIS IN DUGOUTS
26. LOCATION OF FUTURE SOCCER FIELD
27. GATE BROKEN
28. LOCATION OF FUTURE SOFTBALL FIELD.

Map Date: 2/22/2017

Imagery Source: Google/TNRIS 2016.

AUSTIN Independent School District

AECOM

Anderson HS
8403 Mesa Dr