

Crockett High School Site Summary

Address	5601 Manchaca Road Austin, TX 78745
Number of Permanent Campus Facilities	2
Original Year of Construction	1969
Total Campus Building Area (combined)	336,603 SF



Introduction

The Crockett High School campus is located at 5601 Manchaca Road in Austin, Texas. Crockett High School was established in 1969, and consists of the primary school along with one additional campus building. These permanent campus buildings include the Main School Building (BLDG-008A), and the Theater (BLDG-008B). The Theater Building was built in 1988. The buildings are connected to one another by exterior, covered concrete sidewalks. The Main School Building was undergoing HVAC (heating, ventilation and air conditioning) renovations during the time of the assessment. Annual maintenance on flooring was also being performed.

Main School Building – BLDG-008A

Building Purpose	Administration Offices, Classrooms, Cafeteria, and Gymnasium	
Building Area	323,738 SF	
Inspection Date	August 9-11, 2016	
Inspection Conditions	100°F - 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	<p>The exterior walls are brick with horizontal and vertical accents of concrete.</p> <p>The exterior walls were in good condition with several observed deficiencies. There were instances of staining and organic growth on the sides of walls, specifically along the base. There was minor staining on the concrete at the top of the building where water flows from the roof. There were cracks in the concrete flooring under the covered walkways. Chipped paint and spalling was observed on several of the concrete columns in the covered walkways.</p>	Good
	Exterior Windows	<p>The exterior windows are single-pane glazing and acrylic, varying throughout the school. The windows along the outer perimeter have plastic panel infill on the bottom portion, metal mesh behind acrylic on the middle portion, and acrylic as the top portion.</p> <p>The windows were in average condition. A window in a courtyard stairwell had a hole and missing weatherstripping. There was a broken pane and several panes with scratched surfaces. It was reported that the gym lobby windows were cracked and in poor condition.</p>	Average
	Exterior Doors	<p>The exterior doors are primarily metal with metal frames. One of the main entry doors was ADA (Americans with Disabilities Act) accessible with a push button to open the door.</p> <p>The exterior doors were in average condition showing</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		typical wear and tear. An exterior overhead door on the southwest wall had deteriorated weather-stripping. A metal overhead door along the southwest wall was aged past its typical design service life and difficult to operate. There was significant wear and tear to the door paint on the doors separating the covered walkway and the interior portions of the building. Chipped paint was observed on the metal framing of a storefront entryway. It was reported that there was a gap in the roll-up door at the kitchen and pests were able to access the building.	
Roofing		The roof material covering the building varies between modified bitumen, built-up asphalt with a granular topping, and metal standing seam roof deck. There is also a covered walkway through the courtyard with a corrugated metal roof. The roof surfaces were observed to be in average condition with some staining, moderate cracking, and isolated areas of blistering and rust. The majority of the roof is covered with modified bitumen, which is stained and slightly cracked over large portions of the roof. Some areas of the modified bitumen, particularly in roof sections A-04 and A-08, were observed to be severely blistered over small areas. The standing seam metal roof over roof section A-33 appeared to be in good condition. The corrugated metal roof deck covering the courtyard walkway was observed to be rusted in some areas. In addition, facility occupants reported that the roof leaks at some expansion joints, at the STOMECH2 room, and above the serving line in the cafeteria.	Average
Interior Construction	Interior Walls	The interior partitions of the building are predominately constructed of CMU (concrete masonry unit) and gypsum wallboard. In addition, fully-glazed walls, brick walls, and moveable partitions were observed. The interior partitions appeared to be in average condition throughout the building. Some small holes were observed, specifically in the CMU walls.	Average
	Interior Doors	The vast majority of interior doors are wood with a metal frame. Some of the wood doors have glass view windows, metal louver panels, and/or metal kick plates. Some painted metal doors were also observed. There were two overhead doors in the cafeteria. There are pocketed steel gates in the corridors. The interior doors and frames were observed to be in average condition given the age of the system and typical signs of wear and use. The overhead doors were in good condition, but showed minor rusting at the base. The pocketed steel gates were recessed at the time of assessment, but the tracks were observed to be in average condition with minor rusting.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Specialties	<p>Painted metal lockers line many of the school's corridors, both inside the building and outside within the covered walkways.</p> <p>The lockers were aged, but most appeared to be in average condition. However, the insides of some lockers were unclean, approximately one third had chipped paint, a locker door was missing, and several of the locks were broken.</p>	Average
Stairs	Exterior Stairs	<p>Several concrete exterior stairs were observed. Stairs within the courtyard space have a red cementitious topping, metal handrails, and metal nosing strip. Stairs along the perimeter of the building are unfinished concrete with painted metal handrails.</p> <p>The stairs were in average condition with several deficiencies observed. The paint on the handrails of the perimeter stairs was peeling. The concrete stairs leading to a utility room is stained, unclean, and rusting.</p>	Average
	Interior Stairs	<p>Several different types of interior stairs were observed. The larger, monumental stairs in main occupant flow areas are concrete with metal nosing strips and metal hand rails. These stairs are similar to the exterior stairs, but do not have the red cementitious topping. Stairs in side corridors are metal pan stairs with VCT (vinyl composite tile), metal nosing guards, and metal hand rails. There is a concrete stairwell in the auto shop with metal railings. Small stairs on grade were also observed, with a rubber covering and metal handrails.</p> <p>The interior stairs were in average condition. Some delamination of the VCT was observed at one interior stair.</p>	Average
Interior Finishes	Interior Wall Finishes	<p>CMU walls and gypsum wallboard walls are primarily painted, while some wallpaper was also observed. Several of the classrooms and corridors have a painted plastic panel attached to the face of the wall. Wood paneling is also present in some rooms, particularly in the administration wing, and ceramic tile lines the walls in most restrooms.</p> <p>The interior wall finishes were in average condition. Some paint was chipped on various walls, and some wood paneling was observed to have wear and discoloration consistent with the age of the building.</p>	Average
	Interior Floor Finishes	Interior floor finishes consist of VCT in most corridors and classrooms, carpet in most offices, and ceramic tile in restrooms and the kitchen. Walls have a rubber baseboard.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The floor finishes were in average condition. There were instances of carpet stains, torn and damaged carpeting, stained VCT, loose rubber baseboards, and missing rubber baseboards. The cafeteria VCT had divots covering a majority of the flooring. Facility staff reported loose floor tiles in the auto shop, cracked ceramic tile in the kitchen, and cracks in the floor of the MRRGYM room.	
	Interior Ceiling Finishes	<p>The majority of the interior spaces are finished with ACT (acoustic ceiling tile). The restrooms are finished with gypsum board. The janitorial closets do not have a drop ceiling, and are open to the structure above. Rooms 13 and 19 were observed to have no drop ceilings, and were open to the structure above.</p> <p>The interior ceiling system was observed to be in average condition showing signs of age and deterioration. The ACT was observed to be stained and buckling in some areas. More staining was observed in the administration wing than in the classrooms.</p> <p>During the time of the assessment, mechanical equipment was being installed. As a result, several ceiling tiles had been removed in various places within the building. In the library, many ceiling tiles were missing, the ceiling support grid was damaged, and one tile was hanging down from a piece of electrical conduit.</p> <p>Facility occupants reported that the locker rooms have a deficient ceiling and that the ceiling grid is in poor condition near the band hall.</p>	Average
Conveying	The building is equipped with a hydraulic passenger elevator to service two levels. This elevator was observed to be in good condition and no operational issues were reported by the facility staff. Access to the elevator machine room was not possible due to floor waxing.		
Plumbing	Plumbing Fixtures	<p>The building has public restrooms for men and women, students, and separate staff restrooms located throughout the facility. These restrooms have a variety of lavatories including stainless and vitreous china sinks in counters with manual faucets, as well as molded lavatory units with sensor style faucets. There are vitreous china, floor-set toilets with manual flush valves, and vitreous china, wall-hung urinals in the men's restrooms with manual flush valves.</p> <p>The male and female locker rooms consist of group showers, individual showers, floor set water closets with manual flush valves, a trough style urinal in the male locker room, and vitreous china lavatories. P-trap style</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>service sinks are found in the janitorial closets.</p> <p>There are single-level electric water coolers located throughout the facility, typically near the public restrooms. There are wall-hung vitreous china hand sinks and faucets in the kitchen.</p> <p>The restroom plumbing fixtures were observed to be in poor condition, as the fixtures were typically aged beyond their typical design service life though still operational. Some of the manual faucets had extremely low flow and pressure. Several flush valves were temperamental when operating, requiring multiple flushes to properly function.</p> <p>The group shower Bradley shower pole units are out of date and replacement parts can no longer be ordered. The thermostatic mixing valves, which supply the tempered water to the showers, are failing. One mixing valve in the male locker room has been replaced, but there is one more in the male locker room and two in the female locker room that have not been. The remaining plumbing fixtures in the locker rooms have exceeded their typical design service life. Many of the fixtures have parts that are failing.</p> <p>P-trap style raised sinks make it difficult to empty buckets by staff and can result in physical harm, as well as spilled water on the floors.</p> <p>The electric water coolers were in good condition.</p> <p>The kitchen equipment appeared to be well maintained. The wall-hung vitreous china hand sinks and faucets were aged and in poor condition.</p>	
	Domestic Water Distribution	<p>All of the plumbing fixtures are serviced with hot water from multiple GWHs or EWHs (gas or electric water heaters) that are located throughout the building. The waters heaters serving the locker rooms, the kitchen, and the home economics and cosmetology classrooms are located in a cellar mechanical room below the kitchen. The locker rooms' water heating system consists of a Raypak hot water boiler and an approximately 500-gallon storage tank. The kitchen water heating system consists of five RBI hot water boilers. There are two additional water heaters. One is located in room 140 and the other is located in room 121.</p> <p>The plumbing distribution equipment was observed to be in average condition due to observed deficiencies and the age of some of the system components. The</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		75-gallon gas-fired water heater serving the home economics and cosmetology classrooms showed signs of corrosion and rust. The Raypak hot water boiler reportedly takes 30 minutes to deliver hot water to the locker rooms. Most likely, this is due to undersized or poor hot water recirculating system. The kitchen water heating system was in good condition with the exception of one (B-3) that had some corrosion and rust along the bottom and was in average condition. Water heaters in rooms 140 and 121 were nonfunctioning. This was believed to be due to pressure fluctuation and lack of pressure regulating or relief valves. The water heaters also showed signs of corrosion.	
	Other Plumbing System	<p>There are roof and floor drains present in the building. The storm drainage system was in poor condition. Debris was observed in many of the roof drain bodies. Storm drain system blockages have been reported by maintenance staff. The roof drain domes were not secured or set onto the drains properly. There were some drain domes removed to allow RTU (roof top unit) condensate to spill into them which also allows debris to collect into the system causes blockages.</p> <p>Maintenance staff reported exterior storm drainpipe and roof drainage pipe blockage due to collapsed pipes near and around the auto shop areas. This caused flooding in the auto shop areas, as rainwater backed up through the floor drains and required the maintenance staff to utilize a portable pump to remove the water from the system and area.</p> <p>Central courtyard drainage was reported as undersized and to cause backups in ground level mechanical room floor drains when it rains. The mechanical room floor drains surrounding the courtyard had been plugged and the AHU (air handling unit) condensate was pumped to utility sinks.</p> <p>Some of the kitchen floor drain grates were loose and some were damaged. The damaged grates had parts protruding upwards causing a tripping hazard.</p>	Poor
Mechanical/HVAC		<p>The major mechanical equipment consists of modular AHUs and RTUs located primarily on the roof or in mechanical spaces inside the school, boilers, chillers, and cooling towers. These serve the HVAC (heating, ventilating, and air conditioning) system throughout the building.</p> <p>There are 44 AHUs located on the roof or inside mechanical rooms. Fifteen AHUs are located on the roof and the other 29 AHUs are located throughout the interior of the facility. These AHUs serve different zone locations throughout the facility.</p> <p>The roof has 12 newer AHUs. These were either installed in the past several</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>years or are currently being installed and have no visible issues. The AHU's that are older are AHU-1, AHU-2, and RTU-MDF-2.</p> <p>There are four mezzanine level AHUs, AHU-18, -19, -23 and -24. These were not accessible at the time of the assessment. Based on the equipment information provided prior to the assessment, AHU-23 and 24 had been recently replaced. Maintenance staff indicated AHU-19 was recently refurbished.</p> <p>The second floor has seven AHUs. Four of the AHUs were new and in the process of being installed. AUH-8, AUH-10, and AUH-31 had reached the end of their typical design service life.</p> <p>The first floor has 11 AHUs. Ten of the AHUs showed signs of age, and corrosion or rust and were at the end of their typical design service life. AHU-6 was new and in the process of being installed.</p> <p>The ground floor has seven AHUs. AHU-21 and AHU-25 were new and installation needs to be completed. FCU's FCU1 and FCU2 were installed within the last several years and were in good condition. AHU-20, AHU-28, and AHU-29 were in average condition but were reaching the end of their typical design service life. Leaks, corrosion, and rust were observed.</p> <p>The AHUs were observed to be in either excellent condition due to being new or average condition with the most typical deficiency being corrosion on the housing enclosure and/or the piping associated with the AHU. Additional deficiencies observed include general aging of the equipment, several with excessive noise and vibration and several leaks. Out of the 44 AHUs, 23 were new or were recently replaced. The three chillers were original to the building and were in average condition. Corrosion and rust, as well as leakage were noted at the system. The system pumps all showed sign of wear with evidence of leaks.</p> <p>Cooling tower CT-2 was rebuilt approximately two years ago. Cooling tower CT-1 was in the process of being rebuilt during the time of the assessment. They were not accessible beyond viewing from ground level. There was minor surface rust on the piping. The two cooling towers were in good condition.</p> <p>The hot water boiler system was installed in 2000 and was in good condition. The system consists of four 1,950,000 BTUH RBI boilers and one 1,250,000 BTUH RBI boiler. Boiler B-3 was the only boiler that showed signs wear with rust and corrosion along the bottom.</p> <p>The roof top condensing units CON-1 and CON-2 are located above the kitchen area and are believed to be serving the kitchen walk-in refrigerator and freezer. They were nearing the end of their typical design service life.</p> <p>Supplemental mechanical equipment for the HVAC system also includes EFs (exhaust fans). Roof top EFs were observed to be original to the building and in average condition based on their age. Many were observed with excessive noise and vibration.</p> <p>Based on the amount of new equipment installed relative to the older existing equipment and systems that are nearing the end of their typical design service life, the HVAC system was in average condition.</p>	

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Fire Protection	Fire Alarm	<p>The building has a fire alarm system that consists of alarm and signaling devices such as horns, strobes, horn and strobe combination devices pull stations, and smoke detectors. The fire alarm system is controlled by a Silent Knight control panel.</p> <p>The fire alarm system was observed to be in good condition. The faculty reported no fire alarm system deficiencies.</p>	Good
	Fire Protection/ Suppression	<p>The majority of the building is not protected by a fire suppression system. This portion of the building is protected by portable fire extinguishers. An automatic wet pipe sprinkler system protects the auto shop areas. The kitchen exhaust hood is equipped with a Badger Range Guard system.</p> <p>The auto shop sprinkler system was installed in 2007 as indicated on the hydraulic information tag on the system valve. This system appeared to be in good condition with no deficiencies observed or reported by the maintenance staff.</p> <p>There was no evidence of inspections or testing of the kitchen hood suppression system, which would ensure the system, is operating properly.</p> <p>Although the fire extinguishers were up to date on inspections, the fire extinguishers that were located in the mechanical rooms were not mounted to the walls. There fire extinguishers were observed to be sitting on the floors, behind equipment and storage, and on mechanical equipment.</p>	Average
Electrical	Electrical Distribution	<p>The electrical service enters the building at 480 volts from a utility transformer into the main electrical room. The service entrance equipment in this room is a 480/277-volt, 2000-amp main, 3-phase switchboard. The utility transformer is located in the yard next to the main mechanical and electrical rooms. There are two power factor correctors in a nearby electrical room which appeared to be in good condition. The service entrance switchboard feeds downstream distribution equipment including switchboards, transformers, and panelboards located in mechanical and electrical rooms throughout the building. It appeared that the service switchboard was installed during a renovation and back-feeds equipment which once was original service gear, so the age of the electrical equipment varies. There are distribution transformers rated at 480-volt primary that step-down to 208/120-volt secondary feeds power to 208/120-volt panel boards. Branch panelboards are</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>typically located in mechanical or electrical rooms to serve general purpose circuits and utilization equipment.</p> <p>Much of the electrical distribution equipment was observed to have exceeded its typical design service life of 20-25 years and was found to be unclean with signs of rust and corrosion. Several items were installed in 2007 and were observed to be in good condition. Several distribution equipment items, particularly transformers, were missing enclosure screws and had handwritten warning signs acknowledging housing issues with the equipment. Some of the panelboards were unable to close due to faulty latches. This condition reduced the integrity of the enclosure, particularly in the event of an arc flash, which is a safety concern. The electrical room located adjacent to the choir room was inaccessible due to storage of non-electrical items; the NEC (National Electric Code) working clearance for all equipment in this space is violated by storage of materials.</p> <p>A generator is located in room STOMECH1 which serves two ATSs (automatic transfer switches) located in the main electrical room. The generator was missing its nameplate and was found to have rust along the base. Both automatic transfer switches are rated at 150A, are located in the main electrical room, and are in excellent condition having been installed in 2007. The size of the ATS's suggests that the generator is only serving life safety and critical loads; this survey could not validate the type of loads that are connected to the generator. The facility is also equipped with a portable generator connection point and a manual transfer switch.</p> <p>Facility staff reported frequent brown and black outs as well as overloaded and tripping circuit breakers in the kitchen panel and the breaker serving room 230.</p> <p>No modern grounding equipment was observed in the facility. In addition, no lighting protection was observed.</p>	
	Lighting	The interior lighting consists of primarily recessed T8 fluorescent lensed troffers. Second floor spaces also contained open recessed down-lighting with compact fluorescent retrofit lamps. The lighting in the courtyards consists of surface mounted HID (high-intensity discharge) fixtures. The majority of interior lighting fixtures appeared to be original to their associated construction period with the only upgrades being the	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>use of retrofitted T8 and compact fluorescent lamps. The fixture lenses throughout were found to be discolored resulting in diminished light levels. In addition, some lenses were found to be cracked or missing and lamps with noticeably different color temperatures have been utilized. The fixture spacing in the classrooms provides adequate lighting levels; however, the lighting in the interconnecting courtyards which serve as corridor connections for the students is insufficient. The facility staff reported that the courtyard lighting is a persistent maintenance issue. Numerous non-functional lighting fixtures were observed throughout as well as exposed wiring in the ceilings and switch locations of the library, several classrooms, and storage rooms.</p> <p>The building's exterior lighting consists of wall-mounted area lighting. The older fixtures are HID; however, some locations have been retrofitted with LED (light-emitting diode) fixtures. Limited lighting has been installed at the building entrances, so emergency egress lighting is insufficient at these locations. Facility staff reported that the lighting levels at the loading dock and gymnasium entrance are insufficient and not functioning properly.</p> <p>A limited number of exit signs were located in the facility. Those present were in good condition; however, the quantity and location did not meet life safety requirements. Emergency lighting wall packs were observed in the courtyards. The spacing of the fixtures was not consistent and did not appear to meet life safety requirements. No battery powered emergency lighting was observed in the remaining portions of the facility. It is assumed that those areas have emergency lighting powered from the generator.</p>	
	Communications & Security	<p>The telephone system is a POTS (plain old telephone system) with handsets located primarily in offices; the facility staff reports that the system functions well. No classrooms to office communications systems were observed. Wi-Fi networking is present in each classroom and the staff reports that it also functions well. The telecommunications service entrance was not observed during the survey due to limited access to portions of the building.</p> <p>A Gemini security system serves the facility. The system consists of CCTV (closed circuit television) cameras and access control devices at most of the main entry points to the building. Access control devices</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		consisted of both proximity card readers as well as keypads. The entry to the kitchen also had access control devices with the addition of a silent alarm. CCTV cameras are typically located around the exterior perimeter of the building with select cameras covering the interior corridors. The facility staff reported that the security system functions well; however, access control was not present at room 170 double doors.	

Exterior System Deficiency Examples

Exterior Walls



Exterior Windows



Exterior Doors





Roofing Deficiency Examples



Interior Construction Deficiency Examples

Interior Walls



Interior Doors**Interior Specialties****Stair Deficiency Examples****Interior Stairs****Exterior Stairs**

Interior Finishes Deficiency Examples

Interior Wall Finishes



Interior Floor Finishes



Interior Ceiling Finishes



Plumbing System Deficiency Examples

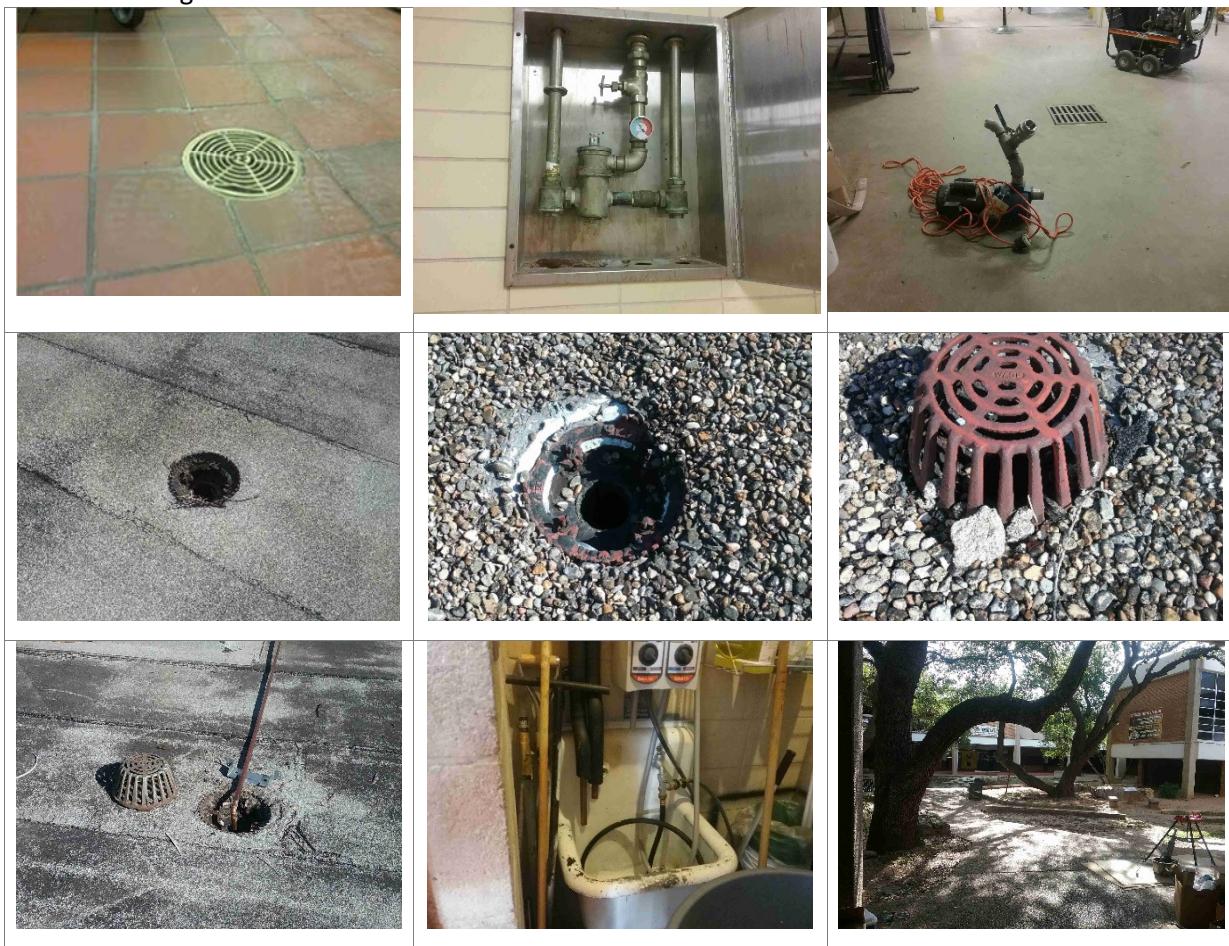
Plumbing Fixtures



Domestic Water Distribution



Other Plumbing



Mechanical/HVAC System Deficiency Examples





Fire Protection System Deficiency Examples

Fire Protection/Suppression



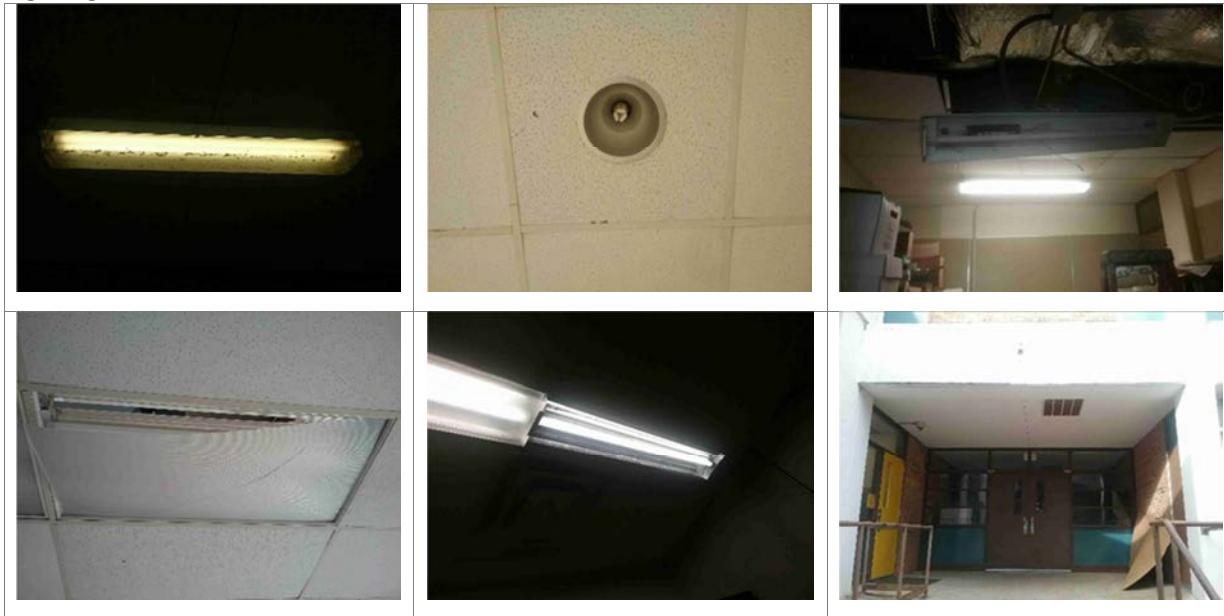
Electrical System Deficiency Examples

Electrical Distribution





Lighting



Theater Building – BLDG-008B

Building Purpose	Theater	
Building Area	12,865 SF	
Inspection Date	August 10-11, 2016	
Inspection Conditions	100°F - 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 walls are brick with horizontal and vertical concrete panels. There are two panels of storefront glazing with metal framing on the southwest wall. The exterior walls were in good condition with few instances of deterioration. There was minor spalling on the foundation wall. Staining was observed on the brick at the base of the building.	Good
	Exterior Windows	The single exterior window is a ticket pass-through in the box office room at the entry to the Theater building. It is surrounded by a metal frame. The window was in good condition.	Good
	Exterior Doors	The exterior doors are primarily metal with metal frames. The exterior doors were in good condition.	Good
Roofing		The roofing system was modified bitumen. There are two metal canopies covers the north west entry. The metal canopies were in good condition. The roof was in good condition. There were no reported or observed deficiencies at the time of the assessment.	Good
Interior Construction	Interior Walls	The interior walls are primarily gypsum board. The perimeter walls are CMU. The entry lobby northeast wall is split-faced CMU. The walls were in good condition.	Good
	Interior Doors	The interior doors primarily consist of wood doors with metal frames. The doors were in good condition. One of the doors had been vandalized with profane carvings.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Specialties	<p>There are painted metal lockers present in the male and female dressing rooms. They did not appear to be heavily used, as they were blocked by boxes and furniture.</p> <p>The lockers appeared to be in good condition.</p>	Good
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	<p>The interior stairs were finished in VCT and had metal non-slip nosing plates.</p> <p>The stairs were in good condition.</p>	Good
Interior Finishes	Interior Wall Finishes	<p>The interior walls primarily have a painted finish. The theater contains a variety of finishes including painted CMU, unpainted brick, wood panels, and acoustic sound panels. All restrooms are finished with ceramic tile.</p> <p>The interior walls were in good condition. Graffiti was observed in the restroom of the male dressing room. There was cracked and peeling paint in the mechanical room.</p>	Good
	Interior Floor Finishes	<p>The flooring of the lobby and second floor consist of VCT and rubber wall base. All restrooms have a ceramic tile floor and base. The janitorial closet has unfinished concrete flooring and a rubber base. The theater contains carpeted aisles, a wood stage, and VCT under the seating. The dressing rooms contain VCT flooring. The rooms on the northeast side of the building have unfinished concrete flooring.</p> <p>The flooring was in good condition. Renovations took place in the summer of 2016; therefore, the flooring condition in the entry lobby space was excellent.</p> <p>The VCT under the first row of seating in the theater was severely scratched. Discoloration and staining was observed on VCT. There was one instance of a loose rubber base.</p>	Good
	Interior Ceiling Finishes	<p>The ceiling of the lobby, restrooms, and second floor consist of ACT as do the corridors and dressing rooms of the theater. The ceiling of the theater is painted gypsum board.</p> <p>The classrooms on the northeast side of the building have ceilings open to the structure above.</p> <p>The ceilings were in good condition with few instances of staining observed.</p>	Good
Conveying	The building is equipped with a hydraulic passenger elevator to service two levels. The elevator was noted as having a maximum weight capacity of 2,100-pounds. This elevator was observed to be in good condition as a recent inspection		Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating	
		certificate issued within the last year, as required, was visible and no operational issues were reported by the facility staff.		
Plumbing	Plumbing Fixtures	The building has public restrooms for men and women, and students located off the main entrance and lobby area of the theater. There are also two small restrooms behind the stage in the support area. The restrooms have vitreous china hand sinks in counters with automatic faucets, along with vitreous china, floor-set toilets with manual flushing mechanisms, and vitreous china, wall-hung urinals in the men's restroom with manual flushing mechanisms. There is a floor set service sink in the janitorial closet, and electric water cooler located in the main lobby area, near the public restrooms. The plumbing fixtures were observed to be in good condition.	Good	
	Domestic Water Distribution	All of the plumbing fixtures are served by EWHs. The EWHs are located near the restrooms which they serve and are in good condition and well maintained.	Good	
	Other Plumbing	The roof drains and interior drainage system were observed to be in good condition.	Good	
Mechanical/HVAC	<p>The major mechanical equipment consists of indoor modular AHUs located in mezzanine level mechanical rooms and one on the roof. AHU-T1 which is located in the mezzanine level mechanical room above the lobby restrooms and accessed via a stair is in average condition. The motor and belt were being replaced during the assessment. AHU-T2 and AHU-T3 are located in mezzanine mechanical rooms adjacent to the stage area and accessed through locked hatches via secured ladders. AHU-T2 was not accessible due to hatch being locked. The access hatch to the AHU-T3 mechanical space was open. The unit was operating but showed signs rust and corrosion around the bottom pan of the unit. It was assumed the same condition would be found for AHU-T2. RTU-12 is located on the roof behind the stage area with access via hatch and ladder. Due to unsafe conditions, RTU-12 was not accessed.</p> <p>A new 750 MBH hot water boiler was in the process of being installed during the time of the assessment.</p> <p>The outside chiller, CH-4 which is located in a fenced area against the west side of the building was observed to have debris and vegetation around the unit. The chilled water pump CHWP-T1 located in the mechanical room with AHU-T1 was making sounds as if the bearing may be covered with dust and there was debris prevalent.</p> <p>The only roof EF that was able to be assessed was EF-T1 located on west part of the roof. The fan appeared to be in good condition.</p> <p>The HVAC system was observed to be in average condition with all of the previously mentioned deficiencies.</p>			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, strobes, horn and strobe combination devices, pull stations, and smoke detectors. The fire alarm system is controlled by a Silent Knight control panel. The fire alarm system was observed to be in good condition with no deficiencies reported by the staff.	Good
	Fire Protection/ Suppression	The building is partially protected with an automatic wet pipe sprinkler system, which covers the theater area, stage, back stage support areas, and the mechanical rooms. The remainder of the building does not have an automatic sprinkler system. It is protected by portable fire extinguishers, which are located throughout the building. This fire protection system was observed to be in average condition. Surface rust was observed on the sprinkler piping and equipment. All observed portable fire extinguishers had inspection tags dated within the last year as required.	Average
electrical	Electrical Distribution	The electrical service for the Theater Building is fed from the main building electrical room. This service enters the building through a 112.5 KVA 480 Volt primary/208/120 volt secondary transformer. This transformer provides service to a 400 amp panel and a 225 amp inside the same electrical room. These panels feed three 222 amp branch panels located in corridor 1. There is also non-automatic 400 amp transfer switch located in the main electrical room of the Theater Building. The majority of the distribution equipment dates to the original construction period. This equipment was observed to have some signs of wear and was in average condition.	Average
	Lighting	The interior lighting consists of primarily recessed T8 fluorescent lensed troffers. The building's exterior lighting consists of wall-mounted area lighting. The older fixtures are HID; however, some locations have been retrofitted with LED fixtures. Facility staff reported that the lights are poor and difficult to access for repair. There is no lighting in the stairs leading to the second floor.	Average
	Communications & Security	A Gemini security system serves the facility. The system consists of an access control device at the main entry point to the building. The system was observed to be in good condition.	Good

Exterior System Deficiency Examples

Exterior Walls

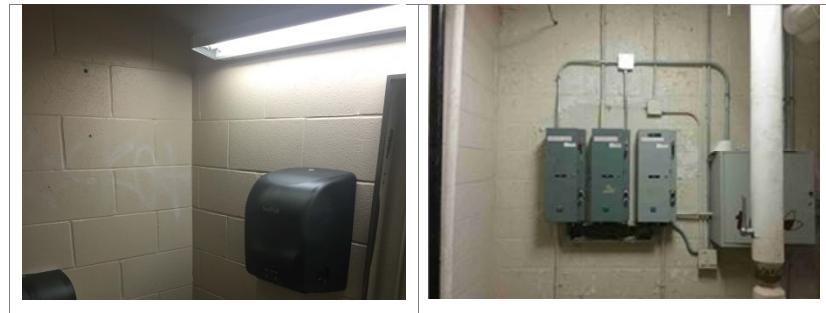


Exterior Doors



Interior Finish Deficiency Examples

Interior Wall Finishes



Interior Floor Finishes



Interior Ceiling Finishes



Mechanical/HVAC System Deficiency Examples



Fire Protection

Fire Protection/Suppression

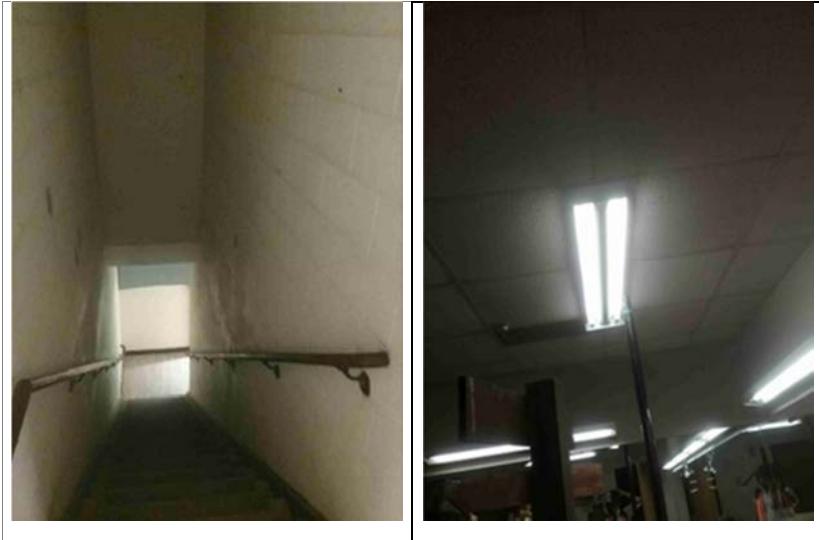


Electrical

Electrical Distribution



Lighting



Crockett 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

Interior Finishes

1. Replace damaged ceiling tiles. Monitor and repair roof leaks as needed on all buildings to prevent further damage.

Plumbing

1. Continuing preventative maintenance on aged plumbing fixtures and/or planning for replacement in the future as fixtures continue to age at all associated campus facilities.
2. Repair or replace any damaged or missing piping insulation as needed at all facilities.
3. Clean and flush out all of the roof and interior floor drainage piping at all facilities, particularly on the eastern roof section of the main school that was observed with standing water. Additionally, repainting or addressing the corrosion on the metal grates/covers for the drains to mitigate further deterioration and build-up around the drains.
4. Repair the collapsed storm sewer below grade and below the auto shop floor slab to prevent flooding of the lower level of the school.
5. Evaluate and, if necessary, correct the drainage sizes of the courtyard drainage system to help eliminate or minimize the chances of back up through the first level mechanical room floor drains.

Mechanical/HVAC

1. Continue to replace the original AHUs and equipment that have reached the end of the typical design service life.
2. Address any rust or corrosion observed to the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, re-painting, and/or repairing by any other means to prevent further deterioration.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.
4. Address any equipment at all of the campus facilities that were noted with excessive noise/vibration by repairing the motor, changing the belt, or any other means to promote efficiency.
5. Repair any observed leaks to prevent water damage to the asset, its piping, support beams, or any other sub-assets. Once leaks are addressed in all facilities, repair or replace any water-damaged components as needed.
6. Plan and track for equipment that uses R-22 refrigerant in all facilities. The refrigerant is being phased out of manufacturing and construction use in the near future, and thus will make all equipment obsolete.
7. Ensure routine preventative maintenance is conducted for cleaning ductwork to promote efficient and clean air flows to all of the facilities' spaces.

Fire Protection

1. Continue annual inspections of the fire protection system (at the Main School Building) auto shop area and theater stage and seating areas) and the portable fire extinguishers (at all facilities).
2. Secure all fire extinguishers in cabinets or brackets in all mechanical rooms.
3. Inspect and test the kitchen hood suppression system and replace if necessary. The system should be inspected annually.

Electrical

1. Repair all panelboard covers reported as unable to close.
2. Repair or replace all electrical equipment affected by corrosion or rust. If the corrosion/rust is beyond the enclosure then replacement is suggested.

3. Replace all distribution equipment which has exceeded its typical design service life.
4. Remove all storage materials from electrical rooms and closets. This is a violation of code and is a safety hazard.
5. Cover all exposed wiring.
6. Replace all outdated luminaires with LED luminaires.
7. Provide egress lighting where required for all buildings.

Main School Building Recommendations

Exterior

1. Remove staining on brick walls.
2. Repair the cracks in the concrete exterior flooring.
3. Repair the deteriorated weather-stripping on an overhead door.
4. Replace the metal, aged overhead door.
5. Repaint exterior doors.
6. Investigate and block access points for pests through the crawlspace, the ceilings, and the kitchen roll-up door.
7. Repair or replace the gym lobby windows.

Roofing

1. Repair areas of roof with reported leaks and monitor for future leaks.
2. Further investigate all roof areas observed with standing water in order to re-slope to proper drainage points.

Interior Construction

1. Repair holes in CMU walls.

Stairs

1. Repair delaminated tile at interior stairs.
2. Repaint metal handrails at all exterior perimeter stairs.
3. Clean the exterior stairwell leading to utility space.

Interior Finishes

1. Replace worn wood paneling.
2. Replace VCT with divots throughout the cafeteria.
3. Fasten loose floor tiles in the auto shop.
4. Replace cracked ceramic floor tiles in the kitchen.
5. Repair cracks on the floor of the MRRGYM room.

Interior Specialties

1. Repair or replace metal lockers with broken locks and repaint scratched lockers.

Conveying

1. Continue annual inspections of the passenger elevators and lifts.

Plumbing

1. Repair or replace the hand sinks in the main school kitchen food prep areas.
2. Replace aged, inefficient EWHs. Track install years of other water heaters and plan for replacement as the typical design service life for a water heater is 10 to 15 years.
3. Ensure that all grease traps in the kitchens have a capacity of at least 1,500-gallons. It is recommended based upon feedback that all grease traps should have a capacity of at least 1,500-gallons for any kitchen space. In addition, it is recommended that all kitchen fixtures and floor drains are connected to grease traps.
4. Replace and update the male and female locker room fixtures including gang shower poles. Replace the remaining hot water mixing valves for the showers.

5. Update and replace the plumbing fixtures in all the restrooms and provide ADA compliant lavatories, urinals, and water closets.
6. Consider replacement of the locker rooms' water heating system based on the age and performance.
7. Perform general maintenance and cleaning of the roof drains.

Mechanical/HVAC

1. Replace the original EFs on the roofs.
2. Repair or replace condenser water pumps. Provide maintenance to existing equipment to help minimize leaks until pumps and equipment is replaced.
3. Replace the older roof top units, AHU-1, AHU-2, and RTU-MDF-2

Fire Protection

1. Inspect and test the kitchen hood suppression system and replace if necessary. The system should be inspected annually.

Electrical

1. Investigate the reported black- and brown-outs. Determine if these are true black- or brown-out events or if the facility is experiencing localized circuit overloads. If the cause is determined to be local, provide additional circuits or panelboards to serve the affected areas. The circuiting should be rearranged in order to balance the loads.
2. Investigate generator loads to determine if life safety loads are served by the generator. If this is the case, test the generator to ensure that all emergency egress lighting and other emergency loads are online within 10-seconds under a black-start situation.
3. Recommend installing a grounding system that would include ground bars in each electrical/telecom space and connected to the building's main ground bar.
4. Replace aged interior and exterior lighting including updates to layout to provide sufficient and consistent lighting levels to suit the purpose of the space.
5. Provide adequate emergency and egress lighting through the facility, including at the building exits to a location ten feet away from the building.

Communications & Security

1. Add a key pad at room 170 double doors as requested by the facility staff.

Theater Recommendations

Exterior

1. Monitor spalling on the foundation.
2. Remove staining on brick at the base of building.

Interior Finishes

1. Paint over graffiti in the restroom.
2. Repair and paint the interior door with profane carvings.
3. Remove peeling paint and repaint walls of the mechanical room.
4. Replace scratched vinyl tiles in the front row of seating in the theater.
5. Repair the loose rubber base.

Conveying

1. Continue annual inspections of the passenger elevators and lifts.

Mechanical/HVAC

1. Replace existing AHUs. Provide safety items for access to equipment such as ladder cages and barriers where hatches are used for access.
2. Clear vegetation and debris from the outside chiller area, and maintain the work area and equipment to maximize the typical design service life of the equipment.

Electrical

1. Replace all outdated luminaires with LED luminaires.
2. Provide lighting in stairwell leading to second floor as this is a life safety hazard.

CRAWL SPACE – Crockett HS – Main Building (BLDG-008A)

Building Purpose	Administrative offices, Gym, Classrooms, and Cafeteria
Inspection Date	September 27, 2016
Inspection Conditions	73° - Cloudy & Dry

Crawl Space System Deficiency Overview

NOTES CONCERNING CRAWL SPACE OBSERVATIONS: EXISTING STRUCTURAL PLANS WERE NOT AVAILABLE FOR CROCKETT HIGH SCHOOL. BASED ON OUR OBSERVATIONS WHILE AT THE SITE, THE MAJORITY OF THE BUILDING HAS NO CRAWL SPACE. INSTEAD, A PIPE TUNNEL (PRESUMABLY SLAB-ON-GRADE) IS USED TO ROUT UTILITY LINES THROUGHOUT THE SUBFLOOR AREA.

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	In both the original building and the additions, the soil in the crawl space ranged from mostly dry to damp (except under pipe leak). No drainage system was seen in the crawl spaces or specified in the existing plans. Soil/drainage deficiencies: <ul style="list-style-type: none">• Damp soil	Average
	Soil Retainers	Plastic soil retainers were seen in the 1998 addition only. Because existing structural plans are unavailable, it is unknown whether the original building has soil retainers. While most observed retainers were in good condition, some had buckled and shifted, allowing minor to significant soil intrusion below the perimeter beams. Soil retainer deficiencies: <ul style="list-style-type: none">• Buckled and shifted soil retainers• Violated clear space below perimeter beams due to exterior soil intrusion	Average
	Areaways/Ventilation	Ventilation was supplied through small vents in the perimeter walls and open connections to the mechanical tunnel in the main building. The 1998 library addition has a mechanical fan to boost ventilation but the fan was not operational (belt missing). No areaways were seen. Ventilation ranged from adequate to subpar based on the humid and stagnant air, sweaty slab and perimeter walls, and foul odor. Some of the vents were partially clogged with dirt.	Average

		<p>Areaway/ventilation deficiencies:</p> <ul style="list-style-type: none"> • Stagnant air / condensation / poor ventilation • Clogged vents 	
	Access Hatches	<p>Crawl spaces were accessed through a door at the end of the mechanical tunnel, a wall hatch, and regular doors that opened to the crawl space below one of the additions. The hatch was difficult to access as it was partially blocked by a pipe; it was in decent condition otherwise except for some minor rust. The regular doors had minor honeycombing around the door frame while the door at the end of the mechanical tunnel had a hole in the nonstructural stucco mesh divider adjacent to the door.</p> <p>The crawl space for the 1998 library addition was accessed through a hole in a wall shared with the original building. Crawl space access was limited in the area below rooms 171 and 174 because of low clearance below interior beams and storage blockage.</p> <p>Access hatch deficiencies:</p> <ul style="list-style-type: none"> • Limited crawl space access • Hatch partially blocked by pipe • Minor concrete defects around door frames • Minor rust on hatch door 	Average
Exposed Structure	Exposed Columns & Tops of Foundations	The columns and tops of foundations in the original construction and additions appeared in good condition and without significant deficiencies.	Good
	Exposed Faces of Perimeter Walls / Beams	<p>Except for exposed reinforcement at one wall cutout and mild honeycombing near a door, the perimeter beams and walls were overall in good condition in both the original building and the additions.</p> <p>Perimeter beam deficiencies:</p> <ul style="list-style-type: none"> • Exposed/corroded reinforcement • Moderate honeycombing 	Good
	Exposed Portions of Interior Floor Beams Above	Cast-in-place interior concrete beams are supported by concrete perimeter beams and interior columns. The floor beams in the original building showed signs of poor concrete consolidation along with exposed/rusting reinforcement. The library addition also had floor beams with poorly consolidated concrete and exposed/rusting reinforcement, albeit to a lesser degree. The library addition had additional steel WF beams to stiffen the slab and perform the task of a concrete beam that appeared to have been built at a shallow depth.	Average

		<p>The steel beams had minor rust and paint chipping but were in decent condition overall.</p> <p>Beam deficiencies:</p> <ul style="list-style-type: none"> • Poorly consolidated concrete (honeycombing) • exposed/rusting reinforcement • Mild rust and paint chipping on steel beams 	
	Underside of Suspended Floor Slabs Above	<p>The slab system alternated between cast-in-place concrete flat slabs in the original building and precast concrete channels in an addition; both are supported by perimeter & interior floor beams. The slab in the library addition was covered with rigid insulation and could not be observed. The suspended slabs for both the original building and additions appeared in good condition overall except for limited exposed reinforcement, honeycombing, and isolated, minor cracking in the channels. A steel plate or angle used in one bay to support the channels (possibly because they were cast too short) appeared in good condition.</p> <p>Slab deficiencies:</p> <ul style="list-style-type: none"> • Exposed/corroding reinforcing • Poor concrete consolidation • Isolated cracks in channel joists 	Average
Pipes, Ducts, Equipment & Fireproofing	Suspended Pipes & Hangers	<p>The cast iron pipes and hangers were mildly to significantly rusted throughout the crawl spaces. Sweating pipes were seen to a limited degree and many pipes had moldy, degraded, and missing insulation. A heavy pipe leak was seen below the kitchen (and staff was informed).</p> <p>Pipe deficiencies:</p> <ul style="list-style-type: none"> • Heavy pipe leak below kitchen • Rusted pipes and hangers • Moldy, degraded, and missing pipe insulation 	Average
	Exposed Ductwork	Ducts were not present in the crawl space areas observed.	N/A
	MEP Equipment	A water heater in the original building crawl space appeared in good condition. An electric panel in one of the additions was covered with a plastic bag (presumably to protect from water infiltration).	Good
	Spray Fireproofing/Insulation	Rigid insulation was attached to the slab soffit in the library addition and appeared in good overall condition; fireproofing/insulation was not seen elsewhere.	Good

Crawl Space Deficiency Examples

Soil, Drainage, Ventilation & Access

		
Damp soil	Saturated soil below leaking pipe	Soil infiltration due to failed soil retainers

		
Violated void space below perimeter beam	Ventilation fan not operational	Condensation on underside of slab

Exposed Structure

		
Poor concrete consolidation in floor beam, exposed/corroded beam reinf	Poor concrete consolidation in slab, exposed wire reinf	Rust and paint chipping on steel beam



Exposed rebar in slab channel



Small cracks in slab channel

Pipes, Ducts, Equipment & Fireproofing



Rusted pipe and degraded insulation



Moldy pipe insulation



Heavy pipe leak



CRAWL SPACE – Crockett HS – Theater (BLDG-008B)

Building Purpose	Theater
Inspection Date	September 27, 2016
Inspection Conditions	73° - Cloudy & Dry

Crawl Space System Deficiency Overview

Building B was constructed with a slab-on-grade and does not have a crawl space.

Crockett 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.

Building A Recommendations

Soil, Drainage, Ventilation & Access

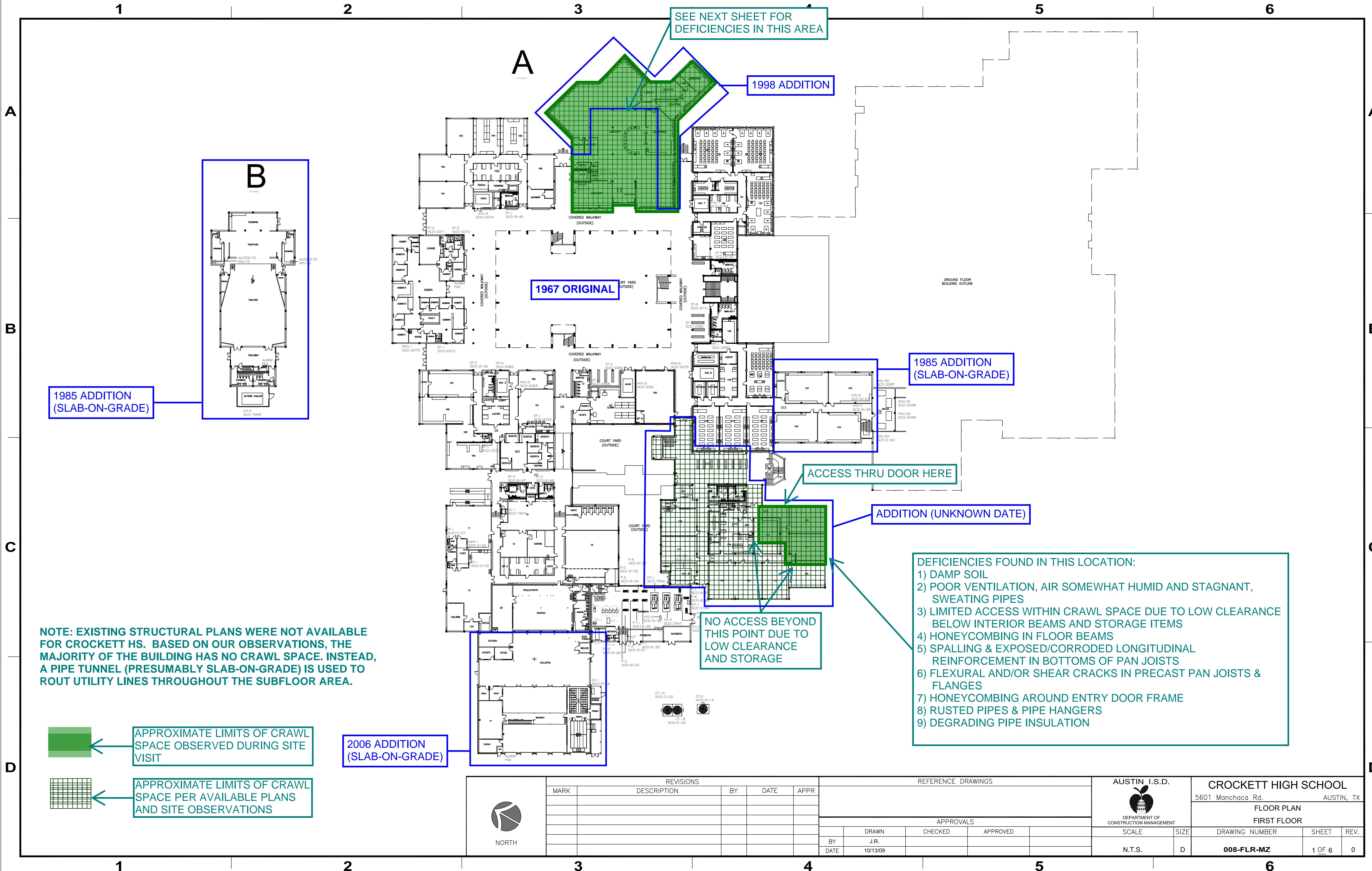
1. Investigate need for site re-grading to promote drainage away from building & limit damp soils in crawl space.
2. Replace failed soil retainers and restore void below perimeter beams.
3. Investigate need for additional ventilation.
4. Clean clogged vents.

Exposed Structure

5. Clean exposed slab & beam reinforcement and protect from corrosion.

Pipes, Ducts, Equipment & Fireproofing

1. Repair leaking pipe.
2. Clean and protect rusted cast iron pipes from further corrosion.
3. Replace heavily corroded hangers.
4. Replace moldy, degraded, and missing pipe insulation.

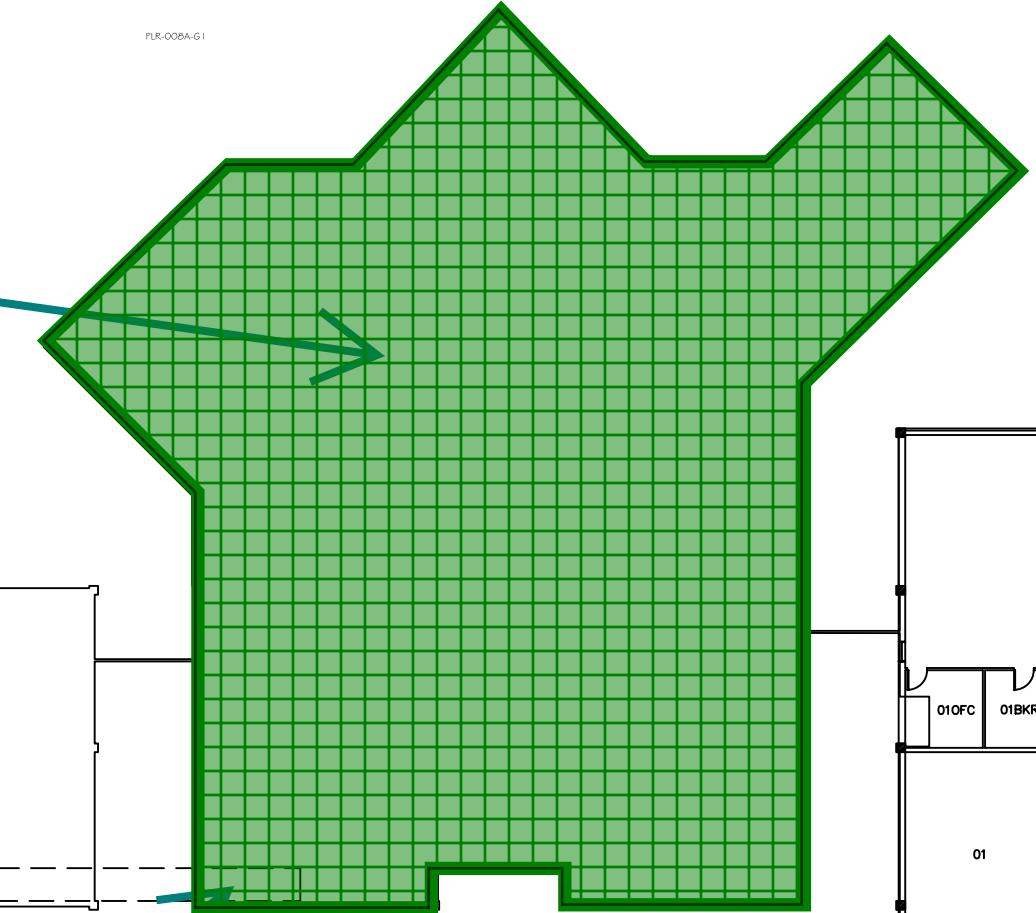


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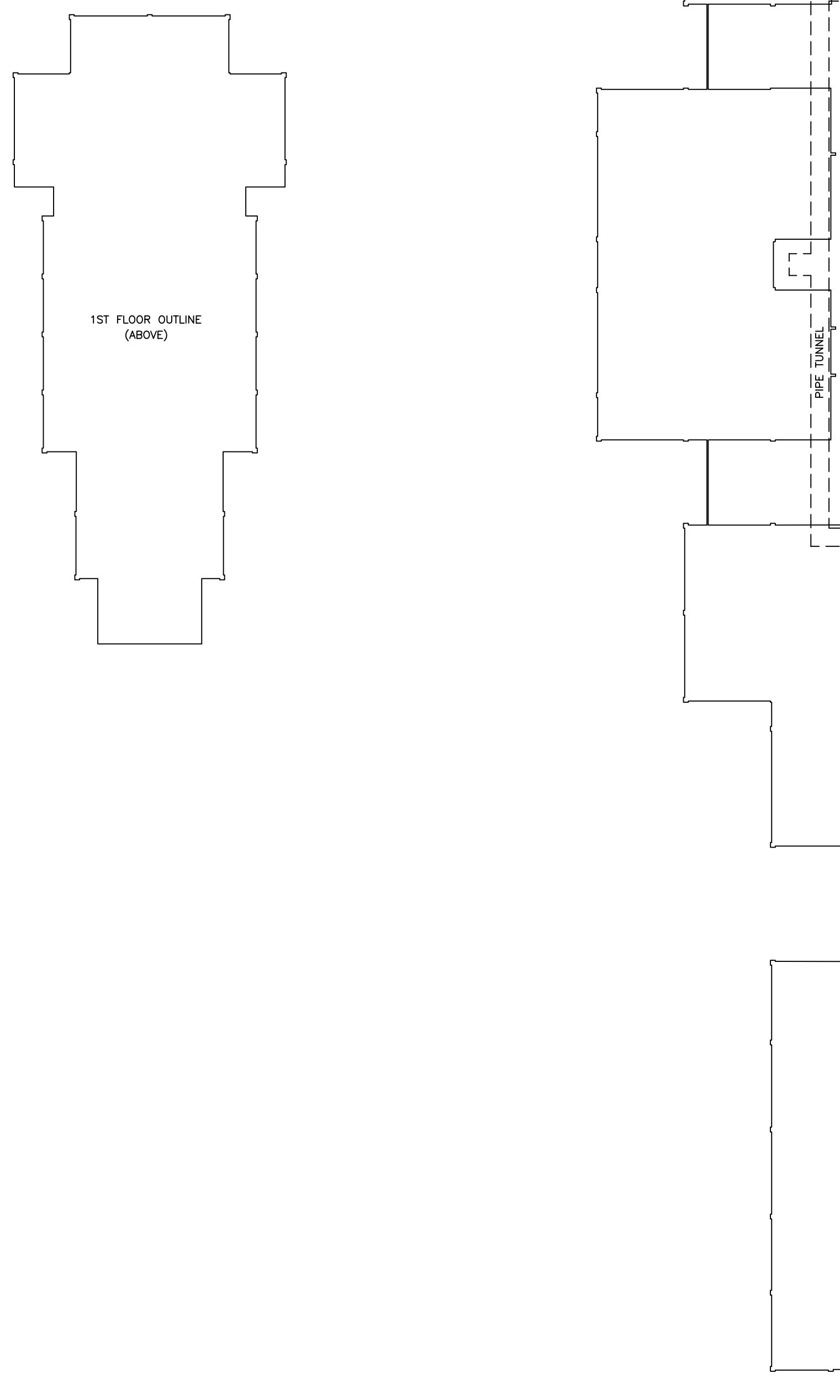
DEFICIENCIES FOUND IN THIS LOCATION:

- 1) DAMP SOIL
- 2) BUCKLED AND SHIFTED SOIL RETAINERS; MINOR TO SIGNIFICANT SOIL INTRUSION
- 3) HUMID AND STAGNANT AIR, CONDENSATION ON PIPES & CONCRETE, POOR VENTILATION
- 4) VENTS PARTIALLY CLOGGED
- 5) VENTILATION FAN NOT OPERATIONAL (MISSING BELT)
- 6) EXPOSED REINFORCEMENT AT WALL OPENING TO ADDITION
- 7) HONEYCOMBING IN PERIMETER & INTERIOR BEAMS
- 8) MODERATELY TO ADVANCED SPALLING AND EXPOSED/RUSTED REINFORCEMENT IN FLOOR BEAMS AND SLAB SOFFIT
- 9) MILD RUST AND CHIPPED PAINT ON STEEL BEAMS
- 10) EXPOSED SLAB REBAR AT PIPE PENETRATIONS
- 11) RUSTED PIPES AND HANGERS
- 12) DEGRADED/MOLDY/MISSING PIPE INSULATION

A



ACCESS THRU PIPE TUNNEL



1ST FLOOR OUTLINE (ABOVE)

(ABOVE)

PIPE TUNNEL

Crockett High School Site Summary

Site/Civil Assessment

Address	5601 Manchaca Road
Number of Permanent Campus Facilities	3
Original Year of Construction	1969
Total Campus Area	40 Acres
Data Collection Method	Desktop, Site Visit
Site Visit/Assessor	01/04/2017 / E. Brunjes-Brandt



Introduction

The Crockett HS campus is located at 5601 Manchaca Road in Austin, Texas. Crockett HS was established in 1969 and consists of a main campus building housing classrooms, gymnasium, administration and a cafeteria. There is a separate performing arts center and a newly built construction technology facility.

Development Information

Watershed	Williamson Creek
Total Impervious Cover	34 %
Allowable Impervious Cover	80 %
Barton Spring Recharge Zone	No

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

Parking and Drives

Parking and Drives	Configuration	Size (SF)
Visitor Parking	53 CB 5 HC	16,500
P1, Staff /Student Parking Lot Stassney	152 CB 2 HC	55,000
P2, Staff /Student Parking Lot Manchaca	250 CB	74,000
R1, Bus Drop-Off Road	15 CB	26,000
R2, Service / Mechanical Road	17 CB 1 HC	35,000
R3, Cafeteria/ Service	NA	5,000



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_Crockett_HS_Site_Civil_Exhibit for additional information.

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Site Improvements	Roadways	<p>The bus drop off road (R1) is asphalt with concrete curb with an entrance and exit on Stassney. It contains longitudinal and alligator cracking that increases in severity near the entrance and exit. The asphalt appears to have been placed at different times as well as expanded to accommodate turning radii into the parking lots. There is an area where a utility patch has become a depression. The concrete approaches from Stassney to the bus drop off have corner cracks and joint spalls where the concrete is coming up in large pieces. There is evidence of vehicles scraping the concrete.</p> <p>The mechanical service road (R2) is asphalt with concrete curb and winds along the south side of the building and connects to the auto shop, gymnasium and a new driveway leading to the construction technology building. There is parking alongside the road in different places. The asphalt pavement is in good condition and only requires crack seal for maintenance. There is one area where the curb is broken at an accessibility ramp.</p> <p>There is a small paved drive leading from the bus drop off to the cafeteria (R3). The area is asphalt with a concrete area for two dumpsters. There is one additional area for a recycling dumpster that does not have a concrete pad or foundation.</p>	<p>R1: Poor</p> <p>R2: Good</p> <p>R3: Average</p>

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>Roadway Deficiencies:</p> <ul style="list-style-type: none"> - R1: Longitudinal and alligator cracking, utility patches - R1: Concrete entrances are cracked with uneven loose pieces and evidence of scraping. - R2: Broken curb and pedestrian ramp - R3: No concrete foundation for recycling dumpster 	Overall: Average
	Parking Lots	<p>The north lot (P1) is asphalt with curb and gutter located along Stassney. The pavement contains longitudinal cracks, alligator cracks, potholes and patches. There is additional damage around the trees where roots have lifted the pavement. Parking stops on the south side of the lot have been crushed and have been pushed into the greenspace. The lights at the east side of the lot are not operational. There is a green storage building sitting in the parking lot that was previously used by the auto repair shop which has been moved across campus. The storage building should be removed or relocated.</p> <p>The west lot (P2) is asphalt with concrete curbs located along Manchaca. The lot surface drains from south to north, where water goes under the sidewalk into a drainage ditch. The area is silted up and grass is clogging the outfall. The pavement is heavily damaged and the extended pavement has not been backfilled behind the curb. The pavement has typical cracking along the joints and in other areas and should be maintained with crack seal. There is increased damage in the entrance lane from Manchaca. There appears to be excess parking capacity in the east lot. The lighting in this lot has been converted to LED fixtures.</p> <p>The majority of the visitor and handicap spaces are located between the performing arts building and the administrative entrance. The pavement condition is average in this area and requires only maintenance. There is a handicap sign that has been knocked down.</p> <p>Parking Lot Deficiencies:</p> <ul style="list-style-type: none"> - P1: Cracking alligator cracking potholes and patches. - P1: Lighting not functioning on east end. - P1: Concrete approaches cracked with scraping. - P1: Remove storage building. - P2: Patched pavement where gates removed, no backfill at curb. - P2: Silted and clogged surface drain. - P2: Entrance lane pavement damaged. 	P1: Fail P2: Average P3: Average Overall: Poor
	Pedestrian Paving	The pedestrian paving at the site is mostly concrete. Where there are no paved sidewalks there are pathways made of crushed granite with either limestone or steel edging. The pathways require some annual maintenance to replace	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>granite that has been washed out.</p> <p>There are areas throughout the site where the concrete sidewalks are badly broken and have become tripping hazards. There are many locations where the sidewalks lead to facilities that have been removed or redeveloped. One sidewalk on the south side of the building has cracked and risen from tree roots causing an area of ponding. Most sidewalks require backfill along the edges of the sidewalk to reduce tripping hazards.</p> <p>Pedestrian Paving Deficiencies:</p> <ul style="list-style-type: none">• Broken sidewalks, heaving• Miscellaneous sidewalks need removal• Backfill sidewalk edges	
	Site Development	<p>Bicycle racks are located at the front of the building however an additional rack is needed on the west side of the building where many bicycles were chained to the railing at the administrative entrance.</p> <p>On the south side of the building, there is a wooden ramp with decking that is rotting and unstable. Outside of the auto shop there are piles of weld samples and auto parts to be disposed of. A door on the south side of the building has panels that have been replaced with plywood. The covered walkway near the dumpsters has ceiling tiles that are sagging and missing.</p> <p>There are reports of a severe rodent infestation throughout the campus.</p> <p>Site Development Deficiencies:</p> <ul style="list-style-type: none">• Bicycle rack needed• Rotten ramp decking• Door with wooden inserts• Piles of welding and car parts at auto shop• Ceiling tiles missing under covered walkway• There are reports of a severe rodent infestation	Average
	Site Drainage	<p>The property drains from southwest to northeast across the site. Most of the water outfalls into an improved ditch adjacent to the railroad track and travels north to Williamson creek. The northwest side of the site drains well into a detention area behind the performing arts building. There was a report of a broken pipe that connects an area drain near the west entrance and another confirmed broken drain pipe that causes water to back up in the drains and flood the auto shop building. There is a pump kept onsite to pump water from the floor inlets during rain events.</p> <p>Major silt buildup and overgrown grass has clogged the drains underneath the sidewalk. Stormwater sits in a muddy area at the southwest corner of the building at the athletics area. Major drainage improvements are needed at this</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>point to convey water from the new detention pond and tennis area through this point and on to the next detention pond.</p> <p>Site Drainage Deficiencies:</p> <ul style="list-style-type: none"> • Broken PVC pipe • Broken roof drain floods auto shop • Clogged drains under sidewalk • Standing water at SW corner of Building 	
	Courtyards	<p>There are three courtyards at the school. The first courtyard (CY1) is surrounded by classrooms and administration offices. (CY1) is large, well maintained and reported to have good drainage. It has paved walkways and other pathways of square pavers that need backfill. The remaining areas are grass or crushed granite that needs to be redone.</p> <p>The second interior courtyard (CY2) contains a large metal chair designed by students. The area has brick pavers, mature landscaping and a covered crosswalk. The downspouts on the crosswalk were completely clogged. There is a disconnected and crushed downspout on the wall of the building and a depressed area under the brick pavers. There is a crushed picnic table that has been moved to the flower bed and a tree that was topped off at 9 feet high in the corner that should be completely removed as kids have used it to climb on the roof.</p> <p>The third interior courtyard (CY3) is used for gardening and agriculture. There are planters that have been built up against the wall to a depth of 4 feet. There have been reports of water penetrating the walls of the building. Drainage inlets are functioning well.</p> <p>Courtyard Deficiencies:</p> <ul style="list-style-type: none"> • CY1: Backfill missing crushed granite, repair benches as needed • CY2: Depression under brick pavers • CY2: Broken picnic table • CY2: Remove tree stump • CY2: Clogged downspouts at covered walkway and broken downspout on wall • CY3: Planters built up against wall 	CY 1 Average CY 2 Poor CY 3 Average Overall: Average
	Landscaping	The site contains many mature oak trees. The exterior planting beds are overgrown and filled with weeds. There is a tribute rose garden that contains both dead bushes and overgrown rose bushes. The interior courtyard plantings were well maintained. There are at least two large oak trees located in the courtyards that have steel supports for mature limbs. The southwest area of the school is mostly wooded with no undergrowth. There is an area by the performing arts center that has no grass. Other areas that experience high foot	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>traffic are covered with crushed granite in need of maintenance.</p> <p>Landscaping Deficiencies:</p> <ul style="list-style-type: none"> • Large trees with unstable limbs • Overgrown planting beds, overgrown rose garden • No grass at corner of performing arts center • Crushed granite needs maintenance 	
Site Utilities	Water Supply	<p>There is a fire hydrant that is set several feet above ground. The riser should be cut down to grade.</p> <p>Water Supply Deficiencies:</p> <ul style="list-style-type: none"> • Fire hydrant needs adjustment 	Average
	Sanitary Sewer	<p>A sanitary manhole cover on the south side of the building has become disconnected from the concrete base and knocked off center by mowers. There is evidence of water and soil infiltration into the sanitary manhole. A fiberglass grease sampling enclosure was not observed onsite.</p> <p>Sanitary Sewer Deficiencies:</p> <ul style="list-style-type: none"> • Manhole needs repair • No fiberglass grease sampling enclosure observed 	Poor
	Storm Sewer	<p>There is an area on the south side of the building where there is severe erosion around an area inlet and water is infiltrating around the pipe where it enters the box. The surface drainage slots under the sidewalk in P2 and the east side of the maintenance service road, R2, are clogged with silt and overgrown vegetation on the outfall side. Constructing a concrete swale or apron on the back side of the sidewalk would improve drainage.</p> <p>An overall drainage solution should be studied and implemented at the southwest corner of the athletic building to consolidate the detention pond outfall, ditches, roadway surface drainage and downspouts.</p> <p>Storm Sewer Deficiencies:</p> <ul style="list-style-type: none"> • Storm inlet erosion • Clogged Sidewalk Drains P2, R2 • Chipped Concrete at inlet P1 • Flooding at southwest corner of the building 	Poor
	Detention Pond	<p>There are three detention ponds on the site. A brand new detention pond was recently constructed between the tennis courts and the softball field. It contains concrete walls and is fenced. The 30" outfall with energy dissipaters which flows</p>	Pond D1 Excellent

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>into an unimproved ditch which is blocked in many places by crushed culverts and temporary driveways. There are demolished fence posts and poles on the ground at the outfall.</p> <p>The water from the first pond eventually flows to a second unimproved pond at the southeast side of the school. The pond is grass with poorly defined edges and a single outfall structure with a damaged grate. The second pond connects with RCP under the track/ football field and eventually connects with Williamson creek along the railroad tracks. The second pond is used for athletics when not flooded. All water from the south and southwest side of the school as well as some of the adjacent park flows through a small area at the southwest corner of the school. This area remains wet and holds water most of the time.</p> <p>Pond 3 is located on the northwest side of the building. The pond operates well and has buildup off debris at the outfall structure.</p> <p>Detention Pond Deficiencies:</p> <ul style="list-style-type: none"> • Pond 1 Outfalls into unimproved ditch, fence post litter • Pond 2 Standing water upstream of pond 2 • Pond 2 Outlet structure with loose and bent grate. • Pond 3 Clogged outlet structure 	Pond D2 Poor Pond D3 Good Overall: Average
	Other Site Mechanical Utilities	<p>There have been lighting improvements around the building where LED fixtures were placed on the roof and the older fixtures were removed without patching the building. Loose conduit was observed on the east wall of the building. The athletic director reported that the lights under the east overhang do not work as well as the lights in the parking lot just north of the track. At the time of inspection there were open excavations of utility work for installation of a laundry room and a bathroom/concession building.</p> <p>Other Utilities Deficiencies:</p> <ul style="list-style-type: none"> • Patching of building where lights have been removed • Loose conduit on wall • Parking lot lights not working. • Open excavations 	Average

Site Improvement Deficiency Examples

Roadways

		
Broken and scraped concrete at Bus drop off entrance/exit, R1	Cracking at bus drop off road, R1	Broken Curb R2

Parking Lots

		
Broken curb stops Staff\Student Parking, P1	Pot hole and cracking Staff\Student Parking, P1	Staff\Student Parking ,P2 Patches where gate was removed

Pedestrian Paving

		
Cracked Sidewalk at athletic building	Remove sidewalk at Construction Construction Technology Center	Backfill Sidewalk (Typical)

Site Development

		
Car parts and welding samples	Bike rack needed	Rotting ramp and decking

Site Drainage

		
Mildew on wall from roof	Ponding water at SW corner of the school	Ditch with erosion and obsolete culverts

Courtyards

		
Center Court Yard (CY2) Broken picnic Table	Center courtyard (CY2) Broken Downspout	Center courtyard (CY2) depression in brick pavers

Landscaping

		
Overgrown landscaping	Broken bench and tree branch support	No grass near performing arts center

Site Utilities

		
Inlet and sanitary manhole with erosion and infiltration	Hole from removed light	Loose conduit

Detention Ponds

		
Clogged outfall structure grate	Outfall structure bent and loose	Outfall structure with demolished fence.

Play Fields

Areas presented in table are approximate.

Playfields	Count	Size (SF)
Basketball Courts	-	-
Tennis Courts	4	24,500
Multi-Purpose	1	60,000
Baseball Field	1	114,374
Softball	1	41,200
Track	1	400 M
Football Field	1	98,000
Bleachers	Yes	Baseball, Softball, Tennis

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Playfields	Tennis Courts	<p>There are 4 tennis courts that have been recently resurfaced and there are a few fine cracks developing in the surface. The fencing is new on the back half of the courts where a retaining wall and area drainage swales have been installed. The fence on the north side of the courts is older and has begun to rust and has been patched in a couple of locations. There is a large hole behind the backboard that appears to be for a utility project, but the hole has not been backfilled. There are new aluminum bleachers set on a concrete pad on the site.</p> <p>Tennis Court Deficiencies:</p> <ul style="list-style-type: none"> • North fence rusting and patched • Large open hole, needs backfilling 	Average
	Track	<p>The track is in new condition and was resurfaced in 2015. There are several fence posts missing along the exterior chain link fencing. The posts are "I" shaped steel. The gate near the building does not close properly. The detention pond floods and overflows alongside the track and athletics area.</p> <p>Track Deficiencies:</p> <ul style="list-style-type: none"> • Missing fence posts, damaged gate • Detention pond is insufficient and floods alongside track area. 	Average
	Soccer Field/ Football	<p>A bathroom and concession building is currently under construction at the northwest corner of the track. Fencing improvements are expected in the area adjacent to the new building. There are no lights on the football/soccer field. The turf was in good condition with normal areas of</p>	Average

	<p>wear in the center of the field. The field was more sloped on the west side. The field is irrigated in with an automatic watering system of eight zones.</p> <p>There is a multipurpose field in the far southwest corner of the site. The field has irrigation on a manually operated system.</p> <p>Soccer/Football Field Deficiencies:</p> <ul style="list-style-type: none">· Inadequate lighting· Minor areas of wear in turf· Sloping field	
Baseball	<p>There is a baseball complex located at the southwest corner of the school. The field is fenced and the turf is in good condition. There is an irrigation system in place but it is not automatic. The dugout areas are covered with a concrete floor and surrounded with cinder block. Each dugout contains two tier wooden benches. There is an embankment area behind home plate that contains a CMU retaining wall with no cap stones, a set of wooden bleachers and a set of aluminum bleachers setting on dirt. The wooden bleachers are rotting and in poor condition. Dirt is held back from the field using railroad ties that are degrading and coming apart.</p> <p>A gravel road/path leads to the baseball field and the concession building the gravel road needs to be regraded or paved as a means to go from the parking to the fields.</p> <p>There are some field lights that belong to the COA adjacent to the baseball field that can be used.</p> <p>Baseball Deficiencies:</p> <ul style="list-style-type: none">· Rotten bleachers· CMU retaining wall without cap· Crumbling railroad ties	Poor
Softball	<p>The softball field is in good condition. It contains a grass outfield and dirt infield in good condition. The field is irrigated with an automatic watering system. There is one set of aluminum bleachers. The dugouts are covered and have concrete floors and a bench in each dugout. There is a batting/ pitching cage on the north side of the field.</p> <p>The field appears to drain well, however there is a grass drainage swale on the uphill side of the field that contains sections of crushed PVC.</p> <p>Softball Deficiencies</p> <ul style="list-style-type: none">· Crushed PVC drainage pipe.	Good

Playfield Deficiency Example

Tennis Courts

		
Fence patch at tennis court	Open utility construction needs backfill	Bleachers and rusting chain link fence at tennis court

Soccer/Football Field

	
Inlet on football field and track, field slope is steep on west side.	Gate does not close properly

Baseball/Softball

	
Rotting Bleachers on dirt. Retaining wall with no cap	Gravel road needs regrading or paving at baseball field

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. R1 Reconstruct Bus Drop Off road
2. R1 Reconstruct and regrade concrete entrances
3. R2 Repair broken curb and pedestrian ramp
4. R3 Provide concrete pad and approach for dumpster

Parking Lots

1. P1 Remove and repair areas of failed pavement, overlay parking lot, restripe
2. P1 Repair area lighting
3. P1 Remove and reconstruct entrance lane pavement
4. P1 Remove or relocate storage building
5. P2 Backfill at curb
6. P2 Clean sidewalk drain and add paved outfall
7. P2 Provide crack seal and sealcoat as needed

Pedestrian Paving

1. Remove and replace broken sidewalk segments
2. Remove sidewalks that are abandoned
3. Backfill the edges of sidewalks

Site Development

1. Add bicycle rack
2. Replace wooden ramp and decking
3. Replace plywood inserts at door
4. Remove debris at auto shop
5. Repair replace ceiling tiles at outdoor walkway
6. Implement rodent eradication program

Site Drainage

1. Repair broken PVC pipe ate east entrance
2. Repair clogged roof drains that flood auto shop
3. Clean and improve clogged sidewalk drain
4. Conduct drainage study to correct standing water and flooding at southwest corner of building by consolidating ditches, downspouts and surface drainage into a channel or culvert.

Courtyard

1. CY1 Backfill crushed granite, re-sod where necessary, and repair benches
2. CY2 Repair depression in brick pavers
3. CY2 Replace broken picnic table
4. CY2 Remove tree stump
5. CY2 Repair clogged downspouts at covered walkway

6. CY2 Replace broken downspout at wall
7. CY3 Monitor waterproofing where planters abut wall

Landscape

1. Remove unstable tree limbs
2. Trim overgrown plants in flower beds. Rehabilitate rose garden
3. Re-landscape at performing arts center
4. Maintain crushed granite pathways and courtyards

Water Supply

1. Cut fire hydrant riser to grade

Sanitary Sewer

1. Repair manhole cover and erosion
2. Install a fiberglass grease sampling enclosure

Storm Sewer

1. Repair storm inlet erosion and infiltration
2. Clean sidewalk drains, P2 and R2
3. Repair chipped curb inlet in P1
4. Study and repair drainage at southwest corner of the building.

Detention Pond

1. Pond 1 Remove posts from outfall improve downstream ditch
2. Pond 2 Relieve standing water
3. Pond 2 Replace loose and bent grate at structure
4. Pond 3 Remove debris from grate at outlet structure

Other Utilities

1. Patch buildings where lights have been removed
2. Repair loose conduit on wall
3. Fix Lights in P1
4. Backfill and clean construction excavations

Tennis Courts

1. Replace north fencing and fabric
2. Backfill utility hole

Track

1. Replace missing fence posts
2. Address flooding of detention pond and make improvements as needed

Soccer/Football Field

1. Add field lighting and improve lighting at the building.
2. Repair sod as needed to maintain field
3. Regrade field

Baseball Field

1. Replace bleacher with aluminum on concrete pads
2. Fill CMU retaining wall with concrete or provide a capstone.

3. Replace crumbling rail road ties with retaining wall.

Softball

1. Regrade ditch uphill from the field, replace PVC culvert with a traffic/ mower rated pipe.

