

Joslin Elementary School Site Summary

Address	4500 Manchaca Road Austin, TX 78745
Number of Permanent Campus Facilities	3
Original Year of Construction	1954
Total Campus Building Area (combined)	45,628 SF



Introduction

The Joslin Elementary School campus is located at 4500 Manchaca Road in Austin, Texas. Joslin Elementary School was established in 1955, and consists of the primary school along with two additional campus buildings. The three permanent campus buildings include the gymnasium, library, cafeteria, kitchen, an administration area and classroom wings. The Main School Building (BLDG-120A) is connected to the Stand-Alone Classroom Building (BLDG-120B, built in 1957) by an enclosed corridor. The main building is connected to the Stand-Alone Library (BLDG-120C, built in 1986) by an exterior covered sidewalk.

Meeting Log		Revision Log		
Date	Meeting	Revision	Date	Summary of Content
7/11/16	Interview	00	8/26/16	Draft Issue
7/11/16	Assessment	01	11/15/16	Added comments from PM Randall Sakai as indicated on email dated 10/28/16.
9/19/16	Cluster Meeting			

Main School Building – BLDG-120A

Building Purpose	Administration, Classrooms, Cafeteria, Kitchen and Gymnasium
Building Area	30,933 SF
Inspection Date	June 14, 2016
Inspection Conditions	97°F, Partly cloudy
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 is primarily a brick finish with plaster accent panels. The exterior steel columns and primary roof framing are exposed. The underside of extended roof panels are exposed and painted to form soffits and covers for walkways located directly below. The exterior appeared to be in good condition.	Good
	Exterior Windows	Exterior windows are single-glazed, ganged, aluminum windows with awning sashes below. Some original upper panels have been replaced with newer, translucent, double-wall polycarbonate lights. South classrooms have an older style window. The windows in the south most four classrooms had no weather-stripping. Considering their age and deficiencies, the windows were observed to be in average condition.	Average
	Exterior Doors	Main entrance doors are painted hollow metal in painted hollow metal frames. North wing classroom doors are painted hollow metal in painted wood frames. South wing doors are painted hollow metal in painted hollow metal frames. The main entrance doors appeared to be in average, serviceable condition. Classroom doors appeared to be in average condition but some did not completely close on their own. Corridor doors were in average condition and were missing weather stripping.	Average
Roofing	Three different roof systems are installed on the building. Approximately equal areas of roof are covered with either a modified bitumen system or a built-up		Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>system. These areas drain to perimeter metal gutters and downspouts. A more recent addition for enlarging the cafeteria is roofed with a newer standing seam metal system that also forms the edge fascia and soffit beneath. The metal roof is designed without gutters, drains, or downspouts.</p> <p>The different roof systems appeared to be in average condition. Much of the metal flashing and metal drip edge, though, appeared to be rusting. Some piping support was missing, resulting in debris collecting on the roof surface. The paint finish on downspouts was peeling.</p>	
Interior Construction	Interior Walls	<p>Interior walls are primarily painted gypsum wallboard on conventional framing with some ceramic tile finish in the east wing. Interior walls in the west wing are CMU (concrete masonry unit) with structural clay tile lower walls and integral base. Jalousie windows are installed between the corridor and cafeteria and appeared to be in good condition. Fixed lights in a painted wood frame are installed between the cafeteria and kitchen. It is in good condition. Structural clay tile forms the walls in the kitchen, between the kitchen and the cafeteria, and between the cafeteria and corridor. It is in good condition. The interior walls in the administration area are either gypsum wallboard on conventional framing, CMU, structural glazed tile or a combination of all. Shared light panels and stained wood louvers are installed between the main office and corridor. There are expansion joint covers in the cafeteria where the north addition abuts the existing.</p> <p>Though aged, the original structural clay tile still appeared to be in good, functioning condition as were other walls.</p>	Good
	Interior Doors	<p>The classrooms are separated by toilet rooms. Doors between classrooms and toilet rooms are painted solid-core wood construction in painted wood frames. The administration/cafeteria area has painted and stained wood doors that are in stained wood frames.</p> <p>Doors between classrooms and toilet rooms showed quite a bit of age and were ill fitted. Some could not be closed. Doors in the administration/cafeteria area appeared to be in good condition.</p>	Poor
	Interior Specialties	System not present.	N/A
Stairs	Exterior Stairs	System not present.	N/A
	Interior Stairs	<p>There are short runs of wood stairs between the cafeteria and cafeteria stage.</p> <p>These wood stairs with handrails appeared to be in good condition.</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Interior Finishes	Interior Wall Finishes	<p>Interior walls are primarily painted gypsum wallboard on conventional framing with some ceramic tile finish in the east wing. Interior walls in the west wing are CMU with structural clay tile lower walls and integral base.</p> <p>Painted wood storage closets are either set into or against interior classroom walls. The south most four classrooms have built-in, stained storage closets.</p> <p>The gymnasium has stained wood paneling set between natural finished brick pilasters. Jalousie windows are installed between the corridor and cafeteria. Fixed window lights in a painted wood frame are installed between the cafeteria and kitchen. Structural clay tile forms the walls in the kitchen, between the kitchen and cafeteria, and between the cafeteria and corridor. The interior walls in the administration area are either gypsum wallboard on conventional framing, CMU, structural glazed tile or a combination of all. Shared light panels and stained wood louvers are installed between the main office and corridor. There are expansion joint covers in the cafeteria where the north addition abuts the existing.</p> <p>Wall finishes in the classroom wings appeared to be in worn or partially restored condition. Surfaces in all other areas appeared to be in average condition.</p>	Average
	Interior Floor Finishes	<p>The predominant finish throughout the building is resilient tile. There is hard tile in the toilet rooms and in the kitchen. Wood plank flooring is installed on the cafeteria stage. The predominant base in the classroom areas is ceramic tile. There is athletic floor tile in the gymnasium with vinyl base. Vinyl base is installed wherever there are painted gypsum walls.</p> <p>The hard tile in the classroom toilet rooms appeared to be old but all floors appeared to be well maintained and in good condition.</p>	Good
	Interior Ceiling Finishes	<p>There is 2'x4' ACT (acoustic ceiling tile) and grid in classroom wings. The south most four classrooms and gymnasium ceilings are formed by the underside of the roof decking (tectum panels).</p> <p>There is 2'x2' ACT and grid as well as painted texture ceiling in the main interior corridors.</p> <p>The cafeteria and administration area ceilings are of 2'x4' ACT and were in good condition. There is 2'x2' vinyl-faced tile in the kitchen, which was in good condition.</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		The 2x4 tile and grid systems in the classroom wings appeared to be sagging, broken, and ill-fitting. All other ceiling finishes appeared to be in good condition.	
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	<p>BLDG-120A of Joslin Elementary School contains predominantly single-use restrooms throughout the facility, with multi-use restrooms found outside of the gymnasium and administration areas. Typical restrooms have floor-mounted vitreous china water closets with manual flush valves. Additionally, wall-hung vitreous china urinals with manual flush valves are located in the dedicated multi-use male restrooms. Typical classrooms contain a single-basin stainless steel or porcelain enamel metal sink with a drinking fountain attached or a porcelain enamel metal sink with separate vitreous china drinking fountain. Stainless steel drinking fountains can be found in the corridors of the building.</p> <p>A lounge contains a stainless steel double-basin sink. There is a porcelain enameled steel handwashing basin sink outside of the cafeteria that has three faucets. The kitchen contains stainless steel kitchen equipment, including a three-basin prep sink. It also has various wall-mounted vitreous china and stainless sinks for personal use. The building has service sinks located in various janitorial closets. There are showers located in the gymnasium office and in room 101.</p> <p>The majority of plumbing fixtures were observed to be in poor working condition, aged and showed signs of deterioration. The drinking fountain in room 205 was cracked and had low flow. The sink in the administration's female bathroom (WFRRADM) was observed to stick on longer than expected. The coated metal handwashing basin sink outside the cafeteria had three faucets. All three faucets were observed to leak. There is a vitreous china personal sink in the kitchen that was observed to leak. The corner sinks in restrooms in rooms 201-206 were old and did not work. They appeared to be abandoned in place. No flow was observed when only the hot water handle of restroom 101HRR's sink was turned on. The sink in room 102 had leakage from both faucets. The gymnasium office sink was spurting uneven flow. The water also had a gray tone. The handheld shower head in the gymnasium office was observed to be leaking.</p> <p>There is a toilet seat in BRRGYM that is undersized.</p>	Poor

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		Corrosion was observed on fixtures in BRRGYM, and an odor was being emitted. One of the urinals in this restroom appeared to not be operational and had a garbage bag over it. There was leakage observed from the toilet in the restrooms off rooms 102 and 104. The sinks in the janitorial closets were observed to be in average to poor condition, with some showing signs of leaks and corrosion around the base.	
	Domestic Water Distribution	Domestic hot water to the kitchen is provided by a 75-gallon water heater stored in the mechanical room (KITMECH) located inside the kitchen. A 50-gallon electric water heater was next to a washer and dryer in room 101LAUN. The unit is approximately 20 years old but appears to be in average condition with minor corrosion and rust on the connections. Various smaller electric water heaters are located throughout the building to provide heated domestic water to specific locations in the school (i.e., administration area and gymnasium shower). Domestic hot water is not supplied to the classroom plumbing fixtures. Damaged insulation, corrosion, and rust were observed on piping throughout the building. The plumbing distribution equipment was observed to be in average condition with typical wear and tear associated with the system's age and general daily use.	Average
	Other Plumbing	The restrooms in room 206 and the male gymnasium (BRRGYM) were observed to be emitting a smell. The floor drains in the kitchen appear to be in average condition and working well. The grease trap in the kitchen was reported in the facility interview to not be draining properly, causing a chronic foul smell. There is abandoned piping in the gymnasium restrooms (BRRGYM and GRRGYM). Roof drains had grates to prevent debris from blocking, but debris was observed surrounding the grate. Corrosion and rust were observed on the kitchen piping fixtures.	Average
Mechanical/ HVAC	The HVAC (heating, ventilating, and air conditioning) system is composed of geothermal water pump units, packaged RTUs (roof top units), heat pump systems, and package units for individual zone temperature controls. A separate geothermal unit is designated for each classroom and administration room. WSHPs (water source heat pumps) in each classroom were not accessible, assumed to be stored within the unit and working properly. RTUs feed the gymnasium and cafeteria. The cafeteria stage houses two ceiling-mounted heat pump units. Two space heaters are outside the gymnasium restrooms (BRRGYM and GRRGYM). Multiple roof top EFs (exhaust fans) ranging in size serve the		Average

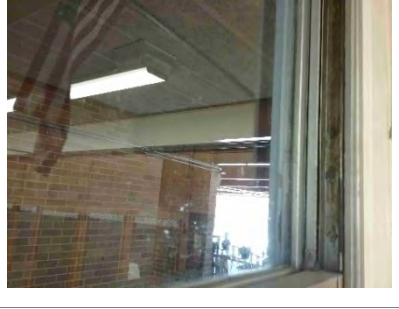
System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>building.</p> <p>The geothermal water pump units were approaching end of useful life, and it was reported in the facility interview that water needs to be manually added twice a year. This is not normal recommended maintenance for these units but was reported to be necessary to keep them functioning. It is suspected there may be a leak in the geothermal well system. Room 201 had a musty smell, possibly coming from the geothermal unit. The unit in room 104 was making a vibrating noise during operation. Two units found in the administration area appeared to be newer and in good condition. There was an in-wall packaged AC unit (PTAC-1) in the gymnasium office that was making a loud grinding noise. Old TRANE heating units were found in the majority of classrooms. It was reported that they were no longer in use and abandoned in place. Some roof top EFs had corrosion and rust. The EF in ELEC300 had corrosion and rust. The EF in the gymnasium was very loud. The kitchen source fan was aged and out of date, showing signs of corrosion and rust.</p>	
Fire Protection	Fire Alarm	<p>The building has a fire alarm system that consists of alarm and signaling devices such as horns, strobes, horn/strobe combinations devices, pull stations, detectors, and a system annunciator. The fire alarm system is controlled by the Silent Knight control panel.</p> <p>The fire alarm system was observed to be in average condition due to some of the fire alarm end devices being near their end of life or worn from outdoor exposure. It should also be noted that the book storage spaces do not have fire detection.</p>	Average
	Fire Protection/Suppression	<p>A fire suppression system is present for the range hood in the kitchen with a tank mounted to the wall at the ceiling. A single sprinkler head was observed in the CCGYM room that did not appear to be functional.</p> <p>The remaining fire suppression system consists of fire extinguishers throughout the building. Visual inspection showed these appeared to be in average condition. The majority of the extinguishers were up to date with inspections, but the extinguisher in the gymnasium was past due on its annual inspection.</p>	Average
Electrical	Electrical Distribution	<p>The electrical service appears to enter the building at the 120/208-volt, 800-amp main panelboard located in the IDF (intermediate distribution frame) room (the main switchboard for the campus is located in BLDG-120B). The 800-amp panelboard feeds a variety of HVAC equipment and smaller subpanels. The building does not have a lightning protection system.</p> <p>The electrical distribution equipment was observed to be in average condition. The majority of the panelboards have been replaced in different phases.</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>Two panelboards, Panel N and Panel TP1B, had missing breaker covers, and the bussing was exposed behind the breaker board. This condition is a life safety hazard, and breaker covers should be installed immediately. There are several safety switches and equipment controls for equipment throughout the building that are dated and past life expectancy.</p> <p>The faculty has reported that breakers commonly trip due to overloaded circuits.</p>	
	Lighting	<p>The building's exterior lighting consists of metal-halide and fluorescent luminaires that are located near parking lots, playground, covered walkways, and building egresses. Exterior luminaires are made up of a variety of different fixture types but are predominately wall-mounted lights and canopy lights. The interior lighting primarily consists of recessed troffers, surface mounted strip lights, and suspended strip light, and recessed downlight fluorescent luminaires. Some storage rooms still feature dated screw-in lamp style luminaires.</p> <p>The lighting for the building appeared to be in average condition. Many interior and exterior luminaires appeared to be aged past their design life. Observed deficiencies included worn and discolored lenses, dim lighting, and non-functional fixtures. There are exit signs present in the building, but several were found to be poorly lit. There was also an instance of a temporary shop light being used as a permanent fixture in room IDF.</p> <p>There were several issues in the branch wiring, including damaged or loose conduit and missing junction box covers. Open conduit could lead to water and insect infiltration into the electrical systems. Several exterior receptacles were found with broken covers, without covers, or severely worn. Some interior electrical receptacles were found to be worn, have broken cover plates, or ground lugs (from a device plug) broken off inside the receptacle. The 100-wing classrooms were found with non-grounded electrical receptacles installed for overhead clocks. Many classroom light switches were worn and past their life expectancy. The faculty has reported that there are common issues with the electrical receptacles and associated circuits in the classrooms that result in tripped circuits. The faculty has also reported inadequate lighting in the restroom vestibules between</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		classrooms, under the covered walkways for the classrooms, and within the nurse's office. The faculty reported that many of the external luminaires were old and replacement parts were difficult to find.	
	Communications & Security	<p>The building is equipped with telecommunications/cable systems, with the main backbone equipment located in the inaccessible MDF (main distribution frame) room. Room 208 contains a cabinet named IDF1-B that houses additional data equipment. Networking Wi-Fi access points are also installed throughout the building. VOIP (voice over IP) telephones are used for voice communications.</p> <p>The building security includes surveillance cameras, motion detectors, and a proximity card access system.</p> <p>The communications and security systems appeared to be in good condition. The faculty reported that the timekeeping and intercom systems work well.</p>	Good

Exterior System Deficiency Examples

Exterior Walls



Exterior Doors

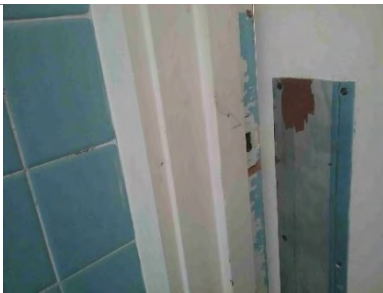


Roofing Deficiency Examples



Interior Construction Deficiency Examples

Interior Doors



Interior Finishes Deficiency Examples

Interior Wall Finishes

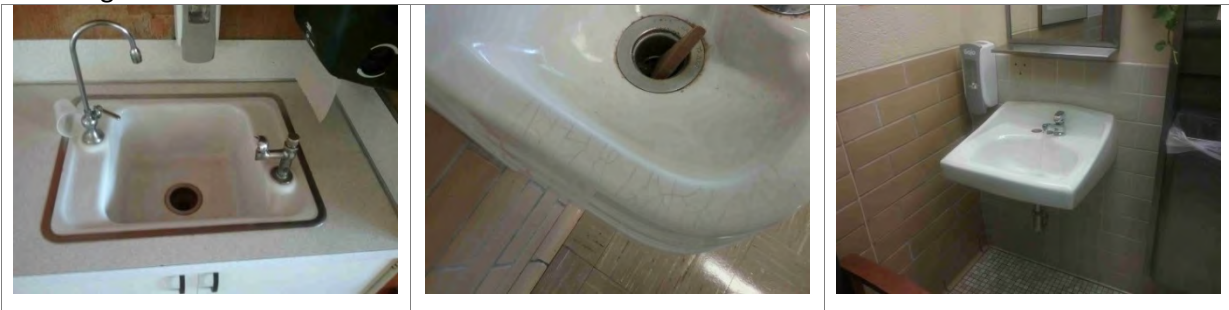


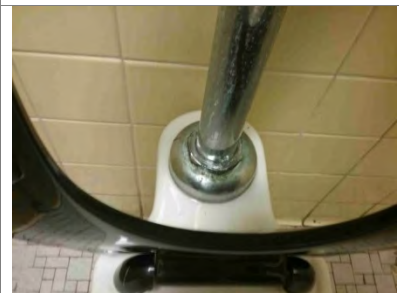
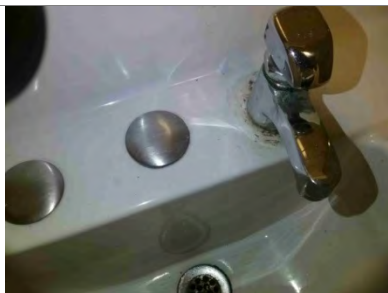
Interior Ceiling Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures



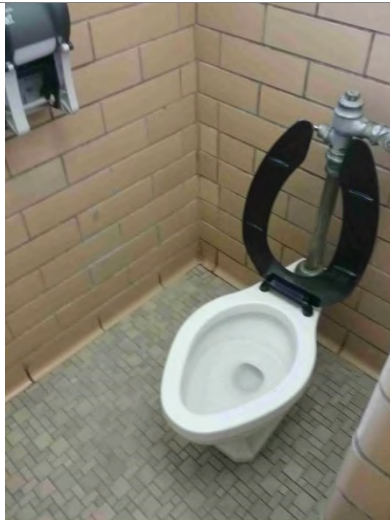


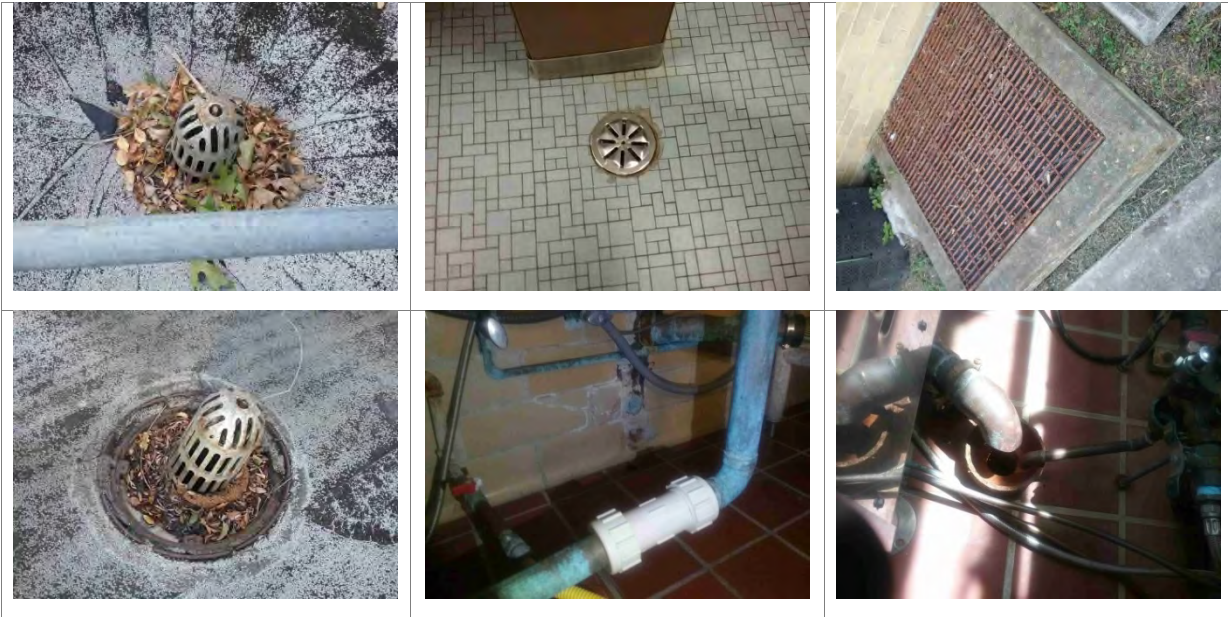


Domestic Water Distribution



Other Plumbing





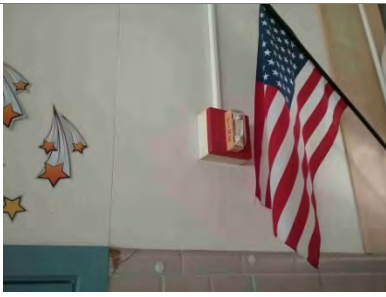
Mechanical/HVAC System Deficiency Examples





Fire Protection System Deficiency Examples

Fire Alarm



Fire Protection/Suppression



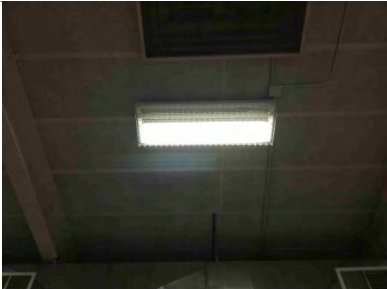
Electrical System Deficiency Examples

Electrical Distribution





Lighting





Stand-Alone Classroom Building – BLDG-120B

Building Purpose	Classrooms
Building Area	11,444 SF
Inspection Date	July 14, 2016
Inspection Conditions	97°F, Partly cloudy
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 is all brick with cement plaster soffits above the south and north walls. An entry soffit exists over the west entry. These durable surfaces appeared to be clean and in good condition. The south roof fascia requires painting (see Roofing).	Good
	Exterior Windows	Windows are ganged, single-glazed, aluminum units with bottom awning sashes. The exterior windows appeared to be in poor condition. Most sash lights were missing putty. Interior film, particularly on the upper lights on the south side, showed age and was discolored. Several lights appeared to have been damaged by BB gun pellets.	Poor
	Exterior Doors	The only exterior doors are located at the west end of the building. This pair of painted, hollow metal, double doors is set in a painted hollow metal frame. The frame has fixed single-glazed sidelights and a transom. These doors appeared to be in average condition, though the paint finish was failing.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Roofing		<p>The roof is a modified bitumen system. The roof surface drains to a center valley where two roof drains are installed. The two drains discharge out of scuppers installed on the side of the building exterior walls.</p> <p>The roof appeared to be in average condition. Evidence of ponding in the valley area was observed and may cause future, accelerated aging. Staining of the corridor's ceiling finish directly below the valley area suggested that damage had occurred in the past. Debris around one of the two roof drains also may be the cause of or contributing to the damage. The fascia below the south face of the roof appeared to be in good condition but requires paint.</p>	Average
Interior Construction	Interior Walls	<p>Corridor walls are CMU or wood frame with either infill wood or wallcovering tack panels in the middle, wood jalousie vents below and jalousie windows above. Walls between classrooms are of CMU above with structural clay tile below.</p> <p>Walls appeared to be in good condition.</p>	Good
	Interior Doors	<p>Doors are painted solid-core wood with vision panels in painted wood frames.</p> <p>All door assemblies appeared to be in good condition.</p>	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	<p>Corridor finishes are paint on wood or fabric tack panels. Classroom finishes are paint on CMU, wood-framed chalkboards, stained wood casework or structural glazed tile.</p> <p>All finishes appeared to be in good condition.</p>	Good
	Interior Floor Finishes	<p>The entire floor surface is finished in resilient tile. Wall base is entirely vinyl but is omitted at structural glazed tile, which forms its own base.</p> <p>Floor finishes appeared to be well maintained.</p>	Good
	Interior Ceiling Finishes	<p>Corridor ceilings are painted, blown acoustic. Classroom ceilings are 2x4 acoustic lay-in panels in grid.</p> <p>Both ceiling types appeared to be in average condition. The corridor ceilings had some minor water staining. This damage could possibly be attributed to the roof. The roof appeared to have ponding damage and debris-clogged drains directly above the corridor.</p>	Average
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The majority of the classrooms in BLDG-120B do not contain plumbing fixtures. Rooms 302, 309 and 310 contain single-basin sinks. Rooms 309 and 310 contain	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
		<p>combination sink and drinking fountain fixtures. Multi-use restrooms are found in the front corridor of the building and contain floor-mounted vitreous china water closets and wall-mounted vitreous china sinks. Wall-mounted vitreous china urinals are in the dedicated male restroom. A janitorial mop sink is in CC300.</p> <p>Plumbing fixtures appeared to be in average working condition, with some showing minor signs of deterioration but still operational. No flow was observed to the hot water knob in room 302. The mop drain in CC300 was observed to be in average working condition with signs of corrosion and rust at the base.</p>	
	Domestic Water Distribution	<p>No hot water was observed to be fed to the building. The plumbing distribution equipment appeared to be in average condition with minor deterioration observed on piping throughout the building. The domestic water system appeared to be in average condition with typical wear and tear associated with the system's age and general daily use. The sink in room 302 had evidence of leaks coming from underneath it.</p>	Average
	Other Plumbing	<p>Minimal "other plumbing" was visible during inspection. Floor drains in the multi-use restrooms (GRR300 and BRR300) appear to be in average condition. The male restroom's floor drain had damage to the grate.</p>	Average
Mechanical/ HVAC	<p>BLDG-120B's HVAC system is composed of geothermal water pump units in the individual classrooms and heat pump systems to feed the library. Bathrooms also contain on-ceiling heat pumps and EFs. WSHPs in each classroom were not accessible, assumed to be stored within the unit and working properly.</p> <p>The HVAC system appeared to be in average condition; however, the majority of the equipment is past its expected design life. Some units show signs of degradation with rust and corrosion. Like the main building, geothermal water pump units were approaching end of useful life, and it was reported in the facility interview that water needs to be manually added twice a year. This is not normal recommended maintenance for these units but was reported to be necessary to keep them functioning. It is suspected there may be a leak in the geothermal well system. Additionally it was reported in the facility interview that the geothermal units in the corridor (SC008331 and SC008306) do not work.</p> <p>The geothermal unit in room 302 was making a buzzing noise when operating. The heat pump systems in the ceiling of the bathrooms (GRR300 and GRR300) were not operating during inspection, and surrounding areas were observed to be very warm. Old TRANE heating units were found in the majority of classrooms. It was reported that they were no longer in use and abandoned in place. Multiple HVAC units were observed to be using R-22 refrigerant, which is an outdated refrigerant that is being phased out of use.</p>		Average

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/strobe combination devices, pull stations, detectors, and annunciators.</p> <p>The fire alarm system appeared to be in average condition due to the majority of the end devices being near or past their design life.</p>	Average
	Fire Protection/ Suppression	<p>The fire suppression system consists of portable fire extinguishers only. There is no automatic sprinkler system in the building.</p> <p>Visual inspection of the fire extinguishers determined they appear to be in average condition and annual inspections were up to date.</p>	Average
Electrical	Electrical Distribution	<p>The electrical service enters the building at the 120/208-volt, 2000-amp main switchboard located in ELEC300 on the north side of the building. The service switchboard feeds various panelboards throughout the building. The building does not have a lightning protection system.</p> <p>The electrical distribution equipment appeared to be in good condition. All of the panelboards have been replaced since the original construction. One panelboard, Panel J located in ELEC300, was found to have corrosion on the enclosure. The building also has several safety switches and equipment controls for equipment throughout the building that are dated and past life expectancy.</p>	Good
	Lighting	<p>The building's exterior lighting consists of metal-halide luminaires (wall mounted and canopy style) at the building egresses and on each side of the building. The interior lighting primarily consists of suspended strip light T8 fluorescent luminaires.</p> <p>Building exit luminaires were found to function properly. The lighting for the building was observed to be in average condition. The only lighting deficiencies found during the assessment were loose or missing lenses from interior luminaires. Several deficiencies were found related to branch wiring: loose or open conduit on the building exterior, dated or worn electrical receptacles, a non-grounded electrical receptacle in room 301, and worn light switches throughout the building. It is worth noting that room 310 has a defective light switch that required the switch be forced up to activate the classroom lights.</p>	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Communications & Security	<p>The building is equipped with telecommunications/cable systems. Networking Wi-Fi access points are installed throughout the building. VOIP telephones are used for voice communications.</p> <p>The building security includes surveillance cameras and motion detectors. Two exterior surveillance cameras were found overlooking the portable building area and the north parking lot. The interior surveillance camera overlooks the building egress. Motion detectors are installed throughout the classrooms.</p> <p>The communications and security system was found to be in average condition. The building has several areas where telecommunications cabling is damaged or exposed. An exterior distribution board for telephone/networking was found uncovered. Telephone cabling was found damaged or exposed throughout the classrooms. It should be noted that this system may be abandoned in place due to the presence of the VOIP telephones.</p>	Average

Exterior System Deficiency Examples

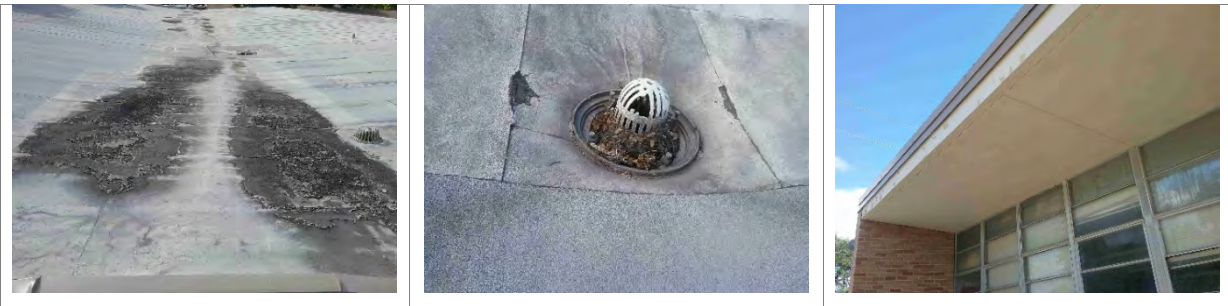
Exterior Walls



Exterior Doors

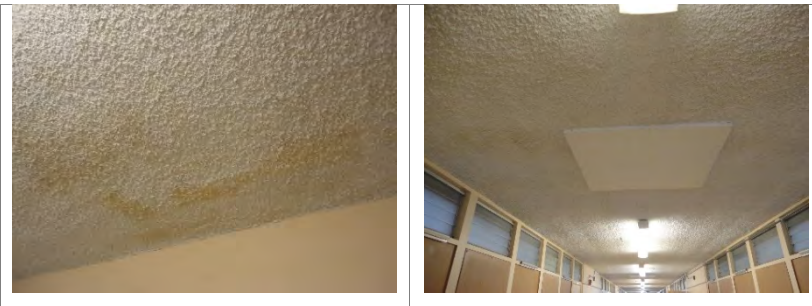


Roofing Deficiency Examples



Interior Finish Deficiency Examples

Interior Wall Finishes



Plumbing System Deficiency Examples

Plumbing Fixtures



Domestic Water Distribution

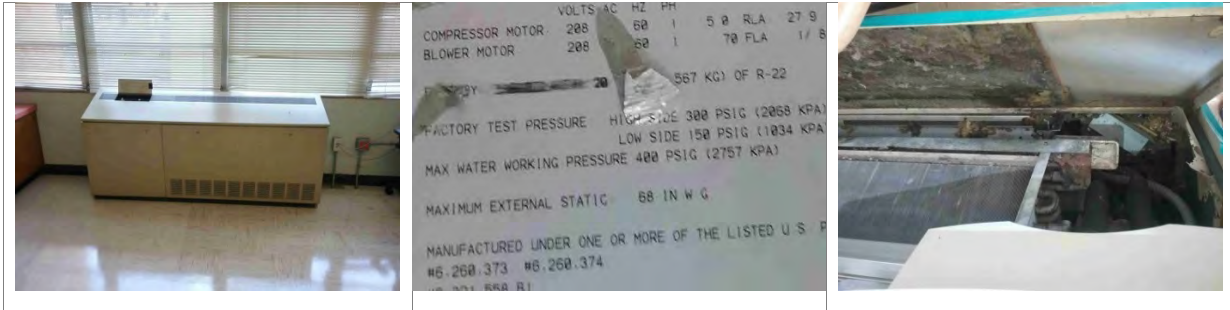


Other Plumbing



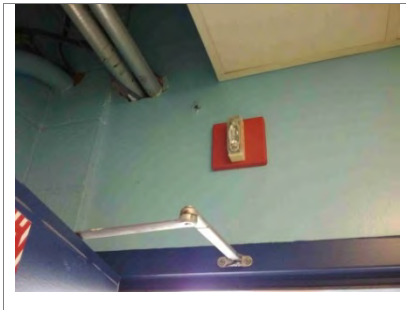
Mechanical/HVAC System Deficiency Examples





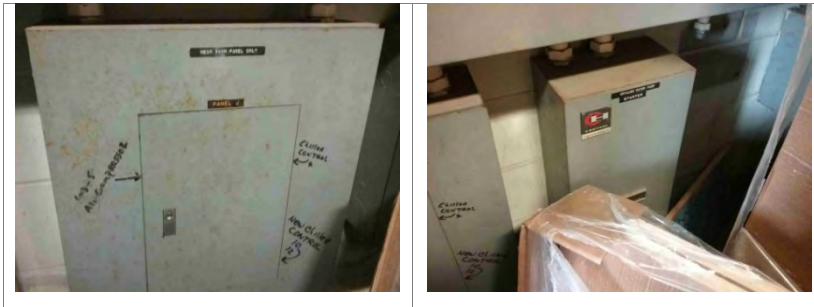
Fire Protection

Fire Alarm



Electrical System Deficiency Examples

Electrical Distribution



Lighting





Communications & Security



Stand-Alone Library – BLDG-120C

Building Purpose	Library
Building Area	3,250 SF
Inspection Date	May 17-18, 2016
Inspection Conditions	May 17- 80°F, Sunny May 18 - Overcast with rain
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 finish is brick on three sides and a brick and plaster finish on the south gable wall. All walls appeared to be in good condition, including the soffit formed by the roof system (see Roofing).	Good
	Exterior Windows	Exterior windows are single-glazed, single-hung, aluminum units. Larger south windows are fixed with opaque bottom panels. All units appeared to be well sealed and in good condition.	Good
	Exterior Doors	There is a single painted hollow metal door in a painted hollow metal frame. The frame includes a sidelight and transom. The door appeared to be in good operable condition; however, the paint finish was beginning to exhibit deterioration and therefore the overall system was rated as average.	Average
Roofing	A standing seam metal pan roof system is installed. The panels also form the edge fascia and soffit beneath. This roof system appeared to be providing good service.		Good
Interior Construction	Interior Walls	Walls are gypsum board on conventional stud framing. The walls appeared to be in good condition, but were rated as average because cracks have formed above several interior wall openings.	Average

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Interior Doors	Doors are stained solid-core wood in painted hollow-metal frames. The doors, frames, and hardware appeared 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 finish consists of paint on gypsum wallboard. Accent brick is installed on an area-dividing wall. Ceramic tile forms the rear wall of the restroom. All finishes appeared to be in good, clean condition.	Good
	Interior Floor Finishes	Floor finish is carpet tiles in the main reading room and resilient tile elsewhere. All finishes appeared to be well maintained and in good condition.	Good
	Interior Ceiling Finishes	The ceiling system throughout consists of 2'x4' acoustical tiles set in a suspended grid. The system appeared to be tight, clean, and well aligned.	Good
Conveying	System not present.		N/A
Plumbing	Plumbing Fixtures	The library contains a stainless steel double-basin sink and a single-use restroom. The restroom contains a floor-mounted vitreous china water closet and wall-mounted vitreous china sink. Plumbing fixtures were observed to be in average working condition, with some showing minor signs of deterioration but still operational. There was no hot water to either of the sinks. The water closet had evidence of leaks around the base.	Average
	Domestic Water Distribution	No hot water was observed to be fed to the building. The plumbing distribution equipment appeared to be in good condition with no observed corrosion or rusted piping throughout the building.	Good
	Other Plumbing	Minimal "other plumbing" was visible during inspection. Floor drains in the restroom appeared to be in good condition with no signs of corrosion to the grate.	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
Mechanical/ HVAC	<p>BLDG-120C's HVAC system is composed of heat pump systems and exterior air conditioner condenser units. The restrooms contained an EF.</p> <p>The HVAC system appeared to be in average condition. One of the exterior AC condenser units was aged and out of date with signs of corrosion and rust. The unit also had damage to the insulation on the refrigerant lines and was using R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. Two heat pump systems were noted on the floorplan, but only one was observed in the assessment. This unit (HP SC008314) was relatively new and in good condition. The unit that was not located is possibly in the ceiling but was unable to be assessed.</p>		Average
Fire Protection	Fire Alarm	<p>The building has a fire alarm system that consists of alarm and signaling devices such as horns, strobes, horn/strobe combination devices, pull stations, detectors, and annunciation systems. The fire alarm system is controlled by the Silent Knight control panel.</p> <p>The fire alarm system was observed to be in good condition.</p>	Good
	Fire Protection/ Suppression	<p>Fire suppression is achieved through the use of portable fire extinguishers only. There is no automatic sprinkler system.</p> <p>Visual inspection of the fire extinguishers determined they were in good condition and annual inspections were up to date.</p>	Good
Electrical	Electrical Distribution	<p>Distribution for BLDG-120C is located in room LIBHP via a single 120/208-volt, 250-amp panelboard that was installed in 2000.</p> <p>The electrical distribution equipment appeared to be in good condition. No major deficiencies were found during the assessment.</p>	Good
	Lighting	<p>The building's exterior lighting consists of metal-halide canopy luminaires on the covered walkway at the main entrance. The interior lighting primarily consists of recessed troffer T8 fluorescent luminaires.</p> <p>The lighting for the building appeared to be in good condition. The external luminaires on the covered walkway were found to be dated and discolored.</p>	Good

System	Subsystem	Condition and Deficiency Overview	System Condition Rating
	Communications & Security	<p>The building is equipped with telecommunications systems with the main equipment located in LIBMAGRM. Networking Wi-Fi access points are installed throughout the building. VOIP telephones are used for voice communications.</p> <p>The building security only consists of motion detectors.</p> <p>The communications and security system was found to be in good condition.</p>	Good

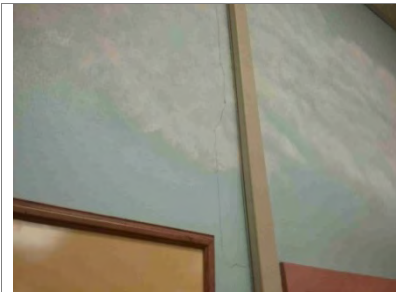
Exterior System Deficiency Examples

Exterior Walls



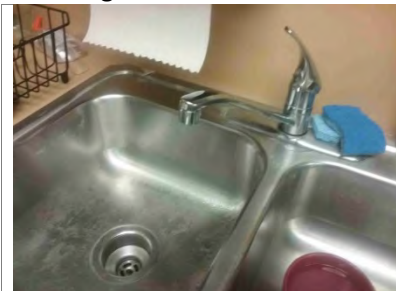
Interior Construction Deficiency Examples

Interior Walls

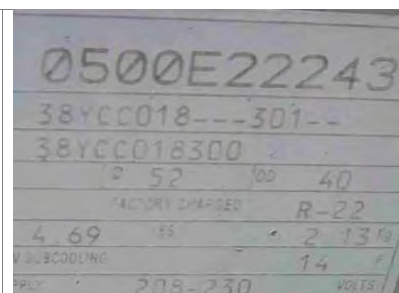


Plumbing System Deficiency Examples

Plumbing Fixtures



Mechanical/HVAC System Deficiency Examples



Electric System Deficiency Examples

Lighting



Joslin Elementary 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

Exterior

1. Examine all exterior doors for complete weather stripping. Install weather stripping as required.

Plumbing

1. Repair faucets on sinks that are not functioning properly.

Mechanical/HVAC

1. Replace HVAC units that use R-22 refrigerant, which is an outdated refrigerant that is being phased out of use. These systems may need to be replaced before they meet their design life due to refrigeration restrictions.

Fire Protection

1. Replace worn or dated fire alarm end devices.

Electrical

1. Replace lamps in luminaires throughout campus that have burned out.
2. Replace all outdated or damaged luminaires with LED luminaires with dimming capabilities.
3. Replace worn and dated electrical receptacles throughout campus.
4. Replace light switches that are worn, damaged, or past their life expectancy.
5. Replace corroded or dated control panels and electrical safety switches for mechanical equipment.
6. Troubleshoot and repair circuit trips associated with worn electrical receptacles throughout the buildings.

Main School Building Recommendations

Exterior

1. Replace, or if possible, retrofit the older style windows installed in the south most four classroom's exterior walls with weather stripping.

Roofing

1. Inspect all roof surfaces for required maintenance.
2. Support surface-installed piping above roof surfaces.
3. Clear debris off the roof surfaces and gutters.
4. Evaluate the possibility of replacing rusted, metal flashings. Monitor drip-edge flashings for rust degradation.
5. Repaint downspouts where required.

Interior Construction

1. Replace interior doors, frames, and hardware in the classroom wings that are in poor condition. The doors between toilet rooms and classrooms, in some cases, were unable to be closed.

Interior Finishes

1. Complete the finishing of classroom-wing walls and apply new paint.
2. Repair and refinish stained woodwork in the south most four classrooms.
3. Examine the ceiling grid system in the classroom wings for serviceability. Replace sagging, broken ceiling tiles. If feasible, consider installing a 2'x2' system in order to minimize the sagging of tiles.

Plumbing

1. Replace aged plumbing fixtures to maintain a functioning system.
2. Replace the cracked drinking fountain in room 205.
3. Remove fixtures that have been abandoned in place and no longer function.
4. Repair gymnasium hand-held shower head that was observed to be leaking.
5. Repair water closets observed to have evidence of leaks.
6. Repair urinal in BRRGYM that has been bagged.
7. Repair or replace any damaged or missing piping insulation as needed at all facilities.
8. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset in all facilities by cleaning, repainting, or repairing to prevent further deterioration.
9. Replace water heaters that are beyond their expected design life before failure occurs.
10. Inspect, clean and repair plumbing in multiple bathrooms that are emitting an unpleasant odor.
11. Clean and flush out all floor drains to ensure adequate drainage; it was reported these are not draining properly.
12. Clean out storm and condensate exterior drains to avoid plugging and backup.
13. Inspect the grease trap in the kitchen and clean or replace as necessary.

Mechanical/HVAC

1. Replace HVAC equipment that is beyond its expected design life before failure occurs.
2. Repair any equipment that was noted with excessive noise/vibration.
3. Repair geothermal units in the corridor (SC008331 and SC008306) that were reported to not work.
4. Remove any equipment that has been abandoned in place and is no longer functioning.
5. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing prevent further deterioration.

Fire Protection

1. Inspect extinguishers that are past due on their annual inspections, and replace if necessary.
2. Remove sprinkler heads that are no longer in use.
3. Install additional fire detection end devices within book rooms.

Electrical

1. Immediately provide missing breaker cover plates for all panels with open slots, as these instances should be considered life safety hazards
2. Install a permanent luminaire in room IDF.
3. Repair loose or open conduit throughout the interior and exterior of the building.
4. Replace exterior electrical receptacle covers that are damaged or not present.
5. Install additional lighting for the nurse's office, under covered walkways for 100-/200-wing classrooms, and in the restroom vestibules in the 100-/200-wing classrooms, as recommended by campus faculty.

Stand-Alone Classroom Recommendations

Exterior

1. Replace damaged glass lights. Re-putty window sashes as required. Replace existing interior window film where currently applied. This is an aesthetic suggestion and not necessarily a requirement.
2. Prepare the west exterior door assembly for paint and apply a new paint finish.

Roofing

1. Examine the possibility of forming cricket roof areas between drains to create a better functioning drainage system.
2. Clean and repair the east roof drain.
3. Prepare the south fascia below the roof drip metal edge for paint and apply a new paint finish.

Interior Construction

1. Investigate the source of damage to existing stained ceiling areas in the corridor. Once corrected, repaint damaged ceiling areas.

Electrical

1. Repair or replace Panel J in ELEC300.
2. Repair or replace interior luminaire covers that are loose or missing.
3. Remove or repair unsecured telephone cabling.

Stand-Alone Library Recommendations

Exterior

1. Prepare the west exterior door assembly for paint and apply a new paint finish.

Interior Construction

1. Examine several locations where the gypsum wallboard has cracked near adjacent wall openings in the library main room. The fact that no damage was noted to the exterior wall suggests that there is no abnormal structural movement, though this should not be ruled out. It is, however, common practice to install drywall control joints above drywall openings. This was not done when the interior walls were constructed. It is suggested that these be added vertically at the locations of existing cracks if wall repair/renovations are considered.

Plumbing

1. Repair any water closet with evidence of leaks underneath.

Mechanical/HVAC

1. Verify functionality of ceiling-mounted heat pump units in the multi-use restrooms.
2. Address any rust or corrosion observed on the equipment, its associated piping, or any other sub-asset by cleaning, repainting, or repairing to prevent further deterioration.
3. Repair or replace any damaged or missing piping insulation as needed at all facilities.

Joslin Elementary 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.

2018 Bond Planned Improvements from PM Randall Sakai on 10/28/16.

- Summer 2018.
 - Replace ceiling.
 - Replace toilet partitions.
 - Replace WSHPs in BLDG-120A.
 - Replace WSHPs in BLDG-120B.
 - Replace WSHPs in BLDG-120C.
 - Replace HVAC controls.
 - Replace gymnasium HVAC unit.
 - Replace ductwork insulation.
 - Replace sanitary sewer under building.
 - Replace sanitary sewer at restrooms and other rooms.
 - Replace sanitary sewer between building and city tap.
 - Replace sidewalk.
 - Replace light pole.