FACILITY REPORT

City of Dunwoody
Brook Run Park Theater

June 16, 2011

Clark Patterson Lee

Facility Study

City of Dunwoody: Brook Run Park Theater

ARCHITECTURAL NARRATIVE

General Overview

A general walk-thru of the exterior and interior spaces occurred June 3, 2011. The facility has been closed to the public and not used for an extended period of time.

The lack of conditioned air has resulted in humidity damage to most of the interior finishes including peeling and mold growth on painted surfaces, broken/sagging acoustical ceilings, rusted ceiling grids, deteriorated gypsum board wall surfaces, loose floor tile, mold growth in carpets, deteriorated millwork, warped and peeling wood door veneers, and mold growth on theatre seating, curtains, drops, and wall/ceiling grilles & registers.

Vandalism has resulted in damage to many of the interior finishes, notably paint spilled on floor surfaces, graffiti painted on both painted and brick wall surfaces, torn wallpaper, broken millwork door fronts, paint splattered on drinking fountains, and missing ceiling tile. Vandalism has also occurred on the exterior including broken windows and graffiti painted on glazing.

An interior renovation of the facility should include testing for asbestos, lead paint, mold, and other hazardous materials prior to any demolition, the complete demolition of all interior finishes and built-in furnishings & equipment, repairs to any damaged surfaces and materials, and the construction of new interior finishes and built-in furnishings & equipment.

No cracks or settlement were noticed in the interior and exterior masonry construction and the overall substructure of the facility appeared in solid condition.

Concerning the exterior skin of the facility and how it measures up to the current energy code, the age of the existing roof and the thickness/condition of the existing roof insulation will determine if it should be considered for replacement. The existing aluminum windows, storefront and curtainwall should be replaced with thermally broken systems including energy efficient low-e, tinted and insulated glazing.

Floor Finishes

VCT: Existing vinyl composition flooring is in poor condition showing wear from heavy use and damage from high humidity and vandalism. All existing VCT, resilient flooring accessories and flooring adhesives should be completely removed with floor slabs prepped to receive new flooring applied with no-VOC adhesives. All floor slabs should be tested for excessive moisture content due to the age and condition of the existing underslab vapor barriers and the humidity levels maintained in the closed facility, prior to new flooring installation.

Rubber Flooring: Existing rubber flooring is in poor condition showing wear from heavy use and lack of floor maintenance. Existing floor pattern is miniature basketball court. All existing rubber flooring, accessories and flooring adhesives should be completely removed with floor slabs prepped to receive a new floor finish applied with no-VOC adhesives. All floor slabs should be tested for excessive moisture content due to the age and condition of the existing underslab vapor barriers and the humidity levels maintained in the closed facility, prior to new flooring installation.

Carpeting: Existing carpeting is in poor condition showing wear from heavy use and lack of floor maintenance as well as mold from high humidity. All existing carpeting, accessories and adhesives should be completely removed with floor slabs prepped to receive a new floor finish applied with no-VOC adhesives. All floor slabs should be tested for excessive moisture content due to the age and condition of the existing underslab vapor barriers and the humidity levels maintained in the closed facility, prior to new flooring installation.

Ceramic Tile Flooring: Existing ceramic tile flooring is in poor condition showing wear from heavy use and lack of floor maintenance. Existing floor pattern is a random mosaic with "dated" colors. All existing ceramic tile flooring, accessories and setting mastics should be completely removed with floor slabs prepped to receive a new floor finish. New tile flooring installed on elevated slabs subject to bending stresses should be installed with a cleavage membrane on a thick-set setting bed if the existing structure and floor transitions allow.

Stage Flooring: Existing stage flooring is in fair condition showing wear from heavy use and lack of floor maintenance. The existing flooring could be stripped, sanded, and re-finished, a typical treatment for stage flooring.

Concrete Flooring: Existing concrete flooring is in good condition showing wear from heavy use and lack of floor maintenance but is free from cracking or damage. The existing flooring could be mechanically cleaned to be returned to new condition.

Ceiling Finishes

ACT: Existing acoustical tile ceilings are in poor condition showing damage from high humidity and vandalism. All existing ACT and suspension grid system and accessories should be completely removed and replaced with new ceiling finishes.

SPC: Existing suspended panel ceilings are in poor condition showing damage from heavy use and high humidity. All existing SPC and suspension grid system and accessories should be completely removed and replaced with new ceiling finishes.

Painted Gypsum: Existing painted gypsum board ceilings and soffits are in fair condition showing some paint damage from high humidity. All existing painted gypsum ceilings and soffits should have any damaged gypsum board repaired, all surfaces sanded and prepped for painting, and new paint finishes.

Wall Finishes

Masonry: Existing masonry walls are in good condition showing some paint damage from high humidity. All existing masonry walls should be thoroughly cleaned and prepped for new paint finishes. Any existing masonry walls with wallpaper should have the wallpaper and adhesives removed with surfaces thoroughly cleaned and prepped for new paint finishes. Some walls surfaces located in restrooms are in poor condition and will require additional effort to repair damaged areas and prep for new finishes.

Painted Gypsum: Existing painted gypsum board walls are in fair condition showing some damage from high humidity and mold/mildew. All existing painted gypsum board walls should have any damaged gypsum board repaired, all surfaces sanded and prepped for painting, and new paint finishes.

Ceramic Tile: Existing ceramic tile walls are in fair condition showing wear from use and lack of maintenance; grout is discolored. Existing ceramic wall tile may be thoroughly cleaned and disinfected. If the grout can be cleaned, the existing tile could remain; if the grout cannot be cleaned, the existing wall tile should be replaced with new finishes.

Wood Wainscot & Trim: Existing painted wood wainscot panels and trim are in good condition showing typical wear from its age. Existing painted wood wainscot panels and trim may be thoroughly cleaned and prepped for new paint finishes.

Millwork

Existing built-in millwork including base cabinets, upper cabinets, shelving, and countertops are in very poor condition with broken and missing components, and damage from humidity and vandalism. All existing millwork should be removed and replaced with AWA "Premium or Custom" grade materials that meet ADA requirements.

Wood Doors & Hardware

Wood Doors: Existing wood door leaves are in fair condition showing wear from age and typical use; all door leaves should be replaced to allow for proper hardware templating, prep, fit, and installation of new door hardware required to meet Codes. Existing door veneer surfaces are aged and in need of refinishing, also prompting the replacement of all wood doors.

Door Hardware: Existing door hardware is in poor condition showing wear from age and typical use and does not meet current Code/ADA requirements. All existing door hardware should be replaced including all exit devices in both interior and exterior door leaves. New door hardware should be heavy duty commercial grade, be provided with ADA levers, and may want to have cores keyed to City of Dunwoody master key system. Electronic security door hardware may be desired at specific exterior doors to facilitate access and entry and monitoring of door latching.

Theater Furnishings & Equipment

Seating: Existing theater seating is in fair condition showing wear from age and mold growth from being exposed to long durations of high humidity levels. Existing seating has cushioned golden/yellow vinyl upholstery seats, backs, and armrests which has a "dated" appearance. Existing seating has excessive spacing between the rows of seating reducing the amount of seating that could otherwise fit in the theater. Seating has not been installed in a large area closest to the stage due to prior occupancy needs. For maximum seating occupancy and aesthetics within the main theatre space, the replacement of the existing theater seating should be considered. Placing rows of seats close to the stage will require the demolition of the existing built-up platforms and curved brick low height wall. New theater seating with current textile fabric and chair finishes could be installed within a new seating layout incorporating rows of seating close to the stage, typical row spacing to increase the number of seats, and ADA seating locations. Replacing the theater seating will facilitate the replacement of the theater flooring.

Stage Curtains & Draperies: Existing theater stage curtain and draperies are in fair condition showing wear from age and mildew odor from being exposed to long durations of high humidity levels. Existing theater stage curtain and draperies are brown fabric which has a "dated" appearance and are located on the theater seating side of the proscenium opening. New theater stage curtain and draperies with current textile fabric and track assemblies should be considered in lieu of reconditioning the existing materials.

Theatrical Rigging System: Existing theatrical rigging system is in fair condition showing typical wear from age. Existing theatrical rigging system is a conventional manual counterweight system. Due to the high cost of new theatrical rigging systems, reconditioning the existing system, including all battens, lines, blocks, counterweights, arbors and hoists, should be considered.

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DESIGN PROFESSIONALS

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BUILDING CODE AND LIFE SAFETY NARRATIVE

Codes and Standards

Building Code and Life Safety upgrades are per:

- International Building Code – 2006, with Georgia amendments.
- NFPA 101 Life Safety Code – 2000 edition.
- Georgia Accessibility Code for Buildings & Facilities – 120-3-20 Handicap Accessibility Law

Existing Facility

The Existing Facility is the Brook Run Park Theater which consists of a Theater, Lecture Hall, Chapel, three classrooms and supporting administrative offices. This building is a Mixed Occupancy with the primary occupancy being A-1 – Assembly with secondary occupancies of A-3 Assembly and E- Educational

Proposed Changes

Primary Occupancy Type:	A1 – Theater
Secondary Occupancy:	A3 – Lecture Hall
	A3- Chapel
	E - Classrooms
Construction Type:	IIB
Area:	Approx. 22,416sf
Occupant Load:	981
Allowable Area per Table 503:	8,500sf
Sprinkler Area Increase:	25,500sf
Total Allowable Area:	34,000sf

Based on the occupant load of the Auditorium (greater than 300) this building will need to be sprinklered.

The existing theater already has space to accommodate 34 wheel chair spaces. Based on the Theater's occupant load of 388 the current building code only requires six wheelchair spaces.

The seating area in the auditorium will need eight assistive listening devices with two of these devices required to be hearing aid compatible.

An accessible ramp or a platform lift will need to be added to the front of the stage to provide an accessible route between the seating area and the performance area. The current ramp does not have the required 1:12 slope to make it accessible. Based on the floor height difference of 3'-4" between the stage and the theater floor, 40 linear feet of ramp excluding landings would be needed. A platform lift may be more feasible given the space requirements for an accessible ramp.

Based on 981 occupants we would need the following number of plumbing fixtures:

Male WC's:	7
Male Lavatories:	6
Female WC's:	11
Female Lavatories:	6
Drinking Fountains:	2
Service Sinks:	1
Unisex Restroom:	1

Currently there are 6 male WC's and 6 Female WC's to serve the building. Existing restrooms at the Theater would need to be enlarged to accommodate the required number of fixtures. Also, restrooms would need to be added in close proximity to both the Lecture Hall and the Chapel. All existing restrooms will need to be enlarged to provide for accessibility requirements.

All existing exit doors would be required to have the exit hardware upgraded.

An accessible exit to grade would be required at both the Lecture Hall and the Chapel. Also, based on the occupant load in these spaces a second means of egress to the exterior would be required.

Currently the double doors that exit from the corridor between the classrooms and the theater are 2'-6" wide. These would need to be changed to a pair of 3'-0" doors.

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MECHANICAL SYSTEMS NARRATIVE

Central Plant

Heating potential is generated by two Weil McLain gas-fired hydronic boilers. Each boiler has an input of 1,950,000 Btu and an output of 1,579,500 Btu. Under perfect conditions these boilers are 81 percent efficient. Currently only one of the boilers is operational and has been run throughout the winter to temper the building. These boilers were manufactured in 1987 and installed in 1990. Distribution is accomplished by one base-mounted pump sized for 138 gallons-per-minute (gpm).

Cooling is generated by a 100-ton Trane chiller. The manufacturer does not have the serial number on record, but it is estimated that the chiller was manufactured and installed in 2000. Distribution is accomplished with two (one redundant) base-mounted five-horsepower pumps sized for 198 gpm and 51-feet head. One of the pumps was observed to be running during the site visit, and there is evidence that it has been rebuilt at some point in the past.

Hot water and chilled water piping are routed below grade from the boiler house into the basement mechanical room of the theater. The chilled water piping runs to each air handling unit. Hot water piping is routed to each air handler, a domestic water heat exchanger/storage tank unit, and is also distributed through the crawl space to a series of re-heat coils.

HVAC System

The Theater is served by two constant-volume air-handling units. The unit manufacturer is Air Therm. The model and serial number could not be obtained during our visit, but the units appeared to be original to the building. AHU-L1 serves the theater and front lobby. Ductwork for the theater is routed from the basement mechanical room up to above the ceiling in the theater and runs out to the front lobby above the ceiling. AHU-L2 serves the classroom/office portion of the building. AHU-L2 is a constant-volume re-heat system, meaning each classroom or zone has a duct-mounted hot water re-heat coil to regulate temperature. The ductwork and piping is routed in the crawl space of the building to registers mounted in the floor of each space.

Temperature Controls

Currently all controls are pneumatic. Compressed air is generated by a compressor in the boiler house. The compressor appears to be original to the boiler plant or approximately 1990; however, this could not be confirmed.

Recommendations

Clark Patterson Lee (CPL) recommends that the existing boilers and associated pump be replaced should the facility be renovated. The boilers are past their average useful life span and

by today's standards are inefficient. CPL recommends new modular condensing boilers be utilized. These boilers can have efficiencies from 92-96 percent.

The average useful life of an air-cooled chiller is approximately 20 years. The existing chiller is 11-years-old and appears to be in good condition. As the chiller has not been run recently, CPL recommends that a factory-trained technician be contacted to inspect the chiller, start-up the unit, and provide a condition report on the chiller. This chiller could potentially be utilized for another 10 years.

CPL performed schematic-level cooling load calculations on the facility using the current number of seats in the theater and today's ventilation standards, and based on these calculations, the existing chiller appears to have sufficient capacity should the facility be renovated.

Both existing air-handling units will need to be replaced should the facility be renovated. The existing ductwork for the theater and front lobby does not appear to be lined, and if this is the case, the ductwork could potentially be cleaned and reused. Schematic level load calculations confirm that, should the seating capacity not change greatly, the existing ductwork is of sufficient size for the air volumes required for the theater. Currently the stage area has no air outlets.

The ductwork for the classroom/office area is located in the crawl space. Supply air is delivered to each space through floor registers and is transferred through louvers above the doors into the corridor. There is a common return grille in the corridor wall on each side of the theater; this is against current codes as a corridor cannot be used as a return air plenum for life safety reasons. CPL would recommend removing all of the supply and return ductwork and providing new overhead distribution to these areas.

The existing mechanical room appears to be of sufficient size to accommodate new equipment should the facility be renovated.

If the building is renovated, the existing air compressor and all associated piping should be removed, and new Direct Digital Control (DDC) controls should be installed for the HVAC system.

PLUMBING SYSTEMS NARRATIVE

All of the existing toilet rooms should receive new fixtures should the facility be renovated. A number of the toilet rooms will be required to be brought up to current accessibility codes. The building plumbing fixture count is addressed in the architectural portion of this narrative.

The existing domestic water heat exchanger should be removed and replaced with a tank-type water heater that will not require the boilers to be running in order to provide hot water for domestic purposes.

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ELECTRICAL SYSTEMS NARRATIVE

Service and Power Distribution system

The existing Main incoming 600A, 208V, 3-phase, 4-wire electrical service consist of a pad mounted Georgia Power utility company transformer with a pedestal mounted meter next to the transformer. Service laterals are delivered underground to the main Distribution Panel "PP-L" located in a basement mechanical room.
The main Distribution Panel "PP-L" feeds a total of five branch circuit panels.
The original electrical service equipment appears to have been installed sometime in the late 1960's. The electrical equipment shows signs of water damage and is outdated and it would be difficult to find the required new parts, such as internal panel parts, breakers, and fuses, etc for restoration of the existing Theater building.
Installation of a new main Distribution Panel and branch circuit panels is recommended. The existing 600 amp service should be more than adequate for the renovation of the existing Theater building and some of the main feeders may be able to be re-used in the renovation depending on exact conductor type, size, condition, and location.

A second incoming 600A, 208V, 3-phase, 4-wire electrical service fed from the same Georgia Power transformer was installed to serve the new chiller plant in approximately 1990. This service is delivered underground to an exterior mounted 600A fused disconnect switch located inside the chiller fence area on the exterior wall of the apparatus building and powers the chiller and chiller support equipment located in the apparatus building.
This second electrical service and associated electrical equipment appears to be in good condition and could most likely be re-used in a future Theater building renovation.

There is also a utility transformer located at the front side of the building that feeds a series of disconnects located on the exterior wall of the Theater building that appear to serve the site lighting. This service appears to a 240/120V single phase service and independent of the other electrical services serving the Theater building. The site lighting fixtures are in a dilapidated condition and would need to be replaced during a building renovation.

General Lighting

Most of the lighting in the general space areas is either outdated or damaged and should not be re-used. New energy saving technology light fixtures should be designed into any future renovation. All new lighting fixtures should be energy efficient fluorescent, LED, or similar. Local switching, occupancy sensors and watts per square foot lighting allowance should be in accordance ASHRAE 90.1 with Georgia amendments.

Emergency Egress Lighting

Currently, emergency egress lighting is achieved with low voltage fixtures connected to a central battery system. This system should be demolished and emergency egress lighting should be addressed with new battery ballast fixtures. This would include interior egress as well as exterior egress per current code.

Exterior Lighting

The Exterior lighting fixtures are outdated, damaged, and it was not clear at the time of site visit if these fixtures were functional. Newer, energy saving and decorative fixtures are recommended at any future building renovation to illuminate all pathways and sidewalks. Control of all outdoor lighting would be via a new exterior lighting control system.

Telephone and Data

The existing telephone and data equipment is outdated and would require new technology panels to be installed for optimum service. Installation of fiber optic cabling would be recommended.

Theater

General lighting for the Theater seating area appears to be in good shape and could possibly be re-used. However; it is recommended that the existing light fixtures be replaced with newer energy efficient type fixtures utilizing existing ceiling cutouts and locations. Some of the stage lighting was intact, and some stage light supports were observed to be dismantled and laying on the stage floor. Exact condition and working order of the stage lights is not known at this time. The dimming panels/lighting controls for the stage lighting were found to be outdated and a new digital lighting control system along with new stage lighting system is recommended to be designed and installed should the building be renovated.

Fire Alarm System

The building is equipped with an addressable Fire Alarm “voice evacuation” type system that appears to be in working condition however, the system should be serviced and inspected by the manufacturer’s representing service agent to determine exact working condition and feasibility for continued use. At the least, it is proposed that all system devices be replaced.
Fire Lite model MS-9200.

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PHOTOGRAPHS OF EXISTING FACILITY

Main Entry of Theater

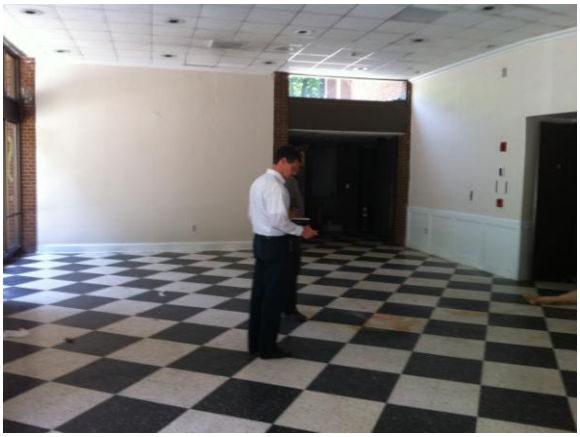
Original Glazing in Aluminum Storefront

Side Exits of Theater

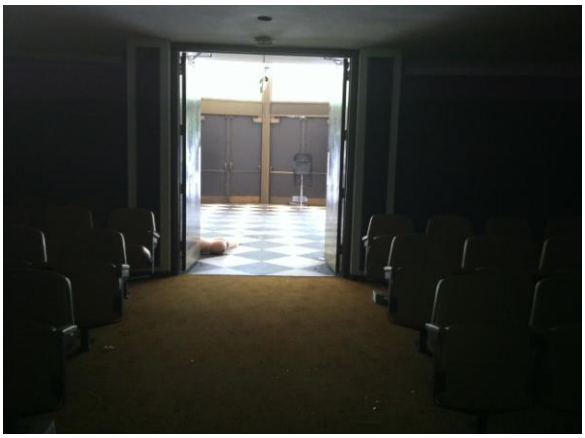
Chiller at Rear of Facility

Loading Dock at Rear of Facility

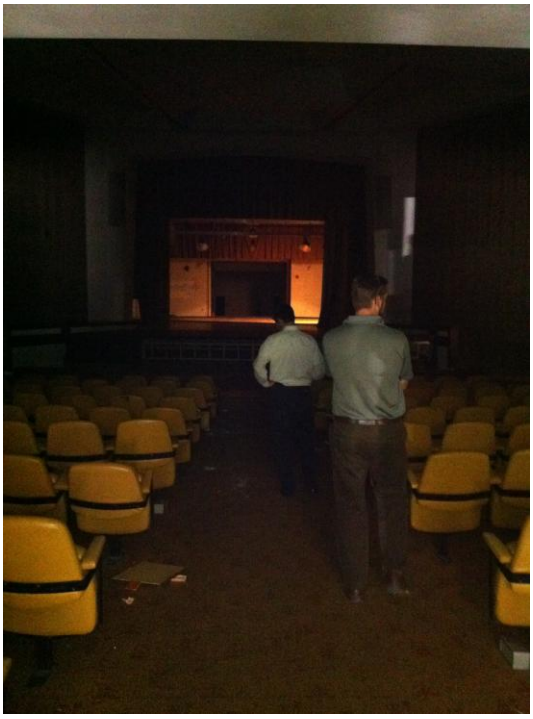
Rear of Facility and Fly Loft



Main Lobby

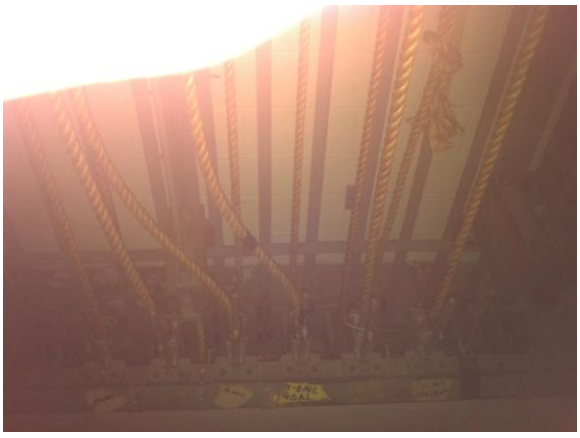


View from Theater to Main Lobby



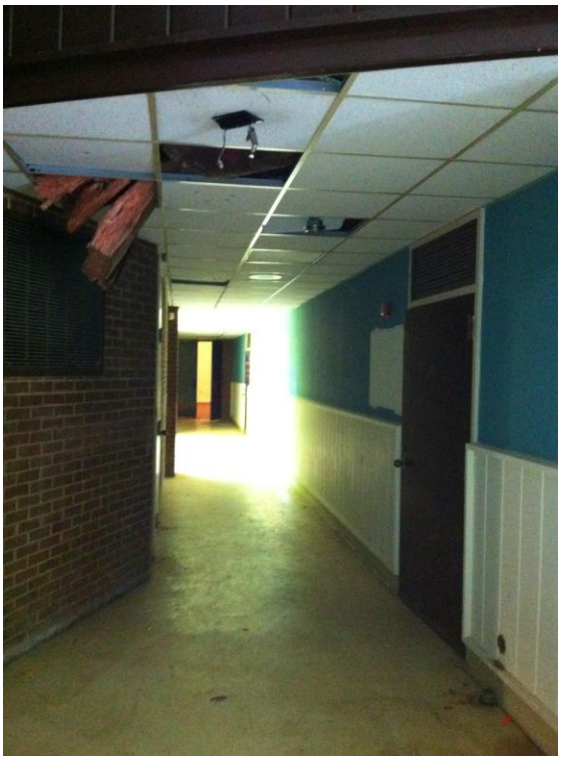
Interior of Theater

Raised Platform at Front of Theater



Theater Rigging System

Back Stage Area



Typical Condition at Corridors

Restroom

Damaged Wall at Restroom/Shower

Damaged Flooring at Restroom

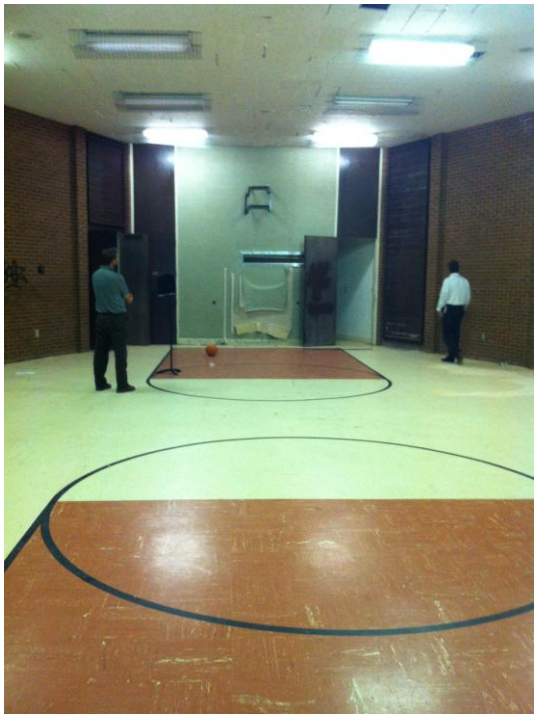
Vandalism at Classroom

Damaged Flooring & Millwork

Damaged Flooring & Millwork

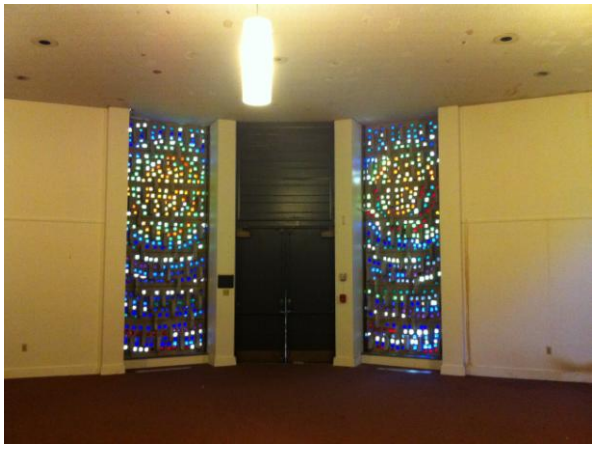
Water Damage & Mold at Wall

Vandalism at Corridor



Damaged Walls at Recreation Room

Vandalism at Chapel Windows



Stained Glass Panels at Chapel

Stained Glass Panels at Chapel

Close Up of Stained Glass Panel

Overgrown Weeds at Interior Courtyard

Damaged Wall at Basement

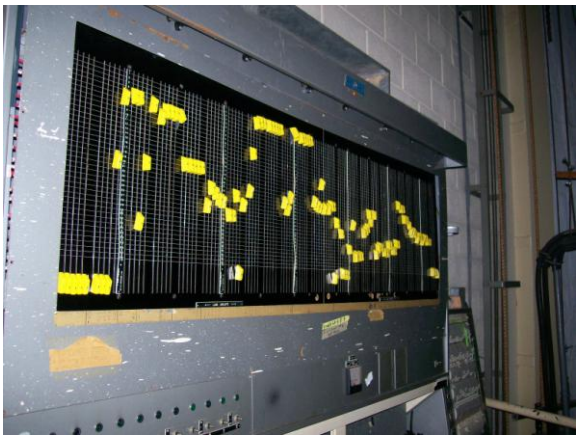
Deteriorated Basement Door & Hardware

Basement Corridor and Stair

Ductwork in Basement

Domestic Water Heat Exchanger

Theater Dimmer Module Control Center



Theater Lighting Dimming Controls

Gas-Fired Hydronic Boiler

Pumps

Boiler Burner Controls

Air Handling Unit

Water Damage at Main Distribution Panel “PP-L”

Water Damage at Main Distribution Panel “PP-L”

Main Distribution Panel “PP-L”