

FACILITY CONDITION ASSESSMENT

Police Department

20 Police Plaza, Geneva IL

DATE: 10/18/2021

ISSUED FOR COUNCIL REVIEW



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TABLE OF CONTENTS

INTRODUCTION:	1
DETAILED BUILDING DESCRIPTION:	2
Building History	2
Architectural Review	3
Mechanical Systems:	10
Plumbing Systems	12
Fire Protection Systems	14
Electrical Systems	14
ACCESSIBILITY SURVEY:	17
Building and site review	17
SECURITY ANALYSIS:	18
Overview:	18
CODE AND ZONING ANALYSIS:	21
HISTORICAL CONSIDERATIONS:	24
RECOMMENDED RESOLUTIONS:	25
Building Recommendations	25
Accessibility Recommendations	29
Security Recommendations	30
Sustainability Recommendations	31
BUILDING MAINTENANCE ANALYSIS:	32

INTRODUCTION:

StudioGC Inc (SGC) was engaged to perform a detailed building assessment for the city of Geneva for multiple buildings. The report is specifically for the joint facility for the Police Station located at 20 Police Plaza. This detailed building assessment organized is divided up as follows:

- *Detailed Building Description*
- *Physical Review of Property*
- *Basic ADA survey*
- *Security Review*
- *Code Review*
- *Recommendations and Budgets*
- *Conclusions and Considerations*
- *Maintenance Budgeting Matrix*

The intent is to provide the City of Geneva with a complete understanding of their current building inventory and the implications on budgeting and resources city-wide. This includes the current challenges, potential resolutions, and budget impacts to resolve those issues.

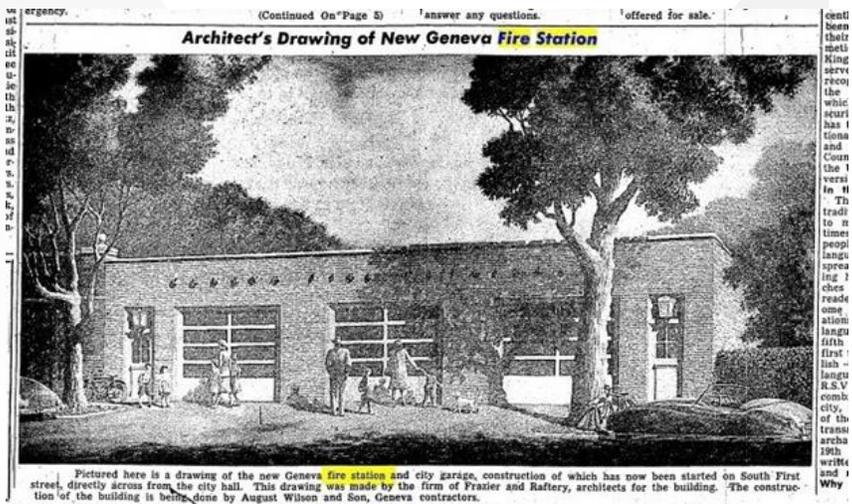
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DETAILED BUILDING DESCRIPTION:

BUILDING HISTORY

The building itself is comprised of three separate buildings built at separate times. The Police Department currently uses a letter system to indicate what section of the building is being discussed. The northern section is Building A, the middle section is Building B, and the southern section is Building C.

The building has been home to the Fire Department, the Public Works Department, Tri-Com Central Dispatch, and now the Police Department and Finance Department. The original building, north section, is believed to have been built around 1915 and used to be home to Ekdahl's Ford Agency and Garage. News reports from the Geneva Republican newspaper in 1952 describe that local architectural firm Frazier & Raftery was designing a "flat roof" building for the Fire Department on the First Street level and a "City Garage" at the lower level. The new building was to wrap around the east end of the old Ford garage. The bid for the construction of the new fire station was awarded to local contractor August Wilson & Son for the sum of \$63,423. The middle section of the building was dedicated on April 28, 1953, and a plaque honoring this is affixed on the west side exterior wall. The south section of the building is believed to have been added in the 1980's when the Police Department first moved to the lower level. Suffice it to say the expectation is that all three



buildings are between 35-100 years old with subsequent renovations in the 1960's, 1970's, 1987 and 2002. The dynamic nature of the multiple tenants and countless renovations make an accurate evaluation of the building extremely challenging.

ARCHITECTURAL REVIEW

- **Building Construction:** *The building construction is in alignment with the means and methods of the period in which it was constructed. It is a combination of concrete block with brick veneer and other materials. The latest addition is a steel frame system with EIFS exterior skin.*
- **Building Envelope:** *The exterior envelope is in poor condition. There are several cracks and evidence of water infiltration in the EIFS and the building shows signs of significant air infiltration due to an inability to maintain a stable thermal environment.*
- **Interior Finishes:** *Some of the interior finishes in lesser used areas are generally in good to fair condition due to their age and intensity of use. However, the interior finishes on the first floor/lower level are showing significant signs of aging and all need replacement. This area of the building gets used 24 hours a day by officers and civilian members of the department.*
- **Windows and Doors:** *The doors and windows are predominately aluminum frame systems. They are in fair condition as is to be expected for the age. They need replacement. There are some windows that*



are glass block and have outlived their useful life. One section has recently failed and had to be replaced due to its poor condition. Remaining sections should also be remedied as soon as possible.

- **Roof:** Across the three buildings there are two different roof systems. The two southern buildings have a true low slope flat roof with modified bitumen or built-up roof. These roofs are past their useful age. It is likely the insulation is significantly deteriorated and will need to be replaced. This will require bringing the entire roof system into energy code compliance. This usually means lifting all the mechanical units to meet manufacturer spacing requirements. The northern building is a modified/built-up roof over wood bowstring trusses. The roof structure is in poor condition and should be structurally evaluated and a program put in place to repair or replace deteriorated members. It is likely this roof will need a full replacement in the coming years. One portion of the roof membrane has been replaced but did not resolve the underlying structural concerns due to age.



- **Site Elements:** Due to the urban location of this facility there is not much of a site. There

is an open area to the north of the building that is subject to flooding due to poor grades. This flooding has occurred with such regularity that the door is permanently blocked, and this has affected the operational processes of the staff.

- **Energy Efficiency:** *The building predates energy efficiency regulations; therefore, it was not constructed with an ability to meet any current considerations for energy efficiency. Any significant renovation of the building envelope will require it to come into compliance. As stated, due to the age and condition of the building is extremely energy inefficient. The roof systems and building envelope are deteriorated to the point of being detrimental to the thermal comfort of the occupants. The inefficiencies of the building systems are reflected in the costs associated with maintaining the building both in utilities and maintenance.*

- **Storage Space:** *Storage is a standard concern in all police stations. Due to the evolution of legal requirements to store evidence, there is not enough storage. Large evidence storage is being housed over at public works in portable containers, the long-term storage has become temporary bike storage, and all the traffic control systems are stored in*



the vehicle garage that doubles as an animal control area. This area also does not contain sufficient room to store the anticipated expansion of the equipment and specialized vehicle needs for an urban force with a significant amount of bike and foot paths. The lack of adequate storage is contrary to best police practices and creates challenges for maintaining adequate chain of custody. Additionally, there is growing need for storage of specialized vehicles including all-terrain vehicles.

Operational Concerns: This facility has significant operational concerns when compared to modern police buildings. The current arrangement of spaces, access to staff, and inefficient and inappropriate operational flows have created an environment where the staff is inefficient as well as in some cases jeopardize critical processes of law enforcement and employee safety. This is further compounded by the presence of Finance. The presence of the rear door allows emergency access to the police stations presents an issue as it prevents a secure perimeter separating it from the Police Department as is required to maintain operational security.



- *There is insufficient interview space with an appropriate level of privacy. One should not be able to witness or hear what goes on within the interview rooms.*
- *The roll call room is undersized and not located in an area that allows for efficient access to patrol vehicles, sally port, holding, evidence, or a report writing area. It is located within the depth of the main floor.*
- *The building has almost no natural light outside of a few offices on the west side. The main floor is buried into the ground and the second floor, at grade to S. First street has no spaces that can take advantage of the natural light. This lack of natural like makes all the interior spaces dark and appear worn.*
- *The breakroom finishes are deteriorated. There was an active leak in the adjacent storage room and there are frequent sewage backups in the same area. Due to the urgency of the issue the City is committing money to lining the pipes. This is a temporary measure and only resolves the issue in the main lines, branch lines are still subject to spontaneous failure.*
- *Doors into the locker rooms open into the changing area and do not provide the proper amount of privacy.*
- *Locker rooms do not meet current standards for police station design. There is no storage for equipment, firearms, or ventilation for uniforms. Additionally, the locker space*

allocated to female staff is under what is currently required and not sufficient for future needs.

- The configuration of the sally port and holding cells does not allow for efficient transport of suspects. The current process requires the officers to leave suspects in the vehicle while they exit the area to properly store their weapons. The sally port is extremely undersized and will not allow for access of transport vans or an ambulance. This has resulted in numerous issues where detainees have had to be brought out into the public lot to transfer them into an ambulance. This jeopardizes the public, fire personnel, and officer safety.*
- Bond windows and systems are not utilized due to the flooding on the north side. Also, the configuration of the electronic security measures makes it difficult to release detainees in a safe and controlled manner. Due to the significant safety, and environmental issues, the bond is not handled in this manner. Detainees are released from the lock up to the parking lot through the sallyport.*
- The holding cells are not configured to align with current operations or Illinois Department of Corrections design requirements. Due to the practice of discharging or bringing suspects to the Kane County Jail most spaces are not often used.*
- There are no photoelectric safety sensors on the garage doors in the sallyport. This is*

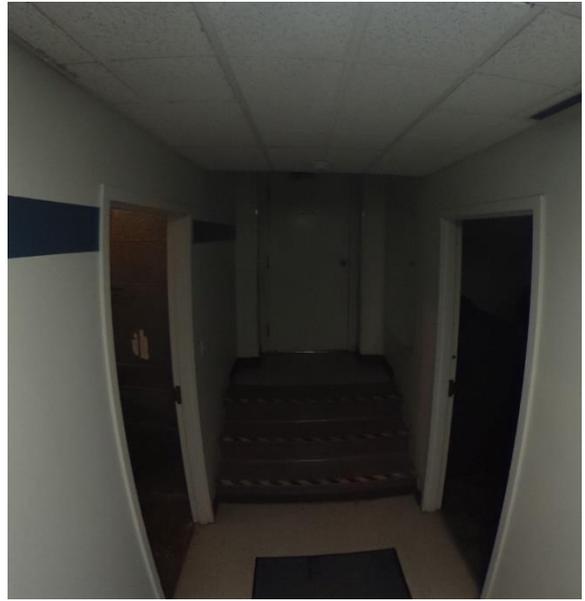


compounded by the limited height of the sallyport exposing the doors to a greater opportunity for damage.

- *The records office layout is not efficient. The staff is required navigate awkwardly placed furniture to interface with the public, Additionally the public has a view of the desks of the staff allowing them to potentially see sensitive documentation.*
- *There is no clear identification between the police station and the adjoining buildings. Due to the design of the buildings, the extent of the police station is not readily apparent to the public.*
- *The parking spaces for the police is remote from the station. It is also significantly undersized for the shift changes and patrol cars. The parking area does not provide adequate protection for officer safety and vehicles.*
- *The lobby report writing room is undersized. It is uncomfortable to interview or write a report with two people in the room.*
- *None of the main floor offices or spaces are sufficiently sized for their needs. A significant expansion would need to occur to accommodate these needs. A few specific items:*
 - *The weight room is undersized and overcrowded, and not properly ventilated*
 - *Patrol report writing area is undersized*
 - *Lobby and vestibule are undersized*
 - *The records manager's office is in a space that was previously a closet and therefore does not have adequate supervisory views or sized in accordance with the manager's needs.*



- *Walls in the administration area, and other areas, were not constructed to minimize sound transfer. Conversations can be heard between rooms readily. There is no space that allows for private and confidential topics. The department currently contracts with a company for victim services/counseling and there is no adequate location for them to work and conduct highly sensitive interviews.*



- *Not enough meeting spaces for staff or Investigations.*
- *No collaboration or dedicated meeting spaces for Investigations.*
- *No training areas of any quantity and size. This jeopardizes staffing flexibility, compliance with future regulations, and efficiencies as outside spaces need to be procured and there are limited training areas across the City.*
- *The evidence area is undersized.*
 - *No room for vehicle processing.*
 - *Not enough storage for long term evidence.*
 - *Evidence processing is properly sized, but equipment and configuration are inefficient. Additionally, the ductwork is not isolated so odors from the processing process, or evidence gathered, infiltrates into the adjacent administrative space.*
- *Critical pathways inside the building require officers to traverse stairs during a response to an emergency call for service. These situations have resulted in employee injury.*
- *All the furniture in the facility has exceed its useful life. While this may appear to be an aesthetic issue, modern furniture systems may be more efficient and ergonomically designed to reduce employee fatigue and injury. Furniture does not have enough secure spaces to store critical materials, and conference rooms do not have requisite collaboration and audiovisual features.*

MECHANICAL SYSTEMS:

Existing Conditions: The existing building has a central heating plant serving part of the building, but no central cooling plant. The multitude of systems throughout the building make reasonable temperature control very challenging. Most workstations have either a portable fan or an individual space heater or both to make accommodations tolerable throughout the day. Thermostatic controls are not located with building orientation in mind and as the system is so significantly out of balance the thermostats are working against each other and causing the building to be out of temperature control.

Central Heating Plant: The central heating plant consists of a Weil McLain gas-fired cast iron hot water boiler installed in 1977 along with an associated pump, air separator, expansion tank, etc.

Hot water supply and return piping are utilized to distribute hot water to building heating elements in limited areas of the building including the vehicle storage areas, Investigation's office, and lower-level northeast.

RTU-1 HVAC System: RTU-1 serves the upper-level locker room. It is a Trane model YHC092 packaged gas heating/cooling single zone unit and has an energy recovery unit installed due to the amount of outside air the system provides to the locker room. The unit was installed in 2005 and cooling capacity is 7.5 tons.

RTU-2 HVAC System: RTU-2 serves the upper-level southeast perimeter offices. It is a Trane model YSC048 packaged gas heating/cooling single zone unit. The unit was installed in 2005 cooling capacity is nominal 4 tons.

RTU-3 HVAC System: RTU-3 serves the upper-level Evidence areas. It is a Trane model YSC036 packaged gas heating/cooling single zone unit. The unit was installed in 2005 cooling capacity is nominal 3 tons.

RTU-4 HVAC System: RTU-4 serves the upper-level Command Support areas. It is a Trane model YSC060 packaged gas heating/cooling single zone unit. The unit was installed in 2005 cooling capacity is nominal 5 tons.

RTU-5 HVAC System: RTU-5 serves the upper-level northeast gym. It is a York model DAYA-T036 packaged gas heating/cooling single zone unit. The unit was installed in 1999 cooling capacity is nominal 3 tons.

RTU-6 HVAC System: RTU-6 serves the upper-level northwest City Services offices. It is a York model DAYA-T048 packaged gas heating/cooling single zone unit. The unit was installed in 2000 cooling capacity is nominal 4 tons.

RTU-7 HVAC System: RTU-7 serves the upper-level east perimeter offices (former computer room). It is a York model DAYA-T036 packaged gas heating/cooling single zone unit. The unit was installed in 2000 cooling capacity is nominal 3 tons.

Lower-Level South HVAC System: The lower-level south offices are heated, cooled, and ventilated by twinned Bryant gas-fired furnaces with an associated air-cooled condensing unit. The equipment was installed in 2008. A Honeywell Add-A-Zone variable volume/temperature zone damper system provides individual temperature control to the multiple spaces it serves. The unit does not have an economizer capability.

Lower-Level North HVAC System: The lower-level north offices are heated, cooled, and ventilated by twinned Bryant gas-fired furnaces with an associated air-cooled condensing unit. The equipment was installed in 2011. An antiquated Masterrol Trolatemp variable volume/temperature zone damper system provides individual temperature control to the multiple spaces it serves. It was noted that the Conference Room has no air movement or temperature control. An independent oscillating fan inside the room is the only means of controlling rising temperatures during meetings. This is a violation of building code and needs to be rectified as soon as feasible.

Bicycle Repair Area HV System: The bicycle repair area is heated and ventilated by a Trane L1X060 horizontal gas-fired furnace installed in 2005. The unit provides a minimum outside air to space and does not have an economizer capability.

Lobby HVAC System: The lobby is heated and cooled by twinned Trane UX100 gas furnaces installed in 2005. Each furnace has a dedicated Trane 27T10042 air-cooled condensing unit with a nominal capacity of 3.5 tons cooling.

Lower-Level Vehicle Storage Garage HV System: The lower-level Vehicle Storage Garage is heated by hot water suspended unit heaters. There is an exhaust fan, but no CO/NO2 detection to start the fan automatically

Lower-Level Sally Port HV System: The lower-level Sally Port is heated by a wall-mounted gas infrared heater. There is no exhaust system and no CO/NO2 detection.

Upper-level Garage HV System: The upper-level garage is heated by a Trane GMD010 gas-fired unit heater installed in 2005. There is a CO/NO2 detector to start an exhaust fan upon sensing high levels of noxious gas.

Miscellaneous Heating Equipment: The lower-level generator room is heated by a suspended hot water unit heater. The perimeter Investigations office is heated by hot water finned tube radiation.

Server Room AC System: The Server Room is cooled by a duct-free split system consisting of an indoor fan coil unit and an outdoor condensing unit.

Temperature Controls: There is no Building Automation System to provide the ability to monitor and control the equipment remotely.

Systems do not adequately address the multitude of buildings and the workspaces within. As an example, the evidence processing, and armory section share a common HVAC control with the administrative section. The comingling of air often comprises air quality as smells from one area shared with another. HVAC control is a frequent complaint among employees.

PLUMBING SYSTEMS

A 2" cold water main enters the building in the mechanical room on the south end east wall. It has a City of Geneva water meter, but no backflow preventer. Much of the domestic water piping observed was copper piping and is in good condition. However due to the age of some of the building areas it is anticipated there is galvanized piping. This needs to be replaced as it is found or becomes problematic.

The domestic water for the building is provided by two separate water heaters. As an example of the ongoing challenges with maintaining the aging components of the building, both hot water heaters observed during the walkthrough of the facility have since failed and have been replaced. The first water heater is in the southeast mechanical room, this water heater is a Bradford White model RG240T6N, 40 – gallon 34,000 BTU gas-fired tank type water heater and only serves a limited number of fixtures on the south end of the building. The second water heater is in the north mechanical room. This water heater is Bradford White model LG2100H803N, 100 gallon 80,000 btuh and serves most the fixtures throughout the building including those on the north end, the detention area and the second floor. This water heater has a single filter water softener system on the cold-water feed to the water heater. Both water heaters were installed with an expansion tank.

Sanitary drainage piping for the building is also reflective of the various ages of the buildings. PVC piping in good condition was found in newer renovated areas on the second floor of the building. However, the older sections on the first-floor portion of the building have a mixture of PVC and cast-iron pipe. Repairs to the first floor sanitary were done in 2013 and in the past several months. Since 2019, waste flows under normal conditions on the first floor frequently cause backups of raw sewage at multiple locations including the detention area, the break room storage room and the women's bathroom. The backups are caused by a combination of old failing pipes and tree root intrusion outside the building. The City is currently working on getting the first-floor sanitary mains lined to address this issue for the short term.

Public toilet room plumbing fixtures are commercial quality fixtures in moderate to poor condition and are failing regularly. Domestic water supply piping to these fixtures is copper. Water closets and urinals are wall-hung china fixtures with manual flush valves. Lavatories are individual bowls integral with counter and have manual faucets. Electric water coolers are old and not ADA compliant.

The exterior door at the bond area has a depressed floor area with a small area drain that is prone to blockage and flooding.

Existing exterior sanitary sewer has been noted to be extremely problematic. A review of the first floor sanitary via sewer camera showed significant blockage in the line due to the age of the cast iron pipe as well as multiple repairs along the line. Garbage disposer and associated drain piping in Kitchen have been noted to be problematic for causing sewage backups so the disposer was ultimately removed. Like most of the first floor sanitary, the break room section should be replaced and upsized due to the poor condition.

Existing cast iron storm piping at roof drains is deteriorating at leaded joints causing numerous leaks and catastrophic flooding. Failure of these pipes often occur during heavy rains that result in significant flooding issue.



Plumbing fixtures in detention areas are in good working order however fixtures should be reviewed for ADA compliance and ligature resistance.

FIRE PROTECTION SYSTEMS

There is no current, complete, fire protection system in the building. Due to the critical nature and the ability to hold prisoners it is imperative that any redesign of the lockup area contain sprinkler heads. Single sprinkler heads fed from domestic water are in various locations of the building. During the 2002 renovation, new glass bulb pendant sprinkler heads were placed at the eastern and western fire doors for the Administrative Offices. No updates appeared to have been made to any other sprinkler heads in the building because the remaining sprinkler heads are much older and are a fusible link style. The locations of the older sprinkler heads appear to be in areas that may have been significant in previous usage demands but now are nothing more than a closet. The following is a list of the older sprinkler head locations: first-floor furnace/laundry room, first floor northwest mechanical/storage rooms, first-floor mini conference room closet, first-floor CSO office closet, first-floor exterior boiler room, second-floor storage room, second-floor roof access room. Some of the older sprinkler heads also showed significant evidence of corrosion and a lack of backflow protection.

ELECTRICAL SYSTEMS

Electrical Service: The main electrical service is fed from a pad-mounted utility transformer located on the north side of the building. The placement of the transformers has proven to be very problematic. They are located within proximity to the building and interfere with safe operations of the back-up generator. The transformers also sit on top of the sanitary discharge for the first floor making replacement of any sanitary pipes very expensive and cost prohibitive. The service entrance conductors are routed underground to service entrance rated panels located in the generator room. The service entrance rated panels are rated at 208/120V-3Ph-4W. They are manufactured by Square D and appears to be in fair condition.

There are (3) electrical meters located outside near the utility transformer. The number of electrical meters is likely due to multiple departments occupying the building at some point in the past.

Electrical Power Distribution: Electrical panels contain circuit breakers and distribute power throughout the facility. All panels are manufactured by Square D of varying ages and are in fair

condition. The multi-tenant past of the building also adds to issues with identifying electrical issues. Electrical panel locations are based on old tenants throughout the building and circuits are often labeled with bygone references; “FIRE DEPARTMENT CIRCUITS, TRI-COM HVAC”. Poor labeling of electrical panels makes identification of electrical issues very challenging. Electrical issues are frequently reported on the first floor. Electrical circuits in this area appear to be near capacity and overuse of electrical components result in circuit trip failures. Lights in the Sergeants Office also pulsate and are problematic for those using that space. This issue is compounded using personal heaters and fans for temperature control. There is also no balance on the circuits. Elements such as the dryer on a common circuit with the detective’s area. The building contains a 100kW natural gas back-up generator located inside the building in the generator room. It is manufactured by Kohler and appears to be in fair condition but near the end of its serviceable life. Technicians are unable to provide an exact age of the unit, but it is believed to have been installed during the 1987 building renovation when the Police Department moved to the first floor. The generator only provides back-up power to select loads in the building that are not clearly identified. During power outages some of the building loses power and is not operational.

Lighting: There are varying styles of fixtures inside the building including 2'x2' troffers, 2'x4' troffers, round downlights, strip lights, decorative pendants, track lights, undercabinet task lights, vandal resistant lights in the holding cell area. Most of the lighting in the building is fluorescent. Interior lighting appears to be in fair to poor condition. Older lighting configurations have continued to fail since the 2002 renovation. An example of this is the interior lighting in the main lobby. Due to poor design and inadequate access, a new lighting system had to be installed to address current needs. The old lobby lights also had an electrical short that caused smoke to fill the building and generated a fire department response.

Exterior fixtures are installed around the outside of the building including round downlights in the exterior soffit. Exterior lighting appears to be in fair condition or completely inoperable depending on the location of the building. The lighting on the east side of the building is functional, with periodic issues with light timers. The lighting on the west side of the building near Route 31 is completely inoperable and appears to have been completely disconnected. The north side lighting is only provided by streetlights along the public sidewalk.

Interior fixtures are controlled by conventional light toggle switches. Exterior fixtures are controlled by a time clock. There are no motion sensing switches in the building, which leads to significant waste in utility costs. As example there are always-on lights in certain locations

that have limited usage and no way of being turned off. There are ongoing efforts to improve the lighting levels and energy efficiency by replacement of fixtures with new LED bulb units.

Emergency Lighting & Exit Signs: Emergency lighting is provided by self-contained units with battery back-up located throughout the building. There are some areas such as the locker rooms on the second floor where the lights have integral batteries for use when power is lost. Exit signs also contain integral back-up batteries and appear to be adequately located.

Fire Alarm System: The existing fire alarm control panel is manufactured by Gamewell and located near the west entrance. The system appears to be in good condition. Initiating and notification devices appear to be adequately provided throughout the building. As noted previously, an annunciator panel at the east side main entrance would better facilitate the processing of information during critical incidents. The placement of the fire alarm controls also is dated to when the building was used a fire station. There is no access to the fire control panel at the police department main entrance, nor is there an annunciator panel for review during an emergency.

Clock System: There is no master clock system in the building. Stand-alone battery-powered clocks are provided throughout the building.

Security: Motion sensors and door contacts are installed throughout the exterior and lobby of the building as part of the access control system. There are significant concerns with security systems throughout the building including access to evidence, evidence processing, secure offices, and adjacent finance department space.

ACCESSIBILITY SURVEY:

The ADA survey is a basic review to identify areas of concern and budget costs to resolve those issues. The comments herein are from an analysis based on the Illinois Accessibility Codes Site Inspection Checklist. This review is in comparison to the most current version of the Illinois Accessibility Code in effect currently. A final note of consideration, while accessibility is often thought to be limited to those in wheelchairs it also applies to those with any level of mobility, or other impairment issues. Given the age of the building and the construction standards, all the issues pertaining to non-compliance with accessibility would be prohibitive to list. It is recognized that the historical nature of the building and extensive cost implications prohibits immediate rectification of the concerns any large renovations of the facility will require that the entire building come into compliance with the ADA laws.

BUILDING AND SITE REVIEW

Parking and Site: The facility was designed at a time predating the current ADA requirements. Despite this, the site is generally accessible. There is accessible parking for the public. The staff parking area is too remote and therefore more ADA parking spaces should be provided for staff in the main visitor area.

Interior: The facility was designed at a time predating current ADA requirement however an elevator was added at the most recent building addition. Otherwise, the changing in levels, the width of corridors, lack of space adjacent to doors, casework size and configuration, toilet rooms and locker rooms all do not meet current ADA requirements.

Signage: There is a general lack of signage and what exists does not meet ADA.

SECURITY ANALYSIS:

OVERVIEW:

The important philosophical consideration to determine the extent and intensity of security measures in municipal buildings is public perception. This is usually determined by the perceived level of inclusion and transparency that is desired for the specific location. This conflict between transparency and access and maintaining security is readily apparent in a facility such as this. The need to allow the public to gain easy access, maintain the community feel is in direct conflict with controlled access, and safe facilities. However, at the police station, there is a public expectation for intensive security and controlled barriers to maintain the safety of the public and the staff.

Parking and Site

Facility security is about providing a multi-layered series of protections. The first layer is the site. There is no site security at this facility. It is recognized that due to the location of the building and limitations in available land some of the recommendations are difficult to enact.

- *Site security is critical to the safe operations of the staff and the public. The lack of a secure environment for staff and the safe transfer of prisoners in and out of the facility is a significant concern.*
- *A security perimeter should be constructed to allow for an access-controlled entry into the staff parking, patrol car parking, sallyport, and a dedicated staff entrance.*
- *There are no barriers to prevent a vehicular attack on the entry of the building.*



- *Lack of site cameras to monitor intruders and record any actions.*
- *The west side, off the First Street, is un-monitored and minimally secured.*
- *There are several blind spots that present safety hazards.*
- *The roofs are readily accessible from First Street due to the low exterior wall heights.*

Interior Security

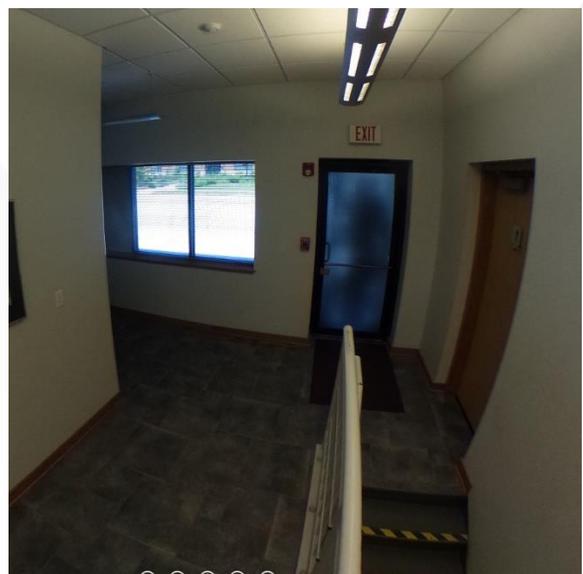
The second layer of security is maintaining controlled access to critical areas. One of the primary concerns about internal security is the balance of providing as many security measures as necessary without compromising operational efficiencies. Should the operation of the facility be compromised it is natural human nature to inadvertently compromise those measures to increase productivity and decrease frustration, e.g., propping doors open to avoid using access control systems.

- *The facility has an access control system that records identification and logs access. The use of the system should be more robust to include more areas of the building. This is a critical requirement for a police station.*
- *The main entry is co-utilized by staff and the public. These functions need to be separate to provide the proper level of monitoring and access control. This is also an important component of employee safety where those reporting for work walk into a situation in the main entrance.*
- *The entry to the building is not visible from the reception/records staff. This is a significant safety concern.*
- *There are hidden areas in the lobby area that are not monitored or visible from staff locations. A ill-intended person can get into the buidling and up to the admin floor*



without being seen. This is a safety concern to all of the administrative staff.

- *The finance department is in the same building but is isolated in terms of critical communications. Their lobby is not of sufficient size or have the appropriate security needs to interface with the public.*
- *Access control should be added to allow the facility to go on lockdown, if necessary, at any time 24 hours a day from a centralized location but to allow the facility lockdown to be lifted on a local level for emergency needs.*
- *The staff has concerns that they are unable to monitor exits in emergency situations or if they are leaving late at night. Parking is not always available close to the building, and this creates heightened security concerns.*
- *There is no ballistic protection, outside of the window to records. Nor is there any ballistic protection at the second-floor administrative entrance.*
- *Finance doors are often propped open and may, in fact, be a required egress out of finance. There is no monitoring of the finance door. There are also compliance issues with non-police personnel having access to critical information systems in the police facility.*
- *Current cameras are outdated and do not have sufficient storage, remote access options, or resolution to meet current needs.*
- *No panic alarms within the police facility, at records and administrative areas.*
- *Armory is not alarmed or monitored.*
- *There is a lack of monitoring or robust access control from the First Street side of the building. If one gains entry on that side, they have full access to the entire building. This includes access through the finance department.*

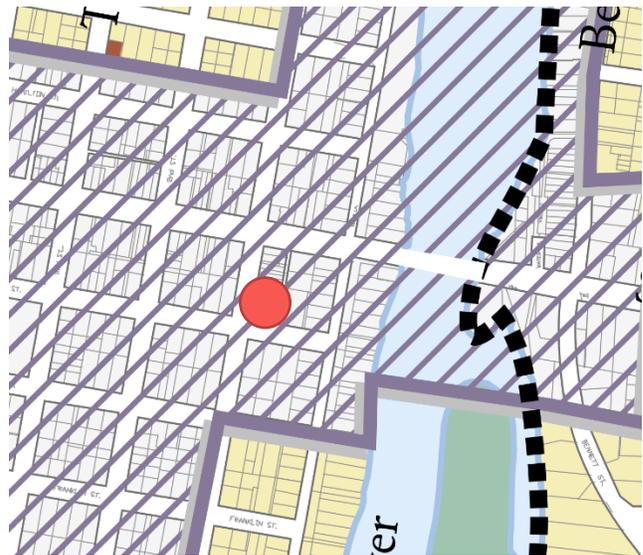


CODE AND ZONING ANALYSIS:

This section is intended to provide some context for future potential expansions of the existing building. This section will provide some context for requirements placed on this site from the City of Geneva.

This property is zoned D-CM as defined by the City of Geneva. It is also designated as Public Land in the Comprehensive Plan. There does not appear to be a PUD in place for this property. This means it has the following limitations.

- *Definition:*
 - *Public Land: "An area containing community facilities or public buildings such as churches, municipal buildings, libraries, museums, and cultural facilities."*
- *The zoning regulations are as follows:*
 - *Maximum Lot Coverage: 30%*
 - *Maximum Building Height: 50 feet*
 - *Front Yard: 0 feet*
 - *Side Yard: 0 feet*
 - *Rear Yard: 0 feet*



A part of this analysis is to give a general idea for the expansion of the existing facilities. While further programming and design will need to be done at a future time this diagram will provide an idea as to the extent of additions as well as other items mentioned in this report.

Legend: Red: Property Line | Blue: Secure Perimeter | Yellow: Building Expansion | Gray: Parking Extent



Property development comments:

- *There is minimal potential for parking or site security measures without the acquisition of additional property. Gray area shown for police parking has no opportunities for a contiguous secure perimeter to the building and there is not sufficient public parking. Even with the addition of more property, the limited footprint within the surrounding facility would require expensive investments in parking infrastructure such as a parking deck with limited and controlled access to certain areas.*
- *If the highlighted yellow areas noted above could facilitate the needs of a potential building expansion, it does not address the significant mechanical and structural components that must be addressed in the very near future. Additionally based on*

zoning requirements the facility is at the maximum sized allowed for a facility of this type. The expansion area is also not of sufficient size to provide any usable additional square footage for likely extensive costs.

- *The city owns the parking spaces at the southeast corner of the site, this is indicated in the dashed lines, this is public parking shared with the police department staff and visitor parking. There are no designated areas separating each parking type aside from some individual spaces.*

HISTORICAL CONSIDERATIONS:

This building is within the Department of Interior and the City of Geneva historic districts. While the building themselves, and the police addition, are not of historic significance any renovations or additions will be subject to the municipal review process. These reviews will have a significant impact on the work that is to be completed and is likely to have an impact on increased operational, and security elements as they are not usually conducive to buildings required to be in compliance with historic design regulations.

RECOMMENDED RESOLUTIONS:

BUILDING RECOMENDATIONS

Architectural: Due to the limited availability of land, parking, and other location-based limitations it is unlikely a significant enough expansion or renovation can occur on this site or within its footprint. A serious evaluation should occur to assess if the current location for the station is appropriate in the context of the City geography and land availability.

- *The facility is nearing the end of its useful life it needs some significant repairs and replacement to extend its life span.*
 - *Windows and other openings*
 - *Roof assemblies*
 - *EIFS wall coverings*
 - *North Building roof structure*
 - *Interior finishes and furniture replacement.*
 - *Sanitary and plumbing systems*
 - *Electrical components are near capacity and there is likely unknown deterioration on the wiring and system components.*
- *Improvements to address security concerns.*
- *More conference rooms and larger staff areas.*
- *Obtain a roof maintenance contract for regular documented assessment and repairs.*
- *Building addition(s) to allow for department reconfiguration to gain operational efficiencies and to meet the growing expectations of a modern police department.*
- *Lack of building code compliance in particular areas*
- *Address critical life safety issues*
- *Provide significant ADA improvements at any interior modifications.*
- *Address concerns relating to best police practices as it pertains to chain of custody and regulatory demands*

Mechanical:

Revision recommendations have been based on providing the building with an energy-efficient and code-compliant building at the completion of the renovation.

- *Central Heating Plant: The central hot water heating plant serves limited areas. The Weil McLain gas-fired cast iron hot water boiler is 43 years old and nearing the end of its useful life. We recommend that the hot water system be removed and the few spaces it serves be heated by electric resistance heaters or gas-fired unit heaters.*
- *RTU-1 HVAC System: RTU-1 and associated energy recovery unit serving the upper-level locker room is 15 years old and should be replaced in the next 5 years.*
- *RTU-2 HVAC System: RTU-2 serving the upper-level southeast perimeter offices is 15 years old and should be replaced in the next 5 years.*
- *RTU-3 HVAC System: RTU-3 serving the upper-level Evidence areas is 15 years old and should be replaced in the next 5 years.*
- *RTU-4 HVAC System: RTU-4 serving the upper-level Command Support areas is 15 years old and should be replaced in the next 5 years.*
- *RTU-5 HVAC System: RTU-5 serving the upper-level northeast gym is 21 years old and should be replaced in the next 2 years.*
- *RTU-6 HVAC System: RTU-6 serving the upper-level northwest City Services offices is 20 years old and should be replaced in the next 2 years.*
- *RTU-7 HVAC System: RTU-7 serving the upper-level east perimeter offices (former computer room) is 20 years old and should be replaced in the next 2 years.*
- *Lower-Level South HVAC System: The gas furnace units and associated air-cooled condensing unit serving the lower-level south offices are 12 years old and should be replaced in the next 8 years. At the time of replacement, the refrigeration piping will need to be replaced due to changing to R410a refrigerant. The unit does not have*

economizer capability and consideration should be given to increasing the size of the outside air duct to prevent mechanical cooling when outside air conditions make free cooling possible.

- *Lower-Level North HVAC System: The gas furnace units and associated air-cooled condensing unit serving the lower-level north offices are 9 years old and should be replaced in the next 11 years. At the time of replacement, the refrigeration piping will need to be replaced due to changing to R410a refrigerant. The antiquated Mastertrol Trolatemp variable volume/temperature zone damper system should be redesigned and replaced. This will necessitate a reconstruction of the duct systems, and this will in turn require replacement of the ceilings and most of the lighting. The system should be checked for airflow rate, particularly the Conference room.*
- *Bicycle Repair Area HV System: The gas furnace serving the bicycle repair area is 15 years old and should be replaced in the next 5 years.*
- *Lobby HVAC System: The gas furnace units and associated air-cooled condensing units serving the lobby are 15 years old and should be replaced in the next 5 years. At the time of replacement, the refrigeration piping will need to be replaced due to changing to R410a refrigerant.*
- *Lower-Level Vehicle Storage Garage HV System: The lower-level Vehicle Storage Garage should be provided with a CO/NO2 detector to automatically start the existing exhaust fan upon sensing high levels of noxious gas.*
- *Lower-Level Sally Port HV System: The lower-level Sally Port should be provided with an exhaust fan and a CO/NO2 detector to automatically start the existing exhaust fan upon sensing high levels of noxious gas. The wall-mounted gas infrared heater is beyond the end of its life and should be replaced in the next 2 years.*
- *Upper-Level Garage HV System: The gas unit heater serving the upper-level garage is 15 years old and should be replaced in the next 10 years.*

- *Miscellaneous Heating Equipment: All hot water heating elements including the lower-level generator room suspended hot water unit heater and perimeter Investigation's office hot water finned tube radiation should be replaced with electric or gas-fired heaters.*
- *Server Room AC System: The Server Room duct-free split system should be replaced in the next 15 years.*
- *Temperature Controls: Consideration should be given to installing a Building Automation System to provide the ability to monitor and control the equipment remotely.*

Electrical:

- *Thermal imaging service is recommended at the switchboard and panels as a preventative measure to ensure all connections are secure and properly terminated.*
- *There appears to be a circuit breaker serving a rooftop unit in panel "ACDP" on the second floor that is experiencing nuisance trips during the summer months. This shall be investigated to determine to cause. It may be possible the circuit breaker is not sized to match the manufacturer's recommendations. The system is noted to be a frequent issue to the point that the roof top unit must be reset manually.*
- *The light level in the lower-level corridor appears low. This may be due to the type and spacing of the ceiling lights installed. Consider replacing the lights to bring up the light levels.*
- *As noted earlier, there appears to be an issue for the lights in Sergeants Office where the lights are observed to be flickering/pulsing. This shall be investigated to determine the cause. It may be possible there is electrical noise caused by other devices on the same branch circuit.*
- *Due to natural gas appliances in the maintenance room on the lower level, carbon monoxide detectors are recommended as well as the inclusion of a commercial exhaust and fire protection system for the cook surface.*

- *Replace receptacles in the kitchen countertop and the evidence garage to be GFCI type due to exposure to moisture.*

Plumbing:

- *An RPZ backflow preventer should be installed on the potable domestic water pipe serving the building to protect the city water supply from the building potable water service. A floor drain should be added near the water service to serve the RPZ backflow preventer.*
- *Add thermostatic mixing valves to all public lavatories.*
- *Provide a backflow preventer on sprinkler head and limit dead-end piping.*
- *Replace area drain with a larger drain at Bond exterior door to prevent flooding.*
- *Replace existing sections of sanitary sewer in poor condition from building to street sewer.*
- *Replace and reroute sections of existing sanitary piping in poor condition serving kitchen sink.*
- *Replace sections of existing suspended storm piping serving roof drains where cast iron leaded joints are failing.*

Fire Protection:

- *Install a complete fire protection system at the next major renovation.*

ACCESSIBILITY RECOMMENDATIONS

- *Renovation to bring restrooms and other public facilities into compliance.*
- *Provide secure side elevator for staff usage*
- *Revise all corridors to meet ADA access requirements.*

- *Revise many of the door and entries to provide appropriate space as required for the ADA regulations*
- *Replace casework to meet ADA requirements.*
- *If larger train spaces are incorporated ADA will be required, an assistive listening system and amplified sound. This will require specialized AV systems.*

SECURITY RECOMMENDATIONS

- *Site: Add exterior cameras at all entrances and facing parking areas. These cameras are to be actively monitored at a central location, typically records.*
- *Site: Replace all cameras.*
- *Site: It is recommended that access control parking be provided for staff with a controlled access route to the building. This can be provided in many other ways than fencing, robust landscaping or ornamental fencing will provide enough awareness to the separation of staff and public spaces.*
- *Add bollards and other physical vehicular protection measures to the main lobby.*
- *Building: A lobby renovation needs to occur to provide an adequate level of security for the main floor.*
- *Building: A second-floor renovation should be undertaken to add additional physical protective measures to the second floor.*
- *Interior: It is critical for the building to be provided with a proximity-based access control system. The current nature of security requires that public work facilities need to have instantaneous access to limit a person's ability to enter the facility as well as limit their access within the facility if they gain entry by compartmentalization.*
- *Interior: Replace all cameras.*

- *Provide a city-wide coordinated access control system and camera system that is accessible by all emergency responders. This system should allow for a central activation of lockdown as well as local lockdown procedures and systems to maintain positive control of the environment.*

SUSTAINABILTY RECOMMENDATIONS

- *There is not likely much that can be done at this facility given the current configuration and likely need for expansion. IF a new facility is constructed options become more readily feasible.*
- *Upgrade lighting to LED lighting with daylighting and occupancy controls.*
- *Investigate opportunities for solar power. (note: Current electrical agreement does not have opportunity for offsetting costs.)*
- *Significant HVAC replacement may be an opportunity for a geothermal system.*
- *All sustainability programs should be evaluated on a cost vs value basis.*
- *Investigate opportunities to obtain certification via a nationally recognized system such as LEED, Green Globes, or EnergyStar Certification.*

BUILDING MAINTENANCE ANALYSIS:

- *The Police department has exceeded annual maintenance budget by over 200% each year. This includes annual increases to get the maintenance issues under control.*
- *This is intended to be a 5-year outlook for anticipated costs and budget concerns. Due to the mechanics of escalation the costs for escalation become exaggerated. This has been moderated manually but remains note of caution in evaluating costs beyond 8 years.*
- *This report should be updated annually by the facilities staff. StudioGC remains committed to providing minor updates as equipment or materials are replaced. It is also recommended that a revised evaluation is done at the 5-year mark to normalize the cost outlooks and align the information to current physical, and market, conditions.*
- *Prevailing professional practices recommend strongly considering replacement of a building if the existing totality of the maintenance costs, within the next 10 years, are 25% of the replacement cost of a new building. The best analogy of this consideration of replacement of a vehicle. If one must replace the engine and that is approximately 10% of a new car cost, it stands to reason that you are also looking at other future risks that make it reasonable to buy a new car. Buildings are somewhat similar. The current maintenance costs are what is known at this time. There will be more significant failures forthcoming.*

A detailed building analysis matrix will be provided at the upcoming presentation. That will be attached the final issuance of this document.