Caribou Police Department

Assessment

ARTIFEX architects & engineers

MW STUDIOS

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POLICE

1. EXECUTIVE SUMMARY

1.1 General Description

In January of 2020, the City of Caribou, Maine contracted with Artifex Architects and Engineers and with Public Safety Consulting Architect, Manns Woodward Studios (MWS) to perform a comprehensive assessment for the Caribou Police department. The scope of work addressed three primary areas of focus:

EXISTING CONDITIONS SUMMARY; OPERATIONS & BUILDING REVIEW –

To better understand the current conditions and capacity of the Caribou Police Department, the team conducted a comprehensive evaluation of law enforcement staffing, spatial requirements, and the physical condition of their current building. This data was captured and presented in both a numerical value of personnel relative to building square footage, along with a supplemental grading rubric that examines the existing structure(s) overall health.

PROGRAMMING & SPACE NEEDS ASSESSMENT –

The breadth of the space needs assessment serves to evaluate the needs of each Police operational Division. Chief, Lieutenant, and fellow representatives were engaged through a programming and space planning interview, conducted on January 13, 2021. Artifex and MWS documented current operational constraints faced, along with the projected space and growth hoped to achieve by 2040.

LOCATION SELECTION/PLANNING –

The City of Caribou tasked the team with evaluating four options based on the properties and spaces currently available, and feasibility of these facilities accommodating the identified needs of the Department:

- Remodel and renovate new offices within the confines of the existing City Hall. In this scenario, the facility was envisioned to be completely renovated to be solely occupied by the Police Department. City Hall offices would be located elsewhere within the City. Within this scheme, the other City agencies which occupy the City Hall would move to a new location with the Police maintaining occupancy of the basement of the building until the expansion was complete.
- Remodel the existing Sweden Street building for the sole purposed of housing Police Department operations.
- Remodel existing SITEL Building to contain Police Department operations with potential for entire City operations to relocate to this facility.
- Maintain existing City Hall for city operations and provide a new comprehensive plan for Police Department to located on currently owned City land or unspecified site.

CURRENT CONDITIONS

The City of Caribou retained Artifex and their consultant, Manns Woodward Studios to evaluate the current facility, as well as two others within the City for their efficacy for repurposing as Police facilities of potential City offices. The three buildings are referenced as I. City Hall; II. 52 Sweden Street; and III. SITEL. The two additional buildings are of the same approximate vintage as the City Hall but have been used for very different purposes throughout their history.

Caribou Police currently operate from small space in the basement of the current City Hall which was initially the City Fire Station. This building, constructed circa 1937, is an example of a facility that has undergone extensive adaptive re-use through a series of reactionary renovations. "Reactionary renovations" are defined as a series of limited renovations that occur within a space to fulfill an immediate need at a minimal cost. Usually, such limited renovations achieve initial success, but due to lack of long term planning, they ultimately present significant maintenance, energy efficiency, and operational functionality issues.

In the case of the current facility, the building clearly demonstrates signs of having had an extensive life-span. Conditions of construction and quality of maintenance indicate that the facility has reached the end of its useful life. While the building is an excellent candidate for comprehensive renovation, it is likely ill-suited to function as a police station. The current building was constructed before the development of conventional building codes. As such, appropriate structural features necessary for a police station are lacking.

The International Building Code (IBC), and Maine Uniform Building and Energy Code, classify a Police Station as an Essential Risk Category IV Structure. Such a designation requires increased seismic, snow, and wind performance under the premise that the continued operation of such buildings during a natural disaster is essential to the community. The original building was not designed or constructed to this standard and retrofit and modernization will prove to be costly. A more in-depth explanation of Risk Category IV structures can be found in section 2.1 of this report.

1.2 General Physical Conditions

- The City Hall general condition is a result of the initial quality of the building, the era in which it was built, history of reactionary renovations, and the maintenance and repair over the period it has been in service. The magnitude of required repairs stated in this report is what would be anticipated in a building that has been in service for this extended period. Nothing in our reporting of conditions suggests that the building has not been maintained apart from the roof and the hose tower which are explainable under current code requirements. However, given the age of the building and the fact that its construction predates any form of conventional building code, there is a high potential for unforeseen conditions to arise. The potential for more considerable damage should be acknowledged as much of the conditions of the building are covered by finishes that were not removed for examination due to the building being currently occupied. The structural conditions of the building would likely require significant upgrades to satisfy the code requirements of a risk Category IV essential facility.
- The Sweden Street general building condition exhibits many of the same characteristics of the City Hall property. However, maintenance and repair requirements are far beyond that of the City Hall due to prior modifications and renovations that have jeopardized the structural integrity of the floor framing and added potential fire hazards. Current conditions suggest that the building has been modified in ways that will require significant remediation, restoration, and new solutions to replace those used in this building before any thought could be given to its use as a future police facility.

- The SITEL building's is in generally good physical condition compared to the previously mentioned candidates. The magnitude of required repairs stated in this report are moderate, other than the extent of those repairs. Our review of the conditions suggests that the methods used to bring heating oil and diesel fuel into the building are not compliant with current codes. We also believe that a significant amount of roof repair/replacement is required based on third party reporting. Further, the building was previously utilized as an office structure and would also likely require structural upgrades to comply with Risk Category IV requirements.

1.3 Opinion of Probable Cost

The report provides an opinion of probable cost to update the building to meet current code requirements. The intent of this portion of the evaluation is to provide the City of Caribou with comparative range indicating the approximate magnitude of costs that might be associated with each property. These figures are intended to serve as approximations at this time. Development of detailed design solutions would be required in order to obtain more accurate cost implications.

1.4 Summary of Project Challenges & Considerations

The recommendations for attending to essential improvements for the three facilities are included in Section 4 of the report: Functional and Operational Deficiencies. The current City Hall building can continue to be utilized as a Police Station per the MUBEC Existing Building Code, as long as no major repairs or remodeling is undertaken. Once a major improvement (such as new HVAC system) is planned, the Code requires that all improvements required under current New Construction (IBC) be made to bring the building into compliance. This requirement is additive by nature to prevent circumnavigation by incremental improvements.

If the rest of the functions within City Hall were to be relocated and the Police were to inhabit the entire building, an update of the entire facility will be required. If this scenario were desirable it is recommended that all occupants vacate the premise for the construction duration in order to mitigate the costs associated with phasing, sequencing, and the logistics of keeping the department operational during construction.

The secondary issue would be the relocation of the City Hall functions from the current facility. Prior to work beginning, the City would need to permanently or temporarily relocate its offices to another facility. This in turn, would impose significant cost implications on the project for the following reasons:

1. The City would need to identify an existing space or acquire a new property to accommodate their programmatic needs. This approach would also likely require renovation and modernization. Acquisition and construction costs to resolve these needs should be taken into consideration. In short, the City would need to complete two capital projects in order to satisfy the needs of one agency.
2. Prior to renovation work occurring for the Police Department, relocation of City Hall functions would need to be completed. The relocation of City Hall operations to an alternative location would likely require 12-24 months to complete when considering times associated with acquisition, planning, construction, and moving. As such, construction and occupancy for the Police Department would be significantly delayed compared to new construction or renovation of an already vacant structure. With annual construction escalation costs hovering around 5%, such delay may easily impose an additional $500,000 compared to today's costs.

The property at 52 Sweden Street is in poor condition and has insufficient square footage to satisfy the programmatic needs of the project. As such, it would not be an appropriate candidate for adaptive reuse.

The SITEL building exceeds the City's space needs, but could be functional with additional HVAC and roofing work. The property is also bound by adjacent buildings, Sweden Street to the south, and Herschel Street to the North. The team has idenfied the following specific challenges associated with this property:

1. Ideally, Sweden Street would serve as the public access point and serve as a visual beacon to the citizens of Caribou. The rear of the building along Herschel Street would be utilized for departmental vehicle access and processing. This approach would fall inline with best practices associated with community policing. However, the floor plate of the building is larger than the programmatic requirements associated with the project. This means that excessive square footage would likely exist between the front and the back of the building.
2. The site does not offer sufficient secure parking for departmental vehicles.

Our team has identified the following key challenges and potential compromises associated with both SITEL and City Hall that will or may need to occur to achieve an acceptable outcome:

1. The existing City Hall layout is comprised of numerous load bearing walls. Further, the building is multiple stories. The recommended program is based upon "right sizing" rooms and optimizing adjacencies for the unique requirements of the department. Tailoring the solution across multiple floors and fitting the spaces within existing structural confines will likely yield rooms that are under or oversized and may fragment the operational efficiency that comes with maintaining adjacencies.
2. The existing buildings may require stabilization and structural upgrades to comply with Risk Category IV requirements. The City Hall and Sweden Street Buildings carry the highest probability of being required to upgrade structural elements of the facility.
3. Elevator access will need to be provided. Depending on the organization of the building and location of detention areas a second elevator may also be required to isolate detainees from other occupants of the building.

2. DEFINITIONS

LAW ENFORCEMENT TERMINOLOGY

CALEA	Commission on Accreditation for Law Enforcement Agencies
PSAP	Public Safety Answering Point
EOC	Emergency Operations Center
IACP	International Association of Chiefs of Police
SDD	Special Deployment Division
SSD	Special Services Division
SVU	Special Victims Unit
DV	Domestic Violence
ATFP	Anti-Terrorism Force Protection
EMA	Emergency Management Agency
EST	Emergency Services Team (SWAT)
CIU	Criminal Investigations Unit
CID	Criminal Investigations Division
SRO	School Resource Officer
EOD	Explosive Ordinance Disposal
IAPE	International Association for Property & Evidence
CRO	Community Resource Officer
CVE	Commercial Vehicle Enforcement
POLY	Polygraph
PIO	Public Information Officer

SPACE NEEDS TERMINOLOGY

NSF	**Net Square Feet:** The amount of usable program each Division requires for operational procedures. Does not consider overall building circulation, utility spaces, shared common spaces with other Divisions or public areas.
GSF	**Gross Square Feet:** The total area in the building. Includes all space needed to circulate personnel, common public areas, utilities, structural systems, and wall thickness.

CODES & STANDARDS TERMINOLOGY

IBC	International Building Code
NFPA	National Fire Protection Association
IEBC	International Existing Building Code
IECC	International Energy Conservation Code
IPC	International Plumbing Code
IMC	International Mechanical Code
ASHRAE	American Society of Heating & Air-Conditioning Engineers
UL 752	Underwriters Laboratory Testing Method for Ballistic Resistance
ASCE	American Society of Civil Engineers
AHJ	Authority Having Jurisdiction. The organization, political subdivision, office, or individual charged with the responsibility of administering and enforcing the provisions of said jurisdictions adopted building code(s).

2.1 CRITICAL FACILITIES & RISK CATEGORY

What is a critical facility?

In general usage, the term "critical facilities" is used to describe all manmade structures or other improvements that, because of their function, size, service area, or uniqueness, have the potential to cause serious bodily harm, extensive property damage, or disruption of vital socioeconomic activities if they are destroyed, damaged, or if their functionality is impaired.

Typically the following buildings fall under the broad umbrella of the critical facility label: emergency response facilities (fire stations, police stations, rescue squads, and emergency operation centers [EOC's]), custodial facilities (jails and other detention centers, long-term care facilities, hospitals, and other healthcare facilities), schools, emergency shelters, utilities (water supply, wastewater treatment facilities, and power), communications facilities, and any other assets determined by the community to be of critical importance for the protection of the health and safety of the population. The adverse effects of damaged critical facilities can extend far beyond direct physical damage. Disruption of healthcare, fire, and police services can impair search and rescue, emergency medical care, and even access to damaged areas.

Who or what determines which structurers are a critical facility?

The definitions that outline what type of structure comprises a critical facility, whether it be from FEMA, IBC, NFPA or ASCE are defined broadly and generalized. The intention is that consideration for labeling a structure as a critical facility is developed by the State of Maine, the local authority having jurisdiction (AHJ.)

What is a Risk Category and why does it matter?

Unlike the generalized terminology for what makes a building a critical facility, the IBC provides very specific guidelines to determine a buildings risk category. The Risk Category is derived by determination of the building's occupancy, and how said occupancy correlates to the greater service it provides within society.

The determination of a building's Risk Category helps set the course heading for identifying what structural provisions a building will require in order to maintain operations in the event of a natural disaster. In short, as the Risk Category rating grows, so do the requirements of the buildings structural design. The determination of these provisions and the buildings Risk Category are outlined within the opening pages of IBC, Chapter 16, Structural Design and further expanded upon within the entirety ASCE 7-10. It should be noted that most critical facilities fall into Category III or Category IV, described below:

Category I includes buildings and other structures whose failure would represent a low hazard to human life, such as agricultural buildings and storage facilities.

Category II includes all buildings not specifically included in other categories such as offices.

Category III includes buildings and other structures that represent a substantial hazard to human life in the event of failure. They include buildings with higher concentrations of occupants (i.e., where more than 300 people congregate in one area). These are typically educational facilities with capacities greater than 250 for elementary and secondary facilities, 500 for colleges and adult education facilities, or 150 for daycare facilities.

Category IV includes essential facilities such as hospitals, fire and police stations, rescue and other emergency service facilities, power stations, water supply facilities, aviation facilities, and other buildings critical for the national and civil defense. These facilities are chosen because of their vitally important role in protecting the health and safety of the community.

What about renovating existing non-compliant buildings?

When considering renovation to existing structures Chapter 1 Appendix 11B of ASCE 7-10, and the entire provisions of the IEBC outline procedural requirements to inform designers and owners how much or how little an existing nonconforming structure will be required to be strengthened to contemporary standards. Renovated work area vs. total building footprint, extent of how invasive said renovation is to the existing structure, alteration to egress pathways, and additions occurring to existing structures all influence the extent of a building "updates" and need to be examined on a on a case by case basis. With the buildings included in this assessment, based on revisions to a percentage of floor area, the City Hall and Sweden Street building would require compliance with the IBC. It is theoretically possible, although not highly probable, that the SITEL building could be modified based on the IEBC.

What does this mean for the project?

The need to update an existing structure during a renovation project, assigning a buildings Risk Category, or the decision to label a facility as critical will reverberate throughout the design and construction process. Project budget, building age, size, location, infrastructure availability and how the structure correlates to the greater operational function it serves should all be considered on a project by project basis.

It is because of this, that a dialog between Owner and the Design Team be developed and ongoing. It should be the primary objective of this dialog to outline project standards, expectations, wants, and needs. Only after this dialog has been developed can the design team move forward confidently to develop a successful project.

3. PURPOSE AND SCOPE

The purpose of this Building Conditions Assessment (BCA) of the three existing potential facility locations is to give information facilitating the decision to be made by the City Council whether the Caribou Police should stay in place and make required improvements including those needed for maintenance, operations, and current Building and other applicable Codes to the building where they are now located or to proceed to another potential existing building within downtown, or to design an alternate floorplan/concept and use that to construct a new facility.

Additionally, this report includes information collected to determine the physical requirements for a Police Facility which meets contemporary standards for facilities of its type and size, based on best practices and current policing requirements and recommendations (IACP and CALEA)

Caribou is the second largest city in Aroostook County, a community of 8,189 located at the heart of rural Northern Maine approximately twenty minutes from the Canadian border. The city has a total area of 80.10 square miles (207.5 km2), of which 79.26 square miles (205.3 km2) is land and 0.84 square miles (2.2 km2) is water. Caribou is located in the geographical center of Aroostook County; the county is readily accessible by two major highways; Interstate 95 from the south and the Trans-Canada Highway from the north and east. In sparsely populated Aroostook County, Caribou is at the hub of spokes serving the area.

The Police Department currently has eighteen (18) full-time employees and +/- seven (7) part-time (reserve) employees. There are potentials for growth in both types and numbers of employees, especially in School Resource Officers, but in other areas as well.

The call numbers and arrests are relatively stable with annual fluctuations of under ten percent with no significant growth.

The buildings under consideration are all within the center of the existing downtown which is currently a member of the Maine Downtown Center Program, a program to assist communities with the revitalization of their downtowns.

It should be understood that this Building Conditions Assessment reviews building systems generally and represents a “level of magnitude” to building conditions and recommended improvement costs. It should be further understood that this BCA does not report on the presence of ACM’s or hazardous materials, and that the City of Caribou has no information regarding these materials so this should also be considered.

4. DESCRIPTION AND OBSERVATIONS

BUILDING/LOCATION	CURRENT/PRIOR USE	SIZE (NET SF)
CITY HALL	Municipal Offices and PD	6,000
52 SWEDEN STREET	Commercial/Call Center	5,665
SITEL	Commercial/Call Center	26,000

4.1 Overall General Description

I. Existing City Hall

The current facility was built as the original fire station for the city. When the new fire station was built, the facility was retrofitted as the City Hall and Police Station with the police occupying the basement of the building. The area occupied represents approximately three thousand square feet. This area was never designed as a police station but has been modified to accommodate that usage. These modifications do not make for a safe, secure, or efficient workspace.

In general the deficiencies in operation are so extensive that the agency personnel have low expectations for the facility.

The use of this portion of the building places it within IBC Category IV - Buildings and other structures designated as essential facilities. A few other examples include (per IBC): “Hospitals and other health care facilities having surgery or emergency treatment facilities. Fire, rescue and police stations and emergency vehicle garages. Designated earthquake, hurricane or other emergency shelters. Buildings and other structures having critical national defense functions”. The occupancy category is a number, Roman Numeral I, II, III, or IV, that affects the structural design load requirement by adjusting the importance factor for the building in relationship to the risk to human life that would exist in the event of the failure AND the importance of avoiding a failure in an emergency due to the nature of the building's function in the event of an emergency. The higher the occupancy category number, the higher the importance of avoiding failure and keeping the building functioning in the event of an emergency. This building does not currently meet the requirements for a Category IV building.

The building is a two story masonry structure with a flat roof. Additionally there is a masonry hose tower also with a flat roof, of newer vintage than the original building, and a pre-engineered garage with a gable metal roof. The few windows in the police section are vinyl replacement windows with those in the jail section covered my steel-framed mesh at the interior. The roofing is a membrane roof which has reached its expected life. There are mechanical units sitting on the roof providing for heating the zones of the building.

The biggest difficulty in evaluating the majority of the building for alternate use is the extent of spaces and interior finishes which made structure not visible without destructive investigation. It was impossible to see the structural make-up or condition of the structural members for the second floor or the roof structure. There appears to be no existing construction plans for the building and so structural walls or bearing points were extrapolated based on general standards for building construction.

The building sits on a sloping site with a flat graded pad at the level of High Street providing access to the First (Main) Floor entrance to City Hall. A green space at the corner of High and Main absorbs the difference in levels as the parking entry from Main Street occurs at the Basement Floor level that provides entry to the Police Department. There is public parking provided in front of the City Hall entry and to the side of the building at the entry to the Police Department with somewhat controlled parking to the rear via a driveway at the eastern side of the building.

CARIBOU CITY HALL

Building System/Function	Description	Status
Overall Performance (Relative to function)	Good response location relative to City and Route 1. Overall position of the building, relative to site provides potential security from lower parking lot, while maintaining an approachable entry at main floor.	Fair
Site Security	3 parking areas - no controls - direct access	Poor
Accessibility (ADA)	Must use different entrance for basement and first floor. No Elevator available	Poor
Foundation System	Unable to view - appears in basement to function with few issues	Fair
Structure	Unable to view - no apparent sagging or issues. Rear wall reported to have been stabilized in the past. Likely not Risk Category IV compliant.	Fair/Poor
Openings (Doors/Windows)	Multiple air leaks and issues with windows and doors	Poor
Thermal /Moisture (Walls/Roof)	Leaks at former hose tower. Minimal insulation in walls and roof.	Fair
Interior Finishes	Interior finishes look well maintained - need new carpeting	Good
Plumbing	Per existing code. Building is not sprinklered. Sprinkler system will be required per IBC/NFPA 1.	Good
Electrical	Lighting configuration older -some compact fluorescents per commercial building regulations.	Fair
HVAC	Standard residential grade hot water heating system. No cooling or mechanical ventilation. System may struggle to be zoned appropriately when building is fully occupied.	Fair/Poor

II. 52 Sweden Street

This building is a single-story commercial building, built prior to 1926 of structural masonry walls with wood floor and roof construction. The building is 5,665 square feet. This building was previously used as a call center and appears to have been originally part of a restaurant. It was never designed or used as a police station.

In general the deficiencies in structure would not align well with its usage as police facility, beginning with its inability to meet Category IV construction standards. The building, a single-story masonry structure with a flat roof has a full basement. The structure for the first floor is made up of 2"x12" floor joists, spanning from eighteen to twenty-six feet depending on the bay, cut to hang from composite beams created by gang nailing six 2"x12" with a 2"x4" cleat on each side. These beams spanned to 12"x12" wood posts of indeterminate age at approximately eighteen feet on center. There was no lateral support for the columns in any direction and no mechanical connection of columns to beams.




Currently the mechanical system for the building, an oil-fired boiler with hot-water baseboard is in an un-rated space with numerous penetrations making for fire-protection issues. Additionally a wood burning furnace has been added within the basement with absolutely no fire protection.

The front windows are commercial storefront with double-glazed glass. The aluminum is in generally good condition, but the masonry surrounding is in poor condition and small ad hoc details have been made to maintain a generally acceptable appearance.


The side of the building is located on a small public street with parking immediately adjacent to the building while the rear is along a small alleyway and adjacent parking. These two sides of the building are majorly masonry in fair condition. The signs of patching and pointing are obvious. The side wall windows are vinyl fixed, double-glazed with an infill panel above. The rear wall is generally patched with two steel doors and one intake vent. The attic is ventilated by two small metal vents on the Stevens Avenue elevation.

Parking is currently available directly in front of the building on Sweden Street, and alongside the building on Stevens Avenue, a one-way street from the south. There is also a city parking lot approximately fifty yards to the rear.

The main floor is a large open space with no structural columns visible. The attic was not accessible leaving a question of how the roof spans of fifty-two (52') feet were achieved within a forty inch (40") attic space above the original plaster ceiling. The roof was not visible at the time of our site visit as it was covered with approximately eight inches of snow.

Interior finishes are fair to poor. The dropped ceiling is approximately eighteen inches below the plaster ceiling which appears to be directly applied to the bottom of the ceiling joists. There are no major water spots or signs of leakage visible on the dropped ceiling. The carpet is in poor condition and needs to be removed. Electrical services are provided to the interior of the building via drops from the ceilings and are wired along the exterior of the perimeter walls.

NEW SWEDEN STREET

Building System/Function	Description	Status
Overall Performance (Relative to function)	Fair response location relative to City and Route 1. Overall position of the building, relative to site provides potential no security from New Sweden or Stevens Street and no controlled parking. Only two potential entry points and no good sally port location.	Poor
Site Security	None	Very Poor
Accessibility (ADA)	Entire building on one level	Very Good
Foundation System	Foundation walls stone and brick and concrete. Floor framing extremely light and not appropriate for public safety use	Very Poor
Structure	Floor structure stressed and roof structure wood but sizing and spacing unknown	Poor
Openings (Doors/Windows)	Storefront windows and doors need replacement. Side windows unprotected. Rear entry metal door rusted	Poor
Thermal /Moisture (Walls/Roof)	Unable to verify but appears to be minimal insulation in walls and roof.	Fair
Interior Finishes	Interior finishes have exceeded life expectancy - require new carpeting, ceiling tiles and painting look well maintained - need new carpeting	Poor
Plumbing	Per existing code. Building is not sprinklered. Sprinkler system will be required per IBC/NFPA 1. Very limited restrooms	Fair
Electrical	Lighting configuration older -plenty of power available	Fair
HVAC	Patchwork heating system - not to current codes. No cooling or ventilation. Requires complete re-do	Very Poor

III. SITEL

This building is a two story downtown commercial building. As originally built, it was a single story with a mezzanine overlooking the first floor. Over time the entire first floor was built over. The most immediate prior use was as a Call Center until recently. The building has been adapted for this purpose including extensive phone and electrical service. The floors have been configured with large open areas, some administrative offices, and service rooms for IT, lounge/lunchrooms, and restrooms. The building is currently unoccupied with some rooms unfinished on the first floor.

The building was obviously not originally designed as a police station or office use, but attempts have been made to configure it for office purposes. The major differences in commercial versus office is the need for daylight, as commercial sales usually require closed display areas with offices needing daylight for workers' health and satisfaction. The structural modifications to support the second floor use as call center entail new steel columns and beams with concrete structural floor. Many compromises would be required to accommodate City offices and police functions, one being the change from the quantity of daylight available in the current City hall versus the lack at the SITEL building. In addition, the Police Department would have to make major accommodations to make this building work as a police facility, if they are even possible; this does not make for an efficient plan or for efficient workflow.

At first glance the building appears in good condition as the construction is steel and masonry, unlike the wood construction of the other options. Again, however, it is difficult to assess certain elements without destructive testing. But no bounciness or deflection at the second floor or roof was noted. There were signs of roof leakage at the second floor ceiling.

The exteriors of the building appear well taken care of with new storefront window and door systems and controlled-access doors.

The masonry is in very good condition and the areas around the entries are also in good condition. The roof was covered in several inches of snow and was not able to be reviewed.


Boilers


Air Handlers

The mechanical system for the building is a ducted forced air system which provides for both heating and air conditioning. The mechanical condensing units were on the roof with air handlers in a penthouse structure accessed by stairs from the second floor mechanical room which contained the building boilers. The oddest element of this system was the fuel storage and delivery: fuel was stored in a partially buried tank at the east side of the building on what appears to be the neighbor's property. It is located below a major exit from the building (one of three entries/exits and the only accessible entrance to the second floor). Diesel fuel, for the emergency generator, was also stored on site with a mini-storage area at the first floor of the building and pumps within the building, piping the fuel to the generator at the first floor rear of the building. The condition of this was hard to assess and the code compliance was also questionable.


Fuel Distribution


Generator


IT Fire Suppression

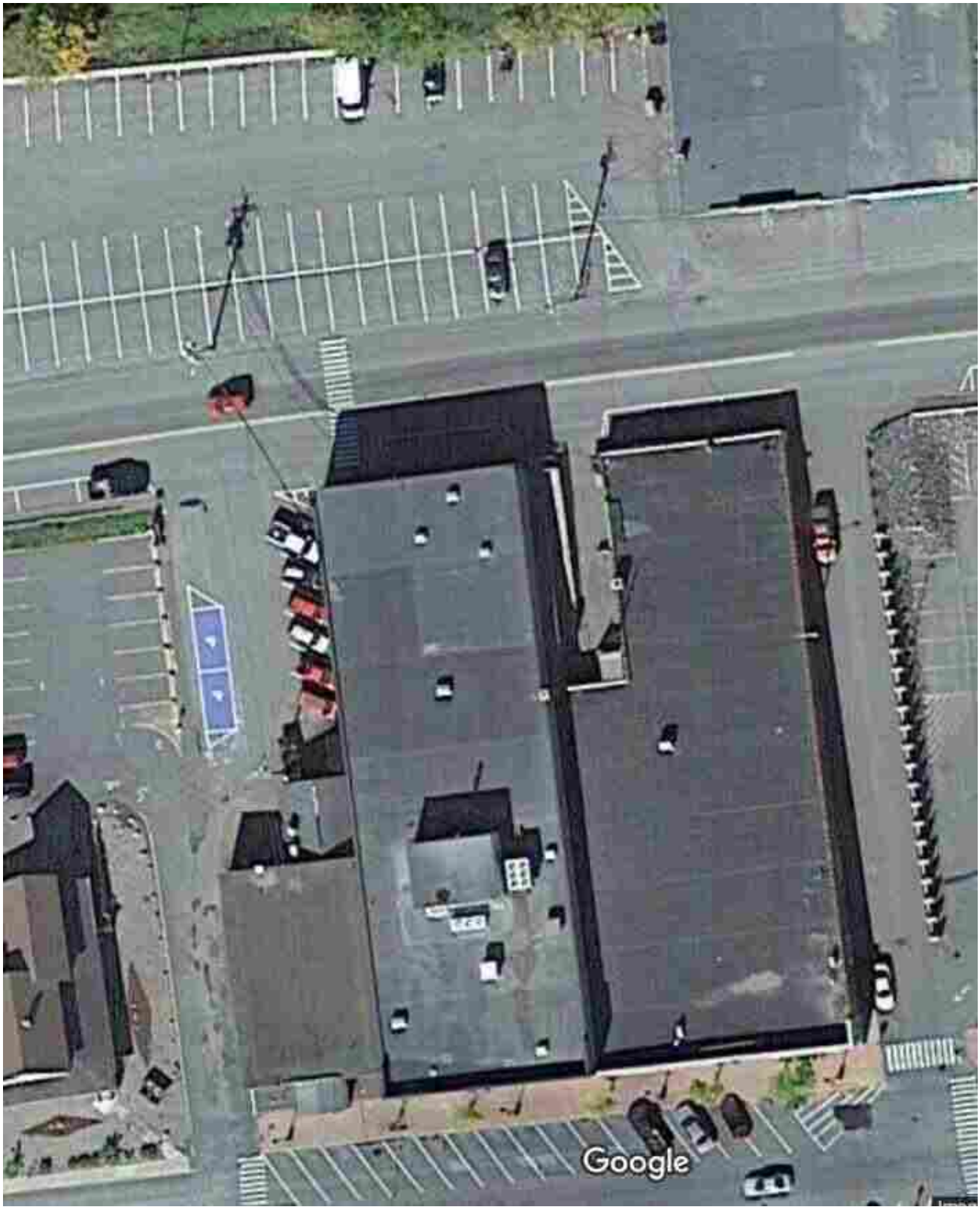
The building is also provided with a dedicated IT room with servers on a rasied floor and fire suppression equipment.

There appear to be sufficient restrooms for a full build-out of the interior floors located throughout each floor level. Some rooms appear recently redone. There are also two code-compliant kichens and lunchrooms within the building.



Of note is the accommodation of the change of floor level from the first to second floor by a monumental stair along the side wall approximately thirty-feet long, creating a very inefficient floor plan.

The building sits on a flat downtown site with streets on two sides and buildings sharing common walls on portions of adjacent sides. There is public on-street parking provided in front of the building with a city-owned parking lot across Herschel Street at the rear. There are cars parked adjacent to the building on private property to one side and the third building entry is in the notch of the building on the opposite side. There is the possibility for out-buildings on the nearby parking lot, but no easy way to provide for a sally port or vehicle storage at the back. Access to the building is limited to the current 3 entries because of the configuration of the building on the lot.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SITEL

Building System/Function	Description	Status
Overall Performance (Relative to function)	Fair response location relative to City and Route 1. Overall position of the building, relative to site provides potential no security from New Sweden Street and shares common walls with buildings on each side. Parking is on-street and in lot at rear. Three potential building entry points but no sally port location.	Poor
Site Security	Sides are secure but front and rear will need to be kept open to streets	Very Poor
Accessibility (ADA)	Two story building. Accessible toilets on both floors.	Good
Foundation System	Concrete slab on grade	Good
Structure	Floor and roof structure steel composite with wood floor joists; unknown if it will meet current code requirements - potential is good	Good
Openings (Doors/Windows)	Storefront windows and doors in very good condition. Side entry is not completely code compliant. Rear entry storefront very good - new. No real windows to building	Fair
Thermal /Moisture (Walls/Roof)	Unable to verify but appears to be minimal insulation in walls and roof. Roof has moisture and leakage issues	Poor
Interior Finishes	Interior finishes are relatively new - require new carpeting and ceiling tiles in individual areas	Good
Plumbing	Per existing code. Building is sprinklered. Plenty of restroom and kitchen facilities	Very Good
Electrical	Lighting configuration appropriate for commercial use - some newer fixtures, plenty or available power.	Very Good
HVAC	Upgraded Commercial HVAC equipment which has probably achieved projected life. Includes A/C and mechanical ventilation. Fuel storage and delivery is problematic.	Fair

4.2 Code Review

The major building and fire codes applying to both the design of a new PD facility, or the use of an existing building are 2015 IBC, NFPA LSC 101, and 2015 IEBC (existing City Hall).

4.2.1 2015 International Building Code & 2012 NFPA LSC 101

The occupancy classifications are Business Group B (IBC) and Existing Business (NFPA LSC 101).

As indicated on the Code Reviews form (Appendix) the occupancy count is based on 100 gross square feet per person, or 6,000 gsf/100 = 60 persons, independent of actual occupants.

The building has exterior structural masonry walls and a wood framed second floor and roof structure bearing on an interior unknown structure. The building's Construction Type is VB (IBC) and 111(000) NFPA LSC 101.

Means of Egress (MOE) components include doors, corridors, stairs, exits, and exit discharge elements. Their fire resistance and dimensional requirements are identified on the Codes Review form.

4.2.2 2015 International Existing Building Code:

As stated in section 102.6.2 of this code; *"Buildings previously occupied. The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as otherwise specifically provided in this code, the NFPA LSC 101, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public."*

4.2.2.1 Repairs (Chapter 6):

- Repairs to the existing building must comply with Chapter 6 of this code and shall not make the building less conforming than it was prior to undertaking the repairs.
- Existing building materials shall be permitted to remain, unless determined by the building official to render the building or structure unsafe.
- Repairs shall be done in a manner that maintains the level of fire protection, means of egress, and accessibility provided.
- Structural repairs or rehabilitation to damaged components shall comply with the provisions of the 2015 IBC for new buildings.
- Repairs to "less than substantial structural damage" shall be permitted to be to their pre-damaged condition.
- Existing electrical wiring and equipment undergoing repair shall be allowed to be repaired or replaced with like material
- Existing mechanical systems undergoing repair shall not make the building less conforming than it was before the repair was undertaken.

4.2.2.2 There are three methods for Compliance to the 2015 IEBC; Prescriptive Method, Work Classification Method, and Performance Method. Of the three, the Work Classification Method considers alterations in increasing levels including Repairs and Levels 1,2, and 3.

We reviewed this building with the assumption that the work area for alterations to the building's interior would be greater than 50% (Level 3) to satisfy the programmed requirements of this law enforcement office.

Buildings renovated to Alterations- Level 3 (Chapter 9) must also comply with Alteration Levels 1 & 2 (Chapters 7 & 8) requirements. Some key provisions noted:

> 707.2 Addition or replacement of roofing or replacement of equipment: Where this results in additional dead loads, structural components supporting such reroofing or equipment shall comply with the gravity load requirements of the IBC.
>
> Exception 1: Structural elements where the additional dead load noted does not increase the force in the element by more than 5 percent.
>
> 805.9.1 Handrails: Exit stairways require handrails designed in accordance with 2015 IBC (1.25"-2" dia.).
>
> 807.2 New structural elements: shall in alterations comply with 2015 IBC.

Generally the structural compliance for Category 4 is significantly higher than current structure and will require additional structural members. The full Code analysis follows in Addenda

The other existing building which would qualify for consideration under the IBC because of prior usage is the SITEL building because it was considered a similar occupancy classification.

That building has concrete masonry walls and a wood and steel framed second floor and roof structure bearing on an interior steel line. The building's Construction Type is VB (IBC) and 111(000) NFPA LSC 101.

Means of Egress (MOE) components include doors, corridors, stairs, exits, and exit discharge elements. Their fire resistance and dimensional requirements are identified on the Codes Review form. The building is protected throughout with an automatic sprinkler system offering enhanced life safety protection. This protection is beneficial in both building and fire code applications.

Again, after review, the assumption is that the renovations would be required to greater than 50% of the floor and roof area and the building would need to be brought up to the current IBC requirements.

2019

Caribou Police Department

Penny Thompson

Safety Committee

3/13/2019

Link to the Compliance Directive 11-05

https://www.maine.gov/labor/Templates/safety_resources.shtml?id=179063#Directive%2011-05%20Law%20Enforcement%20(Rev.%209/2013)

Observed Conditions

Facility Inspection Criteria: Standard:

Personal protective equipment– (safe condition) 1910.132(e)

- No designated area for PPE due to limited space
- Gloves are places in areas where used for easy access; in original container

Fire extinguisher including vehicles (monthly) 1910.157(e)

- Due to lack of communication within committee, this had not been done
  - Update: Issue resolved – now compliant
- Chief Susi said that the fire extinguishers designated as vehicle backups should be in a crate to avoid damage
  - Update: Issue resolved – now compliant

Fire extinguisher (annual maintenance check) 1910.157(e)

- Compliant: all city equipment serviced by Maine Fire Prevention Littleton, Maine

Photos: (Before) (After)

Observed Conditions

Facility Inspection Criteria: Standard:

Electrical outlets/switches–cover plates installed 1910.305(b)

- Compliant: no deficient equipment noticed during visit (not many in view due to amount of property)
- One in dispatch area is loose in wall

Photo:

GFCI receptacles in wet locations and operable 1910.304(b)

- Not checked during visit

Extension cords–temporary use only 1910.305(a)

- Compliant: none viewed

Power strips (not piggybacked) 1910.305(g)

- Compliant: none viewed

Electrical ground pins in place 1910.334(a)

- No cords, attachment plugs, receptacles or other equipment were checked for proper continuity of the equipment grounding connection during visit

Electrical branch circuits labeled 1910.303(f)

- Not educated enough in this field to make judgement on compliance

Observed Conditions

Facility Inspection Criteria: Standard:

Electrical box knockout/breaker covers in place 1910.305(b)

- Not viewed / panel locked

Wiring supported and protected from damage 1910.305(a)

- Sophisticated wiring needed due to amount of electronics present
- Wiring done by professionals
- All areas are used for multiple duties i.e. room with electronics also used for storage
- Wiring in dispatch area can easily be kicked / bumped which may result in interruption of power to computers in dispatch.

Photo electronics room (much wiring present) also used for storage:

Photo of locked Electrical box

Photos of under desk wiring in dispatch:

Observed Conditions

Facility Inspection Criteria:	Standard:
Stairs, treads and railings–safe condition	1910.24

- N/A in the Police department; transition area to municipal building are safe but dirty

Ladders–safe condition	1910.25 & 26

- No ladders present during visit

Floor loading protection (overhead storage)	1910.22(d)

- There is a requirement that “employees involved in warehousing or storage activities know the intended load limits” which would apply to a “structurally supported surfaces”. The floor in the police department is a concrete slab and – to my interpretation of 1910.22(d) would not be covered.

Furnace, boiler & storage room (housekeeping)	1910.22(a)

- Furnace / boiler room not viewed during visit
- All rooms are used for storage due to lack of proper space for operation of police department.
- Private offices were not photographed due to the confidential nature of the business conducted in the police department. Those areas too are used for storage. In some rooms, boxes and other items must be moved to access file storage.

Photos of storage areas:

Observed Conditions

Facility Inspection Criteria:	Standard:
Furnace, boiler & storage room (housekeeping)	1910.22(a)

Photos of storage areas:

Observed Conditions

Facility Inspection Criteria: Standard:

Exits unlocked and useable 1910.36(d)

- Both front and rear exit doors were viewed and operational

Exits signs in place and proper 1910.37(b)

- Compliant for front and rear doors, including directional signage – exit in prisoner area is locked & cells locked due to nature of department
    - Not qualified to comment on protocol for fire procedures of this nature in the department

Exit discharges clear of snow and ice 1910.36(h)

- Compliant except discharge from garage door

Exit access and discharge unobstructed 1910.37(a)

- Safety hazards exist when exiting each door
    - Front Door – uneven surface on sidewalk, rug not regularly replaced (trip hazards)
    - Rear door – rugs not regularly replaced, ill fitting; brick material regularly falls from building and hose tower with potential to hit employees
        - Update: On 3/20/2019, fuel delivery person reported a “near miss” with a falling brick
- Door in detached garage not usable during inspection
    - Update: Replaced 3/20/2019

Photos of front discharge area:

Observed Conditions

Facility Inspection Criteria: Standard:

Exit access and discharge unobstructed 1910.37(a)

Photo of garage door discharge:

Area of 3/20/2019 “near miss”:

Debris falling from building and hose tower:

Observed Conditions

Facility Inspection Criteria:	Standard:
Exit access and discharge unobstructed	1910.37(a)

Photos of hose tower damage:

Photos of rear discharge area where employees walk to cruisers:

Observed Conditions

Facility Inspection Criteria:	Standard:
Exit access and discharge unobstructed	1910.37(a)

Photos of garage door that was not in-service during inspection but replaced 3/20/19:

After the door was replaced:

Observed Conditions

Facility Inspection Criteria: Standard:

Emergency and exit lights, alarms, fire doors operational 1910.37(a)

- One emergency light was found to be non-operational
    - Sargent Vincent said that since there is a generator, this does not apply (did not verify)

Eye wash stations and unobstructed 1910.151

- Eye wash station is in janitor's closet

Photo of light that was not functional:

Eye wash station:

Flammable and combustible storage 1910.106(d)

- None viewed during visit

Housekeeping and sanitation 1910.22(a)

- Due to limited space, there is much to be improved in this area of the standard
    - 1910.22 (a)(1): "All places of employment, passageways, storerooms, service rooms, and walking-working surfaces kept in a clean, orderly, and sanitary condition."
    - 1910.21(b): definition "Walking-working surface means any horizontal or vertical surface on or through which an employee walks, works, or gains access to a work area or workplace location."
- Many areas where the floor is a trip hazard

Observed Conditions

Facility Inspection Criteria:	Standard:
Housekeeping and sanitation	1910.22(a)

Photos of walking-working surfaces in poor repair, broken tiles:

Photos of walking-working surfaces in poor repair, cracked tiles:

Observed Conditions (not on CD 11-05)

Facility Inspection Criteria:	Standard:
General Environmental Controls – Sanitation	1910.141(c)

- "All places of employment shall be kept clean to the extent that the nature of the work allows" 1910.141(a)(3)
- "Washing facilities shall be maintained in a sanitary condition" 1910.141(d)(1)
- "Change rooms. Whenever employees are required by a particular standard to wear protective clothing because of the possibility of contamination with toxic materials, change rooms equipped with storage facilities for street clothes and separate storage facilities for the protective clothing shall be provided." 1910.141(e)
    - No private changing area
- "Eating and drinking areas. No employee shall be allowed to consume food or beverages in a toilet room nor in any area exposed to a toxic material." 1910.141(g)(2)

Photos of toilet facility for staff usage: (furry vent and light with no cover)

Toilet (walls damaged) – hand washing outside toilet and in the "break room" – damaged wall in "break room"

Observed Conditions (not on CD 11-05)

Facility Inspection Criteria:	Standard:
General Working Conditions – Housekeeping	1915.81

- "The employer shall establish and maintain good housekeeping practices to eliminate hazards to employees to the extent practicable." 1915.81 (a)(1)
- "The employer shall store materials in a manner that does not create a hazard for employees." 1915.81 (a)(3)
    - There are many photos of storage areas that are overloaded on previous pages.

Photos of "kitchen" which also has department property storage:

Private offices inside front door have no protection from active assailants. These doors are typically open.

Observed Conditions (not on CD 11-05)

Building may have structural integrity issues which should be investigated by a qualified professional.

Cracks in west side cell area:

Observed Conditions (not on CD 11-05)

Building may have structural integrity issues which should be investigated by a qualified professional.

Cracks in duplex cell area:

Observed Conditions (not on CD 11-05)

Building may have structural integrity issues which should be investigated by a qualified professional.

Cracks in duplex cell area:

Trip hazard in the duplex cell area:

Observed Conditions (not on CD 11-05)

Evidence of moisture damage to ceiling tiles.

Photos of ceiling tiles in rear office area:

Heat not regulated with temperature controls. Door is opened when hot. Heat pump not working (bottom left):

Right side photo (above) is of exterior access door on 25 High Street. Door is used to bring volatile prisoners into the building instead of the front door. Entry / Exit by key only (not a primary entrance / exit door or fire door)

Observed Conditions (not on CD 11-05)

Detached garage observations:

Lack of safety sensors on overhead doors:

Overhead doors not tall enough:

Shop vac needed due to inadequate floor drains:

Observed Conditions (not on CD 11-05)

Detached garage observations:

Property stored near heat source:

Possible issues with southern wall:

Observed Conditions (not on CD 11-05)

This is a public building. All doors were easily operated and panic hardware in place on egress doors.

Daylight can be seen around front doors:

Door to municipal offices, rated assembly information painted over (below right):

NFPA 80 – 4.2.2 “Labels shall be applied in locations that are readily visible and convenient for identification after installation of the assembly.”