



Kenmare City Memorial Hall Evaluation Report

Prepared for:

City of Kenmare
Kenmare, North Dakota

Ackerman-Estvold Project No. R21098

July 2021

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Table of Contents

Introduction 1

Architectural 4-18

Electrical..... 19-22

Mechanical..... 23-25

Conclusions 26

References 27

Figures

FIGURE 1: BUILDING / SITE LOCATION MAP	2
FIGURE 2: EXISTING CONDITIONS TOPOGRAPHIC SURVEY	3
FIGURE 3: SOUTHEAST BUILDING ELEVATION	4
FIGURE 4: NORTHEAST CORNER OF BUILDING	5
FIGURE 5: EAST BUILDING ELEVATION AT ROOF SCUPPER.....	6
FIGURE 6: BACK OF EXISTING STONE CAP FLAG.....	7
FIGURE 7: BACK OF EXISTING STONE CAP	8
FIGURE 8: EXISTING ROOF	8
FIGURE 9: CONCRETE FLOOR BUMP AT SOUTHEAST ENTRANCE	9
FIGURE 10: CORRIDOR CARPETING	10
FIGURE 11: GARAGE FLOOR CRACKS	10
FIGURE 12: GYMNASIUM WOOD FLOOR	11
FIGURE 13: EXISTING VCT FLOORING ON SECOND FLOOR	12
FIGURE 14: PLASTER CRACKS ON SECOND FLOOR	13
FIGURE 15: WOOD PANELING WALLS ON SECOND FLOOR	14
FIGURE 16: EXISTING DOUBLE HUNG WINDOW UNITS	15
FIGURE 17: EXISTING GLASS BLOCK WINDOWS AT WEST SIDE OF GYM	16
FIGURE 18: EAST LOCKER ROOM STAIRS	16

Documents

DOC 1: Existing First floor Plan (A100)	27
DOC 2: Existing Second Floor Plan (A101)	28

INTRODUCTION

Project Overview

Ackerman-Estvold was contracted by the City of Kenmare to develop an Evaluation Report for the existing Kenmare City Memorial Hall Building and Site to identify what deficiencies the existing facility has and bring up the existing facility to an acceptable condition and what the estimated construction cost would be for those improvements. Additional concerns relate to site drainage / grading and the performance of building mechanical systems.

The existing City Memorial Hall building was constructed around 1936 and an extensive Remodeling and Restoration project was completed in 1997.

Field Observations

On May 25th, 2021, Ackerman-Estvold and Prairie Engineering Mechanical & Electrical Engineers met with Kinzie Jensen, Deputy Auditor and Allisha Britton, Kenmare Chief of Police to visually review the building and site conditions and discuss building and site issues.

Refer to Prairie Engineering's Mechanical & Electrical portions of this Evaluation for specific observation.

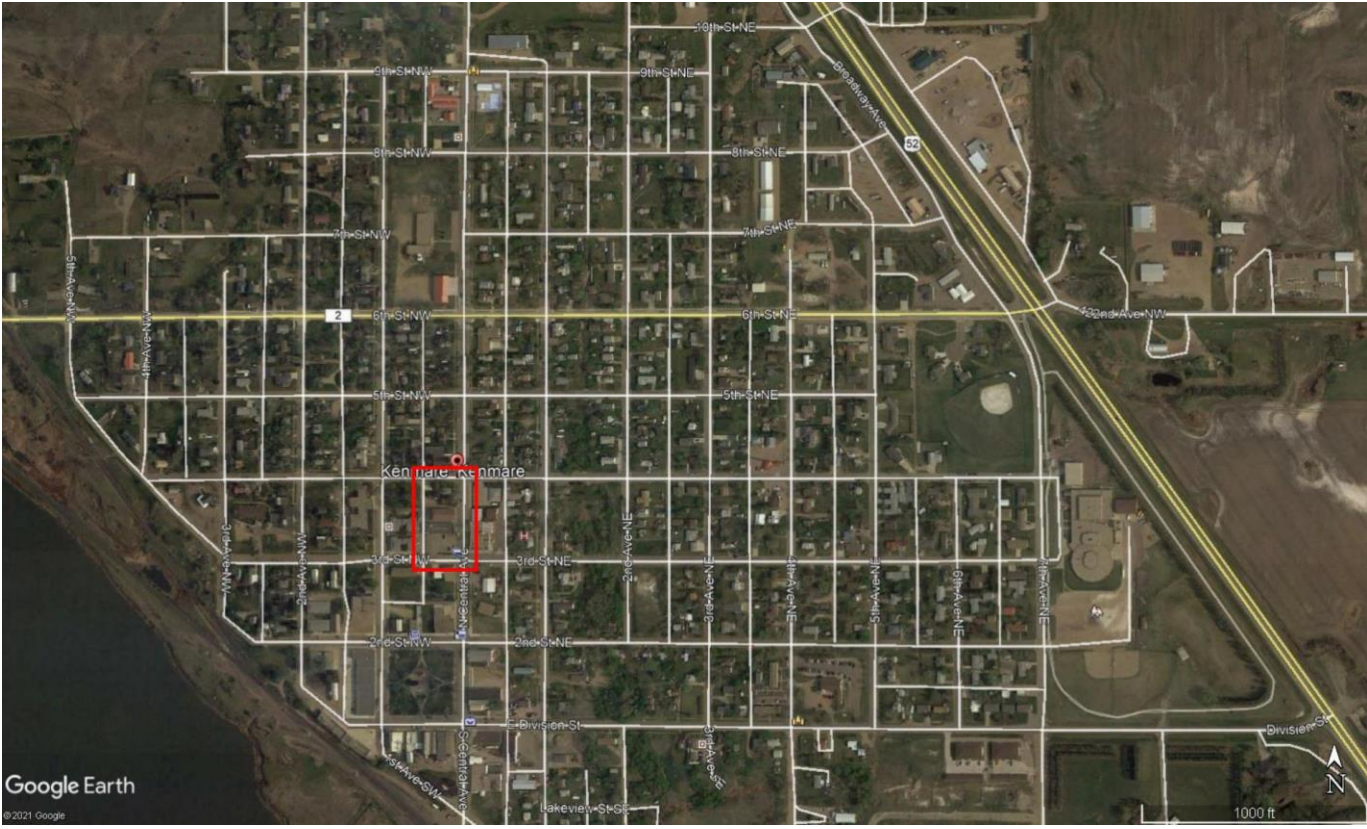


FIG. 1 SITE LOCATION MAP



FIG. 2 BUILDING MAP

ARCHITECTURAL

Exterior

Various issues were noted with regards to the exterior of the building from an architectural standpoint. The following are items that are deficient and require correction:

- A. Face of existing stone base is spalling and cracking from the face of the SE corner of the building and starting to spaul from the west side of the SE entrance, NW Library entrance and south elevation. Deputy Auditor noted that there is water damage in the interior SE corner of her office. It was noted that a new overflow scupper was cut into the exterior parapet wall on the SE corner. This scupper dumps directly down to the SE corner of the building onto the concrete sidewalk bellow. The exterior concrete sidewalk that is adjacent to the SE corner of the building is pulling away at the caulked joint. This joint should be re-caulked to help stop the flow of water into the building.
 - 1) Remediation: Add new downspout to match existing and extend to the curb. Repoint existing face brick at scupper location. Re-caulk existing concrete sidewalk joint. Remove existing spauled stone base and replace with precast concrete panel to match.
 - 2) Estimated cost: \$6,000.



FIG. 3 SOUTH EAST BUILDING ELEVATION

- B. The existing exterior face brick is showing signs of cracking at the upper parapets on the SE, SW, NE, NW, & SW corners, and north parapet of the building. This seems to be the result of the existing roof pulling away from the parapet and water being able to find its way behind the brick. The NE corner brick cracking has been repaired by filling in the cracks with grout, but the wall & chimney seem out of plumb. The existing metal coping at the top of the parapet is pulling away and being ripped off the parapet on the NW corner.
- 1) Remediation: Re-point existing face brick.
 - 2) Estimated cost: \$1,000.



FIG. 4 NORTHWEST CORNER OF BUILDING

- C. The existing exterior face brick grout is deteriorated on the east side of the building under the existing roof scupper. This grout deterioration is due to the water running over the face of the brick and freezing. The face brick at the roof scupper has been re-pointed for about 2'-0". The grout deterioration runs down the entire height of the building. A downspout and extension to the curb have been added.
- 1) Remediation: Re-point existing face brick.
 - 2) Estimated cost: \$2,500.



FIG. 5 EAST BUILDING ELEVATION AT ROOF SCUPPER

- D. The existing stucco finish of the east side walls of the existing garages are peeling and cracking.
- E. The exterior aluminum entrance for the library and book drop floor has water leaks. It was noted that the downspout adjacent to the drop box empties right to the grass next to the foundation. The downspout near the aluminum entrance empties onto the concrete sidewalk, which slopes down to the aluminum entrance.
- F. The storage building addition on the SE corner is missing the metal roof edge transition piece on the north side.
- G. The existing stone flag pedestal and steps are cracking and crumbling. The metal coping that has been installed to cover the pedestal, steps and parapet caps has been torn off in some places due to high winds.
 - 1) Remediation: Remove all existing concrete/stone cap. Repoint all brick at parapet.
 - 2) Replace pre-cast stone flag pedestal & adjacent steps, add all new wood parapet blocking, install new metal coping (**Option 1**).
 - 3) Estimated cost: \$34,000.



FIG. 6 BACK OF EXISTING STONE FLAG CAP

- H. The existing stone parapet caps and stepped flag pedestals are cracked and crumbling. Which is allowing water to penetrate the face brick below and crumble the masonry grout.
- 1) Remediation: Remove all existing concrete/stone cap. Repoint all brick at existing parapet.
 - 2) Add new pre-cast stone coping, flag pedestal & adjacent steps. Repoint all brick at parapet. (**Option 2**).
 - 3) Estimated cost: \$38,000.



FIG. 7 BACK OF EXISTING STONE CAP

- I. The existing roof is a ballasted membrane roof, which has the membrane pulling away from the parapet walls and allowing water to infiltrate the masonry and disintegrate the existing masonry grout.
 - 1) Remediation: Remove existing roof insulation, roof membrane and existing roof ballast.
 - 2) New EPDM roof membrane, new roof insulation and counter flashing.
 - 3) Estimated cost: \$175,000.



FIG. 8 EXISTING ROOF

Sub-total of Exterior Remediation: \$218,500 (OPTION 1); \$222,500 (OPTION 2).

Interior

Issues noted on the interior of the building include the following:

Flooring:

- A. There is a large bump in the concrete floor below the carpeting at the southeast entrance. This bump creates a tripping hazard, as well as a barrier for ADA accessibility.
 - 1) Remediation:
 - i. Grind down bump in concrete floor and prep concrete floor with appropriate floor leveler prep material.
 - 2) Estimated cost: \$300.



FIG. 9 CONCRETE FLOOR BUMP AT SOUTHEAST ENTRANCE

- B. The existing carpeting was installed in the 1997 renovation and is showing signs of traffic wear, tears, and stains. The existing carpeting should be removed and replaced with carpet tile.
 - 1) Remediation: Remove existing carpeting, adhesive, & vinyl base. Prep floor for new carpet tile.
 - 2) Install new carpet tile & vinyl base.
 - 3) Estimated cost: \$23,000.



FIG. 10 CORRIDOR CARPETING

- C. The concrete floor in the City Storage garage has large cracks and slab heaving at a section by the floor drain. This section of concrete slab should be removed and re-poured to slope to the floor drain.
- 1) Remediation: Removal of cracked sections of existing concrete slab.
 - 2) Re-pour new section of concrete slab.
 - 3) Estimated cost: \$2,500.



FIG. 11 GARAGE FLOOR CRACKS

- D. The existing wood floor in the gymnasium is in overall good condition, except for the section in the NE corner that has water damage (approximately 5'-0" W x 12'-0" L). There was a repair done to fix the wood shrinkage/warping. This portion of damage floor is not in the playing court area and could be left as repaired. The cause of the water damage was unknown.
- 1) Remediation: Remove portion of damaged wood floor (60 SF).
 - 2) New wood gym floor with sleepers/subfloor replacement.
 - 3) Estimated cost: \$5,000.



FIG. 12 GYMNASIUM WOOD FLOOR

- E. Painted concrete floor in the lower-level lockers rooms are in good condition.
- F. The laminate flooring in the gymnasium lobby is in very good condition and looks to have been installed within the last 5 years.
- G. The VCT flooring in the kitchen, Men's & Women's toilet rooms, located south of the gymnasium are in good condition.
- H. The VCT flooring on the second-floor kitchen, craft room, and other areas on second floor south of the gymnasium are in poor to bad condition and should be replaced.
- 1) Remediation: Remove existing VCT flooring and adhesive. Asbestos testing of VCT & adhesive.
 - 2) Install new LVT (Luxury Vinyl tile) and vinyl base.
 - 3) Estimated cost: \$8,000.



FIG. 13 EXISTING VCT FLOORING ON SECOND FLOOR

- I. The wood flooring for the east portion of the second floor & stairway is in good condition.
- J. The VCT flooring in the storage room outside the library has cracking that could be caused by cracks in the concrete floor.

Interior Walls:

- A. The interior walls of the existing building are in good condition, with exception of the east wall of the second floor Legion Room. There are many cracks in the plaster, as well as the paint/plaster section falling off the wall. The wall has crumbled down to the metal lath on one of the window jambs. This damage appears to be from previous water damage.
 - a. Remediation: Remove crumbling plaster and rusting metal lath.
 - b. Install new metal lath and re-plaster wall.
 - c. Estimated cost: \$2,500.



FIG. 14 PLASTER CRACKS ON SECOND FLOOR

- B. There are many walls on the second-floor craft room, kitchen, storage, & toilet room that are covered with a dark wood paneling that could be removed and walls painted to lighten up the spaces.
 - a. Remediation: Remove existing wood paneling and wood base.
 - b. Install new gypsum board sheathing, tape, texture, & paint. Install new vinyl base.
 - c. Estimated cost: \$7,500.



FIG. 15 WOOD PANELING WALLS ON SECOND FLOOR

Doors:

- A. The aluminum storefront entrances are in good condition and operating properly.
- B. The exterior hollow metal doors and frames are in good condition.
- C. The interior wood doors are in good condition.
- D. The pair of existing double wood doors into the gymnasium will not close properly due to the doors rub together at the top of the doors. The wood doors need to be adjusted, so the doors shut together.
 - a. Remediation: Shim the existing door hinges or replace the hinge reinforcing at the frame.
 - b. Estimated cost: Shim the existing door hinges (\$200); Replace the hinge reinforcing (\$500 - \$1,000).

Ceilings:

- A. The existing gypsum board ceilings in the Emergency Vehicles conference room & toilet rooms are in good condition. The gypsum board ceilings in the lower-level locker rooms, toilet room, & showers are in good condition. The plaster ceiling in the second floor mechanical room had sections of peeling paint and loose plaster sections that should be repaired.
- B. The metal liner panel ceilings in the Emergency Vehicle & adjacent City Storage are in good condition.
- C. The Acoustic Lay-in ceiling and grid system for the gymnasium, toilet rooms, kitchen, east offices, & second floor are in good condition. There were a few stained ceiling tiles in the second floor Legion room & first floor Council/court room that could be replaced.
- D. The existing exposed insulation with vapor barrier ceiling in the east City Storage garage is in fair condition.

Windows:

- A. The existing aluminum storefront windows at the south & west entrances are in good condition. The existing window units on the south & east of the building are wood framed double hung windows that appear to be original to the building and in good condition, but the glazing was single pane and was rattling during the heavy winds of the site visit. The existing single pane windows would not meet the current Energy Code for U-Factor of Thermal Transmittance.
 - a. Remediation: Remove Existing double hung wood window system and attachment items.
 - b. Install new double hung energy efficient windows and frames.
 - c. Estimated cost: \$26,500.



FIG. 16 EXISTING DOUBLE HUNG WINDOW UNITS

- B. The existing glass block windows on the west side of the gymnasium are in good condition are appears to be original to the building. The glass block windows would not meet the current Energy Code for U-Factor of Thermal Transmittance.
 - a. Remediation: Remove Existing glass block window system and attachment items.
 - b. Install new aluminum storefront window system with energy efficient glazing.
 - c. Estimated cost: \$48,000.



FIG. 17 EXISTING GLASS BLOCK WINDOWS AT WEST SIDE OF GYMNASIUM

Building Foundation:

- A. The building foundation seemed to be in good condition, except for the spalling and cracking of the stone/concrete base as described in the exterior evaluation.
- B. At the bottom of the east stairs of the lower level locker rooms, there is a lot of efflorescence on the cmu foundation walls and concrete floor. It appears that the cmu block had been sealed up to 2'-0" in height in the past, but the efflorescence had peeled away the sealer paint. The vinyl base had been removed in this section of wall.



FIG. 18 EAST LOCKER ROOM STAIRS

Current Building Code Compliance 2018 International Building Code (IBC):

- A. Fire Sprinkler Code Review was completed to verify if any spaces would be required to have an automatic sprinkler system under the current building code. The existing building is not sprinklered.
- a. Gymnasium (Assembly A-4): Sprinkler not required. Section 903.2.1.4; square footage & occupant load conditions not met for sprinkler requirements.
 - b. Council/Court (Assembly A-3): Sprinkler not required. Section 903.2.1.3; square footage & occupant load conditions not met for sprinkler requirements.
 - c. Library (Assembly A-3): Sprinkler not required. Section 903.2.1.3; square footage & occupant load conditions not met for sprinkler requirements.
 - d. City Storage (Fire Department) garage (Storage S-2): Sprinkler not required. Section 903.2.10; square footage and occupant load conditions not met for sprinkler requirements.
 - e. Emergency Vehicles (Storage S-2): Sprinkler not required. Section 903.2.10; square footage and occupant load conditions not met for sprinkler requirements.
 - f. City Storage garage (Storage S-2): Sprinkler not required. Section 903.2.10; square footage and occupant load conditions not met for sprinkler requirements.
 - g. Legion Room (2nd floor) (Assembly A-3): Sprinkler is required. Section 903.2.1.3; Condition 3, location on a floor other than a level of exit discharge serving the occupants.
 - h. Storage (2nd floor) (Storage S-1); Sprinkler not required. Section 903.2.9; square footage and location less than 3 stories above grade plane conditions not met for sprinkler requirements.
 - i. Craft Room (2nd floor) (Assembly A-3); Sprinkler is required. Section 903.2.1.3; Condition 3, location on a floor other than a level of exit discharge service the occupants.
 - j. The entire building would be required to be sprinkled, based on not have adequate fire area separations between the required fire areas.
 - i. Sprinkler Addition for the entire building.
 - ii. Estimated cost: \$86,000
- B. Exiting:
- a. Legion Room (2nd floor) (Assembly A-3) with an Occupant Load of 84 occupants will require the space to have two exits. Currently there is only one exit from the Legion Room. An exterior stairway can be added for the required second exit.
 - i. Exterior metal stair added to the east side of the building.
 - ii. Estimated cost: \$25,000.
 - b. Gymnasium (1st floor) (Assembly A-4) with an Occupant Load of 276 occupants will require the space to have two exits, per Table 1006.2.1 & Sect. 1006.2.1.1. Currently there are three exist and one exist door that swings in the wrong direction.
 - i. Change swing of door.
 - ii. Estimated cost: \$500.
- C. ADA Accessibility Requirements:
- a. There is no accessible means to the second floor. IBC Code Section, Section 1009.2.1, elevator is not required where a required accessible floor is four or more stories above a level of exit discharge.
 - b. There is no accessible means to the lower level locker rooms.

- c. There is no accessible means to the gymnasium, toilet rooms, & kitchen from the SE offices. An accessible ramp would require approximately 36' of ramp and a 5' of landing in the middle. Currently there is only about 7'-0" clear length in the corridor, before the ramp would interfere with entrance into the toilet rooms.
 - d. An Elevator is not required but given the patrons that use the Craft Room & Legion Room, an elevator should be provided. Looking at the existing spaces, there is no room for an elevator shaft in the building to service all the floors, without eliminating the functionality of the existing spaces.
- D. ADA Accessibility at existing toilet rooms:
- a. Women's toilet room south of Gymnasium is handicapped accessible with 5'-0" turning radius, 5'-0" x 5'-0" handicapped toilet stall, grab bars, accessible height lavatory.
 - b. Men's toilet room south of Gymnasium is handicapped accessible with 5'-0" turning radius, 5'-0" x 5'-0" handicapped toilet stall, grab bars, accessible height lavatory.
 - c. Unisex toilet room west of the Police Offices is handicapped accessible with a 5'-0" turning radius, grab bars, and accessible height lavatory.
 - d. Unisex toilet room in Library is handicapped accessible with 5'-0" turning radius, grab bars, and accessible height lavatory.
 - e. The Men's' & Women's Toilet rooms in the Emergency Vehicles area are not handicapped accessible. There is not enough room for a 5'-0" turning radius, grab bars are missing, and the lavatory base cabinet does not allow for accessibility.
 - f. The toilet room in the lower level locker room is not handicapped accessible. There is not enough room for a 5'-0" turning radius, grab bars are missing, and the toilet stall is not 5'-0" X 5'-0" for accessibility.
 - g. The toilet rooms on the second floor, south of the Legion room are not handicapped accessible. There is not enough room for a 5'-0" turning radius and the grab bars are missing. There is not enough floor clearance in front of the lavatories.
 - h. The toilet room on the second floor next to the kitchen is not handicapped accessible. There is not enough room for a 5'-0" turning radius and the grab bars are missing. There is not enough floor clearance in front of the lavatories.
 - i. To make the existing toilet rooms as accessible as possible.
 - i. Estimated cost: \$10,000

Sub-total of Interior Remediation: \$246,000

ELECTRICAL



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KENMARE CITY HALL ELECTRICAL ANALYSIS

Report Date: May 27, 2021
Project No. 21042

ELECTRICAL ASSESSMENT

This electrical assessment will provide a general overview of each portion of the electrical systems at the Kenmare City Building, making note of areas that need attention in immediate to near future. It will also compare the existing electrical systems to the current applicable Code and highlight any deficiencies.

Applicable Codes and Standards:

North Dakota State Building Code
2018 International Building Code (IBC)
2018 International Existing Building Code (IEBC)
2018 International Energy Conservation Code (IECC)
2020 National Fire Protection Association (NFPA) 70 – National Electric Code
2019 National Fire Protection Association (NFPA) 72 – National Fire Alarm and Signal Code
Local Codes

LIGHTING

Light fixtures throughout the entire facility incorporate either T8 fluorescent lamps with electronic ballasts or T12 lamps with magnetic ballasts. Exterior and gymnasium lighting utilize HID lamp type fixtures. T12 lamps are obsolete, and replacements are no longer being manufactured. The exterior fixtures have yellowed lens which greatly reduce light output. The general condition of the interior light fixtures that incorporate T8 lamps is noted as good. However, in any extensive remodeling project, it is not cost effective to remove, store, and re-install light fixtures. Also, the IEBC requires the lighting power density of Level 3 Alterations to comply with the IECC (energy code). It would be difficult to meet the allowed watts per sq. ft. with these existing light fixtures. Therefore, the recommendation is to replace all light fixtures with new LED type, exterior building lighting included.

Lighting control will need to be upgraded to the IECC regulations as well. This includes occupancy sensors, dimming, and time of day controls for all areas of the building.

Emergency egress lighting is accomplished with a main battery backup unit, and remote heads located throughout the facility. Upon testing the system, it appears it is no longer functional. Thus, the building does not currently have emergency egress lighting.

Kenmare City Hall
Electrical Analysis

05/27/2021

POWER

The building's electrical service is a 400 Amp, 120/240 Volt, 3 Phase Delta system. The main distribution panel utilizes circuit breakers to provide power distribution through the building. There is physical space to install additional circuit breakers if required. Replacement parts are readily available for this Siemens panel.

The branch panels in the facility are circuit breaker panels of varying manufacturers. Every branch panel was completely full, leaving no room to add additional circuits if required. Additional branch panels should be strategically added to building. Extension cords are being used in the office spaces because there are not an adequate amount of receptacles installed.

There currently is no backup power source at the facility. At minimum, the Ambulance Garage should be fully backed up by an on-site generator so overhead doors can be opened during a power outage, as well as keeping the heating, lighting, and response equipment operational in that space.

SYSTEMS

FIRE ALARM

The existing analog fire alarm system was installed in 1995. The system utilizes obsolete technology and should be replaced with an addressable type system. Existing raceways and wiring can be re-used depending on the extent of the remodel.

NETWORK CABLING

Network cabling and equipment is sporadically located. No central network closet is established, and the existing equipment locations are not very secure.

PUBLIC ADDRESS

The gymnasium has a public address system to support voice and music reinforcement. The system is adequate for the intended purpose.

MULTIMEDIA SYSTEM

A full multimedia sound/display system with touchscreen control is recommended for the council chambers. The system will be completely addressable so as to direct selected inputs to one or more outputs. Speakers will be installed in the ceiling spaces and microphones will be included for lecture. Flat screen monitors will support HDMI program sources.

Kenmare City Hall
Electrical Analysis

05/27/2021

SURVEILLANCE

Installation of an IP based surveillance system is recommended. Minimum recommended camera coverage would include building entrances and publicly accessible interior spaces as well as exterior building perimeter and parking lot.

SECURITY

An access control system is recommended. This system will automatically lock/unlock and monitor electrically controlled doors and will allow employee access via proximity type reader systems, as well as automatically unlock public doors when scheduled. This system will alleviate the security (duplication) concerns associated with keyed locks.

Kenmare City Hall
 Electrical Analysis

05/27/2021

OPINION OF PROBABLE ELECTRICAL CONSTRUCTION COSTS

This opinion represents our best judgement as design professionals familiar with the local construction industry. It must be recognized, however, that we have no control over the cost of labor, material or equipment, over Contractor's method of determining bid prices, or over competitive bidding market conditions. Accordingly, we cannot, and do not represent that bids will exactly match this opinion of probable costs.

Electrical

1. Service & Distribution.....	\$	23,500
2. Lighting.....	\$	79,600
3. Devices.....	\$	17,100
4. Equipment Connections.....	\$	22,700
5. Basic Material.....	\$	92,100
6. Lightning Protection.....	\$	0
7. Snow Melting.....	\$	0
8. Emergency Generator.....	\$	33,800
	DIVISION 26 SUBTOTAL	\$ 268,800

Communications

1. CATV Distribution.....	\$	0
2. Intercom System.....	\$	0
3. Multimedia System.....	\$	45,000
4. Master Clock System.....	\$	0
5. Network Cabling.....	\$	12,500
	DIVISION 27 SUBTOTAL	\$ 57,500

Electrical Safety & Security

1. Fire Alarm & Detection.....	\$	40,300
2. Surveillance System	\$	27,500
3. Access Control	\$	17,700
	DIVISION 28 SUBTOTAL	\$ 85,500

TOTAL ELECTRICAL CONSTRUCTION: \$411,800

MECHANICAL



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MECHANICAL ANALYSIS

CITY HALL
Kenmare, ND

Report Date: July 2, 2021
Project No. #21042

On May 25, 2021, Prairie Engineering, P.C. visited the City Hall of Kenmare, ND. The purpose of the visit was to assess the general condition of the mechanical and plumbing systems to provide City Hall with a master plan with regard to the mechanical and plumbing infrastructure. Recommendations are based on experience in the HVAC and plumbing industry, and locally adopted building codes.

MECHANICAL SYSTEMS ASSESSMENTS

The mechanical assessments give a general overview of each portion of the mechanical and plumbing systems, making note of areas that need attention in immediate to near future.

Applicable Codes and Standards:

International Energy Conservation Code (IECC);
Uniform Plumbing Code;
North Dakota State Building Code;
International Building Code (IBC);
International Mechanical Code (IMC);
International Fuel Gas Code (IFC);
National Fire Protection Association (NFPA) – Sections as adopted by authority having jurisdiction.

FIRE SUPPRESSION

There is no automatic fire suppression in the facility. It is likely that current codes require a level of automatic fire suppression depending on construction and function. Refer to the architect's analysis for fire suppression requirements and costs.

PLUMBING

City Office Section

The main floor has one toilet room and one janitor closet. The plumbing fixtures are operational and in apparent working condition. These fixtures could remain in use.

The second floor has two toilet rooms and one kitchen. The plumbing fixtures in the toilet rooms and kitchen are unused. The plumbing fixtures are generally in poor condition with some not



Figure 1- 2nd Floor Fixtures

functioning. Fixtures in this section of the building would need replacement or removal. Estimated cost: \$12,500 for replacement; \$1,000 for removal.

Gym Section

The lower level has two public use toilet rooms. The fixtures are manual operation type and could be replaced with hands-free operation type fixtures. Estimated cost: \$12,700.

The plumbing fixtures in the library section are manual operation type and could be replaced with hands-free type fixtures. Estimated cost: \$4,500.

The water heater in the library section is a residential-grade, gas fired, tank-type heater and is showing signs of age. It should be replaced. Estimated cost: \$1,750.

The south end, upper-level plumbing fixtures are dated and could be replaced. Estimated cost: \$4,500.

The mechanical mezzanine above the library has a couple disconnected waste pipes. These pipes should be repaired or capped to prevent sewer odors from entering the space.



Figure 2- Manual Operation

Emergency Services

The water heater is a residential grade, tank-type, electric water heater. The heater is in good condition and could continue to operate.

The plumbing fixtures are in operable condition and could remain unchanged.

CLIMATE CONTROL

City Office Section

Two gas-fired furnaces provide heating and DX cooling to this section. The furnace serving the upper level is gas-fired and in good condition. The furnace serving the lower level is electric heat and should continue to function.

The systems do not provide a high level of zone control on the lower level. Each level is controlled by a single thermostat which tends to produce hot and cold spots throughout this building section. Replacing this system for a system with better zone control would require extensive rework of ducting. Estimated cost: \$60,000.

The upper level has multiple legacy steam radiators that are abandoned with disconnected piping. The heaters and attached piping should be removed. Estimated cost: \$1,200.



Figure 3- Furnaces

Gym Section

The south end, upper-level area is heated by an electric baseboard and could continue in use. There is no cooling in this area. Cooling should be installed. Estimated cost: \$7,500

City Hall Mechanical Analysis

7/2/2021

The gym area is served by a commercial grade gas furnace in the mezzanine above the library.
The furnace appears in good condition and could remain in service.

The library area is served by a commercial grade gas furnace in the mezzanine above the library.
The furnace appears in good condition and could remain in service.

Emergency Services

The Emergency Services area is served by a gas furnace that appears in good condition and could remain in service.

CENTRAL PLANTS

The facility is served by a small gas-fired hot water boiler located in the mechanical mezzanine.
The boiler shows signs of aging and should be scheduled for replacement in the next 5 years.
Estimated cost: \$7,500.

Evaluation Conclusions

In reflection of the multi-discipline assessments of the building, we can offer the following:

- The existing building is structurally safe for occupancy / use.
- The existing ballasted roof & roof insulation should be removed and replaced. The brick parapet wall should be re-pointed, and new roof termination flashing installed. The roof parapet capping should be replaced with either a concrete/stone cap or metal coping/flashing.
- The existing exterior brick walls are showing signs of cracking in the upper parapet corners. The existing brick should be re-pointed at the same time as the roof parapet brick is being re-pointed.
- A downspout/trench drain should be added to the SE overflow scupper and west downspout by the library entrance to help move water away from the building and into the city sewers.
- Various site issues related to drainage & surface sloping, need to be addressed.
- Mechanically, the small hot water boiler that feeds the City Office Section should be replaced in about 5 years. Replacing the Climate control system in the City Office Section would allow for a better zone control of the First Floor Offices.
- Electronically, the emergency egress lighting needs to be addressed. The interior and exterior light fixtures should be replaced with new LED type fixtures.

Summary of Costs

1. Exterior	\$ 222,500
2. Interior	\$ 246,000
3. Mechanical	\$ 113,150
4. Electrical	\$ 411,800
5. Contingency	\$ 150,000
6. Professional Fees	\$ 125,000
	Total \$ 1,268,450

PRELIMINARY
NOT FOR CONSTRUCTION

**KENMARE CITY HALL
BUILDING EVALUATION**
KENMARE, NORTH DAKOTA

DRAWN BY: ---
CHECKED BY: ---

DATE: 7/6/2021

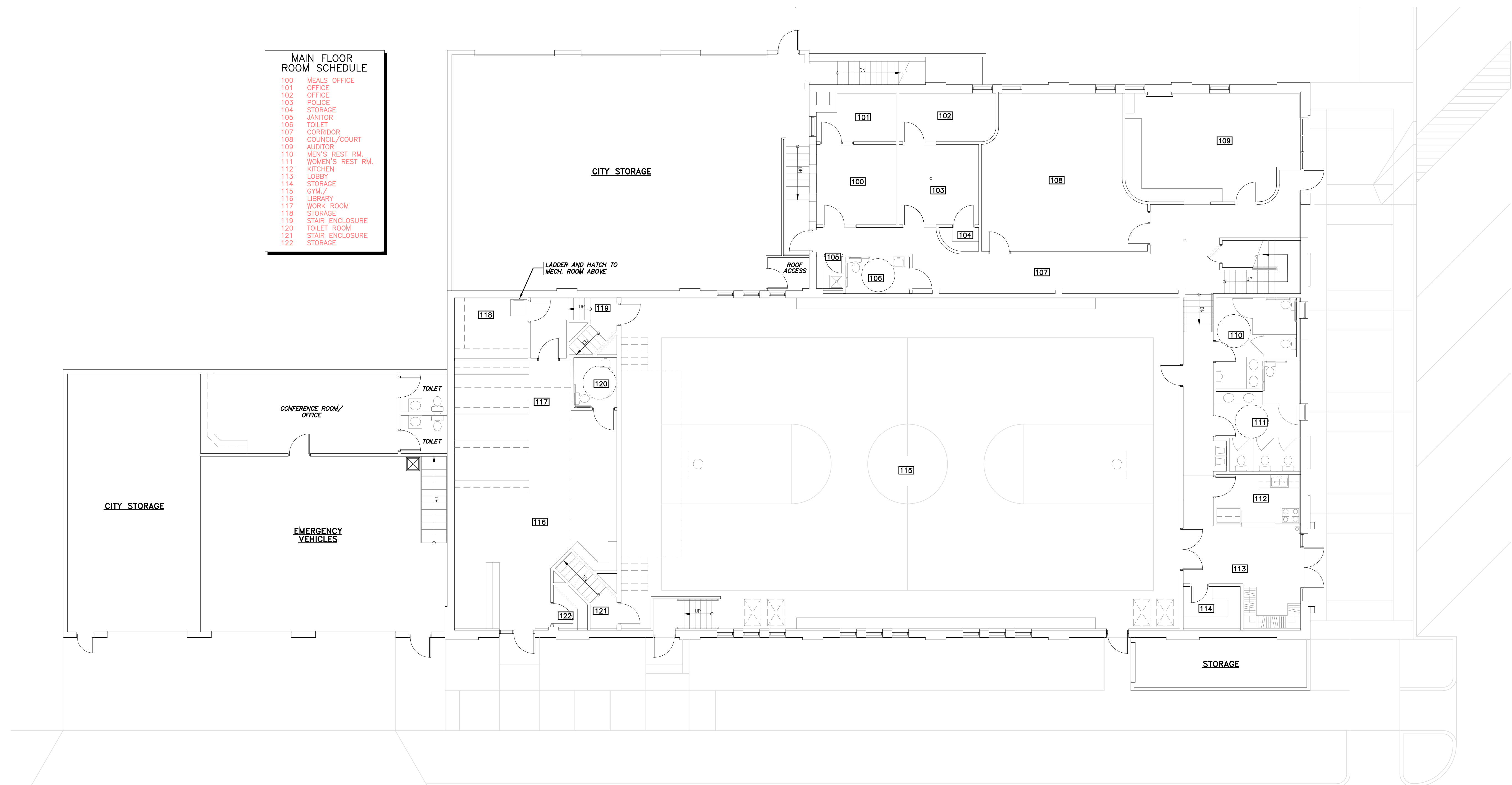
REVISIONS	
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Project No.
R21098

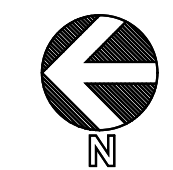
EXISTING
FLOOR PLAN

A100

MAIN FLOOR ROOM SCHEDULE	
100	MEALS OFFICE
101	OFFICE
102	OFFICE
103	POLICE
104	STORAGE
105	JANITOR
106	TOILET
107	CORRIDOR
108	COUNCIL/COURT
109	AUDITOR
110	MEN'S REST RM.
111	WOMEN'S REST RM.
112	KITCHEN
113	LOBBY
114	STORAGE
115	GYM
116	LIBRARY
117	WORK ROOM
118	STORAGE
119	STAIR ENCLOSURE
120	TOILET ROOM
121	STAIR ENCLOSURE
122	STORAGE



1 FIRST FLOOR PLAN
A100 SCALE: 1/8" = 1'-0"



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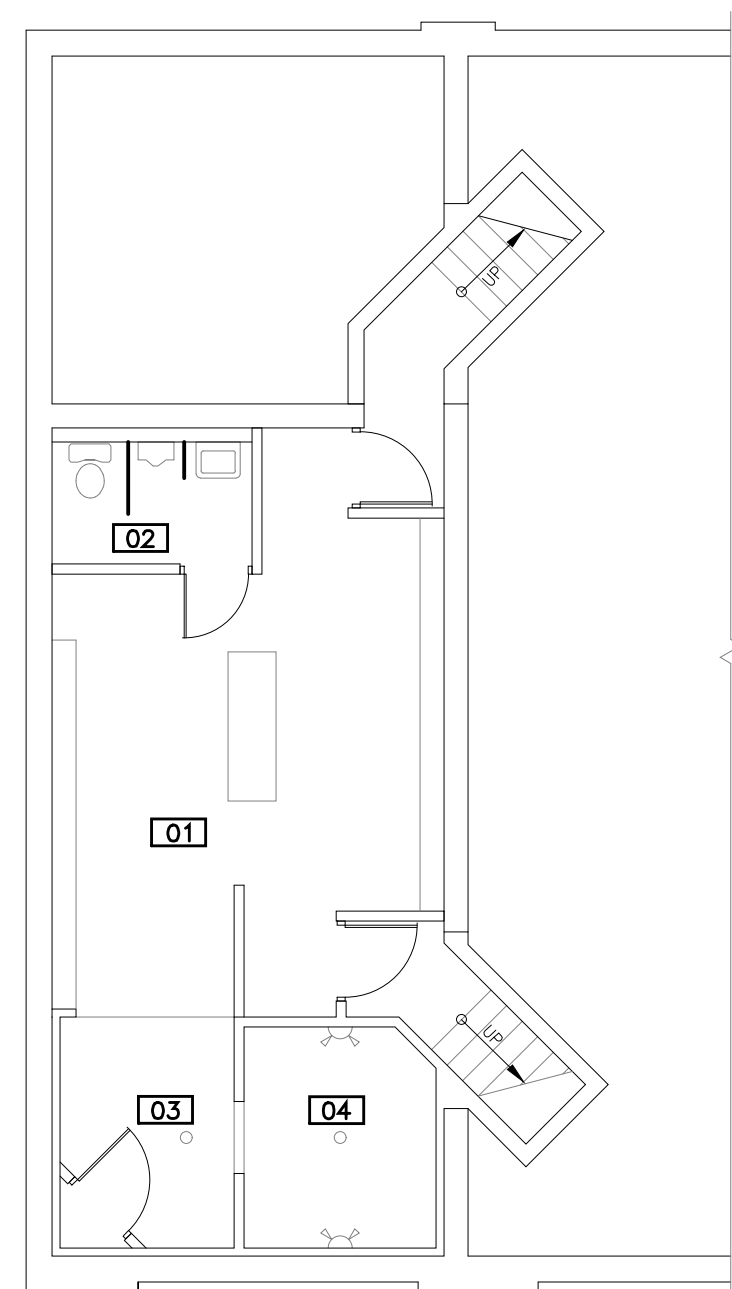
Project No.
 R21098

EXISTING
 FLOOR PLAN

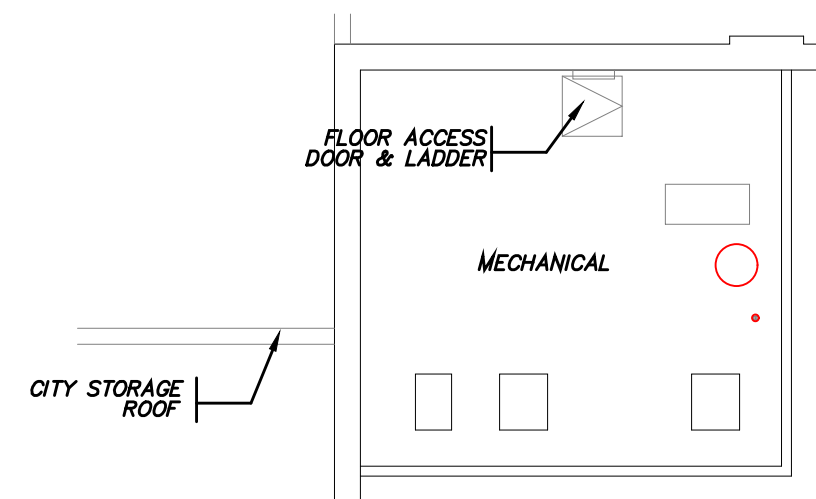
A101

LOWER LEVEL ROOM SCHEDULE

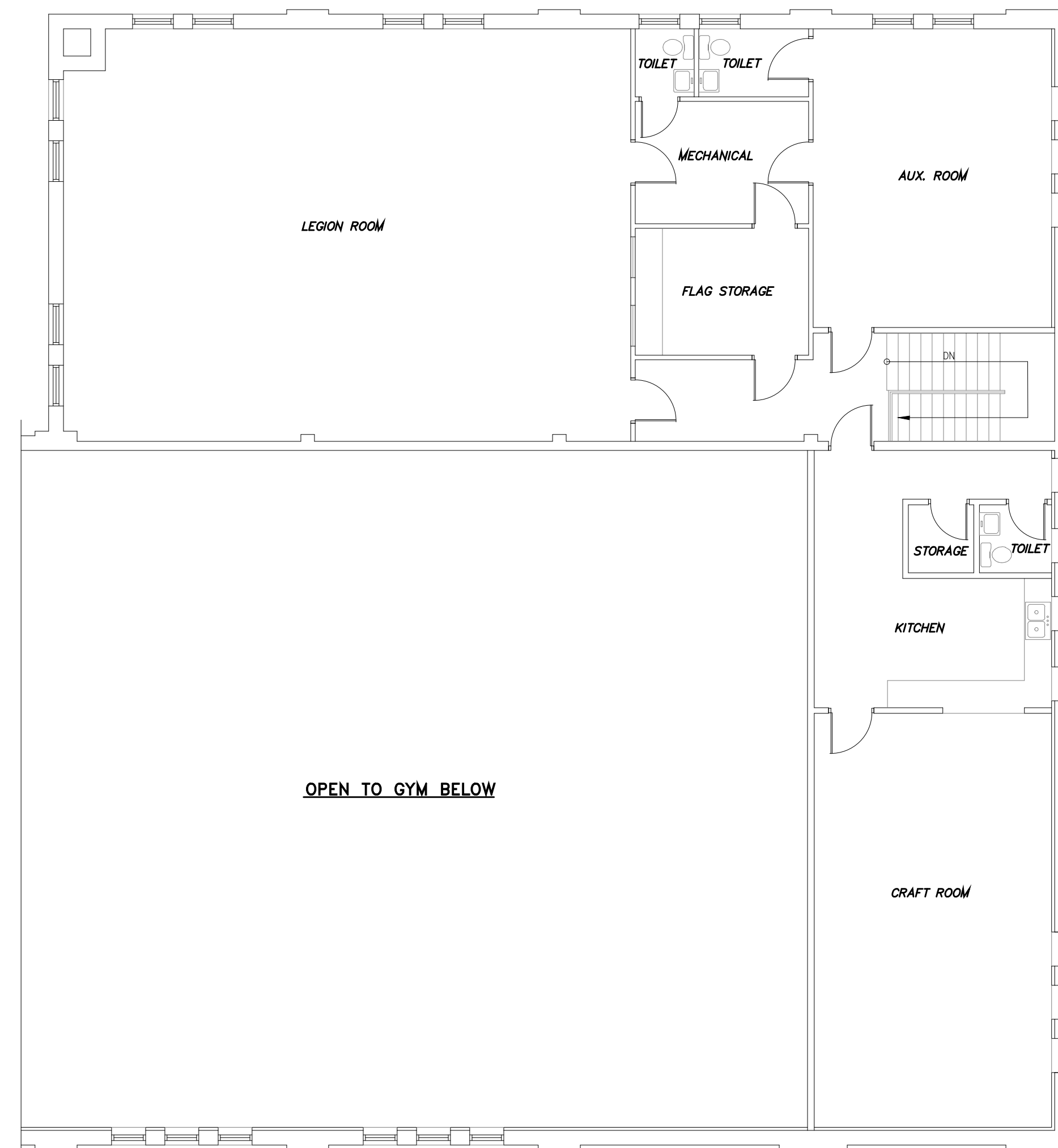
01	LOCKER ROOM
02	TOILET
03	DRYING
04	SHOWER



3
 PARTIAL LOWER LEVEL FLOOR PLAN
 A101 SCALE: 1/8" = 1'-0"



2
 PARTIAL SECOND FLOOR PLAN
 A101 SCALE: 1/8" = 1'-0"



1
 PARTIAL SECOND FLOOR PLAN
 A101 SCALE: 1/8" = 1'-0"

