

Mount 7 Rec Plex

Facility Assessment

December, 2010

Town of Golden



Golden & District Recreation Centre

Facility Assessment

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This Assessment was commissioned by the Town of Golden in November, 2010. The objective of the Assessment is to review the current state of functionality and repair of the Mount 7 Rec Plex (Mt7RP) and identify maintenance work which will be required in the mid-term together with renovations which would benefit the Facility's user groups.

Information for the assessment was gathered through a variety of means including two walkthroughs (conducted October 7 & December 9), interviews with the Building's Maintenance Personnel and review of the available original construction documentation.

The Mt7RP has been a central recreational venue for the Town and surrounding Region since its construction in 1962. In 1980 and 2002 major renovations were undertaken on the Facility. The Facility is primarily used for activities on its main gymnasium floor and stage area. The facility has a compliment of change rooms and washrooms together with a kitchen area, office and storage rooms.

Given the age of the building at 48 years, there are some base building systems which will soon be in need of replacement. The building is generally in fair condition and based upon a visual review has been kept in acceptable repair on an ongoing basis.

The Mt7RP is a well utilized public facility serving a variety of Community needs. It serves many smaller clubs and groups in an economical and convenient location. The Facility is located in close proximity to the local schools, Senior's Centre and other Community recreational facilities. The building currently provides recreation and meeting/office space for the following local user groups:

Sports

- 2-Coed Volleyball Groups
- 2-Coed Badminton Groups
- Boy's & Girl's Basketball League
- Men's Basketball Group
- Kicking Horse Gymnastics Club
- GSS P.E. Classes
- Ewbow Cycle Club
- Coed Indoor Soccer
- GSS Basketball Practices

Activities/Groups

- Craft Faire
- 2-Film Festivals
- 2-Children's Programs Parents & Tots, Wee Care
- GMHA Awards Nite Supper
- Children's Reading Program

Other

- Platta Classes
- Impulse Dance
- Farmer's Market
- New Year's Eve Party
- Flu Clinics
- Federal/Provincial Elections

Summer Users:

- GC&CC Spring Golf Lessons
- KHCC Business Awards Nite
- Ladies Swaire
- 12-Birthday Parties
- Weddings
- Funerals
- KHCC Women's Show
- Grad Reunions

The Facility generally is well used and functions well for its intended uses. The Facility is maintained well and has an ongoing program of upgrades, which in recent years have included the following projects:

- Additional public accessible washroom facilities and storage 2008
- Lower roof redone in 2009
- Lobby floor replacement in 2010
- Gymnasium lights upgraded in 2010
- Bleachers and curtain track replaced in 2010
- Proximity sensors installed on urinals in 2010

The general state of the Mt7RP is consistent with what is to be expected of a facility which is 48 years old. Most of the core building systems are in good working condition and are well maintained. The upgrades proposed focus on replacement of deteriorating interior and exterior finishes/systems, lighting enhancements, replacement of aging equipment and cleaning of ventilation ducts.

The building is a two storey concrete block and steel superstructure resting on a full concrete foundation. The roof structure is a clear span assembly over the gymnasium floor of steel trusses resting on concrete block bearing walls. Roof insulation is assumed to be provided through the use of rigid insulation incorporated in a built-up roof assembly. Exterior wall insulation is provided through a combination of rigid insulation on concrete block and batt insulation in frame walls.

The building's plan contains a large gymnasium floor area with adjacent locker rooms, first aid and a lobby area complete with public washrooms and kitchen. Handicap access to the main level is provided by way of an entry at grade. There is currently no handicap access to the stage or second floor mechanical rooms.

A cursory Structural Review of the building was conducted and it was determined, in a general sense, the building is structurally sound and meets the intent of the Building Code.

The exterior envelope is clad with a combination of pre-finished metal siding and a stucco finish. Based upon a visual review, the exterior stucco finish in places requires repair to prevent further deterioration of the exterior wall system.

The electrical systems were also generally noted to be adequate. The building's electrical service consists of the main 1200 amp service feeding a variety of sub panels localized for specific functions. Lighting is provided by an assortment of T-12 and T-8 fluorescent fixtures. The gymnasium area is lit with metal halide fixtures.

Primary heating and ventilation for the building is provided by two Lennox Complete Heat boiler fired forced air ventilation systems located in the upper mechanical rooms and one ceiling mounted Lennox Elite Series furnace above the Men's washroom in the Lobby which were installed in 2002. There is no heat recovery system used in the building's ventilation system. The gym area is outfitted with an out-of-service rooftop exhaust fan. Supplemental heat in the dressing rooms is provided by way of wall mounted radiators. The required heating load is being met by the existing system.

The number of washroom fixtures is adequate and in a good state of repair. The main washroom fixtures were replaced during the 2002 renovation. The main washroom urinals were recently fitted with proximity sensors which has significantly reduced water usage.

The roof assembly was visually reviewed. The roof is at the end of its intended life cycle as evidenced by a growing number of leaks being reported and repaired. During the visual review it was noted that the built-up roof is blistering in several areas and will continue to do so making the need for piecemeal repairs an ongoing problem. The recommended course of action regarding the roof assembly is to at minimum, replace the main roof over the gymnasium.

Operational costs for the Mt7RP are likely comparable to similar type and age facilities however would be considered relatively high, given current HVAC best practices and sustainable strategies.

A lack of storage throughout impacts the versatility of the Mt7RP for user groups. The storage areas are dispersed throughout the Facility in available areas. A recent conversion of part of the women's showers into storage by the Rotary Club was completed however the lack of fire rating in the room does not comply with the requirements of the Building Code.

In summary, the current state of the Facility is reasonable given its age and upon completion of the recommended work in this Report should provide for another 25 year life cycle. The following sections outline some recommended upgrades and changes which will help to improve functionality, address Building Code compliance and reduce operational costs.

ZONING AND SITE USAGE

The Mt7RP is located in close proximity to the local Schools in an area currently Zoned P-4 Parks & Recreation and as such is properly Zoned. The placement of the building complies with P-4 Setback requirements. Noted below are acceptable uses in a P-4 Zone which could be applicable to future additions:

- Accessory Building
- Assembly Hall
- Art Gallery
- Community Centre
- Library
- Museum
- Public Park
- Recreational Facilities-Indoor
- Recreational Facilities-Outdoor
- Tourist Information Centre

BUILDING CODE COMPLIANCE

The intent of the following summary is to provide an overview of the Facility's current Code compliance. Accordingly, a commentary is provided relative to the major life safety systems and their ability to be modified as practical given existing constraints, to provide a building which meets the intent of the BC Building Code 2006.

This analysis is intended to look at the building and its systems in a broad scope fashion. The Building is classified as an A2 Assembly Occupancy. It currently has a Building Area (as defined in the BCBC 2006) of 1,444 square meters which is well within the allowable of 2,000 square meters under Section 3.2.2.25.

BUILDING SIZE AND CONSTRUCTION

The Building is one storey in height (plus two service rooms and small mezzanine located above the first storey) and is not sprinklered. Generally, the building's size, height and access to streets for fire fighting purposes complies with the current Building Code.

SAFETY WITHIN FLOOR AREAS/EXITS

This section of the Code deals with separation of suites, corridors and exiting. In the existing configuration and typical use, the number and location of exits in general, complies with the Building Code's intent.

ACCESSIBILITY

The Facility does not strictly comply with Section 3.8 Building Requirements for Persons with Disabilities. There is currently accessibility provided for the ground level only, no access is provided to the stage level. Accessible washrooms are provided on the main floor.

The level of compliance can be considered acceptable at this time, given the age and use of the Facility, however should a significant renovation and or addition be contemplated in the future, consideration to stage level access should then be given.

EXPANSION POTENTIAL

The Mt7RP is well sited with area suitable for future expansion on all sides of the Facility.



The plan of action identified in this Study focusses on repair of some building systems in a current state of disrepair and selective upgrades which will provide functional improvements.

BASE BUILDING REPAIR

The scope of work associated with repairing the base building, focuses on the core building systems and configurations. Repair of key building systems will stop further deterioration of the building and extend the Facilities service life.

Architectural

- Replacement of Roof membrane. (\$54,000)
- Fire Rating of Rotary Storage Room. (\$5,000)
- Ventilation Duct Cleaning. (\$5,000)
- Repair of water damaged exterior stucco and interior finishes. (\$25,000)
- Removal and replacement of exterior concrete pads. (\$10,000)
- Replacement of male shower wall protection. (\$4,000)
- Replacement of Basketball backstop winches. (\$2,000)
- Replacement of exterior Mechanical Room doors. (\$2,000)

Budget Cost: \$107,000

Structural

- None noted.

Mechanical

- Replacement of Female Shower mixing valve.
- Relocation of existing gymnasium thermostat.
- Removal of existing fire hose cabinets and associated piping - to be replaced with Fire Extinguishers

Budget Cost: \$7,000

Electrical

- Heating Plant wiring terminations.
- Misc lighting fixtures replacement.
- Activation of existing gymnasium exhaust fan.

Budget Cost: \$4,000

Total Base Building Repair Budget: \$118,000

BUILDING UPGRADES

A few key systems in the building were identified which due to their current condition should be replaced. The replacement will improve the functionality of the Facility for its user groups.

GYMNASIUM FLOOR REPLACEMENT

- The existing gymnasium floor underwent a repair/refinishing approximately 10 years ago due to water damage from a frozen water pipe. The refinishing project was not properly conducted and as a result the floor quickly showed finish de-lamination. Over time in several areas, floor board joints have opened allowing cleaning solutions to drain below the floor surface likely causing some rot and warping which in turn has contributed to further deterioration. Warping is evident in several areas where the flooring section has lifted above the concrete bed. Additionally the state of repair of the roof assembly over the gymnasium contributed to several recent leaks and ponding on the floor surface.

Budget Cost: \$181,000

GYMNASIUM FLOOR VENT REALIGNMENT

- It is recommended that at the time of the floor replacement the floor vents along the north gymnasium wall be relocated to a furred out side wall location, similar to the existing south wall vents. The side wall orientation will help to decrease dust and spillage entering into the ventilation ducts.

Budget Cost: \$7,000

GYMNASIUM FLOOR COVER

- It is recommended that a protective floor cover be installed after the floor replacement in order to increase utilization of the floor area and provide protection to the new surface.

Budget Cost: \$22,000

Total Base Building Upgrade Budget: \$210,000

FURTHER INVESTIGATION

During the Facility Review it was noted that one boiler and hot water tank had been recently replaced in the north upper mechanical room as part of the 2002 system's warranty. It was also noted at the time of the replacement that there may be some elements of the 2002 work, which are not properly installed and functioning.

It is beyond the scope of this Report to provide an in-depth analysis of the installed systems, their installed efficiency and the status of the remaining warranty. Based upon the visual review of installations however, it is recommended that in addition to the heating plant wiring terminations noted in the previous section, an Engineer or a qualified Lennox Contractor be engaged to determine if the system as installed, is operating at its optimal efficiency.

Budget Cost: \$3,000

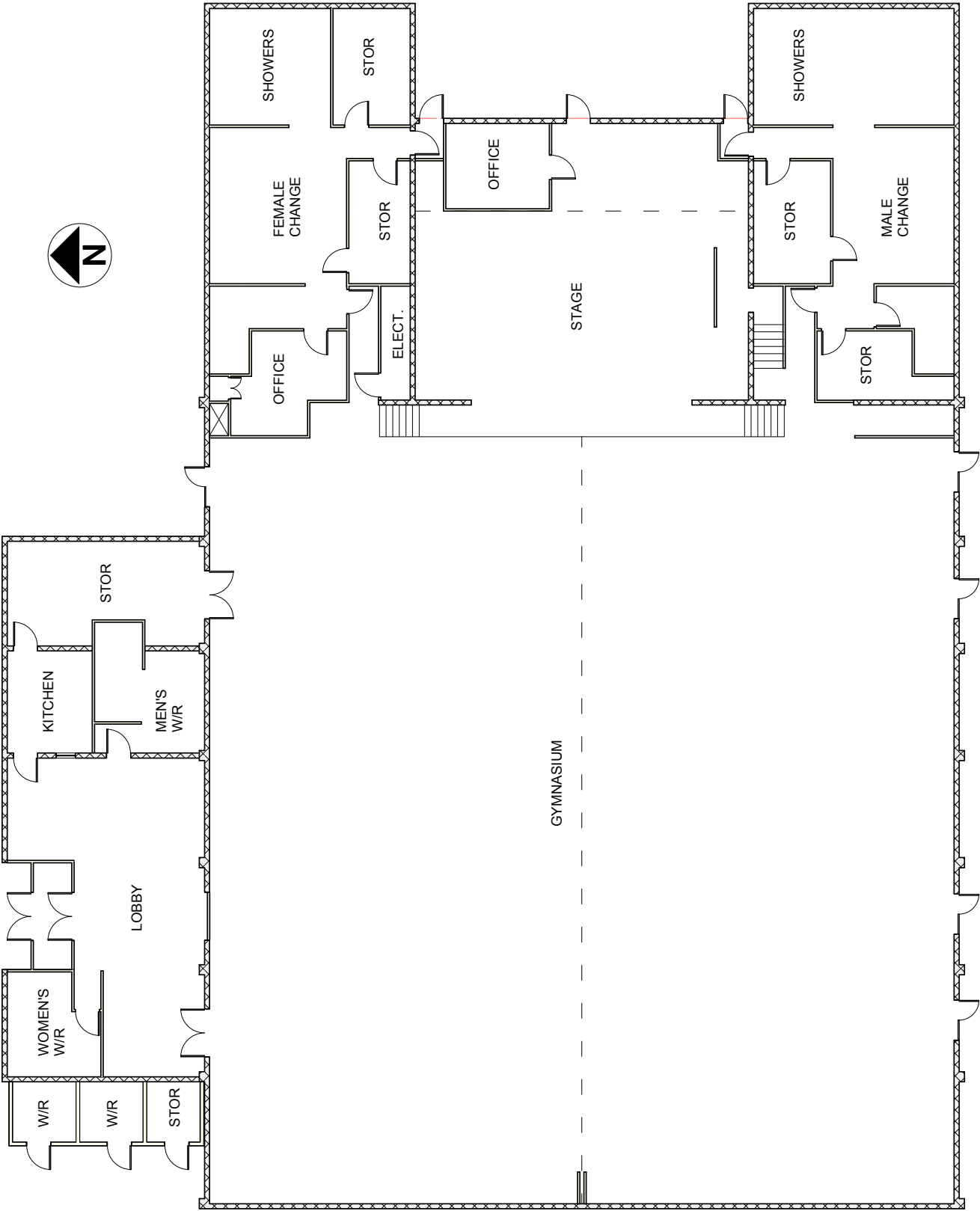
APPENDIX

A Project Drawingsii

B Existing Photographsiv

Site Photo

Main Floor Plan





roof membrane blisters on the gymnasium roof



deteriorated wall finish in male showers



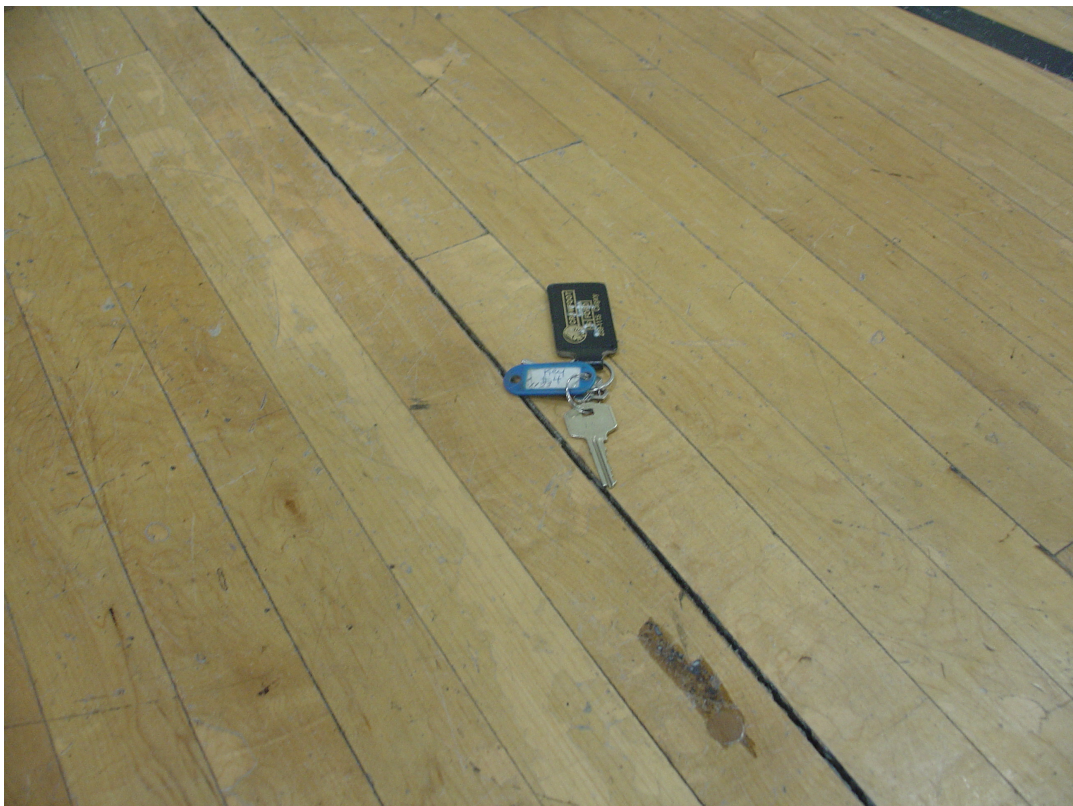
gymnasium



gymnasium floor gaps



gymnasium floor gaps



gymnasium floor gaps



gymnasium floor plank deterioration causing ponding



gymnasium floor plank deterioration causing ponding



gymnasium floor finish de-lamination



poorly installed gym floor insert



poorly installed gym floor insert



deteriorated stucco wall



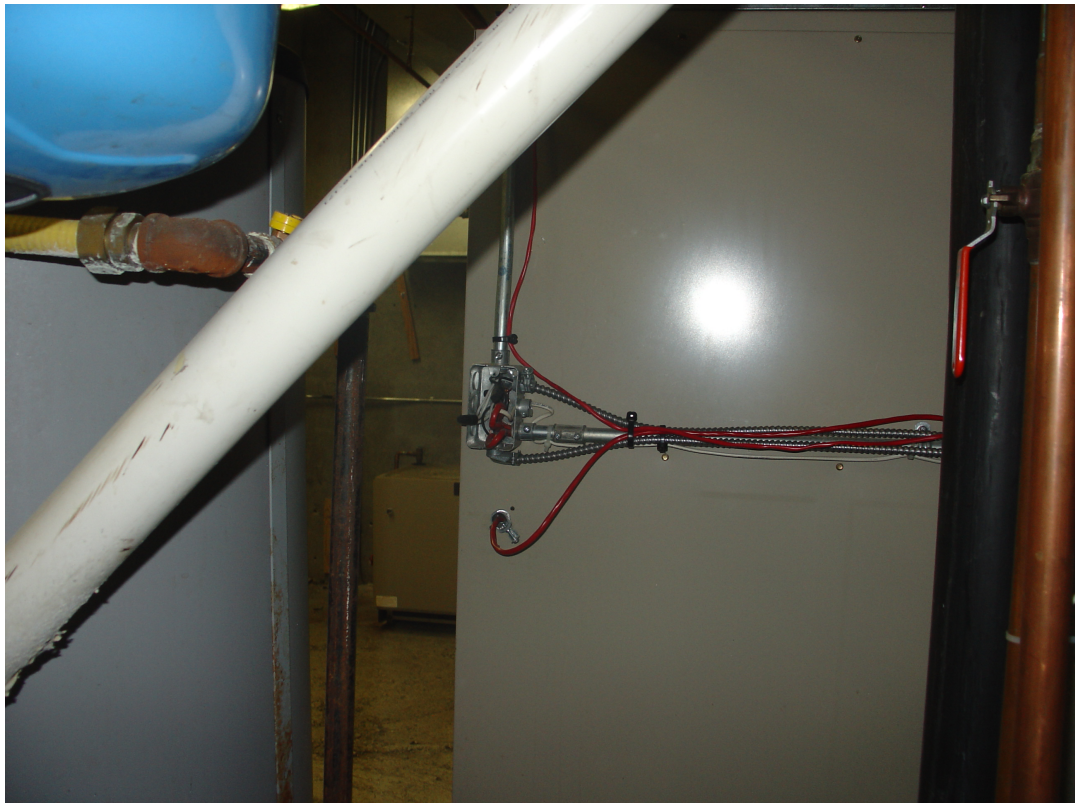
stucco wall interior damage



concrete pad settlement



mechanical penthouse



non-compliant boiler wiring