



Accessibility Study : Portage la Prairie City Hall

City of Portage la Prairie
January 24, 2020

REPUBLIC
ARCHITECTURE
INC

385 ST. MARY AVE
WINNIPEG, MB, R3C 0N1
T (204) 989 0102 F (204) 989 0094
WWW.REPUBLICARCHITECTURE.CA
INFO@REPUBLICARCHITECTURE.CA

Table of Contents

1.0	Executive Summary	3
2.0	Background, Scope and Methodology	4
2.1	Project Background	4
2.2	Applicable Codes and Reference Standards	4
2.3	Methodology	4
3.0	Accessibility Study and Findings	5
3.1	Assessment Overview	5
3.2	Building Analysis	5
3.2.1	Regulatory Requirements	5
3.2.2	Building and Site Analysis	7
3.2.3	Historical Standards and Analysis	12
3.3	Overview of Recommendations	15
3.3.1	First Priority	15
3.3.2	Further Recommendations	16
4.0	Costing	18
4.1	Rough Order of Magnitude Costing	18
Appendices		
Appendix No. 1 – Reference Floor Plans		
Appendix No. 2 – List of References and Information Provided		

THIS PAGE IS INTENTIONALLY LEFT BLANK

1.0 Executive Summary

The City of Portage la Prairie engaged Republic Architecture Inc. in the fall of 2019 to perform an Accessibility Study of the Portage la Prairie City Hall, located at 97 Saskatchewan Ave East, in Portage la Prairie. As a key public facility in the City, it was deemed important for the building to serve all citizens, including those with accessibility needs. This report aims to identify deficiencies in code and best practices and provide recommendations and associated estimated construction costs to achieve recommended upgrades.

The contents of this report include reference to information provided to the consultants by the City of Portage la Prairie, data gathered while on site, and discussions with client representatives.

Overall, the City Hall building cannot, in its present state, be considered accessible. Significant modifications and additions are necessary to provide access to the building, as well as to accommodate persons with accessibility needs within it. A number of best practice recommendations have also been included to improve the experience of visitors to City Hall.

The rough order of magnitude construction estimate to meet these recommendations is \$368,000.

2.0 Background, Scope and Methodology

2.1 Project Background

The Portage la Prairie City Hall was constructed from 1895 to 1898, and originally served as the Post Office and Customs House. Additions were constructed in 1920 and 1935. It was converted to its current function in 1960 and has served as City Hall ever since. Designed by Thomas Fuller, Canada's Dominion Chief Architect from 1881 to 1896, it is one of a number of federal buildings designed and constructed throughout the rapidly developing Canadian west. Designed using a blend of Gothic and Romanesque styles, it is in fact the only surviving public building designed by Fuller remaining in Western Canada.

As a building that serves the public, it is necessary that access is provided to all citizens. As a place of employment, it is also important that amenities are provided for all current and potential staff and visitors. Current building codes dictate the necessity for universal access and the requirements that might apply to this facility.

A previous report (Calnitsky Associates Architecture, 1992) indicated deficiencies in Barrier-free Access, however applicable codes have since been amended, and codes related to Barrier-free Access have become more stringent, necessitating an updated review.

2.2 Applicable Codes and Reference Standards

At the time of writing this report, the Authority Having Jurisdiction (AHJ) over the building is the Portage la Prairie Planning District, who applies the Manitoba Building Code 2011 (MBC 2011), an amended adoption of the National Building Code of Canada 2010 (NBC 2010). Specifically applicable to this building for this report is part 3 and potentially part 9.

Also referred to for review is CSA B651-18, Accessible Design for the Built Environment. While not the specific document governing the design of buildings and other facilities to ensure accessibility, this standard outlines nationally applicable best practices, many of which are adopted by the national building code and applied across Canada.

To aid in review and to identify deficiencies in applicable codes and best practice, checklists produced by Public Works and Government Services Canada have been used, and are included in Appendix #. Where deficiencies in mandated code are found, those are identified as such. Where accepted best practice deficiencies are found, those are noted as recommended upgrades.

2.3 Methodology

The review team began their assessment by studying documents provided by the City of Portage la Prairie, including original drawings from the renovation work issued for tender in 1979 (LM Architectural Group). Also reviewed was the Space Allocation and Renovation study produced in 1992 (Calnitsky Associates Architecture).

A visit to the building was conducted on December 6, 2019, during which the review team was able to document and measure key aspects of the building to determine deficiencies in accessibility compliance and items recommended for upgrades. A walkthrough and discussion was held with the client representative, Jocelyn Lequier-Jobin, which provided a greater understanding of the use of the building and the key areas of concern.

3.0 Accessibility Study and Findings

3.1 Assessment Overview

The primary concern found in the building is the barriers to access the main floor, which is necessary to serve all members of the public. The difference in height from the public sidewalk up to the main floor level is significant and currently can only be accessed by steps at either of the front entrances or the rear entrance. The side entrance is accessed by a step up at the exterior followed by winder steps within the building.

Further to the difficulty in entering the building, there are limitations to access all public areas while within the building. The main floor corridor on the east side of the building could be made accessible with some modification, allowing access to offices throughout the main floor. Access to the second floor is not currently provided as only stairs are available to access the second floor, where the council chambers are located - a significant public place that should be open to all.

Functional use of the building is not considered barrier free, specifically in the lack of barrier free washroom facilities. Main floor washrooms appear to have adequate space to be made barrier free with some modification. Second floor washrooms would require extensive modification to be made barrier free. It was also noted that the main floor service counter does not include a lowered service counter for individuals in a wheelchair.

3.2 Building Analysis

3.2.1 Regulatory Requirements

Accessibility is governed by the Manitoba Building Code 2011 (MBC).

Specific to this project, requirements of accessibility focus on entrances, doors, ramps, stairs, corridors, counters, washrooms and controls.

3.2.1.1 Entrances

The requirements for entrances are as follows:

- At least one pedestrian entrance shall be barrier free, leading from the outdoors at sidewalk level or from a ramp leading from a sidewalk.
- Vestibules shall contain a distance of 1,500 mm between two doors in series, plus the width of any door swing into the vestibule.
- Doors shall be outfitted with power door operators.

3.2.1.2 Doors

The requirements for doors are as follows:

- Provide a clear opening of 825 mm.
- Have a clear manoeuvring area of 1500 mm x 1700 mm in front of the door.
- Have exterior levers or pulls mounted no higher than 1100 mm above the floor level.
- Be provided with power door operators.

3.2.1.3 Ramps

The requirements for ramps are as follows:

- Have a running slope no steeper than 1:12 (8.33%).
- Be at least 900 mm wide between handrails;
- Have level landings measuring 1500 x 1500 mm at the top and bottom of the ramp;
- Have level landings measuring 1500 x 1500 mm at intervals of not more than 9 m;
- Have detectable warning surfaces with changes in colour, texture, resiliency and sound at the leading edge of landings;
- Have handrails on both sides at a height between 865 and 965 mm.

3.2.1.4 Stairs

The requirements for stairs are as follows:

- Have uniform treads and risers no more than 180 mm high and not less than 280 mm deep.
- Be at least 900 mm wide between handrails;
- Have landings at the top and bottom of the stair not less than 1100 mm long;
- Have detectable warning surfaces with changes in colour, texture, resiliency and sound at the top of the stair and leading edge of treads;
- Have handrails on both sides at a height between 865 and 965 mm.

3.2.1.5 Corridors

The requirements for corridors are as follows:

- Be at least 1,100 mm wide.

3.2.1.6 Counters

The requirements for counters are as follows:

- Have at least one barrier-free section not less than 760 mm long;
- Be no more than 865 mm high;
- Have a knee space beneath at least 685 mm high x 485 mm deep.

3.2.1.7 Washrooms (Universal Toilet Rooms)

The requirements for universal toilet rooms are as follows:

- A universal toilet room is required on each floor with public washroom facilities.
- Allow a wheelchair to turn in an open space not less than 1,700 mm in diameter;
- Permit a wheelchair to back in alongside the water closet in a space not less than 875 mm wide;
- Have a water closet with a seat 400-460 mm high;
- Have a lavatory not more than 865 mm high, with clearance beneath 760 mm wide x 735 mm high;
- Have a coat hook located not more than 1,200 mm above the floor on a side wall;
- Have a shelf located not more than 1,200 mm above the floor;
- Have grab bars.

3.2.1.8 Controls (Light Switches and Thermostats)

The requirements for controls are as follows:

- Be operable at a height 400 - 1,200 mm above the floor.

3.2.2 Building and Site Analysis

A site visit was performed December 6, 2019 to assess the current facility against regulatory requirements for barrier-free access. As directed by on-site staff, the review was focused on the main and second floors, as these are the primary areas with public functions and access requirements. The basement was viewed at a cursory level to understand the underlying structures, however was not considered within the scope of review. The attic space was not reviewed as it is designated primarily for storage and is not regularly occupied.

The following section describes observed deficiencies for providing barrier-free access. Room numbers referred to are as shown on Reference Floor Plans (see Appendix 1).

3.2.2.1 Entrances

There are three pedestrian entrances leading into the building; two along the front (north) elevation and one along the back (south) elevation. None of the entrances provide barrier-free access as the entrances are not at sidewalk level, nor are there ramps leading from sidewalk level.

.1 Northeast Entrance

The top landing is too shallow to provide proper clearance in front of the doors. The handrails do not extend 300 mm beyond the top and bottom stair treads. There is no detectable warning surface at the top of the stair.

The doors do not provide sufficient clear width. There is no power door operator on the doors.

.2 Northwest Entrance

The top landing is too shallow to provide proper clearance in front of the doors. The handrails do not extend 300 mm beyond the top and bottom stair treads. There is no detectable warning surface at the top of the stair.

The doors do not provide sufficient clear width. There is no power door operator on the doors.



Fig. 1 Northwest Entrance showing depth of landing, stairs and rails (Northeast similar)

.3 South Entrance

There are not handrails on both sides of the stair. The handrail does not extend 300 mm beyond the bottom stair tread. There is no detectable warning surface at the top of the stair.

There is no power door operator on the doors.

3.2.2.2 Main Floor

Throughout the main floor, thermostat controls are mounted too high on the wall.

.1 Washroom 110

The door does not provide sufficient clear width, and operation is by a knob instead of a lever.

The washroom is too narrow to provide an adequate turning radius. Space between the water closet and sink is too narrow.

There are no grab bars, shelf or coat hook. The mirror and soap dispenser are mounted too high.

.2 Washroom 111

The door does not provide sufficient clear width, and operation is by a knob instead of a lever.

Space between the water closet and sink is too narrow.

There are no grab bars or coat hook. The shelves, mirror and soap dispenser are mounted too high.

.3 Corridor 117

Door operation is by knobs instead of levers.

.4 General Office Area 122

The gate leading through the service counter does not provide sufficient clear width, and the hardware installed to open and latch the gate is not considered code compliant.



Fig. 2 Service counter gate

.5 Public Area 123

Doors leading into the northwest vestibule does not provide sufficient clear

width.

There is no barrier free portion for the service counter.

.6 Corridor 124

The corridor does not provide sufficient clear width.

Door between basement access points does not provide sufficient clear width.
Operation of both doors is by knobs instead of levers.

3.2.2.3 Second Floor

Throughout the second floor, thermostat controls are mounted too high on the wall.

.1 Committee Room 201

The main access door does not provide sufficient clear width, and operation is by a knob instead of a lever.

.2 Council Chambers 202

The main access doors in and out do not provide sufficient clear width, and the door swinging into the room creates an obstructed pathway with a nearby column.



Fig. 3 Double doors to Council Chamber with opposing doorswings and centre post

The egress stair (leading out onto the roof) has too steep of a rise and run, and there is no continuous handrail on either side.

.3 Library Room 203

The main access door has knobs instead of levers for operation.

.4 Washroom 205

The door does not provide sufficient clear width, and operation is by a knob instead of a lever.

The washroom is too narrow to provide an adequate turning radius. Space between the water closet and sink is too narrow.

There are no grab bars, shelf or coat hook. The mirror and soap dispenser are mounted too high.

.5 Washroom 206

The door does not provide sufficient clear width, and operation is by a knob instead of a lever.

The washroom is too narrow to provide an adequate turning radius. Space between the water closet and sink is too narrow.

There are no grab bars, shelf or coat hook. The mirror and soap dispenser are mounted too high.

.6 Corridor 208

The main stair (between main and second floor) does not have a continuous handrail on either side, and there is no detectable warning surface at the top of the stair.



Fig. 4 Stair at second floor; suggested perimeter rail location above wainscoting

3.2.3 Historical Standards

The Portage la Prairie City Hall building is a federally recognized National Historic Site, designated under the name of Portage la Prairie Public Building. As such, any modifications to the building should follow the Standards and Guidelines for the Conservation of Historic Places in Canada. Within that designation, a list of the Character-Defining Elements of the building are clearly outlined.

Key elements, which contribute to the heritage value of the Portage La Prairie Public Building, include:

- its visual prominence in the Saskatchewan Avenue streetscape;
- its design with two major façades, making use of its corner site;
- the integrity of the building's exterior design and materials, notably the varied stonework, from the undressed stone foundation to the hammer-dressed limestone blocks of its elevations and the finely-dressed stone trim;
- its blocky massing, enlivened by advancing and receding volumes of the three-bay façade; the two front entrances, each projecting out and identified by short robust piers, flanking the central bay;
- the animated roofline with varied gables set in with decorative stonework and punctuated with differing windows;
- the vertical lines of the iron-sheathed mansard roof and heavy dentilled cornice.

(Parks Canada Directory of Federal Heritage Designations, Portage la Prairie Public Building National Historic Site of Canada)



Fig. 5 Front Elevation showing prominent Character-Defining Elements

The key considerations when planning any modifications or additions to the building to improve universal access would be to make the minimal amount of intervention possible and to specifically not alter or impact any of the noted character-defining elements. In planning interventions on the building, care must be taken to follow the Standards and Guidelines for the Conservation of Historic Places in Canada – specifically applicable to the building and recommended work is general standards 1, 3, 5, 7, 9 and additional standards for rehabilitation 11 and 12, which read as follows:

1. Conserve the heritage value of a historic place. Do not remove, replace or substantially alter its intact or repairable character-defining elements. Do not move a part of a historic place if its current location is a character-defining element.
3. Conserve heritage value by adopting an approach calling for minimal intervention.
5. Find a use for a historic place that requires minimal or no change to its character-defining elements.
7. Evaluate the existing condition of character-defining elements to determine the appropriate intervention needed. Use the gentlest means possible for any intervention. Respect heritage value when undertaking an intervention.
9. Make any intervention needed to preserve character-defining elements physically and visually compatible with the historic place and identifiable on close inspection. Document any intervention for future reference.

11. Conserve the heritage value and character-defining elements when creating any new additions to an historic place or any related new construction. Make the new work physically and visually compatible with, subordinate to and distinguishable from the historic place.

12. Create any new additions or related new construction so that the essential form and integrity of a historic place will not be impaired if the new work is removed in the future.

In consideration of these guidelines, and the noted deficiencies in access, circulation and amenities within the building, care must be taken in designing any new additions or renovations. The most important consideration would be to not disrupt the key front facade elements, including the two main entrances. The east facade should also be considered important, and impacts to that side of the building should be avoided.



Fig. 6 East Side Elevation

New ramps should be provided on the rear and/or west elevations to provide universal access to building - the rear elevation for convenience to parking and dropoff locations; the west elevation to allow for a dignified, shared access from the front sidewalk. The form and material of these ramps should be in harmony with the original building, but should also be visibly distinct from the building. This applies to both ramps, but with the west side ramp being visible on the front elevation, it's design must be more carefully considered.

Also of importance would be to not disrupt the existing feature stairs within the building leading from main to second floor. To provide vertical circulation, a passenger lift is recommended, and the ideal location appears to be the original vaults located on the main and second floors. Careful design consideration could be made to reuse elements of the vault in the finished installation of the lift, as a reminder of past building functions.



Fig. 7 Original Vault door recommended for conservation

The original main stair - while not specifically noted as a character-defining element - should be considered an important part of the building's character, and not significantly altered. To address the need for a continuous, compliant handrail, it is recommended that a new handrail, similar in form and material, is added above the existing wainscoting on the perimeter of the stair and landing.

3.3 Overview of Recommendations

The list of recommendations has been divided into two priority levels. The first priority is to address accessibility deficiencies to provide barrier free access into the building for public functions on the main floor (City Services) and second floor (Council Chamber functions).

3.3.1 First Priority

To achieve ramp access to the side entrance, the existing door opening would need to be widened to accommodate an accessible door. Within the building, the existing stair to the basement would be removed as winder stairs are not compliant, and a platform for entrance at main floor level is required. Access throughout the basement would be by the existing stair

and a new opening through the foundation wall dividing the basement. The new ramp would extend from the side entrance out to the front sidewalk and would provide a dignified entrance for the public to use when conducting regular business with City of Portage la Prairie.



Fig. 9 Side Entrance; recommend providing ramp access up to main floor level

The next most significant item is providing access from main floor to second floor. To provide a passenger lift, we recommend demolishing the existing concrete structure at the main and second floor vaults. By design, this structure is independent from the surrounding building structure and could be removed, leaving a suitable location and underlying foundation for a new lift. As noted, we recommend conserving elements of the vaults such as the doors to be featured in the new lift as an homage to this previous building function.

To provide a universal second floor washroom, significant reconfiguration is necessary and some space from the existing Library (Room 203) will be used. The recommended outcome would be to provide one universal washroom and one standard, non gender-designated washroom.

Also to be considered is how individuals with accessibility needs move throughout all areas of the building. On main floor, replacement of the existing door at Corridor 117 is recommended, as well as providing new access through the service counter. Addressing the lack of a suitable service counter for individuals in a wheelchair is necessary, to be achieved by modifications to the existing large service counter and potentially reworking the layout of serving staff. Some modifications to interior layouts, especially to accommodate the new public access point and lift will be necessary. On the second floor, modifications to the swing and removal of the centre post of the Council Chamber doors is required.

3.3.2 Further Recommendations

At the rear of the building, universal access could be achieved by demolishing the existing stairs and landing, which are in poor condition, and providing a new landing with a ramp extending

to the east, then switching back. This rear ramp would be conveniently located near parking for staff and public use.



Fig. 8 Rear Entrance; recommend replacement with entrance ramp

To provide amenities for main floor staff and guests, the main floor washrooms appear to have sufficient space to be made universal; recommended work includes replacement of plumbing fixtures, new hardware and accessories such as grab bars, and automatic door operators.

The existing stair from main to second floor requires the addition of a new continuous handrail around the perimeter of the stair. The small stair providing emergency egress from the Council Chamber is also recommended to be improved by adding compliant handrails and modifying the stair to have compliant rise and run.

Other recommendations include Throughout the main and second floor of the building, replacement of door hardware to accessible lever types is recommended, as well as relocation of thermostats, light switches and other controls to universal heights.

The following is a summary of the recommended scope of accessibility improvement items:

First Priority

1. Add ramp to side entrance
2. Add lift at vault location
3. Reconfiguration of second floor washrooms to provide one universal and one standard
4. Main floor accessible routes and service

-replace Corridor 117 door

- replace service counter gate
- provide accessible service counter
- 5. Second floor accessible routes and service
 - reconfigure council room doors

Further Recommendations

- 6. Add ramp to back entrance
- 7. Modify main floor washrooms to be accessible
- 8. Upgrades to stairs
 - provide compliant handrail to main staircase
 - replace emergency exit stair in Council Chamber
- 9. Accessibility upgrades throughout main and second floors
 - replace door hardware
 - relocate control devices

4.0 Costing

4.1 The following is a rough order of magnitude (ROM) costing for the Recommended Accessibility Upgrades for the Portage la Prairie City Hall Building.

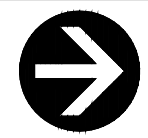
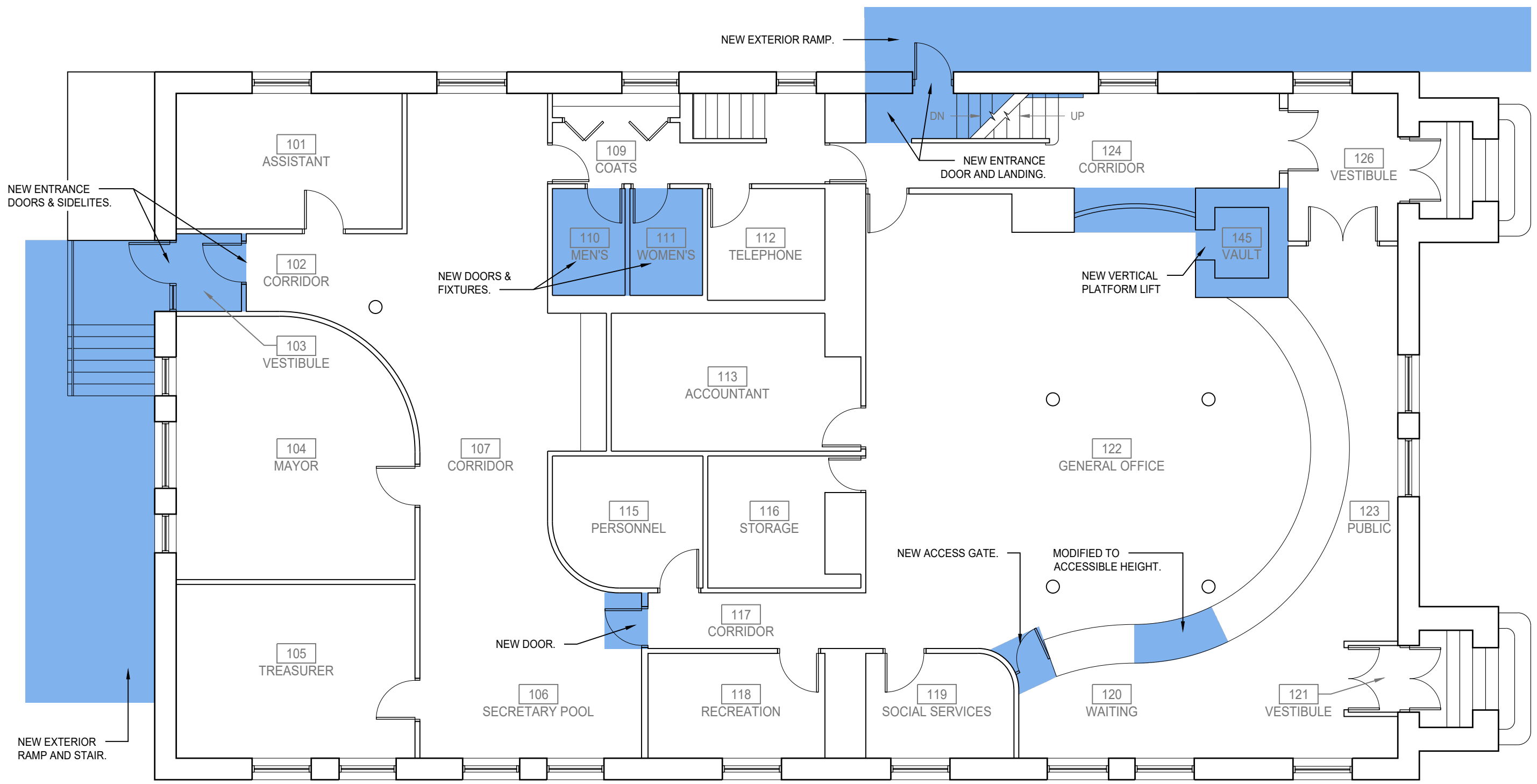
Cost Estimate	
First Priority Work Package	
1. Add ramp to side entrance	
-demolish basement stair, exterior door	\$4,000
-entrance platform	\$3,000
-new ramp (with heritage masonry features)	\$45,000
-exterior door and new door opening	\$7,000
-new opening through basement wall	\$5,000
Sub-total	\$64,000
2. Add lift at vault location	
-demolish vault at main and second floor	\$20,000
-structural reinforcing	\$3,000
-passenger lift integrating heritage features	\$50,000
Sub-total	\$73,000

Cost Estimate	
First Priority Work Package (cont'd)	
3. Reconfigure second floor washrooms	
-demolish existing washrooms	\$5,000
-new universal washroom	\$9,000
-new standard washroom	\$6,000
Sub-total	\$20,000
4. Main floor accessible routes and service	
-service counter modifications	\$7,000
-replace door D117	\$2,000
Sub-total	\$9,000
5. Second floor accessible routes and service	
-reconfigure council room doors	\$3,000
Sub-total	\$3,000
First Priority Work Package Sub-total	
	\$169,000
Further Recommendations	
6. Add ramp to back entrance	
-demolish stair and landing	\$4,000
-new landing, ramp and stairs	\$25,000
-automatic door openers	2 @ \$3,000ea
Sub-total	\$35,000
7. Modify main floor washrooms	
-new toilets, lavatories	2 @ \$2,500ea
-new washroom accessories (grab bars, mirrors, paper towel dispensers, etc.)	2 @ \$600ea
-automatic door openers	2 @ \$3,000ea
Sub-total	\$12,200
8. Upgrades to stairs	
-main stair handrail	\$4,000
-Council Chamber stair	\$3,000
Sub-total	\$7,000
9. Upgrades throughout main and second floors	
-replace door hardware	20 @ \$400ea
-relocate/replace controls	\$5,000
Sub-total	\$13,000

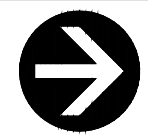
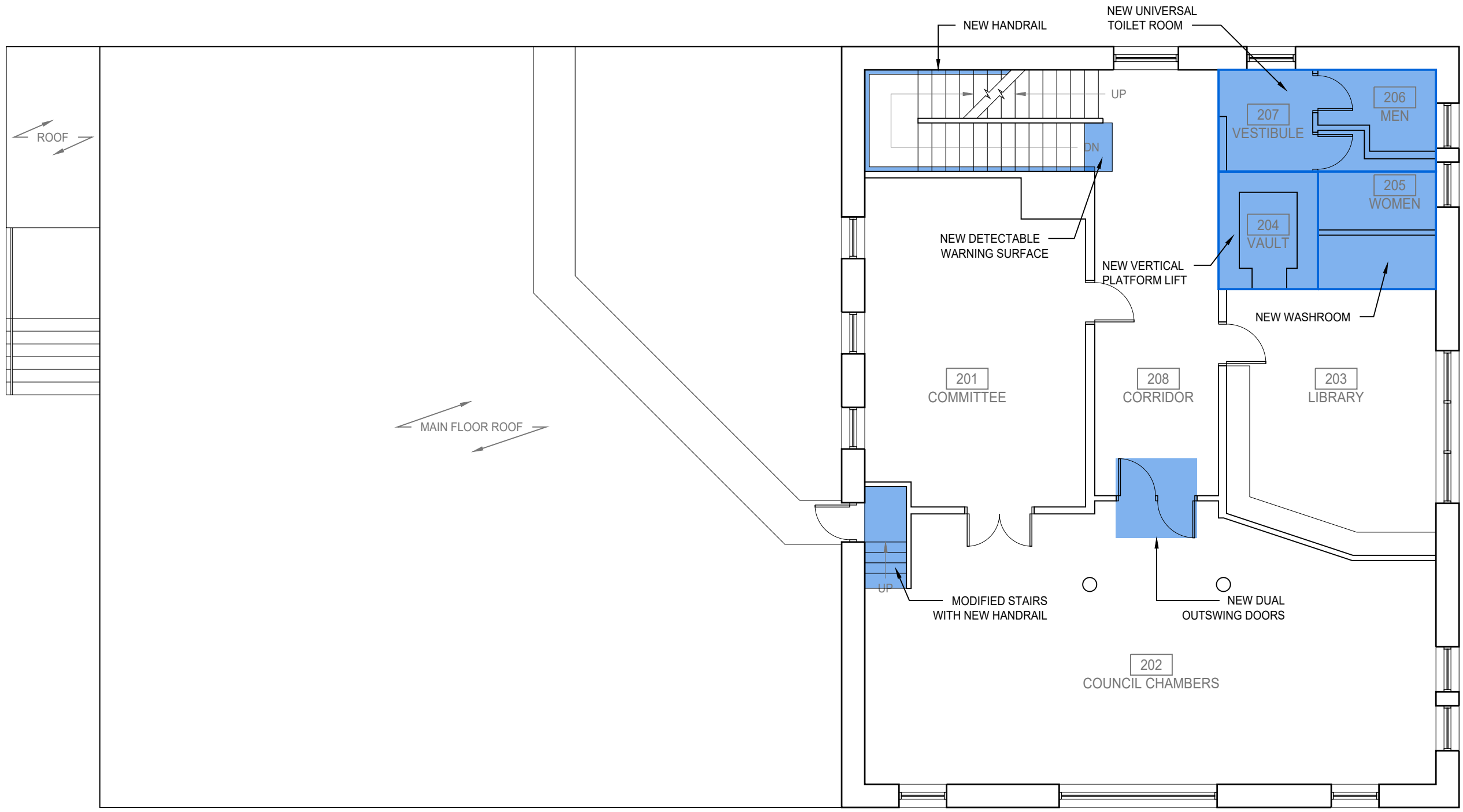
Cost Estimate	
Further Recommendations Sub-total	\$67,200
All Work Packages	\$236,200
Contractor Overheads, Requirements and Fees (20%)	\$47,240
Professional Design Fees (10%)	\$23,620
Sub-total	\$307,060
Contingency (20%)	\$61,412
Total Estimate (rounded)	\$368,000

Appendix No. 1
Reference Drawings

NOT FOR CONSTRUCTION



NOT FOR CONSTRUCTION



Appendix No. 2

List of References and Information Provided

References

Manitoba Building Code (MBC) 2011

National Building Code of Canada (NBC) 2010

Canadian Standards Association (CSA) B651-18, Accessible Design for the Built Environment

Standards and Guidelines for the Conservation of Historic Places in Canada

Parks Canada Directory of Federal Heritage Designations

Information Provided

Original Drawings - Portage la Prairie City Hall Building Renovation, LM Architectural Group, 1979

Space Allocation and Renovation in City Hall Study for The City of Portage la Prairie, Calnitsky Associates Architects, 1993