

Facility Assessment and Recommendations

Sunnyhill Housing Co-op: 787 – 3rd Street NW, Calgary, BC

Project Managed by: Urban Matters CCC | September 2019



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1 Project Overview and Introduction

This report is the output from a facilities assessment commissioned by the Sunnyhill Housing Co-op of Calgary in August 2019. Six different units, the office area and the exterior areas were assessed. The six units represent the three basic unit types (1, 2 and 3 bedroom) that are present in the co-op.

This report follows the technical structure of the Rick Hansen Foundation™'s Accessibility Certification program. Each section considers one aspect of the accessibility of the housing co-op overall, with observations and recommendations specific to each of the three unit types. The report then concludes with an overall recommendation on the practicality of implementation of the recommendations with consideration to whether replacement of certain units might be a more financially viable path to achieving accessibility.

Introduction & Executive Summary

The following information is a guide for how to understand the components of this report. Each of the sections includes a set of observations, referred to as the Existing Conditions Assessment. A set of recommendations runs in parallel to the recommendations. The recommendations are grouped according to three levels of urgency as defined below.

This report will outline numerous potential upgrades to the co-op's housing units. At a high level, we found that the units have significant barriers to accessibility by people with disabilities. Due to the structural layout of the 2 and 3-bedroom units with staircases needed to reach bedrooms, kitchens and other key amenities, they would not be habitable by a person with significantly limited mobility without substantive and expensive upgrades. Although the layout of the 1-bedroom units opens up greater possibility of upgrades, the constrained space for the washrooms, kitchens, and the narrow hallways would cause significant challenges. All of the units have high thresholds or entry stairs which would form a significant barrier to even allow for a visit from a person with limited mobility. The exterior spaces are more accessible, with some realistic possibilities for upgrades and modifications that would be feasible in terms of financial cost and which would also lead to a significant increase in the accessibility of the co-op overall.

Existing Conditions Assessment

The existing conditions assessment is a set of observations related to the accessibility of the subject properties. These observations are limited to aspects of the units that relate to accessibility and are not intended to be a comprehensive description of the units. To make the report more readable, the author has limited redundancy by only making unit-specific comments when necessary.

Recommendations

The report recommendations will be listed as three categories prioritized by safety/liability issues, followed by code requirements, and finally convenience issues:

Basic Access Requirements: Changes are needed to correct a safety/liability issue, to comply with the current building code access requirements, or otherwise provide meaningful, basic access.

Inclusive Access Requirements: Changes are needed to address important issues that are not covered by current code requirements, plus additional, cost-effective measures to improve access across the full range of disability groups.

Full Access Strategy: Identify a ‘best practices’ approach specific to the Sunnyhill Housing Co-op’s needs and facilities through a combination of national and international standards, community preferences and the practical application of universal design.

NOTE: Full Access Strategy recommendations made here do not list every possible access feature that could be deployed. Rather, they are presented as part of an inclusive strategy specific to this facility, and takes into consideration the age, function and future use of the property to develop realistic recommendations for long term planning.

Photos

Photos provided in this report are a small sample of those taken during the data collection process. The ones selected here are chosen either to provide a general view of the items in the category or to assist the reader in understanding the recommendations.

Appendix

The appendix to this report includes a prioritized list of recommended actions to improve accessibility. These are not intended to replace architectural or engineering work and any work commissioned should only be completed after consulting all the relevant engineering and construction professionals.

Initial General Comments

The Sunnyhill Housing Co-op is a 66-unit multi-family development located in the Sunnyside neighbourhood of Calgary, AB. The Co-op has some green space between the units and a play area. It is located near many community amenities including the McHugh Bluff walking trails, the Calgary Curling Club, a community garden and the Bow River Pathway bridge to Prince’s Island Park.

There are eight 1-bedroom units, which are all built on one level. The other units are a mix of 2 and 3-bedroom units, which are all 3-storey designs with interior staircases. There is also a co-op office located on the ground floor of one of the housing units, and a children’s play area located near where most of the residents with young children live.

The co-op's residents are a mix of different ages from families with young children up to seniors. There are not currently many residents with declared disabilities, but this should realistically be expected to change as there are many residents who are retirees. It is therefore very important to ensure that accessibility improvements are made across the co-op, ensuring that residents can as much as possible age in place rather than being forced to relocate as their physical abilities are reduced. There is also potential for a significant negative impact on physical and mental health due to social exclusion if units are not at least made more 'visitable', allowing for barrier-free social interaction between residents.

2 Existing Conditions Assessment

1.1 Vehicular Access



Description: This category includes parking, passenger drop-off zones, and transit stops. Parking should provide sufficient appropriately designed and designated accessible parking spaces. The specific criteria may differ depending on the facility. Design features taken into consideration include quantity and dimensions of the spaces, vertical clearance, surface quality, signage, illumination etc. Note that any off-site parking not in the control of the facility will not be included in the assessment.

1.1.1 Parking

Observations

- Parking is provided at each unit, with a small section of overflow parking.
- There are no covered parking stalls.
- There are no designated accessible or limited mobility parking stalls for guest.
- Most of the available guest parking is parallel street parking on City property.
- The parking spaces are well illuminated by exterior lighting on the housing units and street lighting on adjacent City property.

Recommendations

Basic Access Requirements:

- Add at least one designated accessible guest parking stall of adequate size. Ensure that is located on level ground with minimal slope and cross-slope to allow for safe transfer to/from vehicles with a wheelchair.

Inclusive Access Requirements:

- Request the City to create an additional designated accessible parking stall on the street in front of the co-op with blue paint applied to the curb and vertical signage indicating it as a short-term designated accessible parking stall.

Full Access Strategy:

- Provide a roof shelter over a new designated accessible parking stall to allow people to enter and exit their vehicles while sheltered from the elements.



Figure 1: Possible location for on-street designated accessible parking



Figure 2: Ideal location for off-street designated accessible guest parking stall

1.1.2 Vehicular Access

Observations

- The Co-op is serviced by bus and train connections. The nearest C-train station is located 1km from the property along sidewalks that are in good repair and which have pedestrian-controlled crosswalks.
- The nearest bus stop is stop #5380 at less than 150m from the property. This bus stop is equipped with an enclosed shelter which has seating provided and adequate space for use by a person with a wheelchair.
- Sidewalks from the bus stop to the Co-op are in good repair, have minimal grade, and were well maintained at the time of inspection.

Recommendations

Basic Access Requirements:

- Basic access requirements are met.

2.1 Exterior Approach and Entrance



Description: The exterior approach includes all external pathways connecting features in use upon arrival at the facility; this includes streets, sidewalks, ramps, and stairs. Routes to a building should be convenient and safe for all users while avoiding segregation. Pathways should be fairly level and allow passing, and include seating, signage and wayfinding where applicable. Ramps and stairs should be safe and easily accessible. Entrances should be welcoming, easy to find and easy to use. Sheltered areas should be provided at entrances.

Observations

- Exterior pathways have sufficient clear width, free from obstructions, for people using mobility devices.
- Some sections of exterior pathways have encroaching growth of weeds and flowers from adjacent garden beds that obstruct some of the pathway, making it effectively too narrow to safely use for a person using a mobility device.
- There are several places along the exterior pathways with branches or other natural obstacles that are overhanging at below 1.6m. This creates a potential hazard for people who are blind or low vision.
- One of the gates has a maze entrance with openings too narrow to accommodate a mobility device.
- Units 827 and 839 have staircases which are unprotected along one side and have a steep dropoff.
- With railings included, exterior staircases are too narrow.
- There is no tactile or high visibility indication on top of stairs or ramps, and no tactile indication on stair nosings.
- The entrance to the office has a narrow pathway with stairs, the gate hardware requires good manual

Recommendations

Basic Access Requirements:

- Pull back landscape features (shrubs/flowers) from pathways and instruct maintenance crews to add edging of the lawn areas to their regular lawn mowing schedule so weeds do not encroach onto the pathway surfaces.
- Cut back overhead branches from pathways to ensure overhead height clearance of 2m above surface everywhere along the pathways.
- Ensure that a snow clearing protocol is in place along all exterior pathways and common parking areas.
- Replace staircase at office with a ramp that is compliant to current City of Calgary building code.
- Replace maze entrance gate at rear of the complex with one that is wide enough to allow the passage of a wheelchair (minimum 920mm at narrowest point).
- Cut back overgrowth of shrubs that are hanging over the bench at the play area.

Inclusive Access Requirements:

- Replace exterior staircases on units 827 and 839. Ensure that new staircases are compliant to current City of Calgary building code for width and that they have handrails along both sides.
- Replace all gate hardware with a type of closure that can be operated by people with limited dexterity, e.g. a flip latch.

- dexterity to operate, and the stairs have irregular rise and run with multiple direction changes through the garden area.
 - Backyard gates on all residential units are not useable by people with limited dexterity.
 - Exterior benches have a variety of designs. One of them at the playground area is significantly obstructed by overgrowing shrubs. No shelter is provided on any of the benches.
 - The book exchange box is at an appropriate height but lacks signage and the handle requires good dexterity.
 - Where there are two benches in one location, e.g. at the play area, replace one so that there is one bench that has armrests and one that does not. Ensure both benches can be approached across firm, level ground with a mobility device.
- Full Access Strategy:**
- Consider adding tactile or high visibility indication on top of stairs and ramps, and tactile indication on stair nosings.
 - Add a cover or shelter over one or more of the benches along the longest sections of exterior pathways.
 - Add signage at the book exchange box with large font and high contrast. Replace door hardware on the book box with a type operable by a person with limited dexterity.



Figure 3:
Encroaching Shrub growth



Figure 4:
Overgrown shrubs on play area bench



Figure 5:
Problematic office entrance



Figure 3:
Maze entrance at rear gate



Figure 7:
 Staircase non-compliant to
 current building code



Figure 8:
 Book exchange box

3.1 Interior Circulation



Description: Interior circulation refers to the movement of staff and users throughout the building. This includes hallways, open plan areas, stairways, elevators, doors, etc. Layout should be clear and logical while avoiding level changes within a storey. Handrails and seating are also included where relevant. Dimensions of corridors and doorways are considered, as well as usability of ramps, stairways, and elevators.

3.1.1. Doors and Doorways (not including sanitary facilities)

Observations

- The units all have covered entry doors.
- Every unit has either stairs or significant thresholds at all the entry points.
- Exterior doorways for one bedroom units are less than 800mm clear width; entry doors for two and three bedroom units vary from 700 to 850mm. All entry doors are

Recommendations

Basic Access Requirements:

- Add short ramps to all exterior doors with thresholds; ensure ramps are marked with high visibility edging and have slopes of 1:20.
- Replace exterior staircase approaches to main entry doors with ramps that have slopes of 1:20 and have handrails on both sides which comply to accessibility best practices.

- narrower than accessibility best practice.
- Interior doorways are all built to old building codes and are all far narrower than accessibility best practices and current standards.
 - Door hardware on all doors is difficult for people with limited dexterity to use (knob handles).
 - Sliding glass patio doors have not contrasting or high visibility markings at eye level.
 - Sliding glass patio doors have slight thresholds on interior side.
 - Sliding door hardware is difficult to use for people with limited dexterity.
- Replace all door knobs with lever-style handles.
 - Add D-handles to interior and exterior of sliding doors along with locking hardware that is easy to manipulate by people with limited dexterity.
 - Apply high contrast markings to glass patio doors so that the doors will be visible to people with low vision.
- Inclusive Access Requirements:**
- Install ramp hardware with clear contrast to interior and exterior of sliding patio doors.
- Full Access Strategy:**
- Replace doors with ones that are wide enough to comply with accessibility best practices.



Figure 4:
Entry doors with steps



Figure 10:
Covered entrances

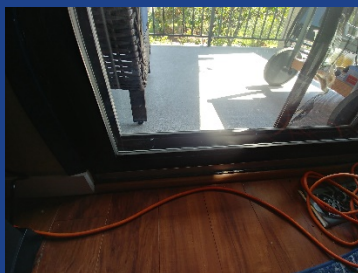


Figure 11:
Threshold on glass patio doors

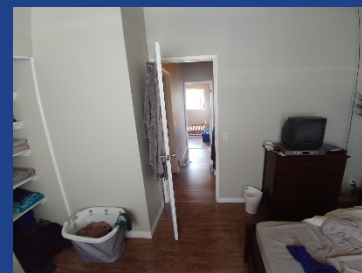


Figure 5:
Typical interior door

3.1.2. Paths of Travel

Observations

- Living spaces in the one bedroom units are all accessed on the same level. Main areas are connected by hallways, and living room and kitchen are open to hallway (without doors).
- Living spaces in the two and three bedroom units are spread across more than one floor and connected with interior staircases. Main areas are connected by hallways, and living room and kitchen are open to hallway (without doors).
- The paths of travel in the main service areas are not kept clear of obstructions in most units.
- The paths of travel have firm, stable, non-slip surfaces and can be traveled by persons using mobility devices without excessive effort or hazard.
- Main paths of travel do not have adequate width for multiple people to pass each other safely.
- Flooring visual design is plain and does not have accented patterns. This is helpful because patterns with numerous bright colours in varying contrasting patterns can be disorienting for people with cognitive impairments.

Recommendations

Basic Access Requirements:

- Main paths of travel should be kept clear of obstructions, but this is an issue which is outside of the control of the housing co-op. A reminder could be given to residents to keep paths of travel clear for fire and safety reasons.



Figure 6:
Living areas open directly
to stairs and hallways



Figure 7:
Most hallways are
used for storage

3.1.3. Corridors and Hallways

Observations

- Hallways are short enough that rest seating and handrails are not needed.
- Hallway widths are according to old building codes. Some are narrower than current codes, and all are narrower than best practice.
- The corridors/hallways have adequate contrast between the walls and floors or have contrasting baseboards so that walls and floors are clearly delineated for people with low vision.

Recommendations

Basic Access Requirements:

- Basic access requirements are met.

Full Access Strategy:

- Hallways are all too narrow to allow safe passage for people using mobility devices, particularly when there is cross-traffic. There is no remediation practically possible given the small existing footprints, location of walls, etc. This issue can only be rectified if the units are replaced.

3.1.8. Interior Stairs

Observations

- The two and three bedrooms all have staircases that are too narrow.
- Handrails have a design which is not graspable by people with limited dexterity.
- Handrails are only mounted on one side of the staircase.
- Most of the staircases are carpeted, which creates a greater slip hazard for people with limited mobility than firmer floor material. Unit 759 is an exception to this and has firm surface material with high contrast and tactile stair nosings.
- Stairs all have closed risers.
- Some stair risers have a slight abrupt underside on the tread which can create a tripping hazard for people with limited mobility.
- There is adequate colour contrast between stair surfaces and walls, and between handrails and the walls.

Recommendations

Basic Access Requirements:

- Replace handrails with the round/tubular style that can be easily and firmly grasped.

Inclusive Access Requirements:

- Replace carpeting on staircase with firm floor material such as the one in Unit 759.
- Replace staircase treatment for ones with abrupt undersides on the nosings with ones that do not have abrupt undersides.



Figure 15:

Example of staircase with firm surface material and high contrast tactile nosings.



Figure 16:

Staircase with problematic handrail and carpeted surface with no contrast/tactile nosings.

4.1 Interior Services and Environment



Description: Interior services include the key features of the buildings that will be used by occupants. Features may differ for each building, but in this case includes acoustic features and illumination.

4.1.1. Acoustic Considerations

Observations

- The acoustic profile of the units are all good due to the use of drywall boards on the walls.
- Reduced exterior sound intrusion is achieved in rooms on the outside perimeter with double glazed windows.

Recommendations

Basic Access Requirements:

- Basic access requirements are met.

4.1.5. Illumination

Observations

- Illumination levels in the buildings are good throughout. Due to the layout of the buildings, most rooms receive natural light through windows and is supplemented with adequate ceiling lighting.
- There is minimal illumination change between exterior and interior at the main entrance doors due to the use of glass panels on the top of or beside the doors.

Recommendations

Basic Access Requirements:

- Basic access requirements are met.



Figure 17:
Windows provide natural lighting.



Figure 18:
Window at top of door reduces lighting transition from interior to exterior.

5.1. Sanitary Facilities



Description: This category includes washrooms and showers and change rooms. These areas must be safe and accessible. No-touch features are encouraged in these areas to improve sanitation and accessibility. Flooring, hardware, grab bars, amenity heights, etc. are all considered.

5.1.1. Washrooms

Observations

- Toilets have back support.
- There is no knee clearance under the sinks.
- There are no grab bars beside or behind the toilets.
- There is not enough clear space inside the bathrooms.
- Most of the bathtubs and showers require stepping 300mm to 500mm up to enter.
- Most of the bathtubs and showers do not have adjustable height shower heads or grab bars.
- Faucets on the sinks use knob style handles.

Recommendations

Basic Access Requirements:

- Add grab bars in shower areas.
- Make all shower heads adjustable height.
- Replace sink faucet knob handles with lever-type handles.

Full Access Strategy:

- The bathrooms are too small to make them accessible within the current footprint. If a larger space could be provided in a substantial renovation, recommend:
 - Using cabinetry that allows knee clearance under sinks.
 - Provide showers or walk-in tubs that can be accessed without significant thresholds.
 - Install grab bars in showers/tubs and beside and behind toilets.

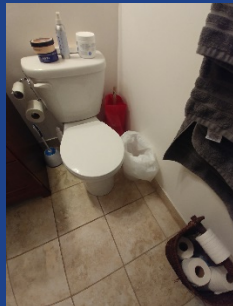


Figure 19:
Typical toilet with no grab bars.



Figure 8:
Tubs require high step to enter and most have no grab bars.



Figure 9:
Fixed shower head.



Figure 10:
Typical bath tub.

6.1 Additional Use of Spaces



Description: This category includes any features that may be specific to the facility in question, such as workstations, cafeterias, playgrounds, pools, change rooms etc.

6.1.1. Kitchen

Observations

- Kitchens do not have counter areas with knee clearance.
- There is no knee clearance under the kitchen sinks.
- The kitchens in the one-bedroom units are very narrow which could make it difficult or impossible to turn around with a wheelchair or other mobility device.
- Drawers and cupboards have small door hardware which could be difficult to grasp for a person with limited dexterity.
- Refrigerators have the type with freezers at the top.

Recommendations

Basic Access Requirements:

- Replace door hardware with larger D-handles.
- Replace refrigerators with bottom freezer units.

Inclusive Access Requirements:

- Remove bottom cabinets in one place to create a work area on a counter with knee clearance.
- Alternately, install a pullout work counter.
- Replace refrigerators with ones that have freezers on the bottom.
- Remove cabinetry below sinks to allow for knee clearance.

Full Access Strategy:

- The kitchens in the one-bedroom units are too small to make them accessible within the current footprint. If a larger space could be provided in a substantial renovation, recommend ensuring enough turning space for a wheelchair and for two people to pass each other.



Figure 23:
Typical one-bedroom unit kitchen



Figure 24:
Typical two- and three-bedroom kitchen

6.1.2. Playgrounds

Observations

- The playground does not have accessible play equipment.
- The surface material of the play area is “pea” gravel which is very soft.
- There is a variety of seating types at or near the play area. Recommendations for this are covered elsewhere in the report.

Recommendations

Basic Access Requirements:

- Basic access requirements are met.

Inclusive Access Requirements:

- Replace surface material with material that is firm enough to allow people with limited mobility or mobility devices to enter the play area (e.g. recycled rubber mats)
- Add some accessible play equipment, e.g. by replacing one of the swings with an accessible one.



Figure 25:
Swingset



Figure 26:
Play Area

3 Conclusion

This document takes the view that Sunnyhill Housing Co-op must anticipate the use of their facilities by an increasingly active community of people with disabilities and at the same time, accommodate the needs of a steadily aging resident mix. Simply put, management needs to understand that in the new millennium, it's normal to have a disability. 'Access' no longer refers to a narrow list of accommodations for wheelchair users. Accessible environments today must also anticipate the needs of a much broader demographic that encompass physical, sensory and intellectual disabilities and seek to create a higher level of inclusion in the facility for all users.

The goal in reacting to this report is to create a seamlessly integrated facility providing all users with appropriate access, safety and dignity as part of the core operating principles of the facilities. Please note the Full Access Strategy recommendations made here do not list every possible access feature that could be deployed.

Since the stated goal at the outset of the project was to identify shortcomings, give an opportunity to address them, and then give guidance on the bigger picture reality of what can be achieved within the constraints of the current structures, we can provide the following overarching recommendations.

1. Review the report for items which can be achieved with reasonable capital investment levels that would make a significant difference in accessibility. In other words, the "low hanging fruit". These include at minimum:
 - Replace all doorknobs with lever-style handles,
 - Replace handrails with a safer type that is graspable,
 - Remind residents to be mindful of clutter in hallways and entrances for safety reasons,
 - Improve landscaping efforts with regards to keeping exterior pathways clear of encroaching growth including both ground level and overhead obstacles.
2. A more significant investment could be made to improve access to enter the units by replacing staircases at the office and some of the other units with wheelchair accessible ramps. This should at minimum include the office and the one-bedroom units.
3. The 2-bedroom and 3-bedroom units will be highly impractical to renovate for accessibility due to their structure. The small size of floor areas and the way they were designed render it virtually impossible to include elevators, and the narrow staircase widths and multiple landings make the addition of stair-climber type floor lifts also virtually impossible to consider. In addition to this, the small floor space and existing location of load-bearing walls would make it more difficult to make the washrooms accessible as they current size does not allow for adequate transfer space from a wheelchair to a toilet, or enough space to enter the bathroom and be able to close the door while seated in a wheelchair. For these units, we recommend focussing on the items pointed out in #1 above, as these would at least allow the units to be liveable for a person with good mobility but limited dexterity, e.g. some types of arthritis.
4. Consider a complete replacement of the four attached one-bedroom units with fully accessible suites. Since everything is on one level, they would be much more suitable for designation as accessible suites. Alternately, it would be possible to undertake substantial renovations to the existing structures on the following conditions:
 - Confirm that interior walls are not load bearing
 - Replace stairs with ramps on exterior entrances
 - Reconfigure rooms to ensure hallways of a minimum of 1m width, preferably 1.2m.

- Ensure kitchens have adequate space to turn around in a wheelchair, for example by making them open to the living rooms by removing the existing dividing wall and replacing all cabinetry to open up that side entirely. Also, ensure that there is some counter space which is lower and still has knee clearance of greater than 800mm, and that there is knee clearance under the sink.
- Increase size of washrooms and add accessibility features such as grab bars and a roll-in shower with level entrance or tub with openable door. Replace all cabinetry to allow for knee clearance under the sink.

The same major renovation could be considered for the four one-bedroom units that are attached to the 2- and 3-bedroom structures. These could be even more challenging to renovate for accessibility due to their different structural design and the potential for less flexibility on moving walls that are load-bearing. Engineering advice should be sought before any contemplation of undertaking such a renovation. Considering the cost of the renovations listed above, it is possible a complete replacement of the four attached one-bedroom units would be more cost effective than renovating them. This would also open the possibility of adding more accessible units by replacing the 4-unit structure with a multi-storey building.

5. Consider the addition of a clubhouse with co-op office space included. This would mitigate against the social exclusion caused by the inaccessibility of all the 2-bedroom and 3-bedroom units. Providing a clubhouse with games area, tables, and an accessible kitchen and washroom would allow people with disabilities to interact socially with other residents. It would also allow residents to invite visitors with disabilities and still have a comfortable and accessible place they can use to enjoy the time together without bringing unnecessary focus to their disability.

In summary, the greatest areas of concern noted in our assessment were related to access through front doors, inaccessible washrooms, and narrow hallways. There are also some reasonably simple upgrades that could be done to the exterior environment of the Co-op. It is our view that the best way to make the Co-op an inclusive and accessible community would be to create a small number of fully accessible level-entry units and provide an accessible social and office space. This would best be achieved by replacing the four one-bedroom units and taking over some of the surrounding green space to include office and social areas that are fully accessible. If that is the direction taken, adding more units by building more storeys should also be given consideration.

Comments on this document should be directed to:

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