

Accessibility Review
Proposed Douglas Street Public Washroom
David Willows March 16, 2022

Background:

The City of Victoria proposes to install a “universally accessible” prefabricated washroom near the intersection of Broughton Street and Douglas Street. The comments in this brief relate strictly to accessibility of the indicated design and do not reflect on the need for the facility nor the location.

Methodology

A review of literature was conducted of materials provided to the Committee of the Whole on 10 March 2022. Some materials were also sent to the City’s Accessibility Advisory Committee. There is insufficient information in the Committee of the Whole package to provide a comment on accessibility, so a site visit to the existing “Langley Loo” was conducted as it is identified as the model for the new washroom.

The “Langley Loo” was assessed by David Willows, an accessible washroom expert, using the lowest recognised accessibility criteria found in the BC Building Code. The Code does not typically apply to accessory buildings under 10 square meters, however City of Victoria staff uses the term “universal accessible washroom” to imply a relationship to the standards in the BC Building Code that specifically addresses the *accessibility* requirements for a “universal” washroom. (Article B.3.8.3.12)

Findings

There are significant shortcomings between the BC Building Code universal washroom accessibility requirements the Langley Loo. It is important to note that the Langley Loo was installed in November 2011 and since then there have been substantial improvements in accessible design standards and 2 significant updates to the BC Building Code. The washroom facility was assessed using the current (2018) BC Building Code the following was observed:

Items found to be consistent with the BC Building Code universal washroom accessibility requirements include (numbers in brackets indicated BC Building Code Division B references):

- ✓ Accessible path of travel appears to be as required (3.8.3.2)
- ✓ Door appears to meet requirements (3.8.3.6)
 - Note: The door is very heavy and may cause problems for people with strength or balance limitations.
- ✓ Toilet appears to meet location and height requirements (3.8.3.11 (1)(d) & 3.8.3.13 (1)(a))
- ✓ Grab bar circumference appears to be as required (3.7.2.8).

- ✓ Toilet paper dispenser appears to be as required (3.8.3.11 (1)(h))
- ✓ Total floor space of the washroom meets requirements (3.8.3.12 (h) (i) &(ii))

The following items are found to not be consistent with the BC Building Code universal washroom accessibility requirements:

- ✗ Required lavatory (sink) complying with section 3.8.3.15 is absent (3.8.3.12 (c))
- ✗ Required faucet is absent (3.8.3.15 (1) (a))
 - A water supply is provided on the exterior of the building; however it can be difficult to locate, the controls do not meet the requirements of article 3.8.3.8 (Controls) and the water does not run a minimum of 10 seconds as required by article 3.7.2.3 (4)(b)(iii) (Lavatories). When tested the faucet ran for an average of 3 seconds.
 - A hand sanitizer dispenser is provided however it is located over the toilet and out of reach for many users.
- ✗ Required soap dispenser is absent (3.8.3.15(f))
- ✗ Required towel dispenser or hand drying equipment is absent (3.8.3.15 (g))
- ✗ Required mirror is absent (3.8.3.15 (2))
- ✗ Toilet flush button is not located as required by 3.8.3.13 nor does the location meet the alternative requirements for controls in 3.8.3.3.
 - The button is located at 1020mm above the floor; however it should be located 500mm-900mm above the floor (3.8.3.13 (1)(b)(i). Alternatively, it could be located as per 3.8.3.8 (Controls), however it is located 100mm too close to the toilet for this standard to be applied.
 - Toilet flush button should be a contrasting colour to aid people with low vision with locating it.
- ✗ Required seat back or other back support absent (3.8.3.13 (c))
- ✗ Grab bars provided do not meet requirements of the building code including:
 - The height is slightly higher than specified in the Code (3.8.3.11 (1)(e)(ii))
 - The required vertical portion of the adjacent wall grab bar is absent (3.8.3.11 (1) e))
 - Consideration should be given to making the grab bars a contrasting colour to assist people with low vision.
 - Grab bars should be “non-slip.” A textured grab bar may better meet this requirement (3.7.2.8 (a))
- ✗ Required coat hook is absent (3.8.3.12(f) & 3.8.3.11 (1)(g))
- ✗ Required shelf is absent (3.8.3.12 (h))

Additional Suggestions:

- Signs using internationally recognised symbols for public toilets should be provided to support both people with cognitive disabilities and tourists. There is no external indication Langley Loo is a toilet and not a public utility access.
- Wayfinding signage consistent with article 3.8.2.12 should be provided to guide people to the nearest public accessible washroom.
- Where possible, elements such as control buttons, grab bars, toilet seats, door handles, and locks should be a contrasting colour to the background.
- Tactile or braille signage consistent with Article 3.8.3.9 should be provided on the front of the washroom to:
 - Identify the structure as a universal gender washroom
 - Provide directions on where to locate the water supply on the exterior of the structure.

Conclusion

The Langley Loo appears to be a robust public facility with some accessible elements; however, it falls significantly short of the basic requirements for a “universal accessible washroom.” As such, the City of Victoria should not identify the washroom as “universally accessible,” “safe and *inclusive*” or any similar terms implying a high level of accessibility and inclusion of members of the disability community without significant design modification. Consideration should also be given to revising the content of the Accessibility Impact Statement from the March 4th 2022 staff report to more accurately describe the accessibility impacts of the proposed facility. In future, referencing specific accessibility standard used, such as the BC Building Code or CAN/CSA B651 *Accessible Design for the Built Environment* as a benchmark will provide Council and the public a more accurate description of the level of accessibility on a project.



Langley Loo Exterior

There is no external indication the structure is a public washroom. The structure could be a public utility access or other civic structure. This is a barrier to tourists and people with cognitive disabilities.

There is also minimal contrast for the door handle, lock and exterior water supply creating a barrier to locating them for people with low vision. There is no braille or tactile signage consistent with article B.3.8.3.9 indicating the structures purpose on or adjacent to the main door for people who are blind or have low vision.

Interior of Langley Loo

The hand sanitizer dispenser is located high and over the toilet making it unreachable for many mobility device users.

Low contrast colour of both the toilet flush button and grab bars can make them difficult to locate for people with low vision. The absence of the required vertical element of the grab bar also fails to provide a means for someone to pull themselves up from a seated position.

The required back support for the toilet is also absent. This is necessary for many people with disabilities including those who have low core muscle tone.



Exterior Water Supply

High contrast, tactile signage with braille is present but it is in disrepair. The absence of wayfinding signage would make locating the water supply near the rear of the structure difficult for a person who is blind or has low vision. Tactile walking indicators consistent with B.3.8.3.9 (3) may be suitable for use to help direct blind and low vision users to the hand wash.

The small activation button for the water supply is recessed in a sleeve and requires significant pressure to operate. The Code requires controls to be operable by a closed fist -something that is impossible with the recessed button. (Article B.3.8.3.8)

The BC Building Code:

The BC Building Code is an “objective based code,” meaning that while it provides specific guidance on how to meet the requirements of the Code, alternative methods that meet the same objective may be considered. Relevant accessibility objectives that pertain to this project are:

OA Accessibility

An objective of this Code is to limit the probability that, as a result of the design or construction of the building, persons with disabilities will be unacceptably impeded from accessing or using the building or its facilities (see Sentence 2.1.1.2.(5) for application limitations).

OA2 Accessible Facilities

An objective of this Code is to limit the probability that, as a result of the design or construction of the building, persons with disabilities will be unacceptably impeded from using the building’s facilities (see Sentence 2.1.1.2.(5) for application limitations).

OA1 pertains specifically to accessible paths and is not pertinent to this review.

Given these “objective statements” it can be implied that anything that provides a lesser level of accessibility would unacceptably impede a person with a disability from accessing or using a building or its facilities.

BC Building Code References.

Retrieved from: <https://www.bcpublications.ca/BCPublications/>

3.8.3.12. Universal Washrooms (See Note A-3.8.3.12.)

1) A universal washroom shall

- a) be served by an accessible path of travel,
- b) have a door complying with Article 3.8.3.6. that
 - i) has a latch-operating mechanism located 900 mm to 1 100 mm above the floor that complies with Clause 3.8.3.8.(1)(c) and is capable of being locked from the inside, and released from the outside in case of emergency, and
 - ii) if it is an outward swinging door that is not self-closing, is provided with a horizontal, D-shaped, visually contrasting door pull not less than 140 mm long located on the inside such that its midpoint is 200 mm to 300 mm from the hinged side of the door and 900 mm to 1 100 mm above the floor (see Note A-3.8.3.11.(1)(c)(vi)),

c) have one lavatory and one mirror conforming to Article 3.8.3.15.,

3.8.3.15. Lavatories and Mirrors

1) Lavatories required by Sentence 3.8.2.8.(7) shall

a) be equipped with faucets complying with Sentence 3.7.2.3.(4),

b) be located to provide a clear floor space in front of the lavatory of not less than 920 mm wide by 1 350 mm deep centered on the lavatory,

c) have a rim height not more than 865 mm above the floor,

d) have a clearance beneath the lavatory not less than

i) 760 mm wide,

ii) 735 mm high at the front edge,

iii) 685 mm high at a point 250 mm back from the front edge, and

iv) 250 mm high to a point 500 mm back from the front edge, (see Note A-3.8.3.15.(1)(d))

e) have insulated water supply and drain pipes where these pipes are exposed (see Note A-3.8.3.15.(1)(e)),

f) have a soap dispenser that

i) is automatic, or

ii) complies with Clause 3.8.3.8.(1)(c) and is located not more than 1100 mm above the floor, within 500 mm from the front of the lavatory (see Note A-3.8.3.15.(1)(f)), and

g) have a towel dispenser or other hand-drying equipment located close to the lavatory, with operating controls not more than 1200 mm above the floor in an area that is accessible to persons using wheelchairs.

2) Mirrors required by Sentence 3.8.2.8.(8) shall be

a) mounted with their bottom edge not more than 1000 mm above the floor, or

b) fixed in an inclined position so as to be usable by a person using a wheelchair.

d) have one water closet conforming to Article 3.8.3.13. and Clause 3.8.3.11.(1)(d), with a clear floor space at least 900 mm wide that is parallel and adjacent to the open side of the water closet,

3.8.3.11(1)(d) (Water Closet Stalls)

d) have a water closet located so that the distance between the centre line of the fixture and the wall on one side is 460 mm to 480 mm,

3.8.3.13. Water Closets

- 1) A water closet for a person with physical disabilities shall
 - a) be equipped with a seat that is not the spring-up type located 430 mm to 480 mm above the floor,
 - b) flush automatically or be equipped with a flushing control that
 - i) is located 500 mm to 900 mm above the floor,
 - ii) is located not more than 350 mm from the transfer side, and
 - iii) complies with Clause 3.8.3.8.(1)(c),
 - c) be equipped with a seat lid or other back support, and
 - d) where it has a tank, have a securely attached tank top.(See Note A-3.8.3.13.(1).)

e) have grab bars conforming to Clauses 3.8.3.11.(1)(e) and (f),

3.8.3.11 Water Closet Stalls

- e) be equipped with an L-shaped grab bar that
 - i) is mounted on the side wall closest to the water closet,
 - ii) has horizontal and vertical components not less than 760 mm long mounted with the horizontal component 750 mm to 850 mm above the floor and the vertical component 150 mm in front of the water closet (see Note A-3.8.3.11.(1)(e)(ii)), and
 - iii) complies with Article 3.7.2.8.,(Specifics on dimensions of grab bars and other attributes)
- f) be equipped with either one grab bar at least 600 mm long and centred over the water closet, or two grab bars at least 300 mm long and located either side of the flush valve, that
 - i) conform to Article 3.7.2.8.,
 - ii) are mounted on the rear wall, and
 - iii) are mounted at the same height as the grab bar on the side wall or 100 mm above the top of the attached water tank, if applicable,

f) have a coat hook conforming to Clause 3.8.3.11.(1)(g),

g) be equipped with a coat hook mounted not more than 1200 mm above the floor on a side wall and projecting not more than 50 mm from the wall, and

g) have a toilet paper dispenser conforming to Clause 3.8.3.11.(1)(h),

h) be equipped with a toilet paper dispenser mounted on the side wall closest to the water closet such that

- i) the bottom of the dispenser is 600 mm to 800 mm above the floor, and
- ii) the closest edge of the dispenser is not more than 300 mm from the front of the water closet

h) unless counter space of not less than 200 mm by 400 mm is provided, have a shelf located not more than 1200 mm above the floor with a useable surface of not less than 200 mm by 400 mm, and

i) have a floor space of not less than

i) 3.7 m² with no dimension less than 1 700 mm when the door swings out, and

ii) 4.0 m² with no dimension less than 1 800 mm when the door swings in.

About the author:

David Willows is a resident of Greater Victoria and parent of a child with cerebral palsy who uses a wheelchair. Since 2018 he has actively worked with disability organisations, municipal, federal, and national government agencies to enhance accessibility in your community. Some of his work includes providing technical support in the development of accessible parking bylaws in several municipalities in the Capital Region. He is also the lead advocate with *Changing Places BC*, and a founding member of *Accessible Washrooms for All/Toilettes accessibles pour tous*, a national network of advocates promoting the use of the internationally recognised “Changing Place” enhanced accessible washrooms standard through both local governments and the Canadian Commission on Building and Fire Codes.