# APPENDIX B - EXISTING TRANSPORTATION CONDITIONS

# MEMO

DATE: October 3, 2018
PROJECT NO: 04-17-0170
**PROJECT: Hume Park Master Plan**
**SUBJECT: Existing Transportation Conditions - Final Memo**

TO: Jenna Buchko
PWL Partnership

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Jenna,

This memo outlines Bunt & Associates Engineering's assessment of existing transportation and access conditions within and in the vicinity of Hume Park in New Westminster. It incorporates comments from the City of New Westminster on the original draft submitted June 6, 2018.

To inform gaps and opportunities for the future Master Plan of the park, this assessment's scope was limited to **the existing condition** of sidewalks, pathways, cycle facilities, parking, accessibility, and other features related to transportation and accessibility. It does make note of future plans where these are known and may affect the development of mitigating options.

Information was collected through site visits, discussions with the City, public records search, and information collected as part of previous Bunt studies. The memo's headings correspond and are limited to sub-chapters 2.3.1 – 2.3.7 from your May 24, 2018 Table of Contents.

## 1. SECTION 2.3.1 – LOCAL + REGIONAL PEDESTRIAN AND CYCLING ROUTES

### 1.1 General Notes

- The park is part of Central Valley Greenway – access from Braid Station and from Fader Street with connection along the Brunette River.
- The park also part of Brunette Fraser Regional Greenway – access along the river to North Road.
- Both greenway connections are mixes of on and off-road paths.
- Per the City's Transportation Master Plan, cycling connection improvements are planned as part of the Central Valley Greenway connection and East Columbia Street..
- Future plans call for improved cycling/pedestrian connection from Braid Street to Braid Station and over Bailey Bridge, across the interchange, and into Coquitlam (see **Figure 1**).

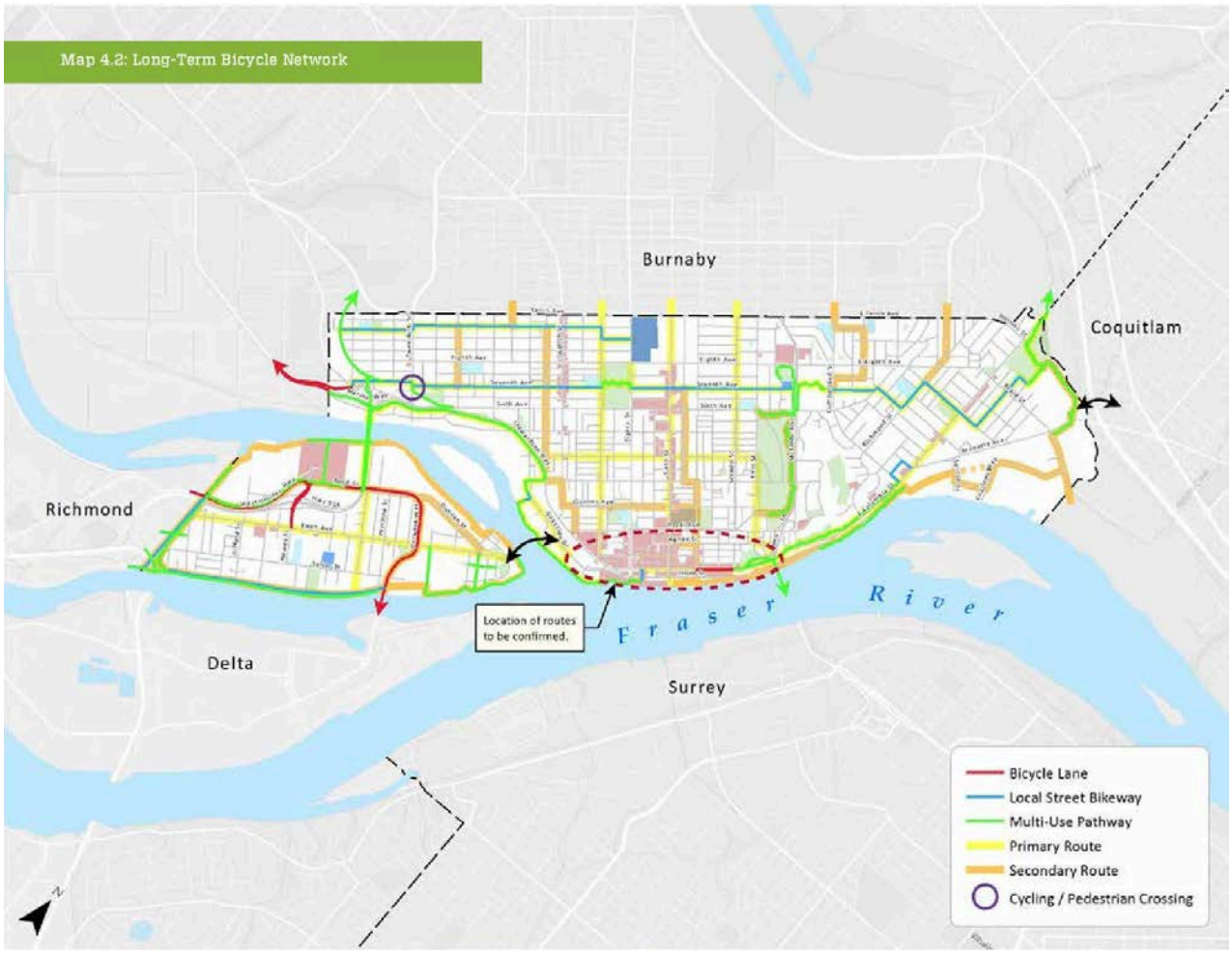



Figure 1 – Long Term Bicycle Network Plan (CNW Transportation Master Plan, 2014)

- The citywide Master Transportation Plan shows sidewalks on both sides of all local roads However, there are no sidewalks along much of Garrett Street on park's south edge.
- No major pedestrian improvements are noted for the immediate area within the MTP

## 2. SECTION 2.3.2 – LOCAL + REGIONAL VEHICULAR ROUTES

### 2.1 General Notes

- East Columbia Street and Braid Street are both designated as City Collectors (see **Figure 2)**.
- Braid Street is a City Collector. Half of the roadway was recently repaved. The other half is awaiting Metro Vancouver water main work.
- Holmes Street is a Neighbourhood Collector.
- Master Transportation Plan (2014) shows average daily volumes of 25,000 + on East Columbia Street and 23,000 + on Braid Street

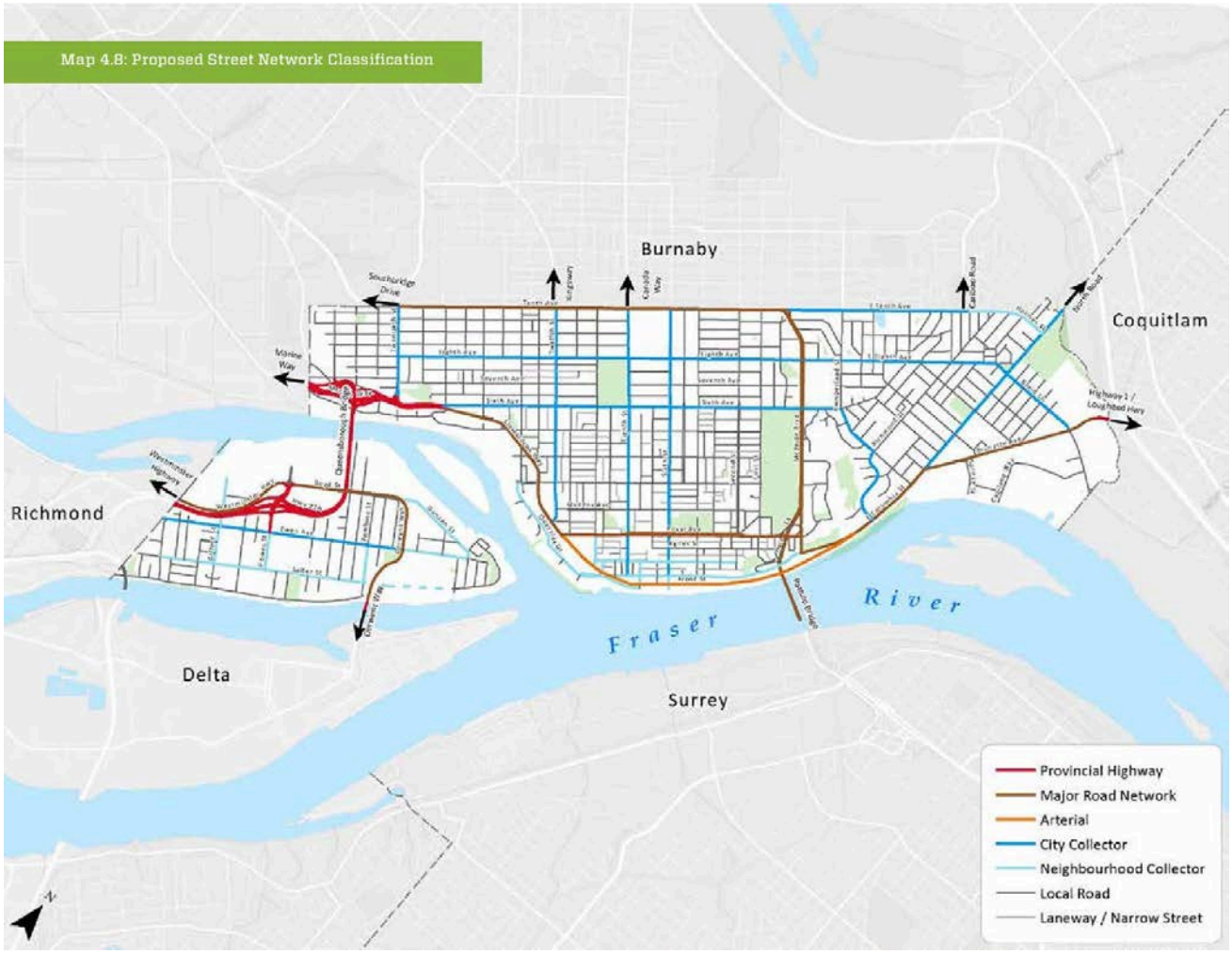



**Figure 2 – Road Hierarchy Plan (CNW Transportation Master Plan, 2014)**

- The Ministry of Transportation and Infrastructure has begun concept designs on the Brunette Avenue interchange near Braid Skytrain Station; capacity impacts and volumes along Braid Street are yet undetermined.[1]
- Both East Columbia Street and Braid Street are designated truck routes as defined by Translink; the City is seeking to remove this designation from East Columbia Street south of Braid Street.
- The City is currently in the process of redesigning East Columbia Street south of Braid Street, in partnership with Fraser Health Authority as part of the redevelopment of Royal Columbia Hospital, as its first multi-modal *Great Street*.

[1] The 2016 *New Westminster's Position Paper on the Brunette Avenue Interchange* supports the redesign in principle but on the condition it enhances mobility and the greater objectives of the City's transportation policies.

# 3. SECTION 2.3.3 – LOCAL + REGIONAL PUBLIC TRANSIT ROUTES

## 3.1 General Notes

- The park is served by three bus routes (C9, 128, 155).
- Access is also available to Braid Skytrain Station (approx. 700m walk).
- The 128 bus service was recently increased to 20-minute weekday frequency.
- East Columbia and Braid streets are slated to be "enhanced transit corridors" in the City MTP, eventually with increased service and rider amenities at stops (see **Figure 3**). This is further supported in the City's *Transit Priorities* document (May 2018).

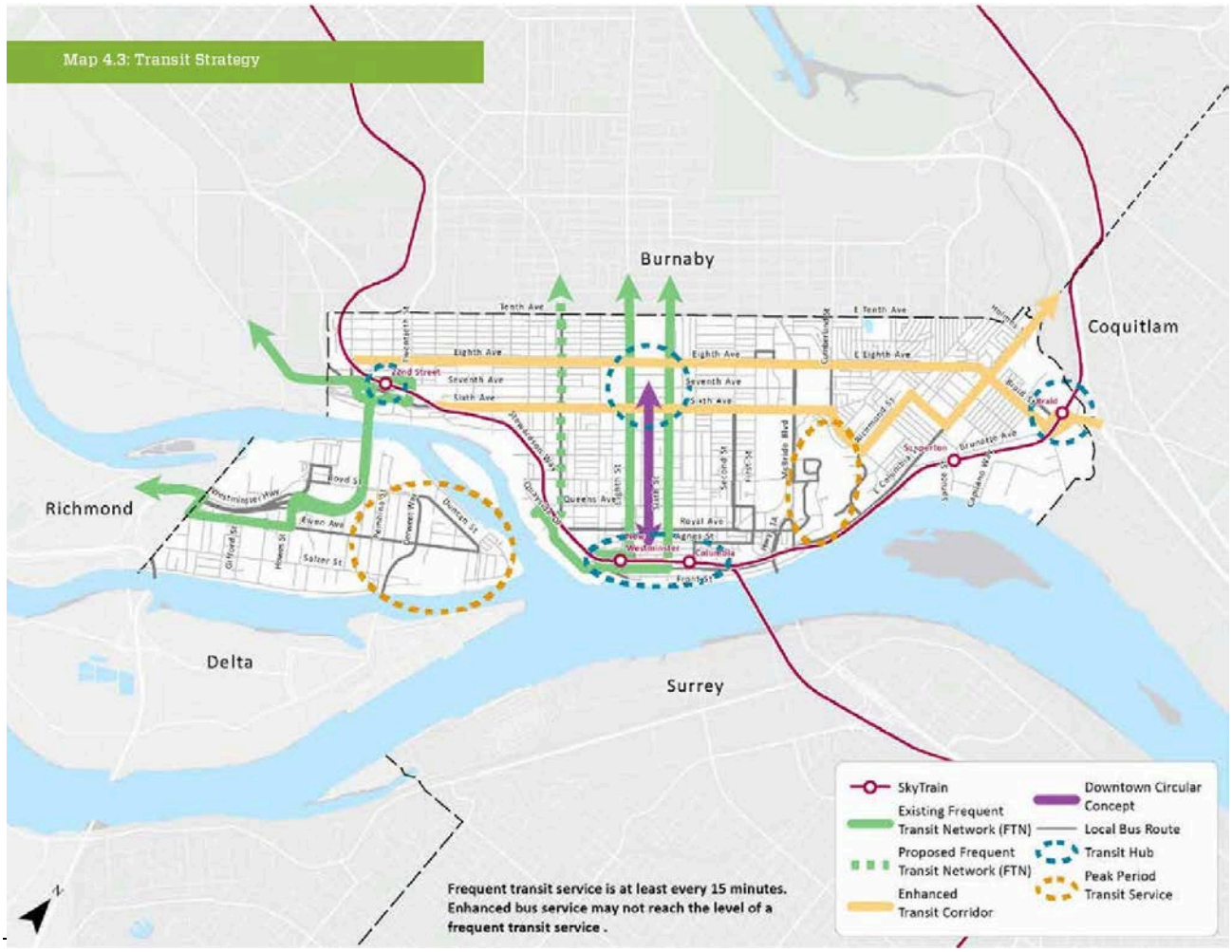



**Figure 3 – New Westminster Transit Strategy (CNW Transportation Master Plan, 2014)**

# 4. SECTION 2.3.4 – LOCAL PARKING

## 4.1 Supply

- Parking Supply within the park is limited to approximately 30 spaces off Hume Park access road + on-street spaces in neighbourhoods to the west and south.
- The largest area of parking is southern end of Hume Park access road – space for 15-25 vehicles, depending on efficiency of parking (see **Figure 4**). Three, smaller off-road bays for 3-5 cars each exist on the west side of Hume Park access road.



**Figure 4 – Parking Area at south end of Hume Park Road**

- On-street spaces on Garrett Street, Kelly Street, and Fader Street are limited to 2H or 3H without a CNW on-street parking permit.
- There are no dedicated cycle parking facilities within the park.

## 4.2 Demand

- Anecdotal evidence from the City of New Westminster suggests very high demand on summer weekends; far beyond the capacity of existing supply within the park.

## 4.3 Regulations

- East Columbia St from E Columbia St to Hume Park road access – 630m length
    - s/b – no parking
    - n/b from north driveway at northeast corner of East Columbia St / Braid St to 35m south of Hoult St pedestrian crossing – NP 7AM-7PM M-F – 140m
    - n/b from Hoult St to Hume Park access – NP

- Braid St from East Columbia St to Garrett St – 280m length
    - NP north and south sides of street
- Kelly St from Braid St to Garrett St – 150m length
    - East side – 130m curbside (2 residential driveways), fire hydrant NP reg's at Garrett St – 2H parking, except with CNW permit
    - West side – 150m curbside (no driveways) – NP, except with CNW permit
- Fader St from Braid St to Garrett St – 150m length
    - East side – 150m curbside (no residential driveways) – NP, except with CNW permit
    - West side – 140m curbside (1 residential driveway) – 2H parking, except with CNW permit
- Garrett St from Garret St bend to Kelly St (south side of park) – 150m length
    - North side (Garret St bend to Hume Park School pedestrian crossing) – 120m curbside + perpendicular spaces – 3H 8AM-6PM M-F (see **Figure 5**).
    - North side (Hume Park School pedestrian crossing to Kelly St) – 30m – NP
    - South side (Garret St bend to Hume Park School pedestrian crossing) – 110m curbside + perpendicular spaces – 3H 8AM-6PM M-F
    - South side (Hume Park School pedestrian crossing to Kelly St) – – 2H 8AM-6PM M-F




**Figure 5 – Garrett Street facing west from Garrett Street bend**

- Garrett St from Braid St to Garrett St – 150m length
    - East side – 140m curbside (1 residential driveway) – NP, except with CNW permit
    - West side – 140m curbside (1 residential driveway) – 2H parking, except with CNW permit
- Hume Park Rd access from E Columbia St to end of road – 300m
    - East side – 300m roadside NP
    - West side – 300m roadside NP, except for 3 indented parking areas. No signage indicating parking regulation change, but parking seemingly tolerated.
- Per the City's Sapperton/Massey Victory Heights Transportation Plan, the following Phase 1 and Phase 2 parking proposals will affect streets adjacent to the park:
    - East Columbia Street – on-street spaces will be removed from the East side north of Braid Street
    - Fader, Garrett, and Kelly streets: combination of short-term (2 hour) parking without permit and 'No Parking w/o Permit'.

## 5. SECTION 2.3.5 – NEIGHBOURHOOD WALKABILITY TO AND WITHIN PARK

### 5.1.1 To Park

- Access from the surrounding neighbourhoods is better from the south than the west. General accessible access is currently poor. There are only three locations where wheelchair/mobility scooters can access the park: Hume Park access road and two openings on the west side of Garrett Street. Access from adjacent streets is not significantly affected by existing grades.
- East Columbia Street between Braid Street and Hume Park road access
    - 1.5m sidewalks on both the east and west sides of street are in reasonable condition with no boulevard; width narrowed in places to 1.2m with pole obstructions (see **Figure 6**).
    - The Braid St/East Columbia St intersection has four functioning pedestrian crossing legs; crosswalk and stop line markings are faded; approximately 90s cycle length for good crossing opportunity.
    - The Hoult Street signalized pedestrian crossing only crosses the south leg; leads to stairs into park (see **Figure 7**). It flashes for 16s when pushed (0.8m/s assumed walking speed). There is no ramp or other accessible means of entry to the park.
    - A fence and wall separate the sidewalk from the park on the east side of East Columbia St. (see **Figure 8**). There is a break in the fence approximately 50m north of Hoult Street that leads to an uneven dirt path and to Hume Park Spray Pool.




Figure 6 – East Columbia Street facing north towards Hoult Street

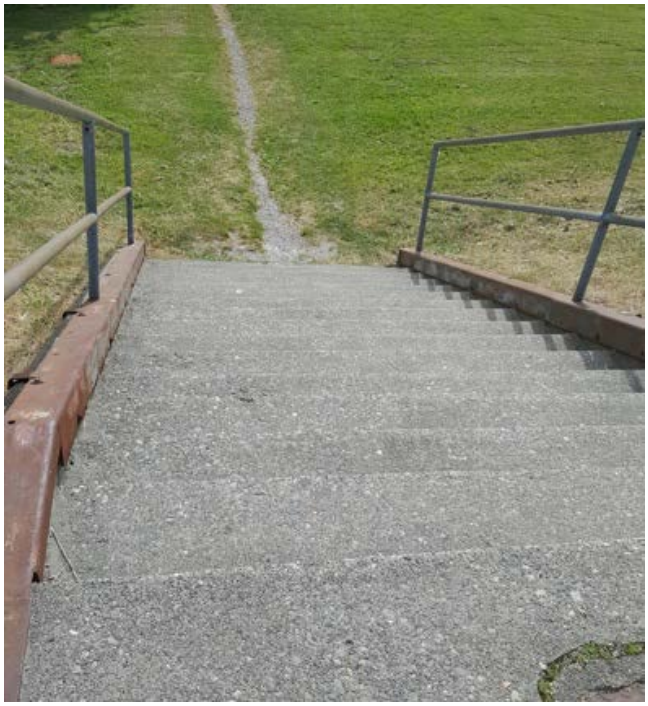


Figure 7 – stairwell facing east into park from Hoult Street crossing



Figure 8 – East Columbia Street facing south towards Hoult Street crossing

- There is a full signal at Holmes Street, approximately 200m north of Hoult Street, with a pedestrian crossing at the south leg only. The pedestrian signal allows 7s of green time + 11s of clearance time (1.2m/s assumed walking speed).[2]
- There is a full signal at the Hume Park road access, approximately 190m north of Holmes Street, with a pedestrian crossing leg at the south side only. The pedestrian signal allows 7s of green time + 11s of clearance time (1.2m/s assumed walking speed).
- The Central Valley Greenway and Brunette Fraser River Greenway access on the west side of East Columbia St from Hume Park access funnels into a combined 1.5m shared path on the west side of road, where it reverts to a shared path, where cyclists are assumed to dismount (see **Figure 9**).

[2] The City confirms this signal is scheduled for reconstruction in 2018/2019 per the Sapperton/Massey Victory Transportation Plan. The plan calls for vehicle capacity enhancements at the intersection.




Figure 9 – Central Valley Greenway becomes 1.5m-shared path north of Hume Park access

- Braid Street between East Columbia St and Garrett Street
    - There are 1.5m sidewalks on both sides of Braid Street, but these are narrowed to 1.0m in places on the north side of the street with pole obstructions and encroaching vegetation (see **Figure 10**).
    - There is no boulevard buffer on the south side of the road, though a 1.0m grass boulevard exists on the north.
    - Curb ramps across Garrett, Fader, Kelly streets lead scooters, wheelchairs, strollers, and visual-impaired pedestrians diagonally into Braid Street rather than parallel to sidewalk.




Figure 10 – Narrowed sidewalks on north side of Braid Street

- Kelly Street between Braid Street and Garrett Street (south side park entrance)
    - The sidewalks end at Garrett Street; east side sidewalk ends in an accessible parking bay painted buffer; west side sidewalk empties into a parking space (see **Figure 11**).

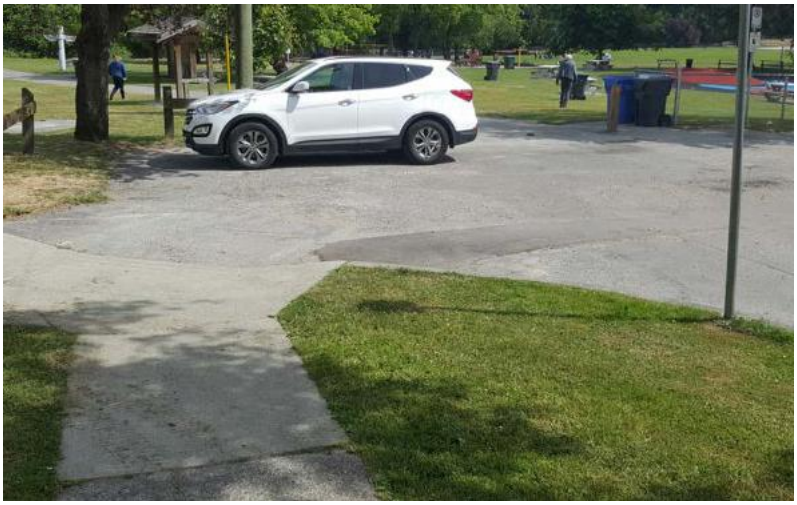


Figure 11 – Sidewalk at north end of Kelly Street leads to parking space

- There are 1.2m sidewalks on both sides of the street with a 3.5m planted boulevard with mature trees; some sidewalk buckling from tree roots but in reasonable condition.
- There is no controlled crossing across Braid Street.
- There is no intersection control at Kelly Street and Garrett Street and no pedestrian guidance from Kelly Street into the park. Drop curbs on both east and west sides of the street are not compliant to current best practice design principles.

- Fader Street between Braid Street and Garrett Street (south side park entrance)
    - There are 1.5m sidewalks on both sides of the street with 3.0m planted boulevard with mature trees; some sidewalk buckling from tree roots but in reasonable condition.
    - Road markings (sharrows and pedestrian crosswalk and stop line markings) across Braid Street were remarked in the summer of 2018. Additional road works await the completion of Metro Vancouver water main work. New sharrow are included.
    - The Braid Street signalized crossing provides 7.5s of green time + 14s clearance time (0.9m/s assumed crossing speed). It provides both pedestrian and cyclist-activation.
    - The west side sidewalk ends at Garrett Street with no intersection control at Fader Street and Garrett Street and no pedestrian guidance from Fader Street into the park.
- Garrett Street between Braid Street and Garrett Street bend (south side park entrance)
    - There are 1.5m sidewalks on both sides of street with no boulevards.
    - The street was repaved in the summer of 2018 and new stop lines painted.
    - The east side sidewalk ends approximately 30m south of the park.
    - There is no intersection control at the Garrett Street bend, no pedestrian guidance from west side sidewalk into the park, and no accessible path from east side sidewalk into the park or to the west side sidewalk.




**Figure 12 – No sidewalks on north side of Garrett Street**

- Garrett Street between Garrett Street bend and Kelly Street
    - There is approximately 40m of new sidewalk on the south side of street between Garrett Street bend and Fader Street.
    - There are no sidewalks on the north side of street or disabled access along the north side (see **Figure 12**).
    - There are no sidewalks on the south side of the street west of Fader Street.
    - The pedestrian priority crossing at the Hume Park School entrance was remarked in the summer of 2018 (see **Figure 13**).
    - There is no street lighting on Garrett Street adjacent to the park.
    - The only connection to the fenced rink is via a staircase. No ramps or accessible amenity is provided.



Figure 13 – Priority Crosswalk at school on Garrett Street near Fader Street

### 5.1.2 Connections to park from Transit

C9 Bus – East Columbia Street

- The bus runs between Lougheed Town Centre Station and Columbia Station and takes approximately 21 minutes for a 1-way run.
- It operates with half-hour frequency during AM, PM peaks, hourly frequency mid-day (8:30-2:30), and hourly frequency Saturday, Sunday, Holidays.
- There are no shelters at the East Columbia Street bus stops adjacent to the park.
- Along East Columbia Street, there are 1.5m-wide sidewalks and no boulevards adjacent to the arterial traffic on the East Columbia Street truck route.
    - n/b stop north of Braid St – no shelter, timetable – 212m south of Hoult St entrance

- s/b stop south of Braid St – no shelter, bench, timetable – 280m south of Hoult St entrance
- n/b stop north of Holmes St – no shelter, bench, time table – 145m south of Hume St park access; MTP shows this as a priority for accessibility improvements
- s/b stop south of Holmes St – no shelter, bench, time table – 165m south of Hume St park access; MTP shows this as a priority for accessibility improvements

<u>128, 155 buses</u> – Braid Street

- Both of these buses run between the Braid St and 22nd St Skytrain stations.
- The 128 bus takes approximately 18 minutes for a 1-way run along 8th Ave. It operates with 20 min frequency most of weekdays (05:40 – 18:53), half-hour to hour afterwards and 30 min frequency Saturday, Sunday, holidays.
- The 155 bus takes approximately 20 minutes for a 1-way run along 6th Ave. It operates with 20 min frequency AM, PM peaks; 30 min frequency mid-day and post PM peak; and 30-35 min frequency Saturday, Sunday, holidays.
- There are no shelters at all but one of the Braid Street bus stops.
- Along Braid Street, there are 1.0m – 1.5m-wide sidewalks, no boulevard on south side, and a 1.0m boulevard on north side adjacent to the arterial traffic on the Braid Street truck route.
    - e/b stop east of E Columbia St – no shelter, bench, timetable – 330m from Fader St entrance
    - w/b stop west of E Columbia St – 430m from Fader St entrance
    - e/b stop west of Fader St – no shelter, bench, time table – 210m from Fader St entrance; MTP shows this as a priority for accessibility improvements
    - w/b stop east of Fader St – no shelter, bench, time table – 240m from Fader St entrance; MTP shows this as a priority for accessibility improvements

<u>Braid St Skytrain Station</u>

- via Braid St – 720m to nearest park entrance, walking conditions noted above
- via greenway – 700m (path east and north sides of Amazon Fulfillment Centre)
    - From northeast edge of Braid Street Skytrain Station, the greenway entrance is unlit and in large parts unkept.
    - The path runs parallel and above the Brunette River and ranges from 1.5m – 3.0m in useable width, with overgrown vegetation in portions.
    - It is devoid of active or passive surveillance opportunities. Hikers and cyclists are walled between two fences for most of the 700m between the station and the park entrance.
    - The surface is an uneven mix of gravel, dirt, and grass until approaching the park's paved surface.

### 5.1.3 Within Park

- The park is bisected by a steep grade change. The grade is elevated in the south and west and falls to the level of the Brunette River bank.
- Flatter areas in the north and south ends of park contain most active amenities: playground, water spray park, tennis courts, baseball diamonds, and picnic areas. They are served by a combination of paved and dirt paths (see **Figure 14**). The City reports that this is intended to be a 6' wide gravel path but has been narrowed by inconsistent maintenance and the encroachment of vegetation.[3]
- A 4m shared path for CVG runs along east edge of the park; it is accessible from Garrett Street and runs down via gravel path to lower park level in north (see **Figure 15**).



**Figure 14 – Hume Park access (south side of park) road facing south**



**Figure 15 – Paved path along east edge of Hume Park**

[3] City Transportation Planner Stephen Blore's notes on the original June 6, 2018 draft memo

- Areas of steep transition in the centre of the park are marked by wooded areas and stairwells (see **Figure 16**).



**Figure 16 – Stairwell connecting lower (south) and upper (north and west) areas of the park**

- Wayfinding signage exists at major intersections within park; but is weathered and faded in places (see **Figure 17**).



**Figure 17 – Examples of faded and weathered wayfinding signage**

## 6. SECTION 2.3.6 – INTERFACE WITH SAPPERTON GREEN DEVELOPMENT

- The adjacent Sapperton Green development area will include direct east-west connections to CVG pathway on the east side of the park as well as direct pedestrian/cyclist access from Wilson and Rousseau streets (see **Figure 18**).

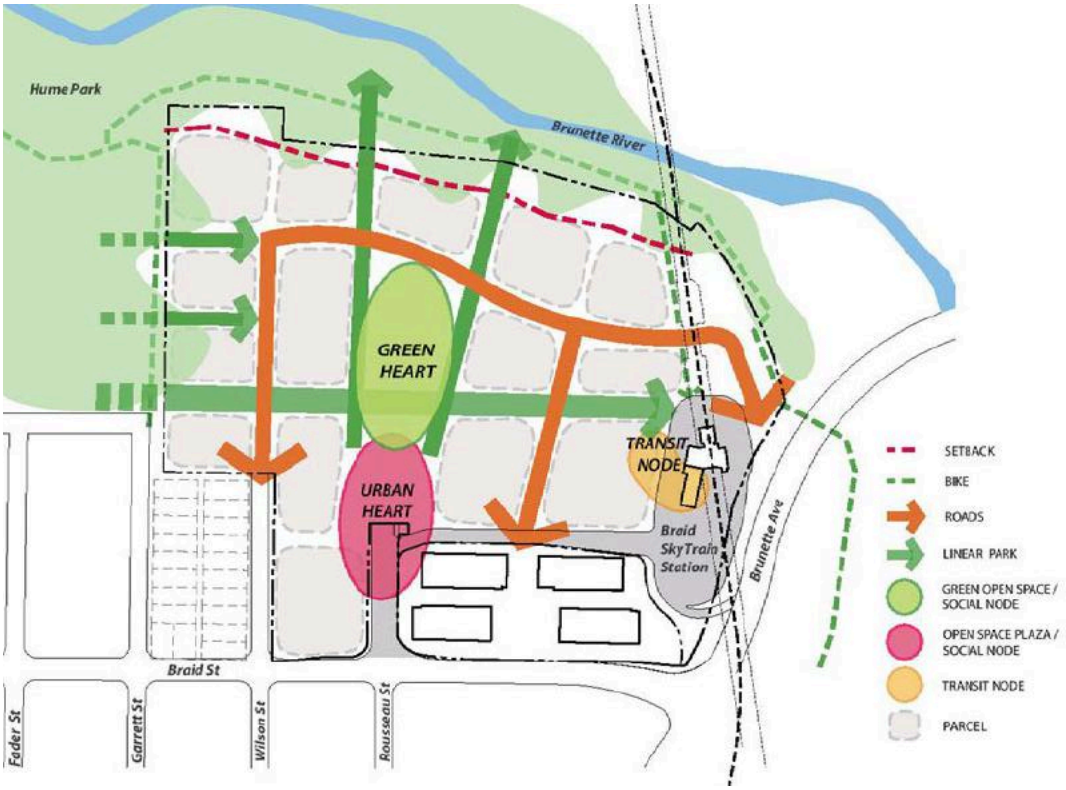



**Figure 18 – Sapperton Green Connection Plan (PWL)**

- The new connections will provide a more direct access between Braid Street Skytrain Station and the park and decrease walking distance to approximately 400m.

## 7. SECTION 2.3.7 – ACCESSIBILITY

- Accessibility for wheelchairs, strollers, and mobility-impaired is generally poor. Accesses at Fader Street, Garrett Street, Hoult Street, and Holmes Street are either via stairwells, uneven dirt paths, or steep landscaped grades.
- The only areas accessible by wheelchair are Kelly Street, Hume Park School crossing, and Hume Park access road.
- A disabled park patron at Hoult Street would need to travel 530m to access south side of park (via East Columbia Street, Braid Street, and Kelly Street) or 690m to access the picnic area off Hume Park access road.

- Areas within the park are also generally not accessible. The only non-vehicular connections between the south and north sides of park require travel over gravel surfaces at steep grades. All other accesses from the flat southwest corner of park are via stairs or wooded paths of various grades, width, and quality of condition.
- As noted above and shown in Figure 13 and Figure 15, there are no sidewalks on the north side of Garrett Street or along Hume Park access road.
- Conditions of access via the CVG are also noted above.

## 8. HIGH LEVEL GAPS AND OPPORTUNITIES

Based on the information and evidence noted above, the following high-level opportunities exist to improve access, accessibility, and parking to and within the park:

- Improvements to access via transit (bus stop upgrades and desire path opportunities across Braid Street and East Columbia Street
- Additional accessible entrances and access from East Columbia Street and Garrett Street; this may potentially include sidewalks on the north side of Garrett Street
- Improvements to visibility, crossing distance, and lighting for pedestrians travelling on and across Garrett Street in the vicinity of the park
- Provide dedicated cycling parking facilities to north and south portions of park.
- Improvements to lighting within and adjacent to the park.
- Improved guidance and traffic control for pedestrians entering the park from Garrett Street, Fader Street, and Kelly Street
- Sidewalks or segregated facilities for pedestrians along Hume Park access road
- Improved accessibility network connecting south and north/west edges of the park
- Upgrades to CVG safety, visibility, lighting, and surfaces to Braid Street Station and beyond on East Columbia Street/North Road north into Coquitlam
- Consider formalizing parking area on south end of Hume Park access road with clearly-marked spaces (reduce likelihood of impromptu and inefficient parking behaviour by individual motorists).
- Consider opening more of the west side – or the whole of the west side – of Hume Park access road to parking bays.
- Revisit utilization and effectiveness of existing permit parking restrictions on Garrett Street, Fader Street, and Kelly Street – per phases 1 and 2 of Sapperton / Massey Victory Neighbourhood Transportation Plan.