IONA ISLAND WASTEWATER TREATMENT PLANT PROJECT
FERGUSON RD. AND CAUSEWAY IMPROVEMENTS
ONLINE CYCLING COMMUNITY STAKEHOLDER MEETING #1
JUNE 15, 2022
SUMMARY

Summary of the Iona Island Wastewater Treatment Plant (IIWWTP) Project (the Project) – Ferguson Rd. and Causeway Improvements Cycling Community Stakeholder Engagement Meeting #1 (Meeting), held June 15, 2022 via videoconference.

1. **Welcome**

   Michelle Candido, Communications and Education Coordinator, External Relations, Metro Vancouver (MV), called the Meeting to order at 1:02pm and welcomed participants.

   The list of meeting participants is included in Appendix A.

   Ms. Candido commenced the presentation titled "Iona Island Wastewater Treatment Plan Projects – Ferguson Road Upgrades and Causeway Improvements" and highlighted:
   - The meeting agenda.
   - The meeting purpose which is to obtain input on the Ferguson Road and Iona Causeway Improvements conceptual designs.
   - The meeting is being recorded for note-taking purposes, and the meeting summary will be shared in approximately 2 weeks.

2. **Iona Island WWTP Project**

   Daniel LeBlond, Senior Project Engineer, Metro Vancouver provided information on the IIWWTP Project and highlighted:
   - The Project goals, which include wastewater treatment to meet regulatory requirements, resource recovery, and community and park integration.
   - The integrated design process (IDP) used for the entire Project. The goal is to incorporate comments into the design as we move forward.
   - Information on the current IIWWTP including that it provides primary level treatment and that much of the plant is at the end of its service life. The regulatory requirement to upgrade the plant is a big driver of this project.
   - Project schedule in relation to early and enabling works; Plant construction completion estimated to be in 2035.
   - Ferguson Road and Iona Causeway projects estimated completion in 2026 and are considered part of the early and enabling projects.
   - The secondary upgrades to the IIWWTP will require approximately 44,000 tonnes of reinforcing steel, 75,765 tonnes of steel piles, 420,000m3 of concrete, 2.35M m3 of import fill and 2.35M m3 of export fill.

- Terminology of road network: Ferguson Road East passes Canada Post building from Grauer Road; the north-south section is called the Iona Causeway; the road into the park is called Ferguson Road again.
- Ferguson Road is the sole access to Iona Island through the Iona Causeway. It is an important link for treatment plant staff, Iona Beach Regional Park (the Park) visitors, and cyclists.
- Ferguson Road has distinct sections including the eastern section (2.3km long with 2 lane road, centre turning lane, and 1.8m cycling lanes on both sides of the road; Ferguson Road (west of Canada Post) (1.8km with 2 sub-standard vehicle lanes, poor pavement conditions, no active transportation connections and bordered by deep drainage ditches); and the western section with gravel walking path to Park.
- Southern section of Iona Causeway – reasonable condition of pavement, no shoulder on one side, with a bit of a shoulder northbound.
- Northern section of Iona Causeway – road condition in reasonable condition. Bit of a shoulder northbound, and a new bike lane southbound.
- Recently updated speed restrictions including 50km/hr east of Canada Post, and 30 km/hr west of Canada Post, all the way to the Park.
- Current Ferguson Road users include automobiles, trucks, road/training cyclists, and recreational cyclists.
- Types of cyclists: our understanding is road/training cyclists look for long stretches of road and recreational cyclists prefer to not ride next to vehicles and travel at lower speeds.
- Construction traffic:
    - Early works (2024 – 2028): peak of ~ 22,000 trips per month.
    - Plant (2028 – 2035): peak of ~ 45,000 trips per month.
    - More trucks for early works; during plant construction, trucks will be related to labour and materials.
    - The numbers above are augmented with a planned barge berth facility to bring materials to site, to help meet our objective of reducing traffic as much as possible.Goal is to ensure we have safe and continued access for all users to the Park and the Project site throughout construction.

3. New Ferguson Road Alignment and Iona Causeway

Basse Clement, Manager of Transportation Planning, McElhanney; and Shane Anderson, Transportation Engineer, McElhanney provided information on the Ferguson Road alignment and Iona Causeway, and highlighted:

- As part of diversifying its revenue sources, YVR is looking to develop light industrial, and logistics types facilities in the Northlands area to complement the existing facilities at the airport. During planning with YVR, McElhanney explored different alignment opportunities to connect into the existing road and trail networks, and ended up with the preferred green alignment (see presentation, slide X). Just north of the green alignment is Sea Island Conservation Area [SICA] land that was set aside for habitat compensation when the 3rd runway was built and cannot be developed.

- The new section of the re-aligned Ferguson Road will include two vehicle lanes (3.3m wide), a centre turning lane (3.3m lane to provide future left turn access into future development on Ferguson Rd), bike facilities on both sides for sport/training road cyclists (1.8m shoulders), a boulevard to provide a buffer (4.4m wide), and a multi-use path (MUP) for approximately 2.5km for pedestrians and recreational/leisure cyclists. This is consistent throughout Ferguson Rd, west of the Canada Post building. See presentation, slides XX to XX.
- The improvements are in line with the City of Richmond's (CoR) Official Community Plan for Mobility and Access, Metro Vancouver's Regional Growth Strategy, and Translink's Regional Transportation Strategy.
- The Iona Causeway includes two vehicle travel lanes going in either direction (3.3m each), a multi-use pathway (MUP) (2.5m) with a crossing, approximately 400m plant entrance queue lane, a shoulder cycling lane on either side (1.8m), and a narrower boulevard (1.5m) between the shoulder and MUP.
- The curve radius is for a 50km/hr to 60km/hr turn, and the curve will help moderate speed.
- South section of causeway: Multi-use path and boulevard separation is narrower here, because we are in an environmentally sensitive area with unique habitat. It's possible the MUP may be wider during full build out, depending on the results found in the environmental studies.
- North section of causeway: the MUP is on the other side because people prefer the sea side section, and pedestrians will eventually need to cross and tie into the trail network at Iona Beach Regional Park. This crosswalk location was selected due to the curve that will help moderate speeds and provide sufficient sight lines.
- The conceptual MUP design has a crossing mid-way along the Iona Causeway. During detailed design this will be finalized, we envision that it will include road stripes and flashing beacons.

4. Discussion

The following table summarizes questions and comments expressed by participants, organized by topic, throughout the meeting.

Issue, Comment, Question	Metro Vancouver (MV)/ McElhanney Response
IIWWTP Projects	
The project will continue until 2038. Where in that timeline do things like road changes occur?	There will be more noticeable upgrades at the front, then potentially some upgrades in the middle, and then more at the end. The first round is focused on safety and access for all users, pending the need for the middle step there may be full heavy construction work, and the end step to the road network will be upgrades to ensure climate resiliency.

Issue, Comment, Question	Metro Vancouver (MV)/ McElhanney Response
Ferguson Road and Iona Causeway Existing Conditions	
All attendees on this call are road cyclists. The differences between road cyclists (recreational/leisure) and sport/training cyclists (competitive) is the way they ride. Sport/training cyclists tend to be close wheel on wheel, and that can impact passing distances.	Noted on the terminology, between different types of cyclists (road cyclists vs. sport/training cyclists), and recognize there is a difference in infrastructure that these groups are looking for.
Proposed Ferguson Road Upgrades	
Will the speed limit be 50 km/hr on Ferguson and the Causeway?	Once the upgrades to Ferguson Road are complete, including the widened travel lanes and 1.8m bike shoulders, we are planning on posting the speed limit on Ferguson Rd. as 50 km/hr. We are expecting to post it at 30 km/hr on the Causeway itself.
What is the typical travel speed on Ferguson today?	There were some traffic calming measures put into place more than a decade ago before the Canada Post building was there to address speeding and street racing. One thing traffic engineers look at is how to get a lane that does not encourage speeding, but still providing space for other users, like cyclists. We have considered 3.3m lane widths which is considered a fairly minimum lane width for large trucks. The radius of the horizontal curve to the Plant is designed for 50 km/hr, so it should moderate speeds coming onto the Causeway.
We see that when roads look like highways, even if they're not called that, people drive on them like highways. Example is Southwest Marine Drive in City of Vancouver (COV), which has wider lane widths for buses and trucks. CoV was not	Speeds are down, anecdotally. When the Canada Post facility opened, we saw that speeds were down because of truck traffic slowing down and turning in. We think a similar thing will happen on this road. The speeds should moderate over time when logistic

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concerned about increased speeds, but they've seen that the speed has gone up by 5-10km/hr. We've had numerous crashes along there, happening at higher differential speed, therefore higher rate of injury. I wouldn't want to see travel lanes any wider, I would be surprised to see people driving at 50 km/hr, and I suggest you think about things that would encourage slowing.	facilities are operating and vehicles, especially heavy trucks, slow down to make a left turn. The weekend is more difficult to predict when logistics facilities aren't operating at the same level and Park users dominate. We are trying to accommodate all users, noting that when we make travel lanes wider there are often other problems.
Provide a caution that this may be more of a highway setting where cars will go faster.	Noted.
1.8m shoulder should be the minimum in this case, whereas 2m is better. The issue is there is no buffer painted, which is better than a single line.	Noted.
When we talk about the 1.8m shoulder in a rural setting, we're often thinking of long straight stretches in rural areas where cost is an issue and very low user volumes. On Ferguson Road, you will have higher volumes because it's a destination, especially on weekends.	Noted.
Anything that can provide additional separation, even if its 200mm of cross hatching between bike lane and travel lane is helpful. The cross-hatching should be additional width, not part of the bike lane or travel lane. A single painted line is a bare minimum, two parallel lines are a bit better, the next step is to put the occasional pylon between the two lines. You can also make it a double width line.	Noted.
The bike shoulder and MUP is a good solution for the different bike users (recreational vs. sport riders).	Noted.

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What do you think the walking volumes will be? MUP along the seawall in Vancouver are not successful, because they have more walkers than can be reasonably accommodated. People will switch between the 2 paths (MUP vs. shoulder) based on walker volumes more than anything else.	Currently there is no walking volume because there is no facility there now. Once the MUP is installed, it will be quite an attractive facility, however most of the pedestrians will be parked at the Iona Beach Regional Park, approximately 1.5km away. There is an expectation that workers at the future logistics facilities will walk along the MUP during their lunch break, etc. There is a regional strategy to connect this location to McDonald Beach, so that may increase pedestrian volumes. We expect initial uptake of pedestrians to be low, and then increase as people learn about the facility. We expect cyclists to be there from day one.
I wouldn't go any narrower than 4m for the MUP	Noted.
The sport cyclists will not use the MUP, unless it's empty. They don't want to be blocked by pedestrians and other users.	Noted.
There should be points where people can cross back and forth from MUP to shoulders through boulevard. This crossover will provide openings for transitions. They don't need to be designed turn lanes, and it only needs to be every ½ block or block.	Our idea is to line up any transitions on the MUP with the new development on Ferguson Roads' driveways, entrances etc. Envisioning 3-4 transitions along Ferguson road, at 90 degrees so it won't be a high speed transition.
One challenge we face is that other users think bikes shouldn't be there (on the sidewalk), or that they are not in their lane. The best way to deal with that is informational signs with a tone that says "Slowing down to see the view, use this lane" or "Travelling quicker? Please use this lane." These tones allow people to self-select. One way to do this on the MUP without a lot of signs is to paint a centre line on it to delineate	Noted.

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direction. This is important because pedestrians do not have a sense of lane discipline.	
A note on physical barriers – the need depends on the travel speed and volumes. As travel speeds and volumes climb they become necessary for cyclists to feel comfortable, however they have their own issues. For concrete barriers to work well, they need to be continuous. If you have driveways and there are gaps in the physical barriers, that's where the crashes occur. Some large vehicles can shift them all the way to the curb since they usually aren't pinned to the road.	Our current planning is to avoid physical barriers between shoulder and vehicle lane because we know there are groups of cyclists who do not want this and will travel in the general purpose lane impeding vehicles.
If plastic pylons are used, it's important they not be the single ones mounted on a spring, they should be the ones that are attached to a plastic strip attached to the roadway; they're rigid but they still bend for emergency purposes. The plastic ones are good because they also prevent cars from parking in the bike lane. But sport cyclists don't like these because it prevents them from forming a pace line where they're riding side by side (can be 2 to 4 bikes wide during rotations). I would not start off with physical separation here for now. You can install plastic pylons later if in practice there are issues.	Noted.
Proposed Iona Causeway Improvements	
No concerns about having the MUP cross.	Noted.
The crossing appears to be quite close to the curve, and should be further away for better sightlines.	This area will be posted at 30 km/hr. We've seen that people tend to drive slower on this section because there are bird watchers and pedestrians.

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	We checked the sight distances around the corner, and you can see several hundred meters, but we can address this during the next design phase. The crosswalk is located here now to accommodate for the future breach and bridge.
I recommend you consider using amber flashing beacons activated by users on the MUP. The best example of the success of those is on the Stanley Park Causeway.	Noted.
I am not comfortable with the queueing lane on the right of the cycle lane because you have vehicles on either side of it. People have expressed to us that they feel very uncomfortable in those types of situations. You would use plastic pylons when you expect cyclists will get sandwiched between traffic. You wouldn't put the pylons on both sides, but just on the side with the slow moving trucks so the trucks understand that it's not a place for them to park.	There are 2 alternatives to this: 1) Leave the cyclists on the outside, so it's truly a shoulder 2) Make shoulder more generous adjacent to the queue lane Initial analysis shows we don't expect long queueing lanes during high cycling volumes. We anticipate that sport cyclists will be taking the road.
I think it's better to have the bike lane be the shoulder, with a crossing at the end.	We are open to this. The concern is if a queue has developed, and the cyclist is using the crossing, when they go to use the crossing in front of the truck, a car may not be aware the cyclist is there. If we did have the bike lane on the shoulder with a crossing, we would need to have a very wide crossing, with lots of signage. The reason we didn't put the bike lane on the shoulder at this location is because we didn't think the sport cyclists would use the shoulder there, and instead would take up the lane, and also that the queueing trucks would park in it even more. We are open to changing this.

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If the only time the queue lane is being used is by trucks that are parked, then it's more of a parking lane and less of a queue lane. If that's the case, then I'd keep the cycling lane on the left side, but I would think about strips of pylon etc.	Noted.
With the bike lane as a shoulder, there should be a MUP crossing at the end of the queueing lane, or at the very least the path should be permeable. The reason for this is if a cyclist sees a queue of trucks, they can cross over.	Noted.
If you want to see where people drive, look at where the lines on the street get erased or where wheel tracks are evident after snowfall.	Noted.
The best would be if you could put a boulevard separation between the queue lane and bike lane, like you have with the MUP.	If we have space for a boulevard separation between the bike lane and queueing lane, we can keep the bike lane to the left of the queuing lane. If we can't find the separation distance, then it sounds like it's better to put the bike lane on the right side. One of the concerns with a boulevard is that if a queueing truck needs to get out of that lane/breaks down, but we could make the boulevard traversable in a pinch.
It might be better to put the bike lane on the right side, or the left side, but in both alternatives you need to consider a row of pylons on a strip to prevent encroachment.	Noted.
We see a wide variety of approaches to temporary traffic management plans (TMP), depending on how far apart they are, how familiar they are with active transportation. Often the people doing traffic management aren't keyed in to the issues with active transportation.	Noted.

Issue, Comment, Question	Metro Vancouver (MV)/ McElhanney Response
They're used to handling trucks, and now they have to manage the interface with cars, trucks and cyclists. When we have longer running projects where we have lots of meetings with the traffic management crew, they get it.	
Other	
You may be contacted by the local Richmond cycling group.	Noted. It would be our pleasure to speak with them.
How far do the road upgrades go?	Up to the entrance to the Iona Beach park.
Are there plans to do anything further, especially along the Iona jetty?	We have plans to upgrade the road all the way up to the washrooms, which goes beyond the Iona Jetty, but not on top of the Iona outfall jetty.
For a cycling amenity, we recommend that it be pavement on the Iona jetty. It doesn't need to be wide and big, but it needs to be smooth.	The Iona outfall jetty is outside the scope of this project. We will consider this in future engagement.
If you want to promote public engagement, we can use our social media channels. Hub has 40,000 supporters who would love to share their opinions.	Noted.

5. **Next Steps & Closing Remarks**

   Ms. Candido highlighted next steps including:

   - Input received during this meeting will be reviewed for design consideration
   - MV will post the meeting presentation and summary on the Metro Vancouver website within the next month
   - MV will provide an update on the final design results and construction timeline when available.

   The meeting concluded at 2:52PM.

APPENDIX A – PARTICIPANT LIST

Amanda Chow, YVR
Jeff Leigh, HUB Cycling
Lisa Storey, HUB Cycling
Daniel LeBlond, Metro Vancouver
Michelle Candido, Metro Vancouver
Nelson Szeto, Metro Vancouver
Lena Zordan, Metro Vancouver
Fatima Ansari, Metro Vancouver (Note taker)
Tina Chiu, Metro Vancouver (Technical support)
Shane Anderson, McElhanney
Basse Clement, McElhanney