

**District of North Vancouver
Community Monitoring & Advisory Committee
Seymour-Capilano Water Utility Projects**

Meeting Notes – May 21, 2014

Agenda

1. Seymour-Capilano Filtration Project
2. E2 Shaft
3. Seymour Main No 2 Assessment Study
4. Capilano Main No 9

Attendance (Bolded names indicate attendance)

Community Advisory Committee Members:

- Lorraine Jamieson Capilano / Grouse Woods Residents Association
- **Peter Thompson** Edgemont Community Association
- **Corrie Kost** Edgemont Community Association
- **Norm Daniels** Lynnmour South Inter-River Community Association
- **Lee Gavel** Lynn Valley Community Association
- **Dan Ellis** Lynn Valley Community Association
- **Anne Cockle** Blueridge Community Association

District of North Vancouver Representatives:

- **Mayor Richard Walton** DNV Council
- **Councillor Robin Hicks** DNV Council
- **Carol Walker** Manager – By-law Enforcement
- **Steve Ono** Manager – Engineering Services/Deputy General Manager
- Erica Geddes Engineering Services
- **Mairi Welman** Strategic Communications & Community Relations

Metro Vancouver Representatives:

- **Carol Mason** Chief Administrative Officer, Metro Vancouver
- **Tim Jervis** General Manager - Water Services Department
- Frank Huber Manager - Major Projects, Management Systems & Utility Support Division
- **Murray Gant** Senior Engineer - Major Projects, Management Systems & Utility Support Division
- Steven Lewis Senior Engineer - Water Services Department
- **Goran Oljaca** Manager - Engineering & Construction Division
- **Hein Steunenberg** Senior Engineer - Engineering & Construction Division
- Mark MacConnell Senior Engineer - Engineering & Construction Division
- Andrew de Boer Senior Engineer - Water Services Department
- **Vanessa Anthony** Consultation & Community Relations Coordinator - Public Involvement Division
- **Steve Billington** Community Liaison Officer - Public Involvement Division

Pacific Liaison and Associates, Inc.

- **Jeff Spruston** Construction Manager

Guests:

- **Scott Ellis** Grouse Mountain
- **Grig Cameron** Resident – Capilano Road

Facilitator:

- **Raymond Penner** the Strategic Action Group
- *Note: These notes have been prepared by the facilitator to capture the essence of the meeting and are not intended to be a verbatim record. CMAC member advice is noted in bold italics. Where it is appropriate, comments from Metro Vancouver, Pacific Liaison and Associates Inc., MMM Group Inc. or the District of North Vancouver are noted as [MV], [PLA], [MMM] or [DNV] respectively.*

1. Seymour-Capilano Filtration Project

a. Capilano Pumping Station

- Complete

b. Capilano Energy Recovery/Break Head Tank

- Turbine inlet valve and actuator installation is complete
- Wicket gates installation complete
- Cables between switchgear and panels are complete
- Overall, turbine installation is approximately 55% complete

c. Capilano Site

- Grout plug welding complete
- TWT sandblasting in preparation for lining touch-ups
- RWT vertical shaft pipe preparation in progress
- RWT Cross at shaft bottom installed; welding complete

d. Twin Tunnels

- Preparing for vertical shaft work
- Tunnel liner pipe extended to Tee locations
- Shaft bottom tees installed; welding in progress

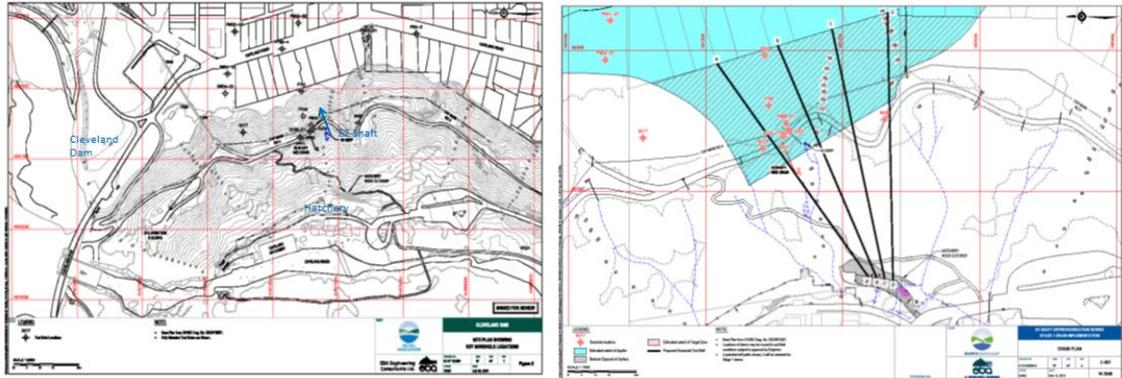
e. Tunnels CMAC Items

- Capilano shaft work 24 hours/day – no noise complaints received since last meeting
- Late night deliveries of over-sized loads to Capilano are upcoming
- There will also be increased concrete deliveries to the site as the grouting in the shafts takes place

2. E2 Shaft

- the E2 shaft was installed in 1957/58 to collect seepage on the East Abutment slope resulting from elevated groundwater pressures in the lower aquifer
- to date it has successfully reduces localized groundwater pressures, but soil loss still occurs

- the shaft is nearly 60 years old, and is nearing the end of its service life; the intent of this project is to replace the aging drainage structure using newer, more advanced technology
- the site plan for the E2 Shaft project, located near the Capilano Hatchery is shown below on the left and the drain plan schematic below right shows the location of the test bores that will take place (up to 3 will be done at first with the possibility of an additional bore)



- the project will drill up to 3 drains, each about 180 m long; each hole to take up to 30 days to drill followed by a 10 day monitoring period
- DNV Noise Bylaw Variance was granted April 7, 2014 to allow 24/7 drilling, as required
- site fencing and implementation of environmental controls are underway and the drilling contractor is preparing for mobilization
- the drilling scheduled is to commence in late May or early June 2014, pending mobilization schedule by contractor; the project is to be completed by late September 2014
- drilling impacts are as follows:
 - intermittent trail closures
 - protective fencing and descriptive signage
 - portions of the drilling will require 24/7 work
 - noise mitigation measures will be implemented if necessary; noise consultant to perform noise monitoring at start of and during drilling work
 - work area will be permanent to provide on-going access to the drains

Discussion

The diagram indicates that the ends of the bore holes will be running under private property. Is this an issue?

[MV] We don't anticipate any issues – this is similar to the twin tunnels project but not as deep – we will be about 60-70 metres beneath the surface.

3. Seymour Main No 2 Assessment Study

- Seymour Main No. 2 is the only water main that comes out of Seymour Lake and goes to the filtration plant and we are examining the geotechnical conditions along this main to determine what we might need to do in the future for the planned Seymour Main No.5 North which would twin Seymour Main No. 2 in this 11 km stretch
- EBA Engineering has been hired to conduct the geotechnical analysis

- the consultant has examined the historical information and has suggested a drilling program to examine the conditions – this will be a combination of 12 sonic bore holes and 4 auger holes and will be done during May
- all the holes are on Mainline Road which is closed for public vehicles but still accessible to pedestrians
- when this is done, they will determine if a second phase will be required and what that might constitute

Discussion

Is the study going to determine what shape the present main is in?

[MV] This will be focused on the geological conditions and, depending on what we find, will also allow us to determine if sections of the water main need to be improved or not. This will also be used to help with the future alignment of Seymour Main No. 5 North.

If the geological conditions are not right, how are these improved?

[MV] We could do a number of things, including moving the line, stabilize the ground and redesign and replace sections of the main to address the various conditions.

Have you perceived a problem that is leading to this study?

[MV] There are two sections of the main which are being closely monitored and which have required some work in the past to do local stabilization.

Are there any concerns where the public has pedestrian access to the areas where the drilling will take place?

[MV] The drilling will take place in very localized areas and will only involve one drill rig at a time which will be safe and confined to one small area; we don't expect any impact to the public.

Will you be doing anything to examine the internal well-being of the pipe?

[MV] As part of the filtration plant project, we had to cut into the existing pipe to do the tie-ins and what we saw was that the pipe was in perfect shape.

How often do you have to do corrosion and pipe protection inspections?

[MV] Seymour Main No. 2 likely needs protection and we are monitoring it on a regular basis. We have to upgrade the system following the filtration plant project as we have added a number of new pipelines.

How often does this involve excavation?

[MV] Since I have been with Metro since 1991, we have not had to do this even once.

What is the design life for Seymour Main No. 2?

[MV] Today we design pipe lines to have a 100 year life expectancy. Seymour Main No. 2 is 60 years old and in good shape. Without the assessment being completed, we might assume that 100 years is a reasonable number for that main as well but this will need to be confirmed with the study.

Has any assessment done of the upper valley with regard to the possibility of a major slide that could disrupt the pipeline?

[DNV] There has been a broad slope stability assessment done District wide and some targeted locations but nothing has been done specifically in that area that I am aware of.

[MV] We will ask our consultants this question. The consultant has looked at the east side of the valley and has concluded that area is not suitable for the future Seymour Main No. 5.

4. Capilano Main No. 9

a. Phase 1 update

- the following work for Phase 1 (valve chamber at Capilano Canyon Regional Park parking lot area) has been completed:
 - pile installation (February 28th)
 - pipe fabrication offsite (April 9th)
 - excavation and shoring (May 16th)
- work is currently taking place on:
 - concrete slab construction (5% complete)
 - chamber pipe installation (0% complete)
- the schedule for completing this work can be seen in the table below:

PHASE 1	2014											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Excavation and Shoring												
Chamber Construction												
Pipe Installation												
Architectural/Landscaping And Site Restoration												

Discussion

[MV] We would welcome input with regard to the timing of the pipe installation – we have some control over this timing. This is a scheduling issue and we need to know in advance if the current schedule isn't appropriate.

[MV] We have had 4 complaints / comments about the reduction to the size of the parking lot due to the excavation.

The perception is that contractor parking is taking up most of the available spaces with very little left for the public. You had mentioned moving the contractor parking in a previous CMAC meeting.

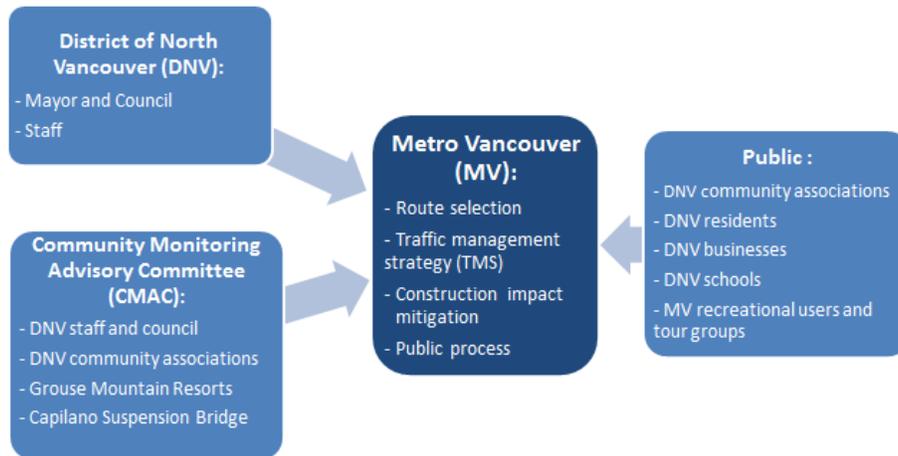
[MV] We have relayed this message to the contractor to find alternate parking and hopefully that will help. We also have Metro Vancouver construction workers there and we will look at what can be done about their parking that won't impact the parking lot.

If you have had 4 complaints during the low demand season, those are likely to build up if the parking availability doesn't improve.

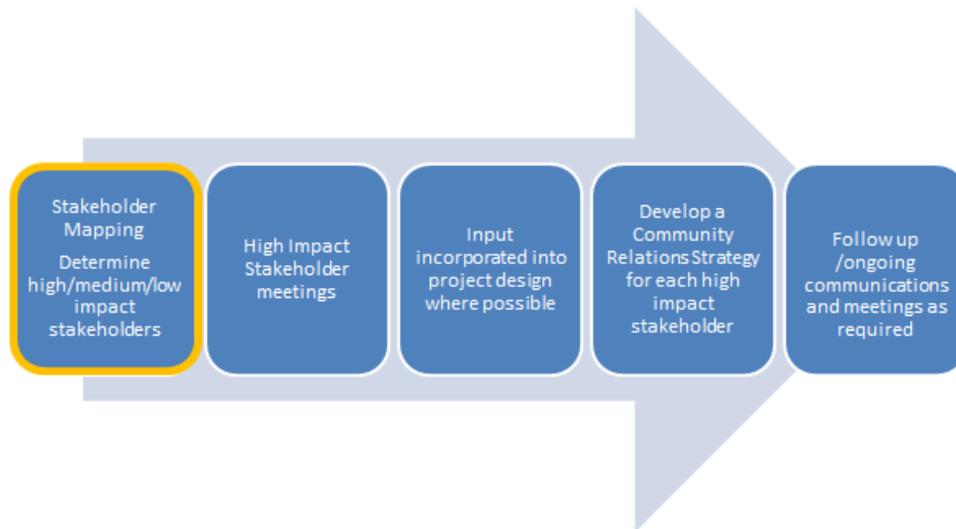
[MV] We can report back at our next CMAC meeting with respect to this schedule and the concerns about parking.

b. Phase 2 Public Process

- a schematic of the audiences for communication about Phase 2 is seen below:



- the process that we will be undertaking for the design phase is shown in the following flow chart:



- the criteria that we will use to determine who the “high impact” stakeholders are includes
 - large/high profile businesses with high number of customers/deliveries
 - restricted or blocked access
 - construction activities close to the property line
 - impacted by traffic detours
 - schools, hospitals, institutions
- at this point, our plans involve meetings with the following:
 - Grouse Mountain Resorts
 - Capilano Suspension Bridge
 - All businesses on Capilano Road
 - Canyon Heights Church on Montroyal Blvd.
 - Schools - Five in the immediate area

- DNV Fire Department
- key issues that we have identified to date include:
 - traffic impacts
 - detour routes
 - emergency and vehicle access
 - noise
 - construction duration
 - construction hours
 - educational opportunities
 - environmental impacts
 - public safety
 - parking restrictions
 - deliveries
 - recreational groups
 - special events
 - community improvements
- we are planning to hold an June 19, 2014 information session with a focus on route selection, an overview of issue identification and an overview of impact mitigation
- following that on July 10 and a date (TBD) in August we are planning workshops that will summarize the June 19th meeting, provide an overview of route selection, focus on traffic and construction impacts and have a roundtable discussions for input
- an example of our approach would be to have a discussion of work hours related to the length of construction as shown in the following chart:

Construction Hour Options	2015				2016				2017			
	3 mo	6 mo	9 mo	12 mo	3 mo	6 mo	9 mo	12 mo	3 mo	6 mo	9 mo	12 mo
Five Day Work Week (7am – 8pm)	9 months											
Six Day Work Week (7am – 8pm)	8 months											
Seven Day Work Week (7am – 8pm)	7 months											
Partially Restricted Construction Hours (7am – 5pm)	15 months											
Fully Restricted Construction Hours (9am – 3pm)	33 months											

- our community meetings for the design phase will be co-sponsored with Edgemont and Upper Capilano Community Association (EUCCA)
- notification will take place via email to EUCCA database, North Shore News and North Shore Outlook ads, DNV and MV websites and flyer notification hand delivery

- follow up is planned with hand out and online feedback forms, summaries posted on webpage and emailed to attendees and slides and video footage of presentation posted on webpage
- our community relations strategy for the design phase will be focused on high impact stakeholders including:
 - Grouse Mountain
 - Capilano Suspension Bridge
 - each of the five key schools
 - residents/businesses directly impacted on Capilano Road
 - residents/businesses impacted in general construction area
- community relations strategy example for Canyon Heights School would include public involvement approach including a list of specific issues and mitigation measures and our communication tactics including signage, email communication to database of parents, written communications delivered through admin office and weekly meetings with CLO and principal
- the following table shows our planned schedule for the engagement program for the design phase

	2012/ 2013	2014											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DNV Staff Communication		[Solid blue bar across all months]											
CMAC	●		●	●	●	●	●			●		●	
Stakeholder Engagement	●		●	●	●	●	●	●					
Public Meetings							●	●	●				
Public Communication	●						[Solid blue bar across Jun-Dec]						

- community liaison during construction (2015) will include day-to-day response to community issues, meetings with impacted stakeholders, public involvement representative on-site, update project information line and contact info on all communication materials
- public involvement during this time will include public meetings, fact sheets - broad community, email updates – MV, Grouse and EUCCA databases, construction, information and “businesses are open” signage, newsletter updates – localized groups of impacted residents, driveway blockage and utility disruption notices, website updates and Twitter - from MV to DNV

Discussion

[DNV] North Vancouver is sort of a captive audience and there are other web sites that serve the North Shore such as the City of North Vancouver and the District West Vancouver and perhaps you should also use these other web sites.

[MV] We will build on the list that we are currently working with.

Is there a timeline to deal with Coast Mountain Bus regarding a shuttle service?

Coast Mountain schedules in 6 month increments.

Most of the target schools on the North Shore also have bus routings where they are picking up their students.

Ministry of Highways will also need lots of lead time for the temporary highway signage for both directions.

[DNV] What about other major developments the District is involved in?

[MV] We are coordinating through the District in all of those projects.

[DNV] Also what about events, including school events that might be impacted by this? You might want to also coordinate with the Recreation Commission and the schools about these.

[DNV] The recreation centre on Queens will be undergoing major construction during the whole time of this project – this likely won't disrupt traffic but you need to be aware of this. Also there is major construction that will be happening on Ridgewood and the SuperValue site in Edgemont Village will be under construction contiguously. Managers for both of those sites will need to know that there will be zero tolerance for any blockages on these routes. This might impact construction costs for those projects for no lane closures for unloading on those streets.

Is there a contingency plan for potential bad weather in the winter months?

[DNV] We designate priority roads for those type of conditions to ensure that we keep those open. There can be shifting of priorities if we need to.

At the first public meeting, you need to be able to explain the “rolling construction” method that you have told CMAC about and what the distances and times are that will be under active construction at any given time.

[DNV] This could be set up with a rolling schedule on-line so that somebody could enquire about this by entering their address. This could be adjusted on a monthly basis to reflect the actual progress.

Some people could use this to plan their holidays.

You will need very detailed mitigation measures that will satisfy those residences that have a colossal change in front of their house for any extended period before you broach the issue. You need to be in front of this.

Does the District have a record of home occupation businesses on Capilano Road? This would be a special group that would need to be addressed – for instance if someone has a hairdressing business in their home and have clients coming there. Also if you can give anyone who is planning a major renovation project as much lead time as possible – they might be entering negotiations with contractors not knowing that access could be restricted.

I would like to know if Coast Mountain and Translink have any commitment to shuttle busses for those who will be cut off from normal access to transit.

[MV] We are in discussions with Coast Mountain Bus Company and we don't yet have an answer.

It takes a year to buy a shuttle bus. This planning needs to be done now – we only have six months. I am afraid that we are running out of lead time with respect to dealing with the transit issues. There will be inconveniences for a short time for those with a car but that doesn't address the transit issue – some of these are going to work, others to the various universities and so on. You will need to come to your first public meeting with answers to this question.

[Facilitator] When you have talked about the construction time, you have focused on the pipeline. However there is also the construction of the valve chamber at Capilano and Edgemont. The timing and disruption from this don't seem to be included in the communication and mitigation plans that you have

shared. The public will not see these as separate projects and will likely not feel that what is being communicated is honest if this is not included.

[MV] CMAC previously has encouraged us to compress the schedule by overlapping the pipeline and valve chamber construction projects. This is one option. The other is to complete the pipeline up to that point and then to have a separate construction project for the valve chamber.

[DNV] Why don't you start at each end and work toward the middle and do it in 4 months? I had assumed that the valve chamber was within the schedule that you presented but if it isn't, this needs to be figured out.

[MV] If your input is to have this as short as possible and this might mean two contractors or two construction crews, then we will have to see what we can do to make this happen.

If you close off each end, there is no place for people in the middle to get out.

[DNV] Actually there are opportunities for access and egress. If it is just local traffic on that section, there is Eldon and Sunset in the middle and after the construction gets past those, they can go north or south. There is a way of making this work from both ends. However we couldn't have people going to Grouse from elsewhere going there, only local traffic.

You might also consider starting in the middle and work both ways.

What is obvious from this conversation is that the minute you go in front of the public with people who haven't had the opportunity to work through this, you will be in trouble. CMAC has had months and we are still having this conversation.

[MV] Our intent was to take our current thinking to the public and ask for their help in working this out.

[Facilitator] I am hearing CMAC asking about various options, not consensus as there is not enough information. I am also hearing that there is consensus on the need for Metro to have adequately have explored the options that have been brought up, with a focus on shortening the construction time.

My belief is that the public will likely want to have the most construction happening in the least amount of time. The valve chamber should be happening simultaneously with the pipeline.

[MV] The suggestion for multiple fronts is something that we have done before and in most cases we would leave this to the contractor but this project is different because of the transit and road network constraints. We will take that suggestion away for further consideration.

[MV] The community will likely tolerate 6 days a week but not 7. Likely if you can do this under 6 months, people will be more tolerant.

[MV] In addition the business impact, not just on Grouse Mountain, but the 4 small businesses in the strip mall that could be wiped out with this project if we don't do something to help them. You also need to take into account that there are three different languages spoken there, Farsi, Korean and Chinese – if you have anyone in Metro that can help Steve communicate with these people it would be a good idea.

Grouse Mountain is probably the biggest source on any given weekend. If there is a way of allowing one-way traffic on Capilano Road on Saturdays, even if that slightly extends the construction schedule, that would be very important to us. We have had the opportunity to do a detailed review of the transportation management strategy. This is not complete yet and we have articulated a number of concerns and are hoping that we will have an individual mitigation plan. We think that there won't be any other business more impacted by this project than us.

The rest of CMAC should have the opportunity to examine the actual transportation management strategy to better understand what assumptions there are in the plan.

It would help moderate the discussion in the public if they had a better understanding of the impact on Grouse Mountain.

In our dealings with the District and Metro on this to date, we have shared some of our metrics including 1.2 million guests a year, 100 deliveries a week, and so on. We believe that the impact on our revenue could be in the millions of dollars over the construction period. Our busiest season is the “green” season when we do about 65% of our business. This is also the most profitable period as we have fewer 24 hour operations. On the North Shore, there are three alternatives for the recreating public and we have two competing operations in the winter on either side of us. If the perception by the public that this is an inconvenient location to get to and we don’t do a good job of communicating detour routes and so on, they will choose one of the other two options.

[DNV] There will also have to be discussions with the residents on Mont Royal and Highland well ahead of time that there will be a complete ban on street parking during the construction. For some, this will be a significant impact. There will be a safety issue with people trying to get out of their driveways with the increased traffic. The drop-off for Canyon Heights school is right at a pinch point and we will have to move this but this will also have some significant logistics for the streets behind. We will likely require several hundred cones with no parking on them that can be moved around. We will have “rat running” on certain streets so might need temporary road barriers that will move with the construction. All this needs to be ready to go on Day 1.

While you might not have every answer at a public meeting, you don’t want to be blindsided.

Another important point is that it would be terrible to finish this project only to find out that one of the utilities is planning on doing something in the near future and once again causing this disruption.

[MV] I am concerned with going ahead with a public meeting on June 19th without having much more firmness in your options, the impacts and mitigation. You don’t want to go into a public meeting to ask with a show of hands what their preferences are.

[Facilitator] After hearing what you have heard tonight, are you having second thoughts regarding your planned public engagement schedule, particularly June 19th as a rollout session?

[MV] That is what I am feeling at this point.

[MV] We have spent a lot of time discussing the transit issue and I realize that we need a lot of time to make any arrangements.

You will need to know your construction schedule before Coast Mountain can consider your needs.

[DNV] We have been discussing presenting to the public options for compressing the construction schedule. Are you suggesting that we don’t present options?

[DNV] I think that the graphic showing the options is quite compelling as I think that people will support doing this in a compressed time frame, particularly including a Saturday.

Every month delayed at the front end adds to the back end. Do you have a particular time you need to finish this?

You need to ensure that when you are finished that you are able to get the pavers in there to finish the job and not leave this unfinished.

[MV] We have flexibility. Our main constraint is that we can’t do our connections in the middle of peak water demand period. That is from May 24 to late September that cannot be used for tie-in work. We also need to consider the paving. There are also the end connections to the existing system and that can be quite complicated.

[Facilitator] Is it reasonable to ask that at the next CMAC meeting, if possible, that you bring back a more information on some of the options for the construction approaches discussed tonight similar to the way the route selection options were developed and presented?

[MV] Yes

In the same way that Phase 1 is causing some parking issues from construction worker parking, maybe there should be some thought given to off-site marshaling area for Phase 2 parking and possibly a worker's shuttle to bring them to the site.

[DNV] You should also identify the various community improvements that will or possibly could take place as an adjunct to this project. We can address who pays for these later, but there are a number of these that will be important to identify to the community.

NOTE: Metro Vancouver has decided to postpone the June 19th public meeting but will provide an update for DNV Council on June 17th.

NEXT MEETING

The next CMAC meeting will be Wednesday, July 2, 2014 from 5-7:00 at the North Vancouver District Hall Meeting Room B.