

Minutes of the meeting of the Liquid Waste Management Plan (LWMP) Joint Technical and Public Advisory Committees (TACPAC) Meeting #11 held on Tuesday, October 27, 2020 at the Comox Valley Regional District Civic Room and via Zoom Online Conference, commencing at 10:00 am.

PRESENT:	A. Habkirk, Chair and Facilitator	
	P. Nash, LWMP Project Coordinator	
	K. La Rose, Senior Manager of Water/Wastewater	CVRD
	J. Boguski, Branch Assistant – Engineering Services	CVRD
	Z. Berkey, Engineering Analyst	CVRD (Zoom)
	M. Rutten, General Manager of Engineering Services	CVRD
	M. Imrie, Manager of Wastewater Services	CVRD
	C. Campbell	WSP
	M. Swift, Town of Comox Councillor	PAC
	W. Cole-Hamilton, City of Courtenay Councillor	PAC
	A. Hamir, Lazo North – Electoral Area B Director	PAC (Zoom)
	A. Gower, CV Chamber of Commerce	PAC (Zoom)
	T. Ennis, CV Conservation Partnership Alternate	PAC
	S. Carey, Courtenay Resident Representative	PAC (Zoom)
	K. Niemi, Courtenay Resident Representative	PAC (Zoom)
	K. van Velzen, Comox Resident Representative	PAC (Zoom)
	D. Jacquest, Comox Resident Representative	PAC
	R. Craig, Comox Resident Representative	PAC (Zoom)
	L. Aitken, Area B Representative Alternate (observer)	PAC (Zoom)
	M. Lang, Area B Resident Representative	PAC (Zoom)
	J. Steele, Area B Resident Representative	PAC (Zoom)
	H. Dewhirst, Comox BIA	PAC
	E. Derby, Island Health	TAC (Zoom)
	S. Ashfield, Town of Comox Engineering	TAC

ITEM	DESCRIPTION	OWNER
11.1	Call to Order Meeting called to order at 10:03am	Allison Habkirk
11.2	Review of Minutes of Meeting #10 and #10A Item 10.6 of meeting minutes for TACPAC meeting #10, should include a note on property negotiation consultant being engaged to work through statutory right-of-way requirements for horizontal directional drilling options. Also in item 10.6, there's a mistake in understanding of clarification raised on figures 3 and 4 in GW solutions report. Clarification wasn't that the figures incorrectly showed Comox No.2 pump station, but rather that it showed forcemain routing through Docliddle, which is incorrect. MOTION: To adopt minutes of meeting #10 and #10A – W. Cole-Hamilton SECONDED – M. Swift CARRIED	Allison Habkirk

ITEM	DESCRIPTION	OWNER
11.3	<p>Presentation of Public Engagement Results</p> <p>Overview provided of public engagement and consultation to date and upcoming additional consultation with Electoral Area B residents on concerns surrounding groundwater. A summary of feedback from online surveys and in person open houses was provided.</p> <p>Christianne Wile, Manager of External Relations, indicated that public engagement was successful as there are a number of completing demands on people’s attention with COVID-19 but there was sufficient response from the public to develop a clear understanding of community concerns and priorities.</p> <p>There are no further opportunities for the public to provide input on the conveyance short list of options, next public engagement is planned for pre-construction of the preferred conveyance solution.</p> <p>Note that Morland Road has been incorrectly spelled in public communications.</p>	Christianne Wile
11.5	<p>* Vary the Agenda*</p> <p>Review of Technical Advisory Committee Evaluation Criteria</p> <p>Paul Nash provided a review and discussion on the TAC evaluation and scoring rationale for each of the technical criteria as summarized in the minutes of TAC Meeting #10A.</p> <p>Was tie-in at marina park considered in evaluation of technical criteria?</p> <ul style="list-style-type: none"> - Yes was considered a construction risk when evaluating the resilience to internal factors criteria, and so Option 3 scored lower in this category <p>Discussion on the operational desirability for Option 1, Mike Imrie indicated operating a high pressure system such as Option 1 is less operationally desirable. WSP noted that while it’s less desirable, Option 1 is still feasible.</p> <p>Follow-up question regarding risk of failure to pipe and ease of repair for different options. Option 1 is easier to fix if a problem occurs, but the entire pipeline is at a shallow depth which arguably results in the pipe being at greater risk of being accidentally damaged by adjacent construction, roadwork etc. Option 2 and 3 each contain two trenchless sections that are at greater depths which greatly reduces chance of being accidentally struck, but does result in repairs being far more challenging if required.</p>	Paul Nash
11.4	<p>Review of Cumulative Cost Impacts</p> <p>Presentation on cumulative cost impacts to residents for the various conveyance options and selected level of treatment option and discussion on the impacts to operating costs. It was noted that considering the cost impacts to residents, greater attendance at open houses was expected. Cost impacts for the various level of treatment options for the wastewater treatment plant upgrades will be provided to the sewage commission as part of the staff report presenting the preferred level of treatment decision.</p>	Kris La Rose

ITEM	DESCRIPTION	OWNER
11.4	<p>Is there an opportunity for grant funding?</p> <ul style="list-style-type: none"> - CVRD will apply for any available grant funding, however typically conveyance projects don't attract grant funding, more feasible that treatment plant upgrades will attract funding due to opportunities for resource recovery and innovation. At this time the cost per connection estimates have assumed no grant funding. - Grant funding under the disaster mitigation fund is also not likely due to project eligibility requirements of funding, however CVRD staff will review to confirm. <p>Kris La Rose provided an additional update on public consultation at this time and the primary issue/ concern being raised by residents being groundwater in the area. Discussion on the contingencies for installing a line in this area including construction technology, leak monitoring/protection was provided and viable solutions will be put in place to ensure concerns are mitigated.</p> <p>Is there any relative difference in seismic vulnerability to cut and cover or tunneling?</p> <ul style="list-style-type: none"> - HDD installation requires thick wall steel pipe to be able to withstand pulling force of construction methodology. Whether it's at the surface or at a greater depth, the pipe will be engineered to handle earthquakes. - With leak detection, staff are in discussion with leak detection companies to determine a successful leak monitoring methodology that will be able to quickly identify and record leaks for repair. <p>Will HDD have an impact of the spring that feeds the Croteau neighborhood?</p> <ul style="list-style-type: none"> - Tunneling experts at WSP have determined that HDD will not affect the flow of ground water due to installation methodology and relative small diameter of the pipe in relation to the ground area. <p>Kris La Rose also provided an update on the Community Benefit Agreement (CBA) with the K'ómoks First Nation (KFN) and the impact on timing for consideration of the preferred conveyance solution by the Sewage Commission. The Sewage Commission decision for conveyance is anticipated in December 2020 or early 2021, following completion of the CBA with the KFN. KFN will not be attending TACPAC meetings moving forward and will remain apprised of the project through regular Chief and Council meetings.</p>	Kris La Rose
11.6	<p>Evaluating Short List Options – Conveyance</p> <p>Summary and review of the evaluation system and previous preliminary scoring of each criteria from TACPAC Meeting No.10.</p> <p><i>Local Economic Benefit Criteria</i></p> <p>Discussion on how to evaluate the future Phase 2 benefit of Option 3, consensus that future benefit should be considered but a delayed impact factor of 25% should be applied to Option 3. 25% delayed impact factor</p>	Paul Nash

ITEM	DESCRIPTION	OWNER
11.6	determined based on service life of pipe, For Option 3 extending life of pipe by 25% for time period (estimated service life of new pipe is 80 years, for Option 3 will only be using for 60 years).	Paul Nash
Lunch		
11.6	<p>Evaluating Short List Options - Conveyance</p> <p><i>Environmental Impacts</i> Consensus that Option 3 for this category be evaluated without discounting environmental risks as risks will happen now or in the future. All options include a stream crossing at Brooklyn Creek. Option 1 would have greater impacts if a leak were to occur because the higher pressure inside the pipe would spill waste at a higher velocity.</p> <p><i>Greenhouse Gasses</i> The calculation formula for greenhouse gas generated through the lifetime of all Options was changed from 60 years to 80 years.</p> <p><i>Social Benefit</i> Per the discussion at TACPAC 10, the scoring for the social categories was revised to be based on the actual lengths of cut/cover and trenchless sections, and the relative impacts of each.</p> <p>For construction impacts, the discount for any future (delayed) impacts associated with Option 3 was reduced from 50% to 25%. Impacts to traffic, local businesses and residents fronting onto the work areas was quantified. The trenchless laydown areas have the greatest local impact, and for the affected properties, for a longer period of construction time than the progression of cut and cover. Option 3 delays part of this disruption to the future, but also occurs additional initial disruption for the Marina Park tie-in. With all options, the construction schedule will be made to mitigate impacts as much as possible.</p> <p>For operational impacts, there were no differences between the options For amenity value, the only identifiable benefit is the potential for cycle lanes after installation of cut and cover forcemain, so Option 1 scored the highest, and Option 3 the lowest, as some of this benefit is delayed from the phased implementation.</p> <p>The final scoring for the social benefit category confirmed the counter-intuitive result that the trenchless methods actually have a greater disruption and less amenity value than conventional cut and cover.</p> <p><i>Financial Summary</i> The group discussed the scoring philosophy for the financial category, which has been net present value. For simplicity, the analysis is based on 25 year amortization for each option. There was general consensus to discount Option 3 by 25% due to the 20 year extension of taxation, keeping in mind that the second phase that is 20 more years of additional tax payers contributing to the repayment.</p>	Paul Nash

ITEM	DESCRIPTION					OWNER																																			
11.6	<p>The final scoring for the three options was:</p> <table border="1" data-bbox="269 197 1214 674"> <thead> <tr> <th>Category</th> <th>Category Value</th> <th>Option 1 Cut and Cover</th> <th>Option 2 Trenchless</th> <th>Option 3 Phased Trenchless</th> </tr> </thead> <tbody> <tr> <td>Technical</td> <td>45</td> <td>21</td> <td>27</td> <td>24</td> </tr> <tr> <td>Affordability</td> <td>18</td> <td>9.4</td> <td>11.9</td> <td>15.5</td> </tr> <tr> <td>Local Economic Benefit</td> <td>2</td> <td>1.4</td> <td>1.0</td> <td>0.9</td> </tr> <tr> <td>Environmental Benefit</td> <td>18</td> <td>10.1</td> <td>10.2</td> <td>9.1</td> </tr> <tr> <td>Social Benefit</td> <td>17</td> <td>8.7</td> <td>7.7</td> <td>8.1</td> </tr> <tr> <td>Total</td> <td>100</td> <td>50.6</td> <td>57.8</td> <td>57.6</td> </tr> </tbody> </table> <p>Discussion on the applicability of the scoring system to a phased option. A phased implementation was not anticipated when the scoring criteria and weighting were developed; it was inherently assumed that any option would be implemented in its entirety. For example, the environmental risk related to an estuary pipeline option had originally only been considered in terms of building and operating an entirely new estuary pipeline, or removing it entirely, rather than a period of continued operation for part of the existing one. Best efforts have been made to apply appropriate discounting to delayed benefits or impacts.</p> <p>Discussion on reality of current economic situation with COVID-19 and if consideration should be included and affordability criteria weighting be amended based on the current situation, which was not anticipated when scoring criteria and weighting were developed. Consensus around the table that weighting of the criteria should not be changed, to keep the result consistent with the original goals as developed and approved by the Sewage Commission. A decision to change the category weighting to place a greater importance on affordability in light of COVID-19 (and lesser importance on other categories) is ultimately a political decision, and the appropriate place for that is at the Sewage Commission.</p> <p>Upon review of the final scoring of the options the following motions were made.</p> <p>MOTION – Recommend Option 1 be removed from consideration and Options 2 and 3 be further assessed by the Sewage Commission and that the Sewage Commission seek the input of the TACPAC on the merits of the Options – A. Gower MOTION WITHDRAWN</p> <p>MOTION – Remove Option 1 from consideration. – A Gower SECONDED – W. Cole Hamilton CARRIED OPPOSED – J. Steel</p>					Category	Category Value	Option 1 Cut and Cover	Option 2 Trenchless	Option 3 Phased Trenchless	Technical	45	21	27	24	Affordability	18	9.4	11.9	15.5	Local Economic Benefit	2	1.4	1.0	0.9	Environmental Benefit	18	10.1	10.2	9.1	Social Benefit	17	8.7	7.7	8.1	Total	100	50.6	57.8	57.6	Paul Nash
Category	Category Value	Option 1 Cut and Cover	Option 2 Trenchless	Option 3 Phased Trenchless																																					
Technical	45	21	27	24																																					
Affordability	18	9.4	11.9	15.5																																					
Local Economic Benefit	2	1.4	1.0	0.9																																					
Environmental Benefit	18	10.1	10.2	9.1																																					
Social Benefit	17	8.7	7.7	8.1																																					
Total	100	50.6	57.8	57.6																																					

ITEM	DESCRIPTION	OWNER
11.6	<p>MOTION – Endorse Option 2 because it has the highest valuation. – A. Gower SECONDED – M. Lang OPPOSED - 7 IN FAVOUR - 2 DEFEATED</p> <p>Consensus from the group that no additional motion is necessary and that commentary be provided weighting the merits of both Options 2 and 3 for consideration by the Sewage Commission for final decision of the preferred solution. Summary of commentary provided below:</p> <ul style="list-style-type: none"> - Option 3 utilizes the full lifecycle of existing assets and reflects policies within the Regional Growth Strategy. - Phased approach allows for more flexibility in future, eg. Updating growth projections and potential for new technology consideration. - Priority for decommissioning Willemar Bluffs and importance of doing so quickly. - There are unknown costs associated with delaying part of construction and escalation of project costs should be considered. - Concern with challenges associated with pipe running under private property as part of HDD installation for Options 2 and 3. - No input from K’ómoks First Nation at this time on Options 2 and 3, input from K’ómoks First Nation is an important consideration in decision of preferred solution. - Weightings created prior to COVID-19 and consideration of cost impacts should be made by Sewage Commission in light of the unexpected current COVID-19 situation. - 	Paul Nash
11.8	<p>Adjournment The meeting was adjourned at 3:45pm.</p>	

Option Name	All Options Summary		Cut & Cover	Trenchless	Phased Trenchless
Category	Goal	Weight %	1	2	3
Technical	Resilience to External Factors	15%	9.0	9.0	7.5
	Resilience to Internal Factors	15%	3.0	9.0	6.0
	Long Term Solution	10%	6.0	6.0	6.5
	Flexibility to accommodate future changes	5%	3.0	3.0	4.0
<u>Technical Total</u>	-	<u>45%</u>	<u>21.0</u>	<u>27.0</u>	<u>24.0</u>
Affordability	Minimize Lifecycle Cost	14%	7.0	9.5	12.9
	Long term Value	4%	2.4	2.4	2.7
<u>Affordability Total</u>	-	<u>18%</u>	<u>9.4</u>	<u>11.9</u>	<u>15.5</u>
Economic Benefits	Benefits to local economy	2%	1.4	1.0	0.9
<u>Local Economic Benefit Total</u>	-	<u>2%</u>	<u>1.4</u>	<u>1.0</u>	<u>0.9</u>
Environment Benefits	Minimize risk of impacts to sensitive environment	12%	6.5	6.7	5.5
	Mitigate climate change impacts (Energy and GHG's)	6%	3.6	3.5	3.6
<u>Environmental Benefit Total</u>	-	<u>18%</u>	<u>10.1</u>	<u>10.2</u>	<u>9.1</u>
Social Benefit	Minimize noise, odour and visual impacts in operation	10%	6.7	6.7	6.7
	Minimize community disruption during construction	3%	1.3	0.4	0.9
	Maximize community and recreational amenity value	4%	0.7	0.5	0.4
<u>Social Benefit Total</u>	-	<u>17%</u>	<u>8.7</u>	<u>7.7</u>	<u>8.1</u>
<u>Grand Total</u>	-	<u>100%</u>	<u>50.6</u>	<u>57.8</u>	<u>57.6</u>