## McLoughlin Point Wastewater Treatment Plant – Revised Rezoning Application Public Hearing





### Why are we here?

- Key Issues:
  - To explain how we have addressed the concerns raised by the public and Council
  - To request relaxation of some of the setback and height requirements of Bylaw 2806
  - To include two small parcels in the application (61.6 m<sup>2</sup>)
- To request that Council adopt revised Bylaw 2805



### **Current Status of Rezoning Approvals**

- Following a public hearing in July 2013, Esquimalt Council amended its OCP (Bylaw 2804) and rezoned the McLoughlin Point Property (Bylaw 2806) in July.
- Under Bylaw 2806 the permitted uses for the McLoughlin Point property includes a Wastewater Treatment Plant
- The CRD has submitted a revised rezoning application to address concerns raised by Council and the public and to accommodate all of the proponent's designs (Bylaw 2805)
- On January 20, 2014 Council gave seconding reading to revised Bylaw 2805.



### **McLoughlin Point Challenges**

- 1. Recognized to be a 'tight' site.
- 2. Architectural design and plant configuration driven by process efficiency.
- 3. The prominent location of the site entrance to Victoria Harbour.
- 4. The cost limitations spelled out in the CALWMP.
- 5. No additional grant funding available (increased costs are to be borne by Core area residents).
- 6. Access to the site through residential neighbourhoods.
- 7. Complying with Bylaw 2806 would limit the capacity of a WWTP at McLoughlin and increase costs to taxpayers.



### The Bylaws and Agreements

- CRD and Esquimalt staff were given a mandate to negotiate a resolution to CRD's concerns with Bylaw 2806.
- The revised Bylaw 2805 and two agreements represent the outcome of those negotiations.
- Staff from CRD and Esquimalt support the revised bylaw and agreements.
- Comparing Bylaw 2806, Revised Bylaw 2805 and the two agreements clearly explains the changes being requested by the CRD.



| Current Bylaw 2806                 | Revised Bylaw 2805/Agreements or<br>Contracts  |
|------------------------------------|--|
| Use of barges                      | Included   |
| Temporary dock for barges          | Included   |
| Traffic management                 | Included (Traffic Management Plan)   |
| Lyall Street Upgrades (\$950K)     | Included   |
| Education and Interpretive Centre  | Included   |
| High Efficiency filters in schools | Outside CRD jurisdiction but addressed<br>by dust suppression during construction<br>and reduced trucking with use of barges |
| Green building                     | LEED gold for Admin. building  |
| Design Guidelines                  | Designs are in compliance  |
| Macaulay Pump Station Upgrade      | Contract will require design to CRD standard (e.g. Craigflower Pump Station  |

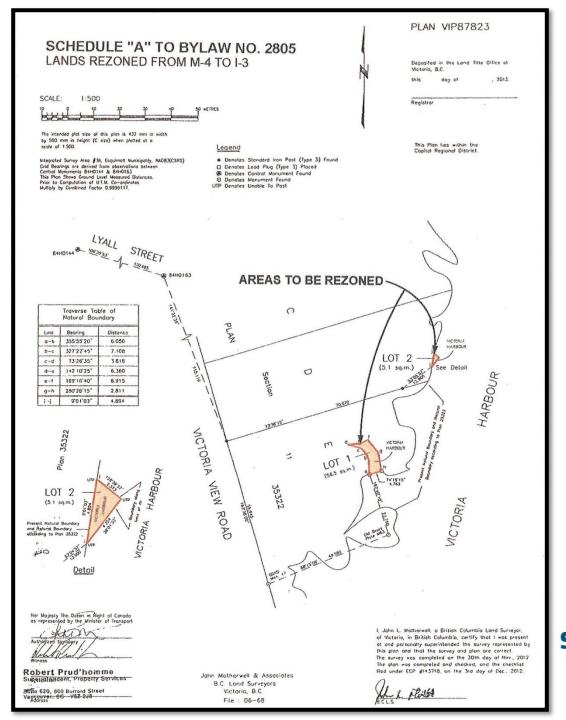


| Current Bylaw 2806                  | Revised Bylaw 2805/Agreements or<br>Contract  |
|-------------------------------------|---|
| Public open space along water front | Walkway and view point included   |
| Public art (\$100,000)              | Included  |
| Upgrade Esquimalt Pump Stations     | Not included – above ground pump<br>stations will be upgraded as part of<br>ongoing CRD's capital program |
| Public open space (\$75K)           | Included, themed play-lot not included  |
| Maximum Flow 108 MI/d               | Not limited, maximize flow to minimize unit cost to taxpayers   |
| Dock and pedestrian ferry service   | Public dock included  |
| Design to include public walkway    | Included  |
| Use of reclaimed water on site      | Included  |
| Heritage signage                    | Included  |



| Current Bylaw 2806  | Revised Bylaw 2805/Agreements or<br>Contract   |
|---|--|
| Themed hydrants   | Not included, standard hydrants and water main upgrades included                               |
| Provision of conduits in trenches                               | Included   |
| Reinstatement of roads affected by construction                 | Included   |
| Odour mitigation  | Included (5 OU at plant boundary)  |
| No trucking of bi-products                                      | Included   |
| Liaison Committee   | Included   |
| Annual Payment of \$55,000                                      | Included   |
| Not included  | New - \$200K to study DES  |
| Not included (replaces annual payment if accepted by Esquimalt) | New - \$7.5 million for DES  |
| Not Included  | Two small parcels recently purchased by CRD. Total area 61.6M <sup>2</sup> (0.4% of site area) |







| Current Bylaw 2806   | Revised Bylaw 2805/Agreements or<br>Contract   |
|--|--|
| No structure within 20 m of HWM to be<br>greater than 5 m – the Low height Area<br>(LHA) | No higher than 12 m up to 35% of LHA<br>and no greater than 35% of length of<br>shoreline at HWM |
| 4 m wide landscaping within setback from HWM   | Not feasible due to exposure and rock.<br>Landscaping provided within tsunami<br>wall area       |
| Building height up to 15 m outside 20m<br>zone if combined with mixed use<br>development | Max. height 12 m outside LHA except 15 m for up to 15% of area outside LHA                       |
| No building within 7.5 m of HWM  | Encroachment of up to 10% of the 7.5 m setback area (actual <4%)                                 |
| Lot coverage no more than 75%  | Included   |
| Floor Area Ratio not to exceed 0.35  | Included   |
| Floor area not to exceed 4500 m <sup>2</sup>   | Included   |



Generic Massing Diagram Illustrating the Maximum Height Permitted under Revised Rezoning Bylaw 2805

> MAX 12m HIGH PERMITTED OUTSIDE THE LOW HEIGHT AREA

MAX 12m HIGH PERMITTED = BETWEEN THE 7.5m & 20m SETBACK

TO MAX OF 35% OF LOW HEIGHT AREA & LENGTH NOT TO EXCEED 35% OF THE LENGTH OF THE SHORELINE MEASURED AT THE HIGH WATER MARK

- MAX 15m HIGH PERMITTED OUTSIDE THE LOW HEIGHT AREA TO MAX OF 15% OF TOTAL SITE AREA

MAX 5m HIGH PERMITTED N THE REST OF LOW HEIGHT AREA MAX 5m HIGH PERMITTED IN THE REST OF LOW HEIGHT AREA

View from South Ogden Point looking north-westward at McLoughlin Point. Zoning maximum heights based on bylaw 2805, superimposed on the McLoughlin site to scale, as seen by the human eye. Diagram is intended to illustrate the maximum allowable building heights, but is not an indication of the overall building massing.

COMPAREMENT AND A HEIGHT AREA

### **Revised Application Specific Issues**

- All designs require <u>minor</u> encroachments into the 7.5 m setback area.
- Minor encroachments support:
  - Optimal capacity on the site
  - Optimal process efficiency
  - Design innovation
  - Diversity of technology solutions
  - Architecturally significant design
  - Least cost to taxpayers



### **Esquimalt Design Review Committee**

- Met 3 times with each proponent team
- Set back issue was specifically discussed
- Committee looking for innovative design
- All proponents left with the impression that the committee could support concessions to the 7.5 m setback constraint to give broad 'license to create' an aesthetically pleasing vista.
- Esquimalt Design Review Committee accepted that all three proponents met the guidelines



### McLoughlin Point Designs

- Proponent designs:
  - Will protect the shoreline
  - Will expand public access and enjoyment of the shoreline
  - Will be the first phase of an Esquimalt shoreline walkway
  - Will be aesthetically pleasing



### APC meeting of January 14, 2014

- The APC were pleased with the revised application
- The APC recognized that the issues previously raised were addressed in the revised application and the agreements
- The APC recognized that the Design Review Committee had confirmed that all three proponents had met the requirements of the Design Guidelines
- The APC expressed concern that if they allowed incursions into the 7.5 m zone the Township would lose control and the proponents could change their designs to increase incursions into the 7.5 m zone.

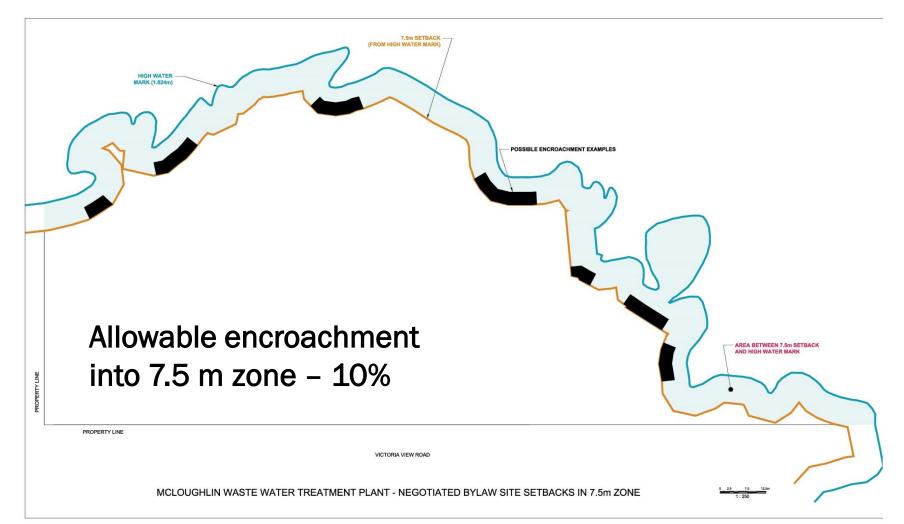


### 7.5 m Setback Encroachment

- The setback negotiated and supported by Esquimalt and CRD staff allowed limited encroachment into the 7.5 m setback area not to exceed 10% of the total area in the 7.5 m zone.
- All three designs have minor encroachments directly related to the irregularity of the shoreline
- Encroachment of actual designs is less than 4% of the total area in the 7.5 m zone
- No encroachment into 7.5 m setback zone to be less than 2 m from the HWM

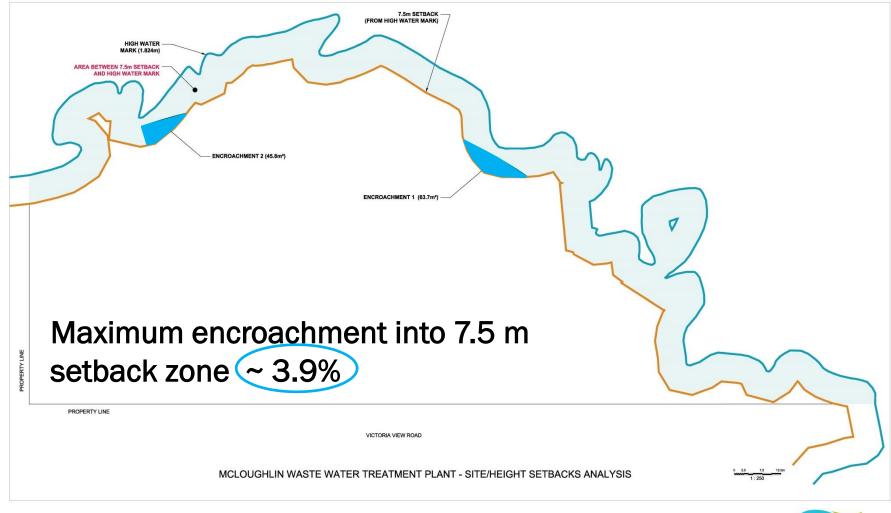


#### Allowable Encroachment Agreed between Staff



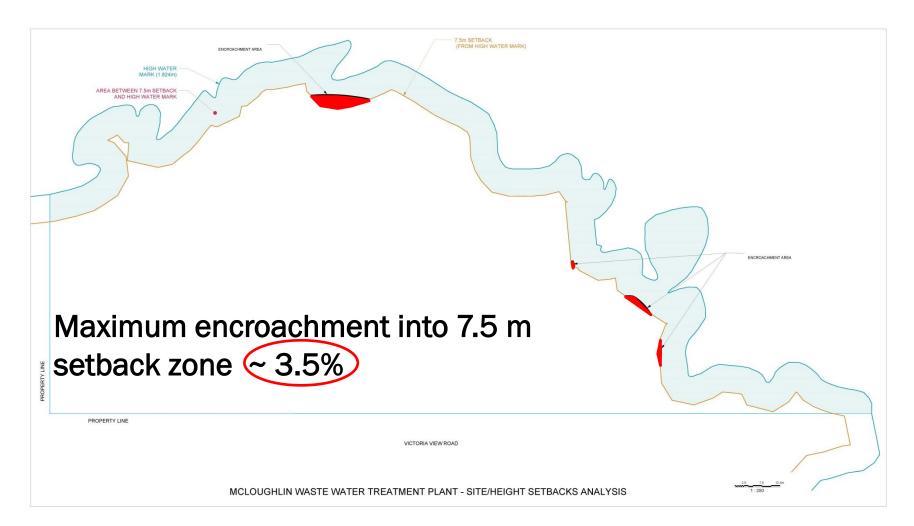


## 7.5 m Setback Encroachment Proponent 1



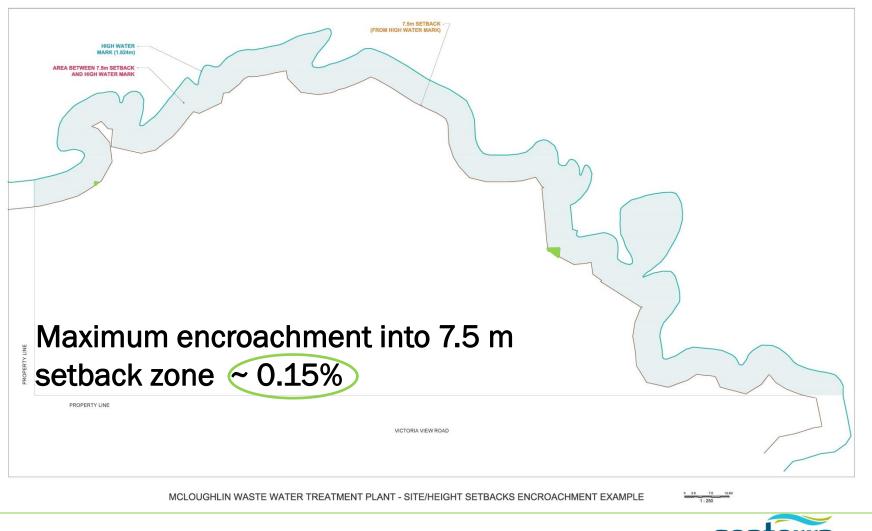


# 7.5 m Setback Encroachment Proponent 2

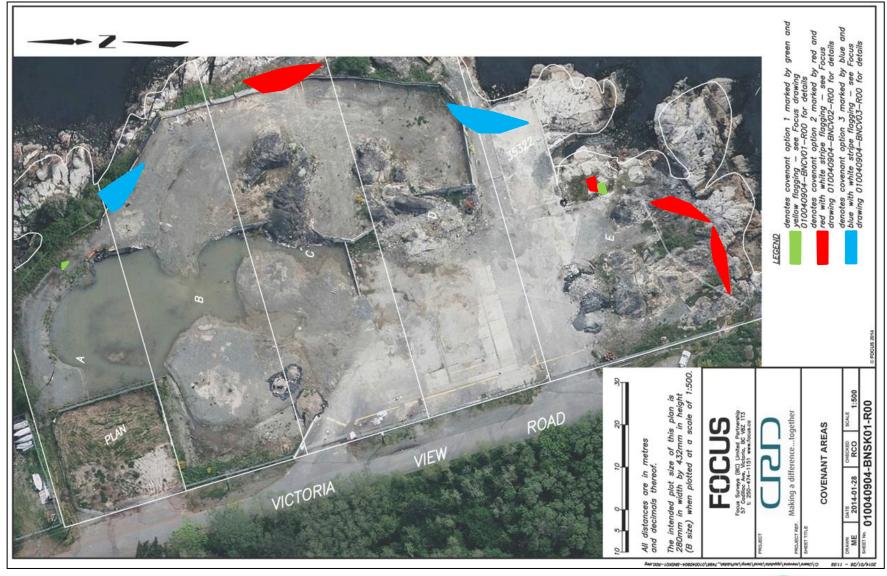




### 7.5 m Setback Encroachment Proponent 3









### 7.5 m Setback Encroachment

To address the concerns of Esquimalt staff and the APC:

- The CRD has agreed to attach the encroachment information provided by the proponents and presented to council as appendices to the revised Bylaw 2805 to prevent future design changes. (Section 219 Covenant)
- With this proposal the CRD believes that the concerns raised by the Esquimalt staff and the APC have now been addressed.



- First Nations considerations
  - Consultation ongoing
  - Participated in blessing ceremony w/Esquimalt Nation
  - Establishment of burial site at Beacon Hill for the Seaterra program
- Economic Impact on tourism
  - Positive eliminates negative impact of dumping raw sewage into the ocean
- Impact of DND lands and residents
  - Ongoing engagement with DND personnel, laydown agreements and impact mitigation



- Tsunami Risk Assessment
  - Study by AECOM used peer reviewed model
  - Modelling by Dr. K.F. Cheung, Professor of Ocean Engineering at the University of Hawaii
  - Terms of reference specifically modified to include higher resolution for the Victoria Harbour area, including the proposed WWTP site at McLoughlin Point.
  - Study coverage included the entire bay area to capture the local wave dynamics and resonance oscillations and provided improved accuracy to the 9 m grid for Victoria Harbour.



- Tsunami Risk Assessment (cont'd)
  - The study also covered the vast majority of the population and all previously identified WWTP sites at risk to a Cascadia Subduction Zone tsunami.
  - As recommended in the AECOM report, the CRD has added a 50% safety factor (risk parameter) of 1.325 m to the projected wave height of 2.5 m plus 0.15 m land subsidence – total 4 m



#### Other Issues of Concern - Tsunami Wall Elevation

| Item                                    | Height | Source  |
|---|--------|---|
| Maximum tsunami water<br>level          | 4.0 m  | AECOM Report plus 50% factor of safety  |
| Storm Surge                             | 1.0 m  | Institute of Ocean Sciences   |
| Rise in sea level due to climate change | 1.0 m  | BC MOE/Climate change adaptation<br>Guideline for Sea Dikes and Coastal<br>Flood Hazard Land Use Jan 27, 2012 |
| Correction to Geodetic<br>Datum         | 0.1 m  | City of Victoria  |
| Total                                   | 6.1 m  | Design height of tsunami wall   |



- Colwood withdrawal from CRD System
  - Colwood's share of McLoughlin capacity < 4%
  - McLoughlin WWTP design capacity would not be reduced
  - Withdrawal provides additional capacity to remaining participants
  - Additional capacity would defer need for new capacity for ~4-5 years



### Conclusion

- The CRD believes that the revised submittal addresses the major concerns identified to date, implements the outcomes of the negotiations with Esquimalt and with the addition of a Section 219 Covenant to the Bylaw also addresses Esquimalt's concerns on the setbacks.
- The revised submittal enables all three designs to be constructed, thereby maintaining the competitive procurement process.
- The CRD requests that the Council of the Township of Esquimalt give third reading to and adopt the revised Bylaw 2805



Thank you.

