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**REPORT TO PORT RENFREW UTILITY SERVICES COMMITTEE  
MEETING OF THURSDAY 18 JUNE 2009**

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**SUBJECTS      AGREEMENT UPDATE BETWEEN THREE POINT PROPERTIES LTD. AND THE  
CAPITAL REGIONAL DISTRICT TO CONSTRUCT WATER AND SEWER OFF-SITE  
WORKS**

**PURPOSE**

To provide the Port Renfrew Utility Services Committee (PRUSC) an update on the proposed servicing agreement between Three Point Properties Ltd. (TPPL) and the Capital Regional District (CRD) to construct off-site works for the Port Renfrew water and the Port Renfrew sewer local service areas for purposes of servicing lands owned by TPPL land.

**BACKGROUND**

In order for Three Point Properties Ltd. (TPPL) to service their development of residential lots, the CRD has set out the improvements to the sewer and water systems required to be completed as a condition of expanding the area to include the TPPL project. TPPL wishes to have the CRD Board establish a new service over the TPPL lands to be included in the sewer and water local service area. Under the new service the CRD would borrow funds for the project and would recover the cost of annual debt servicing from the TPPL lands only, and not from the Port Renfrew water or Port Renfrew sewer local service areas (Attachment 1).

To provide for interim sewerage of the TPPL Phase 1 lands, an upgrade of the existing wastewater treatment plant is necessary to satisfy Ministry of the Environment (MOE) additional treatment capacity and discharge concerns. An MOE discharge permit amendment is currently not an option until the inflow and infiltration (I & I) is reduced. Given the nature of I & I, further investigation cannot be performed until the wet season. TPPL has postponed their construction works until 2010 dependent on the outcome of the I & I investigations and recommended remediation works to rectify. A federal infrastructure grant has been applied for to seek additional funding for the building of a new treatment plant and associated works. TPPL will wait until either the amended permit is given, or the grant is awarded before continuing with any bylaw amendments or service area extensions. It is anticipated that neither of these will be realized until spring of 2010 at the earliest.

To facilitate operation of the new assets by CRD, the CRD Board would amend the establishing bylaws for the Port Renfrew sewer and Port Renfrew water local service areas to include the TPPL lands delineated in the two new service areas established for debt servicing. Those two petitions are currently in final draft form awaiting further development regarding interim permit for the wastewater treatment plant and will not be finalized until all of the unresolved design and financial issues and implications have been effectively dealt with.

**ALTERNATIVES**

1. That the Port Renfrew Utility Services Committee receive this report for information.
2. That the Port Renfrew Utility Services Committee request further information from staff.

**FINANCIAL IMPLICATIONS**

Under the proposed TPPL project there should be little direct cost to those parcels currently in the water and sewer local service areas. If the TPPL sewer and water projects are not completed as proposed, the CRD will need work with the committee to set aside funds for needed upgrade of the systems in the future. As the potential costs of proceeding in this manner may be high, either the project would need to be funded by a borrowing or funded annually over a long period of time.

**SUMMARY**

The TPPL proposal negotiations have been progressing. The off-site sewer works may be phased with an interim upgrade of the existing wastewater plant carried out to permit the servicing of Phase 1, but either by minimizing the I&I and getting an amended permit, or completion of the proposed new wastewater plant and outfall. Recent smoke testing and investigation in hopes of sourcing points of inflow have not been successful. A closed circuit television study will need to be performed during the rainy season to better locate sources of inflow. Costs incurred will be borne by the developer.

CRD staff have identified the requirements for a servicing agreement committing the developer to participate in expansion of other works such as provision of additional fire fighting capacity, alterations to solid waste transfer facilities and provision of other community amenities such as linear parks, community parks or lands for expanded recreation or administration facilities.

Staff have identified the need to commence, with the committee, development of an alternate plan for infrastructure upgrade or replacement in future, should the present project not proceed as planned. The issue of I&I is causing wet weather overflows which the MOE would like addressed.

**RECOMMENDATION**

That the Port Renfrew Utility Services Committee receive this report for information.



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Gary Plevin, ASCT  
Engineering Technician 5

GP:ls  
Attachment: 1

**Three Point Properties Ltd. Proposed development agreement for works.**

**Water System Off-Site and On-Site Works**

The CRD, under the new water service, would finance (through Municipal Finance Authority: MFA) the construction of the following off-site works as conditions of the Port Renfrew water service area boundary amendment.

The phased approach has been broken into two distinct scopes of works as follows:

**Phase 1:**

- Development of the groundwater well site consisting of interconnections from the two production wells (TPPL and CRD) to a new water treatment and booster station on Parkinson Road.
- Construction of a new water treatment and booster station with hydrogen sulfide stripping, disinfection, pumping, controls and SCADA monitoring system and standby power.
- Construction of a new water main from the Parkinson/Deering intersection approximately 100 meters towards the school lands with the installation of an intermediate booster pump, sized to provide adequate pressures for servicing the first phase of TPPL lots (behind the community center). There is no planned relocation of the existing reservoir in the Phase 1 development plan.
- Dependent on the size of the booster pump, a Pressure Regulating Valve may be necessary to regulate the pressures in Beach Camp.

**Phase 2:**

- Relocation of water reservoir to a higher elevation and increasing the storage capacity.
- Extension of Phase 1 water main and return line from relocated reservoir back to Parkinson Road.
- Decommission of interim booster pump serving Phase 1 development and replacing with larger pump to feed reservoir.
- Construction of a pressure reducing station to avoid excess pressure in lower Beach Camp if not already done under Phase 1 works.

TPPL, as the developer, would be responsible for the following water system on-site works:

- Installation of new mains, services, valves, blow offs, drain downs, fire hydrants and infrastructure required to extend servicing to their lands as they are developed.
- Turn-over of the new infrastructure to the CRD to operate as components of the Port Renfrew water system.
- Provision of rights of way or property required for CRD to construct, take over, maintain, replace or otherwise operate the extended water system.

**Sewer System Off-Site and On-Site Works**

The CRD, under the new sewer service, would finance the construction of the following off-site works as conditions of the Port Renfrew sewer system boundary amendment:

**Phase 1: 42 lots behind community center only**

- Upgrade to existing Waste Water Treatment Plant (WWTP) and upgrade to existing pipe works to reduce inflow and infiltration into the system, allowing for more treatment capacity which would accommodate the planned 42 lots. Only once the Inflow and Infiltration issue has been successfully resolved will the Ministry of the Environment consider issue an interim permit to discharge effluent from the plant to include the Phase 1 lots.

Phase 2: full development of TPPL lands, exact size tentative.

- Installation of new sewer outfall and pumped main with a nominal capacity of 1,600m<sup>3</sup>/day.
- Installation of new membrane bioreactor waste treatment facility with influent screening and grit removal and washing, flow equalization to 400m<sup>3</sup>/day, daily treatment to 200m<sup>3</sup>/day, standby power, sludge thickening, control building and electrical and controls system. The WWTP can be built in modules to allow future increased flows being treated through “add-ons” to the plant. Provision will be made to secure an adequate footprint to accommodate such future infrastructure growth.
- Installation of upgraded pumps and controls at the existing treatment plant and construction of a new interconnect main from the upgraded pump station to the treatment plant.

TPPL, as the developer of their lands, would be responsible for the installation of the following on-site works:

- Gravity sewage mains and service laterals to each parcel of land developed on the system.
- Construction of pumping stations with forcemain, standby power, and SCADA control system to interconnect low lying areas to the gravity system.
- Turnover of the new infrastructure to the CRD to operate as components of the Port Renfrew sewer system.
- Provision of rights of way or property required for CRD to construct, take over, maintain, replace or otherwise operate the extended sewer system.

Sewer System Improvement Costs

Preliminary construction costs for the various components of the system are itemized following. Costs for administration, project management, contingency and inflation are not included in the costs. These costs are estimates and are provided for information only:

Wastewater plant	\$1,830,575
Outfall and connecting main	\$631,000
Interconnection from Beach Camp	<u>\$572,000</u>
Total Sewer Construction	\$3,033,575

Water System Improvement Costs

Phase 1:

New Well head, pump, site works	\$72,000
New water treatment/ pump station	\$590,000
Booster Station for Phase 1	\$50,000
PRV station	<u>\$17,000</u>
Construction Phase 1	\$729,000

Phase 2:

Intermediate Booster Station for Phase 2	\$723,000
Relocate Reservoir to higher elevation	\$60,000
Water mains to / from reservoir	\$513,000
Reservoir access, creek crossing, ROW	<u>\$127,000</u>
Construction Phase 2	\$1,423,000

Total Water Construction	\$2,152,000
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### Snuggery Cove

Portions of the new developments would be serviced from the water main system installed for Snuggery Cove. CRD would seek to expand the Snuggery Cove water service area to include those new parcels which benefit from the Snuggery Cove service. In this manner, costs now paid by existing parcel owners in the area would generally be reduced.

### Wastewater Plant Registration

CRD staff are exploring the option to amend the existing MOE permit for Phase 1. Any proposal to construct a new plant and outfall must be registered with the Province of BC under the Municipal Sewage Regulation (MSR). The CRD, as ultimate owner and operator of the new works, would sign on to the MSR. CRD staff continues to source inflow and infiltration in the catchment area so as to be able to minimize superfluous rain water in the sewer system, thereby minimizing treatment capacity of the plant. Additional smoke and dye testing was conducted on May 25, 2009 to source points of source of inflow; however, non additional sources were found.

### Implications to the Service Areas

The project evaluation process has provided CRD staff a better understanding of the costs of meeting new sewage discharge regulations and the cost of infrastructure renewal. Should the current proposal for sewer works not move forward as planned, the committee will need to explore with CRD staff how to, in future, provide funds for meeting new provincial regulations and for infrastructure renewal. For the water system, the implications of not having the project proceed include the need to fund a basic structural upgrade and roof for the existing plant as well as funding for upgrades to the electrical service, provision of standby power, provision of H<sub>2</sub>S stripping equipment, and completion of the ROW commitments to the land owner. While these costs may be expended over a period of years, the resultant cost to a homeowner will be significant.

The proposed project, in the long term, will impact many other services and community assets besides the sewer and water local services. The CRD is developing a master servicing agreement, recognizing this impact, which will commit the developer to:

- Participate in funding of future fire department upgrades in concert with the expansion of the present fire service area to include newly developed housing on the Three Point lands.
- Participate in funding of future solid waste facility upgrades in concert with the expansion of the solid waste service area, as required.
- Participate in dedication of lands for community or linear parks as may be deemed desirable for the community.
- Participate in dedication of lands for community administration and recreation as may be deemed desirable.

This agreement will form part of the presentation package to the community and the CRD Board at the time of establishing the new water and sewer service areas.

### Operating Cost Sharing

Operating costs for the sewer system would continue to be recovered by way of parcel tax and user fee from all properties receiving service from the present or the extended system. The Port Renfrew sewer local service area would be expanded to include the new TPPL service area for this purpose. The cost of the new treatment works and additional pumping stations would be higher than the existing system. CRD would seek assistance from the developer to offset costs in the initial years of operation to maintain an operating cost similar to that assessed to a homeowner today.

### Timing of Process

Discussions with the developer indicate a willingness to proceed to complete the necessary agreements and bylaws over the next few months to be in a position to commence construction of works on the Phase 1 development by spring of 2010. CRD staff from Environmental Services, Planning and Protective Services and Finance and Corporate Services Departments have been meeting regularly in support of this timetable. Draft agreements and establishing bylaws will be presented to the committee when finalized, for consideration as part of the approval process.