DISTRICT OF SUMMERLAND

THE CORPORATION OF THE
DISTRICT OF SUMMERLAND
COUNCIL REPORT

DATE:	November 23, 2017	FILE: 2016-1787
TO:	Dean Strachan, Acting Chief Administrative Officer	
FROM:	David Svetlichny, Director of Finance Kris Johnson, Director of Works and Utilities	
SUBJECT:	13610 Banks Crescent – Financial & Infrastructure Analysis	

STAFF RECOMMENDATION:
That Council pass the following resolution(s):

> *THAT the report titled "*13610 Banks Crescent – Financial & Infrastructure Analysis" dated November 23, 2017 from the Director of Finance and Director of Works and Utilities be accepted for information.

PURPOSE**:**
To provide financial and infrastructure analysis on the potential implications to the District that would result from the construction of the proposed development at 13610 Banks Crescent.

BACKGROUND and DISCUSSION:
Further to the Workshop held October 25th and the Council Report on November 14th which outlined the infrastructure impacts that may result from the proposed development, Staff have completed a detailed financial analysis in order to quantify the operational cost implications that the proposed development would pose on the District.

FINANCIAL IMPLICATIONS:

1. GENERAL FUND

Property Taxation
To quantify the estimated annual taxation revenues that would be generated from this proposed development, data from a comparative facility was needed in order to make the appropriate calculations. After discussions with representatives from BC Assessment Authority, the Southwind Retirement Resort, located at 3475 Wilson Street in Penticton, was used as the facility was constructed in 2015 (so it is fairly new) and it offers similar levels of care.

Details provided by BC Assessment for this property were as follows:

Square footage:	159,167	
2017 Assessment values:	Land	$ 1,614,000
	Buildings	19,098,000
	Total	$ 20,712,000
Value per square foot (Land & Buildings)		$ 130

Based on discussions with BC Assessment, and review of existing assisted living complexes in Summerland (Angus Place & Summerland Senior Village), it was concluded that the entire proposed development would be classified as Class – 1 Residential for property taxation purposes.

Using the site plans provided by the developer we were able to extrapolate the approximate assessed value for each of the five proposed buildings (parking lots were also included in this calculation as they also generate taxation revenue) and calculate the approximate property taxes based on the District of Summerland's 2017 Class 1 taxation rates. The estimated annual municipal taxation revenue would be as follows:

Proposed Development	# of Units	Square Footage	Approximate Assessed Value	2017 Property Taxes
Building A - Market Housing (1 and 2 bedroom)	87	180,700	$ 23,514,094	$ 73,634
Building B - Market Housing (1 and 2 bedroom)	83	154,837	20,148,613	63,095
Building C - Independent Living (1 bedroom)	107	130,015	16,918,504	52,980
Building D - Memory Care (1 bedroom)	52	89,929	11,702,271	36,646
Building E - Market Housing (1 and 2 bedroom)	86	173,239	22,543,095	70,594
	415			$ 296,949

Fire Department

Based on discussions with the District of Summerland's Fire Chief, the Fire Department has identified some potential concerns with the construction of this development. However, mitigation of these concerns is all at the expense of the developer. Some of the main concerns are:

- Progressive sprinkler and standpipe riser must be installed during construction
- 24 hours, 7 days per week, on site security during construction
- Perimeter fencing around the entire construction site
- Adherence to the District's High Building Bylaw are adhered to.

In reviewing these concerns, it is the Finance Department's assumption that only one of the concerns could have potential future financial ramifications on the District's operations.

The District's High Building Bylaw notes that any building 6 storeys or higher is required to construct and equip, at the developer's cost, fire department rooms. Upon completion of the development, the loose equipment becomes the property of the District. Preliminary drawings indicate that four such fire department rooms will be required. It is estimated that each room will have approximately $12,000 of loose equipment that will need to be maintained and eventually replaced by the District. It should be noted that if this development is built under the 6-storey threshold, then the requirement to construct and equip fire department rooms is no longer mandatory.

Annual maintenance of this equipment has been deemed to be insignificant, however, future capital replacement would cost the District approximately $48,000. Based on an average 15-year useful life cycle this works out to be approximately $3,200 per year. Alternatively, the District, as part of the Development Agreement could require a covenant that would require the strata to replace the equipment based on the average useful life cycle, at their cost.

The Fire Chief has also noted there may be an increase in the amount of calls the Fire Department receives due to this development (i.e.: false alarms, etc.). However, this potential increase is very difficult to quantify as well as it is not specific to this one development. These potential increased calls can be attributed to any proposed development within the District.

RCMP

2016 census data noted that the District of Summerland's population was 11,615. This was an increase of 335 or 2.97% over 2011 census data. The proposed development will add approximately 1,000 residents to the District, thereby increasing our overall population to 12,615. This is important to note as the District's current share of RCMP costs is based on a 70%/30% split with the Federal Government. Once the District reaches a population of 15,000 our proportionate share of RCMP costs will increase to 90%.

Calculating when the District will reach this threshold is very subjective with numerous assumptions needing to be made. District staff have reviewed data from the last 4 censuses covering the years 2001 through 2016. Based on the data, the average annual population growth over this 15-year period was 0.63%. Taking this into account, the District will reach an estimated 15,000-population level in 2046. If the 1,000 estimated residents at this proposed development were not considered, and keeping all other assumptions the same, then the District would reach an estimated population of 15,000 in the year 2057.

The District's 2017 RCMP contract budget is $1,182,596. This is based on the 70/30 split noted above. For comparative purposes, if the District was currently over the 15,000-population threshold then the 2017 RCMP contract budget, at 90%, would have been $1,520,481, a difference of $337,885.

Roads & Sidewalks

The proposed development is expected to generate 2,032 vehicle trips per day. Based on a review of the background traffic volumes from the Solly Road and Latimer Avenue intersection completed as part of the Transportation Review and Roads Assessment, the traffic distribution to and from the site was estimated as:

- 50% of the traffic will be to and from the central core of Summerland via Prairie Valley Road on to Solly Road;
- 25% of the traffic will be to and from the north via Highway 97 onto Solly Road; and,
- 25% of the traffic will be to and from the south, which will be split:
    - 12.5% along Solly Road and Latimer Avenue to Highway 97; and,
    - 12.5% along Gillespie Road and Lakeshore Drive to Highway.

This results in 1,778 vehicles per day travelling to and from the site via Latimer Avenue and Solly Road and 254 vehicles per day travelling on Gillespie Road, MacDonald Street, Solly Road and Lakeshore Drive.

Based on the additional traffic volumes expected from this development, reconstruction of approximately 700m of Solly Road and 300m of Latimer Avenue to a collector road standard should be considered. The estimated costs to upgrades these roadways to an 8.6m wide asphalt roadway with sidewalk on one side is roughly $1.8M; $1.2M for Solly Road and $0.6M for Latimer Avenue. Staff are continuing to negotiate with the Developer to determine the amenity contribution amount for these upgrades.

Road & Sidewalk – Future Repairs & Maintenance

The recommended upgrades to a collector standard will increase the amount of asset along this roadway that the District will own and maintain moving forward. These include increasing the asphalt area by 900m^2 from 7,700m^2 to 8,600m^2, increasing the sidewalk length by 870m from 230m to 1,100m, and adding retaining walls which is conceptually estimated at 650 vertical square metres. The additional of these assets will not increase the operational costs to the District but it will impact the future replacement investment. The annual depreciated cost of these additional assets is approximately $9,400; however, reconstruction of these roadways will also delay a projected capital cost of $194,000 to mill and overlay the existing roadways in the next 10+ years

Roadway Snow Removal & Sanding

The District has 145km of paved roads and the total Snow Removal and Sanding budget in 2017 is $293,724 of which approximately $264,249 is attributable to roads. Therefore, the annual operational costs to maintain 1.1km which equates to the length of road from Highway 97 to the proposed development is approximately $2,000 so any increase to this would be minimal.

Sidewalk Snow Removal

Along Solly Road and Latimer Avenue from Highway 97 to the proposed development, there is currently 230m of sidewalk, which snow removal is completed by the District. The proposed upgrades would add 870m of sidewalk along these roadways; however, the District only removes snow from sidewalk that does not front private property; therefore, 180m of the additional sidewalk would be added to the District operations and the remaining 690m which fronts private property would be the responsibility of the property owners to clear. The District currently removal snow from approximately 11,400m of sidewalk within the District so the addition of 180m equates to an increase of 1.6%. The total Snow Removal and Sanding budget in 2017 is $293,724 of which approximately $29,075 is attributable to sidewalks. Therefore, an increase of 1.6% equates to an increase of less than $500.

Stormwater

The onsite storm drainage system is designed to handle the post-development 100-year storm event while retaining a maximum release rate equal to the pre-development 10-year storm event. This means an onsite storage tank is required to store runoff during a rain event and is allowed to release it into the District's stormwater system at a controlled rate. This will increase the volume of stormwater flowing through the downstream system but will not cause any increase in operational costs.

Waste Management/Recycling

The District currently contracts out waste and recycling collection for residential properties. The proposed development would not fall into residential waste collection parameters. Therefore, this development would be required to hire a private waste contractor, at their own expense, to deal with waste management as well as recycling.

If the private waste contractor hauled the garbage to the Summerland landfill, then the District would see an increase in tipping fee revenues. Staff have not quantified this increase in fees as there are currently too many unavailable data points to make a reasonable calculation.

It is estimated that this development would produce between 1.6 to 2.5 tonnes per week. In 2016 received an average of 96 tonnes per week at the Summerland Landfill. This Development would have a minor impact on the day to day operations, but it would reduce the time until closure by approximately 1.7-2.5%. Over the long term, this means that the time until closure will be reduced by approximately 1 year; therefore, the closure and post closure cost would need to be collected in a shorter duration, which means the tipping fees may have to be increased if the additional tipping fees collected from this development do not cover the 1-year closure and post closure costs.

Recreation

Staff anticipate that an increase in the District's overall population by approximately 1,000 new residents will have some impact on overall recreation costs. More people will be using the pool, trails, parks, etc. Staff does not believe this increased capacity will lead to capital facility upgrade requirements if current service levels are maintained. There may be programing changes that may need to be addressed, or the possibility of keeping a facility open longer to accommodate higher demand, but no major capital upgrades are anticipated due to this development.

The District's 2017 recreation budget was $1,609,257. Based on a population of 11,615 this calculates out to $138.55 per resident. As noted above, based on current service levels, there are no anticipated capital upgrades required due to this proposed development. Based on this, the per resident cost of recreation, based on 2017's recreation budget would decrease to approximately $127.57. These calculations assume that current service levels will be maintained at the current status quo. There may be a need to increase certain programs due to this increased capacity, which in turn would increase overall costs. However, without knowing which programs and which facilities they may be run out of, trying to quantify this increase is not practicable.

Council should also note that any potential operational increases would be offset by the actual fees associated with using the facilities, however, this has not been calculated the potential variability in potential facility utilization and program participation is too subjective.

Transit

There are no anticipated changes to the current transit routes or bus stop locations as a result of this development; therefore, are no anticipated operational cost increases. The Developer has noted that private shuttle services will be provided from this development; therefore, it is assumed that this would include transportation to an existing bus stop to connect to the existing transit system without having to modify the services provided by BC Transit.

2. UTILITIES

Electrical

To provide Council with estimated annual electrical revenues we examined the billing structure of similar types of facilities within the District of Summerland (Angus Place & Summerland Senior Village). It was determined that the proposed market housing units (buildings A, B & E) within this proposed development would be captured within the District's Residential Electricity rate structure. This rate structures consists of a per unit base fee, plus residential consumption, plus a KVA demand charge. It was further determined that the independent living and memory care facilities (Buildings C & D) would be billed based on the rate code of Primary Power Less than 500KVA Demand. This rate code consists of a per unit base fee (1 per building), plus consumption and KVA demand charge.

By using historical data from the above noted comparable facilities, we were able to extrapolate the data and calculate the following estimated revenues:

Buildings A, B & E:		**AVG Monthly**	**Annual**	
Electrical Base Rate		$ 17.62	$ 211.44	
Electrical Consumption		65.46	785.50	
KVA Demand Charge		17.08	204.96	
		$ 100.16	$ 1,201.90	
			(120.19)	10% Discount
			$ 1,081.71	
			x 256	Units
			$ 276,916.99	
Buildings C & D:		**AVG Monthly**	**Annual**	
Electrical Consumption		75.76	909.06	
KVA Demand Charge		15.43	185.20	
		$ 91.19	$ 1,094.26	
			(109.43)	10% Discount
			$ 984.84	
			x 159	Units
			$ 156,588.85	

The above calculation is based on estimated annual KWH for the entire development of 3,074,498 KWH. This can be further broken down to 1,759,294 KWH for buildings A, B & E and 1,315,204 KWH for Buildings C & D. The District's average current direct cost of power from FortisBC is $0.0859/KWH (this rate fluctuates on a monthly basis due to monthly and annual demand levels). Factoring in operational costs of the utility of $0.027/KWH increases the overall cost of power to $0.1129/KWH. Therefore, based on the estimated electrical consumption, the cost of providing power to this facility would cost approximately $347,111. In turn, estimated revenues are projected to be $433,506.

A detailed review of the District's agreement with FortisBC was performed to determine whether there are any thresholds that, if met, could increase the overall cost per KWH to the District. This review included extensive consultation with the District's contracted electrical engineer. It is anticipated that, based on a proposed 4.1-megawatt load and taking into account an 80% industry standard coincidence peak factor, the District would incur additional monthly demand costs, specifically attributable to this development, of approximately $45,300 or $543,600 annually. These additional costs would be partially offset by provisions in the District's current electrical bylaw that would allow the District to bill back, directly to the development, approximately $34,000 of monthly demand or $408,000 annually. This creates a monthly shortfall of $11,300 or $135,600 annually of demand billings that the District would currently have to absorb within operations.

Further discussions with our contract electrical engineer noted that the District could potentially make changes to our current electrical bylaw that would allow the District to invoice the development for the full excess demand amount, which would then ensure the District was not covering any demand billing shortfalls as a result of this proposed development.

Based on discussions with Utilities staff there may be some additional costs that could be attributed to this development such as, potential call outs, meter exchanges and increased postage due to more mailouts. The first two points are quite subjective and could vary drastically, therefore no cost estimate has been provided as it is too subjective. Increased postage on mailouts can be quantified. Based on the proposed 415 units, estimated postage costs would be approximately $5,500 (this is assuming that no residents sign up for electronic billing).

Water and Sewer

To provide Council with estimated annual water and sewer revenues we examined the billing structure of similar types of facilities within the District of Summerland (Angus Place & Summerland Senior Village). It was determined that based on current District bylaws that sewer charges would be billed on a per unit apartment rate charge and water would include a per unit base fee plus commercial rate consumption.

By using historical data from the above noted comparable facilities (water consumption only), we were able to extrapolate the data and calculate the following estimated revenues:

		Monthly	Annual	
Water Base Rate		$ 34.35	$ 412.20	
Water Consumption		4.31	51.71	
Sewer Apartment Rate		17.90	214.80	
Total Annual Charges per Unit		$ 56.56	$ 678.71	
Less 10% early payment discount			(67.87)	10% Discount
	Total per Unit		$ 610.84	
			x 415	Units
		Water & Sewer Facility Total	$ 253,497.25	

Based on discussions with Utilities staff there may be some additional costs that could be attributed to this development such as, potential call outs, meter exchanges and increased treatment and distribution costs. However, this potential increase is very difficult to quantify as there are numerous factors that could arise in any given situation.

Water Treatment

The total volume of water treated in 2016 was 7,590,486m^3 in 2016 or an average of 20,800m^3 per day. Actual water demand throughout the year can vary from approximately 3,000 m^3 per day in winter up to 75,000m^3 per day in the summer. The additional maximum daily demand from the proposed development is estimated to be 500m^3 per day or 182,500m^3 per year, or an increase of 2.4%. The total operation cost related to water treatment for items that would fluctuated with demand; such as treatment chemical, chlorine, process sand and power; is $452,000. Therefore, the increase of 2.4% in treated water could increase operational costs by approximately $11,000.

Wastewater Treatment Plant

For the Wastewater Treatment Plant (WWTP), the average peak daily flows recorded from 2014-2016 was roughly 2,700m^3 per day compared to the WWTP capacity of 4,000m^3 per day. Based on the current actual peak flow of 2,700m^3 per day for the current service population of approximately 6,200 people, the actual peak flow per capita is about 440 L/person/day. Based on the projected population for the development, the actual peak flow may increase by approximately 440m^3 per day from 2,700m^3 per day to 3,140m^3 per day, or 16%. The total operation cost related to water treatment for items that would fluctuated with demand; such as treatment materials, chemicals and power; is $248,664. Therefore, the increase of 16% in wastewater flows could increase operational costs by approximately $40,000.

Lift Stations

The peak flow to the Butler Street Lift Station is anticipated to increase from 22.9 L/s to 31.4 L/s, or 37%. The total operation cost related to the Butler Street Lift Station for items that would fluctuated with increase flows; such as labour to clean sumps, gas and power; is $8,453. Therefore, the increase of 37% in treated water could increase operational costs by approximately $3,200.

3. SUMMARY

The following table summarizes the projected annual revenues and expenses discussed in this report for this proposed development.

General Fund			
Property taxation Revenue			296,949
Fire Department		3,200	
RCMP		N/A	
Roads and Sidewalks - Capital		N/A	
Roads and Sidewalks -Operations		9,400	
Roadway Snow Removal & Sanding		N/A	
Sidewalk Snow Removal		500	
Stormwater		N/A	
Waste Management/Recycling		N/A	
Recreation		N/A	
Transit		N/A	
			(13,100)
			283,849
Utilities			
Electrical Revenues		433,506	
Direct KWH costs		(347,111)	
Excess demand cost		(543,000)	
Excess demand invoiced to development		408,000	
Increased electrical operating costs		(5,500)	
			(54,105)
Water and Sewer Revenues		253,497	
Water treatment expenses		(11,000)	
Wastewater treatment plant expenses		(40,000)	
Lift Station expense		(3,200)	
			199,297
			145,192
			429,041

4. DCC RESERVES

Development Cost Charges, or DCC's, were discussed at the Workshop held October 25th and the Council Report on November 14th. A DCC is a way to assist local governments in paying for the capital costs of future infrastructure upgrades or new infrastructure. DCC's are payable by Developers upon obtaining an approval of subdivision or a building permit. These are enforced through a DCC Bylaw which allows DCC's to be established and collected for the construction, upgrade or improvements to infrastructure related to the following services:

- roads, other than off-street parking;
- sewage;
- water;
- drainage; and,
- parkland acquisition and improvement

DCC balances at December 31, 2016 were as follows:

Water	Sewer	Storm Drain	Roads	Parks	Total
$ 177,031	$ 1,218,057	$ 94,526	$ 458,024	$ 1,044,574	$ 2,992,213

The proposed development would almost double the current DCC reserves with estimated DCC's calculated at $2,921,477. Based on the District of Summerland's current DCC bylaw, the following projects could potentially move ahead with a substantially amount of funding coming from the DCC reserves.

Water DCC

- Trout Creek System Upgrade as per UMA Study

Sewer DCC

- Wastewater Treatment Plant Expansion as per Earthtech Study

Stormwater Drainage DCC

- Jubilee Trunk – Jubilee at Cartwright to Henry, Wharton to Prairie Valley
- Prairie Valley Trunk – Prairie Valley at Prairie Creek (Phinney) to Brown at Prairie Valley
- Prairie Creek Upgrade – Giants Head School to Sinclair (Natural Drainage Course)
- Prairie Creek Upgrade – HWY 97 to West End of Butler (Natural Drainage Course)
- Munroe Stream – Victoria at Simpson to Canyon View (Natural Drainage Course)
- Deer Ridge Channel Upgrade – Deer Ridge to Prairie Creek
- Bentley Road Trunk – West Side of Bentley & across Bentley near HWY 97
- Morrow Avenue – Morrow, Prairie Valley to East of Sutherland

Roads DCC

- Jubilee Road Cartwright to Sinclair
- Jubilee Road Sinclair to Rosedale
- Peach Orchard Road Rosedale to Rose
- Peach Orchard Road Rose to Lakeshore
- Lakeshore Drive Peach Orchard to Fisher Close
- Lakeshore Drive Fisher Close to 708 meters north of HWY 97
- Lakeshore Drive 708 meters north of HWY 97 to HWY 97
- Prairie Valley Road Wharton to Cartwright

Parks DCC

Park Land Acquisition DCC

- Acquisition of two land parcels on the water front along Lakeshore Drive and 4.27 hectares of land for community and neighbourhood parks in accordance with the District of Summerland Recreation Master Plan, December 2001.

Park Improvement DCC

- The provision of park land improvements to existing parks and to parks acquired after the Effective Date of this Bylaw pursuant to any of the Park Land Acquisition DCC Program, the subdivision process or other means, such as improvements to be:

  a) Recreation buildings, such as
     i. Washrooms,
     ii. Washroom accessibility upgrades,
     iii. Change rooms, and
     iv. Change room upgrades; and

  b) Outdoor recreation facilities, such as
     i. Sports fields,
     ii. Playgrounds,
     iii. Casual use facilities and amenities, and
     iv. Trails, fencing, landscaping, drainage and irrigation.

CONCLUSION:
The infrastructure and financial analysis was conducted by staff to give Council a sense of the potential financial impacts that the District may experience if it proceeds. As noted throughout the report, there are a lot of assumptions, generalizations and subjectivity in trying to quantify some of these values, however, staff feel this report provides the information requested by Council.

OPTIONS:
1. Move the motion as recommended by staff.
2. Request additional information on items presented, or on addition items identified.

Respectfully Submitted,

David Svetlichny, CPA, CA
Director of Finance

Kris Johnson, P.Eng.
Director of Works and Utilities

Approved for Agenda

Dean Strachan, MCIP, RPP
Acting CAO