### SUMMARY OF THE CURRENT GEORGE DEVELOPMENT APPLICATION

The George Hotel and Residences Development application is coming up for consideration and a clarification overview and description of the current application is appropriate. The current town website only provides information on the current minor changes to the application and does not provide information on the previous substantial work submitted which forms a major portion of the George application. This summary has also been provided on the George website "georgemarineresortandresidences".

The George Development consists of the following: i) a 111 room boutique hotel with a Conference Centre and a Spa and Wellness Centre ii) a 39 Residential building iii) A below the street 2 level concrete parkade accommodating the required hotel and residential parking iv) An upgrade of the Hyak Marina to expand additional boating slips by approximately 70 slips and provide for a 150 foot commuter ferry.

The George Application includes the Form and Character, Environmental, Geotechnical and Aquifer Development Permits.



Approximate View of the 5 storey George Project from the Gower Point Road sidewalk

#### FORM AND CHARACTER DEVELOPMENT AREA NO. 5 APPLICATION:

The George Hotel, Residential and Parkade Form and Character Development Permit has previously been approved by Planning, Engineering and a previous Council. The current Form and Character design of the George is in response to previous extensive community and planning input. The current application is the same as previously approved except for minor changes that include the height reduction of one commercial storey by 11 feet 4 inches and the elimination of the previously proposed third level of the parkade. The Form and Character development permit allows for minor changes to the previously approved application.

The George Development upland site is most suited for the development of the proposed project. The OCP allows for the George development on the site. The site also has a CDA-2 zoning allowing for the hotel and conference centre, condominium residences and

restaurant proposed development uses. Both the hotel and residences building heights are one storey lower than the zoning allows.

The unique slope of the property from the Gower Point Road sidewalk (geodetic height of 10.5 meters) to the seawalk (geodetic height of 2 meters) allows for the two level concrete parkade to be below the Gower Point Road sidewalk elevation. More importantly the slope also allows the 2 storey parkade to be above the Flood Construction Level (FCL) of 5.37m in response to Sea Level Rise and Climate Change. This ensures that the required parking will not be flooded and avoids the possibility that parking be eliminated by Climate Change causing potential loss of project parking and major losses in Residential and Hotel values.

The unique sloping of the site also allows the concrete residential building's height from the Gower Point Road street level to be 5 stories. From the waterside the height of the George in comparison with existing buildings on Gower Point Road in the commercial area of lower Gibsons are approximately the same.

The 111 room boutique hotel is a 4 storey building plus the one storey Convention and Wellness Centres on the plaza level resulting in the hotel also being 5 stories from the street sidewalk. The hotel convention and wellness centres are ongoing economic generators for the Gibsons community and provide a substantial tax base and employment.

The sloping site also allows for the George project, including the two level parkade, to be built above the aquitard with no requirement to excavate any portion of the aquitard.

The George project has protected the community uses of the Winn Road portion incorporated into the George project by providing 12 community parking stalls in the parkade and the improved pedestrian access through the open plaza area from Gower Point Road to the seawalk.

### **ENVIRONMENTAL DEVELOPMENT PERMIT AREA NO. 2 APPLICATION**

The George Project has previously received a Development Area No 2 approval that included the upland and foreshore lands and approvals for the marina, dredging, piledriving, pier, restaurant and fuel dock. Keystone Environmental and Balanced Environmental previously provided the environmental reports upon which the approval was given. Keystone and Balanced have confirmed that its Environmental reports previously submitted are current and Balanced has provided some additional details for the marina layout.

# DEVELOPMENT PERMITS AREAS NO. 1 AND NO. 9 (geotechnical and aquifer areas)

The issue of the site materials to support the George project and protecting the aquifer has always been considered to be a major focus for the design team, specifically from a geotechnical and hydrogeological viewpoints along with the sea rise and climate change issues. The report prepared by Horizon Engineering for geotechnical and hydrogeological aspects of this project was peer reviewed by Waterline, Levelton, and Geosystems, and the Development Permits for Areas 1 and 9 were previously issued by the Town of Gibsons. Horizon has also confirmed that their reports are current.

The report prepared by Horizon Engineering Inc. includes the following:

- i) Drilling of 9 auger holes, advancing four Dynamic Cone Penetration Tests (DCPTs), drilling of 24 sonic holes, 23 WildCat Cone Penetration tests, 34 Cone Penetration Test (CPT) soundings, 6 Seismic Cone Penetration Test (SCPT), installation of 10 piezometers for monitoring the Aquifer pressures, and laboratory testing on the soil samples. Note that some piezometers were installed in 2014 and many drill holes have been monitored for years.
- ii) The above-mentioned subsurface investigations were carried out to estimate the thickness of the aquitard and depth to the aquifer at different portions of the site, characterizing the aquitard materials, characterizing the aquifer materials, and monitor the aquifer pressures. This magnitude of investigation is not typical for a project of this size.
- iii) A computer model was generated to analyse the site and subsurface conditions during and after construction of the proposed development based on existing information, published literature, and engineering judgement. The analysis included slope stability analysis, seepage analysis, deformation analysis, and liquefaction analysis. The main goal for the aforementioned analyses was to ensure that the underlying Gibsons Aquifer is not compromised (even temporarily) due to construction of the proposed development.
- iv) It was recommended to remove the existing fill and peat soils at the site since they are not part of the aquitard (natural protective structural layers overlying the aquifer). The removal of the fill and peat soils would not have a negative impact on the aquifer and would be carried out one section at a time. Due to the site profile the entire George project, including the two level parkade, is built above the aquitard and no excavation of any part of the aquitard is required.
- v) The existing, natural soils would then be compacted using Rapid Impact Compaction (RIC). If required, the site would then be preloaded using

- imported structural materials to ensure that the subsurface soils would have the strength to carry the loads from the proposed building.
- vi) The foundation system for the proposed building would include a raft slab that would cover the entire footprint of the proposed building. This was recommended to provide more uniform distribution of the building loads to the subsurface soils.
- vii) Horizon has also provided recommendations for the Sea Dike (Seawalk).

In conclusion and based on the years of investigation commencing in 2014, the analysis, monitoring and their extensive analysis of the site materials and aquifer under the George site, Horizon has determined that:

- 1) the aquifer will not be adversely impacted by the George Development. This was also confirmed by the peer review that was carried out in 2017.
- 2) the proposed George project can be built on the existing site materials as proposed

It also must be noted that the aquifer protection area designated in the Area 9 mapping is approximately 1,373,514 square meters and the footprint of The George site is approximately 6,807 square meters being only a 0.5% of the aquifer area.

The George has agreed to pay for the Town of Gibsons to have another peer review of the Horizon reports.

#### **ECONOMIC BENEFITS TO THE COMMUNITY**

Apart from the short term local labour and materials required for the project construction and the long term tax base of the hotel and residences the hotel provides a long term continuous economic community generator through annual tourist, conference, spa and wellness attractions of the hotel.

The following are economic contributions of the George Development:

## **Construction Phase**

Creates approximately \$54, 000,000 of wages and approximately the same amount in required materials

- i) Pays approximately \$1,700,000 in DCCs that pay for new and upgraded road, sewer, water and other town infrastructure.
- ii) Pays 547,890 for building permits.
- iii) Provides \$156,548 to the Gibsons Affordable Housing fund, \$100,000 for the Winegarden Park upgrades and \$350,000 for the upgrade of the sewer pumpstation.
- iv) Pays \$1,000,000 for the removal of the upland and foreshore contamination generated by previous owners.
- v) Pays approximately \$1,000,000 for the upgrading of the seawalk

# Permanent Annual Post Construction Benefits

- vi) The hotel and residences generate approximately \$1,000,000 annual tax payments.
- vii) The Marina pays to TOG an annual 15% of marina revenue for the water lease and provides an additional 70 slips and a commuter ferry slip.
- viii) The hotel, conference and wellness centers generate approximately over 32,000 visitors annually.
- ix) The hotel visitors also generate approximately \$14,000,000 in spending for local businesses.
- x) The hotel generates 130 new permanent jobs.

The George is pleased to provide this information and will continue to provide clarification information relating to the George and its applications.

# ADDITIONAL HORIZON DOCUMENTATION REGARDING THE GIBSONS AQUIFER PROTECTION

The Horizon Geotechnical report is current and consists of multiple complex engineering analysis and conclusions. We thought it might be more informative if we pulled out Horizon engineering information that specifically dealt with the Gibsons Aquifer to better show how the George is protecting the aquifer. Firstly Horizon has reviewed the information provided in section "DEVELOPMENT PERMITS AREAS NO. 1 AND NO. 9 (geotechnical and aquifer areas)" and has stated that "The aquifer will not be adversely impacted by the George Development." The following information is referenced in the attached file "XXX" that sets out the Horizon mapping of the material levels of the aquitard under the George Development and why the aquifer and the aquitard is not negatively impacted by the project.

- 1) The site consists of fill on top of the peat level over the aquitard. The site geotechnically and structurally must be stripped of the fill and peat levels. TOG has stated that the removal of the top 1.5 meters (4.92 feet) will not impact the aquifer.
- 2) Referencing Section A and C on the attached file, the P2 elevation is 5.37 meters and as shown that level is substantially above the existing grade for most of the site and well above the allowed 1.5 meters of allowed stripping. The P3 level on these drawings has been eliminated.

- 3) A small section of the site on sections A and C approaching Gower Point Road show the peat level and non structural fill (seabed sediments) that are to be removed. The P2 elevation in sections A and C is in the peat level and above the aquitard and in section D the P2 lever is well above the aquitard.
- 4) Section E shows even a smaller area (approximately 0.06 % in the north east corner that does cut into the aquitard by approximately 3 feet that will be filled by the proposed 3 foot thick reinforced steel concrete slab. The 3 feet of reinforced concrete raft slab offers considerably more protection for the aquifer than the small area of the aquitard to be removed.