

Official Community Plan

DPA No. 1: Natural Environment

Area

Land within the municipal boundaries of the Corporation of the Township of Esquimalt.

Designation

Development Permit Area No. 1 is designated for the purpose of establishing objectives for:

Section 488 (1) (a)- protection of the natural environment, its ecosystems and biological diversity Note: For DPA justification and exemptions, please refer to the Official Community Plan, pages 75-77.).

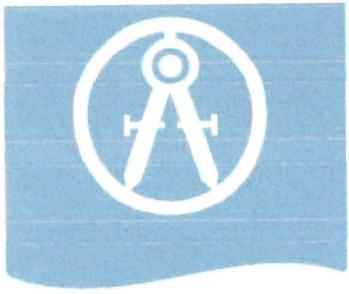
If you are proposing a development within this DPA, please provide your application details in Section A. In Section B, please comment on how you propose to meet the DPA guidelines.

Section A

Application No.	Project Address	Applicant Name
DP	900 Carlton Terrace & 900 Head Street	Richard Gill, Development Manager GMC Projects Inc.

Section B

No.	Guideline	Comments (Please complete with NA where not applicable)
18.5.1	Lands Free of Development	
1	Land within 7.5m of the high watermark of the Gorge Waterway shall be retained in as natural a state as possible. Where the land has been previously altered, the area shall be restored with native trees and plants	NA
2	New buildings/ structures shall not be located within 20 m of the high watermark of the Gorge Waterway.	NA
3	New buildings/ structures shall not be located within 10 m the high watermark of the Strait of Juan de Fuca.	NA

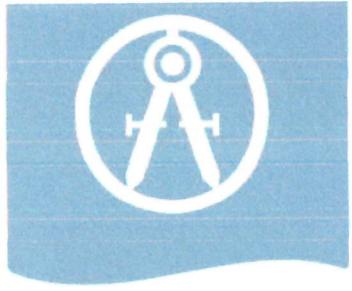


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4	Replacement of, expansion of, densification and intensification of the use of existing buildings within 20 m of the high watermark of the Gorge Waterway is discouraged; detached accessory dwelling units are strongly discouraged in this location.	NA
5	Replacement of, expansion of, densification and intensification of the use of existing buildings within 10 m of the high watermark of the Strait of Juan de Fuca is discouraged and detached accessory dwelling units are strongly discouraged in this location.	NA
6	Variances to 'Building Height' and 'Siting Requirements' will be considered where natural areas and trees are being protected.	The natural area at the corner of Carlton Terrace and Esquimalt road with the large Garry Oak tree will be preserved and protected.
7	Consider the use of conservation covenants for areas having high ecosystem conservation values. Property owners are encouraged to work with local land trusts to protect natural features and valuable habitat areas through land covenants.	NA

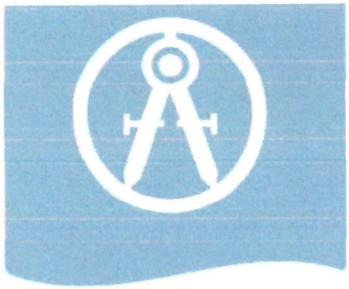
18.5.2 Natural Features

1	Retain existing healthy native trees, vegetation, rock outcrops and soil wherever possible.	The existing Garry Oak tree (NT6), rock outcrops and soil located at the corner of Esquimalt Road and Carlton Terrace will be retained and protected through-out construction.
2	Preserve and enhance native tree and shrub clusters that overhang the waters edge as these provide shade, protection and feeding habitat for fish and wildlife.	NA
3	Preservation of natural topography is favoured over blasting or building of retaining walls.	Most of the existing site is currently occupied by aging buildings and paved parking lots. The only remaining fragment of natural topography on the site is located at the corner of Esquimalt Road and Carlton Terrace will be preserved.
4	Narrower manoeuvering aisles, fewer and smaller parking spaces can be considered where natural areas are being conserved.	There are no at-grade parking areas proposed on site.



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5	Design new development and landscaping to frame rather than block public views.	The proposed landscape design has taken into consideration pedestrian site lines along Head Street, Esquimalt Road and Carlton Terrace.
6	Avoid disturbing, compacting and removing areas of natural soil as this can lead to invasion by unwanted plant species, poor water absorption and poor establishment of new plantings. Use of local natural soil in disturbed and restored areas will support re-establishment of ecosystem functions.	The landscaped areas around NT6 will be undisturbed, except for the addition of compatible plantings. The rest of the landscape will be new soils and plantings.
18.5.3 Biodiversity		
1	New landscaping shall consist predominantly of native plant and tree species. Plants that are native to the Coastal Douglas-fir biogeoclimatic zone are preferred in landscape treatments as they provide habitat for threatened indigenous flora and fauna. Drought tolerant plants native to western North America, that are known to be non-invasive, are a good alternative choice for landscaped areas.	The landscape planting includes a number of native plants and trees where the siting and environmental conditions were appropriate. All of the plants selected are drought tolerant and non invasive. Please refer to tree planting plan for further detail.
2	In residential locations plan for 'nature out front'; for new landscaping in front and exterior side yards use a variety of site-appropriate, native species; thereby contributing positively to pedestrian friendly urban streets, future greenways and habitat enhanced corridors.	NA
3	Choose trees and plants for site conditions; consider shade, sunlight, heat, wind-exposure, sea spray tolerance, and year round moisture requirements in their placement.	All of the plants and trees for this project were selected with consideration to site conditions: including shade, sunlight, heat, wind-exposure, sea spray tolerance, and year round moisture requirements in their placement.
4	Consider the habitat and food needs of birds, pollinators, and humans in tree and plant species selection and placement; native plantings and food gardens compliment each other.	The planting plan includes trees and shrubs that are both pollinators for bees and food providers for birds. The benefits to the human experience of users of the space were also considered with shade.
5	Encourage native plant and food gardens to spill from private land into boulevards.	The native plants in this design are located in both private areas and boulevard gardens.



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6	Avoid monoculture plantings, especially expanses of turf grass outside of playing field sites.	The planting plan does not have mono culture plantings.
7	Snags, logs, driftwood and rock cairns may be used as interesting landscaping features that also provide habitat for native flora and fauna.	We have included large boulders in the landscape design to be used for seating and visual interest.
8	Avoid using fast-growing non-native plants to cover and retain soils as they may become invasive and a constraint to the establishment of other plants.	We have not included any non native invasive plants in our planting plan.
9	Locate civil servicing pipes/lines under driveways or other paved areas to minimize tree root damage. (Note that the majority of trees have their roots in the top 0.6 m of the soil).	The planting plan has located and considered the locations of civil services in the placement of the proposed trees.
10	Design retaining wall spacing and landscape planting areas of sufficient width and depth to support plantings (eg. provide larger spaces for trees).	Soil depth and volume has been considered and calculated in the planting plan and planter depth specifications.
11	Support the daylighting of portions of the stormwater system for enhanced habitat.	The landscape design includes a passive rain garden in the dog park area to retain and filter surface water from that open area.
12	Aim to meet the Canadian Landscape Standards in all landscaping installations.	The landscape design will be specified to the Canadian Landscape Standards at the BP stage.

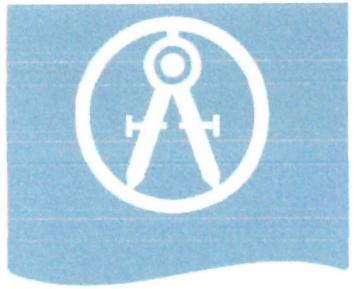
18.5.4 Natural Environment

1	Strategically locate leafy trees/ hedges and water features to mask urban noises such as traffic, garbage collection and delivery locations. Consider that leafy rough barked trees, vine covered walls and natural ground cover materials (mulch, soil) will help dampen urban noise.	We have located leafy trees along all boulevard spaces and public amenity spaces as well as a large water-feature. The rooftop amenity also includes several trees and two water features which will dampen urban noise.
2	Use International Dark-Sky Association approved lighting fixtures in outdoor locations. Outdoor lighting shall be no brighter than necessary, be fully shielded (directed downward and designed to serve pedestrian needs), have minimal blue light emissions and only be on when needed. Avoid vanity lighting, and lighting directed into the night sky and trees tops.	International Dark-Sky Association approved lighting fixtures are used in all outdoor locations. Outdoor lighting will be no brighter than necessary, be fully shielded, have minimal blue light emissions and be on only when needed. No vanity lighting is proposed and no lighting will be directed into the night sky and tree tops.



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3	Light spillage on to waterways is strongly discouraged.	NA
4	Place trees and vegetation near sources of air pollution including busy roadways, to assist in reduction of air pollution through the collection of particulate matter on leaves and needles, and absorption of toxic gases, including but not limited to: ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, carbon dioxide, cadmium, chromium, nickel and lead.	The planting plan locates several trees all along the Esquimalt Rd. frontage as well as along Carlton Terr. and several in the open space a large water feature on the corner of Head St and dog park amenity area. There are also several trees on the rooftop amenity space. There is a large water feature proposed on the corner of Esquimalt and Head St and two water features on the rooftop.
18.5.5 Drainage and Erosion		
1	Preserve, restore and enhance treed areas. Trees are the most effective form of absorbent landscaping due to their extensive root zones and their ability to both absorb water from the soil and intercept precipitation on leaves, needles and branches. Consider that native conifers are well adapted to local wet winters.	The large Garry Oak Tree (NT6) will be retained and protected. There are two significant planted areas at the ground plane, one at the south corner and at the dog park amenity space. There are also several planters throughout the pedestrian frontage to allow for water infiltration. The rooftops are designed as green roofs that both absorb and slow storm water.
2	Reduce the impact of surges in stormwater on shorelines by designing on-site stormwater retention systems to contain the first 3 centimetres [1.25 inches] of precipitation on site, per precipitation event; and incorporating rainwater collection systems into roof design and landscaping.	There is a passive rain garden designed for the dog park amenity space to receive surface water from that open area. In addition the gravel area will be permeable. The rooftops are also green roofs which will both absorb and slow storm water. The large roof top amenity will also absorb storm water in their planters.
3	Consider using shared private/ public rain gardens. Direct a portion of stormwater to adjacent public open spaces, when deemed appropriate by the Director of Engineering and Public Works.	There is a passive rain garden designed for the dog park amenity space to receive surface water from that open area.
4	Maximize the ratio of planted and pervious surfaces to unplanted surfaces, and design paved areas to direct water towards vegetated areas, to help reduce surface run off. Where paved surfaces are needed, intersperse with drought resistant vegetation and trees, to help absorb stormwater, provide shade and reduce the local heat island effect.	We have maximized the planted and pervious surfaces for the open spaces with consideration of addressing the need for pedestrian circulation and access of the building amenities.



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5	Use porous surfaces to enhance stormwater infiltration, permeable paving is preferable for all open air parking areas. Ensure installation methods contribute to sustained permeability and retention of stormwater on the site.	Permeable pavers have been specified for the two main entrances at the ground level. Gravel treated with Romex TM. is specified for the dog park hardscape.
6	Choose absorbent landscaping materials; leaf mulches, wood chips and good quality top soil, over gravel, pavers and concrete. Provide mulch of organic, locally derived materials; leaf mulch from local tree leaves is most desirable.	These locally sourced top quality materials will be specified at the BP stage.
7	Incorporation of rain gardens, bio-swales, rain barrels, and even small depressions (puddles) into landscaping will help reduce surges of stormwater entering local waterways.	We have included a rain garden in the dog park area and we have a number of garden bed depressions in the paver frontage to the building, in addition to the garden bed areas.
8	Planting densities should ensure that vegetated areas will have near 100% plant coverage after two full growing seasons.	The plant densities as specified will reach 100% coverage after two years.

18.5.6 Protect, Restore and Enhance Shorelines

1	Waterfront property owners are encouraged to become familiar with and adopt a 'soft shore' restoration approach to the care of their foreshore property (i.e. Green Shores for Homes).	NA
2	Avoid the expansion of dock area, bulkheads, groins or other shoreline hardening structures. Removal or reductions in the surface area of existing private docks is encouraged.	NA
3	Where shoring methods are required to prevent erosion or the sloughing of the shoreline, choose bio-engineering methods over the use of sea-walls or retaining walls. Where sea-walls or retaining walls are the only means of effectively preventing erosion, design in consultation with qualified environmental professionals, as well as engineering professionals.	NA



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18.5.7 Native Bird Biodiversity	
1	Protect and enhance habitat features like mature trees, shrub clusters, native fruit bearing shrubs, fresh water ponds and ephemeral damp areas (puddles).
2	Encourage increased front yard habitat along quieter streets to reduce bird vehicle conflicts and enhance the pedestrian experience through native plantings.
3	Sustain a mix of habitat types; including forest, shrub-land, meadow, riparian wetland and coastal shoreline ecosystems in landscaping.
4	Incorporate a vertical vegetation structure [vertical habitat] including layers of ground cover, shrub, understorey and canopy in landscape design.
5	Choose a range of native plant species and sizes; a mix of coniferous and deciduous trees will enhance bird species diversity.
6	Incorporate architectural features that limit collisions between birds and windows including patterned, frosted or tinted glass, exterior louvers, blinds, sun shades and canopies.
7	Cap and screen all ventilation pipes and grates, avoid openings greater than 2.0 x 2.0 cm.