- temporary impacts from pouring concrete,
- permanent increase of approximately 16,000m^3 of water column,
- permanent shading of 100m^2 of upper intertidal species (common rush, sea milkwort and grasses) and 148m^2 of intertidal rockweed, and,
- permanent loss of 50m^2 of riparian shrubs and grasses.

4.4.2 Mitigation

Temporary generation of turbidity from dredging will be mitigated through standard BMPs, environmental monitoring and isolation of the worksite from surrounding waters through the use of silt curtains if necessary.

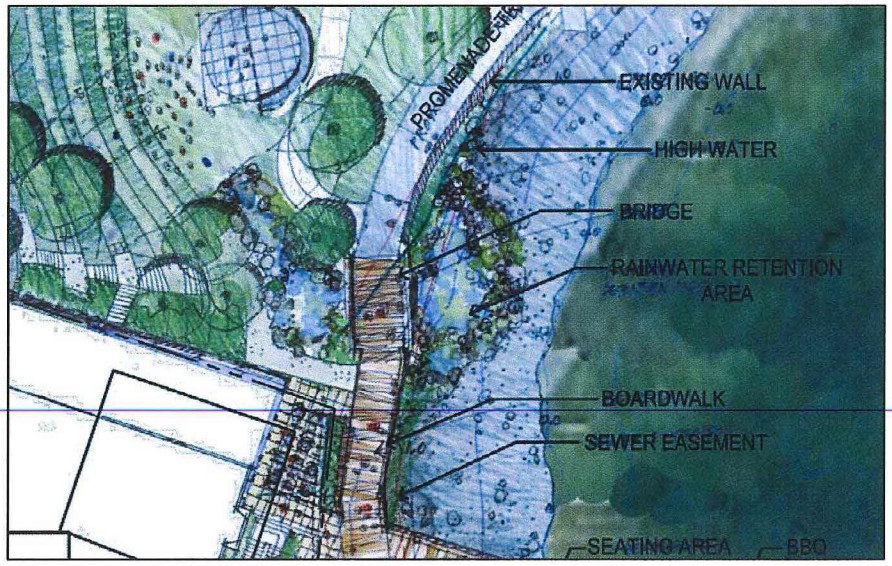
The generation of pressure waves in excess of 30kPa can often be avoided through the use of low impact construction technologies such as vibratory hammers. Monitoring of pressure waves during construction will allow for mitigation strategies such as bubble curtains to be implemented when necessary.

Impacts associated with the use of "wet" concrete can be mitigated through existing BMPs for its use in and around fish bearing waters including monitoring the pH of adjacent marine waters, employing additives to shorten set-up times and precast concrete components.

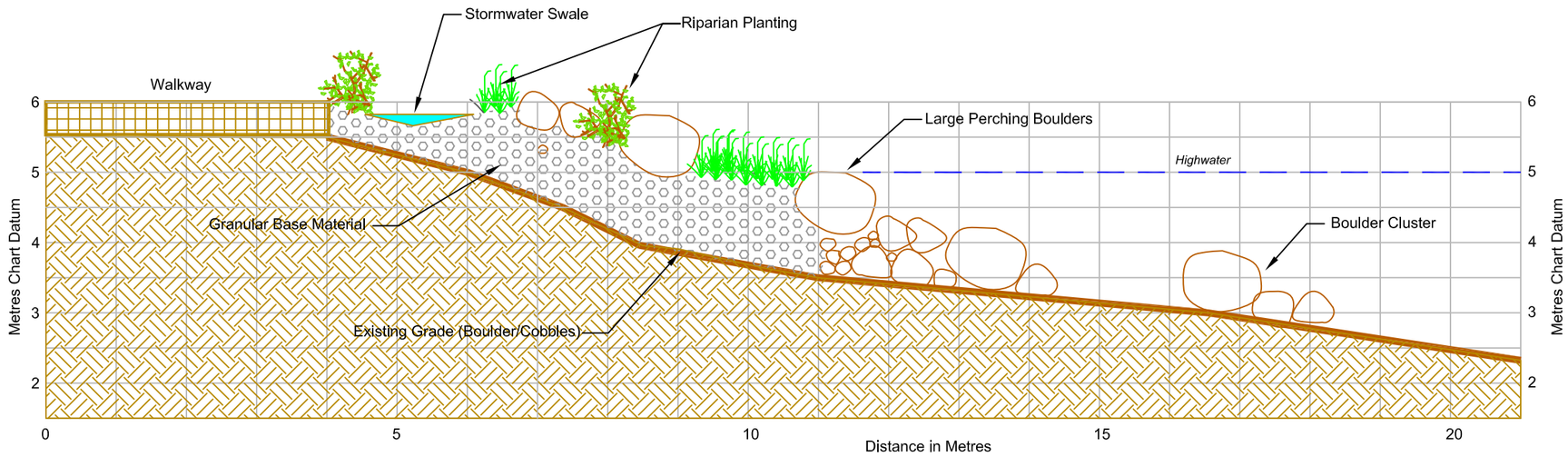
The permanent increase of approximately 16,000m^3 of water column is a direct benefit to fish and fish habitat and does not require mitigation.

The permanent shading and loss of approximately 300m^2 of riparian and intertidal plants is mitigated through the construction of a 500m^2 habitat enhancement feature located along the north edge of the property (see Figure 1). This feature involves the construction of a stream and settling ponds to provide infiltration and retention of sediment laden storm water prior to discharge into the marine environment. The feature will increase biodiversity at the site by providing stable substrates for marine organisms along the rock faces and refuge areas for juvenile fish. The enhancement feature will serve as a public amenity associated with Winegarden Park and with signage improve public awareness of the environment.

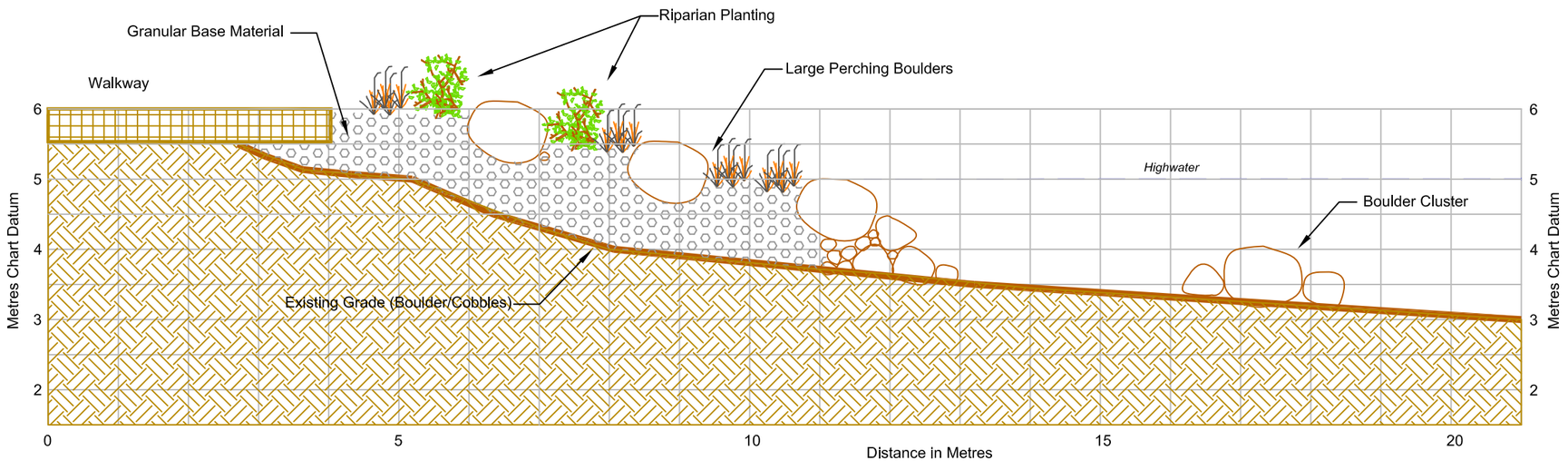
Figure 1. Proposed Habitat Enhancement Feature



North Side of Pier



South Side of Pier



DRAWING NOTES

- Elevations in Metres Chart Datum. Subtract 3 Metres from Chart Datum to arrive at Metres Geodetic

.

- The information, including bathymetric and survey data, presented on the drawings may vary from current conditions due to the passage of time or seasonal changes in substrate and biota.

LEGEND

- Walkway
- Granular Base Material
- Existing Grade
- Boulder Clusters (D50 > 900mm)

PLANT LIST

Elderberry	Snow berry
Nootka Rose	Carex
Ocean Spray	Dunegrass
Prickly Rose	Sea Arrow -grass
Red Elderberry	Sea plantain
Salmonberry	Picklew eed

Ref. No.	REFERENCE

Client:

The George

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Author:

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Checked by	SC
Drawn by	xie
Date	June 28, 2017
Scale	See Barscale
Inspectors	
Paper	11 x 17

PROJECT

THE GEORGE WATERFONT PROJECT
SHORELINE MITIGATION MEASURES
TOWN OF GIBSONS, BRITISH COLUMBIA

DWG. No. 5765-D-02.1 Sections

TREE IMAGES

SHRUB IMAGES

GRASS IMAGES

PERENNIAL IMAGES

PLANT SCHEDULE

GROUND FLOOR

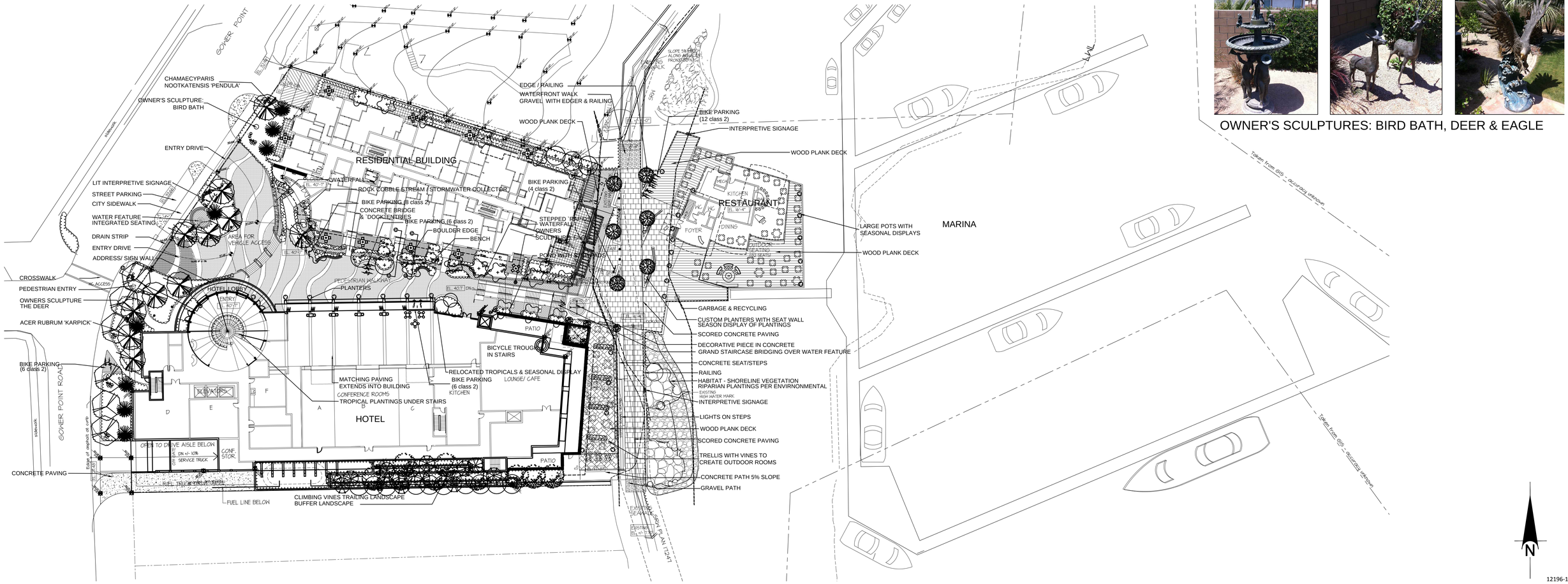
PMG JOB NUMBER: 12-196

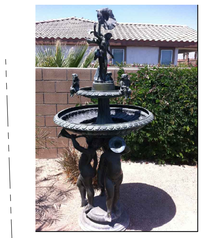
KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
	15	ACER CIRCINATUM	VINE MAPLE	3.5M HT; B&B; 3 STEM CLUMP
	17	ACER PALMATUM `OSAKASUKII'	JAPANESE MAPLE	2.5M HT
	6	ACER RUBRUM 'KARPICK'	COLUMNAR KARPICK MAPLE	7 CM CAL; 2M STD; B&B
	6	AMELANCHIER x GRANDIFLORA 'PRINCESS DIANA'	PRINCESS DIANA SERVICEBERRY	5CM CAL; 1.5M STD; B&B
	8	CHAMAECYPARIS NOOTKATENSIS 'PENDULA'	WEEPING NOOTKA CYPRESS	2M HT; B&B
	4	CORYLUS AVELLANA `CONTORTA'	CORKSCREW HAZELNUT	2.5 M HT; 4 STEM OR MORE; B&B
	14	PICEA OMORIKA	SERBIAN SPRUCE	2.5M HT; B&B
	9	POPULUS TREMULA 'ERECTA'	SWEDISH COLUMNAR ASPEN	8CM CAL; B&B
	11	STYRAX JAPONICUS 'PINK CHIMES'	JAPANESE SNOWBELL	6 M CAL; 1.8M STD; B&B

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED BC LANDSCAPE STANDARD'S LATEST EDITION. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY

LIGHTING: ALL LIGHTING TO BE NIGHT SKY FRIENDLY AND IS TO FOLLOW DEVELOPMENT PERMIT GUIDELINES- AREA #5

BIKE PARKING:
STREET LEVEL - 26 CLASS 2
LOWER LEVEL - 16 CLASS 2





OWNER'S SCULPTURES: BIRD BATH, DEER & EAGLE

12196-15.ZIP

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

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SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
10	16.AUG.17	ISSUED FOR CO-ORDINATION	MM
9	16.JUNE.14	REV. PATIO LOCATIONS	MM
8	16.MAY.09	BIKE RACK COUNT	MM
7	16.MAY.04	REV. CURB & BIKE RACKS	MM
6	16.APR.29	NEW SITE PLAN	MM
5	16.APR.21	NEW SITE PLAN, NOTES ADDED	MM/PC
4	16.03.09	SITE PLAN CHGS, DD	DO/PC
3	16.03.03	SITE PLAN CHGS, DD	DO/ PC
2	16 FEB 17	NEW SITE PLAN	DO/ PC
1	13.OCT.09	NEW SITE PLAN	MM

ARCHITECT:

PROJECT:

THE GEORGE - HOTEL & RESIDENTIAL UNITS

GOWER POINT ROAD
GIBSONS, B.C.

DRAWING TITLE:

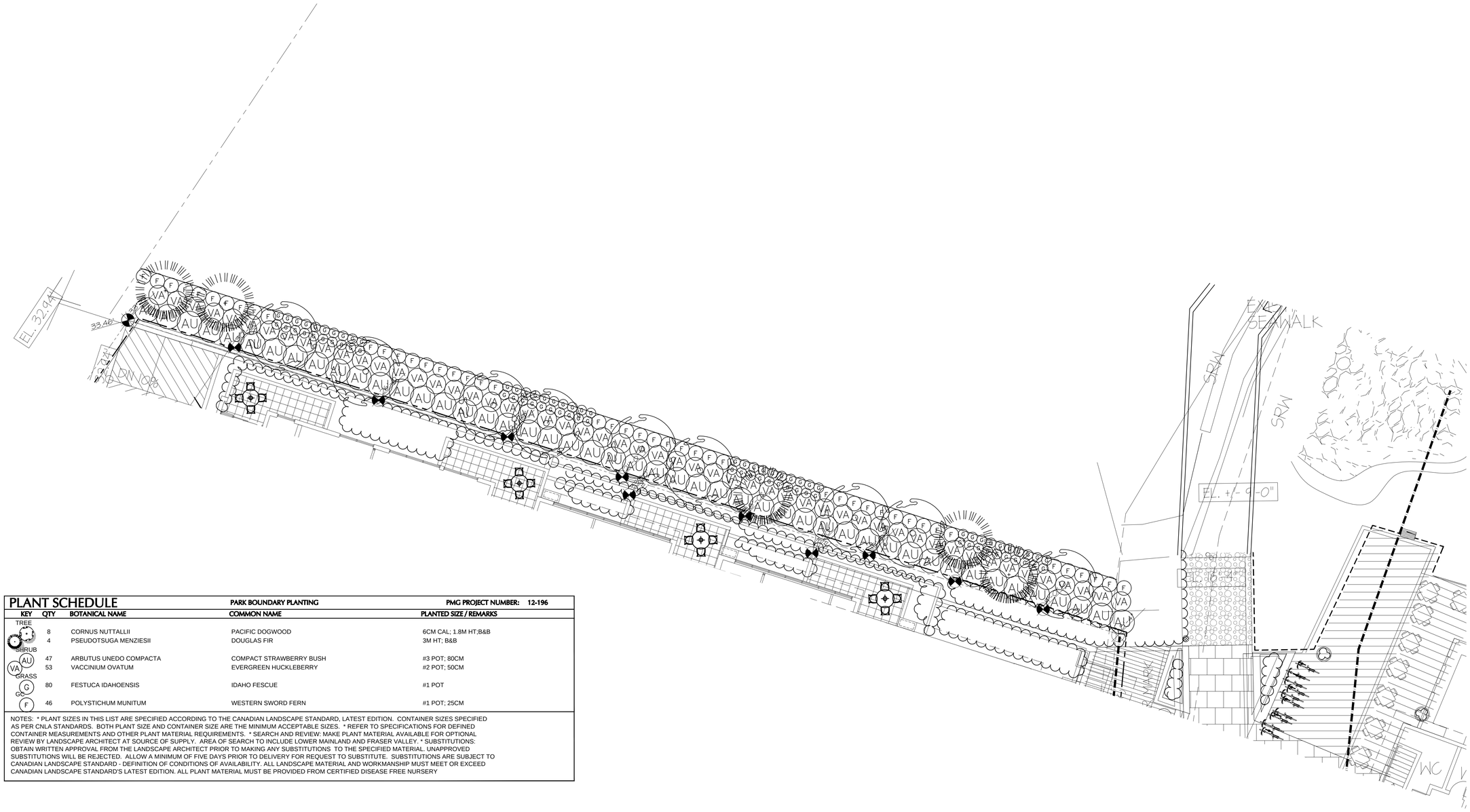
LANDSCAPE PLAN

DATE: 13.SEPT.24
SCALE: 1"=30'-0"
DRAWN: MM
DESIGN: PCM\MM
CHK'D: PCM

DRAWING NUMBER:

L1 OF 5

PMG PROJECT NUMBER: **12-196**



PLANT SCHEDULE

PARK BOUNDARY PLANTING — **PMG PROJECT NUMBER: 12-196**

KEY	QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
TREE				
	8	CORNUS NUTTALLII	PACIFIC DOGWOOD	6CM CAL; 1.8M HT;B&B
	4	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	3M HT; B&B
SHRUB				
AU	47	ARBUTUS UNEDO COMPACTA	COMPACT STRAWBERRY BUSH	#3 POT; 80CM
VA	53	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	#2 POT; 50CM
GRASS				
G	80	FESTUCA IDAHOENSIS	IDAHO FESCUE	#1 POT
GC				
F	46	POLYSTICHUM MUNITUM	WESTERN SWORD FERN	#1 POT; 25CM

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE CANADIAN LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNLA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO CANADIAN LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY. ALL LANDSCAPE MATERIAL AND WORKMANSHIP MUST MEET OR EXCEED CANADIAN LANDSCAPE STANDARD'S LATEST EDITION. ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY

N

12196-17.ZIP

pmg LANDSCAPE ARCHITECTS
Suite C100 - 4185 Still Creek Drive
Burnaby, British Columbia, V5C 6G9
p: 604 294-0011 ; f: 604 294-0022

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SEAL:

NO.	DATE	REVISION DESCRIPTION	DR.
10	17.JULY.19	PARK EDGE PLANTING	MM
9	16.AUG.17	ISSUED FOR CO-ORDINATION	MM
8	16.JUNE.14	REV. PATIO LOCATIONS	MM
7	16.MAY.09	REV. BIKE COUNTS	MM
6	16.APR.29	NEW SITE PLAN	MM
5	16.APR.21	NEW SITE PLAN, NOTES ADDED	MM/PC
4	16.03.09	SITE PLAN CHGS, DD	DO/PC
3	16.03.03	SITE PLAN CHGS, DD	DO/ PC
2	16 FEB 17	NEW SITE PLAN	DO/ PC
1	13.OCT.09	NEW SITE PLAN	MM

ARCHITECT:

PROJECT:

THE GEORGE & WINEGARDEN PARK

GOWER POINT ROAD
GIBSONS, B.C.

DRAWING TITLE:

REMEDIL PLANTING LANDSCAPE PLAN

DATE: 13.SEPT.24
SCALE: 1"=10'-0"
DRAWN: MM
DESIGN: MM
CHK'D: PCM

DRAWING NUMBER: **L7** OF 16

PMG PROJECT NUMBER: **12-196**

2017.July.19

Klaus Fuerniss Enterprises Inc
PO box 570
Gibsons BC
klausfuerr

Attention: Klaus Fuerniss

Re: PMG File No.: 12-196
The George Hotel and Residences, Gower Point Road, Gibsons

The following cost estimate for bonding purposes was based on our latest Landscape Plans dated July 19, 2(

		Size	Approximate Quantity	Unit Price	Total Price
1	Soft landscape growing medium, shrubs, mulch & labour	per sq.ft.	118	$ 15.00	1,770.00
2	Hard Surfacing (cost per ft^2) Decorative concrete pavers,	per sq/ ft/		$ 6.00	-
	Water Features	lump soum			16,000.00
3	Plant Material: a) Trees				
	1) Deciduous	6 cm cal	8	$ 200.00	1,600.00
	2) conifers	3 m ht.	4	$ 175.00	700.00
	Shrubs & ground covers				
	3)	#3 pot	47	$ 25.00	1,175.00
	4)	#2 pot	53	$ 12.00	636.00
	5)	#1 pot	126	$ 10.00	1,260.00
	c) Installation			50%	2,685.50
4	Totals	Total for 1			1,770.00
		Total for 2			16,000.00
		Total for 3			8,056.50
		TOTAL			**$ 25,826.50**

Please note that this is only an estimate, and is subject to change due to economic conditions, availability of materials, and actual site conditions at the time of construction.

Yours truly,

Marlene Messer
PMG Landscape Architects Ltd.

Reviewed By: Patricia Campbell

)17.