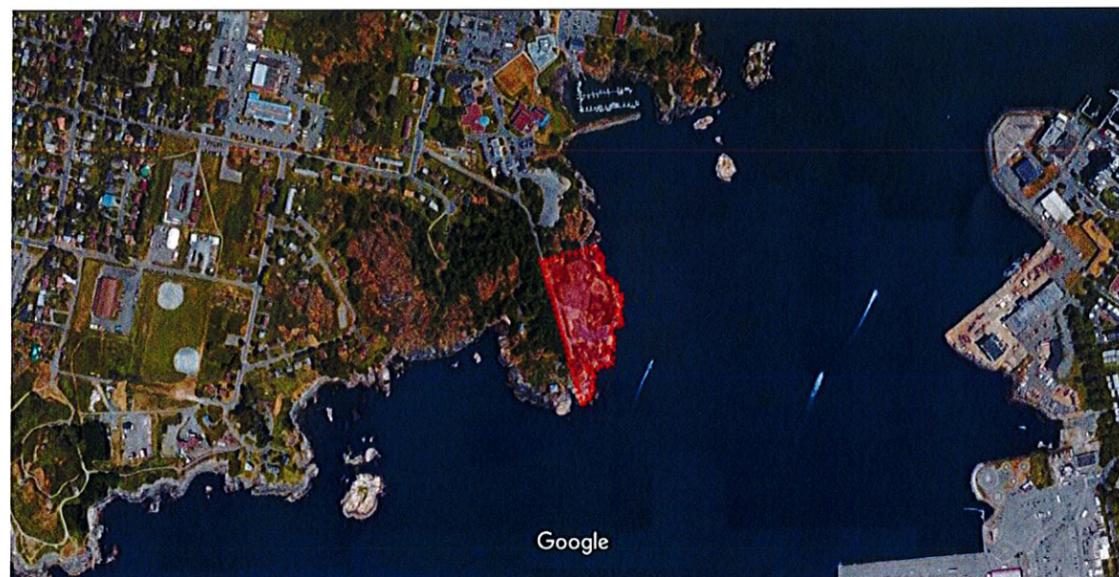


# McLoughlin Point Wastewater Treatment Plant

## HARBOUR RESOURCE PARTNERS PROJECT TEAM

AECOM – Engineering 3292 Production Way Burnaby BC V5Z 4R4 - Ernie Maschner  
 Graham Construction 10840 27 Street SE Calgary AB T2Z 3R6 – Mark Livingston  
 HDR|CEI 203-655 Tyee Road Victoria BC V2A 6P6- Jim Mann  
 LADR Landscape Design 495 Dupplin Rd #2b, Victoria, BC V8z 1B8– Bev Windjack

Google Maps



Google

Imagery ©2016 Google, Map data ©2016 Google 200 ft

### DRAWING LIST - ARCHITECTURAL

SHEET NUMBER	SHEET NAME
A-0	COVER SHEET
A-1	ARCHITECTURAL ROOF PLAN
A-2	RETAINING WALL PLAN
A-3	LEVEL 1
A-4	LEVEL 2
A-5	BUILDING AND SITE SECTIONS
A-6	BUILDING ELEVATIONS
A-7	BUILDING ELEVATIONS 2
A-8	RENDERED VIEWS 1
A-9	RENDERED VIEWS 2
A-10	RENDERED VIEWS 3
A-11	RENDERED VIEWS 4

### DRAWING LIST - CONSULTANTS

SHEET NUMBER	SHEET NAME
010057854-CNSK01-R03	PROPOSED BUILDING AVERAGE GRADES
L1	LANDSCAPE PLAN
L2	PLANT IMAGES
ML-80-C-004	TRUCK TURNING AND PARKING PLAN
ML-80-C-201	EARLY WORK AREA PLAN
ML-80-E-002	ELECTRICAL SITE LIGHTING PLAN

### PROJECT DATA

SITE	LEGAL DESCRIPTION	CIVIC ADDRESS	NOTES
PROJECT LOT	LOT 1, SECTION 11, AND PART OF THE BED OF VICTORIA HARBOUR, ESQUIMALT DISTRICT, PLAN 36468		SECTION 11 ESQUIMALT DISTRICT
LOT AREA	14,213 m <sup>2</sup>		

### ZONING ANALYSIS - McLOUGHLIN POINT SPECIAL USE [I-3]

BONUS DENSITY LEVEL 3	PERMITTED	PROPOSED
FLOOR AREA	4500 m <sup>2</sup>	2157 m <sup>2</sup>
DENSITY (FAR)	0.35	0.15
LOT COVERAGE	65%	61%
MAX HEIGHT	15m	15m

### PARKING

Parking requirements include

SPACES AS DETERMINED BY ZONING BYLAW

	TOTAL SPACES PROVIDED	REQUIRED SPACES
STANDARD SPACE MIN. SIZE: 2.6 X 5.5	2	1
DISABLED SPACE MIN. SIZE: 3.7x 5.5	1	1
ELECTRIC CAR CHARGING STATION STALLS MIN. SIZE:	1	0
<b>SUBTOTAL</b>	4	2
LOADING SPACE MIN. SIZE:	3m X 7.5m X 4.25h	2

NOTES:

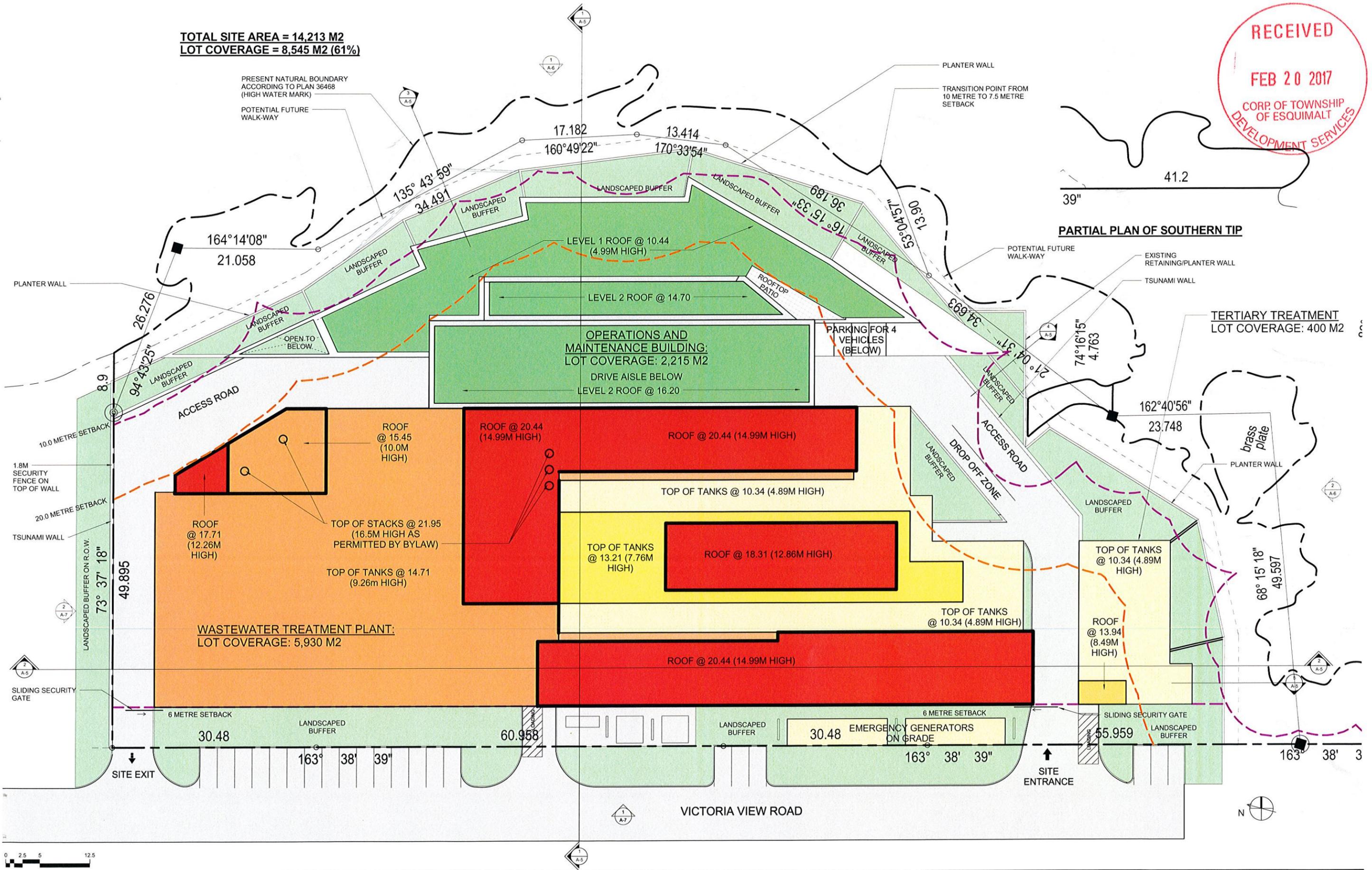


### BUILDING DATA

FLOOR	O & M (FLOOR AREA m <sup>2</sup> )	PROCESSING PLANT (GROSS m <sup>2</sup> )
LEVEL 1	1273 m <sup>2</sup>	PLANT NOT INCLUDED IN FLOOR AREA
LEVEL 2	868 m <sup>2</sup>	
<b>TOTAL</b>	2141 m <sup>2</sup>	
LOT COVERAGE	2215 m <sup>2</sup>	6330 m <sup>2</sup> (INCLUDED IN LOT COVERAGE)



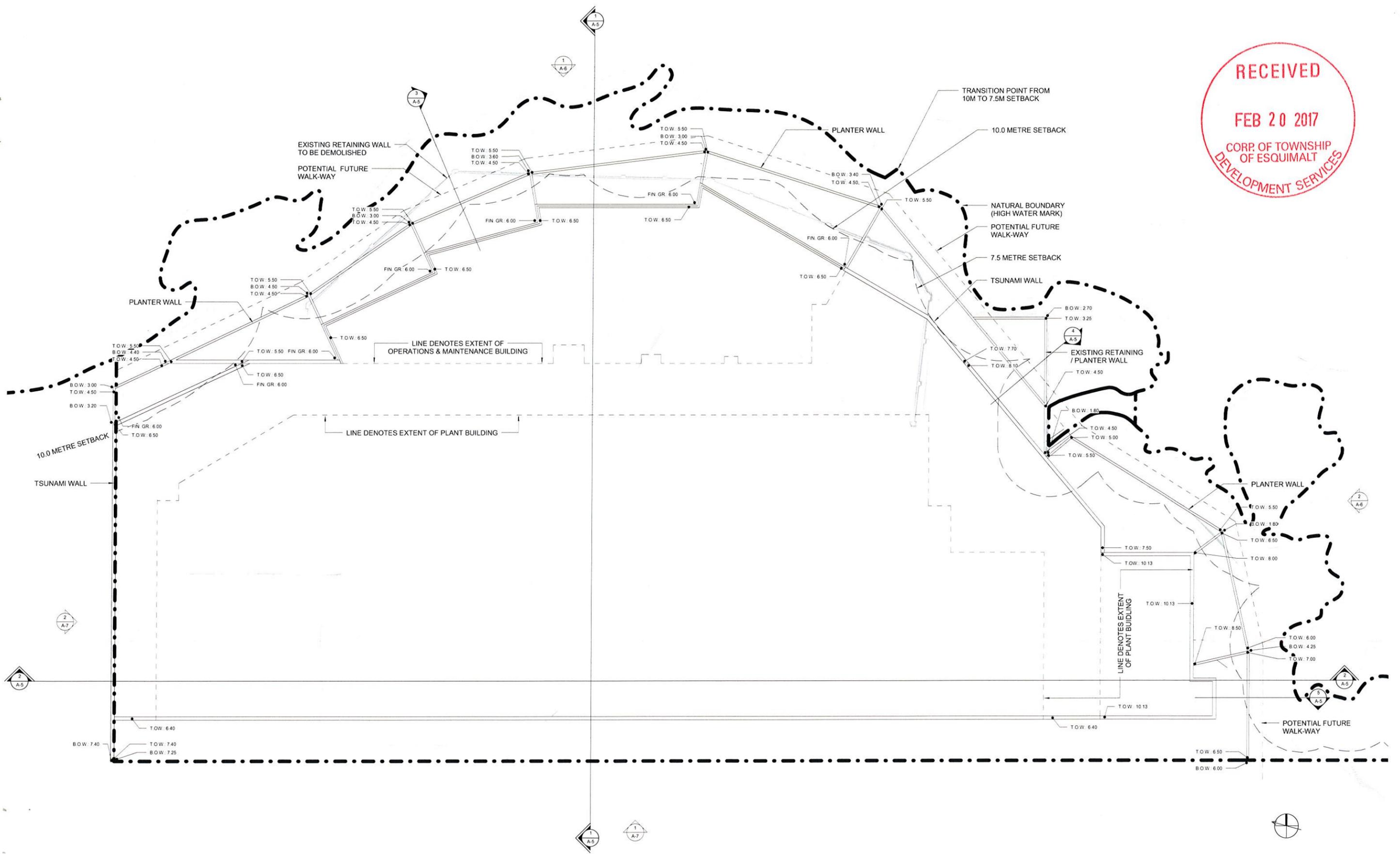
TOTAL SITE AREA = 14,213 M2  
LOT COVERAGE = 8,545 M2 (61%)



PARTIAL PLAN OF SOUTHERN TIP

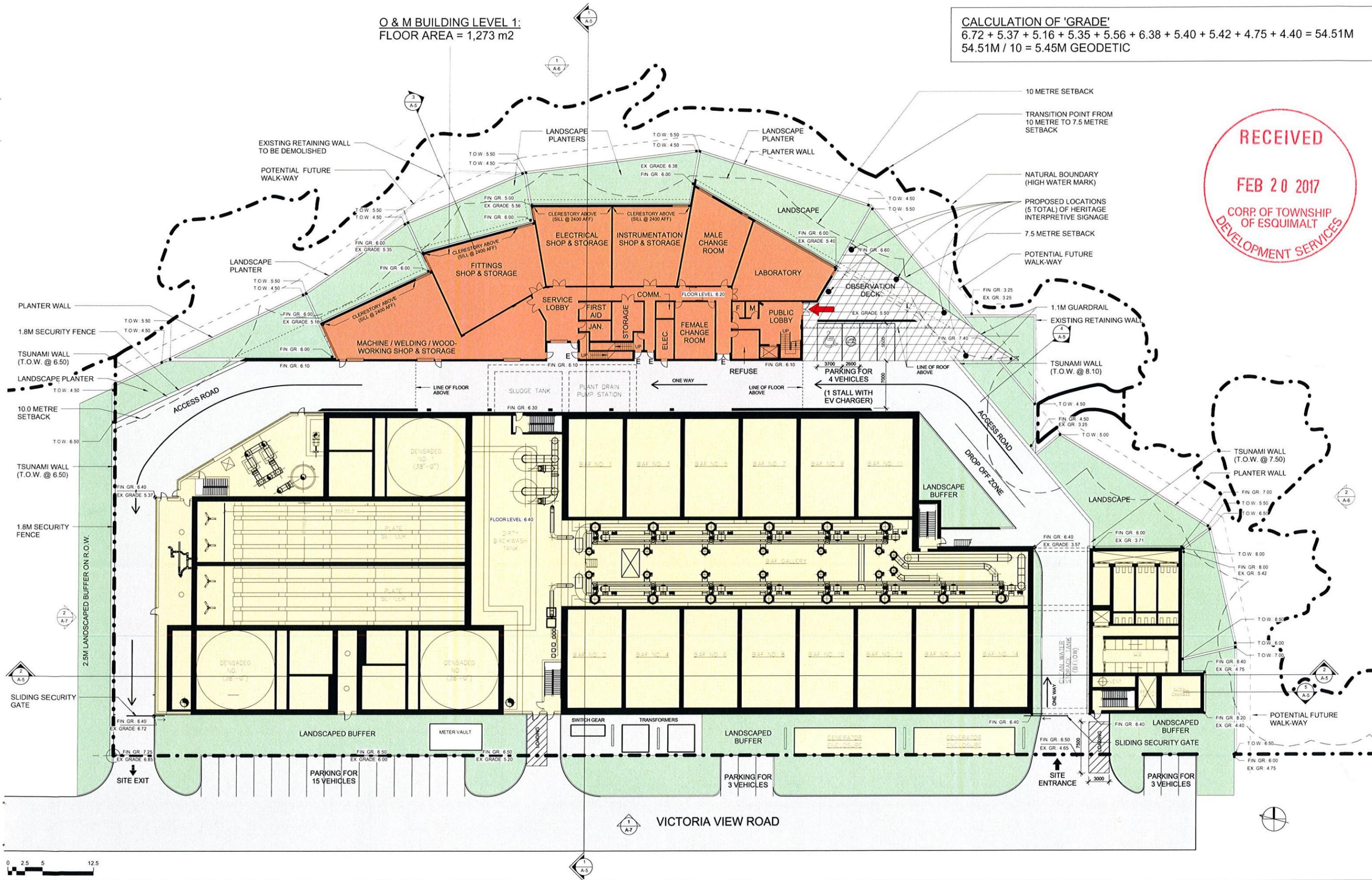
TERTIARY TREATMENT LOT COVERAGE: 400 M2





O & M BUILDING LEVEL 1:  
FLOOR AREA = 1,273 m<sup>2</sup>

**CALCULATION OF 'GRADE'**  
 $6.72 + 5.37 + 5.16 + 5.35 + 5.56 + 6.38 + 5.40 + 5.42 + 4.75 + 4.40 = 54.51\text{M}$   
 $54.51\text{M} / 10 = 5.45\text{M GEODETIC}$





1 BUILDING ELEVATION - EAST  
A-6



2 BUILDING ELEVATION - SOUTH  
A-6



**EXTERIOR ELEVATION KEY NOTES**

GENERAL NOTES

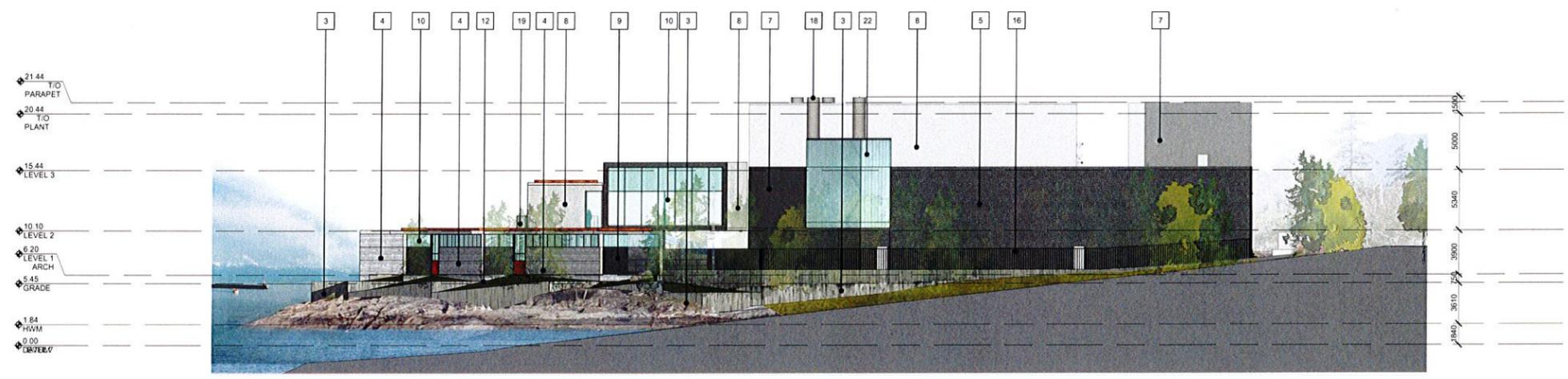
1 ALL RETAINING WALLS TO RECEIVE A LIGHT SANDBLAST FINISH

1	CONCRETE - ARCHITECTURAL FINISH (SMOOTH)	6	MASONRY CLADDING - LIGHT	11	SEDUM MAT GREEN ROOF	16	SECURITY FENCE	21	PRE-PAINTED GENERATOR ENCLOSURE
2	CONCRETE - BOARDFORM (MEDIUM TEXTURE)	7	METAL PANEL CLADDING - DARK	12	LANDSCAPE ELEMENTS	17	INTERPRETIVE SIGNAGE	22	TRANSLUCENT POLYCARBONATE PANEL
3	CONCRETE - BOARDFORM (ROUGH TEXTURE)	8	METAL PANEL CLADDING - LIGHT	13	CLIMBING VEGETATION ON SCREEN ELEMENT	18	ODOUR CONTROL STACKS - GREY METAL		
4	CONCRETE - PRECAST CONCRETE PANEL - BOARDFORM (MEDIUM TEXTURE)	9	STAINED CONCRETE PANEL	14	METAL BAR GRATE SCREEN	19	GLASS GUARD		
5	MASONRY CLADDING - DARK	10	GLAZING IN ALUMINUM FRAME	15	METAL BAR GRATE - SECURITY GATE	20	PIPE RAIL GUARD		

As indicated



1 BUILDING ELEVATION - WEST  
A-7



2 BUILDING ELEVATION - NORTH  
A-7

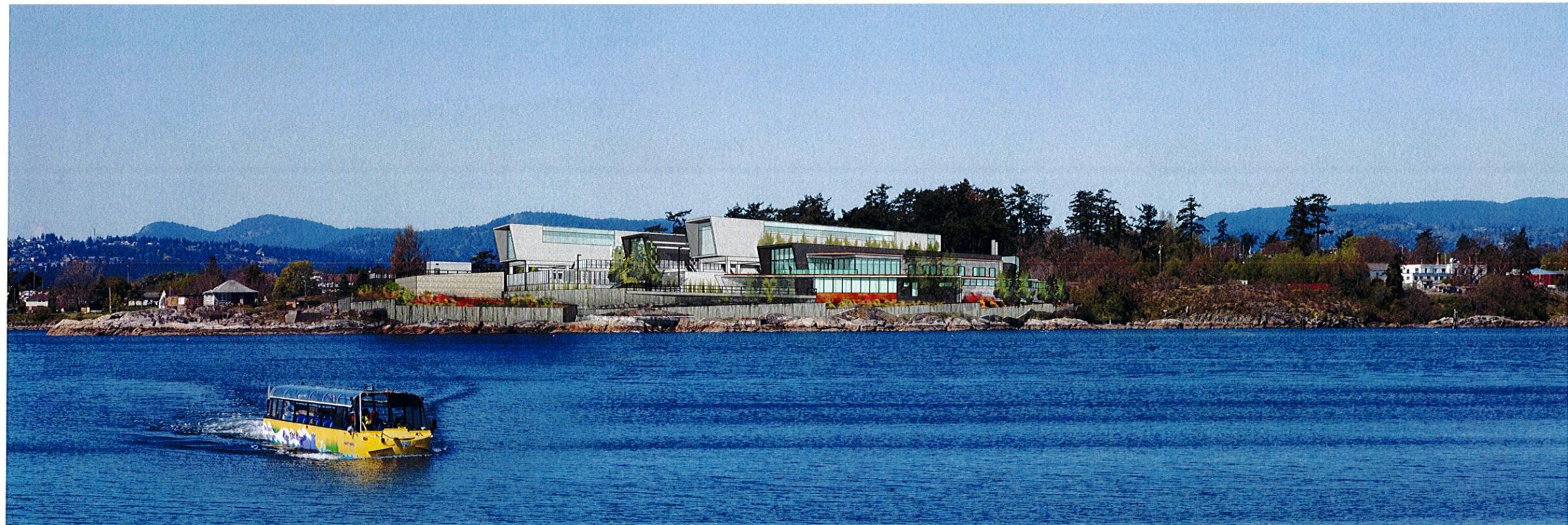


EXTERIOR ELEVATION KEY NOTES					
GENERAL NOTES					
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				19	GLASS GUARD
				20	PIPE RAIL GUARD
				21	PRE-PAINTED GENERATOR ENCLOSURE
				22	TRANSLUCENT POLYCARBONATE PANEL

As indicated



AERIAL VIEW FROM SOUTH EAST



VIEW FROM OGDEN POINT

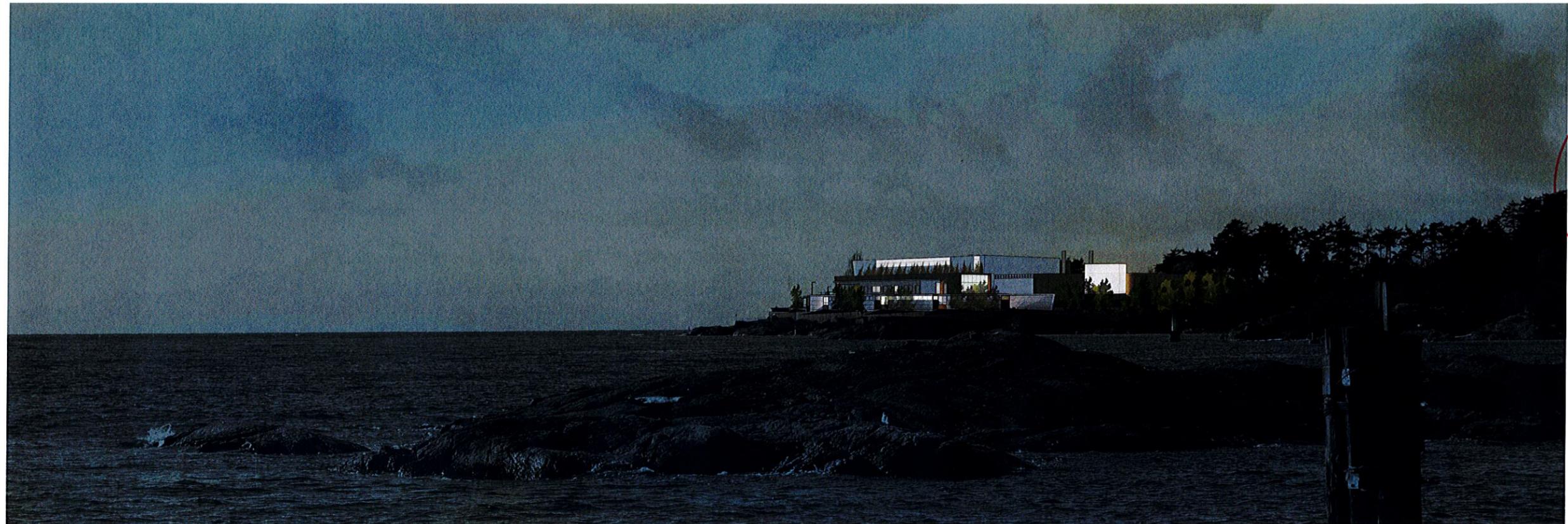


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VIEW FROM SHOAL POINT

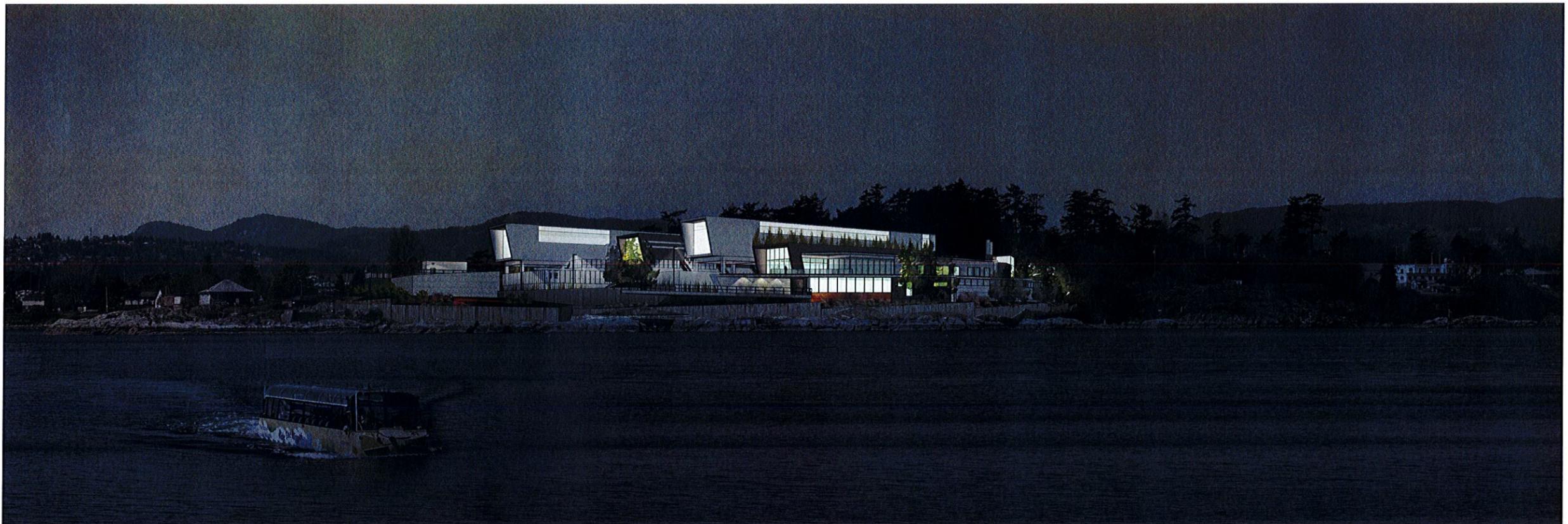


VIEW FROM SONGHEES WALKWAY



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VIEW FROM SONGHEES WALKWAY - NIGHT



VIEW FROM OGDEN POINT - NIGHT



VIEW FROM WATER SOUTH OF SITE





First-level pre-vegetated sedum mat green roof with hydro-mat (different mixes create a banded pattern)

Second-level pre-vegetated sedum mat green roof with hydro-mat (different mixes create a banded pattern)

Douglas Fir (15) and Shore Pine (19) trees provide tall vegetative screening to site. Shoreline plantings are composed of mass plantings of hardy native shrubs and groundcovers. Large shrubs and trailing groundcovers overhang the seawall and provide leaf fall and insect drop into the intertidal area, benefitting fish and other organisms. (Red Elderberry, Oceanspray, Indian Plum, Hooker's Willow, Snowberry, Nootka Rose, Baldhip Rose, Kinnickinnick, Twinflower, Redtwig Dogwood, Oregon Grape)

Large landscape boulders and logs reflect the rocky coastline that surrounds the site

Linear raingarden collects runoff from the road and features native shrubs, ferns and grasses

5M wide vegetated border strip is composed of native and adaptive shrubs and ferns, interspersed with Douglas Fir trees (8). (Red Elderberry, Indian Plum, Redtwig Dogwood, Oceanspray, Oregon Grape, Sword Fern, Deer Fern, Blue Oat Grass)

First-level viewing platform and patio (HydraPressed concrete slabs)

Ground-level viewing platform and plaza featuring interpretive signage cantilevers over the raingarden and boulders below (Sawcut broom finish concrete)

1M wide semi-intensive green roof strip with a hydro-blanket along the building edge supports the growth of vines which grow on the adjacent building face

Large landscape boulders and logs contained within the existing retaining wall reflect the rocky coastline that surrounds the site

Trellis on corner of building supports a Honeysuckle vine

Linear raingarden bordered by a swath of large landscape boulders collects runoff from the road and cantilevered viewing platform above. Rain garden features native shrubs, ferns and grasses

Mounded planting bed with Douglas Fir trees (5) and native shrubs underneath (Redtwig Dogwood, Nootka Rose, Oregon Grape, Sword Fern, Red Elderberry, Salal, Oceanspray, Snowberry)

Rain garden supported by corten steel wall captures runoff from adjacent building roof and roadway. Plantings are composed of native shrubs and grasses)

Shoreline plantings are composed of mass plantings of hardy native shrubs and groundcovers. Large shrubs and trailing groundcovers overhang the seawall and provide leaf fall and insect drop into the intertidal area, benefitting fish and other organisms. Planting beds are mounded (1:3) to building face for screening. (Red Elderberry, Oceanspray, Indian Plum, Hooker's Willow, Snowberry, Nootka Rose, Baldhip Rose, Kinnickinnick, Twinflower, Redtwig Dogwood, Oregon Grape)

Serbian Spruce trees (3) frame trellises on the adjacent building face that support honeysuckle vines. Adjacent plantings are composed of native and adaptive shrubs and grasses. (Honeysuckle, Baldhip Rose, Feather Reed Grass, Blue Oat Grass)

Boulder walls allow planting beds to be mounded against building faces along Victoria View Road. Planting beds are composed of native and adaptive shrubs, ferns and grasses, interspersed with Black Pine (13), Columnar Spruce (15), and Himalayan White Birch (9) trees which provide vertical screening of the site. (Oregon Grape, Strawberry Bush, Coastal Strawberry, Blue Oat Grass, Baldhip Rose, Red Currant, Snowberry)

**Recommended Nursery Stock**

**Trees**

Total: 87

Botanical Name	Common Name	Size
<i>Betula jacquemontii</i>	Himalayan White Birch	6cm cal
<i>Picea omorika</i>	Serbian Spruce	2m ht
<i>Picea pungens 'saei Fastigiate'</i>	Columnar Blue Spruce	2m ht
<i>Pinus contorta</i>	Shore Pine	2m ht
<i>Pinus nigra</i>	Black Pine	2m ht
<i>Pseudotsuga menziesii</i>	Douglas Fir	2m ht
<i>Pseudotsuga menziesii LG</i>	Douglas Fir (Large)	3.5m ht

**Large Shrubs**

Total: 270

Botanical Name	Common Name	Size
<i>Arbutus unedo 'Compacta'</i>	Compact Strawberry Bush	#10 pot
<i>Holodiscus discolor</i>	Oceanspray	#5 pot
<i>Oemlena cerasiformis</i>	Indian Plum	#5 pot
<i>Ribes sanguineum</i>	Red Flowering Currant	#2 pot
<i>Salix hookeriana</i>	Hooker's Willow	#5 pot
<i>Sambucus racemosa</i>	Red Elderberry	#5 pot

**Medium Shrubs**

Total: 1979

Botanical Name	Common Name	Size
<i>Cornus stolonifera</i>	Redtwig Dogwood	#3 pot
<i>Mahonia aquifolium</i>	Tall Oregon Grape	#3 pot
<i>Rosa gymnocarpa</i>	Baldhip Rose	#1 pot
<i>Rosa nutkana</i>	Nootka Rose	#1 pot
<i>Symphoricarpos albus</i>	Snowberry	#3 pot

**Small Shrubs**

Total: 707

Botanical Name	Common Name	Size
<i>Gauletheria shallon</i>	Salal	#1 pot
<i>Mahonia repens</i>	Creeping Oregon Grape	#1 pot

**Perennials, Annuals and Ferns**

Total: 1020

Botanical Name	Common Name	Size
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	#1 pot
<i>Junco effusus</i>	Common Rush	#1 pot
<i>Mahonia repens</i>	Creeping Oregon Grape	#1 pot
<i>Polystichum munitum</i>	Sword Fern	#1 pot

**Groundcovers**

Total: 1562

Botanical Name	Common Name	Size
<i>Arcostaphylos uva ursi 'Vancouver Jade'</i>	Vancouver Jade Kinnickinnick	#1 pot
<i>Fragaria chiloensis</i>	Coastal Strawberry	#1 pot
<i>Linnaea borealis</i>	Twinflower	#1 pot

**Vines**

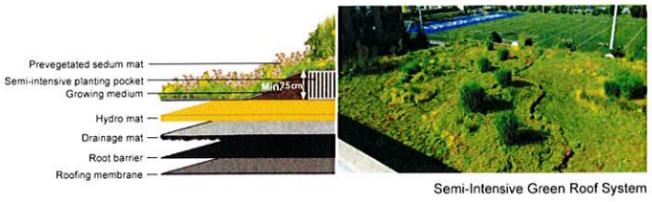
Total: 21

Botanical Name	Common Name	Size
<i>Lonicera periclymenum 'Belgica'</i>	Early Dutch Honeysuckle	#1 pot
<i>Parthenocissus tricuspidata 'Vetchii'</i>	Vetchii Boston Ivy	#1 pot

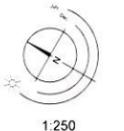
**Green Roof**

Prevegetated Sedum Mat

- Notes:**
- All work to be completed to current BCSLA Landscape Standards
  - All soft landscape to be irrigated with an automatic irrigation system



Semi-Intensive Green Roof System



# MCCLOUGHLIN POINT WASTEWATER TREATMENT PLANT | LANDSCAPE PLAN

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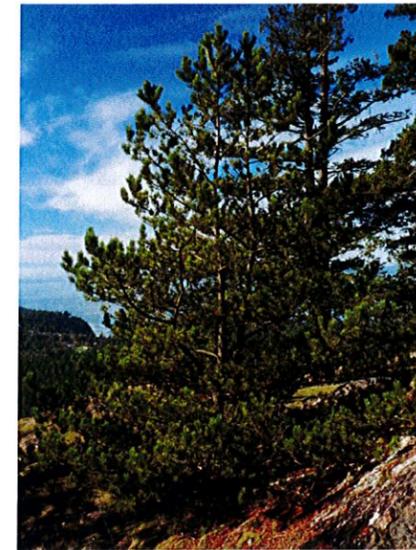
Oceanspray (*Holodiscus discolor*)



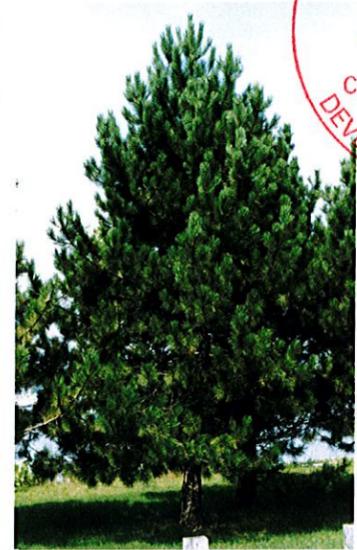
Mahonia nervosa (Low Oregon Grape)



Mahonia repens (Creeping Oregon Grape)



Shore Pine (*Pinus contorta*)



Black Pine (*Pinus nigra*)



Red Elderberry (*Sambucus racemosa*)



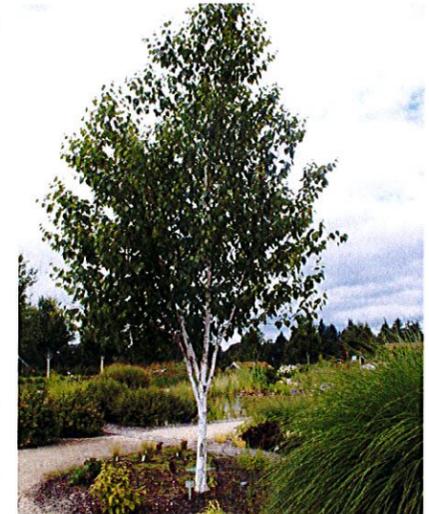
Hooker's Willow (*Salix hookeriana*)



Redtwig Dogwood (*Cornus stolonifera*)



Douglas Fir (*Pseudotsuga menziesii*)



Himalayan White Birch (*Betula jacquemontii*)



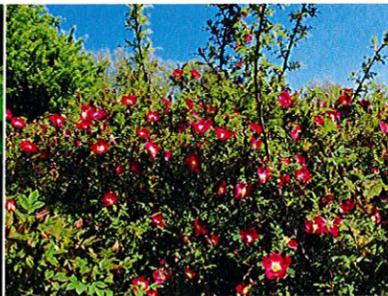
Common Rush (*Juncus effusus*)



Blue Oat Grass (*Helictotrichon sempervirens*)



Coastal Strawberry (*Fragaria chiloensis*)



Rugosa Rose (*Rosa rugosa*)



Boston Ivy (*Parthenocissus tricuspidata* 'Veitchii')



Indian Plum (*Oemleria cerasiformis*)



Nootka Rose (*Rosa nootkatensis*)



Snowberry (*Symph. albus*)



Sword Fern (*Poly. munitum*)



Twinflower (*Linnaea borealis*)



Strawberry Tree (*Arbutus unedo*)



Serbian Spruce (*Picea omorika*)

# MCLOUGHLIN POINT WASTEWATER TREATMENT PLANT | PLANT IMAGES