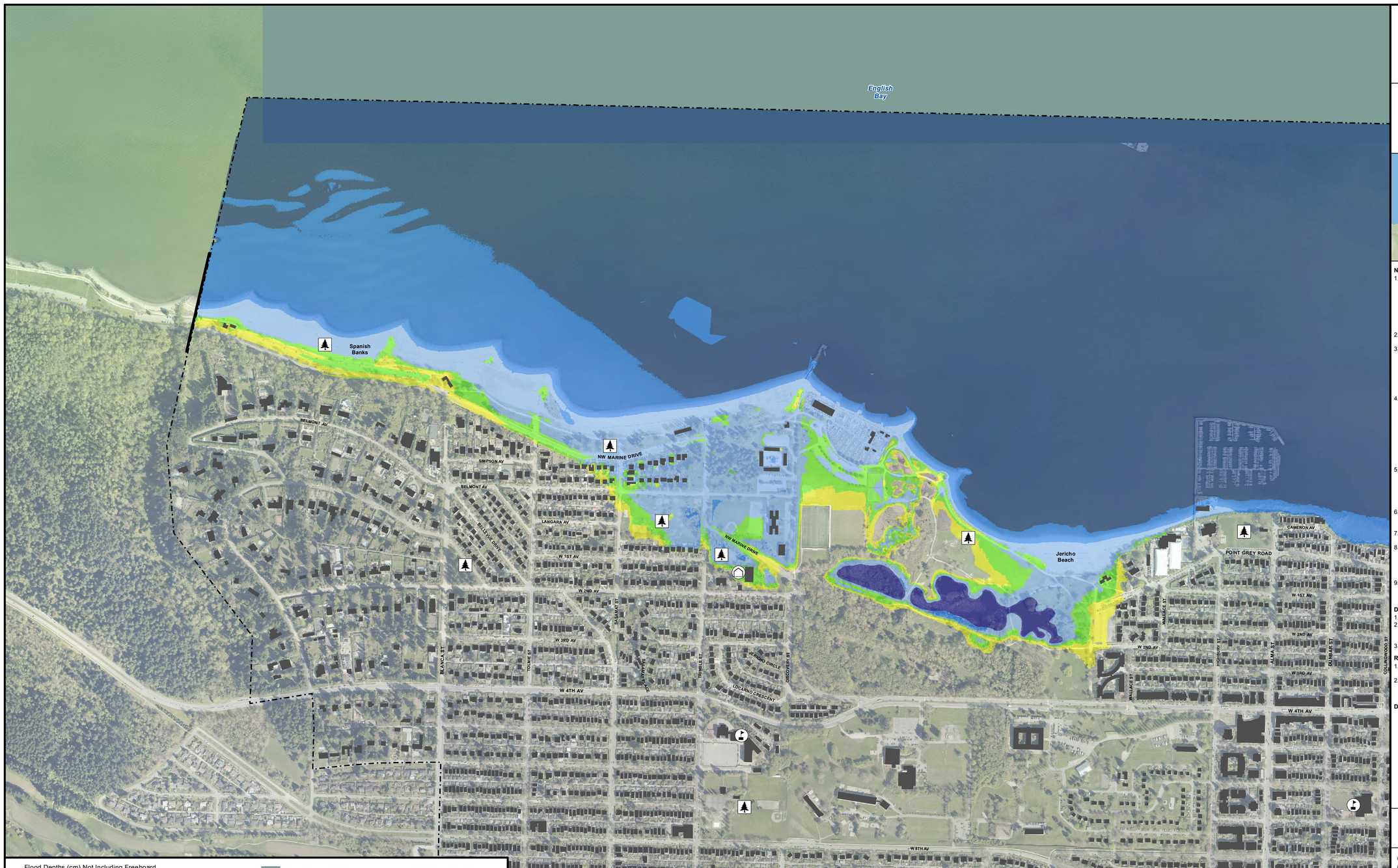

Flood Depths (cm) Not Including Freeboard

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- 50 to 100 — *water on ground floor; basements and underground parking flooded, potentially causing evacuation; electricity failed; vehicles are commonly carried off roadways*
- 100 to 200 — *ground floor flooded; residents evacuate*
- 200 to 500 — *first floor and often roof covered by water; residents evacuate*
- > 500 — *first floor and often roof covered by water; residents evacuate*
- Lake, Pond or Pool *depth unknown*

- Ocean (not modelled)
- Future Building Footprints (2041)
- Park
- Model Zone Boundary
- Indian Reserve Boundary
- City Boundary
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Critical Structures

- Library
- Community Centre/ Neighbourhood House
- Care Facility
- Public Elementary/ Secondary School
- Post Secondary School
- Fire Station
- Police Station
- Emergency Operations Centre

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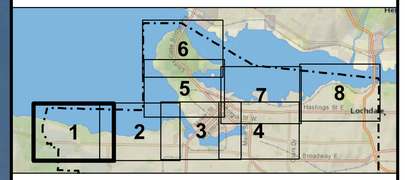

Notes:

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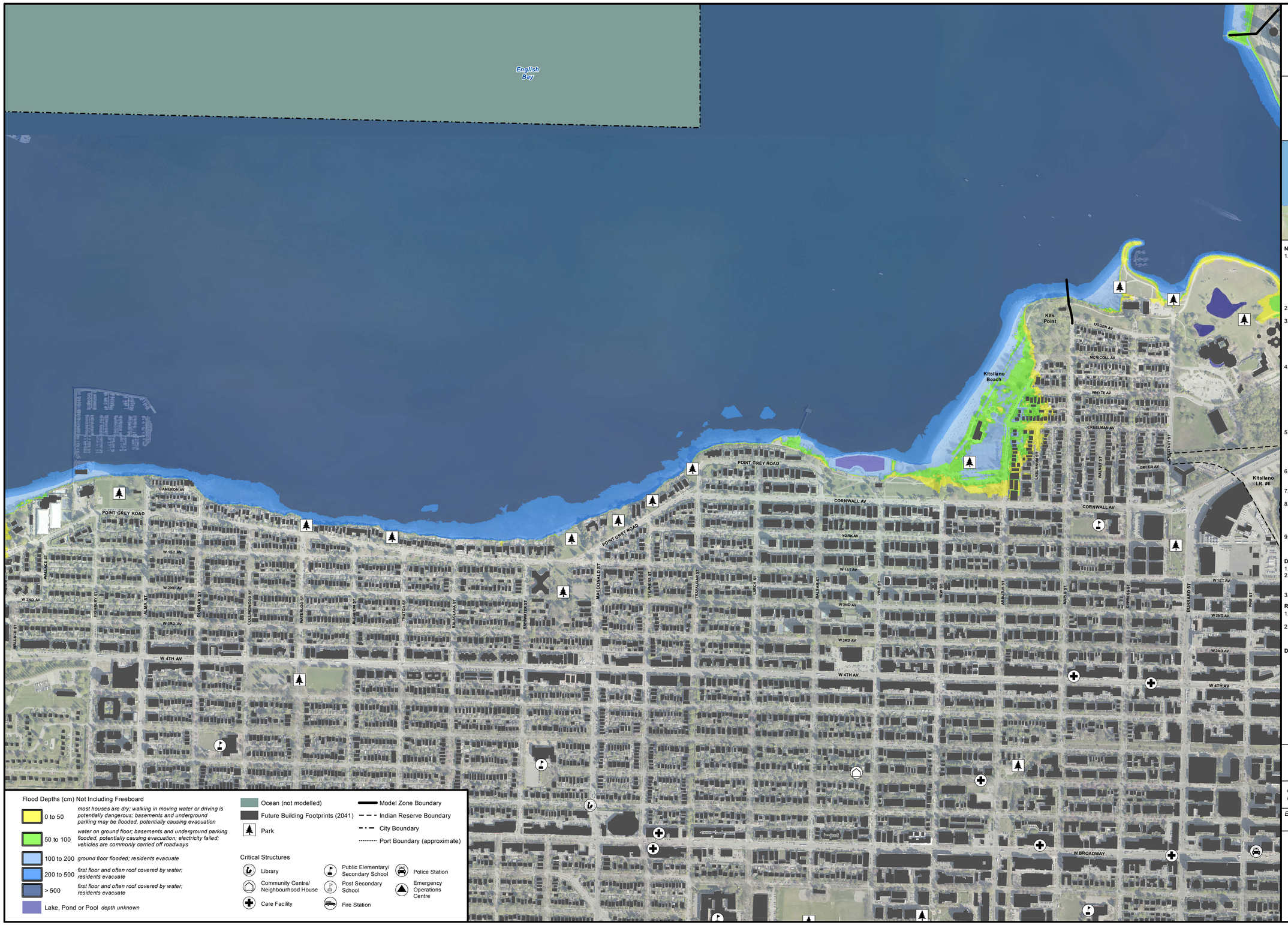
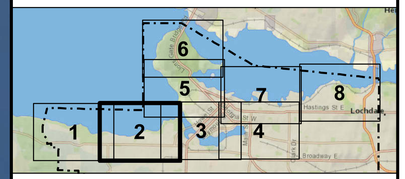
Disclaimer:

SCALE - 1:5,000
0 100 200 300 400 M
N

Coordinate System: NAD 1983 UTM ZONE 10N Units: METRES			Date: 18-JUN-2014
Engineer: VFOC	GIS: MSN	Reviewer: MM	Job Number: 300227

COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD
SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500
MAP 1 OF 8





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- Ocean (not modelled)
- Future Building Footprints (2041)
- Park
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Critical Structures

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SCALE - 1:5,000

0 100 200 300 400 M

N

Coordinate System: NAD 1983 UTM ZONE 10N *Units: METRES*	*Date* *18-JUN-2014*

Engineer	*GIS*	*Reviewer*	*Job Number*
VFOC	*MSN*	*MM*	*300227*

COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD
SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500
MAP 2 OF 8

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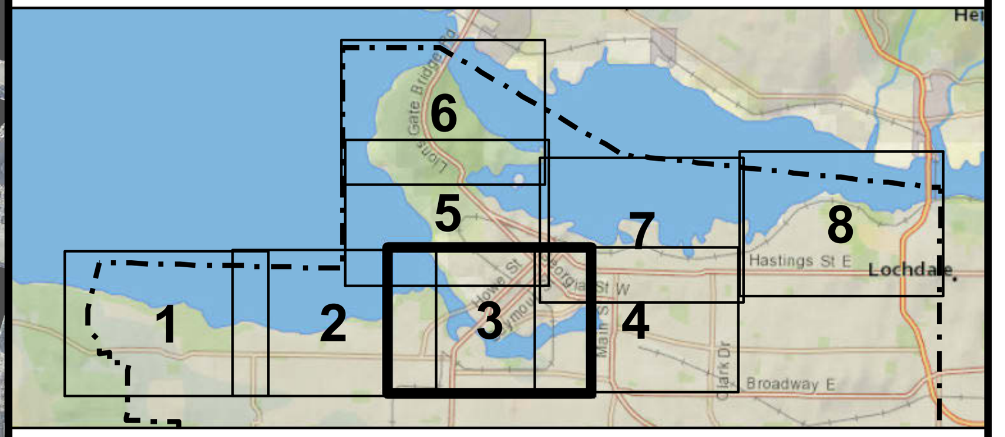

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Disclaimer:

SCALE - 1:5,000

0 100 200 300 400 M

N

Coordinate System: NAD 1983 UTM ZONE 10N Units: METRES	Date 18-JUN-2014

Engineer	GIS	Reviewer	Job Number
VFOC	MSN	MM	300227

COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD

SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500

MAP 3 OF 8

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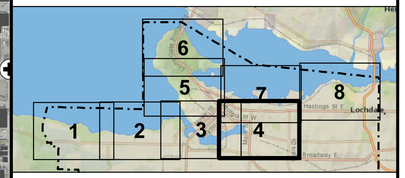

NOTE: Reconstruction of part of Stewart Street as an elevated road is currently in progress and is not represented in the flood model.

Notes:

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0 100 200 300 400 M
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Coordinate System: NAD 1983 UTM ZONE 10N Units: METRES			Date: 18-JUN-2014
Engineer: VFOC	GIS: MSN	Reviewer: MM	Job Number: 300227

COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD
SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500
MAP 4 OF 8

Flood Depths (cm) Not Including Freeboard

0 to 50	*most houses are dry; walking in moving water or driving is potentially dangerous; basements and underground parking may be flooded, potentially causing evacuation*
50 to 100	*water on ground floor; basements and underground parking flooded, potentially causing evacuation; electricity failed; vehicles are commonly carried off roadways*
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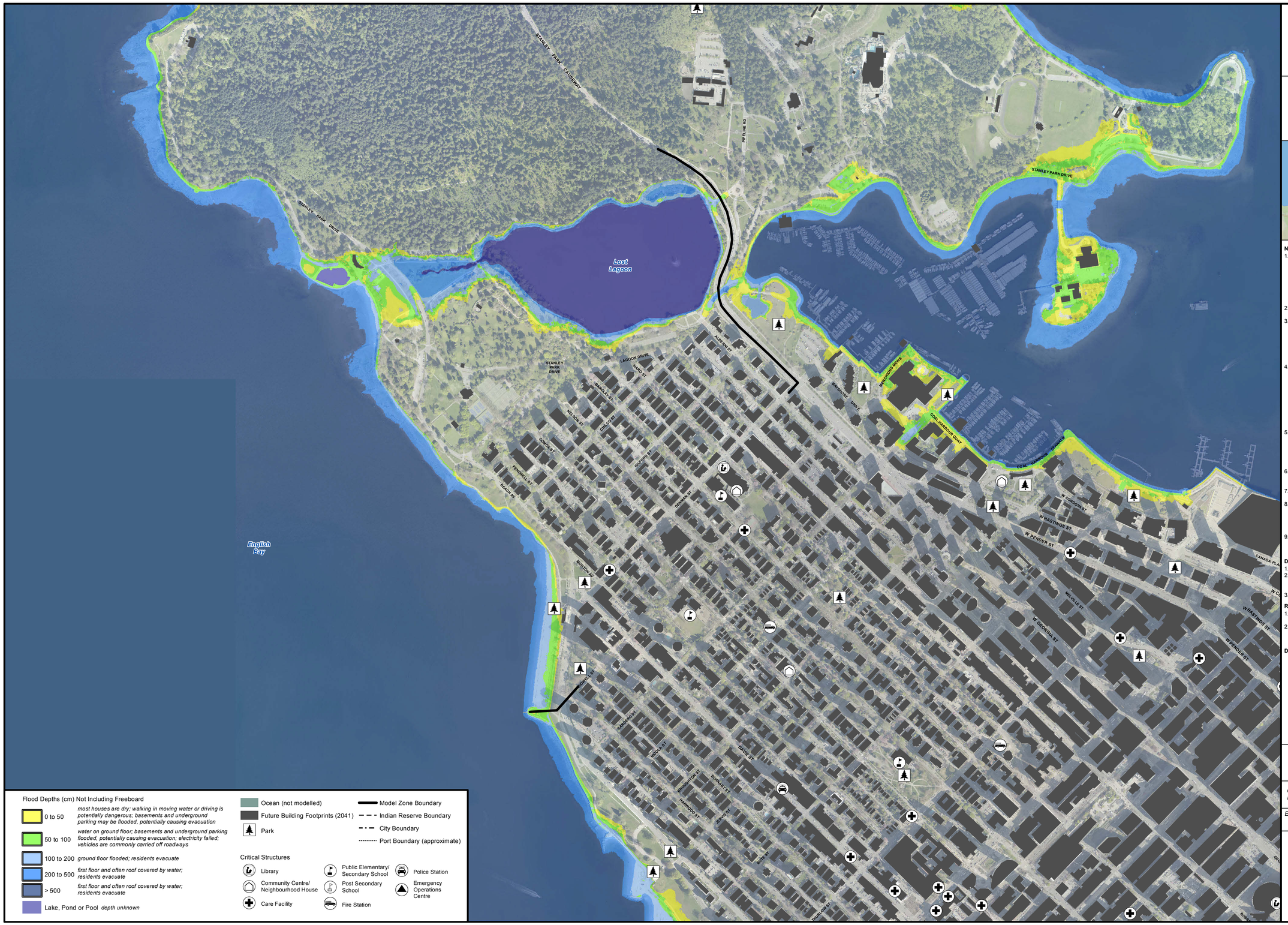
Lake, Pond or Pool	*depth unknown*

Ocean (not modelled)
Future Building Footprints (2041)
Park

Model Zone Boundary
Indian Reserve Boundary
City Boundary
Port Boundary (approximate)

Critical Structures

Library
Community Centre/ Neighbourhood House
Care Facility
Public Elementary/ Secondary School
Post Secondary School
Fire Station
Police Station
Emergency Operations Centre



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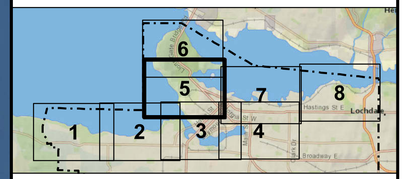

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SCALE - 1:5,000
0 100 200 300 400 M
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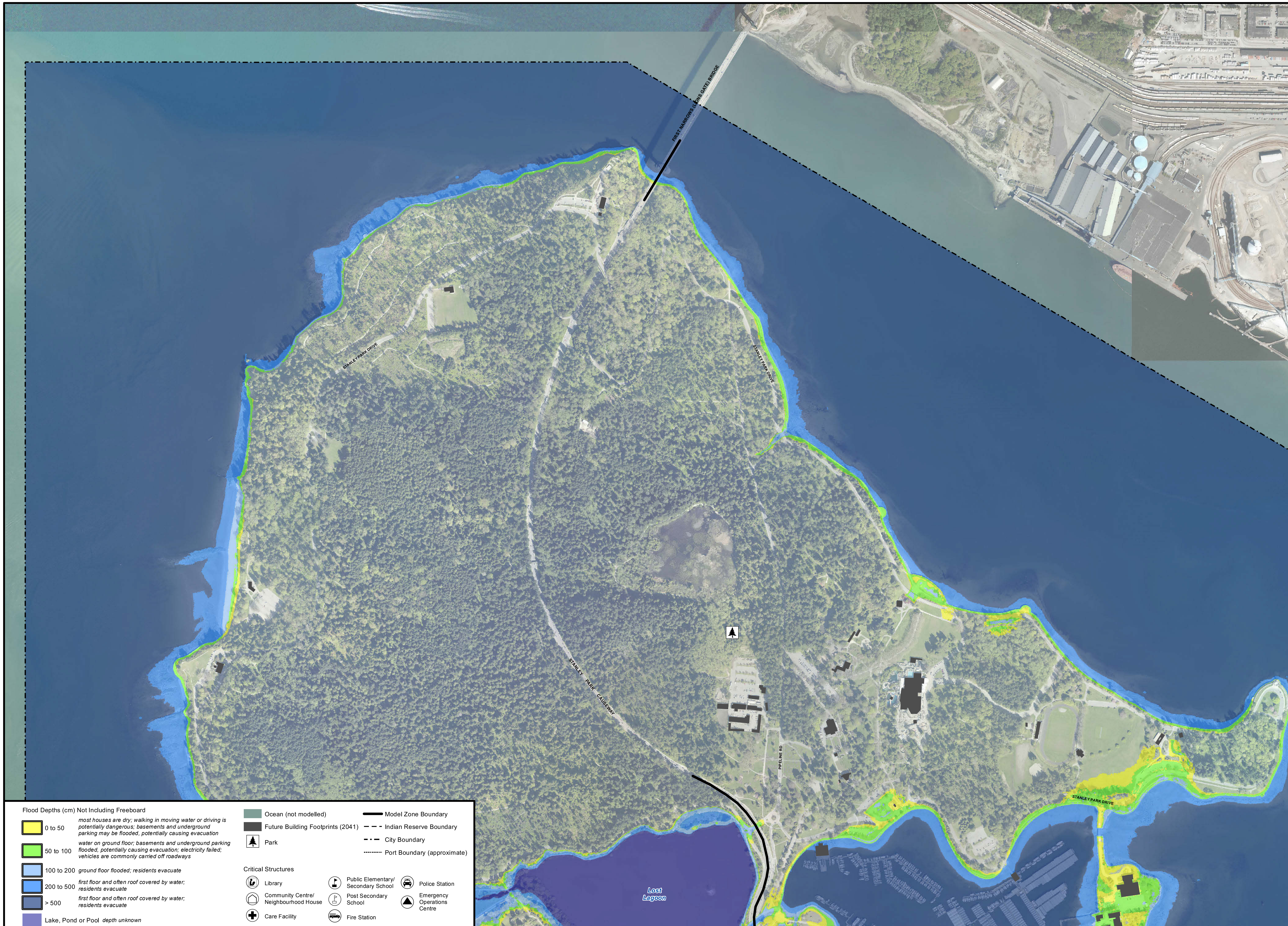
Coordinate System: NAD 1983 UTM ZONE 10N Units: METRES	Date: 18-JUN-2014		
Engineer: VFOC	GIS: MSN	Reviewer: MM	Job Number: 300227

COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD
SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500
MAP 5 OF 8



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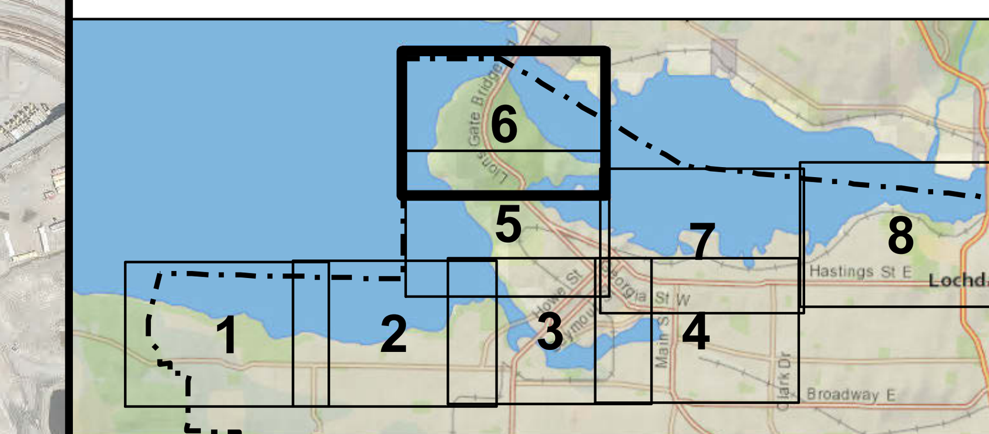

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5. The model geometry was kept constant at all flows although variations (erosion, subsidence, or future constructions) may occur before and during a flood. Irregularities or blockages caused by fences, walls, hedges, vehicles, boats, or other barriers are difficult to characterize and were not represented in the model. The flood map does not take into account flood defences which may be in place now or in the future.
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Disclaimer:

SCALE - 1:5,000

0 100 200 300 400 M

N

Coordinate System: NAD 1983 UTM ZONE 10N Units: METRES		Date 18-JUN-2014	
Engineer VFOC	GIS MSN	Reviewer MM	Job Number 300227

COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD

SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500

MAP 6 OF 8


NOTE: Flooding may affect infrastructure that is located below elevated structures. Depths and extent of flooding in these areas are not represented.
Inner Harbour
CANADA PLACE
W WATERFRONT ROAD
W CORDOVA ST
W HASTINGS ST
W PENDER ST
WATERFRONT RD
PORT LANDS
WATER ST
BLOOD ALLEY SQUARE
ALEXANDER ST
RAILWAY ST
POWELL ST
E CORDOVA ST
E HASTINGS ST
E PENDER ST
KEEFER ST
UNION ST
PRIOR ST
CENTENNIAL RD
CORDOVA DIVERSION
STEWART ST
FRANCES ST
VENABLES ST
GEORGIA ST
HAMILTON ST
SUZHOU ALLEY
COLUMBIA ST
MAIN ST
DUNLEVY AV
JACKSON AV
PRINCESS AV
HEATLEY AV
HAWKS AV
CAMPBELL AV
GLEN DRIVE
VERNON DRIVE
CLARK DRIVE
MCLEAN DRIVE
COMMERCIAL DRIVE
ROGERS ST
NOTE: Reconstruction of part of Stewart Street as an elevated road is currently in progress and is not represented in the flood model.
Flood Depths (cm) Not Including Freeboard
0 to 50 — most houses are dry; walking in moving water or driving is potentially dangerous; basements and underground parking may be flooded, potentially causing evacuation
50 to 100 — water on ground floor; basements and underground parking flooded, potentially causing evacuation; electricity failed; vehicles are commonly carried off roadways
100 to 200 — ground floor flooded; residents evacuate
200 to 500 — first floor and often roof covered by water; residents evacuate
> 500 — first floor and often roof covered by water; residents evacuate
Lake, Pond or Pool depth unknown
Ocean (not modelled)
Future Building Footprints (2041)
Park
Model Zone Boundary
Indian Reserve Boundary
City Boundary
Port Boundary (approximate)
Critical Structures
Library
Community Centre/ Neighbourhood House
Care Facility
Public Elementary/ Secondary School
Post Secondary School
Fire Station
Police Station
Emergency Operations Centre

CITY OF VANCOUVER

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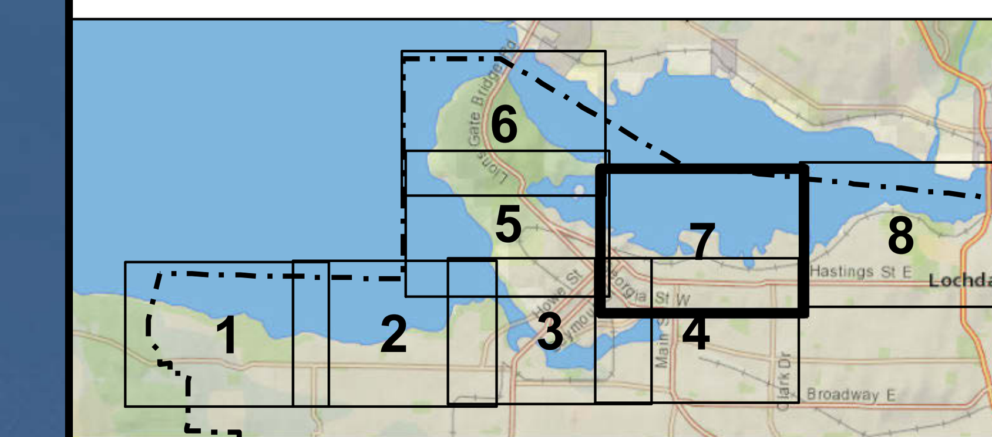

Notes:

1. Flood water levels were developed for five coastal flood scenarios as described in NHC et al. (2014). This map delineates the potential for coastal flooding under Year 2100 conditions assuming a 1.0 m sea level rise (SLR) and a current 500-year return period ocean event. A 500-year return period ocean event means that, on average, the event will occur once in 500 years and that there is a one-in-500 chance that the flood level mapped could be equalled or exceeded in any one year (or that there is about a one-in-10 chance that the flood level mapped could be equalled or exceeded in a period of 50 years).
2. The adopted value for SLR is based on guidelines from Ausenco-Sandwell (2011), and discussions and recommendations from the project's Technical Advisory Group.
3. The flood levels are based on water surface profiles simulated using a two-dimensional hydrodynamic model developed by NHC (NHC et al., 2014). A generalization algorithm was used to merge closely spaced buildings (<5m apart) that would act as a single flow obstacle. Buildings were removed from the model mesh and building outlines represented by solid boundaries. Model roughness values were assigned based on typical land use classes to represent the flow resistance due to various sources of energy loss.
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0 100 200 300 400 *M*

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Engineer	GIS	Reviewer	Job Number
VFOC	MSN	MM	300227

COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD

SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500

MAP 7 OF 8

Flood Depths (cm) Not Including Freeboard

- 0 to 50 — *most houses are dry; walking in moving water or driving is potentially dangerous; basements and underground parking may be flooded, potentially causing evacuation*
- 50 to 100 — *water on ground floor; basements and underground parking flooded, potentially causing evacuation; electricity failed; vehicles are commonly carried off roadways*
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- Lake, Pond or Pool — *depth unknown*

- Ocean (not modelled)
- Future Building Footprints (2041)
- Park
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- Indian Reserve Boundary
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Critical Structures

- Library
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- Post Secondary School
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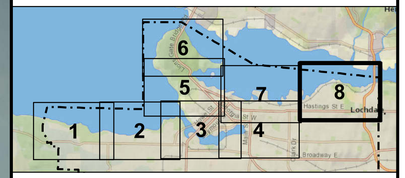

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COASTAL FLOOD RISK ASSESSMENT
BURRARD INLET FLOOD DEPTHS
NOT INCLUDING FREEBOARD
SCENARIO 3 - YEAR 2100, SLR 1 M
PROBABILITY OF 1/500
MAP 8 OF 8