



# Taking Action on Housing

DISTRICT OF  
TOFINO

- Need to do something about housing
- Housing a Top Council Priority
- Market is not going to solve it
- Have land
- Let's take action!



# Taking Action on Housing

## DISTRICT OF TOFINO

- 2015 Housing Needs Assessment
- 2016 RFP existing group to building housing
- 2017 – Tofino Bible Fellowship – let us build some housing
- 2017 –Tofino Housing Corporation restarted
- 2017 Partnership formed between Tofino Housing Corporation and Tofino Bible Fellowship





# Taking Action on Housing



DL 114 – 1.1 ha / 2.7 ac



Sharp Rd – 0.2 ha / 0.5 ac



Public Open House – June 19<sup>th</sup>, 2018





# Taking Action on Housing

## TOFINO BIBLE FELLOWSHIP

- 20 unit apartment
- Studio, 1, 2 and 3 bedroom rental units
- 2500 sq ft of community space
- Large meeting room, breakout rooms and small kitchen

## TOFINO HOUSING CORPORATION

- 35 units on DL 114 – townhouses and apartments
- 11 units at Sharp Rd. courtyard townhouses
- Studio, 1, 2 and 3 bedroom units
- Rental, maybe some attainable homeownership units



# Taking Action on Housing

Memorandum of Understanding  
Nov 2017

Employer Survey  
Nov 2017 –  
March 2018

Rural Dividend Fund  
\$500,000 grant March 2018  
(matching funding TBC)

Spring 2018  
project teams  
assembled

Housing Forum  
Nov 2017

Housing Survey  
Nov 2017 –  
March 2018

Spring 2018  
confirming matching  
funding for design  
phase

June 19<sup>th</sup> 2018 → public presentation of  
preliminary project plans

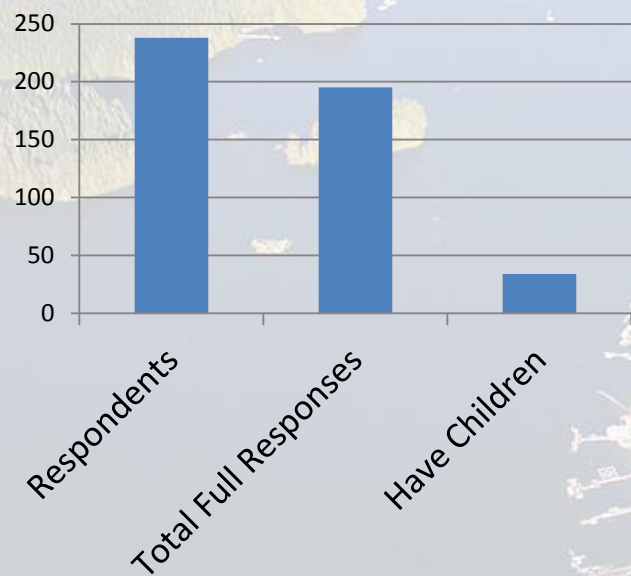
Public Open House – June 19<sup>th</sup>, 2018





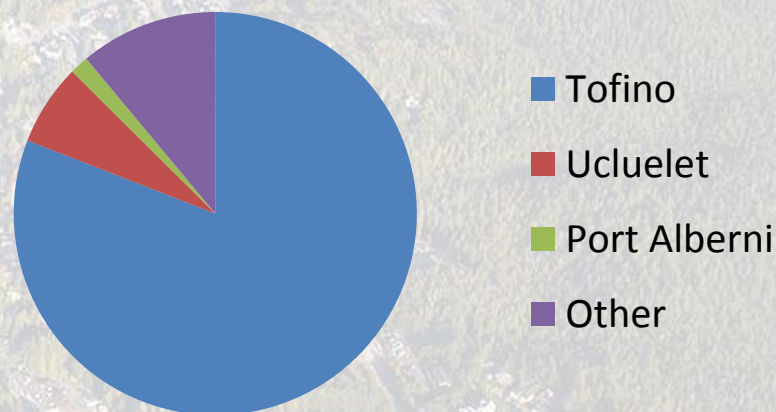
# Taking Action on Housing

## Housing Survey



■ Total respondents

### Currently Living In ...



■ Tofino

■ Ucluelet

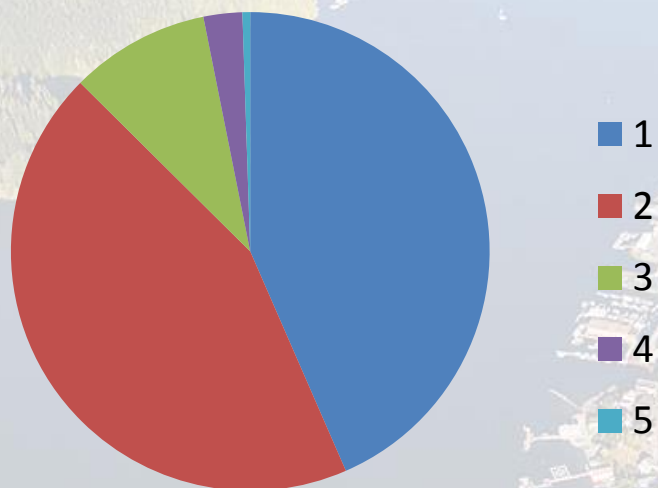
■ Port Alberni

■ Other

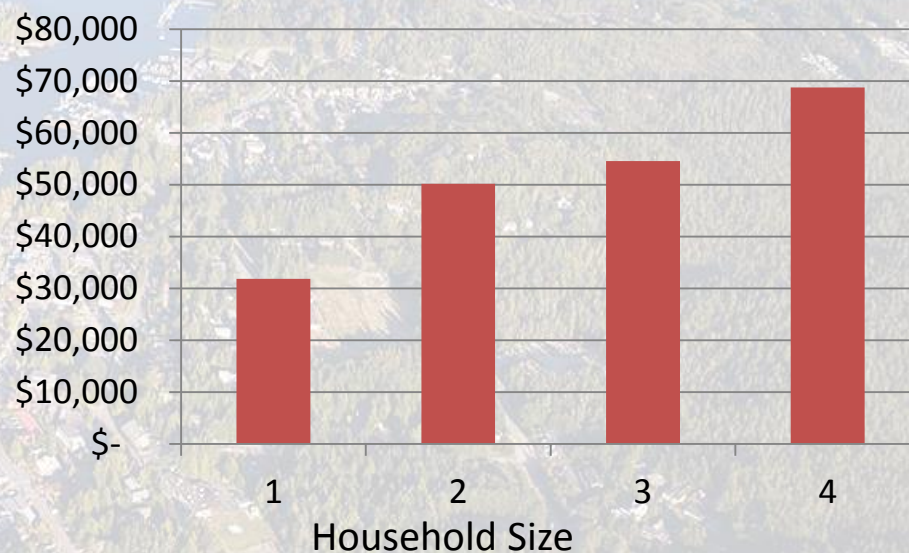


# Taking Action on Housing

**Household Size**



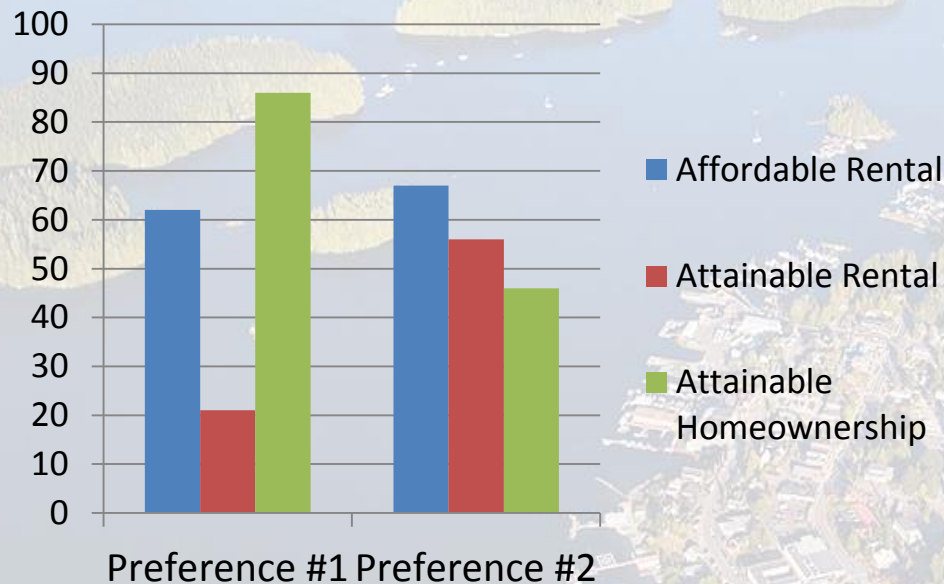
**Average Household Income**







# Taking Action on Housing



## TBF Unit Preference

Studio	16%
1 Bedroom	32%
2 Bedroom	35%
3 Bedroom	18%

## THC Rental Preference

Studio	22%
1 bed apartment	19%
1 bed townhouse	14%
2 bed townhouse	21%
2 bed apartment	12%

## THC Attainable Ownership

2 Bedroom Cottage	33%
2 Bedroom SFD with 1 bed suite	13%
1 Bedroom with Loft Cabin	12%
2 Bedroom Townhouse	11%
3 Bedroom Half-Duplex	9%





# Taking Action on Housing

## Housing Survey

34 respondents rent from employer

## Employer Survey

- 110 Responses
- 17% of Tofino Businesses
- 687 Beds Rented Out
- 120% capacity
- Median price \$400
- 71% year round employees
- 280 employees living in trailers and tents
- Need 240 year round beds
- Need 420 seasonal beds





# Taking Action on Housing



DL 114 – 1 ha / 2.5 ac



Sharp Rd – 0.2 ha / 0.5 ac



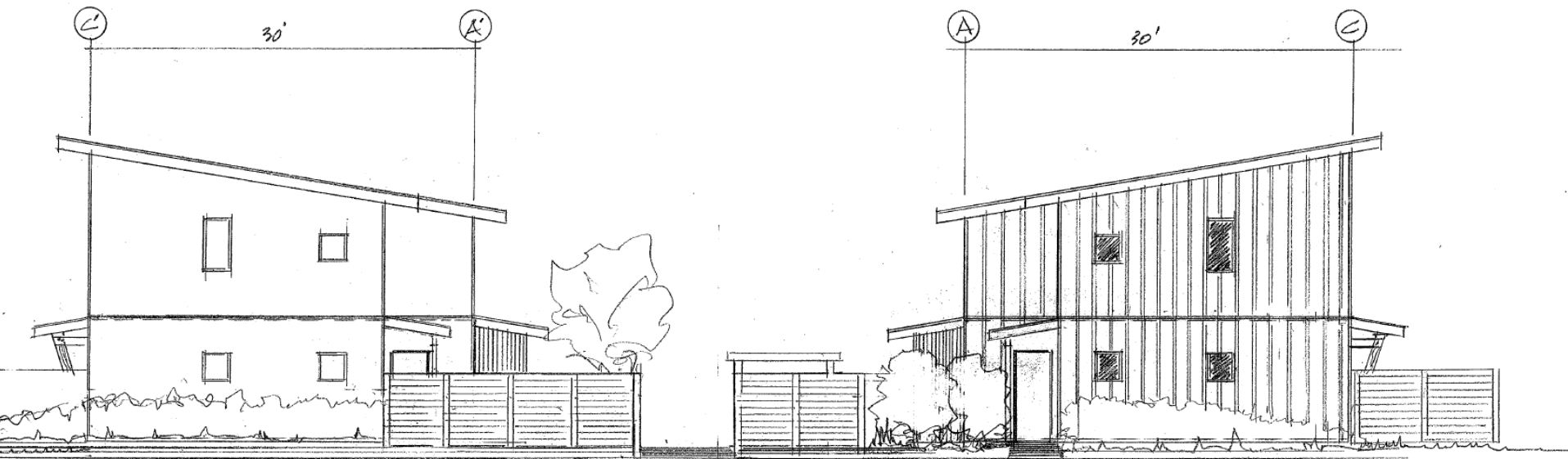
Public Open House – June 19<sup>th</sup>, 2018



LOT 1  
PLAN VIP 54348



# Sharp Rd Townhouse Concept



SHARP ROAD ELEVATION (NORTH)





# Taking Action on Housing



Public Open House – June 19<sup>th</sup>, 2018



# Taking Action on Housing

## DL 114 Local Area Plan (see District of Tofino Official Community Plan) Guidelines

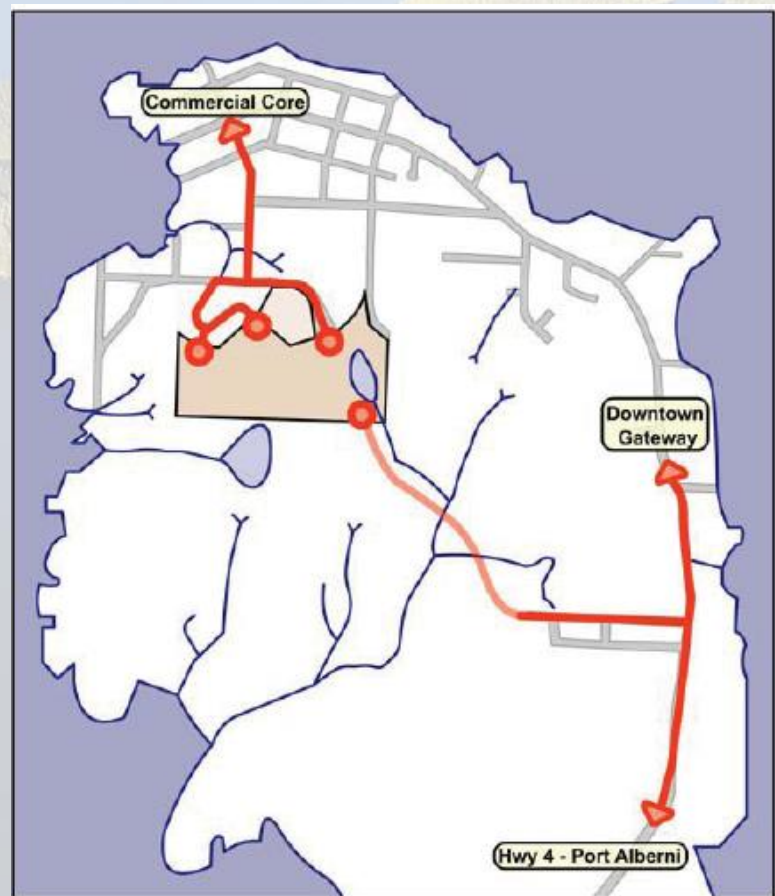
- Respect adjacent land uses;
- Respect and enhance existing natural surface drainage patterns and features;
- Limit development in environmentally significant or sensitive areas/sites;
- Provide a mix of residential densities and types;
- Achieve a net minimum density of 20 units per hectare;
- Maximise the use of existing road and infrastructure and incorporate the proposed Arnet Road Utility Corridor into the infrastructure network;
- Incorporate potential trail network links to community amenities;
- Promote and conserve ecologically sensitive areas;
- Augment adjacent recreation amenities by identifying appropriate linkages and open-space;
- Support OCP land use policies regarding SmartGrowth and open space;
- Keep servicing and infrastructure costs down by incorporating natural hydrological processes (i.e. stormwater management); and
- Promote an active and healthy lifestyle through positive social interaction and opportunities for physical activity.



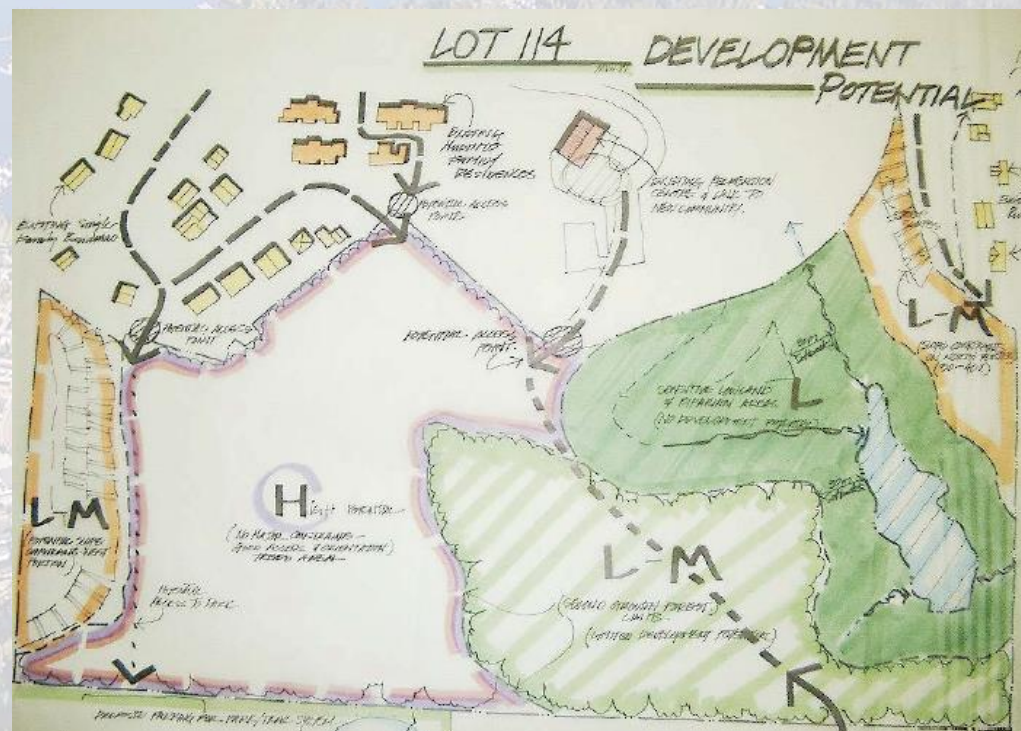


# Taking Action on Housing

Local Area Plan access points

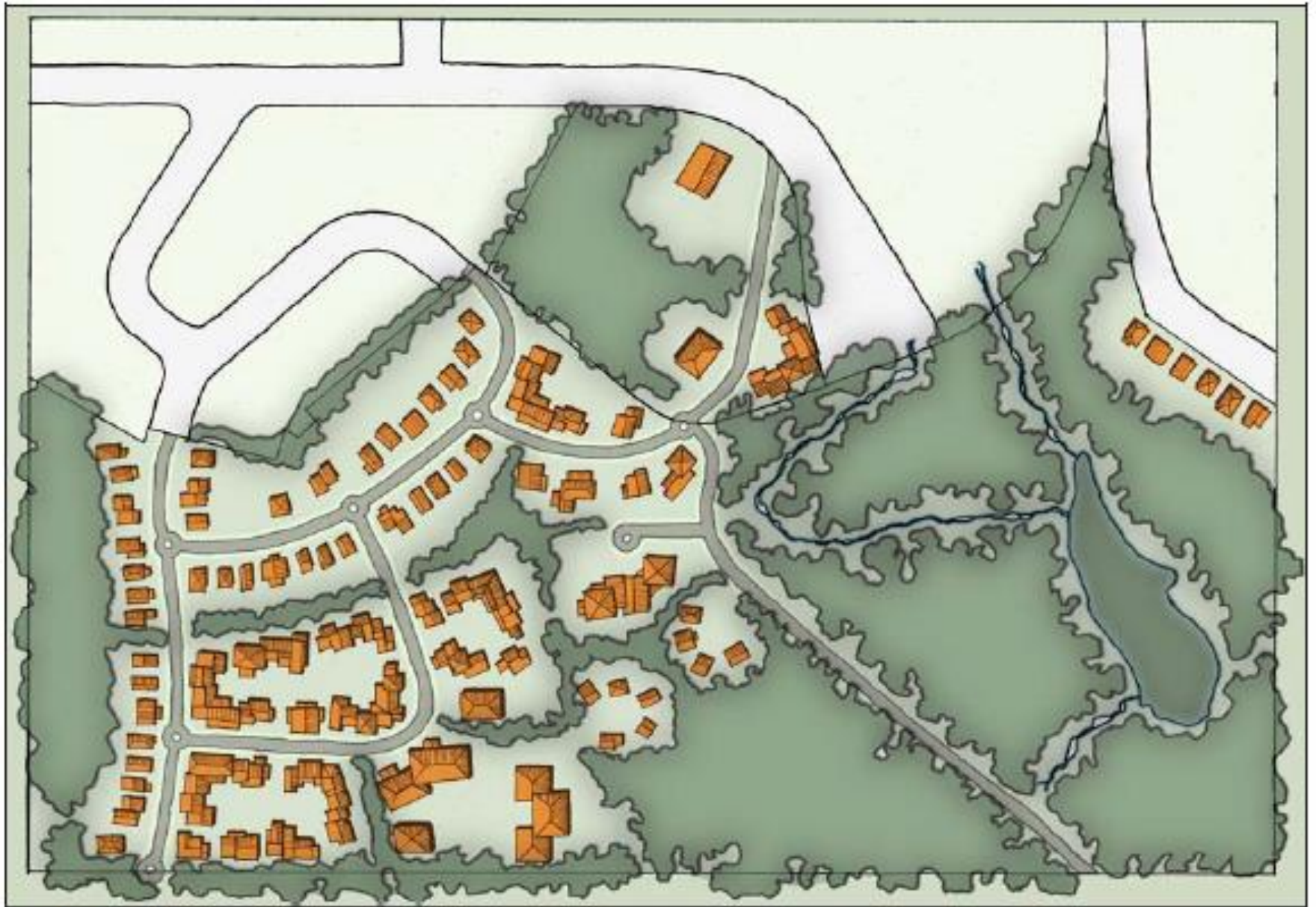


Local Area Plan development potential ratings

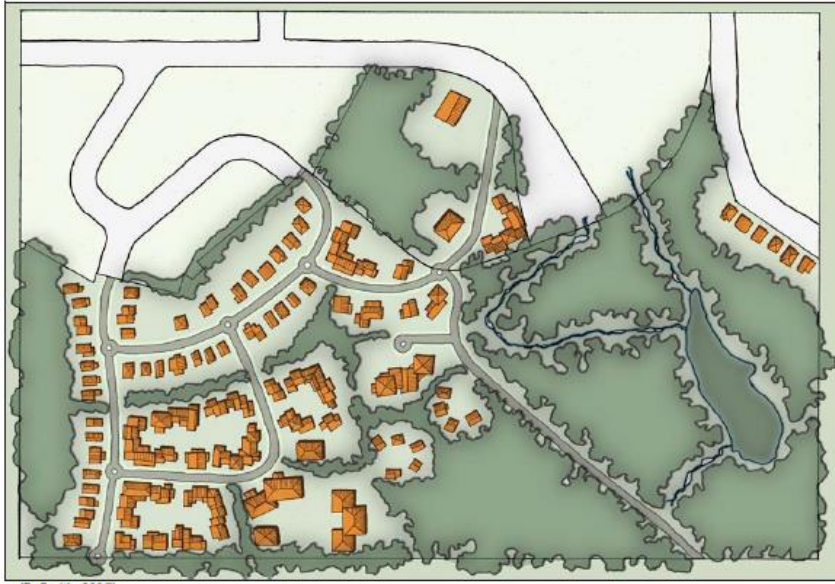


Public Open House – June 19<sup>th</sup>, 2018

# Local Area Plan Overall Land Use Concept







## Steps to Get From Here ...

Look at land and servicing in much more detailed way – *Project Design*

- Topography
- Natural environment – streams, wetlands
- Geology and soils (geotech)
- Civil engineering – roads, water, sewer, storm, hydro, lighting
- Site planning – building location, parking, rainwater management
- Unit mix and size – building design



## To Here ...





# Taking Action on Housing

## Why Access # 3 first?



### #1 – Arnet

- **Sewer line & recreation centre design still underway**
- Access past undevelopable areas
- Adjoining steep slopes
- Long gravel road access (Arnet)

### #2 – Peterson

- Crosses stream and ravine
- No advantage to #3

### #3 – Leighton Way

- Access already there (needs improving)
- Less constraints to accessing developable areas
- **Previously zoned**

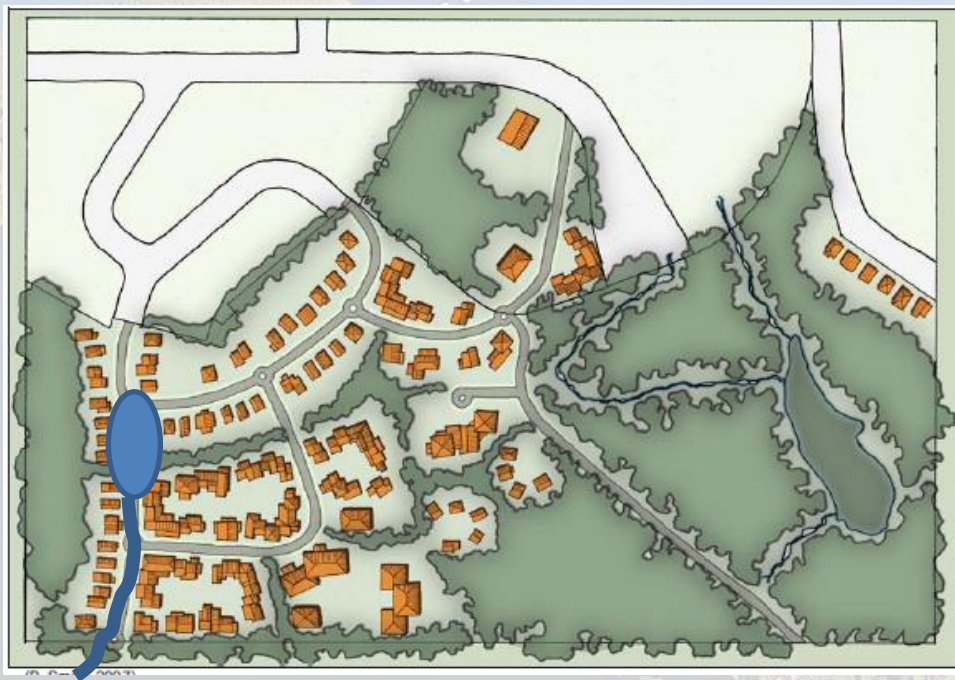
### #4 – Industrial Way

- Very long access not feasible for affordable housing development





# Taking Action on Housing



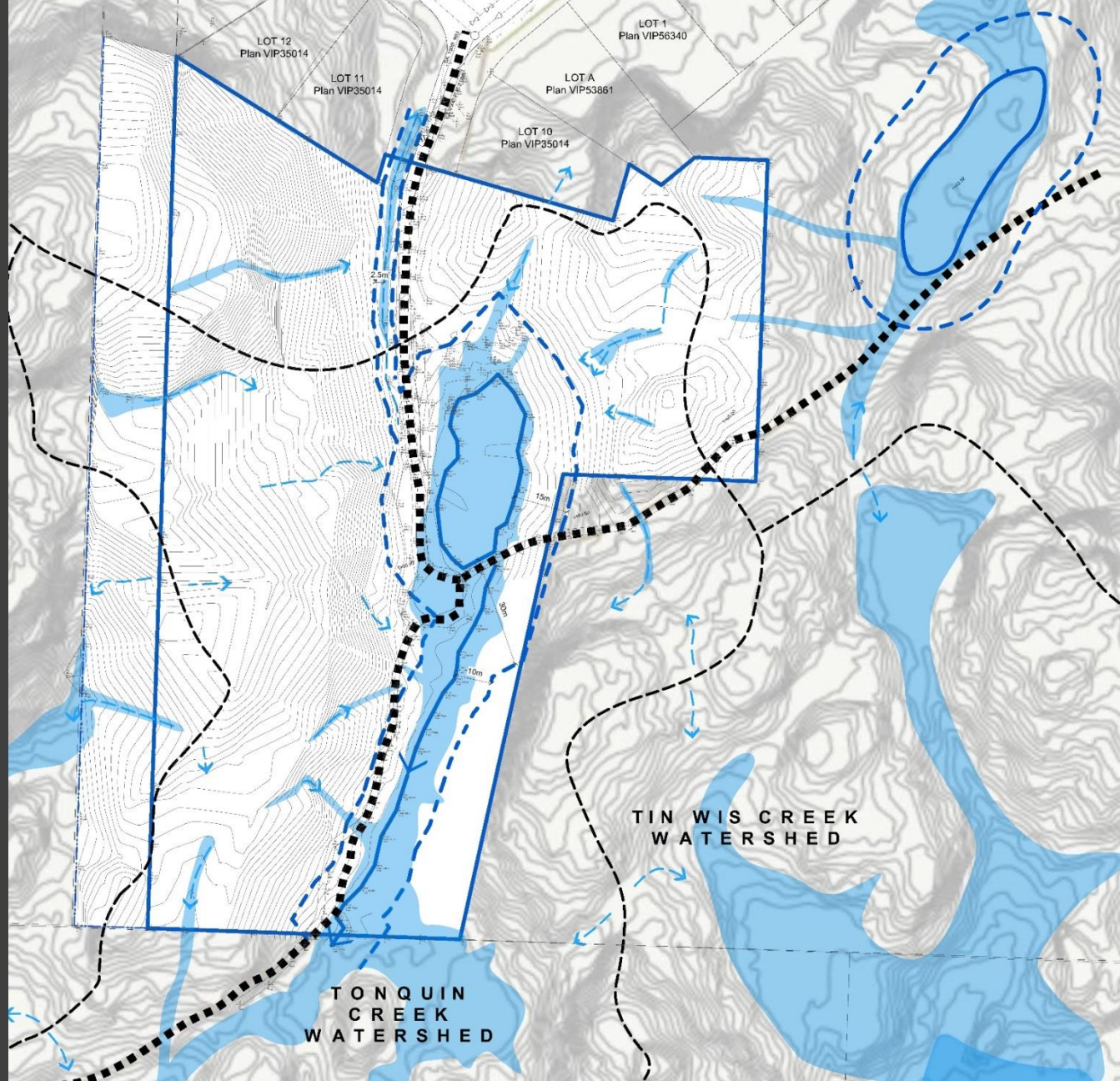
- Protected wetlands and streams
- Steep slopes
- Water management
- Engineering standards
- Funding sources



# SITE ADAPTIVE PLANNING: WATER FLOWS

## LEGEND










- DRAINAGE DIVIDE
- DIRECTION OF WATER FLOW
- WATER-RECEIVING AREA
- MAPPED STREAM
- MAPPED WETLAND WITH SETBACK
- EXISTING TRAIL

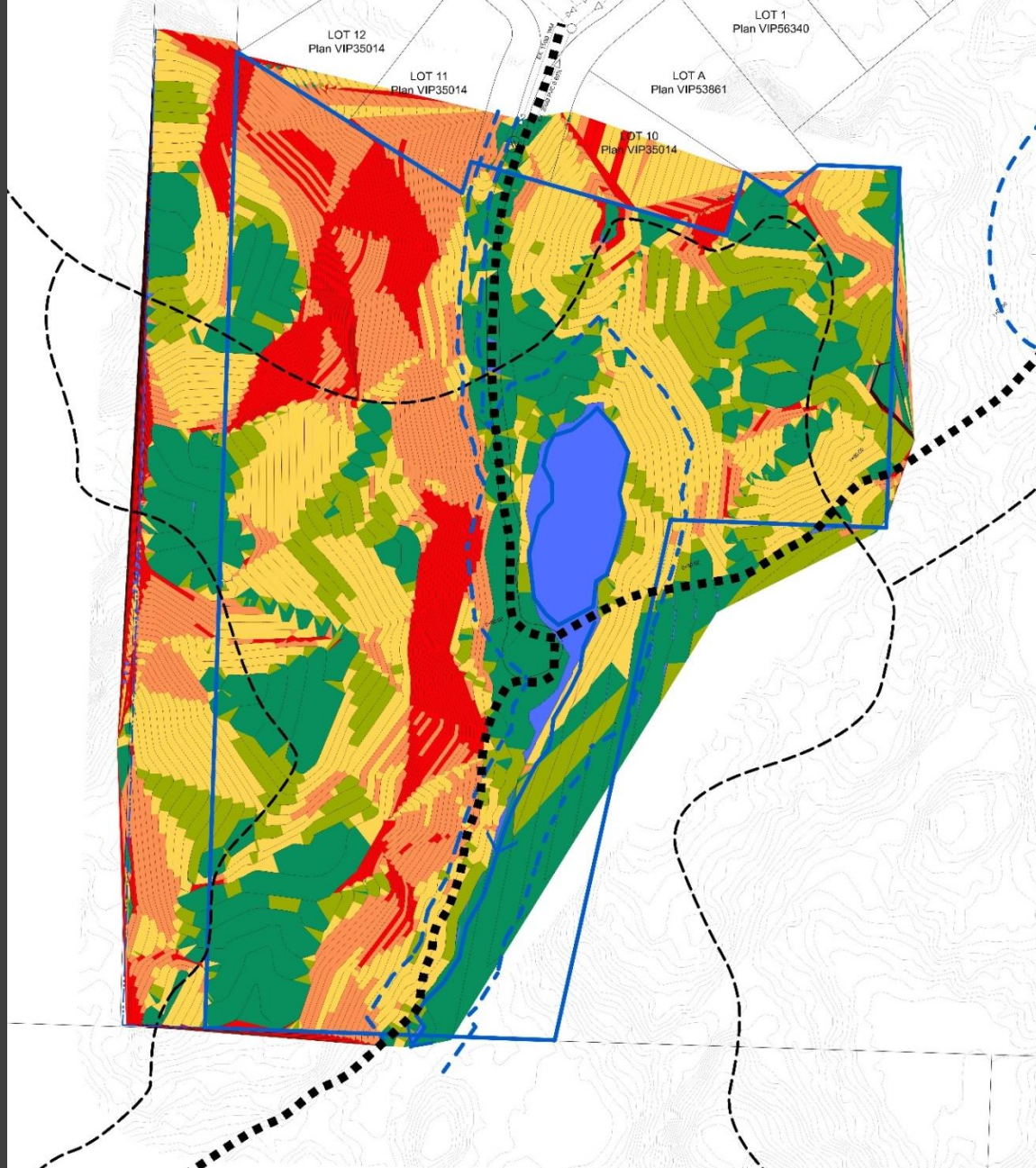




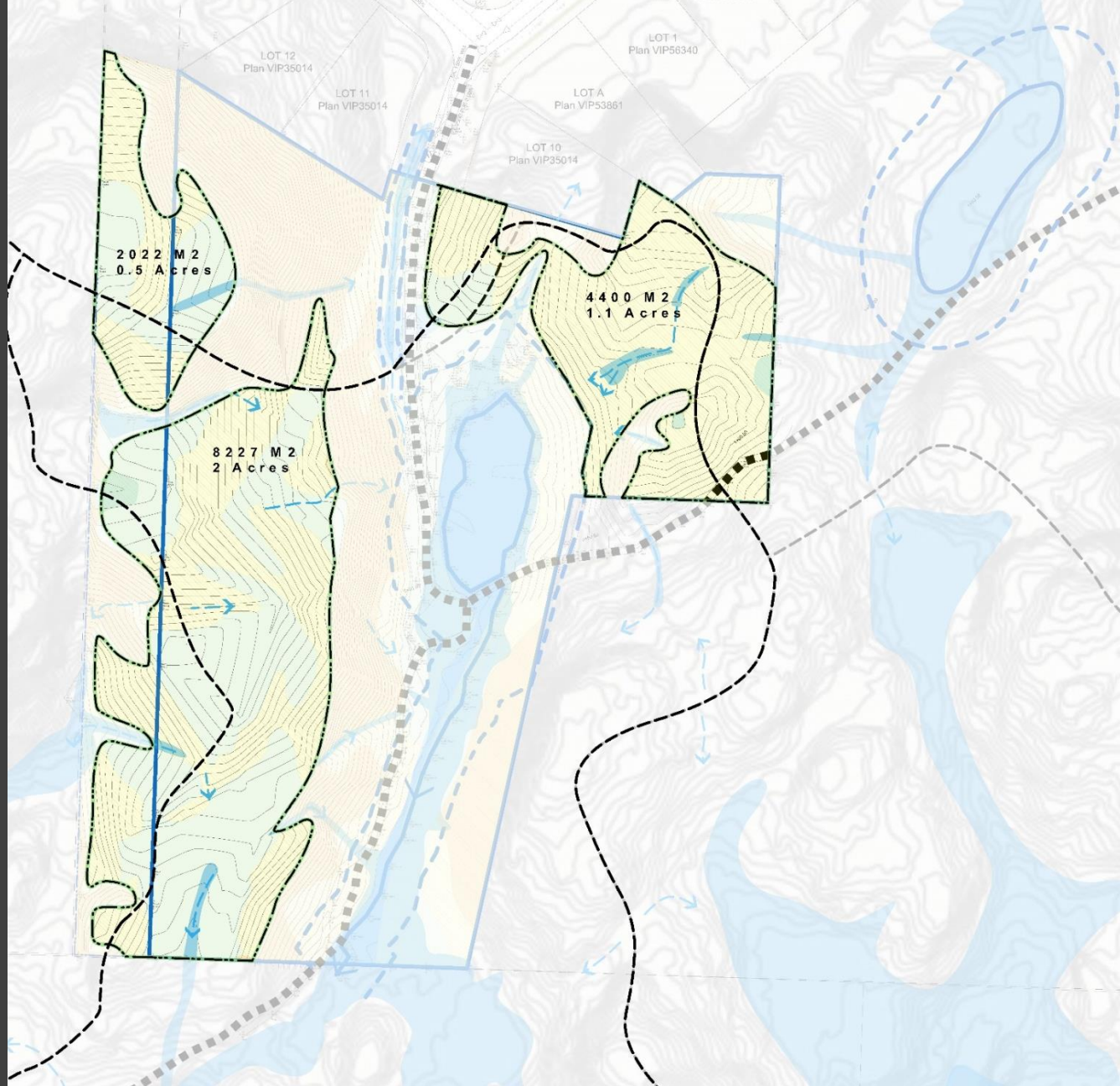
# SITE ADAPTIVE PLANNING: SLOPE ANALYSIS

## LEGEND

-  DRAINAGE DIVIDE
-  FLAT (0-.5%)
-  EASY TO DEVELOP (.5-15%)
-  MODERATE TO DEVELOP (15-20%)
-  DIFFICULT TO DEVELOP (20-33%)
-  STEEP (33-50%)
-  VERY STEEP (>50%)
-  MAPPED WETLAND
-  EXISTING TRAIL



# SITE ADAPTIVE PLANNING: PREFERRED DEVELOPMENT SITES



## LEGEND



### GOOD DEVELOPMENT SITE:

- Slope < 20%
- Outside of Wetland Setbacks (assumed 15m on N&E sides, 30m on S&W sides)
- Not in water receiving area



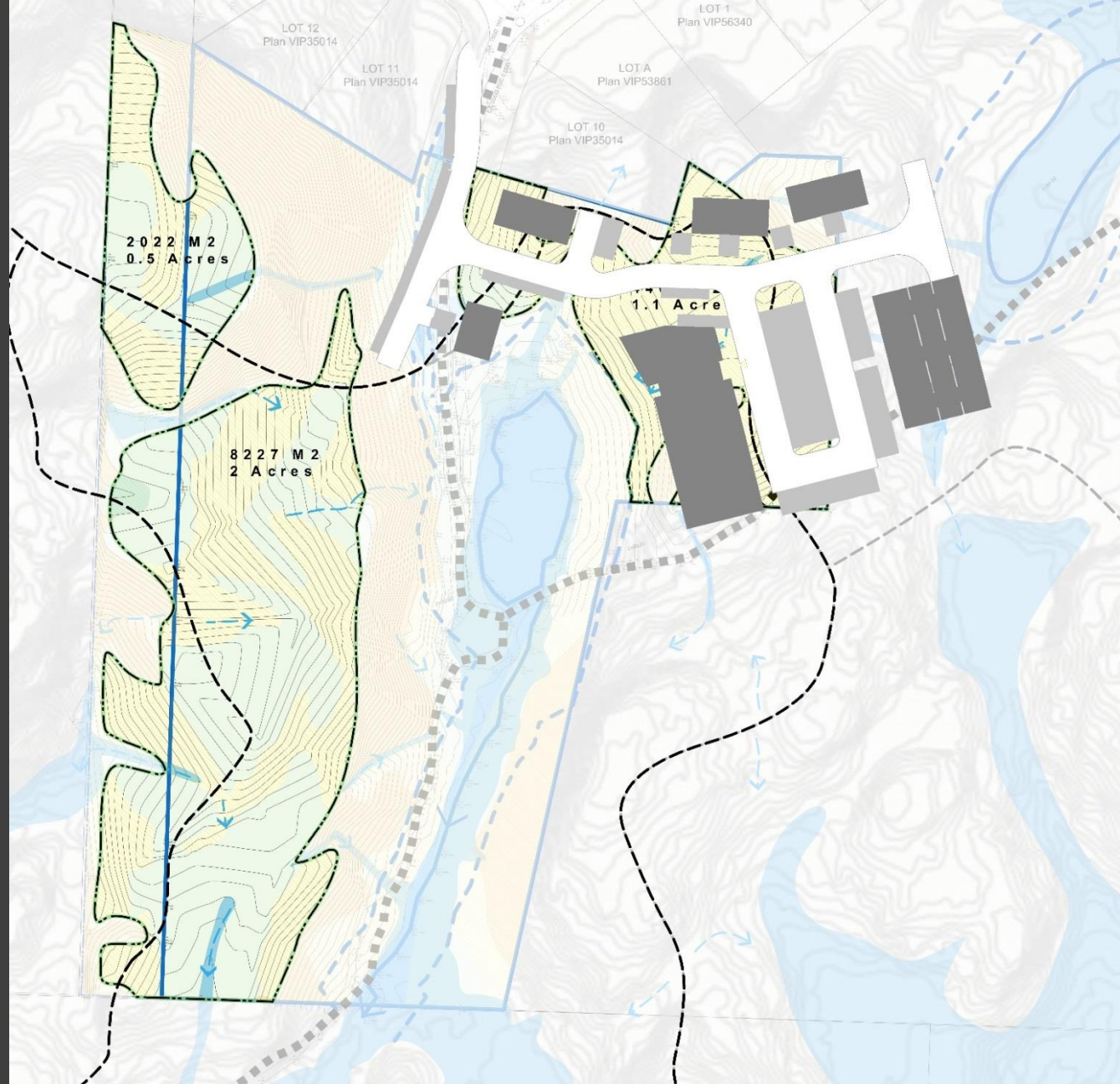
MAPPED WETLAND WITH SETBACK



EXISTING TRAIL



# PHASE 1 SELECTED BUILDING AREA



## LEGEND



**GOOD DEVELOPMENT SITE:**

- Slope < 20%
- Outside of Wetland Setbacks (assumed 15m on N&E sides, 30m on S&W sides)
- Not in water receiving area



**MAPPED WETLAND WITH SETBACK**

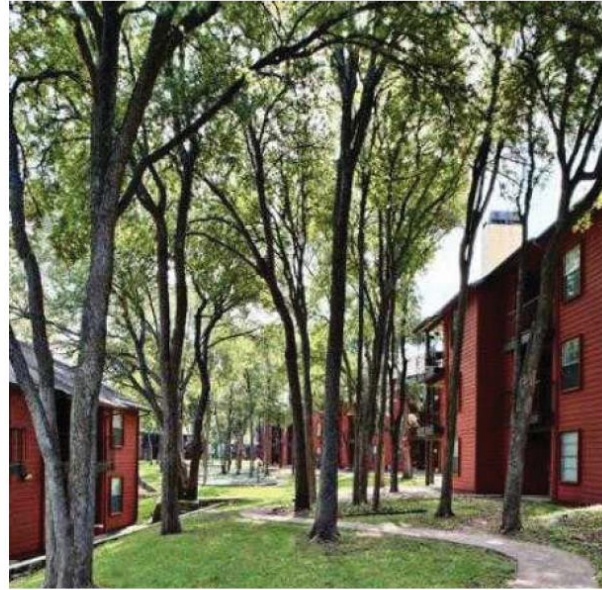
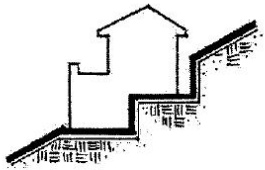


**EXISTING TRAIL**



## CONCEPTS

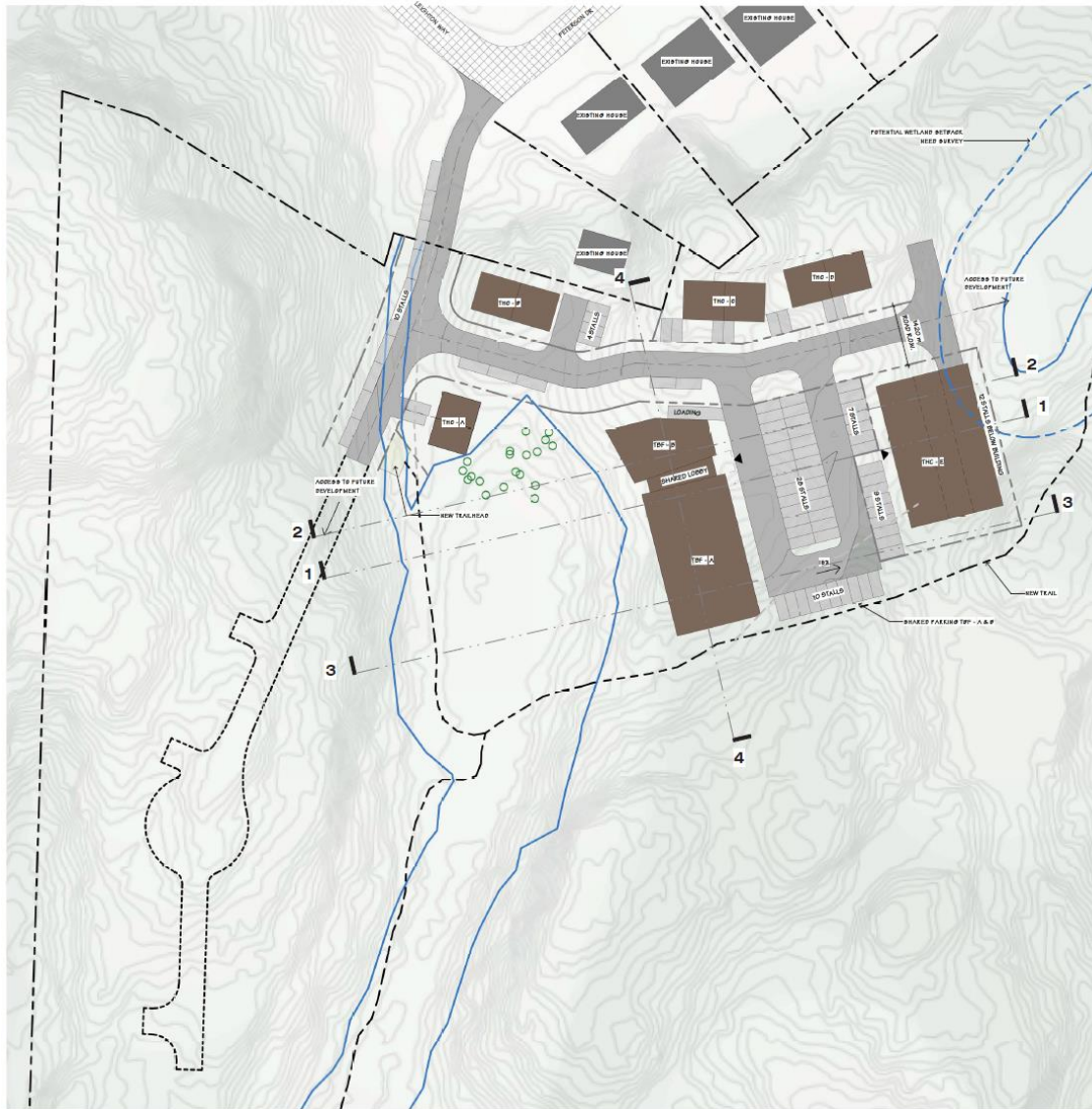
- 1 *WORK WITH EXISTING SLOPES*
- 2 *MAINTAIN EXISTING NATURAL ELEMENTS*
- 3 *INCORPORATE NATURAL MATERIALS*
- 4 *PROVIDE VIEWS TO THE OUTDOORS*
- 5 *PROVIDE NATURAL DAYLIGHTING*



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# DL 114 SITE PLAN



## SITE DIAGRAM LEGEND

- 1 COMMUNITY OVERSEER
- 2 COVERED OUTDOOR SPACE
- 3 NATURAL WOOD PLAYGROUND
- EXISTING PROPERTY LIMITS
- PROPOSED PROPERTY LIMITS
- TRAIL
- EXISTING TRAIL, TO BE MODIFIED
- WETLAND OUTLINE

## PROGRAM

- THC - A = 2 UNITS (TOWNHOUSES)
- THC - B = 4 UNITS (STACKED UNITS)
- THC - C = 4 UNITS (STACKED UNITS)
- THC - D = 4 UNITS (STACKED UNITS)
- THC - E = 21 UNITS (APARTMENT BUILDING)

TOTAL THC = 35 UNITS

- TBF - A = 20 UNITS (APARTMENT BUILDING)
- TBF - B = COMMUNITY CENTRE

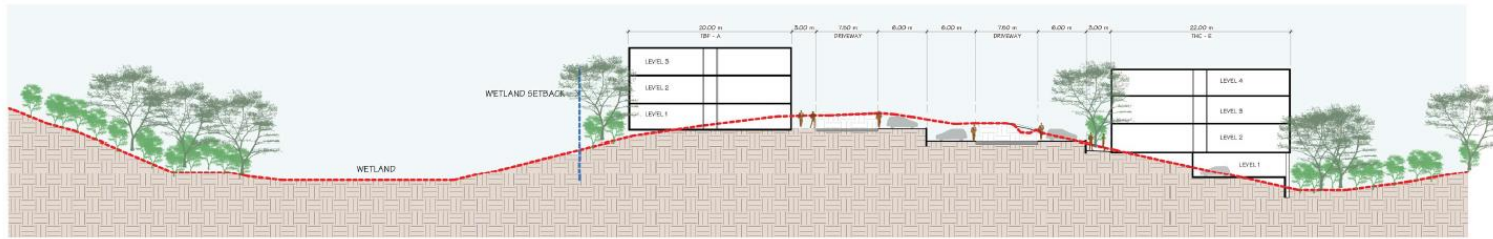
# DL 114 ILLUSTRATIVE MASSING



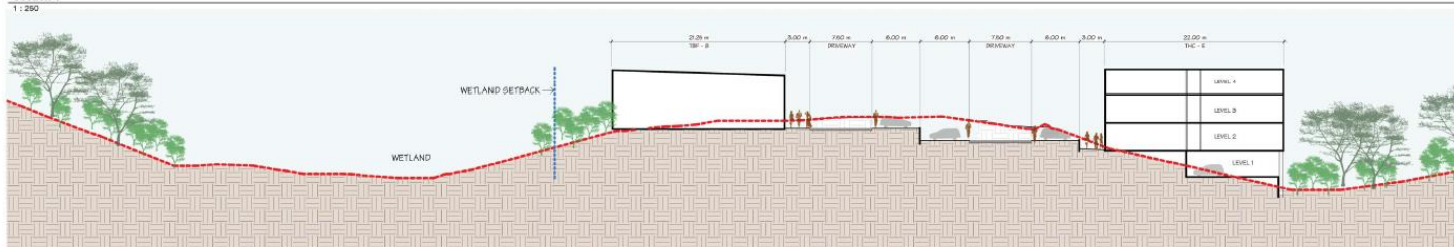
"Image is illustrative of positioning and scale of buildings within the forested and sloped sites, but does not include actual trees or houses on neighbouring sites."



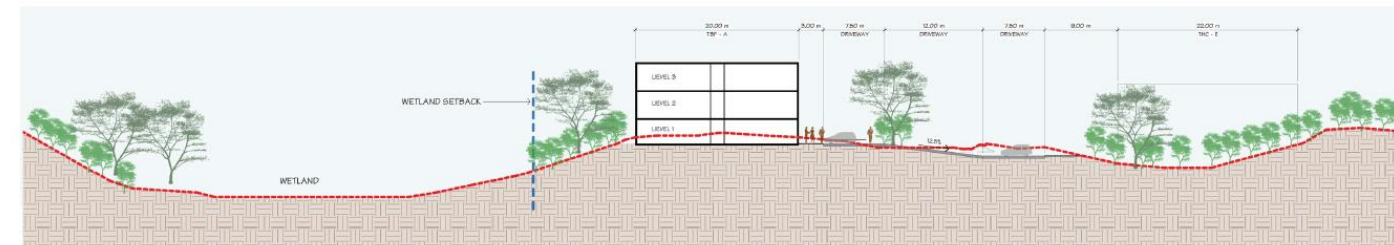
# DL 114 SECTIONS



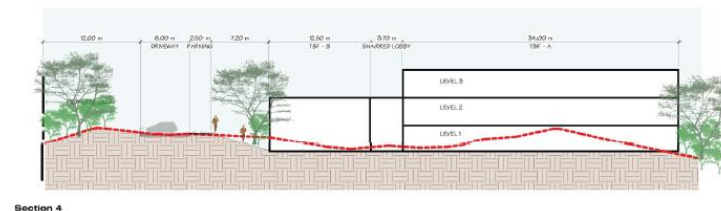
Section 1  
1 : 250



Section 2  
1 : 250



Section 3  
1 : 250



Section 4  
1 : 250

# DL 114 TOWNHOUSE CONCEPT DESIGN



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# DL 114 APARTMENT / COMMUNITY CENTRE CONCEPT DESIGNS



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DL 114  
AFFORDABLE  
HOUSING  
SCHEMATIC SITE PLAN

ROAD RIGHT OF WAY

ACCESS TO FUTURE  
DEVELOPMENT

WETLAND

5m RIPARIAN BUFFER

TRAILS

THC A

THC B

THC C

THC D

COMMUNITY  
CENTRE

TBF A

THC E

15m RIPARIAN BUFFER

WETLAND

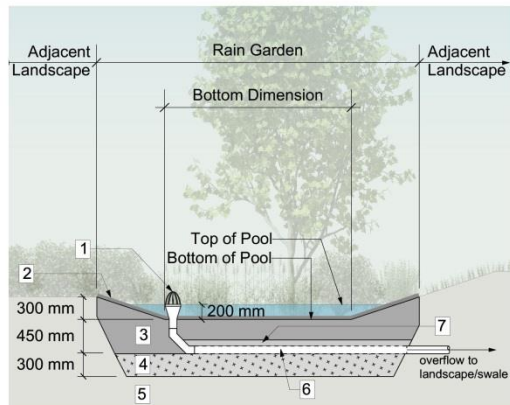




# STORMWATER STRATEGIES

## 1 RAIN GARDENS

Rain gardens are constructed landscape depressions that use permeable soil and plants to slow, cleanse and infiltrate storm-water runoff. Rain gardens are both functional and aesthetic elements in the landscape.



### RAIN GARDEN MATERIALS

1. Overflow drain, 200 mm domed grate + adapter
2. Composted mulch, 50 -70 mm depth
3. Bio-retention growing medium, 450 mm depth
4. Scarified/tilled subgrade, 300 mm depth
5. Existing subgrade/native material
6. 100 mm diameter (min) perforated pipe
7. 25 mm diameter drain rock, 100 mm depth

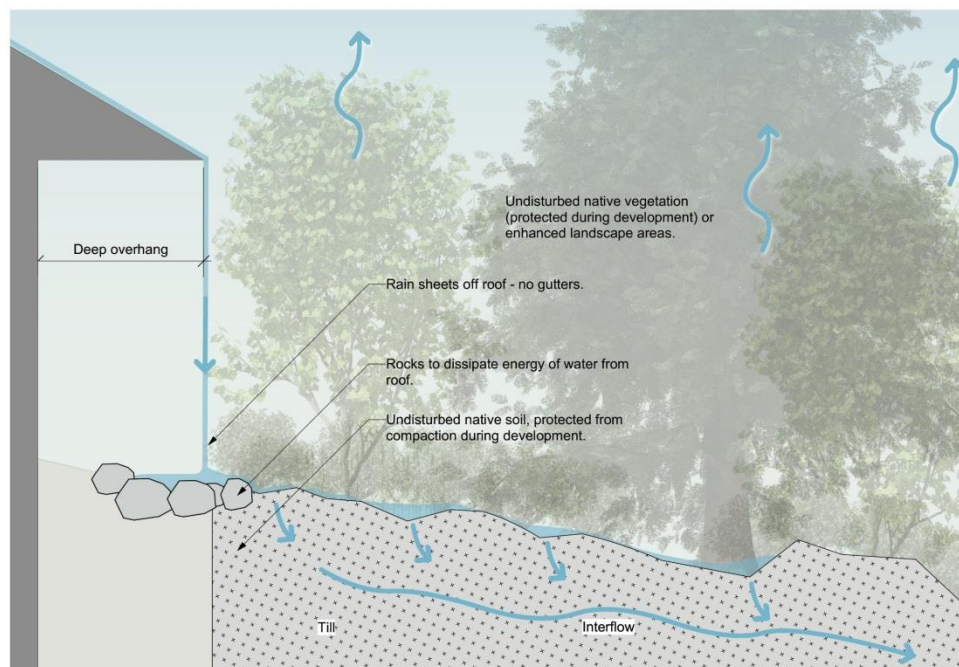


# STORMWATER STRATEGIES

## 2 ABSORBENT LANDSCAPES

Our native forests have the capacity to slow, absorb, evaporate and transpire rainwater. We can use these absorbent landscapes to handle a portion of runoff generated by development. In order to do so, we must protect these absorbent landscapes from development activity, and disperse stormwater towards them via sheet flow.

*MORE INFORMATION: District of Saanich "Stormwater Best Management Practices: Absorbent Landscapes"; GVRD "Stormwater Source Control Guidelines: Absorbent Landscapes" (2005).*

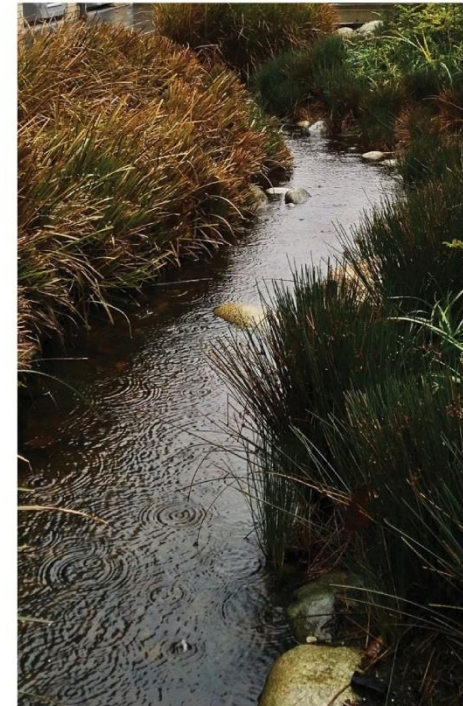
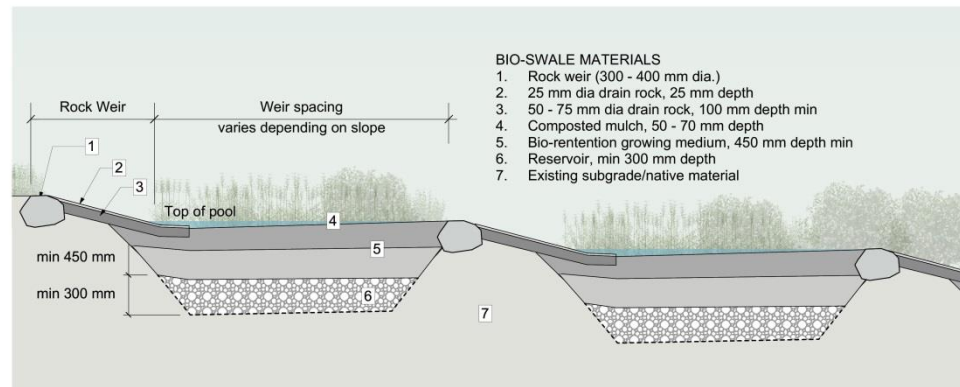




# STORMWATER STRATEGIES

## 3 SWALES

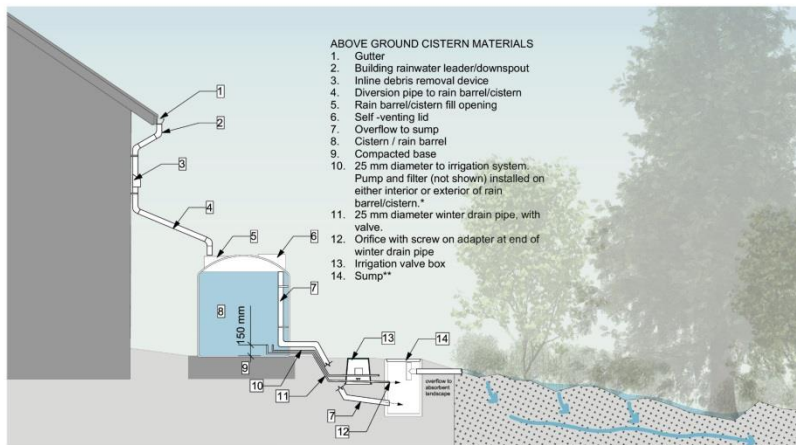
Swales are planted channels that convey stormwater runoff. On sloped sites, swales are constructed using weirs that slow the flow of water and encourage some settling, slowing, and infiltration of runoff.



# STORMWATER STRATEGIES

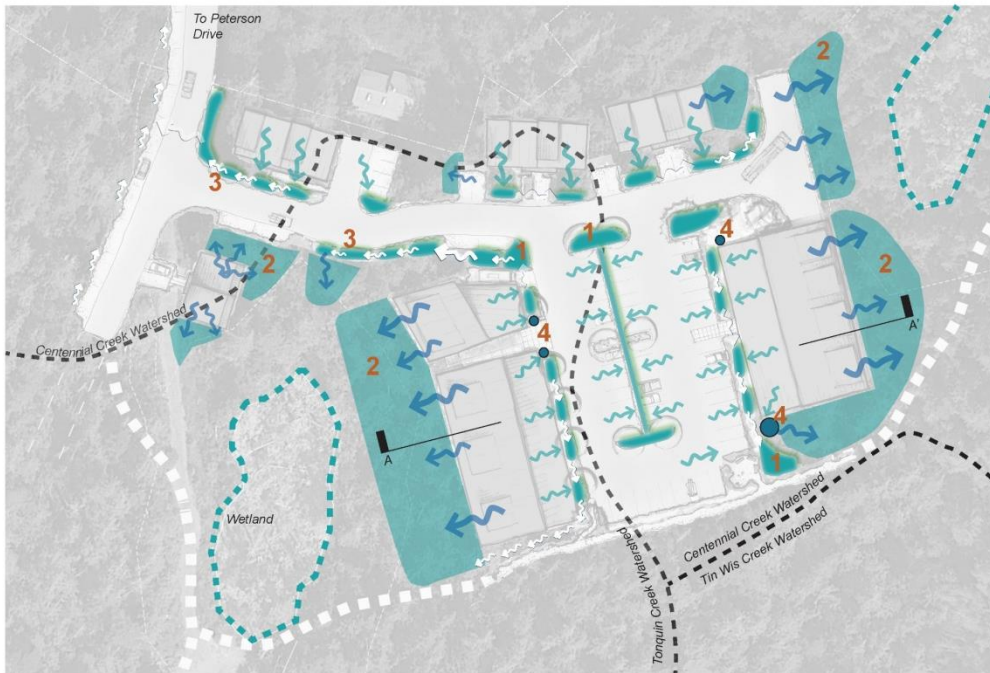
## 4 CISTERNS

Cisterns can be designed to slowly release water during wet months, slowing the rate at which stormwater is released to swales, raingardens or absorbent landscape areas. During dryer months, the cistern stores water for irrigation or fire suppression.

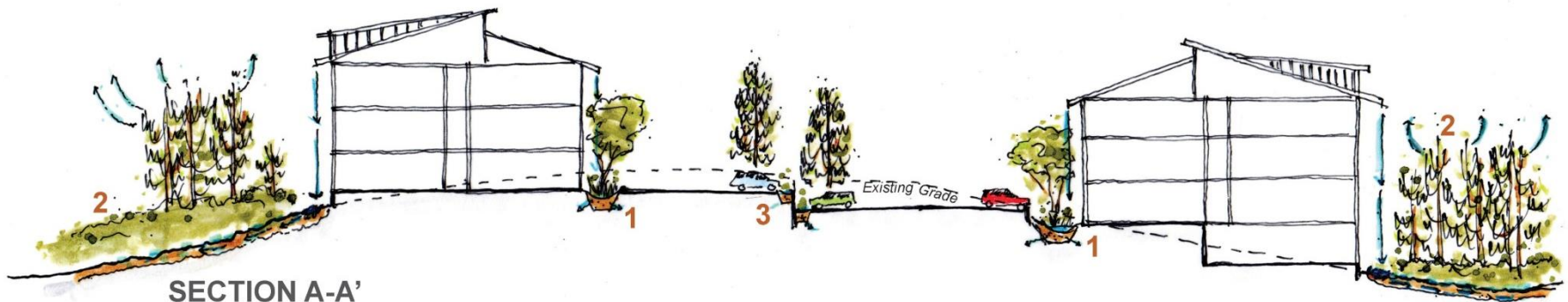




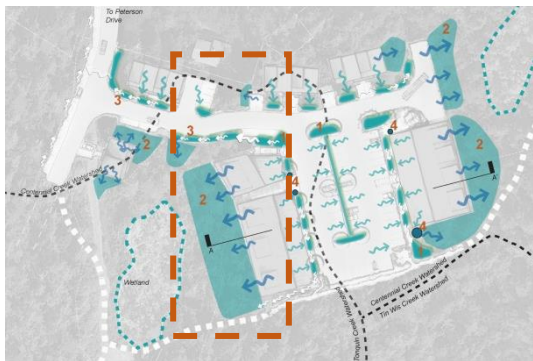
# SCHEMATIC STORMWATER PLAN



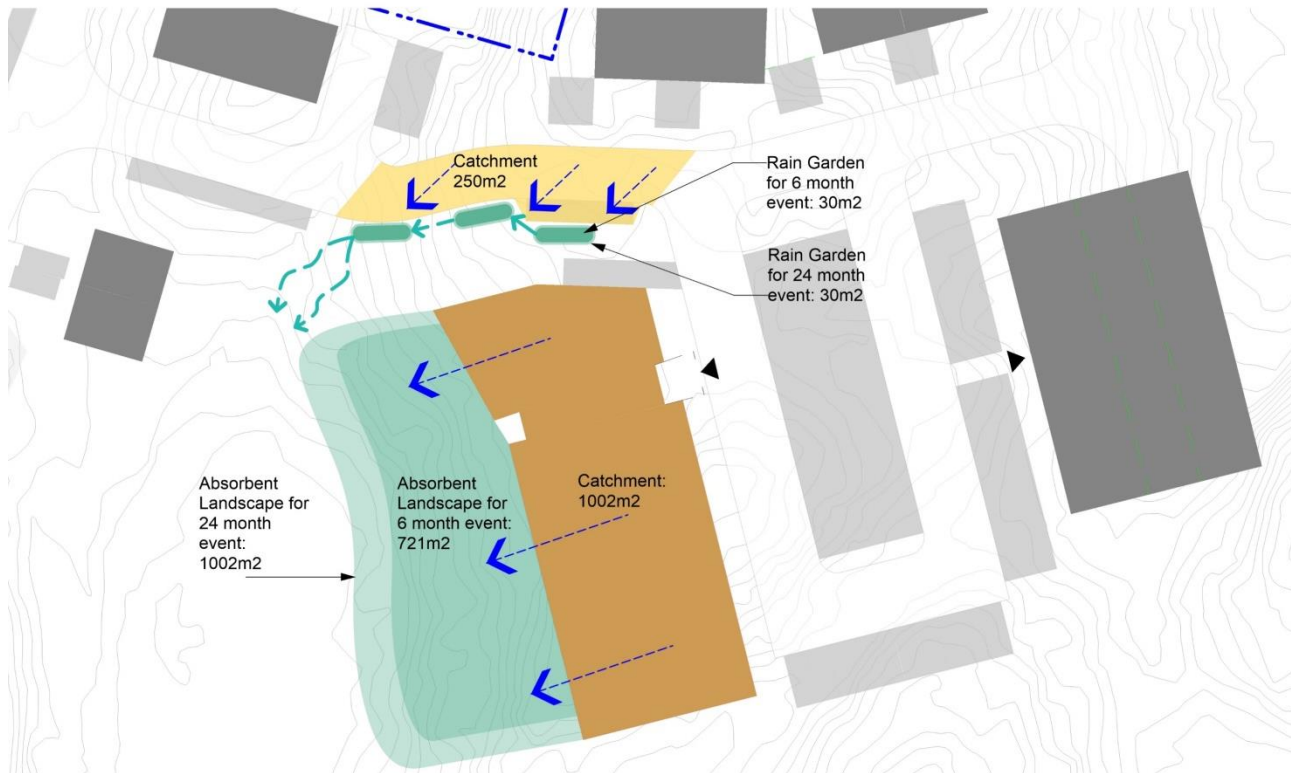
-  1 RAIN GARDENS
-  2 ABSORBENT LANDSCAPES
-  3 SWALES
-  4 CISTERNS



# TESTING STORMWATER DESIGN



Feature and Design Storm	Size Factor
	(sq. ft.) (%)
Rain Garden 6 Month	12%
Rain Garden 2 Year	17%
Absorbent Landscape Capacity-6 month	72%
Absorbent Landscape Capacity-2 year	100%







# Taking Action on Housing

Preliminary Project  
Plans / Pre-Rezoning  
Consultation

Funding Approved!

Move-in!

- Geotechnical test pits
- Additional survey
- Traffic study (DL 114)
- Detailed Environmental Assessment
- Revise Plans
- Initiate Rezoning Process
- Rezoning Approved
- Detailed Plans
- Capital & Operating Budget
- Funding Applications – September 2018 or later

- Confirm rents & prices
- Construction documents
- Building permits
- Tender
- Reconfirm rents & prices
- Construction
- Take-out mortgage

Public Open House – June 19<sup>th</sup>, 2018



# Taking Action on Housing

## Preliminary Project Plans

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## Funding Approved!

- Confirm rents & prices
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- Construction
- Take-out mortgage
- Move in !

- BC Housing
- CMHC (Federal)
- District of Tofino
- Other government & private funding