



DWV Wentworth Collingwood 31 lot Subdivision Trail Standards

All trails on public lands shall be approved and constructed as part of the District's Development Application process. Below clarifies the DWV Park Department submission and trail expectations:

Required Drawing Submissions:

The DWV parks department requires a drawing package for review and approval prior to any installation or construction. Package to include:

1. Trail layout drawing package showing:
 - Site Layout Plan, including sign locations
 - Proposed and existing grading/topography
 - Drainage and erosion control details (culvert, ditch as required etc)
 - Planting/Revegetation Plan
 - Typical Site Sections
 - Trail structure & site details:
 - Trail edge treatment details
 - Trail Surface & build-up details
 - Stair and Step details
 - Railing, Guardrail, Barriers & Fencing details

Project Requirements:

1. Utility ROW's #1, 2, & 3 shall be designed using 'Trail Type 3' standard – see standard below.
2. Owner to provide trail upgrades in three locations to existing trail that will connect Utility ROW #1 to Chippendale Road. Follow 'Trail Type 1' standard design requirements for upgrades. See Figure 1 sketch for upgrade locations and photos. Route and construction method is to be reviewed and approved on site with DWV trail crew.
3. Owner to provide new trail connection from Utility ROW #2 to Chairlift Road via 25th Street ROW - we request the owner design and install 'Trail Type 1'. Route and construction method is to be reviewed and approved on site with DWV trail crew. See standard below.

Trail Standard Types Design Requirements:

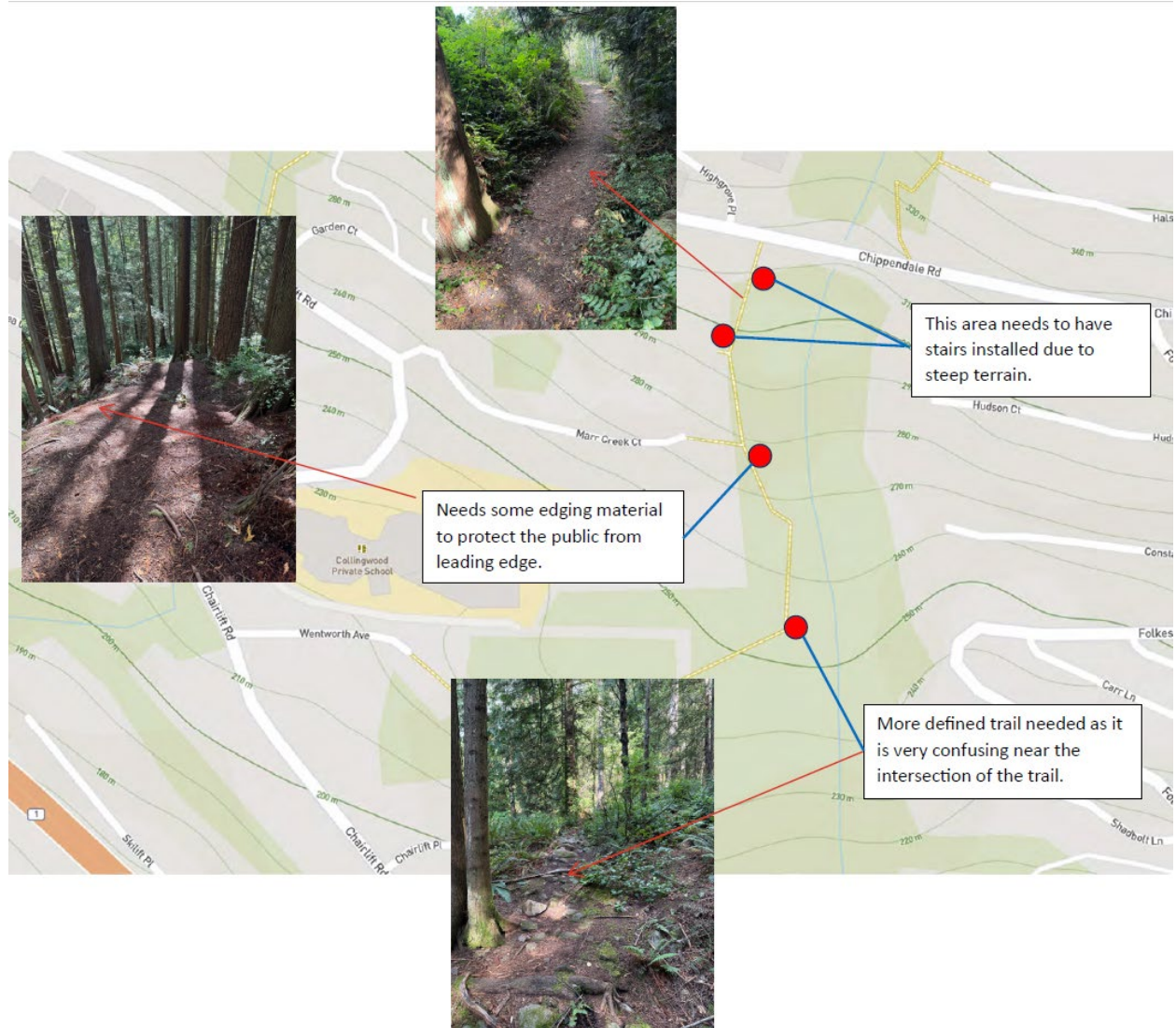
Trail Type 1 ‘Rustic Wilderness Trail’:

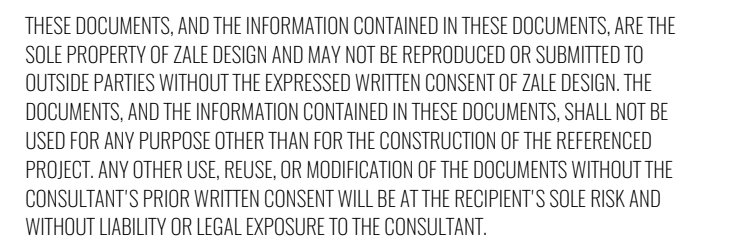
Purpose	Low impact, lightly used hiking and biking trail connections in a hazard free woodland forest setting
Width of path surface	1.0-1.2m wide with 2.2m wide and high clearing
Construction Access	Hand built
Trail surfacing	native materials, if native materials not available – use ¾" minus as needed to create a well-drained, hazard free, compacted, and stable trail surface
Trail edges	stable and smoothly graded into natural grade
Landscape Restoration	replant with resilient, low maintenance, drought tolerant slope stabilizing native plant material as required
Trail Grades	- variable – aim for max. 8.33% longitudinal slope, use 10-12% for short sections, 1-5% is preferable incline - Where trails must exceed 10% for short sections, plan locations so trail surface grades do not exceed half the grade of hillside or side slope the hill is traversing. - The back slope and out-slope of the trails shall be gently blended into natural grade - Ensure a minimum 1% and maximum 3% cross-slope for drainage and comfort. - Follow the contours to create gentle, well drained trails that minimize site disturbance and maximize accessibility and natural drainage. - Allow for natural drainage of water to the outside of the trail where it can be picked up by ditches or other natural drainage.
Stairs	- the maximum grade of the trail before adding stairs or steps shall be 10%. Minimize stairs where possible. - Install a series of in-ground stone stairs using basalt stone slabs with sandblast finish https://www.landscapesupply.com/catalog/product.php?cat_id=34&pid=2255 - All step treads should be sloped slightly (1%) to allow drainage down the steps. Water should be collected and dispersed before and after the step location.
Drainage Structures	- Provide as needed for a well-drained trail and erosion prevention. - locally available wood and rock may be used to create needed drainage structures and support side slopes of paths where the cut/fill slopes are steeper than 1:2 or unstable.
Signage	- All trails shall be clearly marked at entrances or intersections with West Vancouver Park style signage to ensure they are easily recognized as part of the West Vancouver trail system. - Show proposed sign locations on plan. - Signs will be supplied by DWV.
Railings/Fencing/Guardrails	None
As Built Information	Provide the District of West Vancouver with trail alignment and asset/feature information in CAD format for input into the District GIS system for the purpose of the trail inventory, and maintenance management.

Trail Type 3 'Standard Trail':

Purpose	Provide safe pedestrian/bicycle connections to surrounding neighbourhoods in Utility ROW's
Width of path surface	1.8- 2.0m wide + clear 0.5m shoulder on either side
Construction Access	Full Accessibility with Machine
Trail surfacing	use 9mm minus granite rock dust to create a well-drained, hazard free, compacted, and stable trail surface
Trail edges	3:1 max. – stable and smoothly graded.
Landscape Restoration	replant disturbed areas between trail and PL with resilient, low maintenance, drought tolerant slope stabilizing native plant material
Trail Grades	- Aim for hard compacted surfaces with maximum 8.33% (1:12) longitudinal slope with 1-4% (1:20) being the preferred accessible slope. - The back slope and out-slope of the trails shall be gently blended into natural grade and replanted with native vegetation where needed for stability. - Ensure a minimum 1% and maximum 2% cross-slope to ensure drainage. - Follow the contours to create gentle, well drained trails that minimize site disturbance and maximize accessibility and natural drainage. - Provide drop curbs at road entries. - Crowned trail surfaces shall create a 1.5% slope away from the centre of the path to both sides. - Allow for natural drainage of water to the outside of the trail where it can be picked up by ditches or other natural drainage.
Stairs	- the maximum grade of the trail before adding stairs or steps shall be 8.33%. Minimize stairs where possible. - Use a series of in-ground stone stairs with landings where sloping terrain is greater than 8.33%. Materials: basalt stone slabs with sandblast finish https://www.landscapesupply.com/catalog/product.php?cat_id=34&pid=2255 - Provide handrails on both sides of stairs with smooth grasping surfaces on steep or long steps. Handrail running surfaces should be re-sawn, sanded, and beveled as appropriate. Handrails should be designed so that the railing can be easily grasped. Extend the handrails 30 cm past the top and bottom of steps. - All step treads should be sloped slightly (1%) to allow drainage down the steps. Water should be collected and dispersed before and after the step location.
Drainage Structures	- Provide as needed for a well-drained trail and erosion prevention. - Maintain positive drainage on trail by removing water from trail surface and allow it to be stored or moved off the trail surface through the use of ditches, culverts, swales, crowning of trail surface etc.
Signage	- All trails shall be clearly marked at entrances or intersections with West Vancouver Park style signage to ensure they are easily recognized as part of the West Vancouver trail system. - Show proposed sign locations on plan. - Signs will be supplied by DWV.
Railings/Fencing/ Guardrails	1.8m (6'-0") ht black vinyl coated chainlink fence located on private property both sides of all 3 ROW's.
As Built Information	Provide the District of West Vancouver with trail alignment and asset/feature information in CAD format for input into the District GIS system for the purpose of the trail inventory, and maintenance management.

Figure 1.





CONNECTION TO THE EXISTING TRAILS & PARK SYSTEM that have easy-to-maintain native plantings.

Trail Type 1 proposed trail connection through 25th ROW to lane connection to Chairlift Place

EDGE OF ENVIRONMENTAL SETBACK

DRAWING

L1a