

Our File: 2221-49408

May 25, 2022

City of Campbell River
Development Services Department
301 St. Ann's
Campbell River, BC
V9W 4C7

Attention: Meghan Norman, Senior Planner

Minor Development Permit Application – 570 Old Petersen Road

On behalf of our client, Heather Clarke of Discovery Ridge Ventures, we are pleased to submit this application for an Environmental (Streamside) and Hazardous Conditions (Steep Slope) Development Permit (DP). This DP application is related to an active 25-lot subdivision, whereby the city granted an amended Preliminary Subdivision Review (PSR) on November 4, 2021. A copy of the PSR letter is included in the application submission. It should be noted that an application to amend / extend PLR was made in early April that included a request to increase the lot yield from 25 to 28 lots.

Location / Context

Shown below, the subject property is a hooked lot located between Park Forest Drive and the Elk River Timber (ERT) Road. There is a steep slope approximately 17 m high along the east side of the subdivision, and there is a ditch that flows in a west to east direction along the northern portion of the development. The proposed residential lots will be accessed from Park Forest Drive along Prentice Road. The proposed development is located on the eastern 3.28 ha side of the property and represents the fourth phase of the development. The subject lands are zoned R1-A and are designated "Neighbourhood" in the City's Official Community Plan (OCP). The subject lands are adjacent to a recently approved, RM-1 zoned single family subdivision to the north, and a vacant RM-1 zoned property to the south. The property is bound by the ERT to the east, and single-family homes to the west.

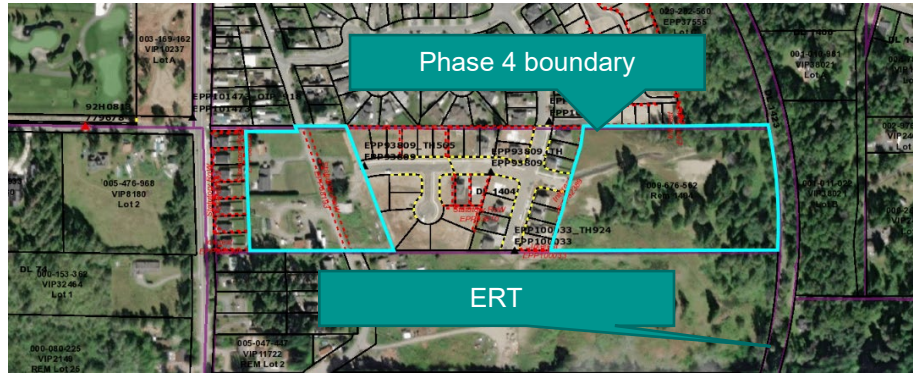


Figure 1: Subject Property

Proposed Development

The proposed subdivision consists of twenty-eight (28) lots as shown on the enclosed Proposed Plan of Subdivision. Shown in Figure #2 below, there is a “steep slope” on the east side of the development lands that will be cut and filled to achieve the final design surface. Shown in the enclosed grading plans, there will be a 10m wide bench separating the lower and upper slopes that will be graded slightly downhill, shown in the enclosed cross sections. The design also includes the construction of a stormwater retention pond that will be constructed on the neighbouring property to the south, near the toe of the slope.

Development Permit Areas

Shown in Figures 2-4 below, the subject area is located within two DP areas (Steep Slope and Streamside). To address Steep Slope DP requirements, this application includes a Geohazard Assessment, prepared by Base Geotechnical (dated March 11, 2022). The report contains a “steep slope” stability assessment for the natural embankment at the proposed residential subdivision, and provides geotechnical recommendations related to future construction activities that could impact the stability of the slope.

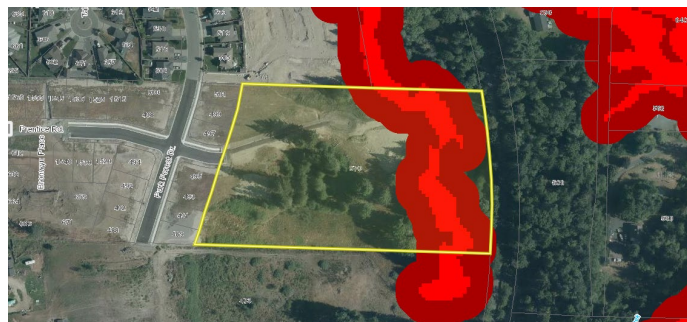


Figure 2: Hazardous Conditions (Steep Slope) DPA

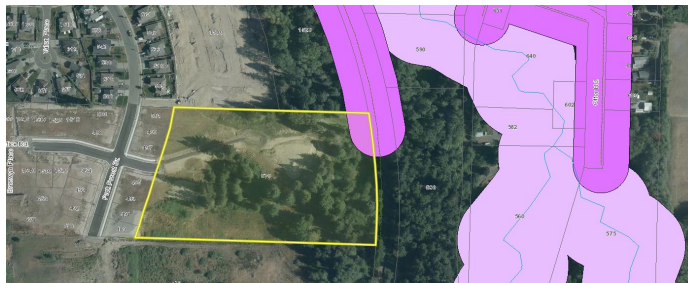


Figure 3 Environmentally Sensitive Areas (Currently Published)



Figure 4: Environmentally Sensitive Areas (Unpublished)

The submitted Geohazard Report addresses the City's Steep Slope DP Guidelines and notes that the development is viable from a geotechnical perspective, provided that the recommendations in the report are carried out (i.e. maintaining a 10m geotechnical setback from the crest of slope for habitable structures, hydroseeding of the slope post disturbance, and implementation of water management activities, etc.). Finally, the report concludes that the development is "safe for the use intended" from a slope stability perspective and includes a signed Landslide Assessment Assurance Statement.

Environmental Development Permit

Prior to the development of previous phases, an Environmental Assessment, prepared by Pacificus Biological Services Ltd., in 2015, which concluded that no watercourses associated with 570 Old Petersen Road were applicable under the previous Riparian Areas Regulation. Since this report was prepared, to support the development of Phase 4, the construction of a stormwater retention pond is proposed adjacent to the site within the eastern portion of 473 Old Petersen Road (Figure #5, below). As 473 Old Petersen Road was not subject to the original 2015 assessment, an updated assessment was prepared by Pacificus to identify any Riparian Area Protection Regulation (RAPR) applicable watercourses are present.

The assessment concludes the following:

- The area in and around the location of the proposed retention pond does not contain any watercourses applicable under the RAPR; as there is no surface connection between the subject

lands and Nunns Creek (although drainage from the development will contribute to the flow of Nunns Creek) (Figure #5)

- As detailed in the report, it is proposed that the retention pond be connected to the ERT Road ditch north of the property, and as no existing ditch line exists between 473 Old Petersen and the ERT Road Ditch (north), upgrades to the ditch are required.
- The proposed upgrades to the ERT Road ditch will serve to change the provincial RAPR status of the watercourses in the area once connection and drainage is established.
- Slope remediation will be outlined as per the Erosion and Sediment Control Plan submitted with this application, which includes environmental monitoring. Remediation will consist of a combination of hydroseeding and /or hand seeding of a native grass mix, as well as planting of suitable native vegetation as necessary. An itemized cost estimate for ESC measures, slope remediation and environmental monitoring have been included with this application.



Figure 5: Mapped watercourses

Thank you in advance for considering this application. Please contact the undersigned if additional information is required.

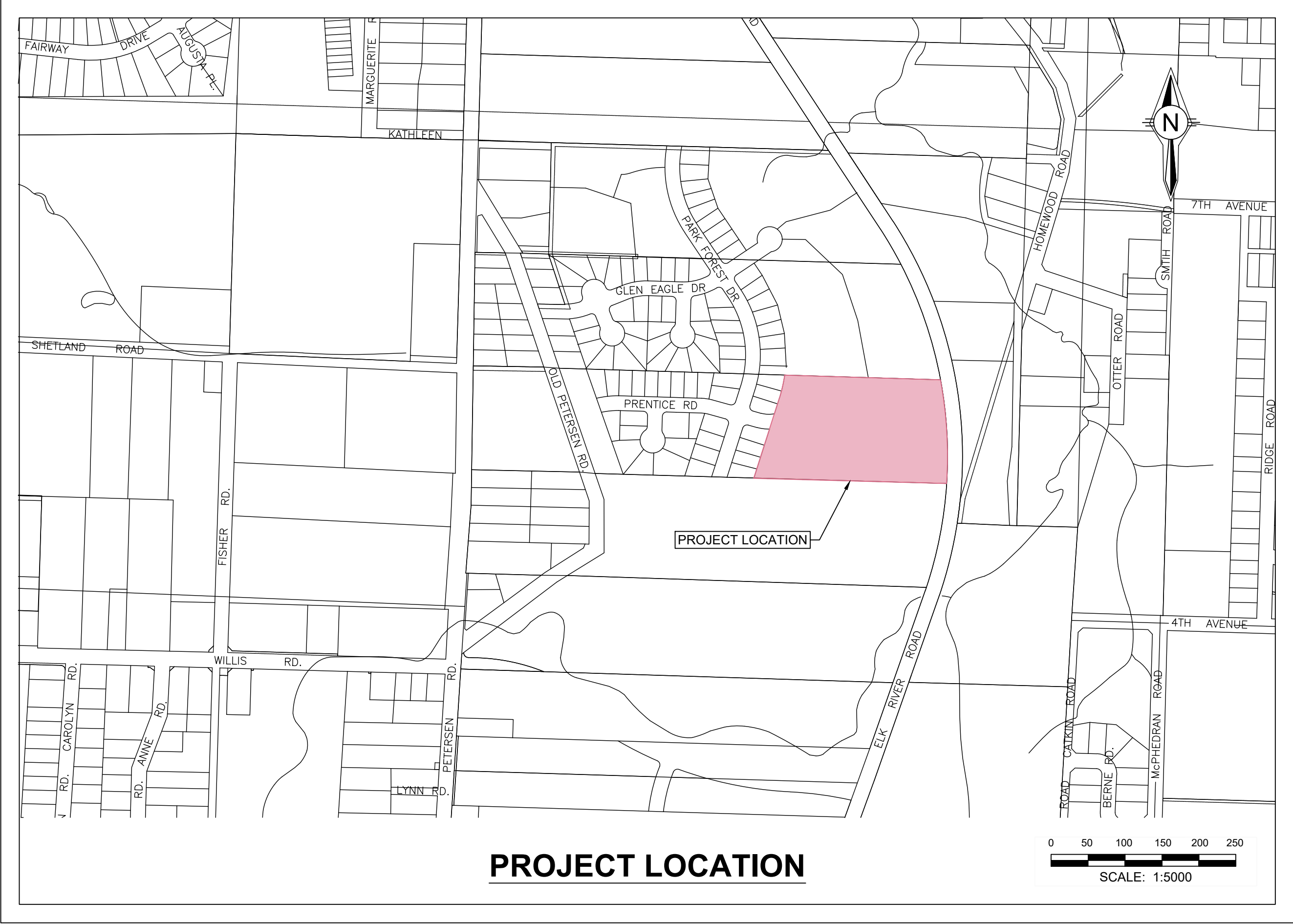
Sincerely,
McElhanney Ltd.

Andy Gaylor, Planner

CLIENT: **DISCOVERY RIDGE VENTURES LTD.**

DESCRIPTION: **DISCOVERY RIDGE - PHASE 4
CAMPBELL RIVER, BC**

LEGAL: **DISTRICT LOT 1404,
SAYWARD LAND DISTRICT,
EXCEPT PLAN EPP68537,
SHOWN IN RED ON DD132225I;
& EXCEPT PL EPP82388**



McElhanney Project No.: **2221-49408**

City Project No.: **P1800104**

Sheet List Table				
REFERENCE	DRAWING TITLE		PAGE	REVISION
C101	OVERALL DEVELOPMENT PLAN	--	1	PA
C102	TOPOGRAPHIC & REMOVALS PLAN	--	2	PA
C103	DETENTION POND LANDSCAPING PLAN	--	3	PA
C104	LOT GRADING PLAN	--	4	PA
C105	ROADWORKS PLAN & PROFILE	PRENTICE ROAD	5	PA
C106	ROADWORKS PLAN & PROFILE	AISLING PLACE & PRENTICE RD CONNECTION	6	PA
C107	CURB RETURN & BULB DETAIL	TYPICAL SECTIONS	7	PA
C108	WATER WORKS PLAN & PROFILE	PRENTICE ROAD	8	PA
C109	WATER WORKS PLAN & PROFILE	AISLING PLACE	9	PA
C110	STORM/SANITARY PLAN & PROFILE	PRENTICE ROAD	10	PA
C111	STORM/SANITARY PLAN & PROFILE	AISLING PLACE	11	PA
C112	STORM/SANITARY PLAN & PROFILE	SRW & PRENTICE RD TIE-IN	12	PA
C113	LOCK BLOCK WALL	PLAN & PROFILE	13	PA
C114	STREET LIGHTING & 3RD PARTY UTILITIES	--	14	PA
C115	EROSION & SEDIMENT CONTROL PLAN	--	15	PA

NOT FOR CONSTRUCTION



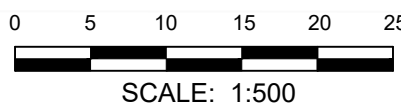
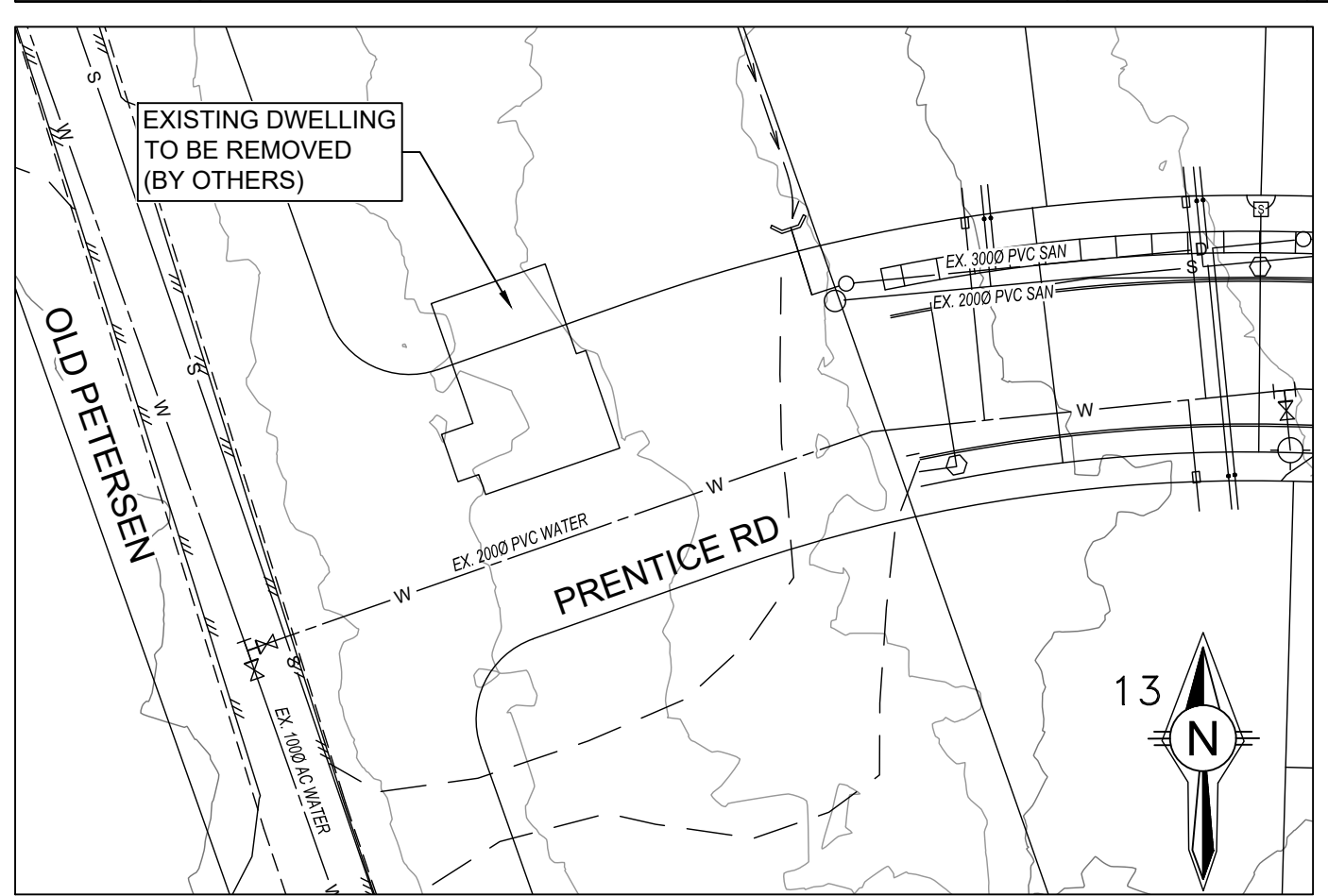
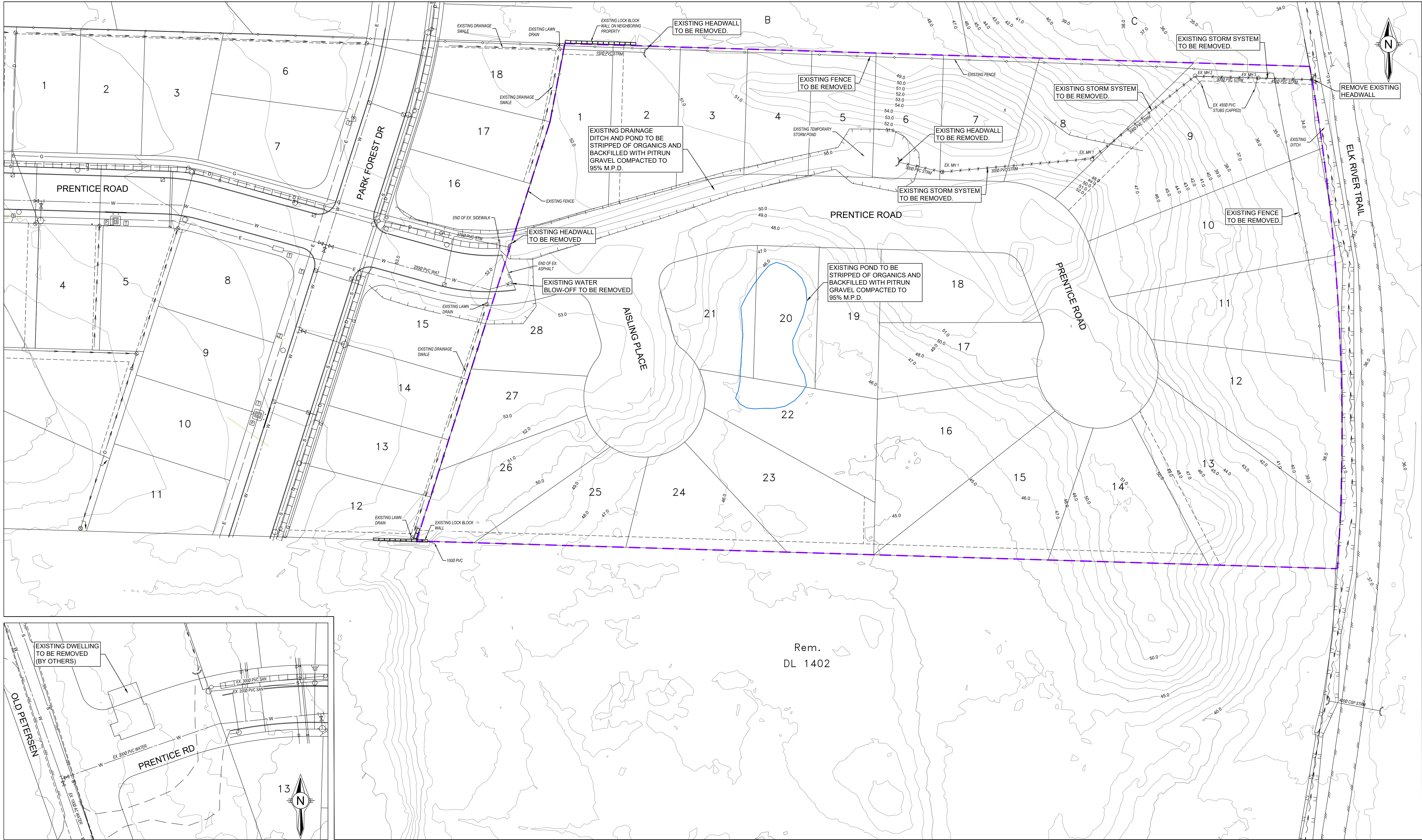
McElhanney

1196 Dogwood Street
Campbell River BC
Canada V9W 3A2
T 250 287 7799

PERMIT TO PRACTICE
McElhanney Ltd.

PERMIT NUMBER: 1003299
Engineers and Geoscientists of BC

PROJECT:
McElhanney: 2221-49408
City: P1800104



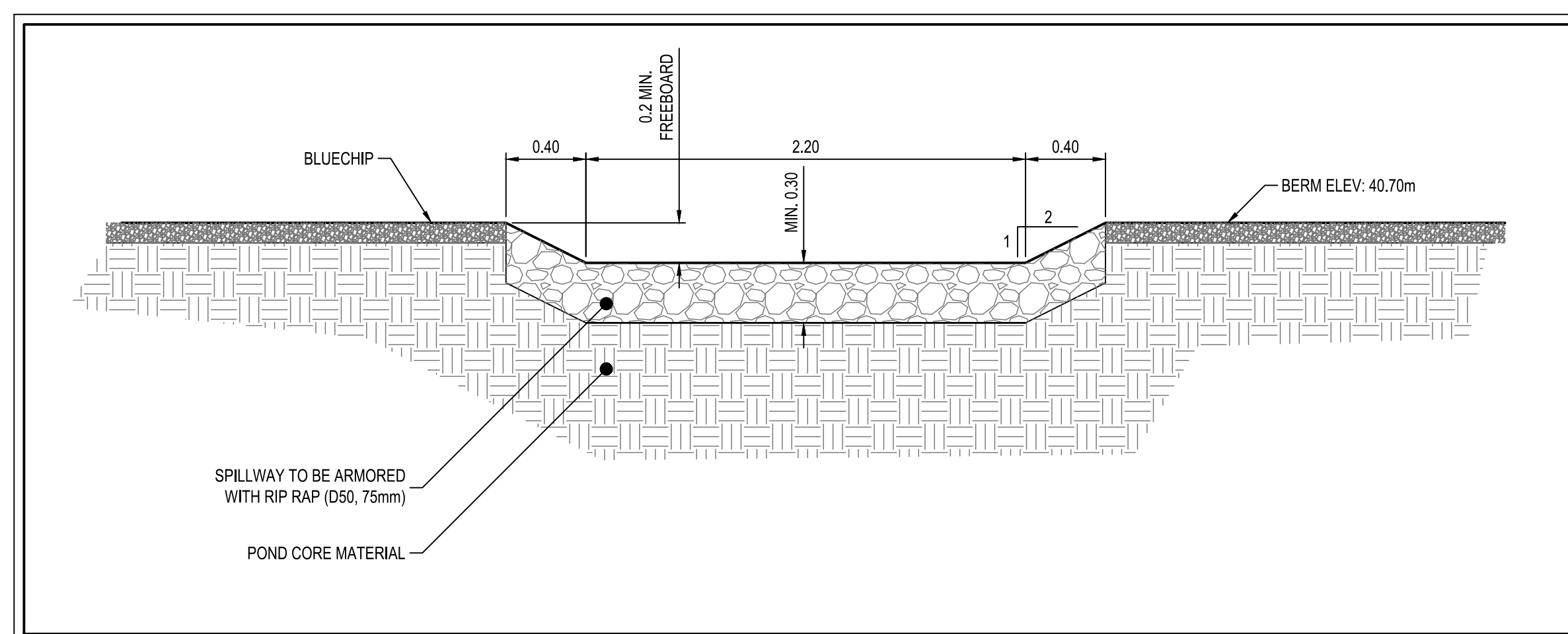
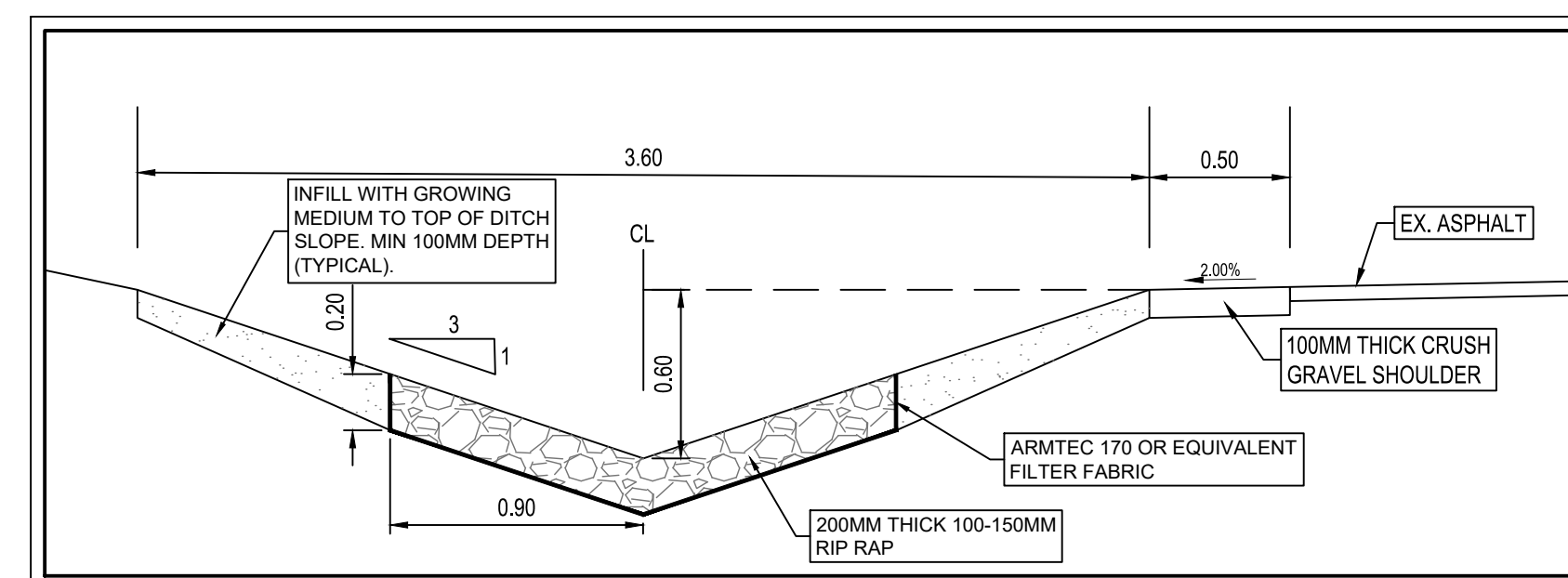
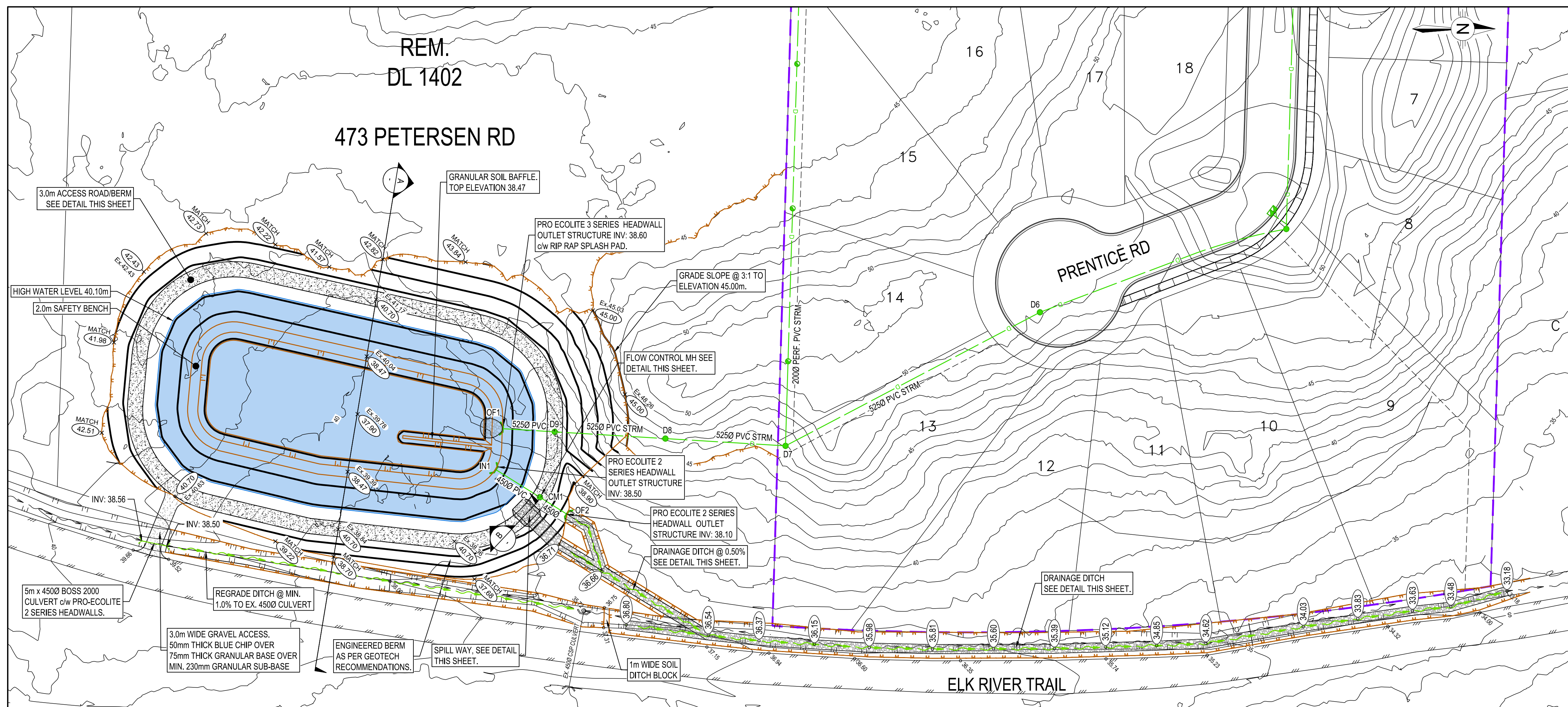
NOT FOR CONSTRUCTION

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DRAWING PATH: G:\PROJECTS\ACTIVE\49408-00 Discovery Ridge - Ph 4, 570 Old Petersen Rd\10.0 DRAWINGS\10.4 Sheets\49408-CO-C102 Topo.dwg Tab C102 Apr 06, 2022 8:52:17am



DESTROY PRINTS OF PREVIOUS REVISION



NOT FOR CONSTRUCTION

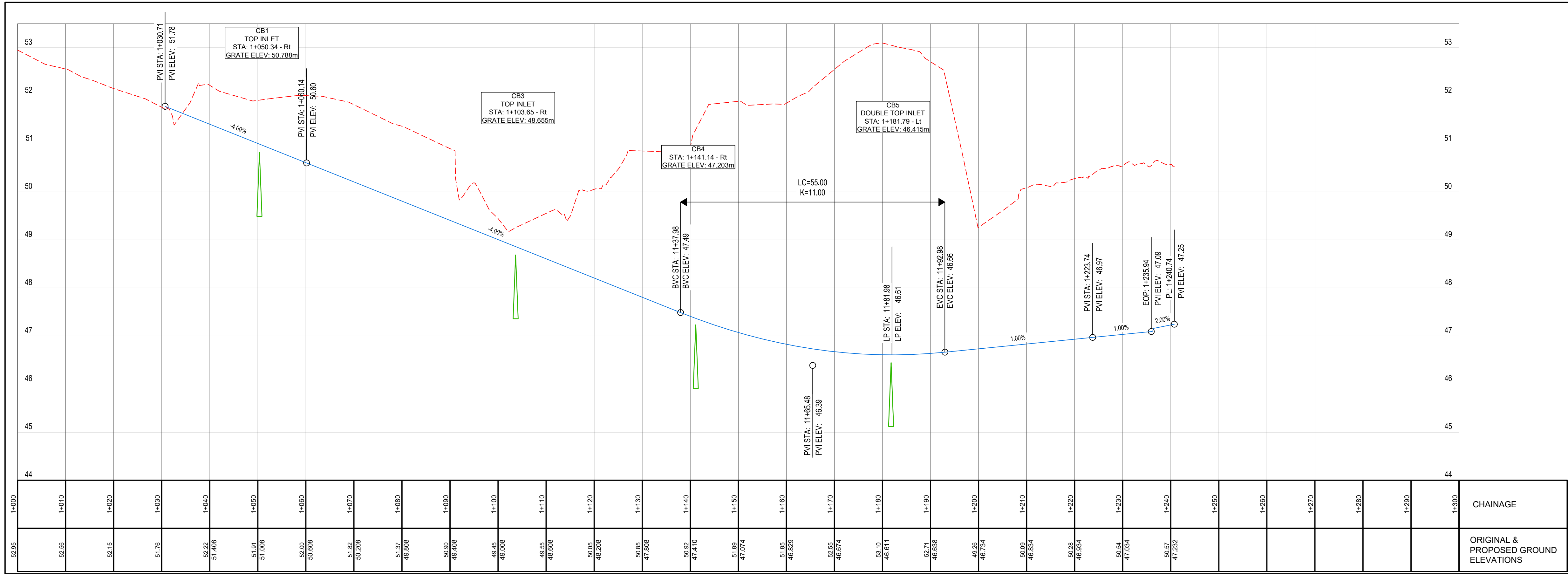
[illegible]

PRELIMINARY
NOT FOR
CONSTRUCTION

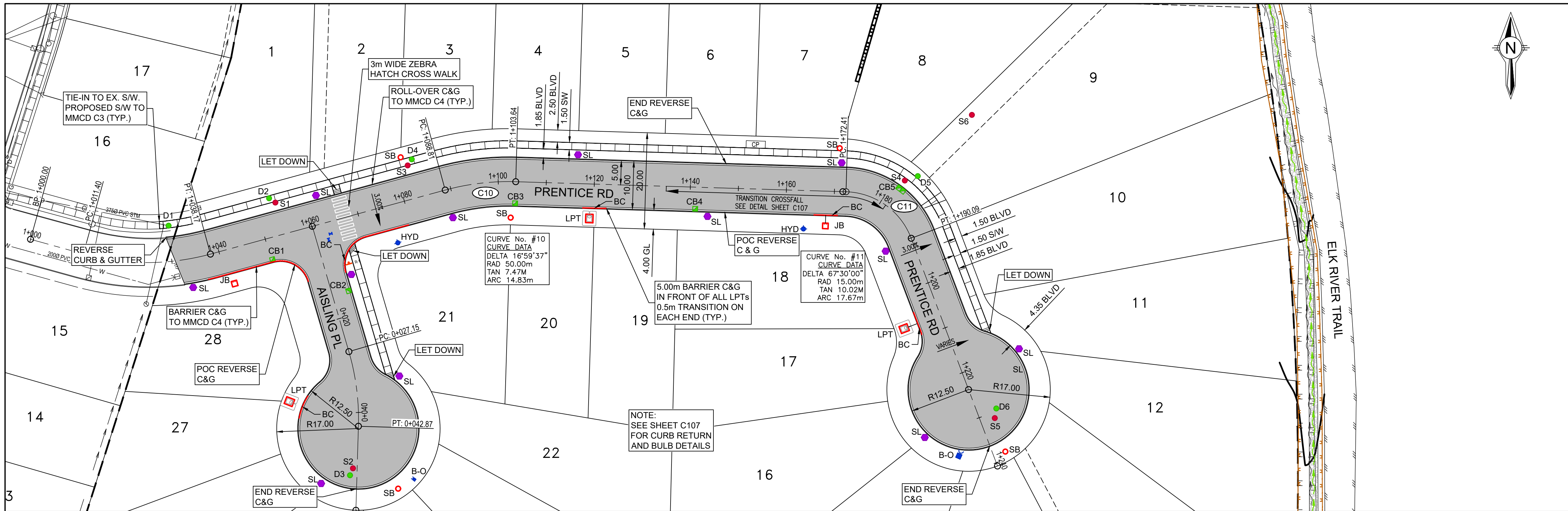
DISCOVERY RIDGE VENTURES LTD.

DRAWING PATH: G:\PROJECTS\ACTIVE\49408-00 Discovery Ridge - Ph 4, 570 Old Petersen Rd\10.0 DRAWINGS\10.4 Sheets\49408-C0-C400 SMM POND.dwg Tab C103 Apr 06, 2022 8:52:49am





ROAD PROFILE
SCALE 1:500H;1:50V



ROAD PLAN
SCALE: 1:500


NOT FOR CONSTRUCTION

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



THIS DRAWING HAS BEEN PREPARED FOR THE CLIENT IDENTIFIED, TO MEET THE STANDARDS AND REQUIREMENTS OF THE APPLICABLE PUBLIC AGENCIES MCELHANNEY LTD., ITS EMPLOYEES, SUBCONSULTANTS AND AGENTS ACCEPT NO RESPONSIBILITY TO ANY OTHER PARTY, INCLUDING CONTRACTORS, SUPPLIERS, CONSULTANTS AND STAKEHOLDERS, OR THEIR EMPLOYEES OR AGENTS, FOR LOSS OR LIABILITY INCURRED AS A RESULT OF THEIR USE OF THESE DRAWINGS.





McElhanney

196 Dogwood Street
Campbell River BC
Canada V9W 3A2
250 287 7799

PERMIT TO PRACTICE

McElhanney Ltd.

PERMIT NUMBER: 1003299

Engineers and Geoscientists of BC

THIS DRAWING HAS NOT BEEN APPROVED
AND MAY CONTAIN ERRORS AND OMISSION

DISCOVERY RIDGE VENTURES LTD

LOCK BLOCK WALL
PLAN & PROFILE

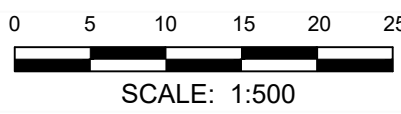
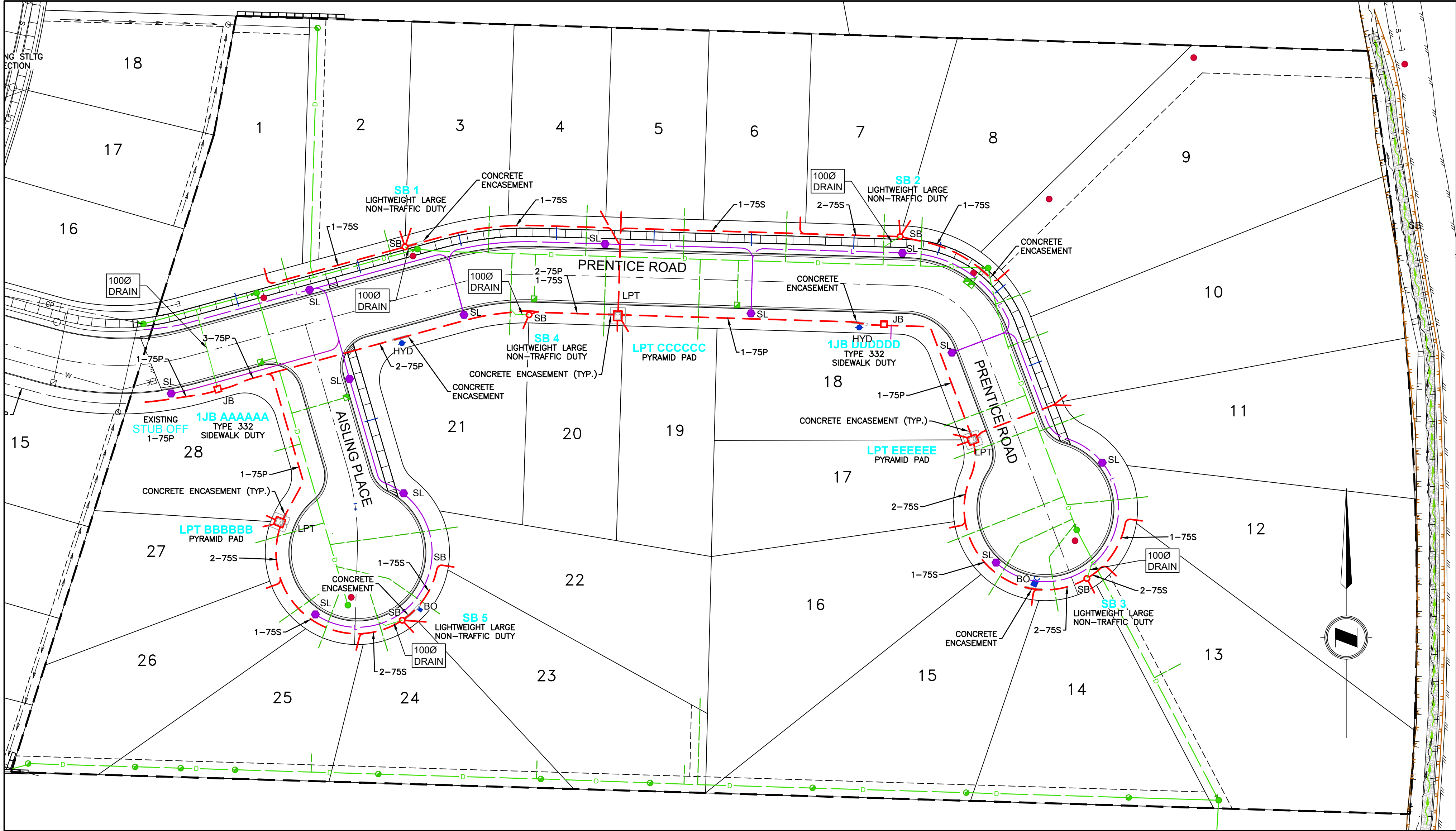
DISCOVERY RIDGE - PHASE 4

CAMPBELL RIVER, BC

CITY PROJECT #	P1800104
SHEET REFERENCE:	C113
McELHANNEY PROJECT #:	2221-49408
SHEET	OF
13	15
REV.	PA

DRAWING PATH: G:\PROJECTS\ACTIVE\49408-00 Discovery Ridge - Ph 4, 570 Old Petersen Rd\10.0 DRAWINGS\10.4 Sheets\49408-C0-C103 GRAD.dwg Tab C114 Apr 06, 2022 8:54:53am

DESTROY PRINTS OF PREVIOUS REVISION



STREETLIGHTING NOTES

- 1. ALL MATERIALS TO BE NEW AND C.S.A. APPROVED, AND IN ACCORDANCE WITH CURRENT CITY OF CAMPBELL RIVER SPECIFICATIONS.
- 2. ALL WORK IN ACCORDANCE WITH B.C. VERSION OF CANADIAN ELECTRICAL CODE. PERMITS AND INSPECTION ARRANGED BY CONTRACTOR; SUBMIT COPIES TO CITY OF CAMPBELL RIVER.
- 3. FOR EXACT LOCATION OF SERVICE BOX AND SYSTEM CONNECTION REFER TO B.C. HYDRO DRAWINGS.
- 4. ALL UNDERGROUND CONDUITS - 32mm RIGID PVC UNLESS OTHERWISE NOTED.
- 5. CONDUCTORS - RW 90 COPPER, COLOUR CODED. WIRES SIZED SO THAT MAX. VOLTAGE DROP FROM HYDRO TO LUMINAIRE IS 5%.
- HOWEVER, MINIMUM WIRE SIZE IS:
 - GROUND RUNS No8
 - FEEDER RUNS No6
 - LUMINAIRE SUPPLY No12
 - CONTROL CIRCUIT No14
- 6. GROUND RODS - 20mm x 3.00m LONG.
- 7. CONDUITS - Min. 500mm BELOW GRADE. BEDDED IN SAND 75mm ABOVE AND 75mm BELOW, AND IDENTIFIED WITH WARNING TAPE.
- 8. POLES - TO BE DETERMINED BY CITY.
- 9. ORNAMENTAL LUMINAIRES - TO BE DETERMINED BY CITY.
- 10. SERVICE EQUIPMENT - 20 AMP, 2 POLE CIRCUIT BREAKER, SIZE 2 CONTRACTOR H-O-A SELECTOR SWITCH, MOUNTED IN CEMA 3 ENCLOSURE, INSTALLED IN GALVANIZED STEEL SUB-BASE (W. COAST ELECTRIC # MSTL 3301)

DESIGN NOTE:
THIS DRAWING PREPARED BY McElhanney WITHOUT BENEFIT OF DESIGN BY AN ELECTRICAL ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK THE DESIGN, TO ENSURE THAT THE WORK IS SAFE, AND THAT THE DESIGN MEETS THE CODE AND OPERATES PROPERLY.

NOTE:
REFER TO TYPICAL SECTIONS ON SHEET C107 FOR STREETLIGHT CONDUIT OFFSET DIMENSIONS.

NOTE:
PRIOR TO CONNECTION TO CITY OF CAMPBELL RIVER ELECTRICAL SYSTEMS, 48 HOURS NOTICE MUST BE PROVIDED TO THE PUBLIC WORKS DIVISION.

SCHEDULE OF STREETLIGHT REQUIREMENTS

No.	REQUIRED
	12

ALL DUCTS TO BE 32 mm Ø RIGID PVC.
APPROX. TOTAL DUCT LENGTH **375 m**

HYDRO "RED-LINE" DRAWING PENDING

TELUS "RED-LINE DRAWING PENDING

CABLE "RED-LINE" DRAWING PENDING

FORTIS BC "RED-LINE" DRAWING PENDING


CONTRACTOR TO SUPPLY AND INSTALL 100mm DRAINS FROM SERVICE BOXES AND JUNCTION BOXES TO STORM SEWER SYSTEM AT LOCATIONS SHOWN ON THIS DRAWING. DEDICATED DRAINS ARE TO CONNECT DIRECTLY TO THE STORM SEWER

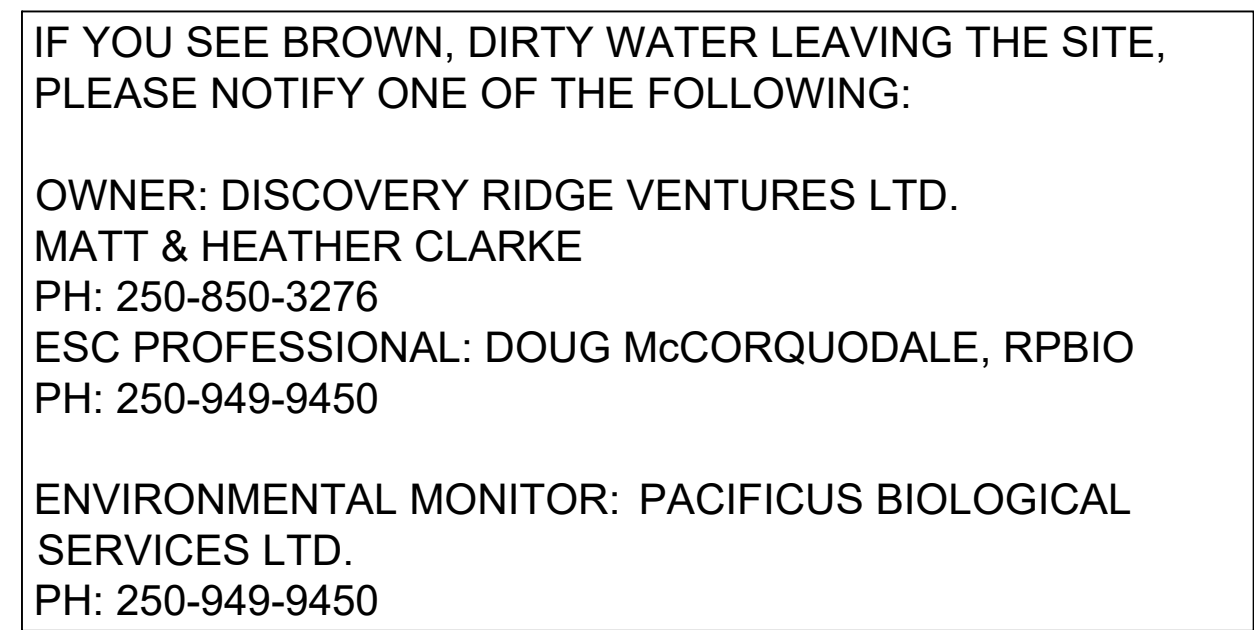
IF IT IS DETERMINED BY INSPECTORS IN THE FIELD THAT THE WATER TABLE IS HIGH OR WATER IS OTHERWISE ENTERING THE HYDRO SYSTEM, THEN HYDRO MAY REQUIRE ADDITIONAL DRAINS TO BE TIED TO THE STORM SYSTEM.

NOTE:
BARRIER CURB REQUIRED BY HYDRO ADJACENT TO LPT'S AND SERVICE BOXES (5.0m ON CENTRE - 2.5m BARRIER CURB ON EACH SIDE). CONFIRM WITH HYDRO AT PRE-CONSTRUCTION MEETING.

THIS DRAWING FOR INFORMATION ONLY.
CONTRACTOR TO OBTAIN FINAL UTILITY DRAWINGS DIRECTLY FROM UTILITY COMPANIES PRIOR TO CONSTRUCTION.

NOT FOR CONSTRUCTION

										McElhanney		<div>PRELIMINARY NOT FOR CONSTRUCTION</div> <div>THIS DRAWING HAS NOT BEEN APPROVED AND MAY CONTAIN ERRORS AND OMISSIONS</div>		DISCOVERY RIDGE VENTURES LTD.		CITY PROJECT # P1800104			
										1196 Dogwood Street Campbell River BC Canada V9W 3A2 T 250 287 7799				STREET LIGHTING & 3RD PARTY UTILITIES		SHEET REFERENCE: C114			
										PERMIT TO PRACTICE McElhanney Ltd. PERMIT NUMBER: 1003299 Engineers and Geoscientists of BC				DISCOVERY RIDGE - PHASE 4		McELHANNEY PROJECT #: 2221-49408			
														CAMPBELL RIVER, BC		SHEET 14 OF 15			
PA	ISSUED FOR REVIEW	EGM	2022-03-29	JS	2022-03-29	EXISTING		LEGEND		DESIGN		EXISTING		LEGEND		DESIGN		REV.	PA
NO.	REVISION	DRAWN	DATE	CHECKED	DATE	EXISTING		LEGEND		DESIGN		EXISTING		LEGEND		DESIGN			



The drawing consists of two parts: a SECTION VIEW on the left and a PLAN VIEW on the right.

SECTION VIEW: This view shows the cross-section of the dam. The upstream face (left) has a vertical height of 600 units and a base width of 300 units. The downstream face (right) has a vertical height of 100 (MIN.) units and a base width of 300 units. The upstream slope is 3L:1V. The downstream slope is 1:3. The dam body is composed of NILEX NON-WOVEN 4545 FILTER FABRIC. A localized ditch deepening to accommodate a check dam is shown on the upstream face. A 37 mm DRAIN ROCK layer is shown on the downstream face. A CLEAN, WASHED 37 mm DRAIN ROCK layer is shown at the base of the dam. A 300 mm DEEP TEMPORARY SWALE AS SHOWN ON PLANS is indicated at the base of the dam.

PLAN VIEW: This view shows the top-down layout of the dam. The dam is rectangular with a width of 1200 units. The upstream face (left) has a 1:3 slope. The downstream face (right) has a 1:3 slope. The dam body is composed of NILEX NON-WOVEN 4545 FILTER FABRIC. A 37 mm DRAIN ROCK layer is shown on the downstream face. A 300 mm DEEP TEMPORARY SWALE AS SHOWN ON PLANS is indicated at the base of the dam. The plan view is labeled "PLACE AT 15m INTERVALS OR AS DIRECTED BY ENGINEER".

Diagram illustrating the layout and dimensions for the stone placement area (SITE) adjacent to the existing asphalt road.

Dimensions:

- EXISTING ASPHALT: 5.00m width.
- STONE PLACEMENT AREA (SITE):
 - Section 1: 6.00m width.
 - Section 2: 5.00m width.
 - Section 3: 3.00m width.
- STONE PLACEMENT AREA (SITE) Depth: 3.00m.
- STONE PLACEMENT AREA (SITE) Material: 50mm CLEAR STON 300mm DEPTH.
- STONE PLACEMENT AREA (SITE) Material: 150mm R/P RAP 300mm DEPTH.

NOTES:

1. GRANULAR MATERIAL IS TO BE CLEAN APPROVED MATERIAL AND PLACED AT NOTED DIMENSIONS PRIOR TO LAND DISTURBANCE.
2. GEOTEXTILE (ARMTEC 250 OR APPROVED EQUIVALENT) IS TO BE PLACED OVER THE ENTIRE AREA PRIOR TO STONE PLACEMENT.
3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL REDUCE TRACKING OR FLOWING SEDIMENT ONTO THE ROAD SURFACE AND GRANULAR MATERIAL IS TO BE REPLACED AS WARRANTED OR AS DIRECTED BY THE ENVIROMENTAL MONITOR.
4. MIN LENGTH OF ONE LOADER TRUCK

0 15 30
SCALE: 1:750

[illegible]

2. **MAINTENANCE FOR ALL STAGES OF CONSTRUCTION (AS APPLICABLE):**
- 2.1. ACCESS IS TO BE CLEARED DAILY BY CIVIL CONTRACTOR TO ENSURE FUNCTIONALITY, ADDITIONAL ROCK TO BE ADDED AS NECESSARY.
- 2.2. THE DESIGN DRAINAGE AREAS ARE TO BE INSPECTED & CLEARED OF DEBRIS WEEKLY OR FOLLOWING STORM EVENTS. SWEEPING OF EXISTING OFFSITE ACCESS ROADS IS REQUIRED WHEN HAULING MATERIALS FROM THE SITE, AT THE FREQUENCY DETERMINED BY THE ESC MONITOR WHICH SHALL BE DEPENDENT ON WEATHER CONDITIONS AND AT A MINIMUM OF ONCE PER WEEK.
- 2.3. CONTRACTOR AND BUILDERS MUST SWEEP AND CLEAN PAVED ON-SITE ROAD SURFACES OF ACCUMULATED SEDIMENTS AT THE END OF EACH WORK DAY. NO SOIL, SAND, OR OTHER MATERIAL WITH HIGH SEDIMENT CONTENT SHALL BE DEPOSITED OR PILED OUTSIDE THE PROPERTY BOUNDARIES, PARTICULARLY ON PAVED ROAD SURFACES.
- 2.4. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- 2.5. SILT FENCES AND BARRIERS TO BE INSPECTED AND REPAIRED AT REGULAR INTERVALS THROUGHOUT THE WEEK, AND AFTER RAIN EVENTS.
- 2.6. REMOVAL OF SEDIMENT FROM ESC CONTROL FACILITIES TO BE DISPOSED OF IN A MANNER AS TO NOT COMPOUND OR COMPROMISE THE SEDIMENT LOADINGS OF OTHER CONTROL MEASURES.
- 3.0 **STAGE 1 - CIVIL CONSTRUCTION:**
- 3.1 THE DEVELOPER WILL BE RESPONSIBLE TO PROVIDE A COPY OF THE ESC PLAN TO THE CIVIL CONTRACTOR.
- 3.2 THE DEVELOPER SHALL BE RESPONSIBLE TO AGREE TO AND AGREE TO BE RESTRICTED TO SPECIFIED ENTRY POINTS.
- 3.3 ALL ONSITE STOCK PILES TO BE FULLY COVERED WITH 5 MIL POLYETHYLENE ADEQUATELY WEIGHTED DOWN WITH SILT FENCE SURROUND AT TOE OF SLOPE (UNLESS OTHERWISE APPROVED BY THE ESC MONITOR).
- 3.4 THE EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. PROTECT WITH AN APPROPRIATE EROSION CONTROL BMP OR AS DETERMINED IN THE FIELD BY THE ESC MONITOR.
- 3.5 THE CONTRACTOR TO COORDINATE THE ELIMINATION OF TEMPORARY ESC OPERATIONS WITH THE ESC MONITOR. ADDITIONAL PROTECTIVE MEASURES MAY NEED TO BE INSTALLED AT THE DIRECTION OF THE ESC MONITOR.
- 3.6 THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL EXISTING EROSION CONTROL MEASURES AND PROTECTIVE MEASURES FOR ANY EXISTING CATCHLAIN BASINS PRIOR TO COMMENCEMENT OF ANY CLEARING OR GRUBBING WORK.
- 3.7 ONLY ONE ACCESS POINT TO THE SITE SHALL BE PERMITTED UNLESS APPROVED BY THE ESC SUPERVISOR AND THE ESC MONITOR.
- 3.8 RECORDS OF ALL ACCESS POINTS SHALL BE MADE TO MINIMIZE THE AMOUNT OF SOILS FROM THE SITE DEPOSITED OUTSIDE THE ACCESS ROADS.

- 4.0 **STAGE 2-FINAL GRADING TO SUBSTANTIAL COMPLETION:**
- 4.1 THE CIVIL CONTRACTOR SHALL ENSURE THAT ESC FACILITIES AS SPECIFIED IN THE ESC PLAN AND ANY ADDENDUMS ARE PROPERLY FUNCTIONING AND THAT PROPER MAINTENANCE OF ESC FACILITIES IS ONGOING AS SPECIFIED IN SECTION 2 (MAINTENANCE).
- 4.2 A 10% CONSTRUCTION OR ROADWAY DISTURBED DRAINAGE SURFACE OUTSIDE ROAD DEDICATION AREAS SHALL BE HYDROLOGICALLY CAPTURED AT A RATE OF 80 KILOGRAMS PER HECTARE.
- 4.3 CONTRACTOR TO COORDINATE THE ELIMINATION OF TEMPORARY ESC FACILITIES THAT ARE NO LONGER REQUIRED BY THE ESC MONITOR. ADDITIONAL PROTECTIVE MEASURES MAY NEED TO BE INSTALLED AT THE DIRECTION OF THE ESC MONITOR.
- 4.4 AT FINAL INSPECTION PRIOR TO THE SITE GOING ON MAINTENANCE, ESC MONITOR ALONG WITH CITY STAFF TO INSPECT AND SIGN OFF ON ESC MEASURES.
- 4.5 DEVELOPER SHALL ENSURE THAT THE LOT OWNER AND/OR HOUSE BUILDER ARE NOTIFIED OF EXISTING ESC FACILITIES AND THEIR RESPONSIBILITY TO ENSURE THAT INDIVIDUAL LOT SEDIMENT CONTROL MEASURES ARE IMPLEMENTED AND PERFORM TO THE STANDARD OF THE ESC PLAN. A COPY OF THIS CORRESPONDENCE TO BE PROVIDED TO THE CITY.
- 4.6 BUILDER AND INDIVIDUAL LOT OWNERS ARE RESPONSIBLE FOR IMPLEMENTATION OF INDIVIDUAL LOT ESC MEASURES AS DEFINED BY THEIR RESPECTIVE BUILDING PERMIT REQUIREMENTS.
- 4.6.1 WHERE RUNOFF FROM CERTAIN AREAS OF THE LOT CANNOT BE DIRECTED TO THE SEDIMENT TRAP VIA THE DRAIN SWALES (S), IT SHALL BE PUMPED INTO THE TRAP.
- 4.6.2 WHERE POSSIBLE, DISCHARGE FROM FOUNDATION LOW DRAINAGE IS TO BE DIRECTED INTO VEGETATED AREAS KEEPING ALL SAND, GRAVEL, SPOIL, MATERIAL, CONCRETE MIX, ETC., OFF PAVED SURFACES.
- 4.7 DEVELOPER RESPONSIBLE FOR RETENTION OF ESC MONITOR UNTIL 1 YEAR MAINTENANCE PERIOD HAS EXPIRED FOR THE DEVELOPMENT. ESC MONITOR TO DETERMINE REASONABLE INTERVALS FOR MONITORING.
- 4.8 ESC MONITOR TO WRITE NOTES FOR THE ENTIRETY OF THE PROJECT SHALL BE SUBMITTED TO THE CITY UPON FINAL COMPLETION OF THE PROJECT.

DATE _____

TO NOTIFY CITY OF CAMPBELL RIVER OF APPOINTED
ENVIRONMENTAL MONITOR 7 DAYS PRIOR TO CONSTRUCTION.
TO BE POSTED AT A LOCATION VISIBLE FROM FROM OUTSIDE
CONSTRUCTION SITE FOR THE DURATION OF THE OF THE
CONSTRUCTION PROJECT.



DRAWING PATH: G:\PROJECTS\ACTIVE\49408-00 Discovery Ridge - Ph 4, 570 Old Petersen Rd\10.0 DRAWINGS\10.4 Sheets\49408-C0-C110-C112 STRM-SAN.dwg Tab C115 Apr 06, 2022 8:55:33am