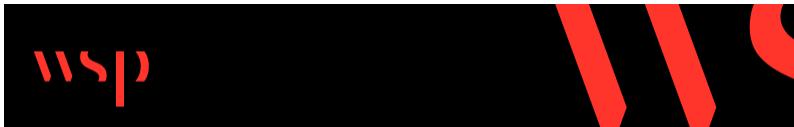


From: [Visser, Mark](#)
To: [Holt, Leigh](#)
Subject: Fw: DFO# 24-HPAC-00422; Road Flood Response, Cowichan Bay, Cowichan Bay; Information request
Date: May 9, 2025 10:04:40 AM
Attachments: [image001.png](#)
[24-HPAC-00422 SIR Response WIP.pdf](#)
[2024-07-02 Mini Rd for DFO.pdf](#)
[Outlook-1lbq50cy.png](#)

Mark Visser

Senior Fisheries Biologist
B.Sc., P.Biol., RP.Bio.

T +1 780-410-6856
M +1 780-271-6602



From: Visser, Mark
Sent: Sunday, July 28, 2024 4:37 PM
To: Hollis, Sean <Sean.Hollis@dfo-mpo.gc.ca>
Cc: Lockhart, Michael <Michael.Lockhart@dfo-mpo.gc.ca>
Subject: RE: DFO# 24-HPAC-00422; Road Flood Response, Cowichan Bay, Cowichan Bay; Information request

Good evening Sean/Michael,

Please find attached responses to the information requested below. In addition, I have attached a revised plan and profile drawing of the works.

Let me know if you have any other questions or comments.

Thanks,



Mark Visser
Senior Fisheries Biologist
B.Sc., P.Biol., RP.Bio

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M+ 1 780-271-6602

From: Hollis, Sean <Sean.Hollis@dfo-mpo.gc.ca>
Sent: Thursday, June 13, 2024 12:49 PM
To: Visser, Mark <Mark.Visser@wsp.com>
Cc: Lockhart, Michael <Michael.Lockhart@dfo-mpo.gc.ca>

Subject: DFO# 24-HPAC-00422; Road Flood Response, Cowichan Bay, Cowichan Bay; Information request

Hi Mark,

After an initial review of the RfR submission package, can you please provide the following information:

- An EMP is referenced within the OEA but has not been supplied. Please provide this document for our review.
- A description of the 79.7 m² temporary intertidal work area including:
 - Characterization of the available habitat as it pertains to Fish use.
 - From page 1 of the OEA, “The temporary work area will be set up and protected from high tide during the construction period and storage of hazardous or deleterious substances will not be permitted.” Please provide:
 - a description of how this area will be prepared/constructed to accommodate the works.
 - the materials and equipment that will be stored within this area.
 - a description of the proposed method of isolation.
 - the intended length of time isolation will be in place.
 - the intended restoration plan for this area.
- Provide a detailed description of the soil management plan and all applicable erosion and sediment control measures that will be implemented during the project.

Once the requested information has been received, I will continue review of the proposed works.

Regards,

[Sean Hollis, RPBio](#)

Biologist | Biologist

Coastal Watershed Operations | Opérations sur les bassins versants côtiers

Fish and Fish Habitat Protection Program | Programme de protection du poisson et de son habitat

Fisheries and Oceans Canada | Pêches et Océans Canada

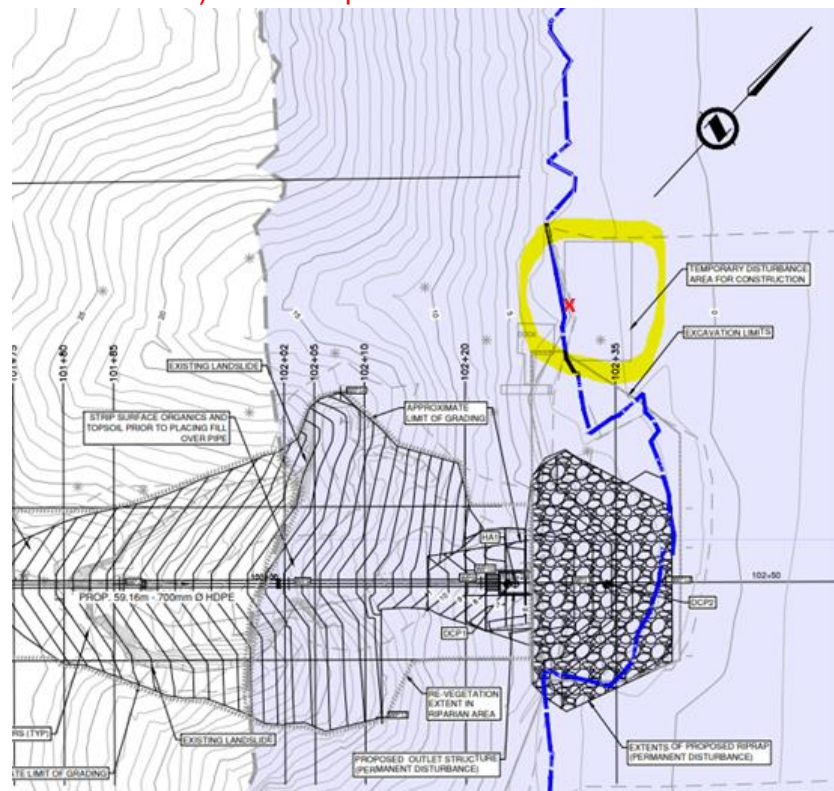
Pacific Region | Région du Pacifique

Government of Canada | Gouvernement du Canada

3190 Hammond Bay Road, Nanaimo, BC V9T 6N7

Sean.Hollis@dfo-mpo.gc.ca | Cell: 604-679-8145 |

1. An EMP is referenced within the OEA but has not been supplied. Please provide this document for our review. **The EMP has not been developed as this will be developed by the Contractor's appropriately qualified professional. The Contractor is required to provide the EMP to MoTI for review and acceptance at least 15 days prior to construction.**
2. A description of the 79.7 m² temporary intertidal work area including:
 - Characterization of the available habitat as it pertains to Fish use. **Habitat within the temporary disturbance areas consisted primarily of sand with pebble and scattered cobbles and a few logs in the upper foreshore. No evidence of eelgrass or understory brown-bladed kelps was observed in the lower intertidal zone, but a small patch of dune grass (*Elymus mollis*) was observed in the upper intertidal zone, just north of the small down shown in the below figure. We have put a red X in the approximate area where the dune grass is located, coordinates are 458338.00 m E, 5396821.00 m N. The riparian area was dominated by invasive English Ivey with a few large overhanging trees. Mitigation measures (i.e. avoidance of dune grass delineating the area for avoidance) will be implemented to minimize risk to fish and fish habitat.**



- From page 1 of the OEA, “The temporary work area will be set up and protected from high tide during the construction period and storage of hazardous or deleterious substances will not be permitted.” Please provide:
 - a description of how this area will be prepared/constructed to accommodate the works. **Prior to the set up of the temporary workspace, the Contractor's appropriately qualified professional will demarcate the extent of the dune grass location for avoidance. Once**

the area has been marked, during low tide the Contractor will install isolation (i.e. concrete lock blocks and ground protection materials) around the temporary workspace for the duration.

- the materials and equipment that will be stored within this area. Materials that will be stored within the temporary workspace include general contractor tools, riprap and materials to construct the outfall structure. As previously indicated no storage of hazardous or deleterious substances, including storage of portable equipment, will not be permitted within this workspace.
 - a description of the proposed method of isolation. The temporary workspace will be isolated using concrete lock blocks, following the Interim Standard for In-Water Site Isolation.
 - the intended length of time isolation will be in place. The temporary workspace will be in place for approximately 2-3 months.
 - the intended restoration plan for this area. The intended restoration would be to restore the area to existing conditions and match the surrounding conditions.
3. Provide a detailed description of the soil management plan and all applicable erosion and sediment control measures that will be implemented during the project. Temporary soil management and temporary Erosion and Sediment Control (ESC) measures that will be implemented during the construction will be determined by Contractor and their appropriately qualified professional with how they plan to complete and sequence the work. The Contractor’s soil management plan and ESC measures will follow the mitigation measures described in the Overview Environmental Assessment, BMPs and guidelines for ESC. The Contractor’s soil management plan and temporary ESC measures will be described in their EMP that will be provided to MoTI for review and acceptance prior to construction.
 4. The Project Schedule has been revised and construction is anticipated to begin early 2025 and be completed by April/May 2025. Construction is anticipated to take approximately 2-3 months once construction kicks off.
 5. Attached is the most up to date plan and profile drawing to clarify the Project Footprints. Below is an image of the Project footprint breakdown:

LOCATION	AREA (m ²)
RIPRAP BELOW HHWLT	128.5
PERMANENT VEGETATION DISTURBANCE WITHIN 30m OF HHWLT	13.97
TEMPORARY DISTURBANCE AREA IN RIPARIAN AREA	807.8
TEMPORARY DISTURBANCE AREA IN NON-RIPARIAN AREA	1892.2
TEMPORARY DISTURBANCE AREA FOR CONSTRUCTION (LAYDOWN AREA)	79.7

DESCRIPTION	AREA (m ²)
RE-SEEDING IN NON-RIPARIAN AREA	1892.2
RE-VEGETATION IN RIPARIAN AREA	807.8

PLOT DATE: 2024/06/24 2:13:037_21_3037_bc_moti_as_and_when_geo_for_hwy_improvements_scr_engineering_geotechnical\02 - Mini Road CVRD Drainage Improvement\07_drawings\DesignModel\20_Working\18122 - Sheets.dwg

Work Point Table				
Raw Description	Finished Ground Elevation	Pipe Invert Elevation	Northing	Easting
WP1	54.542	53.209	396717.0247	458254.1611
WP2	53.422	51.362	396720.9328	458259.7815
WP3	51.588	48.361	396724.7902	458265.3290
WP4	47.961	44.770	396732.4161	458276.2962
WP5	42.212	40.216	396747.0246	458291.6299
WP6	36.516	33.548	396764.5289	458310.0031
WP7	28.250	25.757	396773.6938	458319.6230
WP8	18.737	16.345	396785.3233	458331.8297
WP9	8.284	5.654	396798.5349	458345.6972
WP10	7.347	5.654	396799.7630	458346.9863
WP11	5.416	-	396804.3325	458351.7826
WP12	1.470	-	396811.2360	458359.0287
WP13	15.000	-	396782.0326	458347.7397
WP14	17.256	-	396802.6422	458322.5368

LOT 2
PID 018-672-116
PLAN VIP58490
M48204 (HMQ COV)

LOT 1
PID 002-899-892
PLAN VIP25263
J104314 (BCH SRW)

PLAN VIP79404 (COV)

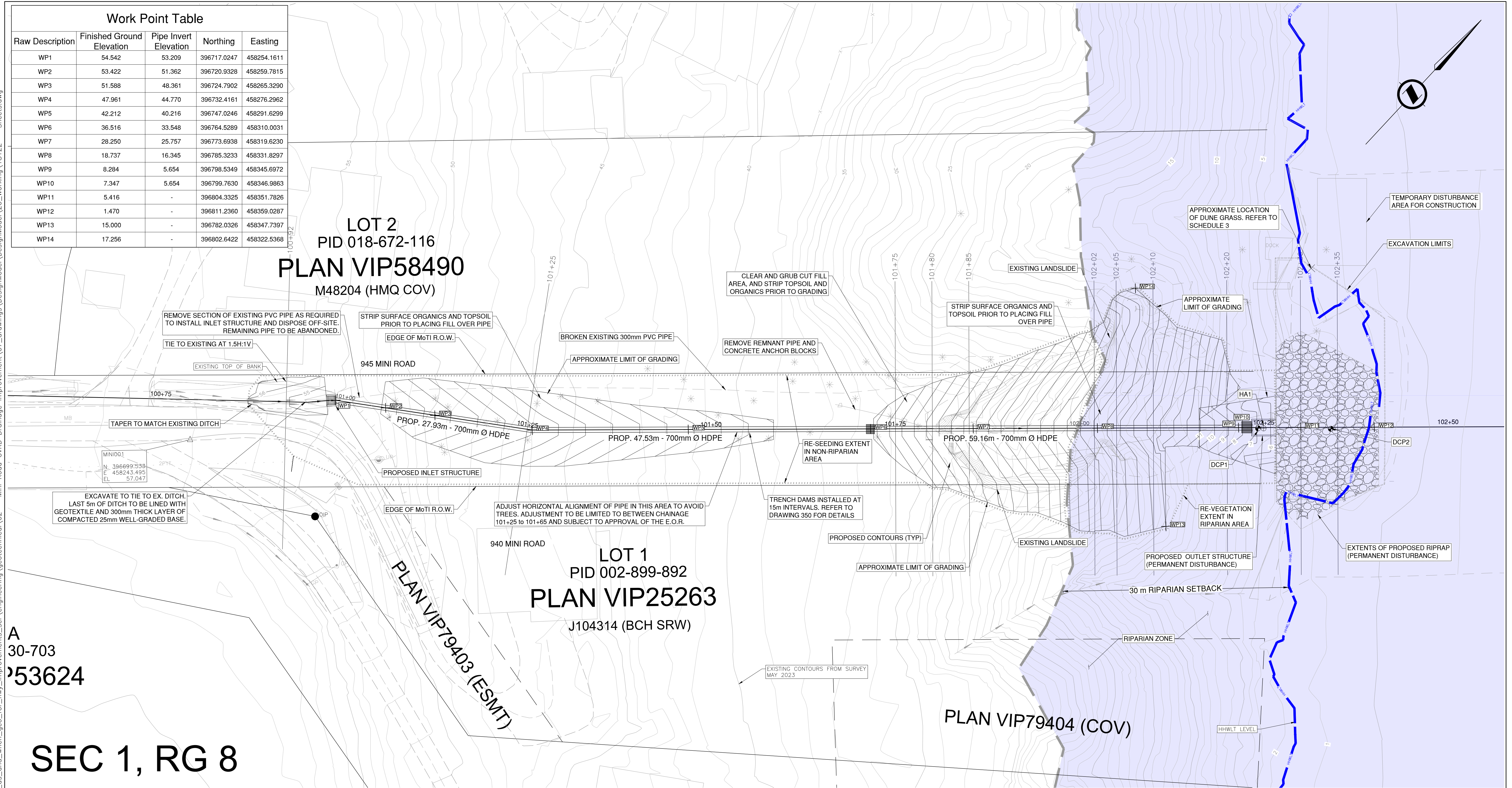
PLAN VIP79403 (ESMT)

A
30-703
53624
SEC 1, RG 8

- NOTES**
- CONTOURS SHOWN ARE BASED ON BC LIDAR DATA AND SURVEY UNDERTAKEN BY WSP ON 05/09/2022, WITH CONTROL MONUMENT NO. 91H0483, LOCATED ON CHEERY POINT ROAD, BETWEEN THE INTERSECTION WITH CHESTNUT ROAD AND GREENBRIER ROAD.
 - RE-VEGETATION WORKS AS DESIGNS AND DIRECTED BY OTHERS.
 - DRAWING TO BE READ IN CONJUNCTION WITH SCHEDULE 3.

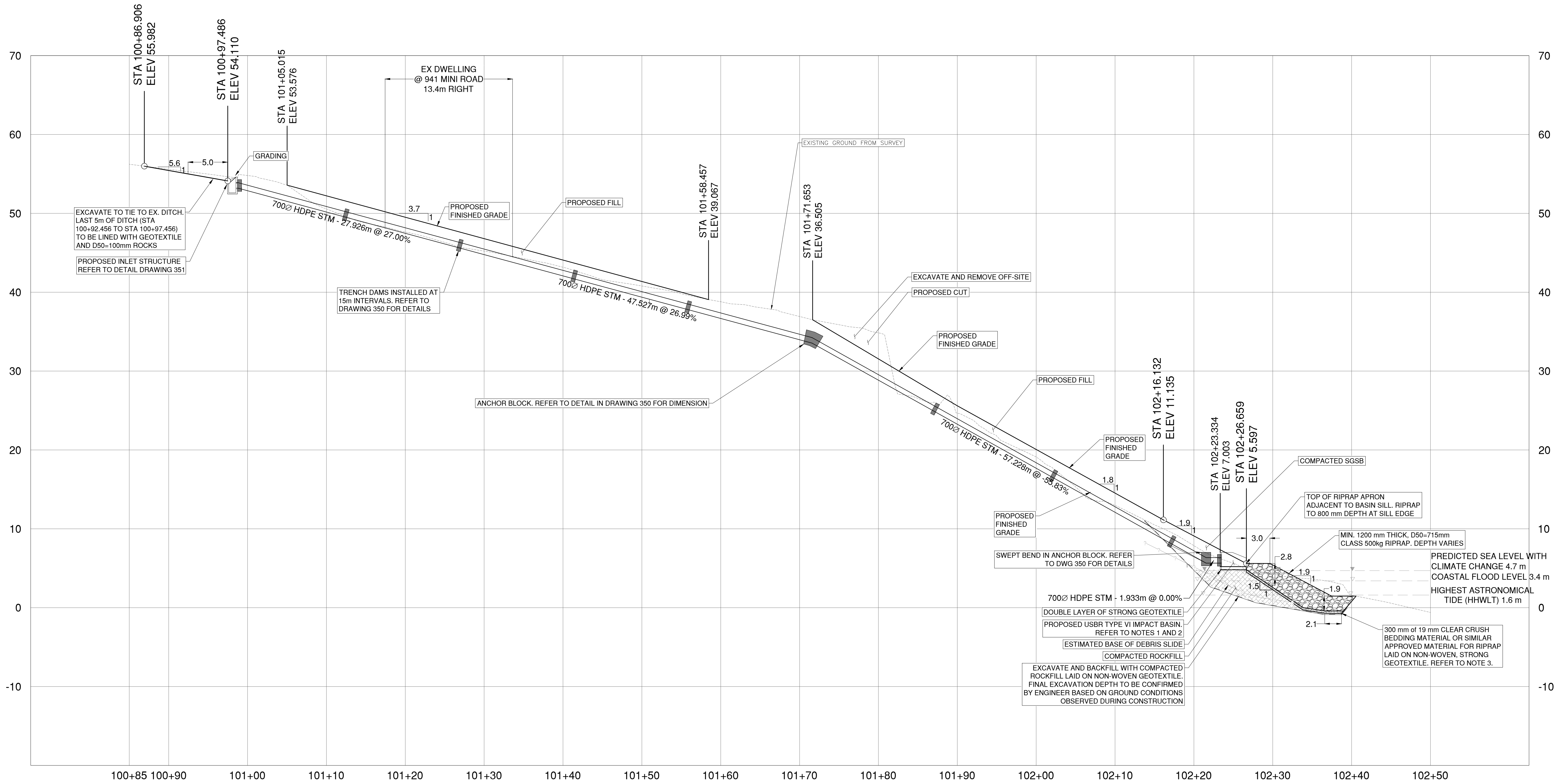
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RE-VEGETATION IN RIPARIAN AREA	807.8



PERMIT TO PRACTICE AND SEAL	SCALE	CAD FILENAME 18122-SHEETS FILE NUMBER 153CS0786 PLOT DATE 6/24/2024	BRITISH COLUMBIA MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE SOUTH COAST REGION HIGHWAY ENGINEERING AND GEOMATICS																												
<table border="1" style="width: 100%;"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>REVISIONS</th> <th>NAME</th> </tr> </thead> <tbody> <tr><td>A</td><td>15/06/2023</td><td>ISSUED FOR DISCUSSION</td><td>DB</td></tr> <tr><td>B</td><td>24/11/2023</td><td>ISSUED FOR 50% DETAILED DESIGN REVIEW</td><td>KQ</td></tr> <tr><td>C</td><td>15/03/2024</td><td>ISSUED FOR 100% DETAILED DESIGN REVIEW</td><td>KQ</td></tr> <tr><td>D</td><td>02/05/2024</td><td>ISSUED FOR 100% DETAILED DESIGN REVIEW</td><td>KQ / DB</td></tr> <tr><td>E</td><td>13/05/2024</td><td>ISSUED FOR 100% DETAILED DESIGN - REVIEW REVISIONS</td><td>KQ / DB</td></tr> <tr><td>F</td><td>12/6/2024</td><td>ISSUED FOR 100% DETAILED DESIGN - REVIEW REVISIONS</td><td>KQ/DB</td></tr> </tbody> </table>	REV	DATE	REVISIONS	NAME	A	15/06/2023	ISSUED FOR DISCUSSION	DB	B	24/11/2023	ISSUED FOR 50% DETAILED DESIGN REVIEW	KQ	C	15/03/2024	ISSUED FOR 100% DETAILED DESIGN REVIEW	KQ	D	02/05/2024	ISSUED FOR 100% DETAILED DESIGN REVIEW	KQ / DB	E	13/05/2024	ISSUED FOR 100% DETAILED DESIGN - REVIEW REVISIONS	KQ / DB	F	12/6/2024	ISSUED FOR 100% DETAILED DESIGN - REVIEW REVISIONS	KQ/DB	DRAINAGE PLAN MINI ROAD SLIDE, COWICHAN BAY SLOPE FAILURE REMEDIATION AND DRAINAGE IMPROVEMENTS		
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MINISTRY EGBC PERMIT TO PRACTICE 1003429		DESIGNED <u>A. RAHMAN</u> DATE 2024-03-15 QUALITY CONTROL <u>K. QAVAMI</u> DATE 2024-03-15 QUALITY ASSURANCE <u>D. BRUTON</u> DATE 2024-03-15 DRAWN <u>J. WISHART</u> DATE 2024-03-15																													
PROJECT NUMBER 18122-0000 REG 2 DRAWING NUMBER 18122-100 REV F																															

PLOT DATE: 2024/06/24 7:24:21 \213037_bc_moti_os_and_when_geo_for_hwy_improvements_scr\engineering\geotechnical\02 - Mini Road CVRD Drainage Improvement\07_drawings\DesignModel\20_Working\18122 - Sheets.dwg



NOTES

1. TO BE FOUNDED ON 150mm THICK LAYER OF 25mm WELL-GRADED BASE (WGB) COMPACTED TO 98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
2. GEOTECHNICAL ENGINEER TO INSPECT BASE OF FILL TO CONFIRM FOUNDATION THICKNESS.
3. SUBGRADE BENEATH TOE OF RIPRAP TO BE INSPECTED BY ENGINEER PRIOR TO TOE CONSTRUCTION.
4. DRAWING TO BE READ IN CONJUNCTION WITH SCHEDULE 3.
5. CONTROL POINTS REFERENCE TOP OF PIPE.
6. WORK POINTS TABLE ON DRAWING NO. 18122-100 DRAINAGE PLAN.

PERMIT TO PRACTICE AND SEAL

SCALE		0 2 1:250 12m		CAD FILENAME	18122 - SHEETS
				FILE NUMBER	153CS0768
				PLOT DATE	6/24/2024
REV	DATE	REVISIONS	NAME		
A	15/06/2023	ISSUED FOR DISCUSSION	DB		
B	24/11/2023	ISSUED FOR 50% DETAILED DESIGN REVIEW	KQ		
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D	02/05/2024	ISSUED FOR 100% DETAILED DESIGN REVIEW	KQ / DB		
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BRITISH COLUMBIA

MINISTRY OF TRANSPORTATION AND INFRASTRUCTURE
 SOUTH COAST REGION
 HIGHWAY ENGINEERING AND GEOMATICS

DRAINAGE PROFILE
 MINI ROAD SLIDE, COWICHAN BAY
 SLOPE FAILURE REMEDIATION AND DRAINAGE IMPROVEMENTS

MINISTRY EGBC PERMIT TO PRACTICE 1003429		DESIGNED	A. RAHMAN	DATE	2024-03-15
		QUALITY CONTROL	K. QAVAMI	DATE	2024-03-15
		QUALITY ASSURANCE	D. BRUTON	DATE	2024-03-15
		DRAWN	J. WISHART	DATE	2024-03-15
PROJECT NUMBER	REG	DRAWING NUMBER	REV		
18122-0000	2	18122-200	F		