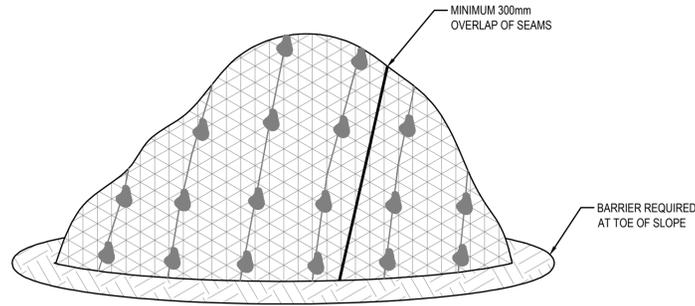


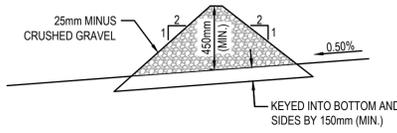
EROSION PREVENTION AND SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES TO BE IN ACCORDANCE WITH THE MINISTRY OF ENVIRONMENT AND FEDERAL FISHERIES.
2. SEDIMENT CONTROL STRUCTURES TO BE INSTALLED IN ACCORDANCE WITH DETAILS ON THIS DRAWING PRIOR TO COMMENCEMENT OF ANY WORK.
3. INSTALL SEDIMENT CONTROL STRUCTURES AT TIMES AND LOCATIONS NOTED OR AS DIRECTED BY ENGINEER.
4. ALL SILT FENCE SHOWN IN DRAWINGS IS TO BE INSTALLED IN ACCORDANCE WITH DRAWINGS DETAILS. CONTRACTOR IS RESPONSIBLE TO INSTALL ADDITIONAL SILT FENCING WHERE NEEDED ON SITE AND DOWNSTREAM OF ALL STOCKPILES AND SPOIL OR AS DIRECTED BY ENGINEER.
5. CONTRACTOR SHALL ENSURE THAT ALL EXCAVATION AND CONSTRUCTION PROCEDURE ARE UNDERTAKEN IN SUCH MANNER AS TO PREVENT SEDIMENT-LADENT RUNOFF FROM WORK SITE ENTERING THE DOWNSTREAM DRAINAGE SYSTEM.
6. A SUPPLY OF EROSION AND SEDIMENT CONTROL MATERIALS SHALL BE KEPT ON CONSTRUCTION SITE AT ALL TIMES TO PROVIDE FOR MINOR UNEXPECTED EROSION OR SEDIMENT CONTROL NEEDS, ROUTINE CONTROL REPLACEMENTS, AND / OR SEDIMENT EMERGENCIES.
7. INSTALL TEMPORARY INTERCEPTOR DITCHES AND SWALES, COMPLETE WITH EROSION PREVENTION MEASURES, AS REQUIRED TO REDIRECT SURFACE DRAINAGE FROM WORK SITE INTO SILTATION CONTROL STRUCTURES DURING CONSTRUCTION AS DIRECTED BY ENGINEER.
8. THE EROSION PREVENTION AND SEDIMENT CONTROL SHOWN IN THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER QUALITY STANDARDS.
9. THE EROSION PREVENTION AND SEDIMENT CONTROL FACILITIES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE STRUCTURES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS OR SITE CONDITIONS, AND TO ENSURE THAT SEDIMENT AND SEDIMENT-LADEN WATER DO NOT LEAVE THE SITE.
10. CONTRACTOR IS RESPONSIBLE TO TAKE ON SITE MEASURES TO MINIMIZE THE TRACKING OF SOIL ONTO EXISTING ROADS AND ROAD CLEANING AS REQUIRED OR AS RECOMMENDED BY ENGINEER.
11. ALL DITCHES NEED TO BE RESTORED AT THE END OF THE DAY, EVERYDAY, IN THE EVENT OF A RAINFALL WHILE THE SITE IS NOT SUPERVISED.
12. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE STRUCTURE. THE SEDIMENT CONTROL CLEANING OPERATIONS SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO DOWNSTREAM SYSTEMS. ALL CONVEYANCE SYSTEMS SHALL BE CLEANED PRIOR TO PAVING.
13. ALL SEDIMENT CONTROL STRUCTURES TO REMAIN IN PLACE UNTIL COMPLETION OF THE PROJECT.
14. ANY DE-WATERING OF EXCAVATION AREAS ARE TO BE PUMPED TO TOP END OF INTERCEPTION DITCHES.
15. NUMBER AND LOCATIONS OF CONTROL STRUCTURES SUCH AS TRENCH DAMS AND SILT FENCING ARE SUGGESTED MINIMUMS. ADDITIONAL STRUCTURES OR ADDITIONAL METHODS MAY BE REQUIRED TO SUIT SITE AND CLIMATE CONDITIONS.



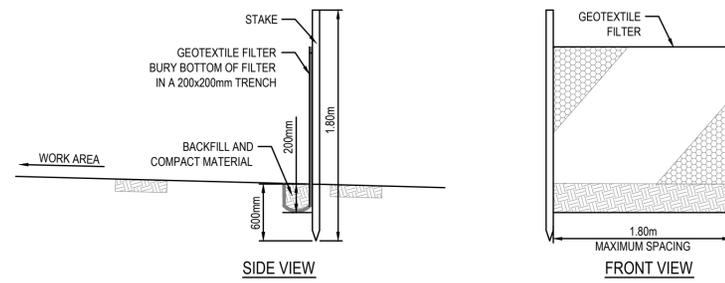
- NOTES:**
1. REQUIRED WHERE STOCKPILE RUNOFF IS DIRECTLY TO DRAINAGE CHANNEL.
 2. MINIMUM 300mm OVERLAP OF ALL SEAMS REQUIRED.
 3. BARRIER REQUIRED AT TOE OF STOCKPILE.
 4. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 3.0m GRID SPACING IN ALL DIRECTIONS.

TOPSOIL STOCKPILE EROSION PROTECTION
SCALE: NTS



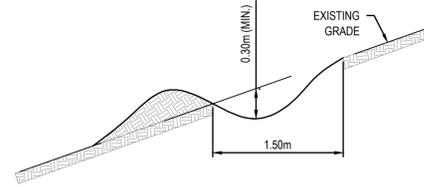
- NOTES:**
- 10m MAXIMUM SEPARATION BETWEEN CHECK DAMS WHEN REQUIRED.
 - REMOVE ANY ACCUMULATED SEDIMENT FROM CHECK DAM WHEN IT HAS REACHED 150mm IN DEPTH AND RESTORE CHANNEL TO ITS ORIGINAL CAPACITY.
 - THE CHANNEL SHALL BE INSPECTED AND MAINTAINED BY CONTRACTOR. IF SCOURING AND EROSION OCCURED, AFFECTED AREAS SHALL BE PROTECTED WITH RIP-RAP, AN EROSION CONTROL BLANKET OR A NET.
 - IMMEDIATELY UPSTREAM OF CHECK DAMS A 300mm DEEP SUMP SHALL BE PROVIDED.
 - HAY BALES MAY SUBSTITUTE CRUSHED GRAVEL CHECK DAMS.
 - INSTALL CHECK DAMS IN INTERCEPTOR DITCHES.

7 CHECK DAM DETAIL
C-012 NTS



- NOTES:**
1. THE GEOTEXTILE FILTER SHALL BE PURCHASED IN A CONTINUOUS ROLLS CUT TO THE LENGTH OF THE BARRIER TO AVOID USES OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPUNCE TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 150mm OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.
 2. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UP SLOPE AREA HAS BEEN PERMANENTLY PROTECTED AND STABILIZED.
 3. SILT FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAIN FALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL MADE IMMEDIATELY.

8 SEDIMENT FENCE DETAIL
C-012 NTS



INTERCEPTOR SWALE
SCALE: NTS

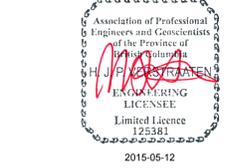
IF EXCAVATION DE-WATERING IS REQUIRED, PUMP ACROSS HIGHWAY TO UPSTREAM SIDE OF UPSTREAM CHECK DAM, USING FLEXIBLE FIRE HOSE

INSTALL MINIMUM 3 CHECK DAMS

PRIOR TO CONSTRUCTION, CONSTRUCT SILT FENCE ALONG TOE OF PROPOSED CONSTRUCTED EMBANKMENT, OTHERWISE ALONG TOP OF EXISTING SLOPE AS SHOWN. SILT FENCING TO EXTEND FOR FULL LENGTH OF WORK AREA.



PROJECT: 121-19597-05



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4		
3	ISSUED FOR TENDER	15/05/08
2	N/A	
1	ISSUED FOR 95% REVIEW	15/01/30
0	ISSUED FOR 60% REVIEW	14/11/24
Revision/	Description/Description	Date/Date

Client/client
CANADA BORDER SERVICES AGENCY

Project title/Titre du projet
STEWART PORT OF ENTRY REDEVELOPMENT STEWART, B.C.

Consultant Signature Only
Designed by/Conçue par H.V.
Drawn by/Dessiné par S.G.
PWGSC Project Manager/Administrateur de Projets TPSGC
Regional Manager, Architectural and Engineering Services / Gestionnaire régionale, Services d'architectural et de génie, TPSGC

Drawing title/Titre du dessin
EROSION AND SEDIMENT CONTROL PLAN

Project No./No. du projet R.071365.001	Sheet/Feuille C-012 13 OF 15	Revision no./La Révision no. 3
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