



1. THESE DRAWINGS HAVE BEEN PREPARED FOR USE WITH AND REQUIRED BEING READ IN CONJUNCTION WITH THE STANDARD SPECIFICATION FOR MUNICIPAL SERVICES AS PUBLISHED BY THE NOVA SCOTIA ROAD BUILDERS ASSOCIATION - NOVA SCOTIA CONSULTING ENGINEERS ASSOCIATION JOINT COMMITTEE ON CONTRACT DOCUMENTS c/o SPECTECH LIMITED, 455 COLBY DRIVE, DARTMOUTH, NOVA SCOTIA, B2Y 2K4; TELEPHONE (902) 430-2834 OR EMAIL w.Strachan@ns.spectech.com
2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS AND REPORT ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
3. ALL WORK ON SITE SHALL CONFORM TO THE PRINCIPLES AND PRACTICES OF THE NOVA SCOTIA DEPARTMENT OF THE ENVIRONMENT, "EROSION AND SEDIMENTATION CONTROL FOR CONSTRUCTION SITES".
4. SEDIMENTATION/EROSION CONTROL MEASURES SHOWN ON THE PLAN ARE MINIMUM. CONTRACTOR TO CARRY OUT OTHER CONTROL MEASURES AS REQUIRED ACCORDING TO H&I AND AS DIRECTED BY THE ENGINEER.
5. DISTURBED AREAS TO BE MULCHED WITH STRAW AND/OR HYDROSEED AS DIRECTED BY THE ENGINEER.
6. SEDIMENTATION CONTROL FEATURES TO REMAIN IN PLACE UNTIL VEGETATION IS ESTABLISHED.
7. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE ACCESS AND STORAGE.
9. ALL MATERIAL TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
10. DO NOT SUBSTITUTE MATERIALS UNLESS PRIOR APPROVAL IS GRANTED.
11. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING WASTE MATERIAL TO APPROVED LOCATION.
12. GEOMEMBRANE
 1. THE CONTRACTOR SHALL GUARANTEE THE HDPE MEMBRANE AGAINST DEFECTS, INSTALLATION AND WORKMANSHIP FOR THE PERIOD OF 2 YEARS COMMENCING WITH THE DATE OF FINAL ACCEPTANCE. THE GUARANTEE SHALL INCLUDE THE SERVICE TECHNICIANS AND ALL MATERIALS REQUIRED FOR THE REPAIRS. THE INSTALLER SHALL FURTHER PROVIDE A WRITTEN GUARANTEE THAT ALL PRODUCTS HAVE BEEN IN ACCORDANCE WITH THE SPECIFICATIONS.
 2. THE GEOMEMBRANE SHALL BE MANUFACTURED FROM NEW FIRST QUALITY POLYETHYLENE RESIN POLYETHYLENE GEOMEMBRANE SHALL MEET ALL REQUIREMENTS FOR THE SPECIFIED END USE.
 3. THE CONDITION OF THE PREPARED SUBGRADE AND SURFACE SHOULD BE INSPECTED PRIOR TO GEOMEMBRANE INSTALLATION.
 4. BE RESPONSIBLE FOR THE CONDITION OF THE GEOSYNTHETIC MATERIALS (GEOTEXTILE, HDPE GEOMEMBRANE) UNTIL THESE INSTALLATIONS HAVE BEEN ACCEPTED BY THE EARTHWORKS CONTRACTOR OR ENGINEER.
 5. ON SLOPES STEEPER THAN 10%, ALL SEAMS SHALL BE ORIENTED DOWN SLOPE AND NOT ACROSS THE SLOPE. NO HORIZONTAL SEAMS SHALL OCCUR LESS THAN 1.5m (AND PREFERABLY 3 METRES) FROM THE CREST OR TOE OF SUCH SLOPES.
 6. PRIOR TO SEAMING, THE GEOMEMBRANE SHALL BE OVERLAPPED A MINIMUM OF 75 MILLIMETRES FOR EXTRUSION WELDING AND 100 TO 150 MILLIMETERS FOR FUSION WELDING. SUFFICIENT OVERLAP MUST BE PROVIDED ON BOTH SIDES OF THE DOUBLE FUSION WELD TO ALLOW FOR DESTRUCTIVE TESTING IN ACCORDANCE WITH ASTM PROCEDURES.
 7. TEST SEAMS (START-UP) - TEST SEAMS SHALL BE MADE TO VERIFY ADEQUATE CONDITIONS EXIST FOR FIELD SEAMING TO PROCEED. EACH SEAMING APPARATUS SHALL PRODUCE A TEST SEAM AT THE BEGINNING OF EACH SHIFT.
 8. VACUUM TESTING - ALL EXTRUSION WELDED SEAMS AND "T" SEAMS SHALL BE EVALUATED USING VACUUM BOX TESTING.
 9. AIR PRESSURE TESTING - DOUBLE WEDGE WELDED SEAMS SHALL BE SEALED OFF AT BOTH ENDS. IF THE SEAM WILL BE AN INTEGRAL PART OF THE GEOMEMBRANE, THE SEALING SHALL BE DONE IN SUCH A MANNER THAT IT DOES NOT IMPAIR THE FUNCTION OF THE GEOMEMBRANE. THE PRESSURE FEED DEVICE SHALL BE INSERTED INTO THE AIR CHANNEL AT ONE END OF THE SEAM AND PRESSURIZED TO 1.5-2.0 BARS. THE FEED VALVE SHALL BE CLOSED AND THE PRESSURE SUSTAINED FOR A PERIOD OF NOT LESS THAN 3 MINUTES.
 10. REPAIR AND TEST AGAIN ANY SEAM FAILING A TEST.
 11. PRODUCE A REPORT IDENTIFYING THE TEST RESULTS.
 12. CONTRACTOR TO ARRANGE PONDS COORDINATE GEOTECHNICAL TESTING/COMPACTION OF THE BERMS AND POND.

NO.	DATE	FOR	REVISION

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ELMWORTH ENERGY

DILLON CONSULTING

NO.	REVISION	DATE	BY	SCALE
1	ISSUED FOR REVIEW	07/09/25	CRS	AS NOTED

**KENNETCOOK SHALE GAS EXPLORATION
HANTS COUNTY, N.S.**

**LEACHATE PRE-TREATMENT
PONDS DETAILS**

PROJECT NO. **07-8198**
SHEET NO. **3**
OF **3**