PART 1 - GENERAL

1.1 SECTION INCLUDES

.1 Materials and installation of geotextile in all areas where contaminated soils were removed prior to backfilling with class “A”.

1.2 RELATED SECTIONS

.1 Section 01 33 00 - Submittal Procedures.

.2 Section 15 49 10 – Environmental Remediation.

.3 Section 31 14 11 - Earthwork and related work.

1.3 MEASUREMENT PROCEDURES

.1 All cost for supply and installation of geotextile shall be considered incidental to leachable lead impacted soil.

1.4 REFERENCES

.1 American Society for Testing and Materials International, (ASTM)
.1 ASTM D 4491-[99a], Standard Test Methods for Water Permeability of Geotextiles by Permittivity.
.2 ASTM D 4595-[86(2001)], Standard Test Method for Tensile Properties of Geotextiles by the Wide-Width Strip Method.
.3 ASTM D 4716-[01], Test Method for Determining the (In-Plane) Flow Rate Per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head.
.4 ASTM D 4751-[99a], Standard Test Method for Determining Apparent Opening Size of a Geotextile.

.2 Canadian General Standards Board (CGSB)
.1 CAN/CGSB-4.2 No. 11.2-[M89(April

1997)], Textile Test Methods - Bursting Strength - Ball Burst Test (Extension of September 1989).

.2 CAN/CGSB-148.1, Methods of Testing Geotextiles and Complete Geomembranes.

.1 No.2-[M85], Methods of Testing Geosynthetics - Mass per Unit Area.

.2 No.3-[M85], Methods of Testing Geosynthetics - Thickness of Geotextiles.

.3 No.6.1-[93], Methods of Testing Geotextiles and Geomembranes - Bursting Strength of Geotextiles Under No Compressive Load.

.4 No.7.3-[92], Methods of Testing Geotextiles and Geomembranes - Grab Tensile Test for Geotextiles.

.5 No. 10-[94], Methods of Testing Geosynthetics - Geotextiles - Filtration Opening Size.

.3 Canadian Standards Association (CSA International)

.1 CAN/CSA-G40.20/G40.21-[98], General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.

.2 CAN/CSA-G164-[M92(R1998)], Hot Dip Galvanizing of Irregularly Shaped Articles.

.4 Ontario Provincial Standard Specifications (OPSS)

.1 OPSS 1860-[March 1998], Material Specification for Geotextiles.

1.5 SUBMITTALS

.1 Submit to Departmental Representative catalogue data at least 2 weeks prior to start of Work, and in accordance with Section 01 33 00 - Submittal Procedures.

1.6 DELIVERY, STORAGE AND HANDLING

.1 During delivery and storage, protect geotextile from direct sunlight, ultraviolet rays, excessive heat, mud, dirt, dust, debris and rodents.

1.7 WASTE MANAGEMENT AND DISPOSAL

.1 Remove from site and dispose of all packaging materials at appropriate recycling facilities.

PART 2 - PRODUCTS

2.1 MATERIAL

.1 Geotextile: non-woven synthetic fibre fabric, supplied in rolls.
.1 Width: 4.5 m minimum.
.2 Length: As required.
.3 Composed of: minimum 85% by mass of polypropylene with inhibitors added to base plastic to resist deterioration by ultra-violet and heat exposure for 60 days.

.2 Physical properties:
.1 Thickness: to CAN/CGSB-148.1, No.3, minimum 1.8 mm.
.2 Mass per unit area: to CAN/CGSB-148.1, No.2, minimum 186 g/m².
.3 Tensile strength and elongation in any principal direction: to [ASTM D 4595].
.1 Tensile strength: minimum 710 N, wet condition.
.2 Elongation at break: maximum 50%.

.3 Hydraulic properties:
.1 Apparent opening size AOS: to ASTM D 4751, 212 micrometres.
.2 Permitivity: to ASTM D 4491, 4480 pers.

PART 3 - EXECUTION

3.1 INSTALLATION

.1 Place geotextile material by unrolling onto graded surface.

.2 Place geotextile material smooth and free of tension stress, folds, wrinkles and creases.

.3 Place geotextile material on sloping surfaces in one continuous length from toe of slope to upper extent of geotextile.

.4 Overlap each successive strip of geotextile 600 mm over previously laid strip.

.5 Protect installed geotextile material from displacement, damage or deterioration before, during and after placement of material layers.

.6 After installation, cover with overlying layer within 4 h of placement.

3.2 CLEANING

.1 Remove construction debris from Project site and dispose of debris in an environmentally responsible and legal manner.

3.3 PROTECTION

.1 Vehicular traffic not permitted directly on geotextile.