

**1 General**

**1.1 RELATED WORK**

- .1 Coordinate the requirements of this section with all other sections, including but not limited to:
  - .1 Section 02210 Rough Grading
  - .2 Section 02212 Topsoil
  - .3 Section 02872 Play Surfacing – Granular
  - .4 Section 02873 Play Surfacing – Engineered Wood

**1.2 QUALITY CONTROL**

- .1 **City of Saskatoon, Parks Branch** to approve french drain or playground drainage construction.
  - .1 Submit one (1) litre sample of Crushed Drainage Rock before installation.

**1.3 INSPECTION**

- .1 Notify **Consultant** for inspection of:
  - .1 Weeping tile and filter cloth installation, before placing aggregate.

**2 Products**

**2.1 FRENCH DRAIN**

- .1 Filter cloth: Layfield Plastics LP4 or approved equivalent.
- .2 Weeping tile: 100mm drain tile c/w filter sock (Polytube).
- .3 PVC pipe: 100mm PVC pipe (when required).

**2.2 PLAYGROUND DRAINAGE**

- .1 PVC pipe: 100mm solid PVC pipe
- .2 Filter cloth to be non-woven geotextile, 30mm thick, roll width min. 4.5m (15 ft.). Geotex 311 by Propex or equivalent.

**LANDSCAPE DRAINAGE**

**2.3 PANEL DRAIN**

- .1 Multi-Flow (150mm width), as distributed by:  
Nilex Inc.  
#3-320 Jessop Avenue  
Saskatoon, Saskatchewan S7N 1Y6  
Phone: 1-888-543-5454
- .2 or approved equivalent.
- .3 Very coarse sand: consisting of hard, durable, angular particles, free from clay lumps, cementation, organic material, frozen material and other foreign or deleterious materials. Approximate particle size of between 1.0 and 2.0mm.

- .1 Gradations: within limits specified when tested to ASTM C136 and ASTM C117. Sieve sizes to CAN/CGSB-8.1:

SIEVE	% PASSING BY WEIGHT
2.0 mm	0-4%
.595 mm	0-4%
.297 mm	less than 1%

**2.4 DRAINAGE AGGREGATE**

- .1 19mm washed, crushed drainage rock, as approved.

**3 Execution**

**3.1 LAYOUT**

- .1 Establish and maintain line and grade controls using appropriate survey personnel and equipment.
  - .1 Contractor is responsible for layout accuracy.

**3.2 EXCAVATION**

- .1 Excavate to lines, grades and elevations per drawings.
- .2 Remove waste material from trench before installing filter cloth.
  - .1 Establish smooth surface at the bottom of trench to permit close contact between filter cloth and prepared surface.

**3.3 INSTALLATION**

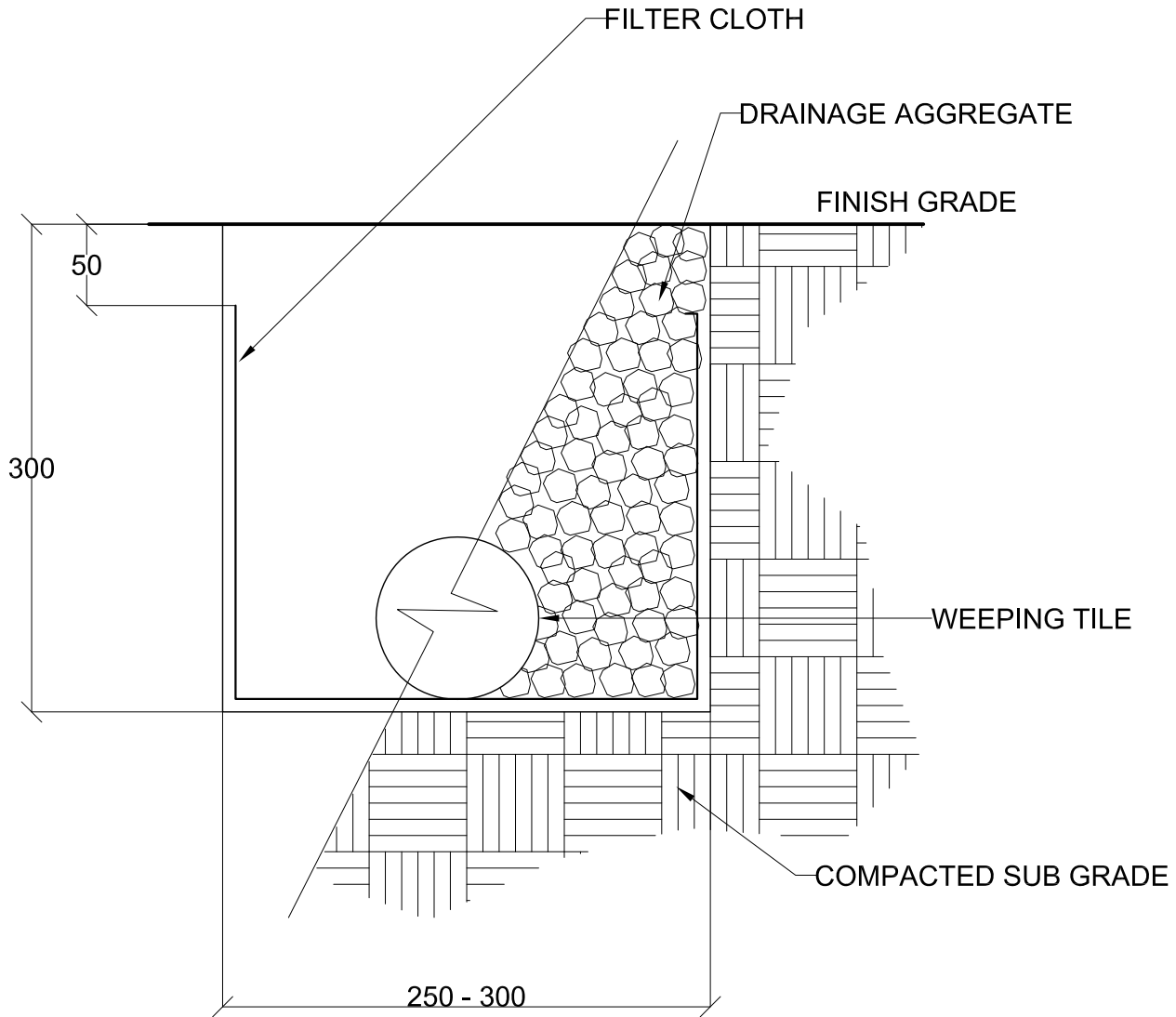
- .1 French Drain
  - .1 Install filter cloth and weeping tile per details and manufacturer's recommendations.

**LANDSCAPE DRAINAGE**

- .2 Lay weeping tile on prepared bed, true to line and grade with inverts smooth and free of sags or high points.
  - .3 Overlap successive filter cloth sheets min. 600mm in flow direction, ensure upstream layer overlap the downstream
  - .4 Fold filter cloth over top of aggregate with min. 50-75mm overlap.
  - .5 Fill with aggregate to finish grade elevations.
  - .6 Damage to filter cloth during weeping tile and aggregate installation is not approved.
  - .7 Connect weeping tile to existing catch basin (if applicable).
- .2 Play Area Drainage
- .1 Install one layer of filter cloth. Insure sub-grade is smooth and free of debris.
  - .2 Secure fabric to timber with 75mm long deck screws and washers at 1800mm intervals. Tape seams with red tuct tape.
  - .3 Lay and secure fabric in sections; advise Owner for inspection of fabric installation prior to drainage aggregate installation.
  - .4 Install drainage aggregate.
  - .5 Install second layer of filter cloth. Lay and secure cloth in sections. Tape seams with red tuct tape.
  - .6 Advise Owner for inspection of fabric installation prior to play surface installation.
  - .7 Install play surfacing.
- .3 Panel Drainage System
- .1 Install panel drain as indicated and according to manufacturer's recommendations.
- 3.4 CLEAN UP**
- .1 Clean adjacent areas at the end of each working day.

**END OF SECTION**

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**NOTE:**

- 1. All units are in millimeters U.N.O.
- 2. Establish positive drainage to outlet (refer to grading plan).



Drawing Title

French Drain

Drawing No.

02712-01

Drawn: HMK

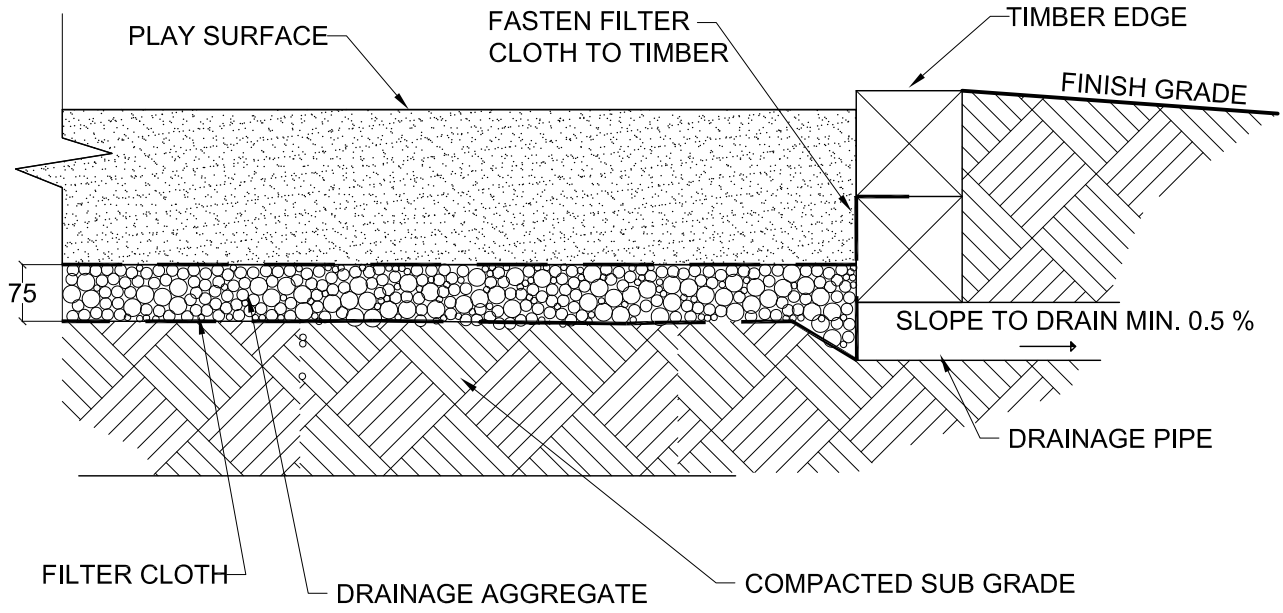
Checked: AO

Date Y/M/D 09/11/23

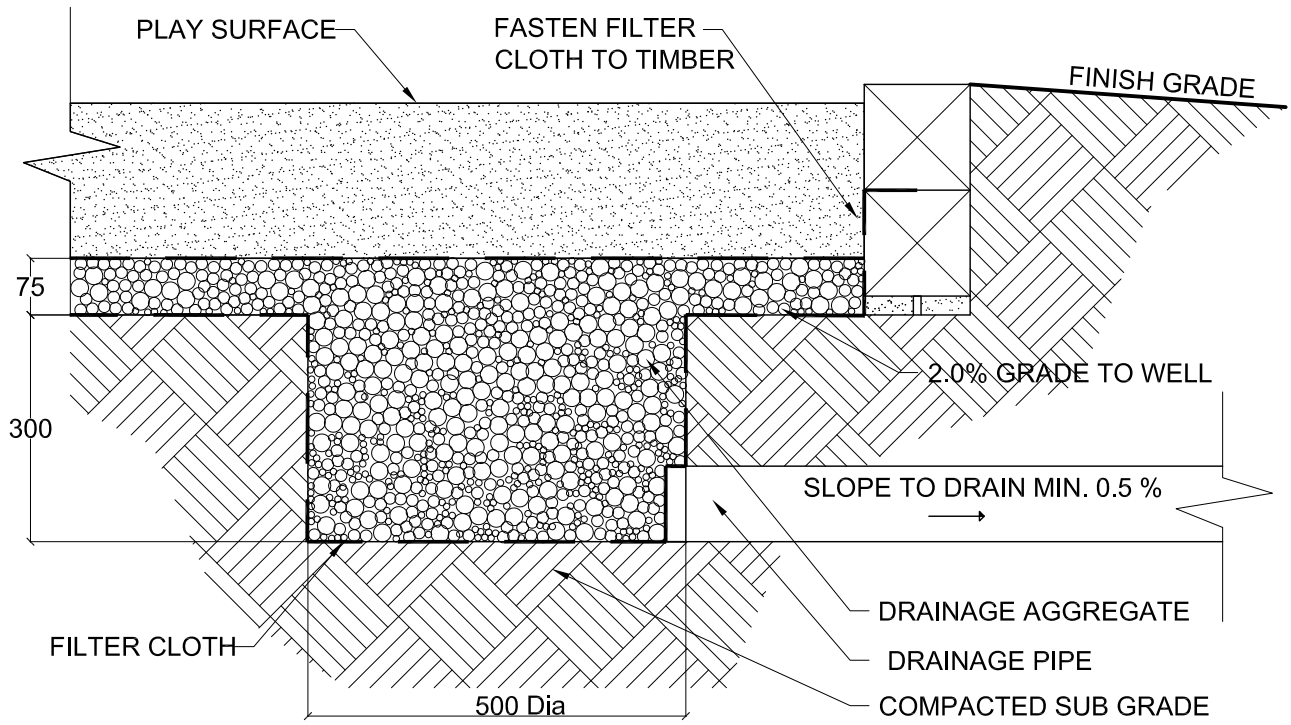
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2012 Standard Details

# SLOPED PLAY AREA




# FLAT PLAY AREA



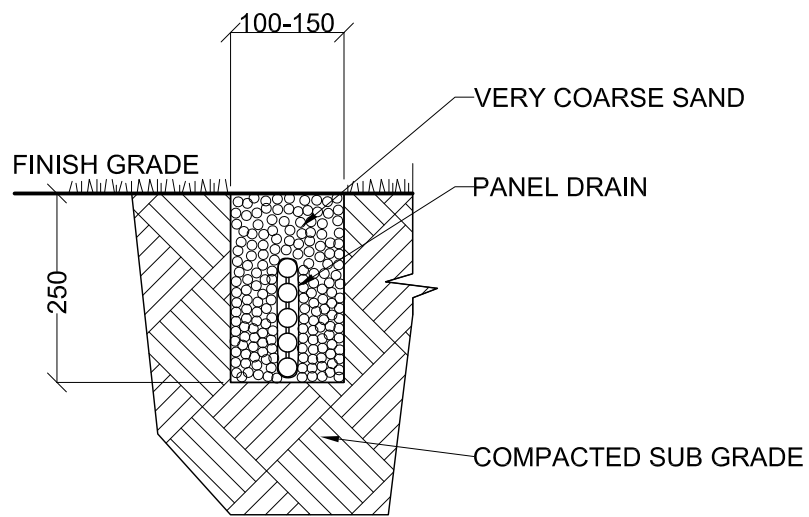
**NOTE:**

1. All units are in millimeters U.N.O.
2. At play edge connect perforated PVC pipe to PVC pipe leading to swale drain inlet or existing / proposed drainage structure

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	Drawing Title		Drawing No.
	Play Area Drainage		02712-02
Drawn: MLS	Checked: AO	Date Y/M/D 11/01/05	Scale: 1:10
			2012 Standard Detail

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NOTE:  
1. All units are in millimeters U.N.O.