

SPLASH & PLAY

Description

This project involves the creation of an alternative to the traditional wading pool that will animate children to have fun with water. Typically there is no play equipment involved other than the installation of water jets and spray nozzles. In addition there is no intention to accumulate any more than 1" (25mm) of water depth in any location. The undulated surface is coated with the CHAMP-TRACK FPU system which provides slip resistance and comfort to the user.

Installation Specification

1. Demolition and Excavation

- 1.1 In the case where there is an existing pool or structure this is to be demolished and removed from the site.
- 1.2 Any seating structures around an existing facility are to be protected and preserved for incorporation into the Splash & Play.
- 1.3 Excavate the existing soil to a depth of 12" (300mm) below the lowest final grade point in the Splash & Play.
- 1.4 Rough grade the excavated base to slope at a rate of 1% in a direction that will allow for the escape of water from under the Splash & Play.
- 1.5 Excavate a hole large enough to accommodate the pump room. The depth of the pump room will be such that the top of the pump room will be 24" (600mm) above the lowest drain. (The installation of the pump room is site specific.)

2 Installation of Pump Room (site specific)

- 2.1 Place 6" (150mm) of compacted sand in the location of the pump room.
- 2.2 The pump room will consist of a double chamber concrete septic tank. The size is to be determined by a licensed pump installer to accommodate the expected water flow.
- 2.3 Place the pump room into the excavation making sure it is level in all directions.
- 2.4 Waterproof the entire outside of the pump room. This is to include the bottom. Waterproofing is to be with a mastic tar.
- 2.5 Backfill with clean sandfill following the connection of all pipes and electrical equipment. Backfill material shall be compacted in 12" (300mm) increments.
- 2.6 Mound sandfill to the top edge of the pump room at a 4:1 slope.
- 2.7 Cover sandfill with a minimum of 2" of topsoil
- 2.8 Supply and install sod to match the surrounding area and to the top edge of the pump room.

3 Installation of Base

- 3.1 Supply and install 3/4" limestone crusherun to a depth of 2" (50mm) below final grade following the contours indicated.
- 3.2 Compact the 3/4" limestone crusherun to 98% proctor density.

4 Installation of Water Lines and Drainage

- 4.1 Dig trenches with a level bottom into the compacted base to a depth 4" (10mm) below the lowest point in the grade to accommodate the water lines from the pump room to the spray fixtures and from the drains to the pump room.
- 4.2 Insert pipes into the trenches ensuring that no kinks occur. No joints other than to connect one fixture to another in the pipes will be allowed under the area of the SPLASH & PLAY. All pipe will be Polyethylene pipe 75psi CSA approved.
- 4.3 Place a 4"(100mm) perforated flex pipe wrapped in geotextile in a trench running across the Splash & Play and following the slope of the undisturbed base. The flexpipe will extend 10'(3,000mm) beyond the finished edge of the SPLASH & PLAY.
- 4.4 Backfill the pipes with 2" (50mm) of sand. No stone backfilling will be allowed.
- 4.5 Reestablish the grade and carefully compact at the location of the pipes.

5 Installation of Spray Fixtures and Drains

- 5.1 Connect all spray fixtures to the appropriate pipes.
- 5.2 Place concrete in a 12"(300mm) square around each fixture to a depth to encapsulate the joint of the horizontal pipe to the vertical pipe.
- 5.3 Secure all fixtures from construction contamination

6 Installation of Asphalt

- 6.1 Asphalt - 2 layers (option determined by client or designer)
 - 6.1.1 Supply and install 1"(25mm) of compacted HL6 asphalt uniformly over the entire area outlined in the plan. Compaction to be with a 1 ton vibrating roller. Care must be taken not to damage the spray fixtures and the pipes below.
 - 6.1.2 Apply a petroleum based tack coat over the compacted HL6 to seal the asphalt layer.
 - 6.1.3 Supply and install 1"(25mm) of compacted HL3A asphalt uniformly over the entire area outlined on the plan. Compaction to be with a 1 ton vibrating roller. Roller marks will not be accepted. Roller marks can be removed either by heating and rolling smooth or the application of a tack coat followed by additional asphalt.
- 6.2 Asphalt 1 layer (option determined by client or designer)
 - 6.2.1 Supply and install 2"(50mm) of compacted HL3 asphalt uniformly over the entire area outlined on the plan. Compaction to be with a 1 ton vibrating roller. Roller marks will not be accepted. Roller marks can be removed either by heating and rolling smooth or the application of a tack coat followed by additional asphalt.

7 Hydrostatic Valves

- 7.1 Standard swimming pool hydrostatic valves with extensions will be installed in locations as directed by the owner. The total number of hydrostatic valves will not exceed 1 per 200 ft² of surface area.
- 7.2 In the selected locations cut a clean square 12" x 12" (300mm x 300mm) through the asphalt.
- 7.3 Excavate a hole to accommodate the hydrostatic valve and extension.
- 7.4 Wrap the hydrostatic extension with a geotextile.
- 7.5 Backfill and compact around the hydrostatic valve with clean sand.
- 7.6 Place concrete around the hydrostatic valve seat to hold firmly into place. Care must be taken not to damage the hydrostatic valve.

8 Installation of Mechanical and Electrical

- 8.1 The owner will supply a water source, electrical connection and water drain to sewer.
- 8.2 Install the pumps and valving as shown in the detail plans. This installation must be carried out by a license pump installer. This work to include all connections of pipes, pumps and drains
- 8.3 Install electrical supply according to municipal by-laws for the pumps and timers.
- 8.4 Install 2 timers. The first timer will allow the pumps to operate at selected times within a 24 hour period. The second timer will allow for the pumps to operate for up to 30 minutes during the selected operation hours of the first timer.

9 Installation of CHAMP-TRACK FPU surface

- 9.1 Cut a reglet 6" (15mm) from the edge of the asphalt around the perimeter of the asphalt.
- 9.2 Installation of the CHAMP-TRACK FPU surface to a depth of 5mm in two layers. Materials will consist of a lower layer of polyurethane with red EPDM rubber cast into the surface and a top layer of polyurethane with red EPDM cast into the surface. The only polyurethane that will be accepted will be ELAST441 or ELAST480 as supplied by Elastech Products. No prepolymers will be considered.
- 9.3 Following installation of the CHAMP-TRACK FPU surface, all excess materials including rubber granules and polyurethanes are to be removed from the site. Empty packaging is to be removed from the site.

10 Clean-up and Landscaping

- 10.1 All materials will be removed from the site and the site will be left in a clean manner.
- 10.2 Topsoil and sod will be placed in all disturb areas.