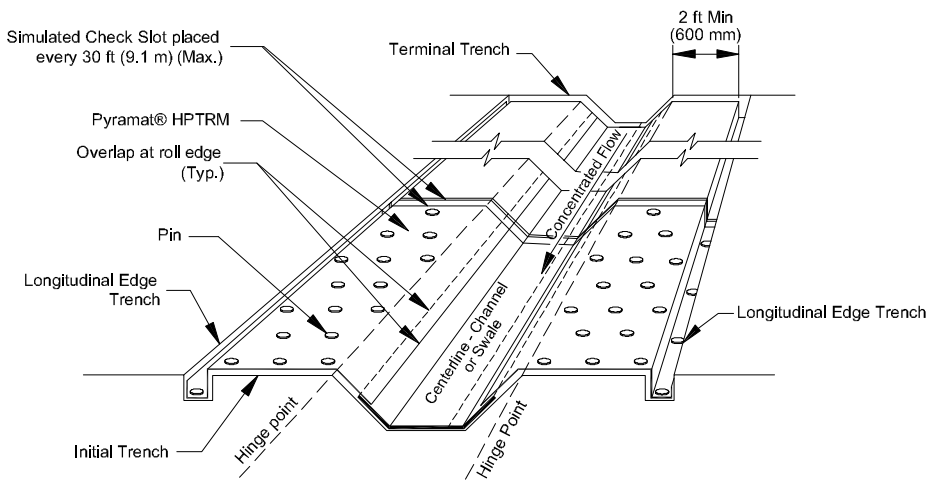

PERSPECTIVE

NOTE: For clarity, perspective view does not show all pins.

FIGURE 1: OVERVIEW OF PYRAMAT® HPTRM IN CHANNEL

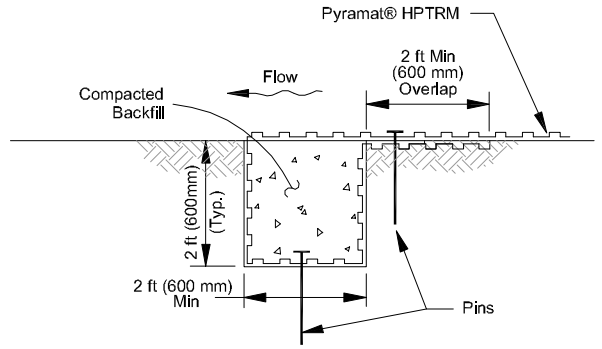

FIGURE 2: INITIAL TRENCH (DOWNSTREAM) DETAIL

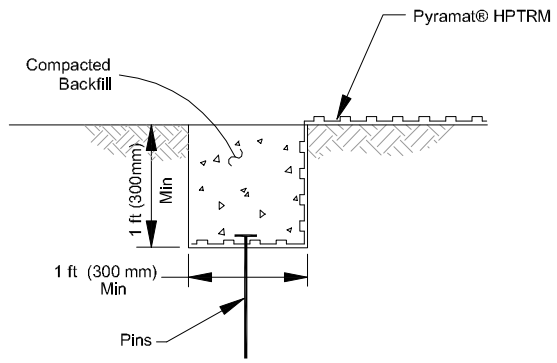

FIGURE 3: LONGITUDINAL EDGE TRENCH DETAIL

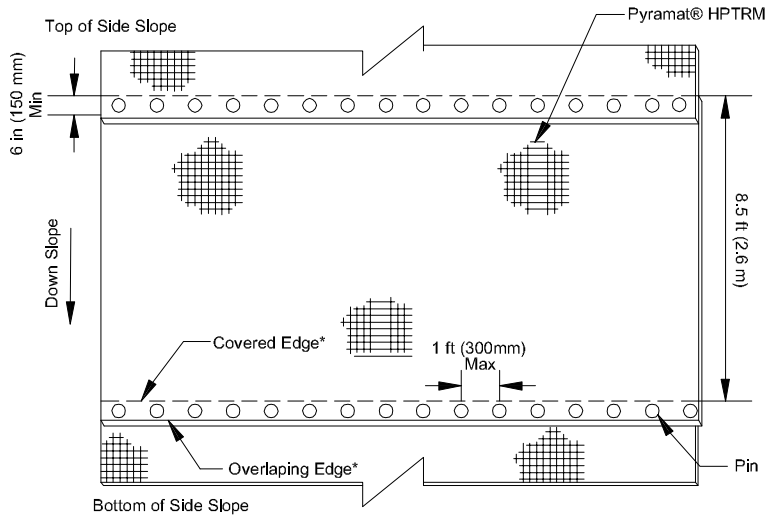

FIGURE 4: PYRAMAT® HPTRM OVERLAP AT ROLL EDGE DETAIL

*Note: Pyramat® HPTRM Edge Shingle/Overlap placement depends on down slope direction (i.e Shingle in the direction of the down slope)

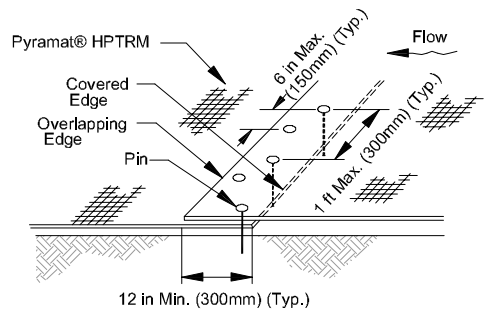

FIGURE 5: PYRAMAT® HPTRM OVERLAP AT ROLL END DETAIL

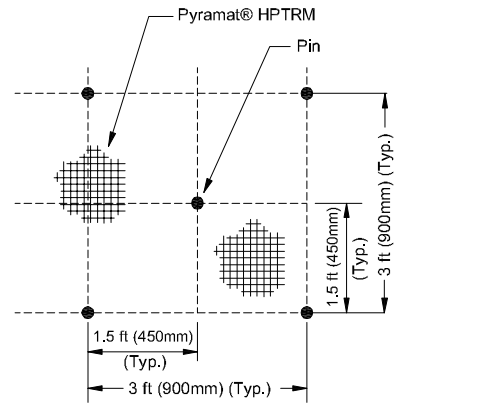

FIGURE 6: PIN PATTERN DETAIL

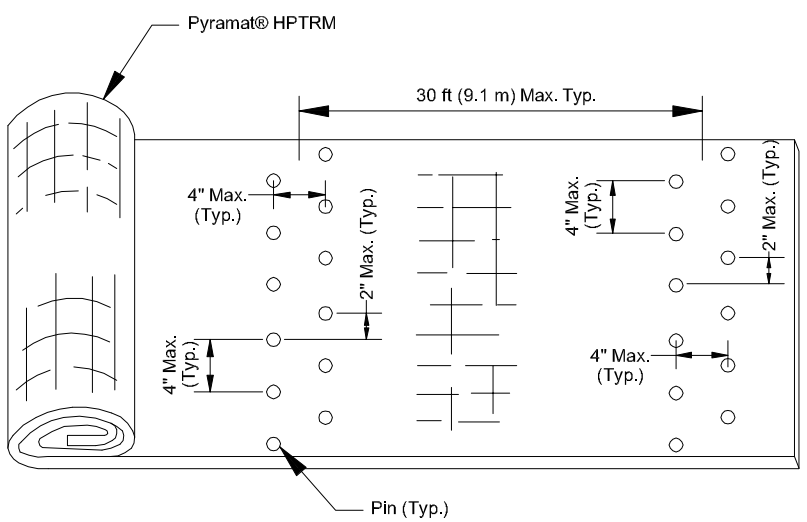

FIGURE 7: SIMULATED CHECK SLOT DETAIL

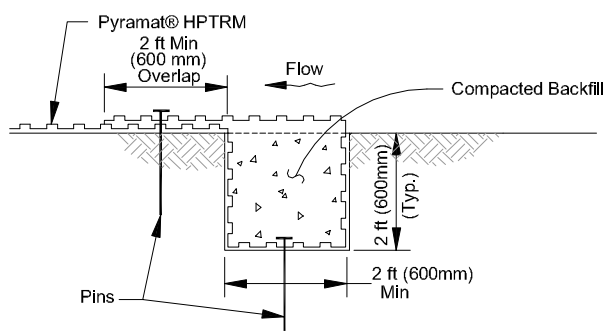

FIGURE 8: TERMINAL TRENCH (UPSTREAM) DETAIL

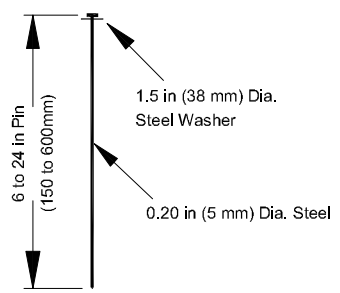

FIGURE 9: PIN DETAIL

PYRAMAT® HPTRM IN CHANNEL

PRE-CONSTRUCTION

- A pre-construction meeting should be held with the construction team and a representative from Propex. This meeting shall be scheduled by the contractor with at least two weeks notice. Also, Propex suggests that installation monitoring of the Pyramat® HPTRM be performed by a qualified independent third party.

SITE PREPARATION

- Grade and compact area of Pyramat® HPTRM installation as directed and approved by Engineer. Subgrade shall be uniform and smooth. Remove all rocks, clods, vegetation or other objects so the installed mat will have direct contact with soil surface.
- Prepare seedbed by loosening the top 2-3 in (50-75 mm) minimum of soil.
- Incorporate amendments such as lime and fertilizer and/or wet the soil, if needed.
- Do not mulch areas where mat is to be placed.

SEEDING

- Apply seed to soil surface before installing mat. Disturbed areas shall be reseeded.
- Consult project plans and/or specifications for seed types and application rates.

INSTALLATION IN STORM WATER CHANNELS

- Figure 1 shows general installation layout and details for Pyramat® HPTRM in storm water channels.
- Excavate an initial trench 24 in wide x 24 in deep (600 x 600 mm) minimum across the channel at downstream end of project (see Figure 2). Deeper initial trench and/or hard armoring may be required in channels that have the potential for scour.
- Excavate a longitudinal edge trench 12 in wide x 12 in deep (300 x 300 mm) minimum along both sides of the installation to bury edges of mat (see Figure 3). The trench shall be located 24 in (600 mm) minimum over crest of slope.
- Beginning at the centerline of the channel, place roll end into the initial trench (with 24 in (600 mm) minimum lap) and secure with pinning devices on 12 in (300 mm) centers (see Figure 2). Position adjacent rolls and secure in trench in same manner. Backfill and compact soil into trench as directed and approved by Engineer.
- Unroll mat in the upstream direction over the compacted trench.
- Secure initial trench lap with pinning devices on 12 in (300 mm) centers (see Figure 2).
- Secure longitudinal edge trench with pinning devices on 12 in (300 mm) centers (see Figure 3).
- Continue installation as described above, overlapping adjacent rolls as follows:
  - A. Roll edge overlap: 6 in (150 mm) minimum overlap with upslope mat on top. Secure with one row of ground pinning devices on 12 in (300 mm) centers (see Figure 4).
  - B. Roll end overlap: 12 in (300 mm) minimum overlap with upstream mat on top. Secure with two rows of ground pinning devices staggered 12 in (300 mm) apart on 12 in (300 mm) centers (see Figure 5).
- Secure mat using suggested ground pinning devices for appropriate frequency and pattern shown on the Pin Pattern Guide (see Figure 6).
- For channel reaches longer than 45 ft (13.7 m), install simulated check slots per Figure 7. This method includes placing two staggered rows of pins on 4 in (100 mm) centers at 30 ft (9.1 m) intervals (see Figure 7) or across the midpoint of the channel for channel lengths less than 60 ft (18.2 m).
- Excavate terminal trench 24 in wide x 24 in deep (600 x 600 mm) minimum across the channel at the upstream end of the project (see Figure 8). Deeper terminal trench and/or hard armoring may be required in channels that have the potential for scour.
- Pin, backfill and compact upstream end of mat in terminal trench (see Figure 8). Terminal trench pinning devices should be spaced on 12 in (300 mm) centers (see Figure 8). Unroll mat in downstream direction over compacted trench with a minimum 24 in (600 mm) lap. Secure lap with pinning devices on 12 in (300 mm) centers.

GROUND PINNING DEVICES

- Metal pins should be at least 0.20 in (5 mm) diameter steel with a 1 1/2 in (38 mm) steel washer at the head of the pin (see Figure 9). Metal pins should be driven flush to the soil surface. Pins should be between 6-24 in (150-600 mm) long and have sufficient ground penetration to resist pullout. Longer pins may be required for looser soils. Heavier metal stakes may be required in rocky soils. Depending on soil pH and design life of the pin, galvanized or stainless steel pins may be required. Consult project plans and/or specifications for tie down device details.

SOIL FILLING

- Installed Pyramat® HPTRM shall be seeded and soil-filled.
- After seeding, spread and lightly rake 1/2 - 3/4 in (12-19 mm) of fine site soil or topsoil into the mat and completely fill the voids using backside of rake or other flat tool.
- If equipment must operate on the mat, make sure it is of the rubber-tired type. No tracked equipment or sharp turns are allowed on the mat.
- Avoid any traffic over the mat if loose or wet soil conditions exist.
- Smooth soil-fill in order to just expose the top of Pyramat® HPTRM. Do not place excessive soil above the mat.
- Broadcast additional seed and install a Landlok® ECB above the soil-filled mat (if desired).
- Irrigate as necessary to establish/maintain vegetation. Do not over irrigate.

Please note that the information presented herein is general information only. It is for conceptual use only and not intended to be used for construction. While every effort has been made to ensure its accuracy, this information should not be used for a specific application without independent professional examination and verification of its suitability, applicability, and accuracy.

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