AQUABLOK® EXAMPLE SPECIFICATIONS: TRENCH DAMS

The Contractor shall place cutoff trench dams of AquaBlok across and along the pipe trench at the locations shown on the plans to retard and impede the movement of groundwater (and associated contaminants, if present) along the outside of the pipe and/or through the trench. Product information and handling requirements for AquaBlok, a bentonite-aggregate composite material, are included as Attachment I.

Sufficient sheeting, bracing, timbering, etc., shall be provided, installed and used by the Contractor to maintain the sides of the trench dam in a substantially vertical position. All excavation and forming shall be in accordance with (insert local specification number).

Trench dam dimensions shall be as shown on Figure 1. Where pipe cover is less than 5-feet (1.5 m), the dam shall extend to 1-foot (0.3 m) of the existing surface. The trench dam installation shall have a minimum of 3-feet (0.9 m) of AquaBlok above the crown of the pipe. The trench dam installation shall have a minimum of: 1-foot (0.3 m) of compacted soil atop the AquaBlok under standard soil construction and backfill conditions; 2-feet (0.6 m) of compacted soil and/or base (per established construction specifications) atop the AquaBlok for light-duty pavement conditions; and 3-feet (0.9 m) of compacted soil and/or base (per established construction specifications) atop the AquaBlok for heavy-duty pavement conditions.

The Contractor shall exercise due care in material handling to prevent field and installation damage which could impair the function and durability of the installation. Contractor shall place AquaBlok in dry state using clean, dry equipment in a manner to eliminate voids from bridging. Under heavy-duty pavement installations, and if not wetted by surroundings, AquaBlok should be wetted in place in 1-foot (0.3 m) lifts to initiate hydration and insure water contact with all material. AquaBlok should not be blended with native soil and does not require mechanical compaction.

Option: A geotextile fabric per engineers specification can be added at the upper boundary of the AquaBlok (minimum 2-feet (0.6 m) overlap on all sides) to serve as a physical separation layer between the AquaBlok and the backfill/road base. A reinforced geotextile can be substituted both for physical separation and for further structural stability.