Field Drop Inlet Protection Sediment and Debris Control GUIDE SPECIFICATION

PRODUCT: **Drop Guard™**

MANUFACTURER:

ERTEC®

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1.0 Description:

Work covered under this item consists of installing a Drop Guard™ Field Drop Inlet Protection Device (FDIPD) for <u>unpaved field drop</u> inlets or grated drain inlets in softscape areas. The purpose is to minimize silt and sediment and stop debris from entering the storm or sanitary drain systems.

2.0 Material:

Provide a drop inlet or grated drain inlet protection device:

- **Size.** Furnish drain inlet protection device with a vertical height of 11 or 8 inches above ground. Individual panels shall have a width of 15 or 12 inches and a length of 7 feet. Identify outside dimension of concrete apron or grate to determine the number of required panels. Panels must overlap a minimum of 4 inches (example: a drain inlet with a concrete apron with outside dimensions of 4'x4' will require three 7 foot panels).
- Structure. Furnish a drain inlet protection device manufactured from non-biodegradable materials. It shall be UV stable, resist cracking or performance deterioration from sunlight for 4 years. System shall be made from recyclable materials and recyclable at the end of life. Filter material shall be laminated between and protected by semi-rigid layers of apertured polymeric high density polyethylene (HDPE). Service temperature shall be from -30 to 160 deg F. Filter fabric shall last the life of the unit.
- Flow Rate. Furnish a FDIPD containing a filter fabric with a minimum clean water flow-through rate between 130 and 180 gallons per square foot per minute and a percentage-open-area of 9% to 13%. The filter fabric shall extend to the height of the panel.
- Reinforcing Stakes: Install stakes at the panel overlaps and other locations as needed. Wood stakes must be minimum 1"x2"x18" and fastened to the drain inlet protection device with 1" wood screws. Fasten wood stakes such that the walls of the device have sufficient support to resist collapse from 7 to 10 inches of water pressure surrounding the perimeter of the device. For drain inlets with on side longer than 30" install a stake at each over lap and assure there is at least one stake on each side of the inlet.
- **Transport/Logistics**: Furnish a drain inlet protection device that can be assembled on-site, and easily disassembled for compact storage and transportation.

3.0 Installation Guidelines:

- 1. Trench around the grate or concrete apron to a minimum depth of 4".
- 2. Wrap drain inlet protection device panels around outside of concrete apron or grate. Bend sharply around corners for tight fit.

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- 3. Overlap panels by 4" minimum (panels are 7' long). See installation guidelines for number of panels required.
- 4. Install wood stakes (1"x2"x18") on the inside or outside at the overlaps and in the center of each side. Drive stakes so tops are flush with the top of Drop Guard™. Fasten each stake to Drop Guard™ with two 1 inch wood screws. Backfill soil.
- 5. After installation, it is recommended to stabilize the soil around the drain inlet with straw mulch or erosion control blankets. Drop Guard[™] is highly effective when used in combination with other surface soil erosion/re-vegetation practices such as erosion control blankets, hydraulic mulching, etc.

4.0 Maintenance:

Perform maintenance as required. Inspect following rainfall events and at least daily during
prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Trash shall
be removed daily and sediment shall be removed when the sediment accumulation reaches
half the vertical height. Removed sediment shall be incorporated in the project at designated
locations or disposed-of outside the project or in conformance with requirements. Remove
the device after final stabilization has been achieved.

5.0 Method of Measurement:

 Field Drop Inlet Protection Device. Field Drop Inlet Protection device size will be based on the outer dimensions of the drop inlet manhole. The units shall fit around the outside of the concrete apron.

6.0 Basis of payment:

- Field Drop Inlet Protection Device. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Drop Inlet Protection Device." This price is full compensation for furnishing, placing, maintaining, and for permanently removing the drop inlet protection device from the project, and for all other materials, labor, tools, equipment, and incidentals.
- Removal of drop inlet protection device will not be paid for directly but is subsidiary to the
 installation item. When the Engineer directs that the drop inlet protection device installation
 or portions thereof be replaced, payment will be made at the unit price bid for "Drop Inlet
 Protection Device," which is full compensation for the removal and reinstallation of the drop
 inlet protection device installation.