

**ITEM NO. 638S
PIPE OUTLET SEDIMENT TRAP**

638S.1 Description

This item shall govern construction of a basin formed by an embankment or excavation along with an embankment at the point of discharge of the pipe. The removal of the pipe outlet sediment trap structure shall also be included in this item. The outlet for the trap shall be through a perforated riser and a pipe through the embankment.

This specification is applicable for projects or work involving either inch-pound or SI units. Within the text, the inch-pound units are given preference followed by SI units shown within parentheses.

638S.2 Submittals

The submittal requirements for this specification item shall include the Size, properties, banding, installation details and instructions for the corrugated metal pipe for the pipe and pipe riser.

638S.3 Materials

Corrugated metal pipe shall be used with diameter selected from the following table:

Minimum Pipe Diameter		Maximum Drainage Area	
Inches	Millimeters	Acres	Hectares
12	300	1	0.4
18	450	2	0.8
21	525	3	1.2
24	600	4	1.6
30	750	5	2.0

638S.4 Construction Methods

All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of in a manner that will not interfere with the excavation and construction of the trap as indicated on the Drawings and/or Standard Detail Number 638S-1, "Pipe Outlet Sediment Trap." The trap shall not drain onto the public right of way.

All excavation operations shall be carried out in such a manner that erosion and water pollution shall be minimal. Any excavated portion of sediment trap shall have 2:1 or flatter slopes.

All pipe connections shall be watertight.

At least the top 2/3 of the riser shall be perforated with 1/2 inch (12.5 mm) diameter holes spaced 8 inches (200 mm) vertically and 10 to 12 inches (250 to 300 mm) horizontally.

Fill material around the pipe spillway shall be compacted in 4 inch (100 mm) layers. A minimum of 2 feet (0.6 meter) of compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment.

The fill material for the embankment shall be free of roots or other woody vegetation, as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with mechanical equipment while it is being constructed.

The structure shall be inspected monthly and after each rainfall. Repairs shall be made by the Contractor, as needed, throughout the duration of the contract or until the Engineer or designated representative provides written permission to remove the structure.

Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap or 1 foot (300 mm), whichever is less. The sediment that is removed shall be deposited in an approved area and in such a manner that it will not erode.

The structure shall be removed and area restored and vegetated when the drainage area has been properly stabilized.

638S.5 Measurement

Acceptable work performed as prescribed by this item will be measured by the square yard (square meter: 1 square meter equals 1.196 square yards) of sediment trap constructed.

638S.6 Payment

The work performed and materials furnished and measured as provided under "Measurement" will be paid for at the unit bid price per square yard of "Pipe Outlet Sediment Trap". The price shall include full compensation for furnishing, hauling and placing all materials, labor, tools, equipment and incidentals necessary to complete the work including inspecting, repairing, replacing and relocating existing fencing, removal of silt and removal and disposal of all materials at the completion of construction.

Payment will be made under:

Pay Item No. 638S: Pipe Outlet Sediment Trap Per Square Yard.

End

SPECIFIC CROSS REFERENCE MATERIALS
Specification 638S, "Pipe Outlet sediment Trap"

City of Austin Standard Details

<u>Designation</u>	<u>Description</u>
Number 638S-1	Pipe Outlet Sediment Trap

City of Austin Standard Specifications

<u>Designation</u>	<u>Description</u>
Item No. 510	Pipe

RELATED CROSS REFERENCE MATERIALS
Specification 638S, "Pipe Outlet sediment Trap"

City of Austin Standard Specifications

<u>Designation</u>	<u>Description</u>
Item No. 101S	Preparing Right of Way
Item No. 102S	Clearing and Grubbing
Item No. 111S	Excavation
Item No. 120S	Channel Excavation
Item No. 401S	Structural Excavation and Backfill
Item No. 602S	Sodding for Erosion Control
Item No. 605S	Soil Retention Blanket
Item No. 606S	Fertilizer
Item No. 608S	Planting
Item No. 610S	Preservation of Trees and Other Vegetation
Item No. 620S	Filter Fabric

Texas Department of Transportation: Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges

<u>Designation</u>	<u>Description</u>
Item No. 100	Preparing Right-of-Way
Item No. 110	Excavation
Item No. 132	Embankment
Item No. 158	Specialized Excavation Work
Item No. 166	Fertilizer
Item No. 168	Vegetative Watering

Item No. 169
Item No. 204

Soil Retention Blanket
Sprinkling