

**SEDIMENT TRAP NOTES:**

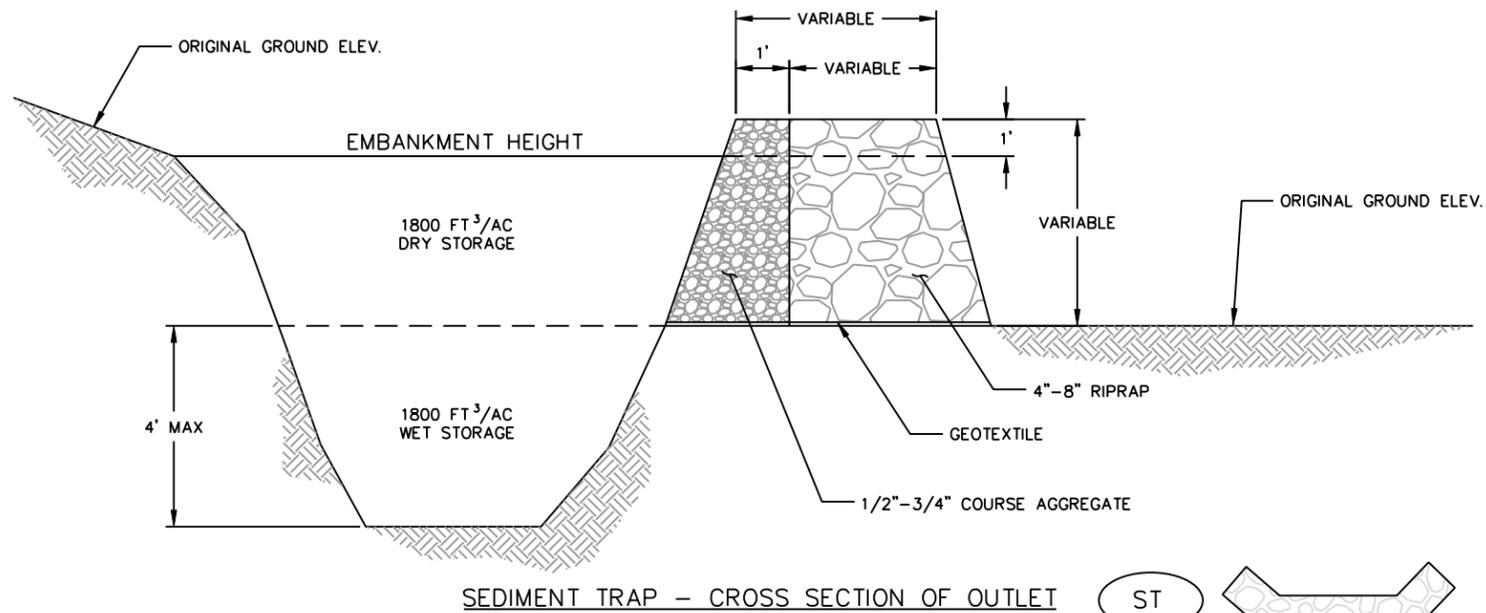
1. USE ONLY IF THE CONTRIBUTING DRAINAGE AREA TO THE TRAP IS 5 ACRES OR LESS. IF THE CONTRIBUTING DRAINAGE AREA IS GREATER THAN 5 ACRES, THEN A SEDIMENT BASIN SHOULD BE CONSIDERED.
2. USE ONLY FOR TREATMENT OF ONSITE RUNOFF.
3. NEVER CONSTRUCT A SEDIMENT TRAP ON A FLOWING STREAM OR IN WETLANDS.
4. TRAPS SHOULD NOT BE LOCATED CLOSER THAN 20 FEET FROM A PROPOSED BUILDING FOUNDATION OR EDGE OF ROAD.
5. A RECTANGULAR AND SHALLOW TRAP, WITH A LENGTH-TO-WIDTH RATIO OF 2:1 OR GREATER IS RECOMMENDED.
6. MAXIMUM EMBANKMENT HEIGHT SHALL BE 5 FEET MEASURED ON THE DOWNSTREAM SIDE. THE MINIMUM TOP EMBANKMENT WIDTH SHALL BE 4 FEET. SIDE SLOPES FOR THE EMBANKMENT AND THE EXCAVATED AREAS SHALL BE 2:1 OR FLATTER.
7. FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIAL.
8. INLETS TO SEDIMENT TRAP SHALL ENTER AT THE FURTHEST DISTANCE TO OUTLET DESIGNED SO AS NOT TO ERODE SIDE SLOPES OF SEDIMENT BASIN.

**INSTALLATION NOTES:**

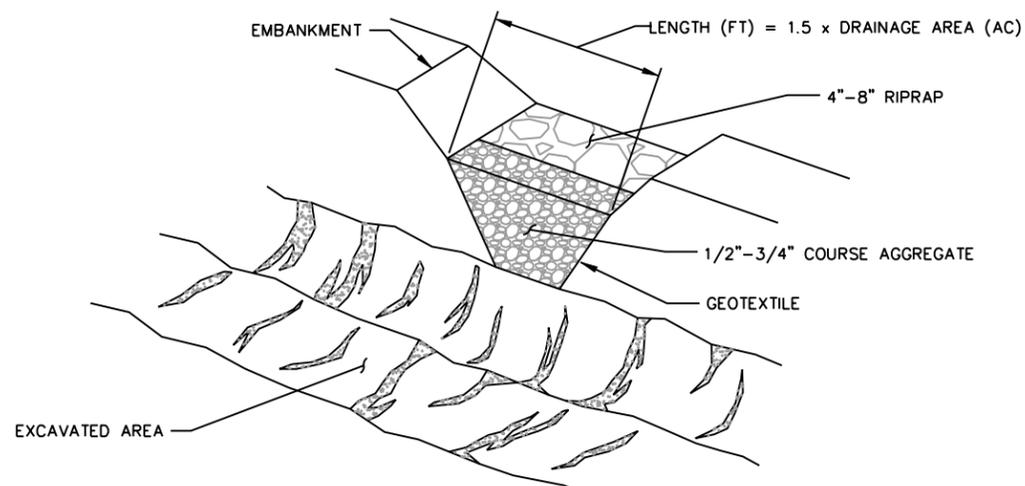
1. SEDIMENT TRAPS, ALONG WITH OTHER PERIMETER CONTROLS, SHALL BE INSTALLED BEFORE ANY LAND DISTURBANCE TAKES PLACE IN THE DRAINAGE AREA.
2. THE AREA UNDER THE EMBANKMENT SHALL BE CLEARED AND STRIPPED OF ANY VEGETATION AND ROOTS.
3. A GEOTEXTILE SHOULD BE PLACED AT THE STONE-SOIL INTERFACE TO ACT AS A SEPARATOR.

**MAINTENANCE NOTES:**

1. SEDIMENT SHALL BE REMOVED FROM THE TRAP WHEN THE WET STORAGE VOLUME IS REDUCED BY HALF. SEDIMENTS REMOVED MUST BE PROPERLY DISPOSED.
2. THE CONTRACTOR SHALL INSPECT SEDIMENT TRAP EVERY TWO WEEKS AND AFTER ANY SIGNIFICANT STORM EVENT; ROCKS CLOGGED WITH SEDIMENT SHALL BE CLEANED OR REPLACED.
3. SEDIMENT TRAPS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREAS ARE STABILIZED AND ACCEPTED BY THE CITY.
4. IF SEDIMENT TRAPS ARE REMOVED, THE DISTURBED AREA SHALL BE SEEDED, CRIMPED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.



SEDIMENT TRAP - CROSS SECTION OF OUTLET



SEDIMENT TRAP - OUTLET (PERSPECTIVE VIEW)

**SEDIMENT BASIN NOTES:**

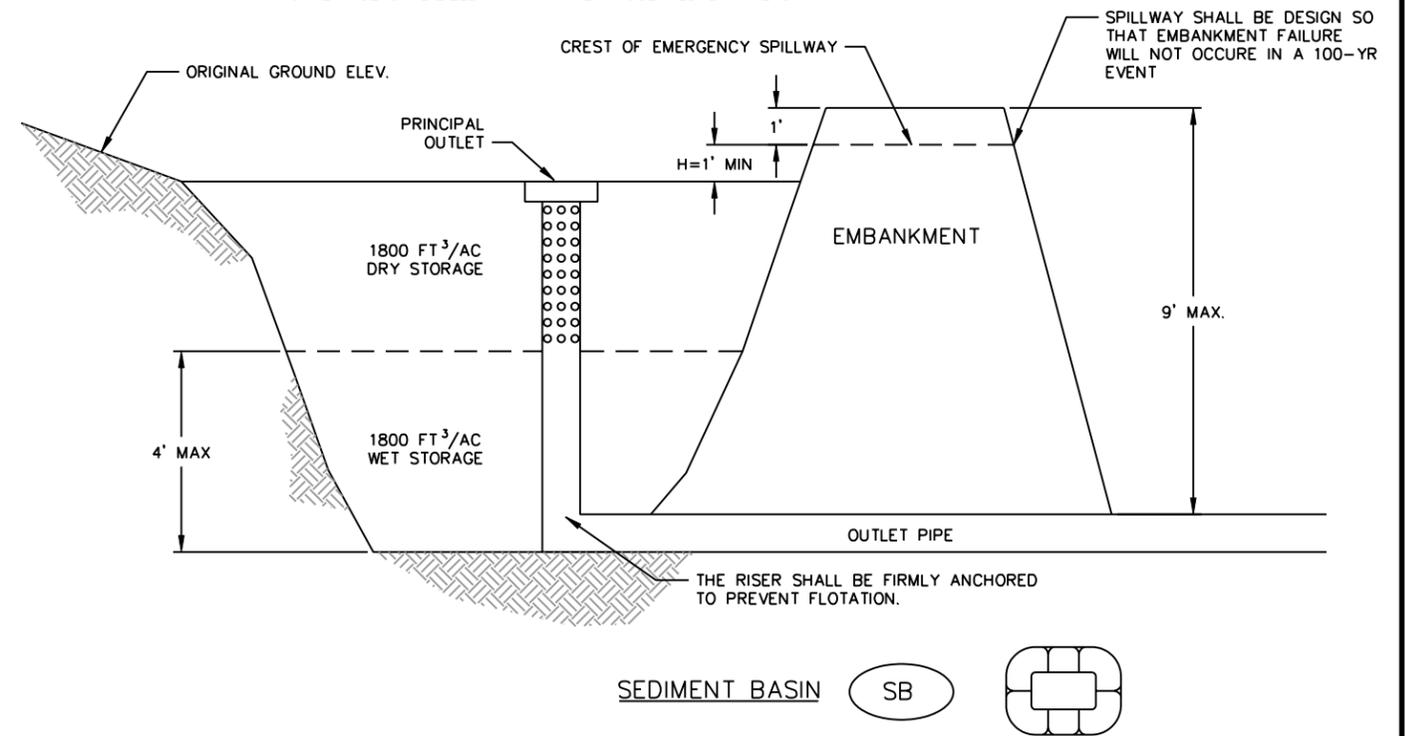
1. USE FOR CONTRIBUTING DRAINAGE AREAS GREATER THAN 5 ACRES.
2. DO NOT USE ON SITES WHERE FAILURE OF THE STRUCTURE OR EMBANKMENT WOULD RESULT IN LOSS OF LIFE, DAMAGE TO HOMES OR BUILDINGS, OR INTERRUPTION OF USE OR SERVICE OF PUBLIC ROADS OR UTILITIES.
3. SEDIMENT BASINS SHOULD BE USED IN CONJUNCTION WITH EROSION CONTROL PRACTICES SUCH AS TEMPORARY SEEDING, MULCHING, DIVERSION DIKES, ETC. TO REDUCE THE AMOUNT OF SEDIMENT FLOWING INTO THE BASIN.
4. NEVER CONSTRUCT A SEDIMENT BASIN ON A FLOWING STREAM.
5. USE FOR TREATMENT OF ONSITE RUNOFF ONLY.
6. THE BASIN SHALL BE LONG AND NARROW, WITH A LENGTH-TO-WIDTH RATIO OF 2:1 OR GREATER. APPROPRIATE BASIN SHAPE MAY BE ATTAINED BY PROPERLY SELECTING THE SITE OF THE BASIN, BY EXCAVATION, OR BY THE USE OF BAFFLES.
7. MAXIMUM EMBANKMENT HEIGHT SHALL BE 9 FEET. MEASURES SHOULD BE INCORPORATED IN THE EMBANKMENT TO PROTECT AGAINST FAILURE DUE TO SEEPAGE. A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED FOR SPECIFIC DESIGN CONSIDERATIONS.
8. THE BASIN OUTLET SHALL CONSIST OF A PRINCIPAL OUTLET (PERFORATED VERTICAL PIPE) AND AN EMERGENCY SPILLWAY.
9. REFER TO CDOT'S EROSION CONTROL AND STORM WATER QUALITY GUIDE BMP SC6 (SEDIMENT BASIN) FOR DESIGN OF THE OUTLET AND SPILLWAY.
10. INLETS TO SEDIMENT BASIN SHALL ENTER AT FURTHEST DISTANCE TO OUTLET DESIGNED SO AS TO NOT ERODE SIDE SLOPES OF SEDIMENT BASIN.

**INSTALLATION NOTES:**

1. AREAS UNDER THE EMBANKMENT AND ANY STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
2. TO FACILITATE CLEANOUT AND RESTORATION, THE POOL AREA (MEASURED AT THE TOP OF THE PRINCIPAL OUTLET) SHALL BE CLEARED OF ALL BRUSH AND TREES.
3. DESIGN ELEVATIONS, WIDTHS, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE SPILLWAY AND MUST BE CONSTRUCTED WITHIN A TOLERANCE OF +/-2.4 INCHES.
4. THE EMBANKMENT SHALL BE CONSTRUCTED ON UNDISTURBED GROUND.
5. FOR EARTHEN-FILL EMBANKMENTS, A CUTOFF TRENCH SHALL EXTEND UP BOTH ABUTMENTS TO THE TOP OF THE PERFORATED VERTICAL PIPE.
6. THE RISER AND BARREL OF THE PRINCIPAL OUTLET SHALL BE PLACED ON A FIRMLY COMPACTED SOIL FOUNDATION. THE BASE OF THE RISER SHALL BE FIRMLY ANCHORED ACCORDING TO DESIGN CRITERIA TO PREVENT FLOTATION.
7. PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, AND CRUSHED STONE SHALL NOT BE USED AS BACKFILL AROUND THE OUTLET PIPE.

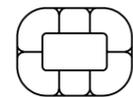
**MAINTENANCE NOTES:**

1. SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN THE WET STORAGE VOLUME HAS BEEN REDUCED BY HALF. THE ELEVATION OF THE SEDIMENT CLEAN OUT LEVEL SHALL BE CALCULATED AND CLEARLY MARKED ON THE RISER. SEDIMENTS REMOVED MUST BE PROPERLY DISPOSED.
2. THE CONTRACTOR SHALL INSPECT SEDIMENT BASIN EVERY TWO WEEKS AND AFTER ANY SIGNIFICANT STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
3. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREAS ARE STABILIZED AND ACCEPTED BY THE CITY.
4. IF SEDIMENT BASINS ARE REMOVED, THE DISTURBED AREA SHALL BE SEEDED, CRIMPED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.



SEDIMENT BASIN

SB



**SEDIMENT TRAP & SEDIMENT BASIN**



CITY OF LOVELAND  
PUBLIC WORKS DEPT.  
STORMWATER

STORMWATER  
CONSTRUCTION  
DRAWINGS

APPROVED: KWG  
DATE: 8/17/07  
DRAWN BY: TBK

DRAWING  
SW-18