

**STORMWATER APPLICATION
RESIDENTIAL USE**

Property Owner's Name: _____
Mailing Address: _____

Phone: _____ Email: _____
Address of development: _____
Approved Use: _____
Tax Map Parcel Number: _____
Municipality: _____
Other structures on property: _____
Directions to site: _____

By signing this application, I acknowledge that I have read the Stormwater Management Ordinance adopted by the Municipality and I have selected the Stormwater Management System(s) to which I will construct for said development. I agree to construct the Stormwater Management System(s) in accordance with the construction details provided in the Stormwater Management Ordinance.

I will construct the following Stormwater Management System(s) for said development.

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Stormwater Infiltration chambers |
| <input type="checkbox"/> | Typical rain garden / bioretention area |
| <input type="checkbox"/> | Dry well / Seepage pit |

I acknowledge that I and/or my assignees/grantees shall be responsible for maintenance of the Stormwater Management System(s) selected and that such Stormwater Management System(s) shall remain as a permanent fixture that cannot be altered, replaced, or removed without prior written approval from the Municipality.

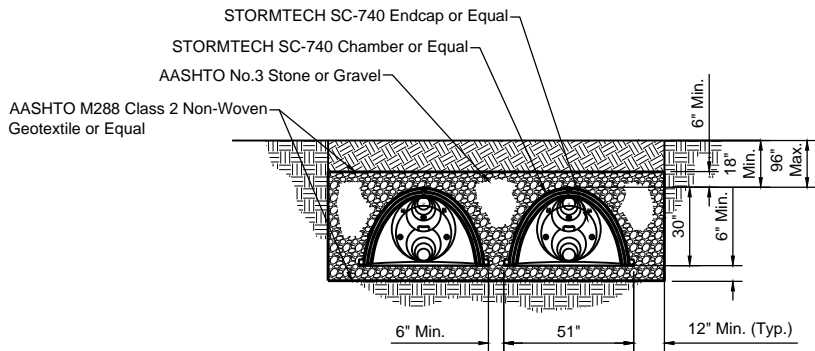
I acknowledge that upon completion of the construction of the selected Stormwater Management System(s), I will contact the Municipality for an inspection.

Signature of Landowner

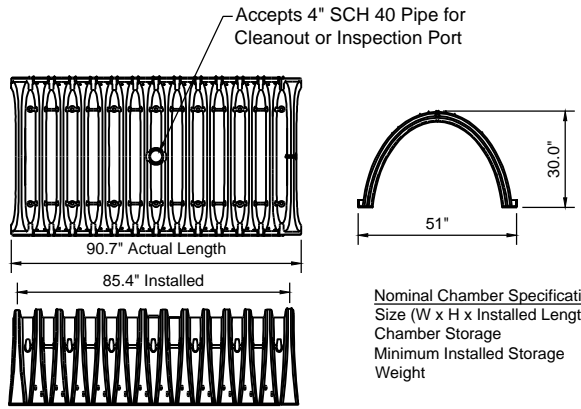
Date

Printed Name

**RETURN ORIGINAL TO THE MUNICIPALITY AND
PROVIDE A COPY WITH THE BUILDING PERMIT APPLICATION.**



CROSS SECTION
N.T.S.

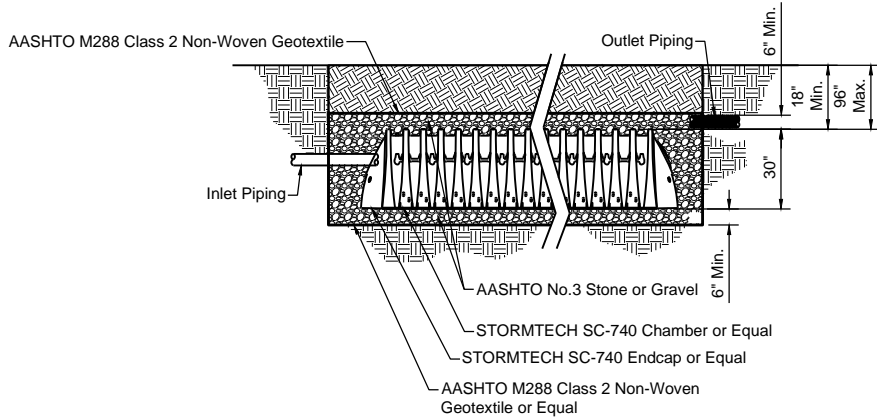


TECHNICAL SPECIFICATIONS
N.T.S.

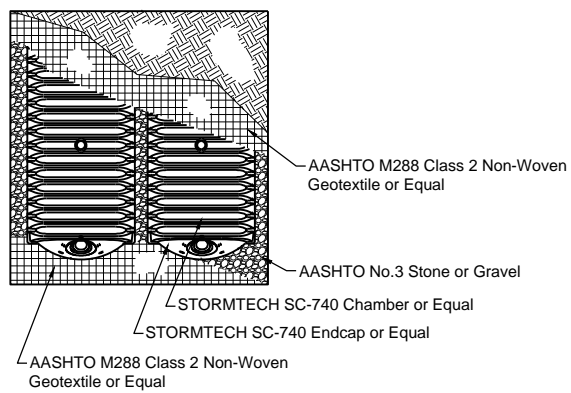
Nominal Chamber Specifications

Size (W x H x Installed Length)	51.0" x 30.0" x 85.4"
Chamber Storage	45.9 Cubic Feet
Minimum Installed Storage	74.9 Cubic Feet
Weight	75 Lbs.

Note:
Outlet pipe shall discharge to daylight.



PROFILE
N.T.S.



PLAN VIEW
N.T.S.

STORMWATER INFILTRATION CHAMBER DETAIL
SC-740

GENERAL NOTES

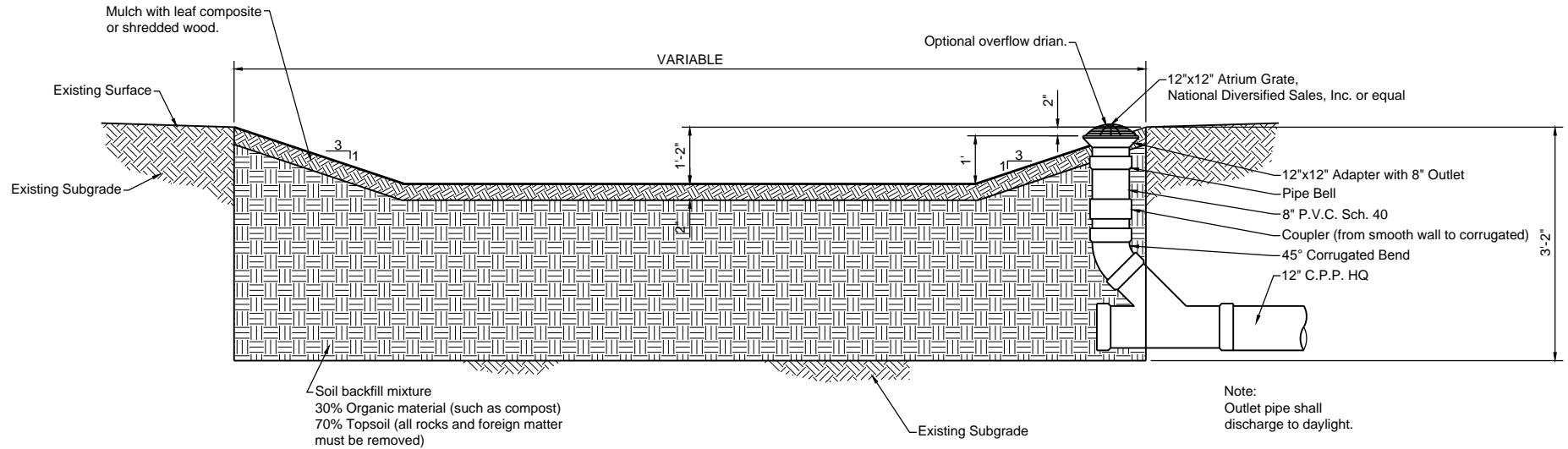
1. Stone placement between chambers rows and around perimeter must follow instructions as indicated in the most current version of STORMTECH's installation instructions.
2. Backfilling over the chambers must follow requirements as indicated in the most current version of STORMTECH's installation instructions.
3. AASHTO M288 Class 2 Non-Woven Geotextile (Filter Fabric) must be used.
4. The contractor must apply erosion and sediment control measures to protect the stormwater system during all phases of site construction per local codes and design engineer's specifications.
5. Contractor shall install (1) chamber per 500 sf of roof area for each lot.

Typical Rain Garden/Bioretenention Area

A Rain Garden (Bioretention Area) is an excavated depression area on the surface of the Land in which native vegetation is planted to filter and use stormwater runoff. Runoff pond o top of the surface of the rain garden and then infiltrates into an enhanced soil/planting mix below the surface where plants can use the water to grow. Bioretention also improves water quality, vegetation filters the water, and the root systems encourage or promote infiltration. The picture above shows a cross-section of a typical rain garden. Key elements of rain garden include:

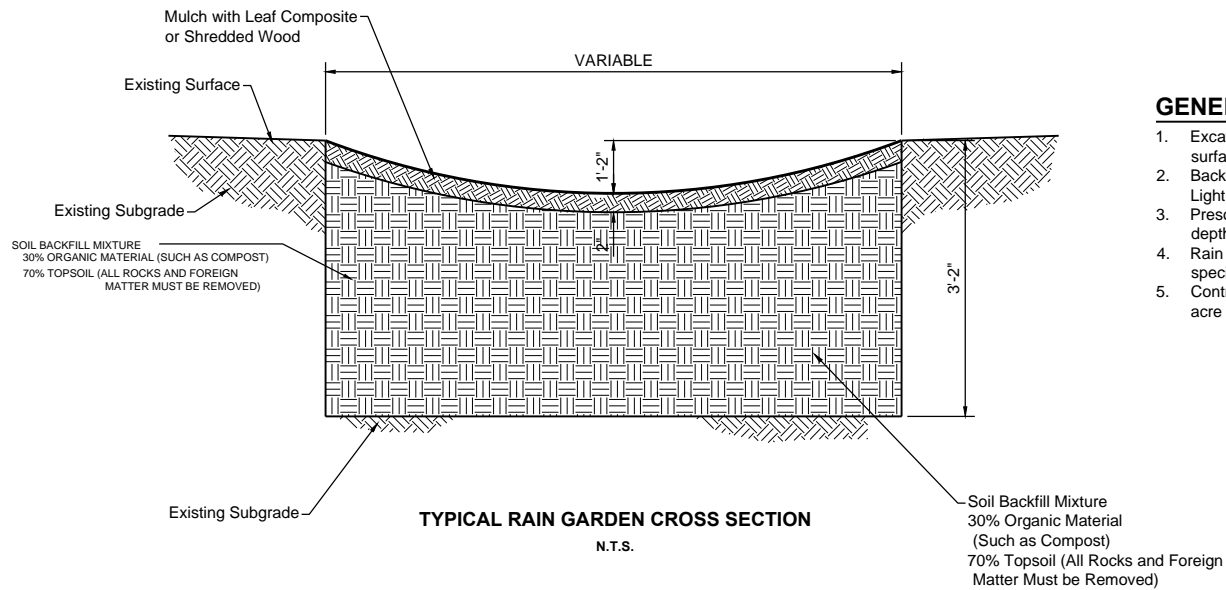
- Ponding depths recommended to 1 foot or less.
- Native vegetation that can tolerate dry and wet weather.
- An overflow area where, if the bioretention area were to overflow, the overflow would flow over pervious area (i.e. grass, meadow), and would not cause harm to property, or;
- An overflow such as a domed riser to allow excess flow from large storms to travel to other substantial infiltration areas or pervious areas.
- Maximum side slopes of: 1 are recommended, however, where space is limited, 2:1 side slopes may be acceptable with approval from the municipal engineer.
- The soil/planting mix depth should be between 1.5 feet to 6 feet deep.
- Provide a storage volume of 8 cubic feet for every 100 square feet of impervious surface, (roof, pavement, gravel, etc.) that drains to the Rain Garden. Assume void space of 10% in the Soil/Planting Mix.

Note:
If overflow drain is not used, all
overflow must be directed away from
houses and adjacent properties.



TYPICAL RAIN GARDEN PROFILE

N.T.S.



TYPICAL RAIN GARDEN CROSS SECTION

N.T.S.

GENERAL NOTES

1. Excavate rain garden area to depth of 3'-2" and scarify the existing soil surfaces. Do not compact existing surface.
2. Backfill rain garden with soil mixture, overfill to allow for settlement. Light hand tamping is acceptable if necessary.
3. Presoak soil to aid in settlement, then complete grading to specified depth and add a layer of mulch.
4. Rain garden area shall be vegetated with native floodplain plant species.
5. Contractor shall install rain garden with a volume of 1,110 CU.FT. per acre of lot area.

Dry Well / Seepage Pit

A dry well (or Seepage Pit) is a subsurface storage facility that temporarily stores and infiltrates runoff from the roofs of buildings or other impervious surfaces. A dry well can be either an excavated pit filled with stone fill, or a structural prefabricated chamber, (see illustration below). Dry wells discharge the stored runoff via infiltration into the surrounding or underlying soils. An overflow mechanism (surcharge pipe, connection to larger infiltration area, etc.) will ensure that additional runoff is safely conveyed downstream. Key elements of a Dry Well include:

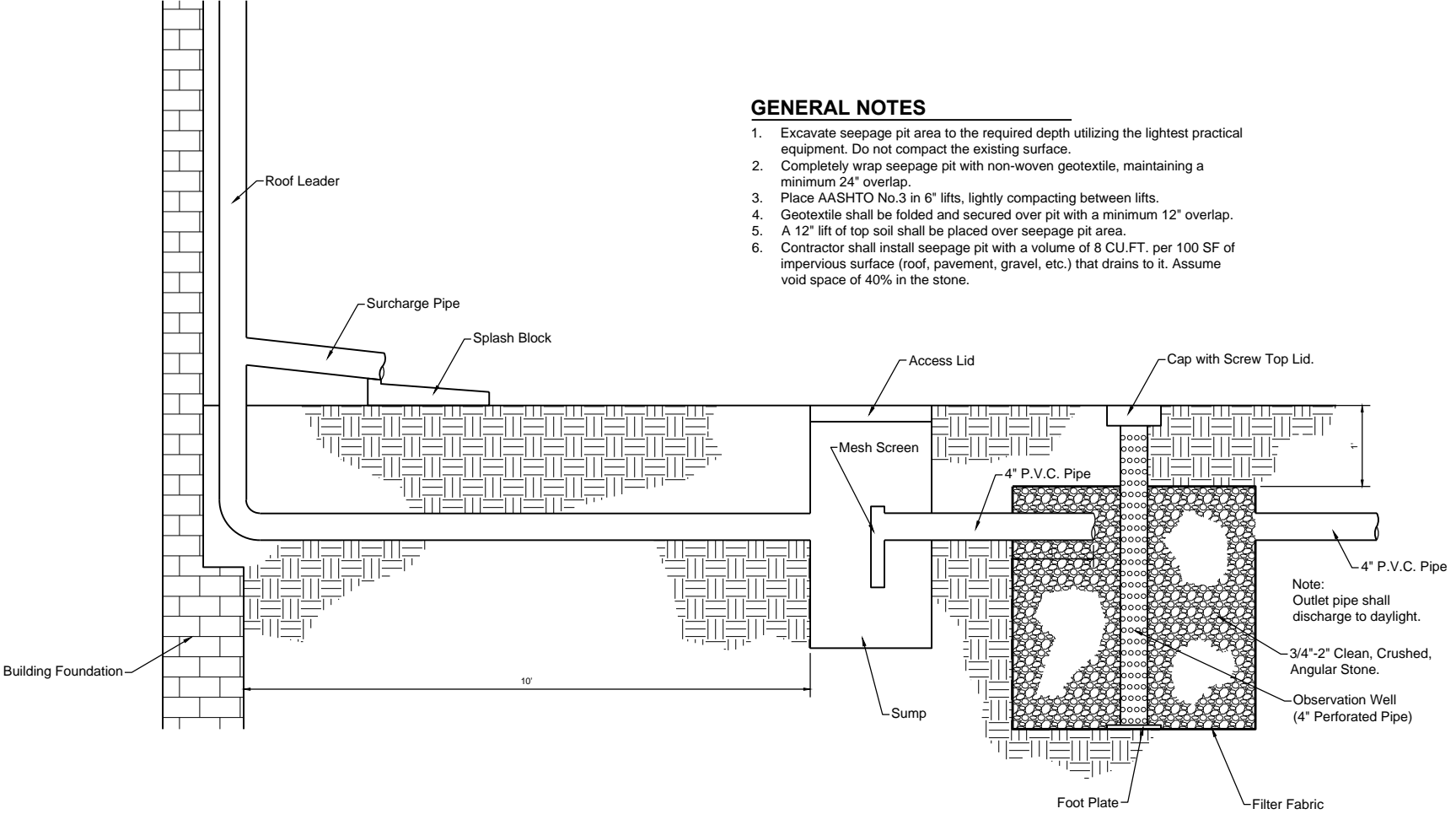
- Facilities should be located a minimum of ten (10) feet from building foundations.
- Construction of a dry well should be performed after surface soils in all other areas of the site are stabilized to avoid clogging.
- During construction, compaction of the subgrade soil in the bottom of the dry well should be avoided, and construction should be performed only with light machinery.
- Gravel fill should consist of stone with an average of 1-1/2 to 3 inches in diameter with the gravel fill wrapped in a nonwoven geotextile that separates the stone fill from the surrounding soil.
- At least 12 inches of soil needs to be placed over the top of the dry well.
- At least one observation well / cleanout is recommended
- Infiltration testing is recommended to ensure the underlying soil is capable of infiltrating the needed volume of the needed volume of stormwater. If positive infiltration is not available than another control method must be utilized.
- Maintenance will require periodic removal of sediment and leaves from sumps and cleanouts.
- Dry wells shall provide a storage volume of 8 cubic feet for every 100 square feet of impervious surface (roof, pavement, gravel, etc.) that drains to it.

Refer to the following illustration of a typical seepage pit.

Additional information is available in the Pennsylvania Stormwater Best Management Practices Manual.

GENERAL NOTES

1. Excavate seepage pit area to the required depth utilizing the lightest practical equipment. Do not compact the existing surface.
2. Completely wrap seepage pit with non-woven geotextile, maintaining a minimum 24" overlap.
3. Place AASHTO No.3 in 6" lifts, lightly compacting between lifts.
4. Geotextile shall be folded and secured over pit with a minimum 12" overlap.
5. A 12" lift of top soil shall be placed over seepage pit area.
6. Contractor shall install seepage pit with a volume of 8 CU.FT. per 100 SF of impervious surface (roof, pavement, gravel, etc.) that drains to it. Assume void space of 40% in the stone.



TYPICAL SEEPAGE PIT DETAIL
N.T.S.