

# Vernon Township – Roadside Ditch Culvert Installation Permit Application

**Applicant Name:** \_\_\_\_\_ **Telephone No.:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Owner Name:** \_\_\_\_\_ **Telephone No.:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Project Location and Description** *(Provide a description of the project location and the work being proposed. Include the length, type, size of pipe, the number and location of catch basins, etc. The applicant is required to provide a drawing or sketch showing the project layout and details):*

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**Project Justification** *(Open ditches are much easier and cost effective for the Township to maintain, and it is the desire of the Township to minimize the number of roadside ditch culvert installations. Describe the need for the proposed culvert pipe installation):*

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**Anticipated Start Date for Project Work:** \_\_\_\_\_ **Anticipated Completion Date:** \_\_\_\_\_

**Comments and Special Conditions (Township to Complete):**

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By signing this application, the applicant agrees to all "General Conditions and Requirements" and "Special Conditions" as set forth by Vernon Township for the installation of a roadside ditch culvert piping system. Furthermore the applicant agrees to pay all required fees as identified and described by the Township.

**Applicant Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Signature of Approval (Township Roadmaster):** \_\_\_\_\_ **Date:** \_\_\_\_\_

# Vernon Township – Roadside Ditch Culvert Installation Permit Application

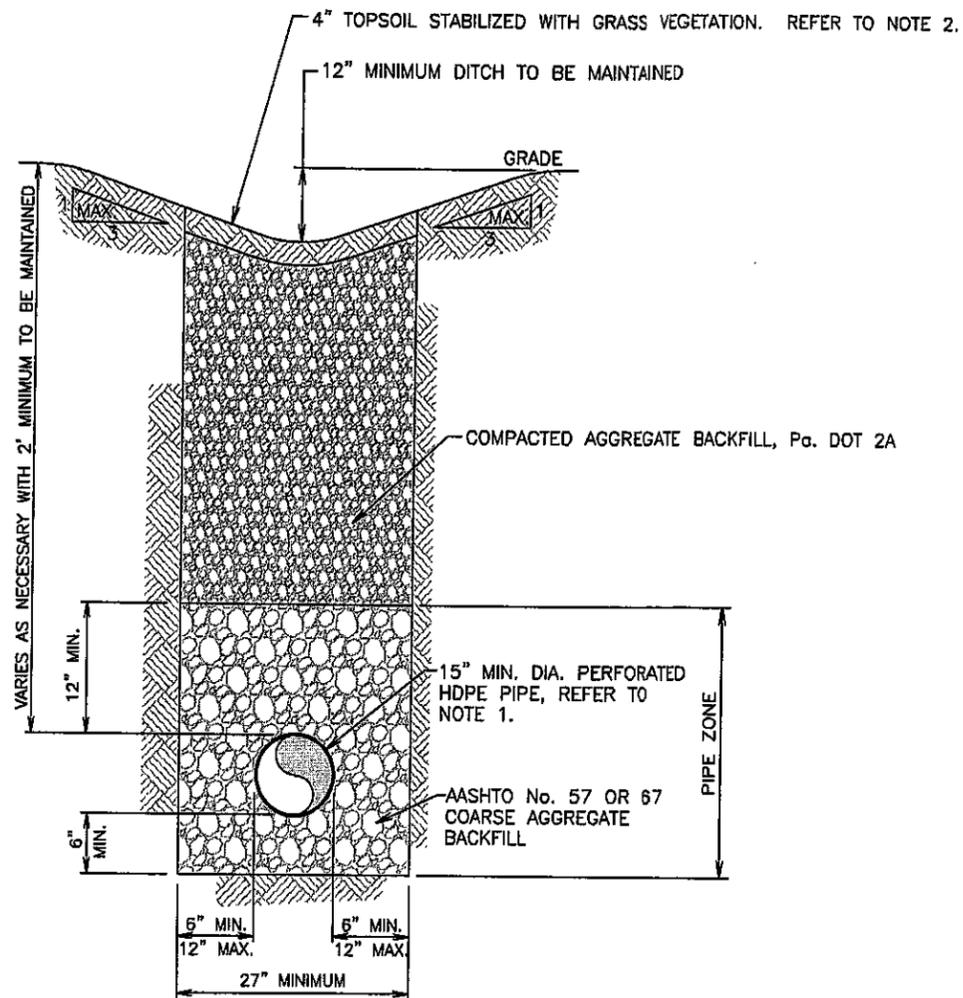
## General Conditions and Requirements:

1. All piping, catch basins, fittings, etc. shall be provided and installed by the applicant in accordance with all applicable Township requirements, and the construction details shown in Exhibits A, B, and C shall be adhered to without exception; unless otherwise approved in writing by the Township Roadmaster.
2. The applicant shall provide as part of the application a drawing indicating the proposed culvert system layout and construction detail. The drawing must be to scale and include appropriate detail to accurately and completely describe the proposed project. The Township may reject any application on the sole basis of inadequate drawing detail and clarity.
3. Catch basins must be included in any culvert system installation that exceeds 40-feet in length, and all open pipes must be provided with a flared inlet section as approved by the Township Roadmaster.
4. Proposed culvert system installations that in the opinion of the Township Roadmaster represent a risk in any way to Township property or citizenry shall not be permitted without the review and concurrence from the Township Engineer.
5. Any proposed culvert system installation that in the opinion of the Township Roadmaster does not provide adequate flow conveyance capacity or presents a risk of damage to Township roadways and/or other property, may be denied.
6. The Township Roadmaster may request that the proposed culvert system be designed by a Professional Engineer or Professional Land Surveyor, and in such cases it shall be the responsibility of the applicant to secure said professional services at their own expense.
7. The applicant shall be responsible for the following review and inspection fees:
  - a. Base Application/Inspection Fee (Due upon application approval).....\$100.00\*
  - b. Inspection Security (Due upon application approval).....\$150.00\*\*

\* The base Application/Inspection fee covers a maximum of two "routine" inspections by the Township Roadmaster

\*\* The Inspection Security is held by the Township to cover any inspection or construction issue review costs beyond initial review of the application and two "routine" inspections by the Township Roadmaster. Additional review and/or inspection costs will be accrued at the normal costs incurred by the Township, and said cost will be paid for by the Township using the Inspection Security. In the event that the Inspection Security is not fully utilized through the project, any remaining funds will be returned to the applicant upon proper completion of the project.
8. The Applicant or current property owner shall be responsible for all maintenance costs that result from obstructed or "clogged" culverts and catch basins.

Applicant Initials: \_\_\_\_\_ Date: \_\_\_\_\_



NOTE:  
 "PEA GRAVEL" WILL NOT BE AN ACCEPTABLE AGGREGATE FOR USE IN THE PIPE ZONE.

## TYPICAL PIPE CULVERT INSTALLATION DETAIL

NOT TO SCALE

NOTES:

1. THE MINIMUM PIPE SIZE PERMITTED SHALL BE 15" DIA., AND SAID PIPE SHALL BE PERFORATED. THE TOWNSHIP ROADMASTER MAY REQUIRE AN ENGINEER'S VERIFICATION OF THE APPROPRIATE PIPE SIZE WHERE THERE IS A CONCERN THAT A 15" DIA. WILL NOT BE ADEQUATE TO CONVEY THE ANTICIPATED FLOW.
2. TOPSOIL AND VEGETATION IS ONLY ALLOWED FOR DITCH SLOPES OF LESS THAN 2.25%. DITCH SLOPES GREATER THAN 2.25% SHALL BE STABILIZED WITH ROCK RIP-RAP AS DIRECTED BY THE TOWNSHIP ROADMASTER.
3. IF IN THE OPINION OF THE TOWNSHIP ROADMASTER THERE ARE ANY CONCERNS REGARDING PIPE CAPACITY, SURFACE STABILIZATION, AND/OR GENERAL SAFETY, AT HIS DISCRETION, THE TOWNSHIP ENGINEER MAY BE CONSULTED TO DETERMINE AN APPROPRIATE DESIGN APPROACH



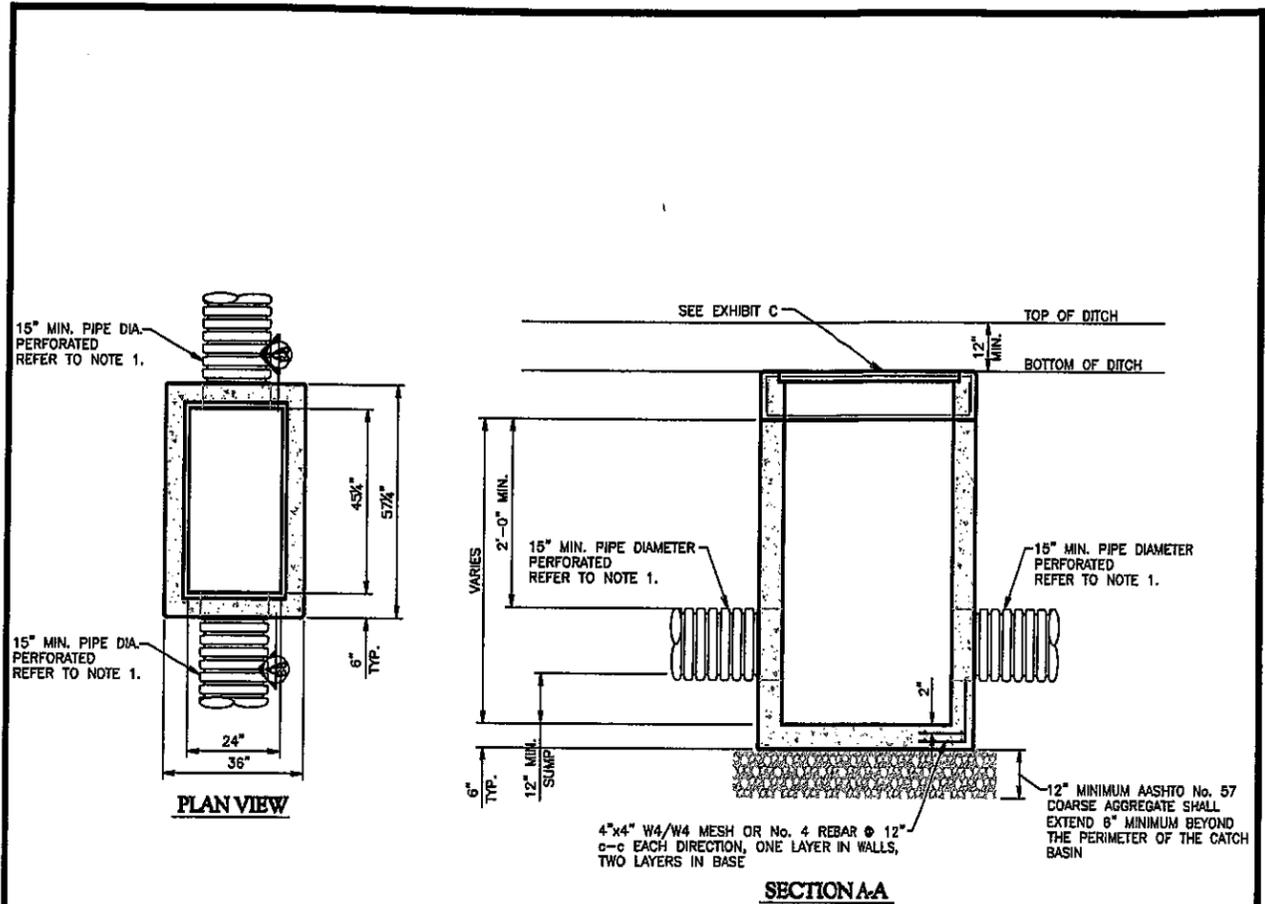
**Porter Consulting Engineers, P.C.**  
 Developing Engineered Solutions To Meet Your Project Needs

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 Monaca, Pennsylvania 16335  
 Phone: (814) 337-4447  
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115 West 11th Street  
 Erie, Pennsylvania 16501  
 Phone: (814) 455-5344  
 Fax: (814) 455-6033

### VERNON TOWNSHIP ROADSIDE DITCH CULVERT INSTALLATION

Checked by: <b>L. ASHLEY PORTER, P.E.</b>	Approved by: <b>L. ASHLEY PORTER, P.E.</b>
Drawn by: <b>ROBYN M. KEITH</b>	Date: <b>7/6/2011</b>
Scale: <b>NOT TO SCALE</b>	Drawing No.: <b>EXHIBIT A</b>



**TYPICAL CATCH BASIN DETAIL**  
NOT TO SCALE

**NOTES:**

1. THE MINIMUM PIPE SIZE PERMITTED SHALL BE 15" DIA., AND SAID PIPE SHALL BE PERFORATED. THE TOWNSHIP ROADMASTER MAY REQUIRE AN ENGINEER'S VERIFICATION OF THE APPROPRIATE PIPE SIZE WHERE THERE IS A CONCERN THAT A 15" DIA. WILL NOT BE ADEQUATE TO CONVEY THE ANTICIPATED FLOW.
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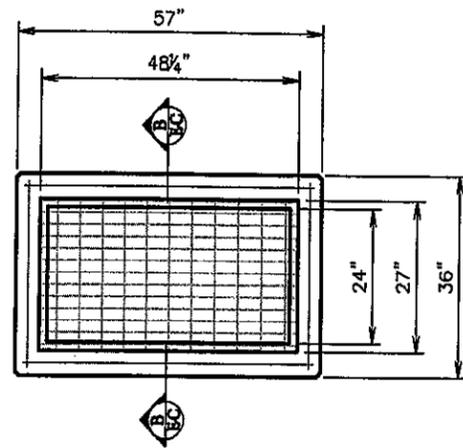
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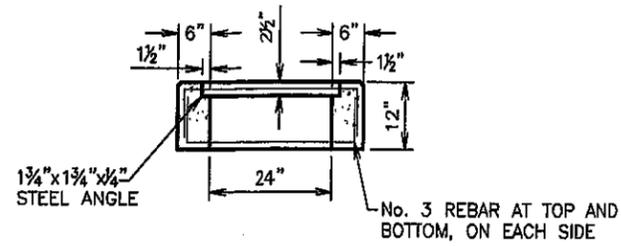
115 West 11th Street  
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**VERNON TOWNSHIP  
ROADSIDE DITCH CULVERT INSTALLATION**

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Drawn by: <b>ROBYN M. KEITH</b>	Date: <b>7/6/2011</b>
Scale: <b>NOT TO SCALE</b>	Drawing No.: <b>EXHIBIT B</b>



**PLAN VIEW**



**SECTION B-B**

**NOTES:**

1. PRE-CAST CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 psi @ 28 DAYS AND SHALL HAVE AN ENTRAINED AIR CONTENT BETWEEN 5% AND 6 1/2%.
2. ALL TOLERANCES SHALL BE  $\pm 1/4$ " UNLESS NOTED.
3. ALL REINFORCEMENT SHALL HAVE A MINIMUM 1 1/2" CONCRETE COVER.
4. ALL OUTSIDE CORNERS TO HAVE A 3/4" CHAMFER.
5. SEAL THE FRAME TO THE CONCRETE CATCH BASIN USING BUTYL BASED FLEXIBLE JOINT SEALANT.

**TYPE M CONCRETE INLET DETAIL**

NOT TO SCALE



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Scale: <b>NOT TO SCALE</b>	Drawing No.: <b>EXHIBIT C</b>