



Trench Installation  
HDPE INSTALLATION DETAIL

| PIPE DIAMETER | MIN. TRENCH WIDTH * |
|---------------|---------------------|
| 4"            | 21"                 |
| 6"            | 23"                 |
| 8"            | 26"                 |
| 10"           | 28"                 |
| 12"           | 30"                 |
| 15"           | 34"                 |
| 18"           | 39"                 |
| 24"           | 48"                 |
| 30"           | 56"                 |
| 36"           | 64"                 |
| 42"           | 72"                 |
| 48"           | 80"                 |
| 54"           | 88"                 |
| 60"           | 96"                 |

\*Trench centered on pipe

**NOTES:**

1. HDPE pipe is not approved for Public Storm Sewer systems.
2. HPDE pipe is approved for Private Storm Sewers from 15" up to 24" diameter pipe.
3. HPDE pipe is approved for Detention Facilities up to 60" diameter pipe.
4. All pipe systems shall be installed in accordance with ASTM D2321, "Standard practice for underground installation of thermoplastic pipe for sewers and other gravity flow applications", latest edition
5. Measures should be taken to prevent migration of native fines into backfill material when required.
6. **FOUNDATION:** Where the trench bottom is unstable, the contractor shall excavate to a depth required by the engineer and replace with suitable material as specified by the engineer. As an alternative and at the discretion of the design engineer, the trench bottom may be stabilized using Geotextile material.
7. **BEDDING:** Suitable material shall be ASTM Class IA or ASTM Class IB, KDOT PB-2 or KDOT PB-3 or similar crushed aggregate product as approved. The contractor shall provide documentation for material specification to engineer, unless otherwise noted by the engineer. Minimum bedding thickness shall be 4" for 4"-24" diameter pipe; 6" for 30"-60" diameter pipe.
8. **INITIAL BACKFILL:** Suitable material shall be ASTM Class IA or ASTM Class IB, KDOT PB-2 or KDOT PB-3 or similar crushed aggregate product as approved in the pipe zone extending not less than 6" above crown of pipe. The contractor shall provide documentation for material specification to engineer. Material shall be installed in accordance with ASTM D2321, latest edition. Install and compact in 6" maximum lifts.
9. **MINIMUM COVER:** Minimum cover, H, in non-traffic applications (grass or landscape areas) is 18" from top of pipe to ground surface. Additional cover may be required to prevent flotation. For traffic applications, minimum cover, H, is 18" up to 24" diameter pipe and 24" of cover for up to 60" diameter pipe, measured from top of pipe to bottom of flexible pavement or to top of rigid pavement.

**NOTE TO DESIGN PROFESSIONAL:**

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The design professional assumes all responsibility for verification that this supplemental design detail is suitable for use on any specific construction plan. By incorporation of this supplemental design detail into a construction plan, the design professional certifies that they have determined that this supplemental design detail is suitable for use on their specific construction plan.

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WEB SITE ADDRESS: <http://www.opkansas.org/Doing-Business/Construction-Details>

| REVISIONS:          |                      |
|---------------------|----------------------|
| 5/20/2011           |                      |
| 12/1/2012           | Revised Const. notes |
| RELATED ORDINANCES: |                      |
| OPMC Title 15       |                      |



PLANNING DEPARTMENT  
SUPPLEMENTAL DETAILS

HDPE INSTALLATION DETAIL

Year 2013 Edition