

Design Assumptions for Nebraska Base Drawing NE100-20-002 PVC Canopy Inlet

Revised: 04/03 Replaces: 5001-62

PVC Canopy Inlet

This installation does not lend itself to applications where there may be a need to draw down the permanent pool. When a Nebraska Department of Natural Resources (NDNR) permit is required to construct the project, consult with an engineer.

The pipe strength requirements based on maximum fill height are determined by criteria contained in FOTG Pond (378) or Underground Outlet (620) standards.

If the PI of the soil in the embankment is less than 15, the inlet area will be armor coated or have a concrete apron.

Recommend that the inlet extends a minimum of 1 ft. beyond earthfill.

Exposed PVC pipe may be painted to protect it from ultraviolet deterioration.

Instructions for
NE Base Drawing NE100-20-002
PVC Canopy Inlet

Fill in the following data fields to automatically fill in the necessary data fields on the drawing.

Title block

Title line(s)

Subtitle line

County, State

Sheet number of

Who / When

Designed

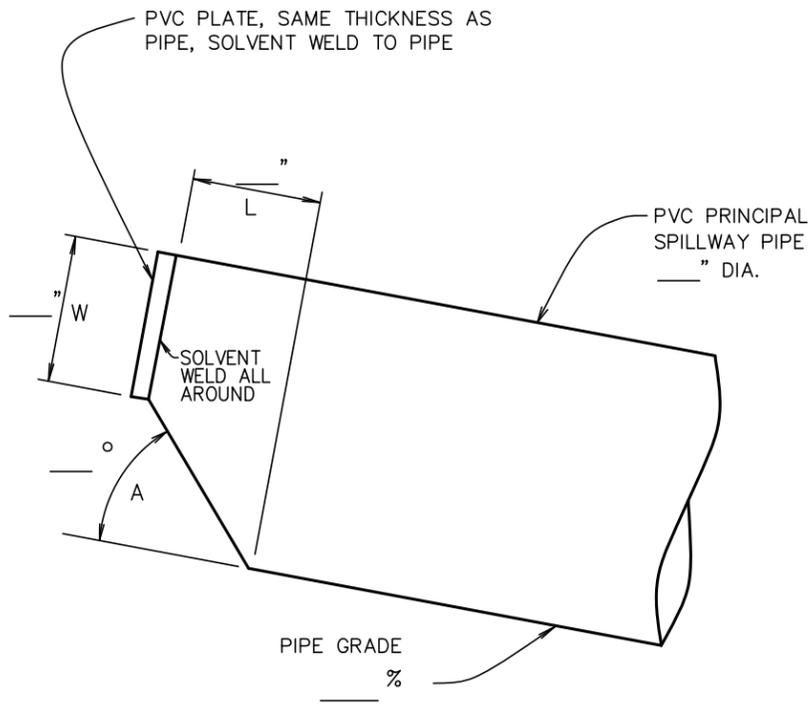
Drawn

Checked

Fill data directly on drawing

Left click yellow boxes on drawing to mark with X as required.
Left click blue data fields to enter required data.

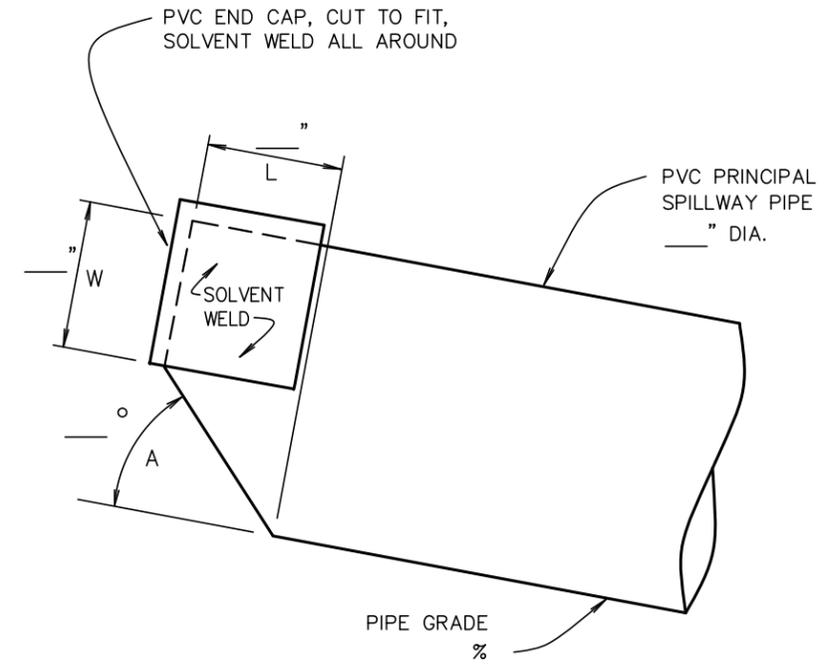
Nebraska Standard Drawing
NE100-20-002 Revised: 04/03 Replaces: 5001-62



DETAIL OF CANOPY INLET WITH PLATE

DIMENSION TABLE

| PIPE DIAMETER (INCHES) | PIPE GRADE (PERCENT) | W (INCHES) | L (INCHES) | A (DEGREES) |
|------------------------|----------------------|------------|------------|-------------|
| 6 | 1-5 | 1-1/8 | 3-1/4 | 56 |
| | 5.1-15 | 1-1/4 | 4-7/8 | 45 |
| | 15.1-25 | 1-5/8 | 6-5/8 | 33 |
| 8 | 1-5 | 1-1/2 | 4-3/8 | 56 |
| | 5.1-15 | 1-5/8 | 6-3/8 | 45 |
| | 15.1-25 | 2-1/8 | 8-3/4 | 33 |
| 10 | 1-5 | 1-7/8 | 5-3/8 | 56 |
| | 5.1-15 | 2 | 8 | 45 |
| | 15.1-25 | 2-5/8 | 11 | 33 |
| 12 | 1-5 | 2-1/4 | 6-1/2 | 56 |
| | 5.1-15 | 2-3/8 | 9-5/8 | 45 |
| | 15.1-25 | 3-1/4 | 13-1/4 | 33 |
| 15 | 1-5 | 2-7/8 | 8-1/2 | 56 |
| | 5.1-15 | 3 | 12 | 45 |
| | 15.1-25 | 4 | 16-1/2 | 33 |



DETAIL OF CANOPY INLET WITH PARTIAL END CAP

NOTES:

- SDR _____ PRESSURE RATED PVC PIPE SHALL CONFORM TO ASTM STANDARD D2241, SCHEDULE 40 AND 80 SHALL CONFORM TO ASTM STANDARD D1785.
- THE LONGEST SECTION OF PIPE IN THE INSTALLATION SHALL NOT EXCEED 20 FEET IN LENGTH.
- PVC PIPE SHALL BE JOINED BY SOLVENT WELDED OR DOUBLE GASKETED COUPLING. THE STRENGTH OF THE JOINT OR COUPLING SHALL BE CONSISTENT WITH THE STRENGTH OF THE PIPE BEING USED.
- THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED SO THE LOWER ONE-SIXTH OF THE CIRCUMFERENCE WILL BEAR AGAINST ORIGINAL OR COMPACTED EARTH.
- THE CANOPY MAY BE FABRICATED USING EITHER A PVC PLATE OR PVC END CAP.

REQUIREMENT TABLE

_____ LIN.FT., _____" DIA., PVC PIPE WITH CANOPY INLET AND SOLVENT WELDED OR GASKETED JOINTS.

MINIMUM STRENGTH REQUIRED

| | |
|--------------------------|--------------------------------|
| <input type="checkbox"/> | SDR 17, 250 P.S.I., ASTM D2241 |
| <input type="checkbox"/> | SDR 21, 200 P.S.I., ASTM D2241 |
| <input type="checkbox"/> | SDR 26, 160 P.S.I., ASTM D2241 |
| OR | |
| <input type="checkbox"/> | SCHEDULE 80, ASTM D1785 |
| <input type="checkbox"/> | SCHEDULE 40, ASTM D1785 |

EQUIVALENT SDR RATINGS FOR SCHEDULE 40 & 80 PVC PIPE (ASTM D1785)

| DIAMETER (INCHES) | SCHEDULE 40 SDR EQUIVALENT | SCHEDULE 80 SDR EQUIVALENT |
|-------------------|----------------------------|----------------------------|
| 6" | 24 | 15.5 |
| 8" | 27 | 17.5 |
| 10" | 30 | 18 |
| 12" | 31.5 | 19 |
| 15" | --- | --- |

Date _____

Designed _____

Drawn _____

Checked _____

Approved _____



CAD file: NE100-20-002.dwg

Drawing No. _____