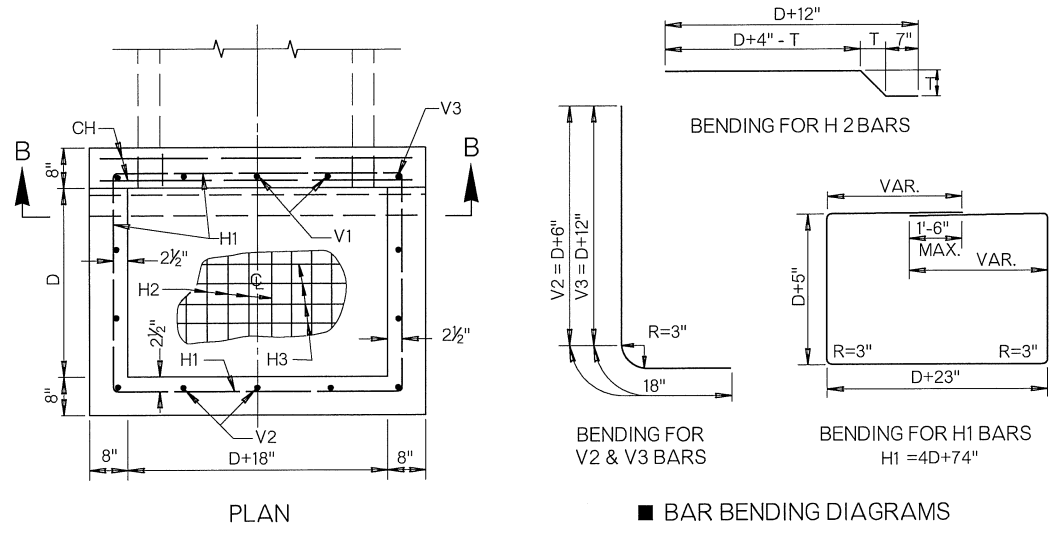
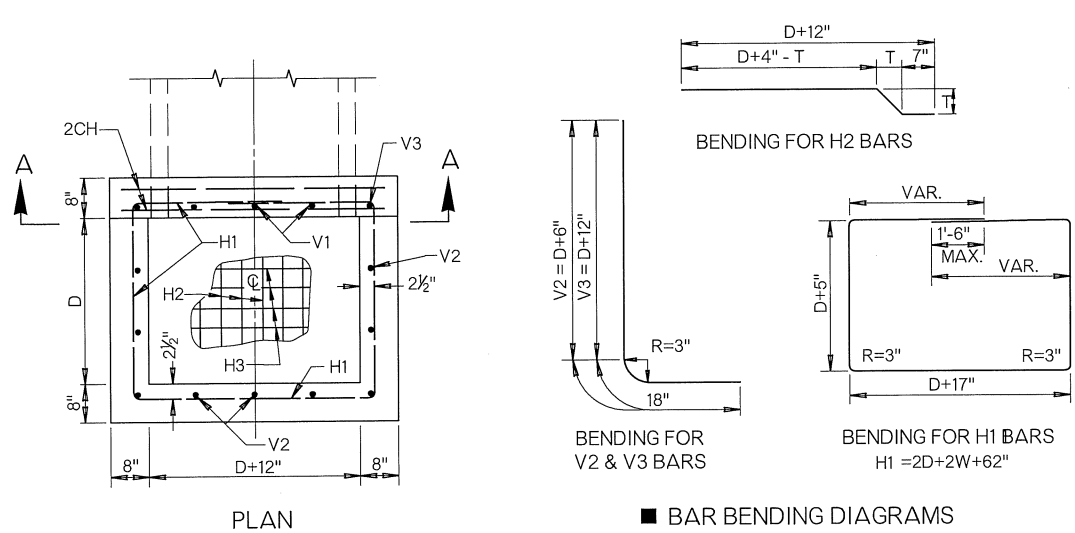
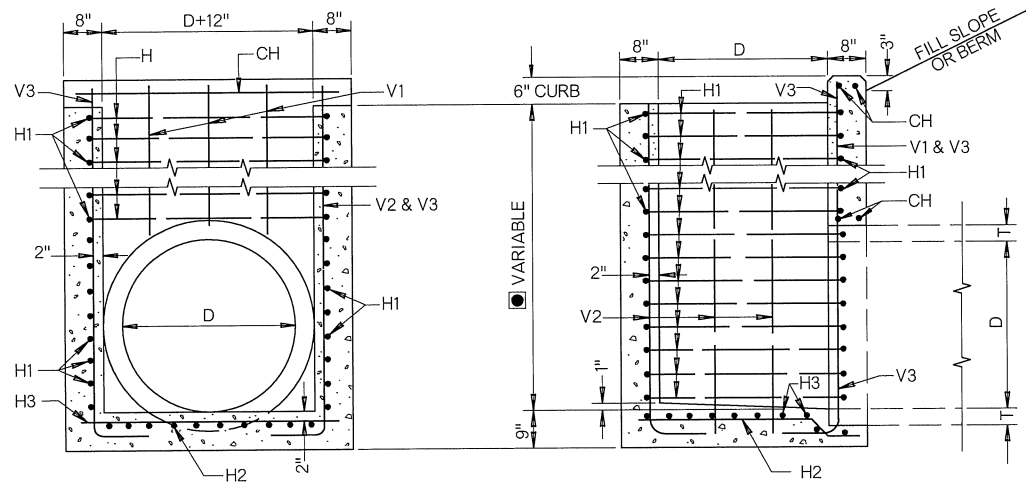


TYPICAL GRATE DETAIL

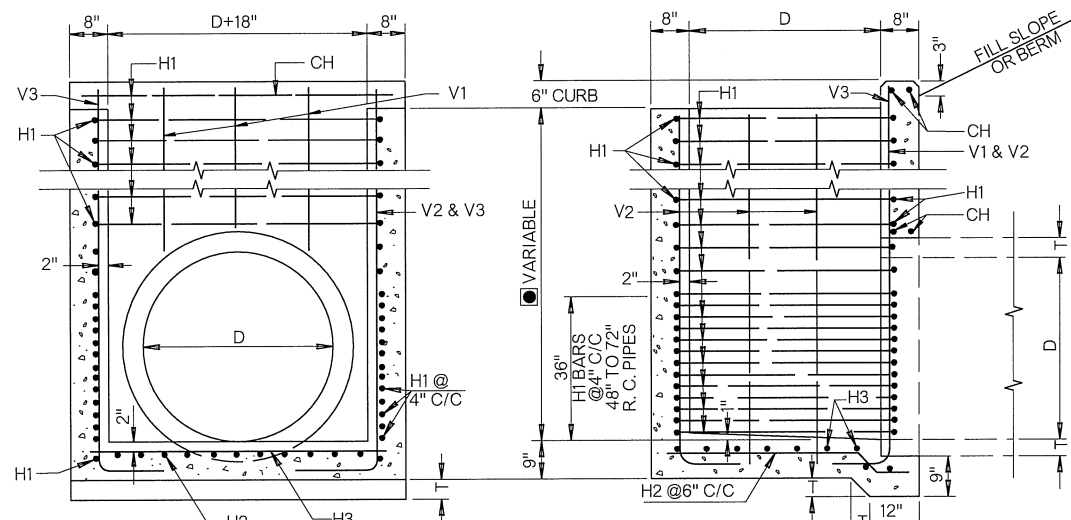


SECTION A-A

SECTION ON C

DROP INLET FOR 18" TO 42" REINF. CONCRETE PIPE

■ DIMENSION FOR STD. HEIGHT DROP INLET TO BE (D+T+3")



SECTION B-B

SECTION ON C

DROP INLET FOR 48" TO 72" REINF. CONCRETE PIPE

GENERAL NOTES

- ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2009 ODOT STANDARD SPECIFICATIONS.
- HORIZONTAL REINFORCING BARS SHALL BE PLACED AT 6" CENTERS EXCEPT AS SHOWN FOR 48" TO 72" R.C. PIPE. VERTICAL BARS ARE TIE BARS SPACED AS SHOWN.
- MAXIMUM DEPTHS OF DROP INLET FOR 48" TO 72" PCP SHALL BE AS FOLLOWS:  
48" RCP - 18'-0"  
54" RCP - 16'-0"  
66" RCP - 12'-0"  
72" RCP - 10'-0".
- TOTAL QUANTITIES AS SHOWN IN TABLE ARE COMPUTED TO TOP OF PIPE AND INCLUDE CURB. FOR DROP INLETS OF GREATER DEPTH, MULTIPLY THE FIGURE IN PER FOOT COLUMN BY THE HEIGHT FROM TOP OF PIPE TO TOP OF DROP INLET AND ADD THE RESULT TO THE QUANTITY IN THE PRECEDING COLUMN.
- INLET TOP OPENING SHALL HAVE 3" x 7.58 LBS/FT. STD. WEIGHT STEEL PIPE, GALVANIZED, SCHEDULE 40, PIPE SAFETY GRATES INSTALLED PERPENDICULAR TO THE DIRECTION OF TRAFFIC AT 12" (MAXIMUM) CENTERS WITH THE COST OF PIPE SAFETY GRATES & ALL HARDWARE NEEDED FOR THE INSTALLATION TO BE INCLUDED IN THE PRICE BID FOR THE INLET.
- PIPE GRATE ENDS SHALL BE HELD DOWN WITH 1/2" x 5 1/2" GALVANIZED BOLT, WASHER & NUT MEETING THE REQUIREMENTS OF ASTM A325. BOLT THREADS, 1 3/4", SHALL REMAIN EXPOSED FOR INSTALLING GRATE.
- BAR BENDING DIAGRAMS AND DIMENSIONS FOR DESIGNS 1 THROUGH 10, AS SHOWN THIS SHEET, ARE FOR STANDARD DEPTH DROP INLETS.
- ARCH PIPES MAY BE USED INSTEAD OF ROUND PIPES AT THE DISCRETION OF THE ENGINEER.

| DIMENSIONS REINFORCING STEEL & QUANTITIES |                       |                 |                            |                     |       |                 |       |                 |       |                     |       |                     |       |                 |       |                  |      |                                              |                                        |                                              |                                        |                             |
|-------------------------------------------|-----------------------|-----------------|----------------------------|---------------------|-------|-----------------|-------|-----------------|-------|---------------------|-------|---------------------|-------|-----------------|-------|------------------|------|----------------------------------------------|----------------------------------------|----------------------------------------------|----------------------------------------|-----------------------------|
| DESIGN<br>NUMBER                          | DIMENSIONS            |                 |                            | REINFORCING STEEL   |       |                 |       |                 |       |                     |       |                     |       |                 |       | CLASS A CONCRETE |      | REINFORCING STEEL                            |                                        | PIPE<br>GRATES                               |                                        |                             |
|                                           | D<br>DIAM.<br>OF PIPE | AREA<br>OF PIPE | T=<br>THICKNESS<br>OF WALL | #4 BARS<br>STRAIGHT |       | #4 BARS<br>BENT |       | #4 BARS<br>BENT |       | #4 BARS<br>STRAIGHT |       | #4 BARS<br>STRAIGHT |       | #4 BARS<br>BENT |       | #4 BARS<br>BENT  |      | TOTAL TO<br>TOP OF PIPE<br>INCLUDING<br>CURB | PER FOOT<br>OF<br>ADDITIONAL<br>HEIGHT | TOTAL TO<br>TOP OF PIPE<br>INCLUDING<br>CURB | PER FOOT<br>OF<br>ADDITIONAL<br>HEIGHT | NO.<br>OF<br>PIPE<br>GRATES |
|                                           |                       |                 |                            | NO.                 | LGTH. | NO.             | LGTH. | NO.             | LGTH. | NO.                 | LGTH. | NO.                 | LGTH. | NO.             | LGTH. |                  |      |                                              |                                        |                                              |                                        |                             |
|                                           |                       |                 |                            |                     |       |                 |       |                 |       |                     |       |                     |       |                 |       | EA               | IN   |                                              |                                        |                                              |                                        |                             |
| IN                                        | SQ.FT                 | IN              | EA                         | IN                  | EA    | IN              | EA    | IN              | EA    | IN                  | EA    | IN                  | EA    | IN              | EA    | IN               | CY   | CY/VF                                        | LBS                                    | LBS/VF                                       | EA                                     |                             |
| 1                                         | 18"                   | 1.77            | 2½"                        | 4                   | 29"   | 5               | 134"  | 7               | 30"   | 7                   | 26"   | 2                   | 12"   | 6               | 42"   | 2                | 48"  | 0.58                                         | 0.21                                   | 77                                           | 24                                     | 2                           |
| 2                                         | 24"                   | 3.14            | 3"                         | 4                   | 35"   | 6               | 158"  | 8               | 36"   | 8                   | 32"   | 3                   | 13"   | 6               | 48"   | 2                | 54"  | 0.86                                         | 0.26                                   | 104                                          | 29                                     | 2                           |
| 3                                         | 30"                   | 4.91            | 3½"                        | 4                   | 41"   | 7               | 182"  | 9               | 42"   | 9                   | 38"   | 4                   | 14"   | 7               | 54"   | 2                | 60"  | 1.20                                         | 0.30                                   | 138                                          | 35                                     | 3                           |
| 4                                         | 36"                   | 7.07            | 4"                         | 4                   | 47"   | 8               | 206"  | 10              | 48"   | 10                  | 44"   | 4                   | 16"   | 8               | 60"   | 2                | 66"  | 1.58                                         | 0.35                                   | 176                                          | 42                                     | 3                           |
| 5                                         | 42"                   | 9.62            | 4½"                        | 4                   | 53"   | 9               | 230"  | 11              | 54"   | 11                  | 50"   | 5                   | 18"   | 10              | 66"   | 2                | 72"  | 2.11                                         | 0.40                                   | 223                                          | 49                                     | 4                           |
| 6                                         | 48"                   | 12.57           | 5"                         | 4                   | 59"   | 15              | 254"  | 12              | 60"   | 12                  | 56"   | 5                   | 19"   | 10              | 72"   | 2                | 78"  | 2.60                                         | 0.45                                   | 333                                          | 52                                     | 4                           |
| 7                                         | 54"                   | 15.90           | 5½"                        | 4                   | 65"   | 16              | 278"  | 13              | 66"   | 13                  | 62"   | 6                   | 21"   | 10              | 78"   | 2                | 84"  | 3.18                                         | 0.49                                   | 385                                          | 60                                     | 5                           |
| 8                                         | 60"                   | 19.63           | 6"                         | 4                   | 71"   | 17              | 302"  | 14              | 72"   | 14                  | 68"   | 6                   | 22"   | 11              | 84"   | 2                | 90"  | 3.79                                         | 0.54                                   | 448                                          | 66                                     | 5                           |
| 9                                         | 66"                   | 13.76           | 6½"                        | 4                   | 77"   | 18              | 326"  | 15              | 78"   | 15                  | 74"   | 7                   | 24"   | 12              | 90"   | 2                | 96"  | 4.47                                         | 0.59                                   | 517                                          | 74                                     | 6                           |
| 10                                        | 72"                   | 28.27           | 7"                         | 4                   | 83"   | 19              | 350"  | 16              | 84"   | 16                  | 80"   | 7                   | 25"   | 14              | 96"   | 2                | 102" | 5.21                                         | 0.64                                   | 594                                          | 83                                     | 6                           |

| BASIS OF PAYMENT |                                      |      |
|------------------|--------------------------------------|------|
| ITEM NO.         | ITEM                                 | UNIT |
| 611 (G)          | INLET CDI RCP DES. ●                 | EA   |
| 611 (H)          | ADD'L. DEPTH IN INLET CDI RCP DES. ● | VF   |

● DESIGN NUMBER SHALL BE SPECIFIED.