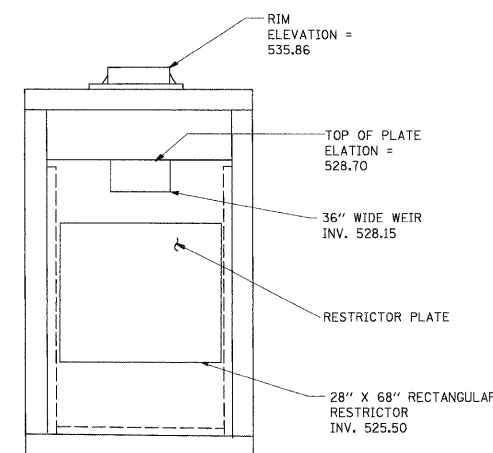
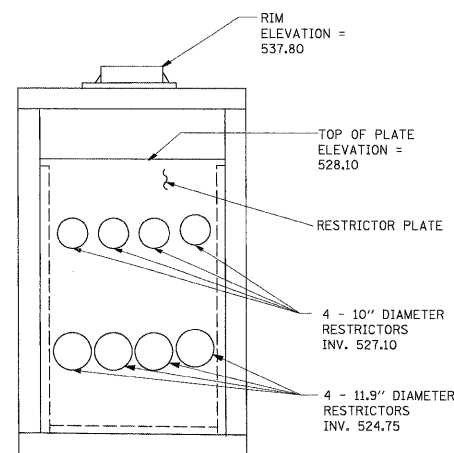
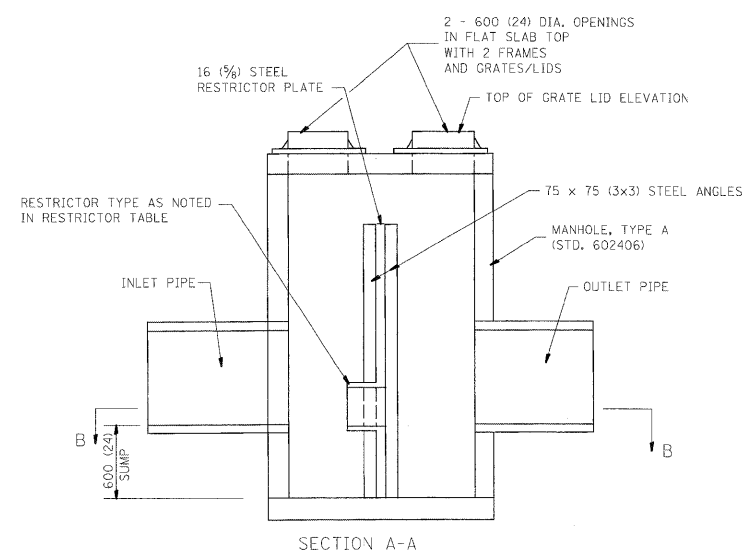
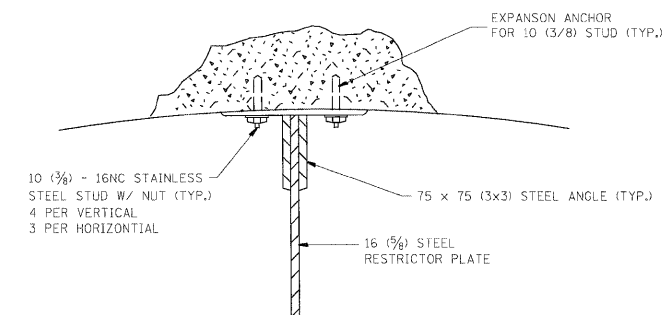
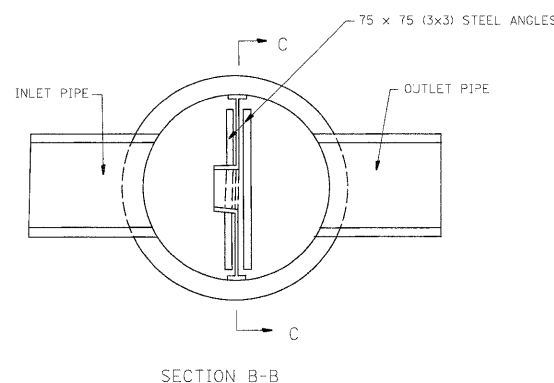
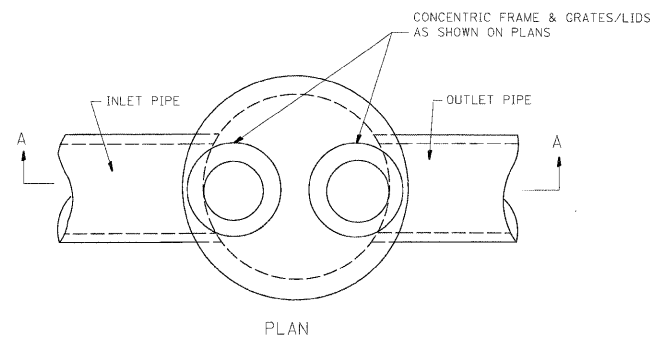
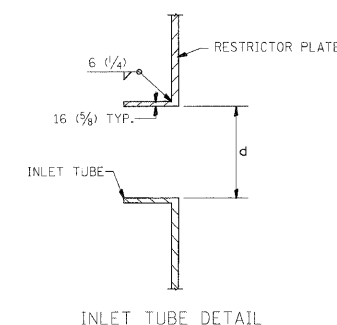


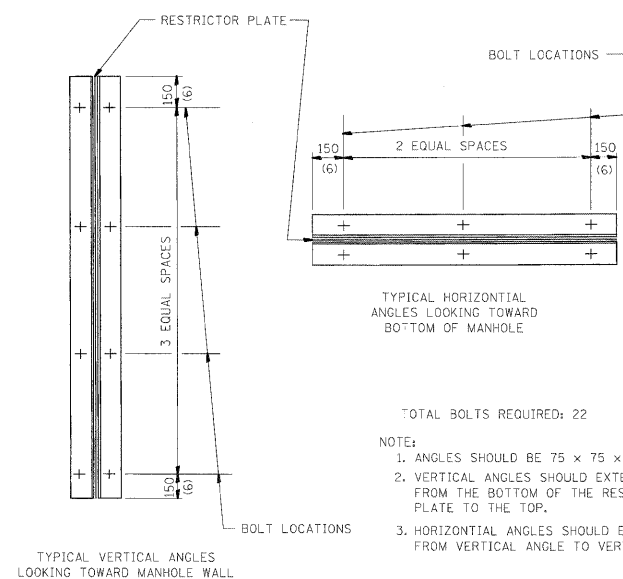
| | | | | |
|---------------------|----------|------------------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| STA. | TO STA. | | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |



- NOTES:
1. ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
 2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.
 3. BASIS OF PAYMENT: "MANHOLES, TYPE A, 1.8m (6FT.) DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH



| STRUCTURE NUMBER | STATION | MANHOLE DIAMETER | FRAME AND GRATE | RESTRICTOR TYPE | INSIDE LOWER RESTRICTOR DIAMETER OR SIZE mm (in.) (d) | INVERT OF LOWER RESTRICTOR | INSIDE UPPER RESTRICTOR DIAMETER OR SIZE mm (in.) (d) | INVERT OF UPPER RESTRICTOR | ELEVATION OF TOP OF PLATE OVERFLOW |
|------------------|---------|------------------|-----------------|-----------------|---|----------------------------|---|----------------------------|------------------------------------|
| S26 POND 1E | 3028+81 | 6' | 2 TY 1F CL | 5 | 28"x68" RECTANGLE | 525.50 | 36" WIDE WEIR | 528.15 | 528.70 |
| S19 POND 1W | 2027+14 | 6' | 2 TY 1F CL | 5 | 4-11.9" DIA. | 524.75 | 4-10" DIA. | 527.10 | 528.10 |



- TOTAL BOLTS REQUIRED: 22
- NOTE:
1. ANGLES SHOULD BE 75 x 75 x 10 (3x3x3/8)
 2. VERTICAL ANGLES SHOULD EXTEND FROM THE BOTTOM OF THE RESTRICTOR PLATE TO THE TOP.
 3. HORIZONTAL ANGLES SHOULD EXTEND FROM VERTICAL ANGLE TO VERTICAL ANGLE.

| RESTRICTOR TYPE | | | | | |
|-----------------------|-------------|---------------------|--------------------|--------------------|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| RE-ENTRANT TUBE | SHARP EDGED | SQUARE EDGED | RE-ENTRANT TUBE | SQUARE EDGED | ROUNDED |
| | | | | | |
| LENGTH: 1/2 TO 1 DIA. | | STREAM CLEARS SIDES | LENGTH: 2-1/2 DIA. | LENGTH: 2-1/2 DIA. | |
| C=.52 | C=.61 | C=.61 | C=.73 | C=.82 | C=.98 |

VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

ILLINOIS DEPARTMENT OF TRANSPORTATION

MANHOLE WITH RESTRICTOR PLATE

| REVISIONS | |
|-----------|----------|
| NAME | DATE |
| R. SHAH | 09/09/94 |
| R. SHAH | 10/25/94 |
| E. GOMEZ | 08/28/00 |
| M. GOMEZ | 01/08/01 |

SCALE: NONE DRAWN BY
DATE **DATE** CHECKED BY
BD600-04 (BD-12)

FILE NAME =
D:\60\CL31-SHT-DRAIN20.dgn

| | | |
|------------------------|-----------------|-----------|
| USER NAME = TKLuegel | DESIGNED - PKT | REVISED - |
| PLOT SCALE = 1:50 | DRAWN - PKT | REVISED - |
| PLOT DATE = 12/11/2009 | CHECKED - CL | REVISED - |
| | DATE - 12/18/09 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RESTRICTOR MANHOLE DETAIL

SCALE: NONE SHEET NO. 20 OF 22 SHEETS STA. TO STA.

| | | | | |
|---|--------------|--------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 55 | (99-1&2)AC-3 | WILL | 524 | 163 |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT | | | CONTRACT NO. 60C31 | |

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FINAL