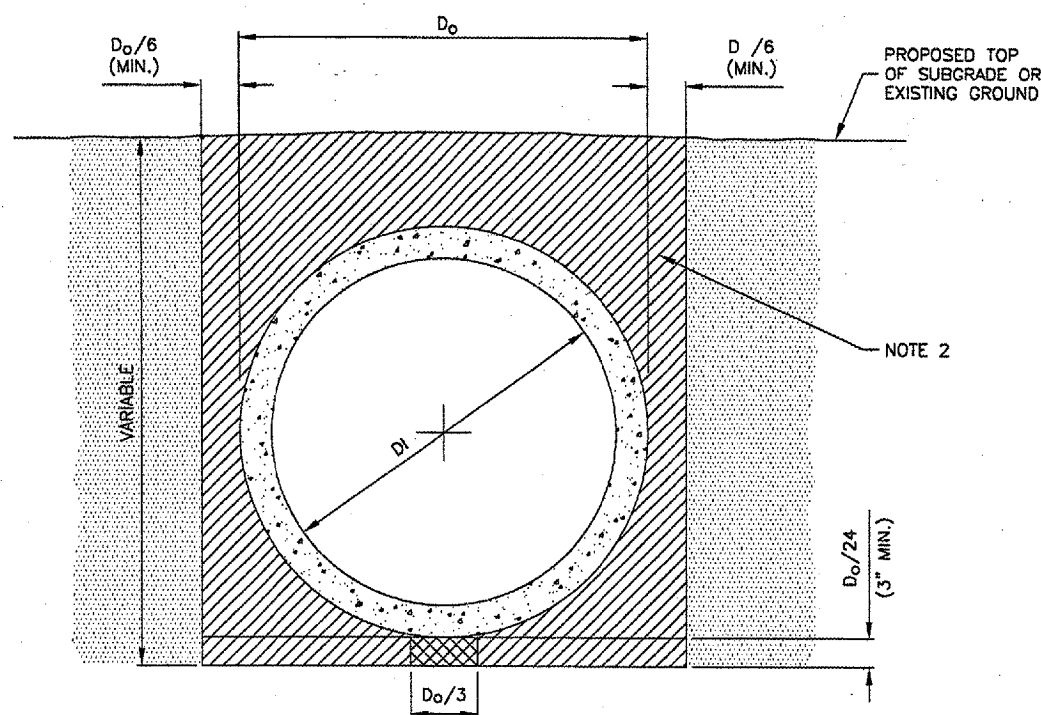


STANDARD TRENCH INSTALLATION
 NON-PAVED AREA
 N.T.S.



STANDARD TRENCH INSTALLATION
 PROPOSED PAVED AREAS
 N.T.S.

LEGEND

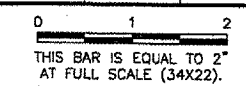
- DRAINAGE CONDUIT MATERIAL-CONCRETE
- MIDDLE BEDDING LOOSELY PLACED UNCOMPACTED BEDDING
- HAUNCH AND OUTER BEDDING COMPACTION- TO ENGINEER'S SATISFACTION & BEDDING FACTORS FOR THE INDIRECT DESIGN METHOD (DESIGN DATA 40), AMERICAN CONCRETE PIPE ASSOCIATION.
- LOWER SIDE AND OVERFILL COMPACTION- SAME AS EMBANKMENT REQUIREMENTS

D_0 PIPE OUTSIDE DIAMETER
 D_1 PIPE INSIDE DIAMETER

- NOTES**
- BEDDING SHOWN IS IN ACCORDANCE WITH "STANDARD EMBANKMENT INSTALLATIONS", STANDARD INSTALLATION & BEDDING FACTORS FOR THE INDIRECT DESIGN METHOD (DESIGN DATA 40), AMERICAN CONCRETE PIPE ASSOCIATION.
 - BACKFILL TO EXTEND 3' BEYOND EDGES OF PROPOSED PAVEMENT.

REVISIONS

NUMBER	BY	DATE



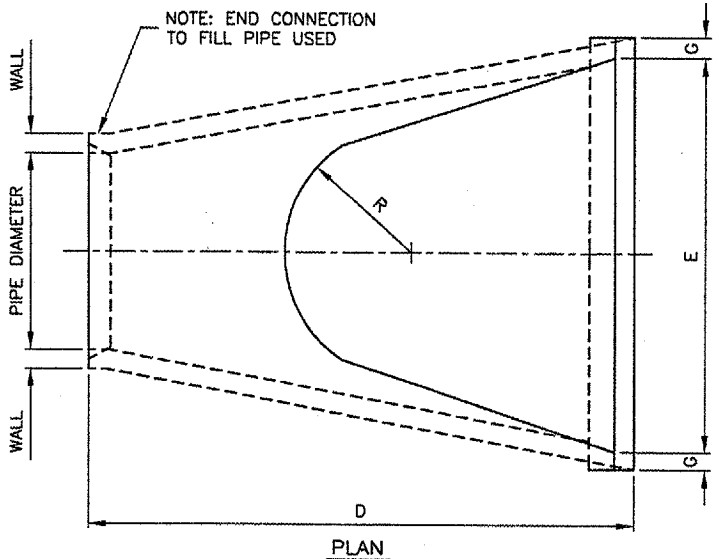
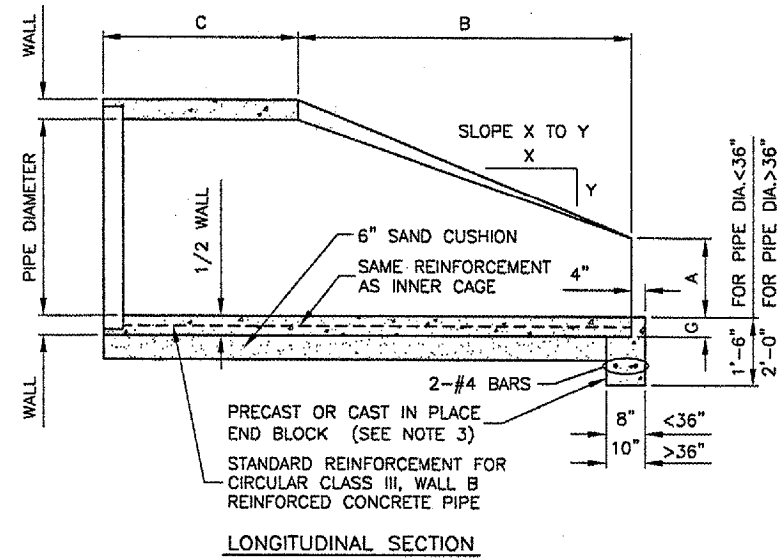
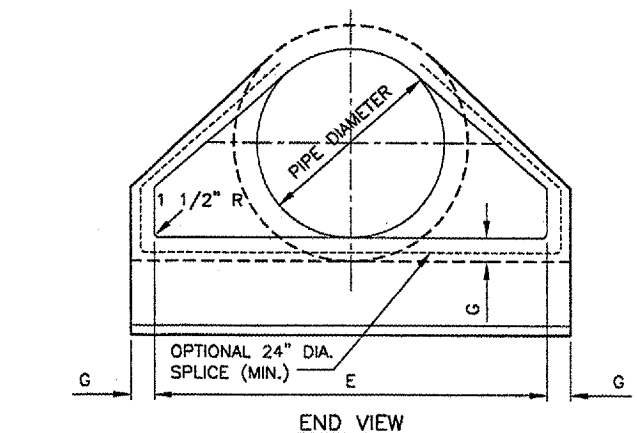
DIMENSIONS - TABLE 1

PIPE DIA.	APPROX WT.(lbs.)	WALL	A	B	C	D	E	G	R	SLOPE
12"	530	2"	4"	2'-0"	4'-0 7/8"	6'-0 7/8"	2'-0"	2"	9"	3:1
15"	740	2 1/4"	6"	2'-3"	3'-10"	6'-1"	2'-6"	2 1/4"	11"	3:1
18"	990	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2 1/2"	12"	3:1
21"	1280	2 3/4"	9"	2'-11"	3'-2"	6'-1"	3'-6"	2 3/4"	13"	3:1
24"	1520	3"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	3"	14"	3:1
27"	1930	3 1/4"	10 1/2"	4'-0"	2'-1 1/2"	6'-1 1/2"	4'-6"	3 1/4"	14 1/2"	3:1
30"	2190	3 1/2"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3 1/2"	15"	3:1
33"	3200	3 3/4"	1-1 1/2"	4'-10 1/2"	3'-3 1/4"	8'-1 3/4"	5'-6"	3 3/4"	17 1/2"	3:1
36"	4100	4"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	4"	20"	3:1
42"	5380	4 1/2"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	4 1/2"	22"	3:1
48"	6550	5"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	5"	22"	3:1
54"	8240	5 1/2"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"	5 1/2"	24"	2.4:1
60"	8730	6"	2'-11"	5'-0"	3'-3"	8'-3"	8'-0"	5"	*	2:1
66"	10710	6 1/2"	2'-6"	6'-0"	2'-3"	8'-3"	8'-6"	5 1/2"	*	2:1
72"	12520	7"	3'-0"	6'-6"	1'-9"	8'-3"	9'-0"	6"	*	1.86:1
78"	14770	7 1/2"	3'-0"	7'-6"	1'-9"	9'-3"	9'-6"	6 1/2"	*	1.82:1
84"	18160	8"	3'-0"	7'-6 1/2"	1'-9"	9'-3 1/2"	10'-0"	6 1/2"	*	1.5:1

* RADIUS AS FURNISHED BY MANUFACTURER.

NOTES

- PRECAST CONCRETE FLARED END SECTIONS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-170 CLASS III, WALL B REINFORCED CONCRETE PIPE.
- PRECAST CONCRETE FLARED END SECTION FOR PIPE DIAMETER REQUIRED SHALL BE AS INDICATED ON DETAIL PLAN FOR EACH INDIVIDUAL INSTALLATION.
- THE END BLOCK SHALL BE PLACED PRIOR TO THE INSTALLATION OF THE FLARED END SECTION. THE END BLOCK SHALL BE BACKFILLED IN ACCORDANCE WITH ITEM 701.



PRECAST REINFORCED CONCRETE FLARED END SECTION
 (I.D.O.T. STD. NO. 542301)
 N.T.S.

**SPRINGFIELD AIRPORT AUTHORITY
 ABRAHAM LINCOLN CAPITAL AIRPORT
 SPRINGFIELD, ILLINOIS**

**CONSTRUCT RUNWAY 13/31 RSA IMPROVEMENTS
 DRAINAGE DETAILS 1**

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 License No. 184-000613

DESIGN BY: RLV
 DRAWN BY: DPA
 CHECKED BY: RLV
 APPROVED BY: RLV
 DATE: 04/24/07
 JOB No: 05035-03
 ILL. PROJ. NO. SPI-3488
 AIP PROJ. NO. 3-17-0096-42
 SHEET 25 OF 79 SHEETS