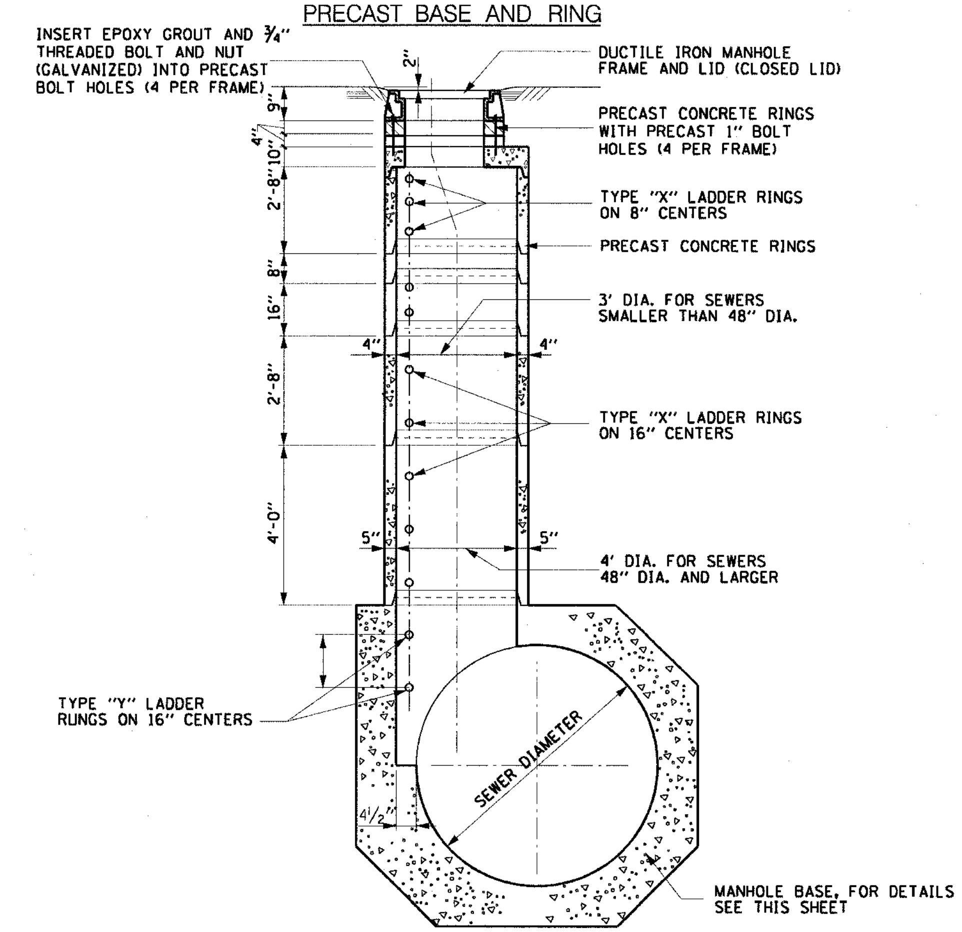
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
90/94	2021-922PT.1-AC	COOK	460	99
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

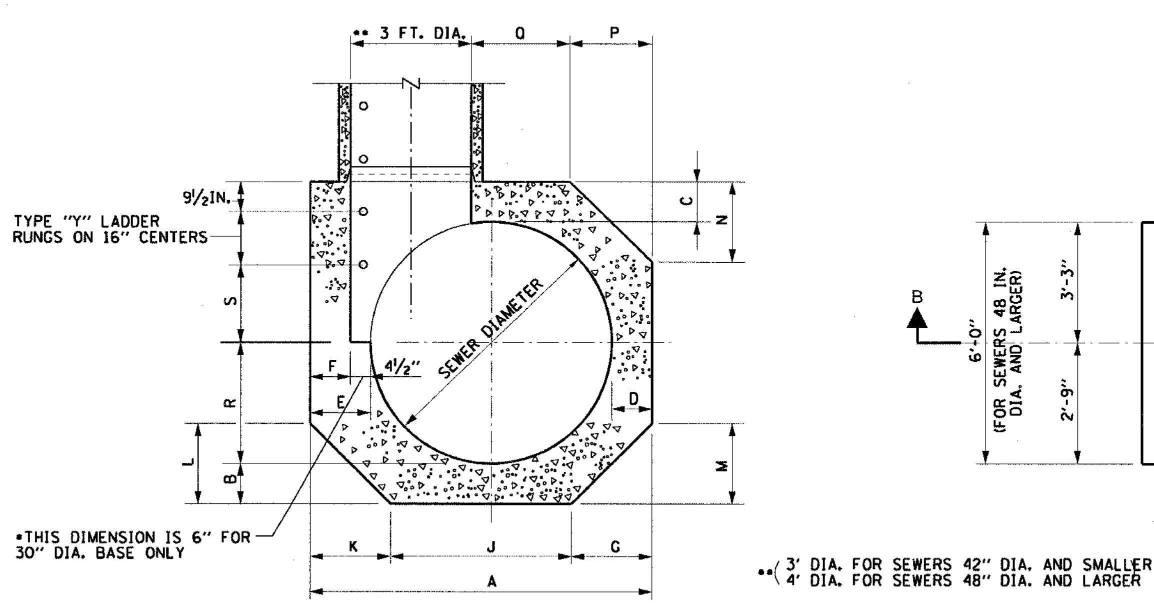
62693

TYPE "A" MANHOLE PRECAST BASE AND RING



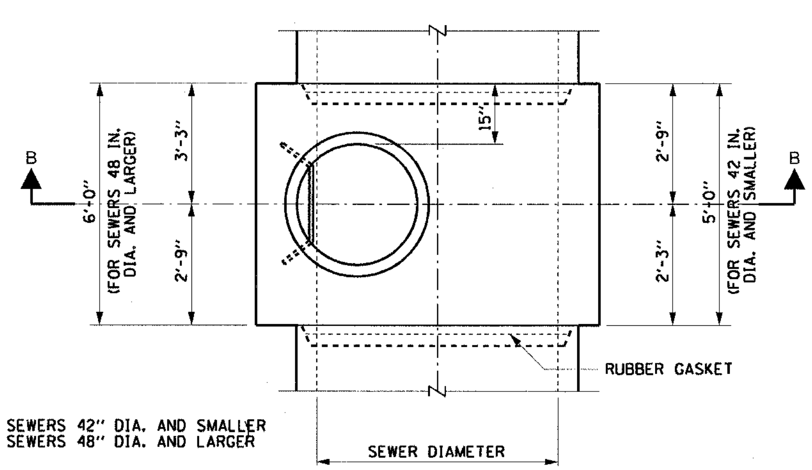
DETAIL OF PRECAST RING

SEWER DIA.	DIMENSION OF PRECAST MANHOLE BASE																No."Y" RUNGS
	A (FT-IN)	B	C	D	E	F	G	J	K	L	M	N	P	Q	R	S	
120"	12'-4½"	12"	12"	12"	16½"	12"	4'-0"	4'-0"	4'-4½"	2'-7½"	2'-5"	3'-6"	3'-6"	3"-10½"	2'-0"	18½"	6
108"	11'-4½"	12"	12"	12"	16½"	12"	3'-8"	3'-8"	4'-½"	2'-5"	2'-2"	3'-2½"	3'-2½"	3'-2"	2'-0"	6½"	6
102"	10'-10½"	12"	12"	12"	16½"	12"	3'-6"	3'-6"	3'-10½"	2'-4"	2'-1"	3'-0"	3'-0"	2'-10½"	2'-0"	16½"	5
96"	10'-2½"	11"	11"	11"	15½"	11"	3'-3"	3'-3"	3'-8½"	2'-3"	23"	2'-10½"	2'-10½"	2'-5"	2'-0"	9½"	5
90"	9'-8½"	11"	11"	11"	15½"	11"	3'-1"	3'-1"	3'-6½"	2'-1½"	22"	2'-9"	2'-9"	2'-0½"	2'-0"	19½"	4
84"	9'-1/2"	10"	10"	10"	14½"	10"	2'-11"	2'-11"	3'-2½"	23"	21"	2'-5½"	2'-5½"	1'-9"	2'-0"	12½"	4
78"	8'-6½"	10"	10"	10"	14½"	10"	2'-9"	2'-9"	3'-½"	22"	20"	2'-4½"	2'-4½"	1'-4"	2-0"	6½"	4
72"	7'-10½"	9"	9"	9"	13½"	9"	2'-6"	2'-6"	2'-10½"	21"	18"	2'-2¼"	2'-2¼"	11¼"	2-0"	15½"	3
66"	7'-4½"	9"	9"	9"	13½"	9"	2'-4"	2'-4"	2'-8½"	19½"	17"	2'-½"	2'-½"	7"	2'-0"	9½"	3
60"	6'-8½"	8"	8"	8"	12½"	8"	2'-1 ½"	2'-1"	2'-6"	18"	15"	1'-5½"	1'-5½"	7"	2'-0"	18½"	2
54"	6'-2½"	8"	8"	8"	12½"	8"	23½"	23"	2'-4"	17"	14"	11½"	11½"	7"	2'-0"	12½"	2
48"	5'-6½"	7"	7"	7"	11½"	7"	20½"	21"	2'-1"	15"	12½"	4½"	4½"	7"	2'-0"	21½"	1
42"	5'-1/2"	7"	7"	7"	11½"	7"	18½"	19"	23"	14"	11"	-	-	17½"	21"	18½"	1
36"	4'-4½"	6"	6"	6"	10½"	6"	16"	16"	20½"	12½"	9½"	-	-	10½"	18"	14½"	1
30"	4'-0"	6"	6"	6"	12"	6"	14"	14"	20"	12"	8½"	-	-	6"	15"	11½"	1
24"	4'-0"	6"	6"	12"	12"	6"	16"	16"	16"	9½"	9½"	-	-	6"	12"	8½"	1



SECTION B-B

DETAIL OF PRECAST BASE



PLAN

GENERAL NOTES:

1. PRECAST CONCRETE RINGS SHALL CONFORM TO A.S.T.M. DESIGNATION C 76 FOR REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV, WALL B.
2. STANDARD LENGTHS OF RINGS ARE: 4 FT., 2 FT.-8 IN., 1 FT.-4 IN., 8 IN., AND 4 IN. COLLAR.
3. WHERE THE 8 IN. RING IS INDICATED IN THE TABULATION, A SEPARATE ONE PIECE CONE 3FT.-4IN. IN HEIGHT MAY BE USED AS AN ALTERNATE.
4. THE EIGHT (8)IN. RING, WHEN USED SHALL ALWAYS BE PLACED DIRECTLY UNDER THE CONE.
5. WHEN AN EIGHT (8)IN. RING IS USED, OMIT THE TOP LADDER RUNG WHERE THE DIMENSION FROM TOP OF CONE TO TOP OF CASTING IS LESS THAN 16 IN.
6. THE KEY AND KEYWAY FOR PRECAST MANHOLE BASE TO SUIT THE CONCRETE PIPE AND RISER RINGS AS FURNISHED.
7. CAST TWO (2)IN. HOLES IN MANHOLE RISER; INSERT TYPE "X" RUNGS AS SHOWN IN APPROPRIATE HOLES AND PLUG WITH EMBECO GROUT. FILL UNUSED HOLES.
8. SIX (6)IN. MINIMUM GRANULAR EMBEDMENT UNDER ALL PRECAST MANHOLE BASES.
9. ARRANGE MANHOLE SECTIONS SO AS TO PREVENT CUTTING JOINTS WITH ENTERING PIPE.
10. BACKFILL WITH EXCAVATED MATERIAL UNLESS UNDER OR WITHIN 2 FT. OF EXISTING OR PROPOSED PAVEMENT, SHOULDER, OR STRUCTURE IN WHICH CASE, USE TRENCH BACKFILL.
11. USE 12 IN. BASE WHEN BASE IS CAST AS INTEGRAL PART OF THE BARREL.
12. ALL FRAMES AND LIDS SHALL BE NEENAH FOUNDRY CO. No. R-3492, 100,000 LB. RATING, ASPHALT PAINTED. (ON LID PROVIDE "STORM SEWER" IN 2 IN. CAPITAL LETTERS).
13. USE RUBBER GASKETS IN ALL STRUCTURE JOINTS.
14. FOR REINFORCED STEEL DETAILS OF MANHOLE BASES SEE SHEET NOS. 90 AND 91.

CTE ENGINEERS
CONSOER TOWNSEND ENVIRODYNE ENGINEERS, INC.
303 EAST WACKER DRIVE, SUITE 600
CHICAGO ILLINOIS 60601-5212, PHONE: (312) 938-0300

4 OF 8

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 90/94 (DAN RYAN EXPRESSWAY)
63rd ST TO 59th ST (FRONTAGE ROAD & RAMPS)

DRAINAGE DETAILS
TYPE "A" MANHOLE
FOR SEWERS 24" AND LARGER

SCALE: NONE DRAWN BY: JB
DATE: October 29, 2004 CHECKED BY: EEY

10/21/2004 02:07:35 PM