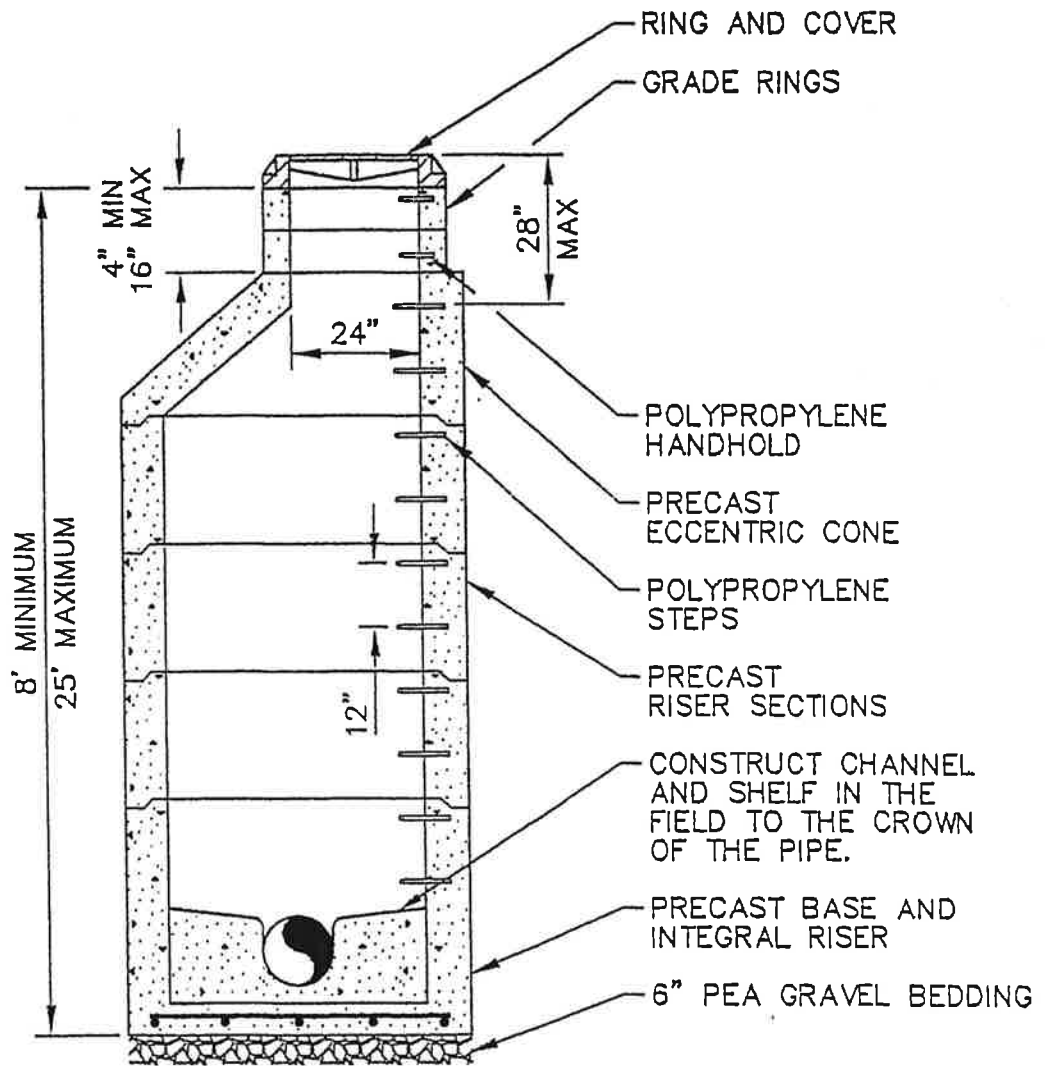


**LIST OF DRAWINGS**

**CHAPTER 5 - SEWER**

<u>TITLE</u>	<u>DRAWING</u>
Type 1 Manhole	5-01
Shallow Manhole	5-02
Manhole Collar	5-03
Clean-Out	5-04
Outside Drop Inlet	5-04A
Air Release Assembly	5-05
Pig Port	5-06
Terminus Pig Launch Port	5-07
6" Pressure Sustaining Device	5-08
L.S. Emergency Bypass Connection	5-09
Typical Side-Sewer Connection	5-10



MANHOLE - TYPE 1  
48" AND 54"  
**DETAIL**

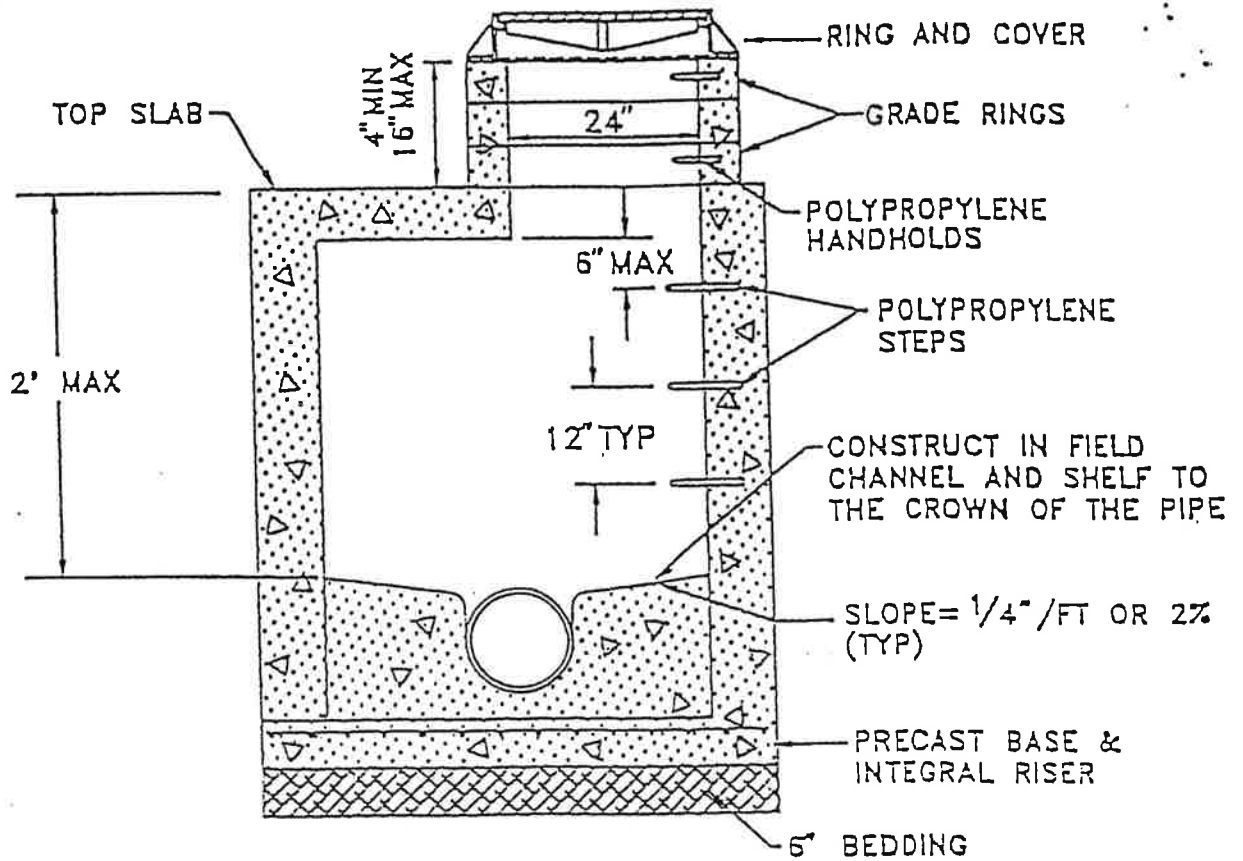
NO SCALE

NOTES:

1. CONNECTIONS TO MANHOLE SHALL BE MADE BY KOR-N-SEAL BOOT, SAND COLLAR OR A-LOCK.
2. FLAT TOP MANHOLES UNDER 3 FEET MAY BE USED UPON APPROVAL BY CITY ENGINEER.
3. SEE WSDOT STANDARD PLANS, FIGURE 3-23g FOR FURTHER SPECIFICATIONS.

CITY OF AIRWAY HEIGHTS DEPARTMENT OF PUBLIC WORKS			
<b>MANHOLE-TYPE 1</b> <b>48" AND 54"</b>			
APPROVED BY		DATE	
CITY ENGINEER			
OWN	CKD	DATE	FILE
DGE		3-24-94	5-01

REF \_\_\_\_\_ NAME \_\_\_\_\_



**NOTES:**

1. PRECAST MANHOLES SHALL MEET THE REQUIREMENTS OF ASTM C478. JOINTS SHALL BE RUBBER GASKETED CONFORMING TO ASTM C443 AND SHALL BE GROUTED FROM THE INSIDE. LIFT HOLES SHALL BE GROUTED FROM THE OUTSIDE AND INSIDE OF THE MANHOLE.
2. STEPS IN MANHOLE SHALL HAVE 6" MINIMUM CLEARANCE. HANDHOLES IN ADJUSTMENT SECTION SHALL HAVE 3" MINIMUM CLEARANCE. THE FIRST STEP OR HANDHOLD SHALL BE A MAXIMUM OF 12" FROM THE TOP OF THE COVER.
3. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM.
4. CONNECTION TO MANHOLE SHALL BE MADE BY KOR-N-SEAL BOOT, SAND COLLAR OR A-LOCK.
5. SEE DETAIL 7-3 FOR MANHOLE COLLAR INSTALLATION.
6. A SEWER GUARD SHALL BE INSTALLED IN ANY MANHOLE SUBJECT TO FLOODING.

CITY OF AIRWAY HEIGHTS  
DEPARTMENT OF PUBLIC WORKS

**SHALLOW  
MANHOLE**

APPROVED BY  
CITY ENGINEER

DATE

DWN

OXD

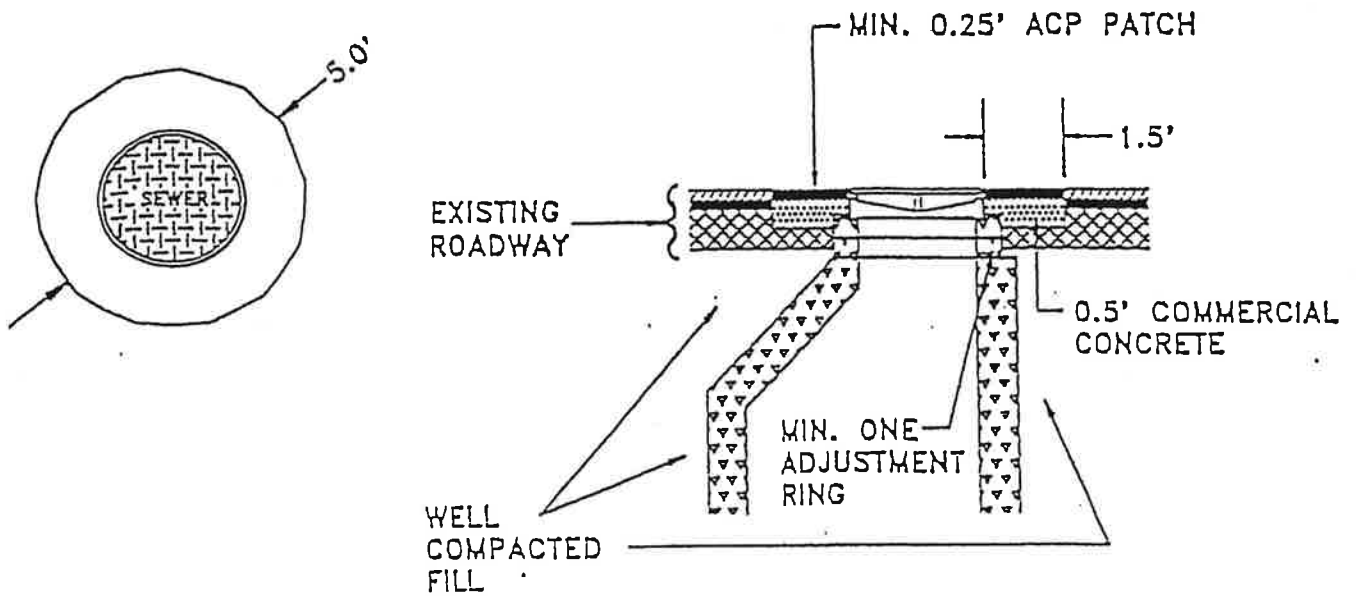
DATE

5/24/04

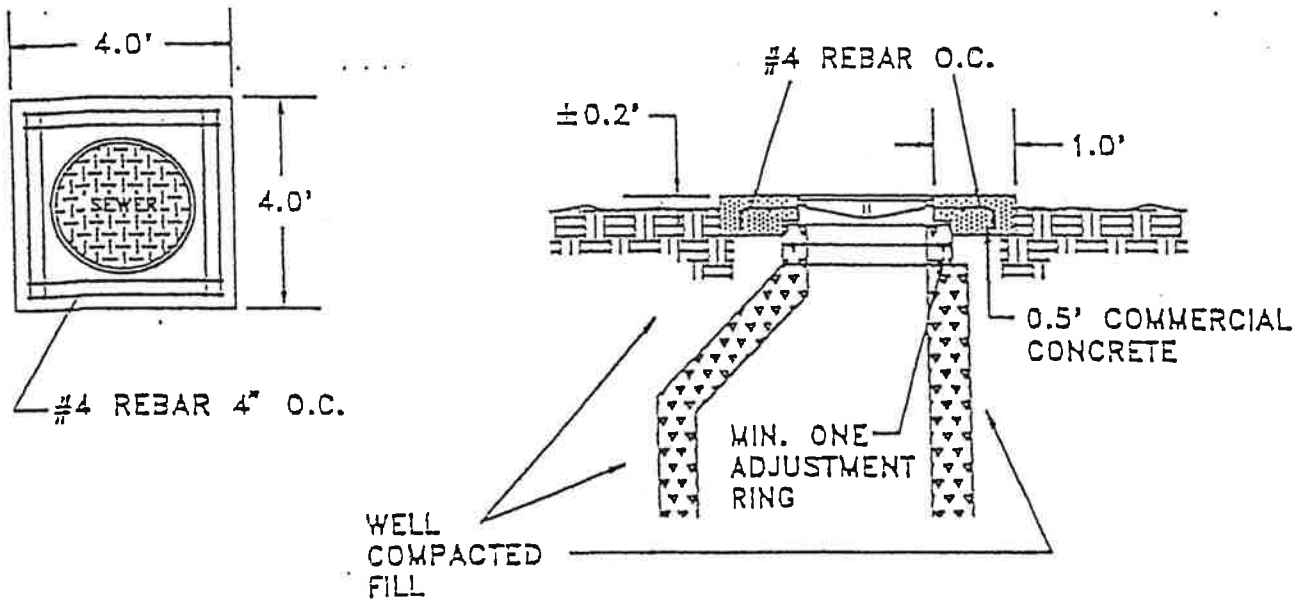
FILE

FIG 5-02

# MANHOLE IN ASPHALT



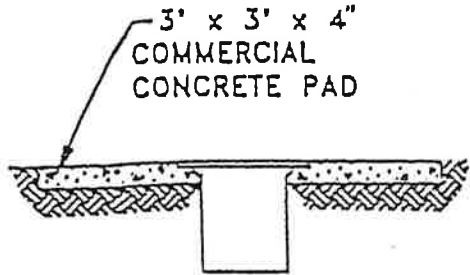
# MANHOLE OUTSIDE ASPHALT



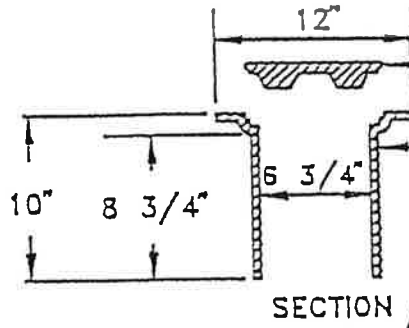
**NOTE:**

1. ON MANHOLE OUTSIDE ASPHALT ADD REINFORCING STEEL AS SHOWN ABOVE. DEFORMED BAR TO MEET ASTM A615 GRADE 50  $F_y=50,000$  P.S.I.

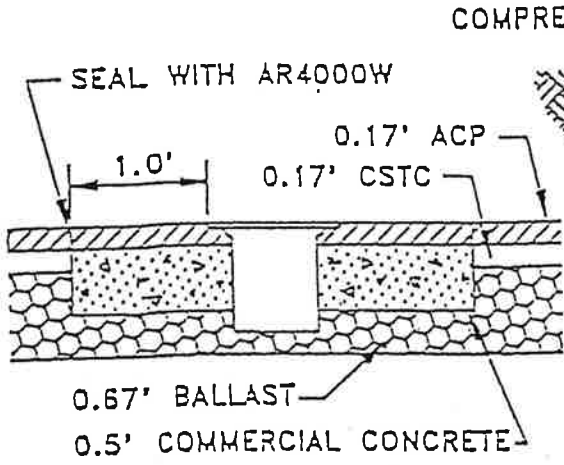
CITY OF AIRWAY HEIGHTS DEPARTMENT OF PUBLIC WORKS			
<b>MANHOLE COLLAR</b>			
APPROVED BY CITY ENGINEER		DATE	
DWN	DXS	6/24/94	FILE FIG 5-03



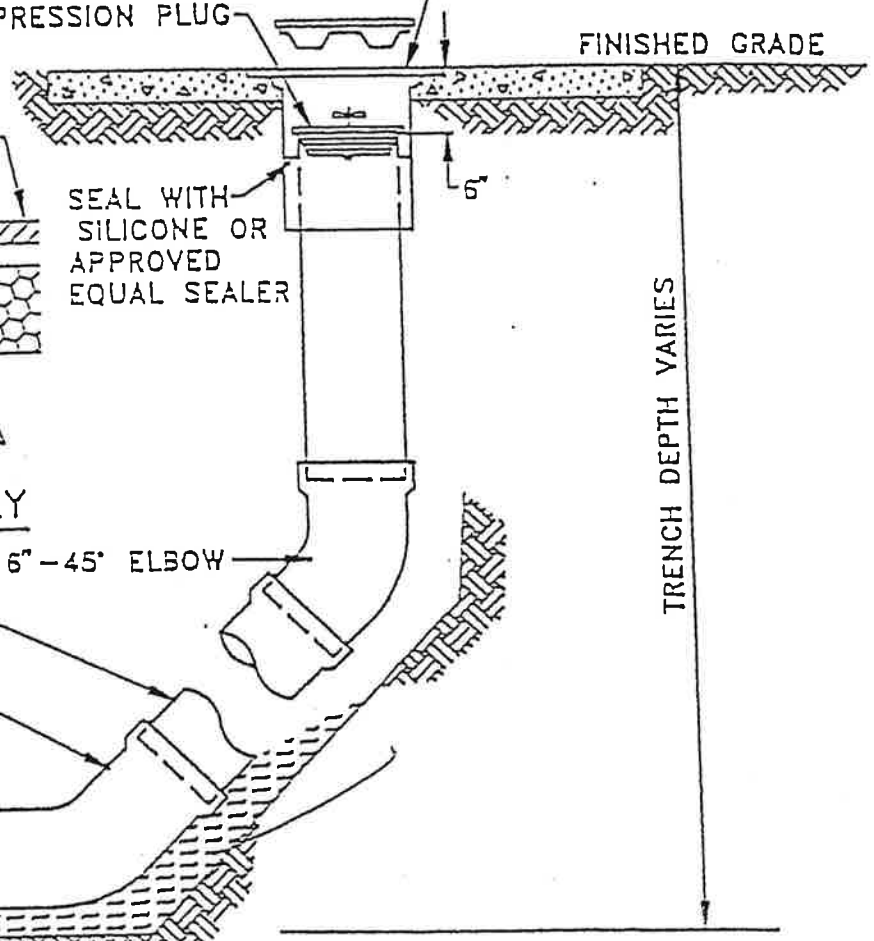
OUTSIDE PAVED AREA



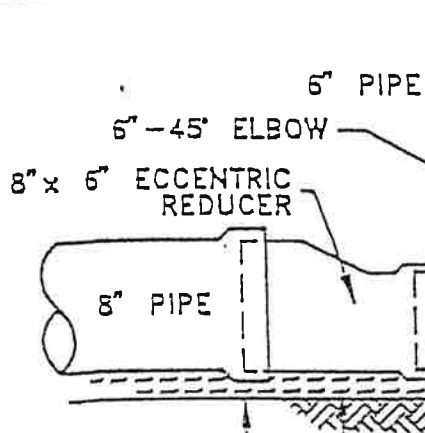
RECESSED HANDLE TYPE  
COVER  
INLAND FOUNDRY #248  
VALVE BOX WITH "LACEY  
SEWER" CAST IN LID



INSIDE PAVED ROADWAY



TRENCH DEPTH VARIES



TRENCH BOTTOM  
BEDDING AS REQUIRED

NOTE:  
ALL SEWER PIPE SHALL BE ASTM 3034  
SDR 35.

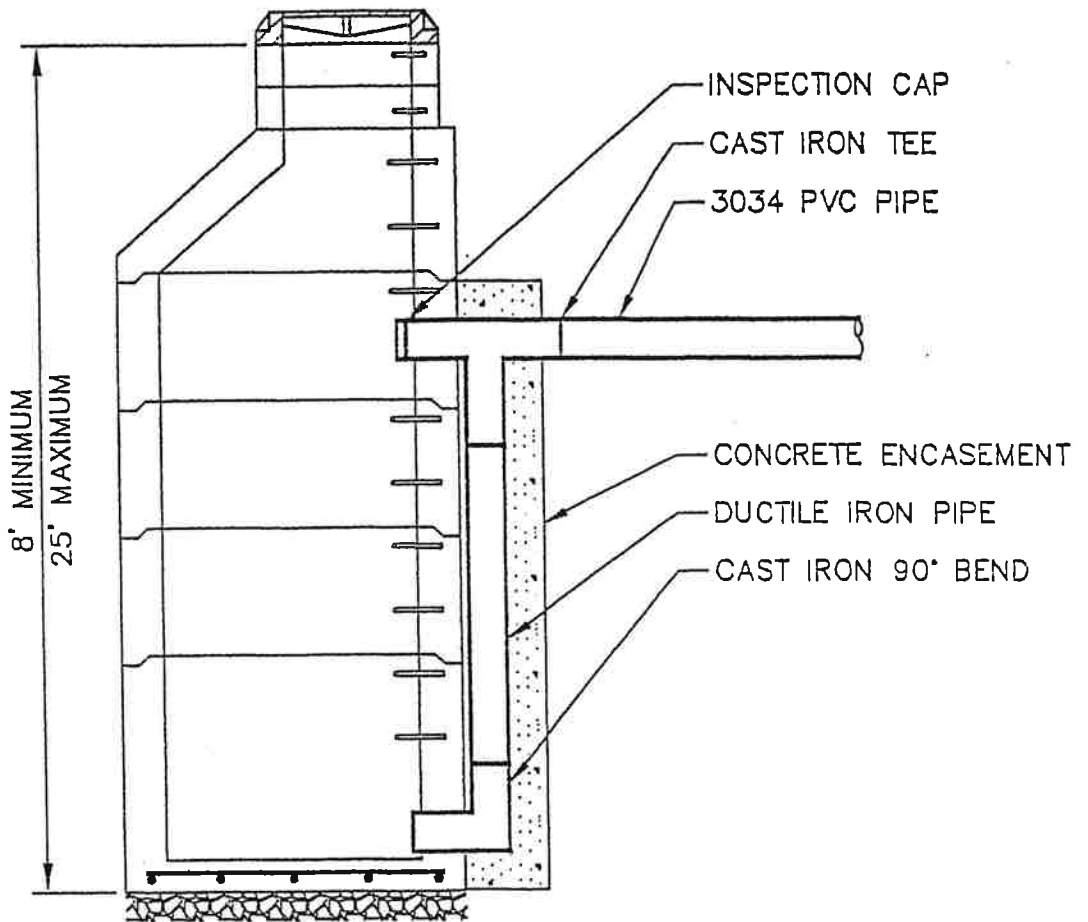
CITY OF AIRWAY HEIGHTS  
DEPARTMENT OF PUBLIC WORKS  
CLEAN-OUT  
DETAIL

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

REF

DWG NO. 000

DATE FILE  
8/24/94 FIG 5-0



OUTSIDE DROP INLET

DETAIL

NO SCALE

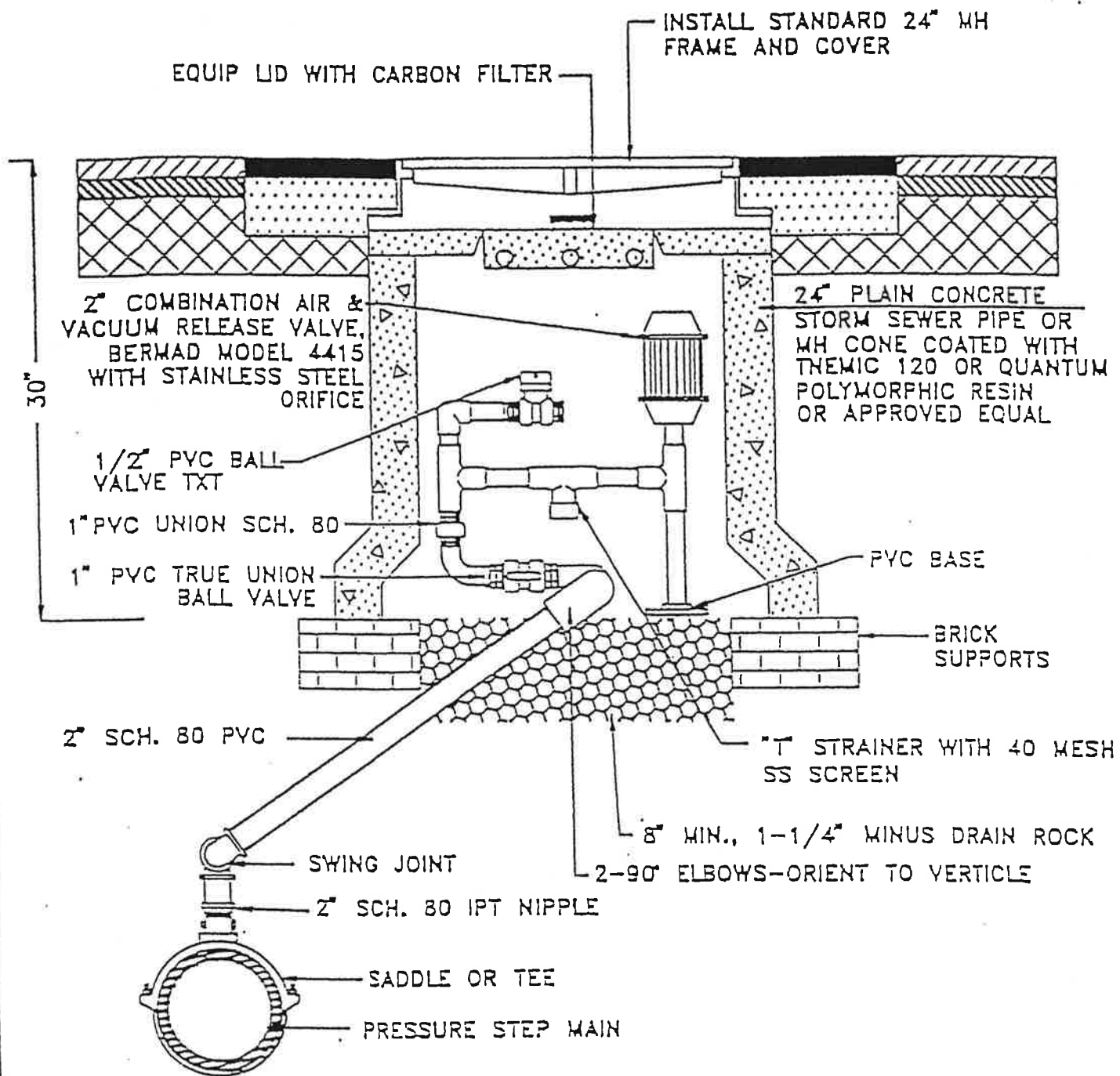
CITY OF AIRWAY HEIGHTS  
DEPARTMENT OF PUBLIC WORKS

OUTSIDE  
DROP INLET

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

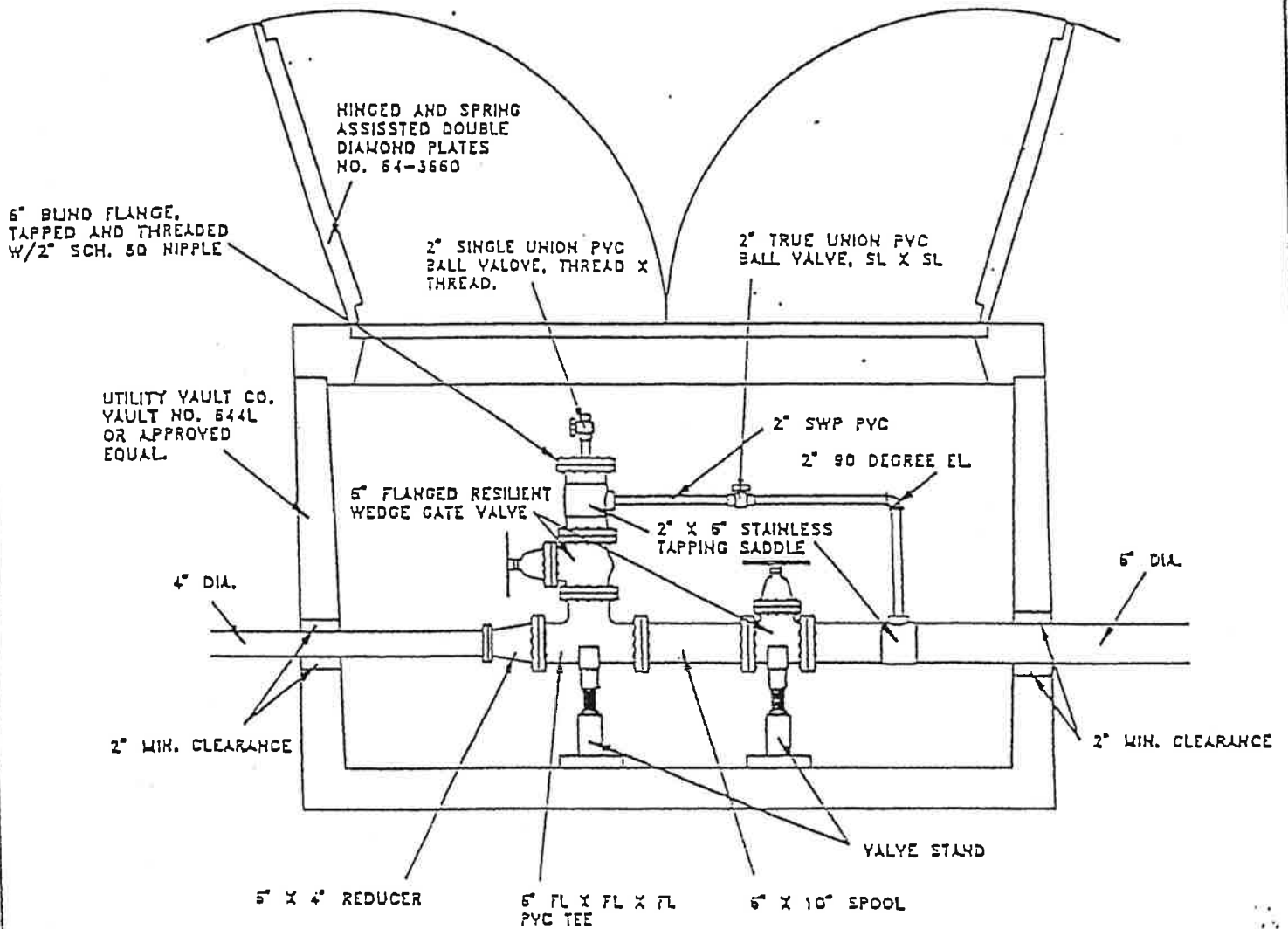
DWN	DGE	CKD	DATE	FILE
			3-24-34	5-34A

REF NAME



NOTE:  
 1. LOCATE AIR RELEASE ASSEMBLY IN SIDEWALK WHEN POSSIBLE.

CITY OF AIRWAY HEIGHTS DEPARTMENT OF PUBLIC WORKS			
AIR RELEASE ASSEMBLY			
APPROVED BY	DATE	DATE	FILE
CAN	9/24/94		73 5-05



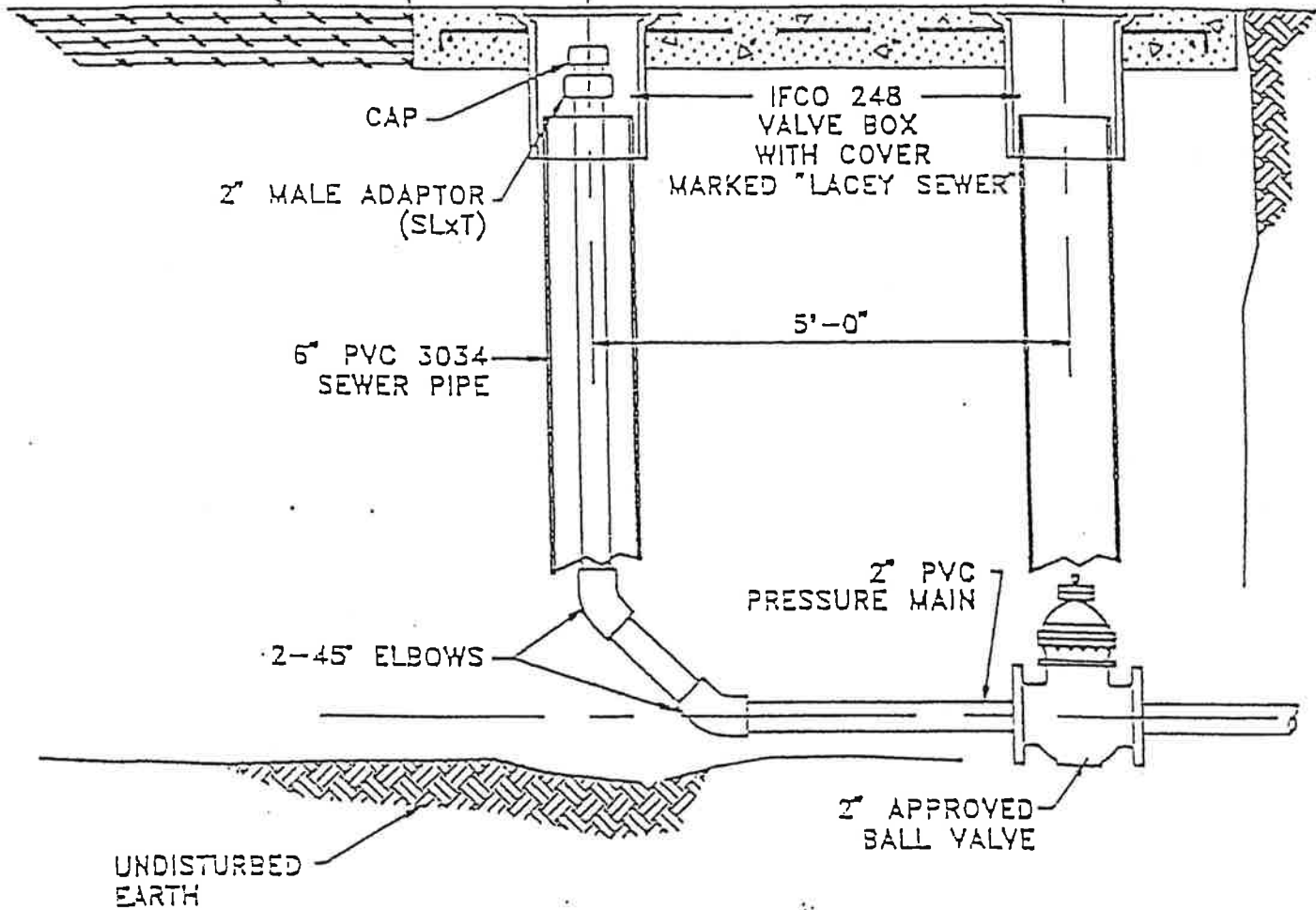
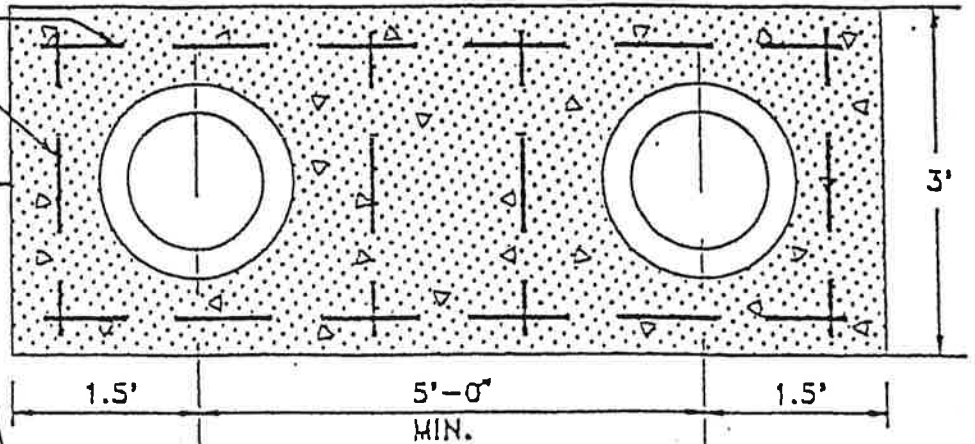
CITY OF AIRWAY HEIGHTS:	
DEPARTMENT OF PUBLIC WORKS	
PIG PORT DETAIL	
APPROVED BY	DATE
CITY ENGINEER	
DWA	DKD
DATE	FILE
6/24/94	FIG 5-06



#4 REBAR TO MEET  
ASTM A615 GRADE  
60 FY=6000PSI

CLASS 'B' CONCRETE  
PAD - 8' x 3' x 4"  
(IF OUTSIDE PAVED  
ROADWAY)

PAVEMENT



IFCO 248  
VALVE BOX  
WITH COVER  
MARKED "LACEY SEWER"

2" MALE ADAPTOR  
(SLxT)

6" PVC 3034  
SEWER PIPE

2" PVC  
PRESSURE MAIN

2-45° ELBOWS

2" APPROVED  
BALL VALVE

UNDISTURBED  
EARTH

CITY OF AIRWAY HEIGHTS  
DEPARTMENT OF PUBLIC WORKS

TERMINUS  
PIG LAUNCH PORT

APPROVED BY  
CITY ENGINEER

DATE

DATE

NO.

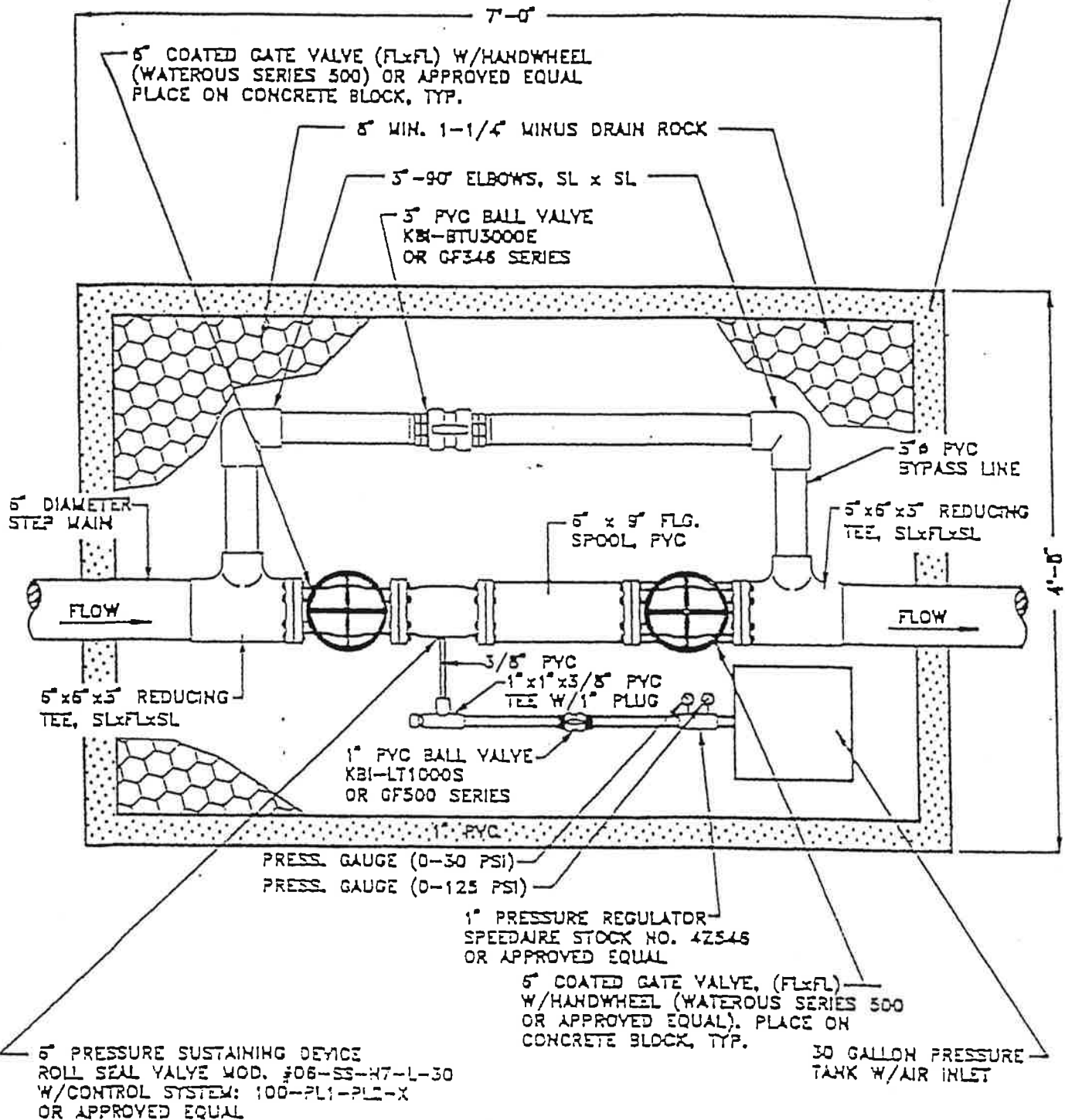
DATE

FILE

6/24/94

FIG 5-0

UTILITY VAULT CO. VAULT NO 575-B, W/O BOTTOM AND COVER #57TL-2-332P, MARKED "SEWER" OR APPROVED EQUAL

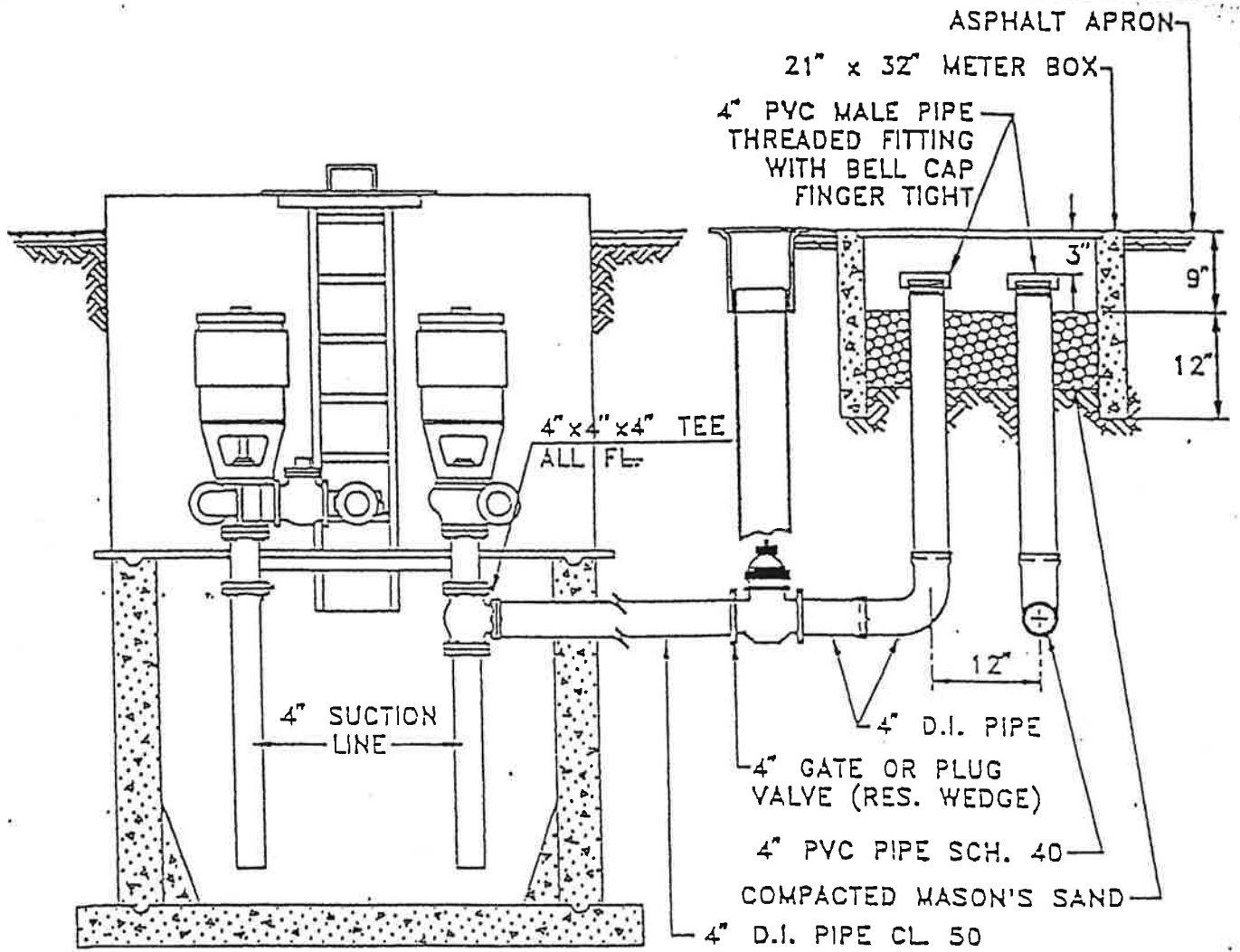


CITY OF AIRWAY HEIGHTS  
 DEPARTMENT OF PUBLIC WORKS

**6 INCH PRESSURE  
 SUSTAINING DEVICE**

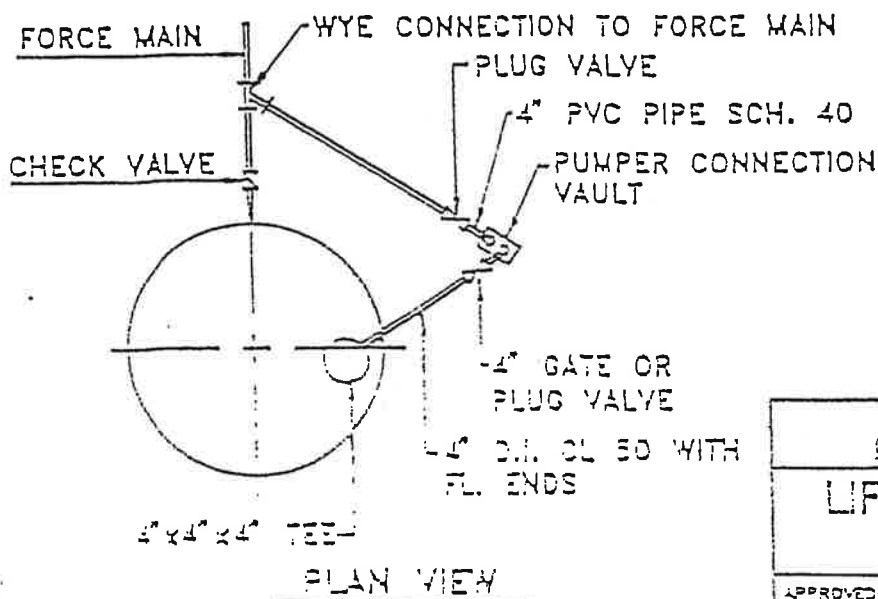
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CITY ENGINEER \_\_\_\_\_

DAN \_\_\_\_\_ DATE 6/24/94 FILE FIG 5-03



LIFT STATION

PUMPER CONNECTION VAULT

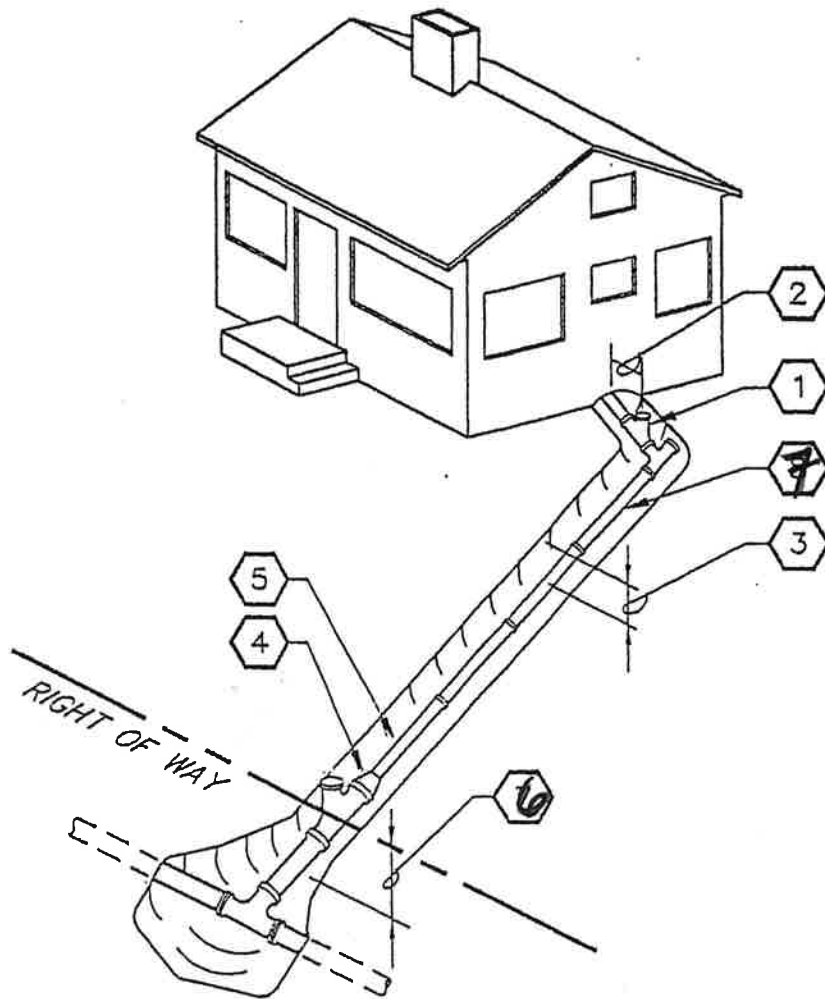


PLAN VIEW

CITY OF AIRWAY HEIGHTS  
 DEPARTMENT OF PUBLIC WORKS  
**LIFT STATION EMERGENCY  
 BYPASS CONNECTION**

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CITY ENGINEER \_\_\_\_\_

DATE 6/24/94 FILE FIG 5-C



## SIDE SEWER CONNECTION DETAIL

NO SCALE

### CONSTRUCTION NOTES:

- ① 4" DOUBLE SWEEP AT HOUSE.
- ② 30" MINIMUM CLEARANCE FROM ANY FOUNDATION WALL.
- ③ MINIMUM COVER ON PRIVATE PROPERTY IS 24" OVER TOP OF PIPE.
- ④ 6" x 4" REDUCER WHERE REQUIRED.
- ⑤ SIDE SEWER PIPE SHALL BE 4" OR LARGER.

- ⑥ MINIMUM DEPTH AT PROPERTY LINE IS 48".
- ⑦ BUILDING SEWER SHOULD HAVE A MINIMUM 2% UNIFORM GRADE AND BE IN STRAIGHT ALIGNMENT INSOFAR AS POSSIBLE.

CITY OF AIRWAY HEIGHTS  
DEPARTMENT OF PUBLIC WORKS

### SIDE SEWER CONNECTION

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

DWN \_\_\_\_\_ CKD \_\_\_\_\_ DATE 2/11/08 FILE S-10

REF

NAME