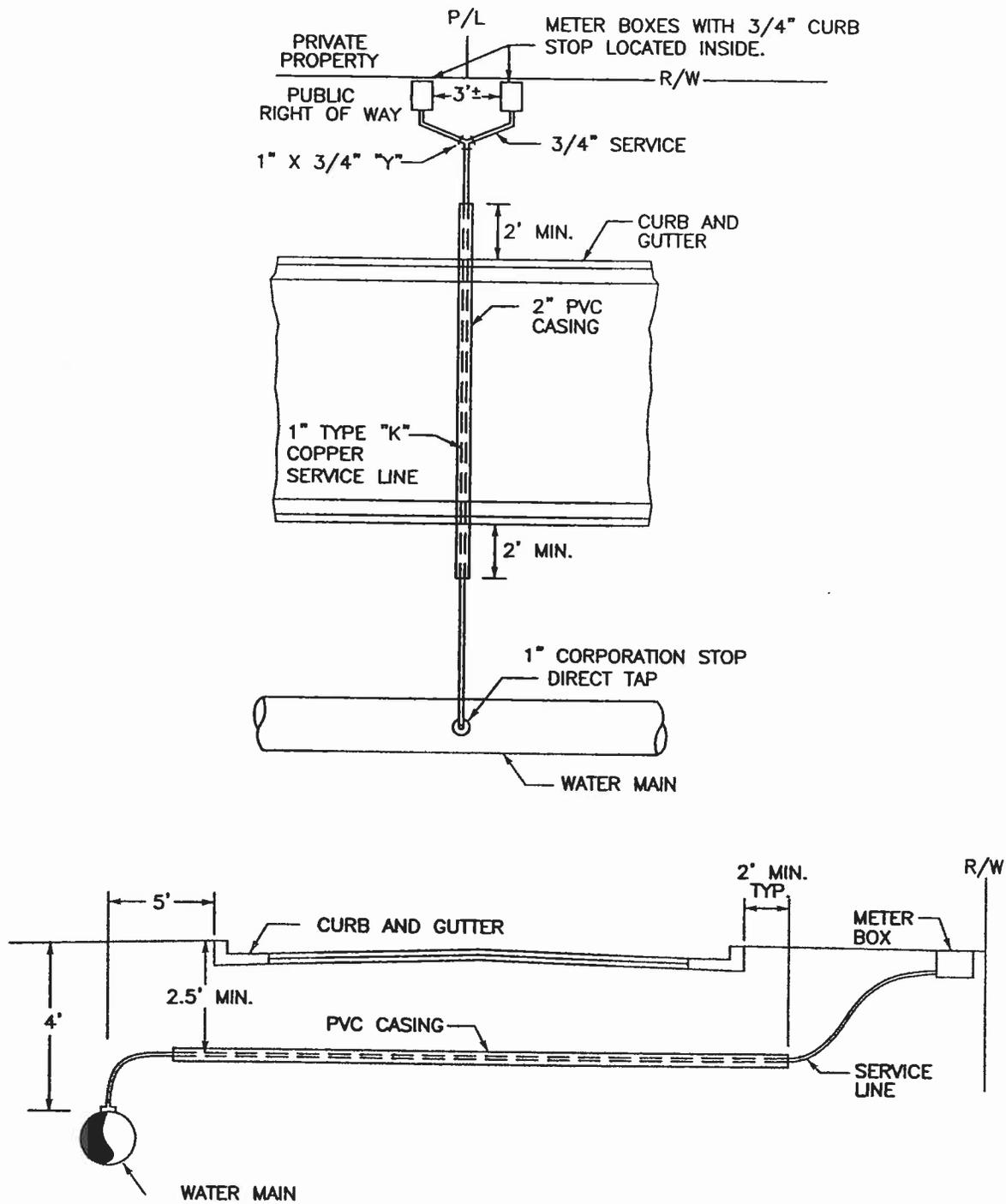


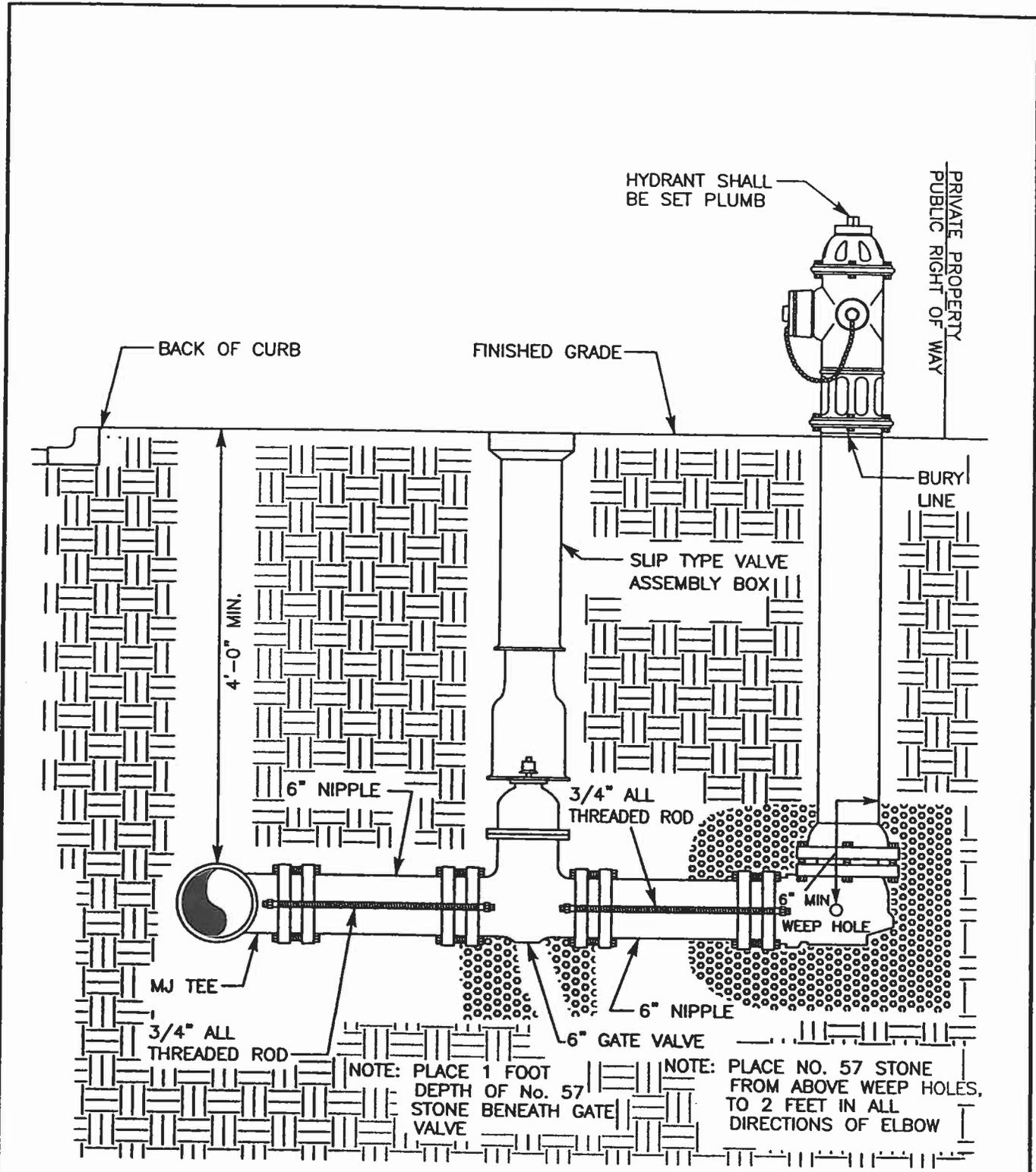
**NOTE:**

1. ON ALL UNCURBED STREETS, UTILITY LOCATIONS SHALL BE AT THE SAME DISTANCES FROM C/L AS SHOWN ABOVE.

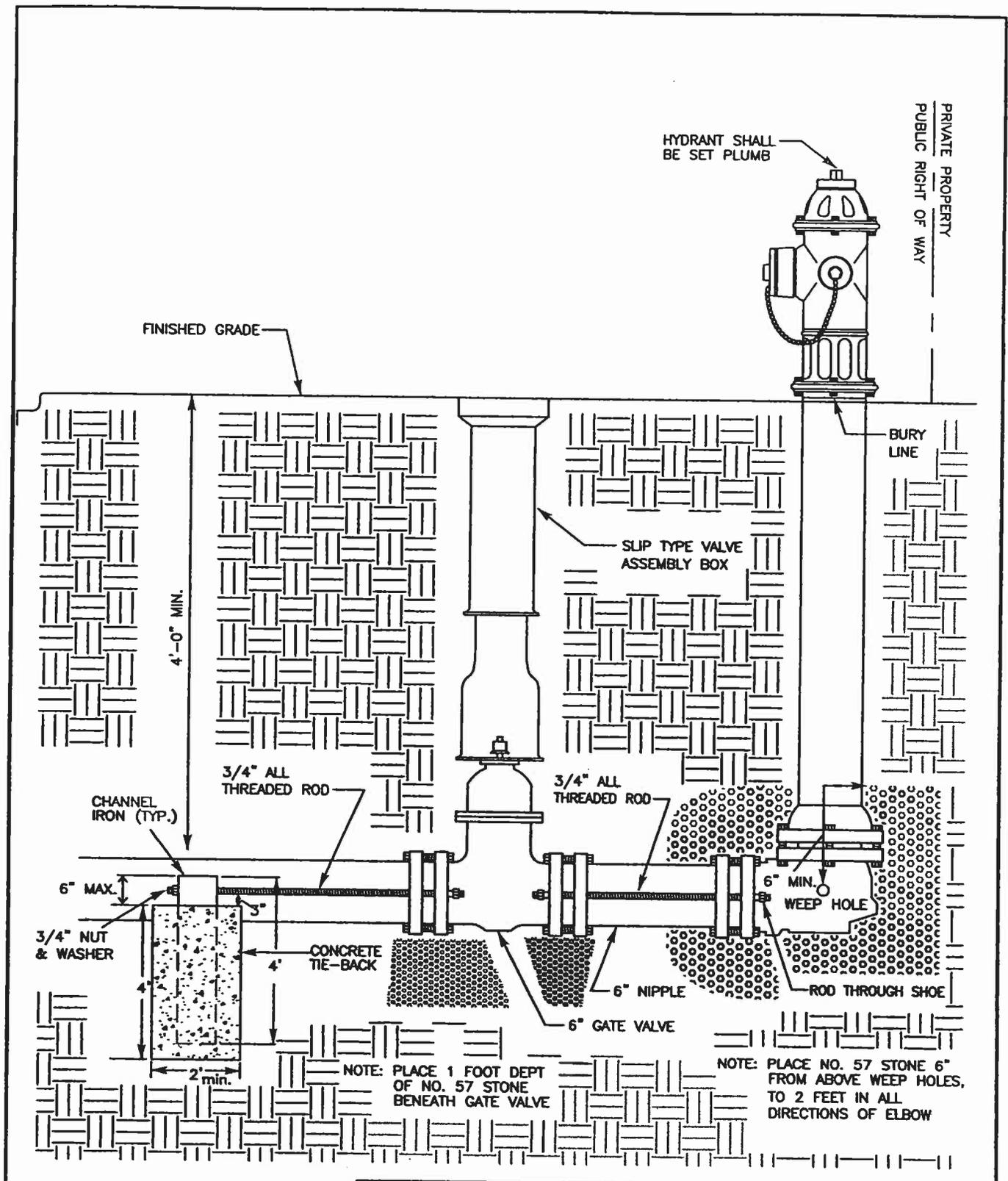
LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL NO.
UNDERGROUND UTILITIES LOCATIONS	1.1



<b>LOCUST GROVE WATER AND SEWER DEPARTMENT</b>	
DETAIL TITLE:	DETAIL NO.
LONG SIDE SERVICE	2.1



LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL No.
TYPICAL FIRE HYDRANT	3.1



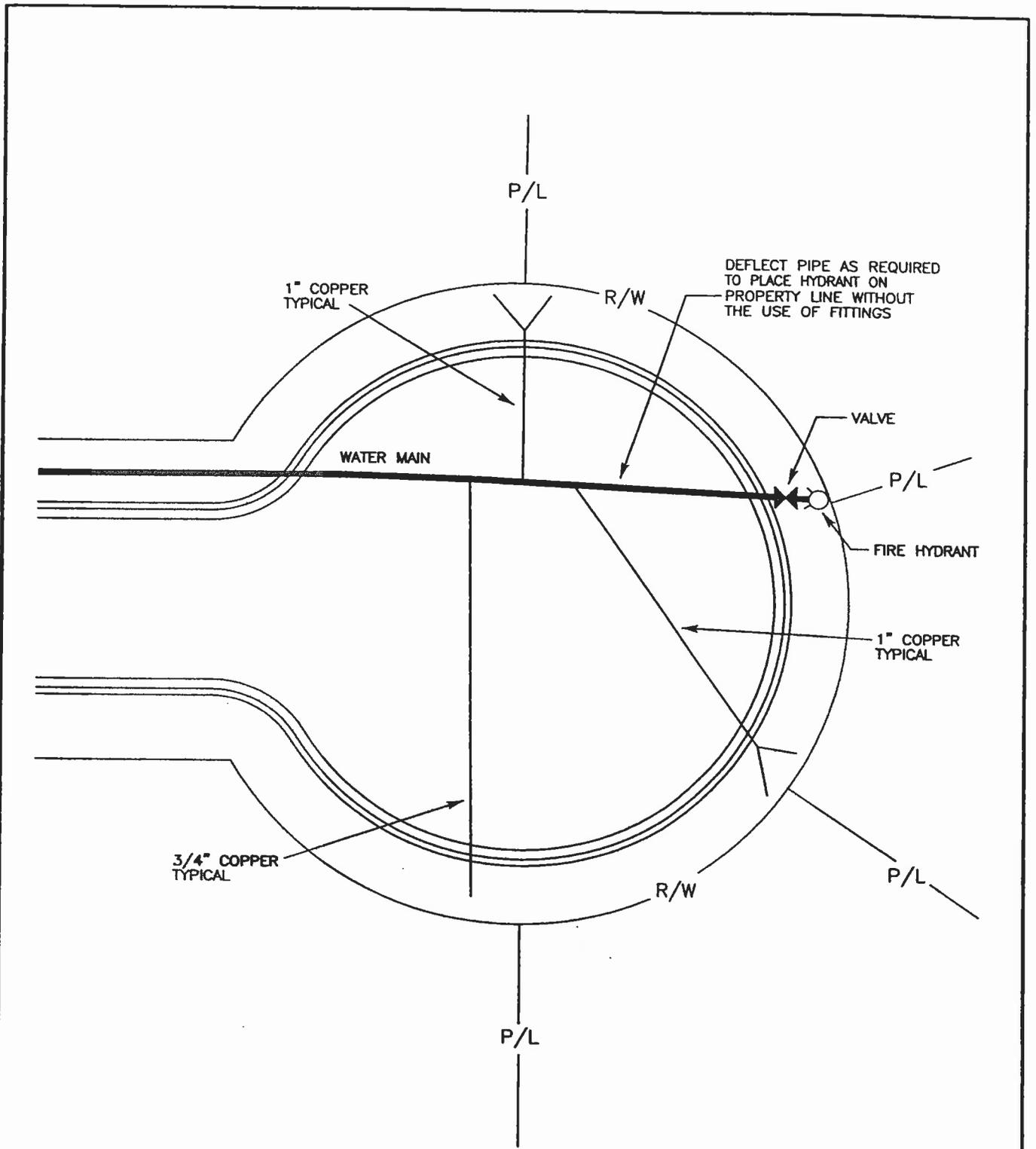
LOCUST GROVE WATER AND SEWER DEPARTMENT

DETAIL TITLE: \_\_\_\_\_

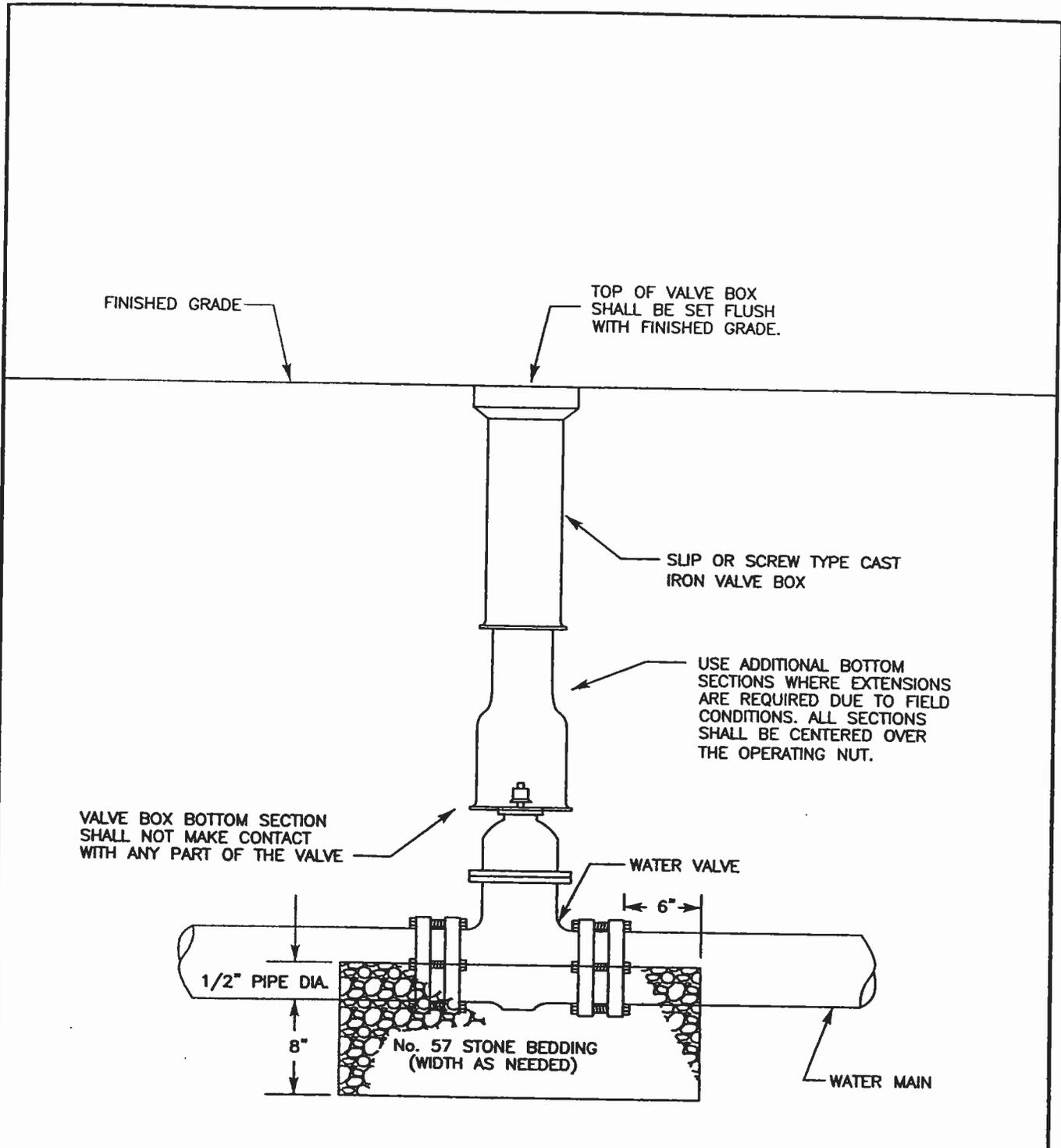
DETAIL No. \_\_\_\_\_

TYPICAL CULDESAC  
FIRE HYDRANT DETAIL

4.1



LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL NO.
FIRE HYDRANT IN CULDESAC	5.1

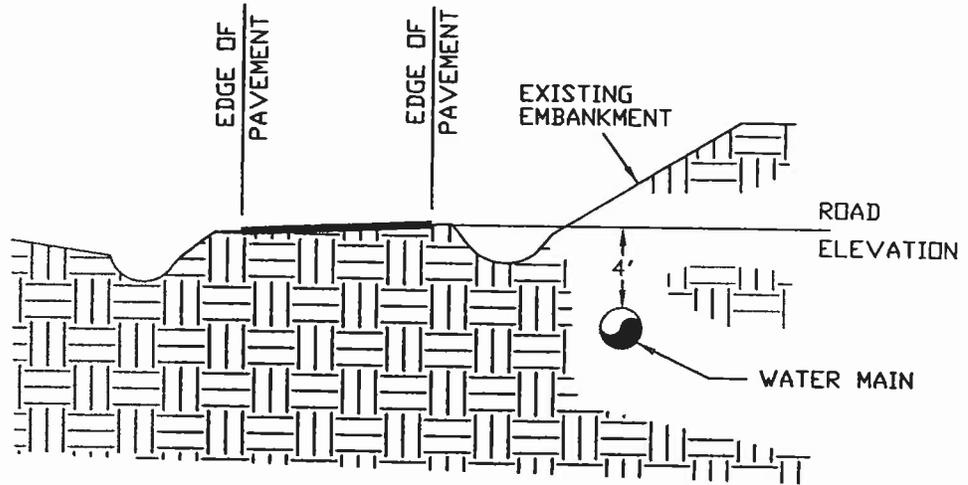


VALVE BOX BOTTOM SECTION SHALL NOT MAKE CONTACT WITH ANY PART OF THE VALVE

NOTE: VALVE BOX SHALL NOT BE SET IN A DEPRESSED AREA.

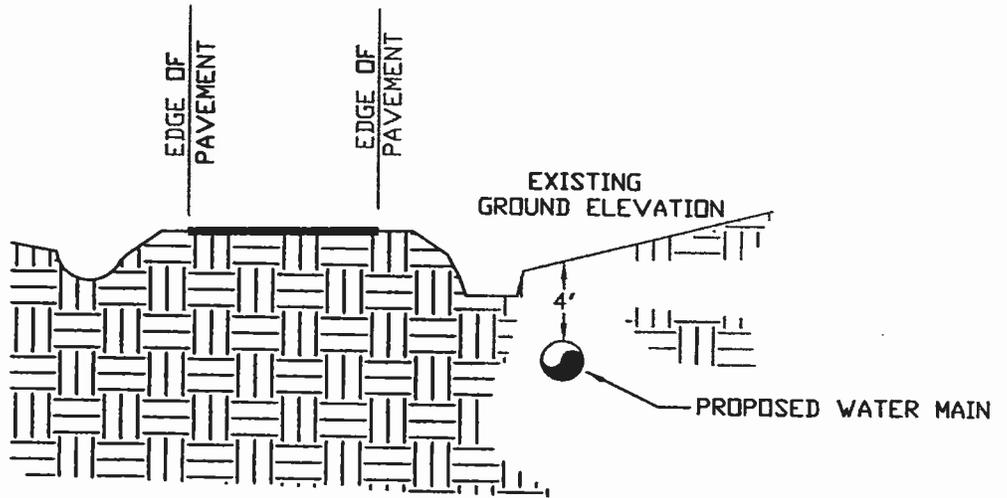
LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL NO.
VALVE BOX	6.1

WHERE GROUND ELEVATION IS ABOVE ROAD ELEVATION



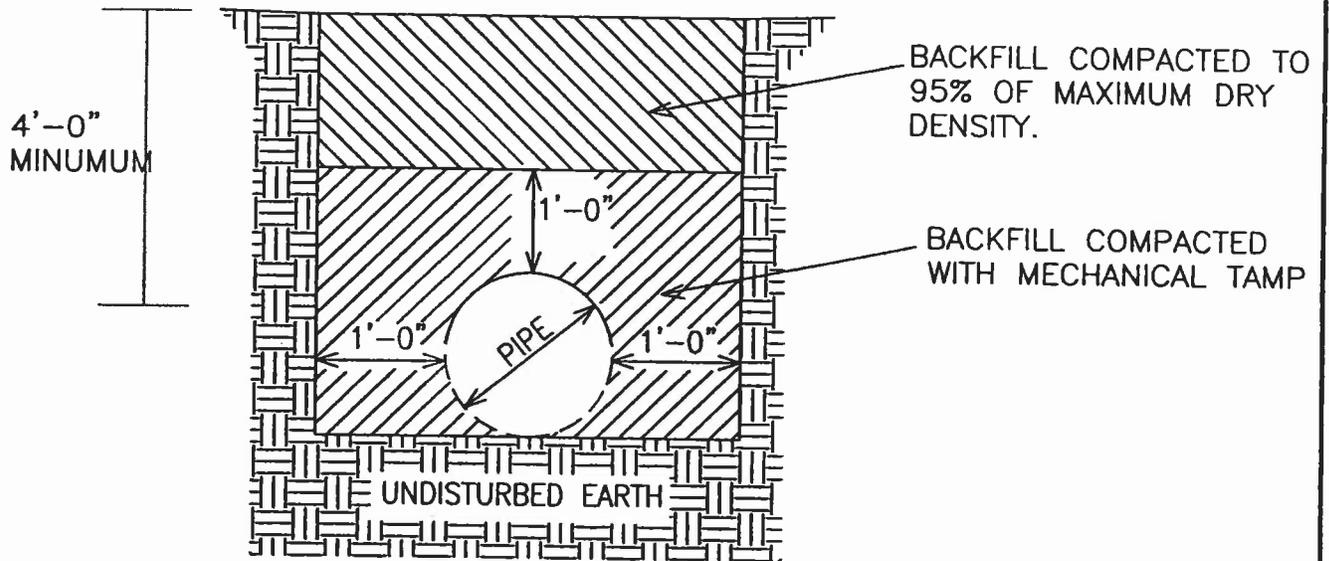
NOTE: UNLESS OTHERWISE INDICATED ON PLANS MINIMUM SOIL COVER ABOVE PIPE IS 4 FEET.

WHERE GROUND ELEVATION IS BELOW ROAD ELEVATION



NOTE: UNLESS OTHERWISE INDICATED ON PLANS MINIMUM SOIL COVER ABOVE PIPE IS 4 FEET.

LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL NO.
PIPE DEPTH AT EDGE OF PAVEMENT	7.1



NOTES: UNSUITABLE SOILS ENCOUNTERED IN BOTTOM OF EXCAVATED TRENCH SHALL BE EXCAVATED & REPLACED WITH NO. 57 STONE.

ONLY SUITABLE SOIL SHALL BE USED AS BACKFILL.

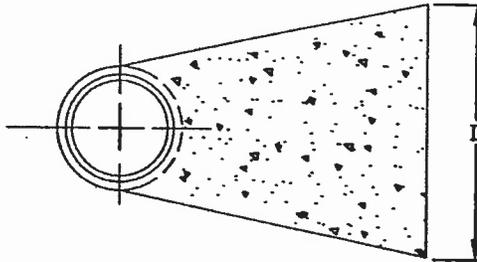
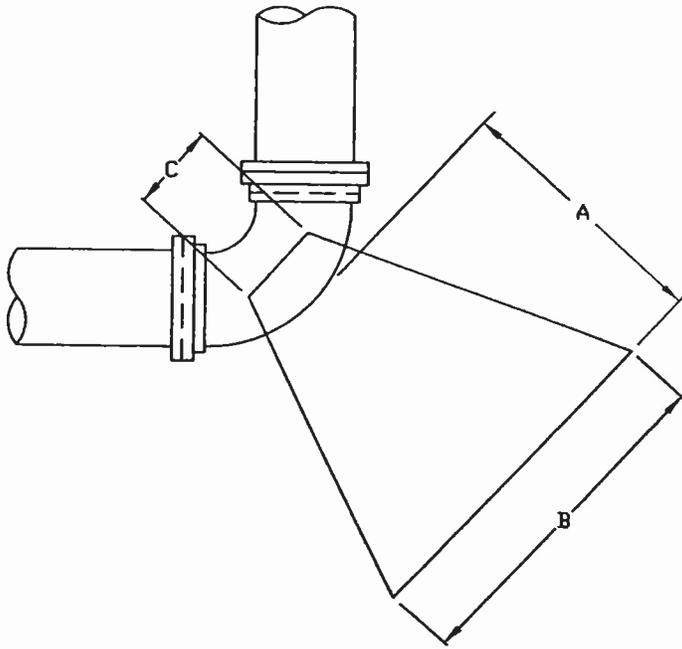
LOCUST GROVE WATER AND SEWER DEPARTMENT

DETAIL TITLE:

DETAIL No.

TYPICAL DUCTILE IRON PIPE BEDDING

8.1



SECTION

MINIMUM  
DIMENSIONS FOR CONCRETE BLOCKING

BEND	PIPE SIZE	A	B	C	D
11 1/4°	6"	1.0'	1.0'	7"	1.0'
	8"	1.0'	1.25'	7"	1.0'
	12"	1.0'	2.0'	11"	2.0'
	16"	2.0'	3.0'	15"	2.0'
	20"	2.0'	3.0'	19"	3.0'
	24"	3.0'	4.0'	22"	3.0'
22 1/2°	6"	1.0'	1.5'	7"	1.0'
	8"	1.0'	2.0'	7"	2.0'
	12"	2.0'	3.0'	11"	2.0'
	16"	2.0'	4.0'	15"	3.0'
	20"	3.0'	5.0'	19"	3.0'
	24"	4.0'	6.0'	22"	4.0'
45°	6"	1.5'	2.0'	7"	1.5'
	8"	2.0'	3.0'	7"	2.0'
	12"	2.0'	4.0'	11"	3.0'
	16"	3.0'	5.0'	15"	4.0'
	20"	4.0'	6.0'	19"	5.0'
	24"	5.0'	8.0'	22"	6.0'
90°	6"	1.5'	2.5'	7"	2.0'
	8"	2.0'	3.0'	7"	3.0'
	12"	4.0'	6.0'	11"	4.0'
	16"	4.0'	7.0'	15"	5.0'
	20"	8.0'	8.0'	19"	7.0'
	24"	6.0'	10.0'	22"	8.0'
TEES AND PLUGS	6"	1.5'	2.0'	7"	2.0'
	8"	2.0'	3.0'	7"	2.0'
	12"	2.0'	4.0'	11"	4.0'
	16"	3.0'	5.0'	15"	5.0'
	20"	4.0'	7.0'	19"	6.0'
	24"	5.0'	8.0'	22"	7.0'

NOTES:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
2. THRUST BLOCK SHALL BE POURED AGAINST UNDISTURBED SOIL.
3. BOLTS/NUTS SHALL BE PROTECTED FROM CONCRETE COVERAGE.

LOCUST GROVE WATER AND SEWER DEPARTMENT

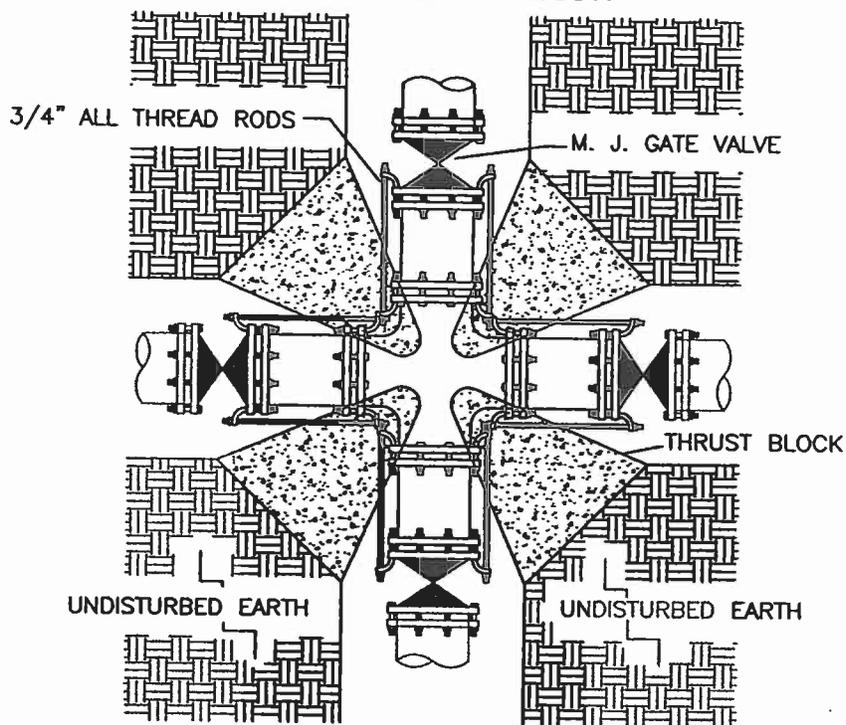
DETAIL TITLE:

DETAIL NO.

THRUST BLOCK DIMENSIONS

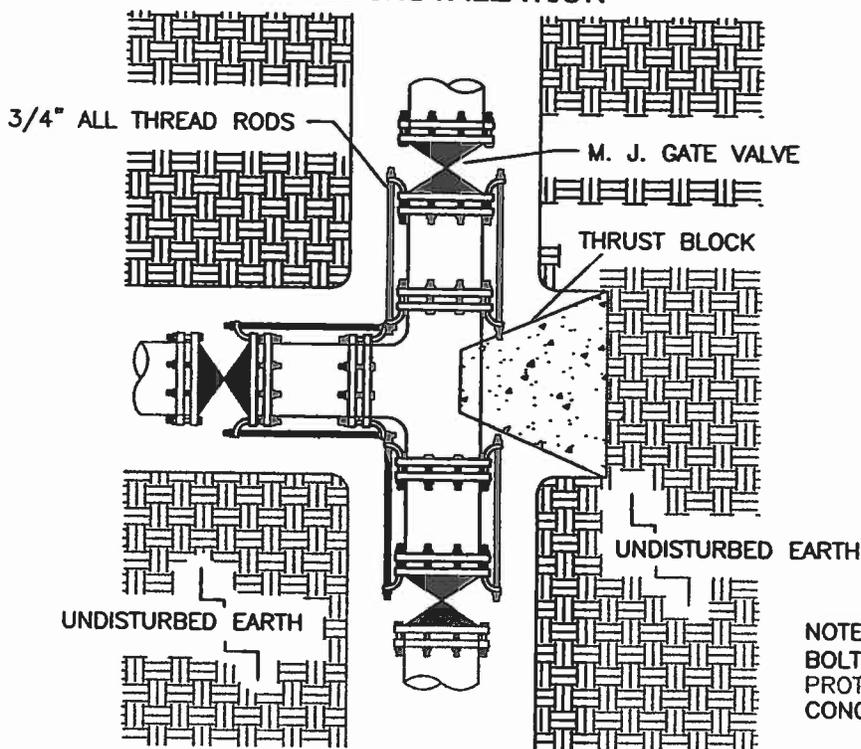
9.1

### CROSS INSTALLATION



NOTE:  
BOLTS/NUTS SHALL BE  
PROTECTED FROM  
CONCRETE COVERAGE

### TEE INSTALLATION



NOTE:  
BOLTS/NUTS SHALL BE  
PROTECTED FROM  
CONCRETE COVERAGE

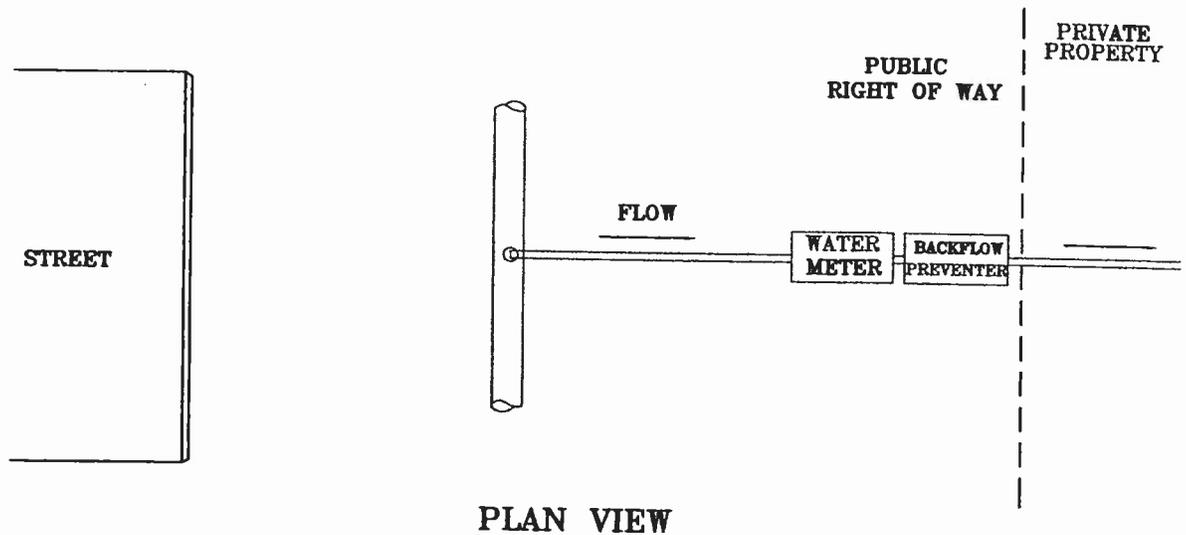
LOCUST GROVE WATER AND SEWER DEPARTMENT

DETAIL TITLE:

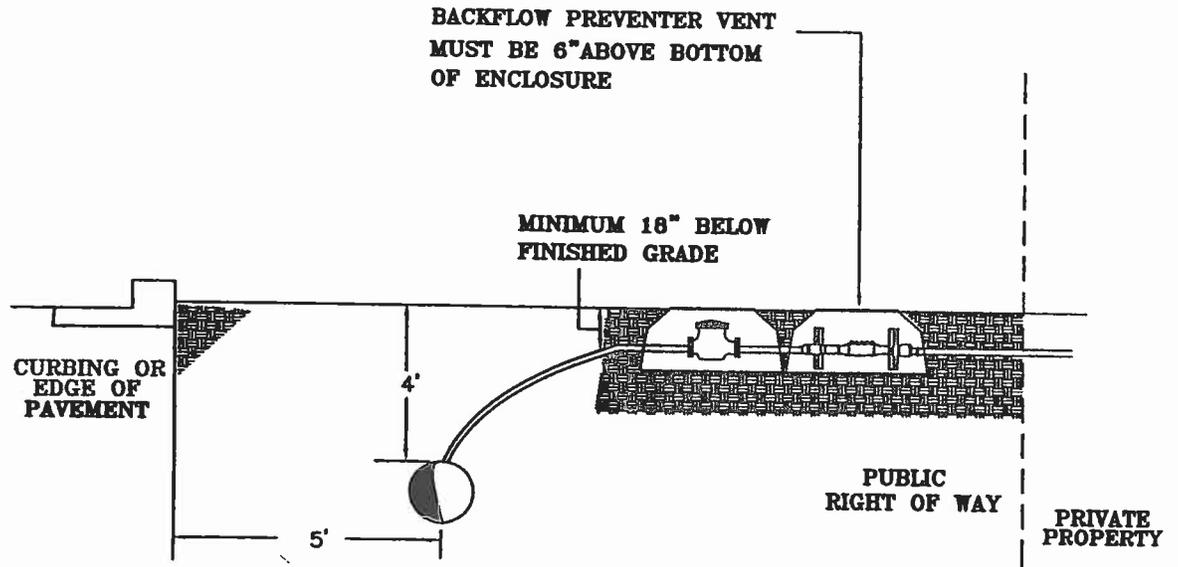
DETAIL NO.

THRUST RESTRAINT AT FITTING

10.1



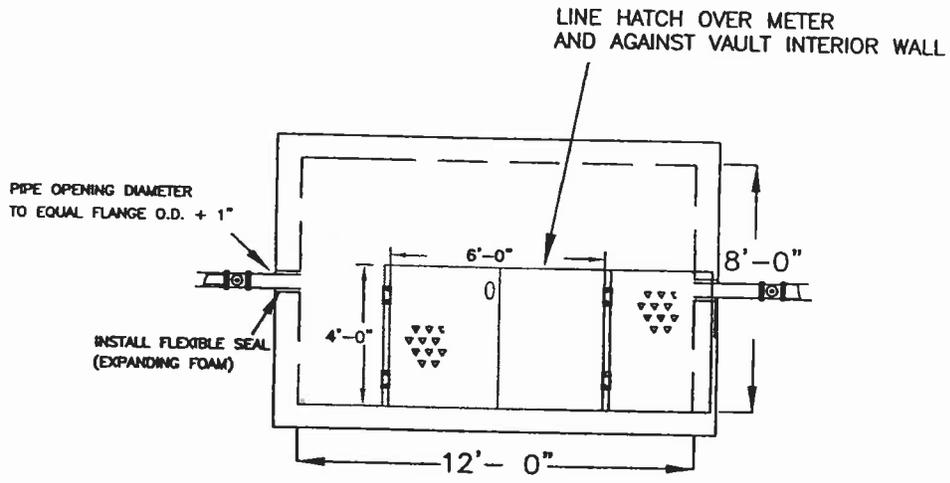
PLAN VIEW



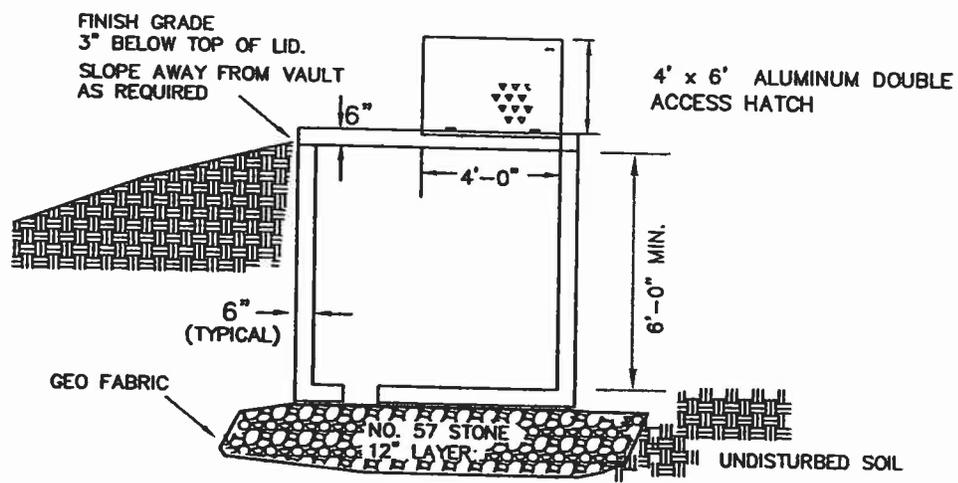
SIDE VIEW

LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL No.
WATER METER BOX	11.1





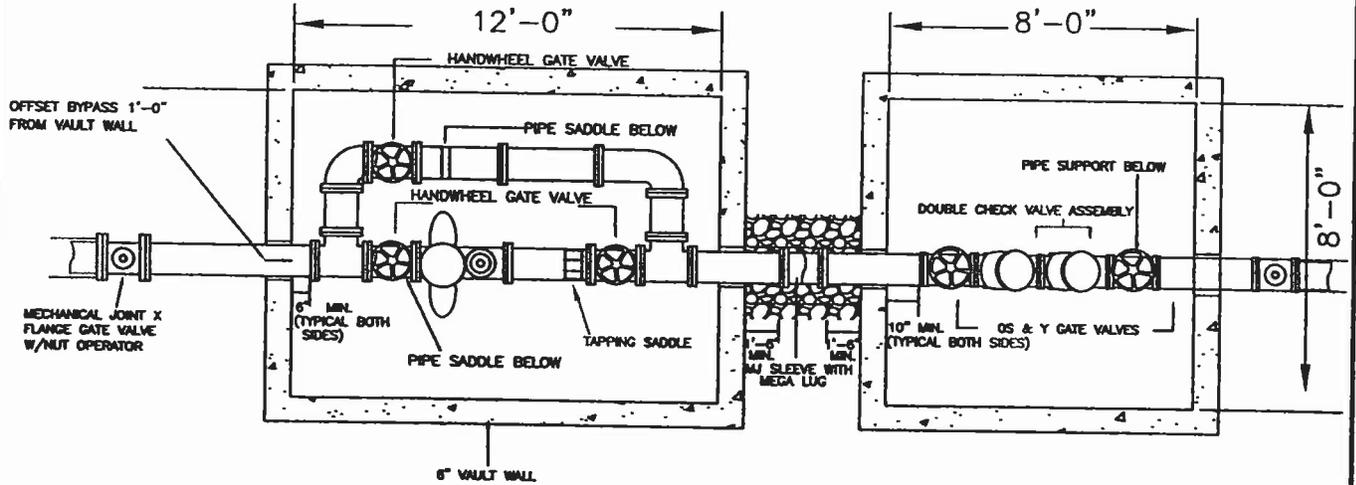
PLAN VIEW



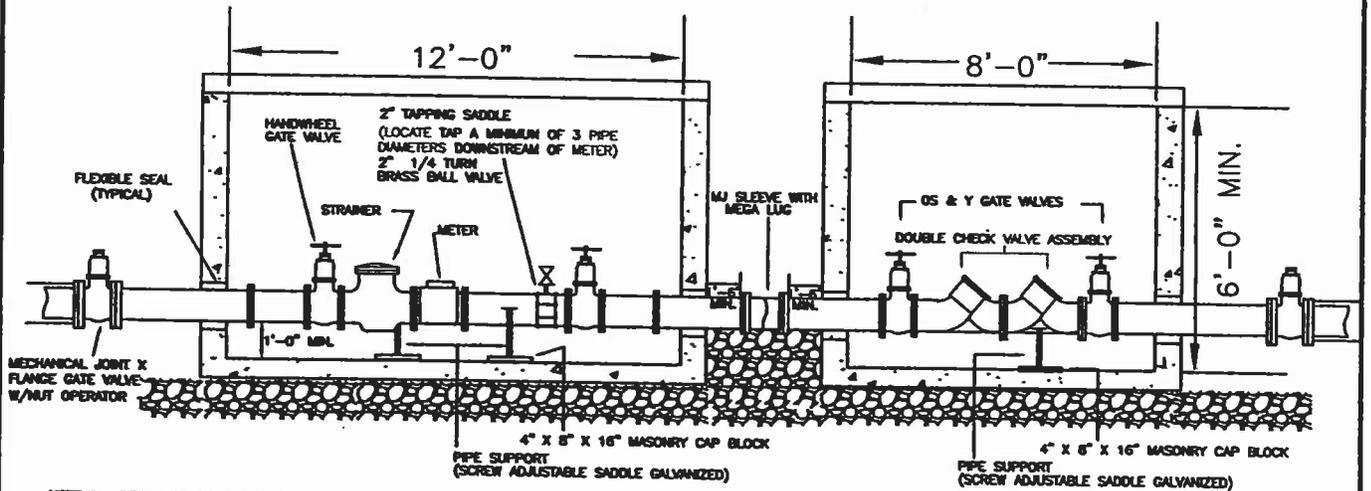
SECTION VIEW

LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL No.
3" DOMESTIC METER VAULT AND LID(CONCRETE)	13.1

# SEE SPECIFICATIONS FOR SIZE DETAILS



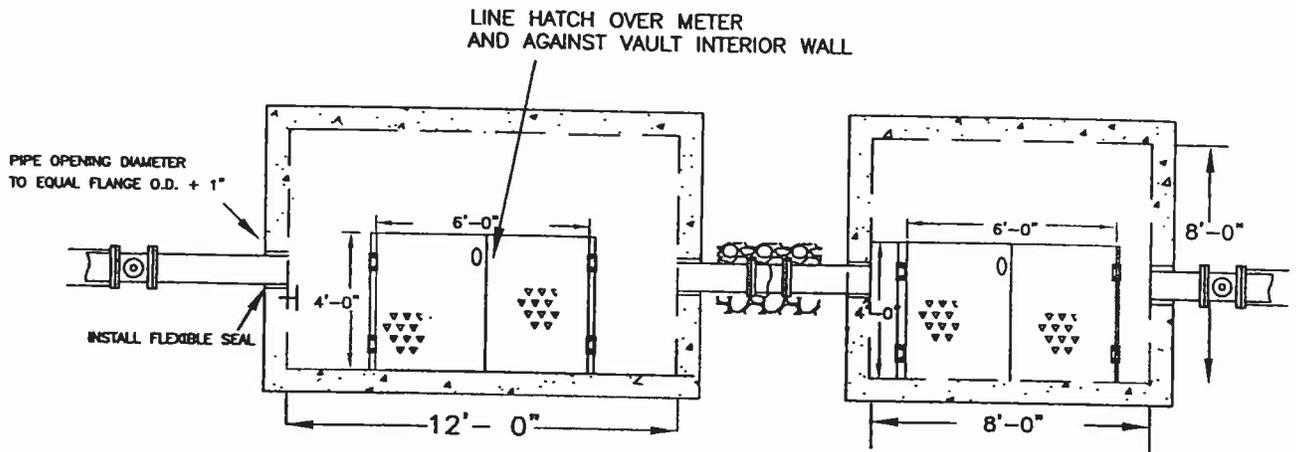
PLAN VIEW



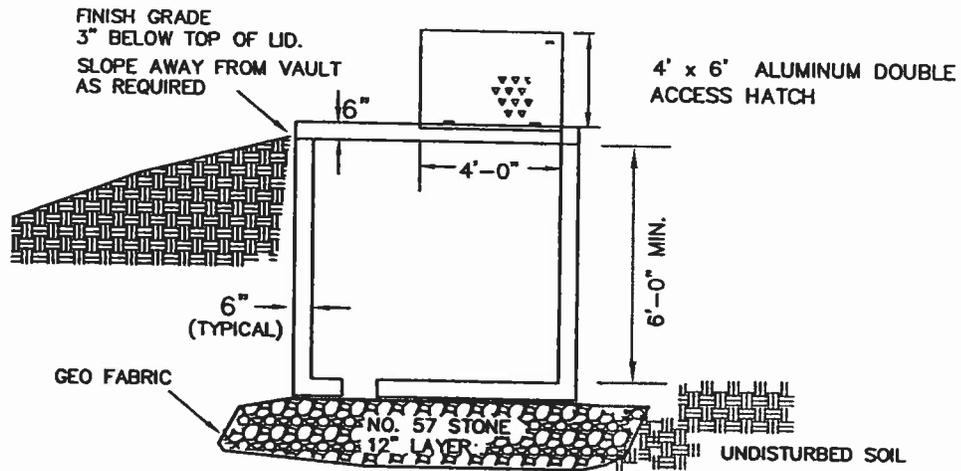
NOTE 1: PIPE TAPS SHALL BE PERFORMED USING A WATER COOLED CORING DEVICE. PIPE SHALL NOT BE TAPPED USING CUTTING TORCH.  
NOTE 2: VAULTS SHALL BE SIZED ACCORDINGLY FOR 8" AND 10" METERS AND DOUBLE CHECK VALVES.

SECTION VIEW

LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL No.
FIRE METER	14.1



PLAN VIEW



SECTION VIEW

LOCUST GROVE WATER AND SEWER DEPARTMENT

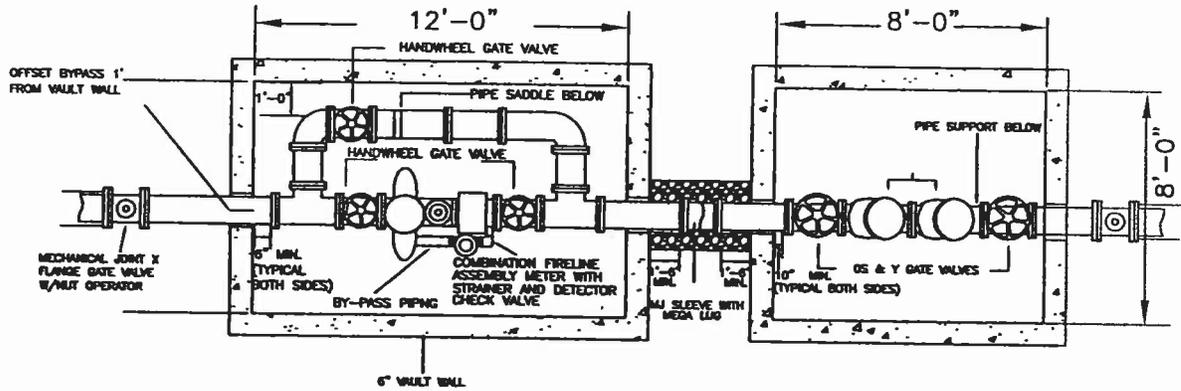
DETAIL TITLE:

DETAIL No.

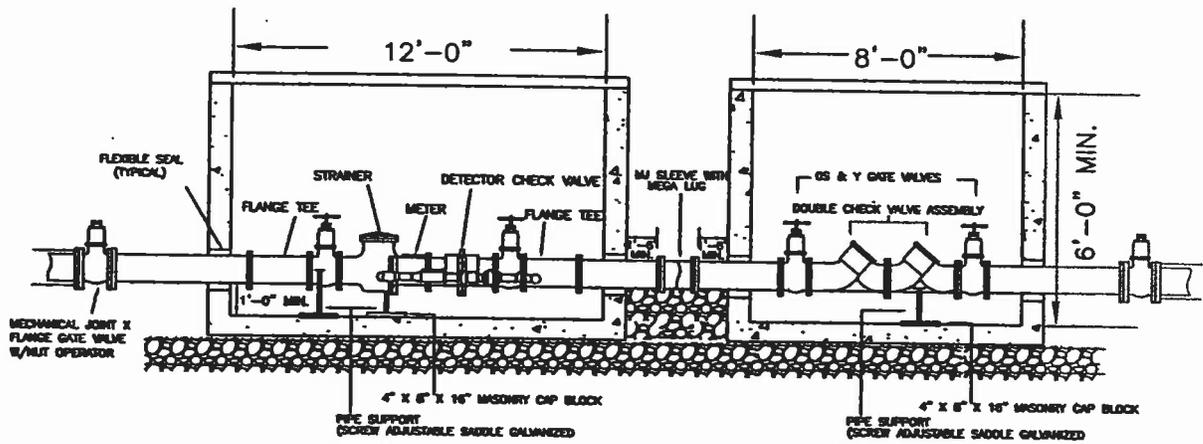
FIRE METER VAULT  
AND LID(CONCRETE)

15.1

SEE SPECIFICATIONS FOR  
SIZE DETAILS



PLAN VIEW



SECTION VIEW

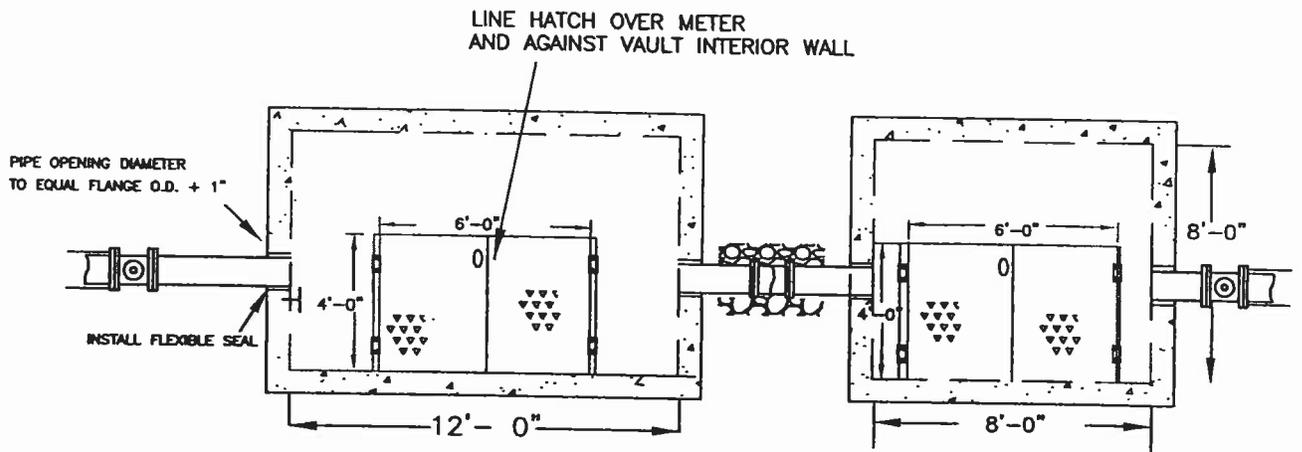
LOCUST GROVE WATER AND SEWER DEPARTMENT

DETAIL TITLE:

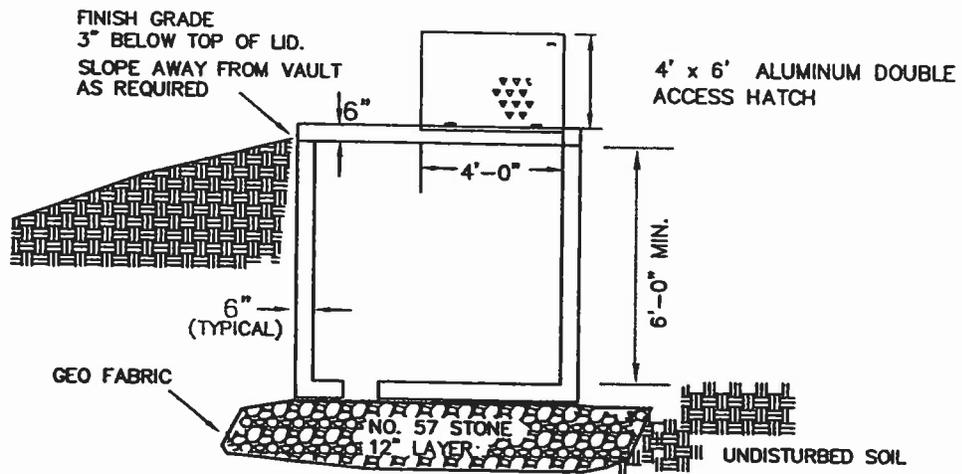
DETAIL No.

COMBINATION METER

16.1

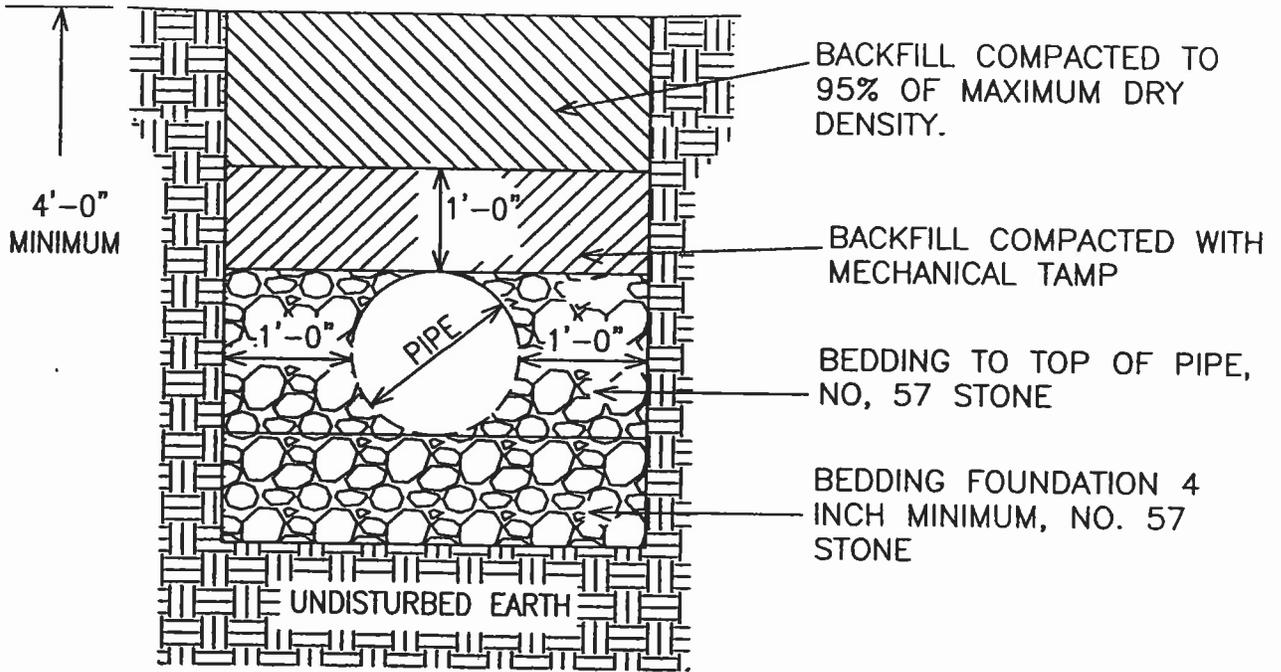


PLAN VIEW



SECTION VIEW

LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL No.
COMBINATION METER VAULT AND LID(CONCRETE)	17.1



NOTES: UNSUITABLE SOILS ENCOUNTERED IN BOTTOM OF EXCAVATED TRENCH SHALL BE EXCAVATED & REPLACED WITH NO. 57 STONE.

ONLY SUITABLE SOIL SHALL BE USED AS BACKFILL.

LOCUST GROVE WATER AND SEWER DEPARTMENT

DETAIL TITLE:

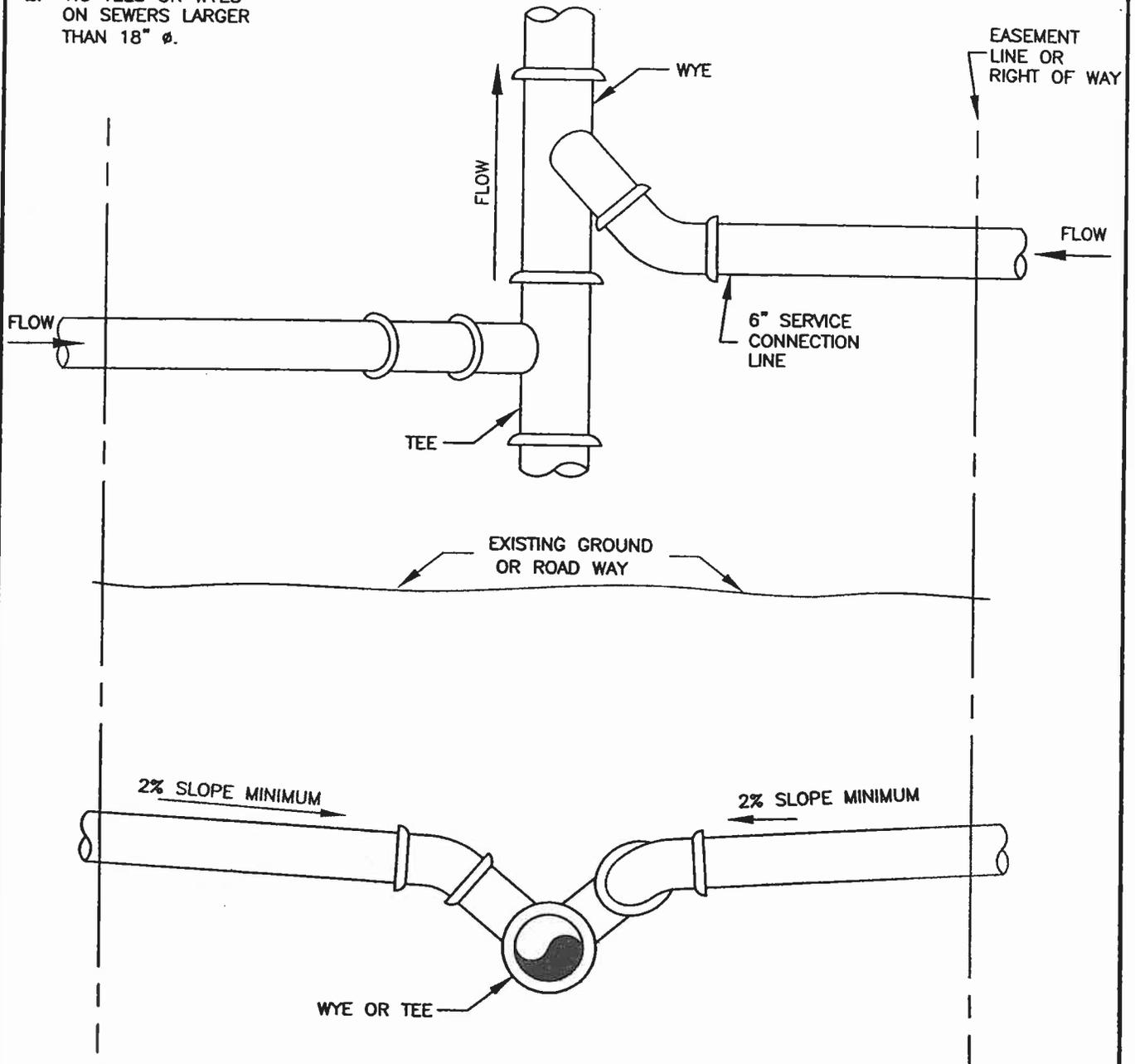
DETAIL No.

TYPICAL P.V.C. SEWER PIPE BEDDING

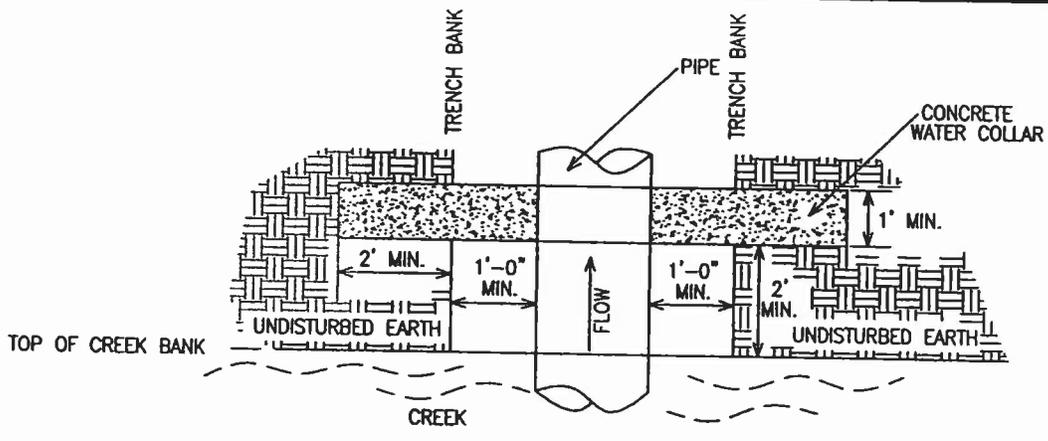
18.1

**NOTES:**

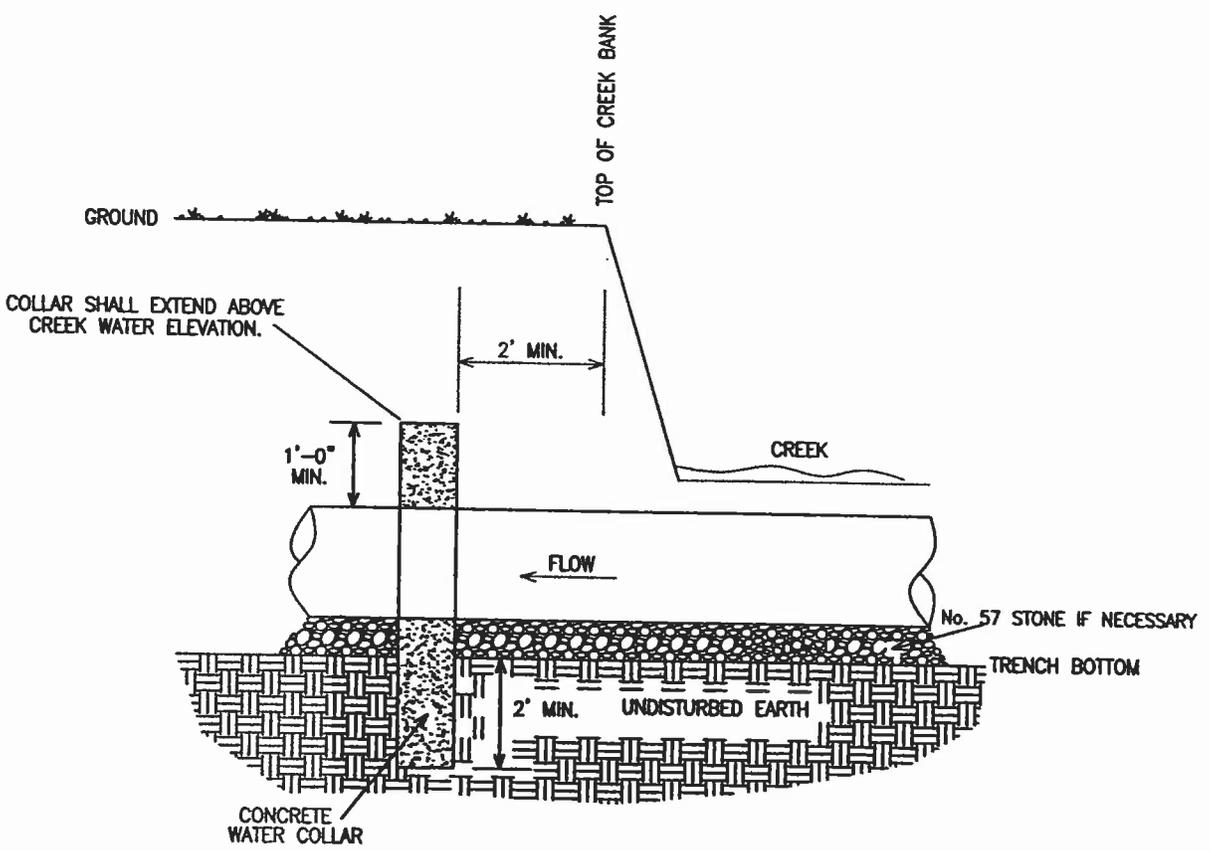
1. CONNECTION TO NEW SEWER SHALL BE WITH TEE OR WYE.
2. NO TEES OR WYES ON SEWERS LARGER THAN 18"  $\phi$ .



<b>LOCUST GROVE WATER AND SEWER DEPARTMENT</b>	
DETAIL TITLE:	DETAIL NO.
LATERAL CONNECTION	19.1

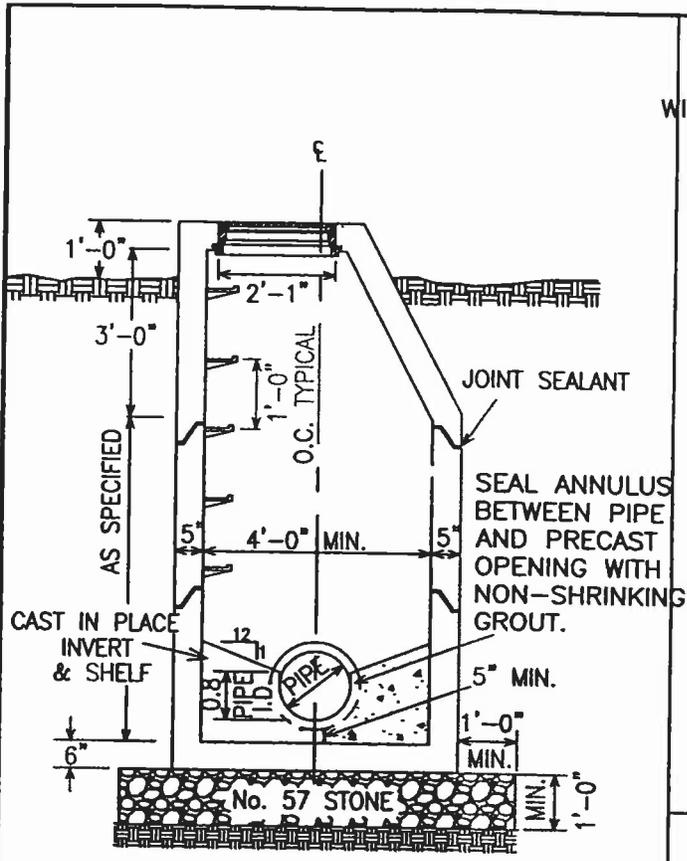


PLAN VIEW



SIDE VIEW

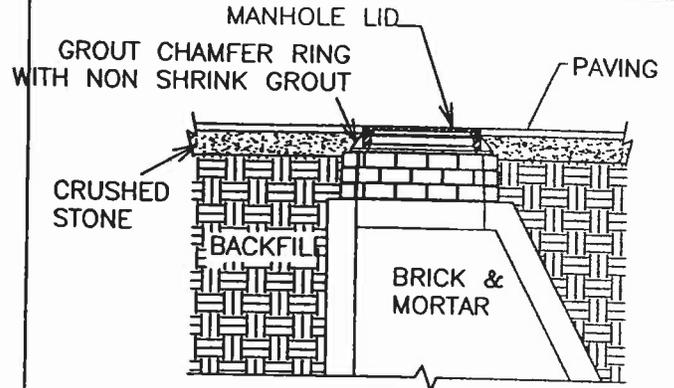
LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL NO.
PIPE COLLAR	20.1



**NOTES:**

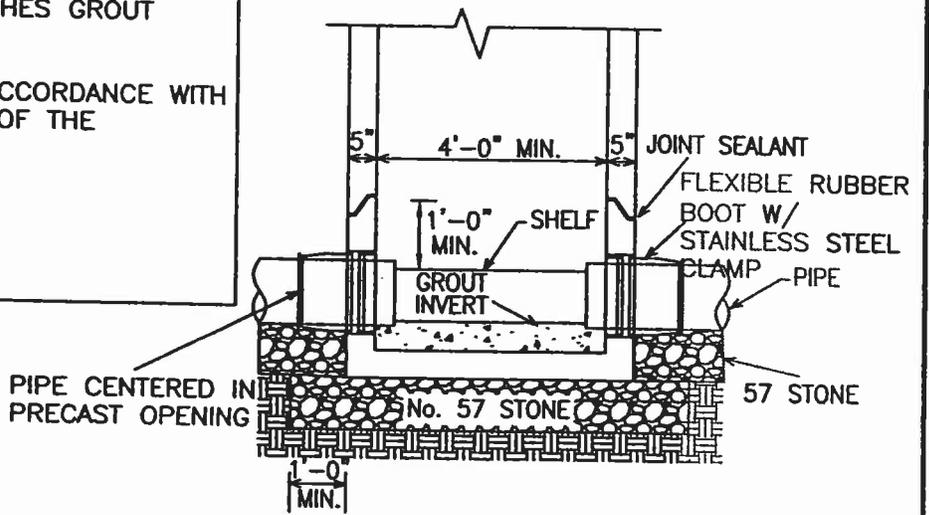
1. SHELF AND INVERT SHALL BE TROWEL FINISHED.
2. WHEN BRICK IS USED AS A FILLER, PROVIDE MINIMUM 2 INCHES GROUT OVER BRICK.
3. LINE MANHOLE IN ACCORDANCE WITH DIVISION III, SECTION 9 OF THE SPECIFICATIONS.

**MANHOLE SECTION**



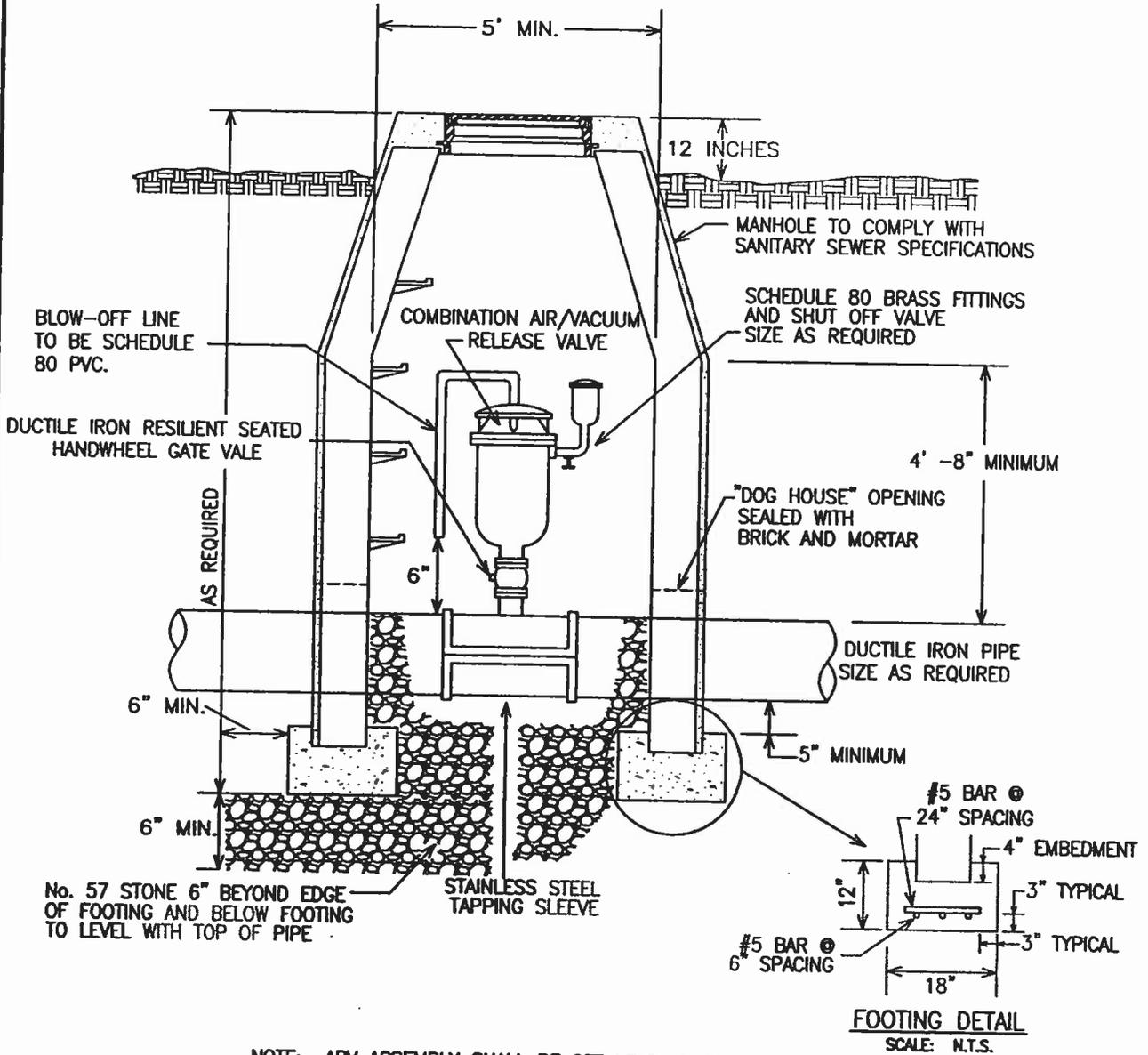
- NOTES:**
1. BRICKS SHALL BE STACKED NO MORE THAN FIVE COARSE.
  2. BRICKS SHALL BE BEDDED AND JOINTED IN MORTAR PER CCWA SPECIFICATIONS.
  3. CONTRACTOR SHALL APPLY A MINIMUM 1/2" THICK MORTAR COATING (SMOOTH FINISH) TO INTERIOR FACE OF BRICK.

**TYPICAL MANHOLE IN PAVEMENT DETAIL**



**MANHOLE SECTION**

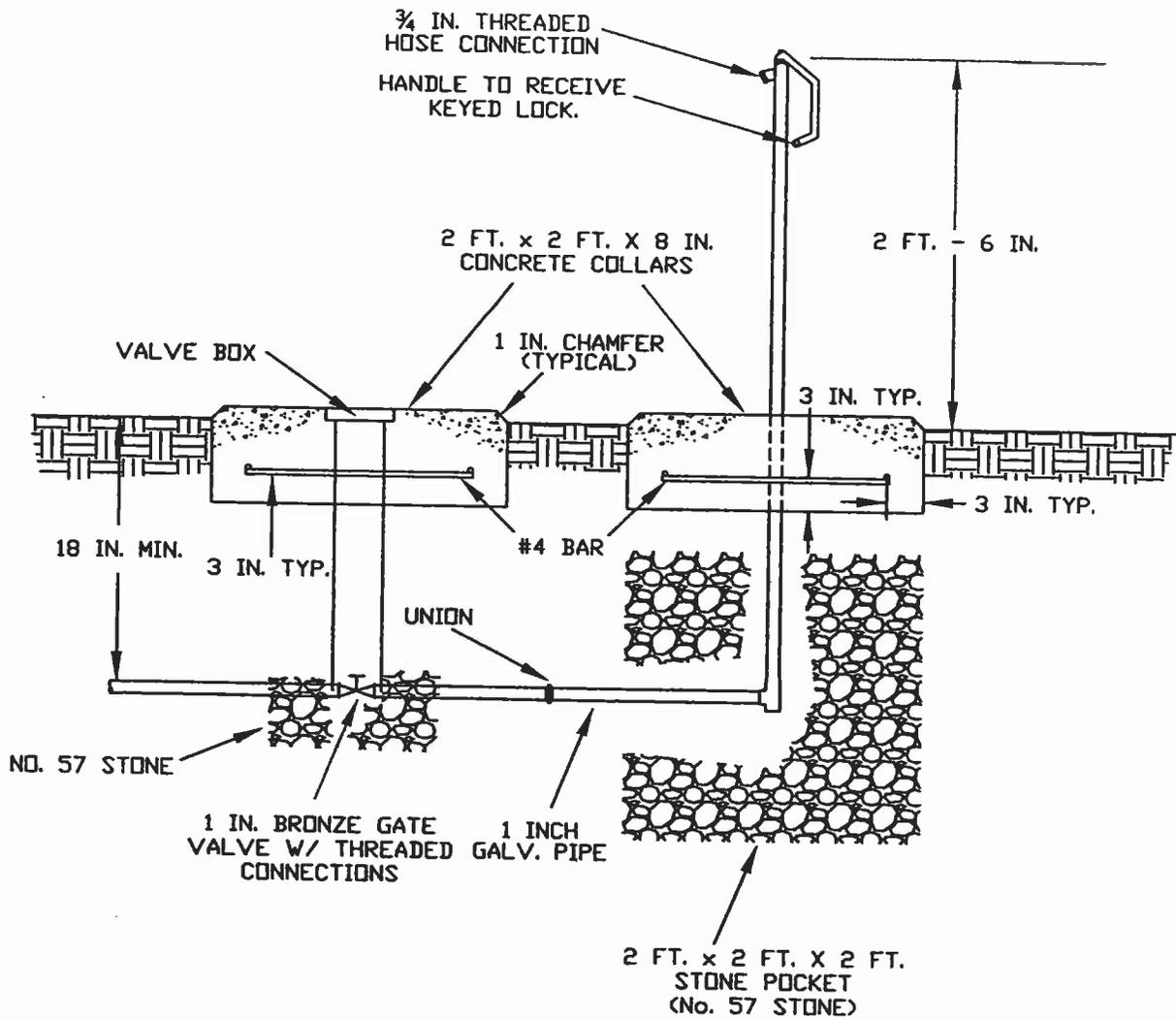
<b>LOCUST GROVE WATER AND SEWER DEPARTMENT</b>	
DETAIL TITLE:	DETAIL NO.
MANHOLE SECTIONS	21.1



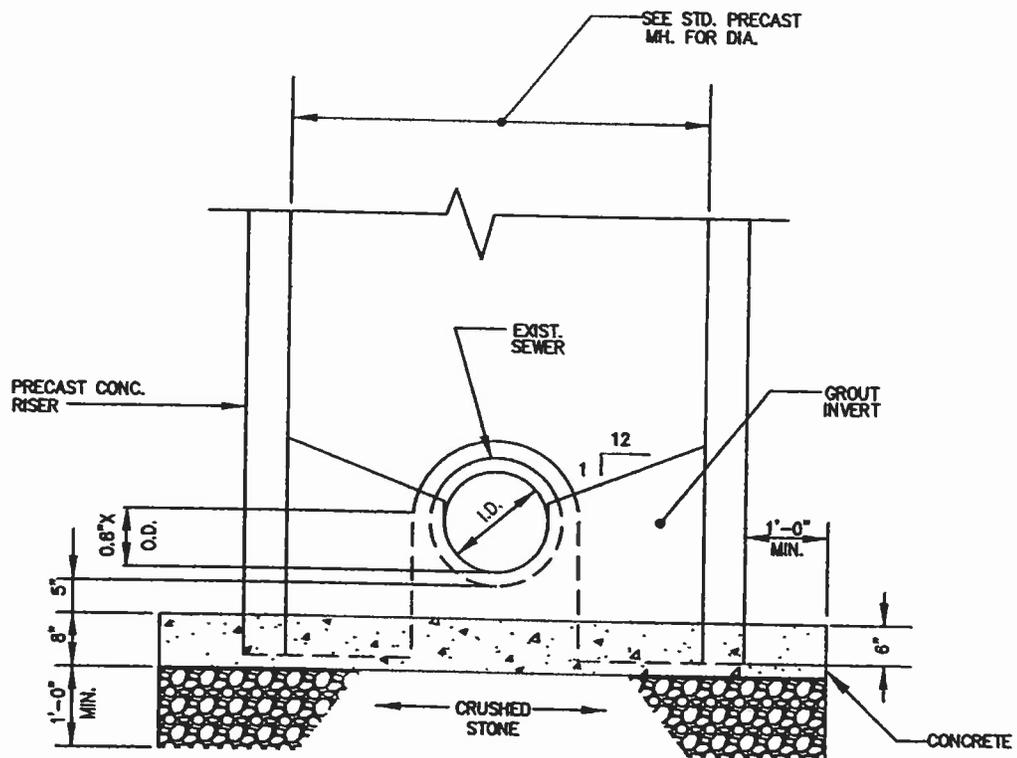
**NOTE:** ARV ASSEMBLY SHALL BE SET LEVEL & PLUMB

<b>LOCUST GROVE WATER AND SEWER DEPARTMENT</b>	
DETAIL TITLE:	DETAIL NO.
<b>COMBINATION AIR/VACUUM RELEASE VALVE</b>	<b>22.1</b>

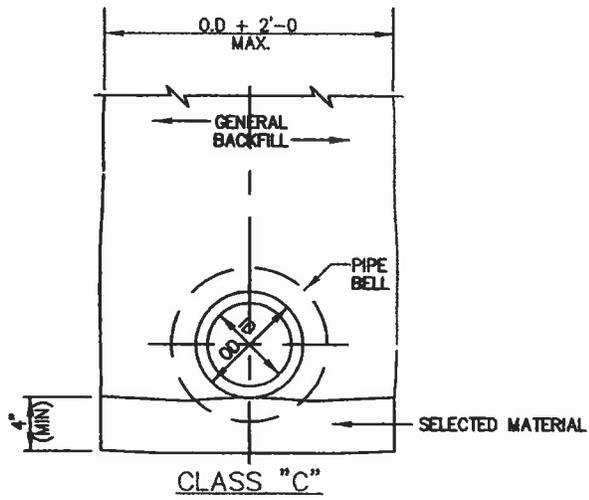




LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL NO.
YARD HYDRANT	26.1



LOCUST GROVE WATER AND SEWER DEPARTMENT	
DETAIL TITLE:	DETAIL NO.
TYPICAL DOG HOUSE MANHOLE DETAIL	31.1



<b>LOCUST GROVE WATER AND SEWER DEPARTMENT</b>	
DETAIL TITLE:	DETAIL NO.
<b>TYPICAL CLASS "C" BEDDING DETAIL</b>	<b>32.1</b>