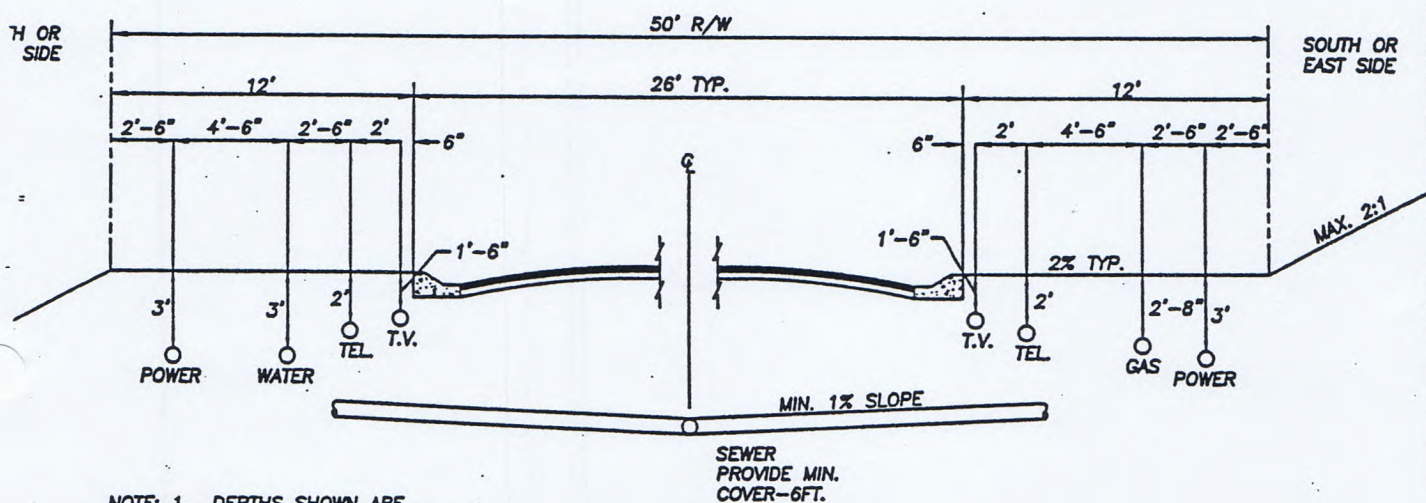


STANDARD DETAIL 1-1 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



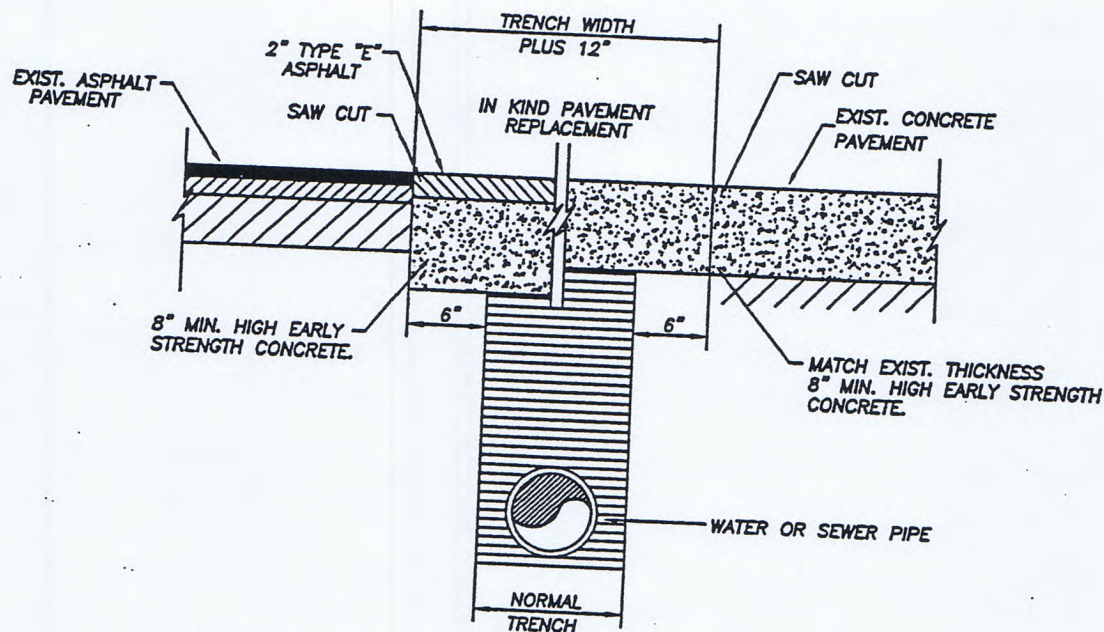
- NOTE: 1. DEPTHS SHOWN ARE MINIMUMS AND ARE TO BE TAKEN FROM TOP OF CURB ELEVATION.
2. WHEN UTILITY CONDUIT IS REQUIRED, CONDUIT SHALL BE OF SIZE AND DEPTH APPROPRIATE FOR THAT UTILITY, AND INSTALLED AT A MIN. 24" DEPTH

TYPICAL UTILITY PLACEMENT

N.T.S.

APPROVED
Rec. by: D2 Date: 1-12-04

STANDARD DETAIL 1-2 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



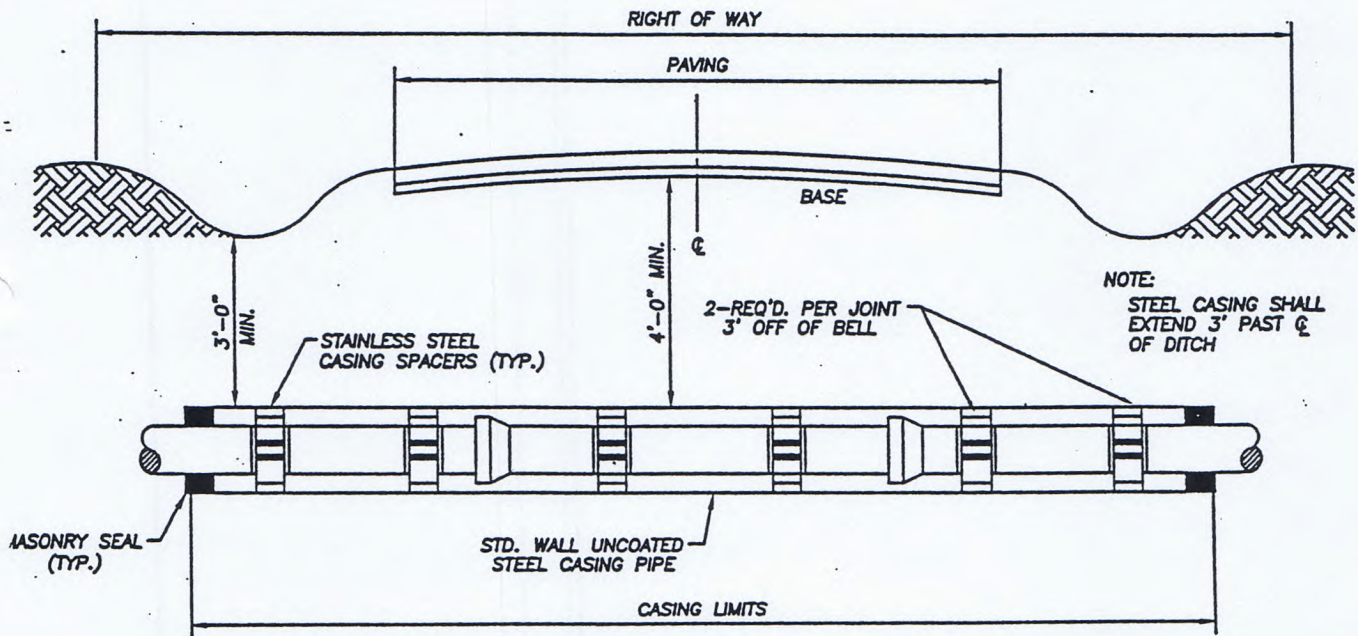
NOTE: TRENCH TO BE BACKFILLED IN MAXIMUM 8" (LOOSE) LIFTS AND THOROUGHLY COMPACTED TO NOT LESS THAN 95% STANDARD PROCTOR DENSITY AT OPTIMUM MOISTURE BY METHODS SATISFACTORY TO ENGINEER.

TYPICAL PAVEMENT CUT

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL 1-3
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT

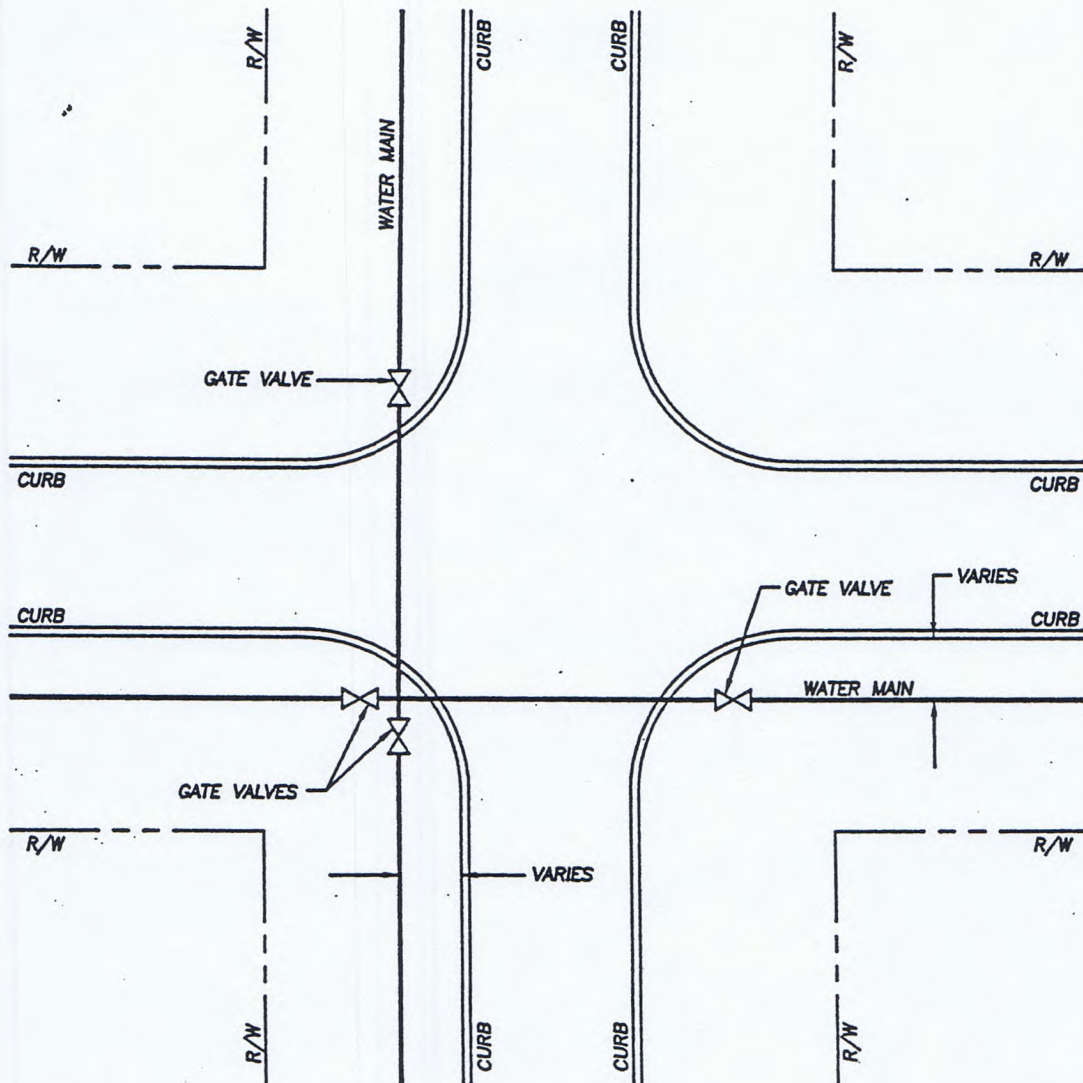


TYPICAL HIGHWAY CROSSING

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL 1-4
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



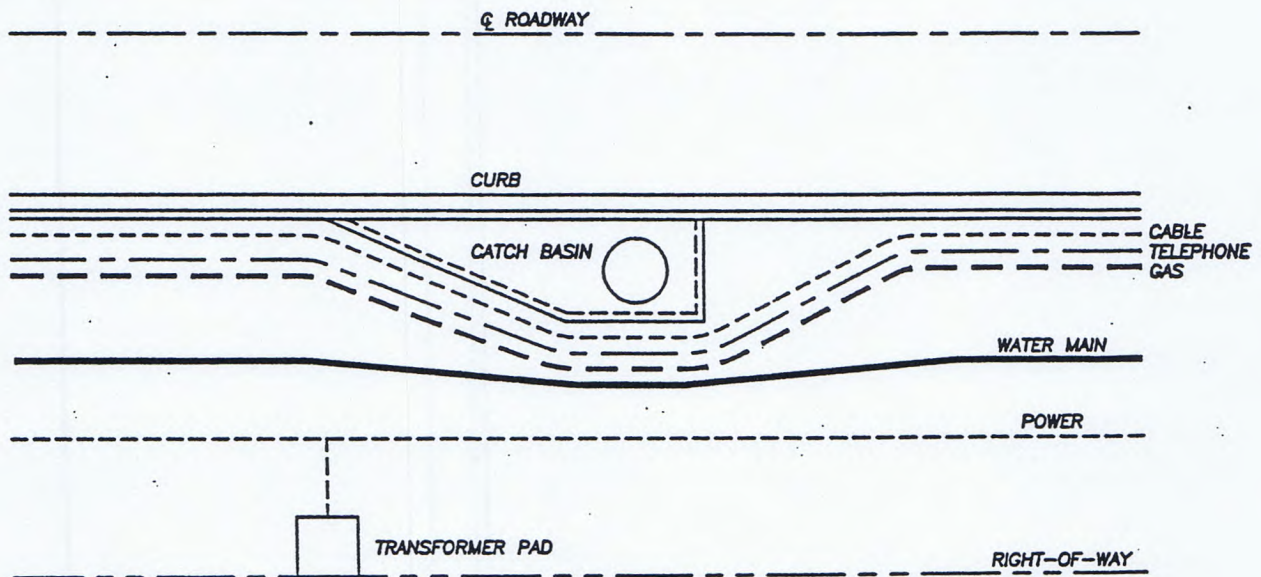
1. VALVES ARE TO BE LOCATED WITH IN RIGHT-OF-WAY OF ROADWAY
2. GATE VALVES ARE NOT REQUIRED ON DEADEND LEGS LESS THAN 1000 LINEAR FEET IN LENGTH
3. VALVES SHALL NOT BE LOCATED IN DITCH LINE

WATER LINE VALVING
AT INTERSECTION

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL 1-5
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



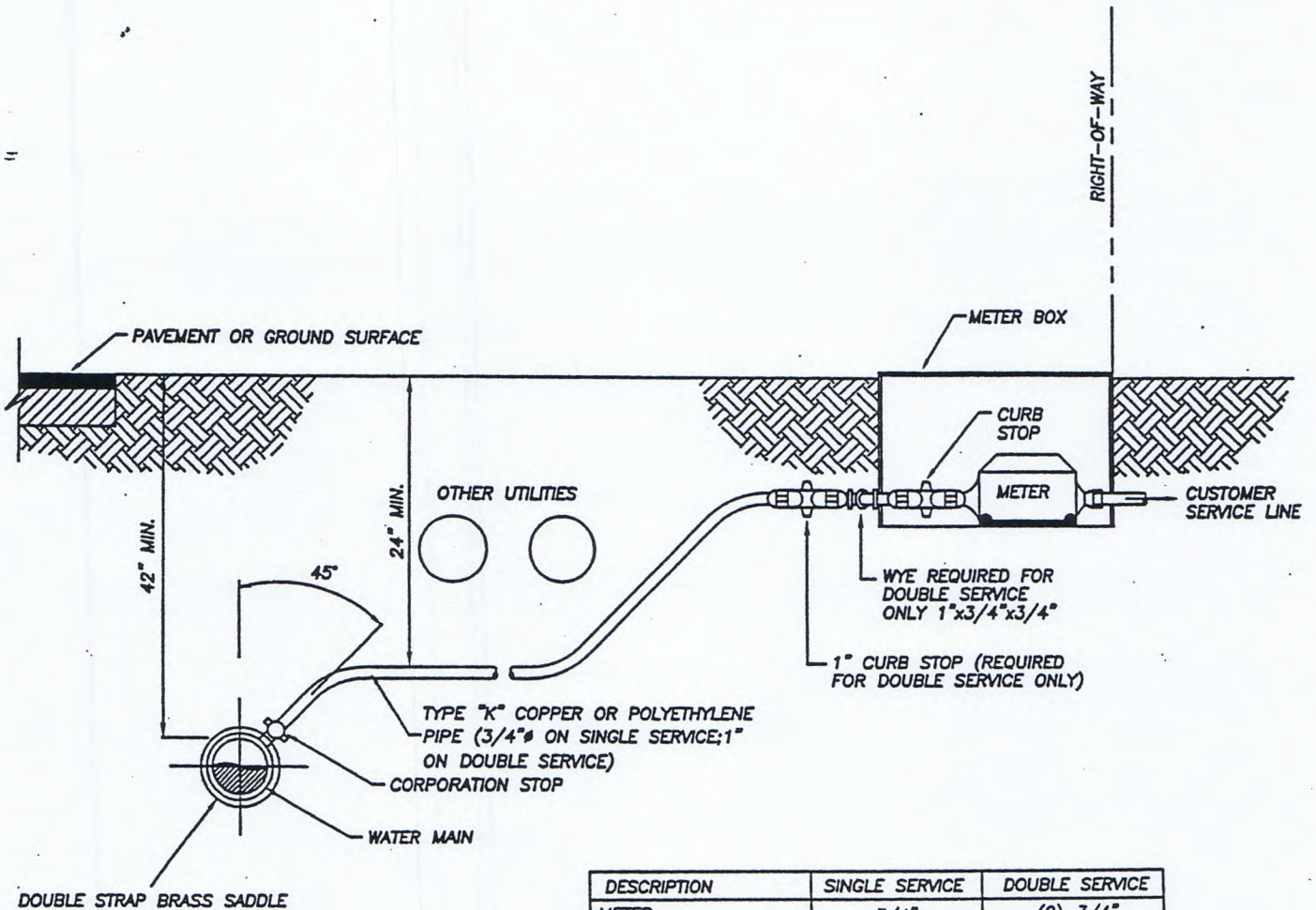
UTILITY LOCATION

N.T.S.

APPROVED
Rec. by: 02 Date: 1-12-04

STANDARD DETAIL 1-6 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT

RIGHT-OF-WAY



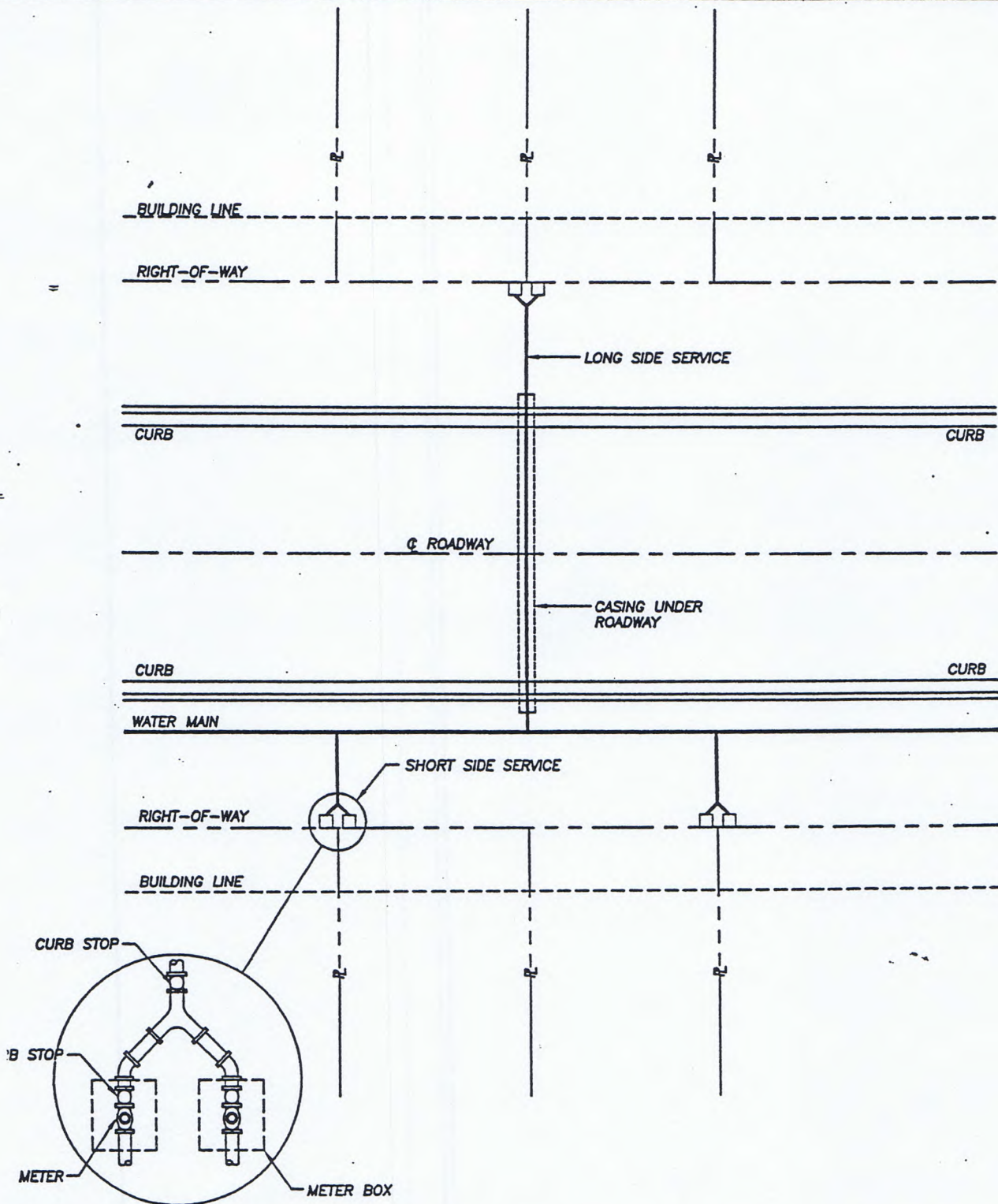
DESCRIPTION	SINGLE SERVICE	DOUBLE SERVICE
METER	3/4"	(2)-3/4"
CORPORATION STOP	3/4"	1"
COPPER SERVICE LINE	3/4"	1"
CURB STOP	3/4"	1" (2)-3/4"
DOUBLE STRAP TAPPING SADDLE	3/4"	1"

WATER METER INSTALLATION

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL 1-7
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT

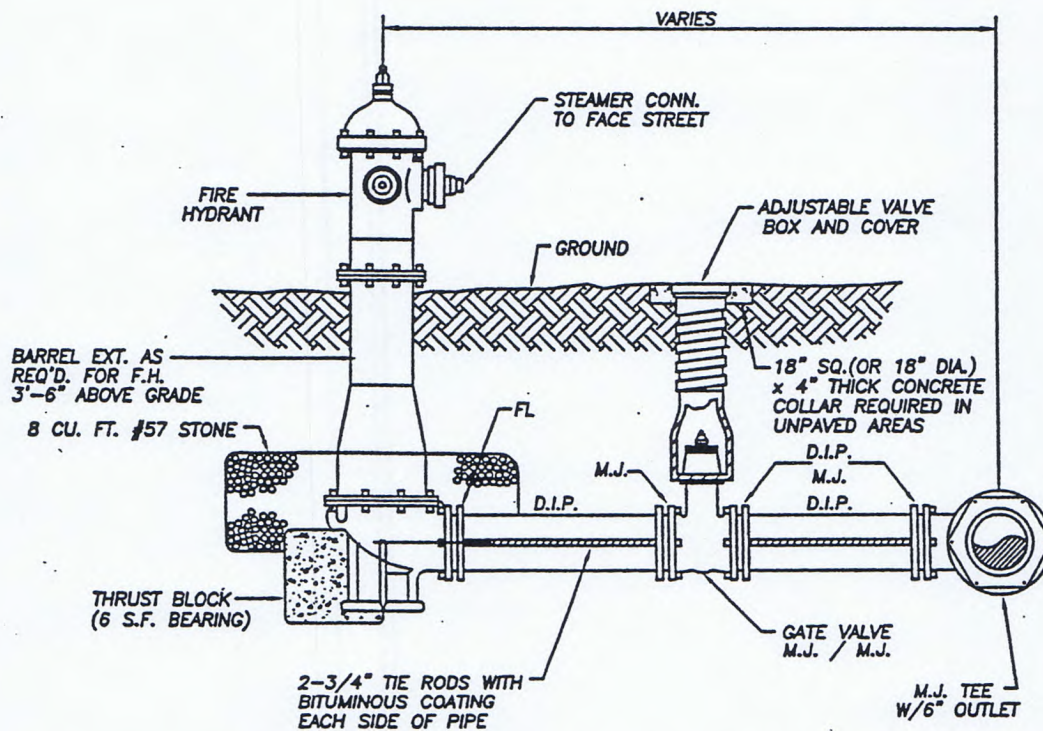


WATER METER LOCATION
FOR SUBDIVISION

N.T.C.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL 1-8 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



PROFILE — RODDED LEADER

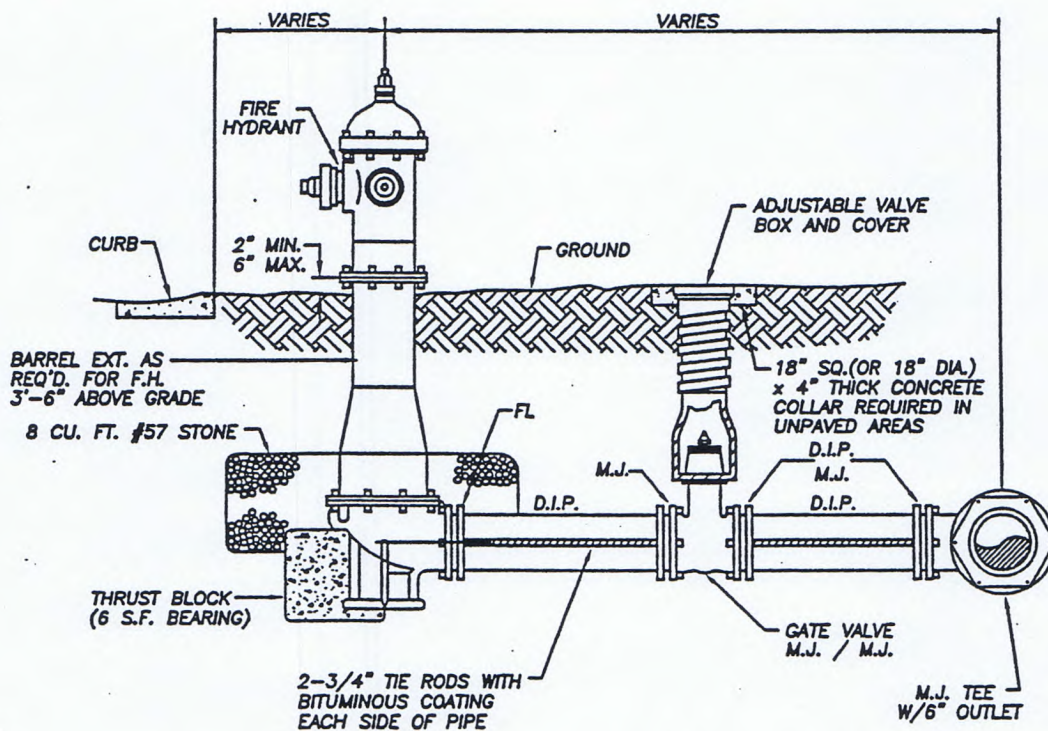
FIRE HYDRANT INSTALLATION

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL 1-9
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT

SUBDIVISION STANDARD



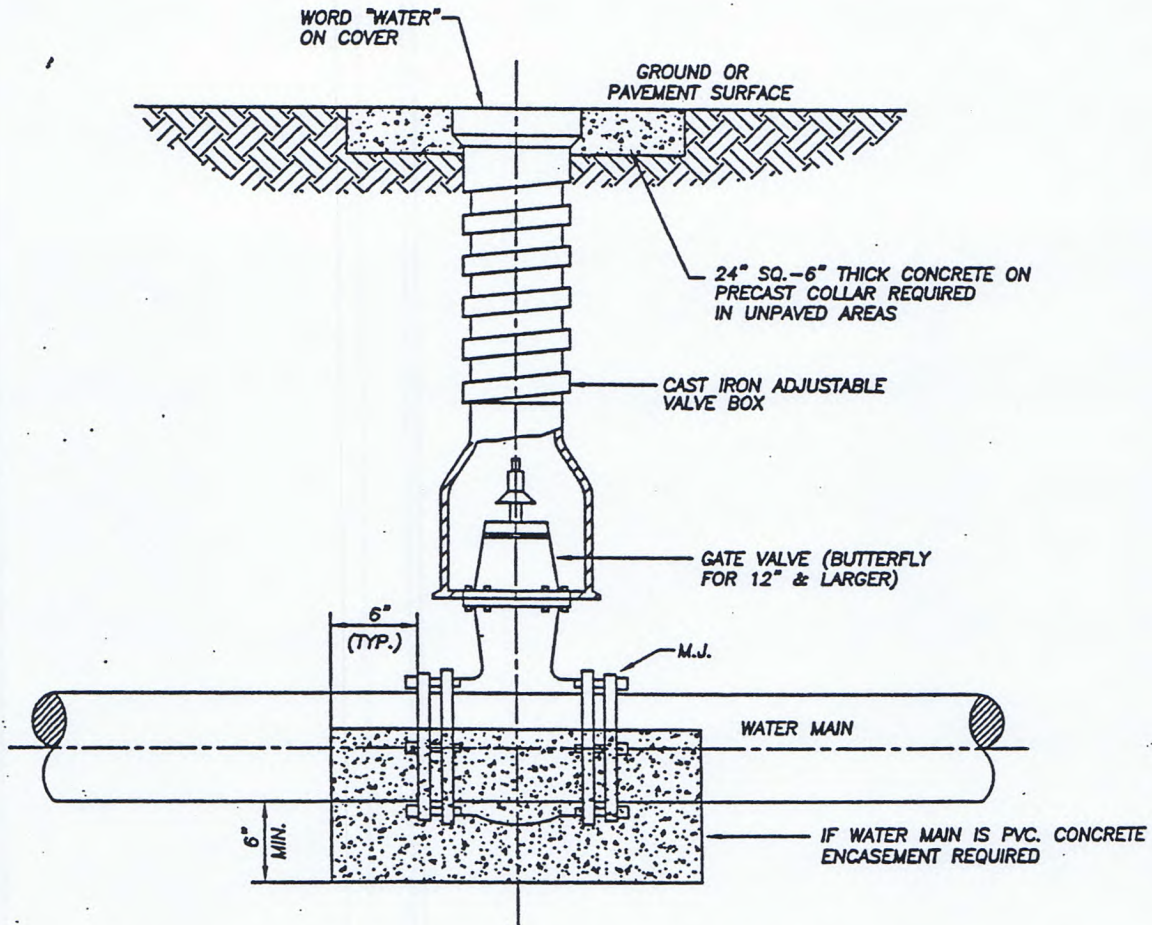
PROFILE — RODDED LEADER

FIRE HYDRANT INSTALLATION

N.T.S.

APPROVED
Rec. by: OZ Date: 1-12-04

STANDARD DETAIL 1-10
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



NOTE:

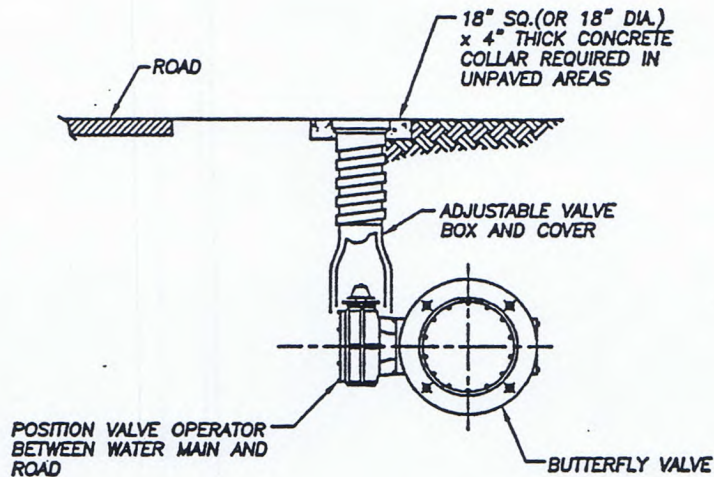
WHERE VALVE MARKERS ARE REQUIRED, INSTALL PRECAST REINFORCED CONCRETE SQUARE POST, MINIMUM 4" SQUARE AND 6 FEET LONG, ENGRAVED WITH WORD "VALVE" IN 2" HIGH LETTERING.

TYPICAL VALVE INSTALLATION

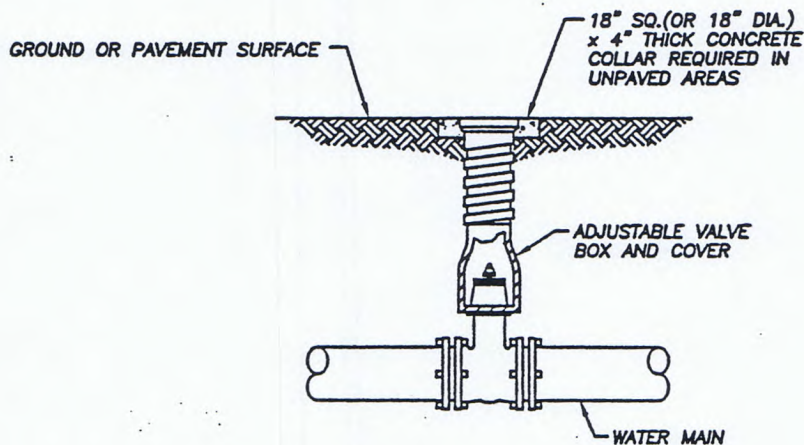
N.T.S.

APPROVED
Rec. by: 02 Date: 1-12-04

STANDARD DETAIL 1-11
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



BUTTERFLY VALVE DETAIL



GATE VALVE DETAIL

GATE VALVE INSTALLATION

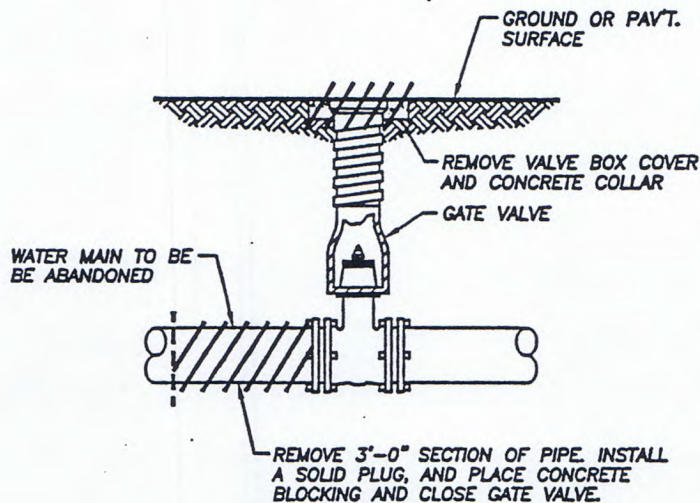
N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

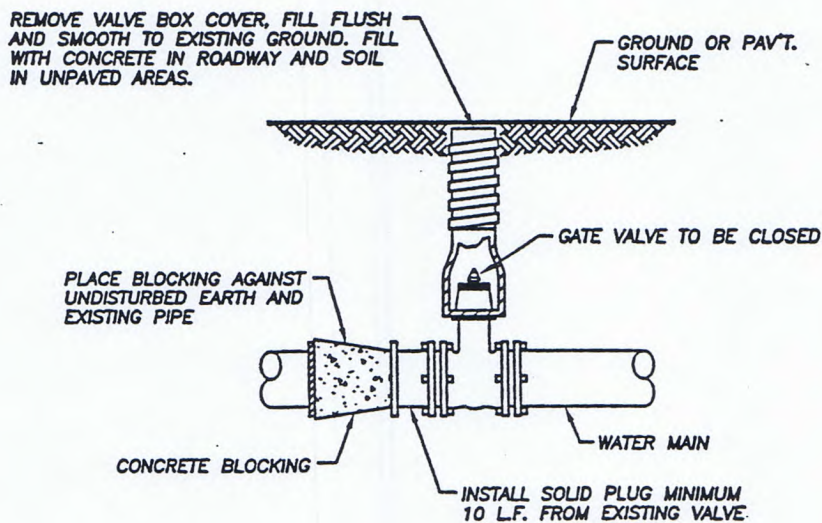
STANDARD DETAIL 1-12

CITY OF BARNESVILLE

WATER AND SEWER DEPARTMENT



EXISTING SECTION



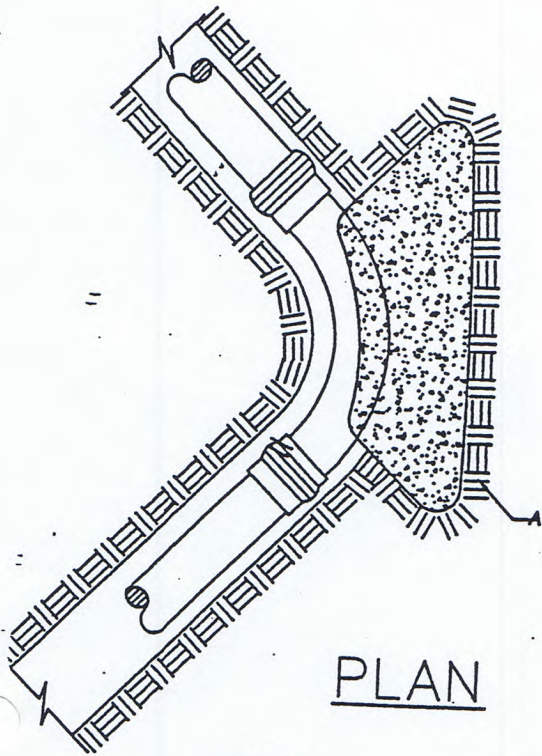
REVISED SECTION

LINE ABANDONMENT AT VALVE

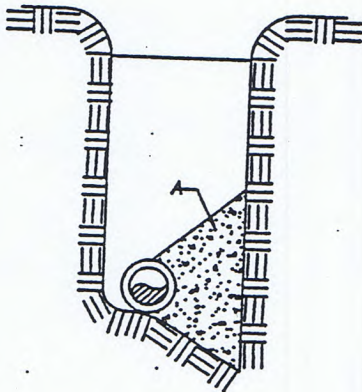
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APPROVED
Rec. by: DZ Date: 1-12-04

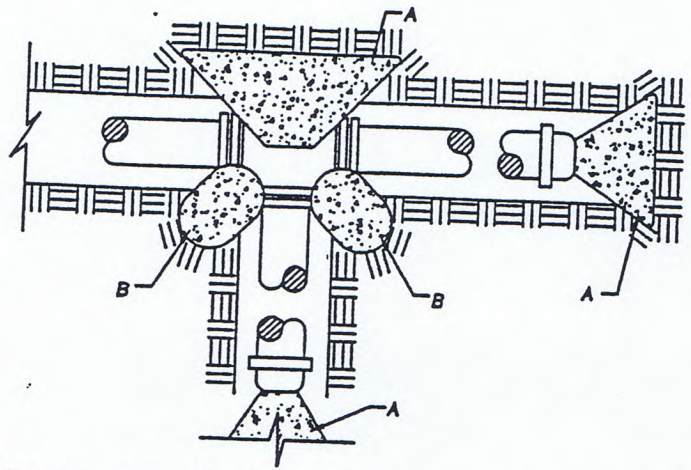
STANDARD DETAIL 1-13 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



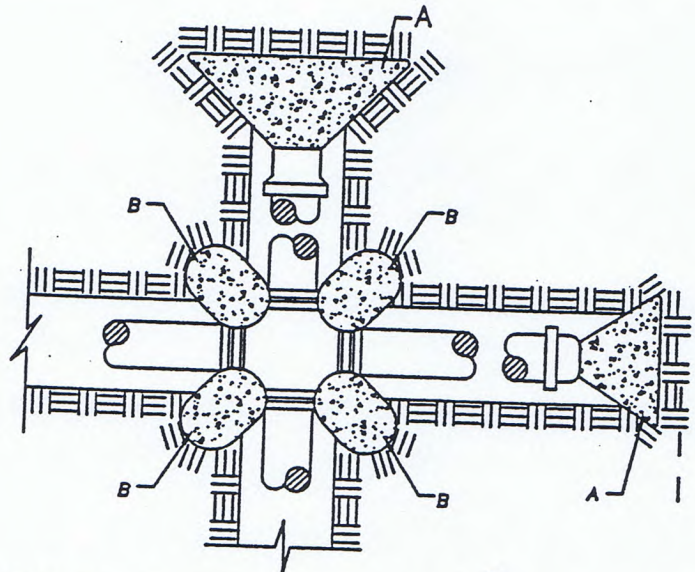
PLAN



TYP. SECTION



TEE W/ 1 OR 2 PLUGS



CROSS TEE OR CROSS TEE
W/ 1 OR 2 PLUGS

UR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL WHERE TRENCH WALL HAS
EN DISTURBED, EXCAVATE LOOSE MATERIAL & EXTEND THRUST BLOCK TO UNDISTURBED
TERIAL

BENDS & TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
ICE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCK.

ETE SHALL BE 3000 P.S.I.

IG SHALL BE CONSTRUCTED AS PER AWWA STANDARD C600-SECTION 12.3
EST REVISION.

PIPE SIZE	2"	4"	6"	8"	10"	12"
A*	1	1.5	3	6	9	12
B*	1	1	2	4	5	8

* CHART NO.'S ARE SQ. FT. BEARING ON UNDISTURBED MATL.

THRUST BLOCK DETAIL

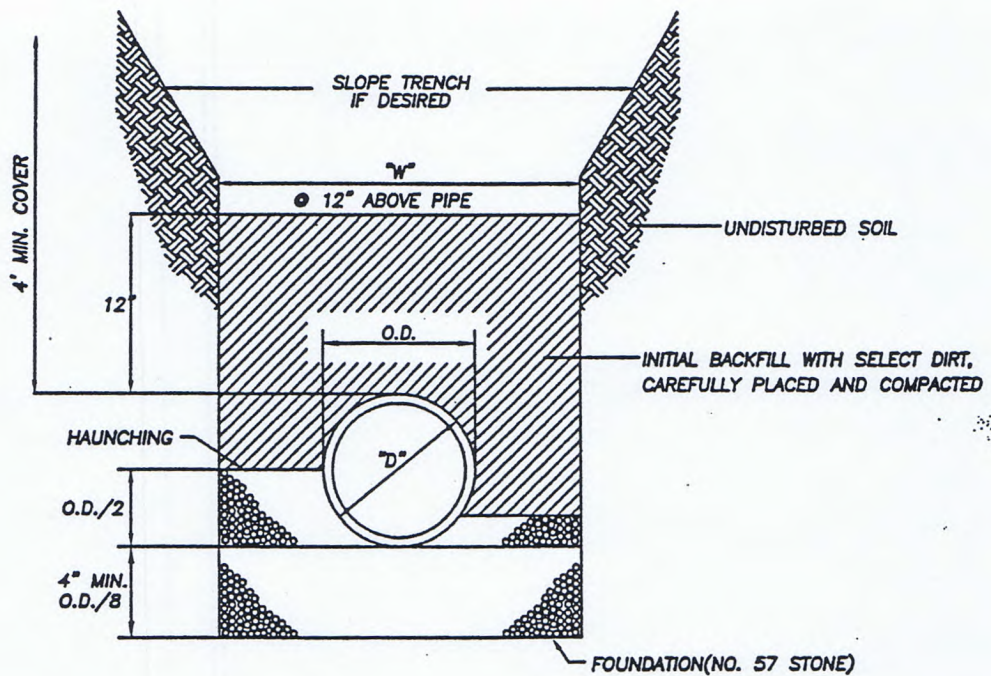
APPROVED

Rec. by: DZ Date: 1-2-04

STANDARD DETAIL SS-01 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT

IN NON-PAVEMENT AREA,
BACKFILL IS TO BE PLACED
AND MOUNDED TO ALLOW
FOR CONSOLIDATION.

- NOMINAL PIPE DIAMETER
- OUTSIDE PIPE DIAMETER
- O.D. PLUS TWO FEET MIN.
O.D. PLUS FOUR FEET MAX.

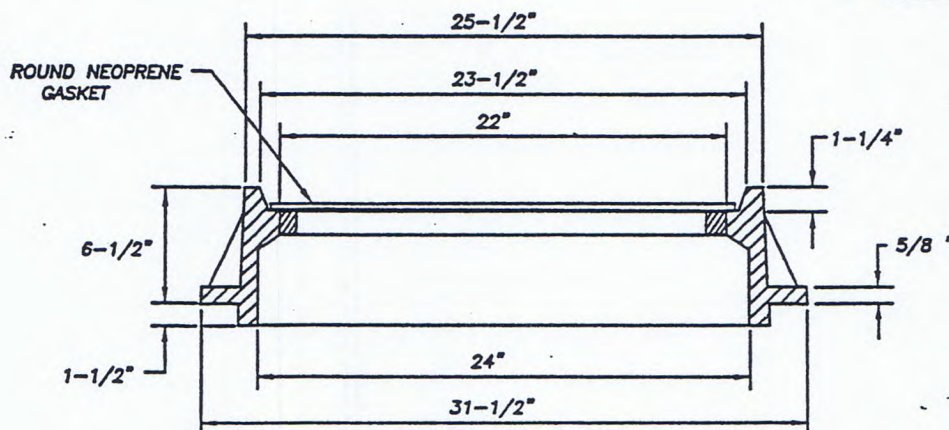
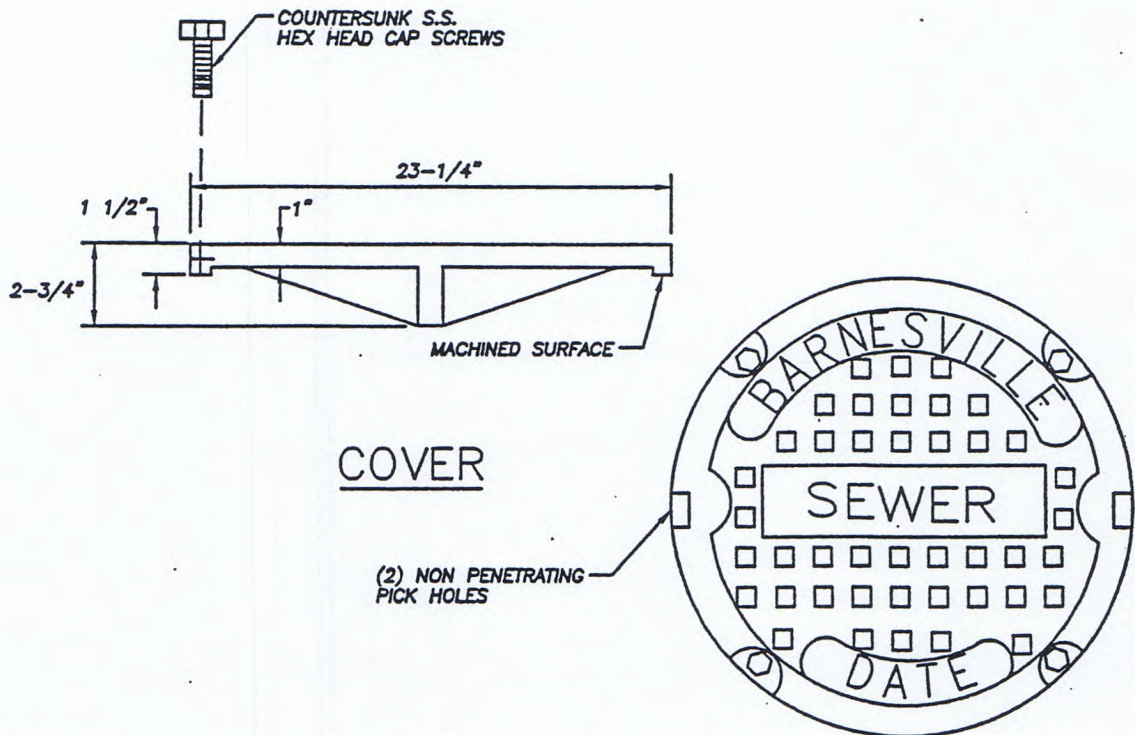


TYPICAL SEWER PIPE BEDDING

N.T.S.

APPROVED
Rec. by: 02 Date: 1-12-04

STANDARD DETAIL SS-02 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



NOTES: VULCAN VM-3 MOD. OR APPROVED EQUAL
MIN. FRAME WT. 200LBS. (APPROX.)
MIN. FRAME WT. 120LBS. (APPROX.)

FRAME

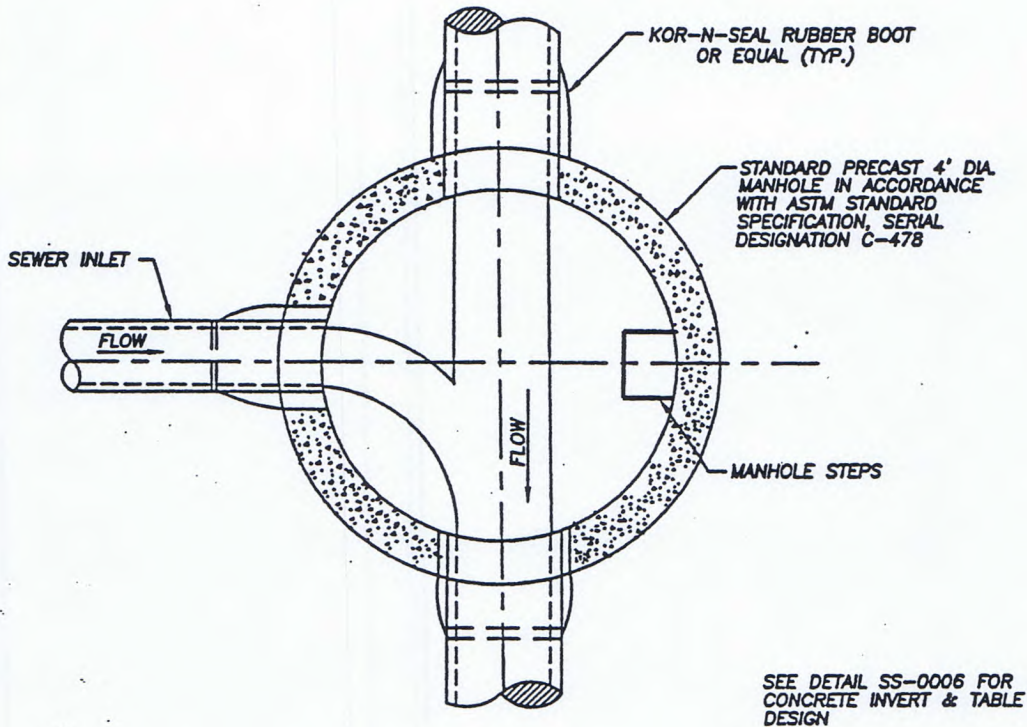
TYPICAL SECTION MANHOLE FRAME AND COVER

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

TYPICAL SECTION STANDARD MANHOLE

STANDARD DETAIL SS-04
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



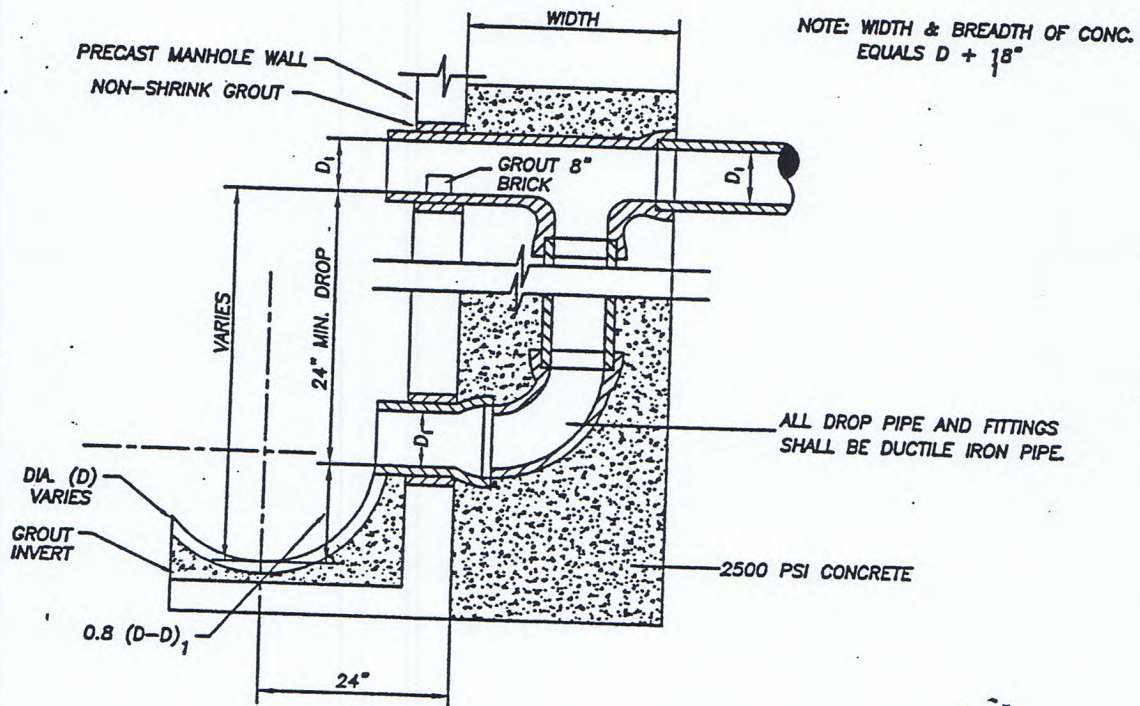
PLAN

STANDARD MANHOLE

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL SS-05 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT.

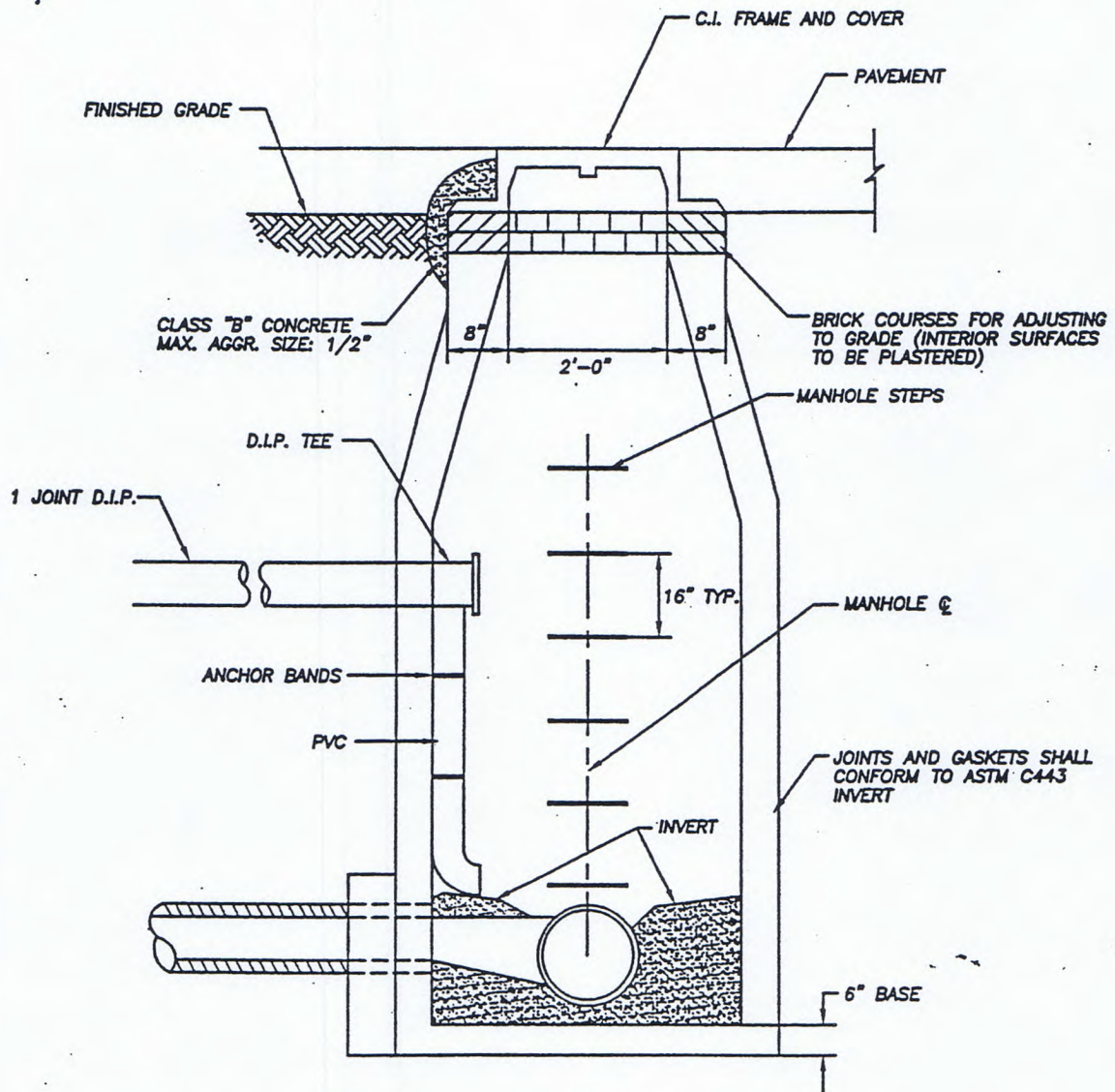


OUTSIDE DROP MANHOLE

N.T.S.

APPROVED
Rec. by: 02 Date: 1-12-04

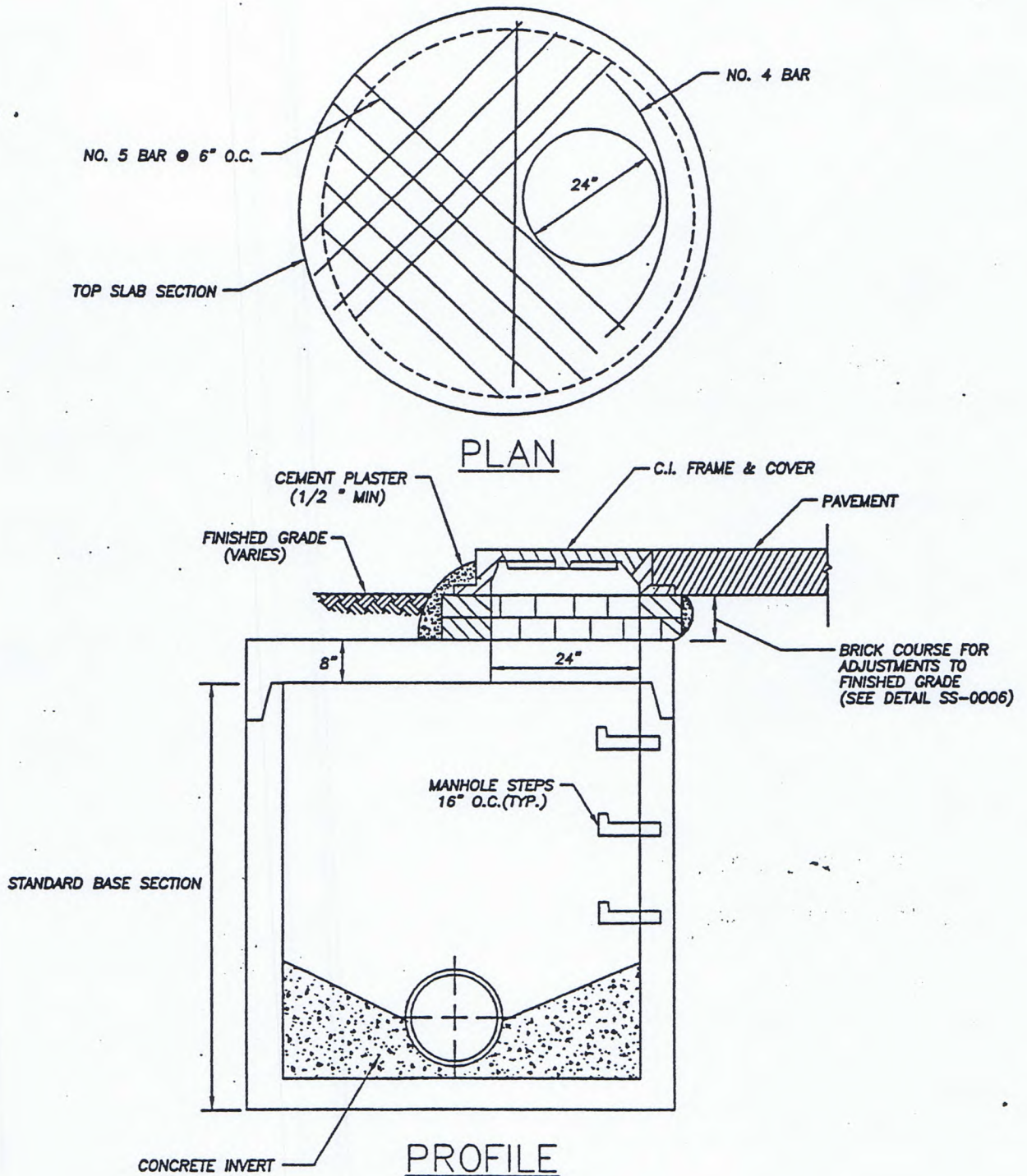
STANDARD DETAIL SS-06
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



APPROVED
Rec. by: DZ Date: 1-12-04

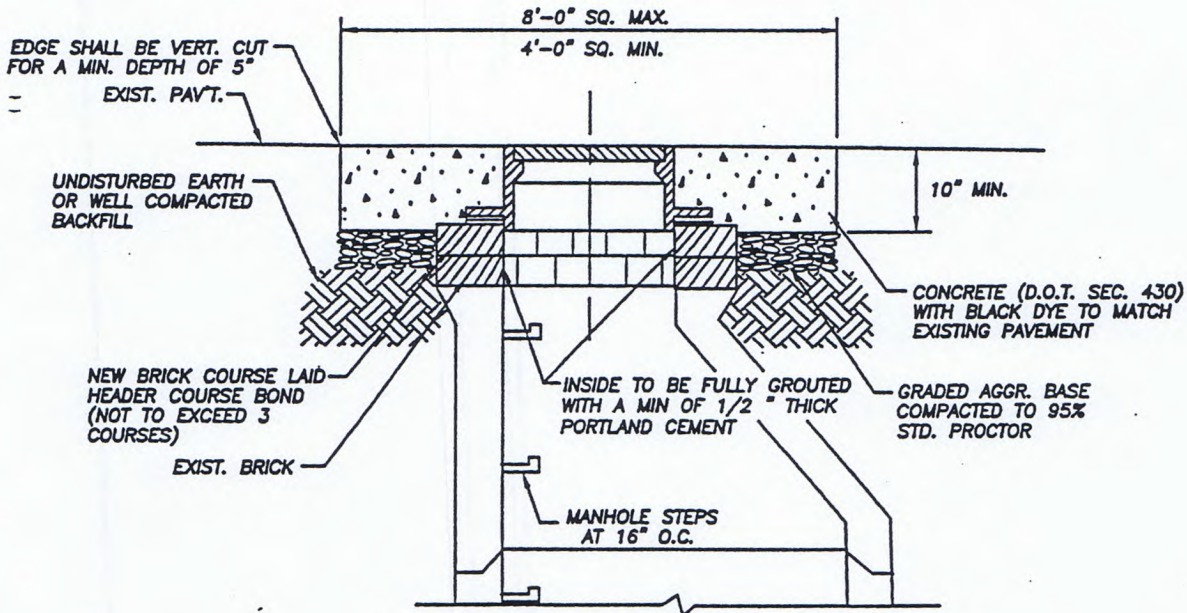
TYPICAL SECTION
INSIDE DROP MANHOLE

STANDARD DETAIL SS-07
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



TYPICAL SECTION
STANDARD SHALLOW MANHOLE

STANDARD DETAIL SS-08 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



NOTES:

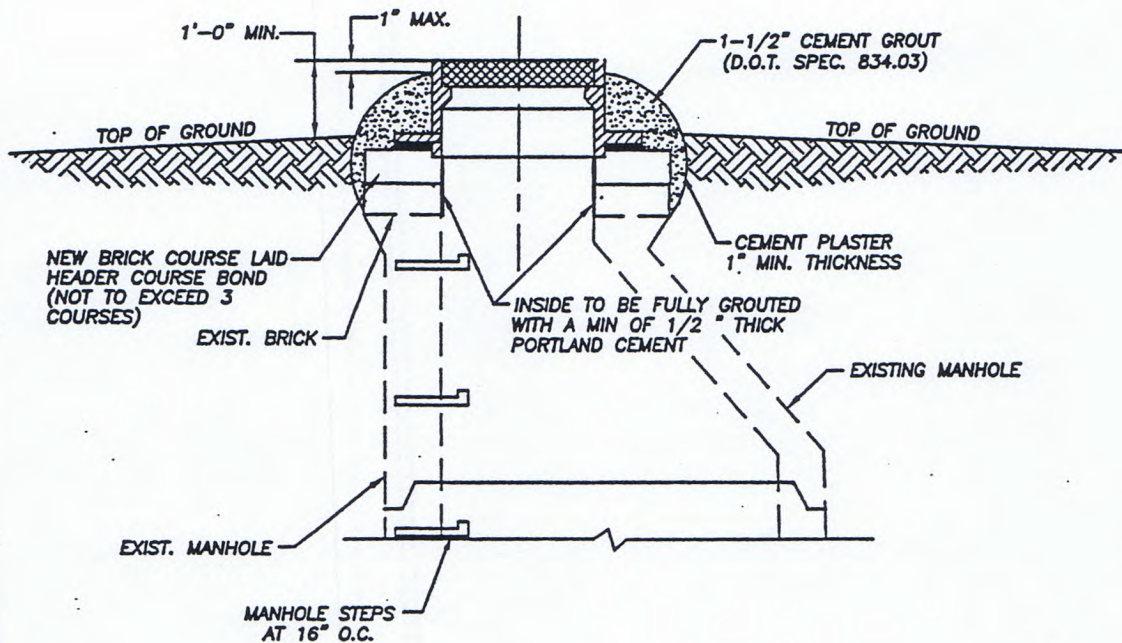
1. CONCRETE FOR COLLAR SHALL BE A MIN. OF 10" THICK AND SHALL EXTEND FROM THE MIDDLE OF THE LAST NEW COURSE OF BRICK TO THE TOP OF THE RING AND COVER.
2. IF REPLACEMENT OF THE FRAME & COVER IS NECESSARY, THE WEIGHT OF THE FRAME SHALL BE APPROX. 200 LBS AND THE COVER APPROX. 120 LBS. THE FRAME AND COVER SHALL BE VULCAN VM-3MOD. OR EQUAL.

TYPICAL SECTION MANHOLE FLUSH WITH PAVEMENT

N.T.S.

APPROVED
Rec. by: D2 Date: 1-12-04

STANDARD DETAIL SS-09
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT.



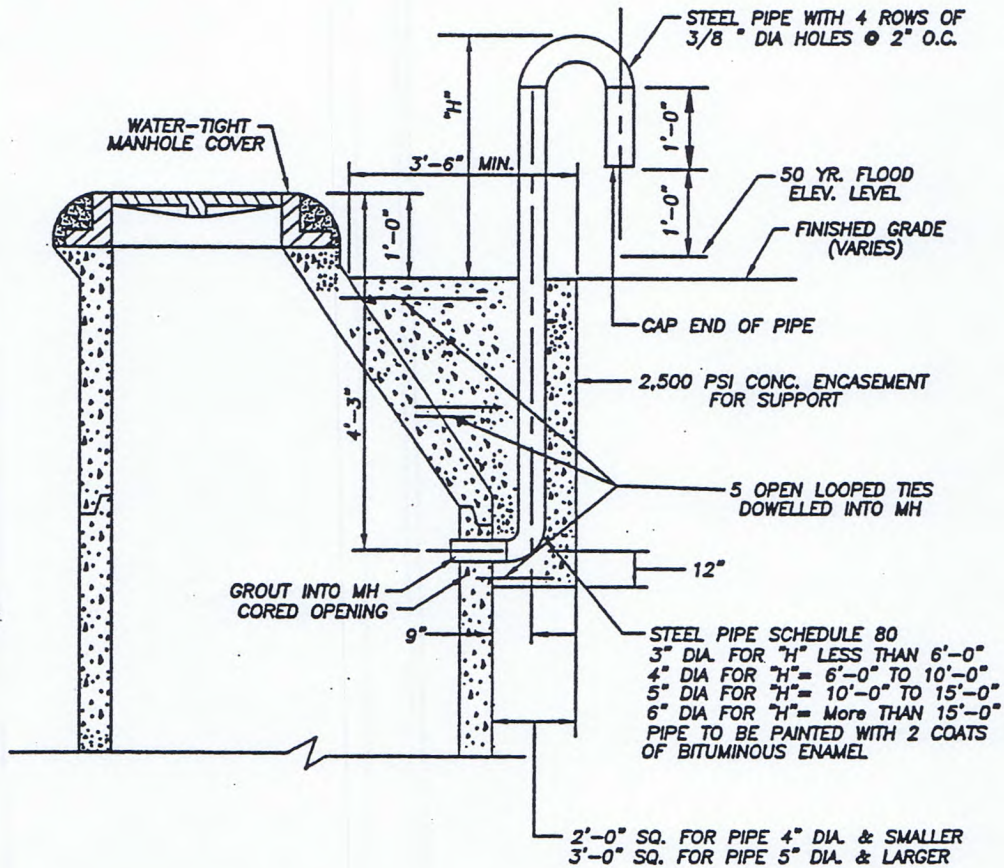
NOTES: 1. IF REPLACEMENT OF THE FRAME COVER IS NECESSARY, THE WEIGHT OF THE FRAME SHALL BE APPROX. 200# AND THE COVER APPROX. 120#. THE FRAME & COVER SHALL BE VULCAN VM-3MOD. OR EQUAL

TYPICAL SECTION MANHOLE
RISING ABOVE GRADE

N.T.S.

APPROVED
Rec. by: OZ Date: 1-12-04

STANDARD DETAIL SS-10 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



CONNECTION TO MANHOLE TO CONSIST OF STEEL PIPE AND
CLASS "D" CONCRETE COMPLETE

TYPICAL SECTION VENTED MANHOLE

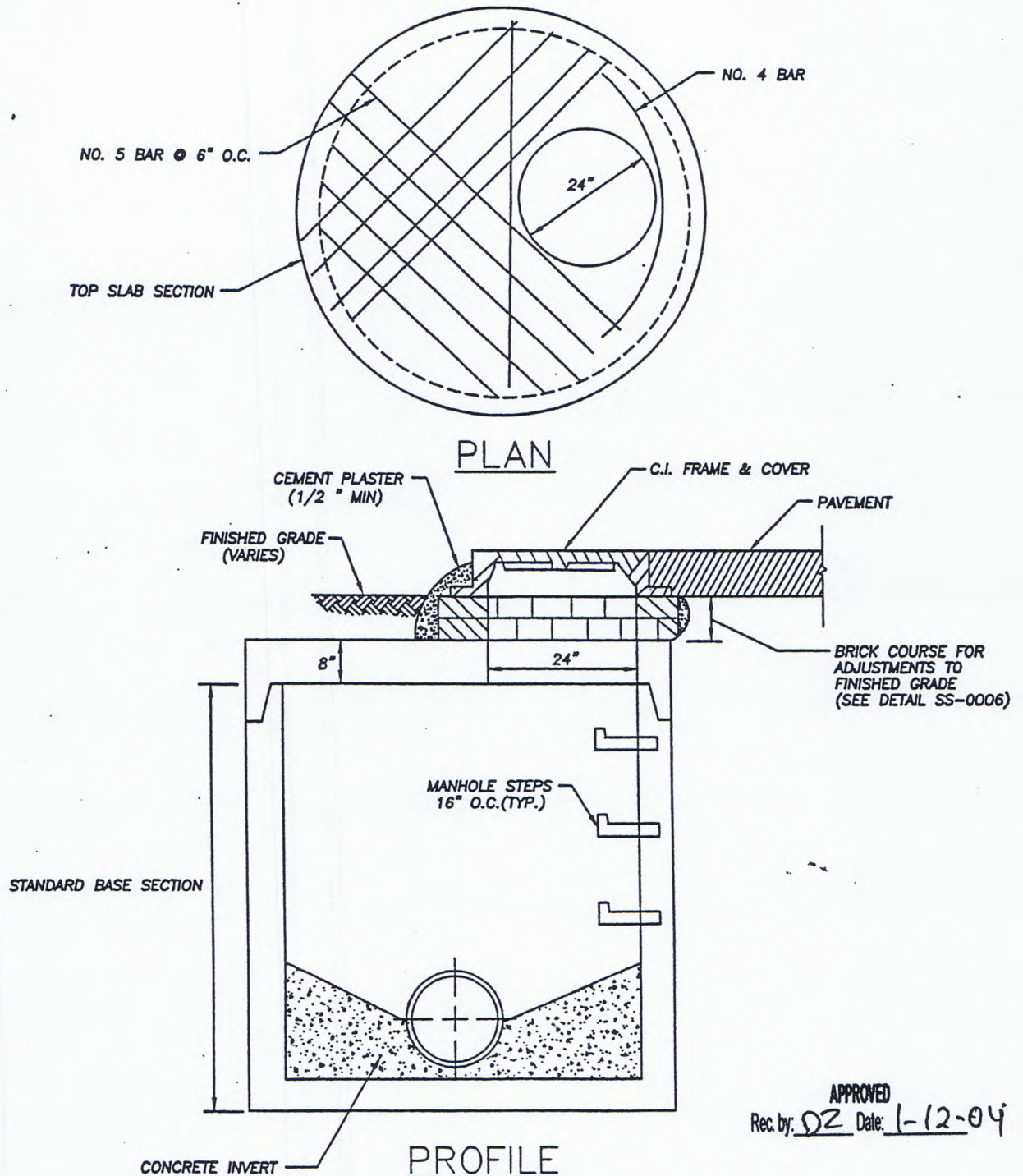
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APPROVED
Rec. by: DZ Date: 1-12-04

N.T.S.

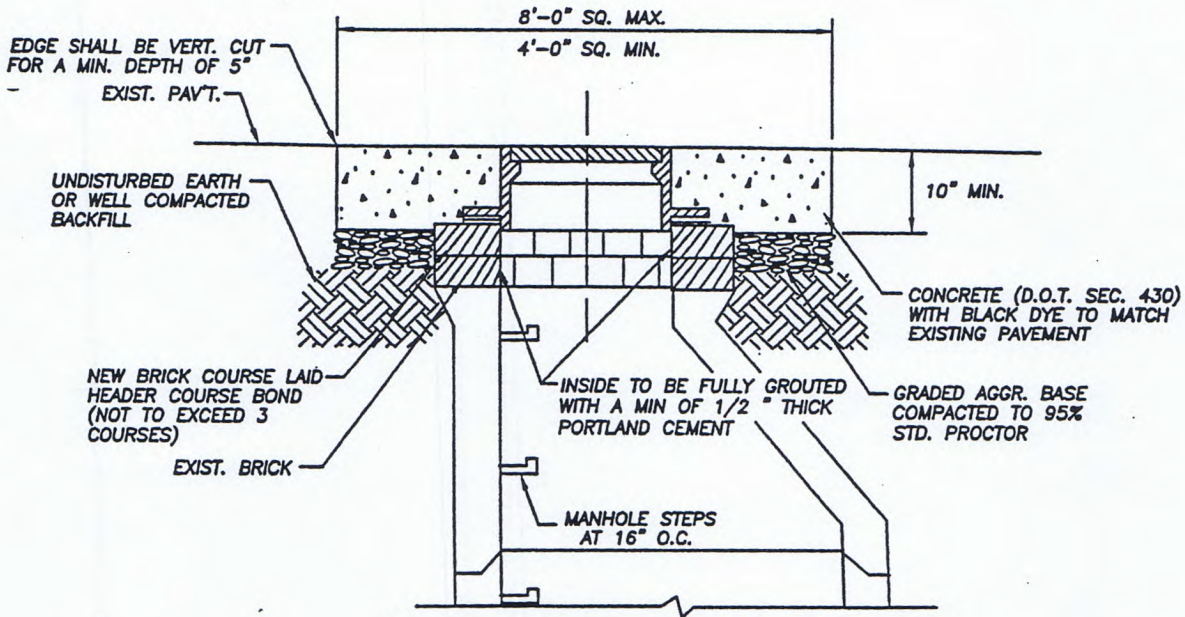
APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL SS-07
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



TYPICAL SECTION
STANDARD SHALLOW MANHOLE

STANDARD DETAIL SS-08 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



NOTES:

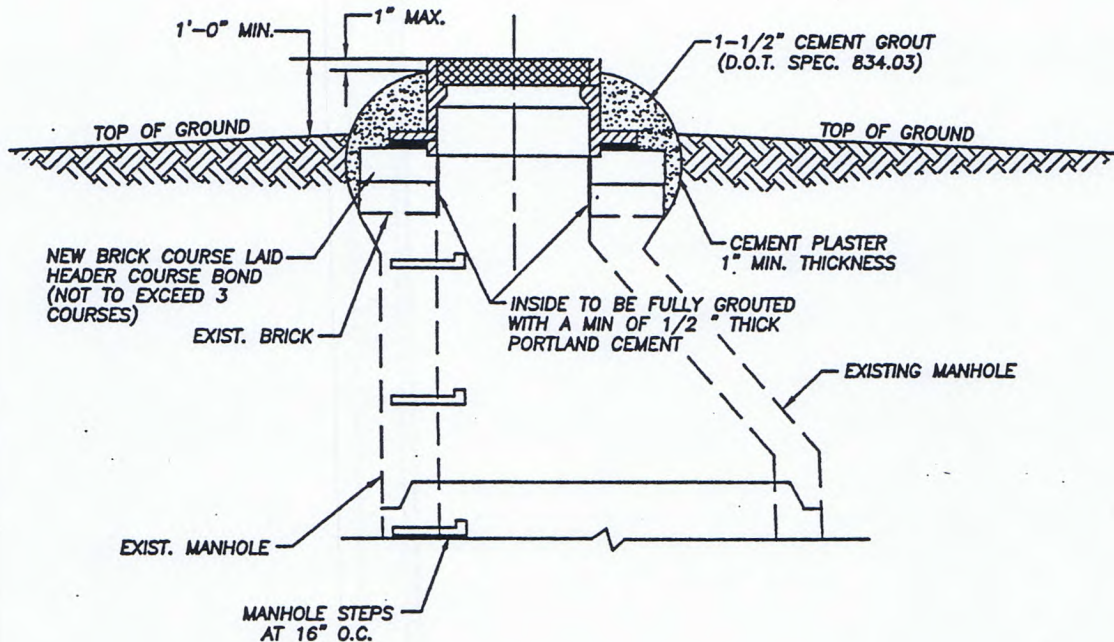
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TYPICAL SECTION MANHOLE FLUSH WITH PAVEMENT

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL SS-09 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT.



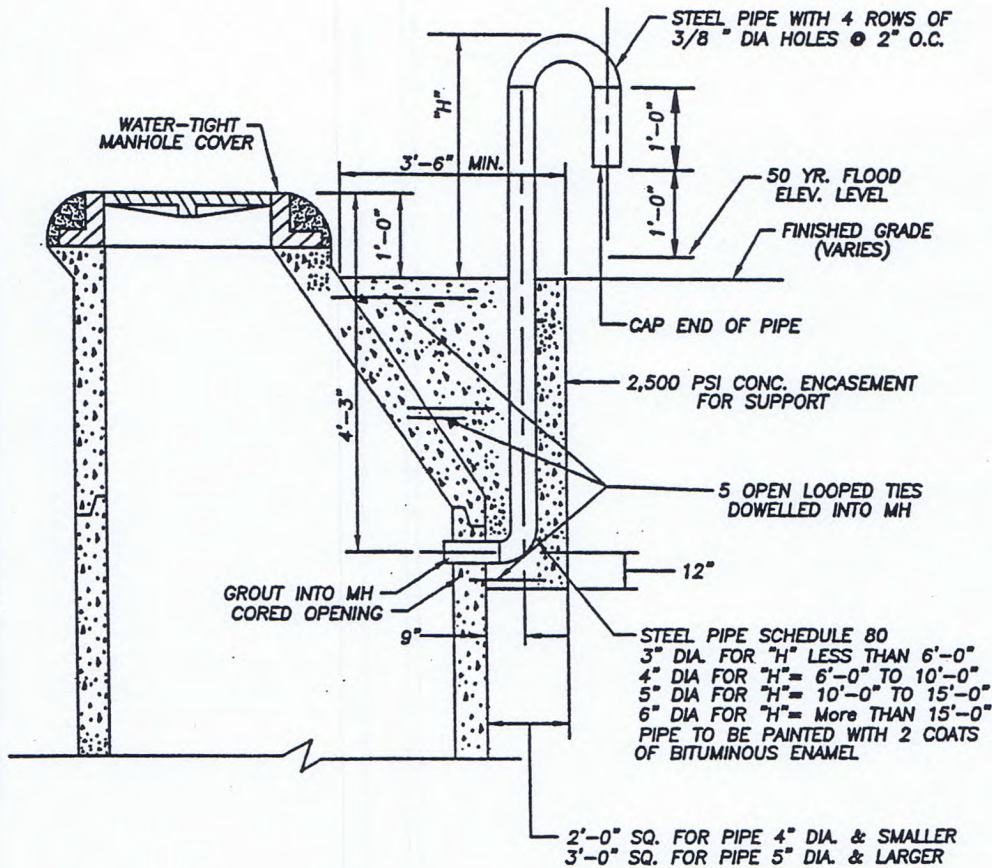
NOTES: 1. IF REPLACEMENT OF THE FRAME COVER IS NECESSARY, THE WEIGHT OF THE FRAME SHALL BE APPROX. 200# AND THE COVER APPROX. 120#. THE FRAME & COVER SHALL BE VULCAN VM-3MOD. OR EQUAL

TYPICAL SECTION MANHOLE RISING ABOVE GRADE

N.T.S.

APPROVED
Rec. by: QZ Date: 1-12-04

STANDARD DETAIL SS-10 CITY OF BARNESVILLE WATER AND SEWER DEPARTMENT



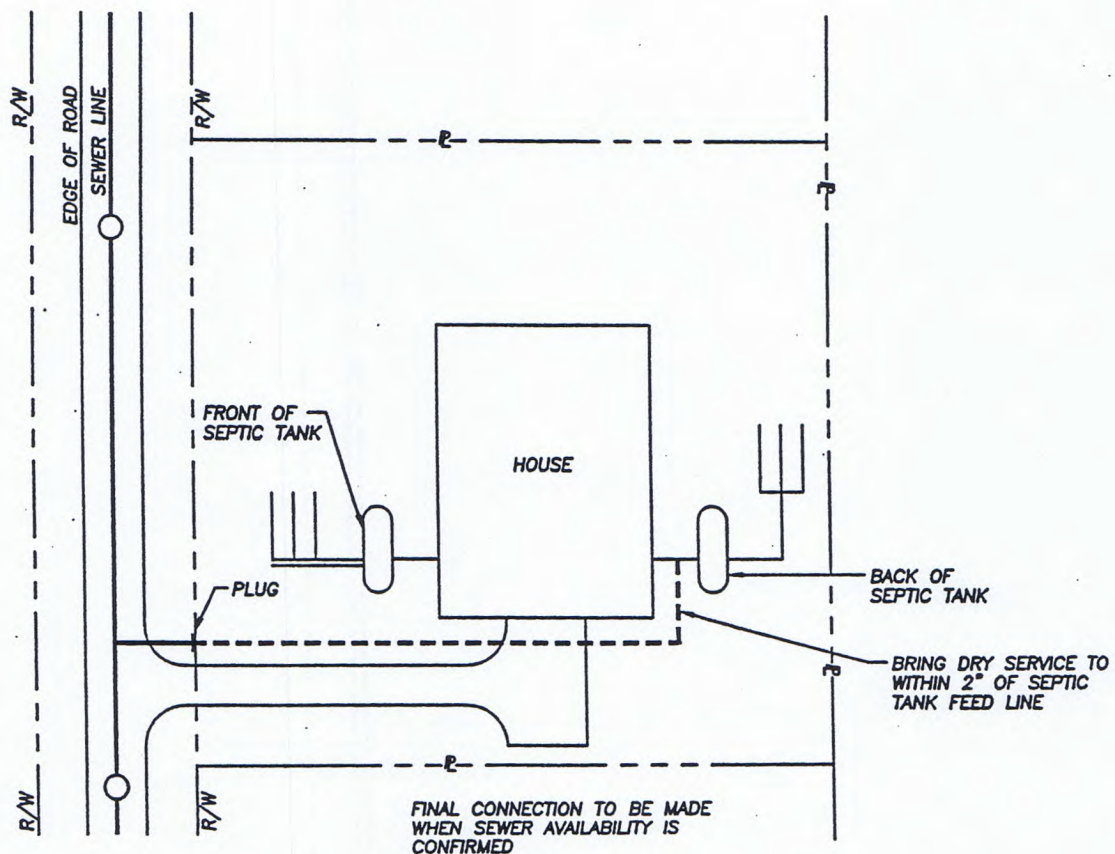
CONNECTION TO MANHOLE TO CONSIST OF STEEL PIPE AND
CLASS "D" CONCRETE COMPLETE

TYPICAL SECTION VENTED MANHOLE

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04

STANDARD DETAIL SS-11
CITY OF BARNESVILLE
WATER AND SEWER DEPARTMENT



DRY SEWER LINE CONNECTION

N.T.S.

APPROVED
Rec. by: DZ Date: 1-12-04