

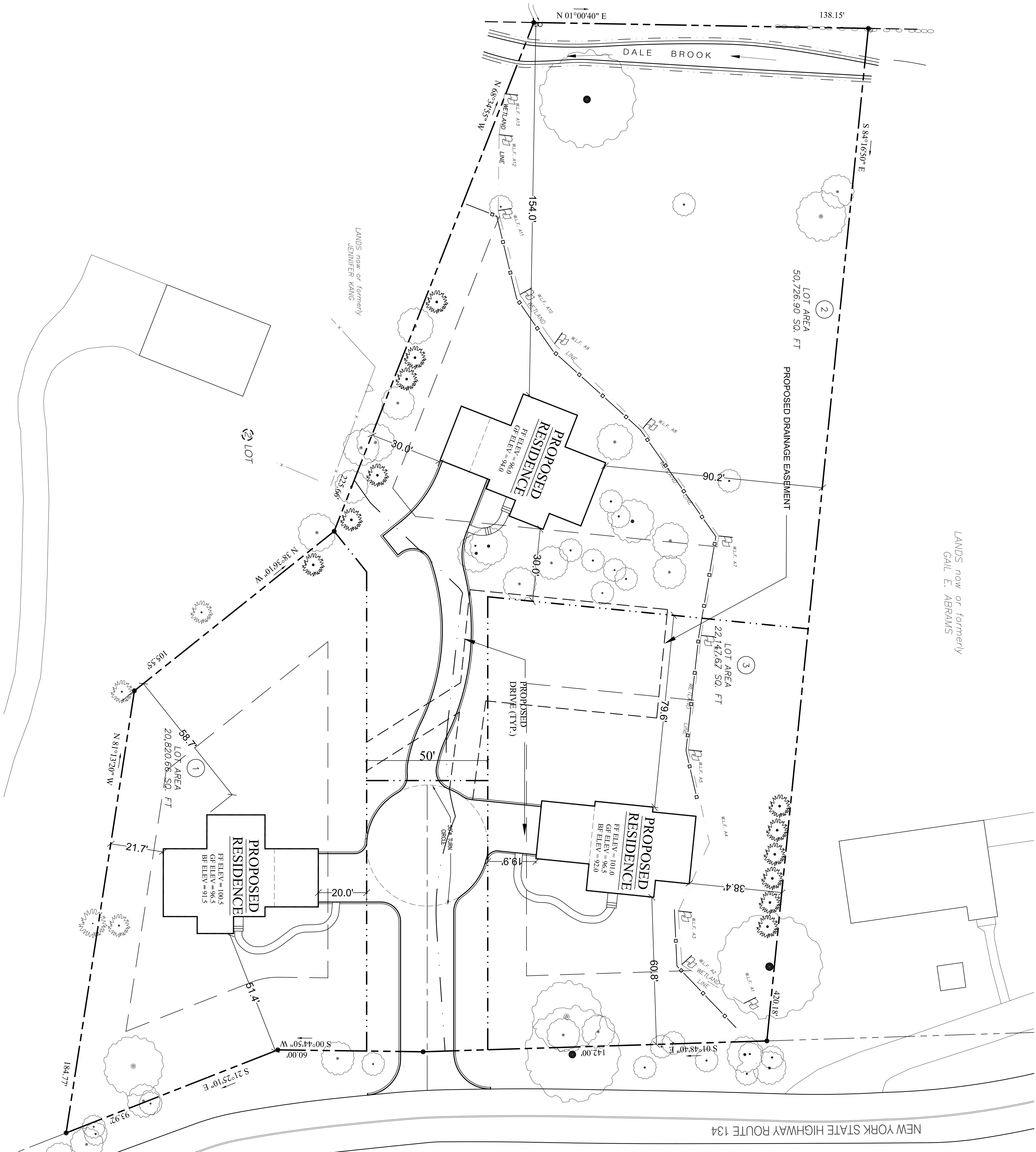
**OWNER / DEVELOPER:** MGM DESIGN & CONSTRUCTION GROUP, LLC  
347 FIFTH AVENUE

**WATER FACILITIES:** PUBLIC WATER FACILITIES

**ZONING DISTRICT:** R-20, ONE FAMILY RESIDENTIAL

ZONING DISTRICT:		R-20, ONE FAMILY RESIDENTIAL			
DIMENSIONAL REGULATIONS:	REQUIRED	LOT 1	LOT 2	LOT 3	VARIANCE REQUIRED
MINIMUM SIZE OF LOT:	20,000 SF.	20,820 SF.	50,726 SF.	22,147 SF.	NONE
MINIMUM LOT AREA:	90 FT.	112 FT.	138 FT.	115 FT.	NONE
MINIMUM LOT WIDTH:	130 FT.	182 FT.	249 FT.	160 FT.	NONE
MINIMUM LOT DEPTH:					
MINIMUM YARD DIMENSIONS:					
PRINCIPAL BUILDING - FRONT YARD SETBACK:	30 FT.	51.4 FT.	30 FT.	60.8 FT.	NONE
REAR YARD SETBACK:	34 FT.	58.7 FT.	35.4 FT.	78.6 FT.	NONE
ONE SIDE YARD SETBACK:	18 FT.	20 FT.	30 FT.	19.9 FT.	NONE
COMBINED SIDE YARD SETBACK:	34 FT.	21.7 FT.	120.2 FT.	38.4 FT.	NONE
MAXIMUM % OF LOT TO BE OCCUPIED:					
LOT COVERAGE:	SEE NOTE 1	2.39% SF	4.49% SF	2.40% SF	NONE
BUILDING COVERAGE:	22%	10.3%	4.2%	8.8%	NONE
MAXIMUM HEIGHT:					
PRINCIPAL BUILDING - FEET:	35 FEET	30 FEET	30 FEET	30 FEET	NONE
PRINCIPAL BUILDING - STORIES:	2 1/2	2 1/2	2 1/2	2 1/2	NONE

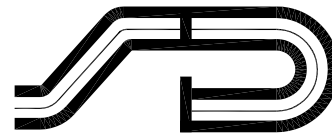
ZONING REGULATION NOTES:  
1. MAX IMPERVIOUS COVERAGE SHALL BE PER SECTION 200-21(B).



**NOTES:**  
1. UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.



NOTES:  
1. UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION  
OF SECTION 7209 (2)(b) OF THE NEW YORK STATE EDUCATION LAW.





- GENERAL NOTES:
1. THE LOCATIONS AND ORIENTATIONS OF THE PROPOSED RESIDENCES, INCLUDING GARAGES, SHALL BE CONSTRUCTED AS SHOWN ON THESE PLANS UNLESS MODIFICATIONS THEREOF HAVE BEEN APPROVED BY THE PLANNING BOARD OF THE TOWN OF OSSING.
  2. ALL PROPOSED UTILITIES INCLUDING ELECTRIC LINES, TELEPHONE LINES, CABLE TELEVISION LINES, ETC., SHALL BE LOCATED UNDERGROUND.
  3. AS INDICATED IN CORRESPONDENCE FROM THE VILLAGE OF OSSING, DATED 6/20/06, AND FROM THE TOWN CONSULTING ENGINEER, DATED 11/16/06: THE VILLAGE OF OSSING IS WILLING AND ABLE AND HAS ADEQUATE PRESSURE AND VOLUME, TO SERVE THIS SUBDIVISION.

- 1-1/2"Ø TYPE-K COPPER WATER SERVICE  
MAINTAIN MIN. 4 FT COVER (TYP)  
CURB BOX SET FLUSH WITH GRADE  
(TYP)  
LIMITS OF COMMON ACCESS  
& UTILITY EASEMENT  
22 FT WIDE PRIVATE COMMON DRIVEWAY  
6" ASPHALT CURB WHERE SHOWN  
(3) - 4"Ø LATERALS FROM SEWER MAIN TO  
PROPERTY LINE.  
CONNECT FORCE MAIN TO LATERALS WITH  
CLEAN OUT AT PROPERTY LINE. SEE DETAIL.  
PROP. 140 LF - 8" CL 54 DIP WATERMAIN  
MAINTAIN MIN. 4 FT COVER  
8" x 8" TAPPING SLEEVE AND  
VALVE - OPEN RIGHT  
(SEE DETAIL)

APPROXIMATE LOCATION OF EXISTING  
SANITARY AND WATER SERVICES TO BE  
ABANDONED IN ACCORDANCE WITH  
WESTCHESTER COUNTY HEALTH  
DEPARTMENT REGULATIONS.  
EXISTING UTILITY POLE.  
ELECTRIC SERVICE TO BE INSTALLED AND  
CONTINUED UNDERGROUND THROUGH  
UTILITY EASEMENT FROM THIS POINT.

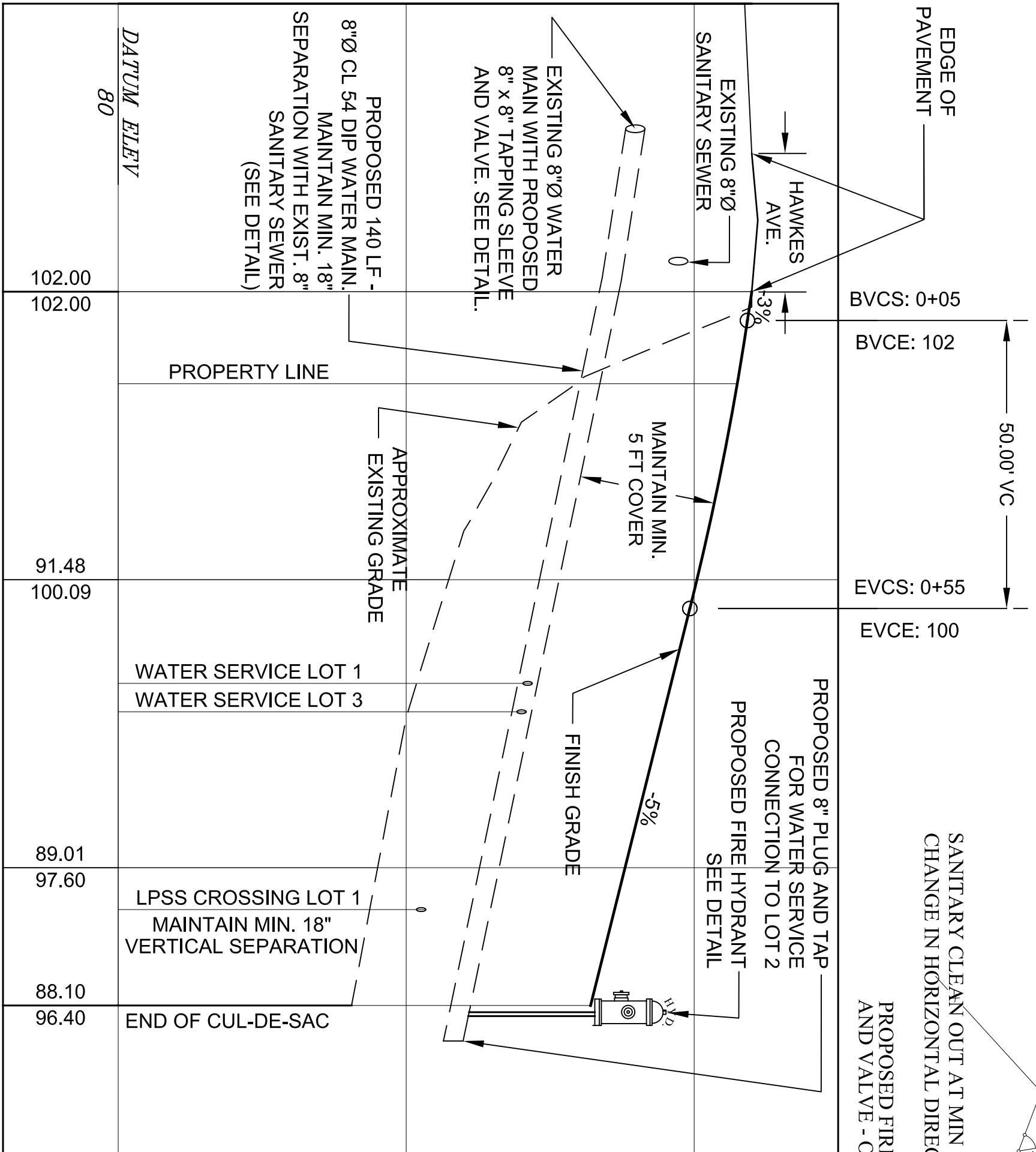
EXISTING DRIVEWAY ACCESS  
WILL BE CLOSED AND REGRADED.

EXISTING RESIDENCE & ACCESSORY  
BUILDINGS TO BE REMOVED (TYP.)

## LEGEND

- EXISTING TOPOGRAPHY  
PROPOSED TOPOGRAPHY  
EXISTING BUILDINGS  
PROPOSED HOUSE AND DRIVE  
EXISTING PROPERTY LINES  
PROPOSED EASEMENTS  
EXISTING SANITARY SEWER & MANHOLE  
PROPOSED SANITARY MANHOLE/CLEANOUT  
AND 11/2" PVC SDR-21 FORCE MAIN  
EXISTING GRAVEL DRIVE  
PROPOSED CATCH BASIN  
PROPOSED CATCH BASIN &  
HDPE DRAINAGE PIPE  
PROPOSED HEADWALL WITH RIP RAP  
PROPOSED 1-1/2" Ø PVC SDR-21  
WATERMAIN  
PROPOSED 1-1/2" Ø PVC SDR-21  
MAIN AND CLEAN OUT MANHOLE  
PROPOSED 1-1/2" Ø COPPER WATER  
SERVICE AND CURB BOX  
PROPOSED FIRE HYDRANT  
LOCATION OF WATER MAIN CROSSING

NOTES:  
1. UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION  
OF SECTION 260.07 OF THE NEW YORK STATE ELECTION LAW.



COMMON DRIVE AND UTILITY PROFILE  
SCALE: VERT. 1"=20'  
HORIZ. 1"=40'

0+00	102.00	102.00	91.48	100.09	89.01	97.60	88.10	96.40	1+00
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PROPOSED GRADING & UTILITY PLAN  
PREPARED FOR  
**MGM DESIGN & CONSTRUCTION GROUP, LLC**  
5 Hawkes Avenue Town of Ossing Westchester Co., New York

TOWN TAX MAP DATA:  
SECTION: 2  
BLOCK: 4  
26  
LOT AREA: 2.15 ACRES

SCALE: 1" = 20'  
DRAWN BY: TK  
DATE: 3/23/18

Revisions:  
No. Date Comments:  
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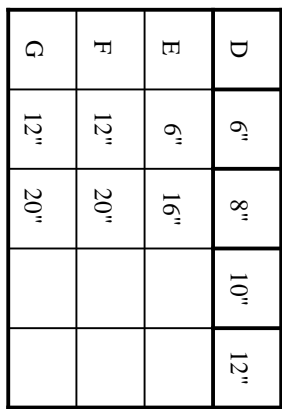
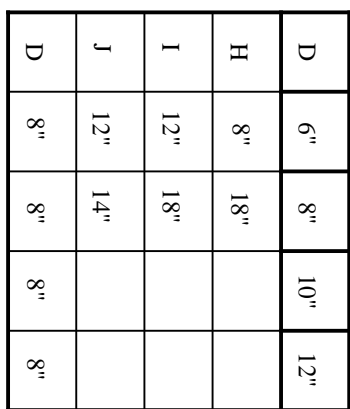
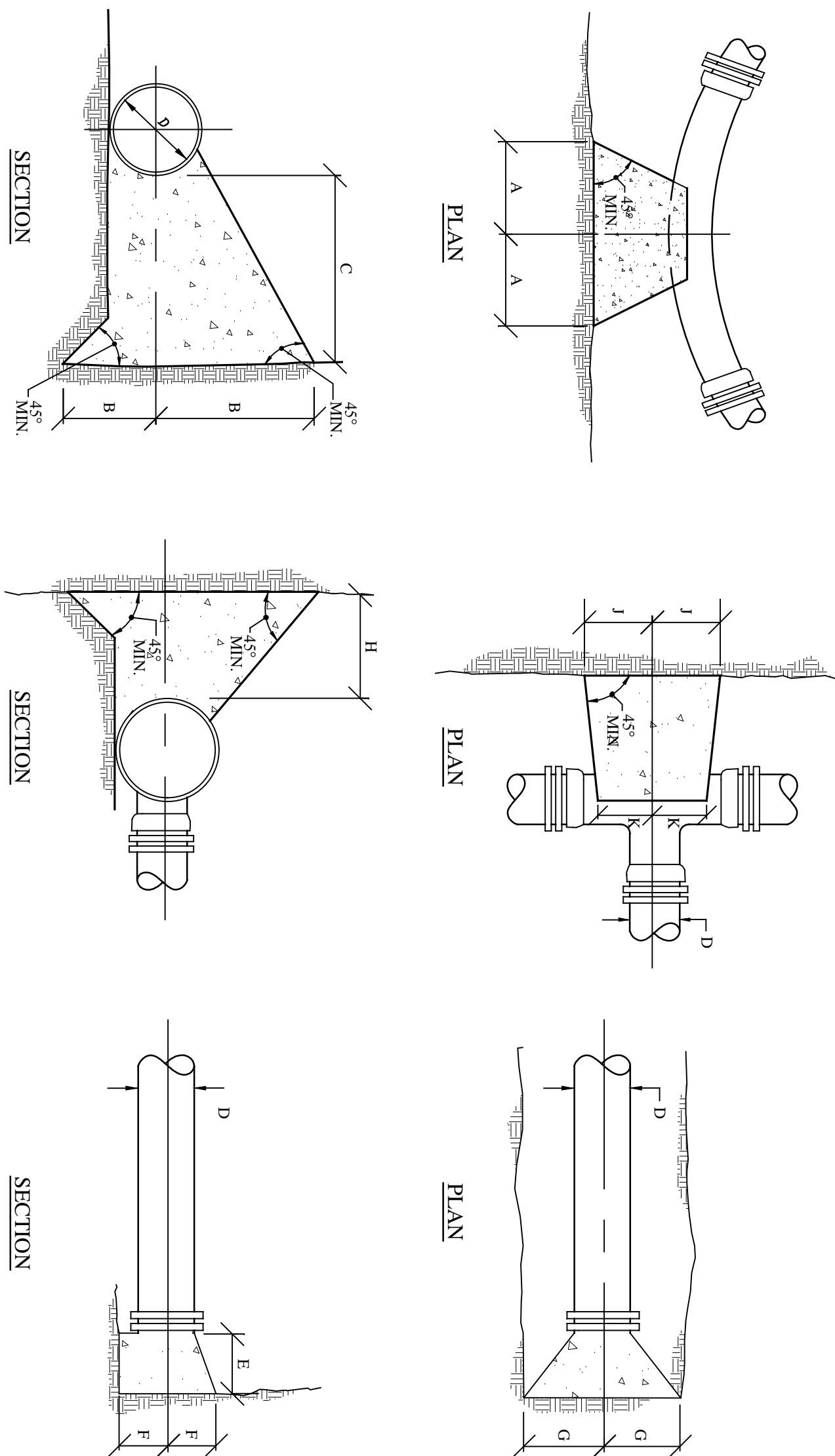








**NOTES:**  
1. UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.



NOTES:

ALL CONCRETE SHALL BE 2500 PSI. (MIN).  
ALL THRUST BLOCKS SHALL BE CARRIED TO UNDISTURBED EARTH.  
MINIMUM BEARING AREA SHALL BE 4 SQ. FT.

ALL BOLTS SHALL BE COVERED WITH BURLAP BEFORE POURING CONCRETE.



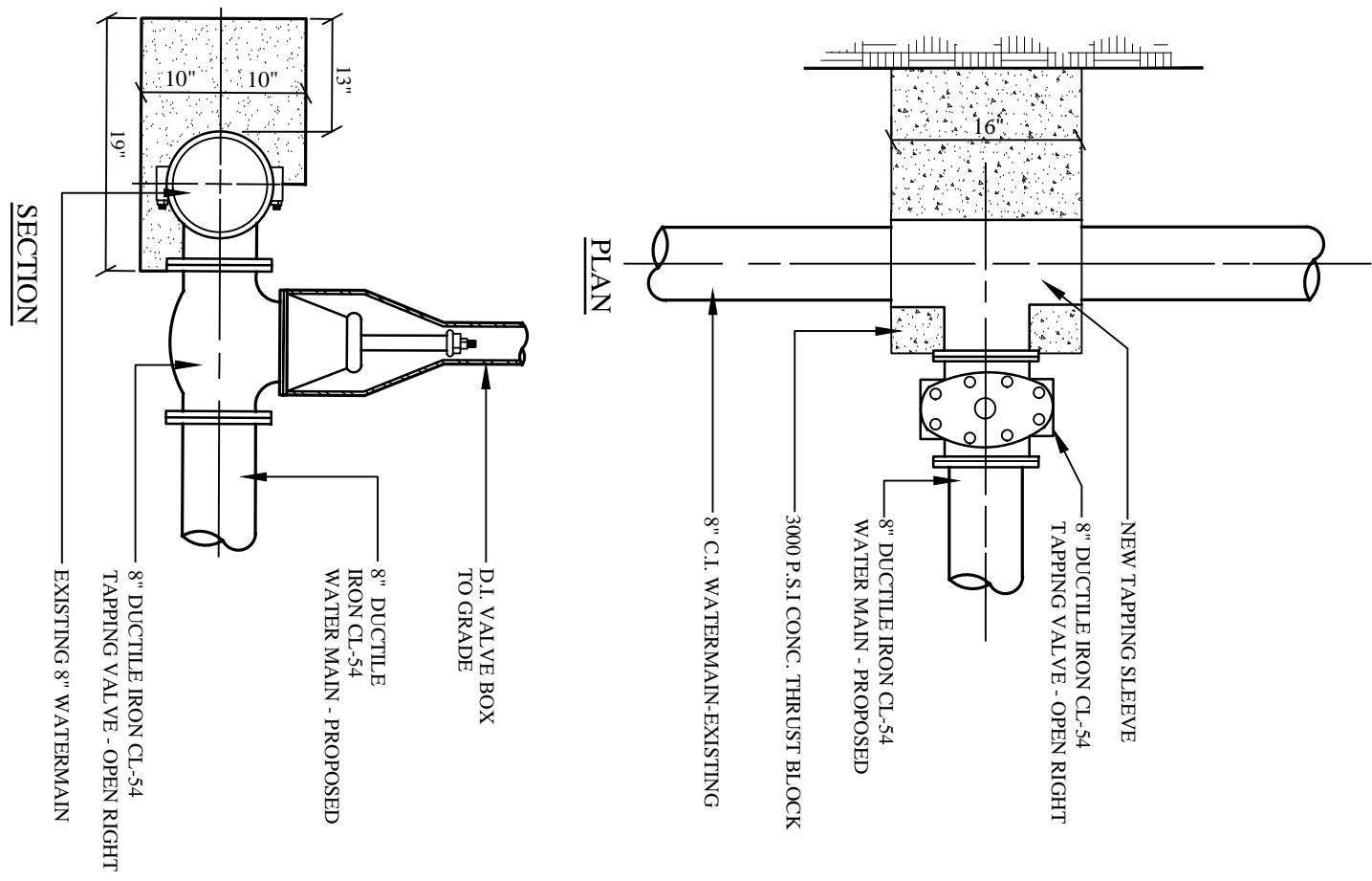
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HORIZONTAL BEND

## THRUST BLOCK

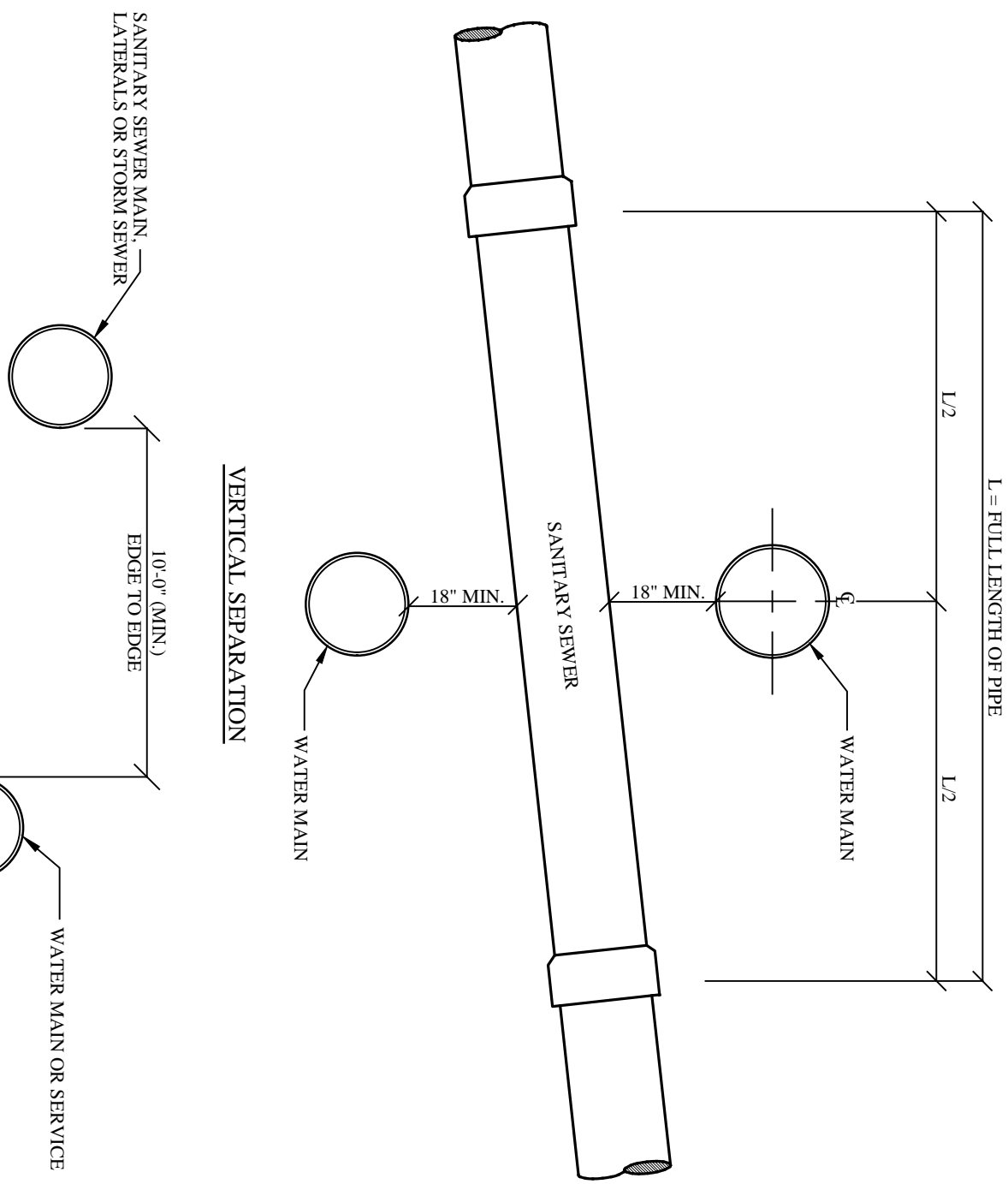
## THRUST BLOCK DETAILS

SCALE: N.T.S



## TAPPING SLEEVE & GATE VALVE CONNECTION

NTIS

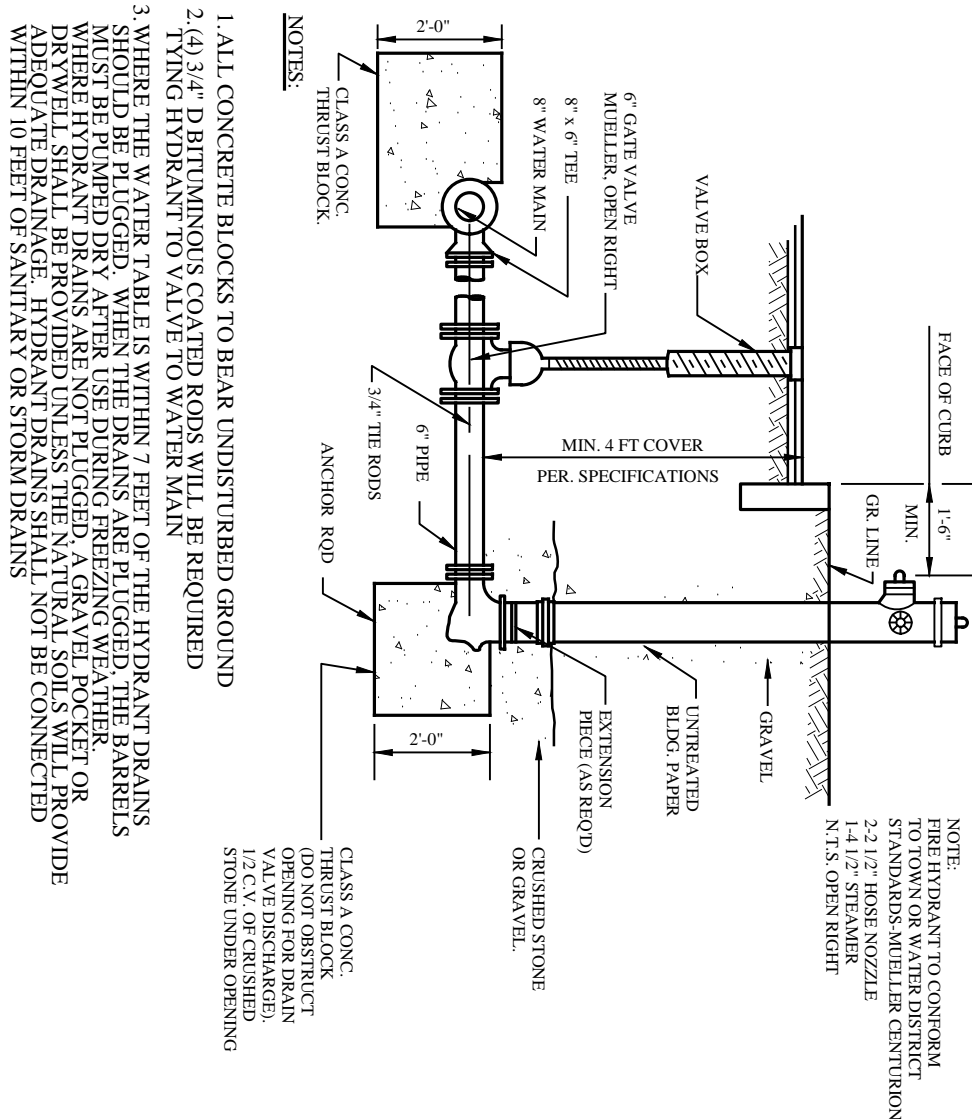


**NOTES:**

1. WHERE THE SANITARY SEWER MAIN IS ACROSS THE WATER MAIN AND IF MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED, THE INSTANT SHALL BE WEATHERED EDGE TO EDGE.
2. WHERE THE SANITARY SEWER MAIN IS PARALLEL TO AN EXISTING OR PROPOSED WATER MAIN A 10' MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED.
3. IF AN EXISTING WATER MAIN IS TO BE RELOCATED, THE NEW WATER MAIN SHALL BE INSTALLED TO THE RIGHT OF THE EXISTING WATER MAIN.
4. IF NON PRESSURE CAST IRON, VITRIFIED TILE OR ASBESTOS CEMENT SERVICE PIPE IS USED, THE WATERSEWER CANTY DEPARTMENT OF HEALTH PRIOR TO CONSTRUCTION.
5. IF THE SANITARY SEWER MAIN MUST BE INSTALLED AS FOLLOWS:
  - a) THREE (3) LENGTHS OF OTHER CAST IRON OR ASBESTOS CEMENT PRESSURE PIPE MUST BE USED, THE MIDDLE LENGTH SHALL BE 10' LONG.
  - b) THREE (3) LENGTHS OF PRESSURE PIPE MUST BE INSTALLED IN THE SAME MANNER AS REQUIRED FOR WATER MAINS (SEE SPECIFICATIONS)
6. IN THOSE CASES WHERE, DUE TO FIELD CONDITIONS, THE SEWER MUST BE PLACED ABOVE THE WATER MAIN, EACH VARIATION OF WATER-SEWER CROSSING FROM THAT SHOWN ON THIS DETAIL SHALL BE INDIVIDUALLY REVIEWED AND APPROVED BY THE HEALTH DEPT.

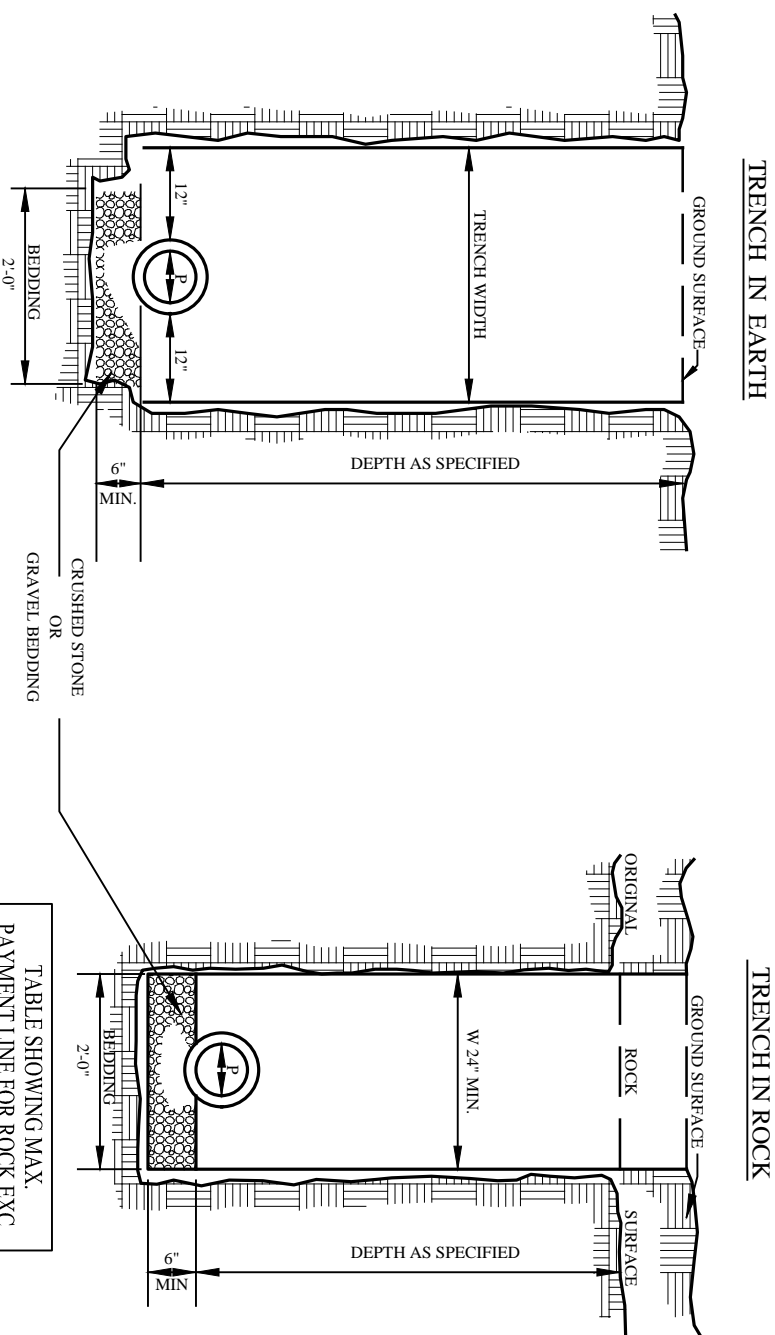
## SEWER & WATERMAIN CROSSING

N.T.S.



## TYPICAL HYDRANT

NT.S



## TRENCH IN EARTH

### TRENCH IN ROCK

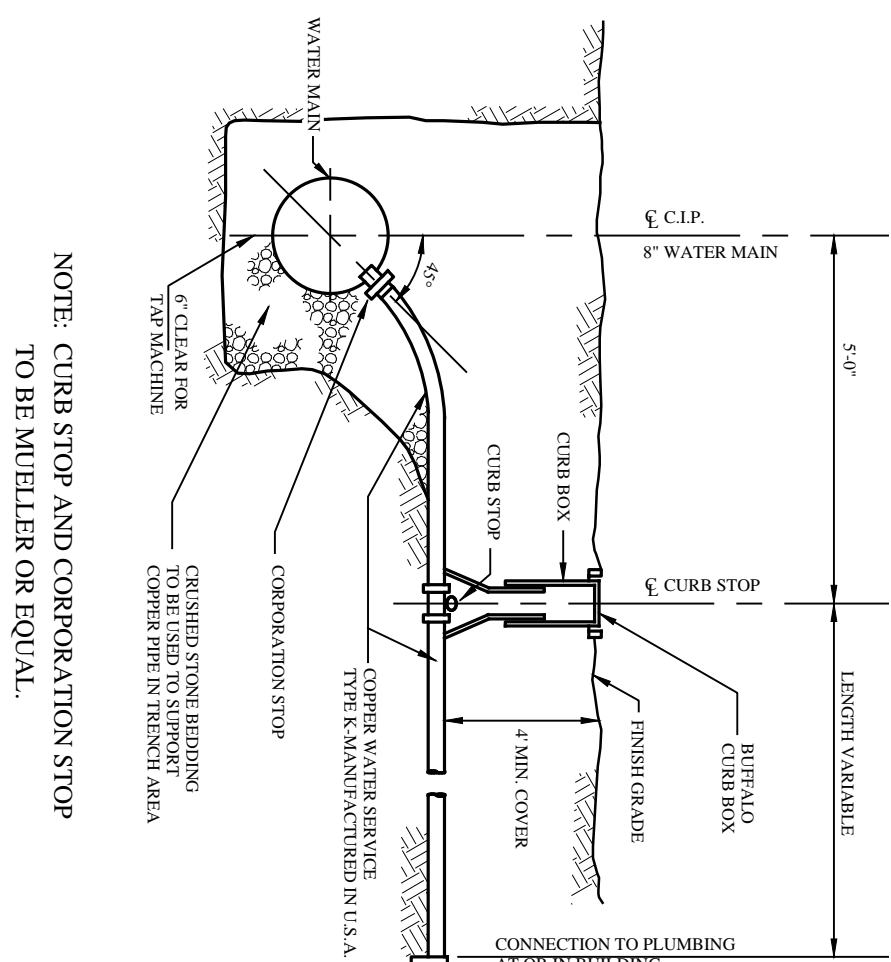
NOTE:

CRUSHED STONE OR GRAVEL BEDDING, COST OF SAME TO BE INCLUDED IN THE UNIT PRICE BID FOR PIPE  
PAYMENT LIMIT LINES FOR EXCAVATION IN EARTH OR ROCK, FOR MANHOLES, CATCH BASINS AND OTHER STRUCTURES SHALL BE SIX (6) INCHES BEYOND THE NEAT LINES OF THE STRUCTURE.

TABLE SHOWING MAX. PAYMENT LINE FOR ROCK EXC.	
Depth to F.L. "ft. bl.	Allowable Width "w"
0 to 8"	p + 16"
8 to 12"	p + 22"
12 to 16"	p + 28"
16 to 20"	p + 34"
over 20"	p + 40"

## TRENCH DETAIL.

N.T.S.



TO BE MUELLER OR EQUAL.

SELLER OR EQUAL.

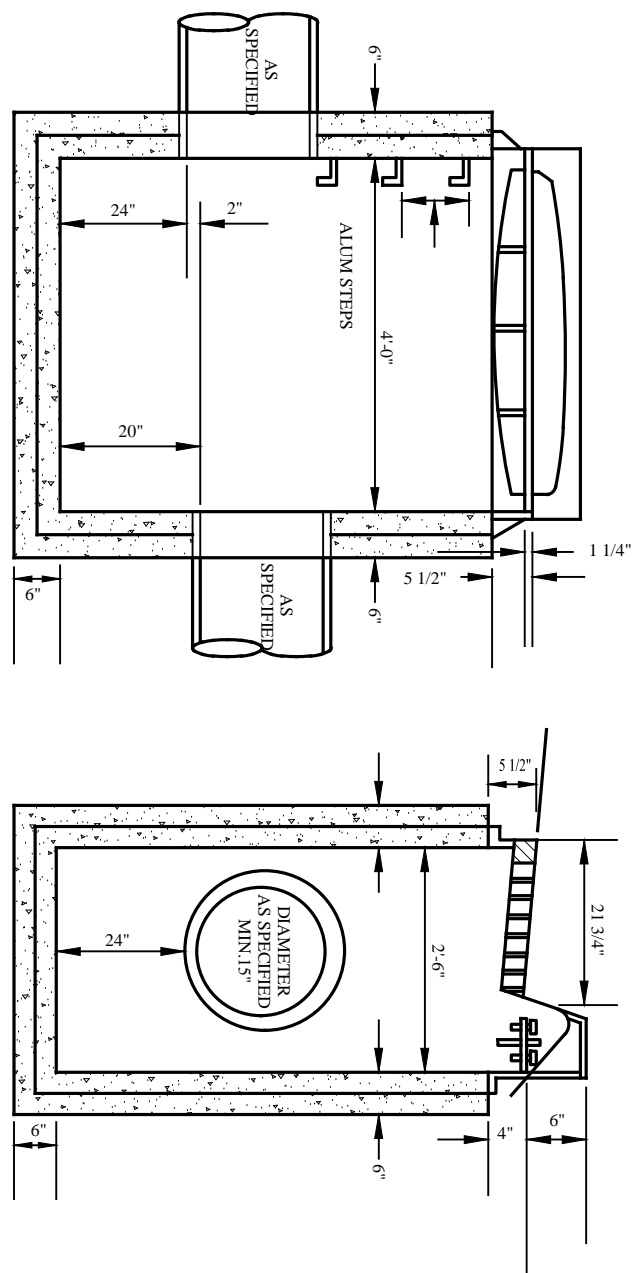
### TYPICAL HOUSE CONNECTION

**N.T.S**

### Water Main Notes:

1. Water mains crossing house sewers, storm sewers or sanitary sewers shall be laid to provide a vertical separation of a minimum of 18" between the bottom of water main and top of sewer.
2. Water mains passing under house sewers, in addition, shall be protected by providing a vertical separation of 18" minimum from the bottom of the sewer to the top of the water main and adequate structural support for the sewer to prevent excessive deflection of the joints and the sewer settling and breaking the water main. In addition the length of water pipe is to be centered at the point of crossing so that the joints will be equidistant and as far as possible from the sewer. No water main shall pass through or come in contact with any part of a sewer or sewer manhole.
3. The cover over the top of the water main shall be a minimum of 4 feet to a maximum of 5.5 ft.
4. Water mains to be ductile iron pipes (DIP) (gray joint) and fittings shall be factory coated with AWWA C541 All-Condition Epoxy Coating System and shall be pressure rated at 250 psi. All necessary joint materials shall be furnished. Water mains shall be installed in accordance with AWWA standards latest revisions.
5. All gate valves shall be Mueller resilient wedge (turn right open) type and shall meet AWWA standards latest revision. All valves must be installed inside a standard manhole or in large valve box with support.
6. All service connections and small diameter extensions shall conform to AWWA C-151.
7. Retainer glands and concrete thrust blocks or rods shall be used at all locations where restraints exist.
8. Installation and testing of the water main shall be inspected by the Town Engineer.
9. As-built drawings shall show dimensions between all valve turning nuts and finish grade.
10. Installation, disinfection and testing to be witnessed and certified by a licensed professional engineer or Town of Ossining Engineer.
11. All hydrants and valves shall be as manufactured by the Mueller Company.
12. All procedures and instructions set forth under the regulations of Industrial Code 53 shall be followed prior to starting any construction or excavation.
13. The Contractor is advised that before he connects to the existing water system, he must notify and coordinate his operations with the Town of Ossining Water Department's Superintendent.
14. The Contractor is to maintain constant pressure in all water mains at all time. If the need should arise that water service is to be interrupted for a short period, it must be coordinated with the Engineer and the Superintendent of Water.
15. If, during construction, it is found that the required separation of water mains, sanitary sewers, storm sewers, and building sewers cannot be met, the developer or his authorized representative shall contact the Westchester County Department of Health.
16. All types of installed pipe shall be pressure tested and leakage tested in accordance with the latest edition of AWWA Standard C-600.
17. All new, cleaned or repaired water mains shall be disinfected and bacteriological testing performed in accordance with the latest edition of AWWA Standard C-651.99) (except for Section 4.4.2 which is not approvable). The specifications include detailed procedures for the adequate flushing, disinfection, and micro biological testing of all water mains.
18. The Westchester County Department of Health shall be given 48 hours notice prior to any pressure leakage tests and/or disinfection and bacteriological tests performed on the proposed water main.
19. Road openings shall be done in accordance with conditions of permit, and coordinated with the Town of Ossining.





FRONT VIEW

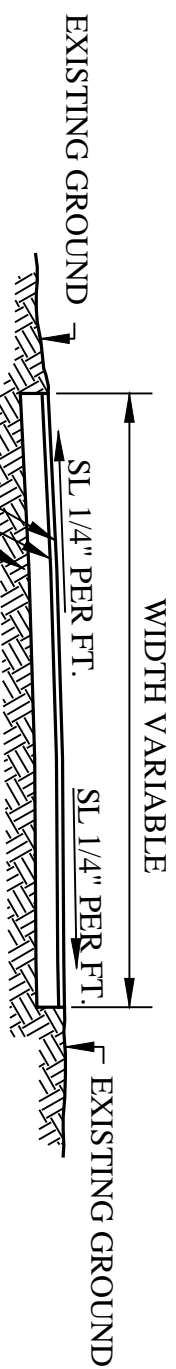
SIDE VIEW

NOTE:

TYPE A CATCH BASIN AS SHOWN HERE ON WILL BE UTILIZED WHERE THE NEED FOR A DROP INLET EXISTS. THE CURB TYPE CASTING SHALL BE SUBSTITUTED WITH CAMPBELL ROUNDARY FRAME AND GRATE NO.343 OR EQUAL.

### TYPICAL CATCH BASIN

N.T.S.



EXISTING GROUND  
SL. 1/4" PER FT.  
EXISTING GROUND  
SL. 1/4" PER FT.  
COMPACTED SUBGRADE  
3" BASE COURSE NYSDOT SPECS  
ITEM 403.07 ASPHALT CONC. TYPE 1A BASE  
2" TOP COURSE NYSDOT SPECS  
ITEM 403.01 ASPHALT CONC. TYPE 1A TOP

NOTE:

3 CRUSHED STONE MAY BE USED ON SINGLE DRIVEWAYS SERVING ONE HOUSE. 3" BINDER PAINT MIX MUST BE USED FOR DRIVEWAYS SERVING 2 OF MORE HOUSES.

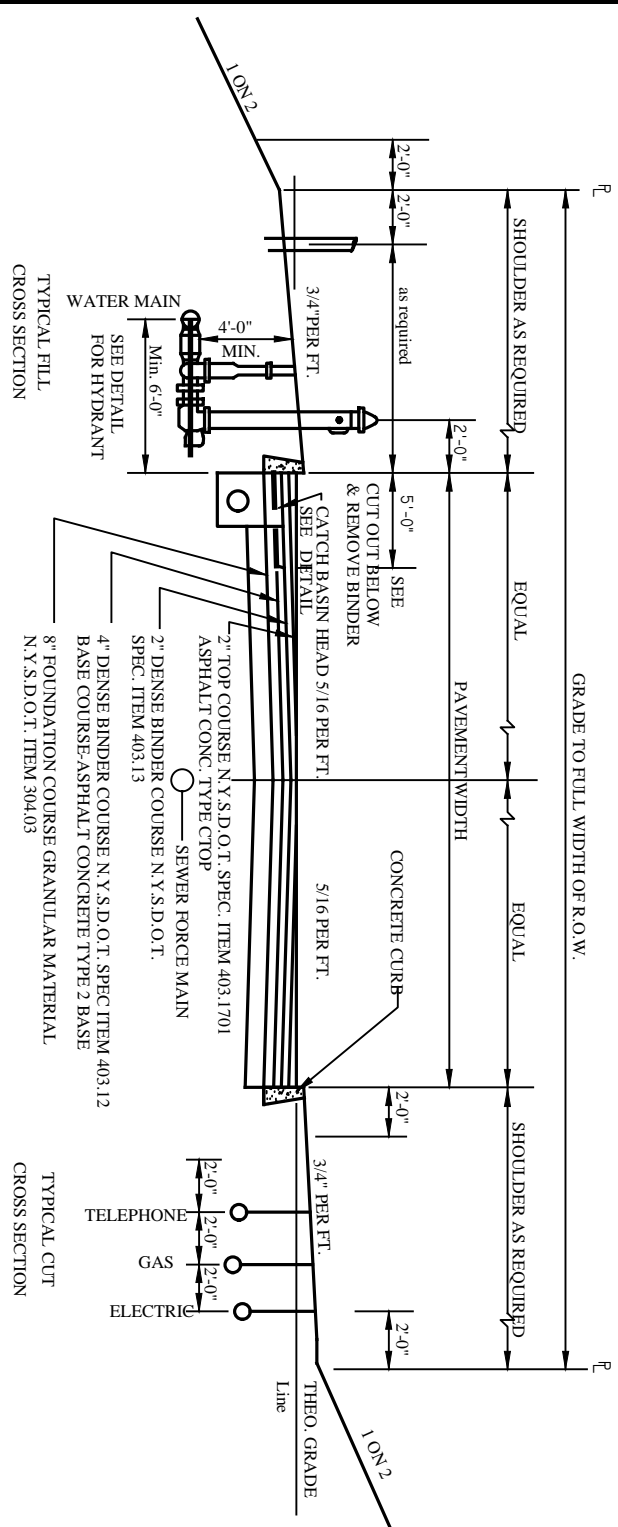
IF DRIVEWAY GRADE EXCEEDS 10%, THEN 2 OFF STREET PARKING AT DRIVEWAY ENTRANCE MUST BE PROVIDED.

THE WIDTH OF THE DRIVEWAY GIVING ACCESS TO POTENTIAL BUILDING LOTS SHALL BE A FUNCTION OF THE INTENSITY OF ITS USE AND SHALL CONSTRUCTED ACCORDANCE WITH THE FOLLOWING TABLE:

NO. OF POTENTIAL DWELLINGS	PAVEMENT WIDTH	RIGHT-OF-WAY WIDTH
1	12'	15'
2	16'	20'
3	18'	25'
4 OR MORE	24'	50'

### TYPICAL DRIVEWAY DETAIL

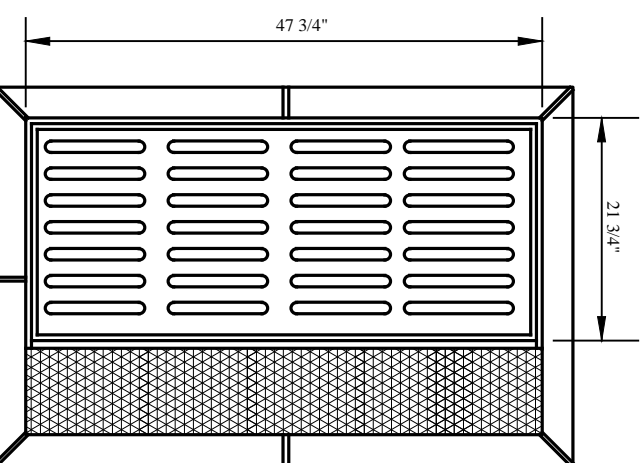
N.T.S.



- NOTE:
1. ALL SHOULDER LINES AND STOPS TO BE FINE GRADED AND SMOOTHED WITH APPROVED GRASS SEED AT THE RATE OF 1.2 LB PER 100 SQ. FT. AT 4" x 10" SPACING AND BROADCAST.
  2. SHOULDER ROCK BE INSTALLED IN THE ROAD BED IT MUST BE 3/4" MINIMUM IN SIZE AND 1/4" MINIMUM IN SPACING.
  3. INSTALL ALL CURB TYPE CATCH BASINS SUCH THAT THE TOP OF THE CURB AND THE TOP OF THE GRATE IS AT THE ELEVATION OF THE TOP OF THE BINDER COURSE OF THE DRIVEWAY. THE CURB SHALL BE 3" MINIMUM IN HEIGHT AND 4" MINIMUM IN WIDTH. THE CURB SHALL BE 3" MINIMUM IN THICKNESS AND 4" MINIMUM IN WIDTH.
  4. INSTALL ALL MANHOLE FRAMES AND COVERS TO THE GRADE. THE FRAMES SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG. THE COVERS SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG. THE FRAMES SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG. THE COVERS SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG.
  5. CURB SHALL BE INSTALLED ON A 3" MINIMUM IN THICKNESS AND 4" MINIMUM IN WIDTH.

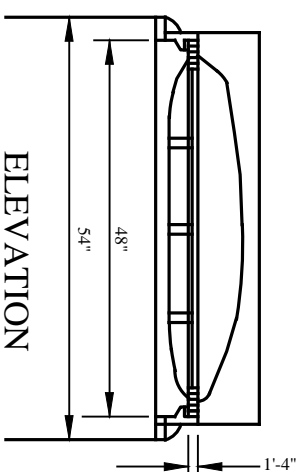
### TYPICAL 18 FT WIDE COMMON DRIVEWAY SECTION

N.T.S.

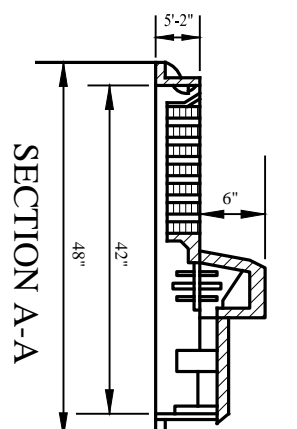


NOTE:

HIGHWAY CATCH BASIN HEAD CURB TYPE STEPMAN FLOW GRATE NO. 2548 CAMPBELL FOUNDATION NO. 2541 OR EQUAL.



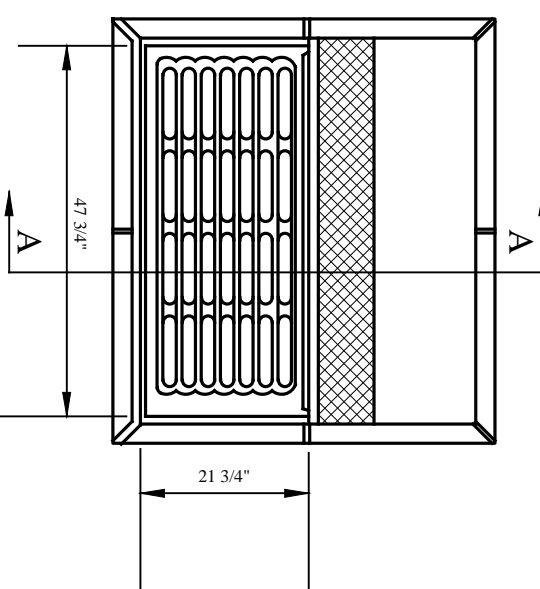
ELEVATION



SECTION A-A

### TYPICAL FRAME AND GRATE

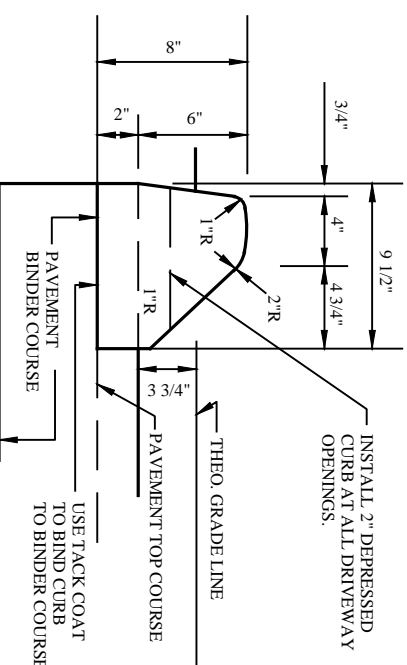
N.T.S.



NOTE:

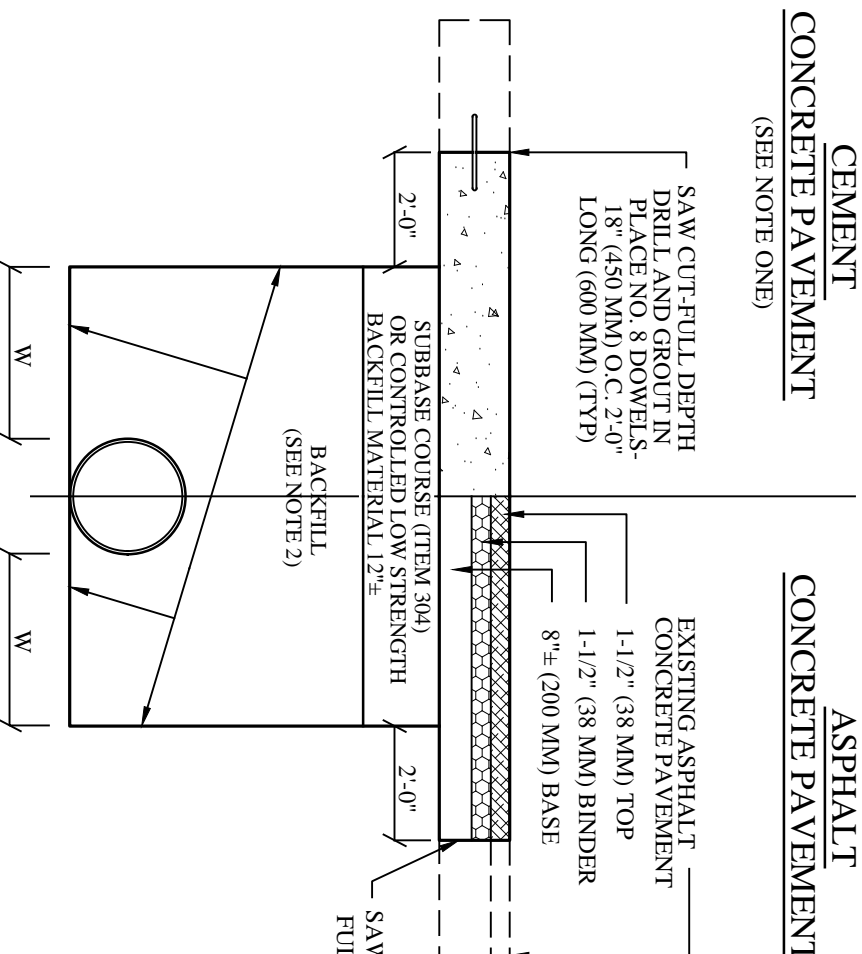
"STORM FLOW GRATING" CURB TYPE CATCH BASIN IN FRAME AND GRATE TYPE STEPMAN FLOW GRATE NO. 2548 CAMPBELL FOUNDATION NO. 2541 OR EQUAL.

PLAN



### TYPICAL ASPHALT CURB DETAIL

N.T.S.



### CEMENT CONCRETE PAVEMENT

(SEE NOTE ONE)

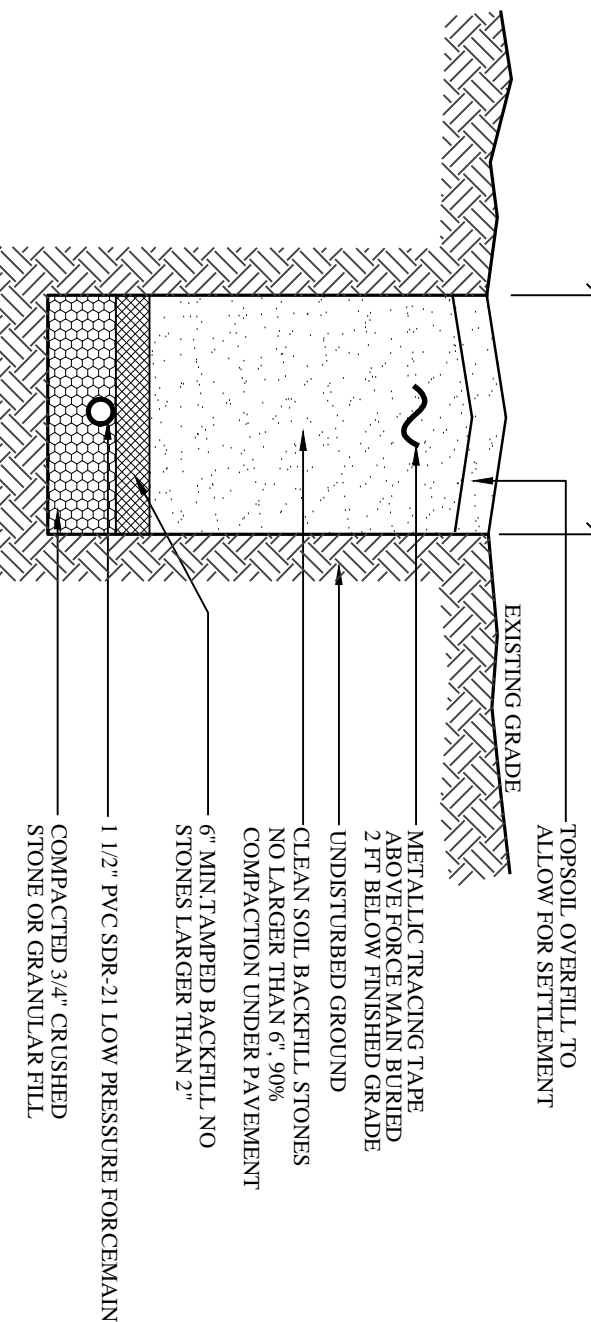
### ASPHALT CONCRETE PAVEMENT

NOTES:

1. WHEN CONCRETE IS USED, IT SHALL BE REMOVED PORT AND CEMENT CONCRETE WITH COARSE INSTALLED AT THE REQUIRED SPACING. WHEN ASPHALT CONCRETE IS USED, IT SHALL CONSIDER BINDER AND TOP COARSE. THE TOTAL PAVEMENT THICKNESS SHALL MATCH EXISTING UNLESS OTHERWISE REQUIRED BY THE REGION.
2. WHEN "W" IS LESS THAN 18" (450 MM), CONTROLLED LOW STRENGTH BACKFILL SHALL BE USED. WHEN "W" IS 18" (450 MM) OR MORE, BACKFILL SHALL BE USED. THE BACKFILL SHALL BE 3" MINIMUM IN THICKNESS AND 4" MINIMUM IN WIDTH. THE BACKFILL SHALL BE 3" MINIMUM IN THICKNESS AND 4" MINIMUM IN WIDTH.

### PAYMENT REPLACEMENT DETAIL

N.T.S.

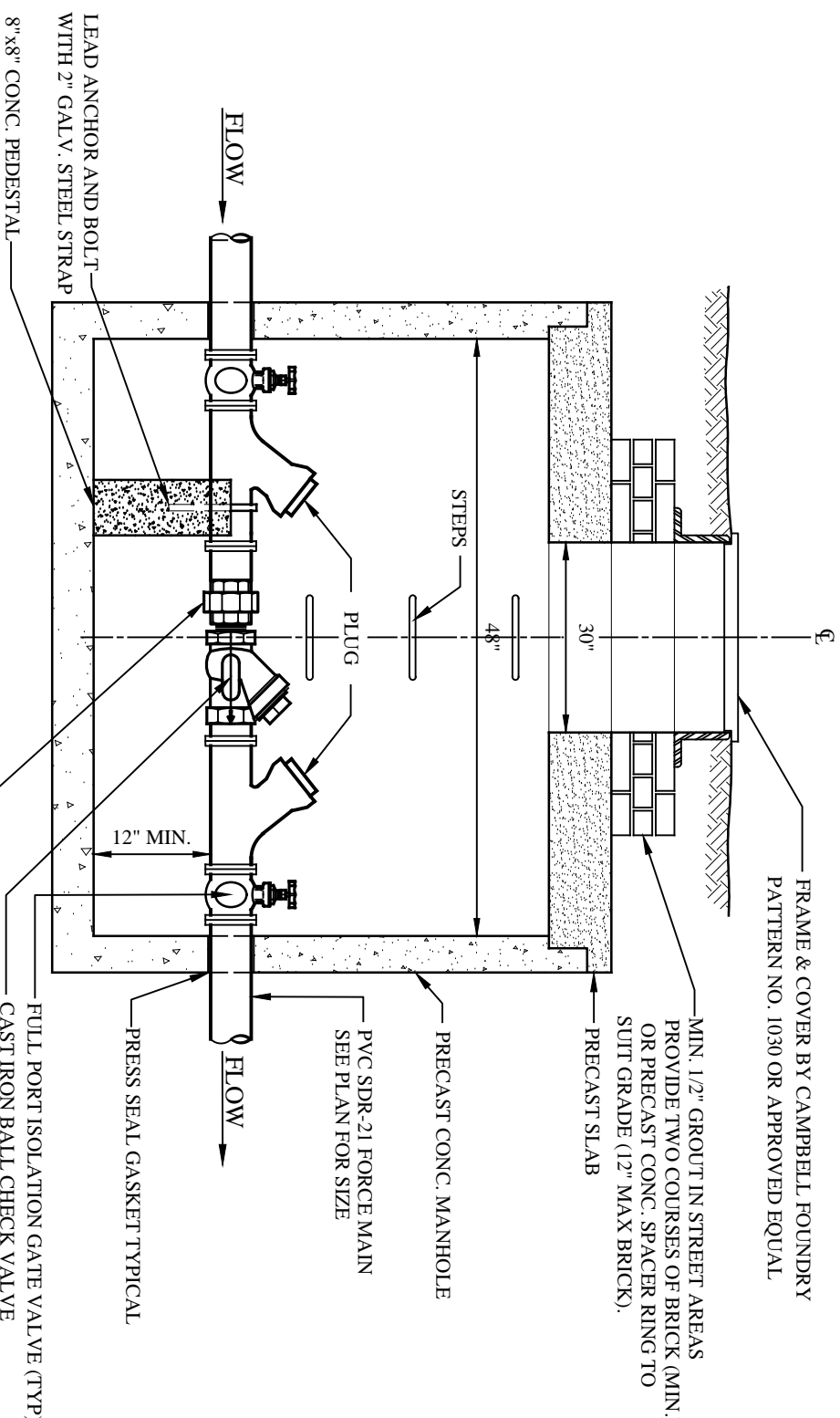


NOTES:

1. WHEN FORCE MAIN IS INSTALLED IN FILL SECTION, COMPACTED CRUSHED STONE, GRAVEL, OR APPROVED STRUCTURAL FILL TO BE INSTALLED.
2. FORCE MAIN TO BE INSTALLED TO THE TOP OF THE MANHOLE. THE MANHOLE SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG. THE MANHOLE SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG.
3. THE MANHOLE SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG. THE MANHOLE SHALL BE 18" (450 MM) O.C. 2'-0" (600 MM) LONG.

### FORCE-MAIN DETAIL

N.T.S.

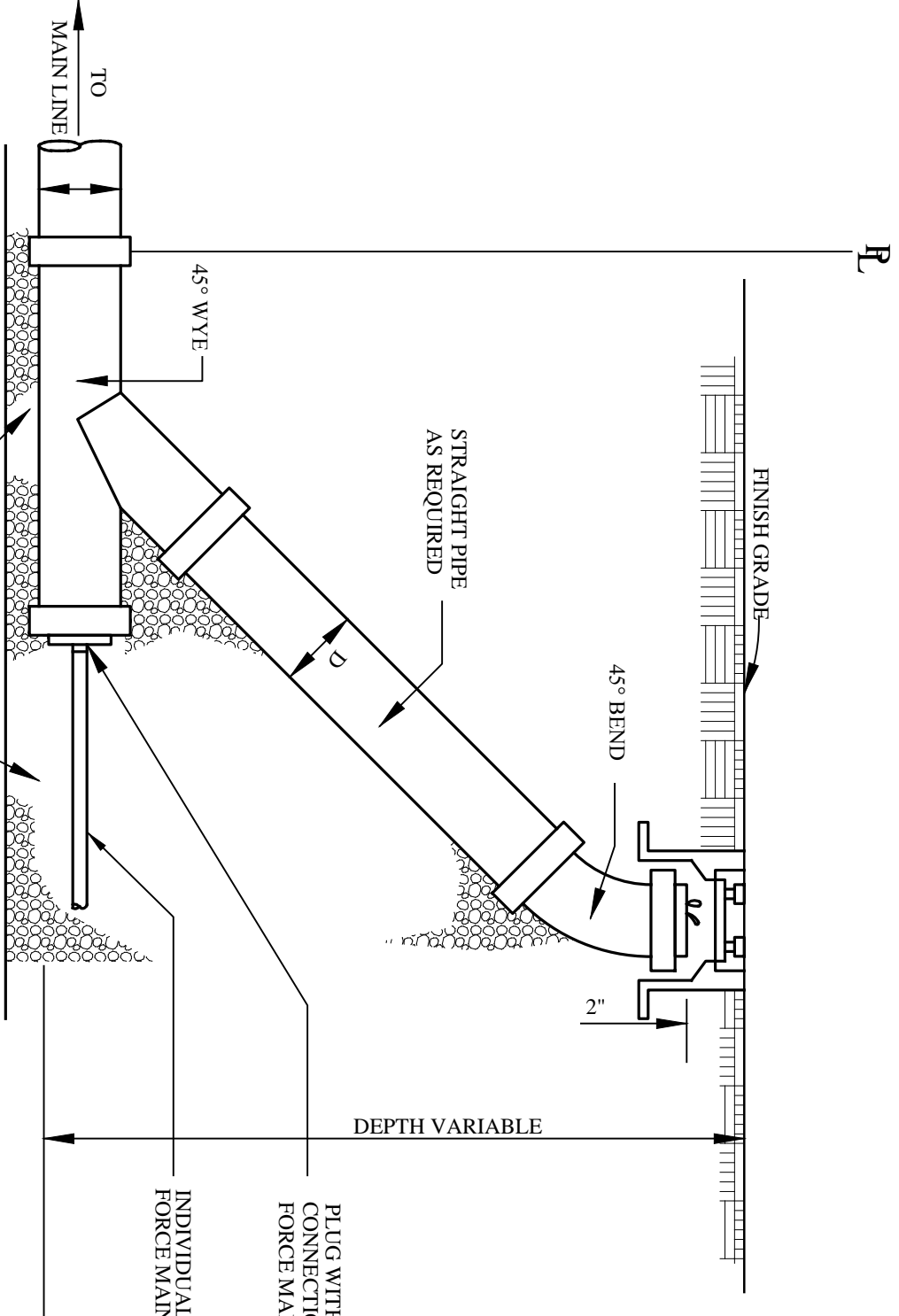


NOTE:

1. ALL FITTINGS TO BE WHITE HD AS MANUFACTURED BY GPC PRODUCTS INC. OR APPROVED EQUAL.

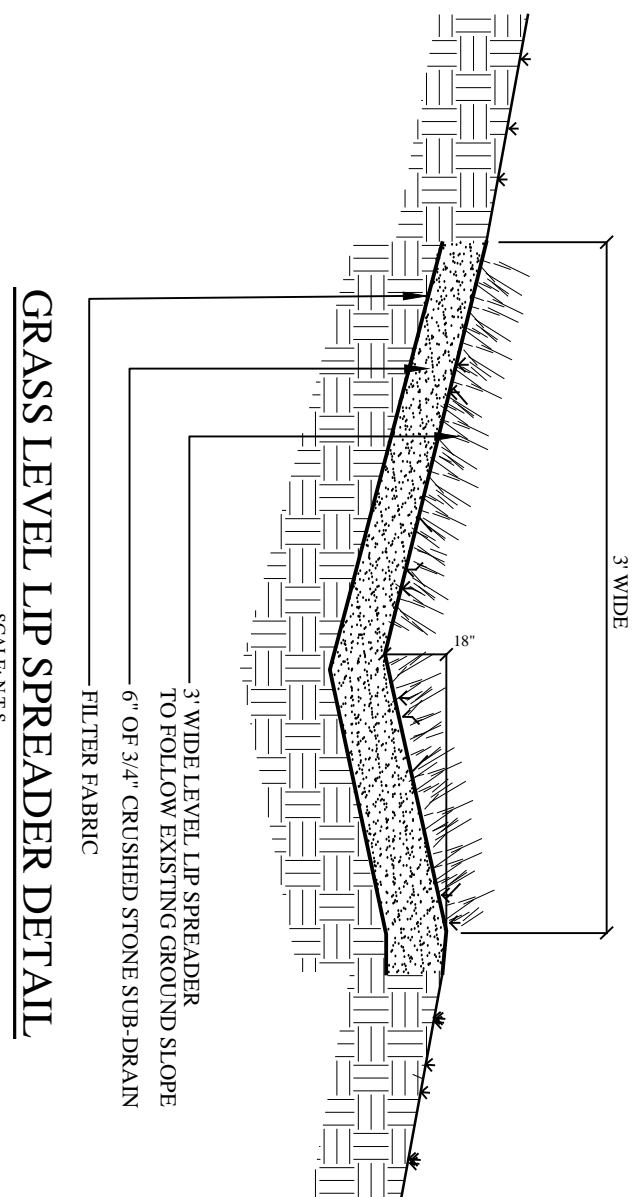
### FORCE MAIN CLEAN OUT MANHOLE DETAIL

N.T.S.



### TYPICAL SEWER LINE CLEANOUT

N.T.S.

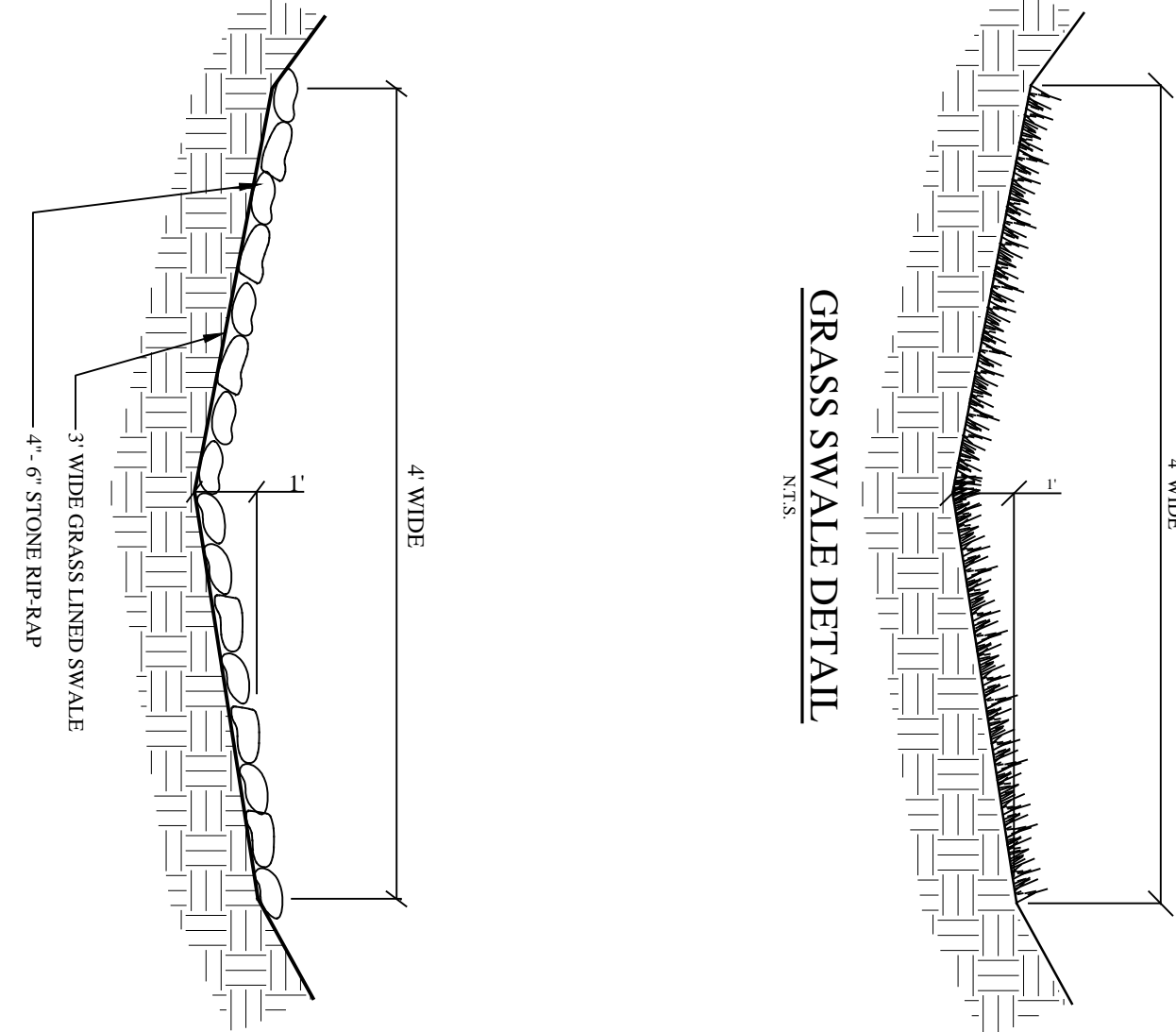


### GRASS LEVEL LIP SPREADER DETAIL

SCALE: N.T.S.

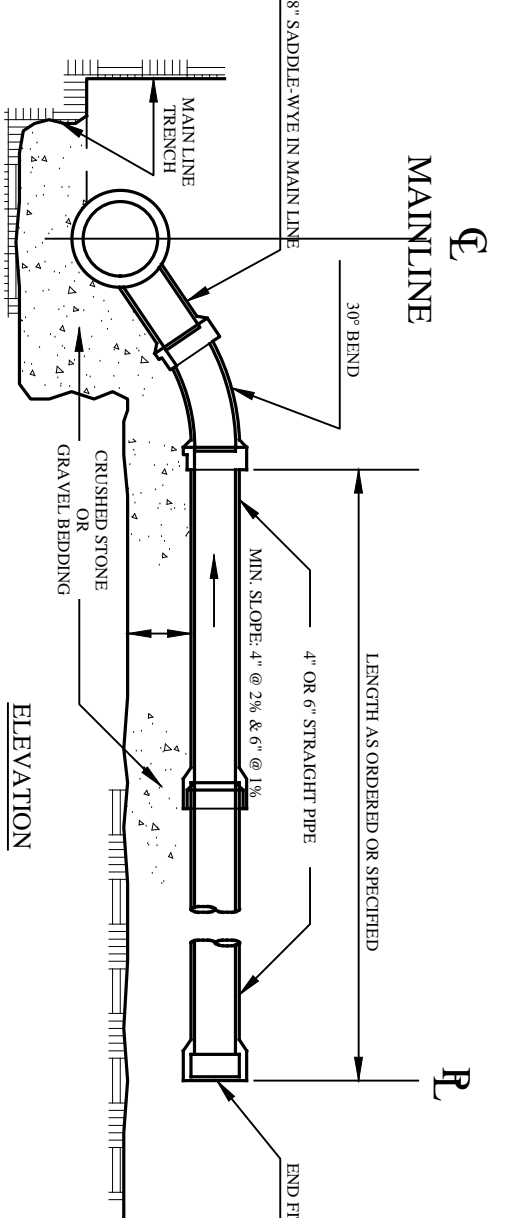
### GRASS SWALE DETAIL

N.T.S.

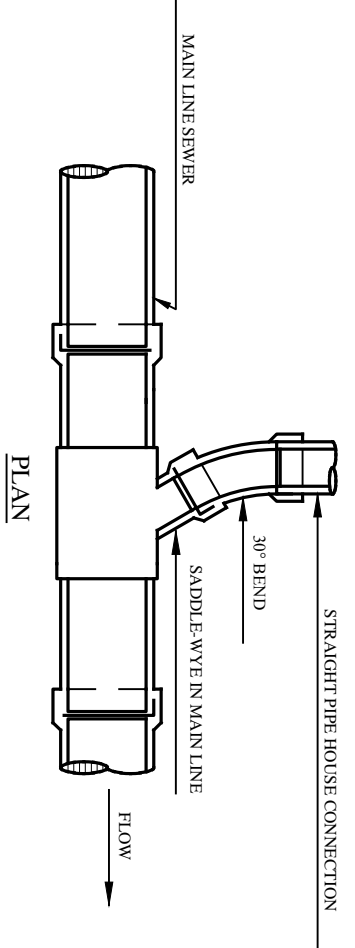


### RIP-RAP SWALE DETAIL

N.T.S.



ELEVATION

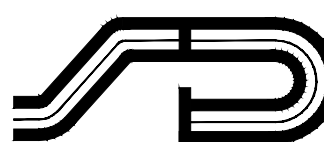


PLAN

### TYPICAL SEWER TO HOUSE CONNECTION

N.T.S.

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ENGINEERING SPECIFICATIONS FOR CULTREC CHAMBERS

SCOPE

CULTREC CONTACTOR® AND RECHARGER™ POLYETHYLENE CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER AND/OR ON-SITE WASTEWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION, OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

MATERIAL PROPERTIES

UNITS ARE MANUFACTURED FROM HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMDHPE).

CHAMBER REQUIREMENTS

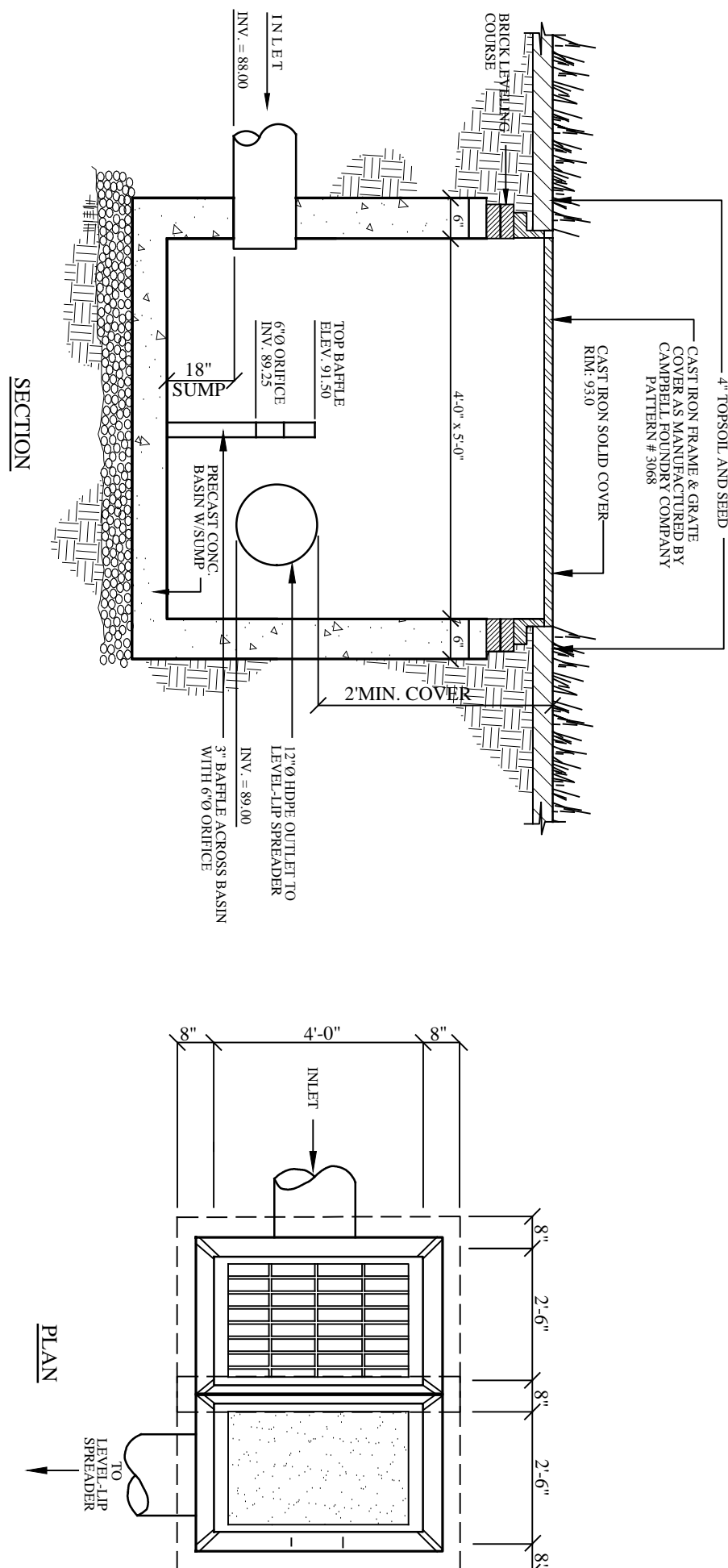
1. THE CHAMBERS WILL BE MANUFACTURED BY CULTREC, INC. OF BROOKFIELD, CT (203-775-4416).
2. SIDEWALLS ARE MANUFACTURED WITH AN OPEN BOTTOM. INTEGRALLY FORMED END WALLS AND PERFORATED CHAMBERS.
3. THE CHAMBERS MUST HAVE ACHIEVED A MINIMUM OF 5 YEARS INSTALLATION HISTORY WITHOUT STRUCTURAL DEFICIENCIES.
4. CONTACTOR® AND RECHARGER™ CHAMBERS WILL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIB, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.
5. THE CHAMBERS MUST NOT UTILIZE SEPARATE END PLATES OR SEPARATE END WALLS. THE CHAMBERS' END WALL WILL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT.
6. THE STARTER CHAMBER UNIT MUST BE UNIFORMLY FORMED AS A WHOLE PART OF THE ELONGATED CHAMBER UNIT HAVING TWO FULLY FORMED INTEGRAL END WALLS, AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
7. INTERMEDIATE UNITS MUST BE UNIFORMLY FORMED AS A WHOLE PART OF THE ELONGATED CHAMBER UNIT. INTERMEDIATE UNITS MUST BE FULLY FORMED INTEGRAL END WALLS, AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
8. THE END CHAMBER UNIT MUST BE UNIFORMLY FORMED AS A WHOLE PART OF THE ELONGATED CHAMBER UNIT HAVING ONE FULLY FORMED INTEGRAL END WALL, AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
9. ALL CHAMBERS WILL BE ARCHED IN SHAPE AND HAVE 3.47° OR 2.9° ROUNDED DISCHARGE HOLES BORED INTO THE SIDES OF EACH UNIT FOR WATER INFILTRATION OR EXFILTRATION.
10. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN RIBS AS DETAILED.
11. H-10 UNITS ARE DESIGNED ACCORDING TO AASHTO/AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRAFFIC OFFICIALS) LOAD RATING OF 16,000 LBS. AXLE WITH 6" OF COMPACTED COVER.
12. H-20 UNITS ARE DESIGNED ACCORDING TO AASHTO/AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRAFFIC OFFICIALS) LOAD RATING OF 32,000 LBS. AXLE WITH 7"-14" OF COMPACTED COVER UNDER THE PAVEMENT WHEN USING CONTACTOR® HD HEAVY DUTY CHAMBERS AND 14" - 18" OF COMPACTED COVER WHEN USING RECHARGER™ HD HEAVY DUTY CHAMBERS.
13. UNITS WILL BE FORMED WITH A COLORED STRIPE SO THEY CAN BE EASILY IDENTIFIED AS AN H-20 UNIT. HEAVY DUTY HD H-20 UNITS MUST MEET LOAD TESTING TO 20,000 LBS./SQ. FT. BEWEATH ONE FOOT OF 85% COMPACTED FILL, WHICH EXCEEDS AASHTO H-20 RATING.
14. POLYETHYLENE CHAMBERS MUST HAVE THE ABILITY TO ACCEPT AND CARRY UP TO 4" PIPE THROUGH ITS INTEGRALLY FORMED VERTICAL SUPPORT WALL.
15. SEPARATE INLET OR END PLATES CANNOT BE USED WITH THIS UNIT.
16. REPEATING SUPPORTING END WALLS AND SUPPORTING STRUTS ON END WALLS OF ELONGATED CHAMBER SHALL BE SPACED EVERY SO MANY FEET AS FOLLOWS:

Model	Feet	Model	Feet
Connector® Field Diameter C-1	8-400	Connector® 100	7-50
Connector® Field Diameter C-2	8-600	Connector® 125	6-25
Connector® Field Diameter C-3	8-800	Recharger™ 180	6-33
Connector® Field Diameter C-4	8-1000	Recharger™ 280	7-60
Connector® E2-24	8-400	Recharger™ 330	6-25
Connector® E2-30	6-25	Recharger™ 400	6-75

Model	Length	Log-up Length	Width	Invert	Effective	Storage	# of Ribs	# of Penetrations	Max Unit Depth
	Feet	Inches	Inches	Height Inches	Base Elevation ft./ft.	Capacity ft. <sup>3</sup> /ft.	Ribs	Perforations	Inches
Connector® Field Diameter C-1	8-50	8-00	24	8-50	3-00	0.875	0.42	35	20
Connector® Field Diameter C-2	8-50	8-00	24	8-50	3-00	1.750	0.84	50	40
Connector® Field Diameter C-3	8-50	8-00	24	8-50	3-00	2.625	1.26	75	60
Connector® Field Diameter C-4	8-50	8-00	24	8-50	3-00	3.500	1.68	100	80
Connector® E2-24	8-50	8-00	16	12-30	6-00	0.875	0.42	35	36
Connector® E2-30	8-50	8-00	20	12-30	6-00	1.650	0.84	50	50
Connector® 100	7-50	6-25	30	12-30	6-00	0.875	0.42	35	10
Connector® 125	7-50	6-25	30	12-30	6-00	1.650	0.84	50	15
Connector® 180	7-50	6-25	30	18-30	11-50	1.650	0.84	50	15
Connector® 280	7-50	6-25	30	18-30	11-50	2.475	1.26	75	18
Recharger™ 180	7-50	6-25	30	18-30	11-50	2.475	1.26	75	18
Recharger™ 280	7-50	6-25	30	18-30	11-50	2.475	1.26	75	24
Recharger™ 330	6-25	30	12-30	6-00	2-00	2.475	1.26	75	24
Recharger™ 400	6-25	30	12-30	6-00	2-00	2.475	1.26	75	24

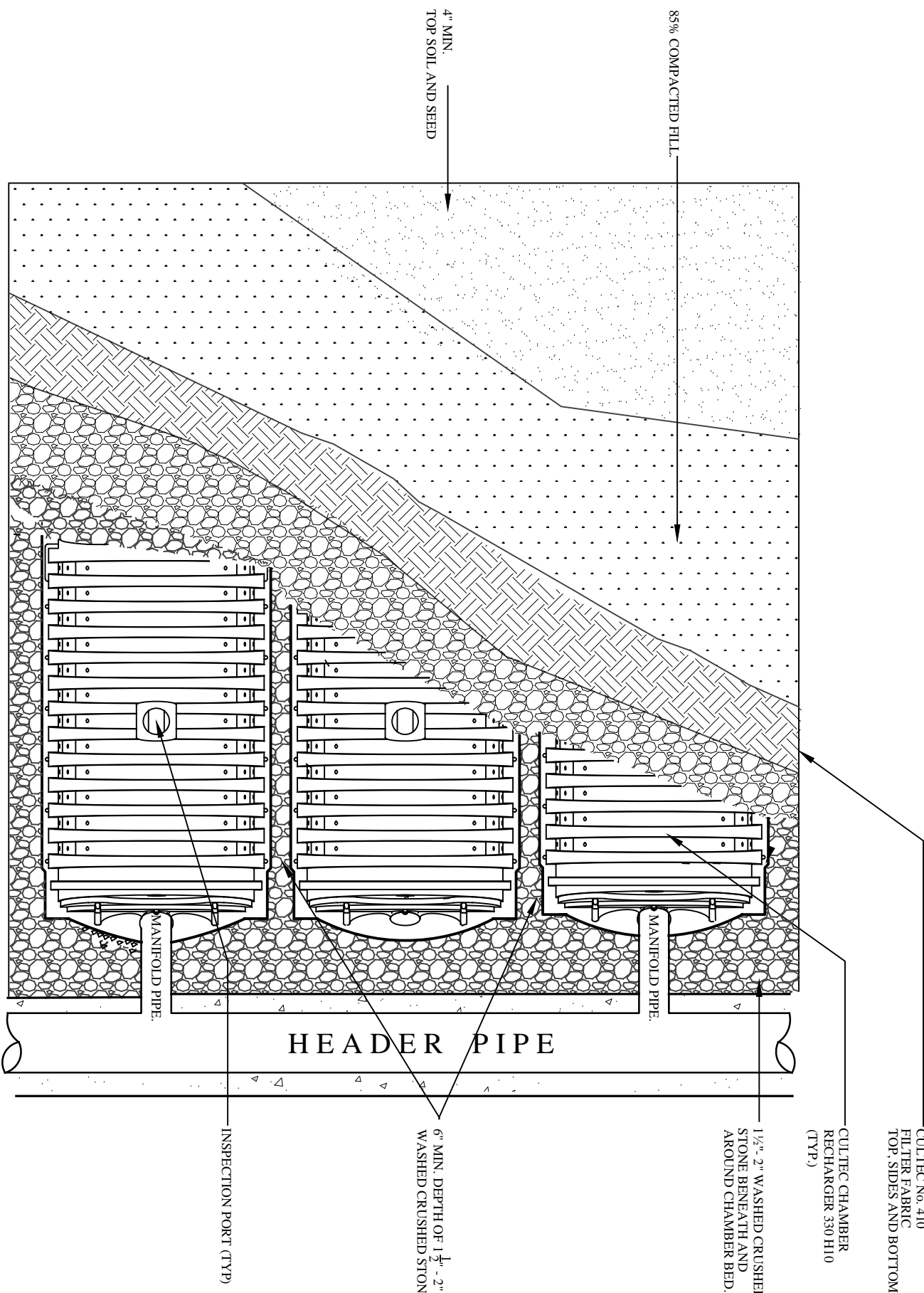
CHAMBER INSTALLATION

1. CULTREC NO. 400™ FILTER FABRIC SHALL BE USED AS INDICATED IN THE INSTALLATION REQUIREMENTS.
2. ALL REQUIRED STONE MUST BE CLEAN WASHED 1 1/2 INCH TO 2 INCH DIAMETER STONE.
3. OVERLAPPING INTERLOCKING RIBS WILL CONNECT UNITS.
4. INSTALLATION SHALL BE IN ACCORDANCE WITH CULTREC INSTALLATION INSTRUCTIONS AND THOSE ISSUED BY THE CONTACTOR® OR RECHARGER™ MANUFACTURING PROCESS. CHAMBERS WILL BE MANUFACTURED USING VACUUM THERMOFORMING.



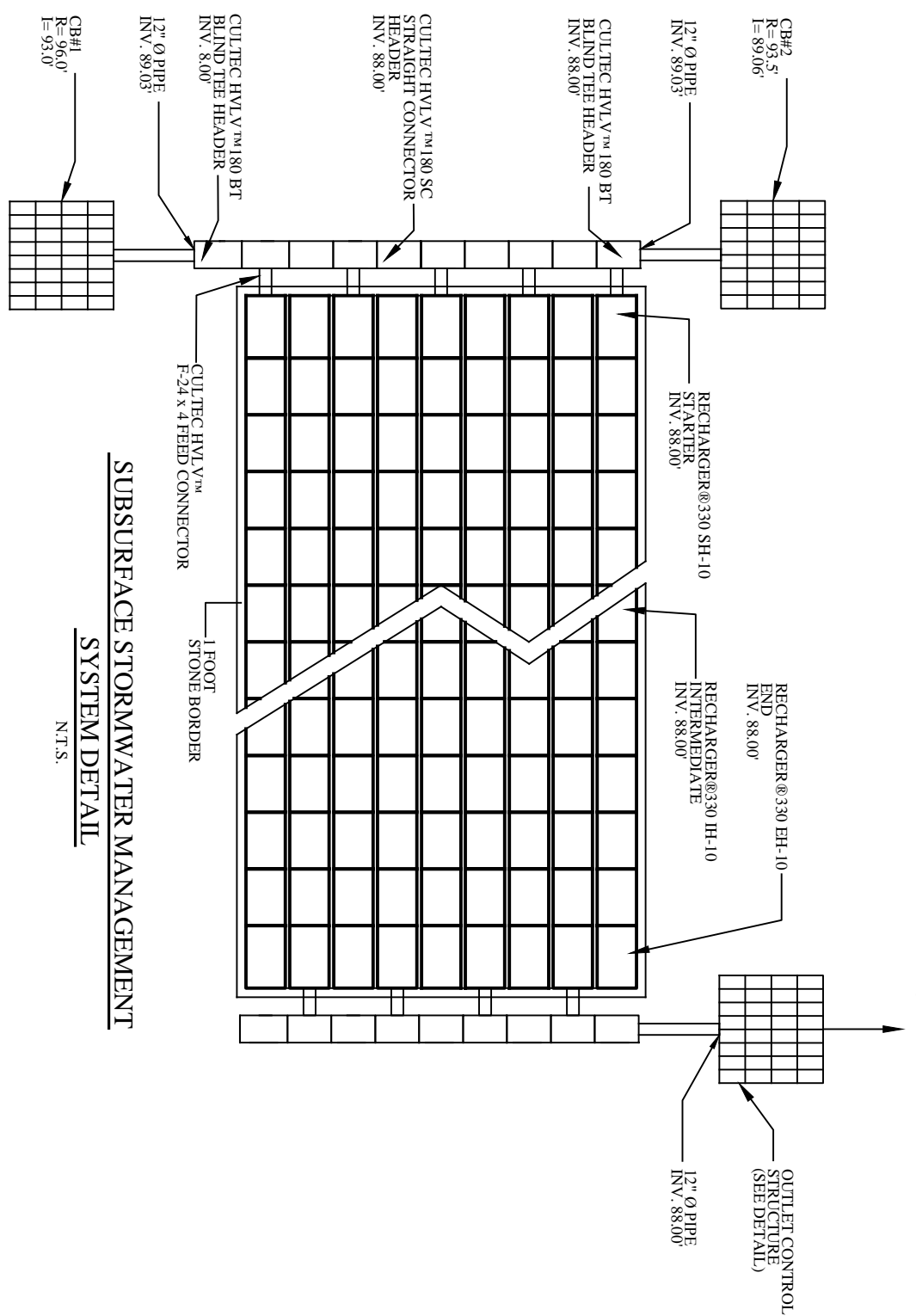
CULTREC CHAMBER SYSTEM - HD INSTALLATION UNPAVED

N.T.S.

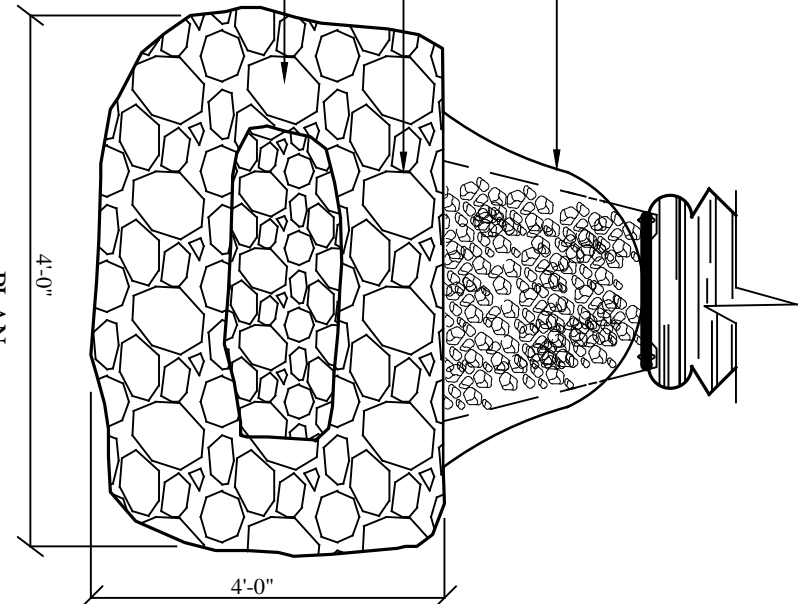
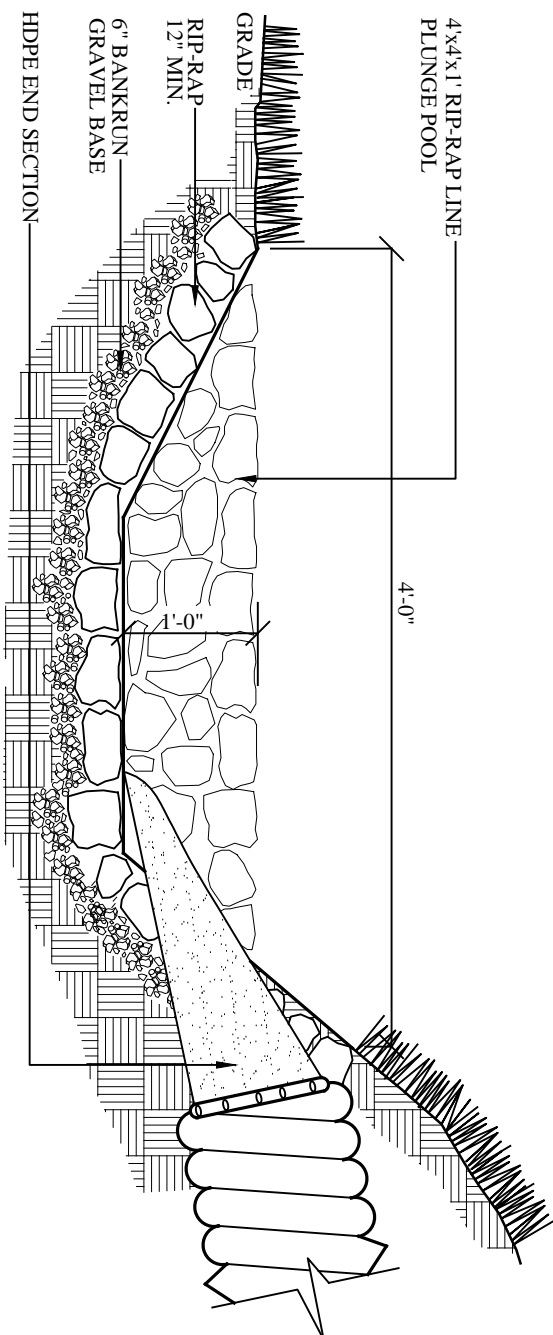


SUBSURFACE STORMWATER MANAGEMENT SYSTEM DETAIL

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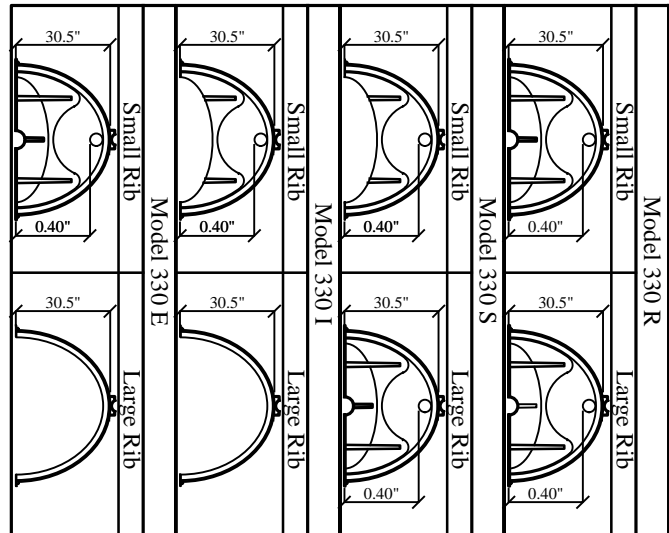


SECTION



END SECTION W/PLUNGE POOL DETAIL

N.T.S.



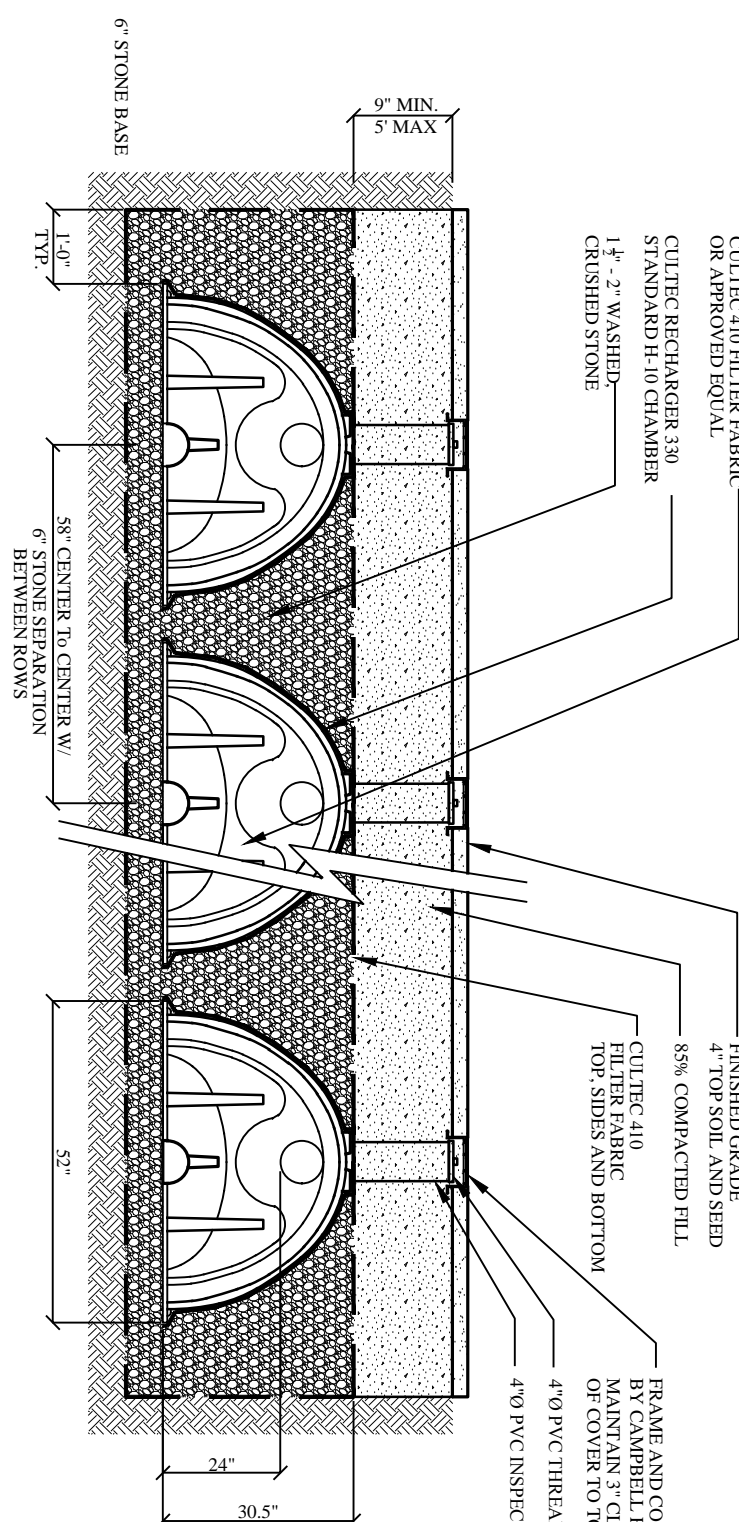
SPECIFICATIONS	Model 330 R	Model 330 L	Model 330 S	Model 330 E	Model 330 B
LENGTH	7.5	7.5	7.5	7.5	7.5
WIDTH	6.25	6.25	6.25	6.25	6.25
HEIGHT	2.9	2.9	2.9	2.9	2.9
DEPTH	1.7	1.7	1.7	1.7	1.7
MIN. STROKE WITH STONE	6.6	6.6	6.6	6.6	6.6

GENERAL NOTES:

- 1. CULTREC 400 FILTER FABRIC OR APPROVED B.O.M.
- 2. CULTREC 330 R CHAMBER
- 3. STANDARD 18\"/>

RECHARGER™ 330 SECTION VIEW

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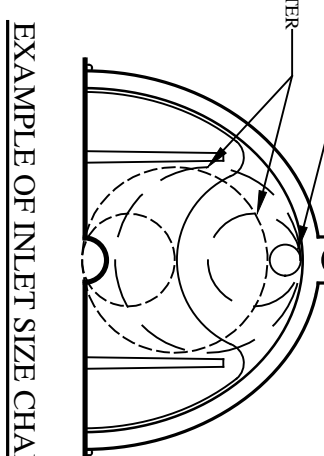
TYPICAL CROSS SECTION RECHARGER 330 UNPAVED H-10 CULTREC CHAMBER SYSTEM

(0.35 CF/LE)

N.T.S.

DESIGN NOTES: RECHARGER 330

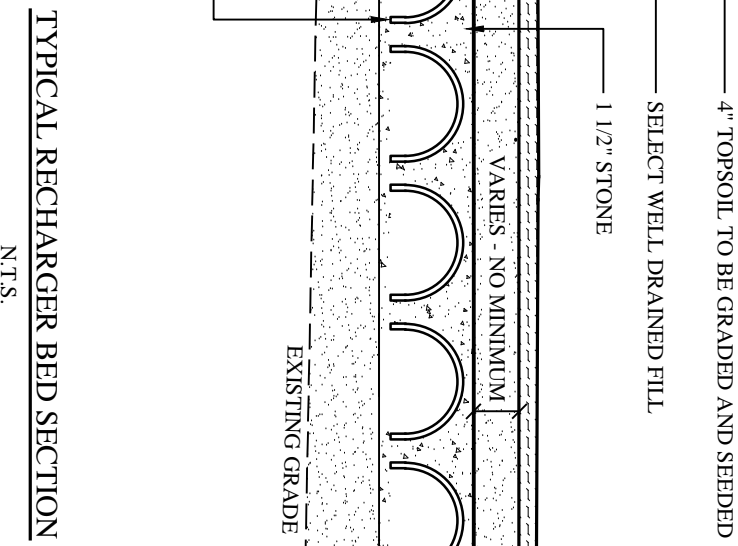
RECHARGER 330 IS 6.25' X 5.2' X 30.5"



EXAMPLE OF INLET SIZE CHANGE FOR RECHARGER™ 330

N.T.S.

- DESIGN UNIT BASED ON RECOMMENDED METHOD OF INSTALLATION.
- CAPACITY OF VOID PROVIDED BY STONE IS CALCULATED @ 40% OF TOTAL VOLUME.\*
- DESIGN UNIT CAPACITY IS 10.35 CUBIC FEET PER LINEAR FOOT.
- TOTAL STONE REQUIRED PER UNIT: 45.33 CUBIC FEET.
- TOTAL AREA PER UNIT: 30.19 SF
- DEPTH OF INSTALLATION TO TOP OF CHAMBER IS 3.05'
- 1" STONE BORDER IS REQUIRED AROUND THE CHAMBER BED.
- MANUFACTURED BY CULTREC, INC. OF 878 FEDERAL ROAD BROOKFIELD, CT 06804 USA 203-775-4416
- \* STONE USED FOR BACKFILL OF CHAMBER SHOULD BE ANALYZED FOR TRUE CAPACITY AND PERCENTAGE OF VARIATION SHOULD BE TAKEN INTO ACCOUNT.



TYPICAL RECHARGER BED SECTION

N.T.S.