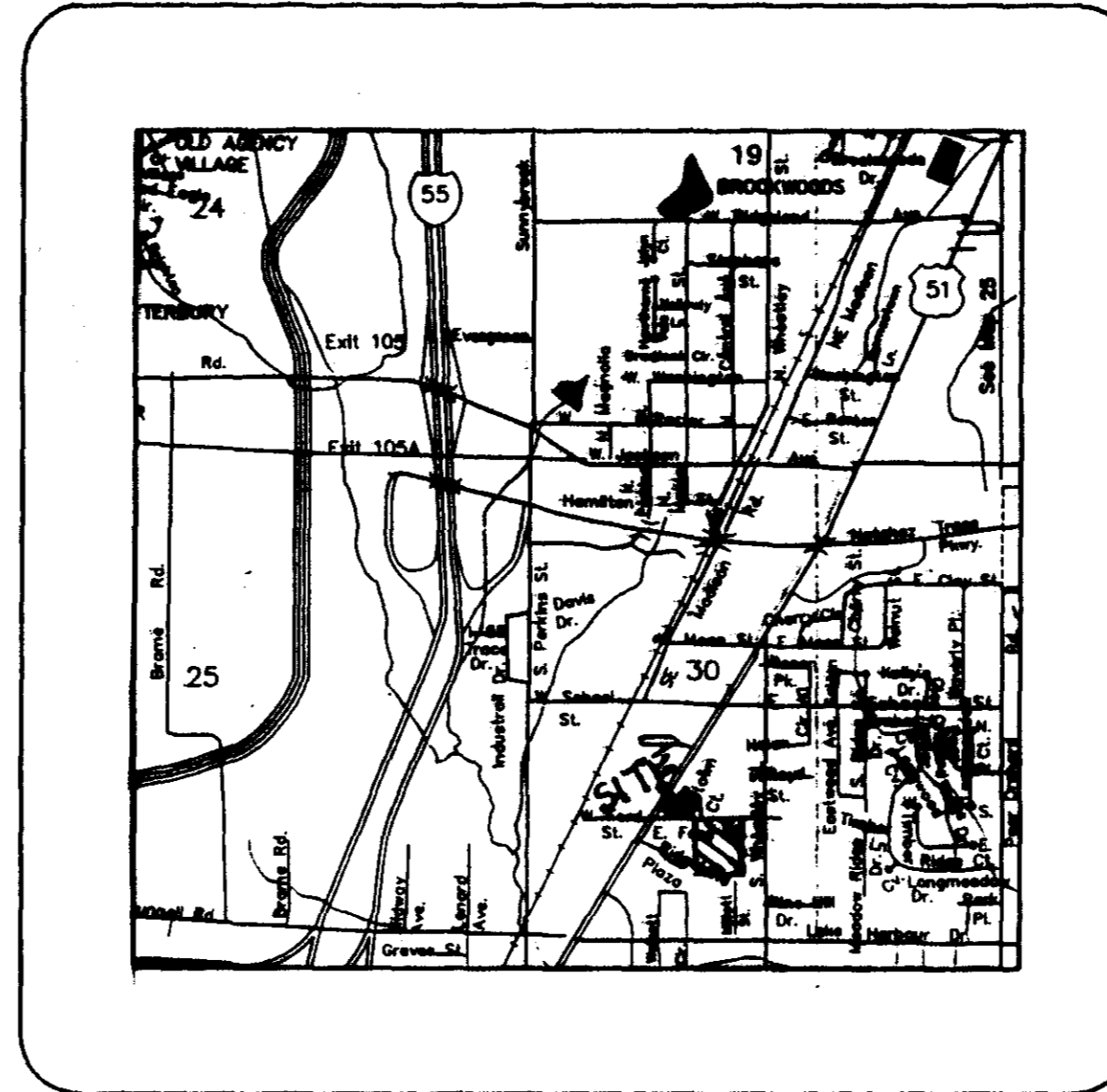


Construction Plans

# WILLOW POND

Situated in the NE 1/4 of the SW 1/4  
Section 30, T7N - R2E  
Ridgeland, Madison County, Mississippi



## Index of Drawings

<u>Sht. No.</u>	<u>Description</u>
1	COVER SHEET
2	PRELIMINARY PLAT
3	PLAN - PROFILE : WILLOW COVE
4	STANDARD WATER DETAILS
5	STANDARD SEWER DETAILS
6	EROSION CONTROL PLAN

THIS DRAWING CORRECTED  
**AS BUILT**  
DATE 9-25-98  
SIGNED K.P. [Signature]

Designed By: Central Mississippi Engineering, Inc.

Florence, Mississippi 39073  
115 East Main Street

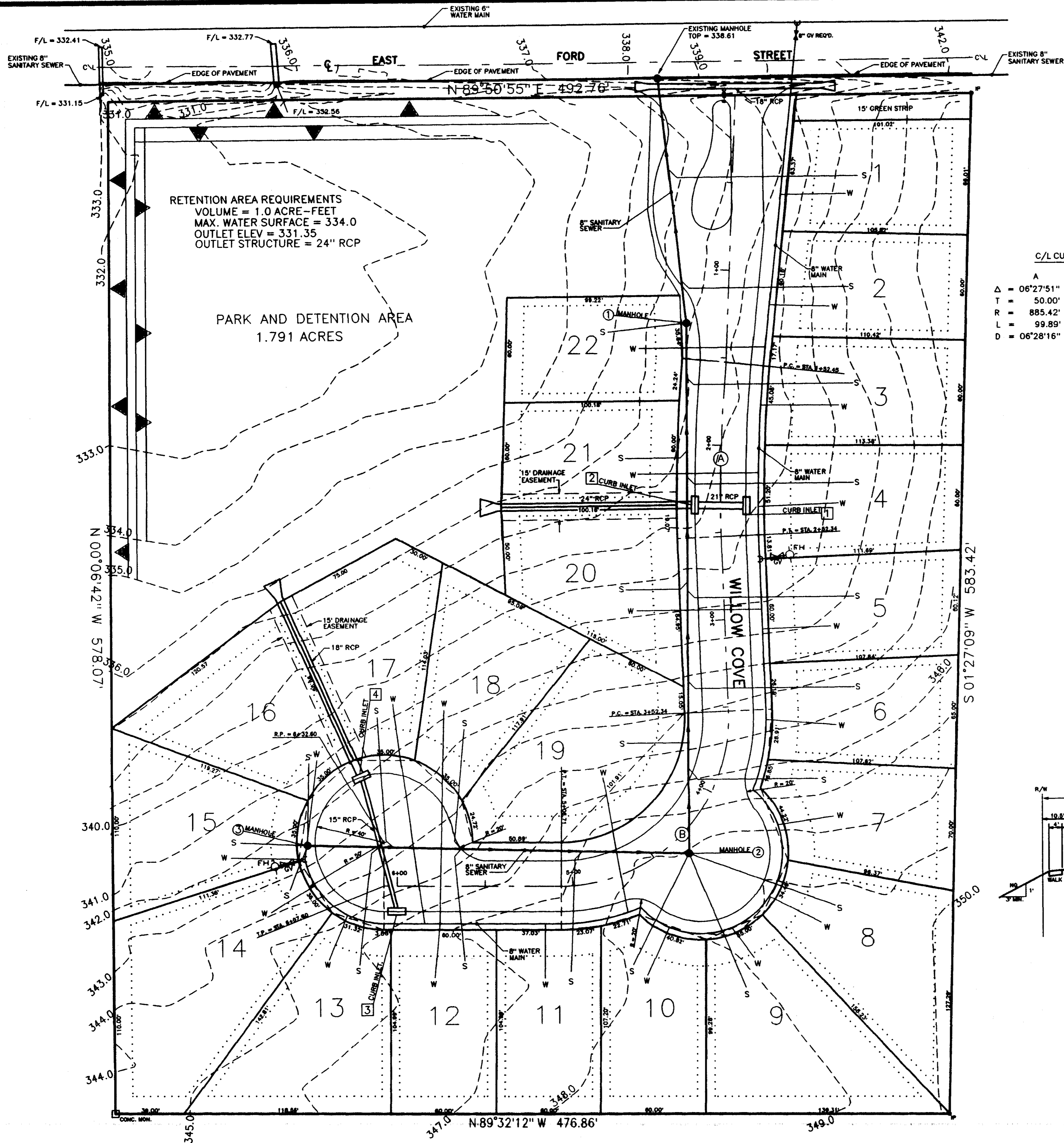


Developed By: Ford Street Properties

P.O. Box 2547  
Madison, Mississippi 39130

APRIL, 1998

**PWP-05038**



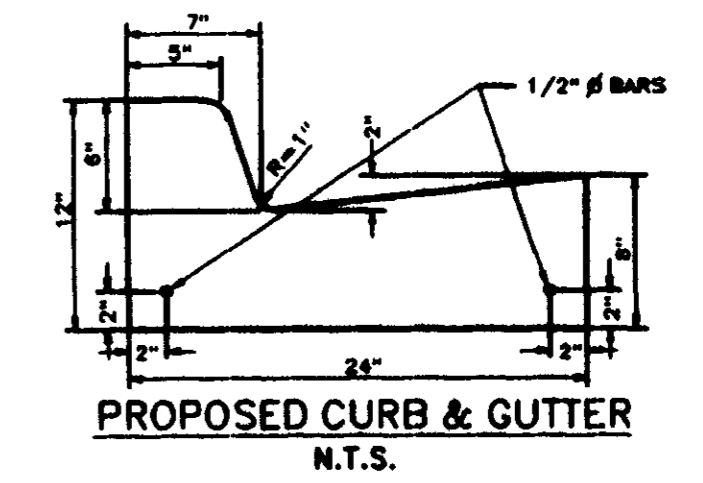
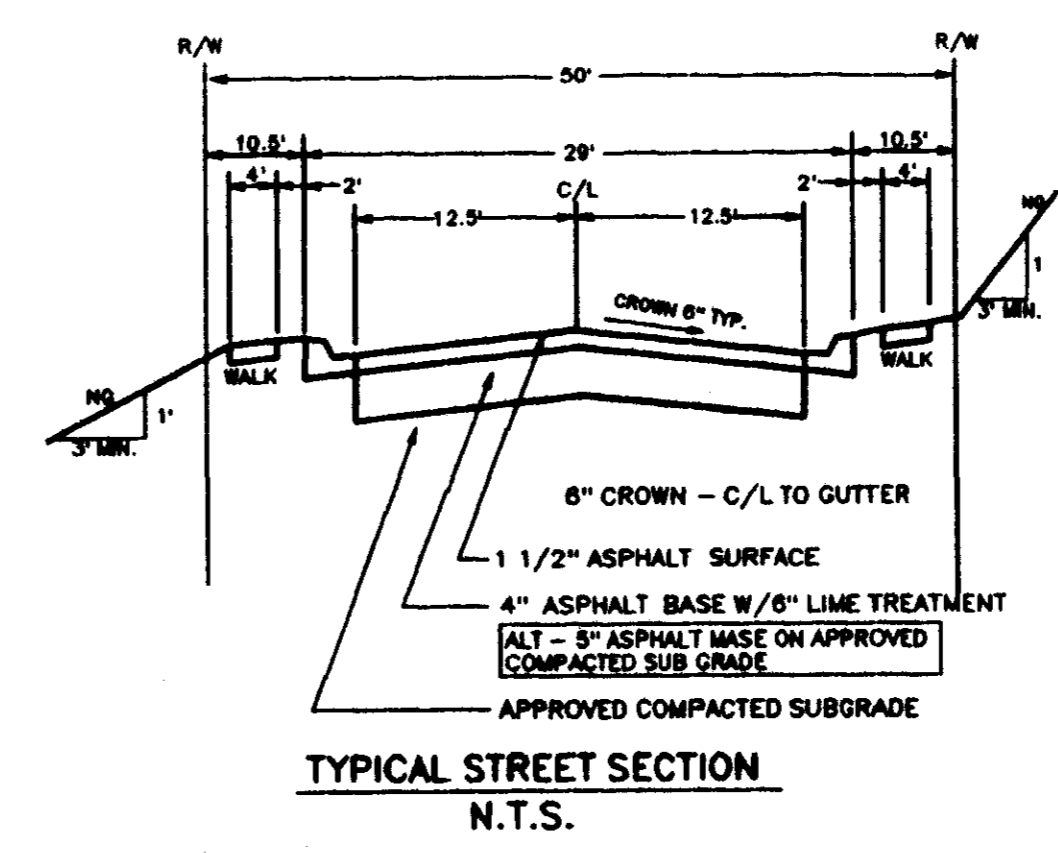
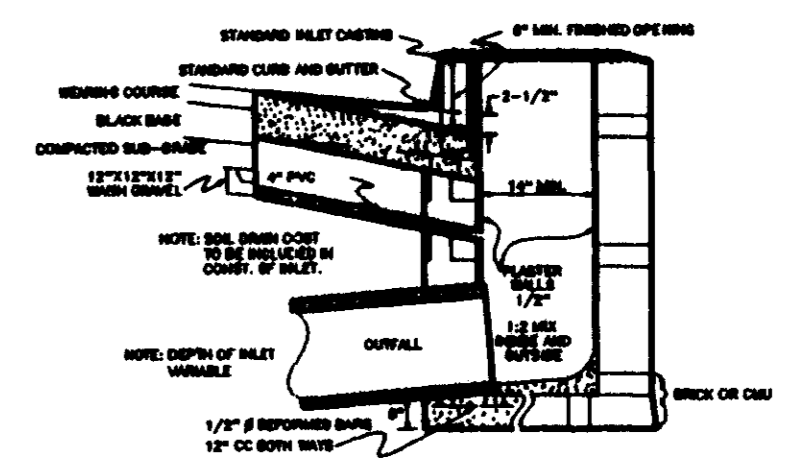
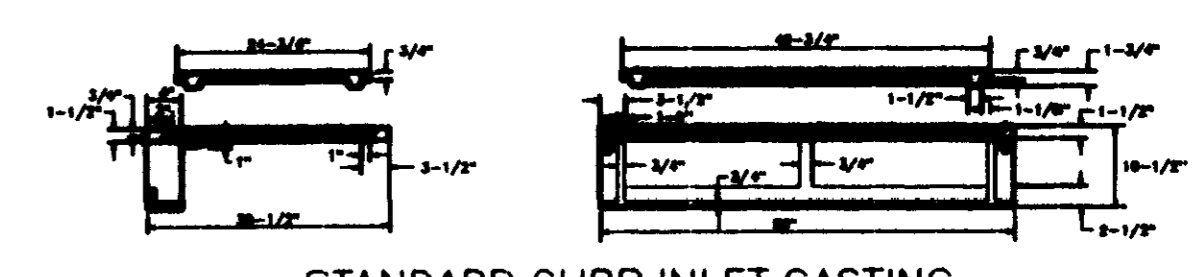
RETENTION AREA REQUIREMENTS  
VOLUME = 1.0 ACRE- FEET  
MAX. WATER SURFACE = 334.0  
OUTLET ELEV = 331.35  
OUTLET STRUCTURE = 24" RCP

PARK AND DETENTION AREA  
1.791 ACRES

C/L CURVE DATA

A	B
Δ = 06°27'51"	Δ = 92°40'37"
T = 50.00'	T = 100.00'
R = 885.42'	R = 95.43'
L = 99.89'	L = 154.37'
D = 06°28'16"	D = 60°02'14"

- 1 - THIS PROPERTY IS SITUATED IN ZONES "AE" & "X" ACCORDING TO F.I.R.M. MAP NO. 280110-0320-D. DATED: APRIL 15, 1994.
- 2 - ELEVATIONS ARE NGVD BASED ON RM 263. BASE FLOOD ELEVATION IS 331.0 NGVD.
- 3 - THIS PLAN IS PREPARED FROM A CLASS "B" SURVEY BY MAPTECH, INC. DATED: NOVEMBER 25, 1997.
- 4 - ACREAGE FOR THIS PROJECT IS 6.462 ACRES.
- 5 - PRESENT ZONING IS R - 1. THIS PROJECT IS BEING PROPOSED AS A PURD.
- 6 - THE UNITS WILL BE SINGLE FAMILY DETACHED HOMES.
- 7 - THE GREEN AREA IS 1.791 ACRES OR 27.7% OF THE GROSS PROJECT AREA.
- 8 - SETBACKS:  
FRONT = 15'  
SIDE = 5'  
REAR = 10'



DEVELOPER: KAPCO INVESTMENT CO.  
P.O. BOX 2547  
MADISON, MISSISSIPPI

PRELIMINARY PLAT

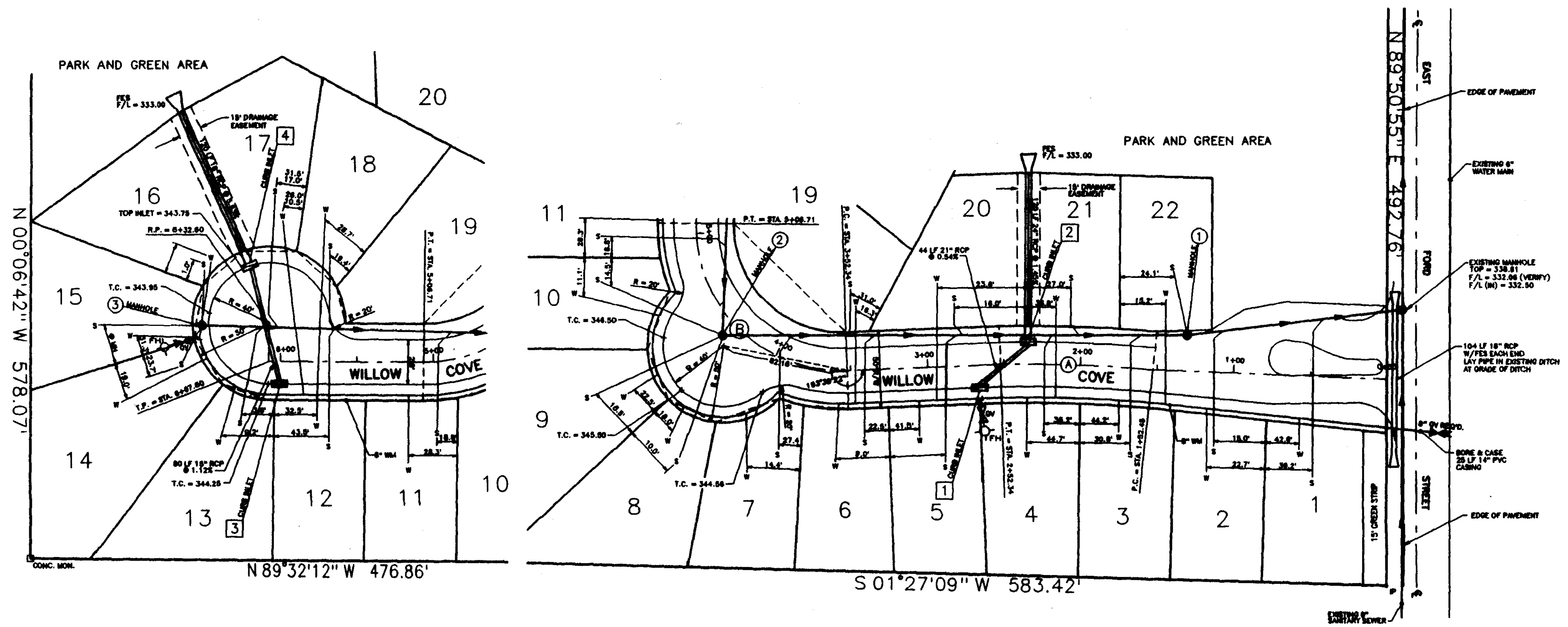
Revised:  
5/29/1998 - CITY COMMENTS  
4/29/1998 - CITY COMMENTS  
8/28/1998 - AS-BUILT

CENTRAL MISSISSIPPI ENGINEERING, INC.  
115 EAST MAIN STREET  
FLORENCE, MISSISSIPPI

WILLOW POND  
RIDGELAND, MISSISSIPPI

Design: KYLE P. LONES  
Drawn: ETS  
Approved: KYLE P. LONES  
Date: JANUARY 10, 1998

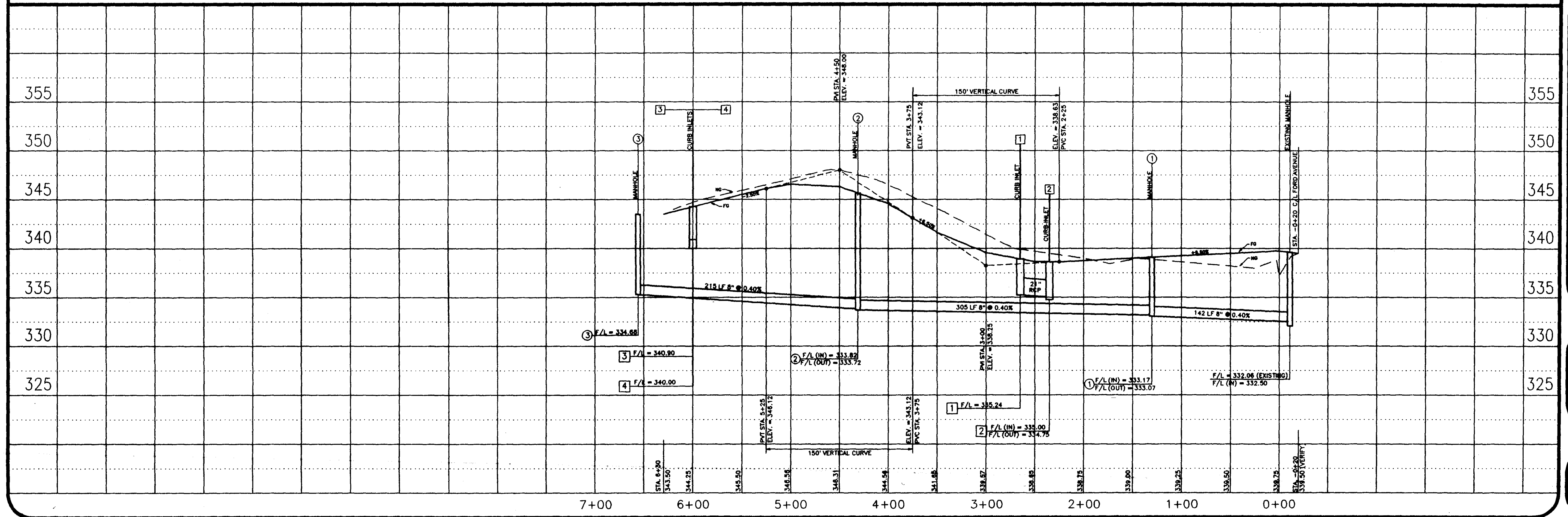
Sheet No.  
2



PLAN & PROFILE - WILLOW COVE

SCALE:  
 PLAN: 1" = 50'  
 PROFILE: 1" = 50' HORIZONTAL  
 : 1" = 5' VERTICAL

C/L CURVE DATA	
A	B
$\Delta = 06^{\circ}27'51''$	$\Delta = 92^{\circ}40'37''$
$T = 50.00'$	$T = 100.00'$
$R = 885.42'$	$R = 95.43'$
$L = 99.89'$	$L = 154.37'$
$D = 06^{\circ}28'16''$	$D = 60^{\circ}02'14''$



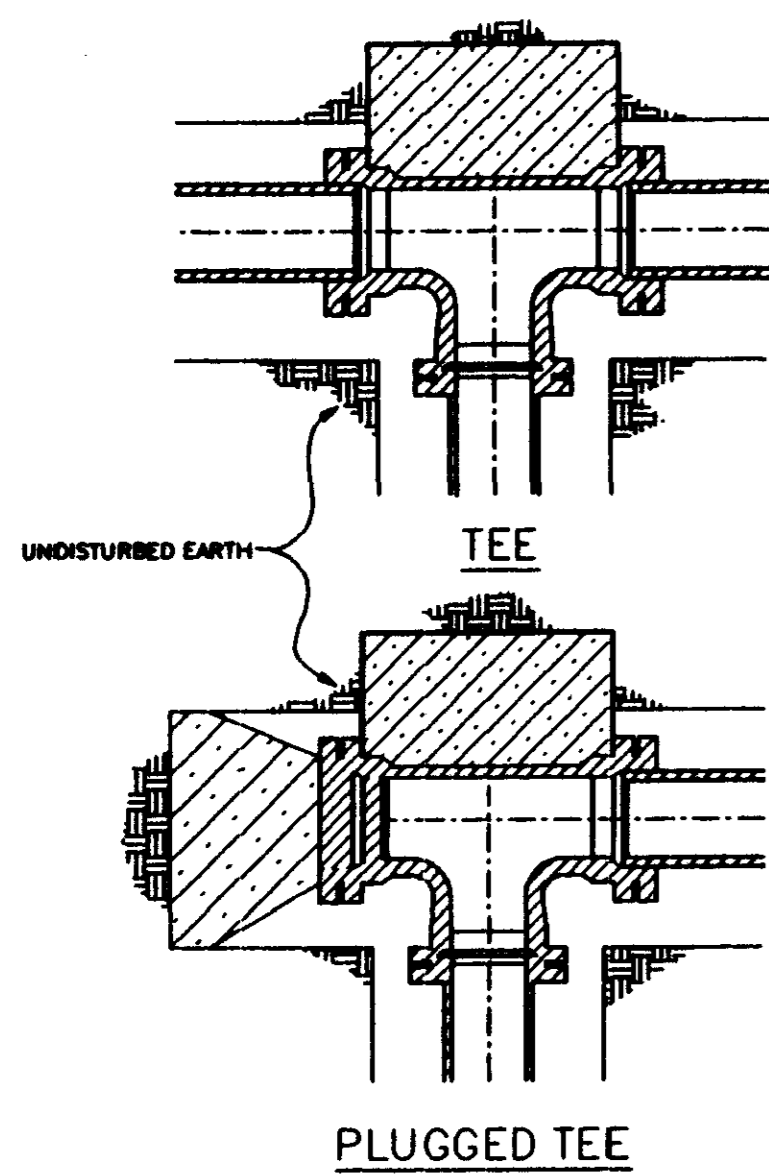
NO. DATE: 8/11/1988

Central Mississippi Engineering  
 115 E. MAIN ST. - FLORENCE, MS 39073

WILLOW POND  
 RIDGELAND, MISSISSIPPI

Prepared: KARL P. LONG  
 Drawn: ETG  
 Approved: KARL P. LONG  
 Date: JANUARY, 1988

Sheet #  
 3



PLUGGED TEE

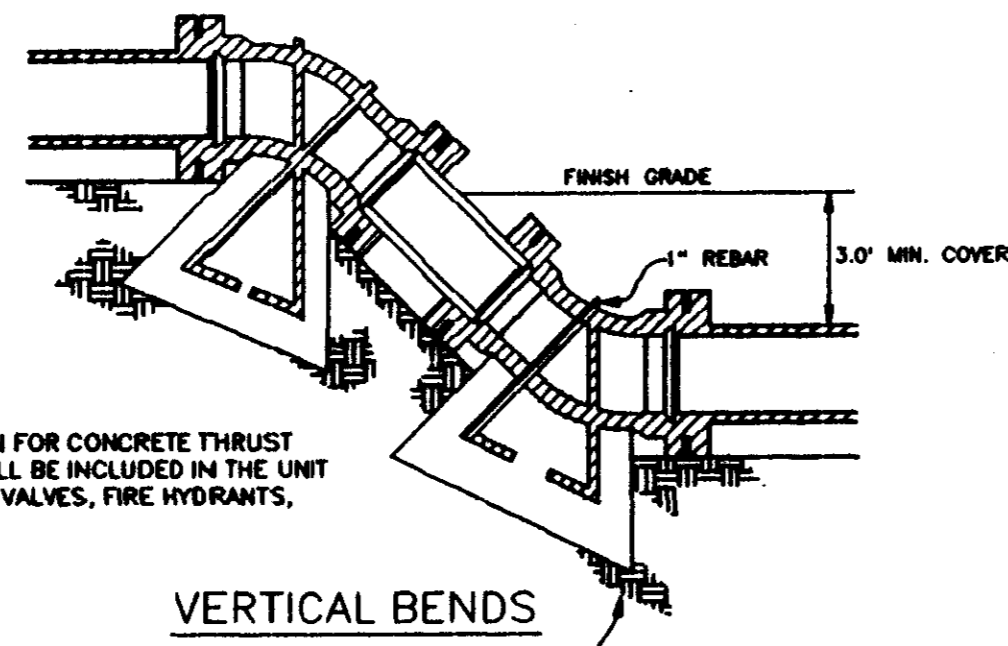
BEARING AREA IN SQ. FT.

NOMINAL PIPE DIAMETER (IN.)	HEAD-ON TEE OR TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	2.0	2.0	2.0
8	2.0	2.0	2.0	2.0	2.0
12	8.0	8.0	4.0	3.0	3.0
18	8.0	12.0	6.0	4.0	4.0

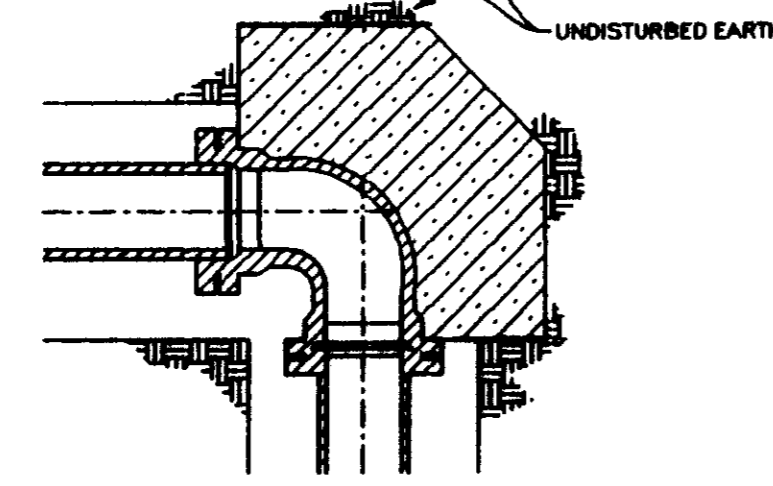
  

	VERTICAL BENDS	8.0 (23)	4.0 (12)	4.0 (12)
4		8.0 (23)	4.0 (12)	4.0 (12)
6		14.0 (43)	6.0 (22)	4.0 (12)
8		27.0 (1.0)	8.0 (23)	6.0 (23)
12		88.0 (25)	22.0 (66)	8.0 (23)
18		89.0 (23)	18.0 (47)	18.0 (47)

VOLUME OF BLOCK INCLUDING SOIL LAMB. CU. FT. (CU. YDS.)

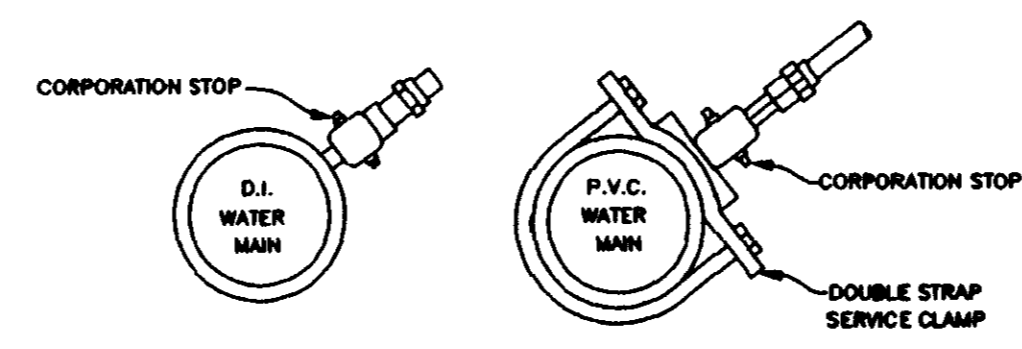
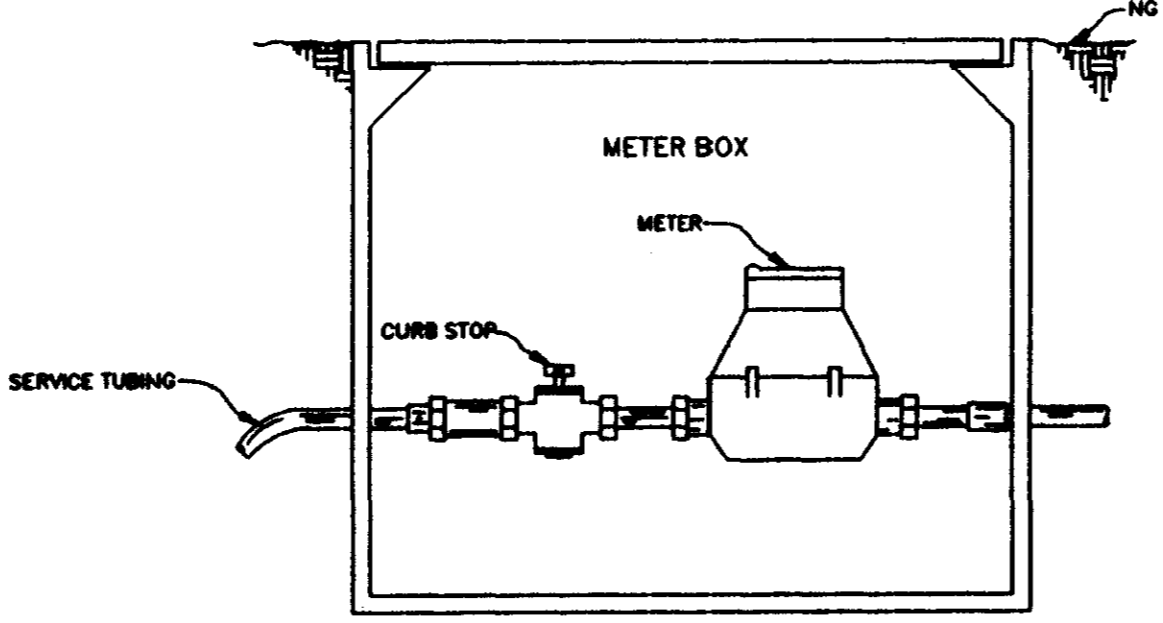


VERTICAL BENDS



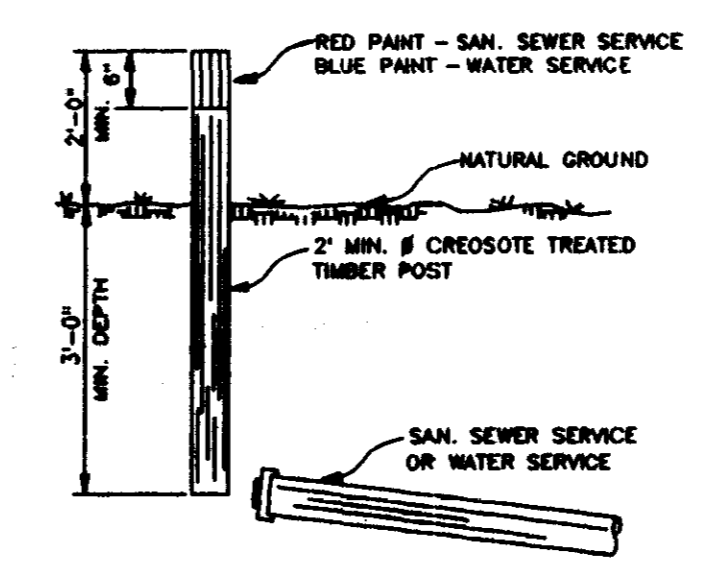
90° BEND

TYPICAL BLOCKING ON WATER MAIN  
(3000 PSI CONCRETE REVD.)



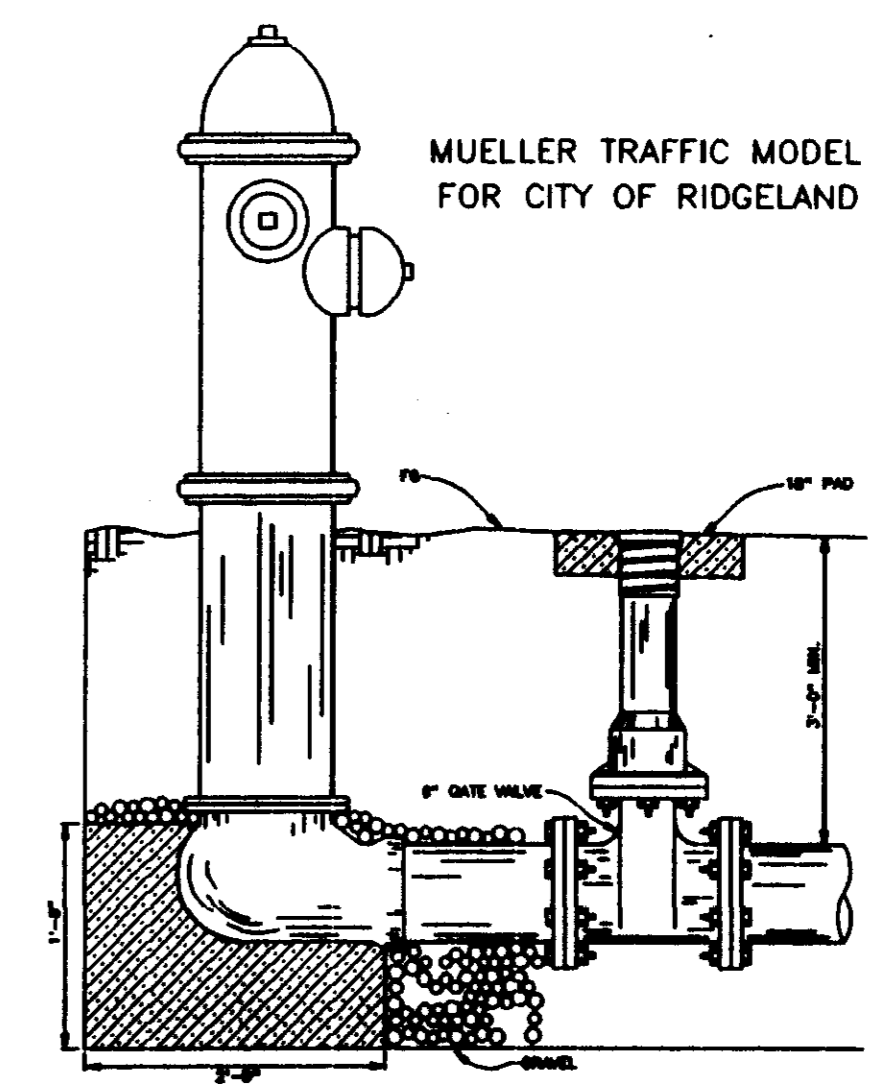
TYPICAL SERVICE ASSEMBLY

NOTE:  
1. CITY OF RIDGELAND REQUIRES MUELLER H-10472 BRASS SERVICE CLAMPS.

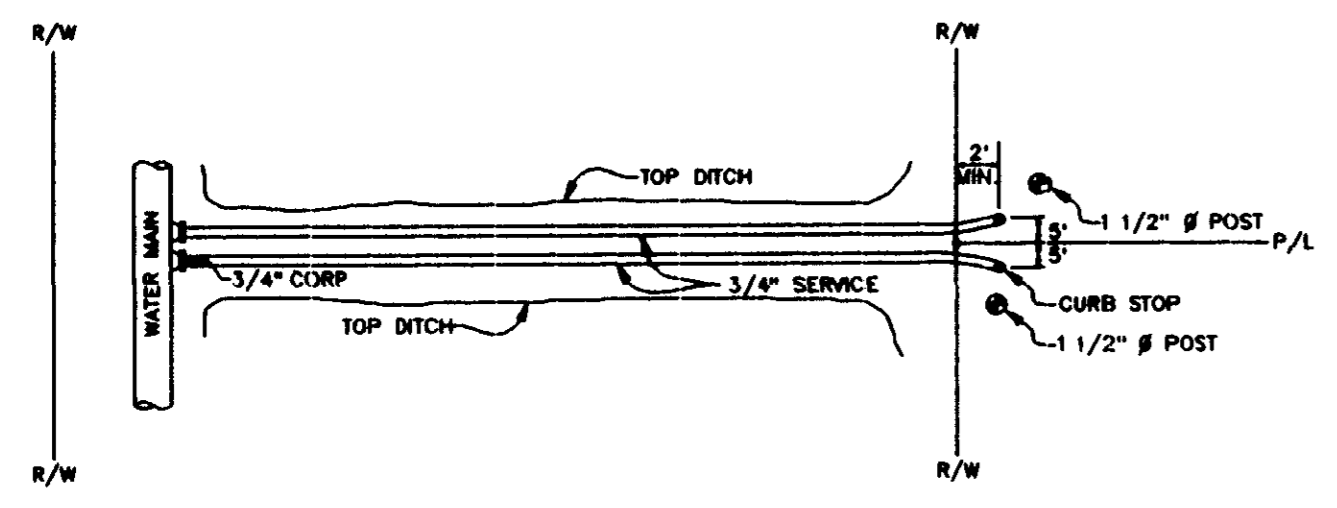
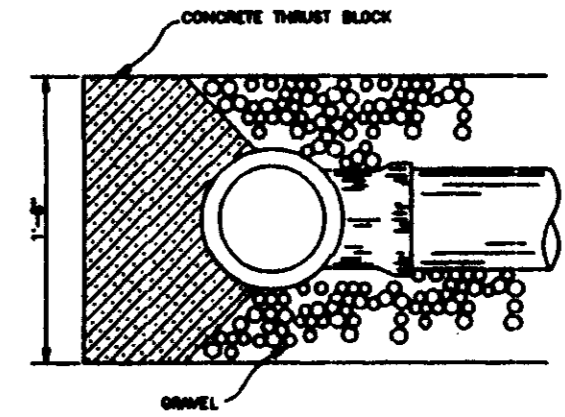


SERVICE MARKER DETAIL

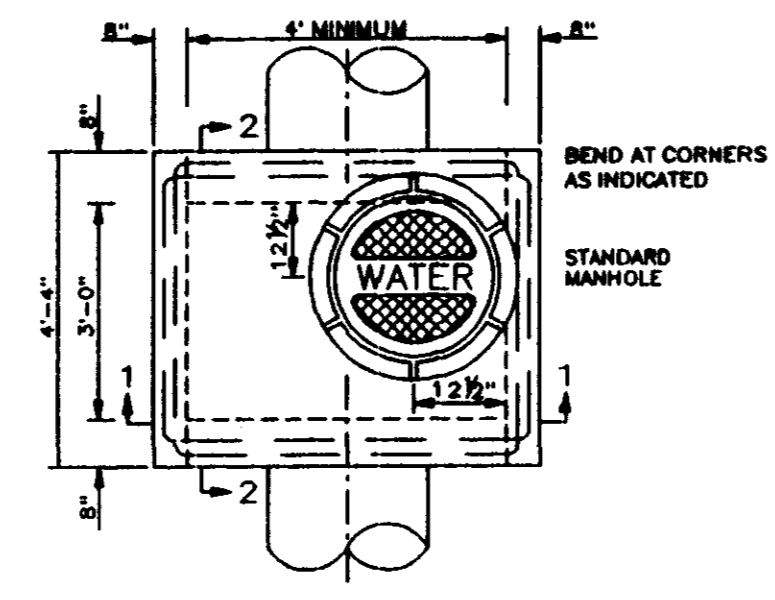
NOTE:  
1. ALL F.H. INSTALLATION REQUIRES A D.I. ANCHOR COUPLING.  
2. VALVE REQUIRED ON ALL FIRE HYDRANT LEGS.  
3. INSTALL BACKFLOW DEVICE ON FH LEG BETWEEN HYDRANT AND VALVE.



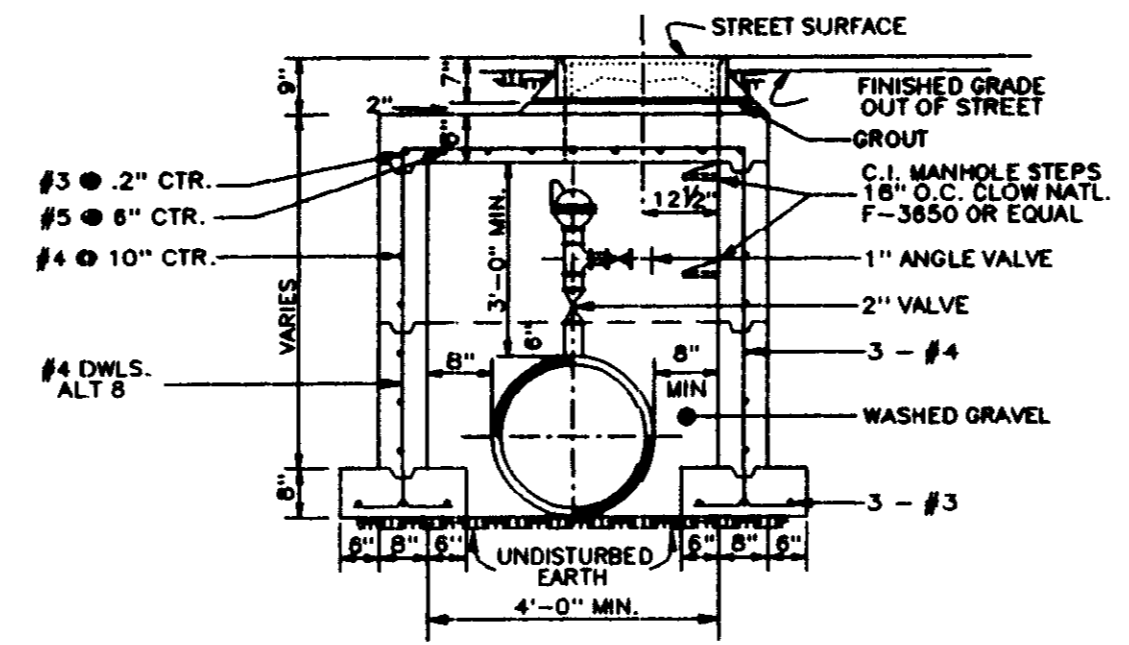
FIRE HYDRANT DETAIL



DOUBLE SERVICE DETAIL - WATER

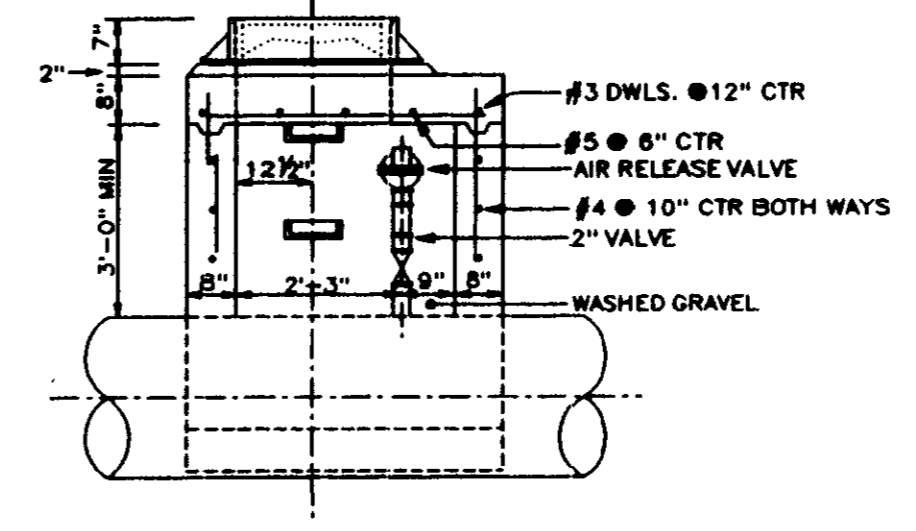


PLAN



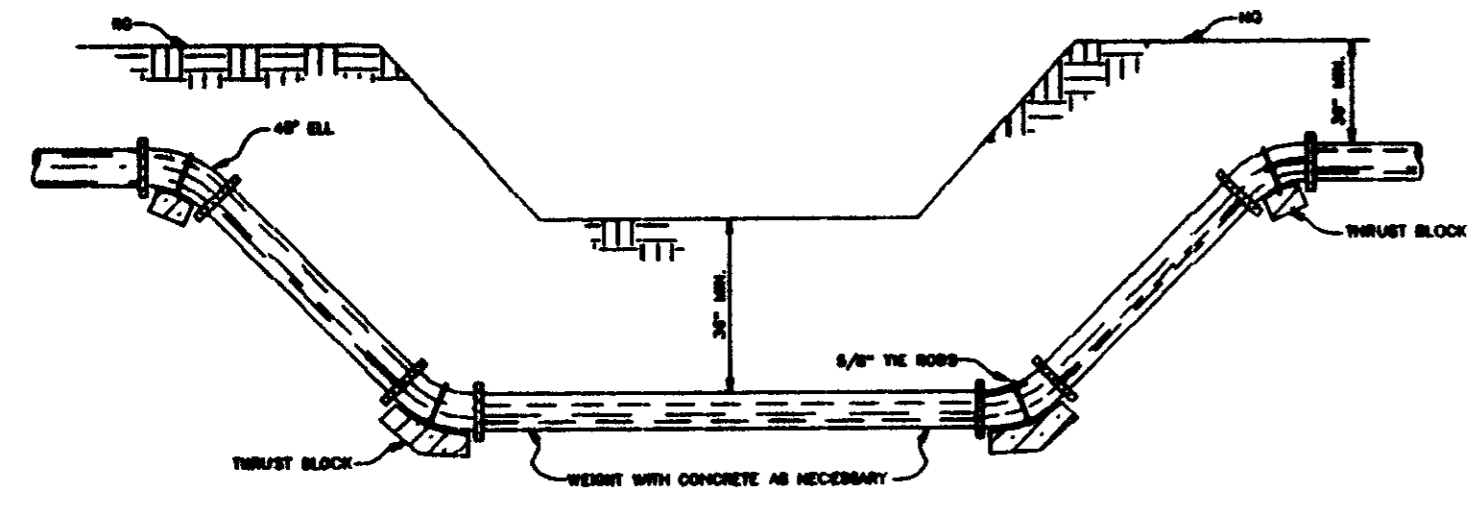
SECTION 1 - 1

TYPICAL AIR RELEASE VALVE AND MANHOLE

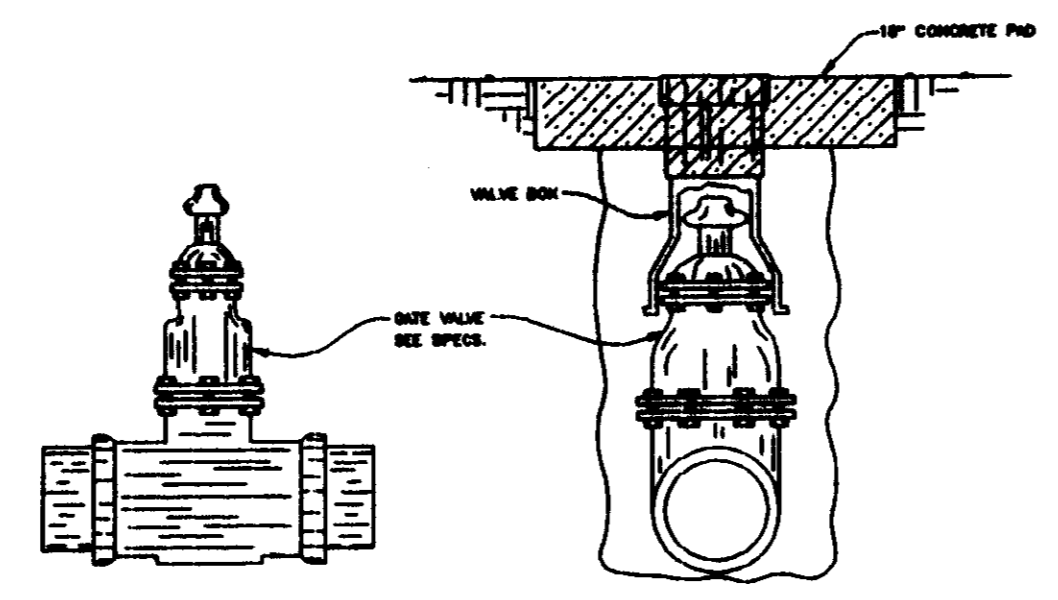


SECTION 2 - 2

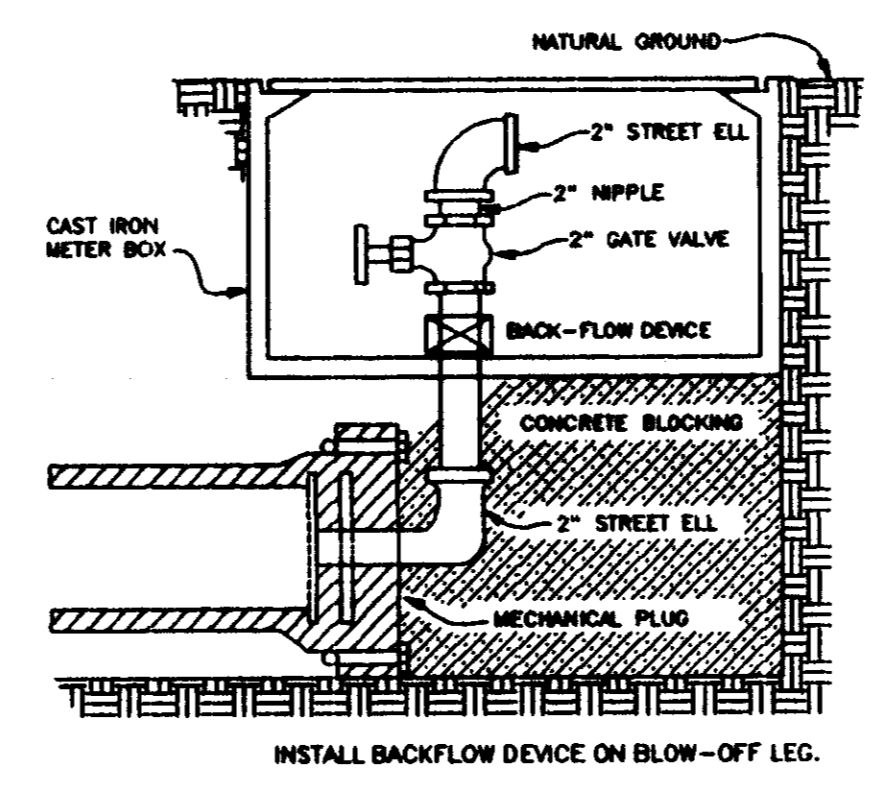
NOTE:  
STANDARD 4\"/>



TYPICAL CREEK CROSSING



TYPICAL GATE VALVE DETAIL



TYPICAL BLOW - OFF ASSEMBLY

NOTE: ALL MATERIALS FOR CONSTRUCTION OF BLOW - OFF ASSEMBLY SHALL BE OF 2\"/>

WATER SPECIFICATIONS

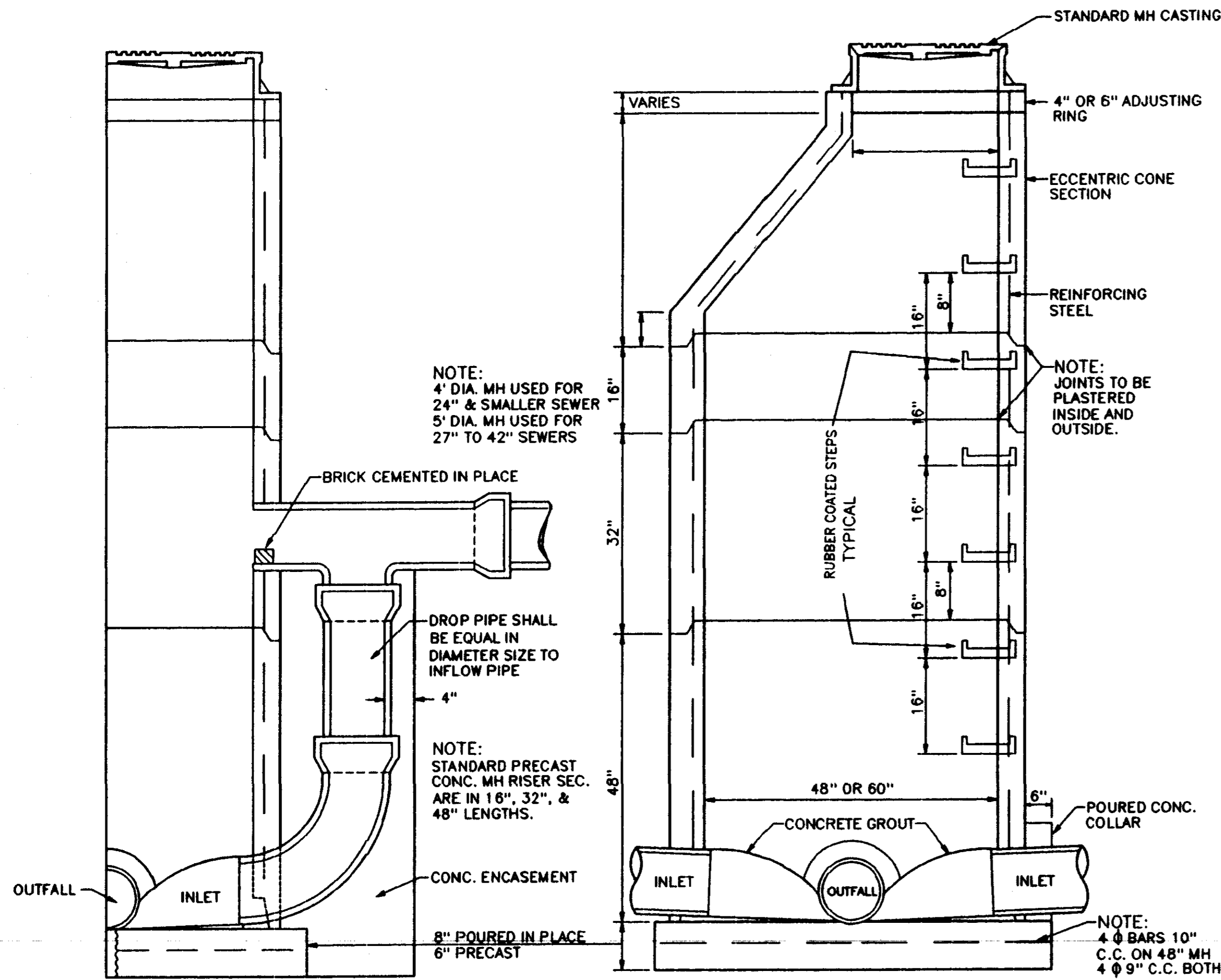
- 1 - Water mains are to be thoroughly flushed and sterilized in accordance with AWWA Standard C-601. Proof of two (2) satisfactory bacteriological tests from the Mississippi State Board of Health Laboratory will be furnished to the ENGINEER. Samples for testing will be taken from each dead end line as applicable for testing.
- 2 - Water mains are to be pressure tested in accordance with AWWA Standard C-600-77, Section 4 results to be furnished to the ENGINEER.
- 3 - Water mains to be C-900 PVC, Class 150, with 36\"/>

Revised: \_\_\_\_\_  
 Approved: \_\_\_\_\_  
 Date: \_\_\_\_\_

CENTRAL MISSISSIPPI ENGINEERING, INC.  
 115 E. MAIN STREET  
 FLORENCE, MISSISSIPPI

STANDARD WATER DETAILS  
 WILLOW POND

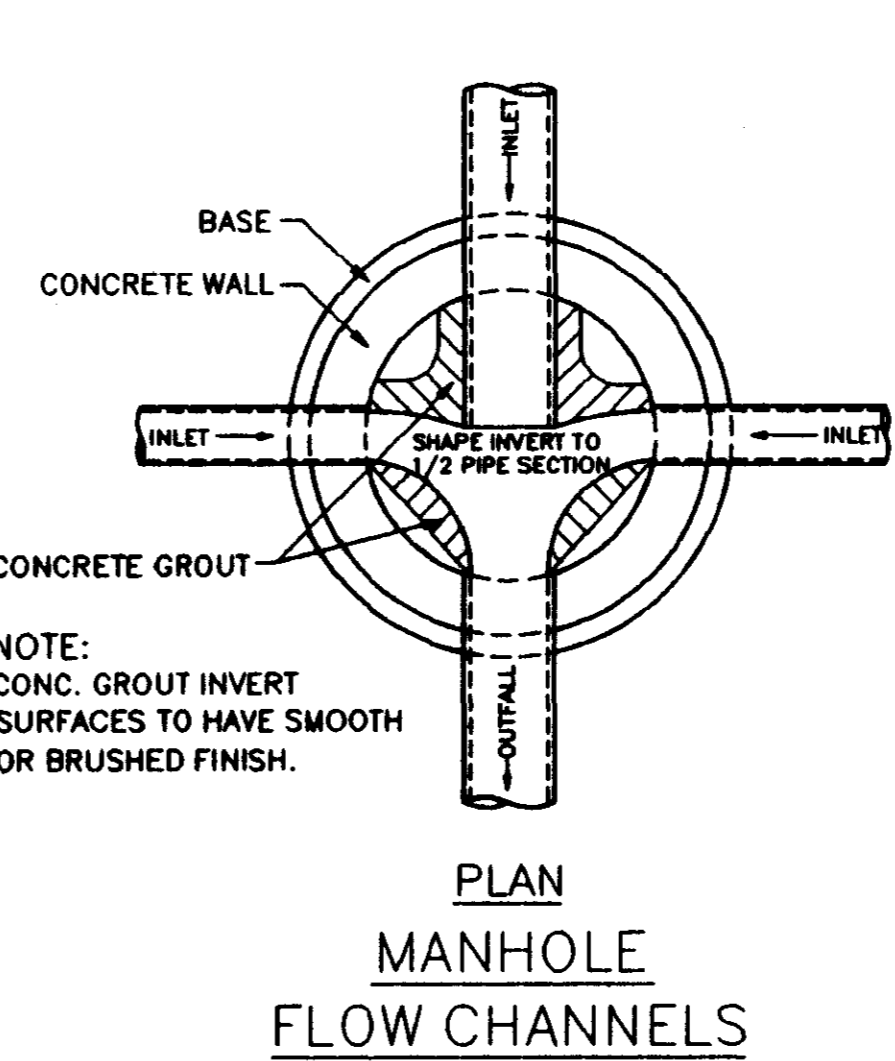
Designed: \_\_\_\_\_  
 Drawn: \_\_\_\_\_  
 Approved: \_\_\_\_\_  
 Date: \_\_\_\_\_



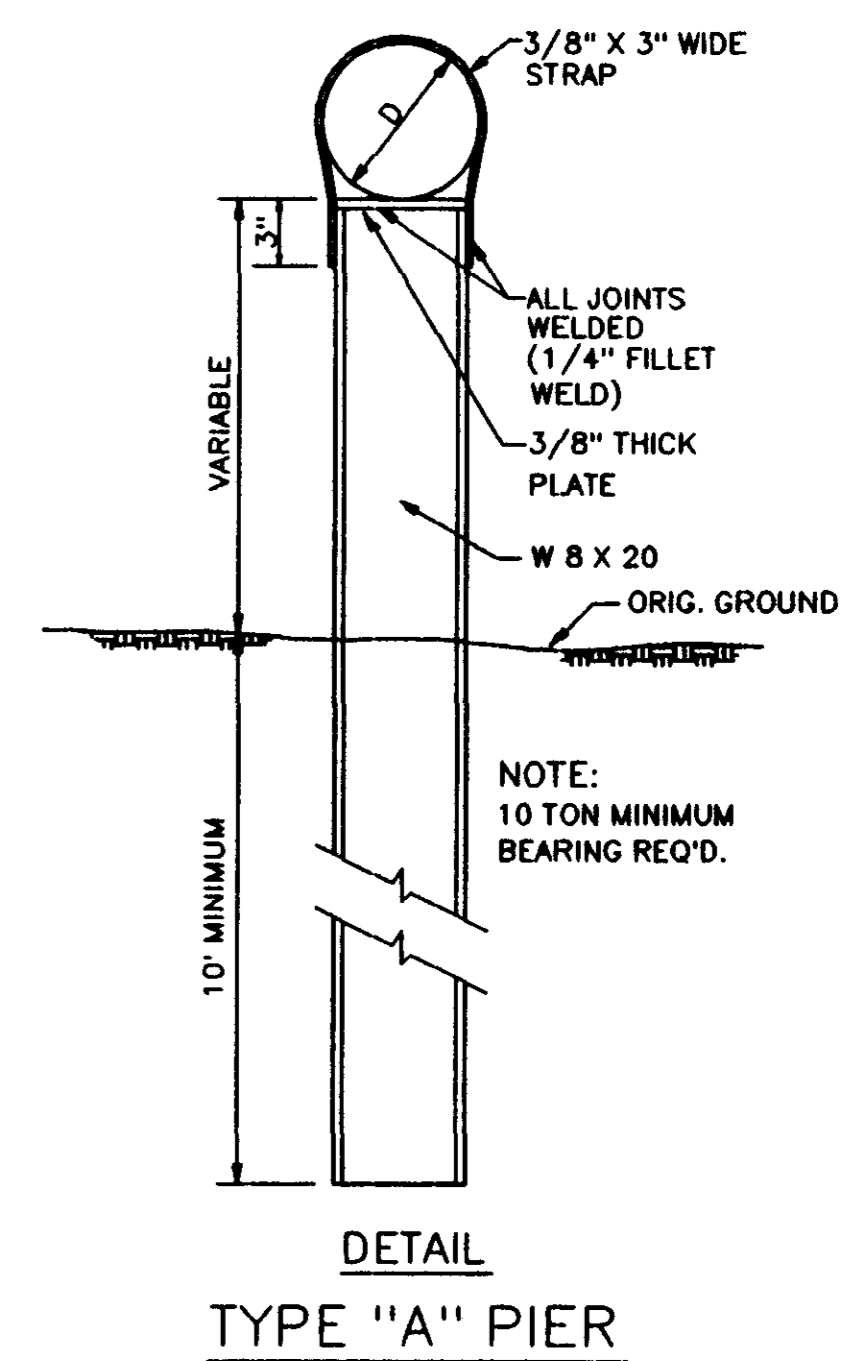
SECTION OF PRECAST CONCRETE WITH DROP CONNECTION      SECTION OF PRECAST CONCRETE MANHOLE

**SEWER SPECIFICATIONS**

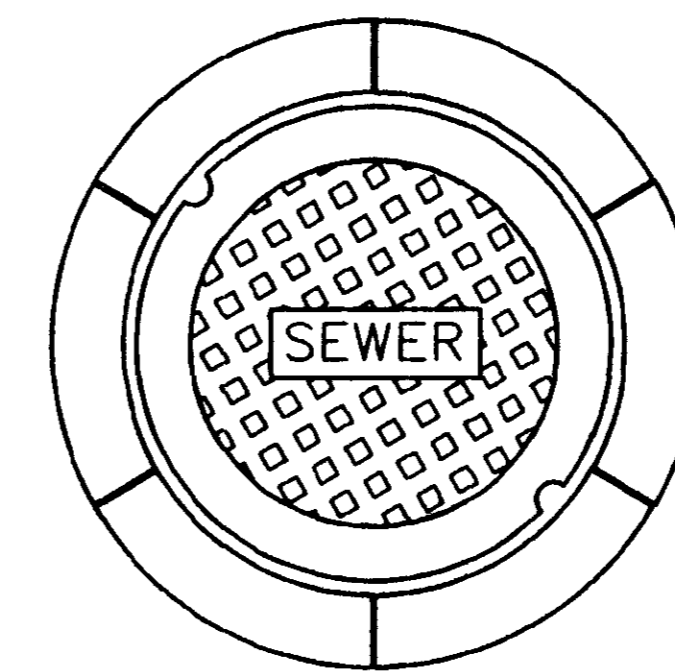
- 1-All sewer main and services shall be Extra Strength Vitrified Clay Pipe (ASTM C-700), or PVC sewer pipe (ASTM D-3034), SDR 26.
- 2-Manholes to be precast concrete conforming to ASTM C-478. All manholes shall be waterproofed and shall have water-tight flexible connections at inlets and outlets.
- 3-Manhole casting to be Harper No. 1, MSPE Standard, or approved equal.
- 4-Sewer mains to be tested by air per ASTM C-828, results to be furnished to the ENGINEER and the UTILITY. PVC sewer pipe to have a maximum of 5.0% deflection as determined by the pulling of a 5% mandrel after the pipe has been backfilled for at least 30 days.
- 5-All sewer services to be marked at the property line with a 2" diameter creosote post or other acceptable marker.
- 6-Bedding for sewer pipe shall be Class "C" in accordance with ASTM C-12 for rigid pipe and Class "B" in accordance with ASTM D-2321 for flexible pipe.
- 7-Manholes shall be waterproofed with an application of Koppers 300 M Coal Tar Epoxy or approved equal, inside and outside. Steps to be rubber coated.
- 8-All sewer 24 inches or less will be laid with straight alignment between manholes and will be checked by either laser or lamping methods.
- 9-All backfill will be of suitable material, hand tamped to (1) foot of the top of the pipe, and material placed in such a manner as not to disturb the alignment of the pipe.
- 10-Sewer and water mains will have a minimum separation of ten (10) feet horizontally and 18 inches vertically with relation to each other.
- 11-Leakage tests shall include appropriate water or low pressure air testing. The leakage outward or inward (exfiltration or infiltration) shall not exceed 200 gallons per inch of pipe diameter per mile per day (0.19 m<sup>3</sup>/cm of pipe dia./km/day) for any section of the system. An exfiltration or infiltration test shall be performed with a minimum positive head of 2 feet (0.61 m). The air test, if used, shall, as a minimum conform to the test procedure described in ASTM C-828-76T entitled "Tentative Recommended Practice for Low-Pressure Air Test of Vitrified Clay Pipe Lines". The testing methods selected should take into consideration the range in ground water elevations projected and the situation during the test.
- 12-HORIZONTAL SEPARATION-Sewers shall be laid at least 10 ft., horizontally, from any existing or proposed water main. The distance to be measured from edge to edge. In cases where the 10 ft. separation is not practical, a separation of 18 inches, vertically, will be allowed if the water main is in a separate ditch, if approved by the ENGINEER.
- 13-CROSSINGS-Sewers crossing water mains will be laid to provide a minimum vertical separation of 18 inches between the outside of each pipe. The crossing will be arranged so that the sewer joints will be equidistant and as far as possible from the water main. Sewers crossing over water mains shall have adequate structural support to prevent damage to the water main.



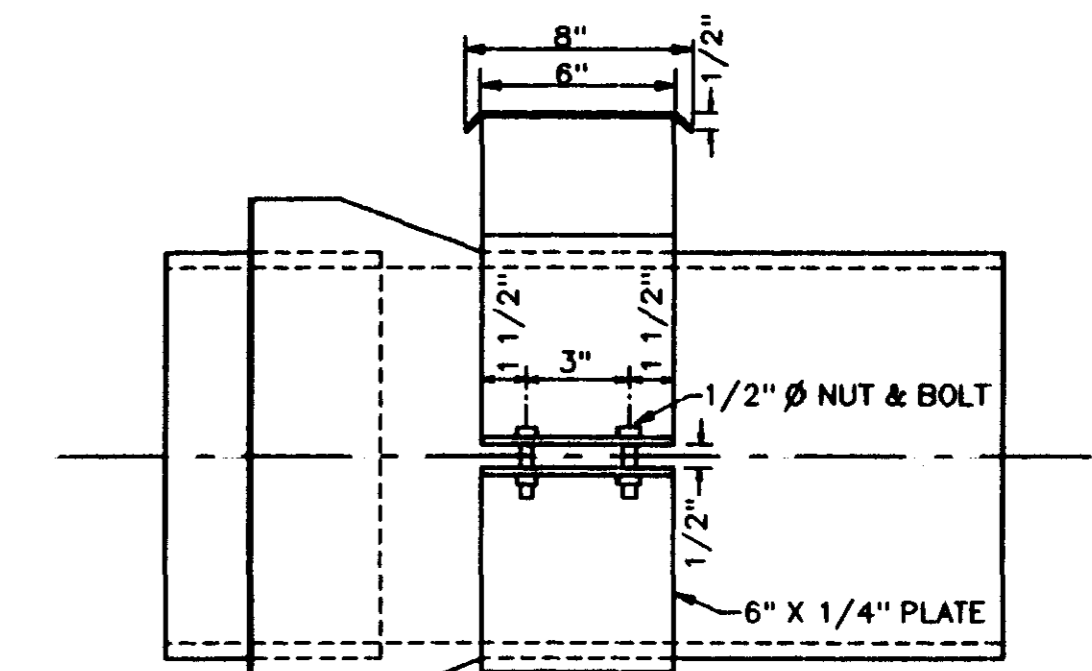
PLAN MANHOLE FLOW CHANNELS



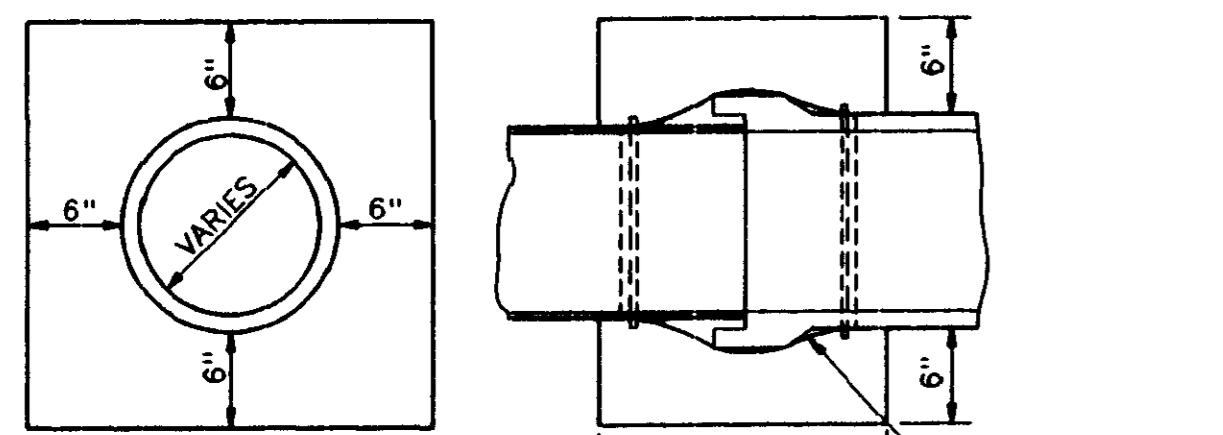
DETAIL TYPE "A" PIER



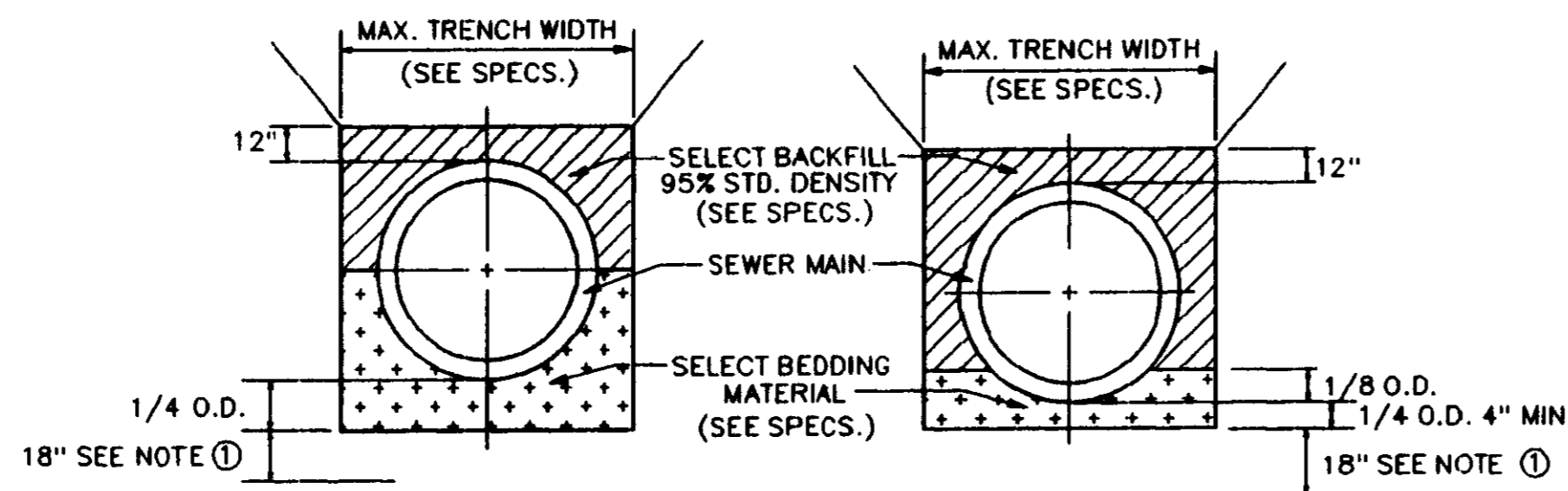
PLAN MANHOLE CASTING VULCAN VM - 8 OR APPROVED EQUAL



ENCASEMENT DETAIL

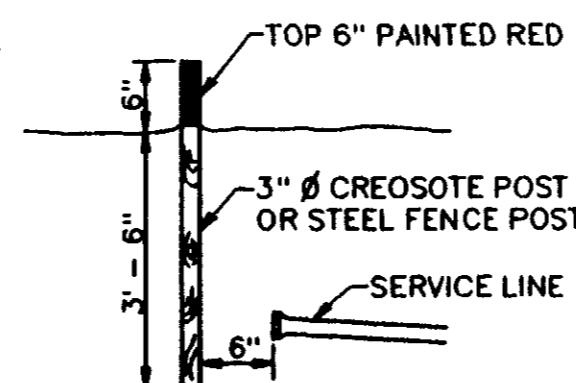


ELEVATION SECTION CONCRETE COLLAR DETAILS

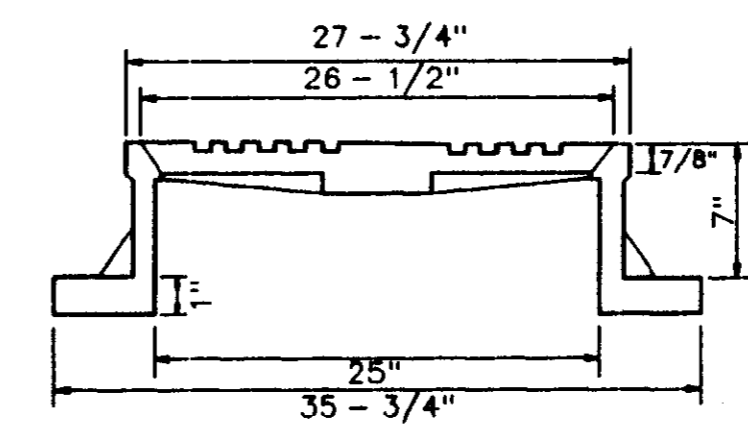


TYPICAL SECTION CLASS "B" BEDDING      TYPICAL SECTION CLASS "C" BEDDING

① DEWATERING REQ'D. TO THIS LEVEL (MIN.). CONTRACTOR WILL NOT BE ALLOWED TO WORK WHEN WATER LEVEL IS NOT MAINTAINED BY DEWATERING SYSTEM TO THIS ELEVATION OR LOWER.

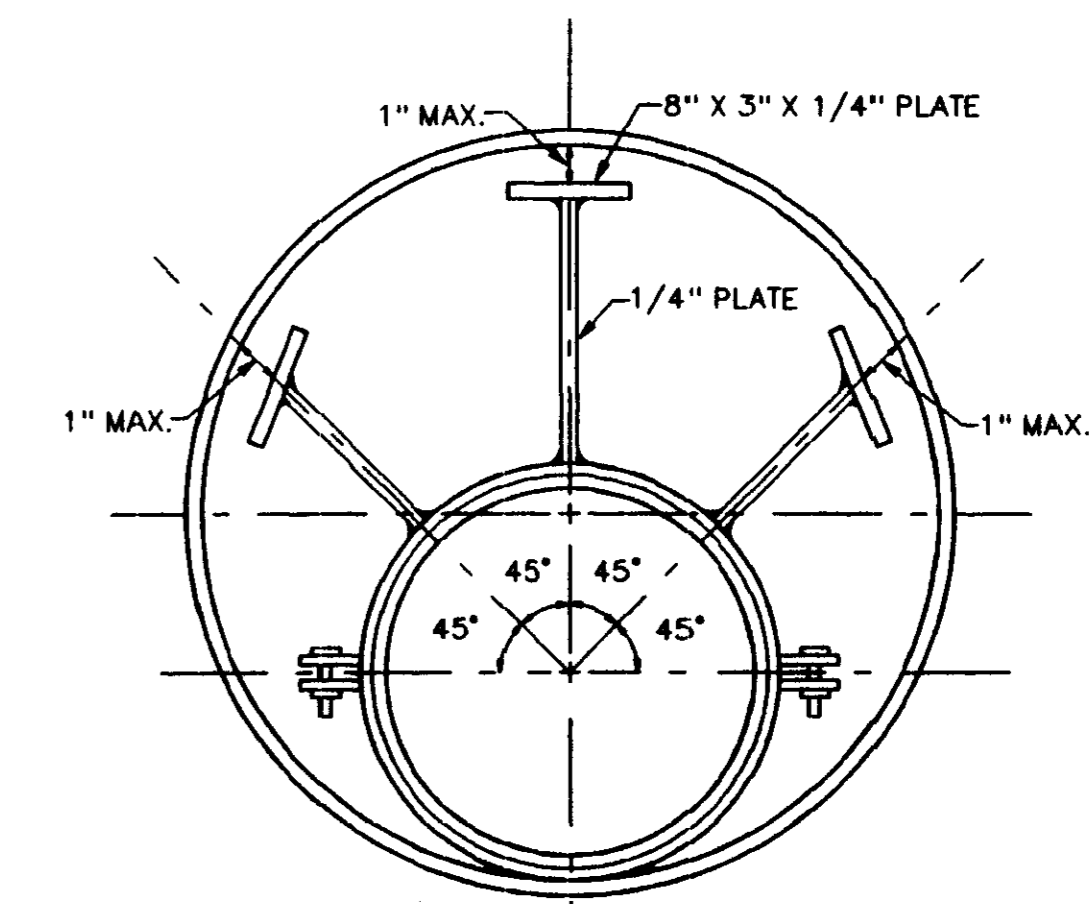


SEWER SERVICE MARKER

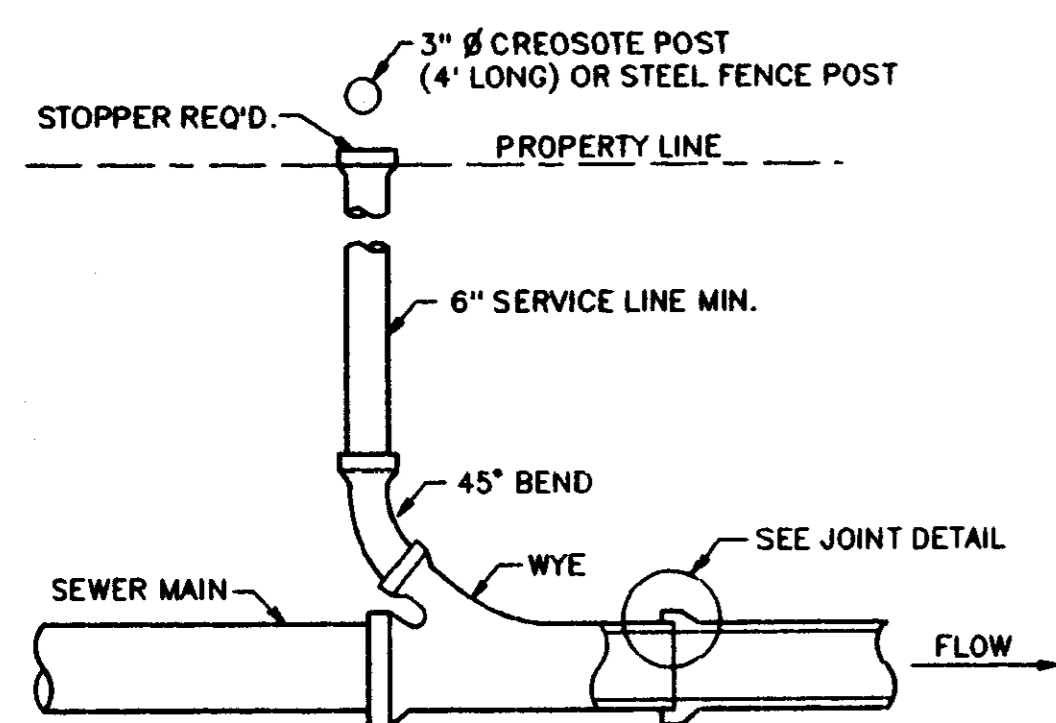


SECTION STANDARD MANHOLE CASTING

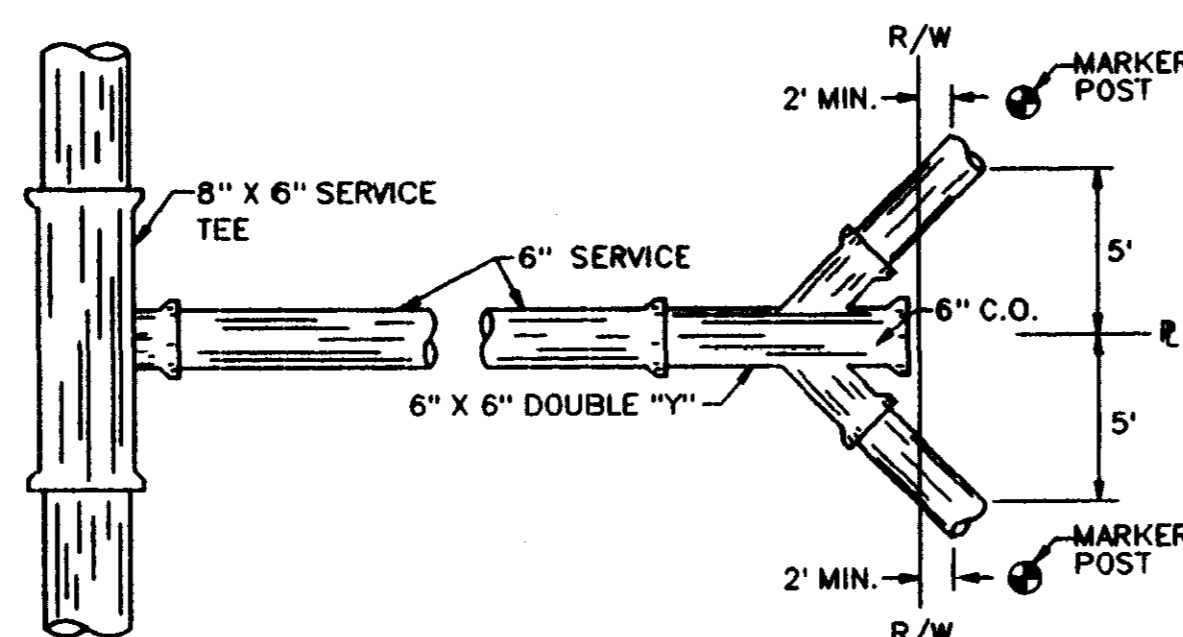
NOTE:  
 1. CARRIER PIPE IS D.I.P. OR SDR 26 PVC PUSH ON JOINT; USE ONE SUPPORT ASS'Y. PER JOINT OR PART THEREOF.  
 2. CASING PIPE MATERIAL IS STEEL OR PVC.  
 3. HOT DIP GALVANIZE ALL STEEL ASS'Y. PARTS AFTER FABRICATION.  
 4. CADMIUM PLATED NUTS & BOLTS.



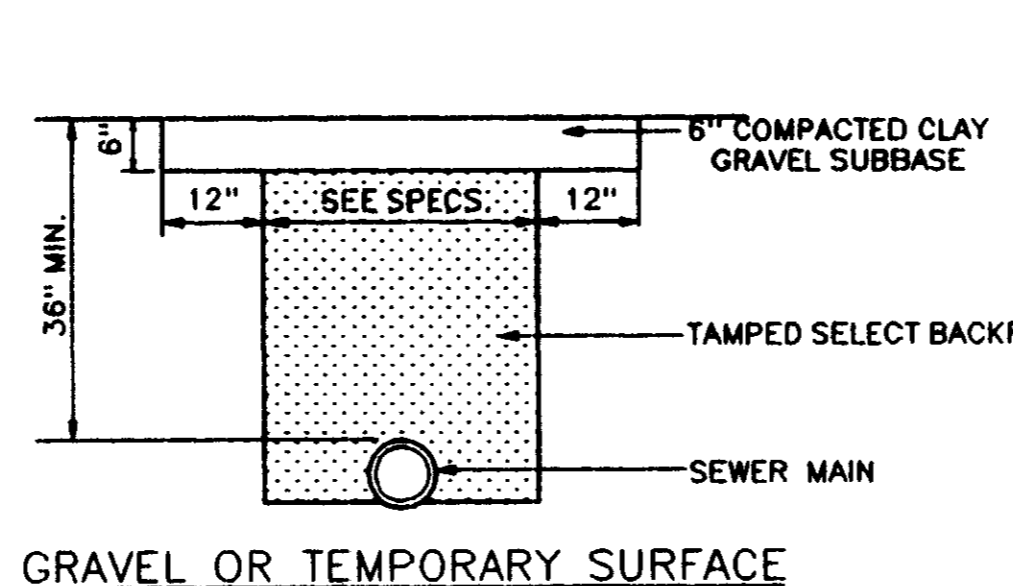
ENCASEMENT DETAIL



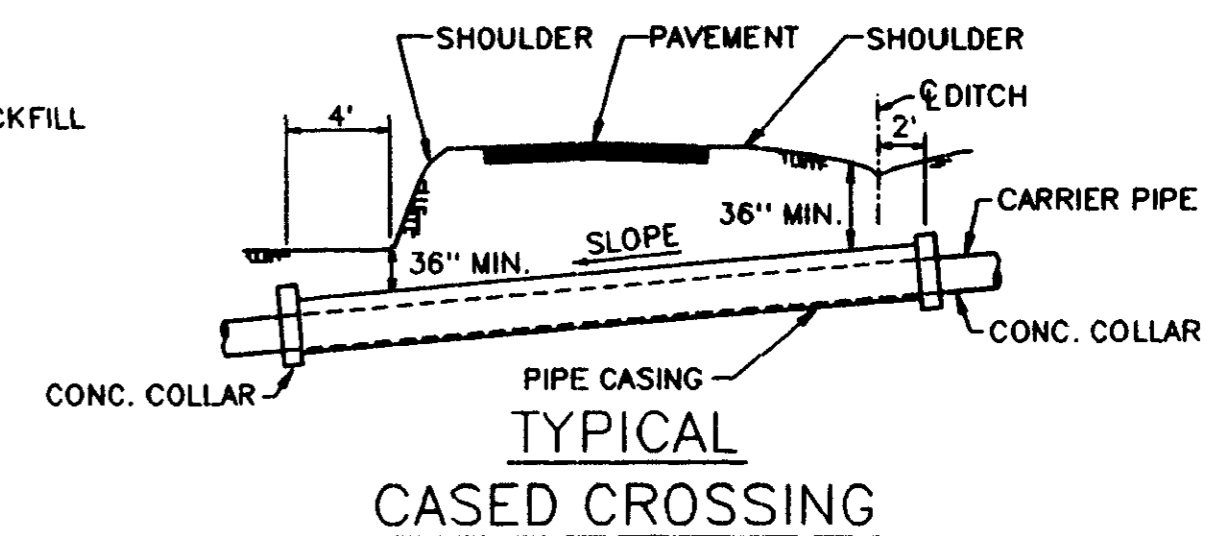
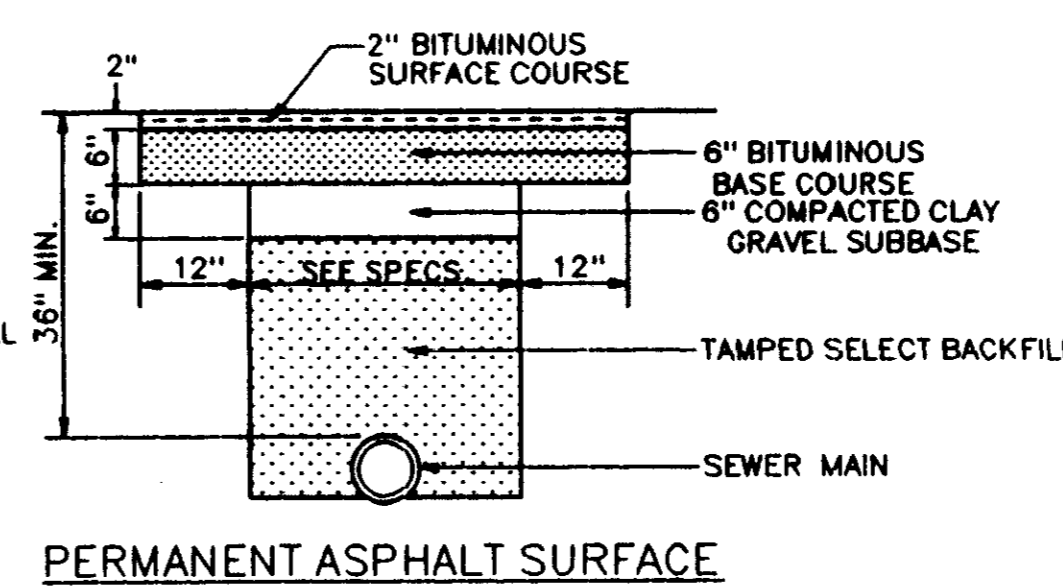
TYPICAL SERVICE TO PROPERTY LINE WITH WYE JOINT



DOUBLE SEWER SERVICE DETAIL



TYPICAL TRENCH SECTIONS ACROSS IMPROVED SURFACE AREAS



TYPICAL CASED CROSSING

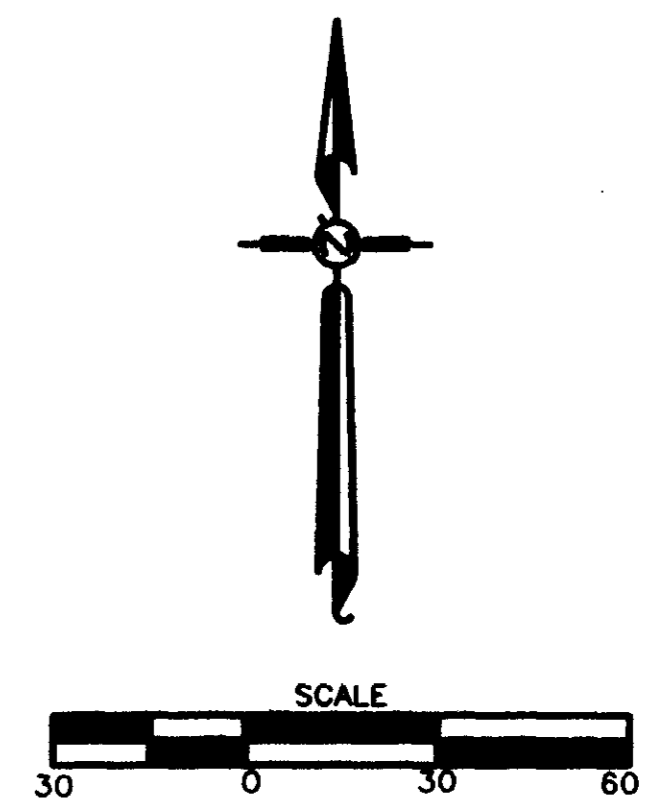
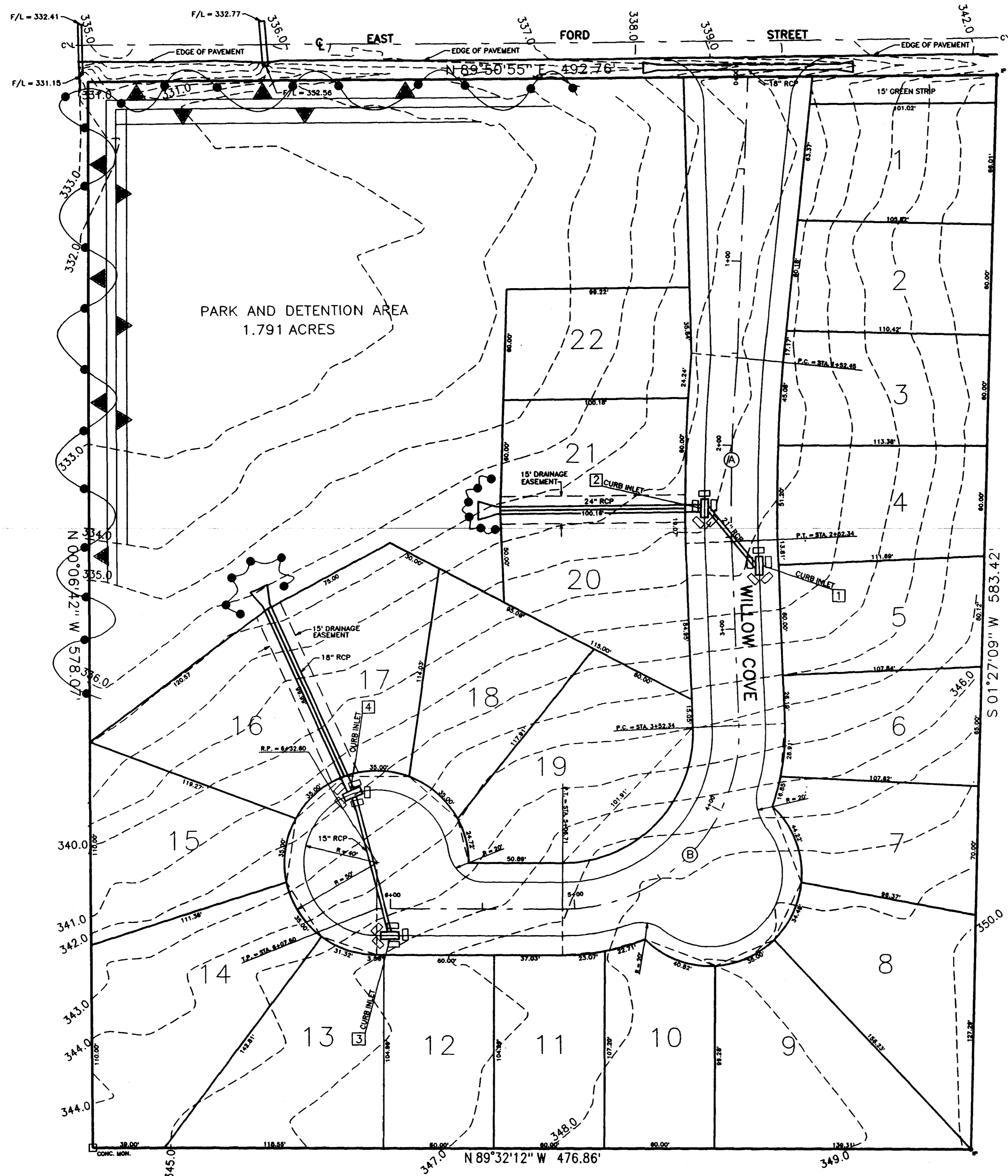
Revised: \_\_\_\_\_  
 Drawn: \_\_\_\_\_  
 Checked: \_\_\_\_\_  
 Date: \_\_\_\_\_

CENTRAL MISSISSIPPI ENGINEERING, INC.  
 115 E. MAIN STREET  
 FLORENCE, MISSISSIPPI

STANDARD SEWER DETAILS

Designed: \_\_\_\_\_  
 Drawn: \_\_\_\_\_  
 Approved: \_\_\_\_\_  
 Date: \_\_\_\_\_

5



1 - THIS PROPERTY IS SITUATED IN ZONES "AE" & "X" ACCORDING TO F.I.R.M. MAP NO. 280110-0320-D. DATED: APRIL 15, 1994.  
 2 - ELEVATIONS ARE NGVD BASED ON RM 263. BASE FLOOD ELEVATION IS 331.0 NGVD.

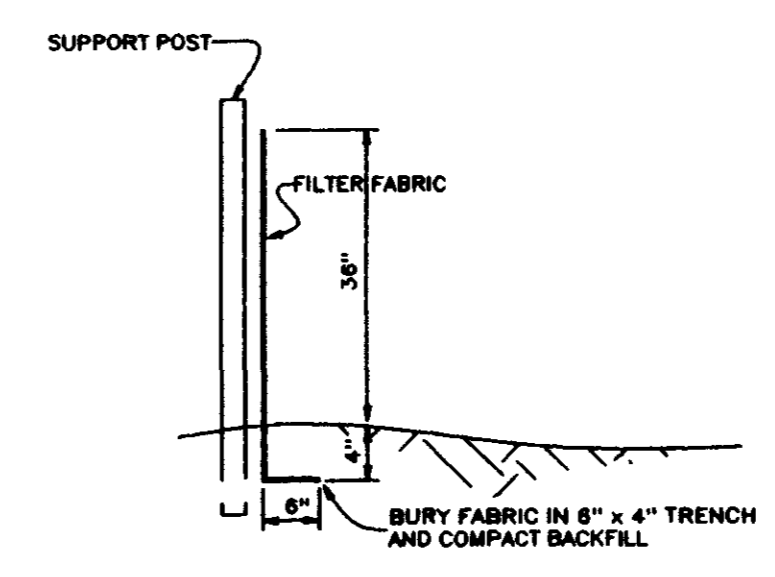
**EROSION CONTROL CONSTRUCTION PROCEDURES**

1. GENERAL  
Structural Controls (hay bales, silt fence, etc.) to be installed as soon as possible after site clearing is completed. Vegetative controls (seeding, sodding, etc.) to be installed upon completion of construction.
2. STRUCTURAL CONTROLS  
  - A. Silt fence material to be TYPAR 3341 or approved equal. Fence supports to be on 10 foot maximum spacings. Construct fence per detail on drawing.
  - B. Hay bales should be fresh (same year) baled with bindings adequate to hold bale shape. Bales should be fitted together or double stacked to ensure silt retention. Bale stakes to be minimum 2"x2"x30" stakes with a minimum of two (2) stakes per bale. Place one (1) bale in gutter line, as required on steep slopes, to dissipate velocity.
3. MAINTENANCE  
  - A. SILT FENCE - All fencing to be thoroughly checked weekly and after each rain. Silt build-up of one (1) foot or more to be removed and re- placed on-site as required or disposed of off-site using an approved disposal area. Re-bury "tail" of fabric as required.
  - B. HAY BALES - All hay bales to be checked weekly and after each rain. Bales to be re-positioned and re-staked if required to insure integrity of structure. Silt build-up of 1/2 to 2/3 of bale height will be removed and replace on-site as required or disposed of off-site using an approved disposal area.
  - C. OFF-SITE - Adjacent streets, walks, gutters, etc. will be inspected and cleared on a weekly basis. During periods of rain, the cleaning will take place daily. Seed and fertilize all disturbed areas outside of street area with applicable seasonal seed and rates as soon as possible after installation of utilities.
4. MONITORING  
All controls will be inspected on a weekly basis and after each rain. Inspection reports to be filled out and submitted monthly per the permit requirements. A rain gauge will be placed on the site and will be read during each inspection. In lieu of the rain gauge, the inspector may monitor local weather reports (radio-newspaper) daily and determine amount of rainfall for the report.
5. COMPLETION OF CONSTRUCTION  
Upon completion of construction, final controls will be put into practice within seven (7) days. Final controls include upgrade of hay bales and silt fence, as required, and seeding and sodding of the site. Inspection and reporting to continue for a minimum of eight (8) weeks or until final controls are successful. Provide for individual lot erosion controls thru language in covenants or language in sales contracts or deeds.
6. TEMPORARY WASTE DISPOSAL  
Conform to all applicable State and Local regulations concerning portable toilets and solid waste disposal.
7. MISCELLANEOUS  
Conform to all applicable municipal or other local storm water managements requirements and ordinances.

- NOTES:
1. HAY BALES AROUND INLETS TO BE MAINTAINED UNTIL BASE PAVING IS INSTALLED
  2. INLETS TO BE ADEQUATELY RINGED WITH BALES - MINIMUM SIX (6) BALES PER INLET

INDICATES HAY BALES MINIMUM SIX (6) BALES PER INSTALLATION. BALES TO BE ADEQUATELY SECURED TO PREVENT MOVEMENT - INSTALLATIONS TO BE MAINTAINED THROUGHOUT DURATION OF CONSTRUCTION

INDICATES SILT FENCE MATERIAL TO BE "TYPAR" 3341 OR APPROVED EQUAL. SUPPORTS TO BE 10' O/C MAX. MAINTAIN THROUGHOUT DURATION OF CONSTRUCTION



Revised:  
 5/28/1998 - CITY COMMENTS

CENTRAL MISSISSIPPI ENGINEERING, INC.  
 115 EAST MAIN STREET  
 FLORENCE, MISSISSIPPI

WILLOW POND  
 RIDGELAND, MISSISSIPPI

Prepared: MARK P. LINDSAY  
 Drawn: BTE  
 Approved: MARK P. LINDSAY  
 Date: APRIL 8, 1998

Sheet No.  
 6

**EROSION CONTROL PLAN**