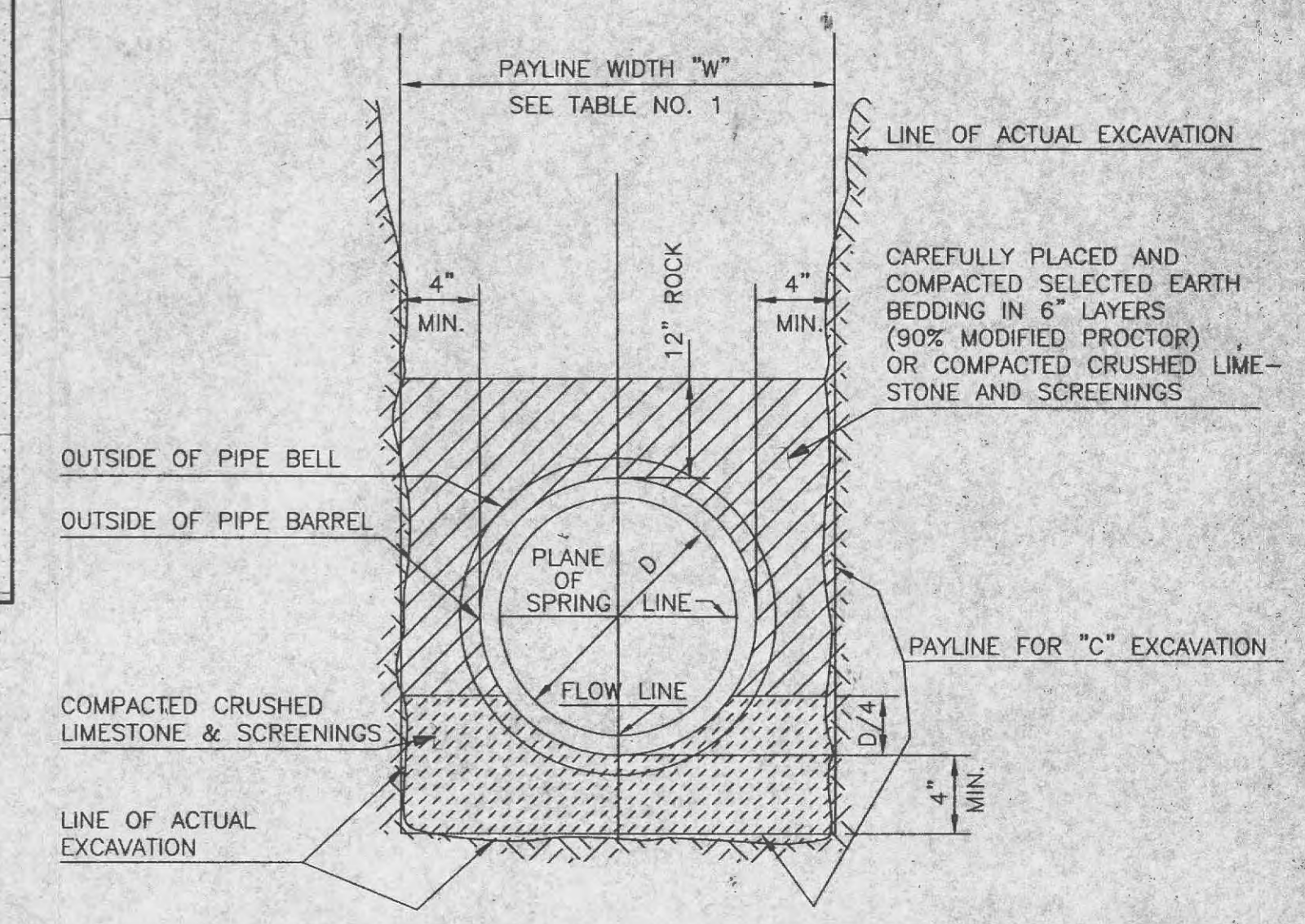


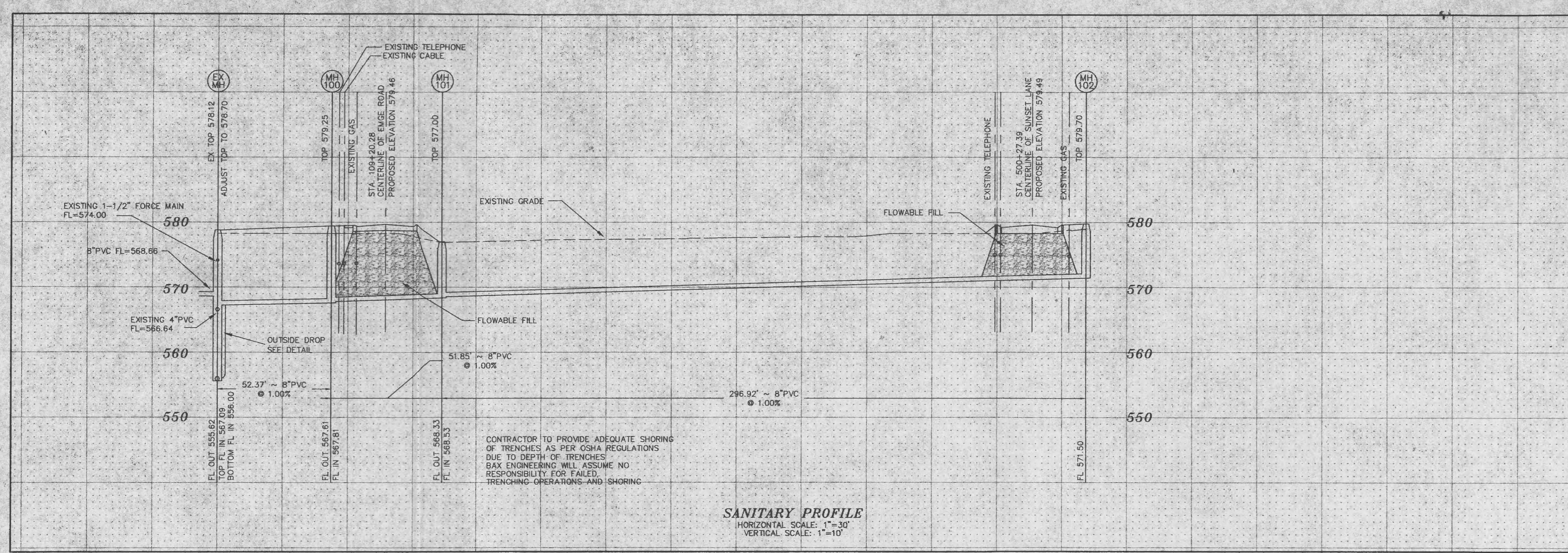
02-11932 5-28-02
CLIENT CHANGES 9-13-02
CLIENT CHANGES 9-26-02
CITY COMMENTS 10-2-02

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement	Inside Diameter of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.86				

TABLE NO. 1
PAYLINE WIDTHS OF TRENCH AND
PAY-QUANTITIES OF CONCRETE



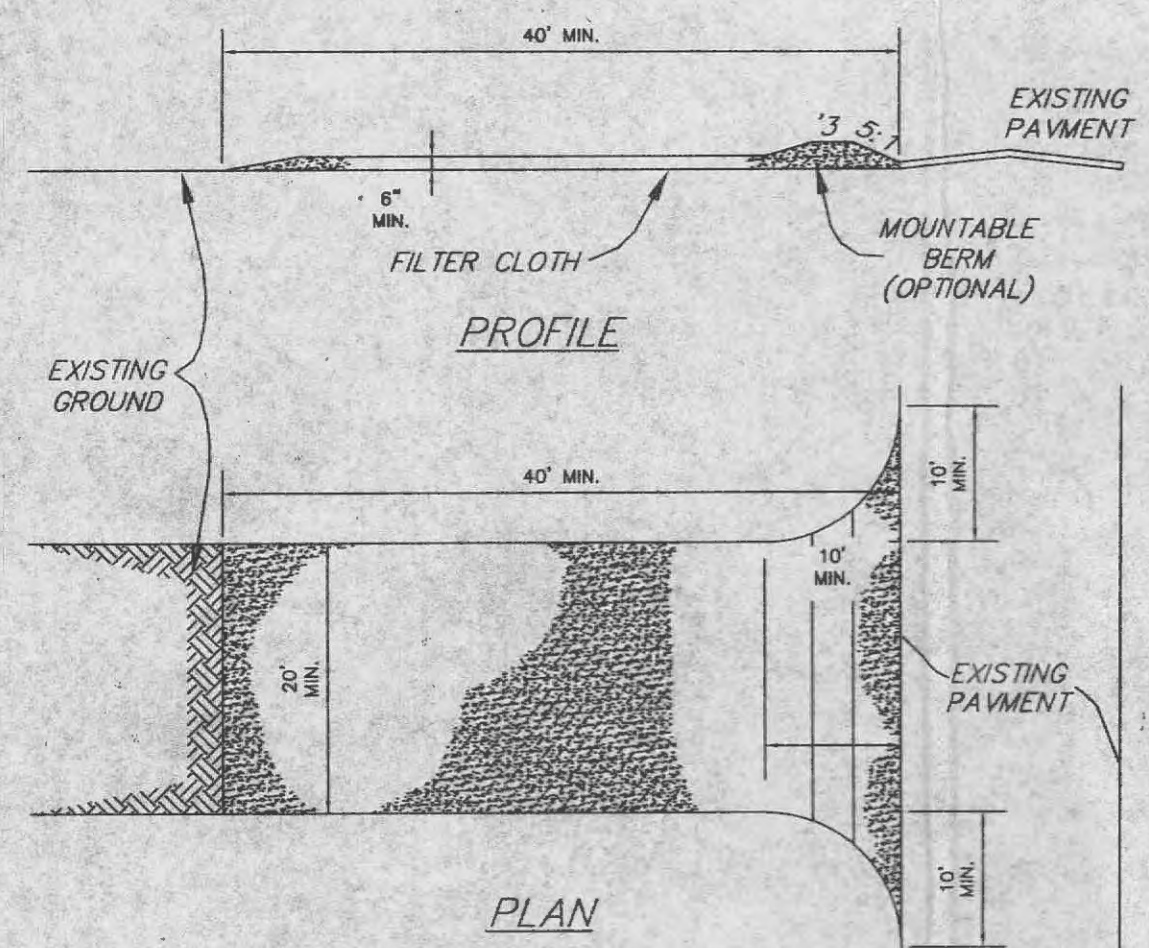
PIPE BEDDING CLASS "C"
(FOR ALL PIPE EXCEPT
REINFORCED CONCRETE PIPE)



SANITARY PROFILE
HORIZONTAL SCALE: 1"=30'
VERTICAL SCALE: 1"=10'



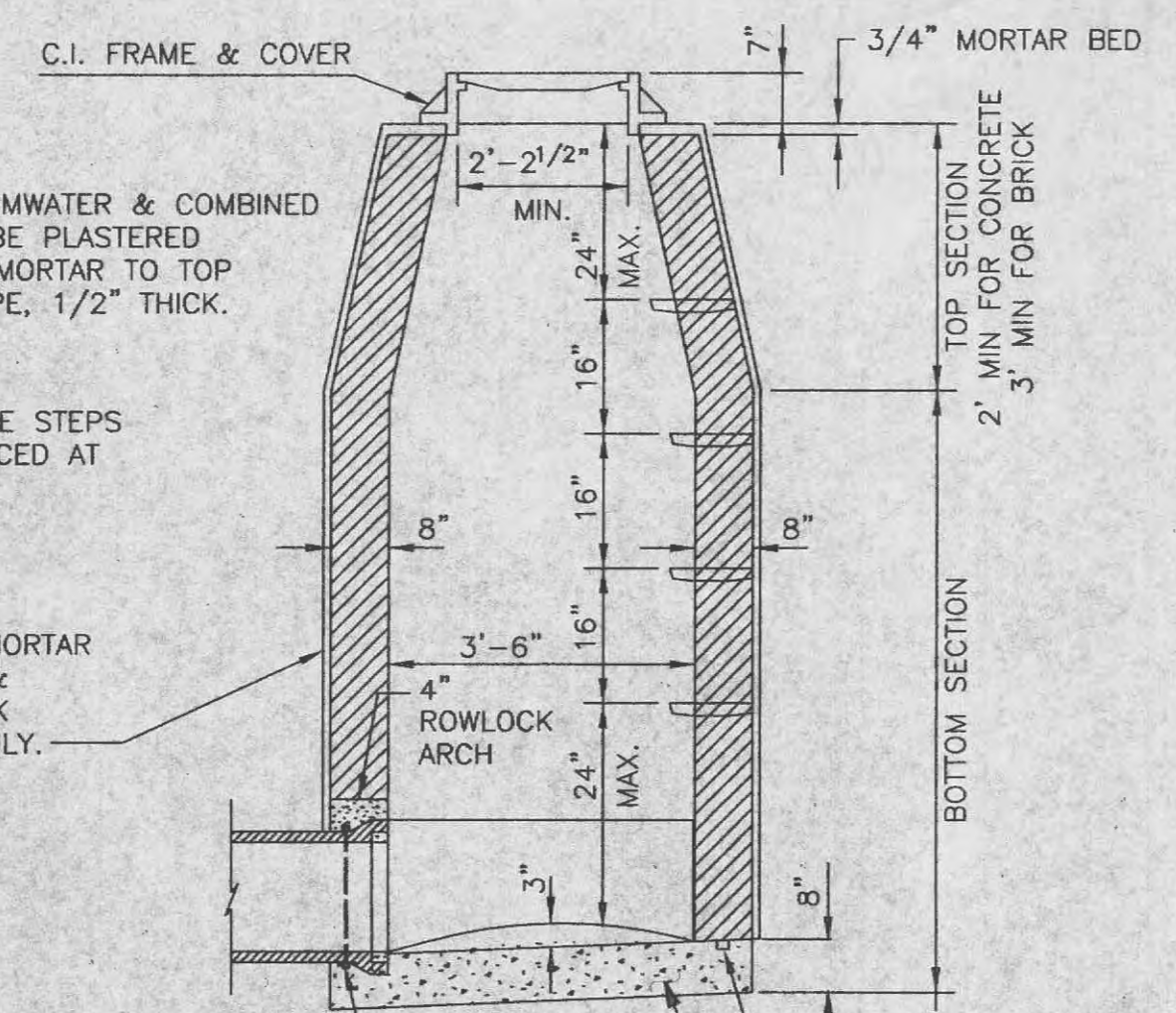
CALL BEFORE
YOU DIG!
1-800-DIG-RITE



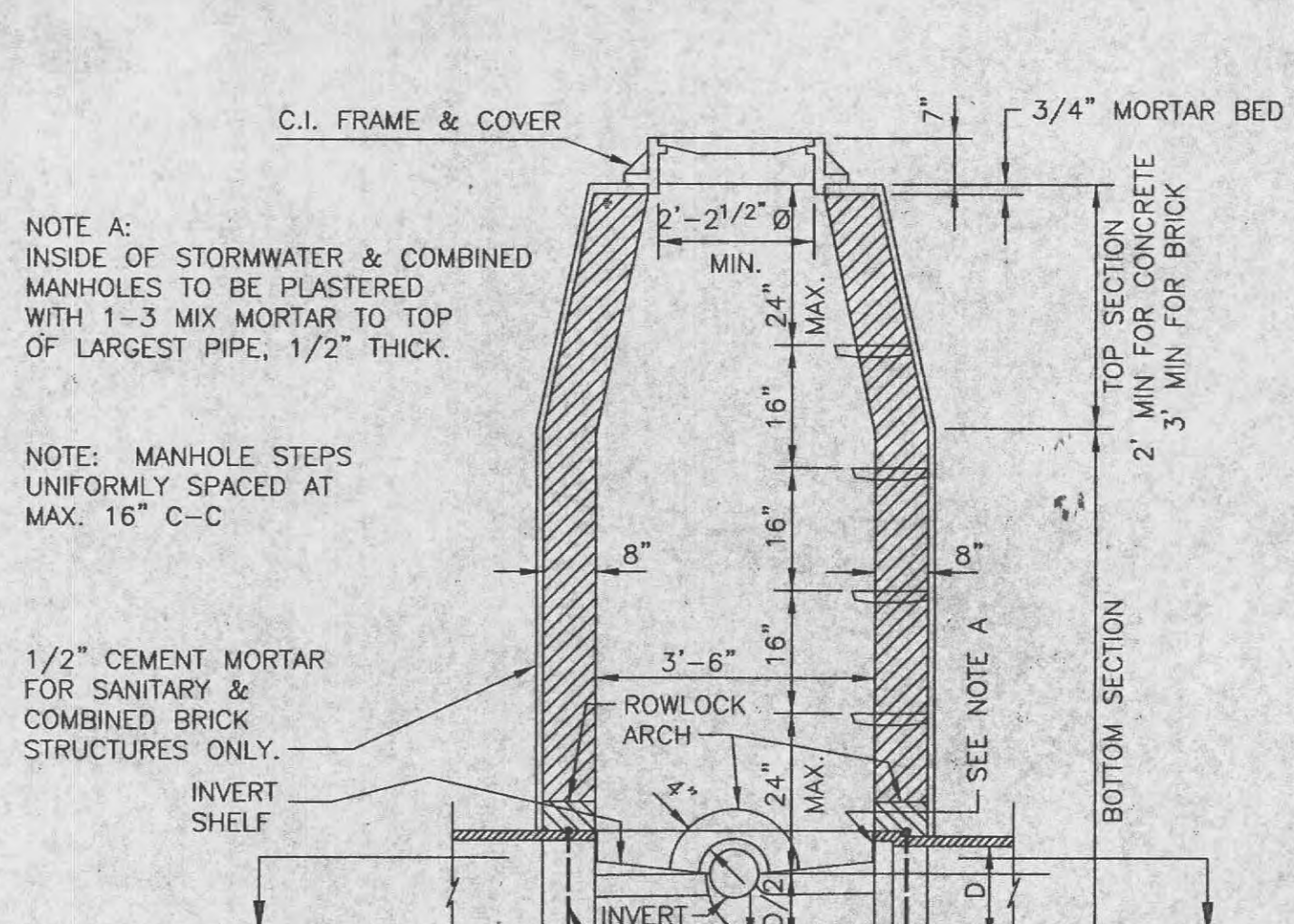
CONSTRUCTION SPECIFICATIONS

- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 40 feet.
- Thickness - Not less than six (6) inches.
- Width - Twenty (20) foot minimum, but not less than the full width at points where ingress or egress occurs.
- Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
- Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
- Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
- Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE/WASHDOWN AREA
NOT TO SCALE

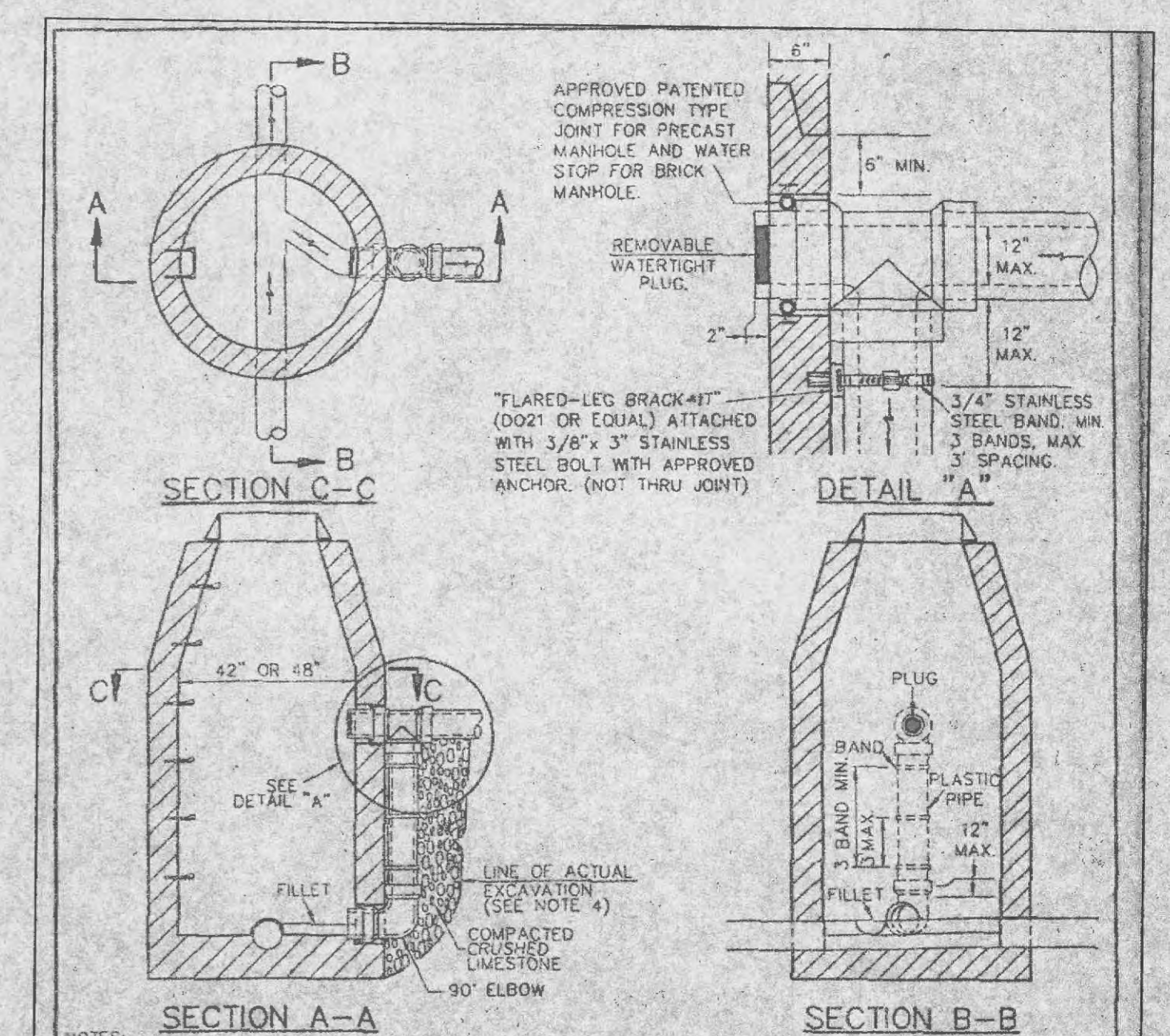


TERMINAL MANHOLE



SECTION A-A

LINE MANHOLE
PIPE SEWERS 8"-24" DIA.



- NOTES:
- THE MINIMUM INSIDE DIAMETER FOR THE BASE AND RISER SECTIONS SHALL BE 42" FOR 8" DIAMETER SANITARY SEWERS AND A MINIMUM INSIDE DIAMETER OF 48" FOR ALL SANITARY AND COMBINED SEWERS LARGER THAN 8" DIAMETER.
 - NEW OUTSIDE DROP ON EXISTING MANHOLE REQUIRES THAT THE FLOWLINE OF THE NEW DROP PIPE ELBOW BE CONSTRUCTED AT THE SAME ELEVATION AS THE SPRINGLINE OF THE EXISTING SEWER MAIN AT THE CENTER OF THE EXISTING MANHOLE. A CLASS "A" CONCRETE FILLET AND INVERT SHALL BE CONSTRUCTED FOR DROP PIPE.
 - DIAMETER OF DROP PIPE FOR COMBINED SEWERS AND SANITARY SEWERS IS SAME AS INCOMING 8", 10" OR 12" PIPE SEWER UNLESS OTHERWISE SHOWN ON PROJECT PLANS FOR SEWERS 16" THROUGH 24". A DROP IS NOT TO BE USED. RATHER, CONNECT TO MANHOLE AT OR WITHIN 24" ABOVE ITS FLOWLINE.
 - IF EXCAVATED SPACE OUTSIDE OF DROP PIPE EXCEEDS ONE (1) FOOT, PROVIDE 6" CLASS "A" CONCRETE ENCASUREMENT ON INCOMING LINE FROM WALL OF MANHOLE TO A MINIMUM OF TWO FEET INTO UNDISTURBED EARTH WITH A MINIMUM OF 4-#4 REBARS FOR LENGTH OF ENCASUREMENT OR INSTALL ONE (1) LENGTH OF D.I.P. FROM "TEE" FITTING INTO UNDISTURBED EARTH.

OUTSIDE FOULWATER DROP MANHOLE	METROPOLITAN ST. LOUIS SEWER DISTRICT Standard Details of Sewer Construction		
	Dr. S.A.M. Ch. P.W.S.	2000	SHEET 16