

PLAN NOTEBOOK No. _____	SURVEYED _____		BY _____	DATE _____
	PLOTTED _____			
	ALIGNMENT CHECKED _____			
	RT OF WAY CHECKED _____			

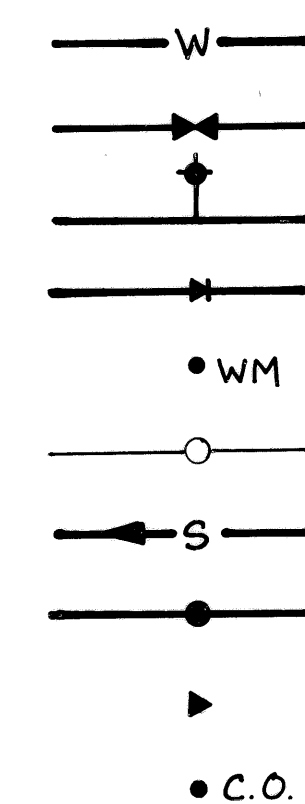
VDOT NO. 6013



FOR UTILITY ADJUSTMENTS ONLY

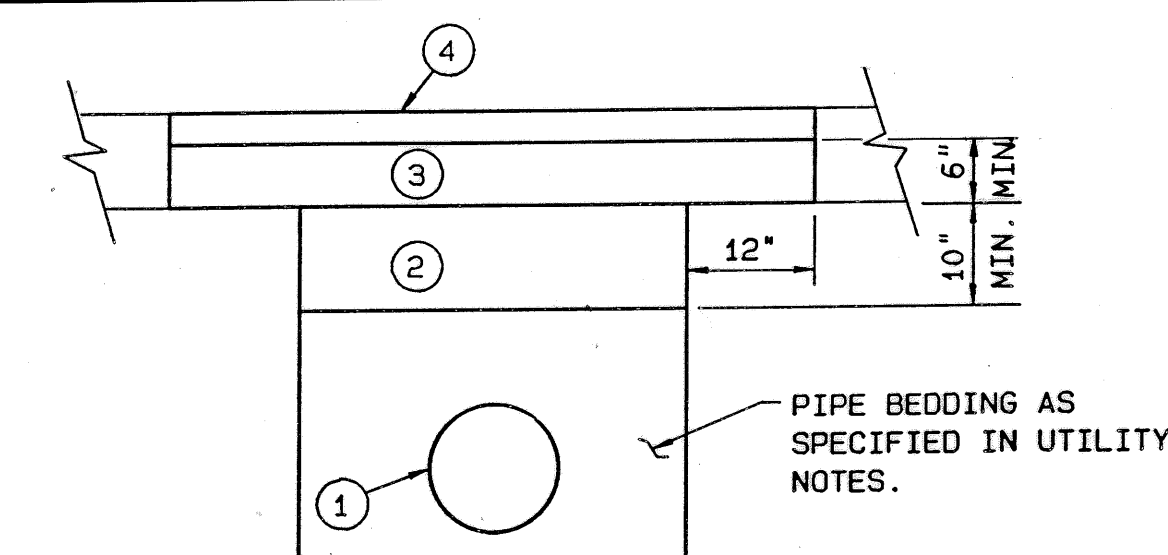
RE Y	REVISED	FHWA REGION	STATE	FEDERAL AID	STATE		SHEET NO.
		3	VA	PROJECT	ROUTE	PROJECT	14(2)
						U000-128-116, RW-201 C-501	

SYMBOL



ABBREVIATION

GV	GATE VALVE
FH	FIRE HYDRANT
RED.	REDUCER
WM	WATER METER
WMH	WATER MANHOLE
	SANITARY SEWER LINE
SMH	SANITARY SEWER MANHOLE
	PLUG
C.O.	CLEAN OUT



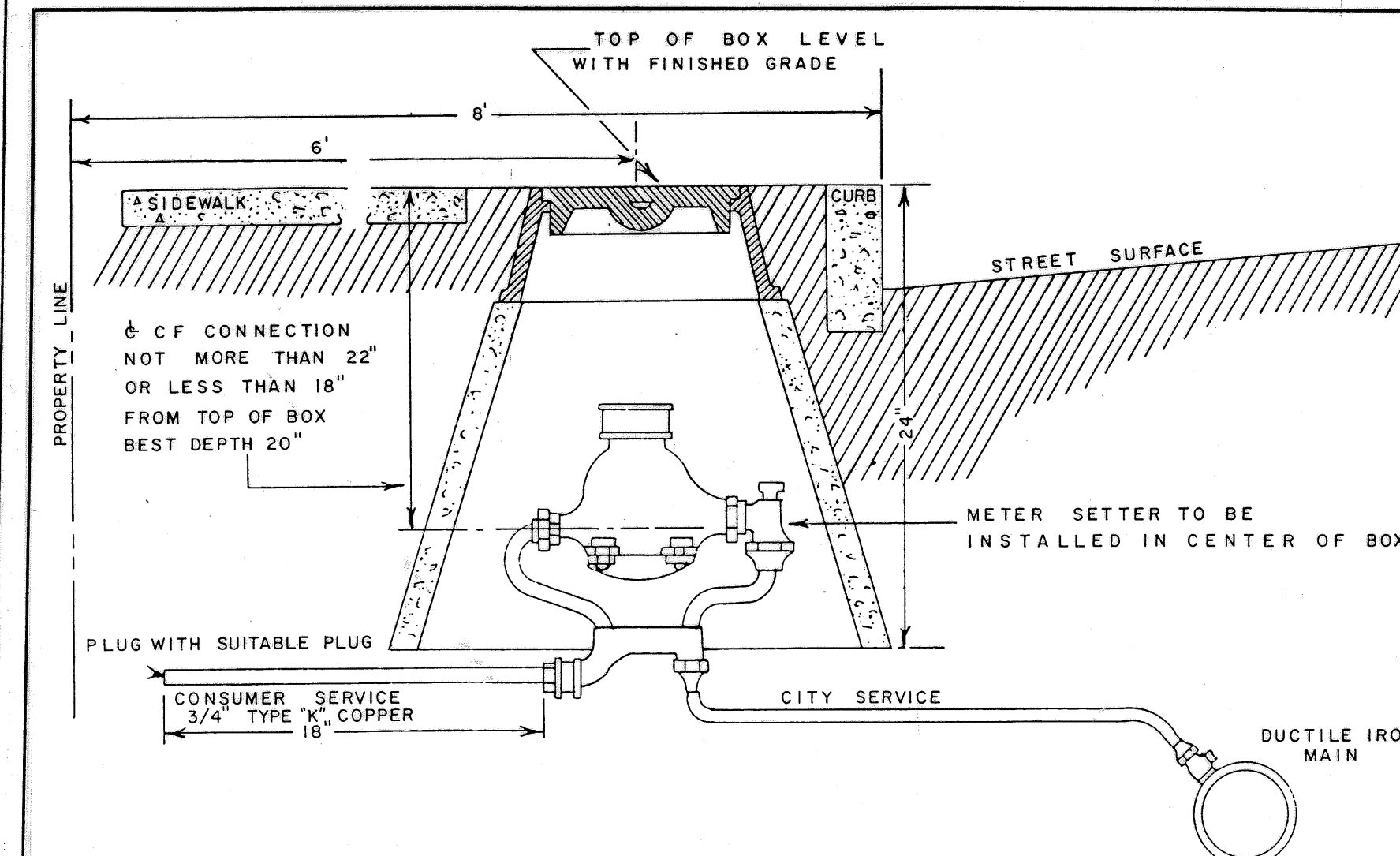
PAVEMENT STRUCTURE

ASPHALT CONCRETE BASE AND SURFACE

- ① PIPE CULVERTS, CONDUITS AND UTILITY ITEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS.
- ② SUBBASE - AGGREGATE MATERIAL TYPE I, SIZE 21A.
- ③ ASPHALT CONCRETE TYPE BM-2.
- ④ SURFACE - ASPHALT CONCRETE TYPE SM-2B @ 165 LBS. PER SQ. YD.

PAVEMENT REPAIR

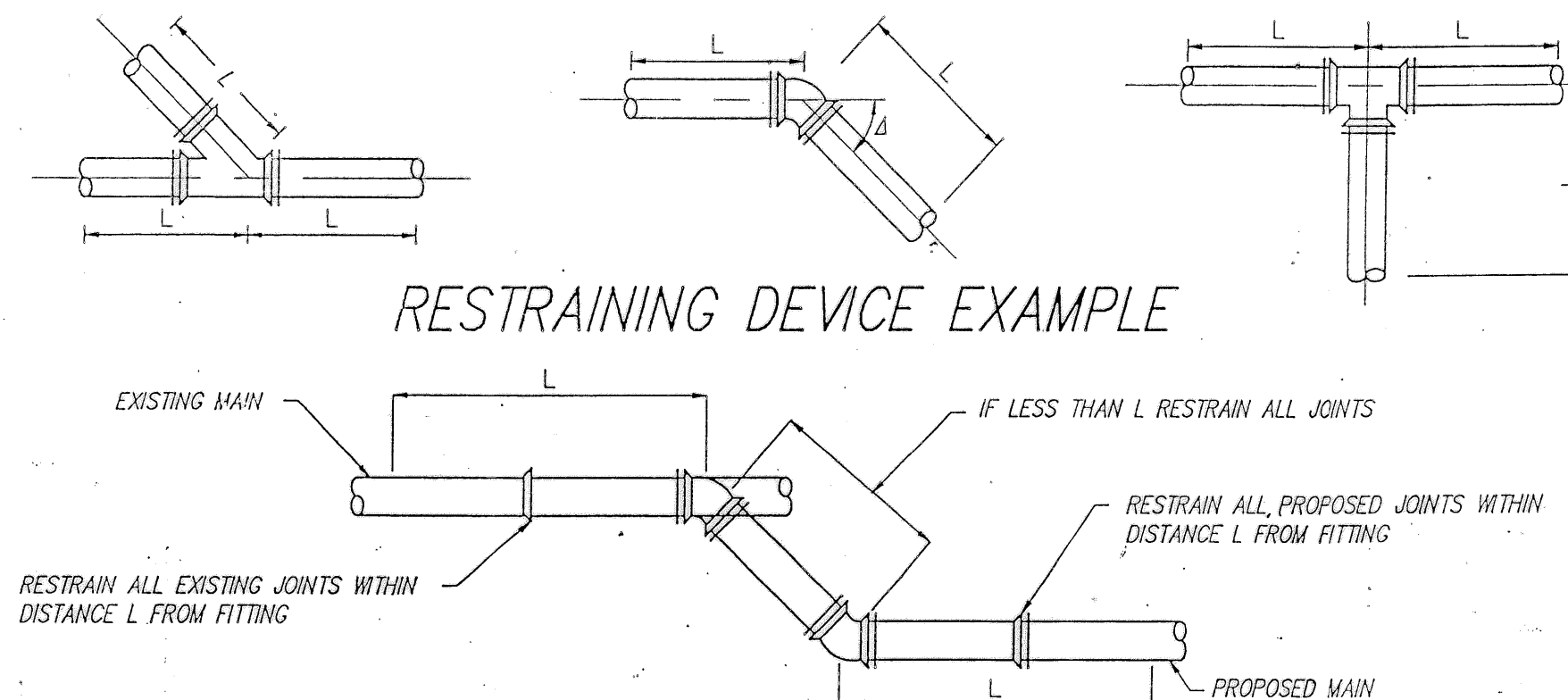
NO SCALE



NO SCALE

NO SCALE
STANDARD SETTING FOR 5/8" WATER METER

MECHANICAL RESTRAINING DEVICE DETAIL AND NOTES

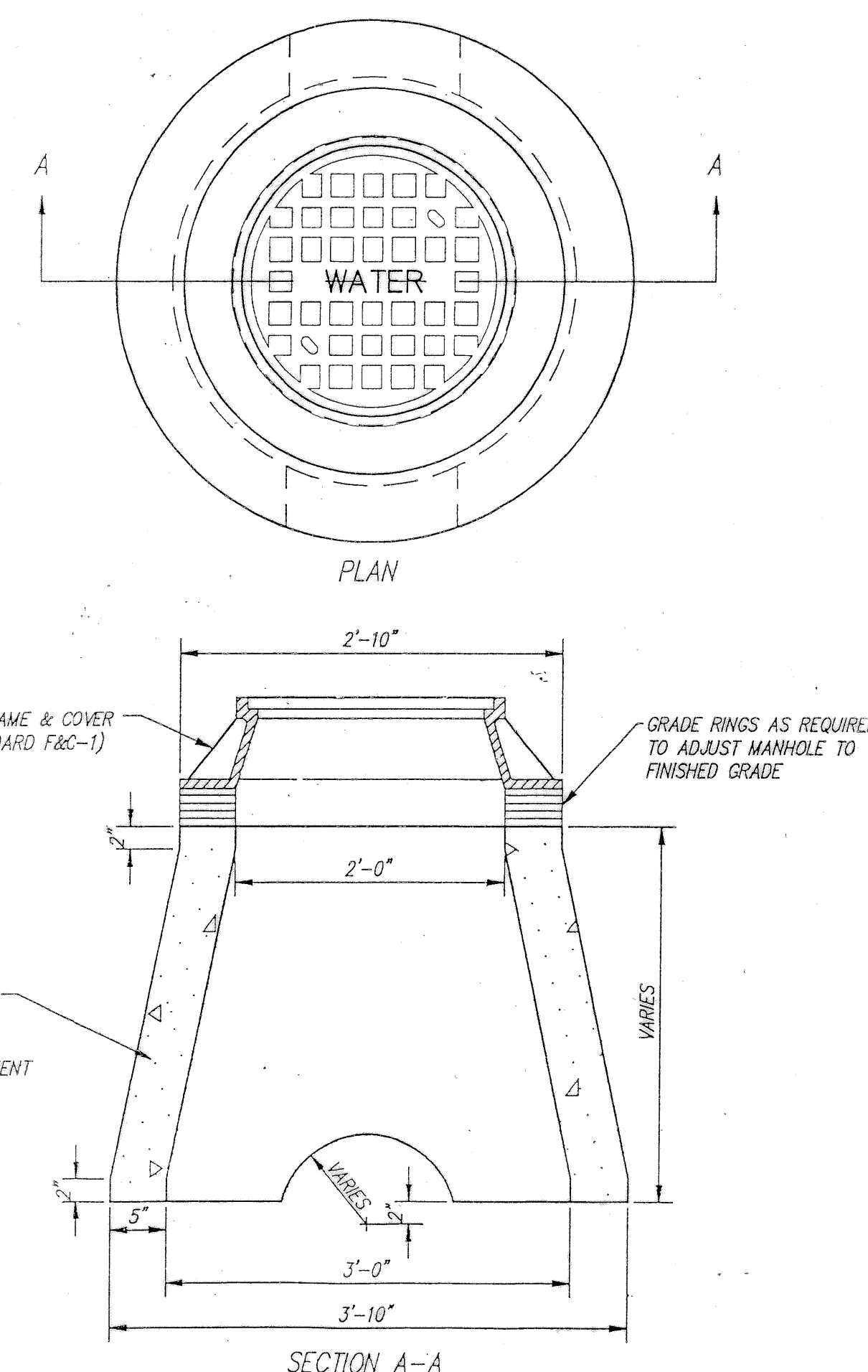


NOTES:

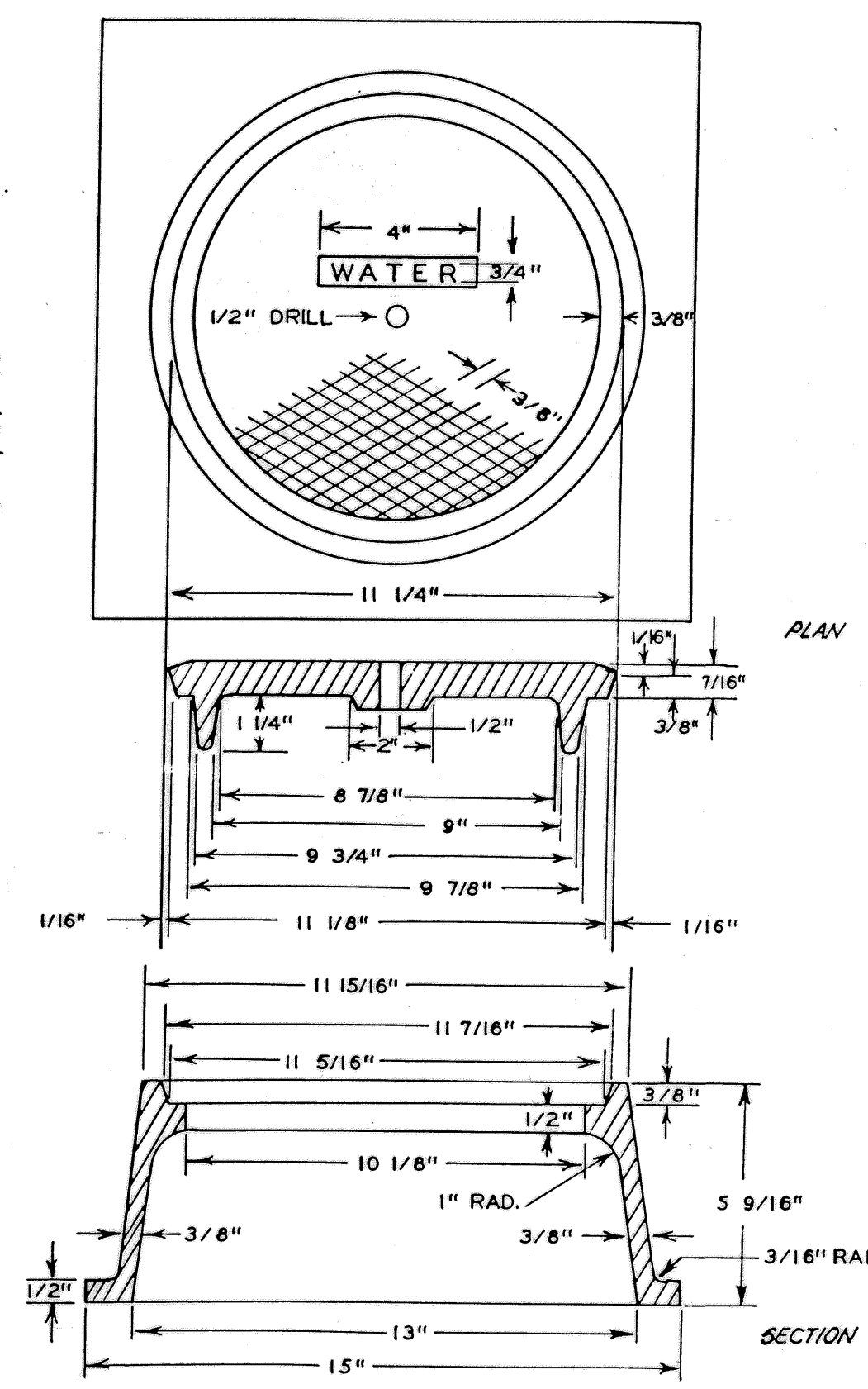
1. RESTRAINED LENGTH BASED ON INTERNAL PRESSURE OF 150 PSI AND 3" OF COVER.
2. VALVES, TEES, AND PLUGS SHALL BE RESTRAINED BASED ON RESTRAINED LENGTH FOR 90° BENDS UNLESS OTHERWISE NOTED.
3. EXISTING PIPE ADJACENT TO PROPOSED BENDS, WYES, VALVES, TEES, AND PLUGS SHALL BE UNCOVERED AND THE JOINTS RESTRAINED FOR THE LENGTHS INDICATED WITH A MECHANICAL JOINT RESTRAINING MECHANISM WHICH, WHEN ACTUATED, IMPARTS MULTIPLE WEDGING ACTION AGAINST THE PIPE.

PIPE SIZE	MINIMUM LENGTH OF PIPE WITH RESTRAINED JOINTS (L)							
	$\Delta=90^\circ$		$\Delta=45^\circ$		$\Delta=22\frac{1}{2}^\circ$		$\Delta=11\frac{1}{4}^\circ$	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
4"	20	35	8	14	4	7	2	3
6"	29	49	12	20	6	10	3	5
8"	38	64	16	27	8	13	4	6
10"	45	77	19	32	9	15	4	8
12"	53	90	22	37	11	18	5	9

PRECAST VALVE VAULT DETAIL



NOTE:- ALL CASTINGS SHALL BE COMMERCIALY MACHINABLE.
THE FOLLOWING PORTIONS OF COVER SEATS AND COVER SHALL BE MACHINED:
FRAME SURFACES, VERTICAL SURFACES OF COVER SEAT.
COVER- UNDER SURFACES AND VERTICAL SURFACES OF COVER SEAT.
AFTER FITTING INTO THE COVER SEAT.
AFTER MACHINING, COVER SHALL SEAT IN ANY POSITION WITHOUT ROCKING AND BE FLUSH WITH TOP OF FRAME. SIDE PLATE OF COVER SHALL NOT BE MORE THAN 1/4".
LETTERS ON COVER SHALL BE 1" HIGH AND 3/16" THICK. NOVEMBER, 12, 1984



CAST IRON METER BOX FRAME & COVER

SERVICE CONNECTION WYES