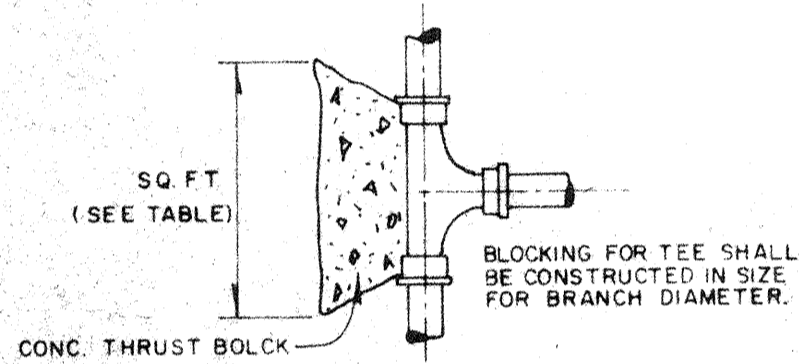
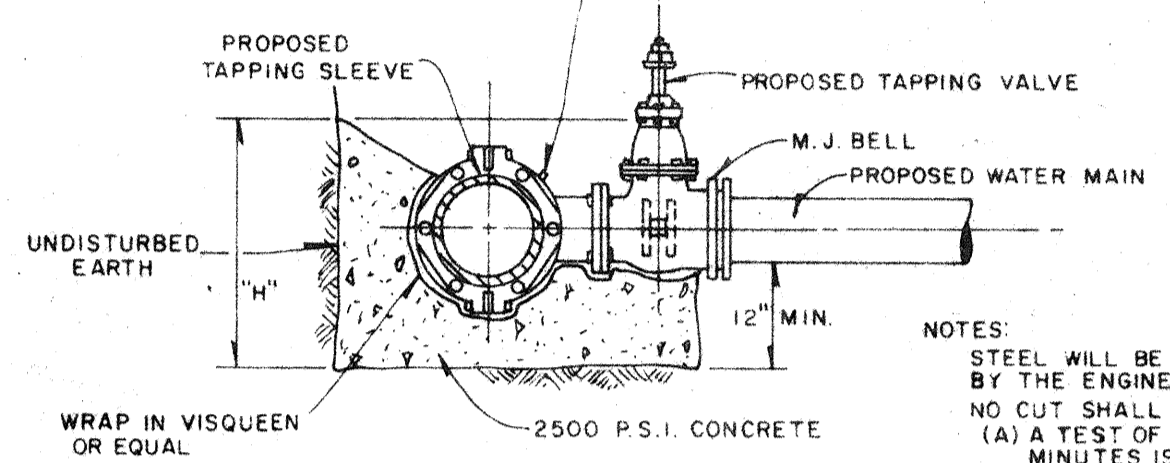
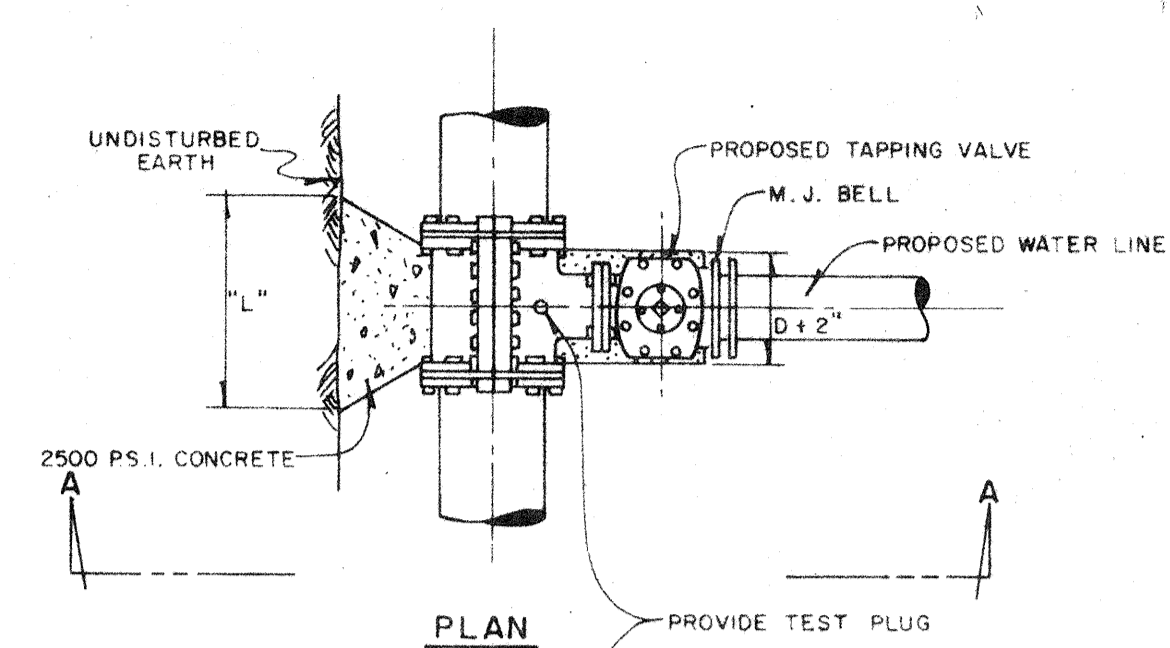


THRUST BLOCK AREAS IN SQ. FEET					
PIPE SIZE	TEE	90°	45°	22-1/2°	11-1/4°
2"	2.0	1.2	0.8	0.4	0.2
3"	3.8	3.0	1.6	0.8	0.4
4"	5.6	5.4	3.0	1.6	0.8
6"	12.0	12.0	6.6	3.4	1.8
8"	19.6	22.0	11.6	6.0	3.0
10"	32.0	34.0	18.2	9.2	4.6
12"	46.0	48.0	22.6	13.2	6.6
14"	62.0	66.0	36.0	18.2	9.2
16"	80.0	85.0	46.0	22.4	12.0

150 P.S.I. TEST PRESSURE
 ASSUMED SOIL BEARING CAPACITY OF 1000 LBS PER SQUARE FOOT.
 AREAS OF THRUST BLOCKS WILL BE ADJUSTED AS DIRECTED BY THE ENGINEER
 ACCORDING TO ACTUAL FIELD CONDITIONS.
 AREAS OF DEAD END BLOCKS SHALL BE THE SAME AS FOR TEES.



THRUST BLOCK DETAILS

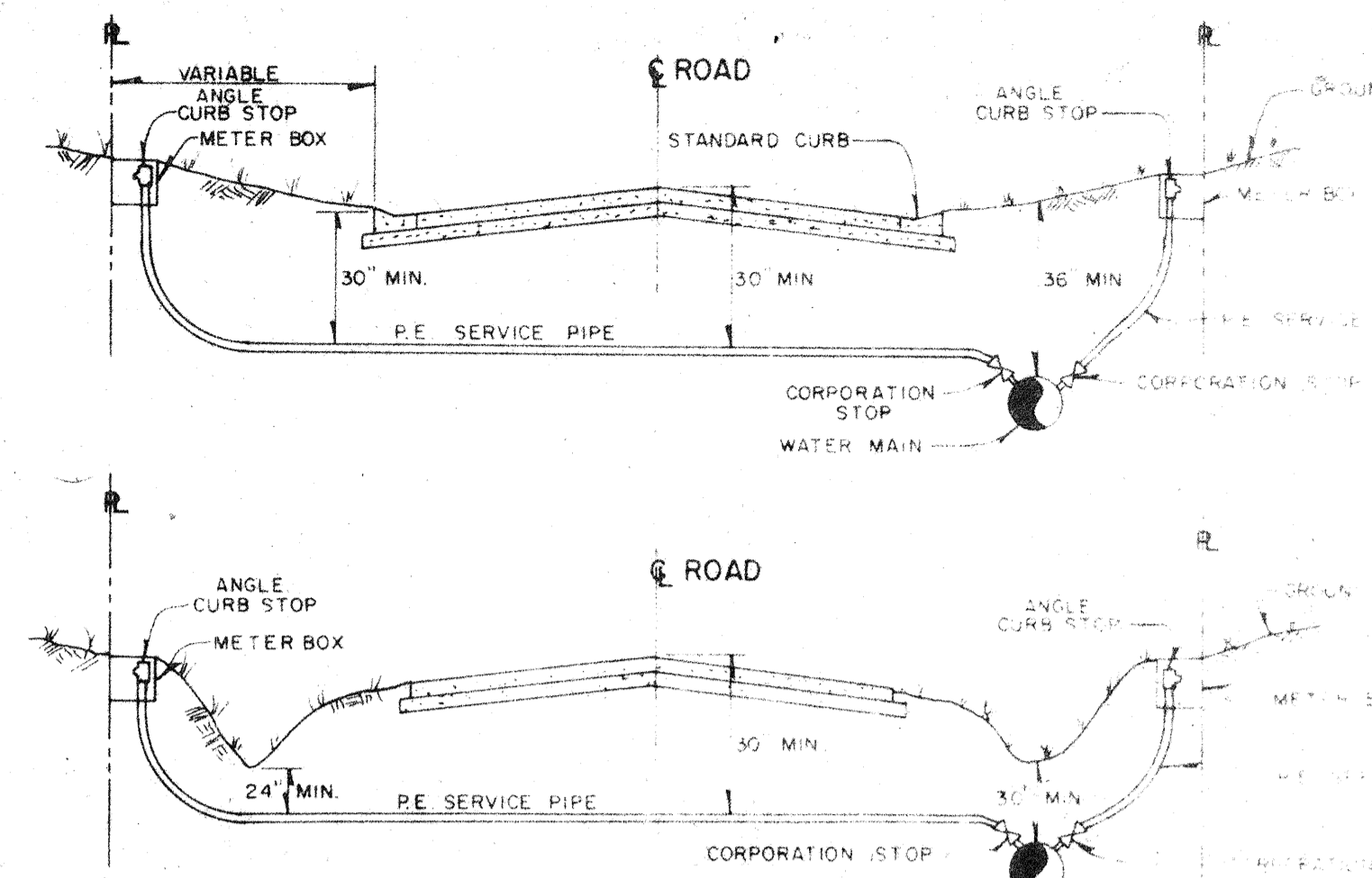


NOTES:
 STEEL WILL BE USED AS REQUIRED BY THE ENGINEER.
 NO CUT SHALL BE MADE BEFORE:
 (A) A TEST OF 150 P.S.I. FOR 30 MINUTES IS MADE, AND
 (B) THE CONCRETE BLOCK HAS CURED FOR 48 HOURS.

RUN	BRANCH											
	4"	6"	8"	10"	12"	16"	20"	24"	30"	36"	42"	48"
4"	15	20										
6"	15	20	23	30								
8"	15	20	23	30	31	39						
10"	15	20	23	30	31	39	40	48				
12"	15	20	23	30	31	39	40	48	48	57		
16"	15	20	23	30	31	39	40	48	48	57	62	78
18"	15	20	23	30	31	39	40	48	48	57	62	78
20"	15	20	23	30	31	39	40	48	48	57	62	78
24"	15	24	23	30	31	39	40	48	48	57	62	78
30"	15	30	23	30	31	39	40	48	48	57	62	78

NOTE: "L" & "H" DIMENSIONS ARE IN INCHES

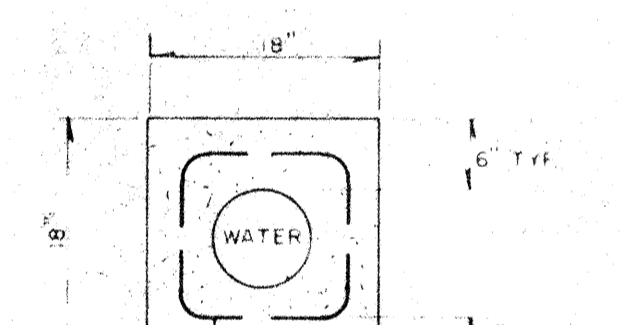
TAPPING SLEEVE & VALVE BLOCKING DETAIL



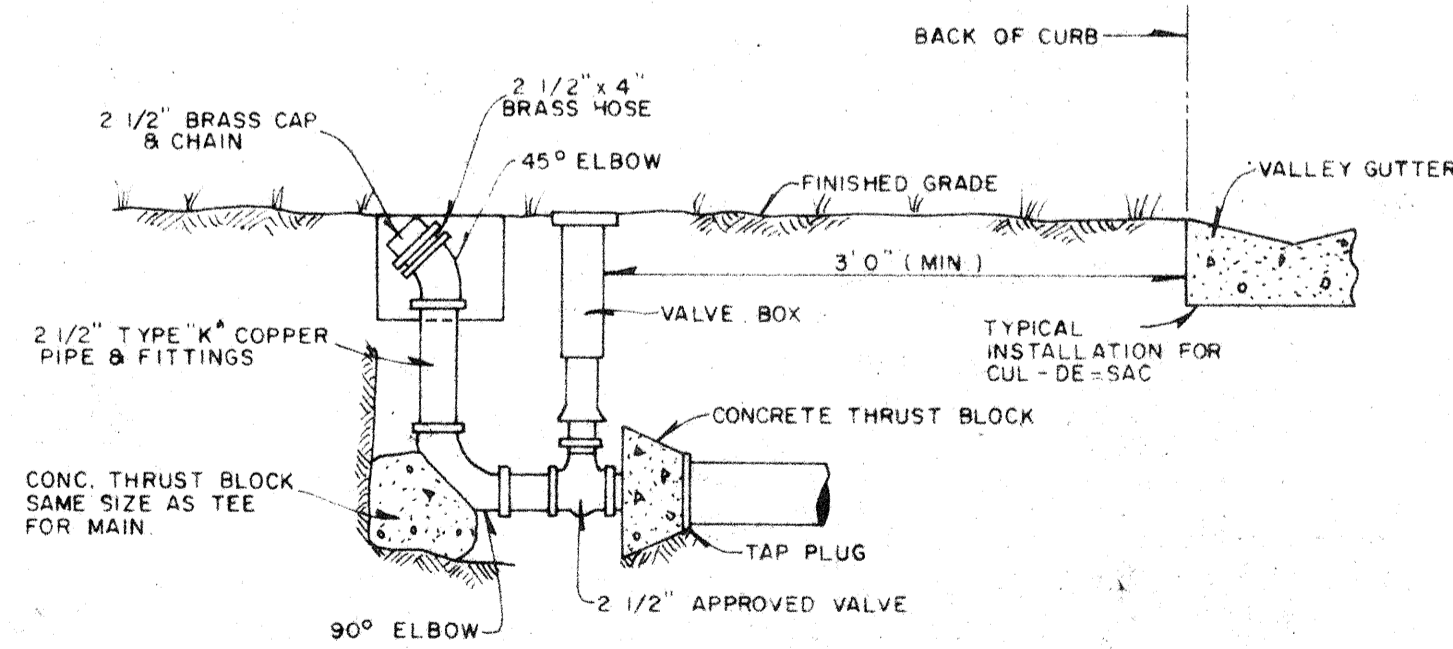
MATERIALS:
 * CURB STOP: MUELLER ANGLE METER VALVE (OR EQUAL) H-1425B(1) WITH LOCKING HAVING COMPRESSION INLET B & P OUTLET.
 ALT. CURB STOP: MUELLER ORISEAL MARK III (OR EQUAL) H-1503 Z (12") HAVING COMPRESSION INLET B & P OUTLET.
 CORPORATION STOP: MUELLER H-1500B (1") OR EQUAL WITH CC THREAD INLET B COMPRESSION OUTLET.
 SERVICE PIPE: POLYETHYLENE PLASTIC PIPE PE 3406, COPPER TUBE SIZE, 160 P.S.I. WORKING PRESSURE.
 * NOT AVAILABLE FOR 2" SIZE

NOTES:
 1. TAPS SHALL NOT BE CLOSER THAN 2 FEET APART OR CLOSER THAN 2 FEET TO ANY JOINT.
 2. TAPS IN MULTIPLE GROUPS SHALL NOT BE MADE IN THE SAME LONGITUDINAL LINE OF THE PIPE, BUT SHOULD BE STAGGERED.
 3. FOR SERVICE INSTALLATION ON WATER MAINS OF 4" DIA OR SMALLER, A MUELLER DOUBLE STRAP SERVICE CLAMP, H-16105, WITH CORPORATION STOP, (C.C.) THREAD OR APPROVED EQUAL, SHALL BE USED.
 4. FOR 2" SERVICE INSTALLATION A DOUBLE STRAP SERVICE CLAMP WILL BE REQUIRED AS DESCRIBED IN NOTE 3; FOR 6" P.V.C. PIPE.

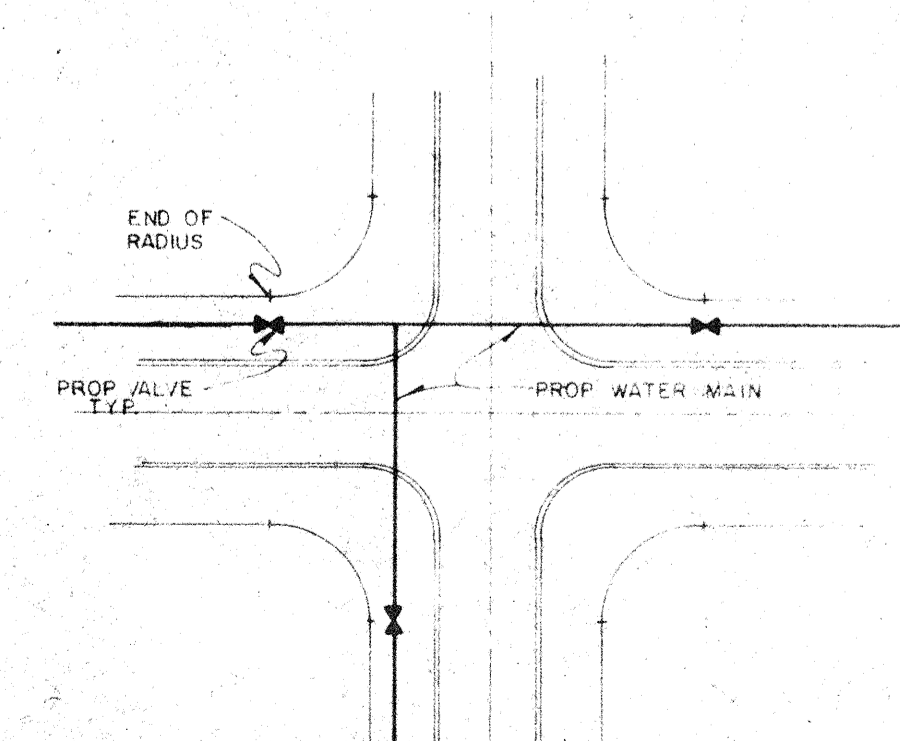
SERVICE CONNECTION DETAIL



CONCRETE VALVE BOX PAD



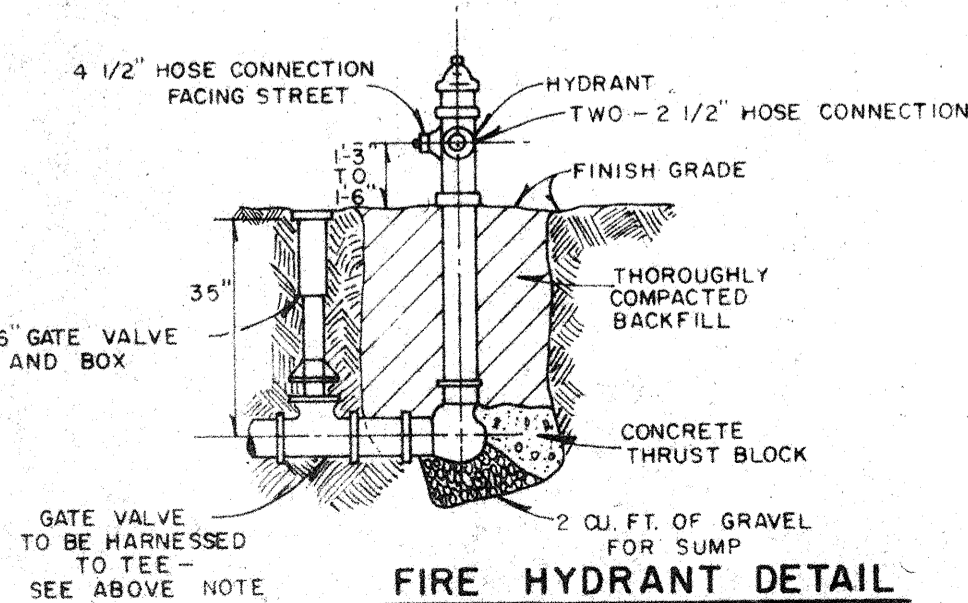
BLOW-OFF DETAIL



TYPICAL VALVING AT ROAD INTERSECTION

AS BUILT PLANS

Date 6/15/81 BY M.J.Y.



FIRE HYDRANT DETAIL

DESIGNED BY: J.G.
 DATE: MAY, 1980
 SCALE: AS SHOWN
 CHECKED BY: DONALD J. SHULL/CFE
 PROJECT NO: 2041
 DRAWN BY: DONALD J. SHULL/CFE
 P.L.A.C.E.T. NO. 5636
 CONSULTING ENGINEERS & SURVEYORS
 SMALLY, WELLFORD & NALVEN, Inc.
 SARASOTA, FLA.
 FOR: HARRY A. MACENEN, ARCHITECT
 SAILBOAT SQUARE
 WATER DISTRIBUTION SYSTEM
 STANDARD CONSTRUCTION DETAILS
 DRAWING NUMBER: 4
 REVISION: