

TOWN OF
ADDISON
DALLAS COUNTY, TEXAS

CONSTRUCTION PLANS FOR

GREENHAVEN APTS

8" WATERLINE REPLACEMENT

MAYOR :

D. LYNN SPRULL

COUNCIL MEMBERS :

**RICHARD RODER
JIM DUFFY
JOHN NOLAN
JOHN BRANCH
RILEY REINKER**

CITY MANAGER :

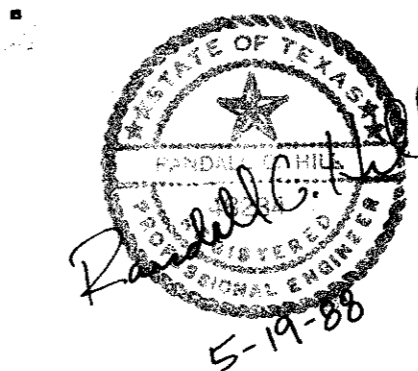
RON WHITEHEAD

DIRECTOR OF UTILITIES :

DON PREECE

SHEET INDEX

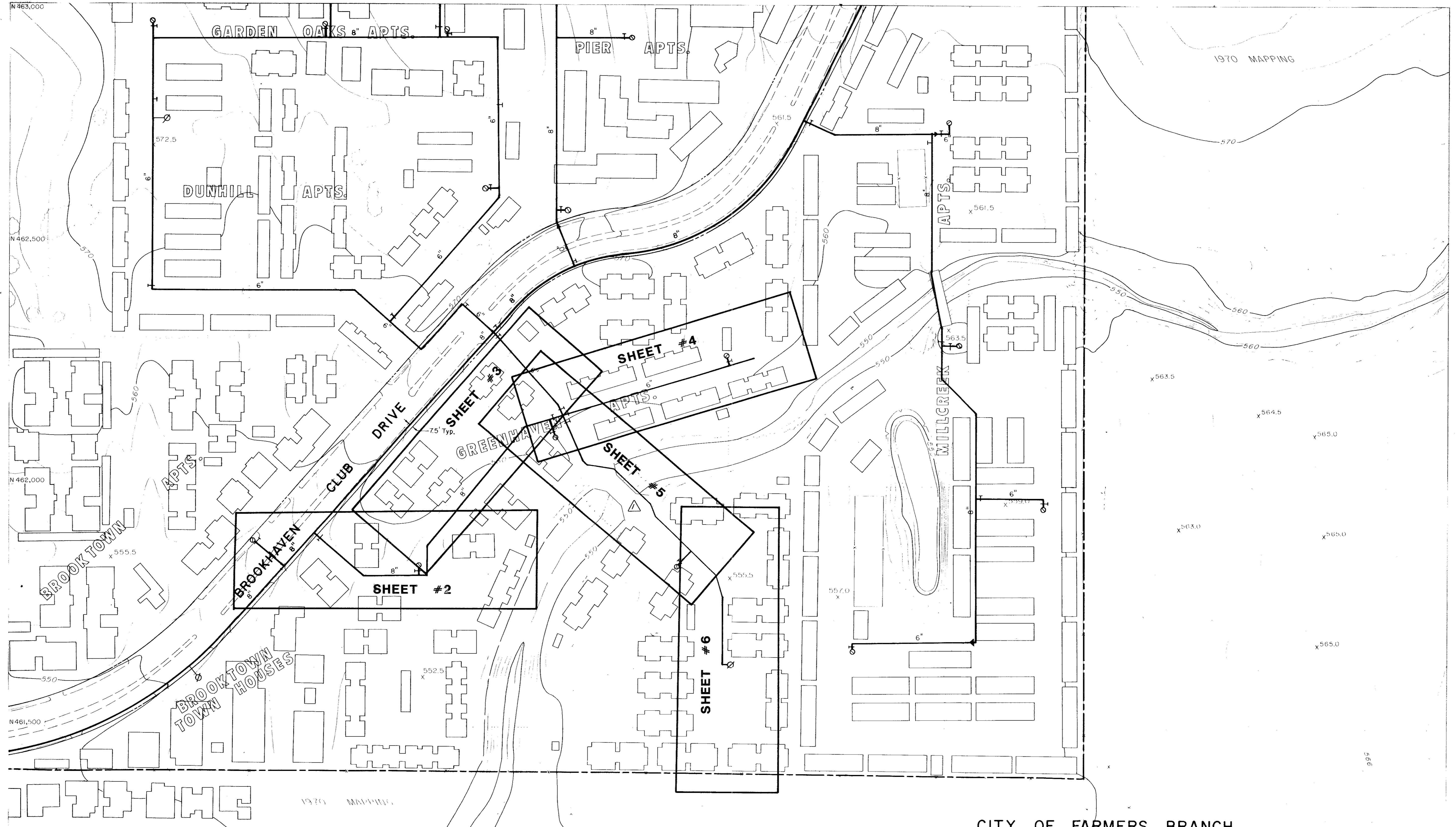
- COVER SHEET
- 1. TITLE SHEET
- 2. STA. 0+00 TO STA. 3+25 LINE "A"
- 3. STA. 3+25 TO STA. 7+60 LINE "A"
- 4. STA. 0+00 TO STA. 3+85 LINE "C"
- 5. STA. 0+00 TO STA. 5+25 LINE "B"
- 6. STA. 5+25 TO STA. 7+25 LINE "B"
- 7. STD. WATER DETAILS SD-15
- 8. STD. WATER DETAILS SD-16
- 9. STD. WATER DETAILS SD-17



APPROVED BY: *[Signature]* DATE: _____
D. LYNN SPRULL, MAYOR

GINN, INC.
Consulting Engineers Dallas, Texas

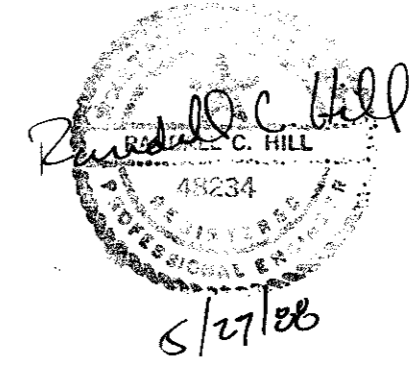
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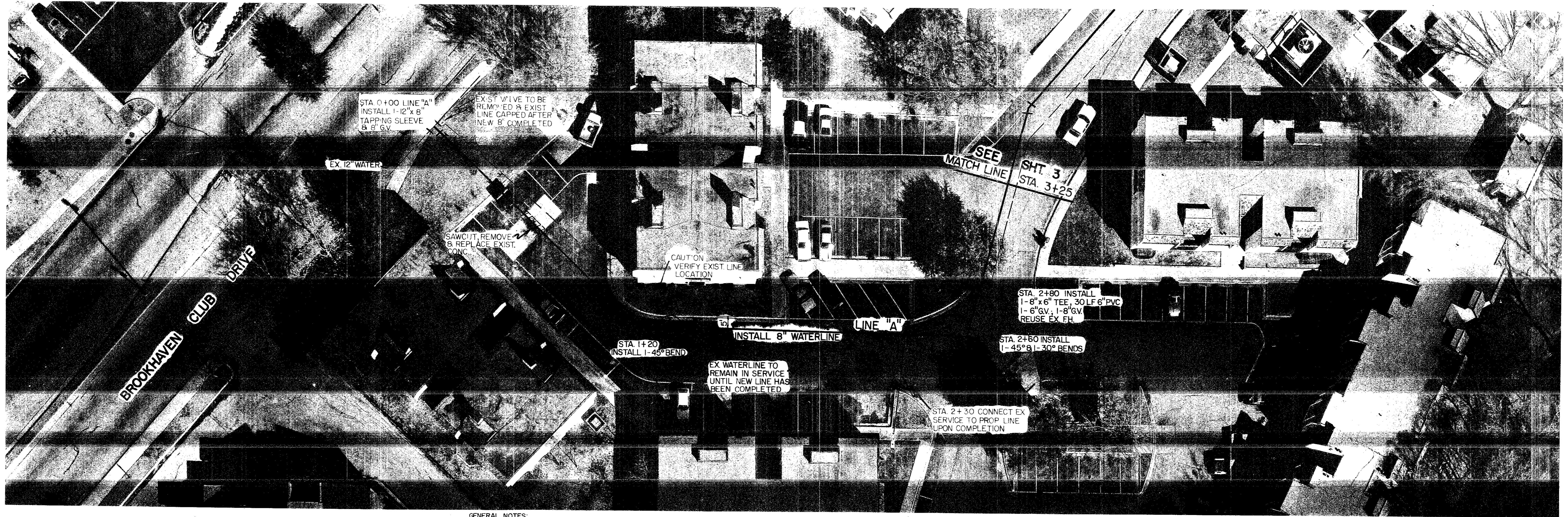


CITY OF FARMERS BRANCH

RECORD DRAWING

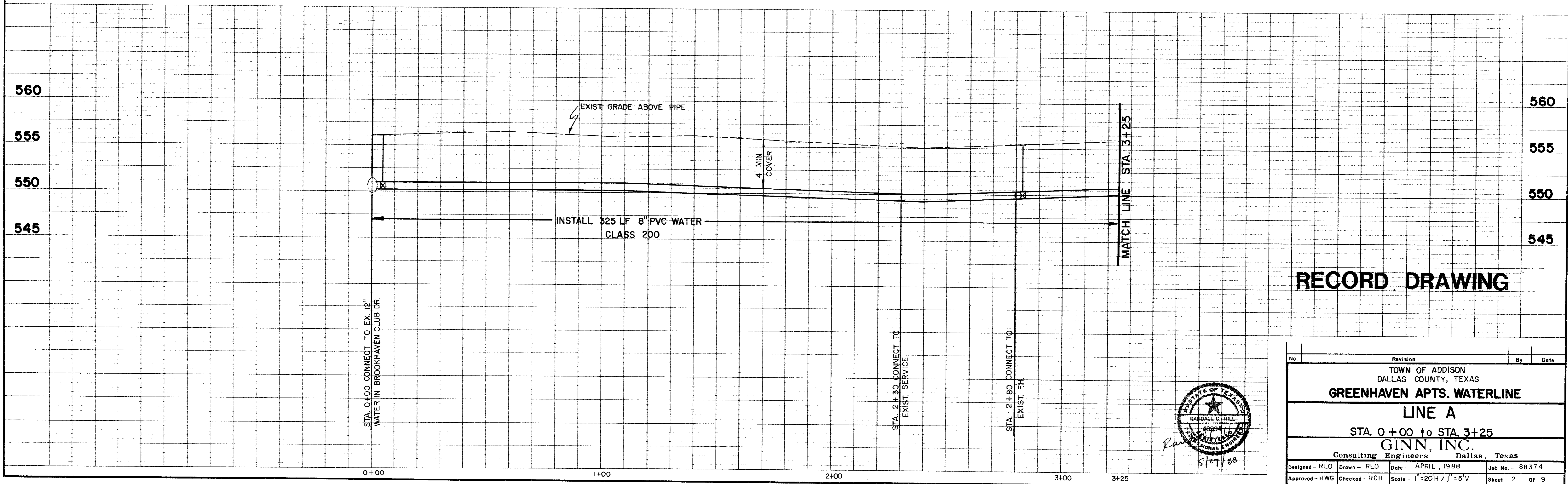
Revised		Exist. Water Line Location		R.L.O.		7/88	
No.	Revision	By	Date				
TOWN OF ADDISON DALLAS COUNTY, TEXAS							
GREENHAVEN APTS. WATERLINE							
TITLE SHEET							
GINN, INC. Consulting Engineers Dallas, Texas							
Designed - GINN	Drawn - GINN	Date - MAY, 1988	Job No. - 88374				
Approved - HWG	Checked - RCH	Scale - 1" = 20' H / 1" = 5' V	Sheet 1 of 9				



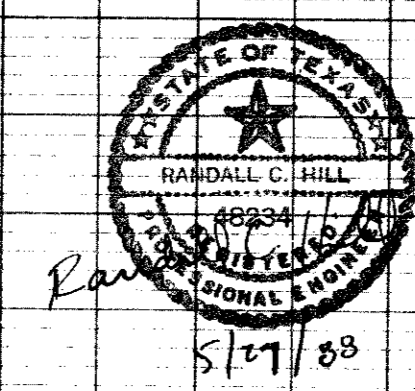


GENERAL NOTES:
 CONTRACTOR TO VERIFY STA.'S UPON
 ACTUAL LAYOUT OF THE PROJECT IN THE FIELD.
 CONTRACTOR TO CUT & PLUG EX WATERLINE
 AFTER NEW WATERLINE IS IN SERVICE.

NOTE : ALL DIMENSIONS ARE TO BACK OF CURB
 UNLESS OTHERWISE NOTED



RECORD DRAWING



No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS GREENHAVEN APTS. WATERLINE LINE A STA. 0+00 to STA. 3+25 GINN, INC. Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - APRIL, 1988	Job No. - 88374
Approved - HWG	Checked - RCH	Scale - 1"=20'H / 1"=5'V	Sheet 2 of 9



STA 3+60 INSTALL
1-30° BEND

STA 4+95 & STA 5+35
CONNECT EX SERVICES
TO PROP LINE UPON ITS
COMPLETION

SAWCUT, REMOVE, &
REPLACE EX CONC

STA 6+75 INSTALL
1-30° BEND

STA 7+25 INSTALL
1-8" x 6" TEE, 1-90° BEND (6")
1-6" x 6" TAPPING SLEEVE
& VALVE. PLUG EX AS SHOWN.

STA 7+60 END LINE "A"
STA 0+00 BEGIN LINE "B"
INSTALL 1-90° BEND

STA 7+00 INSTALL
1-8" x 6" TEE, 1-6" GV
REUSE EX. FH.
1-8" GV, 40 LF 6" PVC

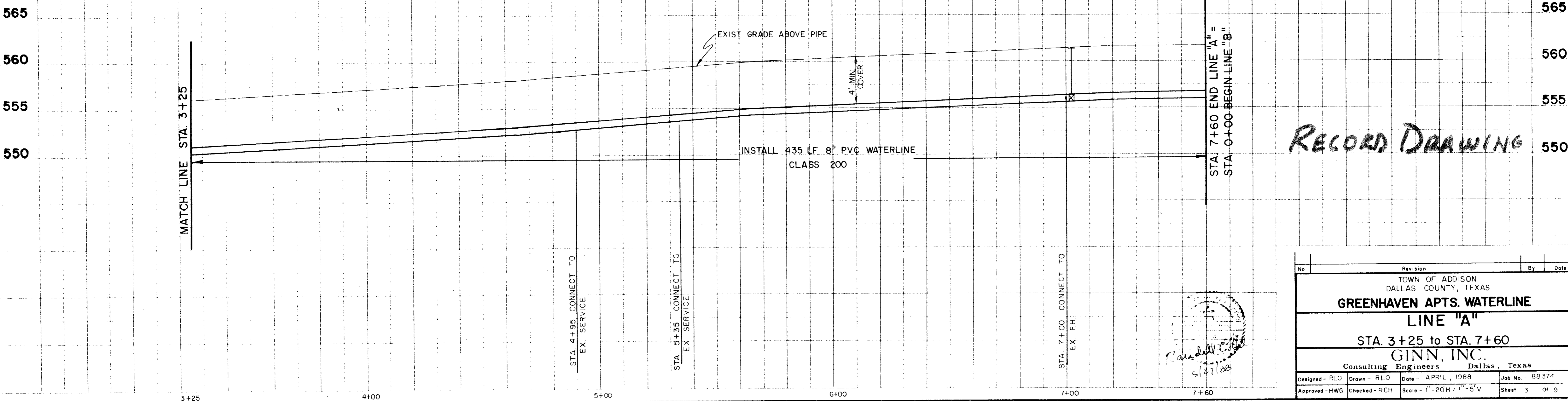
STA 7+05 INSTALL
1-22 1/2° BEND

EX WATER TO REMAIN
IN SERVICE UNTIL NEW
LINE HAS BEEN COMPLETED

MATCH LINE
SEE

STA. 3+25
SHT. 2

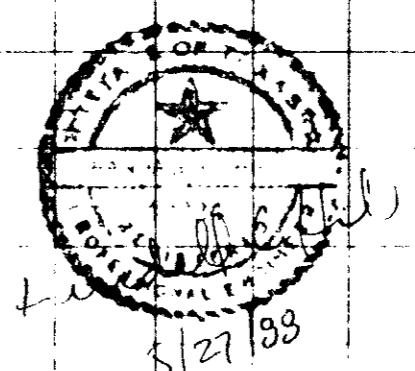
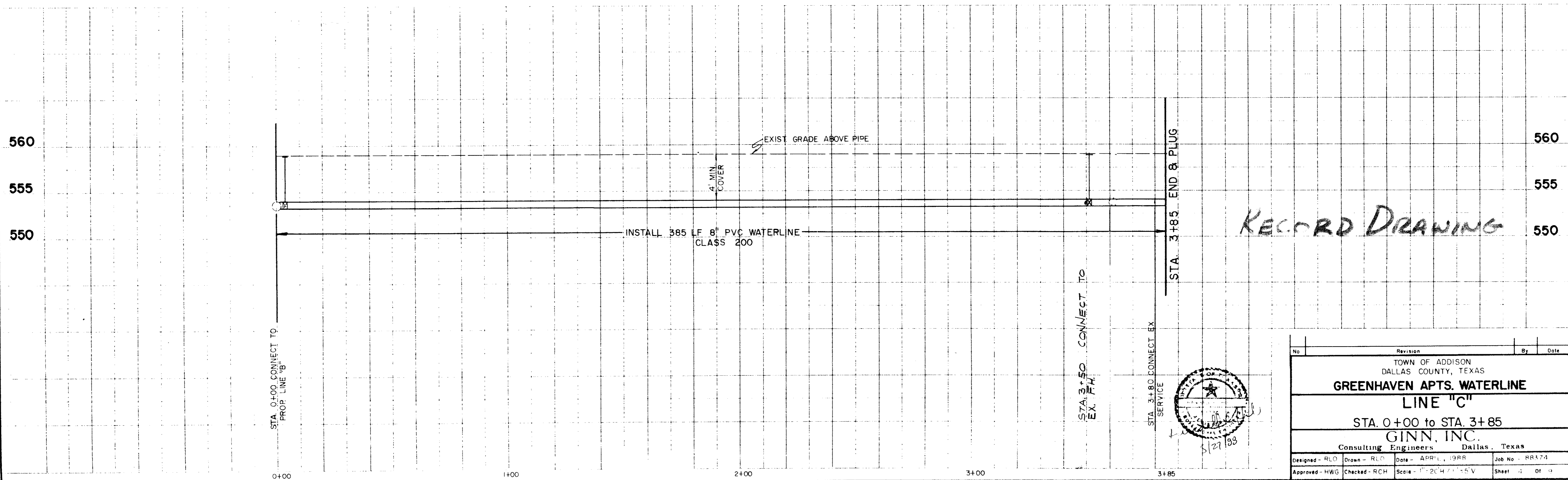
LINE "A"
INSTALL 8" PVC WATER



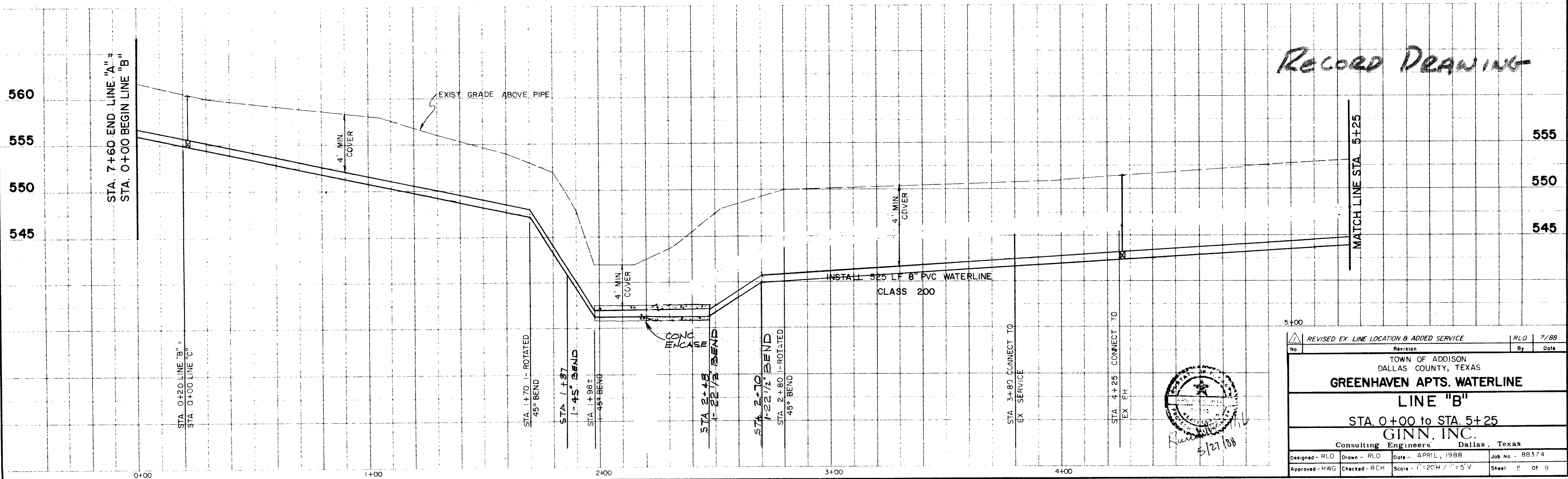
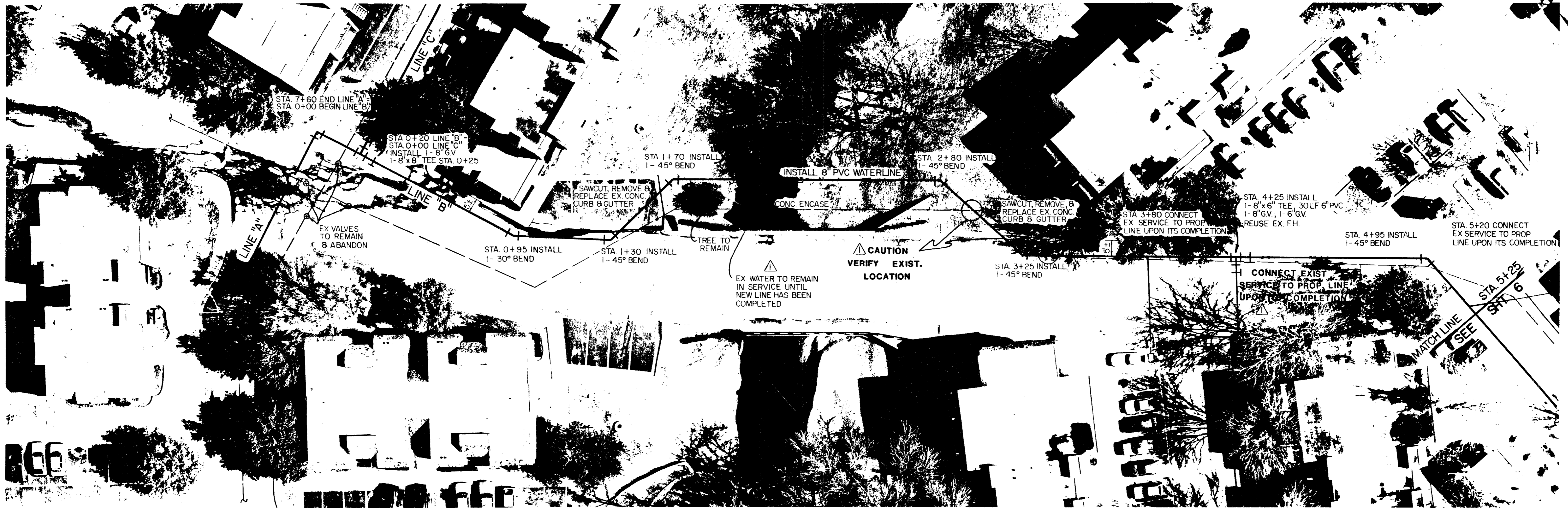
RECORD DRAWING

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
GREENHAVEN APTS. WATERLINE			
LINE "A"			
STA. 3+25 to STA. 7+60			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - APRIL, 1988	Job No. - 88374
Approved - HWG	Checked - RCH	Scale - 1"=20H / 1"=5' V	Sheet 3 of 9

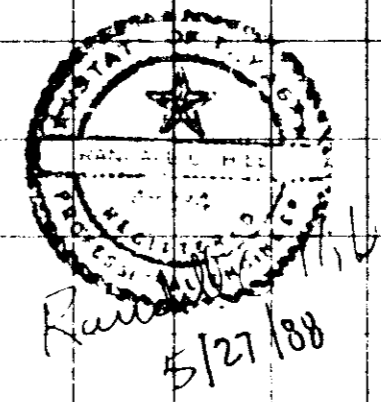
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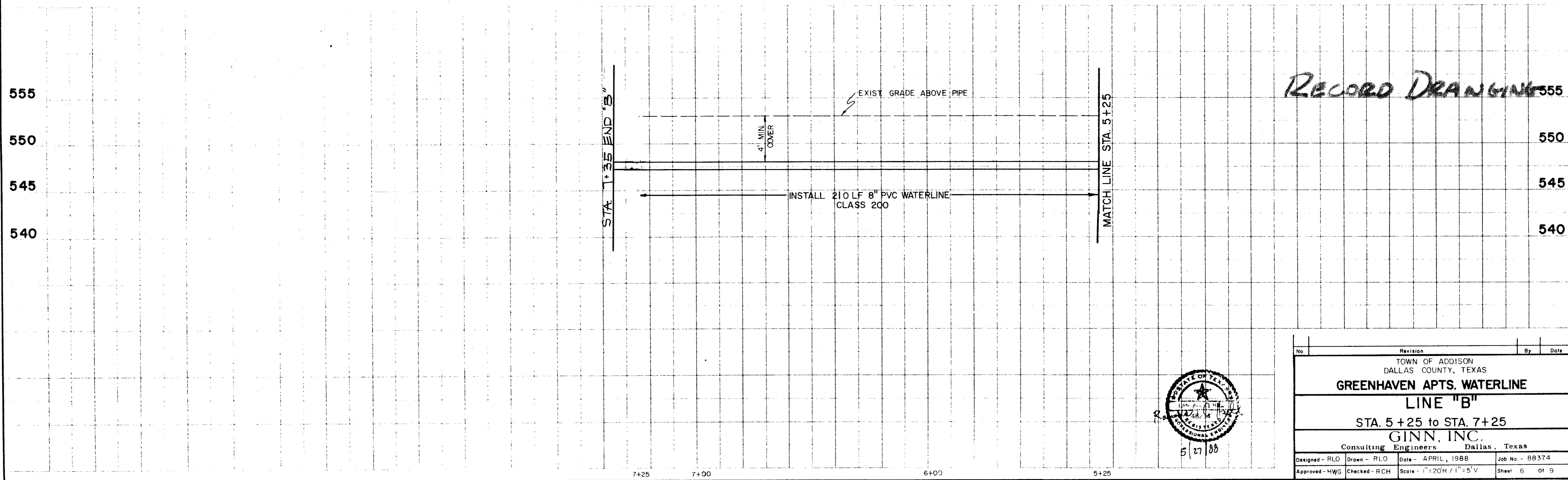
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
GREENHAVEN APTS. WATERLINE			
LINE "C"			
STA. 0+00 to STA. 3+85			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - APRIL, 1988	Job No - RR174
Approved - HWG	Checked - RCH	Scale - 1"=20' HORIZ. 1"=5' V.	Sheet 1 of 3



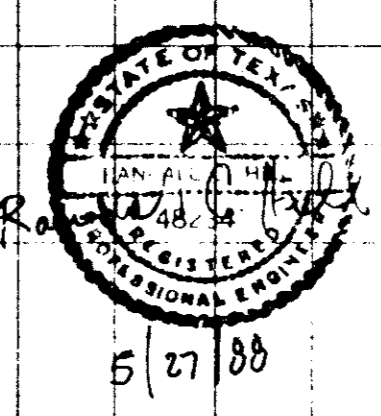
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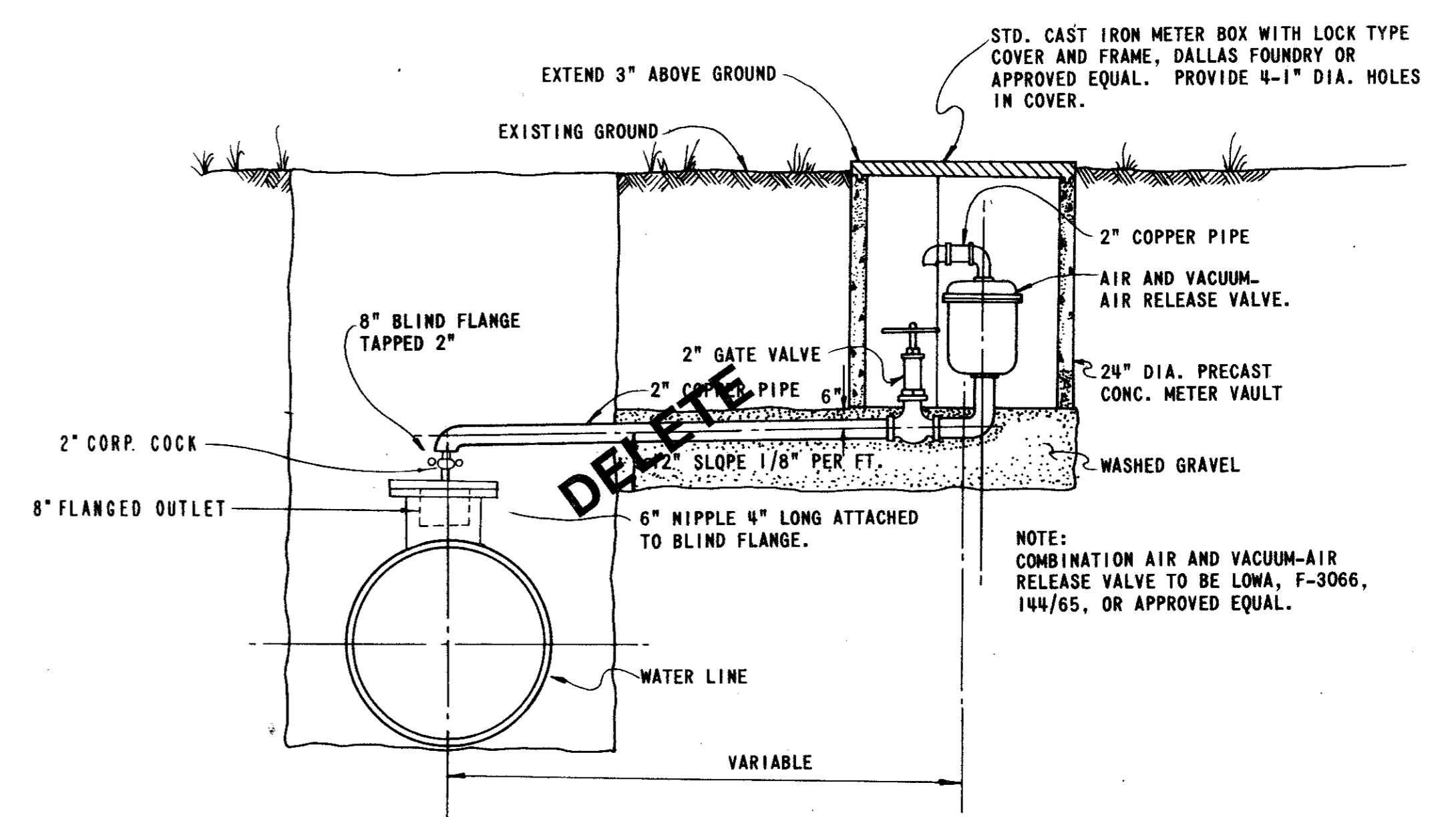
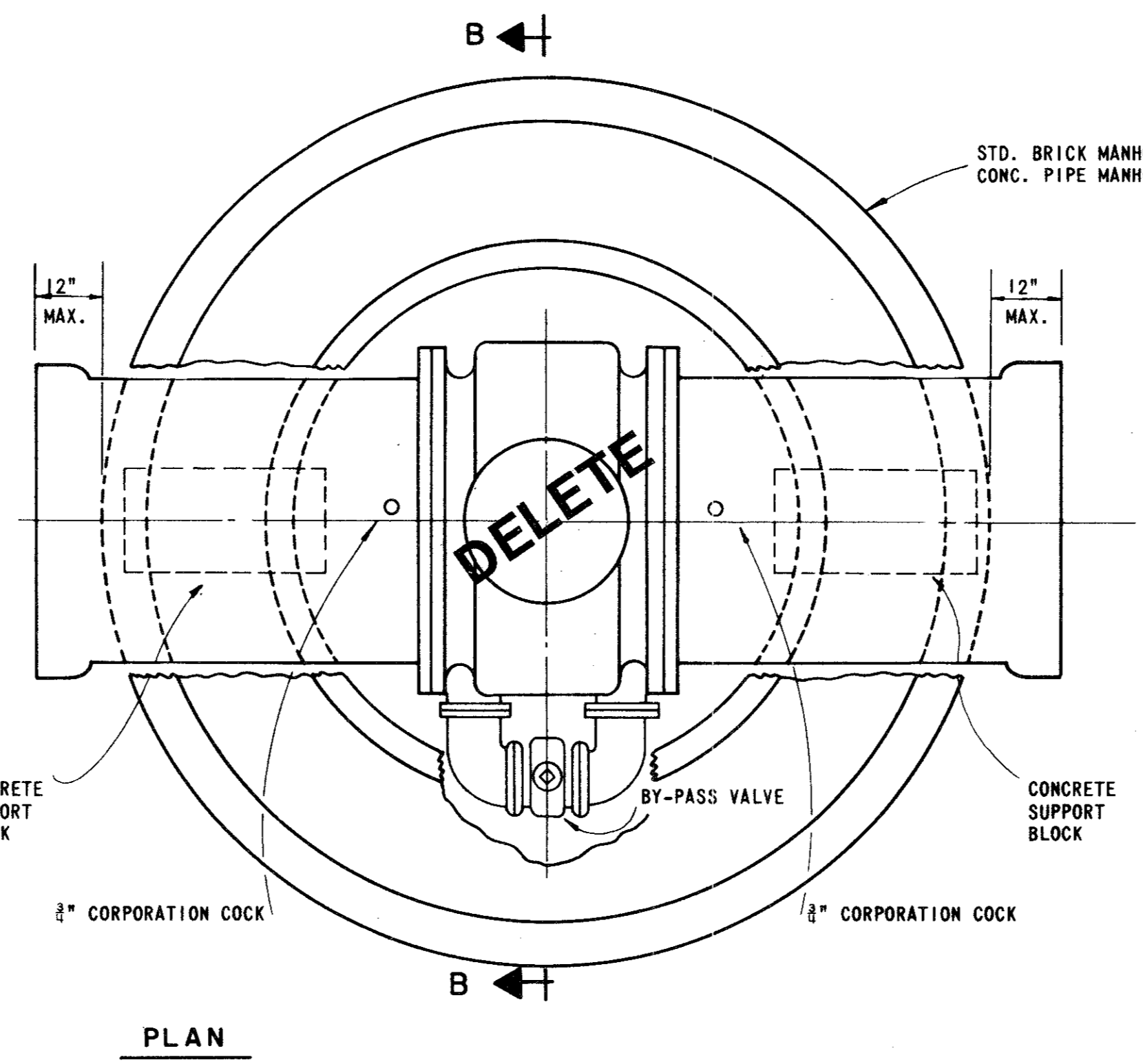
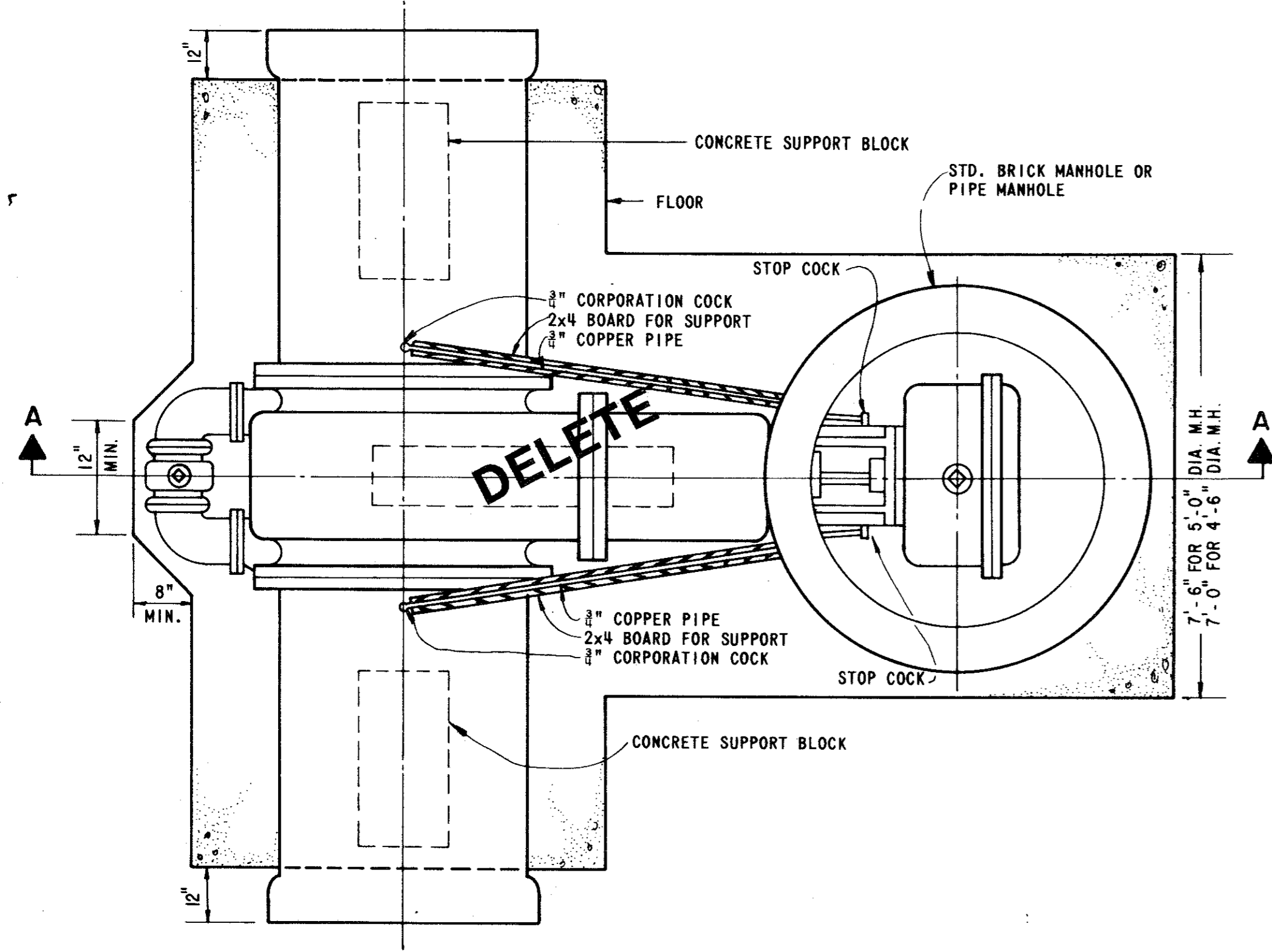
REVISD EX LINE LOCATION & ADDED SERVICE		RLO	7/88
No	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS GREENHAVEN APTS. WATERLINE LINE "B" STA. 0+00 to STA. 5+25 GINN, INC. Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - APRIL, 1988	Job No. - 88374
Approved - HWG	Checked - RCH	Scale - 1" = 20'H / 1" = 5'V	Sheet 5 of 9



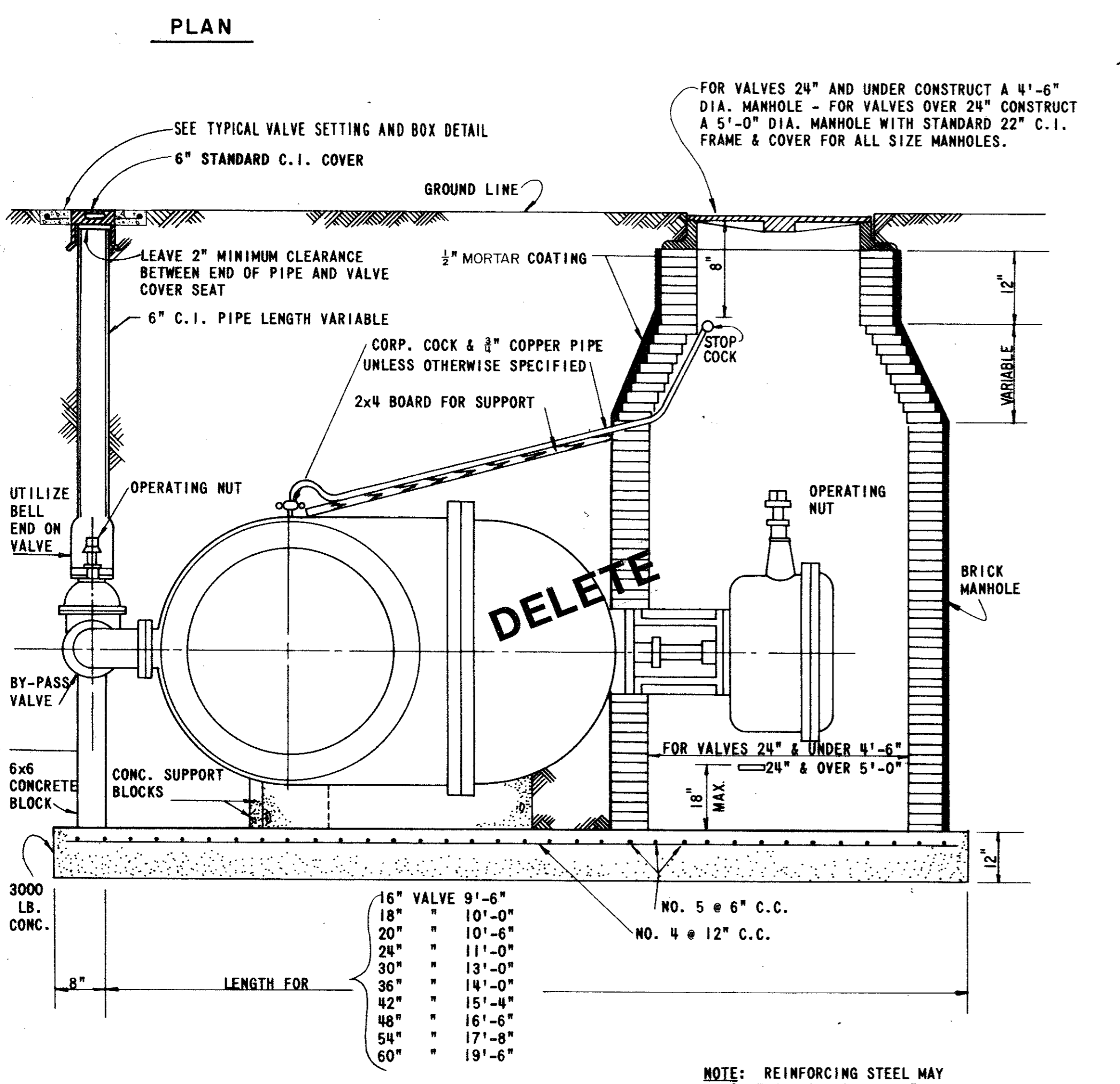
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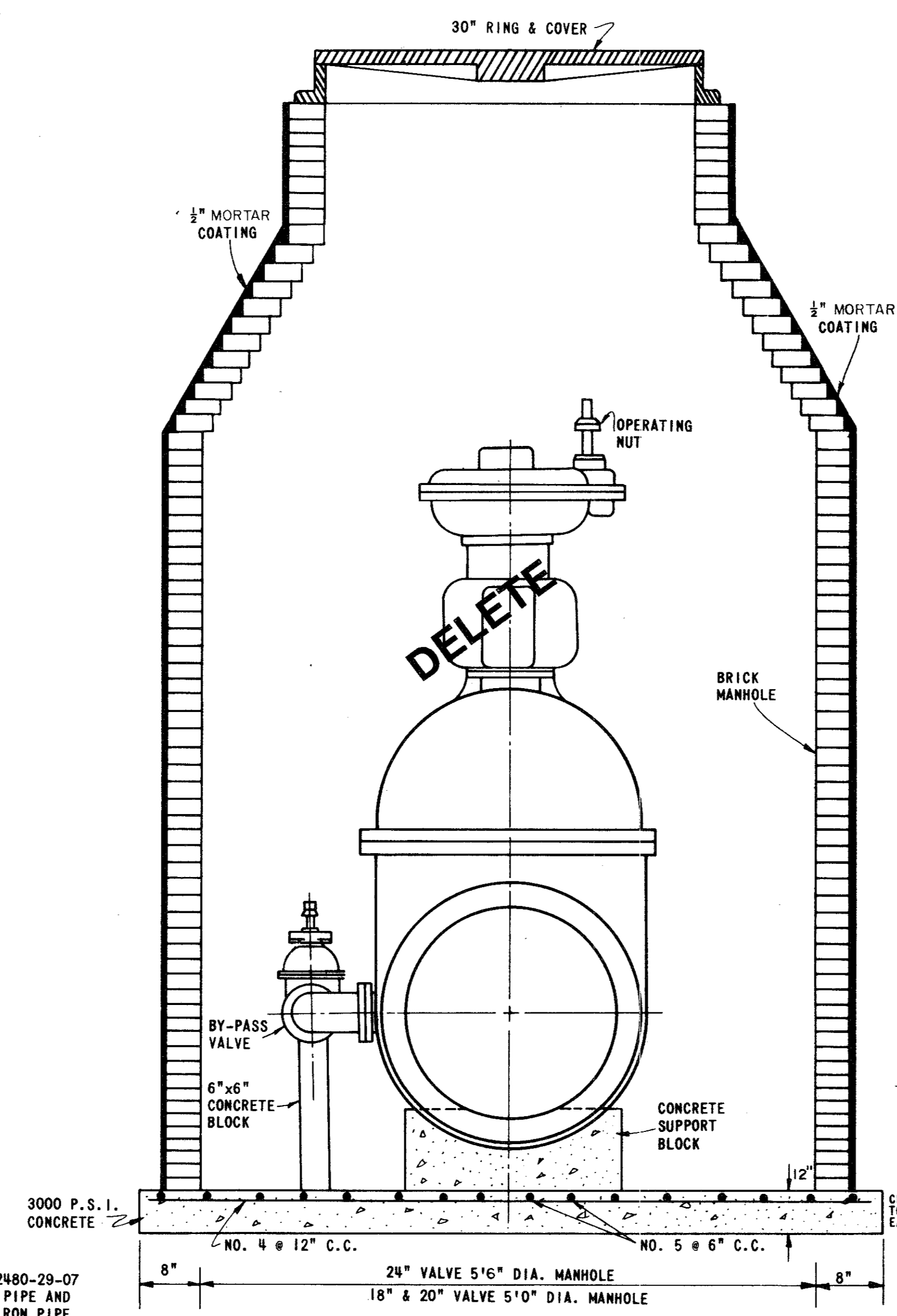
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
GREENHAVEN APTS. WATERLINE LINE "B"			
STA. 5 + 25 to STA. 7 + 25			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - APRIL, 1988	Job No. - 88374
Approved - HWG	Checked - RCH	Scale - 1" = 20'H / 1" = 5'V	Sheet 6 of 9



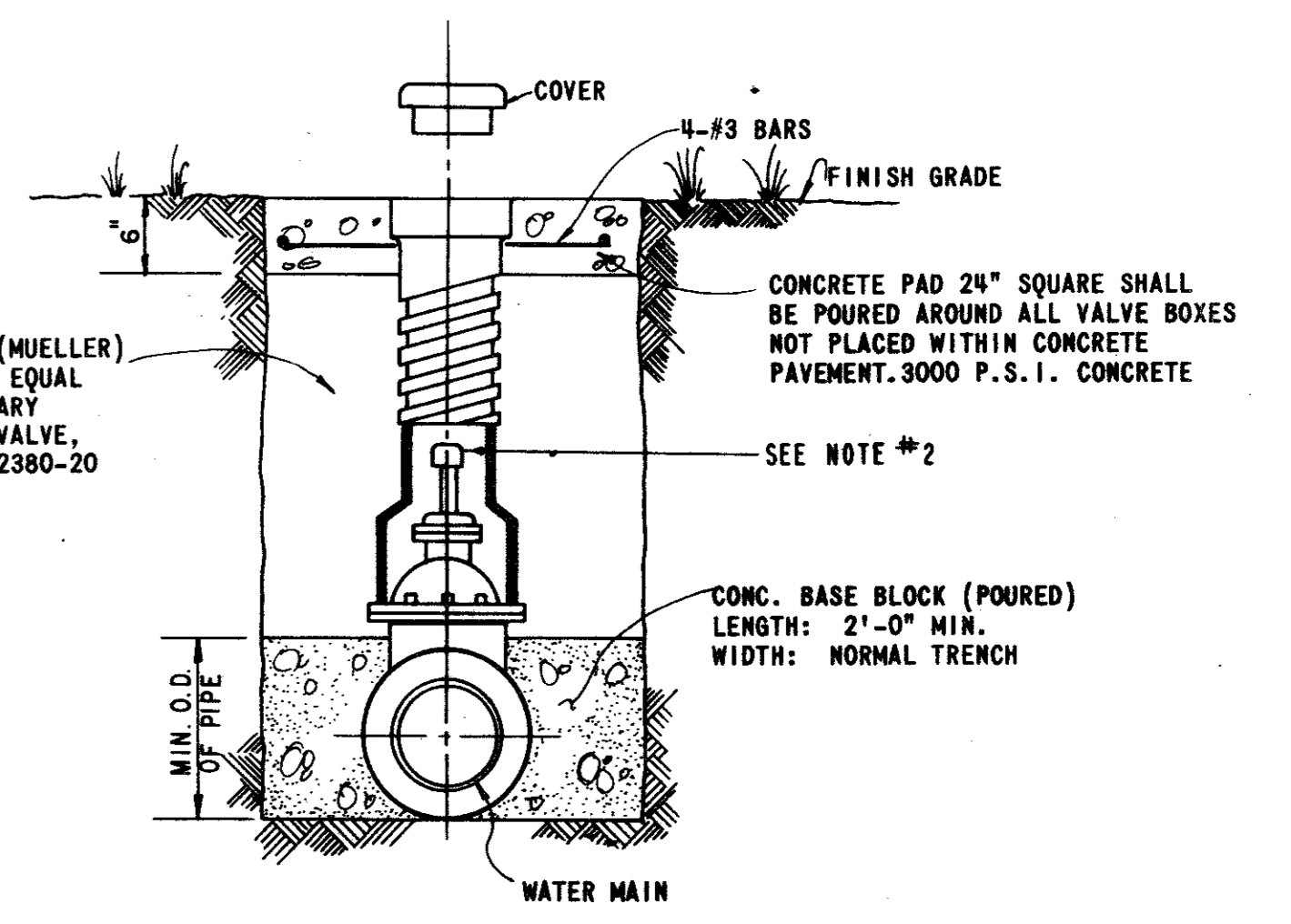
TYPICAL AIR AND VACUUM-AIR RELEASE VALVE INSTALLATION



SECTION A-A
HORIZONTAL VALVE INSTALLATION

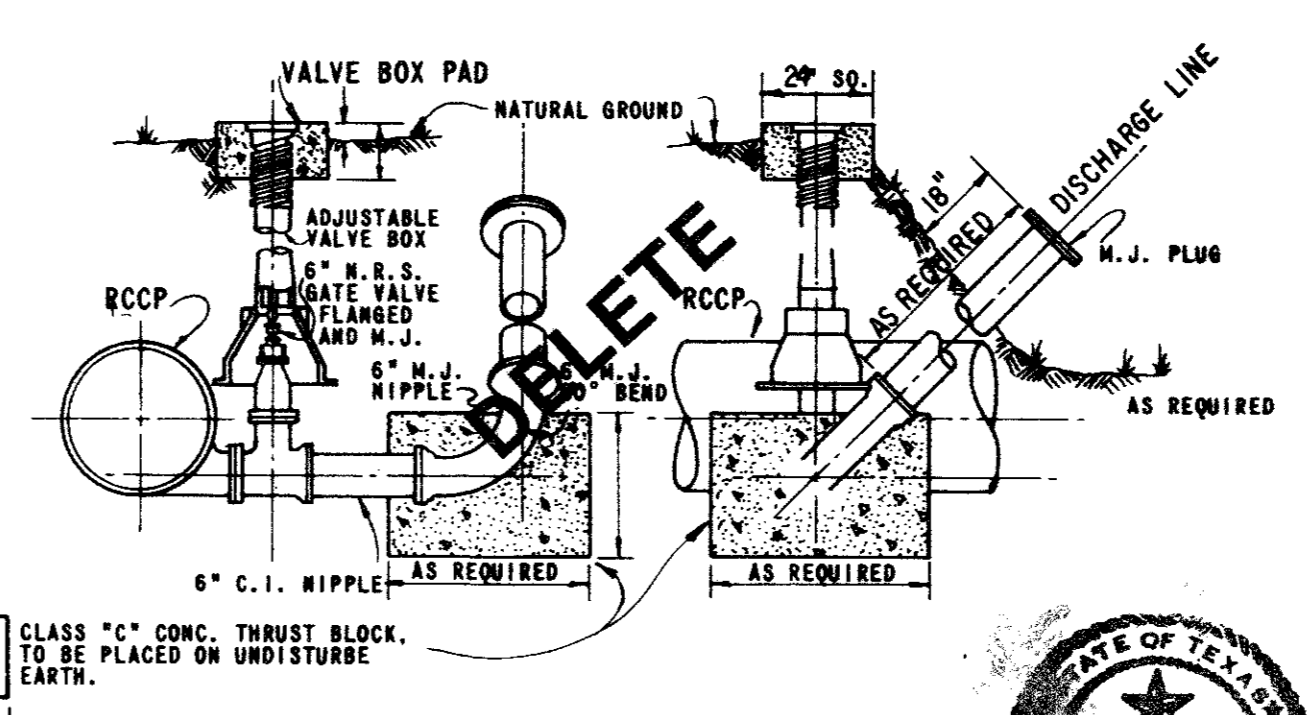


SECTION B-B
VERTICAL VALVE INSTALLATION



- NOTE:
- 4'-12" RS GATE VALVES SHALL BE IN ACCORDANCE WITH ANWA STANDARD C-509-80 OR LATEST THEREOF. ALL VALVES SHALL BE MUELLER A-2370 OR APPROVED EQUAL.
 - A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE THATS OPERATING NUT IS LOCATED IN EXCESS OF 4 FEET BELOW THE TOP OF VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT ITS TOP IS WITHIN 4' OF VALVE BOX LID.

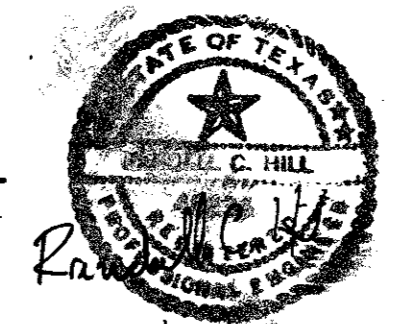
TYPICAL VALVE SETTING AND BOX



BLOW OFF VALVE DETAIL

RECORD DRAWING

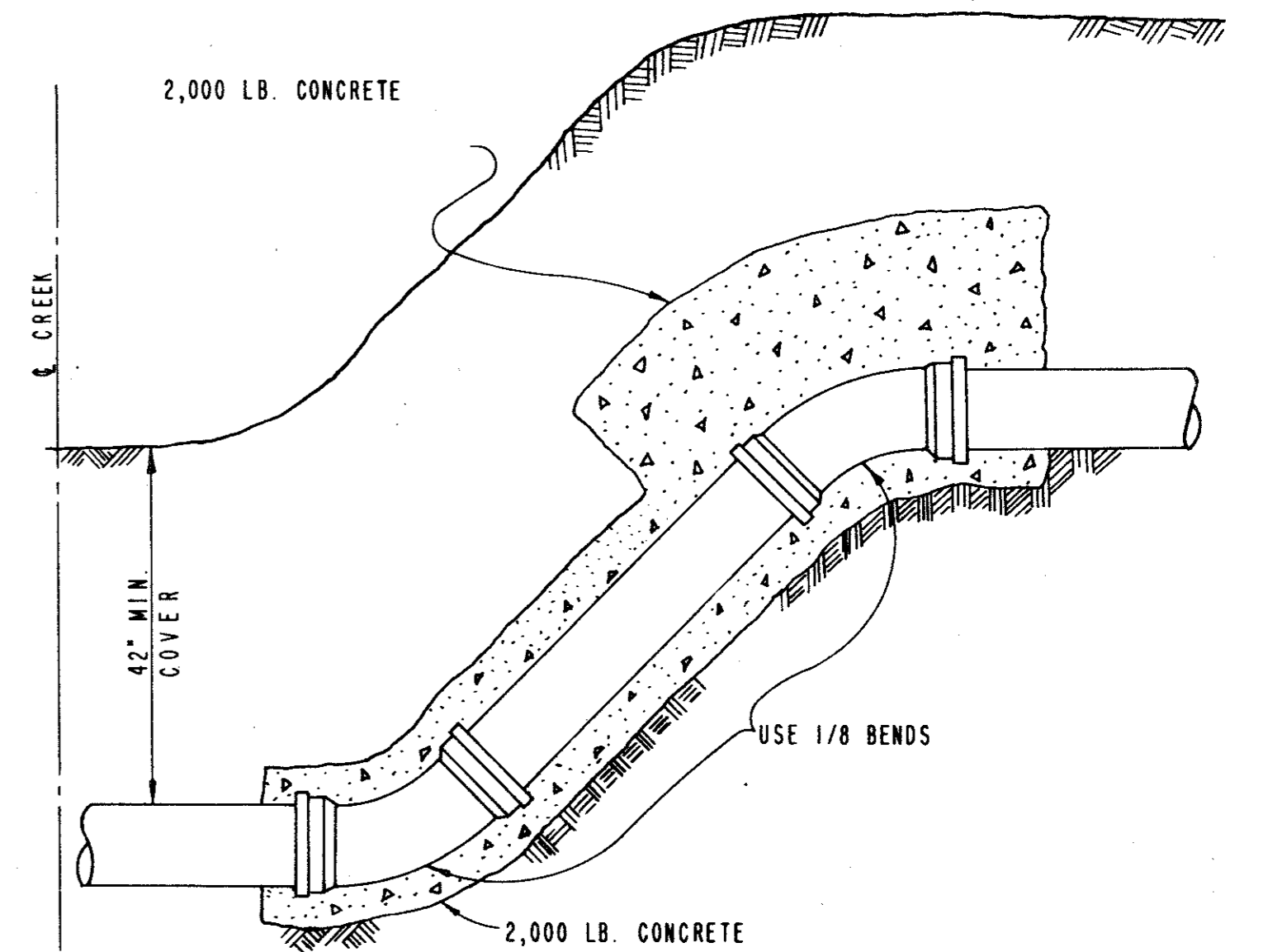
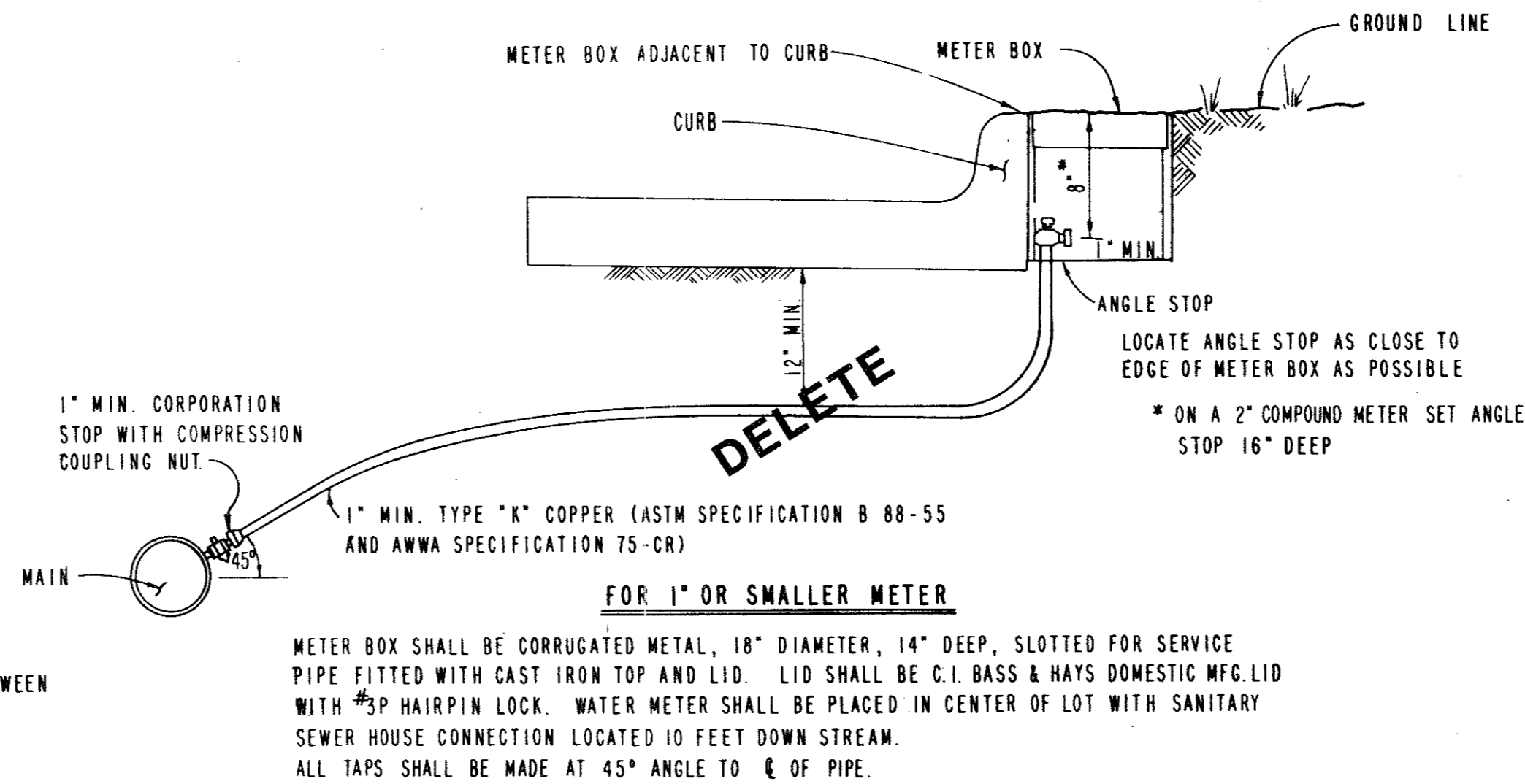
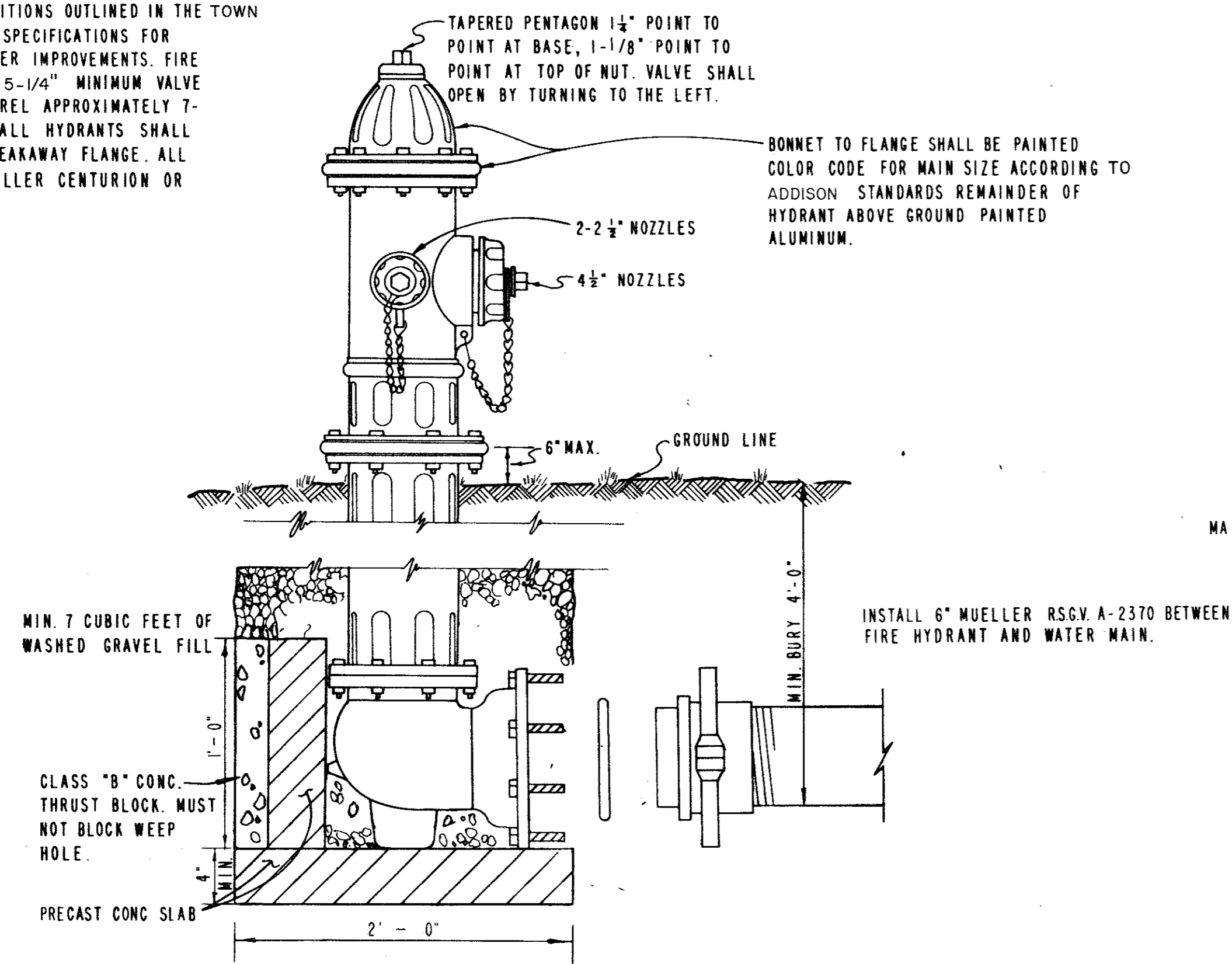
NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
VALVES			
APPROVED _____			H. WAYNE GINN, P.E.
DATE MARCH, 1984			SHEET SD-15



5/27/80

NOTE:

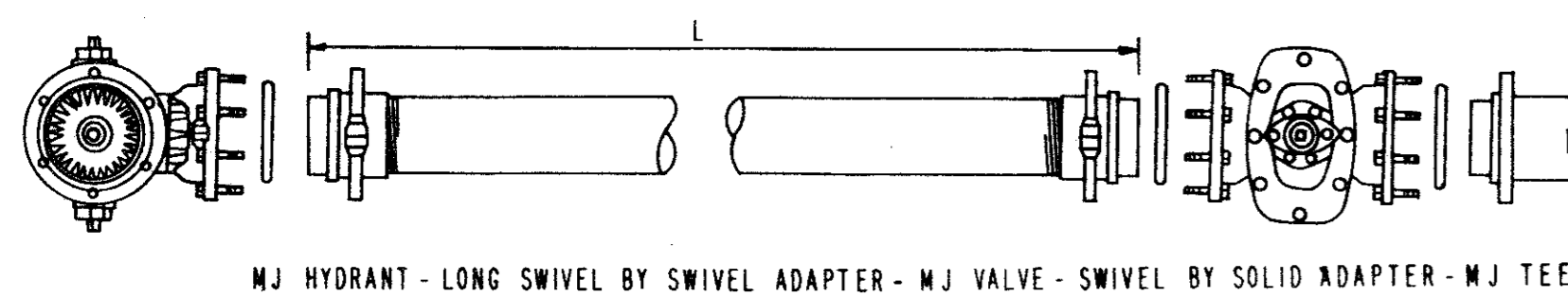
IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO AWWA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE, C-502-73. EXCEPT FOR CHANGES OR ADDITIONS OUTLINED IN THE TOWN OF ADDISON STANDARD SPECIFICATIONS FOR WATER AND SANITARY SEWER IMPROVEMENTS. FIRE HYDRANTS SHALL HAVE A 5-1/4" MINIMUM VALVE OPENING AND WITH A BARREL APPROXIMATELY 7-INCH INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE. ALL HYDRANTS SHALL BE MUELLER CENTURION OR APPROVED EQUAL.



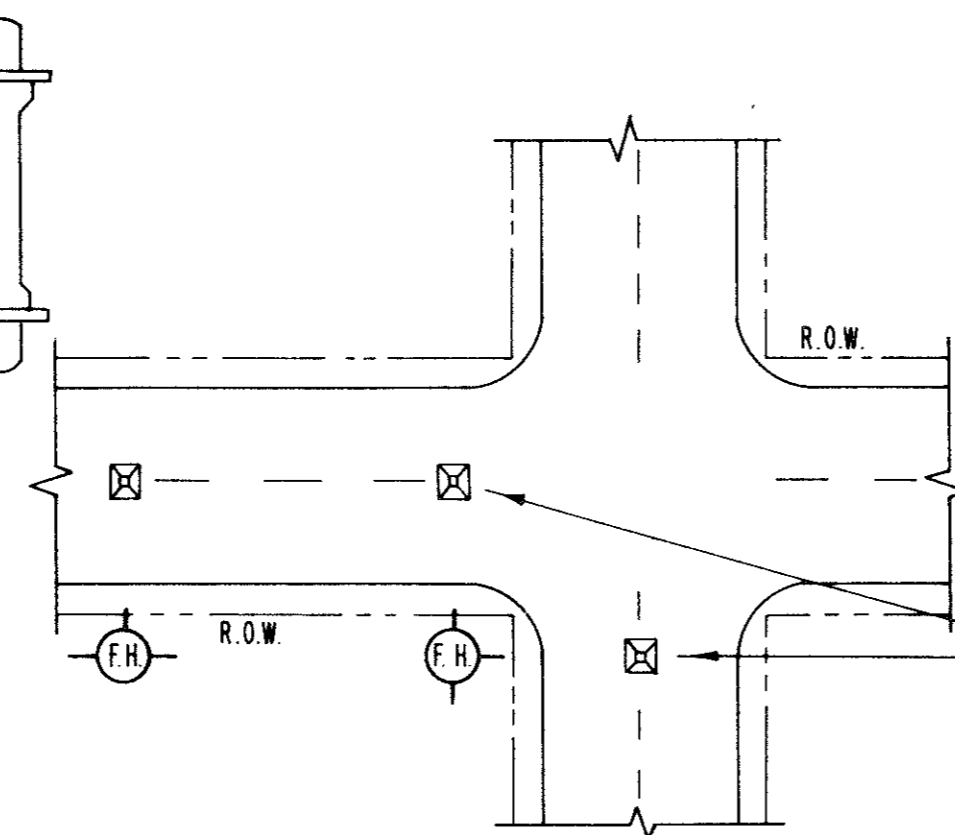
TYPICAL SERVICE CONNECTION WITH METER BOX

MUELLER TYPE A COPPER SERVICE PIPE SOFT ANNEALED	DOUBLE STRAP BRONZE SERVICE SADDLE WITH C.C. THREADS	MUELLER CORPORATION STOP	MUELLER ANGLE STOP	BASS & HAYS SLOTTED METER BOX
1 INCH	1 1/2 INCH	H-15008	H-14258	34 AS
1 1/2 INCH	2 INCH	H-15013	H-14286	55 A
2 INCH		H-15013	H-14286	55 A

W/H 15428 COUPLING

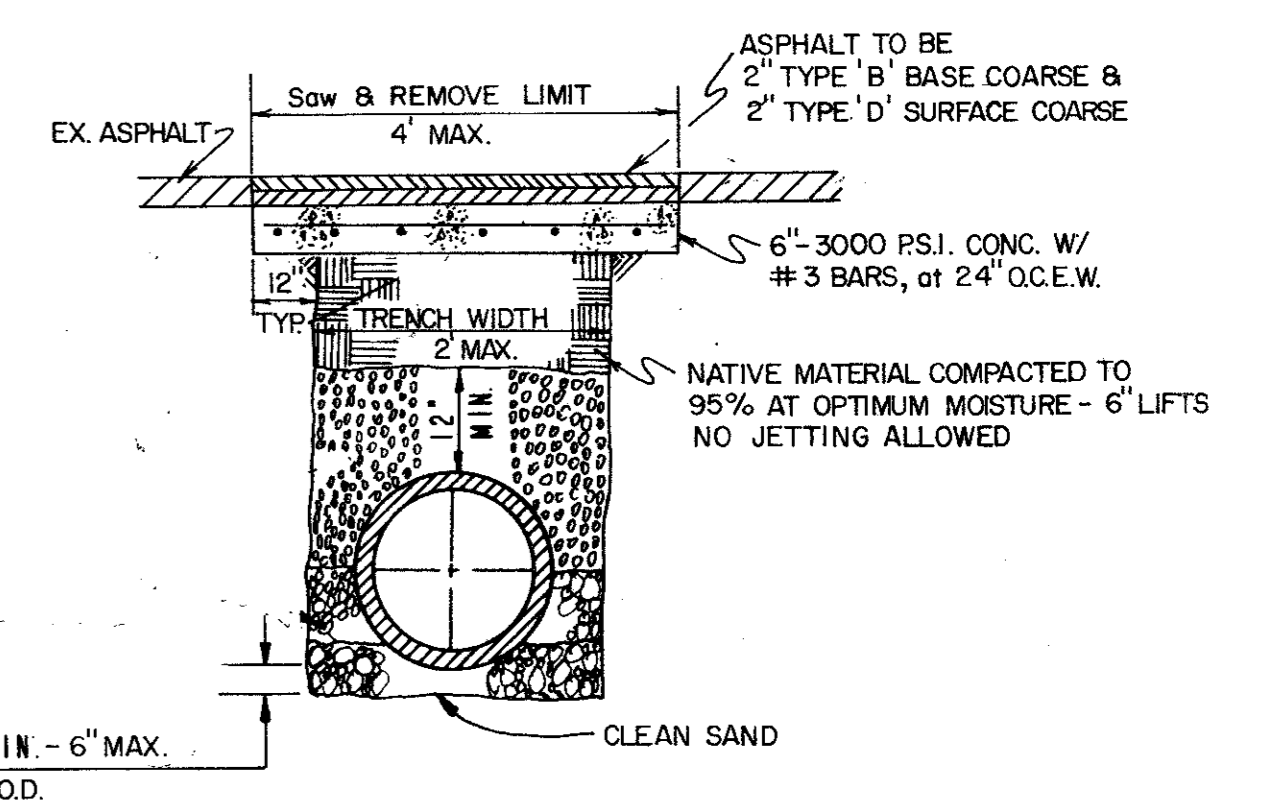
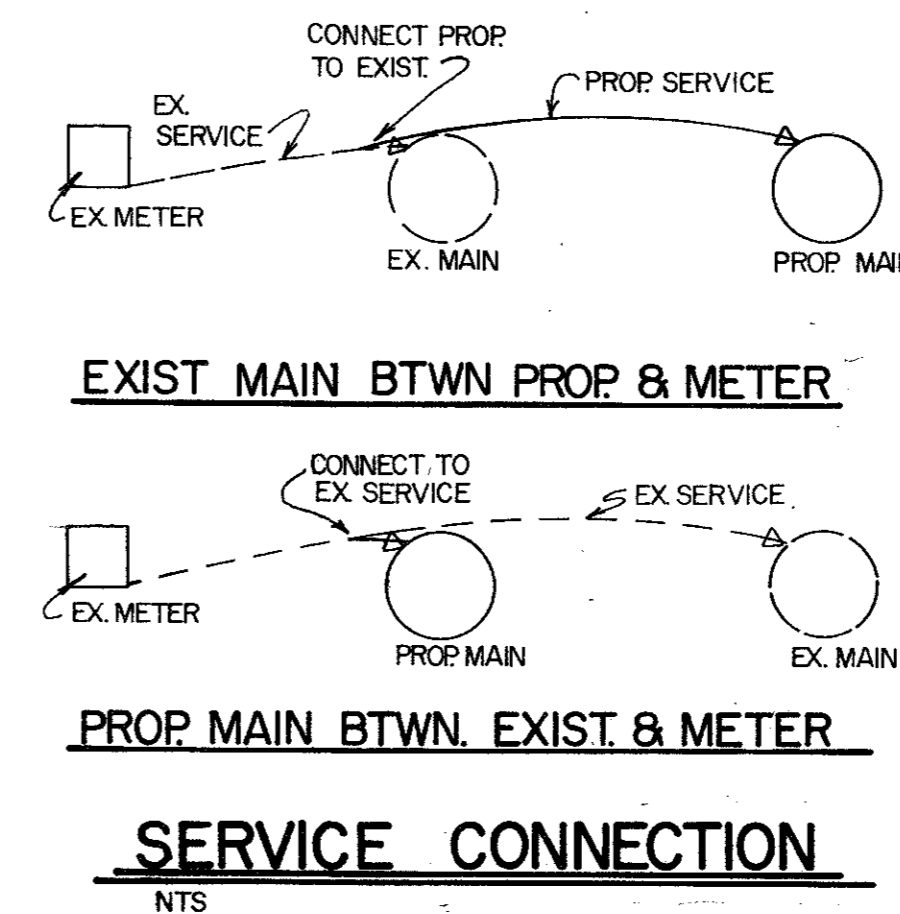


TYPICAL FIRE HYDRANT INSTALLATION



TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION (NO SCALE)

A BLUE STIMSONITE FIRE-LITE REFLECTOR (OR APPROVED EQUAL) TO BE PLACED IN THE CENTER OF STREET OPPOSITE FIRE HYDRANTS THE INSTALLATION OF THIS REFLECTOR SHALL BE AS PRESCRIBED BY THE MANUFACTURER.



TYPICAL BACKFILL WATER MAIN

THRUST IN TONS FOR VERTICAL BENDS

I.D. IN INCHES	11.25°	15°	22.50°	30°	45°	60°	75°	90°
12								
14								
16	2.94	3.90	5.78	7.54	10.66	13.06	14.56	15.08
18	3.72	4.94	7.30	9.54	13.50	16.52	18.42	19.08
20	4.60	6.10	9.02	11.78	16.66	20.40	22.76	23.56
24	6.62	8.78	12.98	16.96	23.98	29.38	32.76	33.92
30	10.34	13.72	20.28	26.52	37.50	45.92	51.22	53.02

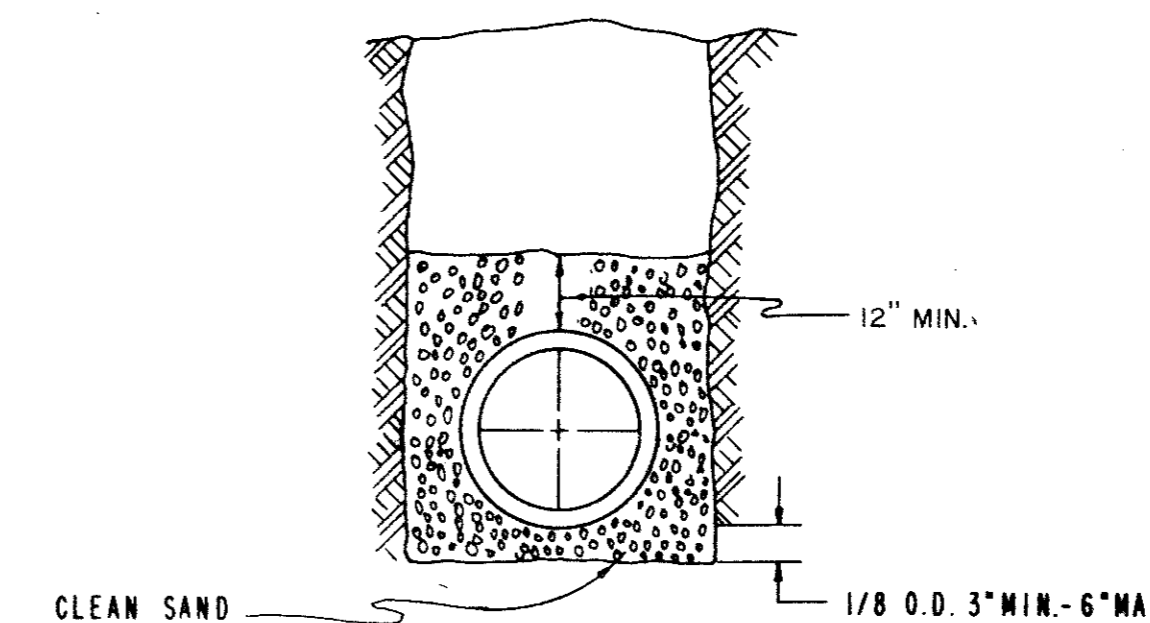
GENERAL NOTES:

ALL CALCULATIONS ARE BASED ON TOTAL INTERNAL PRESSURE OF 150 P.S.I.

ALLOWABLE SOIL BEARING PRESSURES MUST BE AT LEAST ONE TON PER SQUARE FOOT FOR THE THRUST BLOCKS SHOWN. IN SOILS OF LESSER CAPACITY, INCREASE SIZE AND BEARING AREA PROPORTIONATELY. VOLUMES OF VERTICAL BEND THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED, AND THE CORRESPONDING WEIGHT OF THE CONCRETE (AT 4,000#/C.Y.) EQUALS THE VERTICAL COMPONENT OF THRUST ON THE VERTICAL BEND ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE FOR BLOCKING SHALL BE 2,000 CONCRETE.

DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER, BUT SHALL NOT BE LESS THAN THE DIMENSIONS SHOWN HERE.



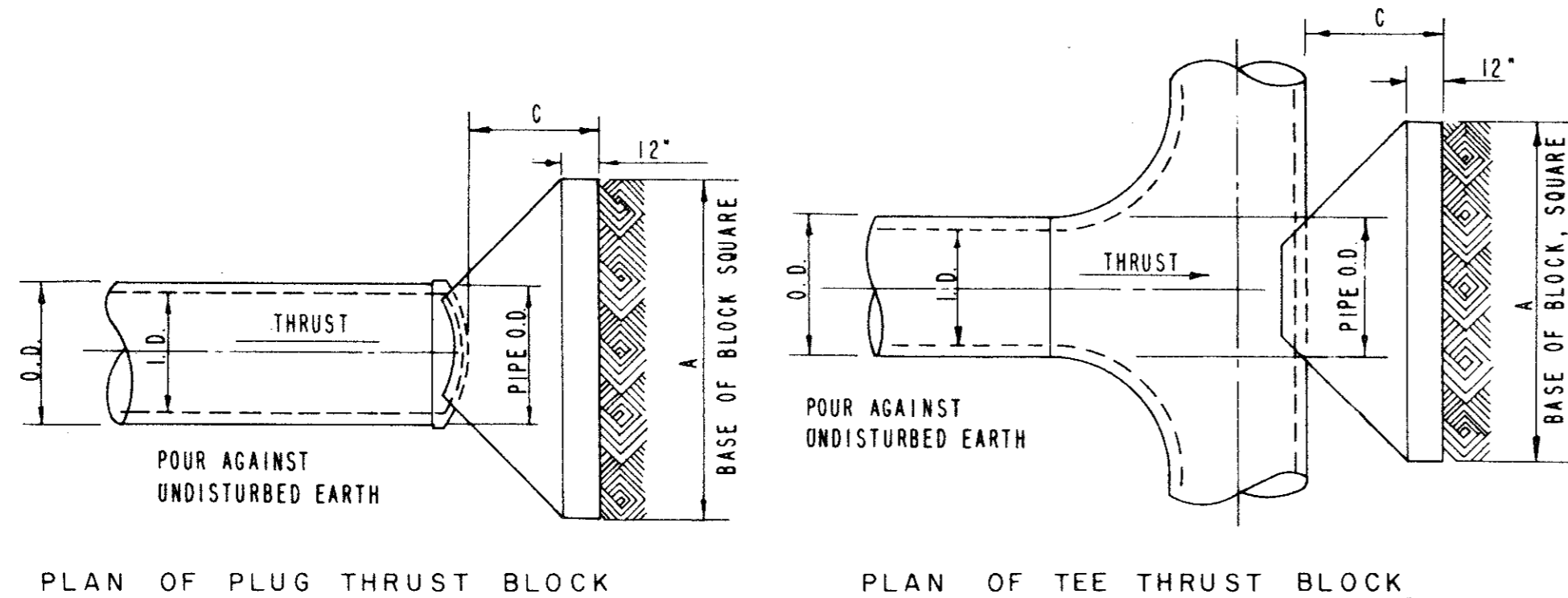
CLASS 4 EMBEDMENT P.V.C. WATER PIPE



5/27/88

TEES & PLUGS

I.D. UNIT	A FT.	C FT.	THRUST TONS
12"			
14"			
16"	3.87	1.57	15.08
18"	4.37	1.77	19.09
20"	4.86	1.97	23.56
24"	5.82	2.36	33.93
30"	7.28	2.95	53.01



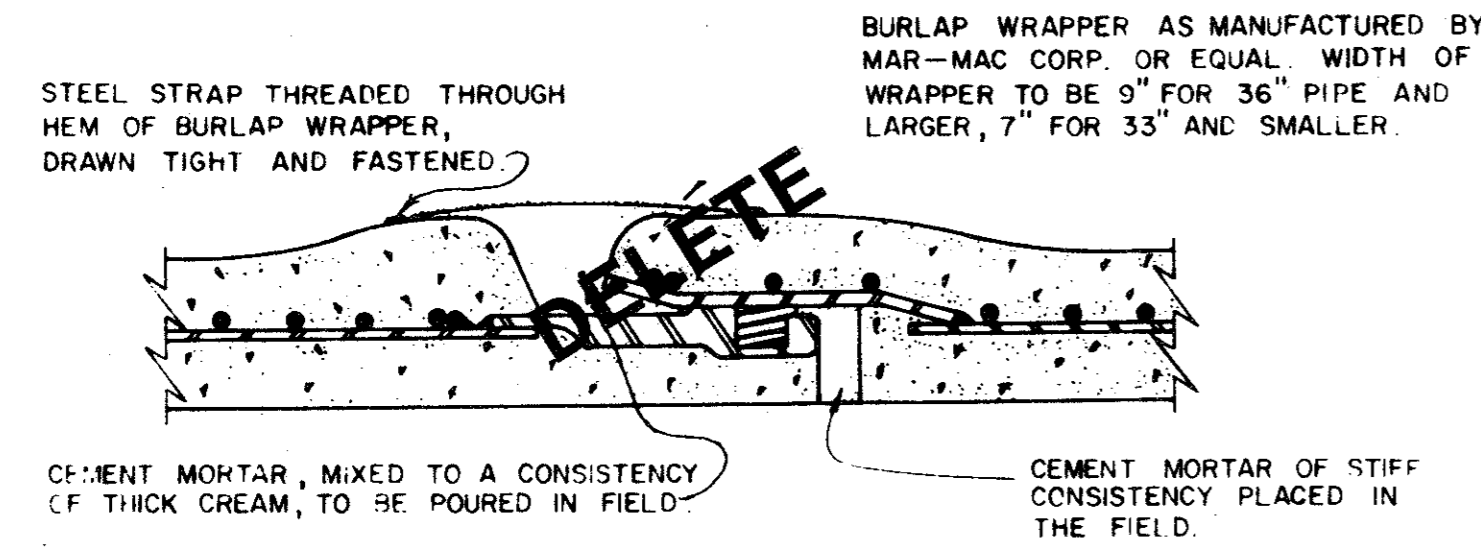
TYPICAL PLUG & TEE THRUST BLOCKS

RECORD DRAWING

NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
FIRE HYDRANT - SERVICE CONNECTION			
APPROVED _____		H. WAYNE GINN, P.E.	
DATE: MARCH, 1984		SHEET SD-16	

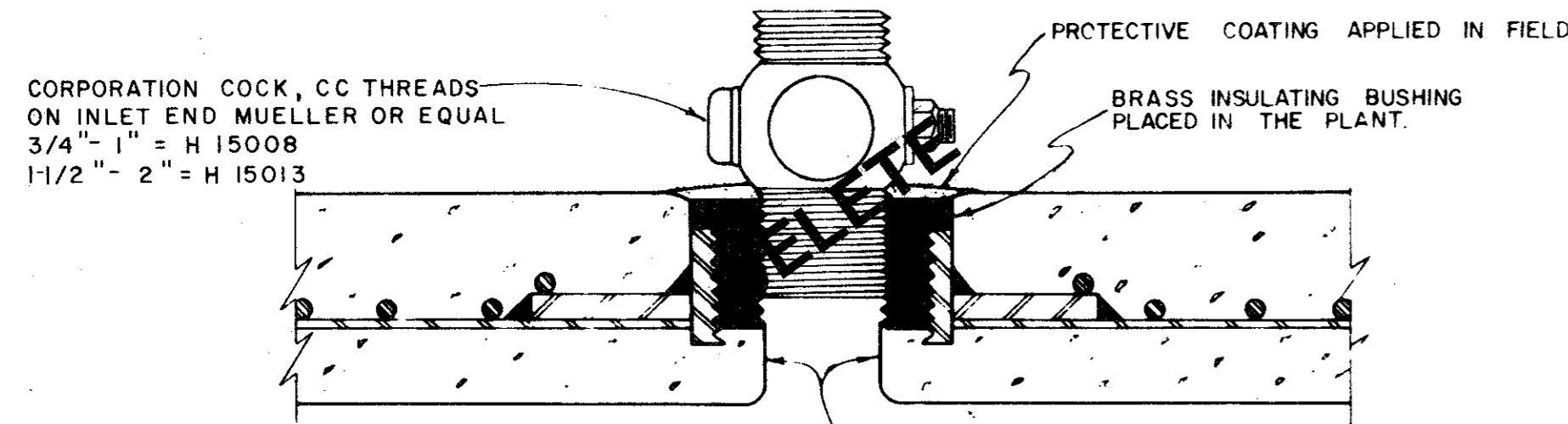
NOTE:

PROVIDE 1" MINIMUM THICKNESS CONCRETE OR CEMENT MORTAR COATING IN THE FIELD FOR THE PROTECTION OF ALL EXPOSED STEEL SUCH AS FLANGES, CAULKED JOINTS, THREADED OUTLETS, CLOSURES, ETC. THE CEMENT MORTAR USED SHALL CONSIST OF ONE PART PORTLAND CEMENT TO TWO AND ONE-HALF PARTS OF FINE, SHARP (PLASTER) SAND. WHERE SHOWN, COATING IS TO BE REINFORCED WITH WIRE MESH.



STANDARD RUBBER GASKET JOINT

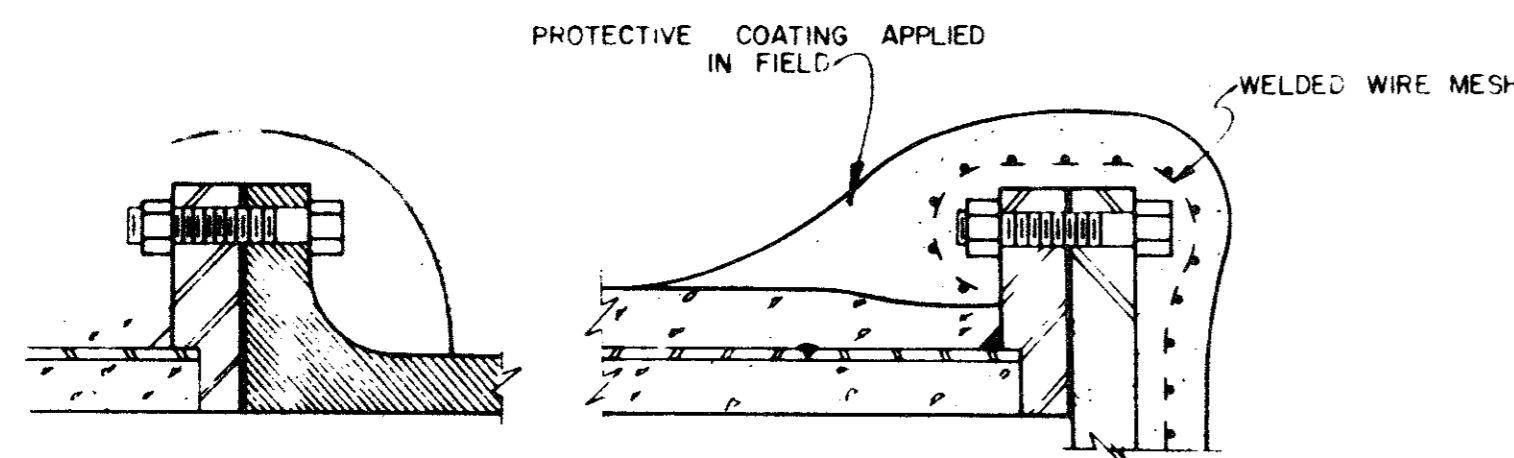
NOTE: ALL CLOSURE SECTIONS SHALL BE FABRICATED WITH HAND HOLES TO ALLOW WIPING INSIDE OF JOINTS AFTER CLOSURE IS IN PLACE.



THREADED CONNECTION

NOTE:

IF CORPORATION COCK IS NOT PROVIDED IN FIELD, THEN STEEL PLUG SHALL BE COVERED WITH CEMENT MORTAR.

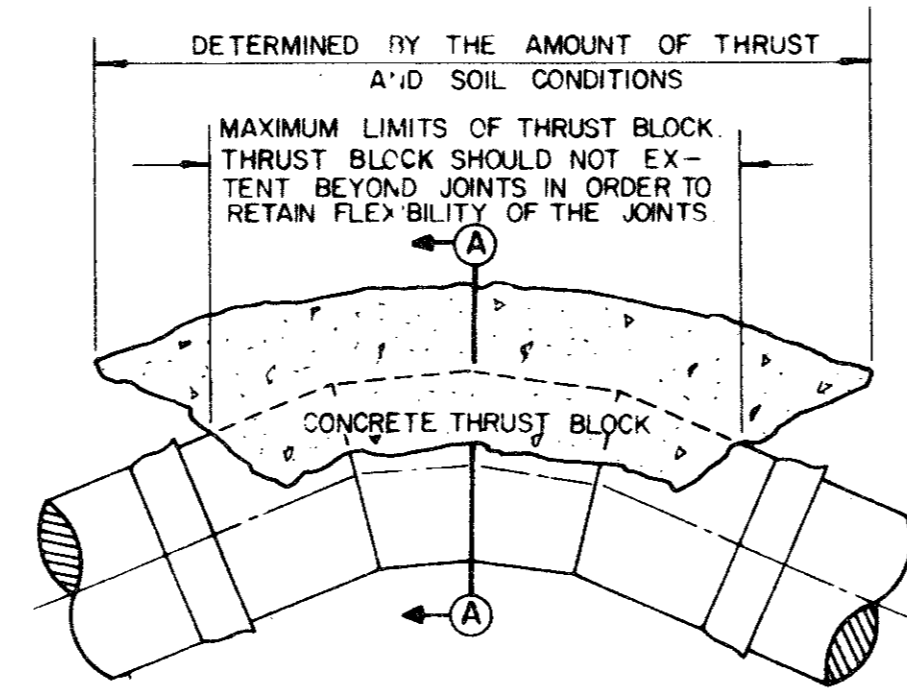


FLANGED CONNECTIONS

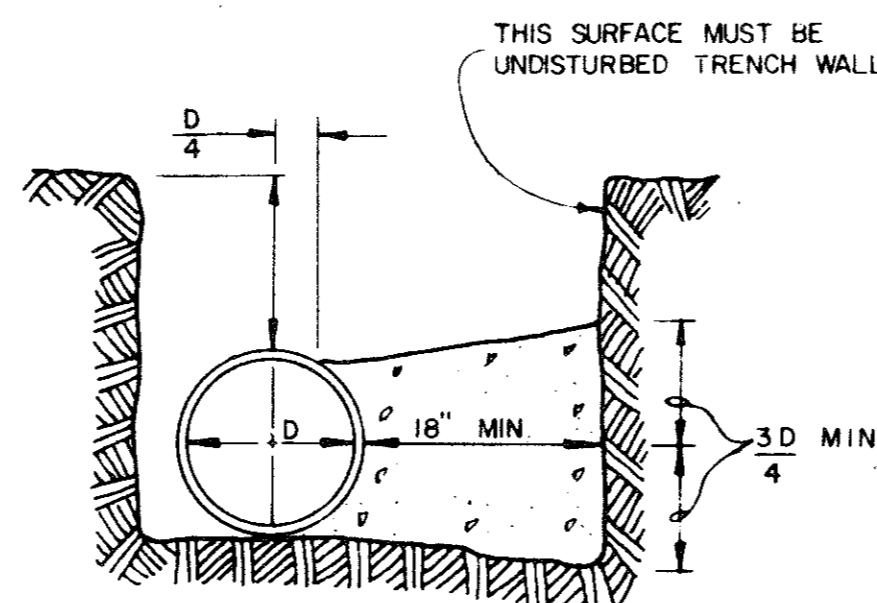
REINFORCED CONCRETE CYLINDER PIPE DETAILS

NOTE:

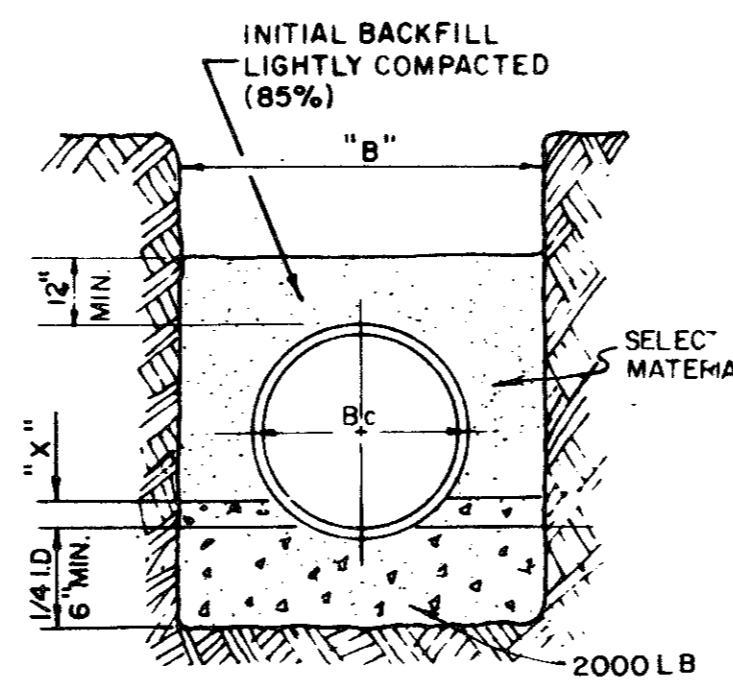
ANY SURFACE RECEIVING A CEMENT MORTAR COATING SHALL BE THOROUGHLY CLEAN AND WETTED WITH WATER JUST PRIOR TO PLACING THE CEMENT MORTAR COATING. AFTER PLACEMENT, CARE SHALL BE TAKEN TO PREVENT CEMENT MORTAR COATING FROM DRYING OUT TOO RAPIDLY BY COVERING WITH DAMP EARTH OR BURLAP. CEMENT MORTAR COATING SHALL NOT BE APPLIED DURING FREEZING WEATHER.



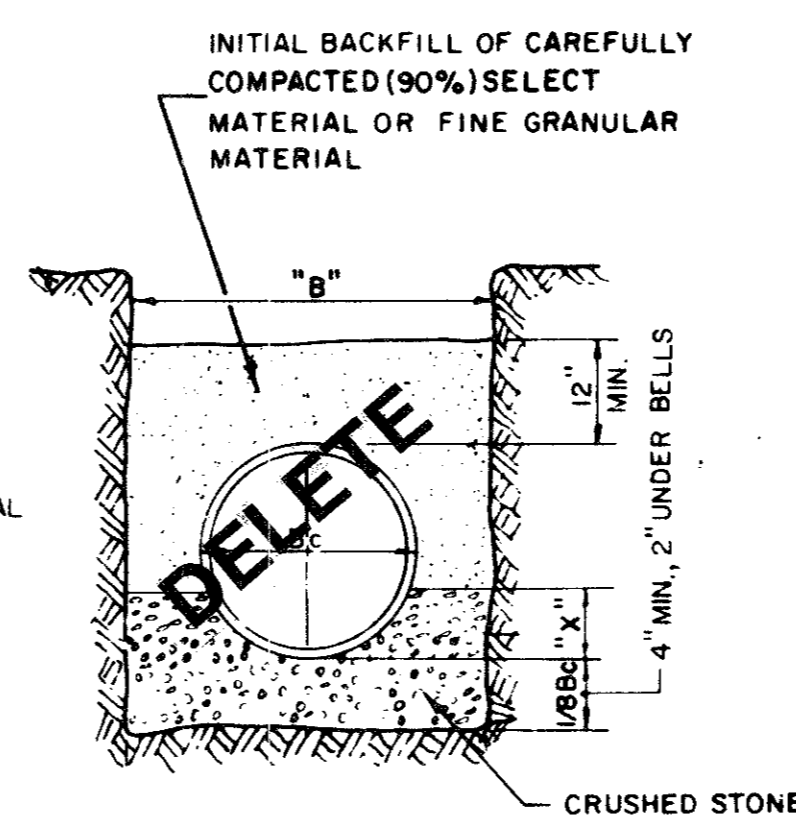
PLAN VIEW



THRUST BLOCK DETAIL

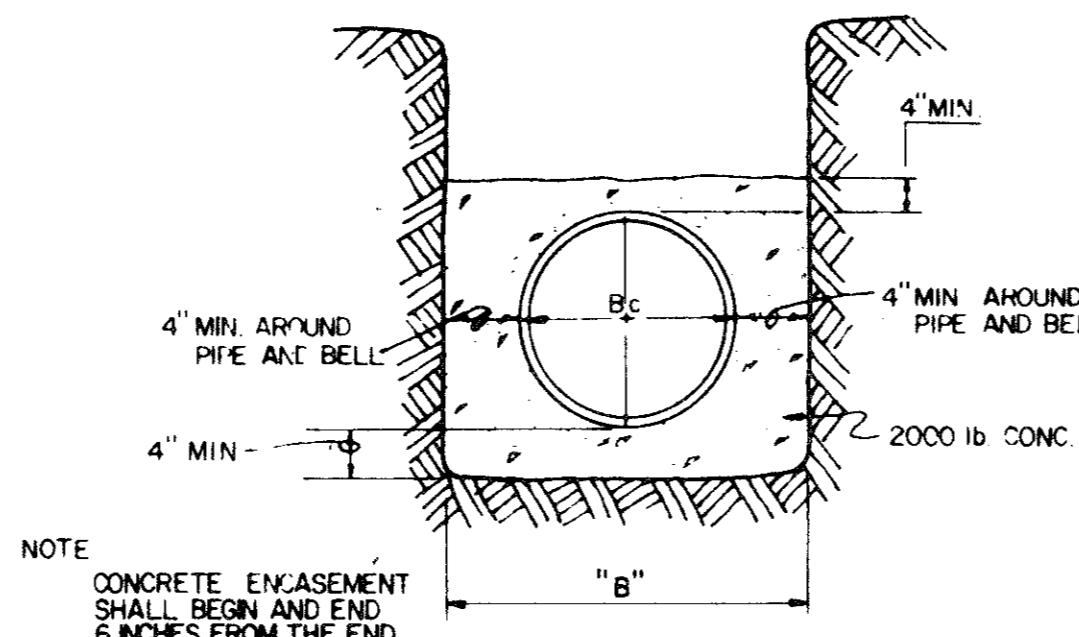


CONCRETE CRADLE



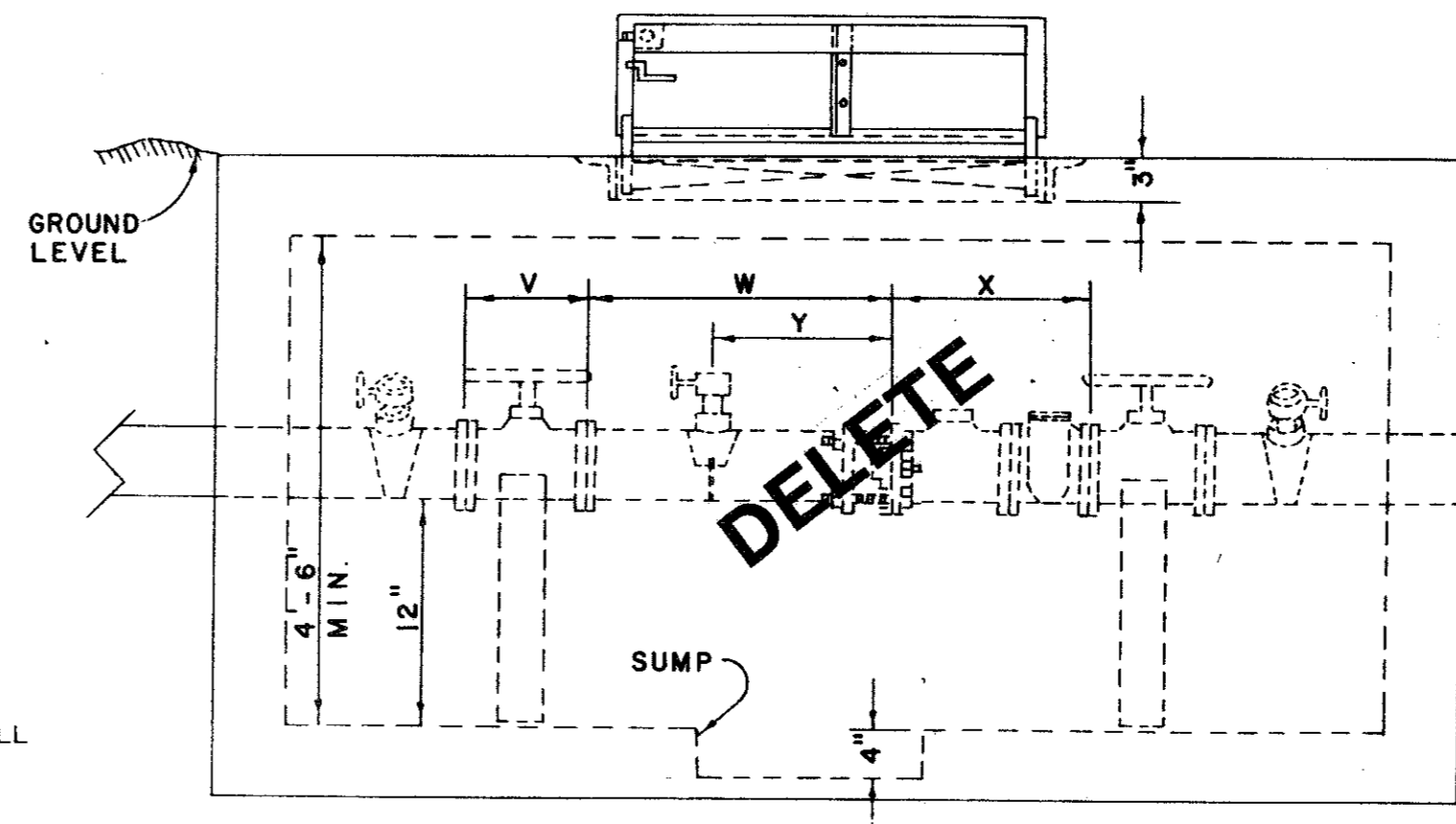
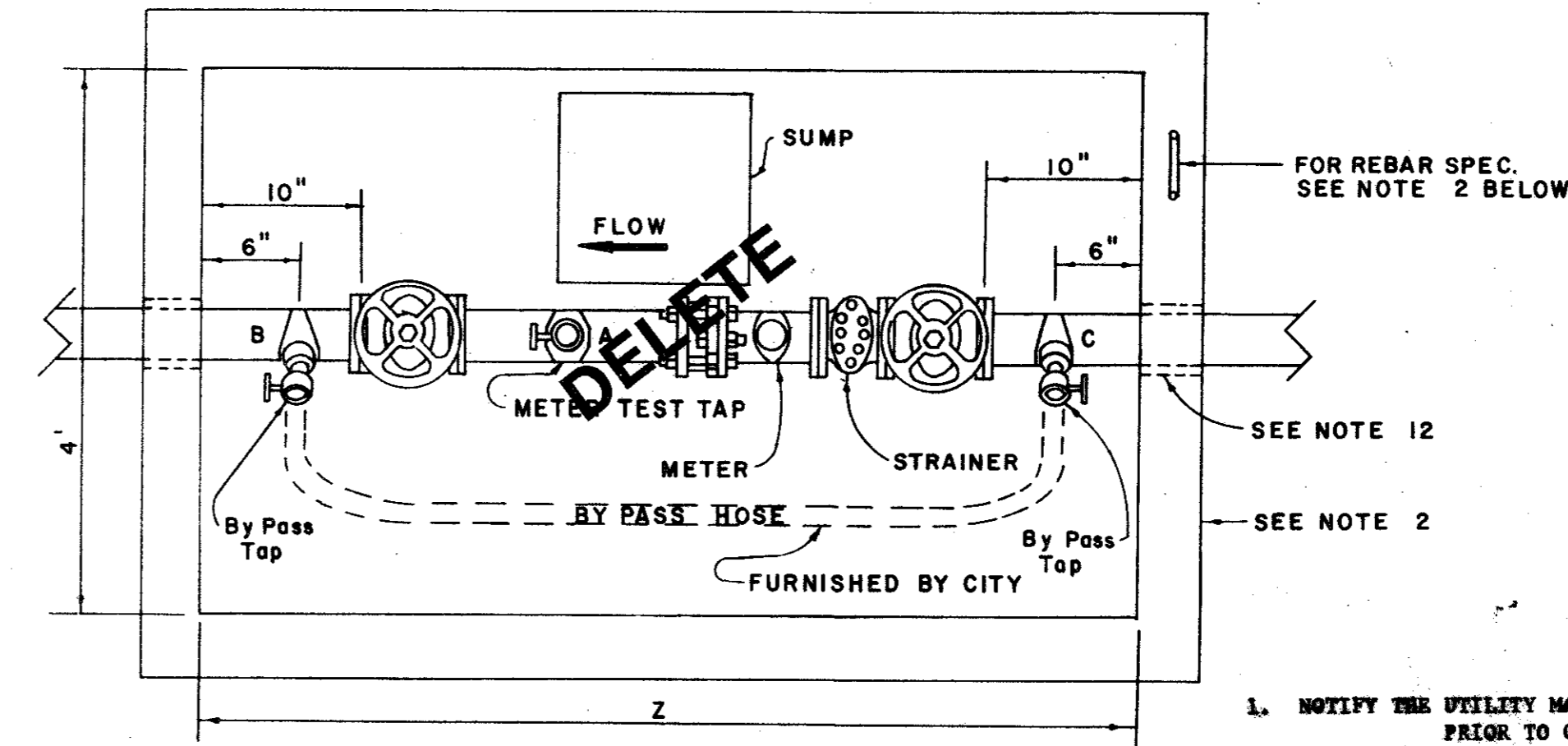
CLASS "1" EMB.

EMBEDMENT DETAILS



NOTE: CONCRETE ENCASEMENT SHALL BEGIN AND END 6 INCHES FROM THE END OF A JOINT

CONCRETE ENCASEMENT

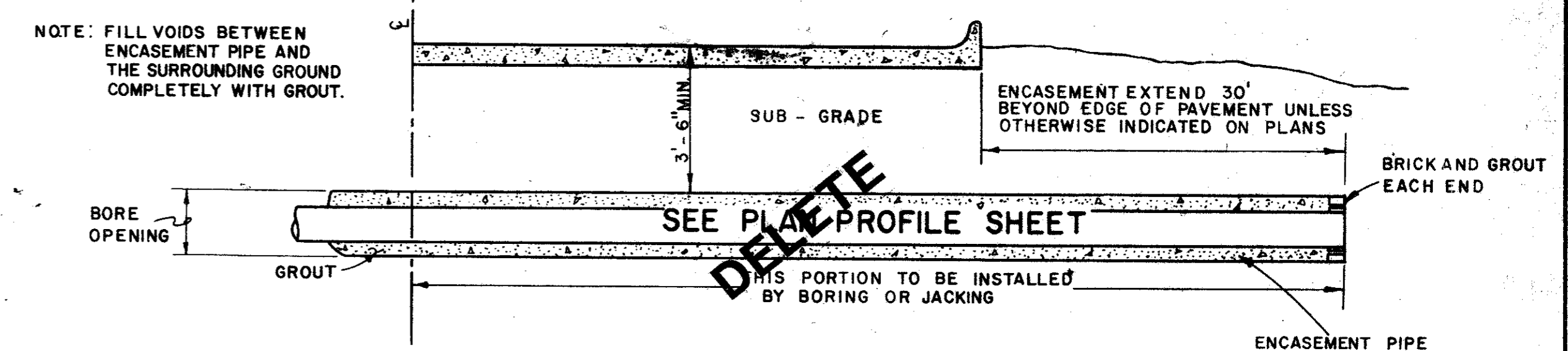


DIMENSION FOR 3", 4", & 6" M.V.

MIN. DIMENSION	3"	4"	6"
V	8"	10.5"	18"
W	20"	23"	27"
X	9"	9"	12"
Y	6'-1"	7'	7'-5"
Z	6'-1"	7'	7'-5"

METER VAULT & BY-PASS SPECIFICATIONS

- NOTIFY THE UTILITY MAINTENANCE DEPARTMENT PRIOR TO CONSTRUCTION OF VAULT OR BY-PASS ASSEMBLY.
- THE METER VAULT CAN BE EITHER POURED IN PLACE OR PREFABRICATED. CONCRETE SHALL BE 6" THICK AND BE 3000 PSI REINFORCED WITH #4 STEEL BARS ON 12" CENTERS EACH WAY IF THE VAULT IS POURED IN PLACE. PREFABRICATED VAULTS SHALL BE 4" THICK AND BE 4500 PSI CONCRETE #4 STEEL BARS ON 8" CENTERS. THESE ARE MINIMUM SPECIFICATIONS.
- THE VAULT WILL NOT BE PUT IN ANY DRIVE OR PARKING AREAS AND MUST BE LOCATED IN A UTILITY EASEMENT.
- A DRAWING WITH THE EXACT MEASUREMENTS OF THE METER VAULT AND BY-PASS WILL BE GIVEN TO THE CONTRACTOR FOR A 3", 4" AND 6" METER.
- THE VAULT LID SHALL BE A BELLO LID, TYPE Q-4 SINGLE LEAF DESIGN, ANGLE FRAME IS 1/2" STEEL WITH STRAP ANCHORS BOLTED TO THE EXTERIOR. THE LEAF IS 1/2" STEEL DIAMOND PATTERN PLATE, PIVOTING ON TONSON BARS FOR EASY OPERATION. THE MINIMUM LIVE LOAD CAPACITY IS 150 LBS. PER SQUARE FOOT. THE SIZE OF THE LID IS 3'x3'.
- THE LID SHALL BE PAINTED WITH 43-36 TYPING DIFFERENT ALUMINUM PAINT OR APPROVED EQUAL.
- CONTRACTOR SHALL MAKE 3 TAPS INSIDE THE VAULT. TAP A MUST BE AT LEAST TWO PIPE DIAMETERS DOWNSTREAM OF METER AND MUST BE 2". TAPS B & C MUST BE MADE AT APPROXIMATELY 45° ANGLE ON EACH END OF THE PIPING BEFORE IT INTERSECTS THE WALL. CONTRACTOR SHALL FURNISH MUELLER NO. 8-10499 FOR 3"x2", MUELLER NO. 8-10604 FOR 4"x2", AND MUELLER NO. 8-10508 FOR 6"x2", OR APPROVED EQUAL SERVICE TAPPLERS, BRASS TAPPLERS AND NO. 7500 GREG BRASS OR APPROVED EQUAL GATE VALVES.
- THE STRAINER, METER, AND FURNISHING COUPLERS WILL BE PROVIDED AND INSTALLED BY THE TOWN OF ADDISON AT THE CONTRACTOR'S EXPENSE.
- THE STRAINER, METER AND FURNISHING COUPLERS WILL NOT BE SET UNTIL THE METER VAULT AND TAPS ARE ACCEPTED BY THE TOWN OF ADDISON, UTILITY MAINTENANCE DEPARTMENT.
- THE GATE VALVES ARE REQUIRED TO BE MODEL A-2370-2 FLANGED EIGHT-PORT GATE VALVES.
- THE BOTTOM OF THE METER VAULT MUST BE 4" THICK CONCRETE WITH A MIN. OF 11" CENTER TO CENTER 4" DIA. REBAR UNDERLAPPING A MIN. OF 6" AND 12" IN DIAMETER SHALL BE INSTALLED TO ONE SIDE OF THE CENTER OF THE BOTTOM SLAB. IF PREFABRICATED IN FIELD WHEN THE JOINTS JOIN THE TRENCH, A LAYER OF BURGLAP SHALL BE USED TO SEAL THE JOINT.
- CONTRACTOR SHALL HAVE A CHOICE OF EITHER HAVING A LINE SHAL UNL SLABE MADE, NO-2-32-2-4 FOR 4" DIA. DIA. NO-2-32-2-4 OR NO-12-37-2-2" FOR 6" PIPE CAST IN THE VAULT OR HAVE THE VAULT WALL GATED BEFORE INSTALLATION OF VAULT AND PIPING. IN EITHER CASE, A LINE SHAL MODEL NO. 12-408-C MUST BE USED TO SEAL THE ANGULAR SPACE BETWEEN THE PIPE AND THE WALL. THE BOTTOM OF THE WALL WITH A MINIMUM OF 2" IS REQUIRED.
- UNDER EACH VALVE WILL BE A CONCRETE SUPPORT.
- DEPTH OF VAULT SHALL BE A MINIMUM OF 4' FEET.



HALF-SECTION TYPICAL HIGHWAY CROSSING NO SCALE

NOTE: ENCASEMENT PIPE MAY BE ELIMINATED FOR CITY STREETS.

TABLE OF QUANTITIES OF MATERIALS IN CUBIC YARDS PER 100 LINEAR FEET						
INSIDE DIAMETER OF PIPE	APPROX. OUTSIDE DIAMETER OF PIPE	"X" IS A MINIMUM DEPTH	"B" TRENCH WIDTH FOR COMPUTATION OF QUANTITIES	CONCRETE		CRUSHED STONE FOR CL" EMBEDMENT
				FOR EMBEDMENT	FOR ENCASEMENT	
REINFORCED CONCRETE CYLINDER PIPE						
14"	17.25"	2.53'	34"	6.91	16.07	5.16
16"	19.38"	2.84'	36"	7.50	17.76	5.64
18"	21.78"	3.19'	38"	8.11	19.52	6.16
24"	27.75"	4.06'	44"	9.97	24.90	9.28

RECORD DRAWING

NO.	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
WATER PIPE DETAILS			
APPROVED		H. WAYNE GINN, P.E.	
DATE MARCH, 1984		SHEET SD-17	

