

WOLFE BRANCH UTILITY DISTRICT

MORGAN & ROANE COUNTIES, TENNESSEE

WATERWORKS PROJECT

CONTRACT NO. 1

WATER DISTRIBUTION SYSTEMS ADDITIONS

INDEX OF DRAWINGS

DWG. NO.

COVER SHEET	390-1-1
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BOARD OF COMMISSIONERS

FRED NEWCOMB, CHAIRMAN

PAUL SCARBROUGH, SECRETARY

HOLLIS EBLE, COMMISSIONER

DONALD PAINTER, MANAGER

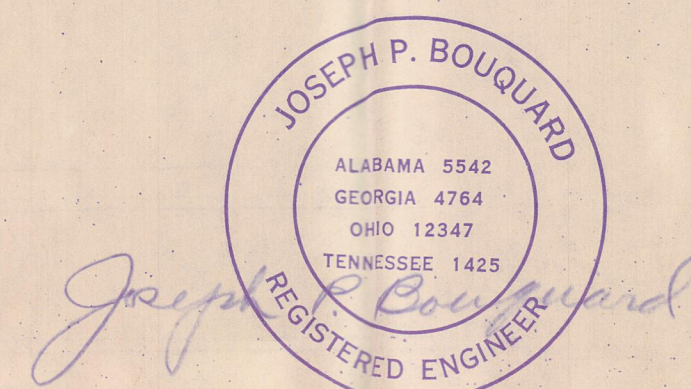
U.S. DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION

WILLIAM PATTERSON—COUNTY SUPERVISOR

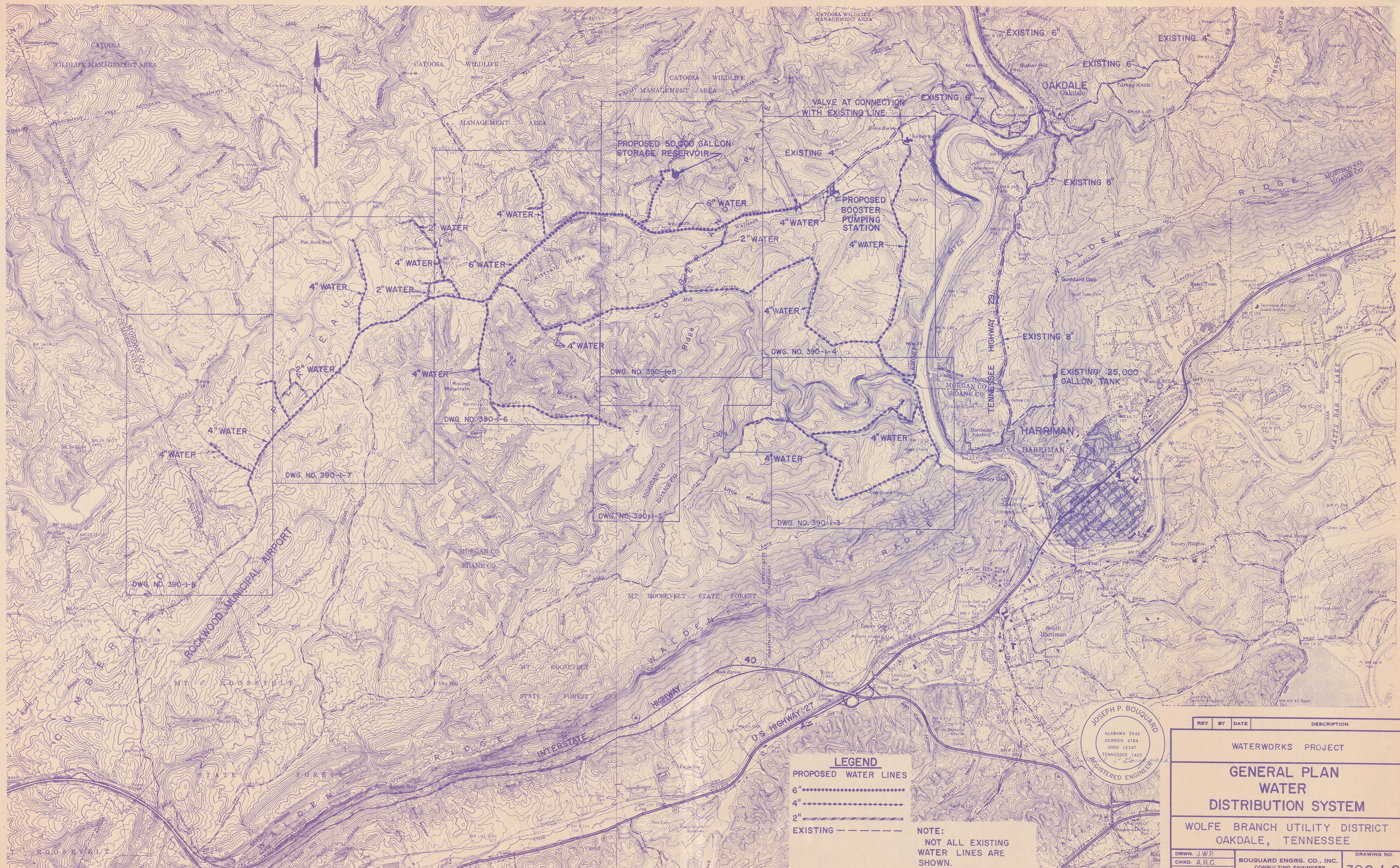
APPROVED *F. Newcomb*
WOLFE BRANCH UTILITY DISTRICT

PREPARED BY
BOUQUARD ENGINEERING CO., INC.

CHATTANOOGA, TENNESSEE
APRIL 1976



SET NO. _____

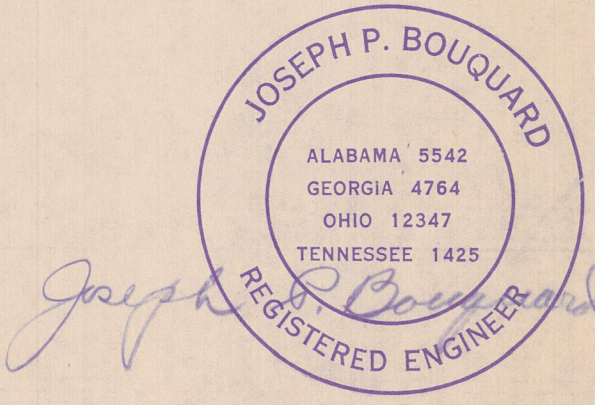


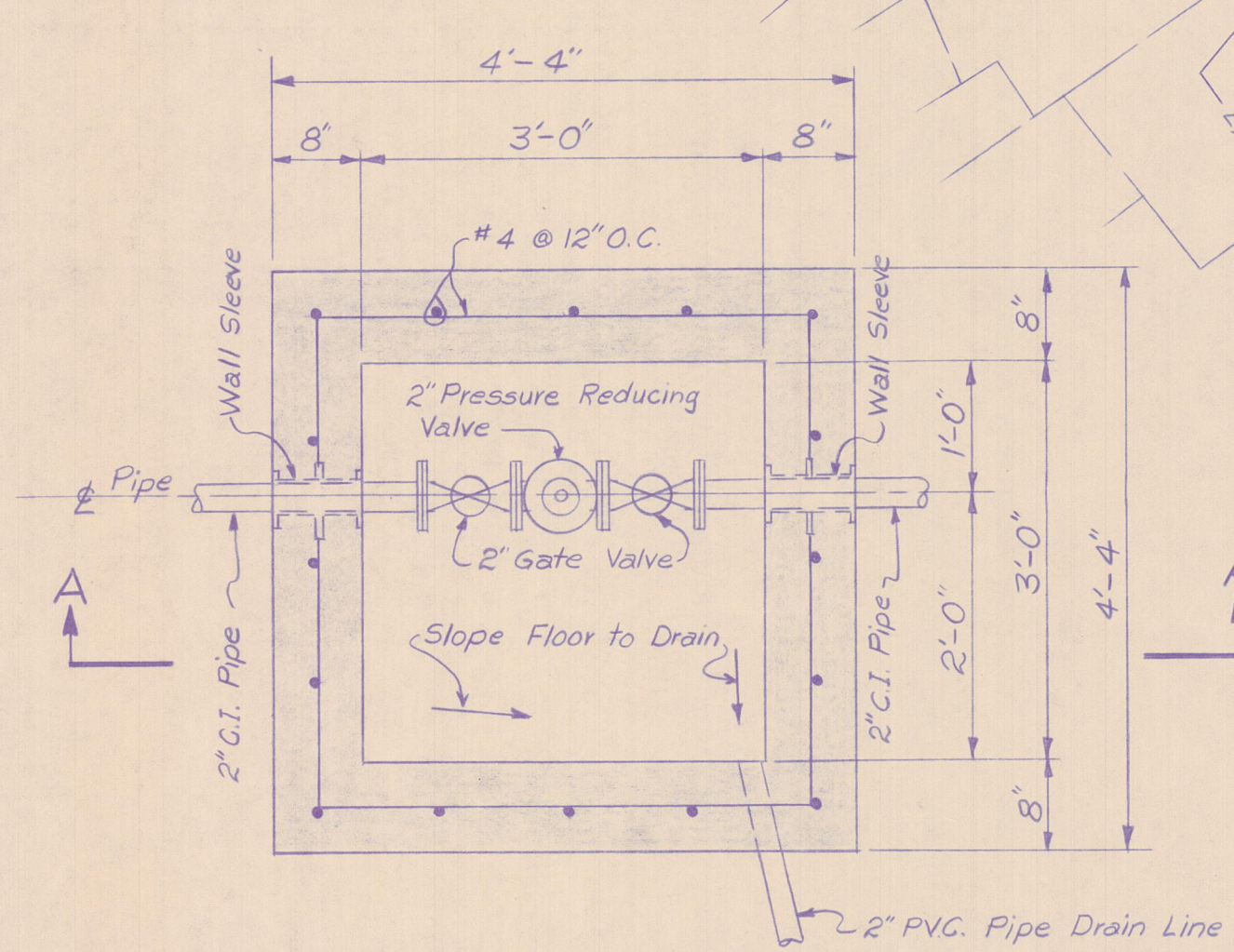
LEGEND
PROPOSED WATER LINES
6"
4"
2"
EXISTING - - - - -

NOTE:
NOT ALL EXISTING
WATER LINES ARE
SHOWN.

JOSEPH P. BOUQUARD
ALABAMA 5542
GEORGIA 4764
OHIO 12347
TENNESSEE 1425
REGISTERED ENGINEER

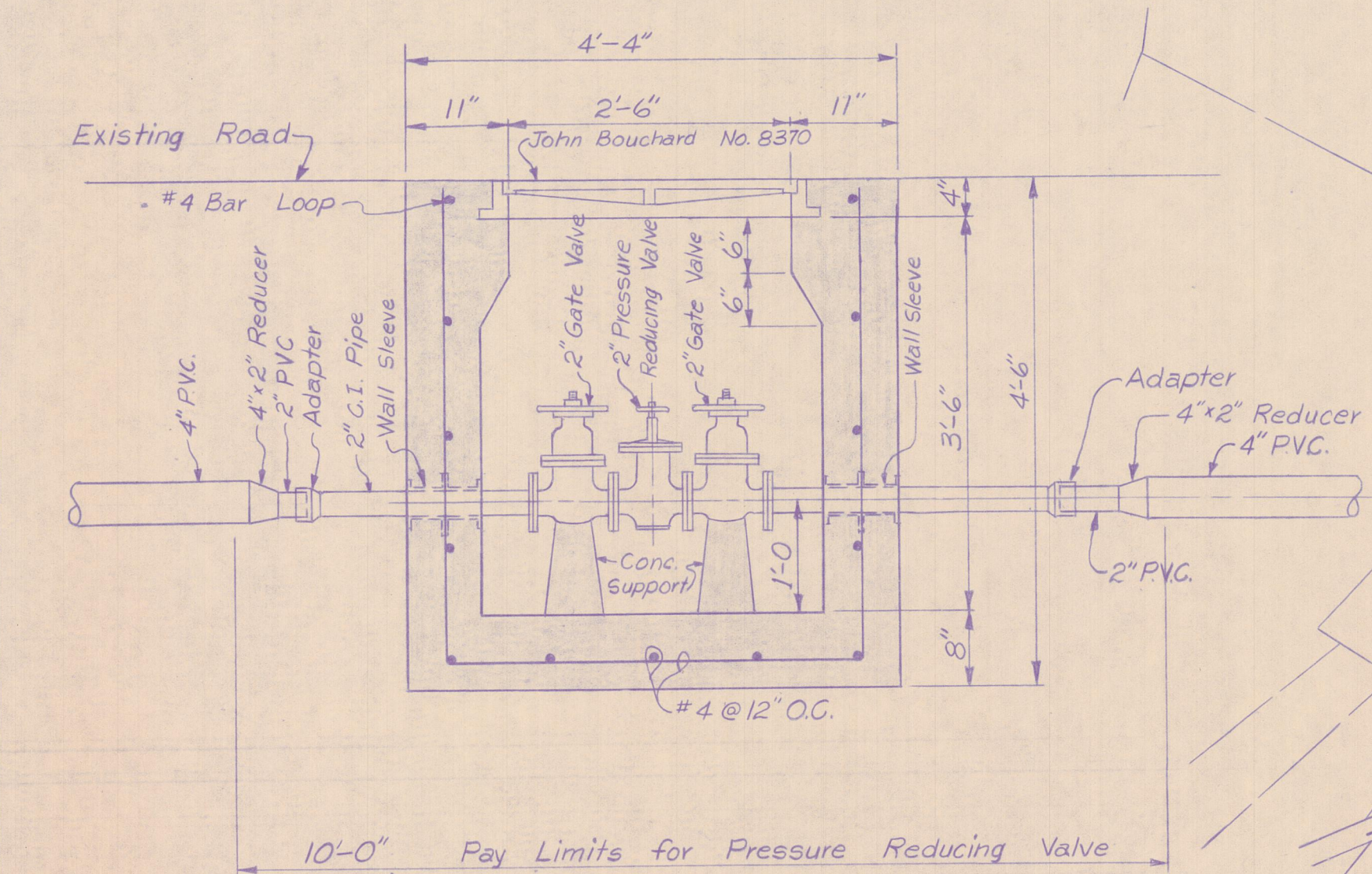
REV	BY	DATE	DESCRIPTION
WATERWORKS PROJECT			
GENERAL PLAN WATER DISTRIBUTION SYSTEM			
WOLFE BRANCH UTILITY DISTRICT OAKDALE, TENNESSEE			
DRWN. J.W.P.	BOUQUARD ENGRG. CO., INC.		DRAWING NO.
CHKD. A.R.C.	CONSULTING ENGINEERS		390-1-2
DATE APRIL 1976	CHATTANOOGA, TENNESSEE		
SCALE: 1"=2000'			

DIETZGEN



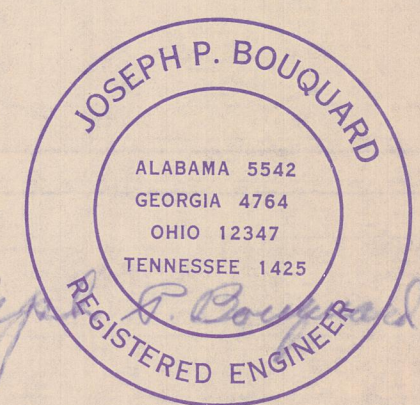
SECTIONAL PLAN
Scale: 3/4"=1'-0"

PRESSURE REDUCING VALVE DETAILS



SECTION A-A
Scale: 3/4"=1'-0"

MATCH LINE "B" Scale: 1"=400' DWG. NO. 390-1-5



REV	BY	DATE	DESCRIPTION
WATERWORKS PROJECT			
WATER DISTRIBUTION SYSTEM			
SHEET 2 OF 6			
WOLFE BRANCH UTILITY DISTRICT OAKDALE, TENNESSEE			
DRWN. G.W.P.		DRAWING NO.	
CHKD. A.R.C.		BOUQUARD ENGRG. CO., INC.	
DATE APRIL 1976		CONSULTING ENGINEERS	
SCALE: NOTED		CHATTANOOGA, TENNESSEE	
		390-1-4	

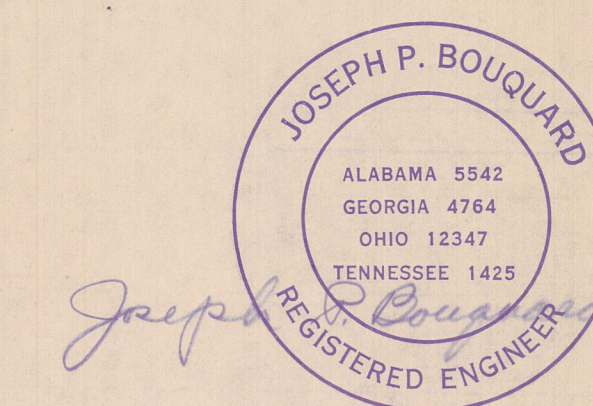
DWG. NO. 390-1-3
MATCH LINE "A"



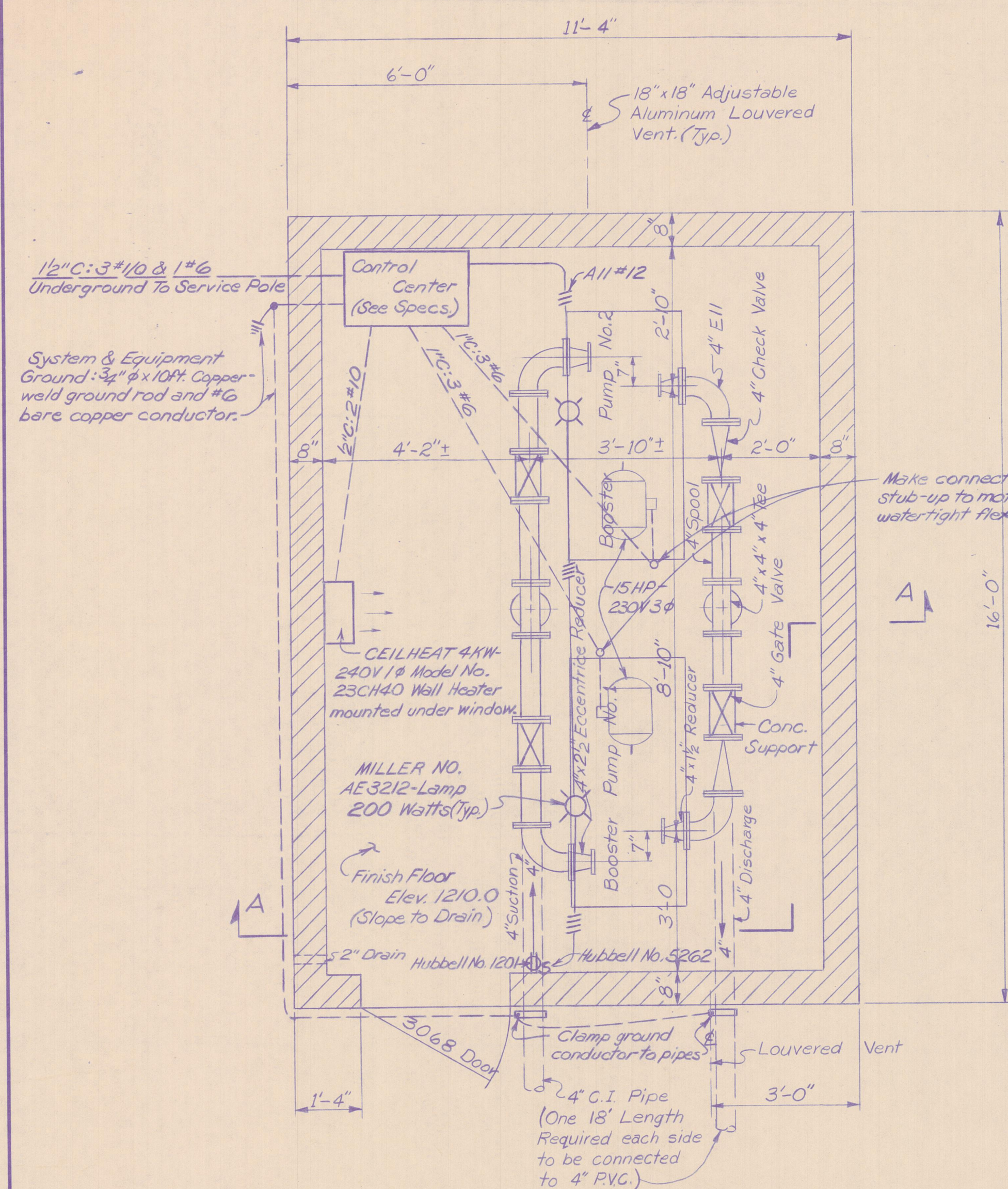
REV		BY	DATE	DESCRIPTION
WATERWORKS PROJECT				
WATER DISTRIBUTION SYSTEM				
SHEET 4 OF 6				
WOLFE BRANCH UTILITY DISTRICT OAKDALE, TENNESSEE				
DRWN. G.W.P.		CHKD. A.R.C.		DRAWING NO.
DATE APRIL 1976		BOUQUARD ENGRG. CO., INC.		390-I-6
SCALE: 1"=400'		CONSULTING ENGINEERS CHATTANOOGA, TENNESSEE		

MATCH LINE "F"

DWG. NO. 390-I-7

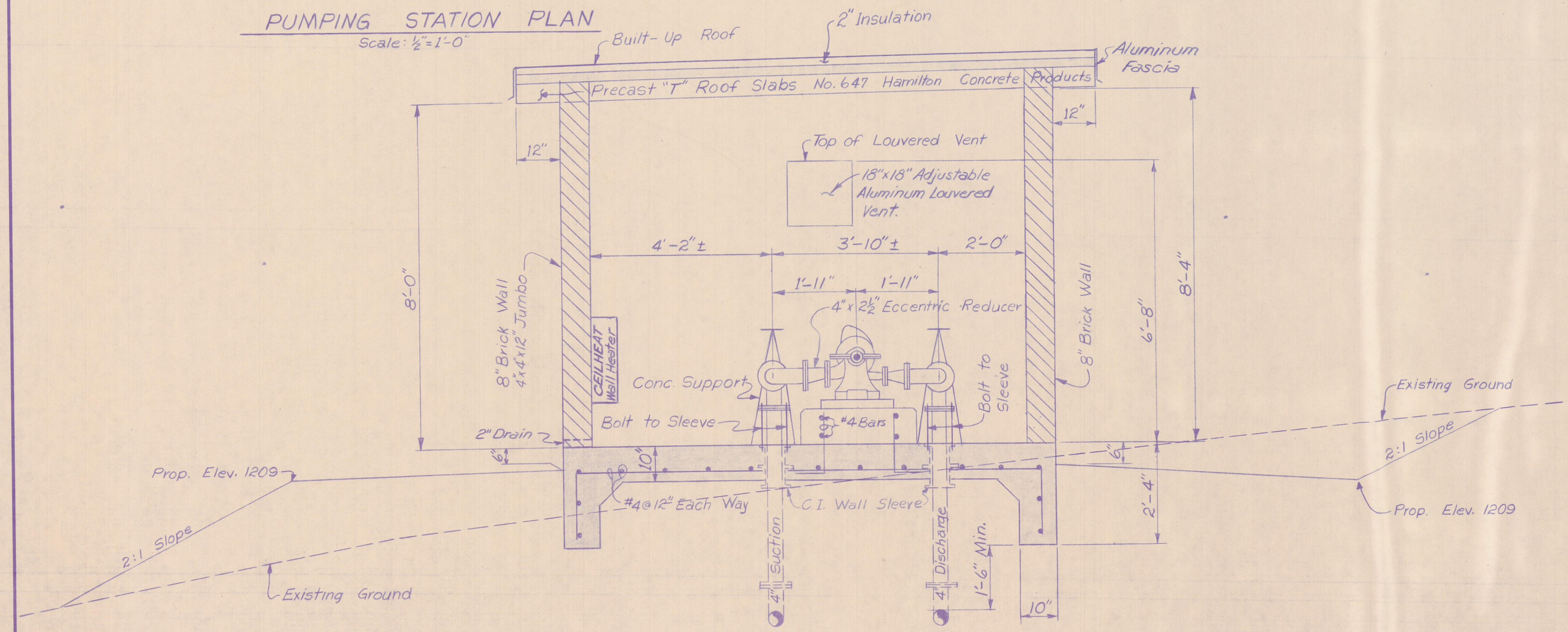


REV	BY	DATE	DESCRIPTION
WATERWORKS PROJECT			
WATER DISTRIBUTION SYSTEM SHEET 6 OF 6 WOLFE BRANCH UTILITY DISTRICT OAKDALE, TENNESSEE			
DRWN. G.W.P.	BOUQUARD ENGR. CO., INC.		DRAWING NO.
CHKD. A.R.C.	CONSULTING ENGINEERS		390-I-8
DATE APRIL 1976	CHATTANOOGA, TENNESSEE		
SCALE: 1"=400'			

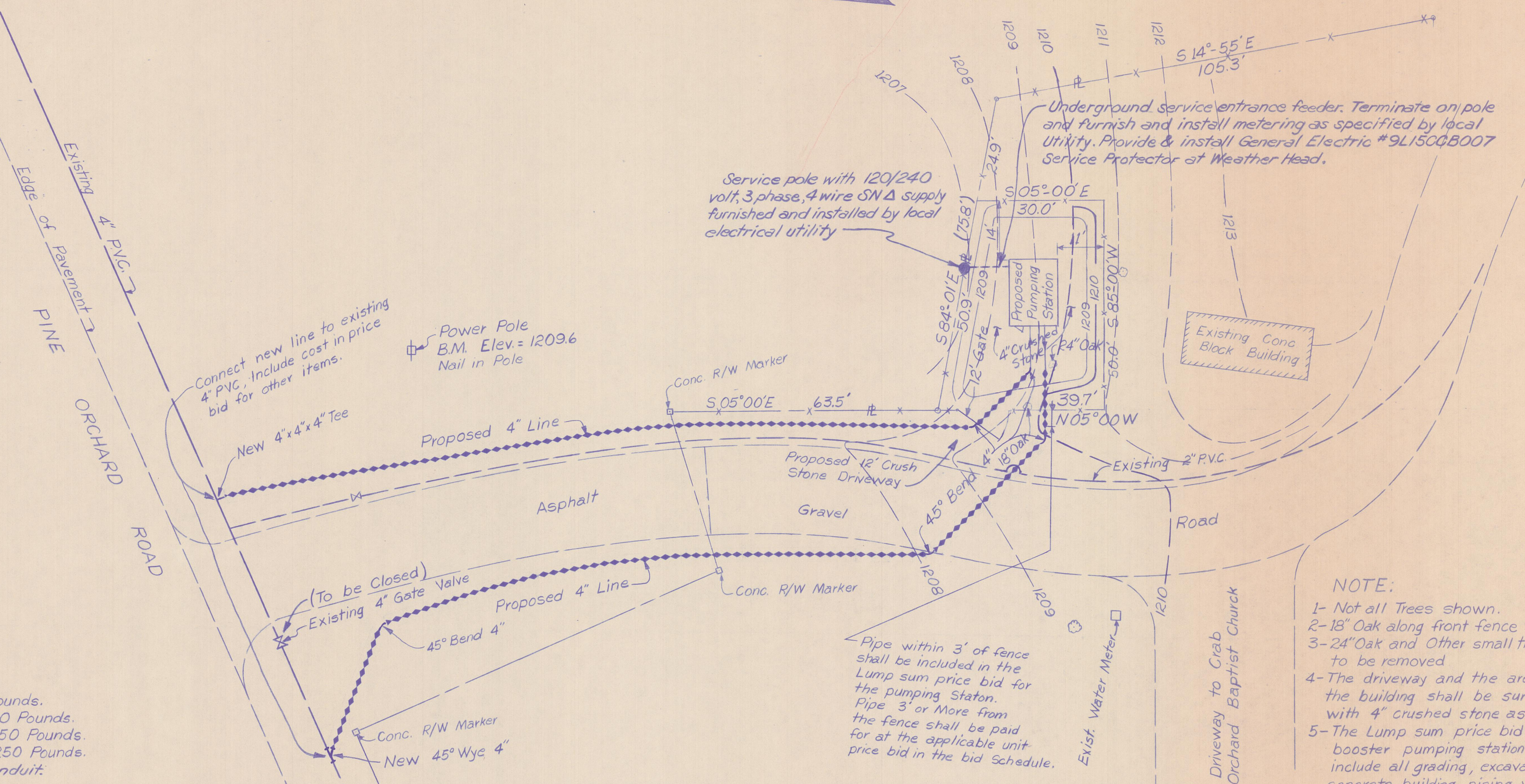


PUMPING STATION PLAN
Scale: 1/2"=1'-0"

NOTE:
1- Suction flanges to be ASA 125 Pounds.
2- Suction Valves to be AWWA 150 Pounds.
3- Discharge flanges to be ASA 250 Pounds.
4- Discharge Valves to be AWWA 250 Pounds.
5- All Wiring shall be in Galv. Rigid Conduit.
6- Valves and Fitting shall have suitable supports.



SECTION A-A
Scale: 1/2"=1'-0"



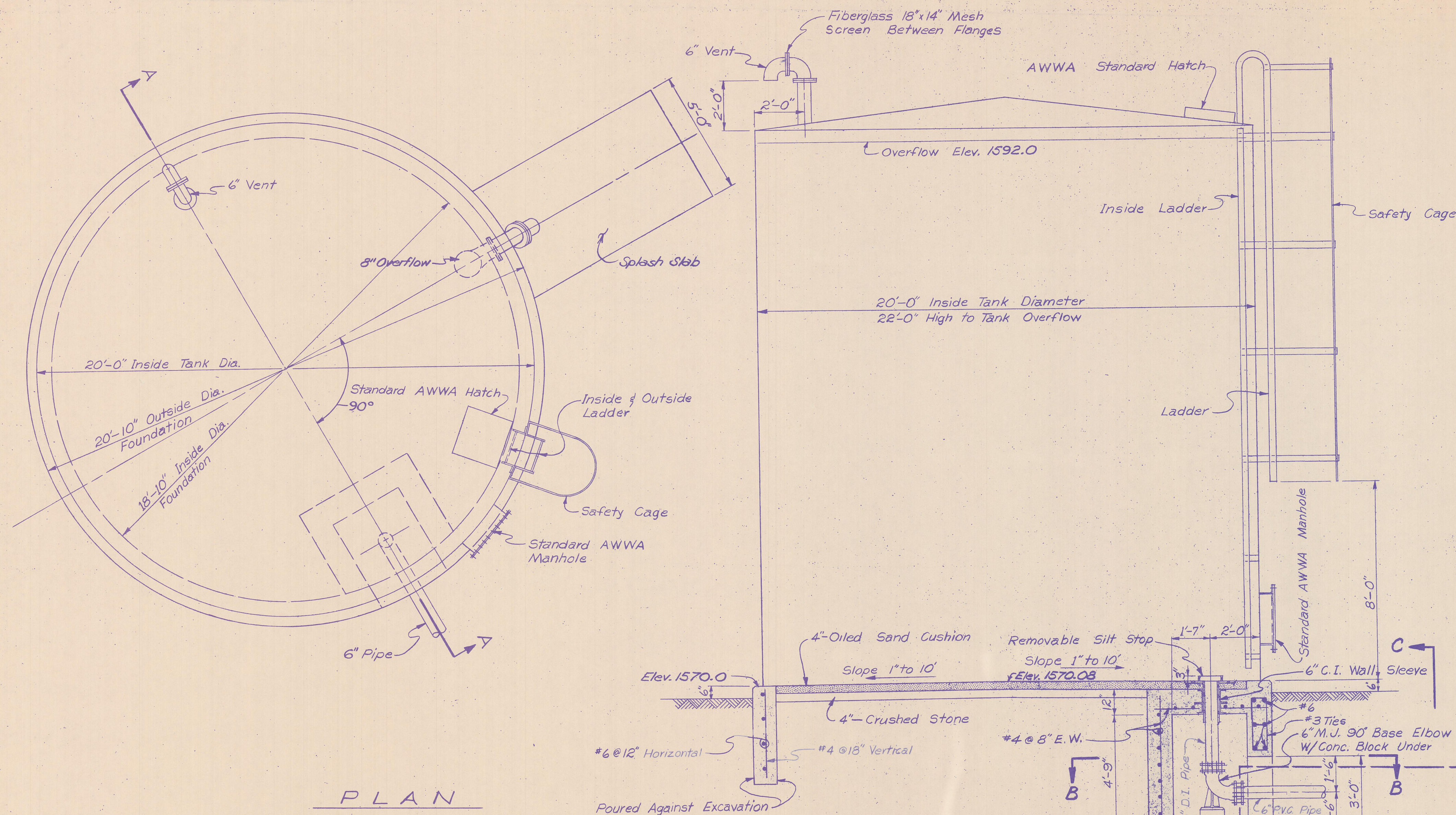
SITE PLAN
Scale: 1"=20'-0"

NOTE:
1- Not all Trees shown.
2- 18" Oak along front fence to remain.
3- 24" Oak and Other small trees to be removed.
4- The driveway and the area around the building shall be surfaced with 4" crushed stone as shown.
5- The Lump sum price bid for the booster pumping station shall include all grading, excavation, concrete, building, piping, valves, pumps, controls, electrical, fencing and all other items required to provide a booster pumping station complete in place as shown on the plans and specifications.

Ref. FB. 65 P.25

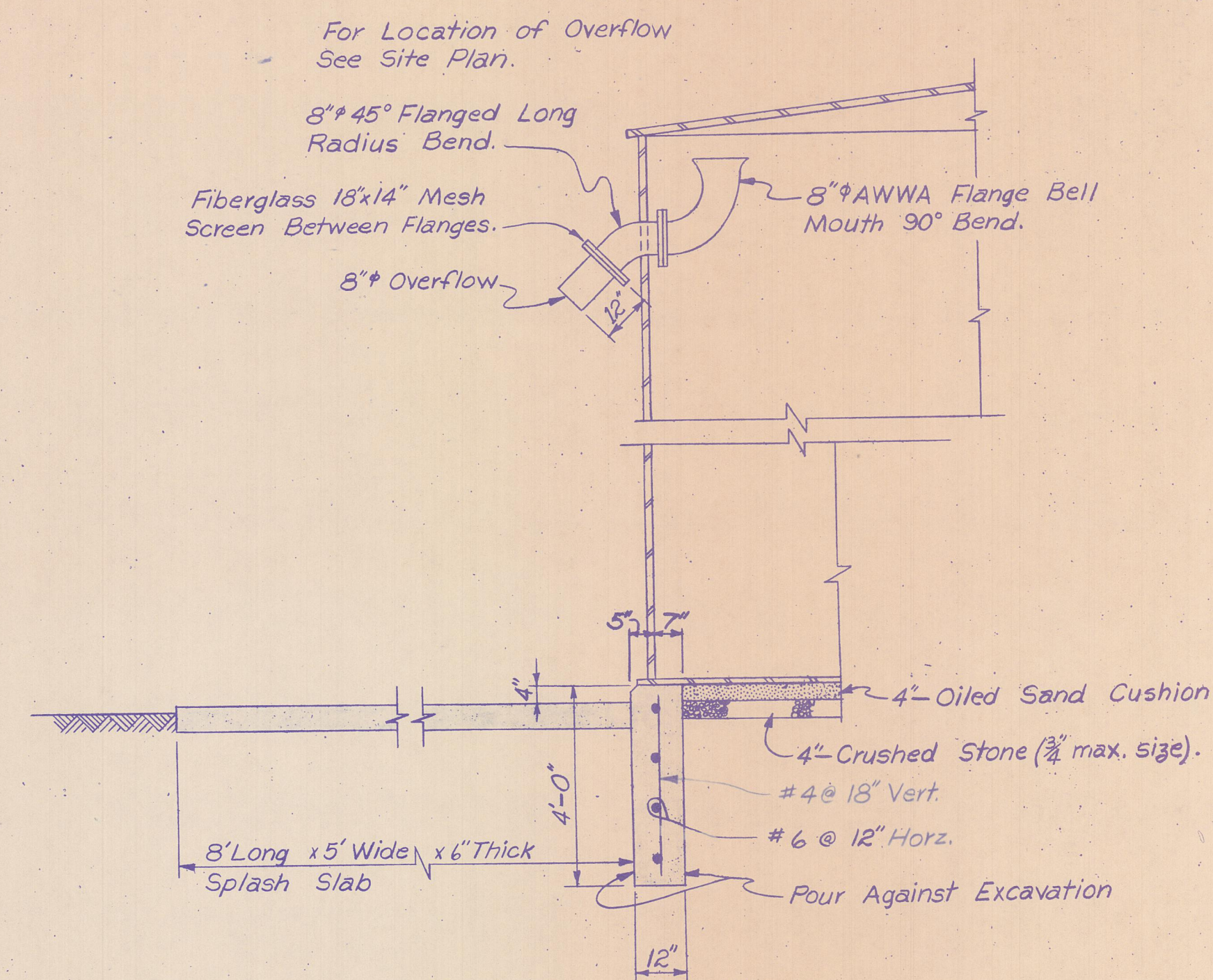
REV	BY	DATE	DESCRIPTION
WATERWORKS PROJECT			
BOOSTER PUMPING STATION			
WOLFE BRANCH UTILITY DISTRICT OAKDALE, TENNESSEE			
DRWN. G.W.P.		DRAWING NO.	
CHKD. A.R.C.		BOUQUARD ENGRG. CO., INC.	
DATE APRIL 1976		CONSULTING ENGINEERS	
SCALE NOTED		CHATTANOOGA, TENNESSEE	
		390-1-9	

JOSEPH P. BOUQUARD
ALABAMA 5542
GEORGIA 4764
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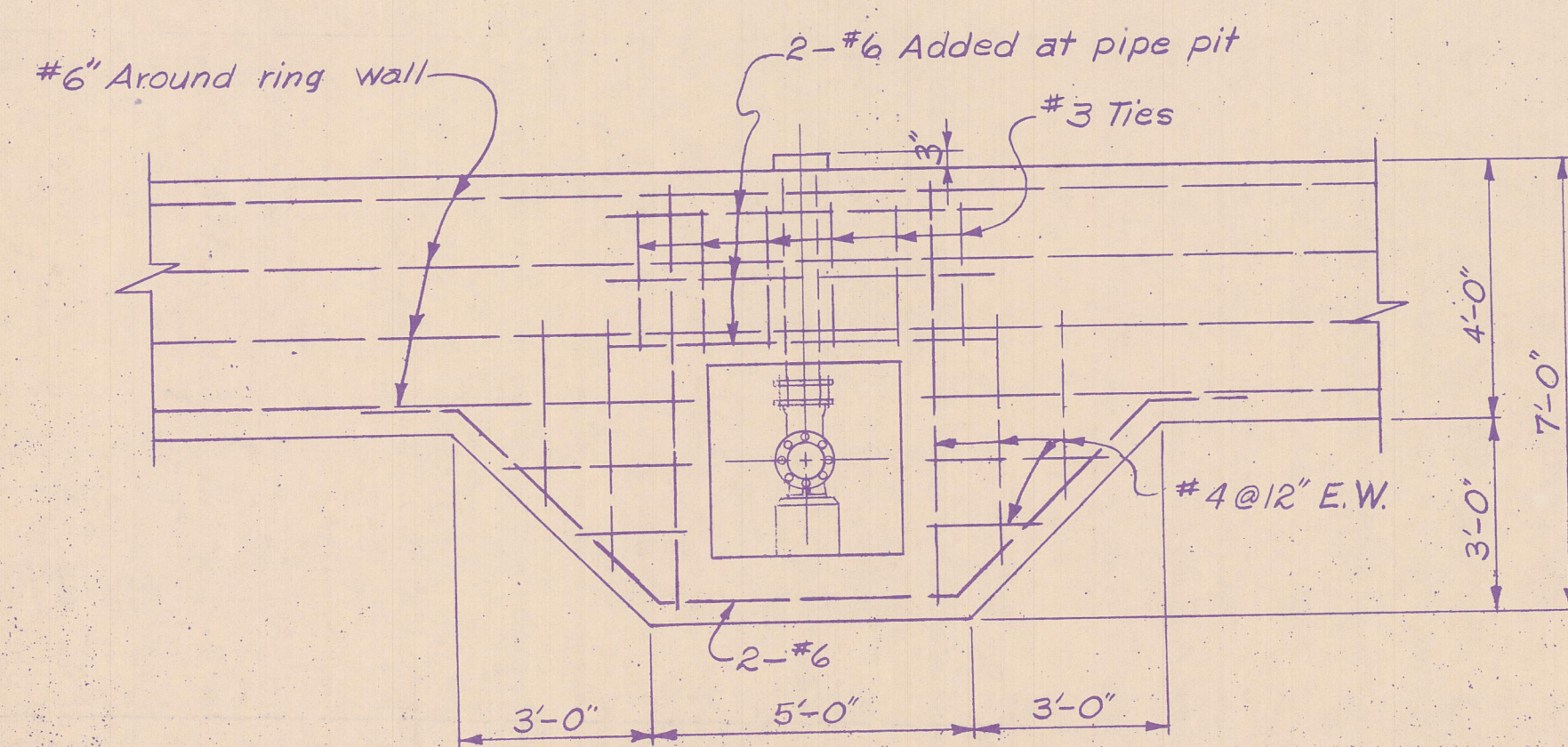


PLAN

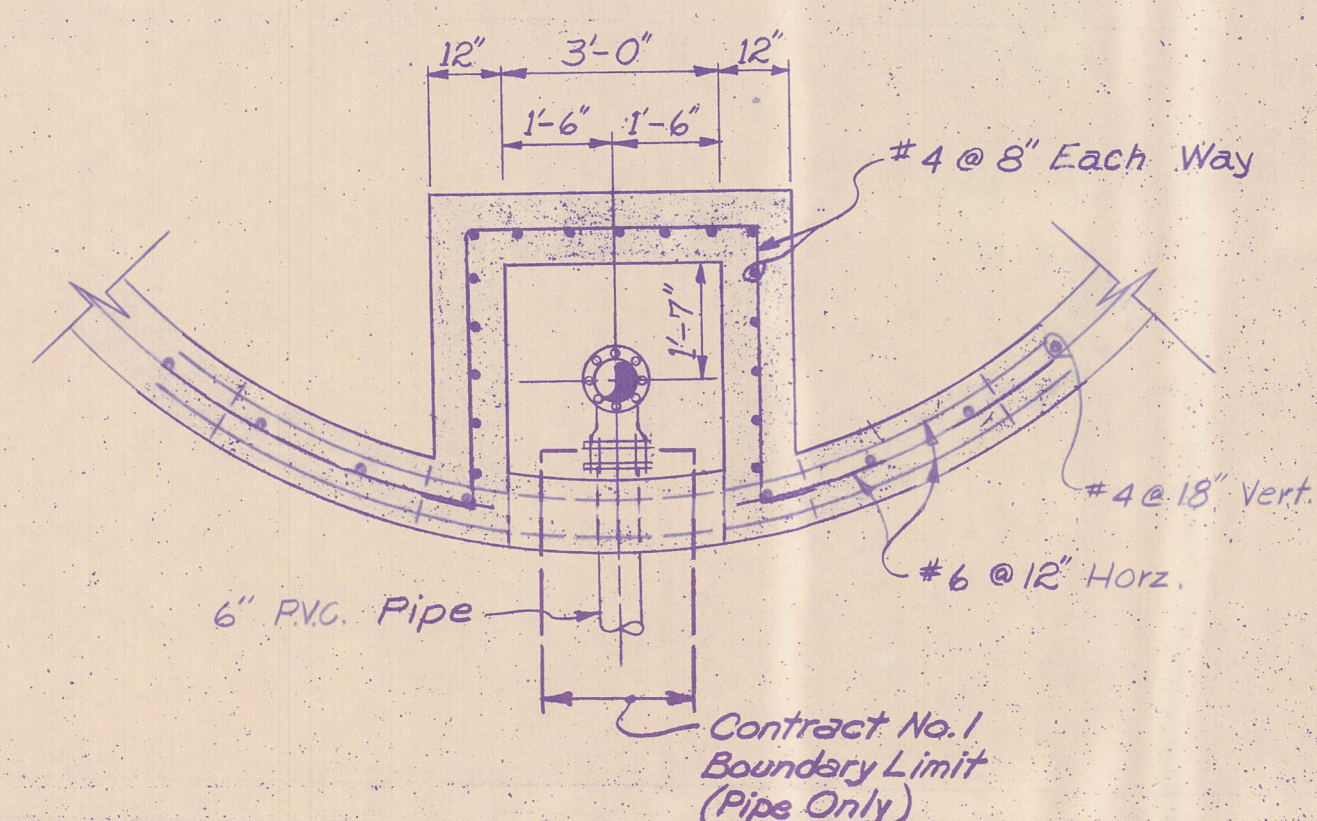
SECTION A-A



RINGWALL & OVERFLOW DETAIL



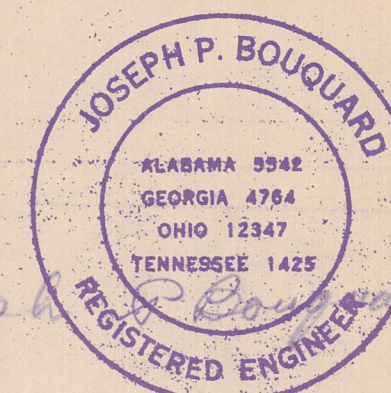
SECTIONAL ELEVATION C-C



SECTION B-B

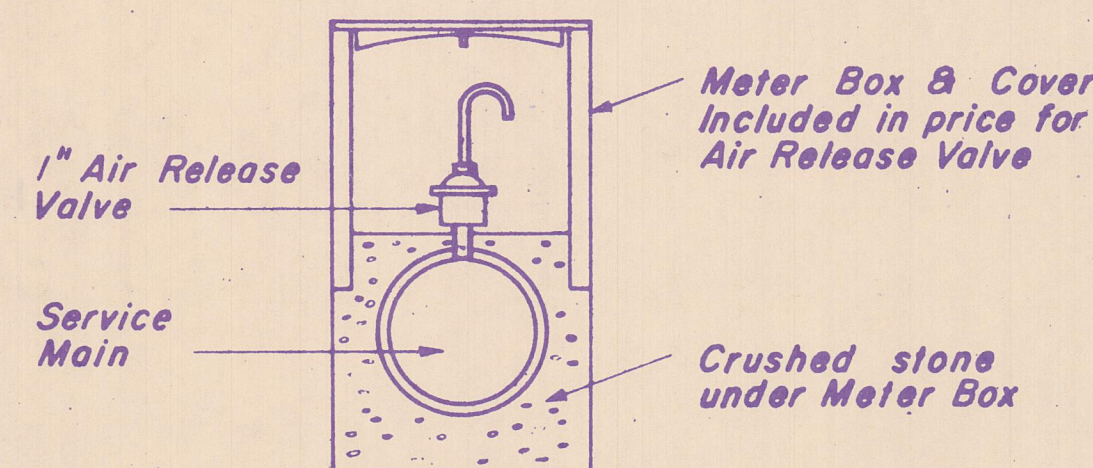
NOTE:

Alternate bids are being taken on a 15,000 Gallon Storage Reservoir 23'-6" Dia. x 24'-0" High. All dimensions to be adjusted to fit.

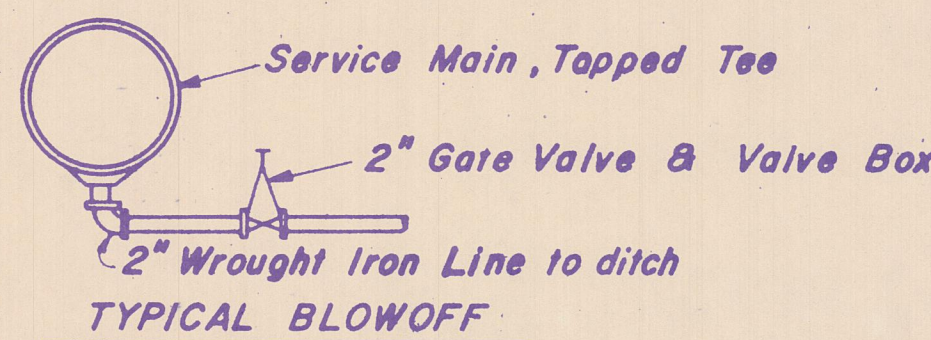


REV	BY	DATE	DESCRIPTION
WATERWORKS PROJECT			
50,000 GALLON STORAGE RESERVOIR			
WOLFE BRANCH UTILITY DISTRICT OAKDALE, TENNESSEE			
DRWN. G.W.P.	CHKD. A.R.C.	DATE APRIL 1976	SCALE 3/8" = 1'-0"
BOUQUARD ENGRG. CO., INC. CONSULTING ENGINEERS CHATTANOOGA, TENNESSEE			DRAWING NO. 390-I-10

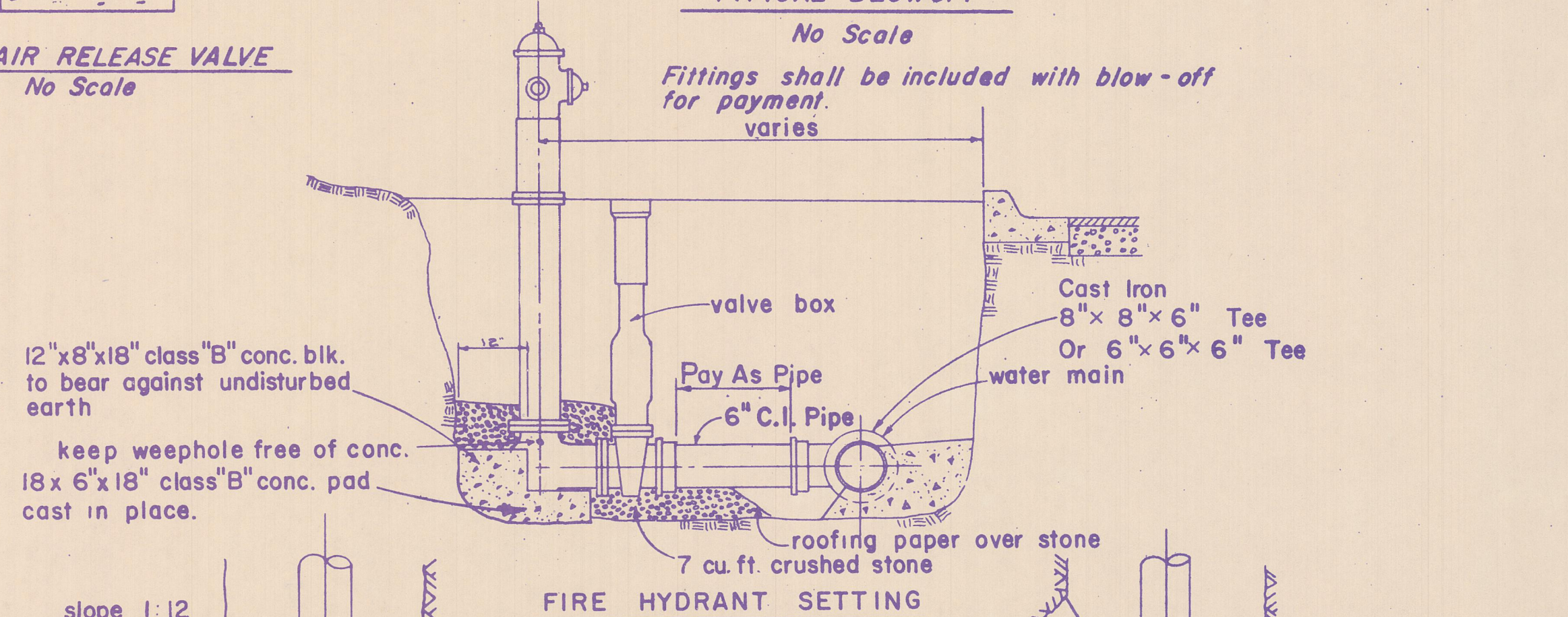
50,000 GALLON STORAGE RESERVOIR - 1 REQUIRED



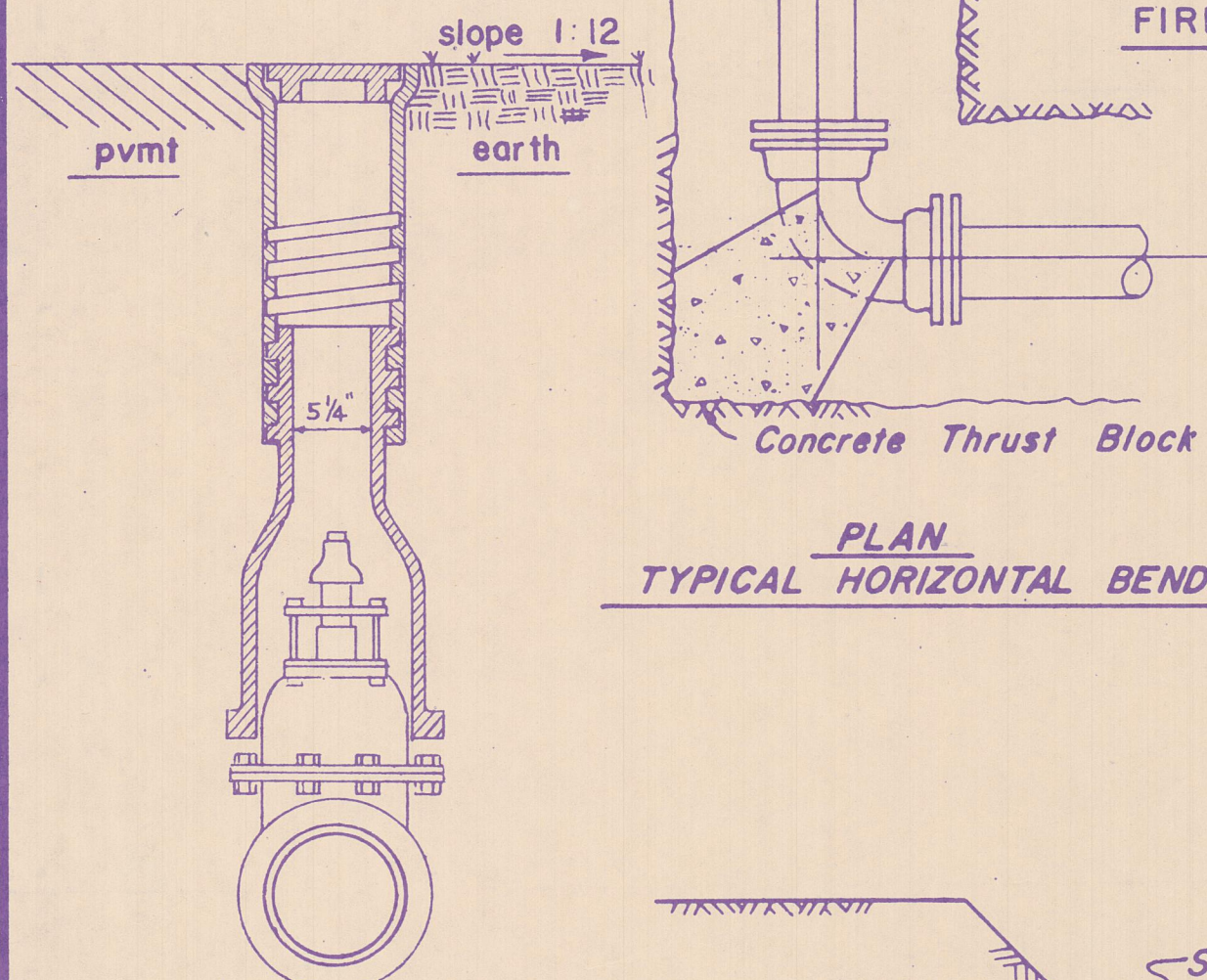
TYPICAL AIR RELEASE VALVE
No Scale



TYPICAL BLOWOFF

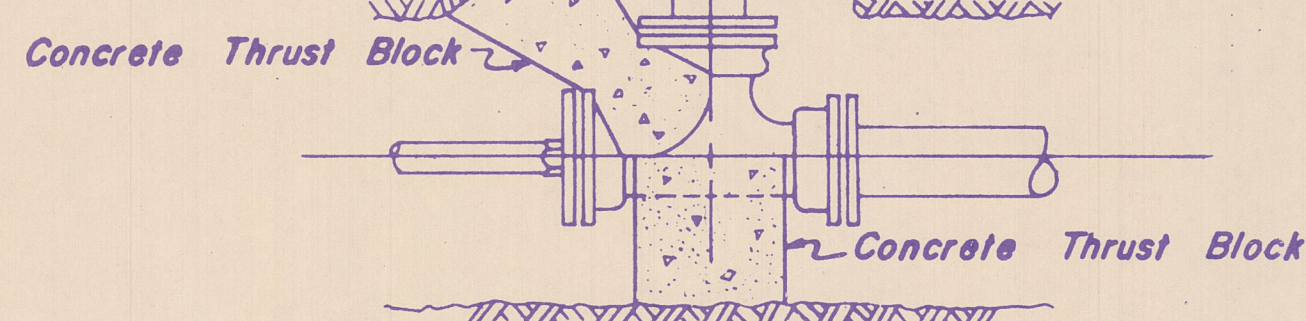


FIRE HYDRANT SETTING

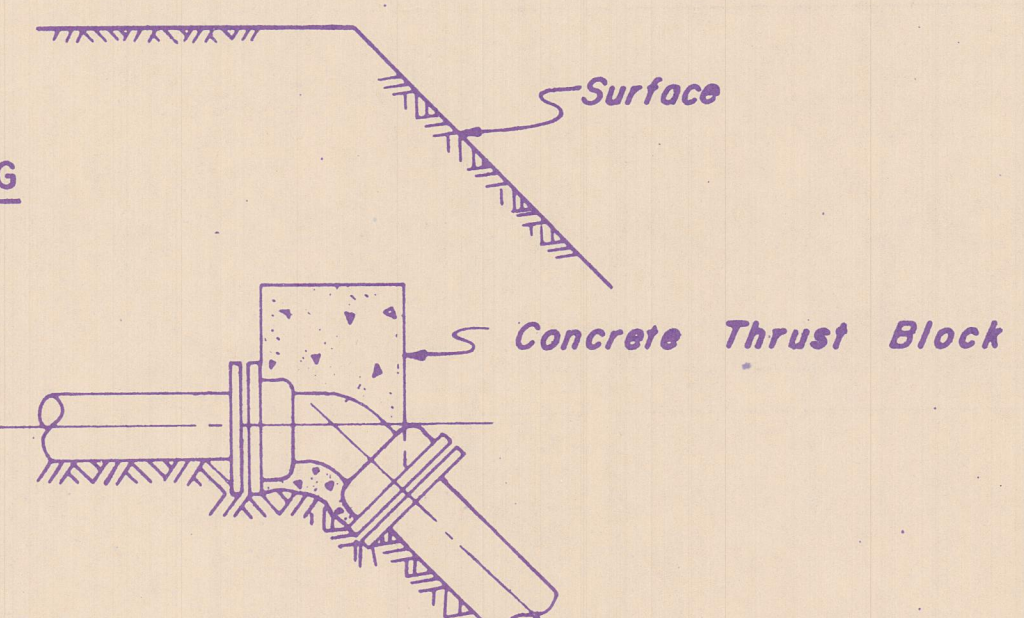


TYPICAL VALVE BOX SETTING

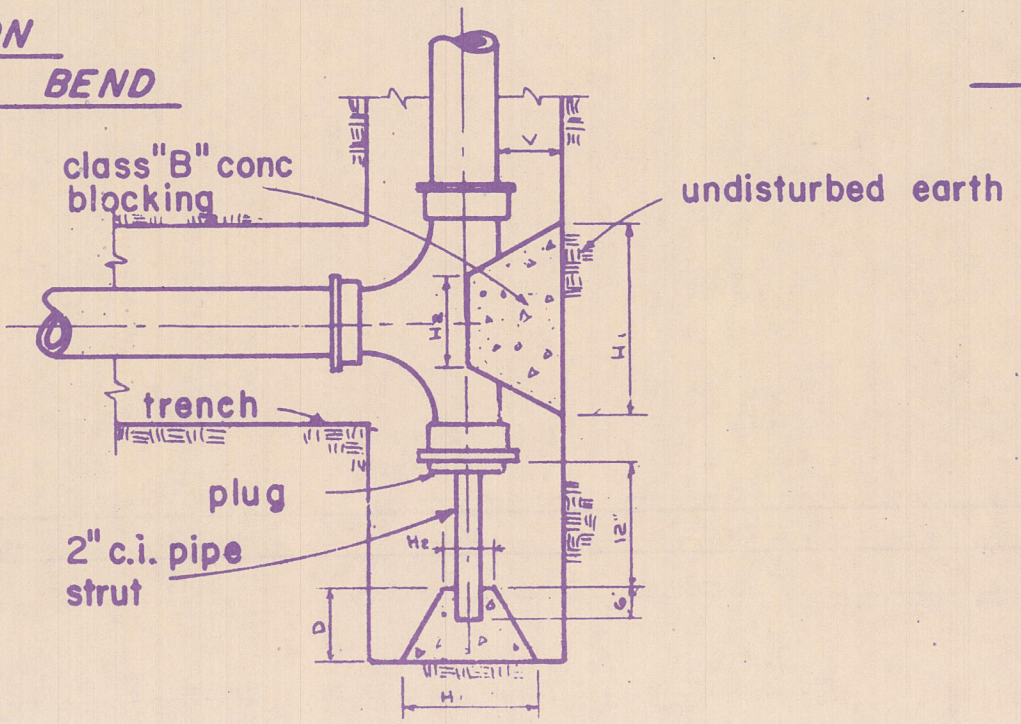
PLAN
TYPICAL HORIZONTAL BEND



PLAN
UNBALANCED TEE



ELEVATION
TYPICAL VERTICAL BEND



TEES AND PLUGS

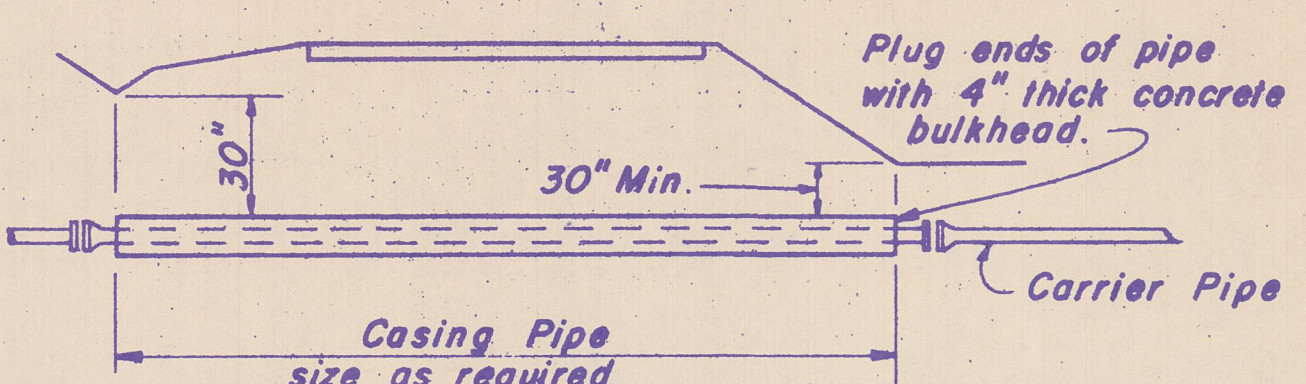
Table of dimensions for tee and plug conc. blocking

LINE SIZE	W.	H.	W.	H.	D.
6"	24"	16"	16"	16"	16"
8"	36"	24"	24"	24"	24"

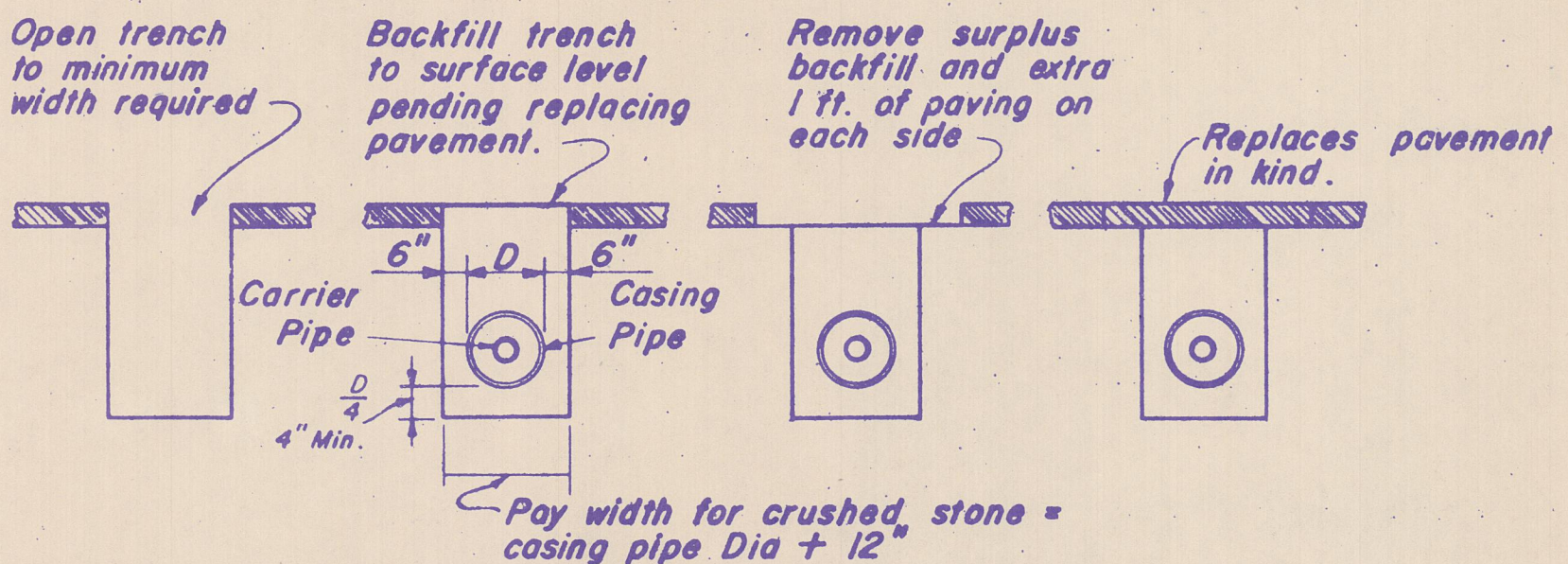
Note: other size pipe and fittings blocking to be adjusted proportionally. do not cover m.j. bolts or bell openings with conc.

PIPE SIZE

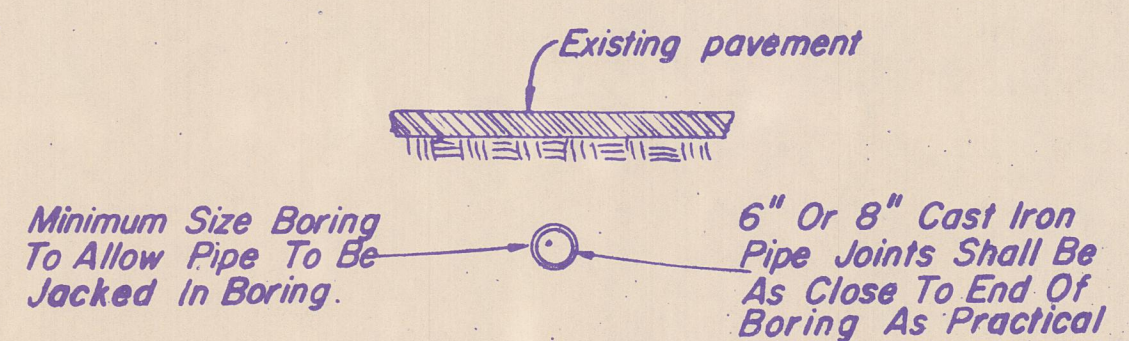
Carrier Pipe	Casing Pipe*	Wall Thickness
12"	24"	.375"
10"	20"	.3125"
8"	16"	.250"
6"	12"	.250"
4"	10"	.250"
3" A.C.	8"	.250"
2 1/2" C.I.	8"	.250"



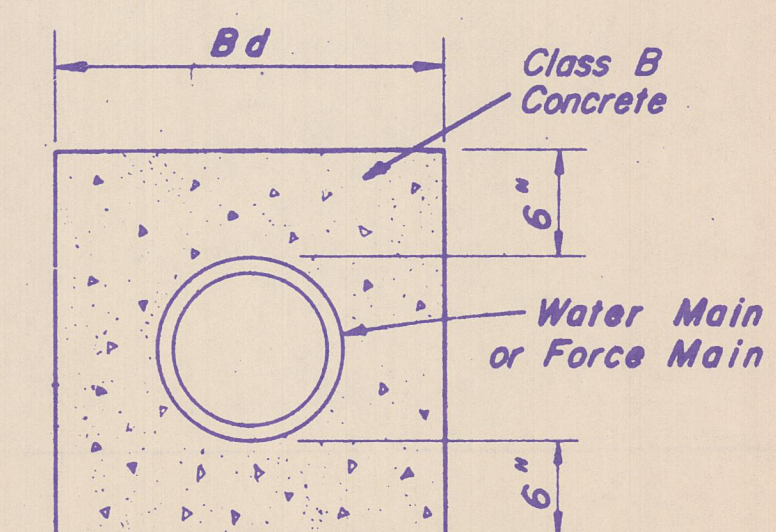
PROFILE
BORING OR JACKING
See NOTES



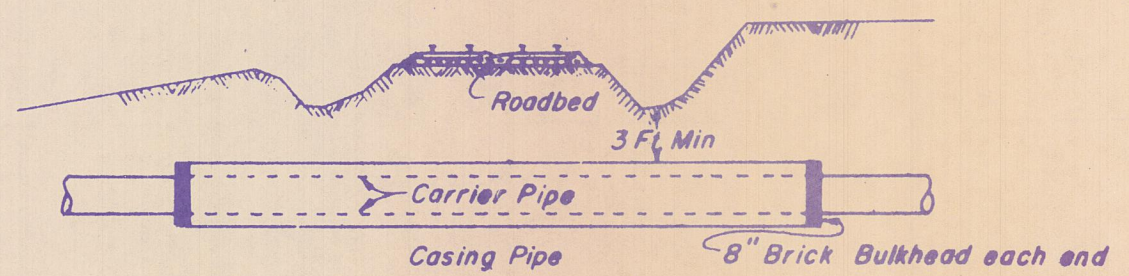
SECTION - OPEN CUT
See paragraph 3 under Notes
TYPICAL HIGHWAY CROSSING



BORING UNDER CITY STREETS - NO CASING

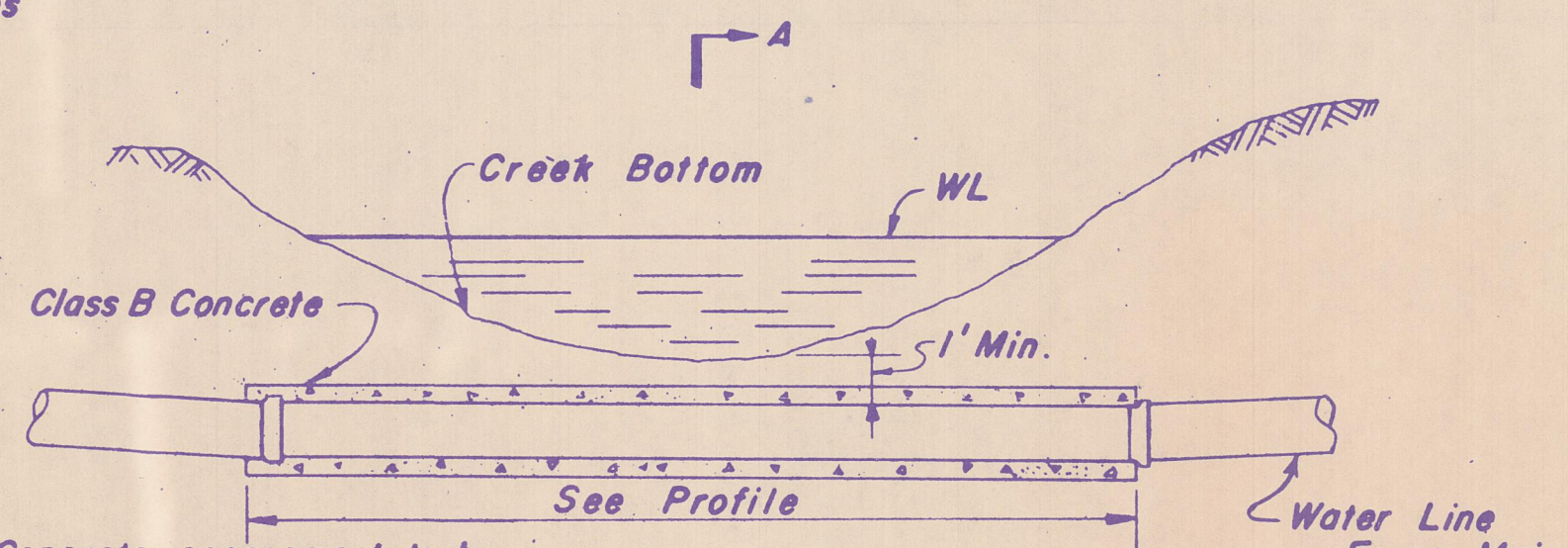


CONCRETE ENCASEMENT
SECTION A-A
No Scale



8" Carrier pipe 18" Casing pipe
250" Min. Wall Thickness
10" Carrier pipe 20" Casing pipe
281" Min. Wall Thickness

TYPICAL RAILROAD CROSSING



NOTE: Concrete encasement to be provided when directed by the Engineer

TYPICAL CREEK CROSSING
No Scale

NOTE: JOINT DEFLECTION ON CURVES SHALL NOT EXCEED MANUFACTURER'S RECOMENDATIONS PROPER FITTINGS SHALL BE USED FOR GREATER DEFLECTION WHERE REQUIRED.

GENERAL NOTES:
Not all culverts and pipe crossings are shown. Contractor shall locate all drainage structures and protect them from damage.

NOTES: Specifications for placing pipe lines within the Right-of-Way or crossing State and U.S. Highways.

1. All pipe lines shall have a minimum of 30" cover except where deeper cover is indicated on the drawings. All trench excavation within the right-of-way and not under paving shall be backfilled by tamping in 6" layers. All surplus material shall be removed from the right-of-way and the excavation finished flush with surrounding ground.
2. Highway Crossings under paved roads and paved cross roads within the State and U.S. Highway right-of-way shall be incased and placed by boring or jacking. Boring or jacking shall extend from toe of shoulder slope to toe of shoulder slope. On lines crossing the entire width of right-of-way, the length of casing shall be determined by the Division Engineer, Tennessee Highway Department. All boring and jacking shall be done as shown on this drawing.
3. Where it is evident that boring is impractical due to rock or other obstruction the Division Engineer may grant permission to open cut the paving. Where open cut is allowed the following conditions will be met:
 - (a) All backfill material will be stabilized with Portland Cement and mixed in a concrete mixer. If soil is used, it shall be a sandy material free from lumps or clods and shall be stabilized with two (2) sacks of cement per cubic yard of soil. If sand or gravel are used, pit run material may be used, and it shall be stabilized with one (1) sack of cement per cubic yard. Backfill must be tamped in a moist condition.
 - (b) One half of the traveled portion of the paving must be open to traffic at all times.
 - (c) Open cutting of pavement shall be done in the manner and sequence shown on this drawing.
4. Valve boxes on shoulders and in highway ditches shall be left below grade, so that graders working on the shoulder and in the ditches will not hit the top of the valve boxes.
5. Casing pipe shall be either corrugated or standard black steel pipe applicable and suitable to method of installation employed. Corrugated pipe size 6" shall be 18 gage steel. Corrugated pipe size 8" to 24" shall be 16 gage steel.
6. Where sodding is disturbed by excavation or backfilling operation, such areas shall be replaced by mulch sodding on all slopes of 5% or less. All slopes over 5% shall be replaced with block sodding. No separate payment shall be made for sodding which shall be included in the bid price for installation of pipe.

JOSEPH P. BOUQUARD
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GEORGIA 4764
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TENNESSEE 1425
REGISTERED ENGINEER

REV	BY	DATE	DESCRIPTION
WATERWORKS PROJECT			
PIPING DETAILS			
WOLFE BRANCH UTILITY DISTRICT OAKDALE, TENNESSEE			
DRWN. D.E.B.	BOUQUARD ENGINEERING CO.	DRAWING NO.	
CHKD. J.P.B.	CONSULTING ENGINEERS	390-1-12	
DATE APRIL 1976	CHATTANOOGA, TENNESSEE		
SCALE NONE			