

HOWARD COUNTY, MARYLAND

RIVER ROAD PRESSURE REDUCING VALVE

CAPITAL PROJECT No. W - 8170
 CONTRACT No. 44 - 3024

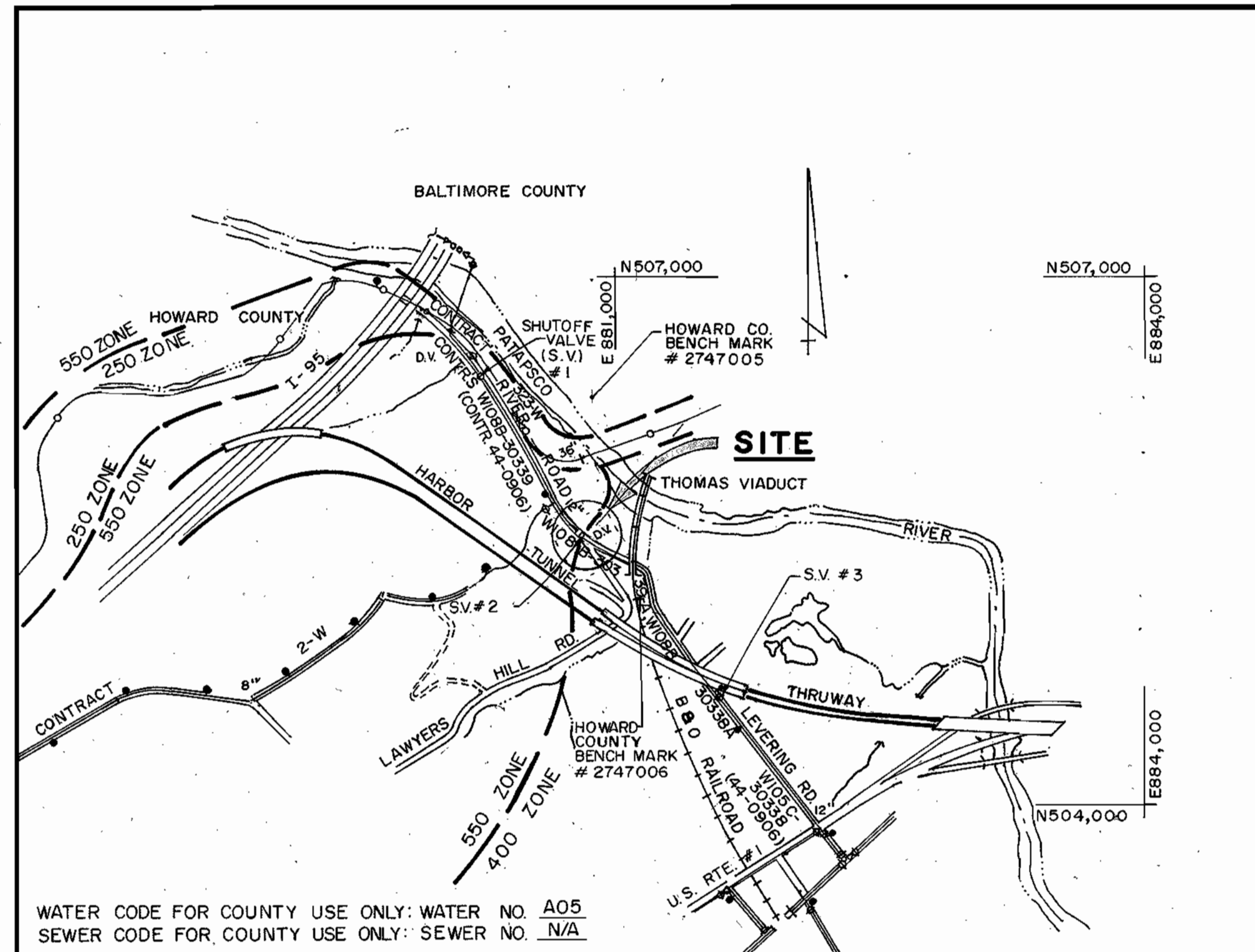
GENERAL NOTES

- APPROXIMATE LOCATION OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SUPPLY. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
- ALL HORIZONTAL CONTROLS ARE BASED ON MARYLAND STATE COORDINATES.
- ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATA.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- CLEAR ALL UTILITIES BY A MINIMUM OF 6". CLEAR ALL POLES BY 2'-0" MINIMUM OR TUNNEL AS REQUIRED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES, ANY COST INCURRED BY THE OWNER FOR THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONEY OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [] AT THE LOCATION OF THE TEST PIT. A NOTE OR NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS
 STATE HIGHWAY ADMINISTRATION - 531-5533
 BALTIMORE GAS & ELECTRIC CO. SERVICES 850-4620
 BALTIMORE GAS & ELECTRIC CO. UNDER GROUND DAMAGE CONTROL 859-9004
 BALTIMORE GAS & ELECTRIC CO. TROUBLE SHOOTING - 298-9001
 MISS UTILITY - 1-800-257-7777
 COLONIAL PIPELINE - 795-1390
 BUREAU OF UTILITIES, HOWARD COUNTY DEPT. OF PUBLIC WORKS-992-2366
- TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
- ALL WATER MAINS TO BE D.I.P. CLASS 52 UNLESS OTHERWISE NOTED.
- TOPS OF ALL WATER MAINS TO HAVE MINIMUM OF 3-1/2' COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH THE STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE STRAPPED AND BUTTRESSED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS. SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1003 OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER VALVES ON THE EXISTING WATER SYSTEM.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (992-2437)
 - ALL VEGETIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 a) 7 CALENDER DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1,
 b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
 - ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (Sec. 51) SOD (Sec. 54), TEMPORARY SEEDING (Sec. 50) AND MULCHING (Sec. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
 - ALL SEDIMENT STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 - SITE ANALYSIS:

TOTAL AREA OF SITE	NA	ACRES
AREA DISTURBED	0.03	ACRES
AREA TO BE ROOFED OR PAVED	0.03	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0	ACRES
TOTAL CUT	60	CU. YDS.
TOTAL FILL	60	CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION	NA	
 - ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 - ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY, BY THE HOWARD COUNTY DPM SEDIMENT CONTROL INSPECTOR.
 - ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- NOTE: REFER TO CONTRACT SPECIFICATIONS (PROJECT MANUAL) FOR SEEDING NOTES.



LOCATION MAP

Scale: 1" = 600'

INDEX OF SHEETS

No.	DESCRIPTION
1.	TITLE SHEET
2.	PRESSURE REDUCING VALVE VAULT PLAN, PROFILE AND DETAILS
3.	PRESSURE REDUCING VALVE VAULT ELECTRICAL

BENCH MARKS

- HOWARD COUNTY BENCH MARK #2747006 ON THE EAST SIDE OF THE BALTO. & OHIO RAILROAD 100' SOUTH OF THE RAILROAD CROSSING LEVERING ROAD ELEV. 66.558 COORDINATES: N505193.127, E881132.876
- HOWARD COUNTY BENCH MARK #2747005 ALONG NORTH SIDE OF PATAPSCO RIVER 550'± FEET NORTHWEST OF THOMAS VIADUCT; ELEV. 70.331 COORDINATES: N506314.106, E880876.414

DEVELOPER'S CERTIFICATION
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEARING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 Thomas E. Butley
 DEPARTMENT OF PUBLIC WORKS

ENGINEER'S CERTIFICATION
 "I CERTIFY THAT THIS PLAN FOR EROSION & SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Timothy J. Wolfe
 SPOTTS, STEVENS & MCCOY, INC.
 555 FAIRMOUNT AVE., SUITE 230
 TOWSON, MARYLAND 21284

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 John M. Blaha
 U.S. SOIL CONSERVATION SERVICE
 DATE: 8/1/90
 THIS DEVELOPMENT PLAN IS APPROVED FOR THE SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 John M. Blaha
 DATE: 8/1/90
 HOWARD COUNTY S.C.D.

STAKEOUT TABLE 12" W. & 8" W.

POINT ON 12" W. & 8" W.	TRAVERSE LINE LOCATION	RIGHT ANGLE OFFSET	POINT ON 12" W. & 8" W.	TRAVERSE LINE LOCATION	RIGHT ANGLE OFFSET
WL STA 0+00 12" X 8" TEE	M-51 TO M-50 112'	17' RT.	WL STA 0+43 12" X 8" VALVE	M-51 TO M-50 122'	15' RT.
WL STA 0+03 8" VALVE	M-51 TO M-50 112'	14' RT.	WL STA 0+46 12" X 8" TEE	M-51 TO M-50 122'	18' RT.
WL STA 0+18 8" 1/2" BEND	M-51 TO M-50 113'	1' LT.	12" DIVISION VALVE	M-51 TO M-50 117'	17' RT.
WL STA 0+28 8" X 8" TEE	M-51 TO M-50 123'	0.5 LT.			

QUANTITIES			
ITEM	ESTIMATE	ASBUILT	MATERIAL SUPPLIER
REMOVALS & BACKFILL	LUMP SUM		
PRV VAULT INCL. ELECT. COMPLETE	LUMP SUM		
PRESSURE RELIEF VALVE & MH COMPLETE	LUMP SUM		
6" WATER & FTGS	30 L.F.		
8" WATER & FTGS	40 L.F.		
12" WATER & FTGS	15 L.F.		
6" VALVE	2		
8" VALVE	2		
12" VALVE	1		

RIVER ROAD PRESSURE REDUCING VALVE
 CAPITAL PROJECT No. W - 8170
 CONTRACT No. 44 - 3024

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

Michael S. Somers 10/26/90
 DIRECTOR OF PUBLIC WORKS (Acting) DATE

Thomas E. Butley 10-26-90
 CHIEF, BUREAU OF ENGINEERING DATE

Robert M. Berman 10-24-90
 CHIEF, BUREAU OF UTILITIES DATE

Chris D. Dorman 10-18-90
 CHIEF, UTILITY DESIGN DIVISION DATE

SSM
 SPOTTS, STEVENS & MCCOY, INC.
 ENGINEERS - SURVEYORS - PLANNERS - SCIENTIST
 555 FAIRMOUNT AVE., SUITE 230
 TOWSON, MD. 21204
 (301) 494-0500



DES: KEB			
DRN: KEB, JJK			
CHK: TWW			
DATE: 8/1/90	BY: NO.	REVISION	DATE

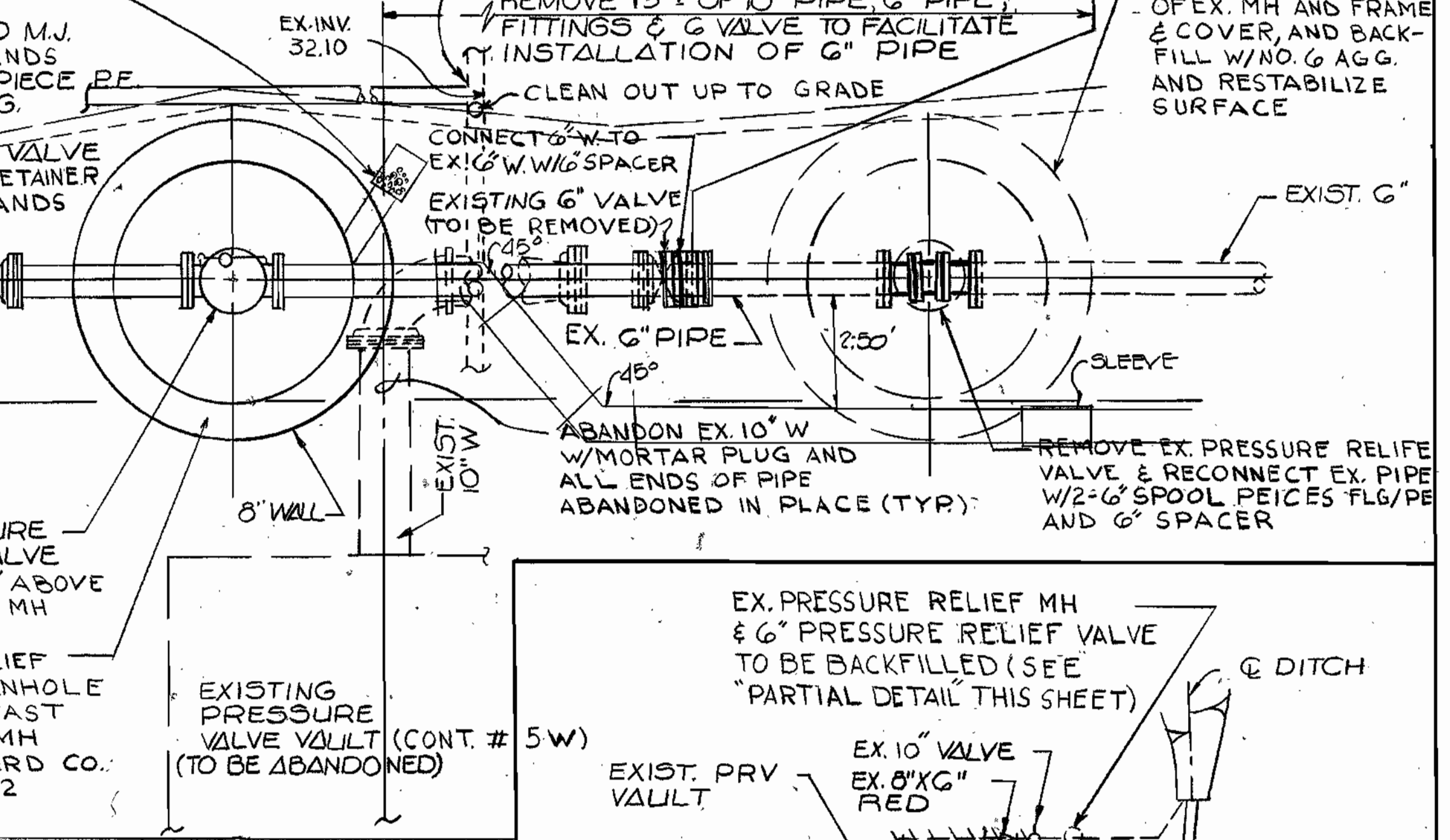
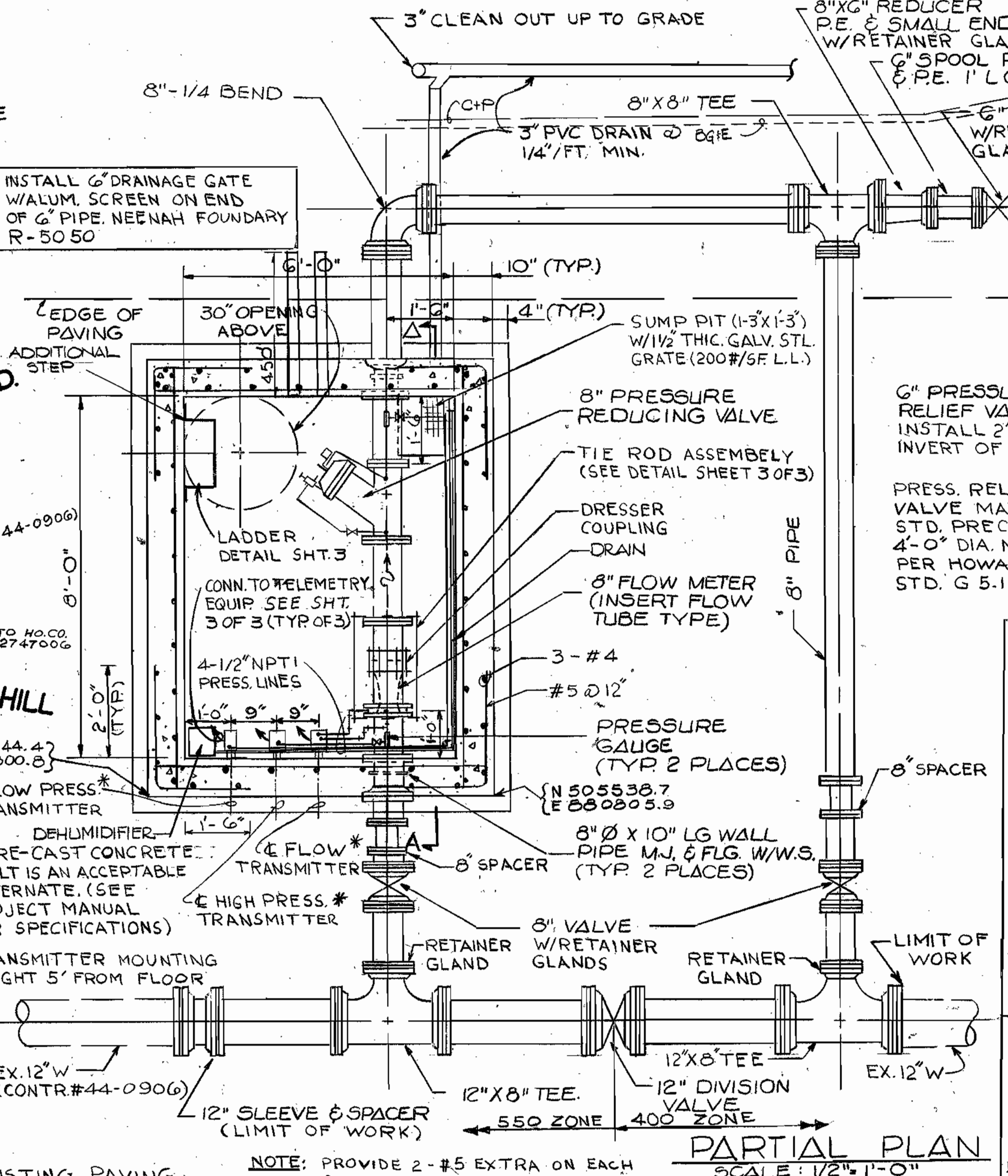
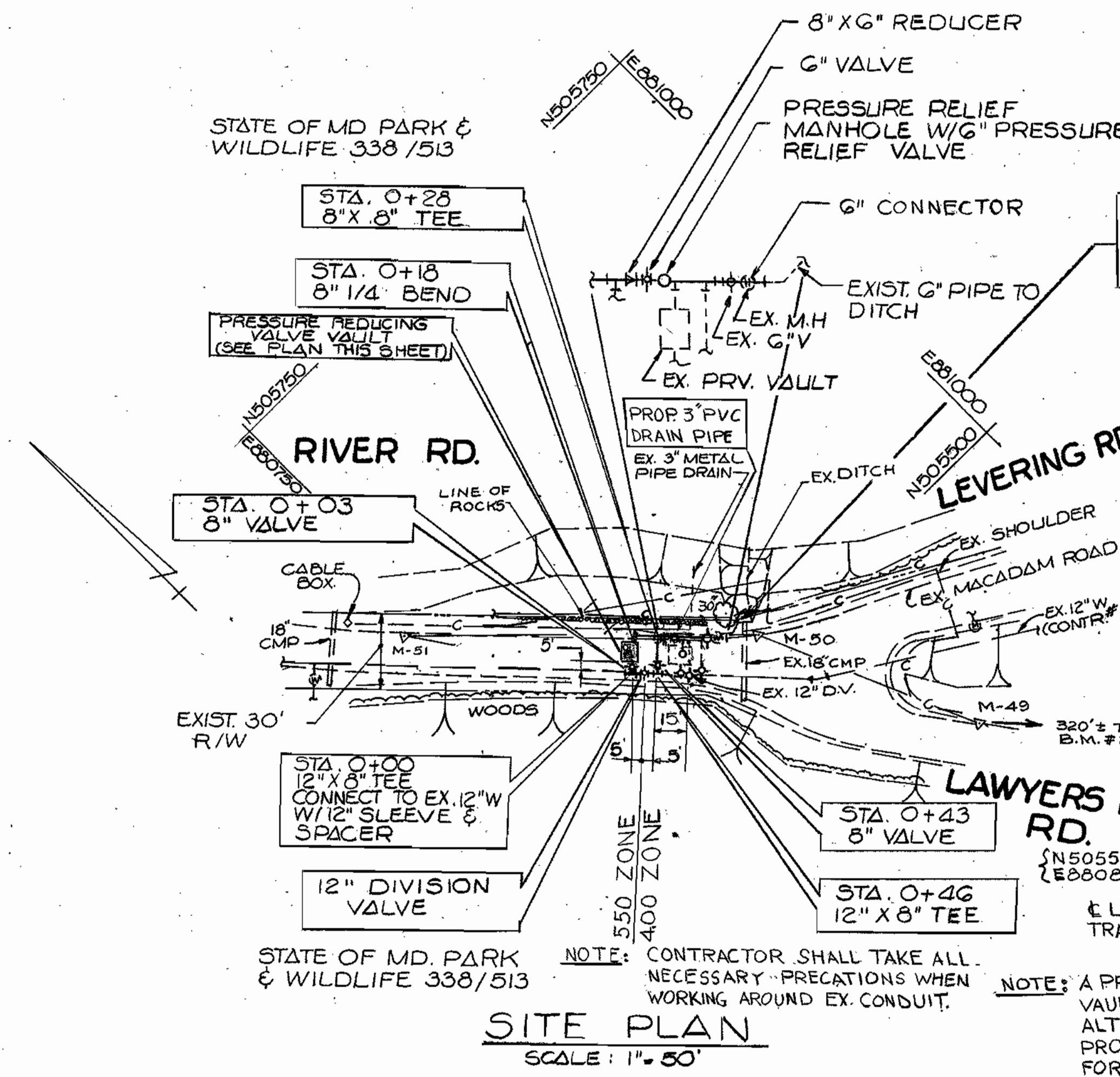
TITLE SHEET

RIVER ROAD PRESSURE REDUCING VALVE
 CONTRACT NO. 44-3024
 ELECTION DISTRICT
 ELK RIDGE NO. 1

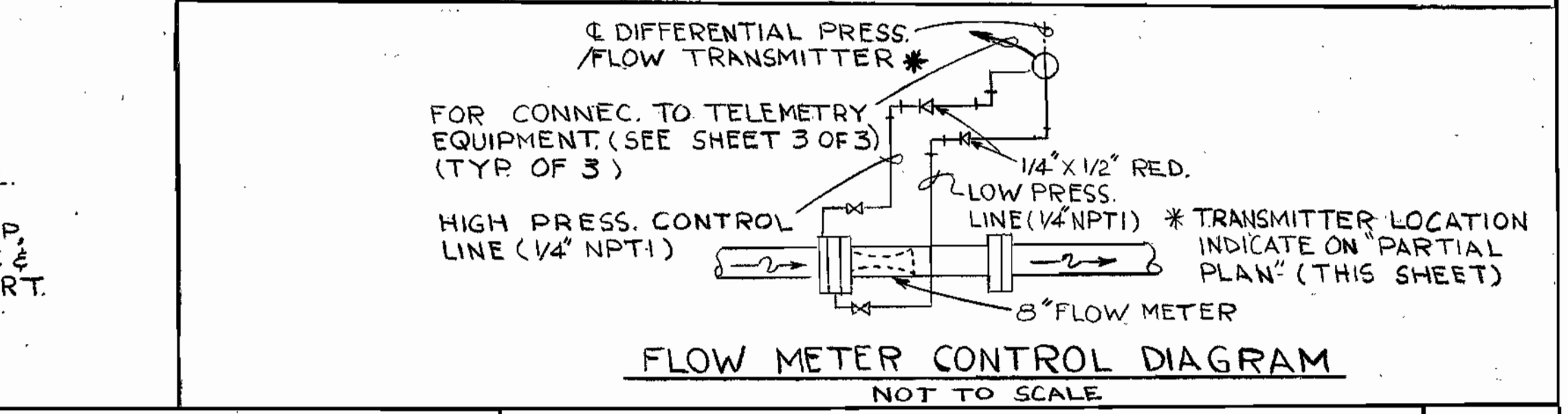
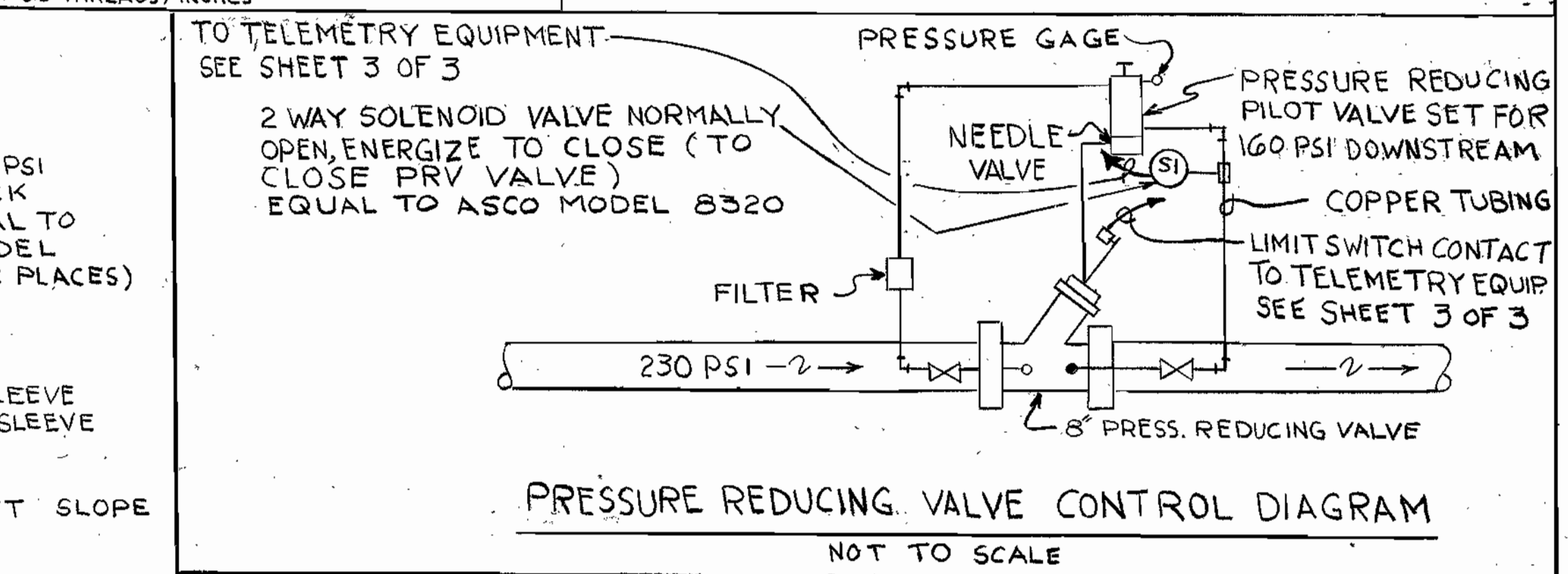
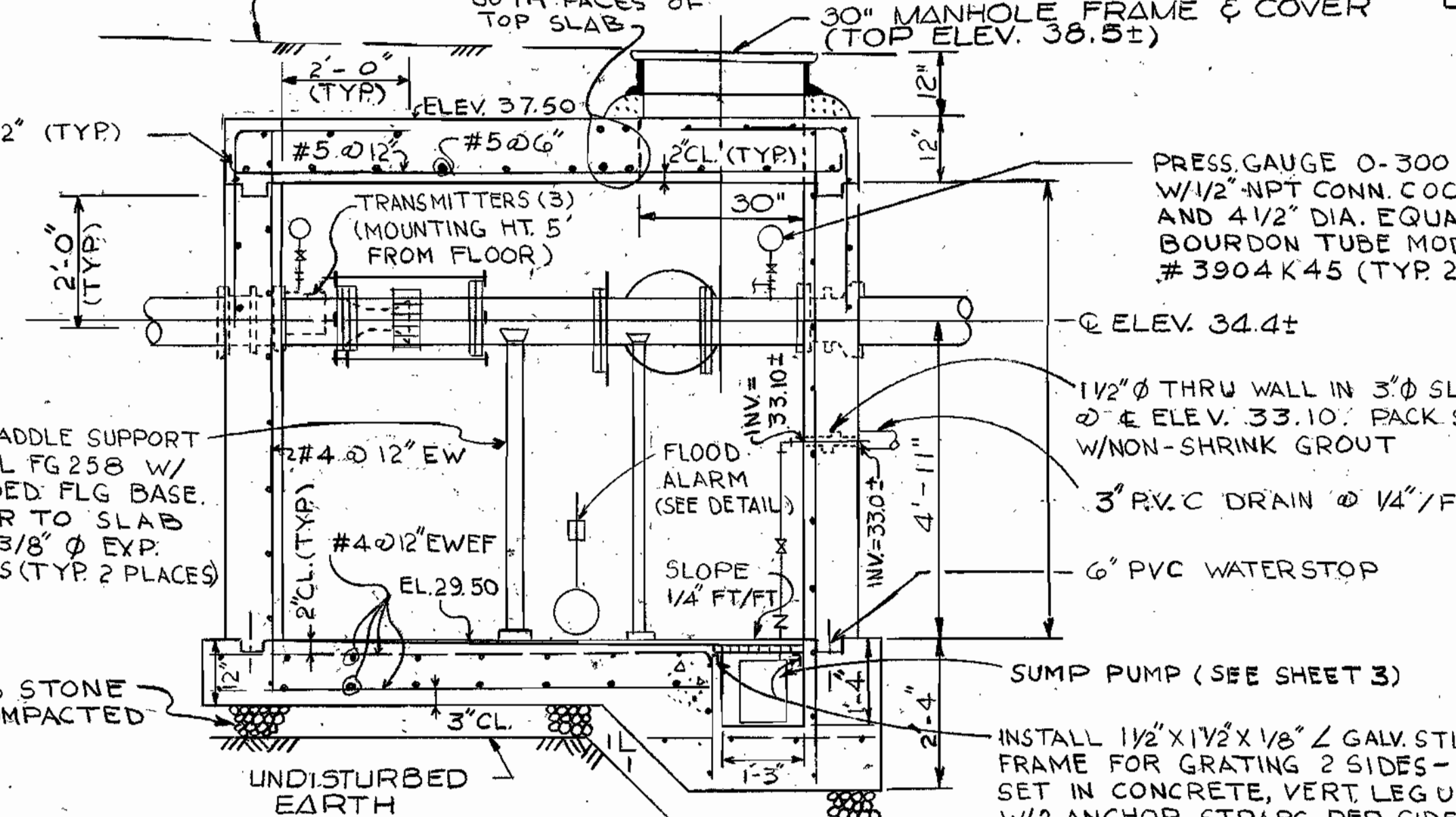
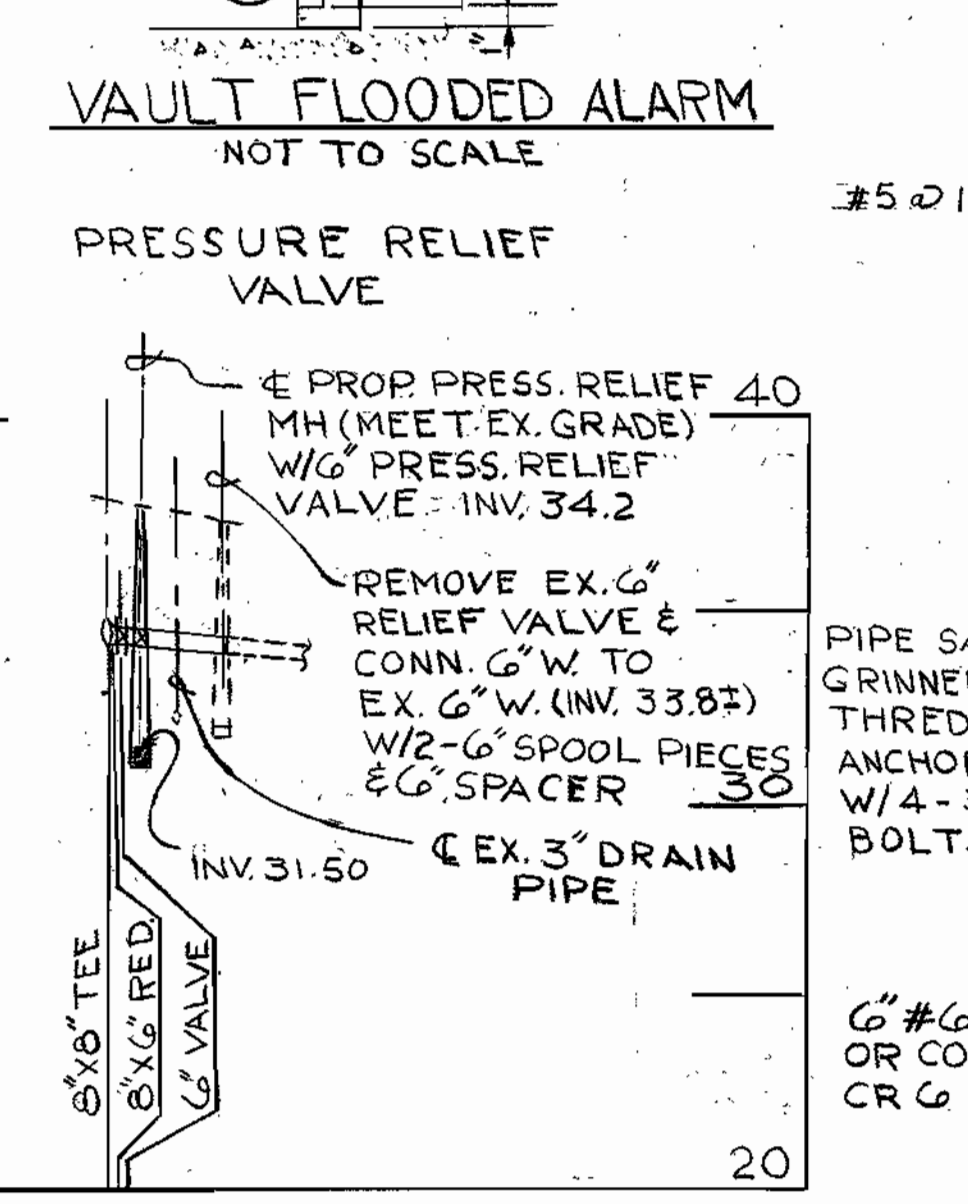
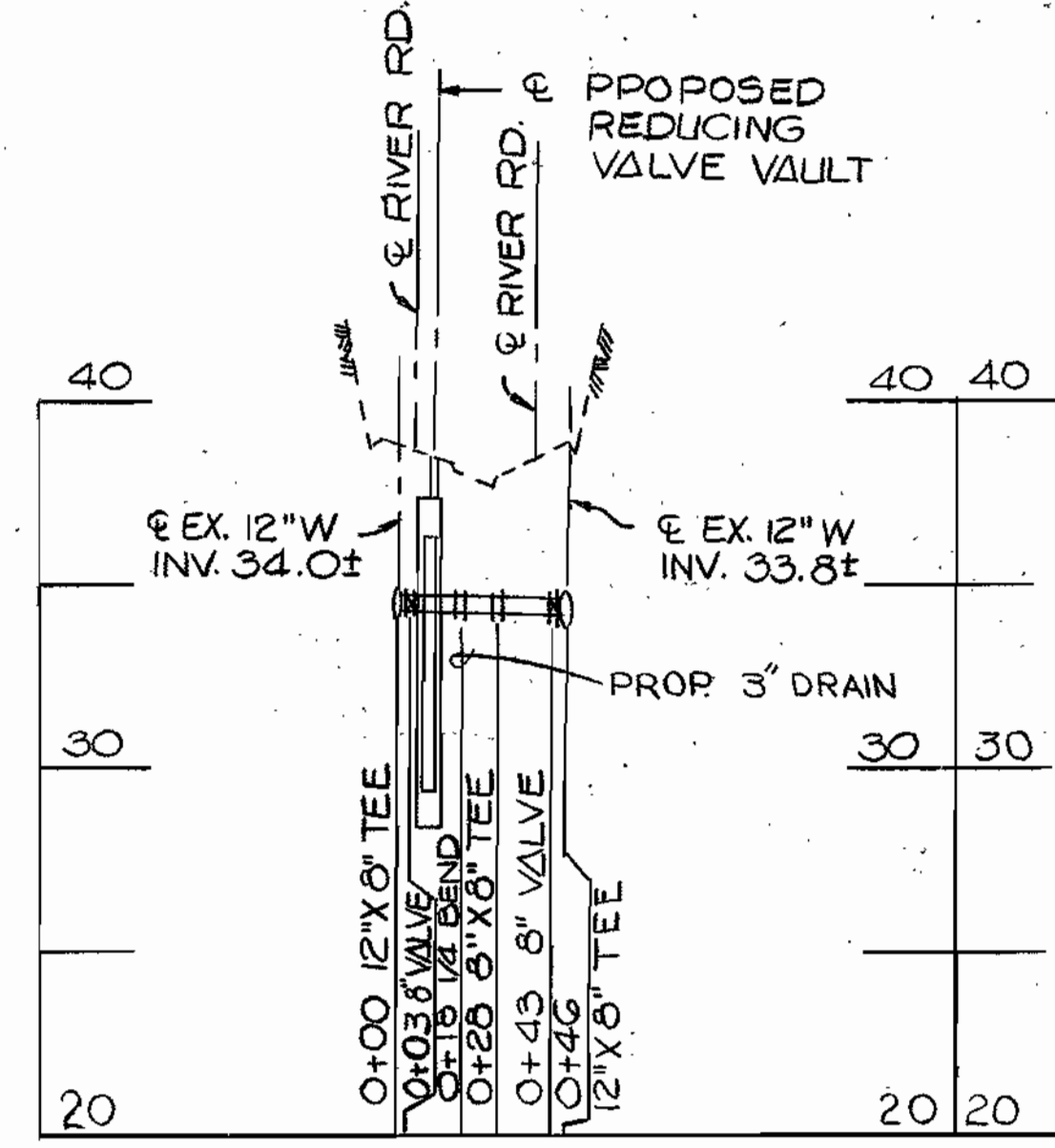
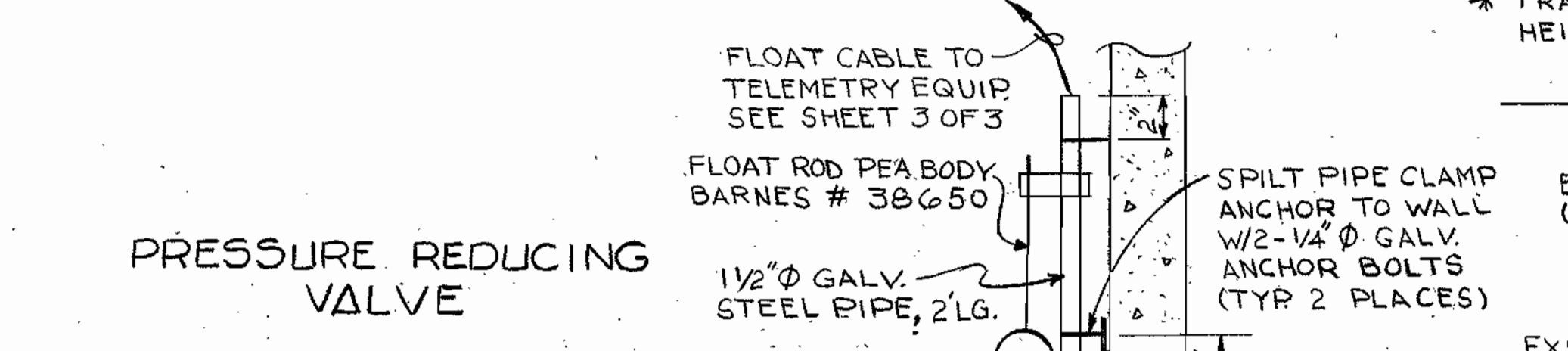
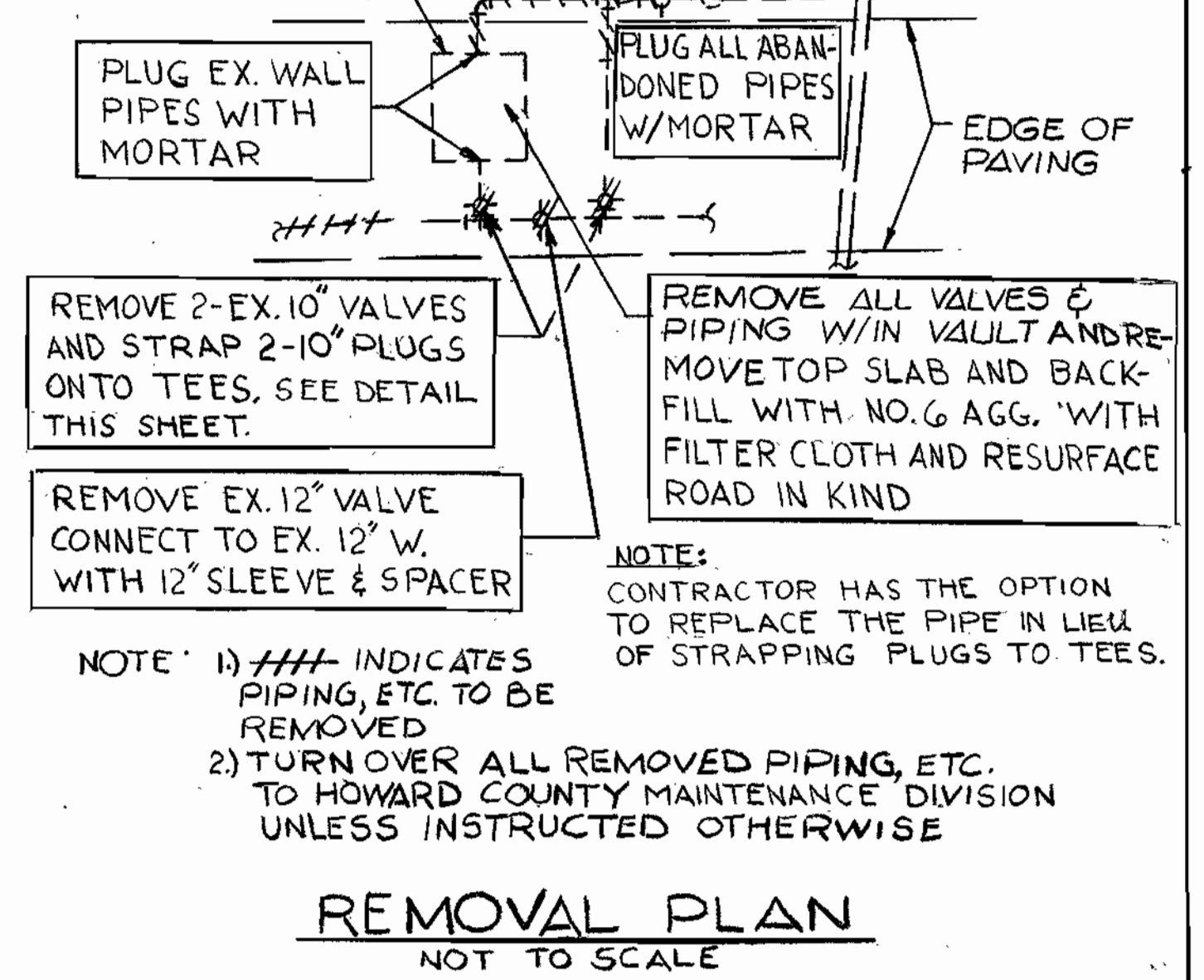
SCALE AS SHOWN
 SHEET 1 OF 3

AS-BUILT 8-

NOTE: REFER TO "REMOVAL PLAN" FOR PIPE & FITTINGS REMOVALS



- SEQUENCE OF CONSTRUCTION AND REMOVALS**
1. NOTIFY HOWARD CO. BUREAU OF UTILITIES 992-2362 AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK
 2. SHUT DOWN EXIST. PRESSURE REDUCING VALVE (P.R.V.) AND KEEP EXIST. P.R.V. CLOSED. SHUT OFF VALVE (S.V.) #2 (SEE "LOCATION MAP" SHT. 1)
 3. REMOVE EXIST. P.R.V. RELIEF MH & APPURTENANCES AS INDICATED ON PLAN WITH THE EXCEPTION OF THE EXIST. D.V. AND ASSOCIATED EXIST. D.V. AND ABANDON EXIST. P.R.V. VAULT.
 4. INSTALL PROPOSED P.R.V. VAULT, RETAIN EXIST. PIPING EXCEPT EXIST. 12" W. DO NOT CONNECT TO EXIST. 12" W.
 5. CLOSE S.V. #1 & S.V. #3 AND CONNECT PROPOSED P.R.V. AND DISCONNECT EXIST. P.R.V. FROM EXIST. 12" W.
 6. CLOSE PROPOSED 12" D.V. OPEN IN SERVICE.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

10/26/90
DIRECTOR OF PUBLIC WORKS (Acting) DATE

10-24-90
CHIEF, BUREAU OF UTILITIES DATE

SSM
SPOTTS, STEVENS & MCCOY, INC.
ENGINEERS - SURVEYORS - PLANNERS - SCIENTIST

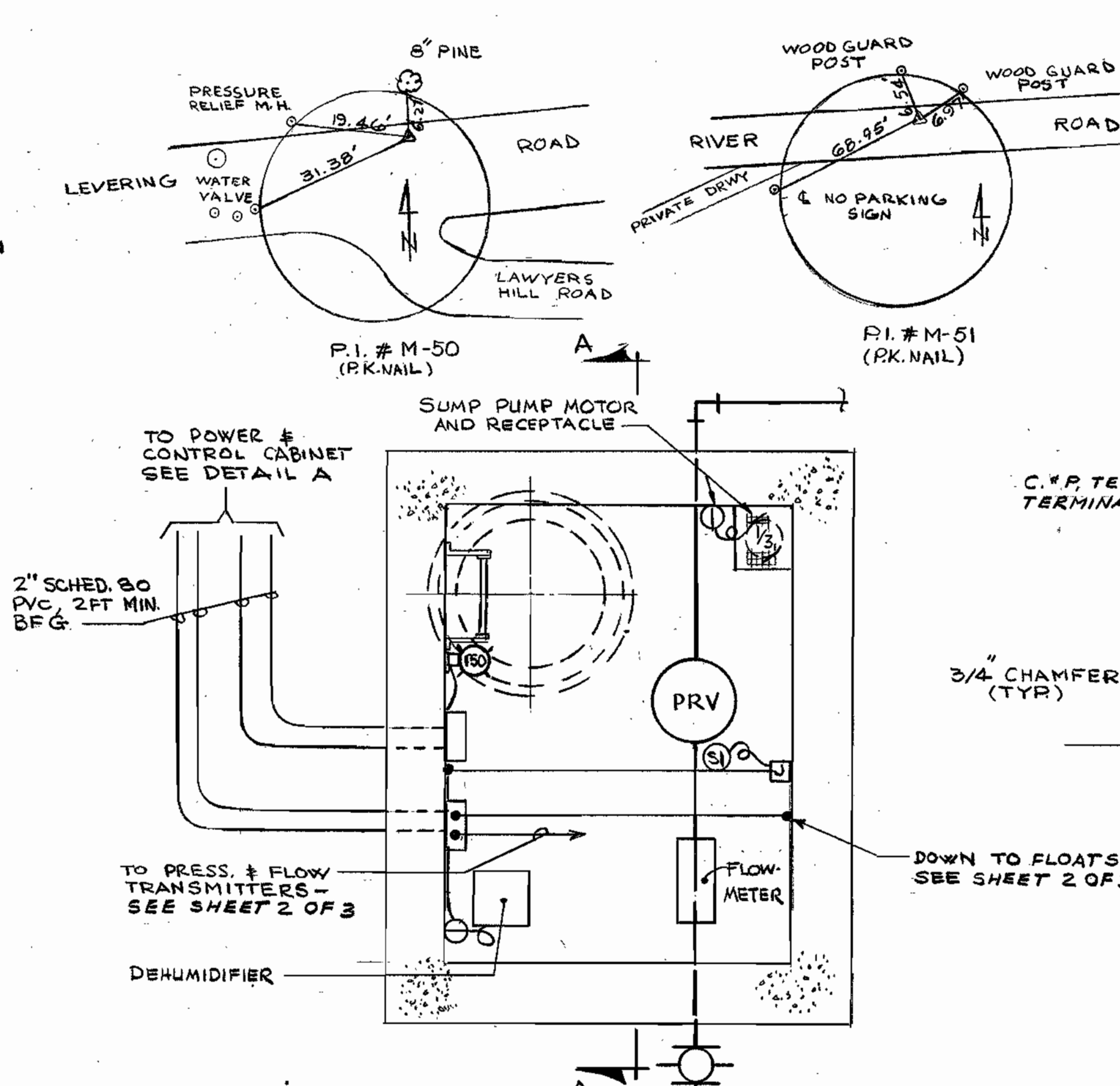
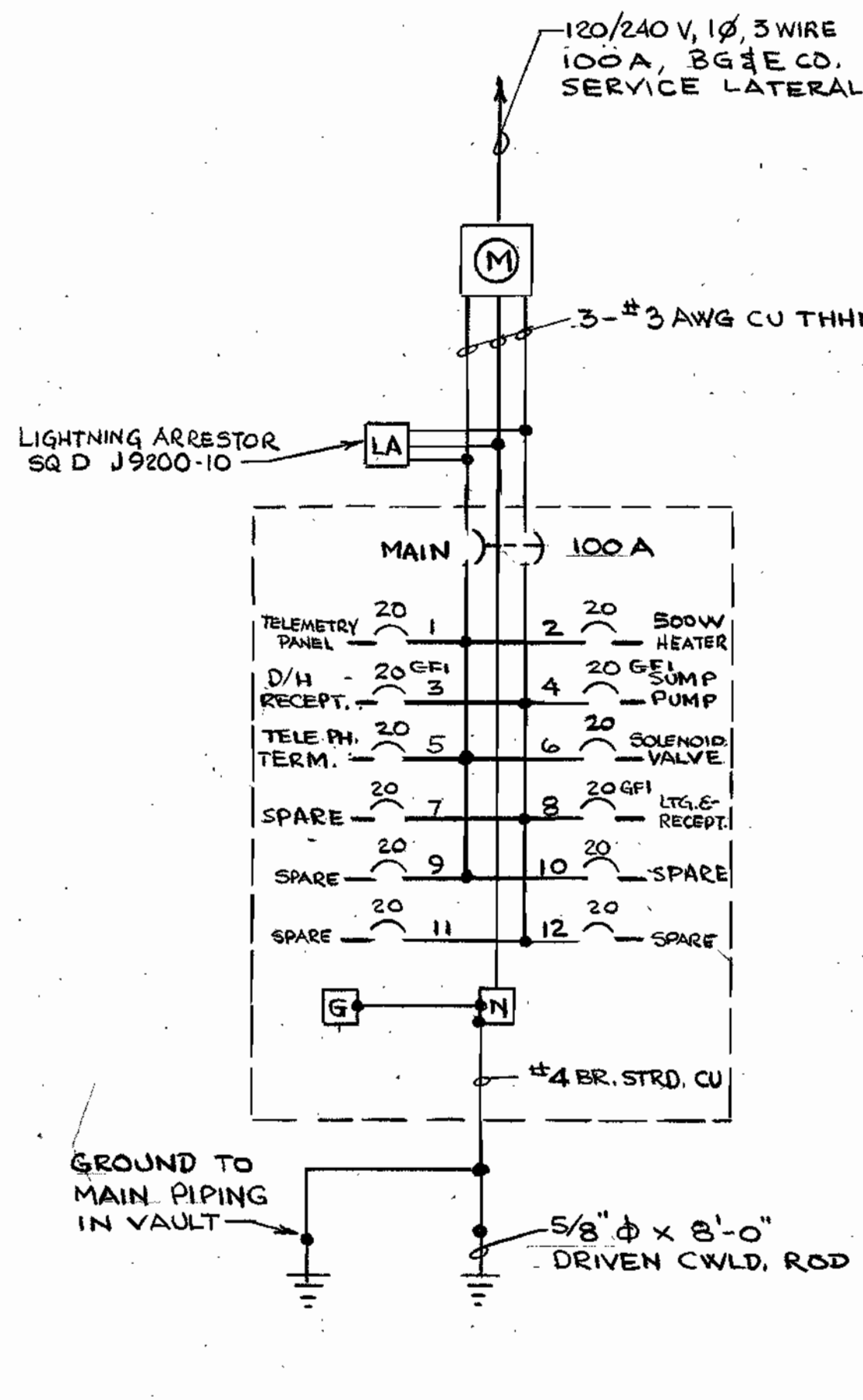
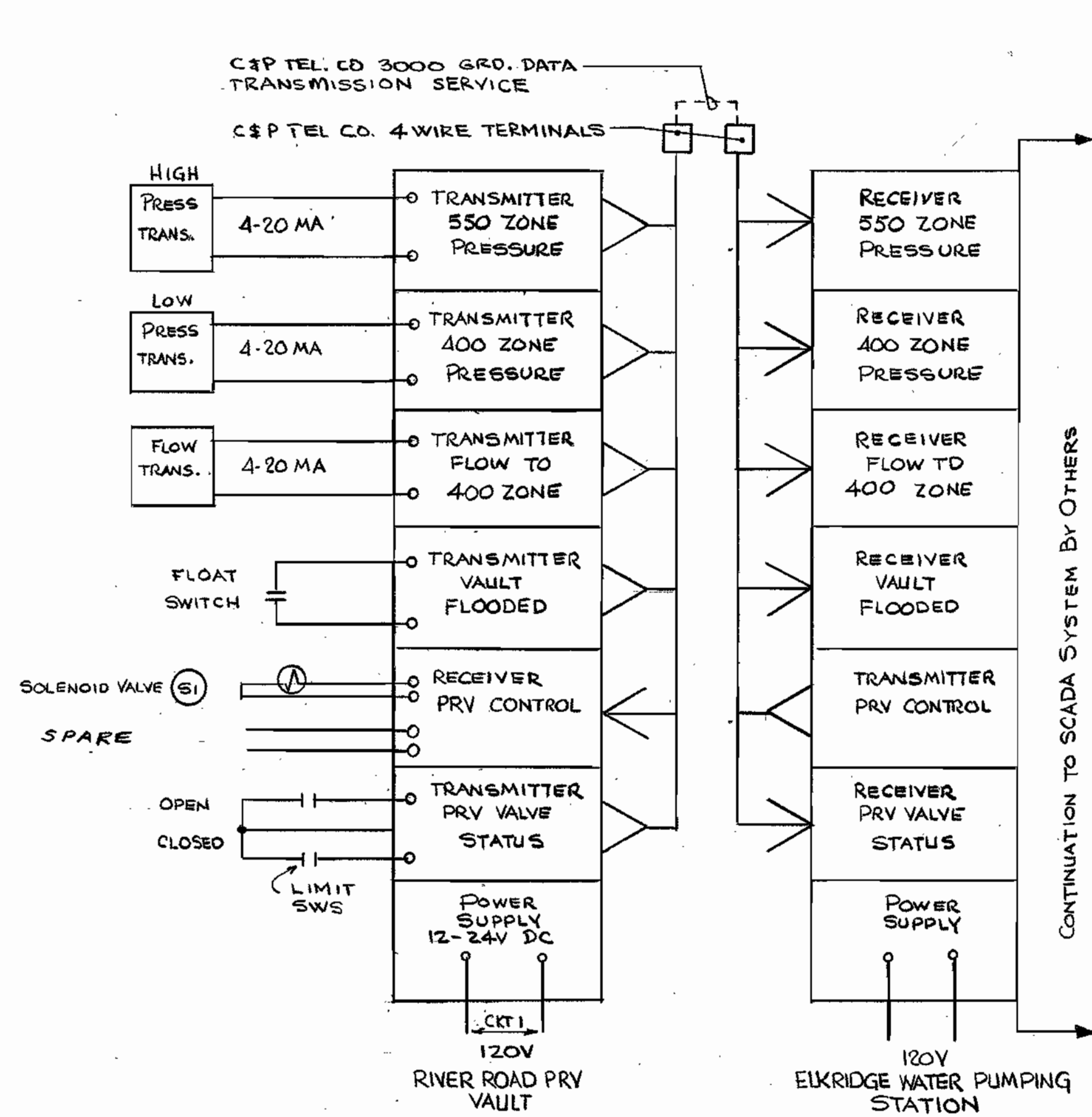
555 FAIRMOUNT AVE., SUITE 230
TOWSON MD. 21284
(301) 494-0500

DES: T.W.
DRN: G.S.
CHK: T.W.
DATE: 8-1-90

PRESSURE REDUCING VALVE VAULT
PLAN, PROFILE & DETAILS

RIVER ROAD PRESSURE REDUCING VALVE
CONTRACT NO. 44-3024
ELECTION DISTRICT ELKRIDGE NO. 1

SCALE AS SHOWN
SHEET 2 OF 3
AS-BUILT



DETAIL "A"
POWER AND CONTROL CABINET
SCALE 1/2" = 1'-0"

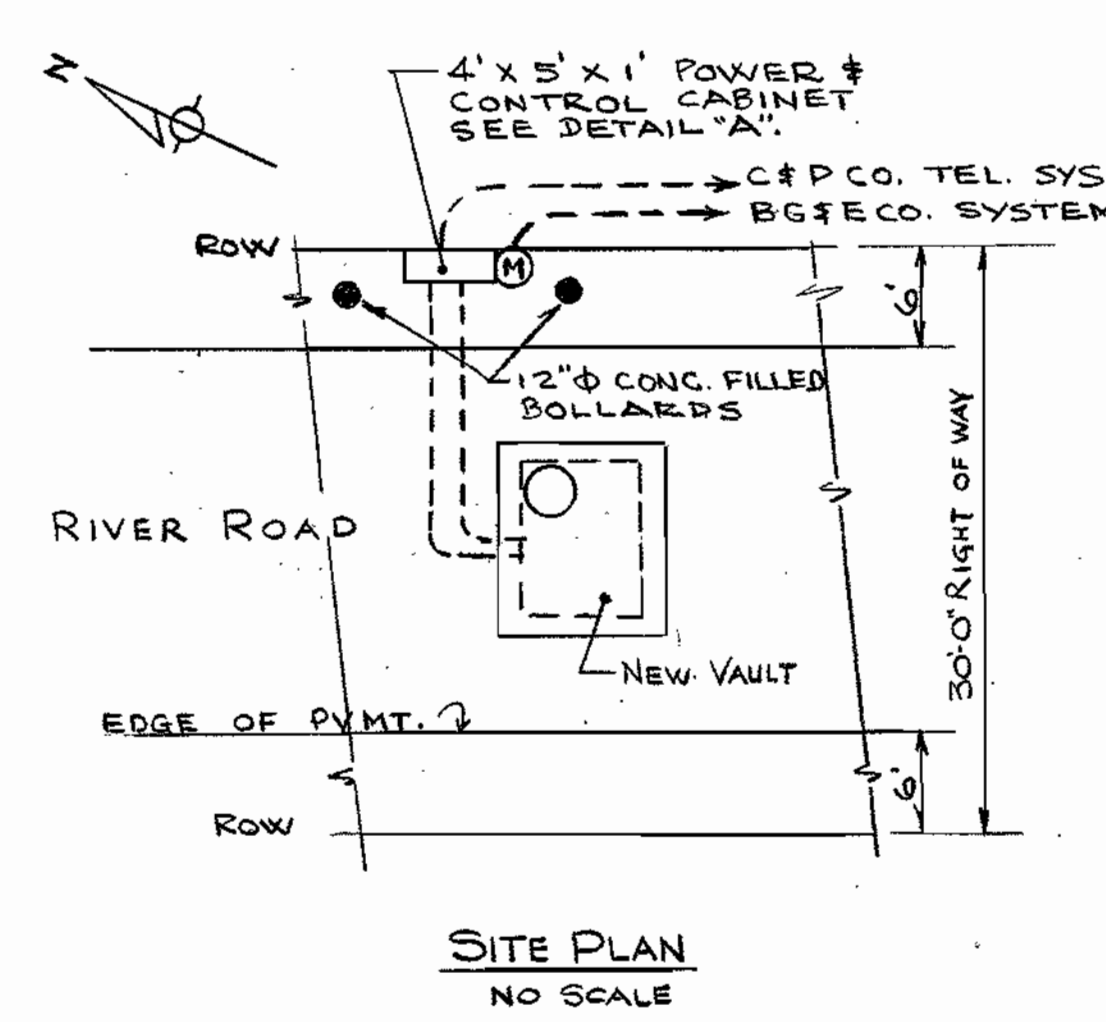
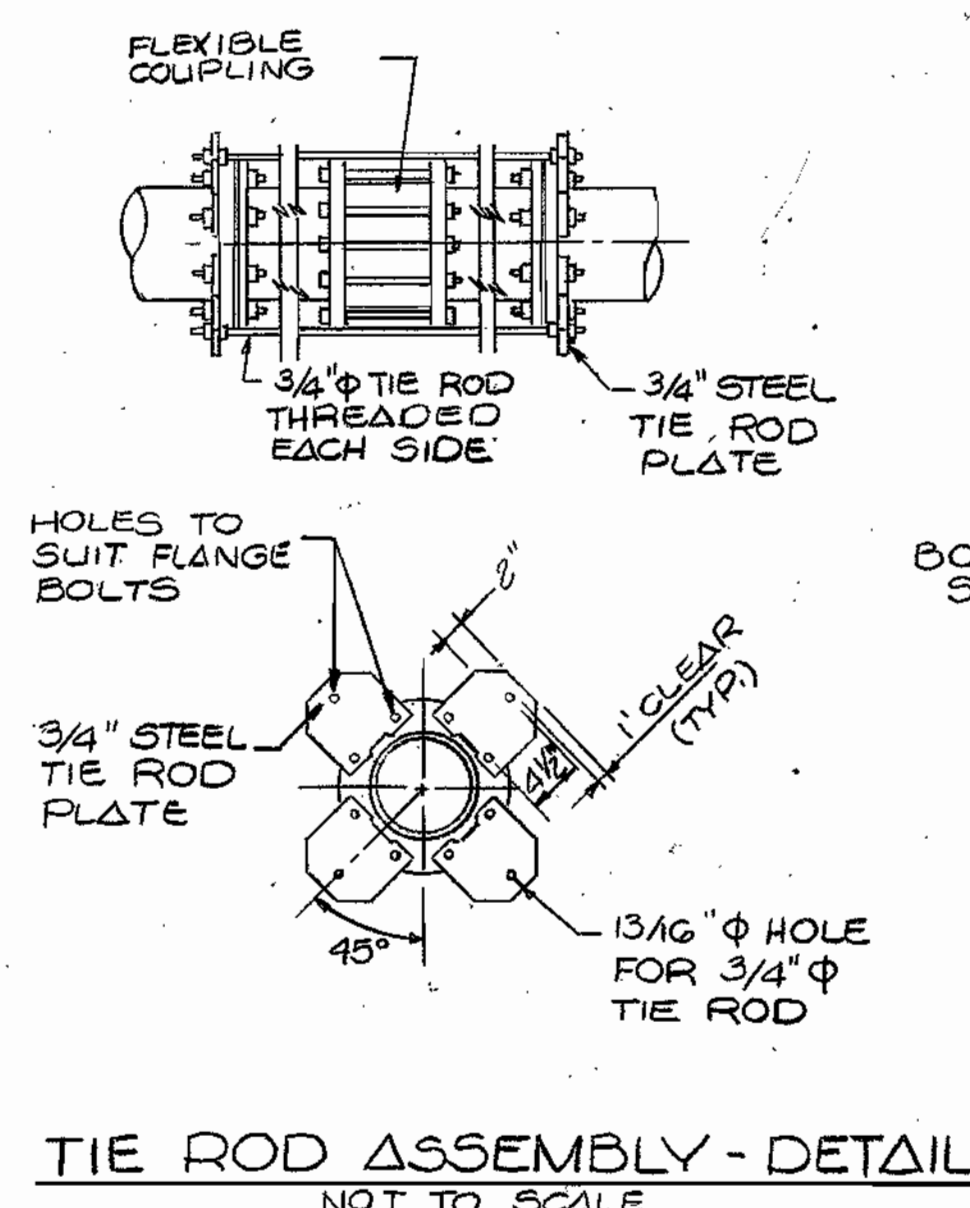
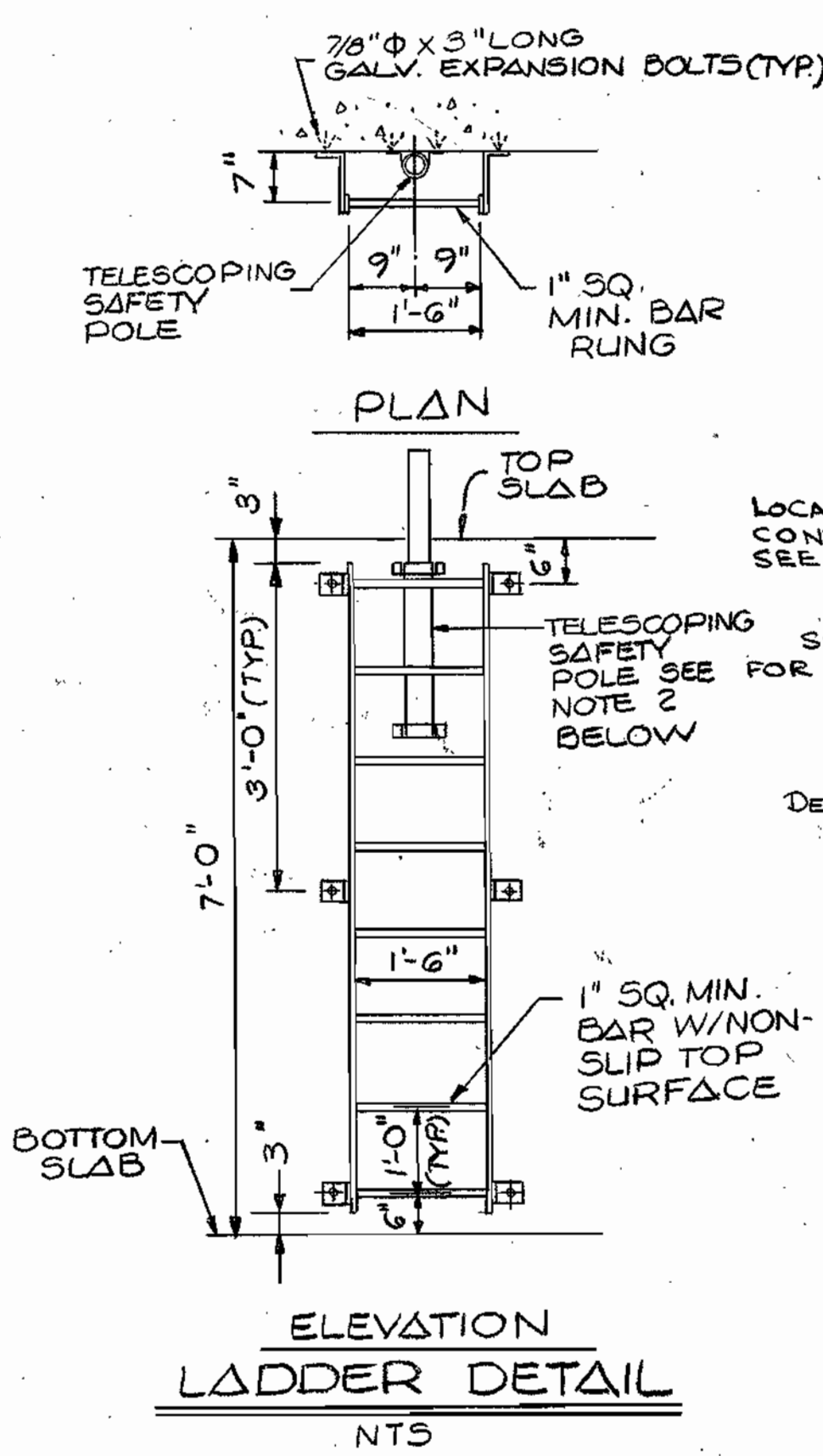
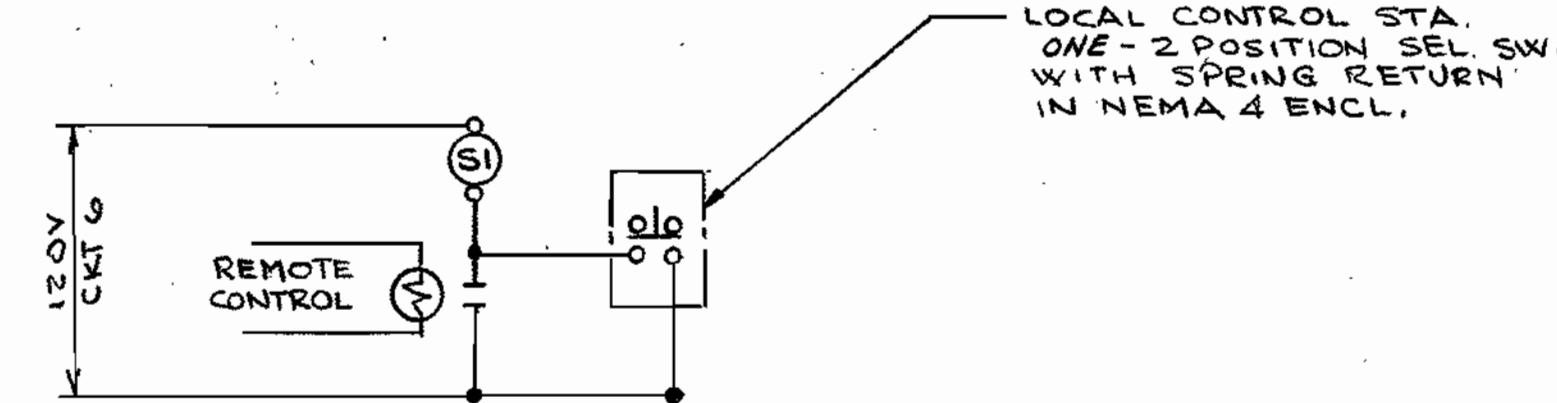
EQUIPMENT LIST

- DEHUMIDIFIER:** WHITE-WESTINGHOUSE - MODEL ED 508K, 2.1 PINTS/HR. MOISTURE REMOVAL RATE, 7.5 AMPS, 115/1160, FROST CONTROL, ADJUSTABLE HUMIDISTAT, SET POINT - 60% R.H., WT. - 42 LBS.
- ELECTRIC HEATER:** BERKO - MODEL PHT-500-A - 120V Ø 4.2 AMPS - 500 WATTS - 1708 BTUH, INTEGRAL THERMOSTAT WITH MOUNTING BRACKET.
- SUMP PUMP:** LITTLE GIANT PUMPCO. - # 6-CIA - AUTOMATIC OPERATION - 1/4 H.P. - 115V - 1 1/2" DISCHARGE - 1750 GPH @ 10'-0" TOTAL HEAD.

SYMBOL LIST

- INCANDESCENT FIXTURE
- ⊕ 125 V, 20A, DUPLEX RECEPTACLE
- ⊕ 125 V, 20A, SINGLE RECEPTACLE
- S 125 V, 20A, 1P SWITCH
- ⊕ MOTOR WITH HORSEPOWER NOTED
- WP WEATHER PROOF
- GFI GROUND FAULT INTERRUPTING
- ⊕ GROUND
- ⊕ JUNCTION OR PULL BOX (NM)
- NM NON METALLIC, CARLON OR EQUAL
- ⊕ B.G. & E. KW/H METER

- CONSTRUCTION NOTES:**
- 1- ALL WIRING SHALL BE MINIMUM #12 AWG, THHN, UNLESS OTHERWISE NOTED.
 - 2- ALL CIRCUITS SHALL BE INSTALLED IN NON-METALLIC (SCH. 40 OR EQUAL) RACEWAYS AND BOXES UNLESS NOTED OTHERWISE.
 - 3- ALL CONDUIT SHALL BE 3/4" MINIMUM UNLESS NOTED OTHERWISE.
 - 4- WIRING AND CIRCUIT ROUTING NOT SHOWN ON DRAWINGS SHALL BE DETERMINED BY CONTRACTOR ACCORDING TO FIELD CONDITIONS.
 - 5- FULL SIZE EQUIPMENT GROUNDING CONDUCTORS SHALL BE ROUTED WITH ALL CIRCUITS.
 - 6- ALL GROUNDING ELECTRODE CONDUCTOR CONNECTIONS SHALL BE MADE WITH THERMOWELD OR 2-BOLT COPPER LUG CONNECTORS.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Robert M. Berman 10/26/90
DIRECTOR OF PUBLIC WORKS (Acting) DATE

Robert M. Berman 10-24-90
CHIEF, BUREAU OF UTILITIES DATE

William G. Patrick 10-26-90
CHIEF, BUREAU OF ENGINEERING DATE

William G. Patrick 10-18-90
CHIEF, UTILITY DESIGN DIVISION DATE

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DES: RGP	BY: _____	NO. _____	REVISION _____	DATE: 8-1-90
DRN: JH/DA				
CHK: RGP				

**ELECTRICAL
PRESSURE REDUCING VALVE
VAULT**

600' SCALE MAP NO. 32 BLOCK NO. 21

RIVER ROAD PRESSURE REDUCING VALVE

CONTRACT NO. 44-3024
ELECTION DISTRICT
ELKRIDGE NO. 1

SCALE AS SHOWN

SHEET 3 OF 3

AS-BUILT