

RESTRICTED

171M

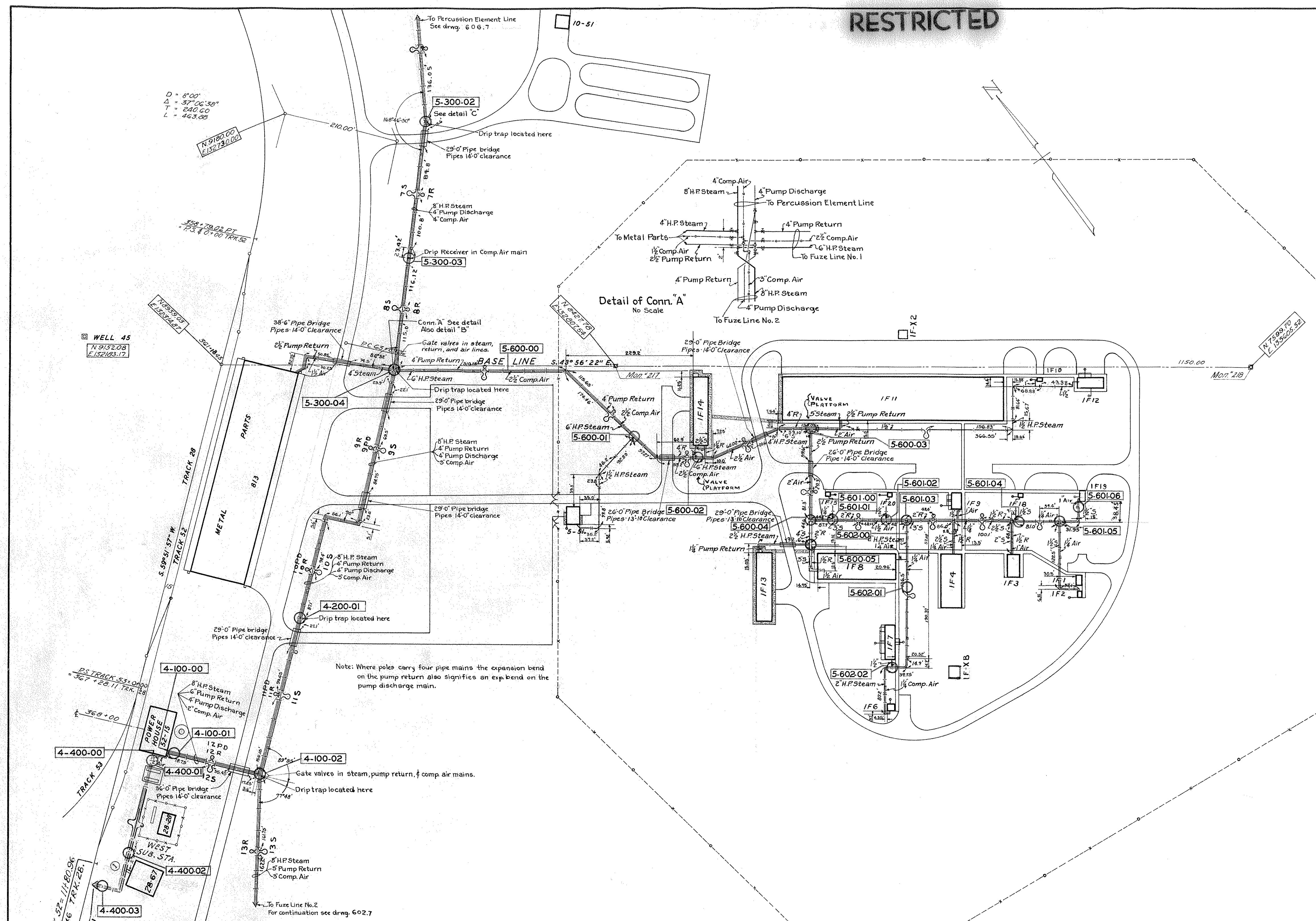
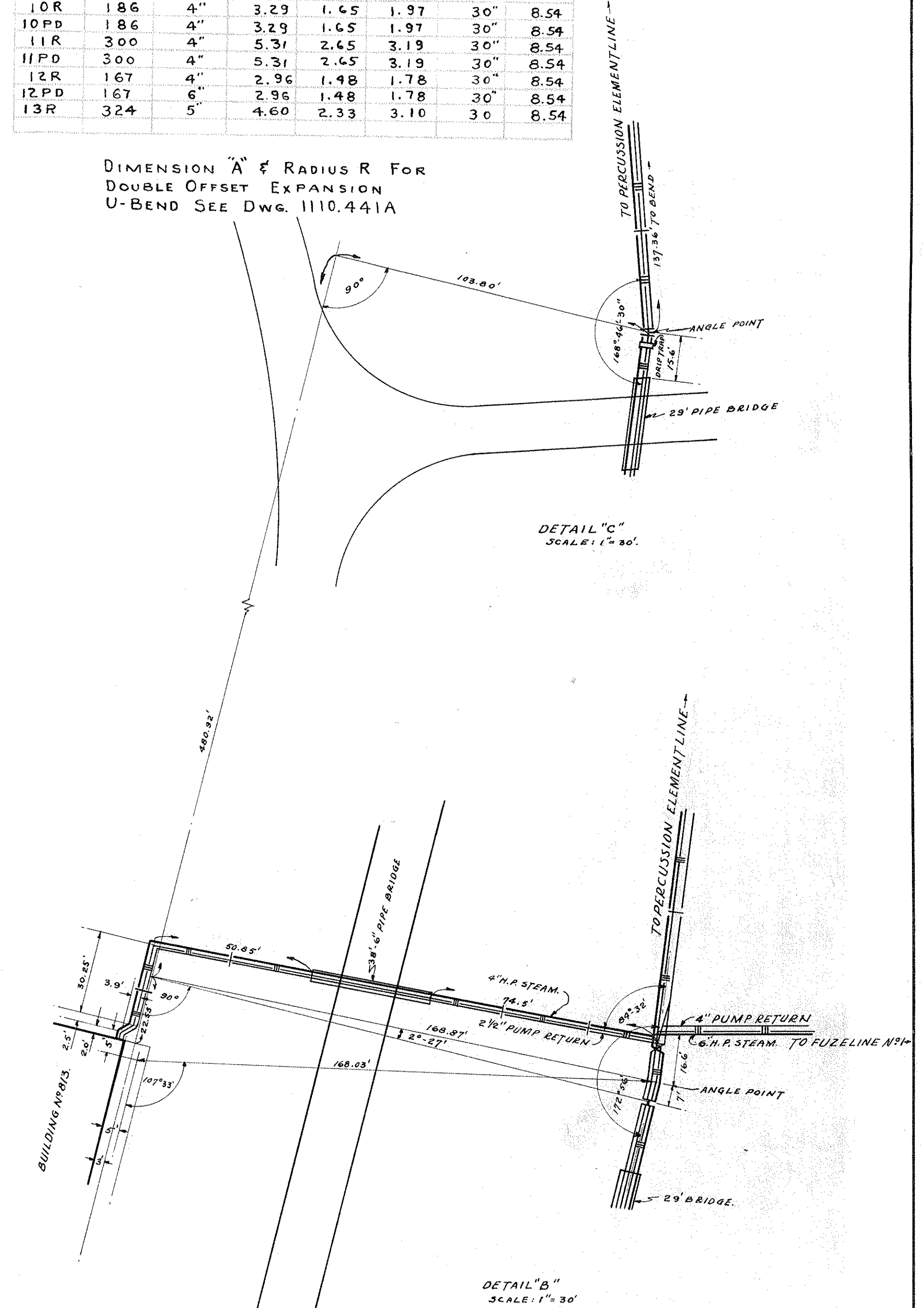
PIPE BEND DATA FOR STEAM

BEND NUMBERS	DISTANCE IN FT.	PIPE SIZE	CALC. EXP. IN INCHES	COLD STRAIN INCHES	DESIGN EXP. INCHES	RADIUS OF BEND	"A" DIMEN IN FT.
7 S	186	8"	4.91	2.46	2.95	40"	11.50
8 S	231	8"	6.10	3.05	3.66	40"	11.40
9 S	207	8"	5.44	2.73	3.28	50"	14.23
10 S	186	8"	4.91	2.46	2.95	40"	11.40
11 S	300	8"	7.92	3.96	4.75	45"	12.80
12 S	167	8"	4.41	2.21	2.65	40"	11.40
13 S	324	8"	8.80	4.40	5.86	45	12.80

PIPE BEND DATA

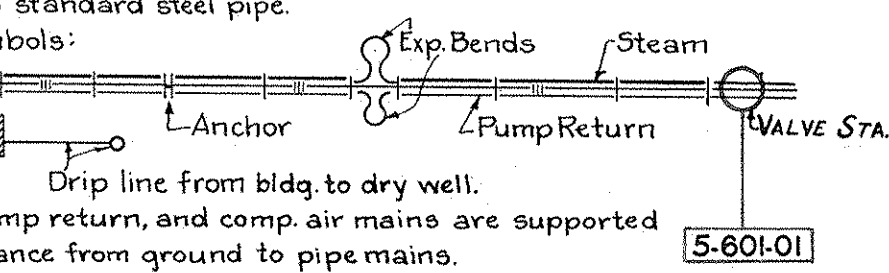
BEND NUMBERS	DISTANCE IN FT.	PIPE SIZE	CALC. EXP. IN INCHES	COLD STRAIN INCHES	DESIGN EXP. INCHES	RADIUS OF BEND	"A" DIMEN IN FT.
7 R	186	4"	3.29	1.65	1.97	25"	7.11
8 R	231	4"	4.09	2.05	2.45	25"	7.11
9 R	207	4"	3.66	1.83	2.20	25"	7.11
9 PD	207	4"	3.66	1.83	2.20	30"	8.54
10 R	186	4"	3.29	1.65	1.97	30"	8.54
10 PD	186	4"	3.29	1.65	1.97	30"	8.54
11 R	300	4"	5.31	2.65	3.19	30"	8.54
11 PD	300	4"	5.31	2.65	3.19	30"	8.54
12 R	167	4"	2.96	1.48	1.78	30"	8.54
12 PD	167	4"	2.96	1.48	1.78	30"	8.54
13 R	324	5"	4.60	2.33	3.10	30	8.54

DIMENSION "A" & RADIUS R FOR DOUBLE OFFSET EXPANSION U-BEND SEE DWG. 1110.441A



LINE STA.	VALVES		TRAPS
	STEAM	RETURN	
5-600-00			
5-600-01			
5-600-02			
5-600-03			
5-600-04			
5-600-05			
5-601-00			
5-601-01			
5-601-02			
5-601-03			
5-601-04			
5-601-05			
5-601-06			
5-602-00			
5-602-01			
5-602-02			

Steam pressure at Boiler House 145 lbs. per sq. inch.
 Outside steam and compressed air mains: Standard weight steel pipe.
 Outside pump return mains: Standard weight genuine wrought iron pipe.
 Insulation:
 Outside steam mains: Double standard 85% carbonate of magnesia sectional covering wrapped with asphalt saturated felt.
 Outside pump return mains: Standard 85% carbonate of magnesia sectional covering wrapped with asphalt saturated felt.
 Outside compressed air mains: No covering.
 Pole supports are 6" standard steel pipe.
 Conventional symbols:
 Drip line from bldg. to dry well.
 Outside steam, pump return, and comp. air mains are supported on poles. 14'-0" clearances from ground to pipe mains.



DRAWING REVISED PER FIELD SURVEY
 DATE 29 APRIL 1955
 CONTRACT NO. DA-11-173-ORD-65
 TRYGVE HOFF & ASSOCIATES
 REV. BY A.J.T. CHK'D BY A.F.M.

3-FIELD CHECKED AND ADDED VALVE STATION
 NUMBERING SYSTEM AS OF THIS DATE
 OCTOBER 30 1956

1ST NO. DESIGNATES POWERHOUSE AREA
 2ND " " MAIN LINE NO IN HUNDRED SERIES
 3RD & 4TH NOS. DESIGNATES SUBLINE SERIES
 5TH " 6TH " " VALVE STATIONS

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171M

WILBUR WATSON AND ASSOCIATES
 ARCHITECTS AND ENGINEERS
 CLEVELAND, OHIO
 RAVENNA, OHIO

CONSTRUCTION DIVISION
 OFFICE OF THE QUARTERMASTER GENERAL
RAVENNA ORDNANCE PLANT
FUZE LINE NO. 1
LOCATION MAP
STEAM & AIR

SCALE 1" = 100'

REVISIONS:
 1 ATLAS
 2 EXTEND
 3 REVISION

DATE 7-1-52
 6934
 601.7