

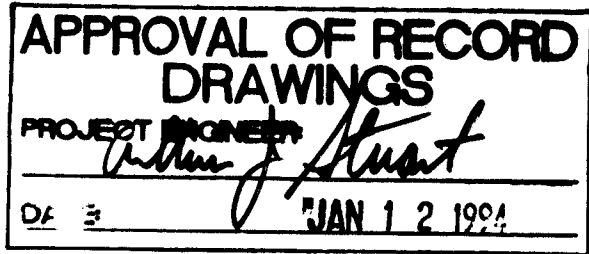
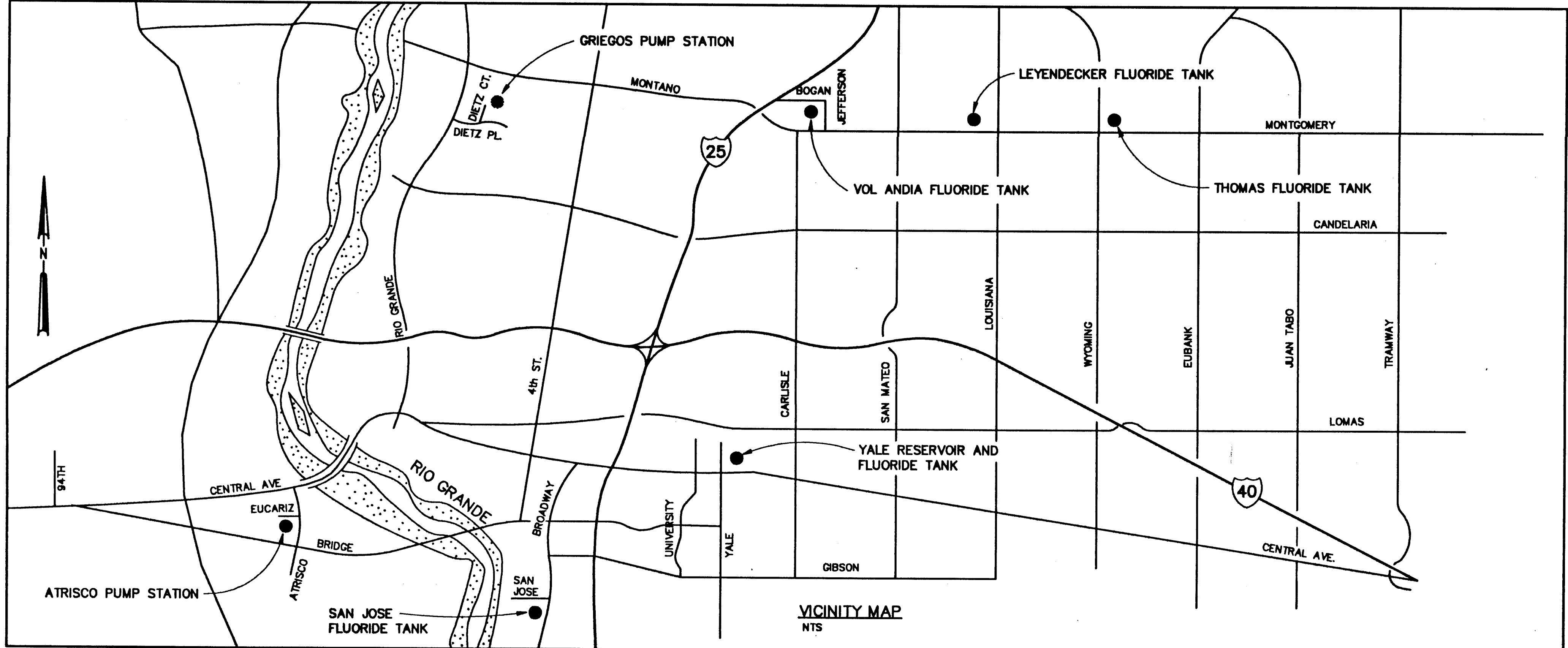
# CITY OF ALBUQUERQUE

## YALE RESERVOIR REPAIR, FLUORIDE TANK REPLACEMENT PHASE 1 AND ATRISCO PUMP STATION REPLACEMENT

### INDEX OF DRAWINGS



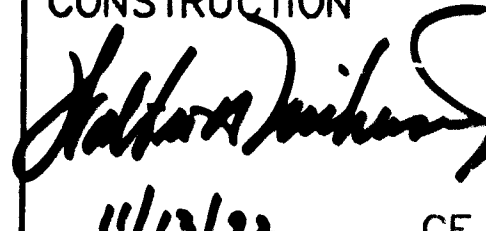


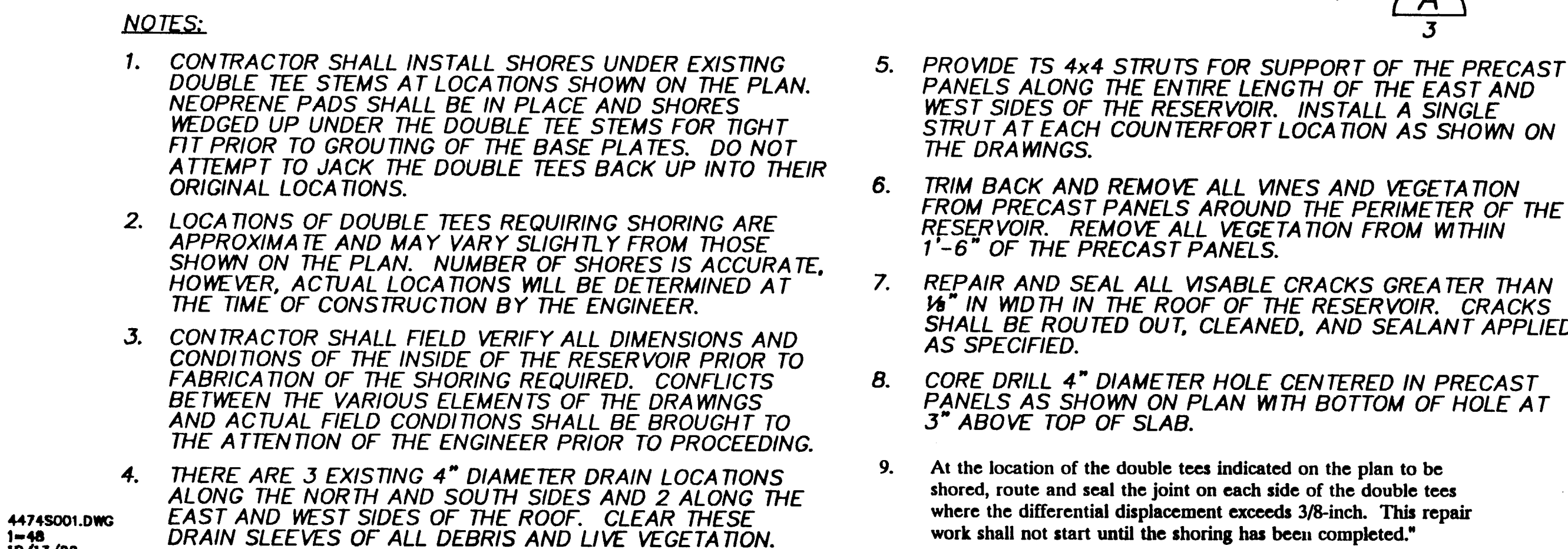
TITLE	SHEET
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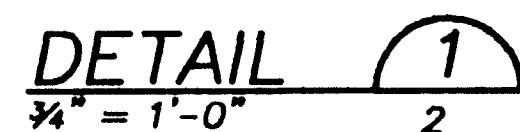


**RECORD DRAWINGS**  
Revisions Drawn by R. GONZALES Date SEPT. 1993  
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26 4366.910194

REV	SHEETS	CITY ENGINEER	DATE	USER DEPT	DATE	USER DEPT	DATE
APPROVAL OF REVISIONS							
 SCANNED BY BY LASON		 CH2M HILL 6121 Indian School Rd, NE Suite 122 Albuquerque, New Mexico 87110 (505) 884-5600		APPROVED FOR CONSTRUCTION  11/13/92 CE			
PROJECT NO. 4366.91				SHEET 1 OF 13			


[illegible]



- ## ABBREVIATIONS

<b>AL, ALUM</b>	<b>ALUMINUM</b>	<b>MB</b>	<b>MACHINE BOLT</b>
<b>BPV</b>	<b>BUTTERFLY VALVE</b>	<b>MFG</b>	<b>MANUFACTURING</b>
<b>BLDG</b>	<b>BUILDING</b>	<b>MG</b>	<b>MILION GALLON</b>
<b>BOT</b>	<b>BOTTOM</b>	<b>MH</b>	<b>MANHOLE</b>
<b>BRG</b>	<b>BEARING</b>	<b>MIN</b>	<b>MINIMUM</b>
<b>C</b>	<b>CHANNEL</b>	<b>MT</b>	<b>MALE THREAD</b>
<b>CCP</b>	<b>CONCRETE CYLINDER PIPE</b>	<b>NTS</b>	<b>NOT TO SCALE</b>
<b>CI</b>	<b>CAST IRON PIPE</b>	<b>OC, O.C.</b>	<b>ON CENTER</b>
<b>C</b>	<b>CENTERLINE</b>	<b>OD</b>	<b>OUTSIDE DIAMETER</b>
<b>CLR</b>	<b>CLEAR</b>	<b>OFF</b>	<b>OWNER-FURNISHED EQUIPMENT</b>
<b>COL</b>	<b>COLUMN</b>	<b>OPNG</b>	<b>OPENING</b>
<b>CONC</b>	<b>CONCRETE</b>	<b>P</b>	<b>PLATE</b>
<b>CONN</b>	<b>CONNECTION</b>	<b>PE</b>	<b>PLAIN END</b>
<b>CONT</b>	<b>CONTINUOUS</b>	<b>PJF</b>	<b>PREMOLDED JOINT FILLER</b>
<b>COR</b>	<b>CORNER</b>	<b>PP</b>	<b>POWER POLE</b>
<b>CPLG</b>	<b>COUPLING</b>	<b>PSI</b>	<b>POUNDS PER SQUARE INCH</b>
<b>CTRD</b>	<b>CENTERED</b>	<b>PVC</b>	<b>POLYVINYL CHLORIDE</b>
<b>DBL</b>	<b>DOUBLE</b>	<b>RCP</b>	<b>REINFORCED CONCRETE PIPE</b>
<b>DI</b>	<b>DUCTILE IRON PIPE</b>	<b>RDCR</b>	<b>REDUCER</b>
<b>DIA, D</b>	<b>DIAMETER</b>	<b>REINF</b>	<b>REINFORCED</b>
<b>DIAG</b>	<b>DIAGONAL</b>	<b>REQD</b>	<b>REQUIRED</b>
<b>DN</b>	<b>DOWN</b>	<b>SCH, SCHED</b>	<b>SCHEDULE</b>
<b>DWGS, DWGS</b>	<b>DRAWINGS</b>	<b>SIM</b>	<b>SIMILAR</b>
<b>EA</b>	<b>EACH</b>	<b>SPECS</b>	<b>SPECIFICATIONS</b>
<b>EF</b>	<b>EACH FACE</b>	<b>SQ</b>	<b>SQUARE</b>
<b>ELEV</b>	<b>ELEVATION</b>	<b>S x S</b>	<b>SOCKET BY SOCKET</b>
<b>EW</b>	<b>EACH WAY</b>	<b>SST</b>	<b>STAINLESS STEEL</b>
<b>EXST</b>	<b>EXISTING</b>	<b>STD</b>	<b>STANDARD</b>
<b>FB</b>	<b>FABRICATED</b>	<b>STL</b>	<b>STEEL</b>
<b>FCA</b>	<b>FLANGED COUPLING ADAPTOR</b>	<b>T</b>	<b>THICKNESS</b>
<b>FLEX</b>	<b>FLEXIBLE</b>	<b>T&amp;B</b>	<b>TOP AND BOTTOM</b>
<b>FLG</b>	<b>FLANGE</b>	<b>TS</b>	<b>TUBE SHAPE</b>
<b>FRP</b>	<b>FIBERGLASS REINFORCED PLASTIC</b>	<b>TPY</b>	<b>TYPICAL</b>
<b>GAL</b>	<b>GALLON</b>	<b>V</b>	<b>VOLT</b>
<b>GALV</b>	<b>GALVANIZED</b>	<b>W</b>	<b>WATER</b>
<b>GR</b>	<b>GRADE</b>	<b>WI</b>	<b>WITH</b>
<b>HT</b>	<b>HEIGHT</b>	<b>W/O</b>	<b>WITHOUT</b>
<b>L</b>	<b>ANGLE</b>	<b>WSP</b>	<b>WELDED STEEL PIPE</b>
<b>LB</b>	<b>POUND</b>	<b>♦</b>	<b>DIAMETER</b>




1. REMOVE DETERIORATED AND LOOSE CONCRETE DOWN TO SOUND CONCRETE. PATCH WITH REPAIR MATERIAL AS SPECIFIED FORMING DEPRESSION AS REQUIRED FOR COMBIFLEX JOINT. INSTALL STRUTS SUPPORTING RECENT PANELS PRIOR TO ACCOMPLISHING THIS REPAIR, SEE 
2. EXISTING RESERVOIR ROOF CONTAINS 14 - 3/8" DIA GREASED POST TENSIONED TENDONS IN THE EAST-WEST DIRECTION. LOCATE THESE STRANDS AND FIRST REPAIR AREA WITHIN 1'-0" EITHER SIDE OF STRAND BEFORE REPAIRING REMAINDER OF JOINT. ONCE 2'-0" WIDE TENDON ZONE IS REPAIRED AT EACH TENDON AND PATCH MATERIAL HAS REACHED A COMPRESSIVE STRENGTH OF 4,000 PSI PROCEED WITH REMAINDER OF JOINT REPAIR. SUBMIT REPAIR PROCEDURE TO ENGINEER FOR REVIEW PRIOR TO STARTING WORK.
3. INSTALL BUILDING PAPER IN JOINT ABOVE INSIDE FACE OF RESERVOIR WALL. OMIT BUILDING PAPER 1'-0" EITHER SIDE OF TENDONS (SEE NOTE 2).
4. PAINT WITH SYSTEM NO. 6 AS SPECIFIED IN SECTION "PAINTING".
5. Where concrete is not spalled or loose on top surface, grind and chip down as required to provide an even surface for the installation of the COMBIFLEX joint material as shown on the Drawings and in accordance with the manufacturers requirements. Joint material shall be continuous along the East and West sides of the reservoir."



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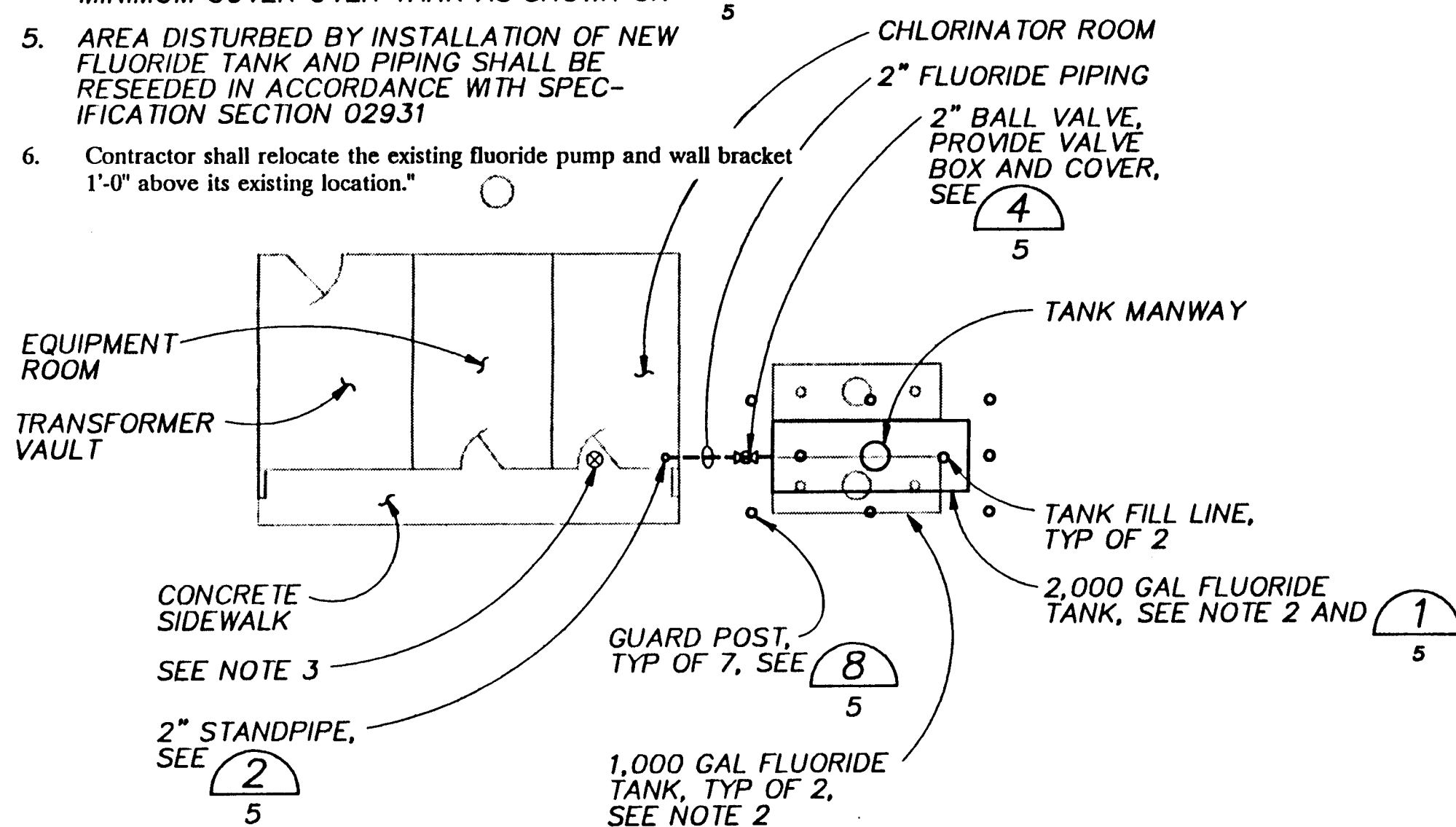
APPROVAL OF RECORD  
DRAWINGS  
PROJECT ENGINEER  
*Arthur J. Stuart*  
DATE: 1993 JUL 19 94

VERIFICATION SCALES  
 BAR IS ONE INCH ON  
 ORIGINAL DRAWING  
 0  1"  
 IF NOT ONE INCH ON  
 THIS SHEET, ADJUST  
 SCALES ACCORDINGLY

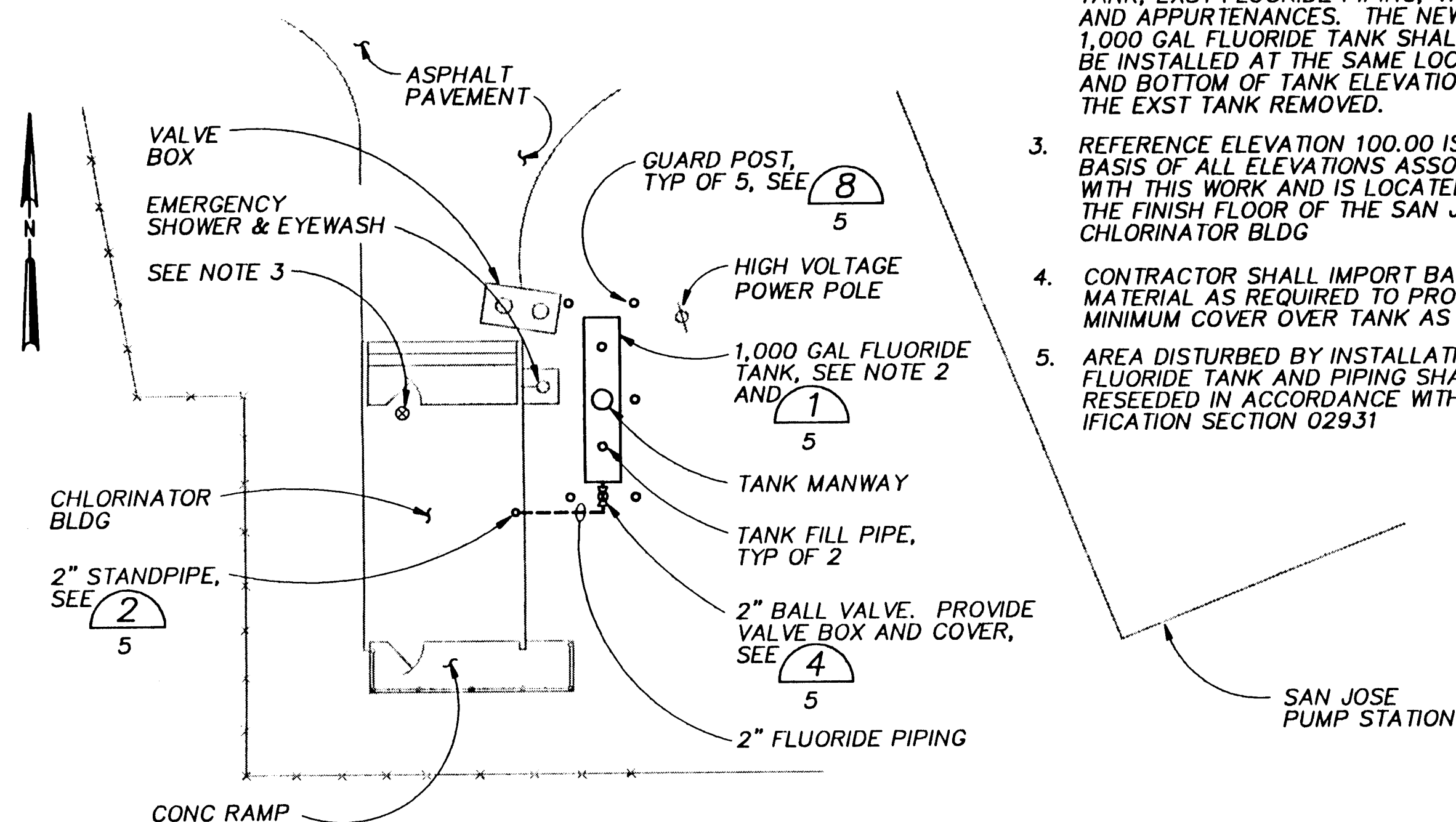
<p align="center"><b>CITY OF ALBUQUERQUE</b>  <b>PUBLIC WORKS DEPARTMENT</b>  <b>ENGINEERING DIVISION</b></p>					
<p><b>TITLE: WATER SYSTEM REHABILITATION</b>  <b>YALE RESERVOIR DETAILS</b></p>					
<b>APPROVALS</b>	<b>ENGINEER</b>	<b>DATE</b>	<b>APPROVALS</b>	<b>ENGINEER</b>	<b>DATE</b>
D.R.C. Choir			Water		
Trans. Dev.			Waste Water		
Hydrology					
<b>DRAWING NO. 4366.91</b>		<b>MAP NO.</b>		<b>SHEET 3 OF 11</b>	

1. CONTRACTOR SHALL VERIFY ACTUAL LOCATION OF EXST BURIED FLUORIDE PIPING.
2. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXST 1,000 GAL FLUORIDE TANKS, EXST FLUORIDE PIPING, VALVES, AND APPURTENANCES. THE NEW 2,000 GAL FLUORIDE TANK SHALL BE INSTALLED AT THE SAME LOCATION AND BOTTOM OF TANK ELEVATION AS THE EXST TANKS REMOVED.

3. REFERENCE ELEVATION 100.00 IS THE BASIS OF ALL ELEVATIONS ASSOCIATED WITH THIS WORK AND IS LOCATED AT THE FINISH FLOOR OF THE CHLORINATOR ROOM OF THE EXST LEYENDECKER WELL NO. 1
4. CONTRACTOR SHALL IMPORT BACKFILL MATERIAL AS REQUIRED TO PROVIDE MINIMUM COVER OVER TANK AS SHOWN
5. AREA DISTURBED BY INSTALLATION OF N FLUORIDE TANK AND PIPING SHALL BE RESEED IN ACCORDANCE WITH SPECIFICATION SECTION 02931
6. Contractor shall relocate the existing fluoride pump a 1'-0" above its relocate location."

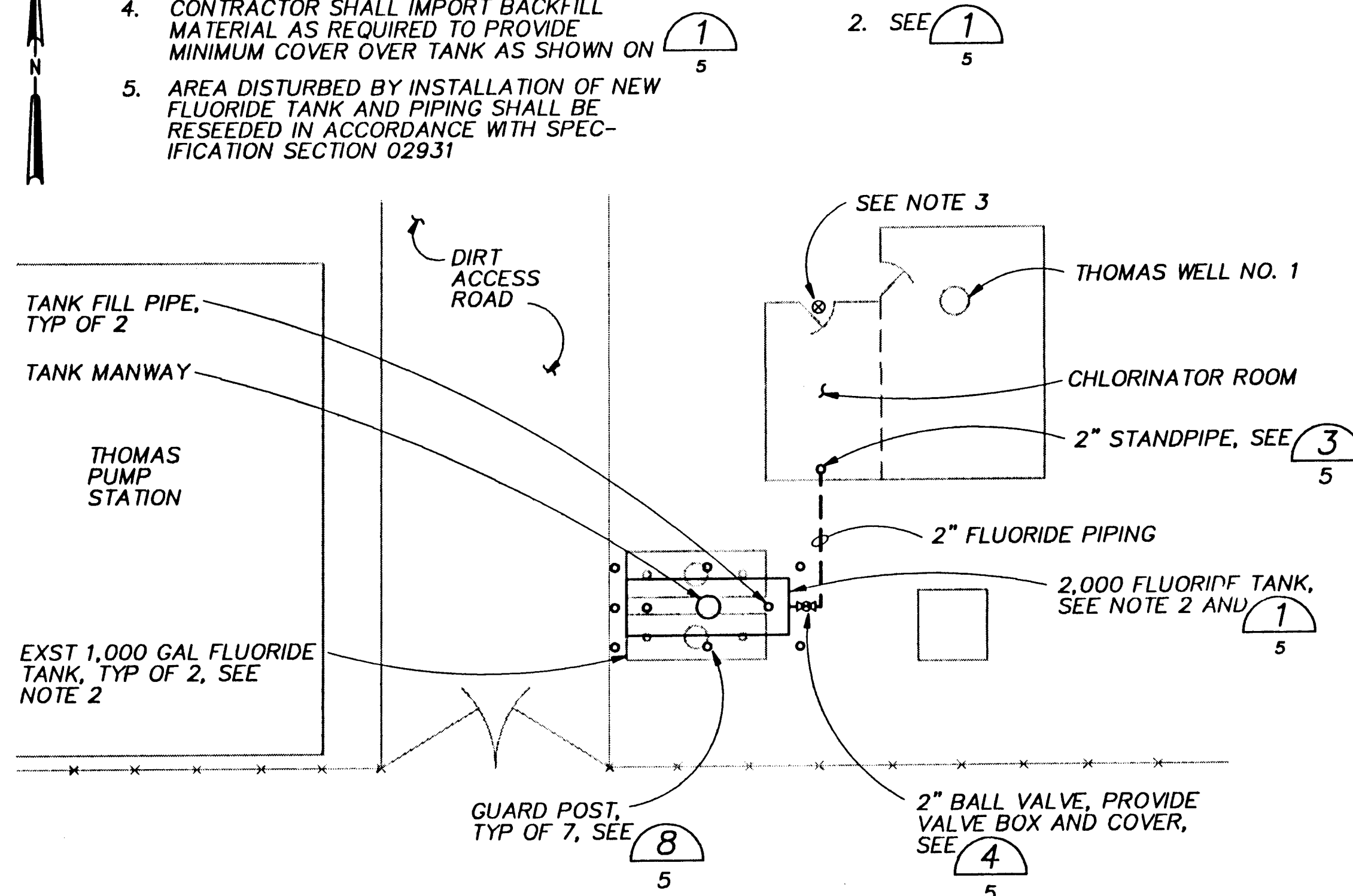

$$1'' = 10'$$

1. **CONTRACTOR SHALL VERIFY ACTUAL LOCATION OF EXST BURIED FLUORIDE PIPING.**
2. **CONTRACTOR SHALL REMOVE AND DISPOSE OF EXST 1,000 GAL FLUORIDE TANK, EXST FLUORIDE PIPING, VALVES, AND APPURTENANCES. THE NEW 1,000 GAL FLUORIDE TANK SHALL BE INSTALLED AT THE SAME LOCATION AND BOTTOM OF TANK ELEVATION AS THE EXST TANK REMOVED.**
3. **REFERENCE ELEVATION 100.00 IS THE BASIS OF ALL ELEVATIONS ASSOCIATED WITH THIS WORK AND IS LOCATED AT THE FINISH FLOOR OF THE SAN JOSE CHLORINATOR BLDG**
4. **CONTRACTOR SHALL IMPORT BACKFILL MATERIAL AS REQUIRED TO PROVIDE MINIMUM COVER OVER TANK AS SHOWN**
5. **AREA DISTURBED BY INSTALLATION OF FLUORIDE TANK AND PIPING SHALL BE RESEEDD IN ACCORDANCE WITH SPECIFICATION SECTION 02931**



$$1'' = 10'$$

1. CONTRACTOR SHALL VERIFY ACTUAL LOCATION OF EXST BURIED FLUORIDE PIPING.
2. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXST 1,000 GAL FLUORIDE TANKS, EXST FLUORIDE PIPING, VALVES, AND APPURTENANCES. THE NEW 2,000 GAL FLUORIDE TANK SHALL BE INSTALLED AT THE SAME LOCATION AND BOTTOM OF TANK ELEVATIONS AS THE EXST TANKS REMOVED.

3. REFERENCE ELEVATION 100.00 IS THE BASIS OF ALL ELEVATIONS ASSOCIATED WITH THIS WORK AND IS LOCATED AT THE FINISH FLOOR OF THE CHLORINATOR ROOM OF THE EXST THOMAS WELL NO. 1
4. CONTRACTOR SHALL IMPORT BACKFILL MATERIAL AS REQUIRED TO PROVIDE MINIMUM COVER OVER TANK AS SHOWN
5. AREA DISTURBED BY INSTALLATION OF FLUORIDE TANK AND PIPING SHALL BE RESEDED IN ACCORDANCE WITH SPECIFICATION SECTION 02931


$$\underline{1'' = 10}$$

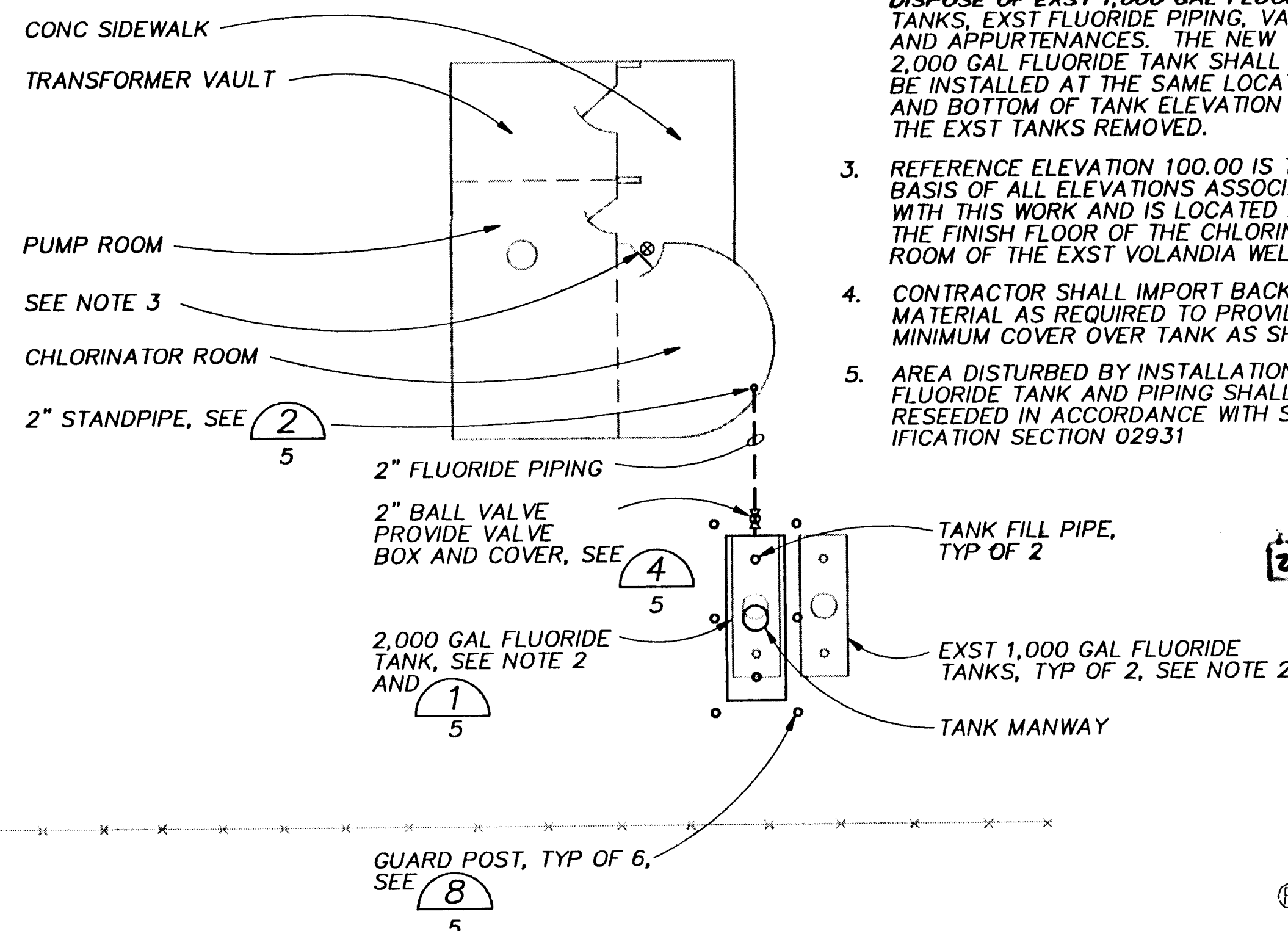
- | LOCATION               | NO. OF TANKS | TANK SIZE | TANK DIA (D) | FINISH GRADE ELEV. @ TOP OF TANK (SEE NOTE 1) | BOTTOM OF TANK ELEV (SEE NOTE 1) | HEIGHT OF STAND PIPE (HS) | HEIGHT TO TOP OF FIRE PIPE (HF) |
|------------------------|--------------|-----------|--------------|---|----------------------------------|---------------------------|---------------------------------|
| LEYENDECKER WELL NO. 1 | 1            | 2000 GAL  | 5'-0"        | 103.00  | 95.98±                           | 1'-9"                     | 8'-6"                           |
| SAN JOSE WELL NO. 1    | 1            | 1000 GAL  | 4'-6"        | 101.25  | 95.19±                           | 0'-8"                     | 7'-6"                           |
| THOMAS WELL NO. 1      | 1            | 2000 GAL  | 5'-0"        | 102.25  | 95.24±                           | 1'-9"                     | 8'-6"                           |
| VOLANDIA WELL NO. 1    | 1            | 2000 GAL  | 5'-0"        | 102.50  | 95.48±                           | 1'-11"                    | 8'-6"                           |
| YALE PUMP STATION      | 1            | 1000 GAL  | 4'-0"        | 101.00±                                       | 95.42±                           | 1'-0"                     | 7'-0"                           |

- NOTES:**  
1. ELEVATIONS SHOWN ON THIS SCHEDULE ARE BASED ON REFERENCE ELEVATION 100.00 AS DESCRIBED ON THE SITE PLAN FOR EACH FACILITY.
2. SEE 

Revisions Drawn by R.GONZALES Date SEPT. 1993

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1. CONTRACTOR SHALL VERIFY ACTUAL LOCATION OF EXST BURIED FLUORIDE PIPING.
2. **CONTRACTOR SHALL REMOVE AND DISPOSE OF EXST 1,000 GAL FLUORIDE TANKS, EXST FLUORIDE PIPING, VALVES, AND APPURTENANCES. THE NEW 2,000 GAL FLUORIDE TANK SHALL BE INSTALLED AT THE SAME LOCATION AND BOTTOM OF TANK ELEVATION AS THE EXST TANKS REMOVED.**
3. REFERENCE ELEVATION 100.00 IS THE BASIS OF ALL ELEVATIONS ASSOCIATED WITH THIS WORK AND IS LOCATED AT THE FINISH FLOOR OF THE CHLORINATION ROOM OF THE EXST VOLANDIA WELL NO. 1
4. CONTRACTOR SHALL IMPORT BACKFILL MATERIAL AS REQUIRED TO PROVIDE MINIMUM COVER OVER TANK AS SHOWN ON
5. AREA DISTURBED BY INSTALLATION OF NEW FLUORIDE TANK AND PIPING SHALL BE RESEEDED IN ACCORDANCE WITH SPECIFICATION SECTION 02931

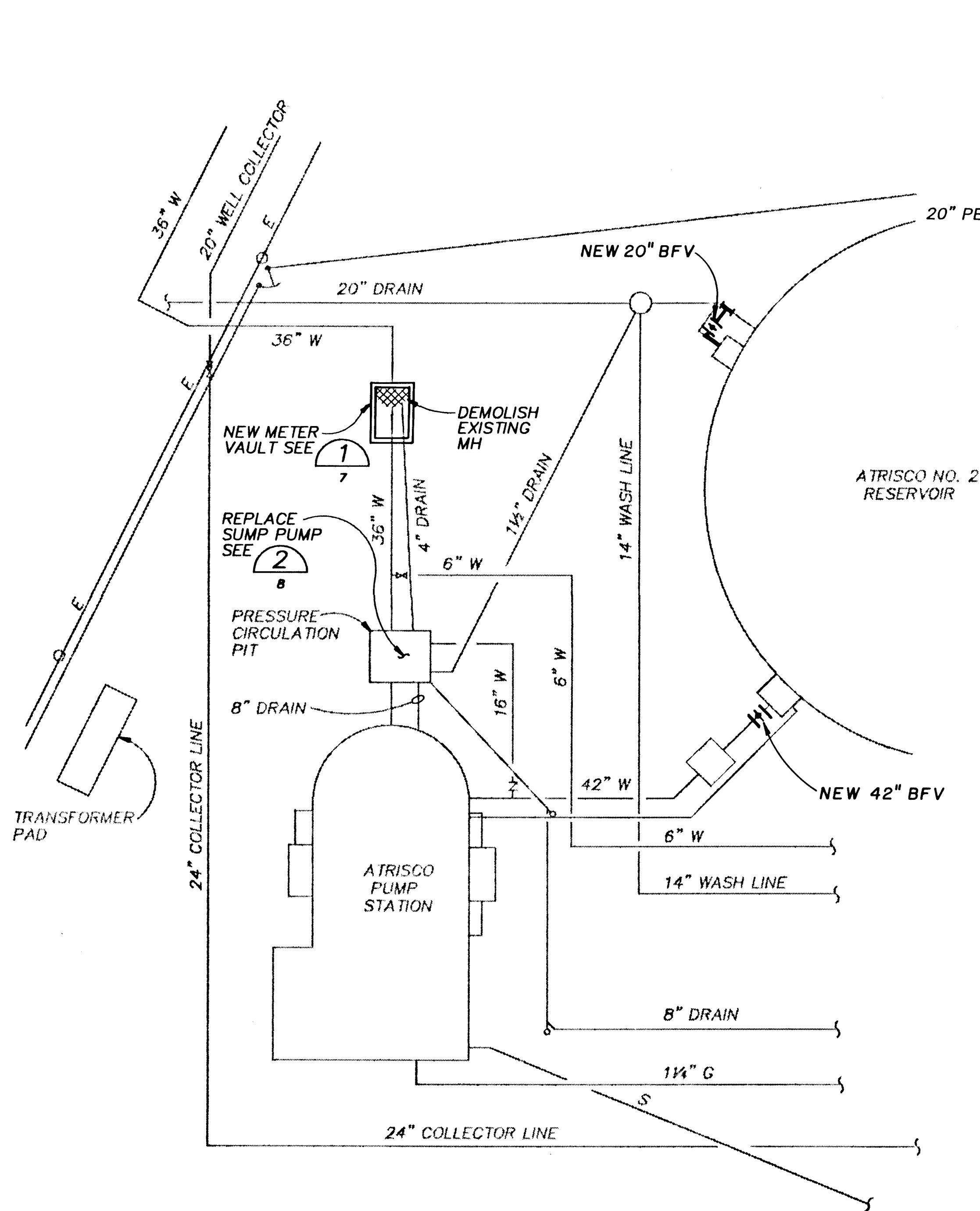

$$1'' = 10'$$

SCANNED BY  
BY LASON

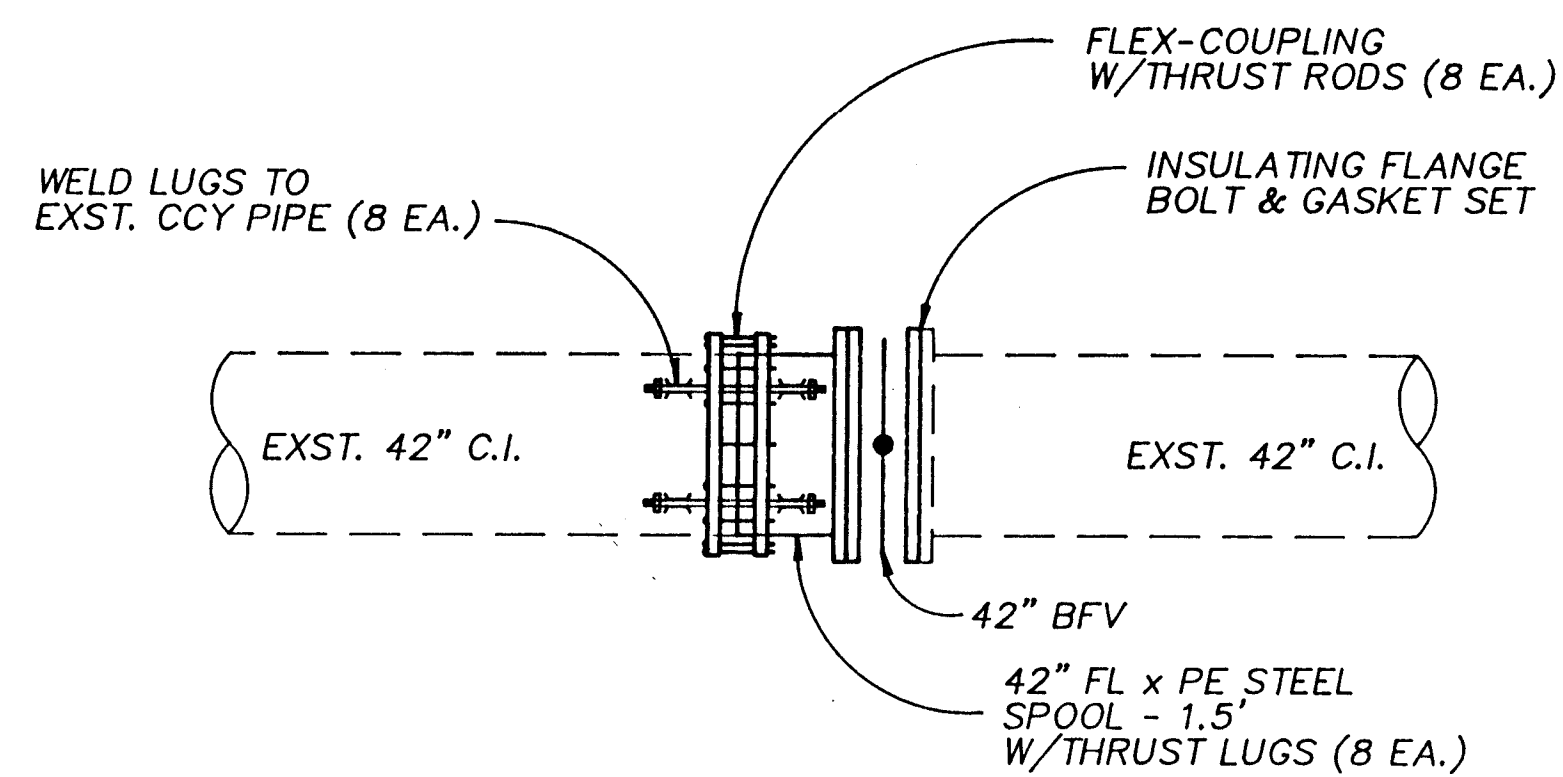


CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: WATER SYSTEM REHABILITATION FLUORIDE TANK SITE PLANS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. 4366-91		MAP NO.	SHEET 4	OF 11	

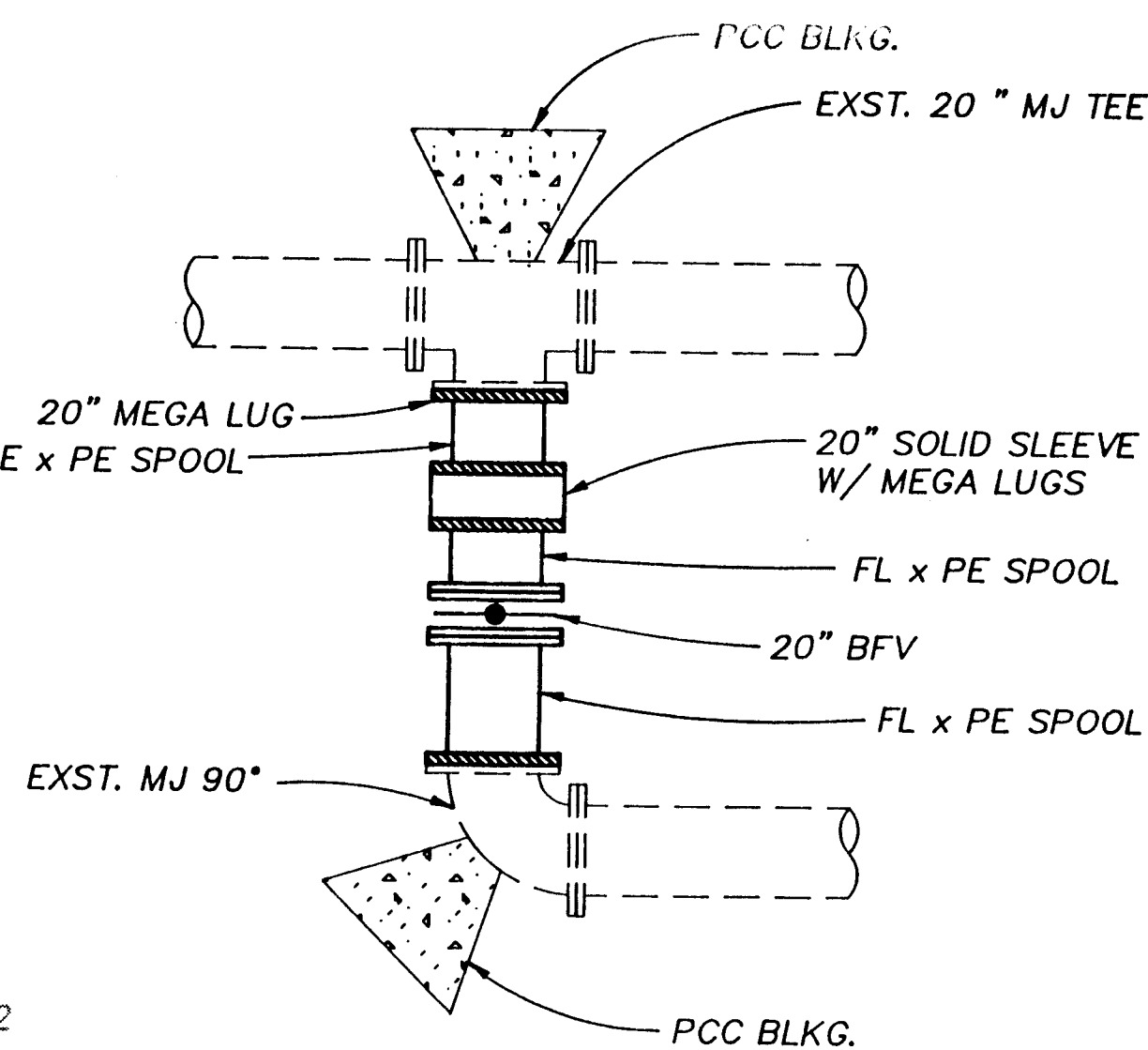




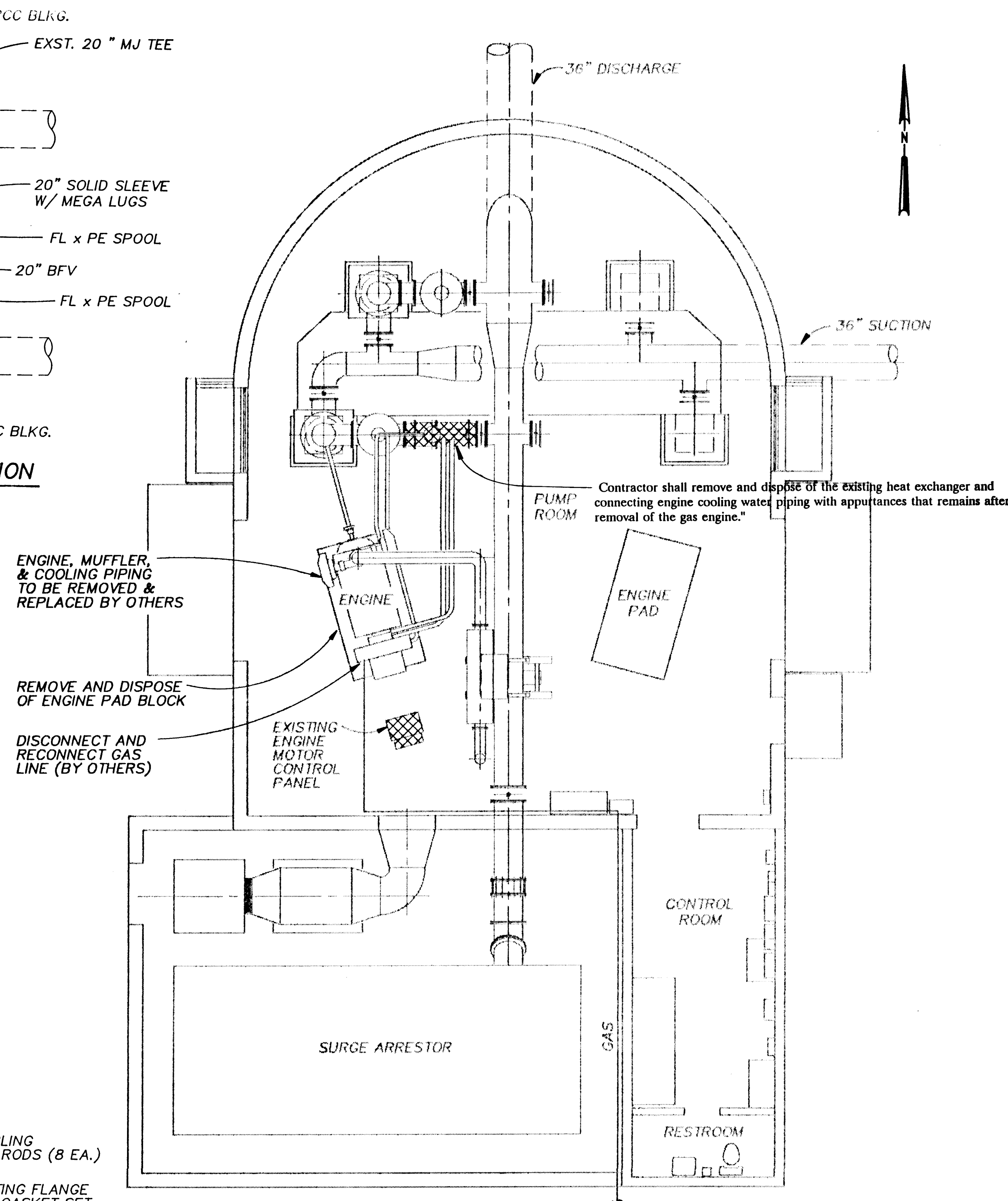
**SITE PLAN**  
1" = 20'



**42" BFV INSTALLATION**



**20" BFV INSTALLATION**



**PUMP STATION DEMOLITION PLAN**

3/16" = 1'-0"

26 4366.910694

**RECORD DRAWINGS**

Revisions Drawn by R. GONZALES Date SEPT. 1993

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**APPROVAL OF RECORD DRAWINGS**  
PROJECT ENGINEER  
*William J. Stuart*  
DATE JAN 12 1994

SCANNED BY  
BY LASON

**VERIFY SCALES**  
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0 1"  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: WATER SYSTEM REHABILITATION ATRISCO PUMP STATION PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	4366.91	MAP NO.		SHEET 6	OF 11

AS BUILT INFORMATION			BENCH MARKS			SURVEY INFORMATION			ENGINEER'S SEAL			REVISIONS			REMARKS		
CONTRACTOR	NO.	DATE	CONTRACTOR	NO.	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE
STAMPED BY			STAMPED BY														
DATE			DATE														
ADJUSTED BY			ADJUSTED BY														
DATE			DATE														
FIELD ADJUSTMENT BY			FIELD ADJUSTMENT BY														
DATE			DATE														
DRAWINGS CORRECTED BY			DRAWINGS CORRECTED BY														
DATE			DATE														
RECORDED BY			RECORDED BY														
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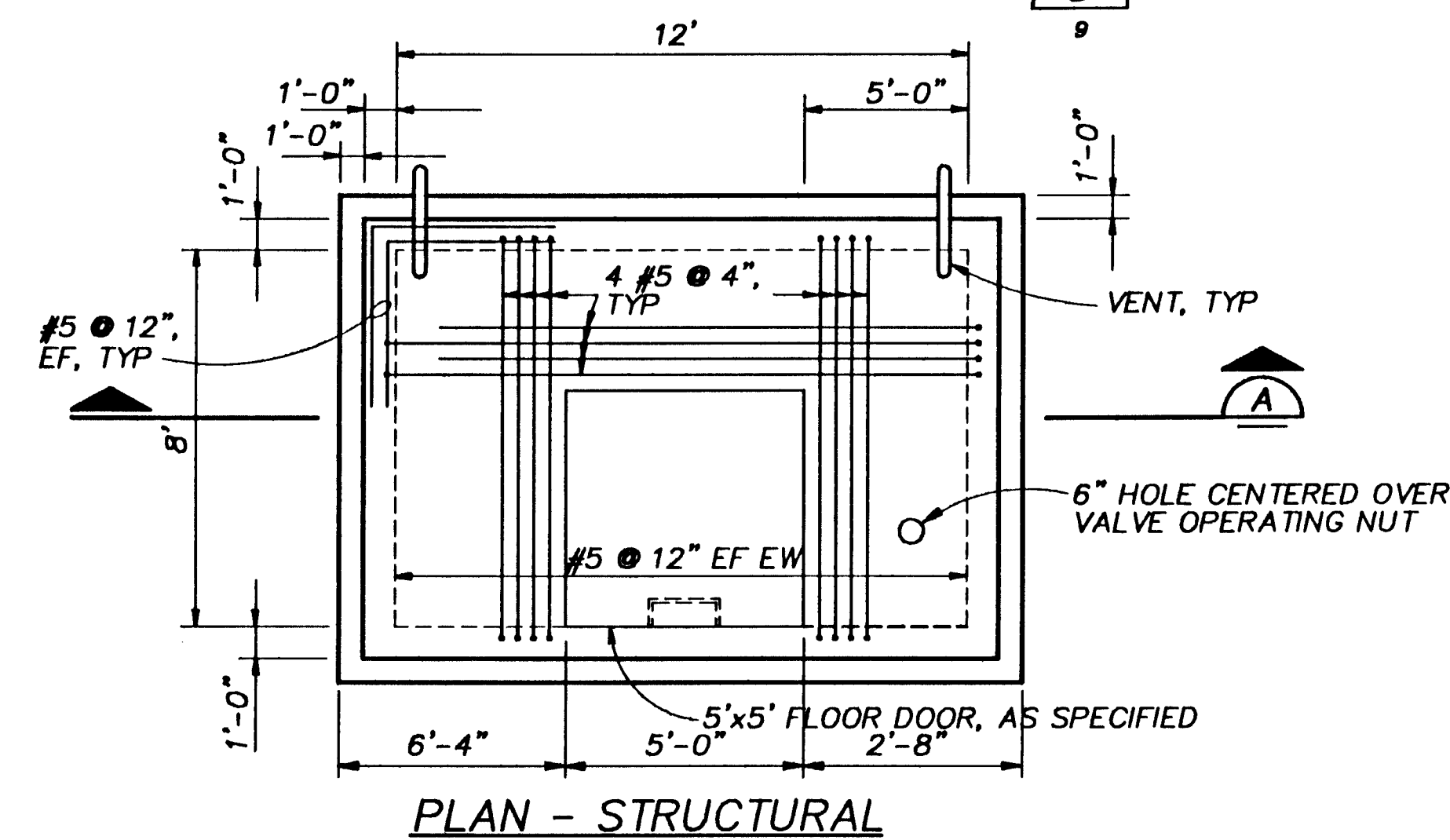




**Note:** Contractor shall provide anchor bolts, in accordance with the specification, and in number as required by base manufacturer for securing the engine to the new concrete pedestal. Anchor bolts shall be 3/4" diameter "J" bolts" embedded a minimum 1'-6" below the top surface of the pedestal. The horizontal leg of the bolts shall be a minimum of 2-1/2". Bolt projection shall be coordinated with the engine base requirements. Provide high density polyethylene plastic anchor bolt sleeve to allow for minor adjustment. Sleeve shall be single unit construction with deformed sidewalls such that concrete and grout lock into place as manufactured by Sincos West, 655 East Cochran Street, Simi Valley, CA 93085, telephone 805/522-3991, or equal.

Revisions Drawn by R.GONZALES Date SEPT. 1993

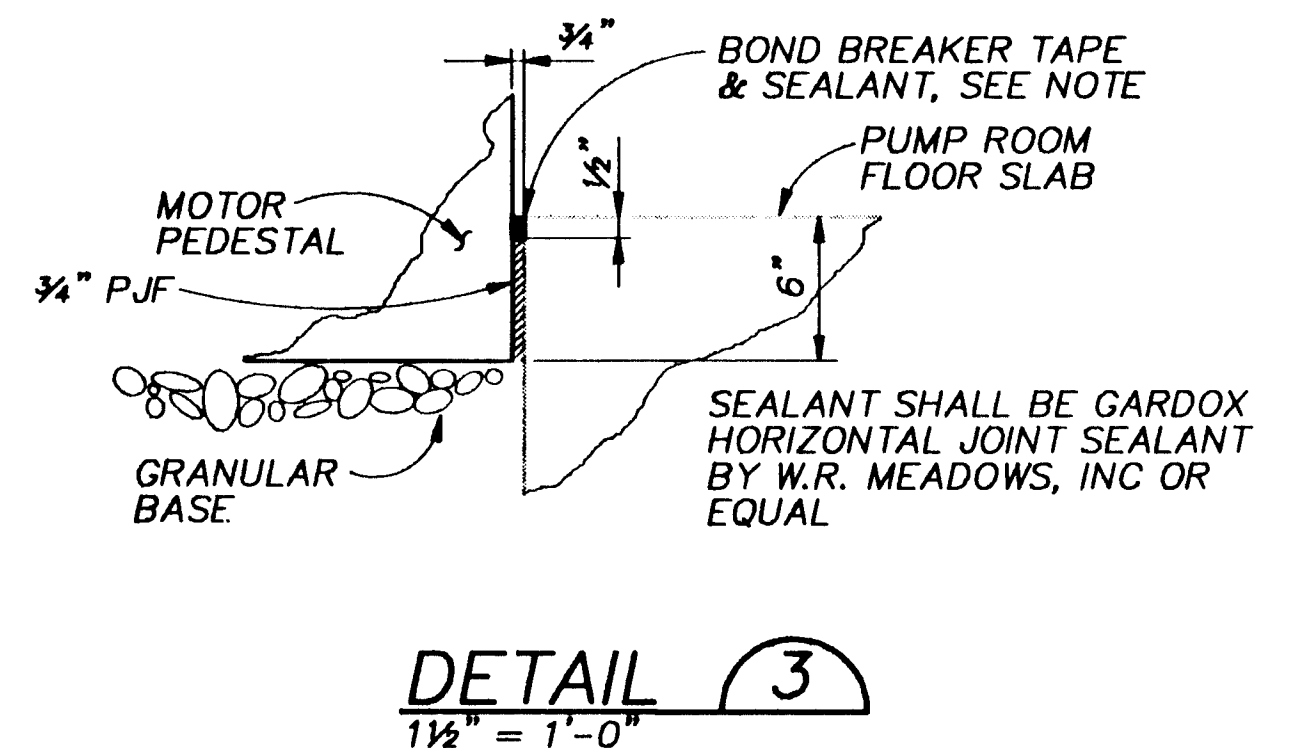
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- NOTES:**
- 1. METER VAULT SHALL BE 8' x 12' INSIDE DIMENSIONS**
  - 2. CONTRACTOR SHALL VERIFY LOCATION, DEPTH, MATERIAL AND DIAMETER OF EXISTING PIPE.**
  - 3. CONSTRUCT VENTS AGAINST WALL OPPOSITE LADDER AS SHOWN.**



NTS



**NOTE:**  
AFTER CUTTING FULL SIZE OUTLET OPENING  
IN EXISTING PIPE AND WELDING ON NEW  
OUTLET, REPAIR DAMAGED PIPE LINING  
SYSTEM ON NEW OUTLET AND EXISTING  
PIPE TO MATCH ORIGINAL.

**VERIFY SCALES**  
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ORIGINAL DRAWING  
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SCALES ACCORDINGLY.

APPROVAL OF RECORD  
DRAWINGS  
PROJECT ENGINEER  
DATE: JAN 12 1984

SCANNED BY  
BY LASON




CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION

TITLE: WATER SYSTEM REHABILITATION  
ATRISCO PUMP STATION DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					

DRAWING NO.	4366.91	MAP NO.	SHEET 7	OF 11/13
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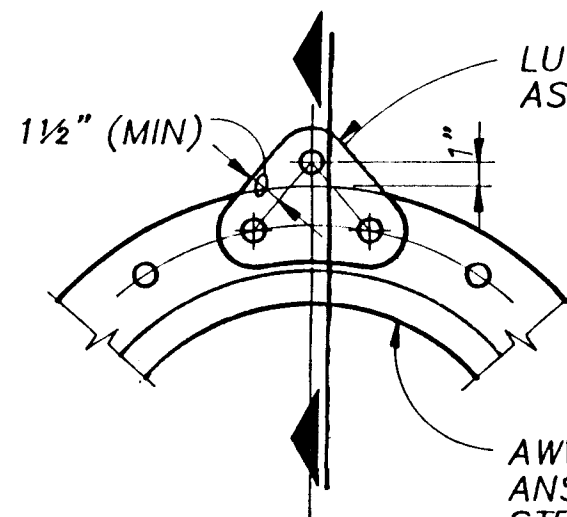
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES					
		NO.	BY	DATE			
						CONTRACTOR	
						WORK	
						STAKED BY	DATE
						ACCEPTANCE BY	DATE
		NO.	DATE			FIELD	DATE
						ADJUSTED BY	DATE
						DRAWINGS	DATE
						CORRECTED BY	DATE
<b>MICRO-FILM INFORMATION</b>							
RECORDED BY							
DATE							
NC							



<b>REVISIONS</b>			
		REMARKS	BY
<b>DESIGN</b>			
DESIGNED BY B. PATTON		DATE 11/3/92	
DRAWN BY R. SANOBANK		DATE 11/4/92	
CHECKED BY J. WINTERS		DATE 1/12/92	

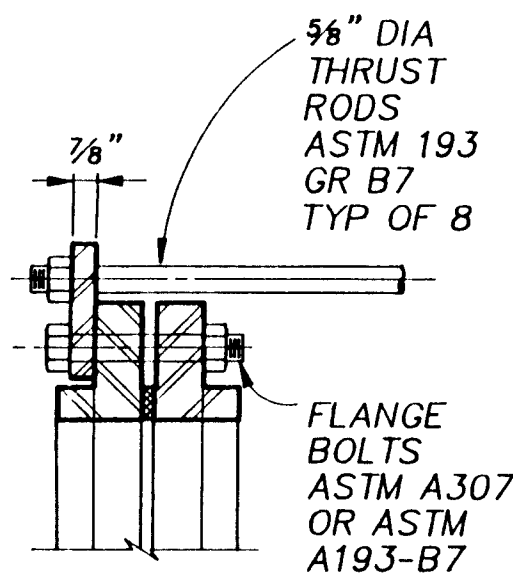
**NOTES:**

1. THRUST RODS SHALL CONFORM TO ASTM A193 GRADE B7.
2. NUTS FOR THRUST RODS SHALL CONFORM TO ASTM A194 GRADE 7.
3. LUG PLATES SHALL CONFORM TO ASTM A-36.
4. THRUST ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES TO PREVENT UNEVEN ALIGNMENT AND TO ALLOW EQUAL STRESS ON ALL RODS UNDER PRESSURE. TIGHTEN UNTIL SNUG. THREADS SHALL PROTRUDE FROM NUTS. PEEN THREADS AFTER TIGHTENING NUTS.
5. LUG PLATES SHALL BE EQUALLY SPACED AROUND PIPE.



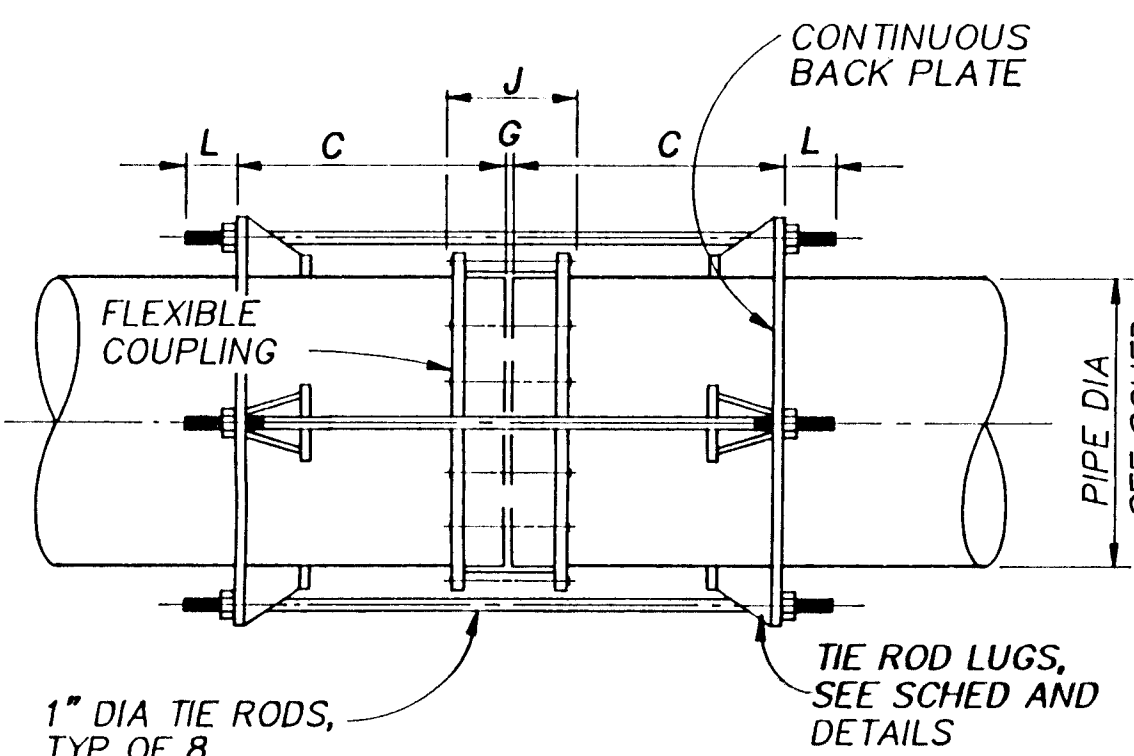
FRONT ELEVATION

LUG



SECTION

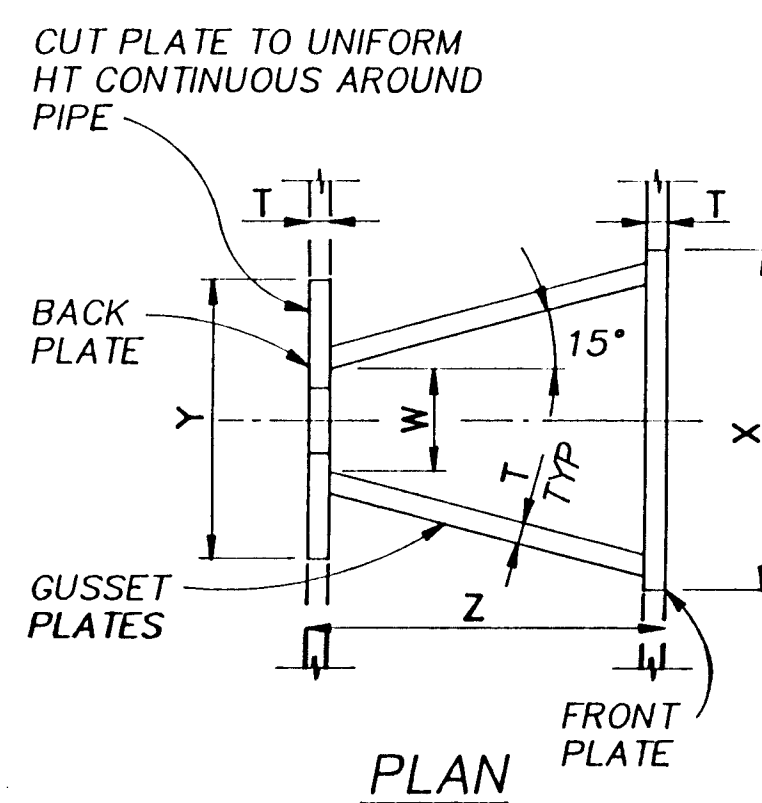
FLANGE LUG DETAIL 1  
NTS



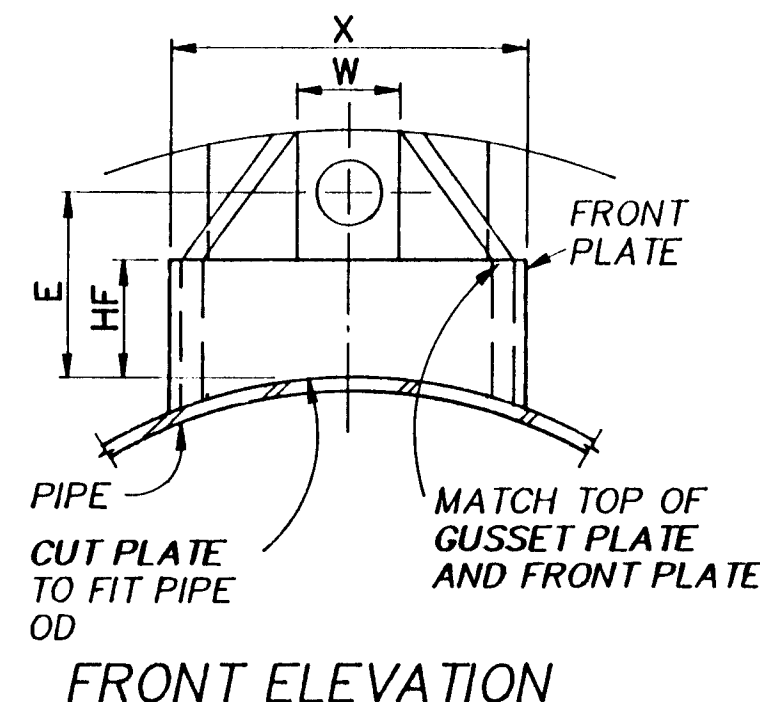
**NOTES:**

1. THE MIDDLE RING LENGTH OF THE FLEXIBLE COUPLING SHALL BE AS SPECIFIED.
2. THE CONTRACTOR SHALL DETERMINE THE LENGTH "J" (COUPLING BOLT LENGTH) FROM MANUFACTURER'S CATALOGS USING THE SPECIFIED MIDDLE RING LENGTH.
3. "G" = MANUFACTURER'S RECOMMENDED SPACE BETWEEN ENDS OF PIPE.
4. "C" = J+Z+1 INCH. (ROUND THIS VALUE UP TO NEXT EVEN INCH), MINIMUM. (FOR Z DIMENSIONS, SEE LUG SCHEDULE.)
5. TIE ROD LENGTH = 2L+2C+G.

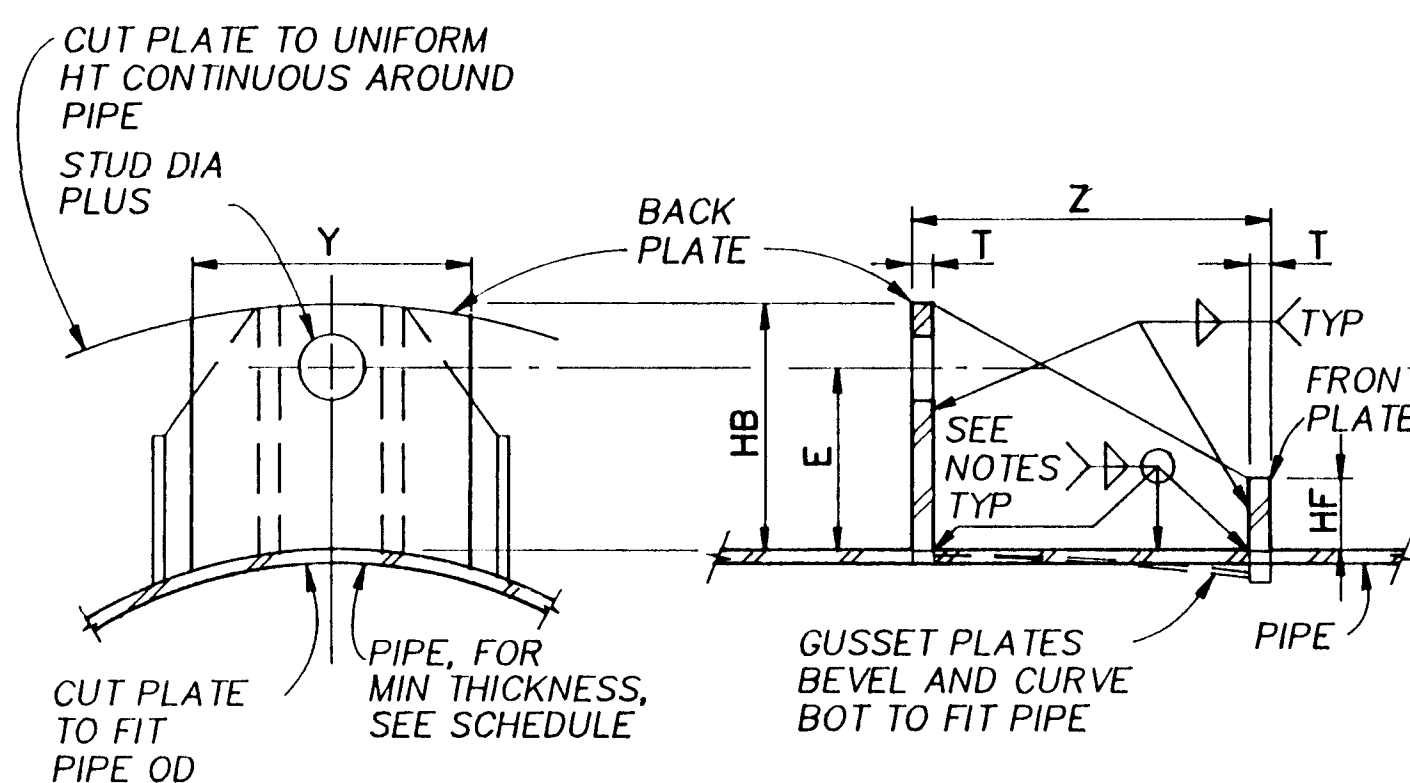
THRUST TIE DETAIL  
FOR STEEL PIPE



PLAN



FRONT ELEVATION

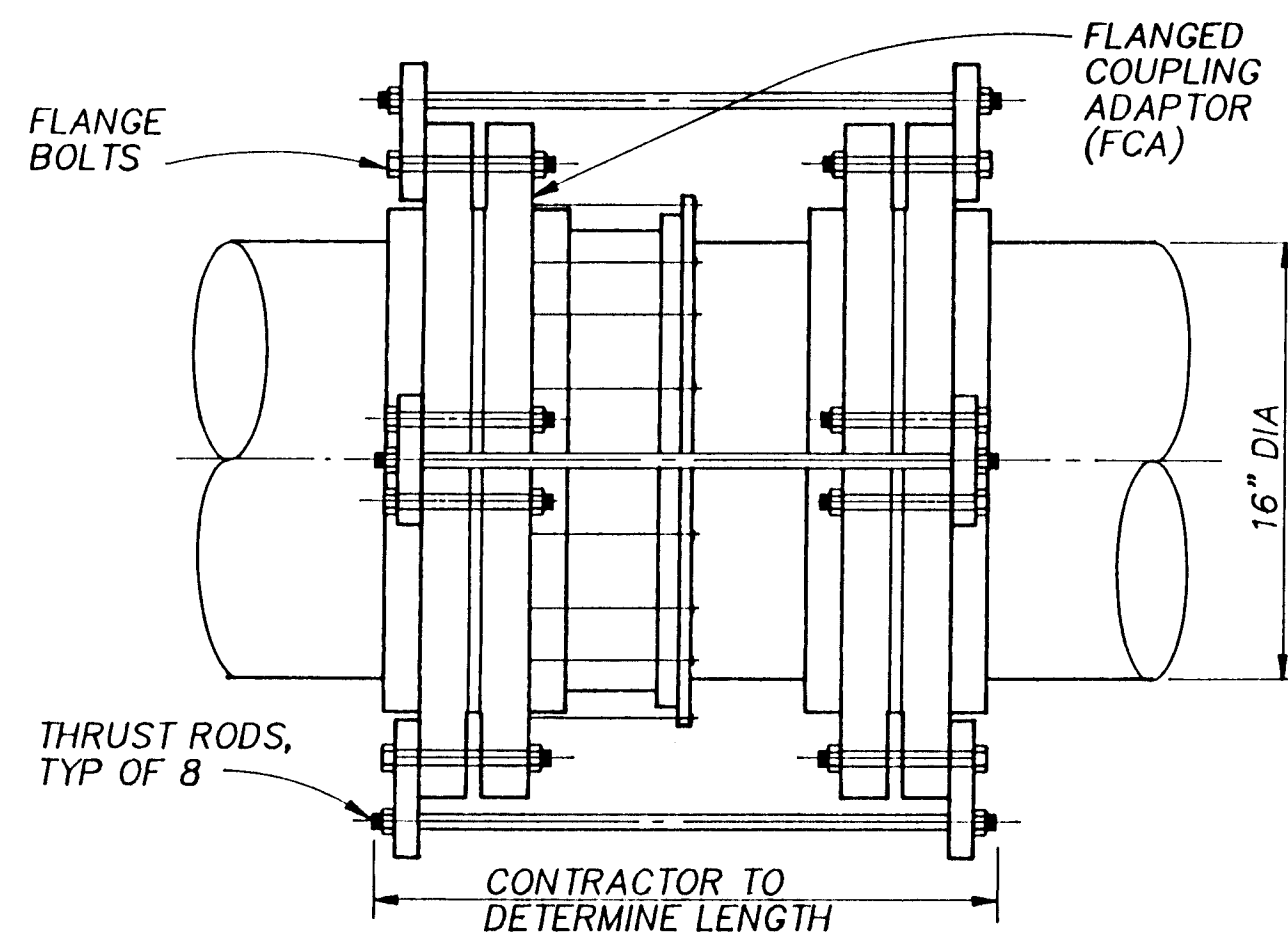


BACK ELEVATION

SECTION

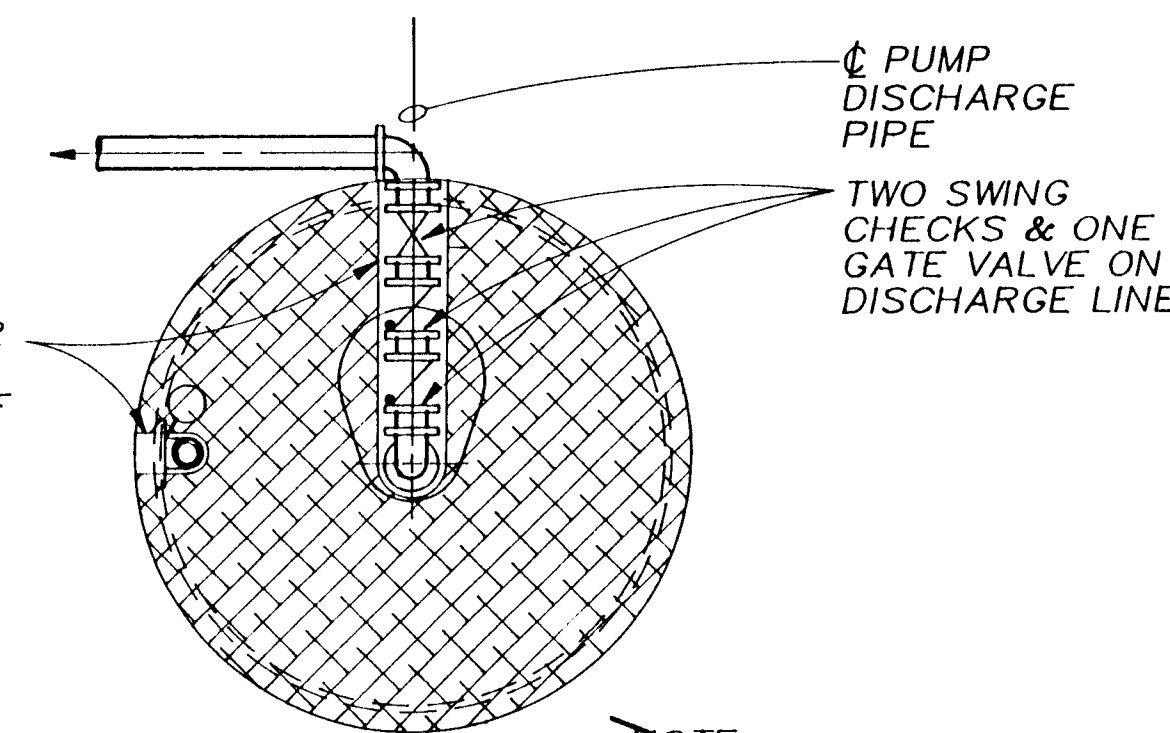
TIE ROD LUG

TYPICAL THRUST TIE ROD DETAIL 4  
NTS



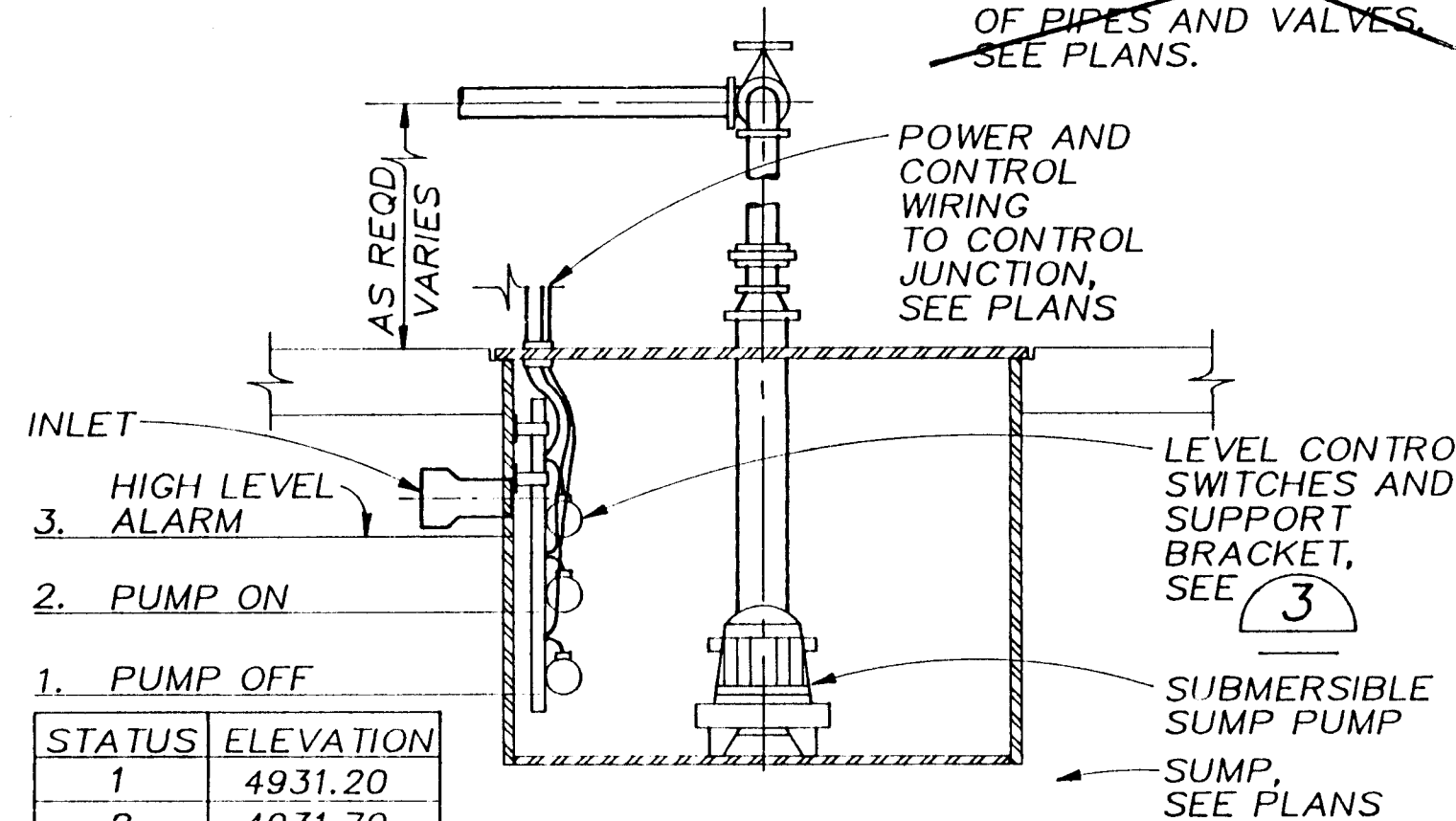
THRUST LUG DETAIL  
FOR STEEL PIPE

MODIFY EXST COVER AS REQUIRED TO PERMIT REMOVAL OF COVER WITHOUT DISTURBING PIPING



PLAN

NOTE: THIS DETAIL SHOWS GENERAL PIPING ARRANGEMENT. FOR SPECIFIC ORIENTATION OF PIPES AND VALVES, SEE PLANS.



SECTION

SUMP PUMP DETAIL 2

NTS

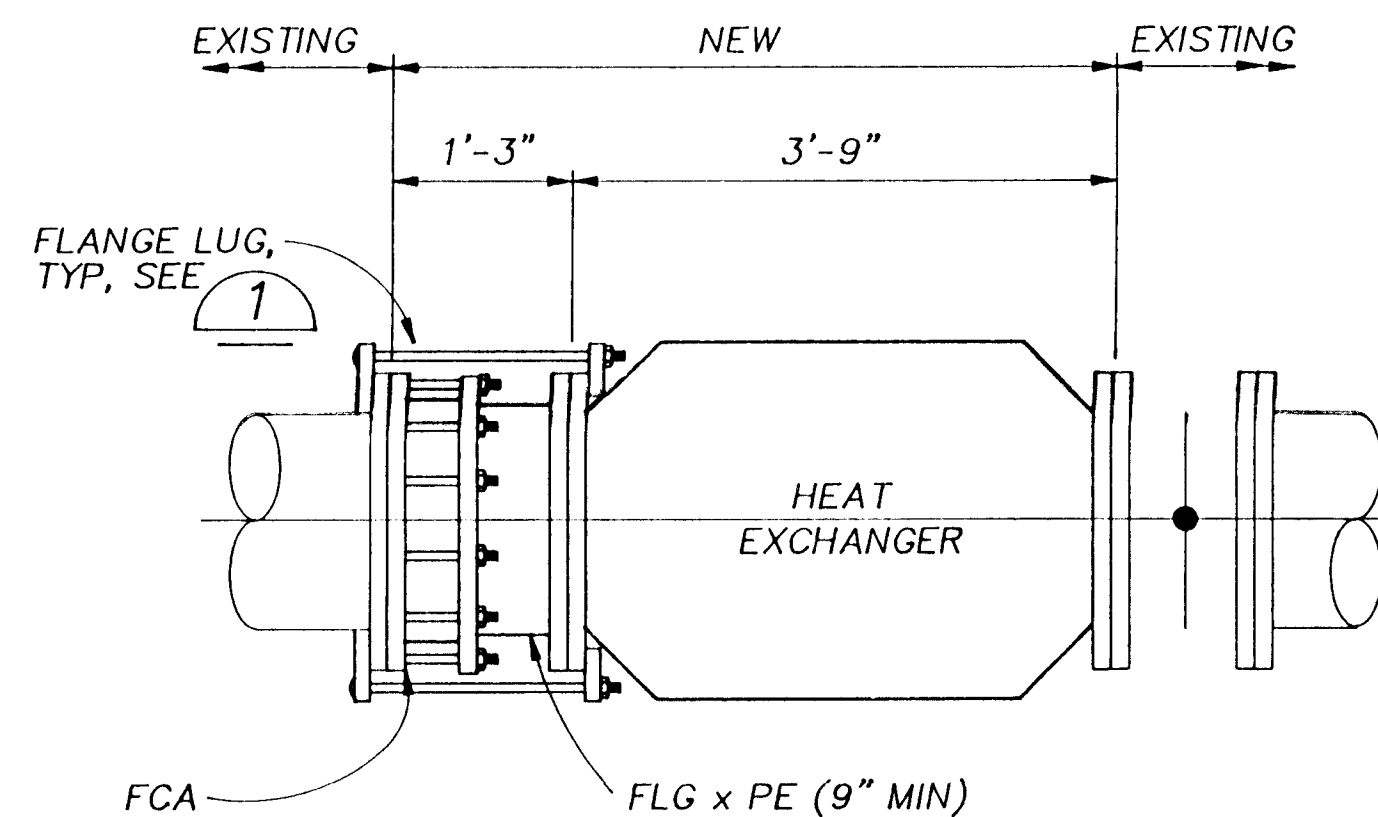
**NOTE:**

"Contractor shall provide fittings as required to connect new 2-inch diameter sump pump discharge to existing sump pump discharge piping."

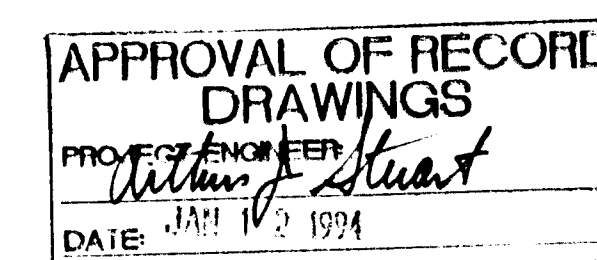
**NOTES:**

1. LUG SCHEDULE DIMENSIONS IN INCHES.
2. TIE RODS SHALL CONFORM TO ASTM A193 GRADE B7.
3. NUTS SHALL CONFORM TO ASTM A194 GRADE 2H.
4. PLATE SHALL CONFORM TO ASTM A283 GRADE D.
5. TIE ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES TO PREVENT UNEVEN ALIGNMENT AND TO ALLOW EQUAL STRESS ON ALL TIE RODS UNDER PRESSURE. TIGHTEN UNTIL SNUG. THREADS SHALL PROTRUDE FROM NUTS. PEEN THREADS AFTER TIGHTENING NUTS.
6. TIE ROD LUGS SHALL BE SPACED EQUALLY AROUND PIPE.
7. FILLET WELDS SHALL MEET THE MINIMUM REQUIREMENTS OF THE AISC SPECIFICATION EXCEPT AS FOLLOWS: FILLET WELDS SHALL BE 1/4-INCH MINIMUM EXCEPT WHEN WELDING 3/16-INCH PLATE WHERE THEY SHALL BE 3/16-INCH.
8. CATHODIC PROTECTION FOR FLEXIBLE COUPLINGS REQUIRED WHERE NOTED ON PLANS OR IN THE SPECIFICATIONS.
9. FOR ALL BURIED ASSEMBLIES, COAT ALL TIE RODS AND EXPOSED STEEL WITH 16 MILS OF BITUMASTIC.

LUG SCHEDULE										
STUD DIA	LUG TYPE	T	W	X	Y	Z	HB	E	HF	L
1	II	1/2	1-3/4	5-3/4	Cont	6	4-1/2	3-1/4	2	4



HEAT EXCHANGER DETAIL 4



VERIFY SCALES  
BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

**RECORD DRAWINGS**

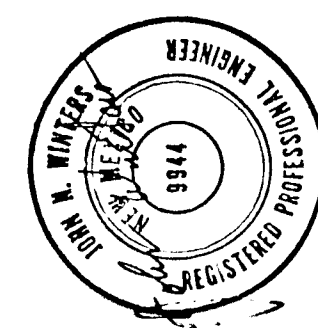
Revisions Drawn by R.GONZALES Date SEPT. 1993

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

SCANNED BY LASON

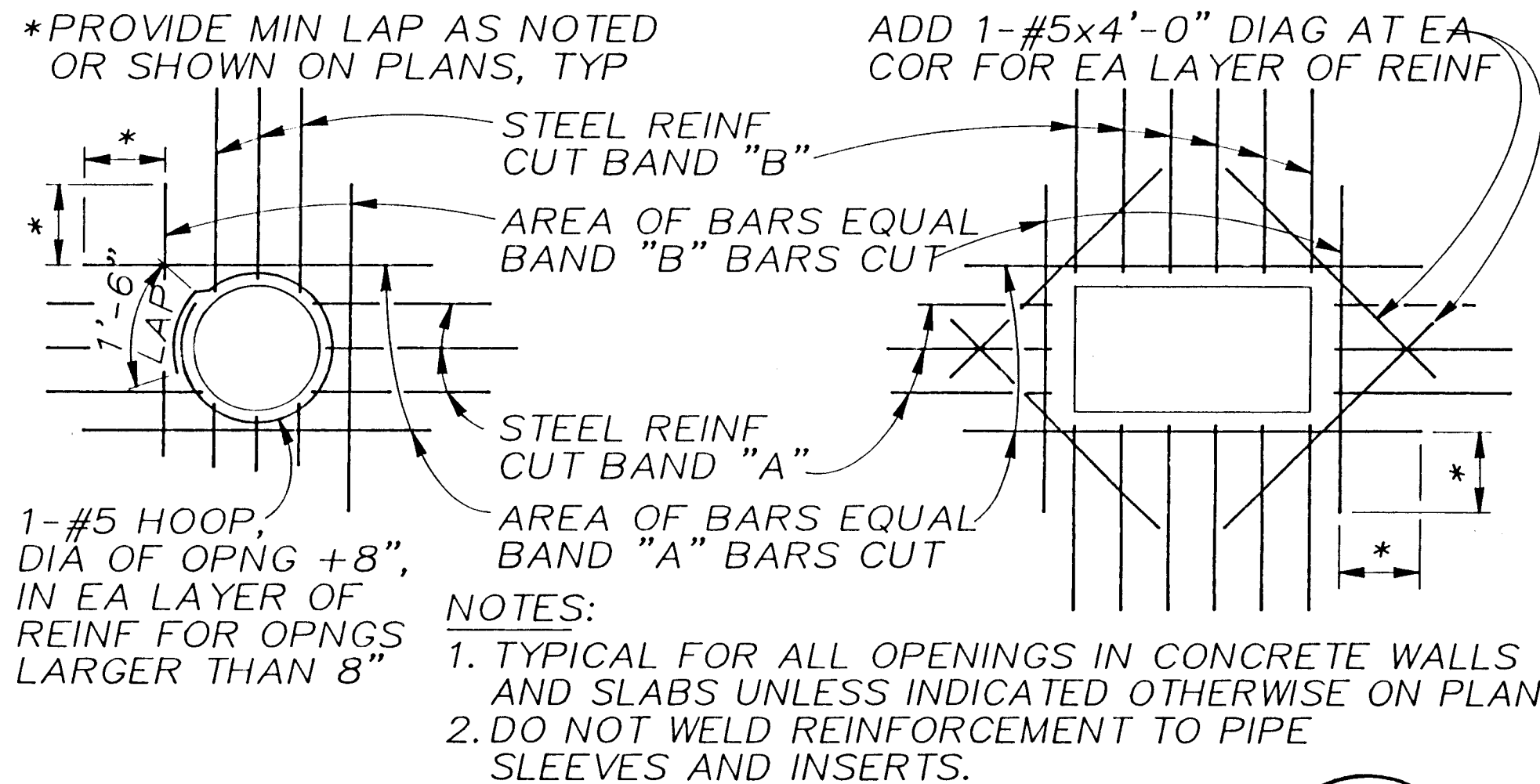


AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
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STAGED BY	DATE	BY	NO.	STAGED BY	DATE	BY	NO.	NO.	DATE	BY	NO.	NO.	DATE	BY	NO.
ACCEPTANCE BY	DATE	BY	NO.	ACCEPTANCE BY	DATE	BY	NO.	NO.	DATE	BY	NO.	NO.	DATE	BY	NO.
FIELD ACCEPTANCE BY	DATE	BY	NO.	FIELD ACCEPTANCE BY	DATE	BY	NO.	NO.	DATE	BY	NO.	NO.	DATE	BY	NO.
DRAWINGS	DATE	BY	NO.	DRAWINGS	DATE	BY	NO.	NO.	DATE	BY	NO.	NO.	DATE	BY	NO.
CHECKED BY	DATE	BY	NO.	CHECKED BY	DATE	BY	NO.	NO.	DATE	BY	NO.	NO.	DATE	BY	NO.
RECORDED BY	DATE	BY	NO.	RECORDED BY	DATE	BY	NO.	NO.	DATE	BY	NO.	NO.	DATE	BY	NO.
NO.				NO.				NO.				NO.			



REVISIONS	DATE	BY
DESIGN	10/18/92	M. BREWER
DRAWN BY	10/23/92	R. SANDBANK
CHECKED BY	11/12/92	J. WINTERS

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: WATER SYSTEM REHABILITATION ATRISCO PUMP STATION DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	4366.91	MAP NO.		SHEET 8	OF 1113

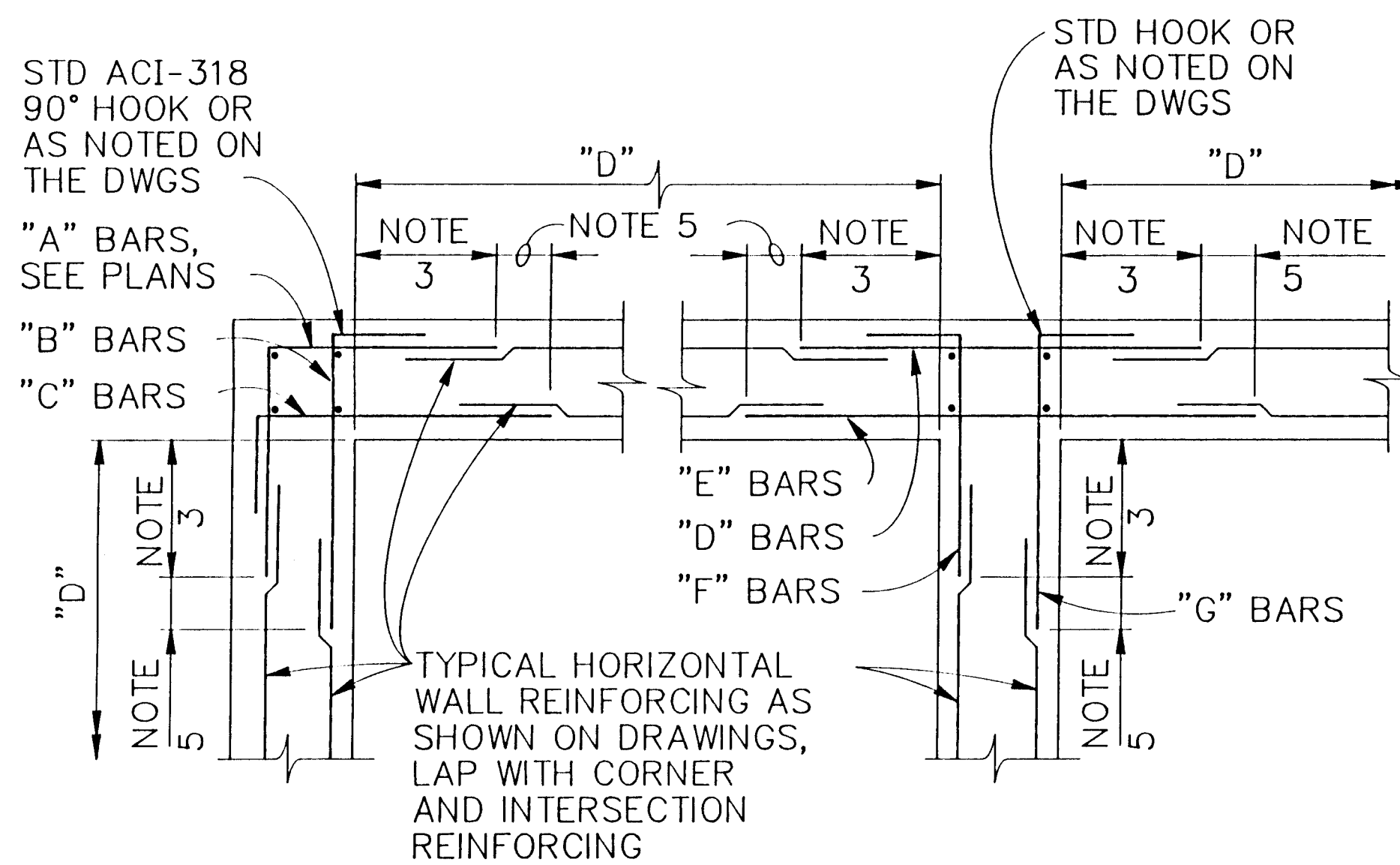


## OPENING REINFORCING

NTS

1

7



## TYPICAL DOUBLE MAT CORNER AND INTERSECTION REINFORCING

NTS

(SEE PLANS FOR SIZE AND SPACING)

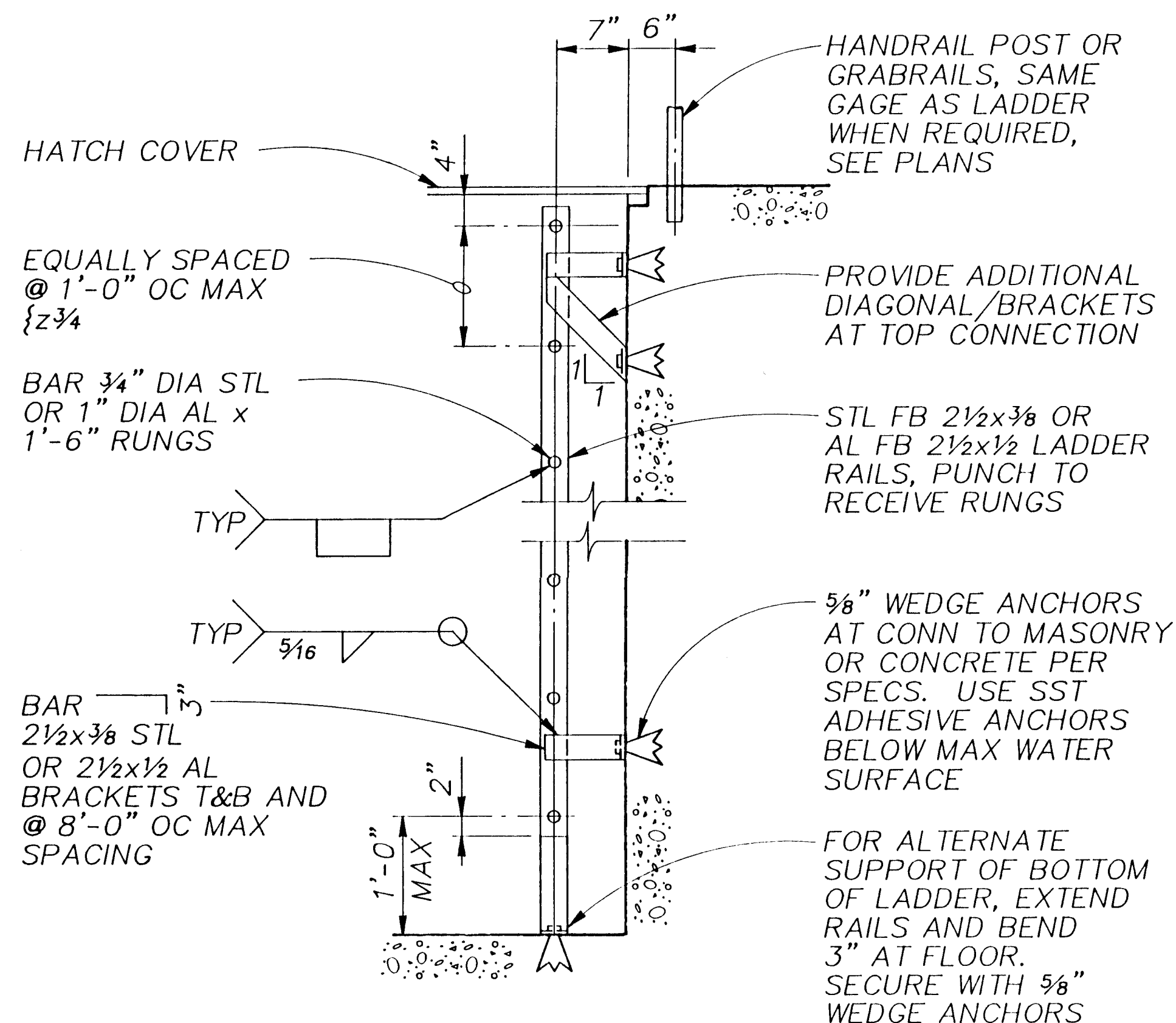
2

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## GENERAL STRUCTURAL NOTES

### CORNER AND INTERSECTION REINFORCING DETAILS

1. TYPICAL HORIZONTAL WALL CORNER AND INTERSECTION REINFORCING LAYOUT IS SHOWN TO AVOID CONGESTION AND PERMIT PROPER PLACEMENT, FOR SIZE AND SPACING SEE PLANS. ALL HORIZONTAL REINFORCING AT CORNERS AND INTERSECTIONS SHALL BE FABRICATED AND INSTALLED WITH SPLICES LOCATED WHERE SHOWN REGARDLESS OF BAR SIZE AND SPACING.
2. WHERE THE CORNER OR INTERSECTION REINFORCING SIZE AND SPACING IS NOT SHOWN, NOTED OR TABULATED ON THE PLANS, THE SIZE AND SPACING SHALL BE THE SAME AS THE WALL HORIZONTAL REINFORCING SHOWN ON THE WALL SECTIONS OR AS NOTED FOR THE REINFORCING BETWEEN THE CORNERS OR INTERSECTIONS.
3. EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS, THE LENGTH INDICATED AS "NOTE 3" SHALL BE THE LESSER OF D/4, 10 FEET, OR 1.0 TIMES THE HEIGHT OF THE WALL, EXCEPT THAT IN NO CASE SHALL IT BE LESS THAN 2.0 FEET.
4. D = LENGTH OF WALL PARALLEL TO THE BAR LENGTH IN QUESTION.
5. EXCEPT WHERE OTHERWISE SHOWN ON THE DRAWINGS, THE LENGTH INDICATED AS "NOTE 5" SHALL BE EQUAL TO ONE "LAP LENGTH" AS REQUIRED BY THE GENERAL STRUCTURAL NOTES. USE THE LAP LENGTH AS REQUIRED FOR THE SMALLER OF THE TWO REINFORCING BARS BEING SPLICED.
6. UNLESS OTHERWISE NOTED, "B" AND "C" BARS ARE THE SAME SIZE AND SPACING AND, "F" AND "G" BARS ARE THE SAME SIZE AND SPACING.



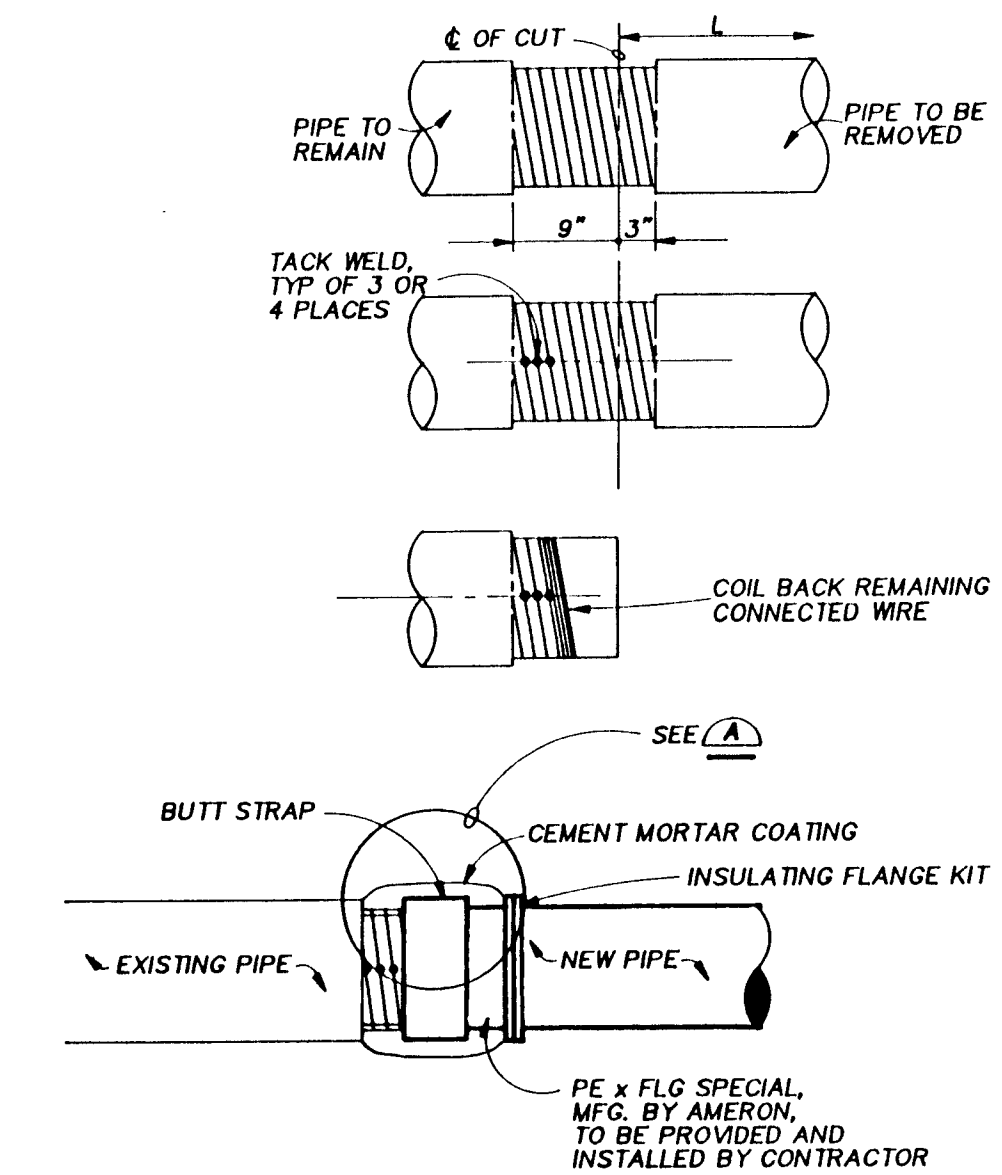
- NOTES:
1. HOT DIP GALVANIZE STEEL AFTER FABRICATION.
  2. PROVIDE PROTECTION FOR DISSIMILAR METALS AND CONCRETE PER SPECIFICATIONS.

## LADDER

NTS

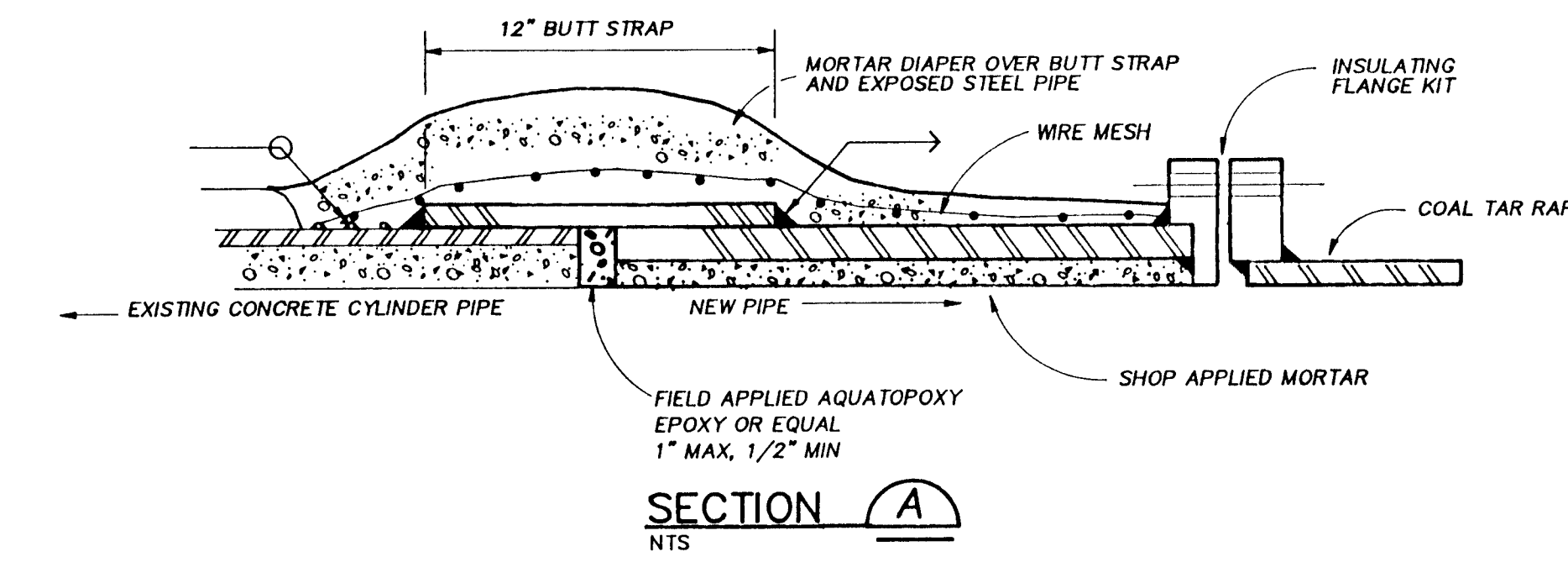
3

7



## BUTTSTRAP DETAIL

NTS



## BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE

APPROVAL OF RECORD DRAWINGS

PROJECT ENGINEER

DATE JAN 2 1994

## RECORD DRAWINGS

Revisions Drawn by R. GONZALES Date SEPT. 1993

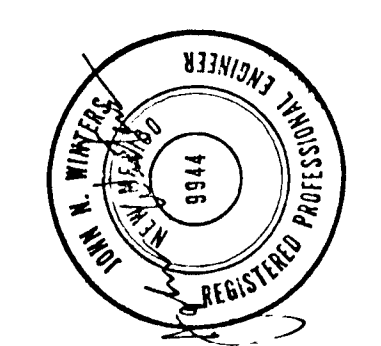
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING

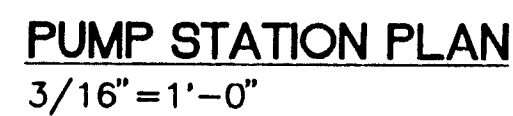
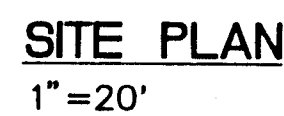
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
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INSPECTOR'S	DATE	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE
ACCEPTANCE BY	DATE	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE
VERIFICATION BY	DATE	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE
DRAWN BY	DATE	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE
RECORDED BY	DATE	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE	NO.	BY	DATE	DATE
NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.	NO.



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: WATER SYSTEM REHABILITATION					
ATRISCO PUMP STATION DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. 4366.91			MAP NO.		SHEET 9 OF 13





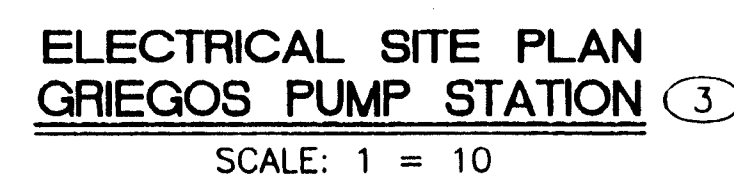
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| DRAWING<br>NO. | E-01 | MAP<br>NO. | SHEET<br>10 | OF<br>11 |
|----------------|------|------------|-------------|----------|

EATRISCO.DWG 1=1 11-12-92

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INTO THE  
SCANNED BY  
BY LASON

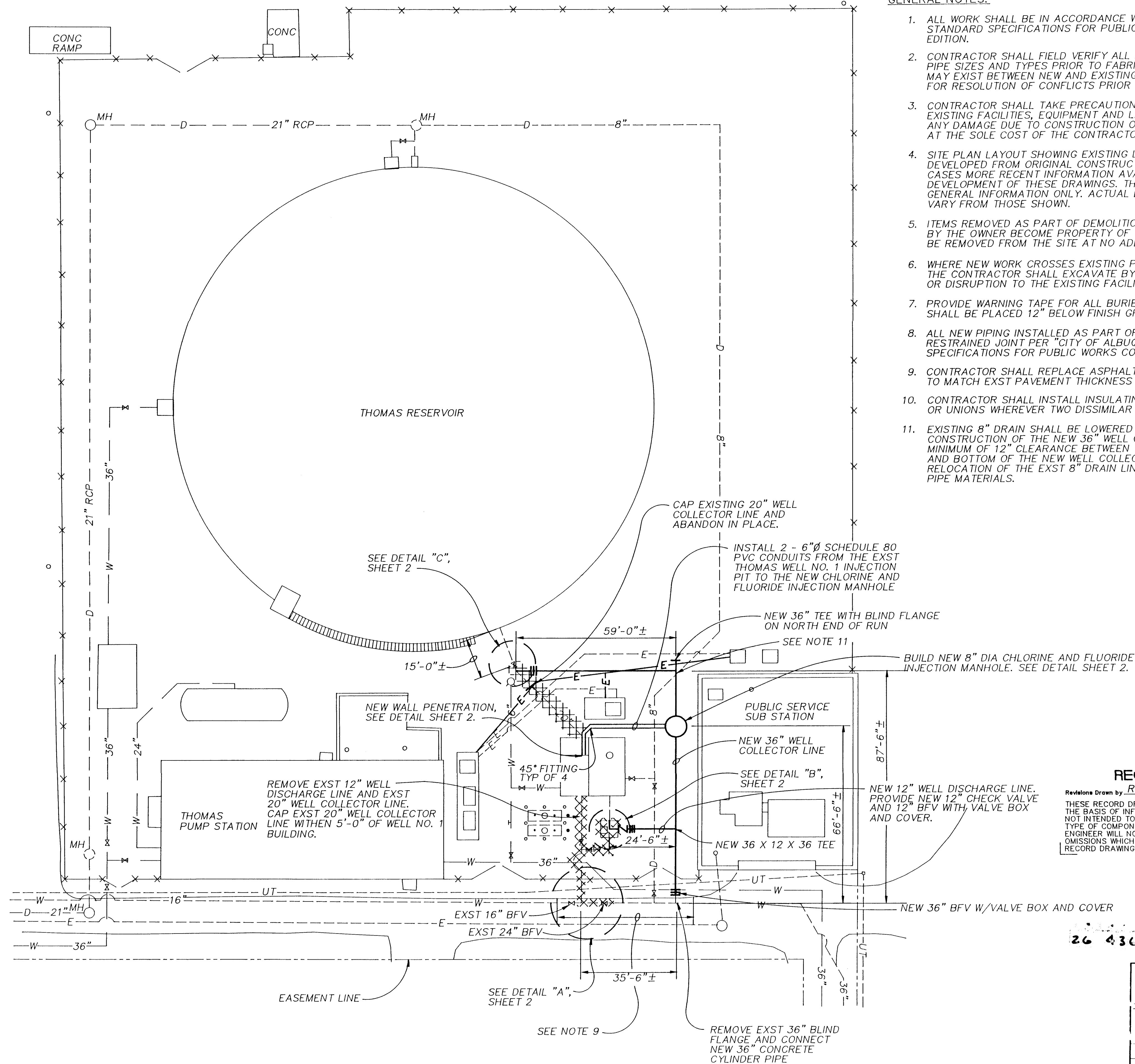




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GREGORYS DWG 1-10 11 12-92




1. ALL WORK SHALL BE IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 1986 EDITION.
2. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, PIPE SIZES AND TYPES PRIOR TO FABRICATION. SOME INTERFERENCES MAY EXIST BETWEEN NEW AND EXISTING MATERIALS. CONSULT ENGINEER FOR RESOLUTION OF CONFLICTS PRIOR TO PROCEEDING WITH THE WORK.
3. CONTRACTOR SHALL TAKE PRECAUTIONS SO AS NOT TO DAMAGE EXISTING FACILITIES, EQUIPMENT AND LANDSCAPING DURING CONSTRUCTION. ANY DAMAGE DUE TO CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE SOLE COST OF THE CONTRACTOR. NOT ALL UTILITIES ARE SHOWN.
4. SITE PLAN LAYOUT SHOWING EXISTING LOCATIONS OF FACILITIES WAS DEVELOPED FROM ORIGINAL CONSTRUCTION DRAWINGS AND IN SOME CASES MORE RECENT INFORMATION AVAILABLE AT THE TIME OF DEVELOPMENT OF THESE DRAWINGS. THIS LAYOUT IS PROVIDED FOR GENERAL INFORMATION ONLY. ACTUAL LOCATIONS OF FACILITIES MAY VARY FROM THOSE SHOWN.
5. ITEMS REMOVED AS PART OF DEMOLITION WORK AND NOT SALVAGED BY THE OWNER BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST TO THE OWNER.
6. WHERE NEW WORK CROSSES EXISTING PIPING OR ELECTRICAL CONDUITS THE CONTRACTOR SHALL EXCAVATE BY HAND TO PREVENT DAMAGE OR DISRUPTION TO THE EXISTING FACILITIES.
7. PROVIDE WARNING TAPE FOR ALL BURIED PIPING AND CONDUIT. TAPE SHALL BE PLACED 12" BELOW FINISH GRADE.
8. ALL NEW PIPING INSTALLED AS PART OF THIS WORK SHALL BE RESTRAINED JOINT PER "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".
9. CONTRACTOR SHALL REPLACE ASPHALT PAVEMENT IN THIS AREA TO MATCH EXST PAVEMENT THICKNESS AND FINISH ELEVATIONS.
10. CONTRACTOR SHALL INSTALL INSULATING FLANGES, COUPLINGS, OR UNIONS WHEREVER TWO DISSIMILAR METAL PIPES ARE CONNECTED.
11. EXISTING 8" DRAIN SHALL BE LOWERED AS NECESSARY TO ALLOW CONSTRUCTION OF THE NEW 36" WELL COLLECTOR LINE. PROVIDE MINIMUM OF 12" CLEARANCE BETWEEN TOP OF 8" DRAIN LINE AND AND BOTTOM OF THE NEW WELL COLLECTOR LINE. MATERIALS FOR RELOCATION OF THE EXST 8" DRAIN LINE SHALL MATCH EXISTING PIPE MATERIALS.

APPROVAL OF RECORD  
DRAWINGS  
PROJECT ENGINEER  
*Arthur J. Stuart*  
DATE JAN 12 1974

Revisions Drawn by R. GONZALES Date SEPT. 1993

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, OF THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION OF ANY COMPANIES, INDUSTRY, OR CONSTRUCTING. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

**VERIFY SCALES**  
BAR IS ONE INCH ON  
ORIGINAL DRAWING  
0  1"  
IF NOT ONE INCH ON  
THIS SHEET, ADJUST  
SCALES ACCORDINGLY.

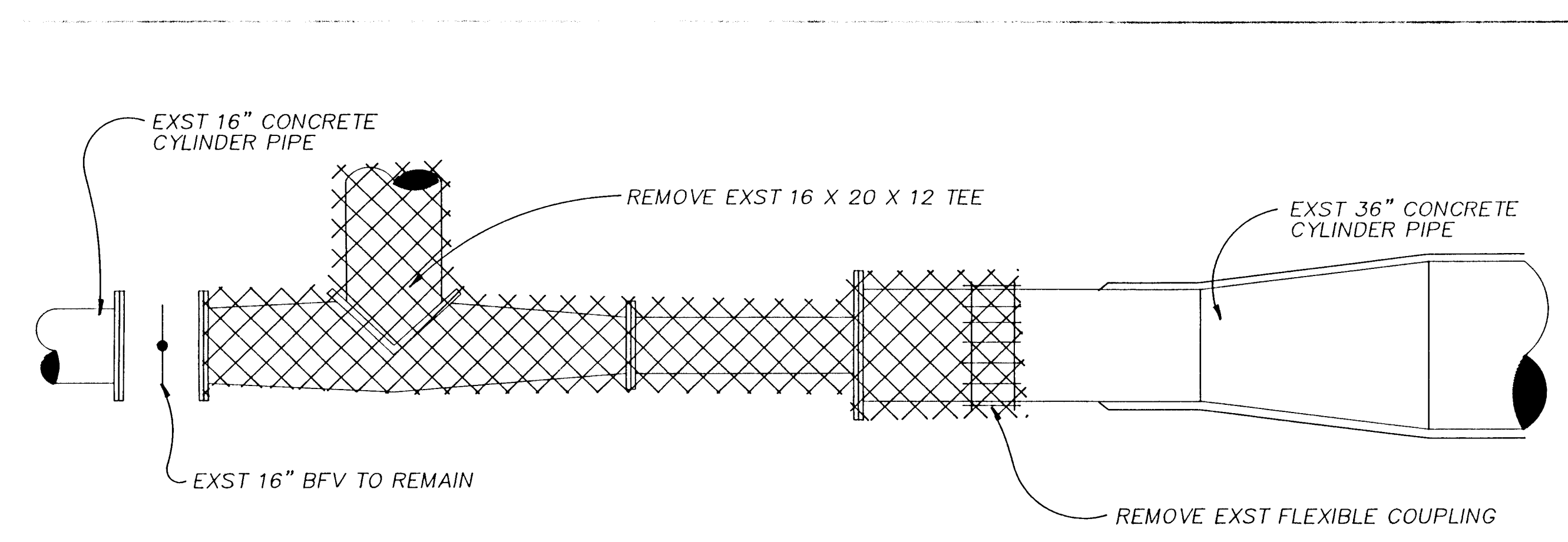
THOMAS RESERVOIR SITE PLAN

SCANNED BY  
BY LASON

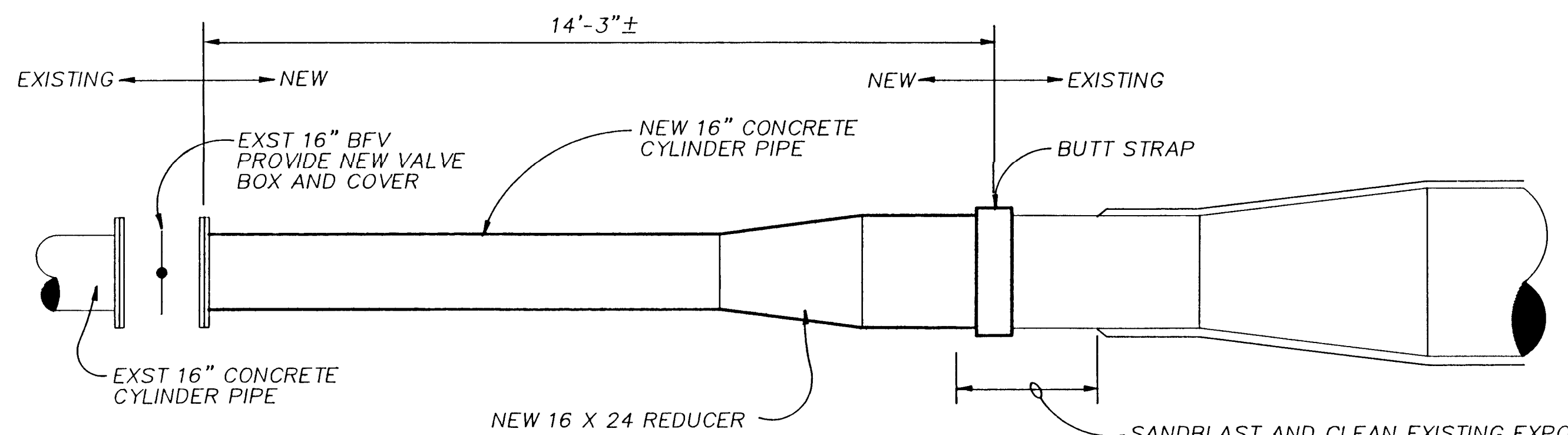


D: \34474\0\4474C001.DWG  
1\* = 20'  
1/25/93

CITY OF ALBUQUERQUE					
PUBLIC WORKS DEPARTMENT					
ENGINEERING DIVISION					
TITLE: WATER SYSTEM REHABILITATION					
THOMAS WELL COLLECTOR MODIFICATION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. 4366.91		MAP NO. F-20		SHEET 12 OF 13	

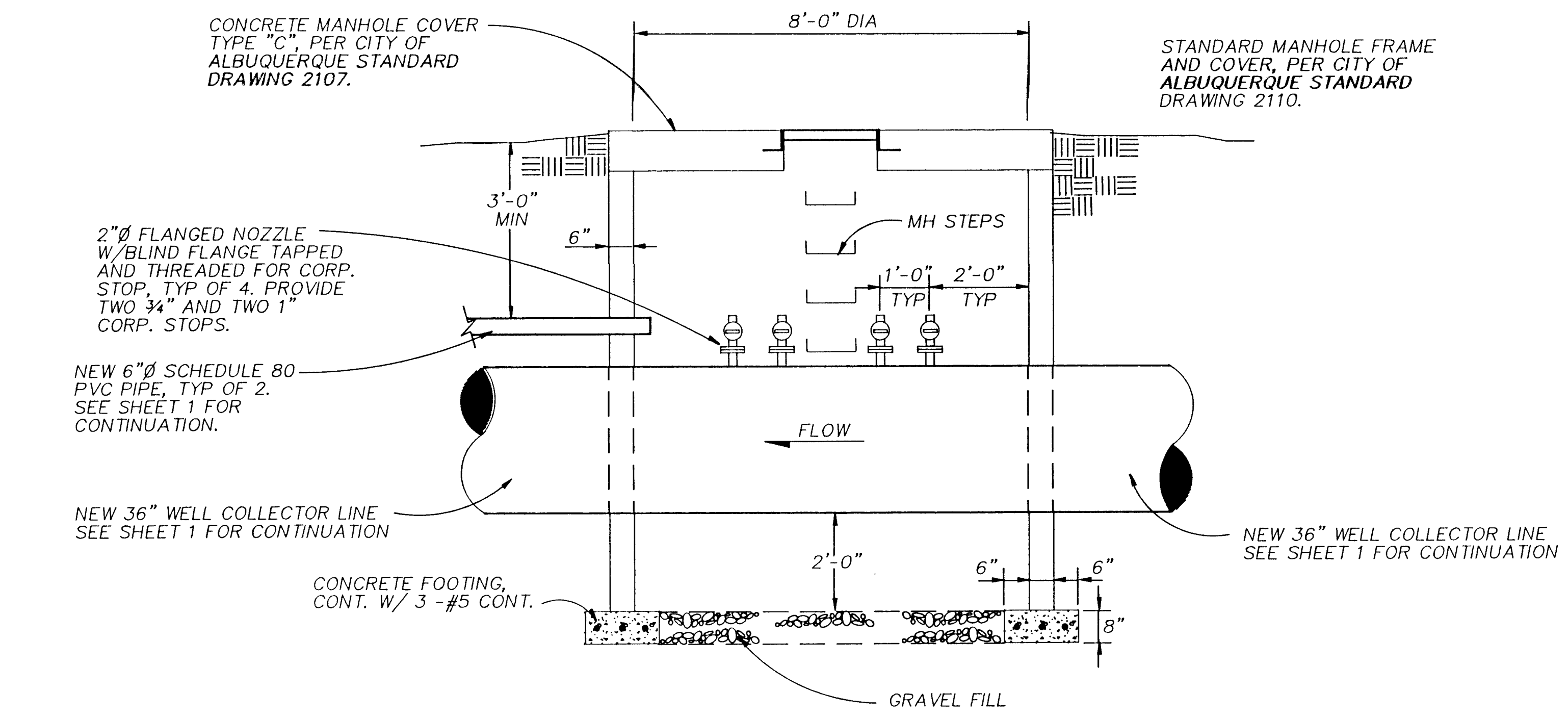


**PLAN - EXISTING**  
1/2"=1'-0"

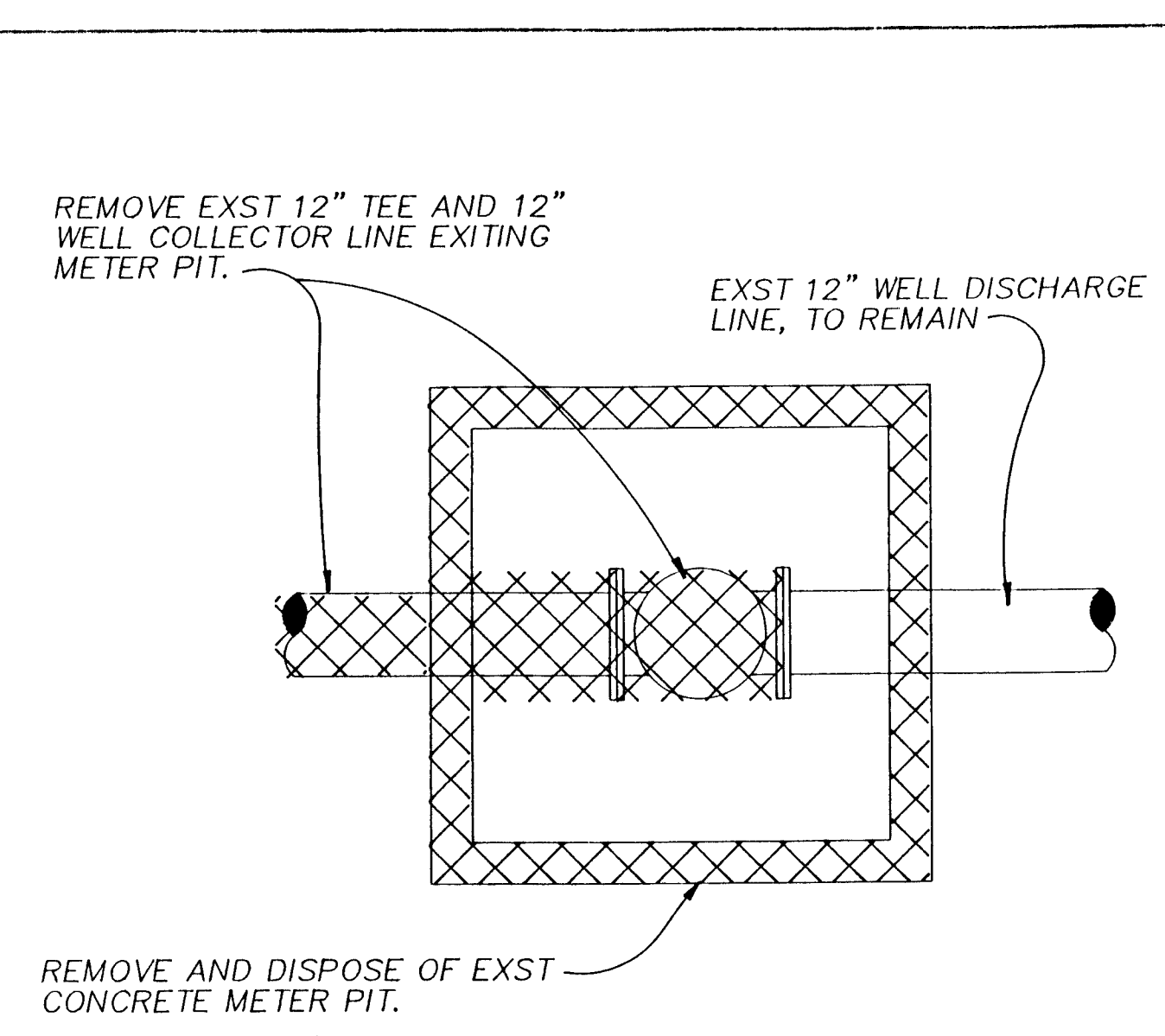


**PLAN - NEW**  
1/2"=1'-0"

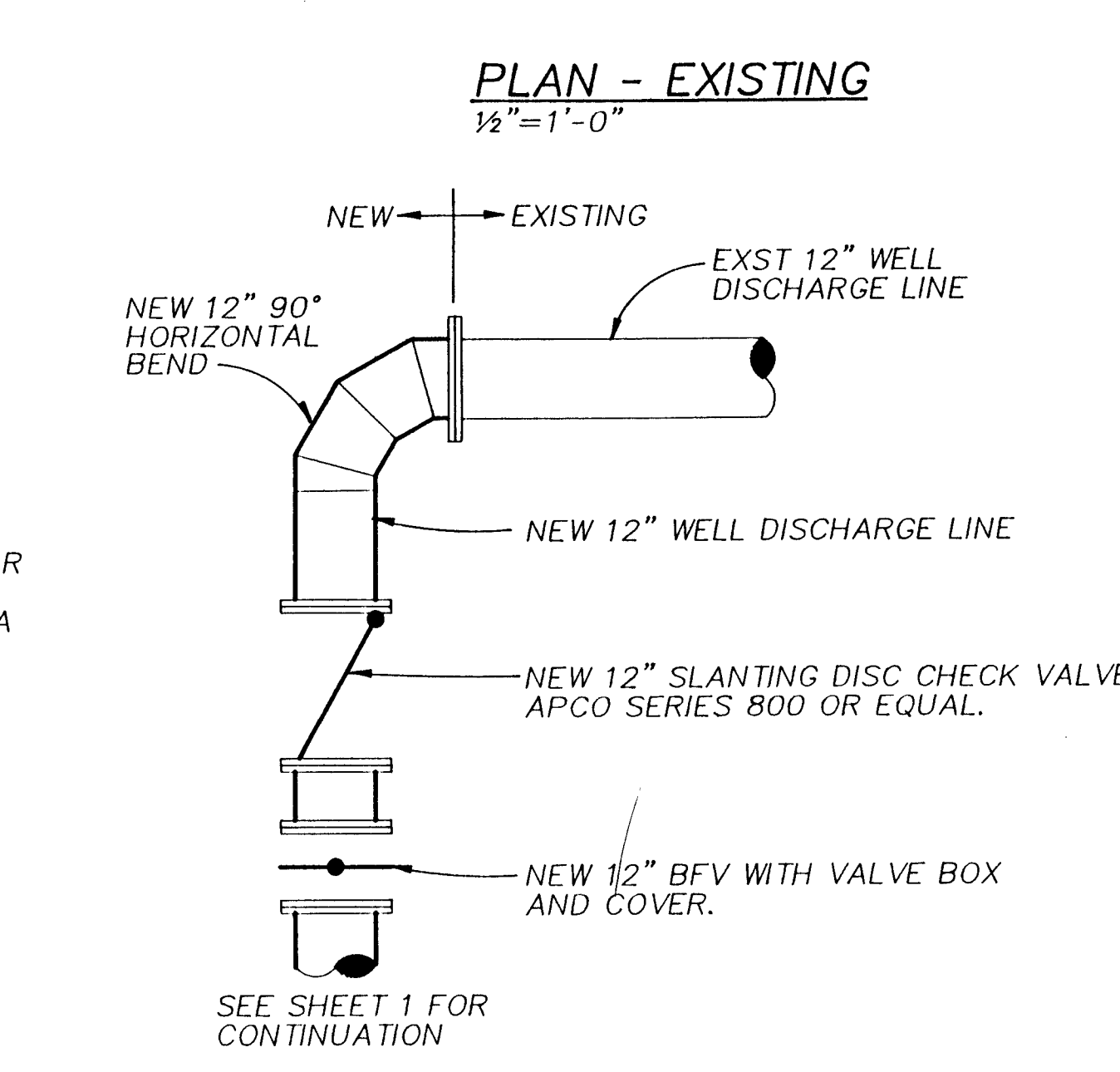
**DETAIL "A"**



**CHLORINE AND FLUORIDE INJECTION MANHOLE**  
1/2"=1'-0"

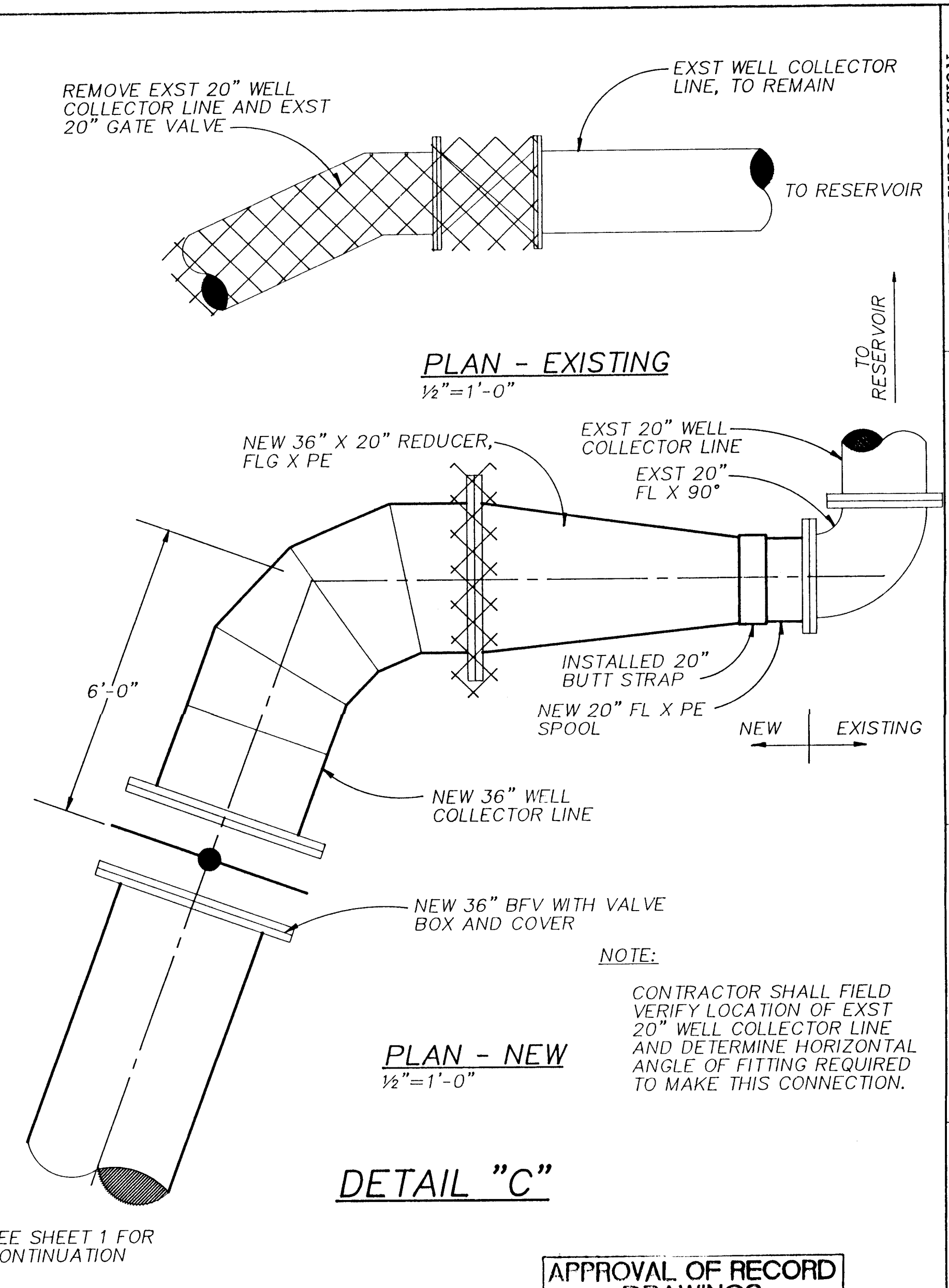


**PLAN - EXISTING**  
1/2"=1'-0"



**PLAN - NEW**  
1/2"=1'-0"

**DETAIL "B"**



**PLAN - EXISTING**  
1/2"=1'-0"

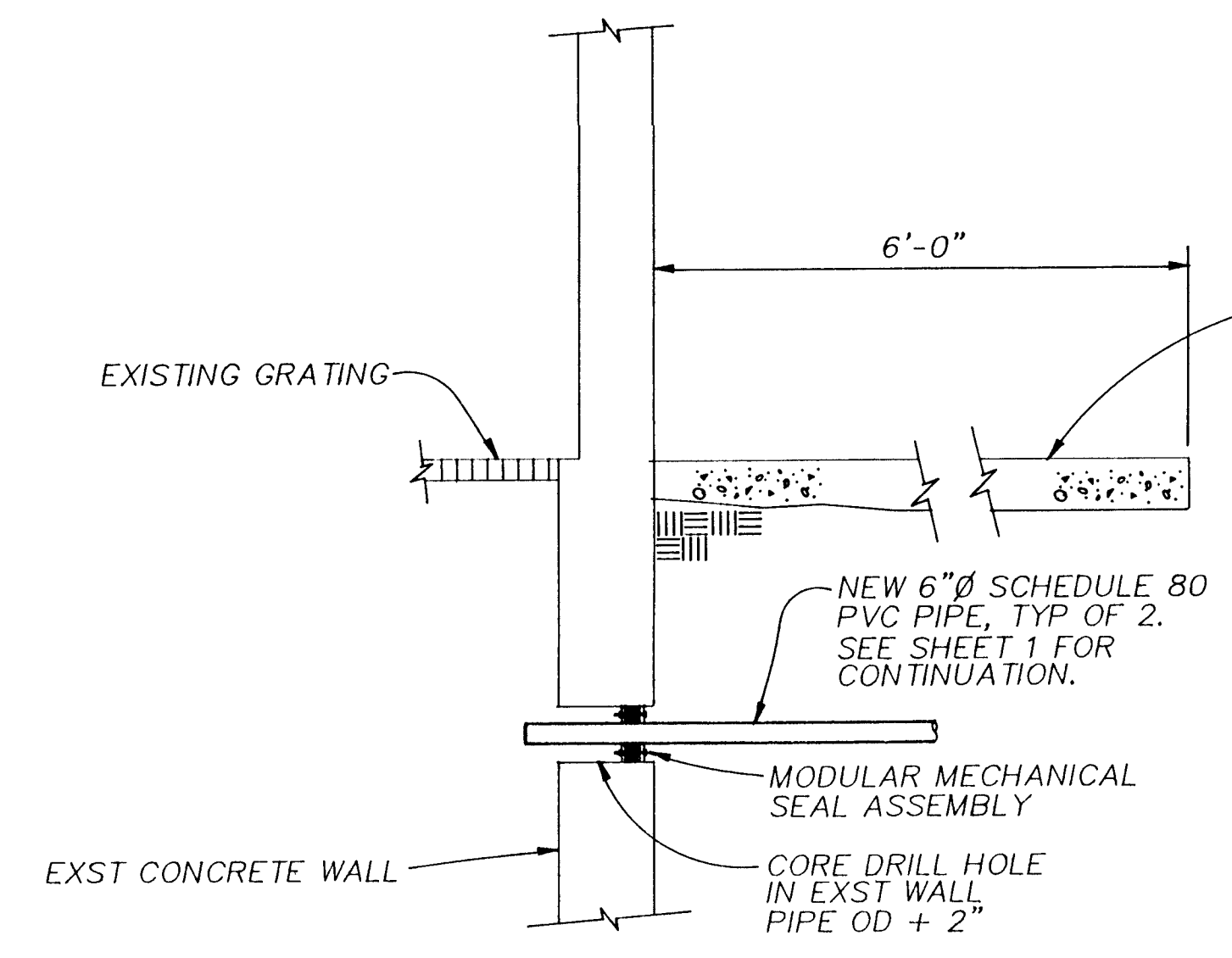
**PLAN - NEW**  
1/2"=1'-0"

**DETAIL "C"**

**NOTE:**  
CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXST 20" WELL COLLECTOR LINE AND DETERMINE HORIZONTAL ANGLE OF FITTING REQUIRED TO MAKE THIS CONNECTION.

**APPROVAL OF RECORD DRAWINGS**  
DESIGNED BY: *Arthur J. Stuart*  
DATE: JAN 12 1994

**RECORD DRAWINGS**  
Revisions Drawn by: R. GONZALES Date: SEPT. 1993  
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



**WALL PENETRATION DETAIL**  
NTS



26 4366-911394

**VERIFY SCALES**  
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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: WATER SYSTEM REHABILITATION					
THOMAS WELL COLLECTOR MODIFICATION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	4366 91		MAP NO.	F-20	SHEET 13 OF 13