

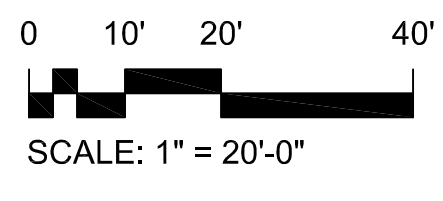
A
three inches = one foot
1
B
one and one half inches = one foot
2
C
one inch = one foot
2
D
three quarters inch = one foot
4
E
one half inch = one foot
4
F
one quarter inch = one foot
8
one eighth inch = one foot
16
1/3/2017 9:28:23 AM



- ### SHEET KEYED NOTES
- 1 TIE-IN NEW 3" WATER SERVICE LINE TO NEW BUILDING TO EXISTING 6" WATER MAIN.
 - 2 NEW 6" SANITARY SEWER LINE. INV. ELEVATION AT BLDG. ENTRANCE 1086.20'
 - 3 NEW 3" WATER LINE. INV. ELEVATION AT BLDG. ENTRANCE 1086.70'.
 - 4 CAP EXISTING 5" NG LINE.
 - 5 INSTALL NEW 3" WATER METER VALVE AND BOX.
 - 6 ROUTE NEW 3" LOW PRESSURE STEAM LINE AND 1" CONDENSATE LINE TO NEW BLDG. 2 MECHANICAL ROOM. REFER TO PL102 FOR CONTINUATION.
 - 7 ROUTE NEW 6" CHS/R LINE TO NEW BLDG. 2 MECHANICAL ROOM. REFER TO MH401 FOR CONTINUATION.
 - 8 JACK AND BORE UNDERNEATH BUILDING. ROUTE CHILLED WATER SUPPLY AND RETURN LINES BELOW THE CRAWLSPACE UNDERNEATH THE BUILDING.
 - 9 TIE-IN NEW 6" CHILLED WATER SUPPLY/RETURN LINE TO EXISTING 12" CHS/R.
 - 10 APPROXIMATE LOCATION OF NEW 600 KVA GENERATOR. INSTALLED UNDER A DIFFERENT PROJECT.
 - 11 REPLACE EXISTING FIRE HYDRANT WITH NEW (IF NON-FUNCTIONAL) FIRE HYDRANT. VDOT STANDARD DRAWING FH-1.

LEGEND

— W —	EXISTING WATER
— SAN —	EXISTING SANITARY SEWER
— GAS —	EXISTING NATURAL GAS
— E —	EXISTING ELECTRICAL DUCT
— UT —	EXISTING TELEPHONE
— UE —	EXISTING ELECTRICAL CONDUIT
— — —	EXISTING STEAM LINE
— W —	EXISTING CHILLED WATER SUPPLY/RETURN
— SAN —	NEW WATER
— — —	NEW SANITARY SEWER
— — —	NEW STEAM
— UT —	NEW TELEPHONE CONDUIT
— UE —	NEW ELECTRICAL CONDUIT
— — —	NEW STORM WATER PIPE
— GAS —	NEW NATURAL GAS
— — —	NEW CHILLED WATER SUPPLY/RETURN
[Pattern]	EXIST. CONC. SIDEWALK
[Pattern]	EXIST. STRUCTURE/BLDG.
[Pattern]	NEW ASPHALT AREA
[Pattern]	NEW STRUCTURE/BLDG.
[Pattern]	NEW CONC. SIDEWALK
EL.	ELEVATION
EX.	EXISTING
SD	STORM DRAIN
FH	FIRE HYDRANT
MH	MAN HOLE
SAN	SANITARY SEWER
(8)	NEW WORK KEYED NOTE
⊗	POINT OF CONNECTION



6F SITE UTILITY PLAN

1"=20'-0"

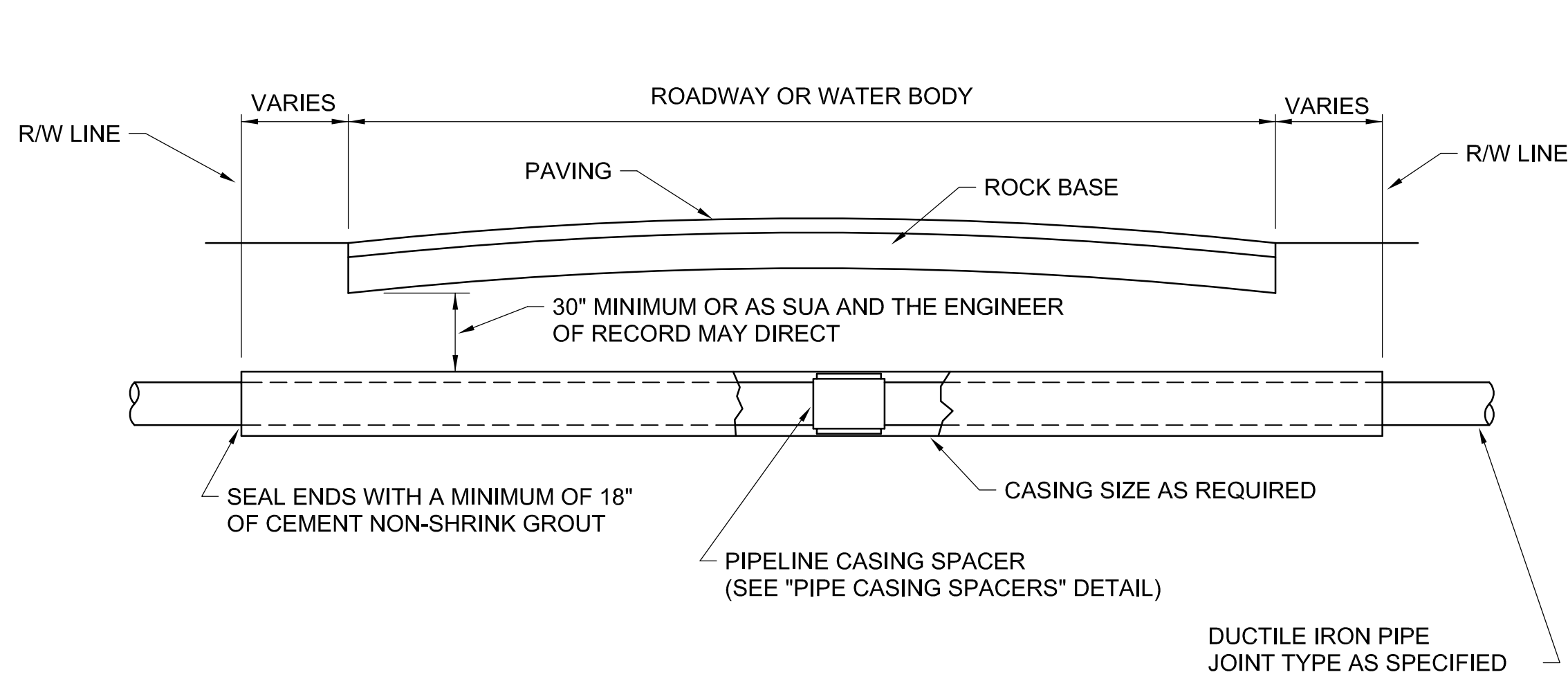
NOTE: REFER TO ELECTRICAL SITE DRAWINGS FOR ELECTRICAL AND TELECOMM NEW WORK.

CONSTRUCTION DOCUMENTS FULLY SPRINKLERED

Revisions: Date:	 Corporate Office: 766 Middle St. Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716		Approved: Patient Safety Nurse	Approved: Energy Engineer	Approved: Safety Manager	Approved: Service Chief	Drawing Title SITE UTILITY PLAN NEW WORK	Project Title RELOCATE AND EXPAND RENAL DIALYSIS	Date 2018.02.16	Project No. 658-315	Building Number 2	Checked SC	Drawn JL	Drawing No. CU101	Sheet 20 of 120	Veterans Affairs
				Approved: Chief of Police	Approved: Infection Control Officer	Approved: Chief of Staff										
				Approved: Chief of Mental Health Service	Approved: GEMS Coordinator	Approved: Associate Director										
						Approved: Medical Center Director										



A
three inches = one foot
1
one and one half inches = one foot
2
one inch = one foot
C
one inch = one foot
three quarters inch = one foot
D
three quarters inch = one foot
E
one half inch = one foot
F
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
1/32017 9:28:23 AM

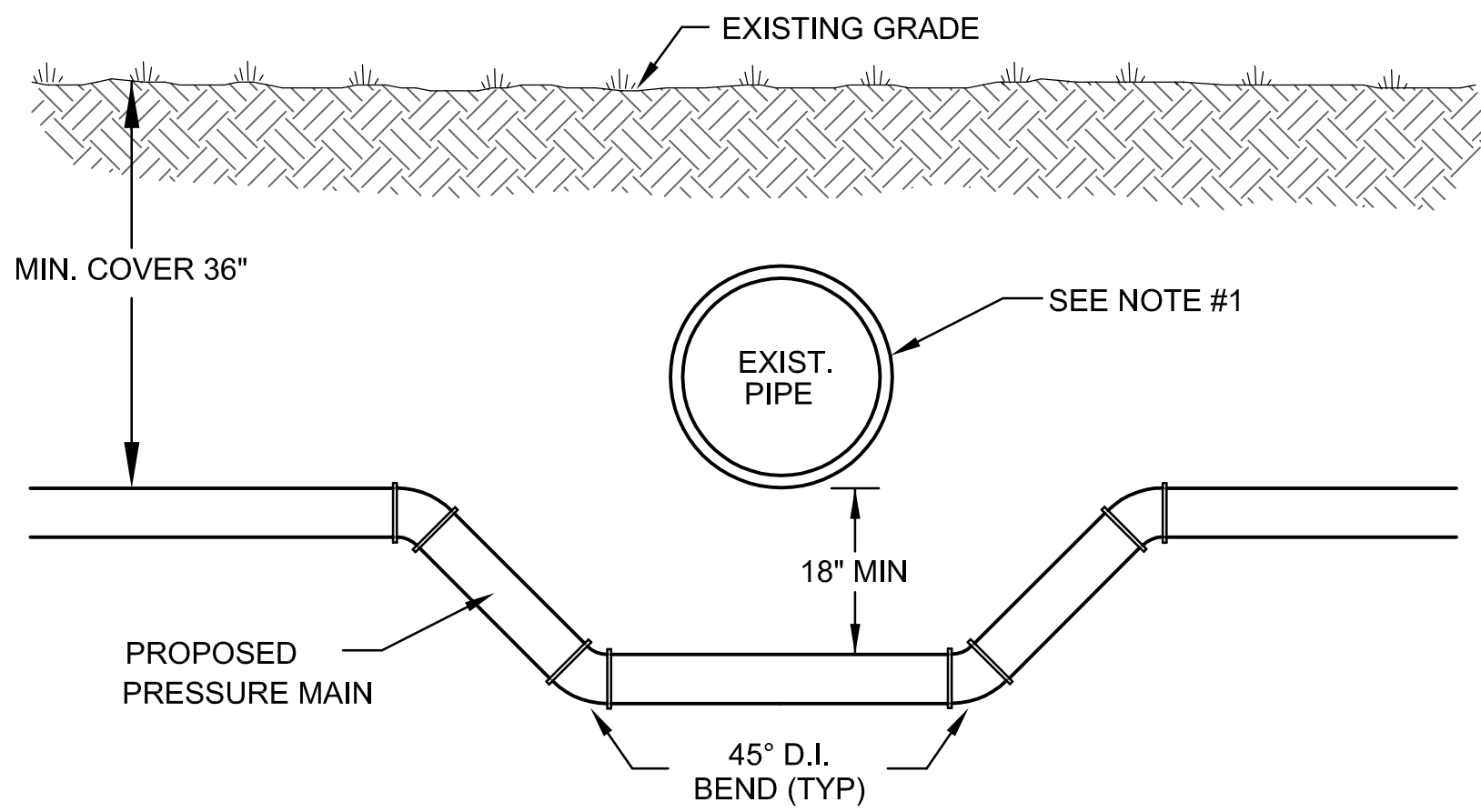


NOMINAL PIPE SIZE	STEEL CASING	THICKNESS SCHEDULE
4"	12"	.375
6"	16"	.375
8"	18"	.375
10"	20"	.375
12"	24"	.375
14"	24"	.375
16"	30"	.375
18"	30"	.375
20"	36"	.375
24"	42"	.500
30"	48"	.500
36"	54"	.500
42"	60"	.500
48"	72"	.500

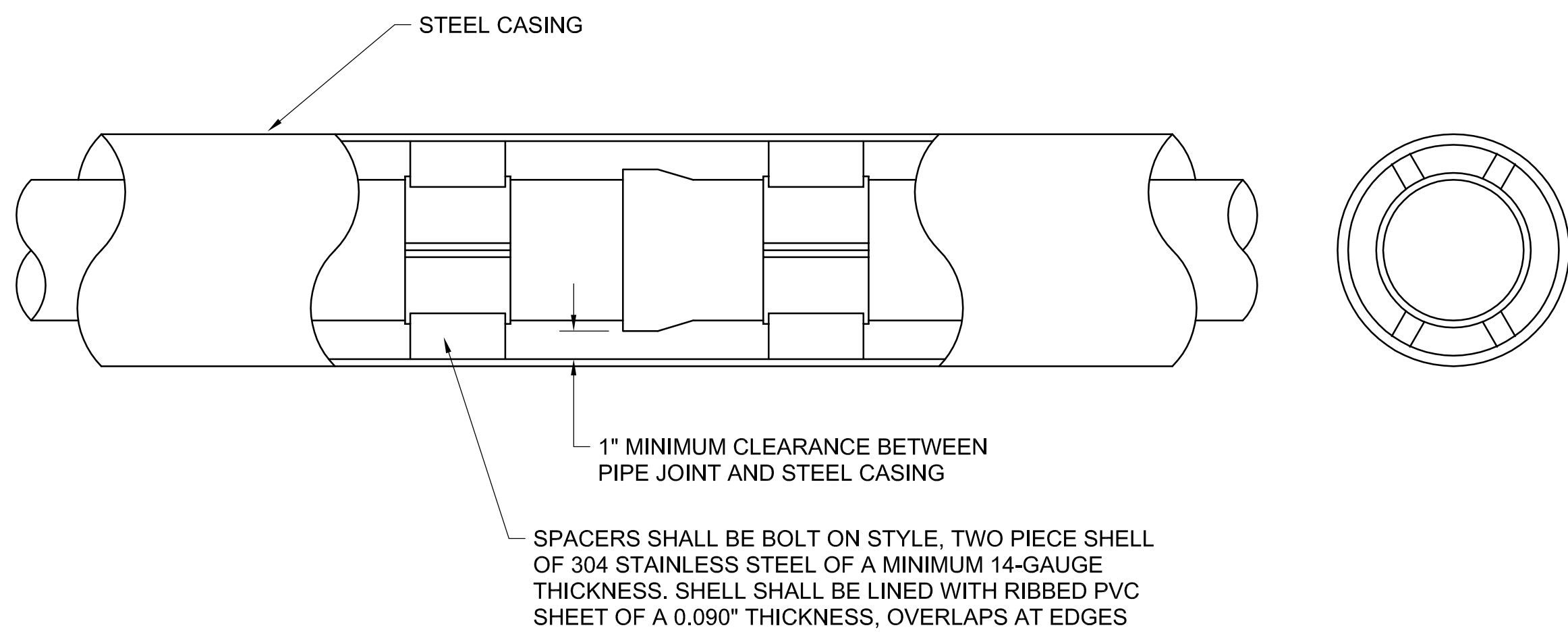
(PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

8D CASING INSTALLTION

- NOTES:
- IF EXISTING PIPE IS WATER OR SEWER MAIN, REFER TO ENCASEMENT DETAIL FOR ADDITIONAL SPECIFICATIONS.
 - ALL FITTINGS ARE TO BE C.I. RETAINING JOINT TYPE.



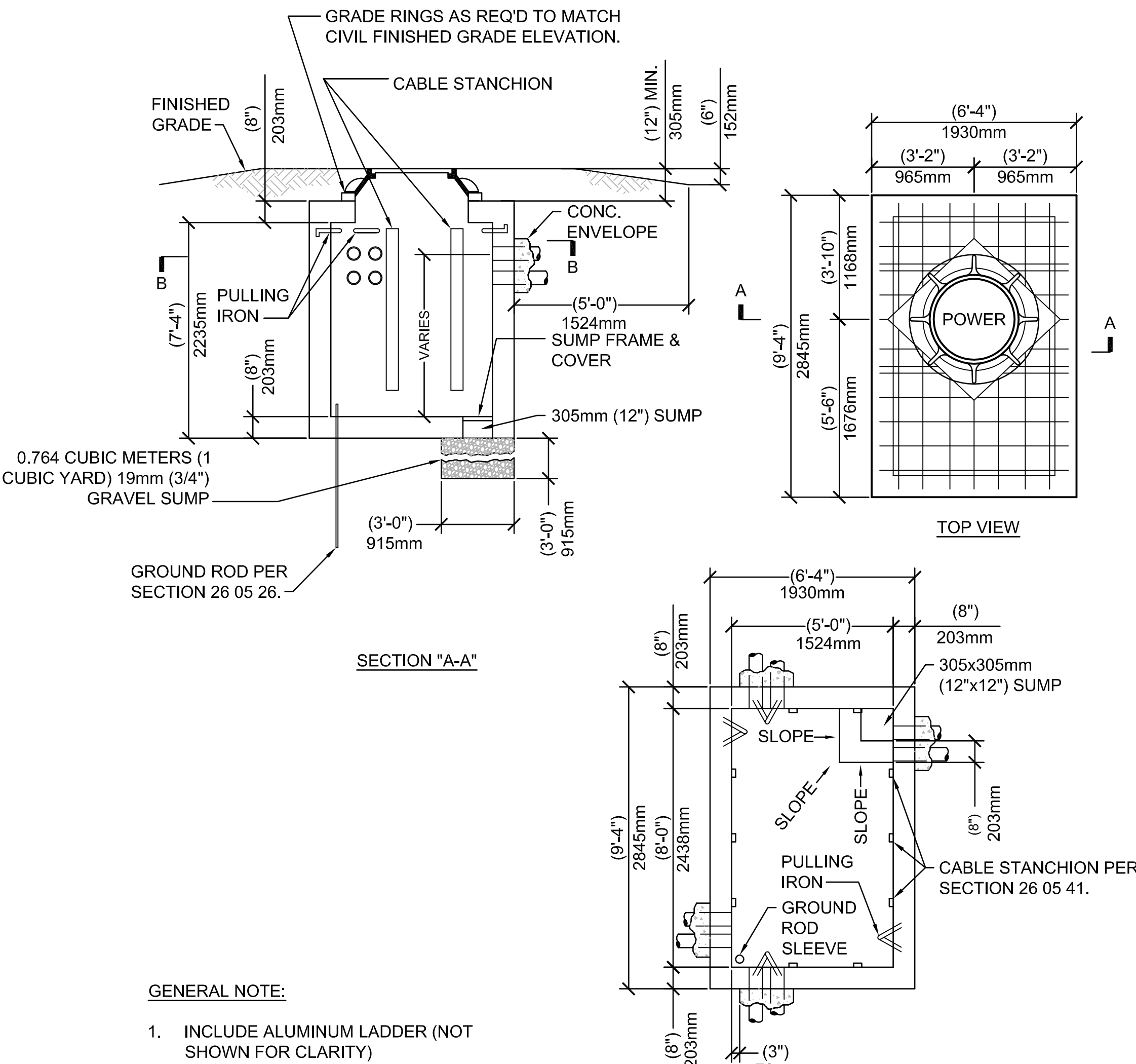
8F CONFLICT DETAIL



NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)

- CARRIER PIPE FOR 4" THROUGH 24" DIAMETER PIPE WITHIN CASING SHALL BE MECHANICAL JOINT WITH MEGALUG OR APPROVED EQUAL RESTRAINT GLAND.
- RESTRAINED MECHANICAL JOINTS SHALL BE USED FOR PIPE 30" DIAMETER AND ABOVE AND SHALL HAVE FACTORY WELDED RETAINING RINGS. AMERICAN RESTRAINED JOINT PIPE OR APPROVED EQUAL MAY BE USED.
- FOR PIPE DIAMETERS 4" THROUGH 12" INSTALL STAINLESS STEEL PIPE CASING SPACERS 5' OR LESS FROM EACH END OF PIPE BUT NOT MORE THAN 10' APART (2 PER PIPE). FOR PIPE DIAMETERS 14" AND LARGER INSTALL STAINLESS STEEL PIPE CASING SPACERS 5' OR LESS FROM EACH END OF PIPE AND ONE CENTERED ON PIPE (3 PER PIPE)(CASCADE MFG. CO. OR APPROVED EQUAL).
- PIPE CASING SPACERS SHALL BE CENTER POSITIONED.
- ALTERNATE METHODS OF PIPE SUPPORT WITHIN THE CASING MUST BE APPROVED BY SUA PRIOR TO INSTALLATION.

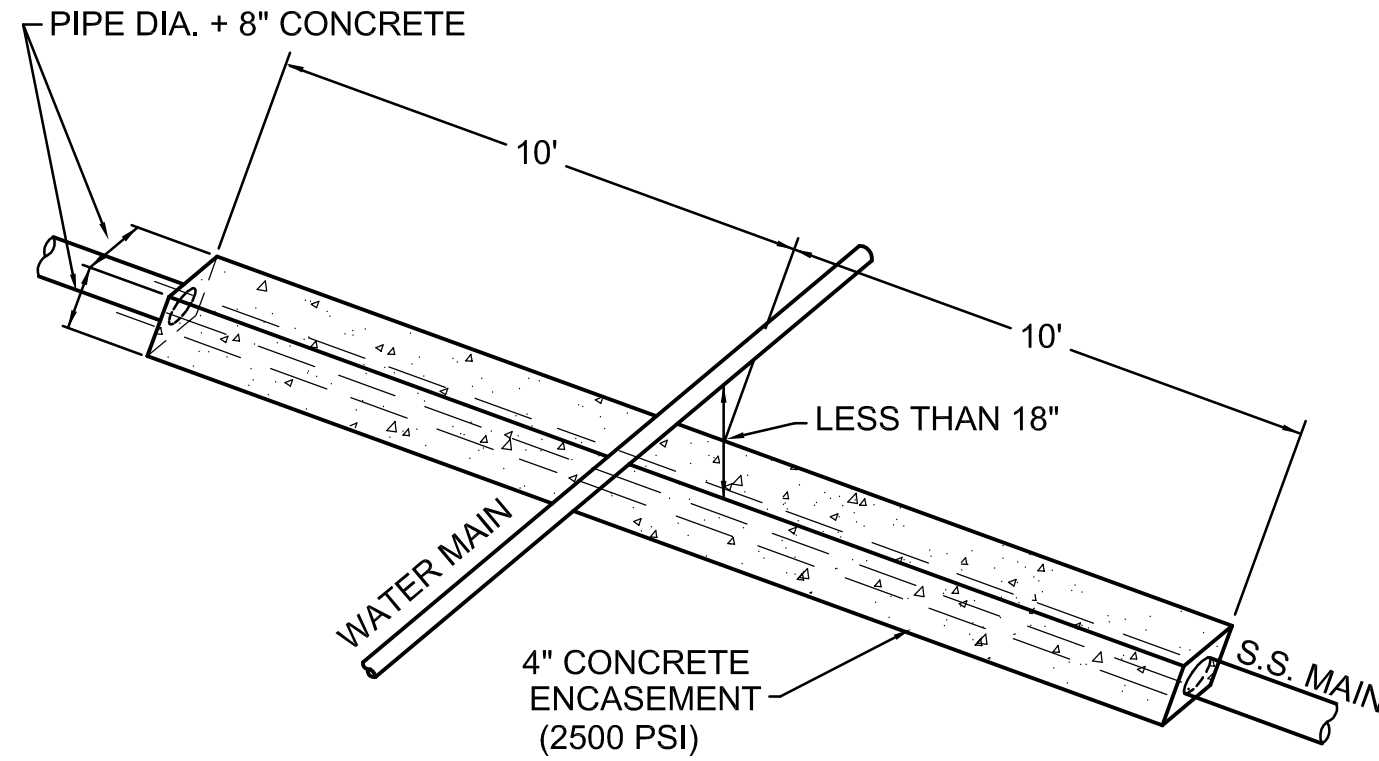
6C PIPE CASING SPACERS



5F POWER MANHOLE DETAILS

SANITARY SEWER LINES (GRAVITY OR PRESSURE) SHALL HAVE 18" OR GREATER VERTICAL CLEARANCE BELOW ANY POTABLE WATER LINE WHEN CROSSING. A MINIMUM OF 6" VERTICAL CLEARANCE IS REQUIRED FOR OTHER UTILITIES. HORIZONTAL CLEARANCE BETWEEN SANITARY SEWER LINE THAT IS PARALLEL TO AND LESS THAN 18" BELOW A POTABLE WATER LINE SHALL BE 10' OR GREATER. A MINIMUM OF 30" IS REQUIRED FOR OTHER UTILITIES.

IF THIS IS NOT POSSIBLE OR PRACTICAL, SEE BELOW:



FOR CROSSING: ENCASE AS ABOVE SO THAT THE ENDS OF ENCASEMENT ARE AT LEAST 12' FROM ANY WATER LINE JOINT. WATER LINE JOINT MUST NOT BE CLOSER THAN 5' TO THE POINT OF CROSSING, OR IT MUST ALSO BE ENCASED.

ALTERNATE 1: USE EQUALLY (OR HIGHER) RATED PRESSURE PIPE FOR SEWER WITH NO JOINTS CLOSER THAN 12' APART AND 6" VERTICAL.

ALTERNATE 2: PLACE SEWER LINE INTO STEEL CASING AND CENTER 20' PIECE WITH 4' VERTICAL CLEARANCE AND SEAL ENDS.

FOR PARALLEL: AND 6' TO 10' APART USE ALTERNATE 2, BUT IF MORE THAN 40' IN LENGTH, ALTERNATE 1 MUST BE USED AND JOINTS ARE TO BE STAGGERED. IF LINES MUST BE 3' TO 6' APART, ALTERNATE 1 MUST BE USED WITH A HIGHER RATED PRESSURE PIPE FOR SEWER (i.e., WATER LINE IS DR25 THEN USE DR18 OR 21 FOR SEWER).

3C SEWER-WATER SEPARATION & CLEARANCES DETAIL

Revisions:		Date:				Corporate Office: 766 Middle St, Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716				Approved: Patient Safety Nurse		Approved: Energy Engineer		Approved: Safety Manager		Approved: Service Chief		Drawing Title CIVIL UTILITY DETAILS		Project Title RELOCATE AND EXPAND RENAL DIALYSIS		Date 2018.02.16							
																		Approved: Chief of Facility Management Svc.		Building Number 2		Checked SC				Drawn JL		Project No. 658-315	
																		Approved: Chief of Staff								Drawing No. CU502			
																		Approved: Associate Director								Sheet 22 of 120			
																				Approved: Medical Center Director									