

SPECIFICATIONS & NOTES

1. THE SCHEDULES ON THIS SHEET SHALL BE USED FOR REFERENCE PURPOSES ONLY, AND CANNOT SUBSTITUTE FOR STRUCTURAL DESIGN FOR PARTICULAR SITE CONDITIONS.
2. THE DATA IN THE SCHEDULES IS VALID ONLY WITHIN THE FOLLOWING (OR ANY LESS STRINGENT) DESIGN ASSUMPTIONS (1997 UBC-1998 CBC):
 - a. FOR SEISMIC ZONES 1, 2A, 2B, 3, AND 4 - FOR OXYGEN-FILLED TANKS OR PER 1997 UBC WITH IMPORTANCE FACTORS OF 1.25/1.5 (UNO).
 - b. DESIGNATION "4*" PERTAINS TO SEISMIC ZONE 4, OXYGEN-FILLED TANKS PER 1998 CBC TITLE 24 VOL. 2A WITH IMPORTANCE FACTORS OF 1.5/1.5.
 - c. DESIGNATION "4LIN" PERTAINS TO SEISMIC ZONE 4, NITROGEN-FILLED TANKS PER 1997 UBC WITH IMPORTANCE FACTORS OF 1.0/1.0.
 - d. FOR SEISMIC 4, THE DESIGN SITE HAS SOIL PROFILE "SD", AS IS NO CLOSER THAN 10 KM FROM FAULT TYPE "A", AND NO CLOSER THAN 5 KM FROM FAULT TYPE "B".
 - e. MAXIMUM WIND SPEED 110 MPH, EXPOSURE "C".
 - f. ALLOWABLE BEARING CAPACITY OF SOIL 1500 PSF WITH 1.33 INCREASE FOR TRANSIENT LOADS.
3. THE SPECIFIED BEARING CAPACITY OF SOIL REQUIRES GEOTECHNICAL INVESTIGATION.
4. ACTUAL INSTALLATION MAY REQUIRE SOIL IMPROVEMENT, INCLUDING SOIL REPLACEMENT, OVEREXCAVATION, SCARIFYING, RECOMPACTION, ETC. SOME INSTALLATIONS REQUIRE ANTI-FROST MEASURES. REFER TO LOCAL CODES, GEOTECHNICAL REPORT, AND STRUCTURAL DESIGN DOCUMENTATION FOR SPECIFIC REQUIREMENTS.
5. THE INSTALLATION SITE SHALL BE SUPPLIED WITH ADEQUATE DRAINAGE (BY OTHERS) PREVENTING WATER PONDING/ACCUMULATION ON, AROUND, AND UNDER THE NEW CONCRETE.

6. ALL CONCRETE IS AT LEAST 2500 PSI NORMAL WEIGHT CONCRETE. SPECIAL INSPECTION NOT REQUIRED BY DESIGN.
7. ALL REBARS ARE PER ASTM A615 Gr60.
8. FOR INSTALLATIONS UNDER PER CBC TITLE 24, USE 1
S3 DETAIL TO ASSURE 1/8" MAX. GAP BETWEEN THE BASEPLATE/SHEAR PLATE.
9. FOR ALL INSTALLATIONS OTHER THAN PER ITEM 8, THE DIFFERENCE BETWEEN THE DIAMETER OF THE BASEPLATE HOLES AND THE SPECIFIED ANCHOR SHOULD NOT EXCEED THE "DD" VALUE PROVIDED BELOW.

ANCHOR DIAMETER	DD
5/16" TO 1"	5/16" MAX
1" TO 2"	1/2" MAX
OVER 2"	1"
10. IF THE DIFFERENCE BETWEEN THE DIAMETER OF THE BASEPLATE HOLES AND THE SPECIFIED ANCHOR EXCEEDS THE "DD" VALUE, INSTALL THE TANK ACCORDING TO THE FOLLOWING SPECIFICATION.
 - a. PLACE THE TANK ON THE ANCHORS.
 - b. OIL THE INNER SURFACES OF ALL BASEPLATE HOLES.
 - c. FILL THE HOLES TO TOP OF BASEPLATES WITH SIKAGROUT 212 OR OTHER NON-SHRINK DRYPACK.
 - d. IF GROUT IS TO BE USED IN POURABLE FORM, SEAL THE HOLES TO PREVENT LOSS OF GROUT.
 - e. INSTALL A 1/4" THICK A36 SQUARE WASHER (EA. SIDE TO MEASURE NOT LESS THAN 1.5 HOLES DIAMETER) UNDER EACH NUT.
 - f. TIGHTEN ALL NUTS TO SNUG CONDITION.
11. ALTERNATIVELY TO ITEM 10, ITEM 8 SPECS MAY BE USED FOR OVERSIZED (NON-CONFORMING TO ITEM 9) HOLES.
12. ANCHOR RODS MADE OF QUENCHED AND TEMPERED STEEL (DESIGNATED AS "QT") SHALL NOT BE SUBJECTED TO WELDING OR HEATING AND SHOULD BE SUPPLIED WITH DOUBLE BOTTOM NUTS. ANCHOR RODS MADE OF CARBON ("C") OR HIGH-STRENGTH LOW-ALLOW ("HSLA") STEELS MAY HAVE SINGLE TACK-WELDED BOTTOM NUTS.

3
S3

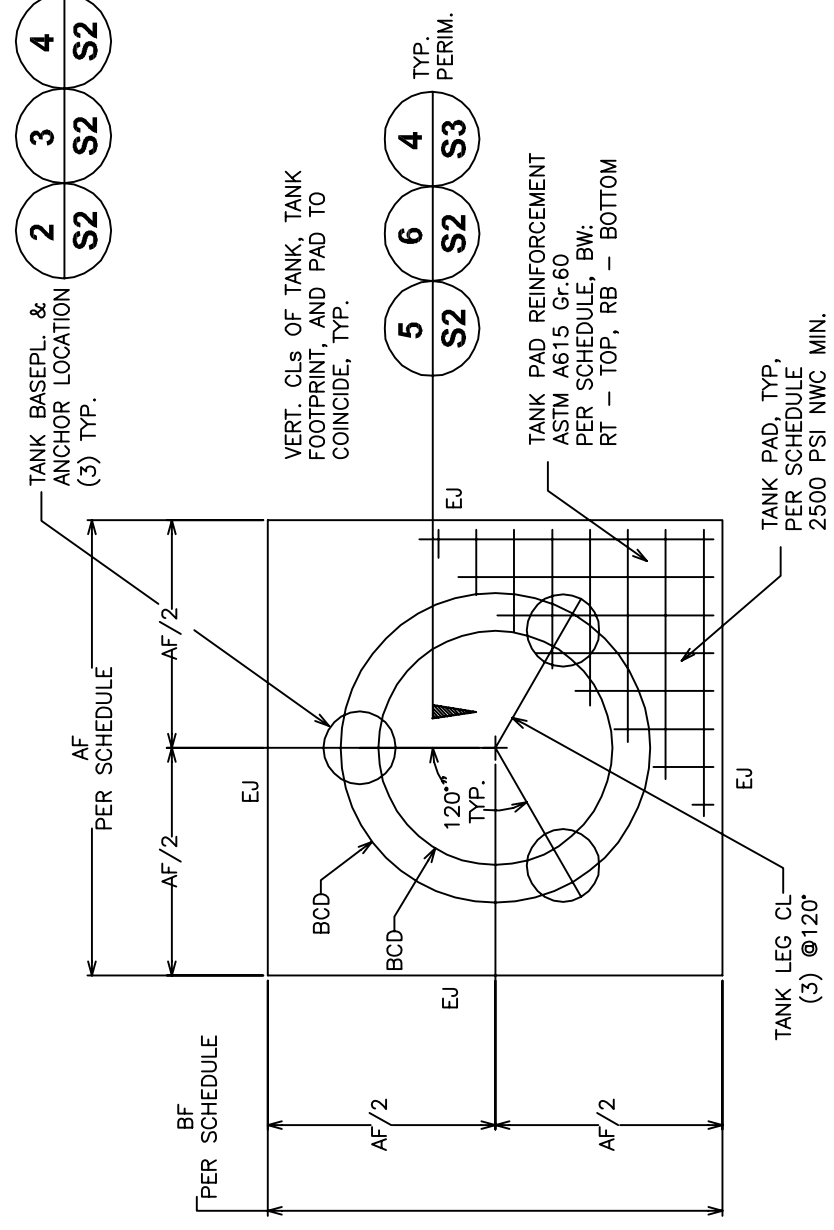


FOR SCHEDULES REFER TO SHEETS S4 AND S5. FOR DETAILS REFER TO SHEETS S2 AND S3

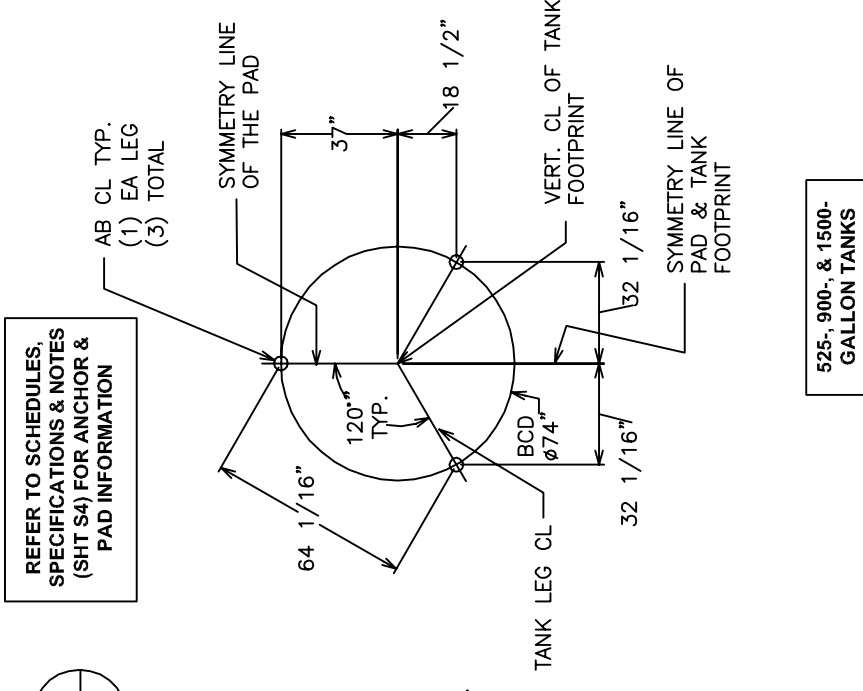
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A		UPDATE STAMP	EXPIRATION DATE	CMV	7-22-04	CHK'D BY	3/6/02	APPLICATION	QUANTITY REQ'D
REV.	ECC #	REVISION DESCRIPTION			BY	DATE	PROJ ENGR	3/6/02	
		MATERIAL					MFG ENGR		
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				PART NUMBER	11682254				
				SCALE	N/A				
				DD NOT SCALE					
				SHEET	1 of 5				

Storage Systems Divis
New Prague Operations

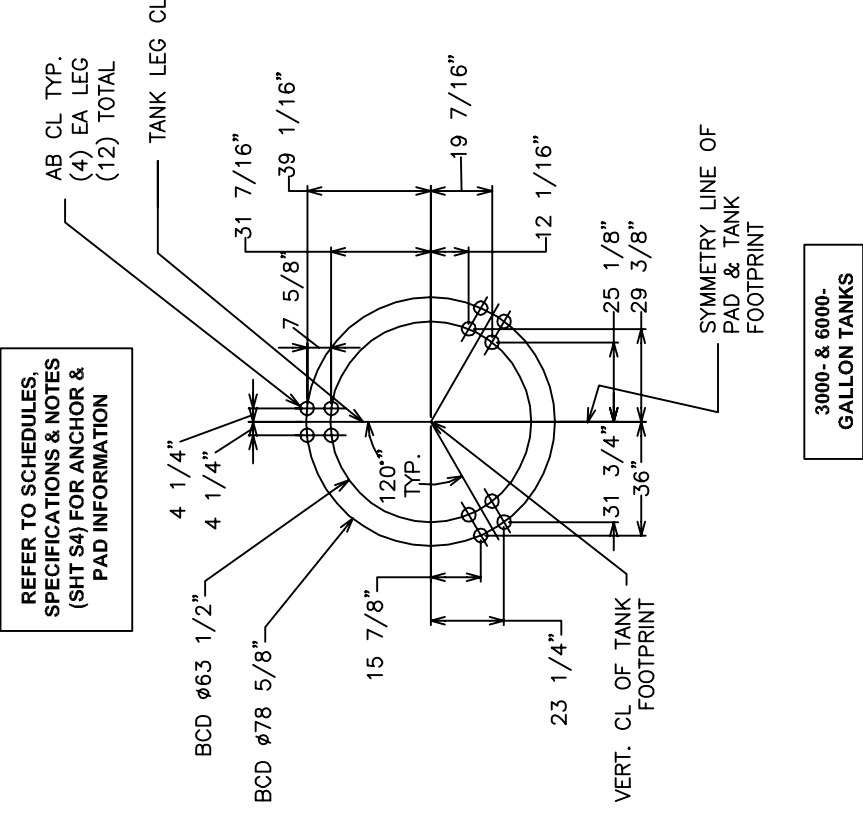
TITLE FOUNDATION L/D
ZONE 0/4 175-500PS
DRAWING NO. C-11682254
REV. B



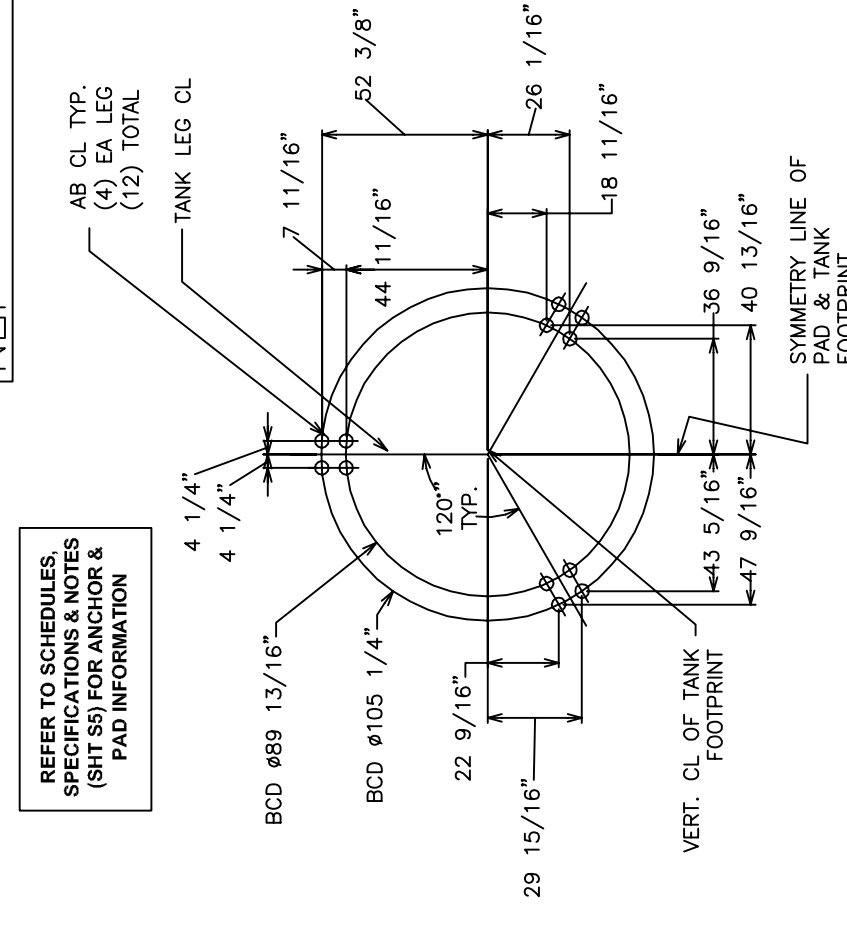
1 (N) TANK PAD - ANCHOR BOLT LAYOUT
GENERIC PLAN, NTS



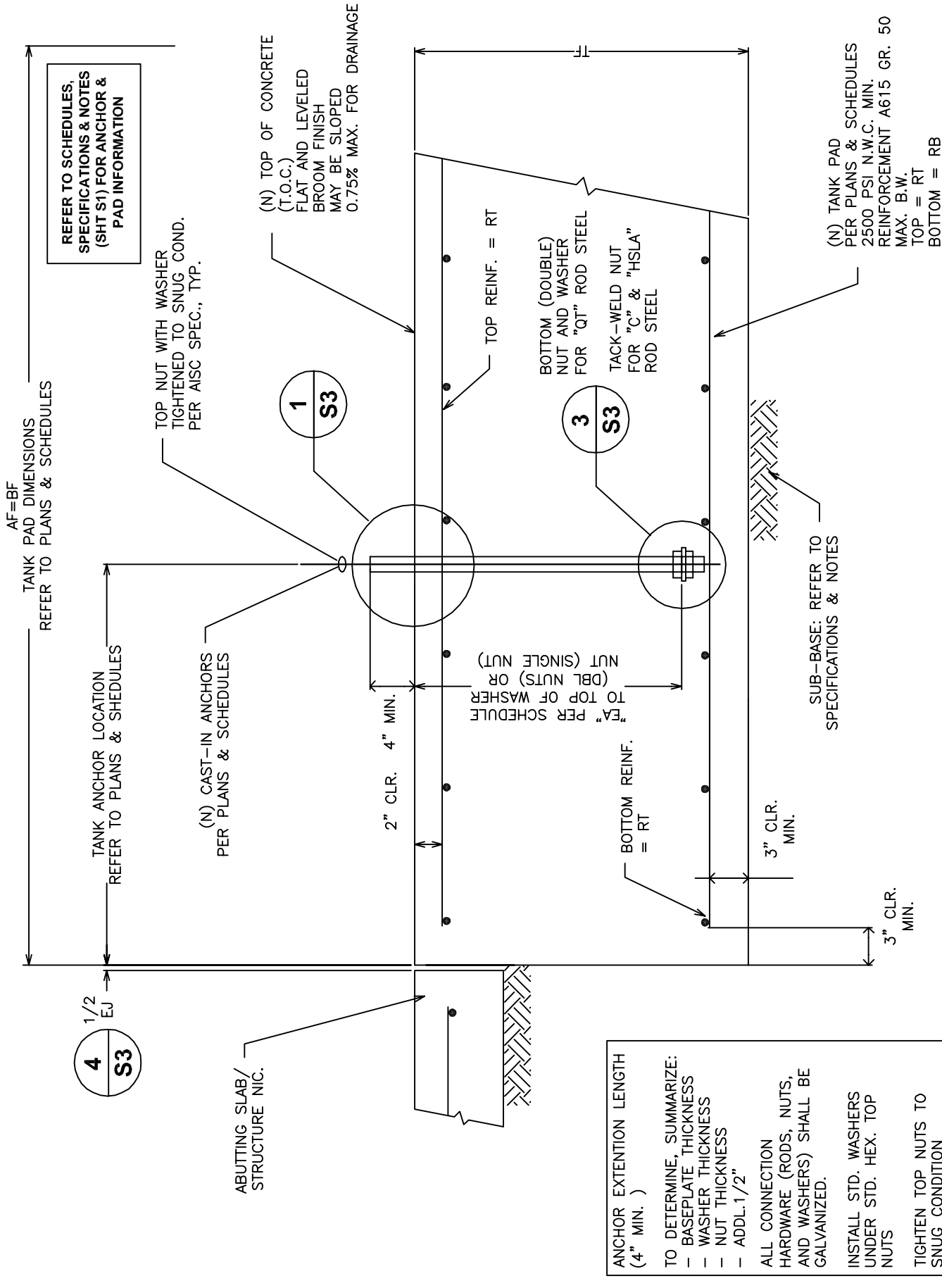
2 ANCHOR BOLT LAYOUT
SCALE: 1" = 5'-0"



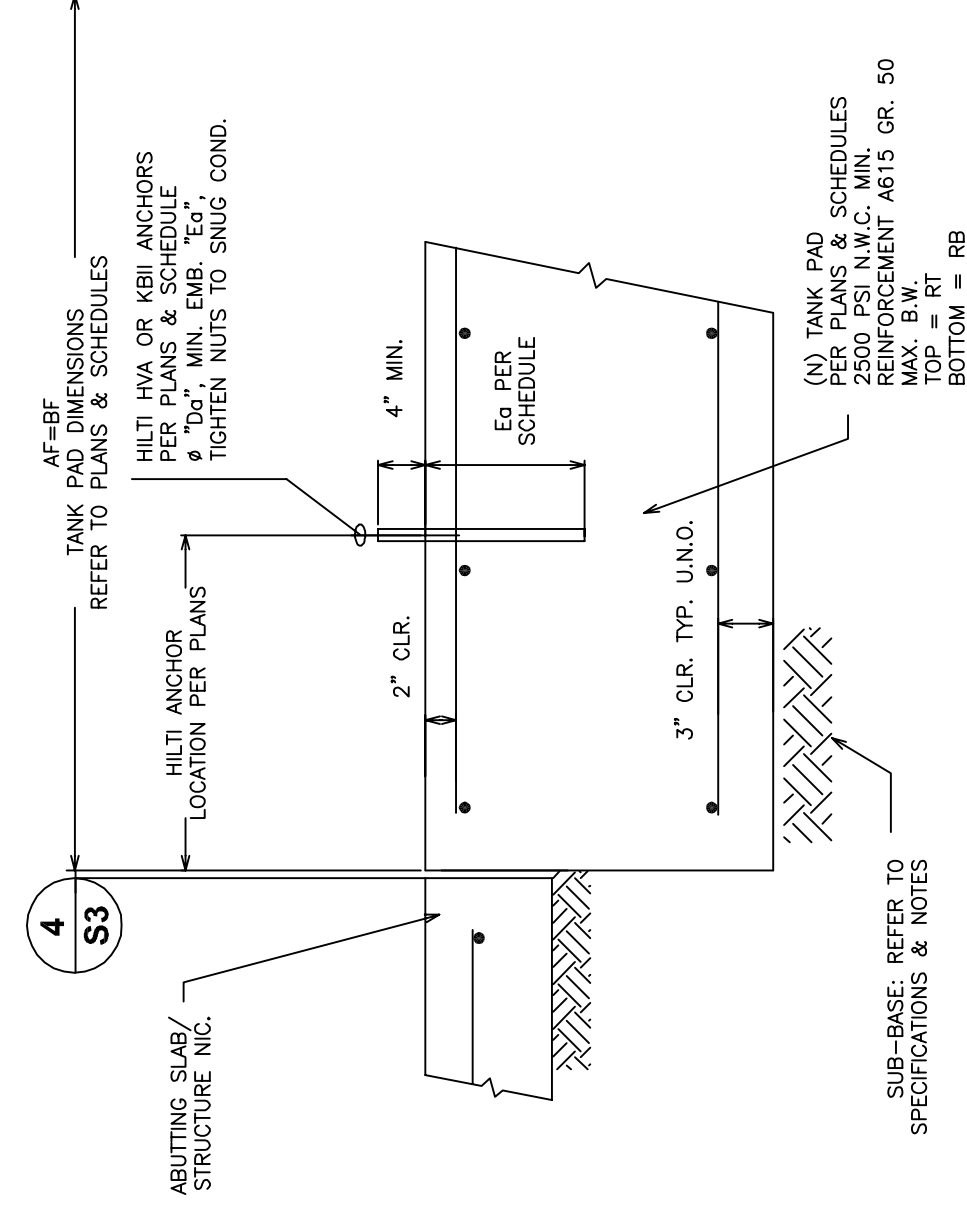
3 ANCHOR BOLT LAYOUT
SCALE: 1" = 5'-0"



4 ANCHOR BOLT LAYOUT
SCALE: 1" = 5'-0"



6 (N) TANK PAD: CAST-IN ANCHOR INSTALLATION
GENERIC SECTION, NTS



5 (N) TANK PAD: DRILL-IN ANCHOR INSTALLATION
GENERIC SECTION, NTS

ANCHOR EXTENSION LENGTH (4" MIN.)
TO DETERMINE, SUMMARIZE:
- BASEPLATE THICKNESS
- WASHER THICKNESS
- NUT THICKNESS
- ADDL. 1/2"
ALL CONNECTION HARDWARE (RODS, NUTS, AND WASHERS) SHALL BE GALVANIZED.
INSTALL STD. WASHERS UNDER STD. HEX. TOP NUTS
TIGHTEN TOP NUTS TO SNUG CONDITION

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REV.	ECD #	REVISION DESCRIPTION	DATE	APPROVED	DATE	USED ON	FINAL ASS	QUANTITY REQ'D
			3/6/02	JJS				

MAT'L

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PART NUMBER: 11682254

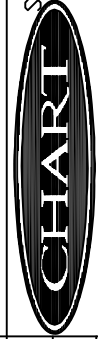
SCALE: N/A

DRAWING NO: C-11682254

REV: E


TITLE: FOUNDATION L/D ZONE0-4 175-500PS

Storage Systems Divi
New Prague Operator



SCHEDULES FOR TANK PADS FOR, AMD ANCHORAGE OF, CRYOGENIC VESSELS

Tank Capacity, Gallons	525				900				1500				3000				6000			
	0-4*	0-3	4	4*	0-2A	2B-3	4	4*	4 LIN	0-2A	2B-3	4	4*	4 LIN	0-2A	2B-3	4	4*	4 LIN	
Ftng. Dims.	8	8	8	8	8'-6"	9	10	10'-3"	8'-3"	10	12	13	13'-3"	11	15	17	18	19'-6"	16	
	8	8	8	8	8'-6"	9	10	10'-3"	8'-3"	10	12	13	13'-3"	11	15	17	18	19'-6"	16	
	12	12	15	15	15	15	18	18	18	15	18	20	18	16	18	24	26	30	26	
Ftng. Reinf.	4@18	4@18	4@14	4@14	4@14	4@14	5@18	5@18	5@18	5@18	5@18	5@16	5@18	5@18	5@18	6@18	6@18	6@18	6@18	
	4@18	4@18	4@14	4@14	4@14	4@14	5@18	5@18	5@18	5@18	5@18	5@16	6@18	5@18	6@12	6@18	8@18	8@18	6@16	
Cast-in Anchors,	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	
	0.625	0.625	0.875	0.875	0.875	0.875	1.000	1.000	1.000	0.875	0.875	0.875	0.875	0.875	1.000	1.125	1.000	1.000	1.000	
	7.50	7.50	10.50	10.50	10.50	10.50	12.00	12.00	12.00	10.50	12.00	14.00	12.00	11.00	13.00	19.00	21.00	24.00	21.00	
	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A449	A449	A449	
	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	QT	QT	QT	
	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	DBL	DBL	DBL	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.00	3.00	3.00	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.500	0.625	0.500	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0625	1.0625	1.0625	
Sp. Insp.	No	No	No	No	No	Yes	Yes	Yes	No	No	No	No	Yes	No	Yes	Yes	Yes	Yes	No	
# per leg	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	
Dae, in	0.625	0.625	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	
Eae, in	5.000	5.000	8.250	8.250	6.625	12.375	12.375	12.375	12.375	6.625	12	12	12	8	12	15	15	15	15	
Steel ASTM	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A36	A193	A36	A36	A36	
Sp. Insp.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
# per leg	1	1	1	1	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	
Dam, in	0.625	0.625	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Eam, in	4.00	4.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	
Sp. Insp.	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
Calc. Sheet.	C1	D1	D2	D3	E1	E2	E3	E4	E5	F1	F2	F3	F4	F5	G1	G2	G3	G4	G5	

REV.	ECD #	REVISION DESCRIPTION	BY	DATE	APPROVED	DATE	NEXT ASS'Y	USED ON	APPLICATION	QUANTITY REQ'D
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					<p style="font-weight: bold; font-size: large;">11682254</p>					
<p style="font-size: x-small;">MATERIAL</p> <p style="font-size: x-small;">REVISION DESCRIPTION</p>					<p style="font-weight: bold; font-size: large;">CHART</p> <p style="font-weight: bold; font-size: large;">Storage Systems Division</p> <p style="font-weight: bold; font-size: large;">New Prague Operations</p> <p style="font-weight: bold; font-size: large;">TITL FOUNDATION L/O</p> <p style="font-weight: bold; font-size: large;">ZONE0/4 175-500PSI</p> <p style="font-size: small;">DRAWING NO. C-11682254</p> <p style="font-size: small;">SCALE N/A</p> <p style="font-size: small;">REV. B</p>					