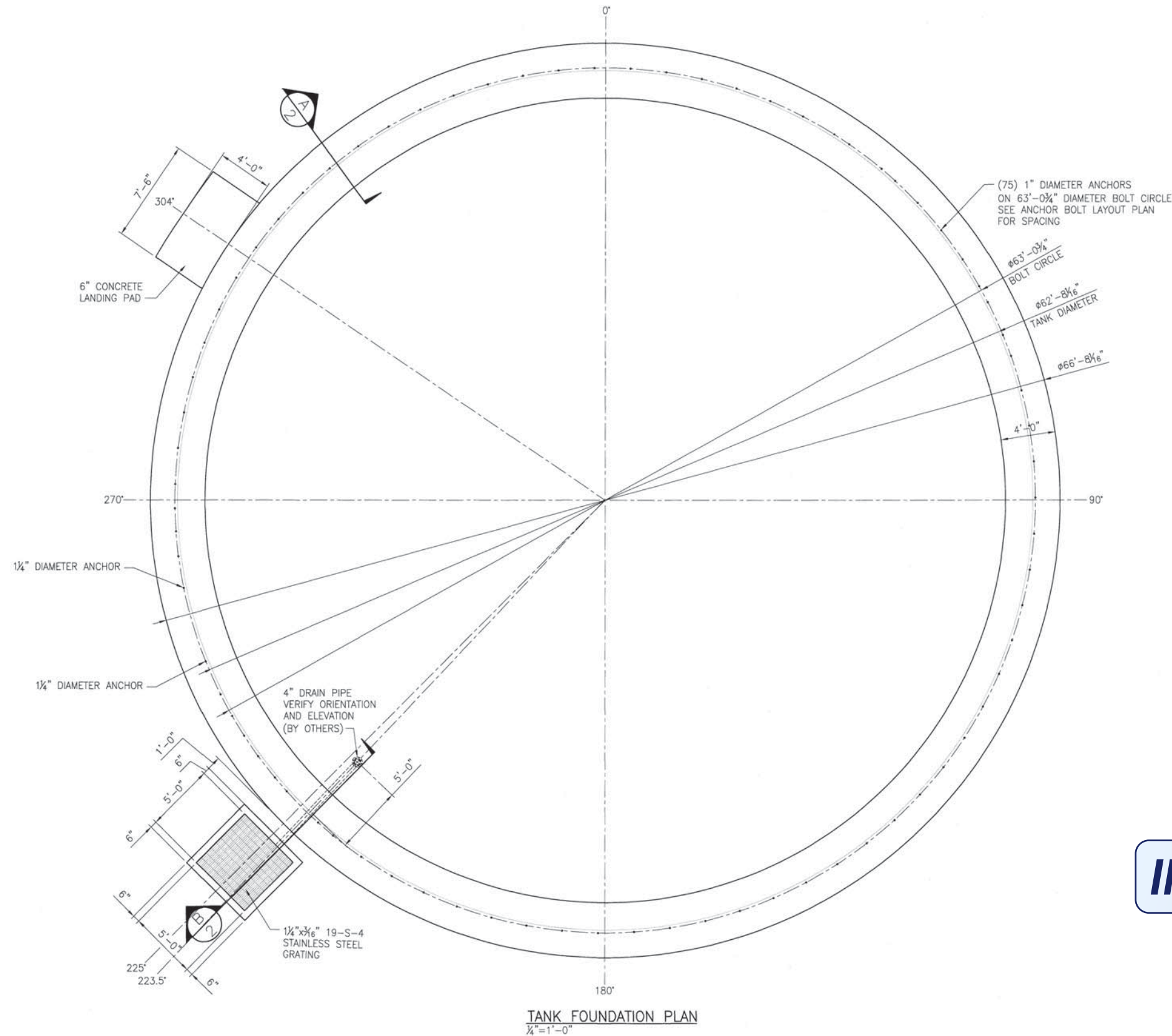


# FOUNDATION FOR 62.67' DIAMETER x 37.96' TALL BOLTED STEEL WATER TANK



### DESIGN NOTES:

- FOUNDATION DESIGNED IN ACCORDANCE WITH IBC 2018/ASCE 7-16/ANSI/AWWA D-103-09
- DESIGN LOADS:  
 DESIGN SPECIFIC GRAVITY = 1.0  
 ROOF LIVE LOAD = 25 PSF  
 SNOW LOAD = 25 PSF  
 WIND: = 150 MPH, EXPOSURE C  
 SEISMIC:  $S_s=1.75$ ,  $S_1=0.60$ , SITE CLASS D,  $I=1.0$   
 SEISMIC USE GROUP I
- ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSF PER GEOTECHNICAL REPORT NO. 1413-15-050 BY S&ME, INC. DATED JULY 10, 2018.

### GENERAL CONDITIONS:

- WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS.
- CONTRACTOR IS RESPONSIBLE TO REVIEW THE PLANS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE LIABLE FOR ANY AND ALL DAMAGES WHICH MAY BE DUE TO HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
- THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS.

### SITE WORK:

- FOOTINGS AND TANK FLOOR MUST BEAR ON SUBGRADE SOIL OR STRUCTURAL FILL PREPARED AND COMPACTED AS REQUIRED BY THE GEOTECHNICAL REPORT.
- RING WALL BELOW GRADE SHALL HAVE BACKFILL PLACED EQUALLY ON BOTH SIDES UNTIL THE REQUIRED LEVELS ARE REACHED.

### CONCRETE:

- CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301 LATEST EDITION, STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE, PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, DETROIT, MICHIGAN, EXCEPT AS MODIFIED BELOW:  
 EXPOSURE CLASS = F0, S0, P0, C1  
 MINIMUM  $f'_c$  = 4000 PSI  
 MAXIMUM WATER/CEMENT RATIO = 0.45  
 MAXIMUM AGGREGATE SIZE = 1"  
 GRADE 60 REINFORCING STEEL
- MAKE ALL BARS CONTINUOUS AROUND CORNERS OR PROVIDE CORNER BARS OF EQUAL SIZE AND SPACING.
- ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1".
- LAP ALL CONTINUOUS BARS 40 X DIA.
- NO SLUMP OVER 4" SHALL BE PERMITTED FOR STRUCTURAL CONCRETE.
- ALL CONCRETE SHALL BE CONSOLIDATED IN PLACE USING INTERNAL VIBRATOR. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE WITHIN FORMS.
- CONCRETE SHALL MEET THE TOLERANCES OF AWWA D103-09 SECTION 13.6.
- TESTING AND LAB REQUIREMENT ARE AS LISTED PER STATEMENT OF SPECIAL INSPECTIONS ON SHEET 2.

**INFORMATION ONLY**

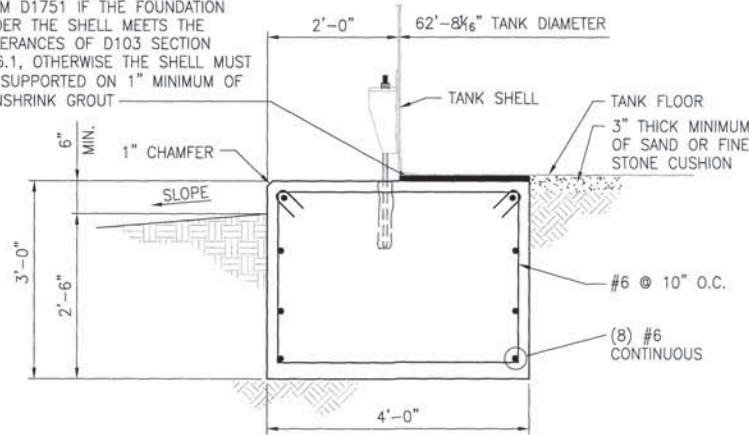
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62.67' DIAMETER x 37.96' TALL  
WATER STORAGE TANK

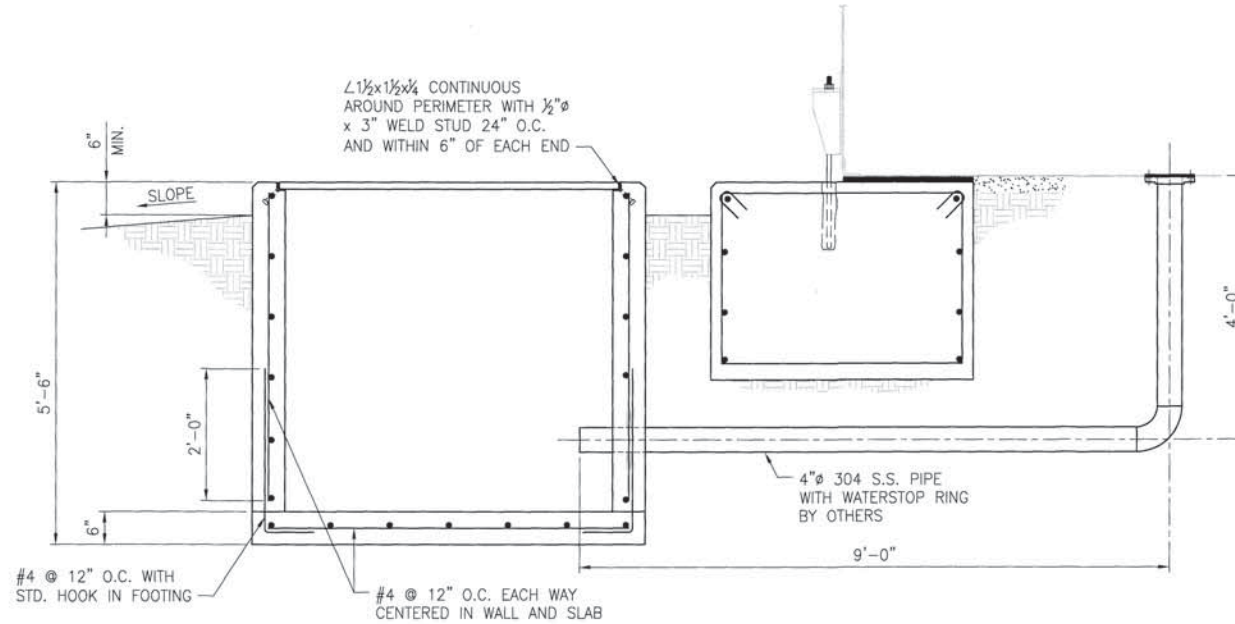
BOLTED WATER STORAGE TANK

ADDED ANCHOR BOLT LAYOUT PLAN AND REINFORCEMENT LAYOUT PLAN		ISSUED FOR APPROVAL		REVISIONS	
No.	DATE	BY	DESCRIPTION	No.	DESCRIPTION
08/05/20		KGH			
07/09/20		KGH			

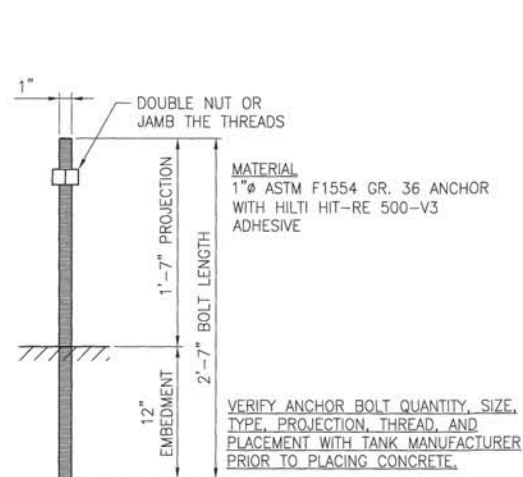
TANK SHELL MAY BE SUPPORTED ON 1/2" CANE-FIBER JOINT FILLER MEETING THE REQUIREMENTS OF ASTM D1751 IF THE FOUNDATION UNDER THE SHELL MEETS THE TOLERANCES OF D103 SECTION 13.6.1, OTHERWISE THE SHELL MUST BE SUPPORTED ON 1" MINIMUM OF NONSHRINK GROUT



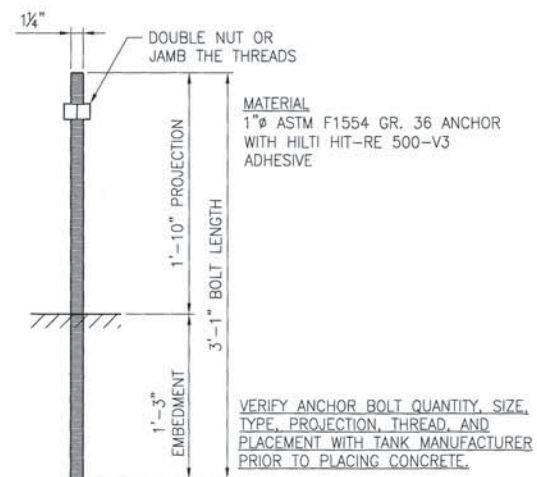
FOOTING SECTION A  
3/4"=1'-0"



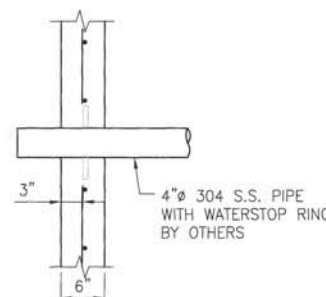
DRAIN PIT SECTION B  
3/4"=1'-0"



ANCHOR BOLT DETAIL  
(75 REQUIRED)



ANCHOR BOLT DETAIL  
(2 REQUIRED)



DRAIN PIT OPENING DETAIL  
1"=1'-0"

STATEMENT OF SPECIAL INSPECTIONS 2015 IBC

PROJECT: BOLTED WATER STORAGE TANK  
LOCATION: MONCK'S CORNER, SOUTH CAROLINA

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS OF IBC SECTIONS 1704 AND 1705. INCLUDED ARE:  
• SCHEDULE OF SPECIAL INSPECTIONS AND TESTS APPLICABLE TO THIS PROJECT:  
• SPECIAL INSPECTIONS PER SECTIONS 1704 AND 1705  
• SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE  
• SPECIAL INSPECTIONS FOR WIND RESISTANCE

• LIST OF THE TESTING AGENCIES AND OTHER SPECIAL INSPECTORS THAT WILL BE RETAINED TO CONDUCT THE TESTS AND INSPECTIONS.

SPECIAL INSPECTIONS AND TESTING WILL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, THIS STATEMENT AND IBC SECTIONS 1704, 1705, 1707, AND 1708.

THE SCHEDULE OF SPECIAL INSPECTIONS SUMMARIZES THE SPECIAL INSPECTIONS AND TESTS REQUIRED. SPECIAL INSPECTORS WILL REFER TO THE APPROVED PLANS AND SPECIFICATIONS FOR DETAILED SPECIAL INSPECTION REQUIREMENTS. ANY ADDITIONAL TESTS AND INSPECTIONS REQUIRED BY THE APPROVED PLANS AND SPECIFICATIONS WILL ALSO BE PERFORMED.

INTERIM REPORTS WILL BE SUBMITTED TO THE BUILDING OFFICIAL AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE IN ACCORDANCE WITH IBC SECTION 1704.1.2

A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS, TESTING AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY (SECTION 1704.1.2). THE FINAL REPORT WILL DOCUMENT:

- REQUIRED SPECIAL INSPECTIONS;
  - CORRECTION OF DISCREPANCIES NOTED IN INSPECTIONS.
- THE OWNER RECOGNIZES HIS OR HER OBLIGATION TO ENSURE THAT THE CONSTRUCTION COMPLIES WITH THE APPROVED PERMIT DOCUMENTS AND TO IMPLEMENT THIS PROGRAM OF SPECIAL INSPECTIONS. IN PARTIAL FULFILLMENT OF THESE OBLIGATIONS, THE OWNER WILL RETAIN AND DIRECTLY PAY FOR THE SPECIAL INSPECTIONS AS REQUIRED IN IBC SECTION 1704.1.

THIS PLAN HAS BEEN DEVELOPED WITH THE UNDERSTANDING THAT THE BUILDING OFFICIAL WILL:

- REVIEW AND APPROVE THE QUALIFICATIONS OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE INSPECTIONS.
- MONITOR SPECIAL INSPECTION ACTIVITIES ON THE JOB SITE TO ASSURE THAT THE SPECIAL INSPECTORS ARE QUALIFIED AND ARE PERFORMING THEIR DUTIES AS CALLED FOR IN THIS STATEMENT OF SPECIAL INSPECTION.
- REVIEW SUBMITTED INSPECTION REPORTS.
- PERFORM INSPECTIONS AS REQUIRED BY THE LOCAL BUILDING CODE.

PREPARED BY:  
J. REESE LEAVITT, P.E.  
REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE

OWNERS AUTHORIZATION: \_\_\_\_\_ BUILDING OFFICIALS ACCEPTANCE: \_\_\_\_\_  
OWNER: \_\_\_\_\_ BUILDING OFFICIAL: \_\_\_\_\_  
SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

SCHEDULE INSPECTION, TESTING AGENCIES, AND INSPECTORS

RESPONSIBILITY	FIRM	ADDRESS, TELEPHONE, EMAIL
1. SPECIAL INSPECTION (EXCEPT FOR GEOTECHNICAL)		
2. MATERIAL TESTING		
3. GEOTECHNICAL INSPECTIONS		

SCHEDULE OF SPECIAL INSPECTION

APPLICABLE TESTS AND INSPECTIONS ARE INDICATED BELOW WITH A SOLID FILLED RECTANGLE "■".

APPLIES	VERIFICATION AND INSPECTION	C	P	NOTES
	TABLE 1705.3 - CONCRETE			
■	1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT	---	X	
□	2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2B	---	---	
□	3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	X	---	
■	4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	---	X	
■	5. VERIFYING USE OF REQUIRED DESIGN MIX	---	X	
■	6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	---	
□	7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	---	
■	8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	---	X	
□	9. INSPECTION OF PRESTRESSED CONCRETE: A. APPLICATION OF PRESTRESSING FORCES B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC FORCE-RESISTING SYSTEM	X	---	
□	10. ERECTION OF PRECAST CONCRETE MEMBERS.	---	X	
□	11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	---	X	
■	12. INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	---	X	
	TABLE 1705.6 - SOILS			
■	1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	---	X	
■	2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	---	X	
□	3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	---	X	
■	4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	---	
■	5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	---	X	

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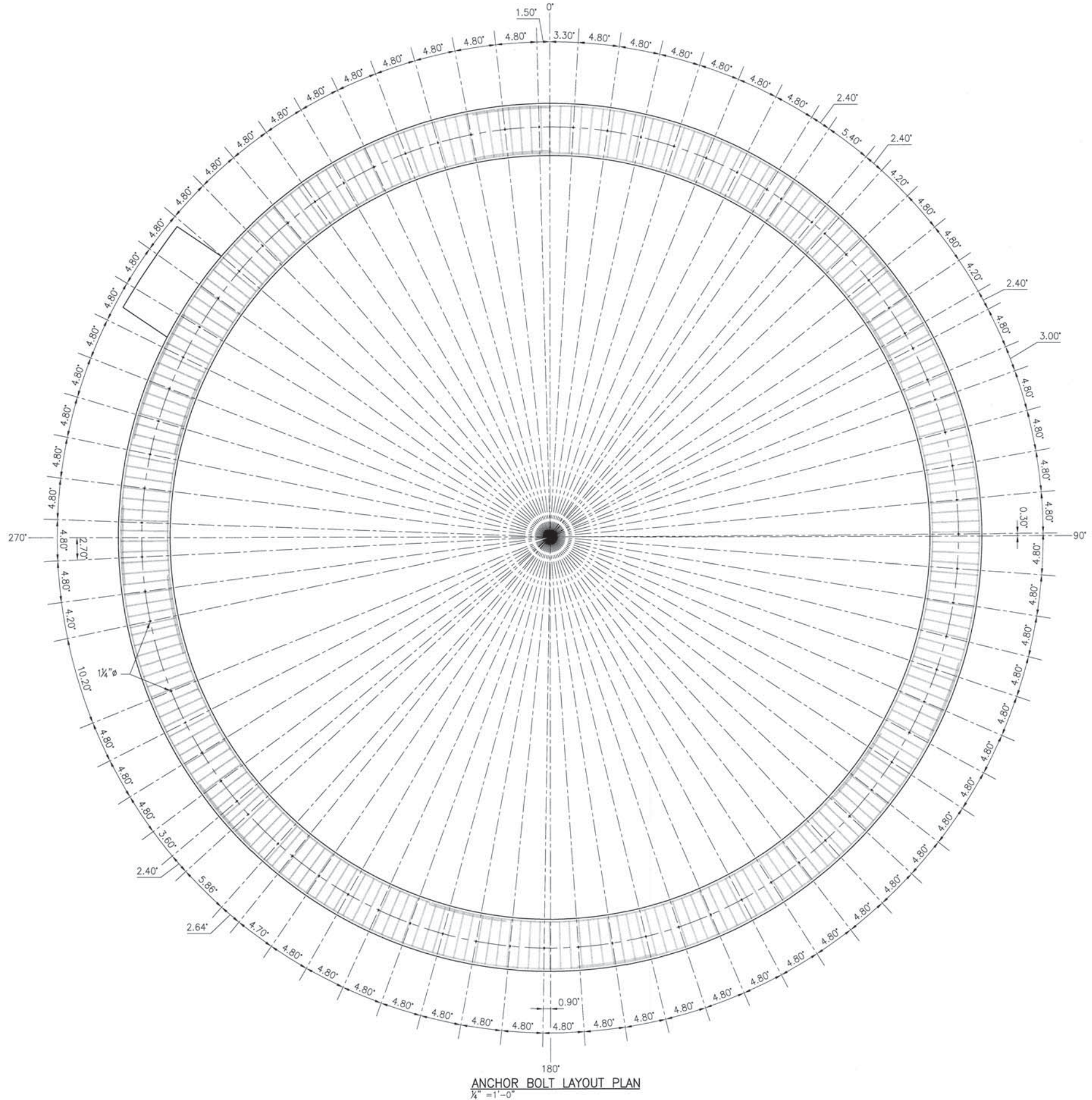
UNITED INDUSTRIES GROUP, INC.  
 11 RANCHO CIRCLE, LAKE FOREST, CA 92650, USA  
 Phone (949) 759-5300 Fax (949) 759-5425 info@unitedind.com

**62.67' DIAMETER x 37.96' TALL  
 WATER STORAGE TANK**

BOLTED WATER STORAGE TANK

REVISIONS	
No.	DESCRIPTION
1	ADDED ANCHOR BOLT LAYOUT PLAN AND REINFORCEMENT LAYOUT PLAN ISSUED FOR APPROVAL
2	
3	
4	

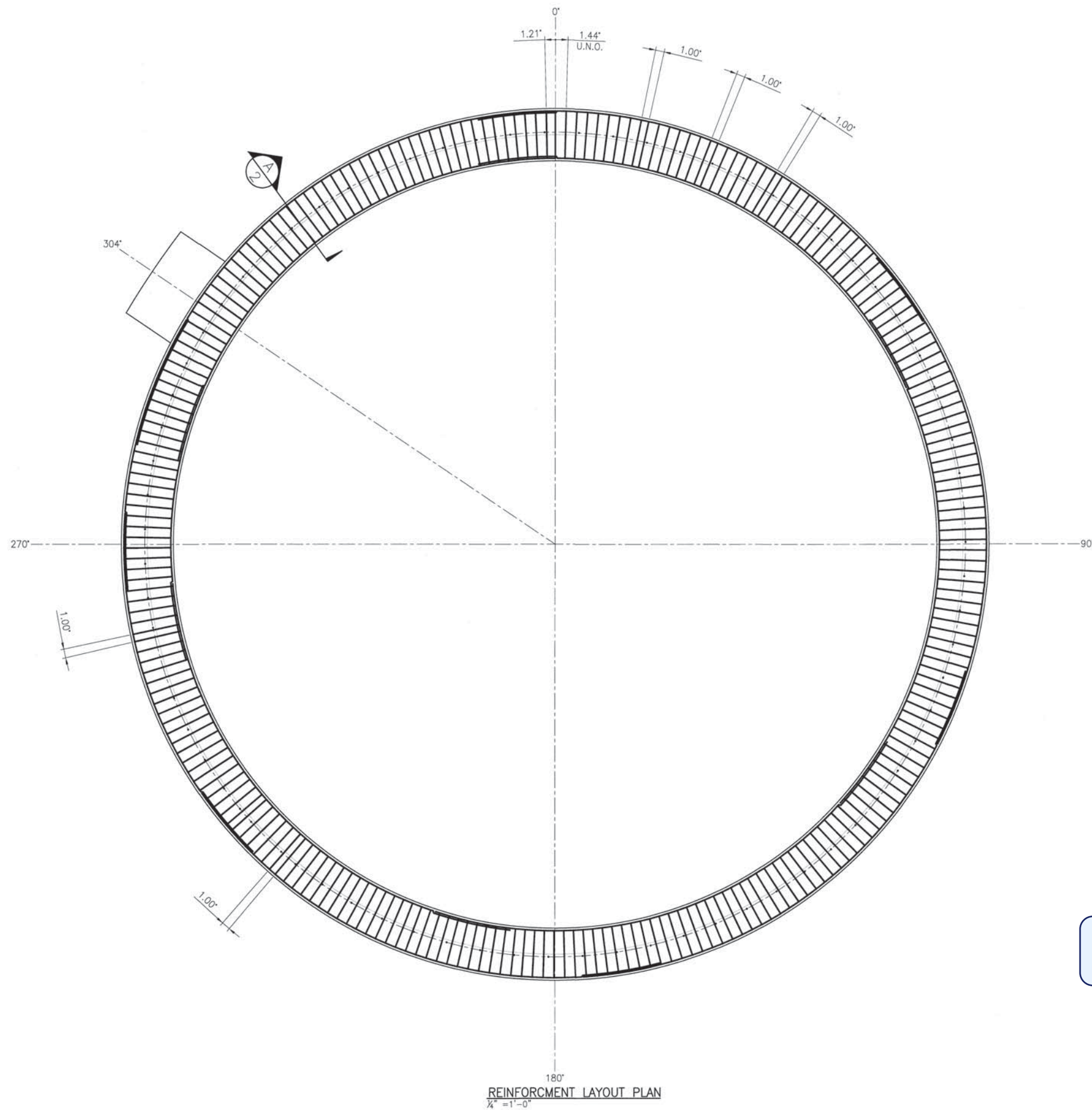
NOTED **3 OF 4**



ANCHOR BOLT LAYOUT PLAN  
 $\frac{1}{4}'' = 1'-0''$

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180°  
**REINFORCEMENT LAYOUT PLAN**  
 1/4" = 1'-0"

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Job Number: \_\_\_\_\_  
 Checked By: \_\_\_\_\_  
 Drawn By: \_\_\_\_\_  
 Date: \_\_\_\_\_

**62.67' DIAMETER x 37.96' TALL  
 WATER STORAGE TANK**

**BOLTED WATER STORAGE TANK**

No.	DATE	BY	DESCRIPTION	REVISIONS
1	08/05/20	KGH	ADDED ANCHOR BOLT LAYOUT PLAN AND REINFORCEMENT LAYOUT PLAN	
2	07/09/20	KGH	ISSUED FOR APPROVAL	