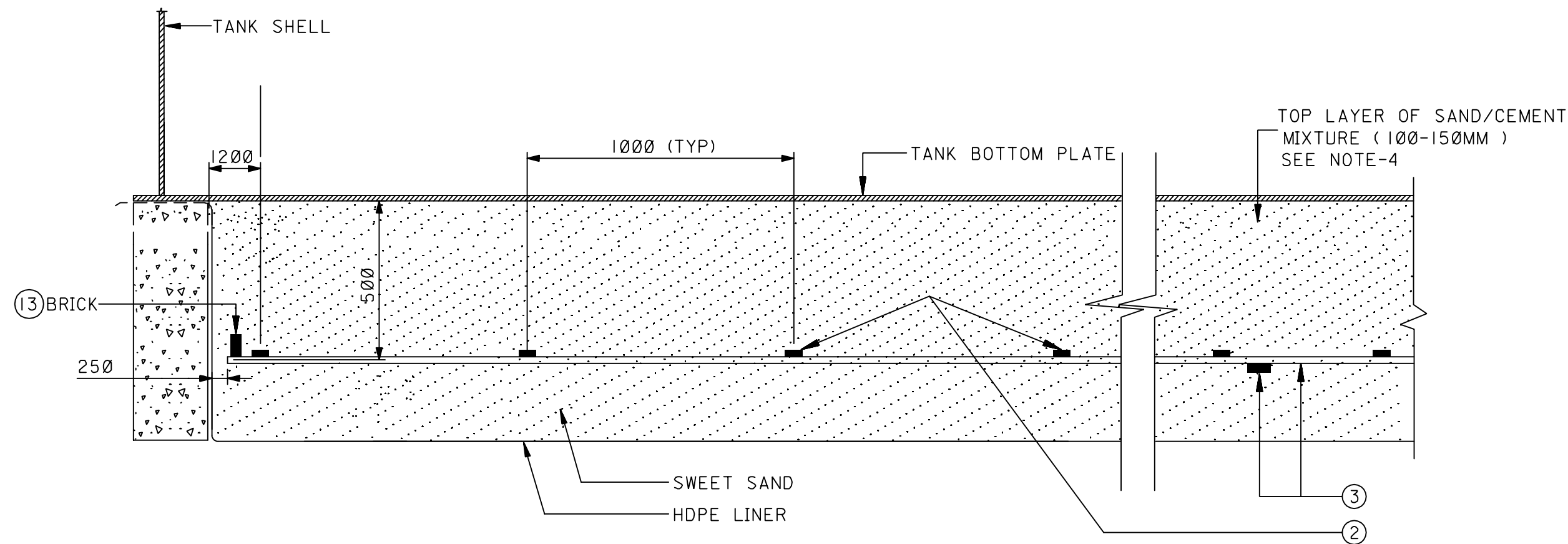
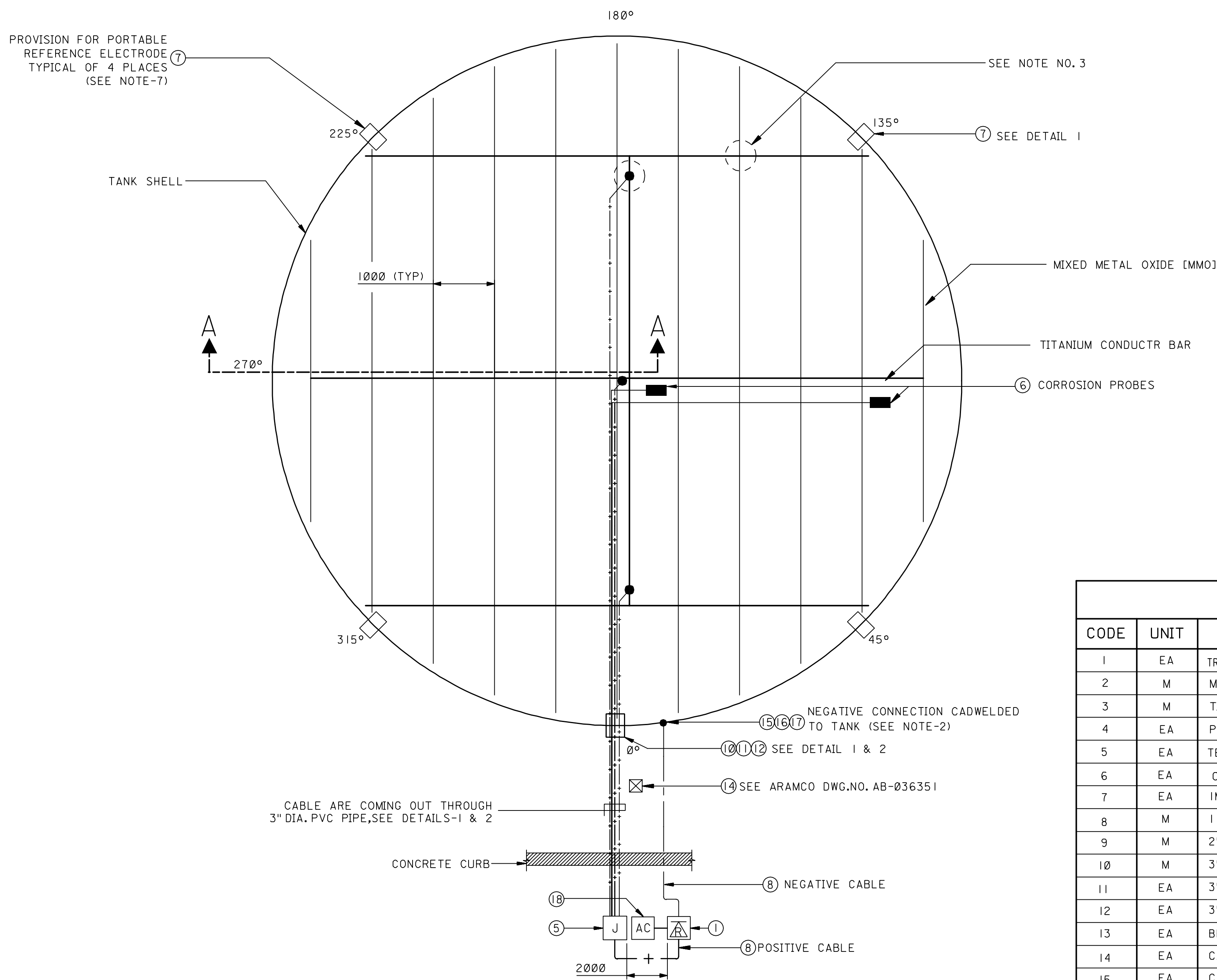
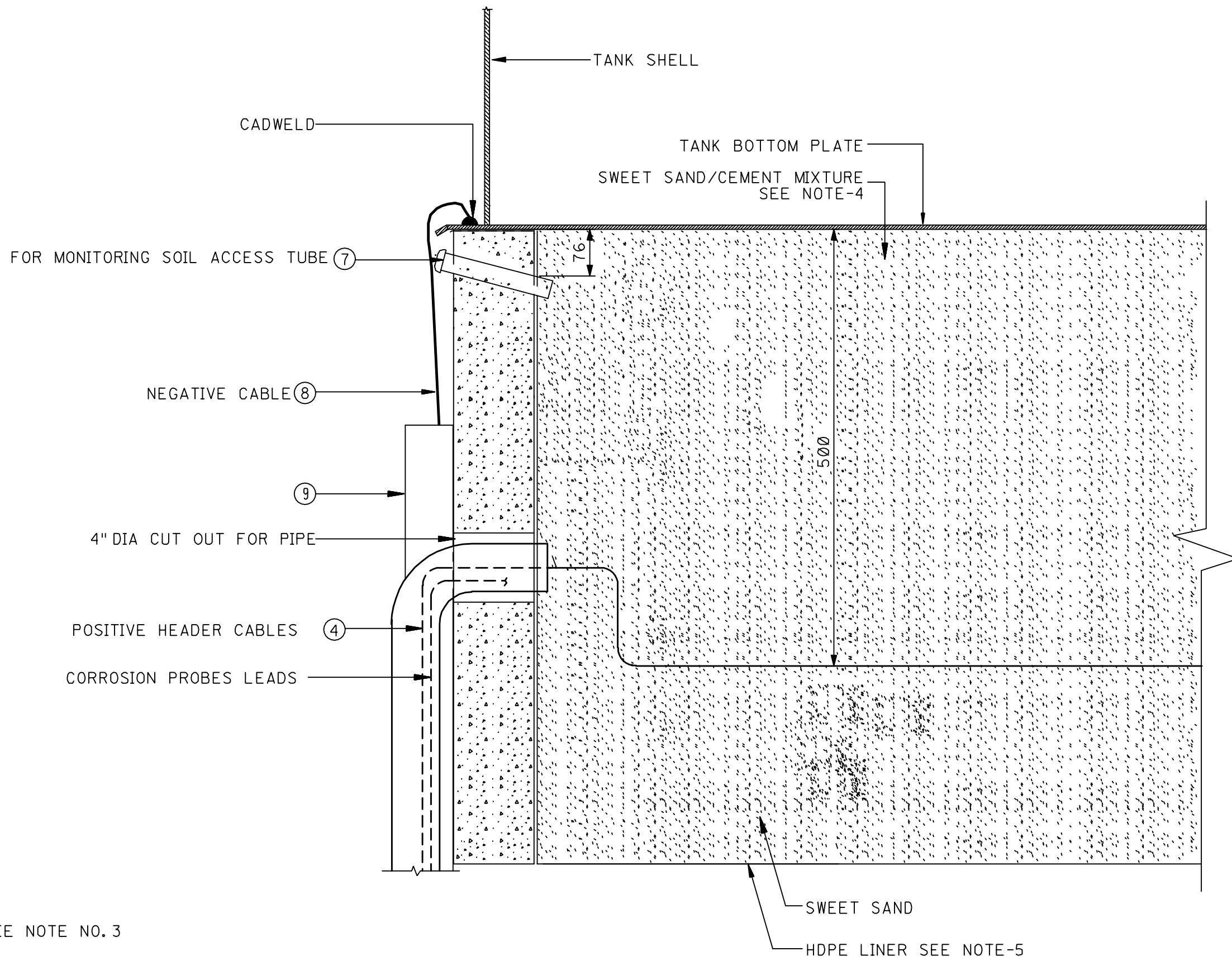




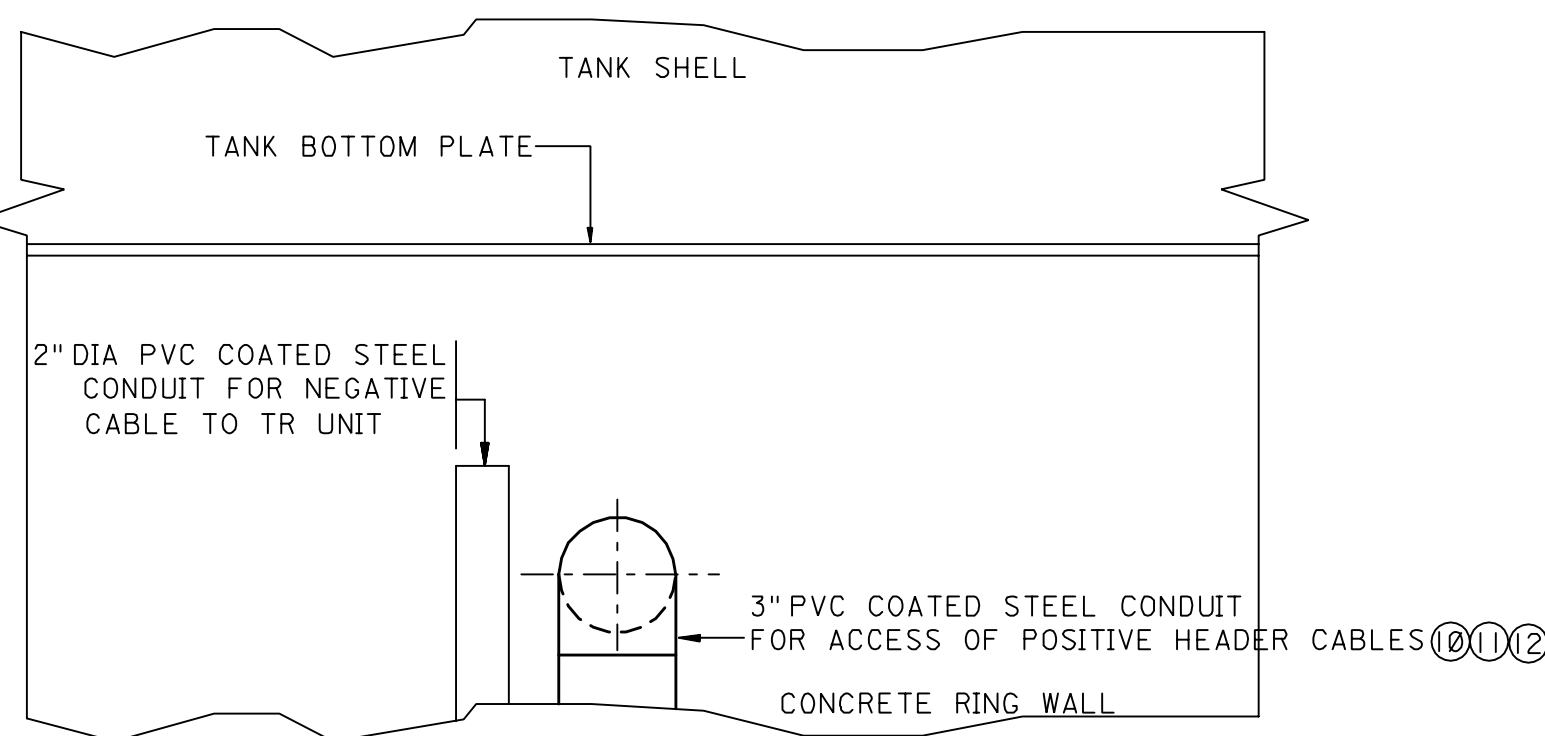
SECTION - AA



SCHEMATIC PLAN VIEW



DETAIL - 1
SECTION THROUGH TANK FOUNDATION



DETAIL - 2
C.P. SYSTEM CONDUIT ENTRY

MATERIAL LIST

CODE	UNIT	DESCRIPTION
1	EA	TRANSFORMER RECTIFIER UNIT (T/R)
2	M	MIXED METAL OXIDE ANODE, TITANIUM TO ASTM B256 SPECIFICATION - GRADE I
3	M	TITANIUM CONDUCTOR BAR TO ASTM B256 SPECIFICATION - GRADE I
4	EA	POSITIVE HEADER CABLE 16MM.SQ KYNAR/HMWPE
5	EA	TERMINAL ANODE JUNCTION BOX, NEMA 4X
6	EA	CORROSION PROBES
7	EA	1Mx1.5\"DIA. PVC PIPE C/W ADAPTER & END CAP
8	M	1 CORE x 25mm.sq HMWPE CABLE
9	M	2\"DIA PVC COATED CONDUIT
10	M	3\"DIA PVC COATED CONDUIT
11	EA	3\"DIA END BUSHING (PVC COATED)
12	EA	3\"DIA PVC COATED LONG RADIUS BEND
13	EA	BRICKS
14	EA	CABLE MARKERS
15	EA	CADWELD MOLD FOR 16MM.SQ CABLE
16	EA	CADWELD POWDER NO.15
17	EA	FLINT GUN
18	EA	AC SWITCH

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
- CADWELD THE NEGATIVE CABLE FROM THE NEGATIVE TERMINAL JUNCTION BOX TO THE TANK. THE PREFERRED LOCATION FOR THE CADWELD IS THE TANK RIM .
- SPOT WELDING IS REQUIRED AT EACH CROSSING OF MMO RIBBON ANODE TO CONDUCTOR BAR, AND CONDUCTOR BAR TO CONDUCTOR BAR .
- THE TANK BOTTOM FOUNDATION MIXTURE SHALL BE AS PER 32-SAMSS-005 .
- THE HDPE LINER SHALL MEET THE REQUIREMENTS OF 32-SAMSS-005 .
- COAT THE UNDERSIDE OF THE TANK BOTTOM PLATES AS PER SAES-H-001 .
- ANODE DEPTH SHALL BE FIXED AT 500MM AND ANODES SHALL BE SPACED 1000MM APART .
- INSTALL A MINIMUM OF TWO CORROSION PROBES AT LOCATION SHOWN . ADD A THIRD PROBE FOR TANK 30 METERS AND MORE .
- MAINTAIN A 1200MM CLEARANCE FROM TANK FOUNDATION AND ANODES .
- INSTALL AS MINIMUM FOR CONDUCTORS BAR AS SHOWN ON THE DRAWING FOR RECTIFIER SIZE 10 A AND LESS . INCREASE THE NUMBER AS FOLLOW:
NUMBER OF CABLES = RECTIFIER AMPS RATING
3
EXAMPLE: FOR RECTIFIER SIZE 35 A, USE 12 CABLES .

LEGENDS:

	TRANSFORMER RECTIFIER
	5 TERMINAL JUNCTION BOX
	NEGATIVE CABLE: 25MM. SQ HMWPE
	POSITIVE CABLE: 25MM. SQ HMWPE
	POSITIVE HEADER CABLE: 16MM. SQ KYNAR-HMWPE
	MIXED METAL OXIDE COATED TITANIUM RIBBON
	TITANIUM CONDUCTOR BAR

REFERENCE DRAWINGS

CATHODIC PROTECTION DETAILS IMPRESSED CURRENT TANK BOTTOM	AA-036355, 1& 2
CATHODIC PROTECTION/RECTIFIER INSTALLATION DETAILS	AA-036378, 1& 2
CATHODIC PROTECTION/INSTALLATION DETAILS DIRECT BURIED CABLE	AA-036615
TERMINATION DETAILS CABLE IDENTIFICATION	AD-036132
CATHODIC PROTECTION, MARKER PLATE DETAILS	AB-036351
THERMITE WELDING OF CABLES TO PIPELINE AND STRUCTURE	AB-036381
CP JUNCTION BOX MOUNTING DETAILS	AB-036540

SCALE:

REVISION CERTIFICATION	EDSD VERIFICATION
THIS INDICATES THAT REV. NO. OF THIS DRAWING IS COVERED FOR ALL APPROVAL/CERTIFICATION REQUIREMENTS BY DRAWING COMPLETION CERTIFICATE (DCS) NO.	EDSD VERIFICATION NO. CONTROL NUMBER BY: DATE:

REV. NO.	DATE	JO/EWO	DESCRIPTION	ENGG. CERT.	PMT	OPRNS.
16	MAY07		GENERAL REVISION	AAB		

DESIGN CERTIFICATION	CHECKED BY:
DRAWN BY:	DATE COMPLETED
DATE STARTED	
DISCIPLINE ENGINEER	
PROJECT ENGINEER	

THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNTIL CERTIFIED AND DATED.	CERTIFIED BY:	SIGNATURE	DATE
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SAUDI ARABIAN OIL COMPANY

REVIEW FOR KEY DRAWINGS	REQUIRED ☐	NOT REQUIRED ☐
CONSTRUCTION AGENCY		
OPERATIONS		
OTHER		

IMPRESSED CURRENT TANK BOTTOM CATHODIC PROTECTION DETAILS

STD. DWG.			SAUDI ARABIA	
PLANT NO.	INDEX	DRAWING NUMBER	SHT. NO.	REV. NO.
990	X	AA-036355	001	16

RESTRICTED

VECTOR CADD-3A

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