



GREENCUBE
ENGINEERING & MINING CO.

TARAZ BITUMEN PLANT PROJECT



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GREEN CUBE IDEA
ENGINEERING & MINING CO.

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PROCESS DATA SHEET FOR 1000 M3 STORAGE TANKS	TRZ-PR-DS-013-01	1 of 2

PROCESS DATA SHEET FOR
1000 M3 STORAGE TANKS

TANK NUMBER:
TK-101/102/103/104/105/106

02					
01	22. Jun. 2026	Issued for Approval	A.Joorabloo	H. Abhaji	A.Mobaraki
00	14. Jun. 2026	Issued for Comment	A.Joorabloo	H. Abhaji	A.Mobaraki
Rev	Date	Description	Prepared By	Checked By	Approved By

TARAZ BITUMEN PLANT PROJECT

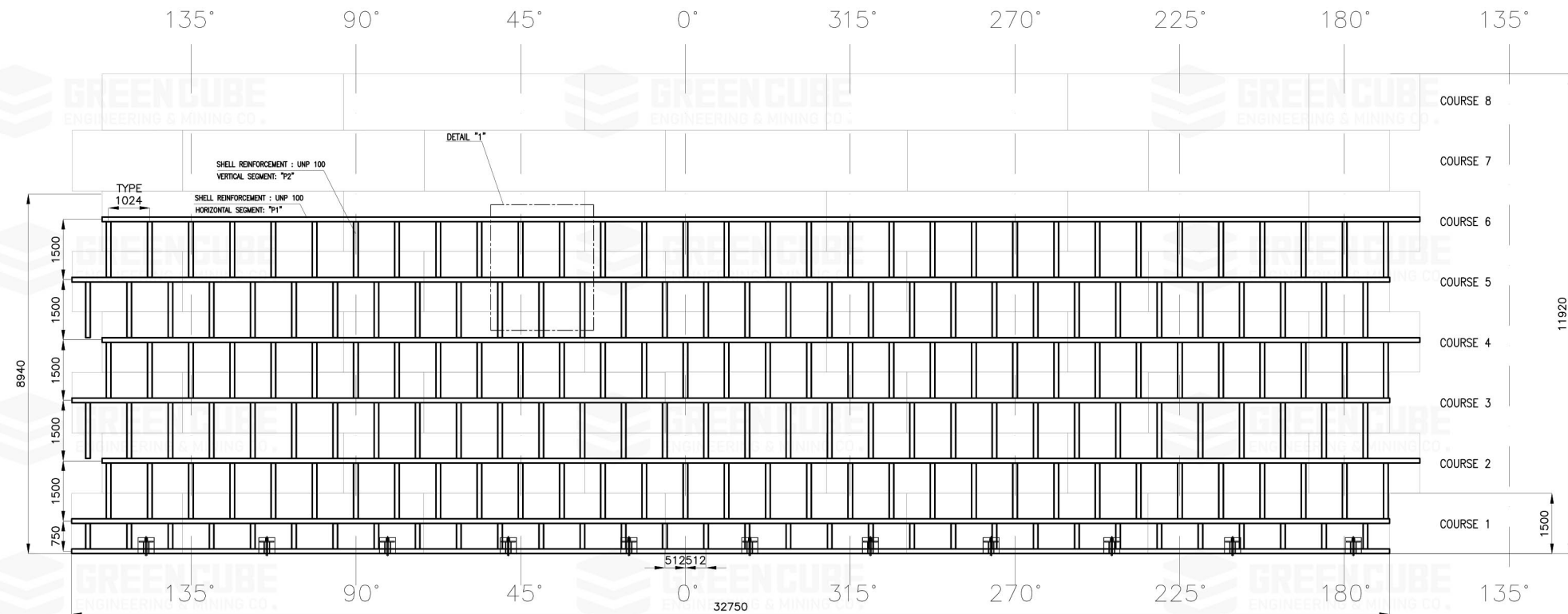


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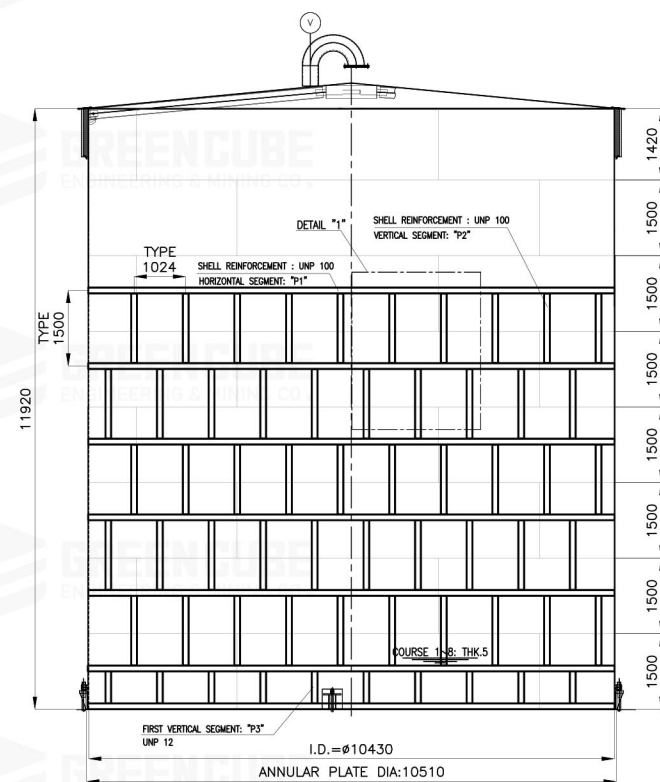
DOCUMENT TITLE	DOCUMENT NUMBER	Page
PROCESS DATA SHEET FOR 1000 M3 STORAGE TANKS	TRZ-PR-DS-013-01	1 of 2

1	•	GENERAL							
2	•								
3	•	TANK No. : TK-101/102/103/104/105/106				SERVICE : Vacuum Bottom and Bitumen Storage Tank			
4	•	No. REQUIRED : 6							
5	•	Size Limitations :		Tank Diameter : 10430 mm		Shell Height : 11920 mm			
6	•	Capacity Maximum : 1000 m³		Operating : 950 m³		Wall Insulation Thickness : 10 cm			
7	•	Product Stored :							
8	•	Liquid : Vacuum Bottom and Bitumen		Density : 950 Kg/m³ at 120 °C		Viscosity : 527 cP at 120 °C			
9	•	Pour Point : >60 °C		Vapor Pressure 0.01 bara at 120 °C		Blanketing Gas : -			
10	•								
11	•								
12	•	Max. Operating Temp. 220 °C		Design Temp. 250 °C		Max. Liquid Level 11500 mm			
13	•	Design Pressure ATM (API 650)		Filling Rate: 110 m³/h		Emptying Rate: 110 m³/h			
14	•								
15	•	NOZZLE and MANHOLE SCHEDULE (for Shell)							
16	•	Mark	Service	Qty.	Size, NPS, or Dia. (In.)	Flange Class or Thick.	PROJECTION	ELEVATION	REMARK
17	•								
18	•								
19	•	N1	INLET	1	6"	150#	200 mm	500 mm	
20	•	N2	CIRCULATION LINE (JET NOZZLE)	1	6"	150#	200 mm	1100 mm	
21	•	N3	OUTLET	1	6"	150#	200 mm	500 mm	
22	•	TT 1/2	TEMPERATURE TRANSMITTER	2	2"	300#	200 mm	500 mm/11000 mm	
23	•	TG	TEMPERATURE GAUGE	1	2"	300#	200 mm	6000 mm	
24	•	LT	LEVEL TRANSMITTER	1	3"	300#	200 mm	300 mm	
25	•	Hs 1/2/3	HOT OIL SUPPLY	3	2"	150#	200 mm	250 mm	
26	•	Hr 1/2/3	HOT OIL RETURN	3	2"	150#	200 mm	900 mm	1
27	•	D	DRAIN	1	4"	150#	200 mm	500 mm	
28	•	M1	SHELL MANHOLE	1	24"	-	200 mm	-	
29	•	M2	SHELL MANHOLE	1	24"	-	200 mm	-	
30	•								
31	•	NOZZLE and MANHOLE SCHEDULE (for Fixed Roof and Bottom)							
32	•	M3	ROOF MANHOLE	1	24"	-	200 mm		
33	•								
34	•	V	VENT	1	8"	HAND MADE	1000 mm		
35	•								
36	•	GH	GAUGE HATCH	1	8"	HAND MADE	200 mm		
37	•								
38	•	LI	LEVEL INDICATOR	1	18"	HAND MADE	200 mm		
39	•								
40	•								

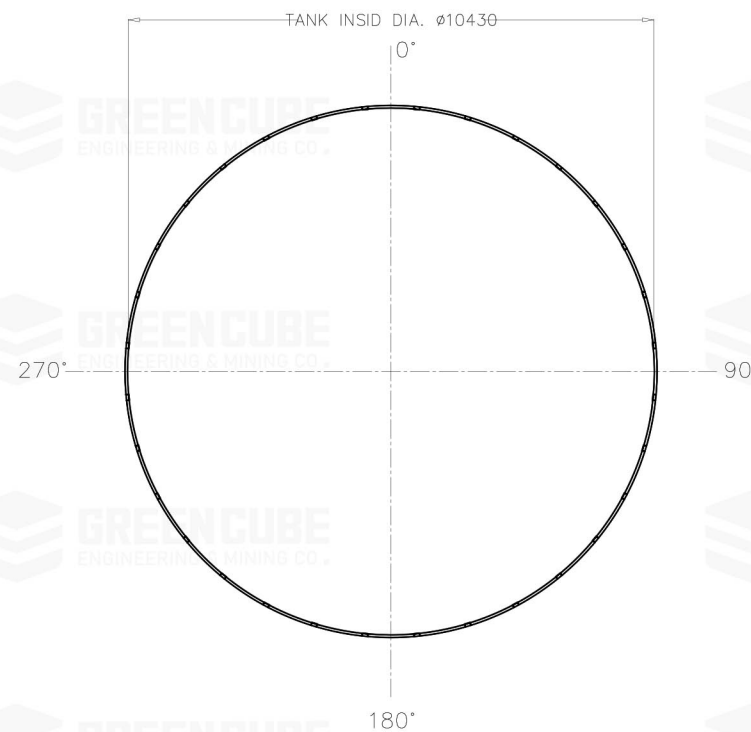




1000 M3 TANKS
SHELL PLATE REINFORCEMENT
SCALE: 1:200

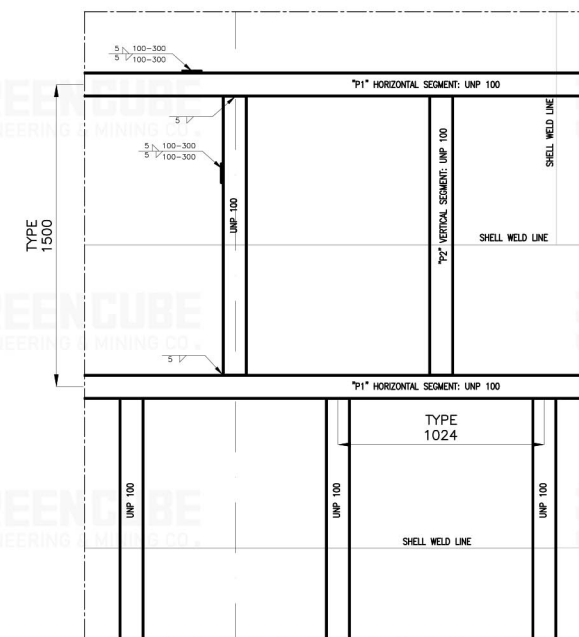


STORAGE TANK GENERAL ASSEMBLY
SCALE: 1:200



STORAGE TANK PLAN

SCALE: 1:200



DETAIL "1"

SCALE: 1:50

NOTE

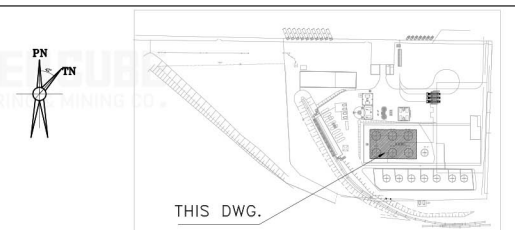
1) ALL DIMENSION IN "mm"

REINFORCEMENT & INSULATION SUPPORT
PART LIST (FOR ONE TANK)

ITEM	QTY.	DESCRIPTION	DIMENSION	MATERIAL	WEIGHT(Kg)
P1	232 M	HORIZONTAL SEGMENT U CHANNEL	UNP 100	ST-37-2	2274
P2	160 No.	VERTICAL SEGMENT U CHANNEL	UNP 100*1380mm	ST-37-2	2164
P3	32 No.	VERTICAL SEGMENT U CHANNEL	UNP 100*630mm	ST-37-2	198

<i>TOTAL WEIGHT</i>	4636
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KEY PLAN



O3					
O2	ISSUED FOR APPROVAL	A..J	H..A	A..M	20.Apr.2026
O1	ISSUED FOR APPROVAL	A..J	H..A	A..M	26.May.2026
O0	ISSUED FOR COMMENT	A..J	H..A	A..M	1.Apr.2026
REV.	DESCRIPTION	PREP.	CHK.	APP.	DATE

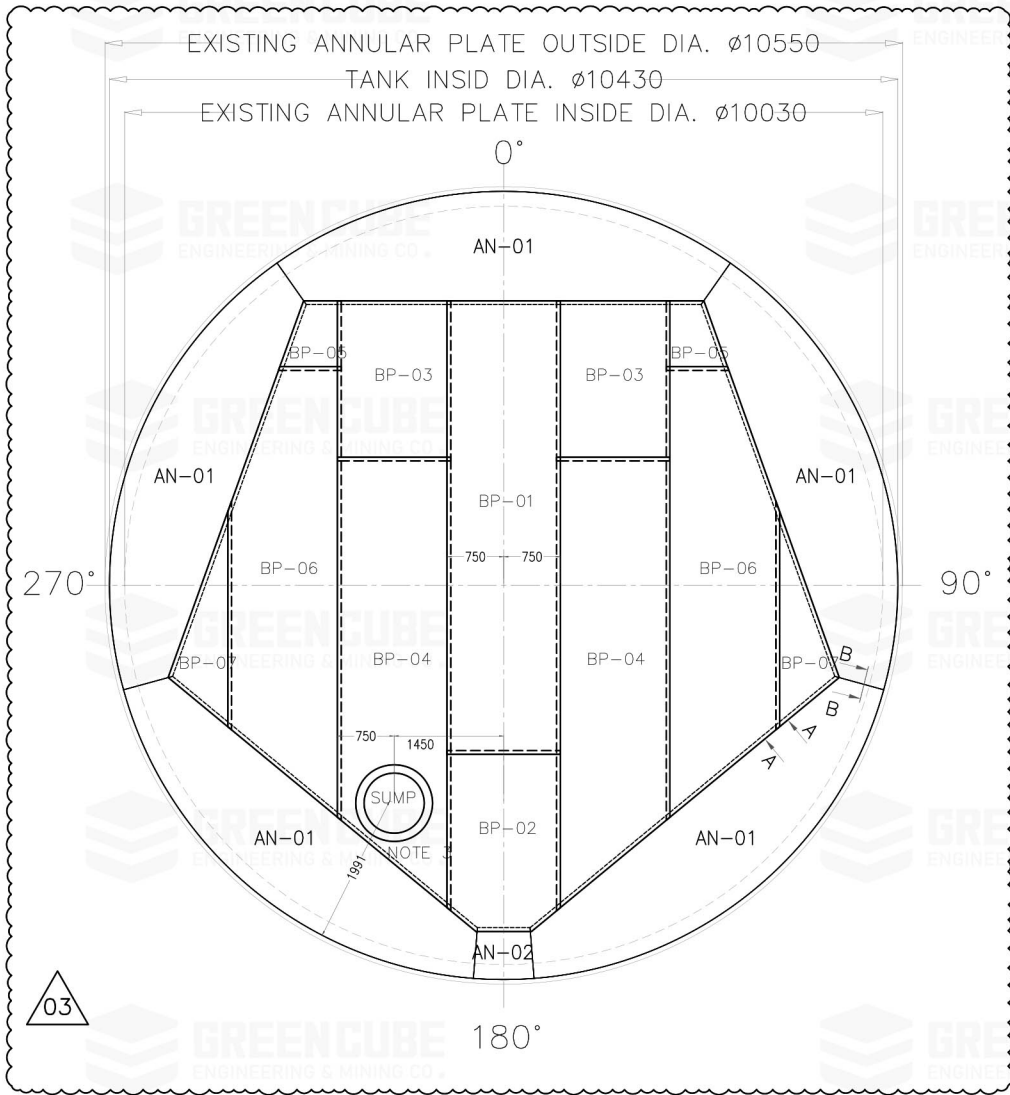
CLIENT: **Tarazbitum**
BITUMEN.PRODUCTION

CONTRACTOR:  **GREENCUBE IDEA**
ENGINEERING & MINING CO.

PROJECT:	TARAZ BITUMEN PLANT
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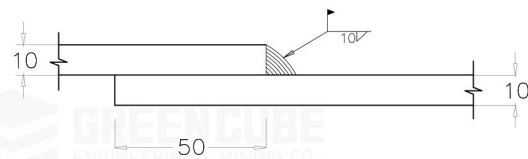
DRAWING TITLE:
1000 M3 TANKS REINFORCEMENT DRAWING

SCALE	SIZE	DOCUMENT NUMBER	SHEET	REV.
AS SHOWN	A3	TRZ-ME-DW-301	1 OF 1	02

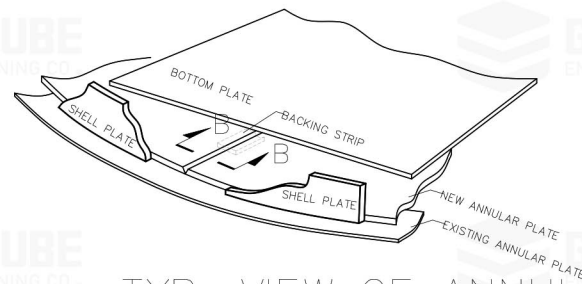


P L A N
BOTTOM & ANNULR PLATE

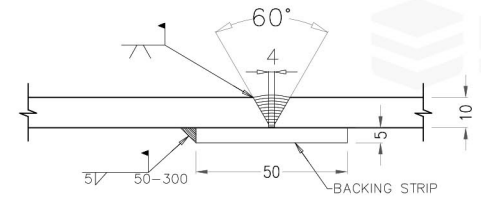
SC: 1-100



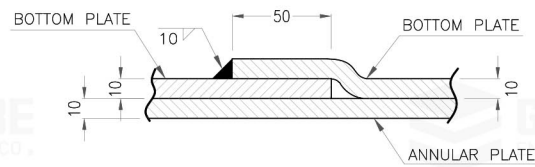
BOTTOM PLATE TYPICAL
LAP JOINT



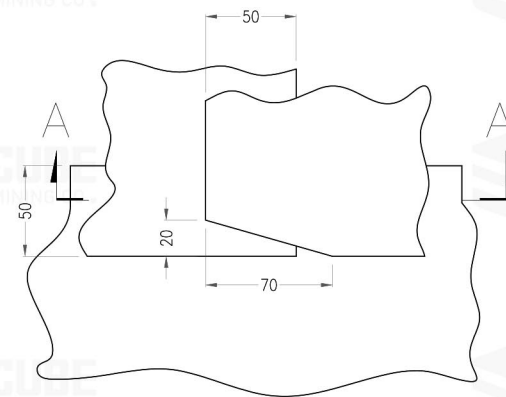
TYP. VIEW OF ANNULAR
PLATE JOINT



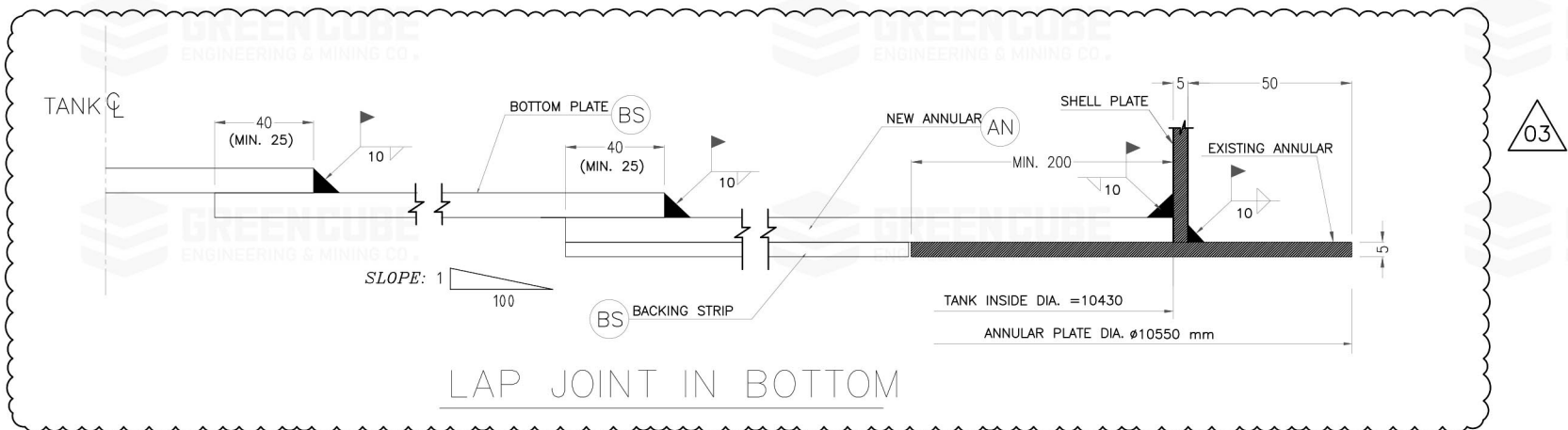
SECTION B - B



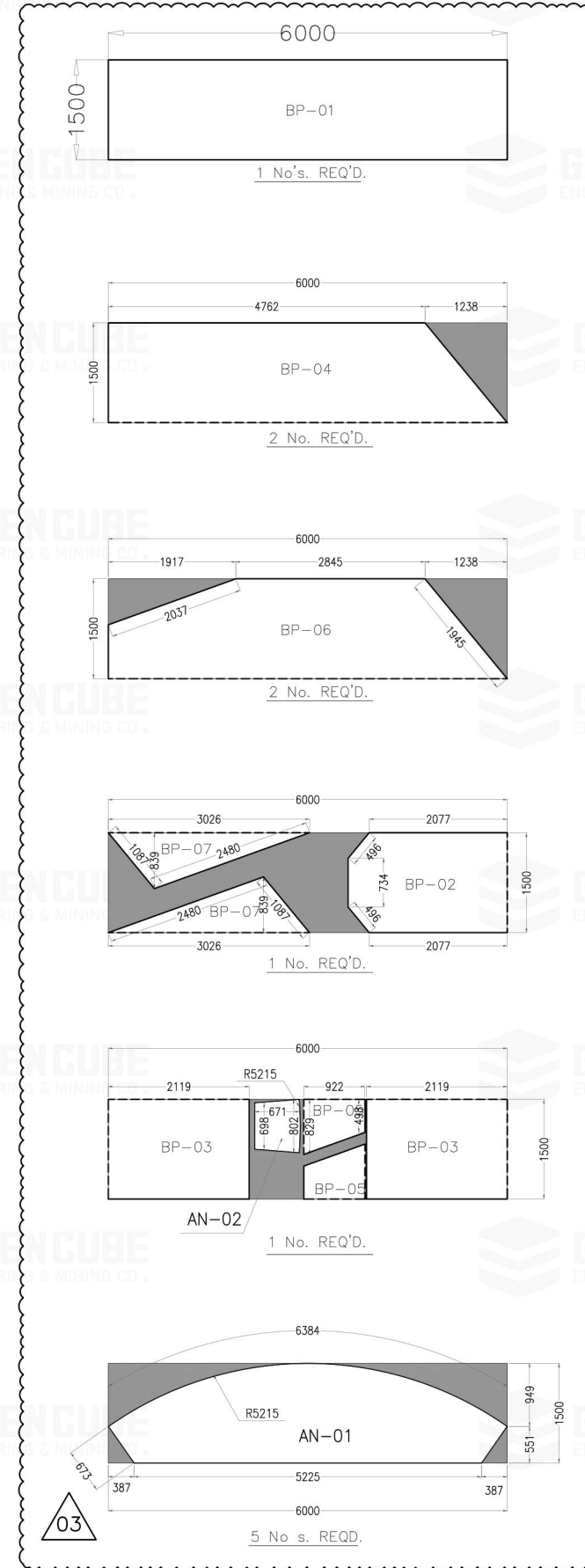
SECTION A - A



THREE LAP JOINT
DETAIL

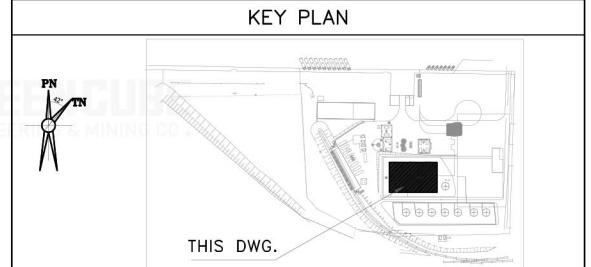


LAP JOINT IN BOTTOM



- NOTE**
- 1) ALL DIMENSIONS ARE IN 'mm'.
 - 2) ALL ANNULAR AND BOTTOM PLATE THICKNESS ARE 10mm.
 - 3) THE SUMP MUST BE INSTALLED ON THE SIDE OF THE EXISTING 4" NOZZLE. FOR DETAIL SEE DWG NO. TRZ-ME-DW-305

PART LIST (FOR ONE TANK)					
ITEM	QTY.	DESCRIPTION	DIMENSION	MATERIAL	WEIGHT(Kg)
AN	5	ANNULAR PLATE	PL. 6000x1500x10	ST-37-2	3590
BP	7	BOTTOM PLATE	PL. 6000x1500x10	ST-37-2	4928
BS	1	BACKING STRIP	F.BAR 50x5x6000	ST-37	12
TOTAL WEIGHT					8530



REV.	DESCRIPTION	PREP.	CHK.	APP.	DATE
03	ISSUED FOR APPROVAL	A.J	H.A	A.M	08.Jun.2026
02	ISSUED FOR APPROVAL	A.J	H.A	A.M	08.Jun.2026
01	ISSUED FOR APPROVAL	A.J	H.A	A.M	06.Jun.2026
00	ISSUED FOR COMMENT	A.J	H.A	A.M	14.Apr.2026

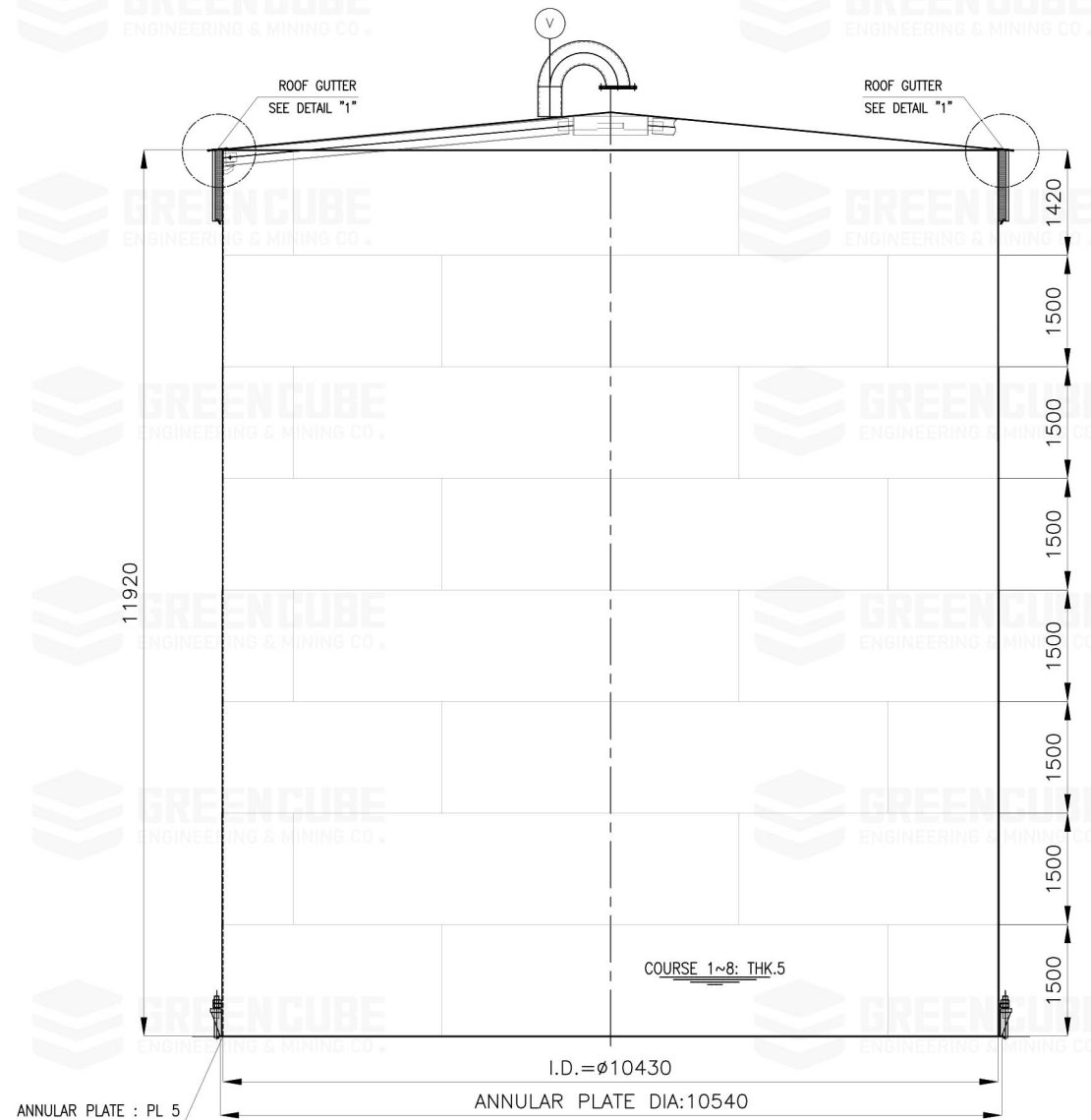
CLIENT: **Tarazbitum**
BITUMEN PRODUCTION

CONTRACTOR: **GREENCUBE**
ENGINEERING & MINING CO.

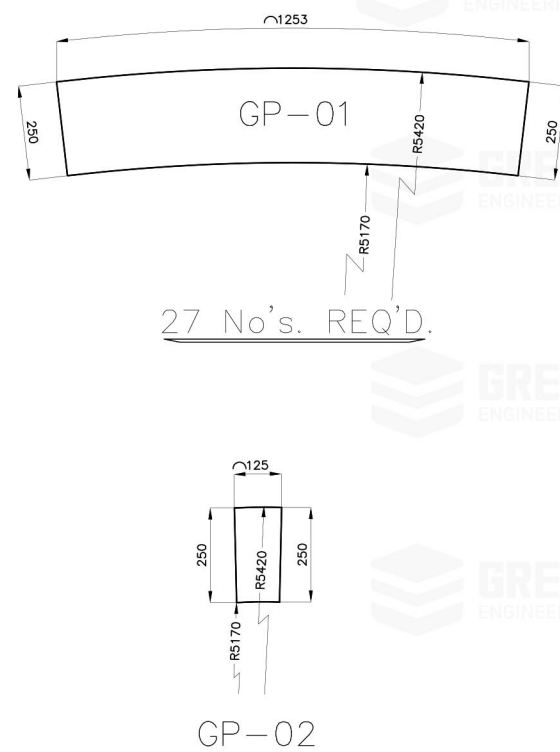
PROJECT: **TARAZ**
BITUMEN PLANT

DRAWING TITLE:
1000 M3 TANKS
BOTTOM PLATE ARRANGEMENT

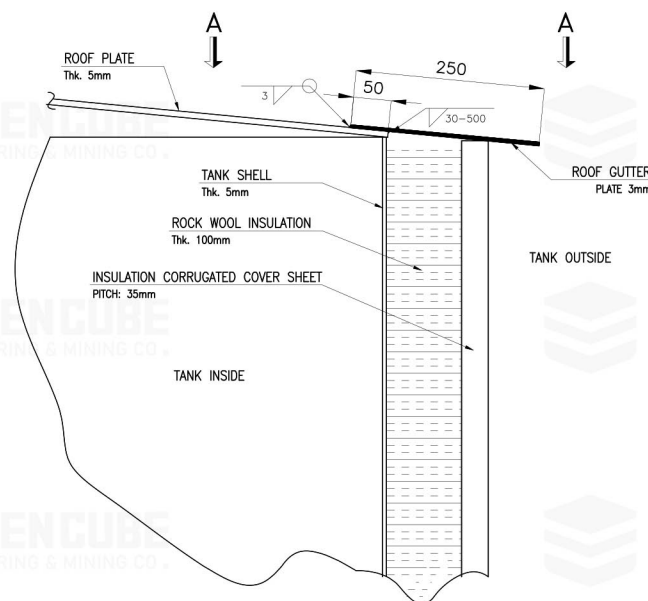
SCALE	SIZE	DOCUMENT NUMBER	SHEET	REV.
AS SHOWN	A3	TRZ-ME-DW-303	1 OF 1	03



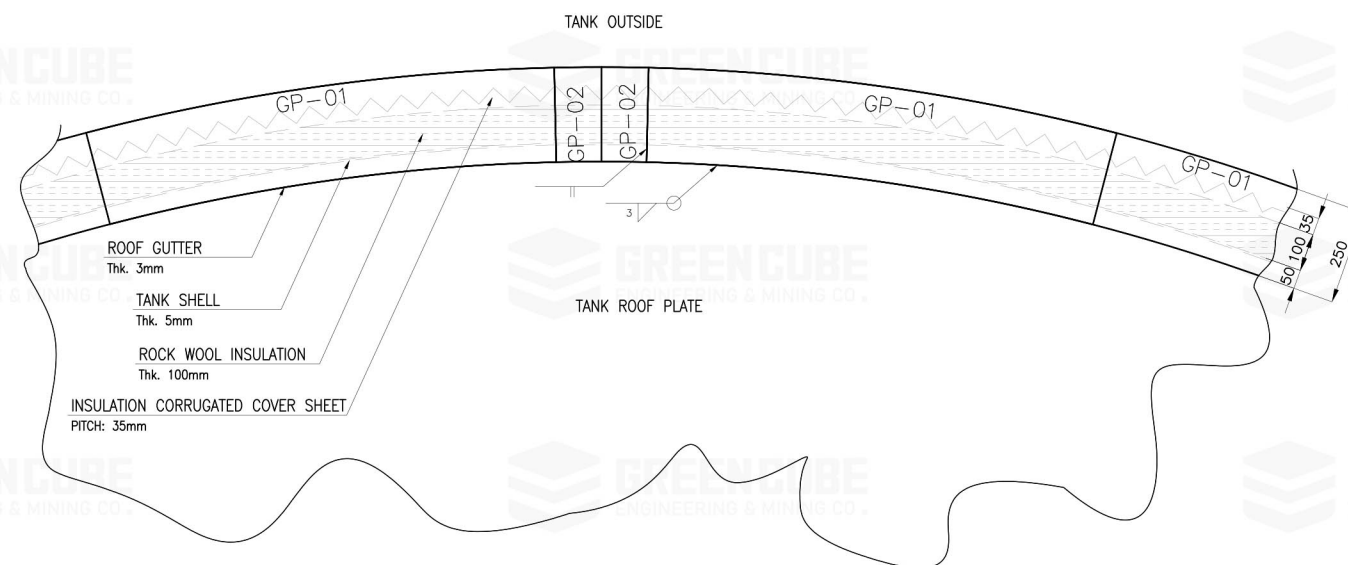
STORAGE TANK GENERAL VIEW
SCALE: 1:100



CUTTING PATTERN FOR GUTTER PLATE
SCALE: 1:20



DETAIL "1" (ROOF GUTTER)
SCALE: 1:10



VIEW "A-A"
SCALE: 1:20

NOTE

1) ALL DIMENSION IN "mm"

GUTTER
PART LIST (FOR ONE TANK)

ITEM	QTY.	DESCRIPTION	DIMENSION	MATERIAL	WEIGHT(Kg)
GP-01	27 No.	GUTTER PLATE	1250x250x3 mm	ST-37-2	199
GP-02	2 No.	GUTTER PLATE	125x250x3 mm	ST-37-2	1.5
TOTAL WEIGHT					100.5

KEY PLAN

03					
02					
01					
00	ISSUED FOR COMMENT	A.J	H.A	A.M	7.Jun.2026
REV.	DESCRIPTION	PREP.	CHK.	APP.	DATE

CLIENT:



CONTRACTOR:



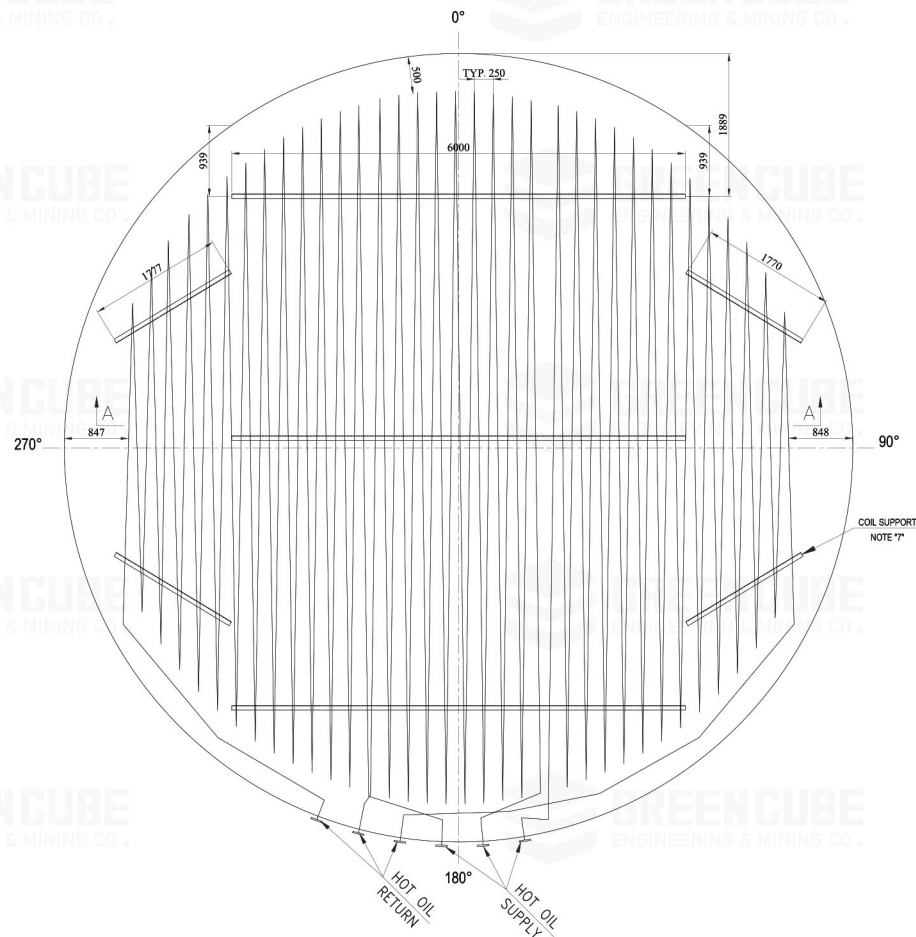
PROJECT:

TARAZ
BITUMEN PLANT

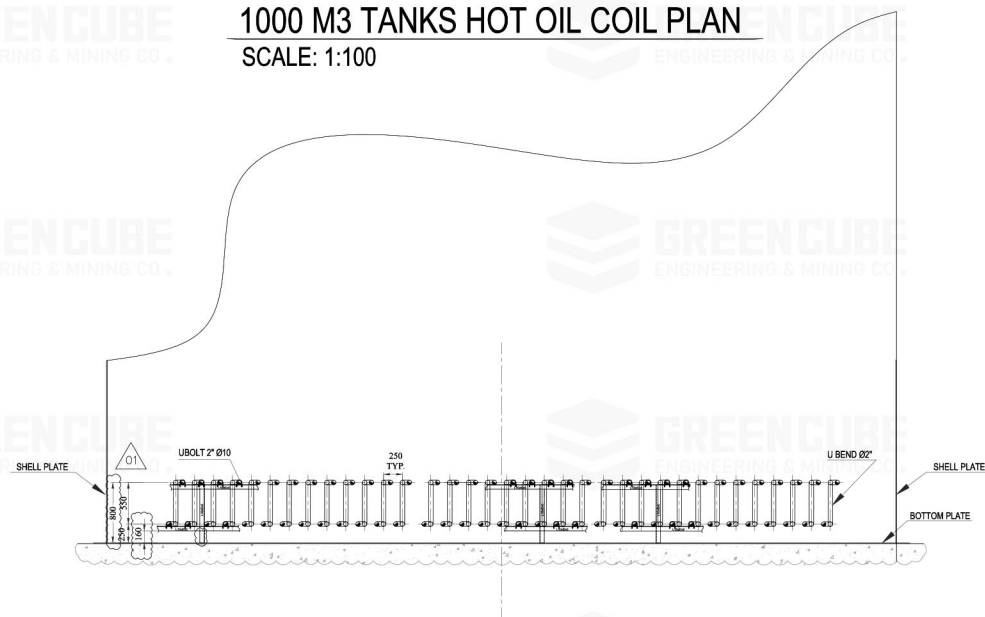
DRAWING TITLE:

1000 M3 TANKS
ROOF GUTTER DETAIL

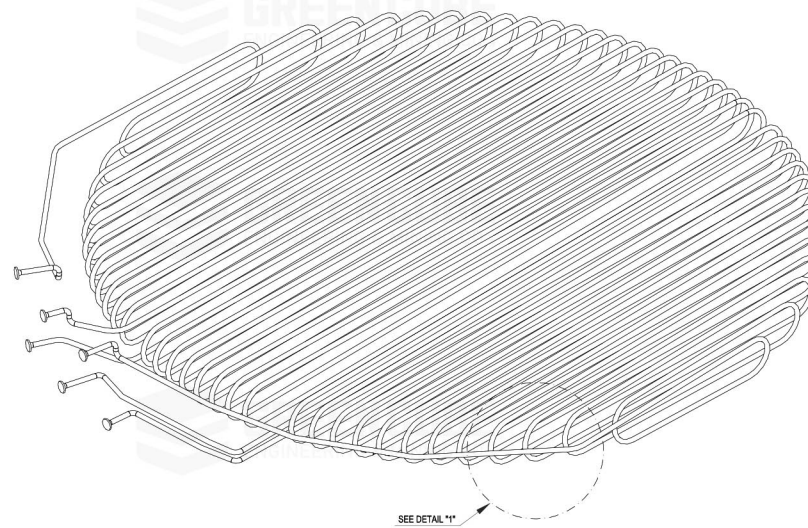
SCALE	SIZE	DOCUMENT NUMBER	SHEET	REV.
AS SHOWN	A3	TRZ-ME-DW-304	1 OF 1	00



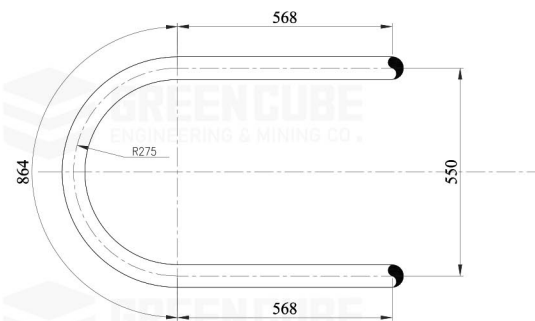
1000 M3 TANKS HOT OIL COIL PLAN
SCALE: 1:100



SECTION 'A-A'
SCALE: 1:100



HOT OIL COIL 3D VIEW
SCALE: N.T.S.



DETAIL "1": HOT OIL COIL U BEND
SCALE: 1:20

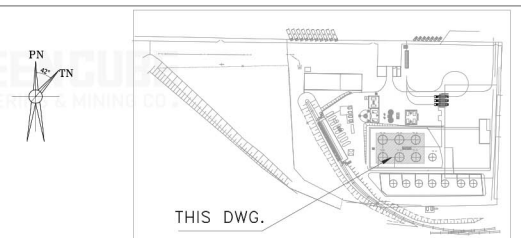
NOTE

- 1) ALL DIMENSIONS ARE IN "mm".
- 2) ALL ELEVATION DIMENSION BASE IS TOP OF BOTTOM PLATE.
- 3) TANK DIAMETER IS 10.43 m.
- 4) TOTAL LENGTH OF HOT OIL COIL IN EACH TANK IS 580m (3 Sec.PIPE 2").
- 5) 73 NO. U-BENDS 2" Ø 550mm ARE REQUIRED FOR EACH TANK.
- 6) FOR NOZZLE POSITION DETAILS SEE "TANK NOZZLE ORIENTATION" DOCUMENT.
- 7) FOR COIL SUPPORTS USE L60x60x6 mm

HOT OIL COIL MATERIAL
FOR EACH TANK

ITEM	DESCRIPTION	SIZE	QTY.	UNIT
1	PIPE, ASME B36.10, BE, SMLS, SCH40, API5L GR.B	2"	560	M
2	U BEND PIPE, SMLS, SCH40, API5L GR.B	2"	73	No.
3	U BOLT 2" Ø10mm	2"	190	No.
3	L 60x60x6mm	60mm	81	M

KEY PLAN



03					
02					
01	ISSUED FOR COMMENT	A.J	H.A	A.M	22.Jun.2026
00	ISSUED FOR COMMENT	A.J	H.A	A.M	12.Apr.2026
REV.	DESCRIPTION	PREP.	CHK.	APP.	DATE

CLIENT:



CONTRACTOR:



PROJECT:

TARAZ
BITUMEN PLANT

DRAWING TITLE:

1000 M3 TANKS
INTERNAL HOT OIL COIL

SCALE	SIZE	DOCUMENT NUMBER	SHEET	REV.
AS SHOWN	A3	TRZ-ME-DW-302	1 OF 1	01

