

CONSULTANCY SERVICES TO CONDUCT SURVEYS AND DEVELOPMENT OF DESIGNS FOR KYUSO ROCK CATCHMENT WATER SUPPLY PROJECT IN KITUI COUNTY UNDER ENDING DROUGHT EMERGENCIES-CLIMATE PROOFED INFRASTRUCTURE IN ASAL (EDE-CPIRA) PROGRAMME



CONSULTANT:

DATE:





CONTRACT NO: WSTF/EU/RFP/09/2022-2023

TENDER DRAWINGS



KYUSO PROPOSED WATER SYSTEM





KYUSO ROCK CATCHMENT WATER SUPPLY PROJECT



KYUSO ROCK CATCHMENT WATER SUPPLY PROJECT

TENDER DOCUMENTS: BOOK OF DRAWINGS

DRAWING INDEX: KYUSO PROPOSED WATER SYSTEM

No.	Drawing No.
1.	KYUSO/ WATERLINES-KYUSO/00
2.	KYUSO/ WATERLINES-KIMANGAO/02
3.	KYUSO/ WATERLINES-KIMANGAO/02
4.	KYUSO/ WATERLINES-KIMANGAO/03
5.	KYUSO/ WATERLINES-KIMANGAO/04
6.	KYUSO/ WATERLINES-KIMANGAO/05
7.	KYUSO/ WATERLINES-KIMANGAO/06
8.	KYUSO/ WATERLINES-KITURA/01
9.	KYUSO/ WATERLINES-KITURA/02
10.	KYUSO/ WATERLINES-KITURA/03
11.	KYUSO/ WATERLINES-KITURA/04
12.	KYUSO/ WATERLINES-KITURA/05
13.	KYUSO/ WATERLINES-KITURA/06
14.	KYUSO/ WATERLINES-KITURA/07
15.	KYUSO/ WATERLINES-KYUSO/T/01
16.	KYUSO/ WATERLINES-NGUNI/01





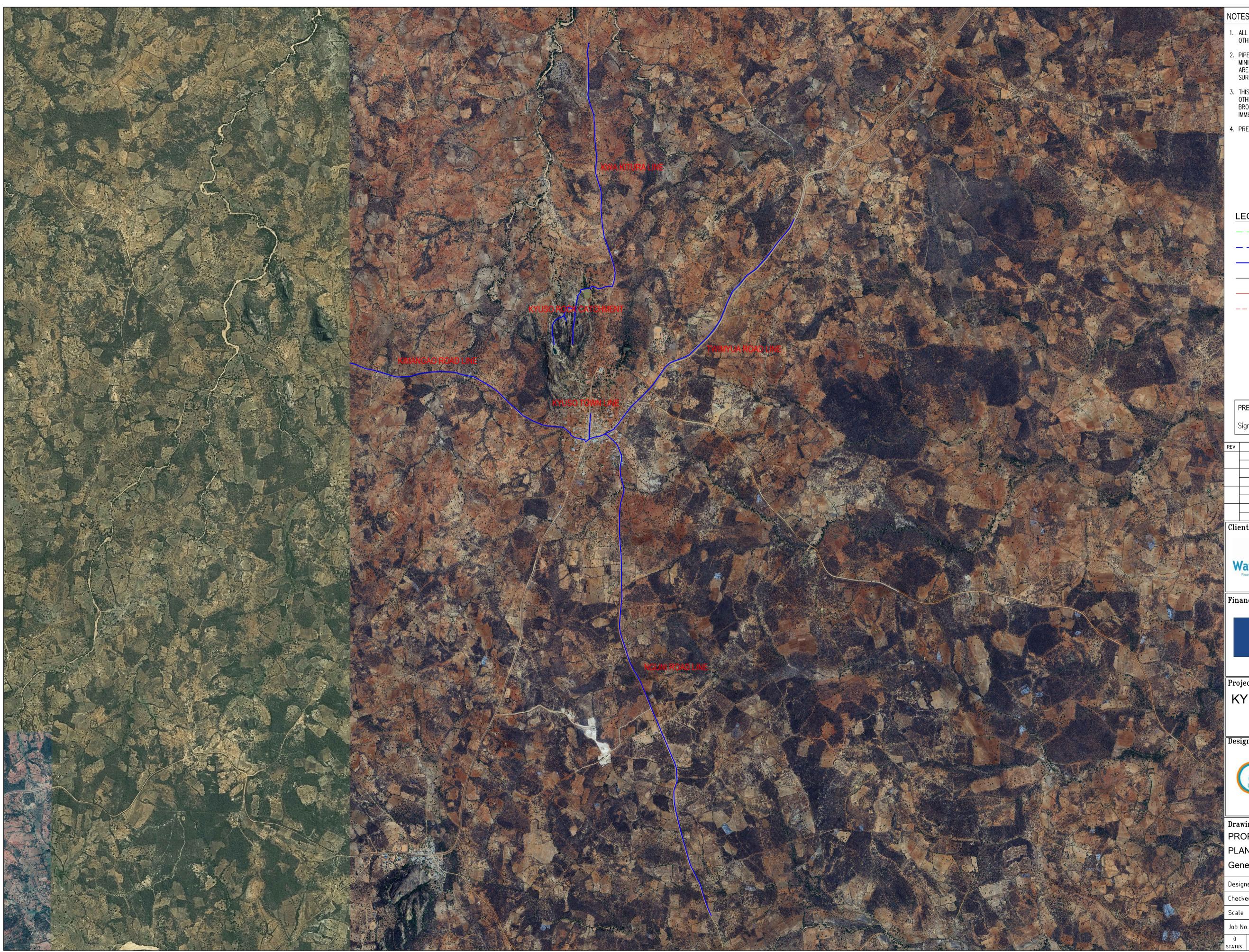
Drawing No.	Drawing Title						
KYUSO WAT	ER PIPELINES						
INES-KYUSO/00	KYUSO OVERALL PLAN WATER (Plan and Profile Sheet 1 of 1)						
INES-KIMANGAO/01	KYUSO KIMANGAO ROAD LINE (Plan and Profile Sheet 1 of 6)						
INES-KIMANGAO/02	KYUSO KIMANGAO ROAD LINE (Plan and Profile Sheet 2 of 6)						
INES-KIMANGAO/03	KYUSO KIMANGAO ROAD LINE (Plan and Profile Sheet 3 of 6)						
INES-KIMANGAO/04	KYUSO KIMANGAO ROAD LINE (Plan and Profile Sheet 4 of 6)						
INES-KIMANGAO/05	KYUSO KIMANGAO ROAD LINE (Plan and Profile Sheet 5 of 6)						
INES-KIMANGAO/06	KYUSO KIMANGAO ROAD LINE (Plan and Profile Sheet 6 of 6)						
INES-KITURA/01	KYUSO KWA KITURA LINE (Plan and Profile Sheet 1 of 7)						
INES-KITURA/02	KYUSO KWA KITURA LINE (Plan and Profile Sheet 2 of 7)						
INES-KITURA/03	KYUSO KWA KITURA LINE (Plan and Profile Sheet 3 of 7)						
INES-KITURA/04	KYUSO KWA KITURA LINE (Plan and Profile Sheet 4 of 7)						
INES-KITURA/05	KYUSO KWA KITURA LINE (Plan and Profile Sheet 5 of 7)						
INES-KITURA/06	KYUSO KWA KITURA LINE (Plan and Profile Sheet 6 of 7)						
INES-KITURA/07	KYUSO KWA KITURA LINE (Plan and Profile Sheet 7 of 7)						
INES-KYUSO/T/01	KYUSO KYUSO TOWN LINE (Plan and Profile Sheet 1 of 1)						
INES-NGUNI/01	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 1 of 11)						

No.	Drawing No.	Drawing Title
17.	KYUSO/ WATERLINES-NGUNI/02	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 2 of 11)
18.	KYUSO/ WATERLINES-NGUNI/03	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 3 of 11)
19.	KYUSO/ WATERLINES-NGUNI/04	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 4 of 11)
20.	KYUSO/ WATERLINES-NGUNI/05	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 5 of 11)
21.	KYUSO/ WATERLINES-NGUNI/06	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 6 of 11)
22.	KYUSO/ WATERLINES-NGUNI/07	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 7 of 11)
23.	KYUSO/ WATERLINES-NGUNI/08	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 8 of 11)
24.	KYUSO/ WATERLINES-NGUNI/09	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 9 of 11)
25.	KYUSO/ WATERLINES-NGUNI/10	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 10 of 11)
26.	KYUSO/ WATERLINES-NGUNI/11	KYUSO NGUNI ROAD LINE (Plan and Profile Sheet 11 of 11)
27.	KYUSO/ WATERLINES-TWIMYUA/01	KYUSO TWIMYUA ROAD LINE (Plan and Profile Sheet 1 of 7)
28.	KYUSO/ WATERLINES-TWIMYUA/02	KYUSO TWIMYUA ROAD LINE (Plan and Profile Sheet 2 of 7)
29.	KYUSO/ WATERLINES-TWIMYUA/03	KYUSO TWIMYUA ROAD LINE (Plan and Profile Sheet 3 of 7)
30.	KYUSO/ WATERLINES-TWIMYUA/04	KYUSO TWIMYUA ROAD LINE (Plan and Profile Sheet 4 of 7)
31.	KYUSO/ WATERLINES-TWIMYUA/05	KYUSO TWIMYUA ROAD LINE (Plan and Profile Sheet 5 of 7)
32.	KYUSO/ WATERLINES-TWIMYUA/06	KYUSO TWIMYUA ROAD LINE (Plan and Profile Sheet 6 of 7)
33.	KYUSO/ WATERLINES-TWIMYUA/07	KYUSO TWIMYUA ROAD LINE (Plan and Profile Sheet 7 of 7)
	COMP	OSITE FILTRATION UNIT
34.	KYUSO/CFU-LAYOUT/01	COMPOSITE FILTRATION UNIT PLAN (Sheet 1 of 1)
35.	KYUSO/CFU-LAYOUT/02	COMPOSITE FILTRATION UNIT FILTER MEDIA DETAILS (Sheet 1 of 1)
36.	KYUSO/CFU-LAYOUT/03	COMPOSITE FILTRATION UNIT SECTION DETAILS (Sheet 1 of 1)
37.	KYUSO/CFU-LAYOUT/04	COMPOSITE FILTRATION UNIT PLAN&SECTION DETAILS (Sheet 1 of 1)
	CONTR	OL ROOM_PUMP HOUSE

No.	Drawing No.	Drawing Title				
38.	KYUSO/CONTROL ROOM_PUMP HOUSE/01	CONTROL ROOM_PUMP HOUSE (Sheet 1 of 5)				
39.	KYUSO/CONTROL ROOM_PUMP HOUSE/02	CONTROL ROOM_PUMP HOUSE (Sheet 2 of 5)				
40.	KYUSO/CONTROL ROOM_PUMP HOUSE/03	CONTROL ROOM_PUMP HOUSE (Sheet 3 of 5)				
41.	KYUSO/CONTROL ROOM_PUMP HOUSE/04	CONTROL ROOM_PUMP HOUSE (Sheet 4 of 5)				
42.	KYUSO/CONTROL ROOM_PUMP HOUSE/05	CONTROL ROOM_PUMP HOUSE (Sheet 5 of 5)				
	50 N	/I3 MASONRY TANK				
43.	KYUSO/50 M3 MASONRY TANK - BPT/01	SLAB PLAN AND DETAILS (Sheet 1 Of 1)				
44.	KYUSO/50 M3 MASONRY TANK - BPT/02	TANK SECTION DETAILS (Sheet 1 Of 1)				
45.	KYUSO/50 M3 MASONRY TANK - BPT/03	SECTION DETAILS (Sheet 1 Of 2)				
46.	KYUSO/50 M3 MASONRY TANK - BPT/04	SECTION DETAILS (Sheet 2 Of 2)				
47.	KYUSO/50 M3 MASONRY TANK - BPT/05	PIPEWORK SCHEDULE (Sheet 1 Of 1)				
48.	KYUSO/50 M3 MASONRY TANK - BPT/06	MISCELLANEOUS DETAILS (Sheet 1 Of 1)				
		GUARD HOUSE				
49.	KYUSO/PROPOSED GUARD HOUSE - /01	PLAN, SECTION AND DETAILS (Sheet 1 of 1)				
50.	KYUSO/PROPOSED GUARD HOUSE - /02	ELEVATION, SECTION AND DETAILS (Sheet 1 of 1)				
51.	KYUSO/PROPOSED GUARD HOUSE - /03	PLAN, SECTION AND DETAILS (Sheet 1 of 1)				
		LATRINE				
52.	KYUSO/PROPOSED LATRINE - /01	PLAN, SECTION AND DETAILS (Sheet 1 of 1)				
53.	KYUSO/PROPOSED LATRINE - /02	ELEVATION, SECTION AND DETAILS (Sheet 1 of 1)				
54.	KYUSO/PROPOSED LATRINE - /03	PLAN, SECTION AND DETAILS (Sheet 1 of 1)				
		SEPTIC TANK				
55.	KYUSO/SEPTIC TANK DETAILS – LAYOUT/01	SEPTIC TANK DETAILS (Sheet 1 of 1)				
		WATER KIOSK				
56.	KYUSO/WATER KIOSK - /01	PLAN, SECTION AND DETAILS (Sheet 1 of 1)				

.)			
- /			
.)			

No.	Drawing No.	Drawing Title									
57.	KYUSO/WATER KIOSK - /02	ELEVATION, SECTION AND DETAILS (Sheet 1 of 1)									
58.	KYUSO/WATER KIOSK - /03	PLAN, SECTION AND DETAILS (Sheet 1 of 1)									
59.	KYUSO/WATER KIOSK - /04	ELEVATION, SECTION AND DETAILS (Sheet 1 of 1)									
60.	KYUSO/WATER KIOSK - /05	PLAN, SECTION AND DETAILS (Sheet 1 of 1)									
	STANDARD DRAWINGS										
61.	KYUSO/ WSP STDs-CROSSINGS/01	RIVER AND ROAD OVERCROSSING (Sheet 1 of 2)									
62.	KYUSO/ WSP STDs-CROSSINGS/02	RAIL CROSSING & RIVER UNDERCROSSING (Sheet 2 of 2)									
63.	KYUSO/ WSP STDs-FENCING GATE/03	FENCING GATE (Sheet 1 of 1)									
64.	KYUSO/ WSP STDs-MARKER POST/04	MARKER POST (Sheet 1 of 1)									
65.	KYUSO/ WSP STDs-VALVE CHAMBERS/04	VALVE CHAMBERS (Sheet 1 of 2)									
66.	KYUSO/ WSP STDs-VALVE CHAMBERS/05	VALVE CHAMBERS (Sheet 2 of 2)									
67.	KYUSO/ WSP STDs-WASHOUT CHAMBERS/06	WASHOUT CHAMBERS (Sheet 1 of 2)									
68.	KYUSO/ WSP STDs-WASHOUT CHAMBERS/07	WASHOUT CHAMBERS (Sheet 2 of 2)									
69.	KYUSO/ WSP STDs-SURFACE BOX/08	SURFACE BOX (Sheet 1 of 1)									
70.	KYUSO/ WSP STDs-THRUST BLOCKS/09	THRUST BLOCKS (Sheet 1 of 3)									
71.	KYUSO/ WSP STDs-THRUST BLOCKS/10	THRUST BLOCKS (Sheet 2 of 3)									
72.	KYUSO/ WSP STDs-THRUST BLOCKS/11	THRUST BLOCKS (Sheet 3 of 3)									
73.	KYUSO/ WSP STDs-BEDDING/12	BEDDING (Sheet 1 of 1)									
74.	KYUSO/ WSP STDs-GMS LADDER/13	GMS LADDER (Sheet 1 of 1)									



- 1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- 2. PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

	,	Ń							
		$\left\langle \right\rangle$							
LEGENI	D:	V							
	— — — — EXIS	TING GROU	JND PR	OFILE					
	- — — WAT	ER LINES	(EXISTI	NG)					
	— — WAT	ER LINES	(PROPC	DSED)					
	—— — RIVE	R/STREAM							
	— – STA	TIC HEAD							
SA SA		RAULIC GR	ADE LI	NE					
¥	- SIN(- AIR	GLE ORIFI VALVE	CE						
	- 7 – WAS	SHOUT							
ŴĊ									
PRELIMINA	ARY ISSUE								
Signed: T	eam Leader		•••••						
REV	REVISIONS		SIGN	DATE	APPROVED				
		BY CHECKED							
		BY CHECKED							
		BY							
		CHECKED BY							
Client		CHECKED							
Water Financing the Wat									
Financier									
*	* * * *								
Project									
	O ROC VATER				IENT				
Design Con	sultants.								
Losai	P.O Box Tel: +254 +254	ands Road, 30337-0010 4 718 875 3 4 788 352 5 fo@losaima)0 Nairc 10 33	bi, Ker					
Drawing Title PROPOSED KYUSO WATER LINES PLAN									
General L	ayout								
Designed by									
	JMM	Drawn b	у	KC	.K				

H = 1:1,00 V = 1:100

DWG. No.

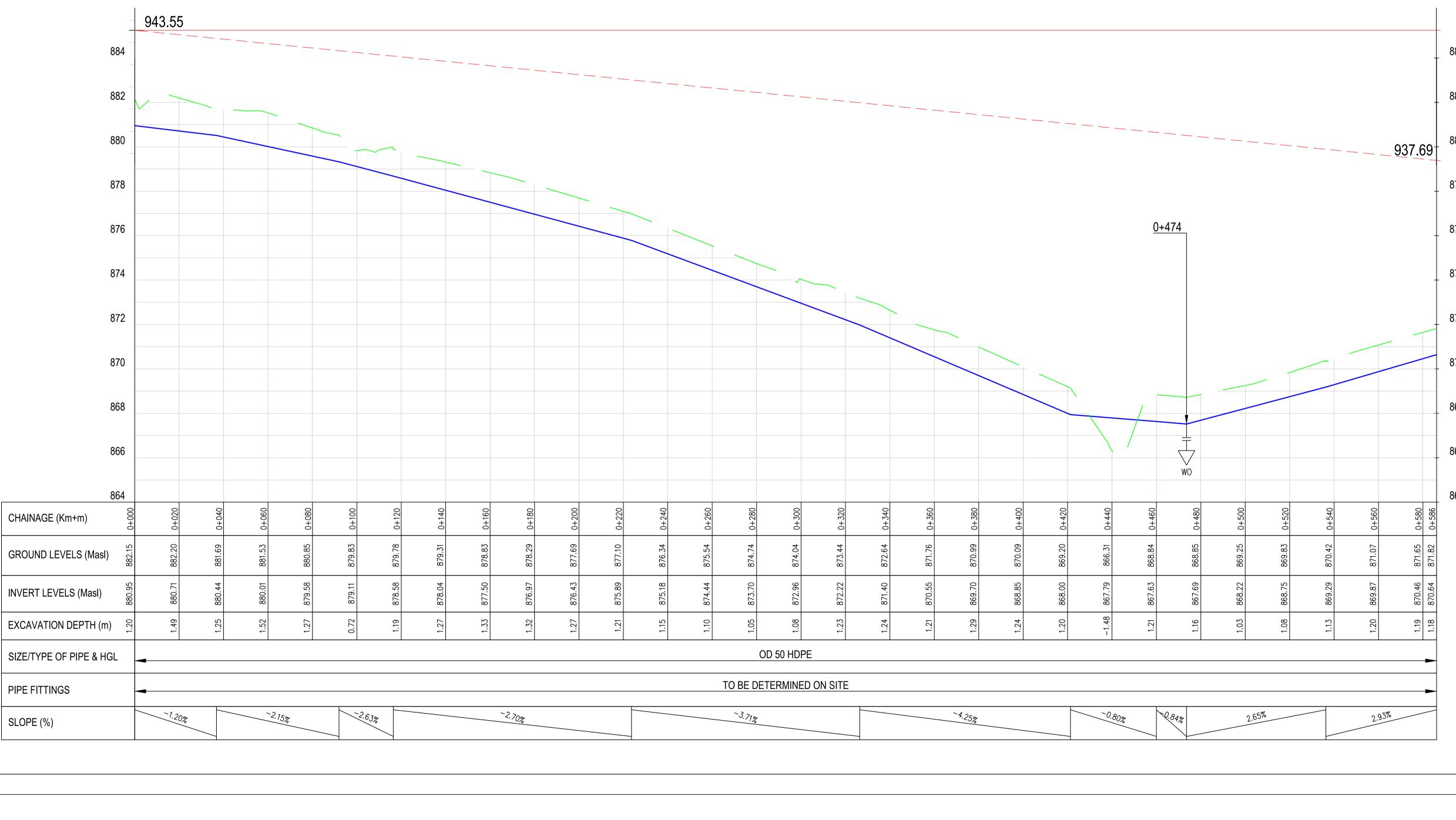
Date

SHEET 1 OF 1

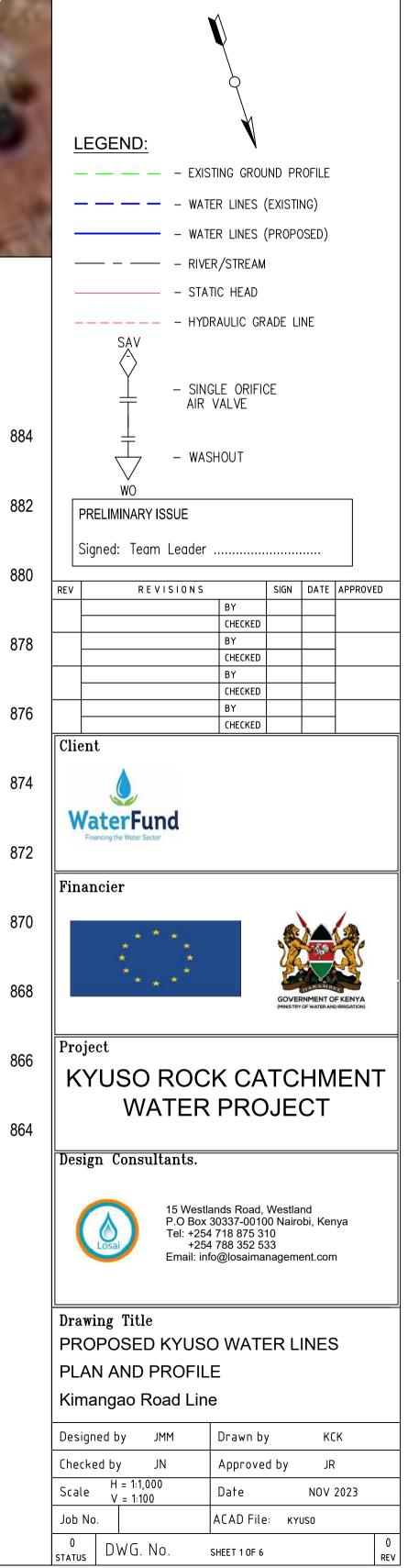
ACAD File: KYUSO

NOV 2023

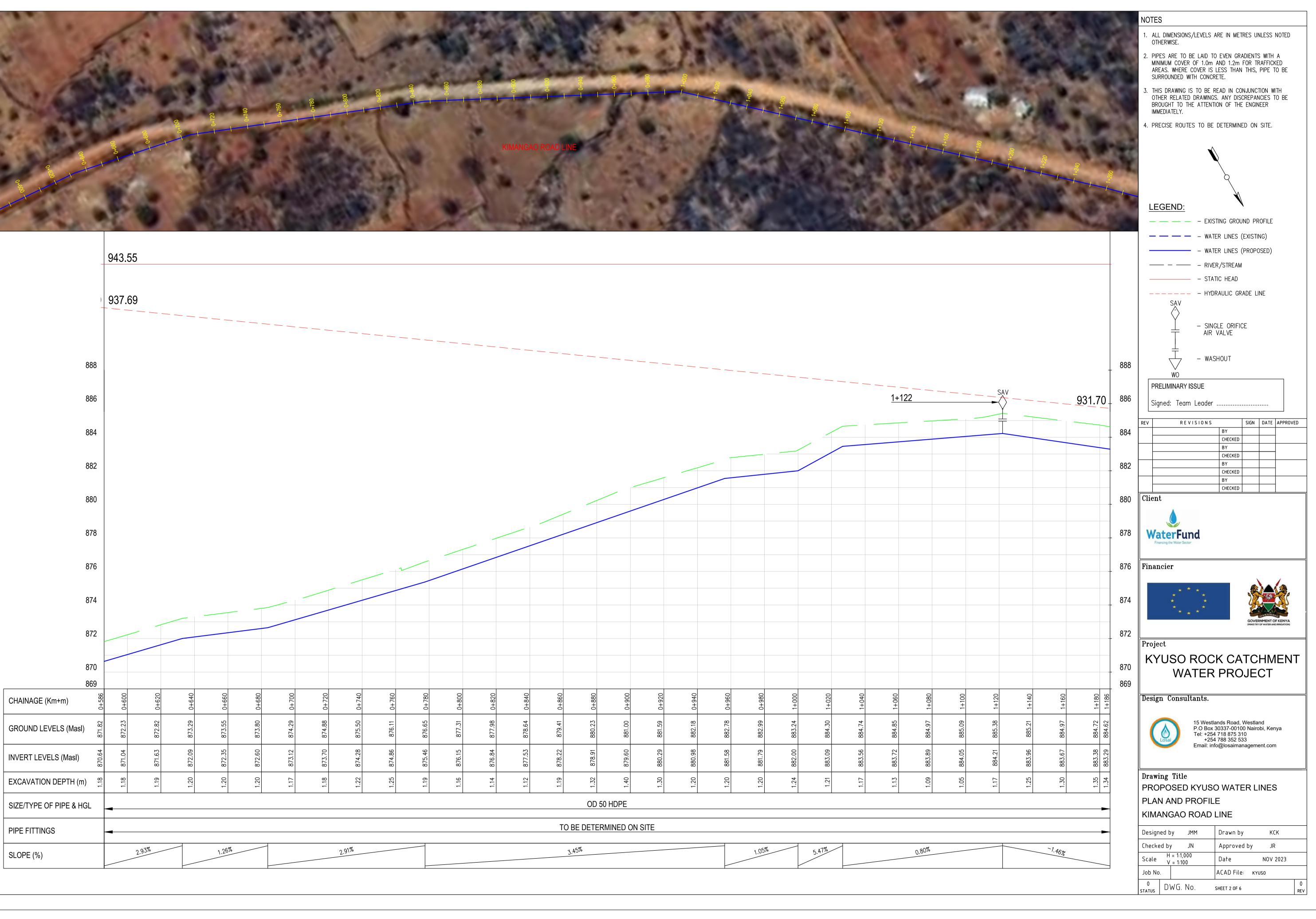


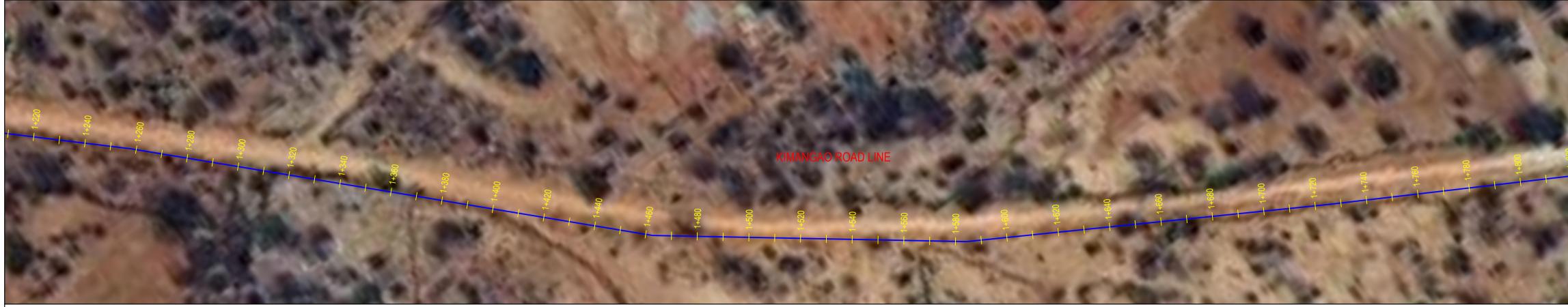


- 1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

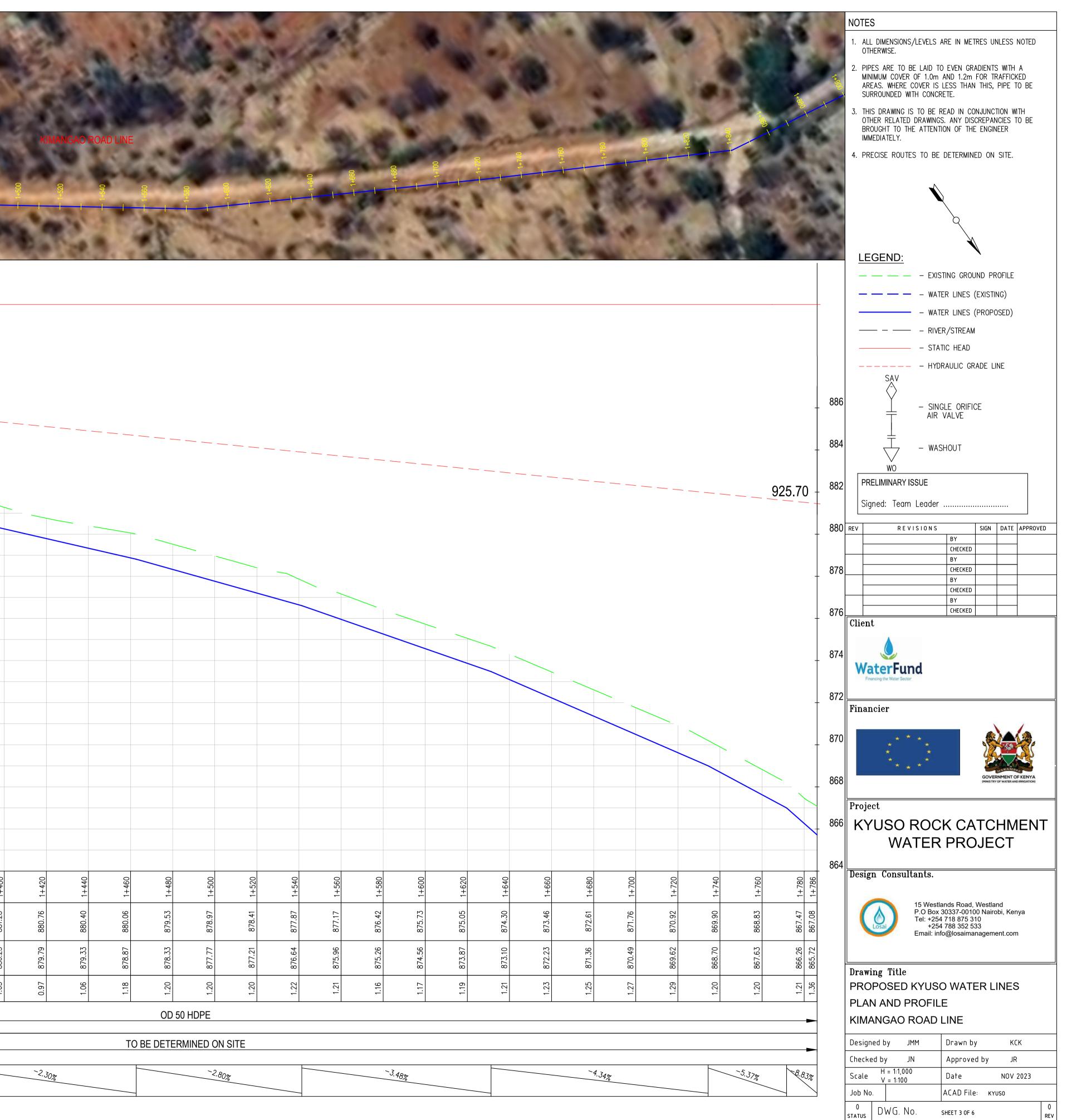




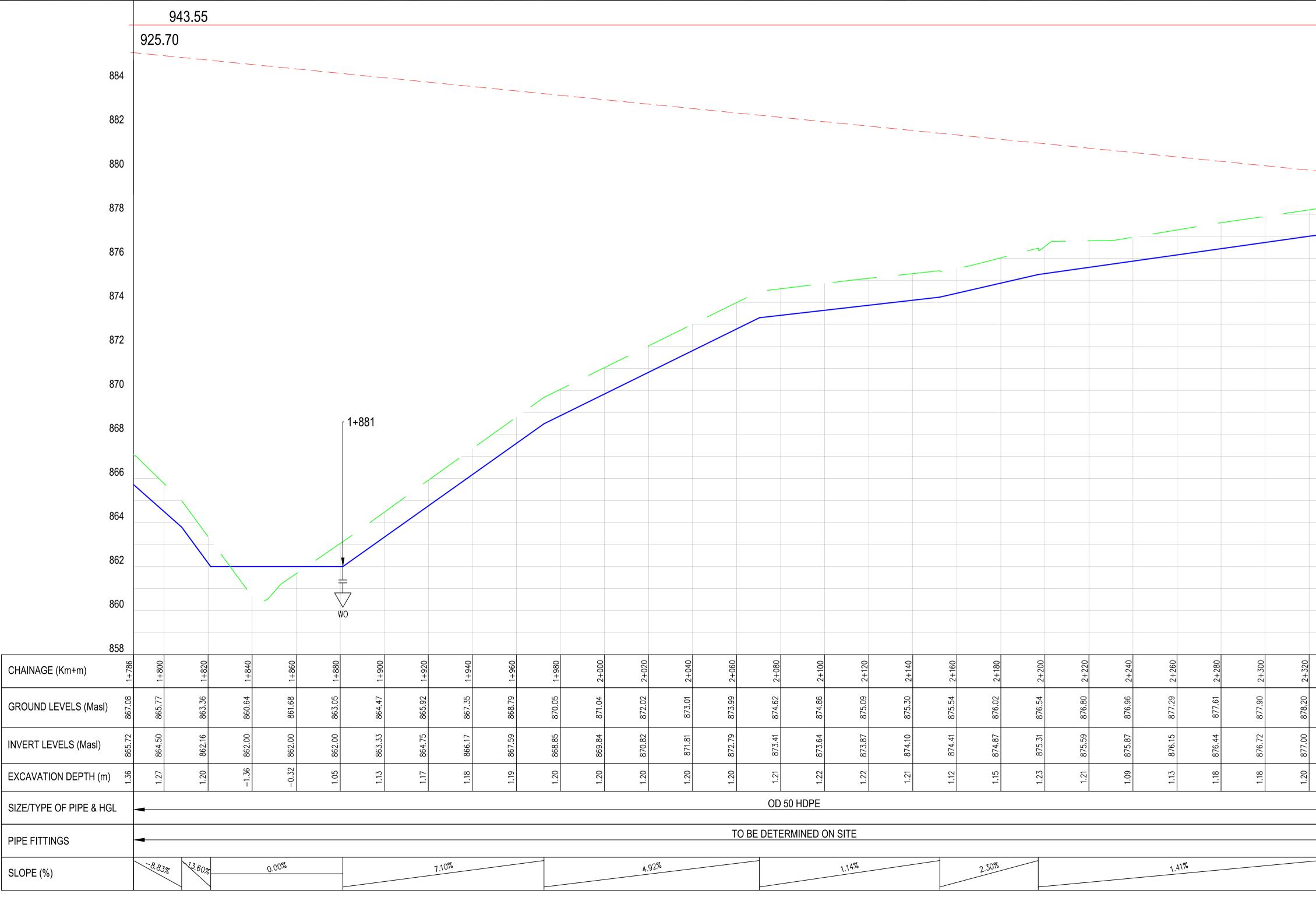




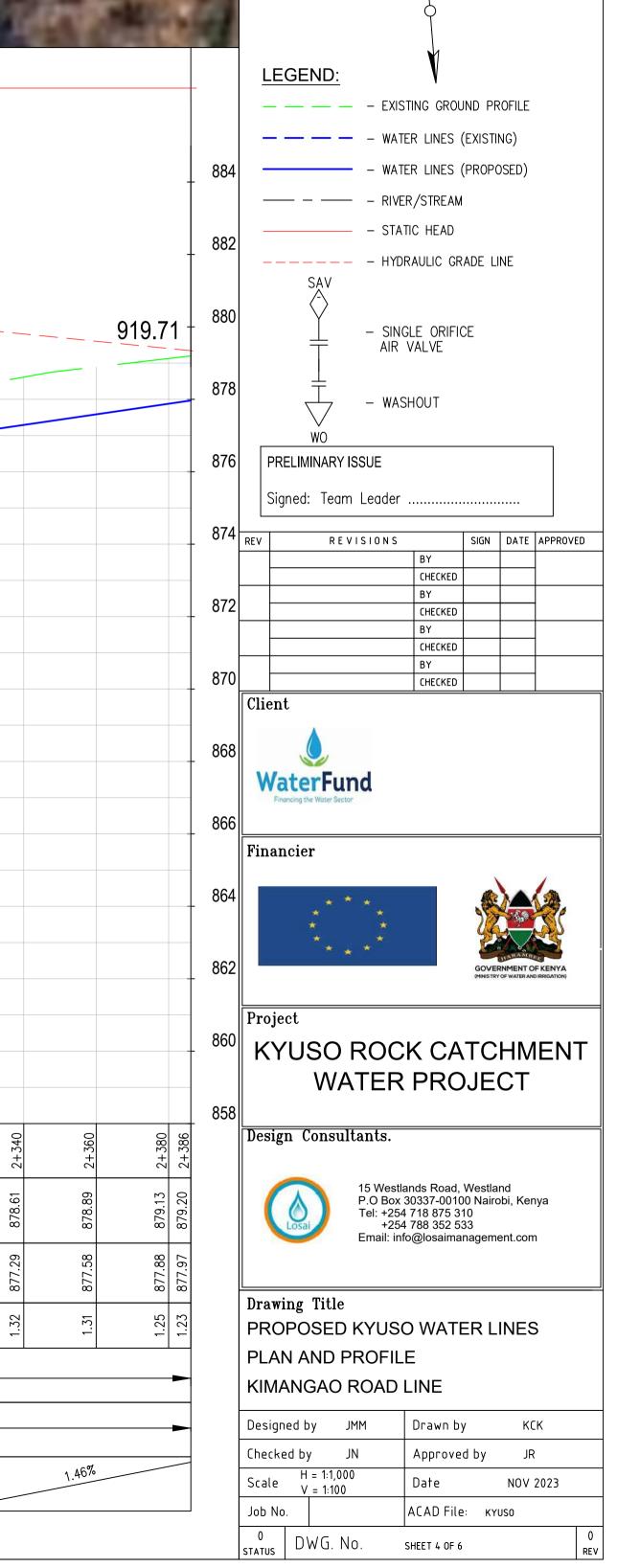
		943.55										
		70										
	931.	931.70										
886												
884												
882												
880												
070												
878												
876												
874												
872												
870												
868												
866												
864												
	1+100	1+220	1+240	1+260	1+280	1+300	1+320	1+340	1+360	1+380	1+400	
GROUND LEVELS (Masl)			883.72	883.41		883.22	882.97	882.63	882.30	881.88	881.28	
INVERT LEVELS (Masl)			882.50	882.21		882.02	881.76	881.42	881.08	880.71	880.25	
EXCAVATION DEPTH (m)	1.31	1.26	1.22	1.20	1.20	1.20	1.21	1.21	1.22	1.17	1.03	
SIZE/TYPE OF PIPE & HGL												
PIPE FITTINGS						0						
SLOPE (%)		-1.	46%			0.48%		-1.7	1%			



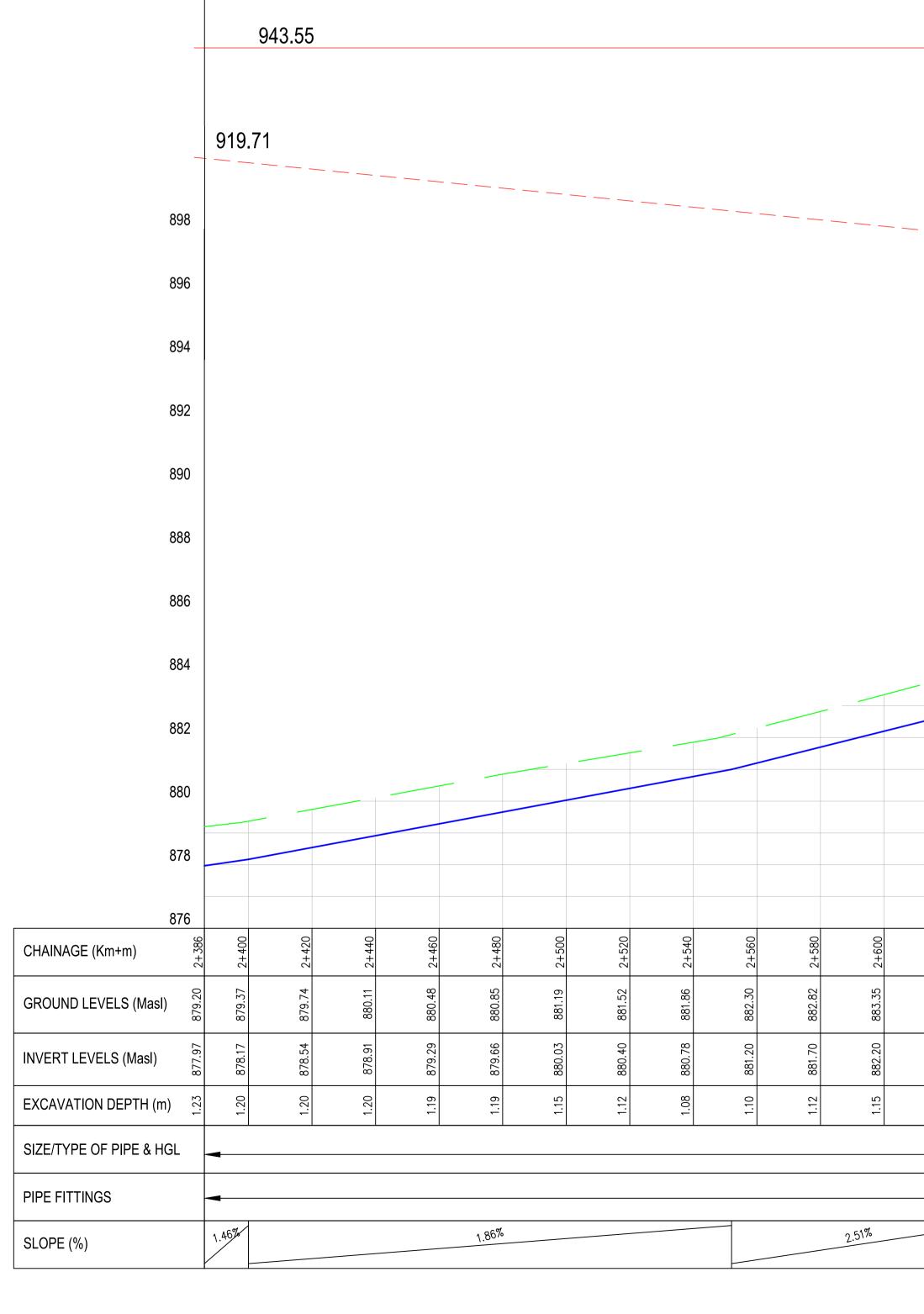




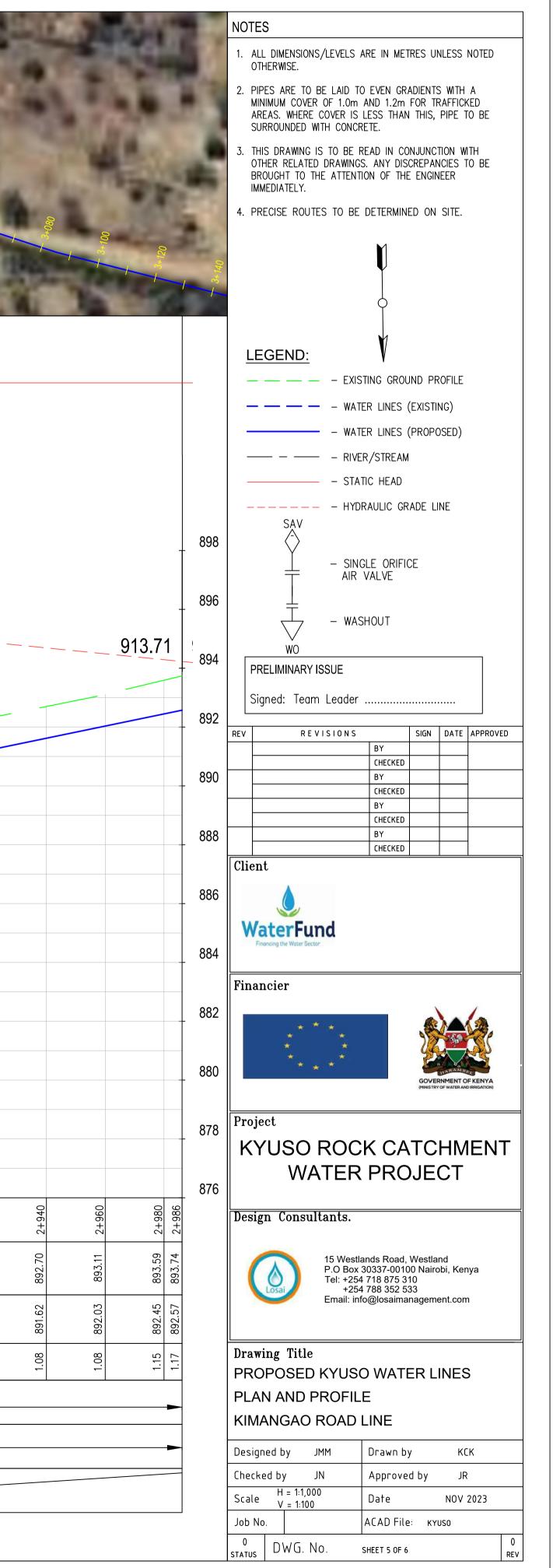
- . ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.



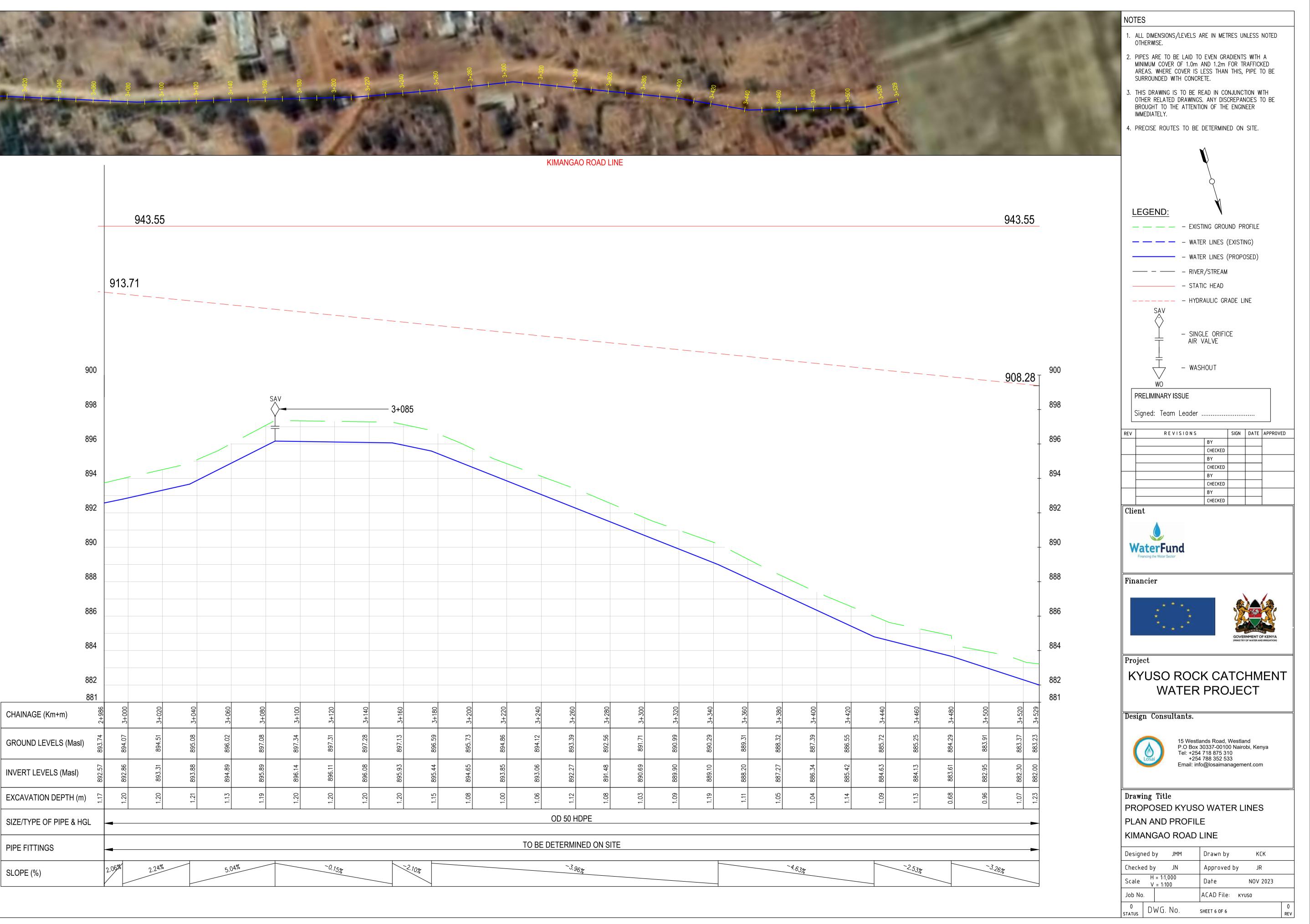




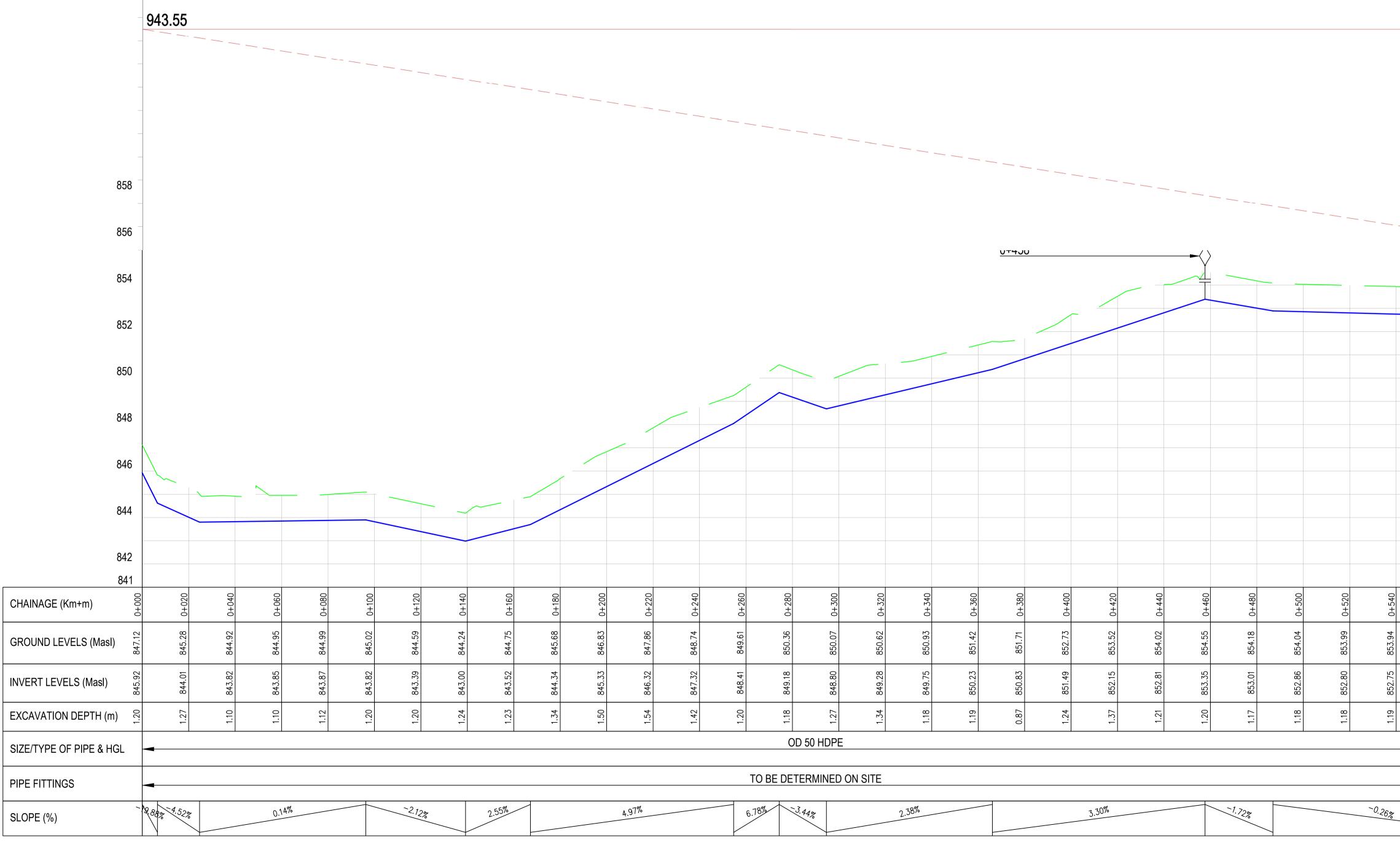
2+740 	24										3 				
		ĸ	IMANGAO	ROAD LINE										070-1	90.
													10		
1	.0						1	80	-def				ЦĽ,	10	
				·											
															- — — -
2+620	2+640	2+660	2+680	2+700	2+720	2+740	2+760	2+780	2+800	2+820	2+840	2+860	2+880	2+900	2+920
883.88 2+	884.42 2+	885.08 2+	885.78 2+	886.38 2+	886.81 2+	887.53 2+	888.27 2+	888.97 2+	889.84 2+	890.34 2+	890.75 2+	891.11 2+	891.47 2+	891.90 2+	892.30 2+
882.70 88	883.24 88	883.83 88	884.42 88	885.01 88	885.60 88	886.35 88	887.12 88	887.89 88	888.66	889.14 89	889.56 89	889.97 89	890.38	890.79 89	891.21 89
1.18 88	1.17 88	1.25 88	1.35 88	1.37 88	1.21 88	1.18 88	1.15	1.08 88	1.18 88	1.20 88	1.20 88	1.14 88	1.09 89	1.11 89	1.09 89
			OD 50	HDPE											
		TO B		AINED ON S	1										
			2.95%				3.84%	0						2.06%	











858

854

852

850

848

846

844

842

841

580

353.

852.65

1.21

0+560

353.

2

1.20

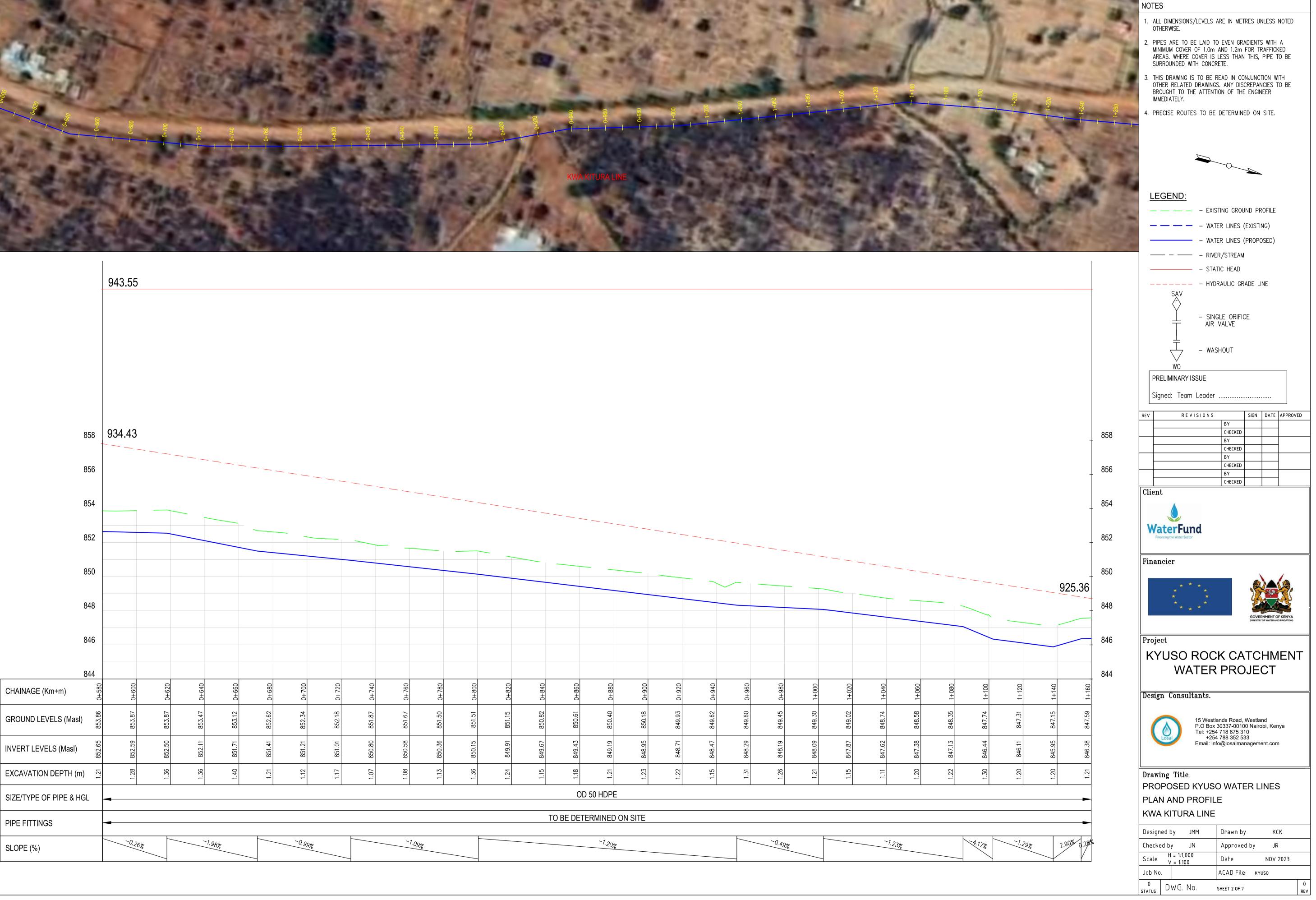
1.19

934.43 856

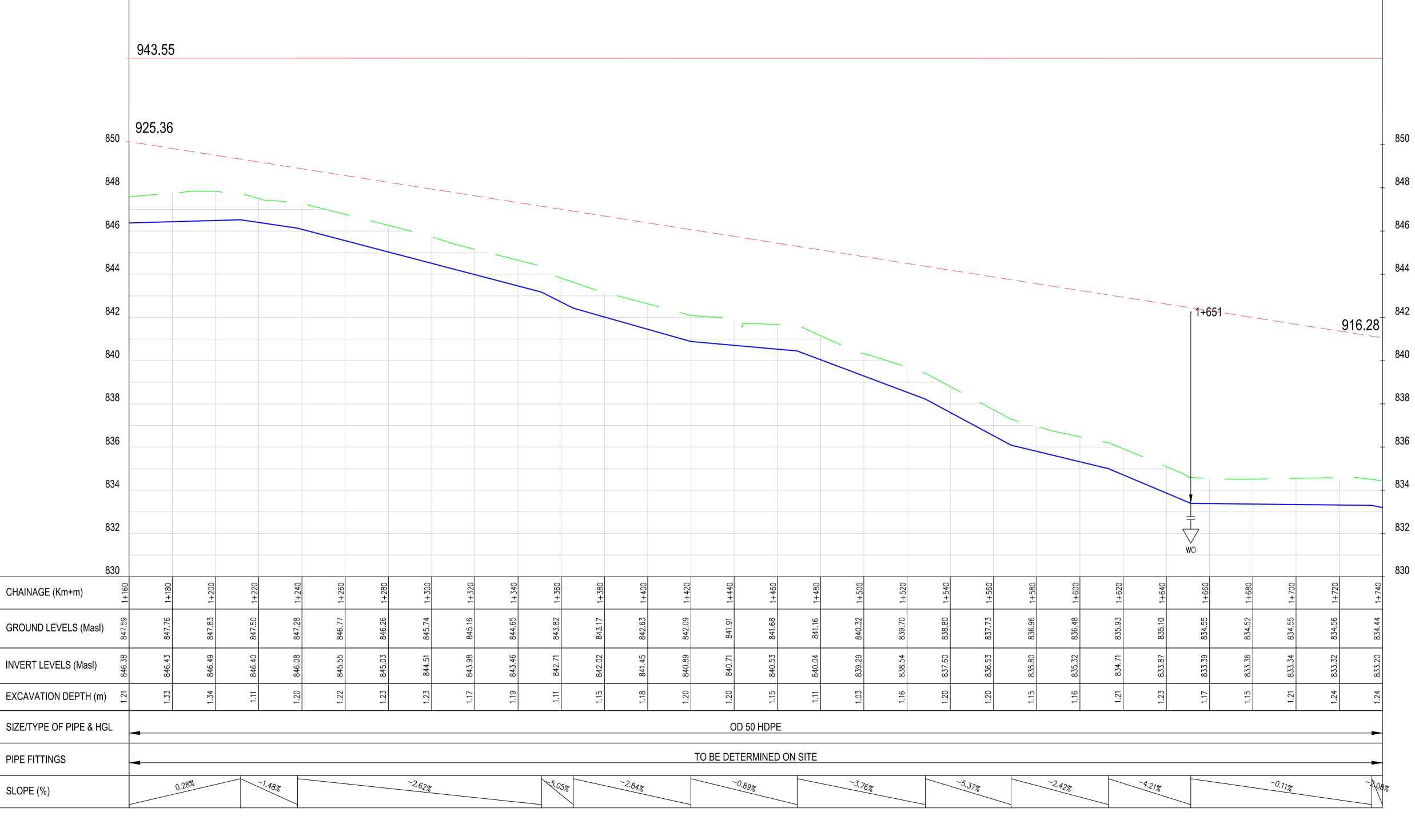
- 1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- 2. PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

				4			
				þ			
			/				
L	EGENE	<u>):</u>	L	(
_				TING GROU			
				er lines			
_				R/STREAM		JSLD)	
_				TIC HEAD			
_			— HYD	RAULIC GR	ADE L	INE	
	SAV	/					
	<u> </u>			GLE ORIFIC	CE		
			AIK	VALVE			
	Ţ	7	– WAS	SHOUT			
	WO						
F	PRELIMINA	RY ISS	UE				
S	Signed: Te	eam L	eader		•••••	•••••	
REV		REVIS	I O N S		SIGN	DATE A	
-				BY CHECKED			
				BY CHECKED			
				BY CHECKED			
-				BY			
Clie	ent		ł	CHECKED	<u> </u>	<u> </u>	
W	Ater Financing the Wate		ł	CHECKED			
W) ater		1				
Fin:	AterF Financing the Wate	r Sector	* * *		(MINISTR)	RNMENT OF H Y OF WATER AND IR	RIGATION)
Fin:	AtterF Financing the Wate ancier ject YUSC	n Sector		KCA			RIGATION)
Fin:	AtterF Financing the Wate ancier ject YUSC	n Sector					RIGATION)
Fina Pro	AtterF Financing the Wate ancier ject YUSC	D R /AT	OC	KCA			RIGATION)
Fina Pro	iect YUSC	D R /AT sulta:	OC ER nts.	KCA	Westla 00 Nairo 10 33	HME CT	ENT
Fina Pro K	ancier ject YUSC W ign Con	r Sector DR VAT sulta:	OC ER nts.	ands Road, 30337-0010 718 875 3 788 352 5	Westla 00 Nairo 10 33	HME CT	ENT
Fina Pro K Des	ancier ject YUSC wing Tit	r Sector DR VAT sulta: P T E	OC ER o Box el: +25/ mail: inf	ands Road, 30337-0010 718 875 3 788 352 5	OMINISTRY ATC DJE Westla 00 Nairc 10 33 nagem	nd obi, Keny ent.com	ENT
Fina Pro Des Dra PR	ancier ject YUSC wing Tit	r Sector DR VAT sulta: 1! T E	OC ER nts. 5 Westli .0 Box el: +254 +254 mail: inf	Ands Road, 30337-0010 718 875 3 7788 352 5 fo@losaima	OMINISTRY ATC DJE Westla 00 Nairc 10 33 nagem	nd obi, Keny ent.com	ENT
Fina Fina Pro Constant Des	ancier ject YUSC Wing Tit OPOSE	T Sector D R VAT Sulta: 14 P T E Lle D R D R	OC ER o Box el: +254 +254 mail: inf	Ands Road, 30337-0010 718 875 3 7788 352 5 fo@losaima	OMINISTRY ATC DJE Westla 00 Nairc 10 33 nagem	nd obi, Keny ent.com	ENT
Fina Pro Des Des Dra PR PL/	ign Con wing Tit OPOSE AN ANE	T Sector D R VAT Sulta: 14 P T E Lle D R D R	OC ER 5 Westla .0 Box el: +252 +252 mail: inf YUS(OFIL _INE	Ands Road, 30337-0010 718 875 3 7788 352 5 fo@losaima	Westla 00 Nairc 10 33 nagem	nd obi, Keny ent.com	a
Fina Fina Pro M Des Dra PR PL/ KW Desi Chec	ign Con wing Tit OPOSE AN ANE /A KITU gned by tked by	Social COR VAT sulta: 19 T E I E I E I E I E I E I E I E I E I E	OC ER 5 Westla .0 Box el: +252 +252 mail: inf YUS(OFIL _INE	Approve	Vestla 00 Nairo 10 33 nagem ER L	HMENT OF P CT HMME CT INES KCK JR	a
Fina Fina Pro Des Des Chec Scal	ign Con wing Tit OPOSE AN ANE /A KITU gned by :ked by e H = 1: v y = 1:	Soctor Soctor C R /AT Sulta: 14 T E D R IRA I JMM JN 1,000	OC ER 5 Westla .0 Box el: +252 +252 mail: inf YUS(OFIL _INE	Approve Date	OVERSTRA VESTIA 00 Nairo 10 33 nagem ER L y d by	HMENT OF P CT HMME CT INES KCK JR NOV 20	a
Fina Fina Pro M Des Dra PR PL/ KW Desi Chec	ign Con wing Tit OPOSE AN ANE /A KITU gned by cked by e H = 1: No.	Soctor Soctor C R /AT Sulta: 19 T E 10 D R IRA I JMM JN 1,000 100	OC ER 5 Westla .0 Box el: +252 +252 mail: inf YUS(OFIL _INE	Approve	OVERSTRA VESTIA 00 Nairo 10 33 nagem ER L y d by	HMENT OF P CT HMME CT INES KCK JR	a



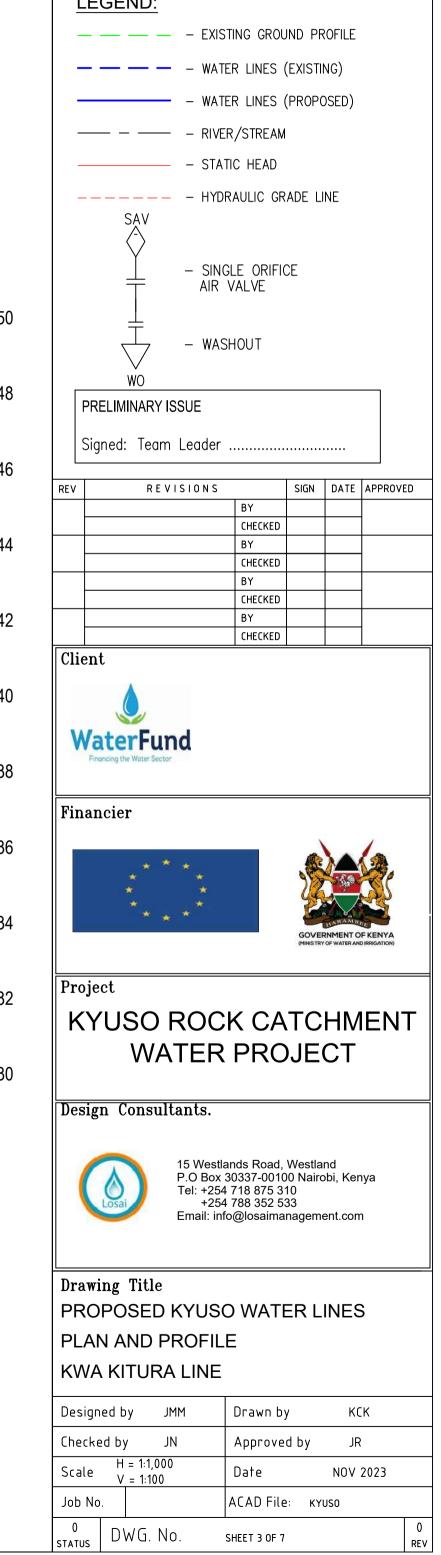


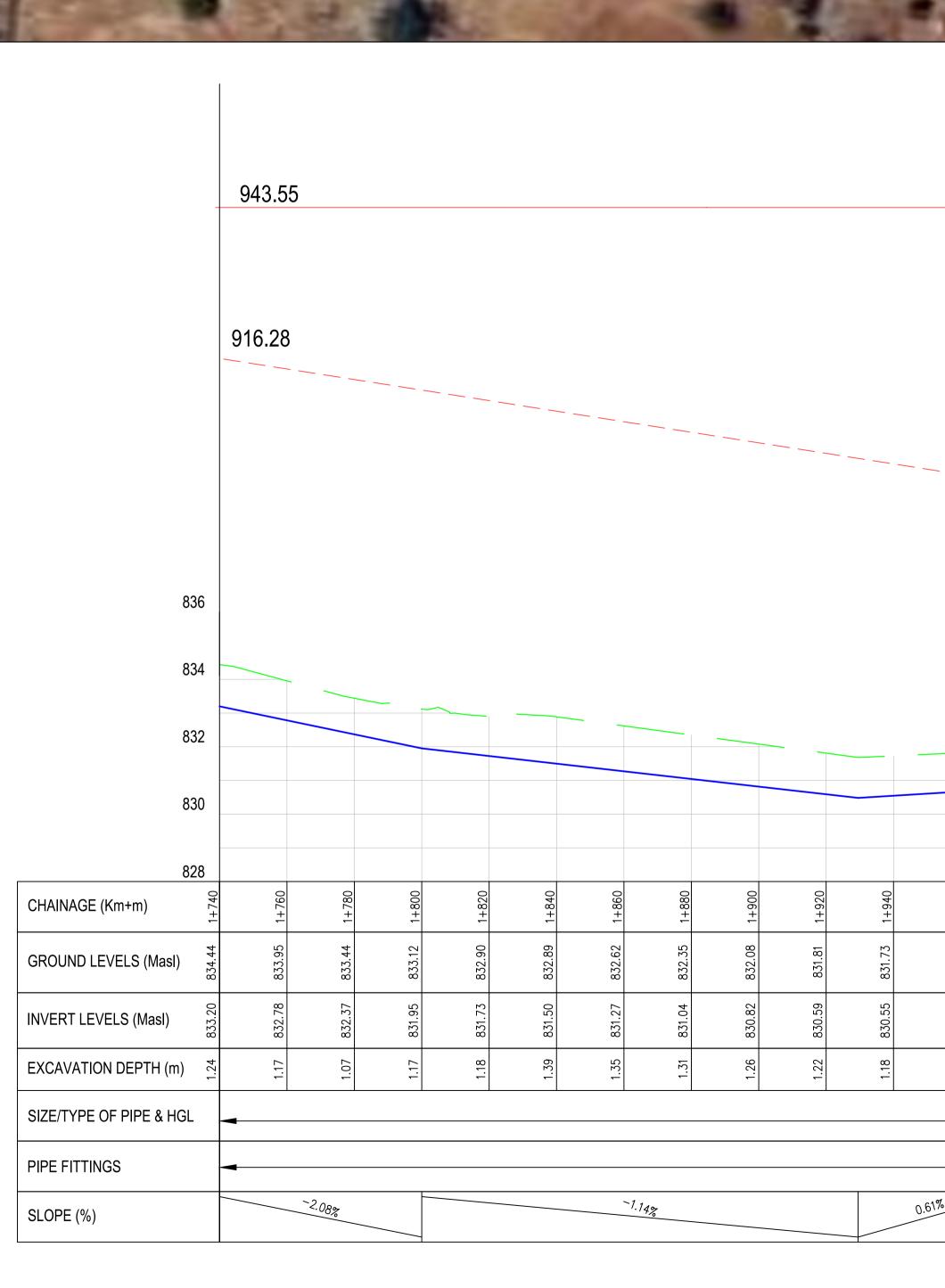




- . ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- 2. PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

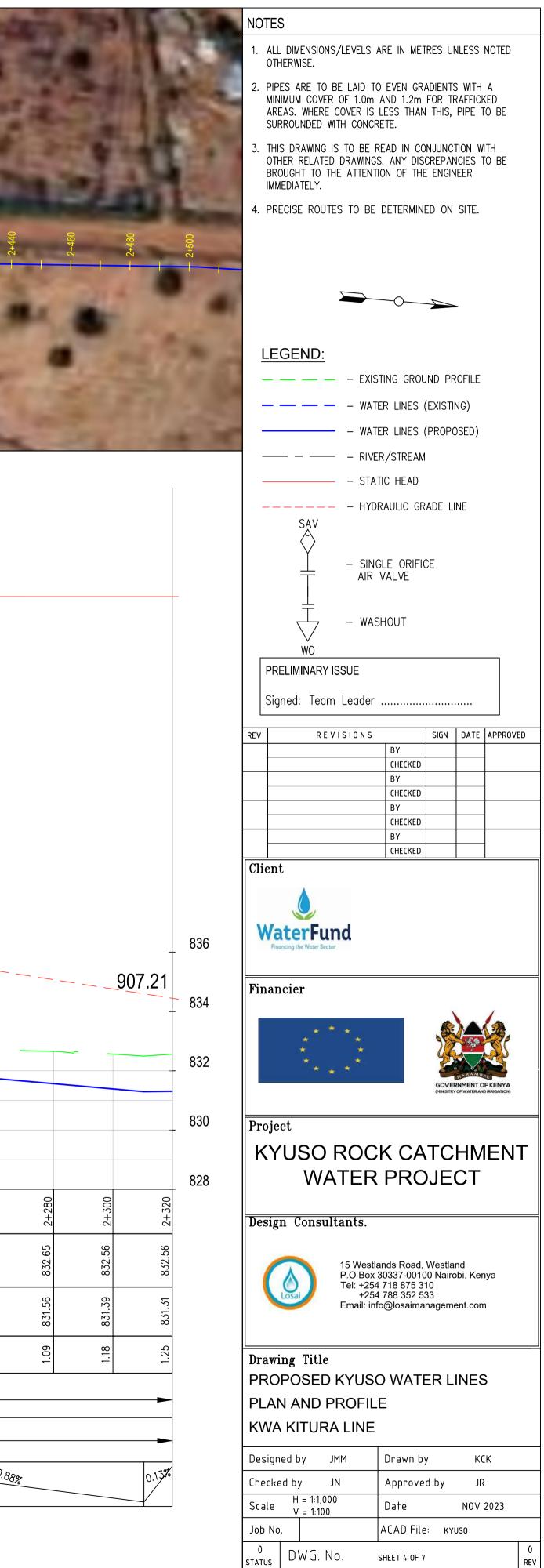
LEGEND:





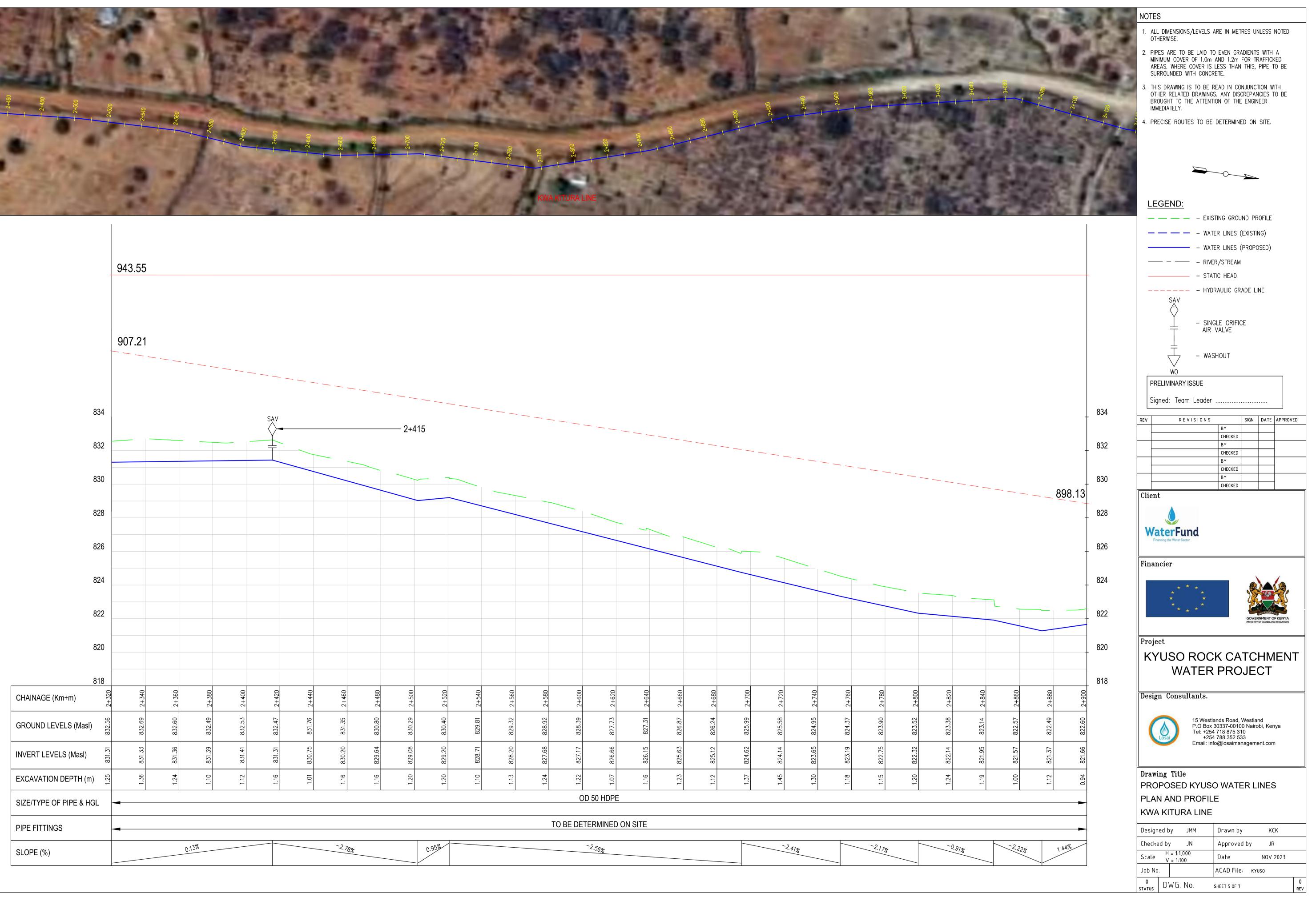


										_						
													_			
														<u> </u>		
																_
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	
1+960	1+980	2+000	2+020	2+040	2+060	2+080	2+100	2+120	2+140	2+160	2+180	2+200	2+220	2+240	2+260	
+	+	2+	2+	5+ 2	2+	2+	24	24	2+	2+	2+	2+	2+	5+	+ 2	
831.82	832.05	832.48	832.70	832.89	833.10	833.20	833.60	833.76	833.55	833.43	833.43	833.56	833.15	832.89	832.77	
831	832	832	832	832	833	833	833	833	833	833	833	833	833	832	832	
	~~						~	~~		~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~		
5	4	ω	5	9	0	4	ω	52	53	5	21	1	6	2	4	
830.67	830.84	831.08	831.32	831.56	831.80	832.04	832.28	832.52	832.53	832.42	832.31	832.21	832.09	831.92	831.74	
8	8	ω	δ		<u></u>	81	81	6	8	8	œ	ŵ	8		8	
1.15	1.21	1.41	1.38	1.33	1.30	1.16	1.32	1.24	1.02	1.01	1.11	1.35	1.05	0.97	1.03	
·			~			``	Ţ	-	· ·			`	-		· ·	
			C	יחחה בע בע	F											
				DD 50 HDP												
			TO BE DE	TERMINE	ON SITE											
.61%					1.20%						-0.53%		-			-0.88%
					1.6-											

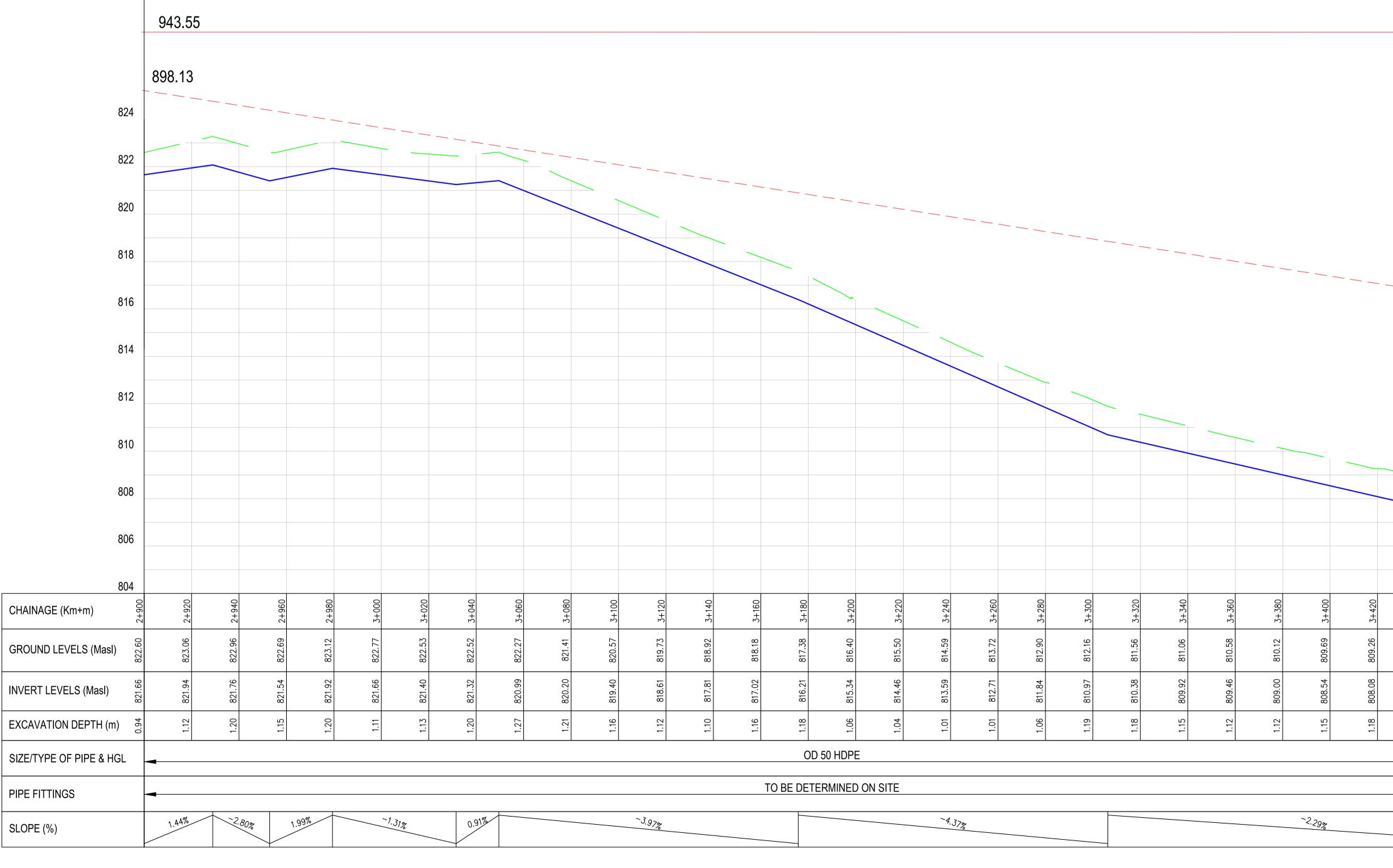


REV









 - 3+420 - 3+440 - 3+460	+ 3+480 - 3+500 3+520	3+540 3+560 3+580	3+600	- 3+640 - 3+660 - 3+680
KWA KITURA LINE				



824

822

820

818

816

814

812

810

808

806

804

3+440

87

62

24

3+460

37

808.

807.17

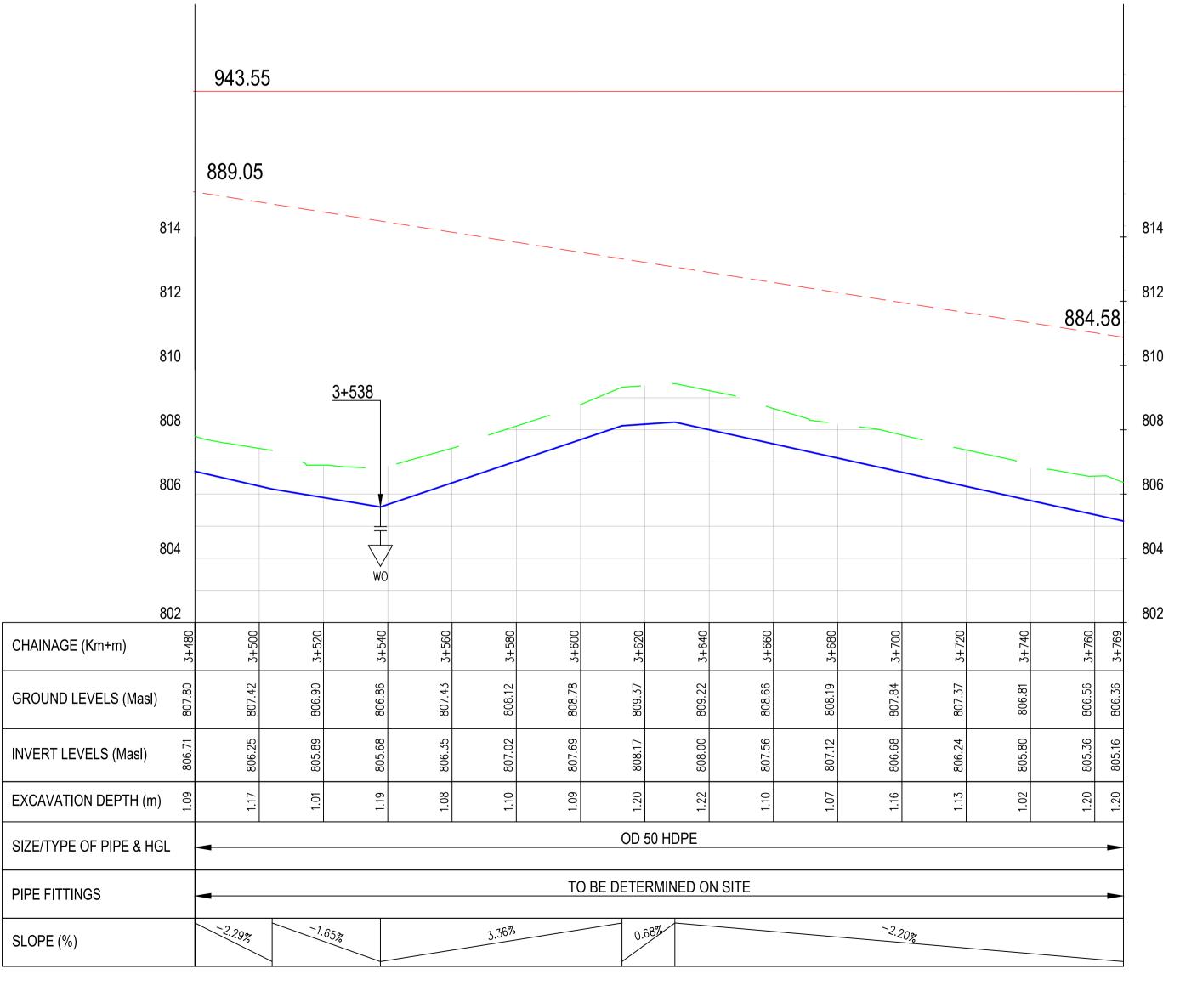
21

889.05

- 1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

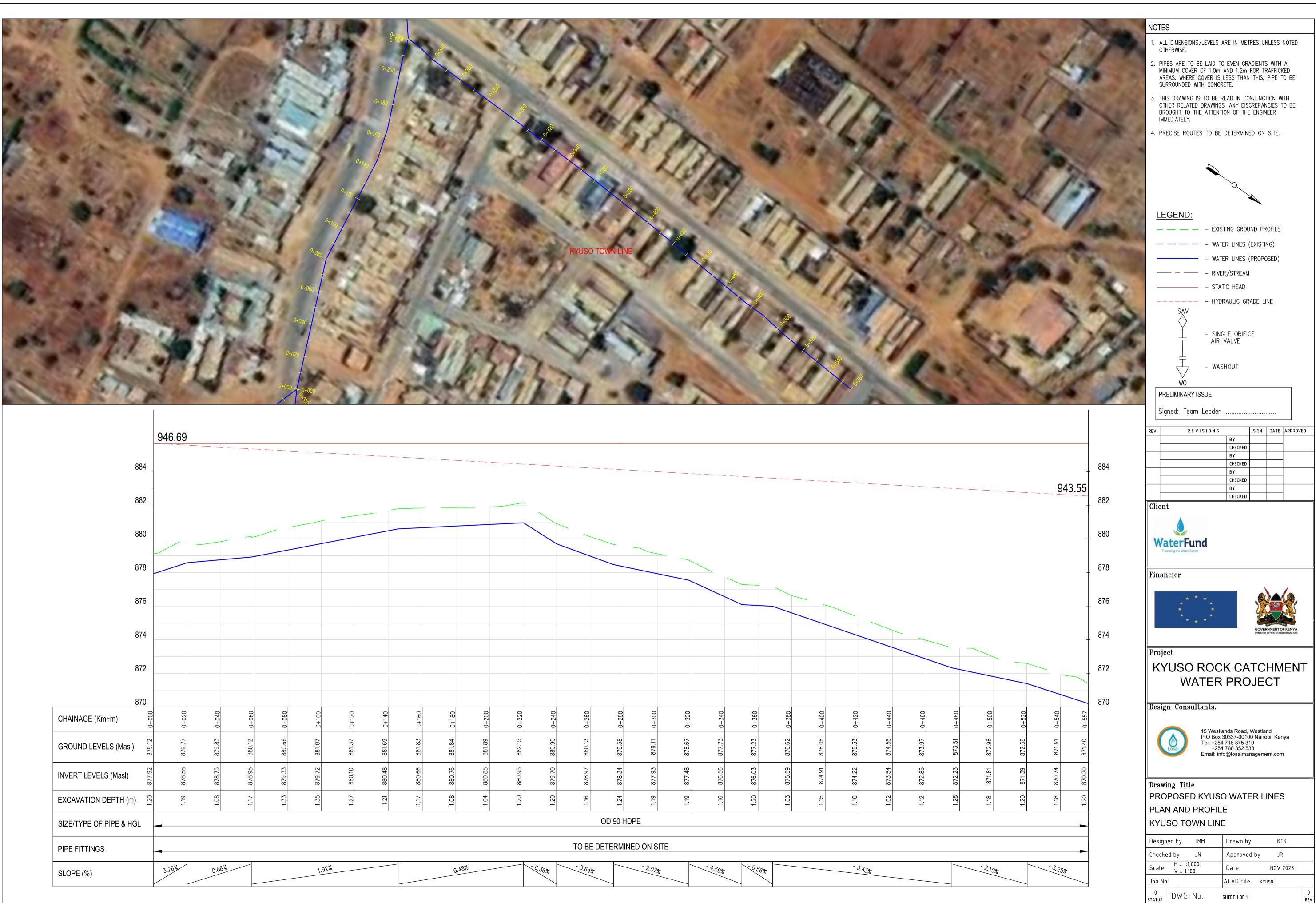
	LEGE	<u>IND:</u>			0					
								ROFILE		
						INES				
				- WA ⁻	ter i	INES	(PROP	OSED)		
						TREAM				
				- sta	ATIC	HEAD				
		SAV		- HY[ORAU	LIC GR	ADE L	INE		
		$\langle \rangle$								
		ľ	-			ORIFI	CE			
		Τ		AIR	VAL	.VE				
	-	<u>+</u>	_	- WA	SHUI	IT				
	Ň			117	51100	- 1				
[PRELIM	WO IINARY	'ISSI	JE						
	Signed	: Tea	m Le	eader		•••••	•••••	•••••		
REV		RE	VIS	1 0 N S		,	SIGN	DATE	APP	ROVE
					B	Y IECKED				
					B	Y IECKED			+	
					В				+	
					B					
					C	HECKED				
		rFu								
Fi	Financing th	he Water Sec								
Fi		he Water Sec							1.	
Fi	Financing th	he Water Sec		* *					6	
Fi	Financing th	he Water Sec		***			2			
Fin	Financing th	he Water Sec		***						
	Financing th	he Water Sec		* *						
Pr	Financing U nancie oject	r * *	* * * *	*			(MINISTR	Y OF WATER AN	ND IRRIGATH	DN)
Pr	Financing th	r * * * SO	* * * *	*					ND IRRIGATH	DN)
Pr	Financing U nancie oject	r * * * SO	* * * *	*				Y OF WATER AN	ND IRRIGATH	DN)
Pr Þ	Financing U nancie oject	r * * SO W/	* * * * R(ND IRRIGATH	DN)
Pr Þ	Financing U nancie oject	r * * SO W/	* * * * R(ND IRRIGATH	DN)
Pr Þ	Financing U nancie oject	r * * SO W/	R A T 11tar	OC ER Its.	lands	RC	(TC) JE	HN CT		DN)
Pr Þ	Financing U nancie oject	r * * SO W/	R R A T Iltar 15 P.0 Te	OC ER Its. West O Box bl: +25 +25	alands 3033 4 718	Road, 57-0010 875 3 352 5	Vestla 00 Nair 10 33	HN CT	1EI	DN)
Pr Þ	Financing U nancie oject	r * * SO	R R A T Iltar 15 P.0 Te	OC ER Its. West O Box bl: +25 +25	alands 3033 4 718	Road, 57-0010 875 3 352 5	Vestla 00 Nair 10 33	HN CT	1EI	DN)
Pr Þ	Financing U nancie oject	r * * SO	R R A T 15 P.0 Te	OC ER Its. West O Box bl: +25 +25	alands 3033 4 718	Road, 57-0010 875 3 352 5	Vestla 00 Nair 10 33	HN CT	1EI	DN)
Pr P De	Financing U nancie oject (YU) sign () sign () awing	r SO VV/ Consu	R R R A T Iltar 15 P.4 Te En	OC ER Its. West O Box Box Box Box Box Box Box Box Box Box	lands 3033 4 718 4 788	Road, 7-001(875 3 352 5 558aima	Westla 00 Nair 10 33 nagem	HN CT	nya m	DN)
Pr P De	Financia di nancie oject (YU) sign () sign () awing ROPC	r SO VV/ Consu	R R A T Iltar 15 P.' Te En	OC ER Ints. West O Box Box Box Box Box Historia Solution Mest O Box Box Box Box Box Box Box Box Box Box	(lands 3033 4 718 4 788 10@l	Road, 7-001(875 3 352 5 558aima	Westla 00 Nair 10 33 nagem	HN CT	nya m	DN)
Pr P De Dr Pl	awing ROPC AN A	r SO VV/ Consu Consu Title		OC ER Nts. West O Box Sh: +25 +25 nail: ir	Clands 3033 4 718 4 788 10@l	Road, 7-001(875 3 352 5 558aima	Westla 00 Nair 10 33 nagem	HN CT	nya m	DN)
Pr P De Dr Pl	Financia di nancie oject (YU) sign () sign () awing ROPC	r SO VV/ Consu Consu Title		OC ER Nts. West O Box Sh: +25 +25 nail: ir	Clands 3033 4 718 4 788 10@l	Road, 7-001(875 3 352 5 558aima	Westla 00 Nair 10 33 nagem	HN CT	nya m	DN)
Pr P De Dr PI K	awing ROPC AN A	r SO VV/ Consu Consu D SED ND I TUR		OC ER Nts. West O Box Sh: +25 +25 nail: ir	Clands 3033 4 718 4 788 10@l	Road, 7-001(875 3 352 5 558aima	Vestla 00 Nair 10 33 nagem	HN CT and obi, Ke eent.cor	nya m	DN)
Pr P De Dr PI K	awing ROPC AN A VA KI signed b	r SO VV/ Consu Consu Consu D VV/ Consu Consu Consu Consu Consu Consu Consu Consu	R R A T Iltar I ¹⁵ P C C N C N N N	OC ER Nts. West O Box Sh: +25 +25 nail: ir	COV COV	Road, 97-0010 875 3 3 352 5 555aima	Vestla 0 Nair 10 33 nagerr	HN CT and obi, Ke eent.cor	nya m S	DN)
Pr P De Dr PI K Chi	awing ROPC ANA VAKI signed by cked by	r SO V/ Consu Consu D SED ND Title SED ND	R A T Itar Is P C T E N C R C A L J M M J M M J N 00	OC ER Nts. West O Box Sh: +25 +25 nail: ir	COV COV	Road, 7-0010 875 3 352 5 osaima VATI	Vestla 0 Nair 10 33 nagerr	HN CT and obi, Ker hent.cor	nya m S	
Pr P De De Chu	awing ROPC ANA VAKI signed by cked by	r SO SO V/ Consu Consu D SED ND Title SED ND TUR y y = 1:1,0	R A T Itar Is P C T E N C R C A L J M M J M M J N 00	OC ER Nts. West O Box Sh: +25 +25 nail: ir	COV COV COV COV COV COV COV COV	Road, 7-0010 875 3 352 5 osaima VATI	Vestla DO Nair 10 33 nagem ER L	HN CT and obi, Ker hent.cor	nya m S CK	
Pr P De De Chu	ale H	r SO SO V/ Consu Consu D SED ND Title SED ND TUR y y = 1:1,0	R A T Iltar Is P C A T En En En S A L JMM JN 00 D	OC ER Nts. West O Box Sh: +25 +25 nail: ir	COV COV COV COV COV COV COV COV COV COV	Road, 37-0010 875 3 3352 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	VVestla DO Nair 10 33 nagerr ER L y d by	HN CT and obi, Ke lent.cor INE: Ki JF	nya m S CK	N-

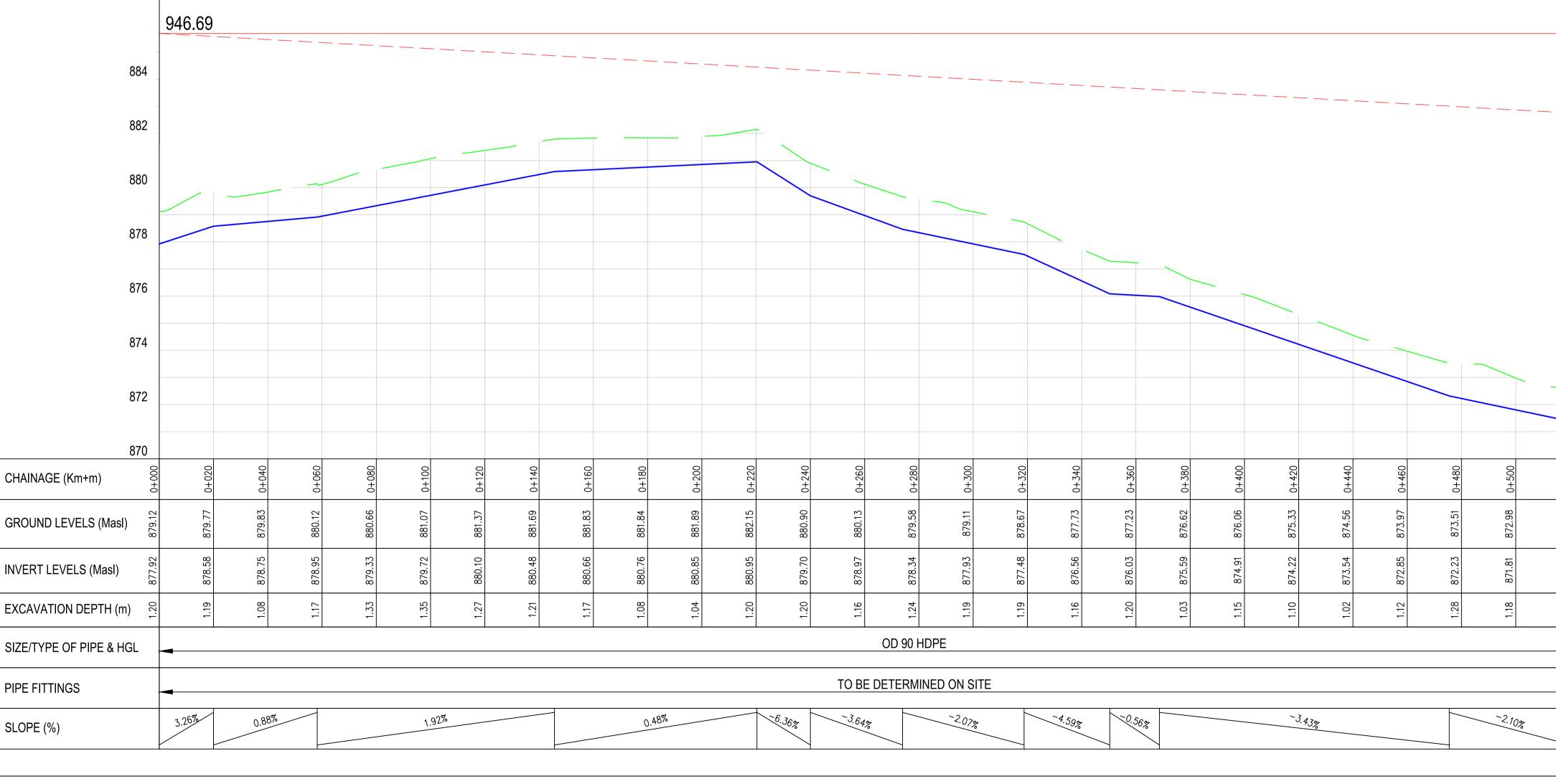




- 1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

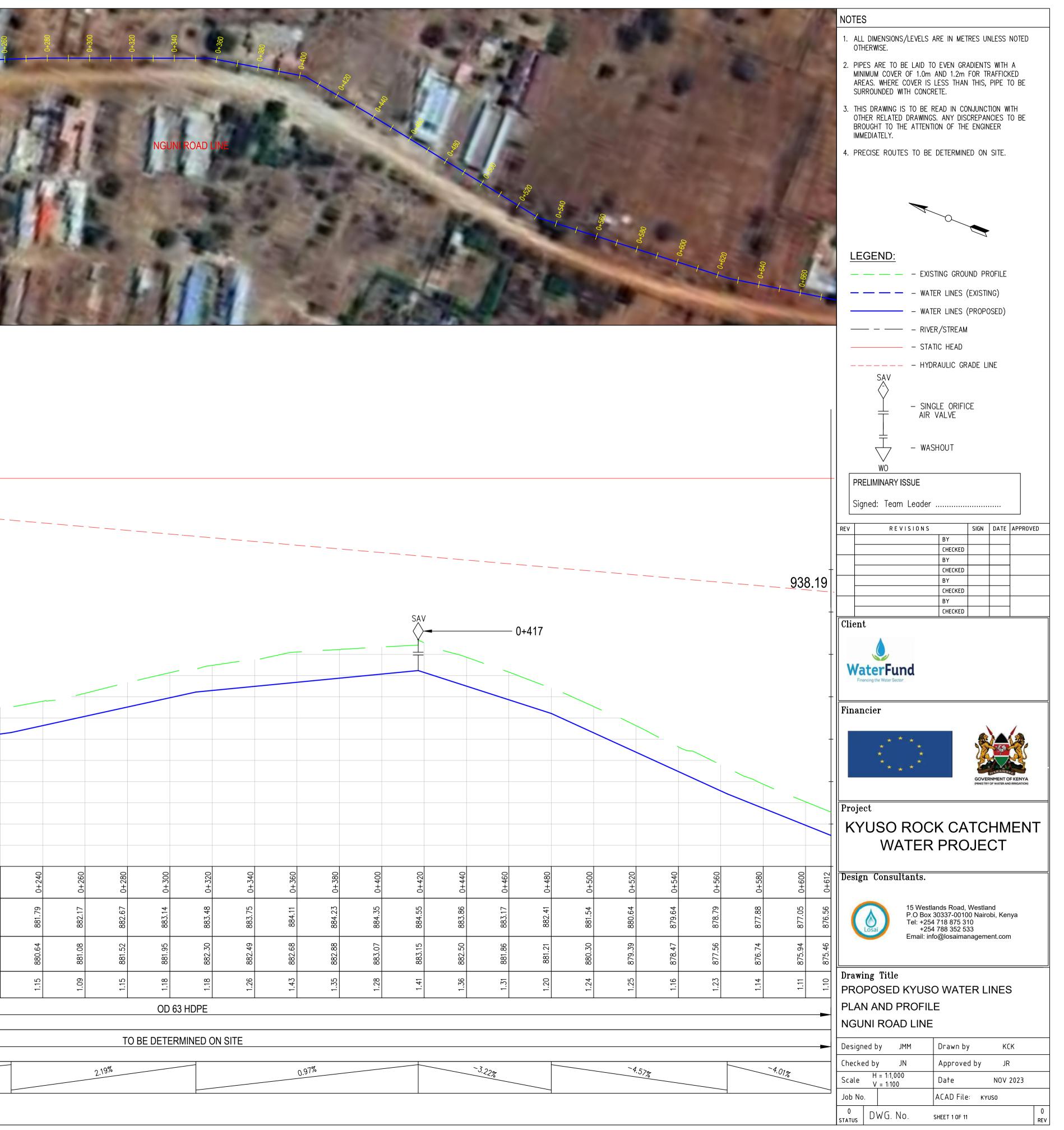
LEGEND: — — — — EXISTING GROUND PROFILE - - - - water lines (existing) – WATER LINES (PROPOSED) – STATIC HEAD — — — — — — HYDRAULIC GRADE LINE SAV - SINGLE ORIFICE AIR VALVE - WASHOUT $\overline{}$ WO PRELIMINARY ISSUE Signed: Team Leader SIGN DATE APPROVED REVISIONS REV BY CHECKED BY CHECKED BY CHECKED BY CHECKED Client WaterFund Financier GOVERNMENT OF KENYA (MINIS TRY OF WATER AND IRRIGATION) Project **KYUSO ROCK CATCHMENT** WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com 0 Drawing Title PROPOSED KYUSO WATER LINES PLAN AND PROFILE KWA KITURA LINE Designed by JMM Drawn by КСК Checked by JN Approved by JR Scale H = 1:1,000 V = 1:100 Date NOV 2023 ACAD File: KYUSO Јођ Мо. 0 STATUS DWG. NO. SHEET 7 OF 7 REV





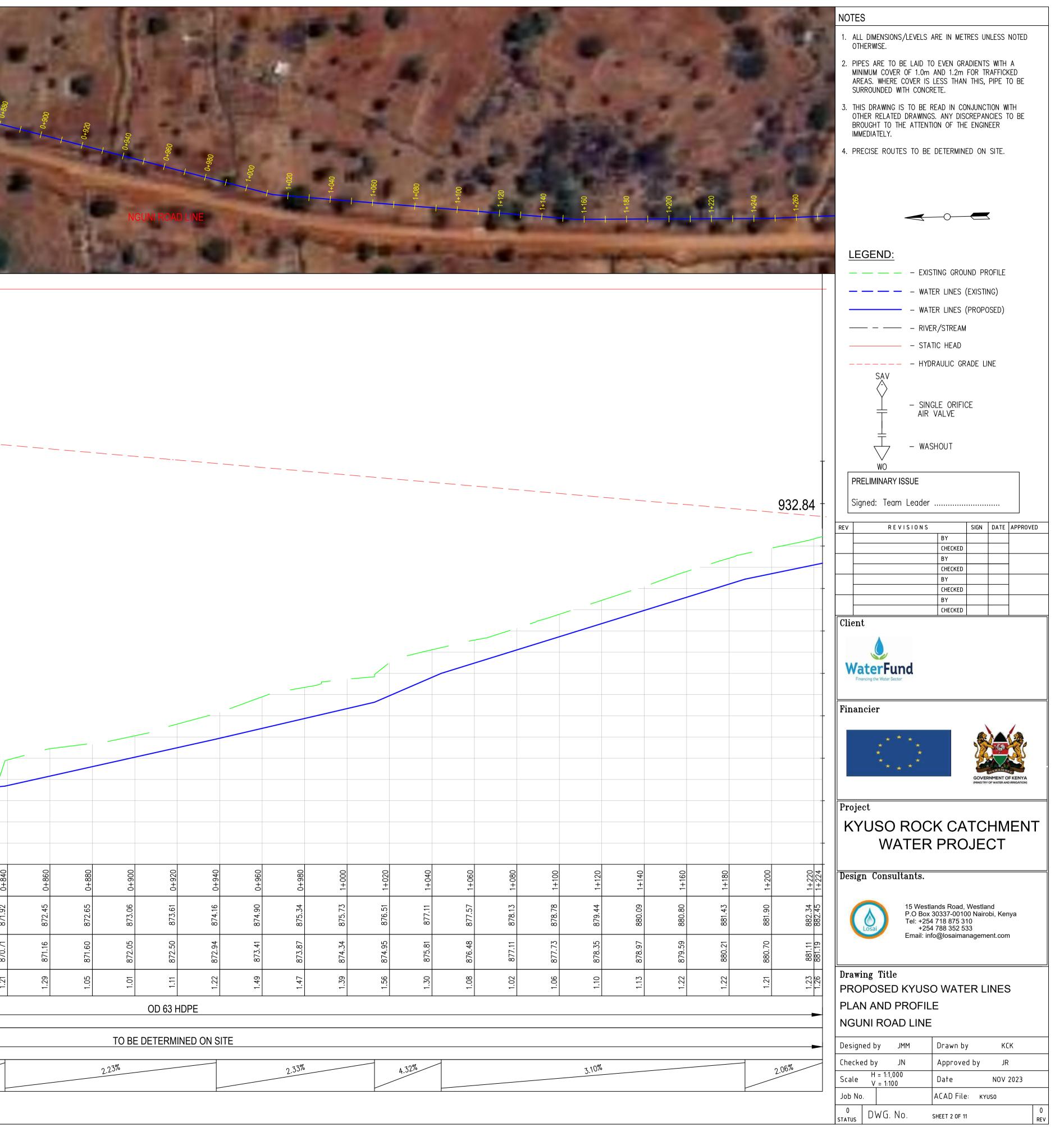
	_	943.55										
	_											
	_											
	_											
8	88											
8	86	-										
8	84											
8	82											
8	80											
8	878											
8	376											
8	874											
CHAINAGE (Km+m)	000+0	0+020	0+040	0+060	0+080	0+100	0+120	0+140	0+160	0+180	0+200	
GROUND LEVELS (Masl)	879.12		879.40	879.63	879.82	879.86	880.13	880.41	880.55	881.02	881.32	
()												
INVERT LEVELS (Masl)	878.00	878.79	878.25	878.38	878.51	878.64	878.89	879.16	879.43	879.70	879.97	
EXCAVATION DEPTH (m)	1.12	1.44	1.15	1.25	1.31	1.22	1.24	1.25	1.12	1.32	1.35	
SIZE/TYPE OF PIPE & HG	L	-										
PIPE FITTINGS		-										
SLOPE (%)		11.48% -4.	16%	().67%				1.35	5%		





0+600 0+620 0+640 0+660	89. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	0+140 1=0	04180	+800 1+800	+	00																
0+600 0+620 0+640 0+660	10+100 t+080	115	5				0+880	006+0	0+920	0+840	30											
				-	6						086+0 	000+1	- 1+020	1+040	1+060	-080	8	2				
				-					\$	NGUNI R	OAD LINE					Ť.	± ÷		1+1+1	1+160	1+180	- 1+200
943.5	55	220	£. 1	D.E	100					200.		يتحاد	a°.		ł			£-7	-	- 1	-	1
938.1	9																					
886																						
884																						
882																						
880																					_	
878						0.000																
876						0+800																
874																						
872																						
870						=																
868 867	60 40	0 0	720	200	W	0	0	860	880	00	50	09	0	0	0	9	0	0	00	20	40	c
CHAINAGE (Km+m) 910 GROUND LEVELS (Masl) 92	.48 0+64 .69 0+66	0+0 20+1 20+1	5 5	.79 0+76	.50 0+800	.36 0+82	.92 0+840	.45 0+	.65 0+88	06 0+90	0+0	96+0 0+96	.34 0+980	.73 1+000	3.51 1+020	7.11 1+040	:57 1+060	8.13 1+080	1+10	.44 1+12	0.09 1+14	880.80 1+160
GROUND LEVELS (Masl) 92.928 1000000000000000000000000000000000000	4.34 875 4.34 875 3.52 874		8/1.11 8/2.26 8/0.64 8/1.85	0.53 871	0.41 0/1	0.49 870	870.71 871.92	1.16 872	1.60 872	2.05 873	2.50 873		3.87 875	4.34 875	4.95 876	5.81 877	5.48 877.57	7.11 878	7.73 878	3.35 879	3.97 880	870 50 880
EXCAVATION DEPTH (m) 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	1.14 87/ 1.17 87/ 1.17 87/		1.14 8/ 1.21 870	1.26 870 1.20 870 1.20 87	1.20 070	-0.13 870	1.21 87	1.29 871.	1.05 87	1.01 872	1.11 872 1.22 872 872	1.49 87.	1.47 87.	1.39 874	1.56 874	1.30 87	1.08 876	1.02 87	1.06 87	1.10 878	1.13 878	1 22 870
SIZE/TYPE OF PIPE & HGL						i				OD 6	53 HDPE										I	
										TO BE DETER	RMINED ON	SITE										
SLOPE (%)	-4.01%	93%	58%	-0.57%		1.02%			2.23	3%			2.33%		4.7	32%				3.10%		

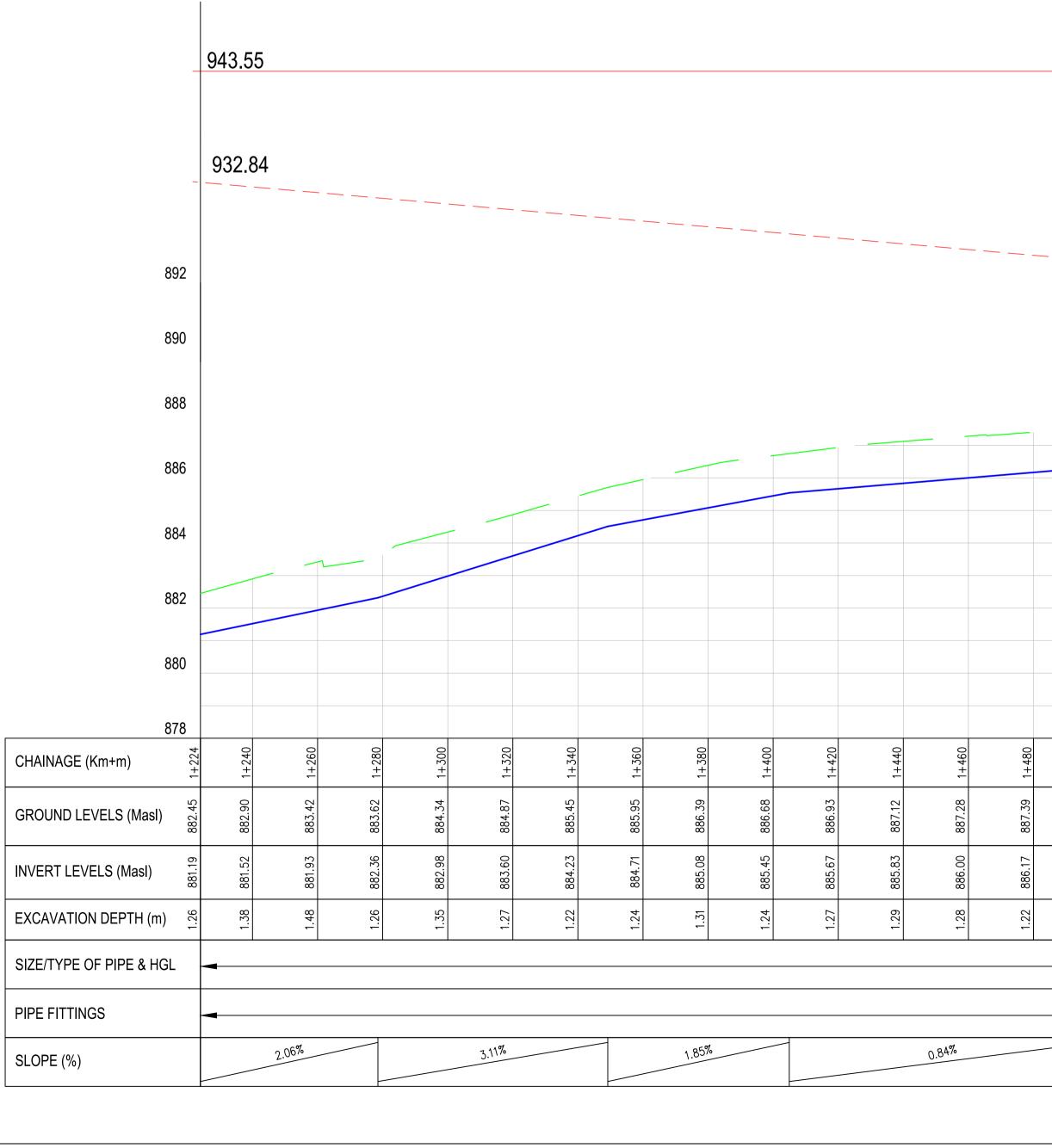






_ _ _ _ _ _ _ _ _ _ _ _ _ _ _

SAV

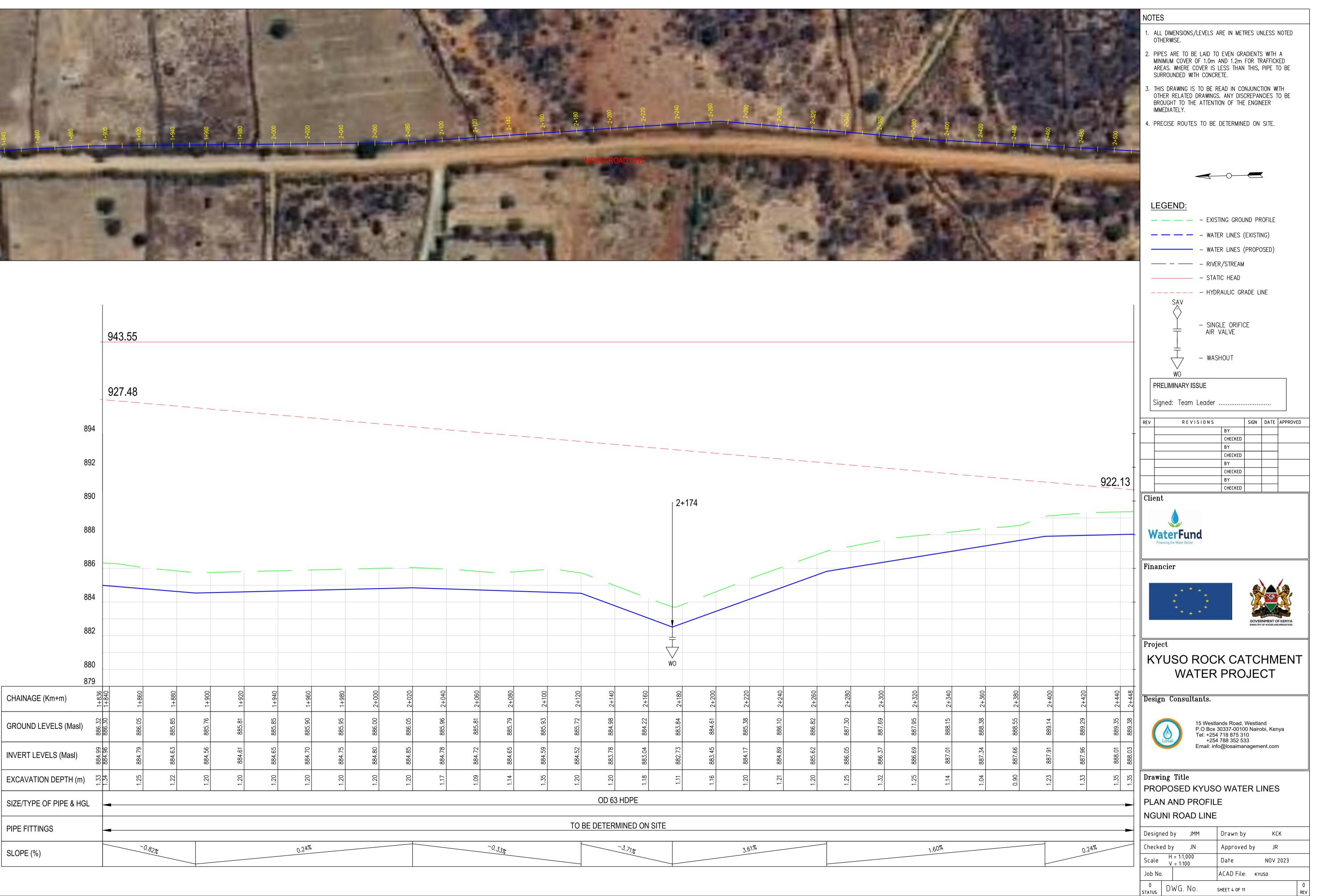


1+460	1+480	1+500	1+520	1+540	1+560	1+580	1+600	1+620	1+640	1+660	1+680	1+700	1+720	1+740	1+760	
887.28	887.39	887.68	887.71	887.74	887.89	887.96	887.81	887.67	887.59	887.74	887.55	887.36	887.40	887.17	886.88	
886.00	886.17	886.33	886.45	886.57	886.69	886.76	886.66	886.55	886.45	886.35	886.24	886.11	885.95	885.78	885.62	
1.28	1.22	1.35	1.26	1.17	1.20	1.19	1.15	1.11	1.14	1.39	1.31	1.25	1.45	1.39	1.27	
			(DD 63 HDP	E								l	I		
			TO BE DE	TERMINE	O ON SITE											
0.84%				0.59	%				-0.52%					-0.8	33%	
		F														

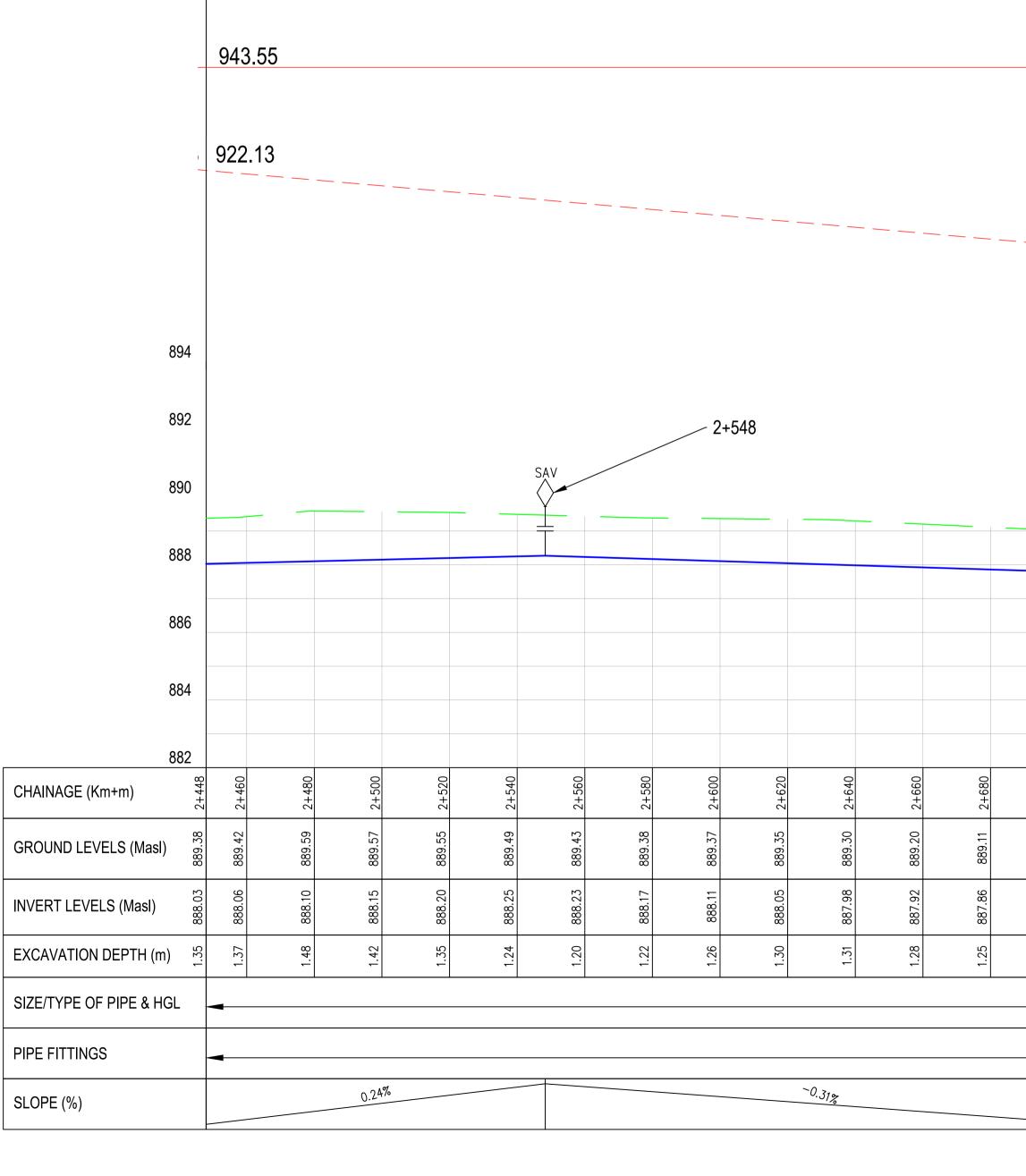
— 1+576

	ere.	100	-	22	-			-		13	NOTES
	1	0							3		1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
	11								-	-	 PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
	1	2 0	2								3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
1+680							70+ 			-	4. PRECISE ROUTES TO BE DETERMINED ON SITE.
										No. of Lot of Lo	LEGEND: EXISTING GROUND PROFILE WATER LINES (EXISTING) - WATER LINES (PROPOSED)
											- SINGLE ORIFICE AIR VALVE - WASHOUT WO
											PRELIMINARY ISSUE Signed: Team Leader
									927.4	48_	REVISIONS SIGN DATE APPROVED BY CHECKED CHECKED
1+576										-	Client
											WaterFund Financing the Water Sector
											Financier Financier Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT
1+640	1+660	1+680	1+700	1+720	1+740	1+760	1+780	1+800	1+820	1+836	Design Consultants.
887.59	887.74	887.55	887.36	887.40	887.17	886.88	886.65	886.52	886.40	886.32	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com
886.45	886.35	886.24	886.11	885.95	885.78	885.62	885.45	885.29	885.12	884.99	Email: info@losaimanagement.com
1.14	1.39	1.31	1.25	1.45	1.39	1.27	1.20	1.23	1.28	1.33	Drawing Title PROPOSED KYUSO WATER LINES PLAN AND PROFILE NGUNI ROAD LINE
-0.52%					-0.83%				-0.82%		Designed byJMMDrawn byKCKChecked byJNApproved byJRScaleH = 1:1,000 V = 1:100DateNOV 2023
			_					4		_	ScaleV = 1:100DateNUV 2023Job No.ACAD File:KYUSO0DWG. NO.SHEET 3 OF 110REV





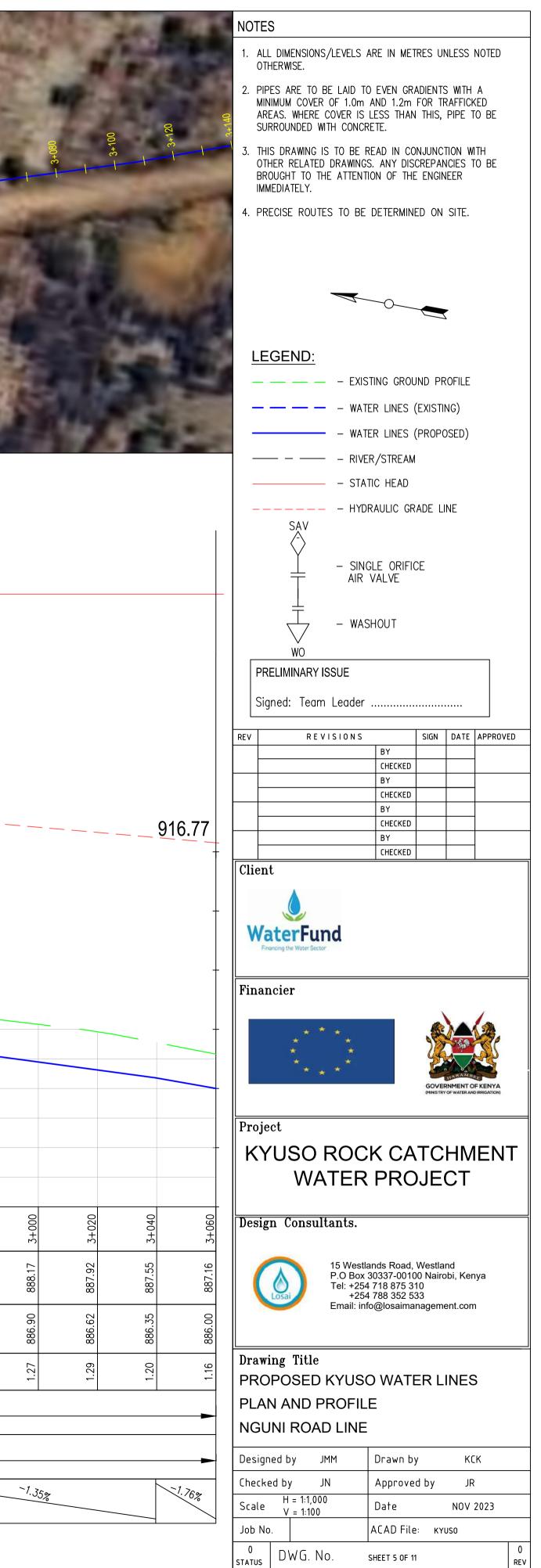




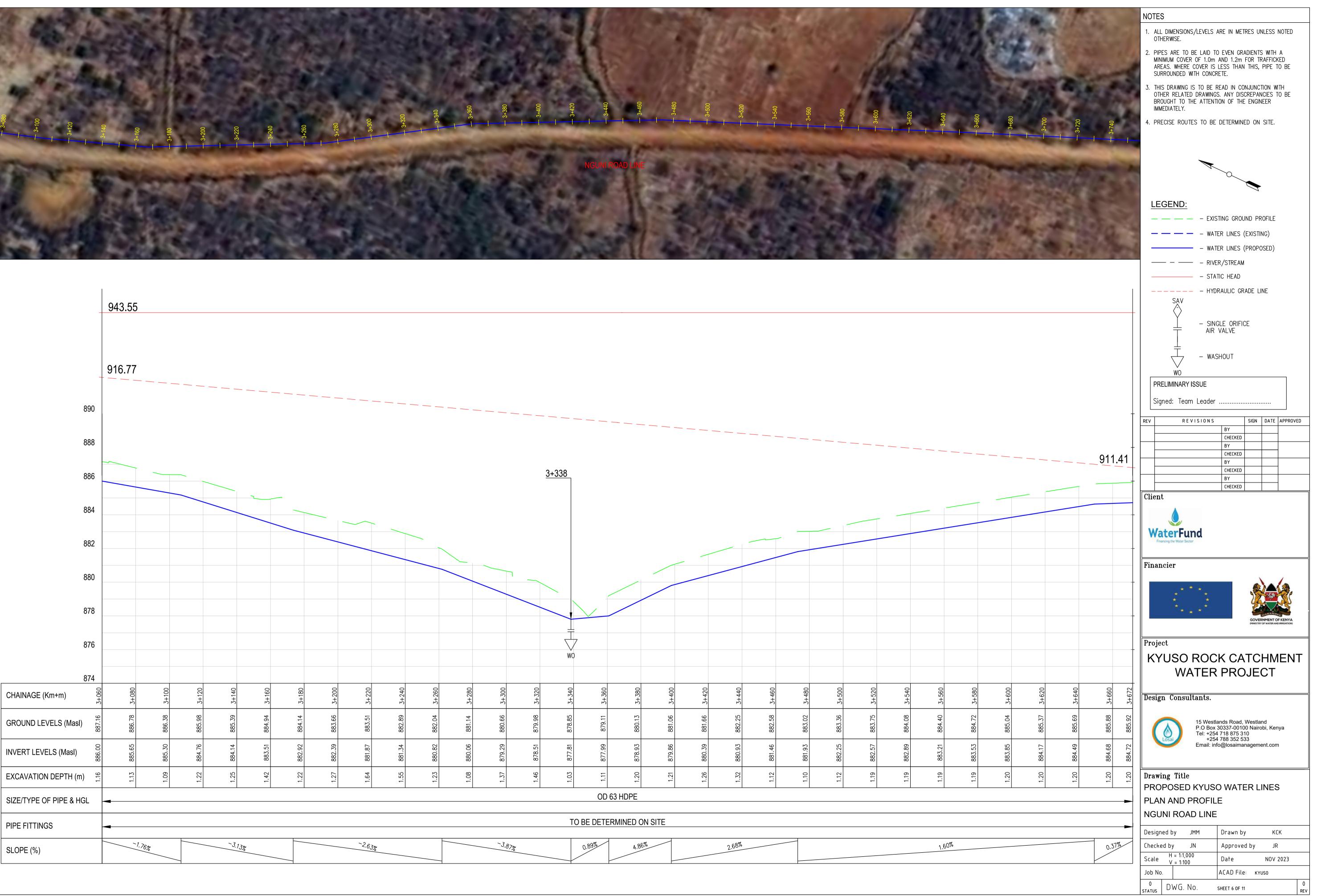
2+680	2+700	2+720	2+740	2+760	2+780	2+800	2+820	2+840	2+860	2+880	2+900	2+920	2+940	2+960	2+980	
889.11	889.02	888.92	888.84	888.86	888.86	888.78	888.71	888.63	888.56	888.50	888.45	888.47	888.57	888.64	888.40	
887.86	887.80	887.74	887.69	887.64	887.58	887.53	887.48	887.43	887.38	887.37	887.39	887.42	887.44	887.44	887.17	
1.25	1.22	1.18	1.15	1.22	1.27	1.25	1.23	1.21	1.19	1.13	1.05	1.05	1.13	1.20	1.24	
				OD 63 HD)PE											

TO BE DETERMINED ON SITE

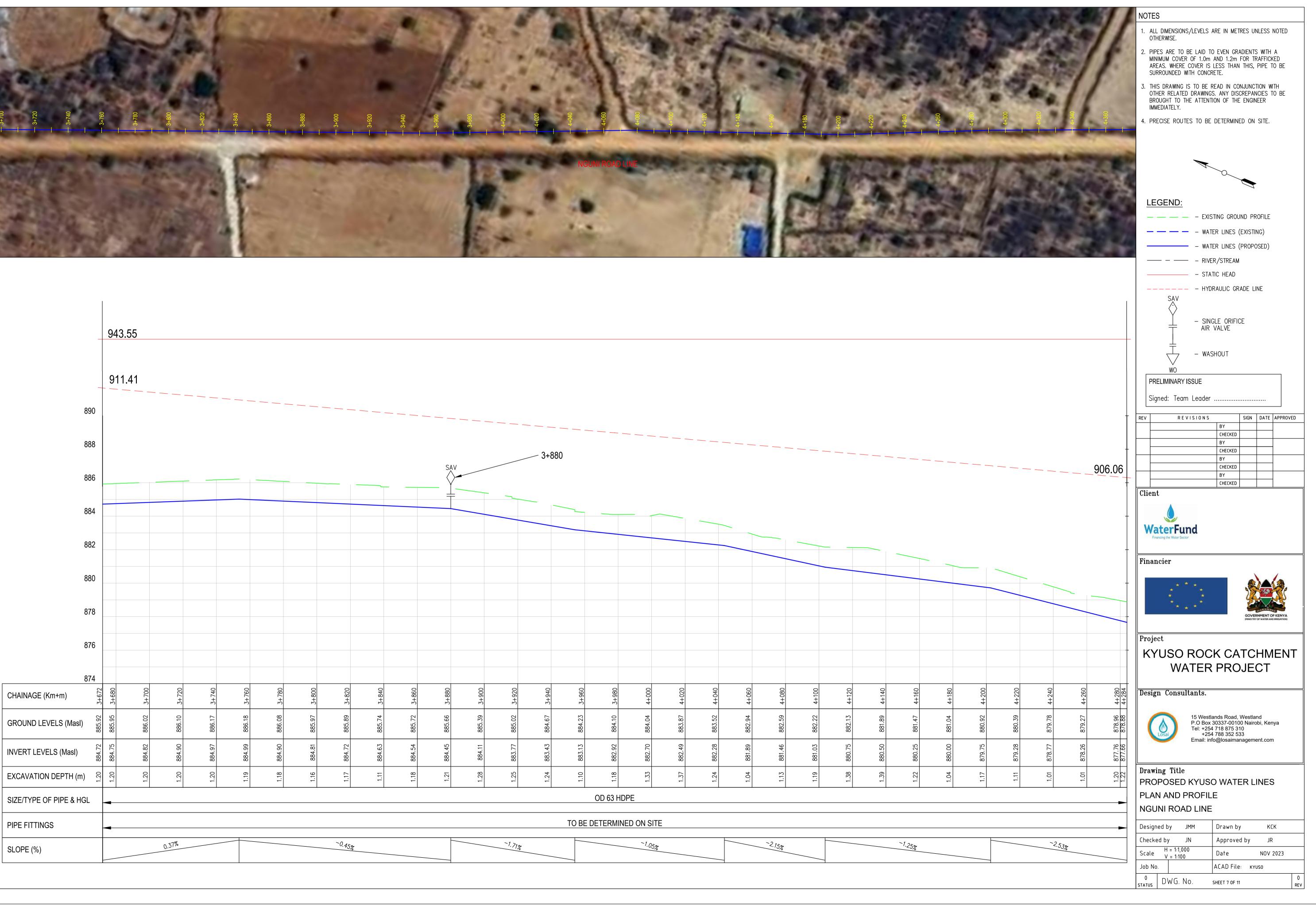
-0.26%	0.13%	





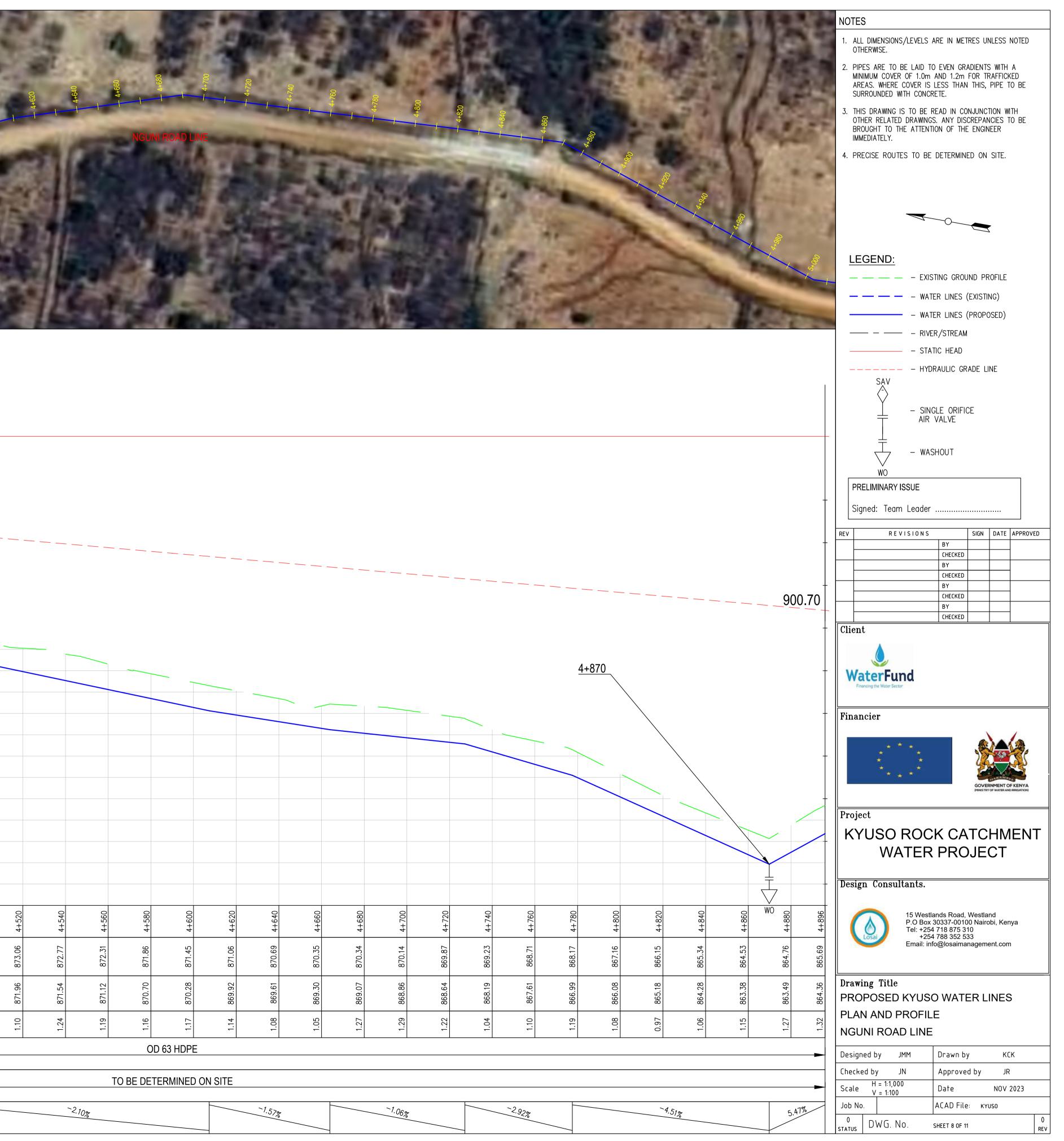




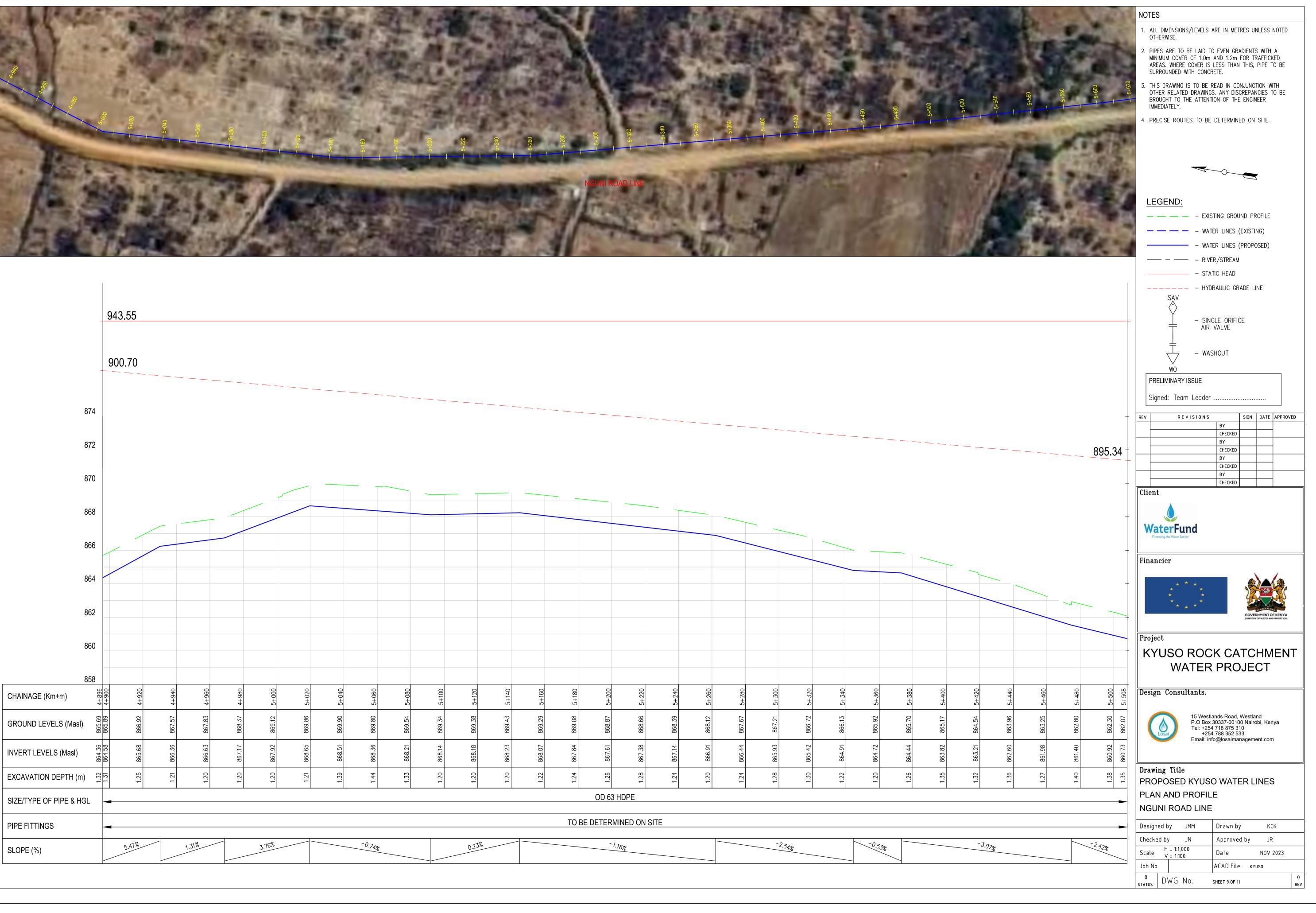


	1																										
	943.5	55																									
	906.0)6																									
880																											
878									— — .																		
876						_																					
070																									— — -		
874										<u> </u>																	
872													_													070	
072																		_							<u>4</u> -	+870	
870																											
868																											
866																											
864																											
862 861																											
AGE (Km+m)	4+284	4+320	4+340	4+360	4+380	4+400	4+420	4+440	4+460	4+480	4+500	4+520	4+540	4+560	4+580	4+600	4+620	4+640	4+660	4+680	4+700	4+720	4+740	4+760	4+780	4+800	
ND LEVELS (Masl)	8.49 4 8.49 4	877.92	7.34 4	6.80	876.53 4	6.02 4	5.52 4	4.95	48	4.01	3.41	73.06 4	2.77 4	872.31 4	871.86 4	.45	1.06 4	70.69 4	0.35 4	0.34 4	870.14 4	9.87 4	9.23 4	8.71 4	8.17 4	7.16 4	
ە 	.00 87. 25 87.		16 87	60 87		37 87	.20 87	87	27 874.	81 87	88 87		54 87			28 871	32 87	<u>∞</u>	87	07 87		64 86	19 86	01 86	99 86	86	
T LEVELS (Masl)	877.	876.	876.1	875.	875.13	874.6	874.2	873.74	873.27		872.38	871.96	871.5	871.12	870.70	870.28	869.9	869.61	869.30	869.0	868.86	868.6	868.1	867.61	866.99	866.0	
/ATION DEPTH (m) ရှိ	1.22	1.20	1.18	1.20	1.39	1.35	1.31	1.21	1.20	1.20	1.03	1.10	1.24	1.19	1.16	1.17	1.14	1.08	1.05	1.27	1.29	1.22	1.04	1.10	1.19	1.08	
YPE OF PIPE & HGL															OD 6	3 HDPE											

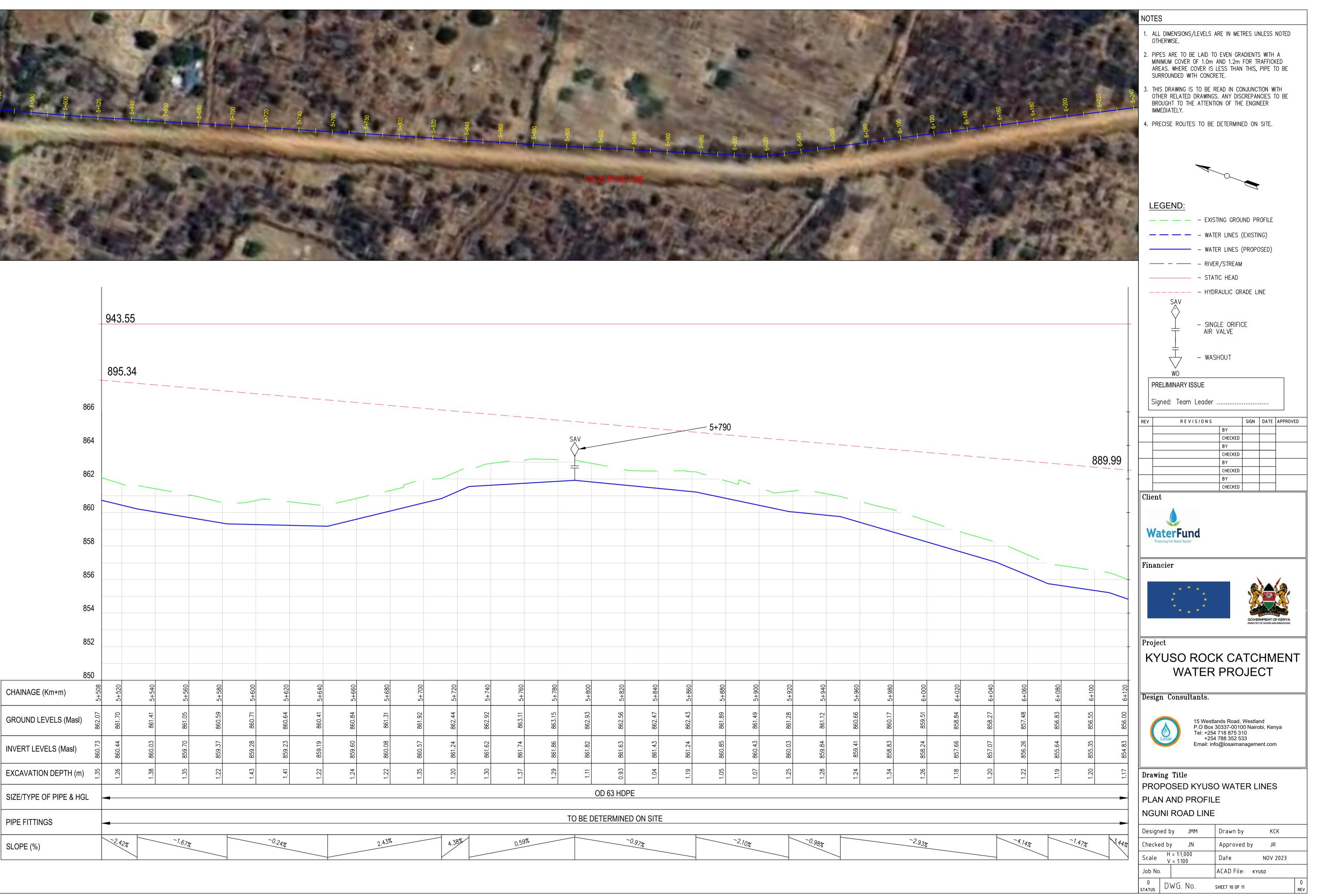




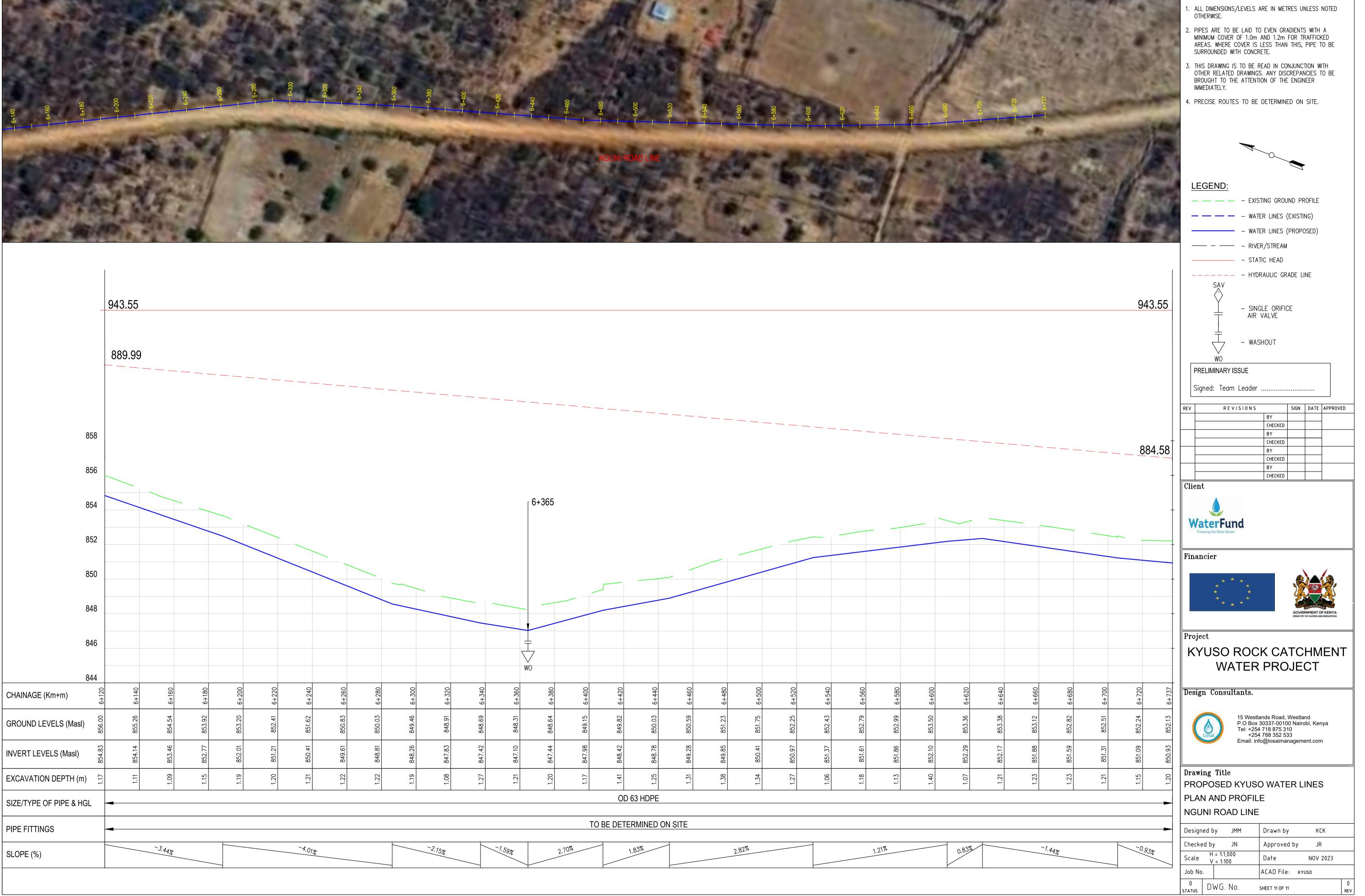






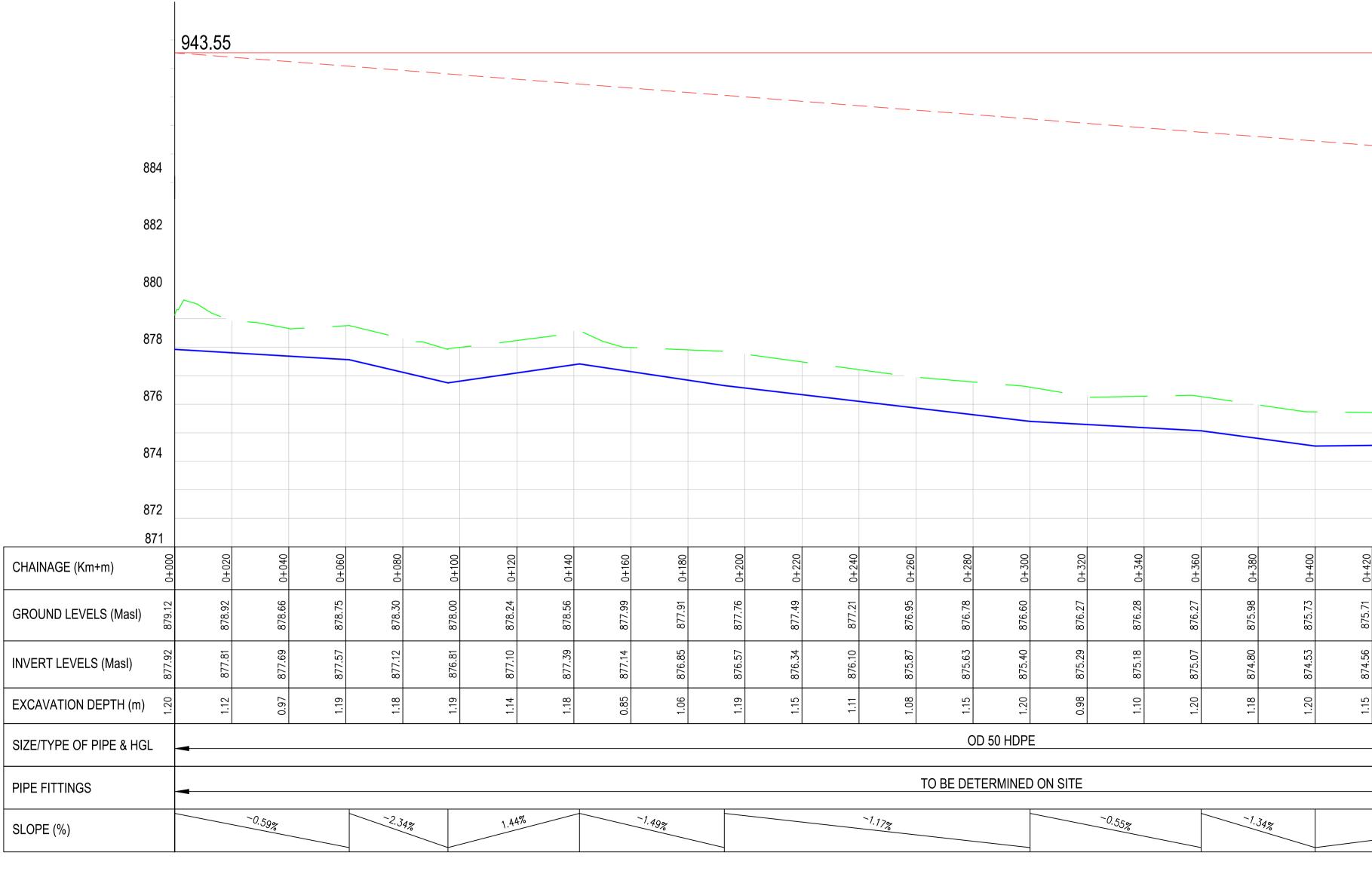






- 6+420 - 6+440 - 6+460 - 6+480	- 6+500 - 6+520 - 6+540 - 6+560	+ 6+620 6+620 6+640	
NGUNI R	ROAD LINE		



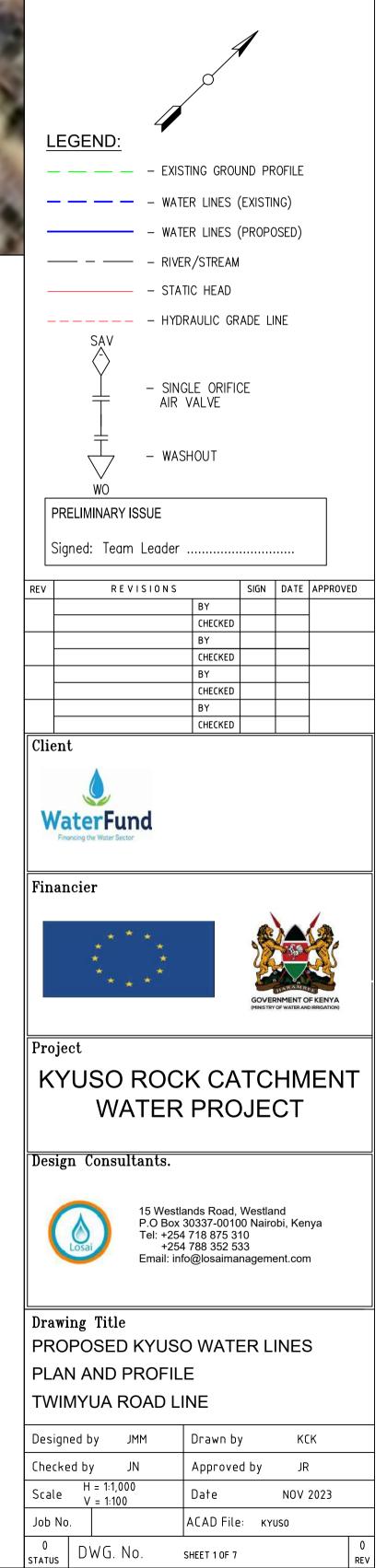


														 .		
20	40	00	-280	0	20	40	00	8	0	20	440	00	80	0	50	40
0+220	0+240	0+260	0+28	0+300	0+320	0+340	0+360	0+380	0+400	0+420	0+4	0+460	0+480	0+500	0+520	0+540
877.49	877.21	876.95	876.78	876.60	876.27	876.28	876.27	875.98	875.73	875.71	875.69	5.77	875.94	875.94	876.17	876.38
87	87	87	87	87	87	87	87	87	87	87	87	875.	87	87	87	87
34	0	87	53	40	29	18	70	80	53	56	28	61	53	70	8 8	05
876.34	876.10	875.87	875.63	875.4	875.29	875.18	875.07	874.80	874.53	874.56	874.58	874.61	874.63	874.	874.88	875.05
1.15	1.11	1.08	1.15	1.20	0.98	1.10	1.20	1.18	1.20	1.15	1.11	1.16	1.31	1.24	1.30	1.33
			(DD 50 HDPI	<u> </u>										I	
			TO BE DE	TERMINED	ON SITE											

-1.17% -0.55% -1.34% 0.12% 0.89%

NOTES

- 1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- 2. PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.



939.06

884

882

880

878

876

874

872

871

0+540

38

376

05

875.

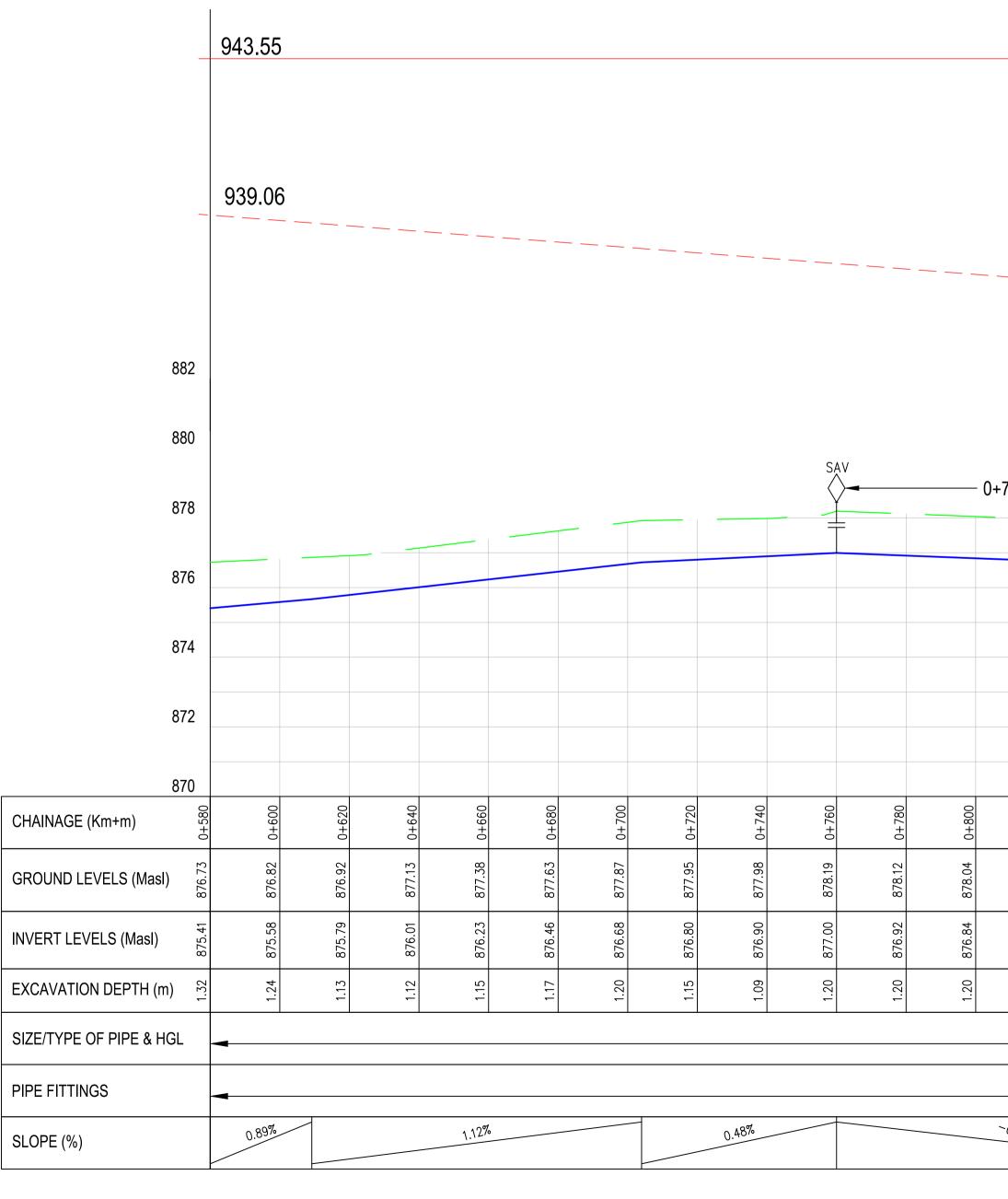
1.33

27

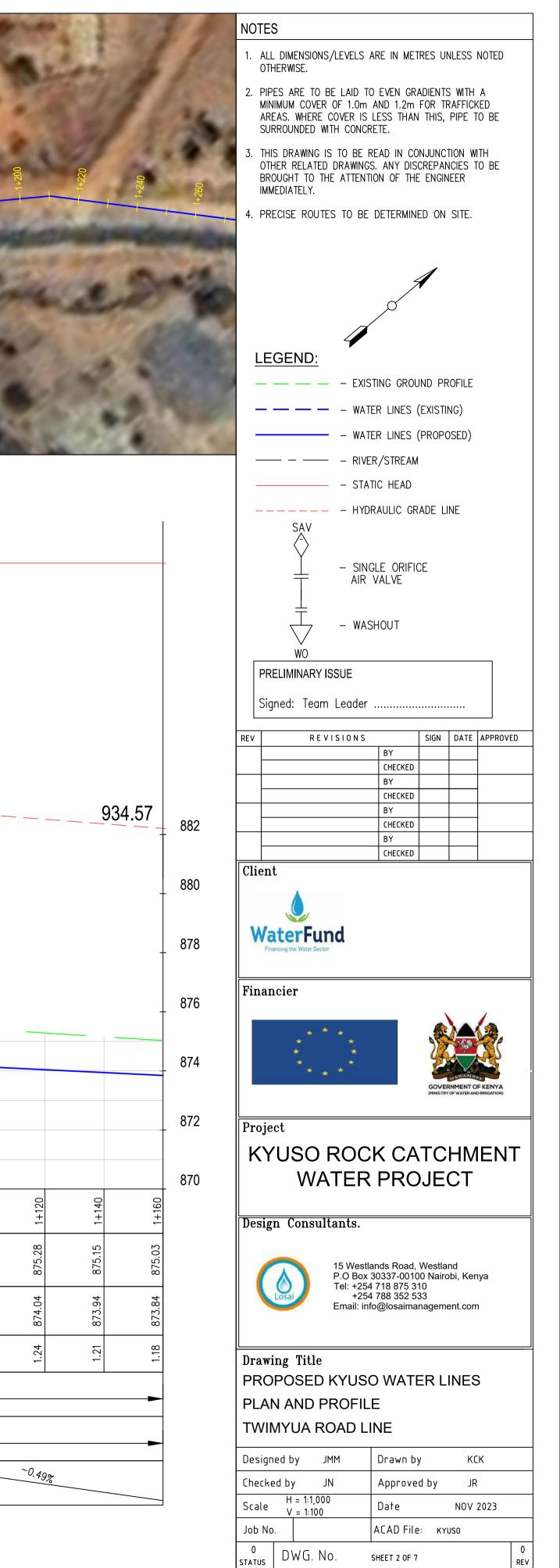
32



_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

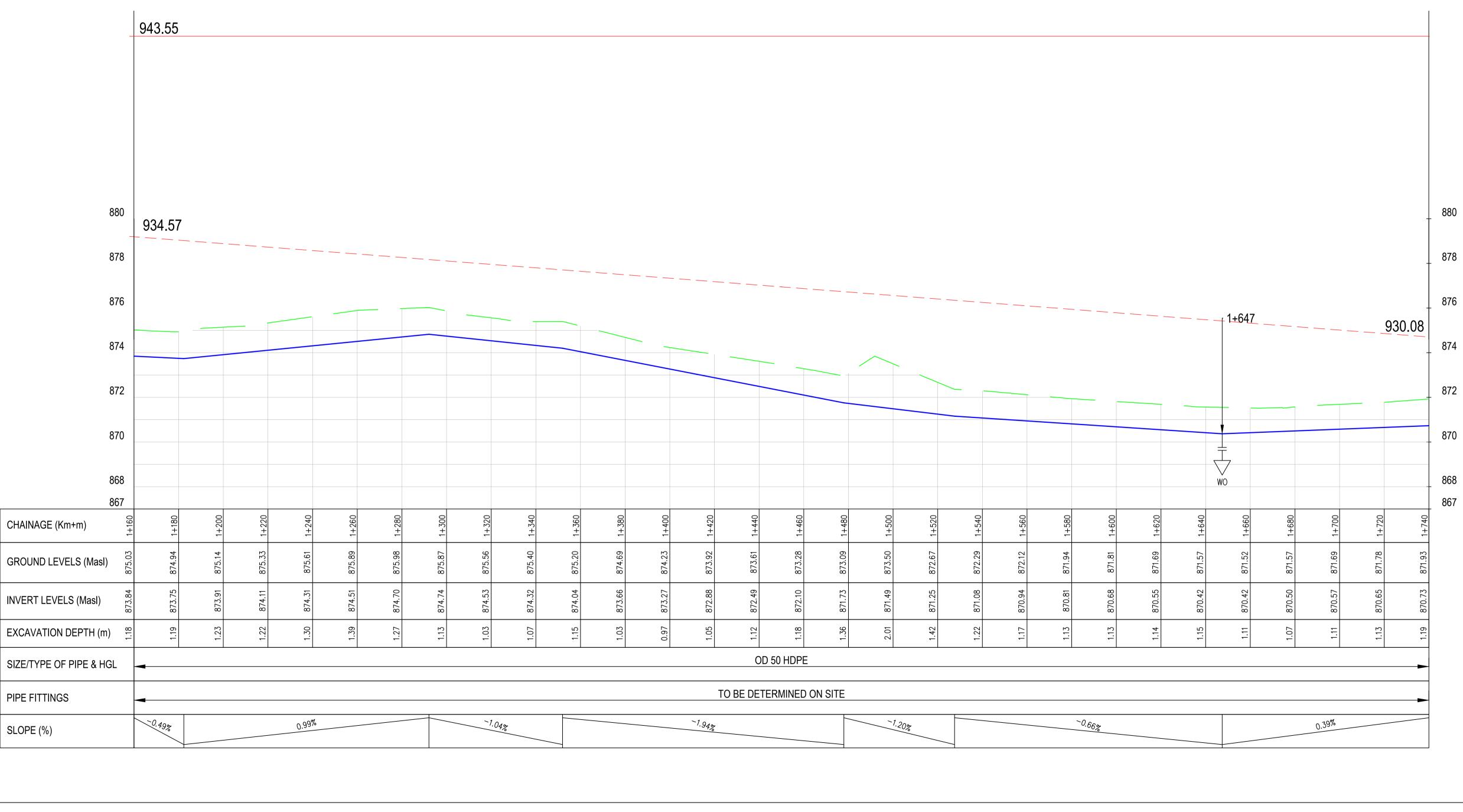


	0+760															
0+800	0+820	0+840	0+860	0+880	006+0	0+920	0+940	096+0	0+980	1+000	1+020	1+040	1+060	1+080	1+100	
878.04	877.96	877.89	877.81	877.67	877.52	877.37	877.22	877.10	876.99	876.76	876.34	875.95	875.67	875.42	875.38	
876.84	876.76	876.69	876.61	876.48	876.35	876.21	876.07	875.93	875.80	875.58	875.23	874.87	874.52	874.23	874.14	
1.20	1.20	1.20	1.20	1.19	1.18	1.16	1.15	1.17	1.20	1.18	1.1	1.08	1.15	1.19	1.25	
			(DD 50 HDP	E											
			TO BE DE	TERMINE	O ON SITE											
	-0.39%						-0.69%					-1.77%				
														.		



REV

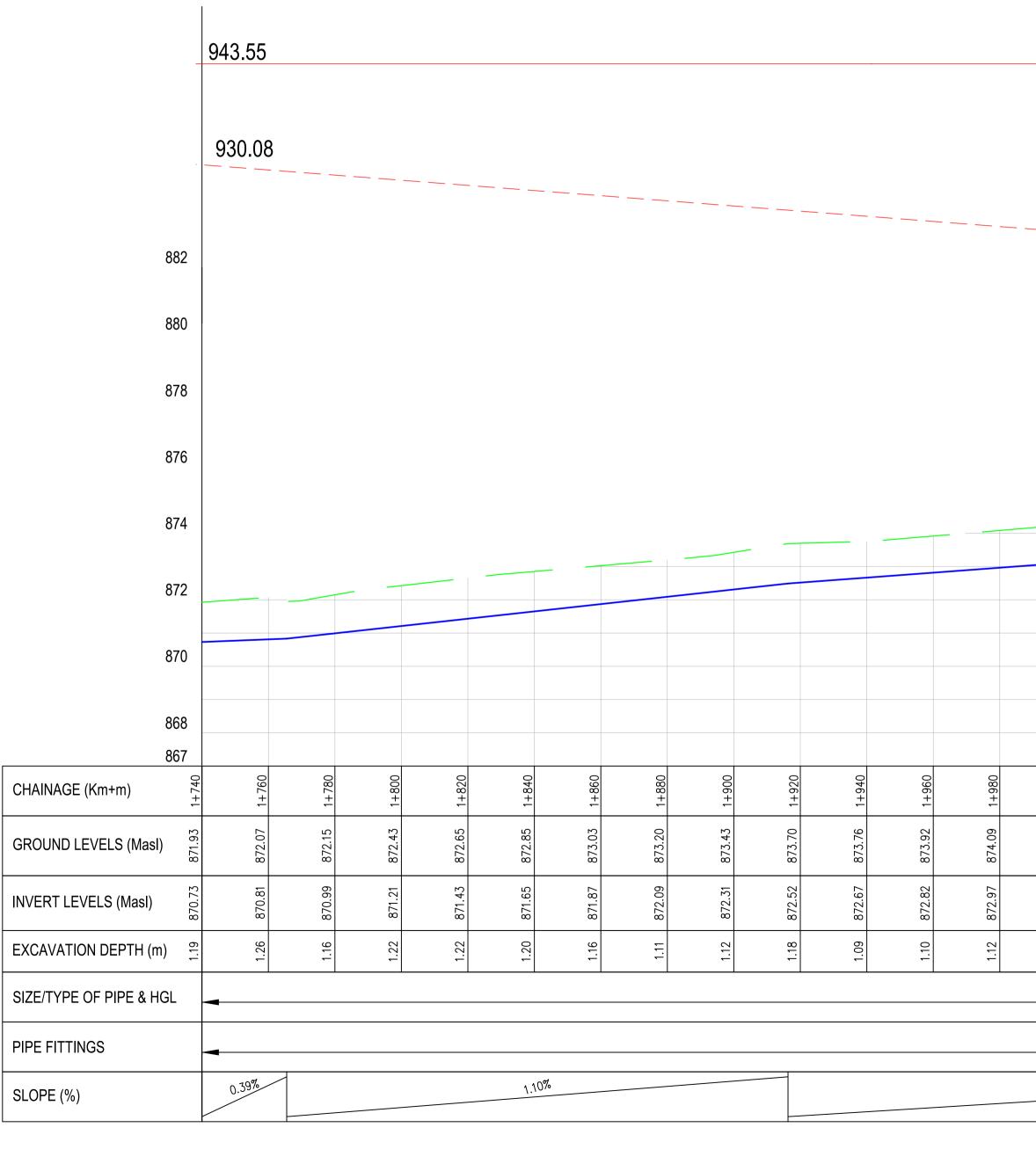




- 1. ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- 2. PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

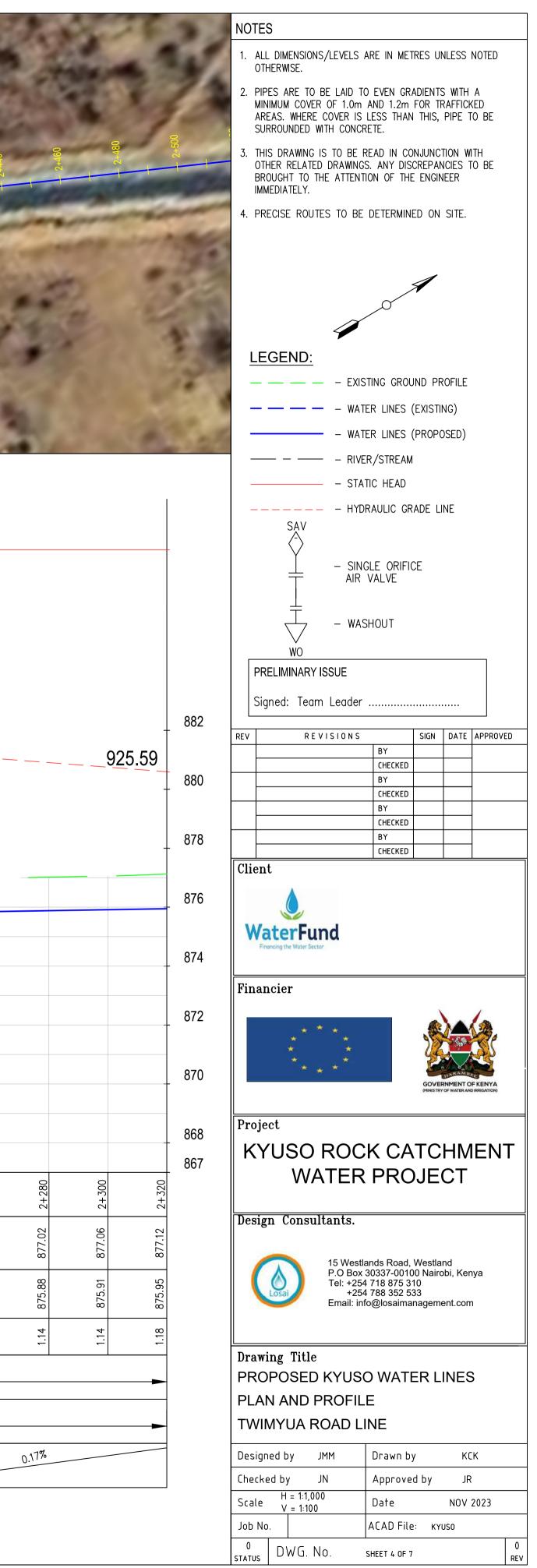
	7
	Ŕ
[
LEGEND:	
— — — — – EXIS	TING GROUND PROFILE
<u> </u>	ER LINES (EXISTING)
——————————————————————————————————————	ER LINES (PROPOSED)
——— — — RIVE	R/STREAM
——————————————————————————————————————	TIC HEAD
	RAULIC GRADE LINE
SAV	
	GLE ORIFICE VALVE
AIK	VALVE
was	SHOUT
WO	
PRELIMINARY ISSUE	
Signed: Team Leader	
REV REVISIONS	SIGN DATE APPROV
	CHECKED
	BY CHECKED
	BY
	BY
Financing the Water Sector Financier	
Financier	GOVERNMENT OF KENYA (MINISTRY OF WATER AND IRRIGATION)
Financier	
Financier Financier Project KYUSO ROC WATER Design Consultants. 15 Westla P.O Box Tel: +254 +254	
Financier Financier Project Froject KYUSO ROC WATER Design Consultants. 15 Westla P.O Box Tel: +254 +254	AND WESTRY OF WATER AND INRIGATION AND AND AND AND AND AND AND AND AND AND
Financier Financier Project KYUSO ROC WATER Design Consultants. Design Consultants. 15 Westla P.O Box Tel: +254 +254 Email: inf Drawing Title PROPOSED KYUSO PLAN AND PROFIL	AND WESTRY OF WATER AND INRIGATION AND AND AND AND AND AND AND AND AND AND
Financier Financier Financier Froject KYUSO ROC VATER Design Consultants. 15 Westla P.O Box Tel: +254 +252 Email: int Drawing Title PROPOSED KYUSO PLAN AND PROFIL TWIMYUA ROAD LI Designed by JMM Checked by JN H = 11000	Ands Road, Westland 30337-00100 Nairobi, Kenya 718 875 310 788 352 533 fo@losaimanagement.com
Financier Financier	AND THE STRY OF WATER AND BRECATION AND STRY OF WATER AND STRY AND STRY OF WATER AND S
Financier Financ	Ands Road, Westland 30337-00100 Nairobi, Kenya 718 875 310 788 352 533 fo@losaimanagement.com



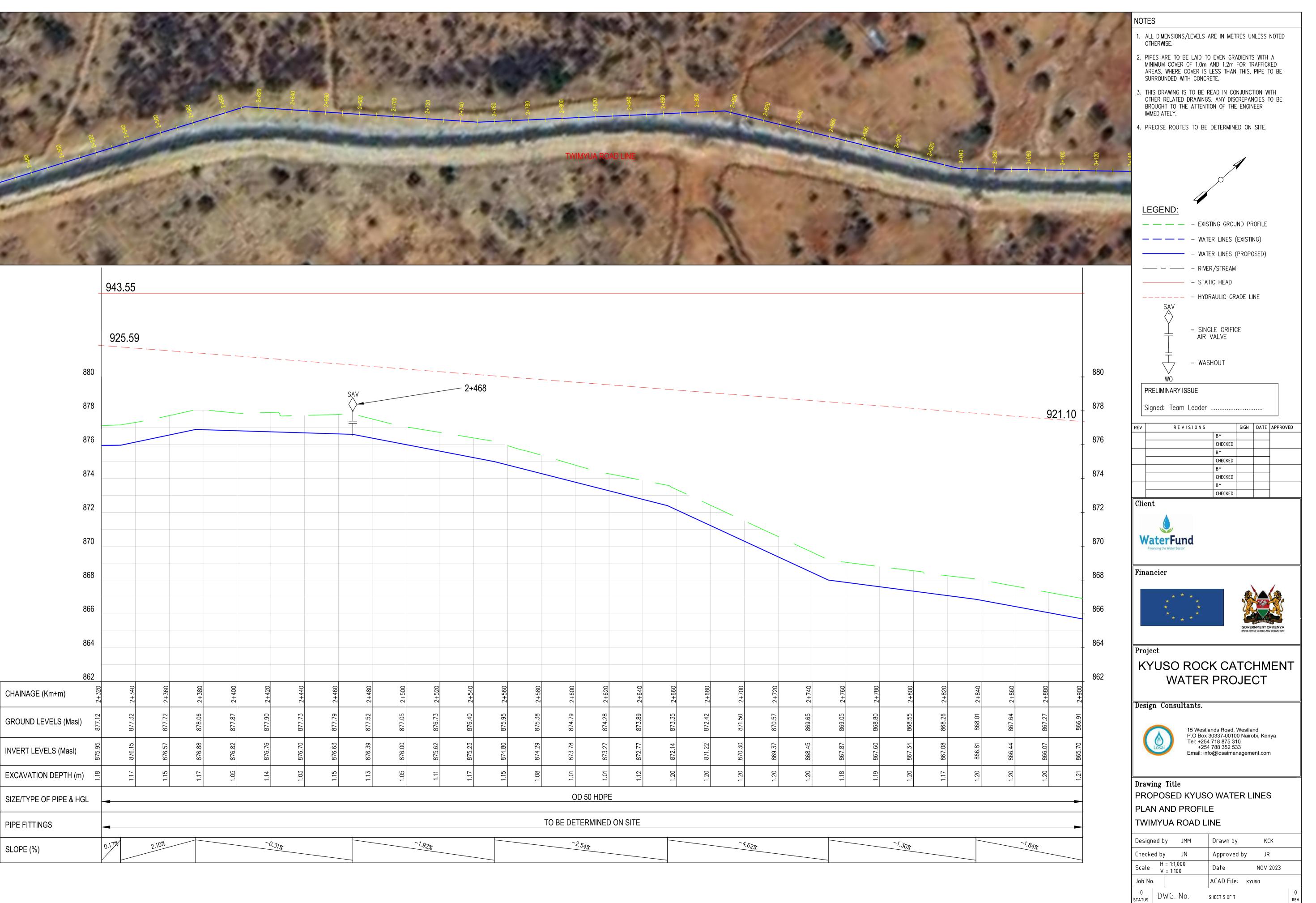


																-
1+960	1+980	2+000	2+020	2+040	2+060	2+080	2+100	2+120	2+140	2+160	2+180	2+200	2+220	2+240	2+260	
873.92	874.09	874.25	874.42	874.59	874.76	874.91	875.06	875.32	875.66	876.00	876.26	876.50	876.71	876.94	876.98	
872.82	872.97	873.12	873.26	873.41	873.56	873.71	873.86	874.10	874.41	874.72	875.03	875.34	875.65	875.81	875.85	
1.10	1.12	1.14	1.16	1.18	1.19	1.20	1.20	1.22	1.26	1.28	1.24	1.17	1.07	1.13	1.13	
			C	DD 50 HDP	E											
			TO BE DE	TERMINE	O ON SITE											

0.75%

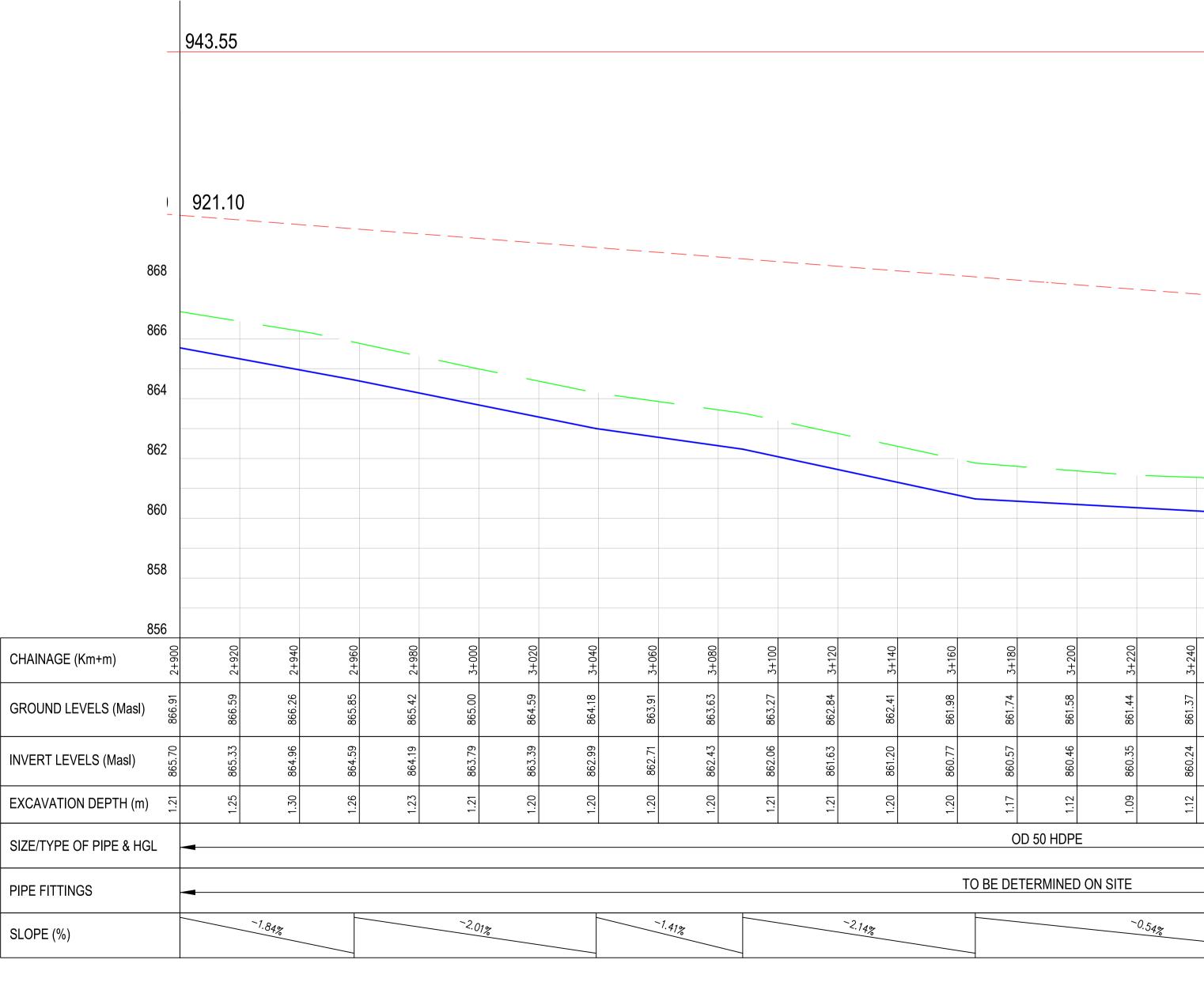






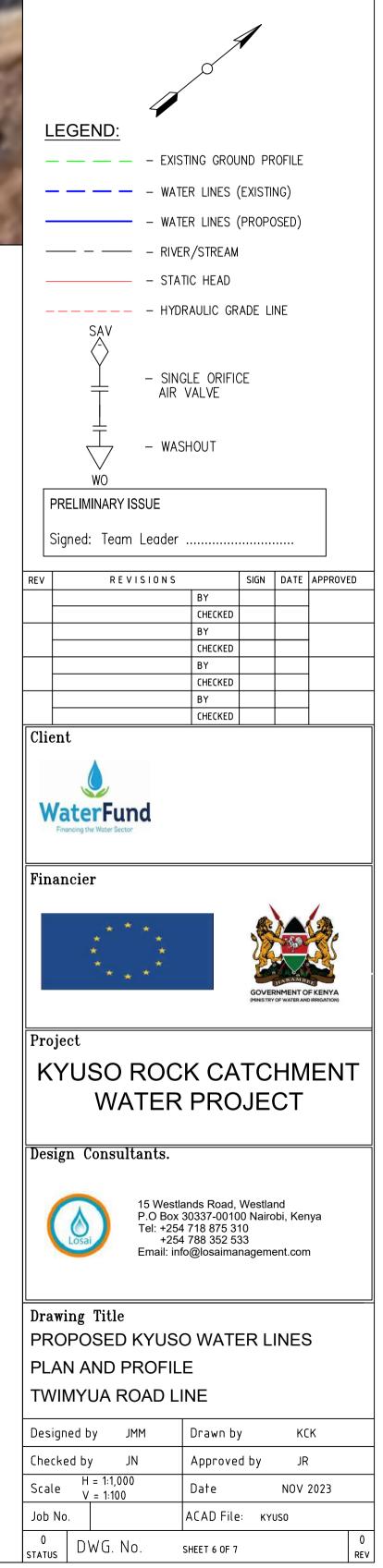
~2.54%	~4.62%	-1.30%	





												3+343			·		
												VO					
3+120	3+140	3+160	3+180	3+200	3+220	3+240	3+260	3+280	3+300	3+320	3+340	3+360	3+380	3+400	3+420	3+440	3+460
862.84	862.41	861.98	861.74	861.58	861.44	861.37	861.30	861.23	861.15	861.08	861.01	860.77	860.70	860.78	860.86	860.93	861.09
861.63	861.20	860.77	860.57	860.46	860.35	860.24	860.14	860.03	859.95	859.88	859.81	859.76	859.72	859.67	859.67	859.78	859.89
1.21	1.20	1.20	1.17	1.12	1.09	1.12	1.16	1.20	1.20	1.20	1.20	1.01	66.0	1.11	1.19	1.15	1.20
			OD	50 HDPE													
		T	O BE DETE	RMINED ON	N SITE												
	-2.14%				-0.5	4%				-0.36%			-0.23%			0.5	55%

- ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- 2. PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- . THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.



868

866

864

862

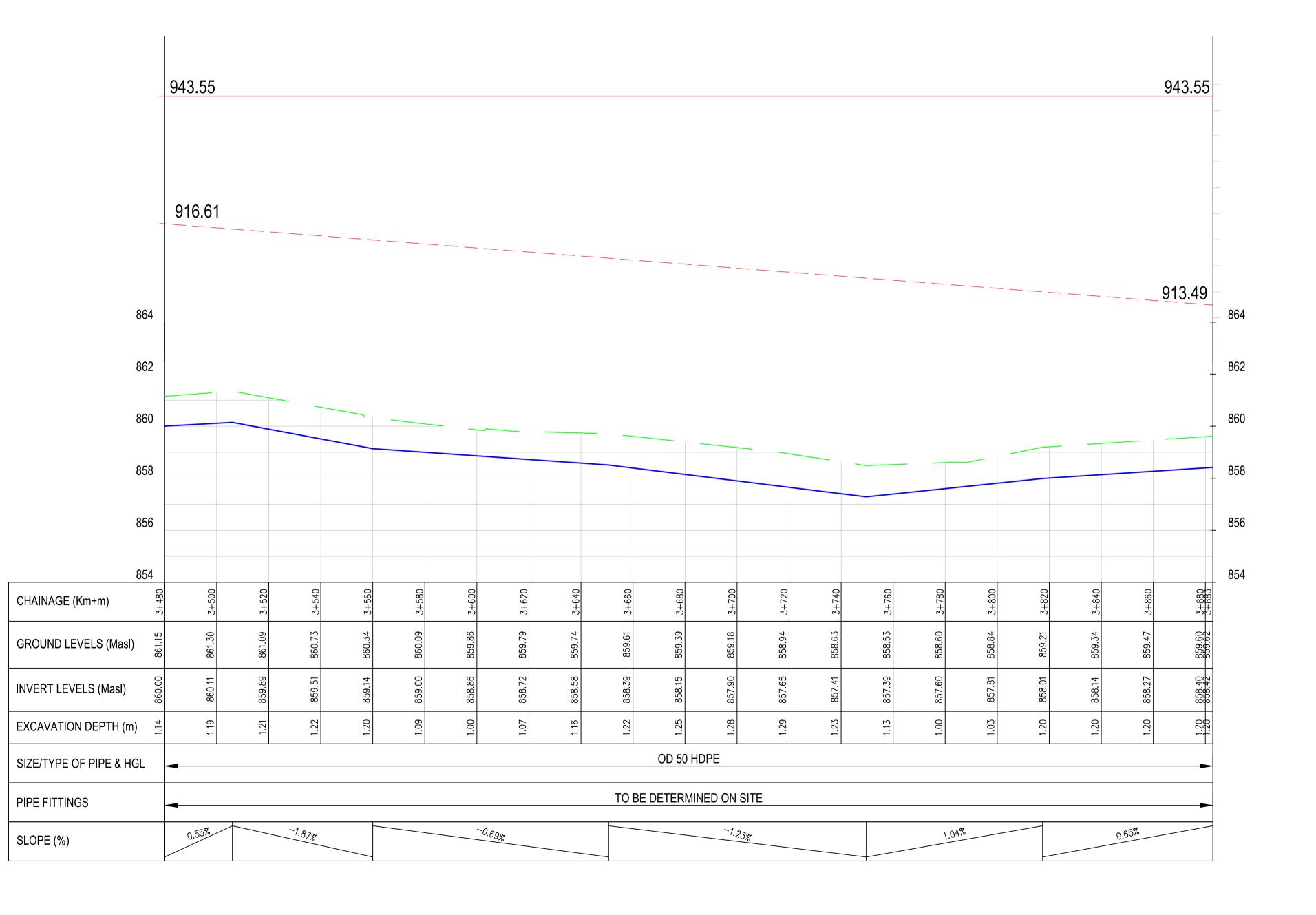
860

858

856

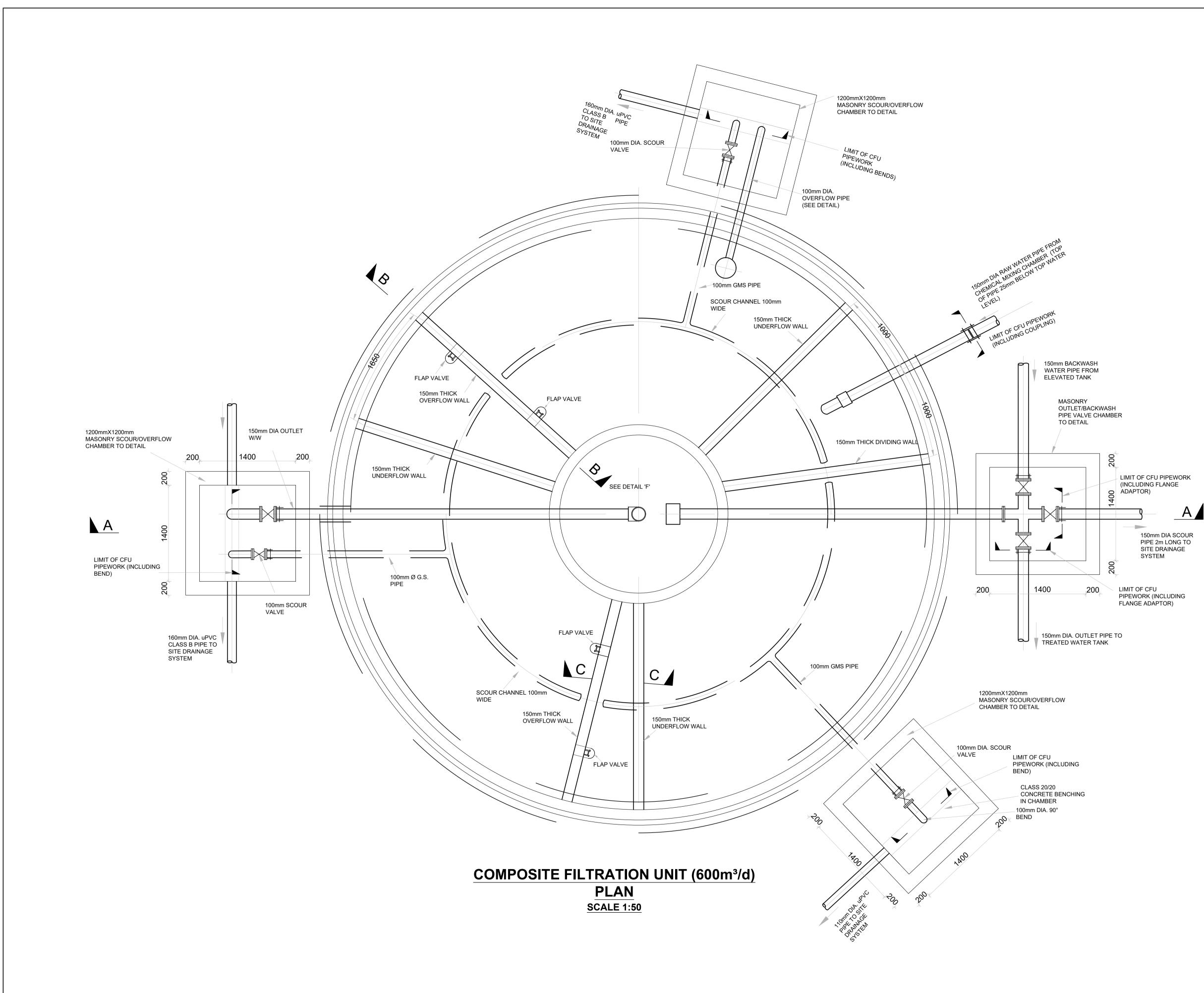
916.61



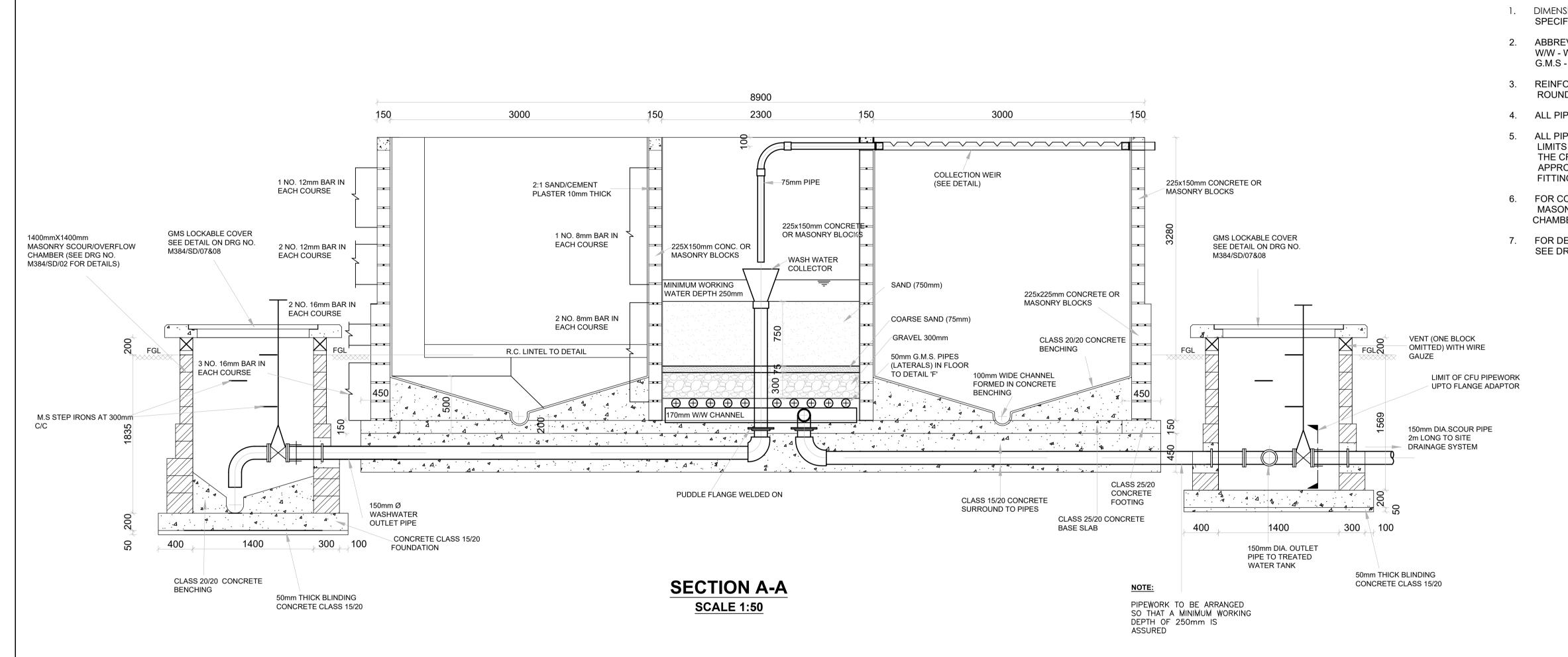


- . ALL DIMENSIONS/LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
- PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0m AND 1.2m FOR TRAFFICKED AREAS. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
- 3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH OTHER RELATED DRAWINGS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- 4. PRECISE ROUTES TO BE DETERMINED ON SITE.

LEGEND: — — — — – EXISTING GROUND PROFILE - - - - water lines (existing) — — — — — — HYDRAULIC GRADE LINE SAV - SINGLE ORIFICE AIR VALVE - WASHOUT WO PRELIMINARY ISSUE Signed: Team Leader REVISIONS SIGN DATE APPROVED REV BY CHECKED BY CHECKED BY CHECKED BY CHECKED Client WaterFund Financier GOVERNMENT OF KENYA (MINISTRY OF WATER AND IRREGATION) Project **KYUSO ROCK CATCHMENT** WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com Losai Drawing Title PROPOSED KYUSO WATER LINES PLAN AND PROFILE TWIMYUA ROAD LINE Designed by JMM Drawn by КСК Checked by JN Approved by JR Scale H = 1:1,000 V = 1:100 Date NOV 2023 ACAD File: KYUSO Јођ Мо. 0 STATUS DWG. NO. SHEET 7 OF 7 REV



1. ALL DIMENSIONS ARE IN OTHERWISE.		LINI ESS	NOTED	
		UNLLUU	NOTED	
				1
PRELIMINARY ISSUE				
Signed: Team Leader	r	••••	•••	
REV REVISIO	N S BY	SIGN [DATE API	PROV
	CHECKED			
	BY CHECKED			
	BY CHECKED			
	BY CHECKED			
Client				
WaterFund				
Financing the Water Sector				
Financing the Water Sector			-1	
Financing the Water Sector		×	1549	S
Financing the Water Sector				
Financing the Water Sector			MENT OF KE	
Financing the Water Sector		(MINISTRY OF)	WATER AND IRRIG	ATION)
Financier Financier Project KYUSO ROCK C			WATER AND IRRIG	ATION)
Financier Financier Project KYUSO ROCK C	CATCHN		WATER AND IRRIG	ATION)
Financing the Water Sector			WATER AND IRRIG	ATION)
Financier Financier Project KYUSO ROCK C			WATER AND IRRIG	ATION)
Financier Financier Project KYUSO ROCK (PF Design Consultants.	ROJECT			ATION)
Financier Financier Project KYUSO ROCK C PF Design Consultants.	ANDIECT Ands Road, Westla 30337-00100 Nair 718 875 310 788 352 533			ATION)
Financier Financier Project KYUSO ROCK C PF Design Consultants.	ROJECT			ATION)
Financier Financier Project KYUSO ROCK C PR Design Consultants.	ANDIECT Ands Road, Westla 30337-00100 Nair 718 875 310 788 352 533			ATION)
Financier Financier Project KYUSO ROCK C PF Design Consultants.	ANDIECT ands Road, Westla 30337-00100 Nair 718 875 310 788 352 533 o@losaimanagem			ATION)
Financier Financier Project Project KYUSO ROCK C PR Design Consultants. 15 Westla P.O Box 3 Tel: +254 Email: info Drawing Title	ANDIECT			ATION)
Financier Financier Financier Project KYUSO ROCK C PR Design Consultants. 15 Westla P.O Box 3 Tel: +254 +254 Email: infe Drawing Title KYUSO LAYOUT F	ANDIECT	and obi, Kenya eent.com		ATION)
Financier Financier Project KYUSO ROCK O PF Design Consultants. 15 Westla P.O Box 3 Tel: +254 +254 Email: info Drawing Title KYUSO LAYOUT F TREATMENT WOF COMPOSITE FILTI	ROJECT ands Road, Westla 30337-00100 Nair 718 875 310 788 352 533 o@losaimanagerr PLAN RKS RATION	and obi, Kenya eent.com		
Financier Financier Financier Project RYUSO ROCK C PR Design Consultants. 15 Westla P.O Box 3 Tel: +254 +254 Email: infe Drawing Title KYUSO LAYOUT F TREATMENT WOF	ANDIECT	and obi, Kenya eent.com		
Financier Financier Financier Project KYUSO ROCK (C PR Design Consultants. 15 Westla P.O Box (3 Tel: +254 +254 Email: info Drawing Title KYUSO LAYOUT F TREATMENT WOF COMPOSITE FILTI Designed by JMM	ROJECT	UNIT		



MATERIAL	DIAMETER (mm)	DEPTH IN mm	LOCATION
GRAVEL	38-20	75	BOTTOM
	20-12	75	n
	12-5	75	n
	5-2	75	
COARSE SAND EFFECTIVE SIZE	1.0	75	MIDDLE
SAND EFFECTIVE SIZE	0.5		
UNIFORMITY COEFFICIENT	1.5	750	ТОР
TOTAL THICKNES	S OF FILTER BED	1125	

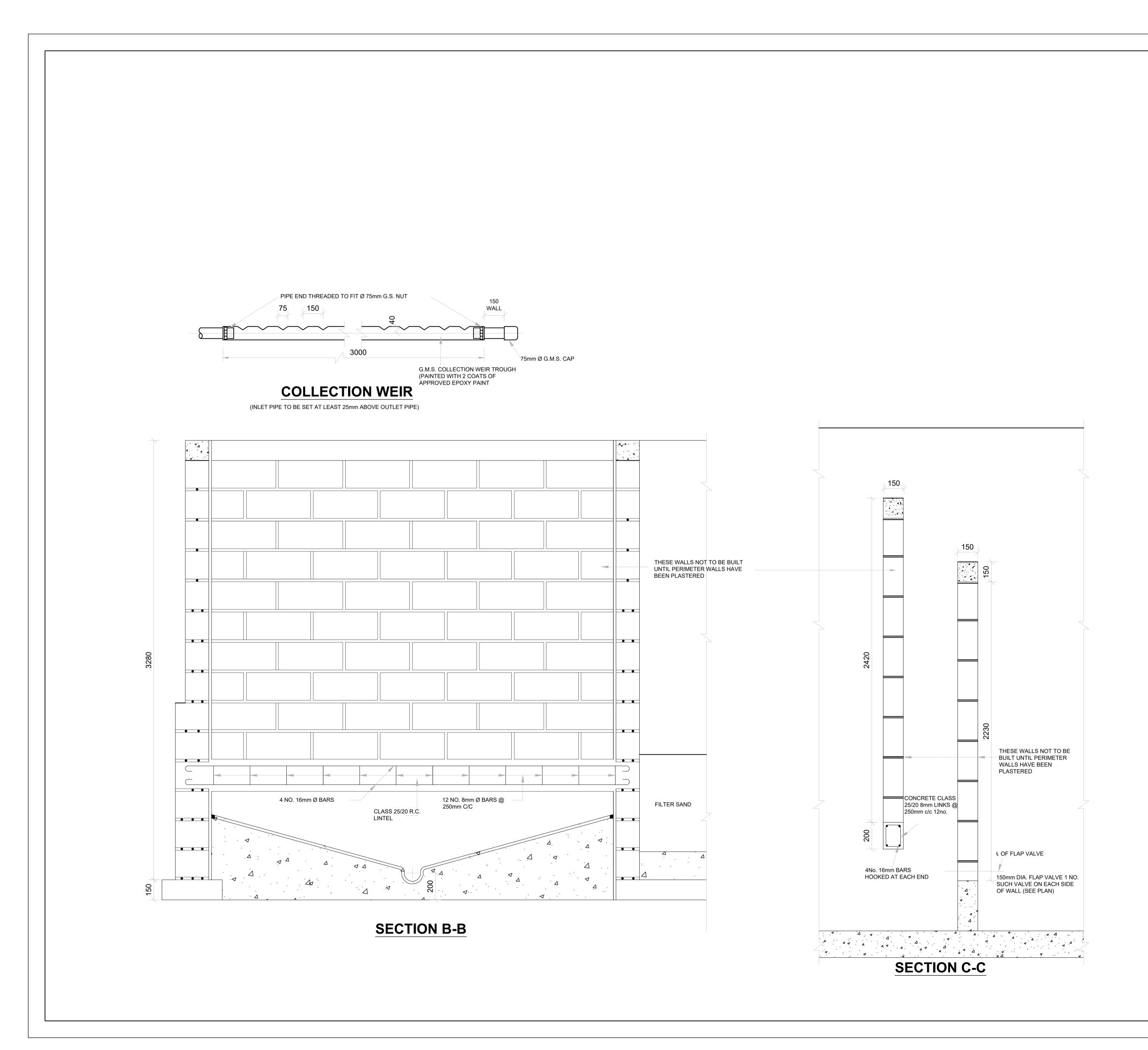
FILTER MEDIA DETAILS

DETAILS OF LATERALS

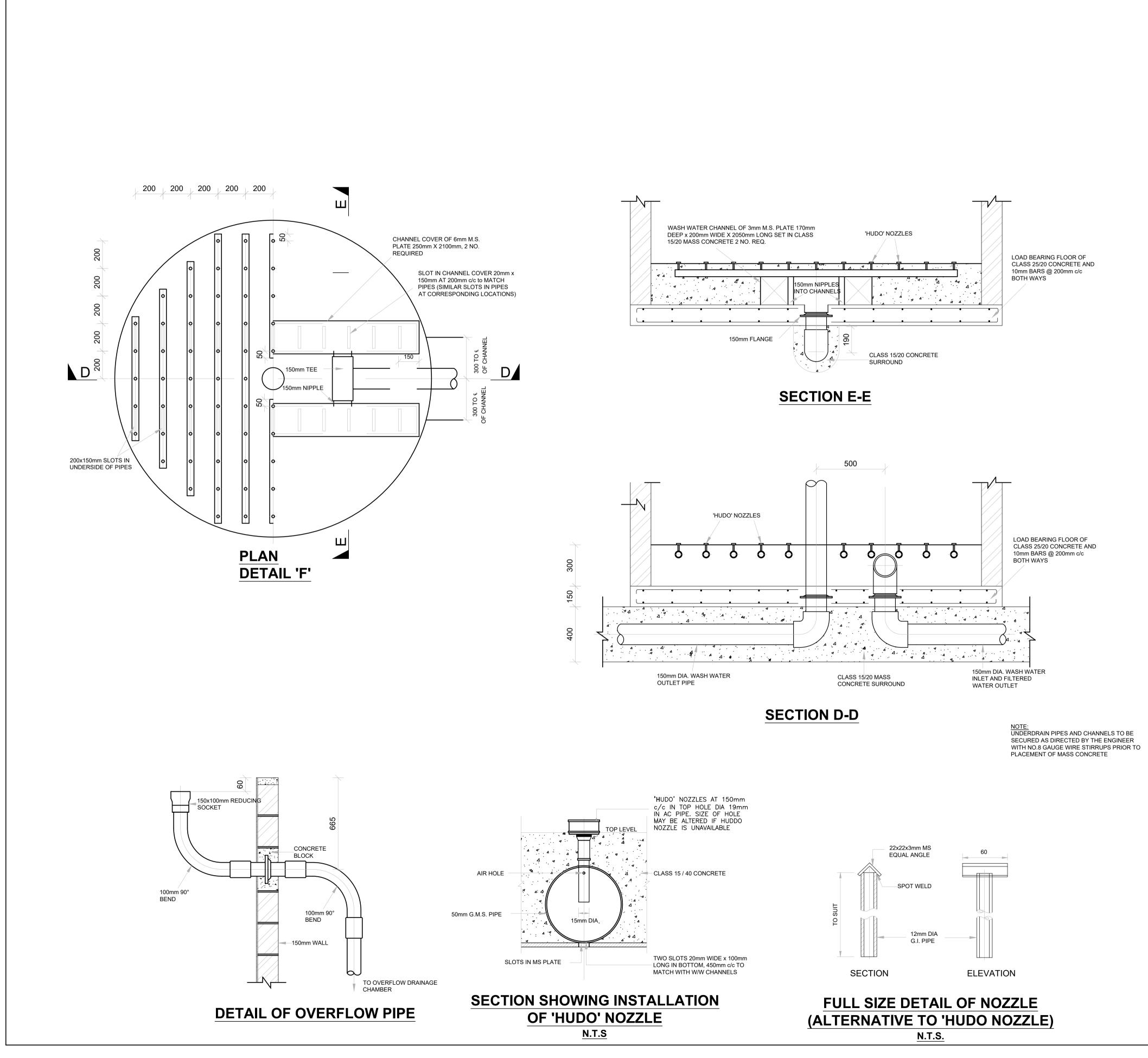
OVERALL LENGTH	NO. OF HOLES PER PIPES	NO. REQUIRED
900	5	4
1300	7	2
1700	9	2
2100	11	4

	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
ons in mm unless otherwise Ied	
'IATIONS; 'ASHWATER GALVANISED MILD STEEL	
RCEMENT BARS ARE MILD STEEL BARS TO B.S. 4449	
E DIAMETERS ARE NOMINAL SIZES	
EWORK WITHIN THE CFU UPTO THE SHOWN TO BE QUANTIFIED WITH	
J PIPES AND FITTINGS TO BE /ED LINED FERROUS PIPES AND S	
NSTRUCTION DETAILS OF RY	
RS SEE DRG NO. M384/SD/02	
TAILS OF GMS LOCKABLE COVERS G NO. M384/SD/07&08	
	PRELIMINARY ISSUE
	Signed: Team Leader
	REV REVISIONS SIGN DATE APPROVED BY BY
	CHECKED BY
	CHECKED BY
	CHECKED
	CHECKED
	CHECKED Client
	Client
	Client WaterFund Financing the Water Sector
	Client WaterFund
	Client WaterFund Financing the Water Sector
	Client WaterFund Financing the Water Sector
	Client WaterFund Financing the Water Sector
	Client WaterFund Financing the Water Sector Financier Client Financier GOVERNMENT OF KENYA
	Client WaterFund Financing the Water Sector Financier Covernment of Kenya GOVERNMENT OF KENYA COVERNMENT OF KENYA
	Client WaterFund Financing the Water Sector Financier Financier Construction of the Water Sector Financier Financier Financier Financier Financier Financier Financier Financier Financier Financier Financier Financier Financier
	Client WaterFund Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT
	Client Client Financier Financier Project KYUSO ROCK CATCHMENT WATER
	Client Client Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenva
	Client Client Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland
	Client Client Client Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Te: +254 718 875 310 +254 788 352 533
	Client Client Client Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Te: +254 718 875 310 - +254 718 875 233
	Client Client Financier Froject Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 313 Errail: info@losaimanagement.com Drawing Title KYUSO LAYOUT PLAN
	Client Client Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. IS Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 718 852 533 Email: info@losaimanagement.com Drawing Title KYUSO LAYOUT PLAN TREATMENT WORKS
	Client Client Financier Financier Project Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com Drawing Title KYUSO LAYOUT PLAN TREATMENT WORKS COMPOSITE FILTRATION UNIT
	Client Client Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland PROJECT 15 Westlands Road, Westland PROJECT 15 Westlands Road, Westland PROJECT Design Consultants. Drawing Title KYUSO LAYOUT PLAN TREATMENT WORKS COMPOSITE FILTRATION UNIT Designed by JMM Drawn by KCK
	Client Financier Froject Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairob, Kenya Tel: +254 718 875 310 +254 788 872 533 Email: info@losaimanagement.com Drawing Title KYUSO LAYOUT PLAN TREATMENT WORKS COMPOSITE FILTRATION UNIT Designed by JMM Drawn by KCK Checked by JN Approved by JR could H = 1:1,000 Double Amount of the course
	Client Client Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland P.O Box 3037-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 718 875 2533 Email: info@losaimanagement.com Drawing Title KYUSO LAYOUT PLAN TREATMENT WORKS COMPOSITE FILTRATION UNIT Designed by JMM Drawn by KCK Checked by JN Approved by JR

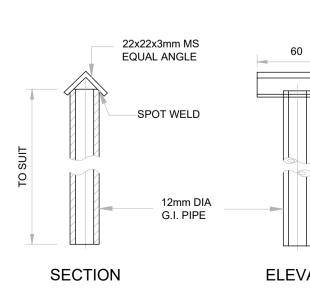
NOTES



	ΓES						
1.	IES ALL DIMENSIONS OTHERWISE.	ARE IN	1 M	ILLIMETERS	UNLES	S NOT	ED
Γ	PRELIMINARY IS	SUE					
	Signed: Team		er.				
	REVI				SIGN	DATE	
		310		BY CHECKED	31011	DAIL	
				BY CHECKED			
				BY CHECKED			
				BY CHECKED			
Clie	ent						
	٨						
V	VaterFun Financing the Water Sector	d					
-ino	ancier						1
	***	**					Ac
	- ¹ *	**			2		
						OF WATER AN	
^{>} ro	ject						
K١	/USO RO					IT W	/ATER
		Pl	20	DJECT			
Des	sign Consultai	nts.					
		45 10/	1		le ce el		
		P.O Box Tel: +25	: 303 4 71	s Road, West 37-00100 Nai 8 875 310	irobi, Ker	ya	
	Losal			8 352 533 Iosaimanager	nent.com	1	
	wing Title 'USO LAYC		Ы	AN			
СС	OMPOSITE	FILT	R	ATION	UNI	Г	
Des	signed by J	MM		Drawn	by	K	СК
	ecked by JI H = 1:	1,000		Approv	ed by		
	$\frac{\text{ale}}{\text{V}} = \frac{1}{1:1}$	100		Date ACAD F	ile:		0 2023
		No.	′				0

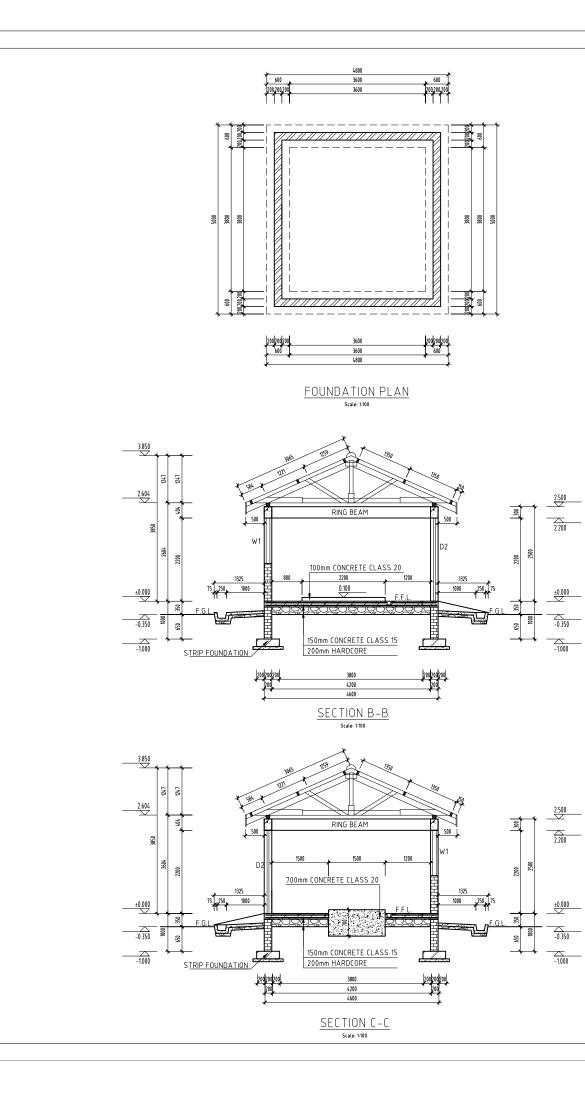


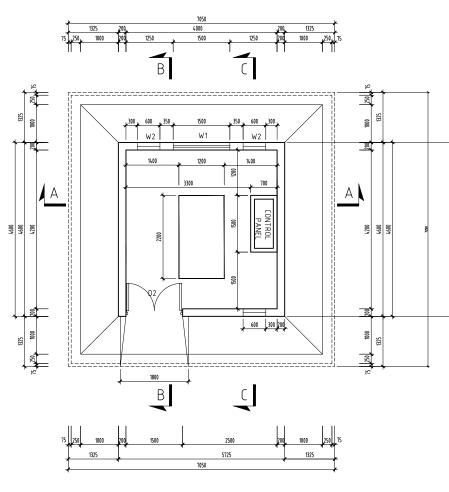




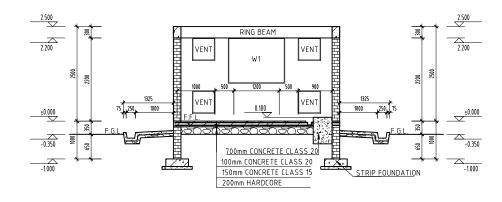
<u>N</u>	OTES
1.	DIMENSIONS IN SPECIFIED
2.	ABBREVIATION W/W - WASHWA G.M.S - GALVAN

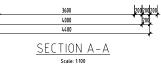
	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED
	OTHER₩ISE.
I UNLESS OTHERWISE	
2	
D MILD STEEL	
	PRELIMINARY ISSUE
	Signed: Team Leader
	REVISIONS SIGN DATE APPROVED
	BY
	CHECKED BY
	CHECKED
	CHECKED BY
	СНЕСКЕД
	Client
	Client
	Client WaterFund Financing the Water Sector
	WaterFund Financing the Water Sector
	WaterFund
	WaterFund Financing the Water Sector
	WaterFund Financing the Water Sector
	Financing the Water Sector
	Financing the Water Sector
	<image/> <section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header>
	<image/> <section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header>
	<image/> <section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header>
	<image/> <section-header><section-header><section-header><section-header><section-header><section-header><image/></section-header></section-header></section-header></section-header></section-header></section-header>
	<image/>
	<image/> <section-header><section-header><section-header><section-header><image/><image/><image/><image/></section-header></section-header></section-header></section-header>
	<image/>
	<image/>
	<image/> Financier Image: Construction of the second state of the sec
	<image/> <section-header><section-header><section-header><image/><image/><image/><image/><section-header><section-header><image/><section-header><image/><section-header><image/></section-header></section-header></section-header></section-header></section-header></section-header></section-header>
	<image/> <section-header><section-header><section-header><image/><image/><image/><image/><section-header><section-header><section-header><section-header><image/><section-header><text></text></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>
	<image/> <section-header><section-header><section-header><image/><image/><image/><image/><section-header><image/><section-header><image/><section-header><image/></section-header></section-header></section-header></section-header></section-header></section-header>
	<image/>
	<image/>
	Financier Froject Froject Correct Correct Consultants. Design Consultants. Project Statistic Consultants. Design Consultants. Project Statistic Consultants. Project Project Statistic Consultants. Project Pr
	<image/>





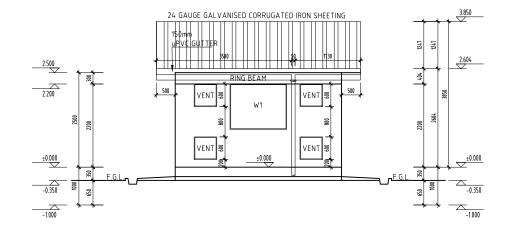
FLOOR PLAN Scale: 1:100



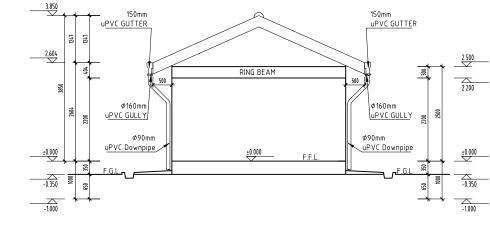


200200200 200

1. ALL DIME OTHERWIS		ARE IN MI	LLIMETERS	UNLES	S NOT	ED	
PRELIMIN	NARY ISS	SUE					
Signed:	Team l	_eader .					
EV	REVIS			SIGN	DATE	APPRO	/FD
	REVIS	STUNS	BY	SIGN	DATE	APPRO	ED
			CHECKED BY				
			CHECKED BY				
1			CHECKED				
			BY				
Client							
Client		_	BY				
Client	y		BY				
Client	Fun	d	BY				
	Fune	d	BY				
Water	Fune	d	BY				
Water	Fund	d	BY			(
Water	Fune Water Sector	d	BY				
Water	Func	d	BY				
Water Franking the T	Fund Water Sector	d	BY	GOVER		F KENYA KENYA KENYA	
Financier	Fund	d * * *	BY	GOVER		F KENYA	
Financier	* * *	* * *	BY CHECKED	GOVER	OF WATER AND	DIRBIGATION	T
Financier Project KYUS	Water Sector		BY CHECKED		HM	DIRBIGATION	T
Financier Project KYUS	SO R	XOCP			HM	DIRBIGATION	T
Financier Project KYUS	SO R	XOCP			HM	DIRBIGATION	T
Financier Project KYUS	SO R WAT	ROCP TER	BY CHECKED	JE		EN	T
Financier Project KYUS	SO R WAT	ROCP TER	BY CHECKED	JE		EN	T
Financier Project KYUS	60 R WAT	* * * * * * * * * * * * * * * * * * *		Westla 0 Nairc	HM CT nd bi, Ken	IEN yya	T
Financier Project KYUS	60 R WAT	* * * * * * * * * * * * * * * * * * *	BY CHECKED	Westla 0 Nairc	HM CT nd bi, Ken	IEN yya	T
Financier Project KYUS Design Cor	600 R WAT	* * * * * * * * * * * * * * * * * * *	BY CHECKED	Westla 0 Nairc	HM CT nd bi, Ken	EN	
Processor Project KYUS Design Col Orawing Ti DETAILE	GOR BOR SOR SOR SOR SOR SOR SOR SOR SOR SOR S	ROCH FER 5 Westlar 20 Box 37 18: 5 Westlar 18: 18: 19: 19: 19: 19: 19: 19: 19: 19: 19: 19	BY CHECKED K CAA PRC 0337-001/18 075-3 778 952-5 778 952-5 778 952-5 778 952-5	Westla 0 Nairc 10 13 nageme	HM CT nd bi, Ken	EN	T
Financier Froject KYUS Design Cor Design Cor Design Ti	GOR BOR SOR SOR SOR SOR SOR SOR SOR SOR SOR S	ROCH FER 5 Westlar 20 Box 37 18: 5 Westlar 18: 18: 19: 19: 19: 19: 19: 19: 19: 19: 19: 19	BY CHECKED K CAA PRC 0337-001/18 075-3 778 952-5 778 952-5 778 952-5 778 952-5	Westla 0 Nairc 10 13 nageme	HM CT nd bi, Ken	EN	T
Financier Froject KYUS Design Cor Design Cor Design Ti Drawing Ti DETAILE	GOR BOR SOR SOR SOR SOR SOR SOR SOR SOR SOR S	ROCH FER 5 Westlar 20 Box 37 18: 5 Westlar 18: 18: 19: 19: 19: 19: 19: 19: 19: 19: 19: 19	BY CHECKED K CAA PRC 0337-001/18 075-3 778 952-5 778 952-5 778 952-5 778 952-5	Westla 0 Nairc 10 13 nageme	HM CT nd bi, Ken	EN	
Financier Froject KYUS Design Cor Design Cor Design Ti Drawing Ti DETAILE	SOOR nsultant) 1 T E D DE DL RO	SOCH FER 5 Westlar 20 Box 31 20 Box	BY CHECKED K CAA PRC 0337-001/18 075-3 778 952-5 778 952-5 778 952-5 778 952-5	USE Westla No Nairco Nairco Nairco Nairco No Nairco Nair	HM CT nd bi, Ken	yya 1	T
Financier Financier Project KYUS Design Con Control Designed by Checked by	SOOR nsultant) 1 T E D DE DL RO	SOCH SOCH SOCH SOCH SOCH SOCH SOCH SOCH	BY CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED	Westla 0 Nairc 33 nageme HOU	HM CT nd bli, Ken ent.com	yya K	T

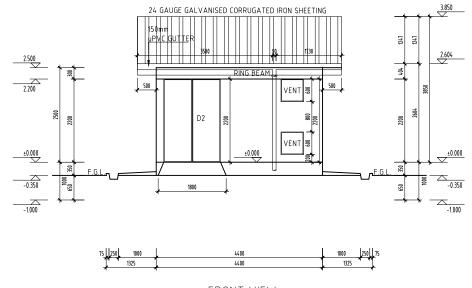






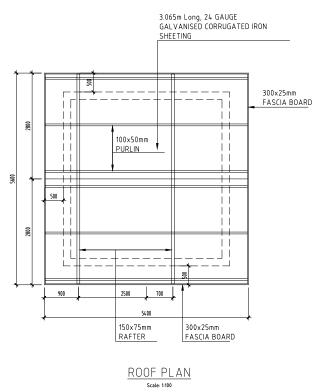


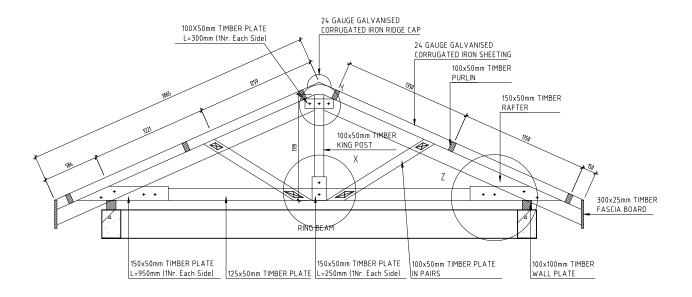
SIDE VIEW Scale: 1:100



FRONT VIEW Scale: 1:100

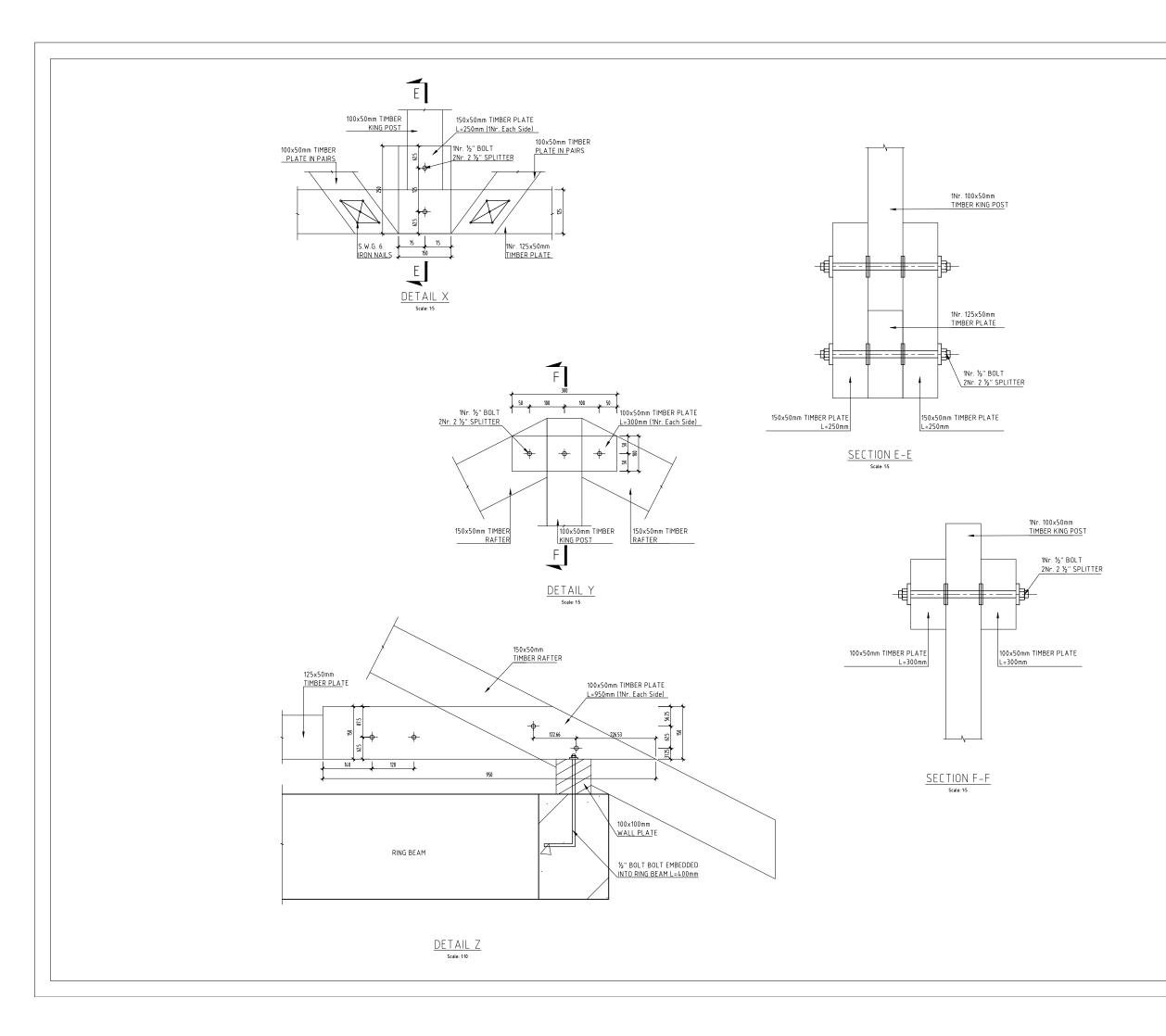
NOTES			
1. ALL DIMENSIONS ARE IN I OTHERWISE.	MILLIMETERS	UNLESS 1	NOTED
PRELIMINARY ISSUE Signed: Team Leader			
REV REVISIONS	BY CHECKED	SIGN DA	TE APPROVED
	CHECKED BY CHECKED		1
	BY		_
1			
Client	BY CHECKED		
Financier Project KYUSO ROC WATER Design Consultants.	CHECKED CHECKED CK CA 2 PRO	TCH JEC ⁻	T
Financier Froject KYUSO ROCC WATER Design Consultants. Exposed Design Consultants. Design Consultants.	CHECKED CHECKED CK CA 2 PRO	TCH JEC Vestland	MENT T
Financier Froject KYUSO ROCC WATER Design Consultants. 15 West PO Box PO BOX P	CHECKED CHECKE	Vestland) Nairobi, I 0 3 aagement.	MENT T Kenya com
Financier Froject KYUSO ROCC WATER Design Consultants.	CHECKED CHECKED CHECKED CK CA 2 PRO 30337-001 30337-001 30337-001 30337-001 2 PRO 2 PRO 1 2 PRO 1 PRO	TCH JEC Narobi, Narobi, 0 3 aggement.	MENT T Kenya com
Financier Froject KYUSO ROCC WATER Design Consultants. Design Consultants. 15 West P O Box P O	CHECKED CHECKE	TCH JEC Westland D Narrobi, 3 agement. HOUSE	MENT T Kenya com
Financier Froject KYUSO ROCC WATER Design Consultants. Design Consultants. Drawing Title DETAILED DESIGN CONTROL ROOM_ Designed by JMM Checked by JM	CHECKED CHECKE	Vestland D Nairobi, I 3 agement.o HOUSE	MENT T com E KCK JR DV 2023



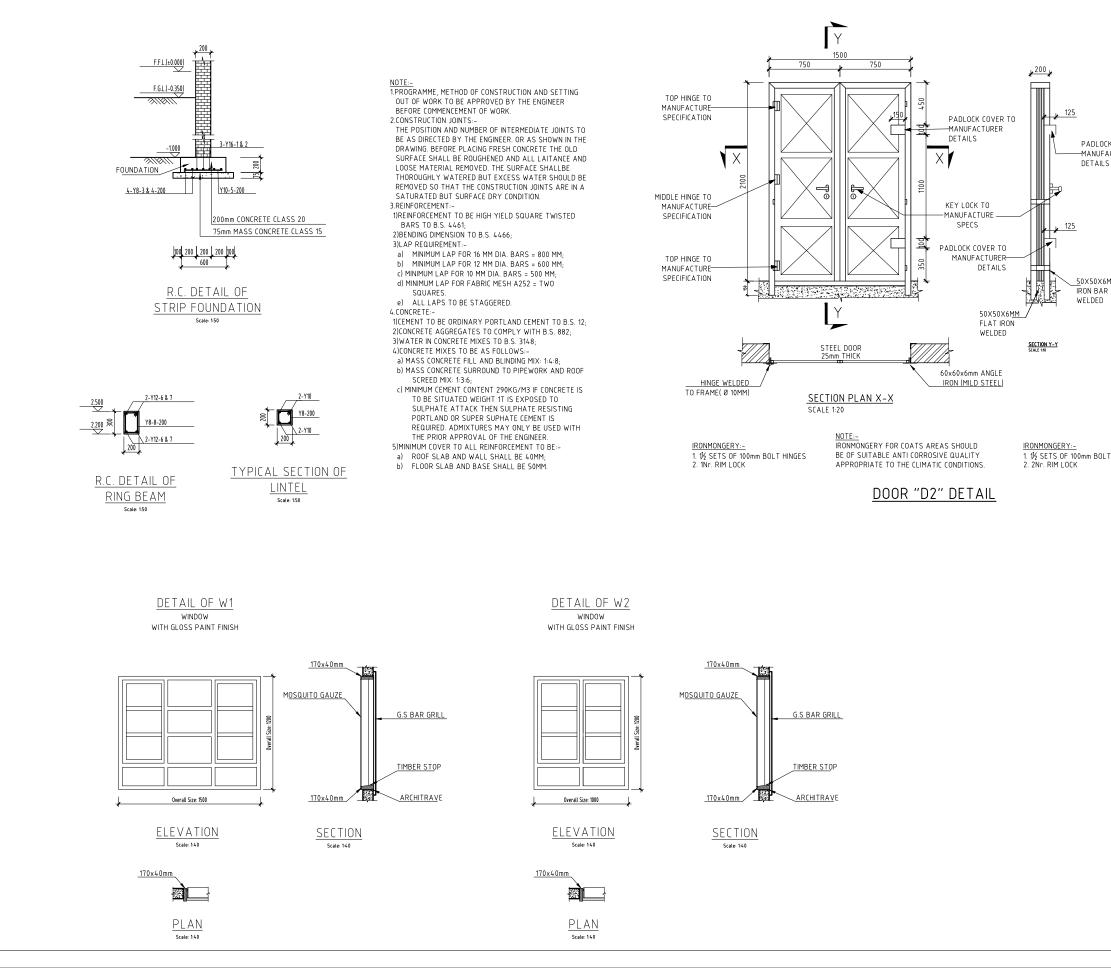


DETAIL OF ROOF Scale: 1:20

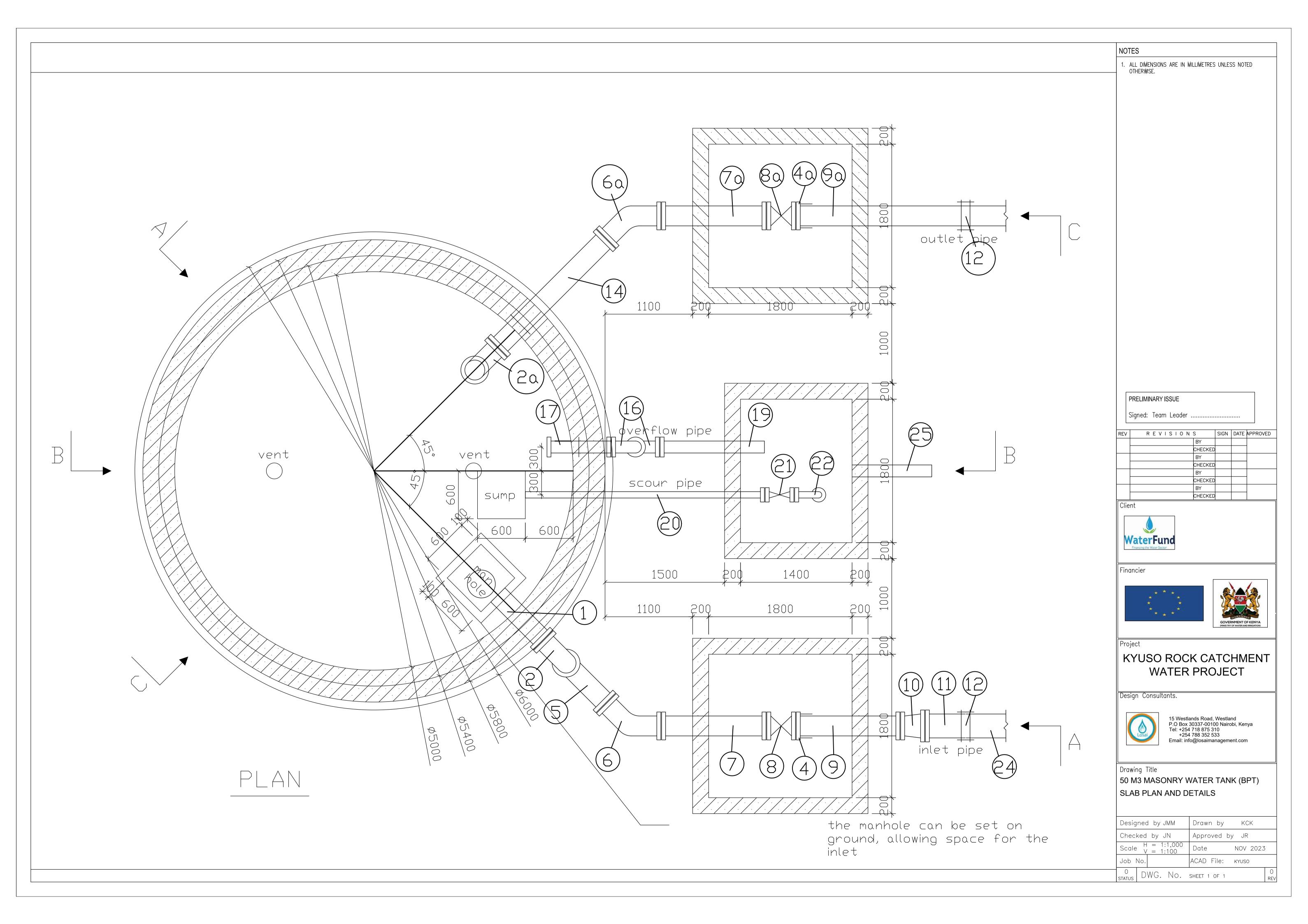
	1
NOTES 1. ALL DIMENSIONS ARE IN	MILLIMETERS UNLESS NOTED
OTHERWISE.	WILLIWETERS ONLESS NOTED
PRELIMINARY ISSUE	
Signed: Team Leade	r
REV REVISIONS	BY SIGN DATE APPROVED
	CHECKED BY
	CHECKED BY
	CHECKED BY
Client	CHECKED
WaterFund Financing the Water Sector	
Financier	
Tindicier	
217.15	
1. An	
	GOVERNMENT OF KENYA O'BINSTRY OF WATER AND RESOLUTION
Project	
	CK CATCHMENT
WATEF	R PROJECT
Design Consultants.	
P.O Box Tol: +20	tlands Road, Westland x 30337-00100 Nairobi, Kenya
Losai +25 Email: i	54 718 875 310 54 788 352 533 nfo@losaimanagement.com
Drawing Title	
DETAILED DESIG	
CONTROL ROOM	_PUMP HOUSE
Deciseed by 1974	Drava by KCK
Designed by JMM Checked by JN	Drawn by KCK Approved by JR
Scale V = 1:100	Date NOV 2023
Job No.	ACAD File: KYUSO
0 DWG. No.	SHEET 1 OF 1 0 REV

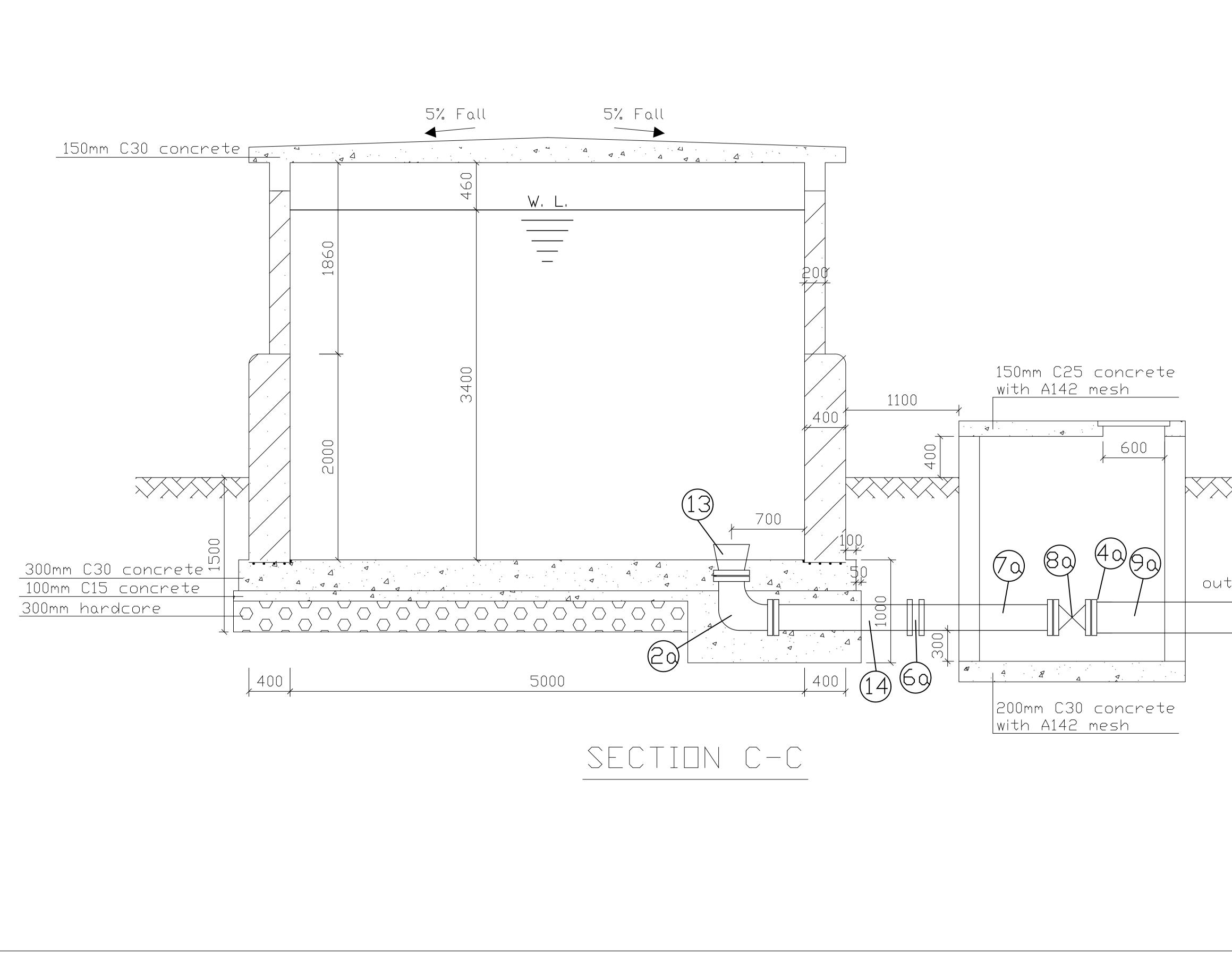


	1
NOTES 1. ALL DIMENSIONS ARE IN	MILLIMETERS UNLESS NOTED
OTHERWISE.	WILLIWETERS ONLESS NOTED
PRELIMINARY ISSUE	
Signed: Team Leade	r
REV REVISIONS	BY SIGN DATE APPROVED
	CHECKED BY
	CHECKED BY
	CHECKED BY
Client	CHECKED
WaterFund Financing the Water Sector	
Financier	
Tindicier	
217.15	
1. An	
	GOVERNMENT OF KENYA O'BINSTRY OF WATER AND RESOLUTION
Project	
	CK CATCHMENT
WATEF	R PROJECT
Design Consultants.	
P.O Box Tol: +20	tlands Road, Westland x 30337-00100 Nairobi, Kenya
Losai +25 Email: i	54 718 875 310 54 788 352 533 nfo@losaimanagement.com
Drawing Title	
DETAILED DESIG	
CONTROL ROOM	_PUMP HOUSE
Deciseed by 1974	Drava by KCK
Designed by JMM Checked by JN	Drawn by KCK Approved by JR
Scale V = 1:100	Date NOV 2023
Job No.	ACAD File: KYUSO
0 DWG. No.	SHEET 1 OF 1 0 REV

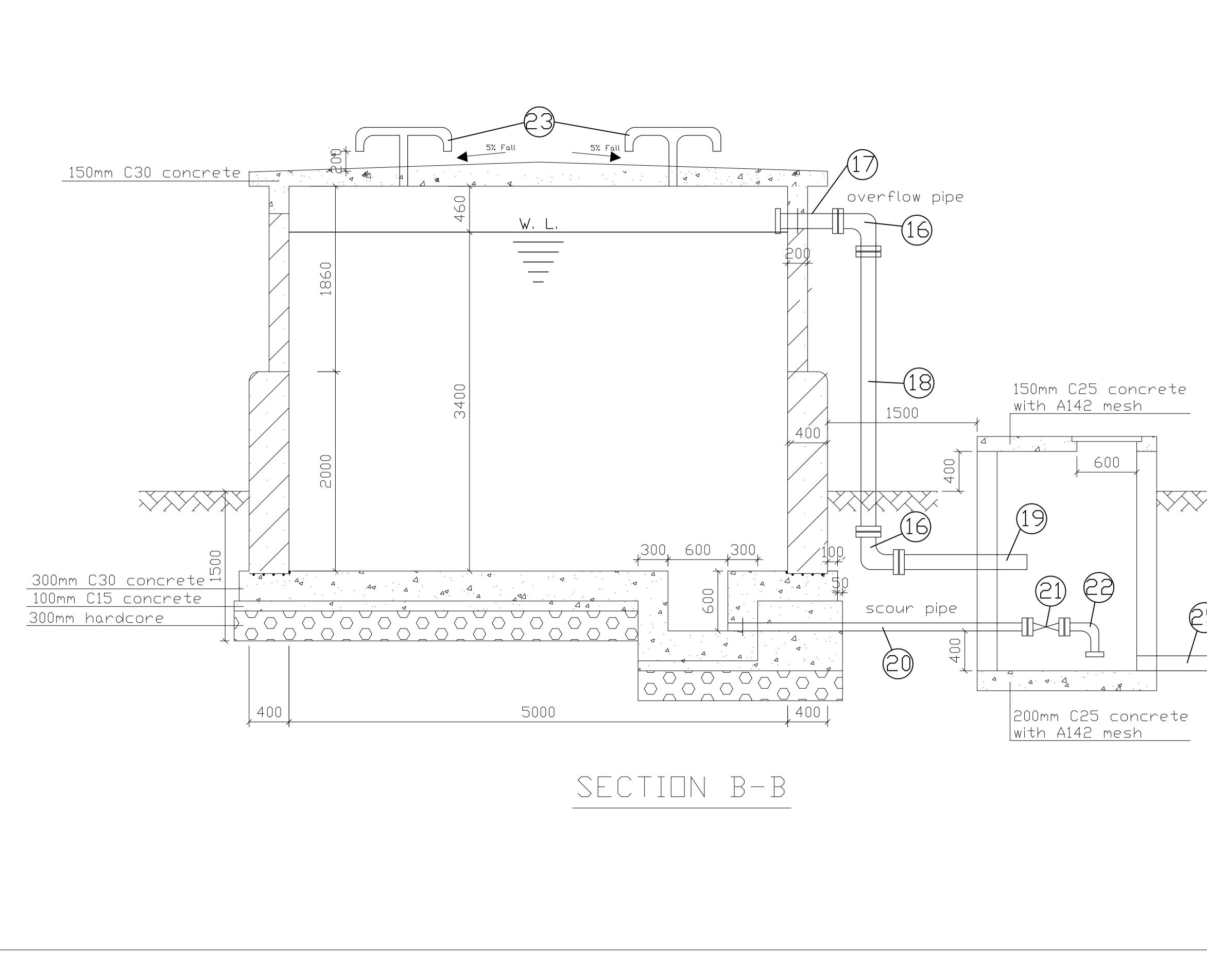


	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED
	OTHERWISE.
COVER TO TURER	
IORER	
1	
1	
	PRELIMINARY ISSUE
	Signed: Team Leader
	REV REVISIONS SIGN DATE APPROVED
	BY CHECKED
	BY
HINGES	CHECKED BY
	CHECKED
	BY
	BY CHECKED
	Client
	CHECKED
	Client
	Client
	Client WaterFund Proveng to Water Stater
	Client WaterFund Proveng to Water Stater
	Client
	Client WaterFund Proveng to Water Stater
	Client Client WaterFund Financier Constant of acceleration Constant of acceleration Constant of accelerations Constant of accelerations
	Client Client Financier Financier Project
	Client Client Financier Froject KYUSO ROCK CATCHMENT
	Client Client Financier Financier Project
	Client Client Financier Froject KYUSO ROCK CATCHMENT
	Client Client Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants.
	Client Client Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants.
	Client Client Client Client Client Financier Froject Froject KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tei: +224 718 352 533
	Client Client Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants.
	CIERT CIERT CIERT Financier Froject Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westland Road, Westland P.O BOX 30337-00100 Nairobi, Kenya TE: 224 718 522 533 TE: 224 718 52 53 TE: 224 718 52 55 TE: 224
	Client Client Financier Froject Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland Pro 287 178 975 310 The 274 718 975 332 Email: Info@losalimanagement.com
	Client Client
	Client Client Financier Froject Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland Pro 287 178 975 310 The 274 718 975 332 Email: Info@losalimanagement.com
	Client Client
	Client Client Client Financier Froject Project MYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. IS Westlands Road, Westland Proyect Design Consultants. IS Westlands Road, Westland Proyect Design Consultants. The 224 718 325 233 Email: info@losaimanagement.com
	Client Cl
	Client Client Client Financier Froject Project MYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. 15 Westlands Road, Westland Proyect Design Consultants. The 244 718 875 310 247 478 335 223 Email: info@losaimanagement.com

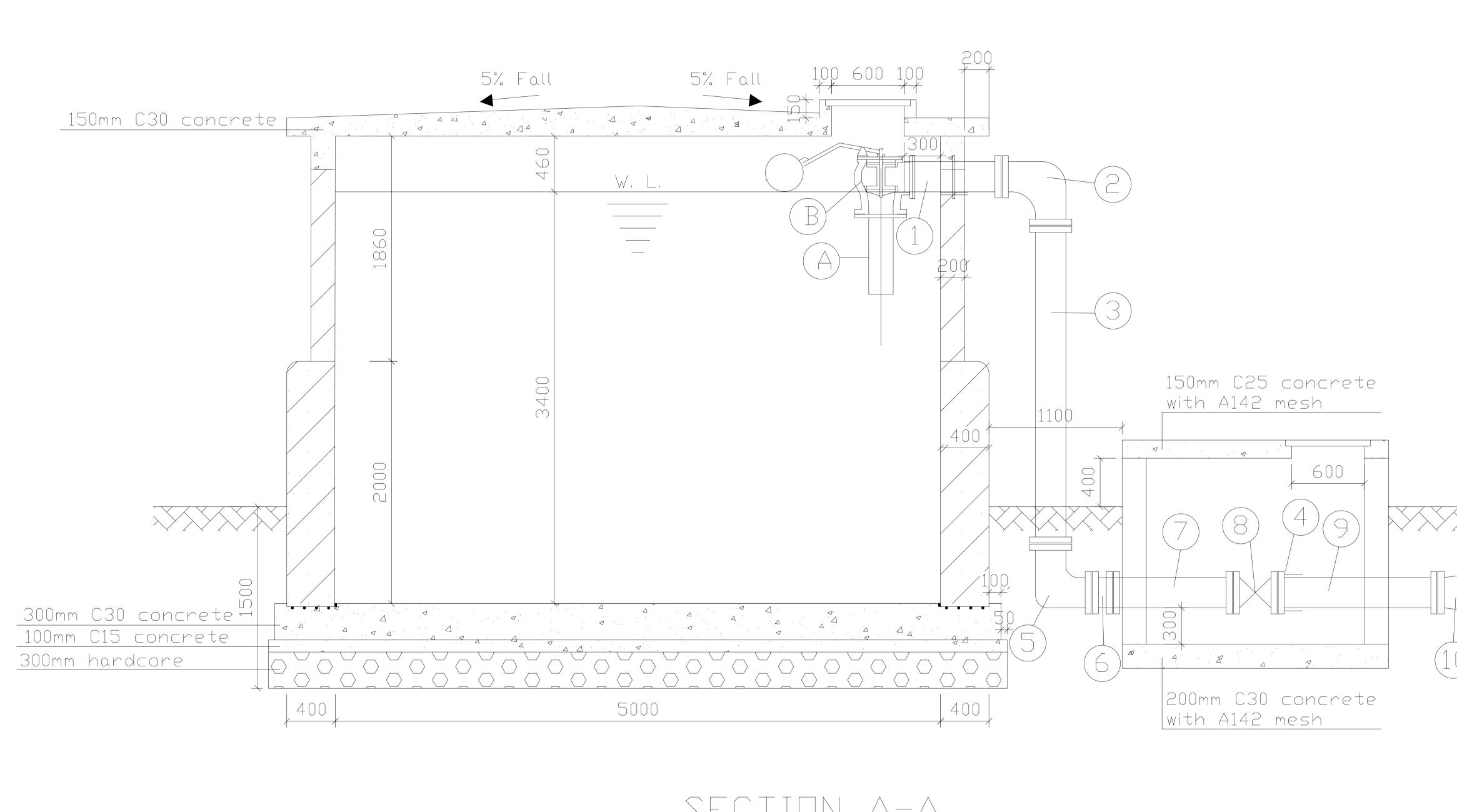




	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
	PRELIMINARY ISSUE Signed: Team Leader REV R E V I I OHECKED BY I I I I I OHECKED BY I
et pipe	<image/> Financier Image: Construction of the con
	TANK SECTION DETAILSDesigned by JMMDrawn by KCKDesigned by JMDrawn by KCKChecked by JNApproved by JRScale H = 1:1,000Date NOV 2023Job No.ACAD File: KYUSOJob No.ACAD File: KYUSO0 STATUSDWG. No. SHEET 1 OF 1



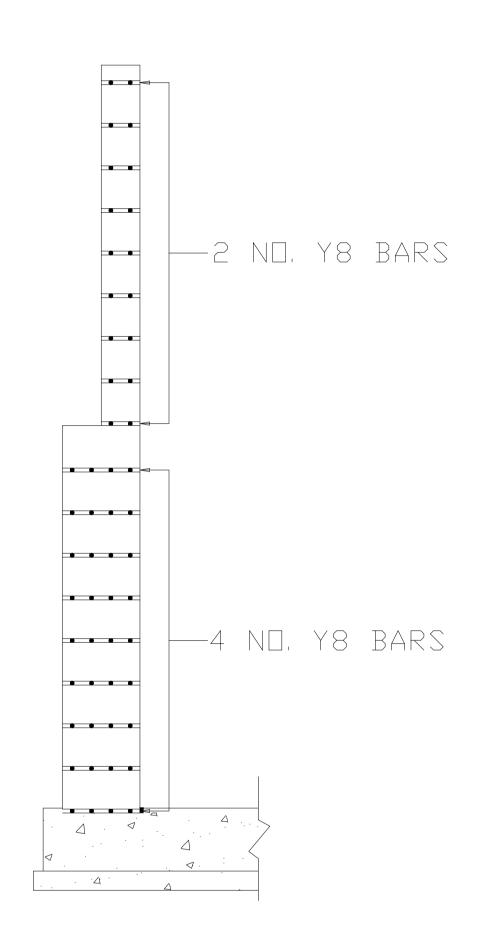
	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
	PRELIMINARY ISSUE Signed: Team Leader
	REV REVISIONS SIGN DATE APPROVED BY BY CHECKED CHECKED CHECKED BY BY CHECKED CHECKED CHECKED BY BY CHECKED CHECKED CHECKED CHECKED BY CHECKED CHECKED CHECKED BY BY CHECKED CHECKED CHECKED BY BY BY CHECKED CHECKED BY BY CHECKED CHECKED CHECKED BY BY CHECKED CHECKED CHECKED BY BY CHECKED CHECKED CHECKED BY BY BY CHECKED CHECKED BY BY BY CHECKED CHECKED BY BY BY CHECKED CHECKED CHECKED BY BY BY BY CHECKED CHECKED CHECKED BY BY BY BY BY CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHEC
×	Client WaterFund Financing the Water Sector
)	Financier
	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants.
	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com
	Drawing Title 50 M3 MASONRY WATER TANK (BPT) SECTION DETAILS Designed by JMM Drawn by KCK
	Designed by JMMDrawn byKCKChecked by JNApproved by JRScaleH = 1:1,000 V = 1:100DateNOV 2023



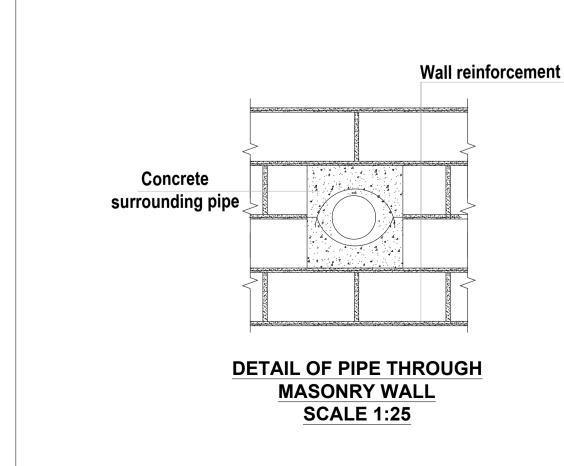
SECTION A-A

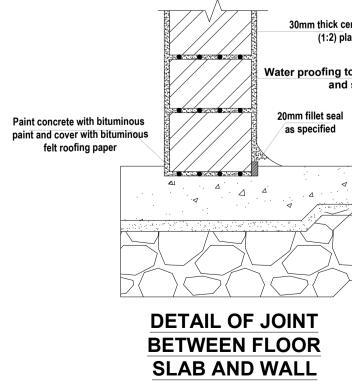
	NOTES 1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
	PRELIMINARY ISSUE Signed: Team Leader
	REV REVISIONS SIGN DATE APPROVED BY CHECKED END END END
	CHECKED BY CHECKED BY
	CHECKED BY CHECKED
	Client
nlet pipe	WaterFund Financing the Water Sector
	Financier
	COVERNMENT OF KENYA (MINIS TRY OF WATER AND IRROGATION)
	Project KYUSO ROCK CATCHMENT
	WATER PROJECT
	Design Consultants.
	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310
	+254 788 352 533 Email: info@losaimanagement.com
	Email: info@losaimanagement.com Drawing Title 50 M3 MASONRY WATER TANK (BPT) SECTION DETAILS Designed by JMM Drawn by KCK
	Email: info@losaimanagement.com Drawing Title 50 M3 MASONRY WATER TANK (BPT) SECTION DETAILS

ITEM		DESCRIPTION	DIA(mm)	LENGTH(mm)
	A	SINGLE FLANGED PIPE WITH PUDDLE FLANGED	50	L = 400
	В	FLANGED BEAT EQUILIBRIUM FLOAT VALVE	50	
	1	SINGLE FLANGED PIPE WITH CENTRAL PUDDLE FLANGE	50	L=800
	2	90° DOUBLE FLANGED BEND	50	400*400
	2a	90° DOUBLE FLANGED BEND	50	400*400
	3	DOUBLE FLANGED PIPE	50	L=2610
	4/4a	FLANGED ADAPTOR	50/50	
	5	90° DOUBLE FLANGED BEND	50	400*700
	6/6a	45° DOUBLE FLANGED BEND	50/ 50	400*400
	7/7a	DOUBLE FLANGED PIPE	50/ 50	L=1310
	8/8a	ALL FLANGED GATE VALVE	50/ 50	L=360
	9/9a	SINGLE FLANGED PIPE	50/ 50	L=1250
	10	DOUBLE FLANGED CONCENTRIC TAPER	50*50	L=300
	11	SINGLE FLANGED PIPE	50	L=500
	12	V.J. STEPPED COUPLING	50/50	
	13	SINGLE FLANGED BELL MOUTH	50	L=300
	14	DOUBLE FLANGED PIPE	50	L=1920
	16	90° DOUBLE FLANGED BEND	50	300*300
	17	DOUBLE FLANGED PIPE WITH PUDDLE FLANGED	50	L=200
	18	DOUBLE FLANGED PIPE	50	L=1980
	19	SINGLE FLANGED PIPE	50	L=1300
	20	SINGLE FLANGED PIPE WITH PUDDLE FLANGED	50	L=3000
	21	ALL FLANGED GATE VALVE	50	L=360
	22	90° DOUBLE FLANGED BEND	50	300*300
	23	G.S. VENT	100	
	24	HDPE PIPE	50	
	25	UPVC PIPE	50	



SECTION THRO' WALL





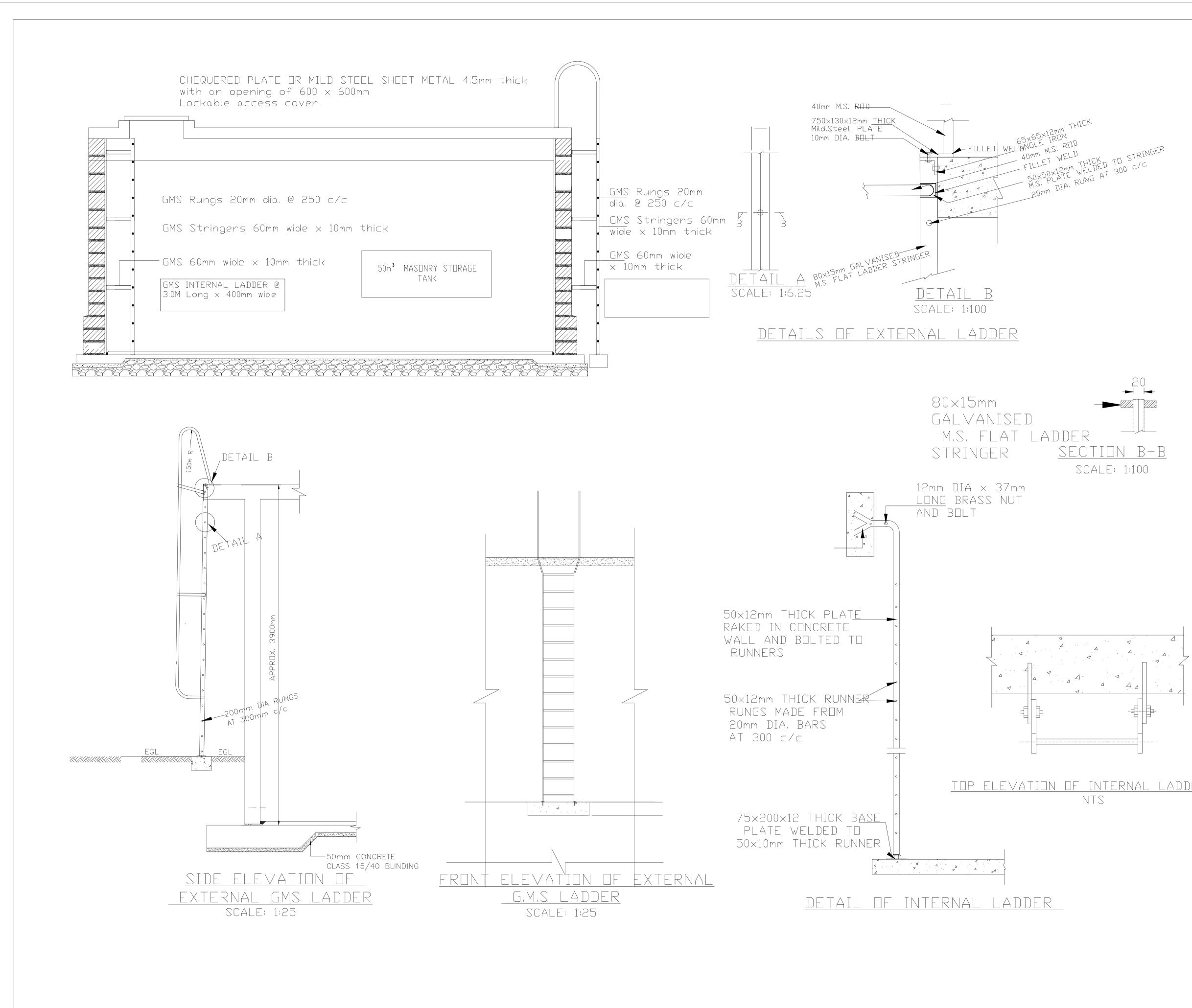
SCALE 1:10

BPT PIPEWORK SCHEDULE

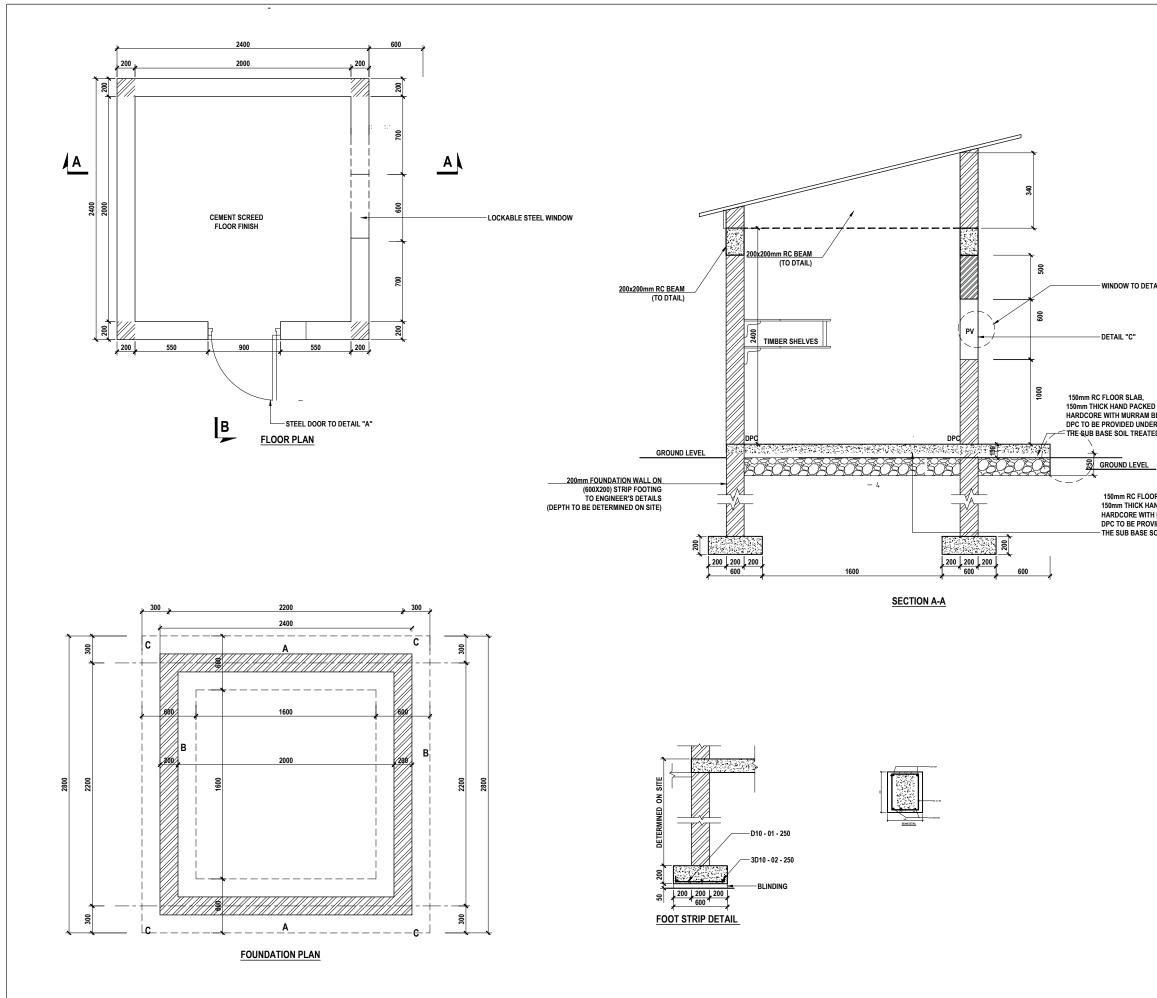
30mm thick cement/sand (1:2) plaster

Water proofing to all internal surfaces shall be approved by Engineer and shall be applied by Specialist contractor

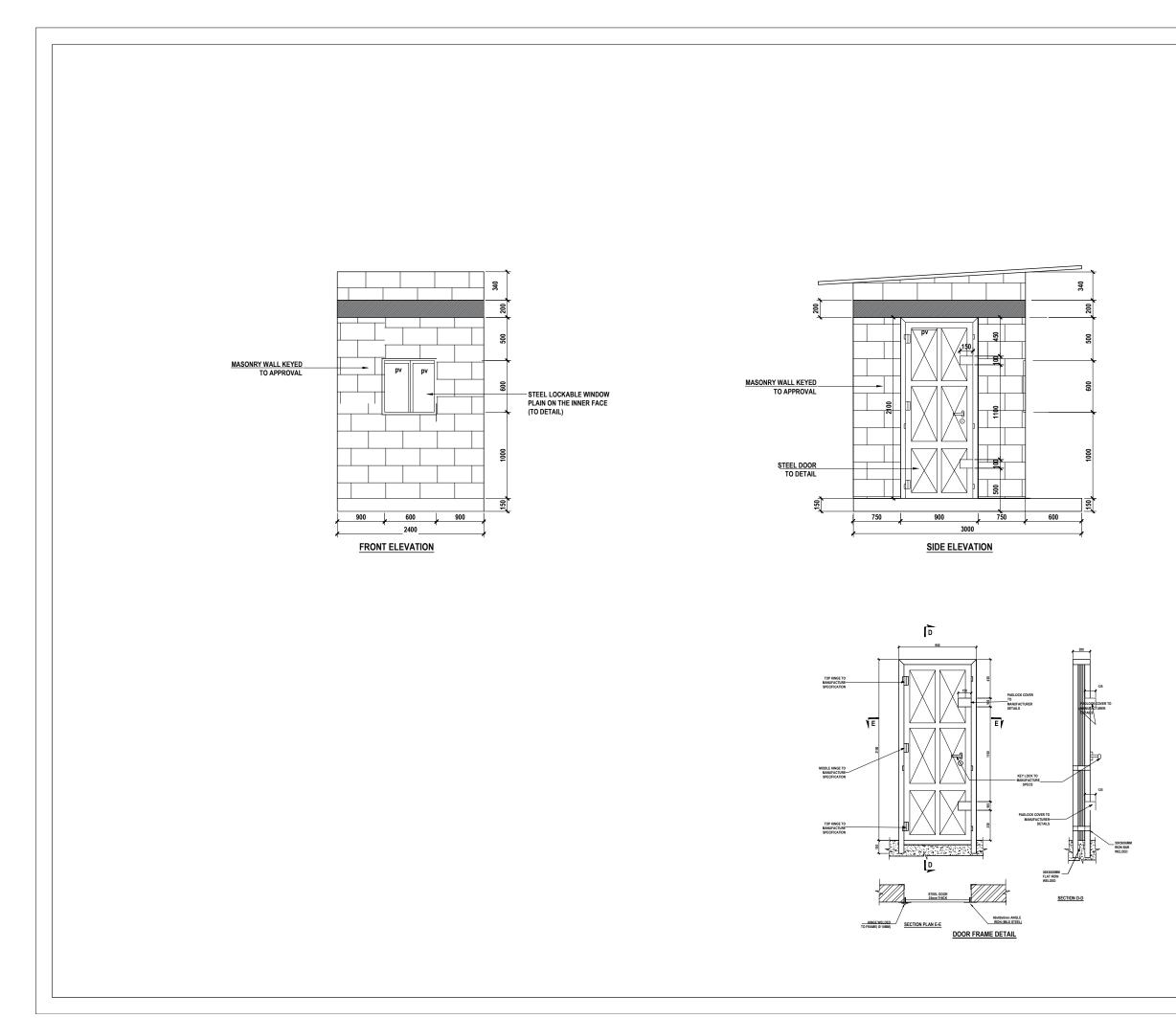
	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
QUANTITY	
1	
1	
1	
1	
1	
1	
2	
2	
2	
2	
2	
2	
2	PRELIMINARY ISSUE
1	Signed: Team Leader
1	REVISIONS SIGN DATE APPROVED BY BY
2	CHECKED BY
1	CHECKED BY
1	CHECKED BY CHECKED
1	Client
1	
1	WaterFund Financing the Water Sector
2	
	Financier
1	
	Project KYUSO ROCK CATCHMENT
	WATER PROJECT
	Design Consultants.
	15 Westlands Road, Westland
	P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com
	Drawing Title 50 M3 MASONRY WATER TANK (BPT)
	PIPEWORK SCHEDULE
	Designed by JMM Drawn by KCK
	Checked by JNApproved by JRScaleH = 1:1,000 V = 1:100DateNOV 2023JobNo.ACAD File:KYUSO



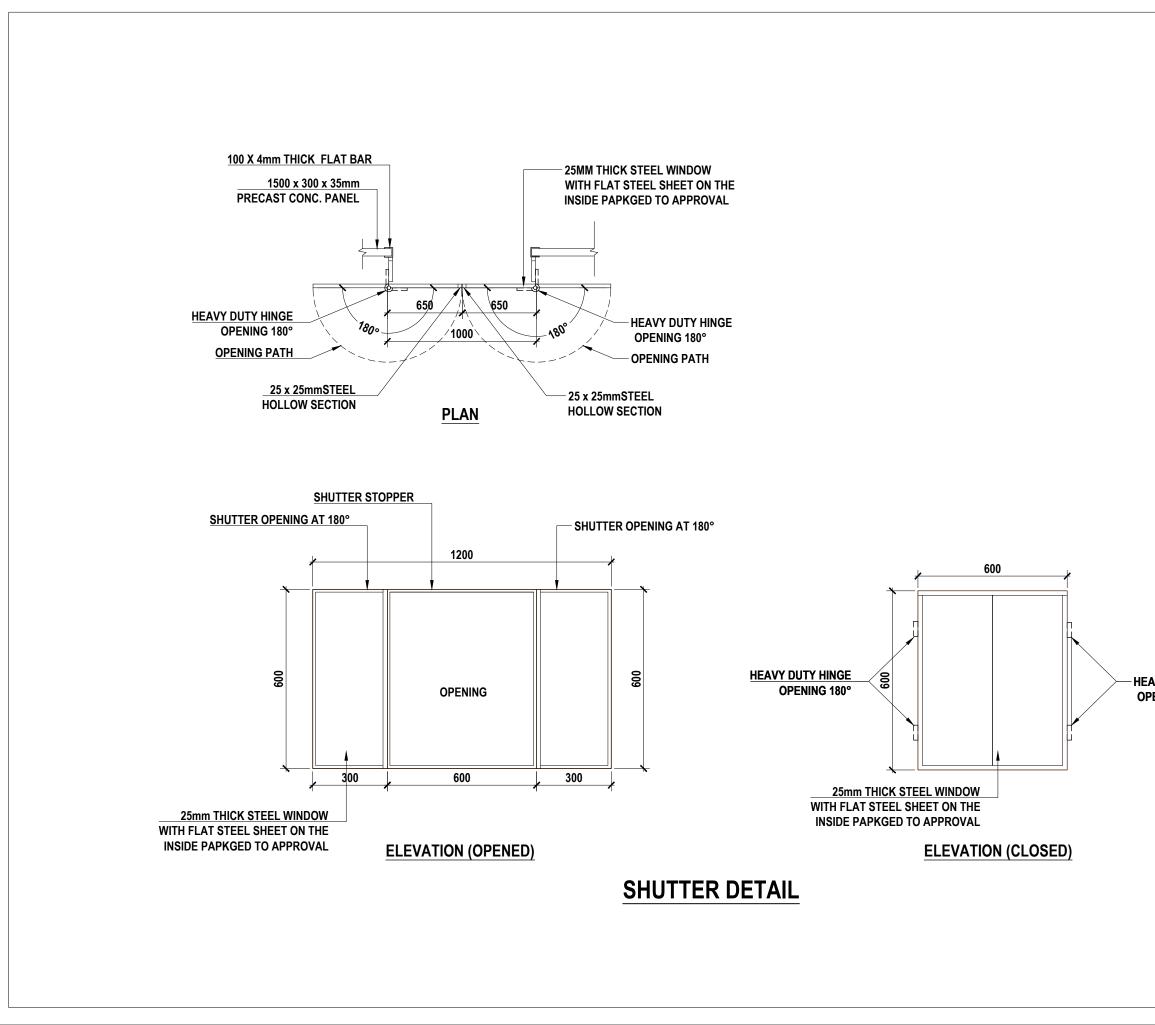
OT-ERWISE. PRELIMINARY ISSUE Signed: Team Leader Signed: Team Leader D+Eckels DECENSION	•	1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED		
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY BY BY CHECKED BY Client BY Client Financier Financier Project Project Project Structure Colspan="2">Structure Colspan="2" <td <="" colspan="2" td=""><td></td><td></td></td>	<td></td> <td></td>			
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise Project Exercise Project Clients Design Consultants. Exercise 2000 Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310				
Signed: Team Leader REV REVISIONS BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY Client BY Client Exercise Financier Exercise View Exercise View Exercise View Exercise View Exercise Design Consultants. St Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: :264 718 875 310		PRELIMINARY ISSUE		
REV REVISIONS SIGN DATE APPROX BY				
BY BY BY CHECKED Financier CHECKED Forject CHECKED Design Consultants. CHECKED Design Consultants. 15 Veestlands Road, Westland CHECKED Design Consultants. 15 Veestlands Road, Westland CHECKED				
BY BY BY BY CHECKED BY BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED BY CHECKED Client Client Financier Client Froject Client Project Client Design Consultants. Consultants. Testign Consultants. Stored, Westland P.0 Box 30337-00100 Nairobi, Kenya Test: 2547 188 75 310	R	BY		
Image: Straight of the straight				
Image: CHECKED BY Client Image: Checked Image: Checked Financier Image: Checked		СНЕСКЕД		
Client Client Financier Financier Froject Project Client Client Financier Financier Client Financier Client Financier Client Financier Client Financier Client Financier Client Financier Client Financier Client Financier Client Financier Client Financier Client Financier Client Client Financier Client Clie		СНЕСКЕД		
Client Image:				
Financing the Water Sector Financier Financier Froject Project Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya Te: Sector 12 States 2533		Client		
Financing the Water Sector Financier Financier Froject Project Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya Te: Sector 12 States 2533				
Financing the Water Sector Financier Financier Froject Project Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya Te: Sector 12 States 2533		WaterFund		
Froject Image: Consultants. Design Consultants. States Road, Westland P.O. 2003/00/10/10/10/10/10/10/10/10/10/10/10/10/	11			
Froject Image: Consultants. Design Consultants. States Road, Westland P.O. 2003/00/10/10/10/10/10/10/10/10/10/10/10/10/		1 mean rooming units in the optimized and setup.		
Project KYUSO ROCK CATCHMEN WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533				
Project KYUSO ROCK CATCHMEN WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533				
Project KYUSO ROCK CATCHMEN WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533				
KYUSO ROCK CATCHMEN WATER PROJECT Design Consultants. Image: Design Consultants Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533				
KYUSO ROCK CATCHMEN WATER PROJECT Design Consultants. Image: Design Consultants Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533		Financier		
WATER PROJECT Design Consultants. Image: Consultants in the start of the st		Financier		
Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533		Financier () () () () () () () () () ()		
15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533		Financier Financier		
15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533		Financier Financier		
P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533		Financier Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT		
+254 788 352 533		Financier Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT		
		Financier Financier Froject CYUSSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland		
		Financier Financier Financier Froject Project Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Te: +254 718 875 310 +254 788 352 533		
		Financier Financier Financier Froject Project Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Te:: +254 718 875 310 +254 788 352 533		
Drawing Title		Financier Image: Ima		
50 M3 MASONRY WATER TANK (BPT)		Financier Image: Imag		
		Financier Image: Imag		
50 M3 MASONRY WATER TANK (BPT)		Financier Image: Imag		
50 M3 MASONRY WATER TANK (BPT)		Financier Image: Imag		
50 M3 MASONRY WATER TANK (BPT) MISCELLANEOUS DETAILS		Financier Financier Froject Project Design Consultants. IS Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Te: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com Drawing Title 50 M3 MASONRY WATER TANK (BPT) MISCELLANEOUS DETAILS		



	NOTES
	 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
L	
-	
WELL COMPACTED INDING ON COMPACT EARTH	
ALL GROUND FLOOR WALLS	PRELIMINARY ISSUE
) WITH ANTI TERMITE	Signed: Team Leader
	REV R E V I S I O N S SIGN DATE APPROVED BY BY <t< td=""></t<>
SLAB,	CHECKED BY
D PACKED WELL COMPACTED	CHECKED
MURRAM BLINDING ON COMPACT EARTH DED UNDER ALL GROUND FLOOR WALLS	CHECKED
IL TREATED WITH ANTI TERMITE	BY CHECKED
	Client
	WaterFund
	Finanding the Water Sector
	Financier
	Investment of wares and designation
	Project
	KYUSO ROCK CATCHMENT
	WATER PROJECT
	Design Consultants.
	15 Weetlande Doad Woetland
	I I WESIAIUS NUAU, WESIAIU
	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310
	P. Dox 30337-0010 Nairobi, Kenya Tel: +254 718 875 310 -2547 788 352 533 Email: info@losaimanagement.com
	Tel: +254 718 875 310 +254 788 352 533
	Tel: +254 718 875 310 +254 788 352 533
	Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com
	Tel: +254 718 875 310 2547 788 352 533 Email: info@losaimanagement.com
	Drawing Title PROPOSED GUARD HOUSE
	Drawing Title PROPOSED GUARD HOUSE
	Drawing Title PROPOSED GUARD HOUSE SLAB PLAN AND DETAILS
	Drawing Title PROPOSED GUARD HOUSE SLAB PLAN AND DETAILS
	Drawing Title PROPOSED GUARD HOUSE SLAB PLAN AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Parke H=11000

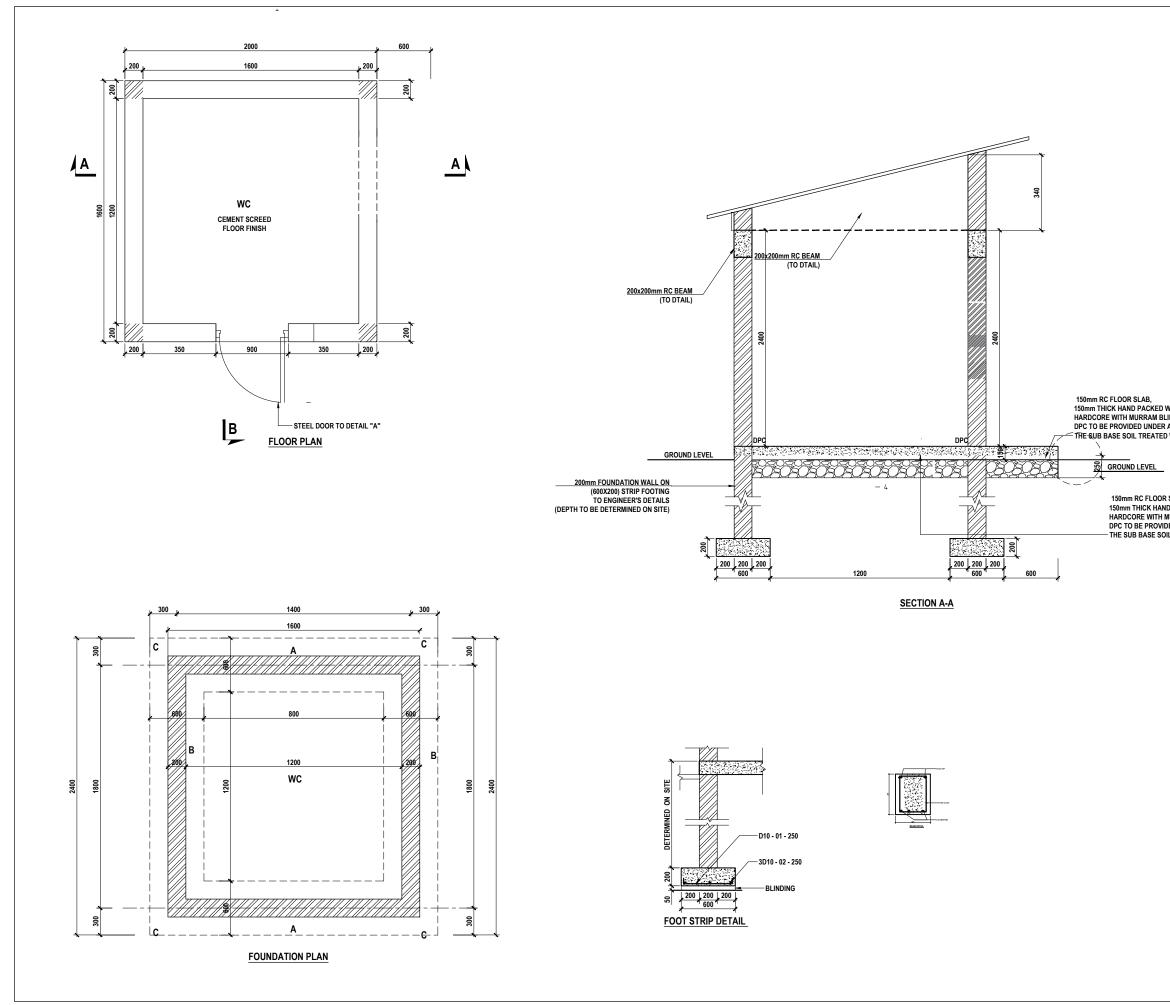


NOTES						
	DIMENSIONS	ARE IN M	MILLIMETRES	UNLES	SS NOT	ED
OTHER	RWISE.					
PREL	iminary is	SUE				
Signe	ed: Team	Leader				
REV	REV	ISIONS		SIGN	DATE	APPROVED
			BY CHECKED			
			BY CHECKED			
_			BY CHECKED			
Client						
	er Fur	d	CHECKED			
	erFur	nd	CHECKED			
Wat	ng the Water Sector	ıd	CHECKED			
Wat	ng the Water Sector	nd	CHECKED			
Wat	ng the Water Sector	nd	CHECKED			
Wat	ng the Water Sector	nd	CHECKED	Gover		
Financie	ng the Water Sector	nd	CHECKED	GOVER		
Financie Project	er * * *	* * *	CHECKED BY CHECKED			
Financie Project	ar JSO F	÷.	Снескер	тс	HM	
Financie Project KYU	ar JSO F WA	ROC	CHECKED BY CHECKED	тс	HM	
Financie Project KYU	ar JSO F	ROC	Снескер	тс	HM	
Financie Project KYU	ar JSO F WA	ROC TER	CHECKED BY CHECKED	TC JE	HM CT	IENT
Financie Project KYU	ar JSO F WA	ROC TER 15 Westle 15 Westle 15 Tel: +254 Tel: +254	CHECKED BY CHECKED K CA PRC	USSTA	HM CT	IENT
Financie Project KYU	ar JSO F WA	ROC TER 15 Westle 15 Westle 15 Tel: +254 Tel: +254	K CA PRC	USSTA	HM CT	IENT
Project KYL Design	are Water Sector	ROC TER 15 Westle 15 Westle 15 Tel: +254 Tel: +254	CHECKED BY CHECKED K CA PRC	USSTA	HM CT	IENT
Financie Project KYL Design	are Water Sector	ROC TER 15 Weetle 254 254 Email: Inf	CHECKED BY CHECKED CHECKED KCA PRC	TC JE 0 Nairc 10 33 nageme	HM CT	IENT
Financie Project KYL Design	er JSOF WA Consulta	ROC TER 15 Westlet 254 254 254 254 254 254 254 254 254 254	CHECKED BY CHECKED CHECKED K CA PRC ands Road, 30337-0713 718 8752 5: o@losaima	TC DJE Westla 0 Nairc 10 33 nagemu	HM CT nd wbi, Ker	IENT
Financie Project KYL Design	art Water Sector	ROC TER 15 Westlet 254 254 254 254 254 254 254 254 254 254	CHECKED BY CHECKED CHECKED K CA PRC ands Road, 30337-0713 718 8752 5: o@losaima	TC DJE Westla 0 Nairc 10 33 nagemu	HM CT nd wbi, Ker	IENT
Financie Project KYL Design	Title OSED CATION,	ROC TER 15 Westlet 254 254 254 254 254 254 254 254 254 254	CHECKED BY CHECKED CHECKED K CA PRC ands Road, 30337-0713 718 8752 5: o@losaima	TC DJE Westla 0 Nairc 10 33 nagemu	HM CT nd wbi, Ker	IENT
Financie Froject KYL Design Drawing PROP ELEV/ Designed Checked	artic Water Sector art JSO F WAA Consultar Title OSED G ATION, by JN	ROC TER 15 Westle Enal: Inf GUARI SECTI	CHECKED BY CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED CHECKED	Westla 0 Nairc 10 33 nagemu SE D DE		IENT
Financie Financie Project KYL Design Design Drawing PROP ELEV/	r JSOF WA Consultar Title OSED A ATION, by JM	ROCC TER hts. 15 Westel 254 Email: Inf GUARI SECT	CHECKED BY CHECKED CHE	TC DJE Westla 0 Nairc 10 33 nageme SE D DF	HM CT nd bbi, Ker ent.com	IENT

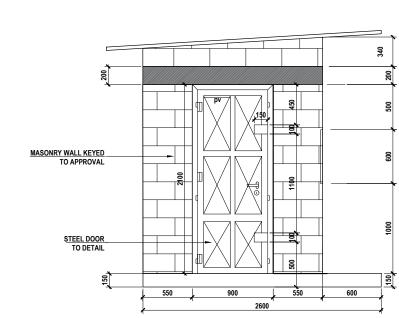


PRELIMINARY ISSUE Signed: Team Leader REVISIONS BORI BY BORI BY BY BY	PRELIMINARY ISSUE Signed: Team Leader BY		ALL DIN	MENSIONS ARE IN M	ILLIMETRES	UNLES	SS NOT	TED
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED OHECKED I I BY I I Delecked I I Design Consultants. I Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
Signed: Team Leader REVISIONS SIGN DATE APPROVED BY DITE DITE BY DITE DITE Client BY DITE Client Difect Difect Froject KYUSO ROCK CATCHMENT VATER PROJECT Difect Design Consultants. 15 Westlands Road, Westland P.0 Box 30337-00100 Nairobi, Kenya TE: +224 718 875 310 ± -224 728 825 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Signed: Team Leader REVISIONS SIGN DATE APPROVED OPECKED BY OPECKED BY OPECKED BY OPECKED DECIGN OPECKED DEVECKED Drawing Title P							
REV REVISIONS SIGN DATE APPROVED BY I I I BY I I BY I OHECKED I BY I Image: State of the stat	Image: Project REVISIONS SIGN DATE APPROVED BY OHECKED OHECKED OHECKED OHECKED BY OHECKED OHECKED OHECKED CHECKED BY OHECKED OHECKED CHECKED OHECKED OHECKED OHECKED Checked BY OHECKED OHECKED Client OHECKED OHECKED OHECKED Financier OHECKED OHECKED OHECKED Project KYUSO ROCK CATCHMENT WATER PROJECT OHECKED OHECKED Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: +254 718 875 2533 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1100 Date NOV 2023	ſ	PRELIN	INARY ISSUE				
BY And Control (Control (Contro) (Control (Contro) (Control (Control (Control (Contro) (Co	BY OHECKED BY OHECKED BY OHECKED BY OHECKED BY OHECKED Client OHECKED Client OHECKED Financier OVERCHENT Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet: +224 718 875 310 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Date NOV 2023		Signed	: Team Leader				
BY And Control (Control (Contro) (Control (Contro) (Control (Control (Control (Contro) (Co	BY OHECKED BY OHECKED BY OHECKED BY OHECKED BY OHECKED Client OHECKED Client OHECKED Financier OVERCHENT Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet: +224 718 875 310 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Date NOV 2023	DEV	1	REVICIONO		0.01	DATE	
BY OHECKED BY OHECKED BY OHECKED BY OHECKED Client OHECKED Client Complexity Client OHECKED Client OHECKED Client OHECKED OHECKED OHECKED OHECKED OHECKED OHECKED OHECKED OHECKED OHECKED OHECKED COLSPANE" Consultants. OPROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	BY OHECKED Client OHECKED Financier OVECHED Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 3037-00100 Nairobi, Kenya Tel: 4264 718 975 253 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1100 Date	REV		REVISIONS		SIGN	DATE	APPROVED
BY Delecked OHECKED Delecked BY Delecked OHECKED Delecked Client Delecked Image: State of the s	BY CHECKED BY OHECKED BY OHECKED Client Example State Financier Example State Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Example State Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 825 233 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 Y=1:00 Date							
BY OHECKED Client Client Image: Client Image: Client <tr< td=""><td>BY CHECKED Client Client Financier Client Project Client KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Project 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet +224 718 825 303 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Date NOV 2023</td><td></td><td></td><td></td><td></td><td></td><td></td><td> </td></tr<>	BY CHECKED Client Client Financier Client Project Client KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Project 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet +224 718 825 303 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Date NOV 2023							
Client Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Image: Project 15 Westlands Road, Westland Pro Box 30337-00100 Nairobi, Kenya Te: +264 718 875 310 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	CHECKED CIERTE CONCOMENTATION Financier Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P O Box 30337-00100 Nairobi, Kenya TE: +254 718 875 310 TE: +254 718 875 310 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale NOV 2023							-
Financier Image: Imag	Financier Froject Froject Consultants. Design Consultants. Design Consultants. Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=1100 Date NOV 2023				_			
Project Example of the second sec	Project Example of the second sec	Clie	ent		BY			
Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +224 718 352 533 Email: Info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 357 313 Email: Info@bsaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 Late NOV 2023		Vate		BY			-
Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +224 718 352 533 Email: Info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 357 313 Email: Info@bsaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 Late NOV 2023	V	Wate Financing t		BY			
Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +224 718 352 533 Email: Info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 357 313 Email: Info@bsaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 Late NOV 2023	V	Wate Financing t		BY			<u> </u>
KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Image: Constreacting consultants. <tr< td=""><td>KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet + 224 718 875 310 Erwalt: Info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1:00 Date NOV 2023</td><td>V</td><td>Wate Financing t</td><td></td><td>BY</td><td></td><td></td><td></td></tr<>	KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet + 224 718 875 310 Erwalt: Info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1:00 Date NOV 2023	V	Wate Financing t		BY			
KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Image: Constreacting consultants. <tr< td=""><td>KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet + 224 718 875 310 Erval: Info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1:00 Date NOV 2023</td><td>V</td><td>Wate Financing t</td><td></td><td>BY</td><td>GOVE</td><td></td><td>-</td></tr<>	KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet + 224 718 875 310 Erval: Info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1:00 Date NOV 2023	V	Wate Financing t		BY	GOVE		-
WATER PROJECT Design Consultants. Image: Consultants. 15 Westlands Road, Westland P:O Box 30337-00100 Nairobi, Kenya Te: +254 718 875 310 +254 718 875 310 +254 718 875 310 Harding Title Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-0010 Nairobi, Kenya TE: 4254 718 875 310 +2254 718 875 310 Hailing Title Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11000 Y=1100 Date NOV 2023	V	Wate Financing t		BY	GOVE		F KENYA OF MENYA
Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tei: +254 718 875 310 +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tet: + 254 718 875 310 + 254 718 875 310 + 254 718 875 310 Hereit Consumer of the second	Fin	ancier	* * * * * * *	BY CHECKED	ONNESTR	Y OF WATER AP	
15 Westlands Road, Westland P.O Box 30337-0010 Nairobi, Kenya Tet: +224 718 875 310 +224 728 352 533 Email: info@losaimanagement.com	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: ±254 718 875 310 ±254 718 875 310 ±254 718 875 310 Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11000 Y=1100 Date NOV 2023	Fin	ancier	SO ROC	BY CHECKED	TC	HN	
15 Westlands Road, Westland P.O Box 30337-0010 Nairobi, Kenya Tet: +224 718 875 310 +224 728 352 533 Email: info@losaimanagement.com	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya TE: ±254 718 875 310 ±254 718 875 310 ±254 718 875 310 Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11000 Y=1100 Date NOV 2023	Fin	ancier	SO ROC	BY CHECKED	TC	HN	
Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1:00 Date NOV 2023	Fin Pro	ancier Diject	SO ROC WATER	BY CHECKED	TC	HN	
Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1:00 Date NOV 2023	Fin Pro	ancier Diject	SO ROC WATER	BY CHECKED	TC	HN	
Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	Drawing Title PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11000 V=1:00 Date NOV 2023	Fin Pro	ancier Diject	SO ROC WATER onsultants.	BY CHECKED		HM CT	IENT
PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11,000 V=1:100 Date NOV 2023	Fin Pro	ancier Diject	SO ROC WATER onsultants.	BY CHECKED K CA PRC	Westla 00 Nairo	HM CT	IENT
PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	PROPOSED GUARD HOUSE PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11,000 V=1:100 Date NOV 2023	Fin Pro	ancier Diject	SO ROC WATER onsultants.	BY CHECKED K CA PRC	Westla 00 Nairo	HM CT	IENT
PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK	PLAN, SECTION AND DETAILS Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=11,000 V=1:100 Date NOV 2023	Fin Pro	ancier Diject	SO ROC WATER onsultants.	BY CHECKED K CA PRC	Westla 00 Nairo	HM CT	IENT
Designed by JMM Drawn by KCK	Designed by JMM Drawn by KCK Checked by JN Approved by JR Scale H=1:1,000 V=1:100 Date NOV 2023	Fin Pro Des	ancier oject CYU sign C	SO ROC WATER onsultants.	BY CHECKED K CA PRC	Westla 0 Nairo 10 33 nagem	HM CT	IENT
	Checked by JN Approved by JR Scale H = 11,000 V = 1,100 Date NOV 2023	Fin Pro Pro Dro PF	ancier oject (YU) sign C	SO ROC WATER onsultants. 15 Weetle P.0 Box 15: *254 Email: inf Title DSED GUARI	K CA PRC	Westla Westla 33 nagem	HN CT nd bbi, Ker	IENT
	Checked by JN Approved by JR Scale H = 11,000 V = 1,100 Date NOV 2023	Fin Pro Pro Dro PF	ancier oject (YU) sign C	SO ROC WATER onsultants. 15 Weetle P.0 Box 15: *254 Email: inf Title DSED GUARI	K CA PRC	Westla Westla 33 nagem	HN CT nd bbi, Ker	IENT
the second se	Scale H=1:1,000 V=1:100 Date NOV 2023	Fin Pro Pro Dro PF	ancier oject (YU) sign C	SO ROC WATER onsultants. 15 Weetle P.0 Box 15: *254 Email: inf Title DSED GUARI	K CA PRC	Westla Westla 33 nagem	HN CT nd bbi, Ker	IENT
H = 1-1 000	Scale V=1:100 Date NOV 2023	Fin Pro Des Dro PF PL	ancier oject (YU) sign C awing ROPC AN, S	SO ROC WATER onsultants. 15 Westia 15 Westia 16 Westia 17 Westia 17 Westia 17 Westia 18 Westia 19 Westia 1	BY CHECKED K CA PRC Mass Road, 00337-001C 718 875 37 788 352 32 20Iosalma	Westla Westla 33 nagem	HIV CT	IENT
Coolo II- LI,VW Data NOV 0000	Job No. ACAD File: KYUSO	Fin Pro Des Dro PF PL Des Che	ancier aject Sign C Sign C Sign C C Sign C Sign C S	SO ROC WATER onsultants. 15 Westla 15 Vestla 15 Vestla 16 Vestla 16 Vestla 17 Vestla 17 Vestla 17 Vestla 18 Vestla 19 Vestla	BY CHECKED K CA PRC MARCA MARC	Westla 0 Nairc 10 33 nagem SE AILS	HN CT nd bbi, Ker ent.con	nya n ck
Scale V=1:100 Date NOV 2023		Fin Pro Des Dro PF PL Des Che	oject Sign C SYU wing S ROPC AN, s signed by	SO ROC WATER onsultants.	BY CHECKED K CA PRC MAS Road, 30337-0010 718 352 57 788	Westla 0 Nairo 10 Nairo SE AILS	HN CT nd bbi, Ker ent.con	nya n ck
	Scale V=1:100 Date NOV 2023	Fin Pro De:	ancier oject (YU)	SO ROC WATER onsultants.	BY CHECKED K CA PRC	Westla 00 Nairo	HM CT	IENT
		Fin Pro Des Dro PF PL Des Che	oject Sign C SYU wing S ROPC AN, s signed by	SO ROC WATER onsultants. 15 Westle P.0 Box T5: +254 Email: Info Title DSED GUARI SECTION AN Y JM Y JN 1=11,000	BY CHECKED K CA PRC MARCA MARC	Westla 0 Nairc 10 33 nagem SE AILS	HN CT nd bbi, Ker ent.con	nya n ck

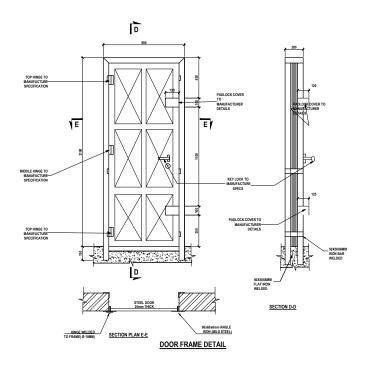
HEAVY DUTY HINGE OPENING 180°

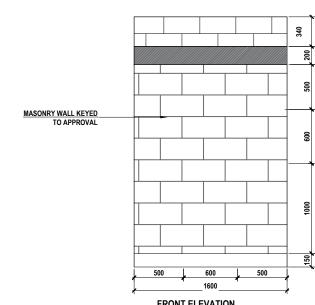


	NOTES	
	NOTES 1. ALL DIMENSIONS ARE IN OTHERWISE.	MILLIMETRES UNLESS NOTED
ELL COMPACTED NDING ON COMPACT EARTH LL GROUND FLOOR WALLS WITH ANTI TERMITE	PRELIMINARY ISSUE Signed: Team Leader REV REVISIONS	SIGN DATE APPROVED BY CHECKED
SLAB, PACKED WELL COMPACTED URRAM BLINDING ON COMPACT EARTH ED UNDER ALL GROUND FLOOR WALLS . TREATED WITH ANTI TERMITE		BY CHECKED BY CHECKED BY CHECKED
	P.O Box Tel: +25- +25-	
	1	
	Designed by JMM Checked by JN	Drawn by KCK Approved by JR



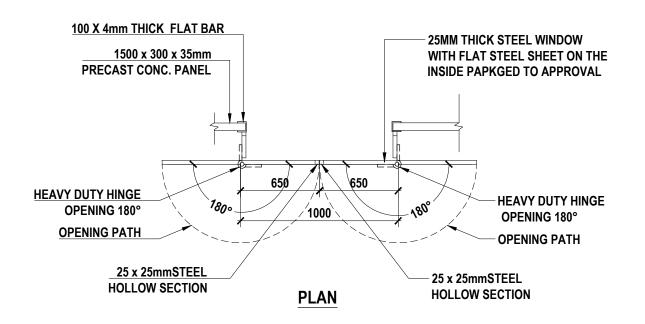


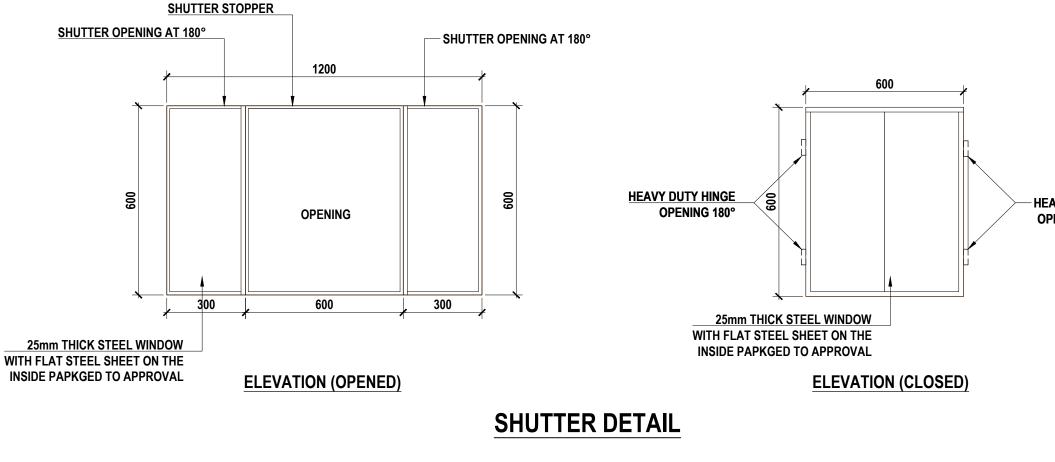






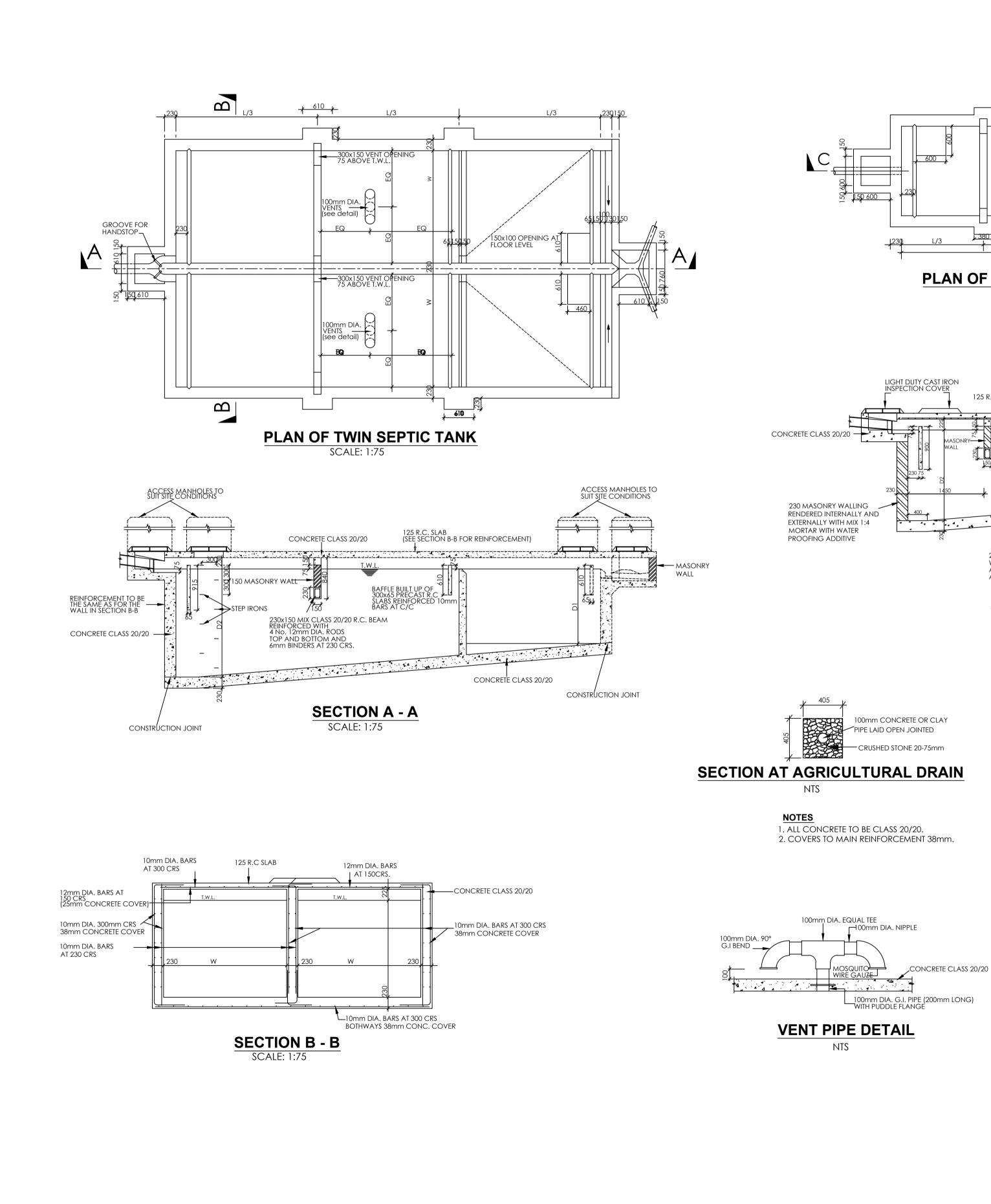
					_
NOTES 1. ALL DIMENSIONS ARE IN A	MILLIMETRES	UNLES	SS NOT	ED	
OTHERWISE.					
PRELIMINARY ISSUE					
Signed: Team Leader					
REV REVISIONS		SIGN	DATE	APPROVED	_
	BY CHECKED				
	BY CHECKED BY				
	CHECKED				
Client	CHECKED				_
WaterFund					
Financing the Water Sector					
Financier					
		Y,		XS	
		GOVER	INMENT OF	F KENYA	
Project					_
KYUSO ROC	K CA	ТС	ΗМ	ENT	
WATER	PRC	JE	СТ		
Design Consultants.					
_					
15 Westla P.O Box Tel: +254	ands Road, 30337-0010 1718 875 3 1788 352 5	Westla 00 Nairc 10	nd bi, Ken	ya	
+254 Email: inf	4 788 352 53 fo@losaima	33 nageme	ent.com		
Drawing Title PROPOSED LATRI	NE				
ELEVATION, SECT		ID DE	ETAI	LS	
Designed by JMM	Drawn by		KC	к	
Checked by JN Scale H=1:1,000	Approved Date	by	JR NOV 2	1023	-
Job No.	ACAD File:	KYU			
0 DWG. No.	SHEET 1 OF 1				0 EV

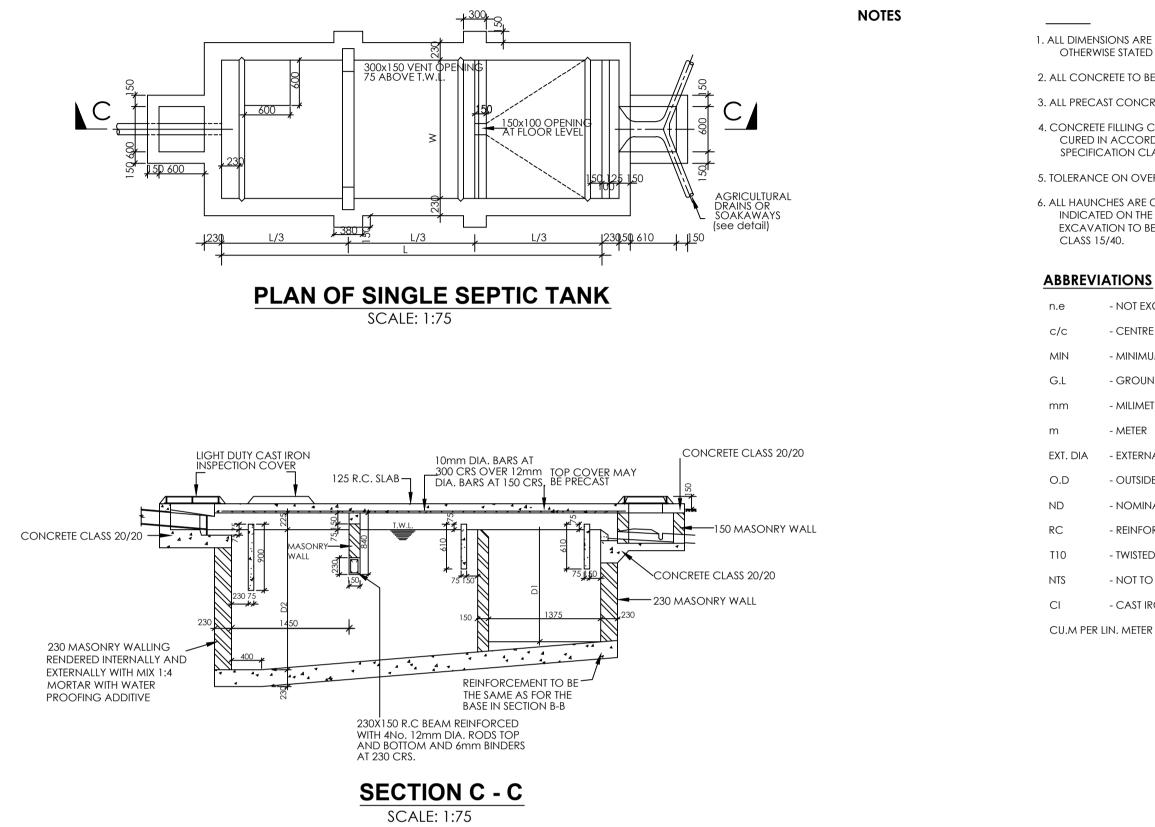




NO	TES					
1.		NS ARE IN M	MILLIMETRES	UNLES	SS NOT	ED
	OTHERWISE.					
	PRELIMINARY	Y ISSUE				
	Signed: Tea	ım Leader				
	1					
REV	R	EVISIONS	BY	SIGN	DATE	APPROVED
			CHECKED			1
			BY CHECKED			1
			BY			
	<u> </u>		CHECKED BY			
Clie	 ent		CHECKED			
V	VaterFu	Ind				
	conversing one water Se	10 MT				
Fin	ancier					
_						1.
					16.9	1 and a start
	*.			45		Res Contraction
		18 C		GOVER		DF KENYA
				. webtiky		
	oject					
K	YUSO	ROC	K CA	тс	ΗN	IENT
		ATER				
Des	sign Consul	tants.				
		15 Westla P.O Box	ands Road, 30337-0010	Westla 0 Nairc	nd bi, Ker	туа
	Losai	Tel: +254 +254	30337-0010 718 875 31 788 352 53	0	nt -	
		∟mail: inf	o@losaimar	ageme	nt.con	u .
L		<u> </u>				<u> </u>
	owing Title					
	ROPOSED					
PL	AN, SEC	TION AN	ND DET	AILS	5	
Des	signed by	JMM	Drawn by		ĸ	СК
	ecked by	JN	Approved	by	JF	
Sca	H = 1:1,000		Date	. 1	NOV	
	No. V = 1:100		ACAD File:	KYU		2320
0		No		KTÚ		0
STATL	IS DWG.	INU.	SHEET 1 OF 1			REV
0	DWG	No.	SHEET 1 OF 1			

HEAVY DUTY HINGE OPENING 180°

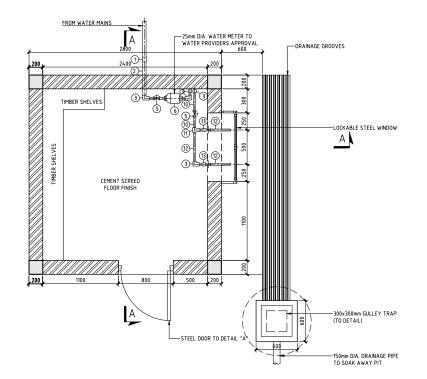


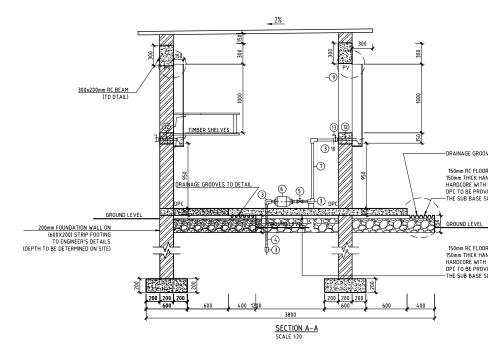


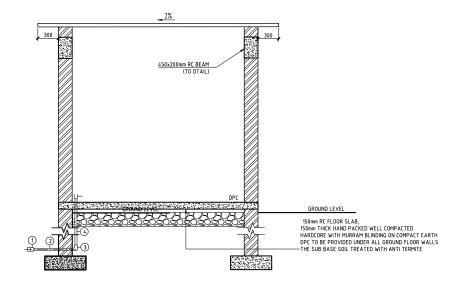
SINGLE TANK CAPACITY				
CU METRES	L/3	W	D1	D2
4.75	915	1070	1525	1715
6.50	1070	1220	1525	1755
8.40	1220	1220	1525	1790
10.50	1370	1525	1525	1830
13.15	1525	1675	1525	1865
15.90	1675	1830	1525	1905
18.85	1830	1980	1525	1940
21.50	1980	2055	1525	1980
24.30	2135	2135	1525	2020
27.25	2210	2210	1525	2060
30.45	2440	2285	1525	2095
33.65	2570	2360	1525	2135
37.30	2740	2440	1525	2170
41.00	2895	2515	1525	2210
44.80	3050	2590	1525	2245
48.45	3200	2665	1525	2285

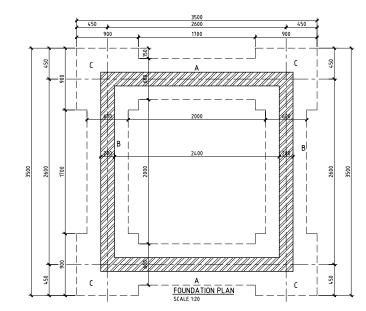
1. ALL CONCRETE MIX TO BE CLASS 20/20 UNLESS OTHERWISE SPECIF 2. COVER TO ALL REINFORCEMENT 40mm WALLS AND BASE, 25mm ROOF SLAB.

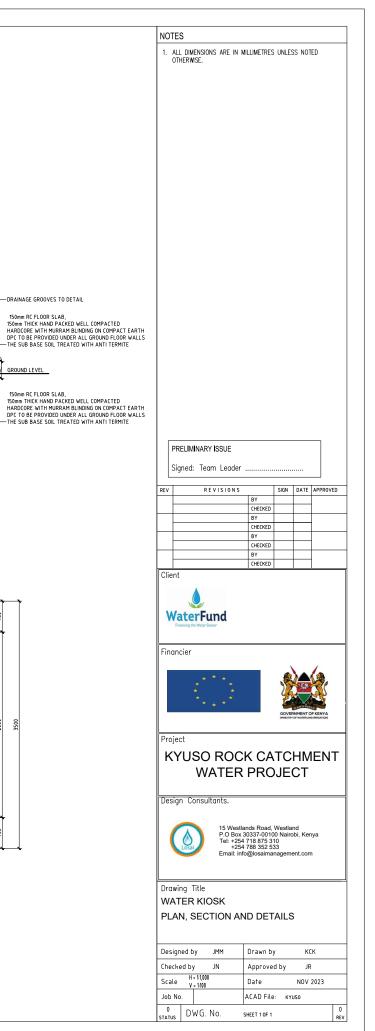
	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
ONS ARE IN MILLIMETERS UNLESS E STATED	
ETE TO BE CLASS 20/20	
T CONCRETE UNITS TO BS 556	
FILLING CLASS 25/20 VIBRATED AND ACCORDANCE WITH THE APPROPRIATE	
TION CLAUSES. ON OVERALL SIZE 3mm	
IES ARE CLASS 15/40 CONCRETE AS O ON THE SPECIFICATION OVER	
DN TO BE MADE GOOD IN CONCRETE 40.	
TIONS	
NOT EXCEEDING	
CENTRE TO CENTRE	
· GROUND LEVEL · MILIMETER	
- METER	
- EXTERNAL DIAMETER	
- OUTSIDE DIAMETER - NOMINAL DIAMETER	
- REINFORCED CONCRETE	
- TWISTED BAR 10mm SIZE	
- NOT TO SCALE - CAST IRON	PRELIMINARY ISSUE
N. METER - CUBIC METER PER LINEAR	Signed: Team Leader
METER	REV REVISIONS SIGN DATE APPROVED
	BY
	CHECKED BY
	CHECKED
	CHECKED
	CHECKED
	Client
	WaterFund
	Financing the Water Sector
TWIN	Financier
TANK	Financier
CAPACITY CU METRES	
9.50	
13.00	
21.00	(MINISTRY OF WATER AND IRRIGATION)
26.30	Project
31.80	KYUSO ROCK CATCHMENT
37.70 43.00	WATER PROJECT
48.60	
54.50	Design Consultants.
60.90	15 Westlands Road, Westland
67.30 74.60	P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310
82.00	+254 788 352 533 Email: info@losaimanagement.com
89.60	
89.60 97.70	Drawing Title
97.70	Drawing Title
97.70 SPECIFIED	Drawing Title SEPTIC TANK DETAILS
97.70 SPECIFIED	
97.70 SPECIFIED	
97.70 SPECIFIED	SEPTIC TANK DETAILS
97.70 SPECIFIED	SEPTIC TANK DETAILS Designed by JMM Drawn by KCK
	SEPTIC TANK DETAILSDesigned by JMMDrawn byKCKChecked by JNApproved byJRSaclaH = 1:1,000DataNOV 2027

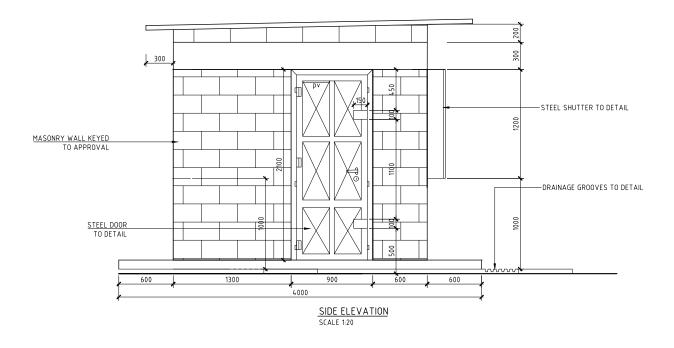


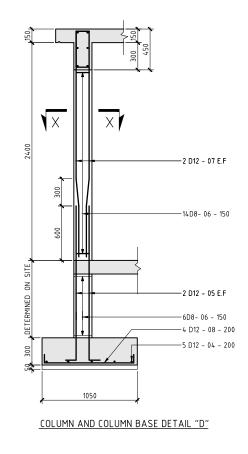


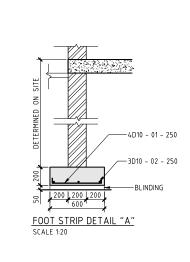


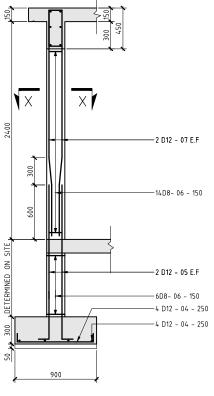






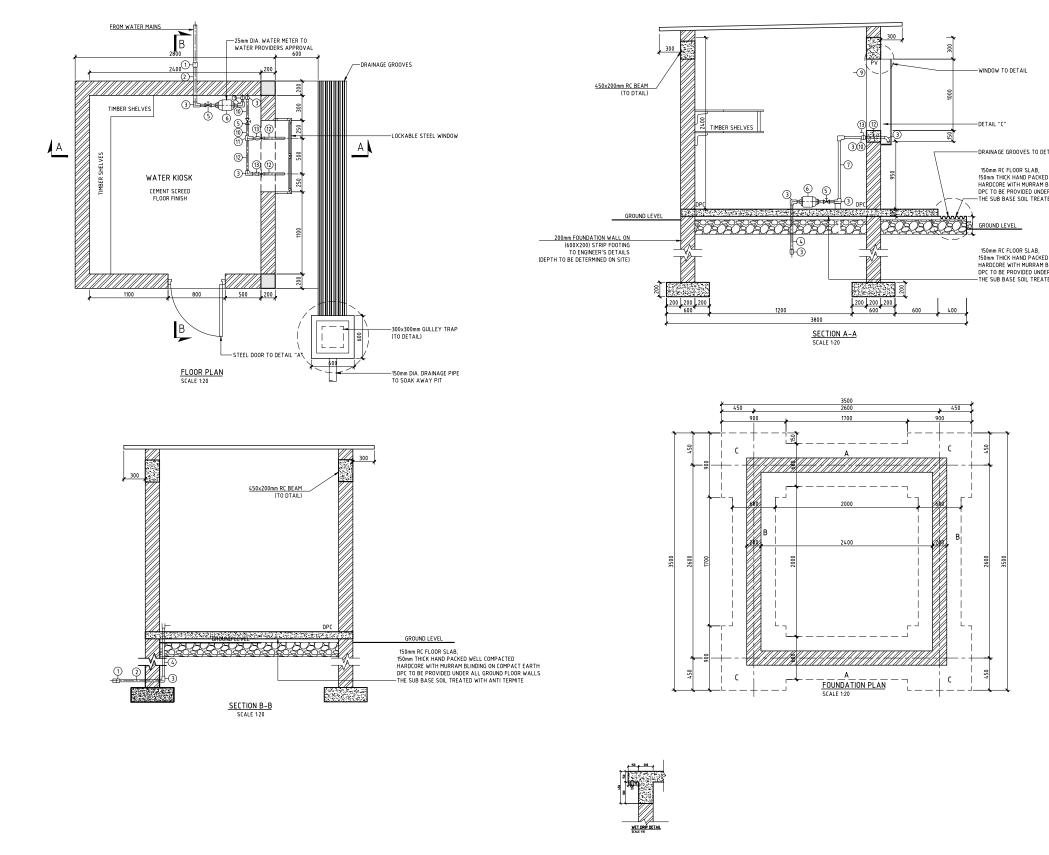




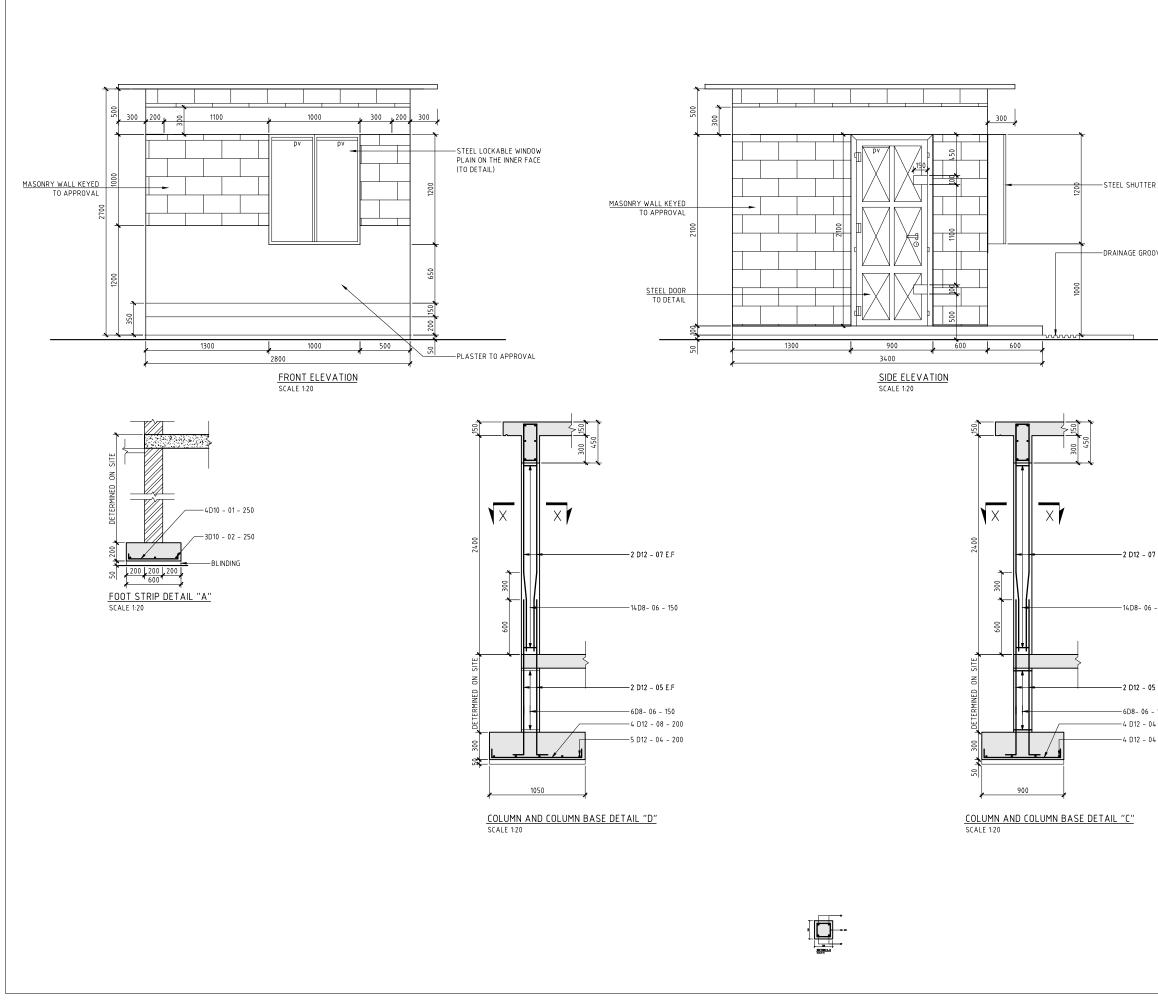


COLUMN AND COLUMN BASE DETAIL "C"

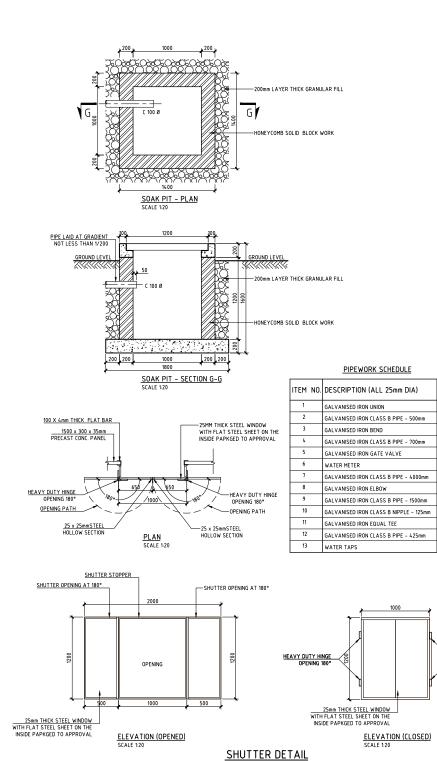
1. ALL DIMENSIONS ARE IN I	MILLIMETRES	UNLES	S NOT	ED	
OTHERWISE.					
PRELIMINARY ISSUE					
Signed: Team Leader					
REV REVISIONS		SIGN	DATE	APPROVE	D
	BY CHECKED BY				
	CHECKED				
	CHECKED				
Client	CHECKED				
WaterFund					
Financing the Water Sector					
Financier					
				A.	
1		4			
		GOVER	INMENT O	FKENYA	
Project					
KYUSO ROC				EN	Г
WATER	PRO	JE(
Design Consultants.					
15 West	ands Road	Westla	nd		
Tel: +25-	ands Road, 30337-0010 4 718 875 3 4 788 352 53	10 33			
Email: in	fo@losaima	nageme	ent.com	1	
Drawing Title					
WATER KIOSK					
PLAN, SECTION A	ND DET	AILS	;		
D					
Designed by JMM Checked by JN	Drawn by Approve		KC JR		
Scale V = 1:100 V = 1:100	Date	,	NOV		
Job No.	ACAD File	: KYI	JSO		_
DWG. No.	SHEET 1 OF 1				0 rev



	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED
	OTHERWISE.
COMPACTED G ON COMPACT EARTH	
ROUND FLOOR WALLS ANTI TERMITE	
COMPACTED IG ON COMPACT EARTH	
GROUND FLOOR WALLS TH ANTI TERMITE	
	PRELIMINARY ISSUE
	Signed: Team Leader
	REV R E V I S I O N S SIGN DATE APPROVED BY BY I
	CHECKED
	BY CHECKED
	BY
	CHECKED BY
	Client
	Financier
	GOVERNMENT OF KENYA (MINISTO V MAZIA A DI MONACO)
	Project
	KYUSO ROCK CATCHMENT
	WATER PROJECT
	Design Consultants.
	45 Manifesta Dr. et Manifest
	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310
	Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com
	L
	Drawing Title
	WATER KIOSK
	PLAN, SECTION AND DETAILS
	Designed by JMM Drawn by KCK
	Checked by JN Approved by JR
	Checked by JN Approved by JR Scale H=11000 V=1100 Date NOV 2023
	Saula H=11,000 Data Nov 2022



	NOTES
	NOTES
	 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
O DETAIL	
o bernie	
ES TO DETAIL	
	PRELIMINARY ISSUE
	Signed: Team Leader
	REV REVISIONS SIGN DATE APPROVED
	CHECKED BY
	CHECKED
	BY CHECKED
	BY CHECKED
.F	Client
.1	
	WaterFund
	WaterFund Finanding the Weter Sector
150	
	Financier
F	GOVERNMENT OF KENYA onnistiti of water and inscartor
50	Project
250	KYUSO ROCK CATCHMENT
250	WATER PROJECT
	WATER FROJECT
	Design Consultants.
	15 Westlands Road, Westland P.O Box 30337-00100 Nairobi. Kenya
	P O Box 3037-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 325 2533
	Email: info@losaimanagement.com
	Drawing Title
	WATER KIOSK
	PLAN, SECTION AND DETAILS
	Designed by JMM Drawn by KCK
	Checked by JN Approved by JR
	Scale H=11,000 Date NOV 2023
	Job No. ACAD File: KYUSO
	0 DWG. NO. SHEET 1 OF 1 0 DWG.



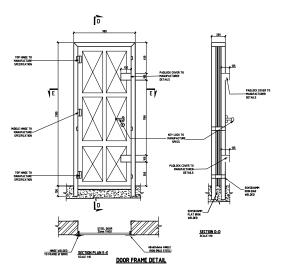
QTY 3

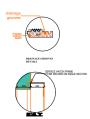
10

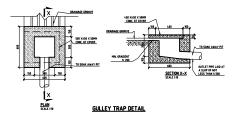
3

2

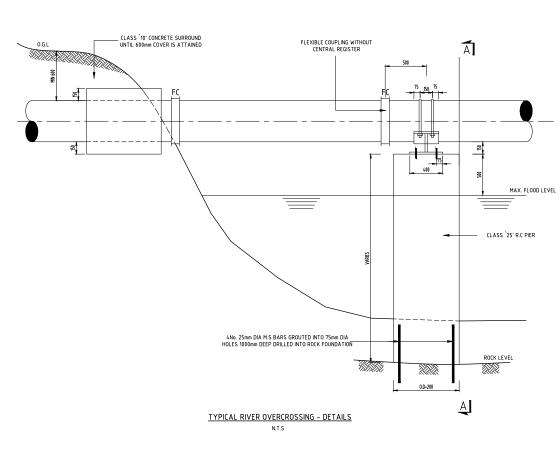
HEAVY DUTY HINGE OPENING 180°

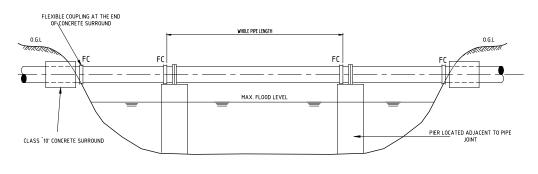




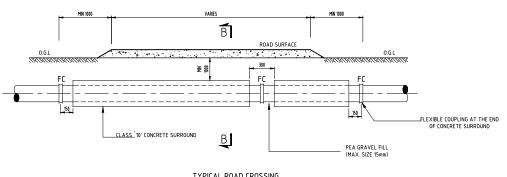


1.	ALL.	DIMENSI	ONS	ARE I	N MILI	IMETRES	G UNLF	55 NOT	TED
	OTHE	RWISE.							
_									
	PREI	LIMINAR	RY IS	SSUE					
1	Sign	ed: Te	am	Lead	er	•••••			
REV		R	R E V	1 S I O N	5		SIGN	DATE	APPR
						BY THECKED			-
						3Y THECKED			
	-					BY THECKED			
						BY THECKED			
Clie	l ent								
Clie	l ent								
				d					
		terF	ur	nd					
۷	Vat	ing the Water I	Ur	nd					
۷		ing the Water I	Sector	nd					
۷	Vat	ing the Water I	UT Sector	nd *_					
۷	Vat	ing the Water I	UT Sector	nd					
۷	Vat	ing the Water I	UT Sector	nd			GOVE		OF KENY
Fine	Franci	er **	UT Sector	nd * * *			GOVE		F KENY
Find	Vat Pront	er * *	: *	* * *			PINETRO	CF WATER AP	0 1000.00
Find	Vat Pront	er ***	Sector * *	* * * *	CK		TC	HN	0 1000.00
Find	Vat Pront	er ***	Sector * *	* * * *	CK	CA	TC	HN	0 1000.00
Find Pro	iject	er ***	Sector * D I /A	× * *	CK		TC	HN	0 1000.00
Find Pro	iject	er *** JSC W	Sector * D I /A	RO TE	CK R F	PRC	TC JE	HM CT	11
Find Pro	iject	er *** JSC W	Sector * D I /A	RO TE	CK R F	PRC	TC JE	HM CT	11
Find Pro	iject	er *** JSC W	Sector * D I /A	* * * * * * ROO TEE * *	CK RF stland ox 300 254 77		Westland 00 Nairci 10	HM CT	1Eľ
Find Pro	iject	er *** JSC W	Sector * D I /A	* * * * * * ROO TEE * *	CK RF stland ox 300 254 77	s Road, 37-0010 8 875 3 8 352 5	Westland 00 Nairci 10	HM CT	1Eľ
Find Pro K	iject Sign	er JSC W Const	Sector	* * * * * * ROO TEE * *	CK RF stland ox 300 254 77	s Road, 37-0010 8 875 3 8 352 5	Westland 00 Nairci 10	HM CT	1Eľ
Find Pro K		er *** JSC W	Sector DI JIta	* * * * ROO TEI nts.	CK RF stland ox 300 254 77	s Road, 37-0010 8 875 3 8 352 5	Westland 00 Nairci 10	HM CT	1Eľ
Find Pro K Des Dra				* * * * * ROO TEI * * Email:	CK RF stland ox 303254 77 info@	s Road, 37-001(8 875 3 8 352 5 Iosaima	Westla Westla 333 nagem	HN CT nd bbi, Ker	1Eľ
Find Pro K Des Dra				* * * * * ROO TEI * * Email:	CK RF stland ox 303254 77 info@	s Road, 37-001(8 875 3 8 352 5 Iosaima	Westla Westla 333 nagem	HN CT nd bbi, Ker	1Eľ
Pro Pro Des Dra W/ PL	iject YU Sign			* * * * * ROO TEI * * Email:	Stland R F stland S54 77 S54 77 S54 77 S54 77 S54 77 S54 77 S54 77	s Road, 37-001(8 875 3 8 352 5 Iosaima	Westla 0) JE	HIV CT nd bbi, Ker	1Eľ
Find Pro K Des Dra W/ PL	iject YU Sign	er JSC V Consu Consu Title ER KIU , SEC		ROOTEI nts. 15 Wee P.O.B. F.O.B. Email: 56K ON /	Stland ox 30054 77 S54 77 S55 S54 77 S55 S54 77 S55 S55 S55 S55 S55 S55 S55 S55 S55 S	s Road, 37-0011 8 875 3 Iosaima	Westla 00 Nairc 10 33 nagem	HIV CT nd bbi, Ker	nya n
Find Pro K Des Dra W/ PL	igne igneck	er USC Consu O g Title ER KIU , SEC		ROOTEI nts. 15 Wee P.O.B. F.O.B. Email: 56K ON /	Stland cx 300 S54 71 S54 71 S54 77 S54 77 S54 77 S54 77 S64 77 S6	PRC \$ Road, 37-0011 8 875 3 8 875 3 8 875 3 1 DET	Westla 00 Nairc 10 33 nagem	HIV CT nd bbi, Ker ent.com	nya n

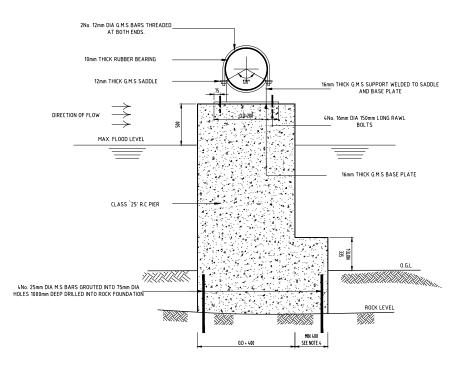


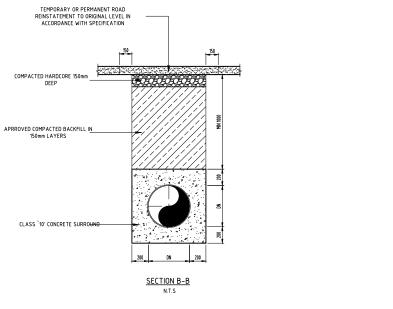


TYPICAL RIVER OVERCROSSING N.T.S



TYPICAL ROAD CROSSING N.T.S

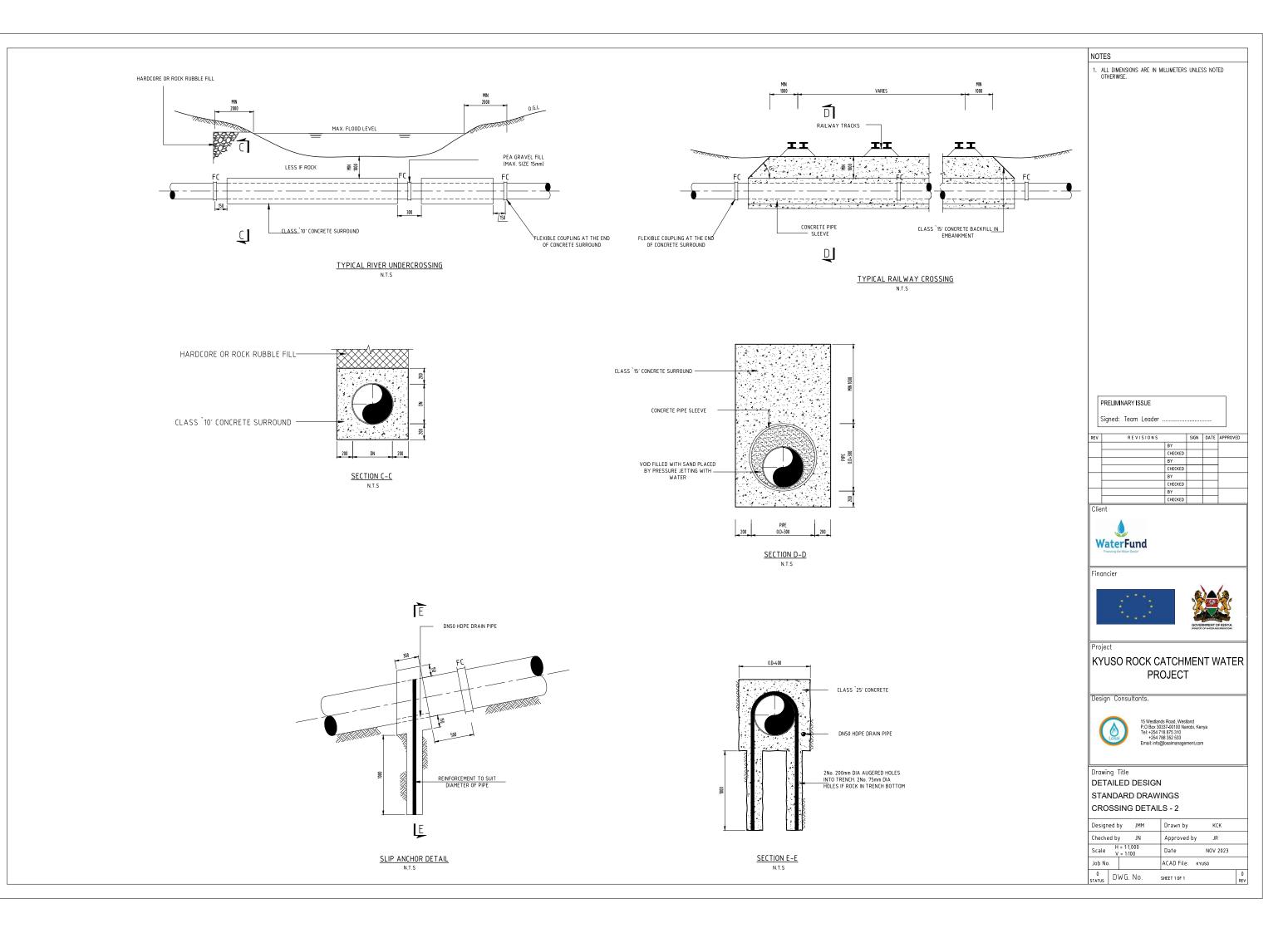


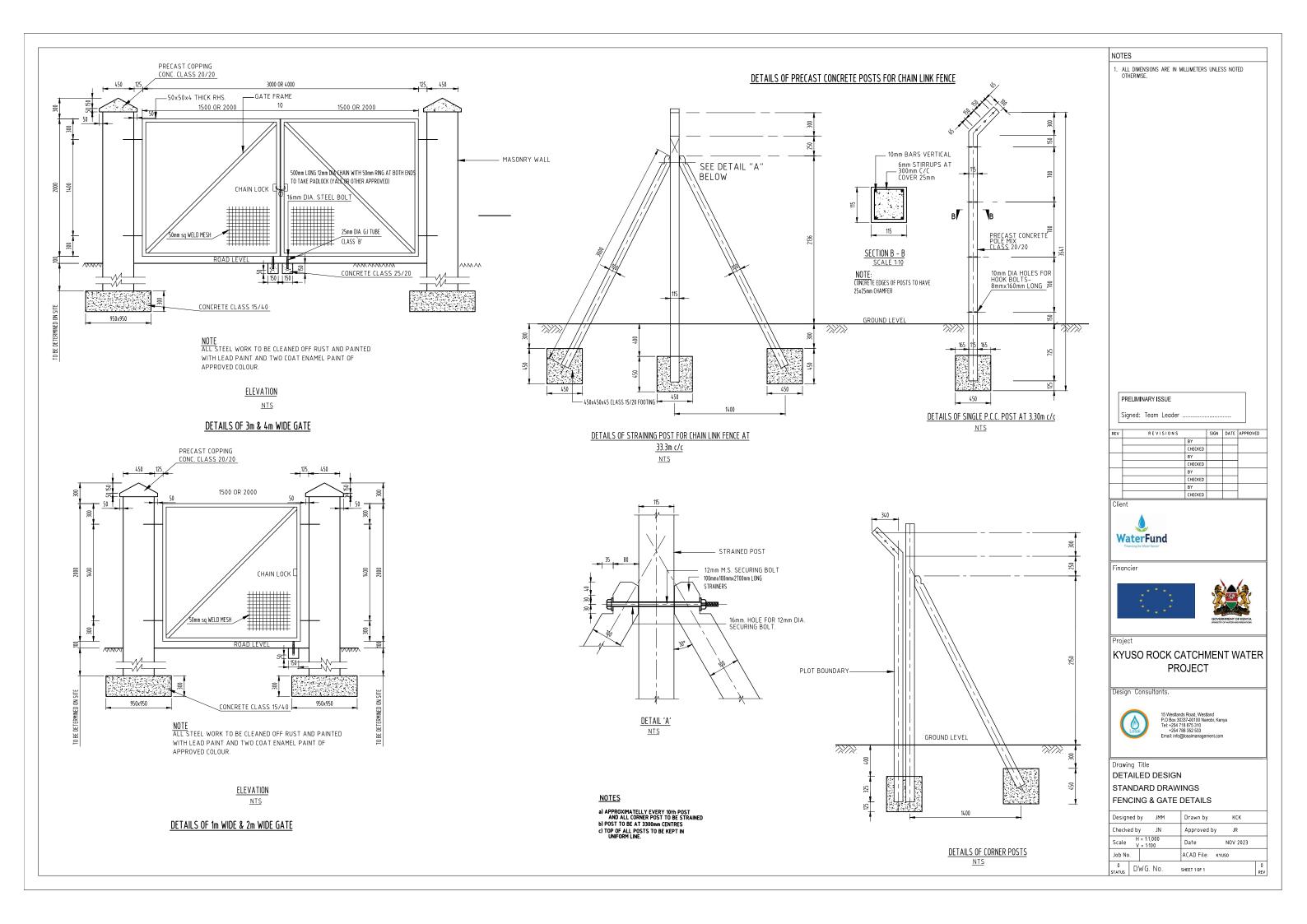


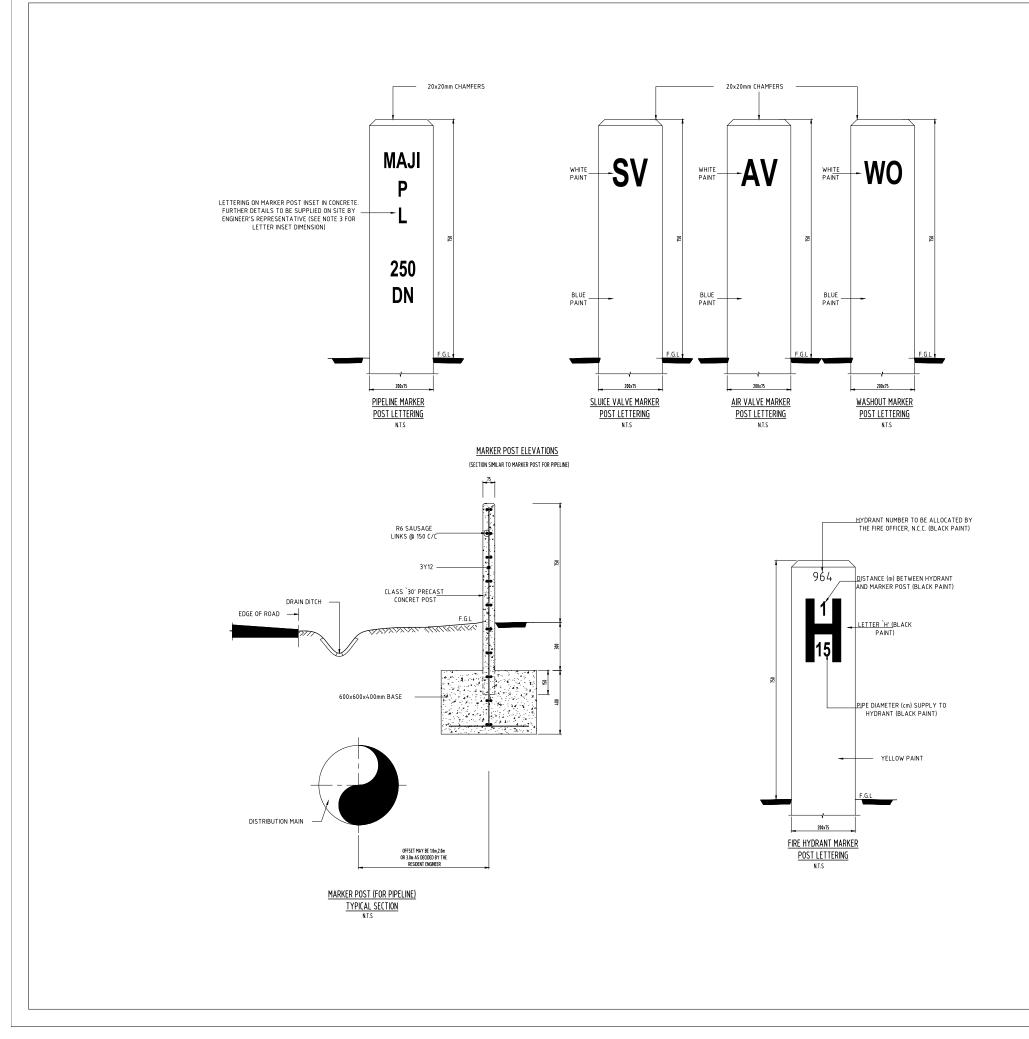


NOTES	
-	MILLIMETERS UNLESS NOTED
OTHERWISE.	MICLINE FERS UNLESS NUTED
PRELIMINARY ISSUE	
Signed: Team Leader	r
REV REVISIONS	SIGN DATE APPROVED
	BY CHECKED
	ВҮ
	CHECKED BY
	CHECKED BY
	CHECKED
Client	
WaterFund	
Financing the Water Sector	
Financier	× 7

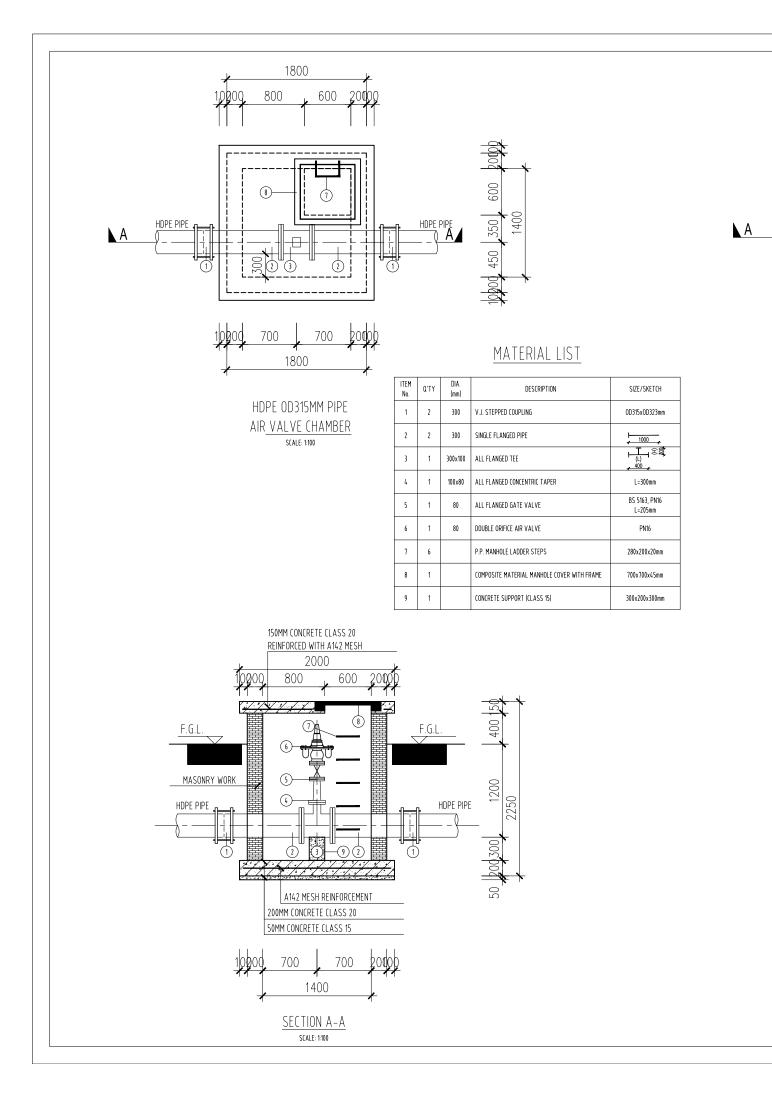
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
	GOVERNMENT OF KENYA (MINISTRY OF WATER AND IRREGATION)
Project	
	CATCHMENT WATER
	ROJECT
Design Consultants.	
story. conduction	
15 Westla	ands Road, Westland
P.O Box 3 Tel: +254	ands Road, Westland 30337-00100 Nairobi, Kenya 718 875 310 788 352 533
Email: inf	o@losaimanagement.com
Drawing Title	
DETAILED DESIG	N
STANDARD DRAW	VINGS
CROSSING DETAI	LS - 1
Designed by JMM	Drawn by KCK
Checked by JN	Approved by JR
H = 1:1,000	Date NOV 2023
Job No.	ACAD File: KYUSO
STATUS DWG. NO.	SHEET 1 OF 1 REV

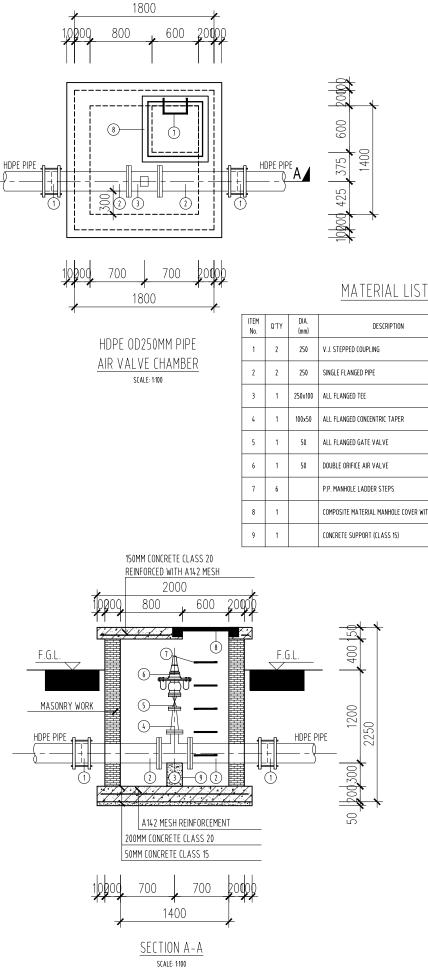






NOTES I. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE. PRELIMINARY ISSUE Signed: Team Leader SIGN DATE APPROVED REVISIONS REV BY CHECKED BY CHECKED BY CHECKED BY CHECKED Client WaterFund Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com Drawing Title DETAILED DESIGN STANDARD DRAWINGS MARKER POST DETAILS Designed by JMM кск Drawn by JR Checked by JN Approved by H = 1:1,000 Scale Date NOV 2023 V = 1:100 Job No. ACAD File: KYUSO 0 DWG. No. 0 REV SHEET 1 OF 1

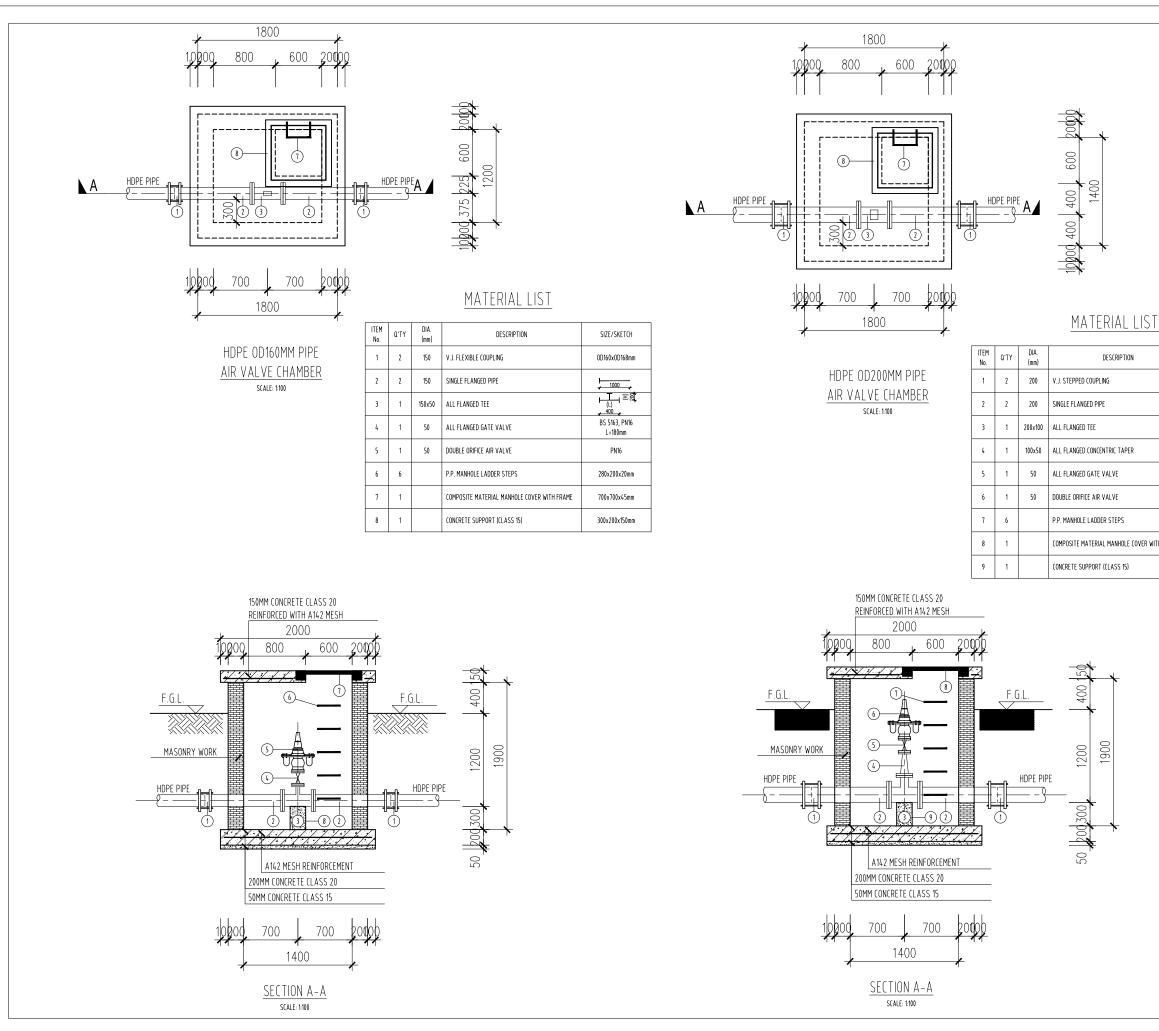




I. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

	SIZE/SKETCH
	OD250xOD273mm
	↓ <u>1000</u>
	L=300mm
	BS 5163, PN16 L=180mm
	PN16
	280x200x20mm
WITH FRAME	700x700x45mm
	300x200x250mm

					I
PRELIMINARY ISSUE					
Signed: Team Leader					
REV REVISIONS	BY	SIGN	DATE	APPR	OVED
	CHECKED BY			-	
	CHECKED BY		-	1	
	CHECKED			1	
	ev.	<u> </u>		-	
	BY CHECKED			-	
Client					
Client WaterFund Frances div Mater Sector					
٨					
WaterFund Francing the Name Sector				1.	
WaterFund Francing the Name Sector					
WaterFund Francing the Name Sector					
WaterFund Francing the Name Sector		GOVE			A 40
Financier		GOVE		DF KENY	A0
Financier Project	CHECKED	University			
Financier Project KYUSO ROCK C/	CHECKED	MEN			
Financier Project KYUSO ROCK C/		MEN			
Financier Project KYUSO ROCK C/		MEN			
Financier Project KYUSO ROCK C/ PR(Design Consultants.		MEN F			
Financier Project KYUSO ROCK C/ PR(Design Consultants.			IT V		
Financier Project KYUSO ROCK C/ PR(Design Consultants. 15 Westland 15 Westland 15 Westland 15 Westland 15 Westland 15 Westland 15 Westland		MEN F	NT V		
Financier Project KYUSO ROCK C/ PR(Design Consultants. 15 Westland 15 Westland 15 Westland 15 Westland 15 Westland 15 Westland 15 Westland		MEN F	NT V		
Financier Project KYUSO ROCK C/ PRO Design Consultants. 15 Westland 16 PO Box 30 Tel + 254 77 Email: inlog Drawing Title		MEN F	NT V		
Financier Project KYUSO ROCK C/ PRO Design Consultants. 15 Westland 15 Westland PO Bav 30 15 Westland PO Bav 30 TE + 254 77 Email: inlog Drawing Title DETAILED DESIGN	ATCHI DJECT 88 Road, Wes 337-00100 Ne 18 875 310 18 875 310 18 875 310 18 352 533 30 saimanage	MEN F	NT V		
Financier Project KYUSO ROCK C/ Project Consultants. Design Consultants. 15 Westland Pro Dex 30 15 Westland Pro Dex 30 15 Westland Pro Dex 30 Tel + 254 7 Email: infog Drawing Title DETAILED DESIGN STANDARD DRAWI	ATCHI DJECT is Road, Wes 337-00100 Ne 8337-00100 Ne 8337-00100 Ne 8332 533 8005 8005 NGS	MEN T uland irobi, Ke ment.cor	NT V		
Financier Froject KYUSO ROCK C/ Project Consultants. Fis Westland Design Consultants. Fis Westland Project Tel + 264 7 Email: Info@ Drawing Title DETAILED DESIGN STANDARD DRAWI AIR VALVE CHAMB	ATCHI DJEC Is Road, Wes 337-00100 Ne 18 875 310 33 325 233 glosaimanage NGS ERS -	MEN T uland irobi, Ke ment.cor	JT V	TAV TAV	
Financier Project KYUSO ROCK C/ PRO Design Consultants. Tis Westland Design Consultants. Tis Westland Design Consultants. Tis Westland Design Consultants. Tis Westland Design Consultants. Tis Westland Design Consultants. Tis Westland Designed by JMM	ATCHI DJECT is Road, Wes 337-00100 Ne 18 875 310 33 325 533 glosaimanage NGS ERS - Drawn b	MEN T tiand irrobi, Ke ment.cor	IT V		
Financier Project KYUSO ROCK C/ Project KYUSO ROCK C/ PRO Design Consultants. 15 Westland Pro Dex 30 15 Westland Pro Dex 30 Ter + 254 77 Email: infog Drawing Title DETAILED DESIGN STANDARD DRAWI AIR VALVE CHAMB Designed by JM Checked by JN Scale H = 11,000	ATCHI DJEC ss Road, Wes 337-00100 Na 83 352 533 900saimanage NGS ERS - Drawn b Approve	MEN T tiand irrobi, Ke ment.cor	IT V		
Financier Project KYUSO ROCK C/ PRO Design Consultants. The resource of the resource of	ATCHI DJECT is Road, Wes 337-00100 Ne 18 875 310 33 325 533 glosaimanage NGS ERS - Drawn b	MEN F ment.cor 1 y d by	IT V		



	SIZE/SKETCH
	OD200xOD219mm
	L=300mm
	BS 5163, PN16 L=180mm
	PN16
	280x200x20mm
ITH FRAME	700x700x45mm
	300x200x200mm

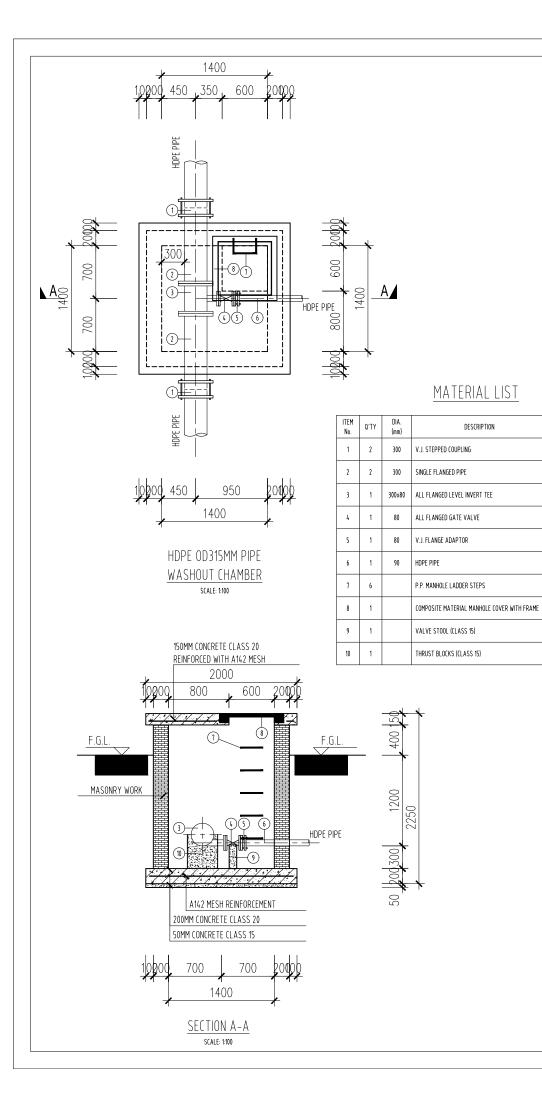
Г								_
	PRELIM	INAR	r I SSI	JE				
!	Signed:	: Tea	im Le	eader				
REV		R	VIS	1 O N S		SIGN	DATE	APPROVED
					BY CHECKED			
					BY CHECKED			-
					BY CHECKED			-
								-
Clie	nt				BY CHECKED			-
	ent Vate Financing th	erFu we Water Se	und	l				-
V	0	erFu w Water Se	und	l				
V	Vate Financing th	we Water Se	ector					<u> </u>
V	Vate Francing th	we Water Se	* *					
V	Vate Francing th	we Water Se	* *			GOVE		
V	Vate Francing th	we Water Se	* *			GOVEI		
Find	ancier ject	* * * *	* *	*	CHECKED	PINSTR		DE KENYA DE KENYA DE BRIGATION
Find	ancier ject	* * * *	* *	K C/		MEN		DE KENYA DE KENYA DE BRIGATION
Find	ancier ject	* * * *	* *	K C/	CHECKED	MEN		DE KENYA DE KENYA DE BRIGATION
Find Pro	ancier ject	* * * * * D R	* * * *	K C/ PR		MEN		DE KENYA DE KENYA DE BRIGATION
Find Pro	Vate Exercise to ancier ject /USC	* * * * * D R	* * * * OCC	K C/ PR(MEN	AT V	DE KENYA DE KENYA DE BRIGATION
Find Pro	Vate Exercise to ancier ject /USC	* * * * * D R	* * * * OCC	K C/ PR(MEN	AT V	DE KENYA DE KENYA DE BRIGATION
Find Pro	Vate Exercise to ancier ject /USC	* * * * * D R	tants 15 P.(Te	K C/ PR(5. Westlanc D Box 30.7			JT V	DE KENYA DE KENYA DE BRIGATION
Find Pro	Vate Exercise to ancier ject /USC	* * * * * D R	tants 15 P.(Te	K C/ PR(5. Westlanc D Box 30.7			JT V	DE KENYA DE KENYA DE BRIGATION
Find Pro K	ject (USC)	D R	tants 15 P.(Te	K C/ PR(5. Westlanc D Box 30.7			JT V	DE KENYA DE KENYA DE BRIGATION
Fina Pro K1 Des	Vate Exercise to ancier ject /USC		tants 15 P.C En	K C/ PR(D Box 30: 3. Westland D Box 30: 1: + 1254 71 + 254 71	CHECKED CHECKED ATCHI DJECT ds Road, West 337-00100 Na 337-00100 Na 337-0000 Na 307-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 357-0000 Na 357-00000 Na 357-000000 Na 357-000000 Na 357-00000 Na 357-		JT V	DE KENYA DE KENYA DE BRIGATION
Find Pro K1 Des Dra DF	ject /USC	D R onsul	tants 15 P.C. Ten En	K C/ PR(0 Box 30.7 2 Box 30.7 2 St. 2 St.	CHECKED CHECKED ATCHI DJECT ds Road, West 337-00100 Na 337-00100 Na 337-0000 Na 307-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 337-0000 Na 357-0000 Na 357-00000 Na 357-000000 Na 357-000000 Na 357-00000 Na 357-		JT V	DE KENYA DE KENYA DE BRIGATION
Find Pro K1 Des Dra DE ST	ject ign Co ign Co	D R onsul	tants DES DES	K C/ PR(9 Box 30 5.	ATCHI DJECT 337-00100 Na 83 S2 533 8Josaimanage		JT V	DE KENYA DE KENYA DE BRIGATION
Find Pro Ki Des Dra DE ST AIF	ject ign Co ign Co	Title ED I ARC	tants DES DES	K C/ PR(9 Box 30 5.	ATCHI DJECT 337-00100 Na 83 S2 533 30osimanage	land ment.cor	JT V	VATER
Find Pro K1 Des Dra DE ST Alf Des	ject ject (USC ign Ca ign	D R onsul	tants DES DES DF CH. JMM	K C/ PR(9 Box 30 5.	ATCHI DJECT s Road, West 337-00100 Mest 337-00100 Mest 347-0000 Mest 34	VIEN Iland irobi, Ker	nya n	
Find Pro K1 Des Dra DE ST Alf Des	ject /USC ign Co wing T TAIL AND, R VAI igned b icked by le t	D R onsul	COC tants DES DES DES DES DES	K C/ PR(9 Box 30 5.	ATCHI DJECT ds Road, West 337-00100 Nest 337-00100 Nest 347-0000 Nest 347-00000 Nest 347-00000 Nest 347-	veent	nya n K(

0 DWG. No.

SHEET 1 OF 1

0 REV

NOTES 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.



DESCRIPTION

SIZE/SKETCH

0D315x0D323mm

1000

, **T**, ≘≋,

BS 5163, PN16

L=205mm

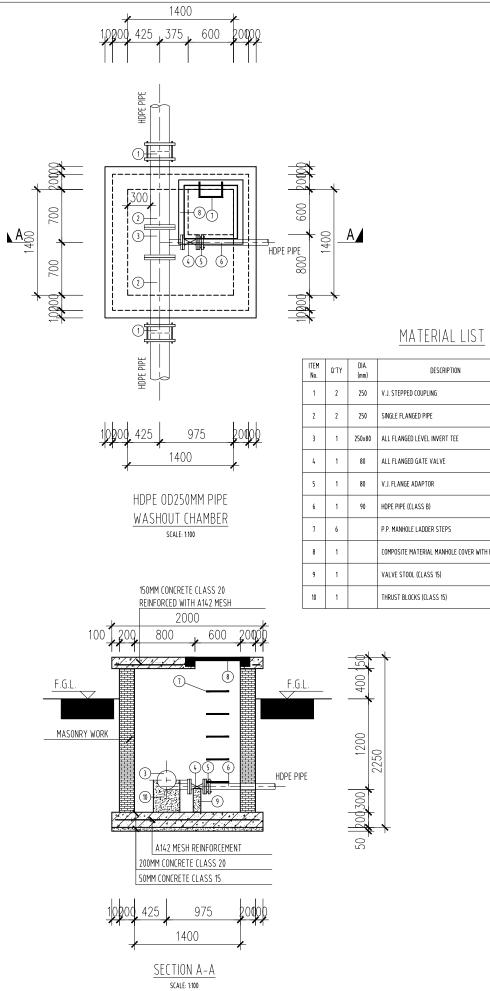
DN80x0D90mm

CLASS B

280x200x20mm

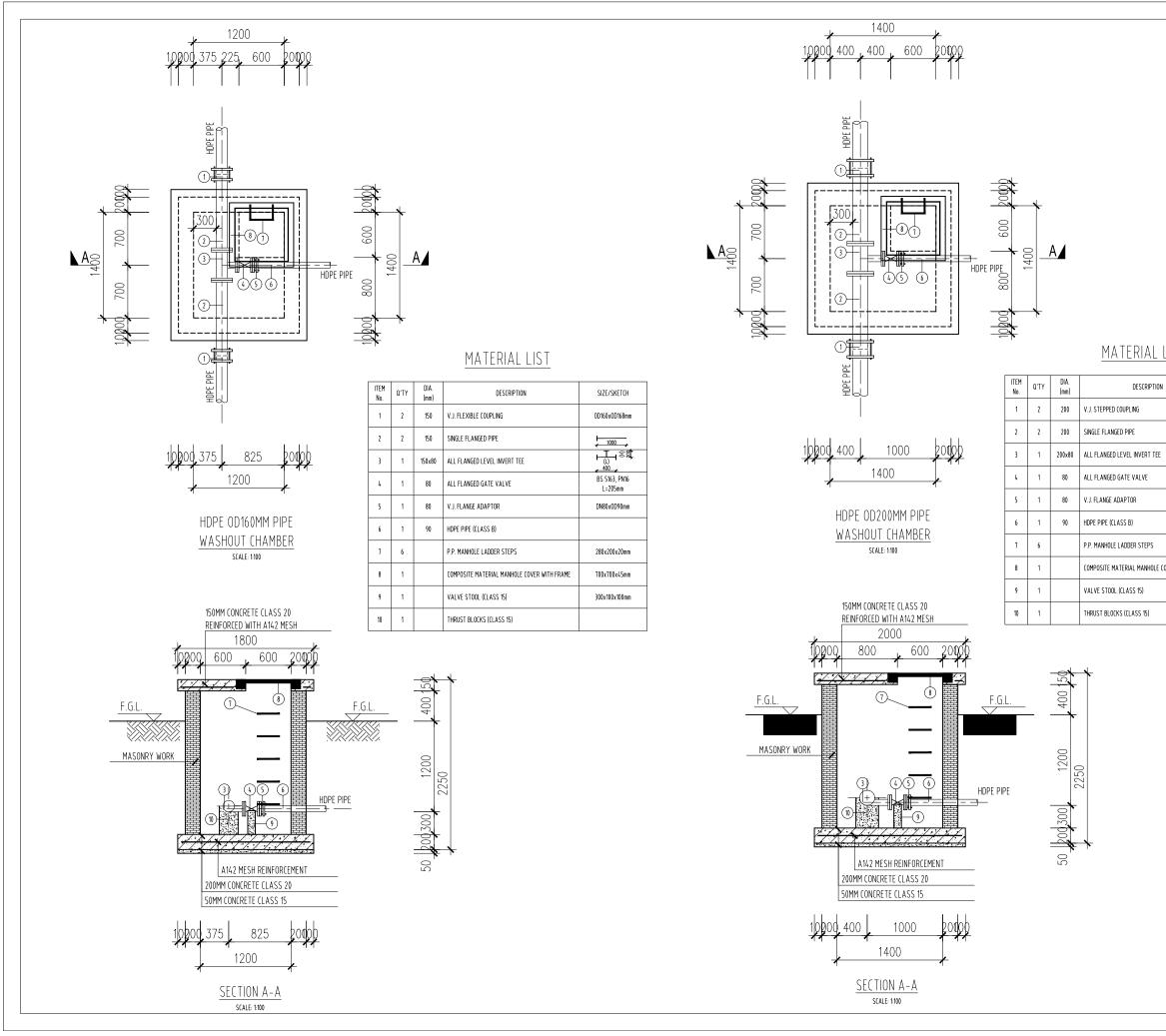
700x700x45mm

300x100x100mm



	NO.	TES					
		ALL DIMENSI OTHERWISE.	ONS ARE IN N	AILLIME TERS	UNLES	IS NOTE	ED
A	4 4 50						
							_
		PRELIMINAF Signed: Te	RY I SSUE am Leader				
	REV		REVISIONS		SIGN		APPROVED
				BY CHECKED BY		_	
				CHECKED BY			
				CHECKED BY CHECKED		_	
	Clie	ent	und				
		ancier	* ***		GOVER	INMENT OF OF WATERLAND	F KENYA
		oject YUSO F	ROCK C	ATCHI OJECT		IT W	ATE!
	Des	sign Consu	15 Westlan P.O Box 30 Tel: +254 7 +254 7	ds Road, West 337-00100 Na 18 875 310 88 352 533 ⊉losaimanagei			
				,ininger			
		awing Title ETAILED	DESIGN				
	DE ST	ETAILED	DESIGN D DRAW				
	DE ST W/	ETAILED FANDARI	DESIGN D DRAW	INGS Drawn by		КС	к
	DE ST W/ Des	ETAILED	DESIGN D DRAW TS - 1 JMM JN ,000	INGS		KCI JR NOV 2	
	DE ST W/ Des Che Sca	ETAILED FANDARI ASHOUT signed by ecked by H = 1.1 V = 1.1 V = 1.1 0 No.	DESIGN D DRAW TS - 1 JMM JN ,000	INGS Drawn by Approve	d by	JR NOV 2	

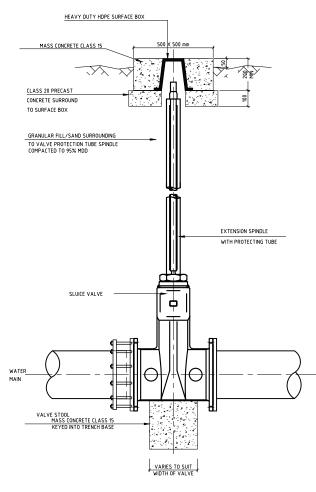
	SIZE/SKETCH
	OD250xOD273mm
	↓ <u>1000</u>
	↓ <u>↓</u> Ξ (L) + ⁴⁰⁰
	BS 5163, PN16 L=205mm
	DN80xOD90mm
	280x200x20mm
FRAME	700x700x45mm
	300x100x100mm



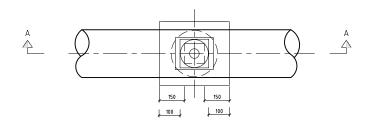
	SIZE/SKETCH
	OD200xOD219mm
	1000
	BS 5163, PN16 L=205mm
	DN80x0D90mm
	280x200x20mm
OVER WITH FRAME	700x700x45mm
	300x100x100mm

PR	ELIM	NAR	Y ISS	UE							
Sig	ned:	Tea	ım L	eade	er						
REV		RI	EVIS	1 O N S	5		SIGN	DATE	AP	J PROV	/ED
						BY CHECKED					
						BY CHECKED					
-									t		
					_	BY			1		
	ate	rFu	und	1		BY CHECKED BY CHECKED					
	ate	rFu rFu		ł		CHECKED BY					
Wa	ancing the	rFu e Water Se	unc	1		CHECKED BY					
Wa	ancing the	rFu water Sa	ector *	1		CHECKED BY					
Wa	ancing the	rFu v Water Su	LIN(Refor	1		CHECKED BY					
Wa	ancing the	rFu weerSi	ector *	1		CHECKED BY	GOVE		J F KE		
Finance	cier	rFu wester Sa	ector	1		CHECKED BY	GOVE		SF KEE	NYA	
Finance	cier	* * * *	* , * ¹	* *		CHECKED BY CHECKED					
Finance	cier	* * * *	* , * ¹	* * * * *			MEN				ER
Finance Project	cier ct JSC	× * * D R	* · · · · · · · · · · · · · · · · · · ·	K (PF		CHECKED BY CHECKED	MEN				ER
Finance Project	cier ct JSC	× * * D R	* · · · · · · · · · · · · · · · · · · ·	K (PF			MEN				= = = R
Finance Project	cier ct JSC	× * * D R	* · ·	K (PF	RO	CHECKED BY CHECKED	MEN r	IT V			ER
Finance Project	cier ct JSC	× * * D R	* · ·	K (PF	RO	CHECKED BY CHECKED	MEN r	IT V			ER
Finance	cier ct JSC	× * * D R	ttant	* * * * * * * * * * * * * * * * * * *	ands 30331 4 718 4 788		MEN Г	NT V			ER
Finance Projec KYU Design	cier cier JSC		ttant	* * * * * * * * * * * * * * * * * * *	ands 30331 4 718 4 788	CHECKED BY CHECKED TCCHI JECT Road, Wess Road, Wess Roa	MEN Г	NT V			=R
Finance Frojec KYU Design	cier cier JSC	Wester Sc D R D R D R D R D R	ector	* * * * * * * * * * * * * * * * * * * *	ands 30337 4 718 4 788 fo@lo	CHECKED BY CHECKED TCCHI JECT Road, Wess Road, Wess Roa	MEN Г	NT V			=R
Finance Frojec KYU Desigr	anding the citer Dist Dist Dist Dist Dist Dist Dist Dist			KK (PF SS. SS. SIG	ands 30331 4 718 4 788 fo@lo	CHECKED BY CHECKED TCCHI JECCI JECCI Road, Wes 700100 X 352 533 saimanage	MEN Г	NT V			= = =
Finance Frojec KYU Design	cier cier JSC JSC		ttant 11 P T E DE	K (PF S. Westli 25:+25: +25: +25: +25: SIG RAV	ands 30331 4 718 4 788 fo@lo	CHECKED BY CHECKED TCCHI JECCI JECCI Road, Wes 700100 X 352 533 saimanage	MEN Г	NT V			=R
Finance Projecc KYU Desigr ODrawin DETAI	non Co Dier Dier Dier Die Die Die Die Die Die Die Die Die Die		ttant 11 P T E DE	K (PF S. S. Si Westl Si Vestl Si Vestl Si Vestl Si G Rav 2	ands 3033; 4 718 4 788 fo@lo N	CHECKED BY CHECKED TCCHI JECCI JECCI Road, Wes 700100 X 352 533 saimanage	Land tand ment.cor	NT V			=R
Finance Projec KYU Design	cier bier JSC JSC In Co Ing T AILI SHC SHC ied b	D R D R D R D R D R D R D R D R D R D R	tant E DE JMM JN	K (PF S. S. Si Westl. Si Westl. Si Westl. Si Westl. Si Si G Rav 2	AO ands 1 30333 4718 4788 fo@lo N VIN	CHECKED BY CHECKED TCCHI JECT JECT Road, West Road, West Starton Start	MEN C utland irrobi, Ke ment.cor	NYA N			=R
Finance Project KYU Design Drawin DETA STAI WAS Design	cier cier JSC JSC AILI ND/ SHC bed by HC	D R onsul	OC Itant E DE S JMM JN JN	K (PF S. S. Si Westl. Si Westl. Si Westl. Si Westl. Si Si G Rav 2	AO ands I 30331 4718 4718 4788 fo@lo N VIN	CHECKED BY CHECKED TCCHI JECT Road, Wess Road, Wess Road, Wess Status St	VIEN T Lland lirobi, Ke ment.cor y d by	nya n K(JF			=R

I. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

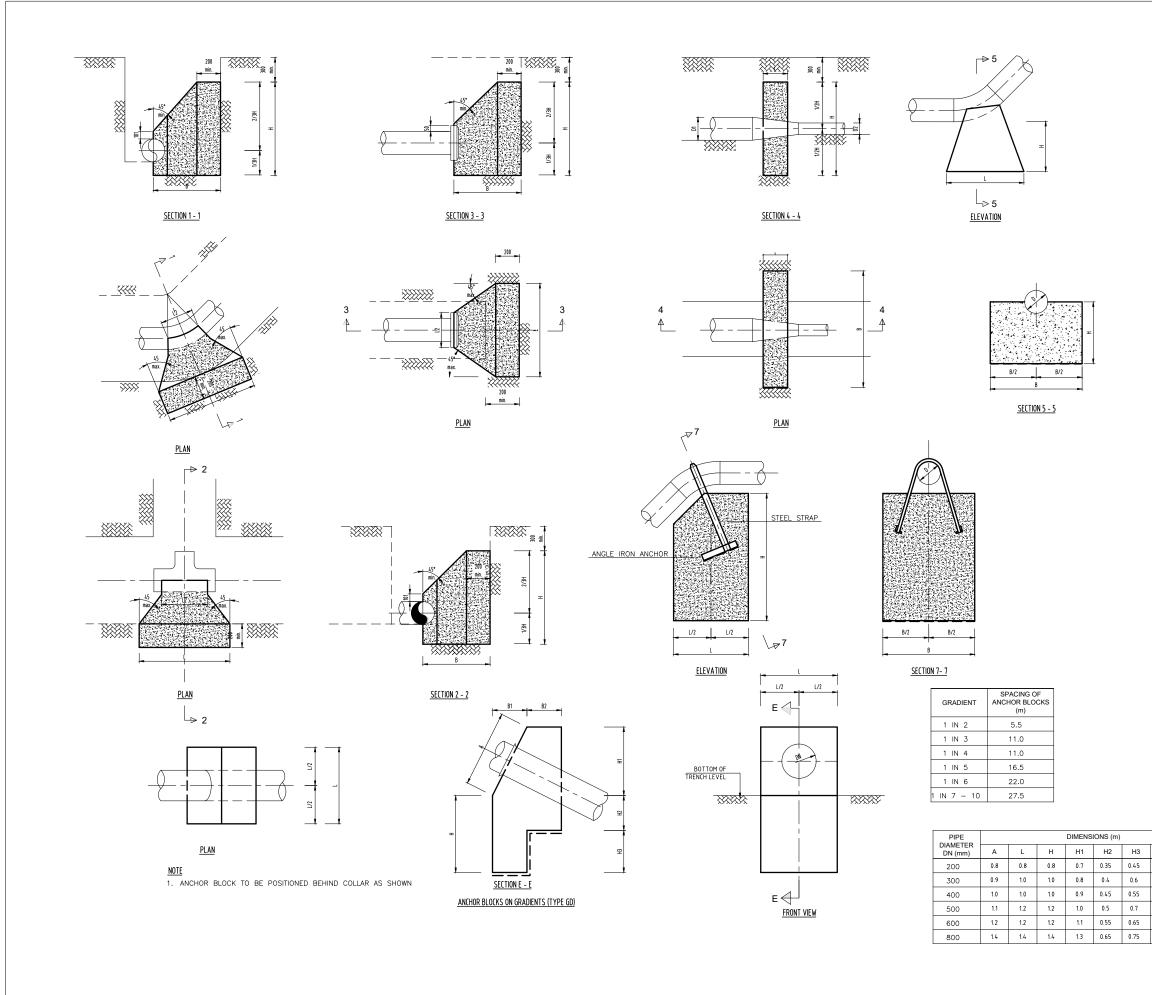






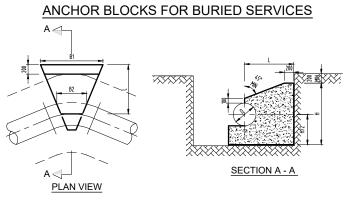
PLAN VIEW DETAILS OF VALVE SURFACE BOX

NOTES I. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE. PRELIMINARY ISSUE Signed: Team Leader ... SIGN DATE APPROVED REVISIONS REV BY CHECKED BY BY CHECKED BY CHECKED BY CHECKED Client WaterFund Financier Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 30337-00100 Nairobi, Kenya Tel: +254 718 875 310 +254 788 352 533 Email: info@losaimanagement.com Losai Drawing Title DETAILED DESIGN STANDARD DRAWINGS VALVE SURFACE BOX DETAILS Designed by JMM кск Drawn by Checked by JN JR Approved by Scale V = 1:100 Date NOV 2023 ACAD File: KYUSO Job No. 0 DWG. No. 0 REV SHEET 1 OF 1

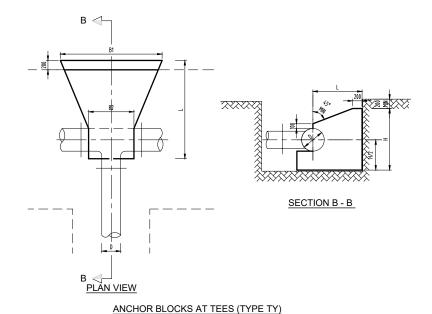


1. ALL DIMENSIONS ARE IN 1				
OTHERWISE.	MILLIMETERS	UNLES	IS NOT	ED
PRELIMINARY ISSUE				
Signed: Team Leader				
	•••••			
REVISIONS	BY	SIGN	DATE	APPROV
	CHECKED BY			<u> </u>
	CHECKED			1
	BY			
	BY CHECKED BY			-
Client	CHECKED			
Client Client WaterFund Proving to Water Sector	CHECKED BY			
WaterFund Francing the Water Dector	CHECKED BY			
WaterFund Proncing the Water Sector	CHECKED BY			10
Client Client Client Fracing be Water Search Financier	CHECKED BY			
WaterFund Proncing the Water Sector	CHECKED BY			
WaterFund Proncing the Water Sector	CHECKED BY	GOVER		
Financier	CHECKED BY	GOVERY		-
Financier Project KYUSO ROCK C	СНЕСКЕД	MEN		
Financier Project KYUSO ROCK C	CHECKED BY CHECKED	MEN		
Financier Project KYUSO ROCK C PR	СНЕСКЕД	MEN		
Financier Project KYUSO ROCK C PR	СНЕСКЕД	MEN		
Financier Project KYUSO ROCK C PR Design Consultants.			IT W	
Financier Froject KYUSO ROCK C Project Consultants. 15 Westlan P.0 Box 0 16 Westlan P.0 Box 0 17 Westlan P.0 Box 0 18 Westlan P.0 Box 0 P.0 Box 0	Снескер ВЧ Снескер Снескер АТСНІ ОЈЕСТ 0JЕСТ 18 875 310	MEN Г	IT V	
Financier Froject KYUSO ROCK C Project Consultants. 15 Westlan P.0 Box 0 16 Westlan P.0 Box 0 17 Westlan P.0 Box 0 18 Westlan P.0 Box 0 P.0 Box 0		MEN Г	IT V	
Financier Froject KYUSO ROCK C Project Consultants. Design Consultants. 15 Westlam THE-263 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam	Снескер ВЧ Снескер Снескер АТСНІ ОЈЕСТ 0JЕСТ 18 875 310	MEN Г	IT V	
Financier Froject KYUSO ROCK C Project Consultants.	CHECKED BY CHECKED CHECKED ATCHI OJECT vds Road, Wast 337.00100 ha 18 875 310 78 852 533 @Josaimanage	MEN Г	IT V	
Financier Froject KYUSO ROCK C Project Consultants. Design Consultants. 15 Westlam THE-263 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam 15 Westlam	CHECKED BY CHECKED CHECKED ATCHI OJECT ds Road, West 337-0010 Na 18875 310 18875 310 18875 310 1	MEN Г	IT V	
Financier Froject KYUSO ROCK C Project COUSTINE COUSTINE Design Consultants. 15 Bysedian Tel: +254 16 Bysedian 16 Bysedian 1	CHECKED BY CHECKED CHECKED ATCHI OJEC1 ds Road, West 337-0010 R8 352 533 @losaimanage	MEN Г	IT V	
Financier Froject KYUSO ROCK C Project KYUSO ROCK C Project Consultants. Design Consultants. 15 Westlam 15 Westlam 16 Westlam 17 Westlam 18 Westlam 18 Westlam 18 Westlam 18 Westlam 19 Westlam 1	CHECKED BY CHECKED CHECKED ATCHI OJEC1 ds Road, West 337-0010 R8 352 533 @losaimanage	MEN T	IT V	VATE
Financier Financier Project KYUSO ROCK C PR Design Consultants. Design Consultants. Design Consultants.	CHECKED BY CHECKED CHECKED ATCHI OJECT dis Road, West 3337-00100 Na 18 875 310 88 352 530 80 saimanage	MEN T tiand irrobi, Ker ment.com	IT W	/ATE
Financier Financier Project KYUSO ROCK C PR Design Consultants. Design Consultants. Design Consultants.	CHECKED BY CHECKED CHECKED ATCHI OJECI dis Road, West 3337-00100 Na 18 875 310 88 352 530 80 355 530 80 355 555 555 80 555 80 555 555 80	MEN T tiand irrobi, Ker ment.com		

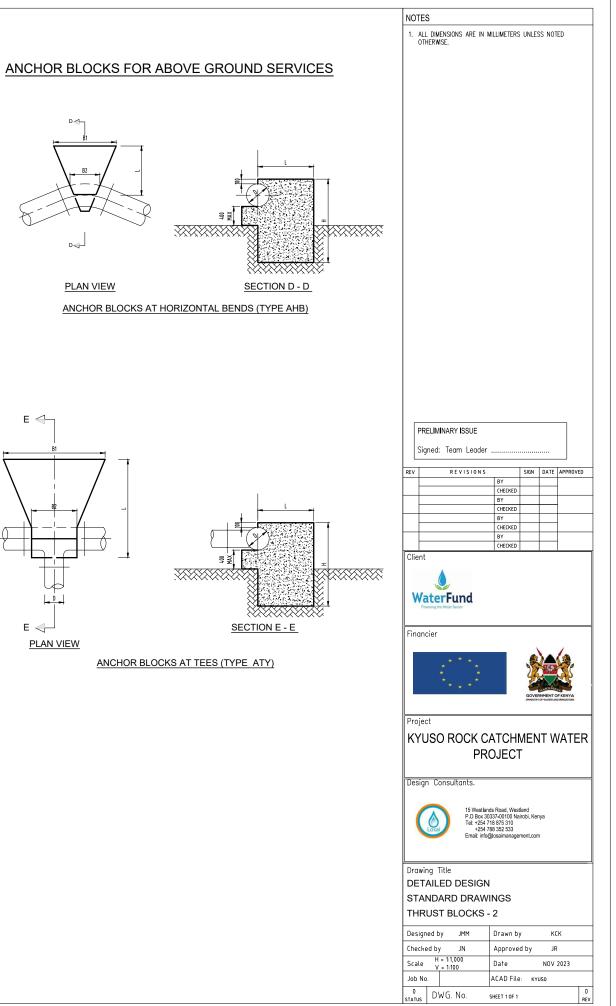
B1	B2
0.35	0.35
0.4	0.4
0.45	0.45
0.5	0.5
0.55	0.55
0.65	0.65

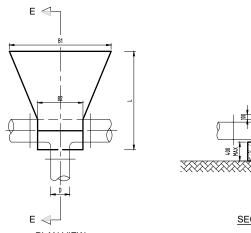


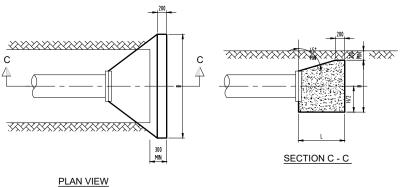
ANCHOR BLOCKS AT HORIZONTAL BENDS (TYPE HB)



DIMENSIONS OF ANCHOR BLOCKS FOR BURIED SERVICES BENDS (TYPE HB) - 90° 16 24 1.6 3.5 0.6 1.8 350 25 37.5 2.0 4.0 0.6 1.8 BENDS (TYPE HB) - 60° 24 1.5 2.8 0.45 1.6 16 350 25 37.5 1.8 3.4 0.45 1.8 BENDS (TYPE HB) - 45° 1.3 2.6 0.45 1.4 16 24 350 25 37.5 1.7 3.0 0.45 1.7 BENDS (TYPE HB) - 22.5° 1.2 0.2 1.2 1.5 16 24 350 0.2 1.4 25 37.5 1.4 2.0 BENDS TYPE HB - 11.25° 0.9 1.0 0.2 1.2 16 24 350 25 37.5 1.2 1.2 0.2 1.2 TEE (TYPE TY) 1.5 2.8 0.45 1.6 16 24 350 0.45 1.8 25 37.5 1.8 3.4 END CAPS (TYPE EC) 16 24 1.5 2.8 1.6 350 37.5 1.8 25 1.8 3.4







PIPE OPERATING TEST B2 н B1 L DIAMETRE PRESSURE PRESSURE (BAR) (BAR) (m) (m) (m) (m) (mm) BENDS (TYPE AHB) - 90° 3.5 3.0 3.0 0.6 16 24 350 0.6 4.0 25 37.5 3.5 3.5 BENDS (TYPE AHB) - 60° 0.45 3.0 16 24 3.0 2.5 350 25 37.5 3.0 3.5 0.45 3.5 BENDS (TYPE AHB) - 45° 2.5 2.5 0.45 3.0 16 24 350 0.45 3.0 25 37.5 3.0 3.0 BENDS (TYPE AHB) - 22.5° 16 24 2.0 2.0 0.2 2.5 350 0.2 2.5 25 37.5 2.5 2.5 TEES (TYPE ATY) 24 3.0 2.5 0.45 3.0 16 350 25 37.5 3.0 3.5 0.45 3.5

DIMENSIONS OF ANCHOR BLOCKS FOR ABOVE GROUND SERVICES

ANCHOR BLOCKS AT END CAPS (TYPE EC)

11.25 deg

B Strap Vol H L B Strap Vol

(m) (m) (m) (m) (mm) (m³) (m) (m) (m) (m) (mm) (m³)

VERTICAL BENDS (TYPE CV) - CREST (dimensions in metres)

HL

22.5 deg

0.60 0.80 0.70 30x4 0.28 0.50 0.50 0.50 30x4 0.12 0.40 0.40 0.40 30x4 0.07

0.80 0.90 0.70 30x4 0.44 0.60 0.70 0.50 30x4 0.20 0.50 0.50 0.40 30x4 0.10

0.90 1.20 0.80 30x4 0.72 0.80 0.90 0.50 30x4 0.34 0.60 0.70 0.40 30x4 0.17

0.80 1.20 0.70 30x4 0.55 0.60 0.60 0.70 30x4 0.24 0.40 0.50 0.70 30x4 0.14 0.80 1.20 0.70 30x4 0.55 0.80 0.80 0.70 30x4 0.43 0.60 0.60 0.70 30x4 0.25

0.90 1.40 0.80 30x4 0.82 0.80 1.20 0.70 30x4 0.62 0.70 0.70 0.70 30x4 0.34 **90** 0.80 1.20 1.00 30x4 0.78 0.70 0.90 0.80 30x4 0.48 0.60 0.70 0.70 30x4 0.29

0.80 1.70 1.10 30x4 1.10 0.80 1.30 0.90 30x4 0.86 0.80 1.00 0.80 30x4 0.63

1.10 1.60 1.20 40x4 1.73 0.80 1.30 1.10 30x4 1.05 0.60 1.20 0.90 30x4 0.62 150 1.30 1.80 1.40 40x6 2.71 0.80 1.60 1.30 30x4 1.50 0.90 1.20 1.00 30x4 1.05 **240** 1.30 2.20 1.80 60x6 4.06 1.00 1.70 1.60 40x6 2.49 0.90 1.50 1.20 40x4 1.56
 90
 1.20
 1.80
 1.40
 60x6
 2.46
 1.00
 1.50
 1.20
 60x4
 1.67
 0.80
 1.20
 1.00
 60x4
 0.93

 150
 1.40
 2.20
 1.60
 60x6
 3.96
 1.00
 1.70
 1.40
 60x4
 2.18
 1.00
 1.50
 1.24
 1.74

150 0.80 1.50 1.10 30x4 1.02 0.80 1.10 0.80 30x4 0.66 0.70 1.00 0.70 30x4 0.48

 90
 0.80
 1.60
 1.40
 40x4
 1.35
 0.70
 1.50
 0.90
 30x4
 0.85
 0.60
 1.00
 0.80
 30x4
 0.47

 150
 0.95
 1.80
 1.60
 40x4
 2.09
 0.90
 1.20
 30x4
 1.49
 0.70
 1.20
 1.00
 30x4
 0.81

240 1.00 2.00 2.00 40x6 3.00 1.00 1.60 1.60 30x4 2.35 0.80 1.40 1.20 30x4 1.29

240 1.60 2.50 2.20 100x6 7.09 1.20 2.00 1.80 80x4 3.95 1.00 1.70 1.20 60x4 1.96

45 deg

TEES AND ENDS - TYPE TY

(dimensions in metres)

L B Strap Vol

(m) (m) (mm) (m³)

Pipe

Diameter

(mm)

80

100

150

200

250

300

Test

Pressure

(m)

90

150

240

90

150 240

240

90

н

(m)

VERTICAL BENDS (TYPE DV) - DEPRESSIONS (dimensions in metres)

Pipe Diameter	Test Pressure		4	45 de	g			2	2.5 de	eg		11.25 deg					
		Н	L	В	L2	Vol	Н	L	В	L2	Vol	н	L	В	L2	Vol	
(mm)	(m)	(m)	(m)	(m)	(m)	(m ³)	(m)	(m)	(m)	(m)	(m ³)	(m)	(m)	(m)	(m)	(m ³)	
80	90	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.20	0.10	0.03	
	150	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.20	0.10	0.03	
	240	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.20	0.10	0.03	
100	90	0.50	0.40	0.30	0.15	0.05	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.20	0.10	0.03	
	150	0.50	0.40	0.30	0.15	0.05	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.20	0.10	0.03	
	240	0.50	0.40	0.30	0.15	0.05	0.50	0.40	0.30	0.10	0.04	0.50	0.40	0.20	0.10	0.03	
150	90	0.55	0.60	0.30	0.30	0.08	0.55	0.40	0.30	0.14	0.05	0.55	0.40	0.30	0.13	0.05	
	150	0.55	0.70	0.40	0.30	0.11	0.55	0.50	0.30	0.14	0.06	0.55	0.50	0.30	0.13	0.06	
	240	0.55	0.80	0.40	0.30	0.13	0.55	0.70	0.30	0.14	0.07	0.55	0.50	0.30	0.13	0.06	
200	90	0.60	0.80	0.40	0.35	0.14	0.60	0.70	0.30	0.14	0.08	0.60	0.50	0.30	0.13	0.06	
	150	0.60	0.90	0.40	0.35	0.15	0.60	0.70	0.30	0.14	0.08	0.60	0.50	0.30	0.13	0.06	
	240	0.60	1.10	0.60	0.35	0.27	0.60	0.80	0.40	0.14	0.12	0.60	0.60	0.40	0.13	0.09	
250	90	0.65	0.80	0.50	0.40	0.20	0.65	0.70	0.40	0.15	0.12	0.65	0.60	0.40	0.14	0.10	
	150	0.65	1.00	0.70	0.40	0.32	0.65	0.80	0.50	0.15	0.16	0.65	0.60	0.40	0.14	0.10	
	240	0.65	1.20	0.70	0.40	0.37	0.65	1.00	0.50	0.15	0.19	0.65	0.70	0.50	0.14	0.14	
300	90	0.70	1.00	0.50	0.40	0.25	0.70	0.80	0.40	0.16	0.14	0.70	0.60	0.40	0.15	0.11	
	150	0.70	1.20	0.70	0.40	0.40	0.70	1.00	0.50	0.16	0.21	0.70	0.70	0.40	0.15	0.12	
	240	0.70	1.50	1.00	0.40	0.67	0.70	1.20	0.70	0.16	0.34	0.70	0.80	0.40	0.15	0.14	

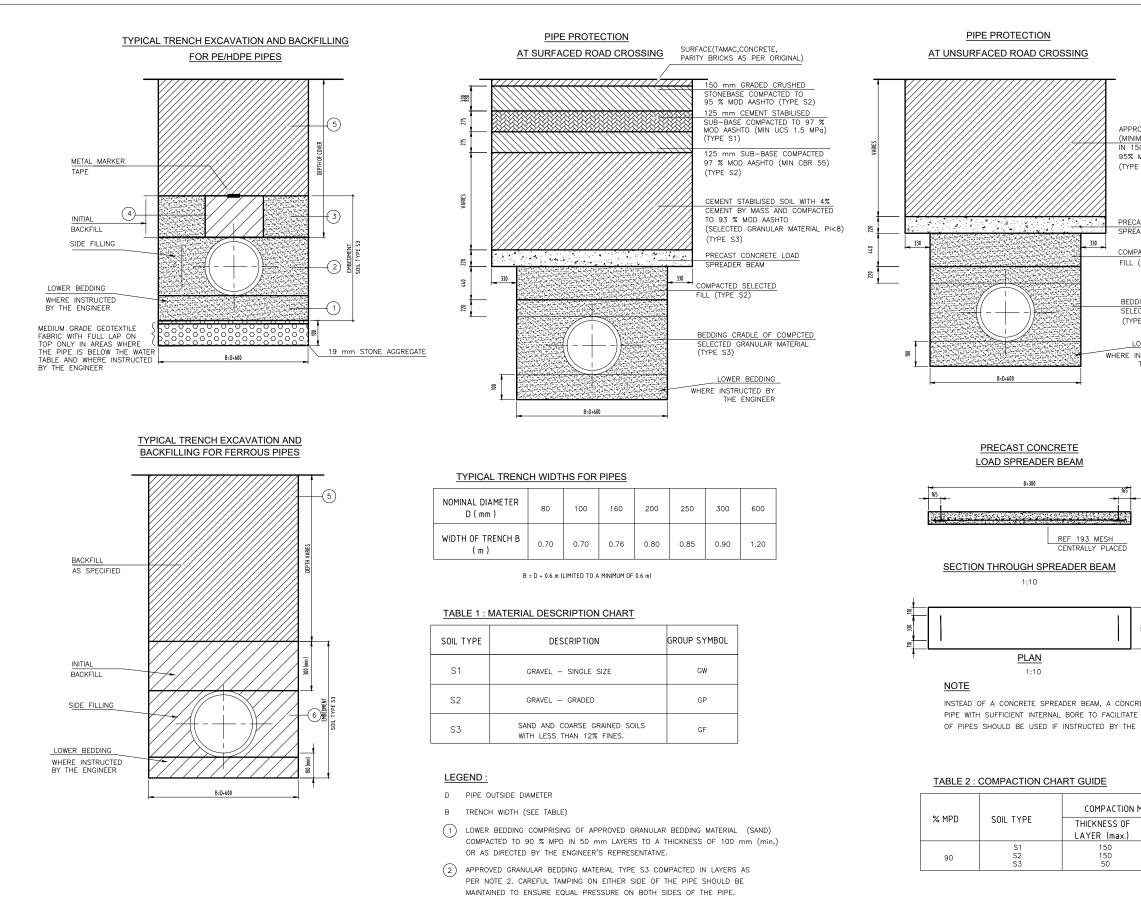
REDUCERS- TYPE RD (dimensions in metres)

Pipe	Test				
Diameter	Pressure				
		L	В	Н	Vol
(mm)	(m)	(m)	(m)	(m)	(m ³)
100/80	90	0.35	0.50	0.40	0.07
	150	0.35	0.55	0.45	0.09
	240	0.35	0.60	0.55	0.12
150/80	90	0.40	0.50	0.40	0.08
	150	0.40	0.60	0.40	0.10
	240	0.40	0.75	0.55	0.17
150/100	90	0.40	0.50	0.40	0.08
	150	0.40	0.60	0.40	0.10
	240	0.40	0.70	0.45	0.13
200/100	90	0.40	0.70	0.50	0.14
	150	0.40	0.80	0.70	0.22
	240	0.40	1.00	0.80	0.32
200/150	90	0.40	0.60	0.40	0.09
	150	0.40	0.65	0.40	0.10
	240	0.40	0.75	0.50	0.15
250/100	90	0.40	0.80	0.60	0.18
	150	0.40	0.90	0.70	0.24
	240	0.40	1.00	0.80	0.31
250/150	90	0.40	0.80	0.60	0.18
	150	0.40	0.85	0.70	0.23
	240	0.40	0.95	0.85	0.32
250/200	90	0.40	0.70	0.60	0.16
	150	0.40	0.75	0.70	0.20
	240	0.40	0.90	0.80	0.28
300/100	90	0.40	1.00	0.70	0.27
	150	0.40	1.30	0.90	0.46
	240	0.40	1.50	1.00	0.59
300/150	90	0.40	1.00	0.70	0.27
	150	0.40	1.25	0.80	0.39
	240	0.40	1.50	1.00	0.59
300/200	90	0.40	1.00	0.70	0.27
	150	0.40	1.00	0.80	0.31
	240	0.40	1.20	1.00	0.47
300/250	90	0.40	1.00	0.70	0.26
	150	0.40	1.00	0.80	0.30
	240	0.40	1.10	1.00	0.42

HORIZONTAL BENDS - TYPE HB (dimensions in metres)

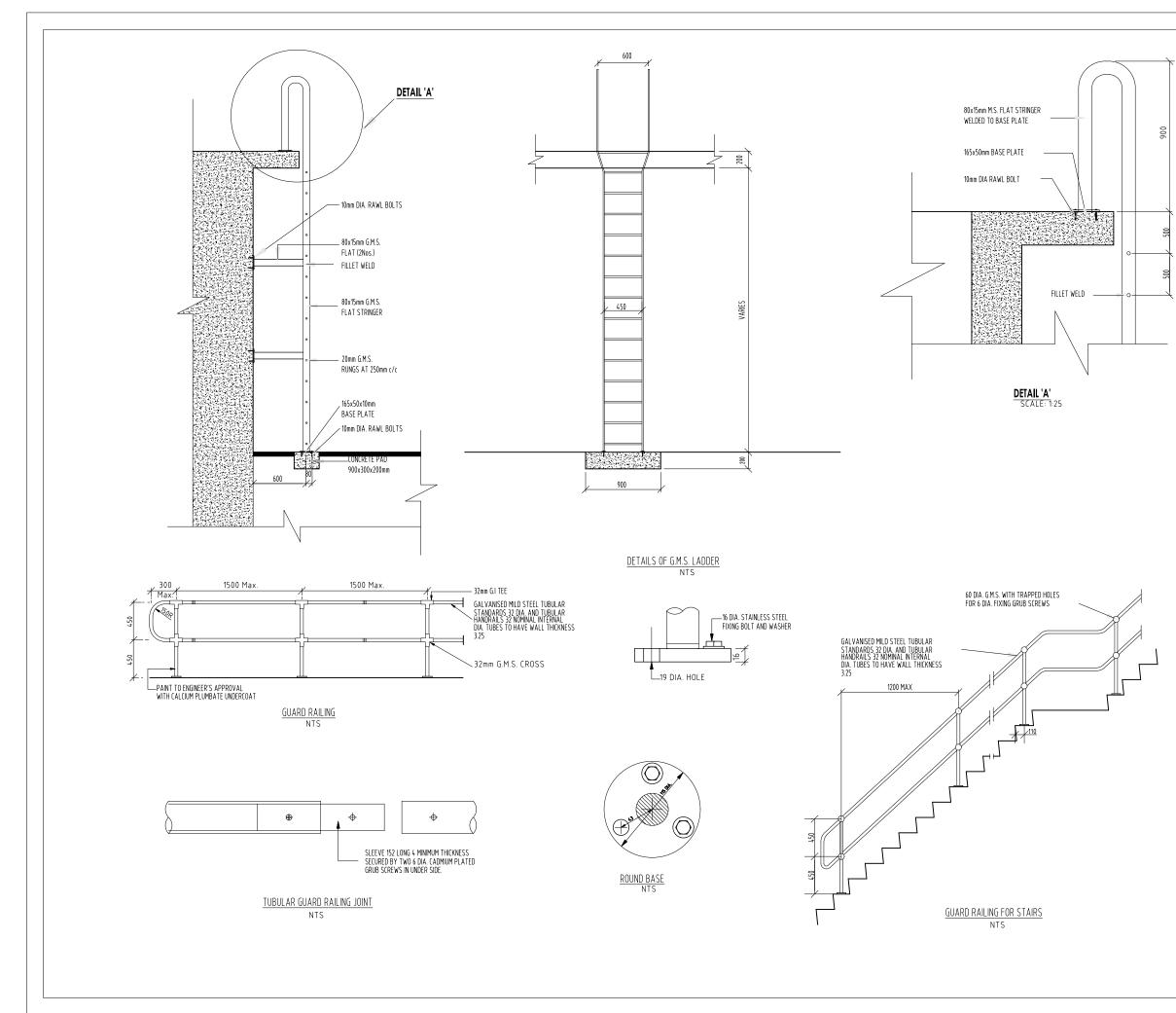
Pipe Diameter	Test Pressure		9	0 deg	I			4	15 deç)			2	2.5 de	eg			11	l.25 d	eg		Bran Diame			Tees	and E	Ends	
Diameter	Flessule	н	I	в	L2	Vol	н	1	В	L2	Vol	н	1	В	L2	Vol	н		в	L2	Vol	Diame	lei Fiessule	Н		В*	L2	Vol
(mm)	(m)	(m)	(m)	(m)	(m)	(m ³)	(m)	(m)	(m)	(m)	(m ³)	(m)	(m)	(m)	(m)	(m ³)		(m)			(m^3)	(mn) (m)	(m)	(m)			(m ³)
65	90	0.30	0.30	<u>`</u>	· /	· ,	(m)	· ,	<u>`</u>	· /		(111)	(m)		(III)	()	(11)	(11)	(m)	(m)	()	65	90	0.24	, í	<u>`</u>	l · · ·	-
65	90 150	0.30	0.30	0.60	0.10	0.04	0.20	0.21	0.60	0.10	0.02											60	90 150		0.25	0.60	0.07	
	240			0.60	0.10	0.06	0.28	0.28	0.60	0.10	0.03	0.04	0.05	0.00	0.40	0.00							240	0.33	0.33	0.60		-
0.0		0.50	0.51				0.36	0.37			0.05	0.24	0.25	0.60	0.10	0.03								0.42	0.43	0.60		
80	90	0.32	0.32		0.10		0.22	0.22		0.10												80	90	0.26	0.26	-	0.08	-
	150	0.42	0.43	0.60	0.10		0.30	0.30	0.60	0.10	0.04	0.19	0.20	0.60	0.10	0.02							150	0.35	0.35	0.60		-
	240	0.54	0.54	0.60	0.10		0.39	0.39	0.60	0.10	0.06	0.26	0.27	0.60	0.10	0.03	0.17	0.17	0.60	0.10	0.01		240	0.45	0.46	0.60		_
100	90	0.46	0.46	0.65	0.15		0.33	0.33	0.65	0.15	0.05	0.22	0.23	0.65	0.10	0.02						100	90	0.39	0.39	-	0.10	-
	150	0.60	0.60	0.65	0.15	0.15	0.43	0.44	0.65	0.15		0.30	0.31	0.65	0.10	0.04	0.20	0.20	0.65	0.10	0.02		150	0.50	0.51		0.10	
	240	0.76	0.76	0.65	0.15	0.23	0.55	0.56	0.65	0.15	0.13		0.40	0.65	0.10	0.07	0.26	0.27	0.65	0.10			240	0.64	0.64		0.10	
150	90	0.67	0.67	0.65	0.30	0.19	0.49	0.50	0.65	0.20		0.34	0.35	0.65	0.14	0.05	0.22	0.23	0.65	0.13	0.03	150		0.57	0.57	0.65		
	150	0.86	0.87	0.65	0.30	0.30	0.64	0.64	0.65	0.20	0.17	0.45	0.46		0.14	0.09	0.31	0.31	0.65	0.13			150	0.73	0.74	0.65		
	240	1.01	1.18	0.65	0.30	0.46	0.81	0.81	0.65	0.20	0.26	0.58	0.58	0.65	0.14	0.13	0.40	0.41	0.65	0.13	0.07		240	0.92	0.93	0.65	0.15	0.33
200	90	0.87	0.87	0.70	0.35	0.32	0.64	0.65	0.70	0.20	0.18	0.46	0.46	0.70	0.14	0.09	0.31	0.32	0.70	0.13	0.05	200	90	0.74	0.74	0.70	0.20	0.24
	150	1.05	1.19	0.70	0.35	0.51	0.83	0.83	0.70	0.20	0.28	0.59	0.60	0.70	0.14	0.15	0.41	0.42	0.70	0.13	0.08		150	0.94	0.95	0.70	0.20	0.37
	240	1.05	1.91	0.70	0.35	0.79	1.04	1.05	0.70	0.20	0.43	0.75	0.76	0.70	0.14	0.23	0.53	0.54	0.70	0.13	0.12		240	1.05	1.36	0.70	0.20	0.57
250	90	1.05	1.06	0.70	0.40	0.45	0.78	0.79	0.70	0.25	0.24	0.56	0.57	0.70	0.15	0.13	0.39	0.39	0.70	0.14	0.07	250	90	0.89	0.90	0.70	0.25	0.34
	150	1.09	1.70	0.70	0.40	0.72	1.00	1.01	0.70	0.25	0.40	0.73	0.73	0.70	0.15	0.21	0.51	0.52	0.70	0.14	0.11		150	1.09	1.21	0.70	0.25	0.53
	240	1.09	2.74	0.70	0.40	1.13	1.09	1.48	0.70	0.25	0.62	0.91	0.92	0.70	0.15	0.32	0.65	0.66	0.70	0.14	0.17		240	1.09	1.94	0.70	0.25	0.82
300	90	1.13	1.49	0.75	0.40	0.69	0.96	0.97	0.75	0.25	0.38	0.69	0.70	0.75	0.16	0.20	0.48	0.49	0.75	0.15	0.10	300	90	1.09	1.10	0.75	0.30	0.52
	150	1.13	2.50	0.75	0.40	1.12	1.13	1.35	0.75	0.25	0.61	0.89	0.89	0.75	0.16	0.32	0.63	0.64	0.75	0.15	0.17		150	1.13	1.77	0.75	0.30	0.82
	240	1.13	4.01	0.75	0.40	1.76	1.13	2.17	0.75	0.25	0.96	1.11	1.12	0.75	0.16	0.49	0.80	0.81	0.75	0.15	0.26		240	1.13	2.83	0.75	0.30	1.27

NOTES					_
 ALL DIMENSIONS ARE IN M OTHERWISE. 	ILLIMETERS	UNLES	S NOT	ED	
				_	
PRELIMINARY ISSUE					
Signed: Team Leader					
REV REVISIONS	1	SIGN	DATE	APPROVED	
	BY CHECKED				
Client					
WaterFund					
Financing the Water Sector					
Financier					
				10	
		32	15,9	3C	
. ****		2	INHAME		
		OMINISTRY	INMENT C	F KENYA DIRRGATION	
Project					
KYUSO ROCK CA			IT W	/ATEI	₹
PRO	DJECT	-			
Design Consultants.					
Design Constitutions.					
15 Westland P.O Box 303	s Road, West 37-00100 Na	land irobi. Ker	iva		
Tel: +254 71 +254 78	8 875 310 8 352 533				
Email: info@	losaimanagei	nent.con	1		
Described TV					
Drawing Title DETAILED DESIGN					
STANDARD DRAWI	NGS				
THRUST BLOCKS -					
Designed by JMM	Drawn by	,	к	K	\neg
Checked by JN	Approve		JR		\dashv
Scale H = 1:1,000 V = 1:100	Date		NOV	2023	
Job No.	ACAD File	: KY	JSO		
0 DWG. No. s	HEET 1 OF 1				0 REV

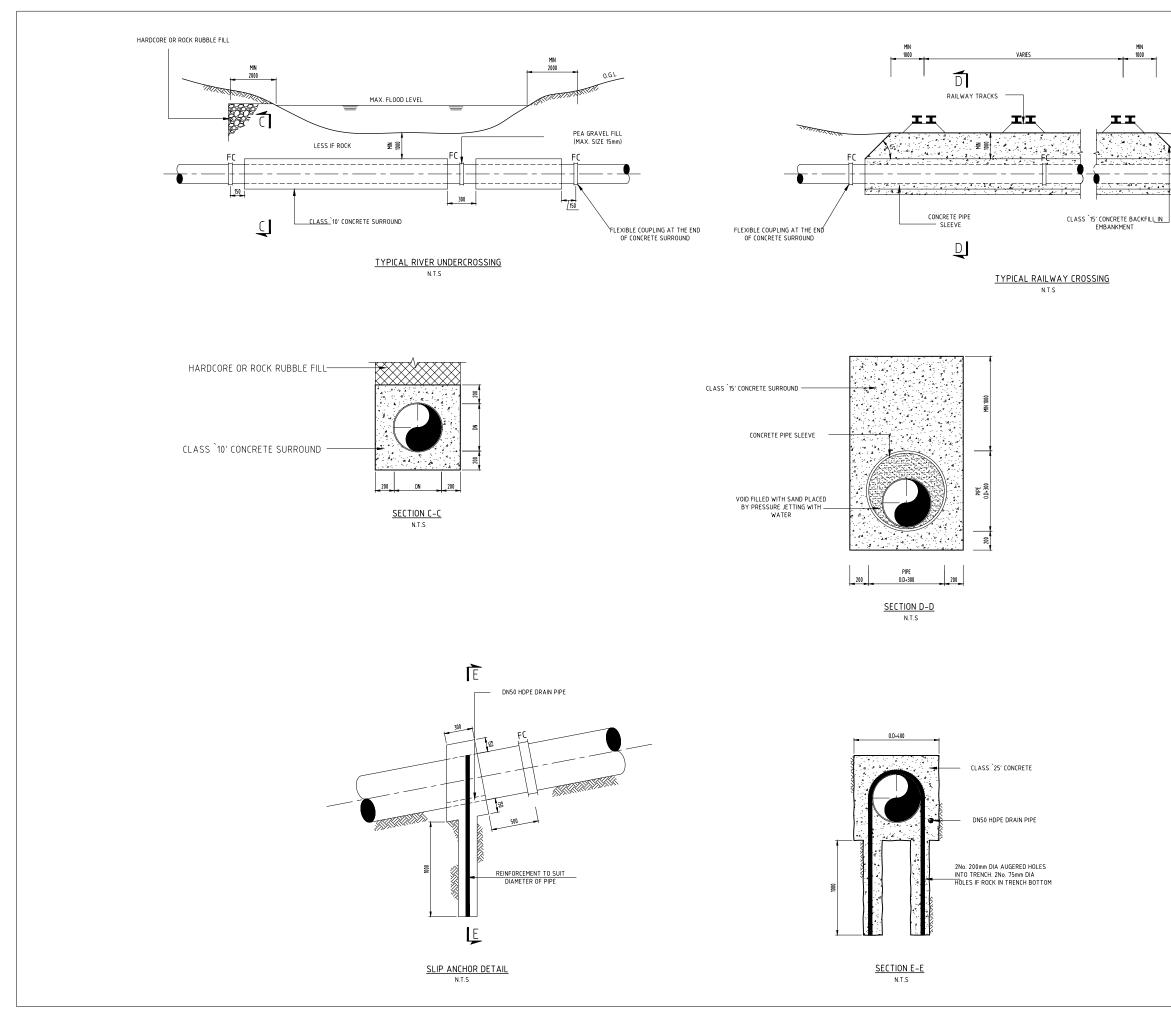


- APPROVED GRANULAR BEDDING MATERIAL TYPE S3 COMPACTED IN SHALLOW LAYERS TO A MAXIMUM OF 150 mm THICK.
- (4) AS IN (3) ABOVE, BUT EXCESSIVE TAMPING TO BE AVOIDED.
- 5 NORMAL BACKFILL MATERIAL PROPERLY RAMMED IN LAYERS. NOT EXCEEDING 150 mm THICK.

	NOTES
	1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
OVED GRAVEL MATERIAL IUM CBR 50) COMPACTED	
0 mm LAYERS TO MOD AASHTO DENSITY	
S2)	
ST CONCRETE LOAD	
DER BEAM	
CTED SELECTED TYPE S2)	
TTPE SZ)	
NG CRADIE OF COMPCTED	
NG CRADLE OF COMPCTED CTED GRANULAR MATERIAL S3)	
·	
WER BEDDING STRUCTED BY	
HE ENGINEER	
	PRELIMINARY ISSUE
	Signed: Team Leader
	REV R E V I S I O N S SIGN DATE APPROVED BY BY <t< td=""></t<>
	CHECKED BY
	CHECKED BY
	CHECKED BY
	Client
	WaterFund
Ŧ	Financing the Water Sector
	Financier
4	
1	
Ŧ	
	OMMETRY OF WARRAND MIREARD MIREARD MI
INSERTION	Project
INSERTION	Project KYUSO ROCK CATCHMENT WATER
INSERTION	Project KYUSO ROCK CATCHMENT WATER PROJECT
TE OR STEEL INSERTION ENGINEER.	Project KYUSO ROCK CATCHMENT WATER
INSERTION ENGINEER.	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants.
NSERTION NGINEER. THOD No. OF	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 3037-00100 Nairobi, Kenya Tel -254 718 875 310 -254 788 253 233
NSERTION NGINEER. ETHOD No. OF PASSES	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants.
NSERTION NGINEER. THOD No. OF	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland PO Bex 30337-00100 Natrol, Kenya Tet - 264 778 8752 833 Email: info@losaimanagement.com
ETHOD PASSES 2	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 3037-00100 Nairobi, Kenya Tel -254 718 875 310 -254 788 253 233
INSERTION ENGINEER. ETHOD No. OF PASSES 1 2	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. IS Westlands Road, Westland PO Bex 30337-00100 Natrock, Kenya Tet - 254 778 8752 333 Email: info@losainanagement.com Drawing Title DETAILED DESIGN STANDARD DRAWINGS
ETHOD PASSES 2	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 3037-00100 Narobi, Kenya Tel + 254 718 355 210 -254 788 352 2033 Email: info@losaimanagement.com Drawing Title DETAILED DESIGN STANDARD DRAWINGS PIPE BEDDING DETAILS
ETHOD PASSES 2	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 3037-00100 Narobi, Kenya Tel -254 778 352 303 Email: into@losaimanagement.com Drawing Title DETAILED DESIGN STANDARD DRAWINGS PIPE BEDDING DETAILS Designed by JMM Drawn by KCK
NSERTION INGINEER. ETHOD No. OF PASSES 1 2	Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westlands Road, Westland P.O Box 3037-00100 Narobi, Kenya Tel + 254 718 355 210 -254 788 352 2033 Email: info@losaimanagement.com Drawing Title DETAILED DESIGN STANDARD DRAWINGS PIPE BEDDING DETAILS



	NO											
		TES				105		LLIMETER				
		OTHE	.RWIS	SE.								
	-										_	
		PREL										
	2	Signe	ed:	Te	am	Lea	der .					
F	REV			R	EV	\$10	N S	BY	SIGN	DATE	APP	ROVED
╞		F						BY CHECKED BY			1	
		F						BY CHECKED BY	-		1	
		F						CHECKED			1	
ļ	Clie	Ŀ						BY CHECKED				
	W	Vat	ter	F								
ŀ	Find		ting the 1	Water	un	d						
	Find	ancie	ting the 1	Water :	un	d					1.	
	Find	ancie	ting the 1	Water	un Rector	d.						5
	Fine	ancie	ting the 1	* * *	*	d *			GOVE		AF KENY	S
			er	* * * *	*	d * •			GOVEI		OF KENY	YA
	Pro	iject	er	* * * *	*	***			ONNETH	OF WATER AN	018966471	
	Pro	iject	er	* * * *	*	¢.			MEN	OF WATER AN	01896(47)	
	Pro K1	iject /US	er	* * * *	* * {0	CK F		ATCH DJEC	MEN	OF WATER AN	01896(47)	
	Pro K1	iject	er	* * * *	* * {0	CK F			MEN	OF WATER AN	01896(47)	
	Pro K1	iject /US	er	* * * *	* * (0)	CK F	PRO)JEC	MEN	IT W	01896(47)	
	Pro K1	iject /US	er	* * * *	× ×	CCK F nts.	estland: 0x 303 254 71 254 78	Road, Wer 37-00100 N 3 875 310 3 352 533	MEN T itland airobi, Ker	IT W	01896(47)	
	Pro K1	iject /US	er	* * * *	× ×	CCK F nts.	estland: 0x 303 254 71 254 78		MEN T itland airobi, Ker	IT W	01896(47)	
-	Pro	iject YUS	er SO Cor		× ×	CCK F nts.	estland: 0x 303 254 71 254 78	Road, Wer 37-00100 N 3 875 310 3 352 533	MEN T itland airobi, Ker	IT W	01896(47)	
	Pro K1 Des	iject /US	er SO Coi		× × Itar	CK F nts.	estland ox 303 254 71 254 78 : info@	Road, Wer 37-00100 N 3 875 310 3 352 533	MEN T itland airobi, Ker	IT W	01896(47)	
	Pro K Des Dra Dra	iject YUS sign			× CO Iltar	CK F nts. 15 We POB Tel: + Email:	estland ox 303 254 71 254 78 info@	Road, Wer 37-00100 N 3 875 310 3 352 533	MEN T itland airobi, Ker	IT W	01896(47)	
- - -	Pro K) Des Dra DFa ST	iject YUS sign wing TA				CK F P.0 B Tel: + Email: SIQ DRA	estland ox 303 254 711 254 78 GN WI	Road, We: 37-0010 N 3 875 310 3 352 533 osaimanag	MEN T itland airobi, Ker	IT W	01896(47)	
	Pro K Des Dra Dra ST GN Des	iject YUS Sign wing TA TANI MS I				CK F nts. 15 We POB Tel: + Email: ESI(DRA R D	estland ox 303 254 711 254 78 GN WI	NGS NLS Drawn t	MEN T itland airrobi, Ker	IT W	VA ⁻	
	Pro K) Des Dra Dra ST GN Des Che	iject YUS isign wing ETA WS I ignee cked	er SO Coi J Ti ILE IDA LAI d by H =			CK F nts. 15 We P.O B Tel: +: Email: Email: CK F CK F C E SIC	Standor ox 303 254 71 254 78 Sinfo@	NGS NILS Drawn E	MEN T itland airrobi, Ker	IT W	VA ⁻	
	Pro K Des Dra Dra ST GN Des	iject YUS sign wing TA TAN MS I ignec cked le	er SO Coi J Ti ILE IDA LAI d by H =			CK F nts. 15 We P.O B Tel: +: Email: Email: CK F CK F C E SIC	Standard Sta	NGS NLS Drawn t	MEN T utland ment.cor	IT W nya n	VA ⁻	TER



	NOTES 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED ODJERNMEE
	OTHERWISE.
ATTAVATAT	
FC	
	PRELIMINARY ISSUE
	Signed: Team Leader
	REV R E V I S I O N S SIGN DATE APPROVED
	BY CHECKED
	BY CHECKED
	BY CHECKED
	BY CHECKED
	Client
	WaterFund
	WaterFund Financing the Vitare Sector
	Financier
	Financing the Water Sector
	Financing the Water Sector
	Financier
	Financing the Water Sector
	Financier Financier Financer Financer Financer Financer Financer Financer Financer Financer
	Financier Financier Project KYUSO ROCK CATCHMENT WATER
	Financier Financier Project
	Financier Financier Project KYUSO ROCK CATCHMENT WATER
	Financier Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants.
	Financier Financier Froject Project KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Westands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland P:0 Box 3037-00100 Natrob, Kenya 15 Westlands Road, Westland
	Financier Financier Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT
	Financier Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. 15 Weslands Road, Wesland PO Box 30337-00100 Narrod, Kerya Ter + 224 718 875 313
	Financier Financier Froject Cyclosed Consultants. Design Consultants. Project 15 Weslands Road, Wesland PC Des 332 033 Project Project Design Consultants. Project Project Project Design Consultants. Project Project Project Design Consultants. Project Project Project Design Consultants. Project Project Project Project Design Consultants. Project Project Project Project Project Project Design Consultants. Project Pr
	Financier Financier Froject Project Design Consultants. Pesign Consultants. Project 19 Weslands Road, Wesland P. Rous 2003 700100 Autors, Kerys Te: 254 718 875 101 254 788 852 533 Email: Info@Isaamanagement.com
	Financier Financier Financier Froject KYUSO ROCK CATCHMENT WATER Project Besign Consultants. Design Consultants. IS Weslands Road, Wesland P.O Box 3037-0010 Nairobi, Kenya Tei -254 718 875 310 -254 788 252 333 Erail: info@losaimanagement.com Drawing Title DETAILED DESIGN STANDARD DRAWINGS CROSSING DETAILS - 2
	Financier Financier Financier Financier Financier Froject Froject KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. IS Westands Road, Westland P.O Box 3037-00100 Nairobi, Kenya Tel -254 718 875 310 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 754 -254 788 75 -254 788 754 -254 788 75
	Financier Financier Financier Froject KYUSO ROCK CATCHMENT WATER PROJECT Design Consultants. Design Consultants. IS Westands Road, Westland P.O Box 3037-20100 Nairob, Kenya Tel: +254 778 357 310 +254