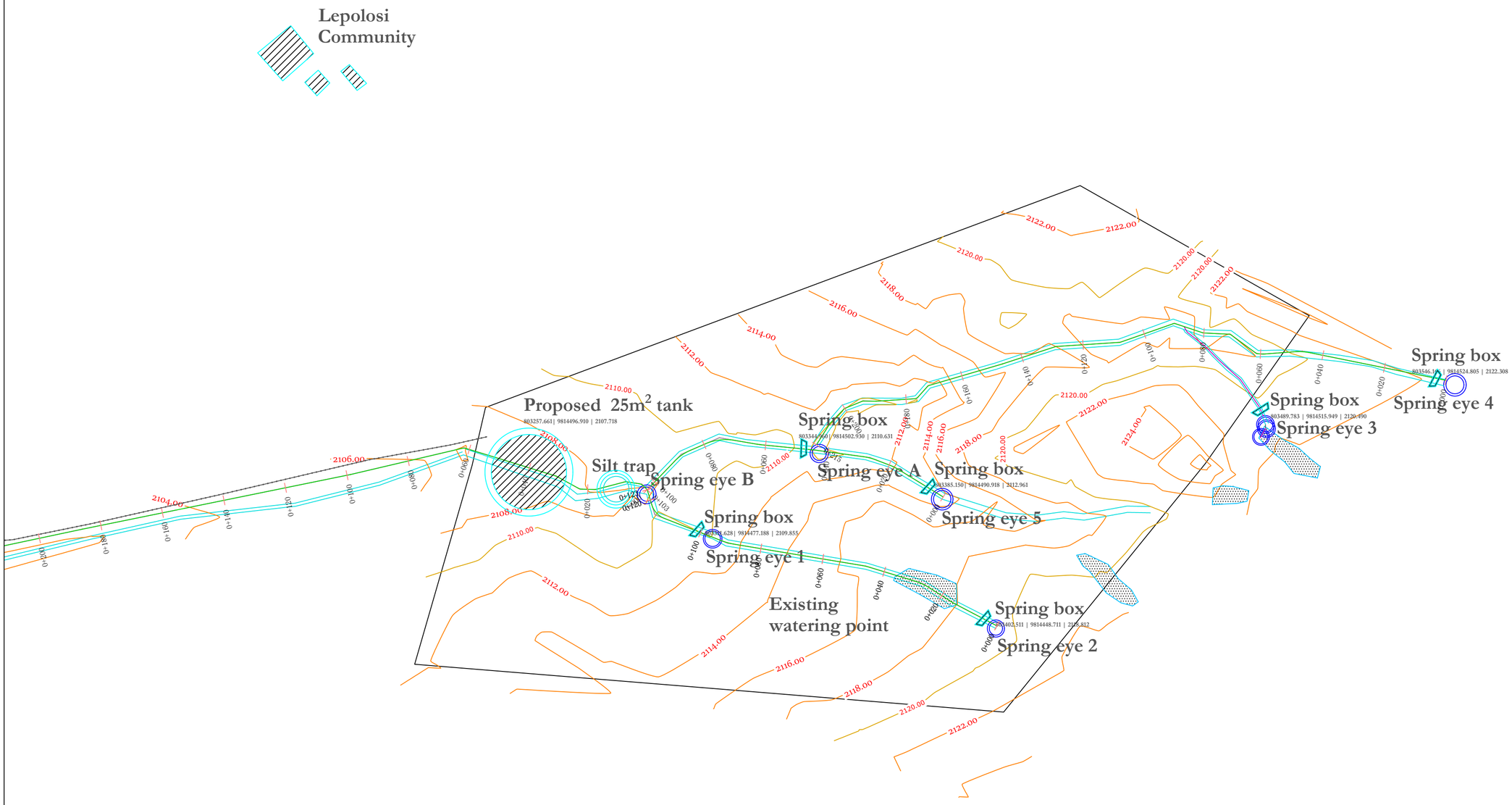
LEPOLOSI SPRINGS SURVEY



LEGEND

- Tree/Bushes
- Control/Beacon Point
- Contours
- Fence
- Path
- Spring Eye
- Swamp
- Spring box

INFORMATION

Scale:		Date:
1:1000 (A2)		March 2023

NOTES

1. Contour interval Major 10 Meters
   Minor 2.0 m
2. Total area surveyed 2.96 Ha

PROJECT DETAILS

Project:	Lepolosi Topographic Survey
Client:	Amref Health Africa P. O. Box 30125-00100 Nairobi Kenya Email: info.kenya@amref.org
Surveyor:	Peter Njenga Wainaina

DRAWN BY

No:	Name:
1.	Peter Njenga Wainaina *Registered Land Surveyor* Signature: _____ Contact: 0712 909 354 Email: wainjenga@gmail.com

COORDINATE SYSTEM

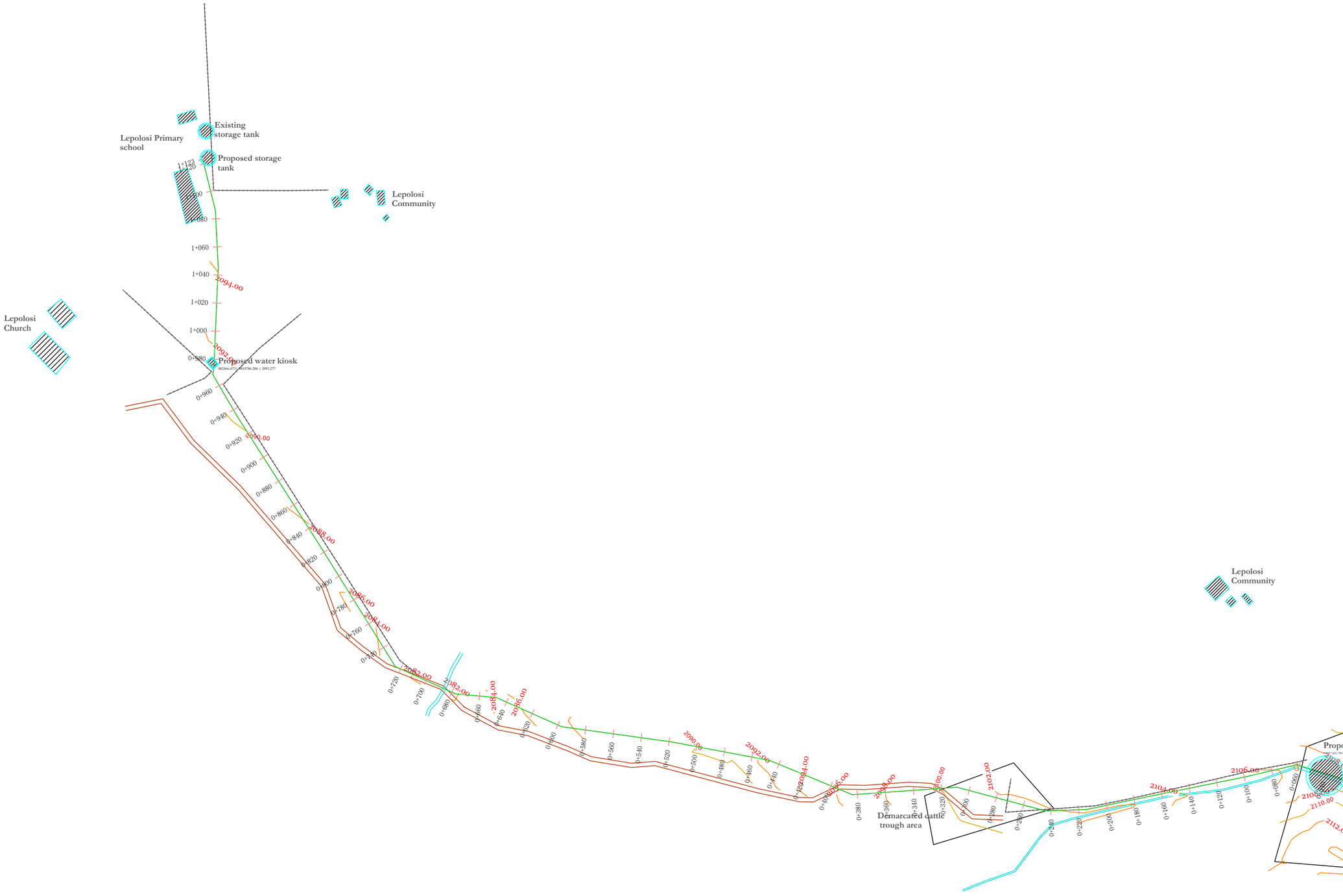
Projection: UTM
Datum: WGS84
Ellipsoid: WGS84
Zone: 36S
Units: Meters

DWG No:	Sheet No. 1 of 2

LOCATION DIAGRAM

Not to scale

LEPOLOSI SPRINGS SURVEY



LEGEND

- Tree/Bushes
- Control/Beacon Point
- Contours
- Fence
- Path
- Spring Eye
- Swamp
- Spring box

INFORMATION

Scale:		Date:
1:2000 (A2)		March 2023

NOTES

1. Contour interval Major 10 Meters
   Minor 2.0 m
2. Total area surveyed 2.96 Ha

PROJECT DETAILS

Project:	Lepolosi Topographic Survey
Client:	Amref Health Africa P. O. Box 30125-00100 Nairobi Kenya Email: info.kenya@amref.org
Surveyor:	Peter Njenga Wainaina

DRAWN BY

No:	Name:
1.	Peter Njenga Wainaina *Registered Land Surveyor* Signature: _____ Contact: 0712 909 354 Email: wainjenga@gmail.com

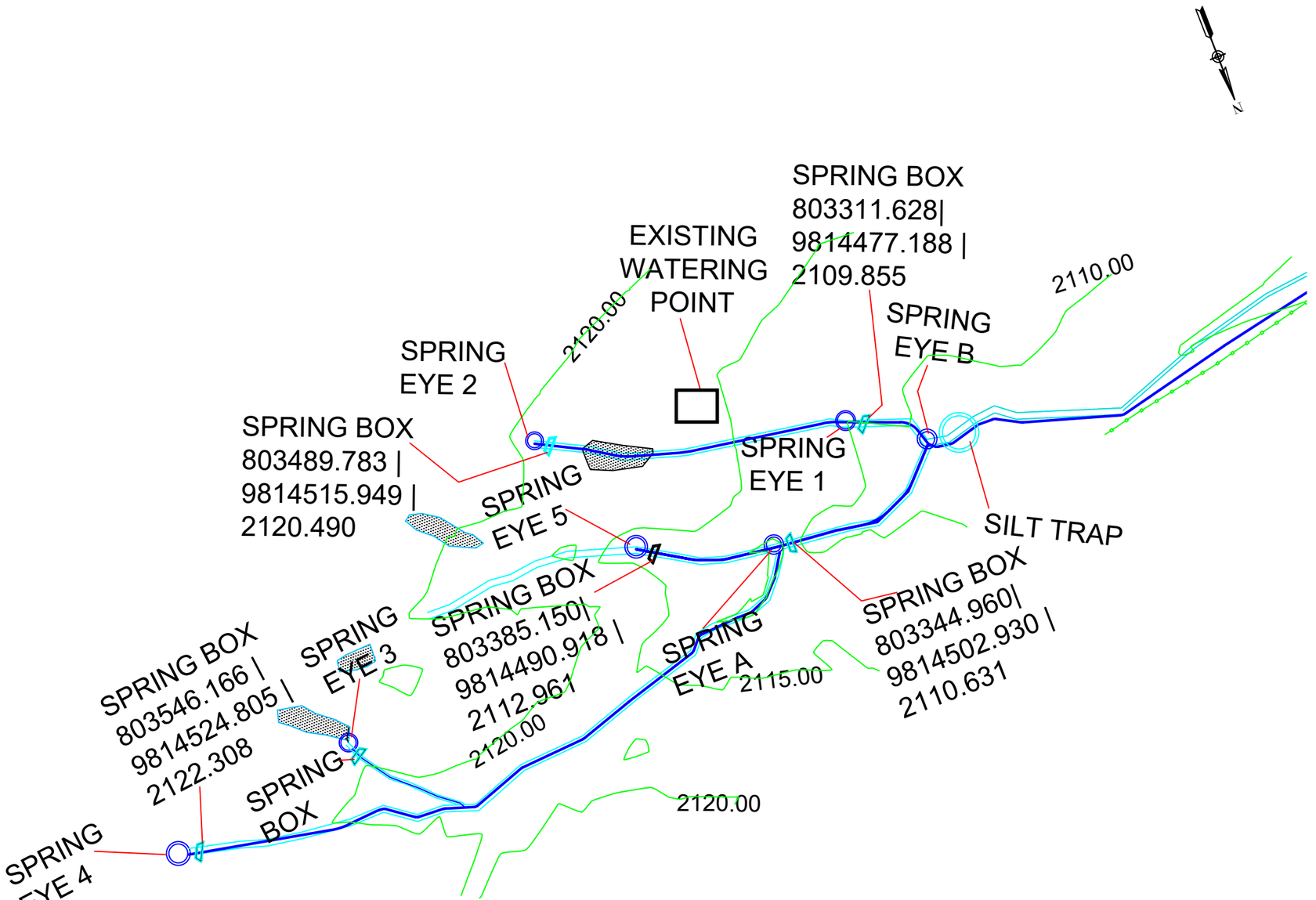
COORDINATE SYSTEM

Projection: UTM
Datum: WGS84
Ellipsoid: WGS84
Zone: 36S
Units: Meters

DWG No:	Sheet No. 2 of 2

LOCATION DIAGRAM

Not to scale



NOTES:

1. ALL LEVELS ARE IN METRES BASED ON NATIONAL DATUM.
2. ALL DISTANCES ARE IN METRES UNLESS STATED OTHERWISE.
3. THE LOCATION OF PIPES FROM EDGES OF ROADS, PLOT BOUNDARIES AND FENCES AS SHOWN ARE APPROXIMATE.
4. EXACT LOCATION OF UNDERGROUND SERVICES TO BE CROSSED BY PIPELINES TO BE DETERMINED BY THE CONTRACTOR WITH ASSISTANCE FROM THE RELEVANT AUTHORITY AND FULL RESPONSIBILITY FOR ANY DAMAGE LIES WITH THE CONTRACTOR.
5. THE ACTUAL SETTING OUT TO BE CONFIRMED ON SITE BY THE ENGINEER
6. MINIMUM COVER TOP ALL PIPES TO BE 1.0M

LEGEND:

- PROPOSED WATER MAIN
- ROAD
- SPRING EYE
- STRUCTURES
- 2120 CONTOURS
- FENCE
- SWAMP
- SPRING BOX

Client:

Amref Health Africa
P. O. Box 30125-00100
Nairobi Kenya
Email: info.kenya@amref.org

Project:

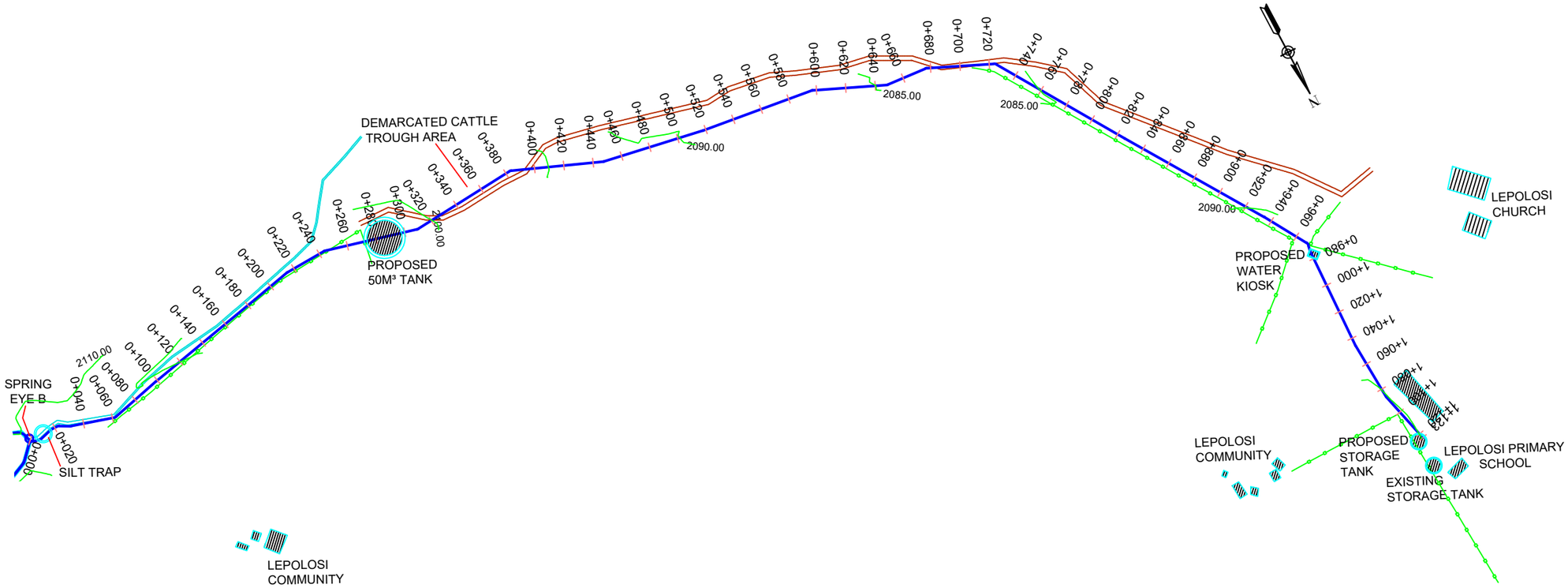
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

LEPOLOSI SPRINGS OVERVIEW MAP

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	:A3 1:750
Drg No.	: AMREF/LEP/GL/01

No. Revisions	Date	Approved By:



NOTES:

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LEGEND:

- PROPOSED WATER MAIN
- ROAD
- SPRING EYE
- STRUCTURES
- 2120 CONTOURS
- FENCE
- SWAMP
- SPRING BOX

Client:

amref health africa

Amref Health Africa
P. O. Box 30125-00100
Nairobi Kenya
Email: info.kenya@amref.org

Project:

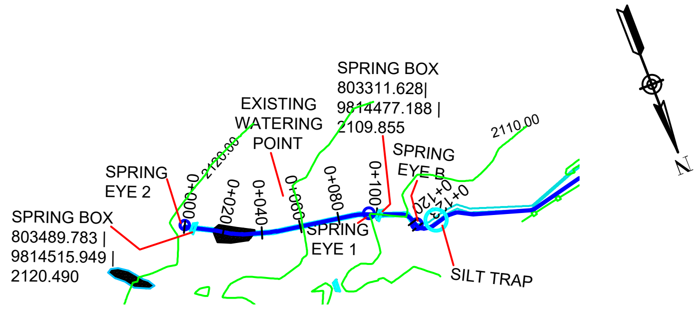
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

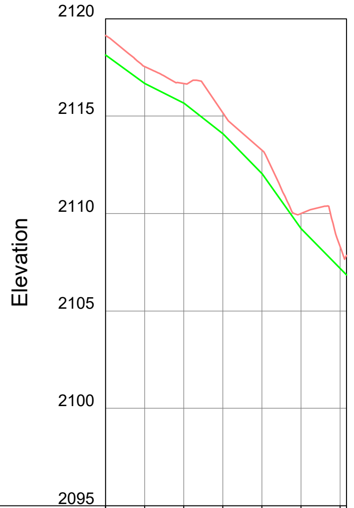
SPRING TO LEPOLOSI PRIMARY SCHOOL PROPOSED STORAGE TANK LAYOUT

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: AS SHOWN
Drg No.	: AMREF/LEP/MP/01

No. Revisions	Date	Approved By:



LINE 1 PIPELINE PROFILE KM 0+000 TO KM 0+123



CHAINAGE (Km+m)	0+000	0+020	0+040	0+060	0+080	0+100	0+120	0+123
GROUND LEVEL (m amsl)	2119.135	2117.538	2116.671	2115.179	2113.257	2110.005	2108.342	2107.852
INVERT LEVEL (m amsl)	2118.135	2116.671	2115.677	2114.096	2112.057	2109.245	2107.203	2106.852
TRENCH DEPTH (m)	1.00	0.87	0.99	1.08	1.20	0.76	1.14	1.00
PIPE LENGTH & GRADIENT	L=20.05 S=7.32%	L=20.26 S=4.97%	L=19.98 S=7.94%	L=20.19 S=10.21%	L=20.05 S=14.11%	L=23.47 S=10.19%		
PIPE DETAILS								
VALVE CHAMBER NUMBER								
DESIGN FLOW (M^3/day)								
BEDDING DETAILS								
HORIZONTAL BENDS								
VERTICAL BENDS								

NOTES:

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5. THE ACTUAL SETTING OUT TO BE CONFIRMED ON SITE BY THE ENGINEER
6. MINIMUM COVER TOP ALL PIPES TO BE 1.0M

LEGEND:

- PROPOSED WATER MAIN
- ROAD
- SPRING EYE
- STRUCTURES
- 2120 CONTOURS
- EL STATIC
- HGL
- ORIGINAL GROUND LEVEL
- PIPE INVERT LEVEL
- S.A.V SINGLE ORIFICE AIR VALVE USE AUTOMATIC AIR VALVE OR SMALL ORIFICE AIR VALVE
- D.A.V DOUBLE ORIFICE AIR VALVE USE LARGE ORIFICE AIR VALVE
- S.V SECTIONAL VALVE
- W.O WASHOUT
- 11.25 STANDARD BEND

Client:

Amref Health Africa
P. O. Box 30125-00100
Nairobi Kenya
Email: info.kenya@amref.org

Project:

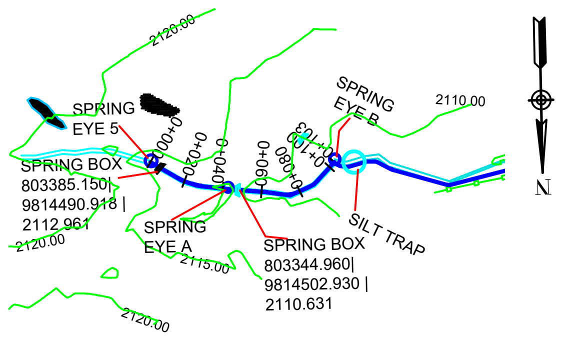
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

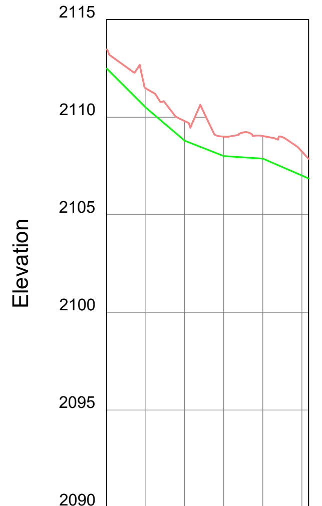
LINE 1 PIPELINE LAYOUT AND PROFILE
CHAINAGE 0+000 TO CHAINAGE 0+123

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: HS 1:2000 VS 1:200
Drg No.	: AMREF/LEP/LN1/01

No. Revisions	Date	Approved By:



LINE 2 PIPELINE PROFILE KM 0+000 TO KM 0+103



CHAINAGE (Km+m)	0+000	0+020	0+040	0+060	0+080	0+100	0+103
GROUND LEVEL (m amsl)	2113.479	2111.481	2109.791	2109.001	2109.034	2108.225	2107.852
INVERT LEVEL (m amsl)	2112.479	2110.482	2108.791	2108.001	2107.875	2107.003	2106.852
TRENCH DEPTH (m)	1.00	1.00	1.00	1.00	1.16	1.22	1.00
PIPE LENGTH & GRADIENT	L=20.10 S=9.98%	L=20.07 S=8.45%	L=20.02 S=3.95%	L=20.00 S=0.63%	L=23.48 S=4.36%		
PIPE DETAILS							
VALVE CHAMBER NUMBER							
DESIGN FLOW (M³/day)							
BEDDING DETAILS							
HORIZONTAL BENDS							
VERTICAL BENDS							

NOTES:

1. ALL LEVELS ARE IN METRES BASED ON NATIONAL DATUM.
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5. THE ACTUAL SETTING OUT TO BE CONFIRMED ON SITE BY THE ENGINEER
6. MINIMUM COVER TOP ALL PIPES TO BE 1.0M

LEGEND:

- PROPOSED WATER MAIN
- ROAD
- SPRING EYE
- STRUCTURES
- 2120 CONTOURS
- EL STATIC
- HGL
- ORIGINAL GROUND LEVEL
- PIPE INVERT LEVEL
- S.A .V — SINGLE ORIFICE AIR VALVE USE AUTOMATIC AIR VALVE OR SMALL ORIFICE AIR VALVE
- D.A .V — DOUBLE ORIFICE AIR VALVE USE LARGE ORIFICE AIR VALVE
- S.V — SECTIONAL VALVE
- W.O — WASHOUT
- 11.25 — STANDARD BEND

Client:

Amref Health Africa
P. O. Box 30125-00100
Nairobi Kenya
Email: info.kenya@amref.org

Project:

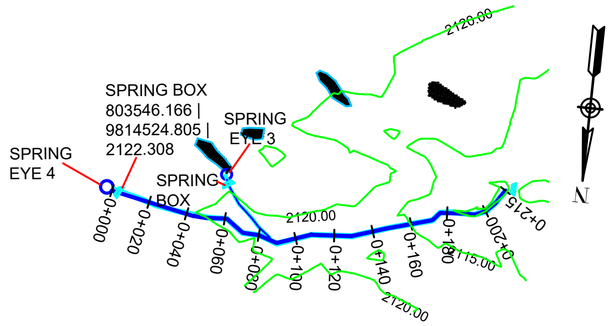
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

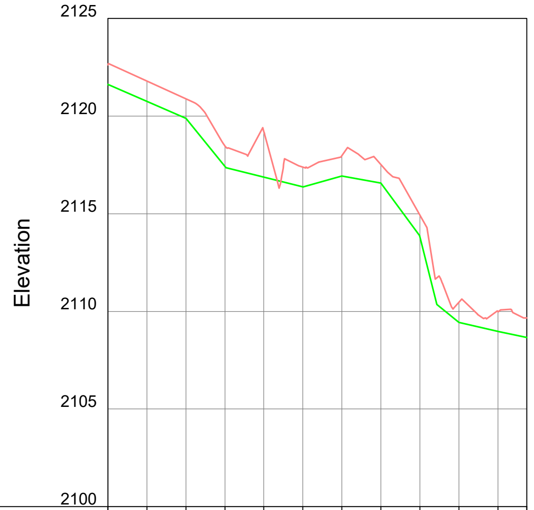
LINE 2 PIPELINE LAYOUT AND PROFILE CHAINAGE 0+000 TO CHAINAGE 0+103

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: HS 1:2000 VS 1:200
Drg No.	: AMREF/LEP/LN2/01

No. Revisions	Date	Approved By:



LINE 3 PIPELINE PROFILE KM 0+000 TO KM 0+215



CHAINAGE (Km+m)	0+000	0+020	0+040	0+060	0+080	0+100	0+120	0+140	0+160	0+180	0+200	0+215
GROUND LEVEL (m amsl)	2122.622	2121.806	2120.895	2118.480	2119.215	2117.391	2117.979	2117.530	2114.937	2110.461	2110.000	2109.659
INVERT LEVEL (m amsl)	2121.622	2120.758	2119.895	2117.427	2116.875	2116.372	2116.931	2116.573	2113.816	2109.430	2108.979	2108.659
TRENCH DEPTH (m)	1.00	1.05	1.00	1.05	2.34	1.02	1.05	0.96	1.12	1.03	1.02	1.00
PIPE LENGTH & GRADIENT	L=40.04 S=4.32%		L=20.66 S=12.34%	L=39.59 S=2.51%		L=19.91 S=2.82%	L=20.06 S=1.79%	L=19.98 S=13.60%	S=30.79% S=3.50% L=11.34	L=20.62 S=2.26%	L=14.15 S=2.17%	
PIPE DETAILS												
VALVE CHAMBER NUMBER												
DESIGN FLOW (M³/day)												
BEDDING DETAILS												
HORIZONTAL BENDS												
VERTICAL BENDS												

NOTES:

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5. THE ACTUAL SETTING OUT TO BE CONFIRMED ON SITE BY THE ENGINEER
6. MINIMUM COVER TOP ALL PIPES TO BE 1.0M

LEGEND:

- PROPOSED WATER MAIN
- ROAD
- SPRING EYE
- STRUCTURES
- 2120 CONTOURS
- EL STATIC
- HGL
- ORIGINAL GROUND LEVEL
- PIPE INVERT LEVEL
- S.A .V — SINGLE ORIFICE AIR VALVE USE AUTOMATIC AIR VALVE OR SMALL ORIFICE AIR VALVE
- D.A .V — DOUBLE ORIFICE AIR VALVE USE LARGE ORIFICE AIR VALVE
- S.V — SECTIONAL VALVE
- W.O — WASHOUT
- 11.25 STANDARD BEND

Client:

Amref Health Africa
P. O. Box 30125-00100
Nairobi Kenya
Email: info.kenya@amref.org

Project:

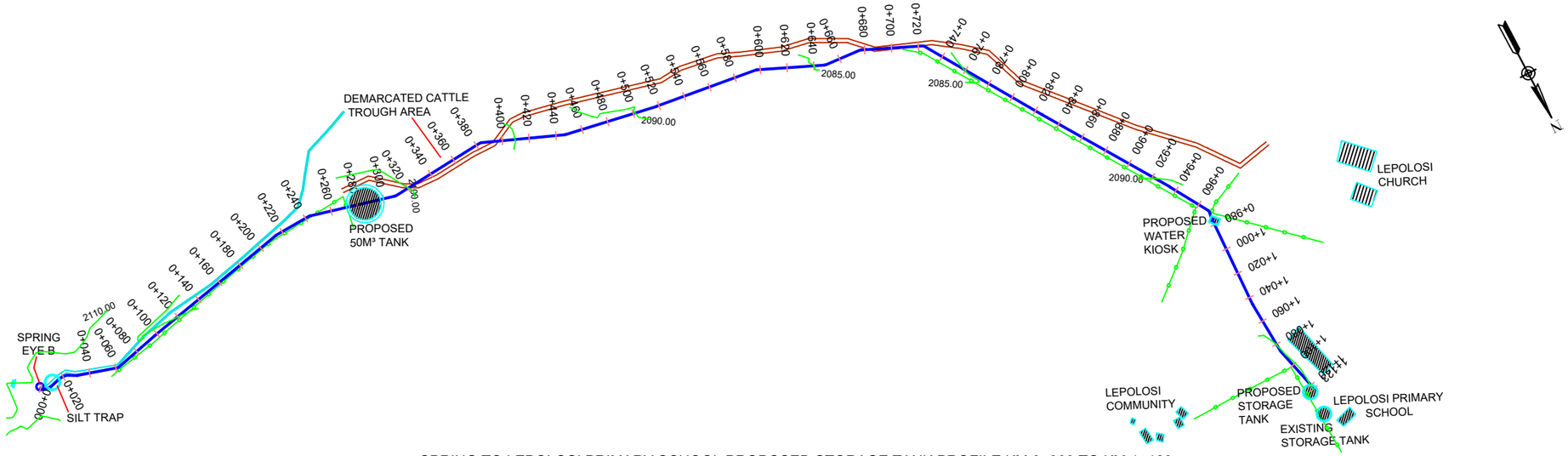
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

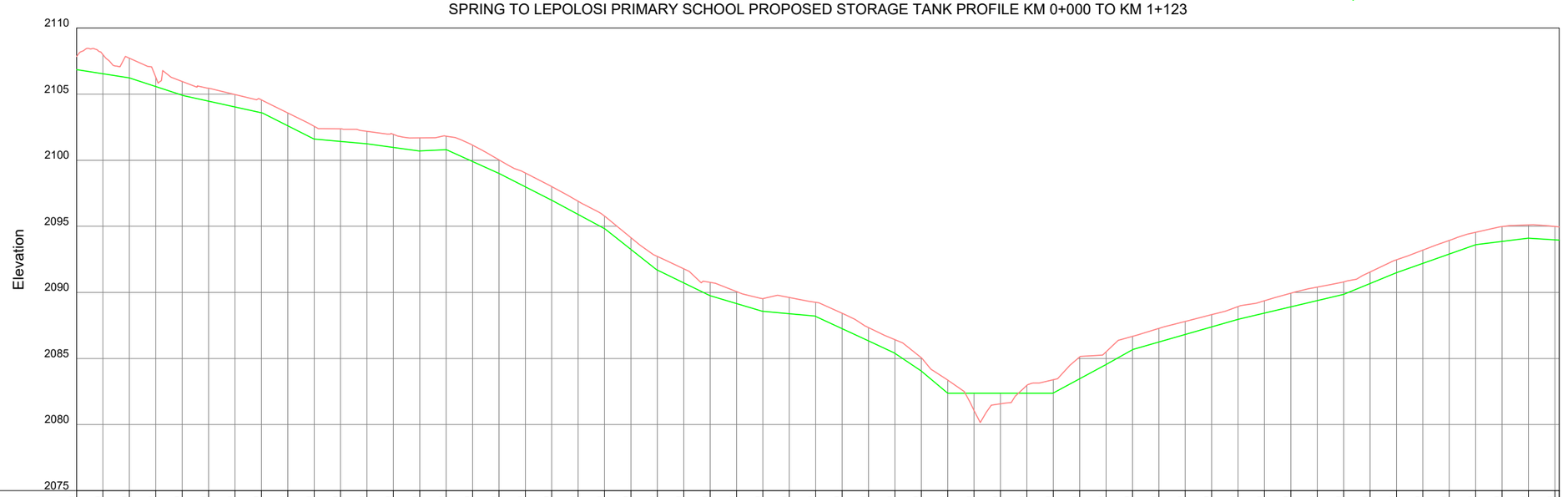
LINE 3 PIPELINE LAYOUT AND PROFILE CHAINAGE 0+000 TO CHAINAGE 0+215

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: HS 1:2000 VS 1:200
Drg No.	: AMREF/LEP/LN3/01

No. Revisions	Date	Approved By:



SPRING TO LEPOLOSI PRIMARY SCHOOL PROPOSED STORAGE TANK PROFILE KM 0+000 TO KM 1+123



CHAINAGE (Km+m)	0+000	0+020	0+040	0+060	0+080	0+100	0+120	0+140	0+160	0+180	0+200	0+220	0+240	0+260
GROUND LEVEL (m amsl)	2107.852	2107.994	2107.718	2106.281	2105.953	2105.437	2104.968	2104.563	2103.566	2102.557	2102.378	2102.185	2101.953	2101.692
INVERT LEVEL (m amsl)	2106.852	2106.542	2106.233	2105.580	2104.928	2104.470	2104.024	2103.579	2102.597	2101.592	2101.417	2101.241	2100.962	2100.692
TRENCH DEPTH (m)	1.00	1.45	1.48	0.70	1.03	0.97	0.94	0.98	0.97	0.97	0.96	0.94	0.99	1.00
PIPE LENGTH & GRADIENT	L=40.01 S=1.55%		L=41.23 S=3.26%		L=59.61 S=2.23%			L=39.23 S=5.02%		L=40.07 S=0.88%		L=39.47 S=1.40%		L=20.64 S=0.52%
PIPE DETAILS														
VALVE CHAMBER NUMBER														
DESIGN FLOW (M³/day)														
BEDDING DETAILS														
HORIZONTAL BENDS														
VERTICAL BENDS														

CHAINAGE (Km+m)	0+280	0+300	0+320	0+340	0+360	0+380	0+400	0+420	0+440	0+460	0+480	0+500	0+520	0+540
GROUND LEVEL (m amsl)	2101.815	2101.133	2100.023	2099.038	2098.006	2096.897	2095.766	2094.140	2092.717	2091.783	2090.763	2090.060	2089.522	2089.615
INVERT LEVEL (m amsl)	2100.795	2099.904	2099.005	2097.984	2096.959	2095.893	2094.826	2093.257	2091.698	2090.727	2089.757	2089.156	2088.562	2088.384
TRENCH DEPTH (m)	1.02	1.23	1.02	1.05	1.05	1.00	0.94	0.88	1.02	1.06	1.01	0.90	0.96	1.23
PIPE LENGTH & GRADIENT	L=40.37 S=4.50%		L=39.75 S=5.12%		L=40.18 S=5.34%		L=39.25 S=7.88%		L=40.58 S=4.85%		L=39.68 S=3.01%		L=39.60 S=0.89%	
PIPE DETAILS														
VALVE CHAMBER NUMBER														
DESIGN FLOW (M³/day)														
BEDDING DETAILS														
HORIZONTAL BENDS														
VERTICAL BENDS														

CHAINAGE (Km+m)	0+560	0+580	0+600	0+620	0+640	0+660	0+680	0+700	0+720	0+740	0+760	0+780	0+800	0+820
GROUND LEVEL (m amsl)	2089.252	2088.427	2087.331	2086.425	2085.045	2083.363	2081.076	2081.573	2082.958	2083.396	2085.115	2085.504	2086.672	2087.271
INVERT LEVEL (m amsl)	2088.178	2087.259	2086.339	2085.396	2084.044	2082.369	2082.367	2082.367	2082.367	2082.389	2083.468	2084.548	2085.662	2086.245
TRENCH DEPTH (m)	1.07	1.17	0.99	1.03	1.00	0.99	-1.29	-0.79	0.59	1.01	1.65	0.96	1.01	1.03
PIPE LENGTH & GRADIENT	L=40.73 S=4.60%		L=19.59 S=4.67%	L=20.45 S=6.75%	L=20.19 S=8.38%	L=79.58 S=0.00%				L=40.31 S=5.40%		L=20.60 S=5.57%	L=79.75 S=2.86%	
PIPE DETAILS														
VALVE CHAMBER NUMBER														
DESIGN FLOW (M³/day)														
BEDDING DETAILS														
HORIZONTAL BENDS														
VERTICAL BENDS														

CHAINAGE (Km+m)	0+840	0+860	0+880	0+900	0+920	0+940	0+960	0+980	1+000	1+020	1+040	1+060	1+080	1+100	1+120 1+123
GROUND LEVEL (m amsl)	2087.808	2088.318	2088.922	2089.362	2089.943	2090.407	2090.792	2091.543	2092.465	2093.195	2093.929	2094.549	2094.976	2095.096	2094.986
INVERT LEVEL (m amsl)	2086.816	2087.387	2087.958	2088.432	2088.905	2089.379	2089.852	2090.669	2091.486	2092.191	2092.896	2093.600	2093.851	2094.096	2093.969 2093.947
TRENCH DEPTH (m)	0.99	0.93	0.96	0.93	1.04	1.03	0.94	0.87	0.98	1.00	1.03	0.95	1.12	1.00	1.02
PIPE LENGTH & GRADIENT			L=79.89 S=2.37%				L=40.19 S=4.08%		L=59.99 S=3.52%			L=39.69 S=1.24%		L=23.60 S=0.63%	
PIPE DETAILS															
VALVE CHAMBER NUMBER															
DESIGN FLOW (M³/day)															
BEDDING DETAILS															
HORIZONTAL BENDS															
VERTICAL BENDS															

NOTES:

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5. THE ACTUAL SETTING OUT TO BE CONFIRMED ON SITE BY THE ENGINEER
6. MINIMUM COVER TOP ALL PIPES TO BE 1.0M

LEGEND:

PROPOSED WATER MAIN
ROAD
SPRING EYE
STRUCTURES
2120 CONTOURS
EL STATIC
HGL
ORIGINAL GROUND LEVEL
PIPE INVERT LEVEL
S.A .V SINGLE ORIFICE AIR VALVE USE AUTOMATIC AIR VALVE OR SMALL ORIFICE AIR VALVE
D.A .V DOUBLE ORIFICE AIR VALVE USE LARGE ORIFICE AIR VALVE
S.V SECTIONAL VALVE
W.O WASHOUT
11.25 STANDARD BEND

Client:

Amref Health Africa
P. O. Box 30125-00100
Nairobi Kenya
Email: info.kenya@amref.org

Project:

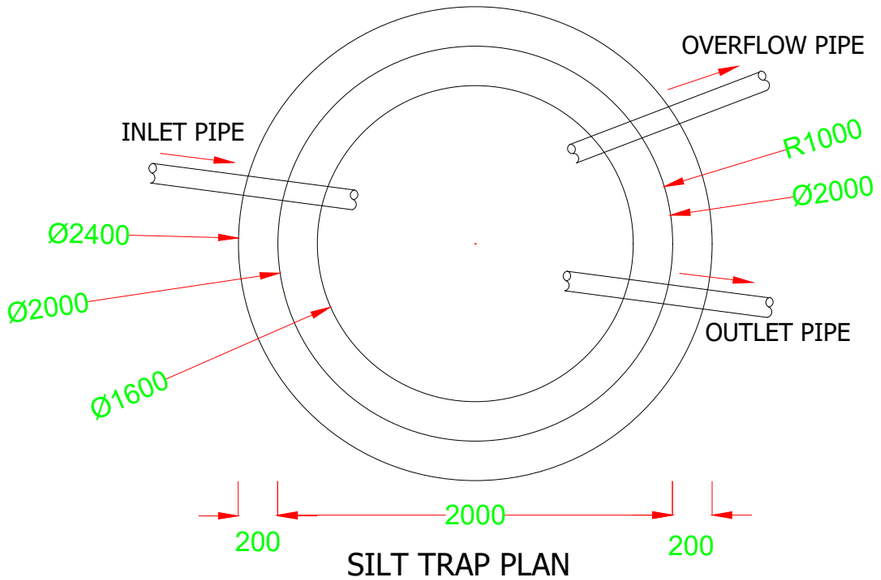
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

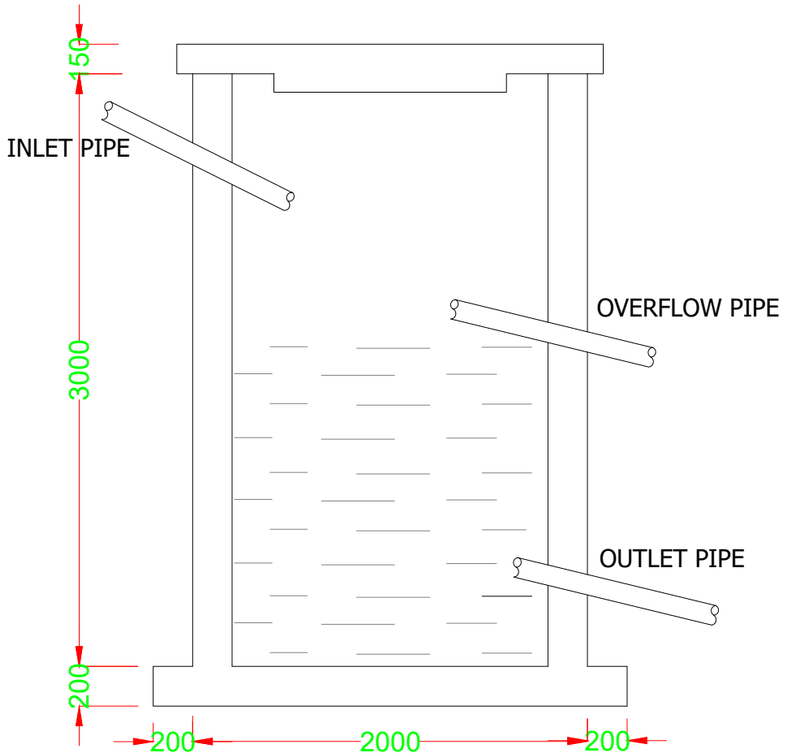
SPRING TO LEPOLOSI PRIMARY
SCHOOL PROPOSED STORAGE TANK
LAYOUT AND PROFILE
CHAINAGE 0+000 TO CHAINAGE 1+123

Drawn by : S.O
Surveyed by : N.W
Designed by : J.A
Checked by : J.A
Approved by : J.A
Date : MAY, 2023
Scale : HS 1:2000 VS 1:200
Drg No. : AMREF/LEP/LN4/01

No. Revisions	Date	Approved By:



SILT TRAP PLAN
SCALE (A3) 1:16



SILT TRAP SECTION
SCALE (A3) 1:16

NOTES:

1. ALL LEVELS ARE IN METRES BASED ON NATIONAL DATUM.
2. ALL DISTANCES ARE IN METRES UNLESS STATED OTHERWISE.
3. THE LOCATION OF PIPES FROM EDGES OF ROADS, PLOT BOUNDARIES AND FENCES AS SHOWN ARE APPROXIMATE.
4. EXACT LOCATION OF UNDERGROUND SERVICES TO BE CROSSED BY PIPELINES TO BE DETERMINED BY THE CONTRACTOR WITH ASSISTANCE FROM THE RELEVANT AUTHORITY AND FULL RESPONSIBILITY FOR ANY DAMAGE LIES WITH THE CONTRACTOR.
5. THE ACTUAL SETTING OUT TO BE CONFIRMED ON SITE BY THE ENGINEER

Client:

amref health africa

Amref Health Africa
P. O. Box 30125-00100
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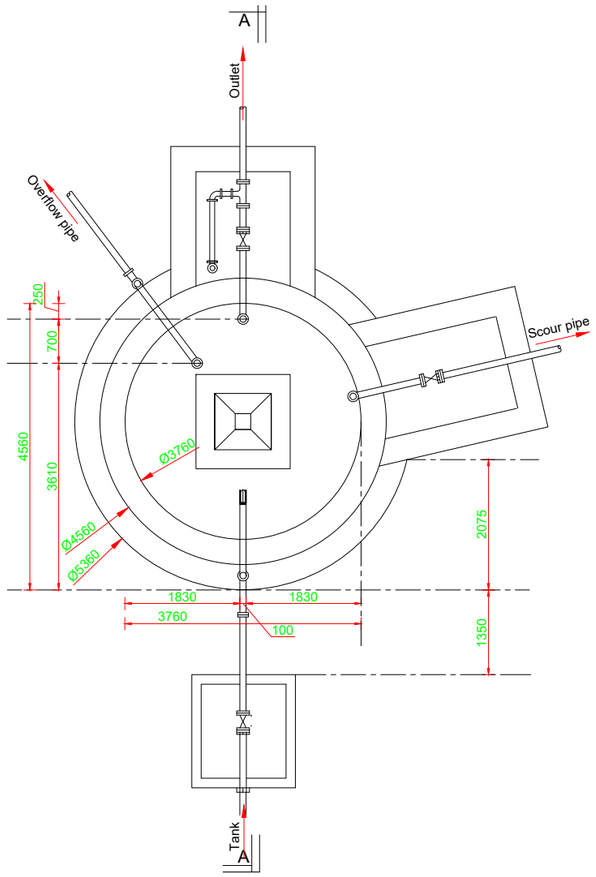
Project:
LEPOLOSI WATER SUPPLY PROJECT

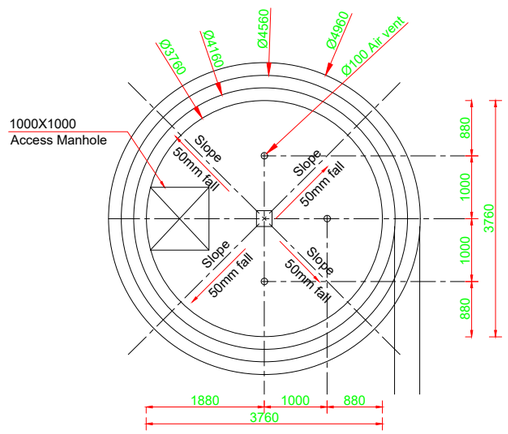
Drawing Title:
10M³ SILT TRAP PLAN
AND SECTION

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: AS SHOWN
Drg No.	: AMREF/LEP/STR/01

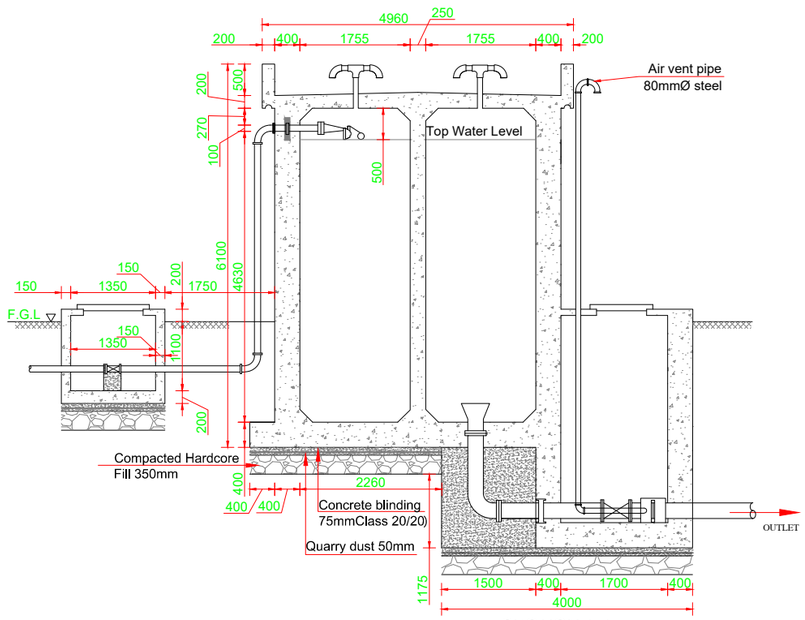
No. Revisions	Date	Approved By:



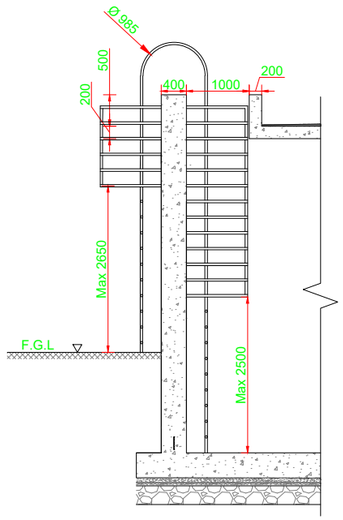
BASE PLAN
Scale 1:100



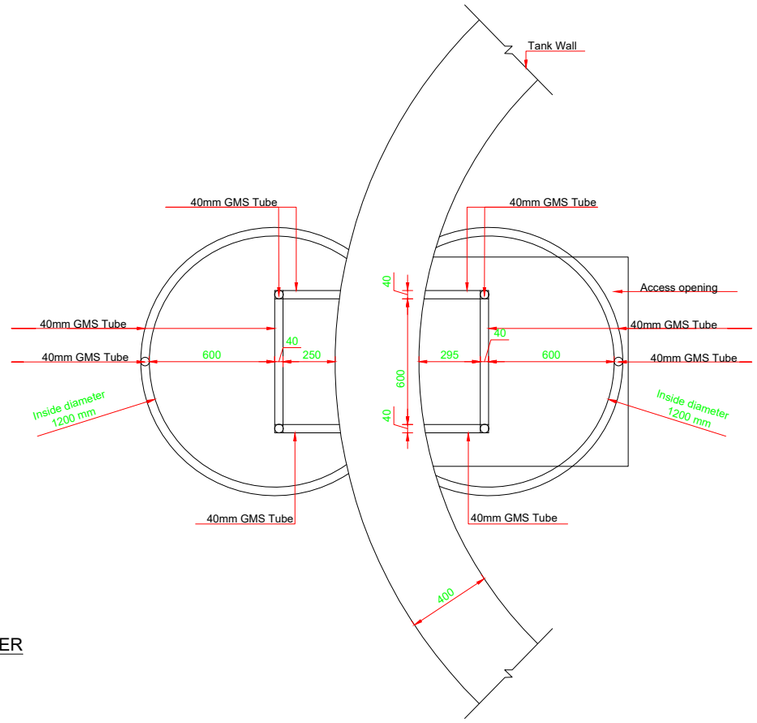
ROOF PLAN
Scale 1:100



SECTION A-A
Scale 1:100



SIDE ELEVATION FOR THE LADDER
Scale 1:100



PLAN FOR THE LADDER
Scale 1:30

NOTES:

1.All dimensions are are in millimetres unless specified otherwise.
2. All levels are indicated in meters unless specified otherwise.
3. Structural Drawing to be read in conjunction with the relevant drawings
4. All structural concrete to be Class C30/20 unless stated otherwise.
5. Minimum cover to all reinforcement to be:
Slabs & Walls = 25mm
Foundations = 50mm
6. Maximum tolerance on concrete cover is +/- 5mm.
7. All high tensile (T) bars to be in accordance with BS 4449 and fabric mesh to be made from cold worked steel bars in accordance with BS 4483.
8. Minimum laps to all bars to be 50Ø unless stated otherwise.
9. All reinforcement to be inspected by the structural Engineer before concreting.
10. Maximum aggregate size to be 20mm
11. All foundations to be taken down to firm bearing strata to Engineer's approval.
12. Foundations designed for allowable bearing pressure of 150KN/m².

Client:

Amref Health Africa
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Project:

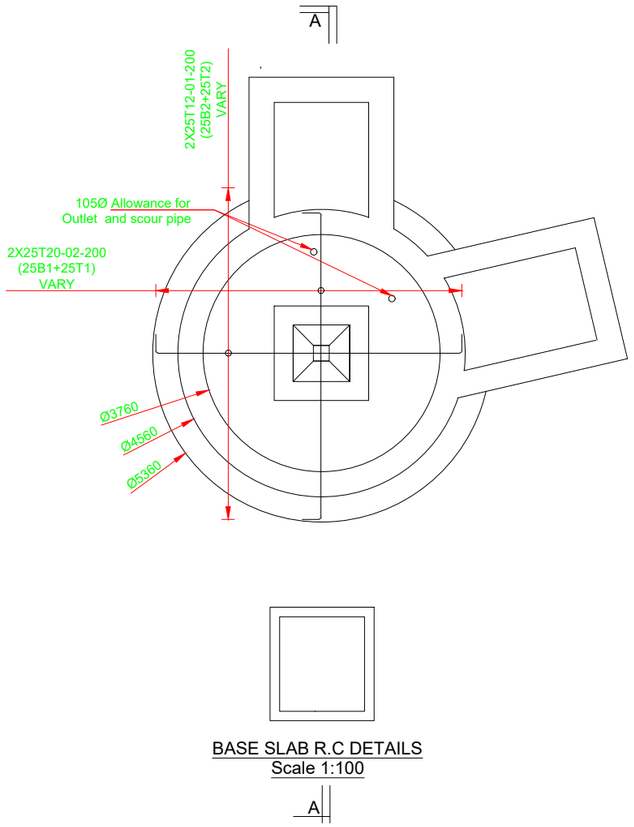
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

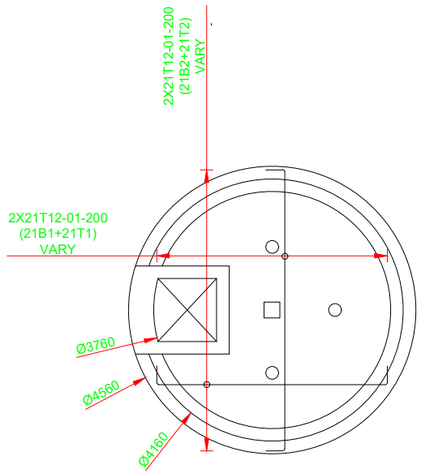
50M³ STORAGE TANK BASE, ROOF, SECTION AND LADDER DETAILS

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: AS SHOWN
Drg No.	: AMREF/LEP/ST/01

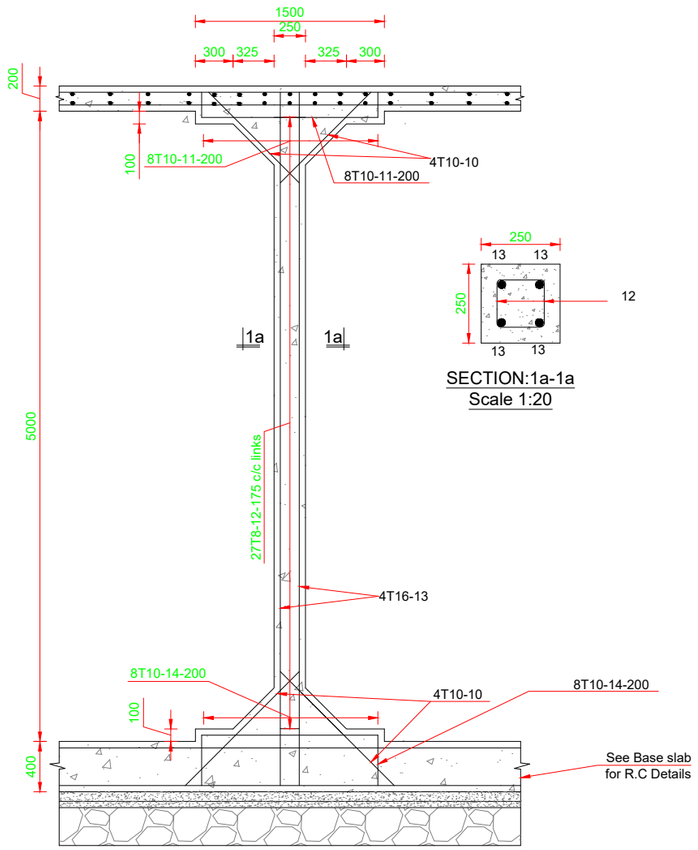
No. Revisions	Date	Approved By:



BASE SLAB R.C DETAILS
Scale 1:100

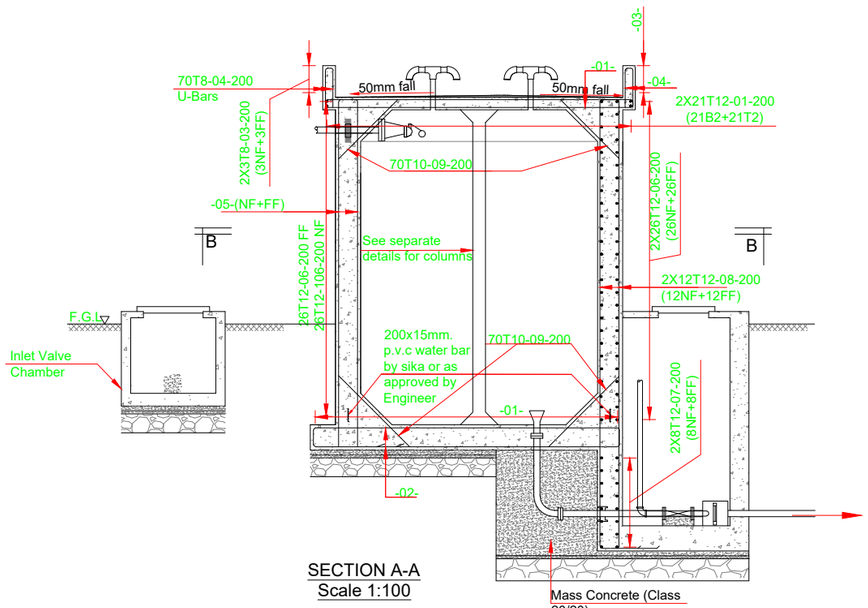


ROOF SLAB R.C DETAILS
Scale 1:100

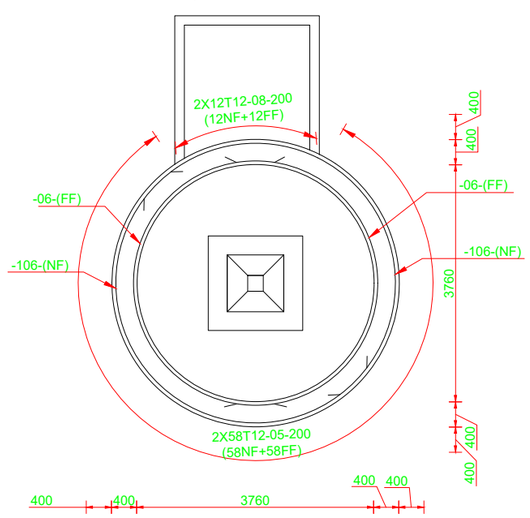


TYPICAL COLUMN
Scale 1:50

SECTION:1a-1a
Scale 1:20



SECTION A-A
Scale 1:100



SECTION B - B
Scale 1:100

NOTES:

1.All dimensions are are in millimetres unless specified otherwise.
2. All levels are indicated in meters unless specified otherwise.
3. Structural Drawing to be read in conjunction with the relevant drawings
4. All structural concrete to be Class C30/20 unless stated otherwise.
5. Minimum cover to all reinforcement to be:
Slabs & Walls = 25mm
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12. Foundations designed for allowable bearing pressure of 150KN/m².

Client:

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Project:

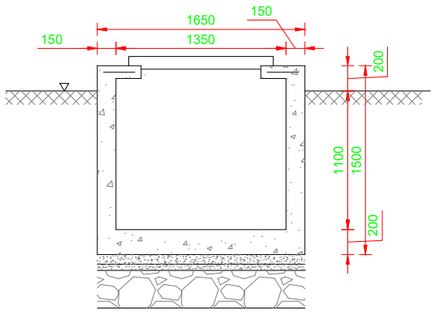
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

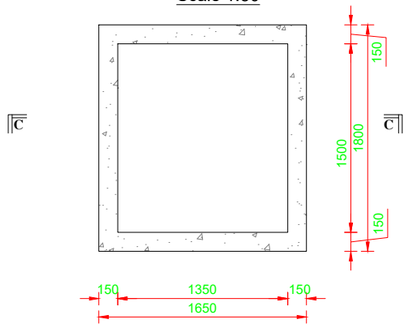
50M³ STORAGE TANK BASE, ROOF AND COLUMN STRUCTURAL DETAILS

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: AS SHOWN
Drg No.	: AMREF/LEP/ST/02

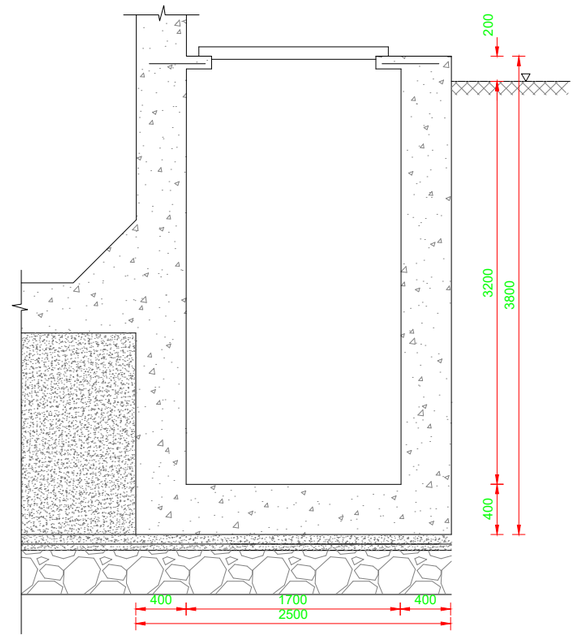
No. Revisions	Date	Approved By:



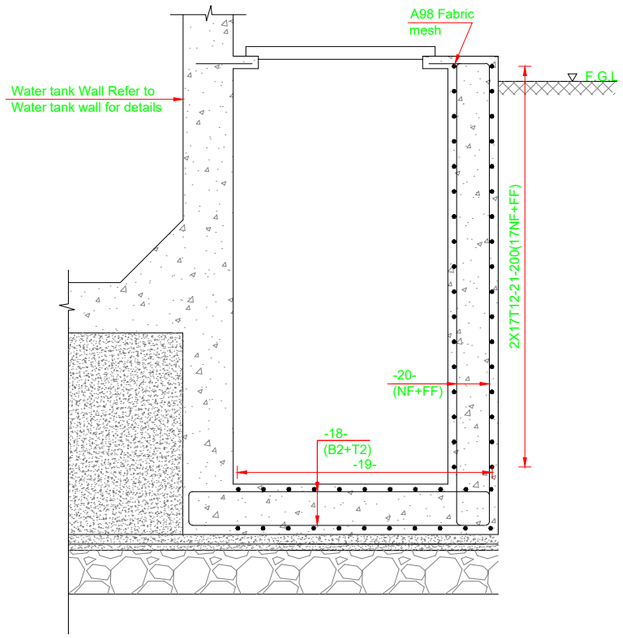
INLET VALVE CHAMBER
SECTION C-C
Scale 1:50



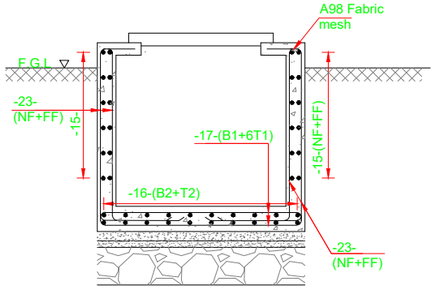
INLET VALVE CHAMBER
BASE SLAB LAYOUT
Scale 1:50



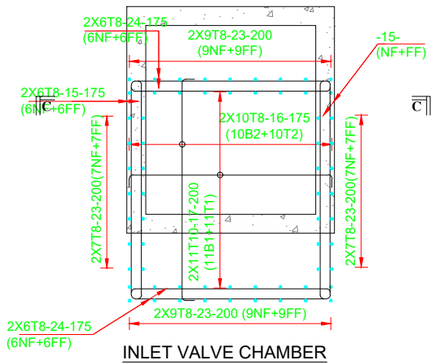
OUTLET AND SCOUR VALVE CHAMBER
SECTION D-D
Scale 1:50



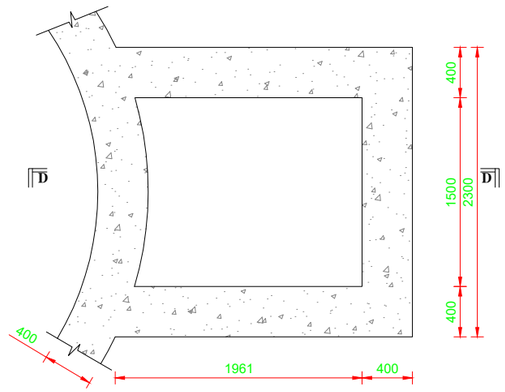
OUTLET AND SCOUR VALVE CHAMBER
SECTION D-D R.C DETAILS
Scale 1:50



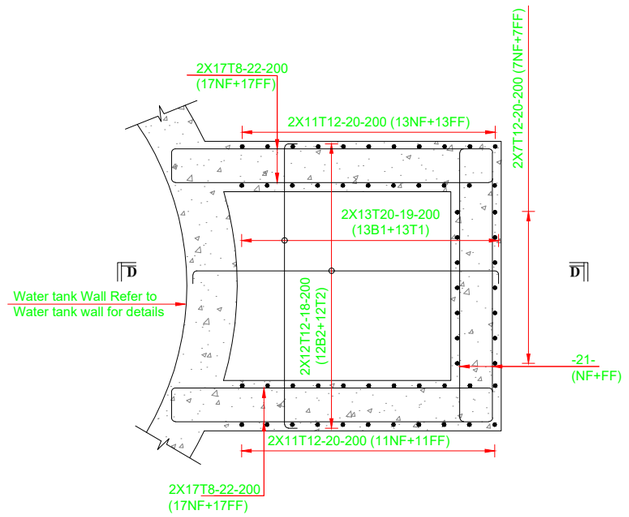
INLET VALVE CHAMBER
SECTION C-C R.C DETAILS
Scale 1:50



INLET VALVE CHAMBER
BASE SLAB AND R.C DETAILS
Scale 1:50



OUTLET AND SCOUR VALVE CHAMBER
BASE SLAB LAYOUT
Scale 1:50



OUTLET AND SCOUR VALVE CHAMBER
BASE SLAB AND R.C DETAILS
Scale 1:50

NOTES:

1.All dimensions are are in millimetres unless specified otherwise.
2. All levels are indicated in meters unless specified otherwise.
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4. All structural concrete to be Class C30/20 unless stated otherwise.
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Foundations = 50mm
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7. All high tensile (T) bars to be in accordance with BS 4449 and fabric mesh to be made from cold worked steel bars in accordance with BS 4483.
8. Minimum laps to all bars to be 50Ø unless stated otherwise.
9. All reinforcement to be inspected by the structural Engineer before concreting.
10. Maximum aggregate size to be 20mm
11. All foundations to be taken down to firm bearing strata to Engineer's approval.
12. Foundations designed for allowable bearing pressure of 150KN/m².

Client:

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Nairobi Kenya
Email: info.kenya@amref.org

Project:

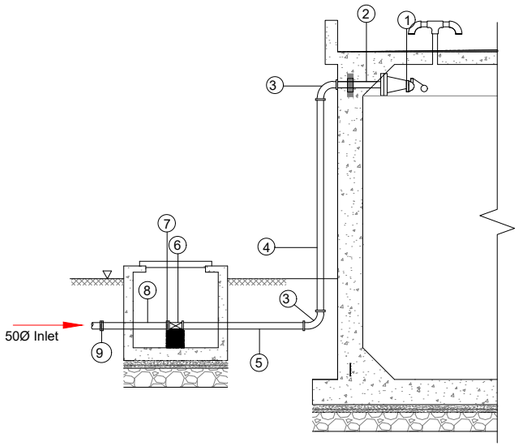
LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

50M³ STORAGE TANK
VALVE CHAMBER DETAILS

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
Scale	: AS SHOWN
Drg No.	: AMREF/LEP/ST/03

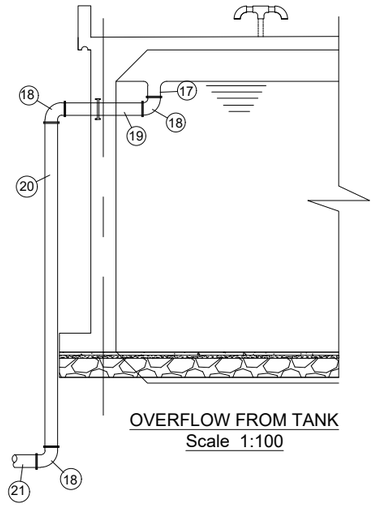
No. Revisions	Date	Approved By:



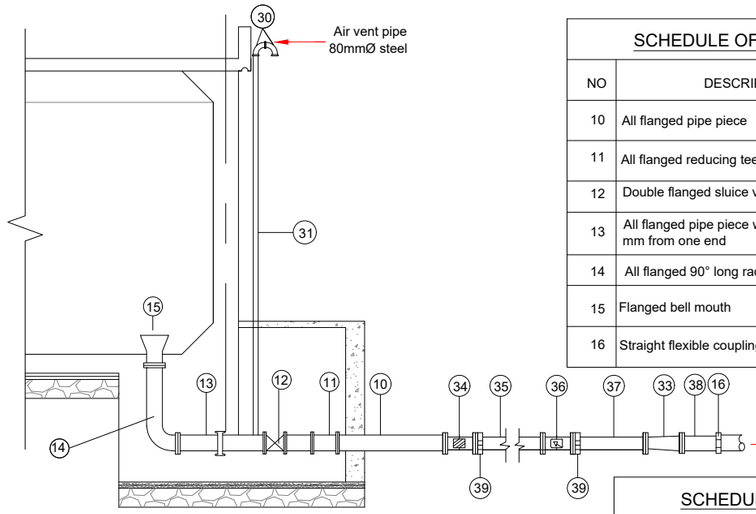
INLET PIPE WORK
Scale 1:100

SCHEDULE OF INLET PIPE DETAILS

NO	DESCRIPTION	LENGTH (mm)	DIA (mm)	PN	QTY
1	Ball and float valve	——	50	10	1
2	All flanged pipe piece with central puddle flange	1000	50	10	1
3	All flanged bend 90° long radius	——	50	10	2
4	All flanged pipe piece	4000	50	10	1
5	All flanged pipe piece	500	50	10	1
6	All flanged sluice valve	——	50	10	1
7	Flange adaptor	——	50	10	1
8	All spigot pipe piece	1000	50	10	1
9	Straight flexible coupling	——	50	10	1



OVERFLOW FROM TANK
Scale 1:100



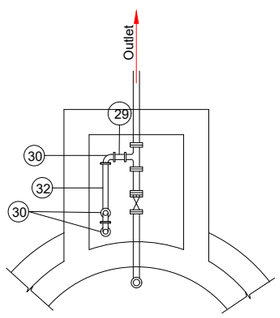
OUTLET PIPE WORK SECTION
Scale 1:100

SCHEDULE OF OUTLET PIPE DETAILS

NO	DESCRIPTION	LENGTH (mm)	DIA (mm)	PN	QTY
10	All flanged pipe piece	1000	50	10	1
11	All flanged reducing tee		50/80	10	1
12	Double flanged sluice valve	——	50	10	1
13	All flanged pipe piece with puddle flange 100 mm from one end	1500	50	10	1
14	All flanged 90° long radius bend		50	10	1
15	Flanged bell mouth	——	50	10	1
16	Straight flexible coupling	——	50	10	1

SCHEDULE OF OUTLET PIPE DETAILS

NO	DESCRIPTION	LENGTH (mm)	DIA (mm)	PN	QTY
33	Flange adaptor	——	50	10	2
34	All flanged strainer	——	50	10	1
35	Flanged pipe piece	1000	50	10	1
36	All flanged master meter	——	50	10	1
37	All Flanged pipe piece	1000	50	10	1
38	All flanged pipe piece	500	50	10	1



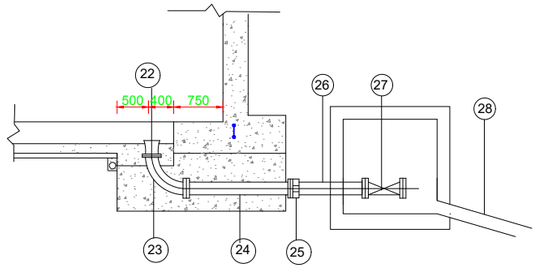
OUTLET AIR VENT PIPE WORK
Scale 1:100

OUTLET AIR VENT PIPE DN 80 STEEL

NO	DESCRIPTION	DIA (mm)	LENGTH (mm)	PN	QTY
29	All flanged pipe piece	80	500	10	1
30	All flange 90° bend	80		10	4
31	All flanged pipe piece	80	6000	10	1
32	All flanged pipe piece	80	1000	10	1

SCHEDULE OF OVERFLOW PIPE DETAILS

NO	DESCRIPTION	LENGTH (mm)	DIA (mm)	PN	QTY
17	Flanged bell mouth	——	100	10	1
18	All flanged 90° long radius bend	——	100	10	3
19	All flanged pipe piece with central puddle flange	1100	100	10	1
20	All flanged pipe piece	5500	100	10	1
21	Flanged pipe piece	500	100	10	1



SCOUR DETAILS
Scale 1:100

SCHEDULE OF SCOUR STEEL PIPE FITTINGS

NO	DESCRIPTION	LENGTH (mm)	DIA (mm)	PN	QTY
22	Bell mouth flanged	——	100	10	1
23	Long radius bend 90° Flanged	——	100	10	1
24	All flanged pipe piece	1800	100	10	1
25	Flange adaptor	——	100	10	1
26	Flanged spigot pipe piece	1000	100	10	1
27	Sluice valve flanged	——	100	10	1
28	All spigot pipe piece PVC drain pipe	1000	100	10	1

NOTES:

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4. All structural concrete to be Class C30/20 unless stated otherwise.
5. Minimum cover to all reinforcement to be:
Slabs & Walls = 25mm
Foundations = 50mm
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8. Minimum laps to all bars to be 50Ø unless stated otherwise.
9. All reinforcement to be inspected by the structural Engineer before concreting.
10. Maximum aggregate size to be 20mm
11. All foundations to be taken down to firm bearing strata to Engineer's approval.
12. Foundations designed for allowable bearing pressure of 150KN/m².

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Project:

LEPOLOSI WATER SUPPLY PROJECT

Drawing Title:

50M³ STORAGE TANK
PIPE WORK DETAILS

Drawn by	: S.O
Surveyed by	: N.W
Designed by	: J.A
Checked by	: J.A
Approved by	: J.A
Date	: MAY, 2023
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Drg No.	: AMREF/LEP/ST/04

No. Revisions	Date	Approved By: