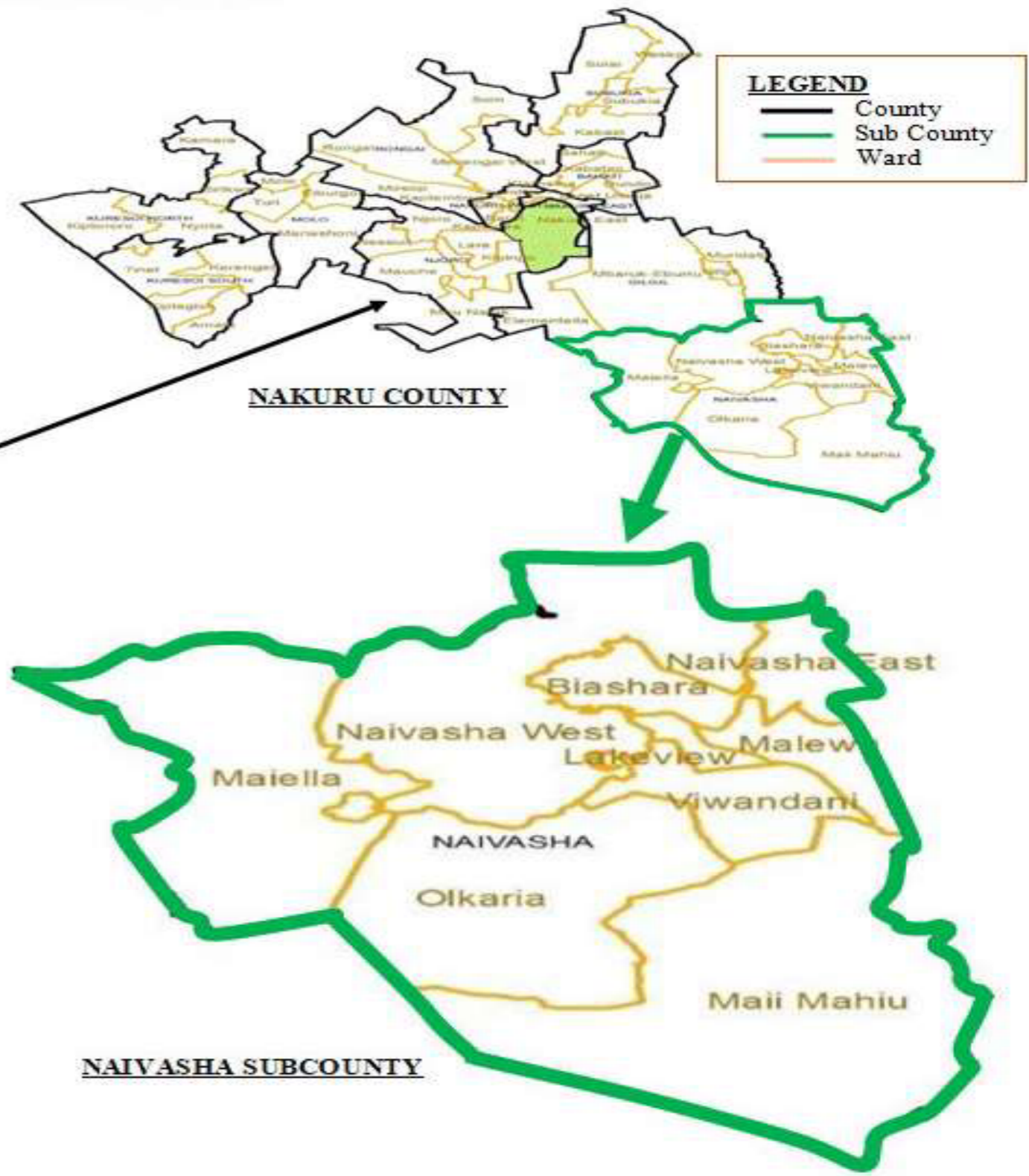
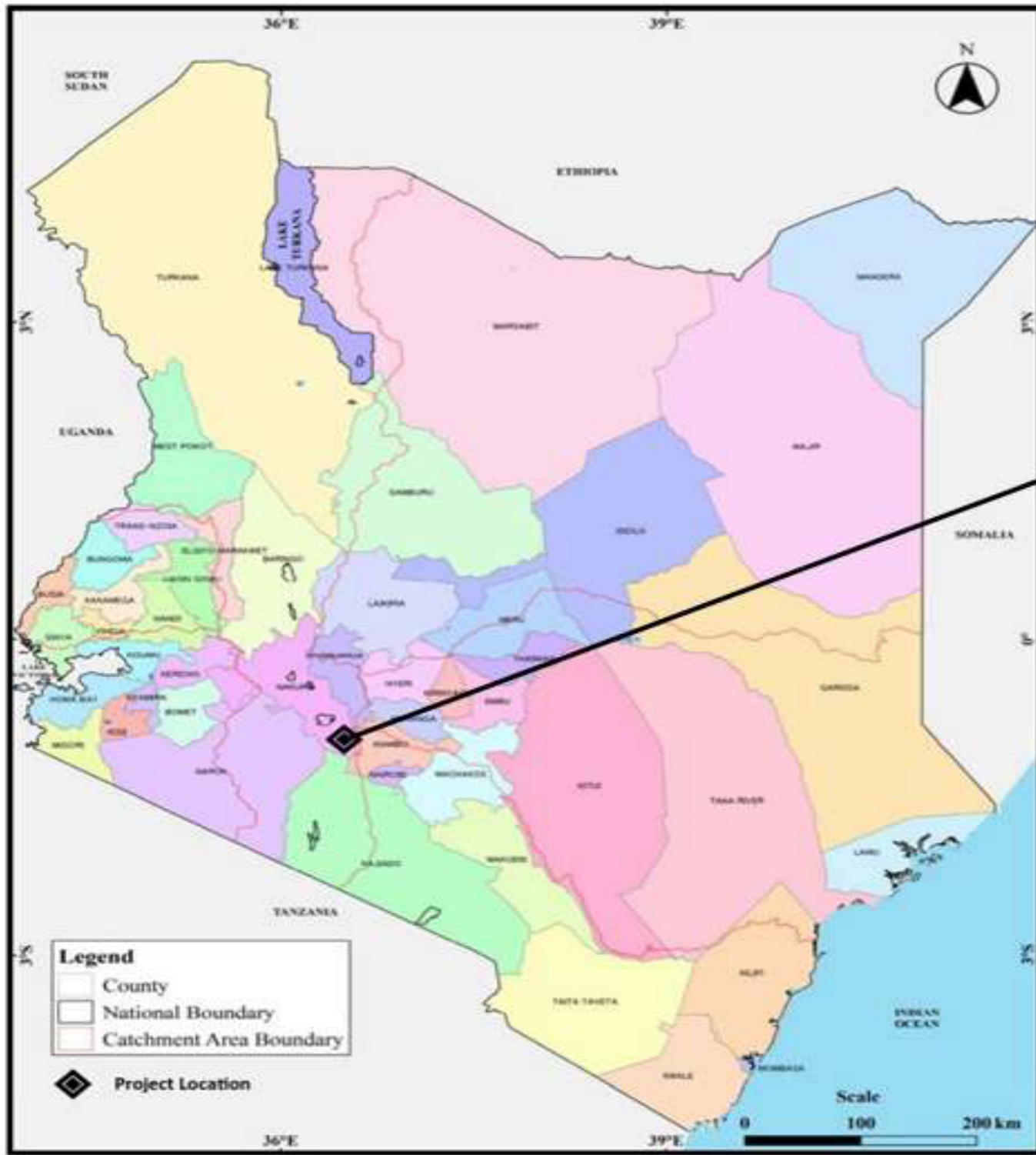



PROJECT LOCATION MAP



REV	Description	Sign	Date	Approved

Firm Name and Address



NAIVASHA WATER SEWERAGE & SANITATION COMPANY LTD.
P. O. Box 321
Naivasha Kenya
Email: naivashawater@gmail.com
Tel: 0705 877 770

SURVEYED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DESIGNED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN: _____	DATE:	OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024

LEGEND:

MC	METER CHAMBER	PVC	POLYVINYL CHLORIDE
●	ROAD CROSSINGS	DIA	DIAMETER
DWC	DOUBLE WALL CORRUGATED		
HDPE	HIGH DENSITY POLYETHYLENE		

Project:	NAIVAWASCO CLSG PHASE 2 PROJECT
Drawing Title:	CONSTRUCTION OF HDPE PIPELINES FOR NORTHERN CBD
Scale:	AS SHOWN (A3)
Sheet No:	1 OF 6
Drawing No:	NAIVAWASCO-CLSG -1

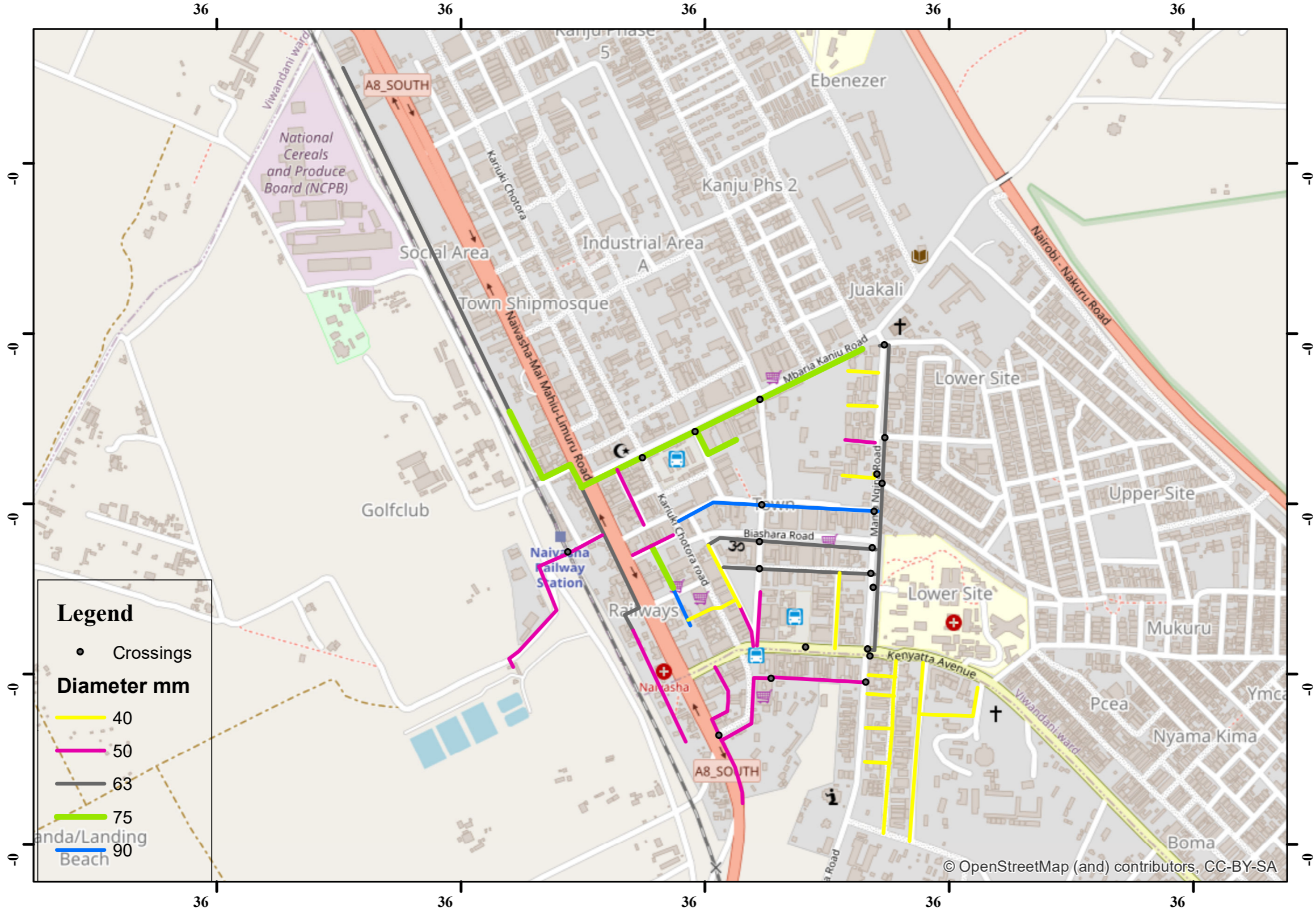
CONSTRUCTION OF HDPE PIPELINES AT NORTHERN CBD

NOTES

1. ALL LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
2. POSITION OF EXISTING SERVICES WILL BE CONFIRMED DURING SETTING-OUT.
3. LOCATION AND DEPTH OF COVER OF ALL SERVICES MUST BE CHECKED ON SITE PRIOR TO EXCAVATION.
4. EXISTING SERVICES ARE TO BE PROTECTED AND DIVERTED AS APPROVED BY THE ENGINEER.
5. CONTOUR ELEVATION IN METERS.
6. THE ACTUAL ALIGNMENT WILL BE CONFIRMED DURING SETTING OUT.
7. FOR CROSSING DETAILS REFER TO STANDARD DRAWINGS
8. MINIMUM COVER TOP ALL PIPES TO BE 1.0M.
9. FOR THE TEMPORARY AND PERMANENT SURVEY BENCHMARK DETAILS USED IN THE DESIGN, PLEASE REFER TO THE SURVEY REPORTS.

LEGEND:

- MC METER CHAMBER
- ROAD CROSSINGS
- DWC DOUBLE WALL CORRUGATED
- HDPE HIGH DENSITY POLYETHYLENE
- PVC POLYVINYL CHLORIDE
- DIA DIAMETER
- GV GATE VALVE
- AV GATE VALVE

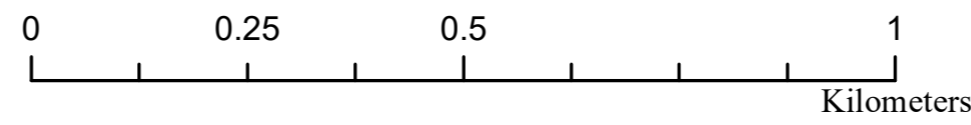


Legend

- Crossings

Diameter mm

- 40
- 50
- 63
- 75
- 90



REV	Description	Sign	Date	Approved
REVISIONS				

Firm Name and Address

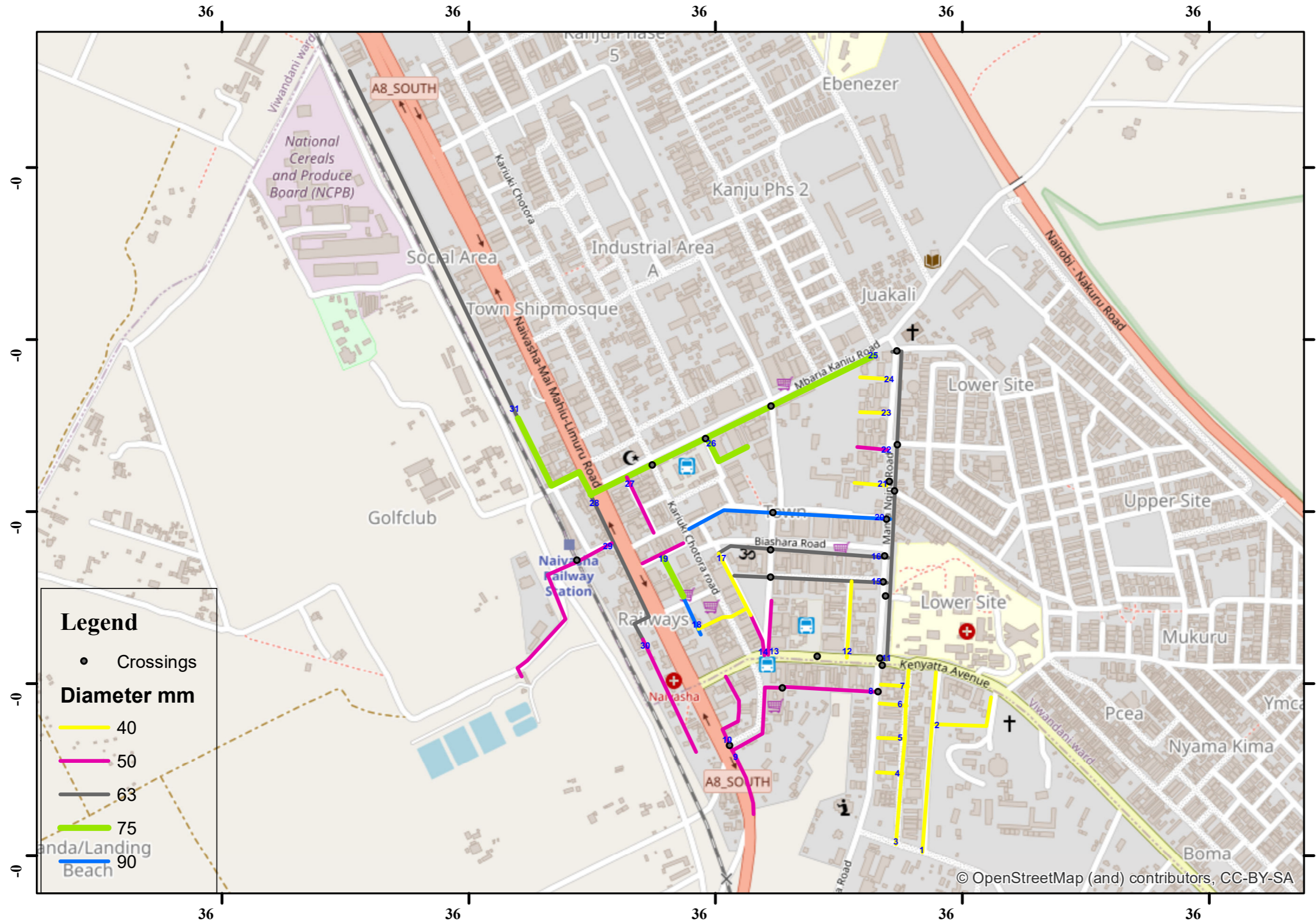
NAIVASHA WATER & SANITATION COMPANY LTD.
P. O. Box 321
Naivasha Kenya
Email: naivashawater@gmail.com
Tel: 0705 877 770

WaterFund
Financing the Water Sector

SURVEYED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024
DESIGNED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN: _____	DATE: OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024

Project:	NAIVAWASCO CLSG PHASE 2 PROJECT
Drawing Title:	CONSTRUCTION OF HDPE PIPELINES FOR NORTHERN CBD
Scale:	AS SHOWN (A3)
Sheet No:	2 OF 6
Drawing No:	NAIVAWASCO-CLSG -2

CONSTRUCTION OF HDPE PIPELINES AT NORTHERN CBD



NOTES

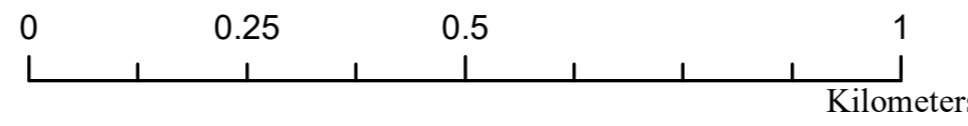
1. ALL LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
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LEGEND:

- MC METER CHAMBER
- ROAD CROSSINGS
- DWC DOUBLE WALL CORRUGATED
- HDPE HIGH DENSITY POLYETHYLENE
- PVC POLYVINYL CHLORIDE
- DIA DIAMETER
- GV GATE VALVE
- AV GATE VALVE

Legend

- Crossings
- Diameter mm**
- 40
- 50
- 63
- 75
- 90



Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree

REV	Description	Sign	Date	Approved
REVISIONS				

Firm Name and Address

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Email: naivashawater@gmail.com
Tel: 0705 877 770

WaterFund
Financing the Water Sector

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DESIGNED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN: _____	DATE: OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024

Project:	NAIVAWASCO CLSG PHASE 2 PROJECT		
Drawing Title:	PIPE FITTINGS OF HDPE PIPELINES FOR NORTHERN CBD		
Scale:	AS SHOWN (A3)	Sheet No:	2A OF 7
Drawing No:	NAIVAWASCO-CLSG -2A		

SN.	SPECIFICATIONS	No.
1.	75mm x 63mm HDPE Compressed Reducer	1
2.	63mm HDPE Compressed End Coupler	1

Pipe 31

SN.	SPECIFICATIONS	No.
1.	160mm x 1.5" Saddle Clamp	1
2.	1.5" Hex Nipple	1
3.	1.5" Gate Valve	1
4.	50mm HDPE Male Adaptor	1
5.	Sluice Valve Chamber (1200x800x1200mm)	1

Pipe 8

SN.	SPECIFICATIONS	No.
1.	110mm x 1.5" Saddle Clamp	1
2.	1.5" Hex Nipple	1
3.	1.5" Gate Valve	1
4.	50mm HDPE Male Adaptor	1
5.	50mm HDPE Compressed End Coupler	1

Pipe 13

SN.	SPECIFICATIONS	No.
1.	90mm HDPE Compressed End Cap	1

Pipe 19

SN.	SPECIFICATIONS	No.
1.	75mm HDPE Butt Fused Stub Complete With Flange	2
2.	75mm Flanged GI Tee	1
3.	2.5" Sluice Valve	1
4.	75mm HDPE Butt Fused Stub Complete With Flange	1
5.	75mm HDPE Compressed Elbow	1
6.	75mm HDPE Compressed End Coupler	1

Pipe 26

SN.	SPECIFICATIONS	No.
1.	160mm*1.25" Saddle clamp	1
2.	1.25" Hex Nipple	1
3.	1.25" Gate Valve	1
4.	40mm HDPE Male Adaptor	1
5.	40mm HDPE Compressed End Coupler	1
6.	Sluice Valve Chamber (1200x800x1200mm)	1

Pipe 1

SN.	SPECIFICATIONS	No.
1.	50 mm HDPE Compressed Tee	1
2.	50mm HDPE Compressed End Coupler	1

Pipe 9

SN.	SPECIFICATIONS	No.
1.	50mm x 40mm HDPE Compressed Reducer	1

Pipe 14

SN.	SPECIFICATIONS	No.
1.	160mm*3" Saddle clamp	1
2.	3" Hex Nipple	1
3.	3" Gate Valve	1
4.	90mm HDPE Male Adaptor	1
5.	90mm HDPE Compressed End Coupler	1
6.	Sluice Valve Chamber (1200x800x1200mm)	1

Pipe 20

SN.	SPECIFICATIONS	No.
1.	75mm*1.5" Saddle clamp	1
2.	1.5" Hex Nipple	1
3.	1.5" Gate Valve	1
4.	50mm HDPE Male Adaptor	1
5.	50mm HDPE Compressed End Coupler	1

Pipe 27

SN.	SPECIFICATIONS	No.
1.	40 mm HDPE Compressed Tee	1
2.	40mm HDPE Male Adaptor	2
3.	1.25" Gate Valve	1
4.	40 mm HDPE Compressed End Elbow	1
5.	40mm HDPE Compressed End Coupler	1

Pipe 2

SN.	SPECIFICATIONS	No.
1.	50mm HDPE Compressed Elbow	1
2.	50mm HDPE Compressed End Coupler	1

Pipe 10

SN.	SPECIFICATIONS	No.
1.	160mm*2" Saddle clamp	1
2.	2" Hex Nipple	1
3.	2" Gate Valve	1
4.	60mm HDPE Male Adaptor	1
5.	60mm HDPE Compressed End Coupler	1
6.	Sluice Valve Chamber (1200x800x1200mm)	1

Pipe 15 & 16

SN.	SPECIFICATIONS	No.
1.	160mm*1.25" Saddle clamp	1
2.	1.25" Hex Nipple	1
3.	1.25" Gate Valve	1
4.	40mm HDPE Male Adaptor	1
5.	40mm HDPE Compressed End Coupler	1

Pipe 21,23 & 24

SN.	SPECIFICATIONS	No.
1.	75mm*2" Saddle clamp	1
2.	2" Hex Nipple	1
3.	2" Gate Valve	1
4.	63mm HDPE Male Adaptor	1

Pipe 28

SN.	SPECIFICATIONS	No.
1.	160mm*1.25" Saddle clamp	1
2.	1.25" Hex Nipple	1
3.	1.25" Gate Valve	1
4.	40mm HDPE Male Adaptor	1
5.	40mm HDPE Compressed End Coupler	1
6.	Sluice Valve Chamber (1200x800x1200mm)	1

Pipe 3

SN.	SPECIFICATIONS	No.
1.	160mm*2" Saddle clamp	1
2.	2" Hex Nipple	1
3.	2" Gate Valve	1
4.	60mm HDPE Male Adaptor	1
5.	60mm HDPE Compressed End Coupler	1
6.	Sluice Valve Chamber (1200x800x1200mm)	1

Pipe 11

SN.	SPECIFICATIONS	No.
1.	63mm x 1.25" Saddle clamp	1
2.	1.25" Hex Nipple	1
3.	1.25" Gate Valve	1
4.	40mm HDPE Male Adaptor	1
5.	40mm HDPE Compressed Tee	1

Pipe 17

SN.	SPECIFICATIONS	No.
1.	160mm*1.5" Saddle clamp	1
2.	1.5" Hex Nipple	1
3.	1.5" Gate Valve	1
4.	50mm HDPE Male Adaptor	1
5.	50mm HDPE Compressed End Coupler	1

Pipe 22

SN.	SPECIFICATIONS	No.
1.	75mm*2" Saddle clamp	1
2.	2" Hex Nipple	1
3.	2" Gate Valve	1
4.	63mm HDPE Male Adaptor	1
5.	50mm HDPE Compressed End Coupler	1

Pipe 29

SN.	SPECIFICATIONS	No.
1.	40 mm HDPE Compressed Tee	1
2.	40mm HDPE Male Adaptor	2
3.	1.25" Gate Valve	1
4.	40 mm HDPE Compressed End Coupler	1

Pipe 4,5,6 & 7

SN.	SPECIFICATIONS	No.
1.	110mm x 1.25" Saddle Clamp	1
2.	1.25" Hex Nipple	1
3.	1.25" Gate Valve	1
4.	40mm HDPE Male Adaptor	2
5.	63mm x 1.25" Saddle Clamp	1

Pipe 12

SN.	SPECIFICATIONS	No.
1.	110mm x 90mm HDPE Reduced Coupling	1
2.	90mm x 1.25" Saddle Clamp	1
3.	40mm HDPE Male Adaptor	1
4.	90mm x 75mm HDPE Reduced Coupling	1

Pipe 18

SN.	SPECIFICATIONS	No.
1.	160mm x 75mm HDPE Compressed Reducer	1
2.	75 mm HDPE Compressed End Elbow	3

Pipe 25

SN.	SPECIFICATIONS	No.
1.	63mm*1.5" Saddle clamp	1
2.	1.5" Hex Nipple	1
3.	1.5" Gate Valve	1
4.	50mm HDPE Male Adaptor	1
5.	50mm HDPE Compressed End Coupler	1

Pipe 30

NOTES

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LEGEND:

- MC METER CHAMBER
- ROAD CROSSINGS
- DWC DOUBLE WALL CORRUGATED
- HDPE HIGH DENSITY POLYETHYLENE
- PVC POLYVINYL CHLORIDE
- DIA DIAMETER
- GV GATE VALVE
- AV GATE VALVE

REV	Description	Sign	Date	Approved
REVISIONS				

Firm Name and Address

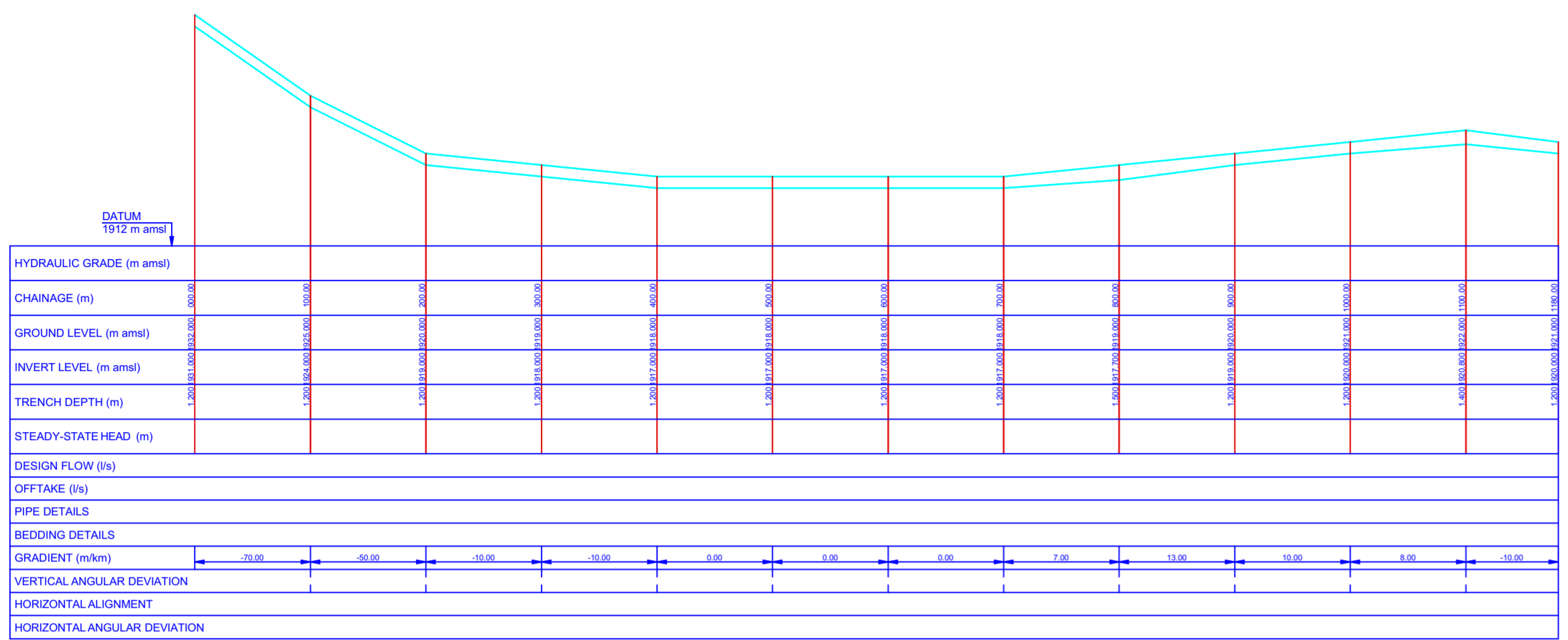
NAIVASHA WATER & SANITATION COMPANY LTD.
P. O. Box 321
Naivasha Kenya
Email: naivashawater@gmail.com
Tel: 0705 877 770

WaterFund
Financing the Water Sector

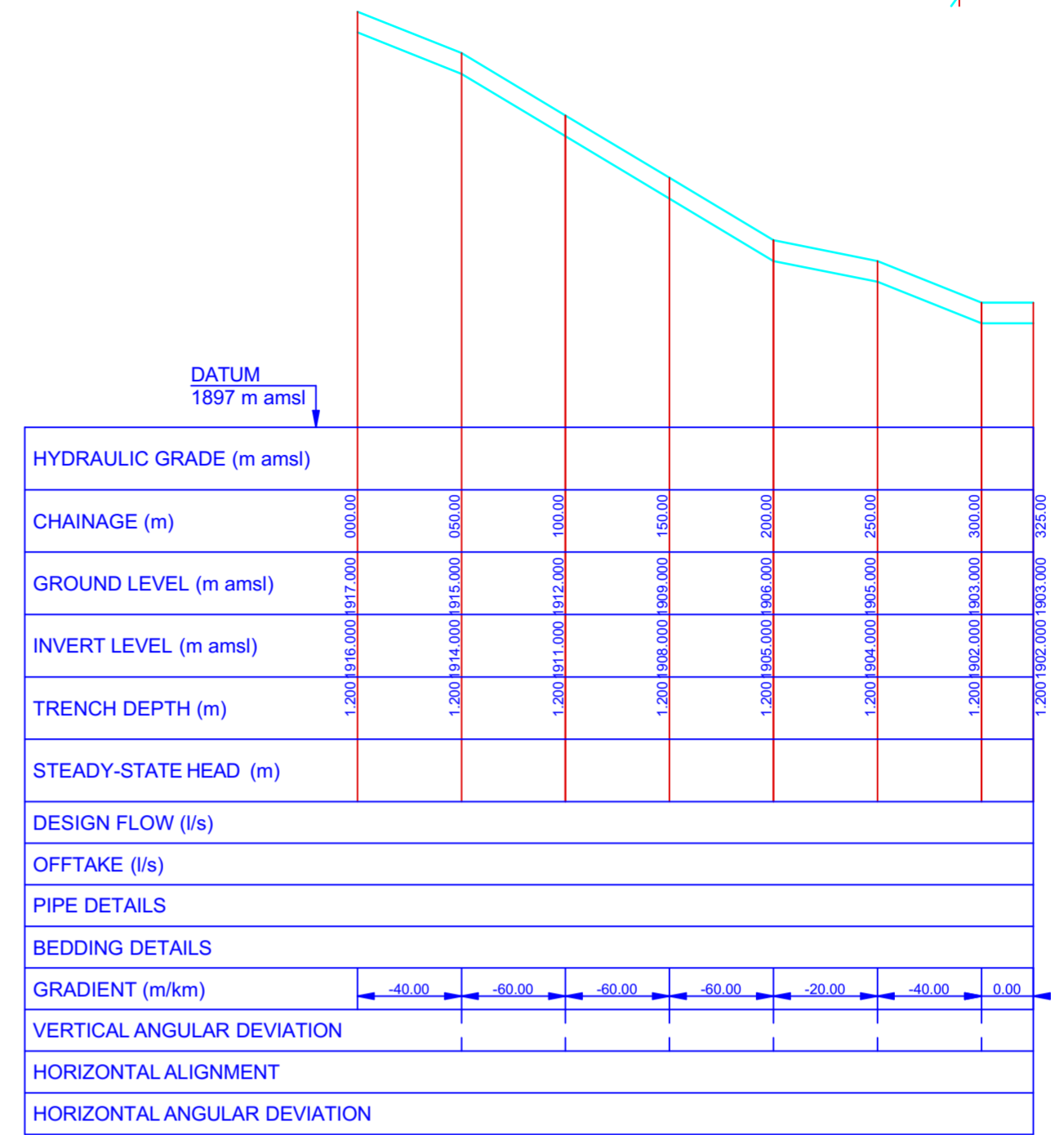
SURVEYED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DESIGNED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN: _____	DATE:	OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024

Project:	NAIVAWASCO CLSG PHASE 2 PROJECT
Drawing Title:	PIPE FITTINGS OF HDPE PIPELINES FOR NORTHERN CBD
Scale:	AS SHOWN (A3)
Sheet No:	2B OF 7
Drawing No:	NAIVAWASCO-CLSG -2B

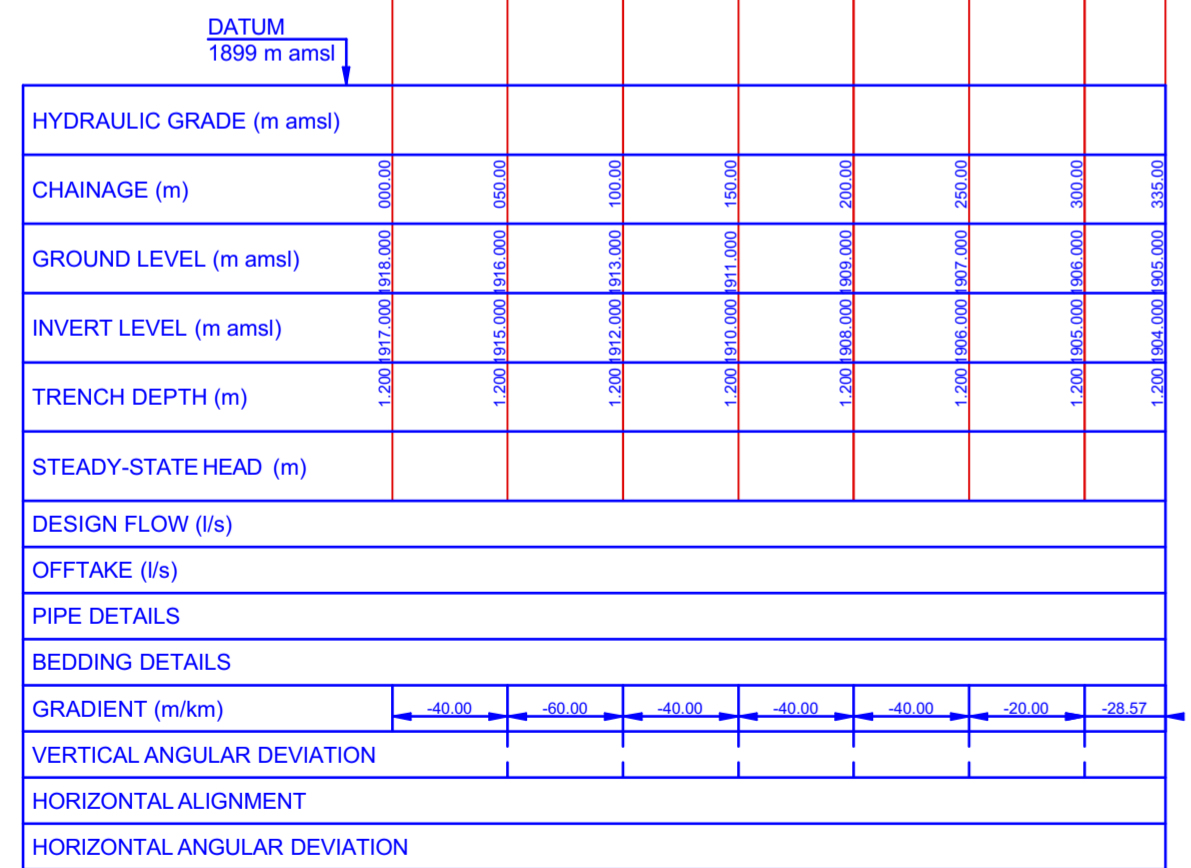
NAVAWASCO CLSG PHASE 2 PROJECT



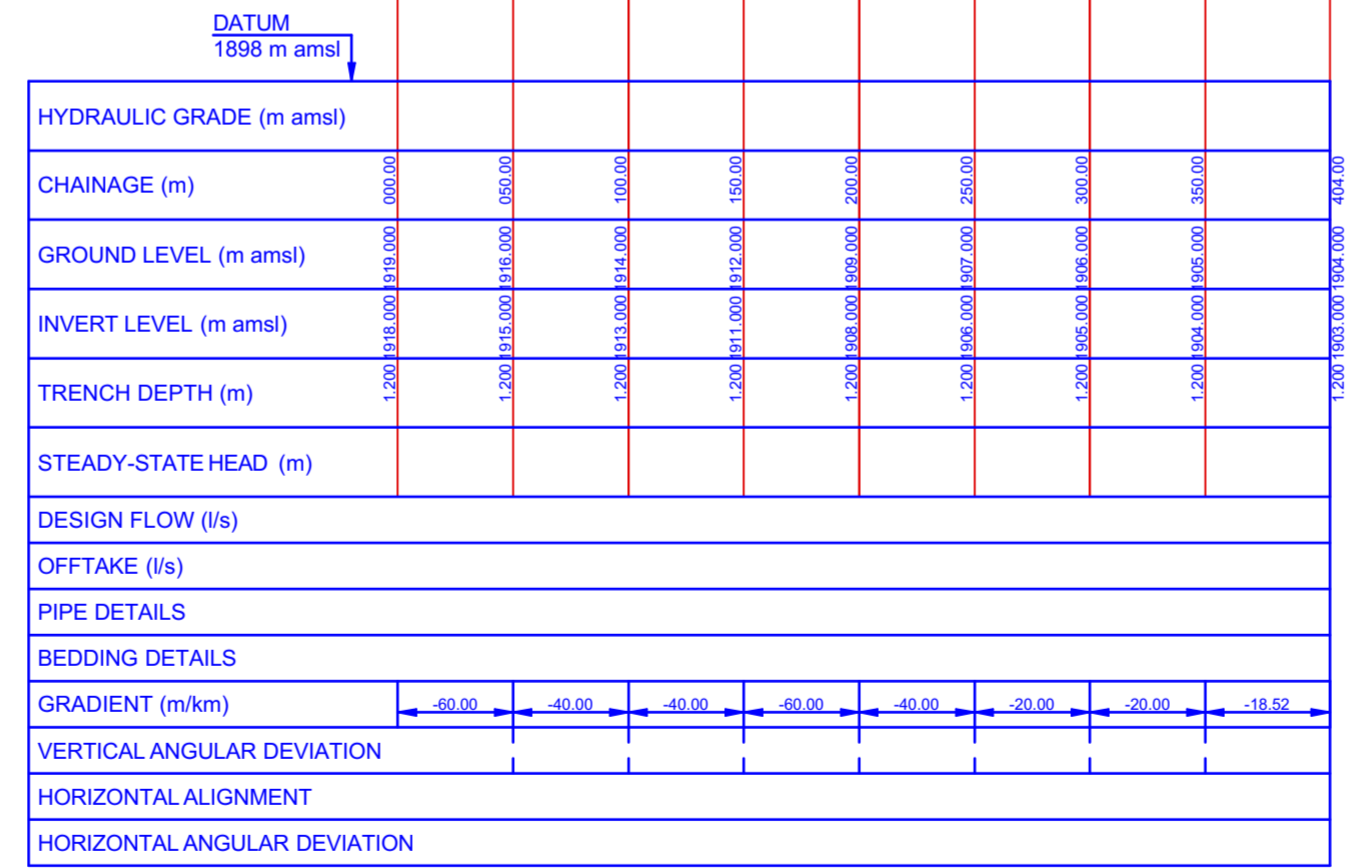
**LONGITUDINAL PROFILE
160mm LINE (0-1180m)**



**LONGITUDINAL PROFILE
90mm LINE (0-325m)**



**LONGITUDINAL PROFILE
110mm LINE (0-335m)**



**LONGITUDINAL PROFILE
90mm LINE (0-404m)**

NOTES

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LEGEND:

- MC METER CHAMBER
- ROAD CROSSINGS
- DWC DOUBLE WALL CORRUGATED
- HDPE HIGH DENSITY POLYETHYLENE
- PVC POLYVINYL CHLORIDE
- DIA DIAMETER
- GV GATE VALVE
- AV AIR VALVE

REV	Description	Sign	Date	Approved

Firm Name and Address

NAIVASHA WATER & SANITATION COMPANY LTD.
P. O. Box 321
Naivasha Kenya
Email: naivashawater@gmail.com
Tel: 0705 877 770



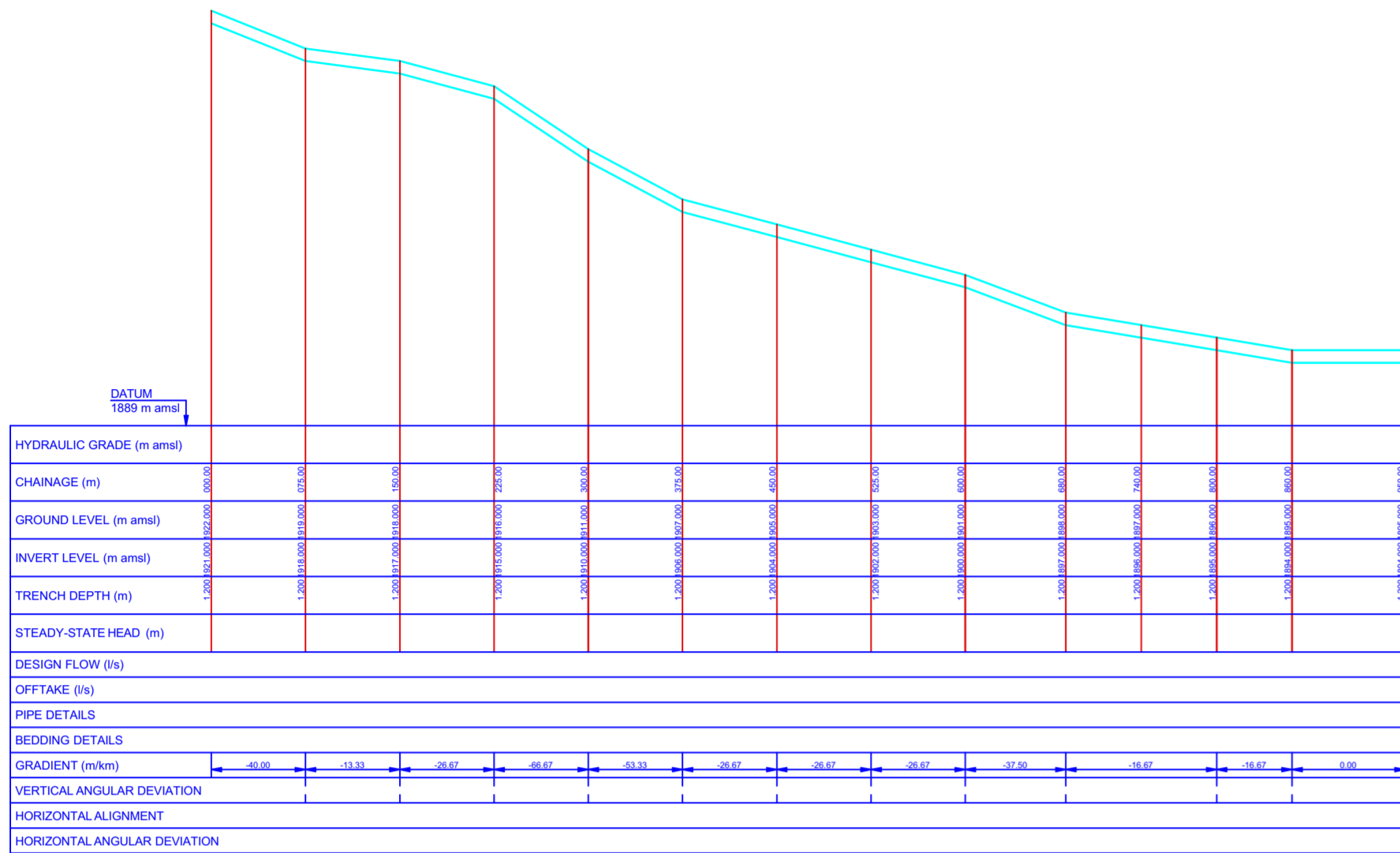
SURVEYED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024
DESIGNED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN: _____	DATE: OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN: _____	DATE: OCTOBER, 2024

Project: **NAIVAWASCO CLSG PHASE 2 PROJECT**

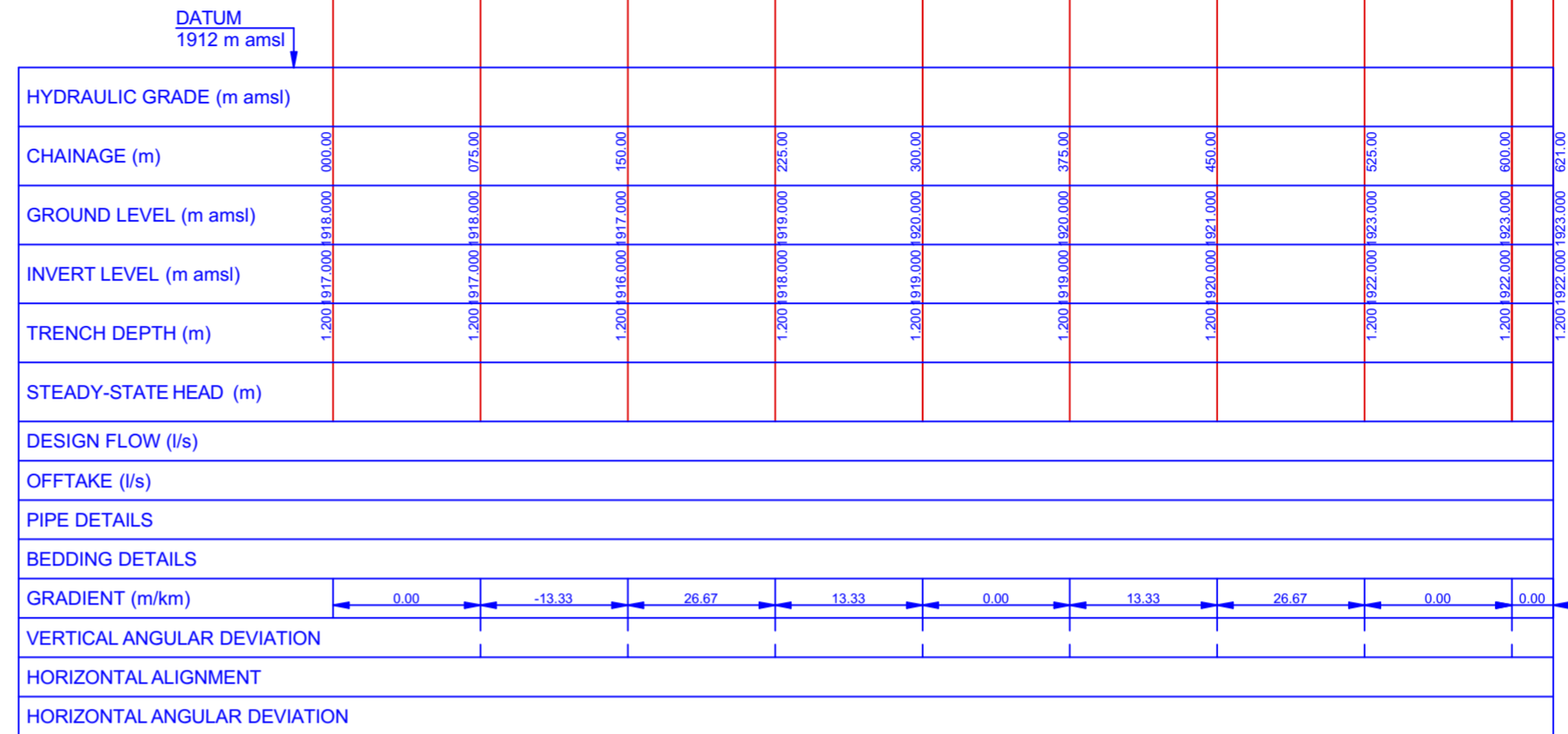
Drawing Title: **CONSTRUCTION OF HDPE PIPELINES FOR NORTHERN CBD (PROFILE LAYOUT)**

Scale: AS SHOWN (A2) Sheet No: 3 OF 6 Drawing No: NAIVAWASCO-CLSG-3

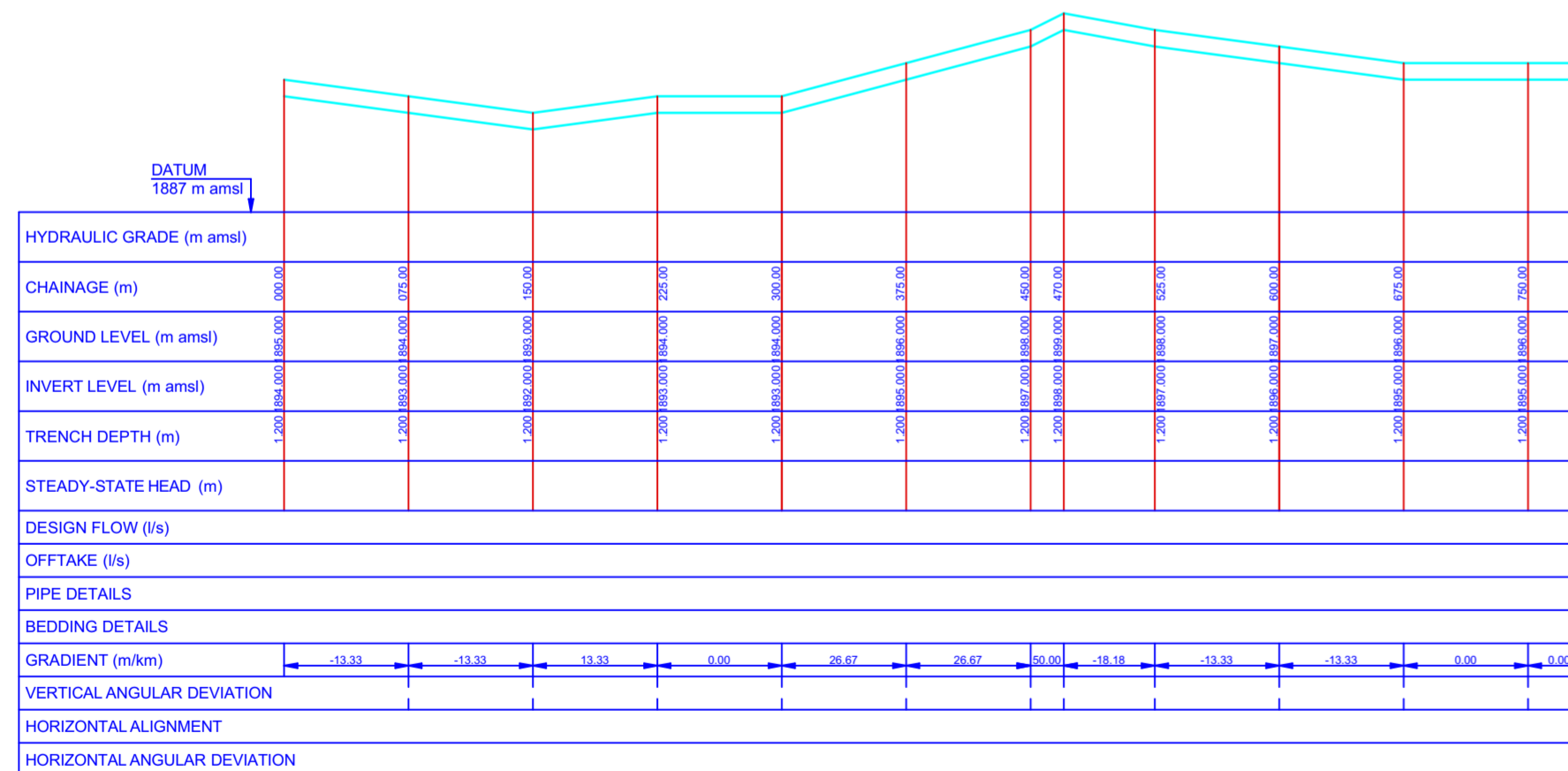
NAVAWASCO CLSG PHASE 2 PROJECT



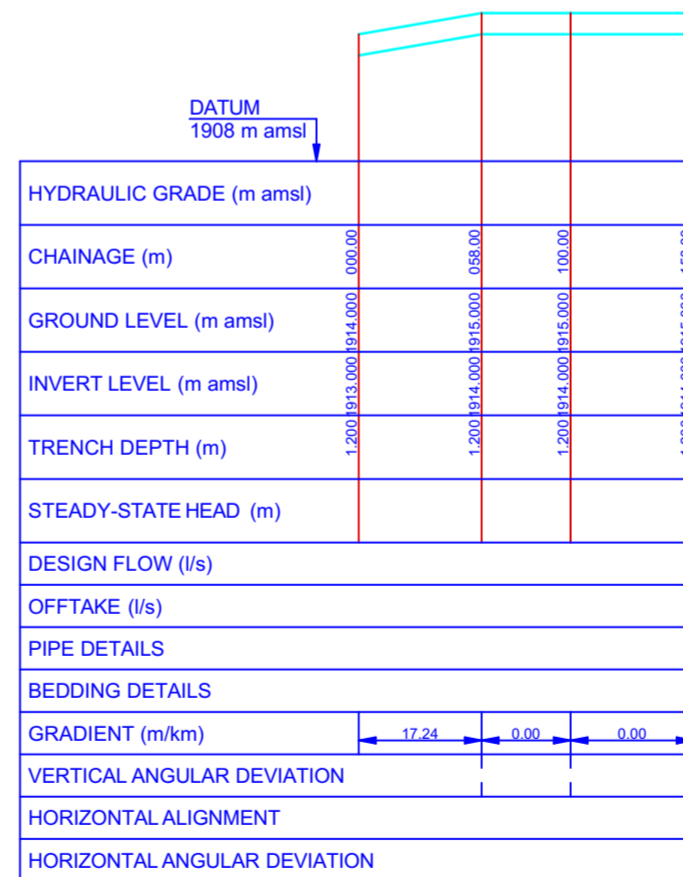
**LONGITUDINAL PROFILE
75mm LINE (0-950m)**



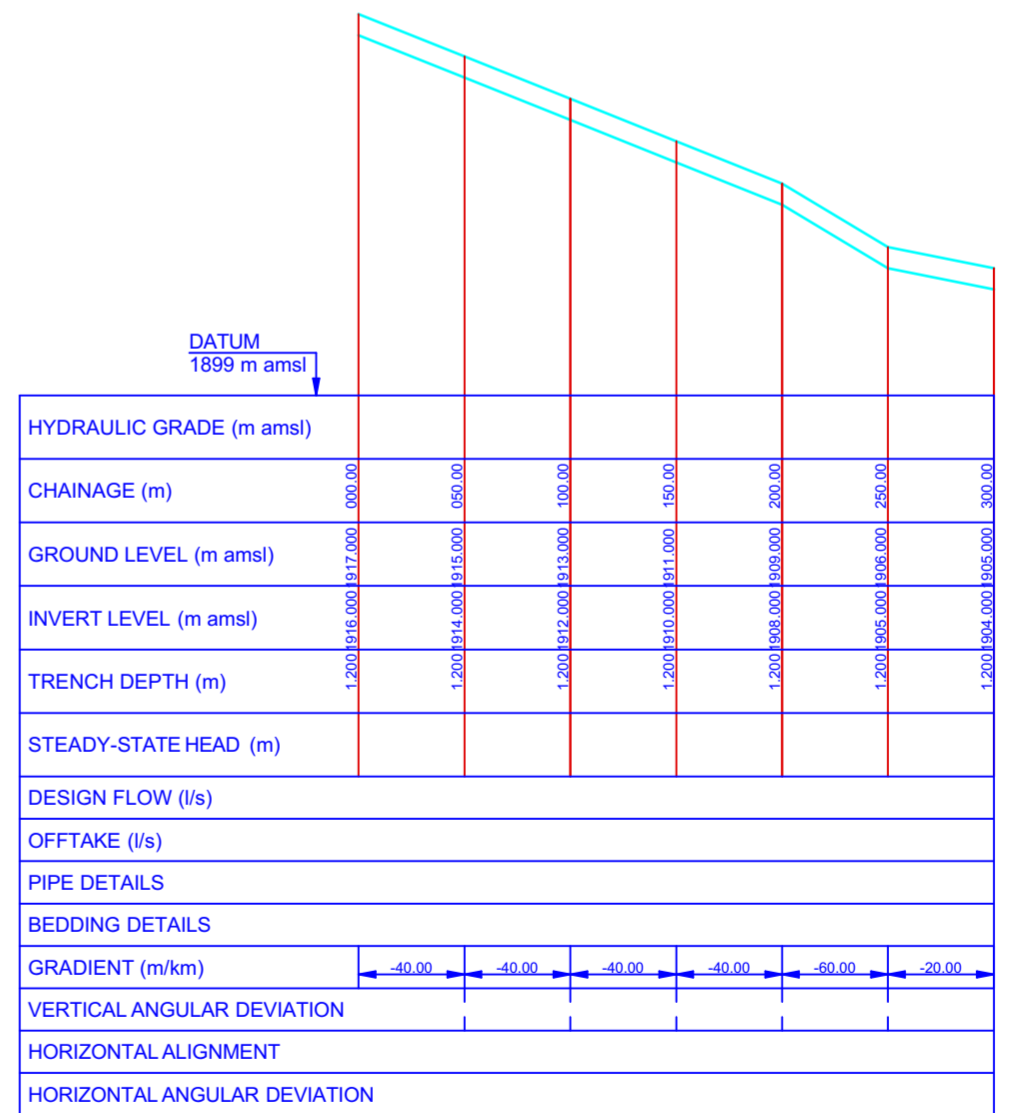
**LONGITUDINAL PROFILE
63mm LINE (0-621m)**



**LONGITUDINAL PROFILE
63mm LINE (0-788m)**



**LONGITUDINAL PROFILE
63mm LINE (0-158m)**



**LONGITUDINAL PROFILE
63mm LINE (0-300m)**

NOTES

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LEGEND:

- MC METER CHAMBER
- ROAD CROSSINGS
- DWC DOUBLE WALL CORRUGATED
- HDPE HIGH DENSITY POLYETHYLENE
- PVC POLYVINYL CHLORIDE
- DIA DIAMETER
- GV GATE VALVE
- AV GATE VALVE

REV	Description	Sign	Date	Approved

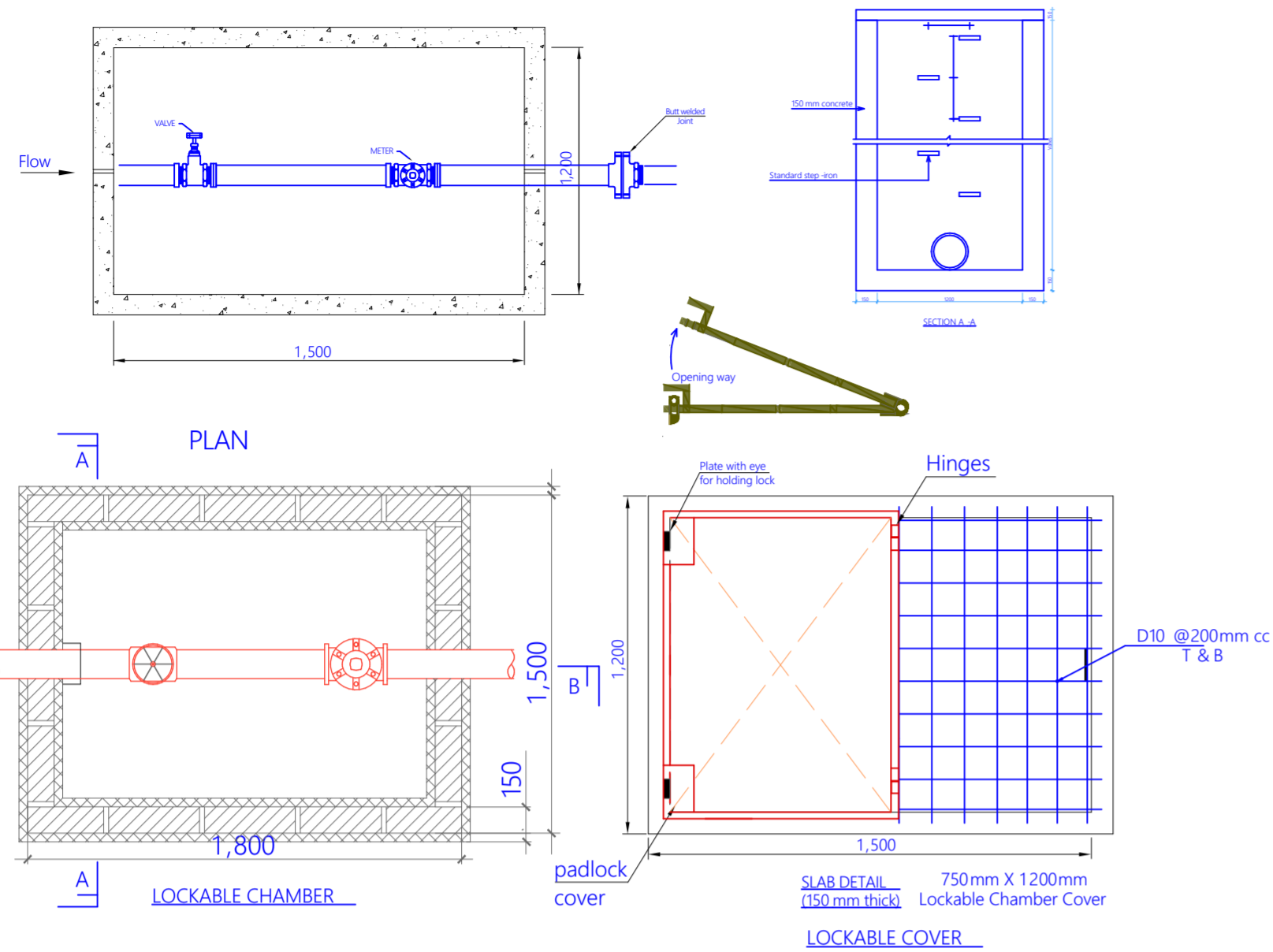


SURVEYED BY:	F. MWAREMA	SIGN:		DATE:	OCTOBER, 2024
DESIGNED BY:	F. MWAREMA	SIGN:		DATE:	OCTOBER, 2024
DRAWN BY:	S. MWANGI	SIGN:		DATE:	OCTOBER, 2024
APPROVED BY:	F. MWAREMA	SIGN:		DATE:	OCTOBER, 2024

Project:	NAVAWASCO CLSG PHASE 2 PROJECT		
Drawing Title:	CONSTRUCTION OF HDPE PIPELINES FOR NORTHERN CBD (PROFILE LAYOUT)		
Scale:	AS SHOWN (A2)	Sheet No:	4 OF 6
Drawing No:	NAVAWASCO-CLSG-4		

NAIVASHA CLSG PHASE 2 PROJECT

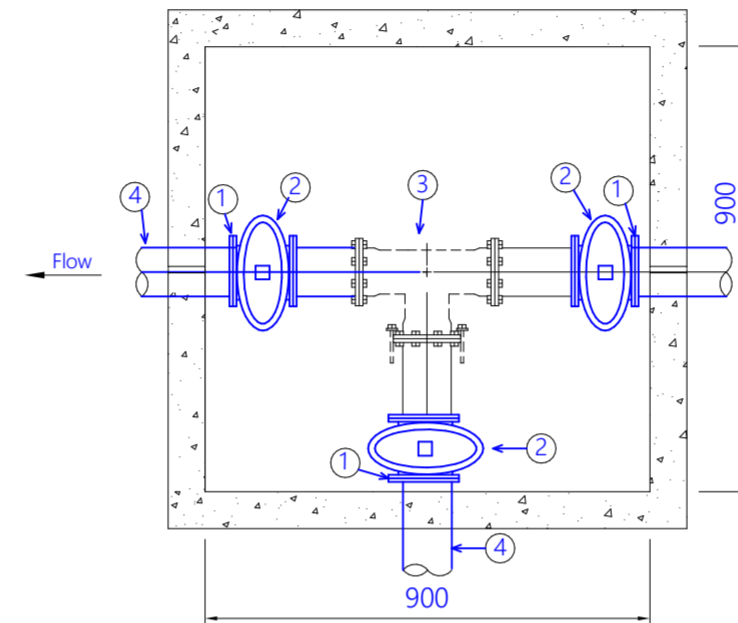
METER CHAMBER



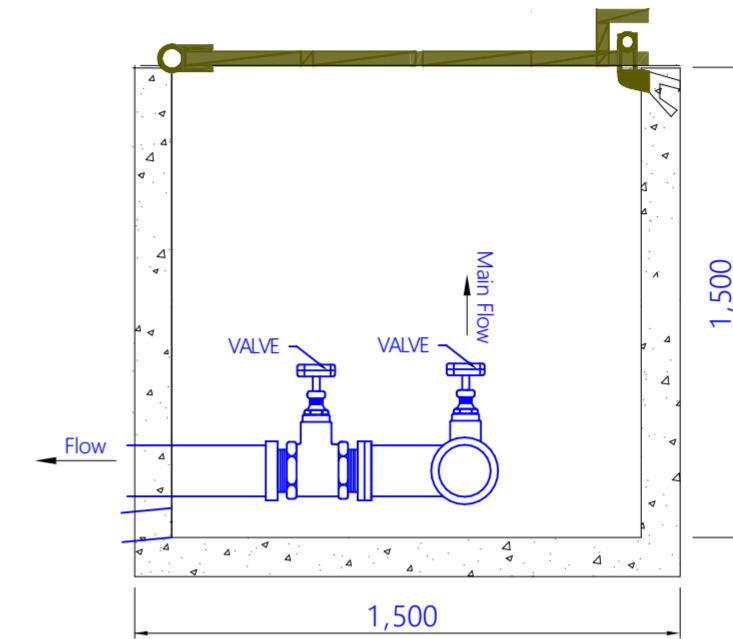
WO

SN.	SPECIFICATIONS	No.
①	HDPE Butt -fused Stub + Flange	3
②	Sluice Valve , AVK type	3
③	Fabricated Steel Flanged Equal Tee	1
④	HDPE Pipe	

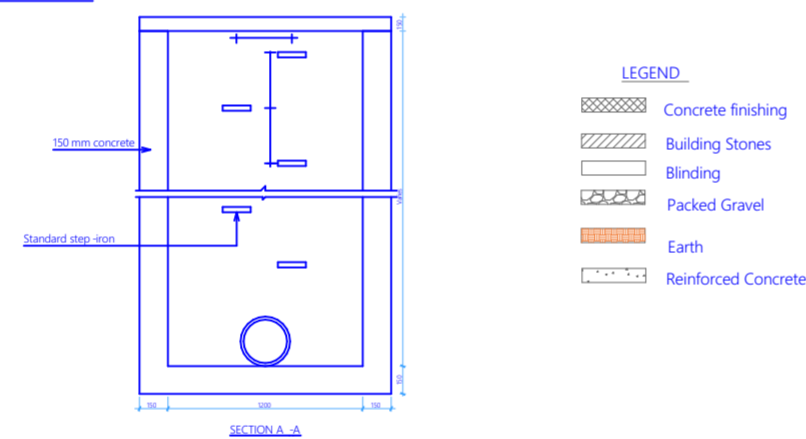
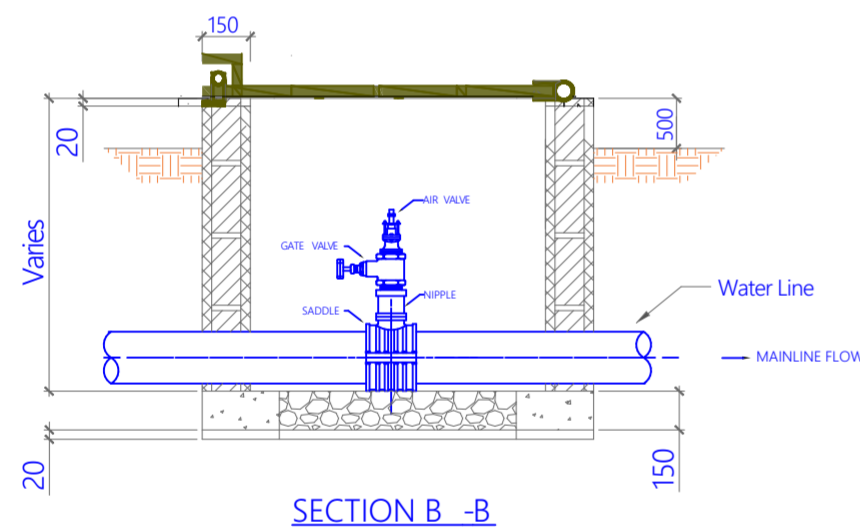
WASH OUT PLAN



WASH OUT SECTION

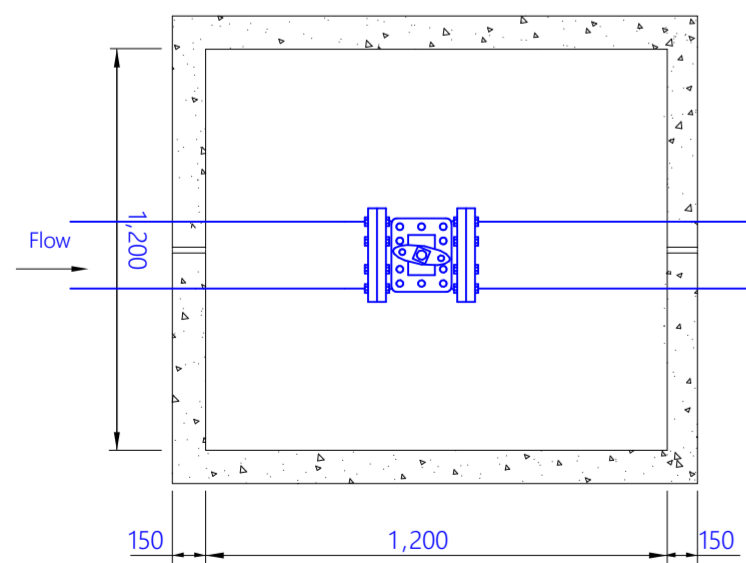


VALVE CHAMBER

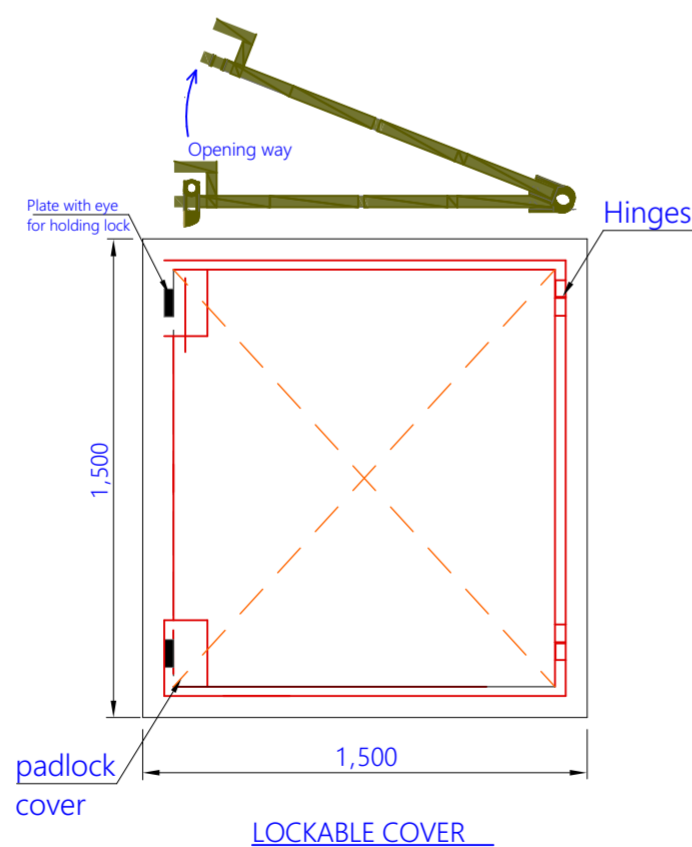


LEGEND:

	Concrete finishing
	Building Stones
	Blinding
	Packed Gravel
	Earth
	Reinforced Concrete



AIR VALVE CHAMBER



LOCKABLE COVER

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LEGEND:

MC	METER CHAMBER
	ROAD CROSSINGS
DWC	DOUBLE WALL CORRUGATED
HDPE	HIGH DENSITY POLYETHYLENE
PVC	POLYVINYL CHLORIDE
DIA	DIAMETER
GV	GATE VALVE
AV	GATE VALVE

REV	Description	Sign	Date	Approved
REVISIONS				

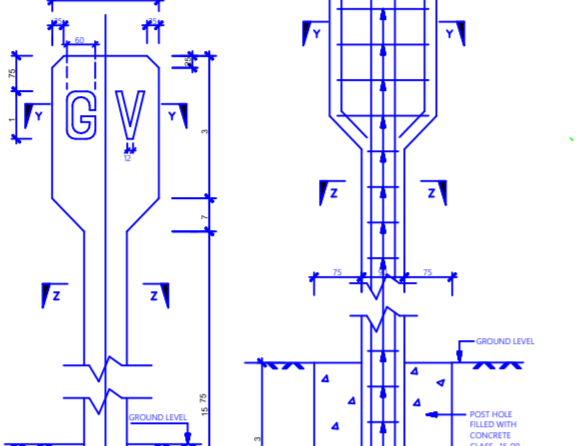
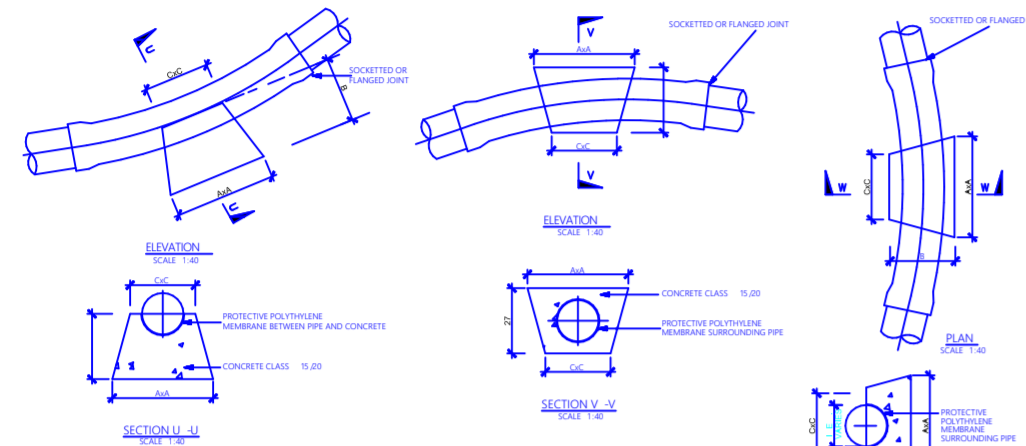
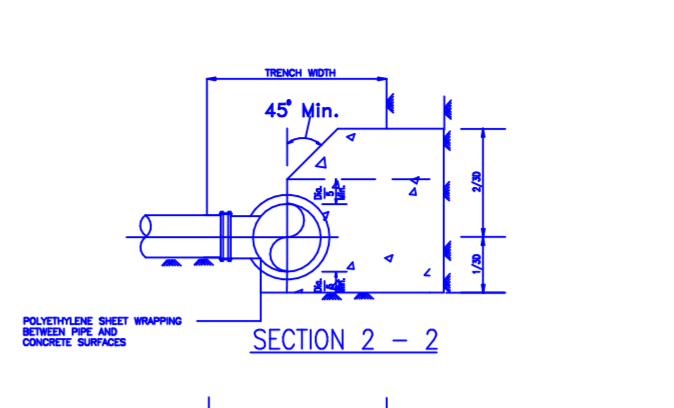
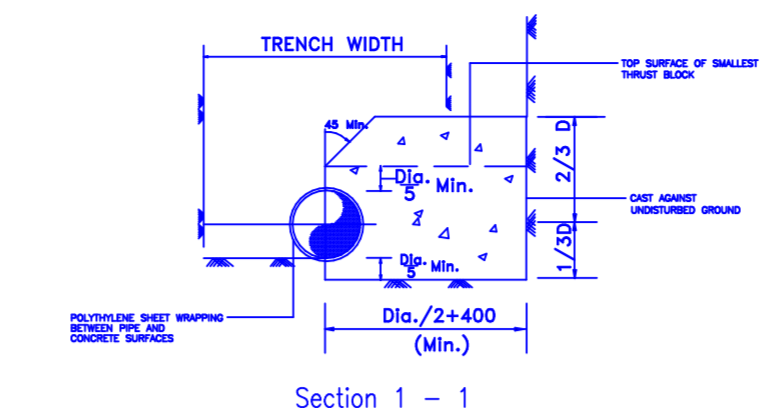
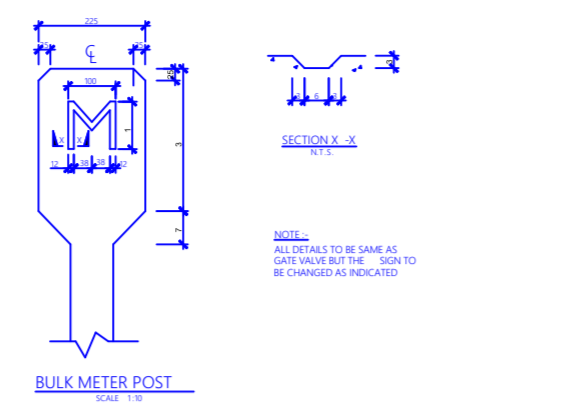
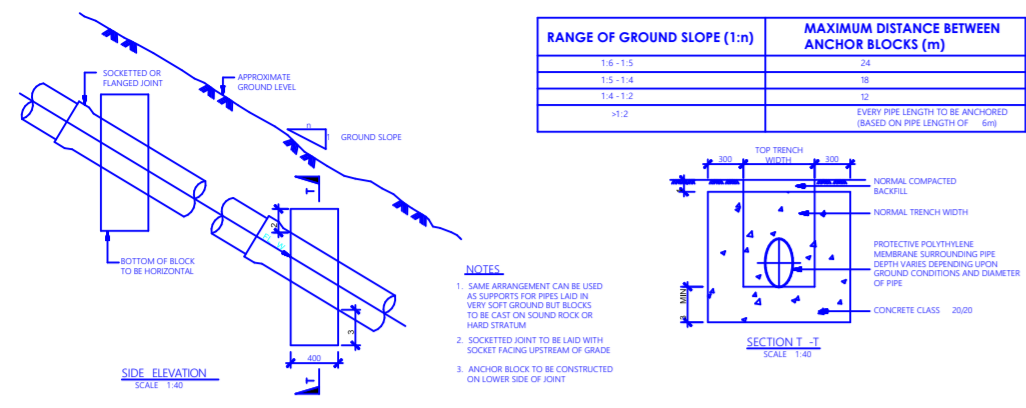
Firm Name and Address

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Tel: 0768 877 770

SURVEYED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DESIGNED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN: _____	DATE:	OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024

Project:	NAIVAWASCO CLSG PHASE 2 PROJECT		
Drawing Title:	UTILITY CHAMBERS IN PIPELINES INFRASTRUCTURE FOR NORTHERN CBD		
Scale:	AS SHOWN (A2)	Sheet No:	5 OF 6
Drawing No:	NAIVAWASCO-CLSG -5		

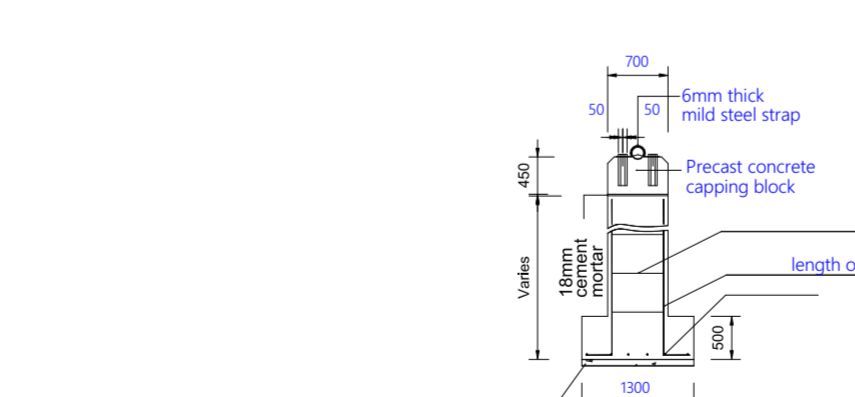
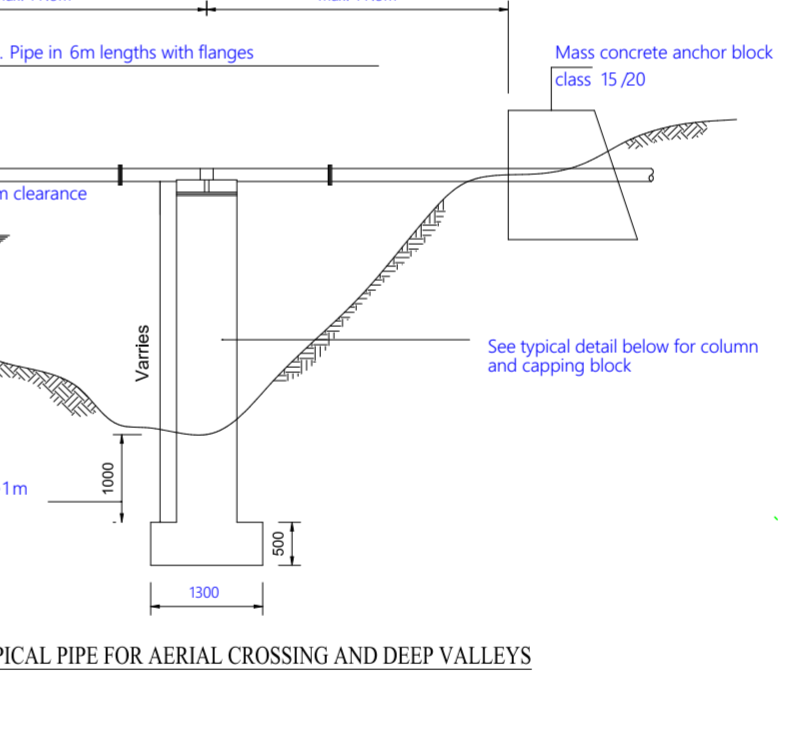
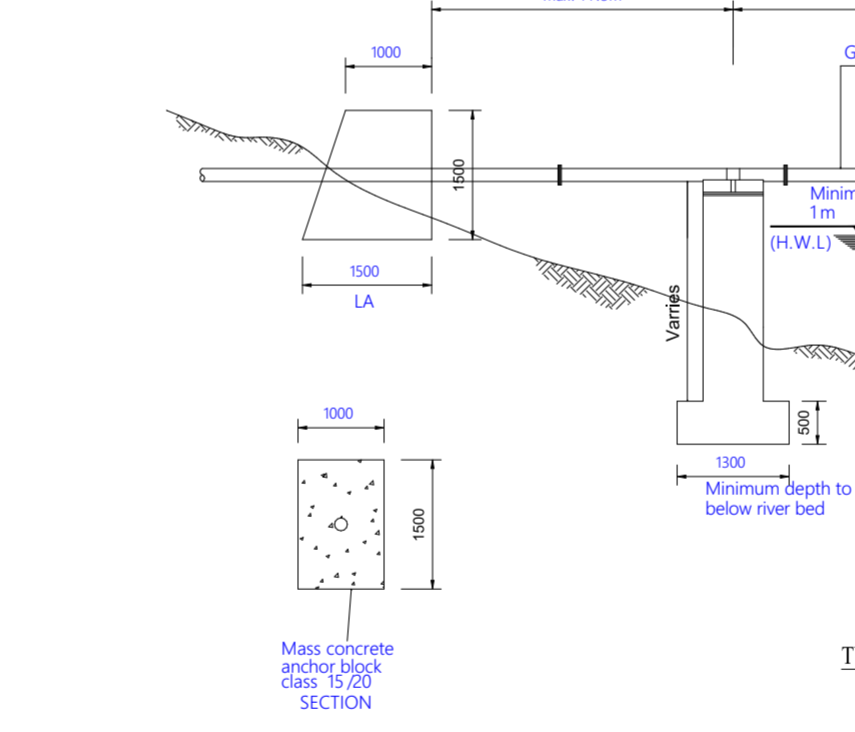
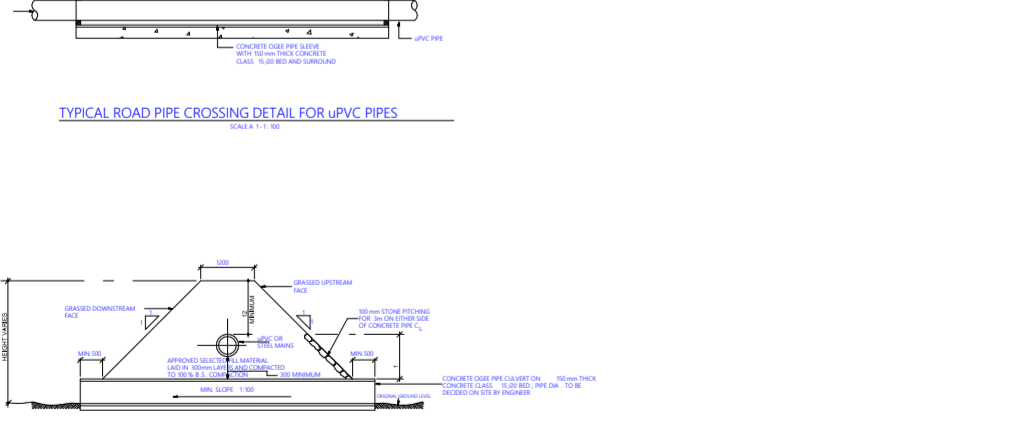
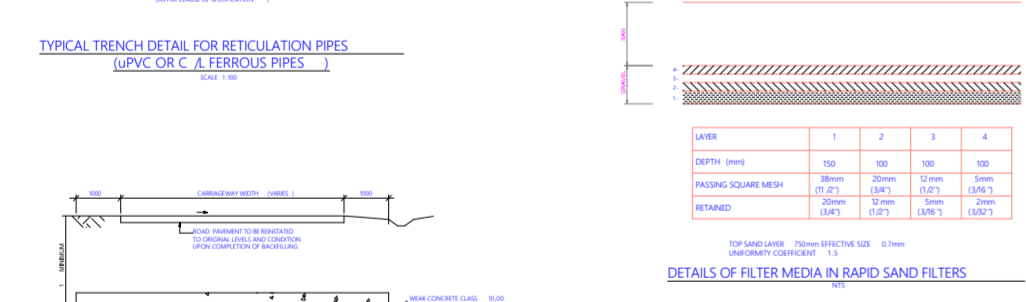
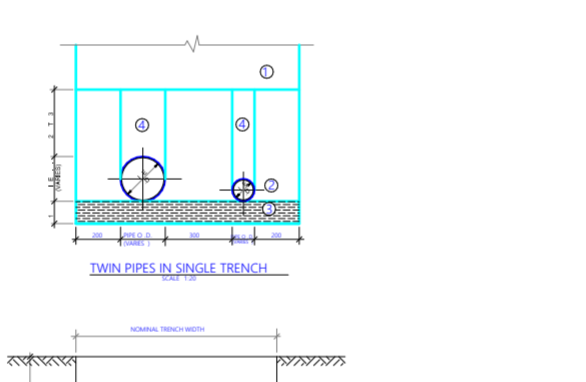
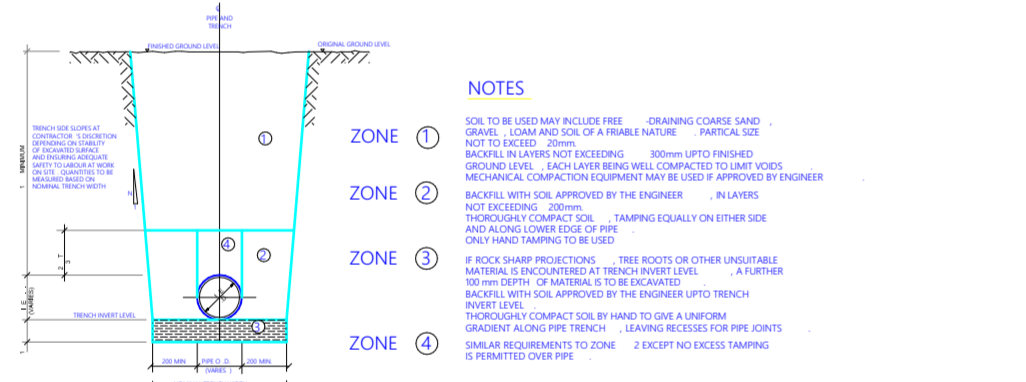
NAVASHA CLSG PHASE 2 PROJECT



TEST HEAD (mm)	BENCH SIZE (mm)				TEST HEAD (mm)	BENCH SIZE (mm)
	800	700	600	500		
100	2,043.5x3,150	1,813.5x2,727	1,623.7x1,914	1,481.8x1,811	1,312.2x1,591	1,162.2x1,406
150	2,443.5x3,657	2,158.5x3,237	1,923.7x2,292	1,741.8x2,111	1,532.2x1,891	1,362.2x1,606
200	2,843.5x4,164	2,558.5x3,744	2,283.7x2,697	2,041.8x2,411	1,792.2x2,191	1,582.2x1,811
250	3,243.5x4,671	2,958.5x4,251	2,643.7x3,152	2,341.8x2,711	2,042.2x2,491	1,782.2x2,031
300	3,643.5x5,178	3,358.5x4,758	3,003.7x3,653	2,641.8x3,011	2,292.2x2,871	1,982.2x2,331
350	4,043.5x5,685	3,758.5x5,265	3,363.7x4,154	2,941.8x3,311	2,542.2x3,251	2,182.2x2,631
400	4,443.5x6,192	4,158.5x5,772	3,723.7x4,655	3,241.8x3,611	2,792.2x3,631	2,382.2x2,931
450	4,843.5x6,699	4,558.5x6,279	4,083.7x5,156	3,541.8x3,911	3,042.2x4,011	2,582.2x3,231
500	5,243.5x7,206	4,958.5x6,786	4,443.7x5,657	3,841.8x4,211	3,292.2x4,391	2,782.2x3,531
550	5,643.5x7,713	5,358.5x7,293	4,803.7x6,158	4,141.8x4,511	3,542.2x4,771	2,982.2x3,831
600	6,043.5x8,220	5,758.5x7,800	5,163.7x6,659	4,441.8x4,811	3,792.2x5,151	3,182.2x4,131
650	6,443.5x8,727	6,158.5x8,307	5,523.7x7,160	4,741.8x5,111	4,042.2x5,531	3,382.2x4,431
700	6,843.5x9,234	6,558.5x8,814	5,883.7x7,661	5,041.8x5,411	4,292.2x5,911	3,582.2x4,731
750	7,243.5x9,741	6,958.5x9,321	6,243.7x8,162	5,341.8x5,711	4,542.2x6,291	3,782.2x5,031
800	7,643.5x10,248	7,358.5x9,828	6,603.7x8,663	5,641.8x6,011	4,792.2x6,671	3,982.2x5,331
850	8,043.5x10,755	7,758.5x10,335	6,963.7x9,164	5,941.8x6,311	5,042.2x7,051	4,182.2x5,631
900	8,443.5x11,262	8,158.5x10,842	7,323.7x9,665	6,241.8x6,611	5,292.2x7,431	4,382.2x5,931

TEST HEAD (m)	BEND	DIMENSIONS (D)mm x (L)mm x V(m)									
		800	700	600	500	400	350	300	250	200	150/100
150	30°	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7	1,891.8x9.7
150	45°	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1	1,891.8x12.1
150	90°	2,443.5x19.8	2,043.5x19.8	1,643.5x19.8	1,243.5x19.8	843.5x19.8	443.5x19.8	443.5x19.8	443.5x19.8	443.5x19.8	443.5x19.8

TEST HEAD (m)	BEND	DIMENSIONS (D)mm x (L)mm x V(m)									
		800	700	600	500	400	350	300	250	200	150/100
100	30°	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4	1,481.8x7.4
100	45°	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7	1,481.8x9.7
100	90°	1,983.5x15.2	1,583.5x15.2	1,183.5x15.2	783.5x15.2	383.5x15.2	383.5x15.2	383.5x15.2	383.5x15.2	383.5x15.2	383.5x15.2



NOTE
Minimum cover to reinforcement 25mm

- NOTES**
- ALL LEVELS ARE IN METERS UNLESS STATED OTHERWISE.
 - POSITION OF EXISTING SERVICES WILL BE CONFIRMED DURING SETTING-OUT.
 - LOCATION AND DEPTH OF COVER OF ALL SERVICES MUST BE CHECKED ON SITE PRIOR TO EXCAVATION.
 - EXISTING SERVICES ARE TO BE PROTECTED AND DIVERTED AS APPROVED BY THE ENGINEER.
 - CONTOUR ELEVATION IN METERS.
 - THE ACTUAL ALIGNMENT WILL BE CONFIRMED DURING SETTING OUT.
 - FOR CROSSING DETAILS REFER TO STANDARD DRAWINGS
 - MINIMUM COVER TOP ALL PIPES TO BE 1.0M.
 - FOR THE TEMPORARY AND PERMANENT SURVEY BENCHMARK DETAILS USED IN THE DESIGN, PLEASE REFER TO THE SURVEY REPORTS.

- LEGEND:**
- MC METER CHAMBER
 - ROAD CROSSINGS
 - DWC DOUBLE WALL CORRUGATED
 - HDPE HIGH DENSITY POLYETHYLENE
 - PVC POLYVINYL CHLORIDE
 - DIA DIAMETER
 - GV GATE VALVE
 - AV GATE VALVE

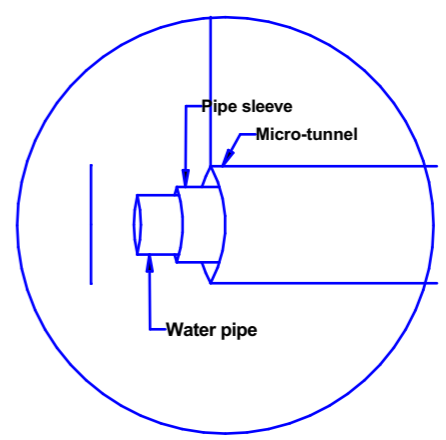
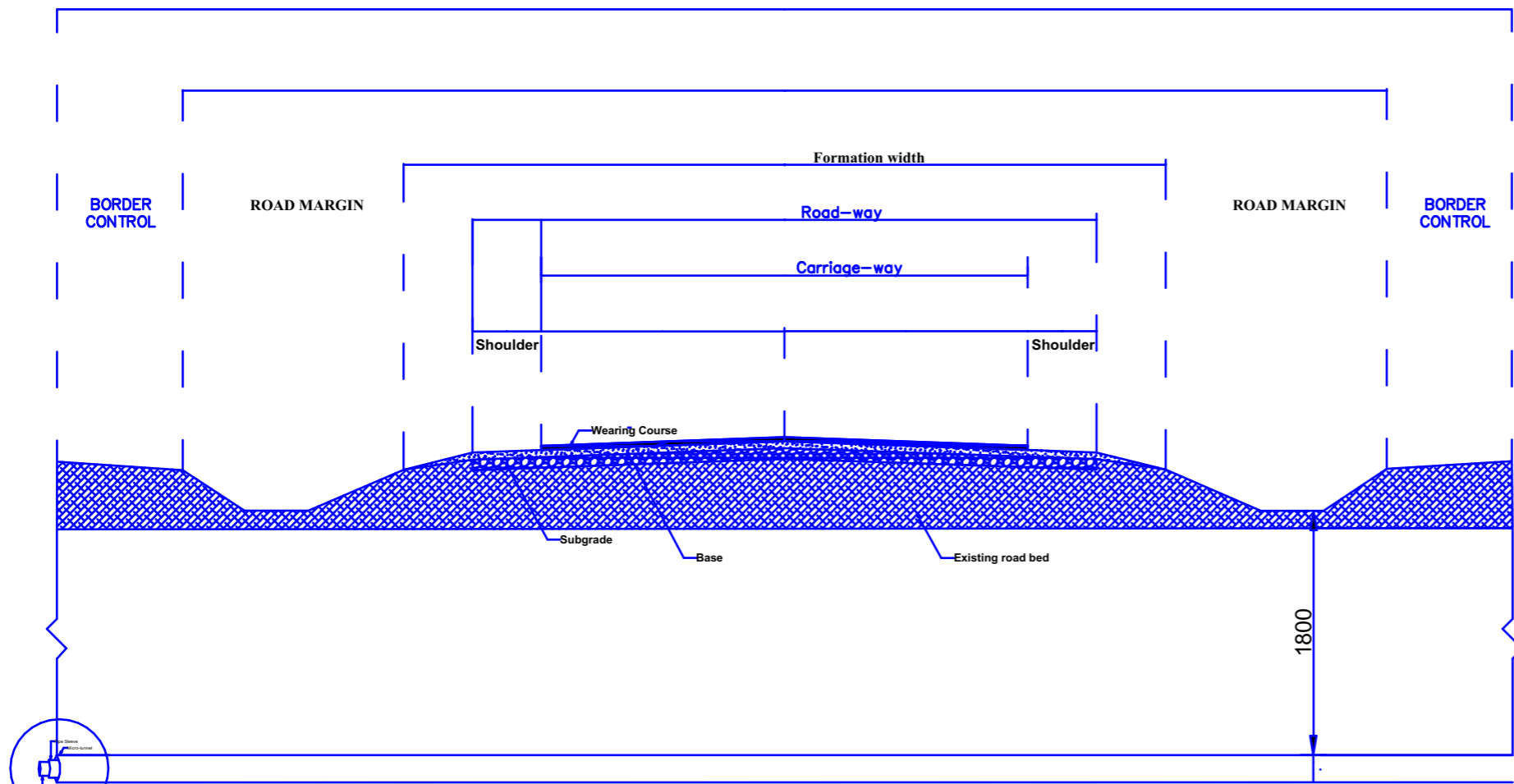
REV	Description	Sign	Date	Approved
REVISIONS				

Firm Name and Address

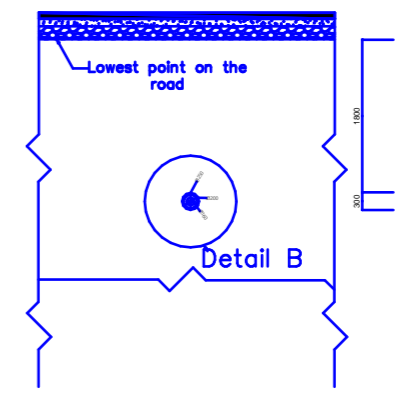
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Tel: 0706 877 770

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DESIGNED BY:	F.MWAREMA	SIGN:	DATE:	OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN:	DATE:	OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN:	DATE:	OCTOBER, 2024

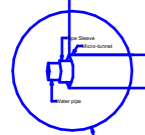
Project:	NAIVAWASCO CLSG PHASE 2 PROJECT		
Drawing Title:	PIPE IDENTIFICATION & SUPPORT SYSTEM OF PIPELINES FOR NORTHERN CBD		
Scale:	AS SHOWN (A2)	Sheet No:	6 OF 6
Drawing No:	NAIVAWASCO-CLSG-6		



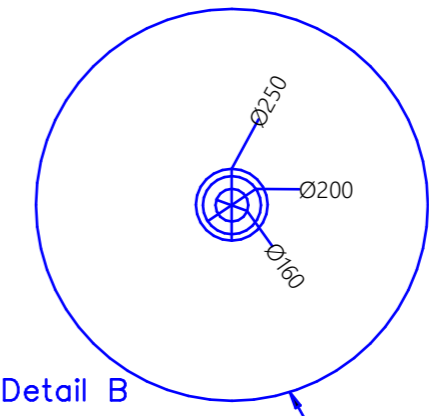
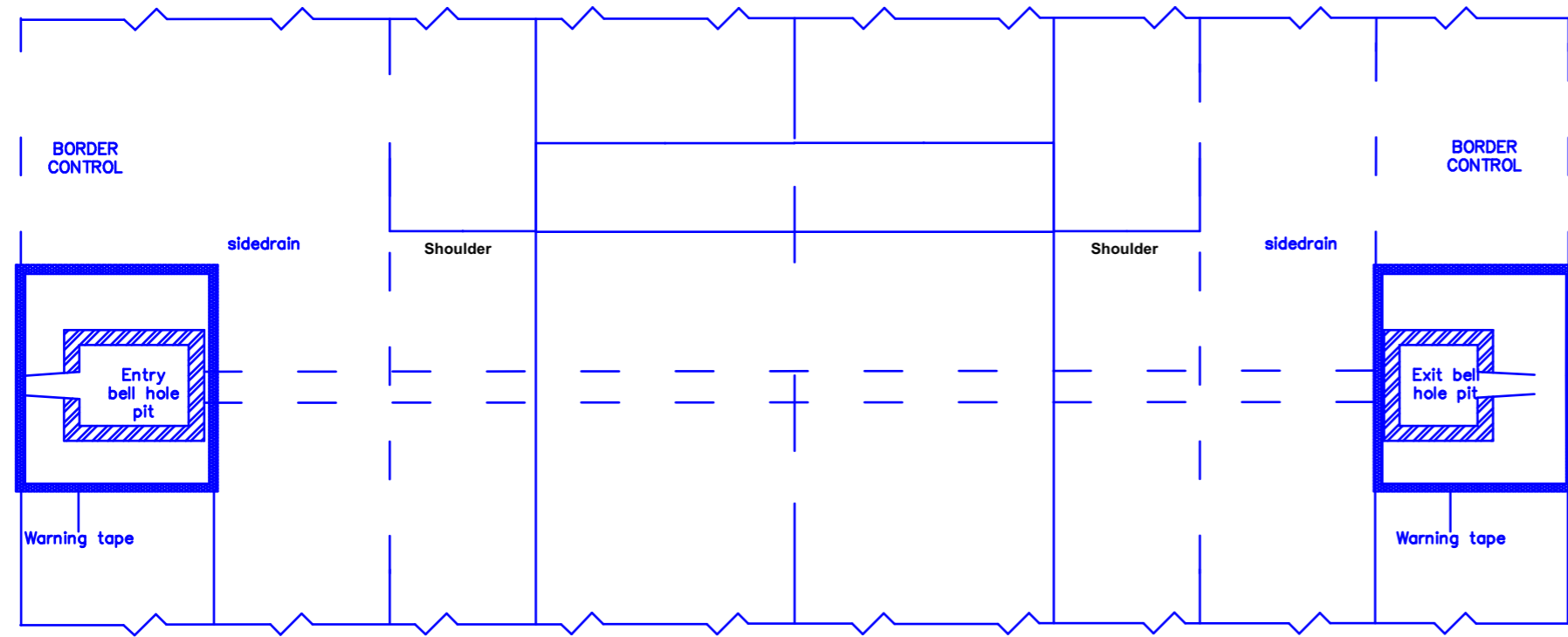
Detail A



Detail B



Detail A



Detail B

NOTES

- safety measures shall be taken into consideration
- installation of warning signs, reflective signs and visible at a distance
- Excavated materials shall be disposed in accordance to environmental standards
- Water should be protected from entering the tunnel
- Proper installation of casing pipe to avoid settlement
- Excavation should be done within the shortest time possible
- Backfilling of end pit and receiving pit to be approved by qualified authority of personnel

FLOOR PLAN

REV	Description	Sign	Date	Approved
REVISIONS				

Firm Name and Address

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Naivasha Kenya
Email: naivashawater@gmail.com
Tel: 0705 877 770

SURVEYED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DESIGNED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024
DRAWN BY:	S.MWANGI	SIGN: _____	DATE:	OCTOBER, 2024
APPROVED BY:	F.MWAREMA	SIGN: _____	DATE:	OCTOBER, 2024

LEGEND:

MC	METER CHAMBER	PVC	POLYVINYL CHLORIDE
○	ROAD CROSSINGS	DIA	DIAMETER
DWC	DOUBLE WALL CORRUGATED		
HDPE	HIGH DENSITY POLYETHYLENE		

Project:	NAIVAWASCO CLSG PHASE 2 PROJECT
Drawing Title:	CROSSING OF HDPE PIPELINES FOR NORTHERN CBD
Scale:	AS SHOWN (A3)
Sheet No:	7 OF 7
Drawing No:	NAIVAWASCO-CLSG -7