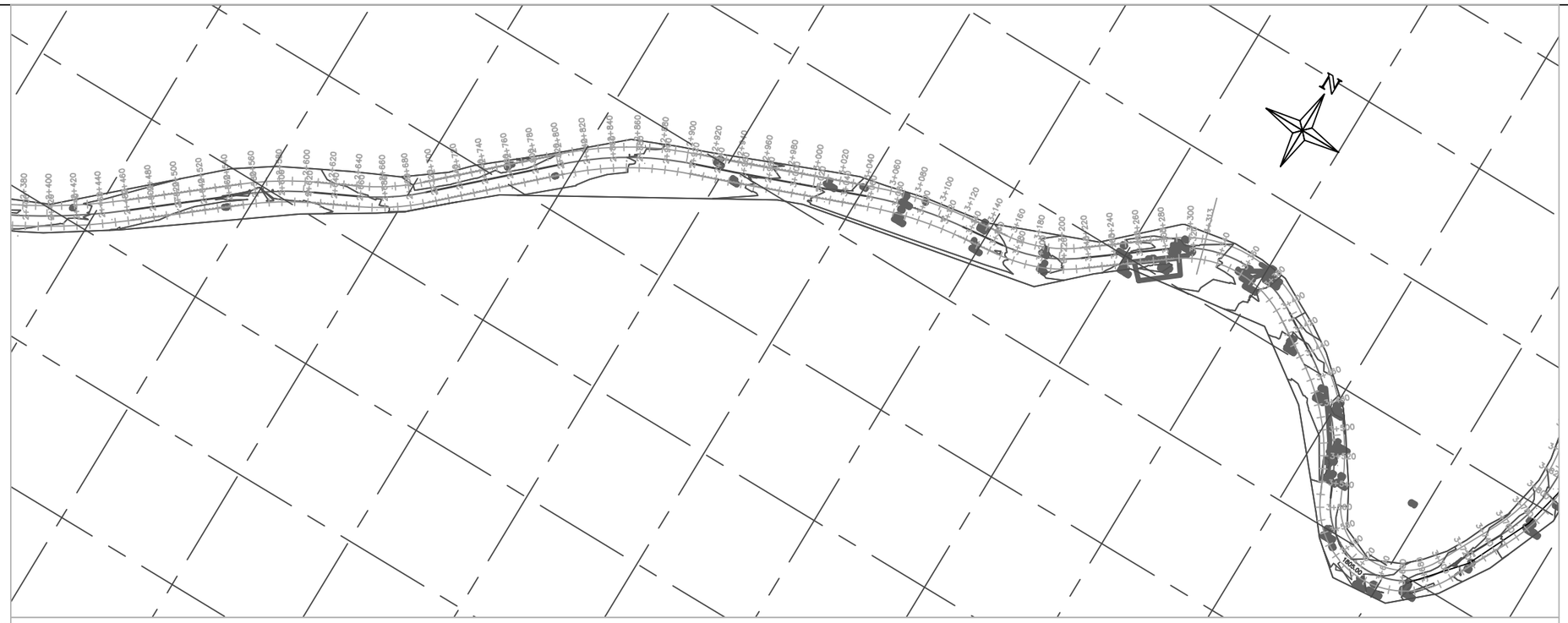

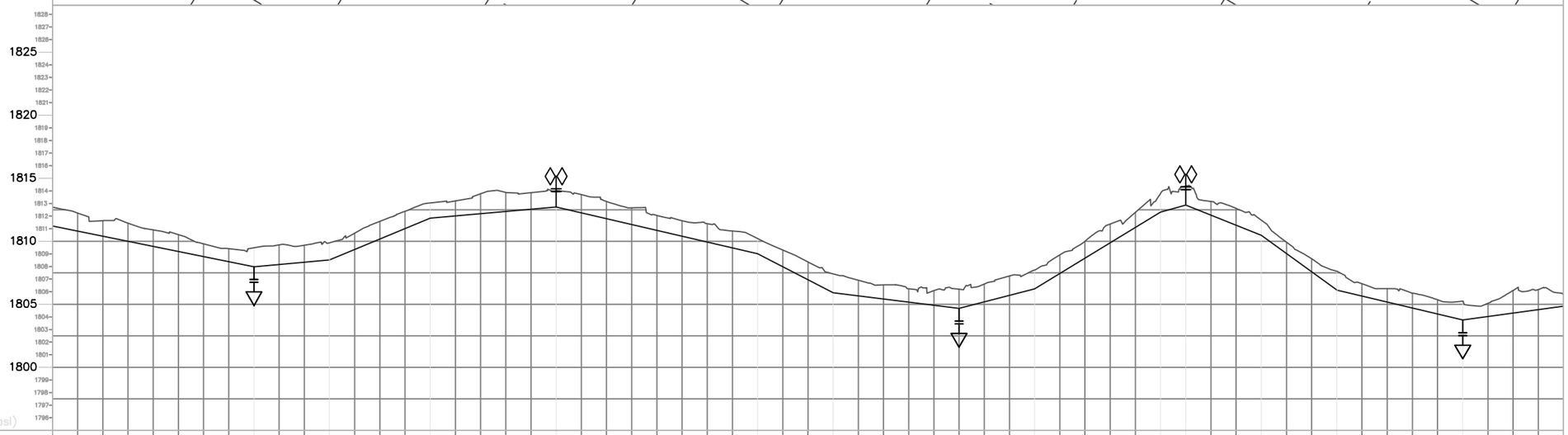

CHAINAGE (m)	GROUND LEVEL (m)	INVERT LEVEL (m)	PIPE DEPTH
2+400	1812.717	1811.212	1.506
2+420	1812.237		
2+440	1811.643		
2+460	1811.445		
2+480	1810.909		
2+500	1810.529		
2+520	1809.801		
2+540	1809.424		
2+560	1809.488	1807.988	1.500
2+580	1809.716		
2+600	1809.700		
2+620	1809.890	1808.516	1.374
2+640	1810.649		
2+660	1811.585		
2+680	1812.386		
2+700	1813.045	1811.844	1.201
2+720	1813.209		
2+740	1813.773		
2+760	1813.873		
2+780	1813.857		
2+800	1814.009	1812.727	1.282
2+820	1813.705		
2+840	1813.156		
2+860	1812.658		
2+880	1812.057		
2+900	1811.636		
2+920	1811.397		
2+940	1810.825		
2+960	1810.220	1809.020	1.200
2+980	1809.313		
3+000	1808.370		
3+020	1807.421	1805.921	1.500
3+040	1806.916		
3+060	1806.541		
3+080	1806.229		
3+100	1806.092		
3+120	1806.203		
3+140	1806.608		
3+160	1807.249		
3+180	1807.721	1806.232	1.489
3+200	1808.928		
3+220	1809.996		
3+240	1811.370		
3+260	1812.296		
3+280	1813.797	1812.315	1.482
3+300	1814.384	1812.884	1.500
3+320	1813.170		
3+340	1812.616		
3+360	1811.680	1810.480	1.200
3+380	1809.937		
3+400	1808.617		
3+420	1807.628	1806.142	1.487
3+440	1806.631		
3+460	1806.252		
3+480	1805.882		
3+500	1805.365		
3+520	1805.258	1803.758	1.500
3+540	1805.082		
3+560	1806.103		
3+580	1806.174		
3+600	1805.744	1804.847	0.896

PIPE SLOPE: 1:49.6 | 1:113.6 | 1:24.0 | 1:113.2 | 1:43.2 | 1:19.4 | 1:81.3 | 1:38.9 | 1:16.4 | 1:35.1 | 1:25.0 | 1:13.8 | 1:42.2 | 1:73.4

PIPE SIZE AND TYPE: DN250mm DIAMETER STEEL PIPELINE PN12.5

PIPE FITTING

LINE B1 PROFILE

SCALES: HOR. 1:2000 & VER. 1:200

NOTES

1. ALL LEVELS ARE IN METERS ABOVE ORDINARY DATUM.
2. PIPES ARE TO BE LAID TO EVEN GRADIENTS WITH A MINIMUM COVER OF 1.0M. WHERE COVER IS LESS THAN THIS, PIPE TO BE SURROUNDED WITH CONCRETE.
3. ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
4. LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
5. EXACT SETTING OUT OF PIPELINE TO BE DETERMINED ON SITE BY THE ENGINEER
6. ALL SOILS ARE RED COFFEE SOILS UNLESS OTHERWISE STATED.

LEGEND

PROPOSED PIPELINE
EXISTING GROUND PROFILE
WOV —WASHOUT VALVE
DN —NOMINAL DIAMETER
PN —NOMINAL PRESSURE
VB —VERTICAL BEND
HB —HORIZONTAL BEND
SV —SLUICE VALVE
ER —EARTH ROAD
GR —GRAVEL ROAD
CS —CONCRETE SURROUND
—EARTHWORKS (CUT–AWAY)
—DOUBLE AIR VALVE
—WASHOUT VALVE
—SECTIONAL VALVE

BENCHMARKS

POINT	EASTINGS (m)	NORTHINGS (m)	HEIGHT (m)
TBM1	280973.500	9918864.200	1558.096
TBM2	281427.200	9918702.800	1533.156
TBM3	281885.000	9918548.100	1511.129

FOR CONSTRUCTION
Signed C.T.M.S _____

PROJECT
GITHAGARA-MAIRO ROAD WATER INFRASTRUCTURE RELOCATION PROJECT

CLIENT
TANA WATER SERVICES BOARD
P.O.Box 1292 - 00100
NYERI, KENYA
E mail: info@twsb.co.ke
CLIENTS SIGNATURE _____

FUNDING
THE NATIONAL GOVERNMENT OF KENYA
MINISTRY OF WATER AND SANITATION
P.O.Box
NAIROBI, KENYA
E mail: info@gok.co.ke

DRG TITLE
WATER SUPPLY
PIPELINE HYDRAULIC PLAN AND PROFILE
(LINE B1 SHEET 3 OF 4)

JOB No TWWDA-50/2021 | DRG No TWWDA/GIMA/WIR- 003

DESIGNED	MARIGI MENGO	REVISIONS			
DRAWN	NYAGA MURITHI	A		D	
CHECKED	ENG.D.NGUGI	B		E	
SCALE AS SHOWN (A3)	DATE JUNE, 2021	C		F	