

- NOTES**
1. ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
  2. COORDINATES ARE BASED ON UTM.
  3. LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
  4. GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE BY THE ENGINEER.
  5. 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.
  6. ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
  7. IN WATER LOGGED AREAS, PIPES TO BE BEDDED WITH SINGLE SIZED OR GRADED AGGREGATES AS PER CLAUSE 430.1 AND 216 OF TECHNICAL SPECIFICATIONS AND/OR ANCHOR BLOCKS AS MAY BE DIRECTED ON SITE BY THE ENGINEER.

- LEGEND:**
- PROPOSED PIPELINE
  - EXISTING GROUND PROFILE
  - PIPE INVERT PROFILE
  - EXISTING ROAD
  - ◇ AIR VALVE
  - DAV DOUBLE AIR VALVE
  - ▽ WASHOUT
  - WO1 WASHOUT TYPE 1
  - WO2 WASHOUT TYPE 2
  - DN NOMINAL DIAMETER
  - PN NOMINAL PRESSURE
  - VB VERTICAL BEND
  - HB HORIZONTAL BEND
  - ▨ EXISTING STRUCTURE
  - ER EARTH ROAD
  - GR GRAVEL ROAD
  - CUT




DISTANCE	DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS(m)	DEPTH FROM GROUND LEVEL TO INVERT LEVEL (m)	HGL(m)	FLOW DATA	TYPE OF PIPE AND SIZE
	1+350.00	1179.33	1181.02	1.34	1174.58		
	1+380.00	1182.39	1183.75	1.36	1177.44		
	1+400.00	1183.75	1185.34	1.46	1174.37		
	1+420.00	1185.34	1186.73	1.35	1174.30		
	1+440.00	1186.73	1187.61	1.41	1174.23		
	1+460.00	1187.61	1188.34	1.31	1174.16		
	1+480.00	1188.34	1188.88	1.42	1174.09		
	1+500.00	1188.88	1189.29	1.39	1174.02		
	1+520.00	1189.29	1189.65	1.32	1173.95		
	1+540.00	1189.65	1189.87	1.33	1173.88		
	1+560.00	1189.87	1190.26	1.50	1173.81		
	1+600.00	1190.26	1190.65	1.33	1173.74		
	1+620.00	1191.21	1191.21	1.33	1173.67		
	1+640.00	1191.84	1191.84	1.39	1173.60		
	1+660.00	1192.50	1192.50	1.37	1173.53		
	1+680.00	1193.18	1193.18	1.37	1173.47		
	1+700.00	1193.60	1193.60	1.41	1173.40		
	1+720.00	1193.87	1193.87	1.30	1173.33		
	1+740.00	1194.09	1194.09	1.37	1173.26		
	1+760.00	1194.12	1194.12	1.28	1173.19		
	1+780.00	1193.85	1193.85	1.35	1173.12		
	1+800.00	1194.03	1194.03	1.33	1173.05		
	1+820.00	1193.87	1193.87	1.35	1172.99		
	1+840.00	1193.64	1193.64	1.29	1172.92		
	1+860.00	1193.51	1193.51	1.34	1172.85		
	1+880.00	1193.29	1193.29	1.29	1172.78		
	1+900.00	1193.26	1193.26	1.41	1172.70		
	1+920.00	1193.01	1193.01	1.34	1172.63		
	1+940.00	1192.83	1192.83	1.32	1172.56		
	1+960.00	1192.77	1192.77	1.44	1172.48		
	1+980.00	1192.49	1192.49	1.32	1172.41		
	2+000.00	1192.63	1192.63	1.46	1172.33		
	2+020.00	1192.59	1192.59	1.41	1172.26		
	2+040.00	1192.53	1192.53	1.35	1172.19		
	2+060.00	1192.51	1192.51	1.33	1172.11		
	2+080.00	1192.18	1192.18	1.34	1172.04		
	2+100.00	1191.13	1191.13	1.38	1171.96		
	2+120.00	1189.49	1189.49	1.33	1171.89		
	2+140.00	1187.69	1187.69	1.35	1171.82		
	2+160.00	1186.02	1186.02	1.39	1171.74		
	2+180.00	1184.42	1184.42	1.37	1171.67		
	2+200.00	1182.77	1182.77	1.40	1171.59		
	2+220.00	1181.05	1181.05	1.38	1171.52		
	2+240.00	1179.25	1179.25	1.40	1171.45		
	2+260.00	1177.59	1177.59	1.40	1171.37		
	2+280.00	1176.24	1176.24	1.41	1171.30		
	2+300.00	1174.85	1174.85	1.38	1171.22		
	2+320.00	1173.39	1173.39	1.33	1171.15		
	2+340.00	1172.01	1172.01	1.36	1171.08		
	2+360.00	1170.52	1170.52	1.42	1171.00		
	2+380.00	1169.53	1169.53	1.43	1170.93		
	2+400.00	1169.06	1169.06	1.36	1170.85		
	2+420.00	1168.07	1168.07	1.26	1170.78		
	2+440.00	1167.35	1167.35	1.42	1170.71		
	2+460.00	1166.45	1166.45	1.40	1170.63		
	2+480.00	1165.35	1165.35	1.40	1170.56		
	2+500.00	1163.86	1163.86	1.41	1170.48		
	2+520.00	1163.89	1163.89	1.42	1170.41		
	2+540.00	1164.85	1164.85	1.31	1170.33		
	2+560.00	1165.65	1165.65	1.38	1170.25		
	2+580.00	1165.60	1165.60	1.26	1170.18		
	2+600.00	1165.67	1165.67	1.26	1170.10		
	2+620.00	1165.92	1165.92	1.44	1170.02		
	2+640.00	1165.89	1165.89	1.24	1169.95		
	2+660.00	1166.13	1166.13	1.32	1169.87		
	2+680.00	1166.59	1166.59	1.46	1169.79		
	2+700.00	1167.50	1167.50	1.34	1169.72		
	2+714.00	1168.05	1168.05	1.25	1169.67		


RIANDUSIAKAGO ALIGN  
SCALE: HOR 1:2000 VERT 1:1000

**FOR CONSTRUCTION**  
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
REV-1	CHECKED			
REV-2	CHECKED			
REV-3	CHECKED			
REV-4	CHECKED			
REV-	ISSUED FOR CONSTRUCTION			

CLIENT  

**TANA WATER WORKS DEVELOPMENT AGENCY**  
 P. O. BOX 1292-10100  
 NYERI

PROJECT  
**DESIGN FOR REHABILITATION OF ENA SIAKAGO WATER PROJECT**

Civil/Structural Engineers  

**TANA WATER WORKS DEVELOPMENT AGENCY**  
 P. O. BOX 1292-10100  
 NYERI

Drawing Title  
**RIANDU\_SIAKAGO\_TWM**  
**PLAN\_AND\_PROFILE\_DRAWINGS**

Designed by DWN	Drawn by MMN
Checked by JMM	Approved by
Scale 1:1750	Date SEP2022
Job No. 1.0	ACAD File: ACADFILENAME
PD STATUS	DRAWING No. 1-RS\PD\02
REV	REV