



DISTANCE DATUM (m)	2188.552182.362184.84 0+020.00 2188.502177.922180.79 0+040.00 2188.442173.482175.24 0+060.00 2188.392169.932171.36 0+080.00 2188.332168.612169.48 0+100.00 2188.282168.202169.09 0+120.00 2188.222167.782168.74 0+140.00 2188.172167.122168.78 0+160.00 2188.112168.042169.25 0+180.00 2188.062164.262166.65 0+200.00 2188.002160.462162.49 0+220.00 2187.952156.952158.60 0+240.00 2187.892153.942155.28 0+260.00 2187.842151.022152.57 0+280.00 2187.782148.402150.20 0+300.00 2187.732146.942148.21 0+320.00 2187.672145.482146.53 0+340.00 2187.622144.102145.21 0+360.00 2187.562143.252144.34 0+380.00 2187.512142.402143.53 0+400.00 2187.452141.552142.58 0+420.00 2187.402140.692141.66 0+440.00 2187.342139.932140.84 0+460.00 2187.292139.692140.50 0+480.00 2187.232139.452140.24 0+500.00 2187.182139.212139.98 0+520.00 2187.122139.082140.31 0+540.00 2187.072139.292140.41 0+560.00 2187.012139.492140.42 0+580.00 2186.962138.232139.31 0+600.00 2186.902136.982138.03 0+620.00 2186.852136.062137.09 0+640.00 2186.792135.722136.72 0+660.00 2186.742135.372136.34 0+680.00 2186.682135.172136.31 0+700.00 2186.632135.542136.71 0+720.00 2186.572135.922136.87 0+740.00 2186.522136.862137.96 0+760.00 2186.462137.872138.90 0+780.00 2186.412138.292139.28 0+800.00 2186.352138.582139.56 0+820.00 2186.302138.202139.19 0+840.00 2186.242137.652136.75 0+860.00 2186.192137.112136.18 0+880.00 2186.132135.462136.70 0+900.00 2186.082133.702134.94 0+920.00 2186.022132.002133.37 0+940.00 2185.972130.522131.75 0+960.00 2185.912129.292130.23 0+980.00 2185.862128.222129.25 1+000.00 2185.802127.152128.18 1+020.00 2185.752126.292127.25 1+040.00 2185.692126.062127.08 1+060.00 2185.642125.832126.93 1+080.00 2185.582124.282125.76 1+100.00 2185.532122.722124.31 1+120.00 2185.472121.152122.56 1+140.00
GROUND LEVELS (m)	
INVERT LEVELS (m)	
HGL (m)	
FLOW DATA	0.04M ³ /S
TYPE OF PIPE AND SIZE	S.V. A.V. PN10 DN 225MM PIPE A.V. W.O. A.V.

- NOTES**
- ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
 - COORDINATES ARE BASED ON UTM.
 - LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
 - GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE BY THE ENGINEER.
 - 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.
 - ALL BENDS ARE HORIZONTAL UNLESS OTHERWISE STATED.
 - 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

FOR CONSTRUCTION
signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			
CO	ISSUED FOR CONSTRUCTION	BY		
		CHECKED		

CLIENT

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

PROJECT

DESIGN FOR KAHARO WATER PROJECT

Civil/Structural Engineers

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

Drawing Title

KAHARO WATER PROJECT
TREATED WATER GRAVITY MAIN
PLAN AND PROFILE (SHEET 1 OF 4)

Designed by DWN	Drawn by EWN
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date SEPT 2022
Job No. 1	ACAD File:
PD STATUS	DRAWING No. TWWDA/KWP/TGM-01

TWGM
SCALE: HOR 1:2000 VERT 1:1000