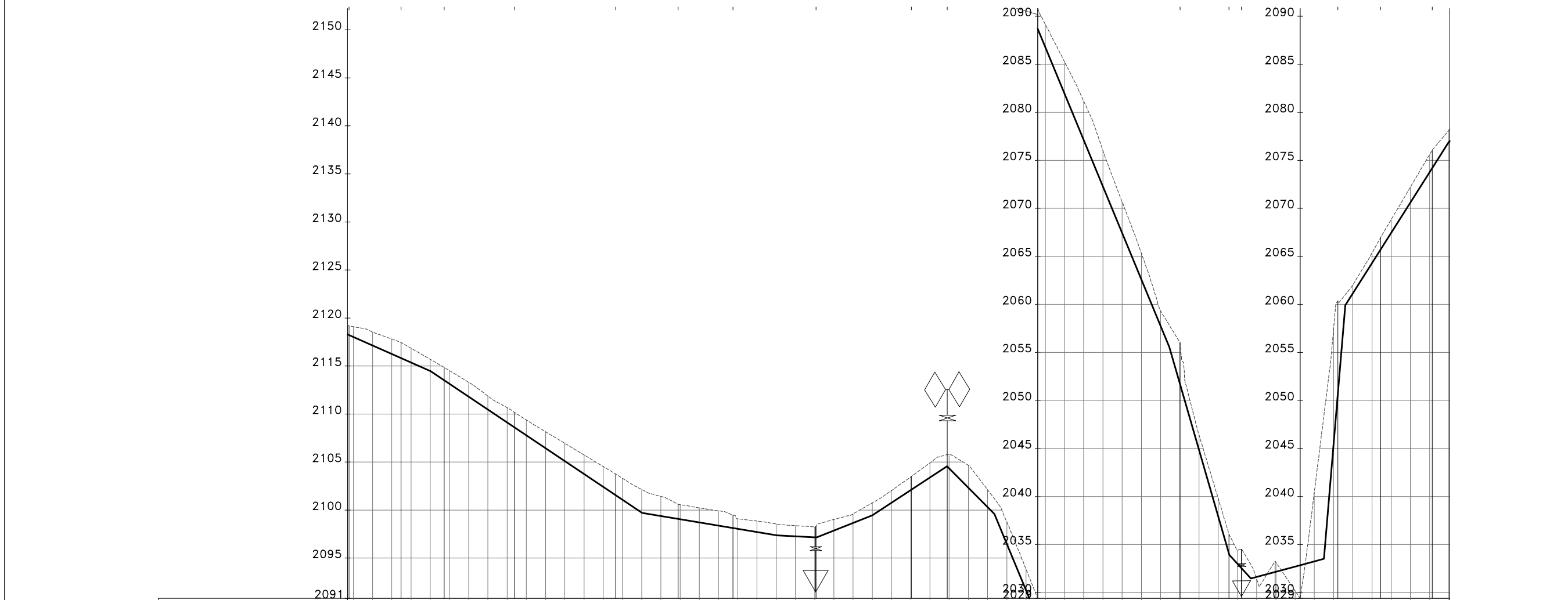


- NOTES**
1. ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
  2. COORDINATES ARE BASED ON UTM.
  3. LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
  4. GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON 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.
  8. STEEL PIPES OF DN 200MM TO BE USED AT CHAINAGE 3+240-3+280 FOR RIVER CROSSING



- LEGEND:**
- PROPOSED PIPELINE
  - EXISTING GROUND PROFILE
  - PIPE INVERT PROFILE
  - EXISTING ROAD
  - ◇ — AIR VALVE
  - DAV — DOUBLE AIR VALVE
  - ▽ — WASHOUT
  - WO1 — WASHOUT TYPE 1
  - A.B — ANCHOR BLOCK
  - 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	BY	SIGN	DATE	APPROVED
		CHECKED			
		CHECKED			
		CHECKED			
CO	ISSUED FOR CONSTRUCTION	BY			
		CHECKED			

DISTANCE DATUM (m)	GROUND LEVELS (m)	INVERT LEVELS (m)	HGL (m)	FLOW DATA	TYPE OF PIPE AND SIZE
2170.692118.022119.092+300.00	2170.422117.132118.532+320.00	2170.162116.252117.812+340.00	2169.892115.362116.852+360.00		
2169.622114.472115.692+380.00	2113.132114.522+400.00	2168.782111.802113.312+420.00	2168.202110.462111.882+440.00		
2167.622109.122110.662+460.00	2167.042107.782109.392+480.00	2166.462106.442108.162+500.00	2165.882105.102106.952+520.00		
2165.302103.762105.752+540.00	2164.722102.422104.542+560.00	2164.142101.082103.312+580.00	2163.562099.742102.152+600.00		
2162.972099.382101.432+620.00	2162.392099.052100.572+640.00	2161.812098.712100.232+660.00	2161.232098.382099.932+680.00		
2160.652098.042099.092+700.00	2160.072097.712098.872+720.00	2159.492097.382098.552+740.00	2158.912097.262098.382+760.00		
2157.752097.862099.022+800.00	2157.172098.652099.602+820.00	2156.592099.452100.752+840.00	2156.012100.762102.042+860.00		
2155.432102.072103.462+880.00	2154.852103.392104.932+900.00	2154.272104.332105.812+920.00	2153.692102.322104.672+940.00		
2153.112100.312102.112+960.00	2152.532098.472098.762+980.00	2151.952091.632093.843+000.00	2151.372086.792089.163+020.00		
2150.792081.952085.273+040.00	2150.212077.112081.163+060.00	2149.632072.272076.013+080.00	2149.052067.432070.683+100.00		
2148.472062.602065.333+120.00	2147.892057.762059.323+140.00	2147.312051.782056.063+160.00	2146.732044.862046.413+180.00		
2146.152037.932039.793+200.00	2145.572033.002034.413+220.00	2144.982031.622031.393+240.00	2144.402032.162033.143+260.00		
2143.822032.702030.183+280.00	2143.242033.242040.463+300.00	2142.662045.352057.403+320.00	2142.082061.142062.033+340.00		
2141.502064.292065.353+360.00	2140.922067.442068.833+380.00	2140.342070.602072.223+400.00	2139.762073.752075.603+420.00		
2139.182076.892078.123+440.00					

TWGM  
SCALE: HOR 1:2000 VERT 1:1000

**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 3 OF 4)

Designed by DWN	Drawn by EWN
Checked by JMM	Approved by
Scale AS SHOWN (A1)	Date JUNE 2022
Job No. 1	ACAD File:
PD STATUS	DRAWING No. TWWDA/KWP/TGM-03