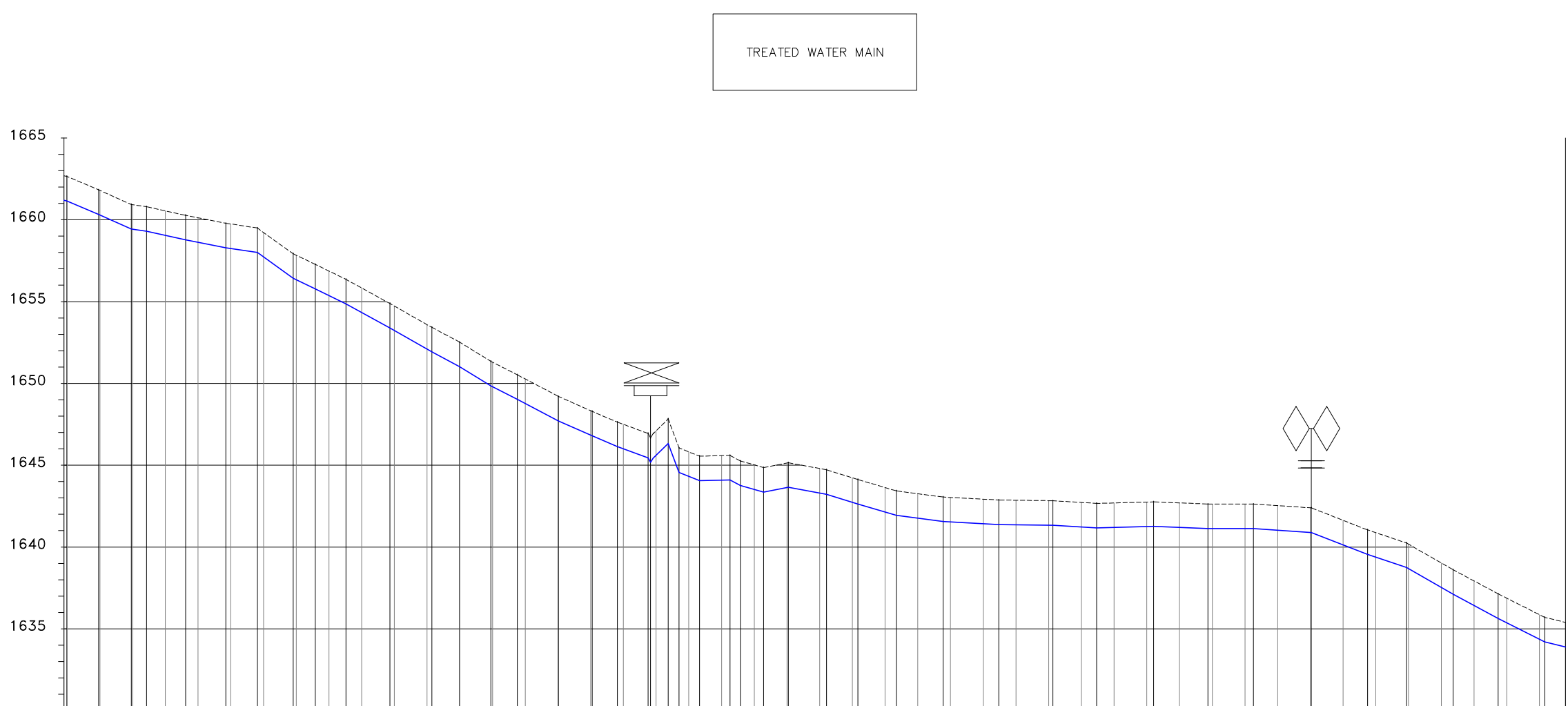


- NOTES**
- ALL LEVELS ARE IN METERS ABOVE SEA LEVEL.
 - COORDINATES ARE BASED ON UTM.
 - LOCATION OF AIR VALVES, WASHOUTS, BENDS AND OTHER FITTINGS AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER ON SITE.
 - GROUND AND INVERT LEVEL SHOWN ARE AS SHOWN ON DRAWING UNLESS OTHERWISE INDICATED ON SITE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




| CHAINAGE (m) | EXISTING GROUND LEVEL (m) | INVERT LEVELS (m) | H.G.L (m) DATUM (m) | TYPE OF PIPE AND SIZE | REMARKS | PIPE FLOW DATA |
|--------------|---------------------------|-------------------|------------------------|-----------------------|---------|----------------|
| 1688.90 | 1661.14 | 1661.14 | 1662.64 | PN 10 315MM HDPE PIPE | | 0.04681M3/S |
| 0+920.0 | | | | | | |
| 1688.87 | 1660.29 | 1660.29 | 1661.79 | | | |
| 0+940.0 | | | | | | |
| 1688.85 | 1659.42 | 1659.42 | 1660.92 | | | |
| 0+960.0 | | | | | | |
| 1688.82 | 1659.05 | 1659.05 | 1660.55 | | | |
| 0+980.0 | | | | | | |
| 1688.80 | 1658.62 | 1658.62 | 1660.12 | | | |
| 1+000.0 | | | | | | |
| 1688.77 | 1658.25 | 1658.25 | 1659.75 | | | |
| 1+020.0 | | | | | | |
| 1688.75 | 1657.73 | 1657.73 | 1659.23 | | | |
| 1+040.0 | | | | | | |
| 1688.72 | 1656.33 | 1656.33 | 1657.83 | | | |
| 1+060.0 | | | | | | |
| 1688.70 | 1655.37 | 1655.37 | 1656.87 | | | |
| 1+080.0 | | | | | | |
| 1688.67 | 1654.33 | 1654.33 | 1655.83 | | | |
| 1+100.0 | | | | | | |
| 1688.64 | 1653.23 | 1653.23 | 1654.73 | | | |
| 1+120.0 | | | | | | |
| 1688.62 | 1651.92 | 1651.92 | 1653.42 | | | |
| 1+142.9 | | | | | | |
| 1688.59 | 1651.02 | 1651.02 | 1652.52 | | | |
| 1+160.0 | | | | | | |
| 1688.57 | 1649.80 | 1649.80 | 1651.30 | | | |
| 1+180.0 | | | | | | |
| 1688.54 | 1648.77 | 1648.77 | 1650.27 | | | |
| 1+200.0 | | | | | | |
| 1688.52 | 1647.72 | 1647.72 | 1649.22 | | | |
| 1+220.0 | | | | | | |
| 1688.49 | 1646.83 | 1646.83 | 1648.33 | | | |
| 1+240.0 | | | | | | |
| 1688.47 | 1646.00 | 1646.00 | 1647.50 | | | |
| 1+260.0 | | | | | | |
| 1688.44 | 1645.60 | 1645.60 | 1647.10 | | | |
| 1+280.0 | | | | | | |
| 1688.42 | 1644.31 | 1644.31 | 1645.81 | | | |
| 1+300.0 | | | | | | |
| 1688.39 | 1644.09 | 1644.09 | 1645.59 | | | |
| 1+320.0 | | | | | | |
| 1688.37 | 1643.52 | 1643.52 | 1645.02 | | | |
| 1+340.0 | | | | | | |
| 1688.34 | 1643.65 | 1643.65 | 1645.15 | | | |
| 1+360.9 | | | | | | |
| 1688.32 | 1643.30 | 1643.30 | 1644.80 | | | |
| 1+380.0 | | | | | | |
| 1688.29 | 1642.73 | 1642.73 | 1644.23 | | | |
| 1+400.0 | | | | | | |
| 1688.26 | 1642.13 | 1642.13 | 1643.63 | | | |
| 1+420.0 | | | | | | |
| 1688.24 | 1641.76 | 1641.76 | 1643.26 | | | |
| 1+440.0 | | | | | | |
| 1688.21 | 1641.53 | 1641.53 | 1643.03 | | | |
| 1+460.0 | | | | | | |
| 1688.19 | 1641.42 | 1641.42 | 1642.92 | | | |
| 1+480.0 | | | | | | |
| 1688.18 | 1641.37 | 1641.37 | 1642.87 | | | |
| 1+489.5 | | | | | | |
| 1688.16 | 1641.36 | 1641.36 | 1642.86 | | | |
| 1+500.0 | | | | | | |
| 1688.14 | 1641.33 | 1641.33 | 1642.83 | | | |
| 1+520.0 | | | | | | |
| 1688.11 | 1641.22 | 1641.22 | 1642.72 | | | |
| 1+540.0 | | | | | | |
| 1688.09 | 1641.19 | 1641.19 | 1642.69 | | | |
| 1+560.0 | | | | | | |
| 1688.06 | 1641.25 | 1641.25 | 1642.75 | | | |
| 1+580.0 | | | | | | |
| 1688.04 | 1641.20 | 1641.20 | 1642.70 | | | |
| 1+600.0 | | | | | | |
| 1688.01 | 1641.13 | 1641.13 | 1642.63 | | | |
| 1+620.0 | | | | | | |
| 1687.99 | 1641.13 | 1641.13 | 1642.63 | | | |
| 1+640.0 | | | | | | |
| 1687.96 | 1641.03 | 1641.03 | 1642.53 | | | |
| 1+660.0 | | | | | | |
| 1687.94 | 1640.90 | 1640.90 | 1642.40 | | | |
| 1+680.0 | | | | | | |
| 1687.91 | 1640.13 | 1640.13 | 1641.63 | | | |
| 1+700.0 | | | | | | |
| 1687.89 | 1639.38 | 1639.38 | 1640.88 | | | |
| 1+720.0 | | | | | | |
| 1687.86 | 1638.67 | 1638.67 | 1640.17 | | | |
| 1+740.0 | | | | | | |
| 1687.84 | 1637.53 | 1637.53 | 1639.03 | | | |
| 1+760.0 | | | | | | |
| 1687.82 | 1636.43 | 1636.43 | 1637.93 | | | |
| 1+780.0 | | | | | | |
| 1687.80 | 1635.37 | 1635.37 | 1636.87 | | | |
| 1+800.0 | | | | | | |
| 1687.78 | 1634.36 | 1634.36 | 1635.86 | | | |
| 1+820.0 | | | | | | |
| 1687.77 | | | | | | |

FOR CONSTRUCTION

| REV | REVISIONS | SIGN | DATE | APPROVED |
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| | BY | | | |
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CLIENT




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

PROJECT

NGARIAMA NJUKIINI WATER PROJECT

Civil/Structural Engineers



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

Drawing Title

NGARIAMA NJUKIINI WATER PROJECT
TREATED WATER GRAVITY MAIN
PLAN AND PROFILE (SHEET 2 OF 17)

| | |
|---------------------|----------------|
| Designed by DWN | Drawn by EWN |
| Checked by JMM | Approved by |
| Scale AS SHOWN (A1) | Date MAY, 2022 |
| Job No. 1 | ACAD File: |