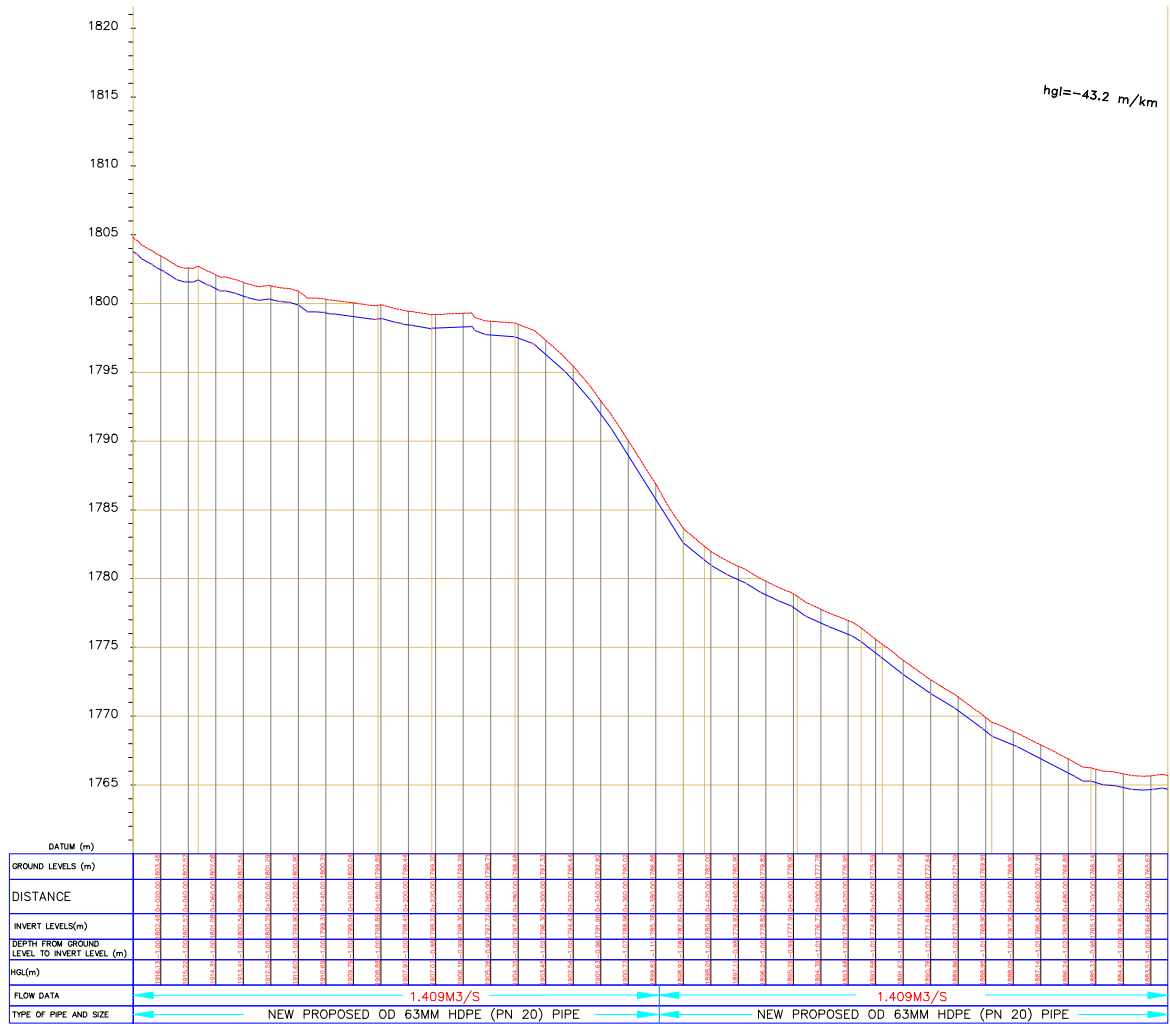


PLAN



LONGITUDINAL SECTION OF ABWETENE RETICULATION LINE

## 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
- AIR VALVE
- DAV — DOUBLE AIR VALVE
- WASHOUT
- WO2 — WASHOUT TYPE 2
- DN — NOMINAL DIAMETER
- PN — NOMINAL PRESSURE
- HB — HORIZONTAL BEND
- EXISTING STRUCTURE
- ER — EARTH ROAD
- GR — GRAVEL ROAD

## FOR CONSTRUCTION

signed CMTS

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

CLIENT  
THE CHIEF EXECUTIVE OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

PROJECT  
DESIGN FOR KAARI WATER SUPPLY PROJECT

Civil/Structural Engineers  
CHIEF MANAGER TECHNICAL  
SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

Drawing Title  
ABWETENE RETICULATION LINE FROM  
CH.0+000.00-0+752.00  
SHEET 1 OF 1

PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

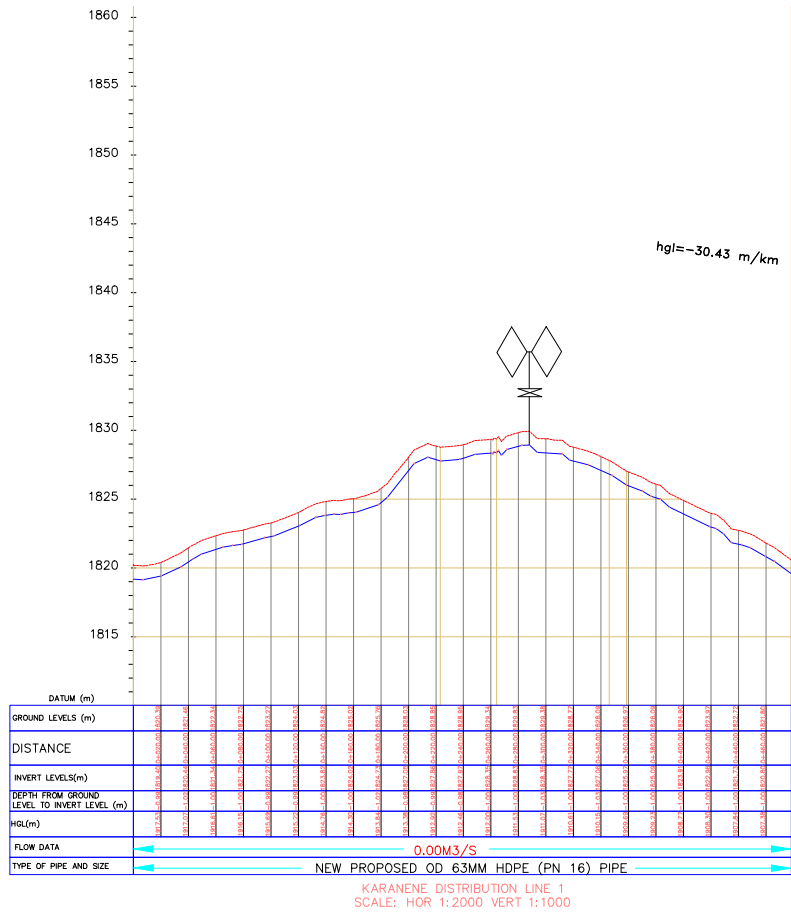
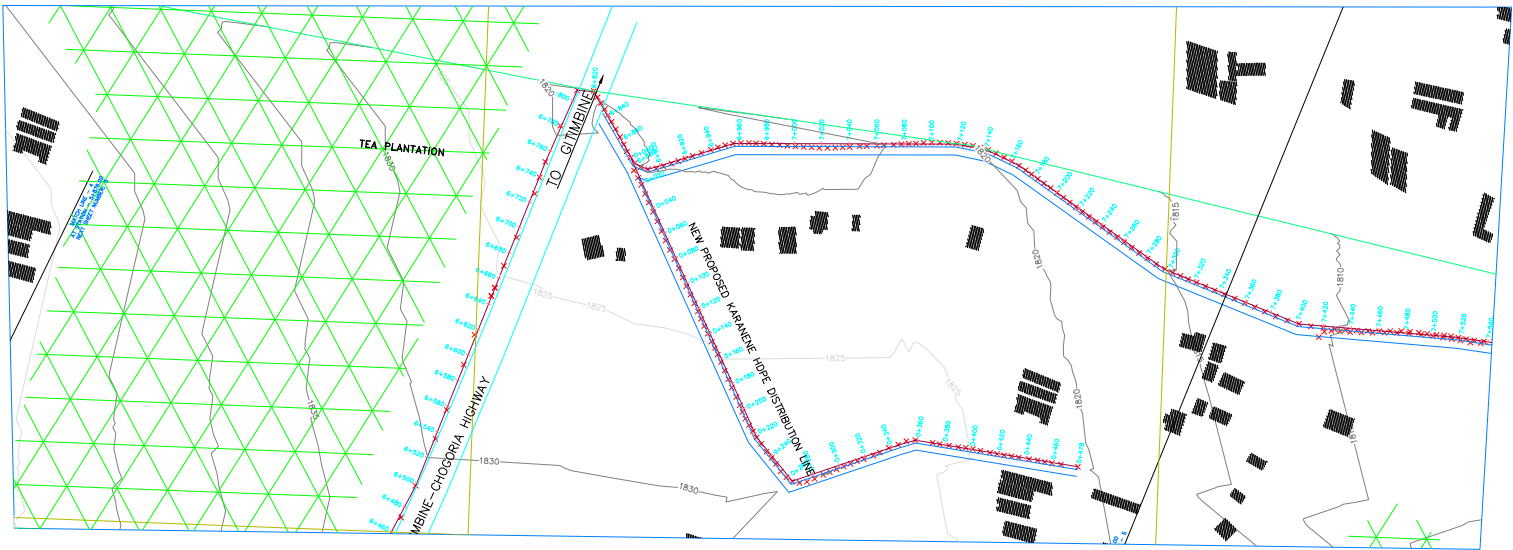
Designed by G.M.G Drawn by G.M.G

Checked byJMM/KNG Approved by D.N.M

Scale 1:3750 Date MARCH-2024

Job No. 1.0 ACAD File: ACADFILENAME

PD STATUS DRAWING No. TWWDA/KSWP REV REV



## NOTES

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- PIPE INVERT PROFILE
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signed CMTS

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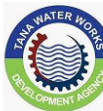


THE CHIEF EXECUTIVE  
OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

## PROJECT

DESIGN FOR KAARI WATER SUPPLY PROJECT

## Civil/Structural Engineers



CHIEF MANAGER TECHNICAL  
SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

## Drawing Title

KARANENE RETICULATION LINE FROM  
CH.0+000.00-0+460.00

SHEET 1 OF 1

## PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

Designed by G.M.G

Drawn by G.M.G

Checked by JMM/KNG

Approved by D.N.M

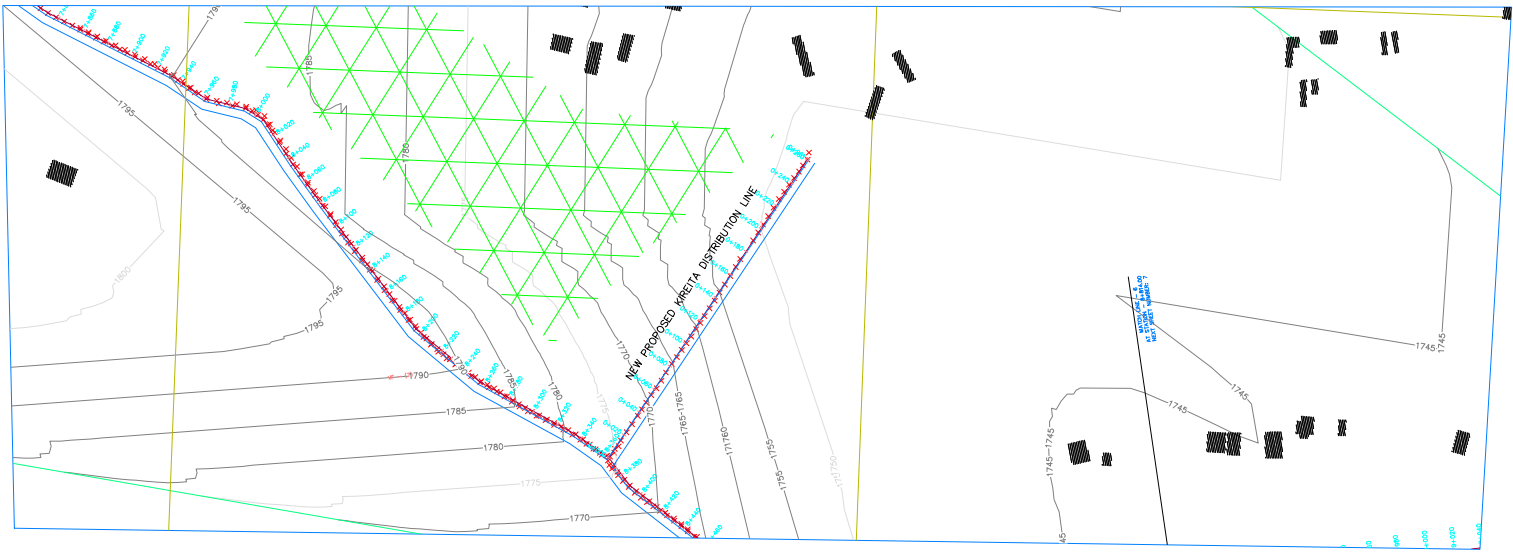
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Date MARCH-2024

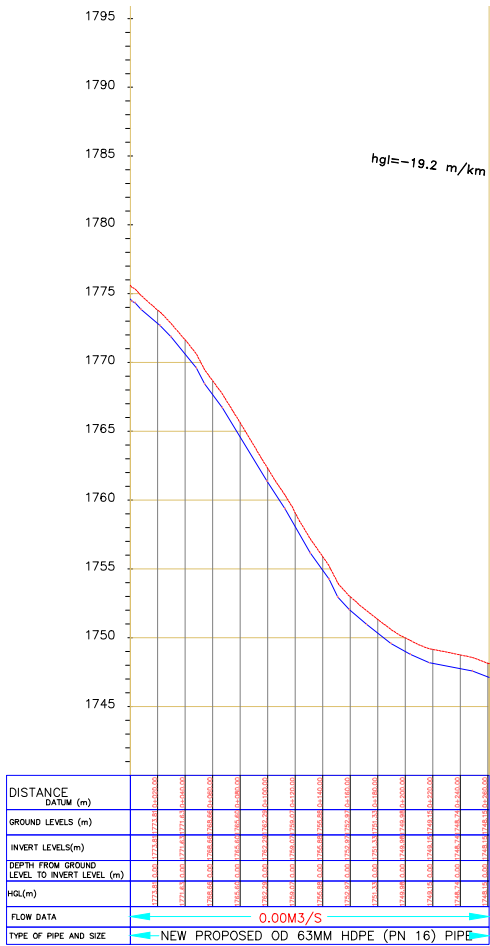
Job No. 1.0

ACAD File: ACADFILENAME

PD STATUS	DRAWING No. TWWDA/KSWP	REV REV
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PLAN



LONGITUDINAL SECTION OF KIREITA RETICULATION LINE

## NOTES

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- EXISTING GROUND PROFILE
- PIPE INVERT PROFILE
- AIR VALVE
- DAV — DOUBLE AIR VALVE
- WASHOUT
- WO2 — WASHOUT TYPE 2
- DN — NOMINAL DIAMETER
- PN — NOMINAL PRESSURE
- HB — HORIZONTAL BEND
- EXISTING STRUCTURE
- ER — EARTH ROAD
- GR — GRAVEL ROAD

## FOR CONSTRUCTION

signed CMTS

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

CLIENT  
THE CHIEF EXECUTIVE OFFICER  
TANA WATER WORKS DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

PROJECT  
DESIGN FOR KAARI WATER SUPPLY PROJECT

Civil/Structural Engineers  
CHIEF MANAGER TECHNICAL SERVICES  
TANA WATER WORKS DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

Drawing Title  
KIREITA RETICULATION LINE FROM  
CH.0+000.00-0+260.00  
SHEET 1 OF 1

PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

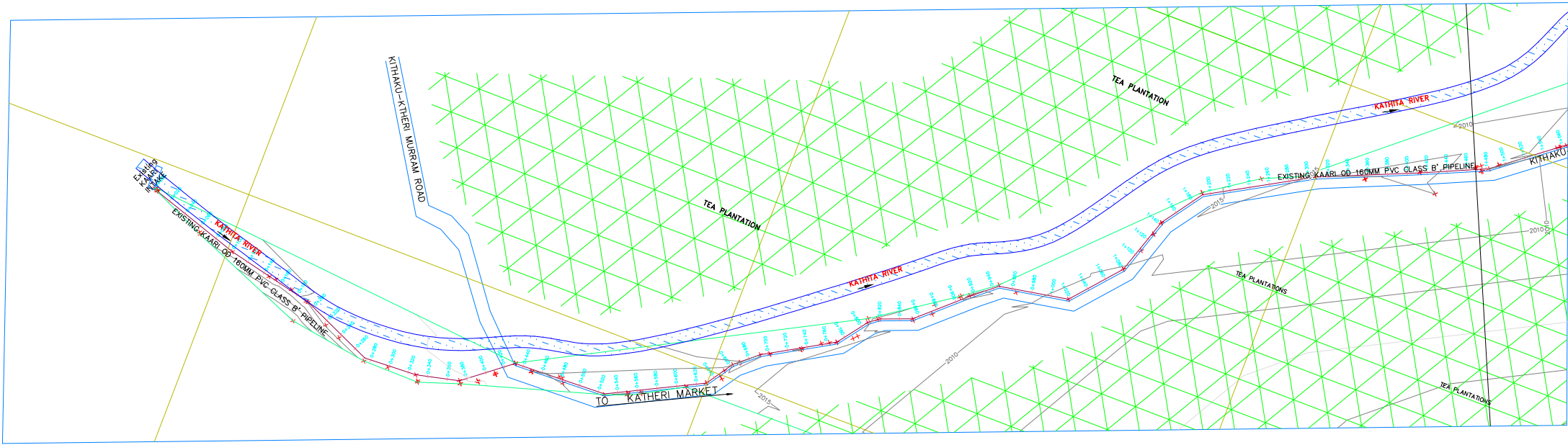
Designed by G.M.G Drawn by G.M.G

Checked byJMM/KNG Approved by D.N.M

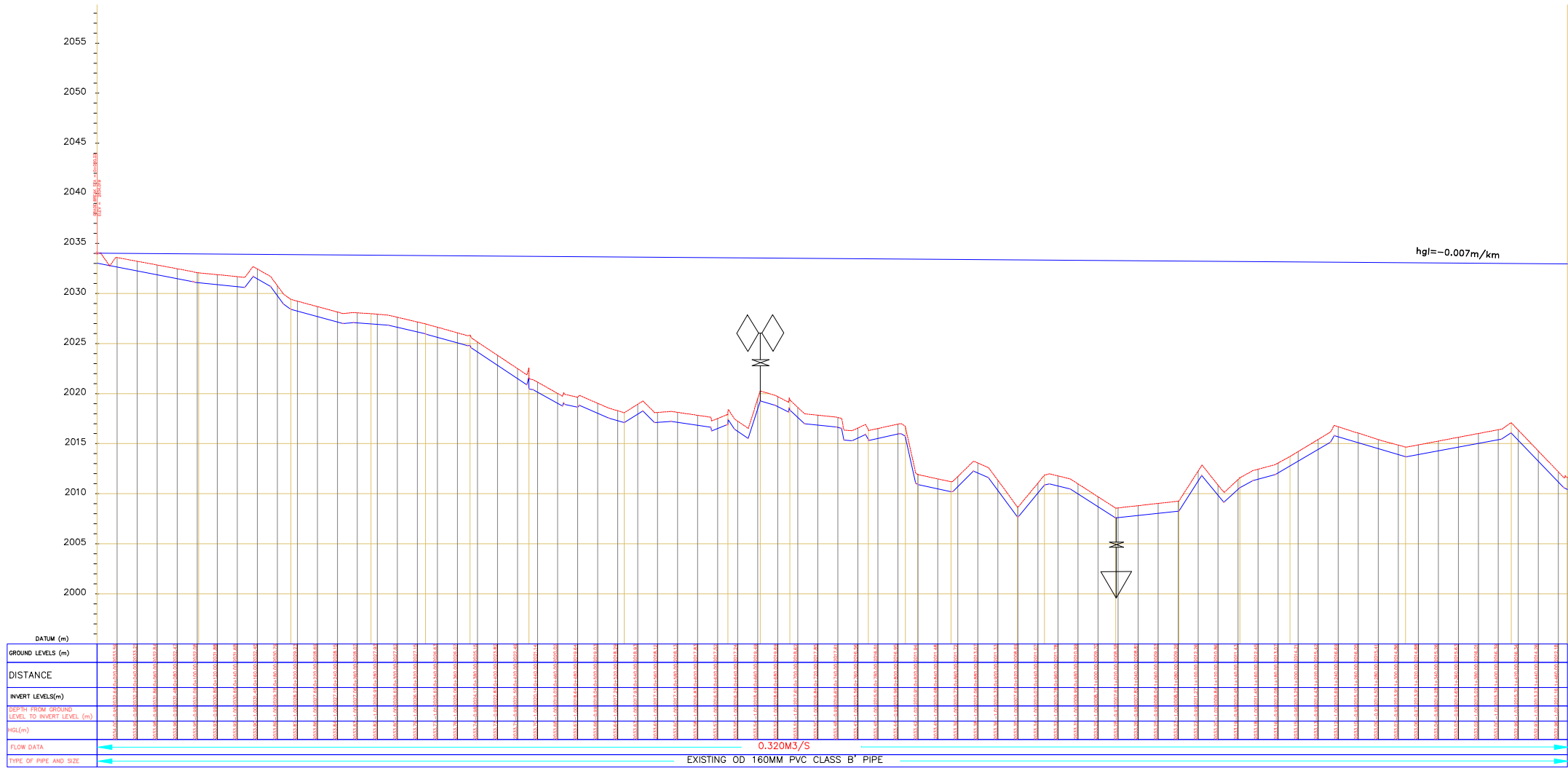
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Job No. 1.0 ACAD File: ACADFILENAME

PD STATUS DRAWING No. TWWDA/KSWP REV



PLAN



LONGITUDINAL SECTION OF KAARI TRANSMISSION MAIN

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## LEGEND:

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- EXISTING GROUND PROFILE
- PIPE INVERT PROFILE
- AIR VALVE
- DOUBLE AIR VALVE
- WASHOUT
- WASHOUT TYPE 2
- NOMINAL DIAMETER
- NOMINAL PRESSURE
- HORIZONTAL BEND
- EXISTING STRUCTURE
- EARTH ROAD
- GRAVEL ROAD

## FOR CONSTRUCTION

signed CMTS

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

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THE CHIEF EXECUTIVE  
OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

PROJECT

DESIGN FOR KAARI WATER SUPPLY PROJECT

Civil/Structural Engineers



CHIEF MANAGER TECHNICAL  
SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

Drawing Title

KAARI WATER TRANSMISSION MAIN FROM  
CH.0+000.00-1+460.00

SHEET 1 OF 7

PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

Designed by G.M.G

Drawn by G.M.G

Checked by JMM/KNG

Approved by D.N.M

Scale 1:3750

Date MARCH-2024

Job No. 1.0

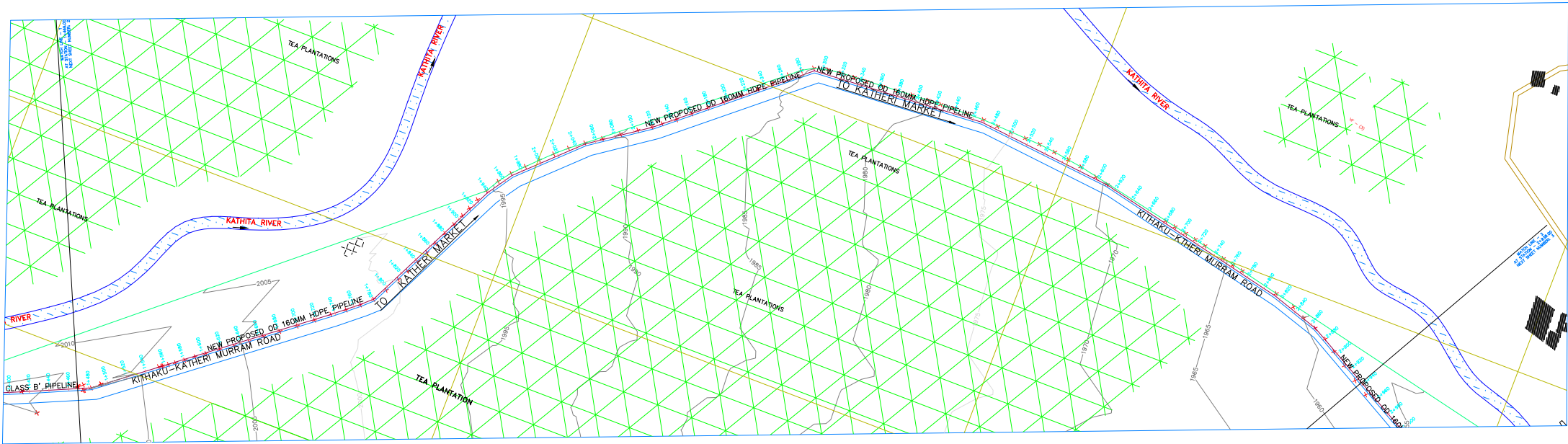
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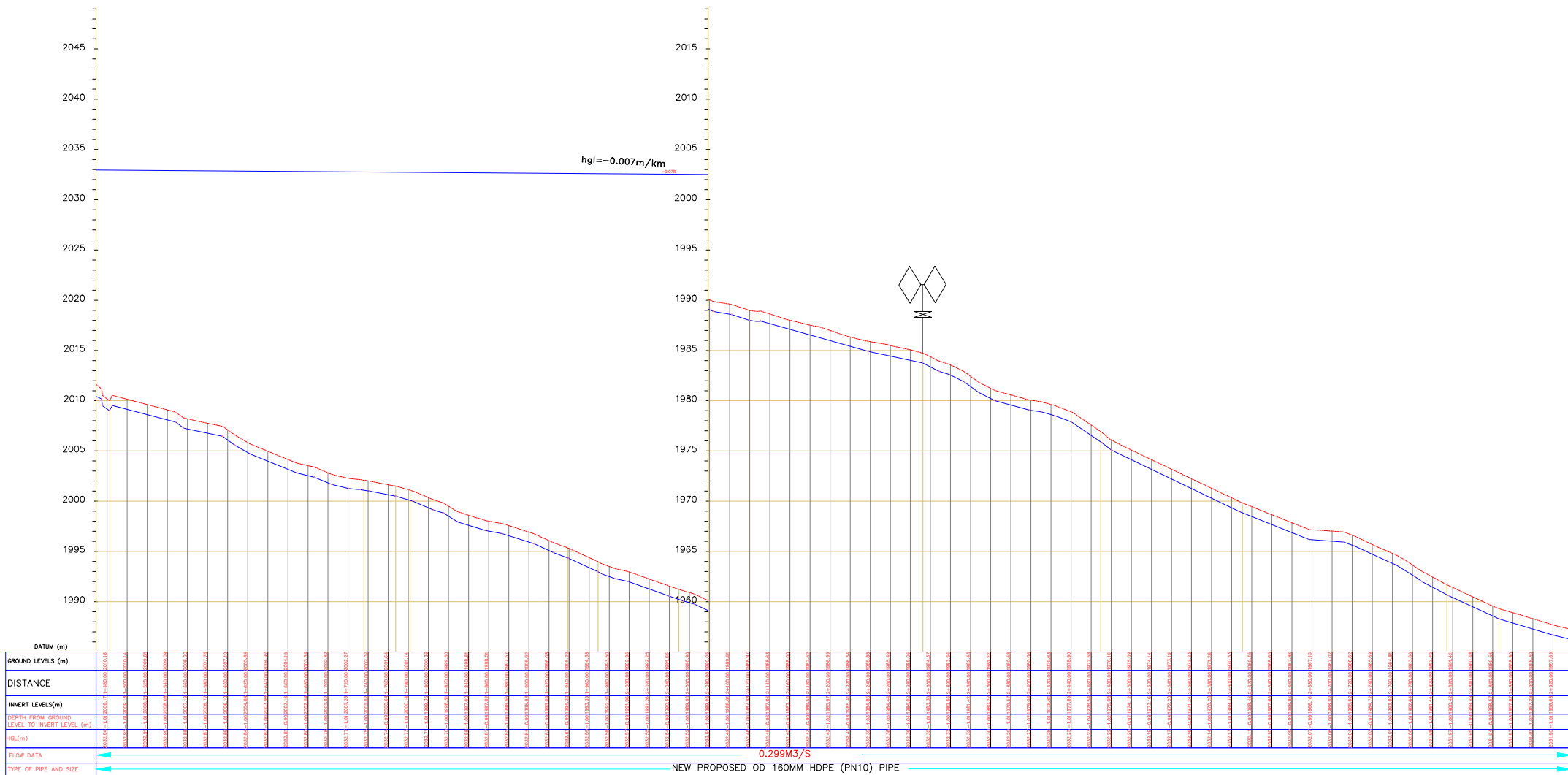
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REV  
REV





PLAN



Kaari Transmission Main  
SCALE: HOR 1:2000 VERT 1:1000

Kaari Transmission Main  
SCALE: HOR 1:2000 VERT 1:1000

Kaari Transmission Main  
SCALE: HOR 1:2000 VERT 1:1000

LONGITUDINAL SECTION OF KAARI TRANSMISSION MAIN

## NOTES

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## FOR CONSTRUCTION

signed CMTS

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REV-4	BY CHECKED			
REV-3	BY CHECKED			
REV-2	BY CHECKED			
REV-1	ISSUED FOR CONSTRUCTION BY CHECKED			

## CLIENT



THE CHIEF EXECUTIVE  
OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

## PROJECT

DESIGN FOR KAARI WATER SUPPLY PROJECT

## Civil/Structural Engineers



CHIEF MANAGER TECHNICAL  
SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

## Drawing Title

KAARI WATER TRANSMISSION MAIN FROM  
CH.1+460.00-2+940.00

SHEET 2 OF 7

## PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

Designed by G.M.G

Drawn by G.M.G

Checked by JMM/KNG

Approved by D.N.M

Scale 1:3750

Date MARCH-2024

Job No. 1.0

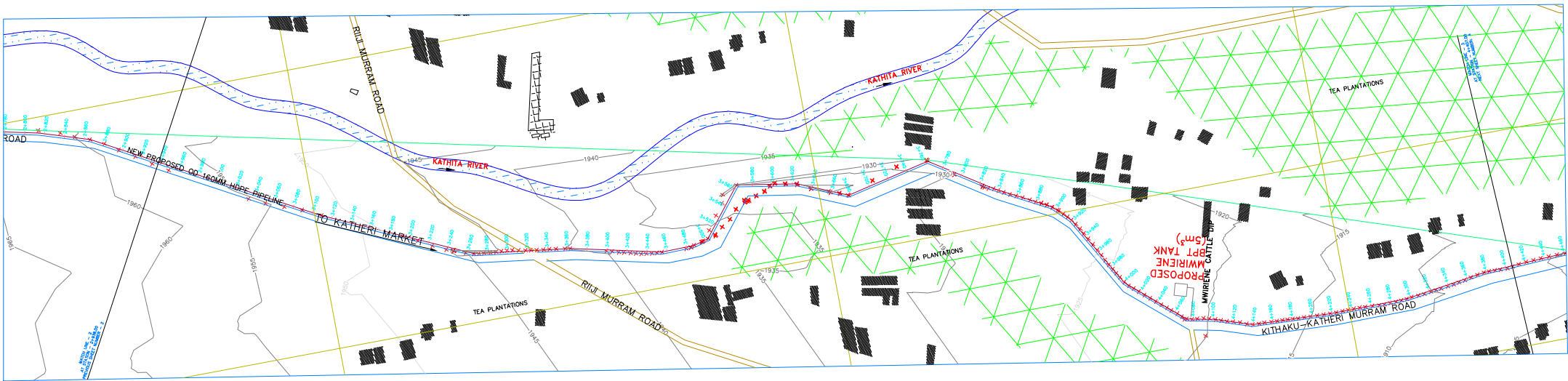
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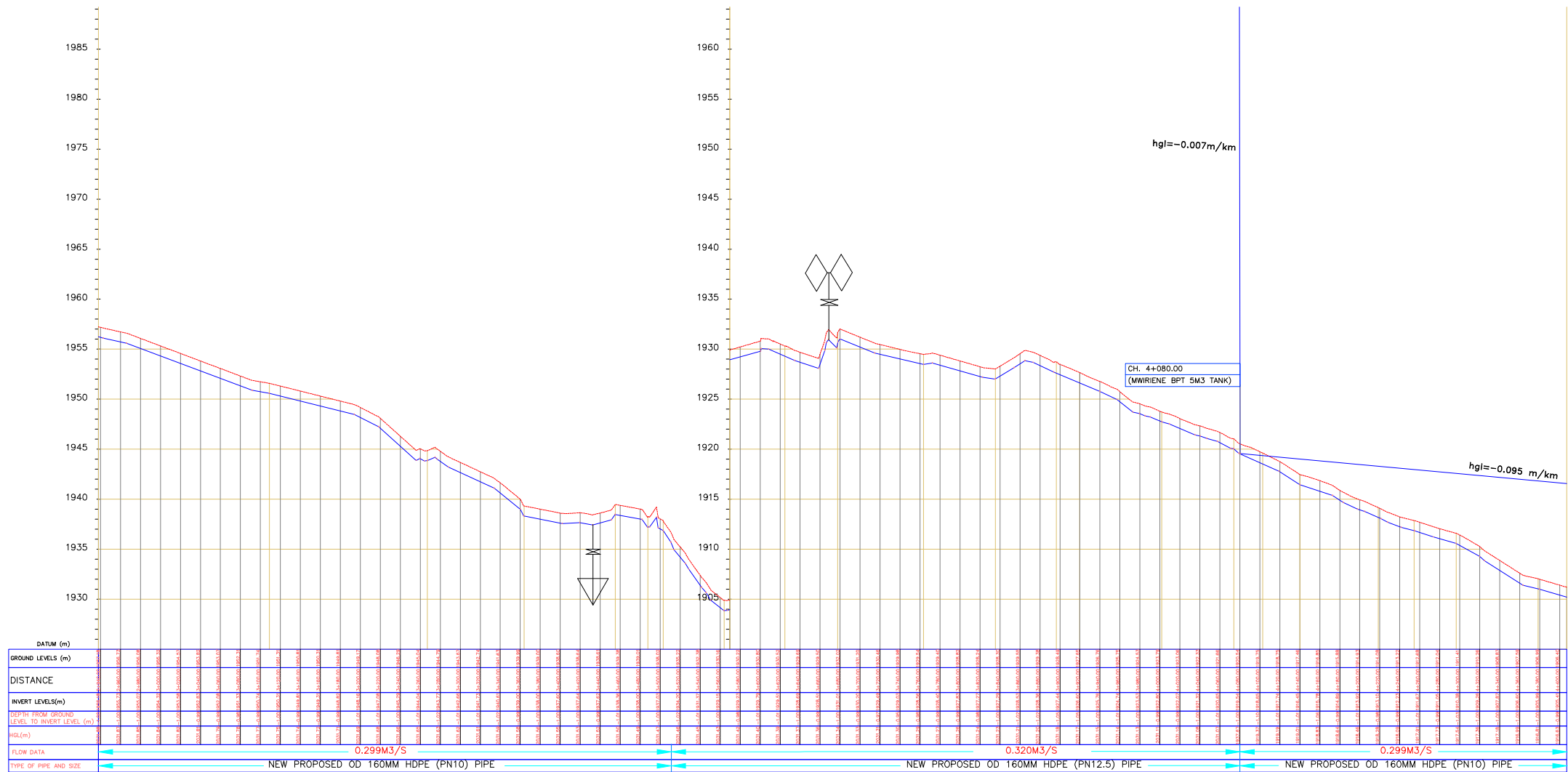
DRAWING No. TWWDA/KSWP

REV

REV



PLAN



LONGITUDINAL SECTION OF KAARI TRANSMISSION MAIN

## NOTES

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- PIPE INVERT PROFILE
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- DAV — DOUBLE AIR VALVE
- WASHOUT
- WO2 — WASHOUT TYPE 2
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- PN — NOMINAL PRESSURE
- HB — HORIZONTAL BEND
- EXISTING STRUCTURE
- ER — EARTH ROAD
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## FOR CONSTRUCTION

signed CMTS

REV	REVISIONS	SIGN	DATE	APPROVED
REV-4	BY CHECKED			
REV-3	BY CHECKED			
REV-2	BY CHECKED			
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CLIENT



THE CHIEF EXECUTIVE  
OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

PROJECT

DESIGN FOR KAARI WATER SUPPLY PROJECT

Civil/Structural Engineers



CHIEF MANAGER TECHNICAL  
SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

Drawing Title

KAARI WATER TRANSMISSION MAIN FROM  
CH.2+940.00-4+420.00  
SHEET 3 OF 7

PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

Designed by G.M.G

Drawn by G.M.G

Checked by JMM/KNG

Approved by D.N.M

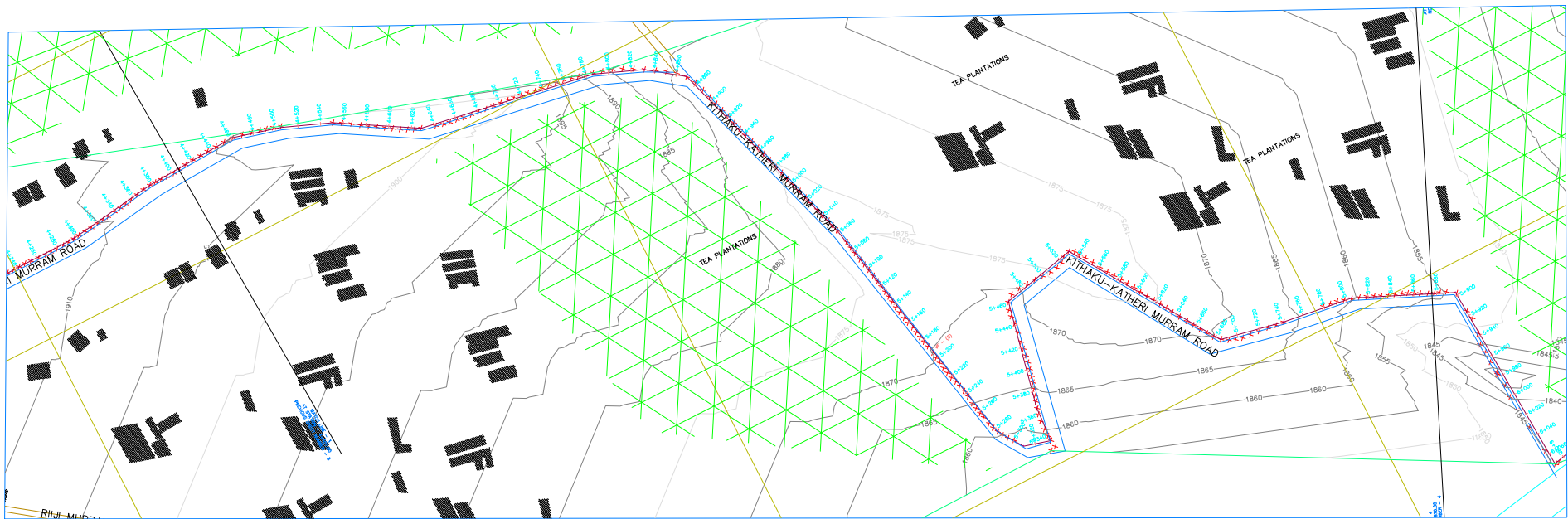
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Date MARCH-2024

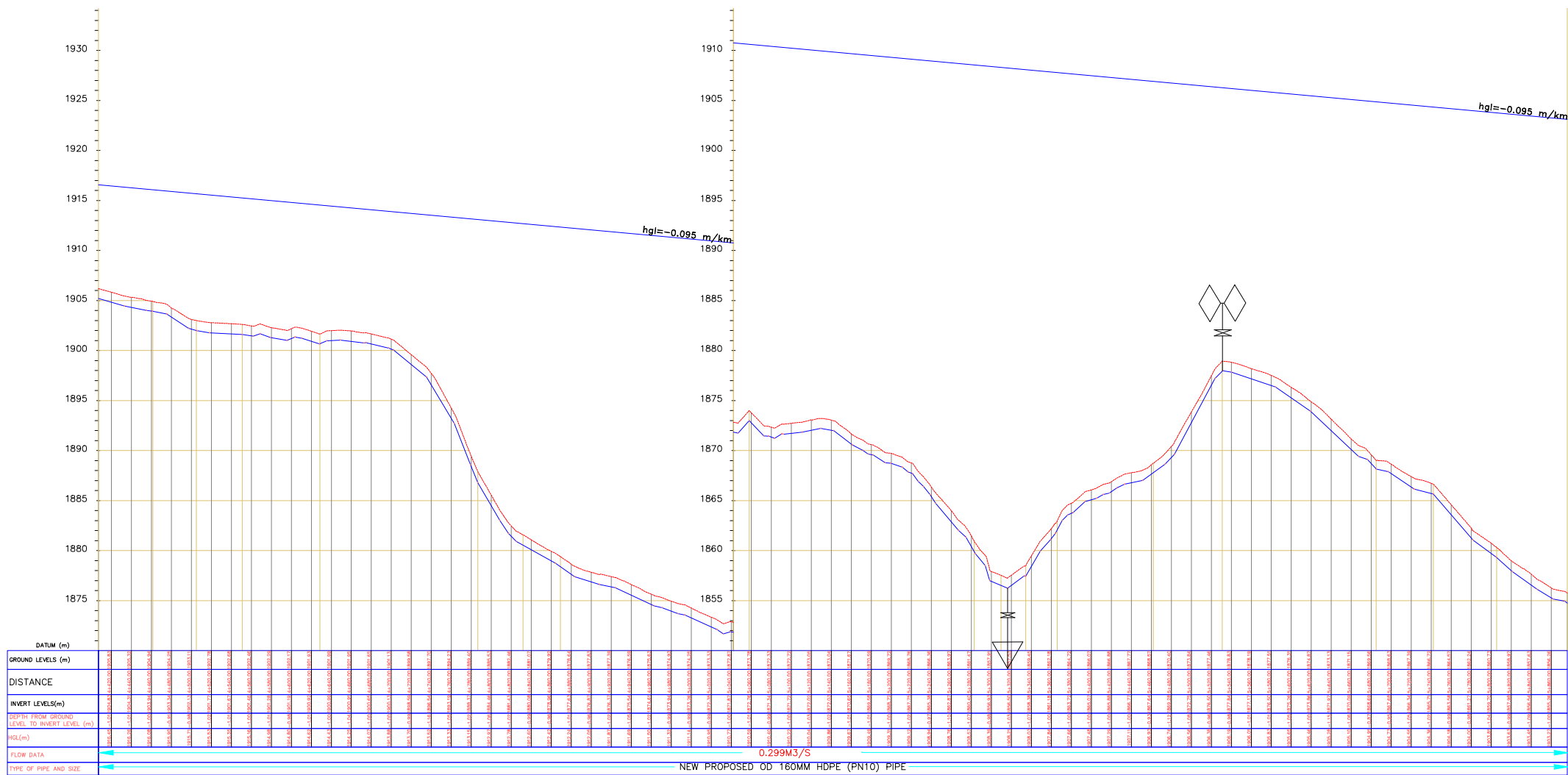
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PD STATUS	DRAWING No.	REV
	TWWDA/KSWP	



PLAN



LONGITUDINAL SECTION OF KAARI TRANSMISSION MAIN

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- PIPE INVERT PROFILE
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- DOUBLE AIR VALVE
- WASHOUT
- WASHOUT TYPE 2
- NOMINAL DIAMETER
- NOMINAL PRESSURE
- HORIZONTAL BEND
- EXISTING STRUCTURE
- EARTH ROAD
- GRAVEL ROAD

## FOR CONSTRUCTION

signed CMTS

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CLIENT  
THE CHIEF EXECUTIVE OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

PROJECT  
DESIGN FOR KAARI WATER SUPPLY PROJECT

Civil/Structural Engineers  
CHIEF MANAGER TECHNICAL SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

Drawing Title  
KAARI WATER TRANSMISSION MAIN FROM  
CH.4+420.00-5+880.00  
SHEET 4 OF 7

PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

Designed by G.M.G Drawn by G.M.G

Checked byJMM/KNG Approved by D.N.M

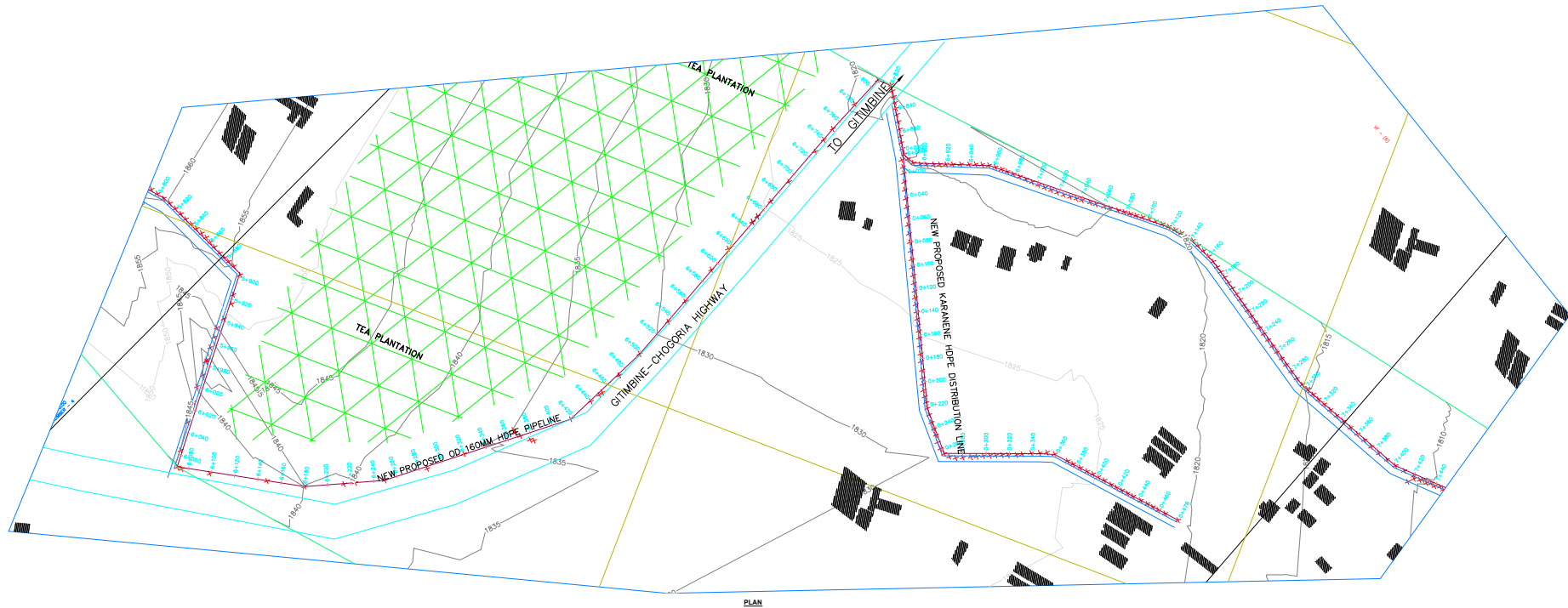
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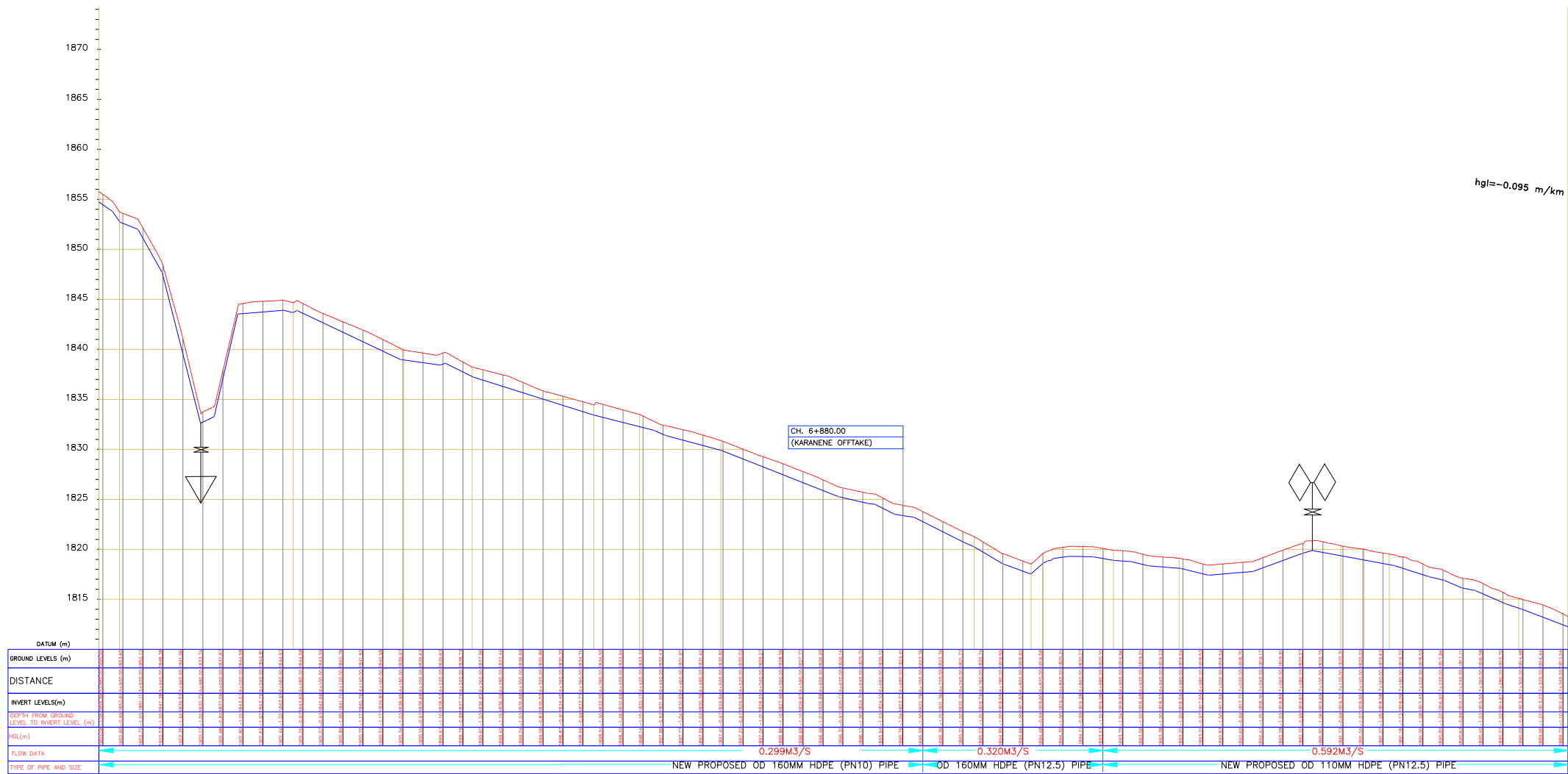
PD STATUS DRAWING No. TWWDA/KSWP

REV





PLAN



LONGITUDINAL SECTION OF KAARI TRANSMISSION MAIN

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## FOR CONSTRUCTION

signed CMTS

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## CLIENT

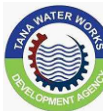


THE CHIEF EXECUTIVE  
OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

## PROJECT

DESIGN FOR KAARI WATER SUPPLY PROJECT

## Civil/Structural Engineers



CHIEF MANAGER TECHNICAL  
SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

## Drawing Title

KAARI WATER TRANSMISSION MAIN FROM  
CH.5+880.00-7+340.00  
SHEET 5 OF 7

## PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

Designed by G.M.G

Drawn by G.M.G

Checked by JMM/KNG

Approved by D.N.M

Scale 1:3750

Date MARCH-2024

Job No. 1.0

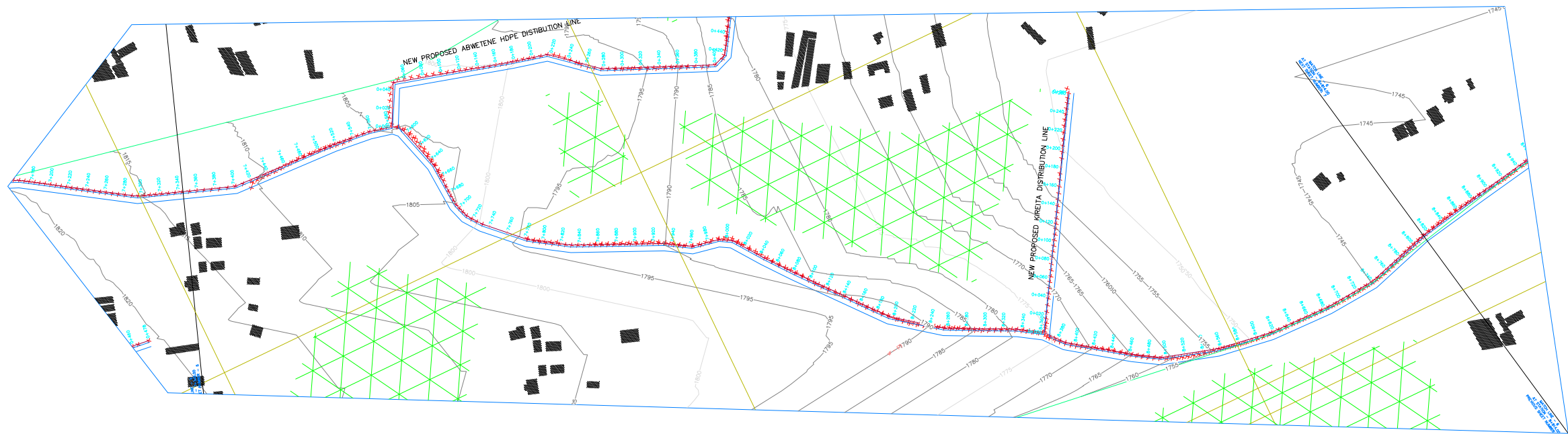
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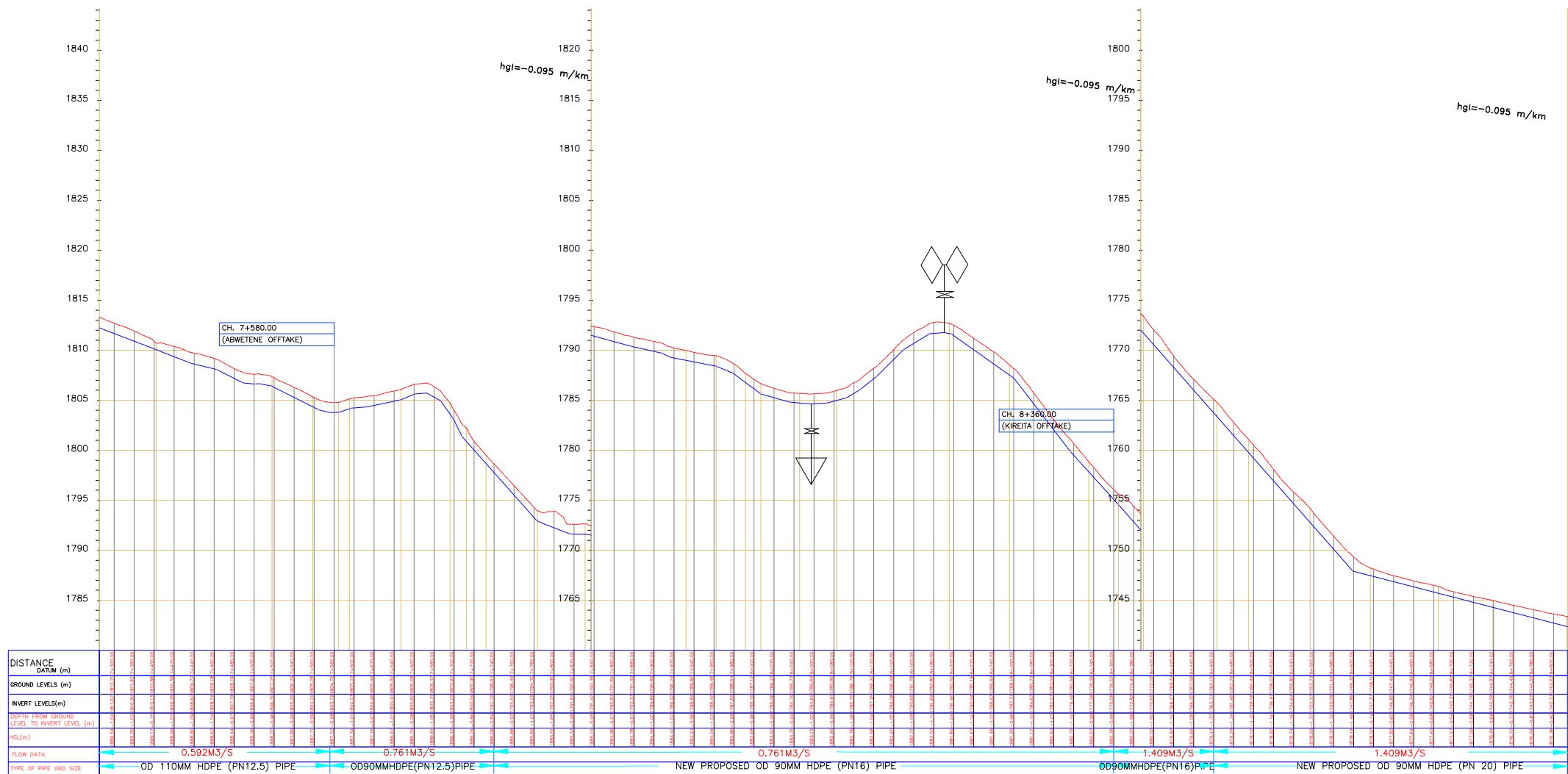
DRAWING No. TWWDA/KSWP

REV  
REV





PLAN



LONGITUDINAL SECTION OF KAARI TRANSMISSION MAIN

## NOTES

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- 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
- AIR VALVE
- DOUBLE AIR VALVE
- WASHOUT
- WASHOUT TYPE 2
- NOMINAL DIAMETER
- NOMINAL PRESSURE
- HORIZONTAL BEND
- EXISTING STRUCTURE
- EARTH ROAD
- GRAVEL ROAD

## FOR CONSTRUCTION

signed CMTS

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

CLIENT  
THE CHIEF EXECUTIVE OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

PROJECT  
DESIGN FOR KAARI WATER SUPPLY PROJECT

Civil/Structural Engineers  
CHIEF MANAGER TECHNICAL SERVICES  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

Drawing Title  
KAARI WATER TRANSMISSION MAIN FROM  
CH.7+340.00-8+820.00  
SHEET 6 OF 7

PLAN AND PROFILE DRAWINGS

Surveyed by N.G.W

Designed by G.M.G Drawn by G.M.G

Checked by JMM/KNG Approved by D.N.M

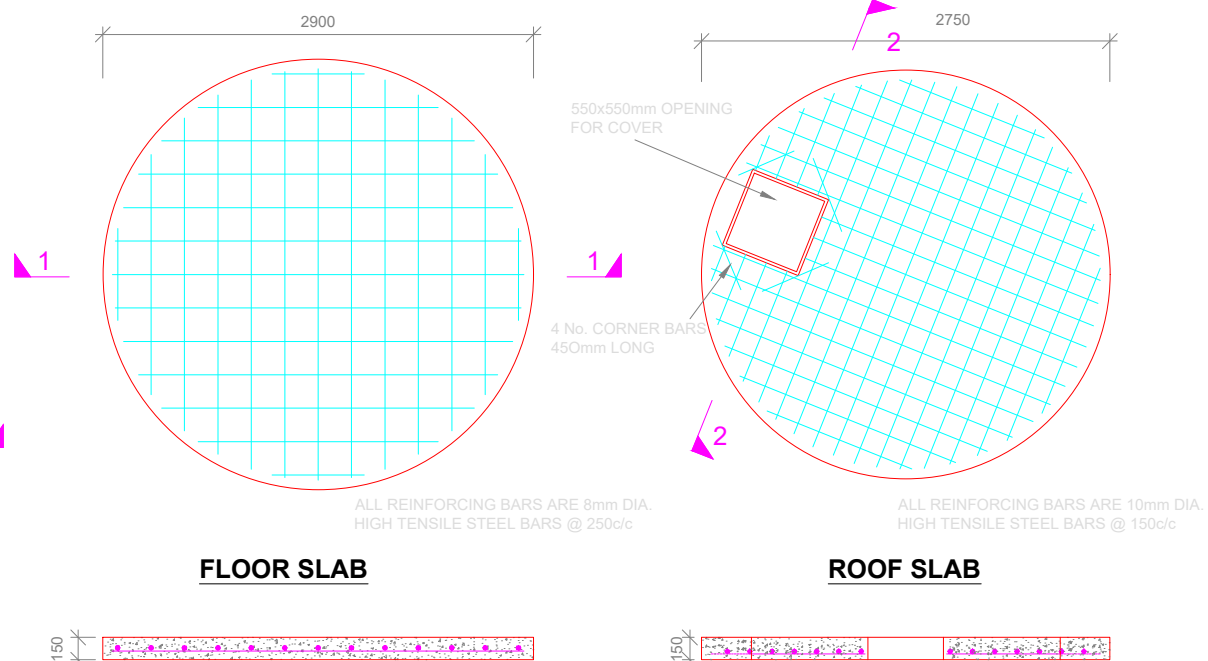
Scale 1:3750 Date MARCH-2024

Job No. 1.0 ACAD File: ACADFILENAME

PD STATUS DRAWING No. TWWDA/KSWP

REV REV

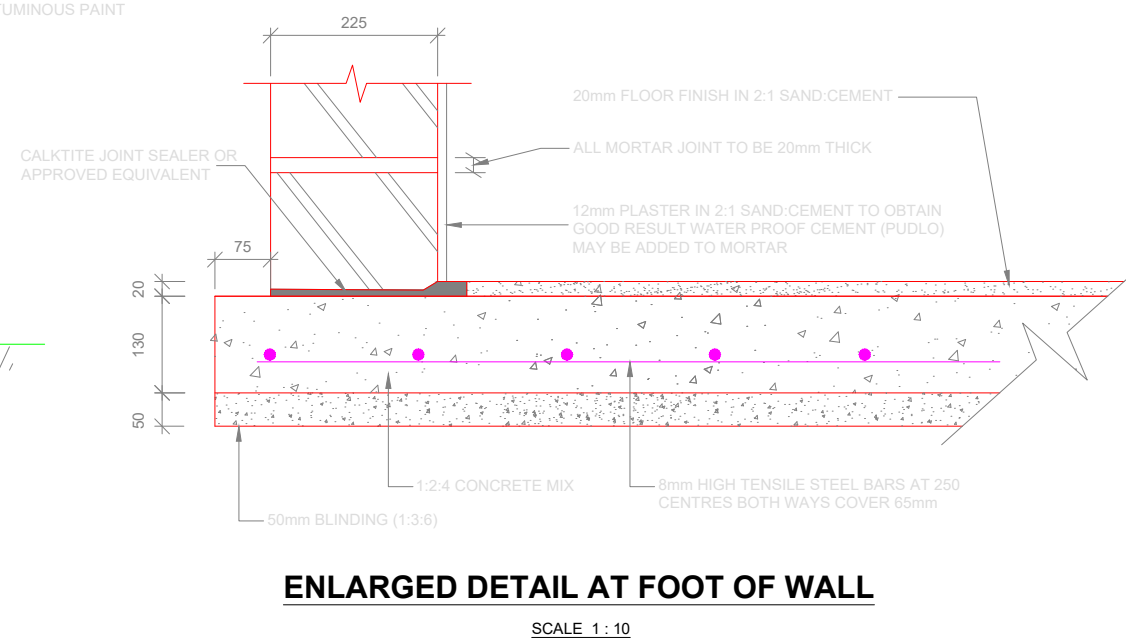




## ROOF SLAB

## SECTION 2-2

SCALE 1 : 50



SCALE 1 : 10

1. T.W.L - TOP WATER LEVEL
2. G.L - GROUND LEVEL
3. R.C - REINFORCED CONCRETE
4. FE. - FERROUS

R E V I S I O N S		SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			

**THE CHIEF EXECUTIVE OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P.O BOX 1292 - 10100,  
NYERI, KENYA**

CIVIL / STRUCTURAL ENGINEERS:  
**THE CHIEF TECHNICAL MANAGER  
TANA WATER WORKS  
DEVELOPMENT AGENCY**  
P.O BOX 1292 - 10100,  
NYERI, KENYA

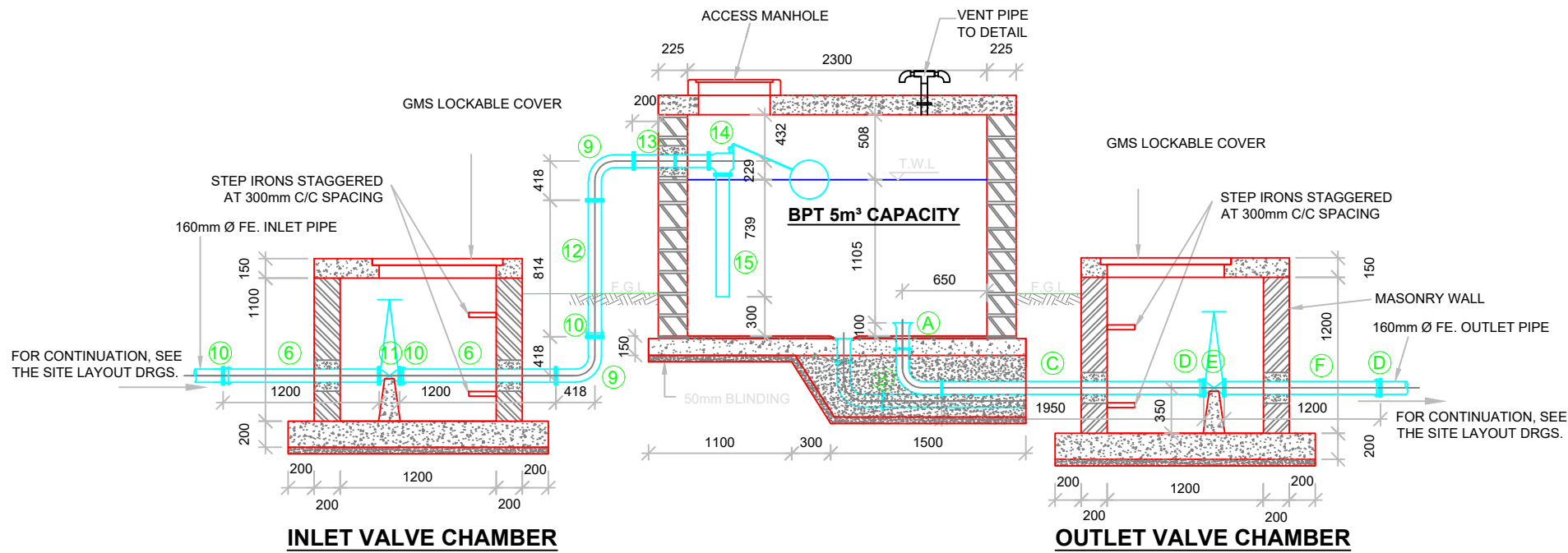
PROJECT TITLE:  
**TETU AGUTHI WATER SUPPLY PROJECT**

**KAARI WATER SUPPLY PROJECT**

DRAWING TITLE:

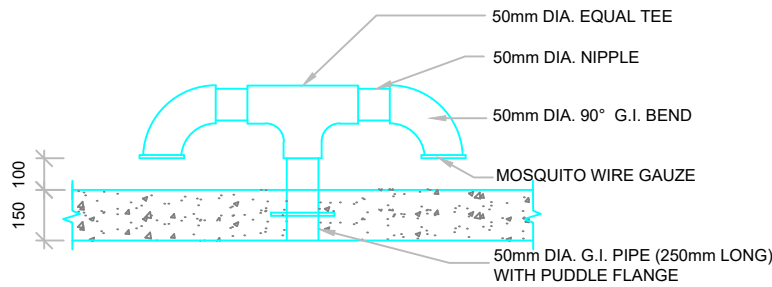
**BREAK PRESSURE TANK  
ON KAARI TRANSMISSION MAIN LINE  
(CAPACITY 5m<sup>3</sup>)  
PLAN, SECTION & R.C. DETAILS**

Designed by: G.M.G	Drawn by: G.M.G
Checked by: J.M.M/K.N.G	Approved by: D.N.M
Scale: 1:25	Date: MARCH 2024
DRG No. KWSP/BPT/1	
	REV

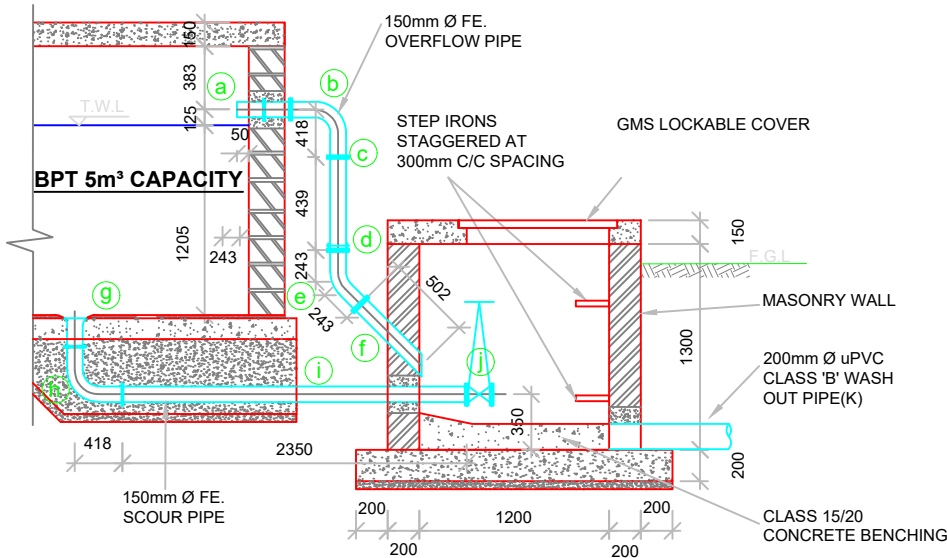


SECTION A-A  
INLET & OUTLET PIPEWORK DETAILS

SCALE 1 : 50



VENT PIPE DETAIL  
N.T.S



OVERFLOW & WASHOUT CHAMBER  
SECTION B-B  
OVERFLOW & WASHOUT PIPEWORK DETAILS

SCALE 1 : 50

BPT No. 1  
OVERFLOW AND SCOUR PIPEWORK DETAILS  
APPROVED LINED FERROUS PIPES AND FITTINGS

OVERFLOW PIPE WORK

- (a) 150 mm DIA. FLANGED SPIGOT PIPE 425mm LONG WITH A PUDDLE FLANGE AT 162.5mm FROM THE SPIGOT END.....1 Nr.  
(b) 150 mm DIA. ALL FLANGED 90° BEND .....1 Nr.  
(c) 150 mm DIA. FLANGED SPIGOT PIPE 439mm LONG (CUT TO SUIT ON SITE).....1 Nr.  
(d) 150 mm DIA. FLANGE ADAPTOR .....1 Nr.  
(e) 150 mm DIA. ALL FLANGED 45° BEND .....1 Nr.  
(f) 150 mm DIA. FLANGED SPIGOT PIPE 502mm LONG WITH A SPIGOT END BEVELLED (CUT TO SUIT ON SITE).....1 Nr.

WASHOUT/SCOUR PIPE WORK

- (g) 150 mm DIA. FLANGED BELLMOUTH .....1 Nr.  
(h) 150 mm DIA. ALL FLANGED 90° BEND .....1 Nr.  
(i) 150 mm DIA. DOUBLE FLANGED PIPE 2350mm LONG .....1 Nr.  
(j) 150 mm DIA. ALL FLANGED GATE VALVE TO EURO 20 SERIES, TYPE 23 OR APPROVED EQUIVALENT.....1 Nr.  
(k) 200mm DIA. uPVC CLASS 'B' PIPE 10000mm LONG. ....1 Nr.

BPT No. 1  
INLET PIPEWORK DETAILS  
APPROVED LINED FERROUS PIPES AND FITTINGS

- (1) 160Vmm DIA. COUPLING. ....1 Nr.  
(2) 160 mm DIA. FLANGED SPIGOT PIPE 1200mm LONG .....1 Nr.  
(3) 160 x 160mm DIA. ALL FLANGED RADIAL TEE .....1 Nr.  
(4) 160 mm DIA. BLANK FLANGE .....1 Nr.  
(5) 160 mm Plain Ended Pipe.....1 Nr.  
(6) 160 mm DIA. FLANGED SPIGOT PIPE 1200mm LONG .....4 Nr.  
(7) 160 mm DIA. COUPLING .....2 Nr.  
(8) 160 mm DIA. PLAIN ENDED PIPE 8m LONG(CUT TO SUIT ON SITE)....1 Nr.  
(9) 160 mm DIA. ALL FLANGED 90° BEND .....3 Nr.  
(10) 160 mm DIA. FLANGE ADAPTOR .....3 Nr.  
(11) 160 mm DIA. ALL FLANGED GATE VALVE .....1 Nr.  
(12) 160 mm DIA. FLANGED SPIGOT PIPE 814mm LONG (CUT TO SUIT ON SITE).....1 Nr.  
(13) 160 mm DIA. DOUBLE FLANGED PIPE 575mm LONG WITH A PUDDLE FLANGE AT 262mm FROM ONE END.....1 Nr.  
(14) 160 mm DIA. ALL FLANGED FLOAT VALVE TO SERIES 1042 BIWATER CATALOGUE OR APPROVED EQUIVALENT.....1 Nr.  
(15) 160 mm DIA. FLANGED SPIGOT FERROUS PIPE 739mm LONG.....1 Nr.

BPT No. 1  
OUTLET PIPEWORK DETAILS  
APPROVED LINED FERROUS PIPES AND FITTINGS

- (A) 160 mm DIA. FLANGED BELLMOUTH .....1 Nr.  
(B) 160 mm DIA. ALL FLANGED 90° BEND .....2 Nr.  
(C) 160 mm DIA. FLANGED SPIGOT PIPE 1950mm LONG (CUT TO SUIT ON SITE).....1 Nr.  
(D) 160 mm DIA. FLANGE ADAPTOR .....2 Nr.  
(E) 160 mm DIA. ALL FLANGED GATE VALVE .....1 Nr.  
(F) 160 mm DIA. FLANGED SPIGOT PIPE 1200mm LONG .....3 Nr.  
(G) 160 mm DIA. COUPLING .....2 Nr.  
(H) 160 mm DIA. PLAIN ENDED PIPE 8m LONG(CUT TO SUIT ON SITE)....1 Nr.

- (J) 160 mm DIA. BLANK FLANGE .....1 Nr.  
(K) 160 x 160mm DIA. ALL FLANGED RADIAL TEE .....1 Nr.  
(L) 160mm DIA. FLANGED SPIGOT PIPE 1200mm LONG .....1 Nr.  
(M) 160 mm DIA. COUPLING .....1 Nr.

- NOTES**
1. ALL PIPE, FITTINGS AND VALVE DIAMETER ARE NOMINAL DIAMETERS & OF CLASS NP 16
  2. OTHER PIPES AND FITTINGS ARE SHOWN ON THE SITE LAYOUT PLANS
  3. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED
  4. ONLY FIGURED DIMENSIONS TO BE TAKEN FROM THIS DRAWING
  5. PIPE AND FITTINGS DIMENSIONS ARE BASED ON STEEL PIPES AND FITTINGS AS MADE BY ASP (K) LTD.
  6. VALVES DIMENSIONS ARE BASED ON EURO 20 SERIES, TYPE 23 (SHORT FACE TO FACE TYPE VALVES) AS MADE BY PONT-A-MOUSSON (SAINT GOBAIN PAM).

**ABBREVIATIONS**

- |          |                         |
|----------|-------------------------|
| 1. T.W.L | - TOP WATER LEVEL       |
| 2. F.G.L | - FINISHED GROUND LEVEL |
| 3. G.I   | - GALVANISED IRON       |
| 4. R.C   | - REINFORCED CONCRETE   |
| 5. M.S   | - MILD STEEL            |
| 6. BPT   | - BREAK PRESSURE TANK   |
| 7. FE.   | - FERROUS               |

R E V I S I O N S		SIGN	DATE	APPROVED
	BY			
	CHECKED			
	BY			
	CHECKED			
	BY			
	CHECKED			

CLIENT:

**THE CHIEF EXECUTIVE OFFICER  
TANA WATER WORKS  
DEVELOPMENT AGENCY**  
P.O BOX 1292 - 10100,  
NYERI, KENYA

CIVIL / STRUCTURAL ENGINEERS:  
**THE CHIEF TECHNICAL MANAGER  
TANA WATER WORKS  
DEVELOPMENT AGENCY**  
P.O BOX 1292 - 10100,  
NYERI, KENYA

PROJECT TITLE:

**KAARI WATER SUPPLY PROJECT**

**KAARI WATER SUPPLY PROJECT**

DRAWING TITLE:

**BREAK PRESSURE TANK  
ON KAARI TRANSMISSION MAINLINE  
(CAPACITY 5m³)  
PIPEWORK DETAILS**

Designed by: G.M.G	Drawn by: G.M.G
Checked by: J.M.M/K.N.G	Approved by: J.M.M
Scale: 1:50	Date: MARCH 2024
DRG No.KWSP/BPT/2	
REV	



NOTES

LEGEND:

- PROPOSED PIPELINE
- EXISTING GROUND PROFILE
- PIPE INVERT PROFILE
- EXISTING ROAD
- AIR VALVE
- DOUBLE AIR VALVE
- WASHOUT
- PRESSURE REDUCING VALVE
- SLUICE VALVE
- WASHOUT TYPE
- PRESSURE RELIEF VALVE
- NOMINAL DIAMETER
- NOMINAL PRESSURE
- CHECK VALVE
- VERTICAL BEND
- HORIZONTAL BEND
- EXISTING STRUCTURE
- EARTH ROAD
- GRAVEL ROAD
- CUT

FOR CONSTRUCTION

signed CMTS

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

CLIENT




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

PROJECT

KAARI WATER SUPPLY PROJECT

Civil/Structural Engineers



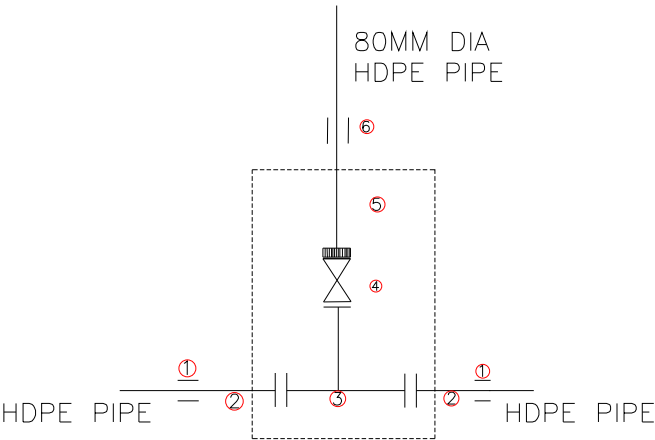
TANA WATER WORKS  
DEVELOPMENT AGENCY  
P. O. BOX 1292-10100  
NYERI

Drawing Title

VALVE CHAMBERS ARRANGEMENTS  
FOR KAARI WATER SUPPLY

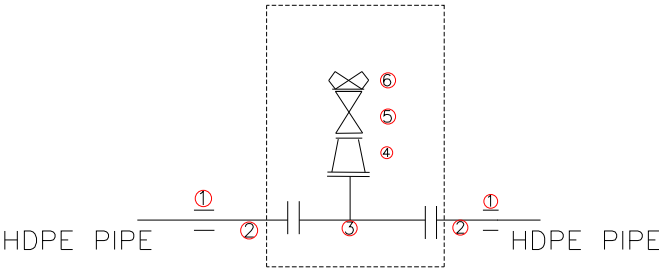
Designed by GMG	Drawn by GMG
Checked by KNG	Approved by DMN
Scale	Date APRIL2024
Job No.	ACAD File: ACADFILENAME
DRAWING No. <span>TWWDA/K-MWP/VC-01</span>	

TEE & WO DETAIL



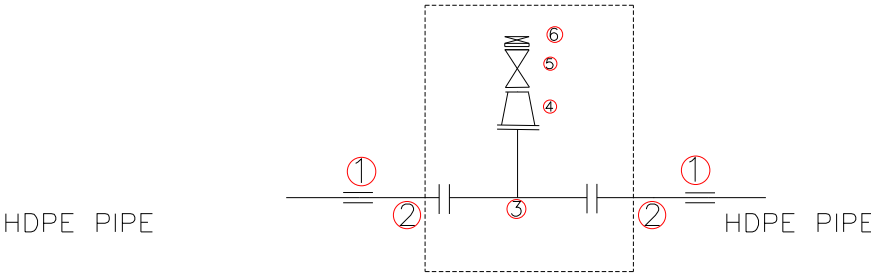
- 1 2 Nos 140MM DIA ADOPTER
- 2 2 Nos 140MM DIA SINGLE FLANGED SPIGOT FERROUS PIPE 1200 MM LONG
- 3 1 Nos 140MMX80MM DIA FLANGED FERROUS TEE
- 4 1 Nos 80MM DIA FLANGED GATE VALVE
- 5 1 Nos 80MM DIA SINGLE FLANGED SPIGOT FERROUS PIPE
- 6 1 Nos 80MM DIA ADOPTER

TEE & DAV DETAIL



- 1 2 Nos 140MM DIA ADOPTER
- 2 2 Nos 140MM DIA SINGLE FLANGED SPIGOT FERROUS PIPE
- 3 1 Nos 140MMX140MM DIA ALL FLANGED FERROUS TEE
- 4 1 Nos 140MMX80MM DIA FLANGED CONCENTRIC TAPER
- 5 1 Nos 80MM DIA GATE VALVE
- 6 1 Nos 80MM DIA DOUBLE AIR VALVE

TEE& SLUICE VALVE



- 1 2 Nos 140MM DIA ADOPTER
- 2 2 Nos 140MM DIA SINGLE FLANGED SPIGOT FERROUS PIPE 1200MM LONG
- 3 1 NOs 140MMX140MM DIA ALL FLANGED FERROUS TEE
- 4 1 Nos 140MMX80MM DIA FLANGED CONCENTRIC TAPER
- 5 1 NOs 80MM DIA FLANGED GATE VALVE
- 6 1 NOs 80MM DIA SLUICE VALVE