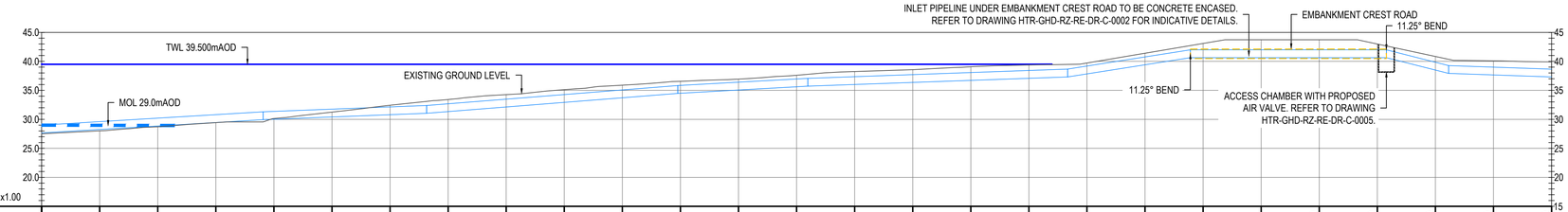
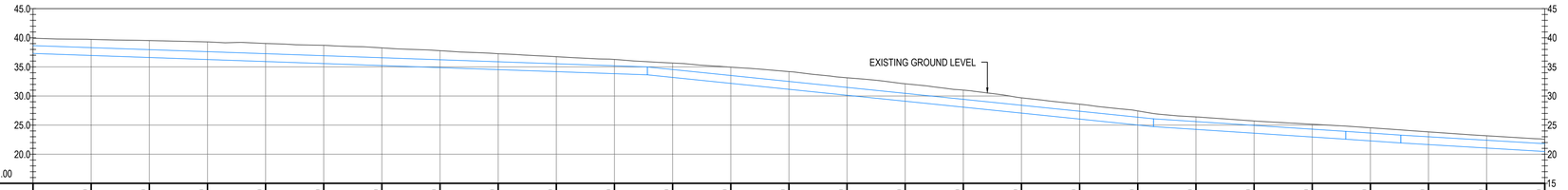


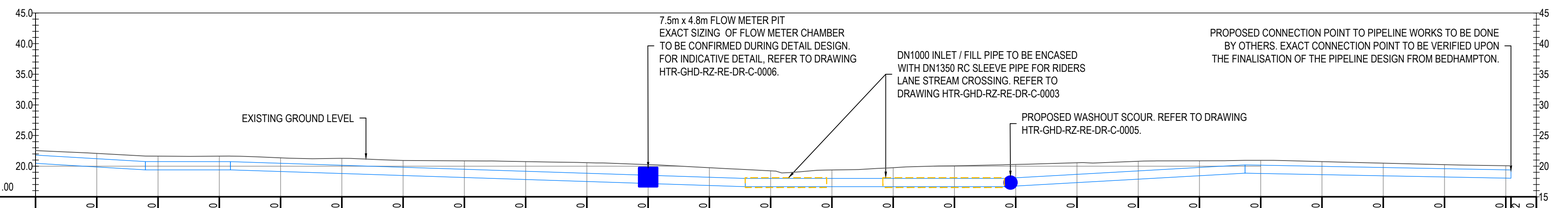
VERTICAL EXAGGERATION x1.00

CHAINAGE	790.000	800.000	810.000	820.000	830.000	840.000	850.000	860.000	870.000	880.000	890.000	900.000	910.000	920.000	930.000	940.000	950.000	960.000	970.000	980.000	990.000	1000.000	1010.000	1020.000	1030.000	1040.000
EXISTING SURFACE LEVEL	28.017	28.719	29.430	30.137	31.244	32.433	33.420	34.264	35.121	35.890	36.545	36.943	37.602	38.242	38.569	39.070	39.370	39.550	39.895	40.165	40.266	40.312	40.337	40.210	40.089	39.910
COVER	-1.591	-1.491	-1.381	-1.235	-0.517	0.282	0.731	0.781	0.845	0.820	0.704	0.535	0.641	0.883	0.854	0.999	0.943	0.525	0.640	0.975	1.614	1.614	0.875	0.991	1.087	1.254
INVERT LEVEL	26.922	30.125 / 30.725				31.220 / 31.220						34.652 / 34.652	35.896 / 35.896						37.489 / 37.489	40.810 / 40.810			40.810 / 40.810	38.097 / 38.097			33.816
GRADIENT PIPE LENGTH (m)	-1:17 53.29m		-1:26 28.15m		-1:13 43.24m					-1:18 22.40m		-1:28 44.72m						-1:6 21.14m		Horizontal 33.76m			1:4 10.71m		1:29 123.39m	
PIPE DETAILS	DN1000 DUCTILE IRON		DN1000 DUCTILE IRON		DN1000 DUCTILE IRON					DN1000 DUCTILE IRON		DN1000 DUCTILE IRON						DN1000 DUCTILE IRON		DN1000 DUCTILE IRON			DN1000 DUCTILE IRON		DN1000 DUCTILE IRON	
CONSTRUCTION METHOD	PIPE LAID ON RESERVOIR FLOOR PROFILE TO BE CONFIRMED DURING DETAIL DESIGN				OPEN-CUT - PIPE LAID WITHIN RESERVOIR EMBANKMENT															OPEN-CUT - UNDER EMBANKMENT CREST ROAD					OPEN-CUT - PIPE LAID WITHIN RESERVOIR EMBANKMENT		



VERTICAL EXAGGERATION x1.00

CHAINAGE	1050.000	1060.000	1070.000	1080.000	1090.000	1100.000	1110.000	1120.000	1130.000	1140.000	1150.000	1160.000	1170.000	1180.000	1190.000	1200.000	1210.000	1220.000	1230.000	1240.000	1250.000	1260.000	1270.000	1280.000	1290.000	1300.000
EXISTING SURFACE LEVEL	39.730	39.524	39.291	39.023	38.710	38.265	37.788	37.265	36.754	36.280	35.660	34.958	34.195	33.126	32.098	31.013	29.688	28.694	27.440	26.409	25.716	25.147	24.536	23.838	23.168	22.568
COVER	1.421	1.562	1.676	1.754	1.788	1.699	1.560	1.384	1.219	1.093	1.113	1.434	1.694	1.649	1.644	1.581	1.280	1.209	1.078	0.800	0.759	0.842	0.897	0.840	0.764	0.759
INVERT LEVEL	38.097									33.816 / 33.816									24.911 / 24.911				22.753 / 22.753	22.106 / 22.106		19.568
GRADIENT PIPE LENGTH (m)	1:29 123.39m											1:10 87.05m								1:15 33.06m			1:15 9.46m	1:17 42.71m		
PIPE DETAILS	DN1000 DUCTILE IRON											DN1000 DUCTILE IRON								DN1000 DUCTILE IRON			DN1000 DUCTILE IRON	DN1000 DUCTILE IRON		
CONSTRUCTION METHOD	OPEN-CUT - PIPE LAID WITHIN RESERVOIR EMBANKMENT																									



VERTICAL EXAGGERATION x1.00

CHAINAGE	1310.000	1320.000	1330.000	1340.000	1350.000	1360.000	1370.000	1380.000	1390.000	1400.000	1410.000	1420.000	1430.000	1440.000	1450.000	1460.000	1470.000	1480.000	1490.000	1500.000	1510.000	1520.000	1530.000	1540.000	1540.842 / 1545.000
EXISTING SURFACE LEVEL	22.082	21.652	21.629	21.355	21.270	20.923	20.863	20.743	20.567	20.250	19.746	19.233	19.374	19.747	20.049	20.275	20.555	20.792	20.876	20.943	20.739	20.485	20.245	20.069	
COVER	0.867	0.890	0.889	0.882	1.124	1.103	1.370	1.576	1.726	1.736	1.558	1.236	1.377	1.750	2.052	2.174	1.892	1.566	1.089	0.786	0.773	0.710	0.660	0.675	
INVERT LEVEL	22.106	19.568 / 19.568		19.565 / 19.565						16.822 / 16.822						16.822 / 16.822			19.031 / 19.031					18.203	
GRADIENT PIPE LENGTH (m)	1:17 42.71m		1:6106 13.87m				1:31 84.03m						Horizontal 42.30m				-1:18 39.30m			1:52 43.40m					
PIPE DETAILS	DN1000 DUCTILE IRON		DN1000 DUCTILE IRON				DN1000 DUCTILE IRON						DN1000 DUCTILE IRON				DN1000 DUCTILE IRON			DN1000 DUCTILE IRON					
CONSTRUCTION METHOD	OPEN-CUT																								

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE (UNO).
2. ALL LEVELS ARE IN METRES TO ORDNANCE DATUM UNO.
3. DO NOT SCALE FROM THIS DRAWING. IF IN DOUBT, CONSULT THE ENGINEER.
4. ALL CO-ORDINATES ARE RELATIVE TO OS NATIONAL GRID.
5. DESIGN AND ARRANGEMENT OF THE CONTROL ROOM AND FINAL ACCESS ROADS IS STILL TO BE FINALISED AND SUBJECT TO DETAILED DESIGN.
6. AT THE TIME OF THE DEVELOPMENT OF THIS DRAWING, THE DESIGN OF THE EMBANKMENT, CONTROL ROOM, ACCESS ROAD, SPILLWAY AND OTHER FEATURES WERE STILL TO BE FINALISED. THE LAYOUTS AND POSITIONS SHOWN ARE ONLY PRELIMINARY AND ARE SUBJECT TO CHANGE.
7. TOP WATER LEVEL (TWL) = 39.5m AOD, MINIMUM OPERATING LEVEL (MOL) = 29.0m AOD.

GROUND SURFACE INDICATED ON LONG SECTIONS IS BASED ON BORROW PIT DESIGN AS OF NOVEMBER 2023. AT THE TIME OF PREPARATION OF THESE DRAWINGS, THE BORROW PIT AND RESERVOIR FLOOR SURFACE WAS STILL BEING FINALISED. IT IS EXPECTED THAT THIS GROUND PROFILE WILL CHANGE AND THE PROFILE AND ALIGNMENT OF THIS PIPELINE IS TO BE FINALISED AT DETAILED DESIGN.

REFERENCE DOCUMENTS AND DRAWINGS

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH HTR-GHD-CU-RE-DR-S-0009 AND HTR-GHD-CU-RE-DR-S-0010.

0 5 10 15 20 25m
SCALE 1:500 AT ORIGINAL SIZE

Rev	Description	Checked	Approved	Date
P05	HWTWR IMPACT ASSESSMENT	ND	TG	22.02.2024
P04	HWTWR SUBMISSION	NK	KN	19.01.2024
P03	DETAIL DESIGN SUBMISSION	NK	KN	05.12.2023
P02	FOR INFORMATION	NK	KN	29.09.2023
P01	FOR INTERNAL REVIEW	NK	KN	13.09.2023

Author FJ **Drafting Check** NK
Designer NK **Design Check** ND

Telephone: Havant (023) 9249 9888
Fax: Havant (023) 9245 3632
Website: www.portsmouthwater.co.uk
Registered Office: PO Box 8 West Street
Havant Hampshire PO9 1LG
REGISTERED IN ENGLAND No. 2536455

Portsmouth Water

Future Water MJJV Ltd

GHD

Project No. 12547181

Client PORTSMOUTH WATER

Project HAVANT THICKET RESERVOIR

Status FOR APPROVAL Status Code S3

Drawing Title INLET / FILL PIPELINE LONGSECTION (SHEET 02 OF 02)

Size A1

Drawing No. HTR-GHD-CU-RE-DR-S-0011 Rev P05

Plot Date: 22 February 2024 - 11:20 PM Plotted by: Franz Alexis Juanico File Name: C:\Users\fjuanico\DC\ACCDocs\GHD Services Pty Ltd\12547181 - Havant Thicket Reservoir\Project Data & Docs\WIP (S0)\GHD Engineers\Structures (6)\Models\Civil 3D\Production Drawings\HTR-GHD-CU-RE-DR-S-0011.dwg