

Cambridge Waste Water Treatment Plant Relocation Project
Anglian Water Services Limited

Design Plans – Waterbeach Pipeline Long Sections

Application Document Reference: 4.14
PINS Project Reference: WW010003
APFP Regulation No. 5(2)o

Revision No. 03
19th February 2024

Document title	Design Plans - Waterbeach Pipeline Long Sections
Version No.	C03
Date Approved	28.01.23
Date 1st Issued	30.01.23

Version History

Version	Date	Author	Description of change
C01	30.01.23	-	DCO Submission
C02	13.10.23	-	Key Plan and Sheet 10 updated to reflect changes in the Scheme Order Limits
C03	19.02.24	-	4.11.7 and 4.11.8 updated to reflect the Applicants commitment to HDD under the important hedgerow.



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1 Introduction 1

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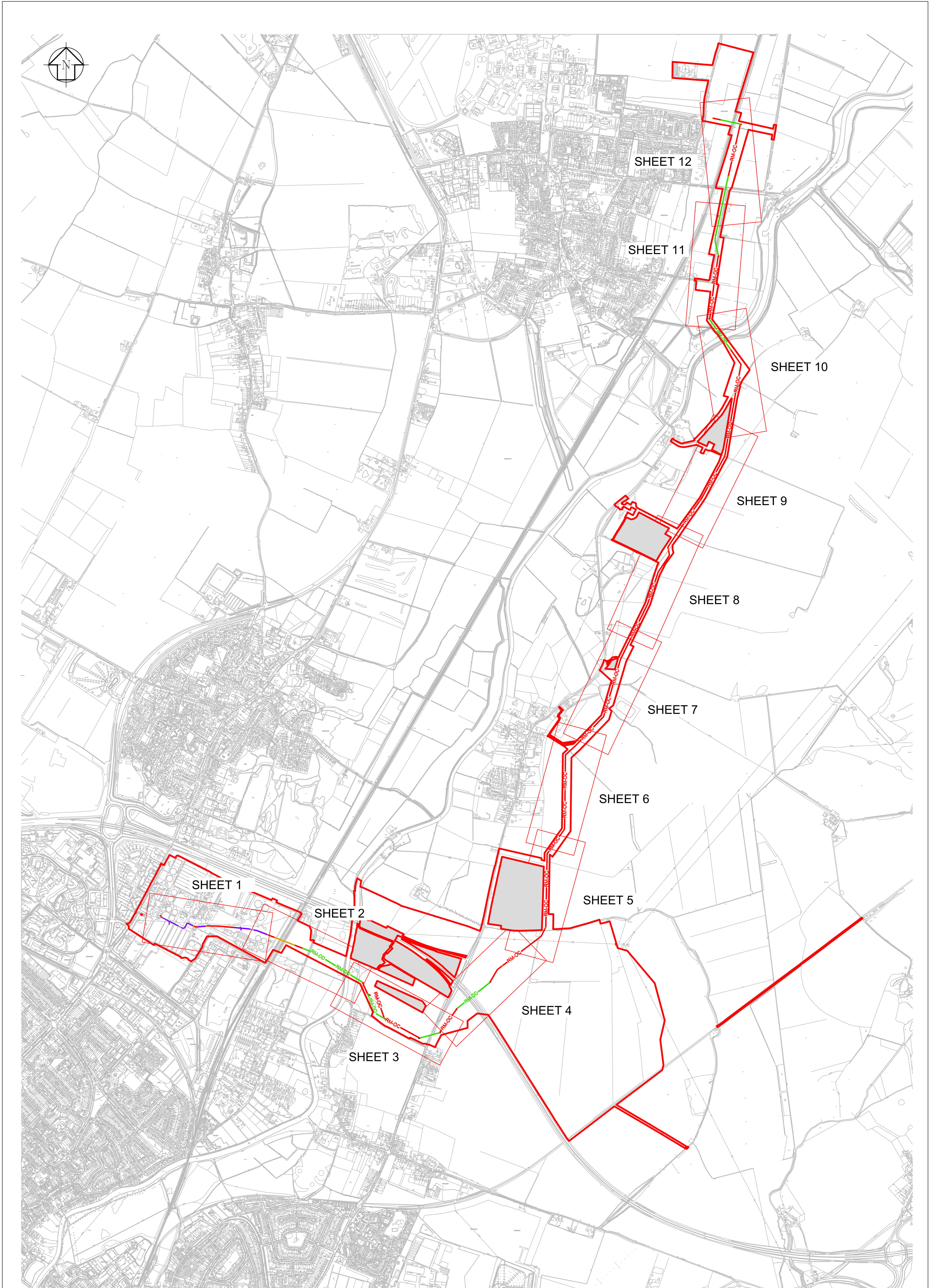
1 Introduction

- 1.1.1 The ‘Design Plans - Waterbeach Pipeline Long Sections’ (the Plans), listed in Table 1.1, relate to an application made by Anglian Water Services Limited (the “Applicant”) under section 37 of the Planning Act 2008 (the “2008 Act”) for a Development Consent Order (DCO) for the Cambridge Waste Water Treatment Plant Relocation Project.
- 1.1.2 The Plans are included in the DCO application in compliance with Regulations 5(2)(o) of the Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (the “2009 Regulations”), which require:
- “5(2) The application must be accompanied by—*
- (o) “any other plans, drawings and sections necessary to describe the proposals for which development consent is sought, showing details of design, external appearance, and the preferred layout of buildings or structures, drainage, surface water management, means of vehicular and pedestrian access, any car parking to be provided, and means of landscaping;”*
- 1.1.3 As these Plans are part of the application documentation, they should be read alongside and are informed by the other application documentation. In particular, these Plans should be read alongside Schedule 1 (Authorised Development) of the Draft Development Consent Order (Application Document Reference 2.1) and the Works Plans (Application Document Reference 4.3).

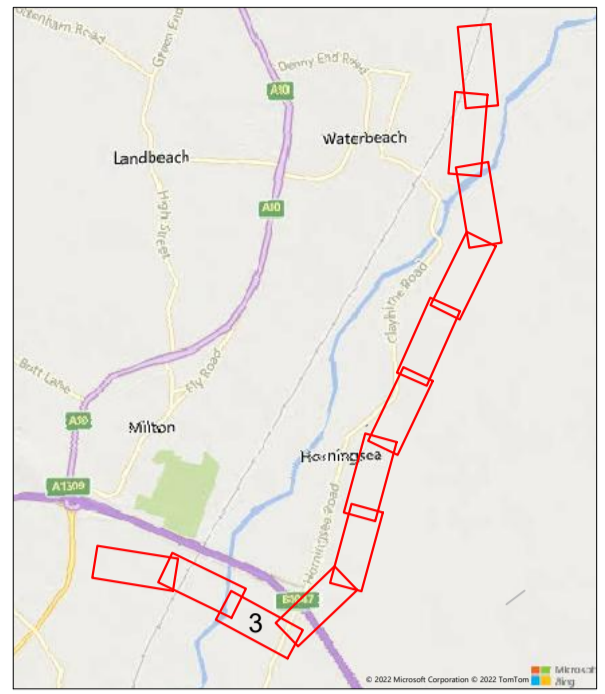
Table 1-1: Schedule of plans in this application document

Application Document Ref	Document Title	Drawing Number	Revision	Status
4.14.0	4.14.0 Design Plans – Waterbeach Pipeline Long Sections – Key Plan	00001-100006-CAMEST-ZZZ-LAY-Z-9700	C02	S4
4.14.1	4.14.1 Design Plans – Waterbeach Pipeline Long Sections – Sheet 1	00001-100006-CAMEST-ZZZ-LAY-Z-9701	C01	S4
4.14.2	4.14.2 Design Plans – Waterbeach Pipeline Long Sections – Sheet 2	00001-100006-CAMEST-ZZZ-LAY-Z-9702	C01	S4
4.14.3	4.14.3 Design Plans – Waterbeach Pipeline Long Sections – Sheet 3	00001-100006-CAMEST-ZZZ-LAY-Z-9703	C01	S4
4.14.4	4.14.4 Design Plans – Waterbeach Pipeline Long Sections – Sheet 4	00001-100006-CAMEST-ZZZ-LAY-Z-9704	C01	S4

Application Document Ref	Document Title	Drawing Number	Revision	Status
4.14.5	4.14.5 Design Plans – Waterbeach Pipeline Long Sections – Sheet 5	00001-100006-CAMEST-ZZZ-LAY-Z-9705	C01	S4
4.14.6	4.14.6 Design Plans – Waterbeach Pipeline Long Sections – Sheet 6	00001-100006-CAMEST-ZZZ-LAY-Z-9706	C01	S4
4.14.7	4.14.7 Design Plans – Waterbeach Pipeline Long Sections – Sheet 7	00001-100006-CAMEST-ZZZ-LAY-Z-9707	C02	S4
4.14.8	4.14.8 Design Plans – Waterbeach Pipeline Long Sections – Sheet 8	00001-100006-CAMEST-ZZZ-LAY-Z-9708	C02	S4
4.14.9	4.14.9 Design Plans – Waterbeach Pipeline Long Sections – Sheet 9	00001-100006-CAMEST-ZZZ-LAY-Z-9709	C01	S4
4.14.10	4.14.10 Design Plans – Waterbeach Pipeline Long Sections – Sheet 10	00001-100006-CAMEST-ZZZ-LAY-Z-9710	C01	S4
4.14.11	4.14.11 Design Plans – Waterbeach Pipeline Long Sections – Sheet 11	00001-100006-CAMEST-ZZZ-LAY-Z-9711	C01	S4
4.14.12	4.14.12 Design Plans – Waterbeach Pipeline Long Sections – Sheet 12	00001-100006-CAMEST-ZZZ-LAY-Z-9711	C02	S4



C01	20/01/23	FOR DCO SUBMISSION	S4	JJP	MR	MH	DES'D: XLI	DATE: 20/01/23	DRAWN: JJP	DATE: 20/01/23	CHK'D: MR	DATE: 20/01/23	APP'D: MH	DATE: 20/01/23	SCALE: 1:10000	@ A1
REV	DATE	DETAILS	STAT	BY	CHK	APP										
CAMBRIDGE WASTE WATER TREATMENT PLANT RELOCATION PROJECT			4.14.0 DESIGN PLANS WATERBEACH PIPELINE LONG SECTIONS KEY PLAN REGULATION 5(2)(o)								The plan is produced by Anglian Water Services Limited, from Ordnance Survey Crown Copyright, Licence 100022432. This map is to be used for the purposes of viewing the location of Anglian Water plant only. Any other use of the map data or further copies are not permitted. This notice is not intended to exclude or restrict liability for death or personal injury resulting from negligence. The original document stored in the BIM 360 Doc Project carry the version, suitability code, revision and approval information. Prints are uncontrolled and shall not be used for construction.				A1	
DRAWING No. 00001-100006-CAMEST-ZZZ-LAY-Z-9700											REV. C01 S4					



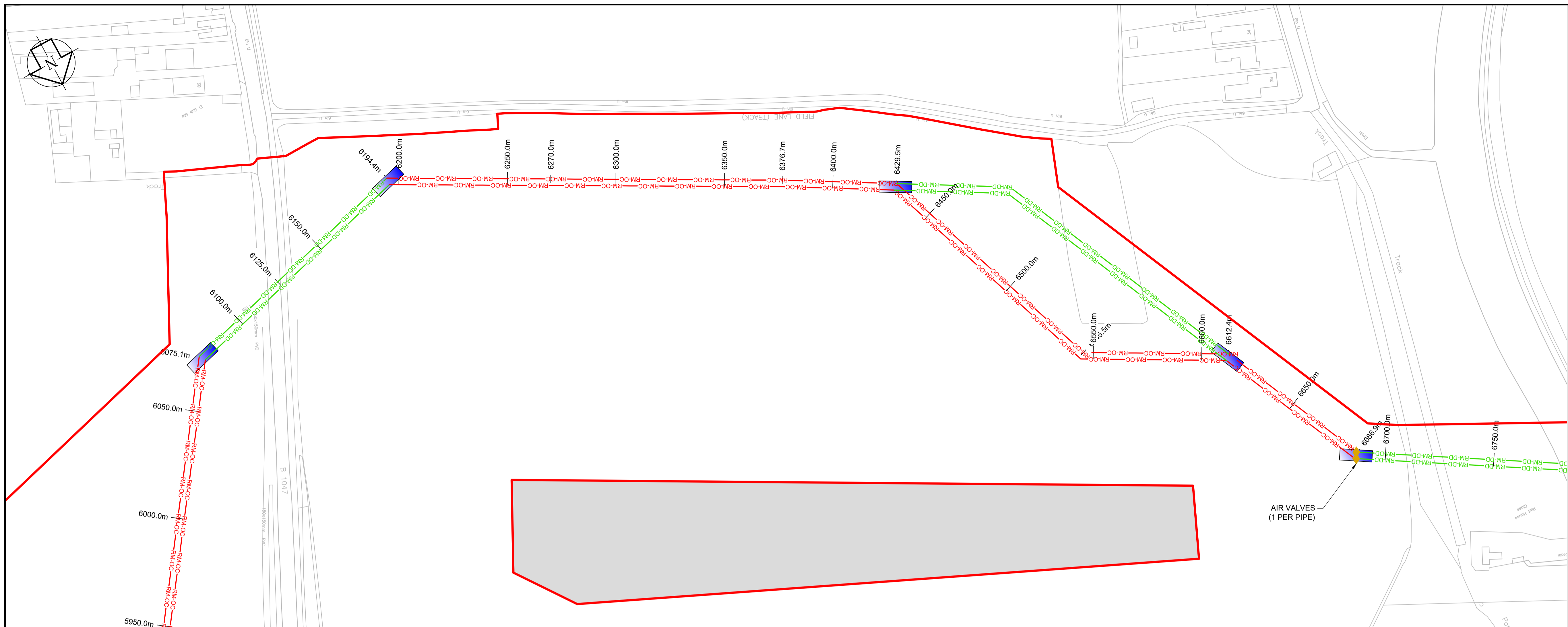
KEY PLAN

GENERAL NOTES

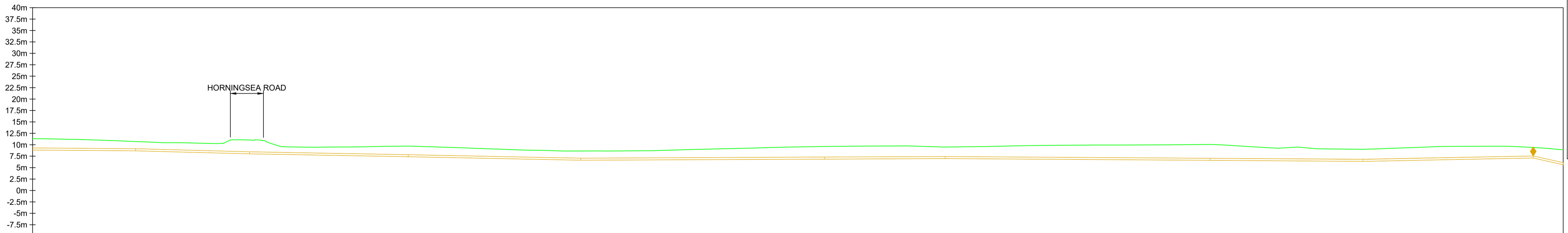
1. WATERBEACH PIPELINE ROUTE IS INDICATIVE.
2. LAYOUT PLANS HAVE BEEN ORIENTATED SO THAT FEATURES ALIGN WITH CROSS SECTIONS.
3. THE LEGEND IS IDENTICAL ON ALL SHEETS OF THE WORKS PLANS AND THEREFORE NOT ALL ITEMS DETAILED IN THE LEGEND ARE REPRESENTED ON EACH SHEET.
4. PE = POLYETHYLENE.
5. WATERBEACH PUMPING STATION IS TO BE CONFIRMED AT DETAIL DESIGN STAGE AND MAY BE LOCATED FURTHER NORTH WITHIN THE FIELD OR EXISTING WATERBEACH WATER RECYCLING CENTRE SITE.

LEGEND

- [Red outline box] SCHEME ORDER LIMITS
- [Grey box] LAND OUTSIDE SCHEME ORDER LIMITS
- [Red dashed line] PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY OPEN CUT
- [Green dashed line] PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY DIRECTIONAL DRILL
- [Yellow dashed line] PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY TUNNELLING
- [Purple dashed line] PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS ABOVE GROUND
- [Blue rectangle] LAUNCH AND RECEPTION PIT FOR DIRECTIONAL DRILL
- [Yellow diamond] INDICATIVE AIR VALVE LOCATION
- [Blue line] EXISTING SURFACE WATERCOURSE
- [Green line] EXISTING GROUND LEVEL
- [Orange line] PROPOSED TWIN 500mm DIAMETER SEWER RISING MAINS IN SECTION



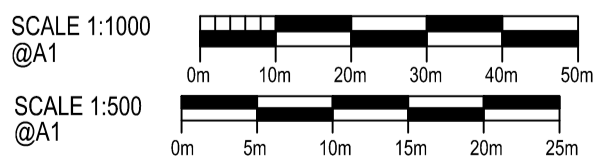
PLAN
1:1000



CHAINAGE (m)	EXISTING GROUND LEVEL (m)	DEPTH TO INVERT (m)	INVERT LEVEL (m)	PIPE GRADIENT	PIPE DETAILS
6030.0	11.346	2.480	8.866	1:271	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
6040.0	11.288				
6050.0	11.156				
6060.0	10.986				
6070.0	10.813				
6075.1	10.689	2.000	8.689		
6090.0	10.458				
6100.0	10.386				
6110.0	10.273				
6120.0	11.084	3.000	8.083		
6125.0	11.033				
6130.0	10.993				
6140.0	9.586				
6150.0	9.482				
6160.0	9.495				
6170.0	9.513				
6180.0	9.617				
6190.0	9.683				
6194.4	9.702	2.300	7.402		
6200.0	9.627				
6210.0	9.467				
6220.0	9.294				
6230.0	9.113				
6240.0	8.935				
6250.0	8.795				
6260.0	8.668				
6270.0	8.638	2.000	6.638		
6280.0	8.639				
6290.0	8.670				
6300.0	8.701				
6310.0	8.831				
6320.0	8.973				
6330.0	9.087				
6340.0	9.215				
6350.0	9.348				
6360.0	9.478				
6370.0	9.564				
6376.7	9.616	2.737	6.879		
6380.0	9.635				
6390.0	9.683				
6400.0	9.730				
6410.0	9.750				
6420.0	9.646				
6429.5	9.498	2.500	6.998		
6430.0	9.505				
6440.0	9.582				
6450.0	9.647				
6460.0	9.761				
6470.0	9.845				
6480.0	9.883				
6490.0	9.920				
6500.0	9.943				
6510.0	9.955				
6520.0	9.974				
6530.0	10.010				
6540.0	10.058				
6545.5	10.074	3.462	6.612		
6550.0	9.990				
6560.0	9.688				
6570.0	9.394				
6580.0	9.382				
6590.0	9.218				
6600.0	9.075				
6610.0	8.900				
6620.0	9.026				
6630.0	9.135	2.617	6.389		
6640.0	9.317				
6650.0	9.500				
6660.0	9.632				
6670.0	9.659				
6680.0	9.685				
6690.0	9.586				
6700.0	9.473	2.300	7.170		
6710.0	8.954	3.305	5.649		

NEW FOUL RM - LONGSECTION 3 OF 12
SCALE: HORIZONTAL 1:1000, VERTICAL 1:500. DATUM: (-10.00m)

TWIN 500mm PE100 SDR11 PIPES BY DIRECTIONAL DRILLING



REV	DATE	DETAILS	STAT	BY	CHK	APP
C01	20/01/23	FOR DCO SUBMISSION	S4	JJP	MR	MH

DES'D:	DATE:	SCALE:
XLI	20/01/23	AS SHOWN @A1
DRAWN:	DATE:	
JJP	20/01/23	
CHK'D:	DATE:	
MR	20/01/23	
APP'D:	DATE:	
MH	20/01/23	

PROJECT TITLE
CAMBRIDGE WASTE WATER TREATMENT PLANT RELOCATION PROJECT

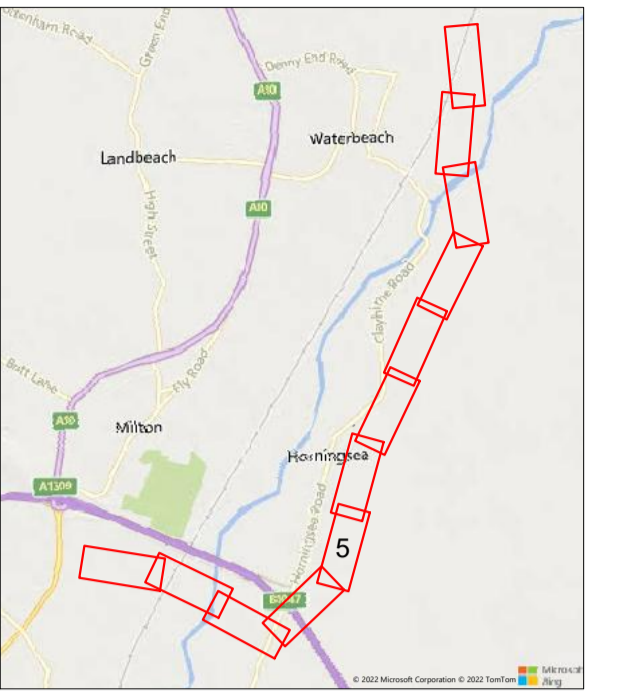
DRAWING TITLE
4.14.3 DESIGN PLANS WATERBEACH PIPELINE LONG SECTIONS SHEET 3 REGULATION 5(2)(o)

Thorpe Wood House, Thorpe Wood, Peterborough, Cambridgeshire, PE3 9WT
Tel: 01733 414100 Fax: 01733 414111

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DRAWING No. **00001-100006-CAMEST-ZZZ-LAY-Z-9703**

REV. **A1**
C01 S4



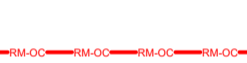



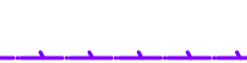






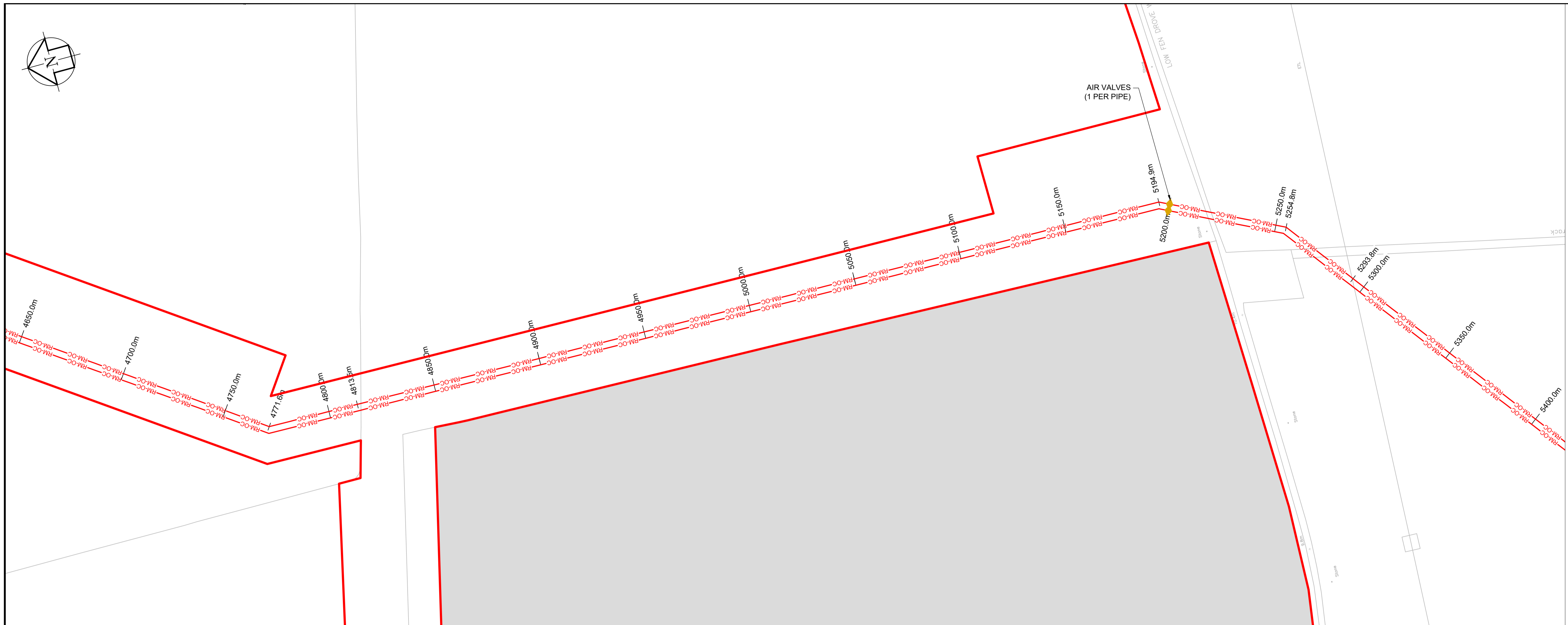
KEY PLAN

GENERAL NOTES

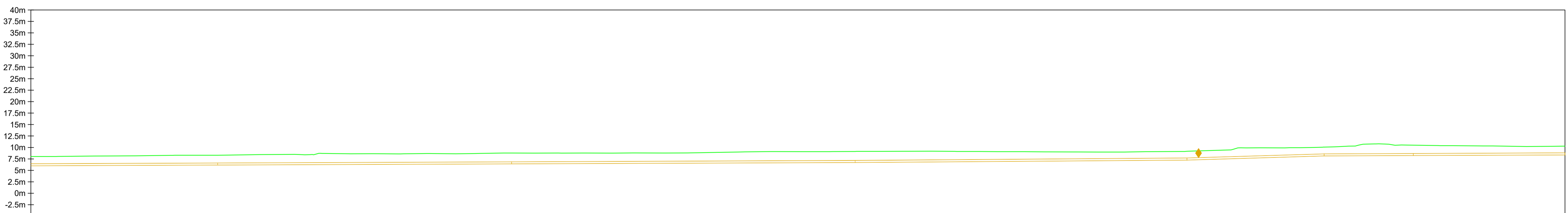
1. WATERBEACH PIPELINE ROUTE IS INDICATIVE.
2. LAYOUT PLANS HAVE BEEN ORIENTATED SO THAT FEATURES ALIGN WITH CROSS SECTIONS.
3. THE LEGEND IS IDENTICAL ON ALL SHEETS OF THE WORKS PLANS AND THEREFORE NOT ALL ITEMS DETAILED IN THE LEGEND ARE REPRESENTED ON EACH SHEET.
4. PE = POLYETHYLENE.
5. WATERBEACH PUMPING STATION IS TO BE CONFIRMED AT DETAIL DESIGN STAGE AND MAY BE LOCATED FURTHER NORTH WITHIN THE FIELD OR EXISTING WATERBEACH WATER RECYCLING CENTRE SITE.

LEGEND

-  SCHEME ORDER LIMITS
-  LAND OUTSIDE SCHEME ORDER LIMITS
-  PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY OPEN CUT
-  PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY DIRECTIONAL DRILL
-  PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY TUNNELLING
-  PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS ABOVE GROUND
-  LAUNCH AND RECEPTION PIT FOR DIRECTIONAL DRILL
-  INDICATIVE AIR VALVE LOCATION
-  EXISTING SURFACE WATERCOURSE
-  EXISTING GROUND LEVEL
-  PROPOSED TWIN 500mm DIAMETER SEWER RISING MAINS IN SECTION

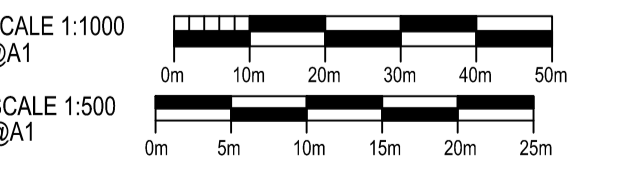


PLAN
1:1000



CHAINAGE (m)	EXISTING GROUND LEVEL (m)	DEPTH TO INVERT (m)	INVERT LEVEL (m)	PIPE GRADIENT	PIPE DETAILS
4690.0	8.013	2.000	6.013	1:500	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
4700.0	8.031	2.110	6.176		
4710.0	8.087			1:500	
4720.0	8.139				
4730.0	8.159			1:500	
4750.0	8.273				
4760.0	8.286			1:500	
4770.0	8.287				
4780.0	8.358			1:500	
4790.0	8.437				
4800.0	8.465			1:500	
4810.0	8.412				
4813.5	8.417			1:500	
4820.0	8.676				
4830.0	8.612			1:500	
4840.0	8.637				
4850.0	8.604			1:500	
4860.0	8.660				
4870.0	8.650			1:500	
4880.0	8.654				
4890.0	8.722			1:500	
4900.0	8.781	2.348	6.433		
4910.0	8.763			1:500	
4920.0	8.774				
4930.0	8.786			1:500	
4940.0	8.772				
4950.0	8.794			1:500	
4960.0	8.796				
4970.0	8.795			1:500	
4980.0	8.836				
4990.0	8.924			1:500	
5000.0	9.018				
5010.0	9.085			1:500	
5020.0	9.093				
5030.0	9.086			1:500	
5040.0	9.093				
5050.0	9.132	2.399	6.733	1:500	
5060.0	9.149				
5070.0	9.156			1:500	
5080.0	9.183				
5090.0	9.155			1:500	
5100.0	9.122				
5110.0	9.095			1:500	
5120.0	9.089				
5130.0	9.055			1:272	
5140.0	9.029				
5150.0	9.011			1:272	
5160.0	8.999				
5170.0	9.021			1:272	
5180.0	9.089				
5190.0	9.108			1:272	
5194.9	9.167	1.900	7.267		
5200.0	9.257			1:272	
5210.0	9.404				
5220.0	9.916			1:67	
5230.0	9.921				
5240.0	9.957			1:67	
5250.0	10.000				
5254.8	10.066	1.900	8.166	1:67	
5260.0	10.152				
5270.0	10.511			1:480	
5280.0	10.763				
5290.0	10.532			1:480	
5293.8	10.501	2.253	8.247		
5300.0	10.449			1:480	
5310.0	10.389				
5320.0	10.347			1:480	
5330.0	10.309				
5340.0	10.232			1:480	
5350.0	10.236				
5360.0	10.279			1:480	
5390.0	10.279				

NEW FOUL RM - LONGSECTION 5 OF 12
SCALE: HORIZONTAL 1:1000, VERTICAL 1:500. DATUM: (-5.00m)



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DRAWN: JJP	DATE: 20/01/23	
CHK'D: MR	DATE: 20/01/23	
APP'D: MH	DATE: 20/01/23	

STAT	BY	CHK	APP
S4	JJP	MR	MH

PROJECT TITLE
CAMBRIDGE WASTE WATER TREATMENT PLANT RELOCATION PROJECT

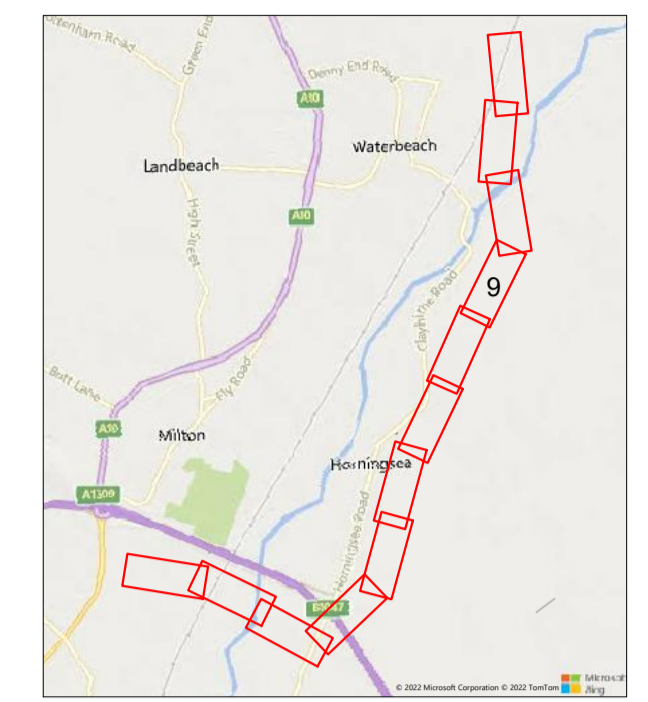
DRAWING TITLE
4.14.5 DESIGN PLANS WATERBEACH PIPELINE LONG SECTIONS SHEET 5 REGULATION 5(2)(o)



DRAWING No. **00001-100006-CAMEST-ZZZ-LAY-Z-9705**

REV. **C01 S4**

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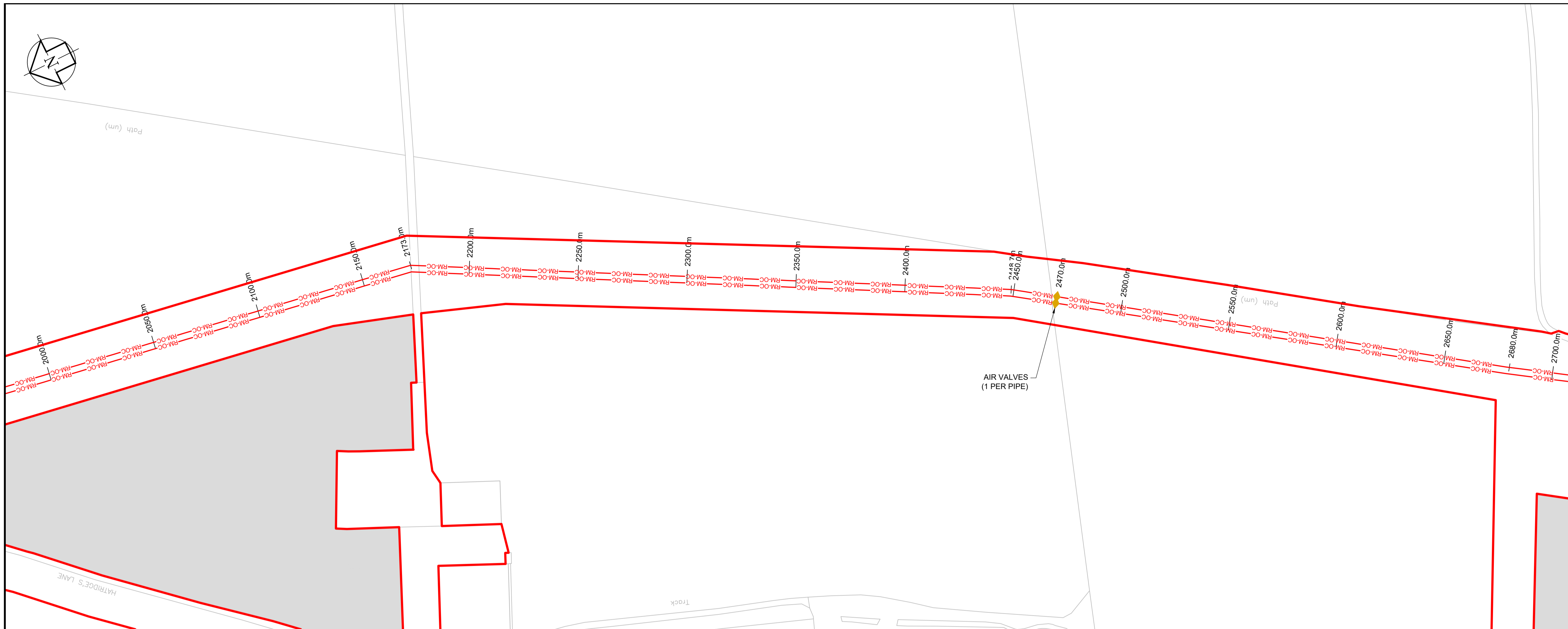
KEY PLAN

GENERAL NOTES

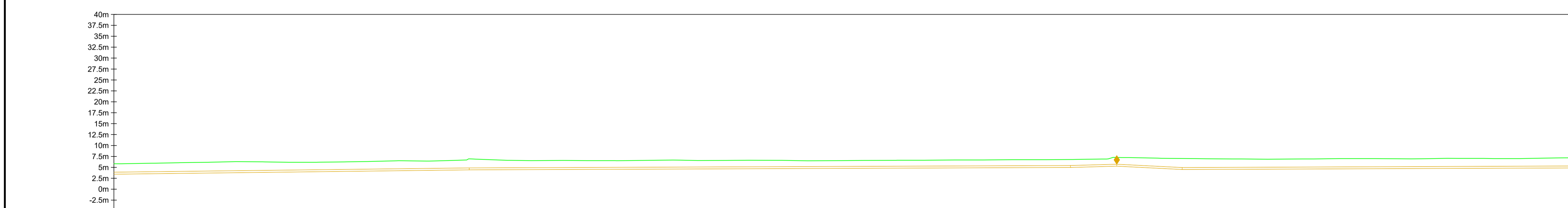
1. WATERBEACH PIPELINE ROUTE IS INDICATIVE.
2. LAYOUT PLANS HAVE BEEN ORIENTATED SO THAT FEATURES ALIGN WITH CROSS SECTIONS.
3. THE LEGEND IS IDENTICAL ON ALL SHEETS OF THE WORKS PLANS AND THEREFORE NOT ALL ITEMS DETAILED IN THE LEGEND ARE REPRESENTED ON EACH SHEET.
4. PE = POLYETHYLENE.
5. WATERBEACH PUMPING STATION IS TO BE CONFIRMED AT DETAIL DESIGN STAGE AND MAY BE LOCATED FURTHER NORTH WITHIN THE FIELD OR EXISTING WATERBEACH WATER RECYCLING CENTRE SITE.

LEGEND

- SCHEME ORDER LIMITS
- LAND OUTSIDE SCHEME ORDER LIMITS
- PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY OPEN CUT
- PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY DIRECTIONAL DRILL
- PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS BY TUNNELLING
- PROPOSED TWIN 500mm DIAMETER PE SEWER RISING MAINS ABOVE GROUND
- LAUNCH AND RECEPTION PIT FOR DIRECTIONAL DRILL
- INDICATIVE AIR VALVE LOCATION
- EXISTING SURFACE WATERCOURSE
- EXISTING GROUND LEVEL
- PROPOSED TWIN 500mm DIAMETER SEWER RISING MAINS IN SECTION

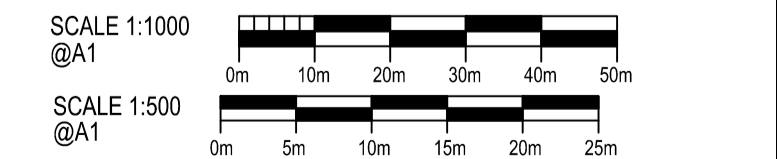


PLAN
1:1000



CHAINAGE (m)	EXISTING GROUND LEVEL (m)	DEPTH TO INVERT (m)	INVERT LEVEL (m)	PIPE GRADIENT	PIPE DETAILS
2010.0	5.827	2.368	3.458	1:166	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2020.0	5.877				
2030.0	5.970			1:166	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2040.0	6.063				
2050.0	6.138				
2070.0	6.290				
2080.0	6.241				
2090.0	6.158				
2100.0	6.161				
2110.0	6.211				
2120.0	6.287			4.442	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2130.0	6.386				
2140.0	6.509			1:500	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2150.0	6.459				
2160.0	6.512	2.500	4.442		
2170.0	6.665				
2173.0	6.392				
2180.0	6.804				
2190.0	6.615				
2200.0	6.543				
2210.0	6.558				
2220.0	6.566				
2230.0	6.546			1:72	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2240.0	6.531				
2250.0	6.581				
2260.0	6.638				
2270.0	6.639				
2280.0	6.559				
2290.0	6.577				
2300.0	6.619				
2310.0	6.614				
2320.0	6.573				
2330.0	6.506				
2340.0	6.537				
2350.0	6.569				
2360.0	6.594				
2370.0	6.616				
2380.0	6.631			2.000	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2390.0	6.669				
2400.0	6.686			1:39	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2410.0	6.701				
2420.0	6.742				
2430.0	6.750				
2440.0	6.768			4.526	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2448.7	6.889 2448.7	1.806	4.994		
2450.0	6.876			1:500	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2470.0	7.287	2.000	5.287		
2480.0	7.196				
2490.0	7.067				
2500.0	7.026	2.500	4.526		
2510.0	6.969				
2520.0	6.929				
2530.0	6.888				
2540.0	6.861				
2550.0	6.902				
2560.0	6.921				
2570.0	6.983			2.297	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2580.0	7.006				
2590.0	6.992				
2600.0	6.964				
2610.0	6.964				
2620.0	7.052			1:472	TWIN 500mm PE100 SDR11 PIPES BY OPEN CUT
2630.0	7.053				
2640.0	7.031				
2650.0	7.008				
2660.0	7.050				
2670.0	7.137				
2680.0	7.163				

NEW FOUL RM - LONGSECTION 9 OF 12
SCALE: HORIZONTAL 1:1000, VERTICAL 1:500. DATUM: (-10.00m)



DES'D: XLI	DATE: 20/01/23	SCALE: 1:2000 @A1	PROJECT TITLE	DRAWING TITLE	anlianwater	<small>The plan is produced by Anlian Water Services Limited, from Ordnance Survey Crown Copyright, Licence 100022432. This map is to be used for the purposes of viewing the location of Anlian Water plant only. Any other use of the map data or further copies are not permitted. The notice is not intended to exclude or restrict liability for death or personal injury resulting from negligence. The original document stored in the BIM 360 Doc Project carry the version, suitability code, revision and approval information. Prints are uncontrolled and shall not be used for construction.</small>	<div style="font-size: 2em; font-weight: bold; text-align: center;">A1</div>
DRAWN: JJP	DATE: 20/01/23		CAMBRIDGE WASTE WATER TREATMENT PLANT	4.14.9 DESIGN PLANS WATERBEACH PIPELINE	Thorpe Wood House, Thorpe Wood, Peterborough, Cambridgeshire, PE3 8WT Tel: 01733 414100 Fax: 01733 414111		
CHK'D: MR	DATE: 20/01/23		RELOCATION PROJECT	LONG SECTIONS SHEET 9			
APP'D: MH	DATE: 20/01/23			REGULATION 5(2)(o)			

REV	DATE	DETAILS	STAT	BY	CHK	APP
C01	20/01/23	FOR DCO SUBMISSION	S4	JJP	MR	MH

Get in touch

You can contact us by:



Emailing at info@cwwtpr.com



Calling our Freephone information line on **0808 196 1661**



Writing to us at **Freepost: CWWTPR**

You can view all our DCO application documents and updates on the application on The Planning Inspectorate website:

<https://infrastructure.planninginspectorate.gov.uk/projects/eastern/cambridge-waste-water-treatment-plant-relocation/>