It's everyone's water

J682.69

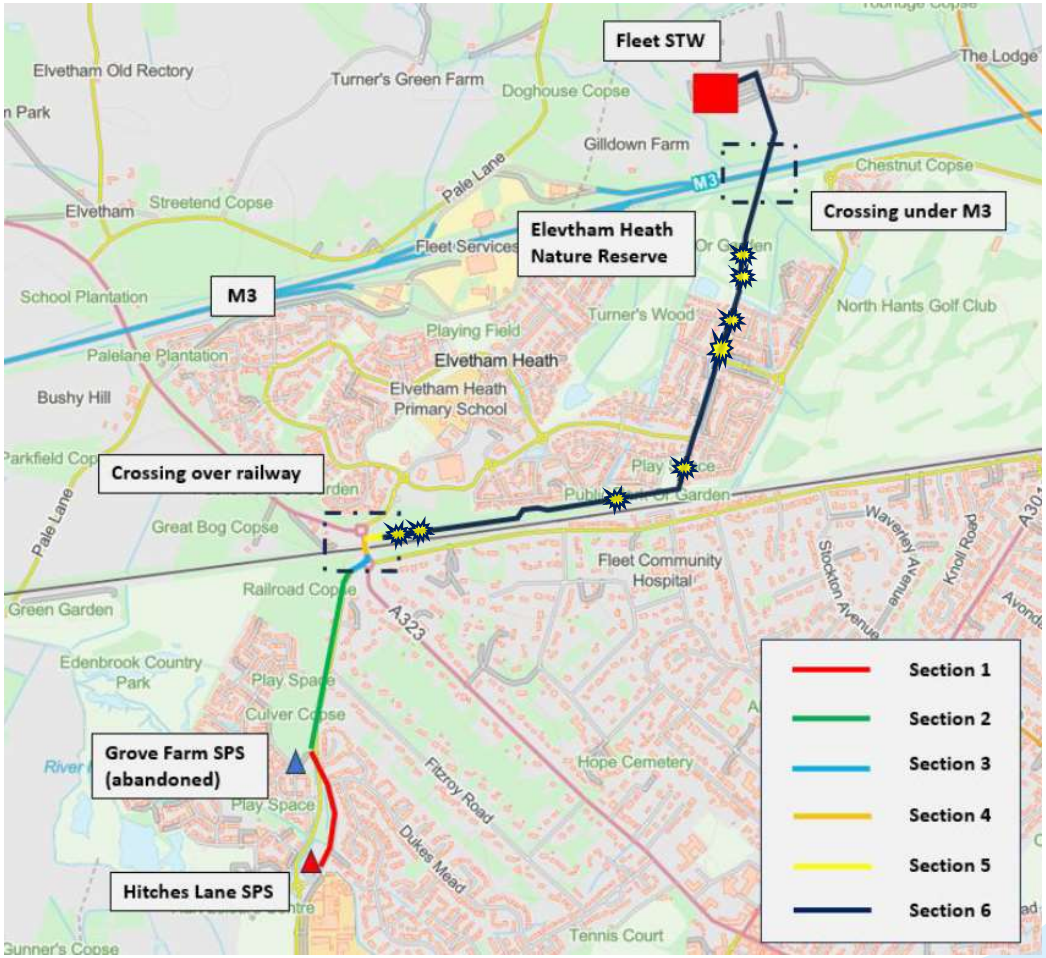
Hitches Lane Rising Main, Fleet. Hampshire

Leaks on Rising Main

Hitches Lane Rising Main – Overview

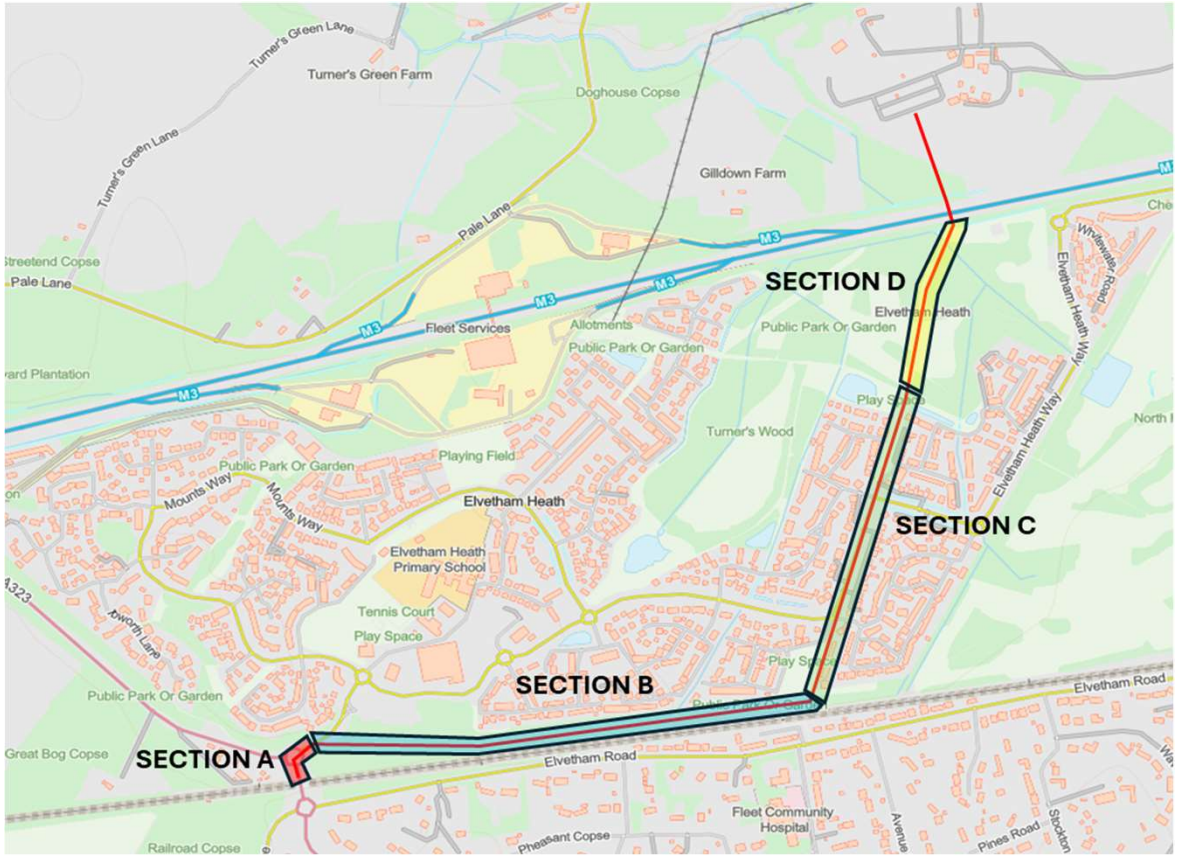
Overview

- Hitches Lane PS – Rising Main connects the Pumping Station to Fleet Sewage Treatment Works
- Pumps discharge around 215 litres/second (in Dry Weather – 300 litres/second in Wet Weather. This is between 774 and 1080 tonnes per hour.
- Upgrade of PS and approximately 512m of rising main in 2012 when Grove Farm Pumping Station was replaced by Hitches Lane Pumping Station
- Wet well (storage tank) at Hitches Lane Pumping Station holds approx. 5200m³ (5.2 million litres) which can give us the ability to shut down for around 8 hours if the tank is empty.
- In dry weather a burst can require around 30 tankers and specialist pumps to control the flow.
- Tanker control in wet weather is 48 tankers with specialist pumps.
- Section 6, where the leaks are located, was installed in 1988 just before Water Privatisation (1989).



What are we Proposing to do.

Site Broken into 4 sections



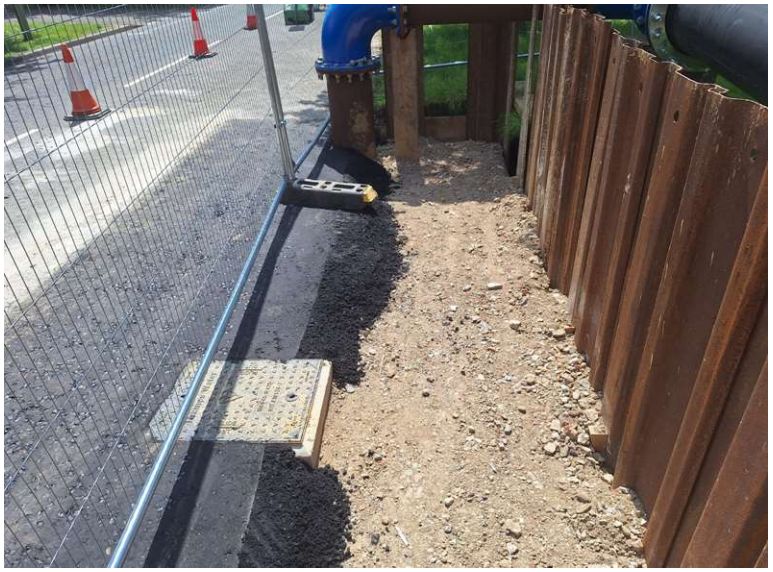
Section A (5A)	– 125m
Section B (6B)	- 800m
Section C (6C)	– 600m
Section D (6D)	– 310m
Total Length	= 1835m

What happened last week

Three leaks had to be repaired as an Emergency. Two located in a complex location on Network Rail owned land and one near the railway footbridge ramp. Between 40 and 50 tankers were required to control the flow.

What else have Thames been doing

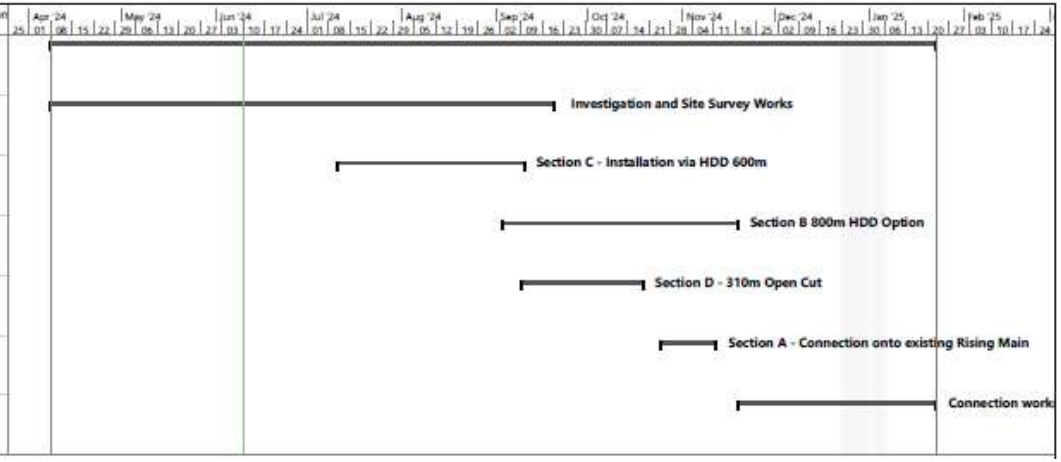
Survey works and works to make access easier



Current Programme

This is not final and maybe subject to change following ongoing investigations

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**Full Programme**	**194 days**	**Mon 08/04/24**	**Wed 22/01/25**	
2		**Investigation and Site Survey Works**	**116 days**	**Mon 08/04/24**	**Thu 19/09/24**	
28		**Section C - Installation via HDD 600m**	**42 days**	**Thu 11/07/24**	**Mon 09/09/24**	
36		**Section B 800m HDD Option**	**55 days**	**Tue 03/09/24**	**Mon 18/11/24**	
45		**Section D - 310m Open Cut**	**30 days**	**Mon 09/09/24**	**Fri 18/10/24**	
51		**Section A - Connection onto existing Rising M**	**12 days**	**Fri 25/10/24**	**Mon 11/11/24**	
56		**Connection works**	**36 days**	**Tue 19/11/24**	**Wed 22/01/25**	



The hope is to be able to get the sections that impact residents and road users the mostly completed during the various school holidays

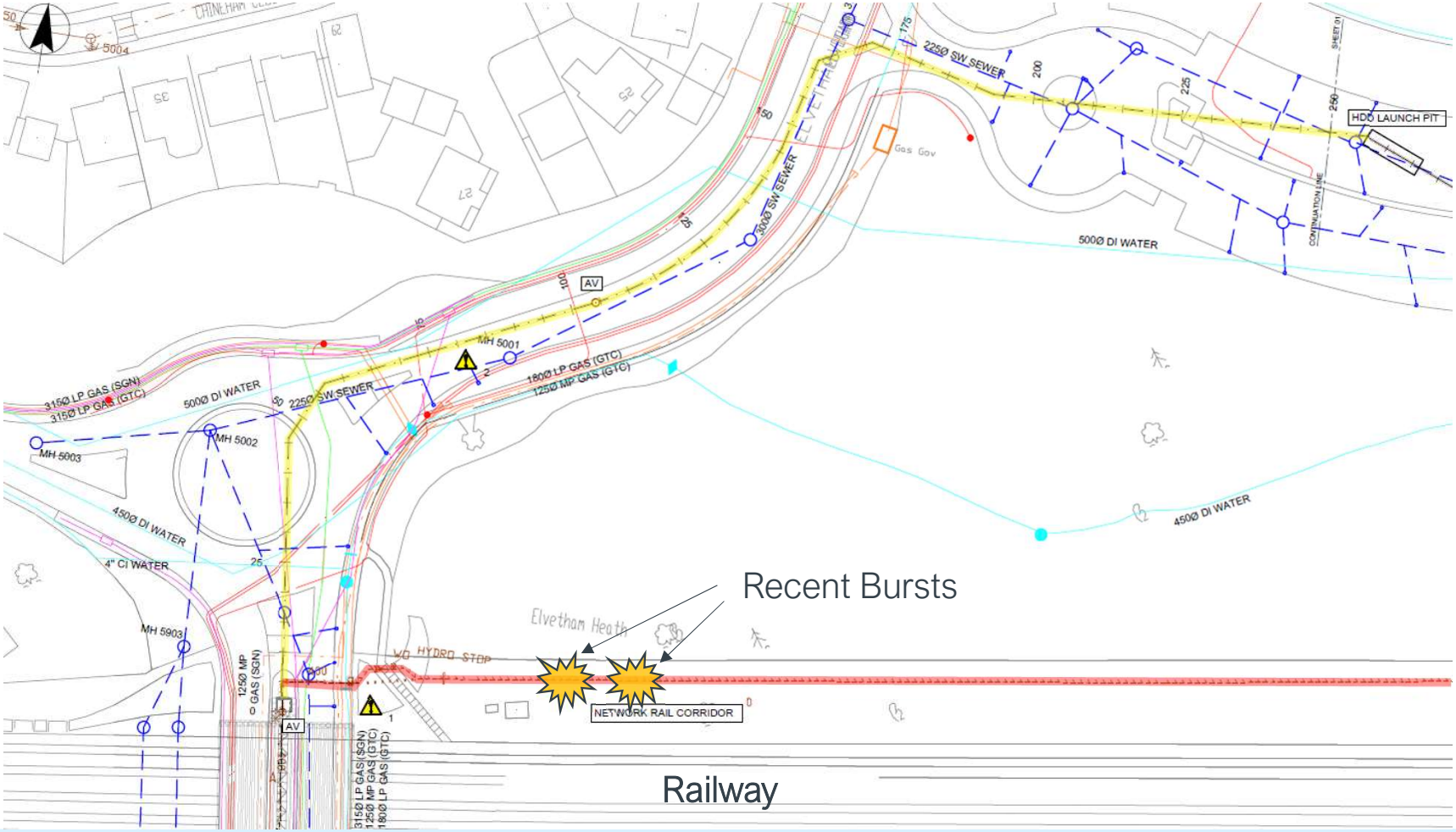
Section C – Summer Holidays

Section A – October Half Term

Final Connection Works – Christmas Holiday

Section A – Current favoured design

Fleet Road Railway Bridge to Park and Ride Car Park



Old Rising Main

New Rising Main

Current Proposed Dates

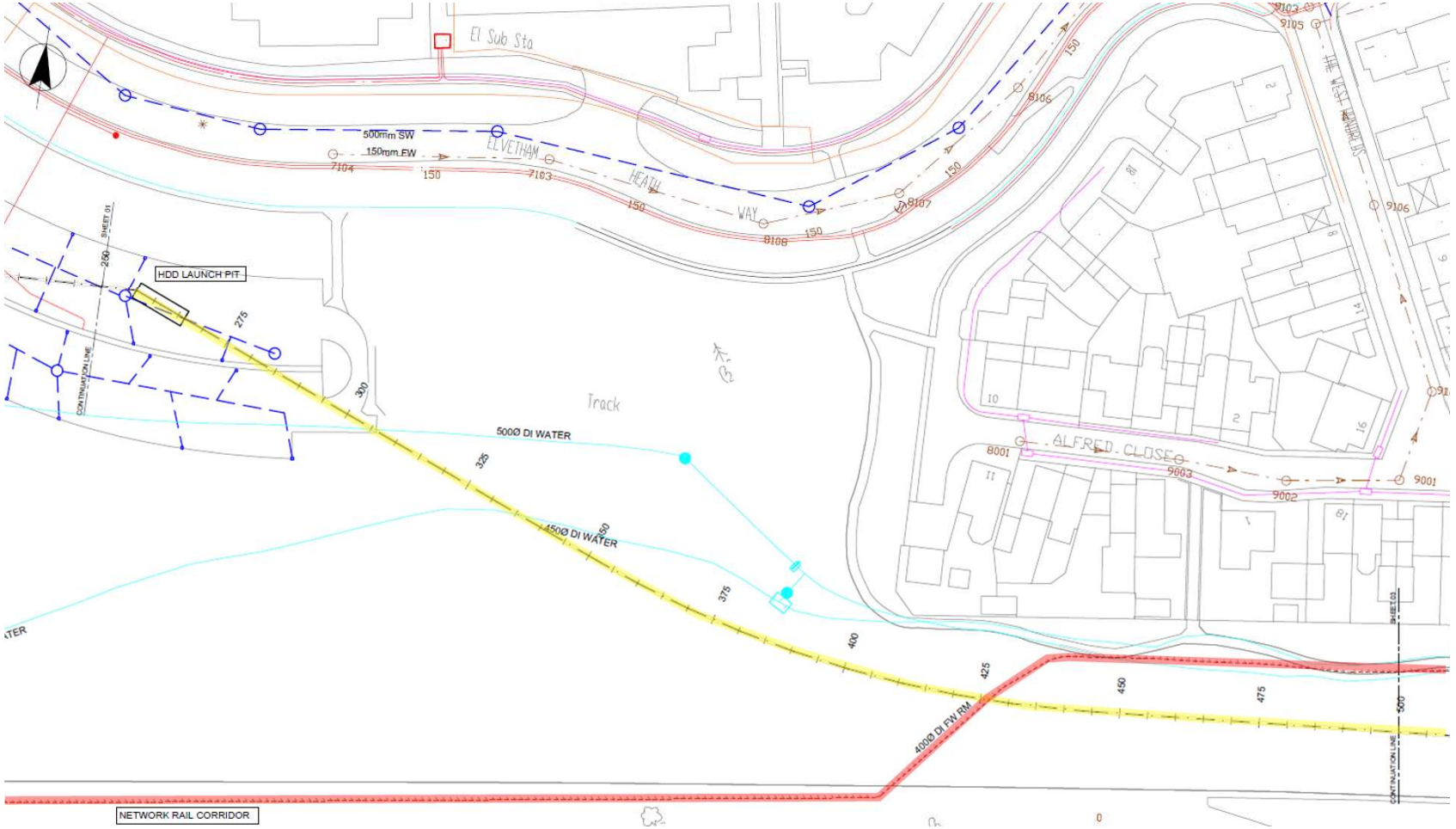
25/10/24 to 11/11/24 this may change.

Method of Construction

Open cut excavation

Section B (part 1) – Current favoured design

Fleet Road Park and Ride Car Park to Woodland



Old Rising Main

New Rising Main

Current Proposed Dates

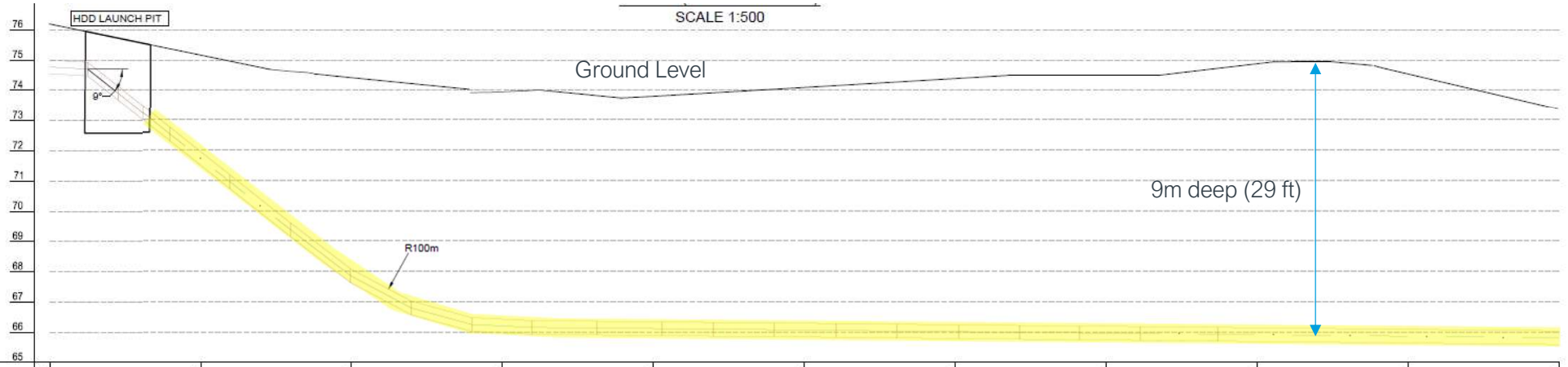
03/09/24 to 18/11/24 this may change.

Method of Construction

Horizontal Directional Drilling (HDD)

Section B (part 1) – Current favoured design

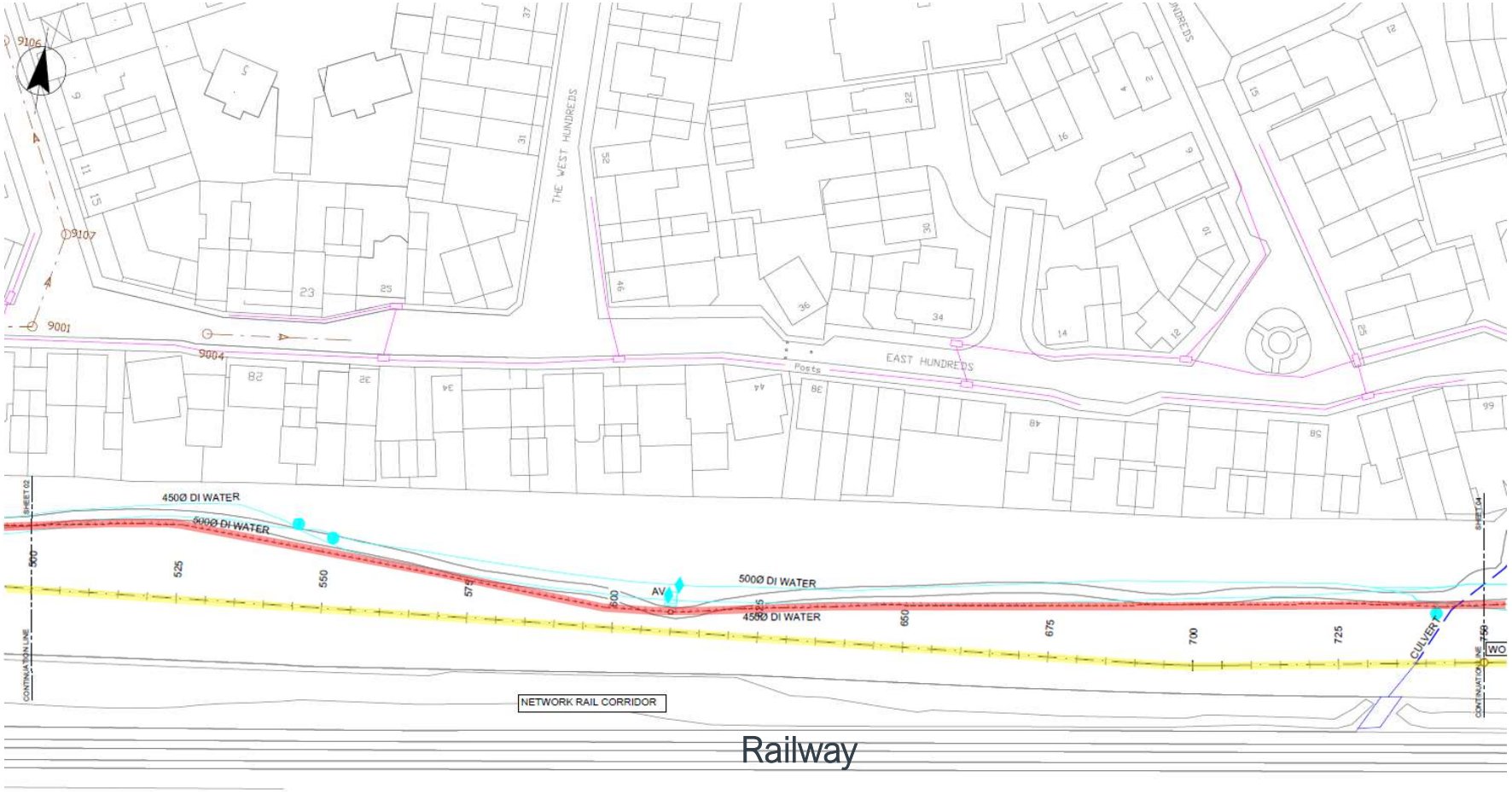
Fleet Road Park and Ride Car Park to Woodland



CHAINAGE (m)	250					275		300		325		350		375		400		425		450	475	500
GROUND LEVEL (mAOD)		???	???	???	???		???	74.63	???	???	73.92	73.95	74.00	???	???	???	???	???	???	???	???		
CROWN LEVEL (mAOD)	75.19	74.89	74.08	73.43	72.71		71.13	69.56	68.03	66.98	66.43		66.34	66.32	66.29	66.28	66.26		66.24	66.22	66.20	66.18	66.16		66.14	66.11			
INVERT LEVEL (mAOD)	74.82	74.52	73.71	73.06	72.34		70.76	69.19	67.67	66.61	66.07		65.97	65.95	65.93	65.91	65.89		65.87	65.85	65.83	65.81	65.79		65.77	65.74			
DEPTH OF COVER (m)	-0.22	-0.22	-0.22	-0.22	-0.22		-0.22	5.03	-0.22	-0.22	7.45		7.62	-0.22	-0.22	-0.22	-0.22		-0.22	-0.22	-0.22	-0.22	-0.22		-0.22	-0.22			
PIPE LENGTH		26.27	5.07	4.11	4.55	10.00	10.00	10.00	10.00	10.00	10.00	10.79	10.77	8.54	10.00	10.29	10.09	10.22	10.13	9.79	10.13	12.84	246.83					
PIPE GRADIENT																												
MATERIAL																												
TOPOGRAPHY/ LAND OWNERSHIP																												
CONSTRUCTION	HDD																										OPEN CUT	

Section B (part 2) – Current favoured design

Woodland Parallel to Railway



Old Rising Main

New Rising Main

Current Proposed Dates

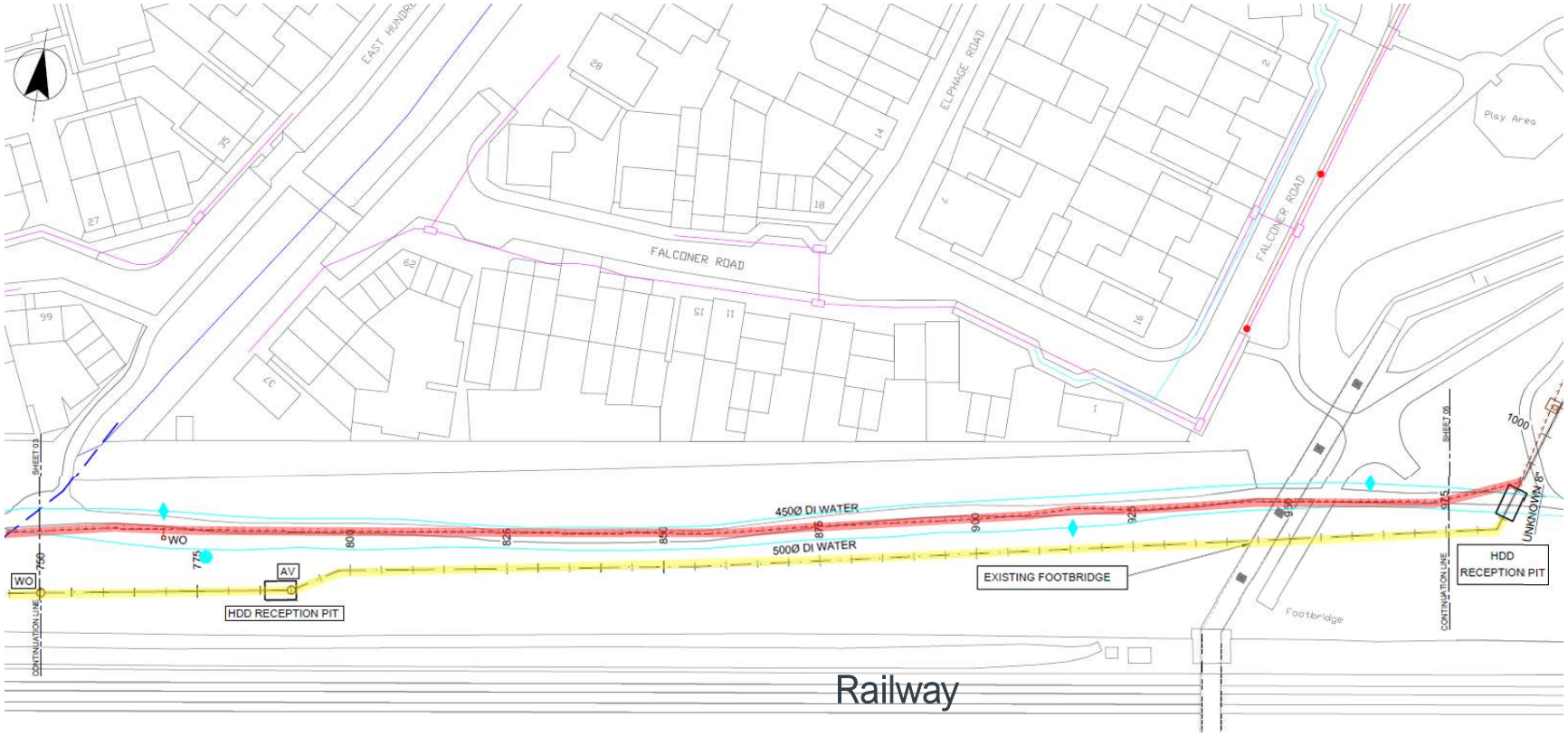
03/09/24 to 18/11/24 this may change.

Method of Construction

Horizontal Directional Drilling (HDD)

Section B (part 3) – Current favoured design

Woodland Parallel to Railway as far as the Railway Bridge



Old Rising Main

New Rising Main

Current Proposed Dates

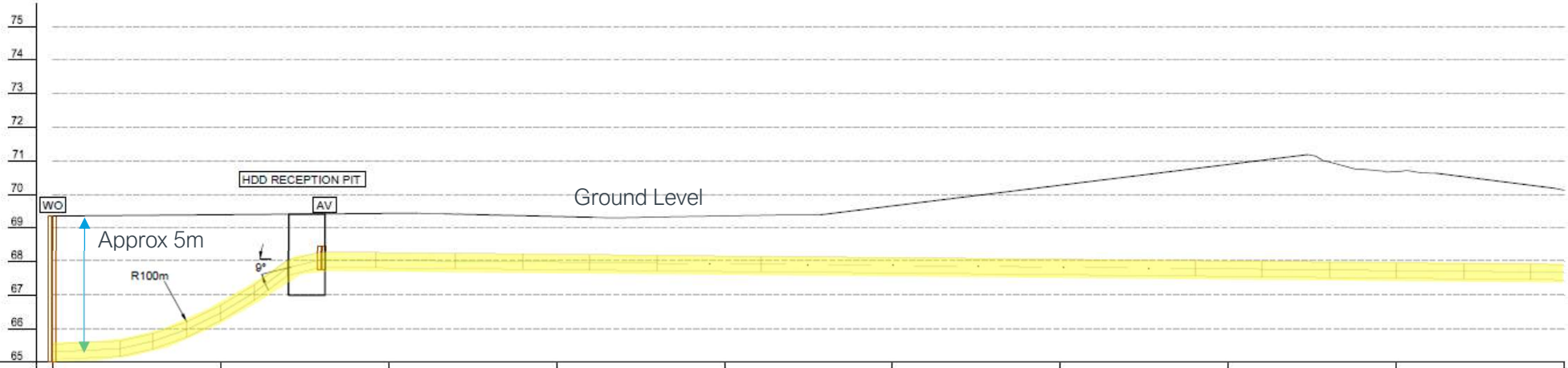
03/09/24 to 18/11/24 this may change.

Method of Construction

Horizontal Directional Drilling (HDD) and Open Cut Excavation

Section B (part 3) – Current favoured design

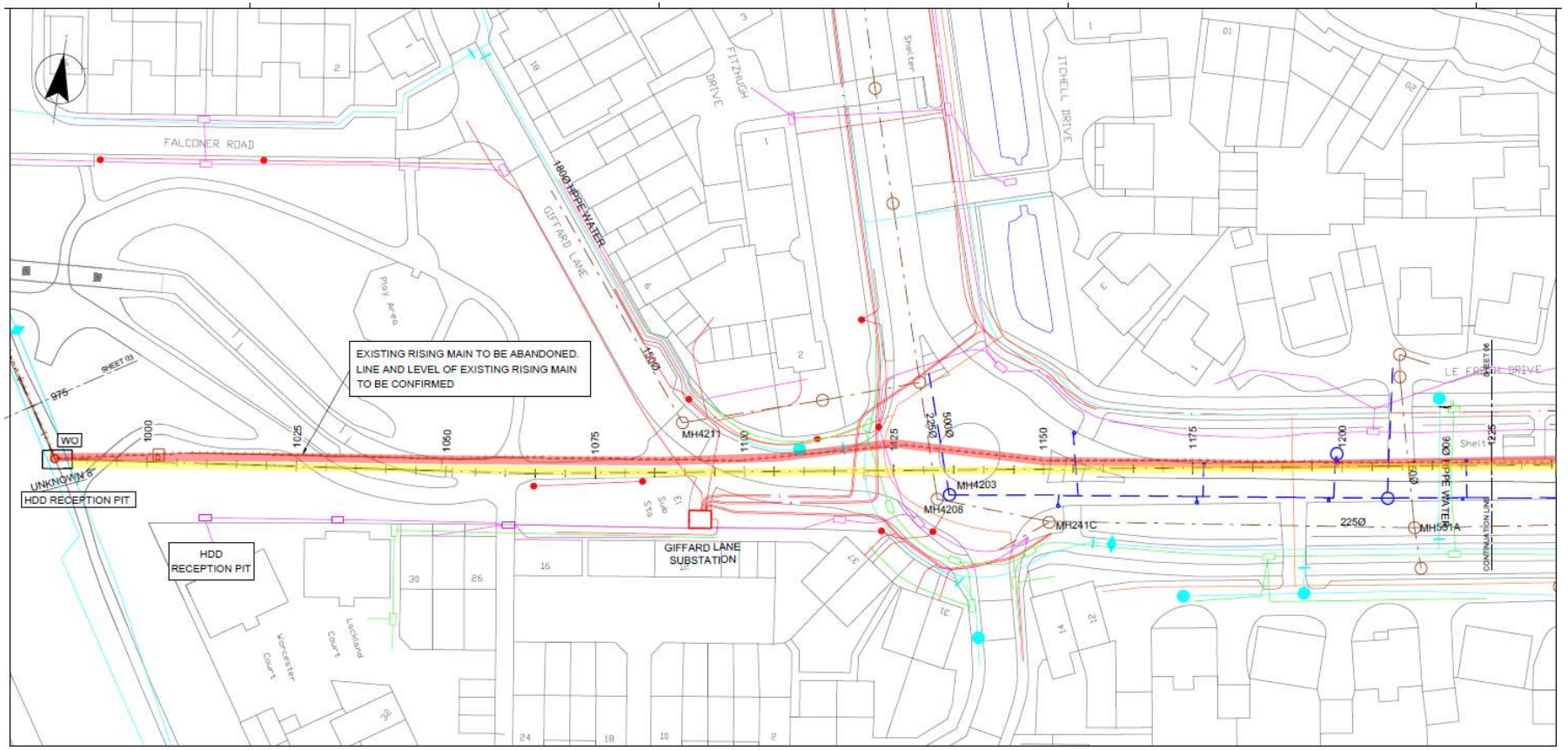
Woodland Parallel to Railway as far as the Railway Bridge



CHAINAGE (m)	750					775					800					825					850					875					900					925					950					975
GROUND LEVEL (mAOD)	???		???	???	???		???	???	???	???		???	???		69.32	69.32	69.36	69.38					???			???	???	70.96	**70.68**	???	???	???	70.12
CROWN LEVEL (mAOD)	**65.59**		65.59	65.81	66.16	66.63	67.23	67.96	68.20	68.19		68.16	68.14		68.12	68.09	68.07					67.94			67.92	67.90	67.88	67.86	67.84																		
INVERT LEVEL (mAOD)	**65.13**		65.22	65.44	65.79	66.27	66.87	67.59	67.84	67.82		67.80	67.78		67.76	67.73	67.71					67.58			67.56	67.54	67.52	67.50	67.48																		
DEPTH OF COVER (m)	**-0.22**		-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22		-0.22	-0.22		1.15	1.19	1.26					-0.22			-0.22	3.02	2.75	-0.22	-0.22																		
PIPE LENGTH	44	60	10.00	5.00	5.00	5.00	5.00	5.00	5.00	8.21	11.79	10.00	10.00	10.00	15.49	64.51								10.00	10.00	10.00	10.00	10.00	10.00																	
PIPE GRADIENT	1:500	-1:107		-1:23	-1:14	-1:11	-1:8	-1:7	-1:21	1:500	1:500	1:500	1:500	1:500	1:737	1:500								1:500	1:500	1:500	1:500	1:500	1:500																	
MATERIAL																																													
TOPOGRAPHY/ LAND OWNERSHIP																																													
CONSTRUCTION	OPEN CUT																																												

Section C – (Part 1) Current favoured design

Network Rail Footbridge to Elvetham Heath Way



Old Rising Main

New Rising Main

Current Proposed Dates

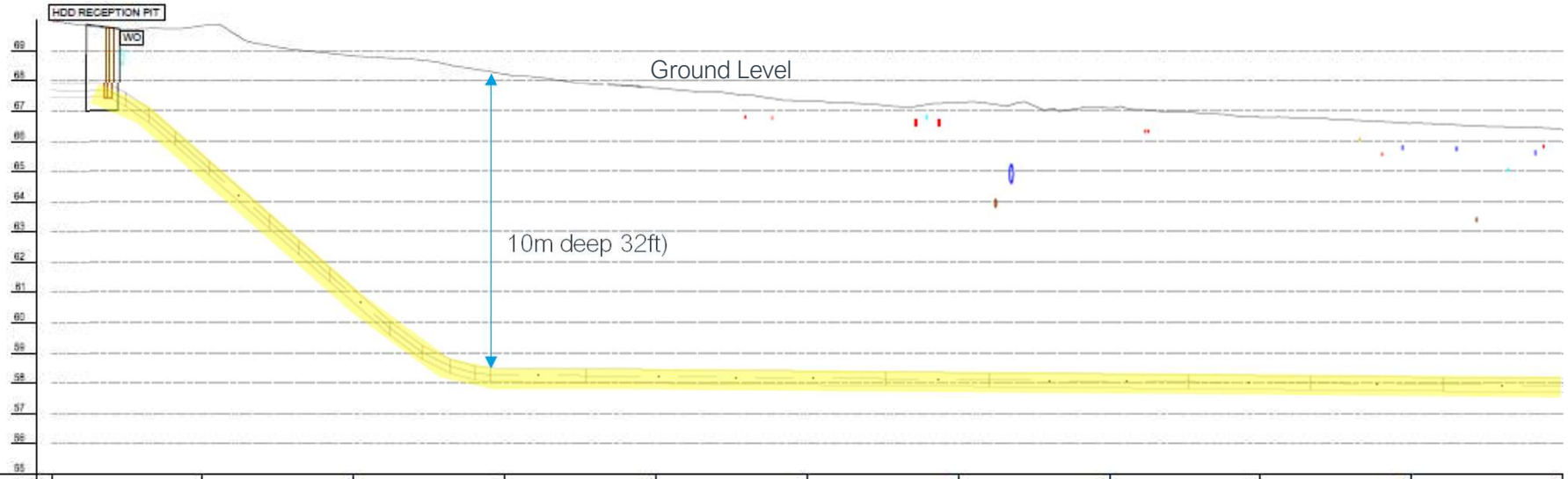
11/07/24 to 09/09/24 this may change.

Method of Construction

Horizontal Directional Drilling (HDD)

Section C – (Part 1) Current favoured design

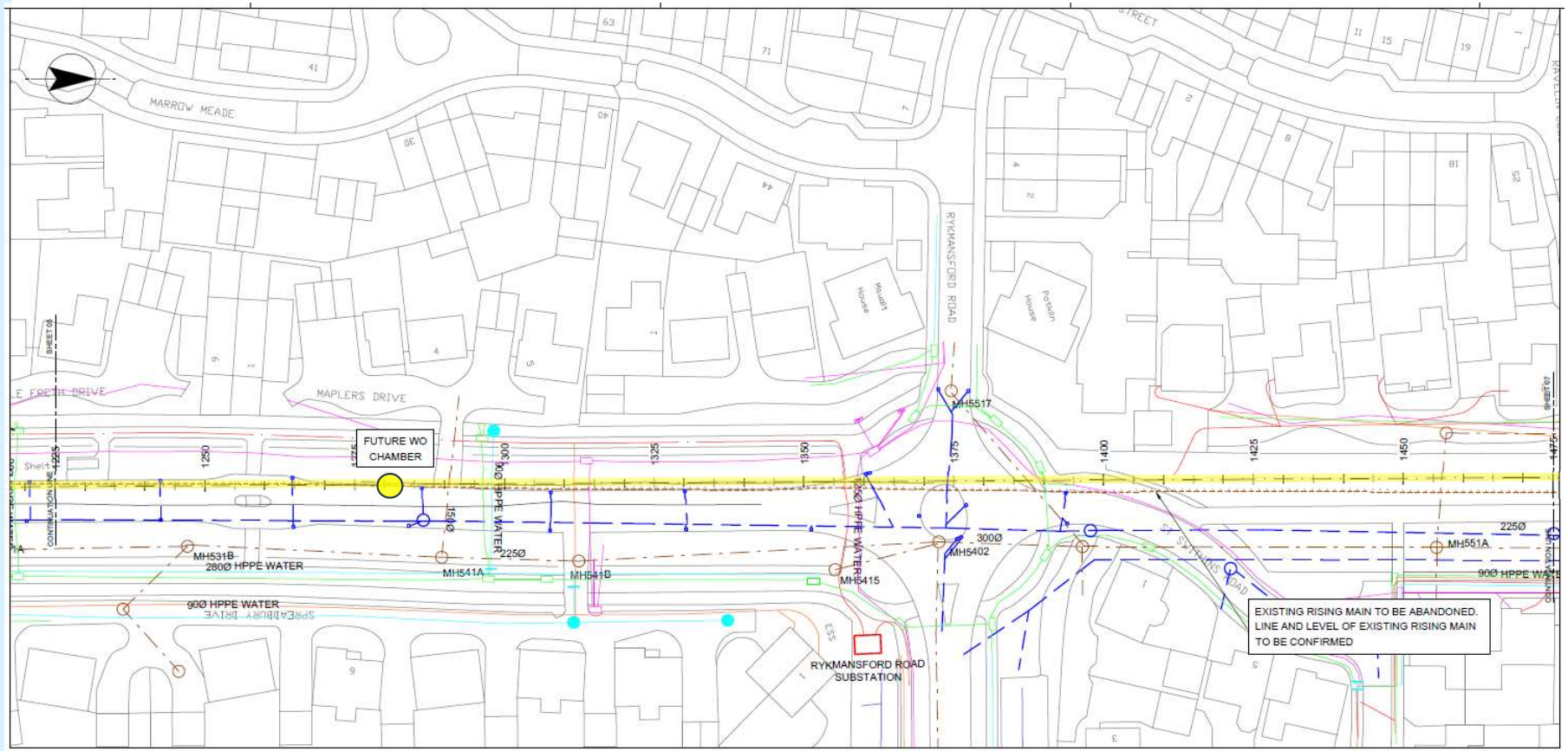
Network Rail Footbridge to Elvetham Heath Way



CHAINAGE (m)	975						1000					1025					1050	1075		1100		1125		1150			1175			1200		1225
GROUND LEVEL (mAOD)	69.99		69.75	69.71	69.74	69.73	69.83	69.86	69.17		69.02	68.91	68.82	68.75	68.68	68.60	68.39	68.22	67.89	67.74		67.32	67.16	67.26	67.23		67.08	66.84	66.77	66.75		66.57	66.54	66.39
CROWN LEVEL (mAOD)	67.89		67.85	67.55	67.03	66.26	65.28		63.52	62.63	62.27	61.75		59.99	59.20	58.73	58.51	58.45	58.42			58.32		58.28			58.22		58.18			58.13	
INVERT LEVEL (mAOD)	67.53		67.49	67.18	66.66	65.89	64.91		63.15	62.27	61.99	61.39		59.62	58.83	58.36	58.14	58.08	58.05			57.95		57.91			57.85		57.81			57.76	
DEPTH OF COVER (m)	2.39		1.85	2.12	2.67	3.44	4.54		3.61	4.34	4.27	4.11		8.72	9.44	9.74	9.83	9.81	9.44			8.80		8.90			8.68		8.53			8.37	
PIPE LENGTH		19.91		2.92	3.82	4.47	5.53	10.00		5.00	5.00	10.00		5.28	4.72	3.91	2.71	15.80	49.63			17.01		32.89			20.31		22.00			68.79	
PIPE GRADIENT		1:500		1:10	1:7	1:6	1:6	1:6		1:6	1:6	1:6		1:7	1:10	1:18	1:43	1:465	1:500			1:500		1:500			1:500		1:500			1:500	
MATERIAL																																	
TOPOGRAPHY/ LAND OWNERSHIP																																	
CONSTRUCTION		OPEN CUT																	HDD														

Section C – (Part 2) Current favoured design

Elvetham Heath Way



Old Rising Main

New Rising Main

Current Proposed Dates

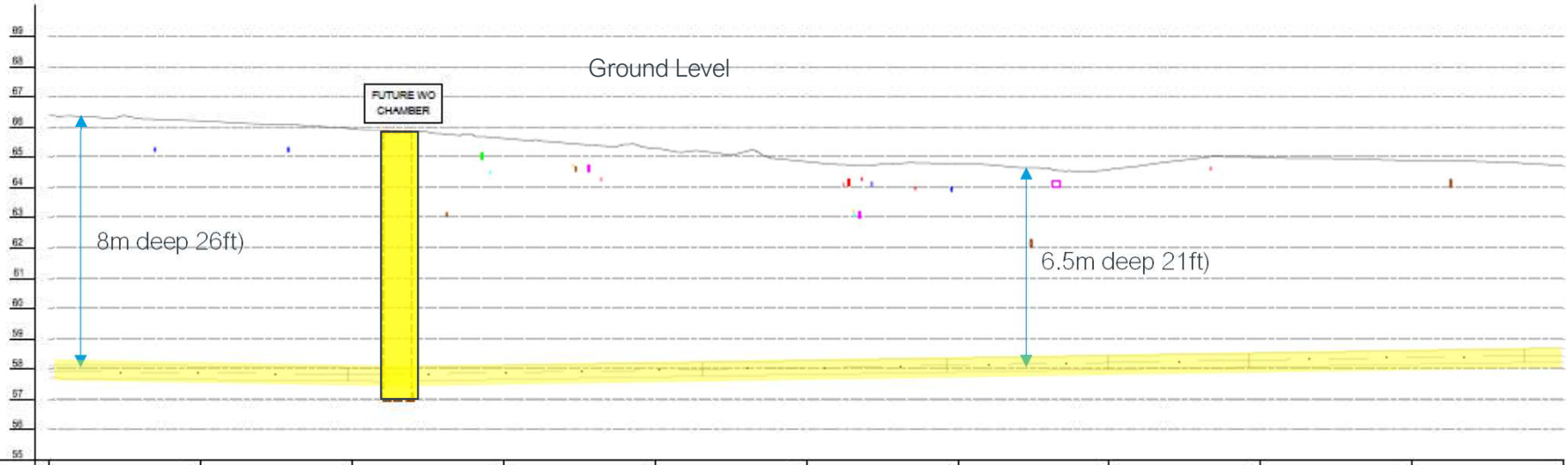
11/07/24 to 09/09/24 this may change.

Method of Construction

Horizontal Directional Drilling (HDD)

Section C – (Part 2) Current favoured design

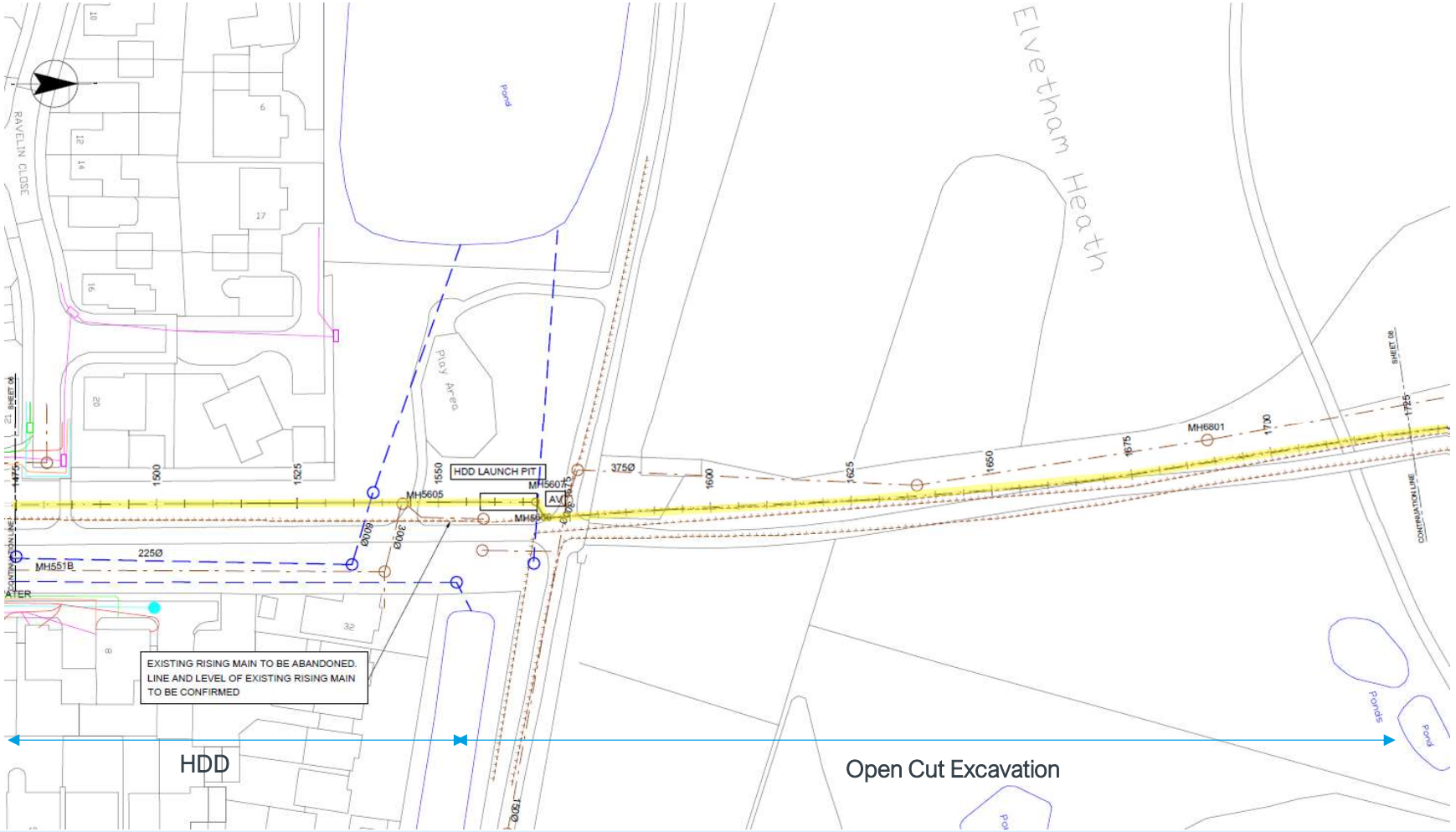
Elvetham Heath Way



CHAINAGE (m)	1225	1250	1275	1300	1325	1350	1375	1400	1425	1450	1475
GROUND LEVEL (mAOD)	66.39	66.20	65.86	65.60	65.25	65.17	64.83	64.76 / 64.75	64.58	64.48 / 64.47	64.77	64.69
CROWN LEVEL (mAOD)	58.13	57.99	57.98	58.16	58.29	58.38	58.46	58.61	
INVERT LEVEL (mAOD)	57.76	57.63	57.61	57.79	57.92	58.01	58.09	58.24	
DEPTH OF COVER (m)	8.37	7.92	7.84	6.97	6.43	6.14	6.48	6.12	
PIPE LENGTH		68.79	6.33	52.13	40.36	26.76	23.23	45.42	36.90
PIPE GRADIENT		1:500	1:500	-1:300	-1:300	-1:300	-1:300	-1:299	-1:301
MATERIAL											
TOPOGRAPHY/ LAND OWNERSHIP											
CONSTRUCTION						HDD					

Section C/D – Current favoured design

Elvetham Heath Way to Nature Park



Old Rising Main

New Rising Main

Current Proposed Dates

Section C -11/07/24 to 09/09/24 this may change.

Section D -09/09/24 to 18/10/24 this may change

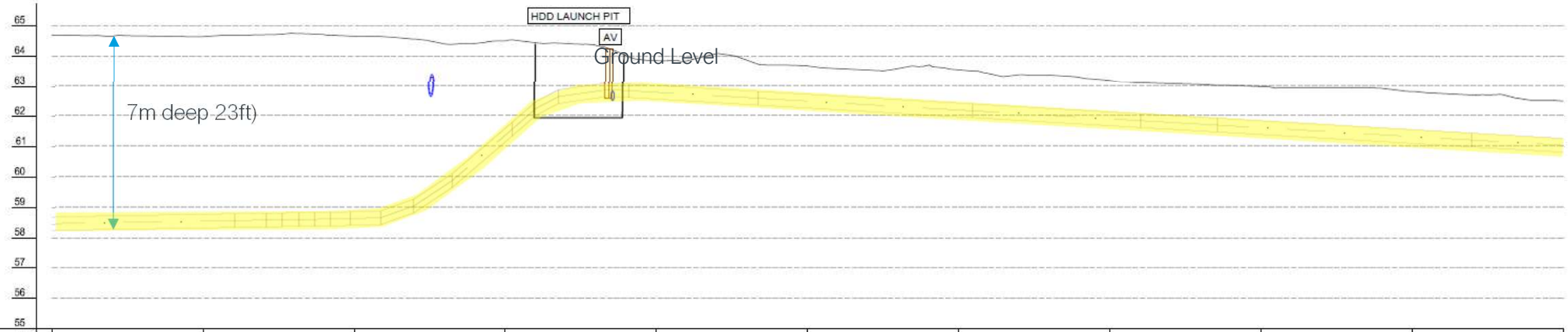
Method of Construction

Horizontal Directional Drilling (HDD) – Section C

Open Cut Excavation Section D

Section C/D – Current favoured design

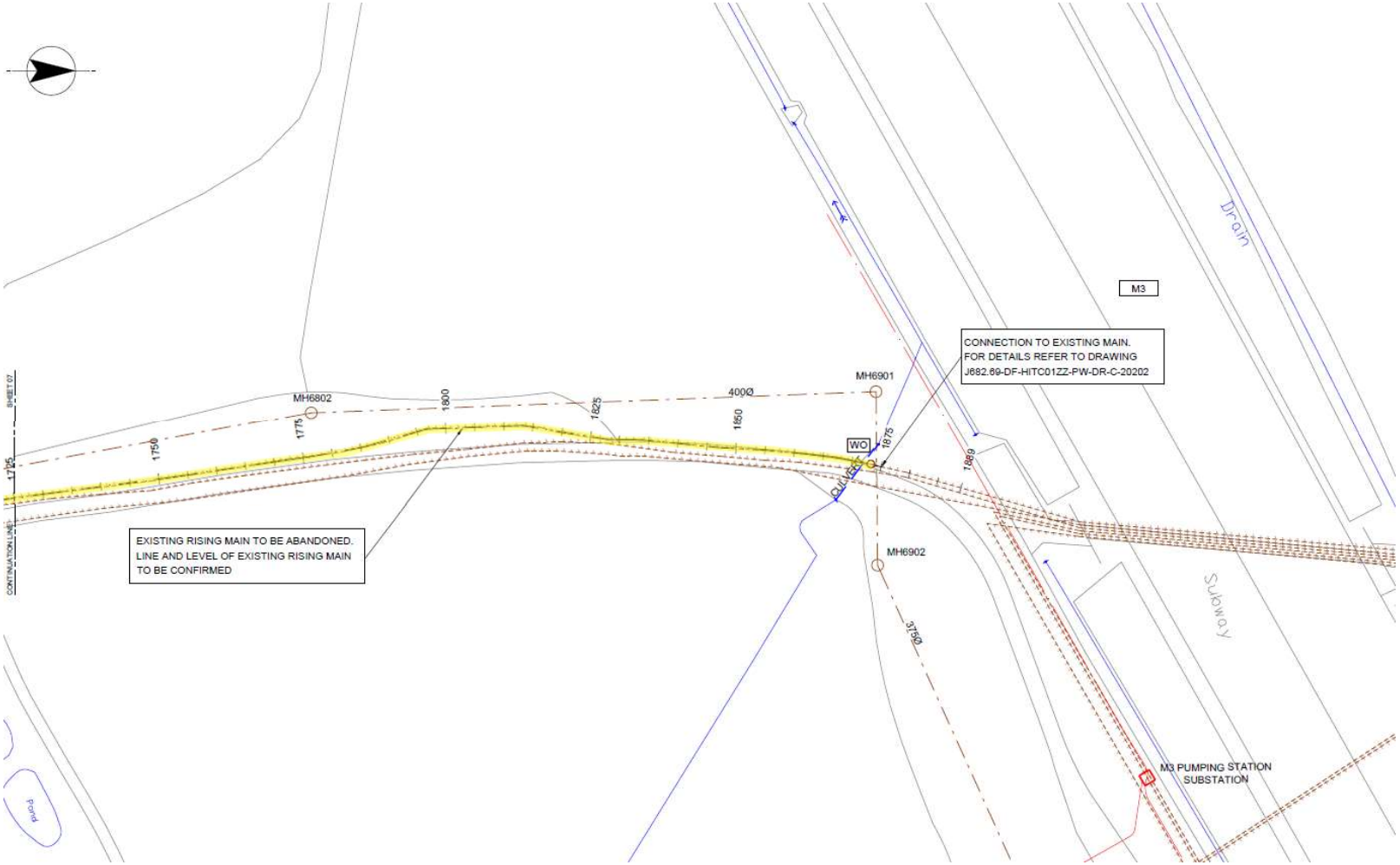
Elvetham Heath Way to Nature Park



CHAINAGE (m)	1475	1500	1525	1550	1575	1600	1625	1650	1675	1700	1725
GROUND LEVEL (mAOD)	64.69	64.64 64.69 64.71 64.73 64.74 64.72 64.69 64.66	64.64 64.56 64.39 64.50 64.55	64.44 64.42 64.24 63.96	63.84 63.73	63.67 63.54 63.50	63.18 63.10	63.00 62.95	62.79 62.67	62.47	
CROWN LEVEL (mAOD)	58.61	58.73 58.75 58.76 58.77 58.77 58.78 58.79	58.63 59.21 60.03 61.74	62.41 62.81 63.04 63.00	62.75	62.34	62.01	61.87	61.38		
INVERT LEVEL (mAOD)	58.24	58.36 58.38 58.39 58.40 58.41 58.42 58.43	58.46 58.84 59.67 61.37	62.04 62.44 62.67 62.63	62.38	61.97	61.65	61.50	61.01		
DEPTH OF COVER (m)	6.12	5.92 5.92 5.93 5.94 5.91 5.86 5.82	5.78 5.31 4.32 2.75	1.99 1.58 1.16 0.92	0.93	1.12	1.04	1.09	1.26		
PIPE LENGTH		36.90	5.14 2.62 2.62 2.62 3.21	5.03 5.49 6.26 10.00	3.83 3.83 8.25 3.30	21.37	35.43	27.93	12.53	42.15	20.15
PIPE GRADIENT		-1:301	-1:300 -1:300 -1:300 -1:300 -1:300 -1:300	1:161 -1:14 -1:8 -1:6	-1:6 -1:10 -1:35 1:86	1:86	1:86	1:86	1:86	1:86	1:86
MATERIAL											
TOPOGRAPHY/ LAND OWNERSHIP											
CONSTRUCTION		HDD				OPEN CUT					

Section D – Current favoured design

Nature Park



Old Rising Main

New Rising Main

Current Proposed Dates

Section D -09/09/24 to 18/10/24 this may change.

Method of Construction

Horizontal Directional Drilling (HDD) – Section C

Open Cut Excavation Section D

It's everyone's water

Thank You