

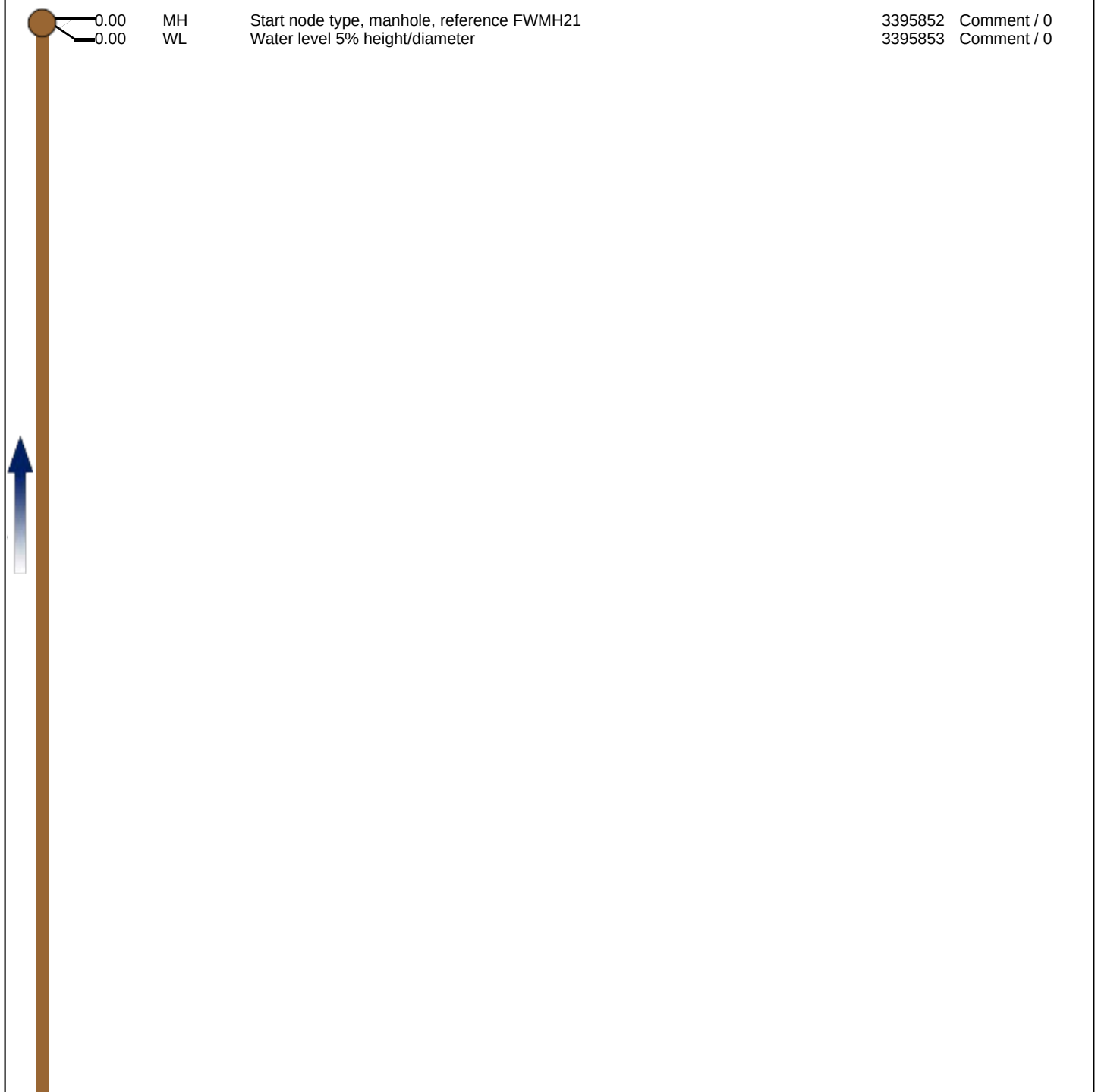
Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 17/06/2019
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JOINING ANOTHER PIPE

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH22 X	Date 17/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 26
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Polyvinyl chloride Category		Start MH FWMH21 End MH FWMH22 Total length 4.95 metres	
Scale 1:0.21 Direction Upstream				

M/H Ref:FWMH21 | I/L : metres | M/H Depth: 850 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH21	3395852	Comment / 0
0.00	WL	Water level 5% height/diameter	3395853	Comment / 0
				
4.95	MHF	Finish node type, manhole, reference FWMH22	3395856	Comment / 0

M/H Ref:FWMH22 | I/L : metres | M/H Depth: 740 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH21 X	Date 17/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 27
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Liner Category		Start MH FWMH21 End MH FWMH20 Total length 18.81 metres	
Scale 1:0.94 Direction Downstream				

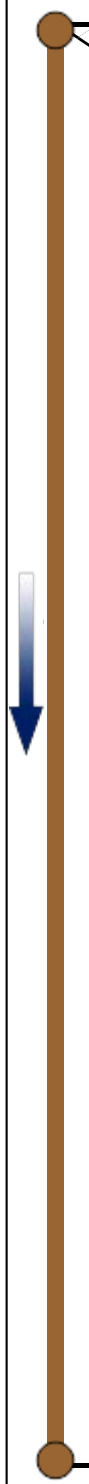
M/H Ref:FWMH21 | I/L : metres | M/H Depth: 850 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH21	3395877	Comment / 0
0.00	WL	Water level 5% height/diameter	3395879	Comment / 0
				
18.81	MHF	Finish node type, manhole, reference FWMH20	3395882	Comment / 0

M/H Ref:FWMH20 | I/L : metres | M/H Depth: 1170 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) SWMH17 X	Date 17/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 28
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 100mm Material Polyvinyl chloride Category		Start MH SWMH17 End MH SWMH6 Total length 12.69 metres	
Scale 1:0.63 Direction Downstream				

M/H Ref: SWMH17 | I/L : metres | M/H Depth: 1100 metres

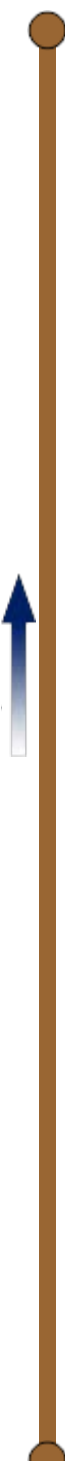
Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference SWMH17	3395911	Comment / 0
0.00	WL	Water level 5% height/diameter	3395912	Comment / 0
				
12.69	MHF	Finish node type, manhole, reference SWMH6	3395913	Comment / 0

M/H Ref: SWMH6 | I/L : metres | M/H Depth: 0 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) SWMH16 X	Date 17/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade /0	Base Unit DDFRT6A12S	Section Number 29
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 225mm Material Vitrified clay Category		Start MH SWMH7 End MH SWMH16 Total length 0 metres	

Scale **1:0.00**
Direction **Upstream**

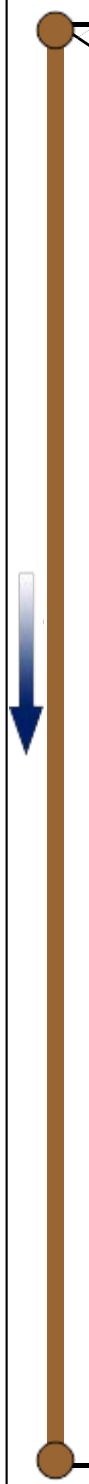
M/H Ref:SWMH7 | I/L : metres | M/H Depth: 2490 metres

	Position	Code	Description	Photo	Type/Grade
	0.00	MH	Start node type, manhole, reference SWMH7	3395973	Comment / 0
	0.00	WL	Water level 5% height/diameter	3395981	Comment / 0

M/H Ref:SWMH16 | I/L : metres | M/H Depth: 0 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) SWMH7 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 30
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 300mm Material Vitrified clay Category		Start MH SWMH7 End MH SWMH8 Total length 8.95 metres	
Scale 1:0.42 Direction Downstream				

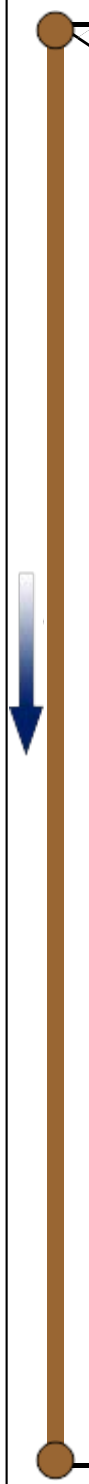
M/H Ref:SWMH7 | I/L : metres | M/H Depth: 2490 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference SWMH7	3397159	Comment / 0
0.00	WL	Water level 5% height/diameter	3397161	Comment / 0
				
8.95	MHF	Finish node type, manhole, reference SWMH8	3397163	Comment / 0

M/H Ref:SWMH8 | I/L : metres | M/H Depth: 0 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) SWMH8 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 31
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 300mm Material Vitrified clay Category		Start MH SWMH8 End MH SWMH18 Total length 26.43 metres	
Scale 1:1.36 Direction Downstream				

M/H Ref:SWMH8 | I/L : metres | M/H Depth: 2660 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference SWMH8	3397174	Comment / 0
0.00	WL	Water level 5% height/diameter	3397175	Comment / 0
				
26.43	MHF	Finish node type, manhole, reference SWMH18	3397211	Comment / 0

M/H Ref:SWMH18 | I/L : metres | M/H Depth: 0 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) SWMH18 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 32
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 300mm Material Vitrified clay Category		Start MH SWMH18 End MH SWMH19 Total length 28.02 metres	

Scale **1:1.47**
Direction **Downstream**

M/H Ref: SWMH18 | I/L : metres | M/H Depth: 2700 metres

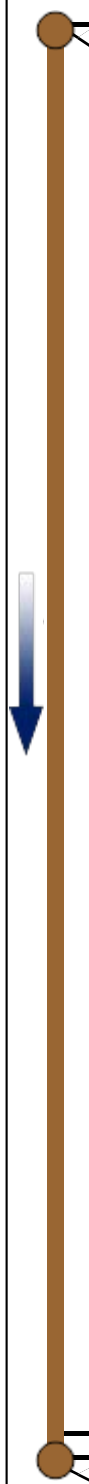
Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference SWMH18	3397606	Comment / 0
0.00	WL	Water level 5% height/diameter	3397609	Comment / 0
7.51	REM	HIDDEN MANHOLE UNDER GRAVEL ACCESS ROAD	3397613	Comment / 0
28.02	REM	NOW AT BACK DROP INTO SWMH19	3397627	Comment / 0
28.02	MHF	Finish node type, manhole, reference SWMH19	3397697	Comment / 0

M/H Ref: SWMH19 | I/L : metres | M/H Depth: 0 metres

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 18/06/2019
From: SWMH18 / To: SWMH19 Size: 300  7.51 M HIDDEN MANHOLE UNDER GRAVEL ACCESS ROAD		From: SWMH18 / To: SWMH19 Size: 300  28.02 M NOW AT BACK DROP INTO SWMH19	

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) SWMH19 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 33
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 300mm Material Vitrified clay Category		Start MH SWMH19 End MH LAKE Total length 49.11 metres	
Scale 1:2.57 Direction Downstream				

M/H Ref: SWMH19 | I/L : metres | M/H Depth: 3250 metres

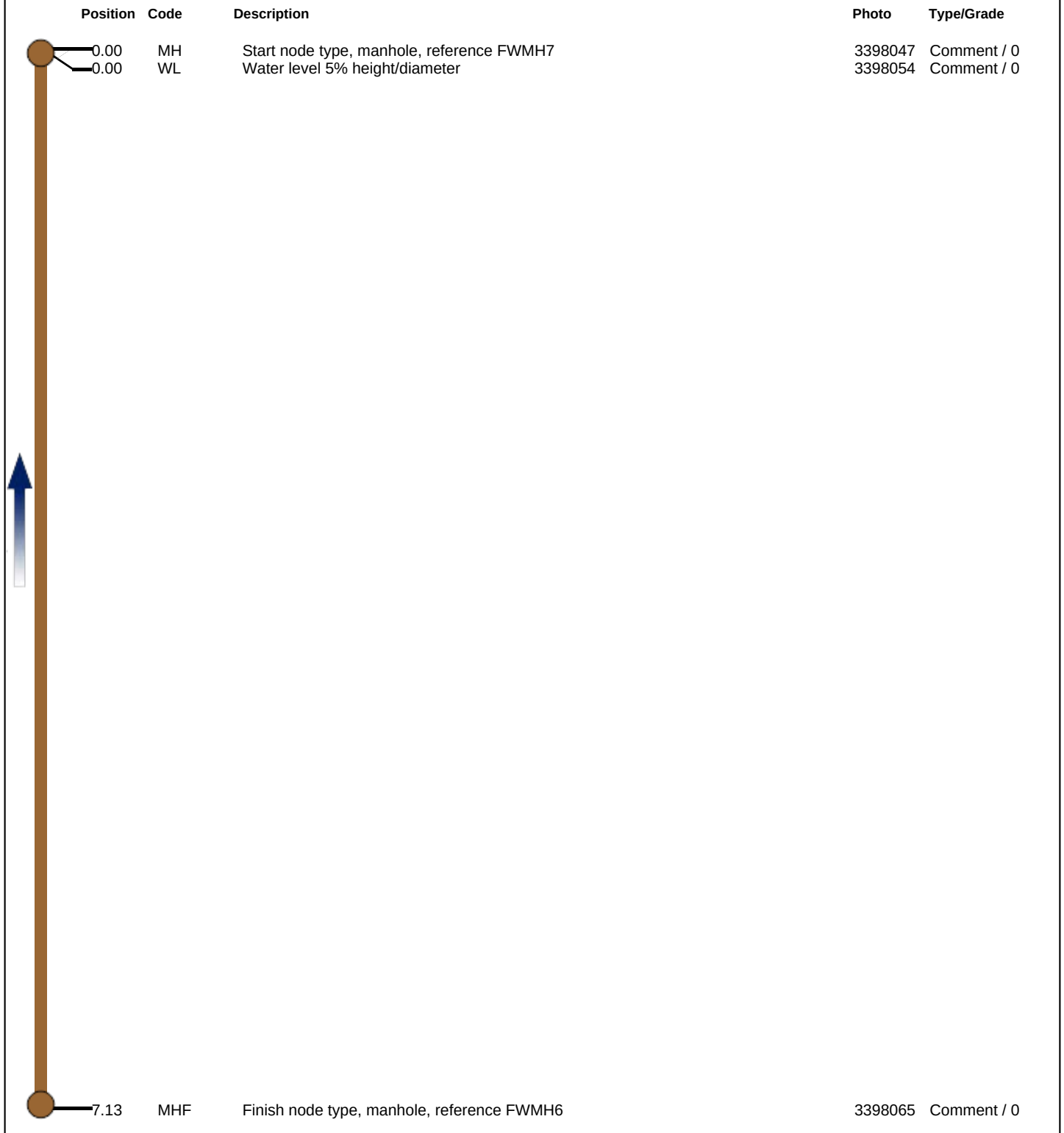
Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference SWMH19	3397864	Comment / 0
0.00	WL	Water level 5% height/diameter	3397865	Comment / 0
				
48.25	REM	HIDDEN MANHOLE	3397889	Comment / 0
49.11	REM	HIGH WATER LEVELS DUE TO LAKE LEVELS UNABLE TO SURVEY FURTHER	3397891	Comment / 0
49.11	OFF	Finish node type, outfall, reference LAKE	3397893	Comment / 0

M/H Ref: LAKE | I/L : metres | M/H Depth: 0 metres

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 18/06/2019
From: SWMH19 / To: LAKE Size: 300  48.25 M HIDDEN MANHOLE		From: SWMH19 / To: LAKE Size: 300  49.10 M HIGH WATER LEVELS DUE TO LAKE LEVELS UNABLE TO SURVEY FURTHER	

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH6 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 34
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 150mm Material Cast iron Category		Start MH FWMH7 End MH FWMH6 Total length 7.13 metres	
Scale 1:0.37 Direction Upstream				

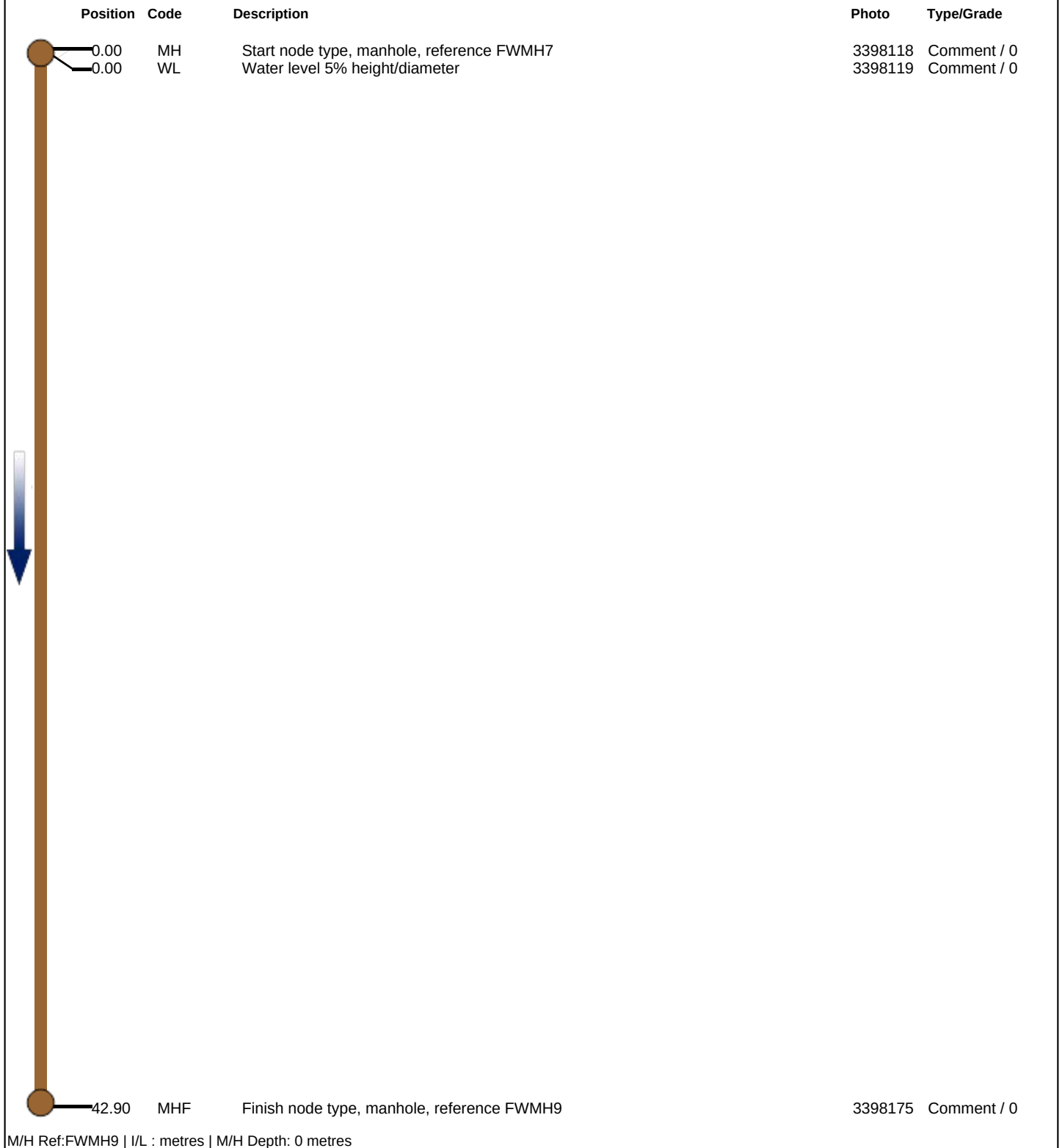
M/H Ref:FWMH7 | I/L : metres | M/H Depth: 1580 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH7	3398047	Comment / 0
0.00	WL	Water level 5% height/diameter	3398054	Comment / 0
				
7.13	MHF	Finish node type, manhole, reference FWMH6	3398065	Comment / 0

M/H Ref:FWMH6 | I/L : metres | M/H Depth: 1560 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH7 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 35
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 150mm Material Cast iron Category		Start MH FWMH7 End MH FWMH9 Total length 42.9 metres	
Scale 1:2.20 Direction Downstream				

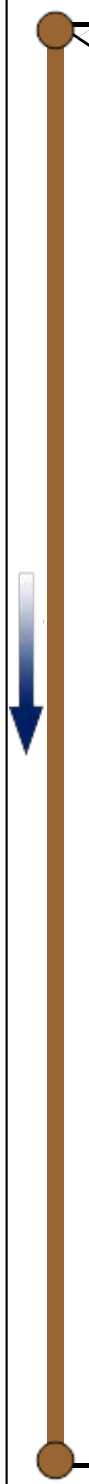
M/H Ref:FWMH7 | I/L : metres | M/H Depth: 1580 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH7	3398118	Comment / 0
0.00	WL	Water level 5% height/diameter	3398119	Comment / 0
				
42.90	MHF	Finish node type, manhole, reference FWMH9	3398175	Comment / 0

M/H Ref:FWMH9 | I/L : metres | M/H Depth: 0 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH8 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 36
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Liner Category		Start MH FWMH8 End MH FWMH7 Total length 6.23 metres	
Scale 1:0.31 Direction Downstream				

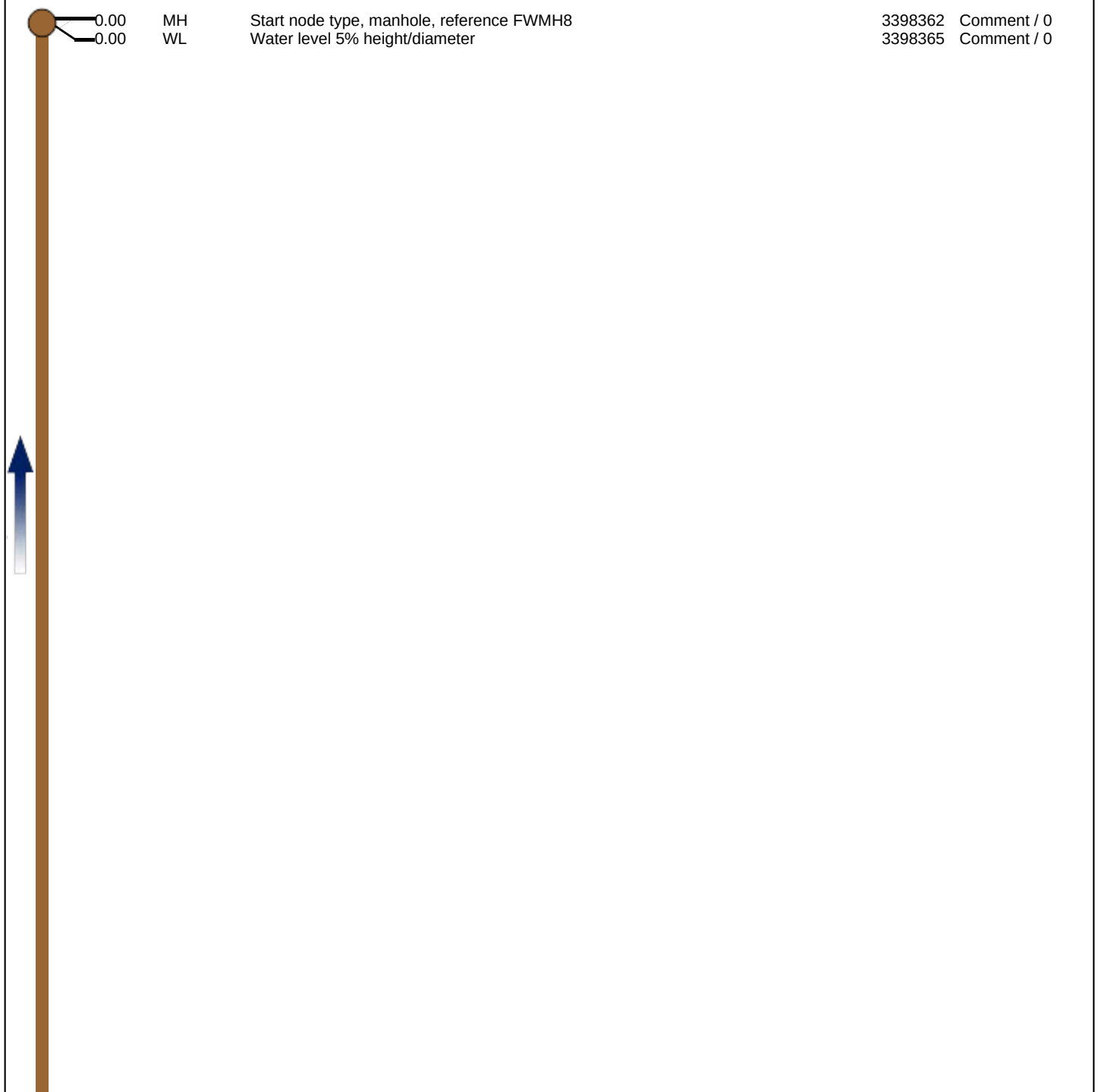
M/H Ref:FWMH8 | I/L : metres | M/H Depth: 1400 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH8	3398326	Comment / 0
0.00	WL	Water level 5% height/diameter	3398328	Comment / 0
				
6.23	MHF	Finish node type, manhole, reference FWMH7	3398359	Comment / 0

M/H Ref:FWMH7 | I/L : metres | M/H Depth: 1580 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH20 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 37
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Liner Category		Start MH FWMH8 End MH FWMH20 Total length 25.31 metres	
Scale 1:1.31 Direction Upstream				

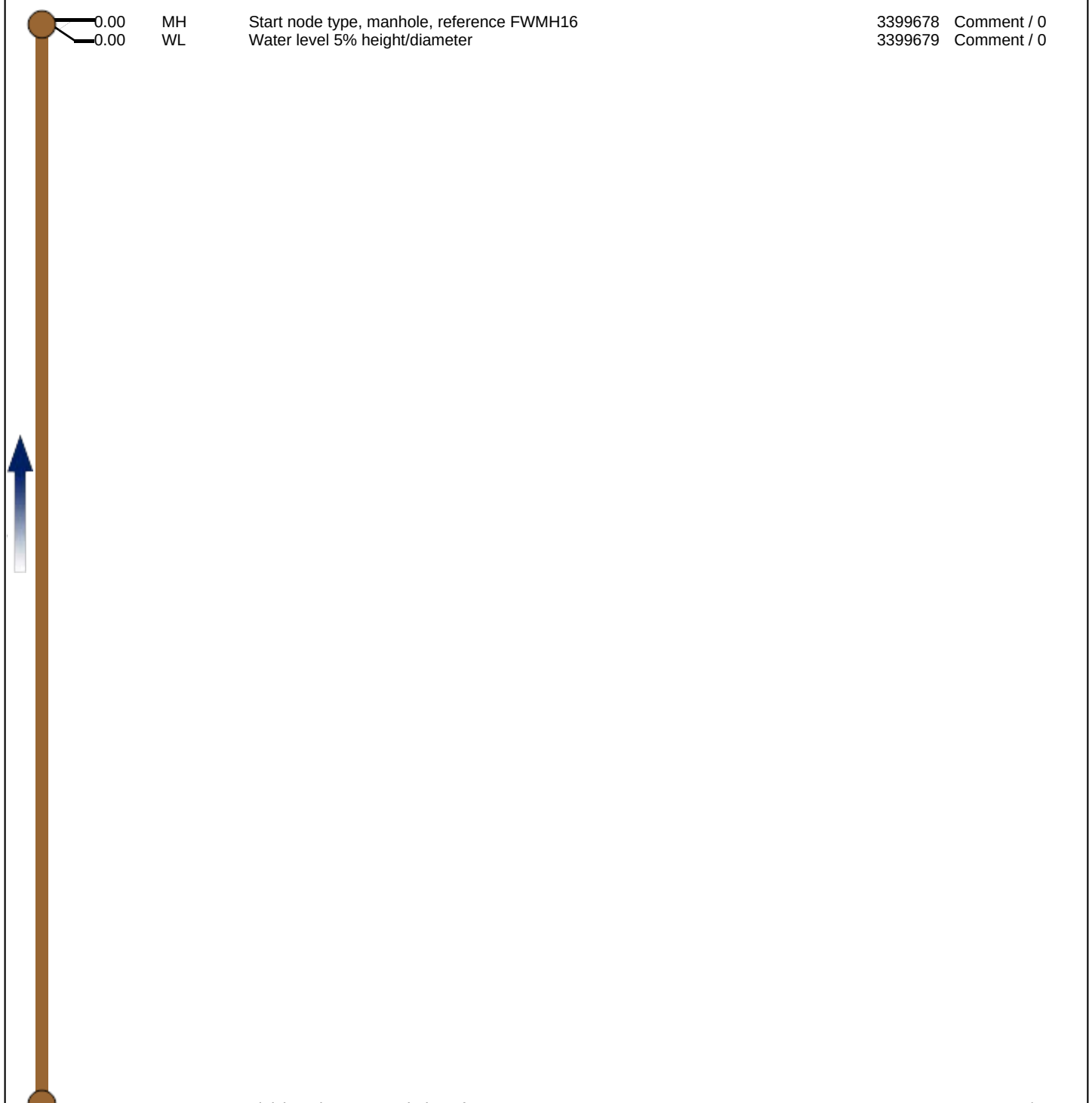
M/H Ref:FWMH8 | I/L : metres | M/H Depth: 1400 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH8	3398362	Comment / 0
0.00	WL	Water level 5% height/diameter	3398365	Comment / 0
				
25.31	MHF	Finish node type, manhole, reference FWMH20	3398376	Comment / 0

M/H Ref:FWMH20 | I/L : metres | M/H Depth: 1170 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH19 X	Date 18/06/2019	Pre Cleaned Not Cleaned
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 38
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Vitrified clay Category	Start MH FWMH16 End MH FWMH19 Total length 9.16 metres		
Scale 1:0.47 Direction Upstream				

M/H Ref:FWMH16 | I/L : metres | M/H Depth: 860 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH16	3399678	Comment / 0
0.00	WL	Water level 5% height/diameter	3399679	Comment / 0
				
9.16	MHF	Finish node type, manhole, reference FWMH19	3399680	Comment / 0

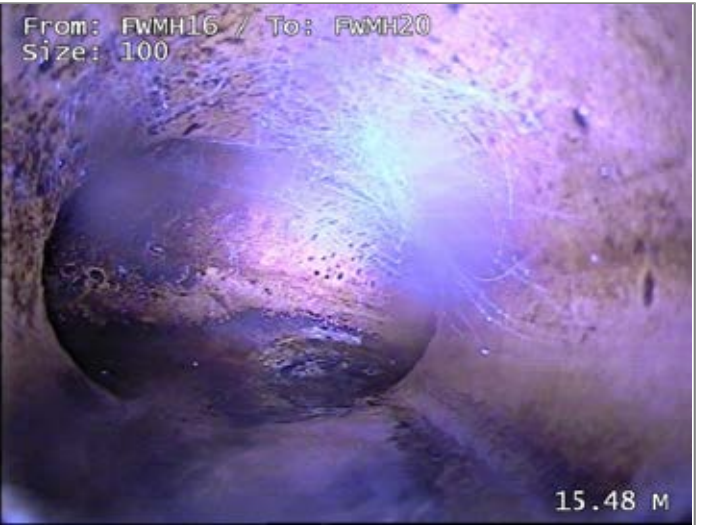
M/H Ref:FWMH19 | I/L : metres | M/H Depth: 0 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH16 X	Date 18/06/2019	Pre Cleaned Not Cleaned
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 39
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Vitrified clay Category	Start MH FWMH16 End MH FWMH23 Total length 25.72 metres		
Scale 1:1.31 Direction Downstream				

M/H Ref:FWMH16 | I/L : metres | M/H Depth: 860 metres

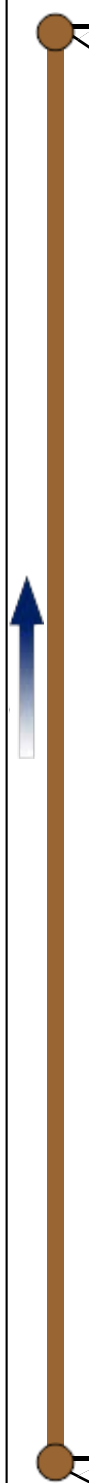
Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH16	3399682	Comment / 0
0.00	WL	Water level 5% height/diameter	3399683	Comment / 0
7.79	REM	JOINS ANOTHER PIPE	3399684	Comment / 0
15.48	REM	JOINS ANOTHER PIPE	3399685	Comment / 0
25.72	MHF	Finish node type, manhole, reference FWMH23	3399686	Comment / 0

M/H Ref:FWMH23 | I/L : metres | M/H Depth: 0 metres

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 18/06/2019
From: FWMH16 / To: FWMH20 Size: 100  8.07 M JOINS ANOTHER PIPE		From: FWMH16 / To: FWMH20 Size: 100  15.48 M JOINS ANOTHER PIPE	

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH17 X	Date 18/06/2019	Pre Cleaned Not Cleaned
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 3/0	Base Unit DDFRT6A12S	Section Number 40
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment		Shape/Size 100mm Material Vitrified clay Category		Start MH FWMH16 End MH FWMH17 Total length 14.52 metres
Scale 1:0.73 Direction Upstream				

M/H Ref:FWMH16 | I/L : metres | M/H Depth: 860 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH16	3399688	Comment / 0
0.00	WL	Water level 5% height/diameter	3399690	Comment / 0
				
14.52	RM	Roots mass 10% cross-sectional area loss	3399691	Service / 3
14.52	MHF	Finish node type, manhole, reference FWMH17	3399692	Comment / 0

M/H Ref:FWMH17 | I/L : metres | M/H Depth: 610 metres

Job Number
780878

Surveyed by (Operator)
PAUL BAYNHAM

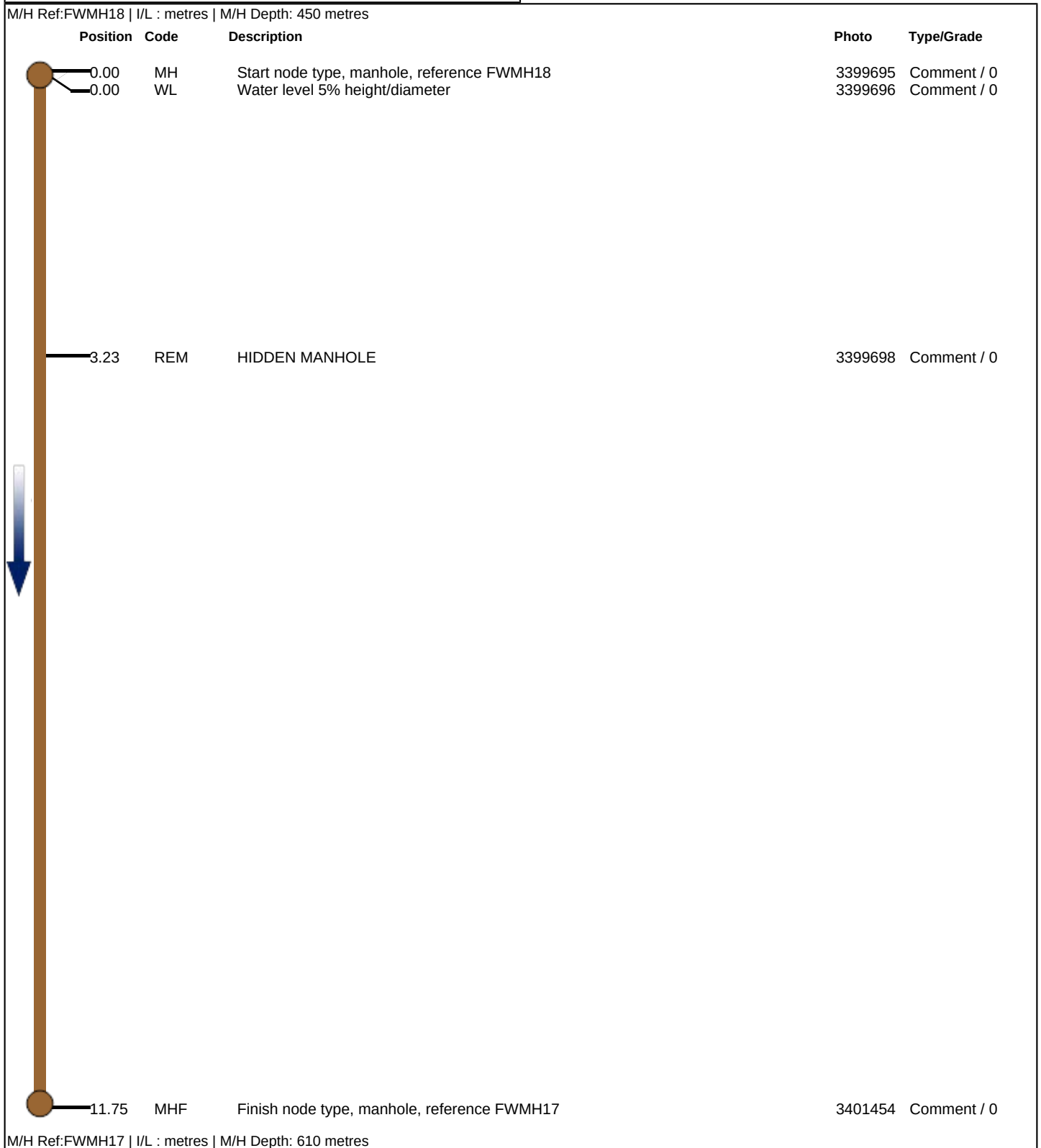
Base Unit
DDFRT6A12S

Date
18/06/2019



Roots mass 10% cross-sectional area loss

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH18 X	Date 18/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 41
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Polyvinyl chloride Category		Start MH FWMH18 End MH FWMH17 Total length 11.75 metres	
Scale 1:0.58 Direction Downstream				



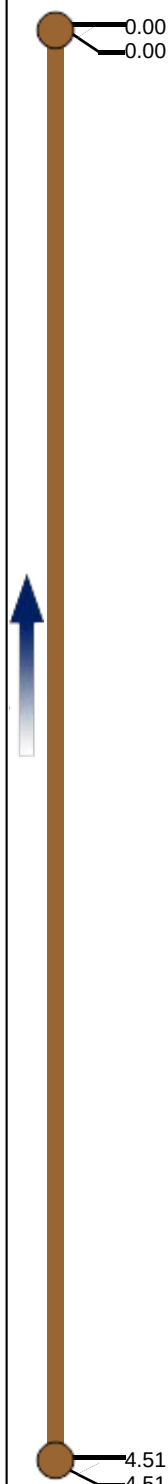
Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 18/06/2019
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HIDDEN MANHOLE

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH23 X	Date 20/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 42
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Vitrified clay Category		Start MH FWMH20 End MH FWMH23 Total length 4.51 metres	
Scale 1:0.21 Direction Upstream				

M/H Ref:FWMH20 | I/L : metres | M/H Depth: 1170 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH20	3404870	Comment / 0
0.00	WL	Water level 5% height/diameter	3404871	Comment / 0
				
4.51	REM	UNABLE TO GET CAMERA THROUGH LINER WITH SKID ON	3404873	Comment / 0
4.51	MCZ	Material of drain/sewer changes to LINER at this point	3404879	Comment / 0

M/H Ref:FWMH23 | I/L : metres | M/H Depth: 0 metres

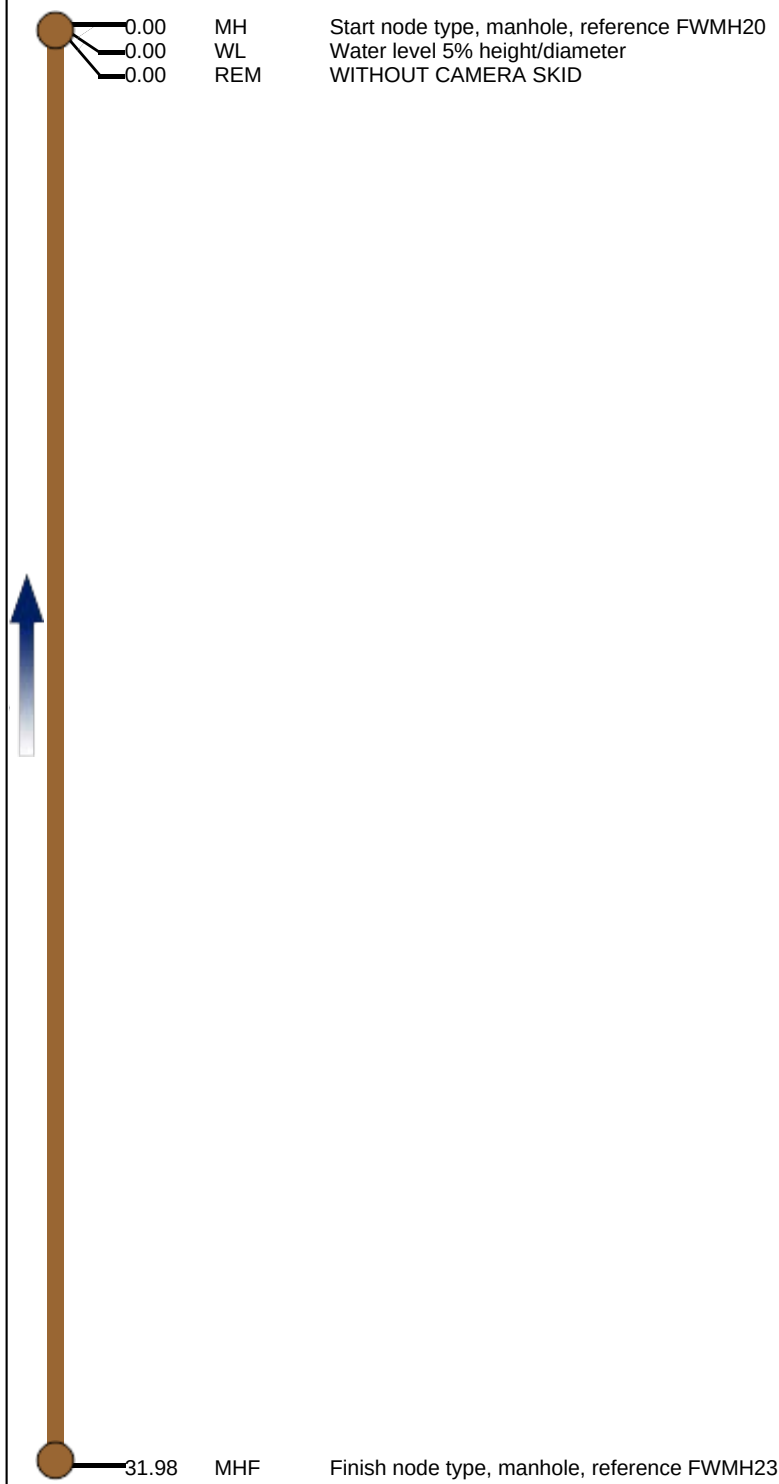
Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 20/06/2019
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UNABLE TO GET CAMERA THROUGH LINER WITH SKID ON

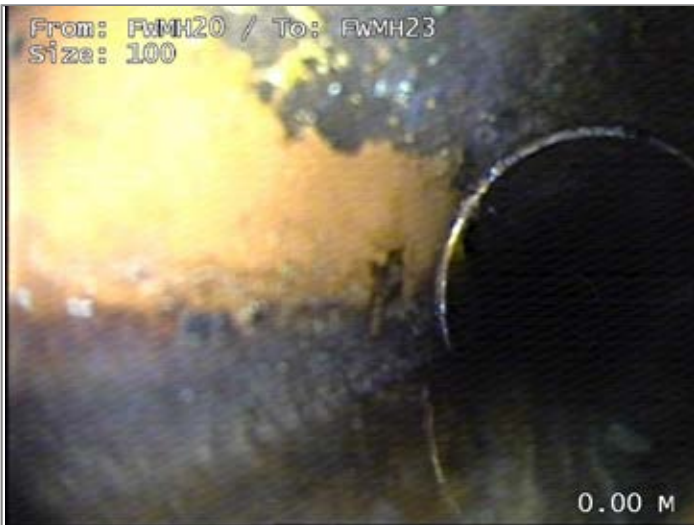
Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH23 X	Date 20/06/2019	Pre Cleaned Flushed through to enable survey
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 43
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Vitrified clay Category		Start MH FWMH20 End MH FWMH23 Total length 31.98 metres	
Scale 1:1.63 Direction Upstream				

M/H Ref:FWMH20 | I/L : metres | M/H Depth: 1170 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH20	3404889	Comment / 0
0.00	WL	Water level 5% height/diameter	3404890	Comment / 0
0.00	REM	WITHOUT CAMERA SKID	3404898	Comment / 0
				
31.98	MHF	Finish node type, manhole, reference FWMH23	3405333	Comment / 0

M/H Ref:FWMH23 | I/L : metres | M/H Depth: 0 metres

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 20/06/2019
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WITHOUT CAMERA SKID

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH9 X	Date 20/06/2019	Pre Cleaned Not Cleaned
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 44
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 150mm Material Cast iron Category	Start MH FWMH25 End MH FWMH9 Total length 48 metres		
Scale 1:2.52 Direction Upstream				

M/H Ref:FWMH25 | I/L : metres | M/H Depth: 2480 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH25	3405344	Comment / 0
0.00	WL	Water level 5% height/diameter	3405347	Comment / 0
				
48.00	MHF	Finish node type, manhole, reference FWMH9	3405430	Comment / 0

M/H Ref:FWMH9 | I/L : metres | M/H Depth: 0 metres

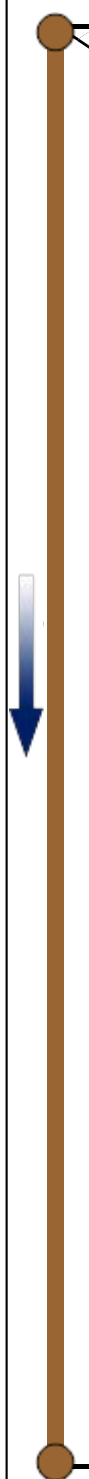
Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH25 X	Date 20/06/2019	Pre Cleaned Not Cleaned
Weather 3 - Light Rain	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 45

Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD	Division District Location Details
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Purpose Duty Foul Catchment	Shape/Size 150mm Material Cast iron Category	Start MH FWMH25 End MH FWMH26 Total length 81.08 metres
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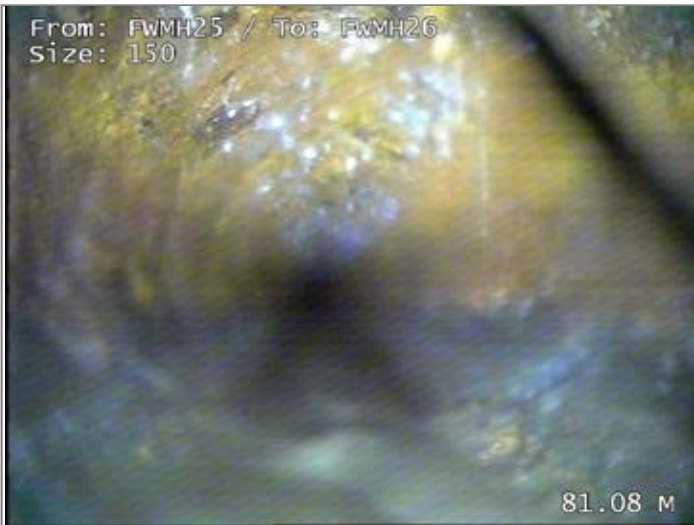
Scale 1:4.25 Direction Downstream
--

M/H Ref:FWMH25 | I/L : metres | M/H Depth: 0 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH25	3405462	Comment / 0
0.00	WL	Water level 5% height/diameter	3405463	Comment / 0
				
81.08	REM	UNABLE TO PUSH ANY FURTHER AND LOCATE MANHOLE RAN OUT OF CABLE	3405507	Comment / 0

M/H Ref:FWMH26 | I/L : metres | M/H Depth: 0 metres

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 20/06/2019
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UNABLE TO PUSH ANY FURTHER AND LOCATE MANHOLE RAN
OUT OF CABLE

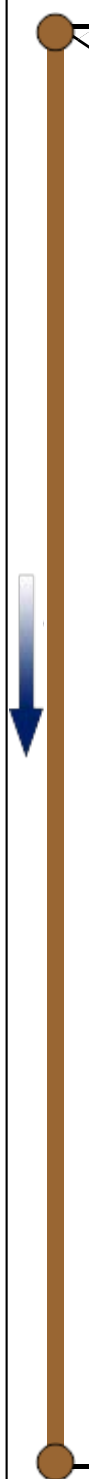
Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH24 X	Date 20/06/2019	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 46

Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD	Division District Location Details
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Purpose Duty Foul Catchment	Shape/Size 100mm Material Vitrified clay Category	Start MH FWMH24 End MH FWMH19 Total length 11.82 metres
--	---	--

Scale 1:0.58 Direction Downstream	
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M/H Ref:FWMH24 | I/L : metres | M/H Depth: 1180 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH24	3406492	Comment / 0
0.00	WL	Water level 5% height/diameter	3406494	Comment / 0
				
11.82	MHF	Finish node type, manhole, reference FWMH19	3406495	Comment / 0

M/H Ref:FWMH19 | I/L : metres | M/H Depth: 1390 metres

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) SWMH6 X	Date 20/06/2019	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/5	Base Unit DDFRT6A12S	Section Number 47
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Surface water Catchment	Shape/Size 150mm Material Vitrified clay Category		Start MH SWMH18 End MH SWMH6 Total length 8.57 metres	
Scale 1:0.42 Direction Upstream				

M/H Ref: SWMH18 | I/L : metres | M/H Depth: 2700 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference SWMH18	3406760	Comment / 0
0.00	WL	Water level 5% height/diameter	3406762	Comment / 0
				

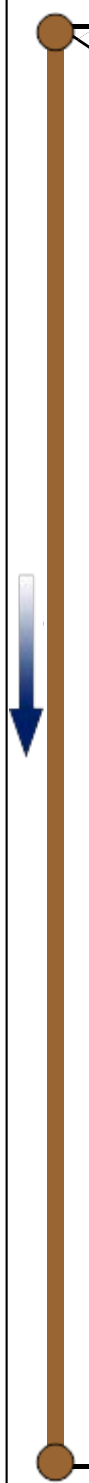
8.57 XP Collapsed drain/sewer 100% 3406763 Structural / 5
8.57 SA Survey abandoned - Remark: ABANDONED SURVEY DUE TO COLLAPSED PIPE 3406764 Comment / 0

M/H Ref: SWMH6 | I/L : metres | M/H Depth: 0 metres

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 20/06/2019
From: SWMH18 / To: SWMH6 Size: 150  8.59 M Collapsed drain/sewer 100% From: SWMH18 / To: SWMH6 Size: 150  8.57 M Survey abandoned - Remark: ABANDONED SURVEY DUE TO COLLAPSED PIPE			

Surveyed by (Operator) PAUL BAYNHAM	Job Number 780878	Pipe Length Reference(PLR) FWMH27 X	Date 21/06/2019	Pre Cleaned Not Cleaned
Weather 1 - Dry	Customer Present	Service Grade/Structural Grade 0/0	Base Unit DDFRT6A12S	Section Number 48
Road BBC Place CAVERSHAM PARK Location PEPPARD ROAD		Division District Location Details		
Purpose Duty Foul Catchment	Shape/Size 100mm Material Polyvinyl chloride Category	Start MH FWMH27 End MH TANK Total length 16 metres		
Scale 1:0.84 Direction Downstream				

M/H Ref:FWMH27 | I/L : metres | M/H Depth: 650 metres

Position	Code	Description	Photo	Type/Grade
0.00	MH	Start node type, manhole, reference FWMH27	3408427	Comment / 0
0.00	WL	Water level 5% height/diameter	3408428	Comment / 0
				
16.00	ICF	Finish node type, inspection chamber, reference TANK	3408432	Comment / 0

M/H Ref:TANK | I/L : metres | M/H Depth: 3700 metres

Structural Defects (SRM 4)

Job Number 780878				Surveyed by (Operator) PAUL BAYNHAM			Base Unit DDFRT6A12S			Date 13/06/2019			
No.	PLR	Dir.	Use	Shape/Size	Date	Mat.	Total Length	Inspection Length	Cat.	Peak Score	Grade	Mean Score	Total Score
1	SWMH1 X	U	S	150	13/06/2019	Vitrified clay	14.1 metres	14.1		0	1	0	0
2	SWMH2 X	D	S	150	13/06/2019	Vitrified clay	19.67 metres	19.67		0	1	0	0
3	SWMH3 X	U	S	225	13/06/2019	Vitrified clay	40.05 metres	40.05		0	1	0	0
4	SWMH4 X	D	S	225	13/06/2019	Vitrified clay	23.11 metres	23.11		0	1	0	0
5	SWMH5 X	D	S	225	13/06/2019	Vitrified clay	25.89 metres	25.89		0	1	0	0
6	FWMH1 X	U	F	100	13/06/2019	Cast iron	22.02 metres	22.02		0	1	0	0
7	PUMP STATIX	U	F	100	13/06/2019	Cast iron	36.16 metres	36.16		0	1	0	0
8	FWMH3 X	D	F	150	13/06/2019	Cast iron	22.02 metres	22.02		0	1	0	0
9	FWMH2 X	U	F	150	13/06/2019	Cast iron	6.21 metres	6.21		0	1	0	0
10	FWMH4 X	U	F	150	13/06/2019	Cast iron	30.38 metres	30.38		0	1	0	0
11	FWMH5 X	D	F	150	13/06/2019	Cast iron	14.34 metres	14.34		0	1	0	0
12	FWMH1B X	D	F	150	13/06/2019	Vitrified clay	1.67 metres	1.67		40	3	23.95	40
13	FWMH1A X	D	F	150	13/06/2019	Vitrified clay	16.49 metres	16.49		10	2	6.06	100
14	FWMH11 X	U	F	100	13/06/2019	Vitrified clay	10.04 metres	10.04		0	1	0	0
15	FWMH12 X	U	F	100	13/06/2019	Vitrified clay	7.07 metres	7.07		0	1	0	0
16	FWMH10 X	D	F	100	13/06/2019	Vitrified clay	10.73 metres	10.73		40	3	4.66	50
17	FWMH13 X	U	F	100	13/06/2019	Vitrified clay	6.36 metres	6.36		0	1	0	0
18	SWMH9 X	U	S	150	13/06/2019	Vitrified clay	11.36 metres	11.36		80	4	7.04	80
19	SWMH10 X	D	S	150	13/06/2019	Vitrified clay	26.41 metres	26.41		0	1	0	0
20	SWMH11 X	U	S	150	13/06/2019	Vitrified clay	9.44 metres	9.44		0	1	0	0
21	SWMH12 X	D	S	150	13/06/2019	Vitrified clay	1.87 metres	1.87		0	1	0	0
22	SWMH15 X	U	S	225	13/06/2019	Vitrified clay	20.52 metres	20.52		0	1	0	0
23	SWMH14 X	D	S	225	13/06/2019	Vitrified clay	32.75 metres	32.75		0	1	0	0
24	FWMH14 X	U	F	100	13/06/2019	Cast iron	27.49 metres	27.49		0	1	0	0
25	FWMH15 X	D	F	100	13/06/2019	Cast iron	36.31 metres	36.31		0	1	0	0
26	FWMH22 X	U	F	100	13/06/2019	Polyvinyl chloride	4.95 metres	4.95		0	1	0	0
27	FWMH21 X	D	F	100	13/06/2019	Liner	18.81 metres	18.81		0	1	0	0
28	SWMH17 X	D	S	100	13/06/2019	Polyvinyl chloride	12.69 metres	12.69		0	1	0	0
29	SWMH16 X	U	S	225	13/06/2019	Vitrified clay	0 metres	29.64		0	1	0	0

Service Defects (SRM 4)

Job Number 780878				Surveyed by (Operator) PAUL BAYNHAM		Base Unit DDFRT6A12S			Date 13/06/2019				
No.	PLR	Dir.	Use	Shape/Size	Date	Mat.	Total Length	Inspection Length	Cat.	Peak Score	Grade	Mean Score	Total Score
30	SWMH7 X	D	S	300	13/06/2019	Vitrified clay	8.95 metres	8.95		0	1	0	0
31	SWMH8 X	D	S	300	13/06/2019	Vitrified clay	26.43 metres	26.43		0	1	0	0
32	SWMH18 X	D	S	300	13/06/2019	Vitrified clay	28.02 metres	28.02		0	1	0	0
33	SWMH19 X	D	S	300	13/06/2019	Vitrified clay	49.11 metres	49.11		0	1	0	0
34	FWMH6 X	U	F	150	13/06/2019	Cast iron	7.13 metres	7.13		0	1	0	0
35	FWMH7 X	D	F	150	13/06/2019	Cast iron	42.9 metres	42.9		0	1	0	0
36	FWMH8 X	D	F	100	13/06/2019	Liner	6.23 metres	6.23		0	1	0	0
37	FWMH20 X	U	F	100	13/06/2019	Liner	25.31 metres	25.31		0	1	0	0
38	FWMH19 X	U	F	100	13/06/2019	Vitrified clay	9.16 metres	9.16		0	1	0	0
39	FWMH16 X	D	F	100	13/06/2019	Vitrified clay	25.72 metres	25.72		0	1	0	0
40	FWMH17 X	U	F	100	13/06/2019	Vitrified clay	14.52 metres	14.52		4	3	0.28	4
41	FWMH18 X	D	F	100	13/06/2019	Polyvinyl chloride	11.75 metres	11.75		0	1	0	0
42	FWMH23 X	U	F	100	13/06/2019	Vitrified clay	4.51 metres	4.51		0	1	0	0
43	FWMH23 X	U	F	100	13/06/2019	Vitrified clay	31.98 metres	31.98		0	1	0	0
44	FWMH9 X	U	F	150	13/06/2019	Cast iron	48 metres	48		0	1	0	0
45	FWMH25 X	D	F	150	13/06/2019	Cast iron	81.08 metres	81.08		0	1	0	0
46	FWMH24 X	D	F	100	13/06/2019	Vitrified clay	11.82 metres	11.82		0	1	0	0
47	SWMH6 X	U	S	150	13/06/2019	Vitrified clay	8.57 metres	8.57		0	1	0	0
48	FWMH27 X	D	F	100	13/06/2019	Polyvinyl chloride	16 metres	16		0	1	0	0

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
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Job Information

Total Distance Surveyed: **966.1 metres**
 Engineer: **PAUL BAYNHAM**
 Number of Surveys: **48**
 Number of Surveys grade 4 or above: **2**

Section 1 Overview (13/06/2019)

Manholes: **SWMH2 to SWMH1**
 Pipe Length: **14.1 metres**
 Structural Grade: **0**
 Service Grade: **0**
 Material: **Vitrified clay**
 Pipe Size: **150mm**
 Use: **Surface water**

Section 2 Overview (13/06/2019)

Manholes: **SWMH2 to SWMH3**
 Pipe Length: **19.67 metres**
 Structural Grade: **0**
 Service Grade: **0**
 Material: **Vitrified clay**
 Pipe Size: **150mm**
 Use: **Surface water**

Section 3 Overview (13/06/2019)

Manholes: **SWMH4 to SWMH3**
 Pipe Length: **40.05 metres**
 Structural Grade: **0**
 Service Grade: **0**
 Material: **Vitrified clay**
 Pipe Size: **225mm**
 Use: **Surface water**

Section 4 Overview (13/06/2019)

Manholes: **SWMH4 to SWMH5**
 Pipe Length: **23.11 metres**
 Structural Grade: **0**
 Service Grade: **0**
 Material: **Vitrified clay**
 Pipe Size: **225mm**
 Use: **Surface water**

Section 5 Overview (13/06/2019)

Manholes: **SWMH5 to SWMH18**
 Pipe Length: **25.89 metres**
 Structural Grade: **0**
 Service Grade: **5**
 Material: **Vitrified clay**
 Pipe Size: **225mm**
 Use: **Surface water**

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
Section 6 Overview (13/06/2019) Manholes: FWMH2 to FWMH1 Pipe Length: 22.02 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 100mm Use: Foul			
Section 7 Overview (13/06/2019) Manholes: FWMH1 to PUMP STATION Pipe Length: 36.16 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 100mm Use: Foul			
Section 8 Overview (13/06/2019) Manholes: FWMH3 to FWMH4 Pipe Length: 22.02 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			
Section 9 Overview (13/06/2019) Manholes: FWMH3 to FWMH2 Pipe Length: 6.21 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			
Section 10 Overview (13/06/2019) Manholes: FWMH5 to FWMH4 Pipe Length: 30.38 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			
Section 11 Overview (13/06/2019) Manholes: FWMH5 to FWMH6 Pipe Length: 14.34 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
Section 12 Overview (14/06/2019) Manholes: FWMH1B to PUMP STATION Pipe Length: 1.67 metres Structural Grade: 3 Service Grade: 0 Material: Vitrified clay Pipe Size: 150mm Use: Foul			
Section 13 Overview (14/06/2019) Manholes: FWMH1A to PUMP STATION Pipe Length: 16.49 metres Structural Grade: 2 Service Grade: 0 Material: Vitrified clay Pipe Size: 150mm Use: Foul			
Section 14 Overview (14/06/2019) Manholes: FWMH10 to FWMH11 Pipe Length: 10.04 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 15 Overview (14/06/2019) Manholes: FWMH11 to FWMH12 Pipe Length: 7.07 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 16 Overview (14/06/2019) Manholes: FWMH10 to FWMH9 Pipe Length: 10.73 metres Structural Grade: 3 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 17 Overview (14/06/2019) Manholes: FWMH12 to FWMH13 Pipe Length: 6.36 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
Section 18 Overview (17/06/2019) Manholes: SWMH10 to SWMH9 Pipe Length: 11.36 metres Structural Grade: 4 Service Grade: 0 Material: Vitrified clay Pipe Size: 150mm Use: Surface water			
Section 19 Overview (17/06/2019) Manholes: SWMH10 to SWMH11 Pipe Length: 26.41 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 150mm Use: Surface water			
Section 20 Overview (17/06/2019) Manholes: SWMH12 to SWMH11 Pipe Length: 9.44 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 150mm Use: Surface water			
Section 21 Overview (17/06/2019) Manholes: SWMH12 to RWP Pipe Length: 1.87 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 150mm Use: Surface water			
Section 22 Overview (17/06/2019) Manholes: SWMH14 to SWMH15 Pipe Length: 20.52 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 225mm Use: Surface water			
Section 23 Overview (17/06/2019) Manholes: SWMH14 to SWMH16 Pipe Length: 32.75 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 225mm Use: Surface water			

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
Section 24 Overview (17/06/2019) Manholes: FWMH15 to FWMH14 Pipe Length: 27.49 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 100mm Use: Foul			
Section 25 Overview (17/06/2019) Manholes: FWMH15 to FWMH3 Pipe Length: 36.31 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 100mm Use: Foul			
Section 26 Overview (17/06/2019) Manholes: FWMH21 to FWMH22 Pipe Length: 4.95 metres Structural Grade: 0 Service Grade: 0 Material: Polyvinyl chloride Pipe Size: 100mm Use: Foul			
Section 27 Overview (17/06/2019) Manholes: FWMH21 to FWMH20 Pipe Length: 18.81 metres Structural Grade: 0 Service Grade: 0 Material: Liner Pipe Size: 100mm Use: Foul			
Section 28 Overview (17/06/2019) Manholes: SWMH17 to SWMH6 Pipe Length: 12.69 metres Structural Grade: 0 Service Grade: 0 Material: Polyvinyl chloride Pipe Size: 100mm Use: Surface water			
Section 29 Overview (17/06/2019) Manholes: SWMH7 to SWMH16 Pipe Length: 0 metres Structural Grade: 0 Service Grade: Material: Vitrified clay Pipe Size: 225mm Use: Surface water			

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
Section 30 Overview (18/06/2019) Manholes: SWMH7 to SWMH8 Pipe Length: 8.95 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 300mm Use: Surface water			
Section 31 Overview (18/06/2019) Manholes: SWMH8 to SWMH18 Pipe Length: 26.43 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 300mm Use: Surface water			
Section 32 Overview (18/06/2019) Manholes: SWMH18 to SWMH19 Pipe Length: 28.02 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 300mm Use: Surface water			
Section 33 Overview (18/06/2019) Manholes: SWMH19 to LAKE Pipe Length: 49.11 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 300mm Use: Surface water			
Section 34 Overview (18/06/2019) Manholes: FWMH7 to FWMH6 Pipe Length: 7.13 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			
Section 35 Overview (18/06/2019) Manholes: FWMH7 to FWMH9 Pipe Length: 42.9 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
Section 36 Overview (18/06/2019) Manholes: FWMH8 to FWMH7 Pipe Length: 6.23 metres Structural Grade: 0 Service Grade: 0 Material: Liner Pipe Size: 100mm Use: Foul			
Section 37 Overview (18/06/2019) Manholes: FWMH8 to FWMH20 Pipe Length: 25.31 metres Structural Grade: 0 Service Grade: 0 Material: Liner Pipe Size: 100mm Use: Foul			
Section 38 Overview (18/06/2019) Manholes: FWMH16 to FWMH19 Pipe Length: 9.16 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 39 Overview (18/06/2019) Manholes: FWMH16 to FWMH23 Pipe Length: 25.72 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 40 Overview (18/06/2019) Manholes: FWMH16 to FWMH17 Pipe Length: 14.52 metres Structural Grade: 0 Service Grade: 3 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 41 Overview (18/06/2019) Manholes: FWMH18 to FWMH17 Pipe Length: 11.75 metres Structural Grade: 0 Service Grade: 0 Material: Polyvinyl chloride Pipe Size: 100mm Use: Foul			

Report Summary

Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
Section 42 Overview (20/06/2019) Manholes: FWMH20 to FWMH23 Pipe Length: 4.51 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 43 Overview (20/06/2019) Manholes: FWMH20 to FWMH23 Pipe Length: 31.98 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 44 Overview (20/06/2019) Manholes: FWMH25 to FWMH9 Pipe Length: 48 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			
Section 45 Overview (20/06/2019) Manholes: FWMH25 to FWMH26 Pipe Length: 81.08 metres Structural Grade: 0 Service Grade: 0 Material: Cast iron Pipe Size: 150mm Use: Foul			
Section 46 Overview (20/06/2019) Manholes: FWMH24 to FWMH19 Pipe Length: 11.82 metres Structural Grade: 0 Service Grade: 0 Material: Vitrified clay Pipe Size: 100mm Use: Foul			
Section 47 Overview (20/06/2019) Manholes: SWMH18 to SWMH6 Pipe Length: 8.57 metres Structural Grade: 5 Service Grade: 0 Material: Vitrified clay Pipe Size: 150mm Use: Surface water			

Report Summary

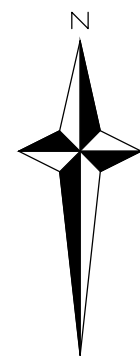
Job Number 780878	Surveyed by (Operator) PAUL BAYNHAM	Base Unit DDFRT6A12S	Date 13/06/2019
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Section 48 Overview (21/06/2019)

Manholes: **FWMH27 to TANK**
 Pipe Length: **16 metres**
 Structural Grade: **0**
 Service Grade: **0**
 Material: **Polyvinyl chloride**
 Pipe Size: **100mm**
 Use: **Foul**

Appendix K

Foul Water Drainage Catchment Plan



- NOTES**
1. This drawing to be read in conjunction with all relevant documents and specifications.
 2. Dimensions are scalable for 'Planning' purposes only.
 3. Any discrepancies found between information shown on this or any other drawing shall be reported to the Engineer immediately and prior to works commencing on site.
 4. Site layout provided by BHP Harwood Architects, drawing no. 3251.P.101, Rev X, dated February 2022.
- KEY**

- Catchment A - New direct gravity connection to Thames Water sewer in Peppard Road
- Catchment B - Existing/ Indirect private gravity connection to Thames Water sewer to be re-used.
- Catchment C - New indirect pumped connection to Thames Water sewer

P5	Care Home moved to Catchment A.	30/06/2023 A. Persins	AP
P4	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	AP
P3	Updated to suit the Architect's latest layout.	05/12/2022 K. Hulse	AP
P2	Updated to suit the Architect's latest layout.	— A. Persins	JH
P1	First issue for PLANNING.	10/12/2021 A. Persins	JH
Rev.	Description	Date	Chkd



Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client :
Beechcroft Developments Ltd

Project :
Caversham Park
Peppard Road, Reading
RG4 8TZ

Title :
Proposed Foul Drainage Catchment Plan

Project Engineer :	A. Persins	Scale :	1:250 @ A1
Project Director :	J. Hanlon	Date :	December 2022
Status :	PLANNING		

Drawing No.	8210940-SK07	Rev	P5
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Appendix L

Correspondence with Thames Water



Mr Aleksejs Persins

Glanville Consultants
Cornerstone House
62 Foxhall Road
Didcot
Oxfordshire
OX11 7AD



23 December 2021

Pre-planning enquiry: Capacity concerns

Site: Caversham Park, Reading, Berkshire, RG4 8TZ

Dear Aleks

Thank you for providing information on your development.

Connect to Thames Water foul sewer under Peppard Road at two locations:

Catchments A & C into public manhole 1301 in front of the site access in Peppard Road. Foul water from Catchment C to be pumped into chamber at the head of the run of Catchment A and discharged into Thames Water sewer by gravity. Planning 33 living units in Catchment A (21 houses and 12 flats) & 53 units (41 houses and 12 flats) in Catchment C.

Catchment B will be connected to the existing private, which appears to connect onto public at Peppard Road.

We have completed the assessment of the foul water flows and surface water run-off based on the information submitted in your application with the purpose of assessing sewerage capacity within the existing Thames Water sewer network.

Foul Water

We've assessed your **foul water** proposals but unfortunately we're unable to meet the needs of your development at this time.

In order to ensure we make the appropriate upgrades – or 'off-site reinforcement' – to serve the remainder of your development, we'll need to carry out modelling work, design a solution and build the necessary improvements. This work is done at our cost.

Once we've begun modelling, we may need to contact you to discuss changing the connection point for capacity reasons. Please note that we'll pay the cost of covering any extra distance if the connection needs to be made at a point further away than the nearest practicable point of at least the same diameter.

How long could modelling and reinforcement take?

Typical timescales for a development of your size are:

Modelling: 8 months
Design: 6 months
Construction: 6 months
Total: 20 months

If the time you're likely to take from planning and construction through to first occupancy is longer than this, we'll be able to carry out the necessary upgrades in time for your development. If it's shorter, please contact me on the number below to discuss the timing of our activities.

What do you need to tell us before we start modelling?

We will only carry out modelling once we're confident that your development will proceed. In order to have this confidence, we'll need to know that you **own the land and have either outline or full planning permission**. Please email this information to us as soon as you have it.

If you'd like us to start modelling work ahead of this point, we can do this if you agree to underwrite the cost of modelling and design. That means we'll fund the work – but you agree to pay the cost if you don't achieve first occupancy within five years.

If the modelling shows we need to carry out reinforcement work, then before we start construction we'll need you to supply us with notification that you've confirmed your F10 – Notification of construction project - submission to the Health and Safety Executive.

Surface Water

In accordance with the Building Act 2000 Clause H3.3, positive connection of surface water to a public sewer will only be consented when it can be demonstrated that the hierarchy of disposal methods have been examined and proven to be impracticable. Before we can consider your surface water needs, you'll need written approval from the lead local flood authority that you have followed the sequential approach to the disposal of surface water and considered all practical means.

The disposal hierarchy being:

- 1) rainwater use as a resource (for example rainwater harvesting, blue roofs for irrigation)
- 2) rainwater infiltration to ground at or close to source
- 3) rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens)
- 4) rainwater discharge direct to a watercourse (unless not appropriate)
- 5) controlled rainwater discharge to a surface water sewer or drain
- 6) controlled rainwater discharge to a combined sewer.

Where connection to the public sewerage network is required to manage surface water flows we will accept these flows at a discharge rate in line with CIRIA's best practice guide on SuDS or that stated within the sites planning approval.

Please see the attached 'Planning your wastewater' leaflet for additional information.

What do I need to do next?

If you've satisfied the points above, then you should compare your own timeline with the typical timescales we've suggested for our activities. If the time you're likely to take from planning and construction through to first occupancy is **more** than the total time we're likely to take, we'll be able to carry out the necessary upgrades in time for your development.

If it's **less** than this, you might want to ask us to start modelling earlier – in which case we'll require you to underwrite the cost, as noted above.

If you've any further questions, please contact me on 07747 642978.

Yours sincerely

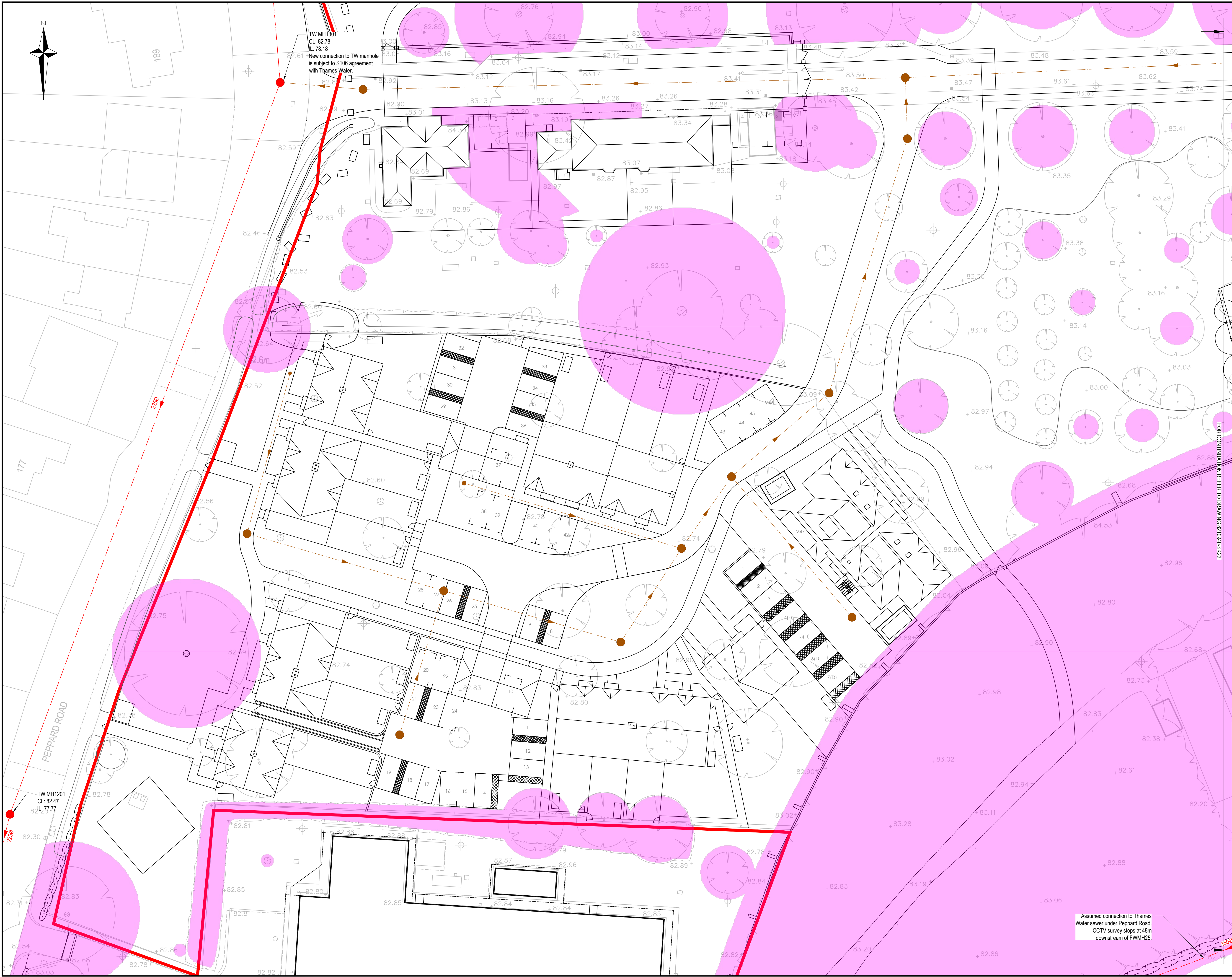
Leigh Khan

Adoption Engineer

Developer Services – Adoptions Engineer, Sewer Adoptions Team

Appendix M

Indicative Foul Water Drainage Strategy



KEY PLAN

NOTES

1. This drawing to be read in conjunction with all relevant documents and specifications.
2. Dimensions are scalable for 'Planning' purposes only.
3. Any discrepancies found between information shown on this or any other drawing shall be reported to the Engineer immediately and prior to works commencing on site.
4. Site layout provided by BHP Harwood Architects, drawing no. 3251.P.101, Rev X, dated February 2022.
5. Topographical survey provided by Midland Survey Ltd.

KEY

PROPOSED DRAINAGE

- Foul water (FW) sewer
- FW manhole
- FW inspection chamber

EXISTING DRAINAGE

- Thames Water foul water (FW) sewer
- Thames Water FW manhole
- Tree root protection area

P5	Updated in line with Client's comments.	30/06/2023 A. Persins	JH
P4	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	JH
P3	Updated to suit the Architect's latest layout.	06/12/2022 A. Persins	JH
P2	Updated to suit the Architect's latest layout.	08/03/2022 A. Persins	JH
P1	First issue for PLANNING.	10/12/2021 A. Persins	JH
Rev.	Description	Date	Chkd

Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

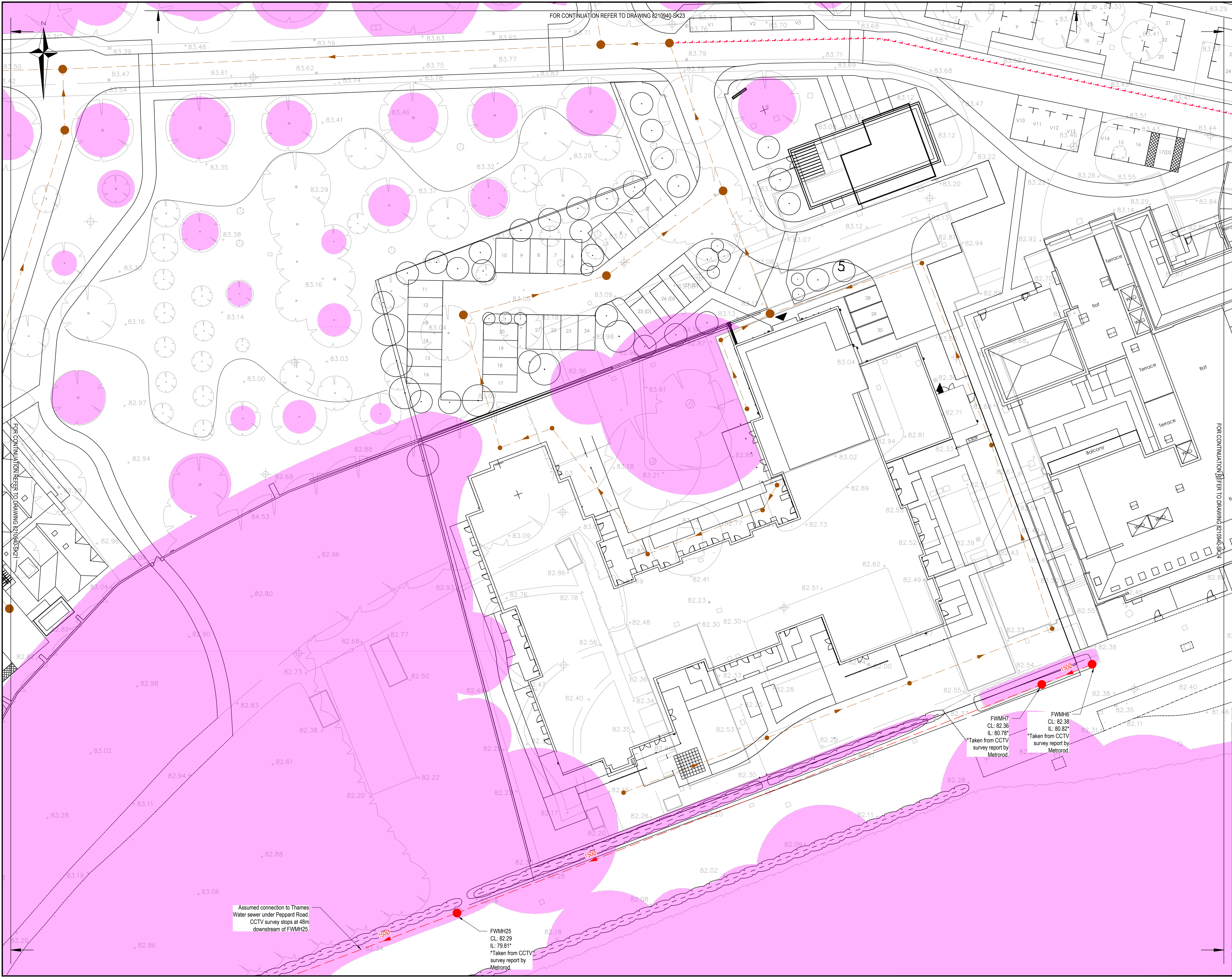
Client : Beechcroft Developments Ltd

Project : Caversham Park
Peppard Road, Reading
RG4 8TZ

Title : Indicative Foul Water Drainage Strategy
Catchment A
Sheet 1

Project Engineer : A. Persins	Scale : 1:250 @ A1
Project Director : J. Hanlon	Date : December 2021
Status : PLANNING	

Drawing No. 8210940-SK21	Rev P5
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- NOTES**
1. This drawing to be read in conjunction with all relevant documents and specifications.
 2. Dimensions are scalable for 'Planning' purposes only.
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 4. Site layout provided by BHP Harwood Architects, drawing no. 3251.P.101, Rev X, dated February 2022.
 5. Topographical survey provided by Midland Survey Ltd.

- KEY**
- PROPOSED DRAINAGE**
- Foul water (FW) sewer
 - FW rising main
 - FW manhole
 - FW inspection chamber
- EXISTING DRAINAGE**
- Thames Water foul water (FW) sewer
 - Thames Water FW manhole
 - Tree root protection area

P5	Updated in line with Client's comments.	30/06/2023 A. Persins	JH
P4	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	JH
P3	Updated to suit the Architect's latest layout.	06/12/2022 A. Persins	JH
P2	Updated to suit the Architect's latest layout.	08/03/2022 A. Persins	JH
P1	First issue for PLANNING.	10/12/2021 A. Persins	JH
Rev.	Description	Date	Chkd



Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

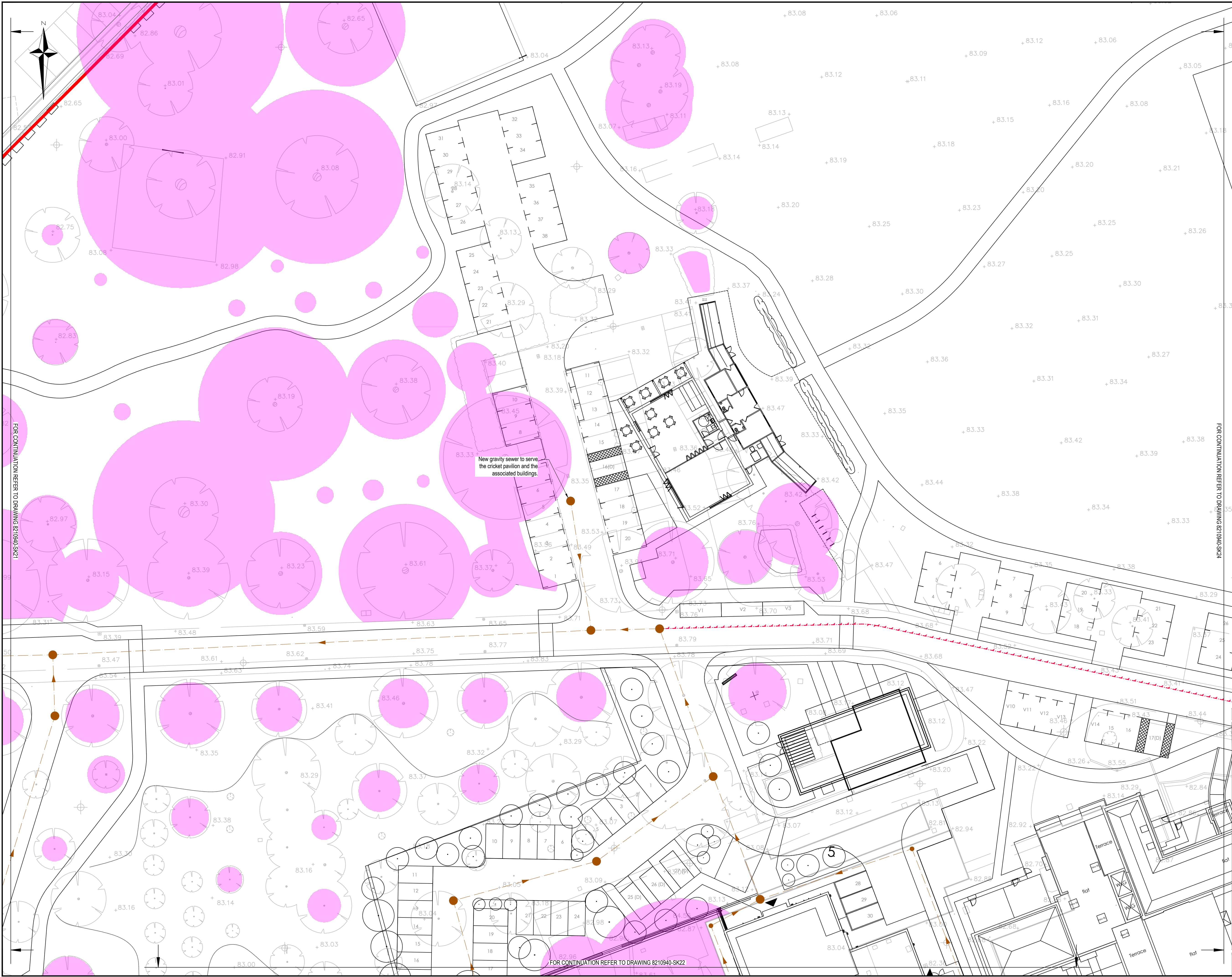
Client : Beechcroft Developments Ltd

Project : Caversham Park
Peppard Road, Reading
RG4 8TZ

Title : Indicative Foul Water Drainage Strategy
Catchments A, B & C
Sheet 2

Project Engineer : A. Persins	Scale : 1:250 @ A1
Project Director : J. Hanlon	Date : December 2021
Status : PLANNING	

Drawing No. 8210940-SK22	Rev P5
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KEY PLAN

NOTES

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4. Site layout provided by BHP Harwood Architects, drawing no. 3251.P.101, Rev X, dated February 2022.
5. Topographical survey provided by Midland Survey Ltd.

KEY

PROPOSED DRAINAGE

- Foul water (FW) sewer
- FW rising main
- FW manhole
- FW inspection chamber

EXISTING DRAINAGE

- Thames Water foul water (FW) sewer
- Thames Water FW manhole
- Tree root protection area

P5	Updated in line with Client's comments.	30/06/2023 A. Persins	JH
P4	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	JH
P3	Updated to suit the Architect's latest layout.	06/12/2022 A. Persins	JH
P2	Updated to suit the Architect's latest layout.	08/03/2022 A. Persins	JH
P1	First issue for PLANNING.	10/12/2021 A. Persins	JH
Rev.	Description	Date	Chkd

Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

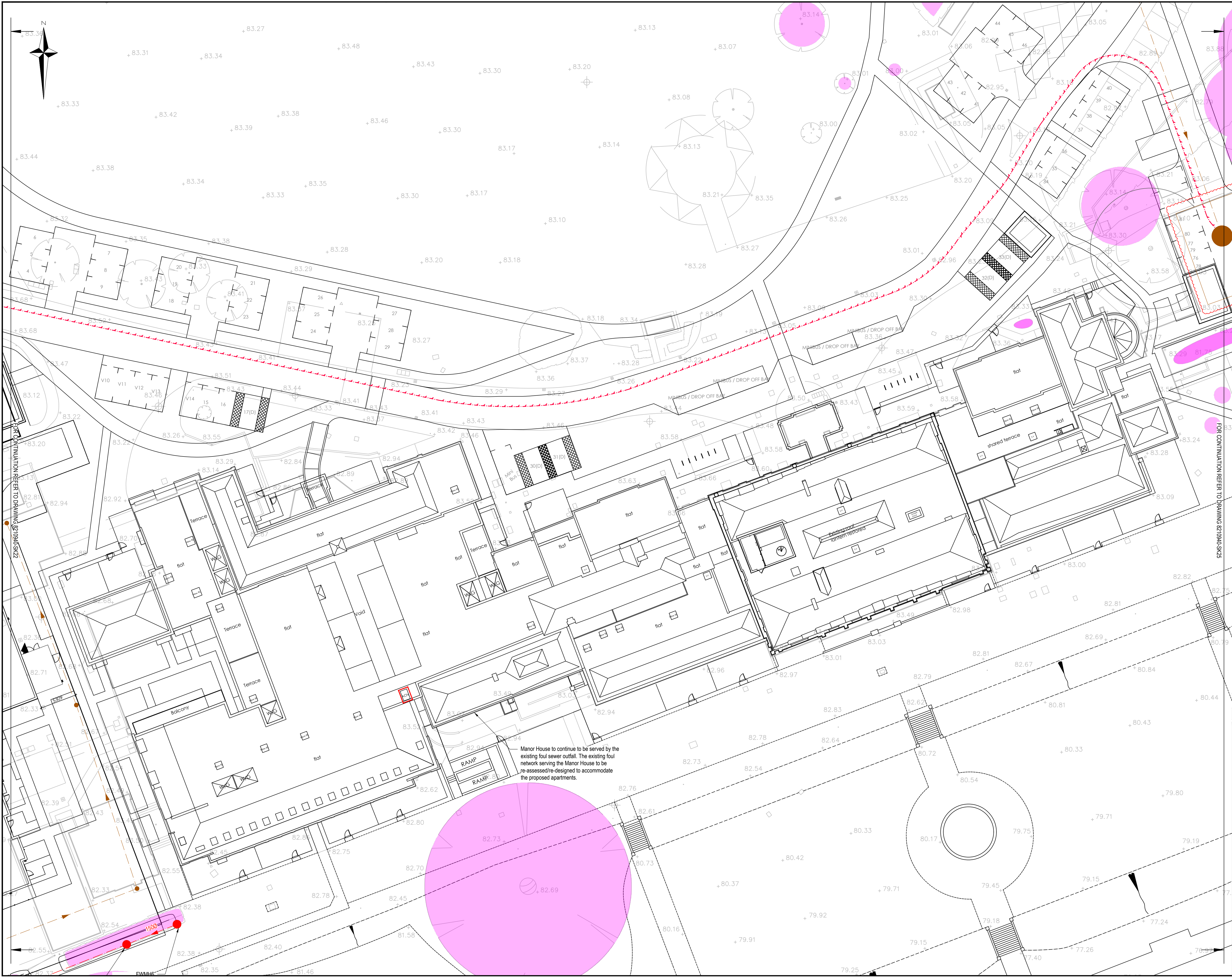
Client : Beechcroft Developments Ltd

Project : Caversham Park
Peppard Road, Reading
RG4 8TZ

Title : Indicative Foul Water Drainage Strategy
Catchment A, B & C
Sheet 3

Project Engineer : A. Persins	Scale : 1:250 @ A1
Project Director : J. Hanlon	Date : December 2021
Status :	PLANNING

Drawing No.	8210940-SK23	Rev	P5
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KEY PLAN

NOTES

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4. Site layout provided by BHP Harwood Architects, drawing no. 3251.P-101, Rev X, dated February 2022.
5. Topographical survey provided by Midland Survey Ltd.

KEY

PROPOSED DRAINAGE

- Foul water (FW) sewer
- FW rising main
- FW manhole
- FW inspection chamber
- FW pump station

EXISTING DRAINAGE

- Thames Water foul water (FW) sewer
- Thames Water FW manhole
- Tree root protection area

P5	Updated in line with Client's comments.	30/06/2023 A. Persins	JH
P4	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	JH
P3	Updated to suit the Architect's latest layout.	06/12/2022 A. Persins	JH
P2	Updated to suit the Architect's latest layout.	08/03/2022 A. Persins	JH
P1	First issue for PLANNING.	10/12/2021 A. Persins	JH
Rev.	Description	Date	Chkd

Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client :
Beechcroft Developments Ltd

Project :
**Caversham Park
Peppard Road, Reading
RG4 8TZ**

Title :
**Indicative Foul Water Drainage Strategy
Catchments B & C
Sheet 4**

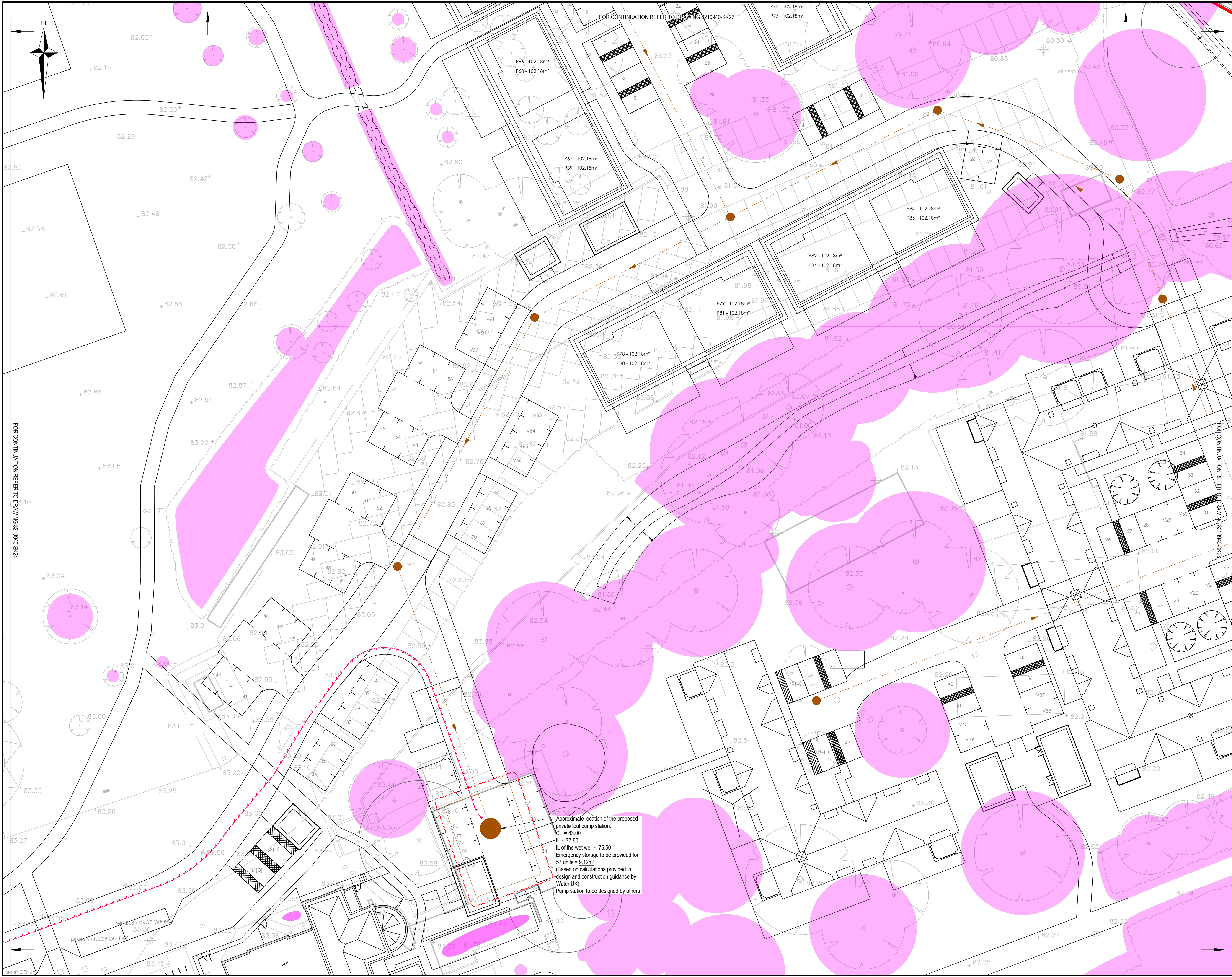
Project Engineer : A. Persins Scale : 1:250 @ A1
Project Director : J. Hanlon Date : December 2021
Status : **PLANNING**

Drawing No. 8210940-SK24 Rev P5

FOR CONTINUATION REFER TO DRAWING 8210940-SK22

FOR CONTINUATION REFER TO DRAWING 8210940-SK25

Manor House to continue to be served by the existing foul sewer outfall. The existing foul network serving the Manor House to be re-assessed/re-designed to accommodate the proposed apartments.



KEY PLAN

NOTES

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4. Site layout provided by BHP Harwood Architects, drawing no. 3251-P-101, Rev X, dated February 2022.
5. Topographical survey provided by Midland Survey Ltd.
6. Drainage installed through root protection area to consider utilisation of thrust bore techniques / air spade or as agreed with arboriculturalist.

KEY

PROPOSED DRAINAGE

- Foul water (FW) sewer
- - - FW rising main
- FW manhole
- FW inspection chamber
- FW pump station

EXISTING DRAINAGE

- - - Thames Water foul water (FW) sewer
- Thames Water FW manhole
- Tree root protection area

P5	Updated in line with Client's comments.	30/06/2023 A. Persins	JH
P4	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	JH
P3	Updated to suit the Architect's latest layout.	06/12/2022 A. Persins	JH
P2	Updated to suit the Architect's latest layout.	08/03/2022 A. Persins	JH
P1	First issue for PLANNING.	10/12/2021 A. Persins	JH
Rev.	Description	Date	Chkd

Glanville
Cornerstone House
62 Foxhall Road, Didcot
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Tel. (01235) 515550 Fax: (01235) 817799
postbox@glanvilgroup.com www.glanvilgroup.com

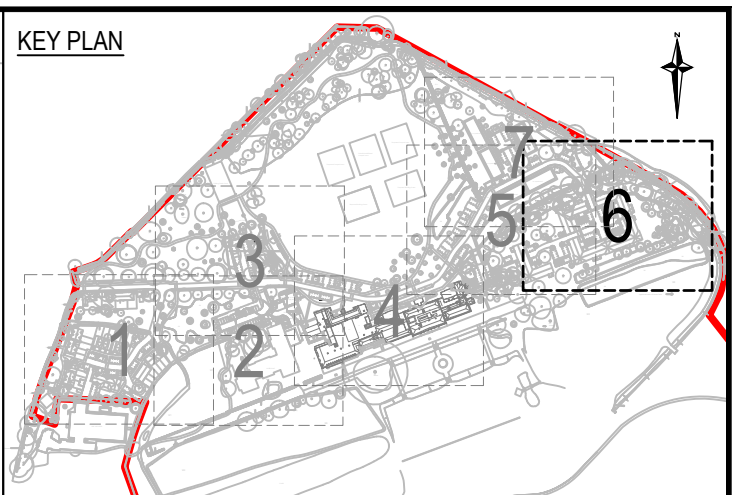
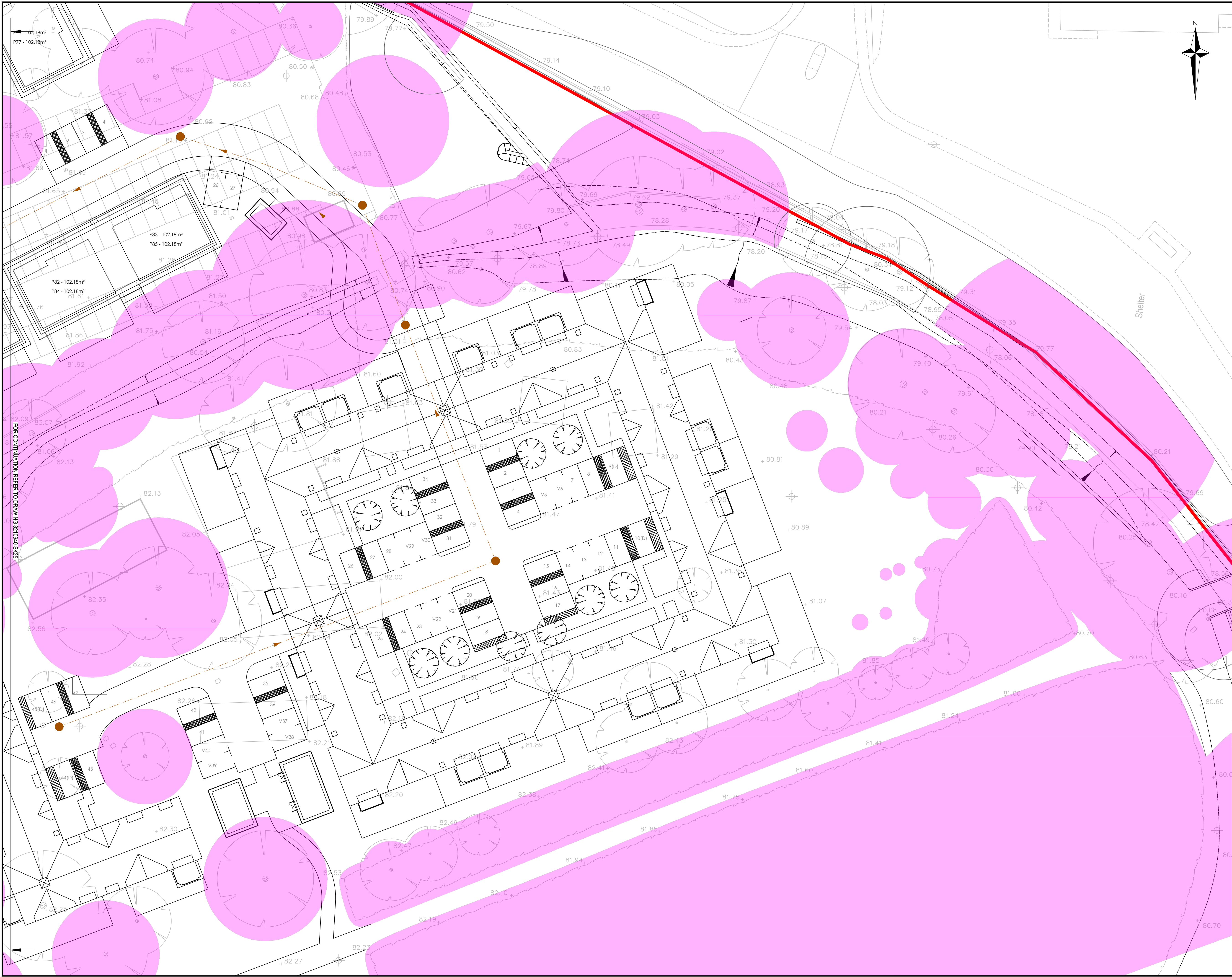
Client : Beechcroft Developments Ltd

Project : Caversham Park
Peppard Road, Reading
RG4 8TZ

Title : Indicative Foul Water Drainage Strategy
Catchment C
Sheet 5

Project Engineer : A. Persins	Scale : 1:250 @ A1
Project Director : J. Hanlon	Date : December 2021
Status : PLANNING	

Drawing No. 8210940-SK25	Rev P5
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- NOTES**
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 4. Site layout provided by BHP Harwood Architects, drawing no. 3251-P-101, Rev X, dated February 2022.
 5. Topographical survey provided by Midland Survey Ltd.
 6. Drainage installed through root protection area to consider utilisation of thrust bore techniques / air spade or as agreed with arboriculturalist.

- KEY**
- PROPOSED DRAINAGE**
- Foul water (FW) sewer
 - FW manhole
 - FW inspection chamber
 - Tree root protection area

P5	Updated in line with Client's comments.	30/06/2023 A. Persins	JH
P4	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	JH
P3	Updated to suit the Architect's latest layout.	06/12/2022 A. Persins	JH
P2	Updated to suit the Architect's latest layout.	08/03/2022 A. Persins	JH
P1	First issue for PLANNING.	10/12/2021 A. Persins	JH
Rev.	Description	Date	Chkd



Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

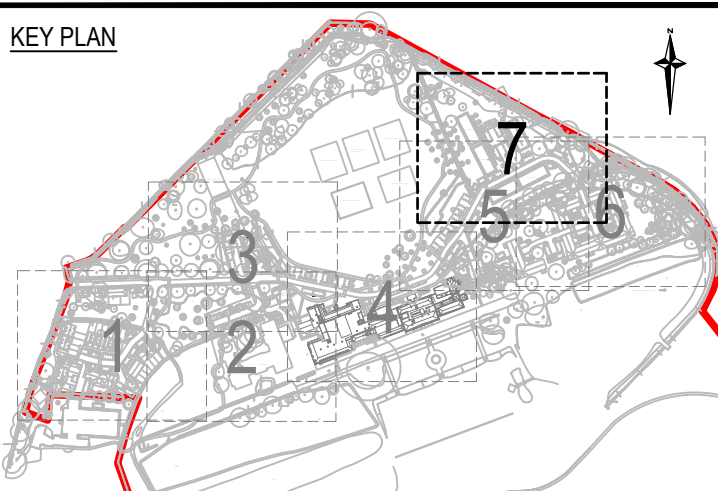
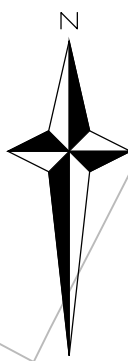
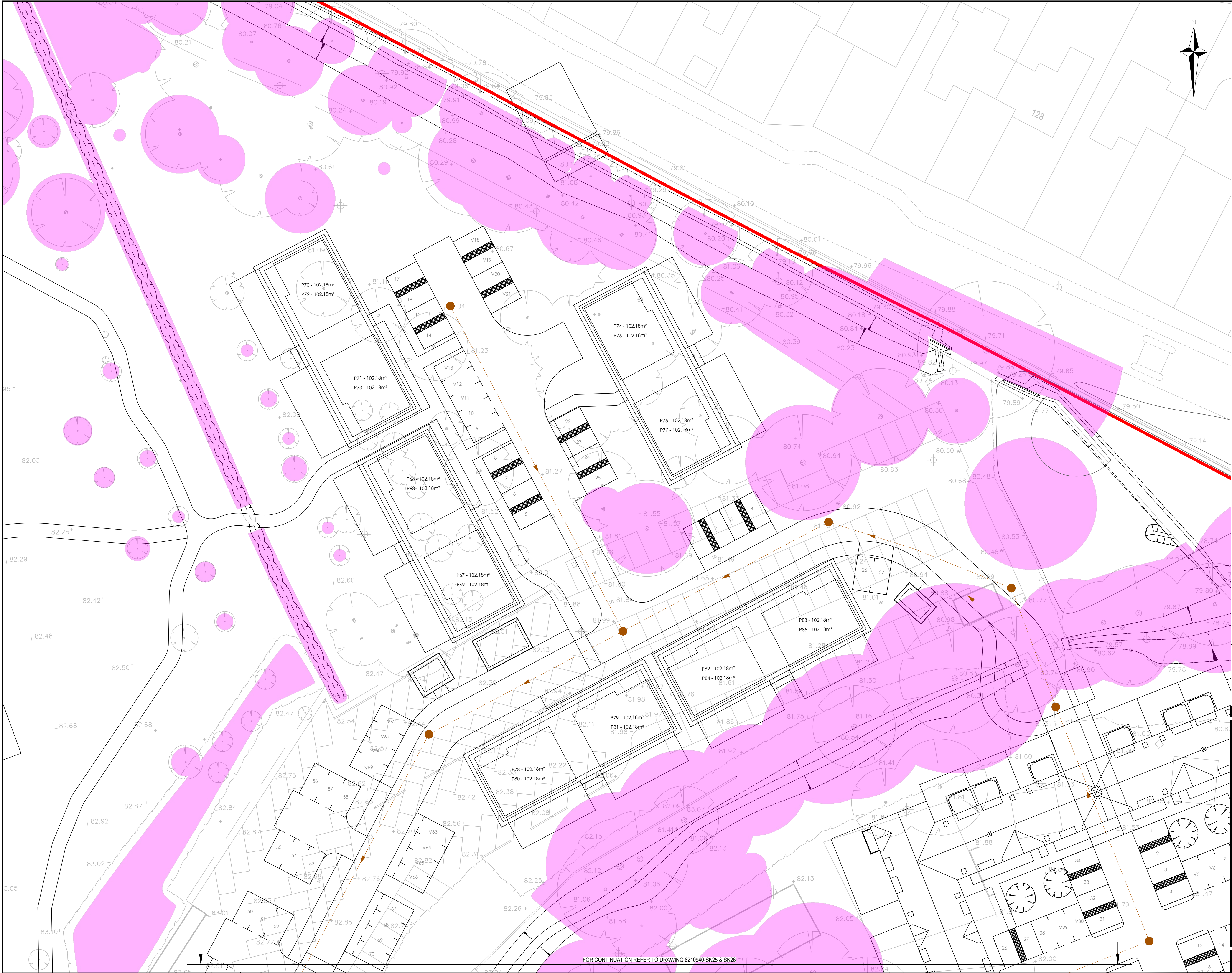
Client : Beechcroft Developments Ltd

Project : Caversham Park
Peppard Road, Reading
RG4 8TZ

Title : Indicative Foul Water Drainage Strategy
Catchment C
Sheet 6

Project Engineer : A. Persins	Scale : 1:250 @ A1
Project Director : J. Hanlon	Date : December 2021
Status :	PLANNING

Drawing No.	8210940-SK26	Rev	P5
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- NOTES**
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 4. Site layout provided by BHP Harwood Architects, drawing no. 3251.P-101, Rev X, dated February 2022.
 5. Topographical survey provided by Midland Survey Ltd.
 6. Drainage installed through root protection area to consider utilisation of thrust bore techniques / air spade or as agreed with arboriculturalist.

- KEY**
- PROPOSED DRAINAGE**
- Foul water (FW) sewer
 - FW manhole
 - FW inspection chamber
 - Tree root protection area

P3	Updated in line with Client's comments.	30/06/2023 A. Persins	JH
P2	Updated to suit the Architect's latest layout.	16/06/2023 A. Persins	JH
P1	First issue for PLANNING.	06/12/2022 A. Persins	JH
Rev.	Description	Date	Chkd

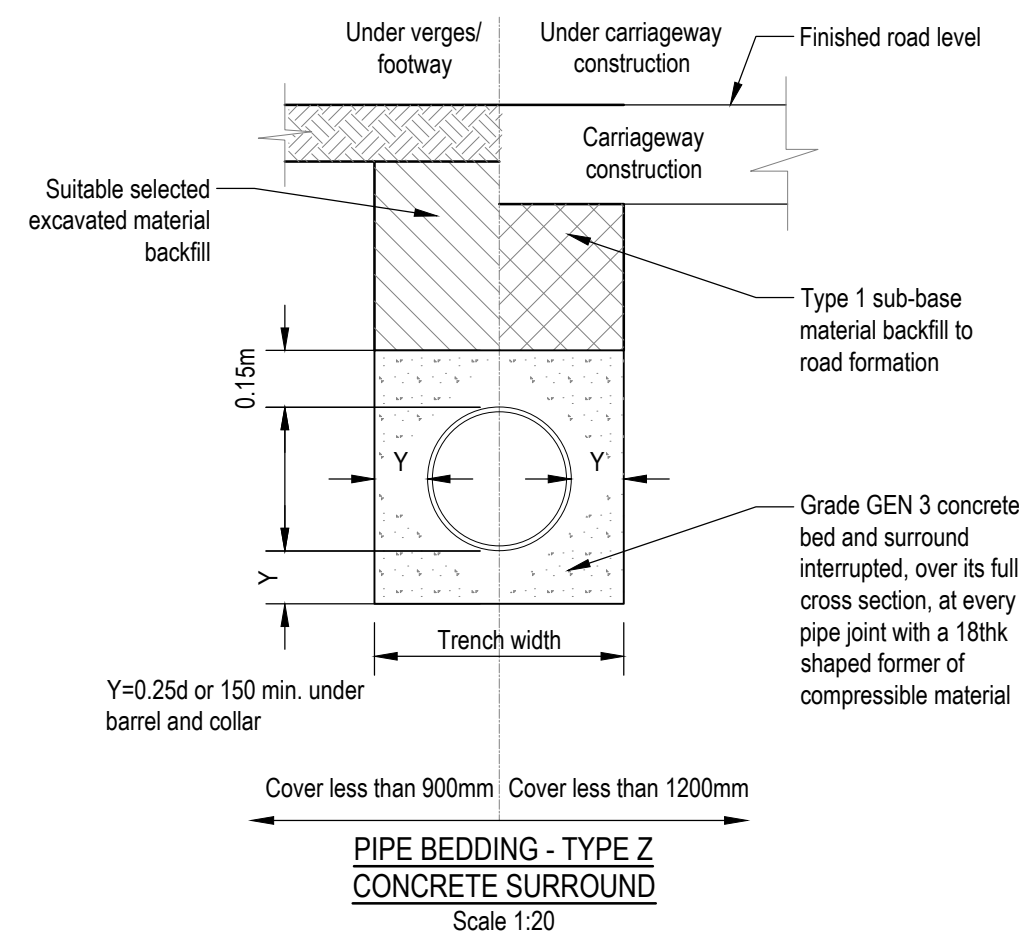
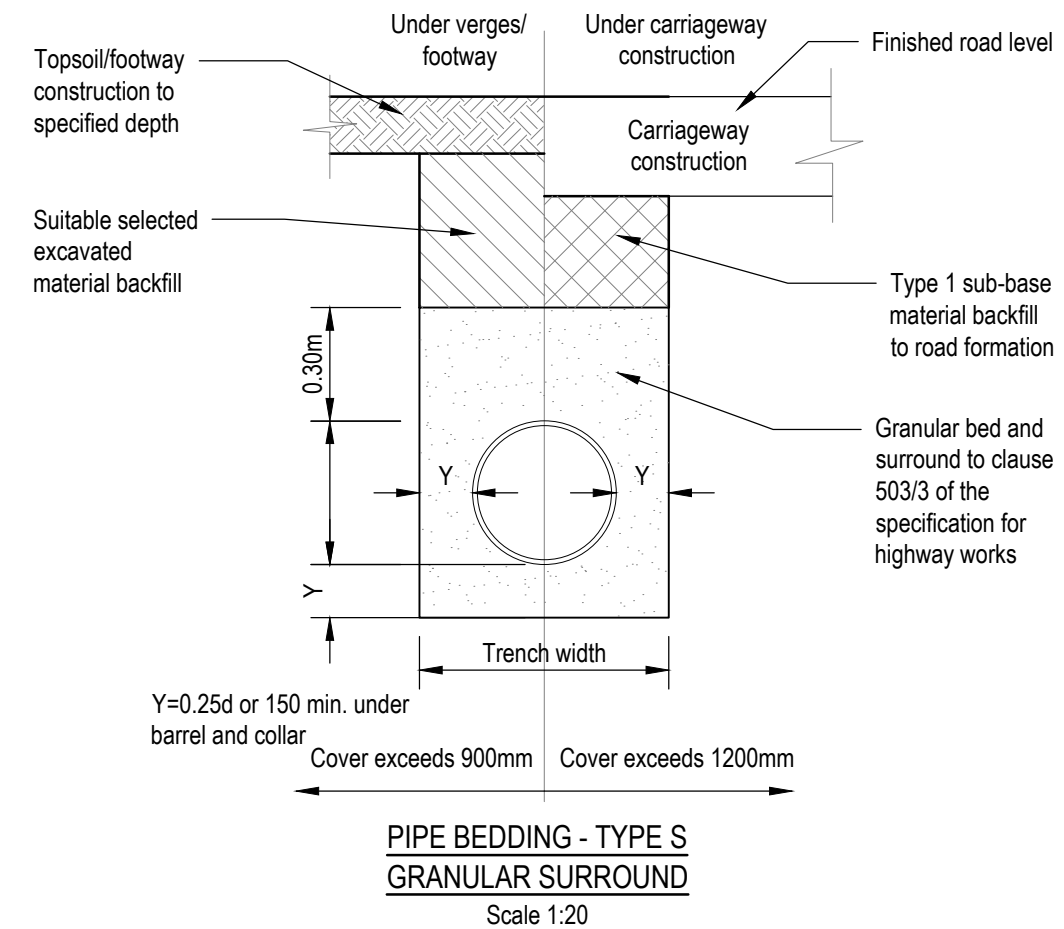
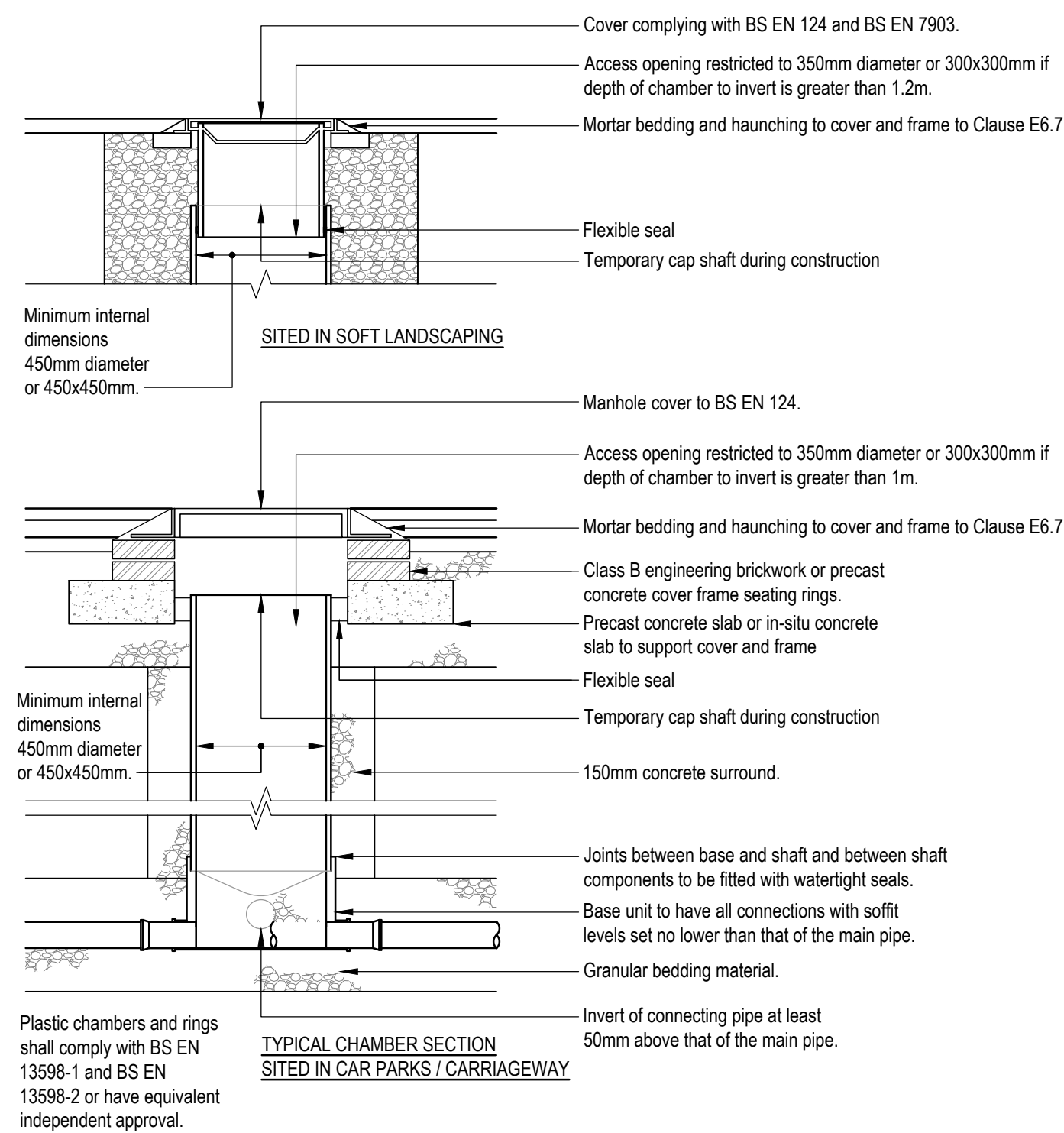
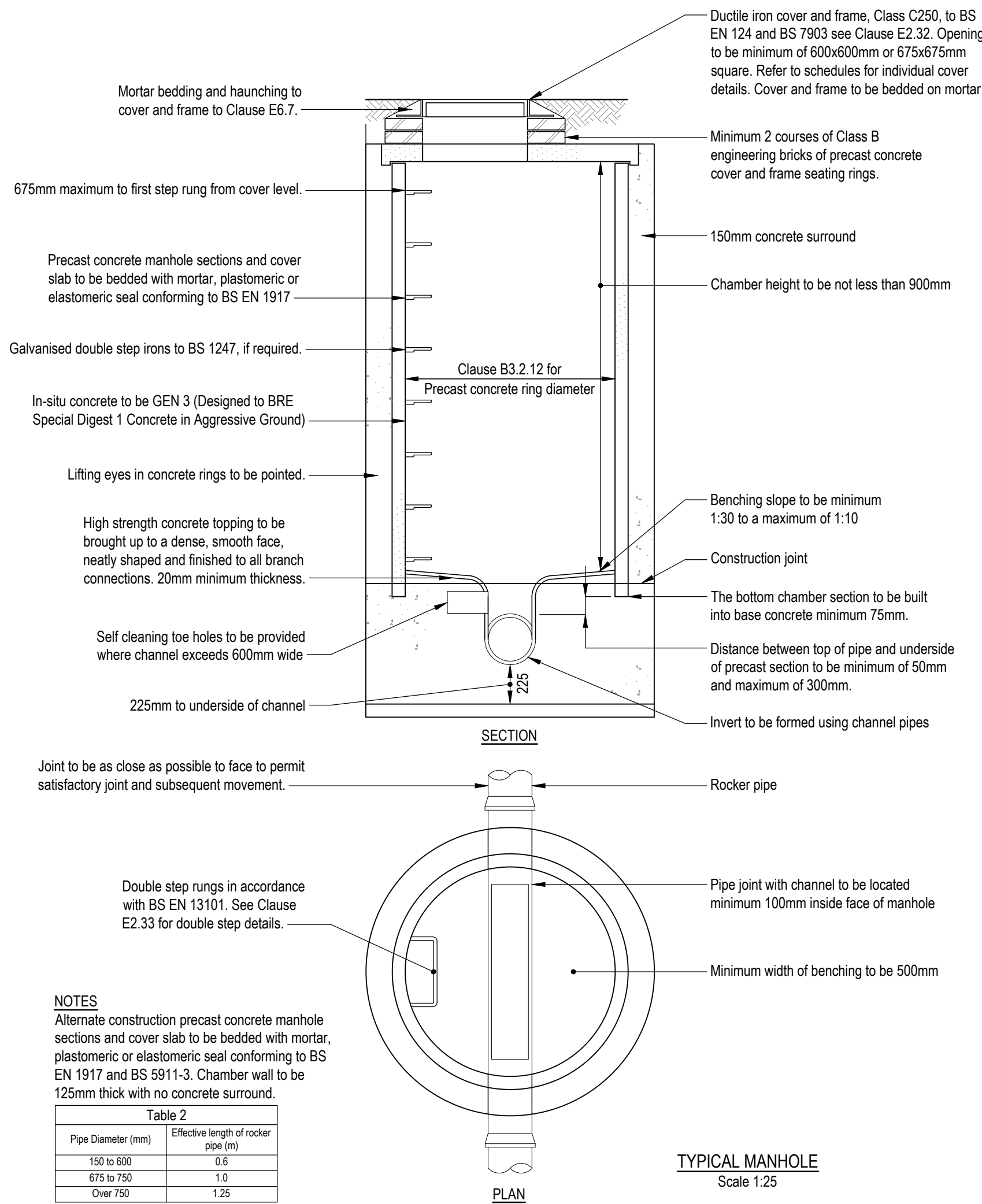


Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client :	Beechcroft Developments Ltd		
Project :	Caversham Park Peppard Road, Reading RG4 8TZ		
Title :	Indicative Foul Water Drainage Strategy Catchment C Sheet 7		
Project Engineer :	A. Persins	Scale :	1:250 @ A1
Project Director :	J. Hanlon	Date :	December 2021
Status :	PLANNING		
Drawing No.	8210940-SK27	Rev	P3

FOR CONTINUATION REFER TO DRAWING 8210940-SK25 & SK26

- NOTES
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P1	First issue for PLANNING.	16/06/2023 A. Persins	JH
Rev.	Description	Date	Chkd



Client :	Beechcroft Developments Ltd		
Project :	Caversham Park Peppard Road, Reading RG4 8TZ		
Title :	Typical Drainage Construction Details Sheet 3		
Project Engineer :	A. Persins	Scale :	As Shown @ A1
Project Director :	J. Hanlon	Date :	June 2023
Status :	PLANNING		
Drawing No.	8210940-SK33	Rev	P1



Cornerstone House, 62 Foxhall Road
Didcot, Oxfordshire OX11 7AD

01235 515550
postbox@glanvillegroup.com
www.glanvillegroup.com

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