



Chainage 780m is to the site boundary at the substation by Queensway. Rising main is continued on drawing 02554-A-114 upto the outfall location

PS4 Rising main gradient change points		
Chainage	Chamber	IL
0m	PS4	5.00
90m	Air Valve A1	5.20
121m	Washout A2	4.92
225m	-	4.57
590m	Air Valve A3	5.30
628m	-	6.00
750m	Air Valve A4	5.58
778m (10m)	Washout A4	5.20
998m (220m)	Air Valve A5	5.90
1048m (270m)	-	5.65
1088m (310m)	Washout A6	5.55
1103m (325m)	-	4.20
1148m (370m)	-	4.42
1173m (395m)	-	5.20
1263m (485m)	Air Valve A7	5.50
1348m (570m)	-	5.30
1366m (588m)	Washout A8	5.80
1403m (625m)	-	4.00
1428m (650m)	-	5.00
1491m (713m)	Outfall MH	5.30

Rising Main Size: 280mm O/D SDR17 HPPE
Non-degradable marker taper to be laid 300mm above rising main.

NOTES
These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9.
The residual risks identified on the DRA / drawings are based on the information available at the time of design.
Any services information indicated on PJA drawings is obtained from third parties, and is given for guidance purposes only. The exact location of any services will need to be verified by the client / contractor before commencing works on site.

THIS DRAWING IS ISSUED AS CONSTRUCTION FOR CONTRACT PURPOSES ONLY. NO INFORMATION SHOWN ON THIS DRAWING IS APPROVED FOR CONSTRUCTION BY THE ADOPTING AUTHORITY AND AS SUCH ANY WORKS UNDERTAKEN TO THESE DRAWINGS ARE SOLELY AT THE CLIENTS RISK. REQUESTED CHANGES BY THE ADOPTING AUTHORITY COULD RESULT IN ABORTIVE WORKS. PJA ACCEPTS NO LIABILITY FOR ANY ABORTIVE WORKS UNDERTAKEN.

- Minimum radius for laying black HPPE pipe is 25 x rising main O.D
- Thrust blocks to be installed on any tight bend.
- Horizontal curvature to be no greater than 22.5°, each bend to be separated by 1m straight.
- In verge minimum cover to top of pipe = 0.9m. In carriageways and access ways minimum cover = 1.2m. Level of pipe as per invert levels shown.
- The route of rising main shall be marked, where practical at every change of direction by approved concrete marker posts. The words "pumped sewer" and depth to top of pipe in meters should be marked on posts.
- Non degradable marker tape (Terratape Sentry Line Detectable 620 or similar approved) shall be laid 300mm above the top of pipe. The tape shall incorporate a track wire which shall be brought to the surface at every marker post (or approx 250m) and connected to terminals on the post. At chambers the tape shall be terminated with 1m of wire coiled inside chamber, entry bring through a sealed duct 300mm below F.G.L At discharge point marker tape should be terminated as agreed with inspector.
- Rising main fittings to chambers to be ductile iron. Rising main pipework to be (Black) HPPE, size as noted on sections.
- On gravity portion of RM, pipeline is to be butt-fusion welded and de-deaded during installation.
- Departure from the design level of any point on the pipeline shall not exceed 30mm, excess of this will cause adverse hydraulic effect.
- All works to be in accordance with "Sewerage sector guidance - Appendix C - DCG 2020" and the Adopting Water Authority's recommendations. All testing shall be carried out as described in "Sewerage sector guidance - Appendix C - DCG 2020".
- Consult pipe manufacturer for laying and proprietary construction details.
- All works in vicinity of trees to be conducted as per the guidelines laid down in BS5837 "Trees in relation to construction"
- Any "Statutory Undertakers" apparatus shown on these drawings should be taken as a guide only, care should be taken when excavating
- All adoptable drainage must be laid in accordance with "Sewerage sector guidance - Appendix C - DCG 2020", together with the Sewerage Undertaker's requirements.

KEY

Surface Profile
Rising Main IL

REV	DATE	REVISION NOTE	BY
C3	24.03.24	RM Profile updated to latest ground levels and revised outfall position	DMcC
C2	23.06.22	Rising main vertical profile updated	MS
A1	24.09.21	Updated with new route	GH

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CLIENT
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PROJECT
Llanwern
Newport

DRAWING TITLE
Pumping Station 4
Rising Main
Long Sections (On-Site)
DRAWING ISSUE STATUS
CONSTRUCTION
PJA JOB No. SUB-CODE DRAWING NO. REVISION
02554 - A - 111 - C3
Revision Letter: P = Prelim / A = Approval / T = Tender / C = Construction
BIM DRAWING REFERENCE

SCALE	DRAWN	REVIEWED	DATE
A1@1:500	GH	DMcC	05.12.19