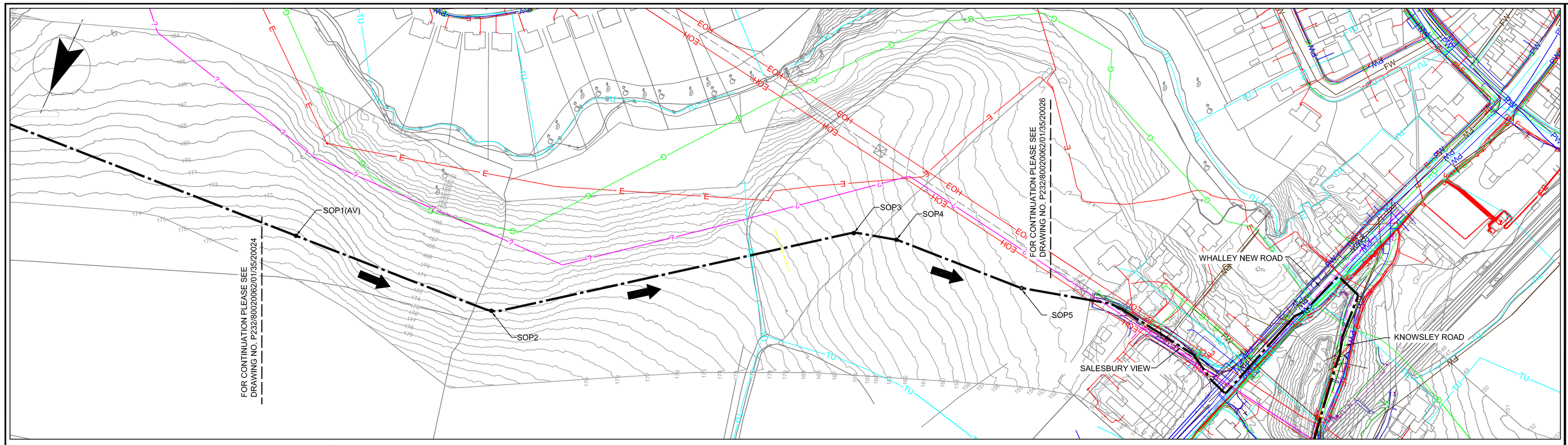


The positions of the apparatus of Utility Companies, Highway Authorities and others close to the Works have been provided for information only, no warranty is given as to the accuracy or completeness of this information and errors and omissions shall not be taken as a change to the Works information or scope of works. In particular, no service connections to individual properties are shown. Where services are not shown this shall not be taken as evidence that no services are present and the Contractor shall ensure he has consulted all relevant records.

PLAN

SCALE 1 : 1250

m50 0 50m

NOTES

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL DIMENSIONS ARE IN MILLIMETRES AND LEVEL IN METRES UNLESS OTHERWISE STATED.
3. ALL LEVELS ARE IN METERS ABOVE ORDNANCE DATUM (NEWLYN).
4. THE CONTRACTOR SHALL CHECK ALL SETTING OUT DIMENSIONS AND LEVELS PRIOR TO COMMENCEMENT OF WORK ON SITE.
5. A MINIMUM GRADIENT OF 1:250 MUST BE MAINTAINED TO FACILITATED DRAINING AND AIR VENTING.
6. THE LOCATION OF THE EXISTING PIPEWORK AND OTHER SERVICES ARE TAKEN FROM SITE AND THIRD PARTY RECORDS AND ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING SERVICES PRIOR TO CARRYING OUT EXCAVATION AND TAKE MEASURES TO PREVENT DAMAGE OF EXISTING SERVICES.
7. CONTRACTOR SHALL CHECK AND INFORM THE ENGINEER SHOULD EXISTING SERVICES OR OTHER DATA IMPACT ON THE PROPOSED LINE AND LEVEL OF THE PIPELINE.
8. 2 No. FIBRE OPTIC CABLES TO BE LAID IN SAME TRENCH AS PIPELINE MAINTAINING SEPARATION AS PER THE PIPE EMBEDMENT STANDARD DETAILS AND SPECIFICATION.
9. REFERENCE TO STANDARD DETAILS SHALL BE MADE FOR LINE VALVE, WASHOUT AND AIR VALVE INSTALLATIONS.
10. REFERENCE TO STANDARD DETAILS SHALL BE MADE FOR THRUST BLOCK / JOINT ANCHORAGE LENGTH REQUIREMENTS.
11. BURIED BOLTED CONNECTIONS TO BE P1 PROTECTED IN ACCORDANCE WITH UU CESWI 7th CL 5.14.
12. ALL PIPEWORK AND BACKFILLING OPERATIONS TO BE CARRIED OUT IN ACCORDANCE WITH CESWI 7TH EDITION WITH UU AMENDMENTS AND SOLUTION SCOPE BOOK REQUIREMENTS.
13. CLAY STANKS AS PER THE STANDARD DETAIL DRAWING AND SHALL BE PROVIDED AT EVERY FIELD BOUNDARY AND CHANGE OF OWNERSHIP.
14. THE CONTRACTOR SHALL PROTECT ALL NEW AND EXISTING PIPEWORK FROM CONSTRUCTION PLANT LOADING AND FLOATATION.
15. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY WORKS AND RESTRAINT.
16. THE BEDDING DETAILS SHOWN ASSUME A 1M WIDE TRENCH WITH A DEPTH OF COVER OF BETWEEN 0.9M AND 3.5M AND THE MINIMUM COMPACTION AS STATED. THE BEDDING, BACKFILL AND SURROUND IS ASSUMED TO BE SUITABLY PROCESSED GRANULAR MATERIAL COMPLYING WITH UU CESWI 7TH UNLESS OTHERWISE STATED. THE ENGINEER SHALL BE CONSULTED IF ANY CHANGE IS REQUIRED FROM THESE PARAMETERS.
17. ALL CHANGES IN DIRECTION FOR PE PIPELINES TO BE FORMED BY COLD BENDING OF BUTT-WELDED PIPE UNLESS SPECIFIED OTHERWISE ON PLAN.
18. FOR PE PIPES, THE MINIMUM BENDING RADIUS OF BUTT-WELDED PIPE IS 25 PIPE DIAMETERS (EG 11.25m FOR 450mm DIAMETER PIPE) AS LONG AS THE AMBIENT TEMP IS GREATER THAN 10°C. THE CONTRACTOR MUST RE-ASSESS BEND RADII BASED ON TEMPERATURE AT TIME OF CONSTRUCTION.

REFERENCES

MISC/80020062/01/00/D_LIST	CONTRACT DRAWING LIST
P232/80020062/01/35/80001 TO 06	AV/LV/WO AND HYDRANT DETAILS
P232/80020062/01/35/80007 TO 09	THRUST BLOCKS
P232/80020062/01/35/80010	PIPE EMBEDMENT DETAILS

LEGEND

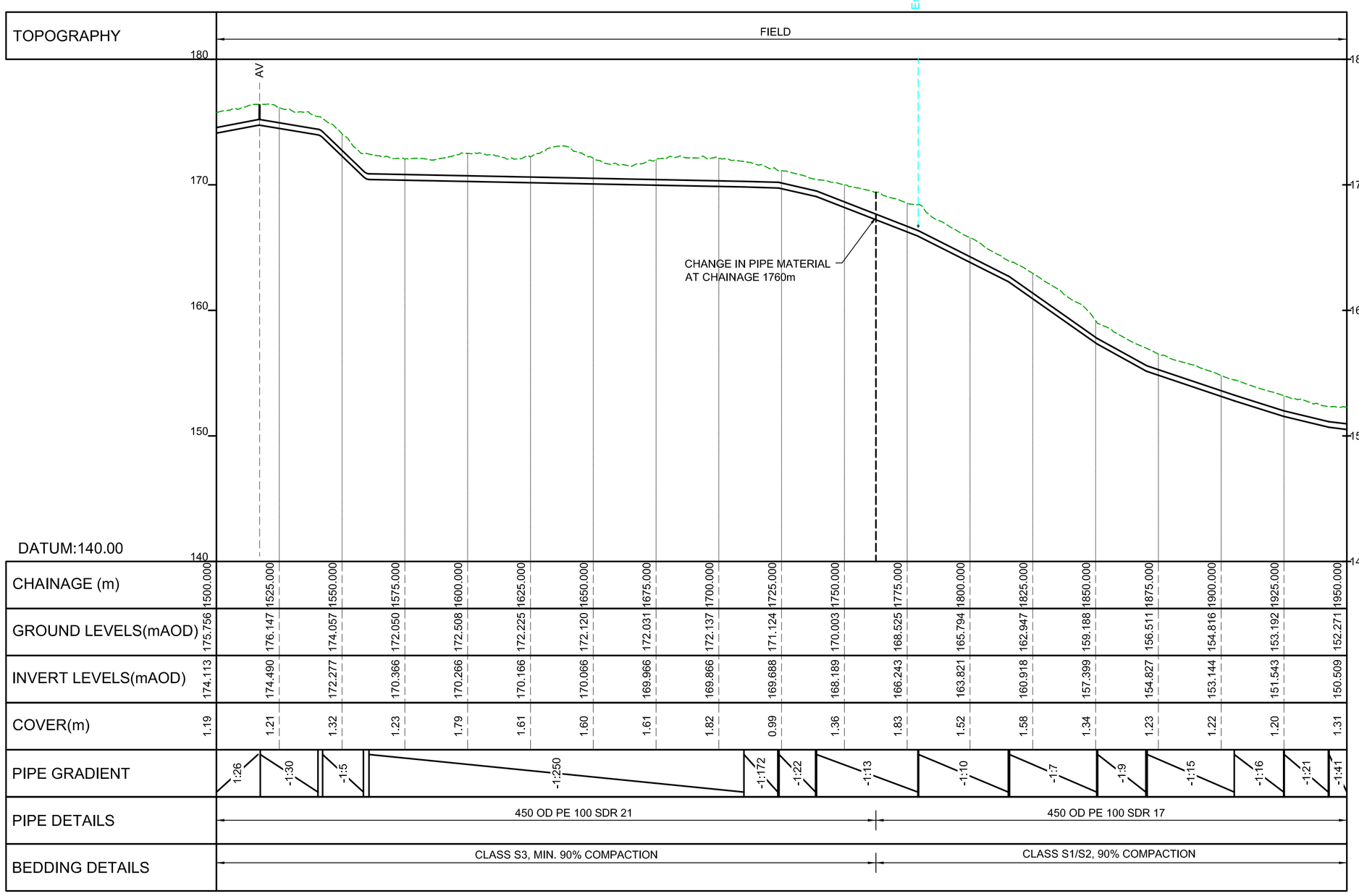
- NEW PIPELINE
- FLOW DIRECTION
- 0.000 0.000 — CONTOURS (mAOD)
- AV / LV / WO — AIR VALVE / LINE VALVE / WASH OUT
- E — Power line unidentified underground
- EOH — Power line unidentified overhead
- G — Gas
- PW — Potable water
- FW — Foul sewer
- CSEW — Combined sewer
- SW — Surface water sewer
- TO — Telecom overhead
- TU — Telecom underground
- CTV — Cable
- EA — Existing pipeline already abandoned
- ? — Unidentifed

TO BE REPRODUCED IN COLOUR ONLY

OS GRID REFERENCE
375726, 431671

CURRENT ISSUE INFORMATION

VERSION	DRWN	CHKD	REVD		DATE
A	KP	MJS	SPM	FOR UU CODING	18.07.13



CHAINAGE (m)	GROUND LEVELS(mAOD)	INVERT LEVELS(mAOD)	COVER(m)
1500.000	175.756	174.113	1.19
1525.000	176.147	174.490	1.21
1550.000	174.057	172.277	1.32
1575.000	172.050	170.366	1.23
1600.000	172.508	170.266	1.79
1625.000	172.225	170.166	1.61
1650.000	172.120	170.066	1.60
1675.000	172.031	169.966	1.61
1700.000	172.137	169.866	1.82
1725.000	171.124	169.688	0.99
1750.000	170.003	168.189	1.36
1775.000	168.525	166.243	1.83
1800.000	165.794	163.821	1.52
1825.000	162.947	160.918	1.58
1850.000	159.188	157.399	1.34
1875.000	156.511	154.827	1.23
1900.000	154.816	153.144	1.22
1925.000	153.192	151.543	1.20
1950.000	152.271	150.509	1.31

PIPE GRADIENT: 1:26, -1:30, -1:5, -1:250, -1:172, -1:22, -1:13, -1:10, -1:7, -1:9, -1:15, -1:16, -1:21, -1:41

LONGITUDINAL SECTION (GRAVITY PIPELINE)

Setting Out Co-ordinates

SOP's	Easting (m)	Northing (m)
SOP1(AV)	369208	431900
SOP2	369094	431894
SOP3	368931	431773
SOP4	368909	431767
SOP5	368835	431763

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDOUS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS:-

CONSTRUCTION
- STEEP GRADIENTS/SIDE SLOPES
- HP GAS MAIN IN VICINITY
- O/H ELECTRICITY LINES

MAINTENANCE / CLEANING / OPERATION
- AS CONSTRUCTION

DECOMMISSIONING / DEMOLITION
- AS CONSTRUCTION

VERTICAL SCALE 1 : 250

10m 0 m10

HORIZONTAL SCALE 1 : 1250

m50 0 50m

FARRANS

JACOBS
Fairbairn House, Ashton Lane, Sale, Manchester, M33 6WP
Tel:+44(0)161 962 1214 Fax:+44(0)161 905 5855
www.jacobs.com

United Utilities

UNITED UTILITIES PLC
HA TO RAMSGREAVE SR SECURITY OF SUPPLY

PLAN AND LONGITUDINAL SECTION

SHEET 25 OF 30

BREAK PRESSURE TANK TO

RAMSGREAVE SR

SCALE	SHEET SIZE
As Shown	A1
DRAWING NUMBER	REVISION
P232/80020062/01/35/20025	A

©The copyright of this document, which contains information of a proprietary nature, is vested in United Utilities Water PLC. The content of this document may not be used for purposes other than that for which it has been supplied and may not be reproduced, either wholly or in part, in any way whatsoever. It may not be used by, or its contents divulged to any other person whatsoever without the prior written permission of United Utilities Water PLC.
Copyright Acknowledgement: Use of Ordnance Survey map data sanctioned by the controller of H.M. Stationery Office. OS Licence Number 100019326. Crown copyright reserved. Unauthorised production infringes copyright