

**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**  
 In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

**CONSTRUCTION**  
 REFER DRA DOCUMENT NO.40018\_001\_DOC\_C01\_001.

**MAINTENANCE/CLEANING**  
 REFER DRA DOCUMENT NO. 40018\_001\_DOC\_C01\_001.

**DECOMMISSIONING/DEMOLITION**  
 REFER DRA DOCUMENT NO. 40018\_001\_DOC\_C01\_001.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

**FARRANS** A CBM COMPANY | **ATKINS** Member of the SNC-Lavalin Group | **Atkins Limited** Chadwick House, Birchwood Park, Warrington, WA3 6AE Direct: 01925 238319

**LEGEND:**

- PLANNING BOUNDARY
- WORKING BOUNDARY
- WATERCOURSE
- PROPOSED PIPE ROUTE
- PUBLIC RIGHT OF WAYS
- TREE
- L.V.
- A.V.
- W.O.
- SETTING OUT POINT
- ELECTRIC POLE
- HAZARD IDENTIFIER
- CLAY STANK

**EXISTING SERVICES:**

- W WATER MAIN
- SSE SEWER MAIN
- HV ELECTRIC-HV
- HV-O ELECTRIC-HV OVERHEAD
- LV ELECTRIC-LV
- LV-O ELECTRIC-LV OVERHEAD
- E ELECTRIC LINE
- BTR BT UNDERGROUND
- T BT OVERHEAD
- VM BT-VIRGIN MEDIA
- LPG GAS-LOW PRESSURE
- MPG GAS-MEDIUM PRESSURE
- SWS STORM WATER MAIN
- SL STREET LIGHT CABLE
- GAS WORKING SAFETY ZONE
- POWER LINE SAFETY ZONE

**REFERENCE:**  
 SZ14-T15A-PR1-M3-001-DWG-CST-G04-034: GENERAL NOTES / REFERENCES  
 40018-001-DWG-CST-G02-001: FLANGE MANAGEMENT DRAWING

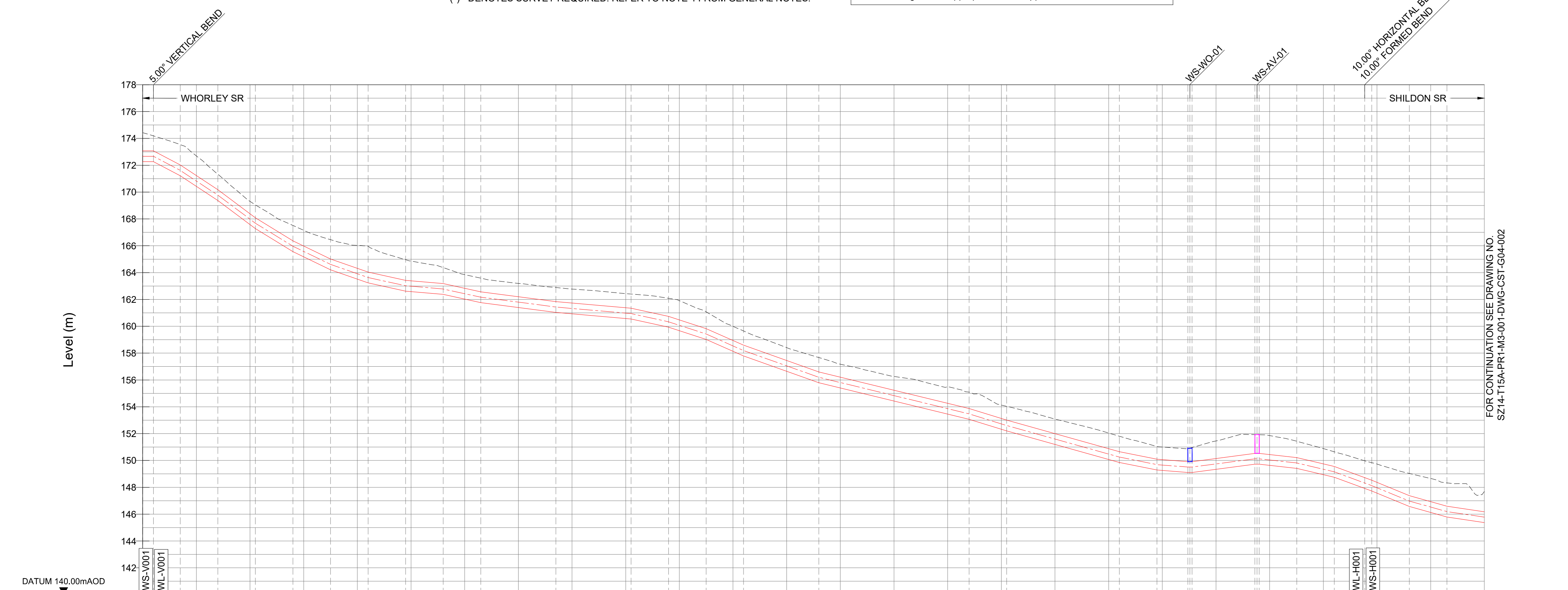
(\*) - DENOTES SURVEY REQUIRED. REFER TO NOTE 4 FROM GENERAL NOTES.

**WHORLEY TO SHILDON SETTING OUT POINTS**

CHAINAGE (m)	EASTING	NORTHING
0	411597.801	516619.444
40	411636.207	516630.623
80	411674.613	516641.801
120	411713.020	516652.980
160	411751.426	516664.158
200	411789.832	516675.336
240	411828.239	516686.515
280	411866.645	516697.693
320	411905.051	516708.872
360	411943.457	516720.050
400	411981.864	516731.229
440	412020.270	516742.407
480	412058.677	516753.585

**WHORLEY TO LONG NEWTON SETTING OUT POINTS**

CHAINAGE (m)	EASTING	NORTHING
0	411598.639	516616.564
40	411637.046	516627.742
80	411675.452	516638.920
120	411713.858	516650.099
160	411752.264	516661.278
200	411790.671	516672.456
240	411829.077	516683.634
280	411867.483	516694.813
320	411905.889	516705.991
360	411944.296	516717.170
400	411982.702	516728.348
440	412021.108	516739.527
480	412059.514	516750.705



PIPE	TWIN 813mm Ø STEEL WATER MAIN (3m C/C)																			
BEDDING	CLASS 'S4' 85% COMPACTION, 1.413m																			
SURFACE	FIELD																			
VERTICAL ANGLE	+Horizontal																			
GRADIENT	-1.10 -1.8 -1.7 -1.8 -1.10 -1.14 -1.23 -1.57 -1.23 -1.38 -1.57 -1.23 -1.15 -1.11 -1.14 -1.21 -1.16 -1.18 -1.25 -1.64 -1.50 -1.26 -1.44 -1.50 -1.14 -1.12 -1.18 -1.34																			
EXISTING GROUND LEVEL	174.434 174.189 173.539 172.698 171.332 169.305 169.047 167.511 167.154 166.452 166.028 165.988 164.859 164.372 163.851 163.584 163.200 162.887 162.774 162.434 162.403 162.088 161.912 161.072 159.997 159.653 158.412 157.668 157.176 156.280 155.506 155.097 155.077 152.043 151.808 151.046 150.914 150.864 149.914 149.984 149.341 149.305 149.150 149.220 149.192 149.163 149.134 149.105 149.076 149.047 149.018 148.989 148.960 148.931 148.902 148.873 148.844 148.815 148.786 148.757 148.728 148.699 148.670 148.641 148.612 148.583 148.554 148.525 148.496 148.467 148.438 148.409 148.380 148.351 148.322 148.293 148.264 148.235 148.206 148.177 148.148 148.119 148.090 148.061 148.032 148.003 147.974 147.945 147.916 147.887 147.858 147.829 147.800 147.771 147.742 147.713 147.684 147.655 147.626 147.597 147.568 147.539 147.510 147.481 147.452 147.423 147.394 147.365 147.336 147.307 147.278 147.249 147.220 147.191 147.162 147.133 147.104 147.075 147.046 147.017 146.988 146.959 146.930 146.901 146.872 146.843 146.814 146.785 146.756 146.727 146.698 146.669 146.640 146.611 146.582 146.553 146.524 146.495 146.466 146.437 146.408 146.379 146.350 146.321 146.292 146.263 146.234 146.205 146.176 146.147 146.118 146.089 146.060 146.031 146.002 145.973 145.944 145.915 145.886 145.857 145.828 145.799 145.770 145.741 145.712 145.683 145.654 145.625 145.596 145.567 145.538 145.509 145.480 145.451 145.422 145.393 145.364 145.335 145.306 145.277 145.248 145.219 145.190 145.161 145.132 145.103 145.074 145.045 145.016 144.987 144.958 144.929 144.900 144.871 144.842 144.813 144.784 144.755 144.726 144.697 144.668 144.639 144.610 144.581 144.552 144.523 144.494 144.465 144.436 144.407 144.378 144.349 144.320 144.291 144.262 144.233 144.204 144.175 144.146 144.117 144.088 144.059 144.030 144.001 143.972 143.943 143.914 143.885 143.856 143.827 143.798 143.769 143.740 143.711 143.682 143.653 143.624 143.595 143.566 143.537 143.508 143.479 143.450 143.421 143.392 143.363 143.334 143.305 143.276 143.247 143.218 143.189 143.160 143.131 143.102 143.073 143.044 143.015 142.986 142.957 142.928 142.899 142.870 142.841 142.812 142.783 142.754 142.725 142.696 142.667 142.638 142.609 142.580 142.551 142.522 142.493 142.464 142.435 142.406 142.377 142.348 142.319 142.290 142.261 142.232 142.203 142.174 142.145 142.116 142.087 142.058 142.029 142.000 141.971 141.942 141.913 141.884 141.855 141.826 141.797 141.768 141.739 141.710 141.681 141.652 141.623 141.594 141.565 141.536 141.507 141.478 141.449 141.420 141.391 141.362 141.333 141.304 141.275 141.246 141.217 141.188 141.159 141.130 141.101 141.072 141.043 141.014 140.985 140.956 140.927 140.898 140.869 140.840 140.811 140.782 140.753 140.724 140.695 140.666 140.637 140.608 140.579 140.550 140.521 140.492 140.463 140.434 140.405 140.376 140.347 140.318 140.289 140.260 140.231 140.202 140.173 140.144 140.115 140.086 140.057 140.028 140.000 143.971 143.942 143.913 143.884 143.855 143.826 143.797 143.768 143.739 143.710 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140.057 140.028 140.000 143.971 143.942 143.913 143.884 143.855 143.826 143.797 143.768 143.739 143.710 143.681 143.652 143.623 143.594 143.565 143.536 143.507 143.478 143.449 143.420 143.391 143.362 143.333 143.304 143.275 143.246 143.217 143.188 143.159 143.130 143.101 143.072 143.043 143.014 142.985 142.956 142.927 142.898 142.869 142.840 142.811 142.782 142.753 142.724 142.695 142.666 142.637 142.608 142.579 142.550 142.521 142.492 142.463 142.434 142.405 142.376 142.347 142.318 142.289 142.260 142.231 142.202 142.173 142.144 142.115 142.086 142.057 142.028 142.000 141.971 141.942 141.913 141.884 141.855 141.826 141.797 141.768 141.739 141.710 141.681 141.652 141.623 141.594 141.565 141.536 141.507 141.478 141.449 141.420 141.391 141.362 141.333 141.304 141.275 141.246 141.217 141.188 141.159 141.130 141.101 141.072 141.043 141.014 140.985 140.956 140.927 140.898 140.869 140.840 140.811 140.782 140.753 140.724 140.695 140.666 140.637 140.608 140.579 140.550 140.521 140.492 140.463 140.434 140.405 140.376 140.347 140.318 140.289 140.260 140.231 140.202 140.173 140.144 140.115 140.086 140.057 140.028 140.000 143.971 143.942 143.913 143.884 143.855 143.826 143.797 143.768 143.739 143.710 143.681 143.652 143.623 143.594 143.565 143.536 143.507 143.478 143.449 143.420 143.391 143.362 143.333 143.304 143.275 143.246 143.217 143.188 143.159 143.130 143.101 143.072 143.043 143.014 142.985 142.956 142.927 142.898 142.869 142.840 142.811 142.782 142.753 142.724 142.695 142.666 142.637 142.608 142.579 142.550 142.521 142.492 142.463 142.434 142.405 142.376 142.347 142.318 142.289 142.260 142.231 142.202 142.173 142.144 142.115 142.086 142.057 142.028 142.000 141.971 141.942 141.913 141.884 141.855 141.826 141.797 141.768 141.739 141.710 141.681 141.652 141.623 141.594 141.565 141.536 141.507 141.478 141.449 141.420 141.391 141.362 141.333 141.304 141.275 141.246 141.217 141.188 141.159 141.130 141.101 141.072 141.043 141.014 140.985 140.956 140.927 140.898 140.869 140.840 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