

Steel / Ductile Iron Pipes PN16 to seal at 16barg						
Gasket Specification	DN100	DN300	DN600	DN700	DN800	DN900
Torque setting (Nm)	49	160	480	467	534	600
C.O.F.	0.120					
Torque sequence	As per Drg: 40018-001-DWG-CST-G02-001 Bolt Specification Grade 4.6					

**FARRANS**  
A CBM COMPANY

**ATKINS**  
Member of the SNC-Lavalin Group

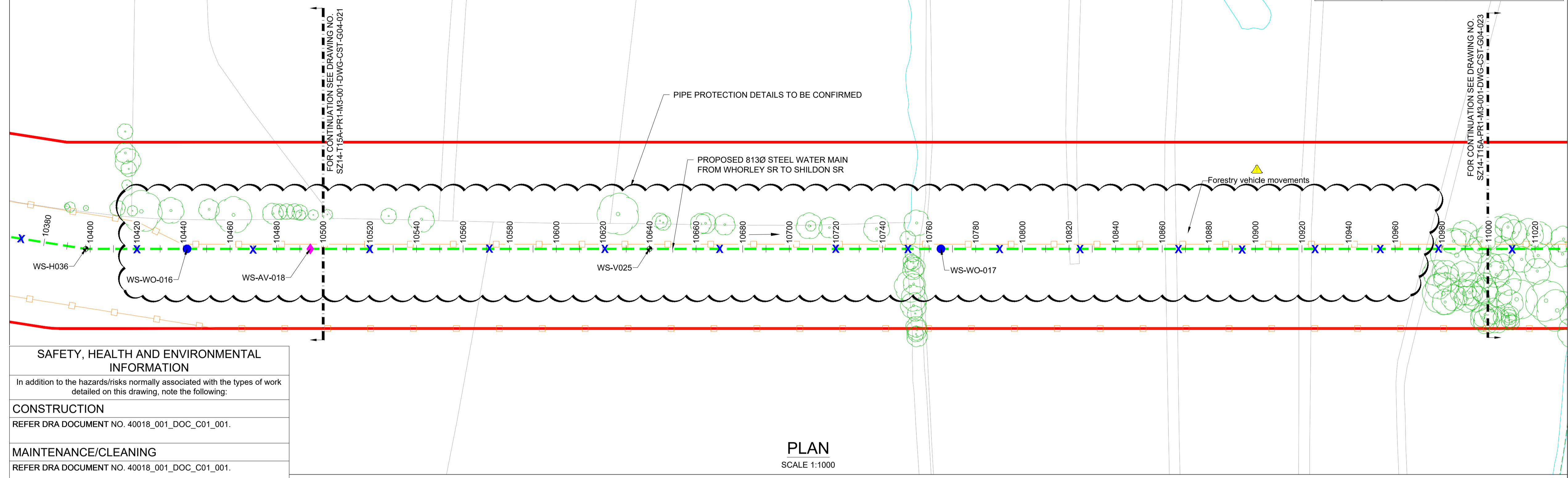
**Atkins Limited**  
Chadwick House, Birchwood  
Park, Warrington, WA3 6AE  
Direct: 01925 238319

**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:**

- WATER MAIN
- SEWER MAIN
- ELECTRIC-HV
- ELECTRIC-HV OVERHEAD
- ELECTRIC-LV
- ELECTRIC-LV OVERHEAD
- ELECTRIC LINE
- BT UNDERGROUND
- BT OVERHEAD
- BT-VIRGIN MEDIA
- GAS-LOW PRESSURE
- GAS-MEDIUM PRESSURE
- STORM WATER MAIN
- STREET LIGHT CABLE
- GAS WORKING SAFETY ZONE
- POWER LINE SAFETY ZONE



**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

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

**KEY PLAN**  
SCALE: NTS

**WHORLEY TO SHILDON SETTING OUT POINTS**

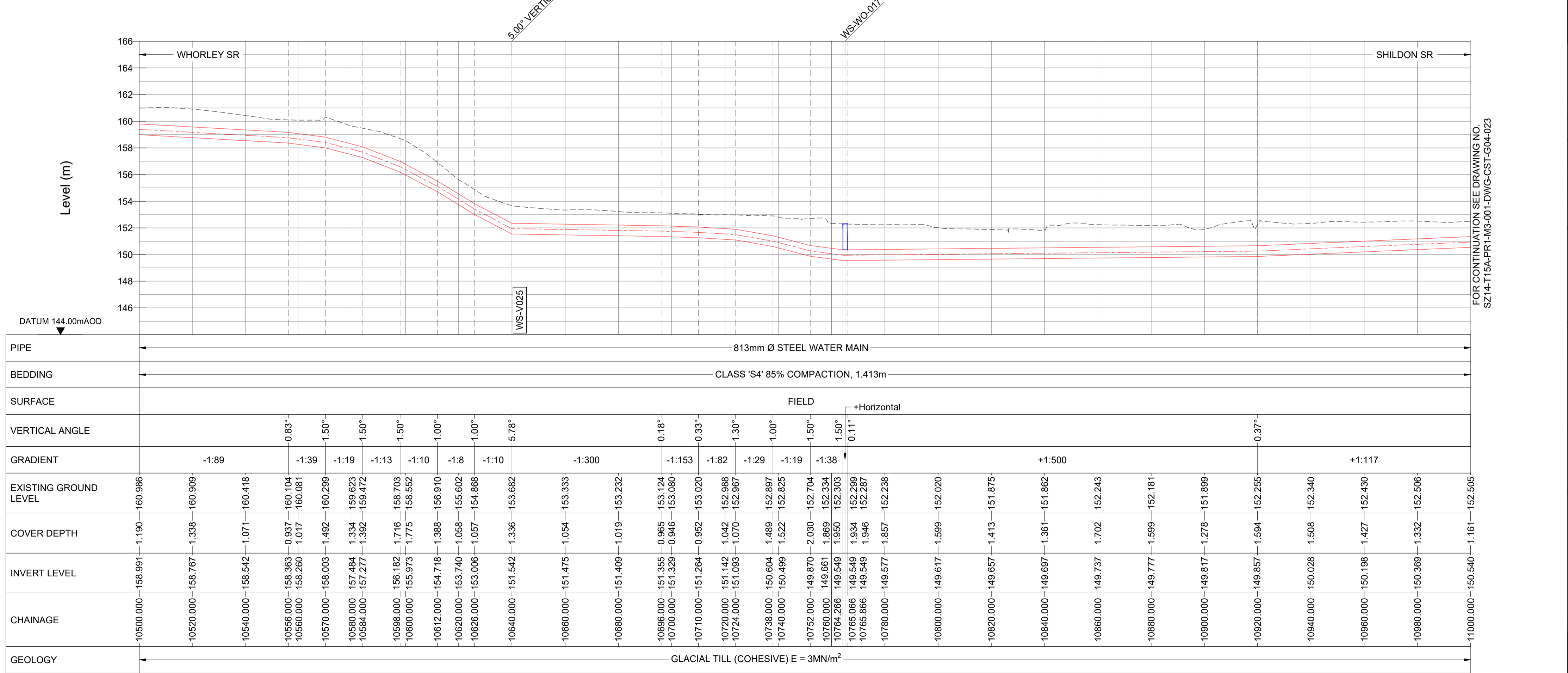
CHAINAGE (m)	EASTING	NORTHING
10520	418163.994	522980.476
10560	418172.522	523019.557
10600	418181.049	523058.637
10640	418189.577	523097.718
10680	418198.104	523136.798
10720	418206.632	523175.879
10760	418215.159	523214.959
10800	418223.687	523254.040
10840	418232.214	523293.120
10880	418240.742	523332.201
10920	418249.269	523371.281
10960	418257.797	523410.361
11000	418266.324	523449.442

**VERTICAL BEND**

SOP NO.	EASTING	NORTHING
WS-V025	418189.577	523097.719

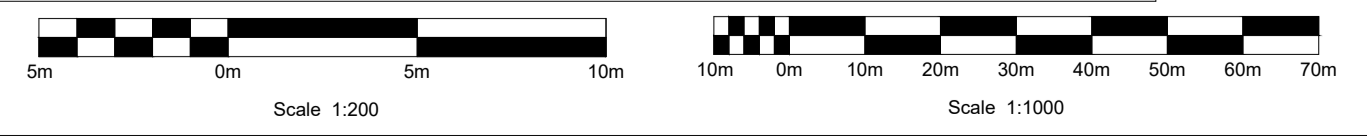
**WASHOUT**

SOP NO.	EASTING	NORTHING
WS-WO-017	418216.239	523219.909



VERTICAL ANGLE	GRADIENT	EXISTING GROUND LEVEL	COVER DEPTH	INVERT LEVEL	CHAINAGE	GEOLOGY
	-1.89	160.996	1.190	158.991	10500.000	GLACIAL TILL (COHESIVE) E = 3MN/m²
	-1.39	160.909	1.338	158.767	10520.000	
	-1.19	160.418	1.071	158.542	10540.000	
	-1.13	160.104	0.937	158.363	10566.000	
	0.83°	160.081	1.017	158.260	10560.000	
	1.50°	160.299	1.492	158.003	10570.000	
	1.50°	159.623	1.334	157.484	10580.000	
	1.50°	159.472	1.392	157.277	10584.000	
	1.50°	158.703	1.716	156.182	10598.000	
	1.00°	158.552	1.775	155.973	10600.000	
	1.00°	156.910	1.388	154.718	10612.000	
	1.00°	155.602	1.058	153.740	10620.000	
	1.00°	154.868	1.057	153.006	10628.000	
	5.78°	153.682	1.338	151.542	10640.000	
	-1.300	153.333	1.054	151.475	10660.000	
	-1.153	153.232	1.019	151.409	10680.000	
	0.18°	153.124	0.965	151.355	10686.000	
	0.33°	153.080	0.946	151.329	10700.000	
	-1.82	153.020	0.952	151.264	10710.000	
	-1.29	152.988	1.042	151.142	10720.000	
	-1.19	152.967	1.070	151.093	10724.000	
	1.00°	152.897	1.469	150.604	10738.000	
	1.50°	152.825	1.522	150.499	10740.000	
	1.50°	152.704	2.030	149.870	10752.000	
	0.11°	152.334	1.869	149.661	10760.000	
	0.37°	152.303	1.950	149.549	10764.266	
		152.289	1.934	149.519	10765.056	
		152.257	1.946	149.549	10765.866	
		152.238	1.857	149.577	10780.000	
		152.020	1.599	149.617	10800.000	
		151.875	1.413	149.657	10820.000	
		151.862	1.361	149.697	10840.000	
		152.243	1.702	149.737	10860.000	
		152.181	1.589	149.777	10880.000	
		151.899	1.278	149.817	10900.000	
		152.255	1.584	149.857	10920.000	
		152.340	1.508	150.028	10940.000	
		152.430	1.427	150.198	10960.000	
		152.506	1.332	150.369	10980.000	
		152.505	1.161	150.540	11000.000	

**LONGITUDINAL SECTION**  
HORIZONTAL SCALE 1:1000 VERTICAL SCALE 1:200



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

**Drawing Status:**  
FOR REVIEW BY LEAD APPOINTED PARTY

**Suitability:**  
S4

Rev.	Description	Date	Drawn	Chk'd	App'd
P06	FOR REVIEW	17.11.2023	AJ	RH	SK
P05	FOR REVIEW	10.10.2023	AJ	RH	SK
P04	FOR REVIEW	18.09.2023	AJ	RH	SK
P03	FOR REVIEW	26.07.2023	AJ	RH	SK
P02	FOR REVIEW	30.06.2023	AJ	RH	SK

**Note:-**  
IF THIS DRAWING IS FOUND TO BE IN ANY WAY INACCURATE, PLEASE ADVISE THE RECORD OFFICE IMMEDIATELY AND COMPLETE AN AMENDMENT FORM.



**CONTRACTOR:** FARRANS  
**REF. NO.:** WN019/0205-4.11  
**I.D. PROJECT NO.:** WN019/0205

**Drawing Title:**  
TEES STRATEGIC TRANSFER MAIN  
WHORLEY SR TO SHILDON SR  
PLAN AND LONGITUDINAL SECTION

**Dwg No:**  
SZ14-T15A-PR1-M3-001-DWG-CST-G04-022

<b>Sheet:</b> 22 OF 33	<b>Date:</b> 17.11.2023	<b>Sheet:</b> A1	<b>Scale:</b> AS SHOWN	<b>Rev No:</b> P06
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