

Steel / Ductile Iron Pipes PN16 to seal at 16 barg					
Gasket Specification	DN100	DN300	DN600	DN800	DN900
Torque setting (Nm)	49	160	480	467	534
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 WAY
- 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
- 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

**REFERENCE:**  
 SZ14-T15A-PR1-M1-001-DWG-CST-G04-029: GENERAL NOTES / REFERENCES  
 40018-001-DWG-CST-G02-001: FLANGE MANAGEMENT DRAWING

**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

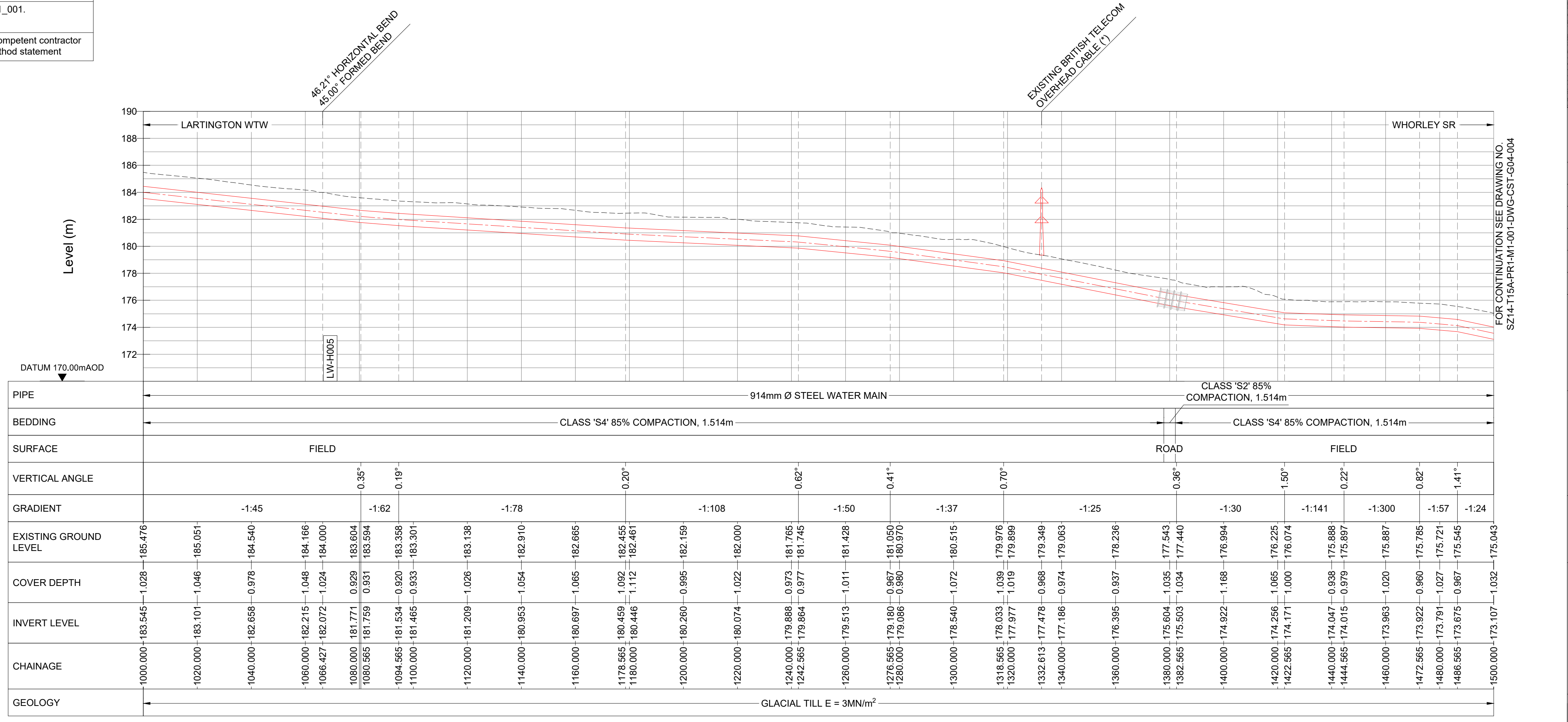
In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following:

**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



**LARTINGTON TO WHORLEY SETTING OUT POINTS**

Chainage	Easting	Northing
1000	401829.318	518833.750
1040	401868.742	518840.513
1080	401902.390	518856.226
1120	401924.792	518889.364
1160	401947.193	518922.503
1200	401969.595	518955.642
1240	401991.996	518988.780
1280	402014.398	519021.919
1320	402036.800	519055.058
1360	402059.201	519088.196
1400	402081.603	519121.335
1440	402104.004	519154.473
1480	402126.406	519187.612

**HORIZONTAL BEND**

SOP NO.	EASTING	NORTHING
LW-H005	401894.789	518844.981

PIPE	914mm Ø STEEL WATER MAIN		CLASS 'S2' 85% COMPACTION, 1.514m		ROAD		CLASS 'S4' 85% COMPACTION, 1.514m		FIELD	
BEDDING	CLASS 'S4' 85% COMPACTION, 1.514m									
SURFACE	FIELD									
VERTICAL ANGLE	0.35° - 0.19° - 0.20° - 0.62° - 0.41° - 0.70° - 0.36° - 1.50° - 0.22° - 0.82° - 1.41°									
GRADIENT	-1.45 - -1.62 - -1.78 - -1.108 - -1.50 - -1.37 - -1.25 - -1.30 - -1.141 - -1.300 - -1.57 - -1.24									
EXISTING GROUND LEVEL	185.476 - 185.051 - 184.540 - 184.166 - 184.000 - 183.604 - 183.594 - 183.358 - 183.301 - 183.138 - 182.910 - 182.685 - 182.455 - 182.461 - 182.159 - 182.000 - 181.765 - 181.745 - 181.428 - 181.050 - 180.970 - 180.515 - 179.976 - 179.889 - 179.349 - 179.063 - 178.236 - 177.543 - 177.440 - 176.994 - 176.225 - 176.225 - 176.074 - 175.888 - 175.888 - 175.697 - 175.697 - 175.887 - 175.785 - 175.721 - 175.545 - 175.545 - 175.043									
COVER DEPTH	1.028 - 1.046 - 0.978 - 1.048 - 1.024 - 0.929 - 0.931 - 0.920 - 0.933 - 1.026 - 1.054 - 1.065 - 1.112 - 0.995 - 1.022 - 1.072 - 1.039 - 1.019 - 0.968 - 0.960 - 1.072 - 1.039 - 1.034 - 1.188 - 1.065 - 1.065 - 1.000 - 0.938 - 0.979 - 1.020 - 0.960 - 1.027 - 0.967 - 1.032									
INVERT LEVEL	184.448 - 184.014 - 183.571 - 183.166 - 182.976 - 182.674 - 182.673 - 182.361 - 182.361 - 182.000 - 181.765 - 181.745 - 181.428 - 181.050 - 180.970 - 180.515 - 179.976 - 179.889 - 179.349 - 179.063 - 178.236 - 177.543 - 177.440 - 176.994 - 176.225 - 176.225 - 176.074 - 175.888 - 175.888 - 175.697 - 175.697 - 175.887 - 175.785 - 175.721 - 175.545 - 175.545 - 175.043									
CHAINAGE	1000.000 - 1020.000 - 1040.000 - 1060.000 - 1066.427 - 1080.000 - 1080.565 - 1084.565 - 1100.000 - 1120.000 - 1140.000 - 1160.000 - 1178.565 - 1180.000 - 1200.000 - 1220.000 - 1240.000 - 1242.565 - 1260.000 - 1276.565 - 1280.000 - 1300.000 - 1318.565 - 1320.000 - 1332.613 - 1340.000 - 1360.000 - 1380.000 - 1382.565 - 1400.000 - 1420.000 - 1422.565 - 1440.000 - 1444.565 - 1460.000 - 1472.565 - 1480.000 - 1486.565 - 1500.000									
GEOLOGY	GLACIAL TILL E = 3MN/m <sup>2</sup>									

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

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

**Suitability:**  
**S4**

Rev.	Description	Date	Drawn	Chk'd	App'd
P04	FOR REVIEW	20.11.2023	AJ	RH	SK
P03	FOR REVIEW	18.09.2023	AJ	RH	SK
P02	FOR REVIEW	26.07.2023	AJ	RH	SK
P01	REVIEW AND COMMENTS	25.04.2023	AJ	SM	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 LARTINGTON WTW TO WHORLEY SR PLAN AND LONGITUDINAL SECTION**

**Dwg No:**  
 SZ14-T15A-PR1-M1-001-DWG-CST-G04-003

Sheet:	Date:	Sheet:	Scale:	Rev No:
3 OF 23	20.11.2023	A1	AS SHOWN	P04

