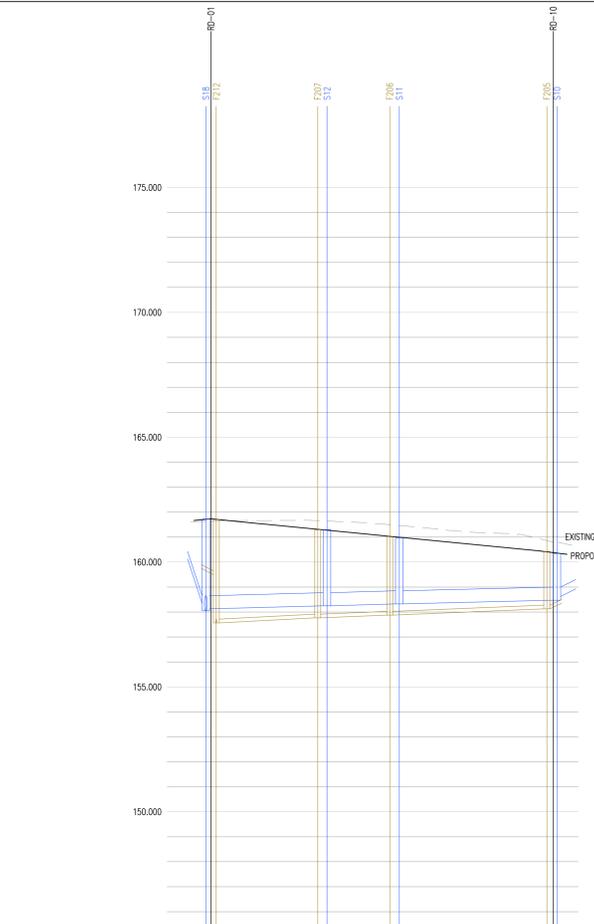


CHANGING	EXISTING GROUND LEVEL	CENTRE LINE	VERTICAL ALIGNMENT	HORIZONTAL ALIGNMENT	LEFT HAND CHANNEL	RIGHT HAND CHANNEL	STORMWATER COVER LEVEL	STORMWATER INVERT	STORMWATER DETAILS	STORMWATER LENGTHS	FOULWATER COVER LEVEL	FOULWATER INVERT	FOULWATER DETAILS	FOULWATER LENGTHS
0.000	156.646	156.235	G = -8.333% 1: -12.0		156.804	156.667	156.413				155.530			
10.000	155.487	155.802			155.971	155.833			Pipe 2.006 Dia 325 Circular CONC 1 in 195	24.362			Pipe 1.006 Dia 150 Circular CLAY 1 in 101	20.236
20.000	154.264	155.069			155.172	155.009			Pipe 2.005 Dia 325 Circular CONC 1 in 196	14.681			Pipe 1.005 Dia 150 Circular CLAY 1 in 128	14.238
30.000	154.652	154.233			154.721	154.671			Pipe 2.004 Dia 325 Circular CONC 1 in 211	31.623			Pipe 1.004 Dia 150 Circular CLAY 1 in 126	31.417
40.000	154.085	153.700			154.154	154.016								

**CLAY PIPE STRENGTH REQUIREMENTS**  
100mm DIA. MINIMUM CRUSHING STRENGTH = 40kN/m  
150mm DIA. MINIMUM CRUSHING STRENGTH = 40kN/m  
225mm DIA. MINIMUM CRUSHING STRENGTH = 45kN/m  
300mm DIA. MINIMUM CRUSHING STRENGTH = 72kN/m

**CONCRETE PIPE STRENGTH REQUIREMENTS**  
ALL CONCRETE PIPES SHOULD BE CLASS 120  
TO EN 1916 / BS 5911-1:2002

**CLASS S TYPE BEDDING AND SURROUND FOR ALL PIPES**

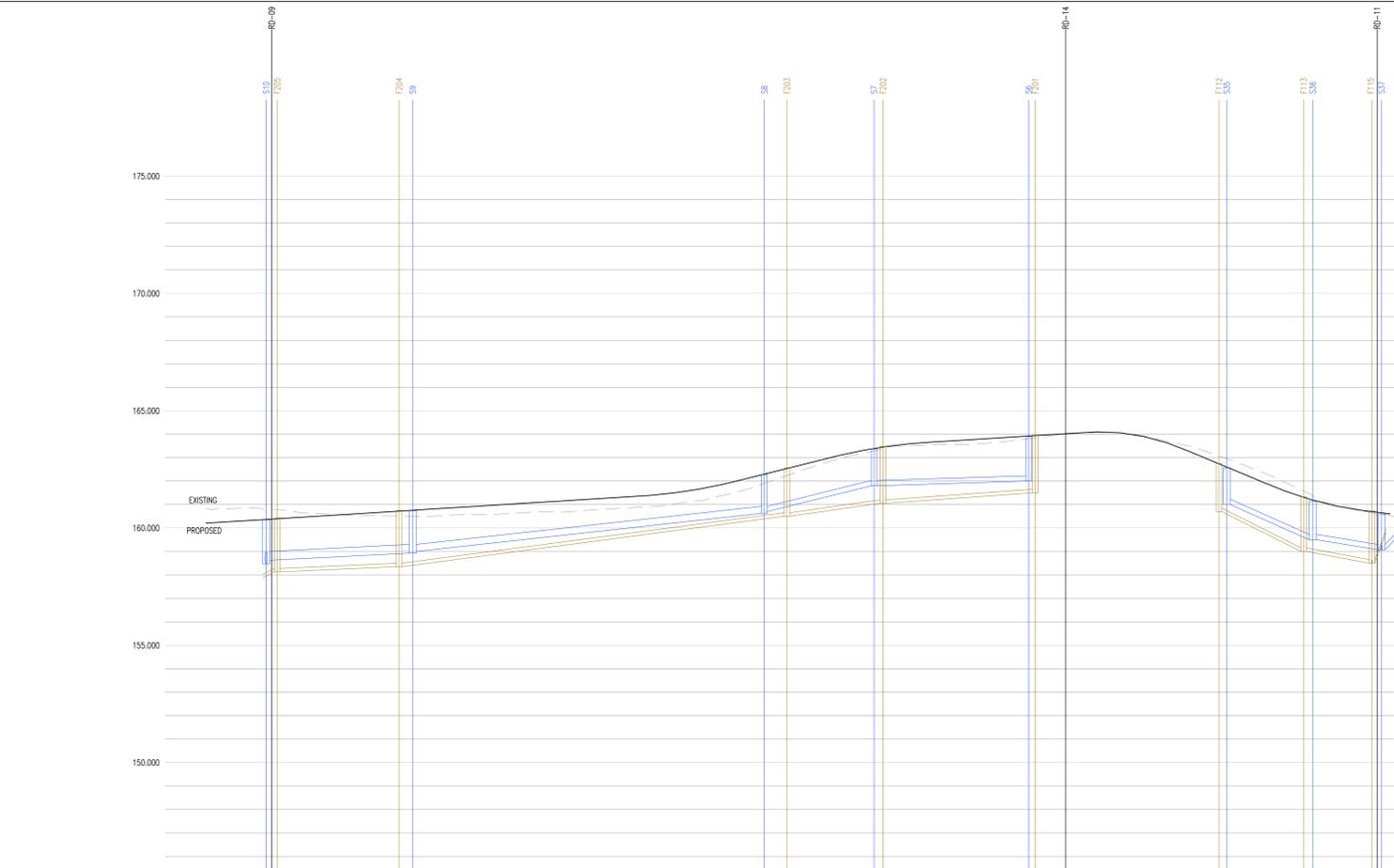


CHANGING	EXISTING GROUND LEVEL	CENTRE LINE	VERTICAL ALIGNMENT	HORIZONTAL ALIGNMENT	LEFT HAND CHANNEL	RIGHT HAND CHANNEL	STORMWATER COVER LEVEL	STORMWATER INVERT	STORMWATER DETAILS	STORMWATER LENGTHS	FOULWATER COVER LEVEL	FOULWATER INVERT	FOULWATER DETAILS	FOULWATER LENGTHS
0.000	161.632	161.632	G = -1.946% 1: -51.4	R = 80.000	161.632	161.632	161.722	158.125			161.697	157.465		
10.000	160.894	161.535			161.457	161.496			Pipe 2.006 Dia 325 Circular CONC 1 in 195	24.362			Pipe 1.006 Dia 150 Circular CLAY 1 in 101	20.236
20.000	161.671	161.340			161.271	161.409			Pipe 2.005 Dia 325 Circular CONC 1 in 196	14.681			Pipe 1.005 Dia 150 Circular CLAY 1 in 128	14.238
30.000	161.184	161.145			161.208	161.277			Pipe 2.004 Dia 325 Circular CONC 1 in 211	31.623			Pipe 1.004 Dia 150 Circular CLAY 1 in 126	31.417
40.000	161.425	160.951			161.043	160.882								
50.000	161.231	160.854			160.915	160.792								
60.000	161.137	160.756			160.811	160.701								
70.000	160.800	160.659			160.697	160.611								
80.000	160.464	160.565			160.606	160.524								
90.000	160.137	160.464			160.464	160.374								
100.000	160.793	160.374			160.286	160.196								
110.000	160.464	160.286			160.101	160.011								
120.000	160.137	160.101			160.011	160.011								

**CLAY PIPE STRENGTH REQUIREMENTS**  
100mm DIA. MINIMUM CRUSHING STRENGTH = 40kN/m  
150mm DIA. MINIMUM CRUSHING STRENGTH = 40kN/m  
225mm DIA. MINIMUM CRUSHING STRENGTH = 45kN/m  
300mm DIA. MINIMUM CRUSHING STRENGTH = 72kN/m

**CONCRETE PIPE STRENGTH REQUIREMENTS**  
ALL CONCRETE PIPES SHOULD BE CLASS 120  
TO EN 1916 / BS 5911-1:2002

**CLASS S TYPE BEDDING AND SURROUND FOR ALL PIPES**



CHANGING	EXISTING GROUND LEVEL	CENTRE LINE	VERTICAL ALIGNMENT	HORIZONTAL ALIGNMENT	LEFT HAND CHANNEL	RIGHT HAND CHANNEL	STORMWATER COVER LEVEL	STORMWATER INVERT	STORMWATER DETAILS	STORMWATER LENGTHS	FOULWATER COVER LEVEL	FOULWATER INVERT	FOULWATER DETAILS	FOULWATER LENGTHS
0.000	160.833	160.205	G = 1.250% 1: 80.0	R = 100.000	160.271	160.136	162.729	160.710			160.625	158.320		
10.000	160.895	160.267			160.396	160.198			Pipe 2.003 Dia 325 Circular CONC 1 in 104	31.229			Pipe 1.003 Dia 150 Circular CLAY 1 in 116	26.044
20.000	160.957	160.329			160.461	160.261			Pipe 2.002 Dia 300 Circular CLAY 1 in 46	75.004			Pipe 1.002 Dia 150 Circular CLAY 1 in 38	82.760
30.000	160.959	160.391			160.526	160.326			Pipe 2.001 Dia 225 Circular CLAY 1 in 21	23.314			Pipe 1.001 Dia 150 Circular CLAY 1 in 37	20.422
40.000	160.955	160.453			160.591	160.391			Pipe 2.000 Dia 225 Circular CLAY 1 in 165	32.988			Pipe 1.000 Dia 150 Circular CLAY 1 in 12	32.408
50.000	160.951	160.515			160.656	160.456								
60.000	160.947	160.577			160.721	160.521								
70.000	160.943	160.639			160.786	160.586								
80.000	160.939	160.701			160.851	160.651								
90.000	160.935	160.763			160.916	160.716								
100.000	160.931	160.825			160.981	160.781								
110.000	160.927	160.887			161.046	160.846								
120.000	160.923	161.107			161.111	160.911								
130.000	160.919	161.129			161.176	160.976								
140.000	160.915	161.151			161.241	161.041								
150.000	160.911	161.173			161.306	161.106								
160.000	160.907	161.195			161.371	161.171								
170.000	160.903	161.217			161.436	161.236								
180.000	160.900	161.239			161.501	161.301								
190.000	160.896	161.261			161.566	161.366								
200.000	160.892	161.283			161.631	161.431								
210.000	160.888	161.305			161.696	161.496								
220.000	160.884	161.327			161.761	161.561								
230.000	160.880	161.349			161.826	161.626								
240.000	160.876	161.371			161.891	161.691								
250.000	160.872	161.393			161.956	161.756								
260.000	160.868	161.415			162.021	161.821								
270.000	160.864	161.437			162.086	161.886								
280.000	160.860	161.459			162.151	161.951								
290.000	160.856	161.481			162.216	162.016								
300.000	160.852	161.503			162.281	162.081								
310.000	160.848	161.525			162.346	162.146								
320.000	160.844	161.547			162.411	162.211								
330.000	160.840	161.569			162.476	162.276								
340.000	160.836	161.591			162.541	162.341								
350.000	160.832	161.613			162.606	162.406								
360.000	160.828	161.635			162.671	162.471								
370.000	160.824	161.657			162.736	162.536								
380.000	160.820	161.679			162.801	162.601								
390.000	160.816	161.701			162.866	162.666								
400.000	160.812	161.723			162.931	162.731								
410.000	160.808	161.745			162.996	162.796								
420.000	160.804	161.767			163.061	162.861								
430.000	160.800	161.789			163.126	162.926								
440.000	160.796	161.811			163.191	162.991								
450.000	160.792	161.833			163.256	163.056								
460.000	160.788	161.855			163.321	163.121								
470.000	160.784	161.877			163.386	163.186								
480.000	160.780	161.899			163.451	163.251								
490.000	160.776	161.921			163.516	163.316								
500.000	160.772	161.943			163.581	163.381								
510.000	160.768	161.965			163.646	163.446								
520.000	160.764	161.987			163.711	163.511								
530.000	160.760	162.009			163.776	163.576								
540.000	160.756	162.031			163.841	163.641								
550.000	160.752	162.053			163.906	163.706								
560.000	160.748	162.075			163.971	163.771								
570.000	160.744	162.097			164.036	163.836								
580.000	160.740	162.119			164.101	163.901								
590.000	160.736	162.141			164.166	163.966								
600.000	160.732	162.163			164.231	164.031								
610.000	160.728	162.185			164.296	164.096								
620.000	160.724	162.207			164.361	164.161								
630.000	160.720	162.229			164.426	164.226								
640.000	160.716	162.251			164.491	164.291								
650.000	160.712	162.273												