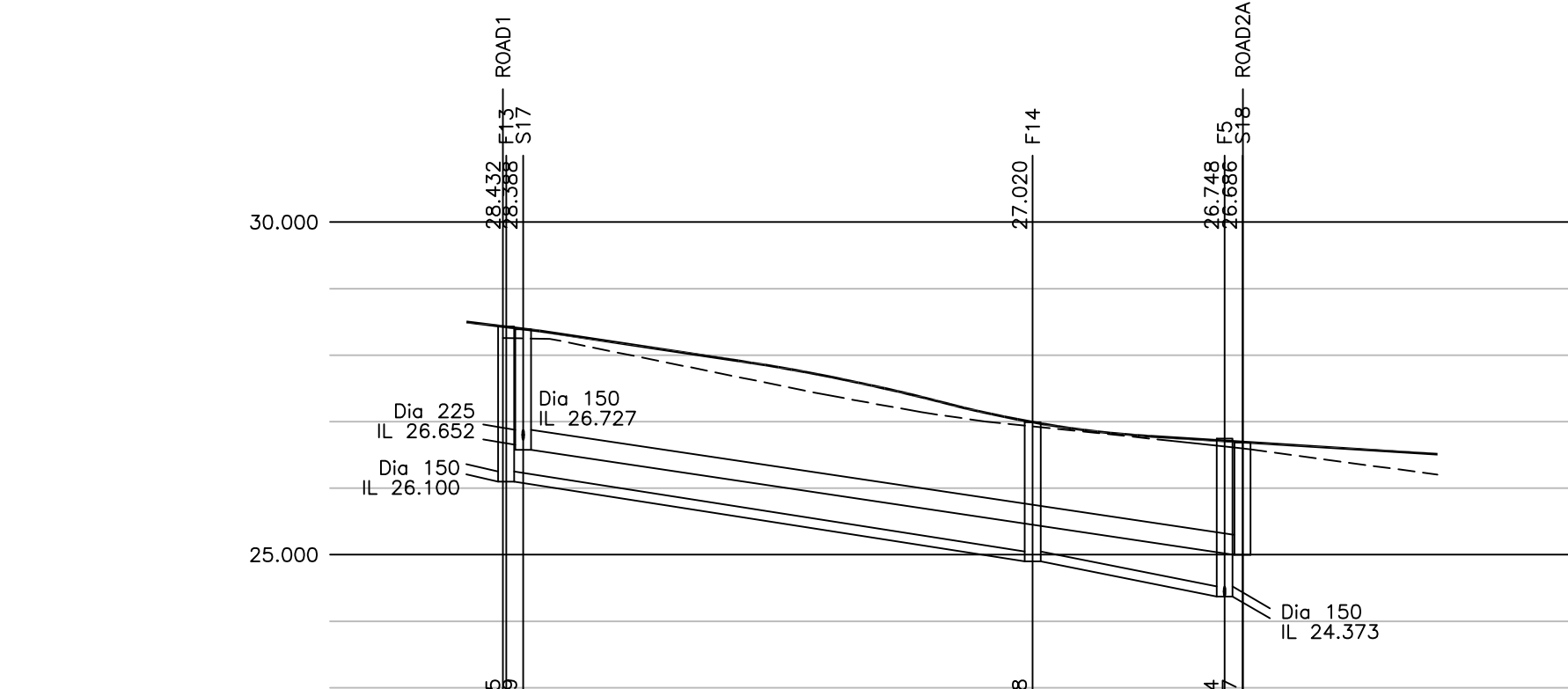
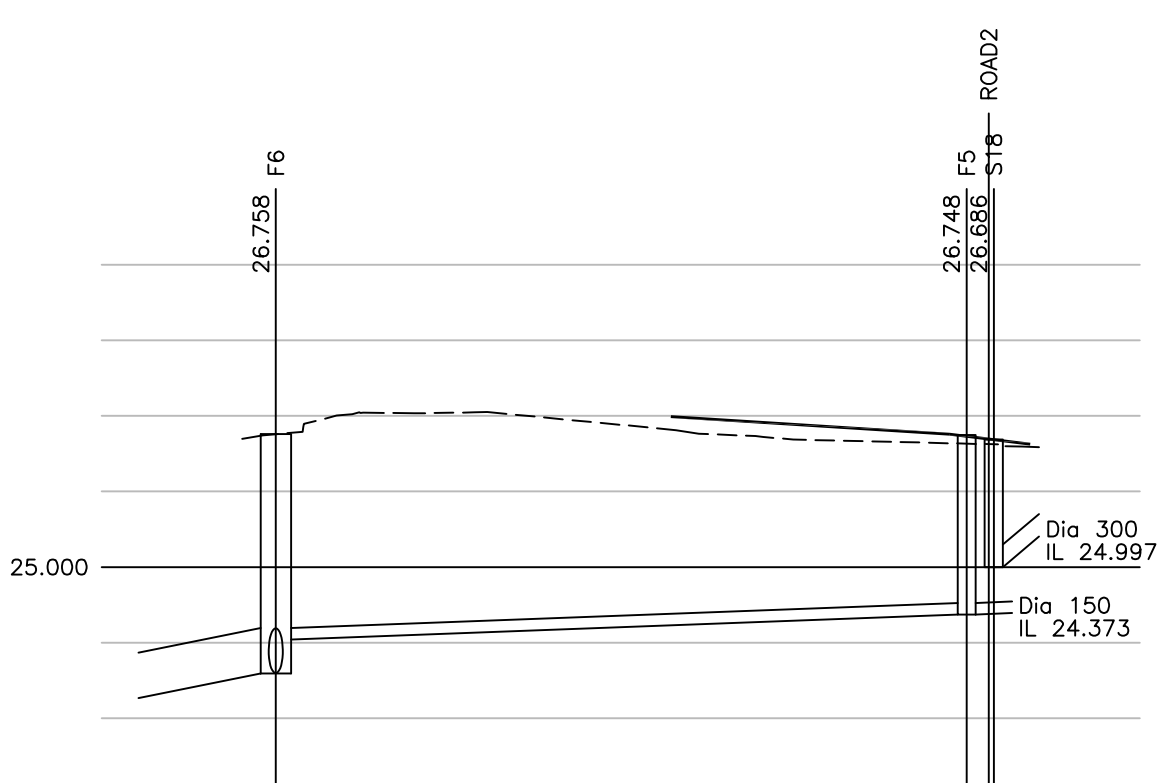
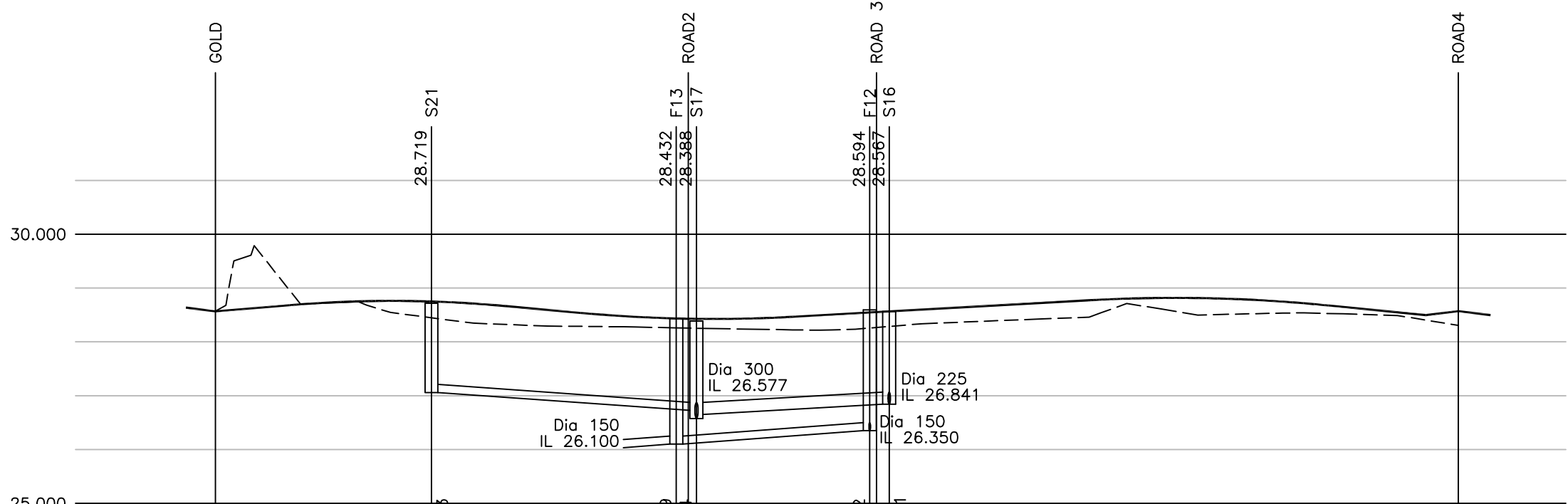




CHAINAGE	0.000	2.766	7.248	10.000	17.700	20.000	27.000	30.000	32.700	33.700	39.818	40.000	48.700	50.244	55.211	55.616	60.000	64.116	70.000	70.249
EXISTING GROUND LEVEL	28.257		27.983		27.577			27.195	32.700		26.925		26.718				26.482		26.209	26.202
ALIGNMENT LEVEL	28.363		28.146		27.915			27.440	32.700		26.986		26.780				26.639		26.514	26.511
VERTICAL ALIGNMENT		G= -3.001% 1: -33.3			L= 15.000 KF= -7.15897			G= -3.89962% L= 15.000			G= -1.250% 1: -80.0									
HORIZONTAL ALIGNMENT																				
LEFT HAND CHANNEL			28.160	28.106	28.077	27.773		27.371			26.917		26.695	26.687		26.570		26.519		26.442
RIGHT HAND CHANNEL			28.244	28.215		27.911		27.509			27.055		26.833	26.824		26.699		26.644		26.562
STORMWATER INVERT		26.577														24.997				
STORMWATER DETAILS			Pipe 3.003 Dia 300 Circular CLAY 1 in 34																	
STORMWATER LENGTHS			53.956																	
FOULWATER INVERT		26.100									24.900	24.900				24.373				
FOULWATER DETAILS			Pipe 3.003 Dia 150 Circular CLAY 1 in 33										Pipe 3.004 Dia 150 Circular CLAY 1 in 28							
FOULWATER LENGTHS			39.573										14.664							



CHAINAGE	0.000	10.000	10.101	12.777	21.031	21.368	26.748	26.886	26.998
EXISTING GROUND LEVEL	26.789	26.652	26.652	26.652	26.603	26.598			
ALIGNMENT LEVEL	26.989	26.864	26.864	26.758					
VERTICAL ALIGNMENT		G= -1.250% 1: -80.0							
HORIZONTAL ALIGNMENT									
LEFT HAND CHANNEL	27.051	26.926	26.926	26.926					
RIGHT HAND CHANNEL	26.926	26.801	26.801	26.801					
FOULWATER INVERT	23.593	24.043			24.373	24.373			
FOULWATER DETAILS		Pipe 1.004 Dia 150 Circular CLAY 1 in 145							
FOULWATER LENGTHS		45.690							



ROAD 1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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A01. These notes are intended to augment drawings and specifications. Where conflict of requirements exists the order of precedence shall be as shown in the specification. Otherwise the strictest provision shall govern.

A02. This drawing to be read in conjunction with all other relevant engineers and architects drawings.

A03. Drawings not to be scaled. All dimensions to be checked on site by the contractor. Any discrepancies to be notified to the Engineer and further instructions obtained before work is commenced.

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Manhole construction - refer to CPA technical bulletin Sept 2001 outlining changes to relevant British Product Standards BS5911-200:1994. All precast concrete products are to be kile marked or they will be rejected as part of an adoptable system. Manhole cover slabs to BS5911

Manhole covers to have a clear opening of 600 x 600mm and shall be class D400 to BSEN124 with 150mm deep frames.

Filled ground must be filled and consolidated under the supervision of YW before any sewer works are carried out. All adoptable sewers to be BSI Kitemarked, (certified to WS-4-35-01)

Plastic channels are not acceptable

All custom built ironwork to be hot dipped galvanised prior to final fitting.

Adoptable sewer pipes to be laid in max 3m lengths unless there is a specific operational need to lay longer lengths.

The chamber size of manholes with more than one connection in them may need to be increased one increment to accommodate the connection and bends.

Yorkshire Water policy is not to accept type C brick manholes and 1050mm diameter manhole rings. Instead it is preferred to use a type B manhole construction with a 1200 or 1500mm cover slab with the opening sited over the channel where the depth of cover to pipe soffit is 1.0-1.5m.

Contractors should be aware of significantly large diameter pipes and manhole chamber rings proposed in this design and precautions should be taken in movement and placing of such items. Also to be considered is the depth of excavation of the drainage works especially the large diameter components up to 8m deep excavations.

All adoptable sewer works and materials to be in accordance with Sewers for Adoption 6th edition. The relevant British / European and Yorkshire Water standards / requirements / addendum & Kitemarked.

Manhole covers shall / must have a clear opening of 600mm and shall be class D400 BSEN124 and be 150mm deep in highways

Where B125 cover & frame has been approved this must be Kitemarked, ductile iron and not coated in plastic and must have suitable size lifting eyes. Screw down covers not acceptable

Filled ground must be filled and consolidated under the supervision of YW before any sewer works are carried out

Yorkshire water are not obliged to accept filter drain / land drainage runoff into the public sewer network or adoptable drainage network (directly or indirectly). An alternative method of disposal of land drainage runoff will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section with regard to the disposal of the filter drain/land drainage run-off.

Cover slabs must carry the BSI Kitemark or will be rejected by Yorkshire Water Inspector. Where the clear opening of the Kitemarked product is different to that of the cover and frame, a loading bearing slab should be fitted above the cover slab to bring the size down to 600mm x 600mm for the Yorkshire Water specified cover size. Please refer to Concrete Pipe Systems Association (CPSA), "Technical Bulletin" issued Autumn 2004 for Kitemarked cover slab opening sizes.

Sulphate resistant cement (C20-DC2) and precast concrete products must be used or a laboratory report provided proving that such precautions are not necessary.

The adoptable sewers shall be a min 1.0m and manholes 0.5m from the kerb and service margins.

Sewers must have 5 metres clearance from trees and hedges (please also refer to Figure 2.3 on page 33 in "Sewers for Adoption" 6th Edition for restrictions on tree planting adjacent to sewers).

Sewers to be laid in class S bedding (150mm granular bed and surround. Where depth of cover is less than 1.2m in highways and verges (or less than 900mm in non vehicle access areas) then a concrete slab should be provided above the granular bed and surround.

Bedding and backfill material to conform with the Water Industry specification 4-08-02 (table A2)

Lifting eyes to be pointed

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A. Full drainage / road redesign in line with planning layout, storage basin replacing tank storage



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