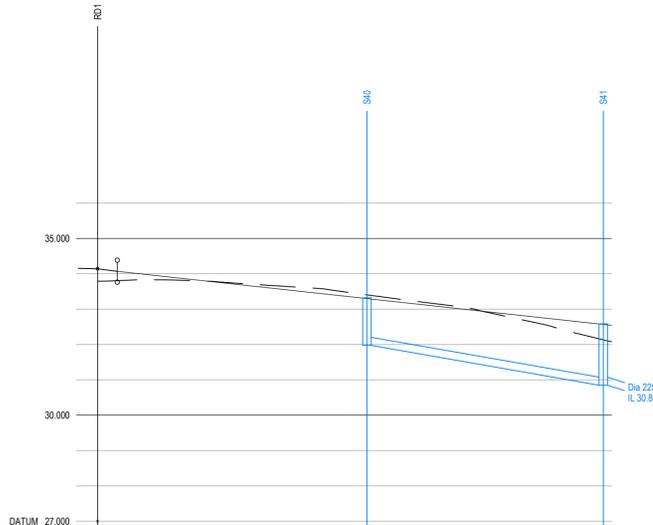


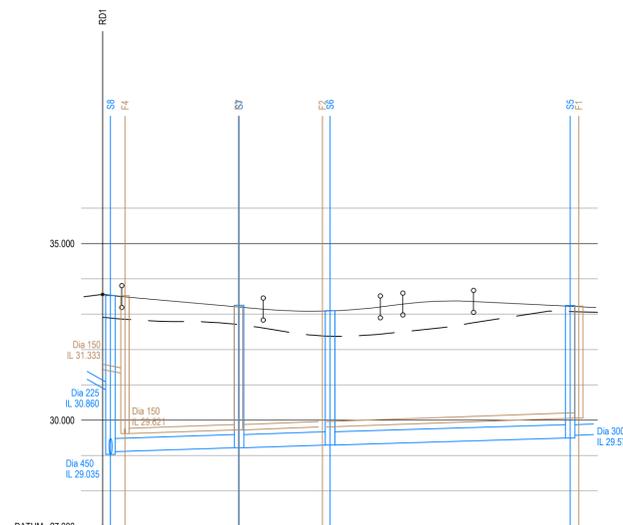


RD3



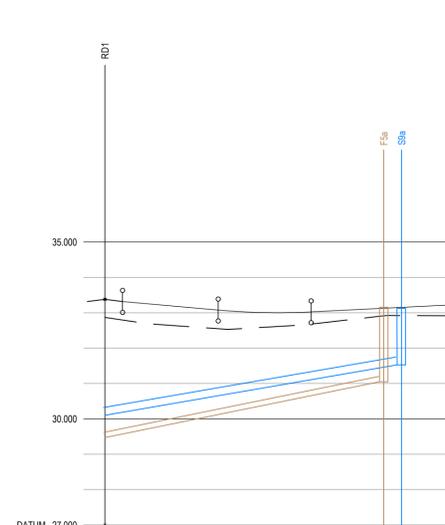
CHAINAGE	0.000	2.173	6.562	9.466	13.179	20.000	25.021	26.190	30.000	33.984	34.885	38.152	40.000	50.000	51.859	52.460	60.000	70.000	72.800
EXISTING GROUND LEVEL	33.790			33.825		33.751			33.600		33.554		33.102		32.704		32.211		32.075
ALIGNMENT LEVEL	34.071		33.913		33.695		33.477		33.259		33.041		32.822		32.604		32.385		32.167
VERTICAL ALIGNMENT	G = -2.182% L = 45.8																		
HORIZONTAL ALIGNMENT	R = 10,000																		
LEFT HAND CHANNEL			33.897	33.916	33.758		33.540		33.321		33.103		32.885		32.667		32.449		32.231
RIGHT HAND CHANNEL	33.841	33.862	33.881		33.633		33.415		33.196		32.978		32.760		32.542		32.324		32.106
CROSSFALLS	LH = -2.50% RH = -2.50%																		
STORMWATER DETAILS	CL 33.321 IL 31.976 Pipe 5.000 Dia 225 Circular uPVC 1 in 30 33.504																		

RD4



CHAINAGE	0.000	2.895	6.100	7.227	10.000	11.116	20.000	22.725	24.843	25.000	29.606	30.000	31.150	32.719	35.000	35.250	36.341	40.000	42.335	45.000	49.678	50.000	52.335	60.000	70.005		
EXISTING GROUND LEVEL	32.912		33.497		33.568		33.191		33.110		33.888		33.120		33.284		33.335		33.335		33.359		33.284		32.988		32.005
ALIGNMENT LEVEL																											
VERTICAL ALIGNMENT	G = -1.784% L = 56.7 KF = 3.89428 L = 16.607 G = -1.000% L = 10.000 KF = -2.85714 G = -1.000% L = 100.0																										
HORIZONTAL ALIGNMENT	R = 10,500																										
LEFT HAND CHANNEL			33.352	33.305		33.129		33.020		33.158		33.145		33.020		33.263		33.435		33.310		33.222		33.248		33.123	
RIGHT HAND CHANNEL	33.605	33.677	33.430		33.254		33.145		33.020		32.863		32.653		32.447		32.234		32.024		31.814		31.604		31.394		31.184
CROSSFALLS	RH = -2.50% LH = -2.50%																										
STORMWATER DETAILS	CL 33.328 IL 29.110 Pipe 1.006 Dia 375 Circular CONC 1 in 170 18.672 CL 33.251 IL 29.220 Pipe 1.005 Dia 375 Circular CONC 1 in 170 13.087 CL 33.229 IL 29.297 Pipe 1.004 Dia 375 Circular CONC 1 in 170 34.008 CL 33.246 IL 29.497																										
FOULWATER DETAILS	CL 33.321 IL 29.621 Pipe 1.002 Dia 150 Circular uPVC 1 in 150 15.783 CL 33.229 IL 29.220 Pipe 1.001 Dia 150 Circular uPVC 1 in 150 12.732 CL 33.251 IL 29.297 Pipe 1.000 Dia 150 Circular uPVC 1 in 150 37.330 CL 33.225 IL 30.090																										

RD5



CHAINAGE	0.000	2.500	5.190	5.513	10.000	16.035	20.000	24.489	25.000	29.209	30.000	35.000	40.000	42.000	48.752										
EXISTING GROUND LEVEL	32.866		33.318		33.164		33.076		33.022		32.959		32.897		32.820		32.913		32.913						
ALIGNMENT LEVEL																									
VERTICAL ALIGNMENT	G = -1.791% L = 55.8 KF = 4.71962 L = 13.174 G = 1.000% L = 100.0																								
HORIZONTAL ALIGNMENT	R = 13,174																								
LEFT HAND CHANNEL			33.292	33.247		33.084		32.969		32.854		32.739		32.624		32.509		32.394		32.279					
RIGHT HAND CHANNEL	33.605	33.677	33.430		33.254		33.145		33.020		32.863		32.653		32.447		32.234		32.024		31.814		31.604		31.394
CROSSFALLS	LH = -2.50% RH = -2.50%																								
STORMWATER DETAILS	CL 33.328 IL 29.110 Pipe 4.000 Dia 225 Circular uPVC 1 in 22 41.240 CL 33.125 IL 31.563																								
FOULWATER DETAILS	CL 33.321 IL 29.621 Pipe 1.002 Dia 150 Circular uPVC 1 in 150 15.783 CL 33.229 IL 29.220 Pipe 1.001 Dia 150 Circular uPVC 1 in 150 12.732 CL 33.251 IL 29.297 Pipe 1.000 Dia 150 Circular uPVC 1 in 150 37.330 CL 33.225 IL 30.090																								

GENERAL NOTES

1. Do not scale
2. The contractor is to check and verify all buildings and site dimensions and levels, including sewer invert levels, before works start on site. The contractor is to comply in all aspects with the current Building Legislation, NRSWA1991, British Standards, Building Regulations etc.
3. Positions of existing services/statutory undertakers apparatus adjacent to or crossing proposed excavations are to be checked by the contractor prior to starting work
4. This drawing is to be read in conjunction with and checked against all other drawings, engineering details, specification and any structural, geotechnical or other specialist document provided.
5. Any anomaly or contradiction between any of the above is to be reported to the client.
6. This drawing is schematic for clarity only, positions of pipe runs and manholes may vary on site due to site conditions

ROAD AND SEWER ADOPTION NOTES

1. All works for Adoption under a Section 38 Agreement shall be carried out to the approval of Carmarthen County Council.
2. All works for Adoption under a Section 104 Agreement shall be carried out to the National Water Council Guide "Sewers for Adoption" 7th Edition and Dwr Cymru Welsh Water's requirements.
3. Street lighting positions to be pegged on site and agreed by the local authority prior to erection commencing.

DRAINAGE NOTES

1. All private drainage shall be in accordance with BS8301 and relevant sections of Approved Document H of the Building Regulations.
2. The contractor is to check the level of existing sewers being used as outfalls or crossing proposed drainage runs PRIOR to laying any pipes. Any discrepancies are to be reported to PHG Consulting Engineers.
3. Position of soil pipes, stubstacks, WC outlets, rainwater downpipes, etc., positions are to be checked against the house type working drawings.
4. Private house drainage will be flexibly jointed plastic or clay pipework. Diameter 100mm unless shown otherwise.
5. All connections for House Drainage shall be 100mm unless noted otherwise and must extend 500mm behind the back of footway/homezone road. All connections when laid shall be plugged, protected as necessary and marked with a stake for future use.
6. For private drains where cover to pipes is less than 900mm in vehicular areas or 500mm in other areas protection in the form of a 100mm thick concrete pad shall be provided over the pipe granular surround.
7. Where pipes pass through screen walls, footings or retaining walls, intels are to be provided over. Under buildings pipes shall be surrounded with 150mm thickness of granular material. Where drains pass within 1m of buildings the wall foundation shall be taken down below the invert of the pipe.
8. Where drains do not exceed 600mm deep, plastic or clay access fittings minimum diameter 225mm shall be used. Elsewhere proprietary plastic or precast concrete inspection chambers shall be used. Unless shown otherwise FW inspection chambers are to be 750mm below dpc level and SW chambers and rodding eyes to be 600mm below dpc.
9. All gullies and rainwater downpipes connected directly to drains are to be roddable.
10. All drainage shall be laid upstream and each run between manholes shall be laid complete prior to backfilling. Where this is not practical trial holes or other means of identifying the line and level of services shall be carried out prior to works commencing.
11. All branch drains, or connections, are to discharge to the collectors obliquely, and in the direction of the main flow.
12. All low spots on hardstanding areas to have yard gullies unless permeable paving is used.
13. The developer must self-verify and certify that the design criteria, material standards and workmanship specifications for the proposed adoptable sewers are in accordance with those set out in "Sewers for Adoption" 7th Edition, A Section 106 application to connect must be made to the water authority, the developer shall give 21 days' notice prior to connection, and the works may only be undertaken by a SSIP accredited contractor.
14. The foul sewers must achieve a minimum flow velocity of 0.75 m/s at one third design flow or when the sewer has a nominal internal diameter of 100mm or where 10 properties or less are connected the sewer must be laid at minimum of 1:80. Where the sewer has a nominal internal diameter of 150mm and at least 10 dwelling units are connected the sewer will be laid at a minimum gradient of 1:150. The maximum gradient a sewer can be laid is 1:5.
15. The surface water sewers must achieve a minimum flow velocity of 1 m/s at pipe full flow or when the sewer has a nominal internal diameter of 100mm the sewer must be laid at minimum of 1:100. Where the sewer has a nominal internal diameter of 150mm or greater the sewer will be laid at a minimum gradient of 1:150. The maximum gradient a sewer can be laid is 1:5.
16. All inspection chamber and manhole covers should adhere to BS EN 124 and be suitable for where the chambers and manholes are situated.
17. Where sewers are located in proximity or between buildings refer to Figures B.1 and B.2.
18. Where new drains pass beneath existing foundations, the walls/foundations are to be fully supported in the temporary condition. Trenches to be filled with concrete post-construction with rocker pipes placed either side of the wall, in accordance with the details

REV.	DATE	DETAILS	AMENDMENTS	BY	CHK
B	13.01.25	Amendments as per comments from Highway Drainage design added		TP	SD
A	13.11.25	First Issue		TP	SD
-	11.11.25	First Issue		TP	SD

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PROJECT: Carmarthen West

DRAWING TITLE: Highway Long Sections Sheet 2

DRAWN:	CHK:	STATUS:	SCALE:
TP	SJD	Preliminary	1:500@A1
DATE:	JOB NO:	DWG. NO:	REV:
Nov 2025	2262	104-2	B