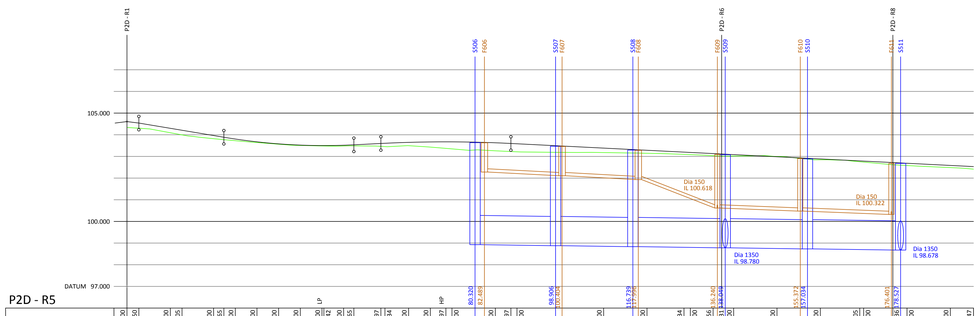
DO NOT SCALE



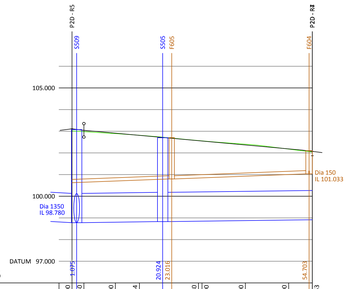
P2D - R5

CHA:AGE	0.000	2.750	10.000	12.705	20.000	22.365	25.000	30.000	35.000	40.000	45.000	48.645	50.000	52.385	58.597	59.534	65.000	70.000	73.597	75.000	80.320	82.489	85.000	88.597	90.000	98.906	100.000	110.000	119.729	120.000	128.534	130.000	136.240	137.271	140.000	150.000	160.000	169.105	170.000	176.401	179.739	179.527	180.000	190.000	195.347
EXIST:G GROUND LEVEL	104.136	104.094	103.818	103.640	103.673	103.580	101.595	101.523	101.481	101.316	103.448	101.431	101.933	102.213	103.187	103.177	101.143	101.083	103.018	102.998	102.844	102.728	102.580	102.764	101.484	101.464	102.413
ALIGNMENT LEVEL	104.540	104.298	103.965	103.865	103.603	103.580	101.523	101.501	101.501	103.316	103.598	103.611	101.648	101.669	103.673	103.972	103.959	103.630	103.598	103.584	103.484	103.384	103.284	103.184	103.084	102.884	102.884	102.784	102.684	103.584	102.331

VERTICAL ALIGNMENT: G= -3.333% 1: -30.0 | KF= 6.92308 L= 30.000 | G= 1.000% 1: 100.0 | L= 30.000 KF= -15.0 | G= -1.000% 1: -100.0

HORIZONTAL ALIGNMENT: R= 65.000 | R= 95.000 | R= 160.000

STORMWATER COVER LEVEL	CL103.835 IL 98.937	CL103.820 IL 98.880	CL103.834 IL 98.835	CL103.977 IL 98.780	CL103.932 IL 98.732	CL102.879 IL 98.678
STORMWATER DETAILS	Pipe 2.000 Dia 1350 CONC 1 : 399 18.744	Pipe 2.001 Dia 1350 CONC 1 : 400 17.986	Pipe 2.002 Dia 1350 CONC 1 : 397 21.427	Pipe 1.005 Dia 1350 CONC 1 : 398 19.097	Pipe 1.006 Dia 1350 CONC 1 : 399 21.557
FOULWATER COVER LEVEL	CL103.629 IL102.279	CL103.459 IL102.159 / IL102.159	CL103.282 IL101.932 / IL101.932	CL103.096 IL100.618 / IL100.618	CL102.901 IL100.477 / IL100.477	CL102.679 IL100.322 / IL100.322
FOULWATER DETAILS	Pipe 2.000 Dia 150 CLAY 1 : 104 17.740	Pipe 2.001 Dia 150 CLAY 1 : 98 17.405	Pipe 2.002 Dia 150 CLAY 1 : 14 18.121	Pipe 1.005 Dia 150 CLAY 1 : 135 18.990	Pipe 1.006 Dia 150 CLAY 1 : 135 20.912



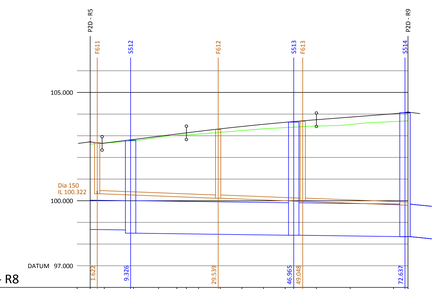
P2D - R6

CHA:AGE	0.000	2.750	10.000	15.554	20.924	23.016	30.000	40.000	50.000	55.453
EXIST:G GROUND LEVEL	103.015	102.891	102.743	102.556	102.401	102.176	102.066
ALIGNMENT LEVEL	103.043	102.912	102.750	102.549	102.307	102.186	102.128

VERTICAL ALIGNMENT: G= -1.814% 1: -55.1

HORIZONTAL ALIGNMENT: R= 70.000

STORMWATER COVER LEVEL	CL103.077 IL 98.780	CL102.701 IL 98.830 / IL 98.830
STORMWATER DETAILS	Pipe 1.004 Dia 1350 CONC 1 : 396 19.805	Pipe 1.003 Dia 1350 CONC 1 : 401 34.870
FOULWATER COVER LEVEL	CL102.705 IL100.798 / IL100.798	CL102.103 IL101.253 / IL101.253
FOULWATER DETAILS	Pipe 1.004 Dia 150 CLAY 1 : 134 24.179	Pipe 1.003 Dia 150 CLAY 1 : 135 31.784



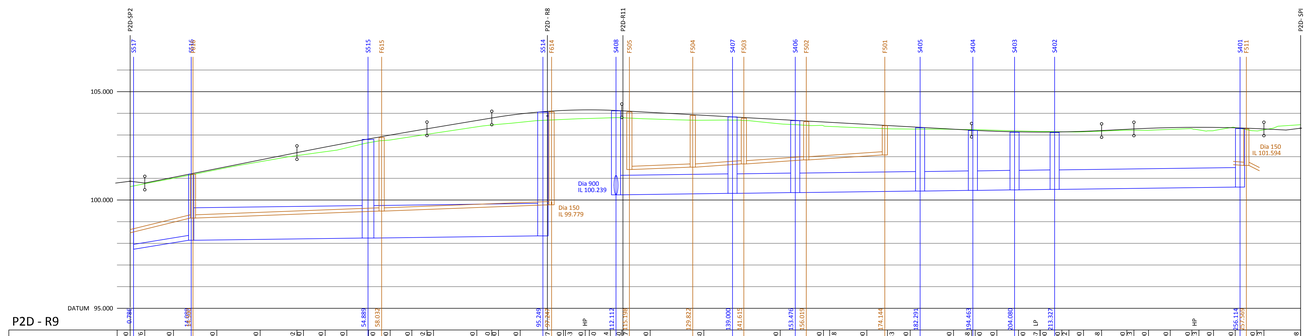
P2D - R8

CHA:AGE	0.000	2.750 / 3.252	9.326	10.000	15.777	20.000	22.202	25.000	29.539	30.000	35.000	40.000	45.000	46.985 / 47.485	52.202	60.000	70.000	72.637	73.335
EXIST:G GROUND LEVEL	102.618	102.764	103.022	103.158	103.319	103.435	103.521	103.654	103.686
ALIGNMENT LEVEL	102.648	102.829	103.079	103.134	103.203	103.319	103.428	103.528	103.621	103.705	103.826	103.860	104.014	104.023

VERTICAL ALIGNMENT: G= 2.500% 1: 40.0 | L= 30.000 KF= -31.20 | G= 1.538% 1: 65.0

HORIZONTAL ALIGNMENT: R= 90.000

STORMWATER COVER LEVEL	CL102.730 IL 98.502 / IL 98.502	CL103.631 IL 98.408 / IL 98.408	CL104.959 IL 98.244 / IL 98.244
STORMWATER DETAILS	Pipe 1.007 Dia 1350 CONC 1 : 393 10.228	Pipe 1.008 Dia 1500 CONC 1 : 401 37.608	Pipe 1.009 Dia 1500 CONC 1 : 401 25.672
FOULWATER COVER LEVEL	CL102.679 IL100.322	CL103.247 IL100.116 / IL100.116	CL103.666 IL99.971 / IL99.971
FOULWATER DETAILS	Pipe 1.007 Dia 150 CLAY 1 : 135 27.819	Pipe 1.008 Dia 150 CLAY 1 : 135 19.509	Pipe 1.009 Dia 150 CLAY 1 : 135 25.863



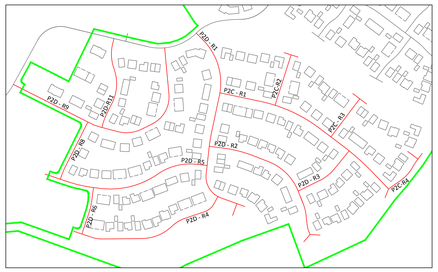
P2D - R9

CHA:AGE	0.000	3.375	10.000	20.000	30.000	38.492 / 40.000	45.000	50.000	55.000	60.000	65.000	68.492 / 70.000	80.000	83.450 / 85.000	90.000	95.277	100.000	100.453	105.000	110.814	111.777 / 111.777	120.000	129.832	132.380	139.000	141.615	150.000	153.476	156.016	160.000	161.418	170.000	174.144	174.713	180.000	182.295	190.000	194.148	194.464	195.000	200.000	204.086	205.000	209.957	210.000	211.327	212.000	215.000	220.000	224.168	230.000	231.323	235.000	240.000	245.000 / 246.927	250.000	255.000	256.114	257.156	260.000	262.000	270.098
EXIST:G GROUND LEVEL	100.618	101.004	103.400	103.768	102.951	102.412	102.770	103.077	103.377	103.586	103.719	103.788	103.741	103.664	103.886	103.514	103.428	103.323	103.275	103.263	103.216	103.164	103.148	103.233	103.259	103.201	103.188	103.474
ALIGNMENT LEVEL	100.781	101.048	101.448	101.848	102.187 / 102.247	102.443	102.833	102.817	102.996	103.170	103.197 / 103.236	103.671	103.786 / 103.855	103.972	104.072	104.135	104.160	104.161 / 104.161	104.119	104.046	103.951	103.824	103.713	103.602	103.491	103.380	103.269	103.222	103.213	103.170	103.143	103.135	103.135	103.144	103.170	103.206	103.264	103.280	103.310	103.343	103.354 / 103.355	103.351	103.332	103.296 / 103.296	103.229

VERTICAL ALIGNMENT: G= 4.000% 1: 25.0 | L= 30.000 KF= -45.00311 | G= 3.333% 1: 30.0 | L= 30.000 KF= -6.750 | G= -1.111% 1: -90.0 | KF= 14.21053 L= 30.000 | G= 1.000% 1: 100.0 | L= 30.000 KF= -15.0 | G= 1.000% 1: -100.0

HORIZONTAL ALIGNMENT: R= 50.000 | R= 40.000 | R= 35.000

STORMWATER COVER LEVEL	CL100.843 IL 97.777	CL101.194 IL 98.341 / IL 98.341	CL98.243	CL104.059 IL 98.344	CL104.117	CL100.239	CL103.835 IL 98.900 / IL 98.900	CL100.306	CL103.664 IL100.542 / IL100.542	CL103.336 IL100.413 / IL100.413	CL103.269 IL100.443 / IL100.443	CL103.128 IL100.467	CL103.135 IL100.489	CL103.296 IL101.036
STORMWATER DETAILS	Pipe 1.012 Dia 225 CLAY 1 : 12 13.311	Pipe 1.011 Dia 1500 CONC 1 : 400 40.800	Pipe 1.010 Dia 1500 CONC 1 : 400 40.360	Pipe 1.006 Dia 900 CLAY 1 : 401 26.858	Pipe 1.005 Dia 900 CLAY 1 : 398 14.324	Pipe 1.004 Dia 900 CLAY 1 : 401 28.460	Pipe 1.003 Dia 900 CLAY 1 : 397 11.917	Pipe 1.002 Dia 900 CLAY 1 : 393 9.435	Pipe 1.001 Dia 900 CLAY 1 : 409 8.999	Pipe 1.000 Dia 900 CLAY 1 : 399 42.693
FOULWATER COVER LEVEL	CL101.186 IL 99.197 / IL 99.197	CL101.247 IL 99.489 / IL 99.489	CL104.065 IL 99.252	CL104.064	IL101.407	CL103.902 IL101.515 / IL101.515	CL100.771 IL101.666 / IL101.666	CL103.616 IL101.851 / IL101.851	CL102.429 IL102.079	CL103.282
FOULWATER DETAILS	Pipe 1.012 Dia 150 CLAY 1 : 21 15.957	Pipe 1.011 Dia 150 CLAY 1 : 135 43.532	Pipe 1.010 Dia 150 CLAY 1 : 135 39.215	Pipe 1.003 Dia 150 CLAY 1 : 135 14.625	Pipe 1.002 Dia 150 CLAY 1 : 80 12.063	Pipe 1.001 Dia 150 CLAY 1 : 80 14.772	Pipe 1.000 Dia 150 CLAY 1 : 80 18.274



KEY PLAN

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Notes

1. Setting out shall be undertaken using only the information given. Distances should not be scaled from this drawing.
2. All sewers shall be constructed in accordance with Sewers for Adoption 6th Edition and United Utilities Details & Guidelines.
3. The minimum gravity pipe diameter under adoptable highways shall be 150mm
4. It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works. The rates shall include for hand dig around services where necessary. The Contractor shall adhere to the CDM Regulations at all times
5. The outsides of all sewers shall be a minimum of 1.0m from kerb lines and the outside of manholes shall be a minimum of 0.5m from kerb lines
6. Existing flows in watercourses, sewers and land drains shall be maintained at all times
7. Only trained personnel shall be permitted to enter confined spaces
8. All materials to bear the relevant B.S. Kitemark and comply fully with the specifications. All concrete & concrete products must use Sulphate resistant cement to withstand Class 3 condition (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur).
9. All opening notices etc. as required under Highways Acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or the Network Operator as applicable.
10. Where "Ultra Rib" UPVC pipes (or similar approved) are used in adoptable drainage they shall be handlied and laid in accordance with the manufacturers instructions and will be subject to post installation deformation testing prior to adoption. A Class S Bed and Surround must be used for "Ultra Rib" pipes
11. Trench backfill in highways to within 1m of highway shall, as directed by the Highway Authority be a suitable granular material all in accordance with Sewers for Adoption.
12. Slab levels shall not be varied without reference to the Engineer for guidance.
13. Pipes have not been designed to accommodate construction traffic loading. The contractor is responsible for providing adequate protection to the pipes during construction.
14. All works to be in accordance with Lancashire County Council's Specification and Standard Details, and as agreed with Lancashire County Council's representative.
15. Manhole pipe connections to be soffit to soffit.

Class 'S' bed and surround to all pipes unless stated otherwise.
Class 'Z' bed and surround to pipes where cover < 1.2m as indicated on longsections.

Coopers Drawing List:

6263 P4 / 01	Proposed Drainage Layout
6263 P4 / 02	Proposed Highway Setting Out
6263 P4 / 03	Proposed Highway Layout
6263 P4 / 04	Proposed Highway Levels and Longsections
6263 P4 / 05	Highway Construction Details
6263 P4 / 06	External Works Layout
6263 P4 / 07	Private Drainage Layout
6263 P4 / 08	Drainage Construction Details.
6263 P4 / 09	Surface Water Manhole Schedules
6263 P4 / 10	Foul Manhole Schedules
6263 P4 / 11	Surface Water Manhole Details
6263 P4 / 12	Foul Manhole Details
6263 P4 / 13	Flow Control Manhole Details
6263 P4 / 14	Drainage Longsections
6263 P4 / 15	Surface Water Catchment Areas
6263 P4 / 16	Sewer Easement Plan
6263 P4 / 17	S38 Agreement Plan

APPROVAL

Rev.	Date	Revision	By	Appd.
A	03.04.20	Issued for S38 and S104 Approval	PJN	AJ

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Client: Taylor Wimpey

Project: STANDEN HALL CLITHEROE

Title: PHASE 4 Highway Longsections Sheet 2 of 3

DRAWING NUMBER			
6263 P4 / 04-2	SCALE at A0	1:500 H, 1:100 V	
	DATE	19.11.19	REVISION
	DRAWN	PJN	A
	CHECKED	AJ	