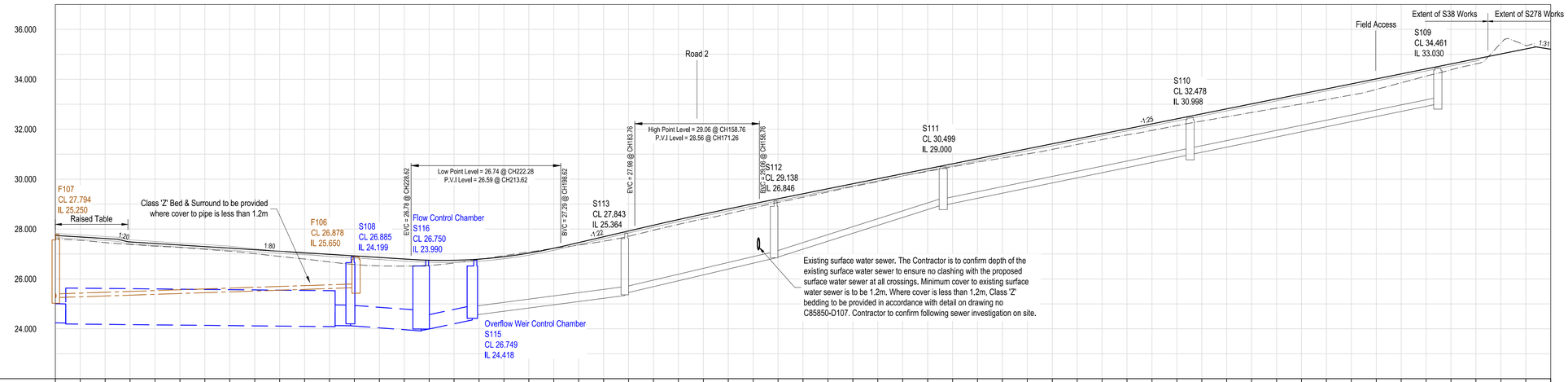
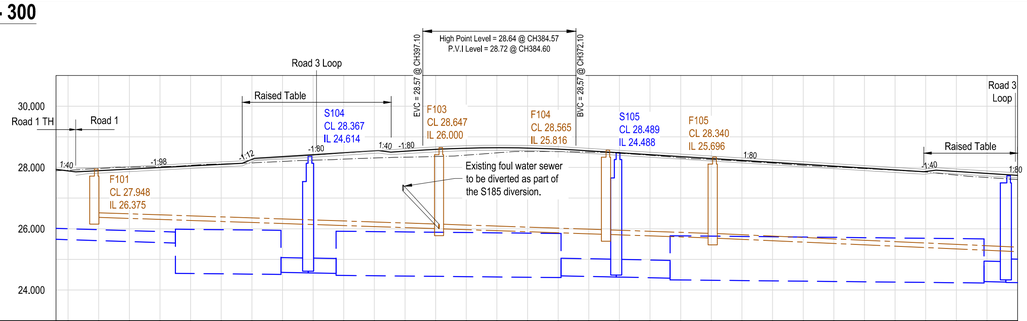


Chainage (m)	300.000	295.000	290.000	285.000	280.000	275.000	270.000	265.000	260.000	255.000	250.000	245.000	240.000	235.000	230.000	225.000	220.000	215.000	210.000	205.000	200.000	195.000	190.000	185.000	180.000	175.000	170.000	165.000	160.000	155.000	150.000	145.000	140.000	135.000	130.000	125.000	120.000	115.000	110.000	105.000	100.000	95.000	90.000	85.000	80.000	75.000	70.000	65.000	60.000	55.000	50.000	45.000	40.000	35.000	30.000	25.000	20.000	15.000	10.000	5.000	0.000
Existing Ground Levels (m)	27.608	27.549	27.457	27.382	27.313	27.261	27.187	27.112	27.013	26.901	26.799	26.680	26.578	26.527	26.514	26.541	26.641	26.780	26.930	27.080	27.228	27.354	27.511	27.708	27.951	28.185	28.405	28.611	28.842	29.066	29.271	29.465	29.701	29.901	30.130	30.311	30.453	30.681	30.845	31.013	31.011	31.191	31.387	31.583	31.771	31.952	32.142	32.325	32.498	32.670	32.843	33.011	33.190	33.370	33.594	33.861	34.128	34.383	34.617	35.449	35.354	35.205
Proposed Road ℄ Level (m)	27.744	27.692	27.620	27.482	27.420	27.358	27.296	27.233	27.171	27.109	27.047	26.984	26.922	26.860	26.798	26.748	26.746	26.793	26.889	27.034	27.228	27.458	27.690	27.923	28.153	28.377	28.595	28.806	29.011	29.212	29.412	29.612	29.812	30.012	30.213	30.413	30.613	30.813	31.013	31.213	31.413	31.614	31.814	32.014	32.214	32.414	32.615	32.815	33.015	33.215	33.415	33.615	33.816	34.016	34.216	34.416	34.616	34.816	35.017	35.317	35.265
Left Channel Level (m)	27.863	27.801	27.538	27.401	27.339	27.277	27.214	27.152	27.090	27.028	26.965	26.903	26.841	26.779	26.717	26.667	26.665	26.712	26.858	26.953	27.147	27.377	27.609	27.841	28.072	28.296	28.514	28.725	28.930	29.131	29.331	29.531	29.731	29.931	30.131	30.332	30.532	30.732	30.932	31.132	31.332	31.533	31.733	31.933	32.133	32.333	32.533	32.734	32.934	33.134	33.334	33.534	33.734	33.935	34.135	34.335	34.535	34.735
Right Channel Level (m)	27.825	27.763	27.701	27.564	27.501	27.439	27.377	27.313	27.210	27.108	27.005	26.903	26.841	26.779	26.716	26.667	26.669	26.712	26.858	26.953	27.147	27.377	27.609	27.841	28.072	28.296	28.513	28.725	28.930	29.130	29.331	29.531	29.731	29.931	30.131	30.331	30.532	30.732	30.932	31.132	31.332	31.532	31.733	31.933	32.133	32.333	32.533	32.734	32.934	33.134	33.334	33.534	33.734	33.935	34.135	34.335	34.535	34.735

Horizontal Alignment	Straight L=104.612m; Curve L=24.938m R=32.000m; Curve L=42.630m R=83.250m; Curve L=83.108m R=115.000m; Straight L=94.491m
Vertical Alignment	Straight Gradient L=25.863m @ 1:80; Straight Gradient L=2.000m @ 1:20; Straight Gradient L=56.826m @ 1:80; Sag L=30.000m Curve: K=5.095; Straight Gradient L=14.858m @ -1:22; Crest L=25.000m Curve: K=39.047; Straight Gradient L=155.808m @ -1:25; Straight Gradient L=2.950m @ 1:31
Road Profile	2.5% Crossfall to Left Side; Transition to Crossfall; Camber 2.5%; Camber 2.5%; Camber 2.5%
Foul Sewers	1.004 150 Ø @ 1:112 L=49.876m Vitrified Clay Class 'S' B&S; 3.000 150 Ø @ 1:150 L=59.934m Vitrified Clay Class 'S' B&S
Surface Water Sewers	1.010 600 Ø @ 1:245 L=4.021m Concrete Class 120 Class 'S' B&S; 1.011 2no 1200Ø @ 1:500 L=54.100m Twin Wall Plastic Pipework B&S TBC by Specialist; 1.012 675 Ø @ 1:405 L=3.242m Concrete Class 120 Class 'S' B&S; 1.013 675 Ø @ 1:70 L=14.642m Concrete Class 120 Class 'S' B&S; 4.005 450 Ø @ 1:24 L=10.291m Concrete Class 120 Class 'S' B&S; 4.004 300 Ø @ 1:39 L=30.677m Concrete Class 120 Class 'S' B&S; 4.003 225 Ø @ 1:22 L=30.360m Vitrified Clay Concrete Class 120 Class 'S' B&S; 4.002 225 Ø @ 1:16 L=34.275m Concrete Class 120 Class 'S' B&S; 4.001 225 Ø @ 1:24 L=48.876m Concrete Class 120 Class 'S' B&S; 4.000 225 Ø @ 1:24 L=49.896m Concrete Class 120 Class 'S' B&S

Road 1 CH 0 - 300

H 500.000
V 100.000



Chainage (m)	456.977	455.000	450.000	445.000	440.000	435.000	430.000	425.000	420.000	415.000	410.000	405.000	400.000	395.000	390.000	385.000	380.000	375.000	370.000	365.000	360.000	355.000	350.000	345.000	340.000	335.000	330.000	325.000	320.000	315.000	310.000	305.000	300.000
Existing Ground Levels (m)	27.896	27.910	27.964	28.008	28.029	28.070	28.113	28.148	28.197	28.237	28.272	28.309	28.336	28.357	28.402	28.477	28.523	28.517	28.501	28.462	28.396	28.313	28.258	28.202	28.139	28.089	28.017	27.965	27.910	27.850	27.751	27.672	27.608
Proposed Road ℄ Level (m)	27.598	27.898	27.996	27.946	27.997	28.048	28.099	28.263	28.354	28.417	28.479	28.542	28.529	28.590	28.629	28.644	28.634	28.598	28.540	28.478	28.416	28.354	28.291	28.229	28.167	28.105	28.042	27.980	27.918	27.867	27.868	27.806	27.744
Left Channel Level (m)			27.814	27.865	27.916	27.967	28.018	28.182	28.273	28.338	28.398	28.461	28.448	28.559	28.548	28.593	28.552	28.516	28.459	28.397	28.335	28.272	28.210	28.148	28.086	28.023	27.961	27.899	27.837	27.786	27.787	27.725	27.663
Right Channel Level (m)			27.990	28.028	28.079	28.130	28.181	28.241	28.316	28.381	28.467	28.542	28.611	28.671	28.711	28.725	28.715	28.679	28.621	28.559	28.497	28.435	28.373	28.310	28.248	28.186	28.124	28.061	27.999	27.948	27.950	27.887	27.825

Horizontal Alignment	Straight L=75.793m; Curve L=31.406m R=70.950m; Straight L=104.812m
Vertical Alignment	Straight Gradient L=3.321m @ 1:40; Straight Gradient L=27.177m @ -1:98; Straight Gradient L=2.000m @ -1:12; Straight Gradient L=20.252m @ -1:80; Straight Gradient L=2.000m @ 1:40; Straight Gradient L=5.226m @ -1:80; Crest L=25.000m Curve: K=10.019; Straight Gradient L=56.797m @ 1:80; Straight Gradient L=2.000m @ -1:40; Straight Gradient L=25.863m @ 1:80
Road Profile	2.5% Crossfall to Left Side
Foul Sewers	2.000 150 Ø @ 1:150 L=56.264m Vitrified Clay Class 'S' B&S; 1.002 150 Ø @ 1:150 L=27.661m Vitrified Clay Class 'S' B&S; 1.003 150 Ø @ 1:150 L=17.911m Vitrified Clay Class 'S' B&S; 1.004 150 Ø @ 1:112 L=49.876m Vitrified Clay Class 'S' B&S
Surface Water Sewers	1.001 300 Ø @ 1:163 L=20.504m Concrete Class 120 Class 'S' B&S; 1.002 2no 12000 @ 1:500 L=17.230m Twin Wall Plastic Pipework B&S TBC by Specialist; 1.003 375 Ø @ 1:295 L=4.428m Vitrified Clay Class 'S' B&S; 1.004 375 @ 1:287 L=4.559m Concrete Class 120 Class 'S' B&S; 1.005 2no 1200Ø @ 1:500 L=36.600m Twin Wall Plastic Pipework B&S TBC by Specialist; 1.006 450 Ø @ 1:245 L=9.042m Concrete Class 120 Class 'S' B&S; 1.007 450 Ø @ 1:239 L=8.843m Concrete Class 120 Class 'S' B&S; 1.008 2no 1200Ø @ 1:500 L=51.100m Twin Wall Plastic Pipework B&S TBC by Specialist; 1.009 525 Ø @ 1:206 L=3.569m Concrete Class 120 Class 'S' B&S; 1.010 600 Ø @ 1:245 L=4.021m Concrete Class 120 Class 'S' B&S

Road 1 CH 300 - 456.977

H 500.000
V 100.000

Foul pipes 1.000 - 1.016 to be adopted under a S185 sewer diversion agreement. For S185 foul water sewer diversion, refer to drawing no. C85850-D120 - D121. No S185 diversion works to be undertaken prior to Southern Water approval.

Existing Utilities

The contractor shall refer to the existing and proposed services information, provided by Bellway Homes (Wessex).

It is the Contractor's responsibility to liaise with all relevant services companies to ensure that all existing services are accurately located and adequately protected during construction.

It is the Contractor's responsibility to liaise with the Developer and all relevant services companies to ensure that all new and diverted services are accurately located and adequately protected during construction.

All works to existing services to be undertaken as required by the Developer. Refer to Developer design.

Drainage & Road Layout Standard Drawing Notes

1. The contractor is to check and verify all buildings, site dimensions and levels, including sewer invert levels, before works start on site.
2. The contractor is to comply in all aspects with the current building legislation, British Standards, building regulations etc.
3. The contractor is to check the level of existing sewers which are to be used as an out-fall prior to commencement of any onsite drainage works. Any discrepancies are to be reported to the Engineer.
4. This drawing is to be read in conjunction with and checked against all other drawings, Engineering Details, specifications and any structural, geotechnical or other specialist document provided.
5. Any anomaly or contradiction between any of the above or difference between actual and drawn details is to be reported to Bellway Homes (Wessex)
6. Drainage to be adopted under Section 104 of the Water Industries Act 1991, shall be constructed and tested in accordance with Sewers for Adoption 6th Edition published by WRC plc and the combined addendum to SFA.
7. Roads, footpaths and parking areas which form part of the highway to be adopted under Section 278 or 38 of the Highways Act 1980 shall comply with the Hampshire County Council's Highway Specification and Standard Details.
8. All substrata structures and unconsolidated material within the road construction width to be removed
9. Formation preparation to be in accordance with Highways Agency Specification for Highway Works (SHW) cl. 616. No prepared formation to be continuously exposed to rain causing degradation below design CBR or to be left uncovered overnight.
10. Any soft, damaged or weak spots including peat contaminated material are to be excavated and replaced with SHW Type 1 in accordance with SHW cl.803 laid and compacted to cl.802, Table 8/4
11. Where ground conditions are deemed to be frost susceptible, refer to Ground Investigation report, carriageway thickness shall be 450mm minimum thickness. All material within 450mm of road construction to be non-frost susceptible.
12. Positions of existing services/statutory undertaker's apparatus adjacent to or crossing proposed sewers are to be checked by the contractor prior to starting work.

All adoptable drainage and highway works to be installed in accordance with;
- S104 & S185 Sewers - Sewers for Adoption 6th edition, including all applicable local Southern Water addendums
- S278 and S38 Highways - Hampshire County Council Specification and Standard Details.

Notes:-

1. Where this drawing has been issued in electronic .dwg format it has been done so in good faith. jnpgroup do not take any responsibility for any inaccuracies in the electronic data, which should be checked against the paper (or .pdf) drawing issue. Any apparent discrepancies should be immediately reported to jnpgroup. The electronic .dwg file should not be assumed to be to scale and should not be used for 'overlaying', setting out or checking of any third party information. All dimensions should be taken from the paper (or .pdf) version of the drawing. Electronic drawings may contain third party information. jnpgroup take no responsibility for this information, which should be checked against the originators paper drawing(s).
2. All working dimensions to be checked on site.
3. Do not scale.
4. Any discrepancies between drawings of different scales, and between drawings and specification where appropriate to be notified to The Engineer for decision.
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6. This drawing should only be used for construction if the drawing status is "Construction". jnpgroup take no responsibility for construction works undertaken to drawings which are not marked with this status.

Health and Safety Note:
The details on this drawing have been prepared on the assumption that a competent contractor will be carrying out the works. If the contractor(s) considers that there is insufficient Health and Safety information on this drawing, this should immediately be brought to the attention of the designer.

Legend:

- Proposed Finished Road Centreline Level
- Proposed Finished Road Channel Level
- Existing Ground Level
- Proposed S104 Foul Water Sewer
- Proposed S185 Foul Water Sewer Diversion
- Proposed S104 Surface Water Sewer
- Proposed S38 Highway Drain

Rev.	Date	Amendment	By	Chk.
E	07.12.18	Class 'Z' bedding note added. Additional S38 manhole added.	CT	KM
D	22.10.18	Highway drainage colour revised to black.	CT	KM
C	12.10.18	S185 foul sewer diversion colour changed, note added. Concrete slab protection added.	CT	KM
B	28.09.18	Surface water drainage updated to suit Wehoilte oversize pipes.	CT	KM
A	13.09.18	Status revised to construction issue.	CT	KT

Status: Construction

Bellway

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Client	Bellway Homes
Job	Bartons Road Havant, Hampshire
Title	Longitudinal Sections Sheet 1 of 2
Scale	As shown @ A1
Date	July 2018
Drawn by	CT
Checked by	KT
Approved by	KT

Drawing No. C85850-D102
Rev. E

QA Ref: QD019 Rev D