

**Design Summary Document Appendix E WSCC Questions dated 090321 PF Responses
Document 040521**

Overarching key comments applicable to whole scheme.

Updated Statement

The current design is for a 7.3 metre wide single carriageway road with 5 metre wide grass verges and 4 metre wide segregated footway/cycleway either side of the A29. The speed limit is to be 30mph. There are a number of junctions along the route, a railway bridge, viaduct and multiple culverts. Some sections of the road are kerbed and others are not. The side roads are designed differently and in accordance with the best practice shown in Manual for Streets.

It should be noted that the detailed Planning Application Boundary has been added to the plans. The East West Link and Barnham Station Link have been removed from the Detailed Planning Application.

Comment provided by WSCC 09.03.21

WSCC COMMENTS		DEVELOPER RESPONSE
Q1	Speed Limit/Design Speed. There is no explanation over how the speed limit of 30mph has been determined for the re-aligned section of the A29, including how this proposal complies with the WSCC Speed Limit Policy (a copy of which is attached for your information). In short the following criteria has to be met for proposed 30 or 40mph speed limits:-	The speed limit of the realigned road is in agreement with the strategic discussions held with WSCC. Specifically the speed of the road was confirmed by Elaine Martin at the A29 Realignment – Phase 1 BEW Delivery Group Meeting on 13 February 2020
Q2	Departures from Standards. There are no details of any departures from standard, so these cannot be taken into account at this stage and will need re-visiting.	Details of the Design Standards used and their application are shown on the drawings. As indicated in Q1 the principals of the road layout were discussed at the BEW Delivery Group meetings.
Q3	Stage 1 Road Safety Audit. No safety audit or designer’s response has been submitted at this stage.	This is to be organised following response to the comments received from WSCC
Q4	Road Geometry/Layout. A design statement has not been submitted. Therefore at this stage there is insufficient detailed information available to assess. The following are examples are those matters that will need to be demonstrated as part of any planning application:- 1. The logic behind how the various road widths were selected (A29 re-alignment and side roads). 2. The logic behind why the verges are so wide (up to 5 metres) as this is not normal practice. Such wide verges may result in higher lighting columns being needed because of how far back the shared use cycleway is from the carriageway due to the presence of the wide verge. 3. The logic behind why the width of the shared use cycleways / footways is 3 metres. If a relatively high level of use is expected, should this be increased in width, rather than the minimum standard being applied? Cycle routes should be considered alongside LTN 1/20. 4. The logic behind how the right turn lane central waiting area lengths were determined. 5. The logic behind the side road priority junction spacing. 6. The logic behind the presence of the large central “One Way” islands in some of the side roads. Can the 3 metre lane widths accommodate HGV movements, as this may be too narrow. 7. The logic behind the presence of the 0.8 metre-wide central islands along some sections of the re-aligned route? Please note this width is not wide enough to accommodate traffic signage / bollards etc with the appropriate clearances etc. 8. Why are some sections of the re-aligned route not kerbed? Normally urban roads with a 30mph speed limit are kerbed for various reasons, including preventing unwanted parking on the grass verges. 9. The bus stop form (layby or on carriageway) should be decided after the design speed is established. 10. The proposed roundabout on the A29 at the southern end of the route – is the forward visibility on the southbound approach to the roundabout consummate with a 85A design speed, as this part of the existing A29 has a 50 mph speed limit? The whole of the splay needs to be offered for adoption. 11. Additionally, it may be necessary to reduce the existing 50mph speed limit on the south and northbound approaches to this roundabout. Ideally a speed limit strategy needs developing for the whole road and the tie-in with existing roads. 12. Is there a reason why refuge islands are not being provided at the Public Right of Way, Green Route and Cycle/Pedestrian crossings of the road?	 The speed limit, typical road characteristics, drainage principals bus stop form of the realigned road is in agreement with the strategic discussions held with WSCC. The speed of the road was confirmed by Elaine Martin at the A29 Realignment – Phase 1 BEW Delivery Group Meeting on 13 February 2020 The cycleway/footway has been changed to a segregated footway cycleway in line with the principals of LTN 1/20 There are no right turn lanes. All priority junctions on A29 are left in/ left out. On the A29 the number of junctions relate to previous discussions with ADC/WSCC regarding the nature of the road and the requirement to limit access points. The spacing of the junctions is driven by the need to access parcels of land logically and on a phase by phase basis. The 0.8m wide central island along the A29 can be increased top 1.5m, although we only envisage for the A29 traffic it would only have bollards at each end. For the side road we would only have left turn only signs. The design of the road is maintaining the principals agreed at the strategic meetings with WSCC. It is noted that the Phase 1 of the A29 maintain the same principals The design of the road is maintaining the principals agreed at the strategic meetings with WSCC. It is noted that the Phase 1 of the A29 maintain the same principals We can not achieve the 85A required forward visibility to the proposed roundabout stop line due to land ownership. It is proposed the Lidsey Bends (north of the roundabout to south of our proposed roundabout the speed limit is reduced to 30mph. This has been included on revised drawings We can not achieve the 85A required forward visibility to the proposed roundabout stop line due to land ownership. It is proposed the Lidsey Bends (north of the roundabout to south of our proposed roundabout the speed limit is reduced to 30mph. As the road is single carriageway in each direction and the speed of the road is 30mph we have provided controlled crossing points in line with the requirements of DMRB. Specifically on the Green Link we have provided a signalised crossing and provided a separate Technical Note on the proposal which has been issued with this revised submission
Q5	Missing Technical Information. 1. The type of frontage, including details of the extent of direct access onto the A29 re-alignment. 2. Explanation over why some of the side roads have right turn lanes, but others do not? 3. Details of the roundabout design parameters e.g. entry/exit lane widths, entry/exit radii, flare lengths, entry path curvature, visibility etc (this list is not exhaustive). 4. Junction radii details. 5. Why do the roundabouts have two exit lanes merging into a single lane such a short distance from the roundabouts? 6. Swept path analysis drawings. 7. Junction visibility splay dimensions and any forward visibility splays dimensions. Please note all visibility splays need to be offered for adoption.	 These will be provided at the application stage and this is currently being discussed with WSCC/ADC separately. We are not sure where this is referred to. Typically where we have introduced side roads on the A29 and they are staggered we have proposed a central island to enable left in and left out, this is to minimise rat running and cross traffic along the main A29 route. These will be provided. The purpose of this submission was to agree the principal A29 and side road layout. In line with Manual for Streets we have proposed a minimum 6m radii for all priority junctions This is in line with modelling requirements which have been checked and discussed with WSCC Various movements have been tracked and will be provided with application Noted and main elements now shown on the drawings.
Q6	Road Horizontal Alignment. 1. Cannot be assessed until it is known if there are any departures from standard (DFS).	Details of the Design Standards used and their application are shown on the drawings. As indicated in Q1 the principals of the road layout were discussed at the BEW Delivery Group meetings.
Q7	Road Vertical Alignment. 1. Cannot be assessed until it is known if there are any DFS	Details of the Design Standards used and their application are shown on the drawings. As indicated in Q1 the principals of the road layout were discussed at the BEW Delivery Group meetings.
Q8	Road Construction. 1. No calculations / ground investigation information/analysis has been submitted in connection with the road pavement/foundation design. This has not been considered at this stage. 2. The cycleway/footway crossings of the various roads / roundabouts should not be raised, as cannot have single road humps in isolation. 3. What do the dashed black lines across the carriageway of the roundabout cycleway/footway crossings represent – it is not clear? Presumably not “Give Way” lines.	Limited ground investigation has been carried out at this stage. The proposal is to construct the road at to follow the existing land contours where possible as indicated on the long sections provided. Controlling ground water during construction is likely to be more of a concern than ground condition. It is assumed for the purpose of this proposal that road construction will be a flexible asphalt concrete construction. Note, the hatching on the drawing only identifies crossing points, although they may not be raised it may be useful to incorporate a hatch or colour to reinforce active crossing points. No they just reinforce the nature of the crossing point. Clarity has been provided over proposed crossing points and the facilities at each
Q9	The whole re-aligned route will need large direction signs (black on white). It needs to be established whether WSCC or the Developer will take the lead in order that there is a consistent and compatible design is produced for both parts of the road (so WSCC northern section and Southern Consortium section). The information on these types of signs cannot be determined in isolation.	This is noted. Signage and specifically strategic signage will need careful consideraton.
Q10	Additionally, the old A29 route will need de-classifying (change in class of road and type). The new route will need classifying as the new A29. Other roads may need changing in this respect as well. At some point it need to be decided whom taking the lead in this respect as quite a complex and time consuming process.	This is noted. Declassification will need careful consideraton.
Q11	Traffic Regulation Orders (TROs) – A strategy will need to accompany the new road in its entirety – so Lidsey Road through to Fontwell Avenue (so WSCC northern section and Southern Consortium section).	This is noted. A complete TRO process will be required.
	Structures Contains ‘Front-End’ pack for railway overbridge – so scope, annotated drawing and impacts summary. This has been referred to Andrew Cook in WSCC Structures Team and as-of 11/02/2021 comments from him are found below: Based on the info provided the following structures are to be provided; i. A single span structure over the railway, allocated structure ref: 1779	Responses as per below

	ii. A multi span structure over the Lidsey Rife, allocated structure ref: 1780 iii. 8No. culverts, allocated structure refs: 1781 - 1788 It is recognised that all of these structures are at the design development stage so details are accepted as being to be ‘light’ on detail, and of course subject to change. Nevertheless, requested commentary as follows:	
Q12	Railway Bridge – ref: 1779 What is the proposed form of the superstructure? The elevation seems to indicate concrete deep beams (or a slab) yet the cross section only shows a very thin slab. The rest of the front-end pack speaks of choices but no decisions seems to have been made for the main longitudinal members.	The FEP provides intial design consideration for discussion with Network Rail. An Options Study for the structure is currently being finalised. At present a steel composite (fabricated steel girder with insitu concrete deck slab or prestressed precast concrete beam construction) are both similarly feasible. GA to be updated to show both deck options. The final choice will be subject to review by Client and TAA.
Q13	Clarification requested on whether the structure is integral or semi integral. NB: Fully integral is expected.	Fully integral in accordance with current standards and best practice to minimise maintenance issues associated with bearings and deck expansion joints.
Q14	It is understood that LTN 1/20 defines the minimum width for a shared use facility as 3.0m, but for over a footbridge 0.5m is added to each side to account for handlebar / kerb scare. The overall width provided is indeed 3.0+0.5+0.5 = 4.0m but WSCC is of the view that there should be a 0.5m verge (or similar) to each side rather than 1.0m to the kerb side.	Noted the proposals show 4.0m segregated width with (0.5m + 0.5m) buffer, appropriate split to be taken forward as part of detailed design
Q15	It is also understood that LTN 1/20 prefers segregated facilities rather than shared. How has the design been arrived at in shared-use form?	A 4m wide segregated route has now been proposed in line with the minimum requirements of LTN 1/20
Q16	Alongside that in points 3 and 4 above, what volume of users has been considered to inform the cycling design elements of the scheme – over the bridge and otherwise?	As highlighted above the principals of the cycle/footway arrangements were discussed at the strategic meetings lead by WSCC and ADC
Q17	Multi span structure over the rife – ref: 1780 No apparent issues with the proposed format as it seems fairly standard, but clarification required in due course as to its articulation. WSCC always seek to reduce our risks associated with the number of and the type of bearings	Agreed. An options study should be undertaken in line with discussions with the Environmental Agency. This will ensure the most appropriate form of structure is proposed. The study will consider an optimal design solution with respect to a number of items including the span, deck arrangement and components such as bearings and expansion joints
Q18	Again, it is WSCC’s understanding that LTN 1/20 defines the minimum width for a shared use facility as 3.0m, but for over a footbridge 0.5m is added to each side to account for handlebar / kerb scare. The overall width provided is indeed 3.0+0.5+0.5 = 4.0m but WSCC is of the view that there should be a 0.5m verge (or similar) to each side rather than 1.0m to the kerb side.	Noted the proposals show 4.0m segregated width with (0.5m + 0.5m) buffer, appropriate split to be taken forward as part of detailed design
Q19	It is also understood that LTN 1/20 prefers segregated facilities rather than shared. How has the design been arrived at in shared-use form?	A 4m wide segregated route has now been proposed in line with the minimum requirements of LTN 1/20
Q20	Alongside that in points 3 and 4 above, what volume of users has been considered to inform the cycling design elements of the scheme – over the bridge and otherwise?	As highlighted above the principals of the cycle/footway arrangements were discussed at the strategic meetings lead by WSCC and ADC
Q21	Culverts – refs: 1781 -1788 The headroom in the culverts is generally insufficient for WSCC to be able inspect them safely. CD 529 suggests an absolute minimum of 1.2m. Under the CDM Regulations the designer is obliged to minimise the risks under the principles of ALARP (As Low As Reasonably Practicable) and given the large amounts of cover and therefore clear availability of being able to increase the headroom, the designer will need to be able provide a very robust answer as to why they have not provided an increased headroom (in excess of the absolute minimum).	DWG 533 is an indicative design of culverts based on provisional cross sections of existing ditch profiles. Detailed design will be required to ascertain access and maintenance requirements. More detailed assessment of location, length of culvert, actual cross section profile and actual water level/flow requirements will be carried out during detailed design. The requirement for screens/grills will also be considered to prevent unauthorised access from H&S point of view but also allow required inspection/maintenance.
Q22	The invert to the culverts should all be lowered so that a natural soft bed can form. The reason for this is two-fold; i. it future-proofs against future incision of the watercourse, climate change etc. ii. it’s ecologically better for aquatic life than a hard concrete invert.	As per Q22 above, these requirement will be considered during detailed design.
Q23	There is a large note regarding drainage calcs of the box sizes so the following comments will hopefully become superseded: i. Why is the CSA of culvert 3 less than half that of the existing land drain? ii. The proposed CSA’s on several of the boxes assume that the culvert will not silt up at the sides and become a similar profile to that of the adjoining embankments. In reality these boxes will silt up so the CSA of the silted up box will become less than the CSA of the existing land drain at full capacity. NB: Arguments of self-cleaning velocities that will keep the boxes clear are unlikely to be accepted.	i. Culvert 3 was considered on post development catchment areas providing a flow rate significantly less than the existing drain profile. This is preliminary design only and will be refined during detailed design. ii. The preliminary design doesn’t account for all constraints and requirements at this stage. The detailed design stage of the box culverts will provide an acceptable allowance for silt build up based on planned maintenance intervals that will aim to provide continuous flow in channel capacity at all times.
Q24	Front-End Pack. The ‘Front-End’ pack shows 3.0m-wide shared ped/cycle lanes over and under the railway bridge (and alongside the new A29)*. Q. How does the design meet the advice contained in LTN 1/20? Q. Are parapet heights sufficient height for expected users?	Yes we have provided routes over and under the bridge structure. These have been increased to 4m A 4m wide segregated route has now been proposed in line with the minimum requirements of LTN 1/20 Yes, parapets to be H4a and 1.8m high in accordance with CD377.
Q25	Gradients to railway bridge. Gradients of 1:20 are shown for both approaches to the railway bridge. Q. Do the approach gradients meet DMRB requirements? Q. What is forward-visibility requirement over the bridge and is this achieved?	In line with chapter 5 of CD109 Highway Link Design the desirable maximum gradient is 6% the maximum gradient shown on our design is 5% See above
Q26	Construction of bridge over railway Point 3.3 of the meeting minutes for Pell Frischmann and Network Rail meeting of 10/09/2020 states that WSCC would be constructing the bridge. It is WSCC’s understanding that the developer will be constructing the entire A29 from Barnham Road to A29 Lidsey Road including the railway bridge and bridge over the Rife.	Noted. This may change if further funding comes forward.
Q27	Is the overall width fit for purpose (i.e. does it incorporate sufficient carriageway, footway and cycleway widths and associated buffers etc.)?	Noted the proposals show 4.0m segregated width with (0.5m + 0.5m) buffer, appropriate split to be taken forward as part of detailed design
Q28	Rife crossing structure. Plans are also included for the crossing of the Rife found between the proposed railway bridge and the southern tie-in point with the existing A29 at Lidsey Road (structures comments are made above). Again, are 1.5m high parapets high enough for cyclists? Design speed and speed limit of road. No information is provided about what design speed has been used to inform the design. Q. Do the various parts of the alignment achieve the speed limits stated? Q. Do the road widths proposed correspond with DMRB for the likely flows expected? Q. Road verges look to be excessively wide (see comments made elsewhere in this response) – why?	Yes, parapets to be H4a and increased to 1.8m high in accordance with CD377.
Q29	Bus stops (and form) The bus stop form (layby or on-carriageway) should be decided after the design speed is established.	Bus stop form of the realigned road is in agreement with the strategic discussions held with WSCC. The speed of the road was confirmed by Elaine Martin at the A29 Realignment – Phase 1 BEW Delivery Group Meeting on 13 February 2020

Q30	Bridleways and other similar infrastructure. No bridleway-standard infrastructure shown throughout the development – all paths either appear to be footways, footpaths or a combination of the two (and shared – not segregated).	We are not designing out the opportunity for bridleway infrastructure. This can be considered further when appropriate.
Q31	Right-hand turning lane found south of the Barnham Road roundabout. The right-hand turning lane found south of the Barnham Road roundabout (so northern-end of the scheme) shows a staggered arrangement for opposing junctions. The junction separation looks like it might be too close, thereby requiring a Departure from Standard (or multiple Departures) to be considered.	These are staggered junctions but with a separation island on the A29 these will be left in and left out junctions only and therefore not interacting directly.
Q32	Drainage Pond 4 Pond 4 is not shown on the submitted drawings. As previously discussed, there are ongoing issues with discharging and angle of rotation.	Pond 4 is shown on the dwgs referenced P1A. Discussions for sizing and location of this pond are ongoing between PF & WSCC and agreed solutions will be presented in due course.
Q33	Junction visibility splays These are not currently shown along the new A29 alignment.	These are now shown on the drawings
Q34	Shared cycle and foot infrastructure. Shared cycle and walking infrastructure either-side of the new A29 alignment. No design documentation in support of these has been provided. Therefore, it will need to be demonstrated how ALL routes comply with LTN 1/20.	A 4m wide segregated route has now been proposed in line with the minimum requirements of LTN 1/20
Q35	Side road widths. Some of the side roads appear somewhat wide at 7.3m. Clearly at this stage the full details of what each is intended to serve is not available. However, the applicant should ensure that all are suitable for their intended purpose – moreso when bus and coach facilities might be proposed (e.g. new waiting facility for Barnham Railway Station). Localised widening on bends etc. would be required if such vehicles were to use these routes on a regular basis. Very little detail shown here to enable an informed response. A road width of 5.5m is shown close to the new railway station car park whereas the rest of the access road is wider. With buses etc. using this link, 5.5m might not be suitable.	In line with MfS 6.5.7 the road has been revised to be a minimum of 6.0m or more.
Q36	Access to new station car park has tight exit radius. Q. How will users of the car park access the railway station?	This has been amended, however it should be noted that East/West Link and Barnham Station Link roads have been removed from the Detailed Planning Application
Q37	Foot and cycle crossing over A29-3 (indicatively shown at-grade) – This was originally shown grade-separated. Q. <i>Why has this crossing now been shown at-grade? and,</i> Q. <i>If proposed as at-grade, is it intended to be via a controlled crossing?</i> Q. <i>On a general point, all non-motorised crossings are shown in a different colour across approach and exit lanes at junctions and roundabouts – What is the design detail for these and can such arrangements be accepted in DMRB design?</i>	As the road is single carriageway in each direction and the speed of the road is 30mph we have provided controlled crossing points in line with the requirements of DMRB. Specifically on the Green Link we have provided a signalised crossing and provided a separate Technical Note on the proposal which has been issued with this revised submission Yes Signal controlled These have been updated in the revised submission showing the detail of the crossing.
Q38	Connection through to Westergate Street. Q. What form of structure is proposed here?; and, Q. Who will build it?	This is a bridge which will go over the Rife. This is part of the Cala Homes Planning Application This is part of the Cala Planning Application
Q39	A29-4 (plan showing one of the roundabouts on the new A29 alignment). Q. Why are two lanes shown on the exit points (N and S) on the roundabout?	This is in line with modelling requirements which have been checked and discussed with WSCC
Q40	Junction separation from new A29 roundabouts and junctions on side roads. Q. Please explain 43m side road junction separation?	We have aligned the first junction spacing with the required SSD identified in Manual for Streets for a 48kph design speed.
Q41	Detail of foot and cycle link into back of St. Phillip Howard School and other paths – insufficient detail shown at this stage. These will need to be considered in relation to LTN 1/20.	Your comments are noted, however it should be noted that East/West Link and Barnham Station Link roads have been removed from the Detailed Planning Application
Q42	Approach lane widths to A29 roundabouts. Do these meet DMRB requirements?	This is in line with DMRB and modelling requirements which have been checked and discussed with WSCC
Q43	Southern tie-in with existing A29 – foot and cycle tie-ins. Q. What is proposed here? How are peds and cyclists fed on and off the paths proposed?	The cycleway will merge back onto the carriageway
Q44	Verge widths. Some measure 5.0m wide. Why are they shown so wide?	These incorporate swales and drainage infrastructure as discussed in the Strategic meetings with WSCC. These are also in line with what is being delivered by WSCC on the northern section of the A29.
Q45	Access to Lidsey Farm (found north of southern tie-in point). Where is access proposed to be taken from for the Lidsey Farm site?	The existing access is to remain. However additional signage will be required
Q46	Roundabout at southern tie-in to old A29 – exit lane. Q. Why is a single exit lane to roundabout shown here, whereas for other roundabouts on the new A29 alignment two-lane exist have been shown? And,	This is in line with modelling requirements which have been checked and discussed with WSCC
Q47	Q. The roundabout looks rather small – does it comply with DMRB requirements?	The proposed roundabout linking back to the existing A29 is of similar size to that throughout the realigned A29 50m ICD.
Q48	7.3m-wide access found just north of southern tie-in roundabout. Q. What will this serve? And,	This will serve a large parcel
Q49	Q. What physical measures will prevent right hand turns in and out (alongside any TROs)?	We have provided a central island guiding traffic at this junction to access via left in left out. Due to its proximity to the A29 roundabout junction it was considered that a central physical island (as per other junctions) was not appropriate. Additional signage could reinforce this as part of the detailed design
Q50	Uncontrolled side road junctions. Q. Are central pedestrian refuges required for these road junctions?	Pedestrian refuse are not shown on the main priority junctions off of the A29. This is primarily because the shared footway/cycleway structure sits 5m behind the carriageway route whereby the side road width reduces to circa 6m to 7m.
Q51	Controlled crossings. No controlled crossings appear anywhere throughout the layout.	As part of the revised submission all crossings on the A29 have been altered to 'controlled crossings' these are primarily zebra crossings except for the Green Link which is proposed as a signal controlled crossing
Q52	Q. What is the non-motorised strategy for the A29 and side roads with regard to crossings?	For the design we show a segregated footway/cycleway on the A29 and a shared footway/cycleway on the side roads. IT should be noted that the side roads are not part of the Detailed Planning Application. We have revised our drawing to show crossings on the side road junctions, but not any refuse islands as this will increase footprint at each junction significantly.

	Side roads.	We have recently revised the scope of the application and outline permission will now be sought for the east-west link, including its side roads from which the majority of the development parcels are accessed. The detailed application will include the A29/E-W link road roundabout, but we will include indicative plans showing the route of the E-W link and expected location of the side roads off this route. However, these details will be subject to further reserved matters approval. The access parameter plan shows the number of parcel access roads from the E-W link road (7 junctions in total) and their indicative locations. Further junctions required for side roads off the A29 (such as those required to the south of the railway and within the mini-masterplan area) will be shown indicatively but the exact alignment and detailed design subject to a planning condition. The only exception to this is the ‘Hanbury Spur’ to the south of the railway link which will provide an alternative route to the existing A29. This will be included in the detailed planning application. Therefore, in short all side roads will be subject to further detailed design with the exception of the Hanbury Spur. The location of the E-W roundabout will be fixed by the detailed part of the permission, but the exact location of other side road junctions will be subject to further agreement secured by a planning condition
Q53	Q. To what extent will they feature in the full planning application?	
	Swept-path diagrams.	
Q54	None provided.	These will be provided in due course.
	Roundabouts.	
Q55	Q. Are all DMRB-compliant in terms of design and size?	Yes, more detail will also be supplied with the Planning Submission at the relevant time.
	Gradients of road alignment (other than bridge).	
Q56	Q. What gradients are being provided for the A29 and also side roads?	Long Sections, these had been provided previously as part of the pack issued to WSCC (Specifically drawings A13394-PF-ZZ-XX-DR-CD-0002 to A13394-PF-ZZ-XX-DR-CD-0006). These drawings include contours and a level strategy for the road (including channel levels), these are currently being updated to align with the revised road footprint, however the principals remain as per the previously issued drawings. We would welcome comment on what has already been submitted.
	Connections to old canal alignment.	
Q57	Q. How will the old canal be integrated into the new A29 and associated residential-led scheme – so crossing point of road and in what guise (e.g. bridlepath status?). And, at-grade or grade-separated?	We are not designing out the opportunity for bridleway infrastructure. This can be considered further when appropriate. This will not be part of the forthcoming application and will be part of a separate exercise.
	Uncontrolled crossing On A13394-PF-ZZ-XX-DR-CD-003.	
Q58	On drawing A13394-PF-ZZ-XX-DR-CD-003 an uncontrolled junction is shown on the inside of a bend. However, neither speed limit or visibility splays are shown.	Speed limit as advised above had been concluded as part of Strategic meetings with WSCC. We have included showing the visibility envelope on the drawings
	Drawing A13394-PF-ZZ-XX-DR-CD-004.	
Q59	On drawing A13394-PF-ZZ-XX-DR-CD-004 two opposing side road junctions are shown with some indicative widening on the main A29 alignment.	These junctions are left in and left out with a central island on the A29. This has been futher enhanced on the revised submission.Therefore movement and interaction between these junctions is not possible.
	Q. Will these junctions be provided with RHT lanes? And if so, does the separation meet DMRB requirements? If not a DfS would need to be considered although it is preferred to design-out the need for DfS’s.	As per the above response not RHT is proposed.
	Brown shading on crossing points.	
Q61	Again like previous plans, brown shading is shown to indicate crossing points. Q. How do these fit-in with DMRB? Q. <i>Would refuges be required?</i>	This has been removed and the specifics of the crossing point shown on the drawings In line with the design for the northern section of the A29 being developed by WSCC we have incorporated refuges at crossing points.
	Approach visibility to roundabouts.	
Q62	On drawing A13394-PF-ZZ-XX-DR-CD-005 approach visibility is not shown. Q. Is approach visibility compliant to DMRB achieved to the roundabouts either-side?	Visibilities have been added to the revised submission drawings. Yes, as shown on drawings
	Junction separation and junction treatment/design.	
Q63	On A13394-PF-ZZ-XX-DR-CD-006 junction separation and junction treatment/design is shown for what appear to be uncontrolled road junctions.	As per drawing A13394-PF-ZZ-XX-DR-CD-0001 issued previously these junctions are left in and left out with a central island on the A29. Therefore movement and interaction between these junctions is not possible.
	Will these junctions be provided with RHT lanes? And if so, does the separation meet DMRB requirements? If not a DfS would need to be considered although it is preferred to design-out the need for DfS’s. (This point is also referred to elsewhere in this document).	As per the above response not RHT is proposed.
	Land boundaries and impacts on existing local accesses and junctions (A13394-SK024 Rev ‘C’).	
Q65	From the scale and level of detail shown on the drawing, it is not possible to establish impacts on existing junctions and accesses found adjacent to the southern tie-in. This needs to be shown far more clearly on any future drawings.	We have provided a larger scale drawing showing more detail
	BEW-PF-GEN-XX-DR-C-0530 P4 (Highway Drainage Strategy).	
Q66	The key doesn’t provide enough detail. Why are certain parts of the road shown in a ‘buff’ colour and others in red?	The difference in colour is to show the provisional catchment areas split for highway runoff. This will be added to the key on the next revision for clarity. See above response
	BEW-PF-GEN-XX-DR-C-0531 P4 (Lidsey Rife Crossing (North))	
Q67	Q. Lack of detail of Rife crossing points (other than reference to culverts). Would culverts be acceptable or are more substantial measures required?	The indicative culverts are shown on dwg 533 which the note on dwg 531 refers to.
Q68	Q. Are ‘split’ carriageway arrangements acceptable on side road links (and on main A29 if shown)?	Not sure of the question being raised here?
Q69	Details of bridge adjacent to Cala Homes land required.	The proposed bridge structure does not form part of this Planning Application. The bridge structure will be submitted by Cala Homes when it comes forward.
	Green links	
Q70	Q. Further detail is required for all (particularly who they are designed for). All appear indicatively for peds and cyclists but not for other users – why?	We are not designing out the opportunity for bridleway infrastructure. This can be considered further when appropriate.
Q71	Access requirements on the boundaries to the site are not shown (i.e. in and out of the site etc.). These will need to be shown to demonstrate how the site connects to and from surrounding paths and other development.	Please refer to outline planning application when submitted.
Q72	The County Council would want operational maintenance to be a forefront consideration particularly in terms of providing access for plant for maintenance of the attenuation basins. From experience with another similar development elsewhere in the County, the County Council is conscious that it is very easy for incompatibility issues to arise between landscape requirements and SuDS requirements. Landscape design was confirmed at an early stage in the planning process for the other development and this similarly was based upon a tree lined link road. This precluded incorporation of swales because the highway corridor width was insufficient to accommodate both swales and the trees without having the trees in the swales. Our drainage engineers do not wish to see a similar constraint placed on implementation of SuDS for the A29. Therefore, this is a key consideration for master-planning, highway corridor width etc.	Noted