A303 Amesbury to Berwick Down

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8.10.16 Traffic and Transport (Tr.1)

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Traffic and Transport (Tr.1)

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16 Traffic and Transport (Tr.1)

Question Tr.1.1

Sustainable travel

The Transport Assessment (TA) Executive Summary states that the scheme will encourage sustainable and accessible travel choices, amongst other things.

Is this a reference to the non-motorised user (NMU) network proposals, or does it also apply to public transport options?

Response

1. This is a reference primarily to the NMU proposals, although there will be improvements in terms of public transport.
2. Paragraph 8.6.2 of the Transport Assessment [APP-297] states that although the scheme cuts across a number of PRoWs, provision is made to maintain the existing function of PRoWs with suitably located bridges and also includes new NMU routes to improve accessibility and connectivity for communities including Winterbourne Stoke and Amesbury and to provide improved access to the World Heritage Site.
3. For one bus service (Route 2 – Salisbury Reds) operating along the A303 (paragraph 9.6.1 of the Transport Assessment [APP-297]), the improved reliability and reduced journey time along the A303 provided by the scheme would have direct benefits and therefore encourage the use of public transport.
4. The scheme will not result in any changes to existing bus stops and will therefore have no direct impact on local bus routes (Paragraph 8.4.1 [APP-297]).

Question Tr.1.2

Traffic flow

Para 3.2.7 of the TA states that the Longbarrow junction would accommodate free-flowing traffic movements between the A360 and A303.

How is this consistent with the use of traffic lights referred to in paragraph 3.2.8?

Response

1. The reference made to “free-flowing traffic movement” refers to the level of capacity provided in the design of the Longbarrow junction for movements between the A360 and A303, rather than the specific method of control for these movements at the junction. Sections 6.7.6 and 6.7.7, and Figure 6-12, of the Transport Assessment [APP-297] evidence this statement by demonstrating that the design will operate without forecast congestion.
2. The Longbarrow junction will not include street lighting to limit visual impact on the World Heritage Site. For this reason, traffic lights will be installed at the junction for safety purposes and it has been assumed that they will operate at night time. The traffic lights will therefore not affect the conclusion that traffic movements will be free-flowing as they are intended to be operational outside of the busier day time periods.

Question Tr.1.3

Departures

Section 3.6 is concerned with Departures from Standard. In this case HE is both the promoter of the scheme and the authority responsible for administering standards.

What arrangements are in place to ensure that independent consideration is given to proposals for Departures to ensure administrative fairness and impartiality?

Response

1. Highway's England have a dedicated Departures Approval System (DAS 3.0) with set embedded processes to be followed in handling and approving Departures from Standards throughout the entire design process. This is set out in Highways England's Departures Manual (Revision 0). This system provides a detailed audit trail of development, assurances and justification for each submitted departure. Once submitted by the Proposer, the Highways England Project Manager, or Assigned Delegate, will assess each Departure with the support of appraisals by suitably assigned independent Technical Specialists that are independent of the design team. The Proposer is a nominated individual from the Design Organisation to oversee the development of a departure application and submit it to Highways England for appraisal. Should the Project Manager deem it to be required, a further independent review by an external organisation would be sought to validate rework or approval of departures.
2. Any road safety aspects related to departures would be considered within the road safety audit process, which is mandatory for all trunk road schemes. This provides an effective, independent review of the road safety implications for all road users. Guidance on the Road Safety Audit process is given in Design Manual for Roads and Bridges (DMRB) Volume 5, Section 2, Part 2, document GG 119, Road Safety Audit revision 1.

Question Tr.1.4

Pedestrian crossings

Para 3.4.4 refers to the two existing subways between the proposed eastern tunnel portal and Countess junction which would be removed. Two new pedestrian crossings would be created around the existing Countess roundabout to provide north/south connectivity along Countess Road under the A303.

i. Would these be usable by all NMUs or are they intended specifically for pedestrian use?

ii. How would they compare in safety/usability terms with the existing underpasses to be removed?

Response

i. **Would these be usable by all NMUs or are they intended specifically for pedestrian use?**

1. The precise form of non-motorised user (NMU) crossing will be confirmed during detailed design. At this stage, it is anticipated that this will include signalised road crossings to provide safe crossing points for pedestrians and cyclists, preserving north/south connectivity along the A345 and enabling pedestrians and cyclists to pass beneath the A303 flyover above as stated in the Environmental Statement Chapter 2: The Proposed Scheme [APP-040], paragraph 2.3.24. This response is also detailed in the Relevant Representations Report [AS-026] (reference number: RR-2283).

ii. **How would they compare in safety/usability terms with the existing underpasses to be removed?**

2. A grade separated underpass solution was discounted on the grounds of prospective safety issues associated with them, for example, the opportunity for anti-social behaviour and the potential threat to personal safety. Whilst a grade separated crossing does have the advantage of physically separating NMUs from live traffic, a new at grade signalised crossing does not compare unfavourably and is considered safe and practical.

Question Tr.1.5

Methodology/Modelling

Para 4.3.1 of the TA states that information from the SW Regional Transport Model has been augmented with the local demand data, local traffic counts and network refinements pertinent to the single scheme being taken forward. Para 4.4.6 gives more information about the additional data used to update the traffic model at PCF Stage 3.

Please provide further explanation of the approach to the development of the model and provide details of the augmented data and how it has been derived, what stakeholder bodies were consulted in the development of the model, and any peer review/validation process that has been carried out.

Response

1. A local transport model has been developed to support the Development Consent Order (DCO) application for the scheme, as per the suggested approach in paragraph 4.6 of the National Policy Statement for National Networks (NPSNN). The model is a refinement of Highways England's South West Regional Traffic Model (SWRTM) with enhancements to local demand data, network representation and calibration and validation to observed traffic data (both counts and journey times) in the vicinity of the scheme. The model is termed the 'A303 Stonehenge SWRTM (DCO)'. The development of the model is summarised in chapter 4 of the Transport Assessment [APP-297].

2. Greater detail on the development and application of the model to support the DCO application is given in the Combined Modelling and Appraisal Report (ComMA) [APP-298]. The ComMA is a detailed summary of four separate documents that provide comprehensive information on the development and application of the 'A303 Stonehenge SWRTM (DCO)' and which form the appendices to the ComMA. These documents form part of the DCO application as follows:

    - ComMA Appendix A – the Transport Data Package [APP-299];
    - ComMA Appendix B – the Transport Model Package [APP-300];
    - ComMA Appendix C – the Transport Forecasting Package [APP-301]; and
    - ComMA Appendix D – the Economic Appraisal Package [APP-302].

3. Of these documents, the Transport Data Package and the Transport Model Package respectively detail the augmented data collection and the use of the data in the development of the refined 2017 Base Year model.

4. The Transport Data Package [APP-299] provides detail on the new data collected in 2017 to refine the SWRTM and enhance the representation of demand local to the scheme. Chapter 2 of the Transport Data Package sets out the requirement for new data, including origin-destination (OD) data, traffic counts and journey time data. The report structure follows guidance given in Highways England's Interim Advice Note (IAN) 106/08. Data surveys and processing have followed

guidance given in the Department for Transport's (DfT) Web-based Transport Analysis Guidance (WebTAG) unit M1.2 '*Data Sources and Surveys'.* The chapter also provides the data collection periods for both the neutral time period (October 2017) and the 'Busy Day' time period (surveyed in August 2017).

5. Specific detail on the data used to refine the SWRTM and produce the 'A303 Stonehenge SWRTM (DCO)' can be found in the Transport Data Package [APP-299] as follows:

    a. Automatic Number Plate Recognition (ANPR) surveys comprising 27 sites, used to refine local trip representation in the vicinity of the scheme, are detailed in chapter 3;

    b. Newly collected Automatic Traffic Count (ATC) data collected over a two-week period at 30 locations, used in the calibration and validation of the traffic model, is detailed in chapter 4, section 1. Existing ATC data provided by Wiltshire Council at 15 locations is detailed in chapter 4, section 2; and existing ATC data available from Highways England's Web-based Traffic Information System (WebTRIS) and collated across 197 sites is detailed in chapter 4, section 3;

    c. Newly collected Manual Classified Turning Counts (MCTC) collected over a three-day period and across 51 sites is detailed in chapter 5;

    d. Updated observed data derived from the Trafficmaster dataset and provided by DfT, used for validation of modelled travel times, is detailed in chapter 6;

    e. Additional Mobile Phone Origin-Destination (MPOD) data collected across 21 Fridays, Saturdays and Sundays for a seven-week period in July and August, used to derive 'Busy Day' travel demand matrices across the South West region is detailed in chapter 7;

    f. Interviews at the Stonehenge visitor centre conducted across three days in both August and October 2017, used to refine local trip representation are detailed in chapter 8; and

    g. Newly collected information on freight movements across the South West (provided by DfT in the form of data from the Continuing Survey of Roads Goods Traffic (CSRGT)) and in the local area through Specialised Goods Vehicle Counts (SGVC), used to refined freight movements on the corridor, is detailed in chapter 9.

6. The Transport Model Package [APP-300] explains the development of the 'A303 Stonehenge SWRTM (DCO)'. The report has been structured in accordance with guidance for the production of Local Model Validation Reports (LMVR) given in IAN 106/08 and WebTAG unit M3.1 '*Highway Assignment Models'*.

7. The Transport Model Package provides detail across all development aspects of the 'A303 Stonehenge SWRTM (DCO)' and the complementary operational models. The model development has been undertaken in accordance with WebTAG unit M3.1, unit M2 '*Variable Demand Modelling*', Highways England's Regional Traffic Model (RTM) guidance and – in the case of the operational

models – IAN 36/01 '*Guidelines for the use of Microsimulation software*'. Specific detail can be found in the Transport Model Package [APP-300] as follows:

a. Model purpose, proposed uses of the model and key design considerations in chapters 1 and 2;
b. Standards against which the model development and out-turn performance (calibration and validation) are measured (typically WebTAG) in chapter 3;
c. Key features of the model in chapter 4;
d. A summary of the data used is provided in chapter 5 (this is primarily a summarised version of information available in the Transport Data Package);
e. Development and refinement of the highway networks in chapter 6;
f. Development and refinement of the travel demand matrices in chapter 7;
g. Calibration and validation of the highway networks in chapter 8;
h. Calibration and validation of route choice in chapter 9;
i. Calibration and validation of the travel demand matrices in chapter 10;
j. Calibration and validation of the assignment in chapter 11;
k. Development and realism testing of the Variable Demand Model (VDM) in chapter 12;
l. Production of the operational models, including network and matrix development and out-turn performance in chapter 13; and
m. Summary of model development and statement of suitability in chapter 14.

8. Throughout the model development process, internal peer review was undertaken by Highways England's Transport Planning Group (TPG). A Business Partner was allocated from TPG to provide guidance, review and critical analysis of the model development process independent to the Highways England Project Management team for the scheme. The TPG Business Partner subsequently approved the ComMA and individual package reports referred to in paragraph 1.2 above.

9. During the model development process, discussions were held with the DfT to review the proposed approach, and the ComMA documentation was subject to DfT scrutiny as part of their review of the business case for the scheme.

10. Model development was also discussed with Wiltshire Council, culminating in their agreement of the suitability of the transport model to assess the scheme impacts as set out in the draft Statement of Common Ground (SoCG) with Wiltshire Council was submitted to the Examination at Deadline 2.

Question Tr.1.6

Methodology/Modelling

Please confirm that you are content with the methodology and results of traffic modelling that has been carried out to support the assessment of the scheme, and in particular whether the validation which has been undertaken represents an industry standard approach to traffic modelling.

Response

1. The Applicant notes that this question is directed at Wiltshire Council. Highways England is content that the methodology followed to develop the transport model accords with the accepted industry standards; the reasons for this are summarised below. Throughout the model development, forecasting and appraisal process, Highways England has engaged with Wiltshire Council. Wiltshire Council has subsequently expressed its view in the agreement as set out in the initial Statement of Common Ground (SoCG) between Highways England and Wiltshire Council, which is to be submitted to the Examination for deadline 2.
2. Development of the 'A303 Stonehenge SWRTM (DCO)' transport model and refinement of its various inputs (including count data, journey time data and Origin-Destination data) has followed the Department for Transport's (DfT) Web-based Transport Analysis Guidance (WebTAG) as set out in paragraphs 4.5 and 4.7 of the National Policy Statement for National Networks (NPSNN). Specific data validation activities included:
    a. Preparation of travel data surveys (including traffic counts, origin-destination surveys and journey times) and subsequent processing and use of data to prepare components of the transport model and for use in model calibration and validation. These data activities have been undertaken in accordance with guidance provided in WebTAG unit M1-2 'Data sources and surveys'. The approach taken is set out in the Combined Modelling and Appraisal (ComMA) report Appendix A [APP-299];

    b. Development of the Base Year highway assignment component of the 'A303 Stonehenge SWRTM (DCO)' networks and demand, and subsequent calibration and validation of these against observed traffic data in accordance with validation criteria and acceptability guidelines given in WebTAG unit M3-1 'Highway assignment modelling'. The approach taken and subsequent demonstration of compliance with guidance is detailed throughout ComMA Appendix B [APP-300];

    c. Development of the Variable Demand Modelling (VDM) component of the 'A303 Stonehenge SWRTM (DCO)' and subsequent realism testing of the demand model in accordance with guidance provided in WebTAG unit M2 'Variable Demand Modelling'. The compliance of the adopted approach with guidance is set out in chapter 12 of ComMA Appendix B [APP-300]; and

   d. Production of traffic forecasts using the validated Base Year highway assignment component and VDM in accordance with WebTAG unit M4 'Forecasting and uncertainty' and using national datasets such as the National Trip End Model

3. (NTEM) provided by DfT. Details of the adopted approach and compliance with guidance is provided throughout ComMA Appendix C [APP-301].

4. Further to the above, supplementary guidance has also been followed where relevant. This includes Highways England's guidance on the Regional Traffic Models (RTMs) as noted in chapter 3 of ComMA Appendix A and, with respect to Air Quality and Noise assessment requirements, scoping advice given in the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 1.

5. DfT produced and validated software and datasets have also been used in production of the traffic model and economic impacts appraisal, including: the National Trip End Model (NTEM), Dynamic Integrated Assignment and Demand Model (DIADEM), Transport User Benefits Appraisal (TUBA) and Costs and Benefits to Accidents – Light Touch (COBA-LT).

6. Therefore, further to the detail provided both above and in the ComMA and its appendices, Highways England is content that the approach to model development and the calibration and validation of the Base Year model follow the industry-standard approach to transport modelling – in particular guidance provided in WebTAG.

Question Tr.1.7

Methodology/Modelling

Please explain why it was determined to be inappropriate/unnecessary to include Warminster and Wilton in the area of detailed modelling (AODM), since these are locations with significant existing congestion influencing the operation of the local road network (Para 4.3.10 of the TA).

Response

1. Department for Transport guidance provided in its Web-based Transport Analysis Guidance (WebTAG) unit M3.1 'Highway Assignment Models' sets out advice on the extent of modelled areas in section 2.2. This guidance has been followed in the definition of the Area of Detailed Modelling (AoDM) as set out in paragraph 4.3.10 and corresponding Figure 4-3 of the Transport Assessment [APP-297]. The local transport model – the 'A303 Stonehenge SWRTM (DCO)' has been developed from Highways England's existing South West Regional Traffic Model (SWRTM) which was used to help define the AoDM.

2. WebTAG unit M3.1 section 2.2.5 defines the AoDM as follows:

   Area of Detailed Modelling. This the area over which significant impacts of interventions are certain. Modelling detail in this area would be characterised by: representation of all trip movements; small zones; very detailed networks; and junction modelling (including flow metering and blocking back).

3. In considering the definition of the AoDM, it is also necessary to understand how the surrounding area is represented. This surrounding area is termed the Rest of the Fully Modelled Area (RoFMA). As defined in the 'A303 Stonehenge SWRTM (DCO)' local transport model, the towns of Warminster and Wilton are both within the RoFMA, close to the AoDM boundary. WebTAG unit M3.1 section 2.2.5 defines the RoFMA as follows:

   Rest of the Fully Modelled Area. This is the area over which the impacts of interventions are considered to be quite likely but relatively weak in magnitude. It would be characterised by: representation of all trip movements; somewhat larger zones and less network detail than for the Area of Detailed Modelling; and speed/flow modelling (primarily link-based but possibly also including a representation of strategically important junctions).

4. Outside of the RoFMA, the remainder of the model is the External Area. The RoFMA in the 'A303 Stonehenge SWRTM (DCO)' is large owing to its heritage from the standard SWRTM model and covers an area from Cornwall in the west to the A34 in the east, and from the south coast to north of the M4 in the north. The External Area therefore is the remainder of the country. WebTAG unit M3.1 section 2.2.5 defines the External Area as follows:

   External Area: In this area impacts of interventions would be so small as to be reasonably assumed to be negligible. It would be characterised by: a network representing a large proportion of the rest of Great Britain, a partial representation of

demand (trips to, from and across the Fully Modelled Area); large zones; skeletal networks and simple speed/flow relationships or fixed speed modelling.

5. WebTAG unit M3.1 section 2.2.8 notes that an existing model with geographic coverage as wide or wider than that for the proposed new model may be used to determine changes in traffic flow from an intervention to provide an indication of where impacts are strong, weak or negligible. This in turn helps to provide the definition for the AoDM, RoFMA and External Areas respectively.

6. Section 3.3.1 of the Combined Modelling and Appraisal (ComMA) report [APP-298] notes that this guidance was followed in developing the AoDM, along with consideration of potential air quality and noise impacts following additional guidance given in the Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3, Part 1. Detail of the exact methods followed are given in Appendix A of the Transport Model Package, which forms Appendix B of the ComMA [APP-300].

7. The extent of the AoDM following these tests is outlined in paragraph A.5.2 of Appendix A to the Transport Model Package [APP-300]. The AoDM has been developed to allow for a robust assessment of the proposed Amesbury to Berwick Down scheme. The AoDM, as shown in Figure 4-3 of the Transport Assessment [APP-297], extends north on the Salisbury Plain, to the north of Larkhill and Bulford, and south to the northern extents of Wilton and Salisbury. The eastern extent of the AoDM extends to the east of the A338, whilst the area extends towards Warminster in the west, incorporating the A36. These are the areas within which – following assessment aligned to WebTAG unit M3.1 and DMRB guidance – significant impacts of the proposed intervention are certain to occur (as per description given in paragraph 2 above).

8. Analysis of the test undertaken at the start of the model development process and documented in Appendix A of the Transport Model Package [APP-300] demonstrates that the impacts of the scheme in Warminster and Wilton are expected to be relatively weak in magnitude. Whilst these areas may experience significant existing congestion that influences operation of the local road network, the proposed Amesbury to Berwick Down scheme is not expected to have a material impact. Therefore, these areas fall in the RoFMA, just outside of the AoDM extents.

9. It should additionally be recognised that due to the 'A303 Stonehenge SWRTM (DCO)' being developed from Highways England's South West Regional Traffic Model (SWRTM), the inter-urban road network throughout the South West is modelled to a greater level of detail than expressed for a RoFMA in section 2.2.5 of WebTAG unit M3.1. Therefore, characteristics that would be expected in the AoDM such as junction modelling incorporating flow metering and blocking-back are present in the modelled main roads around both Warminster and Wilton.

10. Whilst the extent of the AoDM was defined prior to the model development process, the local transport model forecasts of the scheme impacts have been presented in both the ComMA [APP-298] and ComMA Appendix C, the Transport Forecasting Package [APP-301]. Figure 5-12 of the Transport Forecasting Package [APP-301] highlights the predicted change in Annual Average Daily Traffic (AADT) on local roads in 2041 as a result of the scheme with explanatory text given in paragraphs 5.4.18 to 5.4.27. These show no material changes in traffic flows near to Warminster. A reduction of around 2,100 vehicles AADT on the A36 between Stapleford and Wilton is noted as a result of re-routeing onto the A360 with the scheme in place, but with no material change outside the AoDM boundary identified. This affirms the judgement made in defining the extent of the AoDM, confirming that it was not necessary to include Warminster and Wilton in the AoDM to assess the scheme impacts.

Question Tr.1.8

Methodology/Modelling

The busy day model represents an average Friday-Sunday from 15 July to 28 August, but is also considered representative of other busy times of year. Please detail the occurrence/frequency of 'other busy times of year'.

Are there any week days other than Fridays which might fall into this category at particular times of year (Para 4.4.3 of the TA)?

Response

1. There are 12 week days other than Fridays and bank holidays which fall into the 'busy day' category at particular times of year. This is demonstrated below.

2. Section 4.14 of the Transport Forecasting Package (Appendix C of the Combined Modelling and Appraisal Report (ComMA), [APP-301]) explains how Trafficmaster data on travel times along the A303 were analysed. As illustrated in Figure 4-7, the data demonstrates that median average daily journey times between the A338 and A36 through the scheme section varied from a minimum of around 15 minutes to nearly an hour.

3. This profile of delay in the transport model is represented by distinguishing between the busiest period, termed 'busy days' and the rest of the year. As shown in Figure 4-7 of the Transport Forecasting Package, there are delays experienced in the latter period, as well as the former. These delays were experienced during week and weekend days.

4. The journey times observed during the 2017 surveys (Section 2.5 of the Transport Data Package (Appendix A of the ComMA), [APP-299]) represented the average of the 64 busiest days observed in the Trafficmaster data set. Figure 4-7 of the Transport Forecasting Package illustrates the delays represented in the model and shows how the 'busy day' and 'neutral day' periods modelled represent the range of delay observed over the different days of the year.

5. The following table summarises the days of the week and months of the year where the data demonstrated most delay. It shows that delays are most frequent on Fridays, but are also experienced on other weekdays and therefore there are weekdays other than Fridays and bank holidays which fall into the category of "other busy times of year". The 12 week days other than Fridays or bank holidays are listed in Annex Tr.1.8 – A.

Table Tr.1.8 - 1: Number of 'busy days' by month and day type

Month	Monday to Thursday	Friday	Weekend	Bank Holiday
Jan	0	0	0	0
Feb	0	0	0	0

Mar	0	2	0	0
Apr	1	1	0	2
May	0	3	1	1
Jun	1	5	1	0
Jul	2	5	6	0
Aug	5	4	6	1
Sep	0	5	1	0
Oct	1	2	3	0
Nov	0	0	0	0
Dec	2	2	0	1
Total	12	29	18	5

Annex Tr.1.8 - A

The 12 week days other than Fridays and bank holidays which have been identified as 'busy days' are as follows:

- Monday 11th July 2016
- Thursday 28th July 2016
- Monday 1st August 2016
- Monday 8th August 2016
- Thursday 18th August 2016
- Monday 22nd August 2016
- Thursday 25th August 2016
- Monday 24th October 2016
- Wednesday 28th December 2016
- Thursday 29th December 2016
- Thursday 13th April 2017
- Monday 26th June 2017

Question Tr.1.9

Methodology/Modelling

Para 4.7.1 of the TA refers to the use of VISSIM to determine the operational impacts on the network of the scheme during normal operation, during tunnel incidents/maintenance periods and during construction phases.

Can the Applicant confirm that this is an industry standard model in common use in the appraisal of road improvement schemes?

Response

1. Transport Model Package, Appendix B to the Combined Modelling and Appraisal Report [APP-300], Section 2.5.1.e sets out the software packages that have been used in the scheme assessment.
2. In paragraph 4.5 of the National Policy Statement for National Networks (NPSNN) it states that road projects should be assessed using WebTAG guidance. Paragraph 4.6 of the NPSNN states that road projects should usually be supported by a local transport model to provide sufficiently accurate detail of the impacts of a project. WebTAG guidance (Unit M3.1, Appendix B5) recognises the use of Micro-Simulation models as an assessment tool.
3. VISSIM is a microscopic, time-step and behaviour-based simulation model accepted and widely used by the industry to model multimodal transport operations in urban and rural locations.
4. The use and application of micro-simulation traffic models is set out in Highways England Interim Advice Note (IAN 36/01). Table 2.2 and 2.3 of the note indicates that VISSIM is an acceptable micro-simulation tool for assessing the impact of road improvement schemes.

Question Tr.1.10

Methodology/Modelling

Para 4.7.9 d of the TA refers to 'rubbernecking' on the busy day on the stretch of carriageway by Stonehenge as drivers view the stones. Vehicles were observed going extremely slowly past the Stones with large headway to the vehicle in front.

Is this considered to be a significant contributor to the incidence of delay/congestion at busy times in addition to traffic volumes, junction capacity and merging issues?

Response

1. 'Rubbernecking', junction capacity, and merge capacity all constrain traffic volumes and contribute significantly to delay and congestion near Stonehenge.
2. Section 6.5.4 of the Transport Model Package (Appendix B to the Combined Modelling and Appraisal Report [APP-300]) states that 'rubbernecking behaviour' was observed in the data collected for the development of the model. Section 6.5.7 explains that this behaviour limits the capacity of the link between Countess roundabout and Longbarrow on busy days when the behaviour is more prevalent, and demonstrates why rubbernecking is a significant constraint contributing to observed delays.
3. Section 13 of the Transport Model Package also details the rubber-necking behaviour in relation to the micro-simulation models developed for the operational assessment of the scheme. Figure 13-21 shows 'shockwaves' of traffic queues on the section of A303 passing Stonehenge due to rubbernecking behaviour.
4. The sections referred to above demonstrate that Rubbernecking is a significant contributor to the incidence of delay/congestion at busy times.

Question Tr.1.11

Methodology/Modelling

Para 4.7.10 of the TA indicates that in the neutral month no obvious congestion was observed on the network, in either direction during the AM and interpeak periods. Figure 4.8 shows that the average journey time on this stretch of the road does not exceed 20 minutes on more than 265 days of the year.

Could it be inferred from this that the capacity of the A303 hereabouts does not act as a significant brake on economic activity in the SW Region except at busy times, which generally occur at weekends and holidays?

Response

1. Paragraph 4.7.10 of the Transport Assessment [APP-297] refers to a site visit undertaken on a single day in the neutral month: Tuesday 03 October 2017. The site visit covered the morning peak (AM) and interpeak (IP) periods but did not cover the evening peak (PM) period. Point b. of paragraph 4.7.10 notes that no obvious signs of congestion were observed on the A303.

2. Figure 4-8 of the Transport Assessment shows the distribution of median daily observed travel times on the A303 between the A36 and A338 over the course of the year as derived from Trafficmaster Global Positioning Systems (GPS) data provided by the Department for Transport (DfT). The median travel time across all days of the year is 16 minutes and 28 seconds, which itself incorporates an element of delay. The distribution observed of travel times is reproduced below, the second column showing the median time on illustrative days and the final column showing the additional time, i.e. delay, compared with the day of the year on which the median journey time was fastest. This demonstrates that there was a delay in excess of 1 minute and 9 seconds on more than 251 days of the year, one minute 30 seconds on more than 201 days of the year and over 41 minutes on the busiest day of the year.

Table TR.1.11-1: Distribution of observed travel times on the A303 (A36-A338)

Day of year (ranked by delay)	Median travel time (mm:ss)	Excess time relative to fastest days (mm:ss)
1	55:50	41:07
51	25:34	10:51
101	19:29	04:45
151	17:11	02:28
201	16:14	01:30
251	15:52	01:09
301	15:39	00:55
365	14:43	00:00

3. The data demonstrates that delay is experienced throughout the year and is not confined to busy times. However, delays are much more significant during busy times.

4. Economic appraisal of the local transport model outputs has been undertaken and is summarised in chapter 5 of the ComMA [APP-298]. Table 5-3 of the ComMA provides a breakdown of the travel time benefits, showing that 55% of user benefits of the scheme accrue to business related purposes. This highlights that the scheme provides a benefit to the economy of the South West region throughout the year and cannot be interpreted as predominantly related to serving weekend tourist activity.

Question Tr.1.12

Methodology/Modelling

Para 4.7.16 of the TA states that the matrix development methodology (based on MCTC data) "*means that the baseline traffic flows in the operational models do not exactly match those derived from the strategic model. This is typical considering the differences in model type and function.*"

Please provide further explanation of the reason for employing the different models and clarification of the extent and significance of the discrepancy between the data used in the different model types.

Response

1. The function of the strategic model was to identify route choice and variable demand changes across a large spatial network due to the scheme and provide inputs to the economic and environmental appraisals. The strategic model simplifies junction details and averages traffic flows over the modelled period.

2. The function of the operational model was to consider in detail the junction arrangements, turning, weaving and merging movements of traffic in the immediate area around the scheme to inform details of the scheme design.

3. Manual classified turning count (MCTC) data was collected throughout the Area of Detailed Modelling (AoDM) as described in Appendix A of the Combined Modelling and Appraisal Report (ComMA), [APP-299] in Section 5. Both strategic and operational models have used the same survey data, and apply validation criteria appropriate to the differing detail of each model.

4. Within the strategic model development process described in the ComMA Appendix B [APP-300] the data was used to refine the manner in which the strategic model represented traffic patterns within the AoDM. The process of refining the strategic model was guided by the Department for Transport's (DfT) Web-based Transport Analysis Guidance (WebTAG) Unit M3.1. This refinement process was undertaken to add detail to the local area and to retain the overall integrity of the strategic model at the regional level. ComMA Appendix B Sections 8-11 explain the calibration and validation of the strategic model, setting out why it is suitable for its purpose.

5. Within the operational model, MCTC data informed the development of base year demand matrices as described in Chapter 13 of ComMA Appendix B. The development of the operational model has been guided by WebTAG Unit M3.1 and Highways Agency Interim Advice Note 36/01. Section 13.8 and 13.9 explain the calibration and validation of the operational model and conclude that the models are suitable for their purpose.

6. The operational model was developed in recognition that greater detail would be required for scheme layout and details which the strategic model would not be able to replicate. The operational model more accurately represents observed MCTC data and allows greater understanding the performance of the design options, appropriate for its purpose, as explained in [APP-300] Sections 13.8 and 13.9.

7. The forecast flows used in the operational assessment were produced by adding the changes between the base and forecast flows derived from the strategic model to the base year operational model flows. This is industry standard methodology as explained in Paragraph 4.7.16 of the Transport Assessment [APP-297]. Section 4.3 of WebTAG unit M2 explains alternative model forms and the incremental approach applied directly follows the recommendation in paragraph 4.3.12. The incremental approach is advocated in WebTAG because it combined greater confidence in the forecast changes with greater accuracy in reproducing base year conditions, together giving most confidence in the forecasts.

8. The data used in the development of the strategic model and the operational model (as detailed in the Local Model Validation Report (Appendix B of the ComMA [APP-300]) followed guidance in WebTAG and was suitable for each model. Both models have been calibrated and validated to the same survey data and to suitable tolerances in line with guidance from WebTAG. The methodology used ensures that both models are suitable for their intended purposes (as outlined above) and that any discrepancies between traffic flows in the base year strategic and operational models are not significant to the assessment of the impacts of the scheme in the operational models.

Question Tr.1.13

Methodology/Modelling

Please provide clarification of the statement in para 4.8.3 of the TA that "*while the journey time is not represented to the WebTAG tolerances in the busy day, the model does appropriately represent substantial delay from traffic congestion*".

Please explain why it is considered acceptable to depart from WebTAG tolerances in this instance?

Response

1. Paragraphs 13.8.14-13.8.39 of the Combined Modelling and Appraisal Report – Appendix B – Transport Model Package [APP-300] describe the journey time validation of the A303 and local operational models in the neutral and busy day periods. Table 13-24 indicates that 67% (eight out of the twelve) of A303 mainline modelled journey time routes are within the criteria of 15%, or a minute, of observed values which do not meet the WebTAG acceptability guidelines of 85% of routes.
2. Undertaking journey time validation for each hour across a 6-hour time period in a congested microsimulation model, such as the busy day main line model, is extremely challenging, and more complex than constructing 6 individual hourly models. This is because one set of network parameters represent traffic conditions over the whole modelled period and that there are interactions in a given modelled hour which influence the subsequent hours, and the extreme congestion and delays observed on busy days.
3. Paragraphs 13.8.18 to 13.8.24 of the Transport Model Package [APP-300] demonstrate that the substantial delay from traffic congestion is adequately represented. Journey time comparison graphs are included as part of Figures 13-26 to 13-29. The graphs show that the modelled A303 journey times along the scheme reflect observed conditions throughout the 6-hour modelled period.
4. Section 13.9.3 of the Transport Model Package states that although the journey time is not represented to the WebTAG tolerances in the summer, the model does appropriately represent the substantial delay from traffic congestion in this period. Section 14.3.9 concludes that the operational models are intended to test operational performance of the junctions and network.
5. Noting that the WebTAG acceptability guideline in part reflects general use of model outputs to inform economic appraisal (which is not the purpose of the operational model), and the extent to which the operational model satisfactorily reflects the extensive queueing observed on busy days, its performance is demonstrated to be satisfactory for use in testing operational impacts.

Question Tr.1.14

Traffic forecasts

With regard to Para 5.2.5 and Table 5.2 of the TA do you consider that the Applicant has identified all significant future developments which may have an influence on traffic growth and the operation of the road network in future?

Response

1. The Applicant notes that this question is directed at Wiltshire Council. Throughout the model development, forecasting and appraisal process, Highways England has engaged with Wiltshire Council. Wiltshire Council has subsequently confirmed that the forecasting methodology, including the identified significant future developments, is agreed as set out in the initial Statement of Common Ground (SoCG) (submitted for Deadline 2).

2. Section 4.2 of the Transport Forecasting Package (Appendix C of the Combined Modelling and Appraisal Report (ComMA), [APP-301]) sets out how future developments have been identified and detailed in an uncertainty log.

3. Members of the relevant local planning policy team were invited to comment upon the uncertainty log. The project team shared a draft of the uncertainty log on 29th January 2018 with Wiltshire Council and received comments on 14th February 2018. Hampshire County Council and Test Valley Borough Council were also invited to comment on the draft of the uncertainty log on the 7th February 2018 and the 14th February 2018 respectively, with the project team receiving comments on the 8th March 2018. These comments were then incorporated into the uncertainty log. This is reported in section 4.2.10 – 4.2.11 of the Transport Forecasting Package [APP-301].

4. The proposed Boscombe Down development is an important source of uncertainty in local development plans. This development has not progressed to the level of certainty to be included in the core scenario. A specific sensitivity test was therefore undertaken as explained at paragraph 4.12.7 of the Transport Forecasting Package [APP-301] to assess this important source of uncertainty and ensure that the assessment undertaken reasonably considers significant future developments.

Question Tr.1.15

Traffic forecasts

i. In Row 1 of Table 5-3 does Construction Traffic equate with HGV traffic?

ii. In Table 5.3 does the data represent all construction related trips, or only those using the public highway?

iii. If so, can the Applicant point to where in the TA and ES chapters the impacts of traffic using internal haul routes have been specifically assessed given the volumes of material to be moved between the tunnel portals and Parsonage Down?

Response

1. As detailed in Section 5 of Appendix F (Scheme assumptions for DCO construction traffic management modelling) of the Combined Modelling and Appraisal Report – Appendix C – Transport Forecasting Package [APP-301], the construction traffic numbers outlined in Table 5-3 of the Transport Assessment [APP-297] are made up solely of HGV traffic.

2. As detailed in Section 5 of Appendix F of the Combined Modelling and Appraisal Report – Appendix C – Transport Forecasting Package [APP-301], the numbers in Table 5-3 of the Transport Assessment [APP-297] represent construction related trips using the public highway only.

3. The use of the haul routes has not been assessed as part of the Transport Assessment [APP-297] which considers the impact of construction related traffic on the public highway.

4. In the Environmental Statement, the location of the proposed haul routes that have been assessed is detailed in Chapter 2 [APP-040], paragraphs 2.4.17 to 2.4.20 and is shown in Figure 2.7 [APP-061].

5. The noise and vibration impact of the haul routes has been considered in Chapter 9 [APP-047] and Appendix 9.2 – Construction Noise [APP-269] of the Environmental Statement.

6. Air quality issues relating to the haul routes and construction dust have been considered in Chapter 5 [APP-043] and Appendix 5.4 – Construction air quality and mitigation [APP-193] of the Environmental Statement.

7. The effects of construction on biodiversity are set out in paragraphs 8.9.6 to 8.9.176 of Chapter 8 of the Environmental Statement [APP-046]. As detailed within paragraph 8.8.26 of Chapter 8 [APP-046] "*It is considered that accounting for the implementation of measures set out within the OEMP, significant construction impacts to important biodiversity features associated with dust deposition, air pollution, pollution incidents, water quality, light, noise, and vibration would be avoided.*". As noted in the response to EC.1.11, biodiversity assessment of traffic movements on the haul route adjacent to the River Avon Special Area of Conservation (SAC) has been shown not to have an adverse

effect on biodiversity receptors due to the low sensitivity to air quality emissions, as is set out in paragraph 40 (page 17) of Appendix 8.24 - Habitat Regulations Assessment (HRA) Likely Significant Effects Report [APP-265].

8. The Cultural Heritage and Landscape and Visual Effects of the haul routes have been considered as part of the wider environmental assessment reported in Chapter 6 (Cultural Heritage) [APP-044] and Chapter 7 (Landscape and Visual Effects) [APP-045] of the Environmental Statement.

Question Tr.1.16

Traffic forecasts

Does the Council broadly endorse the predicted change in daily traffic (AADT) with the scheme at 2041 set out in Figure 6 – 3 of the TA and the assessment of traffic effects in paras 6.3.12 – 6.3.20 of the TA?

Response

1. The Applicant notes that this question is directed at Wiltshire Council. Throughout the model development, forecasting and appraisal process, Highways England has engaged with Wiltshire Council. Wiltshire Council has subsequently confirmed that the methodology, including the predicted change in daily traffic, is agreed as the basis of impact assessment as set out in the initial Statement of Common Ground (SoCG) (submitted for Deadline 2).
2. Further information on the suitability of the forecasting assumptions and results are detailed in the Transport Forecasting Package (Appendix C of the Combined Modelling and Appraisal Report [APP-301]).

Question Tr.1.17

Traffic forecasts

Table 6.1 shows volume over capacity on the A303 at Stonehenge in 2041, with and without the scheme. With the scheme the A303 would be operating at 50% capacity or under at 'non-busy' times, even in the am or pm peaks. On busy days the scheme would reach 56% volume over capacity Eastbound and 54% Westbound.

i. While it is true that this would represent a substantial improvement in traffic capacity as a result of the scheme, is this an indication of over-specification, with considerable 'spare' capacity remaining unused, even at the busiest times?

ii. Given the concern of a number IPs (eg [RR-0361], [RR-1031], [RR-1731]) that the DCO scheme is over-engineered, does not represent value for money, and would deprive the region of other much-needed investment in transport infrastructure, what consideration was given to a the development of a lower-cost scheme with a closer match between forecast traffic demand and capacity?

Response

1. Table 6.1 of the Transport Assessment [APP-297] shows that one lane in each direction is not enough with Volume over Capacity link values without the scheme at 100% or over in all peaks. As lanes are added to a highway link, the capacity increases in increments linked to the number of lanes, depending on if either one or two lanes are provided, so it is not possible to increase link capacities by small percentage. increases. A single lane option, which could potentially cost less, is shown to not provide the required capacity.

2. The need for a second lane is highlighted in the hourly flows outlined in Appendix J (Hourly flow diagrams – Core scenario) of the Combined Modelling and Appraisal Report – Appendix C [APP-301]. This shows that the "2041 with scheme" link flows past Stonehenge (Figures J.17 to J.20) are in excess of 1,600 vehicles per hour in the AM, PM and Busy period, which is the accepted theoretical capacity of a 2 into 1 lane merge and would therefore cause queuing.

Question Tr.1.18

Impacts on the local road network

Para 6.7.1 of the TA refers to "*an update to the Longbarrow junction in order to reduce queuing resulting with the original design*". The redesign involves provision of a dedicated left turn lane from the A360 to the eastbound on-slip.

Does the Council agree that this would result in a significant reduction in the potential for queuing under these conditions?

Response

1. The Applicant notes that this question is directed at Wiltshire Council. Within the Combined Modelling and Appraisal Report – Appendix C (Transport Forecast Package) [APP-301], Section 6.3 demonstrates that the proposed redesign, which would be undertaken during the detailed design stage, can provide sufficient capacity at this location. Figure 6.6 indicates average speeds on approaches to Longbarrow junction and shows that the design would operate without forecast congestion.
2. Wiltshire Council's views of the assessment are stated in the draft Statement of Common Ground between Highways England and Wiltshire Council (submitted at Deadline 2). Wiltshire Council have expressed no concerns about the operational performance of Longbarrow Junction.

Question Tr.1.19

Impacts on the local road network

Para 6.10.4 indicates that the northern roundabout at Solstice Park will experience southbound queuing on Salisbury Road (from the north) by 2041 during weekday peak periods. In the AM period the model shows queues approaching 1km, and the PM period queue lengths exceed 300 m. These queues are forecast to occur with or without the scheme. Para 6.10.10 and Figure 6.15 identifies an issue that the average 'busy day' journey times will experience delay of approximately three minutes due to the congestion on Solstice Park Avenue extending onto the westbound mainline.

Does the Council agree the resolution of these issues through junction upgrades is not a mitigation requirement of the scheme and that it would be appropriate to leave delivery of improvements in connection with future development proposals within Solstice Park?

Response

1. The Applicant notes that this question is directed at Wiltshire Council. Solstice Park northern roundabout is forecast to reach its operating capacity between 2031 and 2041 irrespective of the scheme as explained in paragraph 6.10.4 of the Transport Assessment [APP-297]. This would be addressed as a routine consideration of the planning process at the appropriate time as explained in paragraph 6.10.11 of the TA. The analysis presented in paragraphs 6.10.12-18 of the TA demonstrates that it would be feasible, when needed, to increase the capacity of the junction and maintain satisfactory operation of Solstice Park.

Question Tr.1.20

Road Safety – Walking, cycling and horses

i. Paragraph 7.2.3 pf the TA refers to proposed provision of Pegasus crossings at Longbarrow south roundabout. On the A360 road and on the former A303, Kent carriage gates will be provided at all access points to link prevent access by motor vehicles. Do the stakeholders consider that this satisfactorily addresses the needs of NMUs in this location?

ii. Paragraph 7.2.4 of the TA refers to risks to personal safety, particularly for wheel chair users. Is it acceptable not to provide lighting to underpasses because they are in a rural area and not on lit routes?

iii. What if any provision is intended to be made for a safe north-south crossing of the A303 at the western end of the scheme at Yarnbury Castle, as sought by Winterbourne Stoke Parish Council?

Response

1. It is assumed that part i of the question is referring to TA paragraph 7.2.13 and part ii of the question is referring to TA paragraph 7.2.14.

i. Paragraph 7.2.3 pf the TA refers to proposed provision of Pegasus crossings at Longbarrow south roundabout. On the A360 road and on the former A303, Kent carriage gates will be provided at all access points to link prevent access by motor vehicles. Do the stakeholders consider that this satisfactorily addresses the needs of NMUs in this location?

2. Pegasus crossings are widely used and are endorsed by the British Horse Society in their "Advice on Road crossings for horses" which states "*A Pegasus crossing is a means of creating a relatively safe means of crossing at grade, which is cheaper and more practical on existing roads, and some new developments, than building an underpass or overpass. However, where new roads are planned, the British Horse Society recommends the use of an underpass as the first choice of crossing if feasible*." The A360 southern link to Longbarrow junction is in cutting to minimise its visual impact on the adjacent World Heritage Site and an underpass is thus not feasible at the crossing point. Public access to bridleways would be controlled by equestrian gates which are too narrow for most vehicles to use. Public access to restricted byways would be controlled by Kent carriage gaps which are designed to prevent entry by vehicles. Highways England believe this satisfactorily addresses the needs of NMUs in this location.

ii. Paragraph 7.2.4 of the TA refers to risks to personal safety, particularly for wheel chair users. Is it acceptable not to provide lighting to underpasses because they are in a rural area and not on lit routes?

3. As detailed in Section 2.3.50 [APP-040], given the WHS context, dark skies are an important consideration within the Scheme design. There would be no

permanent night-time road lighting associated with the Scheme within the WHS, outside of the tunnel. (The dual carriageway beneath Green Bridge No.4 will only be lit during times of daylight).

4. The Design Manual for Roads and Bridges provides guidance on lighting NMU routes in TA91/05 paragraph 8.14 which states:

5. *"NMU routes in rural areas should not normally include lighting unless there are specific requirements, which include:*

   - *High flows of NMUs, particularly on adjacent and shared use NMU facilities;*
   - *Routes with intersections with rights of way and both minor and major roads falling below geometry standards (lighting used at a specific point to highlight danger);*
   - *Routes which form part of an identified school route, commuter route or other route;*
   - *Through any underpass (subject to environmental impact)."*

6. The only NMU route beneath a bridge is alongside the proposed B3083 re-aligned highway. Feedback from the equestrians raised concerns about horses being startled by traffic within an enclosed area, so this route has been provided to separate equestrians from road traffic beneath the bridge. As the B3083 has no NMU provision either side of the bridge and is unlit between its junction with A303 and Shrewton, lighting is not proposed beneath the bridge. Highways England consider it acceptable not to provide lighting to underpasses in remote locations. Lighting on an otherwise unlit route could increase the risks to personal safety by encouraging their use at unsuitable times.

iii. What if any provision is intended to be made for a safe north-south crossing of the A303 at the western end of the scheme at Yarnbury Castle, as sought by Winterbourne Stoke Parish Council?

7. Alternative crossing facilities have been considered for byway SLAN3 located at the west of the Scheme. In total four options were identified, an overbridge, an underpass, remain open as existing and close with restricted access/egress to/from the A303. A grade-separated crossing was identified as a preferred solution for several stakeholders. Two alternatives were identified, an overbridge and an underpass but both options would require significant earthworks to be constructed either side of the A303. An overbridge would create visual intrusion on the sky line and have a negative impact on the setting of the scheduled monument at Yarnbury Castle and would not meet wider policy tests and was therefore discounted. The underpass option was considered not to be appropriate due to buildability constraints and impacts and also discounted as the alternative routes on the Scheme will be available with less physical and environmental intrusion. An alternative reasonably convenient safe crossing point on the A303 trunk road would be available to the east, via Green Bridge No. 1, which does not have a negative impact on the setting of Yarnbury Castle.

Question Tr.1.21

Road safety

Para 7.3.1 of the TA states that the scheme will result in safety benefits through providing a safer road design that the existing road.

Does the Council agree with the forecast reduction in the number of accidents and casualties set out in Table 7-1?

Response

1. The Applicant notes that this question is directed at Wiltshire Council. The transport model development and forecasts have been discussed with Wiltshire Council and their view of the suitability of the methods applied and forecasts is expressed in the Statement of Common Ground to be submitted at Deadline 2.
2. Accident safety benefits were assessed in accordance with WebTAG unit A4.1 Section 2. Table 7-1 of the Transport Assessment [APP-297] sets out an assessment of the number of accidents forecast from the traffic flow and accident rates over the 60-year appraisal period. Modern dual carriageways have lower accident rates than the existing A303 (single carriageway).
3. The forecast reduction in both accidents and casualties occurs despite the increases in traffic that are forecast through this section of the A303 following implementation of the Scheme, and despite overall increases in distance of the A303 as a result of the realigned Longbarrow junction and Winterbourne Stoke bypass. This is due to the reduced incident rates that can be anticipated for modern dual 2-lane roads compared to older 2 lane dual carriageways or single carriageway roads such as the existing A303. Hence, reflecting a safer road design for the Scheme than the existing road. Further detail of this analysis can be viewed in Combined Modelling and Appraisal Report Appendix D – Economic Appraisal Package [APP-302].

Question Tr.1.22

Rights of Way and NMUs

The scheme includes the creation of a new restricted byway with agricultural access on the northern side of the new alignment, west of Winterbourne Stoke to Yarnbury Castle, which will tie in to PRoW SLAN3 north of the A303. A number of RRs (including Winterbourne Stoke Parish Council) have queried the necessity and justification for Green Bridge No 1.

i. Please explain the function of the route and why this alignment was chosen.

ii. What consultation has been carried out with stakeholders and landowners regarding the need for and location of Green Bridge no. 1?

Response

1. The route is intended to address Highways England's requirement to provide parallel routes to new trunk roads for non-motorised users in accordance with their Cycling Strategy as set out in Interim Advice Note (IAN) 195/16. This route provides a route from byway SLAN3 near Yarnbury Castle to the segregated crossing point at Green Bridge No. 1. The location of Green Bridge No. 1 provides ecological connectivity with Parsonage Down SSSI for chalk grassland species and provides potential connectivity for bats. Details can be found in section 8.8 in ES Chapter 8, Biodiversity [APP-046]. It also provides agricultural accesses in this location and accommodates the new restricted byway. A crossing point further west would require significant earthworks and additional land to cross either under or over the proposed A303, and crossings over A303 would have an unacceptable impact on the setting of scheduled monument Yarnbury Castle.

2. The Scheme was the subject of extensive consultation both in relation to the selection of the preferred route and in terms of consultation and supplementary consultation on the proposals that are the subject of the application for development consent. In addition to the formal consultations, regular meetings and updates have taken place with stakeholders including Wiltshire Council and Winterbourne Stoke Parish Council, landowners, occupiers and asset owners. A Walking, Cycling and Horse-Riding Workshop was held for interested stakeholders on 24 July 2018. All views expressed have been considered in the development of the Scheme, as explained in the Consultation Report [APP-026]. Further details of landowner meetings specific to this Written Question can be found in the tables below. Meetings with stakeholders have been documented and will be included in the record of engagement of each Statement of Common Ground, which will be submitted to the Examination in due course. This process will continue as the Scheme progresses to ensure that those persons' individual requirements are understood and met wherever possible.

Biddesden House Farm Partnership (Guinness/Berwick Down Limited)

3. The table below is included as the proposed restricted byway (reference B shown on sheets 1, 2 and 3 of the Rights of Way and Access Plans [APP-009]) directly impacts Guinness/Berwick Down Limited land, which is located to the north of the existing A303, west of Winterbourne Stoke near Yarnbury castle.

Meeting date	Meeting type	Meeting summary	Phase affected / discussion
11/10/2017	Landowner meeting	Reviewing the preferred route in relation to land owned and occupied by The Guinness Family/Druids Lodge farming business.	Preferred Route Announcement Meeting and initial discussions of project route.
19/12/2017	Landowner meeting	Reading Agricultural Consultants site meeting to discuss agricultural implications of the scheme, and explore mitigation options.	Initial discussions of project impacts.
31/01/2018	Land agent meeting	To discuss the design which will be taken to consultation in relation to Guinness and Berwick Down Limited land.	Pre-consultation
21/05/2018	Post Consultation Meeting	Meeting post-consultation addressing concerns raised in consultation response.	Post-consultation.
12/06/2018	Post Consultation Meeting	Post Consultation Meeting to discuss Biddesden House Farm Partnership and Berwick Down Limited consultation response and position statement.	Post-consultation.
17/12/2018	Post DCO Meeting	Guinness meeting to discuss the design and impacts following submission of the DCO.	Post-DCO submission.
10/04/2019	Position statement and Accommodations works plans meeting	Guinness meeting to discuss the Position Statement and Accommodation Works Plans.	Ongoing/Examination.

Parsons

4. The table below is included as the proposed restricted byway (reference B shown on sheets 1, 2 and 3 of the Rights of Way and Access Plans [APP-009]) directly impacts Parsons' land which is located to the north of the existing A303, west of Winterbourne Stoke.

Meeting date	Meeting type	Meeting summary	Phase affected / discussion
10/10/2017	PRA Meeting	Reviewing the preferred route in relation to land owned and occupied by Robin Parsons and his farming business	Pre-consultation
05/12/2017	Reading Agricultural Meeting	Discussed agricultural implications of the scheme, and explore mitigation options	Pre-consultation
24/01/2018	Design Update Meeting	Discussed the design which will be taken to consultation in relation to Robin Parsons land	Pre-consultation
25/05/2018	Post Consultation Meeting	Discussed Mr Parsons consultation response and introduced the position statement which was create from that	Post-consultation
29/11/18	Post DCO submission Meeting	Discussed the submitted DCO design and updates to the position statement and outstanding issues	Post DCO submission
29/03/19	Accommodation Works Plans and Position Statement Meeting	Discussed the accommodation works plans in relation to Mr Parsons land	Examination/Ongoing

Question Tr.1.23

Rights of Way and NMUs

Please provide a response to the request by Berwick Down Ltd [RR-1977] for Green Bridge no. 1 to be moved further west to minimise the need for a long diversion for farm traffic.

Response

1. The location of Green Bridge No. 1 provides ecological connectivity with Parsonage Down SSSI for chalk grassland species and provides potential connectivity for bats. Details can be found in section 8.8 in ES Chapter 8, Biodiversity [APP-046]. It also serves agricultural accesses in this location and accommodates the new restricted byway. A crossing point further west would require significant earthworks and additional land to cross either under or over the proposed A303, and crossings over A303 would have an unacceptable impact on the setting of scheduled monument Yarnbury Castle.

Question Tr.1.24

Rights of Way and NMUs

The scheme includes the creation of a new NMU route, part BOAT and part restricted byway along the southern side of the new alignment, which will tie in with PRoW SLAN3 south of the A303.

i. Please explain the function of the route and why this alignment was chosen.

ii. What consultation has been carried out with stakeholders and landowners?

Response

1. The proposed public rights of way, labelled reference A and D on sheets 1, 2 and 3 of the Rights of Way and Access Plans [APP-009] and described in Schedule 3 to the draft DCO [APP-020], provide a coherent link between the A303, the existing byway network (via SLAN3) and the village of Winterbourne Stoke. As an alternative route to the A303, the routes referenced A and D run parallel to the south of the proposed carriageway. The route is intended to address Highways England's requirement to provide parallel routes to new trunk roads for non-motorised users in accordance with their Cycling Strategy as set out in Interim Advice Note (IAN) 195/16.

2. The Scheme was the subject of extensive consultation both in relation to the selection of the preferred route and in terms of consultation and supplementary consultation on the proposals that are the subject of the application for development consent. In addition to the formal consultations, regular meetings and updates have taken place with stakeholders including Wiltshire Council and Winterbourne Stoke Parish Council, landowners, occupiers and asset owners. A Walking, Cycling and Horse-Riding Workshop was held for interested stakeholders on 24 July 2018. All views expressed have been considered in the development of the Scheme, as explained in the Consultation Report [APP-026]. Further details of landowner meetings specific to this Written Question can be found in the tables below. Meetings with stakeholders have been documented and will be included in the record of engagement of each Statement of Common Ground, which will be submitted to the Examination in due course. This process will continue as the Scheme progresses to ensure that those persons' individual requirements are understood and met wherever possible.

Biddesden House Farm Partnership (Guinness/Berwick Down Limited)

3. The table below is included as the proposed restricted byway (reference D shown on sheet 2 of the Rights of Way and Access Plans [APP-009]) directly impacts Guinness/Berwick Down Limited land which is located to the south of the existing A303, west of Winterbourne Stoke near Yarnbury castle.

Meeting date	Meeting type	Meeting summary	Phase affected / discussion
11/10/2017	Landowner meeting	Reviewing the preferred route in relation to land owned and occupied by The Guinness Family/Druids Lodge farming business.	Preferred Route Announcement Meeting and initial discussions of project route.
19/12/2017	Landowner meeting	Reading Agricultural Consultants site meeting to discuss agricultural implications of the scheme in relation to Guinness/Berwick Down Limited land, and explore mitigation options.	Initial discussions of project impacts.
31/01/2018	Land agent meeting	To discuss the design which will be taken to consultation in relation to Guinness and Berwick Down Limited land.	Pre-consultation
21/05/2018	Post Consultation Meeting	Meeting post-consultation addressing concerns raised in consultation response.	Post-consultation.
12/06/2018	Post Consultation Meeting	Post Consultation Meeting to discuss Biddesden House Farm Partnership and Berwick Down Limited consultation response and position statement.	Post-consultation.
17/12/2018	Post DCO Meeting	Guinness meeting to discuss the design and impacts following submission of the DCO.	Post-DCO submission.
10/04/2019	Position statement and Accommodations works plans meeting	Guinness meeting to discuss the Position Statement and Accommodation Works Plans.	Ongoing/Examination.

Streets

4. The table below is included as the proposed restricted byway (reference A shown on sheets 1 and 2 of the Rights of Way and Access Plans [APP-009]) directly impacts Streets' land which is located to the south of the existing A303, west of Winterbourne Stoke near Yarnbury castle.

Meeting date	Meeting type	Meeting summary	Phase affected / discussion
19/12/2017	Landowner meeting	Discuss agricultural implications of the scheme, and explore mitigation options.	Initial discussions of project impacts.
26/01/2018	Design update meeting	To discuss the design which will be taken to consultation in relation to the land owned and occupied by Charles Street.	Pre-consultation.
13/04/2018	Position statement meeting	Meeting to review plan showing proposed land requirements over Mr and Mrs Street's land.	Discussions of project impacts.
18/05/2018	Post-consultation meeting	Review of consultation response from Mr Street.	Post-consultation.

Andrews

5. The table below is included as the proposed restricted byway (reference A shown on sheets 1 and 2 of the Rights of Way and Access Plans [APP-009]) directly impacts Andrews' land which is located to the south of the existing A303, west of Winterbourne Stoke near Yarnbury castle.

Meeting date	Meeting type	Meeting summary	Phase affected / discussion
18/05/2018	Post consultation meeting	Review of consultation response from the Andrews family.	Post-consultation.

Question Tr.1.25

Rights of Way and NMUs

The scheme includes a new bridleway, east from Winterbourne Stoke to the new Longbarrow Junction, connecting with the new restricted byway through the WHS via Green Bridge no. 2 to the east of the existing Longbarrow junction.

i. Please explain the function of the route and why this alignment was chosen.

ii. What consultation has been carried out with stakeholders and landowners?

iii. Please provide a commentary on the request by Winterbourne Stoke Parish Council (and landowners) for this new bridleway to be re-routed from the north side of the A303 to the south side, and also that a Green Bridge crossing of the A360 at Longbarrow should be provided as a critical safety feature in place of the proposed light-controlled crossing for equines, cyclists and pedestrians.

iv. Please also comment on the feasibility/desirability of the suggestion by Wiltshire Ramblers [RR-0859] that this route should start at the junction of the existing A303 and footpath WST04 to cross the River Till on its own footbridge north of the present A303.

Response

1. It is assumed that the question is referring to Green Bridge No. 4, rather than Green Bridge No. 2**.**

i. Please explain the function of the route and why this alignment was chosen.

2. The proposed non-motorised user route referred to facilitates travel between Winterbourne Stoke and Longbarrow junction and on into the WHS, via Green Bridge No. 4 to the east of the existing Longbarrow junction. This route ties in with the existing rights of way network through its junction with existing byway WSTO6B. As an alternative to using the A303, this route is parallel and therefore equally as direct. This route will be of significant benefit to local people, encouraging walking and cycling, and adding to the amenity of the area. It will connect these users, as well as equestrians, to the new public rights of way proposed within the WHS, providing convenient safe access and the opportunity for the WHS to be explored and enjoyed, thus fulfilling one of the objectives of the Scheme. Full details are shown on the Rights of Way and Access Plans [APP-009] and are described in Schedule 3 to the draft DCO [APP-020].

i. **What consultation has been carried out with stakeholders and landowners?**

3. The Scheme was the subject of extensive consultation both in relation to the selection of the preferred route and in terms of consultation and supplementary consultation on the proposals that are the subject of the application for

development consent. In addition to the formal consultations, regular meetings and updates have taken place with stakeholders including Wiltshire Council and Winterbourne Stoke Parish Council, landowners, occupiers and asset owners. A Walking, Cycling and Horse-Riding Workshop was held for interested stakeholders on 24 July 2018. All views expressed have been considered in the development of the Scheme as explained in the Consultation Report [APP-026]. Details of engagement on matters specific to this Written Question can be found in the tables below. Meetings with stakeholders have been documented and will be included in the record of engagement of each Statement of Common Ground, which will be submitted to the Examination in due course. This process will continue as the Scheme progresses to ensure that those persons' individual requirements are understood and met wherever possible.

Turners

4. The table below is included as the proposed bridleway (reference Z shown on sheet 4 of the Rights of Way and Access Plans [APP-009]) directly impacts Turners' Land which is located to the north of the existing A303, east of Winterbourne Stoke.

Meeting date	Meeting type	Meeting summary	Phase affected / discussion
11/10/2017	PRA Meeting	Reviewing the preferred route in relation to land owned and occupied by Charles Rowland and his farming businesses. Land owner engagement strategy - run through of our strategy with land owners and assurances over timings etc from environment team.	PRA Meeting and initial discussions of project route.
18/12/2017	Landowner meeting	Discuss agricultural implications of the scheme, and explore mitigation options.	Initial discussions of project impacts.
23/01/2018	Landowner meeting	To discuss the design which will be taken to consultation in relation to Turner Family land.	Pre-Consultation.
08/06/2018	Post-Consultation meeting	Post Consultation Meeting with Mr and Mrs Turner and land agent Patrick Durnford.	Post-Consultation.
24/07/2018	Walking, Cycling and Horse Riding Workshop	Attended and contributed to the event	24/07/2018

29/11/2018	Post-DCO Meeting	To discuss the design and impacts following submission of the DCO.	Post-DCO Submission.
11/03/2019	Position Statement Meeting	To discuss the position statement and accommodation works plans.	Ongoing/Examination.

Winterbourne Stoke Parish Council (please refer to Statement of Common Ground for full details)

The bridleway was specifically discussed at the following meetings:

Date	Meeting	Key topics discussed and key outcomes
22/08/2018	Meeting WSPC and Highways England	Meeting to commence preparation of SOCG with Andrew Shuttleworth (WBS), Jim Carr (WBS) Jeremy Damrel, Tim Harper and Stewart Ross (all A303 Technical Partner).
09/01/2019	Meeting WSPC and Highways England	To review an update of the SOCG and discuss matters outstanding.

iii. **Please provide a commentary on the request by Winterbourne Stoke Parish Council (and landowners) for this new bridleway to be re-routed from the north side of the A303 to the south side, and also that a Green Bridge crossing of the A360 at Longbarrow should be provided as a critical safety feature in place of the proposed light-controlled crossing for equines, cyclists and pedestrians**.

5. The proposed bridleway between Winterbourne Stoke and Longbarrow junction is better located on the north side of the old A303, separated from the existing road by an existing mature hedge along part of the route. The alternative route on the south side would mean the removal of an area of woodland and would involve additional earthworks.

6. A green bridge crossing south of the new Longbarrow southern roundabout was considered and subsequently discounted, primarily due to visual intrusion on the landscape as it is required to be suitably raised above the A360 carriageway to provide the necessary headroom. The precise form of non-motorised user (NMU) crossing will be confirmed during detailed design; at this stage it is anticipated that this will be facilitated through the use of Pegasus crossings (signal-controlled crossings adapted for both pedestrian and equestrian use).

7. For further information, refer to the Design and Access Statement [APP-295], Chapter 6.3 Paragraph 6.3.19. The proposed route of the NMU provision within the Scheme is shown on the Rights of Way and Access Plans [APP-009] which show the Longbarrow southern roundabout on sheet 5.

8. Please also comment on the feasibility/desirability of the suggestion by Wiltshire Ramblers [RR-0859] that this route should start at the junction of the existing A303 and footpath WST04 to cross the River Till on its own footbridge north of the present A303.

iv. **Please also comment on the feasibility/desirability of the suggestion by Wiltshire Ramblers [RR-0859] that this route should start at the junction of the existing A303 and footpath WST04 to cross the River Till on its own footbridge north of the present A303.**

9. Between its junction with byway WSTO4 and the start of the new segregated bridleway, the existing A303 will have a 30mph speed limit and, as such, will be safe for use by horse riders alongside motorists. While the precise proposals in this area will be confirmed during the detailed design process if development consent for the Scheme is granted, it is envisaged that pedestrians and cyclists will use a shared path alongside this section of the old A303 before joining the new bridleway (shown as reference 'Z' on Sheet 4 of the Rights of Way and Access Plans [APP-009]). With the Scheme in place, the existing (old) A303 would principally be used only by low levels of local traffic accessing Winterbourne Stoke, Berwick St James and Shrewton. Consequently, the construction of a new, separate footbridge over the River Till is not proposed as part of the Scheme. However, there will be provision over the existing River Till bridge for shared pedestrian and cycle use, segregated from vehicular traffic.

Question Tr.1.26

Rights of Way and NMUs

i. Please provide a commentary on the requests by the British Horse Society [RR-0380] for the provision of a suitable safe crossing system (preferably a bridge) at the new Longbarrow roundabout for the new bridleway leading out of Winterbourne Stoke.

ii. Is there any potential for provision of an off-road link for all NMUs from north of Rolleston Crossroads to the restricted byway at the Visitor Centre?

Response

i. Please provide a commentary on the requests by the British Horse Society [RR-0380] for the provision of a suitable safe crossing system (preferably a bridge) at the new Longbarrow roundabout for the new bridleway leading out of Winterbourne Stoke.

1. A Green Bridge crossing south of the new Longbarrow southern roundabout was considered and subsequently discounted, primarily due to visual intrusion on the landscape as it is required to be suitably raised above the A360 carriageway to provide the necessary headroom. The precise form of non-motorised user (NMU) crossing will be confirmed during detailed design; at this stage it is anticipated that this will be facilitated through the use of Pegasus crossings (signal-controlled crossings adapted for both pedestrian and equestrian use). For further information, refer to the Design and Access Statement [APP-295], Chapter 6.3 Paragraph 6.3.19. The proposed route of the NMU provision within the Scheme is shown on the Rights of Way and Access Plans [APP-009] which show the Longbarrow southern roundabout on sheet 5.

ii. Is there any potential for provision of an off-road link for all NMUs from north of Rolleston Crossroads to the restricted byway at the Visitor Centre?

2. A new off-road link from north of the proposed Rollestone junction to the restricted byway at the Visitor Centre has not been included as part of this Scheme. Wiltshire Council is currently considering the promotion of this right of way.

Question Tr.1.27

Rights of Way and NMUs

Please respond to the suggestion by Fowler Fortescue (obo Robert Turner) [RR-1606] that the existing Byway WST06B should be downgraded to improve the quality of the PRoW network and improve the tranquillity of the WHS landscape.

Response

1. The Scheme is maintaining the continuity of byways WSTO6A and WSTO6B via Green Bridge No.2. Any review of its designated status and use would be a matter for Wiltshire Council as the responsible authority for the byways.

Question Tr.1.28

Rights of Way and NMUs

The scheme includes the creation of a new restricted byway open to NMUs, agricultural and statutory utility vehicles through the WHS along the route of the existing A303, connecting with Stonehenge Road at the eastern end of the scheme. A number of RRs, including the Trial Riders Federation, object strongly to the proposed extinguishment of vehicular rights over the section of the A303 between BOATS AMES 11 and AMES 12.

i. Please provide a detailed justification for the omission of the earlier proposal to provide a new BOAT link for motorised users between AMES11 and AMES12 north of the Normanton Down Barrow Group.

ii. What evidence is there that the provision of such a link for use by motorised traffic would be harmful to heritage and landscape interests, in the light of the retention of AMES12 as a BOAT through the WHS?

iii. Please provide a commentary on Trial Riders Federation's view that turning AMES 11 into a cul de sac by removal of the link along the A303 would be unlawful in the absence of provision for a convenient alternative.

Response

i. **Please provide a detailed justification for the omission of the earlier proposal to provide a new BOAT link for motorised users between AMES11 and AMES12 north of the Normanton Down Barrow Group.**

1. The link to the south of the existing A303 between Byways 12 and 11 (AMES12 and AMES11 respectively) was originally proposed as it had been previously determined that mechanically propelled vehicles should not be allowed to use the public right of way along the de-trunked A303 through the World Heritage Site (WHS). This aligns with the desire to remove the sight and sound of traffic caused by the existing A303 as far as possible. Its removal from the Scheme was one of three changes put forward for supplementary consultation, the feedback from which is summarised in Chapter 6 of the Consultation Report [APP-026].

2. Following analysis of this feedback, and ongoing engagement particularly with heritage bodies and Wiltshire Council, Highways England determined that it would no longer propose a new link between Byways 11 and 12. The removal of this proposed link would avoid having an additional route open to vehicular traffic within the WHS, which would have adversely affected the setting of the Normanton Down barrow group and increased disturbance of nesting Stone Curlew in the Normanton Down RSPB Reserve. The removal of this proposed link would also avoid changes to the tranquillity of the WHS at this location. This change will help achieve Highways England's objective to remove the sight and sound of traffic from much of the WHS landscape, a key aspiration also of the WHS Management Plan.

ii. **What evidence is there that the provision of such a link for use by motorised traffic would be harmful to heritage and landscape interests, in the light of the retention of AMES12 as a BOAT through the WHS?**

3. The Scheme design has sought to remove the sight and sound of traffic caused by the existing A303 as far as possible. Retaining the motorised link between byways 11 and 12 would allow moving vehicles along the existing A303 and be contrary to the design. It would also be contrary to Policy 6b of the WHS Management Plan (2015) ('Manage vehicular access to byways within the World Heritage Site to avoid damage to archaeology, improve safety and encourage exploration of the landscape on foot whilst maintaining access for emergency, operational and farm vehicles and landowners.') which is clear and is backed up by the evidence of the Condition Survey (2012) of damage by the movement of vehicles.

4. One of the key aims of the 2015 Stonehenge, Avebury and Associated Sites World Heritage Site Management Plan for the period 2015-2021 is to 'Reduce the dominance and negative impacts of roads and traffic and ensure any improvements to the A303 support this.' [Simmonds & Thomas 2015, p.11].

5. The 2015 WHS Management Plan also states in paragraph 8.2.13 that 'The impact of vehicles on visible and buried archaeology can be severe particularly during periods of poor weather conditions. In the Condition Survey (2012) it was noted that instances of vehicle damage have increased from previous surveys. There were vehicle impacts recorded on 29 monuments at Stonehenge and 23 at Avebury. These are divided into damage on tracks and ad hoc damage within fields. Particular areas of concern are monuments on Byway 12 in Stonehenge at Normanton Down and elsewhere… A review of the impact of vehicle damage should be undertaken and a prioritised schedule of works developed to reduce or remove the impact of vehicle erosion on the attributes of OUV.'

6. Section 11.4 of the WHS Management Plan (2015) deals specifically with the issues relating to byways. It states 'Issue 47: Damage to archaeology is occurring on byways open to all traffic in the WHS. There are also problems with parking and road safety at junctions.' Vehicular access on the BOATs and the damage it causes to archaeology has been an ongoing issue in the WHS, noted in the 2009 Stonehenge Management Plan (e.g. paras. 9.3.8, 10.1.13 & 10.3.3). Paragraph 11.4.1 of the WHS Management Plan (2015) states that 'Ongoing issues related to vehicle use include direct physical damage to archaeology, negative impacts on the setting of monuments and the wider landscape through illegal parking, impacts on other users and safety at junctions of BOATs with main roads.' Paragraph 11.4.2 then states that 'A particular area of concern is damage to monuments on BOATs within the WHS which accounts for nearly 20% of all vehicle impacts within the Stonehenge area but makes up 50% of the most severe level of vehicles damage. 50% of these were recorded on Byway 12… The WHS Condition Survey (2012) recommended that where damage is due to vehicles on BOATs a Traffic Regulation Order (TRO) be sought to remove motorised vehicles.'

7. Policy 6b of the WHS Management Plan (2015) states that its aim is to 'Manage vehicular access to byways within the World Heritage Site to avoid damage to archaeology, improve safety and encourage exploration of the landscape on foot whilst maintaining access for emergency, operational and farm vehicles and landowners.'

8. Harm to heritage assets by the use of the byways is therefore an ongoing issue within the WHS and is backed up by suitable issues, policy statements and subsequent actions required by the WHS Management Plan (2015). For both landscape and visual, and heritage disciplines the evidence of harm comes from the WHS Condition Survey (2012; see above) and the current existing physical state of Byways 11 and 12, where the surface has become 'rutted' from the use of vehicles, such that if the section of the A303 between byways 11 and 12 retained vehicle rights, or a new link was provided north of the Normanton Down Barrow Group, then it would need a bound surface. As vehicles already currently illegally park on byway 12, it is likely that they would also illegally park on the section between byways 11 and 12. This would result in the creation of new adverse impacts to views of Stonehenge which would then be seen bordered on two sides by parked vehicles.

9. With reference to the Stonehenge and Avebury World Heritage Management Plan (2015), referred to in paragraph 7.6.122 of the Landscape and Visual Impact Assessment [APP-045], the stated 'intrusive elements' within the Word Heritage Site include:

    - "roads and traffic which dominate a number of areas and are visibly and aurally intrusive; and
    - the A344, A303 and A360 at Stonehenge."

iii. **Please provide a commentary on Trial Riders Federation's view that turning AMES 11 into a cul de sac by removal of the link along the A303 would be unlawful in the absence of provision for a convenient alternative.**

10. Highways England does not accept the general proposition that for a way to be a highway in law it must be connected to other highways at both ends. There is no rule of law which compels the conclusion that a cul-de-sac can never be a highway, see for example Roberts v Webster [1968] 1 WLUK 455; 66 L.G.R. 298. Notwithstanding that clarification, the Scheme will create a cul-de-sac byway for mechanically-propelled vehicles only at the northern end of Byway AMES11. All non-motorised users will be able to travel between the de-trunked A303 and Byway 11. Mechanically-propelled vehicles would need to return along Byway 11.

11. The existing A303 currently acts as a link for motorised vehicles between the byways open to all traffic AMES11 and AMES12. The Scheme proposes the removal of approximately 5.91 kilometres of the existing A303 (shown on sheets 4 to 8 inclusive of the Rights of Way and Access Plans [APP-009]) to be replaced by the new and improved A303, shown on sheets 2 to 9 inclusive and sheet 11 of the Rights of Way and Access Plans. AMES 11 and AMES 12 will remain byways

open to all traffic (including motorised vehicles). However, along the line of what will be the former A303, from the existing Longbarrow roundabout (sheet 5 of the Rights of Way and Access Plans [APP-009]) to part way along the existing Stonehenge Road, the Scheme proposes a new restricted byway (references IB, I and J shown on sheets 5 to 8 inclusive of the Rights of Way and Access Plans [APP-009]). Not providing public vehicular rights along the new restricted byway is consistent with the Scheme's aim of removing the sight and sound of traffic from the vicinity of Stonehenge and the historic landscape of the World Heritage Site.

Question Tr.1.29

Rights of Way and NMUs

i. What consideration has been given to the conclusions of the Inspectors in previous Inquiries in 2005 (HA61/4/3) and 2011 (DPI/T3915/11/20) in respect of rights of access for motorised users of the existing BOAT network?

ii. How have their conclusions been taken into account in finalising proposals for the DCO scheme?

iii. How has the Applicant attempted to balance the competing interests of user groups, for example [RR-1741] (Green Lanes Federation), [RR-1742] (GLEAM), [RR-1907] (Trail Riders Fellowship) and [RR-0380] (British Horse Society)?

Response

i. **What consideration has been given to the conclusions of the Inspectors in previous Inquiries in 2005 (HA61/4/3) and 2011 (DPI/T3915/11/20) in respect of rights of access for motorised users of the existing BOAT network?**

1. The National Policy Statement for National Networks (NPSNN) and the World Heritage Site Management Plan (WHSMP) were published after the two public inquiries in 2005 and 2011 and have informed the development of the public rights of way proposals. In accordance with NPSNN para 2.9, the scheme enhances accessibility for non-motorised users to promote sustainable economic growth, quality of life and wider environmental objectives by restoring the tranquillity of the WHS landscape; improving footpaths and bridleways within the WHS; and reconnecting the WHS with local communities. The WHSMP (http://www.stonehengeandaveburywhs.org/management-of-whs/stonehenge-and-avebury-whs-management-plan-2015/) includes the following:

    a. Priority 3 - Reduce the dominance and negative impact of roads and traffic and ensure any A303 improvements support this.

    b. Policy 1d – Development which would impact adversely on the WHS, its setting and its attributes of OUV should not be permitted.

    c. Policy 6a – Identify and implement measures to reduce the negative impacts of roads, traffic and parking on the WHS and to improve road safety and the ease and confidence with which residents and visitors can explore the WHS

    d. Policy 6b – Manage vehicular access to byways within the WHS to avoid damage to archaeology, improve safety and encourage exploration of the landscape on foot whilst maintaining access for emergency, operational and farm vehicles and landowners

2. Highways England's Performance Specification sets out eight key areas against which the Government and the Strategic Roads Network Monitor will measure performance including 6 "Helping cyclists, walkers and other vulnerable users (ref Highways England Strategic Business Plan 2015-2020, page 6).

ii. **How have their conclusions been taken into account in finalising proposals for the DCO scheme?**

3. In 2005 the Inspector concluded that access by mechanically-propelled vehicles (MPV) to the 400m of the proposed Stonehenge Byway between Byways 11 and 12 should be retained. In 2011 the Inspector concluded "The loss of amenity in this respect (use of A303 route by MPVs) has to be balanced against the gains in other aspects of the amenity of the WHS."

4. The requirements of the NPSNN and WHSMP, together with Highways England's requirement to help cyclists, walkers and other vulnerable users, aligned with Government strategy, were all published after these Inspector's conclusions. Access for these user groups was thus given greater weight than the needs of motorised users when developing the public rights of way strategy. The link between Byways 11 and 12 was originally included in the Scheme proposals, but was withdrawn following the statutory consultation. Feedback to the statutory consultation raised concern that vehicles on the new link would have an adverse impact on the adjacent Normanton Down barrow group and on the tranquillity of the WHS at this location. Following analysis of the feedback to the statutory consultation, and ongoing engagement particularly with heritage bodies and Wiltshire Council, Highways England determined that it would no longer propose a new link between Byways 11 and 12. The removal of this proposed link would avoid having an additional route open to vehicular traffic within the WHS, which would have adversely affected the setting of the Normanton Down barrow group and have the potential to cause disturbance to nesting Stone Curlew in the Normanton Down RSPB Reserve.

iii. **How has the Applicant attempted to balance the competing interests of user groups, for example [RR-1741] (Green Lanes Federation), [RR-1742] (GLEAM), [RR-1907] (Trail Riders Fellowship) and [RR-0380] (British Horse Society)?**

5. As stated above, access for cyclists, walkers and other vulnerable users including equestrians was thus given greater weight than the needs of motorised users when developing the public rights of way strategy. Byway 12 is retained as existing, with the added benefit of being able to cross the former A303 unimpeded by trunk road traffic. Byway 11 remains open to all users and is linked to Byway 12 along the former A303 for most classes of user, except those using mechanically propelled vehicles.

Question Tr.1.30

Rights of Way and NMUs

A number of objectors (eg [RR-0059] (Ben Davey) [RR-1485] (Maryam Halcrow) [RR-1731] (Francis Stoner)) consider that removal of the link along the A303 would result in discrimination against groups who rely on motorised transport to gain access to the countryside and the WHS.

i. Please explain how the duties under the Equalities Act have been taken into account in finalising the DCO proposals in this regard.

ii. How does the scheme reflect the commitment in paragraph 3.19 of the NPSNN to 'creating a more accessible and inclusive transport network' which takes account of accessibility requirements of all those who use, or are affected by, national networks infrastructure including disabled users?

Response

i. **Please explain how the duties under the Equalities Act have been taken into account in finalising the DCO proposals in this regard.**

1. The development of the Scheme has been supported by an Equalities Impact Assessment (EqIA) [APP-296]. EqIA is a predictive assessment tool which has contributed to enabling Highway England's compliance with current national legislation set out under the Equality Act 2010 and associated Public Sector Equality Duty (PSED). It is designed to ensure that projects do not discriminate against or disadvantage people, and also considers how equality can be advanced. The Equality Duty covers the following protected characteristics (Equality Act 2010 s4): age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; and sexual orientation.

2. The needs of motorised user groups have expressly been considered in the formulation of the Scheme's proposals. No Byways Open to All Traffic (BOATs) are being removed and a new BOAT on the line of the old A303 to the west of Winterbourne Stoke is included in the Scheme to provide a connection between Winterbourne Stoke and the existing bridleway BSJA3, which is proposed to be converted into a BOAT, to link up with the existing BOATs BSJA3 and BSJA3A (as shown on Sheets 2 and 3 of the Rights of Way and Access Plans) [APP-009]. The only proposed change is in the WHS where byway 11 will no longer provide a through-route via the A303 for motorised vehicles because the old A303 will become a restricted byway (available to NMUs only) in support of the Scheme objective to remove the sight and sound of traffic from the WHS landscape.

3. All of the new Public Rights of Way (PRoW) proposed along the length of the Scheme would be constructed in a way that will make them fit for all the uses permitted by their designated status. In the context of disability discrimination and disabled users, where existing topographical constraints allow, there will be

disabled access to all new PRoW proposed along the Scheme and safer crossings for all are

4. proposed as part of the Scheme. Their access to the Stonehenge Monument and to the WHS will remain. This will be developed through the requirement in D-CH14 of the Outline Environment Management Plan for surfacing within the WHS to be developed in consultation with stakeholders. The PRoW surfacing outside the WHS are currently under discussion with Wiltshire Council. Further clarification is provided within the PRoW report submitted at Deadline 2.

i. **How does the scheme reflect the commitment in paragraph 3.19 of the NPSNN to 'creating a more accessible and inclusive transport network' which takes account of accessibility requirements of all those who use, or are affected by, national networks infrastructure including disabled users?**

6. As set out in the Environmental Statement (ES) Chapter 13, People and Communities [APP-051], congestion on the existing A303 and connecting roads is a source of severance for both motorised travellers and Non-Motorised Users (NMUs), affecting access across the A303 or connecting roads within villages such as Winterbourne Stoke and Shrewton. It also reduces access along the A303 for motorised travellers to services in larger communities such as Amesbury or further afield. The upgraded A303 will allow east-west journeys through the Scheme to take less time, be more reliable and resilient, thereby improving the driver experience and reducing driver stress. The improvements to travel times along the route, which will benefit all motorised travellers, are as per NPSNN paragraph 2.2, covered in the Transport Assessment, Section 6.5 [APP-297].

7. The Scheme will also reduce severance for NMUs. As part of the package of improvements to NMU routes, as described in ES Chapter 13, Section 13.8.5 [APP-051], the Scheme provides the opportunity to enhance the amenity and enjoyment of NMUs, providing additional benefits, as well as addressing adverse effects via mitigation. Section 8.4 of the Transport Assessment [APP-297] also indicates that the Scheme will not result in any changes to existing bus stops and will therefore have no direct impact on local bus routes.

8. A key objective of the Scheme is to provide a positive legacy for communities and improve access both within and to the WHS. The new public rights of way (PRoW) proposed along the Scheme will not only maintain, but will also considerably enhance the existing PRoW network, significantly improving connectivity for users. As set out in the response to part i. the development of the Scheme has been supported by an Equalities Impact Assessment (EqIA) [APP-296]. This identified that disabled users may benefit from new PRoW network and safer crossings proposed as part of the Scheme.

Question Tr.1.31

Rights of Way and NMUs

i. Please provide a detailed response to Wiltshire Council's view that the DCO scheme should make provision for a prohibition of driving order as associated development along this section of the A303 current alignment.

ii. Would the extinction of rights for motorised users result in a breach of the Council's statutory duty under s130 of the Highways Act 1980 to prevent, as far as possible, the stopping up of highway rights with the lack of any mitigation measures?

Response

i. **Please provide a detailed response to Wiltshire Council's view that the DCO scheme should make provision for a prohibition of driving order as associated development along this section of the A303 current alignment.**

1. Highways England notes that the changes to the existing A303 are brought forward pursuant to section 120(3) and Schedule 5 of the Planning Act 2008, rather than as 'associated development' pursuant to section 115 of the Planning Act 2008.

2. The proposals brought forward change the existing A303 at this location from a highway open to all traffic to a restricted byway. As defined in the DCO, 'restricted byway' has the same meaning as in Part 2 of the Countryside and Rights of Way Act 2000, which, at section 48(4) defines a restricted byway as facilitating rights for persons on foot, horseback or leading a horse and for vehicles other than mechanically propelled vehicles.

3. This change therefore means that a prohibition of driving restriction is not required, either within the DCO or to be brought forward by Wiltshire Council.

4. Wiltshire Council would remain the highway and traffic authority for byways 11 and 12 and for the new restricted byway that would replace the existing A303, and the Scheme does not impede Wiltshire Council in the lawful exercise of its functions to prohibit driving, should it choose to do so.

ii. **Would the extinction of rights for motorised users result in a breach of the Council's statutory duty under s130 of the Highways Act 1980 to prevent, as far as possible, the stopping up of highway rights with the lack of any mitigation measures?**

5. Highways England acknowledges the consideration by Wiltshire Council of its duties under section 130 Highways Act 1980 and notes that Wiltshire Council has recently sought its own powers to close byways 11 and 12 under an Experimental Traffic Order.

6. In relation to the change in status of the existing A303, the Applicant notes that section 130 states:

1. *It is the duty of the highway authority to assert and protect the rights of the public to the use and enjoyment of any highway for which they are the highway authority, including any roadside waste which forms part of it.*
2. *Any council may assert and protect the rights of the public to the use and enjoyment of any highway in their area for which they are not the highway authority, including any roadside waste which forms part of it.*
3. *Without prejudice to subsections (1) and (2) above, it is the duty of a council who are a highway authority to prevent, as far as possible, the stopping up or obstruction of—*
    a. *the highways for which they are the highway authority, and*
    b. *any highway for which they are not the highway authority, if, in their opinion, the stopping up or obstruction of that highway would be prejudicial to the interests of their area.*

7. There is not reference to 'mitigation measures' within this wording. The concern is therefore relevant to the references in paragraphs (2) and (3) to Wiltshire Council's duties with regards to 'highway in the area for which they are not the highway authority', which is currently the case for the existing A303. Here, Wiltshire Council may prevent 'as far as possible' any stopping up or obstruction that 'would be prejudicial to the interests of their area'.

8. Notwithstanding that the DCO proposals at this location are not a 'stopping up' in Highways Act terms, even if it was considered that this section generally applied to the proposals:

    - as the proposal is being brought forward as part of the DCO proposals, Wiltshire's engagement in the Examination is 'as far as possible' that the Council will be able to meet their duties under section 130; and
    - neither Wiltshire Council (nor any other party) has claimed that the proposals would be 'prejudicial to the interests of their area' (particularly in light of Wiltshire Council having previously brought forward the Experimental Traffic Order for byways 11 and 12).

9. The extinction of rights to vehicular users proposed through the DCO therefore does not form a risk to Wiltshire Council's duties under section 130(1) or (3) of the Highways Act 1980. Nor does it oblige Wiltshire to exercise the discretionary powers which section 130(2) provides.

Question Tr.1.32

Rights of Way and NMUs

i. Please provide a response to the objection by English Heritage (EH) to the section of the proposed restricted byway running alongside the A360 within the boundary of the Stonehenge Visitor Centre complex, creating a 4-metre wide byway for pedestrians, cyclists and carriages within the boundary of the Stonehenge Visitor Centre.

ii. Please explain the function of the route and why this alignment was chosen. What consultation has been carried out with stakeholders and landowners?

iii. How have EH's concerns regarding visitor safety, security, visitor management, impact on the Visitor Centre and recent investment in car parking been taken into account?

iv. Please respond to the suggestion by EH that an alternative route outside the boundary of the Visitor Centre would not give rise to these adverse impacts.

Response

i. Please provide a response to the objection by English Heritage (EH) to the section of the proposed restricted byway running alongside the A360 within the boundary of the Stonehenge Visitor Centre complex, creating a 4-metre wide byway for pedestrians, cyclists and carriages within the boundary of the Stonehenge Visitor Centre.

1. English Heritage's objections are acknowledged, and alternatives have been developed as set out below. Please also refer to the Statement of Common Ground with English Heritage Trust submitted at Deadline 2, section 4.5. which states "Highways England is discussing with English Heritage Trust whether an alternative route which addresses English Heritage Trust's concerns and meets the objective of improving access to non-motorised users can be found. Further detail is provided in the response to part iii of this question.

ii. Please explain the function of the route and why this alignment was chosen. What consultation has been carried out with stakeholders and landowners?

2. The proposed public rights of way, labelled reference U and UA on sheet 14 of the Rights of Way and Access Plans [APP-009] and described in Schedule 14 to the draft DCO [APP-020], together provide a link between Longbarrow in the south and Airman's Corner in the north. This link provides a connection to the proposed public right of way network at Longbarrow junction and to the wider public rights of way network. In addition, this route also facilitates connection to the Stonehenge Visitor centre, which is a major tourist attraction in the area, allowing sustainable travel to this destination. As this route runs parallel to the A360, it minimises additional infrastructure within the World Heritage Site. Being situated to the east of the A360 gives the route good views over the World Heritage Site making it more attractive to non-motorised users. This route would also provide a key link in a restricted byway route north beyond Rollestone

crossroads which is being promoted by Wiltshire Council. This would provide access to the extensive network of byways on Salisbury Plain. This route was included in the briefing provided to the Walking Cycling and Horse Riding Workshop held on 24 July 2018.

3. Heritage partners including English Heritage attended weekly design meetings during the design development prior to submission of the application. Since the application was submitted, weekly Heritage Partner Design Review meetings have been held, also attended by representatives of English Heritage. Meetings with stakeholders have been documented and are included in the record of engagement of each Statement of Common Ground submitted at Deadline 2.

iii. How have EH's concerns regarding visitor safety, security, visitor management, impact on the Visitor Centre and recent investment in car parking been taken into account?

4. English Heritage's concerns regarding visitor safety, security, visitor management, impact on the Visitor Centre and recent investment in car parking have been taken into account by developing alternatives to the Application design to address these concerns as follows:

   a. visitor safety – a proposed NMU link along the highway verge of the former A344 has been developed, with various alternatives to deal with the crossing of the car park access road. The final proposal will be subject to agreement with Wiltshire Council and English Heritage.

   b. security – a fence would be provided between the new public right of way and the Visitor Centre (which would be considered as part of the OEMP commitment to discuss fencing with English Heritage contained in item D-CH14).

   c. visitor management – this issue has two components; the volume of visitors at the Centre and the impact of visitors using the former A344 to access the car and coach parks. It is not anticipated that the numbers of the public right of way users would have a significant impact on total visitor numbers. In response to English Heritage's concerns, Highways England has proposed to English Heritage that no link would be provided onto the former A344, thus removing the interface between non-motorised user on the restricted byway and visitor vehicles. Users of the public right of way crossing the car park access would give way to vehicles – this would be implemented through the crossing design and details are being discussed with English Heritage.

   d. impact on the Visitor Centre and recent investment in car parking – the alternative layouts described below avoid the car park and minimise the area to be acquired from the grassed area used for overflow parking.

iv. Please respond to the suggestion by EH that an alternative route outside the boundary of the Visitor Centre would not give rise to these adverse impacts.

5. Ongoing discussions with English Heritage, Wiltshire Council and other stakeholders are seeking to find a route that reduces the impact on the Visitor Centre that all stakeholders can agree. There are two main options outside the Visitor Centre, each with variants:

    a. slightly to the west of the proposed restricted byway along a widened highway verge on the eastern side of the A360 and

    b. through privately-owned land to the east, outside the limits of the DCO. The landowner to the east has initially advised that they are unwilling to allow the land to be acquired by negotiation, but discussions are continuing based on part of the route being accommodated within the Visitor Centre.

6. Each of these proposals would be subject to agreement with Wiltshire Council and English Heritage.

Question Tr.1.33

Rights of Way and NMUs

Please respond to the suggestion by Wiltshire Ramblers that byway AMES 2 should be kept open with a footbridge across the A303 to avoid the need for users of Allington Lane or AMES1 to make an unreasonably inconvenient diversion to the west.

Response

1. AMES2 and BULF12 are being closed to improve safety along the A303. This is needed because the current arrangement places slow and fast-moving vehicles in potentially dangerous conflict with each other. Due to the existing A303 infrastructure (road signs and maintenance lay-by), an overbridge from the proposed footpath on AMES1 to AMES2 would require, the removal of existing vegetation and an extensive length of new Vehicle Restraint System (VRS), this would not be achievable within the existing highway boundary. An alternative reasonably convenient safe crossing point on the A303 trunk road would be available a short distance to the west, via the Solstice Park junction.

Question Tr.1.34

Rights of Way and NMUs

Please respond to the suggestion by PFA Consulting obo Amesbury Property Co and ClassMaxi Limited that it would be cheaper to continue AMES 1 as far as the diverted Allington Track as an alternative to the current DCO proposal.

Response

1. The suggested location of the diverted Allington Track / AMES1 T-Junction on the line of the existing AMES1 has been considered by Highways England. The suggested T-Junction would require vehicles travelling north along AMES1 to make a very sharp left hand turn to join the new link to Equinox Drive (reference M on sheet 11 of the Rights of Way and Access Plans [APP-009]). Similarly, vehicles travelling on the new link in an eastbound direction would need to make a very sharp right hand turn to join AMES 1 in a southbound direction. The sharp turn required by the suggested junction would require an excessive carriageway width to accommodate the swept path of those turning movements. Consequently, this option was not progressed further.

Question Tr.1.35

Rights of Way and NMUs

i. Please explain the function and alignment of the proposed footpath along the line of the stopped-up Byway between the new link to the Allington Track and A303, the need for which has been questioned by an IP (Countryside Solutions obo Beacon Hill Land Limited).

ii. What consultation has taken place with landowners and stakeholders?

Response

i. **Please explain the function and alignment of the proposed footpath along the line of the stopped-up Byway between the new link to the Allington Track and A303, the need for which has been questioned by an IP (Countryside Solutions obo Beacon Hill Land Limited).**

1. The proposed public footpath, labelled reference P on sheet 11 of the Rights of Way and Access Plans [APP-009] and described in Schedule 3 to the draft DCO [APP-020], would be of benefit to local people, by maintaining pedestrian access to view the scheduled monument at the existing junction of byway AMES1 and A303. The junction of AMES1 with the A303 would be closed to vehicular traffic, protecting the adjoining monument (tumulus) from further degradation and improving safety on the existing A303 by reducing the potential for conflict arising from traffic from the BOAT joining the A303. As such, and in providing safer NMU connections, the proposal contributes to the achievement of the Scheme's objectives of helping to conserve and enhance the WHS and provide a positive legacy for local communities.

ii. **What consultation has taken place with landowners and stakeholders?**

2. Consultation with Wiltshire Council as public rights of way authority identified the desirability of retaining this path and there is an existing gas service requiring some rights to be maintained. Regular meetings and updates are taking place with landowners, occupiers and asset owners. This process will continue as the Scheme progresses to ensure that those persons' individual requirements are understood and met wherever possible.

Beacon Hill Land Limited engagement record

3. The table below is included as the proposed footpath (reference P shown on sheet 11 of the Rights of Way and Access Plans [APP-009]) directly impacts Beacon Hill Land Limited who own land located to the south of the existing A303, between the existing Allington Track and AMES 1 byway.

Meeting date	Meeting type	Meeting summary	Phase affected / discussion
12/12/2017	Farms Access Meeting	To discuss concerns relating to access for farmers across the A303 after design a review current proposals for farmers access across the A303 post design.	Initial discussions of project impacts
22/01/2018	January Design Update Meeting	Reviewing the preferred route in relation to land owned and occupied by Morrison and King Limited and Beacon Hill Land Limited.	Pre-consultation
31/05/2018	Post Consultation Meeting	Discuss the consultation responses from Morrison & King and Beacon Hill Land Limited.	Post-consultation
07/12/2018	Post DCO Submission Meeting	To discuss the submitted DCO design and address any outstanding points within the Position Statement.	Post-DCO Submission
13/03/2019	Position Statement Meeting	To discuss the current status of the position statements between Morrison and King/Beacon Hill Land Limited and Highways England.	Ongoing/Examination

Question Tr.1.36

Rights of Way and NMUs

What arrangements are to be put in place for the treatment of the stopped up Allington Track, the removal of the metal surface, and subsequent land ownership and maintenance?

Response

1. The Applicant anticipates that the section of the Allington Track which is proposed to be stopped up will be fenced from the new highway and that the existing metalled surface will be punctured, soiled over and seeded, reflecting the change of status from public right of way. However, the Southern Gas Network and Wessex Water mains apparatus located within this area, will affect the final outcome of the surface treatment, as access and working areas would need to be maintained to the satisfaction of those statutory undertakers and further to discussion with the relevant landowners.
2. In terms of land ownership and maintenance, the land in question, being currently public highway, is understood to be owned by the adjoining landowners (in respect of subsoil up to the half width of the highway) with Wiltshire Council having an interest in respect of adopted highway. For the purposes of the Scheme, the land is proposed to be subject to a power to acquire rights compulsorily (in relation to statutory undertakers' apparatus) and as such, would not be acquired outright by Highways England. As a consequence, the ownership position would not change, save that Wiltshire Council's interest in the adopted highway would cease when that highway was stopped up and the land would be subject to new rights acquired for the benefit of relevant statutory undertakers. Any works carried out by the Applicant relative to the changed status of the land would be carried out under powers of temporary possession, as provided for by the draft DCO [APP-020].

Question Tr.1.37

Alternative modes

Paragraph 8.5.4 of the TA suggests that there is very limited scope for coach travel to replace long distance journeys on the A303 and Paragraph 8.5.7 of the TA concludes that analysis of the potential for modal transfer to rail, assuming a hypothetical step-change in rail facilities, showed that traffic flows on the A303 could only be reduced by in the order of 11%. Further detail is set out in the Technical Note Appendix 8.5 to the TA.

i. What is meant by 'a step-change' and what are the prospects of such investment in the rail network occurring?

ii. Would the upgrading of the network necessarily facilitate modal shift such that there would be a significant reduction in forecast traffic flows on the A303 in the do-minimum scenario?

iii. Would traffic reduction meet the other principal objectives of the scheme?

Response

i. **What is meant by 'a step-change' and what are the prospects of such investment in the rail network occurring?**

1. In Appendix 8.5 (Assessment of Alternative Modes (PCF Stage 2) Technical Note) of the Transport Assessment [APP-297], Section 5 considers the pattern of traffic movements using the A303 and identifies those for which access to rail may be feasible. Section 5.6 (Table 5-2) then sets out the potential mode shift for car from rail improvements should different types of public transport improvements by made, including:

    a. Completely reliable services;

    b. Fares reduced by 50%;

    c. Journey times reduced by 20%;

    d. Reduced travel times to/from stations/stops;

    e. Fewer interchanges;

    f. Better passenger information; and

    g. Increased service frequency.

2. The combination of all these changes across the whole South west rail network would constitute the 'step change' referred to.

3. As set out in Section 6 of Appendix 8.5 (Assessment of Alternative Modes (PCF Stage 2) Technical Note) of the Transport Assessment [APP-297] there are

currently no plans of such investment in the rail network occurring. The Network Rail Control Period 6 (CP6) 2019-2024[1] for the South West and Wessex, does not include the required upgrade in rail services and associated infrastructure, that would be required to deliver this step change in rail service.

ii. **Would the upgrading of the network necessarily facilitate modal shift such that there would be a significant reduction in forecast traffic flows on the A303 in the do-minimum scenario?**

4. The assessment undertaken indicates that a step change in rail service provision could conceivably reduce traffic on the A303 corridor by 11%. This level of modal transfer to rail would reduce the 2041 Do-Minimum forecasts flows to 31,000, based on Section 6.1.17 of Appendix 8.5 (Assessment of Alternative Modes (PCF Stage 2) Technical Note) of the Transport Assessment [APP-297]. This is still much higher than the flows experienced today.

5. Thus, the maximum traffic flow reduction achievable from mode shift to rail alternatives is less than the traffic growth forecast over the next 10 years along the corridor and, as such, would not result in a significant reduction in forecast traffic flows on the A303 in the do-minimum scenario, i.e. the problems currently experienced on the A303 would only get worse.

[1] https://www.networkrail.co.uk/who-we-are/publications-resources/cp6deliveryplans/

iii. **Would traffic reduction meet the other principal objectives of the scheme?**

6. Traffic reduction alone would not meet the other Objectives of the scheme, as stated in the Foreword of the Transport Assessment [APP-297]. Table TR.1.37-1 illustrates this:

7. Table TR.1.37-1: A303 Scheme objectives and reference to how traffic reduction alone would not achieve these objectives

Transport (to create a high quality reliable route between the South East and the South West that meets the future needs of traffic)	The maximum conceivable reduction in traffic based on modal transfer (11%) is less than the forecast growth in traffic between 2017 and 2026 along the A303 corridor shown in Table 4-3, Combined Modelling and Appraisal Report [APP-298] (excluding the capacity constrained scheme section). As such, by 2026 traffic volumes would be in excess of those observed today and would exacerbate the problems of congestion and unreliability observed today.
Economic Growth (to enable growth in jobs and housing by providing a free flowing and reliable connection between the South East and the South West)	Improved rail connectivity would support this objective for those movements served by rail. Nevertheless the problems of congestion and unreliability along the A303 would not be addressed, constraining achievement of this objective over a wider area because some of the movements served by the A303 do not start or finish close enough to rail stations to benefit from rail improvements.
Cultural Heritage (to help conserve and enhance the World Heritage Site and to make it easier to reach and explore)	Retaining the A303 within the World Heritage site would not address this objective because the harm caused by traffic currently traversing the WHS would not be addressed.
Environment and Community (to improve biodiversity and provide a positive legacy for nearby communities)	Retaining the A303 in its congested state would mean that the problems observed today would continue.

Question Tr.1.38

Construction traffic impact assessment

Table 9-1 of the TA sets out estimated daily HGV movements during construction phases. The inclusion of 74 tunnel related concrete deliveries in Phase 1 appears to be contrary to the broad phasing set out in para 9.2.1 which suggests that the construction of the tunnel is the primary construction activity in Phase 2, from 2024 onwards. Additionally, it is suggested that excavation spoil from the tunnel will be used in the construction of earthworks associated with the phase 1 activities ie the construction of Winterbourne Stoke By-pass, Longbarrow junction and Countess roundabout flyover.

Please provide further clarification of the phasing and routeing of expected HGV movements, particularly in relation to the construction of the tunnel and the distribution of tunnel spoil.

Response

1. For the purposes of the environmental impact assessment (EIA) and the traffic assessment, two principal phases of the construction programme for the main works have been identified. These are set out in paragraph 2.4.8 of Chapter 2 the ES (the Proposed Scheme) [APP-040] and comprise:
    a. Phase 1, when Winterbourne Stoke bypass, Longbarrow Junction and Countess Roundabout flyover are under construction (likely 2021-2023); and
    b. Phase 2, when the construction of the tunnel is the primary construction activity (2024 onwards). The Winterbourne Stoke bypass, Longbarrow Junction and Countess Roundabout flyover constructed in Phase 1 would be operational during this Phase.
2. A more detailed programme will be developed by the Contractor during the detailed design stage for the Scheme.

    Concrete deliveries during phase 1

3. During Phase 1 there would also be tunnel construction work activity. Chapter 5 of the technical note in Appendix 9.1 of the Transport Assessment [APP-297] set out the assumptions that were made as to when delivery of materials would occur during the two construction phases. It assumed that there would be 19,500 HGV deliveries to supply raw material for the concrete batching plant for the tunnel construction during Phase 1 and that there would be 23,800 HGV deliveries during phase 2. This equates to 74 HGV movements per day in Stage 1 and 44 HGV movements per day in Stage 2.

    Excavation spoil from the tunnel will be used in the construction of earthworks

4. Chapter 5 of the technical note in Appendix 9.1 of the Transport Assessment, sets out the assumption for Construction Site HGV movements which would use the public highway. This includes discussion of transfer of spoil from the eastern cutting to the Longbarrow compound. This references that some of the spoil could be used in the construction of the Countess ramps, with the remainder of the spoil transferred to the Longbarrow compound. The Transport Assessment does not assume that excavation spoil from the tunnel

itself will be used in construction of structural embankments during phase 1 i.e. the construction of Winterbourne Stoke By-pass, Longbarrow junction and Countess roundabout flyover.

Routeing of expected HGV movements

5. Tunnel spoil would be transported by off-highway haul routes between the Longbarrow compound site and land east of Parsonage Down, Material cleared from the eastern tunnel portal would be transported back to the Longbarrow compound site by HGVs on the existing A303 and these numbers have been factored into the traffic modelling assumptions. This is referenced in Chapter 5 of the Combined Modelling and Appraisal Report – Appendix C [APP-301] Appendix F.

6. Chapter 5 paragraph 5.7 of the technical note in Appendix 9.1 [APP-297] explains that HGV deliveries are assumed to route along the following main corridors, based on the percentage distribution identified:
    - A36 (North) – 55%
    - A36 (South) – 15%
    - A303 (West of A36 Junction) – 15%
    - A303 (East of Scheme) – 15%

7. This distribution is based on assumptions of where the raw materials are likely to be sourced from.

Question Tr.1.39

Construction traffic impact assessment

Para 9.4.5 of the TA states that travel plans will be in place, and an assumption of an average vehicle occupancy of three has been made.

Is there any independent evidence which corroborates this assumed occupancy rate?

Response

1. This value has been determined based on experience of similar highway construction projects across the UK. Workers will be based in local accommodation to the site, working in teams. It is normal practice for construction workers to travel together in groups with their work materials.
2. Within the Outline Environmental Management Plan (OEMP) [APP-187], Table 3.2b, Reference MW-TRA3 states that the main works contractor will develop a construction workforce travel plan to reduce the impact of the construction workforce on the transport network. This will include a target to reduce individual car journeys by the construction workforce.

Question Tr.1.40

Construction traffic impact assessment

Figures 9-3 and 9-4 show differences between construction scenarios AADT & 2026 without scheme AADT for Phases 1 & 2 respectively. Paras 9.5.3/4 indicate during construction there is forecast to be a decrease in flows on the A303 mainline near the scheme as traffic re-routes to avoid increases in journey time.

i. Can it be assumed that the majority of re-routeing will take place during peak hours and if so how will this interact with construction staff traffic arriving and departing at the construction compounds?

ii. How has the additional impact of diversions from the A303 on affected communities eg Shrewton been assessed?

Response

i. **Can it be assumed that the majority of re-routeing will take place during peak hours and if so how will this interact with construction staff traffic arriving and departing at the construction compounds?**

1. Further details pertaining to the construction scenario forecasts can be found in the Transport Forecasting Package (Appendix C of the Combined Modelling and Appraisal Report (ComMA), [APP-301]). Appendix R details flow split by time period for the construction scenario forecast and Appendix J details flow split by time period for the core scenario forecasts.

2. The tables below summarise the flow on the A303 in each forecast scenario in each time period from Appendix R and Appendix J of the Transport Forecasting Package [APP-301].

Table TR 1.40 – 1: Forecast Two-Way Flow on A303 North of Wylve (A36 to B3083)

Time Period	2026 without scheme	Construction Phase 1	Difference from without scheme (%)	Construction Phase 2	Difference from without scheme (%)
AM	1,570	1,180	-25%	1,480	-6%
Interpeak	1,570	1,330	-15%	1,520	-3%
PM	1,590	1,230	-23%	1,530	-4%

Table TR 1.40 - 2: Forecast Two-Way Flow on A303 West of Amesbury (Longbarrow to Countess)

Time Period	2026 without scheme	Construction Phase 1	Difference from without scheme (%)	Construction Phase 2	Difference from without scheme (%)
AM	2,210	2,050	-7%	2,160	-2%
Interpeak	2,050	1,860	-9%	2,000	-2%
PM	2,270	1,940	-15%	2,160	-5%

Table TR 1.40 – 3: Forecast Two-Way Flow on A303 South of Bulford (Allington Track to Double Hedges)

Time Period	2026 without scheme	Construction Phase 1	Difference from without scheme (%)	Construction Phase 2	Difference from without scheme (%)
AM	2,820	2,680	-5%	2,780	-1%
Interpeak	2,450	2,260	-8%	2,410	-2%
PM	3,040	2,780	-9%	2,970	-2%

3. The forecast traffic flows show that traffic is forecast to divert from the A303 throughout the day, not just during the peak hours.
4. The additional traffic movements relating to the construction workforce and HGV deliveries of materials were estimated and included in the construction scenario forecasts. As such the traffic forecasts duly represent the interactions of construction traffic and the impacts of these vehicles on network performance. Further information can be found in Sections 9.3 & 9.4 of the Transport Assessment [APP-297].

ii. **How has the additional impact of diversions from the A303 on affected communities eg Shrewton been assessed?**

5. The additional impact of diversions from the A303 on affected communities such as Shrewton is included in the scheme benefits and costs as outlined in Chapter 5 of the Combined Modelling and Appraisal (ComMA) report [APP-298]. These benefits and costs include the effects on users routing and journey times.

6. The additional impact of diversions from the A303 on affected communities such as Shrewton are also reflected in Paragraph 13.9.56 of the Environmental Statement [APP-051] as part of the People and Communities vehicular user severance assessment. Whilst recognising that construction of the Scheme would generate additional traffic which together with works may result in diversions and increases in journey times, it was considered that the volume was not of sufficient scale so as to deter journeys or require long-term diversions to be implemented. On that basis, it was concluded that impacts arising were assessed to be slight and the effect on vehicular users assessed as negligible and not significant.

7. The additional impact of diversions during the construction of the Scheme is also reflected in Paragraphs 13.9.73 – 13.9.92 of the Environmental Statement [APP-051] as part of the human health assessment within the People and Communities chapter. Whilst recognising that construction of the Scheme would result in diversions and increases in journey times, it was considered that the diversions were not of sufficient scale so as to negatively impact on local communities' health and well-being. For all elements of the human health assessment considered to be impacted by diversions, the impact on health and well-being was assessed to be neutral. In addition, the human health assessment considered the health determinant of 'noise, air quality and neighbourhood amenity' and concluded that the overall impact of the Scheme on this determinant was "neutral".

8. The additional impact of diversions from the A303 on local air quality is assessed in Paragraph 5.9.10 – 5.9.44 of the Environmental Statement [APP-043]. Paragraph 5.9.44 concludes that there are no likely significant air quality effects predicted for the construction phases.

9. Paragraph 9.3.10 of the Environmental Statement [APP-047] details the assessment of construction traffic noise impacts. The assessment uses construction traffic data from the traffic models. The impact of diversions from the A303 on traffic noise during construction is therefore included in the construction traffic noise assessment reported in Paragraphs 9.9.24 – 9.9.27 [APP-047]. Moderate or major increases in traffic noise due to the addition of construction traffic or re-routing due to the works, resulting in significant adverse effects, have not been identified on any existing roads. Minor increases are anticipated on the B390 to the north of the Scheme between the A36 and Shrewton due to existing traffic re-routing away from the works. Minor increases are also identified on short sections of road to the north of Salisbury. Based on the magnitude of the

anticipated change and the temporary nature of the impact these are not classed as significant effects.

Question Tr.1.41

Construction traffic impact assessment

Table 9-3 shows that an increase of 13% is forecast at Netton during Construction Phase 1.

Please explain why this is not considered to be significant.

Response

Reporting Correction

1. Table 9-3 of the Transport Assessment [APP-297] shows the two-way annual average daily traffic (AADT) for a number of links which form a north/south screenline through the network. The screenline extends from the M4 at the north through to the A31 at the south and includes The Packway, A4 and A36.
2. Flow at Netton is measured on Beech Walk, a local minor road traversing through the village of Salterton east of the River Avon. On this road Table 9-3 [APP-297] mis-reported that the AADT traffic flow is forecast to increase from 1,700 to 1,900 (13%) during Phase 1 of the construction scenario, rather than from 1,700 to 2,100 (21%). Table 7-1 of the Transport Forecasting Package [APP-301] is similarly corrected below.

Table TR 1.41-1: Correction to 2026 Screenline Flows (two way, AADT) - Construction phase 1

	Name	2026 without scheme	2026 with scheme	% difference
North of A303	M4	81,500	82,100	1%
	A4	11,300	11,400	1%
	A342	8,600	9,000	5%
	N of A303	3,800	3,800	-1%
	Packway	6,900	6,400	-6%
A303	A303	29,400	26,700	-9%
South of A303	S of A303	7,600	7,600	0%
	S of A303	3,000	3,000	0%
	Netton	1,700	2,100	21%
	S of A303	17,400	18,100	4%
	A338	8,300	8,500	2%

	A36	18,000	18,100	0%
	A30	12,300	12,900	5%
	A31	70,100	70,000	0%
Total		279,900	279,600	0%

3. The text below these tables, in Paragraph 7.2.7 of the Transport Forecasting Package [APP-301] and Paragraph 9.5.7 of the Transport Assessment [APP-297] is corrected, as follows:

4. "*There is a forecast reduction in AADT of 3,200 vehicles on the A303 (2,700 vehicles) and The Packway (500 vehicles) in construction phase 1, due to the traffic management measures on the A303 and at Longbarrow and Countess roundabout. The screenline analysis shows that there is forecast to be a corresponding increase in traffic on these alternative routes. Generally these are modest increases dispersed over a wide area with no individual route experiencing an increase more than either a 5% or a 400 vehicle increase in daily traffic volume*"

Response to Question

5. The 400 vehicle increase in two way annual average daily traffic (AADT) flow on Beech Walk in Netton is a result of flow increases which occur throughout the day in all modelled time periods. This increase in flow equates to an average increase in flow of approximately 1 vehicle every 3 minutes in each direction. These are modest increases in traffic flow that would not cause congestion and therefore the impact of the construction traffic of the scheme near Netton was assessed not to be significant.

6. The additional impact of diversions from the A303 on affected communities such as the village of Netton is also detailed in Paragraph 13.9.56 of the Environmental Statement [APP-051]. It is concluded that impacts arising are assessed to be slight.

7. The additional impact of diversions from the A303 on local air quality is assessed in Paragraph 5.9.10 – 5.9.44 of the Environmental Statement [APP-043]. Paragraph 5.9.44 concludes that there are no likely significant air quality effects predicted for the construction phases.

Question Tr.1.42

Construction traffic impact assessment

Para 9.5.9 and Table 9.4 indicate that there is a forecast increase in journey times through the A303 of between 2 and 4 minutes in construction Phase 1, principally due to the speed limit in place during the construction phase. In Construction Phase 2, with Winterbourne Stoke bypass and Countess Flyover in place, delays are predicted to be shorter.

i. What degree of confidence can be placed in these forecasts?

ii. How likely is it that increased diversion rates would result from longer delays on the main-line and would the impact on affected communities still be assessed as acceptable?

Response

i. **What degree of confidence can be placed in these forecasts?**

1. Section 9 and Appendix 9.1 of the Transport Assessment [APP-297] set out the assumptions used in the modelling of the construction scenarios.
2. The traffic management arrangement assumed for the assessment reflects the safety need to reduce traffic speeds where construction workers are in close proximity. There are two conceivable reasons why the traffic management could have more substantial impacts. The first is that the extent could be longer, thereby reducing traffic speeds over a longer section of road and the second is that the arrangements reduce capacity and cause queueing and associated delay.
3. The Outline Environmental Management Plan (OEMP) [APP-187] sets out in Table 3.2b under MW-G32 an obligation to minimise disruption to road users and under MW-TRA2 a requirement to consult with appropriate agencies when developing the Travel Management Plan. These obligations give assurance that appropriate traffic management arrangements that are likely to be of similar extent would be in place.
4. Detailed modelling of the assumed traffic management plans is described in Section 7 of the Traffic Forecasting Package [APP-301]. This demonstrates delays of between 2 and 4 minutes for traffic along the A303 (Table 7.2) and less than a minute for north – south movements along the A345 and A360 and local movements along the Packway (Table 7.3). While the operational assessment notes the need to monitor and optimise signal plans at Countess roundabout to reflect layout changes it identified no particular risks that delays could be substantially larger. A key constraint along the A303 which contributes to queueing and delays on busy days is the 2-1 merge, and while the traffic management arrangements would move the location of this merge, the nature of the constraint itself would not change.

5. On balance, neither reason why longer delays could occur (as referred to in paragraph 2 above) is likely and there can be confidence therefore in the scale and nature of construction traffic delays that has been assessed.

ii. **How likely is it that increased diversion rates would result from longer delays on the main-line and would the impact on affected communities still be assessed as acceptable?**

6. Were there to be increased delay along the A303 mainline, then diversion from the A303 would increase. However, as explained above, it is unlikely that the traffic management arrangements would result in significantly longer delays or larger diversions.
7. Further information on the effects of delay on the A303 mainline and re-routing behaviour can be found in Section 9.5 of the Transport Assessment [APP-297] and Paragraph 13.9.56 of the Environmental Statement [APP-051]. The impact on affected communities is assessed as acceptable.

Question Tr.1.43

Construction traffic impact assessment

Figure 9-5 indicates an increase in AM Peak queue length southbound on the A360 into Longbarrow junction during both phases of construction, up to 700 m in phase 1 and 400 m in Phase 2.

How has the effect of additional delay and inconvenience for drivers heading on into Salisbury on the A460 been taken into account in the assessment?

Response

1. It has been assumed that the final sentence of the question should refer to the A360, not the A460.
2. The impact of construction traffic and diversions from the A303 during construction is included in the assessment of scheme benefits and costs as outlined in Chapter 5 of the Combined Modelling and Appraisal (ComMA) report [APP-298].
3. As explained in paragraphs 9.5.13 and 9.5.14 of the Transport Assessment [APP-297] there is an increase in queueing on the approach to Longbarrow roundabout. This has been assessed (paragraph 9.7.5) as being of an acceptable level. Table 7-3 of the traffic forecasting package [APP-301] shows that journey times along the A360 are forecast to increase by less than a minute at all times of day as a result of scheme construction activities.

Question Tr.1.44

Construction traffic impact assessment

Para 9.7.6 states that in both AM and PM operational models the signals have been adjusted to minimise queuing and journey time increases through Countess Roundabout.

i. Is this likely to have an adverse effect on journey times for non-A303 traffic passing through Countess roundabout at peak and busy times?

ii. How has this been taken into account in the assessment of scheme benefits and costs?

Response

1. In Section 7.3 of the Combined Modelling and Appraisal Report (ComMA) Appendix C [APP-301], the results of the operational modelling during the construction phase were reported. The changes in journey times for all traffic movements were appropriately considered in the assessment of scheme benefits. Section 5.2.9 and 5.2.10 of the ComMA [APP-298] provides an overview of the assessment of delays during construction.

2. The models forecast journey times for A303 and non-A303 traffic during the construction phases.

3. The AM Peak results show journey times on the A345 Southbound route through Countess Roundabout increased by 45 seconds during phase 1, and by 16 seconds for the Northbound route, as explained in paragraph 7.2.10 of the Combined Modelling and Appraisal Report (ComMA) Appendix C [APP-301]. During the second phase of construction, journey times are forecast to reduce for traffic making north-south movements due to the opening of the A303 bridge over the junction, which removes east-west traffic from the junction, allowing capacity to be reallocated to north-south movements.As explained in paragraph 9.5.12 of the Transport Assessment [APP-297] the increases in journey times were judged to be within an acceptable level of tolerance.

4. The PM Peak and "Busy Day" modelling showed negligible changes in journey times on the A345 northbound and southbound through Countess Roundabout during both construction phases.

5. The assessment of scheme benefits and costs explicitly considered the delays forecast during construction. The approach to assessment described in Section 5.5 of the Economic Appraisal Package (ComMA Appendix D) [APP-302] followed WebTAG, and the assessed user disbenefits are explained in Section 9.3.

Question Tr.1.45

Construction traffic impact assessment

The overall conclusion on construction traffic (Para 9.7.7) is that impacts will be of an acceptable level and will be short term. The Construction period is due to last 68 months in total.

While disruption during Phase 2 is predicted to be lower than Phase 1, does this give full weight to the disruption experienced by drivers, particularly for those using the network for regular journeys to work?

Response

1. As explained in section 7 of Appendix C of the Combined Modelling Appraisal (ComMA) Report [APP-301], during the first phase of construction journey times are forecast to increase by 2-4 minutes for eastbound and westbound traffic along the A303 (Table 7-2) and less than one minute for north-south movements along the A345 and A360 and along the Packway.
2. In the context of the A303 movements shown, Table 7-2 also illustrates that journey times without construction would vary between around 30 minutes on 'neutral' days and over 40 minutes on busy days. As illustrated in Figure 4-7 of Appendix C of the Combined Modelling Appraisal (ComMA) Report [APP-301] there is greater day to day variability beyond that represented in the models as resulting from construction of the scheme. The drivers affected by the roadworks already face a much larger uncertainty in their travel times that they need to plan for and accommodate in their travel plans than the relatively modest delays that they would experience during construction.
3. These changes in journey time forecast during the construction period are not of sufficient magnitude to have a significant impact.

Question Tr.1.46

Construction traffic impact assessment

Paragraph 9.1.1 refers to the production of a Traffic Management Plan, to outline the traffic management strategies for construction, operation and emergency situations, to be prepared by the successful contractor. Relevant information is set out in the TA Appendix 9.1 – Technical Note 022: Scheme assumptions for DCO Construction Traffic Management Modelling.

In order to assist understanding of the likely impacts of construction traffic on the local road network and how mitigation measures will be secured in the DCO, can the Applicant provide a draft TMP showing main construction routes, location of compounds, operating lanes, speed limits, carriageway closures, diversion routes, weight restrictions, and traffic management measures and arrangements for busy periods?

Response

1. Highways England confirms that Technical Note 022 in Appendix 9.1 of the Transport Assessment [APP-297] sets out the assumptions made for the traffic management measures during the construction phase(s). This includes assumptions and outline proposals relating to:
    - Traffic management for construction of western tie-in to A303
    - Traffic management for construction of Longbarrow Junction
    - Traffic management for construction of Countess Junction
    - Temporary speed limits on existing roads
    - HGV movements to and from site
    - Workforce numbers
2. The development of mitigation measures in relation to managing the impacts of construction traffic are secured via the Outline Environmental Management Plan (OEMP) (Environmental Statement Appendix 2.2 [APP-187]) at items MW-TRA1 to MW-TRA11.
3. Further information is included in the Environmental Statement Chapter 2 - The Proposed Scheme [APP-040] which includes, in section 2.4, a description of the assumptions applied to the environmental assessment of the construction phase. This includes information on:
    - Construction Activities
    - Construction Programme and working hours
    - Construction compounds and site accesses
    - Haul routes
    - Construction traffic

4. Environmental Statement Figure 2.7 - Illustrative Construction Layout shows indicative locations and layouts for:
    - Construction compounds
    - Temporary diversion routes
    - Site haul roads
5. Further detail required for completion of the Traffic Manage Plan (TMP) will be dependent on the Contractor's chosen methodology and construction programme, both of which are currently unknown. Highways England cannot therefore provide a TMP at this stage. However Highways England consider that, as identified above, there is sufficient information available within the application documentation to understand the likely impacts of construction traffic on the local road network.

Appendices Tr.1

Appendices Tr.1

Question Tr.1.3

Departures Manual Rev 0

Departures Manual

Revision 0

Summary
This manual describes the process for handling and approving departures from standards and requirements.

Feedback and Enquiries
Users of this document are encouraged to raise any enquiries and/or provide feedback on the content and usage of this document to the dedicated Highways England team. The email address for all enquiries and feedback is: departures@highwaysengland.co.uk

This is a controlled document.

Contents

Release notes

Version	Date	Details of amendments
0	Feb 2019	The Departures Manual has been produced to promote better management of project risks associated with departures and improve the quality of departure applications that are submitted for appraisal. It supports the introduction of DAS 3.0, which replaces DAS 2.2 and WebDAS. New features of departures process include the ability provisionally agree a departure and for the project manager to automatically accept the technical specialist's recommendation. The principles of the existing departures process have been retained, but various elements have been clarified or enhanced, enabled by the functionality afforded by the new cloud-based database.

Foreword

Publishing information

This document is published by Highways England.

This document supersedes the following documents, which are withdrawn:

1) CHE Memorandum 106/01 'Departures Approvals System'.
2) CHE Memorandum 137/04 'Revision of Delegation of Responsibilities for Structures-Related Departures from Standards and Specifications'.
3) Procedures Manual (2001)
4) Volume: 'Improving the Network', Chapter 7: 'Departures from Standards'.
5) Volume: 'Maintaining the Network', Chapter: 'Procedures for Departures'.
6) Way we Work 'Retrospective Structures Related Departures'.
7) Departures from road geometry standards (DMRB Volume 6) – Guidelines for designers
8) PCF Departure Check list

Introduction

Departures are used to formalise the assessment, appraisal and approval for all instances where mandatory requirements are not implemented during schemes on the Motorway and All-Purpose Trunk Road Network. In 2018/19, a new process for handling departures and a refresh to the supporting information systems is being introduced.

Vision and objectives for the new departures process

Departures are a value-adding mechanism for Highways England to realise benefits from innovation and value engineering, supported by robust safety and economic cases. They are also necessary where the constraints of the project do not permit a design to standards. In all cases, the use of high quality evidence is required for effective and expedient decision making.

Through reducing the quantity and improving the quality and timeliness of submissions, the impacts to project delivery through processing departures will be significantly reduced and technical specialists will have better availability to support projects.

This will be enabled by introducing early engagement between projects and the Highway England Safety Engineering and Standards Directorate (SES), using a strong, positive dialogue facilitated by the Technical Partners to mitigate abortive effort. Through undertaking more constructive activity at the front end, the back end (delaying aspects) of departures will be reduced.

New guidance and tools will re-enforce a view that the submission of departures is a milestone in the process – not the start – and at its best, processing should be the formal governance process applied to matters that are essentially already agreed.

This Departures Manual specifies the processes to be followed in handling departures, providing advice to maximise the value of departures as a mechanism and minimise the waste and risk that can occur when departures are not managed well. The "new process" implemented in this manual does not represent a significant change from the previous processes that have been applied for departure applications, but instead focuses on the "front-end" of a departure's life to make sure that projects do not carry unacceptable risk or waste associated with departures that are appraised too late in the project life cycle.

Alongside the publication of this manual, WebDAS and DAS 2.2 are being retired and being replaced by a new web-based application, DAS 3.0 (simply referred to as "DAS" throughout this manual). The new DAS streamlines the departures handing process and improves the visibility and opportunities for collaboration between all role holders. A background to the decisions taken to develop this manual and DAS 3.0 is given in Appendix E.Background

A number of other activities are being undertaken in alignment with this vision including the DMRB refresh and continuous improvement and training with stakeholders to improve knowledge and competence with regards departures. Through feedback and lessons learned, this manual will be revised to promote a higher performing departures process.

Background

Technical Governance of Highways Projects

Planning, development, construction and operation of all works on the motorway and all-purpose trunk road network are governed by:

1) statutory and legislative requirements, and;
2) in-house standards containing national requirements and advice, including reference to external voluntary standards.

It is a requirement that all Highways England projects are designed, specified and procured in accordance with these standards which are drawn up following extensive research, trials and experience. The requirements and advice contained in standards provide a mechanism for optimising the solutions to a wide range of design situations within the specific context of the project, where the

design decisions have consequences for the safe and productive delivery of construction, operations, maintenance and retirement of the road network.

Therefore standards are developed with the following considerations in mind:

1) Safety
2) Consistency between projects
3) Value for Money on a whole-life basis
4) Acceptable level of performance
5) Sustainability
6) Mitigating effects on the environment

The benefits to be delivered by any project should be determined through early discussion and agreement with client, designer and stakeholder representatives. The flexibility within these documents should be used to produce value-driven optimal solutions to project challenges identified by assessments.

Developments in Highways England's standards

In July 2012, the Industry Standards Group published a report "Specifying Successful Standards" [Ref 19.I]. which discussed the distinction between requirements and advice in standards and set out a rational approach that provides the basis for governance and control of projects whilst permitting scope for:

1) Embracing the context of the project
2) Innovation and ingenuity to embrace new technology and meet new challenges

Through Annex C of the Highways England Framework document, agreed with Department for Transport (DfT) in April 2015, Highways England undertook to review and update the DMRB. The DMRB refresh has embraced the principles of "Specifying Successful Standards" and has reinforced the distinction between:

1) statutory requirements
2) national requirements of the overseeing organisation
3) advice

This is reflected in consistent terminology being introduced through the to the DMRB and a clear relationship with departures. These distinctions are important and are summarised in the table below.

Relationship between departures and language used following the DMRB refresh

Term	Application	Departure permission
Must	Mandatory - statutory requirement	Not permitted
Shall	Mandatory - national requirement of the overseeing organisation	Permitted in accordance with the processes in this manual
Should	Advice - recommendation	Not applicable - designer maintains justification through design management systems
May	Advice - permission	Not applicable - designer records decision making through design management systems
Can	Advice - statement of fact	Not applicable.

In time through future update projects and regular review cycles, Highways England anticipates all of its standards will be reviewed to clarify what is absolutely mandatory and where departures are permitted and to enable more innovation through better use of performance-based requirements supported by robust advice.

Departures

There are situations where features of the site, innovation of design, construction methods, materials or developments in associated documents make it advantageous or necessary to depart from one or more requirements.

In such cases, a departure from requirement may be considered, providing that it is consistent with current legislation and with Highways England policy. This includes ensuring safety, maintainability and value for money on a whole life basis

The standards governing work on the motorway and all-purpose trunk road network should not be applied in such a rigid manner that innovative ideas are discouraged or scheme costs are increased unnecessarily. However, Highways England directorates cannot expend public funds on an aspect that does not comply with requirements unless an appropriate technical approval has been given. Therefore, all departures need to be appraised to ensure that robust justification exists for not adopting a design fully in accordance with requirements.

The departures process provides the means for providing this assurance and recording the justifications as an important component of Highways England's audit trail and asset data. Each year over 1000 departure applications are submitted to Highways England for appraisal and determination.

A top-level statement of requirements for departure applications is included in GG 101 [Ref 4.N].

Changes being introduced through this manual

Highways England's Technical Assurance and Governance Group (TAGG), custodians of both standards and the departures process have undertaken research into how departures are handled and has identified the following primary historical areas of concern:

1) Departure applications that are not fully justified or contain quality issues.
2) Poor understanding by the supply chain of what Technical Specialists are looking for when appraising departure applications in unfamiliar scenarios.
3) Departures submitted late in the project so that programme is impacted and decision making is too late to be implemented.
4) Poor visibility of upcoming workloads or progress of a departure when someone else "has the ball".

Through embracing lessons learned the new departures process, supported by DAS 3.0, will deliver the following benefits:

1) Provide a means of establishing and viewing of overall "pipeline" of departures – by programme, project, stage and criticality.
2) Provide early warning and risk (opportunity/threat) management for those projects and departures that have been identified with high complexity and/or criticality.
3) Support departure related activity of
    a) Designers
    b) SES Teams
    c) Project Managers
4) Provide enhanced reporting to support forward planning of limited technical specialist resources
5) Support early allocation and engagement of technical specialist(s) to a departure.
6) Introduce the process of providing provisional agreement for a critical departures.
7) Provide a rational progression towards development of the full departure submission.

8) Provide visibility of areas where SES Technical Partners are required to provide input/facilitation.
9) Introduce a new focus on quality management in designers to ensure departures are submitted at the right quality first time.

The formal departure submission process is essentially same as in DAS 2.0 but on a much more flexible, web-based software platform that provides easier access and collaboration. Role and responsibilities have been clarified and processes have been streamlined to minimise the time departure application spend waiting for review or action.

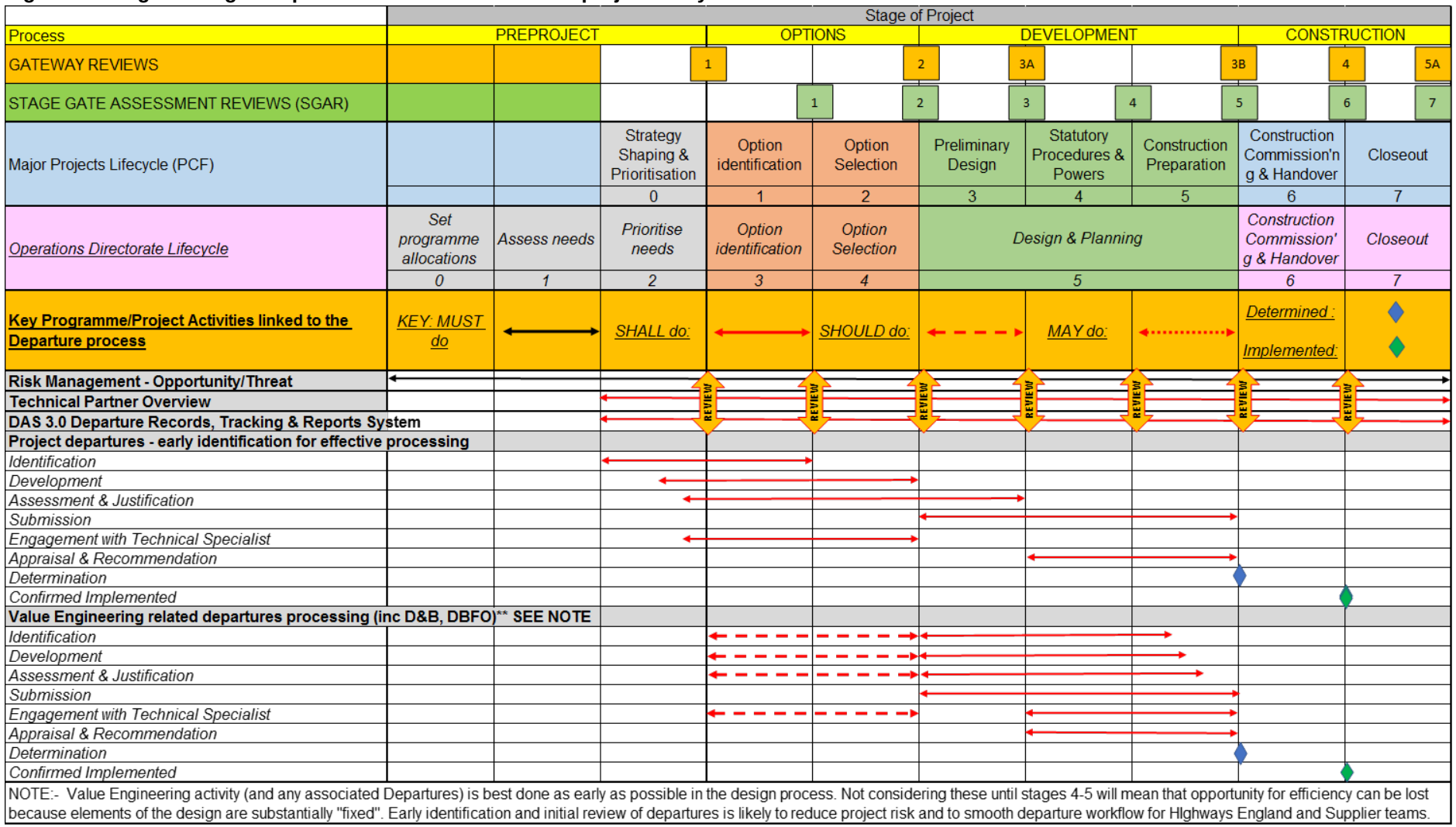
In addition, a number of other important changes are being introduced by other parts of Highways England that will smooth the departures process, namely:

1) Introduction of the SES Technical Partners team to provide an interface for appropriate interaction between schemes and Technial Specialists.
2) Appointment of technical advisors and similar roles within Major Projects Directorate to improve scheme technical assurance, who can review departure applications for quality, completeness and acceptability prior to submission.
3) Review of the DMRB to improve the distinction between requirements and advice, support more supply chain innovation and remove out of date content.

Identification, criticality assessment and progression of departures

Figure 1 shows the intended programming of departures in the context of project life cycle, and the importance of identifying and categorising critical departures as soon as possible to ensure early and timely engagement with Technical Specialist. Sections 3 and 4 provides descriptors of the six departure criticality levels and relates these to their idealised progression in the project life cycle.

Figure 1 - Programming of departures in the context of the project lifecycle



NOTE:- Value Engineering activity (and any associated Departures) is best done as early as possible in the design process. Not considering these until stages 4-5 will mean that opportunity for efficiency can be lost because elements of the design are substantially "fixed". Early identification and initial review of departures is likely to reduce project risk and to smooth departure workflow for HIghways England and Supplier teams.

This Manual

Objectives of the Departures Manual

This document details the departure application and approval process. It includes details of the DAS 3.0 Process. It provides

1) Advice for Highways England staff on the governance and appraisal of departure applications.
2) Advice for design organisations on the phases of departure applications
    a) Identification
    b) Recording
    c) Categorisation
    d) Early engagement
    e) Development
    f) Assessment
    g) Submission
    h) Appraisal
    i) Determination
3) Advice for Highways England Staff, Designers and Constructors to ensure that departures are
    a) Incorporated into the works.
    b) Fully documented and recorded to support asset management and audit.

The structure, content and intended audience of the Departures Manual

This document sets out:

1) The departures process
2) The actions that need to be taken at each stage of the programme or project
3) How early development of a departure should be done, how this reduces programme or project risk and ensures timely determination
4) The scope of the decision-making process
5) The roles and responsibilities of all role holders in the supplier organisation and Highways England.
6) The procedure to be followed by designers/proposers when applying for departures
7) The procedure to be followed by Highways England when appraising and determining departure applications
8) The main design considerations and key assessment requirements so that fully justified applications are discussed and submitted for all departures at the appropriate stage of development
9) How the outcome of the departure process should
    a) Produce a permanent record of each departure application
    b) Produce an audit trail for each application documenting the decisions made at each stage
    c) Include full justifications for each of the decisions
    d) Ensure that the departure application is processed and determined at the most appropriate stage of programme or project development
    e) Provide an evidence base for similar future applications and/or a change to the requirement is departures are being routinely granted.

Different parts of the manual are applicable to roles of

1) Designer
2) Proposer
3) Contractor
4) Project Manager/Project Sponsor

5) Specialist Submission Point
6) Technical Specialist
7) Authorising Signatories

The advice is presented in a single document so that

1) All parties have a full overview
2) All parties have understanding or role and responsibilities

The table below summarises the intended audience for each section of the manual.

Overview of intended audience for each section

	Project Manager	Designer	Proposer	Specialist Submission Point	Technical Specialist	Authorising Signatory
1. Scope	✓	✓	✓	✓	✓	✓
2. Roles	✓	✓	✓	✓	✓	✓
3. Process overview	✓	✓	✓	✓	✓	✓
4. Timely handling of departures	✓	✓	✓	✓		
5. Preparing a departure application		✓	✓			
6. Project governance for departures	✓					
7. Appraising departure applications				✓	✓	✓
8. Related departures and departures that apply at more than one location		✓	✓		✓	✓
9. Guidance for specific circumstances	✓	✓	✓	✓	✓	✓
10. Confidentiality		✓	✓			
11. Continuous improvement through the departures process	✓	✓	✓	✓	✓	✓

Status of this manual

This manual is a procedures document, enforced through the scheme requirements that are owned by the Project Manager. This manual does not form part of the DMRB nor any other standards, but Project Managers are strongly advised to adopt it. Under exceptional circumstances, a project may choose to adopt alternative procedures for handling departures, though this would need to be agreed with each of the affected Specialist Submission Points and the Departures Administration Team, as well as precluding the use of DAS for administering the appraisal and approval process.

In the case of incident on the network a coroner will refer to the records of all decision making for any departures in the area of the incident. The requirements for justifying and approving a departure contained in this manual are considered the minimum necessary for a full and defensible record of decision making for departures.

Abbreviations and symbols

Abbreviations

Abbreviation	Definition
AMOR	Asset Maintenance and Operational Requirements
ASC	Asset Support Contractor
D&B	Design and Build
DAS	Departure Approval System
DBFO	Design, Build, Finance and Operate
DMRB	Design Manual for Roads and Bridges
ECI	Early Contractor Involvement
IAN	Interim Advice Note
LHA	Local Highway Authority
MAC	Managing Agent Contractor
MCHW	Manual of Contract Documents for Highway Works
NMM	Network Management Manual
OD	Operations Directorate
RWSC	Highways England's 'Routine & Winter Service Code'.
SES	Safety Engineering and Standards directorate
TAGG	Technical Assurance and Governance Group
TIN	Temporary Instruction Note
TMMM	Technology Management and Maintenance Manual

Terms and definitions

Terms and Definitions

Terms	Definition
Alternative Proposals	The name given to a departure application submitted as part of a DBFO scheme.
Application	The form that is submitted for appraisal comprising the core information, technical justification and assessment of benefits, risks and impacts.
Appraisal	The review undertaken by a Technical Specialist to inform a recommendation.
Approval	The determination that the departure may be incorporated into the works.
Aspect not covered by requirements	A design feature or method not included in the requirements and thus requiring a departure.
Assessment	The activities undertaken by the Designer to develop the technical justification and benefits, risks and impacts for a departure application and determine if the departure presents a net-benefit to Highways England.
Authorisation	A Technical Specialists recommendation is authorised to be passed to the Project Manager for determination.
Bulk departure	A departure where the same non-compliant method or procedure relates to more than one location or asset.
Condition	A requirement that is to be satisfied by the designer for an approved departure to be valid for incorporation into the works. Has the same status as standards for an approved departure.
Departure (previously: Departure from Standards)	A proposal to derogate from requirements contained in Highways England's standards.
Departure Approval System	Highways England's database for tracking and managing departure applications and recording determinations.
Design and Build	A form of procurement used by Highways England.
Design, Build, Finance and Operate	A form of private finance-based procurement used by Highways England
Departure	A incident of non-conformance with a requirement in design or delivery of highway works.
Departures process	The process defined by this manual for the identification, development, assessment, appraisal and determination of departures.
Determination	The decision to approve, approve with conditions or reject a departure application, based on the Technical Specialist's recommendation and taking account of contractual, commercial and programme issues.

Terms and Definitions (continued)

Terms	Definition
Disposal	Activities relating to decommissioning an asset, including dismantling, demolition and removal.
Early contractor involvement	A form of procurement used by Highways England that enables a Contractor to be represented during the design stages to input to designs for buildability.
EEA State	A state within the European Economic Area, i.e. the European Union (EU) member states, Norway, Iceland or Liechtenstein.
Generic departure	A departure applied on a project, programme, contract or area basis.
Interim document	A document that is published by Highways England as an alternative or supplement to the published standards. Includes Interim Advice Notes, Area Management Memoranda and Temporary Instruction Notes.
Linked departure	A departure that should be appraised alongside another where the combined non-compliant design represents a single safety case. Rejection of one linked departure means that other linked departures are also rejected.
Major Projects Directorate	The Highways England directorate responsible for undertaking major projects on the motorway and all-purpose trunk road network.
Operations Directorate	The Highways England directorate responsible for operating and maintaining the motorway and all-purpose trunk road network and conducting works that do not classify as a major project.
Provisional Agreement	May be given early in the project life cycle by a Technical Specialist for a departure that is critical to project success and, in principle, can be approved. A full application is always required before a departure may be incorporated in to the works. Provisional Agreement does not preclude later rejection.
Rejection	A determination that a departure may not be incorporated in the works.
Relaxation	A provision within a requirement to vary the normal requirements but which does not require a departure.
Requirement	Mandatory content of a standard.
Returned for rework	Where a departure application does not contain sufficient information for a technical specialist to make a recommendations or contains quality issues that mean it cannot be used as a defensible record, it is returned to the designer for rework.
Safety Engineering and Standards	The Highways England directorate responsible for setting policy and requirements for the motorway and all-purpose trunk road network and conducting the technical appraisal of departure applications.

Terms and Definitions (continued)

Terms	Definition
Standard	A document that specifies requirements and advice for delivery of works as listed in the scope section. Note: This document relates to Highways England's in-house standards, alternatively referred to as "Requirements and Advice Documents".
Technical Assurance and Governance Group	The team responsible for provision of advice on, and ensuring consistency of, Highways England's requirements documents and administering the departures process.
Trunk Road Works	All works associated with Trunk Roads, including assessment, design, construction, operation, maintenance and demolition.

1. Scope

Aspects covered

1.1 This document describes the roles and responsibilities and general process that shall be followed when identifying, developing, assessing, submitting, appraising and determining departures.

1.2 An element that does not comply with requirements shall not incorporated into works on the motorway and all-purpose trunk road network in England or other works undertaken by or on behalf of Highways England unless a departure has been approved in accordance with the processes defined in this document.

1.3 The processes described in this document shall be applied to derogation ("departure") from mandatory content ("requirements") in the following document sets:

1) the Design Manual for Roads and Bridges (DMRB);
2) the Manual of Contract Documents for Highways Works (MCHW);
3) the Asset Maintenance and Operational Requirements (AMOR);
4) the Network Management Manual (NMM);
5) the Routine and Winter Service Code (RSWC);
6) the Technology Management and Maintenance Manual (TMMM);
7) Area Management Memoranda (AMMs);
8) Temporary Instruction Notes (TINs); and
9) Interim Advice Notes (IANs).

NOTE 1 The introduction to document sets and individual documents provide implementation instructions to help the designer interpret what content is mandatory and how to implement updated, revised or new requirements that are published during a project or scheme.

NOTE 2 Standards can contain additional requirements for departures to those given in this in this document.

NOTE 3 The requirements in contracts take precedence over the contents of standards.

NOTE 4 Specific guidance given for certain project or contract types are given in Guidance for Specific Circumstances (Section 9).

1.3.1 A departure application may be submitted for:

1) A single requirement;
2) A section of a document; or
3) A whole document

1.4 A departure application shall be made in the following circumstances:

1) a non-standard existing feature is to be retained;
2) due to the layout or other features of the site, a requirement cannot be satisfied;
3) a value engineering exercise has identified significant project or life cycle benefits can be achieved using a design that does not comply with requirements;
4) use of a novel technology or method for which there are no requirements;
5) an aspect not covered by requirements is identified, and;
6) a non-compliance with requirements is identified and cannot be rectified.

1.5 In the event that a Designer identifies issues not covered by this document or needs further guidance on specific requirements they shall contact their Project Manager in the first instance.

1.5.1 Where the Project Manager needs advice to be able to respond to a designer's query, advice should be sought from the appropriate person in Safety Engineering and Standards.

NOTE *The Departures Administration Team can respond to general process-related queries and the Specialist Submission Points can respond to discipline-specific queries.*

1.6 This document defines the permanent record of the full departure application, appraisal and determination for each application made that shall be maintained by Highways England.

NOTE 1 *Maintaining this record is mandatory under the Highways England protocol license agreement.*

NOTE 2 *Highways England can be asked to demonstrate to persons within and outside Highways England that sufficient information was available to make an informed decision about any departure application, and those involved had considered all relevant factors. Such questions can be raised many years after the event, so thorough and accurate records are essential.*

Clarification of where departures are not permitted or required

1.7 Statutory and legislative requirements must always be followed, therefore applications for departures from legislative requirements shall not be submitted.

1.8 A departure shall be not be required in either of the following circumstances:

1) Adoption of a relaxation that is within the limits explicitly permitted by a DMRB or MCHW document.
2) Deviation from a recommendation or permission.

1.8.1 If it is not clear whether a provision in a document is mandatory or advisory prior to developing a departure application, advice should be sought from the Specialist Submission Point, via a Proposer,

Aspects not covered by requirements

1.9 Where it is found that an aspect of the works is not covered by any existing Highways England's requirements or advice documents, a departure application shall be submitted for an "Aspect not covered by requirements".

NOTE 1 *This includes situations where innovative materials, techniques or technologies are proposed where no requirements or permissions (given through "may" clauses) for their use have been published.*

NOTE 2 *The purpose of departure applications for aspects not covered is to record that an aspect is justified and to record where improvements to the standards can be considered.*

1.9.1 Where an aspect not covered by requirements is identified, the principles of the any current, authoritative and relevant design guidance (for example as published by a professional institution) should be used as the basis for design.

Incorporation of non-compliant works that do not have an approved departure application

1.10 The Project Manager shall be promptly notified if a feature incorporated into the works has been identified as:

1) not complying with the requirements, and
2) not in accordance with an approved departure.

1.11 The organisation that would have been responsible for submitting a prospective departure application shall either:

1) Propose measures to address the non-compliance or;
2) Make a retrospective departure application.

1.12 Where a departure is applied for retrospectively, the normal departures application and appraisal process shall apply.

NOTE *A retrospective departure application can be rejected even if the works have been completed, in which case Highways England can require the contractor to rectify the works at their own cost.*

Mutual recognition

1.13 Where mandatory content in a requirements and advice document requires adherence to a part of a "British Standard" or "British Standard which is an adopted European Standard" then the referenced parts shall be considered as requirements.

1.14 Any reference in a document to a "British Standard", or to a "British Standard which is an adopted European Standard", shall be taken to incorporate the relevant parts of any of the following standards:

1) a standard or code of practice of a national standards body or equivalent body of any EEA state;
2) any international standard recognised for use as a standard or code of practice by any EEA state;
3) a technical specification recognised for use as a standard by a public authority of any EEA state; and
4) a European Technical Approval (ETA) issued in accordance with the procedure set out in directive 89/106/EEC.

1.15 A departure application shall not be required where a supply chain member invokes the above mutual recognition requirements and demonstrates that an equivalent level of performance and safety is provided.

NOTE *Highways England can undertake scheme level appraisal of such proposals and reject them if it is demonstrated that an equivalent level of performance and safety is not provided.*

Traffic signs and road markings

1.16 Authorisation of traffic signs (including road markings) that are not prescribed in the Traffic Signs Regulations and General Directions (TSRGD 2016 [Ref 21.I]) as amended is a separate statutory process, therefore a departure shall not be used for authorisation of non-prescribed traffic signs.

2. Roles

Design Organisation

Designer

2.1 The Designer shall identify departures associated with their design and develop the associated departure applications.

2.2 The Designer shall implement the determination.

Proposer

2.3 The Proposer shall be an individual nominated by the Design Organisation to oversee the development of a departure application and submit it for appraisal.

2.3.1 The Proposer should be a senior technical expert who is familiar with proposing departure applications in the technical field of the departure.

NOTE *The primary objective the Proposer role is ensuring that departure applications are submitted such that they contain all the information required to support the Technical Specialist's appraisal. It is intended that, over time, Proposers develop effective relationships with the relevant Specialist Submission Point and Technical Specialists to raise the overall quality and efficiency of the departures process.*

2.4 The Proposer shall verify that applications are assessed and fully justified prior to submission.

Major Projects and Operations Directorate

Project Manager

2.5 The Project Manager shall authorise the submission of a departure application and, based on the Technical Specialist's recommendation, determine if it may be incorporated into the works.

2.5.1 The Project Manager role may be undertaken by a scheme's project manager, project sponsor or a delegate, as agreed on a scheme basis.

2.5.2 The Project Manager may choose automatically accept the Technical Specialist's recommendation.

NOTE *Following successful use within the Structures discipline, this mechanism has been introduced across all disciplines as a means of streamlining the approvals process.*

2.6 For works not promoted by Highways England, the Project Manager shall be the representative that interfaces with the scheme and is responsible for technical assurance. This is usually a member of the Operations Directorate.

Safety, Engineering and Standards

Departures Administration Team

2.7 The Departures Administration Team shall provide assurance tools and resources to support the implementation of the departures process.

NOTE *The Departures Administration Team is the system owner for DAS and can provide advice on process or software related queries.*

Specialist Submission Point (SSP)

2.8 The Specialist Submission Point shall be the initial point of contact for Safety and Engineering Standards for a departure.

NOTE 1 *Specialist Submission Points can be appointed on a national or regional basis and often combine this role with another (e.g. as local Technical Approval Authority for structures).*

NOTE 2 *The Departures Administration Team maintain a list of Specialist Submission Points and can advise on the correct contact for a given departure.*

2.9 The Specialist Submission Point shall nominate the Technical Specialist and Authorising Signatory.

2.9.1 The Specialist Submission Point may select themselves as the Technical Specialist and/or Authorising Signatory.

2.9.2 The Technical Specialist may also be nominated as Authorising Signatory.

Technical Specialist

2.10 The Technical Specialist shall undertake technical appraisal of a departure application and provide a recommendation for determination of the application.

2.10.1 Where a departure is particularly contentious or novel, the Technical Specialist may engage formally or informally with the Designer to support their understanding of the evidence or justification needs to support the departure application, or provide a provisional agreement to help manage project risks.

NOTE *This manual contains the requirements and advice for preparing a departure application, but there can be specific circumstances which mean that the application would benefit from additional guidance from the technical specialist.*

2.10.2 Where the departure interfaces with technical aspects of another discipline, the Technical Specialist should consult with the relevant team(s) within Safety and Engineering Standards.

Authorising Signatory

2.11 The Authorising Signatory shall authorise the recommendation on behalf of Safety and Engineering Standards.

NOTE 1 *The Authorising Signatory is a new role in DAS 3.0, but has been introduced following successful use of a similar role by the Structures discipline. The role provides a means of quality management for the recommendation and can be used to a second opinion that the right level of risk is accepted.*

NOTE 2 *Where the Project Manager has elected to automatically accept the Technical Specialist's recommendation, the Authorising Signatory is the final review before the application is returned to the designer for implementation.*

3. Process overview

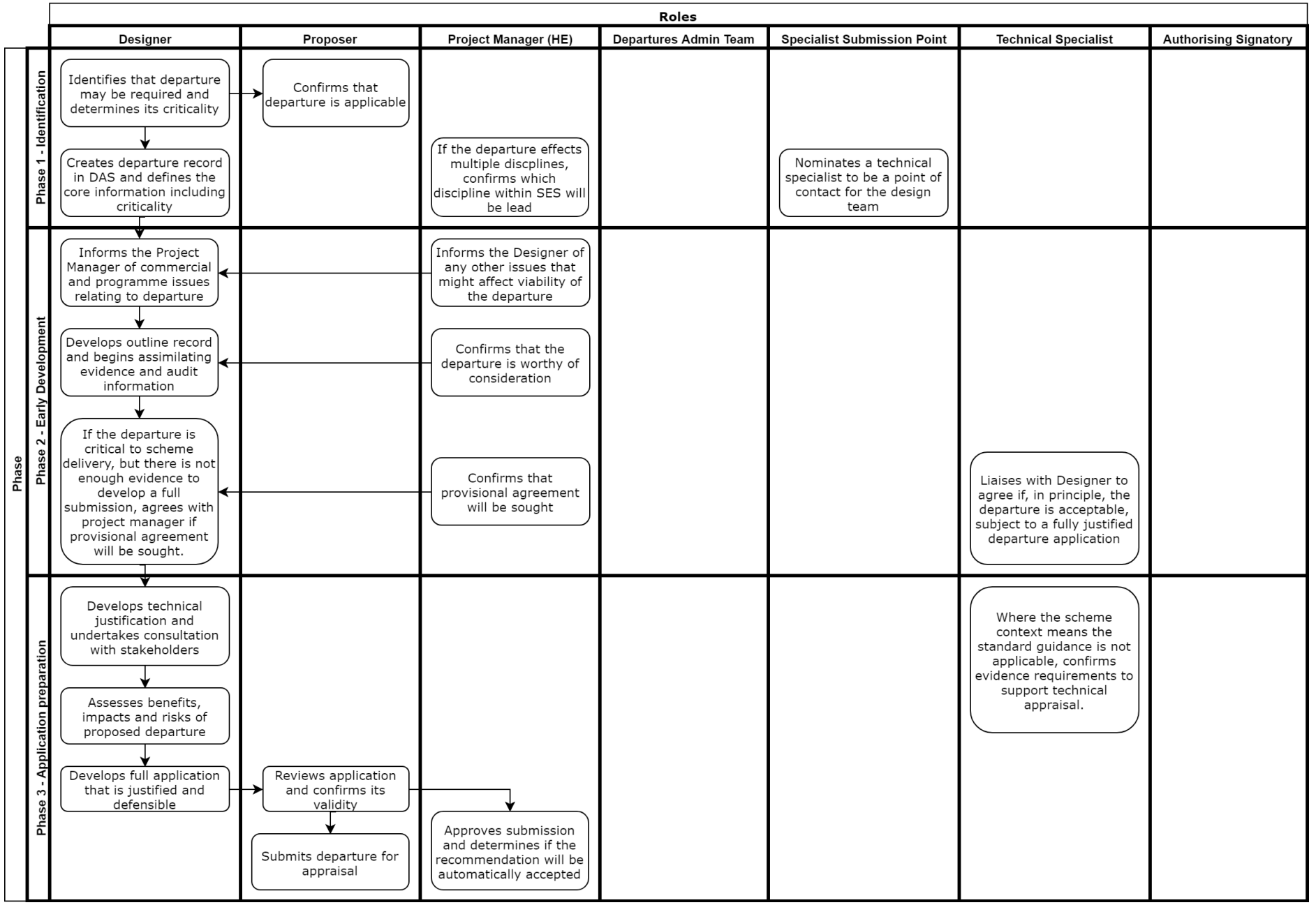
General

3.1 The process for handling departures outlined in Table 3.1 and Figure 3.1a and 3.1b shall be followed.

Table 3.1 Intent of the phases of the departure process

Phase	Intent
1 - Identification	Departures are identified and recorded early in the project life cycle to support project risk management and resource planning.
2 - Early development	Departure is given an early assessment to better understand its criticality to the project and acceptability to the business. Supports project risk management.
3 - Application preparation	Departure is fully assessed for benefits, risks and impacts across the asset life cycle and to record a full technical justification. Robust guidance on the content of departure applications and liaison between the Designer and Technical Specialist mitigates over- or under-developed applications that result in wasted effort by all parties. Project Manager authorises submission.
4 - Administrative check	Departure is checked to avoid incomplete applications being passed to a Technical Specialist for appraisal.
5 - Allocate Technical Specialist	An appropriate Technical Specialist is identified to conduct the appraisal. To promote continuity, this should be the same person who has been engaged in phases 2 and 3. Based on the complexity of the departure an appropriate Authorising Signatory is identified to authorise the recommendation in phase 7.
6 - Technical Appraisal	The application is appraised to confirm it presents: 1) a justification demonstrating that the proposal is technically robust, addresses the needs of stakeholders and includes appropriate monitoring post-implementation; and 2) a benefits, impacts and risks assessment that demonstrates that the benefits outweigh the dis-benefits and that impacts and risks have been mitigated. A recommendation is made to the Project Manager as to what the determination should be.
7 - Determination	The Project Manager determines the outcome of application and informs the Designer whether it is: 1) approved; 2) approved with conditions; or, 3) rejected.

Figure 3.1a Overview of departures process phase 1 - 3



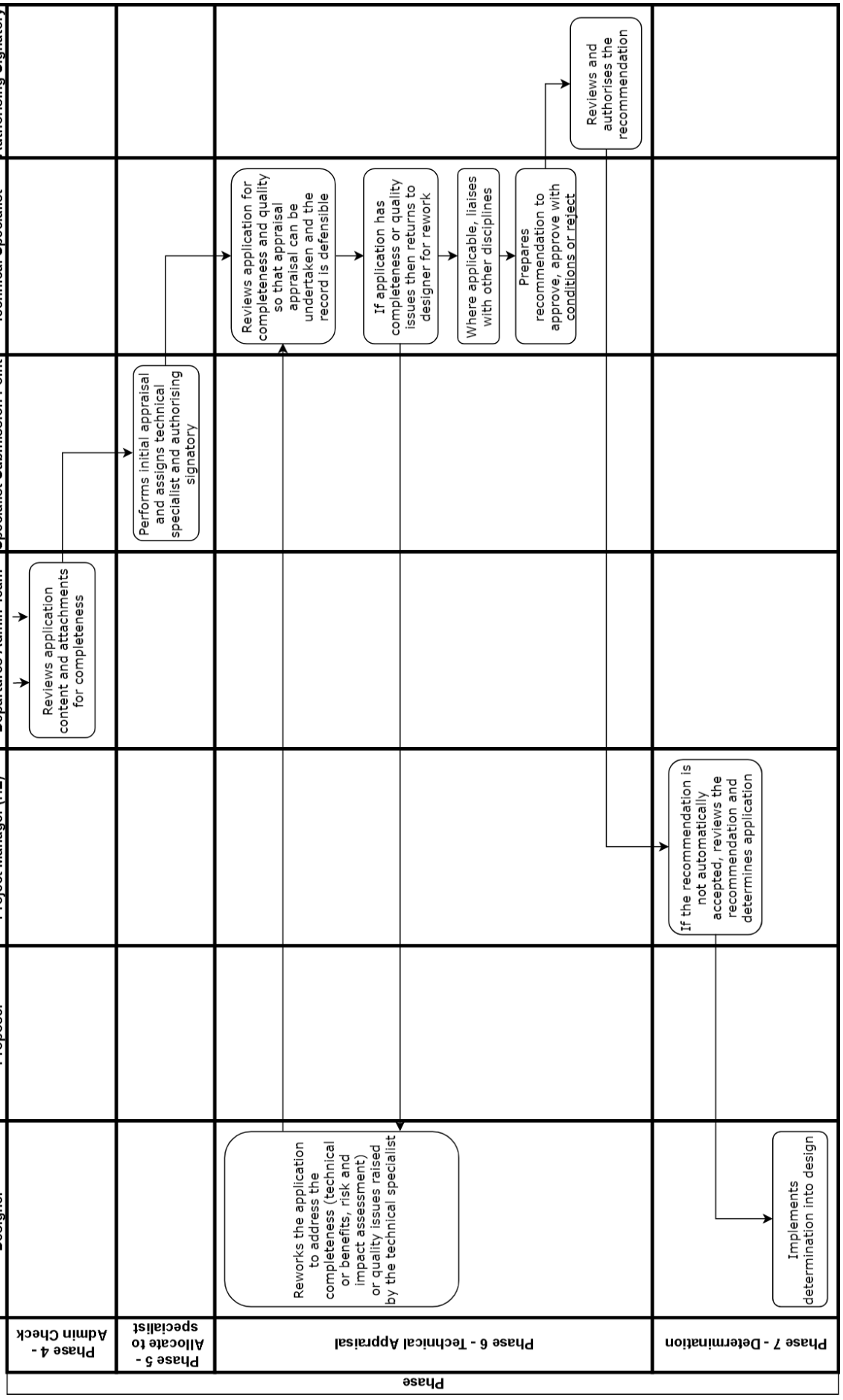


Figure 3.1b Overview of departures process phase 4 - 7

3.1.1 The Proposer may withdraw a departure application at any time, in the event that the Designer no longer requires it as part of the design or the design has changed.

Phase 1 – Identification

3.2 The need for a departure shall be identified as early as possible in the scheme life cycle.

3.2.1 If the Designer is unfamiliar with applying for departures, before proceeding further a Proposer who does have relevant experience should be consulted to confirm that a departure would be required and offers value.

3.3 Once a departure has been identified it shall be categorised into one of the following departure criticality categories given in Table 3.3.

Table 3.3 Departure criticality categories

Category	Description
5	Departures that are fundamental to the viability of the scheme.
4	Departures that are fundamental to the selection of options for the scheme
3	Departures that are fundamental to the delivery of commitments made through consultation or statutory procedures
2	Departures that are not fundamental, but have impact one other disciplines or suppliers during detailed design and can be managed through value engineering during detailed design
1	Departures that are not fundamental and do not have impact on other disciplines or suppliers and can be managed through value engineering during detailed design
0	Departures that relate to non-compliant features incorporated into the works that do not have an approved departure application

NOTE 1 Critical departures can represent a significant risk to the viability of a scheme. A principal outcome of the departures process is to mitigate the risk of a scheme progressing on the assumption that a critical departure is acceptable without verifying this with stakeholders, especially SES technical specialists.

NOTE 2 Examples of highly critical departures include:

1) Departures that effect the scheme extents ("red line boundary").

2) Use of a more cost effective method or material that upon which a business case or funding allocation is based.

3) Commitments made in a ministerial announcement that rely on approval of a departure.

NOTE 3 The departure's criticality can be stated with the GG 104 category (e.g. "5A" or "4C") to aid communication of the relative risk associated with departures, combining programme and safety risk into a single communication device.

3.4 The Designer shall notify the Project Manager of the possible need for a departure application as soon as it is identified.

3.5 Once identified, the Designer or Proposer shall create a record within DAS including:

1) Key scheme information (road, area, current project stage, key dates, Project Manager and a description);
2) A summary of the nature of the departure;
3) The discipline to which the departure relates;
4) An estimated submission date for the departure application; and
5) Contact information for the Designer.

3.6 Designers shall be responsible for identifying any other departures and/or relaxations affecting (or potentially affecting) the acceptability of the departure under consideration before the proposals are developed.

3.7 The lead Safety Engineering and Standards team shall confirm the Specialist Submission Point.

3.8 The Specialist Submission Point shall nominate a Technical Specialist to provide advice during early development, prior to the submission of the departure application.

3.8.1 To promote continuity and consistency, the Technical Specialist that is identified to provide advice during early development should be selected on the basis that they will be the preferred candidate to appraise the departure when it is submitted.

Phase 2 – Early development

3.9 The Designer and Project Manager shall discuss the contractual, commercial and programme risks associated with the departure.

3.10 The Designer shall develop an outline record that includes key details about the departure within DAS, including a clear and concise statement setting out the nature of the departure as well as the key assumptions, parameters and constraints.

NOTE *DAS can also be used to store evidence, drawings and other supporting information to support the outline definition of the departure.*

3.10.1 The level of detail should be proportional to the information available at the stage in the project life cycle it is uploaded.

3.11 The Project Manager shall determine if the proposed departure is worthy of any further consideration, considering the following factors:

1) technical, contractual, commercial or programme benefits, and;
2) safety, statutory, environmental or operational impacts;

3.12 The Designer and Project Manager shall agree if provisional agreement for the departure will be sought from the relevant Safety Engineering and Standards team based on the criticality of the departure to the scheme.

NOTE *Further detail on provisional agreement is given in Section 4.*

3.12.1 Any additional guidance on the information required by the relevant Safety Engineering and Standards team in order to consider provisional agreement should be followed.

3.13 The Technical Specialist shall review the information provided to date by the Designer and determine if provisional agreement will be given to a proposed departure.

3.13.1 Where a departure interfaces with other disciplines, the Technical Specialist should seek advice from the relevant Safety and Engineering Standards teams.

3.13.2 In determining whether provisional agreement will be granted, the Technical Specialist should take into account the evidence constraints at the project stage and consider if there are any issues with the fundamental principles of a departure.

3.14 The granting of an provisional agreement shall not preclude a future recommendation of rejection for a full departure application.

Phase 3 – Departure application preparation

Assessment

3.15 The Designer shall assess the benefits, impacts and risks of the departure to develop a justification to support the application.

NOTE *Further detail on assessment is given in Section 5.*

3.16 The designer shall consult stakeholders and collect other evidence as necessary to support the assessment.

NOTE *Section 5 gives guidance on the evidence and consultations required to be included as part of a departure application and Appendix C gives additional guidance by discipline.*

3.16.1 Where assessment requirements in this manual or in a requirements and advice document is not applicable due to the specific attributes of a departure, the Designer should request departure specific guidance from the Technical Specialist.

3.17 Where there are any interactions with local roads, the local highway/road authority shall be consulted.

NOTE *Further detail in interaction with local roads is given in Section 8.*

Application preparation

3.18 The departure application shall be prepared by the Designer.

3.19 The timing of the departure application shall be discussed with the Project Manager prior to submission, taking account of the potential contractual, financial and programme impacts of the determination.

3.20 All applications shall be accompanied by a full assessment of the impacts and benefits, the risks identified and mitigation measures to be incorporated, and an overall justification.

NOTE *Further detail on the requirements for the application are given in Section 5.*

3.20.1 An independent review of the departure application by an external organisation may be undertaken at this stage at the request of the Project Manager.

3.21 The Proposer shall review the departure application prepared by the Designer prior to submission and ensure that the application is error free and fully justified.

3.22 Highways England staff shall not compile part or all of a departure application on behalf of a Proposer.

3.22.1 Where the Design Organisation is not a member of the Highways England supply chain and is not experienced in preparing departure applications, advice may be sought from Safety Engineering and Standards on the required level of information to support the application.

3.22.2 Support for producing a departure may be sought from the incumbent Service Provider (MAC, MA, TMC, DBFO or Asset Support Contractor) for the relevant road in question, or a suitably qualified and experienced consultant with relevant highway design expertise and appropriate professional indemnity cover could be engaged.

Project manager review

3.23 The Project Manager shall confirm that they support submission of the application.

3.23.1 The Project Manager should review the full application including any supporting documentation to be attached.

3.23.2 The Project Manager may give approval to submit a departure prior to the full application being complete, subject to the design organisation operating a suitable quality management system.

NOTE *Further detail on the Project Manager Review is given in Section 6.*

3.24 Prior to submission, the Project Manager shall indicate if they automatically accept the Technical Specialist's recommendation or if they would like to determine the departure themselves.

NOTE *Further guidance on predetermination by the Project Manager is given in Section 6.*

3.25 The application shall not be submitted unless it has received approval from the Project Manager.

Phase 4 - Departures Administration Team Check

3.26 Prior to passing the departure to the Specialist Submission Point, the Departures Administration Team shall review the application for completeness and for the attachments listed in appendices B and C.

3.27 If required information or attachments are missing, the application shall be returned to the Designer for rework.

NOTE *The Departures Administration Team review does not include any form of quality or technical review.*

Phase 5 – Allocate Technical Specialist

3.28 The Specialist Submission Point shall specify:

1) who will carry out the technical appraisal;
2) if any, stakeholders that the Technical Specialist should consult to inform the recommendation; and
3) who will act as the Authorising Signatory.

NOTE *Further detail on SSP allocation to Technical Specialists is given in Section 7.*

3.29 Where technical appraisal by more than one Safety Engineering and Standards team is required the Specialist Submission Point shall pass the application to the relevant team(s).

Phase 6 – Technical appraisal

3.30 The Technical Specialist shall appraise the application in order to ensure that the proposal is technically justified in the individual circumstances of the specific case.

NOTE *Further detail on the technical appraisal is given in Section 7.*

3.31 Any departure application that does not contain all the evidence requirements described in this manual and/or agreed in Phase 3 or contains errors shall be returned to the Designer for rework.

NOTE *In DAS 3.0 "returned for rework" has replaced rejection for departures that cannot be appraised due to quality or completeness issues. In this leaner process, revisions will not need Project Manager approval to submit and any time limits for each phase will be reset.*

3.32 The Technical Specialist shall make a recommendation that the departure application should be 'approved', 'approved with conditions' or 'rejected'.

3.33 The Authorising Signatory shall review and authorise the recommendation.

NOTE *Further detail on the Authorising Signatory's review is given in Section 7.*

Phase 7 – Determination

3.34 The Project Manager shall determine that the departure application is 'approved', 'approved with conditions', or 'rejected'.

NOTE *If the Project Manager has specified during Phase 3 that the Technical Specialist's recommendation will be automatically implemented then the departure application is automatically determined in accordance with the Technical Specialist's recommendation.*

3.35 Where the Technical Specialist's recommendation is not automatically implemented the Project Manager shall review the recommendation and determine the departure application.

3.36 The final determination decision shall take account of any contractual, commercial, programme and other non-technical issues that may apply as well as the Technical Specialist's recommendation.

NOTE *Further detail on the determination of the departure application is given in Section 6.*

3.37 The approval of a departure application, with or without conditions, shall not imply that Highways England relieves the Designer of any responsibility for the design.

3.38 The Designer shall comply with Highways England's decision and any conditions.

3.39 Approval of a departure application shall be interpreted as a variation of the requirement to the unique circumstances of the site in question and not be construed as a general approval for use elsewhere.

3.40 Any conditions attached to the departure application shall be treated as requirements which have to be met by the design.

3.41 If the departure is subsequently not incorporated into the design or the works it shall be withdrawn by the Designer.

NOTE *The approval assumes the departure will be implemented.*

Revision of departure applications

3.42 In order to maintain an audit trail, where a departure application has been returned for rework or rejected and an amended application is to be submitted, it shall be re-submitted as a revision to the original application and not as a new application.

3.42.1 Where a departure application is re-submitted it should include evidence that the issues that previously resulted in the a return for rework or rejection have been addressed.

3.43 If there is a change to a determined departure that will require a new approval, the departure shall be withdrawn and a new application shall be submitted.

Validity of departure applications post-determination

3.44 Approved departure applications not yet incorporated into the works shall become invalid in the following situations:

1) where superseding requirements are implemented in the intervening period;
2) where progression through the design process results in a change to the previously proposed departure which generates additional risk;
3) if a material change in a scheme design parameter generates additional risk;
4) where research or legislation affects the basis on which the departure application was approved; and
5) if the Designer or Project Manager considers that a change in any other factor may affect the previous approval.

3.45 If the departure is to be incorporated into the works after the departure application approval has been invalidated, then the Project Manager shall consult the Technical Specialist to determine if a revised application is required or if the validity of the approval can be extended.

3.46 The designer shall review each approved departure at each subsequent project stage gate to assess its validity.

4. Timely handling of departures

Timely handing and project risk

4.1 Risk management must be undertaken throughout a project that impacts the spending of public money [Ref 5.N].

4.1.1 Risk management relating to departures should include identifying the appropriate point in the life cycle for development and submission of departure applications.

NOTE 1 Departures can be used to derive significant benefits in cost, delivery or outcomes and decisions are often taken at early project stages that depend on a departure being approved later in the project life cycle. The rejection of a critical departure at a late project stage can require significant re-engineering that results in delays, increased costs and higher environmental impact. Therefore, critical departures can present a key project risk to be managed early in the project life cycle.

NOTE 2 Schemes can also have departures that do not impact the deliverability or outcomes of a project. Such departures do not present a key project risk and handling can therefore be deferred to a detailed design stage. However, every departure can become critical to the on-time delivery of a detailed design, therefore a timely approach to handling all types of departures is necessary.

NOTE 3 The detail required to justify a critical departure is often not available to support a full application at early project stages, therefore a "provisional agreement" mechanism has been introduced to reduce the risk of departures being rejected on technical grounds.

De-risking projects through timely handling of departures

4.2 At the beginning and end of each project stage (the "stage boundary"), the Designer and Proposer shall:

1) Identify any new departures that do not have a record in DAS;
2) Review any previously identified departures to confirm a departure application is still required and withdraw those that are not;
3) Confirm the criticality category for each identified departure (specified in clause 2.6);
4) Determine whether each identified departure requires a provisional agreement;
5) Confirm the development strategy for each identified departure, including
    a) specifying when the departure application will be developed and submitted, and
    b) identifying any tasks that need to be undertaken to facilitate the development of the departure and when these will be undertaken; and,
6) Communicate the outcome of this exercise with the Project Manager.

4.3 The development strategy for each departure shall be assessed on an individual departure basis such that the associated risk is managed to an acceptable level for the project stage.

4.3.1 Figure 4.3.1 indicates how each category of departure should be handled at each project stage.

Figure 4.3.1 Indication of how departures should be handled to manage project risks

		Stage of Project									
Process		PREPROJECT			OPTIONS		DEVELOPMENT			CONSTRUCTION	
GATEWAY REVIEWS				1		2	3A		3B	4	5A
STAGE GATE ASSESSMENT REVIEWS (SGAR)					1	2	3	4	5	6	7
Major Projects Lifecycle				Strategy Shaping & Prioritisation	Option identification	Option Selection	Preliminary Design	Statutory Procedures & Powers	Construction Preparation	Construction Commissioning and Handover	Closeout
				0	1	2	3	4	5	6	7
Operations Directorate Lifecycle		*Set programme allocations*	*Assess needs*	*Prioritise needs*	*Option identification*	*Option Selection*	*Design & Planning*			*Construction Commissioning and Handover*	*Closeout*
		0	*1*	*2*	*3*	*4*	*5*			*6*	*7*
Departure Category - based on Criticality											
5	Departures that are fundamental to the viability of the scheme			Managed	Managed	Determined	Determined	Determined	Determined	Determined	Determined
4	Departures that are fundamental to the selection of options for the scheme by virtue of their impact on one or more disciplines			Identified	Managed	Determined	Determined	Determined	Determined	Determined	Determined
3	Departures that are fundamental to the delivery of commitments made through consultation, having considered all disciplines				Identified	Managed	Managed	Determined	Determined	Determined	Determined
2	Departures that do not have material impact on the consulted design of one or more disciplines as prepared for progression				Identified	Identified	Managed	Managed	Determined	Determined	Determined
1	Departures that have the potential to have an effect on detailed design development of one of more disciplines but which can be managed by value engineering in stages 5-7				Identified	Identified	Identified	Managed	Determined	Determined	Determined
0	Departures that relate to non-compliant features incorporated into the works that do not have an approved departure application.									Determined	Determined

NOTE *Effective planning for the preparation and submission of departure applications through categorisation can remove departures from the project's critical path, allowing collection of evidence and undertaking of consultations in parallel with design development. This has the benefit of reducing project risk and potential duplicated effort.*

4.3.2 The development strategy should take account of time required to undertake evidence collection, consultations, risk assessments and development of mitigation measures for the departure application.

4.3.3 The planned submission date for the departure application should account for the time required for technical appraisal so that the outcome of the determination can be incorporated within the constraints of the project programme.

4.3.4 To mitigate the risk of the departure being rejected or returned for rework, where the standard guidance is not applicable due to the specific attributes of a departure, early engagement with the Technical Specialist should be used to confirm the evidence and justification needs to support the application.

Provisional agreement

4.4 The Designer and Project Manager shall determine if provisional agreement will be sought as part of risk management for critical departures at early project stages.

NOTE 1 *Provisional agreement allows the Designer to work with the Technical Specialist to establish if, in principle and later supported by a full technical justification and benefits case, the proposed departure is acceptable. The intent is not to assess the benefits, risks and impacts of a proposed departure at this stage, but to reduce the risk of projects proceeding on an untested assumption that a departure can be approved.*

NOTE 2 *Provisional agreement is an appropriate mechanism for departures at an early stage of the project life cycle that are critical for scheme delivery and for exploring the use of innovative methods, products or materials.*

4.4.1 "Managed" in Figure 4.3.1 indicates at what stage provisional agreement should be sought for departures with a criticality category of 3 - 5.

NOTE *If the project has reached the detailed design stage a full submission is likely to be more appropriate.*

4.4.2 Provisional agreement should not be used for departures with a criticality category of 0 - 2, instead internal design management should be used for managing associated risks.

4.5 Using key programme decision points (e.g. design fix, stage gate assessment review, etc) as a guide, the timing of the request for provisional agreement shall be agreed between the Designer, the Project Manager and Technical Specialist.

4.6 To support a provisional agreement request, the Designer shall prepare an outline departure record within DAS.

4.6.1 The outline departure record should contain enough information to allow the Technical Specialist to understand the scope, context and drivers for the departure.

4.6.2 The Technical Specialist should indicate to the Designer if there are any areas where clarification is required before a provisional agreement decision can be given.

4.6.3 When allocating resources to develop an outline departure record to support an provisional agreement, the Project Manager should ensure that a balance is maintained between:

1) Preparing enough information so that the Technical Specialist can make an informed decision;
2) Limiting the amount of design work undertaken at an earlier stage than it would otherwise be done, and;
3) Benefiting from the overall project risk reduction resulting from the "in principle" decision.

4.7 If provisional agreement is given, it shall be recorded in DAS either by:

1) The Technical Specialist adding a comment to the departure's diary, or;

2) The Designer attaching the minutes or correspondence confirming the provisional agreement to the departure and referencing this evidence through a comment in the diary.

5. Preparing a departure application

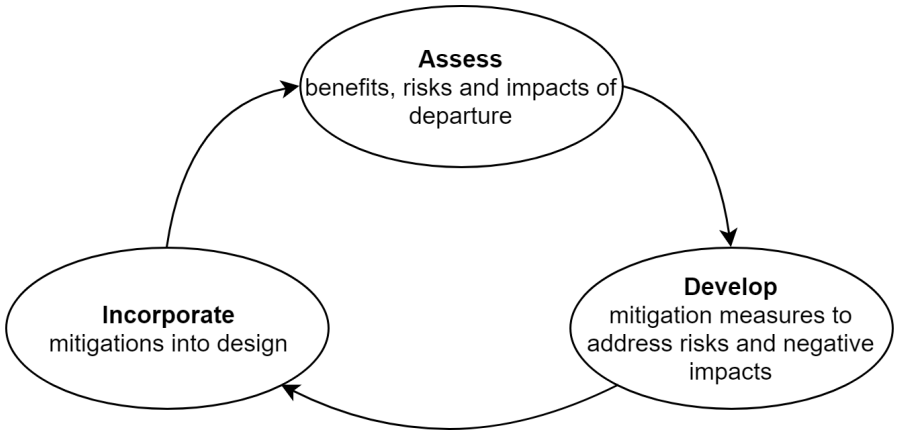
5.1 Where not explicitly stated, requirements in this section shall be undertaken by the Designer and overseen by the Proposer.

Assessing a departure

5.2 The Designer shall carry out a full assessment to identify the benefits, adverse impacts and risks associated with a proposed departure or the whole life of the scheme including during maintenance and demolition.

5.3 An iterative process of design development and assessment shall be undertaken to refine the proposed departure as shown in Figure 5.3.

Figure 5.3 Assessment and development process



5.4 The assessment shall include a comparison with a design that is fully compliant and, if applicable, any other non-compliant design options that have been dismissed.

5.5 Benefits, Impacts and Risks shall be assessed under the following headings:

1) Safety (Operation) – in accordance with GG 104 2018 [Ref 8.N], consider all relevant safety risks to road users and other parties during operation of the road;
2) Safety (Construction, Maintenance and Disposal) – in accordance with GG 104 2018 [Ref 8.N], consider all relevant safety risks to workers and the public during construction, maintenance and disposal;
3) Technical – consider all relevant technical issues;
4) Programme – consider any effects on the project's critical path;
5) Cost – consider any effects on the whole life cost of the scheme;
6) Environmental – consider all relevant environmental issues;
7) Innovation – consider the benefits for both the project and opportunity to standardise any innovative aspects along with any risks;
8) Durability / Maintenance – consider implications for future maintenance; and,
9) Network Availability – consider network availability implications during construction, maintenance and normal use.

5.6 Any other departures or relaxations that impact or interface with the departure under consideration shall be considered as part of the assessment and addressed in the justification.

NOTE *Several departures and/or relaxations in the same or adjacent locations can have a cumulative effect that can be either positive or negative and can include new proposed departures or existing departures at the site. This is often overlooked where associated departures are across different disciplines.*

5.7 In order for the departure application to be approved, the assessment shall demonstrate that the benefits of a proposed departure outweigh any adverse impacts.

Stakeholders

5.8 The assessment shall include engagement with stakeholders and consideration of their needs as agreed with the Project Manager and Technical Specialist.

5.8.1 Stakeholder consultation may include the following groups:

1) Project Management
2) SES Technical Specialists
3) Design - Other design disciplines, Principal Designer
4) Construction - Principal Contractor, specialist suppliers
5) Maintenance - Maintenance organisation (MAC, ASC, ALDM, etc)
6) Operation - Operations Liaison Officer, Traffic Officer Service, Emergency Services, National Traffic Control Centre, Regional Control Centres

NOTE *Section 9 gives additional guidance for interaction with local roads authorities and other infrastructure owners.*

5.8.2 Stakeholders are likely to have limited capacity to participate in engagement activities, therefore the any request for engagement on a departure should be proportionate to the need and respectful of the stakeholder's circumstances.

NOTE 1 *Engagement with Technical Specialists can be supported by the Safety Engineering and Standards Technical Partners.*

NOTE 2 *It is not a responsibility of the Technical Specialist to help the Designer develop the departure application, but they can advise on what would constitute sufficient justification for the departure to be recommended for approval.*

5.8.3 Where consultation notes and minutes are used to support the justification or impacts assessment, they should be attached to the application as evidence.

Safety

5.9 Safety shall be the prime consideration when assessing any proposed departure.

5.10 The departure shall be treated as an activity in GG 104 2018 [Ref 8.N] and subject to the requirements of Safety Risk Assessment.

5.11 The departure shall be categorised as Category A, B or C in accordance with GG 104 2018 [Ref 8.N].

5.12 The categorisation of both the scheme and the departure shall be recorded in the application.

NOTE 1 *A Category C project can have Category A departures that do not present a safety risk that requires special attention. Whereas a Category C departure on a Category C project means that significant attention is required to manage the safety risks.*

NOTE 2 *Combining the criticality (0-5) with the safety risk category (A-C) can help project managers and designers determine when in the project life cycle a departure will be handled.*

5.13 The safety control review group already established for a Category B or C scheme shall be used to endorse the safety risk assessment process for the departure.

NOTE *Departures on Category A schemes does not require referral to a safety review control group.*

5.14 A Technical Specialist in the field of the departure shall be invited to the safety control review group meeting in which the departure is discussed.

5.15 A compliant design shall be considered as the safety baseline for the risk assessment.

5.16 A safety risk assessment shall be undertaken and the output attached to the application.

5.17 Where safety review control group is referred to in the justification, the minutes of relevant meetings shall be attached to the application.

5.18 Where referred to the National Safety Control review group, the minutes of the meeting in which the departure is discussed shall be attached to the application.

Programme benefit

5.19 Where the departure is justified at least in part by a programme benefit, then the predicted net programme benefit shall be estimated and included as part of the departure application.

5.20 The programme for a compliant design shall be used as a baseline for calculating the net programme benefit.

5.21 The net programme benefit calculation shall take into account both the design and construction programme, and any programme implications of the submission and appraisal of the departure application.

5.22 The calculation of the programme benefit shall be included in the departure application with the reasoning for the programme reduction clearly explained.

Cost benefit

5.23 Where the departure is justified at least in part by cost savings, then the predicted net cost benefit of the departure shall be calculated and explicitly stated as part of the departure application.

5.24 The cost for a design in accordance with the requirement under consideration shall be used as a baseline for calculating the net cost benefit.

5.25 This net cost benefit shall be calculated on a whole life cost basis, taking into account:

1) The cost of developing the departure application through phases 1-3 of the departures process;
2) Design costs;
3) Construction costs;
4) Operational costs;
5) Maintenance costs;
6) Any proposed mitigation measures or monitoring costs, and;
7) Decommissioning costs.

5.25.1 The benefits may be attributable directly to Highways England or may be stated as benefits to the wider economy, other stakeholders, etc.

5.26 The calculation of the cost benefit shall be included in the departure application.

Environmental impacts

5.27 Any resultant positive or negative impact of the proposed departure on scenic, historic, or other environmental features shall be assessed.

NOTE *The environmental volumes of the DMRB (e.g. LA 101 [Ref 9.I]) give requirements advice for environmental design and assessment.*

5.28 The environmental impact for a compliant design shall be used as a baseline for calculating the environmental impact.

Innovation

5.29 Where the departure relates to the use of a novel technology or method the risks associated with the innovative aspects of the departure shall be considered.

NOTE *Highways England actively encourages innovation throughout all its activities.*

5.29.1 Where a departure relates to the use of a novel technology the anticipated benefits from the feature in the short, medium and long term should be described, together with any associated risks in the same time frames.

5.29.2 The return vs risk profile for the innovation should be assessed and described with a recommendation for adoption.

5.29.3 Where available, the assessment should reference relevant research results and/or examples of use in other schemes, either in the UK or in other countries, along with any additional information that has the potential to reduce the perceived risk of the innovation (and hence increase the value).

NOTE More detail on departures for pilots and trials is given in Section 9.

Maintenance considerations

5.30 The impact of the departure on routine, planned and unplanned maintenance regimes shall be assessed.

NOTE 1 Maintenance impacts are included in the cost benefit calculation, safety risk assessment, etc. detailed above and can also have specific impacts on the maintainer's regimes that can be disruptive or support their activities.

NOTE 2 Table 5.30N lists maintenance factors that can be impacted by or influence the justification for a departure.

Table 5.30N2 Factors to consider when assessing the maintenance impacts of a departure

Asset Maintainability	Design life of assets Frequency of routine and planned activities Reliability Access requirements Duration of major and minor maintenance activities Means of removal or replacement Impact of maintenance works on customers
Maintenance regimes	Impact of specific maintenance requirements on standard operating and maintenance regimes for the route or section of the motorway and all-purpose trunk road network or the adjacent local authority network Plant and equipment available to the maintainer Skills and capacity of maintainer to adopt alternative regimes Existing risks Traffic management requirements including lane closures, contraflow, diversion routes
Adjacent assets	Access to adjacent structures and ancillary items such as drainage, signs, lighting, signalling equipment, telephones, planting and mown areas Access to ploughed snow storage, salting routes and diversion routes for routine winter maintenance activities

5.30.1 The assessment for safe and satisfactory operation during maintenance works should be validated through consultation with operational teams, which can include adjacent infrastructure owners.

Equality, diversity and inclusion

5.31 The requirements given in GG 101 [Ref 4.N] for equality, diversity and inclusion shall be observed when assessing a departure.

5.32 Where an Equality Impact Assessment (EqIA) is carried out for a departure, it shall be attached to departure application.

Monitoring

5.33 Where, through consultation with the Technical Specialist and Project Manager, post-scheme monitoring relating to the departure is proposed, the application shall include details of:

1) The objective of the monitoring;
2) What is going to be monitored;
3) How it will be monitored;
4) How data will be collected and analysed;
5) The frequency of the proposed monitoring;
6) The duration of the proposed monitoring;
7) The cost of the proposed monitoring (including any set up and long term costs); and
8) Who will have responsibility (including funding) for the monitoring.

NOTE 1 Highways England's Strategic Plan emphasises the need to analyse the safety performance of schemes after construction.

NOTE 2 Even where the designer has not proposed monitoring, it can later be required by the technical specialist as a condition to approval.

The departure application

5.34 For a departure to be approved, the application shall:

1) demonstrate that the technical, contractual, commercial or programme benefits significantly outweigh the adverse impacts, when compared to a compliant design;
2) present a structured risk assessment identifying long and short term risks and any appropriate mitigation measures;
3) demonstrate how safety, environmental, sustainability, operational or other impacts have been considered and any necessary mitigation works required to be implemented as a result;
4) justify the need for a departure in the light of 1) to 3) above; and
5) propose monitoring to measure the performance of the departure.

5.35 The application shall contain enough detail to enable the Technical Specialist to make a recommendation on whether or not to approve the departure application and to be able to justify it afterwards without the need to ask the Designer further questions.

5.36 Regardless of any early engagement, the departure application shall be written assuming that the Technical Specialist has no prior knowledge of the scheme or area in which the scheme is situated.

5.37 Unless expressly permitted in Section 8, an individual departure application shall be made for each independent requirement, section or full requirement and advice document that is not met.

5.37.1 Where the departure results in a design the does not satisfy more than one interdependent requirement, additional requirements that are not met may be referenced as secondary requirements in the application form.

5.38 The application shall contain the information required for all departures by Appendix B and the discipline-specific guidance given in Appendix C, as well as information requested during early engagement with Technical Specialists.

NOTE 1 Incomplete application forms will be returned for rework by SES.

NOTE 2 Guidance on completing the application form is included in Appendix B.

5.39 If a section of the application form is not considered applicable then the reason why an answer has not been provided shall be stated in the application.

Attachments

5.40 Where attachments are included, the application shall:

1) state how each attachment relates to the case for the departure;

2) summarise the pertinent information relating to the application, and;

3) signpost the relevant content within the attachment where it contains information that is not directly relevant to the departure application, .

NOTE *Providing this summary assists the Technical Specialist in conducting a swift appraisal.*

5.40.1 Supporting information for several departures may be contained in the same report or document so long as the relevant areas of the report are clearly referenced in the departure application.

5.40.2 Attachments should be in PDF format or OpenDocument Format (ODF) v1.2.

NOTE *Records can be referred to many years after the departure is determined, therefore compatibility of data formats with future computing functionality is of utmost importance.*

5.41 A plain English title shall be given where a project-specific file naming convention (e.g. IAN 184 [Ref 5.I]) is used.

Governance applied by the design organisation

5.42 The Design Organisation shall apply its Quality Management System, in accordance with GD 2 [Ref 7.N], to the development of an application.

5.42.1 The proposed departure should be reviewed internally with interfacing disciplines to identify any potential areas of conflict or unanticipated impact.

6. Project governance for departures

6.1 Unless explicitly stated, the requirements in this sections shall be undertaken by the Project Manager.

6.2 The Project Manager shall make suppliers are aware of their responsibilities within the departures process.

Departure identification and assessment

6.3 When a potential departure is initially identified by the Designer, the Project Manager shall consider the associated risks and opportunities to the scheme and its benefits to agree whether the departure will be developed for submission.

NOTE Section 4 discusses management of project risks associated with departures.

6.4 The Project Manager shall review the Designer's proposed approach to assessing the departure to confirm it is proportionate and that appropriate technical assurance will be undertaken.

6.5 The Project Manager shall review and confirm the Designer's proposed approach to stakeholder consultation to support the assessment and justification and identify where additional consultation is required.

Pre-submission review

6.6 The Project Manager shall review the departure application prior to submission.

6.6.1 In determining if they support the application the Project Manager should consider the following:

1) The technical, contractual, commercial or programme benefits of the proposed departure;
2) The potential adverse impacts including any safety, contractual, commercial, statutory, environmental, programme or operational issues, including impacts on other disciplines or suppliers;
3) Whether the claimed benefits of the departure will actually be realised by Highways England;
4) Whether any undertakings given during statutory procedures (where applicable) will be breached; and
5) The responses from the consultations which have been undertaken.

6.7 The Project Manager shall confirm that stakeholders who will be directly impacted by the departure (e.g. the ECI contractor, maintainer, DBFO company, an interfacing infrastructure owner or local road authority) have been consulted and agree to the departure being submitted.

NOTE 1 This can be done individually on a departure by departure basis or as a single request covering all departure applications for a scheme or series of schemes.

NOTE 2 Guidance on interaction with local roads and other scenarios where there is interaction with third parties is given in Section 8.

6.8 If the Project Manager is of the view that the realised benefits of the departure outweigh the negative impacts the Project Manager shall approve submission of the departure.

6.8.1 If the case for the departure is clear, approval may be given to submit the departure application before the full application is developed on the basis that the Proposer shall not submit an incomplete submission.

NOTE It is not the Project Manager's responsibility to check the quality or completeness of the departure application.

6.9 If the Project Manager does not support the application they shall provide the Designer with the reasons for the decision, including an explanation of the issues that need to be addressed before they would be able to support the application.

Predetermination

6.10 As part of the approval to submit a departure, the Project Manager shall decide if they want to automatically determine ("predetermine") the departure application in line with the Technical Specialist's recommendation in certain cases or not.

6.10.1 A Project Manager may predetermine some or all of the following:

1) Automatically approve the departure when the Technical Specialist makes a recommendation to approve;
2) Automatically approve the departure with unchanged conditions when the Technical Specialist makes a recommendation to approve with conditions, and;
3) Automatically reject the departure when the Technical Specialist makes a recommendation to reject.

6.10.2 A departure should only be predetermined by the Project Manager where the justification for the departure is clear and there are no insurmountable contractual, commercial or programme implications.

NOTE 1 The facility to predetermine the departure is intended as a way to expedite the departure application process where the case for the departure is clear and the determination decision rests solely on the recommendation of the Technical Specialist.

NOTE 2 If a Project Manager decides to automatically implement the Technical Specialist's recommendation this is the last opportunity the Project Manager will have to review and influence the departure application prior to approval and incorporation into the design, or rejection.

6.11 If there is any interaction with local roads then the Project Manager shall always review the application following the Technical Specialist's recommendation.

Determination

6.12 Following a recommendation being made by the Technical Specialist, the Project Manager shall determine if the departure is:

1) Approved;
2) Approved with conditions, or;
3) Rejected

6.13 In the event that the Project Manager decides there are sufficient grounds to determine an application in a different way to the recommendation of the Technical Specialist, then Table 6.13 shows the appropriate course of action that shall be taken.

Table 6.13 Decision matrix for determining a departure where

<table>
<tr><th colspan="2" rowspan="2"></th><th colspan="3">Technical Specialist's recommendation</th></tr>
<tr><th>Approve</th><th>Approve with conditions</th><th>Reject</th></tr>
<tr><td rowspan="3">Project Manager's Determination</td><td>Approve</td><td>√</td><td>(see table cell to right)</td><td rowspan="2">Either:
1) Reject and ask the designer to resubmit departure addressing the Technical Specialist's concerns, or;
2) Undertake diligence, potentially through seeking independent advice and justify in DAS.</td></tr>
<tr><td>Approve with conditions</td><td rowspan="2">Record reasoning in DAS</td><td>√ if conditions are unaltered, else record in DAS</td></tr>
<tr><td>Reject</td><td>Record reasoning in DAS</td><td>√</td></tr>
</table>

6.14 The justification for approving a departure for which a recommended for rejection was made shall directly address the concerns stated by the Technical Specialist.

7. Appraising departure applications

7.1 Unless explicitly stated, the requirements in this sections shall be undertaken by the Technical Specialist.

7.1.1 Safety Engineering and Standards groups/teams may also develop further guidance for Technical Specialists covering issues specific to their technical discipline.

Early engagement

7.2 Where a departure is of sufficient complexity or criticality that the Designer requires input to minimise risk to design development, the Technical Specialist shall, if requested, provide an initial view of the proposed departure, raise any concerns and define any evidence that will be required to support the application that is in addition to that listed in Appendix B and Appendix C.

NOTE 1 An objective of such early engagement is to limit the number of departure applications that are either:

1) rejected because they would never be acceptable in any circumstance; or

2) returned for rework because they do not present the evidence or justification that the Technical Specialist requires to make a recommendation.

NOTE 2 Early engagement is not intended to introduce additional work for the Technical Specialist, but to formalise the input at the identification and development stages and can be through correspondence, design meetings, participation in SCRG or other forms of interaction.

7.2.1 The Technical Specialist should indicate provisional agreement on the departure application record, where they agree that:

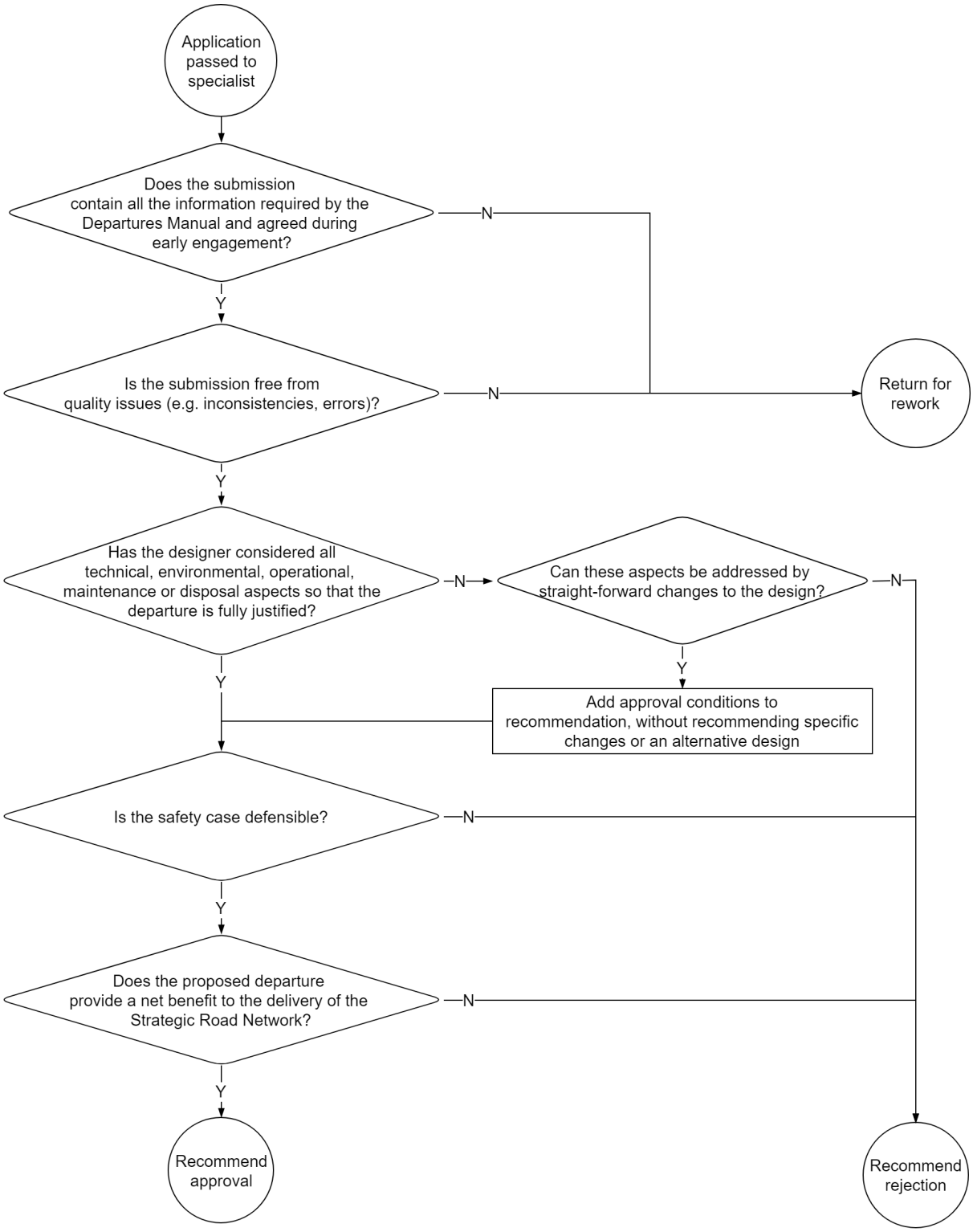
1) the departure is critical to scheme delivery;
2) the Designer has not yet got access to sufficient evidence for a full application, and;
3) if supported by a full justification, the departure would be acceptable.

NOTE Examples of departures critical to scheme delivery and requirements for provisional agreement are given in Section 4.

Technical appraisal

7.3 The Technical Specialist shall use the decision tree given in Figure 7.3 to appraise the departure application.

Figure 7.3 Technical appraisal decision process



7.4 The technical appraisal shall be based only on the information provided in the application.

7.5 Each departure application shall be considered on its own merits appropriate to the individual circumstances of the departure.

7.6 The safety case shall be appraised based on the safety implications of the departure and whether the proposed mitigation measures are sufficient for all stages of the asset's life-cycle:

1) Construction
2) Commissioning/Handover
3) Operation
4) Maintenance
5) Disposal

7.7 The Technical Specialist shall consider if any proposed monitoring is sufficient and if not, require additional monitoring as a condition of the departure application approval.

7.8 Applying professional judgement, the Technical Specialist shall decide if they consider that the proposed departure provides a net benefit to Highways England in fulfilling its objective of "delivering a highly performing strategic road network and the best possible service for road users and other stakeholders" [Ref 6.I] compared to a compliant design or alternative options that have been assessed and dismissed.

NOTE Particularly for third party schemes, a departure can be proposed based on its benefit to other infrastructure owners or the wider economy where there is little to no impact on Highways England's delivery of the Strategic Road Network.

7.9 Where the positive cumulative effect of multiple departures at one location is used to justify some or all of the departures, consideration shall be given to the effect of rejecting one of the departure applications on the technical appraisal of the other associated departure applications.

Making a recommendation

7.10 Having completed the technical appraisal, the Technical Specialist shall make a recommendation to the Project Manager as to whether the proposed departure application should be 'approved', 'approved with conditions' or 'rejected'.

7.11 The recommendation shall make it clear whether the departure application is justified in the individual circumstances of the case, based on the information supplied by the Designer, and give a full explanation of the reasoning.

7.12 The recommendation shall include a summary of any direct interaction with the Design Organisation that has taken place during appraisal to inform the recommendation.

7.13 Where rejection is recommended, the recommendation shall include the reasoning including any specific areas of concern.

NOTE In addition to allowing a free text narrative in the recommendation, DAS presents the technical specialist with options for recording the reasons for rejection that can be reported on and fed back to the design organisation for continuous improvement. This is also presented when "return for rework" is used.

Approval with Conditions

7.14 Conditions shall be stated as requirements (using "shall") for matters that are to be addressed by the Designer before the departure is incorporated into the works.

NOTE Conditions, when approved by the project manager, become a variance to the employer's requirements in the contract and therefore become a project requirement with the same status as standards.

7.15 Conditions shall not give an instruction / recommendation for a specific design change or propose an alternative design.

NOTE 1 Any recommendations made for a specific change or alternative design could make the Technical Specialist a Designer under CDM regulations and the Technical Specialist would have to demonstrate the health and safety had been adequately considered and addressed.

NOTE 2 Example conditions that would not make the Technical Specialist a Designer under CDM Regulations include:

1) The designer shall demonstrate that a certain performance is achieved.

2) Additional requirements for testing, commissioning or handover.

3) Additional monitoring or reporting to be submitted to SES for knowledge purposes (e.g. information to later updating a standard).

Authorising the recommendation

7.16 The Authorising Signatory shall review the Technical Specialist's recommendation to confirm that an appropriate balance of risk and opportunity has been accepted and that the recommendation (including any conditions) is proportionate.

7.17 The Authorising Signatory shall discuss any concerns with the recommendation with the Technical Specialist and together they shall agree if the recommendation will be revised.

7.18 If the Technical Specialist and Authorising Signatory cannot reach consensus on a recommendation, the Specialist Submission Point shall either take the role of both Technical Specialist and Authorising Signatory or escalate the decision within SES.

7.19 When the Technical Specialist's recommendation has been authorised it shall be returned to the Project Manager.

NOTE The Project Manager's determination can be automated, in which case it will be returned directly to the designer by DAS.

Timing

7.20 A time limit of 30 working days shall apply for undertaking phases 5 and 6 (Table 3.1), unless by agreement of the Project Manager.

7.20.1 The project manager should agree to an extension of the 30 working day limit where the Technical Specialist requires input from other disciplines before making a recommendation.

7.21 If the application has been returned for rework, on re-submission the 30 working day limit for appraisal shall be reset.

7.21.1 If missing information or clarification can be provided quickly, then the Technical Specialist may request that the Designer to attach the information without it being returned for rework.

8. Related departures and departures that apply at more than one location

NOTE *[DRAFTING NOTE] Implementation of this section will develop through planned enhancements to DAS 3.0 and the Departures Manual will be revised accordingly. The objective will be to eliminate as much duplication and waste as possible, whilst retaining audit and search functionality.*

Interacting departures that need to be appraised collectively (linked departures)

8.1 Separate applications shall be submitted for linked departures.

NOTE 1 *Linked departures are independent departures which interact to collectively form a safety or benefit case.*

NOTE 2 *If one linked departure is rejected, the justification for the other linked departures is undermined and therefore none of the linked departures can be implemented.*

8.2 To clarify the interacting nature of the departure, the final paragraph of the departure summary of each linked departure shall state "Linked with [DAS Record ID(s)]" and referenced in the "Associated departures" field of the application form.

NOTE *Future DAS functionality is planned to make this link more intelligent for reporting purposes.*

8.3 A strategy document that gives a technical justification and details the benefits, risks and impacts of the overall design shall be attached to the application with location- or requirement-specific considerations detailed within the individual applications.

8.4 For linked departures to be appraised collectively, the applications shall be submitted at the same time.

8.5 The Technical Specialist shall undertake the technical appraisal for the departure taking account of any related departures and the overall design presented in the strategy document.

8.5.1 Where the related departures are within the same discipline, each should be assigned to the same Technical Specialist for technical appraisal.

8.6 The Technical Specialist shall state, as a condition, that approval of an application is subject to all departures referenced within the holistic assessment being approved.

Departures where requirements are interdependent

8.7 Where, by nature of the interdependency of requirements, a departure from one requirement will necessarily result in a departure from another, only one departure application shall be submitted against the requirement considered to be primary and interdependent requirements listed in the "secondary requirement" part of the application form.

Departure proposed for more than one known location (bulk departure)

8.8 Bulk departures shall only be used where.

1) the same non-compliant design feature or method is proposed for use at more than one location, and;
2) each location shares the same geometrical, environmental, operational or usage parameters that influence the safety or benefit case.

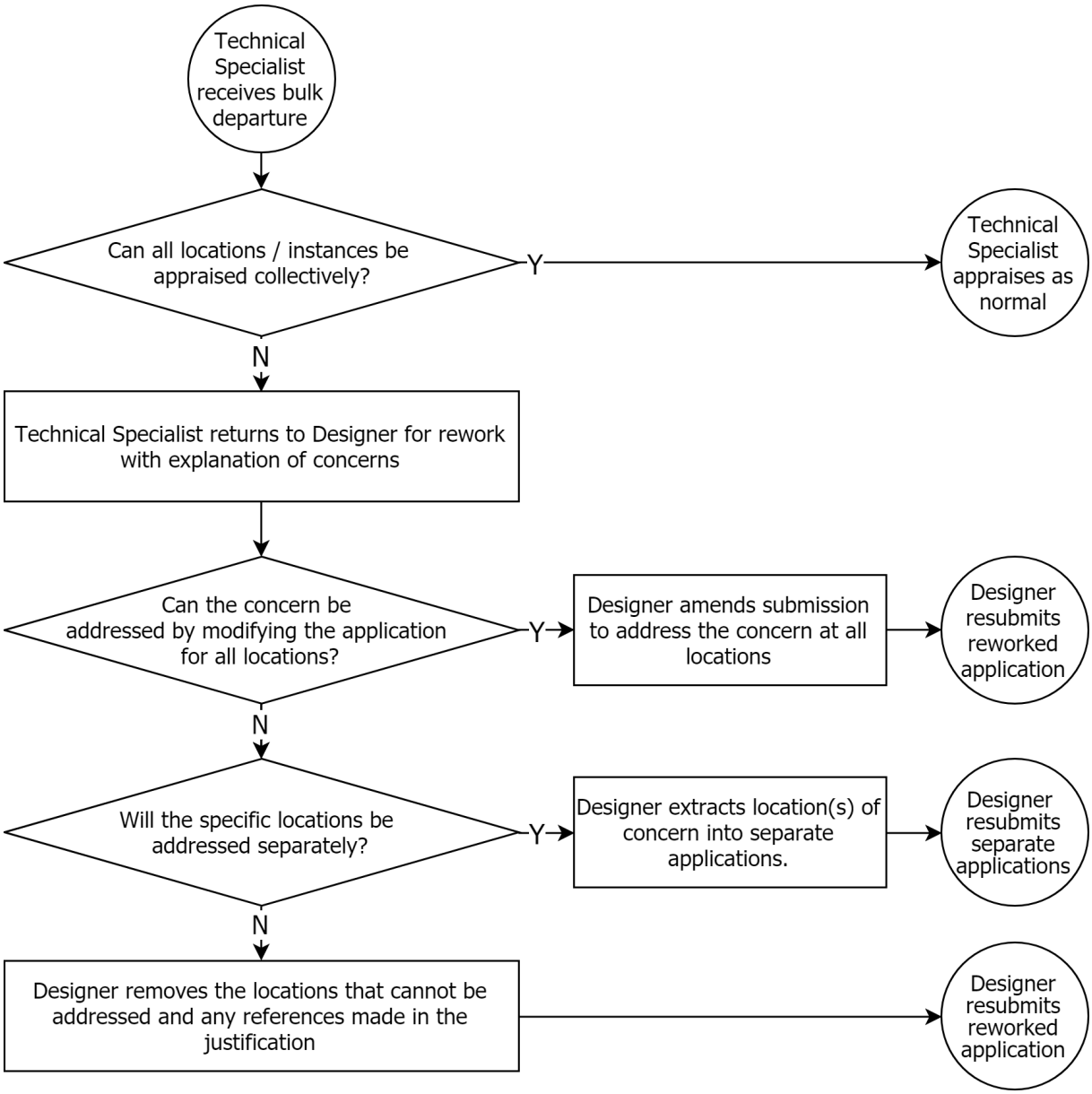
8.8.1 The Designer may contact the Technical Specialist to discuss the applicability of a bulk departure prior to developing the application.

8.9 The bulk departure record shall include the location of every instance where the non-compliant feature is proposed.

8.10 A single recommendation and determination shall be made for a bulk departure that covers all instances listed in the application.

8.11 Figure 8.11 gives the process that shall be followed for appraising and reworking bulk departures where individual instances are unacceptable.

Figure 8.11 Process for appraising and reworking bulk departures



Departure proposed on a contract, route, area or programme basis (Generic departure)

8.12 Generic departure applications shall only be allowed with consent from the Project Manager and Technical Specialist.

8.12.1 Generic departure applications may be used where the same non-standard product, design feature or method is proposed for use at various locations on a contract, route, area or programme basis.

NOTE *An example of where this type of departure application could be appropriate is when bulk procurement contracts for components is being used and a non-standard component is being proposed.*

8.13 This type of departure application shall only be allowed where:

1) applications are made on a contract-by-contract basis (as a 'blanket' approval would be equivalent to creating a new requirement rather than use being permitted as an exception through the

departures process);

2) it is clearly not practicable to state actual locations for usage before non-standard items are ordered; and
3) reference numbers (or other robust method of unique identification) are quoted in the application in order to provide an audit trail and to ensure that the items may be subsequently identified on the network.

Departure proposed where the scheme or location is not known

8.14 A departure application shall not be submitted where the location is not known.

NOTE *Highways England has several routes for exploring the general acceptability of innovative ideas, products or methods (e.g. The Innovation Portal [Ref 8.I]). Engagement through these routes can be used as evidence to support a departure application when the scheme or location is known.*

9. Guidance for specific circumstances

DBFO schemes – post-award

9.1 In the case of post-award DBFO schemes, unless agreed otherwise, the DBFO Company shall submit the departure application to the Department's Nominee as Alternative Proposals under the Review Procedure via DAS.

9.2 The Department's Nominee shall undertake the Project Manager role defined in this manual.

NOTE *The role of the Department's Nominee can be carried out by the Department's Agent or Department's Representative depending on the phase of the DBFO scheme.*

9.3 Once a recommendation has been finalised, the Department's Nominee shall respond to the DBFO Company under the Review Procedure.

9.4 The departure determination for DBFO schemes shall be interpreted in accordance with Table 9.4.

Table 9.4 Interpretation of departure determination for DBFO and D&B schemes

Departure Determination	DBFO Interpretation
Approved	Received
Approved with conditions	Received with comments
Rejected	Returned marked comments

9.5 Any variation to the above guidance shall be set out in the individual DBFO contract documents, as will the technical appraisal and determination timescale.

9.5.1 Depending on Highways England's particular management arrangements for individual DBFO contracts, consultants may be appointed by Highways England to provide detailed scheme advice and recommendations on departure applications as an aid to the Department's Nominee.

Design & Build schemes – post-award

NOTE *[DRAFTING NOTE] Sub-section in abeyance pending discussion with commercial teams.*

9.6 In Design & Build (D&B) contracts, a departure shall mean one or a combination of the following:

1) the use of a technical design directive or technical specification, whether in the DMRB or not, in a manner or circumstance which is not permitted or provided for in such directive or specification;
2) the use of technical design directives other than those in the DMRB;
3) the use of technical specifications for materials or workmanship other than those in the Specification for Highway Works and Highway Construction Details; and
4) the use of a set of requirements (additional criteria) for any aspect of the Works for which requirements are not given in the requirements currently in force.

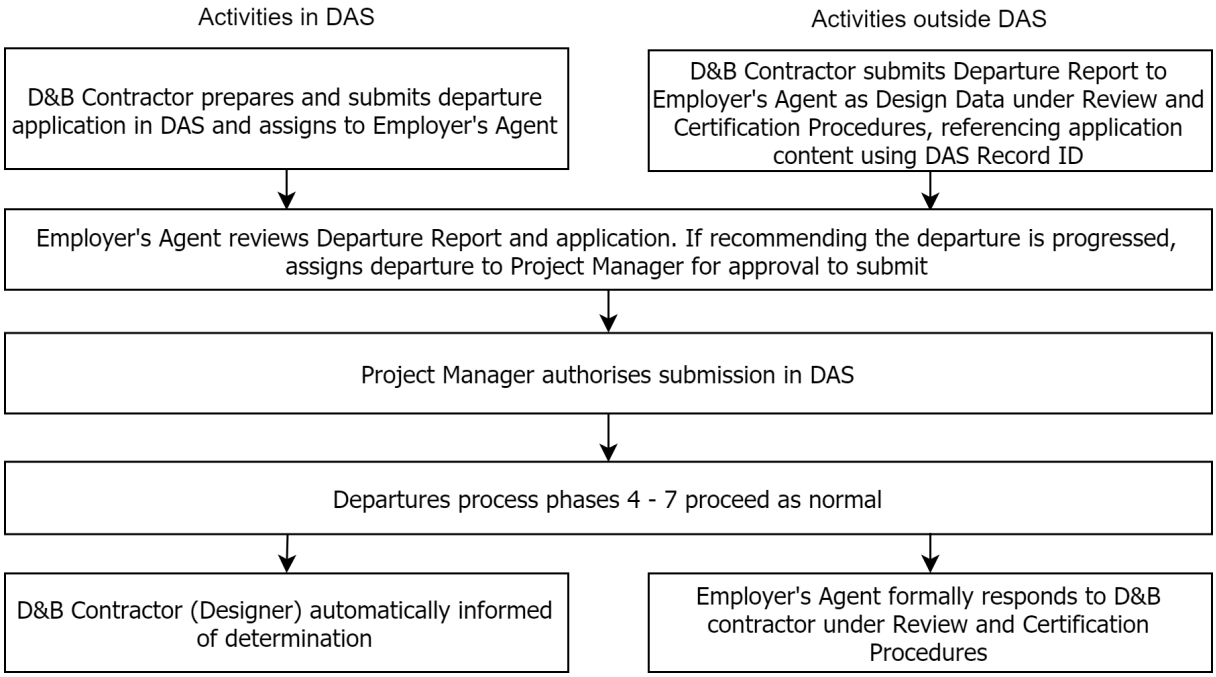
9.7 The D&B roles shall be applied to the departures roles in accordance with Table 9.7.

Table 9.7 Application of departure roles to D&B contracts

D&B Role	Departure Role
D&B Contractor	Design Organisation 1) Designer 2) Proposer
Employer's Agent	As defined below.
Highways England Project Manager	Project Manager

9.8 For post-award D&B schemes, he departure process given in Figure 3.1a and 3.1b shall be modified to incorporate the Employer's Agent as shown in Figure 9.8.

Figure 9.8 Modifications to departures process for post-award D&B schemes



9.9 The departure determination for D&B schemes shall be interpreted in accordance with Table 9.4.

Departures supporting a tender

9.10 A departure application shall be submitted where a tender relies on the approval of a departure that has not already been approved.

9.10.1 A tenderer may request confidentiality for departure applications made at tender stage.

9.11 Confidentiality shall be withdrawn by the Designer if the successful tenderer incorporates the departure into the works.

9.12 Applications submitted by unsuccessful tenderers shall remain confidential.

9.12.1 An unsuccessful tenderer may request for the confidentiality to be withdrawn.

NOTE *See Section 10 for details of confidentiality.*

Pilots and trials

9.13 As noted in the 'Guide for the Design, Management and Delivery of Pilots and Trials on Highways England Network' [Ref 2.N], the proposed use of any design, method or material that does not comply

with, or is an aspect not covered by requirements or advice documents for a pilot or trial shall require a departure.

9.14 The Project Manager shall agree with the relevant Technical Specialist, before a departure application is submitted, which external organisation, or which part of Highways England, will cover the cost of the following aspects:

1) operation of the pilot or design and construction of the trial (or that element of the works if part of a larger scheme);
2) supervision and reporting during the pilot or trial; and
3) surveys to inspect and report on the condition of the trial area(s) after specified periods of time.

9.15 The Project Manager shall also agree the following with the relevant Technical Specialist before a departure application is made:

1) A full assessment of the expected benefits, adverse impacts, hazards and risks associated with the pilot or trial, and details of how the risks are to be managed (including mitigation measures and an 'exit strategy, where appropriate);
2) Draft clause wording for the trial or pilot; and
3) If the work is not covered by the MCHW, draft method of measurement item wording for the trial or pilot.

9.16 The first use of any innovative design, method or material shall require particularly close scrutiny by those assessing and appraising departure proposals as it can be difficult to quantify the potential hazards and risks in advance of the pilot or trial.

9.17 Following the completion of the trial or pilot, the Project Manager shall prepare (or arrange the preparation of) a completion report detailing the results, including recommendations and conditions regarding future use.

9.17.1 This document should include the proposed wording for the text of any new or revised requirement that could be adopted for future use.

9.17.2 The draft wording should also be emailed to the feedback e-mail address for enquiries.

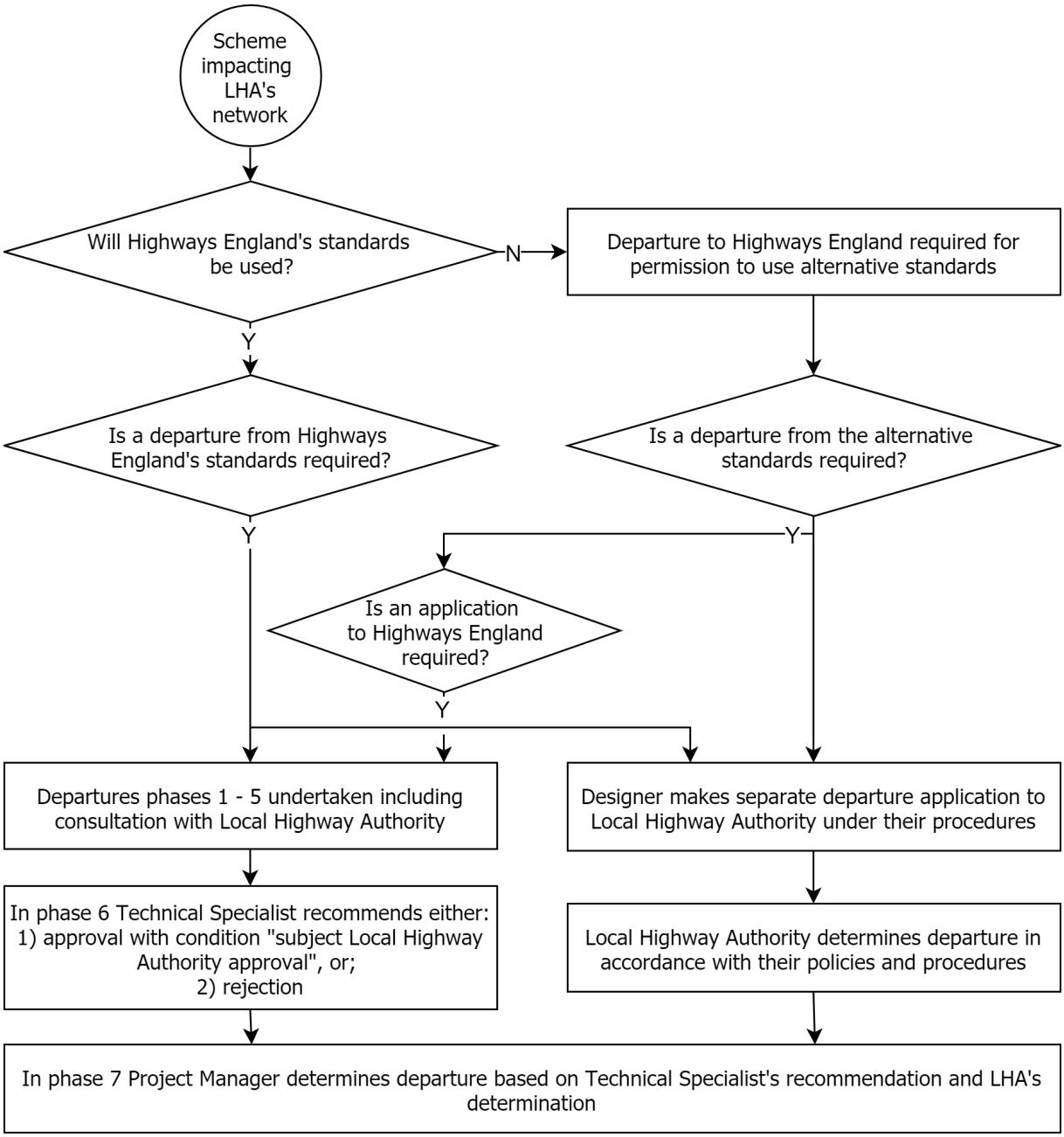
9.17.3 A copy of this report should be passed to the relevant Specialist Submission Point to allow adequate feedback to be established.

9.18 The Designer shall attach the final completion report to the departure record.

Interaction with local roads on works promoted by Highways England

9.19 Where a scheme impact's a Local Highway Authority's (LHA) network, for that part of the works the modified departures process given in Figure 9.19 shall apply.

Figure 9.19 Modified departures process for schemes that impact a Local Highway Authority's network



9.20 Where works that will subsequently be adopted by a Local Highway Authority (LHA) are to be carried out by Highways England, the standards to be used shall be agreed between Highways England and the adopting authority.

NOTE *The final decision for the standards that will be used on a local road is likely to belong to authority that will adopt the road.*

9.21 Where a departure on a scheme promoted by Highways England has an impact on a local road, either temporarily or permanently, a separate departure application shall be determined by the Local Highway Authority prior to the Project Manager determining the application that is made to Highways England.

NOTE *Local Highway Authority processes for determining departure applications are not always fully formalised, but that does not preclude them from assessing whether they are content with the safety of the design of a Highways England-promoted scheme and conveying their approval (or otherwise) in*

writing.

9.22 Where a departure from an alternative standard (that's use has already been approved through a separate departure) is identified, the Designer shall consult the Technical Specialist to confirm if a new departure application to Highways England is required.

9.22.1 The Technical Specialist may instruct the Designer that a departure to an alternative standard is not required. In which case, the Designer shall record the correspondence in the diary and withdraw the departure in DAS.

9.23 The Project Manager shall not approve a departure that impacts a local road that is rejected by the Local Highway Authority.

Works promoted by other organisations

9.24 This manual shall apply to departures for schemes not promoted by Highways England but where Highways England managed roads or assets are impacted.

NOTE 1 The main categories of works promoted by other organisations that effect Highways England managed roads include:

1) *Modifications to Highways England managed assets to allow local highway schemes or development schemes to be built (for example, diversions of Highways England managed road where it crosses the line of a proposed local road or a new development, including the construction of a bridge or other crossing);*
2) *Construction of new roads that are to be immediately adopted by Highways England (such as the construction of new slip roads and junctions or construction of a new highway);*
3) *Construction of new roads to be the responsibility of Highways England after an initial period of operation by the LHA or developer;*
4) *Construction of new or modification of existing private means of access (PMA) onto a trunk road, not promoted by Highways England;*
5) *Construction of new or modification of existing access/egress arrangements to roadside services facilities, in private or public ownership, not promoted by Highways England; and*
6) *Modification of a local road which utilises a Highways England Asset (such as modification to a local road which crosses a bridge owned by Highways England).*

NOTE 2 Such works can be authorised under specific primary legislation (such as the hybrid Bill procedure) or secondary legislation (e.g. a Development Consent Order made under the Planning Act 2008 [Ref 15.I] or an order made under the Transport and Works Act 1992 [Ref 22.I]) and can have policy or procedural differences from the normal regime applicable to planning permissions given to private developers.

NOTE 3 The DMRB and MCHW are mandatory for all works on the motorway and all purpose trunk road network, regardless of who is promoting the works.

9.25 When notified of a proposed departure that could effect a Highways England road or asset, Highways England shall appoint a Project Manager to oversee the departure process and determine the departure.

NOTE 1 Depending on the nature of the scheme, a Project Manager might already be in place.

NOTE 2 Early consultation with the Project Manager and relevant Specialists within Safety Engineering and Standards is critical to ensure their views are considered before the design is finalised and, where a significant number of applications will be submitted, to confirm that resources will be available to appraise and determine departures in accordance with any timescales given in this manual.

Asset Delivery and works undertaken by "in-house" teams

9.26 Where internal an Highways England team undertakes the role of Design Organisation, the requirements of this manual shall apply unaltered.

9.27 The person undertaking the role of Project Manager for determining a departure shall not also be the Designer or Proposer.

Tunnel departures

9.28 For tunnels departure applications, any requirements given in the Road Tunnel Safety Regulations (RTSR SI 2007 No. 1520 2007 [Ref 3.N]) must be followed.

NOTE *"Derogations" for innovative techniques and risk reduction measures associated with tunnels are permitted under the Road Tunnel Safety Regulations (RTSR SI 2007 No. 1520 2007 [Ref 3.N]) 2007 (which transposes the EU Tunnel Safety Directive into UK law).*

9.29 If the departure application is 'approved', the request is then endorsed to this effect and shall be formally submitted as set out in the Road Tunnel Safety Regulations (RTSR SI 2007 No. 1520 2007 [Ref 3.N]) (similarly if 'approved with conditions', once any conditions have been addressed).

NOTE *No further action is required where proposals are determined as 'rejected'.*

Asset maintenance and operational requirements (AMOR)

9.30 Any departures from the AMOR shall follow the process given in the Governance section and Appendices 2.1, 2.2, 2.3, 2.4 and 2.5 of the AMOR [Ref 1.N].

Network Management Manual (NMM) and Routine Winter Service Code (RWSC) departures

9.31 Any departures from the NMM and RWSC shall follow the process shown in the flowchart in Section (vii) of NMM 2009 [Ref 6.N] Part 0 'Introduction'.

NOTE *Although the NMM/RWSC is aligned with the technical appraisal process described in this document there are some differences in roles, responsibilities and terminology. There is also the opportunity, in certain circumstances, to make an appeal to the Regional Operations Board against a departure application determination.*

10. Confidentiality

Confidentiality

10.1 Confidential departure applications shall not be accessible to those outside the design organisation or Highways England staff unless consent is given by the Project Manager.

10.1.1 A designer may request that a departure application is made confidential if the application is made in support of a tender process.

NOTE 1 Highways England cannot guarantee that a 'confidential' departure application will not be disclosed if it is the subject of a request made under the Freedom of Information Act 2000 [Ref 4.I], as the potential exemptions (primarily Sections 41 and 43) have to be examined on a case-by-case basis.

NOTE 2 There can be situations where the Technical Specialist needs to share details of the departure with external organisations during the technical appraisal process.

10.2 Confidentiality shall be withdrawn should the departure be implemented in the works.

11. Continuous improvement through the departures system

Continuous improvement of standards

11.1 The departures process shall not be used as an alternative to keeping standards up to date.

11.1.1 Where multiple departure applications are made relating to the same or similar technical areas, Safety Engineering and Standards should review the relevant standards and consider updating or supplementing these documents with new standards.

NOTE The new version of DAS will have better reporting on departures on individual requirements and integrate directly with the information systems that support the standards (the Technical Standards Enterprise System).

11.1.2 If evidence requirements are consistently falling short then the Technical Specialists should consider whether core guidance, standards or specifications should be updated.

Improving the departures process

11.2 Rejected departures shall record the reason for rejection.

11.2.1 Design Organisations should utilise internal continuous improvement systems to apply lessons learned from the reasons for rejection or return for rework to improve the quality of applications over time.

11.2.2 Safety and Engineering Standards stakeholders should periodically review the reasons for rejection and review the guidance contained in this manual to improve the quality of applications over time.

11.3 The Departures Administration Team shall keep the departures process under review and implement implement changes that will improve the quality and handling of departures.

NOTE 1 All stakeholders can feedback to the Departures Administration Team ideas for how the departures process can be enhanced to improve the quality and handling of departures.

NOTE 2 The end-goal of the continuous improvement process are

1) to minimise the number of departures applications that cannot be approved;

2) reduce waste (including abortive effort and unnecessary handling) associated with departures, and;

3) minimise negative impacts of departures on scheme delivery and benefits realisation.

12. Normative References

The following documents, in whole or in part, are normative references for this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Ref 1.N	Highways England. AMOR, 'Asset Management Operational Requirements'
Ref 2.N	Highways England. 'Guide for the Design, Management and Delivery of Pilots and Trials on Highways England Network'
Ref 3.N	HM Gov legislation.gov.uk The National Archives. SI 2007 No. 1520, 'Highways Tunnels - The Road Tunnel Safety Regulations' , 2007
Ref 4.N	Highways England. GG 101, 'Introduction to the Design Manual for Roads and Bridges'
Ref 5.N	HM Treasury. 'Managing Public Money'
Ref 6.N	Highways England. NMM, 'Network Management Manual' , 2009
Ref 7.N	Highways England. GD 2, 'Quality Management Systems for Highway Design Activities'
Ref 8.N	Highways England. GG 104, 'Requirements for safety risk assessment' , 2018

13. Informative References

The following documents are informative references for this document and provide supporting information.

Ref 1.I	Highways England. AMM 130, 'Area Maintenance Memoranda 130'
Ref 2.I	Highways England. TD 27, 'Cross-Sections and Headrooms' , 2005
Ref 3.I	Highways England. HD 29, 'Data for Pavement Assessment' , 2008
Ref 4.I	HMSO. 'Freedom of Information Act' , 2000
Ref 5.I	Highways England. Highways England. IAN 184, 'Highways England Data & CAD Standard Instructions on naming conventions, file types and data structures for the delivery and transfer of CAD / BIM files to Highways England and its supply chain.'
Ref 6.I	Department for Transport. 'Highways England: Framework Document'
Ref 7.I	Institute of Highways Engineers. 'IHE Guidelines for motorcycling' , 2005
Ref 8.I	Highways England. 'Innovation Portal, https://highwaysengland.co.uk/innovation-hub/'
Ref 9.I	Highways England. LA 101, 'Introduction to Environmental Assessment'
Ref 10.I	Highways England. SD 0, 'Introduction to the Manual of Contract Documents for Highway Works (MCHW)' , 2014
Ref 11.I	Highways England. HD 30, 'Maintenance Assessment Procedure' , 2008
Ref 12.I	Highways England. MCHW Vol 1 Series 1200, 'Manual of contract documents for highways works, Volume 1 Specification for Highways works - Series 1200 Traffic Signs' , 2004
Ref 13.I	Highways England. 'MCHW Volume 2 Series NG 0000' , 2014
Ref 14.I	Highways England. HD 26, 'Pavement Design' , 2006
Ref 15.I	'Planning Act 2008 (as amended)'
Ref 16.I	BSI. BS EN 13201, 'Road Lighting'
Ref 17.I	BSI. BS EN 1463, 'Road marking materials. Retroreflecting road studs' , 2009
Ref 18.I	Highways England. GG 119, 'Road safety audits'
Ref 19.I	Institution of Civil Engineers. Infrastructure Steering Committee. 'Specifying successful standards'
Ref 20.I	Highways Agency. TRG 0500, 'Statutory approval of traffic signal equipment for the control of vehicular and pedestrian traffic on roads'
Ref 21.I	The Stationery Office. TSRGD, 'The Traffic Signs Regulations and General Directions 2016' , 2016
Ref 22.I	'Transport Works Act 1992'

Appendix A. Administration of the departures process

A1 Departures Administration Team

The Departures Administration Team are responsible for the maintenance of the DAS database and maintain a list of the specialist submission points for each standard or clause, as relevant.

A2 Departures help desk

If you need any assistance with your departure submission please call:

Sally Schwalm on 01234 796658 or by email Sally.Schwalm@highwaysengland.co.uk

or

Homayoun Atife 0300 4704752 or Homayoun.Atife@highwaysengland.co.uk

or

Email the team departures@highwaysengland.co.uk

A3 Enquiries

If you have any enquires in relation to this document please contact:

Table A.1 Document enquires contact details

Name	Role	Contact Details
Steve Davy	Head of Technical Standards	Directorate: Safety Engingeering and Standards Division: Innovation and Continuous Improvement Team: Technical Assurance and Governance Group Location: Bedford Telephone: 01234 796076 Email: steve.davy@highwaysengland.co.uk
Suleman Sattar	Senior Technical Advisor	Directorate: Safety Engingeering and Standards Division: Innovation and Continuous Improvement Team: Technical Assurance and Governance Group Location: Bedford Telephone: 01234 796269 Email: suleman.sattar@highwaysengland.co.uk

Appendix B. Departure application form guidance

[DRAFTING NOTE: Appendix B will be implemented during 2019/20 and this will be communicated to stakeholders in a timely manner to mitigate any rework. At launch, DAS 3.0 implements the submission form and fields that is used in WebDAS.]

Appendix B gives guidance on the completion of the application form in DAS. Unless stated otherwise, all form fields are to be completed by the Designer. The form acts as a live record and can be changed, added to and updated throughout Stages 1 to 3 of the departure process.

If a Designer is uncertain as to how any aspect of the form should be completed, they should seek guidance from the Project Manager for the scheme in the first instance.

B1 Record information

The record information is required on creation of the new departure record in DAS and is the minimum information that is needed in order to create a record.

Table B.1 Record information

Field	Guidance
Record ID	Auto-generated
Scheme information: 1) PIN 2) Description 3) HE Project Manager 4) Road 5) Operational Area 6) Current stage 7) Key dates	The scheme information will be automatically pulled from HAMIS. Where there is no information available for any one of these fields the information needs to be provided.
Summary	Provide a brief summary describing the nature of the proposed departure (maximum of 1000 characters).
Label	Select a label for the departure from the list provided.
HE PM Office Location	Provide the office location of the Project Manager
Discipline	Select the discipline to which the proposed departure relates. Where the departure relates to several disciplines then the primary/lead discipline should be given.
Estimated Submission Date	Select the date it is anticipated that the full departure application will be made. This date will not be enforced as a deadline by Highways England, it will only be used internally within Highways England to anticipate forward workload and plan resourcing. This field should be updated if the estimated submission date changes.
Designer: 1) Organisation 2) Contact Name	Provide details of the Designer who will act as the main point of contact for the departure application (Defaults to user who created the departure)

B2 Assignees

People need to be assigned to the different roles that are undertaken as part of the departures process, this ensures they are given the relevant access to the departure application and are correctly notified

when their input is required. Table B.2 indicates who is responsible for nominating and inputting into DAS the holders for the different roles.

Table B.2 Assignee's

Field	Guidance
Proposer	The Proposer should be nominated and inputted by the Designer.
Project Manager	The Project Manager will be automatically inputted from the Record Information.
Specialist Submission Point	The Specialist Submission Point should be nominated and inputted by the Project Manager.
Technical Specialist – Lead	The lead Technical Specialist should be nominated and inputted by the Specialist Submission Point.
Technical Specialist – Support	The support Technical Specialist should be nominated and inputted by the Specialist Submission Point
Authorising Signatory	The Authorising Signatory should be nominated and inputted by the Specialist Submission Point

B3 Key parameters

The key parameter information fields should be completed as part of the early development of the departure and includes key details about the departure, the reason for for the departure and its benefits. The information provided in this section is used as a basis for the Project Manager to make a decision on whether the departure is worthy of further consideration.

Table B.3 Key parameters

Field	Guidance
Standard	Select the standard to which the proposed departure relates or indicate it is an "Aspect not covered by requirements"
Requirement	Select the requirement to which the proposed departure relates or indicate it relates to an "Aspect not covered by requirements"
Secondary requirement	List the standard and requirement of any additional mandatory requirements that will not be met as a result of of the departure proposed
Associated departures	Provide details (including ID's where available) of any other proposed or existing departure applications that are in the same location or could effect the departure.

Table B.3 Key parameters (continued)

Field	Guidance
Form of contract	Select the form of contact for the scheme: 1) Third party / developer scheme 2) Design Services only 3) Design Services with Early Contractor Involvement 4) Design and Build 5) Construction services 6) DBFO 7) MAC 8) ASC 9) [Additional options are available in DAS]
Scheme GG 104 2018 [Ref 8.N] risk category	Select the scheme risk category based on the guidance given in GG 104: 1) A 2) B 3) C
Departure GG 104 2018 [Ref 8.N] risk category	Select the departure risk category based on the guidance given in GG 104: A B C
Criticality	Select the criticality of the departure from the following list: 5 - Departures that are fundamental to the viability of the scheme. 4 - Departures that are fundamental to the selection of options for the scheme by virtue of their impact on one or more disciplines. 3 - Departures that are fundamental to the delivery of commitments made through consultation, having considered all disciplines. 2 - Departures that do not have material impact on the consulted design of one or more disciplines as prepared for progression. 1 - Departures that have the potential to have an effect on detailed design development of one of more disciplines but which can be managed by value engineering in stages 5-7 0 - Departures that relate to non-compliant features incorporated into the works that do not have an approved departure application

Table B.3 Key parameters (continued)

Field	Guidance
Reason for departure	Select the reason for the departure from the following list: 1) Existing sub-standard feature to be retained 2) Requirements cannot be satisfied 3) Use of novel technology or method 4) Value engineering 5) Aspect not covered by requirements 6) Non-compliant construction that cannot be rectified 7) Outdated requirements
Location	Provide a description and OSGB grid reference. Where the departure applies to a wide to a scheme, route or area, give the grid reference for the geometric centre.
Structures key / name	For structures departures this information is exported form the SMIS database.
Additional scheme details	Provide additional details about the wider scheme context for the departure including: 1) Scheme description and objectives (e.g. motorway or trunk road, locality and topography and a statement of the problems that the scheme is intended to address) 2) Type of scheme (e.g. on or off line, junction improvement, widening or new build) 3) Extent (Start and finish chainages, junction names/numbers, landmarks or Start and Finish National Grid references) 4) Context within adjacent highway network (e.g. route standard) 5) Long-term route management strategy (e.g. planned future schemes)
Net cost benefit	Provide the estimated net cost benefit for the departure when compared with a design in accordance with the requirement it is proposed to depart from. The calculation of net cost benefit should be attached to the application. Guidance on the calculation of the net cost benefit is given in Section 5. This field is only applicable to departures submitted for the use of novel technology or method or value engineering (Reason for Departure 3 or 4).

Table B.3 Key parameters (continued)

Field	Guidance
Net programme benefit	Provide the estimated net programme benefit for the departure when compared to a design in accordance with the requirement it is proposed to depart from. The calculation of net programme benefit should be attached to the application. Guidance on the calculation of the net programme benefit is given in Section 5. This field is only applicable to departures submitted for the use of novel technology or method or value engineering (Reason for Departure 3 or 4).
Operations asset manager	Provide the details of the operations asset manager (only applicable for OD departures)
Operations base	Select the HE office where the asset manager is based (only applicable for OD departures)

B4 Departure overview

Provide a concise summary of the departure including the nature of the departure, the reason for the departure, the key considerations and constraints, including any assumptions made.

The departure overview should also include a brief summary of the anticipated negative impacts and risks and the proposals for mitigation.

The departure overview should be approximately 200 words in length and along with the information above should provide enough information to allow the Technical Specialist to consider a provisional agreement.

A plan showing the location and full extent of the proposed departure should be attached.

B5 Technical justification

Provide the technical detail and justification for the departure.

Where relevant, supporting documentation such as drawings, plans and technical notes should be attached, however the parts of the documents that relate to each of the areas below should be clearly referenced.

This should include consideration of the interaction of the departure with other departures at the same location and the context within the wider scheme.

B5.1 Technical description

Provide comprehensive technical and contextual information to justify the departure and aid the technical appraisal of the proposal.

B5.2 Stakeholder consultations

List the stakeholders who have been consulted in the preparation of the departure and provide any observations, comments or concerns raised.

B5.3 Alternative options rejected

List any alternatives design options that were considered int he preparation of the departure application and the reasons for rejection.

B6 Benefits, impacts and risks

Provide a summary of all of the benefits, impacts and risks, when compared to a design fully in accordance with requirements, identified and assessed as part of the departure assessment process, including any mitigation proposed as part of the design. This summary should be broken down into the areas of consideration listed below.

Each section should include justification of why:

1) the benefits outweigh the negative impacts
2) the risks, after mitigation, are as low as reasonably practicable.

Where relevant supporting documentation such as drawings, plans and technical notes should be attached, however the parts of the documents that relate to each of the areas below should be clearly referenced.

Any benefits, impacts or risks that relate to the proposer or an associated party (e.g. cost savings to the developer in the case of a Section 278 scheme) but do not impact Highways England, its road users or the wider community should be ignored.

B6.1 Safety (users)

With reference the attached GG 104 2018 [Ref 8.N] risk assessment, summarise the safety impact of the departure on road users and other parties. Give details of how the safety risk on customers compares to the baseline of a fully compliant design.

B6.2 Safety (construction, maintenance and disposal)

With reference the attached GG 104 2018 [Ref 8.N] risk assessment, summarise the safety impact of the departure on workers during construction, maintenance and disposal of the proposed design. Give details of how the safety risk on workers compares to the baseline of a fully compliant design. Consideration should be given to CDM regulations.

B6.3 Technical

Summarise the technical impact associated with the departure following the incorporation of any mitigating measures. Give details of how the residual risks and impacts compare a design fully complaint with the requirements.

B6.4 Programme

Summarise the effect of the departure on the project's critical path and the future risks to the programme arising from the incorporation of the departure into the design. This should include both design and construction programme considerations.

B6.5 Cost

Summarise the effect of the departure on the project's budget and the future risks to the budget arising from the incorporation of the departure into the design. This should include both design and construction programme considerations.

B6.6 Environmental

Summarise the effect of the departure on all relevant environmental issues following the incorporation of any mitigating measures.

B6.7 Innovation

Where the departure relates to the use of a novel technology or method the risks associated with the innovative aspects of the departure.

B6.8 Durability/maintenance

Consider the implications of the departure for future maintenance of the element under consideration and for other elements of the scheme affected by the departure. Also consider the impact of the departure on the maintenance of other aspects of the scheme.

B6.9 Network availability

Consider the impacts of the departure on network availability during construction, maintenance and normal use.

Appendix C. Additional information required by departure type

C1 Geometric

C1.1 Key parameters

No specific requirements.

C1.2 Departure overview

No specific requirements.

C1.3 Technical justification

Provide the required information under each heading, and refer to Appreciation of site layout in:

1) Design speed and method of assessment:
   a) Existing (where not new build)
   b) Proposed (where different)
2) Measured speed:
   a) Existing (where not new build)
3) Non-motorised user considerations (crossing and longitudinal) :
   a) Existing (where not new build)
   b) Proposed (where different)
4) Details of Street Lighting (if any):
   a) Existing (where not new build)
   b) Proposed (where different)
5) Other (Relevant scheme-specific information such as provision of vehicle restraint system, overtaking opportunities, exposure to severe weather and proximity to features such as junctions, structures or lay-bys)

C1.3.1 Appreciation of site layout, traffic conditions and road safety considerations

Assessment of the effect of the departure on the safety and operation of the improved length of road and its compatibility with adjacent sections of the route, in terms of its current and known future strategy and operational performance requirements.

Take into account:

1) the functional classification of the road;
2) the traffic volume;
3) the character of the traffic;
4) non-motorised users;
5) the type of scheme; and
6) the collision history of the road.

A key factor in consideration of safety is the perception of the road user which can be influenced by a number of factors, including:

1) the general topography and roadside land use;
2) the layout and nature of the road upstream and downstream of the departure site;
3) forward visibility;
4) conflicts in traffic movements;
5) warning and advisory traffic signs;
6) road markings; and

7) the presence and effectiveness of street lighting.

Consider the ability of all vehicular and non-motorised road users (including drivers entering from side turnings and pedestrians, cyclists and equestrians crossing the road) to realise the presence of motor vehicles approaching and to have sufficient time and space in which to carry out their own manoeuvre.

Particular consideration should be given to powered two wheeler, particularly for horizontal curvature. Specific advice for motorbikes has been published by the Institution of Highway Engineers 2005 [Ref 7.I].

C1.4 Benefits, impacts and risks

No specific requirements.

Monitoring is unlikely to be required as it generally features as part of Road Safety Audits (GG 119 [Ref 18.I]) for geometric departures.

C1.5 Supporting documentation

Give references to attached documents:

1) Location plan (typically at 1:10,000, showing scheme extent, location and all existing/associated departures)
2) Layout plans (showing road markings) and sections (scale not less than 1:2500 for links and 1:500 for junctions)
3) Accident summary with commentary, to include a 'bubble diagram' and interpreted listings (to cover last 3 years, except for new build).
4) Traffic data, to include %HGV as well as NMU and P2W flows (existing, year of opening and design year flows and turning movements – data relevant to the case for the departure should be highlighted)
5) Junction capacity checks where relevant (existing, year of opening and design year queue lengths)
6) Photographs/Video footage (except new build)
7) Visibility graphs** for SSD departures (Existing where relevant and proposed)
8) Visibility graphs show SSD plotted against chainage to demonstrate the change in SSD along the length of the road.
9) Swept path plots (for junction geometry departures)
10) Other modelling (3-D 'drive throughs' and microsimulation)
11) Designers (include a list of any SES specialist consulted prior to submission) (published or unpublished)

C1.5.1 Collision analysis

Where a departure application relates to an existing road, an evaluation of the collision history of the relevant section should be carried out to establish whether existing substandard features contribute significantly to any identified road safety problems. he collision analysis should consider the type of collision, severity, contributing circumstances, environmental conditions and time of day. A short report with the conclusions of this analysis should be produced and included with the departure application, and diagrammatic tools should be used where appropriate.

The collision analysis should consider the type of collision, severity, contributing circumstances, environmental conditions and time of day. A short report with the conclusions of this analysis should be produced and included with the departure application, and diagrammatic tools should be used where appropriate.

If any substandard features are indeed shown to contribute in this way then consideration should be given to additional mitigation measures. If they are shown not to contribute to any road safety problems then they do not necessarily have to be upgraded as part of the scheme. However, as they do not meet the current requirements, these features will also be subject to a departure application.

The collision history demonstrating the lack of safety problems attributable to the feature which is subject to the application will form part of the justification for the departure. The Design Organisation should demonstrate that the collision history does not impact on the proposals, rather than for the Highways England to interpret the data. Substandard features should be upgraded if the Designer considers that there are good reasons to do so.

In a similar way, the likely overall collision savings of a proposed layout may form part of the justification for a departure (i.e. where rejection would render construction of a worthwhile safety scheme impractical).

C2 Structures

C2.1 General

C2.1.1 Detail & content

Departure applications should generally be prepared on the assumption that the reviewers have no prior knowledge of the background to the proposal or of the structure involved. Applications should, where appropriate, include suitable descriptions with carefully chosen attachments such as photographs and sketches sufficient to give the reviewer an idea of the nature of the structure affected and the locations and extents of the parts of the structure the proposal affects.

The number of attachments should be no more than necessary to achieve this and should be kept to a minimum. Where in doubt the local SES Submission Point should be contacted for advice prior to the application being made.

C2.1.2 Repeat & similar departures

Proposers should avoid copying the repeat or similar departure details without giving thought to its application at the different structure/site. Reference should be made to previously agreed departure applications which have a relevance to the departure application. Comment should include justification of the relevance and the knowledge or lessons learned taken from the previous departure. Previous comments and conditions provided by SES specialists should also be considered.

It should be noted that the existence of a previously approved application should not be used as the sole justification for the current application. Every application should be presented to address the unique circumstances of the structure or scheme under consideration.

C2.1.3 Specification departures

Where a departure is proposed for additional or substitute specification clauses only the clauses need be detailed in the application. It is the designer's responsibility to produce the associated specification Appendices and these should not be included in the departure application.

C2.2 Key parameters

No specific requirements.

C2.3 Departure overview

C2.3.1 Site details

Ensure that the departure application is site specific and highlight any additional specific site details or constraints which affect the consideration of the departure. For "bulk" departures provide confirmation of whether the departure is affected by site specific details or and confirm that the proposals are appropriate for all structures referenced in the departure application. Any photographs should clearly indicate the location and detail of the elements being considered.

C2.3.2 Highway details

Where relevant outline the type of highway, permitted traffic speed, traffic flows & any existing or proposed restrictions.

C2.3.3 Structure details

Provide relevant details of the structure age, type, span, articulation, joints and include a general arrangement drawing and other relevant structure details. The drawing information provided should be clear and legible and avoid irrelevant detail and caveats. Proposal drawings should also be provided indicating layout of components or phasing of works.

C2.3.4 Vehicle restraint systems

Where relevant include details of the existing and proposed vehicle restraint systems (e.g. component materials, containment, set back, working width). Reference should be made to the Vehicle Restraint System element in the references section of this document for further guidance.

C2.4 Technical justification

C2.4.1 Specific products

Where a tender process will be carried out prior to construction of the works the departure application should remain generic so that the Contractors choice of product is not restricted. Where the scheme is a Design & Build contract or where the departure is a Contractor's proposal a specific product may be proposed.

C2.4.2 Materials

details should be provided of any specific material properties. Copies of test data & certification should be included where relevant to demonstrate the suitability of the proposal. Where available include evidence of use and satisfactory performance of the material.

C2.4.3 Research

Reference should be made to any relevant research studies, technical papers or journals which inform the consideration of the departure application. Copies of relevant publication extracts should be appended to the application.

C2.4.4 Analysis

Include details of the loading, methodology, assumptions, idealisation & key dimensions for structural analysis relevant to the departure application. Details should be provided of any specialist software which has been used in the analysis.

C2.4.5 Geotechnics

Provide details of the geotechnical input which affects the consideration of the departure application. Reference should be made to any relevant geotechnical investigation reports, geotechnical design reports and associated geotechnical certification. Ground information should be provided in the form of a borehole location plan and borehole logs omitting data sheets and ensuring founding levels are clearly marked. A statement should be included outlining soil parameters and design settlements and deflections to be adopted. Extracts from geotechnical reports outlining the proposal should be appended to the application

C2.4.6 Maintenance, monitoring & inspection tasks

Any proposal for additional maintenance, monitoring or inspection as part of the departure should be accompanied by a clear statement detailing where they will be recorded (e.g. maintenance manual, SMIS, etc.) and where associated records will be stored.

C2.4.7 Consultations

Details should be provided of consultation with other authorities and stakeholders. Confirmation of compliance with any resultant special conditions or approvals should be provided.

C2.4.8 Options

Provide discussion of the options which were available with an explanation of why other options were rejected in favour of the departure option. Clarify whether it is possible to design out the need for a

departure. Each option should have a numerical cost estimate and benefit analysis which considers construction, maintenance & whole life costs with specific justification provided to support the selected option.

C2.5 Benefits, impacts and risks

C2.5.1 Departure consequences

Provide a statement which describes the effect of the departure on the asset & network. Outline what would be the implication of not agreeing the departure application. What are the risks associated with approving or rejecting the departure. Consideration should be extended to include potential effects on the structure or network during non-standard situations (e.g. traffic management).

C2.5.2 CDM

Comments should include confirmation of any consultation with and agreement from the Principal Designer. Copies of correspondence or risk assessments are not required.

C2.5.3 Safety

Departures which affect the level of safety when compared with fully compliant options should be subject to detailed risk assessments. Hazards to motorised & non-motorised users, construction & maintenance workers and third parties should be identified. The Proposer should provide confirmation that that such risk assessments have been completed and identify probability and impacts for significant hazards. Proposers should also highlight those risks which have affected the selection of the departure solution from the available options. Proposers should demonstrate that the level of residual risk is as low as reasonably practicable.

C2.5.4 Traffic & accident data

Relevant data should be provided to support the application. Where applicable the most recent 3 years road accident data should be provided in the form of stick plots and interpreted listings. Comment should be provided to demonstrate how the information has been interpreted and the conclusions developed.

C2.5.5 Costs

Include commentary on the trade-off between construction (immediate) and whole life (long term) costs & savings where appropriate. Ensure that there is a clear statement of additional costs or savings.

C2.5.6 Durability

Detail any effects of the departure on the durability of the elements or structure as a whole and any implication for future inspection and maintenance.

C2.5.7 Appearance & aesthetics

Appearance and aesthetics can be a particularly important consideration for some types of structures and a more detailed consideration should be provided where appropriate.

C2.5.8 Construction

Outline any effect the departure will have on the construction process and identify any particular buildability or maintainability issues.

C2.5.9 Contractual implications

Provide confirmation from the Proposer that Highways England Project Manager supports the stated contractual consequences (e.g. additional costs, programme implications).

C2.6 Supporting documentation

No specific requirements.

C3 Vehicle restraint system

C3.1 General

VRS setback departures for permanent installations are a TD 27 2005 [Ref 2.I], Geometry Team departure.

C3.2 Key parameters

Additional information required:

1) Location of departure, in terms of chainage, which carriageway, and whether the departure is on the verge, central reserve or in another position
2) Team not area based so concise narrative of scheme purpose required for context.

C3.3 Departure overview

Additional information required:

1) Photos of site required showing 50 metres either side of hazard. When third party information used (mapping information, video surveys), statement required confirming info is representative of current status.
2) Design drawing including potential discreet hazards within 50 metres (not repeated hazards such as lamp columns or embankments currently unprotected) of the proposed scheme limits and including
3) Full and detailed drawings of products / solutions proposed including Declaration of Conformity / Notified Body Product Assessment where system is not listed on Highways England notified available products website, unless the subject of the departure application is to use a non-compliant system when full background information is required including manufacturer support.
4) Appropriate cross sections relevant to the design / departure.

C3.4 Technical justification

Additional information required:

1) State clearly what the departure is and why it cannot be avoided
2) Reason for VRS installation, identifying the hazard(s) and justification for the hazard's exact location (risk based, not compliant with requirements)
3) Road Restraints Risk Assessment Process (RRRAP) summary or detailed output where applicable including point of no recovery details.
4) VRS are usually modular products with performance specifications, subject to open procurement policies, thus there is need to demonstrate which alternative products have been considered and the reasons for their rejection compared to the product proposed for non-compliant usage (including systems that exceed minimum contractual requirements).
5) Other parties which could influence a decision to approve/reject the departure application
6) The following details should be provided when applicable
    a) Speed limit (mph) and anticipated speed if less than the speed limit
    b) Traffic Flow
    c) Type of Safety Fence/Barrier/Parapet proposed/Transition/Terminal/Crash Cushion
    d) Proposed containment level working width and any other performance criteria pertaining to the specific VRS
    e) Proposed post centres
    f) Setback and clearance (proposed and standard)
    g) A statement that Stopping Sight Distance is/is not to requirements
    h) Cross-section with full dimensional information
    i) Layout plans and detailed plans with full dimensional information.

j) Specific clauses/paragraphs from the requirements and advice document(s) which are being departed from i.e. not just the document reference number
k) Commentary on the supporting documentation (e.g. accident statistics).
l) Options considered; options rejected and the reasons for this
m) Assumptions made and implications if the assumption(s) do not materialise (risk)
n) Correspondence/agreement with:VRS manufacturers where appropriate

7) Any additional information that the designer considers is necessary to support the case for the departure.

Remember that if the barrier is on a two-way road, approach lengths of barrier should be provided to both sides of the obstruction. This applies also at parapet ends. It also applies on major roads where contra flow may occur.

C3.5 Benefits, impacts and risks

Avoid repetition of benefits / impacts cut and pasted into several sub-categories, i.e. 'reduced programme' into safety, financial, time etc.

C3.6 Supporting documentation

No specific requirements.

C4 Drainage and the water environment

C4.1 Key parameters

No specific requirements.

C4.2 Departure overview

No specific requirements.

C4.3 Technical justification

The answers to the following questions should be included:

1) Is the design philosophy altered?
2) Does this departure have any water quality and/or flooding implications?
3) Is this a constructional or maintenance issue?
4) Does this involve 'Sewers for Adoption'?
5) Does this involve any 'SuDS (Sustainable Drainage Solution) for Adoption' for which a departure is required?
6) Does this include any 'Climate Change Adaptation' requirement for which a departure is required?
7) Does this involve retro fitting of a 'Priority Asset' (as defined in AMM 130 [Ref 1.l]) for which a departure is required?

C4.4 Benefits, impacts and risks

No specific requirements.

C4.5 Supporting documentation

No specific requirements.

C5 Geotechnics

C5.1 Key parameters

No specific requirements.

C5.2 Departure overview

No specific requirements.

C5.3 Technical justification

No specific requirements.

C5.4 Benefits, impacts and risks

The following information should be included in the application form:

1) Programme implications
2) Durability implications
3) Performance implications (i.e. details of any subsequent reduction / enhancement in quality offered)

C5.5 Supporting Documentation

An electronic file containing the Geotechnical Design Report should be attached.

C6 Pavement

C6.1 Key parameters

No specific requirements.

C6.2 Departure overview

No specific requirements.

C6.3 Technical justification

Additional information required:

1) Traffic flow (AADT)
2) Traffic flow (Commercial vehicles per day & % OGV2)
3) Design Traffic value in msa
4) Where appropriate ground/foundation condition e.g. CBR test results and ground investigation reports where the departure application relates to the structural aspects of the pavement design
5) For maintenance schemes, the condition of the existing road with reference to HD 29 2008 [Ref 3.I] and HD 30 2008 [Ref 11.I] and other relevant DMRB requirements.
6) Traffic management constraints
7) If analytical design, details as set out in Para 4.12 of HD 26 2006 [Ref 14.I] (DMRB 7.2.3)
8) The time of year when the work will be completed.

C6.4 Benefits, impacts and risks

Additional information required:

1) Environmental impact – where necessary provide noise assessment

C6.5 Supporting documentation

No specific requirements.

C7 Signals and VMS

C7.1 General

For any departure, variation or waiver affecting a type approved traffic / pedestrian signal or variable message sign, contact SES SID Signs and Signals, Safety and Policy Support type approval team. Details are contained in TRG 0500 [Ref 20.I].

C7.2 Key parameters

No specific requirements.

C7.3 Departure overview

No specific requirements.

C7.4 Technical justification

No specific requirements.

C7.5 Benefits, impacts and risks

No specific requirements.

C7.6 Supporting documentation

No specific requirements.

C8 Non-prescribed traffic signs and road studs

C8.1 General

Statutory and mandatory requirements for road studs (both permanent and temporary) are specified in MCHW Vol 1 Series 1200 2004 [Ref 12.I], clauses 1213.1-1213.8. These cross-refer to directions 57 and 58 of the Traffic Signs Regulations and General Directions (TSRGD 2016 [Ref 21.I]).

Type approval is needed for studs outside the scope of the European Standard, e.g. those which incorporate a light source. The minimum performance requirements for retroreflective road studs are now specified in direction 57 by reference to the appropriate classes set out in parts of 1 and 2 of BS EN 1463 2009 [Ref 17.I].

C8.2 Key parameters

No specific requirements.

C8.3 Technical justification

Departures from the cited directions are not granted. However, for any innovative road stud products, the Proposers and Project Managers should allow ample lead time for pre-road trial discussions with colleagues in DfT / Traffic Management Division.

DfT colleagues in conjunction with Highways England SES Safe Roads - Design (SRD) will advise and direct if any annual BSI /Industry road trials, which are usually held in June, are appropriate or in exceptional cases in-situ scheme road trials taking into consideration scheme urgency, costs, risk assessments, and monitoring as appropriate.

C8.4 Benefits, impacts and risks

Time scales and cost information of past road trial performance may be obtained from BSI Product Services.

Where the use of non-prescribed traffic signs is being considered as a mitigation measure, advice should be sought from SES SRD at an early stage. Non-prescribed signs cannot be authorised in circumstances where standard (prescribed) signs should be used. It should be noted that the restoration of existing road markings or the provision of standard traffic signs and road markings do not constitute mitigation measures. Likewise, the application of mandatory processes such as Road Safety Audit does not constitute mitigation for a departure.

C8.5 Supporting documentation

No specific requirements.

C9 Lighting

C9.1 General

The Proposer Organisations should ensure information as described in the departure overview section below is provided in support of all departure applications for Road Lighting departures.

The remaining items are generic and the Proposer Organisation should consider which are appropriate to each specific proposed Road Lighting departure and supply the appropriate information.

C9.2 Key parameters

No specific requirements.

C9.3 Departure overview

Additional information required:

1) Statement describing specifically "what" the departure application is applying for and "why".
    a) For example: "This departure application is applying for a relaxation to the UL requirements of BS EN 13201 [Ref 16.I] along the hard shoulder for an M2 class motorway link in order to avoid having to use a 400W luminaire or a non-G6 rated 250W luminaire with a standard setback behind the barrier".
2) Descriptive impact statement of proposed departure such as:
    a) If reduced uniformity: statement describing how this will present itself and how this will affect road users and road workers.
    b) If reduced Lave: statement describing how this will present itself and how this will affect road users and road workers.

C9.4 Technical justification

Additional information required:

1) An options/recommendations discussion explaining why other options were rejected in favour of the proposed departure option. Where non-standard designs are proposed simply because it is cheaper, then a suitable justification should be made.
2) Evidence that the scheme is adopting a "minimum carbon footprint" approach, e.g. 20/20 (or 55/28) group controlled PECU, electronic control gear, midnight switch-off, central management system etc. including:
    a) This should include evidence that the design hasn't been over-engineered, e.g. 400W lamps used because a trivial part of an exit lane on a gyratory system couldn't achieve Lave using 250W lamps.
    b) Confirmation that the Lighting Class used is appropriate for the traffic volumes, e.g. if a local authority road has been over-lit to a higher class than necessary then avoid the conflict zone at the gyratory system now using the next higher C class than the local authority road. In this case a lesser C class could be used that is perhaps the same lighting level as the Local Authority road.

3) Comparison of the variables required to achieve compliance with requirements compared with values achieved with the departure that shows the extent to which the departure is deviating from compliant design solution, e.g. TI needs to be 10% under standard conditions but departure proposal would achieve TI = 11% which is a 10% deviation from compliant design solution.
4) This should include a statement explaining what the anticipated impact on the design might be once infrastructure is physically installed – e.g. where lighting columns might be placed in slightly different locations to the drawings – columns can often be two or more feet away from their designated location.
5) Clarity of the extents of the road and surrounding area that will be affected by this proposal – such as:
   a) Reduced uniformity: diagram highlighting where the uniformity will be substandard.
   b) Reduced Lave: diagram highlighting where the average luminance will be substandard, e.g. which lanes affected, where and over what distance etc.
6) A statement describing which lighting design software was used. Where available this should include the manufacturer's statement declaring the design accuracy of software, e.g. tolerance of designed output is within ±10% of actual installed.

C9.5 Supporting documentation

No specific requirements.

C9.6 Benefits, impacts and risks

Departures typically involve a change that affects the safety levels that would otherwise be achieved when fully compliant with requirements. Detailed risk assessments identifying the hazards to road user and road worker should include:

1) Probability/impact analysis with scoring and definitions for each hazard.
2) Justification for using qualitative analysis instead of quantitative analysis (if qualitative assessments used).
3) Identification of evidence sources referred to in quantitative assessments.
4) Numerical cost statements for each option. Subjective statements about reduced maintenance/whole life cost are usually insufficient.

C10 Technology

C10.1 General

This replaces previous issues and highlights administration of Technology departure applications to facilitate improved departure applications.

It is advised that a discussion with SES specialists takes place before the Design Organisation submits departure applications to Highways England for consideration. This is to confirm when departure applications are required and how best to compile them.

Designers should not assume that because pre-application discussions have taken place with SES that the need for a fully justified departure application is reduced. It will be the departure application that forms the audit trail for the departure; no formal record of the pre-application meetings or phone calls will be retained by Highways England.

It is essential that wherever possible departure applications are location specific. This enables applications to be easily identifiable with the DAS system in the future.

Care should be exercised on whether to adopt single or "Bulk" departure applications. "Bulk" departure applications may be suitable where an identical feature is deployed in numerous locations and a single coherent justification can be written covering each site.

When a departure application is completed, it greatly helps processing if:

1) The departure application is proof and/or peer read by the Design Organisation before submission
2) Provides full reasoning as to why the departure is required and consideration of options.
3) Written from the perspective of the recipient, i.e. someone not working as close to the scheme as the applicant
4) Written from the perspective of being an auditable document. I.e. contains all the relevant information for the reader to come to a conclusion.

Departure responsibility for Signalling and Electronic Sign "positioning" is now transferred to SES SRD Team. All other departure applications for technology reside with SES Operational Technology Support Team.

Departure applications should accord with the requirements given in this manual. Highways England's requirements for departures are given in GG 101 [Ref 4.N] and SD 0 2014 [Ref 10.I].

C10.2 Key parameters

For departure application revisions, unless a location has changed then it is advised that re-submissions should retain the original DAS ID to ensure that the audit trial is more robust. If a new DAS ID is used reference should be made to the original departure DAS ID.

C10.3 Departure overview

The departure application overview should:

1) Contain a detailed scale plan (where positioning is concerned) covering the location if not the link and/or scheme so that the reasoning of the local decision can be verified.
2) Contain details of the operating regime (e.g. Dynamic Hardshoulder Running, Permanent Through Junction Running etc).
3) Consider the following:
   a) What options have been rejected and why?
   b) Is it safe?
   c) Where are the GG 104 2018 [Ref 8.N] Risk assessments and do they cover the relevant populations and show impact/probability matrices with definitions for the matrix scales?
   d) Will it work?
   e) Will it break anything nearby or connected (upstream or downstream)?
   f) Is it intuitive?
   g) Have the maintaining service provider and NRTS Co. been involved and are they willing and able to accept this solution back into maintenance?
4) For departures applications submitted as "Aspects not Covered" the following considerations will be appraised:
   a) Fitness for purpose? (including suitability (will it work), intuitiveness, equality, diversity, environment and sustainability)
   b) What policies might affect or be affected by the design?
   c) What precedents might be set by such a design?
   d) What interfaces into existing roadside asset might be affected by the design?
   e) What GD04 risk assessments have been done? (What is being tolerated and what mitigation's are in place and what corporate risk or media representation might ensue in the event of failure).
   f) Road user and road worker (including emergency worker) safety?
   g) Operational integrity?
   h) Impact on any related "requirements"?
   i) Willingness and ability for Maintenance Service Provider and NRTS Co to accept the design back into maintenance?
   j) What monitoring activity will be used to verify the design?

k) What trials and pilots activities are supporting the introduction of this solution and are they collecting relevant metrics?

C10.4 Technical justification

Departures often have impact on several service providers e.g., NRTS or the Maintenance Service Provider. Where this is the case, so as to expedite the departure application process it would be beneficial that a written attachment is provided from these service providers confirming their agreement to the proposal.

For some topics designers may choose to use text from previously reviewed departure applications. It is important to remember that each departure application should be location specific; therefore location and any relevant scheme information should be included. The designer should ensure that the justification and detailed solution is both current and appropriate to the particular scheme.

C10.5 Benefits, impacts and risks

No specific requirements.

C10.6 Supporting documentation

Only attach drawings and documents that are both relevant to the justification and quoted within the departure application. If only a page or two of a large document or set of drawings are to be attached then ideally include the relevant pages (plus the front page / change control page to prove traceability); alternatively attach the whole document but make it clear within the justification which pages are taken to apply. The reason is that everything submitted within the departure application is taken to be applicable and should be read and absorbed in coming to a decision. It is not necessary to attach copies of Highways England standards.

C11 Specification departures for all subjects

C11.1 General

Use a separate application for related Method of Measurement departures.

C11.2 Key parameters

No specific requirements.

C11.3 Departure overview

No specific requirements.

C11.4 Technical justification

No specific requirements.

C11.5 Benefits, impacts and risks

No specific requirements.

C11.6 Supporting documentation

Draft Specification for Highway Works Appendix 0/1, Appendix 0/2 and the relevant numbered appendices only are required to support departure applications. The whole specification document is not required.

Each clause should be accompanied by reasons and justification from the Proposer.

Numbering of new clauses should be compliant with 2014 [Ref 13.I], particularly paragraphs 6 and 10, NG Sample Appendix 0/1 and NG Sample Appendix 0/2.

C12 Method of measurement departures for all subjects

C12.1 General

Any specification departure may give rise to related departures from the relevant method of measurement, and vice versa. Separate applications should be made, with cross-references.Any Method of Measurement (MoM) departure application should state clearly whether it arises from either:

For each MoM activity, one departure application only is required.

Where there are a number of related MoM departures covering a number of activities, each application should reference the other related applications in the key parameters section.

The complete bills of quantities are NOT required.

C12.2 Key parameters

Any Method of Measurement (MoM) departure application should state clearly whether it arises from either:

1) a perceived inadequacy in the MoM, or
2) a specification departure

C12.3 Departure overview

No specific requirements

C12.4 Technical justification

The application should include MoM paragraphs:

1) Units
2) Measurement
3) Itemisation
4) Item coverage

C12.5 Benefits, impacts and risks

No specific requirements.

C12.6 Supporting documentation

No specific requirements.

Appendix D. Reasons for the rejection of departures

[Drafting Note] Appendix in abeyance pending development of DAS 3.0.

D1 General reasons for the rejection of departure applications

Common reasons for which departure applications may be rejected are given below.

Table D.1 General Reasons for rejection of departure applications

No.	Rejection category	Reasons for rejection
1	Incompleteness	a) Application form incomplete.
		b) Information required by Departures Manual not included.
		c) All content agreed during early engagement including consultations and evidence are not included.
		d) Interfaces and impact on other disciplines not considered.
2	Quality	a) Errors within the application.
		b) Inconsistencies within the application.
3	Business Case	a) Technical issues have not been adequately considered.
		b) Environmental issues have not been adequately considered.
		c) Operational issues have not been adequately considered.
		d) Maintenance issues have not been adequately considered.
		e) Disposal issues have not been adequately considered.
4	Safety Case	a) Risk assessment is incomplete.
		b) Mitigation measures not considered adequate.
		c) Residual risk is unacceptable.
5	Mitigation	a) More details on the mitigation proposed is required.
		b) Inappropriate mitigation measures proposed.
6	Justification	a) Further specific justification is required for the departure.
		b) The benefits of the departure do not outweigh the negative impacts.
		c) Benefits will not be realised by Highways England.

D2 Additional reasons for specific departure types

Common reasons for the rejection of departure applications for specific departure types are summarised below.

D2.1 Reasons for the rejection of geometric departure applications

Table D.2 Reasons for rejection of geometric departure applications

No.	Rejection Category	Reasons for rejection
1	Collision History	a) No collision summary with commentary
		b) Collision summary needs commentary and/or descriptions
		c) Problem with the detail of the collision commentary and/or descriptions
2	Proposed Layout and Options Rejected	a) Lack of clarity on the nature of the requested departure
		b) Options considered but rejected not included in the application
		c) Drawings of the proposed scheme and the fully compliant scheme not provided
		d) Details of the proposed layout were not clear or more information was needed
3	Traffic Data	a) Traffic/speed data not included within the application
		b) Problem with the traffic/speed data provided within the application
4	Traffic Signing	a) Details of the proposed traffic signing not included within the application
		b) Problems with the proposed traffic signing included within the application
5	Street Lighting	a) Details of street lighting not included in the application
		b) Problems with the detail of the street lighting proposed in the application

Appendix E. Background to the new departures process

E1 The Departures Process (DAS 2.0, WebDAS)

In parallel with development of the Design Manual for Roads and Bridges (DMRB) since 1970 onwards, the DAS 2.0 (system) and WebDAS (web based user interface) processes have been developed and refined.

The DAS 2.0 and WebDAS processes have taken advantage of the growth of computerised record keeping capability They have been successfully operated for providing governance and recording of Departures from Standards documents.

The DAS 2.0 process is basically sound and well understood by Highways England staff and suppliers, but requires a significant element of manual intervention. The system has limited facilities for reporting to support management of:

1) the progression of departures in progress.
2) planning for the technical resources to be engaged in appraising departures.

DAS 2.0 is reliant upon outdated software facilities and needs to be updated. The system is capable of being used more efficiently and effectively by:

1) being mounted on a web-based platform to embrace enhanced functionality.
2) alignment with the changes that have been undertaken to the Future DMRB.

These changes and associated benefits are set out in sections below and have been embodied within the Departures Appraisal System 3.0 (DAS 3.0) to which this manual refers.

E2 Background - Developments in Governance

To assist understanding of the DAS 3.0 process, an outline of developments in governance is provided in this section.

E2.1 Development in Standards, and associated National Requirements and Advice

The standards used for highways works on motorways and all-purpose trunk roads have been continuously under review by Highways England (formerly HA) since 2007.

In July 2012, the Infrastructure Standards Committee of Infrastructure UK published their report "Specifying Successful Standards". This report clarified the status of:

1) Statutory documents and Legislation
2) Departmental & overseeing authority requirements

The report provided a clear distinction between requirements and advice in standards and set out a rational approach that provides the basis for governance and control of projects whilst permitting scope for:

1) Embracing the context of the project
2) Innovation and ingenuity to embrace new technology and meet new challenges

Through Annex C of the Highways England Framework document, agreed with Department for Transport (DfT) in April 2015 Highways England undertook to review and update the DMRB. This work has been undertaken and has:

1) Taken advantage of developments in electronic document management
2) Permitted an efficient collaboration, review and document production process
3) Future proofed ongoing review and development of the DMRB

The DMRB update has embraced the principles of "Specifying Successful Standards" and has reinforced the distinction between:

1) Statutory and Legislation Requirements
2) National Requirements
3) National Advice

This is reflected in consistent terminology in Future DMRB documentation and the relationship with Departures. These distinctions are important and are summarised in table 1 below, which also shows the linkage to the departures as provided for in DAS 3.0.

Figure E.1 Table 1

Interpretation of Requirements and Advice documents			
Document/ Content Type	**Compliance**	**Future DMRB text indicator**	**Departures Process**
Statutory and Legislative - Requirements	Mandatory	"Must"	Departures are not permitted
National - Requirements	Mandatory Except where the Overseeing Organisation has approved a departure	"Shall"	Departures from requirements are permitted. Identify, record, fully justify and determine the departure using the DAS 3.0 process
National - Advice	Considered by Designers. Applied where appropriate. Design approach is to be justified and decisions recorded as part of the designer's technical assurance process	"Should" "May" "Can" / other statement of fact	Departures are not relevant. The design approach is to be justified and decisions recorded in designer's technical assurance plan.
NOTE: - Several sets of documents govern works on motorways and all-purpose trunk roads. The format of these documents has varied over time and mandatory requirements may differ between documents. Content presented in a document as • Mandatory • A clear instruction Shall be considered to be a requirement.			

E2.2 Review of the departures process leading to the changes being introduced in 18/19

The Departures Assurance Process new system (DAS 3.0) has been designed to:

1) Use as far as practicable the current processes for progressing departures
2) Align with the Future DMRB
3) Take full advantage of web-based software facilities for efficient co-operation and document management
4) Provide additional visibility, reporting risk management and planning functionality for users
5) Support further AGILE improvements that can be made to reflect future developments

During all stages of project development and operation this will provide:

1) Ease of use for supplier and Highways England staff
2) Support to Programme and Project risk management activity
3) Correlation with Project Stages
4) Efficient on-line entry, recording, tracking, reporting and record keeping of Departures and associated evidence documents
5) Visibility and forward planning of Specialist Resources and approvals
6) Support to Technical Assurance Partner activity.
7) Robust record keeping and audit trails for future asset management

Objectives and content of the DAS Process are described in more detail in the section below

E3 Departures Appraisal System 3.0 (DAS 3.0)

E3.1 Objectives of DAS 3.0

The objective of DAS 3.0 are as follows:

1) To minimise number of departures overall
2) To encourage designers to identify as early as practicable departures for progression that are critical to the project, to reduce or remove programme or project risk
3) To identify departures for progression where there is demonstrable benefit from
    a) Opportunity for added value
    b) Opportunity for improved cost efficiency
    c) Opportunity for innovation
4) To identify departures that are not fully justifiable and not to be progressed, reducing wasted effort
5) To identify interfaces with other disciplines that will contribute to the project and whose Departures will need consideration to reduce or remove programme or project risk
6) To identify the need for additional Technical Specialist input
7) To set the context of the departures process in terms of
    a) The lifecycle of the programme or project
    b) The stages (and stage gates) that will be encountered during the life cycle of the project and associated discrete, pertinent review points
    c) The Risk Management process for the programme and project,
    d) The Technical Assurance Process
8) To ensure that the pipeline of valid departures is visible and accessible to Highways England and supplier staff
9) To ensure that valid departures are progressed to determination in a timely and efficient manner
10) To ensure that records are kept to support asset management and audit
11) To ensure that the process is supported by an efficient and user-friendly software platform

12) To ensure that the software platform is future proofed – updates and improvements can be easily achieved

E3.2 Development of DAS 3.0

The DAS 3.0 process has drawn upon these studies:

1) An ongoing review of standards by Highways Agency/Highways England since 2007
2) A Lean review of the departures process undertaken by Highways Agency in Feb 2013
3) A review of risk based standards undertaken through Transport Technical Engineering and Research Framework (T-TEAR) in 2014
4) Development work on the Future DMRB through T-TEAR between 2014 and 2016
5) A review of the departures process, DAS 2.0 and WebDAS future needs through between 2015 and 2017
6) A draft "Manual for the Departures Process" (2015 MfD) produced by Highways England between 2014 and 2016. This document provided a comprehensive and useful commentary on the departures process and associated DAS and WebDAS systems.

Development of DAS 3.0 has been undertaken in the following stages:

1) Merging of the Future DMRB and Departures review activity to ensure compatibility
2) Transfer of the current WebDAS and DAS 2.0 functionality onto new web- based software platform
3) Adoption of the draft 2015 MfD as the initial platform for development of DAS 3.0
4) An Initial first edit of the 2016 MfD to align with Manual for Development of Documents (MDD 4.0) terminology
5) A review of departures process overall to incorporate the outputs from the studies listed above
6) Updating of the DAS2.0 process to embrace enhancements to form DAS 3.0
7) Update of the software to suit.

In this way DAS 3.0 has built upon the ideas that support the DAS 2.0 process and uses those features which have been proven to work and have been justified by review. Enhancements have been added to take account of contemporary programme/project governance, alignment with the Future DMRB and the extra flexibility provided by use of a web-based platform.

E3.3 Features of DAS 3.0

E3.3.1 DAS 3.0 related to Project Lifecycle

DAS 3.0 has been aligned with the generic lifecycle for a project:

1) Planning
2) Options
3) Development
4) Construction
5) Handover
6) Operation
7) Maintenance
8) Disposal

E3.3.2 DAS 3.0 related to Programme and Project Management activity

DAS 3.0 has been aligned with the stages and stage gates frequently used for projects. The process is not PCF specific, but can be used for both Major Projects and Operations PCF. The cross correlation between the stages, stage gates and PCF regimes is shown in figure 1 given in the introduction.

DAS 3.0 can be used to support:

1) Programme/Project Managers in Risk Managements throughout the lifecycle.
2) Technical Assurance Partners in project overview
3) Highways England, Designers and supplier staff in recording, tracking, reporting, submission and determination of departures.
4) Highways England staff in maintaining accurate records for management of the asset

These activities are shown on figure 1.

E3.3.3 DAS 3.0 related to handling of departures

Studies undertaken in preparation for DAS 3.0 identified the need for:

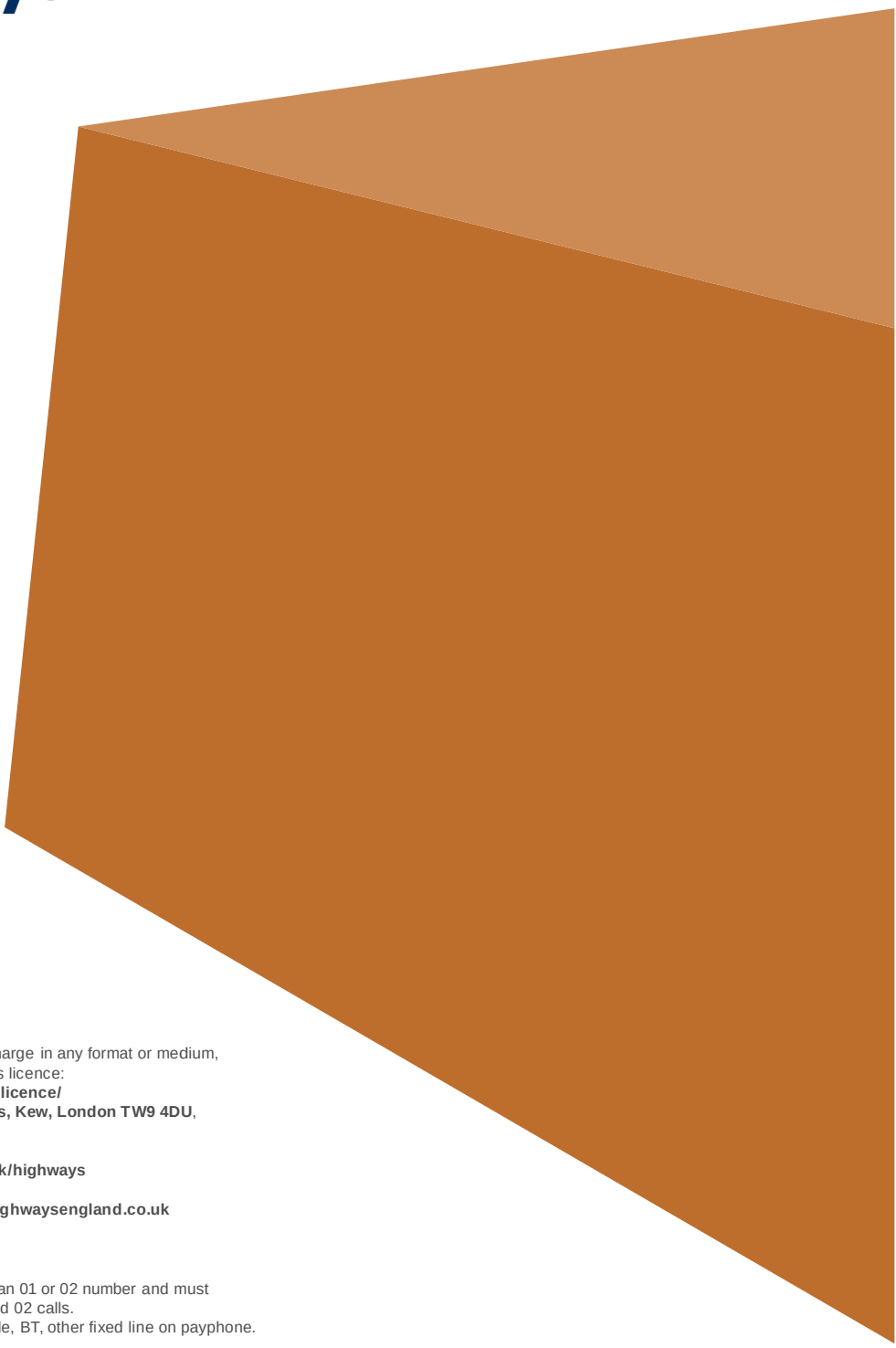
1) Identification of departures early in the project lifecycle – see figure 1 in the introduction.
2) Establishing the record on DAS3.0 for a departure, using core information to support tracking, reporting and planning of Highways England and designer resources.
3) Categorisation of departures early in project life cycle to establish when their determination will be critical. This identifies those departures upon which project viability is heavily dependent even at the Options stage (e.g. Departure categories 5 and 4 – see figure 4.3.1). Risks are managed by ensuring timely progression and determination of these departures.
4) Early engagement with Technical Specialists on critical departures.

E4 Benefits of DAS 3.0 to departures process role holders.

The anticipated benefits to users of DAS 3.0 are4 set out in table 3 below.

Figure E.2 Table 3

Anticipated benefits of DAS 3.0							
Aspect *(Benefit)*	**DAS 3.0 role**						
	Project Manager	**Proposer Designer**	**SES Specialist Submission Point**	**SES Technical Specialist**	**SES Technical Assurance Partner**	**Constructor**	**Operations & Maintenance Manager**
Risk Management:							
Opportunity/Threat	✓	✓	✓	✓	✓	✓	✓
Value Increase Provides scope for:							
Innovation	✓	✓				✓	✓
Project content refinement	✓	✓		✓	✓	✓	✓
Improved User Interface for:							
Data entry		✓				✓	✓
Tracking		✓	✓		✓	✓	✓
Early allocation of Specialists		✓	✓		✓	✓	✓
Early engagement with Specialists	✓	✓	✓		✓	✓	✓
Development		✓		✓		✓	✓
Co-operation	✓	✓	✓	✓		✓	✓
Agreement in Principle status	✓	✓		✓	✓	✓	✓
Only valid departures progressed	✓	✓		✓	✓	✓	✓
Rejected applications minimised		✓		✓		✓	✓
Timely submission of applications	✓	✓	✓	✓	✓	✓	✓
Quicker determinations	✓	✓	✓	✓	✓	✓	✓
Reporting improved visibility of:							
Status at Stage Gates	✓	✓	✓		✓	✓	✓
All records	✓	✓	✓	✓	✓	✓	✓
Departures pipeline	✓	✓	✓	✓	✓		
Departure criticality/priority	✓	✓	✓	✓	✓		
Departure status	✓	✓	✓	✓	✓	✓	✓
Resource management – improved:							
Forward planning		✓	✓	✓	✓		
Current/future commitment		✓	✓	✓	✓		
Peer review support facility	✓		✓	✓	✓		
Cost Efficiency							
Reduced time, reduced costs	✓	✓	✓	✓		✓	
Reduced abortive costs	✓	✓	✓	✓		✓	
Reduced pre-processing time		✓	✓	✓		✓	
Time							
Timely records, submission		✓	✓	✓	✓		
Efficient/visible time - progression	✓	✓	✓	✓	✓		
Records for handover:							
Departure justification	✓	✓	✓		✓		✓
Departure determination	✓	✓	✓		✓	✓	✓
Departure incorporation in works	✓	✓	✓		✓	✓	✓
Asset management & records							
Detailed records captured			✓	✓	✓		✓
Clear audit trail established			✓	✓	✓		✓
Minimised risk of expensive litigation			✓	✓	✓		✓



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