

County Council Development

Teignbridge District: Alterations to widen, as well as straighten the horizontal and vertical alignment of the A382. Including provision of dual carriageway between Drumbridges and Trago Roundabout; widening of the carriageway to 10m from Trago Mills Roundabout to White Hills Cross; provision of a 3.0m wide pedestrian and cycle way alongside the widened road; and provision of a new route connecting the A382 to West Golds Way near the new Newton Abbot Hospital site (Jetty Marsh II). Land at A382, West of Newton Abbot between Drumbridges roundabout on the A38 and West Golds Way, Newton Abbot

Applicant: Devon County Council

Application No: 16/01336/DCR3

Date application received by Devon County Council: 4 May 2016

Report of the Head of Planning, Transportation and Environment

Please note that the following recommendations are subject to consideration and determination by the Committee before taking effect.

Recommendation: It is recommended that:

- (a) Planning permission is granted subject to the conditions set out in Appendix II of this report (with any subsequent changes to the conditions being agreed in consultation with the chairman and Local Member).**
- (b) That Committee notes the Habitats Regulations Assessment attached as Appendix III to this Report.**

1. Summary

- 1.1 This Report relates to the proposed A382 corridor improvement works located to the West of Newton Abbot between Drumbridges roundabout and the A38 and West Golds Way in Newton Abbot.
- 1.2 The main material considerations in the determination of this application are planning policy considerations; nature conservation implications; landscape and visual amenity impacts; Historic Environment impacts; impacts on living and working conditions; traffic and transportation implications; flood risk implications; and surface water management issues.

2. The Proposal/Background

- 2.1 The A382 is the main arterial link between Newton Abbot and the A38 to the north and areas to the west, such as Heathfield Industrial Estate and Bovey Tracey. The road is generally of substandard width and alignment, junctions are generally simple give way type layout. The current road has no footpath or cycleway, except for a small section from Drumbridges roundabout to Stover Country Park. The road carries high traffic volumes and is subject to congestion at times and has a poor safety record.
- 2.2 The proposed improvement route passes alongside a number of land uses including Stover Country Park, caravan parks, Stover Golf Club, and ball clay pits. There are

also a number of individual private properties, areas of agricultural land and woodland immediately adjacent to the A382.

2.3 The main drivers for the scheme are to provide improvements to the A382 which is not built to modern design standards and currently has no facilities for pedestrians and cyclists. The transport objectives of the scheme are:

- To assist in the delivery of planned new development to the west of Newton Abbot
- Improve journey times
- Improve safety
- Encourage the use of sustainable modes of transport.

2.4 The proposed improvements to the A382 propose straightening of the horizontal and vertical alignment of the road, a dual carriageway section between Drumbridges and the Trago Mills Roundabout and widening to a 10m carriageway from Trago Roundabout to White Hills Cross. A new road connecting White Hills Cross to West Golds Way (Jetty Marsh II) would also be constructed as part of the overall corridor improvement. The scheme is about 4km in length.

2.5 The northern end of the scheme would connect to a recently improved Drumbridges Roundabout which connects the A382 to the A38 (national network). This Drumbridges scheme was the first element of the overall improvements to the corridor. The application proposes the following improvements along the A382 corridor:

A38 to Trago Mills Roundabout (approximately 500m)

- Separated dual carriageways
- Provision of footway cycleway
- Improvements to Trago Mills roundabout
- Improvements to Trago Mills Road and Ilford Park access roads

Trago Mills Roundabout to Stover School (approximately 750m)

- 10m wide carriageway, predominantly on embankment
- Crossing of Liverton Brook
- Footway/cycleway on southbound carriageway
- Access to Stover School (left-in/left-out)

Stover School to Greycoat Lane (approximately 900m)

- 10m wide carriageway predominantly at existing levels
- Footway/cycleway at existing levels
- New pedestrian/cycle bridge across the A382
- New roundabout north of Greycoat Lane (access to Forches Cross Industrial Estate)
- Junction with Greycoat Lane
- Existing access to Staplehill Road closed.

Greycoat Lane to Ringslade Road (approximately 580m long)

- 10m wide carriageway predominantly on embankment
- Footway/cycleway on northbound carriageway

- Access to private dwelling, ball clay pit and Highweek
- Roundabout junction with Ringslade Road

Ringslade Road to Exeter Road/Whitehill Cross (approximately 750m)

- 10m wide carriageway (southbound on embankment, northbound in cutting)
- Footway/cycleway alongside northbound carriageway.
- Roundabout junction

Exeter Road/Whitehill's Cross junction to West Golds Way (approximately 340m)
(Jetty Marsh II connection)

- New length of road 7.3m wide carriageway on embankment
- Footway/cycleway alongside northbound carriageway

- 2.6 It is intended that the improvement works would be carried out in three phases:
- Phase 1 - Newton Abbot to Forches Cross (including Jetty Marsh II)
 - Phase 2 – Forches Cross to Trago Mill Roundabout
 - Phase 3 – Dual carriageway section between Trago Mills Roundabout and the A38.
- 2.7 Drainage arrangements for the road improvements and new section of road would use a sustainable drainage system designed to attenuate flows by using filter strips, swales and attenuation ponds.
- 2.8 New street lighting will be provided in accordance with the Highway Authority requirements, which includes the lighting of the new roundabout junctions and the new road (Jetty Marsh II), and the lamp heads of existing lighting replaced. The lamp heads would make use of louvres to reduce light spill and have timed dimming between 10pm and 1 hour after dawn.
- 2.9 Whilst the scheme has been designed to minimise landscape impacts (particularly on mature trees and heritage features) the proposed improvements will involve the removal of trees and hedgerows. The applicant proposes a series of enhancement, mitigation and compensation measures including replacement and additional native planting, maintenance of planting, protection of existing trees not required to be removed and retaining walls to be faced with locally sourced stone.
- 2.10 The loss of habitat due to the works will be the loss of 2.36ha of broadleaved woodland, 0.5ha of coniferous woodland, 2.25ha of mixed plantation 2.28km of hedgerow, 770m of hedgerow with trees, 1ha of scrubland, 2.6ha of arable farmland, 4.8ha of improved grassland and 2.5ha of amenity grassland. The proposed replacement planting would include 3.8km of native hedgerow, 9ha of species rich grassland, 3.3ha of native woodland planting in the scheme corridor, and a further 5.7ha of woodland would be planted at an offsite but local location.
- 2.11 A number ecological mitigation works are proposed including installation of bat boxes, bat culvert, otter underpasses, and wildlife kerbs. Where required the proposed new hedgerows should be planted in advance of the construction phase and be an integral part of the Construction Management Plan.
- 2.12 The A382 corridor runs through rich historic landscape containing both designated and non-designated heritage assets, some of which will be subject to direct and

indirect impact. Mitigation would be provided by restoration and conservation of the listed buildings directly affected. The area has underground archaeological potential but during construction archaeological monitoring and recording would be carried out.

- 2.13 There is a potential that both during and post construction there will be impacts arising from noise, particularly on properties abutting the road and designated areas. As mitigation during the construction phase the applicant has proposed to implement site management practices. Post construction the noise levels would increase and in order to minimise impacts acoustic fencing would be provided at certain locations and lower noise road surfacing would be used.
- 2.14 The proposal has been subject to Environmental Impact Assessment (EIA) and is accompanied by an Environmental Statement (ES). The ES covers the following topics and the issues arising where material to the determination of the application are considered in Section 6 of this Report:
- Site Description
 - Alternative Options
 - Environmental Impact Assessment Methodology
 - Transport & Access
 - Ecology
 - Landscape
 - Archaeology & Cultural Heritage
 - Noise & Vibration
 - Air Quality
 - Greenhouse Gas Emissions
 - Water Resources & Flood Risk
 - Ground Conditions
 - Economic Impact
 - Cumulative Impacts
- 2.15 As a result of the consultation process additional EIA information was required and the consultation responses set out the final comments of the consultees.

3. Consultation Responses

- 3.1 Teignbridge District Council (Planning): No objection. The Council considers that the proposal does not conflict with its Local Plan and is content to accept the decision of the County Planning Authority. In coming to a decision it recognises that DCC will need to balance the comments of its Environmental Health section against the identified strategic need for the road improvements in the emerging Houghton Barton Development Framework SPD.
- 3.2 Teignbridge District Council (Environmental Health): Raise concerns about the impact of noise on properties close to the boundary of the road. Specifically it notes that the 2034 calculated sound map shows many of the noise sensitive sites will be impacted by sound levels above 55dBA when measured over a 16 hour period. It accepts that it will be difficult to protect properties close to the boundary of the new road, but the health and wellbeing of occupiers of current and future residential properties should be considered and justified. It asks whether additional acoustic barriers/structures be added to the road design or properties acoustically insulated, so that noise levels within the living rooms and bedrooms do not exceed 30dB L_{Aeq T}.”
- 3.3 Newton Abbot Town Council: Fully support the proposal.

- 3.4 Teigngrace Parish Council: Objects to the application on the grounds that it is proposed to increase the capacity of one of the existing culverts and this would increase flooding in School Road.
- 3.5 Dartmoor National Park: Consulted as adjoining planning authority and no comments received.
- 3.6 Environment Agency: No Objection. Make the following comments on respective functions of the Agency.

Groundwater and contaminated land: recommend inclusion of planning conditions dealing with risks associated with contamination of the application site.

Biodiversity: Support proposed measures for safe passage of otters. It considers that the proposed biodiversity enhancements should be developed to ensure that there is no net loss of woodland/scrub habitat. Recommend that new tree planting be phased to enable sufficient habitats to develop.

Fisheries: Require that the development ensures that appropriate passage is available for eels.

- 3.7 Natural England: No objection subject to appropriate mitigation being secured. Specific to greater horseshoe bat activity (and thereby on the integrity of the South Hams Special Area of Conservation) Natural England considers that the following mitigation measures are required:
- Measures to prevent detrimental light disturbance
 - Measures to provide safe crossing points and maintain habitat permeability
 - Measures to provide suitable habitats adjacent to the road, and link to the crossing points
 - Offsite resilience measures
 - Provision of links to adjacent development mitigation proposals.

Natural England also provides additional advice on further mitigation including design of culverts; habitat creation; habitat management; temporary measures to be undertaken whilst new habitats become established; a sum of £105k towards habitat resilience works; measures to prevent light spillage; and the provision and implementation of a Landscape and Ecological Management Plan

- 3.8 Devon Wildlife Trust: No comments received.
- 3.9 Royal Society for the Protection of Birds: No comments received.
- 3.10 Historic England: Make a number of comments on the proposal. It concludes that the accumulation of impacts to different designated assets as a result of the proposal will result in significant harm and will need to be considered under para 134 of the NPPF. This highlights the need to balance any harm against the public benefits of the scheme including any conservation gains.

Specifically it identifies significant harm to the physical structure of Liverton Bridge, and the boundary wall to Stover Parkland and notes moderate adverse impacts from noise, impacting upon the setting of the registered parkland.

Historic England considers that the enhancement to the parkland and repairs to Stover Bridge are fundamental parts of the conservation gains required to mitigate the impacts and consider that this should be done through a contribution to a Heritage Lottery Fund.

- 3.11 Devon Gardens Trust: No objection. The Trust comments that whilst the proposal would affect the setting of Stover Park (the widening would completely change the character of the road as it passes by Stover Park) it is pleased that the County Council have opted for the widening on the south west side of the road, outside the park boundary.
- 3.12 Sport England: No objection on the grounds that the proposal meets the exceptions test in that the widening would only affect land that is incapable of forming part of a playing pitch and the development does not impact on the existing playing fields.
- 3.13 National Grid Plant Protection: Provides advice on requirements when working on or close to National Grid apparatus.
- 3.14 South West Water: Conforms that the proposed surface water disposal is acceptable.

4. Advertisement/Representations

- 4.1 The application was advertised in accordance with the statutory publicity arrangements by means of a site notice, notice in the press and notification of neighbours by letter. As a result of these procedures 10 letters of representation have been received from local residents. Of these representations 5 object to the proposal, 4 make comments and 1 supports the scheme. In addition letters of objection have been received from representatives acting on behalf of Stover Golf Club, Trago Mills, Sibelco and the owner of Berry Knowles.
- 4.2 The objections from nearby residents are summarised:
- Impact on the golf course – suggest road widening should take place on opposite side.
 - Visual impact of new pedestrian cycle overbridge.
 - Pedestrian/cycleway would be better located on the opposite side of the road to that proposed.
 - No need for new cycleway as this can be accommodated on the Templar Way.
 - The footpath/cycleway crossing to link up with the recently constructed bridge at Drumbridges should be placed at the Drumbridges roundabout.
 - Impact of noise on residents of Orleigh Cross.
 - Increased air pollution
 - Increase in flood risk
 - Increase in traffic congestion from Orleigh Cross
 - Detrimental visual impact of the proposal.
 - Proposal results in gaining access from Newton Abbot Hospital difficult.
 - Impact on the children's playground
 - Loss of natural habitat.
- 4.3 Those not objecting but making comments refer to the following issues:
- Seeks assurance that flooding would not be made worse
 - Seeks assurances that trees would be protected
 - Wants information on the timing of construction

- Seeks information on noise attenuation measures
- 4.4 The supporting representation is on the grounds of improved safety for access onto the A382, provision of walking and cycling facilities and that the road will support business growth.
- 4.5 The following representations from specific landowners and businesses have been received:
- Stover Golf Club -Concern about the impacts upon the golf course: The Club comment that the application will affect 5 holes at the course but notes the planning permission (ref: 16/00922/MAJ) for the replacement of the 5 holes (Sports England provided conditional support to this application). They request that the replacement golf course facilities are in use before the works for the A382 affecting the existing course commences, and that this is secured by a planning condition or obligation, of the above permission. They also question why the road wasn't widened on the opposite side of the road into the Registered Park and Garden; impacts for users during construction and upon the business; that there is no formal guarantee that the lost holes would be replaced; concerns about additional maintenance if additional holes are provided; concern that car parking would not be adequately replaced; concerns about road safety and access into the gold club; concerns about delays during the construction period for those getting to the golf club and the impact for users; impacts from noise and about how mitigation funding would be spent.
 - Sibelco – Object to the scheme raising concern about the impact upon allocated employment land adjacent to the proposed Whitehill's roundabout and Orleigh Park. The location of the road would reduce the area for the allocated development, stating that this would make it unviable for employment use and access into the site. It also raises concerns about restriction over developing other land owned by Silbelco due to the location of the Jetty Marsh Link. It is considered that the land set aside for the road scheme is greater than necessary. Silbelco consider the land taken by the Jetty Marsh link road is off strategic mineral importance in relation to nationally significant mineral resource, and that the proposed development is likely to sterilise the resource.
 - Trago Mills have raised a number of concerns regarding impacts upon their business, principally these are concerns about the proposed hours for construction; the need for further detail in the construction management plan, particularly in terms of traffic management and the proposed one way system during construction; and the need to address these issue in the ES prior to determination.
 - Berry Knowles – Raise concerns about the need for a verge next to the property; concern about the proximity of the proposal to the dwelling, particularly in relation to impacts from noise; air quality and amenity.
- 4.6 Copies of representations are available to view on the Council website under reference DCC/3851/2016 or by clicking on the following link: <https://planning.devon.gov.uk/PlanDisp.aspx?AppNo=DCC/3851/2016> .

5. Planning Policy Considerations

- 5.1 In considering this application the County Council, as County Planning Authority, is required to have regard to the provisions of the Development Plan insofar as they are material to the application, and to any other material considerations. Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires that where regard is to be had to the Development Plan, the determination shall be in accordance with the Development Plan unless material considerations indicate otherwise. In this case, the Development Plan policies are summarised in Appendix I to this report and the most relevant are referred to in more detail in Section 6 below.

6. Comments/Issues

- 6.1 This section of the Report examines the main material considerations to be considered in the determination of the application.

Planning Policy Considerations

- 6.2 The Teignbridge Local Plan sets out the policies, proposals and actions to meet the environmental, social and economic challenges facing the area between 2013 and 2033 and provides a strategy for the distribution and level of development and supporting infrastructure.
- 6.3 Teignbridge Local Plan Policy HT1 (Heart of Teignbridge – Movement) sets out support for the realignment of the A382 Bovey Tracey Road between Newton Abbot and Drumbridges roundabout at the A382; the provision of pedestrian and cycle provision; and the Jetty Marsh Phase II link road where it can be demonstrated that there would be no adverse effect on the integrity of the South Hams Strategic Area of Conservation (SAC).
- 6.4 Policy S14 (Newton Abbot) provides, amongst other things, for the allocation of employment development; residential development improvements to the road network; and provision of new road infrastructure.
- 6.5 The scheme contributes to the five key objectives set out in the Devon and Torbay Local Transport Plan 3 (2011 - 2026) to achieve the vision for a low carbon transport system that offers choice and encourages sustainable travel behaviour:
- Deliver and support new development and economic growth by opening up development at Forches Cross and Houghton Barton
 - Make best use of the transport network and protect the existing transport asset by prioritising maintenance by improving the existing A382 and increasing capacity
 - Work with communities to provide safe, sustainable and low carbon choices by delivering cycle and pedestrian facilities between new developments and Newton Abbot, giving residents a viable choice to use sustainable modes.
 - Strengthen and improve the public transport network by reducing delay on principle County Bus Routes towards Newton Abbot
 - Make Devon the 'Place to be naturally active' by improving pedestrian and cycle facilities encouraging active travel between new developments and Newton Abbot.
- 6.6 In the determination of this application Members will need to balance this strong policy support against any adverse impacts of the development.

Nature Conservation Issues

Statutory Designations

- 6.7 There are two statutory designations potentially impacted upon by the proposed development, these being the South Hams Special Area of Conservation (SAC) and Stover Park Site of Special Scientific Interest (SSSI).
- 6.8 The northern part of the scheme lies on the edge of the current Chudleigh Greater Horseshoe Bat SAC Sustenance Zone. Two SAC strategic flyways pass across the A382 – one along the top of the A382 (the A38 corridor) and the other along Liverton Brook (which crosses under the A382 at Stover Bridge). Due to the proximity of the site to the European designation, the Council, as Competent Authority, is required by the Habitats Regulations to carry out a Habitats Regulations Assessment (HRA) to screen for likely significant effects on the SAC. A copy of the HRA screening can be found in Appendix III. The screening for the HRA confirms that the scheme has the potential to impact upon Greater Horseshoe bats, though loss of foraging habitat within the Sustenance zone and impacts upon flight lines across the road affecting wider landscape permeability. Mitigation measures have been put forward, in this case these are: the provision of two culverts to facilitate safe crossing points; the protection and enhancement of the existing crossing at Stover/Liverton Bridge; dense tree/scrub planting along the road corridor to discourage the bats from crossing the road and to encourage use of the safe crossing points; lighting lux/timings addressed in the Construction Environmental Management Plan (CEMP); contribution to a mitigation fund for wider improvement associated with the SAC. Subsequently, with mitigation in place, it is view of the Authority view that the proposal would not have a significant adverse effect on the South Hams SAC.
- 6.9 As a result of the proposed drainage arrangements the proposal is not considered to have any direct impact on the Stover Park SSSI.

Priority Habitats

- 6.10 The proposal would result in the loss of hedges, broadleaved woodland, coniferous and mixed plantation. Mitigation will be provided by new hedge along the majority of the road and planting/management of hedges and planting of 3.3ha of broadleaved woodland planting along the scheme corridor, 5.7ha of broadleaved woodland offsite. It is considered that this is an appropriate level of mitigation.

Protected Species

- 6.11 There are a number of potential impacts on bat species, including tree roosts, roosts in buildings and impacts on foraging habitat and flight lines. Survey work has not revealed any evidence of bat roosts in trees. One Greater Horseshoe bat was recorded in the Ice House which will require it to be protected during the construction works. The main impact is that the widened road will either increase the risk of collisions (where crossings are attempted), or increase the barrier effect, especially for low flying species. The Great Horseshoe bat mitigation works will also provide mitigation for other bat species.
- 6.12 The proposal will result in the loss of hedge banks and woodland which is suitable habitat for Dormice and the developer will need to secure the appropriate licence from Natural England before works can take place. In this case the licence is likely to be issued as the development is required to facilitate planned development, there are

no less harmful alternatives and the widening is less damaging than providing a new route. The mitigation set out in the ES (new hedges and replacement and additional woodland) is sufficient to compensate for the loss of habitat.

Nature Conservation Conclusion

- 6.13 In order to secure appropriate protection and mitigation as set out in the ES it is recommended that a planning condition is imposed securing a detailed Landscape and Ecological Mitigation, Management and Monitoring Strategy (LEMMMS) in advance of any works taking place. Also, submission and approval of a detailed Construction Management Plan will be secured by planning condition; this will deal with minimising nature conservation impacts during construction. Other commitments which have been guaranteed by the applicant are the provision of a £105K fund for Greater Horseshoe Bat mitigation and the planting of 5.7ha of broadleaved native woodland to compensate for loss of woodland and to benefit bats, dormice and other wildlife. It is concluded that with this level of mitigation and compensation the impact on nature conservation interest will be appropriately mitigated.

Landscape and Visual Amenity

- 6.14 Landscape impacts arise as a result of the removal of individual mature trees, hedge banks and areas of woodland. There will also be an impact due to the widening of the road corridor (including cuttings and embankments) and the introduction of new engineered structures such as the proposed new roundabouts, overbridge and associated lighting. It is considered that this will result in a moderate adverse and permanent impact.
- 6.15 The relevant landscape designations protected Countryside (Policy S22 – Teignbridge Local Plan), and a Grade II Stover Registered Park and Garden. Views of Haytor, and the Dartmoor National Park (1.5km at its nearest point) can be made from the road, and an Area of Great Landscape Value, is also found to its east (3.25km). In terms of local Landscape Character, the road falls within the ‘Bovey Basin’ area which is described as a largely flat river basin ringed by hills, often wooded, including the rim of Dartmoor.
- 6.16 It is considered that the majority of the adverse landscape and visual effects have been mitigated through sensitive design to restore lost features and planting screening vegetation. This has included the widening the road on its southern side, in order to minimise encroachment into the Registered Parkland.
- 6.17 So far as mitigation is concerned, during the construction phase it is important in landscape and visual terms that existing vegetation not programmed for removal is protected. This would be secured by the provisions of the required Construction Management Plan. The planting and maintenance of new landscaping features would be secured in the required LEMMMS.
- 6.18 In terms of immediate visual impact the properties nearest the new Jetty Marsh Link Road would experience the most significant impact. The properties facing onto where the new road will be presently look out over trees and countryside and this will be replaced by a 5m high embankment on top of which will be a lit road. However, this section of road is identified for construction in the adopted Local Plan and visual impacts will be mitigated by tree planting on the embankment and the lamp heads would be louvered to avoid light shining into the properties.

Landscape and Visual Amenity Impact Conclusion

- 6.19 It is considered that the wooded landscape character of the Bovey Basin as a whole offers potential capacity to accommodate the road widening without resulting in significant long term harm, taking the approach that tree loss is minimised and any proposed tree planting is effectively managed and maintained. In this case it is appropriate to also consider the proposal in the context of the development allocated in the local plan, which will, in any event, significantly change the local landscape context. With the additional mitigation and agreement of details, it is considered that the road proposal meets the local plan criteria as necessary infrastructure, for development in the countryside on the east side of Newton Abbot (S22 Countryside) and the following Landscape policies: S2 (Design Quality); WE11 Green Infrastructure; EN2A (Landscape Protection and Enhancement); EN12 (Woodlands, Trees and Hedgerows).

Historic Environment Impacts

- 6.20 There are a number of listed buildings/structures, and associated historic assets that would be directly, or indirectly affected by the proposed road scheme.

Direct Impacts

- 6.21 In terms of direct impacts a number of structures would be affected. These are Liverton Bridge (Grade II listed building); Stover Park (Grade II listed Registered Park and Garden) and a Milestone located northwest of Stover (Grade II listed).
- 6.22 Liverton Bridge was constructed in 1770 and formed part of the former highway between Bovey Tracey and Newton Abbot. The bridge is simple in architectural design which supports the idea it was not designed as part of the overall parkland landscape, but for more functional purposes. As a result of this proposal the bridge would be significantly altered, the east elevation (facing into the parkland) would remain untouched; but to the west, the bridge would be significantly widened to accommodate a new cycle path and carriageway. This would involve the loss of the west parapet and the extension of the new bridge by approximately 10m. The rest of the historic structure would be left in-situ and the new bridge would be built abutting it, reflecting the dimensions of the supporting arch. The western parapet would be straightened to accommodate the increase in height needed to allow for a more consistent road deck. There would also be a central parapet created in matching rubble stone to separate the cycle path from the road; however, this would have a more elevated position sitting approximately 1 metre above the eastern parapet and would be very close to the layout of the original west parapet. Because of the proposed alterations the bridge is subject of a separate Listed Building Consent application which is subject to the approval of Historic England.
- 6.23 Stover Park and its associated buildings cover an area of 180 hectares and dates primarily from the 18th and mid 19th Century. It includes pleasure grounds, and mid C19 gardens, and parkland. Stover Park is on Historic England's Heritage at Risk Register where its condition is described as 'generally unsatisfactory with major localised problems'. In terms of impacts, construction work would directly affect the boundary of the Parkland through the removal of a number of trees (predominantly on the edge of the Ice House Copse) as well as direct loss of sections of the Parkland boundary wall. A 150m length of wall, in two separate sections would be rebuilt and relocated between 5-10 metres away from its current location. This is required due to the road alignment and associated changes in levels. In this case

the direct physical impacts upon the wall and trees are considered to result in substantial harm.

- 6.24 The listed milestone is within the footprint of the widened road and would be relocated. None the less the milestone would remain intact and Listed Building Consent for its relocation has been granted.

Indirect Impacts

- 6.25 As well as direct impacts on Stover Park, there will be indirect impacts in terms of its rural setting in the landscape. These come about as a result of cumulative impacts from the planned Ilford Park (and associated developments) opening up views of this due to significant tree removal in this area.
- 6.26 It is considered that there would also be indirect impacts on the setting of Stover School. Within the school there are a number of assets, namely Stover House; Granite Lodge; The Clock House; and Former Stables (all Grade II* listed) and the Ice House; Summerhouse and Higher Lodge (Grade II listed). The indirect impacts can occur as a result of changes to the landscape (as a result of the loss of trees and the change in the nature of the road) and impacts on the quiet enjoyment as a result of increased noise levels during construction.

Mitigation

- 6.27 Requirements for protection of existing planting and the provision of new planting will be secured by planning conditions (Construction Management Plan and LEMMS) and this will assist in the mitigation of the impact on the setting of historic environment assets. In addition the following specific enhancements are proposed to be carried out:
- Structural repairs to Templar bridge - located 300m north of Stover School away and forms part of the historic Templar Way, (LBC has already been granted);
 - Tree planting within the Stover Parkland (56 trees);
 - Repairs to the Grade II listed Ice House; (LBC has already been granted)
 - Interpretation boards within Stover Park

Archaeology

- 6.28 There are a number of non designated assets of significance which would be directly affected by construction works associated with the proposal. These include medieval tin mining heritage (characterised by remnant mine working); the Roman Road from Telegraph Hill to Teignbridge; Ilford Park Hospital (Second World War military complex); settlement evidence (including the late 19th century farmstead of Berry Knowles); potential prehistoric remains; and potential early (Pre/medieval) remains associated with the mineral industry. Whilst construction works would involve the loss of any archaeological features any features discovered would be recorded and any finds appropriately curated.

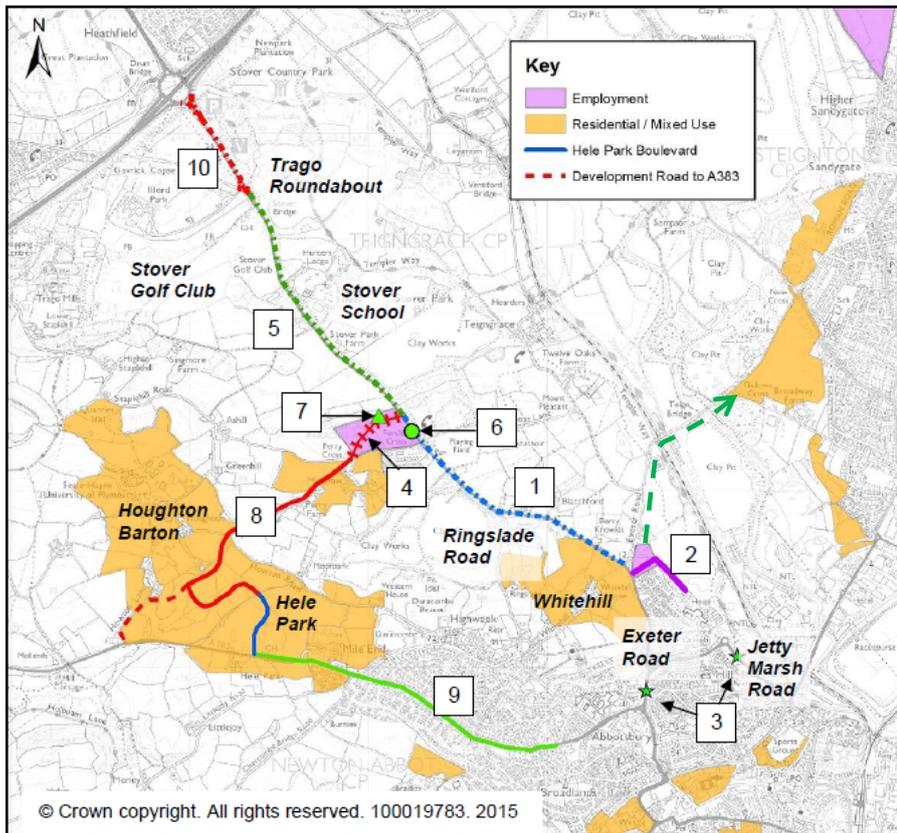
Historic Environment Conclusion

- 6.29 In arriving at a decision on this application, considerable weight has to be given to the desirability of protecting Liverton Bridge, preserving the setting of Stover House (Grade I) and its associated Registered Parkland (Grade II, at Risk) and protecting the non-designated rare medieval tin-streaming works. In this case substantial harm

is predicted upon these assets as a result of the road widening. Nevertheless it is considered that the substantial public benefits in providing infrastructure to support the planned growth of Newton Abbot, for housing and employment outweigh the harm to these heritage assets. The proposed heritage benefits also form part of these substantial public benefits, and would help enhance the historic environment in the longer term. This is in accordance with the Planning (Listed Building and Conservation Areas) Act 1990 and the paragraph 133 of the NPPF.

Traffic and Transportation

- 6.30 The A382 is County Primary Route connecting Newton Abbot to the A38 at Drumbridges roundabout. The existing road is of low standard with poor alignment, no verges, is a narrow carriageway and has no facilities for cyclist or pedestrians. Despite this traffic flows are high with excess of 900 vehicles per hour southbound in the PM peak. As such the route is operating close to capacity due to the low design standard of the road which is estimated to have a capacity of about 1,100 vehicles per hour.
- 6.31 Teignbridge District Council's adopted Local Plan (2013-2033) features a large amount of development (2,300 homes) to the West of Newton Abbot. This development will have direct access onto the A382 and the A383 with a Link Road connecting the two through the development. Also included in the Local Plan is 18 hectares of land for employment, part of which is allocated at Forches Cross which will be accessed from the A382. These developments will significantly increase the growth along the corridor, from vehicles traveling to and from Newton Abbot as well as vehicles traveling further via the A38 to Exeter and Plymouth.
- 6.32 The A382 is one of the worst performing A class roads in terms of safety in Devon (in the top 15% of worst A roads), year on year, with two fatal collisions in the past 5 years. The Road is subject to the national speed limit of 60 mph between the A38 and the edge of Newton Abbot urban area. Despite this average speeds do not exceed 40 mph, suggesting that the alignment of the road is restricting traffic speeds and therefore prolonging journey times.
- 6.33 The proposal to widen the A382 would increase the capacity along this corridor, and allow for future junctions to be incorporated. The construction of the Jetty Marshes link would help alleviate future congestion, and without this link, the additional traffic generated by widening the A382 would get held up at Churchill's Roundabout. The following map provides the context for overall planned development in the area and the table details the works to be carried out in the area and the order it would be carried out in. The works include a range of new facilities for both vehicles (including buses) and pedestrian/cyclists.



Item	Description	A382 Planning Application	Scheme/Phase
1	Realignment and widening of the A382 to 10 metres with shared pedestrian and cycle path between Forches Cross and Whitehill's Cross	✓	A382 Phase 1
2	Jetty Marsh II connection between Whitehill's Cross on the A382 and Jetty Marsh Road near the Hospital	✓	
3	New crossings on Exeter Road and Jetty Marsh Road forming part of the Newton Abbot East-West cycle route ²	X	
4	A new road through proposed employment land at Forches Cross	X	
5	Realignment and widening of the A382 to 10 metres with shared pedestrian and cycle path between Trago Roundabout and Forches Cross	✓	Houghton Barton Package (including A382 Phase 2)
6	Pedestrian and cycle bridge at Forches Cross	✓	
7	Park and Change site	X	
8	A new road through the Houghton Barton development (Houghton Barton Avenue) from Forches Cross employment land, connecting with Hele Park Boulevard (part of the Hele Park development) and a development road to the A383 (part of Houghton Barton Development), completing a connection between the A382 and A383	X	
9	Off-road cycle facilities along Ashburton Road (A383) forming part of the Newton Abbot East-West cycle route	X	
10	Widening of the A382 to 2 lane dual carriageway with shared pedestrian and cycle path between Drumbridges and Trago Roundabout	✓	A382 Phase 3

6.34 It is considered that the scheme will have an overall positive impact on the highway network by reducing journey times and improving safety.

- 6.35 In terms of public transport it is noted that the existing bus stops will be replaced and the current provision maintained and with improved journey times along the A382 bus users will benefit.
- 6.36 The scheme has a significant positive impact on pedestrians and cyclists through the introduction of an off-road shared path from Newton Abbot to Drumbridges connecting with existing infrastructure. Currently there are no facilities for pedestrians and cyclists along the A382 so the new path will have significant benefits. This path will enable walking and cycling journeys to be made to key sites such as Heathfield and Newton Abbot, in addition to future developments at Forches Cross, Houghton Barton and Whitehill.
- 6.37 During construction there will be impacts for users of the existing A382 and the concerns raised by Trago Mills are noted. In the event of planning permission being granted a condition would be imposed requiring the submission and approval of a Construction Management Plan. This would be provided by the contractor prior to the commencement of works and would require specific details of traffic would be managed to minimise impacts. In the longer terms it will be recognised that the improvements to the A382 will benefit existing businesses accessed from the road.

Traffic and Transportation Conclusion

- 6.38 The A382 corridor improvements will have a positive impact in terms of road safety and journey travel times for existing users. The scheme will deliver the new road connection (Jetty Marsh II) which is identified in the adopted local plan and facilitate planned residential and employment development, also identified in the local plan. The corridor improvements will also create new facilities for buses, pedestrians and cyclists. Taking this into account it is considered that there is strong policy support for the development.

Flood Risk and Surface Water Management

- 6.39 The A382 crosses two water courses at Liverton Brook in the North, and Blatchford Brook in the South, and falls within the tidal and fluvial flood plain of the River Teign in the South. The most part of the scheme falls within Flood Zone 1 with (low probability) of flooding, except for The Jetty Marshes Link Road, which is located within Flood Zone 2 (Medium Probability).
- 6.40 The new section of road has been design so the carriageway sits on an embankment raised above the predicted flood levels. As this consequently results in loss of flood storage capacity in this area, compensatory storage has been proposed resulting in a net increase in storage capacity. This would result in minor benefits on down stream flood risk. The culverts that would carry water under the road in both brooks, and other watercourses along the route would be sized so that they would not result in increased flooding downstream.
- 6.41 The existing A382 road has no formal SuDS drainage features, with runoff routed directly to surrounding watercourses with no designed attenuation. The scheme incorporates a number of features to deal with surface water drainage; these are principally SuDS attenuation features, in this case, ponds, adjacent to the six primary catchments. These have been designed to control the rate of surface water runoff from the proposed road to greenfield runoff rates. Devon County Council as lead Local Flood Authority has confirmed that the proposed surface water drainage is both acceptable and in accordance with local and national standards.

- 6.42 In terms of water quality the road drainage systems would have passive treatment pollution control measures, such as catch pits, trapped gullies and oil/grit separators.

Flood Risk and Surface Water Management Conclusion

- 6.43 The concerns of the Parish Council regarding the potential for additional flooding as a result of the scheme are noted, but the details provided with the application demonstrate that there will not be an increase in flooding as a result of the scheme. The requirements for the provision of the detailed drainage scheme will be secured by planning condition.

Impacts on Living and Working Conditions

- 6.44 The main impacts on living and working conditions are considered to be noise and air quality, and these have the potential to be greater during the construction period.

Noise and dust during the construction period

- 6.45 Noise during construction work would be expected from the site preparation, excavation works, piling, final surfacing and associated plant and machinery. The hours for all construction activity would be from 08:00 to 18:00 Mondays to Fridays, and 08:00 to 13:00 on Saturdays. The ES sets out that some evening or night working would be required, but also states that no continuous 24-hour activities are envisaged and no working would take place on Sundays or Bank Holidays working unless agreed with the Planning Authority.

- 6.46 In terms of measures proposed to minimise impacts from construction activities, a Best Practicable Means approach has been put forward and will include the following measures: low noise equipment, use of appropriate silencers and maintenance; considerate timings for deliveries; use of barriers and hoardings.

- 6.47 During the construction period residents near Jetty Mashes in the Orleigh Cross Area, Berry Knowles and users of Stover school, are most likely to experience the effects of dust generated primarily from earthwork activities. Appropriate dust control measures would be put in place and would likely to include the use of water dust suppression. Additional measures near residential properties would also be used, such as speed limits and cessation of dust generation activities during high winds,

- 6.48 The full details of noise and dust control would be provided in a Construction Management Plan which would be required by planning condition and it is anticipated that with appropriate measures in place there would not be significant adverse impacts.

Noise Impacts following the completion of the works

- 6.49 The ES examines the noise impacts of the scheme based on the potential change in vehicle flow and composition of traffic on the A382 and across the wider network. The study area includes the A382 corridor, Ashburton Road, Mile End Road, Broadlands Avenue, Exeter Road, Newton Road and West Golds Way. The baseline for the study is based on noise surveys carried out in 2015 and the operational impacts are assessed in ES at the assumed opening year (2019), one year after opening and 15 years after opening.

- 6.50 The noise assessment identifies that the large proportion of noise will be due to the increase in the speed of traffic and the greatest impact is on land adjacent to the A382 and land adjacent to the new Jetty Marsh Road and the existing West Golds Way. The assessment recognises that the impact of the scheme on the noise environment will be *major* in the long term at 36 receptor locations, and '*substantial*' in the long-term at 207 receptor locations. Because of this mitigation of noise impacts will be required.
- 6.51 The mitigation proposed is the provision of acoustic fencing at selected locations and the use of acoustically treated lower noise road surfacing.
- 6.52 With mitigation, in the longer term, the number of properties experiencing '*major*' noise impacts along the improvement corridor would be reduced to 1, and there would be a reduction to 130 households experiencing '*substantial*' impacts. Outside of the improvement corridor on West Golds Way (where the new road will link into) the north facing flats opposite the hospital would experience '*major*' noise impacts there are no feasible options to provide acoustic fencing. However, under separate legislation (Noise Insulation Regulations) additional noise insulation measures are required.

Air Quality following the completion of the works

- 6.53 The road is designed to reduce traffic congestion and improve journey times and this would by itself have a positive impact on air quality. However, the road is designed to cater for traffic arising from additional developments in the Newton Abbot area and this general increase in traffic will result in an increase in pollutants, with or without the scheme. It is noted that the residential and commercial development identified in the plan is not dependent on the road improvements and without the improvements congestion would worsen and air quality would deteriorate to a much greater extent.

Impacts on Living and Working Conditions conclusion

- 6.54 It is recognised that the development of the road scheme will have adverse impacts during the construction period, but it is considered that these can be adequately mitigated, and the mitigation secured with a Construction Management Plan. Longer term there will be adverse impacts in terms of traffic noise and this impact needs to be considered in the determination of the application.

Other Matters

Land contamination

- 6.55 The risks from potential land contamination have been raised by the Environment Agency. In this case the Agency has suggested planning conditions and these would be incorporated into any grant of permission.

Impact on recreation facilities

- 6.56 The proposed road widening would encroach into the edge of two fields south of Forches Cross, within which a playing pitch is located; impact on a playground and result in the loss of public open space at Orleigh Cross.
- 6.57 The widening of the road would result in the loss of 8,291m² of land currently used as playing fields by Coombeshead Academy and Newton Abbot College. The area directly affected is currently used for long jump and shot put, and does not form part

of the playing pitch itself. The applicant has the ability to offer approximately 3,960m² of land as compensation in the southern end of the bottom field. There is also an option to provide an access off a new roundabout, opening up the opportunity to use this lower field for sports activities which are not currently possible.

- 6.58 The playground which would be lost as part of the development would be replaced by larger, better play facilities. The area used by members of the public as an informal open space, (which includes protected trees and a footpath linking to Exeter Road, which is within the footprint of the proposed new link road), would not be replaced due to limited space available to relocate.

Impact on Stover Golf Course

- 6.59 Stover Golf Club is an 18-hole course, with 5,952 yards and par 69. The land needed to be acquired for the road scheme would result in the impact/loss on 5 golf holes and land from the north eastern boundary of the site, resulting in a loss of 1.5 hectares. Devon County Council (DCC) has engaged in discussions with the club and in an endeavour to assist, it engaged an architect to produce a design for a remodelled course. This design would require the acquisition of approximately 10 hectares of neighbouring farmland. DCC has secured an option to acquire this and obtained planning permission for the remodelling works.

- 6.60 The comments received from Stover Golf Club in relation to the requirement that the replacement part of the course is provided before the works commence are noted. In this case it is very likely that this would be achievable given that the golf course compensation works are within the phase two construction works and these are unlikely to begin for a number of years. However, it is not considered appropriate to require the timescale of works by planning condition as this potentially impacts on the delivery of the road scheme.

- 6.61 The road scheme involves land in a number of ownerships and it in accordance with the normal practice in such cases, the Council would make a Compulsory Purchase Order (CPO) following the grant of planning permission. The compulsory purchase legislation provides for the payment of monetary compensation for the affected land. The costs of equivalent reinstatement would be assessed by the Tribunals Service at the appropriate time. In the meantime DCC will enter into negotiations with the golf club to acquire the land required for the road scheme by agreement in advance of any CPO and the club has been advised on a 'without prejudice' basis that DCC is prepared to treat this as an Equivalent Reinstatement case and that it would exercise the option to the purchase the extension land which it would transfer to the club in exchange for land required for the road scheme and that the club would be granted a lease to enable then to continue to use the land required for the road scheme until required for this purpose. The proposed arrangements would provide that the Council would pay monetary compensation in addition that had regard to the reasonable costs of the golf course reinstatement works, to be paid in stages as the works progressed.

Impact on Mineral Assets

- 6.62 The application site lies almost wholly within the Mineral Safeguarding Area that covers the Bovey Basin ball clay resource. The A382 also directly adjoins operational ball clay quarries at Stover and Ringslade. Devon mineral policy seeks to protect mineral resources within Mineral Safeguarding Areas from sterilisation or constraint by other forms of development.

- 6.63 The mineral owner, Sibelco, has objected on the grounds of sterilisation of mineral. Given the limited encroachment into the ball clay resource on either side of the A382 that would result from the proposed widening and junction improvements, no significant sterilisation is anticipated. This is an issue that would be dealt with as part of any CPO inquiry.

Loss of allocated employment land as a result of the scheme

- 6.64 Objections have also been received from Sibelco regarding the loss of land in its ownership which is within an area identified in the Local plan for employment land. These comments are noted, but the scheme as submitted is considered to be the most appropriate taking into account all the constraints in the area. It is considered that the loss of this employment land, when balanced against the benefits of the scheme, would not have a significant impact on the delivery of the required employment provision during the plan period. The compensation for the loss of the employment land would be considered at any future CPO inquiry and the level of compensation assessed by the Lands Tribunal.

7. Reasons for Recommendation/Alternatives Options Considered

- 7.1 The Committee has the option of approving, deferring or refusing this planning application.
- 7.2 In conclusion, it is considered that the scheme would lead to substantial public benefit in terms of infrastructure provision that would provide a new modern standard gateway to Newton Abbot, help facilitate the delivery of more than 2,000 new homes, and employment areas by improving the capacity of the A382, and improving the resilience through the new Jetty Marsh link. Other benefits include improved cycle/pedestrian facilities, heritage benefit such as renovation works to a listed bridge, a new larger play area at Orleigh Cross and the creation of a new access into the playing field near Forches Cross.
- 7.3 It is considered that the mitigation measures put forward, as set out in this report and secured through the attached conditions would reduce impacts both during the construction period and in the longer term. However, it is the case that all impacts cannot be fully mitigated; in particular there will be ongoing impacts in terms of noise for residents living close to the new road at Jetty Marsh and impacts on heritage assets. It is also the case that new and additional compensatory landscaping will take time to mature.
- 7.4 In coming to a decision Members need to balance the impacts against the benefits. In this case great weight is given to the delivery of the development set out in the local plan and it is considered that planning permission is granted in accordance with the recommendation to this Report.

Dave Black
Head of Planning, Transportation and Environment

Electoral Divisions: Kingsteignton & Teign Estuary and Newton Abbot North

Local Government Act 1972: List of Background Papers

Contact for enquiries: Hayley Stokes

Room No: AB2, Lucombe House, County Hall

Tel No: 01392 383000

Background Paper

Casework File

Date

April 2016

File Ref.

DCC/3851/2016

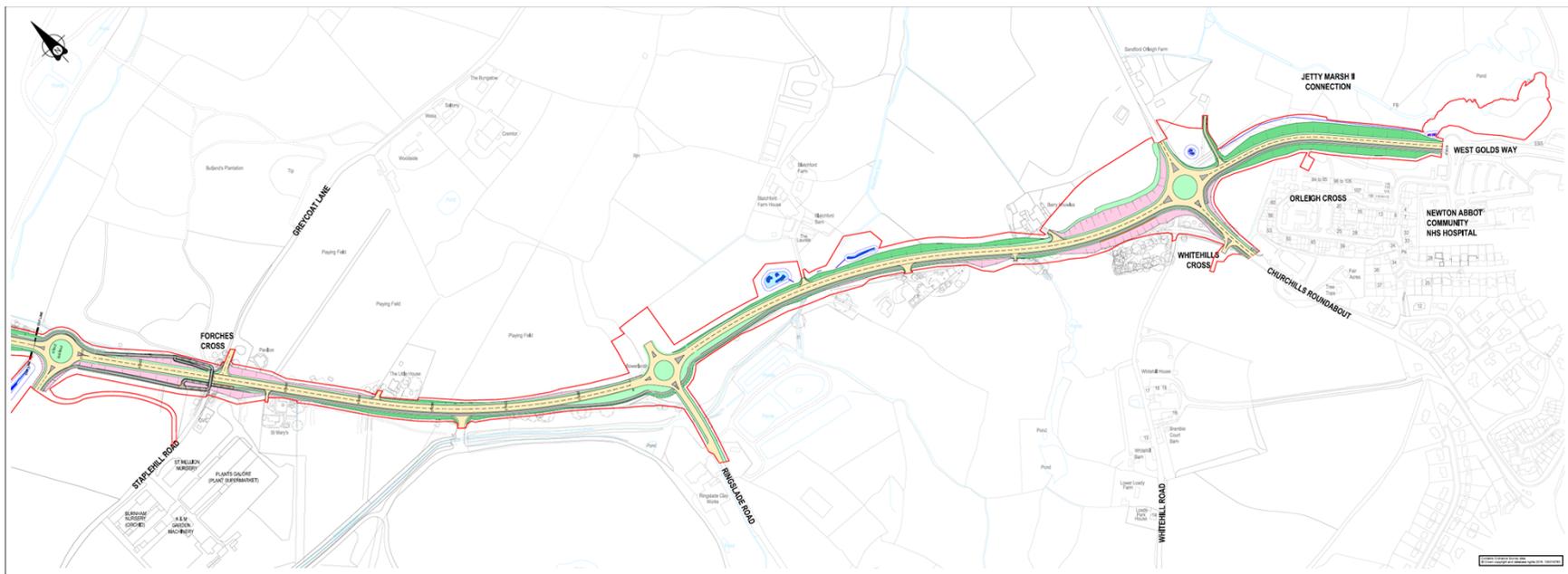
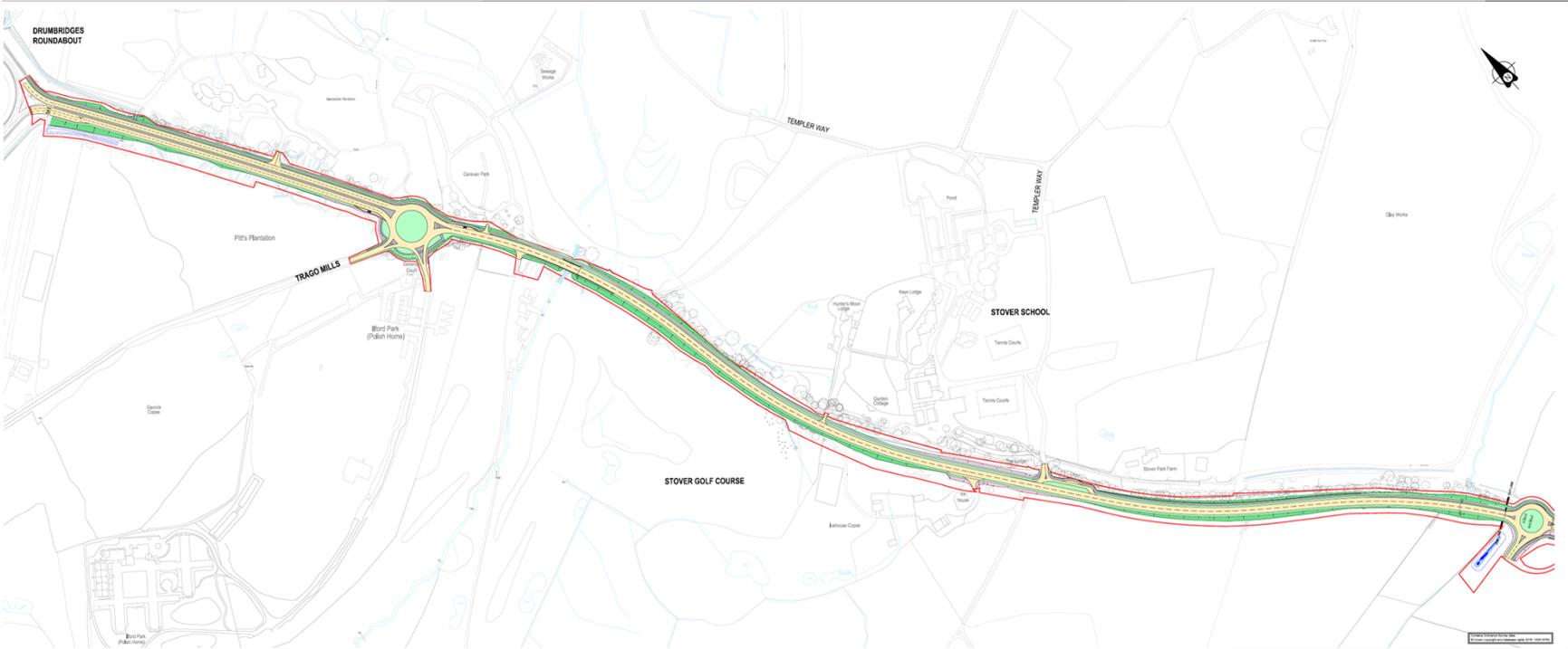
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sc/cr/new route a382 west golds way jetty marsh

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Location Plan





Planning Policy Considerations

Devon Minerals Plan: Adopted 17th February 2017: Policy M02 (Mineral Safeguarding Areas).

Teignbridge Local Plan 2013 - 2033 (Adopted May 2014): Policies EN02A (Landscape Protection and Enhancement); EN03 (Carbon Reduction); EN04 (Flood Risk); EN05 (Heritage Assets); EN06 (Air Quality); EN08 (Biodiversity Protection and Enhancement); EN09 (Important Habitats and Features); EN10 (European Wildlife Sites); EN11 (Legally Protected and Priority Species); EN12 (Woodlands, Trees and Hedgerows); HT01 (Heart of Teignbridge - Movement); S01 (Sustainable Development Criteria); S01A (Presumption in favour of Sustainable Development); S06 (Resilience); S22 (Countryside); WE11 (Green Infrastructure); and WE13 (Protection of Recreational Land and Buildings).

**Appendix II
To PTE/17/25**

Planning Conditions

1. The development shall commence within ten years of the date of this permission.

REASON: In accordance with Section 91 of the Town and Country Planning Act 1990.

STRICT ACCORDANCE WITH PLANS

2. The development shall be carried out in strict accordance with the details shown on the approved drawings and documents numbered B11029/91B - SHEET PA1.1; B11029/63B - SHEET PA2; B11029/83B - SHEET PA3 - CH0 to 1000; B11029/84A - SHEET PA4 CH1000 to 2000; B11029/85A - SHEET PA5 - CH 2000 to 3100; B11029/86A - SHEET PA6 - CH 3100 to 4100; B11029/87C - SHEET PA7 - Sections Plan; B11029/57 - SHEET PA8 - Scheme Plan and Statutory Utilities ; B11029/77E - SHEET; B11029/80A - SHEET PA11; B11029/200 - SHEET PA12; B11029/201 - SHEET PA13; B11029/203 - SHEET PA15; B11029/205 - SHEET PA17 Rev 3 - Stover Bridge Proposed; Appendix 8/13 Outline Written Scheme of investigation (WSI) for Archaeological Mitigation: Sheet 1A; Appendix 8/13 Outline Written Scheme of investigation (WSI) for Archaeological Mitigation: Sheet 1B; Appendix 8/13 Outline Written Scheme of investigation (WSI) for Archaeological Mitigation: Sheet 1C; Appendix 8/13 Outline Written Scheme of investigation (WSI) for Archaeological Mitigation: Sheet 1D; 422.03019.00017.27.014: Sheets 1 Rev 2; 422.03019.00017.27.015: Sheets 2 Rev 2; 422.03019.00017.27.016: Sheets 3 Rev 2; 422.03019.00017.27.017: Sheets 4 Rev 2; 422.03019.00017.27.018: Sheets 5 Rev 2; 422.03019.00017.27.019: Sheets 6 Rev 2; Appendix 7-1 L12 03019.00021.16.014: Sheet 1 Rev 18; Appendix 7-1 L13 03019.00021.16.015: Sheet 2 Rev 18; Appendix 7-1 L14 03019.00021.16.016: Sheet 3 Rev 18; Appendix 7-1 L15 03019.00021.16.017: Sheet 4 Rev 18; Appendix 7-1 L16 03019.00021.16.018: Sheet 5 Rev 18; Appendix 7-1 L17 03019.00021.16.019: Sheet 6 Rev 18; Appendix 7-1 L18 03019.00021.16.021: Sheet 1 Rev 7; Appendix 7-1 L19 03019.00021.16.022: Sheet 2 Rev 7; Appendix 7-1 L20 03019.00021.16.023: Sheet 3 Rev 7; Appendix 7-1 L21 03019.00021.16.024: Sheet 4 Rev 7; Appendix 7-1 L22 03019.00021.16.025: Sheet 5 Rev 7; Appendix 7-1 L23 03019.00021.16.026 Landscape: Sheet 6 Rev 7; Appendix 7-1 L24 03019.00021.16.027 Sections: Sheet 1 Rev 8; Appendix 7-1 L24 03019.00021.16.028 Sections: Sheet 2 Rev 8; B11029-102 Proposed tree planting for Stover Park; Technical Appendix 12/1 Flood Risk Assessment: Proposed Flood Compensation FRA3; Technical Appendix 12/2 Sustainable Drainage Strategy: Sheet FRA3 - 01 Rev 2; Technical Appendix 12/2 Sustainable Drainage Strategy: Sheet FRA3 - 02 Rev 2; Technical Appendix 12/2 Sustainable Drainage Strategy: Sheet FRA3 - 03 Rev 3; Technical Appendix 12/2 Sustainable Drainage Strategy: Sheet FRA3 - 04 Rev 3; Technical Appendix 12/2 Sustainable Drainage Strategy: Sheet FRA3 - 05A Rev 2; Technical Appendix 12/2 Sustainable Drainage Strategy: Sheet FRA3 - 05B Rev 3; except as varied by the conditions below.

REASON: To ensure that the development is carried out in accordance with the approved details.

CONDITIONS (PRE-COMMENCEMENT)

CONSTRUCTION MANAGEMENT

3. Prior to the commencement (including vegetation removal and reinstatement) of each three phases of road building and widening, a Construction Environmental Management Plan shall be submitted to and approved in writing by the County Planning Authority. The Plan shall provide details of:
- (a) Timetable/programme of works;
 - (b) Measures for traffic management [including routing of vehicles to and from the site, details of the number/frequency and sizes of vehicles];
 - (c) Days and hours of deliveries;
 - (d) Location of loading, unloading and storage of plant and materials;
 - (e) Location of contractor compound and facilities;
 - (f) Provision of boundary fencing/hoarding;
 - (g) Parking of vehicles of site personnel, operatives and visitors;
 - (h) Detail for proposals to promote care sharing amongst construction traffic staff;
 - (i) Dust Control, in accordance with the measures set out in table 10-24 'Construction Dust Mitigation Measures' of the Environmental Statement;
 - (j) Noise management procedures, in line with the Best Practicable Means as set out in section 9.91 of the Environmental Statement; and details of additional noise acoustic fencing to be agreed, including timing of construction;
 - (k) The hours for noisy operations that take place on site: to include Piling and breaking up of hard materials;
 - (l) Proposed night- time operations/working;
 - (m) Recycling during construction;
 - (n) Detailed proposals and method statement for soil stripping, storage, handling and reinstatement;
 - (o) Details of any proposed lighting to be used during the construction phase, to include location, lux levels and light spill;
 - (p) Additional measures to be taken if the adjacent major development occurs during the construction period of the road – including proposal at Whitehill's, and Berry Knowles and at Ilford Park;
 - (q) Details of timings and methods for vegetation clearance and for the protection of wildlife habitat; including any requirements for an ecological specialists.

The development shall be implemented in accordance with the approved scheme.

REASON: To ensure adequate access and associated facilities are available for the construction traffic and to minimise the impact of construction activities on nearby residents, businesses, the landscape, ecology and the local highway network in accordance with Local Plan policies: S10 (Transport Networks); S11 (Pollution); EN6 (Air Quality); EN8 (Biodiversity Protection and Enhancement); EN9 (Important Habitats and Features), and the NPPF.

DRAINAGE

4. Prior to the commencement of each 3 phases of development hereby permitted a detailed design of the proposed permanent surface water drainage management system (including pollution prevention measures) for each phase, shall be submitted to, and approved in writing by, the County Planning Authority, in consultation with Devon County Council as the Lead Local Flood Authority. The design of this permanent surface water drainage management system will be in accordance with the principles of sustainable drainage systems, and those set out in 'A382 & Jetty Marsh

Link Road – Response to DCC Letter (Reference: 422-03019-00041, Revision V2, dated September 2016) and those sections not superseded by the aforementioned document within ‘A382 Corridor Improvements Drumbridges to Whitehill's Cross and Jetty Marsh Link II Newton Abbot, Devon - Water Resources and Flood Risk - Appendix 12/2 - Sustainable Drainage Strategy’ (Reference: 422-03019-00031, Revision 1, Dated February 2016).

Reason: To ensure that surface water runoff from the development, during construction and operation, is managed in accordance with the principles of sustainable drainage systems, so as to not to increase the flood risk, or pose water quality issues, to the surrounding area. In accordance with Local Plan policies EN4 (Flood Risk) & S11 (Pollution).

ARCHAEOLOGY/HISTORIC BUILDINGS

5. Prior to the commencement of each 3 phases* of the development, the applicant shall secure the implementation of a programme of archaeological and historic building work in accordance with a written scheme of investigation which has been submitted and approved by the Planning Authority.

The development shall be carried out at all times in strict accordance with the approved scheme, or such other details as may be subsequently agreed in writing by the Planning Authority.

REASON: To ensure that an appropriate record is made of archaeological evidence that may be affected by the development, in accordance with Policy EN5 (Heritage Assets) of the Local Plan and paragraph 141 of the National Planning Policy Framework (2012).

LANDSCAPING/TREES & ECOLOGY

6. All trees and shrubs identified on approved Landscape Mitigation Plans: Appendix 7-1 L12 03019.00021.16.014: Sheet 1 Rev 18; Appendix 7-1 L13 03019.00021.16.015: Sheet 2 Rev 18; Appendix 7-1 L14 03019.00021.16.016: Sheet 3 Rev 18; Appendix 7-1 L15 03019.00021.16.017: Sheet 4 Rev 18; Appendix 7-1 L16 03019.00021.16.018: Sheet 5 Rev 18; Appendix 7-1 L17 03019.00021.16.019: Sheet 6 Rev 18; Appendix 7-1 L18 03019.00021.16.021: Sheet 1 Rev 7; shall be retained and protected during construction in accordance with BS5837:2012 ‘Trees in relation to design, demolition and construction – Recommendations.’

REASON: To ensure that trees, shrubs and other natural features to be retained are adequately protected from damage throughout the construction period, in the interests of visual amenity and in accordance with policy EN12 (Woodlands, Trees and Hedgerows).

7. No development shall take place until the following details have been submitted to and approved in writing by the County Planning Authority. The development shall be implemented in accordance with the approved details.
 - (a) detailed bridge design at Forches Cross (as indicated on plan numbered B11029/201/PO), to include; stone and mortar mix specification; mortar application; coursing and finish of the stone, planting specifications & railings;
 - (b) details design of the Otter Ramps proposed under Liverton Bridge;
 - (c) details of how structures associated with waterways will be passable for Eels;
 - (d) further design refinements of the Jetty Marshes link;

- (e) tree planting on the western side of the new road between Drumbridges Roundabout and Trago Mills Roundabout.

REASON: To protect the character, appearance and setting of the Registered Park and Garden and Stover house, local living conditions, biodiversity and wildlife, in accordance with local policies:- EN2a (Landscape Protection and Enhancement); EN5 (Heritage Assets); EN8 (Biodiversity Protection and Enhancement); EN9 (Important Habitats and Features).

8. The development shall be carried out in accordance with the Stover Park Tree Plan - numbered B11029/102. With the exception of the planting of 'Turkey Oak' trees, a replacement species shall be agreed with the County Planning Authority, prior to commencement of planting. The development shall be carried out in accordance with the approved details.

REASON: To protect the character, appearance and setting of the Registered Park and Garden and Stover house, in accordance with local policy EN5 (Heritage Assets).

9. No development shall take place until a Landscape and Ecological Management Plan (LEMP) has been produced in accordance with best practice guidance and approved in writing by the County Planning Authority(CPA) at least one year before each *phase commences. The LEMP shall include annotated plans, mitigation measures, management and monitoring reports and a schedule for the timing of all works.

The LEMP shall be implemented in strict accordance with the approved details.

The report setting out implementation of the LEMP, compliance and survey reports shall be submitted to the CPA at intervals as agreed in the LEMP.

REASON: To conserve the character of the local landscape, to ensure that ecological mitigation is built into landscaping requirements, to ensure that the road landscape fits in with the landscape context and to respect the setting of Stover Registered Park and Garden in accordance with the NPPF and Local Plan policies: EN2a (Landscape Protection and Enhancement); EN5 (Heritage Assets); EN8 (Biodiversity Protection and Enhancement); EN9 (Important Habitats and Features) & EN12 (Woodlands, Trees and Hedgerows).

10. Prior to the commencement of each phase of development, design details of the proposed road safety barriers shall be submitted to and agreed with the County Planning Authority.

REASON: To reduce carbon emissions resulting from the scheme and to protect the local landscape in accordance with local plan policies: - EN5 (Heritage Assets); EN 12 (Woodland, Trees and Hedgerows); S7 (Carbon Emission Targets).

CONDITIONS (DURING CONSTRUCTION)

NOISE

11. Appropriate noise reduction surfacing, Stone Mastic Asphalt or similar, shall be used as a road coating surface.

REASON: To ensure noise levels fall within acceptable levels to minimise harm upon - local living conditions; ecology and the setting of Historic Assets. In accordance with

policies (EN8) Biodiversity Protection and Enhancement); EN5 (Heritage Assets) and the NPPF (Paragraph 123).

LAND CONTAMINATION

12. Prior to the commencement of each three phases* of the development, a scheme for that phase, that includes the following components to deal with the risks associated with contamination of the site shall be submitted to and approved by the County Planning Authority.
- (1) A preliminary risk assessment which has identified: All previous uses; potential contaminants associated with those uses; a conceptual model of the site indicating sources, pathways and receptors; potentially unacceptable risks arising from contamination at the site.
 - (2) A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
 - (3) The results of the site investigation and detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
 - (4) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the express written consent of the local planning authority. The scheme shall be implemented as approved.

If, during development, contamination not previously identified is found to be present, then no further development (unless otherwise agreed in writing with the County Planning Authority (CPA)) shall be carried out until the developer has submitted and agreed a remediation strategy with the CPA detailing how this unsuspected contamination shall be dealt with. The remediation strategy shall be implemented as approved.

REASON: To protect controlled waters in accordance with Teignbridge Local Plan policy S11 (Pollution).

CONDITIONS (OPERATIONAL)

13. Each phase of the development shall be carried out in accordance with the proposed Lighting plans numbered B11029/77 'Lighting Impact Assessment Plan', and associated lighting statement.

REASON: To protect local living conditions and protected species in accordance with local Plan policies: EN2a (Landscape Protection and Enhancement); EN8 (Biodiversity Protection and Enhancement); EN9 (Important Habitats and Features).

*Phasing refers to the following – Phase 1 - Jetty Marshes link and widening the A382 to Forches Cross/Phase 2 Forches Cross to Trago Mills roundabout/Phase 3, Trago Mills roundabout to Drumbridges roundabout.

Habitats Regulations Assessment May 2017	Competent Authority: Devon County Council
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1. Introduction

This assessment considers whether the proposal, as outlined below, is likely to have a significant effect, either alone or in combination with other plans and projects, on a European wildlife site, in accordance with Regulation 61 (1) of the Conservation of Habitats and Species Regulations 2010, as amended.

Regulation 61(1) makes clear that if a plan or project is likely to have a significant effect on a European site (either alone or in combination with other plans or projects), and it is not directly connected with or necessary to the management of the site, the competent authority shall undertake an Appropriate Assessment of the implications for the site in view of its conservation objectives.

2. Background to the application

2.1 Type of permission: Full Planning Permission

2.2 Application reference: DCC/3851/2016

2.3 Location: A382 – west of Newton Abbot between Drumbridges roundabout on the A38 and West Golds Way, Newton Abbot

2.4 Brief description of proposal: Alterations to widen, as well as straighten the horizontal and vertical alignment of the A382. Proposal for dual carriageway between Drumbridges and Trago Roundabout, and widening of the carriageway to 10m from Trago Mills Roundabout to White Hills Croft. Associated provision of a 3.0m wide pedestrian and cycle way alongside the widened road, landscaping and drainage. Provision of a new route connecting the A382 to West Golds Way near the new Newton Abbot Hospital site (Jetty Marsh II). The developer aims to begin Phase 1 (the southern end of the scheme – Forches Cross to Jetty Marsh) in summer 2018 and this is expected to take one year. Phase 2 would then begin in summer 2019 following completion of Phase 1.

All works will take place within the red line boundary – see Map 1 at the end of this HRA.

Details relating to ecological issues relevant to this HRA can be found in the following documents at <https://planning.devon.gov.uk/PlanDisp.aspx?AppNo=DCC/3851/2016>:

Environmental Statement (SLR, 2016):

- Chapter 6, Ecology + Appendix 6/1 Preliminary Ecological Appraisal (includes target notes for the Phase 1 plans) and Appendix 6/2 Protected Species Survey

Regulation 22 Responses, submitted December 2016:

- Ecology Report (SLR) + related maps (Static Detector Survey Data + Transect Survey Data, Known Bat Roost, Ecology Mitigation Plans)

Amended Information, submitted March 2017

Lighting Impact Assessment Plan

Lighting Statement

Addendum to Dec 2016 Ecology Report

Amended Ecological Mitigation Plan Drawings

Landscape Planting Plans

2.5 Relevant European site and details:

South Hams SAC

Qualifying features:

Annex I Habitats

European dry heaths

Semi-natural dry grasslands and scrubland faces: on calcareous substrates (*Festuco-Brometalia*)

Vegetated sea cliffs of the Atlantic and Baltic coasts

Caves not open to the public

Tilio-Acerion forests of slopes, screes and ravines * Priority feature

Annex II Species

Greater horseshoe bat *Rhinolophus ferrumequinum*

Relevant interest feature: Greater horseshoe bats (*Rhinolophus ferrumequinum*)

South Hams is thought to hold the largest population in the UK. It contains both maternity and hibernation roosts and contains the largest known maternity roost in the UK and possibly in Europe.

The proposal is 5kms from the Chudleigh roost at the nearest point and 6.3 kms from the Chudleigh roost at the furthest point. 1.7kms of the proposed road widening scheme lies within Natural England's GHB sustenance zone for the Chudleigh roost (NE, 2010). Two SAC strategic flyways also pass across the northern section of the road widening scheme. The road lies between the Chudleigh roost and other constituent roosts forming the SAC – see Map 2 at the end of this HRA.

Note that it has been agreed with NE that the Sustenance Zone for the Chudleigh SAC roost will be amended in the revised South Hams SAC guidance currently being developed. The 4km radius for the Zone will be taken from the centre of the roost rather than the edge of the SAC. When this is done this proposal will no longer lie within the SAC Sustenance Zone. However as NE comments on this application still refer to the existing sustenance zone the impacts on foraging habitat in the current zone are set out in this HRA.

Conservation Objectives

With regard to the natural habitats and/or species for which the site has been designated (the Qualifying Features" listed above) and subject to natural change:

Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Conservation Status

The UK report S1304 on GHBs submitted to the EC under Article 17 for 2007-2012 (http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/S1304_ENGLAND.pdf)

states: *There is no information to suggest that there has been a decline in range for this species for the specified time period 2001 - 2012.*

No information is given on long term trends for range. The report states that the short term trends for population and habitat quality are unknown. The report also states that *At the latest assessment, 94% of the area of SAC (690ha) was considered to be in favourable or unfavourable recovering condition.*

NE information on SSSIs states that the condition of the bat caves within Chudleigh Caves and Woods SSSI was assessed as favourable in 2008.

Please note that it has been agreed with NE that, due to distances and the nature of the proposal, there are no other qualifying features of these SACs and no other SACs / SPAs that need to be considered within this HRA screening

2.6 Liaison with Natural England:

Comments from Natural England can be found at:

<https://planning.devon.gov.uk/PlanDisp.aspx?AppNo=DCC/3851/2016>

In their letter dated 19th January 2016 NE states: *Exceptionally in this instance, a different approach to assessing risk is required to address landscape scale severance concerns for greater horseshoe bats attempting to cross the road due to the type and scale of the proposed development. The proposals include a significant widening of an existing road for approximately 4km between the Drumbridges roundabout and Newton Abbot. Whilst the existing road acts to sever habitat links across the road, the widening will likely further discourage and pose an increased risk to low flying species such as greater horseshoe bats that rely upon linear features to facilitate navigation through the landscape. The proposals represent a permanent and irreversible change at a landscape scale, with the potential to further fragment commuting habitats used by greater horseshoe bats to move between the South Hams SAC designated roosts. These potential landscape scale impacts and in-combination could affect the favourable conservation status of greater horseshoe bats by restricting landscape scale connectivity and reduce population resilience to change.*

A meeting between DCC (Hayley Stokes, Planner and Sarah Jennings, Ecologist) was held with Natural England (Julien Sclater) on 13th February 2017 to discuss the draft HRA. A number of actions were agreed during this meeting which are referred to within this HRA.

Given the potential impact of this scheme on landscape permeability and population resilience the whole scheme is being assessed in terms of potential impacts on the SAC, and not just the areas of the scheme within the SAC sustenance zone and flyways.

2.6 Greater Horseshoe Bat Ecology

Greater horseshoe bats use the wider countryside of South Devon for the majority of their activities, including commuting, foraging, roosting, and mating. The SAC designated roost sites were identified on the basis of their relative importance for hibernating during winter, and summer roost sites including nursery roosts where the females for a whole colony gather together to give birth and rear their young.

The key aspects associated with maintaining the integrity of the greater horseshoe bat interest (and its favourable conservation status are) :-

1) The area has to be large enough to provide a range of food sources capable of supporting the whole greater horseshoe bat population; the bats feed at a number of locations through the night and will select different feeding areas through the year linked to the seasonal availability of their insect prey.

2) Greater horseshoe bats regularly travel through South Devon between feeding sites and their roosts via a network of established flyways. They also travel greater distances between the sites designated as the South Hams SAC at certain times of the year, for example: in the spring and autumn between hibernacula and maternity sites; and, in the autumn to mating sites.

3) Greater horseshoe bats need to be able to move through the landscape between their roosts and their foraging areas to maintain favourable conservation status. They require linear features in the landscape to provide landscape permeability. The greater horseshoe bat tends to use landscape

features to navigate, such as lines of vegetation (hedgerows, woodland edge, vegetated watercourses etc) and will tend to fly close to the ground up to a height of 2 meters, and mostly beneath vegetation cover.

4) Greater horseshoe bats are sensitive to light and will avoid lit areas. The interruption of a flyway, by light disturbance or physical removal/ obstruction would force the greater horseshoe bat to find an alternative route which is likely to incur an additional energetic burden and will therefore be a threat to the viability of the bat colony. In some circumstances, an alternative route is not available and can lead to isolation and fragmentation of the bat population from key foraging areas and/or roosts.

5) Most feeding activity is concentrated in an area within 4km of the roost (juvenile bats will forage within 3km at a stage in their life when they are most susceptible to mortality). The most important types of habitat for feeding have been shown to be permanent pasture grazed by cattle, hay meadows, and wetland features such as stream lines and wet woodland.

Taking the above requirements into account, greater horseshoe bats are particularly susceptible to the following changes in their habitat that may arise as a result of development:-

1. Impact on roost sites (including damage, destruction and disturbance)
2. Removal, severance or disturbance of linear features used for navigation and commuting
3. Disturbance from new illumination causing bats to change their use of an area
4. Physical injury by wind turbines
5. Change in habitat structure and composition (loss or change in quality of foraging habitat)

Planning development proposals need to demonstrate that there will be no detrimental impact upon the ability of the greater horseshoe bats to navigate and feed by affecting the ecological impacts identified above. Since these impacts are common to most development types, appropriate mitigation needs to be incorporated to prevent unacceptable damage.

The above is predominantly taken from Natural England South Hams SAC planning guidance, 2010.

3. Is the proposal directly connected with or necessary to the management of a protected site? No
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4. Survey

4.1 Methodology

Bat activity surveys for this application were carried out by SLR in 2014 in consultation with NE who confirmed that the methodology was in accordance with the South Hams SAC guidance. A number of static surveys were also carried out in late summer 2016 in order to further inform mitigation proposals. Note that the 2016 surveys were undertaken purely to find out whether it was possible to confirm GHB presence along the Liverton Brook and the proposed crossings (culverts and cutting). They were not done to establish GHB activity throughout the year.

4.2 Results

This section should be read in conjunction with the report *Response to Further Information Request – Ecology*, SLR (Dec 2016) where more detail is set out and drawings showing the Static Detector Survey Data + Transect Survey Data (Dec 2016)

Analysis of statics data: Through the Reg 22 process DCC Planning asked SLR to further analyse the data on bat passes in order to give a more detailed view on the numbers and behaviour of bats recorded (100 passes over a season could be one bat foraging backwards and forwards on one night, 100 bats commuting through on one night or one bat passing on 100 nights). SLR carried out the analysis using their experience and by looking for the following in the data:

- Occasions where GHB were recorded simultaneously (or at least temporally close enough that an individual could not have covered the distance between the detectors) at detectors positioned in close proximity to

one another. It was their assumption that the more frequently this occurred the greater the number of bats present

- Where there were peaks of activity they looked at the frequency with which GHB registration occurred over the time period that the peak occurred, and made a qualitative decision as to whether this data indicated the presence of low, moderate or high numbers of bats and then made a judgement based on professional experience as to the most likely number of bats present.

4.2.2 Sustenance Zone, Chudleigh roost

2014 statics - see drawings 20 and 21

Statics 1 and 2 (both on the edge of a SAC strategic flyway) – no GHBs recorded

Statics 3 and 4 (ditto) – no GHBs recorded (also in an SAC strategic flyway)

Statics 5 and 6 - no GHBs recorded

Statics 7 and 8 – no GHB recorded

Static 9 - 2 passes (opposite Stover Park Farm in June)

Note that no statics were placed on the Liverton Brook during the 2014 survey.

2014 transect

Transect 1 (within the GHB sustenance zone) = 1 GHB near the Ice House in Ice House Copse in September between sample points 15 and 16.

2016 statics (September only) – see drawing 20

Statics on the hedge between Stover Bridge and Ice House Copse

Static O = 79 – 1-2 foraging bats on 21 of the 28 nights

Static P = 170 – 1-2 foraging bats on 16 of the 28 nights

Para 6.5.4: Data shows no evidence of movement between O and P other than on three occasions and that the hedge is largely used for foraging and possibly as a commuting route. Activity was very variable throughout the survey period with records occurring c.30 minutes after local sunset, occasionally thought the night until c.30 minutes before sunset.

Statics on the Liverton Brook (Stover Bridge)

Static Q = 43 – data indicates 1-2 bats on 19 of 30 nights

Static R = 199 – data indicates 1-2 bats on 15 of 28 nights.

Static S = 80 – data indicates 1-2 bats on 24 out of 29 nights

Para 6.5.5: Data indicates the presence of small numbers (1-2) bats with evidence of foraging under the bridge as well as some evidence of individual GHBs flying crossing the road at this location – over and under the bridge. There was no temporal pattern of activity which indicated a nearby roost.

Data from other surveys of surrounding land:

Activity surveys:

The Jacobs (2014) report for works at Drumbridges Roundabout (in the flyway along the A38) states that the survey results found low numbers of GHBs with increased activity in September. The report states *'it seems extremely unlikely that the area is used by more than one or two individuals... it can be assumed that the Drumbridges Roundabout does not provide an important and regular flight path or foraging habitat for this particular species of bat. The majority of recorded calls were obtained within the centre of the roundabout suggesting (and in concurrence with the absence of greater horseshoe bats seen during the manned culvert surveys) that the species were not using the culverts to access this area (anabats on one side of the culvert only picked up greater horseshoe activity at any particular time) from the adjacent woodland habitats. This would imply that the bats are accessing the centre of the roundabout by either flying over the top of the roundabout and dropping down into the recently cleared roundabout centre or are commuting along the A38, using the unlit roadside verges. Additional bat activity recorded may suggest that the species is using the woodland next to the highway as*

commuting route. In summary, no significant greater horseshoe bat activity was recorded and it is therefore concluded that the habitats surrounding and immediately linked to the Drumbridges Roundabout are not a key resource for this species.

The SLR (2012) report for Ilford park development stated that: *The lack of any greater horseshoe bats recorded in Pitt's Plantation during the October 2011 (JG Ecological Surveys Ltd) and May/June 2012 surveys substantiates the theory that the proposed development site does not lie within a significant commuting route for this species or represent optimum foraging habitat.*

A 2008 survey of Pitts Plantation and Gavrick Copse (Hughes, 2008) found no GHBs in Pitts but regular use of Gavrick Copse along the woodland edge forming the boundary between the Golf Course and the Trago Mills Complex.

No GHBs have been recorded at Stover Country Park (Jon Avon, Stover Park Manager, pers comm).

Roosts:

Information on known roosts is given in Section 7 (p.34) of the report and Drawings 27 and 28. More detailed information is given below.

Ilford park (Polish Camp) – The 2010 monitoring report for the new roosts at Ilford Park stated that there was low level of use by low numbers of GHBs in Huts 21 and 22 (Gillingham, 2010). The original buildings were surveyed in 2007 (Feb and August) when small numbers of non-breeding GHBs were reported and in May and June 2008 when a low level of roosting GHB was reported (Hughes, 2008).

Ice House – SLR survey found 1 GHB in September 2015 (they carried out four visits between Sep 2015 and Feb 2016). Shaw (Hughes, 2005) stated that there was a photographic record of GHB and LHB hibernating in the Ice House from c.2002 but found no sign of GHB in the Ice House stating that if it is used as a hibernacula it is unlikely to be used at this time of year. Shaw did not record any GHBs using the copse during activity surveys and only one LHB (leaving the stable block)

Stable Block adjacent to Ice House Copse – Shaw (Hughes, 2005) found one GHB using the roof void as a day roost in September (note that the roost was only visited during September).

Stover School – Colin Wills (pers comm) reports 5 GHBs hibernating in buildings in 2016.

The nearest known maternity roost is at the Chudleigh SAC roost (~ 5 kms away)

4.2.3 Data outside the sustenance zone

2014 Statics - see drawings 21 and 22

Static 10 = 0

Static 11 = 0

Static 12 = 2 passes (along the proposed line of the road at Whitehill junction)

Static 13 = 53 passes (along the existing tree lined lane within the red line) – analysis shows occasional registrations in May and June and a few individual bats foraging in September, see text below.

Static 14 = 4 passes (in woods next to the lane within the red line)

Static 15 = 44 passes (outside the red line – north of the new Jetty Marshes link) – analysis shows that this is a few individual bats foraging in September, see text below.

Static 16 = 4 passes (outside the red line – north of the new Jetty Marshes link)

Para 2.2.4 and Table 2-9 - The higher number of passes at statics 13 and 15 were largely from a cluster of passes recorded during a few evenings in September (with occasional passes at static 13 in May and June in the early hours). Further analysis of this data showed that the clustering is characteristic of a single foraging bat (flying backwards and forwards) rather than each pass being a separate bat. SLR concluded that the number of GHB passes at Static 15 was from a few individual bats. The September passes typically occurred between 20:00 and 20:30. As GHBs are later emerging species this indicates that the GHBs recorded were from a nearby roost.

2014 Transects – see drawings 23, 24, 25, 26 (although note that these drawings do not show the GHBs recorded between sample points – this information is given in para 3.1 of the Dec, 2016 report)

Transect 2 = 1 GHB at LP 30 along hedge north of Forches Cross within NA1 – date not given

Transect 3 = 1 GHB at LP 49 nr Berry Knowles, 1 GHB at LP 42 on the NW edge of the Linden Homes site and 1

GHB at LP 47 in the middle of the proposed Whitehill junction – dates not given.

Transect 4 = 1 GHB recorded between sample points 66 and 67 in May and 1 GHB between 76 and 77 in October

2016 Statics – see drawings 20, 21 and 22

Statics at Whitehill junction – undertaken in August 2016 in order to help inform mitigation (drawing 22)

Static A = 34 passes - analysis shows a few individual bats were recorded on 15 of the 29 nights (stream to the west of the proposed road)

Static B = 0 passes (woods, near static 14)

Static C = 290 passes - analysis shows 1-2 foraging bats were recorded on all of the 30 nights (hedge in the triangular field leading to the proposed culvert)

Static D = 210 passes – analysis shows 1-2 foraging bats recorded on all but one of the 30 nights (same hedge as above)

Static E = 218 passes - analysis shows 1-2 bats regularly recorded on 28 of the 30 nights (edge of the copse in the proposed GI area in NA2 and above the proposed cutting)

Para 5.5.1 states –‘There was no obvious pattern with respect to the greater horseshoe activity recorded at Location A. Registrations were recorded intermittently throughout the survey period with registrations recorded on 15 out of 30 nights at any time between circa 23:00 to 03:40. On the nights that greater horseshoe bat was recorded the number of registrations recorded ranged between one and five. The activity recorded appears to be limited to occasional flights by individual bats in the proximity of Location A’

Para 5.5.1 - Analysis of data at C and D showed two peaks of activity: one commencing c.30 minutes after sunset and lasting for 10-15 minutes and the second commencing 50 minutes to an hour before sunrise with activity ceasing 30-45 minutes before sunrise. There were occasional records through the night. The numbers and patterns of registrations recorded were consistent with small number (1-2) of foraging bats. There was no evidence of bats commuting along this hedge. Given the time of peaks in activity the bats are likely to be from a local roost, rather than the Chudleigh roost.

Para 5.5.2 – Greater horseshoe was regularly recorded at Location E with registrations recorded on 28 of the 30 night survey period. Counts of 10 or fewer registrations per night were typically recorded, with peaks of 13-14 registrations recorded on four nights and 29 registration recorded on one night. Peaks of activity were recorded from *circa* 30 minutes to an hour after sunset, and from 50 mins to an hour before sunrise with activity ceasing 30-45 minutes before sunrise (indicating that the bats are from a local roost). Additionally there were occasional records throughout the night. Despite the peaks of activity the highest rate of activity recorded was four registrations per minute indicating the presence of only small numbers of bats, likely only 1-2 individuals.

Statics at Whitehill junction – undertaken September 2016 in order to help inform mitigation (drawing 22)

Static H = 52 passes - analysis shows 1-2 bats regularly recorded, 12 out of 17 nights.

Static I = 33 passes – 1-2 bats recorded on 17 of 28 nights

Static J = 99 passes - 1-2 bats recorded on 14 of 15 nights

Para 6.5.1 – GHBs were regularly recorded at these locations with two peaks of activity: one commencing c. 20 minutes after sunset and lasting for 15-20 minutes and the second commencing 50 minutes to an hour before sunrise with activity ceasing 30-45 minutes before sunrise (indicating that bats are from a local roost). There were also occasional records through the night. Analysis of the data did not find evidence of GHBs commuting between these locations across the line of the road however

it is evident that bats do forage on both sides of the road at this location and may therefore cross the existing road.

Statics near Berry Knowles - undertaken in August 2016 in order to help inform mitigation (drawing 22)
Static F = 97 passes - analysis shows that a 1-2 foraging bats were recorded on 29 of the 30 nights.
Static G = 66 passes – 1-2 foraging bats recorded on 20 of the 28 nights.

Para 5.5.3 - F and G were located on opposite sides of the road at Berry Knowles. Analysis of the data showed that registrations were consistent with small numbers of foraging bats and registrations did not indicate that bats were crossing the road. Activity generally commenced between an hour to an hour and a half after sunset with activity regularly recorded for another one or two hours.

Statics on the Blatchford Brook – undertaken in September 2016 in order to help inform mitigation (drawing 22)
Static K = 13 – occasional flights by individual bats
Static L = 0

No evidence of a crossing or temporal patterns of activity. The current culvert is not suitable for GHBs. However this data shows that there are GHBs at this location and they could therefore use a suitable culvert under the road.

Statics north of Forches Cross (brook) - undertaken as above (drawing 21)
Static M = 12 – occasional flights by individual bats recorded on 9 out of 27 nights
Static N = 25 – occasional flights by individual bats recorded on 6 out of 25 nights

Para 6.5.3: The culvert for this brook is not currently suitable for GHBs. However data shows that there are GHBs at this location and they could therefore use a culvert if suitable. No temporal patterns of activity identified. *Evidence of one GHB potentially flying over the road at this location.*

Data from other surveys of surrounding land:

Activity surveys:

Bat survey has been undertaken for the A382 link road but is not yet available. We are aware however that a few GHBs were recorded on the hedge near to the existing culvert north of Forches Cross which is consistent with the data from Static M.

Andrew McCarthy Ecology (AME, 2015) carried out a bat survey for a proposed Sibelco development at Berry Knowles Farm in 2014/15. Results suggested that the majority of the site is of relatively low value for bats reflecting the open agriculturally improved character and lack of grazing during the summer months. However the northern and north-western hedge (Blatchford Brook) support commuting/feeding greater horseshoes with a peak in May, potentially reflecting seasonal landscape-scale movement, perhaps to summer maternity sites. This survey confirms the importance of the Blatchford Brook as a GHB corridor through the landscape.

The EPS Ecology (2013) report for the Linden Homes application at Whitehill (in the NA2 development area) reported the presence of only a few individual GHBs with no evidence of regular feeding behaviour or a commuting route. The report concluded that individual GHBs might be expected to pass through the site as well as, on occasion (i.e. when prey available) stop to feed.

Roosts:

Information on known roosts is given in Section 7 (p.34) of the report and Drawings 27 and 28. More detailed information is given below.

Orchard House outbuildings, Whitehill – During survey for a planning application Dave Wills (2015) found an individual / small number of GHBs using one outbuilding as a night roost and possibly setting it up as a mating roost (although it was noted that it was quite early in the year for this type of activity). An anabat placed in the building from 30th July – 5th August 2015 recorded GHB activity every night and GHB droppings were found (Dave Wills, pers comm)

Sandford Orleigh House – there is a 1960s DBRC record for a LHB (report states that it was possibly a GHB). There are also reports of a minor GHB roost at this site when surveyed for a planning application in 1999. However TDC have not been able to confirm this.

The nearest known maternity roost is at the Chudleigh SAC roost.

4.2.5 Summary of GHB data

Evidence for GHBs foraging in habitat on the edge of the Chudleigh sustenance zone

The only GHBs recorded foraging in the sustenance zone were individuals (1 or 2 bats) foraging along the hedge between Stover Bridge and Ice House Copse and under Stover Bridge. No GHBs were recorded in the stretch of road south of Drumbridges between Pitt's Plantation and Stover Country Park. Previous surveys confirm the unsuitability of Pitt's Plantation for GHBs. Individual GHBs roosting in the buildings in Ice House Copse are likely to use the woodland for foraging.

Flight lines across the road

Survey only found evidence of GHBs crossing the road in two locations: under / over Stover Bridge which crosses the Liverton Brook (and is in a strategic flyway) and one GHB potentially crossed the road near the stream north of Forches Cross. Site assessment showed that the culvert for this stream under the A382 is not currently suitable for GHBs.

Whilst there is no evidence of GHBs crossing the A382 along the line of the Blatchford Brook corridor survey carried out for the Berry Knowles Farm development in 2014/15 shows that the Blatchford Brook is used by GHBs, potentially as a flight line to reach summer maternity roosts. SLR static K also recorded GHBs occurring on the Blatchford Brook where it crosses the A382. The existing Blatchford Brook culvert under the A382 is not suitable for GHBs and GHBs following the Blatchford Brook may therefore cross over the road or may find an alternative crossing (such as at Stover Bridge).

Although there are high numbers of GHB passes in the Whitehill Junction area detailed analysis by SLR showed that these passes were likely to be a small number (1 or 2) of foraging bats which are likely to have emerged from a local roost. There is no evidence of GHBs crossing the road in this area. This is consistent with the Linden Homes survey which recorded only a few individual GHBs on the site.

Flight lines along the road

The only evidence for a GHB flight line along the road is potentially the hedge between Stover Bridge and Ice House Copse (statics O and P), although this was given as a 'possible' and there is no evidence that this is a significant flight line. Although there is no evidence it could be assumed that small numbers of GHBs will be using the flight lines along the road.

Overview

Data from this application and others nearby shows that low numbers of dispersed GHBs are using the landscape along and surrounding this stretch of the A382. There are a number of small satellite roosts along the road corridor, all on the western side of the road other than the roost at Stover School.

This data should be seen in the context of research carried out by Exeter University which has shown that the numbers of bat passes recorded per night falls to very low levels (1-20 passes) within a few hundred metres of known important maternity sites. This also corresponds with expectations from their mathematical models as bats 'fan out' into the landscape as they leave the roost. Therefore low numbers of bat passes need to be accepted as the norm in ecological reports, even in key areas. Further, if a route is used for commuting between maternity/mating/hibernation sites rather than for feeding, then there may be only a few passes even though the route is critical (Fiona Matthews, pers comm).

5. Risk assessment and mitigation – construction and operational phases

Mitigation will be secured via condition or, where necessary, offsite land management agreements. The principle and budget for offsite works would be secured through a commitment in DCC Development Management Committee report for this application. Note that, as DCC is the applicant and the LPA, it is not possible to set up s106 agreements relating to this application. The details of mitigation will be set

out in a LEMMP and CEMP the development and implementation of which will also be a condition of any permission. Works will be monitored by either DCC or the Ecological Clerk of Works for the scheme (responsibilities will be set out in the LEMMP and CEMP).

5.1 Loss/degradation of foraging habitat within the current Chudleigh sustenance zone

Impacts and mitigation:

The proposal will result in the loss of the following potential GHB foraging habitat on the edge of the sustenance zone:

- 1.8ha of mixed plantation woodland – Pitt’s Plantation
- 458m of hedgerow between Stover Bridge and Ice House Copse
- 0.9ha of broad leaved / plantation woodland – Ice House Copse (on the edge of the sustenance zone)

However, survey for this application and others (see para 4.2.5 above) has shown only a few individual GHBs foraging along the hedge, no GHBs foraging in Ice House Copse (although it could be assumed that the individual GHBs roosting in the copse will use it for foraging) and no GHBs foraging in Pitt’s Plantation. Given the low level of GHB use on the edge of the sustenance zone (and that this area will not be within the boundary of the amended sustenance zone) it can be concluded that, without mitigation, loss of these habitats will not have a likely significant effect on the SAC GHB population.

Habitat resilience will be delivered through enhancing GHB foraging habitat both within and outside the red line boundary.

Habitat loss	Habitat gain within the red line
3350m hedge	3689m of species rich hedge
2.34ha broadleaved woodland	3.3ha of broadleaved woodland within the red line + 5.7ha of broadleaved woodland outside the red line boundary in a location which will benefit bats and dormice.
0.54ha of coniferous plantation	
2.25ha of mixed plantation	
	Commitment to create / enhance GHB habitat in the road corridor / sustenance zone using a £105K offset fund as per the habitat offsetting principles set out in Section 5.2.3. This will include habitat suitable for foraging GHBs

5.2 Impacts on flight lines across the A382 – landscape permeability

The majority of the proposal lies outside a strategic flyway. However as stated in section 2.5 in their letter dated 19th January 2016 (and Section 2.5 above) NE state: *Exceptionally in this instance, a different approach to assessing risk is required to address landscape scale severance concerns for greater horseshoe bats attempting to cross the road due to the type and scale of the proposed development. The proposals include a significant widening of an existing road for approximately 4km between the Drumbridges roundabout and Newton Abbot. Whilst the existing road acts to sever habitat links across the road, the widening will likely further discourage and pose an increased risk to low flying species such as greater horseshoe bats that rely upon linear features to facilitate navigation through the landscape. The proposals represent a permanent and irreversible change at a landscape scale, with the potential to further fragment commuting habitats used by greater horseshoe bats to move between the South Hams SAC designated roosts. These potential landscape scale impacts and in-combination could affect the favourable conservation status of greater horseshoe bats by restricting landscape scale connectivity and reduce population resilience to change.*

Impacts of the whole scheme on flight lines are therefore being assessed in order to ensure that landscape permeability and population resilience are maintained for GHBs.

5.2.1 Potential impacts

Barrier effect: Ransone and Hutson (2000) state that the sensory range of a commuting GHB is 5 -10 metres. The widened road could act as an increased barrier to GHBs preventing them from moving across the road to access roosts and foraging. In order for GHBs to move between the Chudleigh roost and other SAC roosts some GHBs are likely to cross the A382 corridor between Bovey Tracey and Newton Abbot. Any increased barrier effect in this area may deter bats from moving between roosts or cause them to take a much longer route than necessary.

Loss of flight lines along the road may also increase the barrier effect through this stretch of countryside.

Given the discussion in section 5.1 it is important to note that the proposal will not create a barrier between the Chudleigh SAC roost and foraging habitat within the sustenance zone.

Collisions: Any increased barrier effect will reduce the potential for collisions. However if GHBs choose to cross the widened road it may pose a greater risk of death or injury through collisions especially given that GHBs are low flying bats.

5.2.2. Actual impacts – before mitigation

Barrier effect and collisions: The existing A road widths vary from 6 - 9m wide (not including verges) and may already therefore act as a barrier to GHBs, especially where wide verges increase the road width (such as at Stover School) and where the road is lit along the section from Forches Cross to the quarry and the Trago Mills roundabout. The only evidence of GHBs currently crossing the road is over and under Stover Bridge and possibly one bat at the stream north of Forches Cross. The Blatchford Brook may be used as a GHB flight line but the existing culvert is not suitable for GHBs to pass through (see para 4.2.5 above). The only evidence of GHBs using flight lines along the road was possibly along the hedge between Stover Bridge and Ice House Copse.

The only safe crossing for GHBs is currently along the Liverton Brook under Stover Bridge (a strategic flyway). Importantly GHBs will continue to be able to fly along the Liverton Brook and under the bridge during both construction and operation of the scheme.

The proposal increases the road width to between 10m (majority of length) and 18m (dual carriageway stretch between Drumbridges and Trago Mills). This will result in the loss of hedges and woodland along the road corridor, largely on the western side (see the ES Ecology Chapter).

In terms of changes to traffic flows DCC Highways has stated 'Whilst an increase in traffic flows is to be expected, the night time flows would continue on the same trend as current figures, in line with the UK's expected growth rate of 2% year on year'.

As stated in section 4 no GHBs have been recorded in the section of proposed dual carriageway between Stover Country Park and Pitt's Plantation. It is therefore very unlikely that any GHBs will be impacted in this section.

Small numbers of GHBs have been recorded roosting at Ice House Copse (September) and Stover School (hibernating). Whilst survey showed no evidence of a crossing at this location it is possible that small numbers of GHBs may cross the road, although the existing road in this section (with a wide verge) may possibly act as a barrier.

Analysis of the data at Whitehill / the new Jetty Marshes road showed that this area is likely to be used by 1 or 2 individual foraging bats, largely during September and likely to be from a local roost. The new junction and stretch of road at Jetty Marshes may therefore, without mitigation, impact on a few individual GHBs. Given the distance from the SAC, the low numbers of GHBs recorded and that these GHBs are likely to be from a local roost rather than the SAC roost, NE advised (during the meeting in February 2017) that any impact on a few GHBs in this location would not have a likely significant effect on the SAC.

Analysis of the GHB data by SLR showed no evidence of other crossings along the existing A382, other than one GHB potentially crossing the road at the culvert north of Forches Cross.

Although, other than Stover Bridge, there is little to no evidence of GHBs crossing the road, it is assumed that GHBs may be crossing, especially along identified flight lines such as the Blatchford Brook and possibly the brook north of Forches Cross. The road widening may therefore act as a barrier to GHBs between Drumbridges and Newton Abbot. At the meeting in February 2017 NE agreed that in order to improve permeability across the road, mitigation should focus on providing safe crossings on the stream corridors (where GHBs have been recorded) and using advance planting along the road to direct bats to these crossings, as set out below.

5.2.3 Mitigation

For further detail see Mitigation Plans 14 – 19 (as submitted in March 2017) and details in the *Response to Further Information Request – Ecology* (SLR, Dec 2016) and the associated Addendum (submitted in March 2017) - <https://planning.devon.gov.uk/PlanDisp.aspx?AppNo=DCC/3851/2016>

Permanent mitigation along the length of the road

Verges managed as low maintenance grassland

Poor quality habitat will be created along the verges to discourage bats from foraging along the road corridor and therefore crossing the road. If evidence emerges that species rich verges will not cause a problem for bats then this proposal will be amended in the LEMMP.

Evidence for verge mitigation: Mitigation for impacts on GHBs resulting from construction of the A477 in Wales included the '*maintenance of attractive linear features perpendicular to the route to lure bats away from the road*' and '*a relatively wide verge of poor quality habitat...directly adjacent to the carriageway..... to discourage bats from foraging along the road.*' No records of bat/vehicle collisions were recorded during monitoring (Wray et al, 2005).

Advance hedge/woodland/scrub planting

New hedges and thickets will be created along the length of the road with an overall height of 3m and with dense planting (hawthorn/blackthorn) to encourage bats to fly along the road to a safe crossing (see mitigation maps for locations) and to link into flight lines in the wider countryside. All planting within the section north of Forches Cross (and therefore in the sustenance zone) will take place 2 years in advance of the habitat being lost. All planting in the section south of Forches Cross will take place in the winter of 2017/18 prior to removal in 2018/19. If new planting is not functional by the time of habitat loss then temporary fencing or willow walls will be erected to provide this barrier.

Note that for the B3193 (a new road scheme) a 3m high dense hedge was recommended by Geoff Billington at crossings (based on experience and research by Limpens, 2005) in order to raise the height of any GHBs choosing to cross the road. It was acknowledged in the HRA screening that there is no published evidence that this works but it was considered that this was best practice (DCC, 2012). Whilst the main purpose of the hedge planting is to guide GHBs to safe crossings it should be noted that this may also encourage crossings at a safer height.

Permanent protection of existing crossing – see Map 3 below

Stover Bridge Crossing over the Liverton Brook (a strategic flyway) – see Drawing 14

This crossing will be protected and enhanced through vegetation clearance from the NE face of Stover Bridge.

Permanent creation of new safe crossings – see Map 3 below

Bat culvert near Forches Cross – see Drawing 17 (Habitat Link 2) and para 9.2 of the SLR report
Survey in Sep 2016 (statics M & N) showed evidence of GHBs at this location on both sides of the road. Survey for the A382 link road through NA1 also records GHBs at this location. The existing culvert is not suitable for bats and cannot, for flooding reasons, be replaced by one suitable for GHBs. An additional 2m dry bat culvert will therefore be provided next to the stream culvert. Planting will direct bats to the culvert and shield this area from headlights. This culvert will link to flight lines provided for TDC's NA1 development on the western side and link into Stover Park Wood mixed plantation, a stream corridor leading to the Teign and vegetation on the edge of Stover Clay Works on the eastern side.

Note that the section of road south of Forches Cross is currently lit (due to mineral workings requirements) and will continue to be lit in the future. This lighting is likely to deter GHBs from crossing this stretch of road and therefore encourage them to use the new culverts.

Bat culvert on the Blatchford Brook – see Drawing 18 (Habitat Link 3) and para 9.3 of the SLR report. The brook provides a potentially strong habitat link on both sides of the A382 through to the Teign Corridor. Survey in Sep 2016 (static K) showed evidence of GHBs on the eastern side of the road at this location. Survey for the Berry Knowles application (AMA, 2015) found GHBs along the brook on the western side of the road, predominantly in May. The AMA report states that this brook is likely to be of strategic importance to GHBs. The existing culvert is not suitable for bats and will be replaced with one at least 1.5m in diameter (maximum diameter possible to meet flood management requirements). Note that monitoring of the SDLR shows that GHBs do use culverts 1.5m high. Maximum water levels for the Blatchford Brook are shown below (AEP = Annual Exceedance Probability). It should be noted that over half a metre of freeboard is maintained during the short periods at which maximum water levels may occur. As for Link 2 planting will direct bats to the culvert and shield the culvert from headlights where needed.

Crossing	Return Period	Maximum Water Level (mAOD)	Top of Culvert (mAOD)	Freeboard (m)
Stover Bridge (Liverton Brook)	10%AEP (1:10yr)	17.64	18.76	1.12
	4% AEP (1:25yr)	17.77		0.99
	2%AEP (1:50yr)	17.89		0.87
	1%AEP (1:100yr)	17.99		0.77
	1%AEP + CC (1:100yr + 30% Climate Change)	18.20		0.56
Ringslade Bridge (Blatchford Brook)	10%AEP (1:10yr)	8.97	10.01	1.04
	5% AEP (1:20yr)	9.03		0.98
	3.33%AEP (1:30yr)	9.06		0.95
	1.33%AEP (1:75yr)	9.13		0.88
	1%AEP (1:100yr) 1%AEP + CC (1:100yr + 30% Climate Change)	9.16 9.27		0.85 0.74
Blatchford Bridge (Blatchford Brook)	10%AEP (1:10yr)	6.94	7.90	0.96
	5% AEP (1:20yr)	7.01		0.89
	3.33%AEP (1:30yr)	7.05		0.85
	1.33%AEP (1:75yr)	7.15		0.75
	1%AEP (1:100yr)	7.20		0.70

Crossing	Return Period	Maximum Water Level (mAOD)	Top of Culvert (mAOD)	Freeboard (m)
	1%AEP + CC			
	(1:100yr + 30% Climate Change)	7.34		0.66

Evidence for bridges/culverts: Mitigation for impacts on GHBs resulting from construction of the A477 in Wales included two culverts (one 2.2m diameter and other 1.8m diameter) located at existing GHB crossing points. Monitoring showed that ‘tunnels are proving to be extremely effective in allowing bats to cross the road safely.’ (Wray et al, 2005). Billington (2003) reported GHBs using tunnels beneath the A38. Monitoring of the SDLR shows GHBs using culverts 1.5m high.

Note that NE asked whether it would be possible for the bat culverts to be in place prior to the road widening. The developer has confirmed that, due to the size of the culverts, the road will need to be dug up in order for them to be put in place and that this is not therefore possible.

Habitat enhancement / creation to increase permeability and population resilience in the landscape

As stated in para 2.5 NE has commented that: *These potential landscape scale impacts and in-combination could affect the favourable conservation status of greater horseshoe bats by restricting landscape scale connectivity and reduce population resilience to change.*

As stated above a number of safe crossings are being created under the A382 in order to ensure that GHBs are able to move between the Chudleigh roost and other roosts. In order to improve connectivity to these crossings as well as increasing GHB population resilience the mitigation package for this scheme will also include a £105K GHB habitat fund. Spend will be overseen by a small steering group, including DCC (as the determining authority for this application and as the Minerals Planning Authority to maximise links with quarry restoration schemes), Stover Country Park (to maximise links to the HLF Parkland bid), TDC (to maximise links with TDC Local Plan developments), DWT (to ensure links are made with any land management being carried out in the area via the Devon GHB Project) and NE.

Opportunities will be sought to spend the funding in the following ways:

- As match funding to the Stover Parkland HLF bid in order to enhance GHB habitat, particularly along stream corridors linking to the A382 crossings. The majority of this habitat would be owned and managed by DCC and would therefore be a permanent gain.
- Through Land Management Agreements (LMAs) with land owners / managers in order to create and enhance GHB habitat, particularly flight lines along or linking to stream corridors which link to the A382 crossings. Note that the detail and duration of the LMAs would obviously be subject to land owner agreement. Works may include:
 - Hedge management
 - Hedge creation to create flight lines and smaller fields for GHBs
 - Woodland planting
 - Grassland management for GHBs
 - Enhancement of stream corridors for GHBs (potentially fencing off streams to allow scrub / trees to grow up and create strengthened GHB corridors)
- A contribution to the creation of a potential new Chudleigh maternity roost with opportunities for hibernation.
- Habitat creation and enhancement within the Chudleigh Sustenance Zone.

5.2.4 Other considerations – not required as HRA mitigation

Whitehill junction/Jetty Marshes road – See Drawing 19 (Habitat Link 5)

In the meeting in Feb 2017 NE advised that any impacts in this area will not have a likely significant effect on the SAC (see discussion in para 5.2.2 above). However 11 culverts of 1.8m diameter are required under the new Jetty Marshes road in order to meet flooding requirements (the area is in a flood

zone) – see Sheet PA11 in the ES. These culverts may provide an opportunity for bats to cross under the road, although as they lead the bats into an existing urban area and a proposed housing development (Linden Homes).

The original ES and Dec 2016 Ecology report suggests that the culvert at the western end should be enlarged for GHBs to a 2m diameter. However, given that this is leading a few GHBs into an urban area Natural England advised in the Feb 2017 meeting that the extra sized culvert is not required for HRA purposes and that the money saved by using a 1.8m culvert would be better spent on improving habitat for GHBs along the corridors leading to the safe road crossings and/or within the SAC sustenance zone. It has therefore been agreed with the developer that the extra £5K required for the larger culvert will be spent on offsite habitat enhancement (see below). This culvert will however remain at the proposed location and will therefore provide connectivity across the road should bats wish to use it (evidence quoted above shows that GHBs will use a 1.8m diameter culvert) linking through to habitat shown on Drawing 19. Any GHBs using habitat north of the new Jetty Marshes road will be encouraged to follow flight lines along the northern side of the road to the Blatchford Brook culvert (again see Drawing 19).]

5.3 Disturbance from light (vehicles/street lights)

5.3.1 Potential impacts:

GHBs are extremely sensitive to increased light levels and will typically avoid areas where conditions are brighter than full moonlight on a clear night (typically recorded as being between 0.25 and 1 lux). Road lighting, vehicle lighting and construction lighting may all therefore deter GHBs from using lit areas for foraging or commuting adjacent to the A382. Lighting may also deter GHBs from using the proposed crossings. Vehicle lighting may temporarily delay GHBs crossing the road (Lemaire and Arthur, 1999).

5.3.2 Actual impacts and proposed permanent mitigation:

See the *lighting impact assessment plan* and *statement* submitted in March 2017 for details.

Operational phase:

The lighting plan shows that road lighting is proposed at:

- a. The new 'Trago Mills' roundabout. However note that this roundabout was already lit and no GHBs have been recorded in this area.
- b. The section at Forches Cross. However note that the majority of this is already lit to meet quarry requirements.
- c. The new Whitehill Junction
- d. Jetty Marsh road.

Lighting in these areas will deter GHBs from crossing the lit road and should therefore encourage GHBs to follow dark flight lines to the crossings. There will be transient illumination along the road from vehicle headlights at night. Again this barrier effect may help in guiding bats to safe crossings.

Lighting has been designed to ensure that there is no impact on the safe crossings identified above or the flight lines that lead bats to these crossings. The 0.5 lux contour is shown on the revised Ecological Drawings (submitted in March 2017). Lighting has been designed in order to minimise light spill on adjacent habitat and ensure that there is no impact on safe crossings identified above or flight lines leading to them. The dark flight lines are shown by red arrows on the Ecological Drawings. Willow walls and planting will ensure that crossings are shielded from headlight spill (see mitigation plans).

Dimming the lights from 8pm and the use of louvres will ensure that the 2 lux contour shown on the Ecological Drawings is actually 0.5 lux for the majority of the year when bats are active. It is not possible to dim the lights earlier than 8pm for H&S reasons.

Construction phase lighting:

The CEMP states that: standard working hours for all construction activity will be from 08:00 to 18:00 Mondays to Fridays, and 08:00 to 13:00 on Saturdays. Construction phase lighting at night to be limited to the installation of culverts/bridges only (short duration works) and to be scheduled to be undertaken in winter to avoid impacts on bats. Any site compound lighting (location unknown) will be directional and low spill. Implementation of the CEMP will be conditioned.

6 Monitoring

A detailed monitoring scheme for both mitigation compliance and GHBs (and other bats) will be required via condition. This will be agreed with DCC and NE, will monitor the effectiveness of the proposed mitigation and ensure that, if necessary, the mitigation is modified following best practice and to an agreed reasonable timescale. The monitoring scheme will also be consistent with any road monitoring being carried out by Exeter University as part of the Devon GHB Project.

The GHB monitoring scheme will identify whether a new baseline survey is required.

7 In combination effects

Work done for DCC's Minerals Plan and TDC's HRAs for NA1 and NA2 development areas has identified the potential for in-combination effects from development pressure in the A382 corridor between Bovey Tracey and Torquay which could effectively create a barrier to GHBs across this landscape and between the SAC roosts. Relevant plans or projects are shown on Map 3, in the context of the safe bat crossings (culverts and Stover Bridge), and include the following (where GHB surveys were undertaken for these applications headline information has been included in this HRA):

Ilford Park (has permission but not yet implemented)

Golf Course extension (ditto)

NA1 development area and A382 link road (in TDC Local Plan)

NA2 development area (in TDC Local Plan)

Berry Knowles housing planning application (not allocated in the TDC Local Plan)

Stover HLF bid

Ringslade and Stover Quarries also lie along the A382 providing opportunities for habitat connectivity as these sites are restored (as per requirements within the Minerals Plan).

The mitigation for the A382 scheme has been developed in liaison with TDC in order to link with the green infrastructure (GI) proposed, and bat flight lines identified in the Master Plans for NA1 and NA2. The proposed culvert at Forches Cross links to flight lines identified for NA1 (see Map 4). Bat surveys for the A382 link road (not yet published) indicate that some of the GHBs recorded in the NA1 area may travel around the edge of Ringslade Quarry joining the Blatchford Brook corridor and the new culvert.

Map 5 and Drawing 19 show that the main swathe of GI through the NA2 development area now leads bats to planting along the top of the proposed cutting. Low flying bats such as GHBs will be encouraged via dense planting to fly to the Blatchford Brook crossing. Although not optimal GHBs will also be able to fly along the dark corridor being created around the edge of the new Whitehill roundabout to the new culvert (Habitat link 5) under the new link road.

An HLF bid is being submitted by DCC to enhance the historic landscape at Stover. A portion of the mitigation funding proposed for offsite works for the A382 may be best used as part of the match funding for the HLF bid in order to ensure that the HLF project enhances the Liverton Brook corridor and stream linking to the Forches Cross culvert. John Avon from Stover Country Park who is leading the HLF bid is positive about this proposal and is developing possible habitat proposals.

8 Conclusion

Based on the impacts identified and the mitigation proposed above, DCC concludes that this proposal is not likely to have a significant effect on the South Hams SAC either alone or in combination with other plans or projects.

Both the mitigation proposed and this HRA are based on known best practice at the time of writing. A condition will be imposed on any permission that the required LEMMP should be based on the mitigation submitted, but be amended if needed (and where this does not impact significantly on scheme design/costs) in order to reflect any changes in best practice relating to GHBs e.g. verge management.

References:

Abbott, I. (2009) *Bat crossings along Irish national roads – implications for planning mitigation measures*. Unpublished data. Abstract for Infra Eco Network Europe 27 September – 1 October 2010. Velence, Hungary.

Andrew McCarthy Ecology (2015) *Proposed Development at Berry Knowles Farm, Newton Abbot, Results of Protected Species Surveys*. Report produced for Sibelco

Bach, L, Burkhardt, P & Limpens, HJGA (2004). *Tunnels as a possibility to connect bat habitats*. *Mammalia*, 68(2); 411-420

Billington (2003) *Radio tracking study of greater horseshoe bats at Chudleigh Caves and Woods Site of Special Scientific Interest*, English Nature Research Report 496

Defra (2012) *The Habitats and Wild Birds Directives in England and its seas. Core guidance for developers, regulators and land/marine managers*. Draft for public consultation.

EPS Ecology (2013) *Bat Survey, Land at Whitehill, Newton Abbot*

Gillingham, J (2010) Monitoring report for roost provision at Ilford Park

Hughes, M (2005) *Ice House Copse, Ecological Site Investigation*. Report submitted to Newton Abbot (Stover) Golf Club.

Hughes, M (2008) Ilford Park Environmental Statement

Jacobs (2014) *A38 Drumbridges Roundabout Improvements. Bat Survey Report*. Produced initially for DCC but submitted to Highways England.

Lemaire M, Arthur L (1999) Bats and roads. In: *Actes des troisiemes rencontres "Routes et Faune Sauvage". Ministere de l'Equipement, des Transports et du Logement et Ministere de l'Amenagement du Territoire et de l'Environnement, 30 septembre au octobre 1998*. SETRA. 3^d Meeting - Roads and wildlife in France. Museum of Natural History, Bourges, France.

Limpens HJGA, Twisk P & Veenbaas G (2005). *Bats and road construction*. Published by the Dutch Ministry of Transport, Public Works and Water Management Directorate- General for Public Works and Water Management, Road and Hydraulic Engineering Institute, Delft, the Netherlands and the Association for the Study and Conservation of Mammals, Arnhem, the Netherlands.

Matthews, F et al (2016) *Roads and Bats: a meta-analysis and review of the evidence*. Mammal Review

Natural England (2010) *South Hams SAC – Greater Horseshoe Bat consultation zone planning guidance*

O'Connor, G and Green, R (2011) *A review of bat mitigation in relation to highway severance*. Highways Agency.

Oxford, M. (2016) *Draft South Hams SAC Mitigation Strategy for the Heart of Teignbridge and Bovey Tracey*. For TDC

Ransome, R. (1996) *The management of feeding areas for greater horseshoe bats*. English Nature Research Report Number 174

Ransome and Hutson (2000). *Action Plan for the conservation of the Greater Horseshoe Bat in Europe*.

TDC (2016) NA2 Whitehill Development Framework Plan SPD, April 2016

<https://www.teignbridge.gov.uk/CHttpHandler.ashx?id=46969&p=0>

TDC (2017) NA1 Draft Development Framework Plan
<https://www.teignbridge.gov.uk/CHttpHandler.ashx?id=48334&p=0>

Wills, D (2015) Ecological Survey and Data Report, Outbuildings at Orchard House

Wray, S, Reason, P, Wells, D, Cresswell, W & Walker, H (2005). *Wildlife crossing structures: planning, placement, monitoring. Design, installation and monitoring of safe crossing points for bats on a new highway scheme in Wales*. In ICOET Proceedings; 369- 379.