

A350 Westbury Bypass Stage 3 Scheme Assessment Report

Part B – Environmental Statement – Non Technical Summary

Prepared by:

RPS, Oxford on behalf of Mouchel Parkman for Wiltshire County Council

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Mouchel Parkman RPS Wiltshire County Council

East Wing Mallams Court County Hall
County Hall Campus 18 Milton Park Bythesea Road
Bythesea Road Abingdon Trowbridge
Trowbridge Oxon Wiltshire
Wiltshire OX14 4RP BA14 8JN

BA14 8JQ

Tel: 01225 756600 Fax: 01225 756611

Email: westbury@mouchelparkman.com



Non Technical Summary

Introduction

- 1.1 Wiltshire County Council proposes to construct a new single-carriageway bypass to the east of Westbury, Wiltshire. In accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 and with the Highways Agency's Design Manual for Roads and Bridges (DMRB) an Environmental Statement has been prepared to accompany the planning application for the proposed scheme. The EIA Regulations and the DMRB require the Environmental Statement to include a Non Technical Summary that summarises in layman's language all of the main points and conclusions of the full document. This document is the Non-Technical Summary.
- 1.2 Both this Non Technical Summary and the Environmental Statement have been prepared by RPS, in conjunction with Mouchel Parkman, the term consultant to Wiltshire County Council.

Need for the Scheme

- 1.3 The A350 provides a major road link from the M4 motorway to the south coast and forms a key part of the strategic road network. Whilst the A350 bypasses many towns along its route, it provides one of the main routes through Westbury town centre. As well as accommodating local traffic, the A350 supports a high proportion of regional traffic and heavy goods vehicles from the West Wilts Trading Estate and the Cement Works. It is an important economic corridor serving the West Wiltshire towns.
- 1.4 The road passes through residential areas as well as commercial areas with some buildings very close to the road edge. Inevitably, congestion is a problem along with the associated issues of noise and air pollution and conflict between traffic and pedestrians.
- 1.5 The scheme aims to provide traffic relief for Westbury, allowing road space in the town to be re-allocated to other modes, improve journey time reliability of the A350 route and improve access to employment areas, particularly the West Wilts Trading Estate, and between the West Wiltshire towns.

Route Description

1.6 The route corridor follows a broad curve around the eastern side of Westbury at a distance of between 200 to 600 metres from the edge of the built up area of the town. Several isolated domestic properties and farmsteads lie on either side of the route, some as close as 80m from the route. The route runs through predominantly open countryside. The southern part of the

corridor is dominated by a dry valley and the scarp slope of Salisbury Plain with large open arable fields at Chalford and Newtown leading up to steeper wooded slopes.

- 1.7 As the corridor continues north of Bratton Road the topography becomes flatter lowland with smaller fields defined by hedgerows and woodland belts. The route passes within 600 metres of the Westbury Cement Works to the east and has a crossing with the railway before the intersection with the existing A350. The route corridor then extends due west across the lowland flood meadows of the wide Bitham Brook corridor where there are smaller lush pasture fields and low hedges. Small streams are lined with willow pollards and occasional alder.
- 1.8 Further west the route rises slightly to cross the railway again and passes through an area of past industrial activity and urban fringe before joining the B3097 Hawkeridge Road opposite Glenmore Farm. The West Wiltshire Trading Estate lies immediately to the west of the western end of the route at Hawkeridge Road.

Scope of the Environmental Impact Assessment

1.9 The EIA Regulations require that a description should be given of the environmental aspects that are likely to be *significantly* affected by the development. To assist that process the scope of the assessment process was consulted on with various organisations, but principally Wiltshire County Council, West Wiltshire District Council, the Environment Agency, English Nature, the Countryside Agency (now both forming Natural England) and English Heritage.

Scheme Proposals

- 1.10 In total the proposed scheme would comprise approximately 5.8 kilometres of new single carriageway around the eastern and northern sides of Westbury that would provide:
 - A new route for the A350 principal road past the town; and
 - Strategic road access to the West Wilts Trading Estate.
- 1.11 Roundabouts would connect the bypass to the existing A350 both north and south of the town, between which there would be no junctions. For descriptive purposes the scheme is divided into the following sections:
 - A350 at proposed roundabout immediately south of Madbrook Farm to the B3098 Bratton Road:
 - B3098 Bratton Road to the proposed Cement Works roundabout on the existing A350 immediately north of the railway line;

- Glenmore section: a 1.2 km long single carriageway between the proposed Cement Works roundabout and the proposed roundabout adjacent to Glenmore Farm; and
- Hawkeridge section: a 0.4 km long realignment of the B3097 Hawkeridge Road between the proposed Glenmore Farm roundabout and the proposed new roundabout at the entrance to the West Wilts Trading Estate at the northern end of the improved section of B3097, adjacent to Hawkeridge Farm.
- 1.12 In addition to the above a 0.55 km length of the B3098 Bratton Road would be realigned slightly to the south of its existing alignment to allow the construction of an over bridge to enable the B3098 to pass under the route of the bypass. There would be no vehicular connection between the new bypass and the Bratton Road.
- 1.13 Other bridges would be constructed to carry the proposed carriageway over two discrete railway lines (Cement Works Railway Bridge and Glenmore Railway Bridge) and three minor stream crossings (Bitham Brook).
- 1.14 A 'green' bridge would be built to allow the proposed carriageway under the minor Newtown Road, while at Chalford another 'green' accommodation bridge would maintain the route of the existing track/Bridleway West36.
- 1.15 At strategic locations wildlife tunnels and crossings would be provided. This includes the Beres Mere Farm Underpass and the Wellhead Underpass (the latter also carrying a public footpath beneath the highway). A number of gantries would be installed to facilitate the movement of bats across the highway.
- 1.16 New flood attenuation ponds would be located at strategic locations as part of the scheme's drainage system. Flood compensation would also be provided.
- 1.17 Lighting would be confined to each of the three northern roundabouts (Cement Works Roundabout, Glenmore Roundabout and Hawkeridge Roundabout) and the new cycle path between the Glenmore roundabout and the Hawkeridge roundabout. To accommodate known bat flight paths in the area of Madbrook Farm the roundabout would not be lit in the conventional way. At that location, low level lighting in the form of vehicle activated signs and solar powered road studs would be used in place of traditional lighting columns.
- 1.18 Comprehensive onsite landscape planting and features are integral to the overall scheme.

Alternatives Considered

- 1.19 The EIA Regulations also require an outline of the main alternatives studied by the applicant.
- 1.20 In recent years the County Council has considered a variety of route options for a bypass to Westbury. These are described in the full text and include various 'Eastern Routes', an 'Inner

Western Route', an 'Outer Western Route', a variety of 'Far Western Routes' as well as improvements to the existing road and the A36.

1.21 Overall the County Council believes that the proposed route represents the optimum balance between the impacts on the environment surrounding Westbury, including on views from the White Horse, and the impacts on properties on the edge of town, whilst still providing an economically viable route which would be effective in removing through traffic and serving the West Wilts Trading Estate and the A350 economic corridor serving the West Wiltshire towns.

Construction Environmental Management

- 1.22 An assessment has been made of the likely impacts of construction activities. The construction period would last approximately 18 months to 2 years, and would involve site preparation, earthworks, main road construction and construction of final surfaces.
- 1.23 The impacts of construction would be temporary and largely local in extent. The main potential impacts would arise from:
 - Generation of dust and noise associated with earthworks and vehicle movements,
 - Pollution risks associated with working in close proximity to surface and groundwater resources,
 - Possible disturbance to ecological and heritage resources,
 - Disruption to access routes, including existing roads and public rights of way,
 - Visual impacts on landscape and townscape features,
 - Generation and disposal of wastes.
- 1.24 A draft Construction Environmental Management Plan (CEMP) for the scheme is included as an Appendix to the Environmental Statement. A specific CEMP for work in the Wellhead Springs area has also been prepared because this area lies within a groundwater source protection zone (SPZ) which is an important public water supply. The preparation and implementation of the CEMPs, with the mitigation measures proposed, would enable the potential impacts of construction to be managed and controlled by the contractor.

Land Use

1.25 In terms of land use the Environmental Statement concentrates on agriculture, particularly in terms of the operation of individual farm holdings along the route. The viability of each farm with the new road in place has been assessed together with the effect that the new road would

have on access to parcels of land divided by the road. The assessment concluded that for each of the eight farms directly affected by the proposals their viability would only be slightly affected in which the impact of the proposed scheme could require minor changes in the management of the enterprise.

Hydrology, Drainage and Water Quality

- 1.26 The Environmental Statement sets out the existing conditions in respect of ground and surface water, briefly summarises the drainage components of the proposed scheme, including the proposed mitigation measures which form an integral part of the scheme proposals, and assesses the likely effects expected to arise from the scheme.
- 1.27 The Westbury area is characterised by the River Biss system, whose main components are the Bitham Brook and the Biss Brook. The bypass would cross the 1 in 100 year floodplain of the Bitham Brook for approximately 450 metres. These watercourses, together with the local ground waters, are of a good quality and are very sensitive to pollution. Of particular significance at the southern end of the scheme is the groundwater SPZ around the public water supply at Wellhead Springs.
- 1.28 The highway drainage and the bridges over the Bitham Brook have been carefully designed to minimise the risk of flooding in the natural environment and to contain any pollution incidents within the highway boundary. The public water supply and the SPZ would be protected by the installation of an impermeable membrane beneath the highway carriageway which would ensure that all surface run-off in the Wellhead Source catchment is positively collected and drained.
- 1.29 Overall the assessment concluded that the potential effects of the scheme on river water quality, land drainage, flooding and public water supply would be neutral.

Landscape, Townscape and Views from the Road

1.30 An assessment has been made of the proposed A350 bypass on the landscape, townscape and views from the road.

Landscape

- 1.31 The key points of the scheme that affect the landscape are:
 - A new highway in open and elevated areas of land
 - Loss of sections of agricultural fields and associated boundary vegetation
 - Loss of some pastoral fields and mature trees

- 1.32 The key components of the scheme that affect the visual impact are:
 - Raised road embankments
 - · Lighting and signs
 - Bridge structures
- 1.33 The baseline study identifies that the area of the proposed bypass lies within two landscape character areas described by the Countryside Agency. These are Area 132: Salisbury Plain and West Wiltshire Downs and Area 117: Avon Vales. Sixteen landscape character types, defined in the Wiltshire Landscape Character Assessment, represent the diversity of the Wiltshire landscape. Within the study area six local landscape areas have been identified as follows:
 - Salisbury Plain Escarpment
 - White Horse Vale
 - West Ashton Gently Rolling Woodland and Farmland
 - River Biss Valley
 - Westbury Industrial Urban Fringe
 - Westbury Vale Fringes
- 1.34 There are no nationally designated landscapes within the study area. However, a Special Landscape Area (SLA) lies immediately to the east of Westbury. The main reason for identification of the SLA is conservation of the natural beauty of the landscape and in this case the SLA acts as a setting for the significant landscape features of Westbury White Horse Hill Figure and Bratton Camp. None of the vegetation along the route alignment is protected by Tree Preservation Orders.
- 1.35 The landscape around Westbury has a recognisable structure and is generally well maintained farmland with some worthy features, including Westbury White Horse Hill Figure, and some detracting features such as Westbury's cement works. The road development would result in some negative effects on the landscape particularly the loss of and intrusion into open areas of farmland. However, overall the landscape would accommodate road development with its integration as part of interconnecting vegetation cover and varied topography. In addition, the landscape effects of the proposed bypass include the loss of boundary vegetation, some mature trees, areas of woodland belt and plantation. The carriageway on raised embankment, bridge structures and lighting at roundabouts would all have a visual impact from properties and rights of way.

- 1.36 The key issue in the design of the proposed bypass is its siting in the landscape. As far as possible the road is sited to observe contours and reduce cutting into higher ground and where feasible the road is aligned to avoid significant areas of woodland and vegetation. The landscape proposals are designed to integrate the road with and reinstate the existing landscape by way of native species planting. This would include:
 - Tree and shrub planting along the road to link with existing field boundaries and patterns
 of vegetation
 - Hedgerows with occasional tree species
 - Tree and shrub planting in fragmented field boundaries
 - Blocks of woodland at junctions
 - Mass tree and shrub planting to soften the appearance of embankments
 - Individual trees at appropriate locations
 - · Breaking out and removal of redundant sections of road
 - Individual trees and hedgerow reinforcement along bat flight lines
 - Hedgerow with trees between Beggar's Knoll and White Scar Hanging
 - Grassland tolerant of wet and dry conditions within pond areas
 - Chalk grassland on some cutting slopes
- 1.37 At many locations the planting proposals would be effective to mitigate landscape and visual impacts of the scheme. However, elevated views of the road would limit the effectiveness of such planting. The overall impact on landscape is assessed to be moderate adverse and the overall impact on views is assessed to be moderate adverse.

Townscape

- 1.38 The key element affecting townscape is:
 - The reduced dominance of traffic through the town
- 1.39 The proposed bypass will help to alleviate traffic problems in Westbury. The townscape assessment considers townscape effects and changes to the townscape character and visual effects that relate to changes in views and visual amenity. Within the study seven townscape character areas were identified as follows:
 - Westbury Historic Centre
 - Newtown and Eastern Suburbs

- Frogmore and Northern Suburbs
- Eden Vale
- Leighton Park
- Westbury Leigh
- Leigh Park
- 1.40 Despite Westbury being an historic town there are no nationally designated townscapes within the study area. Nevertheless, the town centre of Westbury is protected as a Conservation Area, which includes a number of Listed Buildings including the parish church of All Saints. The urban core of Westbury forms a local commercial centre with appropriate amenities. The townscape as a whole has a recognisable structure and is relatively compact with a number of features worthy of conservation. However, some streets and urban spaces are deteriorating visually and audibly due to heavy traffic flows through the town which detracts from the townscape features. Reduced traffic flow in Westbury is likely to result in positive effects on the townscape characteristics.
- 1.41 The most significant impact of a town bypass would occur within the 'Westbury Historic Core' where reduced dominance of traffic would enhance the townscape character within the setting of historic buildings and streets. In addition, reduced traffic flow is likely to generate improved urban vitality and give better opportunity for traffic calming and or pedestrianisation proposals for the town.
- 1.42 The overall impact on townscape would be moderate/large beneficial.

Views from the Road

- 1.43 The key issue for the road user is:
 - The opportunity to open up views of a scenic landscape
- 1.44 The view from the road can be beneficial to travellers. It can allow them to appreciate the beauty of different landscapes. The view from the road can also help drivers locate themselves along the route.
- 1.45 The proposed route of the bypass east of Westbury would provide an opportunity for views from a new road, which at present are not obtained by the road user. The route passes through four distinct landscape character areas. Sections of the proposed route would provide open views to the Westbury White Horse that is of particular interest and an important landscape feature in the area. There would be some disbenefit to views when the bypass is within the Westbury urban fringe.

1.46 The impact of the proposed scheme on views from the road is assessed to be beneficial.

Ecology and Nature Conservation

Designated Sites

1.47 No statutory or non-statutory designated sites would be affected by the road. No mitigation is therefore necessary in relation to statutory and non-statutory designated sites.

Habitats

1.48 A number of habitats would be affected by the road.

Woodland

1.49 Where practicable, measures have been taken in the alignment design to avoid direct impacts on significant areas of woodland. However there are instances where such impacts are unavoidable. In these areas care would be taken to minimise loss of the existing vegetation. Compensatory planting using native species is included as part of the proposals and would, so far as practicable, use planting stock of local provenance.

Scrub (including dense and scattered)

1.50 A small area of dense scrub (located to the south of the existing Bratton Road), and some scattered scrub (either side of the railway) would be lost as a result of the proposals. Planting for landscape purposes and for mitigation of effects on barn owls would provide at least an equivalent area of scrub.

Grassland

1.51 Although much of the grassland that would be affected by the proposals is of low intrinsic nature conservation importance, it does provide habitat for a range of fauna. Creation of grassland close to the alignment of the new road would generally be avoided in order to prevent attracting barn owls into areas where they may at risk of vehicle collisions. In the south of the scheme, close to areas of existing unimproved and semi-improved calcareous grassland, grassland would be sown using seed mixes sourced from suppliers who can ensure that seed is of UK provenance, to encourage the establishment of flora typical of chalk grassland.

Aquatic habitats

1.52 The route of the road has been designed in such a way that most stretches of running water are avoided. However, Bitham Brook and its two associated tributaries/field drainage ditches would be crossed. The construction programme, techniques and materials would include measures to protect the water environment from pollution and degradation. Disturbance to

streamside and in-channel vegetation would be minimised and the number of trees removed during construction would be kept to the minimum required for safe construction. Following construction, any necessary enhancement to the construction area, including possible planting, selective clearance of channel vegetation and re-pollarding of willows would be undertaken in liaison with an experienced ecologist. If any bank reinforcement were necessary, suitable materials such as local stone rip-rap seeded with locally native species would be used.

Hedgerows

1.53 Loss of hedgerows would be limited to that essential to accommodate the scheme. New hedges will be planted/re-routed as appropriate, using species typical of the area and joining to existing hedges in order to maintain connectivity. Gaps that currently exist in hedgerows that are to be retained would be enhanced with planting of species already present in hedgerows in the area. The total length of new hedgerows to be planted would be significantly more than that which would be removed.

Individual standing trees

1.54 As far as possible the pollarded willows along the banks of Bitham Brook and the associated tributaries at Blenches Mill Farm would be retained. Few mature trees would be lost as part of the scheme. Occasional ash and oak would be planted in new hedgerows to establish new standard trees.

Species

Aquatic Invertebrates

1.55 Mitigation incorporated into the scheme for aquatic habitats would ensure that there were no significant changes to the hydrological regime at Wellhead Springs and the Bitham Brook section and associated tributaries at Blenches Mill Farm. By minimising changes to the aquatic habitat, adverse effects on the invertebrate assemblages would also be avoided.

Terrestrial Invertebrates

1.56 There would be direct impacts on terrestrial invertebrate populations of local significance as a result of removal of trees along the line of two of the branches of the Bitham south of Blenches Mill Farm. This would be mitigated by special treatment of the trees being removed, and by planting that would result in increased habitat potential. Other areas supporting important invertebrate communities at Wellhead and White Scar Hanging would not be directly affected.

Reptiles

1.57 A good population of slow worms is known to reside along the dismantled railway line at the western end of the Glenmore Link. There are also some reptiles at this locality. Whilst no

important reptile habitat would be directly affected by the proposals appropriate measures will be implemented during construction to minimise the risk to slow worms and other fauna in this area.

Amphibians

1.58 The two ponds that were found to have populations of great crested newts would not be subject to any direct effects. However, the terrestrial habitat that forms part of their territory would be affected by land-take. Environmental design measures include the creation of habitat for amphibians. During construction newt fencing would be erected and a process of exclusion undertaken to remove from, and prevent newts from returning to, land required by the scheme. The conservation status of the species in the area would not be affected.

Breeding Birds (including Barn Owls)

- 1.59 Removal of woodland, trees, hedgerows and arable land would result in direct habitat loss for breeding birds. However, new planting as part of the environmental design would far exceed the extent of the loss. Many of the species that would be planted are of value to birds, both for feeding and nesting. The use of 'green bridges' where hedgerows and woodland strips are severed would provide continuity of habitat across the road for birds breeding and foraging in those areas.
- 1.60 Whilst the movement of barn owls through and across the route corridor are not known with certainty it is believed that such movements originate further to the east and south in the general area of Salisbury Plain. In such events barn owls would need to cross the existing A350 Trowbridge Road north of Westbury to reach the Bitham. No evidence of road kills was recorded in the 2004 survey. Planting as part of the environmental design for bats crossing the Glenmore Link would also encourage barn owls to fly high over the road and therefore reduce the potential for collisions with road traffic. Further design measures aimed at minimising the potential impact on barn owls include keeping the grass verges along the link short, and having all fence posts pointed to discourage barn owls from roosting.

Water voles

1.61 There would be a change in the habitats at the location of the new bridge on the main channel of the Bitham Brook East. Extensive water vole activity, including burrows, was identified at that location. Both banks at the location of the Bitham Brook East Bridge are likely to be made permanently unsuitable as water vole habitat. There is however extensive suitable water vole habitat both up and downstream, and the bridges have been designed to allow for safe dry passage of the water voles during periods of normal flow. Habitat fragmentation within and along the existing river bank would therefore be minimised. In addition further new water vole habitat will be created on the north and east sides of the adjacent attenuation pond. Overall the area of suitable habitat would be increased.

Otters

1.62 Otters have not been recorded within the route corridor although it is known that their range is extending. Badger proof fencing together with the provision of wildlife tunnels and the design of the Bitham Bridges would in the future allow otters to navigate through the route corridor without coming into contact with vehicular traffic.

Bats

1.63 At least twelve species of bat have been recorded along the proposed bypass route during surveys. A number of roost sites were recorded in proximity to the proposed scheme and a number of significant bat flight routes were also identified, particularly at the southern end of the scheme. Construction impacts on bat flight routes have been principally addressed through the use of boarding to maintain these corridors. The permanent severance of flight lines has been mitigated through the use of tunnels, green bridges and bat gantries.

Badgers

1.64 Badgers are common and their protection is due to welfare concerns, not conservation status. One main badger sett would be lost as a result of the proposals together with one annex sett and two outlier setts. These would be closed under a Government licence and in the case of the main sett the badger population relocated to a new artificial sett to be created nearby. Effects on movement of badgers around their territories would be mitigated by provision of crossing points, and risks of collisions of badgers with traffic on the new road would be minimised by incorporating badger fencing along the entirety of the scheme.

Dormice

No dormice were found in the vicinity of the proposed road during exhaustive surveys between 2004 and 2006. However, other parties have identified two recent records of a single Dormouse nest in close proximity to the proposed scheme. Consequently, the potential presence of Dormice cannot be ignored. The environmental design for the scheme includes the provision of bat gantries and bat tunnels. Rope suitable for use by Dormice would be added to these structures to enable Dormice to cross over and under the proposed road.

Historic Environment

- 1.66 An assessment of the impact of the proposed bypass on the historic environment (archaeology, built heritage and the historic landscape) has been carried out using data obtained from existing desk-based sources and through a programme of field evaluation surveys.
- 1.67 Archaeological remains present on the line of the proposed bypass include prehistoric land surfaces recorded in a dry valley to the east of Wellhead Springs. An Early Iron Age midden

site and other prehistoric remains lie adjacent to Bratton Road. Bronze Age and Iron Age sites survive east of Hawkeridge Road, where later features of Romano-British date are also present. Other Romano-British remains lie east of Warminster Road. Remnants of prehistoric, Romano-British, medieval and post-medieval field systems also survive.

- 1.68 In the wider area are two cross ridge dykes and a round barrow on Upton Cow Down, several other prehistoric barrows, the Iron Age hillfort of Bratton Camp, Westbury White Horse and several medieval moated sites, which are all designated as scheduled monuments.
- 1.69 The built heritage components present are associated with the domestic, ecclesiastical, agricultural and industrial heritage of Westbury and the surrounding area. These include Westbury Conservation Area and numerous listed buildings.
- 1.70 Several landscape features that appear to be vestiges of an historic landscape pattern of at least early post-medieval or medieval date survive on the line of the proposed bypass.
- 1.71 Measures and procedures that will protect the area's archaeological and historic resource have been built into the design and construction programme of the proposed bypass.
- 1.72 The County Archaeologist has expressed a view that components of the Early Iron Age midden site warrant preservation in situ. This has been achieved by realigning an earlier route such that the proposed route and the associated landscaping proposals specifically avoid the midden deposit.
- 1.73 The embankments, earth mounds and other fill components at the Glenmore Railway Bridge and Glenmore Roundabout would protect prehistoric and Romano-British remains through burial.
- 1.74 The landscaping proposals integrating the road with the landscape optimise screening potential and would reduce adverse impacts to the historic landscape pattern and components of the built heritage.
- 1.75 Adverse impacts to archaeological remains would arise where ground works during the construction phase remove and extend below the protective layer provided by the existing topsoil. This would apply to the ditches of former field systems, some prehistoric buried soils, and individual features associated with the Iron Age, Romano-British and other prehistoric sites.
- 1.76 There would be no direct adverse impacts on the form or fabric of the scheduled monuments in the area. Those on Upton Cow Down would have a slight indirect adverse impact from increased noise intrusion. All others including Bratton Camp, Westbury White Horse and associated sites would be sufficiently distant from the proposed bypass or would be effectively screened by the existing topography and landscape features to avoid significant noise and visual intrusion or adverse impacts to their settings.

- 1.77 The proposed bypass would have a slight beneficial effect on Westbury Conservation Area and the listed buildings adjacent to the existing A350 in Westbury by reducing traffic intrusion and the associated noise, vibration and air pollution. Several listed structures adjacent to the bypass would have localised slight adverse impacts from short-term construction works and long-term traffic intrusion.
- 1.78 Adverse impacts to surviving components of earlier historic landscape patterns would arise from ground disturbance works during the construction phase that involve an excavation component or placement of earth mounding. This will apply to several stretches of field lynchets, a water meadow or millpond system, and ridge and furrow. Stretches of the proposed bypass would also contradict the historic road and field pattern.
- 1.79 Of the impacted archaeological remains and historic landscape features, implemented mitigation measures would preserve sites by record before partial loss or destruction thereby reducing the significance of impact. The adoption of satisfactory mitigation measures would ensure that the effect of the scheme will not be in conflict with historic environment policies and there would be no significant residual adverse effect after their implementation.

Geology, Soils, Contaminated Land and Earthworks

- 1.80 Geological material will be recycled within the scheme. The effect that the scheme will have on the geological resources of the route corridor is considered to be neutral.
- 1.81 The soils within the route corridor are not of particularly good quality from an agricultural point of view. Over much of the scheme footprint soil will be stripped from the surface early on in the construction process and then reused in areas of highway planting and to cover the Spoil Disposal Areas which will be returned in agriculture. Only in areas where soil is to be retained in situ, either to protect underlying archaeology or to minimise the risk of pollution to the public water supply borehole at Wellhead, would soil be lost as a resource. The significance of the effect on soils would be slight adverse.
- 1.82 Two areas of contaminated land occur within the route corridor. The first is the clay pit at Westbury Cement works is a licensed landfill site currently operated by Viridor Waste Disposal Ltd. It accepts household, commercial and industrial waste. The pit is approximately 100m from a proposed accommodation road and therefore would not be affected by, nor affect the construction or operation of the proposed bypass. The second is a former Ironstone Quarry backfilled with general building waste located approximately 1km north of Westbury. A 40m length of the Glenmore Link would cross the centre of the former quarry. Overall, the site appears to pose an insignificant contamination risk at present and therefore the significance of the effect is assessed as neutral.

Noise and Vibration

- 1.83 The traffic noise effects of the proposed bypass at Westbury have been assessed. Road traffic noise predictions were undertaken to assess whether the re-distribution of traffic as a result of the proposed bypass would have a significant effect on traffic noise levels at nearby properties.
- 1.84 The predictions showed that traffic noise levels are predicted to decrease through the centre of Westbury, due to the significant diversion of traffic flows from the existing route (principally the A350) through Westbury onto the proposed bypass. This would be a significant benefit to the many properties along the existing route.
- 1.85 Where feasible the design of the route of the proposed bypass has incorporated traffic noise reduction measures such as earth mounding or cuttings, however there are a small number of isolated properties along the route alignment of the proposed bypass, where traffic noise levels are predicted to increase.

Air Quality

- 1.86 The air quality effects of the proposed bypass at Westbury have been assessed. At present, an Air Quality Management Area (AQMA) has been declared in Westbury due to elevated levels of nitrogen dioxide (NO₂) attributable to road traffic emissions. It has been concluded that the majority of the residential locations assessed would experience an improvement in air quality as a result of the proposed bypass. Those receptors located in the centre of Westbury, and particularly those within the AQMA, would experience the greatest improvement. All modelled receptors within the AQMA are concluded to experience very substantial beneficial reductions in annual mean NO₂ concentrations as a result of the proposed bypass. A small number of receptors in the vicinity of the route of the bypass are predicted to experience increases in NO₂ or particulate matter (PM₁₀) concentrations. However, any increases are very small or extremely small with respect to NO₂ and extremely small with respect to PM₁₀.
- 1.87 An assessment of the effects on the nearby Upton Cow Down Site of Special Scientific Interest (SSSI) show that no increases in the levels of oxides of nitrogen would occur at this site as a result of the bypass.
- 1.88 Methods for reducing the air quality impacts of the construction phase have been proposed the main pollutant risk coming from dust. Methods have been put forward to reduce any adverse impacts on local residents.

Pedestrians, Cyclists, Equestrians and Community Effects

- 1.89 For each of the rights of way identified as being directly affected by the proposed bypass, measures designed to reduce the level of impact have been incorporated into the scheme designs. In particular, the degree of connectivity of the existing right of way network will remain once the bypass is built and operational. Where the bypass crosses a right of way an appropriate form of crossing at that location has been identified, either in the form of a bridge, an underpass or an at-grade crossing, and incorporated into the design. For the most part the existing alignment of individual rights of way has been maintained.
- 1.90 Nevertheless, in EIA terms the simple presence of a new road immediately adjacent to, over or under an existing right of way warrants the assessment category of substantial adverse change. This assessment category is not based solely on the visual impact afforded by users of the rights of way that cross the proposed bypass, but also includes noise and perceived safety issues.
- 1.91 Although remaining substantial adverse, the impact of the crossing is moderated at some places by the means of the crossing and the proximity of other infrastructure (e.g. railway lines and other roads). Thus, while the at grade crossings would have the most direct impact on the path user, crossings by bridge or underpass would be perceived as being safer. In addition, the bridges and underpasses would become contained within the proposed vegetation cover over time such that the impact of the road and traffic would be significantly reduced. The design of the Chalford Accommodation Bridge and the Newtown Road Bridge in particular have been designed as 'green bridges' which would blend into the landscape.
- 1.92 There would be no direct effects on cyclepaths and footpaths through Westbury itself. However, the reduction in traffic flows along the existing A350 through the town centre would be beneficial resulting in improved safety and amenity for pedestrians and cyclists using this route.
- 1.93 There are not considered to be any adverse affects on either community facilities or public transport during the operational phase of the proposed bypass.

Planning Policy

- 1.94 An A350 Westbury Bypass is specially included in Transport Policy T14 of the Wiltshire Structure Plan as well as in the West Wiltshire District Plan. Paragraph 3.4.3 states that:
 - "A Westbury Bypass Package is considered to be an important element of the required A350 improvements. The new road package offers the possibility of traffic relief and

environmental improvement for Westbury and improved access to the West Wilts Trading Estate, via the Glenmore Link and a general opportunity for economic growth."

- 1.95 The Westbury Bypass is identified as a proposed measure in the Wiltshire Local Transport Plan 2001/02-2005/06 and Policy T1a of the District Plan safeguards land for an Eastern Bypass route.
- 1.96 The scheme is in accordance with national Government policy and guidance. Thus, reduction of through vehicular traffic in the historic conservation area of Westbury is in keeping with one of the central tenets of the Government's guidance on the historic environment. No sites designated for their importance to nature conservation are directly affected by the proposals, and indirect effects have been shown to be insignificant.
- 1.97 Other national guidance relating to the protection of the countryside and of archaeology have been taken into consideration during the design of the scheme. Thus, the landscape proposals are an integral part of the overall scheme design. With regard to archaeology a comprehensive scheme of field investigation has been undertaken to identify and assess the archaeological potential of the route corridor. Where possible realignment has been adopted to avoid damage to archaeological remains.
- 1.98 Sustainable development is a key theme throughout the various tiers of current land use policy. Whilst the scheme would achieve economic benefits, the likely adverse environmental effects are minimised by route selection, careful and thoughtful design, mitigation measures and local environmental benefits in within Westbury itself.

Cumulative Effects

- 1.99 The assessment of cumulative effects examines the risk that significant effects will occur due the bypass scheme, coinciding with other major developments in the study area both in terms of overall levels of development and their construction activities.
- 1.100 A review of recent planning permissions and other relevant planning policy documents was carried out in order to gain an understanding of the developments which may come forward, or are already in progress within the study area.
- 1.101 The largest single development identified is a residential area known locally as Leigh Park located to the west of Westbury. These proposals include a northern distributor road. Other smaller developments have also been identified but are unlikely to have significant environmental effects either on their own or in combination.
- 1.102 As per common practice, and in agreement with the Highways Authority, the traffic forecast scenarios assumed for the operational bypass have included Leigh Park and some other

developments into the baseline scenario. Consequently, impact predictions of traffic related topics presented in the ES like noise and air quality, reflect this position.

1.103 The anticipated benefits of the bypass in relation to relief of traffic congestion in central Westbury are therefore, still valid, and would reduce the sensitivity of Westbury centre to further development in any case. The risk that some construction impacts of other developments will coincide with construction of the bypass is considered not to be significant.

Conclusion

1.104 It can be concluded that environmental considerations have been at the forefront of the A350 Westbury Bypass design process. Notwithstanding the environmental design characteristics, the way in which they avoid various environmental impacts, and the other mitigation measures that would be utilised to reduce impacts, there would nevertheless be some residual adverse environmental effects. Equally, there would also be some significant environmental benefits in terms of reduced noise, air pollution and townscape effects.

Further Information

1.105 Comments, queries or requests for information concerning the Environmental Statement should be addressed to:

Mouchel Parkman
East Wing
County Hall Campus
Bythesea Road
Trowbridge
Wiltshire
BA14 8JQ

1.106 Copies of this Non Technical Summary are available free of charge. Copies of the full Environmental Statement are also available from Mouchel Parkman at a cost of £300 per copy.

