



THE DEPARTMENT  
OF TRANSPORT

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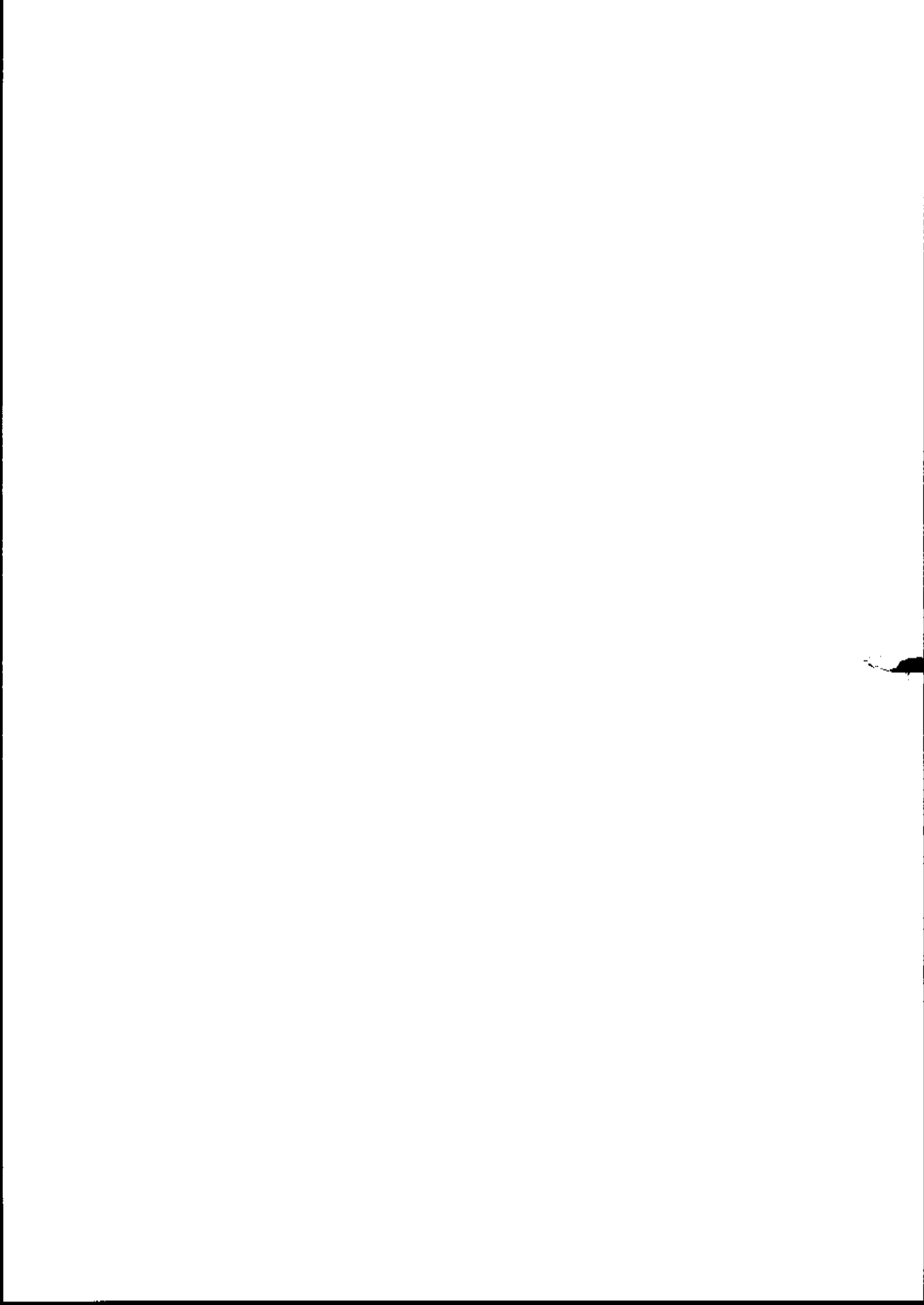
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# A27 TRUNK ROAD POLEGATE BYPASS

## Environmental Statement

November 1991

**WS/Atkins**



**DEPARTMENT OF TRANSPORT**  
**A27 POLEGATE BYPASS**  
**ENVIRONMENTAL STATEMENT**

**November 1991**

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## CHAPTER 1 - INTRODUCTION

### Background

- 1.1 The existing A27 trunk road passes through the built up area of Polegate. The standard of carriageway provision and its alignment, coupled with the numerous side road junctions and private accesses, make the route unsuitable for the existing and predicted volumes of traffic, giving rise to increased potential for vehicular/pedestrian conflict. These problems, and environmental disbenefits for residents adjacent to the route, will be exacerbated by increasing traffic unless a bypass scheme for Polegate is implemented.
  
- 1.2 The preferred route for the Polegate Bypass was announced in 1982, following consideration of various options presented at Public Consultation in 1980. The bypass was temporarily suspended from the Department of Transport's Road Programme but was reinstated in 1985. Higher levels of predicted traffic resulted in the original single carriageway proposal being inadequate and a dual carriageway proposal for the bypass, essentially along the original preferred route line, was presented at Public Consultation in October 1989, together with proposals for the Folkington Link. The draft orders for the proposed scheme for the Polegate Bypass are now published and this Environmental Statement is issued in accordance with European Community Directive 85/337 as applied by Section 105(A) of the Highways Act 1980. Copies of a Non-Technical Summary of the Environmental Statement are available to the public free of charge.

### Complementary Highway Proposals

- 1.3 Complementary Highway proposals connect with the Polegate Bypass and are illustrated in Figure 1. These include the Department of Transport proposals for the Folkington Link, and the East Sussex County Council proposals for the A22 dualling to Nightingale Farm and the A22 New Route. The Public Consultation for the Folkington Link was held in October 1989 and a preferred route was announced on 27 September 1990. (DTP press notice SE 86/90). Although the

great majority of respondents considered the line of the Folkington Link to be acceptable, a significant minority of respondents expressed the view that a decision on the line of the Folkington Link should only be taken in the context of the A27 Lewes to Polegate Study which had been announced in the May 1989 Roads White Paper.

- 1.4 The publication of draft Orders for the Folkington Link has been deferred, and awaits the outcome of further studies and public consultation on possible routes from Lewes to Polegate.
- 1.5 The A27 Polegate Bypass and Folkington Link have been developed in parallel with East Sussex County Council's own proposals for improvement of the A22. These proposals, which are illustrated in Figure 1, involve on line dualling of the existing A22 north of Polegate, and construction of the A22 New Route which will provide access to the expanding industrial, residential and leisure developments to the east of Eastbourne, and ultimately to Eastbourne Town Centre. The A22 dualling and A22 New Route are included in the Council's current Transport Policy and Programme. The planning application for the A22 New Route section from Dittons to Lottbridge Drove has been approved by the County Council, subject to minor reserve matters.
- 1.6 The construction of the County Council's A22 New Route is dependent on the construction of the Polegate Bypass and the Council has made consistent representations urging the early implementation of the A27 Polegate Bypass and Folkington Link.
- 1.7 At the time of writing it is possible that construction will commence in the near future of another County Council proposal, the Brampton/Broadwater/Hospital Link.

## Scope of the Environmental Assessment

- 1.8 In all cases the impacts considered in this Environmental Statement are limited to the area within the cordon defined in Figure 1 except that, in the case of noise, properties adjacent to the ESCC A22 dualling north of Bay Tree Lane and properties north of the B2104 have not been assessed.
- 1.9 The complementary highway proposals described above do not alter impacts of the Polegate Bypass such as landtake and visual intrusion. The other highway proposals do however have an influence upon traffic flows on the Polegate Bypass and hence affect noise and other traffic related impacts where traffic flows 15 years after scheme opening need to be considered.
- 1.10 The following opening dates for new roads have been assumed in describing predicted traffic flows (Chapter 3), noise mitigation effects (Chapter 4) and the Appraisal Framework (Chapter 5).
- i) Polegate Bypass (the published scheme) opens end of 1995
  - ii) A22 dualling north of Polegate opens end of 1995
  - iii) A22 New Route Dittons to Lottridge Drove opens end of 1995
  - iv) Brampton Link open by the end of 1995
  - v) Folkington Link opens end of 2000
  - vi) other A22 New Route Proposals not in place by 2010.

In fact, the A22 New Route Dittons to Lottridge Drove will probably open some six months after the Polegate Bypass, but this is not significant for the purposes of this statement. Also, a different route than the Folkington Link may be constructed to the west of the A22. For the purposes of the report the Folkington Link has been assumed when estimating traffic flows on the Polegate Bypass in 2010; another route to the west of the A22 would not significantly change the predicted Polegate Bypass flows.

1.11 In Chapter 6 traffic and noise effects are considered for the situation immediately prior to opening the Folkington Link (when greater traffic flows would occur on the A27/A22 junction east facing slip roads) and for the situation in 2010 should the complete A22 New Route proposals to Eastbourne Town Centre be in place. Air Quality effects are also considered for the first year of opening, 1996, when the beneficial effects of the introduction of catalytic converters will be less than in future years.

1.12 The format of the statement is based on the Department of Transport's Departmental Standard HD 18/88 and begins with an introduction which gives the background to the published scheme and describes certain complementary highway proposals which connect with the scheme and which of these proposals have been assumed when considering traffic related impacts in Chapter 5. A description of the environmental and planning context of the published scheme follows (Chapter 2). The published scheme is then described (Chapter 3) including measures adopted within the design to reduce environmental effects (Chapter 4). The environmental effects of the published scheme are summarised in tabular form in Chapter 5. This is followed in Chapter 6 by a statement of the traffic related environmental effects arising from different combinations of complementary highway proposals from those considered in Chapter 5. A brief description of alternative routes considered is given in Chapter 7 which also outlines reasons for choosing the published scheme. Environmental considerations have played an integral part in decision making at each stage of the project planning and design. This has included consultations with national and local bodies and organisations and with local authorities.

## **CHAPTER 2 - ENVIRONMENTAL AND PLANNING CONTEXT OF THE PUBLISHED SCHEME**

### **Regional Context**

- 2.1 The A27 between Portsmouth and Pevensey forms part of the Honiton to Folkestone Trunk Road.
- 2.2 The proposed Polegate Bypass is one of a number of schemes in the Department of Transport's National Trunk Road Programme for the improvement of the A27/A259 south coast route. In East Sussex dualling from Brighton to Lewes was completed in 1979 and construction is well advanced on the Brighton Bypass. Pevensey Bypass was opened to traffic in 1990. Other improvements are being planned between Lewes and Polegate, Bexhill and Hastings, and at Winchelsea and Rye. These proposals are illustrated in Figure 2.

### **Landform and Landscape Character**

#### **General Context**

- 2.3 There are three main elements to the landscape around Polegate, which reflect the underlying geology (see Figures 1 and 3). To the south and west are the South Downs, formed from the chalk outcrop on the southern edge of the Weald. Gently undulating countryside, in which Polegate lies, extends northwards into the Sussex Weald, and to the north-east is the open expanse of the Pevensey Levels, a former sea inlet which has gradually filled in.
- 2.4 The South Downs terminate at the 150 m high cliffs of Beachy Head, some 10 km south of Polegate. The chalk hills form a broad band at this point and determine the western limits of Eastbourne and its suburbs. The nearest Downs to Polegate are the series of NNE facing escarpments that extend from Combe Hill near Willingdon to Wilmington Hill some 2 km to the south-west. The Downs extend generally WNW and run beside or near the coast for many miles.

- 2.5 Polegate lies at around 15-20 m Above Ordnance Datum (AOD) in the gently undulating land that extends northwards from the foot of the Downs, which rarely rises above 40 m AOD. This area is mostly clays with some sands. Polegate, Stone Cross and Pevensey all stand on a low east-west ridge of Weald clay, and the proposed route for the by-pass is also situated on this material.
- 2.6 The landscape overlying the clay is characterised by numerous fields, hedgerows and small woods, with the better-drained areas being cultivated and others used for grazing. There is a large area of mixed woodland to the north-west of Polegate, including Abbots Wood, Wilmington Wood, Nate Wood and Ogg's Wood, amongst others. This woodland extends along the west side of much of the A22 north to Hailsham.
- 2.7 The Pevensey Levels are an extensive area of low-lying ground at around 0-4 m AOD between Pevensey and Herstmonceux. They form a distinctive, flat landscape with frequent hedges and few trees, drained by a complex network of ditches. The nearest part of the Levels to Polegate is Glynleigh Level, about 1.5 km north of the existing A27.

#### Local Landscape

- 2.8 To the west of Polegate and the A22 is a local area of high ground, rising to over 40 m AOD near Hide Farm. To the north are Ogg's Wood and Nate Wood which form the edge of an extensive forested area (Figure 3). To the south the land falls slightly to the Lewes-Eastbourne railway line and the existing A27 Lewes Road before rising into the lower slopes of the Downs through the well-wooded parkland of Folkington Manor. The high ground around Hide Farm drains ENE towards Glynleigh Level, forming a shallow valley to the north of Polegate.
- 2.9 The centre of Polegate lies along the existing A27 and along the High Street (see Figure 5). North of the A27 estates of houses and bungalows occupy the area between Sayerland Road and Shepham Lane. The properties along Sayerland

Road have an open front aspect to the north-west across the shallow valley, with foreground trees alongside the A22. The rest of the edge properties have their rear aspects bounded by a belt of mature trees through which bridleway 8 runs. This belt is thicker behind Greenleaf Gardens where the adjacent fields are little used and have developed an attractive mix of trees and shrubs, including many young oaks.

- 2.10 Sayerland Road drops into the shallow valley and joins Sayerland Lane which runs roughly northwards onto the Levels to join Hailsham Road, B2104. Bay Tree Lane continues back to the A22 and Otham Court Lane turns right to head north-east towards Hailsham Road B2104 across the Levels. Shepham Lane emerges from the housing further east and heads north eastwards towards Hailsham Road B2104. All these lanes have well-developed hedgerows for most of their length, particularly Otham Court Lane and Shepham Lane, which have good groups of mature oaks.
- 2.11 There are several further properties and farms along Bay Tree Lane and the first part of Sayerland Lane, including the prominent Bay Tree Farm. Sayerlands, a large house to the north of Sayerland Lane, and Otham Court, a large house to the south of Otham Court Lane, are both listed buildings set in extensive tree planting. Little Shepham stands to the west of Shepham Lane amongst dense woodland. There are a few other isolated properties to the north, all a considerable distance from the proposed road.
- 2.12 Development extends along the north side of the existing A27 eastwards to Dittons where the Polegate By-pass would join the Pevensy By-pass. Some of these properties have extensive rear gardens with some nursery use. East of the proposed junction are further properties along the existing A27 and several isolated properties to the north east along Hailsham Road B2104. This eastern area also contains some substantial tree groups, including Shepham Wood and The Pines, although some groups have suffered extensive storm damage of late.

## Land Use

- 2.13 Agriculture is the main land use to the north of Polegate, with farming units predominantly engaged in pastoral or arable activities. The land adjacent to the A22 is primarily under grass, used to graze and exercise horses. To the west and east of Polegate, arable land is interspersed with grassland which supports dairy and beef herds. In the area between the A22 and Bay Tree Lane there is an intensive poultry unit.
- 2.14 The majority (93%) of the land required for the construction of the bypass is classified by the Ministry of Agriculture Fisheries and Food (MAFF) as grade 3b, land of average quality, the main factor limiting agricultural potential being wetness. There are isolated plots (7%) of higher grade 3a soils, which occur where soil textures are lighter and better drained.
- 2.15 Several of the farms also have equestrian enterprises. A number of intensive market garden enterprises are located between Polegate and Pevensey.

## Planning Designations

- 2.16 Landscape and Planning designations are illustrated in Figure 4. The belt of deciduous woodland which provides a distinct boundary to Polegate in the north is covered by a Tree Preservation Order (TPO). The Sussex Downs Area which lies to the south-west of the town is designated an Area of Outstanding Natural Beauty (AONB), large sections of which are designated "The South Downs Environmentally Sensitive Area" under the 1986 Agricultural Act. It is one of the only five in England and the designation aims to promote traditional farming methods which will help maintain the beauty and wildlife value of the area. Pevensey Level Site of Special Scientific Interest (SSSI) is located approximately 2 km to the north-east of the proposed route and Wilmington Downs (SSSI) and Folkington Reservoir (SSSI) approximately 1 km to the south-west. Land south of the A27 to the west of Eastbourne has been designated the "Sussex Heritage



Coast Policy Area" (non-statutory protection measure) by the County Council because of its outstanding scenic beauty.

- 2.17 The Eastbourne Park district plan forms part of the low-lying wet grazing land of the Willingdon levels east of the A22. The objective of the park is to retain a substantial and visually significant area of recreational open space within easy access of the core of the built up area.

### **Settlement Pattern**

- 2.18 Polegate is located immediately to the north of the built-up area of Eastbourne. The settlement developed along the route of the A22 London to Eastbourne Road and the A27. During the 1930s, Polegate expanded rapidly, with private estate development north and south of the Lewes-Eastbourne railway line. After the second world war, local authority housing was constructed on the southern edge of the town, while private housing was limited to the construction of small bungalow estates rounding-off the built up area. The housing framework boundaries as illustrated in Figure 4, are areas within which the Wealden District Planning Authority will allow new housing development. An area designated by Eastbourne Borough for housing development is also illustrated on Figure 4. These areas of recent and continuing housing development extend beyond the coverage of Figure 4 and are more completely indicated on Figure 1.
- 2.19 The existing A27 through Polegate divides the town's housing areas in the north from the main area of shops and facilities in the High Street, on the south side of the road. The A27 carries particularly large volumes of traffic during the summer months with visitors travelling to Eastbourne and Pevensey Bay, and is often heavily congested creating difficulties for residents. Polegate functions mainly as a residential settlement. The population is approximately 7,200, and is characterised by a high proportion of retired persons (nearly 50%). Employment in Polegate is provided partly by the Chaucer Industrial Estate at Dittons Road on the eastern side of the town.

## Existing Roads

### A27 Trunk Road

- 2.20 The trunk road approaches Polegate from Lewes, to the west, and turns north over the Lewes to Eastbourne railway bridge and shares the 10 metre wide carriageway with the A22 for 0.75 km as far as the A22/A27 T-junction at Cophall Farm. The A27 then turns eastwards through the built up area of Polegate where there are residences on both sides of the road for 2.7 km up to the Old Railway Station public house. The width of road through this section is approximately 7 metres. There are some 15 side road junctions and around 45 private properties with direct vehicular access onto the A27 route. In addition there are shops and on-street parking effectively reducing the width of the road.
- 2.21 Eastwards from the Old Railway Station public house the road is derestricted. Visibility at the double bend where Shepham Lane joins the main road is very poor. From this point to Dittons the alignment is sub standard and additional hazards are created by some 80 further private accesses and by traffic turning into the Chaucer Industrial Estate.
- 2.22 Existing average daily two way flows (AADT) on the A27 through Polegate are around 15000 vpd with 7000 vpd on the Pevensey Bypass. Approximately 12% of these vehicles are heavy goods. During peak periods delays occur at the A27 (Hailsham Road)/A22 junction. Turning movements at the A27/High Street junction into the main Polegate shopping area are also high.
- 2.23 The highest average daily flows are recorded in August and flows in the other summer months of June July and September are only slightly lower. Average daily flows in August exceed those in the neutral month of May by about 10%. The effect of holiday traffic is therefore not particularly marked probably because during the summer months the loss of local commuter traffic reduces the impact of recreational traffic.

## A22 Principal Road

- 2.24 North of Hailsham Road Junction the A22 continues northward, maintaining a 10 metre width for some 1.2 km before widening to dual carriageway. Existing AADT flows on the A22 north of the Hailsham Road junction are around 25000 vpd with approximately 9% of these vehicles being heavy goods.

## Noise

- 2.25 Existing noise levels have been determined in accordance with the measurement and calculation procedures defined in 'Calculation of Road Traffic Noise' - 1988. The area affected by the published scheme has a wide range of noise levels. Properties fronting the existing A27 and the first line of properties back from the A22 in Brookside Avenue and at other similar locations are presently experiencing  $L_{10}$  18 hour levels of 71 to 76 dB(A) depending on distance. Properties in the second or third rows of houses back from the existing A27 are presently experiencing noise levels of the order of 55 to 60 dB(A). Similar levels of noise are found at those properties which form Oakleaf Drive; this reflects the presence of local traffic on this road. Properties in Sayerland Road, Sayerland Lane and Bay Tree Lane which are up to 300 metres from the A22 or A27 are presently exposed to levels in the range of 57 to 67 dB(A) depending on distance from the source. Those properties in Sayerland Lane beyond 300 metres and the majority of houses within the estates to the north of the A27 are exposed to levels in the range of 47 to 55 dB(A). In situations well away from the main roads eg, Little Shepham and Otham Court, levels of noise are as low as 45-48 dB(A). It is unlikely that road traffic is often heard in these areas.

## Wildlife and Conservation

- 2.26 There are no statutory nature conservation sites or other designated areas of conservation value along the published route. The existing ecology of the area was assessed in a survey undertaken in July 1990.

2.27 All the fields along the route have been improved to a certain extent in the past, many have been turned to arable, others used for pasture and haymaking and some have been recently reseeded. None of the fields support a diverse flora, those that are nor under arable tend to be dominated by one or two grass species such as ryegrass and those that are heavily grazed are dominated by ryegrass, thistles, clover and docks. The fields are of no conservation value either in a regional or national context.

2.28 Many of the mixed hedgerows bordering the fields are mature and dense with a wide range of species providing good wildlife habitats and corridors. There are also several small areas of woodland comprising a range of species including mature stands of oak, ash, beech, sycamore, maple, horse chestnut, lime and the occasional conifer. Some badgers activity was identified in the vicinity of the published route, however, no badgers setts were encountered. No significant watercourses are affected by the published route.

### **Archaeology and Cultural Heritage**

2.29 An archaeological study involving a site inspection and examination of various sources providing archaeological information was undertaken in July 1991.

2.30 The main area of interest is Otham Court located to the north of Polegate. The Abbey of Otham was found c. 1180 at the site of an existing chapel on the demesne (land occupied by the Lord of the Manor) of Ralph de Dene. In 1207 the abbey merged with another abbey at Brockley in Kent, and re-established at Bayham on the Kent-Sussex border. The site at Otham became a grange (monastic farm) and a chapel was retained. Both the house and the Chapel are statutory listed buildings. The house, which is a fifteenth century, timber framed building, is listed Grade II. The Chapel is designated as Grade II\*. Grade II\* listed buildings are more important than Grade II and are of particular interest. Only 4% of listed buildings are given this designation. The Chapel is also classified as a Scheduled Ancient Monument (No. 332) and the area around the house and chapel is also designated as a non-statutory site of archaeological

interest. The fields between Otham Court and Lower Mulbrooks Farm, to the north east, are possibly the site of a former castle which predates the abbey. Sayerland House, which dates from the seventeenth century or earlier, is also a Grade II listed building.

- 2.31 An early estate map dated 1794 shows buildings which lie east of Sayerland Road and on the line of the route and which are associated with farms called Swines and Swine Hill. The buildings lie within the demesne of Otham but it has not been possible to trace their history before the eighteenth century.
- 2.32 Just west of the Cuckoo Trail, in the vicinity of the route, is a possible site of a brick kiln.
- 2.33 A medieval settlement - probably a farmstead, may be situated in the fields to the east of Shepham Lane known as Little, Middle and Upper Hipholes.

#### **Footpaths and Bridleways**

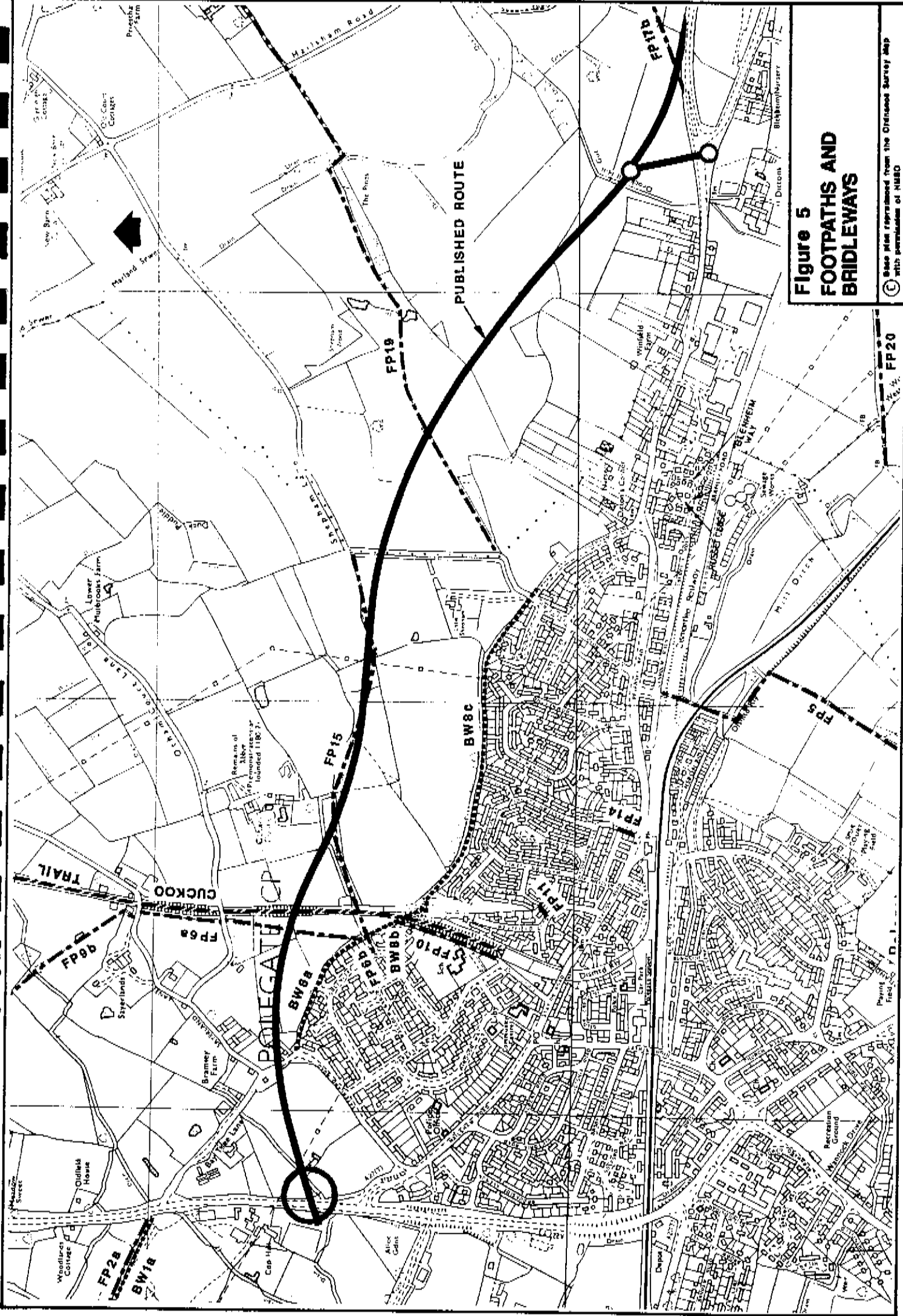
- 2.34 There are a number of footpaths and bridleways in the vicinity of the proposed bypass, these are illustrated in Figure 5. The route crosses 3 public footpaths and a track which includes a section of the former line of the Polegate - Hailsham railway. This now disused railway track is part of a long distance track from Heathfield to Polegate and is called the Cuckoo Trail by the district council. The Cuckoo Trail also forms a part of an equestrian circuit. Bridleway 8a, 8b, 8c, Bay Tree Lane and Bridleway 1a form part of a proposed High Weald Equestrian route. The route also crosses Shepham Lane and Sayerland Road which are used by both pedestrians and equestrians.
- 2.35 On Sunday 5 August 1990 a survey of non-vehicular movements across the line of Polegate Bypass was carried out. The survey commenced at 09.00 hrs and concluded at 19.00 hrs. Weather conditions were dry and sunny with temperatures around 25°C. A cooling breeze made walking conditions very pleasant. The survey day was the first day following a two week period of hot

weather with temperatures reaching 30-35°C. The two-way movements recorded at various locations are indicated in Table 2.1.

**TABLE 2.1**

**Non Vehicular Movements**

Two-Way Movements of Equestrians, Pedestrians and Cyclists 9000 - 1900 Sunday 5 August 1990			
Location	Equestrians	Pedestrians	Cyclists
FP2a/BW1a	3	0	0
Bay Tree Lane	3	3	8
Sayerland Road (North of BW8a)	6	29	35
BW8a	5	2	0
Otham Court Lane (East of Cuckoo Trail)	6	20	24
FP6a (South of Otham Court Lane)	0	4	0
Cuckoo Trail (South of Otham Court Lane)	11	46	0
Shepham Lane (North of FP19)	2	49	50
FP19	0	9	0
FP15	0	11	0



**Figure 5**  
**FOOTPATHS AND**  
**BRIDLEWAYS**

© See also information from the Ordnance Survey map with permission of HSE

FP20





## **CHAPTER 3 - THE PUBLISHED SCHEME**

### **General**

- 3.1 The published scheme provides a new route for the A27, leaving the A22 at Cophall Farm and running eastwards to join the recently completed Pevensey Bypass at Dittons. The proposals are shown in Figures 6, 7 and 8.
- 3.2 At the A22 junction, an elevated roundabout is proposed with structures which would permit the future A27 from Lewes to pass beneath the roundabout on an alignment tying in with the Polegate Bypass. The published scheme will allow all A27 traffic to use the east facing slip roads connecting the A22 roundabout to the Polegate Bypass, until the Lewes to Polegate scheme is in place.
- 3.3 The amenity bunds referred to in the general description of the published scheme which follows are described in greater detail in Chapter 4.

### **Scheme description and Standards**

#### **Polegate Bypass**

- 3.4 The bypass would be a dual two lane carriageway designed to rural all purpose standards with 7.3 metre carriageways, a central reserve of minimum width 4.5 metres containing 1 metre inner hardstrips, and outer verges of 3.5 metres minimum width each containing a 1 metre hardstrip. Widening of the central reserve and verges would be made on curves where necessary to maintain the required forward visibility.
- 3.5 In the published scheme the bypass would commence just west of Sayerland Road where the east facing slip roads from the A22 junction will be located. Sayerland Road would be severed and the centreline level of the bypass at this point would be some 4 metres below the existing Sayerland Road. The combined width of the Polegate Bypass and connecting slip road tapers would require the demolition of

the pair of semi-detached properties in Sayerland Road which are associated with a scrap yard, and also the demolition of the property New Barn Farm.

- 3.6 The route would continue eastwards across open farmland falling gently in cutting some 5 metres deep, curving to the right and crossing the Cuckoo Trail.
- 3.7 The Cuckoo Trail would be carried over the bypass, on a four span bridleway/footpath bridge keeping to the existing line of the Cuckoo Trail in plan. The width of bridleway over the structure would be 2.5 m. In addition to maintaining the Cuckoo Trail, the bridge would also permit other footpath and bridleway routes to be maintained as described in Chapter 4.
- 3.8 East of the Cuckoo Trail the route would level out and curve gently to the left. The ground falls away so that the road is at grade or a little above just to the south east of Otham Court before the ground rises again at Shepham Lane where the route would again be in a cutting some 5 metres deep. Bunds would be constructed alongside both sides of the section on embankment to screen the road; these bunds would marry into the cuttings at the Cuckoo Trail and Shepham Lane crossings.
- 3.9 At Shepham Lane the section of lane crossing the bypass would be stopped up for vehicular traffic. A four span bridge would be provided just to the east of the line of the existing lane to maintain a route for equestrians, pedestrians and cyclists. The width of carriageway over the structure would be 3.5 metres and lockable posts would be provided which could be lowered for farm vehicles. Unrestricted access for equestrians and pedestrians would be possible at all times.
- 3.10 East of Shepham Lane the ground again falls away so that after some 150 metres the road would emerge on embankment and would continue on a gentle right hand curve to Dittons, generally keeping approximately 2-3 metres above existing ground levels. On the south side of the bypass a bund would be constructed for a length of approximately 500 metres west of the roundabout junction with the Pevensy Bypass.

- 3.11 Laybys would be provided on the bypass; on the eastbound carriageway some 350 m east of Shepham Lane and on the westbound carriageway some 500 m west of Shepham Lane.

#### A27/A22 Junction Layout

- 3.12 To allow for the future A27 from Lewes to pass under the A22, the junction roundabout would be elevated approximately 5 metres above the existing road level. The reasons for aligning the future A27 under, rather than over, the A22 are given in Chapter 4. The roundabout would be large with an inscribed circle diameter of approximately 150 metres and 12 metres carriageway widths. The roundabout would be lit. The bridges carrying the roundabout over the future main line would be single span structures.
- 3.13 On the east side of the roundabout, slip roads would slope down to join Polegate Bypass. The slip roads would be 6 metres wide with 1 metre hardstrips on the nearside.
- 3.14 South of the roundabout the A22 and Hailsham Road would be horizontally and vertically realigned to connect into the southern side of the roundabout; the A22 as a 10 metre wide single carriageway with 1 metre hardstrips and the Hailsham Road as a 7.3 metre single carriageway.

#### A22 Dualling

- 3.15 The A22 north of the roundabout would be vertically and horizontally realigned as a rural all purpose dual carriageway, for the most part keeping to the west of the existing road. Existing ground levels would be regained some 150 metres north of Bay Tree Lane, where the A22 would connect with the East Sussex County Council proposal for dualling northwards to Nightingale Farm. The A22 southbound approach to the roundabout would have a free flow facility for traffic turning left onto the eastbound entry slip road of the Polegate Bypass.

- 3.16 Bunds would be provided alongside the proposed slip roads and alongside the eastern sides of the realigned A22 and Hailsham Road. Some bunding would also be provided on the north west sector of the roundabout at Cophall Farm. Construction of the bund, and provision of a ditch and fenceline at the toe, would affect at least part of the garage extension on the north side of Cophall Farm.

#### Bay Tree Lane Link

- 3.17 An underpass of the A22 would be provided just north of the roundabout through which a 5.5 metre wide carriageway, the Bay Tree Lane Link, would run, connecting the northbound carriageway of the A22 with Bay Tree Lane. The works associated with this link, together with the A22 earthworks, would require the demolition of the majority of the outbuildings at Cophall Farm. The link enables northbound traffic from areas in Polegate south of the bypass to access Bay Tree Lane, Sayerland Lane and Otham Court Lane without lengthy diversions which would otherwise be necessary because of the continuous A22 central reserve which would prevent right turns into Bay Tree Lane from the A22.
- 3.18 On the east side of the A22, the earthworks and Bay Tree Lane Link require a large proportion of the land at Bay Tree Poultry Farm which is presently used for spreading poultry manure.

#### Dittons Junction

- 3.19 At the eastern end of the scheme the Polegate Bypass would be connected to the existing Pevensey Bypass and Dittons Road by a double roundabout junction. The junction would be lit and would comprise a northern roundabout 200 metres north of Dittons Road, to which the Polegate Bypass would connect on its north-western side. A 7.3 metre single carriageway with 3.5 metre verges, each containing 1 metre hardstrips, would connect to the Pevensey Bypass from its eastern side. A dual carriageway would run from the southern side of the roundabout to connect with a new roundabout at Dittons Road. This roundabout would have 7.3 metre single carriageways linking east and west to Dittons Road. The roundabout would

be able to accept the proposed East Sussex County Council A22 New Route which would commence at Dittons and continue south to Lottbridge Drove. The existing Pevensey Bypass/Dittons Road junction and a 250 metre redundant length of Pevensey Bypass would be broken up and removed.

#### Statutory Undertakers

- 3.20 The scheme will require the diversion of statutory undertakers' apparatus, particularly in the A22 junction area. The 132 kV overhead electricity line running from Cophall Farm south eastwards toward the Sayerland Road housing area would be amongst these. Options under consideration include the re routing of the overhead line from a new pylon close to the existing one at Cophall Farm to pass eastwards over the A22 to a new pylon and then southwards over the bypass to connect with a new pylon located just south of the existing pylon.

#### Construction

- 3.21 The construction period for the bypass is likely to be two years. Construction would require temporary diversions of traffic at the A22 and Hailsham Road, utilising parts of the newly constructed permanent works and also requiring other temporary works to generally maintain a two way flow of traffic. Similar, but less extensive temporary diversion works would also be required during construction of Dittons Junction.

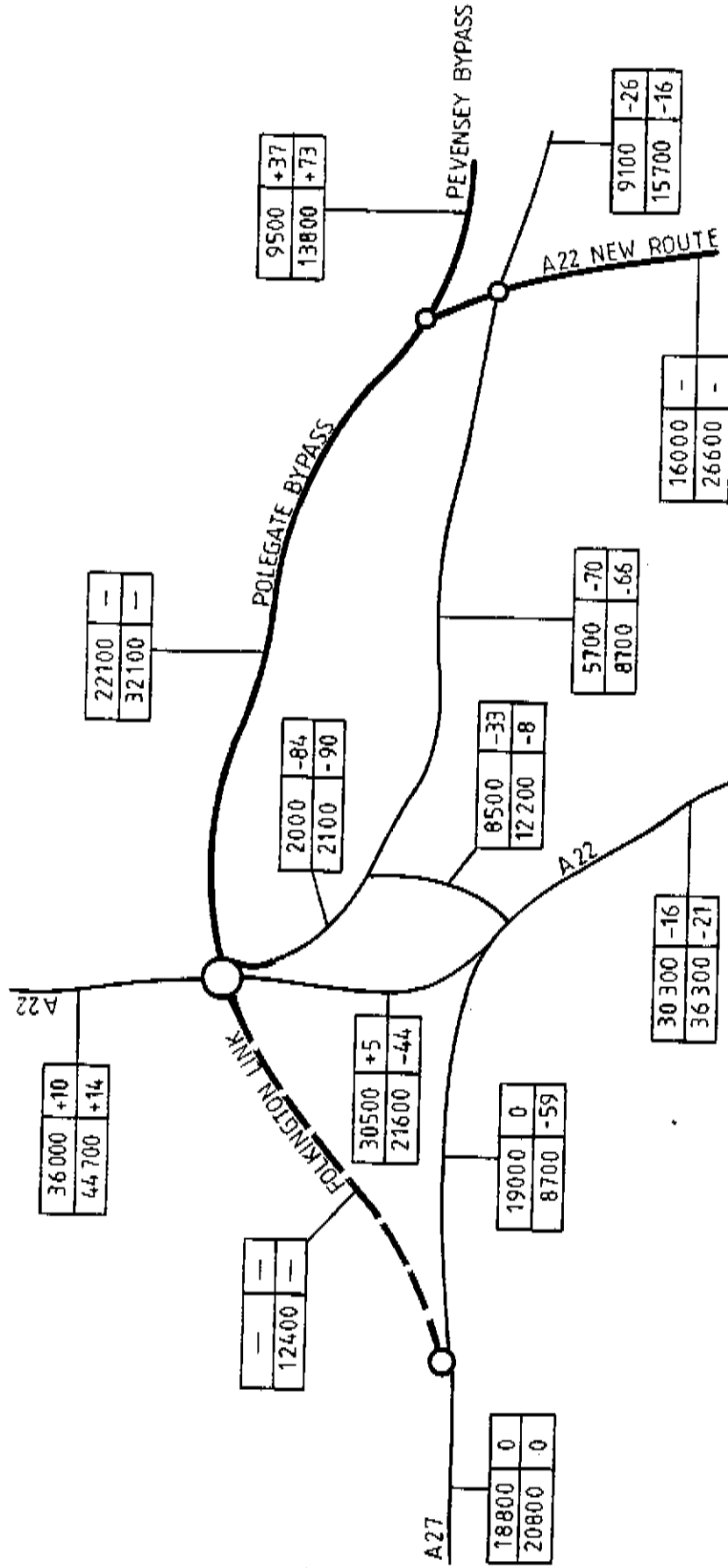
#### Predicted Traffic Flows

- 3.22 Predicted traffic flows for the Polegate area are presented in Figure 9. This shows the situation immediately after the opening of the Department's and the County's published proposals for A27 and A22 (1995). The flows for the design year (2010) are also shown assuming the addition of the Folkington Link.
- 3.23 Figure 9 also shows the flows for 1995 and 2010 for a 'Do-Minimum' network which includes relatively modest improvements at several of the overloaded

junctions but no new routes in the Polegate area. Note, however, that all the traffic forecasts for 1995 (and subsequently) assume the construction of the Brampton/Broadwater/Hospital Link shown in Figure 1.

- 3.24 Daily traffic volumes on the Polegate Bypass are forecast at approximately 22,000 vpd on opening and 32,000 at the design year.
- 3.25 The figures suggest that flows on the A27 through Polegate will be reduced by around 60-70 percent relative to the Do-Minimum network forecasts; west of the priority junction at the northern end of Polegate High Street the reduction could well be significantly greater.

1995 Flows are for Polegate Bypass and A22 Dittons to Lottbridge Drove  
 2010 Flows are for Folkington Link, Polegate Bypass and A22 Dittons to Lottbridge Drove



**Figure 9**  
**1995 AND 2010 AADT FLOWS**  
**- HIGH GROWTH**

1995	% Change from Do Minimum
2010	% Change from Do Minimum





## CHAPTER 4 - EFFECTS AND MITIGATION MEASURES

### Landscape and Visual Amenity

#### Highway Design

- 4.1 Highway design sets standards for vertical and horizontal curvature on a road to achieve safe alignment and sightlines for the design speed. These standards constrain the extent to which a road can be fitted into an undulating landform, although detailed alignment design can usually reduce the effect of major earthworks on the landscape.
- 4.2 The principal effect of such detailed alignment design on the appearance of the Polegate Bypass is that the A22 has been designed to pass over the future A27 at the western junction. The future line of the A27 mainline would be shielded by the east facing slip roads which themselves can be shielded by bunding, an arrangement not possible if the A27 were to pass over the A22. Intrusion to housing is therefore reduced. The junction arrangement also means that any future proposal which extends the A27 into the high ground to the west would require a narrower cutting than would be necessary if the A27 were to pass over the A22.
- 4.3 The A27 continues eastwards from the A22 junction in cutting to reduce its visibility from nearby housing. This allows the Cuckoo Trail bridleway bridge to be only slightly raised above the surrounding landscape. The road runs at grade or a little above past Otham Court, passing into cutting under Shepham Lane, which again allows the overbridge to be accommodated into the landform. The road then continues on embankment, but lower than the housing to the south, before rising slightly to the junction with the existing A27 Pevensey By-pass and proposed A22 New Route.

## Earthmounding and Contouring

4.4 Earth mounds or bunds are proposed where an immediate and permanent visual screen is required and they also achieve a reduction in perceived noise levels. Over structures or where space is limited these effects can be continued by use of fences or walls. The effectiveness of such screens is determined by their height above the carriageway and by how well they can be integrated into the surrounding landform by extending them into adjacent slopes or by contouring the outer faces.

4.5 Cost-effective engineering design would normally propose earthworks with an even gradient at the steepest safe angle for the material being used - usually between 1 in 2 and 1 in 4. In places this may not be visually acceptable and contouring is proposed to soften the engineering profile by reducing the gradient and/or by rolling the slope off at the toe of an embankment so that it can be more successfully married into the adjacent landform. Where lengths of former road have to be removed, contouring is also proposed to recreate a smooth, flowing landform.

## Planting

4.6 Planting is the most extensively used means of mitigating the visual impact of the new road and it is an integral part of the design. However, its benefit is not immediate and may not be fully effective for 15 years or more, depending upon the circumstances. Planting is intended to integrate the road into its surroundings by relating to the existing vegetation pattern, to screen or filter views towards the road from the surroundings and to provide an attractive and varied road for the motorist. It may not be possible to achieve these aims solely within the road earthworks and some additional planting and earthworks are proposed, either on additional land purchased for this purpose under Section 246 of the Highways Act or by agreement on other landowners land under Section 253 of the Highways Act.

4.7 Four types of planting are shown on Figures 6, 7 and 8:-

- dense planting - a continuous cover of trees and shrubs;
- intermittent planting - irregular clumped planting of trees to produce a parkland effect;
- hedgerow planting - along the perimeter of the scheme to reconnect field boundaries;
- offsite planting - usually a narrow belt of trees and shrubs.

The Landscape Proposals Described (see Figures 6, 7 and 8)

4.8 The extent and type of planting proposed along the length of the published route takes account of the existing landscape character and the location of views to be screened. The character of the road corridor is generally rural or urban fringe with numerous field boundaries, woodlands and lanes with substantial hedgerows. There are some large woodlands in the vicinity and, although the Pevensey Levels are close by, their open flat landscape is not encountered. Consequently, woodland planting is used throughout the scheme, partly to compensate for the loss of trees required by the road construction and partly to reflect the nature of the location. The landscape proposals are extensive; this is a reflection of the substantial visual effect the new road would have upon the rural character of the area and upon some nearby residential properties.

The Western Junction

4.9 North of the A22/A27 junction the A22 would be widened and realigned and would be raised above existing ground level to link into the roundabout over the future A27, with east-facing slip roads up to the roundabout. These raised roads and the roundabout bridges would be visible from housing along Sayerland Road to the south, Bay Tree Lane to the east and several single properties, particularly Cophall Farm to the west.

4.10 Extensive bunding 2-3 m above carriageway level is proposed around the junction roundabout and slip roads to provide visual and noise screening; this would be extended to the east until it marries into the cutting sideslopes of the A27. There would also be contouring of land within the roundabout, on land between the old A22 southwards and Hailsham Road, and on the outer face of the bund below Sayerland Road. The intention of this earth modelling would be to create an undulating landform into which the various roads are set, rather than leaving roads standing up above the landform. These earthworks would screen most views from housing of the roads and traffic.

4.11 These earthworks would be densely planted, in time creating a wooded setting which would help to absorb the effects of the lighting on the junction and further screen views of the traffic. Around Bay Tree Farm, some small corners of fields are included in the landscape proposals to help integrate the new local access road into the field pattern. The field remnants below Sayerland Road are also included in the landscape CPO, partly to enable the bund slope to be rounded off and married into the existing slope and partly to enable intermittent planting to be carried out to provide some foreground softening of the views from the housing without blocking their views of the distant higher ground. When established this planting would screen views of the road, traffic and earthworks, with only the top of highway lights remaining visible. However, this wooded outlook would be a substantial change from the more open aspect that some nearby properties currently have.

4.12 Hedgerows are proposed in several locations to tie into the existing pattern of field boundaries, particularly along either side of the A22 northwards.

#### Sayerland Road to Shepham Lane

4.13 The bypass enters cutting slightly west of Sayerland Road and continues in cutting until Otham Court. A length of retaining wall is needed on the south side by the stopped up end of Sayerland Road to minimise the loss of trees behind Mapleleaf Gardens and avoid demolition of properties. The road is slightly above grade

across a watercourse between chainage 4000 and 4200, before returning to cutting into locally higher ground under Shepham Lane. (Chainage is expressed as metres and is a measure of distance along a road; chainages for the Polegate Bypass are marked along the central reserve in Figures 6, 7 and 8).

- 4.14 The cutting sideslopes would be married into the bunding of the western junction, and bunding to 3 m above carriageway level along the south side and up to 4.5 m along the north side is proposed along the raised section of road. This would screen the road and most traffic from housing and a relocated footpath to the south and also from Otham Court, a listed building, to the north. Some 300 m east of Otham Court a notch would be required in the bund to avoid a costly diversion of the existing 33 kV overhead electricity line.
- 4.15 The landform enables the overbridge connecting Cuckoo Walk to be raised only a little above existing ground level, thus reducing visual intrusion on properties along Sayerland Lane and facilitating connection with the new bridleway link.
- 4.16 The theme of dense planting is continued along both sides of the road, with some small field corners on the north side being included in the landscape CPO. These would be planted to provide additional screening to views from Otham Court and preserve the existing field boundaries. A larger area to the south is also included in the landscape CPO for planting and to help protect the mature trees at the rear of Mapleleaf and Greenleaf gardens, which are an important visual element. When established, the planting would screen the road, earthworks and traffic in views from the south and from Otham Court, although a substantial woodland element would be introduced into the foreground of views from Otham Court and its gardens.
- 4.17 Hedgerows are proposed in several locations to tie into the existing pattern of field boundaries, particularly near Otham Court.

## Shepham Lane to the Eastern Junction

- 4.18 The landform allows the overbridge connecting Shepham Lane to be raised only a little above the existing level. The lane is partly realigned on the north side to preserve the hedgerows which contain some good mature oak trees. The route emerges from cutting eastwards and continues above or at grade to the junction at Dittons, where a pair of roundabouts slightly raised above ground level provide the necessary road connections. These roundabouts would be illuminated.
- 4.19 The abutment and access to the north of Shepham Lane bridge would be planted to link into planting in an adjacent field corner included in the landscape CPO. From chainage 5100 there would be a screening bund 3 m above carriageway level on the south side, continuing around the eastern junction, to screen views from and reduce noise at the housing to the south.
- 4.20 Dense planting would be continued around the Shepham Lane cutting and bridge, reflecting the dense woodlands around Little Shepham. This planting would continue along the south side and the bund, but there would be a break on the north side to allow views out towards the Levels. Hedgerow planting would be used extensively along this stretch.
- 4.21 The eastern junction would be set into a small woodland developed on land included in the landscape CPO. This would screen the roundabouts and lighting from housing along the former A27 and from the more open landscape to the east and allow some contouring of the earthworks. The planting would continue along the A27 eastwards to tie into the planting along the Pevensey By-pass. The redundant length of carriageway would be broken out and either planted or returned to agricultural use as appropriate for the design. When established, this planting would result in the new junction being concealed in woodland with links to nearby existing woodland to the west and north. The road and traffic would be concealed from housing and adjacent land uses, apart from the tops of lighting columns and the field pattern to the east would be rationalised.

## Noise

### Prediction of Noise Levels

- 4.22 Noise levels have been predicted in accordance with the calculation procedures defined in 'Calculation of Road Traffic Noise' - 1988. The traffic forecasts used in these predictions are for the year 2010 assuming high growth and with the Folkington Link, Polegate Bypass and A22 New Route from Dittons to Lottbridge Drove in place. The increases in noise referred to in this section are the differences between the noise levels calculated for the 2010 situation and those calculated as prevailing prior to construction.

### Scheme Design

- 4.23 The vertical alignment of the route has been chosen to mitigate noise impacts by means of a cutting and by keeping road levels to a minimum height above ground level. On the sections which are above ground level, further consideration has been given to reducing noise by means of earth bunds. The design of the A27/A22 junction with the trunk road passing under the roundabout was considered to be less intrusive and more amenable to mitigation than a scheme where the trunk road passes over the roundabout.

### Barriers

- 4.24 The barriers in the form of earth bunds proposed for this scheme have been designed to limit noise and visual intrusion whilst at the same time ensuring the bunds themselves do not become too dominant in the landscape. These bunds are described below. Heights referred to relate to height of the top of the bund above adjacent road level.
- 4.25 An earth bund alongside the westbound exit of the A22 roundabout and the east side of the realigned Hailsham Road is proposed to mitigate noise at properties in Sayerland Road. This would limit the number of properties expected to

experience a noticeable increase in noise to about 8. Increases in noise at these properties would range from 3-16 dB(A) with the greatest L<sub>10</sub> 18 hour level rising to 74 dB(A). Without this bund, increases in noise would be noticeable at most or all properties in this road. This bund would generally be 3 metres above the adjacent road level. Noise levels without this bund would be up to 4dB(A) higher.

4.26 An earth bund is proposed alongside the east side of the realigned A22, the north east quadrant of the A22 roundabout and the eastbound entry slip road to mitigate noise intrusion to isolated properties in Sayerland Lane. Starting from the Bay Tree Lane the height of the bund relative to road level is 0.75 m rising to 2 m over the first 30 metres of its length. Continuing southwards, the bund maintains this 2 metre height until the Bay Tree Lane Link underbridge where protection is continued by means of an acoustic fence of the same height. South of this bridge to its termination, the bund resumes and maintains a height of 3 metres above slip road level and then mainline level until it marries in with the 3 m deep cutting at chainage 3200. Around chainage 3150 there is a local reduction in bund height to avoid landtake from Bay Tree Cottage, but an acoustic fence would be provided to maintain the effectiveness of the barrier. Increases in noise at the properties referred to above would be up to 12 dB(A) with the greatest L<sub>10</sub> 18 hour level rising to 66 dB(A). Without this barrier noise levels would be up to 6 dB(A) higher.

4.27 To protect Cophall Farm to the west of the A22, a bund 2 metres above carriageway level would be built on the west side of the A22, adjacent to the roundabout. The effect of this bund would be to mitigate the increase in noise such that levels of noise would be similar to or lower than those presently experienced. Noise levels at this property would increase by 1 dB(A) on the east facade with L<sub>10</sub> 18 hour levels up to 69 dB(A) and decrease on the south facade by 3 dB(A) with levels up to 64 dB(A). Without this earth bund, noise levels would be 3 to 6 dB(A) higher.



- 4.28 An earth bund is proposed to mitigate noise at Otham Court. This bund would be sited on the north side of the proposed Bypass between chainages 3720 m and 4400 m to provide a continuous screen between two sections of road in cutting, although a specially designed notch forming an overlap screen would be necessary some 300 m east of Otham Court to avoid costly diversion of the existing 33 Kv overhead line. The height of this bund would be variable, ranging from 3 metres above road level to the west to 5 metres above road level to the east. This variation has been proposed in order to retain as much as possible of the area of wooded land to the south of Otham Court. Noise levels at the house at Otham Court would be increased by up to 16 dB(A) with  $L_{10}$  18 hour levels of up to 66 dB(A). These predicted noise levels take into account the existing walls and building on the southern boundary and would be more than 3 dB(A) higher if the bund was not built. Noise levels within parts of the gardens would be even more effectively mitigated by this proposal.
- 4.29 To the south side of the proposed bypass between chainages 3900 m and 4250 m an earth bund of 3 metres in height is proposed. Where the existing 33 Kv line passes over, at chainage 4200, a notch in the bund would be necessary and a 3 m high acoustic fence would be provided. This would primarily act as a visual screen by 'filling' a gap between two sections of road which are in cutting. The benefits of noise reductions to those properties south of the proposed bypass would not be large. This is due to the considerable distances between the noise source and the properties generally over 300 metres. Noise levels at these properties closest to the Polegate Bypass would be increased by up to 15 dB(A) with  $L_{10}$  18 hour levels of up to 60 dB(A) on north facing windows.
- 4.30 An earth bund is proposed to mitigate noise to those properties on the north side of the existing A27 near to the eastern roundabout junction of the proposed Bypass. This bund would be 3 metres in height and extend from chainage 5100 m eastwards along the south side of the proposed bypass, returning past the two roundabouts and terminating on the north side of the existing Dittons Road at the end of the scheme. Both ends of this earth bund would taper to existing ground level. Noise levels would be increased by up to 7 dB(A) with  $L_{10}$  18 hour levels

of up to 60 dB(A) on north facing windows. Compared to the situation that would result if the bund was not built, noise levels would be up to 3-4 dB(A) lower. The benefit of the bund would decrease for those properties further westwards, where the increased distance would mean that the proposed bypass would itself be less intrusive.

- 4.31 The overall noise changes resulting from the scheme are detailed in the Appraisal Framework in Chapter 5; 760 residencies would experience noticeable increases in noise levels and 780 residencies would experience noticeable decreases in noise levels.

### **Air Quality**

- 4.32 Assessments of air quality impacts arising from the schemes have been carried out in accordance with the method set out in the Department of Transport Manual of Environmental Appraisal (MEA). This method calculates the peak hour concentration of carbon monoxide (an indicator of vehicle emissions) at particular locations resulting from exhaust emissions from traffic on critical roads within approximately 200 metres of the receptor. The receptors assessed are given in Table 4.1.
- 4.33 The calculations were carried out, taking account of recent European Legislation requiring emissions of carbon monoxide (and other pollutants) from all new cars to be reduced by at least 75% of current levels after 1993 (Official Journal of the European Communities, Nos L214/1 and L226/1). In response to this legislation, estimates of average emissions from the UK vehicle fleet have been published by Warren Spring Laboratory, which reflect reductions in emissions over time resulting from the introduction of emission control technology (three-way catalytic converters). Overall emissions are expected to diminish to 61%, 30% and 17% of 1987 levels for the years 1996, 2000 and 2010 respectively. Hence, these factors have been incorporated into the calculation method specified in the MEA.

4.34 Predicted peak hour concentrations of carbon monoxide are given in Table 4.1 for the design year 2010 for the 'do-minimum' situation and also assuming Folkington Link, Polegate Bypass and A22 New Route to Lottbridge Drive are in place. For both situations the predicted levels are 0.95 parts per million (ppm) or less. The MEA specifies a threshold level of 4 ppm, above which the possibility exists of an air pollution problem. It can be concluded, as predicted concentrations in 2010 are well below this threshold, that air pollution would not represent a problem in the design year.

In Chapter 6 consideration is given to carbon monoxide levels in the opening year, 1996, when the beneficial effects of catalytic converters will be less than in 2010.

**TABLE 4.1**  
**2010 Predicted Carbon Monoxide Concentrations (ppm)**

Receptor	CO-Concentration (ppm)	
	Do-Minimum	FL + PB + A22/1
Brookside Avenue	0.70	0.29
Bay Tree House	0.05	0.18
Bay Tree Cottage	-	0.20
1 Sayerland Road	0.31	0.06
35 Hailsham Road	0.52	0.07
31 Sayerland Road	-	0.24
66/78 Station Road	0.95	0.48
Wyvern, Dittons Road	0.58	0.28

#### Agriculture

4.35 Seven land holdings would be affected by the proposed bypass between the A22 and A27. Bay Tree House poultry farm may become non-viable as the bypass will result in the loss of a large proportion of an open field used to store and spread poultry waste.

4.36 There are relatively few areas of severed land. However, at Priesthawes Farm, where a large area of land would be severed, the bridleway bridge proposed at

public consultation would be widened to farm accommodation standard. This is in view of the inadequate nature of the alternative access routes and the additional time and vehicle operating costs which would otherwise be incurred.

4.37 On Sharnfold Farm access would remain to the land severed on the south of the proposed bypass by means of the existing local road network and the existing access from Dittons Road.

4.38 The comprehensive landscape proposal have given careful consideration to minimising unnecessary disruption to farmland. Consequently, landscape areas would be located along the highway boundary or in residual agricultural areas which are non viable due to size and shape.

### **Wildlife and Conservation**

4.39 The alignment of the road is such that all blocks of woodland would be avoided. The construction of the proposed route, however, would result in the loss and fragmentation of small sections of mature hedgerow, scrub and trees. The loss of habitat would in time be compensated for by the extensive planting of locally occurring native broadleaved trees and shrubs. The planting aims to integrate the scheme into existing areas of vegetation, thus creating new wildlife corridors, as far as possible using species commonly found in the area. These measures would not reach full maturity for several years.

4.40 Provisions would be incorporated into the road design to prevent any loss of or disruption to badger social groups by providing links across the bypass between existing badger paths and foraging areas.

### **Drainage**

4.41 Drainage proposals for the road will be in accordance with agreements of principle made with the National Rivers Authority (NRA). The majority of surface water run-off from the scheme would be discharged into two existing

watercourses which flow into the Pevensey Levels. The first of these runs north eastwards, some 400 m east of Otham Court. Approximately 400 m of the watercourse, immediately downstream of the bypass, would require some enlargement. The second watercourse discharges into the Drockmill Hill Gut and approximately 100 m of this watercourse would require improvement.

4.42 The headwalls which would be constructed at the points of discharge of highway drainage would be equipped with a means of cutting off the discharge in the event of an oil spillage.

4.43 Some existing watercourses flow northwards across the line of the bypass. Culverts would be provided to generally maintain the existing routes, although some diversion of watercourses would also be necessary.

#### **Footpaths and Bridleways**

4.44 A number of public footpaths/bridleways would be affected by the bypass (see Figure 5) requiring some realignment of the existing routes. An underpass (Bay Tree Lane Link) would be provided which would allow pedestrians and equestrians a safer crossing facility across the A22.

4.45 Footpath 6a would be stopped up from its junction with Footpath 6b to its junction with Otham Court Lane. An alternative route would be available via the Cuckoo Trail overbridge.

4.46 Between Otham Court and Shepham Lane Footpath 15 would be realigned on a new route running outside the southern fenceline of the bypass. Access to Shepham Lane north of the bypass would be via the Shepham Lane bridleway bridge.

4.47 Footpath 19 would be stopped up from its junction with Shepham Lane to the point where it intersects the bypass. Access to the remaining section of Footpath

19 to the north of the bypass would be via the Shepham lane bridleway bridge and a new footpath route running outside the northern fenceline of the bypass.

4.48 The section of Footpath 17b, between Dittons Road and the realigned Pevensey Bypass, would be stopped up. An alternative route would be provided running inside the northern fenceline of the realigned Pevensey Bypass and along the verges of Dittons Junction.

4.49 A new footpath/bridleway would be provided extending from the Cuckoo Trail westwards along the northern side of the bypass to the junction of Sayerland Lane and Bay Tree Lane. This new track, in addition to the A22 underpass, would maintain the link between Footpath 2a/bridleway 1a and the Cuckoo Trail, previously provided by Bay Tree Lane and Bridleway 8a.

#### **Community Severance**

4.50 The bypass would sever Sayerland Road from Sayerland Lane and Bay Tree Lane and the proposed A22 dualling would have a continuous central reserve. Traffic from south of the bypass would therefore not be able to turn right from A22 into Bay Tree Lane. This severance would not entirely be mitigated by the provision of the A22 underpass and the Bay Tree Lane Link - residents in Bay Tree Lane and Sayerland Lane will still have a much more complex journey into Polegate and will feel 'severed'.

4.51 Vehicles, pedestrians and cyclists travelling from Sayerland Lane, Bay Tree Lane and Otham Court Lane to the town centre would have an increased length of journey, as a result of the severance of Sayerland Road. Vehicles would use a new route via Bay Tree Lane Link; pedestrians and cyclists could use the new bridleway facility to the north of the bypass, in combination with the Cuckoo Trail.

## Cultural Heritage

- 4.52 The mitigation measures described above would screen the road and its traffic from the house, chapel and gardens at Otham Court and ameliorate the increase in noise perceived around this area. However, the setting of the listed buildings would be altered by the proximity of substantial areas of woodland planting on the roadside earthworks and in adjacent field corners. The present outlook from the house to the south and south-east extends to the wooded edges of Polegate, but the roadside planting would substantially curtail these views. In the principal view to the east the road would be running away to the right and in time would be perceived only as an increase in woodland beyond existing field boundaries.

The non-statutory area of archaeological interest extends to the south and west of the building group. The road and its associated earthworks, which includes a limited amount of screen bunding at this point, extends over the southern corner of this area.

## Construction

- 4.53 The works are constructed entirely within an area of Weald Clay. There is a requirement of approximately 150,000 cubic metres of granular material for construction of certain parts of the works and, as this material does not arise on the site, it would have to be imported from suitable sites remote from the works.
- 4.54 The near surface layer of Weald Clay is a soft material which, in its natural state, would be unsuitable for use in the works. Some 150,000 cubic metres of this material would have to be removed from the site and some 130,000 cubic metres of suitable locally arising materials would have to be imported to realise (in combination with suitable material arising from the site plus the imported granular material referred to above) sufficient fill material for construction of the works.
- 4.55 It may be possible to mitigate the impact of the disposal of the soft clay and the importation of replacement material by treating the upper soft clay layers by a

suitable method such that the material can be used in the works, thereby essentially minimising the earthworks import requirement to that needed for granular material and at the same time largely avoiding the need to dispose of material off site. Suitable methods of treatment are currently under investigation.

- 4.56 The contract for the construction of the works will contain requirements to limit nuisance from dust and noise. The contract would also contain measures to control the use of existing roads by construction traffic and to provide suitable routes for affected public rights of way, by either maintaining the existing route, construction of a temporary diversion across the site or by the completion of the permanent proposals.



## CHAPTER 5 - APPRAISAL FRAMEWORK

### Structure of Frameworks

- 5.1 Details of the environmental effects of the published scheme is provided in tabular form in this Chapter. The format follows that of the appraisal framework specified in the Department of Transport's Manual of Environmental Appraisal. The framework describes the overall effects of construction and operation of the published scheme. The frameworks also compare the published scheme with a "Do-Minimum" scheme. The "Do-Minimum" scheme comprises the following improvements which would need to be introduced to tackle the major traffic problems if the Department and County Council proposals do not materialise:
- replacement of the A27/A22 priority junction with a small roundabout;
  - improvement of the A22/Polegate High Street traffic signals by the provision of additional stopline capacity on the A22;
  - replacement of the existing A27/B2104 Stone Cross priority junction with some form of roundabout arrangement, probably consisting of a double mini-roundabout consistent with the staggered crossroads.
- 5.2 The description of the environmental effects of the published scheme, as presented within the frameworks, has been derived from more detailed work comprising consultations with Statutory Authorities and other bodies, desk studies and fieldwork.
- 5.3 The frameworks are sub-divided into six groups which consider the effects on 1) travellers; 2) occupiers of property; 3) user of facilities; 4) policies for conserving and enhancing the area; 5) policies for transport and development; and 6) financial effects. A full description of the terminology is given within the Manual of Environmental Appraisal.

- 5.4 The effects on travellers are considered in Group 1 which comprises an economic appraisal of the savings associated with the scheme, an estimate of the reduction in road traffic casualties as a result of the scheme, and estimates of driver stress and quality of views from the road.
- 5.5 Within Group 2 the effects of the scheme on occupiers are assessed including residential, industrial, commercial, farming and other interests. The effects considered relate to changes in the noise and visual environment, severance, and loss of land or buildings.
- 5.6 The implications of the scheme for users of facilities which will be affected are addressed in Group 3, followed in Group 4, by a description of the effects of the scheme on policies for conserving and enhancing the area. This group is concerned with the change in the general environmental quality of the area, rather than the direct effect on individuals.
- 5.7 Within Group 5 the effects of the scheme on transport policies and on central and local governments' policies relating to land use and economic development are outlined.
- 5.8 Group 6 considers the Net Present Value (NPV) of the scheme by balancing the scheme costs against the benefits derived within Group 1.

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 1 : TRAVELLERS</b>						
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments	
Car Users	Time savings	£m(PVB)	High 38.6	Low 24.2	0	<p>A. Values are given assuming Polegate Bypass and A22 Dittons to Lottbridge Drive are opened at the end of 1995 followed by the Folkington Link at the end of 2000.</p> <p>B. Values are expressed relative to the 'do-minimum' option. Hence the 'do-minimum' entries are zero.</p> <p>C. Present value of benefits (PVB) are for 30 year periods from the expected date of opening of Polegate Bypass and discounted to 1988 prices at 8% per annum.</p> <p>D. It is assumed that national average figures for vehicle occupancy will apply.</p>
	Vehicle operating cost savings	£m(PVB)	-4.2	-3.3	0	
	Time savings	£m(PVB)	7.0	4.4	0	
Users of light goods vehicles	Vehicle operating cost savings	£m(PVB)	-1.1	-0.6	0	
	Time savings	£m(PVB)	2.0	1.3	0	
Uses of other goods vehicles	Vehicle operating cost savings	£m(PVB)	-0.8	-0.1	0	
	Time savings	£m(PVB)	1.5	1.0	0	
Bus operations and passengers	Vehicle operating cost savings	£m(PVB)	-0.1	-0.1	0	
	Time savings	£m(PVB)	49.1	30.9	0	
All vehicle travellers	Vehicle operating cost savings	£m(PVB)	-6.2	-4.1	0	
	Accident savings	£m(PVB)	5.3	3.9	0	

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 1 : TRAVELLERS					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
All vehicle travellers (continued)	Reduction in casualties:		High		Note A and B apply  The figures indicate the probable total reduction in casualties over the whole of the 30 years assessment period.
	Fatal	Number	Low	0	
	Serious	Number	9	0	
	Slight	Number		0	
	Driver stress		Slight Reduction	Moderate	
	View from the road		Most of the route would be in cutting or between bunds, so lateral views are limited, except at the eastern end of the route. Forward views will be attractive, opening out to the Pevensy levels at the eastern end, and The South Downs at the western end	No change	The extensively planted earthworks will provide most of the interest between Bay Tree Lane and Shepham Lane

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 1 : TRAVELLERS					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
All vehicle travellers (continued)	Traffic delays during construction		At the A27/A22 junction, staged temporary diversions of the A22 and Hailsham Roads would be required, generally maintaining two way flow but to a lower standard than existing. Some single lane working would be necessary outside of peak periods. At Dittons some single lane working would be required	minimal	
	Severance - New		Shepham Lane closed to vehicular traffic  Sayerland Road severed. Alternative Route provided via Bay Tree Lane link and A22 Underpass	None	The existing two way flow on Shepham lane is approximately 150 vehicles per 12 hour day.  Slight increase in journey times for vehicular traffic (less than 5 minutes)  The existing two way flow on Sayerland Road is approximately 850 vehicles per 12 hour day.

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 1 : TRAVELLERS</b>					
<b>Sub-Group</b>	<b>Effect</b>	<b>Units</b>	<b>Published Route</b>	<b>Do Minimum</b>	<b>Comments</b>
Pedestrians	Change in amenity		Substantial reduction in traffic on the existing A27 will improve amenity within Polegate	Pedestrian amenity in Polegate will continue to deteriorate with increasing traffic	Construction of the bypass is predicted to lead to a 70% reduction in traffic on the existing A27 in 1996
	Safety		Diversion of trunk road traffic from the existing A27 will improve pedestrian safety within Polegate. Provision of A22 underpass provides safer pedestrian crossing facility	The risk of accidents to pedestrians within Polegate will rise with increasing traffic	
	Severance - New		Moderate-severe due to closure of Sayerland Road	Pedestrian severance in Polegate will continue to deteriorate with increasing traffic.	Moderate increase in walking distance from north of bypass to Town Centre (c.275 m); maximum increase of c.900 m from north of bypass to properties immediately to the south. A survey of non-vehicular movements along Sayerland Road, carried out on 5.8.90, recorded a total of 70 movements, 29 pedestrians, 35 cyclists and 6 equestrians

**A27 POLEGATE BYPASS**

**APPRAISAL FRAMEWORK**

<b>GROUP 1 : TRAVELLERS</b>					
<b>Sub-Group</b>	<b>Effect</b>	<b>Units</b>	<b>Published Route</b>	<b>Do Minimum</b>	<b>Comments</b>
Pedestrians (continued)	Severance - New (Continued)				Severance of public footpaths is considered in Group 3.
	Severance - Relief from existing		Substantial reduction of traffic on existing A27 reduces severance	None	Construction of the bypass is predicted to lead to a 70% reduction in traffic on the existing A27 in 1996
	Disruption during construction		Existing pedestrian routes would be maintained or suitable temporary diversions provided until the published scheme provisions were in place. Amenity would be reduced	minimal	

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 2 : OCCUPIERS					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
Residential a) Private houses and flats	Properties demolished	Number	3*	0	* Additionally, the garage extension on the north side of Cophall Farm house would require demolition or modification. The cost of property acquisition and demolition is included in Group 6.
	Noise	Number of dwellings experiencing an increase in dB(A) <sub>L<sub>10</sub></sub> 18 hr of 15 or more 10-14 5-9 3-4	20 80 330 330	0 0 0 0	The changes in noise are the difference between those forecast for 2010 and the existing levels, between 0600 and mid-night. The units are L <sub>10</sub> 18 hr dB(A). Noise levels have been predicted in accordance with the measurement and calculation procedures defined in 'Calculations of Road Traffic Noise 1988'. Allowance has been made for the presence of noise and amenity bunds and acoustic fences and it has been assumed that the Folkington Link and A22 Dittons to Lottbridge Drive have been constructed.



A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 2 : OCCUPIERS					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
Residential a) Private houses and flats	Noise (Continued)	Number of dwellings experiencing a decrease in dB(A) <sub>L<sub>10</sub></sub> 18 hr of 3-4 5-9 10-14	680 100 0	0 0 0	

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 2 : OCCUPIERS						
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments	
b) Sheltered accommodation and nursing homes not included in (a) above						
i) Guardian Court, Hailsham Road (no. of apartments within main building 52)	Changes in noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	5-9 dB(A) decrease to SE and NE facades, 3-4 dB(A) decrease to NW and SW facade	Not significant at any part	Outlying bungalows Nos 53 to 62 are included as private houses.	
ii) Queensmead Residential rest home (no. of residents 31 capacity)	Changes in noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	5-9 dB(A) decrease	Not significant at any part		
iv) Victoria House (registered rest home) 15 residents	Changes in noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	5-9 dB(A) decrease to SE and NE facades. 3-4 dB(A) decrease elsewhere.	Not significant		
v) Gilda Crescent Resource Centre (sheltered accommodation) no of residents - 32	Changes in noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	Not significant	Not significant		

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APPRAISAL FRAMEWORK

GROUP 2 : OCCUPIERS					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
b) Sheltered housing continued					
vi) Havelock House Nursing/Rest Home No of Residents - 24	Changes in noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	3-4 dBA decrease	Not significant	

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 2 : OCCUPIERS</b>					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
Residential (continued)	Visual obstruction	Number of properties within 300 m of centre line subject to: High Medium Low	0 4 0	No change	Visual obstruction means visual blocking of the view by a road structure
	Visual intrusion	Number of properties subject to: High Medium Low	43 81 122	Negligible change from increased traffic levels on existing A27	The assessment indicates the degree to which the road and its structures and earthworks are considered to be intrusive according to the Manual of Environmental Appraisal. The level of intrusion is affected by distance from the road, the nature of existing views and the existence of detracting features. The western junction and, to a lesser extent, the eastern junction would be the main sources of visual intrusion as these include the most extensive areas of road development and would require lighting. The western part of the route would also be visually intrusive, as this passes nearest to housing

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 2 : OCCUPIERS						
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments	
Residential (continued)	Severance					
	a) Relief to existing severance		Substantial reduction in traffic on the existing A27 will improve access within Polegate	None	Construction of the bypass is predicted to lead to a 70% reduction in traffic on the existing A27 in 1996	
	b) New severance		Moderate-severe due to the closure of Sayerland Road	Existing severance will increase with increasing traffic	Moderate increase in walking distance from north of bypass to Town Centre (c.275 m); maximum increase of 900 m from north of bypass to properties immediately to the south	
Industrial	Disruption during construction		100 houses within 100 metres of the site will be likely to experience some disruption. The anticipated construction period is two years.	minimal		
	Noise		1 warehouse building plus 10 factory units will experience a decrease in noise of approximately 3-4 dB(A) <sub>L10</sub>		All units in Dittons Road.	

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 2 : OCCUPIERS</b>					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
Commercial premises Cophall Farm (livery and riding school)	Demolitions of outbuildings	No.	12 outbuildings immediately north of farm house demolished	0	The cost of property demolition is included in Group 6
	Landtake as percentage of land holding		14%	None	The cost of land acquisition is included in Group 6
	Severance - New		Slight	None	
New Barn Farm (summer grazing for seven horses)	Landtake as percentage of land holding		35%	None	Demolition of Farm House is included under 'Residential'.

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 2 : OCCUPIERS						
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments	
Commercial premises	Noise increase	Numbers subject to increase of more than 5 dB(A) <sub>L<sub>10</sub></sub> 18 hr	3	No significant change	Dittons Nursery Bramley Farm Otham Court Farm	
	Noise decrease	Numbers subject to decrease of more than 5 dB(A) <sub>L<sub>10</sub></sub> 18 hr	2	No significant change	2 Traders in Hailsham Road.	
	Visual Intrusion	High Moderate Slight	3 3 3	No change		
	Severance - Relief to existing		Substantial reduction in traffic on the existing A27 will improve access within Polegate	Existing severance will increase with increasing traffic		
	Disruption during construction		Significant disruption during construction for Cophall Farm			

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APPRAISAL FRAMEWORK**

<b>GROUP 2 : OCCUPIERS</b>						
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments	
Schools						
a) Polegate County Primary Junior School (not presently in use)	Changes in noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	3-4dB(A) decrease	Not significant		
b) Polegate County Primary School, Oakleaf Drive (n.o.r. 251 from September 1991)	Changes in noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	3-4dB(A) increase to NE and NW facades	Not significant	Part playing field will experience an increase of up to 8dB(A).	
Farming	Landtake	No of farms affected  Hectares of land Grade 3a Grade 3b Total	7  2.58 34.46 37.04	2   0.72  (Including land from Statutory allotment)	Survey based on MAFF Guidelines includes all existing and potential farm land and so includes land currently used for grazing horses. The cost of land acquisition is included in Group 6.	
	Landtake as percentage of land currently farmed  0-5% 5-10% > 10%	No of farms No of farms No of farms	1 - 3		Effects on land used for horses is considered in Group 2 Commercial premises and Group 3 Users	



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APPRAISAL FRAMEWORK

GROUP 2 : OCCUPIERS					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
Farming (continued)	Severance - New	No of farms affected	2	None	Shepham Lane bridleway bridge will be constructed to farm accommodation width for Priestshaw Farm. Access to severed land on Sharnfold Farm will be via local road network
	Disruption during construction		Landtake required by the permanent works will be fenced off at the start of construction. Access to remaining plots will be maintained with a provision equivalent to access pertaining upon completion of the permanent work published scheme.	None	

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 3 : USERS OF FACILITIES</b>					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
<ul style="list-style-type: none"> <li>a) Polegate shopping area</li> <li>b) Community centre</li> <li>c) Library</li> <li>d) Churches</li> <li>e) Medical Centre</li> <li>f) Schools</li> <li>g) Public buildings</li> </ul>	Change in accessibility		Substantial reduction in traffic on the existing A27 will improve amenity, promote ease of access to facilities and reduce pedestrian/vehicle conflict	Existing vehicle/pedestrian conflict will increase with traffic growth in Polegate Town Centre	Construction of the bypass is predicted to lead to a 70% reduction in traffic on the existing A27 in 1996

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 3 : USERS OF FACILITIES					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
Public footpaths	Reduction in amenity		<p>Western section of Footpath 17b stopped up. Alternative route via verges of realigned Pevensey Bypass and Dittons Junction requiring c.150 m extra distance of travel. 3 footpaths will be diverted (FP6a, FP15 and FP19); all require slight additional travel length of between c.100 m and 250 m. Cuckoo Trail path provided with an on-line bridge over the published route. Reduction in amenity due to the introduction of a dual carriageway into an area of essentially rural character.</p> <p>Pedestrian access between FP2a and Bay Tree Lane will be retained via an underpass which will involve moderate (c.350 m) additional travel length</p>	No change	<p>FP15 diversion lies adjacent to the published route for some 750 m; FP 19 diversion lies adjacent to the published route for some 400 m</p> <p>On Sunday 5 August 1990, between 9.00 and 19.00, the following pedestrian movements were counted:</p> <p>FP6a 4                      FP15 11                      FP19 9                      Cuckoo Trail 46</p>

A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK

GROUP 3 : USERS OF FACILITIES					
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments
Bridleways	Reduction in amenity		<p>Cuckoo Trail path provided with an on-line bridge over the published route; Shepham Lane provided with an over-bridge immediately to the east of the existing alignment.</p> <p>Access between BW1a/FP2a and Bay Tree Lane will be retained via an underpass which will involve additional travel length of 350 m. Access between Bay Tree lane and BW8a via Sayerland lane no longer possible; alternative route provided to the north of the Published route which connects with BW8a via Cuckoo Trail - Additional travel length of 200 m.</p> <p>Reduction in amenity due to the introduction of a dual carriageway into an area of essentially rural character.</p>	No change	<p>On Sunday 5 August 1990, between 9.00 and 19.00, 11 equestrian movements were counted.</p> <p>Route proposals maintain existing equestrian circuit and provide for proposed High Weald equestrian circuit</p> <p>On Sunday 5 August 1990, between 9.00 and 19.00, 3 equestrian movements from BW1a to Bay Tree Lane were counted.</p>

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APPRAISAL FRAMEWORK

GROUP 3 : USERS OF FACILITIES						
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments	
Bridleways (Cont)	Reduction in amenity (continued)		Reduction in amenity where bridleway diversion runs to the north of the Published route for 400 m	No change		
	Visual Intrusion		The road or its associated earthworks and structures will be visible from all the redirected lengths of footpaths and bridleways and also from substantial lengths of the existing rights of way either side of the route			
	Safety		Provision of underpass will obviate the need for equestrians to cross the A22	Predicted traffic increases on the A22 would increase equestrian/vehicle conflict		

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 3 : USERS OF FACILITIES</b>						
<b>Sub-Group</b>	<b>Effect</b>	<b>Units</b>	<b>Published Route</b>	<b>Do Minimum</b>	<b>Comments</b>	
Cophall Farm (training and schooling facilities)	Loss of buildings		Bypass will result in loss of buildings and training facilities	No change		
New Barn Farm (summer grazing for seven horses)	Loss of land		Moderate reduction in grazing areas. Residual land will remain available for continued grazing	No change		
Open Space ii) Cuckoo Trail	Changes in traffic noise	dB(A)	3-20 dB(A) increase depending on distance to bypass	No significant change	Maximum increase will occur on bridge over bypass	

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APPRAISAL FRAMEWORK

GROUP 3 : USERS OF FACILITIES						
Sub-Group	Effect	Units	Published Route	Do Minimum	Comments	
ii) Land to the north of Polegate County Primary Junior School	Changes in traffic noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	No significant change	No significant change		
a) Polegate Community Centre, Windsor Way (1800 members and other users)	Changes in traffic noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	3-4 dB(A) decrease along SW side .	No significant change		
b) Users of shops and post office in Station Road	Change in traffic noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	3-4dB(A) decrease	No significant change		
a) Polegate Branch Library in Windsor Way (3429 registered readers, 50 000 visits per year)	Change in traffic noise	dB(A) <sub>L<sub>10</sub></sub> 18 hr	3-4dB(A) increase	No significant change		

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 4 : POLICIES FOR CONSERVING AND ENHANCING THE AREA</b>					
Policy	Authority	Interest	Published Route	Do-Minimum	Comments
To protect agricultural land and woodland (Policy S19) (Policy 10J)	East Sussex County Council Wealden District Council	Agriculture and woodland to remain the main land uses in the countryside	Agricultural landtake and loss of several hedgerows and mature trees. Possible loss of trees protected by a TPO north of Green Leaf Gardens due to cutting of road	No effect	The South Wealden Local Plan does not contain a specific policy to protect agricultural land
To prevent inappropriate development in the countryside (Policy S20)	East Sussex County Council	Development and the use of land and buildings must demonstrate that a countryside location is necessary	A bypass, by its nature is accepted as an exception to the normal restrictive countryside policies. Provides benefits in terms of relief of congestion in Polegate Centre	No effect	
To ensure development has an acceptable impact on its surroundings (Policy S27)	East Sussex County Council	To protect environmental quality	The road will have an impact on its surroundings but the alignment and mitigation measures have been designed to minimise this impact from the outset; in time establishment of planting will reduce the impact further integrate the road into its setting.	No effect	



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APPRAISAL FRAMEWORK

GROUP 4 : POLICIES FOR CONSERVING AND ENHANCING THE AREA					
Policy	Authority	Interest	Published Route	Do-Minimum	Comments
To ensure that development in the countryside conserves or enhances rural character (Policy S17) (Policy S28) (Policy 10F)	East Sussex County Council  Wealden District Council	Maintenance of landscape quality and rural character	The road will initially be an urban element in the rural character of Polegate. The extensive planting proposals are intended to ensure that rural character is restored.	No effect	The proposed road is in cutting, or shielded by bunding, for most of its length which reduces the visual impact
To conserve landscape and natural resources of rural areas (Policy CA/FEN1)	East Sussex County Council	Maintenance of environmental quality, and prevent loss of agricultural land and woodland	The road will detract from the appearance of the landscape north of Polegate and therefore will initially have an adverse effect as the quality of the environment. There is some loss of agricultural land and hedgerows, but no loss of mature woodland. The planting proposals will in time restore the quality of the environment, although the proposed woodland planting will foreshorten some existing open views northwards across the Levels.	No effect	Alignment design and earthmodelling will minimise initial adverse effects of the new road.

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 4 : POLICIES FOR CONSERVING AND ENHANCING THE AREA</b>					
Policy	Authority	Interest	Published Route	Do-Minimum	Comments
To protect Sites of Wildlife Conservation Importance	Nature Conservancy Council Sussex Wildlife Trust	Safeguard ecological interest of sites which are not afforded statutory protection	Loss of several hedgerows and mature trees	No effect	The landscape proposals include extensive planting of species appropriate for the locality. Although this woodland and hedgerow will not provide an immediate substitute for loss of habitat, it will in time provide a greater area of ecological interest.
To prevent the coalescence of settlements (Policy CA/EN2)	East Sussex County Council	Maintenance of gaps of open countryside between Polegate and Hailsham and Stone Cross	The road effectively reduces the gap of open countryside between Polegate and Hailsham. Land between the edge of built-up area and by-pass susceptible to development pressure, may encroach into the gap of open countryside protected by Policy CA/EN2	No effect	The existing tree belt along the northern edge of Polegate provides a clear and definitive boundary to the settlement.

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APPRAISAL FRAMEWORK

GROUP 4 : POLICIES FOR CONSERVING AND ENHANCING THE AREA					
Policy	Authority	Interest	Published Route	Do-Minimum	Comments
<p>To preserve and enhance listed buildings (Policy 10N)</p> <p>To avoid adverse effects on listed buildings or their settings (Policy S27) and archaeological sites</p>	<p>Wealden District Council</p> <p>ESCC</p>	<p>To prevent development which would have a detrimental effect on the setting of listed buildings</p>	<p>The proposed road will be about 100 m from the grade II listed house at Otham Court. There will be views from the house and garden of the planted earth mounding along the north side of the road which will detract from the setting of the building, although the road itself will be screened. Planting will in time create a wooded aspect to this view. The grade II* listed Chapel is largely screened from the road by the house and planting in the garden, but a short stretch will be visible from beside the building and so the setting of the Chapel will be slightly affected. The road and associated earthworks encroach on to the southern edge of the non-statutory site of archaeological interest at Otham Court. Noise levels at Otham Court will substantially increase</p>	<p>No effect</p>	<p>The Chapel building at Otham Court is also designated as a Schedule Ancient Monument, and is given additional statutory protection</p>

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 4 : POLICIES FOR CONSERVING AND ENHANCING THE AREA					
Policy	Authority	Interest	Published Route	Do-Minimum	Comments
To maintain and improve the existing footpath and bridleway network (Policy CA/L12) (Policy 9C)	East Sussex County Council  Wealden District Council	Maintain access to the countryside on the edge of built-up areas	Severance of footpath 6a/6b, alternative route to link with footpath 9b to Sayerlands, provided by the Cuckoo Trail. Access to bridleway 8a at Sayerland Road, affected by proposed cutting for the road at Chainage 3300 m.  Footpath 15 and 19 diverted  Footpath 17b stopped up	No effects	The route crosses several footpaths/ bridleways. All would be provided with alternative route or diversion, although these would be longer
To improve the environment by removing through traffic, especially from unsuitable roads. (White Paper "Roads for prosperity" : 1989)	Department of Transport	Improvement of the environment in Polegate	Through traffic removed from existing A27 in Polegate	Growth in traffic will cause deterioration in present situation	

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 5 : TRANSPORT, DEVELOPMENT AND ECONOMIC POLICIES					
Policy	Authority	Interest	Published Route	Do-Minimum	Comments
<p><u>Transport</u> To ensure the early improvement of trunk road network (Policy S22)</p>	<p>East Sussex County Council</p>	<p>To improve the links between the main coastal towns in accordance with proposed development and change</p>	<p>Improves the links between coastal towns, and accessibility to and through East Sussex</p>	<p>Existing A27 is heavily congested. Increasing delays due to congestion and poor alignment</p>	
<p>The scale and timing of improvements to the A22 and A26 are to be planned in association with improvements to the A27 (Policy CA/T1)</p>	<p>East Sussex County Council</p>	<p>Development of A22 improvements</p>	<p>Preferred route creates opportunity to provide a new A22 link to Eastbourne at the junction of the Polegate and Pevensey by-passes</p>	<p>The County Council will not entertain the construction of the new A22 route to Eastbourne prior to the construction of the Polegate by-pass</p>	
<p>To encourage the early completion of the A27 by-passes at Pevensey and Polegate (Policy CA/T2)</p>	<p>East Sussex County Council</p>	<p>In order to make the best use of strategic network and improve accessibility to and through the County</p>	<p>Concentrates traffic on the trunk road network. Congestion reduced and journey times improved</p>	<p>Poor accessibility to East Sussex.</p>	<p>Pevensey Bypass opened 12/90</p>
<p>To safeguard the route of the A27 Polegate by-pass (Policy 7B)</p>	<p>Wealden District Council</p>	<p>To protect the Department of Transport's preferred route from prejudicial development</p>	<p>Protected by Local Plan Policy 7B</p>	<p>No effect</p>	

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 5 : TRANSPORT, DEVELOPMENT AND ECONOMIC POLICIES</b>					
Policy	Authority	Interest	Preferred Route	Do-Minimum	Comments
To ensure road proposals take full account of their impact on the environment (Policy 7E1)	Wealden District Council	To protect the quality of the landscape, areas of nature conservation interest and rural amenities	The use of ground contouring and cuttings minimises the visual impact of the road. New road reduces impact on residential amenities of properties along existing A27	No effect	
<u>Development and Economic</u> To permit the development of 1,000 dwellings at Stone Cross, separate from the existing settlement of Polegate (Policy CA/M4)	East Sussex County Council	Provision made for a new settlement. Open countryside gap between Polegate and Stone Cross to be maintained	New road introduces an urban element into the open countryside between Polegate and Stone Cross but is planned to accommodate increased traffic flows resulting from the development of the settlement	Severe congestion on existing network likely	
To encourage future development in the Eastbourne area and to consider making allocations of land in association with the A27 Polegate by-pass (Policy CA/E1)	East Sussex County Council	To ensure sufficient highway capacity to accommodate additional traffic generated by proposed housing and business developments in the Eastbourne area	New road will accommodate additional traffic generated by proposed development in the Eastbourne Policy area. Potential to allocate sites in the future with easy access to the new A27	Insufficient capacity on the existing A27 to accommodate new development in the area	

A27 POLEGATE BYPASS

APPRAISAL FRAMEWORK

GROUP 5 : TRANSPORT, DEVELOPMENT AND ECONOMIC POLICIES					
Policy	Authority	Interest	Published Route	Do-Minimum	Comments
To maintain and enhance the quality, range and character of the main town shopping centres (Policy CA/S1/ Policy 8A)	East Sussex County Council  Wealden District Council	To maintain the existing level of services and facilities in Polegate	Improves accessibility to shops for local residents. Possible loss of trade from through traffic. Pedestrian/vehicle conflict reduced	Traffic congestion on existing A27 reduces attractiveness of Polegate as a District Shopping Centre. Current problems likely to increase	
To encourage firms to locate or expand in existing industrial areas (Policy 5A)	Wealden District Council	Main industrial area in Polegate at the Chaucer Industrial Estate, Dittons Road	Improves accessibility of Polegate to strategic road network, more attractive for investment	Traffic congestion on existing A27 reduces attractiveness of Polegate for investment. Problems likely to increase with higher traffic forecasts	
To assist economic growth by reducing traffic costs and to enhance road safety. (White Paper "Roads for Prosperity" : 1989)	Department of Transport	Improved standard of trunk road	Standard of trunk road improved to be commensurate with traffic flows	Existing A27 through Polegate remains substandard and becomes increasingly less cost effective as traffic continues to grow	

**A27 POLEGATE BYPASS  
APPRAISAL FRAMEWORK**

<b>GROUP 6 : FINANCIAL EFFECTS</b>							
Sub-Group	Interest	Units	Published Route		Do Minimum	Comments	
	Costs	£m (PVC)	High	Low			
Department of Transport	Construction costs including preparation and supervision	£m (PVC)	3.16 } 8.89 } 24.4 } 12.25 } 0.05 }		0.8	A. Values are given assuming Polegate By-pass and A22 Dittons to Lottbridge Drive are opened at the end of 1995 followed by the Folkington Link at the end of 2000  Present Value of Costs (PVC) are costs in 1988 prices discounted from the year of expected expenditure to 1988 using a discount rate of 8% per annum	
	Land costs	£m (PVC)	0.04 } 0.69 } 0.07 }		0		
	Maintenance costs	£m (PVC)			0.3	0	Excess maintenance cost due to additional length of road, signing, etc
	Total costs	£m (PVC)			25.5	0.8	
	Total Quantifiable Monetary Benefit	£m (PVB)		High	Low		
				48.2	30.7		Includes savings in time, vehicle operating costs and accidents taken from Group 1
	Net Present Value Compared to Do Minimum	£m (NPV)		23.5	6.0		



## CHAPTER 6 - ENVIRONMENTAL IMPLICATIONS OF INTERIM AND ADDITIONAL PROPOSALS

### Introduction

- 6.1 In Chapter 4, and in the frameworks in Chapter 5, the traffic, noise effects and air quality have been described assuming the year 2010 and that the Folkington Link and A22 Dittons to Lottbridge Drove are in place in addition to the Polegate Bypass.
- 6.2 In this chapter three other situations are considered. The first of these is for the year 2000 immediately prior to the opening of the Folkington Link (see 1.10) when trunk road traffic would still be using the A22 south of the bypass and the east facing slip roads of the A27/A22 junction. Secondly, the effects in 2010 are considered for the situation when all the East Sussex County Council proposals to Eastbourne Town Centre, shown in Figure 1, are in place. Thirdly, air quality effects are considered for 1996, the expected first year of opening, when the beneficial effects of catalytic converters will be less than for subsequent years.

### Traffic

- 6.3 Further analyses have been carried out for the year 2000, immediately prior to the opening of the Folkington Link. The traffic flows for this situation are as shown in Figure 10. The pattern is very similar to the 1995 condition, with substantial reduction along the A27 (east of A22) and significant reductions on A22 south of Polegate.
- 6.4 The traffic flows for 2010 have been repeated (from Figure 9) on Figure 11. The latter also shows the extent of the changes which might occur if the full proposals for the A22 New Route are continued into Eastbourne Town Centre in conjunction with the other County and Eastbourne Borough road proposals shown in Figure 1. These increases have been estimated from information supplied from the East Sussex County Council SATURN model which covers the 'full proposals'

situation. The greatest increases would occur on A22 New Route and Polegate Bypass. These are balanced by the reduction forecast on the existing A22 and via the Friday Street route to the Dittons junction. Changes in the routes into Eastbourne from the east are also anticipated, and these would result in a reduction of the flows on Pevensey Bypass.

- 6.5 The overall peak hour flow levels through the A27/A22 scheme interchanges are expected to show a small reduction and no substantial problems are anticipated in catering for these changes should they materialise.

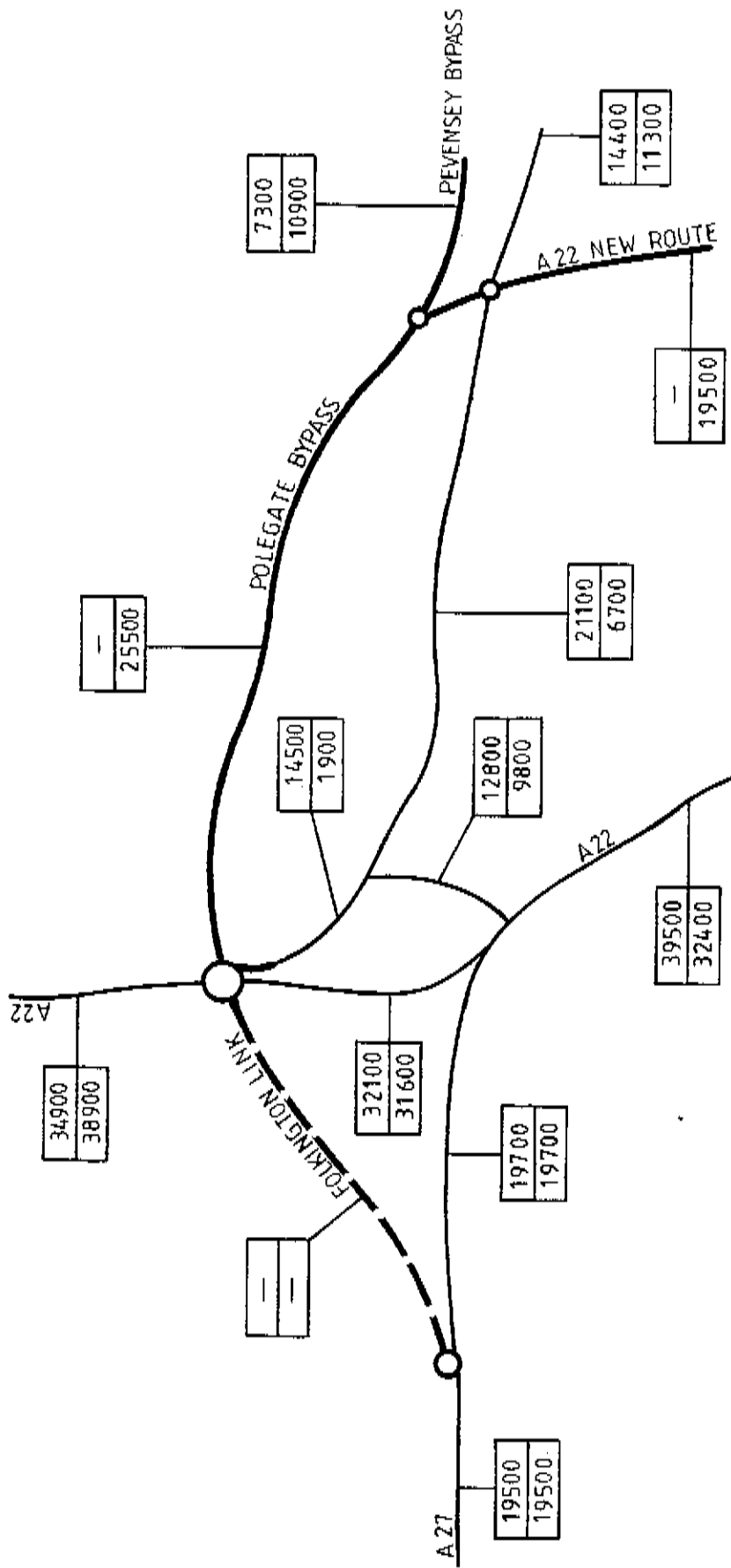
## Noise

### Situation in the Year 2000 Immediately Prior to Opening Folkington Link

- 6.6 This interim situation will give rise to differences in the increases and decreases in noise from those given in the framework. Particular areas of difference are as follows:-

- i) Levels of noise at properties near to the A22 south of the junction with the A27 Polegate Bypass will be up to 2 dB(A) higher.
- ii) Noise levels at properties in the area of the slip roads joining the A22 to the A27 will be 1 to 3 dB(A) lower.
- iii) Noise levels arising from the new Polegate Bypass will be 1 dB(A) lower.

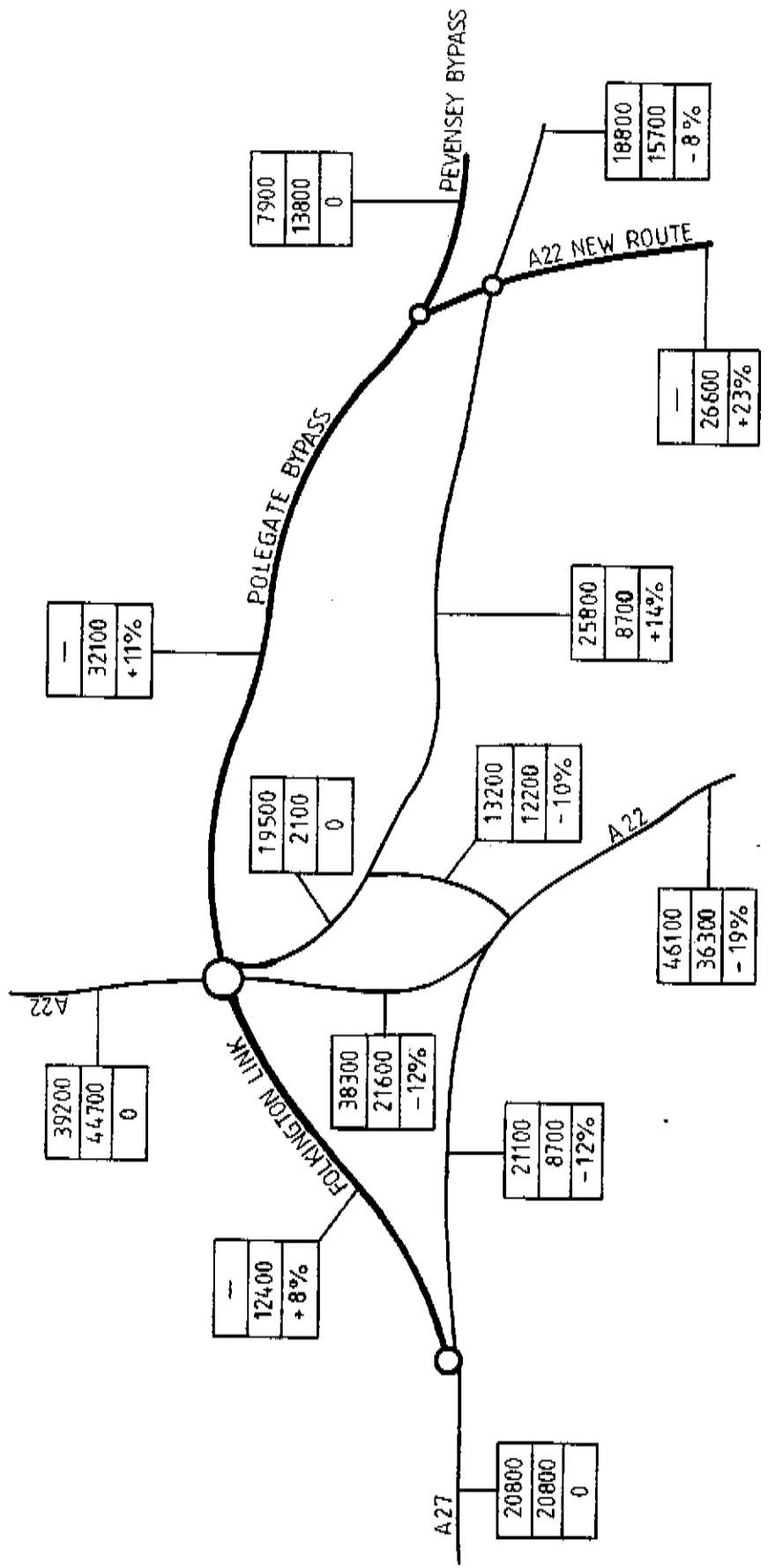
Although there are the local differences described above, the overall effect within the cordon area defined on Figure 1, is similar to that described in the Chapter 5 framework.



Do Minimum  
 Polegate Bypass and A22 Dittons to Lottbridge Drive

**Figure 10**  
 2000 AADT FLOWS HIGH GROWTH  
 PRIOR TO OPENING OF  
 FOLKINGTON LINK

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**Figure 11**  
**2010 AADT FLOWS HIGH GROWTH**  
**POSSIBLE EFFECTS OF**  
**FULL A22 NEW ROUTE**

Do Minimum
2010 Flows with Folkington Link Polegate Bypass and A22 Dittons to Lottbridge Drove
Possible % change with full A22 New Route

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Situation in the Year 2010 with full East Sussex County Council proposals to Eastbourne Town Centre

6.7 The predicted traffic levels for this situation would not cause any major changes in noise level to those described in the Chapter 5 framework. Differences, when they occur, are limited to less than 1 dB(A) although this will generally be an increase.

**Air Quality**

Situation in the first year of opening - 1996

6.8 Concentrations of peak hour carbon monoxide emissions have been calculated for 1996 assuming the Polegate Bypass is in place and also for the do-minimum situation. The concentrations have been calculated using the method described in 4.32 and 4.33. The predicted concentrations are given in table 6.1.

Table 6.1  
1996 Predicted Carbon Monoxide Concentrations (ppm)

Receptor	CO Concentrations (ppm)	
	Do Minimum	PB + A22/1
Brookside Avenue	2.2	1.92
Bay Tree House	0.17	0.56
Bay Tree Cottage	--	0.47
1 Sayerland Road	1.07	0.28
35 Hailsham Road	1.85	0.23
31 Sayerland Road	--	0.57
66/78 Station Road	2.81	1.20
Wyvern, Dittons Road	1.75	0.65

Comparing the Do Minimum levels in Table 6.1 with those in Table 4.1 it can be seen that concentrations in 1996 are around three times greater than those predicted for 2010. This is because the effects of catalytic converters are greater in 2010. The predicted levels for 1996 are below 4 ppm, the level above which

the Department of Transport's Manual of Environmental Appraisal states there is a possibility of an air pollution problem.

#### Situation in the Year 2010 with Full East Sussex County Council Proposals to Eastbourne Town Centre

- 6.9 Peak hour concentrations of carbon monoxide would be not very different from those given in Table 4.1 for Folkington Link plus Polegate Bypass, plus the A22 New Route from Dittons to Lottbridge Drive. These levels are well below the threshold level of 4 ppm, above which there is a possibility of a pollution problem.



## **CHAPTER 7 - ALTERNATIVE PROPOSALS AND REASONS FOR CHOICE OF PUBLISHED ROUTE**

- 7.1 At the public consultation for the Folkington Link and Polegate Bypass, held in October 1989, no alternatives were put forward for the line of the Polegate Bypass as a Preferred Route had already been announced in 1982. The line presented at the 1989 public consultation was essentially the 1982 Preferred Route line (see 1.2)
- 7.2 At the 1980 public consultation for the Polegate Bypass a more northerly route (the Red Route) was also considered but this line is not compatible with the newly constructed Pevensey Bypass nor with the County Council proposals for the A22 and is therefore not considered further here.
- 7.3 At the 1989 public consultation, alternative proposals were put forward for an at grade A27/A22 junction and a single roundabout junction at Dittons. The public consultation proposal also included a bridge over the Polegate Bypass carrying a road connecting Otham Court Lane to Greenleaf Gardens. These proposals are shown in Figure 12. The public consultation proposals did not include a bridge over the bypass on the line of the Cuckoo Trail.
- 7.4 The alternative at grade junction at the A22 was rejected in favour of the grade separated option for the following principal reasons:-
- \* the grade separated layout was preferred by approximately 70% of the public responding to the consultation
  - \* the grade separated layout was preferred by East Sussex County Council, Wealden District Council and Polegate Town Council
  - \* the grade separated layout provides more flexibility for accommodating future growth in traffic.

7.5 The alternative of a single roundabout at Dittons was rejected in favour of the double roundabout layout for the following principal reasons:-

- \* the double roundabout layout was preferred by approximately 75% of the public responding to the layout consultation
- \* it was considered the double roundabout option was superior in terms of traffic hierarchy as local traffic on Dittons Road remains separate from trunk road traffic.

7.6 The public consultation proposal of an Otham Court Lane overbridge provided a means for northbound A22 traffic to access the Bay Tree Lane, Sayerland Lane, Otham Court Lane areas and also provided a pedestrian and equestrian route across the bypass to replace the severed Sayerland Road and Cuckoo Trail.

7.7 The proposal of an overbridge to provide a link from Greenleaf Gardens to Otham Court Lane was opposed by residents of the housing area south of Sayerlands on the grounds of encouraging through traffic to use unsuitable estate roads. East Sussex County Council, Wealden District Council and Polegate Town Council also requested that alternatives to this option be investigated. Representations were also received that a separate bridleway bridge should be provided at the Cuckoo Trail and that there should also be a grade separated equestrian crossing of the A22.

7.8 An alternative proposal was developed of providing a link to Bay Tree Lane from the A22 northbound carriageway via an A22 underpass, and also providing a Cuckoo Trail overbridge.

7.9 This solution was adopted in favour of the public consultation proposals for the following principal reasons:-

- \* no additional traffic should occur on the housing estate roads south of Sayerland Road

- \* the A22 underpass provides a safer A22 crossing facility for equestrians and pedestrians in addition to its function of maintaining access to Bay Tree Lane from the A22 northbound carriageway
  
- \* equestrians and pedestrians remain on the line of the existing Cuckoo Trail and the overbridge also permits equestrian and pedestrian movements from the Bay Tree Lane area to the Greenleaf Gardens Area.

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**A27 POLEGATE BYPASS**

**ENVIRONMENTAL STATEMENT**

**NON-TECHNICAL SUMMARY**

**NOVEMBER 1991**



## **NON TECHNICAL SUMMARY**

### **Introduction**

The Secretary of State for Transport has published an Environmental Statement which describes the assessment of the environmental effects of the proposed A27 Polegate Bypass. This is a summary in non-technical terms of the Environmental Statement prepared for the Polegate Bypass. The Statement describes the environmental effects of the published scheme and what will be done to reduce them.

### **Background**

The existing A27 route passes east-west through the built up area of Polegate. The standard of carriageway, the road alignment, and the many side road junctions and private accesses make the route unsuitable even for the existing volumes of traffic, increasing the risk of accidents. These problems, and environmental disbenefits for residents adjacent to the route, such as noise, air pollution and traffic delays, will grow with increasing traffic unless a bypass scheme for Polegate is implemented.

The proposed Polegate Bypass is one of a number of schemes in the Department of Transport's National Trunk Road Programme for the improvement of the A27. A preferred route for the Polegate Bypass was announced in May 1982 following a Public Consultation in 1980. The route of the published scheme is essentially the same as this preferred route.

### **The Published Scheme**

The published scheme for the Polegate Bypass is shown in the attached figure. At its western end there would be a junction with the A22 at Cophall Farm. The new road would run eastwards to join the recently completed Pevensey Bypass at Dittons, east of Polegate.

The published scheme is compatible with East Sussex County Council proposals for dualling the A22 northwards to Nightingale Farm and with the A22 New Route from Dittons to Lottbridge Drove.

The western junction would consist of an elevated roundabout at the intersection with the existing A22, with east facing slip roads descending to join the Polegate Bypass. Hailsham Road would be realigned to connect with the roundabout. The elevated roundabout would allow for a future two level junction at this location with a future A27 route from Lewes passing under the A22. The junction would be lit. Extensive earth mounding around the junction would provide visual screening.

A link would be constructed between Bay Tree Lane and the northbound carriageway of the A22 and would pass beneath the realigned A22 dual carriageway via an underpass just north of the Cophall Farmhouse. The link would maintain a convenient route for traffic from Polegate south of the bypass to access Bay Tree Lane, Sayerland Lane and Otham Court Lane. The underpass would also provide a safe means for equestrians and pedestrians to cross the A22.

The bypass would be a dual two lane carriageway. East of the A22 junction the bypass would be in cutting to beyond the Cuckoo Trail, a long distance footpath along the line of the disused Heathfield to Polegate railway line. The Cuckoo Trail would be carried over the new road on a bridleway/footpath bridge.

Some 300 metres east of the Cuckoo Trail the route would emerge from cutting onto low embankment before returning to cutting under Shepham Lane. Earth mounding would be constructed along both sides of this section of the route for screening purposes. At Shepham Lane an over-bridge would be provided for equestrians, pedestrians, cyclists and farm vehicles.

East of Shepham Lane the road would be constructed above existing ground level as far as the Dittons Junction, where it will connect to the Pevensey Bypass and Dittons Road by a double roundabout junction. Earth mounding to provide visual screening would be constructed on the west side of the junction and on the south side of the Polegate Bypass on the approach to the junction. The junction would be lit.



New link road provides convenient access from A22 northbound to Bay Tree Lane via an underpass which also provides a safe crossing for pedestrians and equestrians

East Sussex County Council Proposals for A22 Dualling

New bridleway route

Cuckoo Trail carried over bypass on bridleway bridge

Footpath 15 diversion

Bridleway/Farm accommodation bridge provided at Shepham Lane. Shepham Lane stopped up for vehicular traffic

Dual carriageway Polegate Bypass

Footpath 19 diversion

Single carriageway link to Pevensey Bypass

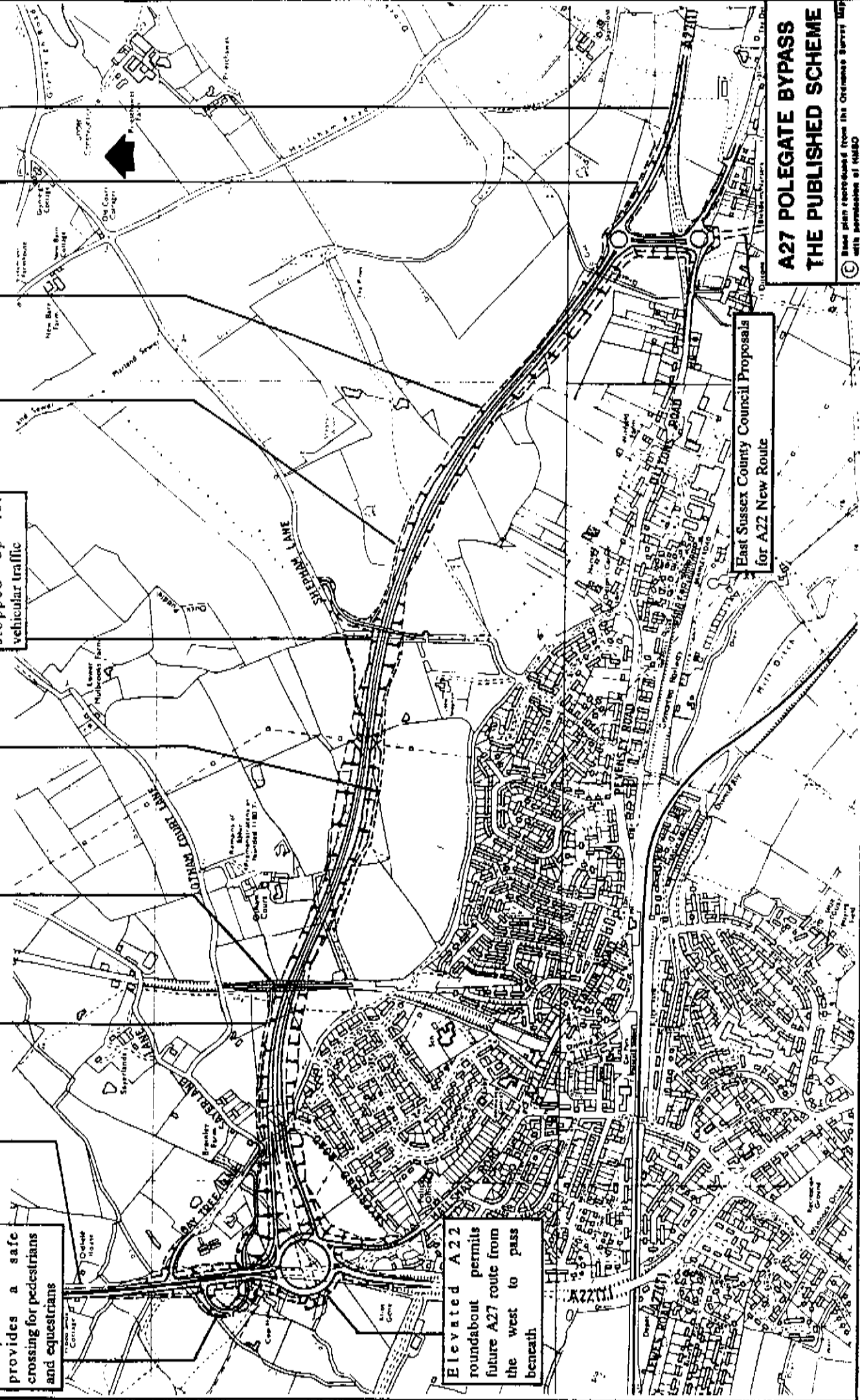
Footpath 17b diversion

Elevated A22 roundabout permits future A27 route from the west to pass beneath

East Sussex County Council Proposals for A22 New Route

# A27 POLEGATE BYPASS THE PUBLISHED SCHEME

© This plan reproduced from the Ordnance Survey Map with permission of H.M.S.O.





Three residential properties would be demolished, a pair of semi-detached properties in Sayerland Road and New Barn Farm. The garage of Cophall Farmhouse would also be affected.

## **Environmental Effects and how these will be reduced**

### **Introduction**

In designing the scheme account has been taken of landscape and visual amenity, ecology, the cultural heritage, agriculture and community impacts such as severance, noise and air quality. Mitigation measures have been incorporated where possible.

### **Landscape**

The western junction design, with the A22 roundabout elevated over the (future) A27, permits more effective screening of the junction than would have been the case had the A27 been designed over the A22. Visual intrusion is thereby reduced.

The western junction would be visible from a number of properties along Sayerland Road to the south, Bay Tree Lane to the east and several single properties. Extensive earth mounding and shaping around the junction would provide visual screening. The earthworks would be densely planted, in time creating a wooded setting to the junction which would help to reduce the effect of lighting on properties and further screen views of the traffic.

Much of the road would be in cutting. This reduces the effects of the road on views from properties in the surrounding area. It also allows the Cuckoo Trail and Shepham Lane overbridges to be only slightly raised above the existing ground level.

There would be dense planting along both sides of the road for most of its length, with some small field corners planted to provide additional screening. The planting of hedgerows is also proposed in several locations to tie into the existing pattern of field boundaries.

The eastern junction would also be set into a small woodland to screen the roundabout and lighting from housing along the former A27.

### Agriculture

Seven land holdings would lose land presently used for grazing, exercising horses, and growing fodder and other crops. Cophall Farm and Bay Tree House Farm would be particularly affected.

There are relatively few areas of severed land. However, at Priesthawes Farm, where a large area of land would be severed, the bridleway bridge at Shepham Lane would be constructed to also accommodate farm vehicles. On Sharnfold Farm, access to land severed to the south of the proposed bypass would be possible by the existing local road network.

Consideration has been given to reducing unnecessary disruption to farmland by locating proposed landscaping in agricultural areas which would no longer be viable due to their size or shape.

### Noise and Air Quality

The vertical alignment of the route has been chosen to reduce noise impact by placing much of the road below existing ground level. Earth mounding and acoustic fencing are also proposed in the most sensitive locations, such as at properties in Sayerland Road and Sayerland Lane, Cophall Farm, Otham Court and properties on the north side of the existing A27 near the proposed roundabout junction. Taking overall account of the above effects of the scheme in the year 2010, compared with existing levels, it is predicted that approximately 760 residences would experience noticeable increases in noise levels and 780 residences would experience noticeable decreases in noise levels.

## Construction

The construction period for the bypass is likely to be two years. Construction would require temporary diversions of traffic at the A22 and Hailsham Road, utilising parts of the newly constructed permanent works and also requiring other temporary works to generally maintain a two way flow of traffic. Similar, but less extensive temporary diversion works would also be required during construction of Dittons Junction.

## Wildlife and Conservation

There are no locally or nationally designated sites of nature conservation value along the published route. The ecological interest of the area is limited as a large number of the fields are used for arable crops and have been improved for agricultural purposes.

The road avoids all blocks of woodland. However, the proposed route would result in loss and fragmentation of small sections of mature hedgerow, scrub and trees. The loss of habitat would in time be compensated for by the extensive planting proposals. Provisions would be incorporated into the road design to prevent any loss of or disruption to badger social groups by providing links across the bypass between existing badger paths and foraging areas.

## Cultural Heritage

The main area of historic interest is Otham Court, which is located to the east of the Cuckoo Trail. The house is a Grade II listed building and the chapel is listed a Grade II\*. The chapel is also classified as a Scheduled Ancient Monument, and the area around the house and chapel is also designated a non-statutory site of archaeological interest. The proposed route and associated earthworks would encroach onto the southern edge of the non-statutory site of archaeological interest.

## **Alternative Proposals and Reasons for Choice of Published Route**

At the public consultation for the Folkington Link and Polegate Bypass, held in October 1989, no alternatives were put forward for the line of the Polegate Bypass as a Preferred Route had already been announced in 1982.

At the 1980 public consultation for the Polegate Bypass a more northerly route was also considered but this line is not compatible with the newly constructed Pevensey Bypass nor with the County Council proposals for the A22.

At the 1989 public consultation, alternative proposals were put forward for a ground level A27/A22 junction and a single roundabout junction at Dittons. The public consultation proposal also included a bridge over the Polegate Bypass carrying a road connecting Otham Court Lane to Greenleaf Gardens. The public consultation proposals did not include a bridge over the bypass on the line of the Cuckoo Trail.

Following consideration of the responses to Public Consultation the following decisions were made:-

- The alternative ground level junction at the A22 was rejected in favour of the two level junction because it was preferred by 70% of the public who responded and by East Sussex County Council, Wealden District Council and Polegate Town Council and, also, because the layout provides more flexibility in accommodating future growth in traffic.
- The alternative of a single roundabout at Dittons was rejected in favour of the double roundabout layout because it was preferred by 75% of the public who responded and because the option was considered superior because traffic on Dittons Road remains separate from trunk road traffic.

- In the light of the opposition to the Otham Court Lane overbridge proposal, on the grounds of encouraging through traffic to use unsuitable estate roads, and representations to provide a bridleway bridge for the Cuckoo Trail and a safe equestrian crossing of the A22, an alternative to the Otham Court Lane overbridge was developed. This proposal, now part of the published scheme, involves a link to Bay Tree Lane from the A22 northbound carriageway via an A22 underpass and also the provision of a Cuckoo Trail overbridge.

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**APPENDIX 1**

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## **APPENDIX 1 - PLANNING POLICIES**

### **POLICY DOCUMENTS**

Polegate is located within Wealden District of East Sussex County. The planning context at the county level is provided by the East Sussex Structure Plan, 6th Alteration. This document was approved by the Secretary of State, with modifications on 24th January 1991, and contains policies for the period 1986-2001. The overall strategy of the Structure Plan aims to foster the County's economic growth, particularly with regard to the opportunities associated with the opening of the Channel Tunnel in 1993. Some of the pressures for future development from the west of the County are to be diverted to the central and eastern coastal towns of Eastbourne and Hastings, where there are fewer planning and environmental constraints.

The local planning context for Polegate is provided by the South Wealden Local Plan, Written Statement and Proposals Map. This document is in 'Deposit Draft' form, having undergone public consultation, and been to Public Local Inquiry. The Inspectors Report on the public inquiry has not yet been published. Therefore although the plan has not been formally adopted by the Borough Council, it is at an advanced stage of the planning process.

The Local Plan contains policies on housing, transport and economic development up to the year 1996, as well as general policies for the countryside and the environment.

## **STRUCTURE PLAN POLICIES**

### **Strategic and General Policies**

The East Sussex County Structure Plan seeks to maintain the existing pattern of settlement in the County, and contains a strategy of concentrating most new development within towns whilst restricting it in the countryside. In terms of the location of future development, Structure Plan Policy S9 advises that the Eastbourne/Hastings areas should accommodate a substantial proportion of growth in the County, in order to relieve some of the pressures for development from the western area of Hove and Brighton where demand for land is high, but planning and environmental constraints are greater.

Major new development is planned at Eastbourne Park with Eastbourne Borough. In relation to the Polegate area, the Structure Plan makes provision for a major new development at Stone Cross, approximately 3 km to the east of Polegate, comprising a new settlement of 1,000 dwellings and associated facilities. Elsewhere, in the countryside, the strategic planning policies seek to protect the character of the landscape, wildlife and rural land use. Policy S17 states that:

"The activities, landscape, wildlife and character of the rural areas will be conserved".

Policy S19 further advises that, "In the countryside (outside the town and village development boundaries) agriculture and woodland will remain the main land uses". Policy S20 also requires that "development and the use of land and buildings must demonstrate that a countryside location is necessary". In view of the general reduction in the need for productive agricultural land, and the need to diversify the rural economy, the Structure Plan also makes provision for some alternative uses of agricultural land, countryside and buildings in appropriate places, in accordance with the conservation and enhancement of landscape, woodland and wildlife (Policy S21).

The overall strategy for transport in the county is set out in policies S22 to S24. In general terms the strategy gives priority to the improvement of the trunk road network in order to

cater for longer distance traffic travelling to or through East Sussex, and to ensure that the County benefits from the opening of the Channel Tunnel in 1993. Policy S22 states:

"The early completion of schemes to improve the trunk road network (A21, A23, A26 (South of A27), A27 and A259) and its links to the main coastal towns will be sought to make the best use of the strategic road network in accordance with the strategy for development and change in those towns".

Policy S23 supports other improvements to the primary routes, but advises that priority will be given to improvements in urban areas and in town centres particularly.

The Structure Plan also specifies criteria which various types of development must meet. Policy S27 states:

"The Local Planning Authority must be satisfied that all development:-

- (a) Has an acceptable impact on its surroundings (including landscape and townscape), on the natural environment of the area (including preventing pollution) and on local amenity;
- (d) Does not damage conservation areas, registered Historic Parks and Gardens, Ancient Monuments, Listed Buildings or their settings, and other sites of demonstrable historical or archaeological importance;
- (e) Conserves and enhances trees, woodland and wildlife habitats;
- (f) Does not create or perpetuate unacceptable traffic or transport conditions and is well located in relation to the road network and public transport;
- (h) Is of an appropriate scale and design, including landscaping and the relationship of the development to its surroundings;

- (i) Where appropriate, provides for the satisfactory preservation of archaeological sites or areas of interest, either in situ or by excavation and recording, prior to development.

More specifically, Policy S28 sets out the criteria which development in the countryside must meet:

"The Local Planning Authority must be satisfied that development in the countryside, outside defined town and village development boundaries also:-

- (a) conserves and/or enhances the landscape and other characteristics of an area, particularly any defined areas of special character;
- (b) maintains and enhances the recreational and tourist use of the area, particularly public access to the countryside.

These policies are designed principally to assist in the detailed control of development, and aim to provide guidance to developers (both public and private) in formulating proposals, and to local authorities in judging them.

For the purposes of policy application, the East Sussex Structure Plan 6th Alteration identifies two separate policy areas; the central area which comprises Eastbourne and Wealden Districts, and the Eastern area which comprises Hastings and Rother. The Polegate area falls within the central Policy Area, where separate policies for development, transport and the environment apply.

Eastbourne forms the focus of the central policy area and is the main shopping, employment, recreational and tourist centre in the area. The overall objectives of policies for the central area are to concentrate new developments in the Eastbourne area in association with an improved road network to serve this growth. Elsewhere, development will be more closely related to the requirements of the local economy and the need to protect the areas countryside, including the Sussex Downs Area of Outstanding Natural Beauty. The major exception to this is the major housing development at Stone Cross. Policy CA/H4 of the

Structure Plan makes provision for about 1,000 dwellings, together with a new primary school and other facilities at Stone Cross, separate from the existing built-up areas of Polegate and Westham and from the Borough of Eastbourne.

### **Central Area Policies - Economic Development**

The Structure Plan seeks to concentrate employment growth in the Eastbourne area, elsewhere provision for business parks on greenfield sites will be made in association with an improved road and transport network. Policy CA/E1 states:

"In Eastbourne and surrounding areas the provision of more jobs for existing and future residents and the expansion and broadening of the economic base will be encouraged. Following further investigation of the scale, type and timing of development required this will include:-

- 1) making major land allocations for employment uses:
  - (a) in association with the completion of the A27 Polegate By-pass, the A22 new route and related improvements, and investigation of the potential for rail access;  
..."

### **Central Area Policies - Transport**

The A27/A259 Brighton to Rye is the main west-east communication link, and the A22 provides the principal north-south route in the central policy area. The Structure Plan notes that the A27/A259 trunk road already has by-passes planned at Polegate and Pevensey. These are considered to be of prime importance because they not only alleviate traffic problems in towns by concentrating traffic onto this route, but also they will accommodate the traffic generated by the additional housing and business development proposed in the Eastbourne area and provide further opportunities for the location of new businesses. Policy CA/T2 therefore states:

"The early completion of improvements to the south coast trunk road (A27 and A259) by the Department of Transport will be encouraged, including:-

- (a) The Pevensey By-pass;
- (b) A By-pass to Polegate, including its westward extension to the A27;
- (c) Comprehensive improvements of the A27 between the Polegate area and Lewes.

Elsewhere, improvements to the primary road network in the Eastbourne area, are dependent or associated with the by-passes on the A27. Policy CA/T1 advises that the scale and timing of improvements to main roads in the area, particularly the primary routes A22 and A26 will be governed by the priority which should be attached to improving the A23, A27, A259 and A21 trunk roads as the main county accesses and through routes. In particular, Policy CA/T3 notes that "priority will be given to providing a new A22 into Eastbourne planned in conjunction with improvements to the A27".

Clearly, the provision of the Polegate By-pass is of great significance for improvements to the A22, since the County Council would not entertain the construction of the new A22 route into Eastbourne prior to the A27 construction. An area of land has now been safeguarded for the new A22 route.

### **Central Area Policies - Conservation and Protection of the Environment**

The Central Policy Area contains landscape and countryside of national importance including the Sussex Downs Area of Outstanding Natural Beauty, and the Heritage Coast. Elsewhere, landscape not subject to statutory designation, is protected by open countryside policies to protect its character and prevent the coalescence of settlements. Policy CA/EN1 seeks to "conserve the landscape, natural resources, woodland and agriculture of the rural areas", and Policy CA/EN2 contains a presumption against development which would reduce gaps of open countryside, including between Polegate and Hailsham, Eastbourne, Pevensey, Westham and Stone Cross.



Policy CA/EN5 specifically seeks to protect rural character and states:

"The special character of the countryside and villages will be protected and enhanced to conserve natural resources and landscape and to provide for informal recreation".

The importance of the countryside for informal recreation is also recognised by the Structure Plan, and Policy CA/L1 states that support will be given to "the use of the countryside on the edge of built-up areas for informal recreation and the provision of improved public access where this does not prejudice the conservation of the area".

## **LOCAL PLANNING POLICIES**

### **Policies for Conserving and Enhancing the Area**

The South Wealden Local Plan area is predominantly rural and includes large areas of high quality landscape. Accordingly an important aspect of the Plan is to protect, conserve and enhance the quality of the rural environment. Policy 10A advises that the District Council will exercise countryside conservation through the use of statutory powers and the preparation of management policies.

Within West Sussex there has been a longstanding policy of restraining residential development in the countryside and the current Local Plan seeks to continue this restrictive policy, in order to prevent the coalescence of settlements and protect rural areas from harmful development. Policy 10F is the principal policy which applies to the area north of Polegate, and states that:

"Outside the housing frameworks, as defined on the Proposals Map, the landscape and character of the countryside will be conserved".

While the Local Plan does not contain any specific policies to protect agricultural land, one of the main aims of countryside policies stated in paragraph 10.2 is to maintain and encourage appropriate agricultural and forestry activities in the Plan area.

The value of protecting trees and woodlands is recognised in Policy 10J, and through this Policy the Council aims to maintain the present level of woodland coverage. The trees which mark the northern edge of Polegate are protected by tree preservation orders. Policy 10J states:

"The important role of trees and woodland in the landscape, within urban areas and in areas proposed for new development will be maintained and enhanced".

There are no conservation areas in the vicinity of the proposed By-pass, but there are two listed buildings at Sayerlands and Otham Court. The Local Plan considers that listed

buildings are an important part of the District's heritage and should be preserved and improved wherever possible. Policy 10N states:

"There will be a presumption against proposals which involve the demolition or unsympathetic alteration of Listed Buildings".

The importance of the countryside for informal recreation is also recognised by the Local Plan, particularly for walking and riding. There are several footpaths and bridleways across the area north of Polegate, including the long distance track from Heathfield to Polegate called the Cuckoo Walk. The Local Plan proposes to maintain and improve the footpath and bridleway network, and Policy 9C states:

"The existing footpath and bridleways network will be maintained and improved where possible, and new footpaths will be provided in new housing developments which should link with the existing network where appropriate".

### **Transport, Development and Economic Policies**

The main aims of the highways and transportation policies of the Local Plan are to maintain the roads in a safe and adequate state, and to provide for new construction or the improvement of existing routes. The A27/A259 is the main east-west route in the Local Plan area, and provides a link between the south coast ports and the north-south arterial roads. The Local Plan points out that a large number of vehicles use this route, and Polegate, Westham and Pevensey experience significant congestion from through traffic. The proposed trunk road schemes to by-pass Pevensey and Polegate, are seen to be particularly important to the Plan area. The District Council supports the County Council view regarding the urgent need to improve the A27/A259 before the proposed opening of the Channel Tunnel, since it will serve as the most direct route between Sussex and the Tunnel terminals. Policy 7B therefore supports the implementation of the Polegate By-pass at the earliest opportunity and states that:

"the Department of Transport's published route of the A27 Polegate By-pass, as shown on the Proposals Map, will be safeguarded from prejudicial development".

In December 1990, Wealden District Council amended certain proposals of the Local Plan in response to formal representations received during the deposit period. The Council resolved to include an additional policy for the consideration of major road schemes. Policy 7E states:

"In considering proposals for major road schemes, the District Council will seek to ensure that full account is taken of their impact on the landscape and the environment through detailed assessments of new schemes. The appropriate authorities will be encouraged to actively seek and consider local views.

Particular regard will be paid to proposals affecting:

- 1) the amenities and character of towns and villages;
- 2) Areas of Outstanding Natural Beauty;
- 3) other areas of designated nature conservation, woodland or historic importance;
- 4) the character and setting of listed buildings and conservation areas".

In terms of economic development, the Local Plan considers that improving communications will help to make the area more attractive to business investment. The upgrading of the A27 is intended to improve accessibility particularly to the Brighton conurbation and ultimately from the Channel Tunnel. The Local Plan policy for economic development seeks to concentrate industrial uses into the main industrial estates, in order to satisfy environmental, traffic and servicing considerations. Policy 5A seeks to encourage new firms wishing to locate in the area, or firms wishing to expand, to locate in recognised industrial areas, including the Chaucer Industrial Estate in Polegate. However, given the proximity of residential properties and the need to maintain the gap between Polegate and Stone Cross, opportunities for expansion of the Chaucer Industrial Estate are seen as limited.

With the exception of the major housing development at Stone Cross there are no other significant areas proposed for development. The housing framework which forms the unit to the development of the settlement is drawn tightly around Polegate, and no new allocations are planned. During the preparation of the Local Plan an appraisal was made by Wealden District Council of all the land in and around Polegate to establish whether there were any

sites suitable for further development. Land to the west, mostly within the Sussex Downs Area of Outstanding Natural Beauty, was ruled out on landscape grounds. Expansion was also ruled out to the north, where it was considered development would be particularly intrusive and where the existing built-up area is clearly defined by the substantial tree line.

In relation to shopping policies, Polegate is an important district centre for many of the surrounding rural parishes, and the Local Plan policy seeks to maintain and improve the level and choice of shopping facilities within the Plan area. Policy 8A advises that further shopping development will be encouraged on suitable sites within the main shopping areas of Polegate.

## EASTBOURNE PARK PLAN

The Eastbourne Park District Plan was adopted by Eastbourne Borough Council in February 1990, and covers 523 hectares of land which forms part of the low-lying wet grazing land of the Willington levels. The northern boundary of the plan area follows the line of the railway, and extends within 100 m of the A27 to the north. While the preferred route for the Polegate By-pass does not fall within the Plan area, the policies of the Eastbourne Park District Plan encompass the strategic road network and therefore have implications for the A27 By-pass.

The overall objective of the Eastbourne District Plan is to retain a substantial and visual significant area of recreational open space within easy access to the core of the built up area. The bulk of the Eastbourne Park area consists of drained marshland, a large proportion of which is in agricultural use. The policies of the Plan are designed primarily to restrain pressures for development in the park area, and to protect open space for existing and anticipated future leisure and recreational needs.

While the majority of the land use and environmental policies of the plan are not directly applicable to the Polegate By-pass, the highway and transportation policies and proposals of the Plan provide additional support to the case for A27 improvements. Paragraph 7.5 acknowledges that since the majority of traffic entering the Eastbourne area uses the A27/A259 east-west, south coast trunk road, the comprehensive proposals by the Department of Transport to improve this route are welcomed and in particular the proposals for the early construction of the Polegate and Pevensey By-passes.

Policy HT1 states that:

"The County Council Structure Plan and Transport Policy and Programme policies encouraging the Department of Transport to improve the A27/A259 South Trunk Road, in particular the early construction of the Polegate and Pevensey By-passes, are fully supported".

Policy HT3 provides further support to the proposed A22 new route connecting Eastbourne to the Pevensey and Polegate By-passes. While this A22 route bisects the Shinewater section of Eastbourne Park, the new route is favoured in order to ameliorate existing traffic problems and improve regional connections to Eastbourne.

Policy HT3 states,

"Land will be reserved for the following strategic road scheme: The A22 new route connecting Eastbourne to the Pevensey and Polegate Trunk Road By-passes passing east of Hampden Park, connecting Willingdon Drove to Lottbridge Drove and then following a south-westward alignment north of the Bridgemere Estate (Southbourne link road) before connecting to the town centre network north of Whitley Road bridge".

The Eastbourne Park District Plan therefore provides additional policy support to the A27 Polegate By-pass. The preferred route of the By-pass would not prejudice the overall objectives of the Plan, namely to retain a substantial area of recreational open space within close proximity to the built up area. Indeed the plan specifically recognises the importance of improved communications to the continued attractiveness of Eastbourne as a tourist centre.

## PLANNING POLICY ANALYSIS

The provision of the A27 Polegate By-pass is wholly supported by the East Sussex Structure Plan and the South Wealden Local Plan. Both documents recognise the importance of improving communications, not only to relieve pressures on urban communities but also to improve accessibility to and through the area. Improvements to the A27 in particular, are seen as a means attracting new business investment into the Eastbourne area and of reaping benefits from the proximity of the Channel Tunnel terminals scheduled to open in 1993.

While the proposed route of the Polegate By-pass runs through attractive open countryside, the area north of Polegate is not protected by any special landscape designations. The road alignments have been carefully designed, and the use of cuttings and earth mounding has minimised potential visual impact. There are no major tree losses. The main areas of planning policy conflict relate to the adverse impact on the setting of the Otham Court complex of listed buildings and Scheduled Ancient Monuments. There are some changes to rights of way which may be contrary to local planning policy to maintain public access to the countryside, although routes have been protected wherever possible. Clearly the introduction of a new road, reduces the gap of open countryside between Polegate and Hailsham to the north, and may also lead to pressure to expand the settlement to the north, up to the line of the by-pass.

To summarise, while it is recognised that the provision of a new road conflicts with policies to protect open countryside and rural character, both the strategic and local planning documents wholly support the provision of the A27 Polegate By-pass in principle. Clearly, the detailed design should respect policies to protect nature or heritage conservation, and the impact on trees, listed buildings, scheduled ancient monuments and rights of way should be minimised wherever possible. A full appraisal of the planning policy and land use impacts of the proposed route is provided in the appraisal framework.





**HIGHWAYS**  
AGENCY

UNCLASSIFIED

TOLLGATE HOUSE

**HA 044/027/000269 1**

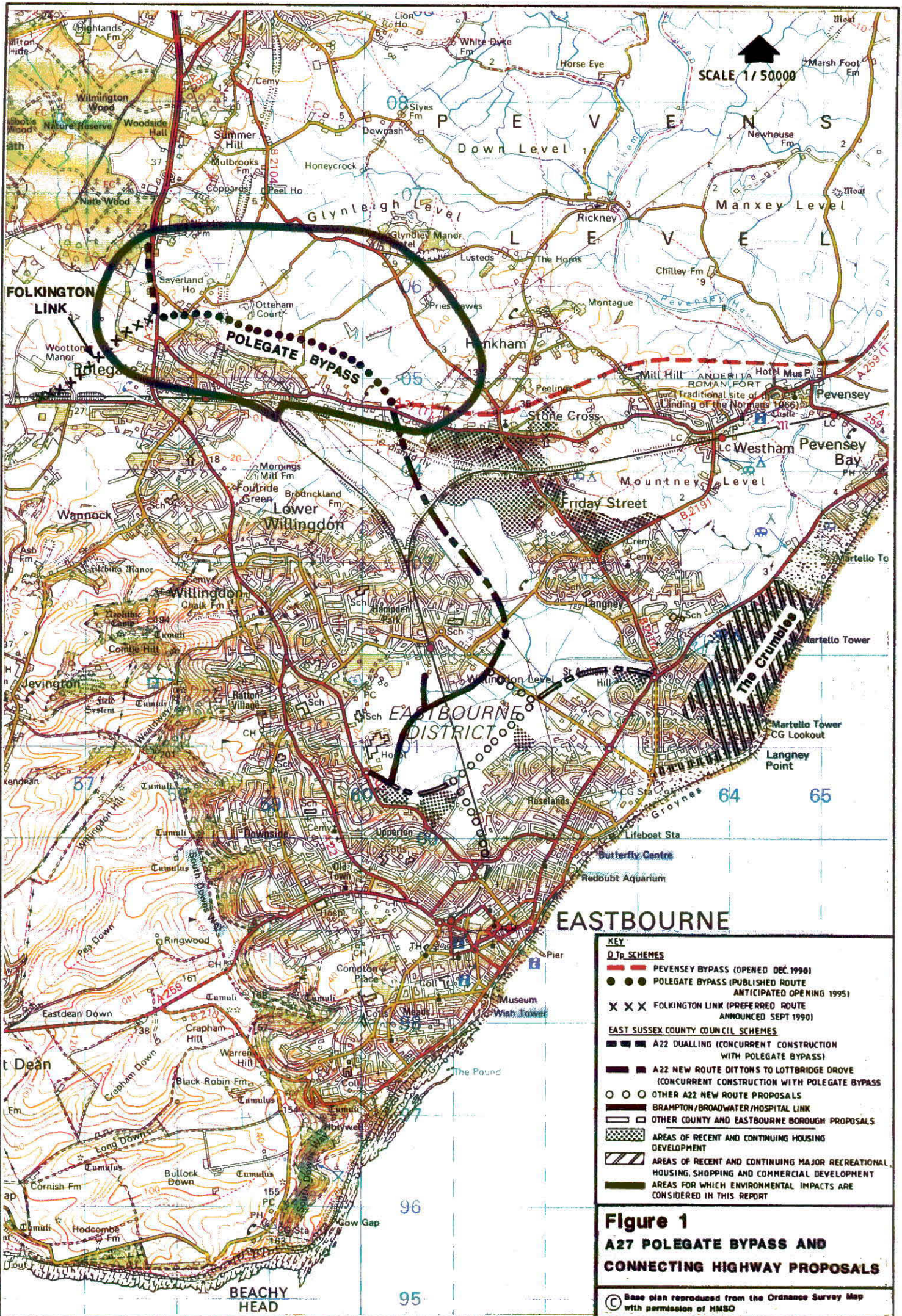
ENVIRONMENT & LANDSCAPE  
Environmental Statement

18/03/2001 15:21:03

# **A27 POLEGATE BYPASS – ENVIRONMENTAL STATEMENT 11/91**



\*HA 44/27/269# 1\*

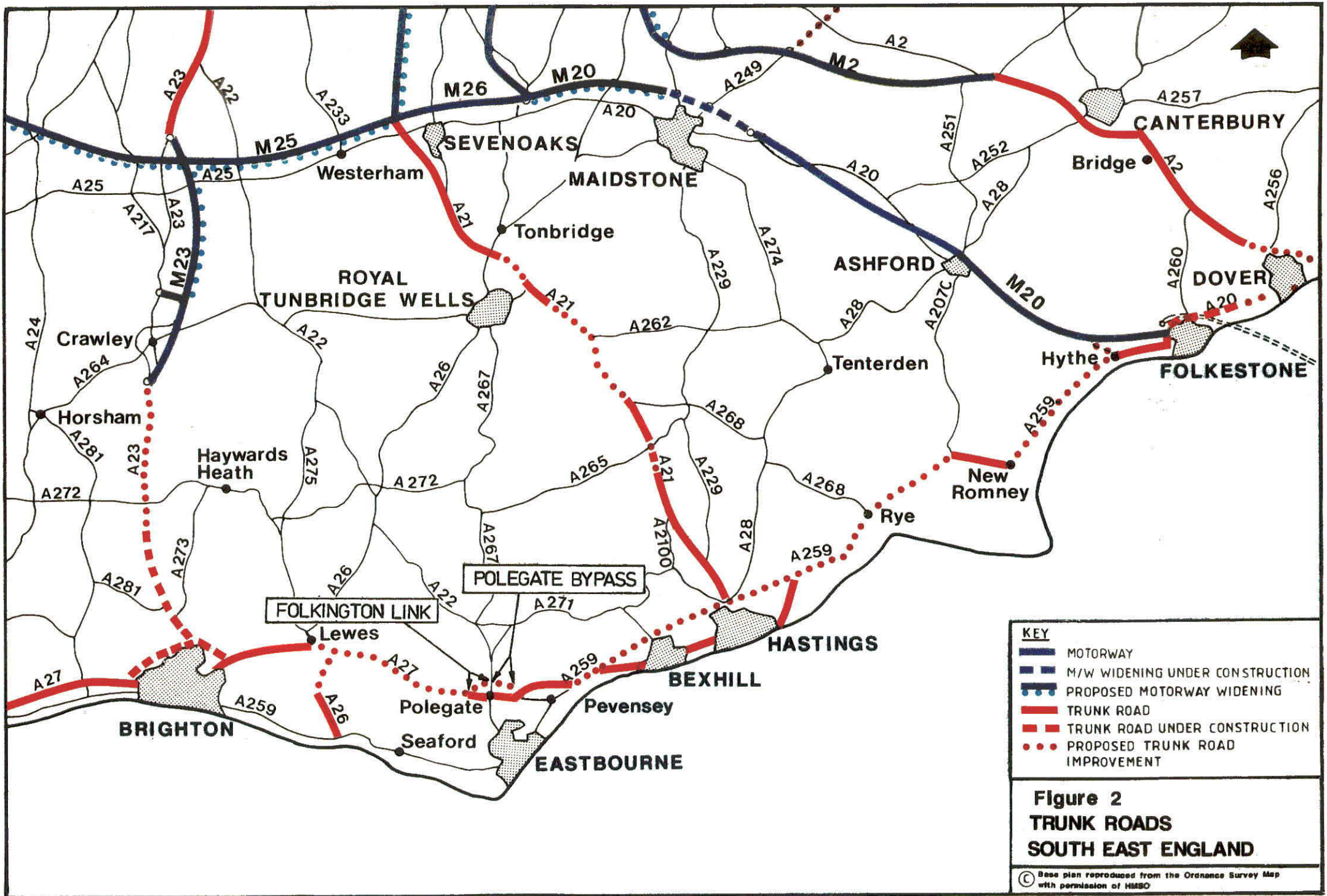


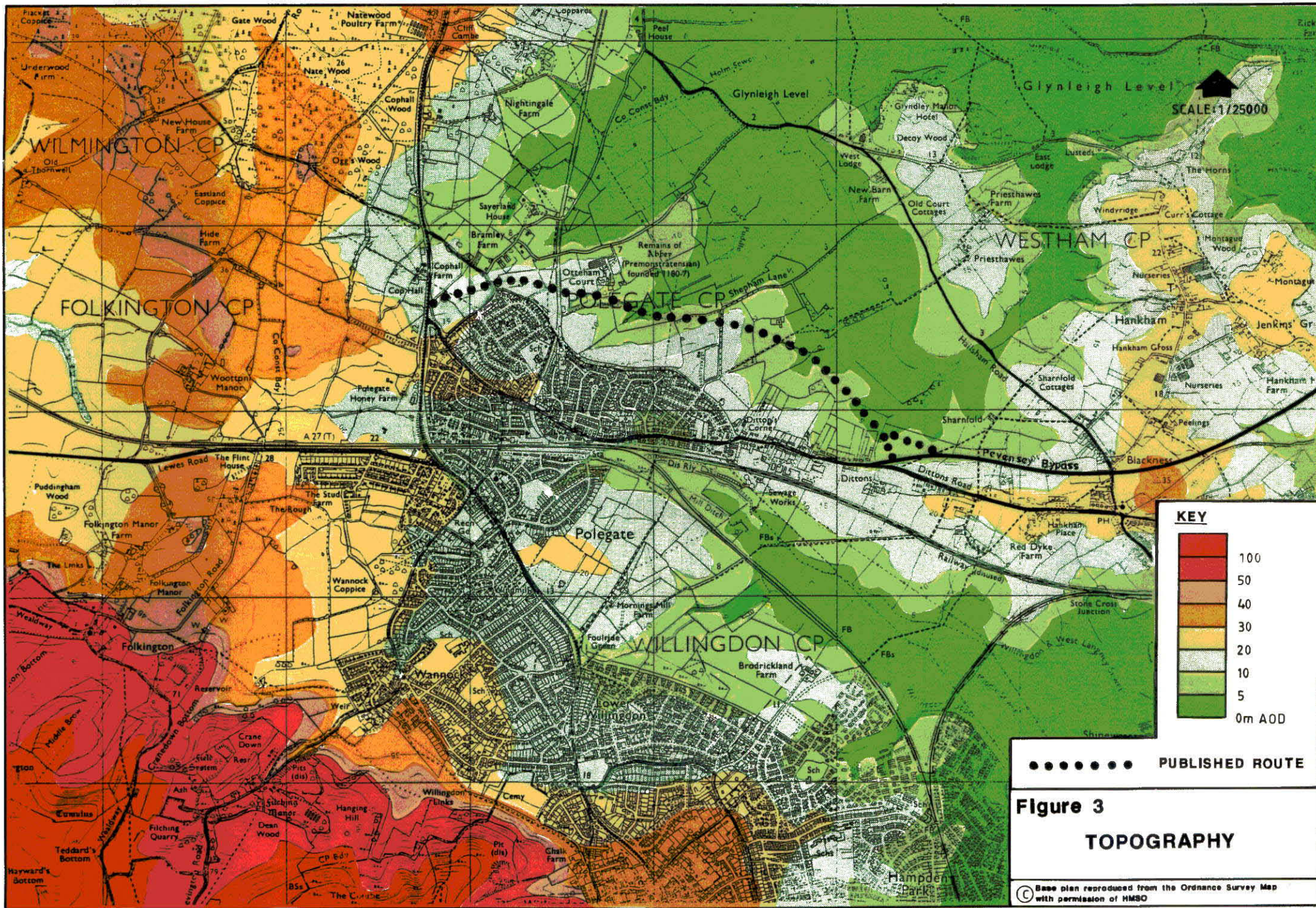
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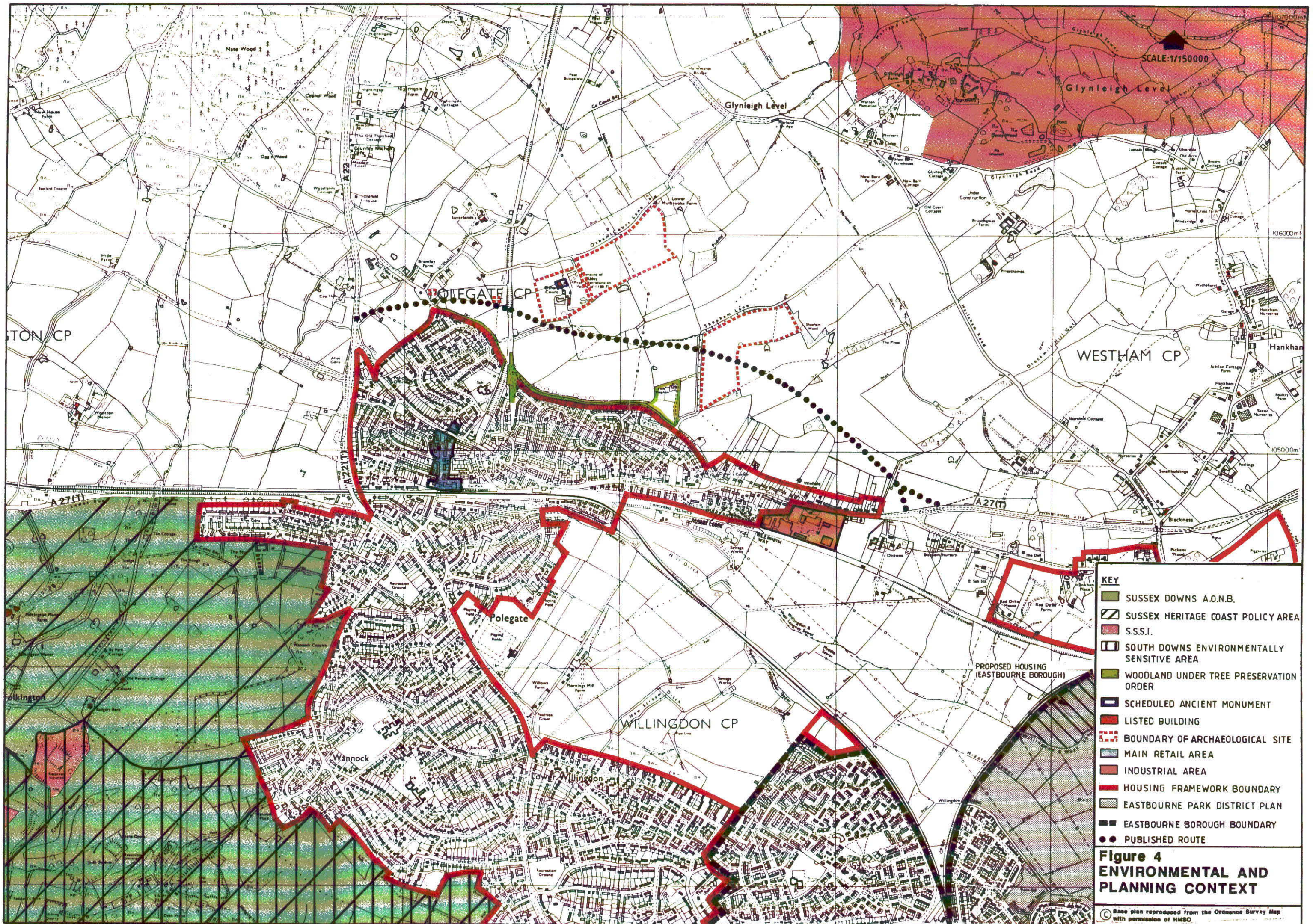
- KEY**
- Dotted line** PEVENSEY BYPASS (OPENED DEC 1990)
  - Dotted line with dots** POLEGATE BYPASS (PUBLISHED ROUTE ANTICIPATED OPENING 1995)
  - XXXX** FOLKINGTON LINK (PREFERRED ROUTE ANNOUNCED SEPT 1990)
  - East Sussex County Council Schemes**
  - Thick dashed line** A22 DUALLING (CONCURRENT CONSTRUCTION WITH POLEGATE BYPASS)
  - Thick solid line** A22 NEW ROUTE DITTONS TO LOTTBRIDGE DROVE (CONCURRENT CONSTRUCTION WITH POLEGATE BYPASS)
  - Thin solid line** OTHER A22 NEW ROUTE PROPOSALS
  - Thin dashed line** BRAMPTON/BROADWATER/HOSPITAL LINK
  - Thin solid line** OTHER COUNTY AND EASTBOURNE BOROUGH PROPOSALS
  - Stippled area** AREAS OF RECENT AND CONTINUING HOUSING DEVELOPMENT
  - Hatched area** AREAS OF RECENT AND CONTINUING MAJOR RECREATIONAL, HOUSING, SHOPPING AND COMMERCIAL DEVELOPMENT
  - Green outline** AREAS FOR WHICH ENVIRONMENTAL IMPACTS ARE CONSIDERED IN THIS REPORT

**Figure 1**  
**A27 POLEGATE BYPASS AND**  
**CONNECTING HIGHWAY PROPOSALS**

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- KEY**
- SUSSEX DOWNS A.O.N.B.
  - SUSSEX HERITAGE COAST POLICY AREA
  - S.S.I.
  - SOUTH DOWNS ENVIRONMENTALLY SENSITIVE AREA
  - WOODLAND UNDER TREE PRESERVATION ORDER
  - SCHEDULED ANCIENT MONUMENT
  - LISTED BUILDING
  - BOUNDARY OF ARCHAEOLOGICAL SITE
  - MAIN RETAIL AREA
  - INDUSTRIAL AREA
  - HOUSING FRAMEWORK BOUNDARY
  - EASTBOURNE PARK DISTRICT PLAN
  - EASTBOURNE BOROUGH BOUNDARY
  - PUBLISHED ROUTE

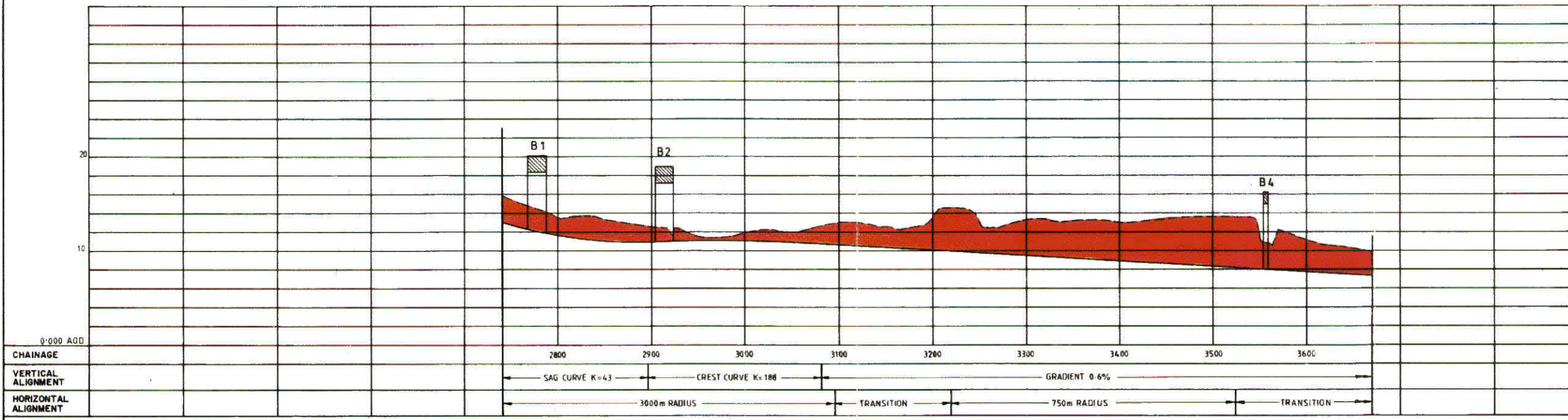
**Figure 4**  
**ENVIRONMENTAL AND**  
**PLANNING CONTEXT**

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- KEY**
- EXISTING WOODLAND, SHELTER BELTS AND HEDGEROWS
  - PROPOSED INTERMITTENT PLANTING
  - PROPOSED DENSE PLANTING
  - LAND TO BE ACQUIRED BY C.P.O. FOR ESSENTIAL LANDSCAPE WORKS
  - PROPOSED HEDGEROW PLANTING
  - EXISTING ROAD BROKEN OUT
  - CONTOURING
  - POSSIBLE OFF-SITE PLANTING (by agreement with landowner)
  - GRASS

- PROFILE KEY**
- ROUTE IN CUTTING
  - ROUTE ON EMBANKMENT



CHAINAGE	2800	2900	3000	3100	3200	3300	3400	3500	3600	
VERTICAL ALIGNMENT	SAG CURVE K=43		CREST CURVE K=188		GRADIENT 0.6%					
HORIZONTAL ALIGNMENT	3000m RADIUS				TRANSITION		750m RADIUS		TRANSITION	



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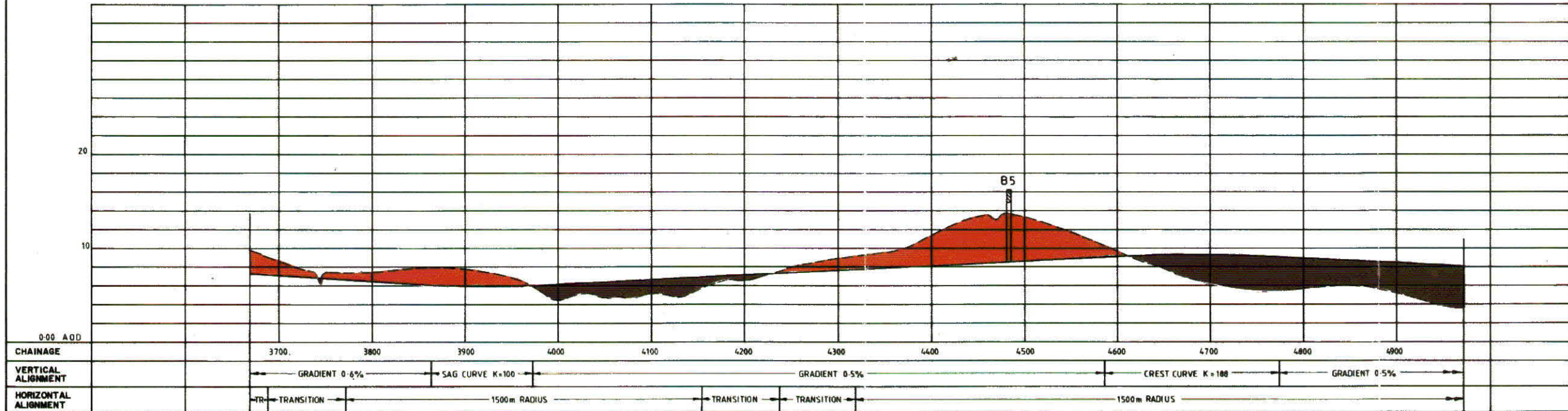
Project  
**A27 TRUNK ROAD  
 POLEGATE BYPASS**  
 Title  
**FIGURE 6  
 SCHEME DESIGN:  
 A22 TO CHAINAGE 3670**



**WS/Atkins**

- KEY**
- EXISTING WOODLAND, SHELTER BELTS AND HEDGEROWS
  - PROPOSED INTERMITTENT PLANTING
  - PROPOSED DENSE PLANTING
  - LAND TO BE ACQUIRED BY C.P.O. FOR ESSENTIAL LANDSCAPE WORKS
  - PROPOSED HEDGEROW PLANTING
  - EXISTING ROAD BROKEN OUT
  - CONTOURING
  - POSSIBLE OFF-SITE PLANTING (by agreement with landowner)
  - GRASS

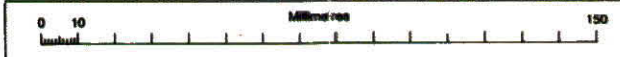
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- ROUTE IN CUTTING
  - ROUTE ON EMBANKMENT

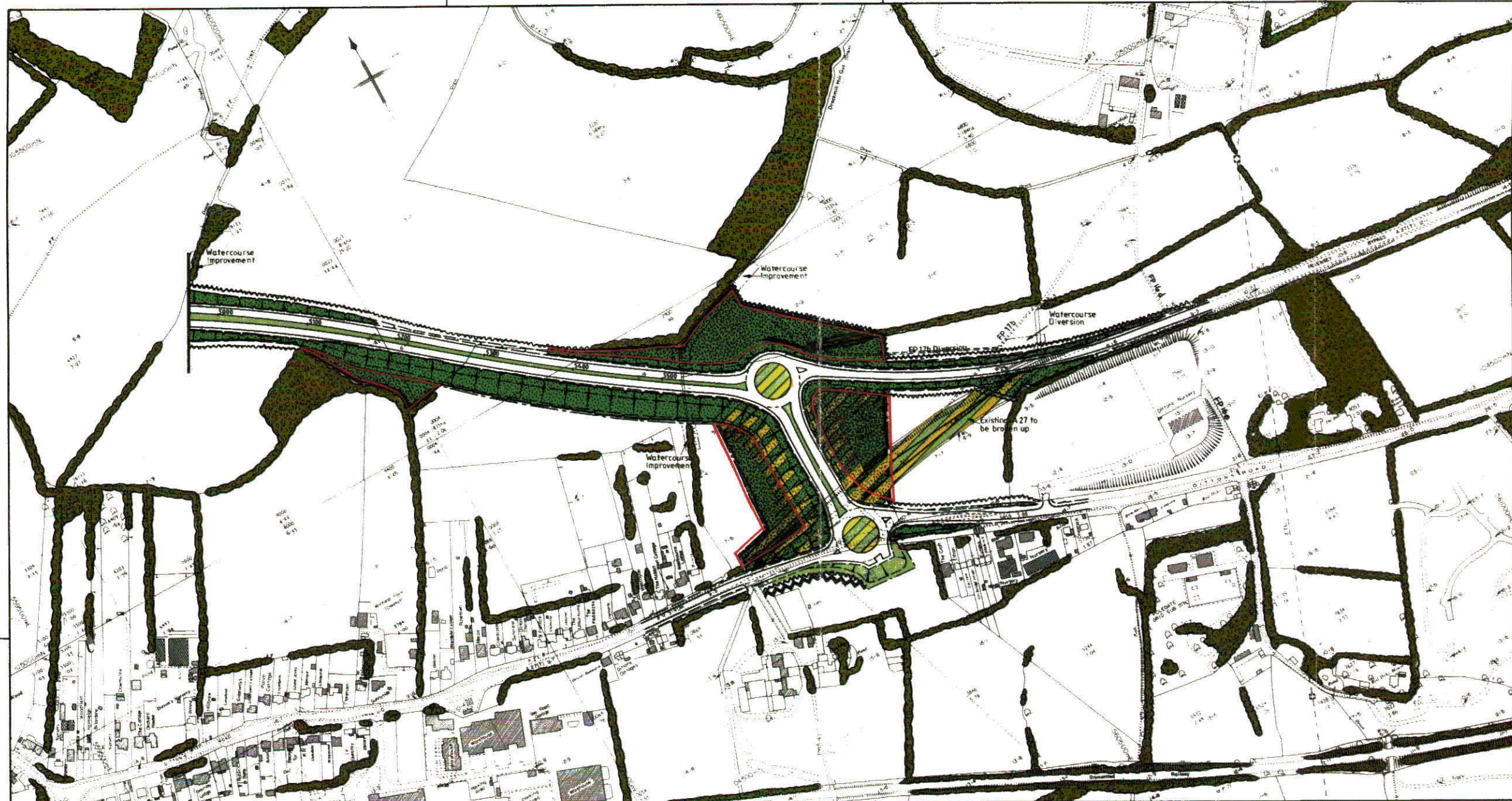


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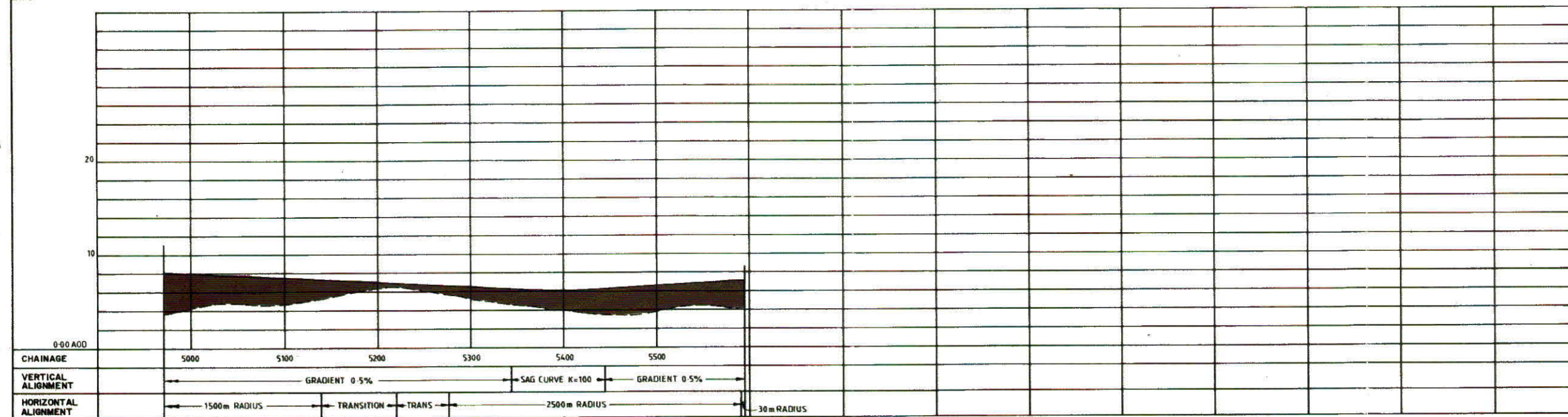
Project  
**A27 TRUNK ROAD  
 POLEGATE BYPASS**  
 Title  
**FIGURE 7  
 SCHEME DESIGN:  
 CHAINAGE 3670 TO 4970**





- KEY**
- EXISTING WOODLAND, SHELTER BELTS AND HEDGEROWS
  - PROPOSED INTERMITTENT PLANTING
  - PROPOSED DENSE PLANTING
  - LAND TO BE ACQUIRED BY C.P.O. FOR ESSENTIAL LANDSCAPE WORKS
  - PROPOSED HEDGEROW PLANTING
  - EXISTING ROAD BROKEN OUT
  - CONTOURING
  - POSSIBLE OFF-SITE PLANTING (by agreement with landowner)
  - GRASS

- PROFILE KEY**
- ROUTE IN CUTTING
  - ROUTE ON EMBANKMENT



0+00 AOD

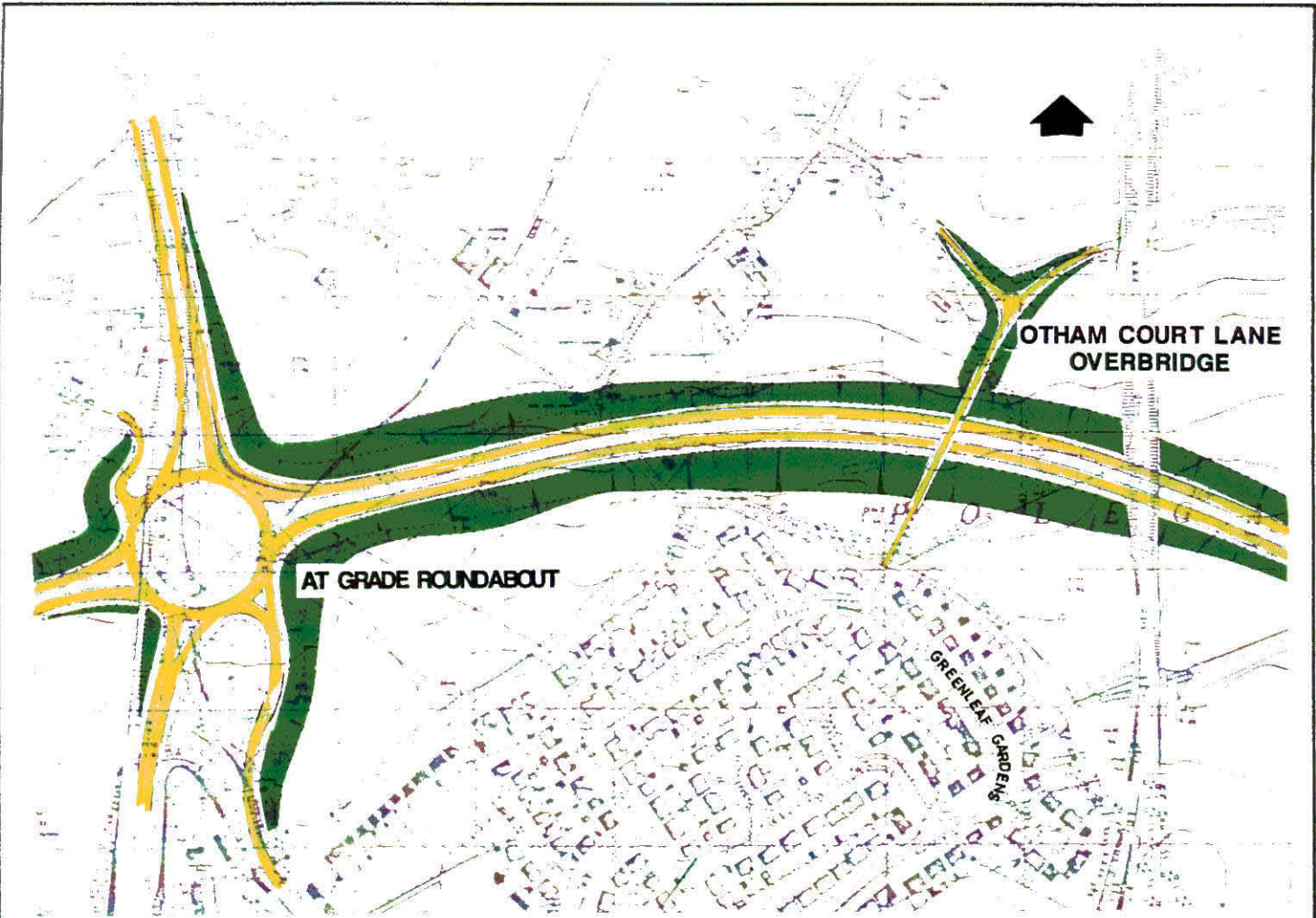


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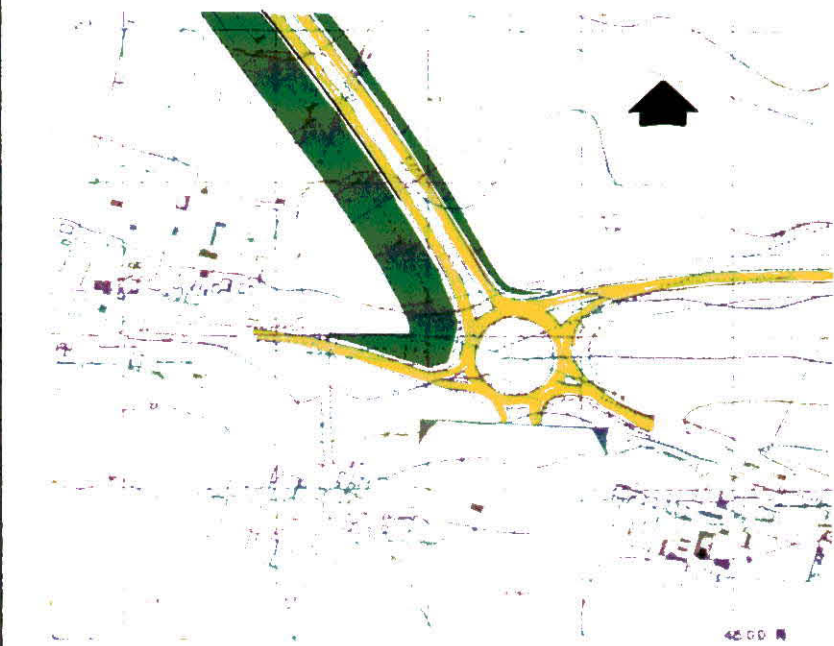
Client  
**THE DEPARTMENT OF TRANSPORT**  
SOUTH EAST CONSTRUCTION PROGRAMME DIVISION  
 PROPOSED A27 TRUNK ROAD BYPASS  
 SURREY

Project  
**A27 TRUNK ROAD  
 POLEGATE BYPASS**  
 Title  
**FIGURE 8  
 SCHEME DESIGN:  
 CHAINAGE 4970 TO  
 PEVENSEY BY-PASS**





**FROM A22 TO CUCKOO TRAIL**



**AT DITTONS**

**Figure 12  
ALTERNATIVES SHOWN AT  
PUBLIC CONSULTATION**

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