

14 PEDESTRIANS, CYCLISTS, EQUESTRIANS AND COMMUNITY EFFECTS

14.1 Introduction

14.1.1 This chapter reports on the predicted effects of the Scheme upon non-motorised movements and journeys made in the locality by pedestrians, cyclists and equestrians using a methodology based upon Volume 11 Section 3, Part 8 of (DMRB).

14.1.2 The scope of the assessment and the Study Area has been determined with reference to reports prepared for an earlier scheme being promoted by the Highways Agency in the early 1990's and the results of a public consultation exercise on the current proposal in spring 2002.

14.1.3 This chapter uses base data collected from pedestrian and cyclist surveys conducted in September and October 1994, May 2002, February 2003 and August 2003. Appendices 14.1 and 14.2 include details of the survey data.

14.2 Baseline Conditions

14.2.1 The Study Area contains a network of footpaths, bridleways, other routes with public access and minor roads. These features are shown on Figures 14.0a and 14.0b. There are also pedestrian and cycle facilities on the existing A380 from Penn Inn roundabout to Kerswell Gardens roundabout. These features are shown on Figures 14.1a and 14.1b.

14.2.2 The existing community facilities, such as schools, churches and post offices are shown on Figures 14.2a and 14.2b.

Pedestrians

14.2.3 At Newton Abbot the existing A380 separates a number of housing areas (Buckland, Newtake, Milber and Aller Park) from the centre of Newton Abbot resulting in a predominant movement of both pedestrians and cyclists across the A380 in this area. To provide for this movement there are existing subways at Penn Inn linking the four quadrants of the roundabout to the sunken central island. These subways allow full traffic free pedestrian and cycle movements.

14.2.4 In addition to the subways there is a footbridge with cycle facilities joining the Brunel Road Industrial Estate and the Buckland Estate, located approximately 600 metres north of Penn Inn.

14.2.5 South of Penn Inn the existing A380 has footways on both sides of the road catering for pedestrian movements between Penn Inn and Kerswell Gardens.

14.2.6 Approximately 300 metres south of the Penn Inn roundabout there is a zebra crossing with a pedestrian island refuge. This crossing point is linked to Addison Road by an adjacent flight of steps and ramp. At the southern end of Addison Road and western end of Aller Brake Road there are two further pedestrian refuge islands.

14.2.7 Further south between the end of the Aller Park Estate and the edge of Kingskerswell there is one central island refuge located at the end of the right turn lane to Aller Road leading the Decoy Industrial Estate. On the edge of Kingskerswell there is a pedestrian refuge at the Under Way junction leading to Coffinswell. It is understood that investigations are ongoing into up grading the latter two crossing facilities to Zebra crossings.

14.2.8 Within Kingskerswell there are three controlled pedestrian crossing facilities. The first, a Puffin crossing, near Priory Avenue is approximately 400 metres north of the Jury's Corner traffic signals. The second is at the traffic signals at Jury's Corner,

which enable pedestrians to cross the road to access Kingskerswell Primary School on Coffinswell Lane. These traffic signals have a full pedestrian phase. The third is a pelican crossing at Southey Crescent/Manor Drive. No other controlled facilities exist; although south of Kerswell Arch there are several central islands for pedestrian use. It is understood that investigations are ongoing into up grading the crossing facilities at Stadium Drive to a Zebra crossing.

- 14.2.9 At Kerswell Gardens roundabout there are traffic islands, which also serve as refuges for pedestrians crossing the A380 Torquay Road and A3022 Riviera Way. There are no pedestrian facilities on the Torbay Ring Road at Kerswell Gardens.
- 14.2.10 There are six footpaths shown on the definitive map that lie adjacent to the route of the Scheme: Footpath No. 37 north of Penn Inn, which forms part of the Templar Way; Beckett's Path, Footpath No. 45 at Penn Inn; Footpaths 39 and 40 at the top of Aller Brake Road/St Marychurch Road; and Footpaths 262 and 36 at Parsons Bridge near Edginswell.
- 14.2.11 Other paths within the Scheme corridor afford access to the Aller Park Estate, Newton Abbot and the land owned by Kingskerswell Parish Council on Kerswell Down. The public rights of way for access to the Aller Park Estate are between Addison Road and St. Lukes Road and Aller Park Road to the main A380 Torquay Road. The paths on Kerswell Downs combine with minor roads in the area giving rise to several pleasant walks.
- 14.2.12 In addition there are a further six short footpaths within Kingskerswell shown on the definitive footpath maps. These footpaths link roads within Kingskerswell or the roads to the main A380.
- 14.2.13 It is known that as part of the reinstatement of the Royal Aller Vale Quarry two new public rights of way are to be provided. One to link to Bridleway B18 and the other to link to Bridleways B8 and B5 and Footpaths FP7 and FP4. All the footpaths, other routes with public access and pedestrian facilities are shown on Figures 14.0a and 14.0b.

Cyclists and Equestrians

- 14.2.14 There is one cycleway within the Study Area north of Penn Inn, which runs parallel with Footpath 37 to link the A382 Newton Road to the Brunel Industrial Estate. There are also shared use footway/cycleway facilities at the Penn Inn roundabout, linked by segregated shared use subways.
- 14.2.15 It is understood that the cycleway north of Penn Inn will in the future form part of the National Cycle Network Route 2. The location of the existing length of cycleway is shown on Figure 14.1a.
- 14.2.16 Along the A380 and A3022 Riviera Way between Penn Inn and Scott's Bridge there are on-road cycle facilities with off-road shared use pedestrian/cycle facilities at Penn Inn and Kerswell Gardens. The location and extent of the cycleway facilities are shown on Figures 14.1a and 14.1b.
- 14.2.17 Surveys show that there are approximately 100 cyclists a day using the A380 between Kingskerswell and Kerswell Gardens.
- 14.2.18 There is one bridleway (No. 18) that runs east/west between the Royal Aller Vale and Zig Zag Quarries. The location of the bridleway is shown on Figure 14.0a.
- 14.2.19 The minor lanes in and around the oldest parts of Kingskerswell, along with Churchway Lane linking North Whilborough with Kingskerswell also afford suitable routes for equestrian activity. No specific equestrian establishment exists within the immediate area.

Public Transport

Bus Services

14.2.20 At present the Service 12 bus route operates at a 12-minute interval between Newton Abbot, Torquay and Paignton following the main A380 route from Penn Inn roundabout to Scott's Bridge. There are a number of intermediate stops in each direction along this route (as shown in Figures 14.2a and 14.2b). Whilst this service provides significant, passenger carrying capacity at an attractive frequency, the buses suffer from the same congestion problems, as other vehicles as there are no bus priority measures along the route in the Study Area. Bus stop usage figures (Bus Stop references BS1 – BS6) are shown in Figure 14.3. The figures are generated from a survey undertaken over a six day period in September and October of 1994.

14.2.21 The historic bus usage data shown in Figure 14.3 has been verified in order to ensure that the data is still valid. In order to verify the 1994 data, a survey was undertaken on Thursday 28 August 2003 to determine the usage of bus stop 1 at Penn Inn, and passenger information was supplied by Stagecoach, detailing bus stop usage for Route 12 between 18 August and 14 September 2003.

14.2.22 The table below details the results of the survey undertaken on 28 August 2003.

Date of Survey	No. of Passengers	
	Embarking	Disembarking
Thursday 28 Aug 03	76	50
Thursday 15 Sep 94	55	28
Thursday 6 Oct 94	139	45

14.2.23 The table shows that the number of passengers using bus stop 1 in 2003 are comparable with the numbers using it in 1994.

14.2.24 The data supplied by Stagecoach details the number of passengers embarking buses from bus stops 1 and 4 at Penn Inn and is shown below:

Period	No. of passengers embarking at BS 1 and 4
6 days 2003 (Stagecoach data)	742
6 days 1994	776

14.2.25 The above table shows that the number of passengers embarking buses at bus stops 1 and 4 are similar for 1994 and 2003. Hence the 1994 data is deemed valid.

Railway

14.2.26 The Torquay Branch railway line is at present accessible from stations at Newton Abbot, Torre, Torquay and Paignton. Devon County Council is at present investigating the possibility of re opening Kingskerswell station, this is a long-term measure identified within the Teignbridge Local Plan. The Torquay Branch Line has a junction with the main Exeter to Penzance line just to the south of Newton Abbot and runs along the whole of the route corridor parallel with the Scheme. There is an approximately 40 minute service along the line.

Community Facilities

14.2.27 The main community facilities are shown on Figures 14.2a and 14.2b.

- 14.2.28 Facilities that lie within close proximity to the Scheme alignment include:
- Sandringham Park, an area of open space to the west of the housing in Penn Inn Close/Queensway/Sandringham Drive, adjacent to the Penn Inn
 - Community centre adjacent to the area of open space outlined above
 - St. Luke's Church, Milber, just to the southeast of Addison Road
 - The Church of Jesus Christ and the Latter Day Saints
 - United Reform Chapel, Yon Street
- 14.2.29 Within Kingskerswell there are six churches, plus various halls used by the community, including Victoria Hall on the main A380, the Community Centre and Constitutional Hall. All hold activities and events including regular meetings for various groups. St. Mary's Church and the Parish Centre Park opposite lie close to the Scheme.
- 14.2.30 Other community facilities within Kingskerswell include; a health centre, dental surgery, library, a primary school and pre-school playgroups. There are also playing fields off Manor Drive (Kingskerswell Parish Playing Fields).
- 14.2.31 Part of Kerswell Down has status as Common Land and is owned by Kingskerswell Parish Council and is regarded as a community facility.
- 14.2.32 Torbay Hospital lies to the southeast of the Torbay Ring Road.

14.3 Rights of Way and Other Routes Survey

Background and Methodology

- 14.3.1 In order to provide current and comprehensive data, a usage survey was commissioned in August 2003. The aim of the survey was to provide additional detail about levels and patterns of usage on the public rights of way and other routes that would be severed by the Scheme. Whilst a survey conducted in 1994 provided information on numbers of users of public rights of way and specific routes taken to reach these, this second survey sought to obtain additional information, for example about journey purpose and frequency of use.
- 14.3.2 Two days of survey work were carried out, one on Thursday 28 August 2003, and the other on Saturday 30 November 2003. Four survey stations were used in order to gather data that reflected patterns of use of the routes that would be severed by the Scheme. The same four survey stations were used on both days, with the exception of Station 1, where a count was not conducted on 30 August 2004. The locations of these stations are detailed in Table 14.0.
- 14.3.3 Surveys were undertaken between 07:00 and 19:00 on both days. The weather conditions were pleasant on the Thursday, being dry, slightly overcast with sunny spells. Saturday was less clement with periodic sunny spells and a heavy downpour early afternoon for an hour. This factor must be taken into consideration when reviewing the survey results. It should be noted that due to the severity of the downpour on the Saturday the count was suspended for approximately one hour between 13:10 – 14:15.
- 14.3.4 At Station 1 a people count was carried out, whereas the surveys at the other three locations (Stations 2, 3 and 4) sought to interview every person/party using each route. The interviews collected data on the following points:
- Type of person – Adult, elderly or child
 - Mode of transport to the footpath
 - Route description
 - Purpose of journey
 - Frequency of use

14.3.5 The routes surveyed varied from those surveyed in 1994. Experience from that survey enabled a more considered approach to be taken, so that only routes that were to be directly affected by the Scheme in terms of severance were included. These were Footpath 45, Footpath 36/262, the entrances to Kerswell Downs and Churchway Lane. The locations of the facilities are shown on Figures 14.0a and 14.0b.

Table 14.0 Location of 2003 survey stations

Station	Route	Location description and notes
1	Footpath 45 (FP 45)	At the western end of Footpath 45 at the border of J Sainsbury's and the footway along the northbound carriageway of the A380. This is approximately at the northern limit of the Scheme.
2	Eastern entrance to Kerswell Downs	Kerswell Downs car park, the largest entry point for the Downs.
3	Churchway Lane	Churchway Lane runs from North Whilborough in the west to Greenhill Road, Kingskerswell in the east. The station was located half way between North Whilborough and Kingskerswell on the Kerswell Downs boundary.
4	Footpath 36/262	Just north of Kerswell Gardens 10m west of the northbound A380 This is approximately at the southern limit of the Scheme.

Level of Use

14.3.6 The survey results for each of the routes is given in Table 14.1. The figures in Table 14.1, and the subsequent analysis, do not differentiate between people using the route on foot, bicycle or horse.

Table 14.1 Total Number of People Counted on 28 and 30 August for each Survey Station

Station	Route	Number of People Observed Using the Route	
		28 August	30 August
1	Footpath 45	105	N/A
2	Kerswell Downs	48	38
3	Churchway Lane	56	52
4	Footpath 36/262	6	8
TOTAL		213	100

14.3.7 A total of 313 people were observed on the routes over the two days. A total of 14 people were surveyed using Footpath 36/262, this usage is comparable with the survey data collected in 1994.

14.3.8 Results from Station 1 show that Footpath 45 has the highest patronage, with 105 people observed on the one day of the survey. The high number of users due to the footpaths close proximity to J. Sainsbury's.

Mode of Transport to the Footpaths

14.3.9 For each person using a route, his or her mode of transport to the surveyed route was also recorded. The results are shown in Table 14.2. The main means of travel recorded at the point of survey was by foot. Of the 313 people counted, a total of 241 were travelling by foot. The second most common mode of travel was by car (57 people).

Table 14.2 Summary of Results: Mode of Travel to the Footpaths

station	Route	Foot	Bicycle	Horse	M/Cycle	Car/Van	Agricultural	Unclassified	Total
1	Footpath 45	92	13	0	0	0	0	0	105
2	Kerswell Downs	40	0	0	0	46	0	0	86
3	Churchway Lane	95	5	6	0	2	0	0	108
4	Footpath 36/262	14	0	0	0	0	2	0	14
TOTAL		241	18	6	0	48	0	0	313

Frequency of Use

14.3.10 Respondents were asked to state how often they used the route. The results to this question are shown in Table 14.3. Of the 208 people observed using the three routes, 188 provided a response to this question, of which 79 people used the footpaths on the daily basis and 81 people monthly. A further 25 people stated that they used the route yearly or never before, and the Kerswell Downs route was used the most by 'one-off' or infrequent users.

14.3.11 The results show that there was a relatively high non-response rate to this question. No answer was recorded for 20 of the 208 people observed using the routes.

Table 14.3 2003 Survey: Frequency of Use

Station	Route	Daily	Weekly	Monthly	Yearly	Never Before	No Response	Total
1	Footpath 45	N/a	N/a	N/a	N/a	N/a	N/a	N/a
2	Kerswell Downs	32	22	3	13	8	8	86
3	Churchway Lane	42	52	0	0	4	10	108
4	Footpath 36/262	5	7	0	0	0	2	14
TOTAL		79	81	3	13	12	20	208

14.4 Mitigation and Detailed Development of the Scheme

14.4.1 The Scheme would sever two public rights of way and two paths without public right of way status between Penn Inn and Kerswell Gardens. Measures have been incorporated in the Scheme to retain/enhance these footpaths by either reinstatement or relocation. These are discussed in more detail in section 14.5.

14.5 Environmental Effects

Methodology

14.5.1 The guidelines set out in the DMRB, as outlined in Table 14.4 below, apply only to pedestrians, as cyclists and equestrians are less susceptible to severance due to the fact that they can travel more quickly.

Table 14.4 Scale of significance of New Severance Impacts

Scale of Significance	Description
Slight	<ul style="list-style-type: none"> • Current journey pattern likely to be maintained but some hindrance to movement e.g. <ul style="list-style-type: none"> - Pedestrians at-grade crossing of new road carrying <8000 vehicles per day (AADT) - New bridge will need to be climbed or a subway traversed - Journeys will be increased by up to 250m
Moderate	<ul style="list-style-type: none"> • Some residents, particularly children and elderly people, likely to be dissuaded from making trips • Other trips will be made longer or less attractive e.g. <ul style="list-style-type: none"> - 2 or more of hindrances set out under 'Slight' applying to single trips - Pedestrian at grade crossing of new road carrying 8000 – 16000 vehicles per day (AADT) in opening year - Journeys increased by 250 – 500m
Severe	<ul style="list-style-type: none"> • People likely to be deterred from making trips to an extent sufficient to induce a re-organisation of their habits, which would lead to a change in the location of centres of activity or in some cases to permanent loss to a particular community • Considerable hindrance will be caused to people trying to make existing journeys, brought about by e.g. <ul style="list-style-type: none"> - Pedestrians at-grade crossing of a new road carrying >16000 vehicles per day (AADT) in opening year - Increase in length of journey of >500m - 3 or more of hindrances set out under 'Slight' or 2 or more set out under 'Moderate'

(Based on DMRB Volume 11 Part 8 June 1993 amended August 1994 and The Severance Sub-Objective TAG Unit 3.6.2, Transport Analysis Guidance June 2003)

Relief from Existing Severance

14.5.2 DMRB Volume 11 Section 3 Part 8 Chapter 7 indicates that relief from severance can be categorised by considering reductions in existing traffic levels. Table 14.5 details significance of reduction in community severance.

14.5.3 **Table 14.5 Significance of Reduction in Community Severance**

Level of Relief	General Rural Area	Built up area
	% Reduction in Traffic	
Substantial	>90%	>60%
Moderate	75 – 90%	30 – 60%
Slight	60 – 75%	<30%

(Source DMRB Volume 11 Part 8 June 1993 amended August 1994)

Confidence Levels

14.5.4 It is also of value to attribute a level of confidence by which the predicted effect has been assessed. The criteria for these definitions are set out in Table 14.6 below.

Table 14.6 Confidence Levels

Confidence Level	Description
High	The predicted impact is either certain, i.e., a direct impact, or believed to be very likely to occur, based on reliable information or previous experience.
Low	The predicted impact and its level are best estimate, generally derived from first principles of relevant theory and the experience of the assessor. More information may be required to improve the level of confidence.

14.5.5 Unless otherwise stated herein confidence levels are high.

14.5.6 The significance of an effect can be scaled as beneficial if the effect is positive, or adverse if the resulting effect is negative. If no overall change results, then the effect can be regarded as neutral.

Effects of Construction

14.5.7 Construction of the Scheme would potentially have two types of relevant effects:

- the temporary severance of public rights of way and disruption to other rights of way and minor roads; and
- potential effects on traffic movements through surrounding settlements as a result of construction activity.

14.5.8 There would be direct disruption of the use of community facilities in the Milber, Aller Park, Newtake and Buckland housing areas as the existing A380 between Penn Inn and Aller would undergo extensive reconstruction from existing single lane carriageway to dual carriageway causing delay in local traffic movements, although measures would be taken to minimise disruption.

14.5.9 During construction those rights of way that traverse the Scheme would be kept open where possible. In some cases temporary closures may be necessary on safety grounds. The duration of the closure/diversion would be kept to the minimum possible. During the construction of the Scheme, users would experience a range of visual impacts. At the southern end of the Scheme, users of Churchway Lane and Footpath 262/36 would experience disruption in the form of severance and close proximity to the road construction activities. Similarly users of Footpath 45 would also suffer construction impacts.

Effects of Operation

- 14.5.10 Between Penn Inn and the Royal Aller Vale Quarry entrance a combined two-way pedestrian/cycle/bus route would be provided. This would incorporate Addison Road and a new link route alongside the new dual carriageway to tie in with the existing A380.
- 14.5.11 An additional access to the Aller Park Estate would be provided by opening the eastern end of Aller Brake Road and creating a new junction with St Marychurch Road. The two-way bus route would be 6.0m wide from Penn Inn to just south of Aller Brake Road and 7.3m onwards to where the route links into the existing A380. The line of the new dual carriageway would result in the loss of two bus stops in each direction; Milber Steps and Aller Brake Road. In order not to disadvantage the residents of Milber Estate, these bus stops would be relocated along the new bus route on Addison Road. One would be located in the proximity of Milber Steps, opposite the triangle of Addison Road, and the other approximately 20m north of the junction of Aller Brake Road and Addison Road. Bus stops are positioned in both directions.

Footpath and other Pedestrian routes, Cycleway and Bridleway Diversions

- 14.5.12 Where footpaths cross the Scheme it is proposed that they would be diverted to the nearest highway structure.
- 14.5.13 From the survey data collected there is no evidence that a pedestrian bridge is justified within the Scheme.
- 14.5.14 Table 14.7 lists the footways and bridleways affected by the Scheme and Appendix 14.1 shows pedestrian count data from 1994, 2002 and 2003 all used to analyse the effects of the Scheme on pedestrians.

Table 14.7 Footways, Footpaths and Bridleways affected

Footpath No./Footway	Chainage	Location	Parish/Authority	Figure No.
Footways	1000 m	Penn Inn Rbt	Newton Abbot	14.0a
FP No. 45	1100 m	A380/Sainsbury's Superstore	Newton Abbot	14.0a
Addison Rd Steps	1400 m	Addison Rd/A380	Newton Abbot	14.0a
Addison Rd/St. Lukes Rd (Not definitive Footpath)	1600 m	West end of St. Luke's Rd /Addison Rd	Newton Abbot	14.0a
Aller Park Rd/A380 (Not definitive Footpath)	2100 m	Southern end Aller Park Rd/A380	Newton Abbot	14.0a
FP Nos. 39 and 40	1100 – 2000 m	Penn Inn Plantation	Newton Abbot	14.0a
A380 Footways through Kingskerswell	3000 - 5100 m	Along A380	Kingskerswell	14.0b
Kerswell Down	4050 – 4300 m	Maddacombe Road	Kingskerswell	14.0b
Churchway Lane	4150 m	Greenhill Road – North Whilborough	Kingskerswell	14.0b
FP Nos. 36 and 262	5750 m	A380 – Edginswell Lane	Torbay Council	14.0b
Kerswell Gardens	5950 m	A380 – A3022	Torbay Council	14.0b

- 14.5.15 Impacts on pedestrians is based on the advice on assessment provided in DMRB Volume 11 Section 3 Part 8 and TAG Unit 3.5.5 Transport Analysis Guidance, June 2003. The approach identified involves developing a schedule, for each important route, of changes in typical journey lengths and likely changes in travel patterns, with an estimate of the number of people affected in each case. The approach used below is based on an assessment of the total change in 'person-minutes' of the journey times of pedestrians.

Penn Inn Roundabout

- 14.5.16 The Scheme would have very little effect on the majority of pedestrian movements at Penn Inn. Most pedestrian movements here take place via the subway complex (average of 75 % pedestrian/cycle movements via subways), which would remain unaffected by the Scheme. Summaries of the effects on daily pedestrian movements in the form of changes in journey time in the Penn Inn area are shown in Appendix 14.3. It can be seen from Appendix 14.3 that movements to and from Shaldon Road, St. Marychurch Road, Queensway and the entrance to Sainsbury's on the A382 will be unaffected by the Scheme, hence there is no change in journey time for pedestrians.

Penn Inn to South end of Addison Road

- 14.5.17 Pedestrians would use the northern most end of Addison Road and be diverted along the footways to an improved Addison Road forming a combined cycle/bus route. With the removal of both the steps from Addison Road to the A380 and the pedestrian crossing facility there would inevitably be an increase in severance and journey time. Pedestrians' would be diverted to use the subways at Penn Inn and this diversion is reflected in the changes in journey times shown in Appendix 14.3. The diversion results in a **'moderate' adverse** effect, as it is a combination of a 'slight' increase due to use of the subway and a 'slight' increase due to the extra 120m (assumed as a diversion from the pedestrian crossing). People already using the subways have been classified as a 'slight' severance due to having to use Addison Road once the Scheme is constructed. However some of these effects are off-set by the provision of bus stops along the improved Addison Road as a road crossing would not be necessary for northbound trips. The end of Footpath 45 would be closed off and re routed to join the end of the subway along the existing covered walkway within Sainsbury's land. A summary of the daily effects on pedestrian movements in the area is detailed in Appendix 14.3.

Addison Road to entrance to the Royal Aller Vale Quarry off the existing A380

- 14.5.18 Along this section of the Scheme the combined cycle/bus route/link road would continue. It would run from the end of Addison Road with a junction to Aller Brake Road and the footpaths from St. Lukes Road and Aller Park Road. At Aller Brake Road the link road would widen to 7.3 m to cater for local vehicle traffic from the Aller Park Estate. There would be no pedestrian provision on the bypass. Some of the increased severance and journey time effects are off-set by the provision of bus stops along the link road as a road crossing would not be necessary for northbound trips, this is especially evident in the Aller Brake Road area where as shown in Appendix 14.3 journey times per pedestrian decrease at Penn Inn. Increased journey times occur as a result of pedestrians being diverted to use the subways. A summary of the daily effects on pedestrian movements in this area is detailed in Appendix 14.3.

Footpaths 39 and 40 at the junction of Aller Brake Road and St. Marychurch Road

- 14.5.19 With the Scheme the eastern end of Aller Brake Road would be opened up and a new junction formed with the St. Marychurch Road. As a result 10 m of Footpath 40 would technically be closed off as it would lie under the new highway. However the opening up of the junction in reality would result in a very **'minor adverse'** impact for

pedestrians in that an island would be provided for crossing. Footpath 39 would be unaffected by the Scheme.

The existing A380 through Kingskerswell

- 14.5.20 Traffic modelling has shown that with the Scheme the vast majority of the traffic would be redistributed onto the new road – traffic flows along the existing section of the A380 between Aller and Kerswell Gardens are predicted to reduce by 71% in the year of the Scheme opening resulting in a far more attractive environment for pedestrians. This represents a 98% reduction in through traffic using the existing A380 at Kingskerswell. The number of people who would benefit from reduced journey times in Kingskerswell has not been analysed because the **‘substantial’ relief** from severance would result in significant change in movements. Pedestrians who use the Primary School, Library, Health Centre, the Post Office, Churches and shops would particularly benefit from the reduction in traffic as these facilities tend to generate movements amongst the most vulnerable groups. Substantial relief from severance is defined in DMRB Volume 11, Section 3, Part 8, Chapter 7 Table 1 > 60 % reduction in existing traffic.

Kerswell Down Area

- 14.5.21 The land is owned by Kingskerswell Parish Council who allow access for the general public. The entrance to the Downs off Maddacombe Road west of Rock House would be closed and an alternative provided 120 m to the west along with a new car park. The Scheme would a pedestrian link to Churchway Lane. Those pedestrians arriving at the Downs by car would not incur an increase in journey length. However, those accessing the Downs by foot through the proposed entrance would incur an increased journey length of 80m with an increased journey time, this severance is regarded as **‘slight’**.

Churchway Lane

- 14.5.22 Churchway Lane would be severed by the Scheme approximately 60m west of its junction with Greenhill Road. A length of agricultural track/bridleway would be provided immediately to the west of the bypass to connect the remaining section of Churchway Lane to Huxnor Road/Yon Street. Pedestrians accessing Churchway Lane from Greenhill Road would incur a maximum increase in journey length of 700m, hence resulting in a **‘severe’** change in journey time as the increase in journey length will be over 500m. In reality only pedestrians accessing Churchway Lane from the north would incur this maximum increase. A summary of the daily effects on pedestrian movements in the area is detailed in Appendix 14.3.

Footpaths No. 36 and 262 (Parsons Bridge)

- 14.5.23 With the Scheme Footpath 262 would remain to give access across the Torquay Branch Line from the existing A380 to the wetlands area. Footpath 36 would be stopped up. An alternative route would be along the toe of the existing embankment under the Torbay Ring Road and along the toe of the new embankment to Parsons Bridge. From analysis of the routes that the nine people surveyed took on the 28 and 30 August 2003, diversions of between 55m and 385m would be incurred. A summary of the daily effects on pedestrian movements in the area is detailed in Appendix 14.3.

Cycling

- 14.5.24 Cycle usage figures can be viewed in Appendix 14.2. The effect on cycling use can be summarised:

Penn Inn Junction

- 14.5.25 There is off road cycle provision at Penn Inn in the form of shared use subways under the roundabout. This facility would not be changed. Cyclists who opt to use the existing highway and roundabout would experience a positive effect by virtue of reduced flows due to the provision of a flyover. On the flyover itself cyclists would be diverted to use cycle facilities at Penn Inn. Cyclists who would wish to travel north of Penn Inn along the A380 will find no change in provision.

Between Penn Inn and Aller

- 14.5.26 The Scheme would relieve the congestion experienced by cyclists but would have an adverse effect by increasing traffic speeds. In view of this cyclists, wishing to continue along the A380 south of Penn Inn, would be directed to join a segregated cycle/footway facility that would run on the east side of the bypass. The first section would connect the end of the subway complex to the northern end of Addison Road. Cyclists would then continue along Addison Road, passed Royal Aller Vale Quarry and then join the existing on road cycle facilities on the A380 south of Aller.

The A380 between Kerswell Gardens and Scott's Bridge

- 14.5.27 In the vicinity of the junction with the Torbay Ring Road and the connection into Torquay at Scott's Bridge increased flows on the existing road layout would have a detrimental effect on cyclists. The proposed terminal junction arrangement, may pose a potential hazard to cycling activities for cyclists on the Torbay Ring Road but the Scheme includes a cycleway link from the existing A380 under the Edginswell Rail bridges to Scott's Bridge.

- 14.5.28 Section of the A380 through Kingskerswell

- 14.5.29 For cyclists who would use the existing A380 through Kingskerswell, the Scheme would have a positive effect on reducing traffic flows and thus increasing the safety for cyclists using the marked cycle lanes on either side of the road.

- 14.5.30 For cyclists who chose to use the bypass, which is discouraged, there would be a greater element of risk as there would be no provision of a segregated cycle lane on the carriageway. However, cyclists could gain refuge by using the hard strips. For cyclists who currently use the side roads around Kingskerswell there would be a slight improvement in the cycling environment, as traffic, which would originally, used the routes parallel to the existing A380 would divert to use the bypass.

Equestrians

- 14.5.31 The effect of the Scheme on equestrian activity is limited to the alterations to side road crossings namely the closure of Churchway Lane and the new bridges at Maddacombe Road, Yon Street and Edginswell Lane.

- 14.5.32 The closure of Churchway Lane would affect on average 5 equestrians per day. With the Scheme there would be an alternative route involving a detour of 700 m, via Yon Street, this would result in an increased journey time.

- 14.5.33 In general it is envisaged that there would be a reduction in traffic using the minor road network, Old Newton Road, Greenhill Road and Edginswell Lane, and this would benefit equestrian users with the most significant improvement on Edginswell Lane.

Public Transport

- 14.5.34 Bus stop usage figures are detailed on Figure 14.3.

- 14.5.35 The removal of through traffic at Penn Inn roundabout would reduce congestion and increase the efficiency and reliability of the service not only between Newton Abbot and Torquay, but the services serving Buckland and Newtake estates.
- 14.5.36 Accessibility, reliability and safety of bus services on the Penn Inn to Aller section would be increased due to the bus route included in the Scheme. The existing two bus stops, Milber Steps and Aller Brake Road, in both directions would be relocated from their current positions onto the bus route. The Scheme would negate the need for passengers to cross the busy A380 as the majority come from the estates on the eastern side of the road.
- 14.5.37 The bus route would link into the existing A380 via widened Romany Jones' lay-by south of a roundabout at Aller to direct traffic either onwards along the existing A380 towards Kingskerswell or along the bypass towards Torquay. Buses would not have to encounter the roundabout hence efficiency and reliability would not be reduced.
- 14.5.38 With the reduction in traffic along the A380 there is no need to continue the separate bus route on from Aller to Kerswell Gardens. Bus services would run along the existing A380 and the existing bus stops in either direction would be retained.

Community Facilities

- 14.5.39 The terminology of impacts are defined by the DMRB Volume 11. An appraisal has also been undertaken in accordance with the Department of Transport's Traffic Analysis Guidance June 2003.

Open Space by Penn Inn Roundabout

- 14.5.40 The open space would suffer a moderate adverse visual intrusion. There would be a slight decrease in noise levels in this area of between approximately 1-3dB.

Community Centre, Buckland

- 14.5.41 The community centre would suffer a slight adverse visual intrusion and there would be a decrease in noise levels in the area of between 1-3dB.

Milber Junior School, Milber

- 14.5.42 The Junior School would suffer a slight adverse visual intrusion. There would be a slight decrease in noise levels in this area of less than 1dB.

St. Luke's Church, Milber

- 14.5.43 The Scheme would have no visual impact on the church. There would be an increase in noise in the area of between 1 and 3dB.

The Church of Jesus Christ and the Latter Day Saints

- 14.5.44 The Scheme would have no visual impact on the church. Access would be improved with the decrease in congestion on Penn Inn roundabout which is the main access point. There would be a decrease in noise levels of 1dB.

Playing Fields off Manor Drive

- 14.5.45 The playing fields would suffer no direct visual intrusion or visual change. The only visual effect would be during construction and in year 1 of Operational Phase, however there would be an increase in noise in the area.

St. Mary's Church, Kingskerswell

- 14.5.46 The church would suffer no direct visual intrusion or visual change the only visual effect would be on the churchyard during construction and in year 1 of Operational Phase. There would be an increase in noise levels of 11dB.

United Reform Chapel at Yon Street

- 14.5.47 The Chapel would suffer a substantial adverse affect by the proximity of the Scheme, especially Yon Street overbridge. Careful consideration will have to be taken over the phasing of construction of the adjacent retaining walls and re instatement of the parking area to the west of the building. Sympathetic treatment of the wall finishes and fencing required would be discussed with both the Chapel authorities and the Local District Council Planning Authority. There would be an increase in noise levels of 24dB(A).

Methodist Church, Kingskerswell

- 14.5.48 The Scheme would result in reduced noise levels around the area of the church as it lies on the edge of the A380.

Kingskerswell Primary School

- 14.5.49 With the Scheme the Kingskerswell Primary School is predicted to experience a reduction in noise of less than 1.0 dB(A).

Health Centre, Kingskerswell

- 14.5.50 The Health Centre in School Road (reception point 73) is predicted to experience an increase in noise of less than 1.0 dB(A) with the Do-minimum situation and a decrease of about 2 dB(A) with the Scheme.

14.6 Summary of Changes in Amenity

- 14.6.1 Set out below is the comparison of change in amenity for pedestrians, cyclists and equestrians where applicable with and without the Scheme.

14.6.2 Penn Inn Roundabout

With Scheme

Virtually no change in amenity for around 1310 pedestrian and 250 cyclist journeys per day as the subway complex at Penn Inn will remain unchanged by the Scheme, and most pedestrians and cyclists use this facility at present. For those who choose to cross at-grade, the traffic in the year of opening is forecast to fall by 9% (averaged over the four arms of the roundabout).

Without Scheme

No change in existing good amenity.

14.6.3 Penn Inn Roundabout to Addison Road (south end)

With Scheme

Improvement in amenity for around 115 pedestrian and 100 cyclist journeys per day. Pedestrians and cyclists will use Addison Road / link road along the whole length of this section. Improved bus facilities.

Without Scheme

Along side of and on the existing A380 there are shared pedestrian/cycle facilities on both sides of the road, with a zebra crossing located just north of the Milber Steps from Addison Road. The overall amenity would remain unchanged.

14.6.4 Footpath 45 – Becketts Path

With Scheme

Reduction in amenity for around 92 pedestrian and 13 cyclist journeys per day. The footpath would be closed from its junction with the A380 and a diversion would be via the existing subway complex at Penn Inn and along the covered walkway within Sainsbury's car park.

Without Scheme

Existing amenity unchanged.

14.6.5 Addison Road (S End) to Royal Aller Vale Quarry

With Scheme

Improvement in amenity for around 60 pedestrian and 90 cyclist journeys per day as they will be away from the A380 on the bus route / link road. Improved bus facilities.

Without Scheme

Existing amenity unchanged.

14.6.6 Footpaths 39 and 40 at St. Marychurch Road

With Scheme

Reduction in amenity for all pedestrians, as a result of the opening to traffic of the eastern end of Aller Brake Road to St. Marychurch Road .

Without Scheme

No change to good existing amenity.

14.6.7 A380 through Kingskerswell

With Scheme

Improvement in amenity for all pedestrians and cyclists as a proportion of the existing traffic will use the bypass hence traffic flows will be reduced through Kingskerswell.

Without Scheme

On the existing A380 there is a footway on both sides of the road adjacent to the carriageway, fronting the houses and shops. There are also on carriageway cycle lane facilities. The amenity for all users would remain unchanged.

14.6.8 Old Newton Road

With Scheme

There would be an increase in amenity for cyclists and pedestrians as there would be a reduction in traffic using Old Newton Road as a result of the opening of the bypass. The lorries accessing Stoneycombe Quarry would still however use Old Newton Road.

Without Scheme

Deterioration in amenity due to traffic continuing to use the alternative routes parallel to the existing A380.

- 14.6.9 Kerswell Down
- With Scheme
- Minimal change in amenity to some users as bridges would be provided at Maddacombe Road and Yon Street over the Scheme.
- Without Scheme
- No change to existing good amenity.
- 14.6.10 Churchway Lane
- With Scheme
- The Scheme severs Churchway Lane. A new length of agricultural track/bridleway would be provided immediately to the west of the bypass to connect the remaining section of Churchway Lane to Huxnor Road / Yon Street. Reduction in amenity for pedestrians and equestrians as they are subject to an 840 m detour.
- Without Scheme
- No change in existing amenity.
- 14.6.11 Edginswell Lane
- With Scheme
- Improvement in amenity for pedestrians and equestrians as traffic using this road as an alternative would use the bypass.
- Without Scheme
- Existing poor amenity will deteriorate further as more traffic would use this route as an alternative.
- 14.6.12 Footpath 262/36
- With Scheme
- Reduction in amenity for pedestrians and cyclists. The proposed diversion is along footways adjacent to existing and proposed carriageways resulting in a diversion of approximately 385m.
- Without Scheme
- Good existing amenity unchanged.
- 14.6.13 Kerswell Gardens to Scott's Bridge
- With Scheme
- Improvement in amenity for pedestrian and cyclists. The proposals would include for a combined footway/cycleway set back from the edge of the existing A380 carriageway, on the eastern side of Kerswell Gardens Roundabout and a shared track is proposed between the Torquay Branch line railway and existing A380 to take pedestrians and cyclists north under the Torbay Ring Road. The proposals would tie in with the existing cycle facilities on Riviera Way.
- Without Scheme
- On existing A380/A3022 there are 1 metre strips for cyclists, and a 1.8m footway adjacent to the road. The amenity for pedestrians and cyclists would deteriorate with the increase in traffic flows.

14.6.14 Bus Stops at Penn Inn

With Scheme /Without Scheme

There would be virtually no change in amenity to the two bus stops at Penn Inn.

14.6.15 Bus Stops at Addison Road

With Scheme

An improvement in amenity passengers. All bus stops would be along Addison Road on a two-way bus route thus passengers would not have to cross the A380 as the majority come from the estates on the eastern side.

Without Scheme

No change in existing amenity but there would be some deterioration in the level of service as traffic flows and congestion increases.

14.6.16 Bus Stops at Aller Brake Road

With Scheme

An improvement in amenity for passengers. The bus route would result in the bus service becoming more efficient and reliable.

Without Scheme

No change to existing good access amenity but there would be some deterioration in the level of service as traffic flows and congestion increases.

14.6.17 Remaining Bus Stops within Kingskerswell

With Scheme

Improvement in amenity for all bus passengers through Kingskerswell due to the reduction in traffic.

Without Scheme

No change to existing good amenity.

14.7 Conclusion

14.7.1 Bus route included within the Scheme is assessed as a **Minor benefit** when considered with the effects on all daily pedestrian movements between Penn Inn and Aller.

14.7.2 The Scheme would secure **Substantial benefits** by relieving Community severance in Kingskerswell.