11 Pedestrians, Cyclists, Equestrians and Community Effects

11.1 Introduction

This chapter provides an assessment of the potential impacts, with respect to pedestrians, cyclists, equestrians and other community effects (referred to as 'pedestrians and others'). In addition to these users, this section also assesses the impacts on vehicle users utilising the local road network to access facilities in the area.

As stated within the DMRB Environmental Assessment Volume 11, Section 3, Part 8, 'Pedestrians and Others' the main effects from a road improvement scheme are likely to be severance, changes to journey lengths and travel patterns and changes in amenity within the local community.

11.2 Methods

11.2.1 Baseline Methods

The assessment of the impacts upon pedestrians and others has been completed in accordance with the requirements of Part 8, Section 3, Volume 11 of the DMRB. In addition, information has been obtained from the following sources:

- Consultation with relevant authorities/organisations including Midlothian Council (MC), Southern Upland Partnership, Cyclists' Touring Club and Sustrans Scotland.
- A site walkover of the proposed scheme.
- Edinburgh and Lothian Structure Plan (2004).
- Midlothian Local Plan (2003).
- A68 Route Action Plan, published in 1997 by Scottish Borders Council.
- Traffic survey information provided by SiAS, survey undertaken April 2004.
- Consultation with Tynewater Community Council and local residents.

11.2.2 Impact Assessment

Based on the use of the area by pedestrians and others and following the criteria in Table 11.1 below, the value of the site can been assessed as being of high, moderate or low value.

Table 11.1.	Value of the Area to Pedestrians and Others.
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Value	Criteria
High	Presence of formal or nationally important footpaths/cycleways or Rights of Way or many locally important paths/accesses highly valued and considered susceptible to relatively small changes.
	No alternative route available and all vehicular journeys on the local road network will be affected
Medium	Presence of several formal/informal paths/accesses considered important to users but reasonably tolerant of change.
	Alternative route available and a significant number of vehicular journeys on the local road network will be affected.
Low	Presence of few informal paths/accesses considered potentially tolerant of substantial change.
	Alternative route available and only a small number of vehicular journeys on the local road network will be affected.

An assessment of the magnitude of the effect is then made using Table 11.2 below. Using these two values, an overall impact significance can be made using the matrix in Table 11.3.

Magnitude	Criteria
Major	A major loss or alteration to the use by pedestrians and others such that post- development character will be fundamentally changed.
	Alternative route is a significant detour (> 5km) and will add substantially to vehicular journey times on the local road network.
Moderate	A loss or alteration to the baseline conditions of use by pedestrians and others such that the post-development character will be significantly changed.
	Alternative route is a significant detour (> 2km but < 5km) and will add moderately to vehicular journey times on the local road network.
Slight	A detectable change from baseline conditions. Change arising from the alteration will be measurable but will not significantly alter the use by pedestrians and others from pre-construction conditions.
	Alternative route is a slight detour (> 0.5km but < 2km) but will not add significantly to vehicular journey times on the local road network.
Negligible	Not expected to affect pedestrians and others in any measurable way, therefore no effects are predicted.
	No significant detour (< 0.5km) or increase in vehicular journey times on the local road network.

 Table 11.2.
 Magnitude of Impact Upon Pedestrians and Others.

Table 11.3. Overall Impact Significance for Pedestrians and Others.

Value	Magnitude of Impact				
	Major	Moderate	Slight	Negligible	
High	Major	Major	Moderate	Slight	
Medium	Major	Moderate	Slight	Negligible	
Low	Moderate	Slight	Negligible	Negligible	

The criteria for vehicle journeys are not contained in the DMRB but have been developed based on professional judgement to allow an assessment to be carried out.

11.3 Baseline Conditions

11.3.1 Pedestrian Use

A baseline drawing showing the area adjacent to the scheme is provided as Figure 11.1.

The trunk road between Pathhead and Fala is generally 7.3m wide and has an associated footway over its entire length. Within the limits of the proposed scheme the footway lies to the northeast of the road. Although used infrequently, the footway is a potential pedestrian link for the smaller communities and farms within the vicinity of Pathhead and it does in fact extend along the entire length of the A68 to the bottom of Soutra Hill.

There are no other formal footpaths or informal paths/tracks in the vicinity of the proposed scheme. However, local residents do on occasion use the local road network to gain access to the trunk road to use public transport.

The A68 Route Action Plan (RAP) considered proposals for pedestrian facilities. The report concluded that provision of a separate route for pedestrians; cyclists and equestrians would benefit those users and vehicle drivers and would improve road safety. For the section of the A68 between Fordel Mains, (5km north of the proposed scheme) and Soutra Hill, (3 km south of proposed scheme) it suggested that the existing footway could be re-designated as a combined cycleway/footway, although the footway would have to be widened to fulfil this role.

No detailed information is available on the number of pedestrians using or crossing the A68, however, it is predicted that there will be relatively few and thus the value of the area with respect to pedestrians is considered to be **low**.

11.3.2 Cyclists Use

There are no formal cycleways or informal cycle paths or tracks in the vicinity of the proposed scheme. Midlothian Council, CTC and Sustrans Scotland have indicated that due to the volume and mix of traffic, the A68 Trunk road is not considered as an ideal route for the cyclist and as such the Council do not promote any cycle routes in the area.

No detailed information is available on the number of cyclists using or crossing the A68. In responses received from CTC Scotland they indicated that it would be very unusual for any CTC group to ride along the A68 for any distance, although club rides and individuals riding alone or as a small group would often be obliged to use short sections if they choose to cycle around the local road network. CTC and Sustrans have indicated that they do cross the A68 when using the local road network in the

area. The two most frequently used routes are shown on Figure 11.1 and comprise the link from the B6458 to the U78 and secondly from the U60 to the U77. Although the more regularly used crossing of the A68 is via the Longfaugh / Fala Dam junction, it has been made more problematic following the re-positioning of the safety fence that protects motorists from the sudden drop created by the retaining wall adjacent to the footway which runs from Magazine Wood to Salters Burn. This safety fence was moved to the middle of the footway making it extremely undesirable as a route for cyclists.

The value of the area with respect to cyclist use is considered to be **low**.

11.3.3 Equestrian Use

The British Horse Society has advised that, as the A68 is a busy major trunk route, they would not advocate any horses and riders crossing or riding on it unless in unavoidable circumstances. They also advise that they are not aware of any riders that cross the A68.

The only riding school in close proximity is Burnside Livery Stables, which lies approximately 2km north of the scheme. Contact was made with the riding school to establish horse movements in the area. When the school was first established, riders did cross the A68 using the C51 Crichton road and the U61 Whitburgh road. The riding school now discourage people on horseback from crossing the A68 and avoid the route with their formal treks due to the speed and volume of the traffic and as such it is predicted that there is no equestrian crossing points on the A68 in the area.

Horses are however kept at Old Crichton Dean, adjacent to the U77, but it has not been indicated by the owners that they cross the A68 corridor with the animals, as they can access an extensive side road network from the U77.

No detailed information is available on the number of equestrian journeys crossing the A68, however, it is predicted that there will be very few if any at all.

The value of the area with respect to equestrian use is considered to be **low**.

11.3.4 Community Use

There are no facilities used by the local community within or adjacent to the proposed scheme. There is, however, a lay-by situated adjacent to the southbound carriageway at Magazine Wood just to the north of the U60 Longfaugh junction and a lay-by adjacent to the northbound carriageway at Hope, just north of the scheme extents, as shown on Figure 7.2 Land Usage Plan. These perform a function for the community at present in terms of providing a suitable and safe place for vehicles to stop.

There are no designated bus stops along this section of the A68 although buses do operate a stop on demand policy and buses can often be seen dropping off or picking up passengers opposite the B6458 Tynehead junction.

The nearest community facilities are located within the village of Pathhead to the north of the proposed scheme. These facilities include a post office, a primary school, a doctor's surgery and a small number of other commercial premises. There are no hospitals or aged persons' homes in the area; however there is private sheltered housing to the north of the village.

It has been indicated that a new school is to be built to the west of the village, which will remove obstructions from the A68 during term time.

The value of the area with respect to community use is considered to be **low**.

11.3.5 Vehicle Journeys on the Local Road Network

There is one private vehicular access onto the A68 from the residential property known as Marldene and there are eleven agricultural accesses onto the A68 via field gates.

Longfaugh farm is accessed via the U60 Longfaugh Road, the existing AADT for this road is 21 (2004 figure). The farm has one field on the opposite side of the A68 trunk road and this is can be accessed via field gates/tracks at either end of the field, refer to Figure 11.1 for locations of all eleven field accesses within the proposed scheme limits. The U77 Fala Dam Road provides access to a number of individual road side properties and access to a number of small settlements set further back, the settlements can also be accessed via the U78 Costerton road. The AADT for the U77 is 90 and 56 for the U78 (2004 figures).

The B6458 Tynehead road is the busiest of all the side roads, this road serves a number of settlements and farms and links through to the A7 near Middleton Moor via the B6367. The AADT for this side road is 519 (2004 figure). Saughland Farm is situated alongside the B6458 and it has several agricultural fields on the northeast side of the A68 and as such farm traffic has to cross the trunk road to service these fields.

For comparison purposes the AADT for the A68 Trunk road through the proposed scheme limits is 9,200 (2004 figures).

The value of the area with respect to vehicle journeys is considered to be **low**.

11.4 Predicted Impacts

11.4.1 Pedestrian Use

The level of pedestrian use in the study area is anticipated to be very low. A new footway will be provided as part of the scheme and will be combined with a cycleway. The new combined footway/cycleway will be constructed to the northeast of the road, on the same side as the existing footway. This new facility is to be set back 2 metres from the trafficked carriageway to enhance its provision. A facility for pedestrians will therefore be maintained. The value of the area with respect to pedestrians is low and it is considered that the new footway/cycleway provision would represent a moderate

beneficial impact. Thus the overall impact is considered to be of **slight beneficial significance.**

The footway link will be interrupted during construction and this is discussed in Chapter 15 – Disruption due to Construction.

11.4.2 Cyclists Use

The level of cyclist use in the study area is assessed as low, although the Cyclists' Touring Club has advised that cyclists do use a short section of the A68 to travel from the U60 to the U77. The preferred scheme includes the closure of the existing U77 Fala Dam road junction with the A68; however direct access to the A68 corridor would be retained for pedestrians and cyclists via a short length of new footway. The proposals also include the closure of the U78 Costerton road, although access for pedestrians and cyclists would again be maintained via a short length of new footway.

The preferred scheme will provide a 1m hard strip on both sides of the widened road, after the hard strip there is likely to be a filter drain, approximately 800mm wide at the surface. The combined footway/cycleway will be created beyond these features and thus improve the situation of pedestrians and cyclists by increasing the existing distance between them and the live traffic to 2 metres. The new footway/cycleway will link to the existing footpath to the north and south of the scheme limits. It is considered that the provision of this new cycleway/footway will provide a moderate beneficial impact. Combined with the sites low value in terms of cyclists, the overall impact is considered to be of **slight beneficial significance**.

11.4.3 Community Use

There are no significant impacts on community use as a result of the proposed scheme option. No new bus stops are proposed but buses will be able to stop on demand as is the current regime. Access in and around the community is predominantly by vehicle and these impacts are assessed in the following section.

11.4.4 Vehicle Journeys on the Local Road Network

With the closure of any junction or access, the issue of increased vehicle journey lengths and times must be considered. The proposed scheme involves the closure of the U77 Fala Dam, and the U78 Costerton side roads. Alternative access is being provided via a new side road which effectively replaces these two side roads. In addition it is proposed to realign the U77 Longfaugh side road. These proposed changes will affect vehicle journeys on the local road network and details of the effects are shown on Figures 11.2 to 11.4. The impacts are discussed below.

Figure 11.2Southbound JourneysFigure 11.3Northbound JourneysFigure 11.4Saughland Farm

North and Southbound Journeys on Local Road Network

(Refer to Figures 11.2 and 11.3). This proposed scheme includes for the closure of both the existing U77 Fala Dam and the U78 Costerton road junctions with the A68. The closure of the U77 junction poses an impact on Marldene and the Old Crichton Dean residential properties when wishing to travel north. Access to the north will now be obtained by the proposed new side road by Haugh Head House, which replaces the existing U78 & U77 Costerton road access. The private access from Marldene onto the A68 would be removed and the U77 would be realigned in order to serve Marldene. Direct access to the A68 from Haugh Head House would be shortened by the introduction of the new side road mentioned above, thus improving the existing arrangement. Refer to Table 11.4 below, which highlights the possible changes to the existing travelling distances to specific points to the north and south on the A68 if the proposed scheme was adopted. Positive values indicate an increase in journey length and a negative value indicates a decrease in journey length.

Position	Point A - A68 SOUTHBOUND			UTHBOUND Point B - A68 NORTHBOUND		DUND
Property	Existing Distance	Proposed Distance	Change	Existing Distance	Proposed Distance	Change
Marldene	1.932	2.411	+0.479	1.005	2.676	+1.671
Old Crichton Dean	1.624	1.817	+0.193	1.266	2.119	+0.853
Haugh Head House	1.379	1.582	+0.203	1.511	1.884	+0.373
Routhenhill	1.147	1.730	+0.583	2.176	2.025	-0.151
Longfaugh Cottages	2.863	2.863	0	1.041	1.041	0
Saughland Farm	1.674	1.674	no change	2.232	2.232	no change

Table 11.4.	Changes in Distance	from Properties to the	e A68 – Proposed Scheme
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all distances in kilometres

From the above table it can be seen that the majority of properties experience a change in journey distance of less than 0.5km which is considered to represent a negligible magnitude of impact in accordance with Table 11.2. Two single residential properties Marldene and Old Crichton Dean experience an increase greater than 0.5km but less than 2km in a northbound direction and as such are considered to experience a slight magnitude of impact. In a southbound direction only Routhenhill experiences an increase in travelling distances greater than 0.5km. Thus, the overall magnitude of impact is considered to be slight and when combined with the low value of the area in terms of vehicle journeys the significance of the impact is deemed to be **negligible**.

As one of the main farms affected by the scheme and because it has several fields on the opposite side of the A68 from its main farm buildings, changes in travel patterns for vehicles from Saughland to these fields are shown on Figure 11.4 and detailed below in Table 11.5.

Table 11.5. Changes in Distance from Saughland Farm to Field Accesses

Options	Existing Distance	Proposed Distance	Change	Impact Magnitude
Option 12	1.009	1.432	+0.423	negligible

all distances in kilometres

From the above table, it can be seen that the change in journey distances for agricultural traffic from Saughland Farm travelling to its fields on the northeast of the A68 is less than 0.5km, therefore the magnitude of impact is considered as being negligible and when combined with the low value of the area in terms of vehicle journeys, the significance of the impact is deemed to be **negligible**. In addition by creating a staggered junction with the B6458 Tynehead side road, the new side road offers a safer access point for the farm traffic.

Summary

The greatest impact identified from the tables above is for the occupants of Marldene when wishing to travel north. With the closure and realignment of the U77 and the closure of the U78, access to the A68 will be via the realigned section of the U77 and the new access road. The alteration to the side road network results in an additional 1.671km being added to northbound journeys for the residents of Marldene. Assuming that a vehicle on the local road network travel at an average speed of 48kph (25mph) and on the A68 average 80kph (50mph), the increase in the journey time from Marldene to the northbound point will be 2.5 minutes (5 minutes on a round trip). The increase in the distance to be travelled and the associated increase in journey time is considered to represent a slight adverse magnitude of impact and when combined with the low site value, gives an overall impact significance of **negligible**.

Travel patterns will be not be significantly altered with the implementation of the proposed scheme. Properties to the east of the A68 are provided for by the introduction of the new side road which offers an improved and safer access onto the trunk road network and there is little or no effect on properties to the west of the A68.

11.5 Mitigation

No significant adverse impacts with respect to journey length and travel patterns for pedestrians, cyclists or equestrian users have been identified. Therefore, no mitigation measures are required. However, the junctions which are to be closed, will maintain access for pedestrians and cyclists and the existing footway adjacent to the A68 will be replaced with a combined footway/cycleway set back 2.0 metres from the trafficked carriageway.

11.6 Residual Impacts

No significant adverse impacts with respect to journey length and travel patterns for pedestrians, cyclists or equestrian users have been identified. Due to the proposed

inclusion of a combined footway/cycleway set back 2.0 metres from the trafficked carriageway the overall residual significance is considered to be **slight beneficial**.

No significant impacts with respect to community severance have been identified, however the application of the above mitigation will provide clear benefits to pedestrians and others. The safety and amenity value of the routes used by pedestrians and others will also remain unchanged. The overall residual significance in terms of community use is considered to be **negligible**.

With regard to vehicle journeys on the local road network, there is no significant adverse impacts associated with the proposed scheme. The overall residual significance in terms of vehicle travellers is considered to be **negligible**.