Aberdeen City Local Development Plan 2016 – Developer Bids

Introduction and Background

The Local Development Plan (LDP) bid form provided by Aberdeen City Council (ACC) suggests that there is no requirement for the submission of bids for development of additional greenfield sites within the City. The form indicates that this is because 'the 2012 LDP identified a significant number of greenfield sites to accommodate these [Strategic Development Plan] requirements'. Bancon believes that this position is at best premature, for a number of reasons, and as a result considers it both sensible and prudent to submit bids for the development of additional greenfield sites. The reasons are: -

1) The requests for LDP bids is based upon the proposed Strategic Development Plan, published in February 2013. It is Bancon's view that the proposed SDP is woefully under allocating land for development. There are significant contradictions between the vision, aims and actual requirements and allowances in the plan. More importantly its growth projections are significantly below those predicted by the Scottish Government. It will surely be rejected by Scottish Ministers.
   It is submitted therefore that the LDPs should be planned to accommodate this likelihood. Considering the SDP and subsequent LDPs will be unlikely to be adopted until 2016, Bancon calculate that there will be considerable additional housing land allocations required in the 2017-2026 and 2027-2035 periods to accommodate the growth that the Scottish Government predicts, and indeed the North East will is already experiencing.
2) Bancon submit that the 2012 LDP fails to provide a 5 year supply of effective housing land, as identified in the latest Housing Land Audit figures. The reliance of the 2012 LDP on a small number of large development sites also fails to provide opportunities for 2nd phase sites to be drawn down early, because these are primarily the same sites as are failing to become effective in phase 1. The current Housing Land Audit identifies a 4.4 year supply, and while the draft 2013 audit suggests an improved situation, there is considerable dubiety about some of the projected delivery rates for large sites. Prudence therefore suggests that there is a requirement to identify more small sites for development as soon as possible to address the shortfall.
3) There are several large sites identified in the 2012 LDP that are proving difficult to develop, or slower to develop than anticipated. While it is tempting to point the finger of blame at the economic conditions, this does not bear close scrutiny. The North East has performed better than most of the UK (only London and the South East being the exceptions), and the population growth since 2006, when the last strategic Development Plan review began, has exceeded even the Scottish Government's high migration forecasts. The 2009 Structure Plan aimed to increase the City Region's population to 480,000 by 2030, and current trends suggest that we have already exceeded that number in 2013. The provision of a range of effective housing sites, bolstered by new allocations, is essential to accommodate the rapidly expanding population.

This Local Development Plan bid is therefore necessary to address any one, two or all of the above. The bid itself will concentrate on the proposed development, and the deliverability of that development. The requirement for the land will be established through the proposed SDP consultation, 2013 Housing Land Audit and progress on large 2012 LDP sites in the interim. Seeking to predict these three variables at this stage in the process is impossible.

1 Name of proposer: Bancon Developments Ltd.
Date: 14/06/13
Address: Banchory Business Centre, Burn O'Bennie Road, Banchory
Postcode: AB31 5ZU

2 Name of landowner: Kennerty Farms c/o Bancon Developments Ltd.
Address: As above.

The site and your proposal

3 Site Name: Peterculter Kennerty Farm

4 Site Location map: The site is located to the west of Peterculter, with access from Kennerty Road. To the north lies Kennerty Farm, and to the south the Deeside Way. An existing residential area is adjacent to the site on the east.

Fig 1 – Proposed development site and route of proposed AWPR.

5 National Grid reference of the site: NJ 834002

6 Current Use of Site/Previous Development: Agricultural/grazing land.

7 Proposed Use of the Site: Residential

8 Details of Housing Proposals: The development proposed consists of 22 dwellinghouses and associated open space, with an adjacent field offering the potential for tennis courts. The proposed layout utilises and improves the existing road network in the area, and provides pedestrian and cycle connectivity to the Deeside Way.

9 Provision of Affordable Housing: on site – 25%

10 Business Land Proposals: N/A

11 Other Proposed Land Uses: The bid includes a play area and kickabout area in the centre of the housing, and an adjacent field offers potential for much needed tennis courts, adjacent to the Deeside Way.

12 Phasing: The site would be developed in one phase.

13 Community Engagement: None to date.

Sustainable Development and Design

14 Sustainability Checklist:

A) Exposure – The site has good shelter to northerly winds

B) Aspect – The site is on low lying ground with higher ground to the north and south offering protection, but the site is gently south facing, therefore benefitting from natural sunlight.

C) Slope – The site is relatively flat.

D) Flooding – A flood risk assessment has been carried out and shows that the site is not at risk from a 1:200 year flood event.

E) Drainage – The site is adjacent to the lower Deeside trunk sewer, while surface water is capable of being drained effectively using SUDS.

F) Built and Cultural Heritage – The development will not lead to the loss or impact upon any listed building or historic landscape.

G) Natural conservation – The development of the site would not impact negatively upon any nature conservation interests, and the extensive landscape planting would improve the biodiversity of the site from its current grazing use.

H) Landscape features – The site does not contain any landscape features of note, other than peripheral mature trees which would be retained as part of the development.

I) Landscape fit – The proposed development will be contained successfully in the surrounding landscape. The Deeside Way is raised around 4-5m above the level of the site, and therefore screens the site from the south. To the north lies Kennerty Farm steadings and surrounding woodland, which screens the site from the north. Figs 2 and 3 below are taken from Google Streetview, showing the context of the site.

Fig 2 – site viewed from southeast corner looking towards Kennerty Farm.

Fig 3 – view from the northwest corner of the site looking south towards the Deeside Way.

J) Relationship to existing settlements – The proposed development will fit successfully into the existing settlement, with existing residential areas immediately adjacent to the east. Fig 4 below demonstrates how the development will successfully round off the southwest corner of the settlement.

Fig 4 – integration into the surrounding area.

K) Land use mix – The proposed development will provide a suitable balance of public open space and recreation facilities along with the 22 houses.

L) Accessibility – The proposed development site is within 400m of the A93 with a regular bus service. Vehicular access is available via Kennerty Road, which leads directly to the A93. Pedestrian and cycle access can also be taken up Kennerty Road, or alternatively along the Deeside Way.

M) Proximity to services and facilities –

Community facilities – 400-800m from the site
Local shops – 400 from the site
Sports facilities – Potentially on site, golf course within 400m
Public transport networks – Within 400m of the site
Primary school – Approximately 800m from the site.

N) Footpath and cycle connections – The Deeside Way, the primary pedestrian and cycle route along the river Dee valley, runs along the southern edge of the site. This provides recreational walks to the west towards Banchory, but also direct pedestrian and cycle access to the town centre and beyond to Cults and Aberdeen to the east.

O) Proximity to employment opportunities – Apart from local service employment, Peterculter offers limited employment opportunities at present. The town is excellently placed to provide access to Westhill and Kingswells, which both offer extensive employment opportunities and the nearby AWPR access will further enhance the connection with these towns. Bancon have also submitted two separate bids for sites within Peterculter that would provide suitable local employment opportunities.

P) Contamination – No constraints.

Q) Land use conflict – No conflict.

R) Physical Infrastructure –

Electricity – available
Gas – available
Water and Sewage – capacity available
Secondary School Capacity – current forecasts indicate capacity at Cults Academy
Primary Capacity – Significant capacity is available at Culter Primary School.

15 Supporting Surveys: A transport study of Peterculter, and the potential improvement to the current situation that the AWPR will bring, along with a Landscape Capacity Study for the wider Kennerty Farm area are appended.

16 Community Benefits of the Proposed Development: The development of the site will provide local housing, including 25% affordable housing, which will contribute to the falling primary school roll. It is noted that almost all development in the 2012 LDP is located within

the route of the AWPR. However, development is essential to maintain the vibrancy of towns, and the viability of services and facilities.

17 Masterplan/Framework: An indicative layout plan is appended to this bid report.

KENNERTY FARM, PETERCULTER
LANDSCAPE CAPACITY STUDY

On behalf of Bancon Developments
January 2009

DAVID WILSON ASSOCIATES
landscape architects

Tel: 01698 200035 Fax: 01698 200036
Aros House 121 Cadzow Street Hamilton ML3 6JA
Also at: 1 Berry Street Aberdeen AB25 1HF
www.davidwilsonassociates.co.uk

KENNERTY FARM, PETERCULTER

Landscape Capacity Study

On behalf of Bancon Developments
January 2009

DAVID WILSON ASSOCIATES
landscape architects

121 Cadzow Street, Hamilton ML3 6JA
Tel: 01698 200035 Fax: 01698 200036
also at 1 Berry St, Aberdeen AB25 1HF

CONTENTS

1. INTRODUCTION

1.1 Peterculter is a large village which lies to the west of Aberdeen City, in the River Dee valley. It is situated on the A93 road that connects Aberdeen with upper Deeside and Perth, 8 miles west of the city centre. The B979 also passes through the settlement, linking to Stonehaven to the south and Westhill to the north.

1.2 Several regular bus services connect Peterculter to Aberdeen and Braemar. The former Royal Deeside Railway was closed to passengers in 1966, and dismantled in 1972 (www.deeside-railway.co.uk).

1.3 According to the population estimates, Peterculter had a population of 4,693 in 2006 (www.aberdeencity.gov.uk). The new Aberdeen City and Shire Draft Structure Plan targets a high scenario population growth throughout the Aberdeen City Region, along with the requirement for an extensive provision of new homes. As a commuter settlement for Aberdeen, Peterculter could also take its share of the proposed greenfield allowances for the city (see table below).

Proposed greenfield housing allowances for Aberdeen City

2007–16	2017–23	2024–30
12,000	5,000	4,000

Source: Aberdeen City and Shire Draft Structure Plan

1.4 Bancon Developments have commissioned David Wilson Associates to prepare a landscape capacity study for the expansion of the settlement to the southwest, at Kennerty Farm. This has been prepared with regard to the review of Aberdeen City and Shire Structure Plan currently underway and also with an opportunity to contribute to the forthcoming new Local Development Plan.

1.5 A minimum of 500 units has been considered an economically viable proposition, on a potential 20 hectare site, so that formed the basis of the study.

1.6 The aim of this study is to identify the limits and opportunities for development in this area, and set out an optimal structure for the potential expansion.

2. METHODOLOGY

2.1. Designation of the potential expansion area (see drawing no. L1) was based on a draft framework provided by Bancon Developments, showing the possible directions of development. It basically sits in a broad valley southwest of Peterculter. The existing settlement boundary (as shown in the Local Plan), Kennerty Farm and the woodland belt along the Culter Burn provide its eastern edge. The area extends to the A93 to the north, and as far west as Coalford, including some Aberdeenshire areas. Following the topography of the valley and also including the woodland at Normandykes to the south, it returns to the settlement boundary at Burnside. The scope of the study may extend beyond this contour, including the relevant neighbouring areas.

2.2. In order to establish the setting into which the new development should blend, the report starts with a description of the Landscape Character of the area. This is examined in relation to the "Landscape Character Assessment of Aberdeen" (LCAA) prepared by Ian Nicol, Anne Johnstone and Laura Campbell in 1996. This document sets out the officially accepted description of the character of the area. Its guidelines for development within this landscape character type are taken into consideration.

2.3. Following this, the existing urban pattern is introduced, starting with a brief historical overview. The settlement structure and its relation to the natural features and the road network are also described.

2.4. The potential expansion area is introduced in a general overview. This includes the description of both the relevant natural and cultural features, and the relationship of the area to the settlement.

2.5. The next chapter provides an analysis of the visual character of both the town and the potential expansion area. This is supported by pictures showing some characteristic views.

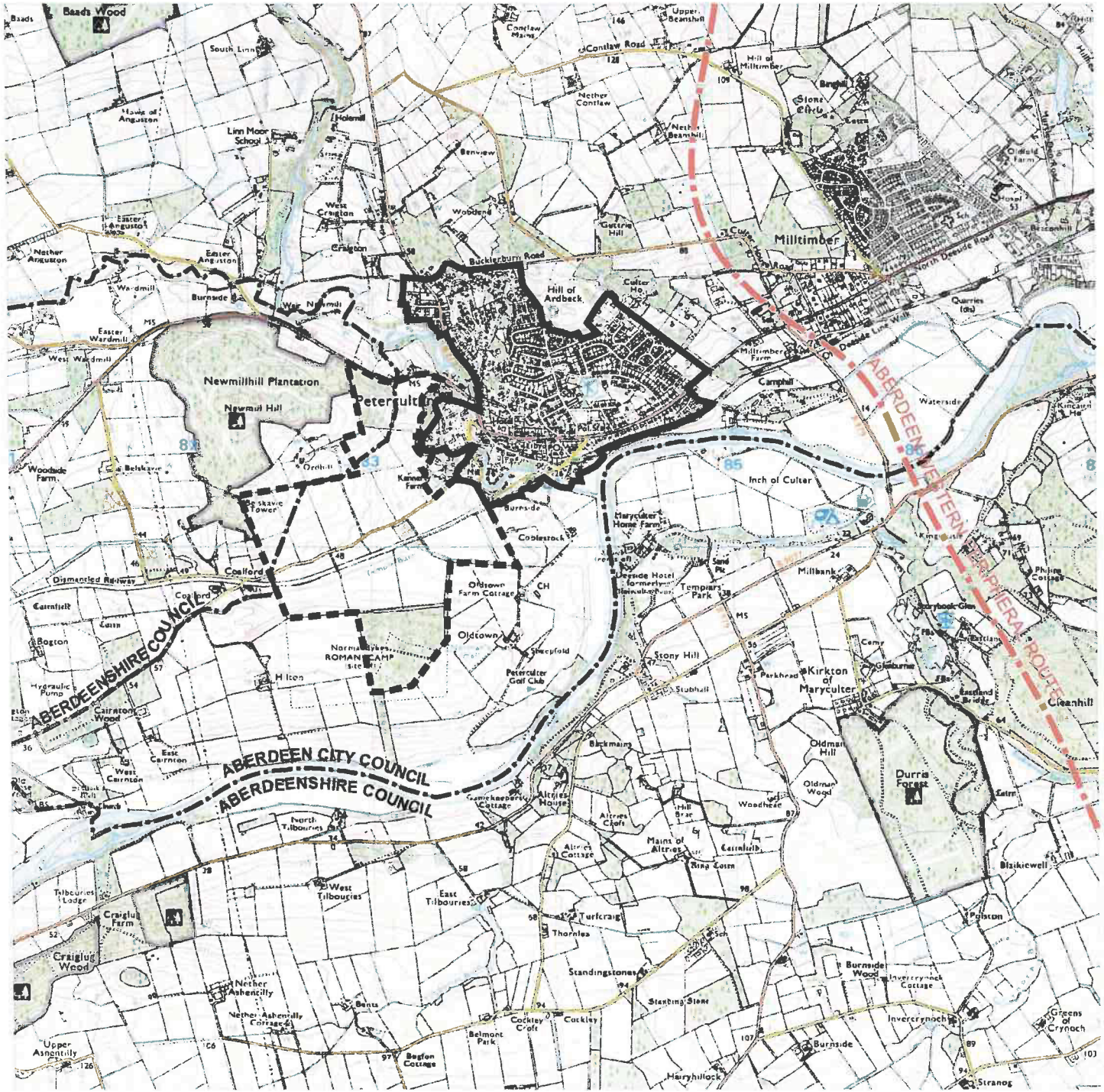
2.6. The use of the site is governed primarily by the policies of both the extant and emerging Structure Plan and Local Plans. These are considered in detail, and the appropriate ones listed, and their relationship to the potential development discussed.

2.7. Having assembled all the relevant information, the landscape capacity of the potential expansion area is then determined in three steps. First, areas that are inevitably not suitable for any type of urban development are identified and excluded. Then, the rest of the area is assessed against several criteria in order to identify areas that are less favourable for development from that certain aspect. The overall result of this helps to identify the sites that are the least suitable for development. Finally, the potential visual impact of development is considered by establishing the view to the potential expansion area by the main receptors (elements which the sites could be seen from). The whole process is explained in detail in the course of the assessment.

2.8. Based on the result of the assessment, the study includes an outline layout proposal for the potential expansion. This is explained and the most important considerations for the potential development described in the last chapter.

2.9. Since there is no official methodology for landscape capacity assessment, the study is based on the recommendations of "Guidelines for Landscape and Visual Impact Assessment" published by the Landscape Institute in conjunction with the Institute of Environmental Management and Assessment, applying them to this situation with a more comprehensive context. Results of similar studies have also been taken into consideration.

2.10. The study also takes into account the relevant national planning policies including Scottish Planning Policy 21 'Green Belts', Scottish Planning Policy Guideline 3 'Planning for Housing' and Planning Advice Notes 44 'Fitting New Housing Development into Landscape', 55 'Planning in Small Towns', 65 'Planning and Open Space' and 72 'Housing in the Countryside'.



KENNERTY FARM, PETERCULTER
LANDSCAPE CAPACITY STUDY

L1: Location

Scale: NTS **January 2009**

DAVID WILSON ASSOCIATES
landscape architects

2.11. The assessment is based primarily on the landscape and visual considerations (and also related to environmental sustainability). Other planning issues (such as distances to individual public services, development costs of public utilities etc.) should be considered at a later stage, when the exact nature of development will be specified within the designated areas. Although the study focuses primarily on residential development, other potentials have also been taken into consideration.

2.12. There has not been a separate ecological or tree survey prepared, but the character of the vegetation and limiting ecological features have been identified during the site survey.

2.13. The relevant Ordnance Survey Explorer map and an extract of the local plan were used to prepare the layouts. In addition to the various printed and electronic sources of information detailed amongst the references, the study was based on site visits in October and December 2008.

3. LANDSCAPE CHARACTER

3.1 The aim of this chapter is to identify the main landscape character that is the setting of Peterculter and its potential expansion. This is based primarily on the "Landscape Character Assessment of Aberdeen" (LCAA) prepared by Ian Nicol, Anne Johnstone and Laura Campbell in 1996. This was complemented with further additions from the site visit and other sources.

3.2 Peterculter sits upon the northern bank of the River Dee, at the influx of Culter Burn. The topography of this area is diverse, with hills rising up to about 100m, dissected by several valleys (see drawing no. L2). The settlement basically occupies the southern, southwest and western slopes of the Hill of Ardbeck.

3.3 While at the higher grounds of the area, Precambrian to Permo-Carboniferous bedrocks appear at the surface, the valley floors are covered by Pleistocene or recent deposits. Most of the soils are formed from glacial till, while in the river valleys they developed on alluvium or meltwater-sorted sands.

3.4 Patches of natural vegetation cover mostly land that is difficult to cultivate. These include the higher rocky hilltops and the floodplains and steep slopes along the River Dee and the burns. The River Dee is designated as a Special Area of Conservation (www.snh.org.uk), with qualifying features including Otter (*Lutra lutra*), Freshwater pearl mussel (*Margaritifera margaritifera*) and Atlantic salmon (*Salmo salar*).

3.5 The climate is varied. The description of "The New Statistical Account of Scotland" (1845) is still valid:

"*On the banks of the river the southern exposure, the thin, dry, sandy soil, the shelter afforded by the numerous enclosures and small plantations, – all combine in giving effect to the rays of the sun, in rendering the temperature high, the air most salubrious, and the climate remarkably genial.*" (p. 106)

In the higher grounds and northern exposures:

"*the situation is more bleak, the land in many places damp and marshy, the temperature low, and the climate proportionably more unfavourable; the crops are consequently later, the snow is often deeper, and frost more intense than on the river side.*" (p. 106)

3.6 The "Landscape Character Assessment of Aberdeen" report classifies the area as 'wooded farmland' where the

"*landuse is predominantly agricultural, with a mixture of arable and grazing.*" "*The small- to medium sized fields are divided by either stone walls (mostly) or fences.*" "*There is also a good deal of woodland present throughout the area. It occurs in a variety of types:- as coniferous plantation, as mixed woodland, as clumps, as shelterbelts and as boundary trees.*" (LCAA, p. 75)

The overall appearance shows a

"*considerable variety of this landscape*". (LCAA, p. 75)

3.7 The main settlements developed on the northern Deeside along the main road that is now the A93. The countryside is linked to this transport route by a network of minor roads.

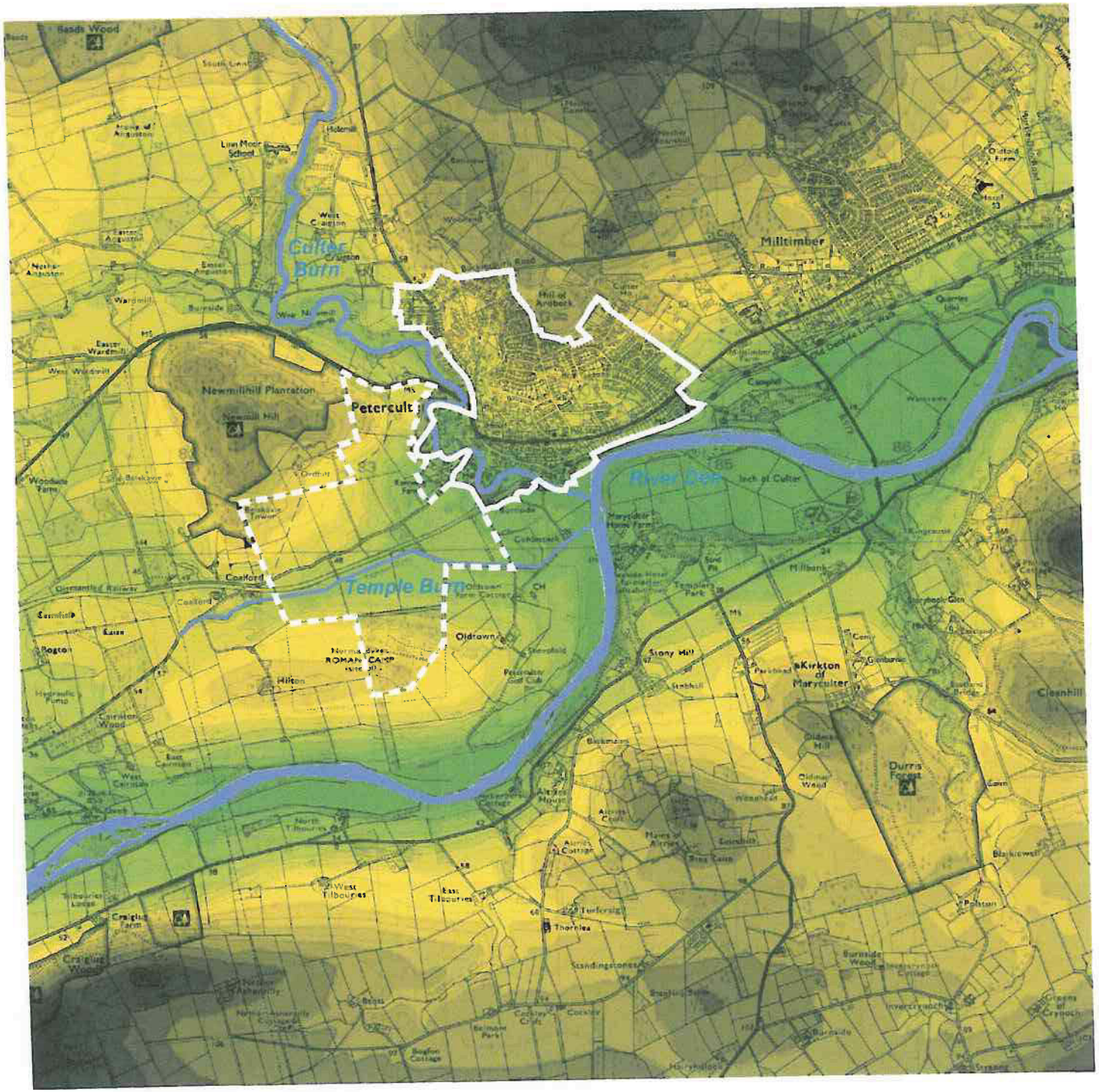
3.8 Settlements are

"*reasonably well integrated into the surrounding landscape by mature tree and shrub planting*" (LCAA, p. 75)

and

"*buildings tend to be traditional in style and are frequently associated with clumps of trees.*" (LCAA, p. 75)

3.9 "*The undulating ground and sequence of minor, generally quiet, roads provides opportunities for informal recreation that would be unlikely to have significant visual or landscape impacts.*" (LCAA, p. 75)



KENNERTY FARM, PETERCULTER
LANDSCAPE CAPACITY STUDY

L2: Topography

Scale: NTS **January 2009**

DAVID WILSON ASSOCIATES
landscape architects

Major destinations include the Drum Castle with its historical castle, garden and old oak wood, and the 18-hole Peterculter Golf Club course.

3.10 The higher grounds provide some excellent viewpoints with long distance views across the open countryside. Although most of the area

"*is visually enclosed by rising land or woodland*",

the westernmost part is

"*overlooked by Peterculter and, therefore, has a higher degree of visibility.*" (LCAA, p. 75)

Conclusions

3.11 With its undulating ground and agriculture as the predominant land use, the area has a rural character.

3.12 Settlements are reasonably well integrated into the landscape by planting. Buildings are usually traditional in style.

3.13 Although most of the area is visually enclosed, the part to the west of Peterculter has a higher degree of visibility (see Landscape Character Assessment of Aberdeen).

4. EXISTING URBAN PATTERN

Historical development

4.1 Peterculter, the "corner land of St Peter" (George Mackay, 2002) developed around a paper mill established in 1751 (Gazetteer for Scotland), to the north of the River Dee where it is joined by the Culter Burn. It was Patrick Duff of Premnay, the then lord of Culter Estate, who leased the Waulkmill on the Leuchar (Culter) Burn to Bartholomew Smith for the factory (www.culter.net).

4.2 In the mid-19th century the parish contained the mansion houses of "Culter, Murtle, Binghill, Countesswells, and Bieldside, with their respective grounds, gardens, and woods." (The New Statistical Account of Scotland, p. 106) Kennerty also appears on a map from 1869. However, it was not until the end of the 19th century, that the present centre of the settlement was established (www.old-maps.co.uk).

4.3 With the development of transport throughout the 20th century, the parish became a commuter settlement for Aberdeen. Built development grew towards the northeast, gaining grounds on the slopes of the Hill of Ardbeck. As a result, the historical town centre has geometrically lost its central position to the settlement.

4.4 The most recent developments appeared to the west, with some even extending to the western banks of Culter Burn. Realization of the proposed Aberdeen Western Peripheral Route (www.awpr.co.uk), crossing between Peterculter and Milltimber (see on Layout 1) may possibly bring further development to the parish.

Structure

4.5 The settlement is bounded on the south by the River Dee. Culter Burn also set a boundary to the built areas throughout centuries of its history. However, some more recent developments appeared on the lower grounds west of the burn. (See drawing no. L3)

4.6 The basic character of the settlement is set by its location on the slopes of the Hill of Ardbeck, exposed to the west, southwest and south. The houses along the Culter Burn sit on low grounds, almost hidden by the containing topography and vegetation.

4.7 The centre of the parish developed along the main road running parallel to the river. This is where most of the retail units are to be found. Most of the neighbourhood streets are linked to this main road as well as School Road and Coronation Road.

4.8 The Local Plan designates two urban green spaces: one in the centre of the eastern part and another to the south, along the former railway line. Culter House also has a valuable garden with mature deciduous trees. The main axis of the proposed core paths is the former railway line, with links towards the north across the settlement.

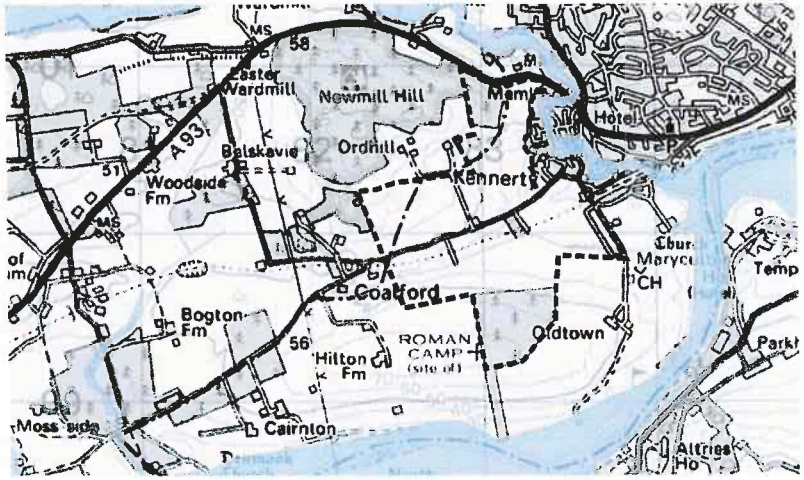
Conclusions

4.9 The exposed hillside location, facing towards lower ground to the southwest provides the settlement with a strong character. Despite the expansion of the last decades, this has still been preserved.

5. POTENTIAL EXPANSION AREA

5.1 The potential expansion area is located southwest of Peterculter. It is shaped as a broad valley descending slightly towards the northeast. Parts of Hilton hilltop to the south and the Newmill Hill ridge to the north are also included. (See drawing no. L3).

5.2 The Temple Burn drains the waters of the area to the River Dee. According to the SEPA Indicative River & Coastal Flood Map for Scotland the area is not threatened by floods (see below).



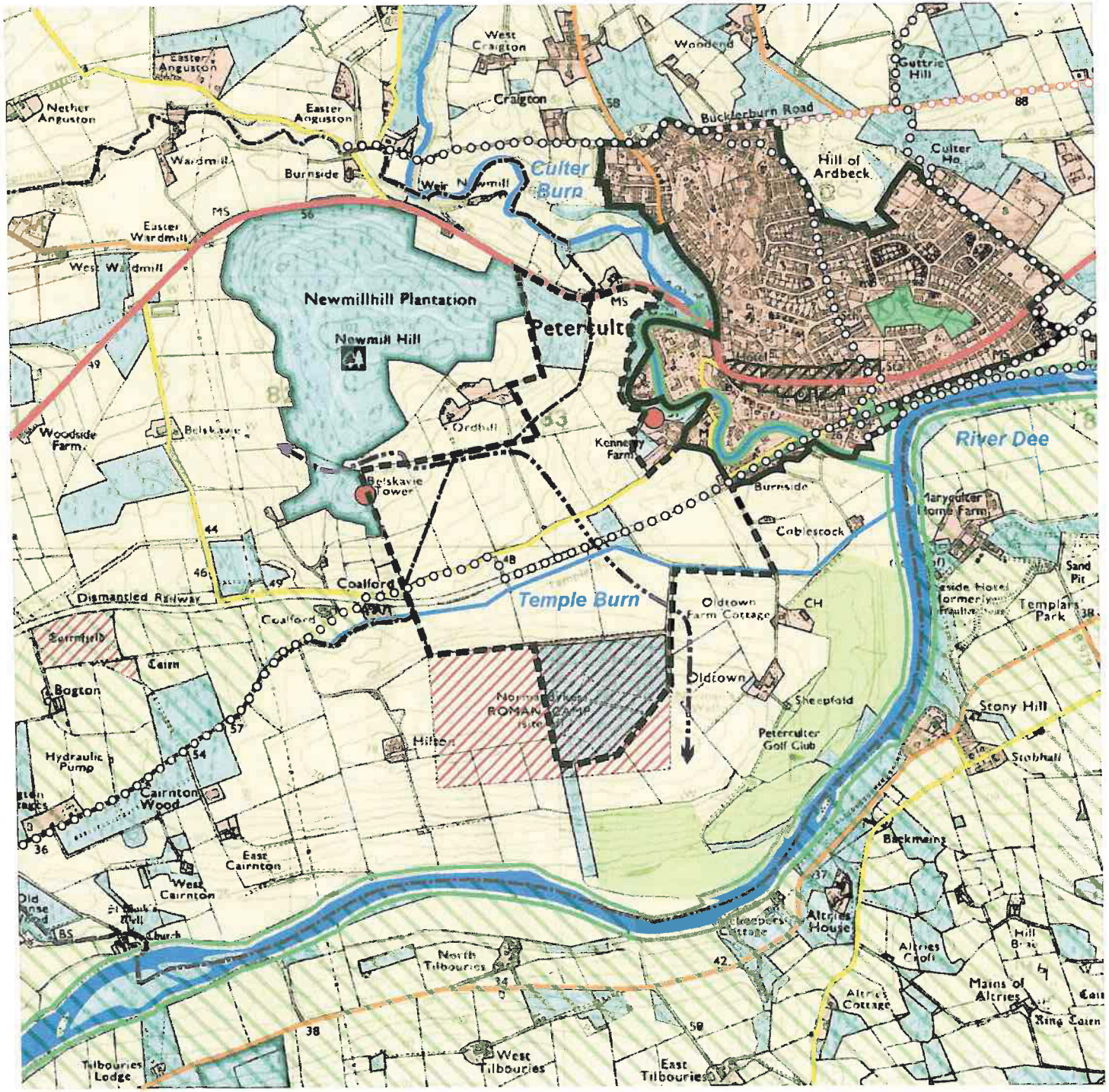
5.3 The bedrocks, which appear at the northern part of the area at the surface, are mainly Dalradian gneisses with intrusions of granite. Most of the soils are formed from glacial till, while those at the valley bottom were developed on glacial meltwater deposits (LCAA).

5.4 According to the relevant map of Soil Survey of Scotland, most of the agricultural land belongs to Class 3_2 'Land capable of producing a moderate range of crops'. The northwest and northeast ends of the area belong to Class 4_2 'Land capable of producing a narrow range of crops'. The southernmost part contains the best quality soil of Class 3_1.

5.5 The structure and the use of the land have not significantly changed since the 19th century (www.old-maps.co.uk). The land use is mostly agricultural, with a mixture of arable (predominantly on the northern part) and grazing land (predominantly on the southern part).

5.6 The Ancient Woodland at Normandykes (recently felled) is part of the area, while the one along the Culter Burn provides the northeast boundary. A minor woodland patch at Newmill Hill, managed by the Forestry Commission, is also included. This has been recently planted (see picture below) within the frame of the Woodland Grant Scheme (Forestry Commission Land Information Search). There is also a minor woodland in the centre of the area, at the Temple Burn.

5.7 The eastern verge of the area, alongside Culter Burn is adjacent to the designated River Dee Special Area of Conservation.



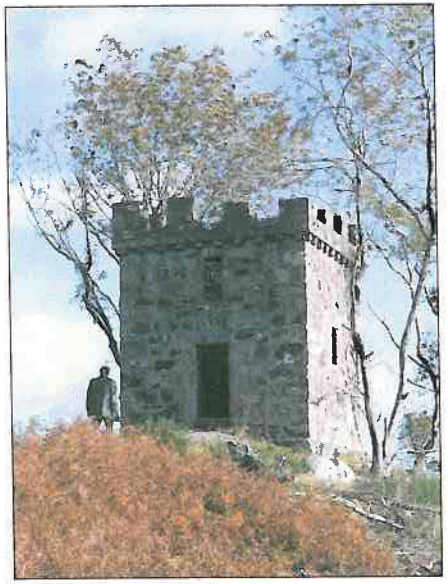
KENNERTY FARM, PETERCULTER LANDSCAPE CAPACITY STUDY

L3: Potential expansion area

Scale: NTS **January 2009**

DAVID WILSON ASSOCIATES
landscape architects

5.8 Amongst the relevant cultural features the most significant is the Scheduled Ancient Monument of Normandykes Roman camp at the southern boundary of the area. Listed buildings of the area include the early 19th century Belskavie Tower (see picture) to the western, and Kennerty House, dated circa 1840, to the eastern edge (www.pastmap.org.uk). There is also a World War I memorial near the northeast edge, next to the A93. The drystone dykes along most of the field boundaries are also worth mentioning.



5.9 The former railway track is another historical feature, presently used as a pedestrian route, and designated as a proposed Core Path.

5.10 The main distribution gas pipe crossing the area from the northwest to the southeast is a significant underground structure.

Relation to the settlement

5.11 Though the steep banks of the Culter Burn separate the area from the main settlement, there is some modern development around Kennerty Farm, adding to what has historically existed. Also, planning permission has been issued to redevelop the Kennerty Farm steadings for 5 new houses.

5.12 There are currently two minor roads linking the area to the settlement and to the A93 across the burn, one from Coalford through Kennerty Farm and the mill to the west end of the village centre, and the other leading from the Peterculter Golf Club along Burnside to the east end. As mentioned above, the former railway track currently provides a pedestrian link. (Visual aspects are discussed in the next chapter.)

Conclusions

5.13 The major constraint within the area is the underground gas pipeline. Relevant natural and cultural features, productive soils and woodland areas should also be considered.

5.14 The area has existing links to the settlement centre through low capacity roads.

6. VISUAL ANALYSIS

Settlement

6.1 With most of its area sitting on a hillside, the settlement is exposed to the west, southwest and south. However, the views from these directions are softened by the existing tree canopy. This is provided by the woodland on the top of the Hill of Ardbeck, the treebelt along the Culter Burn and some major groups of trees within the residential areas. As a result, the appearance of the settlement is not obtrusive (see below the view from Hilton).

6.2 This also relates to the western settlement boundary adjacent to the potential expansion area. Viewing from the west, this edge is almost hidden by the containing topography, and softened by the vegetation around Kennerty Farm. Although tree canopy is less to the south, buildings become obvious only from close proximity.

6.3 Regarding the views seen from within the settlement, many of the houses face the lower lying open countryside along the Dee to the south and southwest. Some of the potential expansion area forms part of these views (see pictures below and next page).

View from the centre towards Ordhill

Potential expansion area

6.4 The main attributes providing the character of the Temple Burn valley include:

- A longitudinal valley providing a sweeping view towards the southwest from the settlement
- A high degree of visibility due to its exposure and open nature
- Small-scale development consisting of scattered, stand-alone farm houses

The view of the potential expansion area from the residential areas on the Hill of Ardbeck

6.5 Due to its character, it is possible to see parts of the area from the higher ground almost all around (see Picture Sheet 1 on page 22). The landform and the agricultural landscape, without any significant obtrusive element, provide attractive views. These are especially eye-catching to the northeast with the backdrop of the settlement and to the southwest with the distant views of rural Deeside (see picture above). Visual sensitivity of this area is therefore generally high.

6.6 Since woodland cover and other screening elements are not significant, the range of internal views depends on the topographic location. At the valley floor it is limited by the surrounding ridges, while the higher ground may provide some more distant views, especially along the axis of the valley.

6.7 Belskavie Tower is probably the most attractive feature of the area and a main focus of many views. The rolling topography, field boundaries and drystone dykes are also significant visual elements. Sheltered mostly by treebelts, the farm houses are not so apparent; they sit in sympathy with the landscape.

6.8 The northernmost section of the area is visually separated from the Temple Burn valley by the ridge of Newmill Hill (see Picture Sheet 2 on page 23). The range of view is more limited here; with the World War I memorial as a unique visual feature.

Conclusions

6.9 Owing to its location and a rich canopy of trees, the settlement provides a pleasant view. Some of the houses enjoy excellent views towards the southwest, including the western section of the potential expansion area.

6.10 Providing clear rural views without any significant obtrusive element, much of the potential expansion area is visually sensitive to changes. Visual impacts therefore are a major concern.

6.11 The northernmost section is visually separated from the core of the area.

7. PLANNING CONTEXT

7.1 The development plan for the area is the Approved Aberdeen & Aberdeenshire Structure Plan and the Aberdeen Local Plan, which cover most of the potential expansion area. However, since a minor section of it sits beyond the Council boundary, relevant policies of the Aberdeenshire Local Plan have also been taken into consideration and included where it was necessary.

7.2 The existing Structure Plan strategy aims at sustainable use of resources.

"Thus the core objectives are to focus future development on existing settlements, and to reduce both the need to travel and the environmental cost of travelling." (p. 11)

This should be achieved through locating

"homes, jobs and services in scale with each other and with the role and function of each settlement." (p.12)

Promotion of environmentally friendly forms of transport (walking, cycling, buses and rail) is also set as a priority.

7.3 Revision of the plan is currently underway. Peterculter is within the boundary of Aberdeen City Council's geographical zone, and as such falls within the Aberdeen Strategic Growth Areas in the Draft Structure Plan.

7.4 The Aberdeen Local Plan "Green Spaces, New Places" was adopted on 25 June 2008 to replace the former Aberdeen City District Wide Local Plan. The Aberdeenshire local plan was adopted in 2006.

7.5 The general considerations regarding landscape protection are set out in Aberdeen Local Plan Policy 31:

"One of the objectives of planning for future development will be to maintain and manage aspects of Aberdeen's unique landscape setting. Development will not be acceptable unless it avoids:

1. adversely affecting landscape character and elements which contribute to, or provide, a distinct 'sense of place' which point to being either in or around "Aberdeen" or a particular part of it;

2. obstructing views of the City's townscape, landmarks and features when seen from publicly accessible vantage points such as roads, railways, recreation areas and pathways and particularly from the main city approaches or 'gateways';

3. disturbance, loss or damage to recognised recreation, wildlife or woodland resources or to the physical links between them;

4. sprawling onto green spaces or buffers between places or communities with individual identities, and those which can provide opportunities for countryside activities.

All developments shall respect the quality of the local landscape character and contribute towards its maintenance and enhancement in terms of siting, scale, massing, colour, design, density, orientation, materials, planting/ landscaping and boundary treatment. They should otherwise be capable of being absorbed within sites without significant adverse impacts upon existing landscape elements, including linear and boundary features or other components, which contribute to local amenity, and provide opportunities for conserving, restoring or enhancing them." (p. 54)

7.6 It is also important to take into consideration that nearby parts of the Deeside are designated as Areas of Landscape Significance in the Aberdeenshire Local Plan.

7.7 Both local plans designate the potential expansion area as part of the Green Belt. Aberdeen Local Plan Policy 28 and Aberdeenshire Local Plan Policy Gen13 exclude any major developments within this area unless it is essential for agriculture, horticulture, forestry, informal countryside recreation, or mineral or landfill workings or if it is directly related to nature conservation.

7.8 For any other purposes, only minor developments may be permitted within the Green Belt, such as conversion of existing buildings or minor housing related to an existing primary industry appropriate to the Green Belt (Aberdeen Local Plan Policy 28 and Aberdeenshire Local Plan Policy Hou3, Gen13). However, the Green Belt is currently under review. This is expected to release greenfield sites for development within the Structure Plan. This may also provide an opportunity for housing in the potential expansion area.

7.9 Some areas along the former railway line and the Culter Burn and within Aberdeen City are also designated as parts of Green Space Network. These are important to protect for the purpose of public enjoyment and recreation. According to Aberdeen Local Plan Policy 29, proposals

"*for development that is likely to destroy or erode the character or function of the green space network will not be permitted.*" (p. 52)

Along with the Green Belt, the Green Space Network is also under review.

7.10 In Aberdeen City, there is no policy on the protection of agricultural land. Aberdeenshire Local Plan Policy Env11 on 'Agricultural Land' therefore relates only to a minor section of the area. Although the policy protects the agricultural area in general, there is no prime quality land within this area that would be a particular concern.

7.11 Due to the presence of some minor woodlands within the area, relevant Aberdeen and Aberdeenshire local plan policies are also important to mention:

"*The City Council will protect and enhance Aberdeen's trees and woodland with the aim of doubling the existing tree cover of the City.*

1. There is a presumption against all activities and development that will result in the loss of or damage to established trees and woodlands that have natural heritage value or contribute to the character, biodiversity or amenity of a particular locality.

2. Planning authorities have a duty to have regard to the planting of trees. Where proposed development unavoidably involves the loss of trees, permission will normally be conditional on a replanting scheme with trees of appropriate species and numbers. New development should make a positive contribution to the enhancement of tree cover by, where appropriate, ensuring provision is made for new street and garden trees and community woodland. New tree planting should consist wholly or mainly of native species."

(Aberdeen Local Plan Policy 33, 'Protecting Trees and Woodlands', p. 55)

"Development that would cause the loss of, or serious damage to, trees or woodlands, which are EITHER covered by an existing or proposed Tree Preservation Order OR of significant ecological, recreational, historical, shelter or landscape value, will be refused unless:

a) its public benefits at the local level clearly outweigh the value of the habitat;
b) the development will be sited and designed to minimise adverse impacts on the biodiversity of the site, including its environmental quality, ecological status and viability;
c) there will be no further fragmentation or isolation of habitats as a result of the development; AND
d) the development incorporates satisfactory measures to replace and/or enhance existing trees and woodlands." (Aberdeenshire Local Plan Policy Env8, 'Trees and Woodlands', p. 20)

7.12 Since the Scheduled Ancient Monument at Normandykes is included, the Aberdeen Local Plan Policy 16, 'Archaeology and Planning' should also be considered:

"*The City Council will refuse planning permission for development that would adversely affect any Scheduled Ancient Monument or its setting. (This will also apply to any other nationally important site, which at the time of application is unscheduled but has been identified by Historic Scotland in the non-statutory register for Aberdeen). Where a proposed development is otherwise acceptable but would affect any known or recorded archaeological site, or any archaeologically sensitive area, the City Council will*

require that provision be made at the developer's expense for appropriate recording of the site (before development takes place).

Where there is reason to believe that a development proposal may affect an area containing archaeological remains, the City Council will request that the applicant provide an assessment and archaeological field evaluation (prior to determination of any planning application). The findings of this assessment and evaluation will be taken into account in deciding whether planning permission should be granted with or without conditions, or refused." (p. 41)

Conclusions

7.13 Aberdeen Local Plan Policy 31, 'Landscape Protection' contains the most important landscape issues that should be regarded in the course of the assessment. It is also important to take into consideration that the neighbouring Aberdeenshire area is designated to be of Landscape Significance.

7.14 Although the area is affected by Green Belt and Green Space Network designations, both are currently under review. Other relevant policies to consider include those related on woodland protection and archaeology.

8. LANDSCAPE CAPACITY ASSESSMENT

8.1 This assessment is carried out in three phases. First, those areas are listed which should be excluded from the development for some reason. In the second step, the rest of the area is assessed against several criteria. These include considerations of the sensitivity of the landscape which make development at certain locations less acceptable. Finally, visual impacts are assessed separately for the potential development.

Exclusions

8.2 The **Temple Burn** should have a buffer zone of at least 10m on both sides.

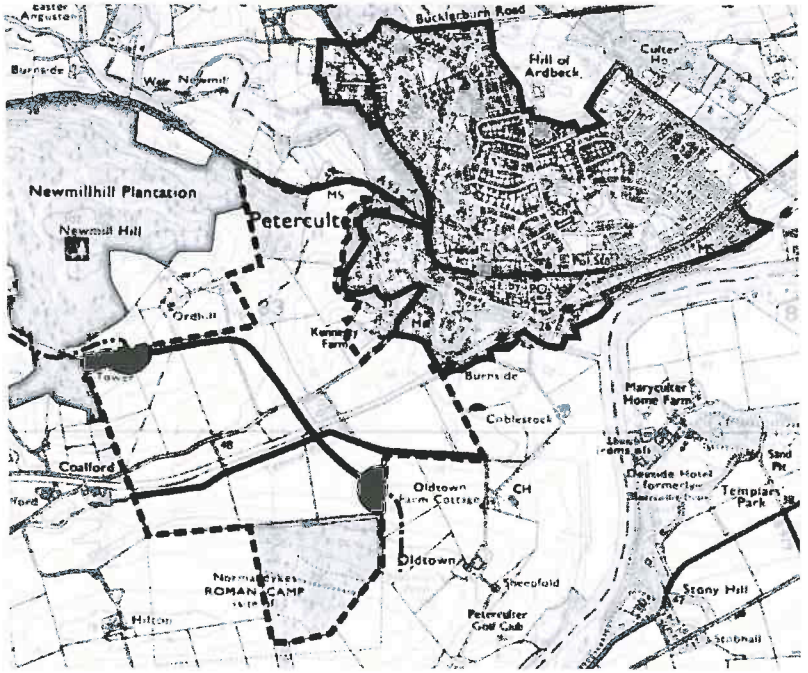
8.3 Special safety distances apply to the **underground gas pipe**. The inner safety zone (95m to both sides) imposes a strict exclusion of any kind of development. Our Client has declared that he would replace part of the pipe for one with higher safety standards. This would reduce the safety distance to only 3m both sides at the section concerned. However, a 12m easement corridor each side must remain clear. (Additional safety zones are considered under the next heading.)

8.4 Parts of the study area within both Aberdeen City and Aberdeenshire are designated as **Green Belt** where local plan policies exclude major residential developments. However, since this designation is currently under review, for the purposes of the study this has been set aside.

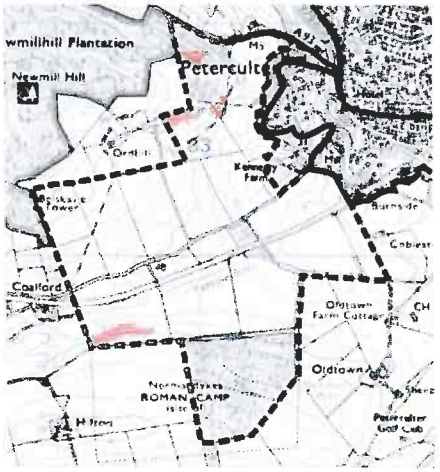
8.5 The figure opposite top shows the areas excluded within the potential expansion area in black.

Landscape considerations

8.6 The following is the assessment against a series of criteria regarding landscape considerations. Related figures show the areas less appropriate from that certain aspect in red.

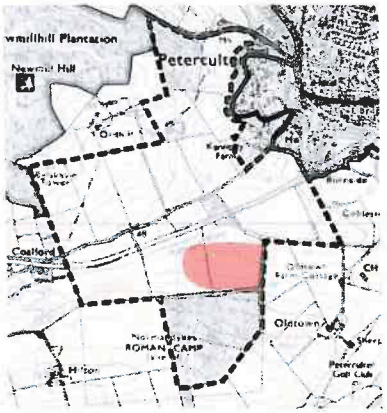


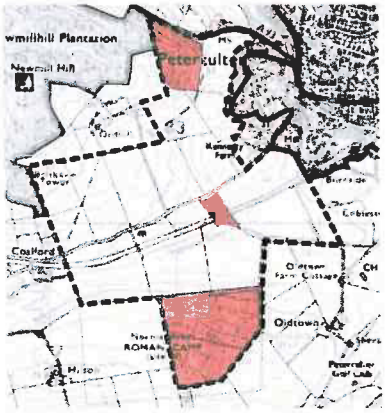
8.7 The **gradient** of the slope is an important environmental consideration, since the lower gradient means less earth moving. This is also significant regarding construction costs. Slopes above a gradient of 20 % (one in five) are regarded as less advantageous (see figure).



8.8 Owing to its topographic position, **climatic conditions** are generally favourable throughout the area, and do not represent a significant basis for differentiation.

8.9 Although quality of agricultural land in Aberdeen City does not represent a policy concern, from the aspect of landscape protection, development should be steered toward land of lower quality. The figure to the left below shows Class 3_1 prime quality soils that are the best soils within the area.

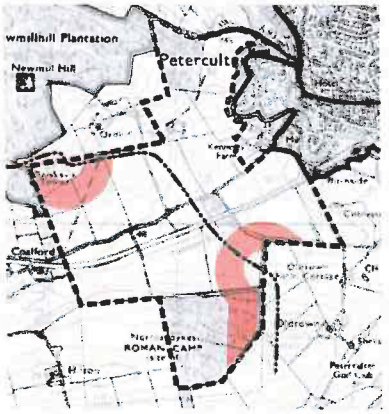


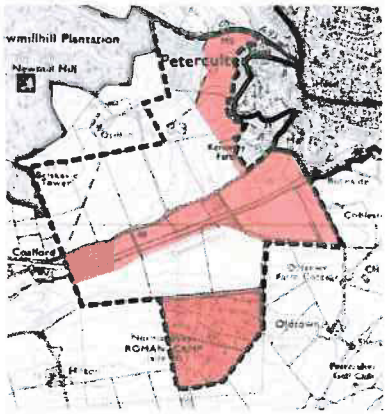


8.10 Although they do not completely exclude it, local plan policies severely restrict developments affecting **woodland areas**. The figure to the right above shows the woodlands concerned. The one at Normandykes is an Ancient Woodland.

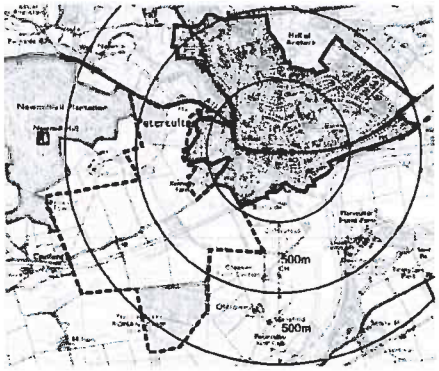
8.11 In the middle safety zone (95 to 240m to both sides) of the existing **underground gas pipe** development is not completely excluded, but densities of potential development are limited to 40 per hectare with a maximum of 30 houses built at any one time. This constraint does not apply to the upgraded section of the pipe. (See figure opposite to the left.)

8.12 Significant sections of the area are designated as part of the **Green Space Network** (see figure opposite to the right). Although the Green Space Network is also being reviewed, it is reasonable to anticipate that this designation will stay. Taking into consideration the extant policies (see in the previous chapter), this would exclude the expansion of the settlement into this direction. Therefore, for the purposes of the study, the designation was considered, but the areas concerned have not been excluded. Since designated areas along the valley floor and the Culter Burn appear as a corridor, some territorial change seems to be possible without threatening their function.

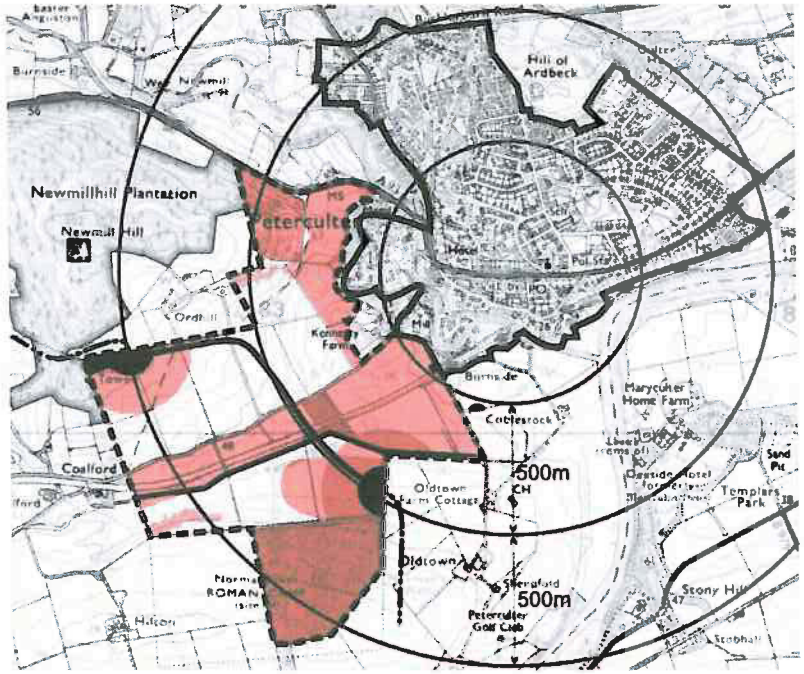




8.13 The **distance from the settlement centre** is a complex criterion including several considerations. Generally speaking, along with the Structure Plan strategy, it aims at a sustainable use of resources by reducing the distance between residential areas and local services. Thus, the more distant areas are less favourable for development. Although the real distance may vary by the length and possible speed of access routes, this was simplified in the model using concentric circles at 500m distances from the parish centre. This criterion is also related to visual considerations, aiming at a compact settlement form.



8.14 The figure below combines all the considerations described above in a single layer. Areas affected by multiple limiting features appear especially to the south. Distance from the settlement centre was not added with shaded layer, but it should also be taken into consideration. The eastern part of the potential development area sits at a reasonable distance, closer to the centre than many already developed areas. On the other hand, the areas to the west would be farther from the centre than the most distant parts of the existing settlement.



Visual impacts

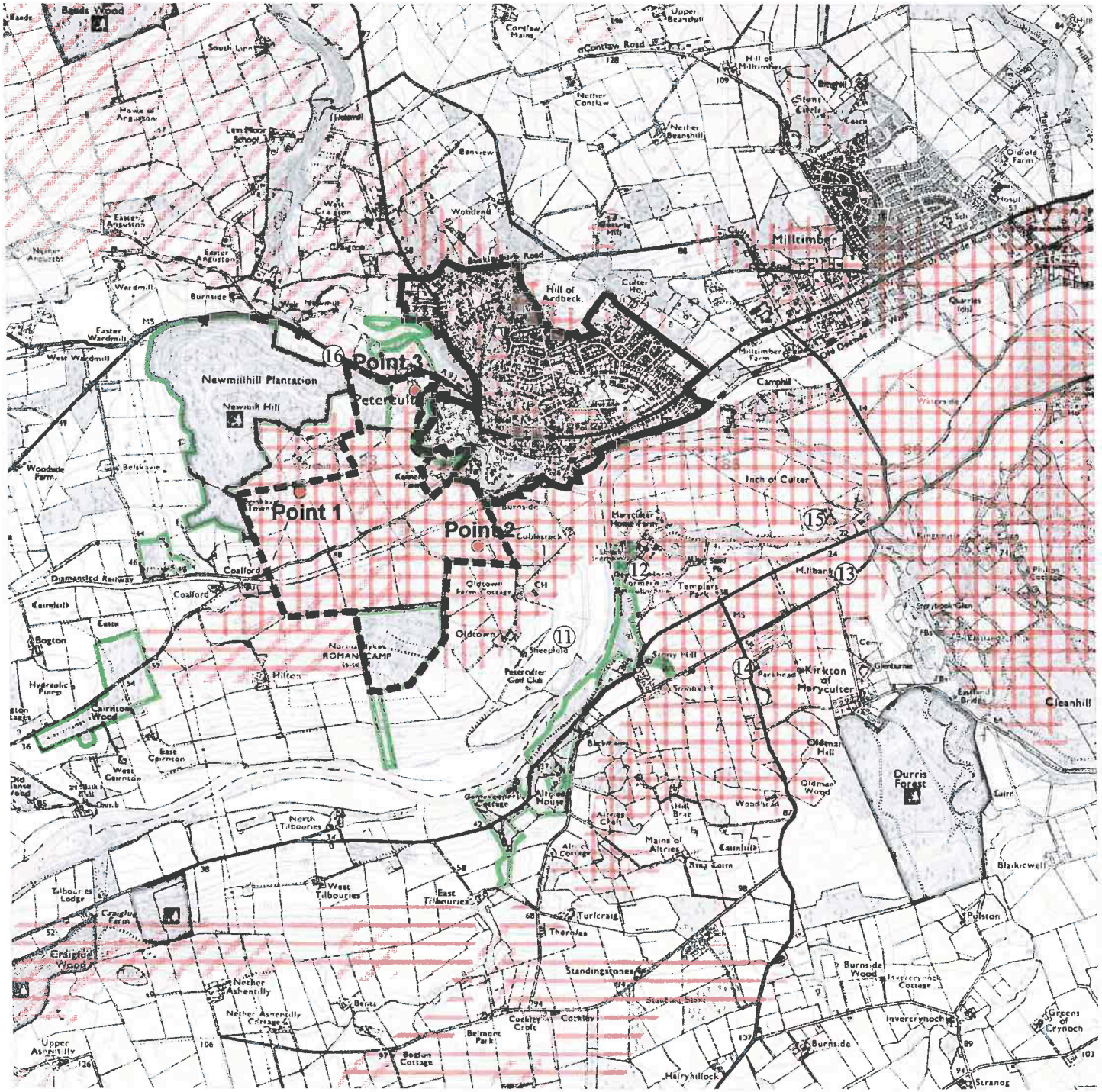
8.15 Since, as described in Chapter 6, the visual impacts are of major concern, this needs careful assessment. The potential receptors are identified first, and then parts of the potential expansion area that are visible from the most significant visual receptors are designated.

8.16 The scope of potential receptors has been established through ground model analysis using KTF 6.7 software produced by Key TERRA-FIRMA Ltd and topographical Land-Form PROFILE data supplied by Ordnance Survey. Selecting three points of the area that represent three distinctive locations, the 'Zones of Visual Influence' output data (drawing no. L4) show the areas from which these could be seen based on the topography of the landscape.

8.17 The supposed height of development is taken to be 8m from ground level. The nearby woodlands were superimposed as visual barriers at a generic height of 15m. Ancient woodlands were regarded as existing, even if they have been recently cut. As the model takes no account of physical visual barriers such as individual houses or buildings and more distant tree cover, these will be discussed below.

8.18 It is also important to mention that woodland belts along the River Dee and the Culter Burn consist mostly of deciduous trees. Therefore their screening effect during the winter season will be more limited than that of the coniferous plantations.

8.19 The most significant receptors are the **residential areas of Peterculter**. Although neighbouring buildings and nearby trees may locally screen the view, there are still plenty of houses, from which the area can be seen. (The picture at the bottom of next page shows these as seen from the centre of the potential expansion area.) The locations most concerned are at the higher Hill of Ardbeck slopes and in the parish centre (see pictures in Chapter 6). Views are also possible from the **A93 road** crossing through the centre. The scope of the view possible from within the settlement was established using three representative points (see figure on the next page), taking the viewpoint height at 5m. The direction of hatching corresponds to that of the central line of each point. As shown on the figure, most of the potential expansion area is affected. The impact is least along the southwest settlement edge and at the valley floor to the southwest.



Settlement Boundary

Settlement Boundary

Woodland Edges Considered

Visual Envelope of

Point 1

Point 2

Point 3

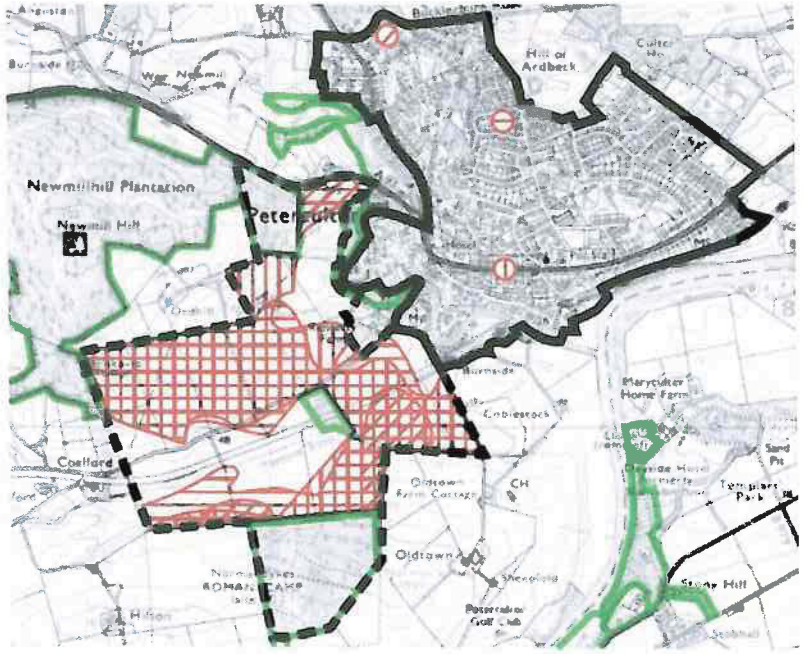
⑪ Visual Receptors (as referred to in text)

KENNERTY FARM, PETERCULTER
LANDSCAPE CAPACITY STUDY

L4: Visual envelope

Scale: NTS **January 2009**

DAVID WILSON ASSOCIATES
landscape architects



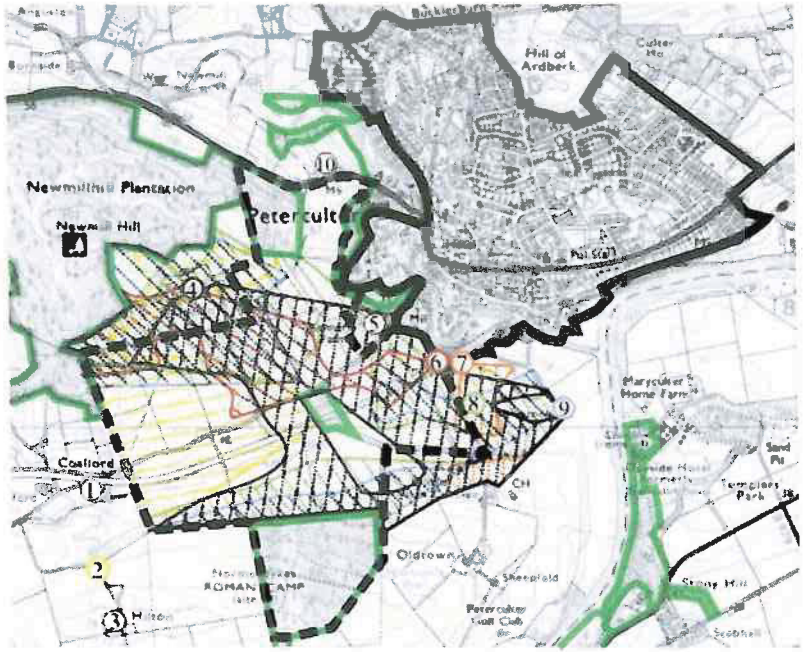
8.20 The number of potential residential receptors increases towards the higher grounds of the area. However, the valley floor also has high importance being in the axis of the sweeping view. Due to this fact and to a relatively high angle of view to the horizontal plane, opportunities for mitigation by screening plantation are limited.

8.21 Additional low range receptors include several farm houses within and near the potential expansion area. The figure on the next page shows them with a number corresponding to those used below. Mitigation in their case would be relatively simple with sheltering tree belts. However, in some cases this would affect them negatively through the loss of their present, generally superb view:

8.22 This relates to **Hilton-North** (2), **Ordhill** (4), **Burnside** (6-7) and two buildings at **Coblestock** (8-9). Their scopes of view, within the potential expansion area, was drawn with regard to their orientation (main view), with a viewpoint height at 5m. The figure on the next page shows these hatched with the colour marking the receptors. The higher grounds and the southeast part are the most affected. The latter is covered mostly by adjacent views.

8.23 **Coalford** (1), **Hilton-South** (3) and **Kennerty Farm** (5) are well contained within the surrounding trees. Impacts on these receptors therefore would be insignificant.

8.24 The **country road** within the area will be a main receptor, however with local traffic only. The new development may also obstruct views from the **Proposed Core Path** at its lower level sections.



8.25 **Peterculter Golf Course** (11) sits on a hillside exposed basically to the southeast. Some views are possible from fairway 3 at the north. A young plantation along the northeast part of the edge will gradually provide screening here. Further mitigation would be possible by additional planting.

8.26 Despite its location on the other side of the Dee, **Maryculter House Hotel** (12) still belongs to low range receptors. There is a fine view to the opposite golf course and the potential expansion area. However, as the golf course plantation grows, this will be almost completely screened, except the arable land at higher grounds (to the right on the picture opposite).

8.27 As a distinct visual unit, the northern section of the potential expansion area is discussed separately. Main receptors here include the westernmost settlement area and the highest one on the Hill of Ardbeck. The section of the **A93 road** (16) along the

northern boundary (see Layout 4) would be a major receptor with significant traffic. The site is directly exposed to the views of those arriving from the west. Possibilities for mitigation are limited, since this would also screen the view of the World War I Memorial (picture below). Owing to its surrounding vegetation, there would be little impact on the farm across the A93 to the north (10).

8.28 Although the layout of visual envelope (L4) shows several potential distant receptors to the south, southeast, east and the northwest, most of these are screened by additional woodlands that have not been taken into consideration in the model process. Exceptions are farm settlements of **Millbank** (13) and **Parkhead** (14) and the **caravan site** (15) at the Inch of Culter to the southeast. Some additional receptors (Cockley and Thornlea) to the south have visual connections only to the higher northern grounds of the area.

Conclusions

8.29 In the first step of the assessment the buffer zone of the Temple Burn and the inner safety zone of the underground gas pipe were excluded.

8.30 Limiting features cover extensive parts, appearing multiple to the south. The function of Green Space Network areas should be maintained, though some territorial changes seem to be possible. Regarding distance from the settlement centre, the eastern parts sit at a reasonable range, while the areas to the west would be farther from the centre than the most distant parts of the existing settlement.

8.31 Since visual impacts are of major concern, these have been assessed thoroughly. Results show that most of the area is exposed to various visual receptors. The least receptors are affected by the views around Kennerty Farm and along the valley floor to the southwest. The northern section of the area is also visually sensitive, with limited possibilities for screening.

9. PROPOSED DEVELOPMENT AREAS

9.1 The results of the assessment have shown that a major urban expansion towards the southwest across the valley would not be acceptable. Only a limited development is possible here, that could help to avoid further growth of the settlement towards the north, and place the historical centre of the settlement into a more focal position again relative to the overall settlement shape. (See Layouts 5 and 6.)

9.2 The proposed development is structured around Kennerty Farm, including locations that would be appropriate to avoid major visual impacts. The landform plays an important role, visually screening most of the sites, and also sheltering them from the winds.

9.3 The eastern verge of the proposed development area is well contained by the landform; therefore visual impacts would be insignificant. However, in order to get closer to the targeted 20 ha development, this area had to be extended to include some areas that could have a low visual impact on the main receptors. This should be mitigated by avenues proposed along the main access roads.

9.4 The residential areas sit both sides of the existing country road, and also include some limited development near Coblestock. This would result in 19.3 hectares of new residential areas that would increase the existing settlement with an additional 14%; a ratio that would seem to be appropriate.

9.5 The land south of the proposed residential areas is designated as open space (6.3 ha). This is an area very much exposed to the visual receptors of the settlement, and therefore not suitable for housing. As open space however, it could be an important site for recreation, and could also include a public playground / leisure ground.

Traffic routes

9.6 The existing road network would be the subject of a separate traffic assessment. It could be possible to provide a new access from the A93 through the ridge along the woodland edge from the north.

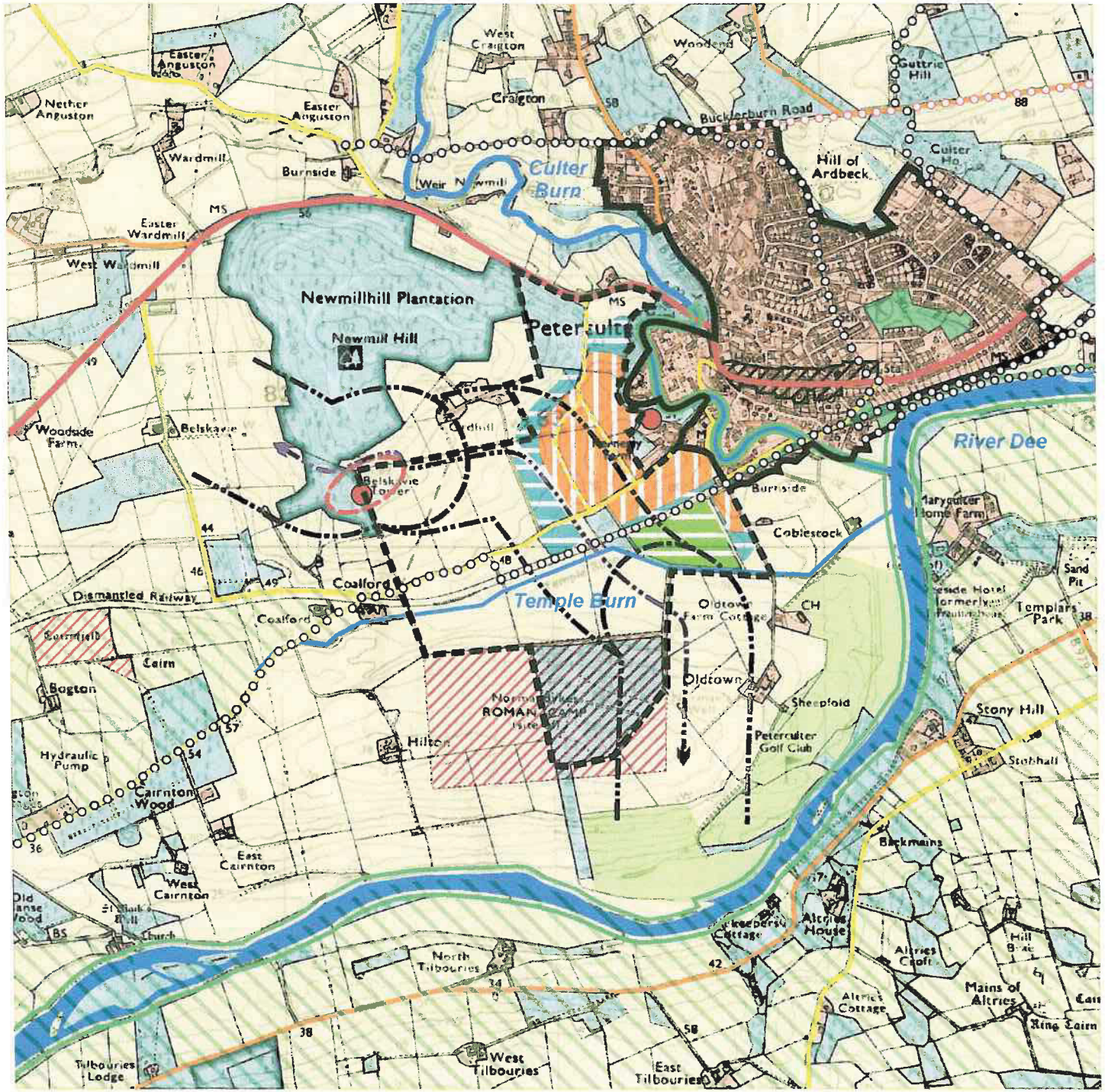
9.7 The importance of the Proposed Core Path on the former railway track would increase with the development. Some woodland belt is necessary along its edge with the residential areas in order to give privacy. With the proper layout and choice of trees this would screen only the houses, but allow some views towards the surrounding landscape.

Proposed woodlands

9.8 A couple of woodland patches and belts are proposed in order to screen the proposed residential areas, or to provide a proper backdrop to them. The woodlands were plotted so that their edges follow contour lines or existing boundaries in order to sit naturally and avoid major change of the landscape pattern.

Green Space Network

9.9 Although some areas designated as parts of the Green Space Network have been used for the proposed development, their function still seems to be possible to maintain. The one along the Culter Burn is replaced by the woodland belt a bit further to the west around the proposed development that connects to the existing woodland section at the Temple Burn. The east-west corridor could also be maintained through the allotments and the pastures at the southern bank of the burn.



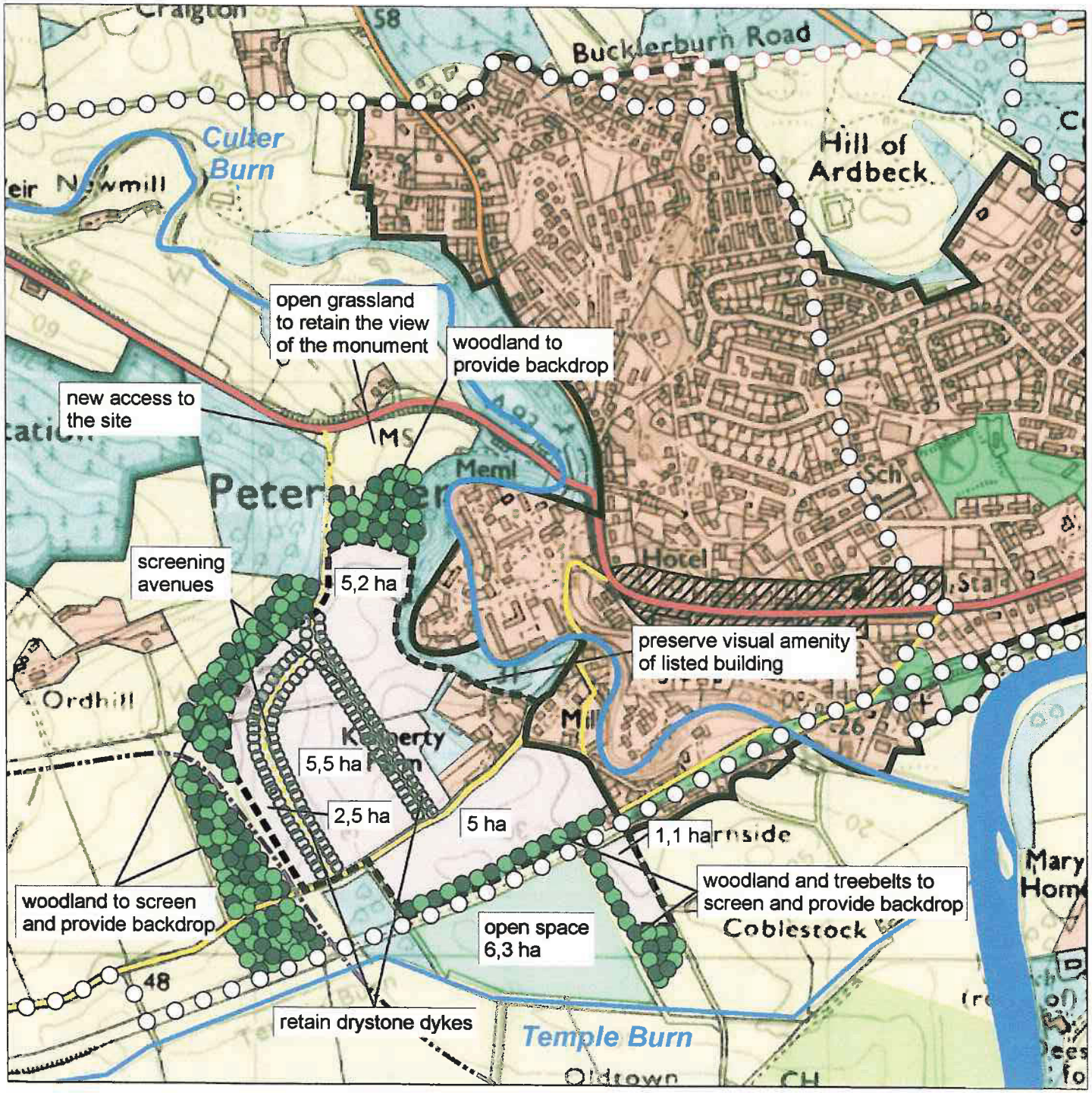
- Agricultural Area
- Woodland
- Golf Course
- Settlement
- Urban Green Space
- District Centre
- Settlement Boundary
- Potential Expansion Area
- River Dee SAC
- Areas of Landscape Significance
- Scheduled Ancient Monument
- Listed Building
- Proposed Core Path
- Aspirational Path
- Underground Pipeline with
- Existing Outer Safety Zone
- Projected Outer Safety Zone
- Proposed Residential Area
- Proposed Woodland
- Proposed Open Space
- Proposed Visual Buffer Zone

KENNERTY FARM, PETERCULTER
LANDSCAPE CAPACITY STUDY

L5: Proposed development 1

Scale: NTS **January 2009**

DAVID WILSON ASSOCIATES
landscape architects



- Agricultural Area
- Woodland
- Golf Course
- Settlement
- Urban Green Space
- District Centre
- Existing Settlement Boundary
- Proposed Settlement Boundary
- Proposed Core Path
- Aspirational Path
- Underground Pipeline
- Proposed Woodland

KENNERTY FARM, PETERCULTER
LANDSCAPE CAPACITY STUDY

L6: Proposed development 2

Scale: 1: 10,000 **January 2009**

DAVID WILSON ASSOCIATES
landscape architects

Cultural heritage

9.10 As a unique feature, Belskavie Tower needs special attention from the Forestry Commission and the Council in order to preserve the view of and from the tower. This requires that a designated zone around the tower (see on Layout 5) should be kept deforested.

9.11 Similarly, the view of the World War I memorial, for those arriving at the A93 road, should be preserved. The area adjacent the road is therefore proposed to be maintained as open grassland.

9.12 The development around Kennerty Farm should be plotted and designed so that it does not have an impact on the listed Kennerty House.

9.13 The drystone dykes marking the field boundaries within the development area should be retained as much as possible as features along the proposed access roads or as fences of the housing lots.

Conclusions

9.14 As a result of the proposals a southwest expansion of the settlement would be possible, with the mitigation of most of the potential impacts:

- Since the expansion is contained within the topography and the proposed woodland belts, the settlement would preserve its basic exposed hillside character.
- For similar reasons, the rural character of the landscape would not significantly change (provided that the architecture would also be sympathetic to the location).
- Views from the potential receptors are mostly preserved, or have only minor impacts.
- The function of the Green Space Network is possible to retain with some territorial change. While the role of the Core Path is strengthened as a recreational corridor, the ecological links could be relocated along the same directions.

View of the potential expansion area from Hilton-North with Peterculter to the right

View of the potential expansion area from Belskavie Tower with Peterculter in the background

View of the potential expansion area from the northeast (ridge of Newmill Hill) with the distant view of Deeside

PICTURE SHEET 1

View of the northern section of the potential expansion area from the east (from the World War I memorial)

View of the potential expansion area from the south (ridge of Newmill Hill) with the westernmost houses of Peterculter in the background

PICTURE SHEET 2

REFERENCES

Plans and Research Studies

1. Guidelines for Landscape and Visual Impact Assessment (2002)
   The Landscape Institute and the Institute of Environmental Management and Assessment, London and New York
2. Landscape Character Assessment. Guidance for England and Scotland
   Topic Paper 6: Techniques and Criteria for Judging Capacity and Sensitivity
   Scottish Natural Heritage – The Countryside Agency
   Source: www.snh.org.uk/wwo/sharinggoodpractice/cci/cci/guidance/
3. Landscape character assessment of Aberdeen. Scottish National Heritage Review. No 80 (1996)
   Ian Nicol, Anne Johnston, Laura Campbell
4. North East Scotland Together. Approved Aberdeen & Aberdeenshire Structure Plan (2001–2016)
   Source: www.nest-uk.net
5. Aberdeen City and Shire: A brighter outlook. Draft Structure Plan (2008)
6. Aberdeen Local Plan (2008)
   Source: www.aberdeencity.gov.uk/acci/web/site/Planning/SL/pla_LocalPlan_home.asp
7. Aberdeenshire Local Plan (2006)
   Source: www.aberdeenshire.gov.uk/planning/finalised/index.asp
8. Draft Core Paths Plan (2008)
   Source:
   www.aberdeenshire.gov.uk/outdooraccess/core_paths_plan/maps.asp
9. Final Draft Core Paths Plan (2008)
   Source: www.aberdeencity.gov.uk/ACCI/web/site/WalkingCycling/SL(WalkingCycling)/wac_corepaths_visionaimsobjectives.asp

Maps

10. Forestry Commission Land Information Search
    Source: www.forestry.gov.uk/forestry/infd-5ztnkv
11. Landmark Information Group Limited's Historical Map Archive website
    Source: www.old-maps.co.uk
12. Ordnance Survey, Explorer 406: Aberdeen & Banchory (2002)
13. Soil Survey of Scotland. Sheet 38: Aberdeen (1984)
    The Macaulay Institute for Soil Research, Aberdeen

Literature

14. George Mackay (2002): Scottish Place Names
    Lomond Books, New Lanark
15. The New Statistical Account of Scotland, Vol. XII, Aberdeen (1845)
    William Blackwood and Sons, Edinburgh and London
    Source: books.google.co.uk

Websites

16. Aberdeen City Council
    www.aberdeencity.gov.uk
17. Aberdeen Western Peripheral Route
    www.awpr.co.uk
18. CulterNet
    www.culter.net
19. Gazetteer for Scotland
    www.geo.ed.ac.uk/scotgaz
20. Indicative River & Coastal Flood Map for Scotland
    www.multimap.com/clients/places.cgi?client=sepa
21. Royal Deeside
    www.royal-deeside.org.uk
22. Scottish National and Regional Archaeological and Architectural Datasets
    www.pastmap.org.uk
23. Scottish Natural Heritage's Information service
    www.snh.org.uk/snhi
24. The Royal Deeside Railway
    www.deeside-railway.co.uk

PRACTICE INFORMATION

David Wilson Associates

1. The landscape architectural practice of David Wilson Associates was established in 1992 and now works from a busy design studio in Hamilton town centre. The staff consist of five qualified Landscape Architects including David Wilson, who has now over twenty five years professional experience. This is reinforced by a qualified and experienced garden designer and horticulturalist and administrative back up.

2. The company use computer-based design and communication systems to provide a professional landscape design and planning service to public agencies, commercial clients and private individuals throughout Scotland, Northern Ireland and the North of England.

3. The workload includes commercial housing layout design, industrial, residential developments, road corridor improvement projects, community parks, play areas, private garden design and ecological and woodland habitat and the full range of landscape initiatives.

4. In addition, the practice has provided a specialist service in preparation of landscape and visual impact studies and, over recent years, has undertaken them for many developers including Bancon, Gladedale, Dawn, Manor Kingdom, Miller, Persimmon, Scotia, Stewart Milne and Wimpey Homes. This has often been followed by David Wilson acting as a professional expert witness at a subsequent public inquiry.

FAIRHURST

Consulting, Transportation
Civil & Structural Engineers

Development Bid Site at
Peterculter West

Traffic Report

Bancon Developments

November 2009

Document Control Sheet

Project Title	Peterculter West
Document Title	Traffic Report
Issue	02
Status	Final Draft
Issue Date	23/11/09

Record of Issue

Issue	Status	Author	Check	Authorised	Date
01	Draft	K Clark			
02	Final Draft	K Clark			

Distribution

Issue	Organisation	Contact	Copies
1	Bancon Developments	H McNab, B Freeman	E-Mail
2	Bancon Developments	H McNab, B Freeman	E-Mail

TABLE OF CONTENTS

INDEX OF TABLES

APPENDICES

1 Introduction

1.1 During the public consultation exercise by Bancon Developments for their development bid site at Peterculter West, concerns were raised regarding existing congestion within Peterculter and the potential traffic impacts of the development site.

1.2 Bancon therefore commissioned WA Fairhurst to examine the existing road network and assess the impact of the development taking into account the impacts of the Aberdeen Western Peripheral Route (AWPR) and the potential for other infrastructure options to alleviate traffic concerns, consisting of:

Improvements to the A93/B979 (Malcolm Road) junction;

A new link from Malcolm Road to the AWPR Milltimber junction;

A new link from School Road to the AWPR junction.

2 Existing Situation

General

2.1 Peterculter lies on the A93, a main east-west arterial route into the city from Deeside. It serves towns situated along the Deeside corridor such as Banchory, Aboyne, Ballater, and Braemar. As such it carries high levels of commuter traffic to and from the city in the morning and evening peaks.

2.2 Whilst this is typical of any of the main arterial routes into the City, such as the A90 north and south, the A944 from Westhill and A96 from Inverurie, the situation in Peterculter is compounded by the A93 also forming the link between two sections of the B979; east of the village at Milltimber and west of the village at Malcolm Road. The B979 currently carries a high level of commuter and strategic traffic between the A90 at Stonehaven to Westhill and Dyce, both major employment areas for the entire region, as it used to bypass the congested A90 and A96 strategic routes passing through Aberdeen.

2.3 The main tidal direction of the B979 traffic is therefore westbound through Peterculter, opposite to the main tidal flow on the A93 which is eastwards towards Aberdeen. However, the A93 also has a local function as Peterculter main street, serving a population of nearly 4.500, so also accommodates general retail and business activity along it's frontage, including parking, servicing and pedestrian movements, signalised crossings as well as a being the main collector road for local residential traffic and the primary bus route. All of these functions contribute to the peak time congestion experienced within Peterculter.

Specific Issues – HGVs and Buses

2.4 There are other specific issues also contributing to congestion, for example the B979 carries a high proportion of HGV traffic, in both directions between the A90 to the south

and the industrial areas at Dyce and Westhill, and the A93 is also a main bus route with the First No.19 providing a 15-minute service and the Stagecoach 201/202/203 services providing a 20-minute service, thus there are buses frequently stopping on-road through Peterculter. These factors combined, lead to large vehicles frequently being in conflict with each other, given that the street also functions as a high street and provides residential parking, thus creating several pinch points. Examples of such pinch points are shown in Appendix A.

Specific Issues – A93/B979 Malcolm Road Junction

2.5 The existing junction between the A93 and B979 Malcolm Road at the west end of Peterculter is substandard in terms of geometry, with restricted visibility for both vehicles wishing to turn right onto Malcolm Road and vehicles exiting Malcolm Road. This junction is the key point of conflict between the two main traffic streams as described previously; the A93 eastbound and B979 northbound, with the B979 traffic turning right having to give way to the oncoming A93 traffic. This is more acute in the AM peak, since the two peak tidal flows do not conflict in the PM peak, i.e. peak flow is southbound on the B979 and does not require to give way to the peak flow on the A93 which is westbound.

2.6 From observation, many of the right turn manoeuvres are performed through the courtesy of the oncoming traffic allowing them to turn, rather than through natural junction capacity or gaps in the traffic stream. This therefore is another source of congestion, both at the junction but also backing up through Peterculter main street. Visibility for the right turn is also restricted which compounds the issue.

2.7 The result is that right turning traffic backs up through Peterculter in the AM peak, further compounded by the other highlighted issues such as pinch points, a high proportion of large vehicles, function as a High Street etc.

3 Future Proposals

Aberdeen Western Peripheral Route (AWPR)

3.1 The proposed AWPR will run between Charleston to the south of Aberdeen and Blackdog to the north, and the Fastlink which will run from Stonehaven to a new junction with the AWPR near Maryculter. The route passes adjacent to Milltimber Brae and a junction is to be provided to the north of Culter House Road, linking to the A93 at the existing A93/B979 junction at Milltimber by way of a new signalised crossroads.

3.2 The AWPR has two important effects on the A93 through Peterculter; in the AM peak there is an increase in eastbound traffic towards the City as a result of additional vehicles access the AWPR junction at Milltimber and a decrease in westbound traffic through the removal of the strategic north-south traffic from the B979. A vice versa effect is witnessed in the PM peak. Both are important in terms of congestion in Peterculter since, as has been established, many of the issues that contribute to the congestion are not simply based on traffic levels.

Existing and Predicted Traffic Levels

3.3 Peak period traffic flows were obtained from the MVA Consultancy, Consultants to Transport Scotland and responsible for the AWPR strategic traffic modelling, for the A93 and B979 through Peterculter before and after the AWPR is in place. The figures are shown in Appendix B and summarised in Table 3-1.

Location	Direction	Change
A93 East of Malcolm Road	Eastbound	26.34%
	Westbound	-62.91%
A93 West of Milltimber Brae	Eastbound	35.40%
	Westbound	-22.99%
B979 Malcolm Road	Northbound	-97.55%
	Southbound	-90.91%

Table 3-1: AWPR Peak Hour Traffic Flow Changes within Peterculter, AM Peak

3.4 Bancon Developments commissioned traffic surveys in Peterculter on the A93 at the School Road and Coronation Road junctions in order to determine current, rather than modelled traffic flows. These were carried out in the AM and PM peak periods and the resulting peak hour flows are shown in Figure 3-1 and Figure 3-2.

3.5 The traffic flows changes resulting from the AWPR, shown above, were applied to the surveyed traffic flows to determine the likely changes in traffic levels through Peterculter. The results are summarised in Table 3-2.

Location	Direction	Without AWPR	With AWPR	Change
A93 East of Malcolm Road	Eastbound	735	929	194
	Westbound	636	236	-400
A93 West of Milltimber Brae	Eastbound	879	1190	311
	Westbound	594	457	-137

Table 3-2: AWPR Peak Hour Traffic Volume Changes, AM Peak

3.6 The results show that the decrease in westbound traffic is predicted to be greater than the corresponding increase in the eastbound direction, with the greatest reduction seen in west Peterculter in the vicinity of Malcolm Brae.

3.7 Therefore, although the AWPR is predicted to increase westbound traffic, this does not necessarily automatically lead to additional congestion through Peterculter since, as has been established, the congestion issue is caused by many varying factors, many of which will be addressed through reduced the more significant reduction in flows, to and from the B979, particularly HGV flows.

3.8 Therefore It is anticipated that the reduced B979 flows will assist in a smoother flow of traffic on the A93, eastbound in the AM peak and westbound in the PM peak to the

extent that although there will be an increase in eastbound traffic, there will be an overall decrease in the level of congestion.

4 Bancon Developments Proposals

4.1 Where congestion is not directly a function of traffic flow, and influenced by other factors, quantifying congestion levels is not straightforward. For example, it is evident that a reduction in B979 traffic will bring congestion benefits and thus increase capacity on the A93. The additional capacity will support further development to the west of Peterculter, however the key question is whether there will be sufficient additional capacity and whether using up the capacity will cancel out the perceived benefits created by the AWPR.

4.2 Bancon Developments are aware of this issue and rather than relying solely on the benefits of the AWPR, other potential measures have been identified which will provide additional capacity to accommodate development at west Peterculter.

Development Traffic

4.3 The final layout of the development showing land use mix and housing numbers has not been determined at this stage, therefore the traffic generation of the site cannot be fully determined, however measures to reduce travel as far as possible will be inherent in the design of the site. It is anticipated that the main direction of travel will be to and from the City, i.e. eastbound in the AM and westbound in the PM, however a trip distribution exercise was carried out to determine the likely destination of trips generated by the development.

4.4 This exercise was carried out using Postcode destination data for work trips originating within the Peterculter postcode area taken from the National Census. The model then assigns a route to each destination postcode, based on the shortest/quickest available. The data are given in Appendix C and the traffic distribution is summarised in Table 4-1.

Route	Distribution
A93 E	83%
A93 W	3%
B979	14%
Grand Total	100.0%

Table 4-1: Peterculter Trip Distribution

A93/Malcolm Road Junction Improvement

4.5 The above distribution confirms that the majority of traffic is to and from the City. However, on the assumption that the B979 is currently the quickest route to and from the main employment centres at Westhill and Dyce, there is a high proportion of Peterculter traffic using that route. Although the AWPR will provide a more direct route for strategic traffic on the B979, i.e. between Stonehaven and Westhill/Dyce, it is likely that the B979 will remain a desirable local route between Peterculter and Westhill, as opposed to travelling through the town, the signalised crossroads at Milltimber, via the

AWPR slip road onto the Milltimber junction. It would also be a desirable route for traffic to the west of Peterculter for the same reason. It should be noted also that the above distribution figures are based on 2001 Census data and employment levels at Westhill have increased considerably since then so the percentage using the B979 is likely to be much higher.

4.6 However, although many of the issues associated with the existing Malcolm Road junction will be eased with the reduction in strategic traffic on the B979 and reduced right turning manoeuvres, the junction geometry is such that the left turn from the A93 cannot readily be performed. Therefore, in recognition of the potential for existing A93 traffic to use the B979 route to Westhill, as well as traffic generated by the proposed development at Peterculter west, two junction improvement schemes have been identified which will allow the left turn to be performed successfully, as shown in Appendix D.

4.7 The first option is to signalise the existing junction which would allow cars only to make the left turn, the second option involves realignment of the A93 via Millside Street and formation of a new priority junction with Malcolm Road which allows all vehicles to make the left turn. By improving the junction and facilitating a left turn, it is anticipated that the effect will be to reduce the through movements in Peterculter, not only from the proposed development but from existing A93 traffic west of Peterculter.

Malcolm Road/Bucklerburn Road/Culter House Road Link

4.8 In combination with the Malcolm Road junction improvement, consideration was given to the provision of an alternative strategic link to the AWPR junction at Milltimber between Malcolm Road and Culter House Road via Bucklerburn Road, to ease traffic on the A93 through Peterculter as shown in Appendix D.

4.9 Culter House Road currently runs between Malcolm Road to the north of Peterculter to the A93 North Deeside Road to the east of Milltimber Brae, although it will be severed as a through route by the AWPR with a connection made on the west (Peterculter) side to the AWPR/A93 Milltimber junction, as shown in Appendix D. Bucklerburn Road is a historic link between Culter House Road and Malcolm Road, linked to Peterculter via School Road. However, Bucklerburn is a private road, in poor state of repair and severed at its west end so the through connection between Malcolm Road and Culter House Road is no longer exists. It is unsuitable in its current format as a strategic link and any upgrade would require negotiation with the relevant landowner.

School Road/Culter House Road Link

4.10 Bancon Developments also own land at Hill of Ardbeck situated to the north of Peterculter between School Road and Culter House Road, also subject of another development bid. Culter House Road can currently be accessed from Peterculter at School Road via Bucklerburn Road. Culter House Road is a narrow unclassified road, approximately 5 metres in width.

4.11 Therefore, as an alternative to the Bucklerburn Road route an improved link through the Hill of Ardbeck site from School Road, bypassing the severed section of Bucklerburn Road, could be made to Culter House Road. Culter House Road could

readily be widened along its length to provide a dedicated access to the AWPR/A93 junction from Peterculter, as an alternative to the A93 shown in Appendix D.

4.12 Such an access could serve a large part of Peterculter north of the A93 and therefore has the potential to reduce the level of local traffic accessing onto the A93 and passing through the town centre, and thus congestion within Peterculter.

4.13 Care would have to be taken in the design of such a route that it does not become a preference for strategic traffic on the A93 in favour of the route via Milltimber junction as this would increase traffic on School Road through the residential areas. This would be achieved through the use of traffic management at the access points along the A93.

AWPR/Fastlink Cleanhill Junction – link to South Deeside Road

4.14 The additional traffic on the A93 through Peterculter created by the AWPR is the result of the re-distribution of strategic traffic from various minor routes back to the strategic road network, specifically South Deeside Road with it being the main alternative to the A93 for trips between Deeside and the City.

4.15 Access to the AWPR from South Deeside Road is also made via the A93 junction at Milltimber. It is considered that an additional link were to be provided between the South Deeside Road and the Cleanhill junction (AWPR/Fastlink) junction, no additional traffic would use the A93 to access the AWPR. An example of the link is identified in Appendix D. Bancon Developments will consult with Transport Scotland and Aberdeen City and Shire Councils regarding the feasibility of providing such a link.

5 Summary and Conclusion

5.1 In response to concerns relating to traffic levels and traffic congestion raised at public consultation events for their Development Bid proposal at Peterculter East, Bancon Developments have sought to address the concerns by commissioning WA Fairhurst to identify factors contributing to congestion, assess current and future traffic levels within Peterculter and consider potential measures to ease congestion, with a view to mitigating the impact of their development proposal.

5.2 It is concluded that there are various factors contribution to congestion within Peterculter and much of these are not exclusively the result of traffic volumes, such as:

Strategic north-south traffic using the B979 between Stonehaven and Westhill/Dyce, particularly HGV traffic, creating peak tidal flows in the opposite direction to the main tidal flows to and from the City within Peterculter;

These opposing tidal flows meeting at the substandard A93/B979 Malcolm Road junction where the B979 traffic has to turn right against the opposing A93 traffic;

The A93 also functioning as Peterculter High Street with associated use as a local retail centre, residential street, main bus route and main distributor for local accesses;

As a result of the A93 also being a functional High Street, pinch points exist on the A93 throughout Peterculter created by bus stops, parked vehicles, loading bays etc

and this is exacerbated by the high level of HGVs also using the B979 route. A high level of pedestrian movements also have to be accommodated.

5.3 Therefore, although it has been identified that traffic levels will increase on the A93 as a result of the AWPR junction located at Milltimber, there is a greater drop in traffic in the opposite direction using the B979 as a strategic route. With much of the congestion resulting from the two opposing flows, particularly HGVs, it is anticipated that despite the increase in traffic on the A93 there will be an overall reduction in congestion levels.

5.4 Whilst it is considered that this alone would support the provision of additional development to the west of Peterculter, further work is required to quantify the actual effects on road capacity and the development impact and this will be done through a full Transport Assessment carried out at the planning application stage. However, rather than rely solely on the AWPR providing the additional capacity at this stage, additional measures have also been identified which could further reduce traffic levels within Peterculter and accommodate the development, namely:

Improvements to the Malcolm Road junction to allow traffic to turn left from the A93 and B979;

Provision of an alternative access road to the AWPR Milltimber junction via Culter House Road, either via an upgraded Bucklerburn Road or via their site at Hill of Ardbeck;

Provision of an additional access at the Cleanhill (AWPR/Fastlink) junction for the South Deeside Road.

5.5 Each of these measures will require more detailed assessment, however, based on current traffic flows, the known causes of congestion and the effects of the AWPR, all have the potential to further reduce congestion within Peterculter and support additional development at Peterculter West.

Figures

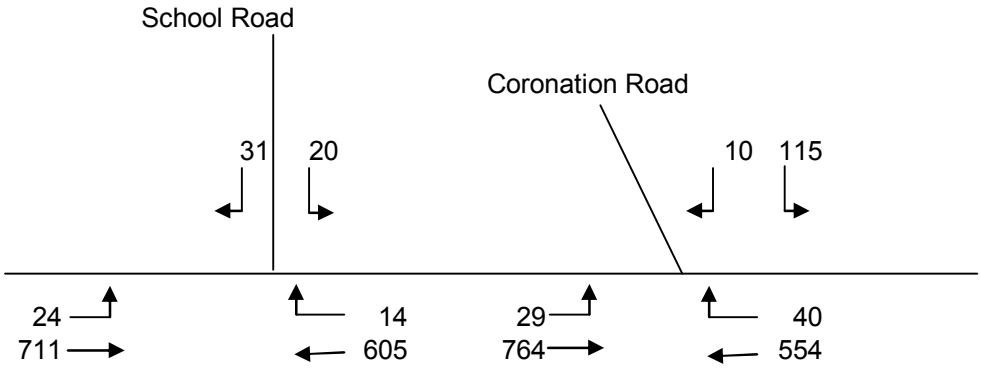


Figure 3-1 Surveyed Flows AM Peak (07:30 - 08:30)

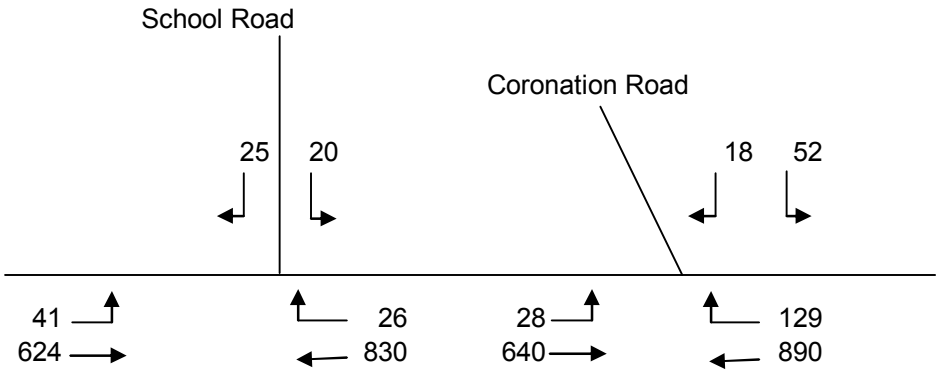
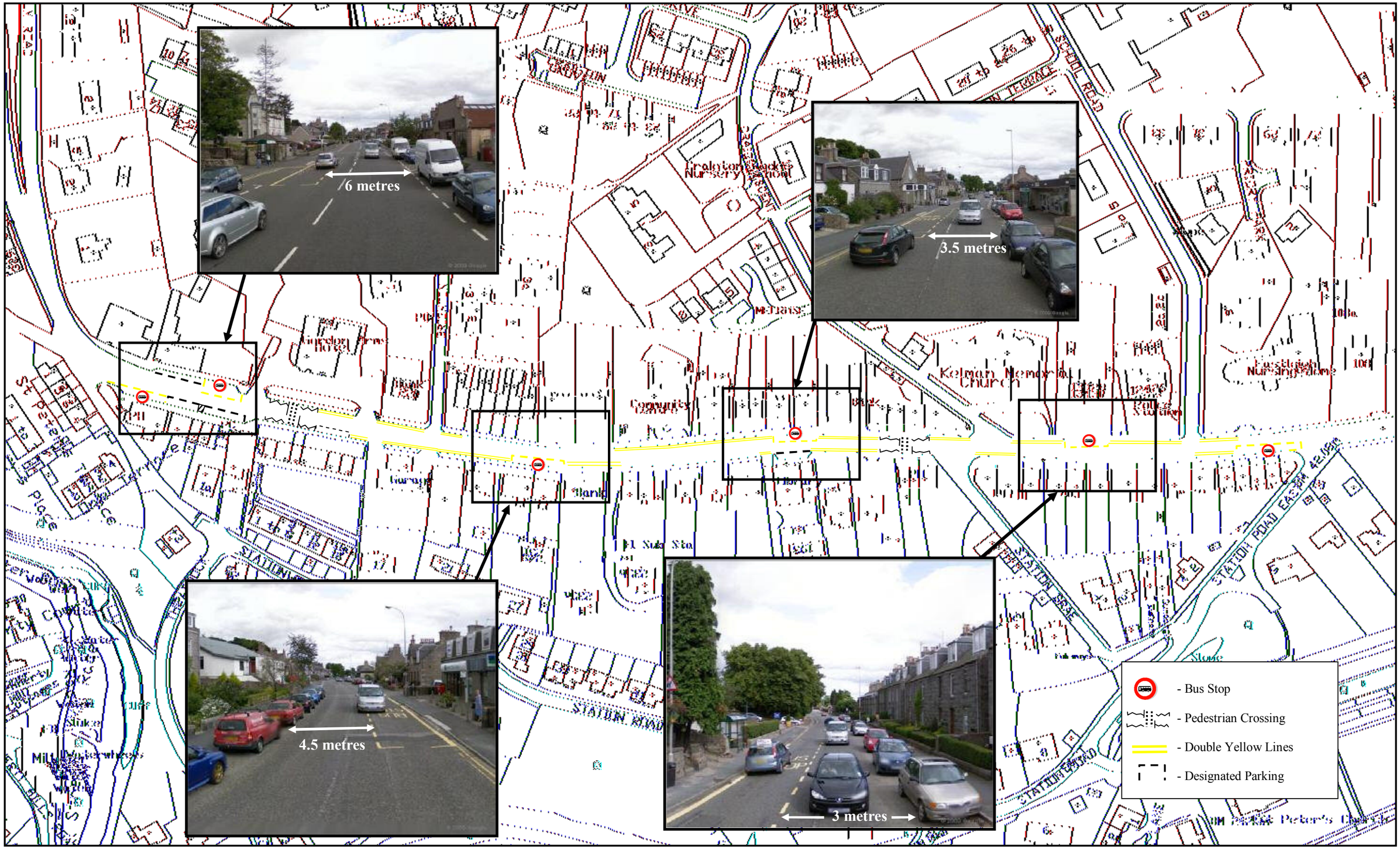


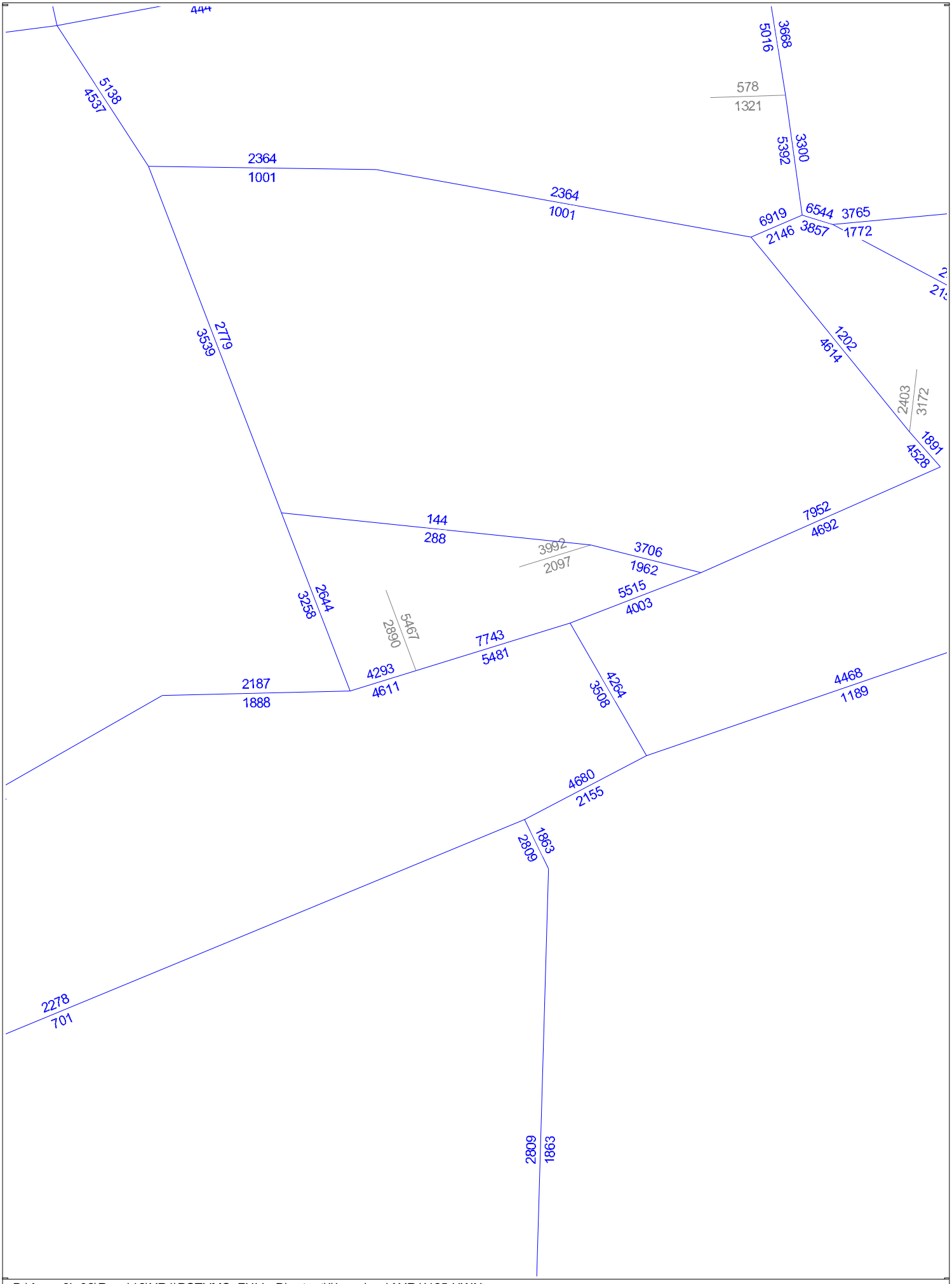
Figure 3-2 Surveyed Flows AM Peak (16:45 - 17:45)

Appendix A
Examples of Pinch Points In Peterculter

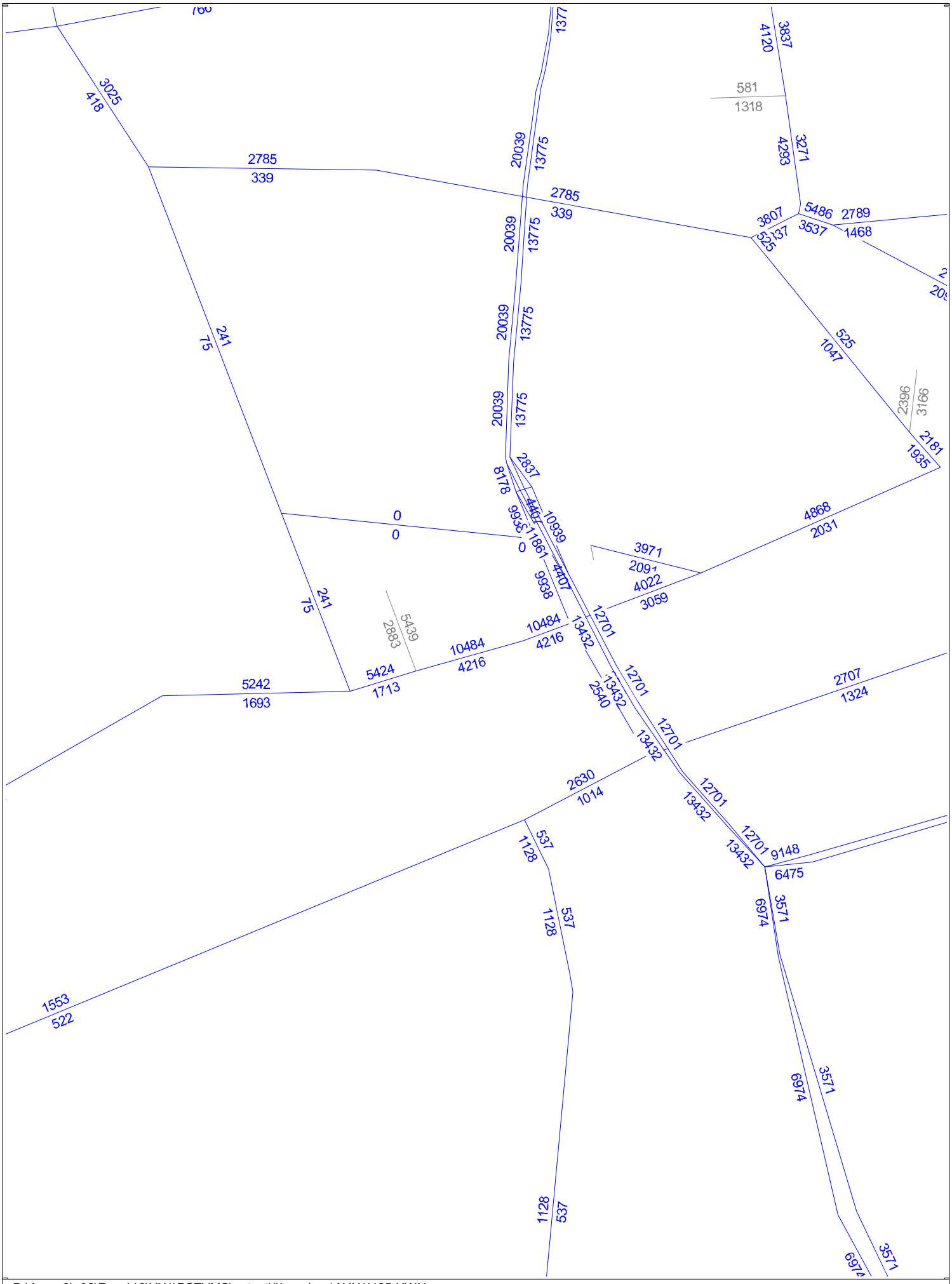
Peterculter High Steet – Pinch Point Examples



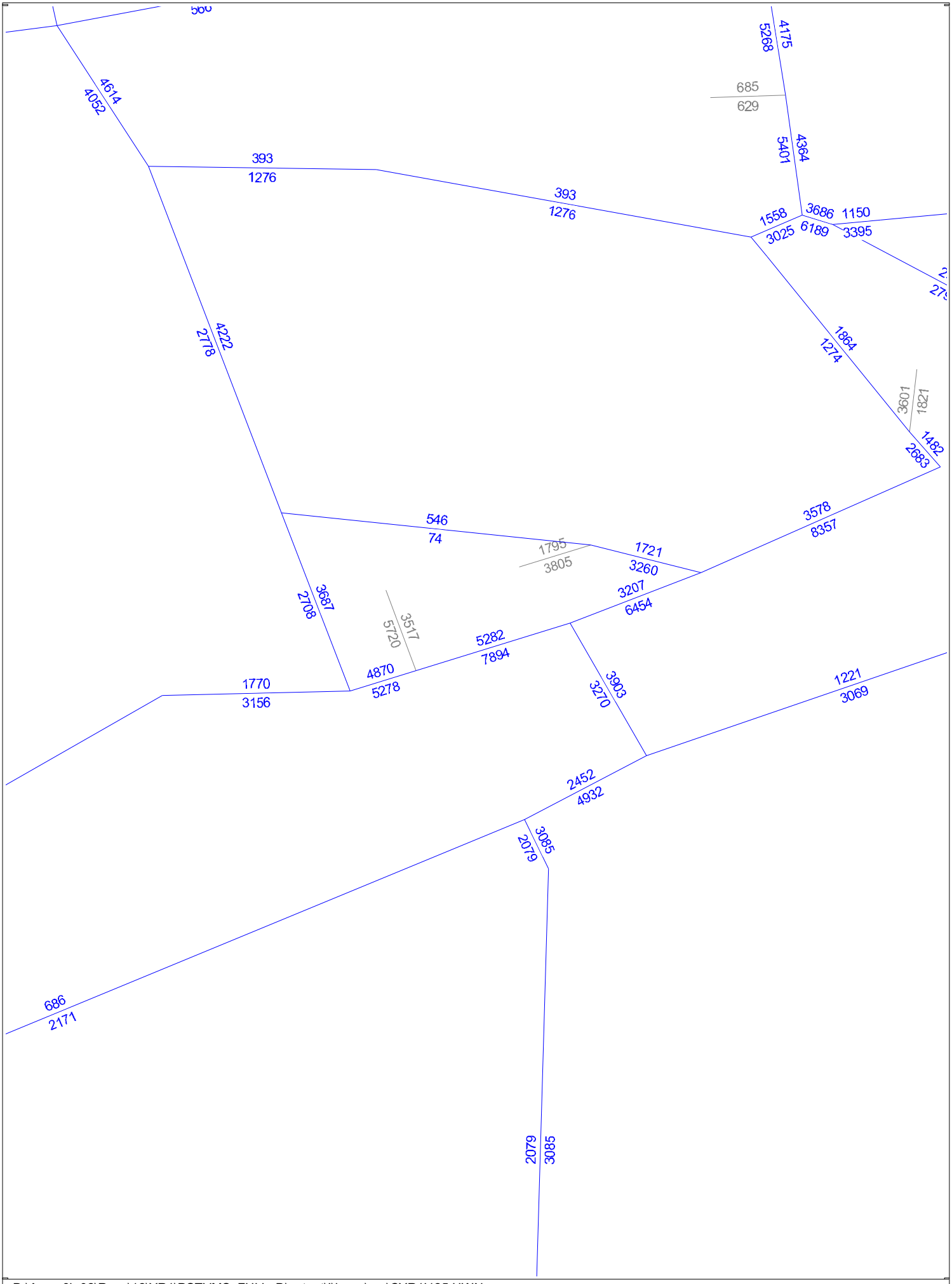
Appendix B
AWPR Traffic Flow Data



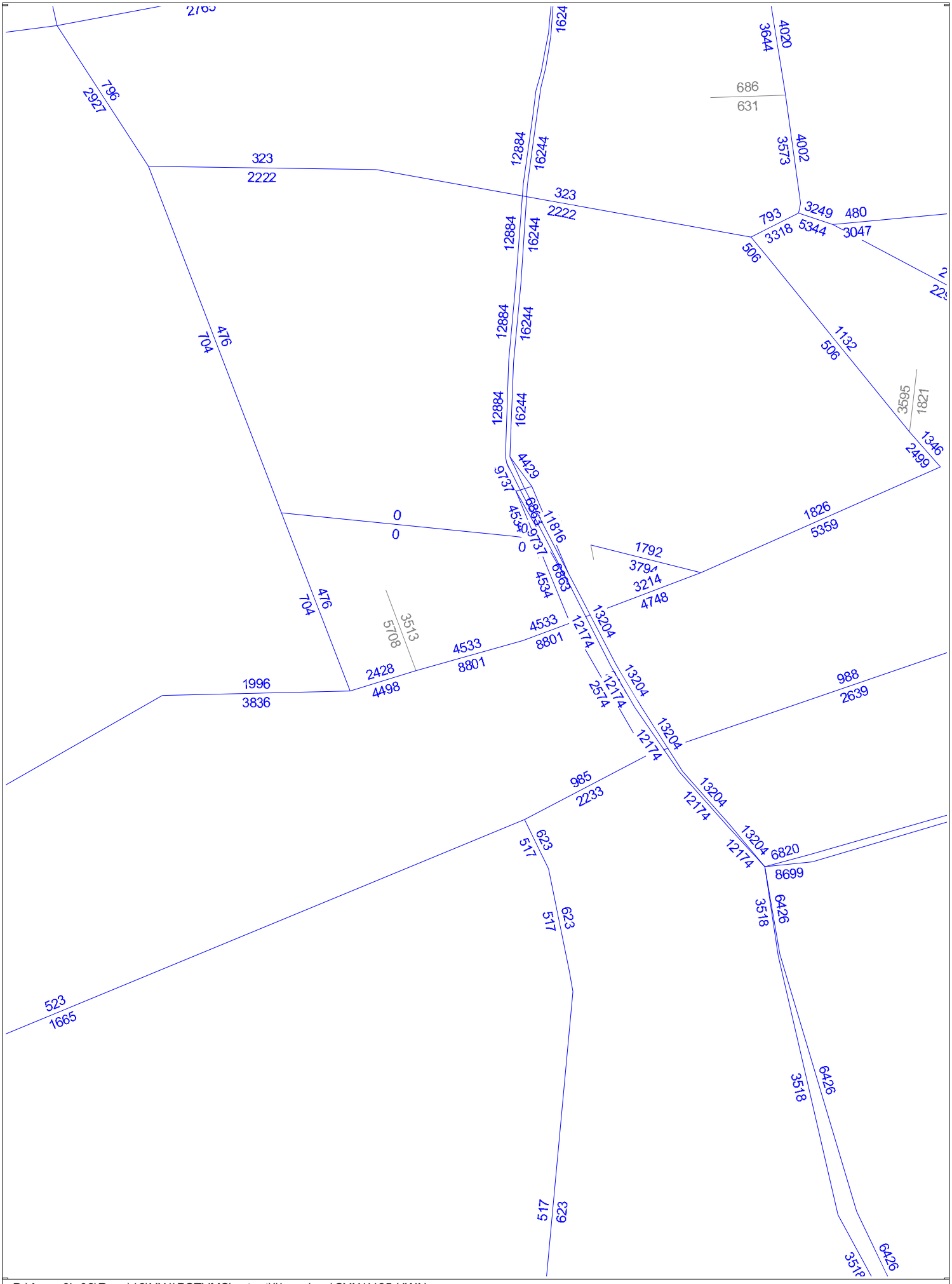
D:\Asam3b.02\Runs\12\YR1\PSTVMS_FULL_D\output\l\hway\am\AYR1l125.HWN
Car Flows (PCUs * 10)



D:\Asam3b.02\Runs\12\YX1\PSTVMS\output\l\hway\am\AYX1I125.HWN
Car Flows (PCUs * 10)



D:\Asam3b.02\Runs\12\YR1\PSTVMS_FULL_D\output\l\hway\pm\CYR1l125.HWN
Car Flows (PCUs * 10)

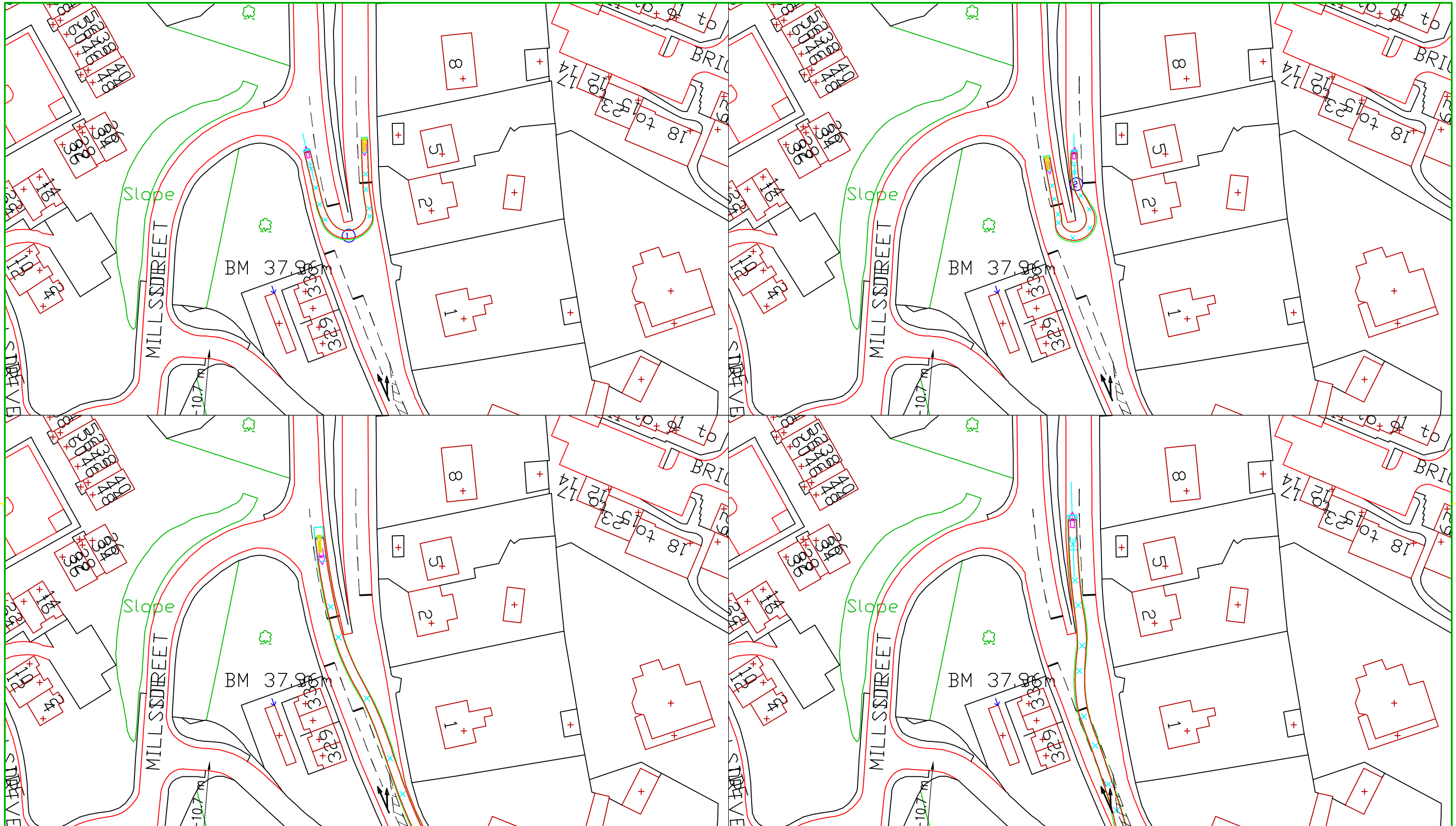


D:\Asam3b.02\Runs\12\YX1\PSTVMS\output\l\hway\pm\CYX1I125.HWN
Car Flows (PCUs *10)

Appendix C
Census Postcode Distribution Data

Destination Postcode	TOTAL	TRAIN	BUS	TAXI	CAR Driver	CAR Passenger	M/CYCLE	BIKE	FOOT	OTHER	Distribution	Route	Car %
AB14 0 (part)	779	1	54	2	231	136	4	2	339	10	24.7%	A93 E	13.9%
AB15 9	417	0	245	0	103	44	0	3	20	2	13.2%	A93 E	6.2%
AB21 7 (part); AB21 0 (part)	236	1	8	15	81	6	1	1	0	42	7.5%	A93 E	4.9%
AB21 7 (part); AB21 0 (part)					81							B979	4.9%
AB10 1	235	0	90	0	110	28	0	2	3	1	7.4%	A93 E	6.6%
AB12 3 (part)	209	0	9	0	182	11	0	2	2	3	6.6%	A93 E	11.0%
AB11 6	97	0	26	0	61	7	0	2	1	0	3.1%	A93 E	3.7%
AB25 2	80	0	5	0	65	7	1	1	1	0	2.5%	A93 E	3.9%
AB25 1	78	0	32	0	39	5	0	0	1	1	2.5%	A93 E	2.3%
AB13 0	78	0	20	0	35	18	0	0	5	0	2.5%	A93 E	2.1%
AB32 6 (part)	77	0	3	0	65	7	0	0	2	0	2.4%	B979	3.9%
AB11 5	69	0	9	1	47	4	2	0	1	5	2.2%	A93 E	2.8%
AB10 7	65	0	17	0	39	6	0	1	2	0	2.1%	A93 E	2.3%
AB15 6	57	0	2	1	50	2	1	0	1	0	1.8%	A93 E	3.0%
AB31 5 (part)	57	0	9	1	41	3	0	0	2	1	1.8%	A93 W	2.5%
AB24 3	54	0	12	0	33	2	0	0	7	0	1.7%	A93 E	2.0%
AB23 8 (part)	50	0	5	0	21	2	0	0	1	0	1.6%	A93 E	1.3%
AB23 8 (part)					21							B979	1.3%
AB10 6	40	0	10	0	25	3	0	0	2	0	1.3%	A93 E	1.5%
AB15 4	40	0	6	0	24	9	1	0	0	0	1.3%	A93 E	1.4%
AB21 9	39	0	3	0	16	3	0	1	0	0	1.2%	A93 E	1.0%
AB21 9					16							B979	1.0%
AB12 4; AB12 3 (part)	35	0	1	0	30	3	0	0	1	0	1.1%	A93 E	1.8%
AB25 3	34	0	2	0	23	6	0	1	2	0	1.1%	A93 E	1.4%
AB22 8	30	0	1	0	18	4	0	0	6	1	1.0%	A93 E	1.1%
AB24 5	29	0	9	0	18	1	1	0	0	0	0.9%	A93 E	1.1%
AB21 0 (part); AB15 8 (part)	25	0	2	1	7	5	0	0	10	0	0.8%	B979	0.4%
AB11 9	23	0	3	0	18	1	0	0	0	1	0.7%	A93 E	1.1%
AB15 5	22	0	4	0	15	2	0	0	1	0	0.7%	A93 E	0.9%
AB15 8 (part)	20	0	5	0	12	2	0	0	1	0	0.6%	B979	0.7%
AB24 4	20	0	5	0	10	3	0	0	2	0	0.6%	A93 E	0.6%
AB12 5 (part)	16	0	0	1	14	1	0	0	0	0	0.5%	A93 E	0.8%
AB39 2	14	0	0	1	12	1	0	0	0	0	0.4%	A93 E	0.7%
AB24 1	14	0	3	0	5	0	0	0	6	0	0.4%	A93 E	0.3%
AB15 7	13	0	1	1	9	1	0	0	1	0	0.4%	A93 E	0.5%
AB16 7	10	0	1	0	8	1	0	0	0	0	0.3%	A93 E	0.5%
AB24 2	8	0	1	0	7	0	0	0	0	0	0.3%	A93 E	0.4%
AB11 7	7	0	0	0	7	0	0	0	0	0	0.2%	A93 E	0.4%
AB51 4	7	0	0	0	7	0	0	0	0	0	0.2%	B979	0.4%
AB11 8	7	0	3	0	3	0	0	0	1	0	0.2%	A93 E	0.2%
AB51 5	6	0	2	0	4	0	0	0	0	0	0.2%	B979	0.2%
AB16 5	5	0	0	0	5	0	0	0	0	0	0.2%	A93 E	0.3%
AB23 8 (part); AB21 7 (part)	5	0	0	0	5	0	0	0	0	0	0.2%	A93 E	0.3%
AB51 3	4	0	0	0	4	0	0	0	0	0	0.1%	B979	0.2%
AB43 9	4	0	0	0	2	0	0	1	0	1	0.1%	A93 E	0.1%
AB51 0	4	0	1	0	2	1	0	0	0	0	0.1%	B979	0.1%
AB31 4	3	0	0	0	3	0	0	0	0	0	0.1%	A93 W	0.2%
AB39 3	3	0	0	0	3	0	0	0	0	0	0.1%	A93 W	0.2%
AB41 9	3	0	0	0	3	0	0	0	0	0	0.1%	A93 E	0.2%
AB12 5 (part)	3	0	0	0	2	0	0	1	0	0	0.1%	A93 E	0.1%
AB42 2	3	0	0	0	1	1	0	0	1	0	0.1%	A93 E	0.1%
AB16 6	2	0	0	0	2	0	0	0	0	0	0.1%	A93 E	0.1%
AB34 5	2	0	0	0	2	0	0	0	0	0	0.1%	A93 W	0.1%
AB42 3	2	0	0	0	2	0	0	0	0	0	0.1%	A93 E	0.1%
AB51 7; AB32 7	2	0	0	0	2	0	0	0	0	0	0.1%	B979	0.1%
AB52 6	2	0	0	0	2	0	0	0	0	0	0.1%	B979	0.1%
AB31 6	2	0	0	0	1	0	0	0	0	1	0.1%	A93 W	0.1%
AB30 1 (part); DD9 7 (part)	2	0	0	0	0	1	0	0	1	0	0.1%	A93 W	0.0%
AB34 4	1	0	0	0	1	0	0	0	0	0	0.0%	A93 W	0.1%
AB41 8	1	0	0	0	1	0	0	0	0	0	0.0%	A93 E	0.1%
AB45 1	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB45 2 (part); AB56 4 (part)	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB53 4	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB55 6; AB54 7 (part)	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB35 5; AB36 8	1	0	1	0	0	0	0	0	0	0	0.0%	A93 W	0.0%
AB41 7	1	0	0	0	0	0	0	0	1	0	0.0%	B979	0.0%
AB38 7	1	0	0	0	0	0	0	0	1	0	0.0%	B979	0.0%
	3157	2	610	24	1660	337	11	18	425	69	100.0%		100.0%

Appendix D
Potential Improvement Schemes



Rev.	Date	Description	Drawn	Checked	Approved

Client:

Project Title:
DEVELOPMENT SITE AT
PETERCULTER, ABERDEEN
BANCON DEVELOPMENTS LTD

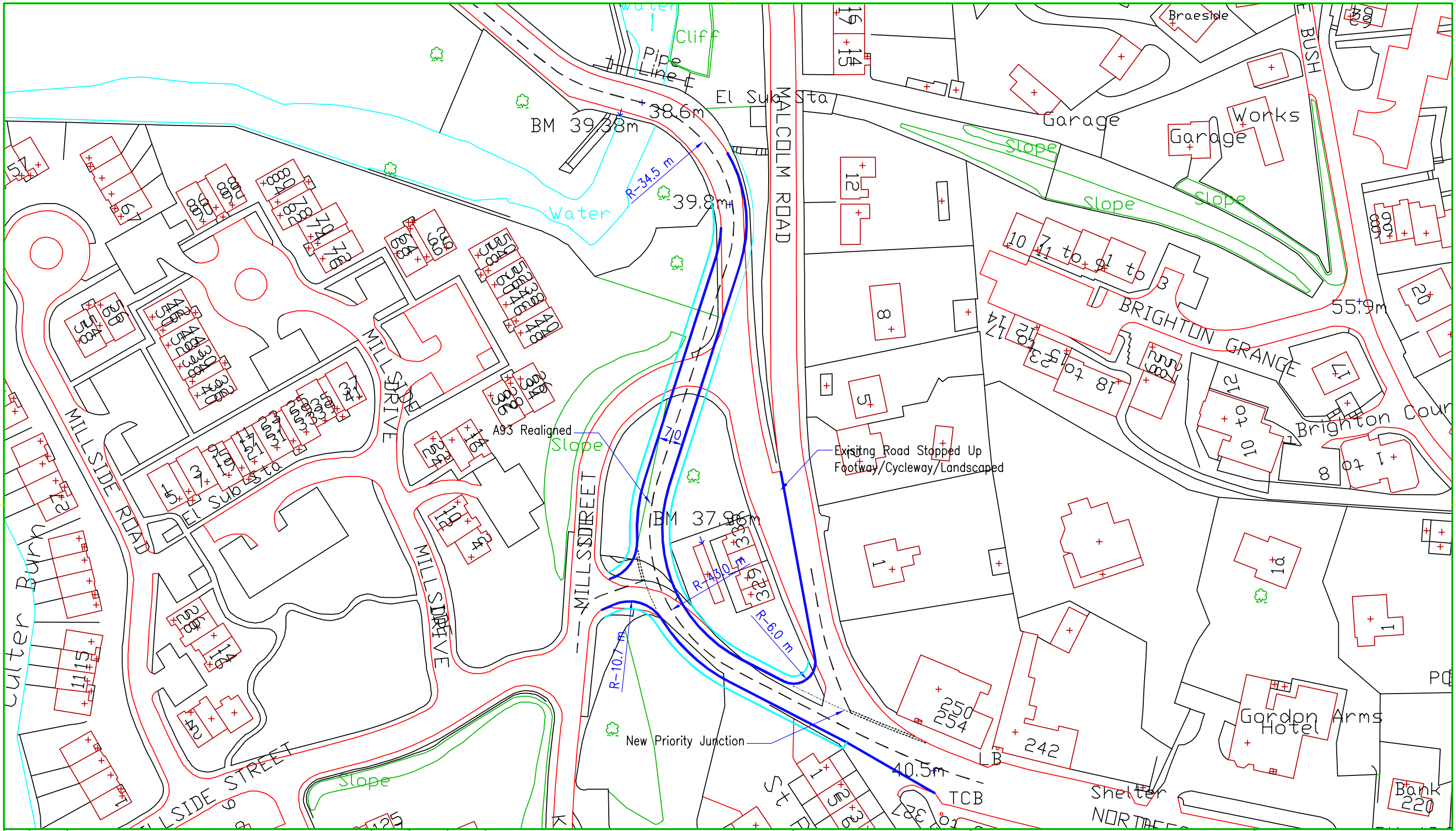
Drawing Title:
POSSIBLE SIGNALISED LAYOUT
THE A93/B979 JUNCITON,
PETERCULTER, ABERDEEN

FAIRHURST
CONSULTING STRUCTURAL AND CIVIL ENGINEERS
88 Queens Road
Aberdeen
AB15 4YQ
T: 01224 321222
F: 01224 323201

Scale at A3:	Status:	CAD File Name:
1:1000	INFORMATION	st00302-.dwg

Drawn:	Checked:	Approved:
WZ		
Date: 17/08/09	Date:	Date:

Drawing No.: 77675/00302
Revision: -



Rev.	Date	Description	Drawn	Checked	Approved

Client:

Project Title:
DEVELOPMENT SITE AT
PETERCULTER, ABERDEEN
BANCON DEVELOPMENTS LTD

Drawing Title:
POSSIBLE IMPROMENT AT
THE A93/B979 JUNCITON,
PETERCULTER, ABERDEEN

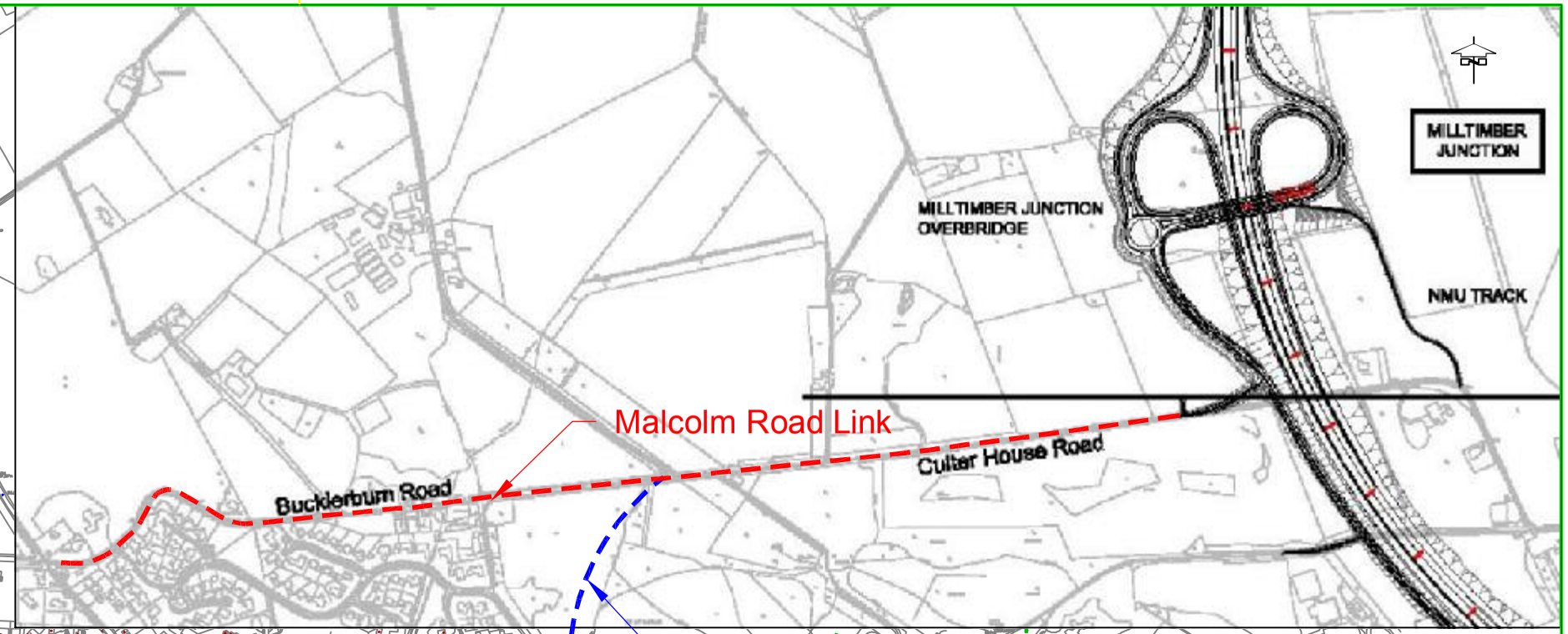
FAIRHURST
CONSULTING STRUCTURAL AND CIVIL ENGINEERS
88 Queens Road
Aberdeen
AB15 4YQ
T: 01224 321222
F: 01224 323201

Scale at A3:	Status:	CAD File Name:
1:1000	INFORMATION	st00301-.dwg

Drawn:	Checked:	Approved:
WZ		
Date: 17/08/09	Date:	Date:

Drawing No.: 77675/00301

Revision: –



Rev.	Date	Description	Drawn	Checked	Approved

Client:

Project Title:
DEVELOPMENT SITE AT
PETERCULTER, ABERDEEN
BANCON DEVELOPMENTS LTD

Drawing Title:
ACCESS LINK OPTIONS
FOR PROPOSED AWPR

FAIRHURST
CONSULTING STRUCTURAL AND CIVIL ENGINEERS
88 Queens Road
Aberdeen
AB15 4YQ
T: 01224 321222
F: 01224 323201

Scale at A3:	Status:	CAD File Name:
1:8000	PRELIMINARY	ft00501-.dwg

Drawn:	Checked:	Approved:
WZ		
Date: 23/11/09	Date:	Date:

Drawing No.: 77675/00501
Revision: -

MARYCULTER BRIDGE

B 979

RIVER DEE CROSSING

102000

KINGCAUSIE

NEW JUNCTIONS

KINCAUSIE/EASTLAND UNDERPASS

EASTLAND

Continued on Sheet 3 of 8 (Figure 4.2c)

101000

Existing Roads Upgraded

New Road

South Deeside Road - AWPR Cleanhill Junction Potential Link

FAIRHURST

Consulting, Transportation
Civil & Structural Engineers

Development Bid Site at
Peterculter West

Traffic Report

Bancon Developments

November 2009

Document Control Sheet

Project Title	Peterculter West
Document Title	Traffic Report
Issue	02
Status	Final Draft
Issue Date	23/11/09

Record of Issue

Issue	Status	Author	Check	Authorised	Date
01	Draft	K Clark			
02	Final Draft	K Clark			

Distribution

Issue	Organisation	Contact	Copies
1	Bancon Developments	H McNab, B Freeman	E-Mail
2	Bancon Developments	H McNab, B Freeman	E-Mail

TABLE OF CONTENTS

INDEX OF TABLES

APPENDICES

1 Introduction

1.1 During the public consultation exercise by Bancon Developments for their development bid site at Peterculter West, concerns were raised regarding existing congestion within Peterculter and the potential traffic impacts of the development site.

1.2 Bancon therefore commissioned WA Fairhurst to examine the existing road network and assess the impact of the development taking into account the impacts of the Aberdeen Western Peripheral Route (AWPR) and the potential for other infrastructure options to alleviate traffic concerns, consisting of:

Improvements to the A93/B979 (Malcolm Road) junction;

A new link from Malcolm Road to the AWPR Milltimber junction;

A new link from School Road to the AWPR junction.

2 Existing Situation

General

2.1 Peterculter lies on the A93, a main east-west arterial route into the city from Deeside. It serves towns situated along the Deeside corridor such as Banchory, Aboyne, Ballater, and Braemar. As such it carries high levels of commuter traffic to and from the city in the morning and evening peaks.

2.2 Whilst this is typical of any of the main arterial routes into the City, such as the A90 north and south, the A944 from Westhill and A96 from Inverurie, the situation in Peterculter is compounded by the A93 also forming the link between two sections of the B979; east of the village at Milltimber and west of the village at Malcolm Road. The B979 currently carries a high level of commuter and strategic traffic between the A90 at Stonehaven to Westhill and Dyce, both major employment areas for the entire region, as it used to bypass the congested A90 and A96 strategic routes passing through Aberdeen.

2.3 The main tidal direction of the B979 traffic is therefore westbound through Peterculter, opposite to the main tidal flow on the A93 which is eastwards towards Aberdeen. However, the A93 also has a local function as Peterculter main street, serving a population of nearly 4.500, so also accommodates general retail and business activity along it's frontage, including parking, servicing and pedestrian movements, signalised crossings as well as a being the main collector road for local residential traffic and the primary bus route. All of these functions contribute to the peak time congestion experienced within Peterculter.

Specific Issues – HGVs and Buses

2.4 There are other specific issues also contributing to congestion, for example the B979 carries a high proportion of HGV traffic, in both directions between the A90 to the south

and the industrial areas at Dyce and Westhill, and the A93 is also a main bus route with the First No.19 providing a 15-minute service and the Stagecoach 201/202/203 services providing a 20-minute service, thus there are buses frequently stopping on-road through Peterculter. These factors combined, lead to large vehicles frequently being in conflict with each other, given that the street also functions as a high street and provides residential parking, thus creating several pinch points. Examples of such pinch points are shown in Appendix A.

Specific Issues – A93/B979 Malcolm Road Junction

2.5 The existing junction between the A93 and B979 Malcolm Road at the west end of Peterculter is substandard in terms of geometry, with restricted visibility for both vehicles wishing to turn right onto Malcolm Road and vehicles exiting Malcolm Road. This junction is the key point of conflict between the two main traffic streams as described previously; the A93 eastbound and B979 northbound, with the B979 traffic turning right having to give way to the oncoming A93 traffic. This is more acute in the AM peak, since the two peak tidal flows do not conflict in the PM peak, i.e. peak flow is southbound on the B979 and does not require to give way to the peak flow on the A93 which is westbound.

2.6 From observation, many of the right turn manoeuvres are performed through the courtesy of the oncoming traffic allowing them to turn, rather than through natural junction capacity or gaps in the traffic stream. This therefore is another source of congestion, both at the junction but also backing up through Peterculter main street. Visibility for the right turn is also restricted which compounds the issue.

2.7 The result is that right turning traffic backs up through Peterculter in the AM peak, further compounded by the other highlighted issues such as pinch points, a high proportion of large vehicles, function as a High Street etc.

3 Future Proposals

Aberdeen Western Peripheral Route (AWPR)

3.1 The proposed AWPR will run between Charleston to the south of Aberdeen and Blackdog to the north, and the Fastlink which will run from Stonehaven to a new junction with the AWPR near Maryculter. The route passes adjacent to Milltimber Brae and a junction is to be provided to the north of Culter House Road, linking to the A93 at the existing A93/B979 junction at Milltimber by way of a new signalised crossroads.

3.2 The AWPR has two important effects on the A93 through Peterculter; in the AM peak there is an increase in eastbound traffic towards the City as a result of additional vehicles access the AWPR junction at Milltimber and a decrease in westbound traffic through the removal of the strategic north-south traffic from the B979. A vice versa effect is witnessed in the PM peak. Both are important in terms of congestion in Peterculter since, as has been established, many of the issues that contribute to the congestion are not simply based on traffic levels.

Existing and Predicted Traffic Levels

3.3 Peak period traffic flows were obtained from the MVA Consultancy, Consultants to Transport Scotland and responsible for the AWPR strategic traffic modelling, for the A93 and B979 through Peterculter before and after the AWPR is in place. The figures are shown in Appendix B and summarised in Table 3-1.

Location	Direction	Change
A93 East of Malcolm Road	Eastbound	26.34%
	Westbound	-62.91%
A93 West of Milltimber Brae	Eastbound	35.40%
	Westbound	-22.99%
B979 Malcolm Road	Northbound	-97.55%
	Southbound	-90.91%

Table 3-1: AWPR Peak Hour Traffic Flow Changes within Peterculter, AM Peak

3.4 Bancon Developments commissioned traffic surveys in Peterculter on the A93 at the School Road and Coronation Road junctions in order to determine current, rather than modelled traffic flows. These were carried out in the AM and PM peak periods and the resulting peak hour flows are shown in Figure 3-1 and Figure 3-2.

3.5 The traffic flows changes resulting from the AWPR, shown above, were applied to the surveyed traffic flows to determine the likely changes in traffic levels through Peterculter. The results are summarised in Table 3-2.

Location	Direction	Without AWPR	With AWPR	Change
A93 East of Malcolm Road	Eastbound	735	929	194
	Westbound	636	236	-400
A93 West of Milltimber Brae	Eastbound	879	1190	311
	Westbound	594	457	-137

Table 3-2: AWPR Peak Hour Traffic Volume Changes, AM Peak

3.6 The results show that the decrease in westbound traffic is predicted to be greater than the corresponding increase in the eastbound direction, with the greatest reduction seen in west Peterculter in the vicinity of Malcolm Brae.

3.7 Therefore, although the AWPR is predicted to increase westbound traffic, this does not necessarily automatically lead to additional congestion through Peterculter since, as has been established, the congestion issue is caused by many varying factors, many of which will be addressed through reduced the more significant reduction in flows, to and from the B979, particularly HGV flows.

3.8 Therefore It is anticipated that the reduced B979 flows will assist in a smoother flow of traffic on the A93, eastbound in the AM peak and westbound in the PM peak to the

extent that although there will be an increase in eastbound traffic, there will be an overall decrease in the level of congestion.

4 Bancon Developments Proposals

4.1 Where congestion is not directly a function of traffic flow, and influenced by other factors, quantifying congestion levels is not straightforward. For example, it is evident that a reduction in B979 traffic will bring congestion benefits and thus increase capacity on the A93. The additional capacity will support further development to the west of Peterculter, however the key question is whether there will be sufficient additional capacity and whether using up the capacity will cancel out the perceived benefits created by the AWPR.

4.2 Bancon Developments are aware of this issue and rather than relying solely on the benefits of the AWPR, other potential measures have been identified which will provide additional capacity to accommodate development at west Peterculter.

Development Traffic

4.3 The final layout of the development showing land use mix and housing numbers has not been determined at this stage, therefore the traffic generation of the site cannot be fully determined, however measures to reduce travel as far as possible will be inherent in the design of the site. It is anticipated that the main direction of travel will be to and from the City, i.e. eastbound in the AM and westbound in the PM, however a trip distribution exercise was carried out to determine the likely destination of trips generated by the development.

4.4 This exercise was carried out using Postcode destination data for work trips originating within the Peterculter postcode area taken from the National Census. The model then assigns a route to each destination postcode, based on the shortest/quickest available. The data are given in Appendix C and the traffic distribution is summarised in Table 4-1.

Route	Distribution
A93 E	83%
A93 W	3%
B979	14%
Grand Total	100.0%

Table 4-1: Peterculter Trip Distribution

A93/Malcolm Road Junction Improvement

4.5 The above distribution confirms that the majority of traffic is to and from the City. However, on the assumption that the B979 is currently the quickest route to and from the main employment centres at Westhill and Dyce, there is a high proportion of Peterculter traffic using that route. Although the AWPR will provide a more direct route for strategic traffic on the B979, i.e. between Stonehaven and Westhill/Dyce, it is likely that the B979 will remain a desirable local route between Peterculter and Westhill, as opposed to travelling through the town, the signalised crossroads at Milltimber, via the

AWPR slip road onto the Milltimber junction. It would also be a desirable route for traffic to the west of Peterculter for the same reason. It should be noted also that the above distribution figures are based on 2001 Census data and employment levels at Westhill have increased considerably since then so the percentage using the B979 is likely to be much higher.

4.6 However, although many of the issues associated with the existing Malcolm Road junction will be eased with the reduction in strategic traffic on the B979 and reduced right turning manoeuvres, the junction geometry is such that the left turn from the A93 cannot readily be performed. Therefore, in recognition of the potential for existing A93 traffic to use the B979 route to Westhill, as well as traffic generated by the proposed development at Peterculter west, two junction improvement schemes have been identified which will allow the left turn to be performed successfully, as shown in Appendix D.

4.7 The first option is to signalise the existing junction which would allow cars only to make the left turn, the second option involves realignment of the A93 via Millside Street and formation of a new priority junction with Malcolm Road which allows all vehicles to make the left turn. By improving the junction and facilitating a left turn, it is anticipated that the effect will be to reduce the through movements in Peterculter, not only from the proposed development but from existing A93 traffic west of Peterculter.

Malcolm Road/Bucklerburn Road/Culter House Road Link

4.8 In combination with the Malcolm Road junction improvement, consideration was given to the provision of an alternative strategic link to the AWPR junction at Milltimber between Malcolm Road and Culter House Road via Bucklerburn Road, to ease traffic on the A93 through Peterculter as shown in Appendix D.

4.9 Culter House Road currently runs between Malcolm Road to the north of Peterculter to the A93 North Deeside Road to the east of Milltimber Brae, although it will be severed as a through route by the AWPR with a connection made on the west (Peterculter) side to the AWPR/A93 Milltimber junction, as shown in Appendix D. Bucklerburn Road is a historic link between Culter House Road and Malcolm Road, linked to Peterculter via School Road. However, Bucklerburn is a private road, in poor state of repair and severed at its west end so the through connection between Malcolm Road and Culter House Road is no longer exists. It is unsuitable in its current format as a strategic link and any upgrade would require negotiation with the relevant landowner.

School Road/Culter House Road Link

4.10 Bancon Developments also own land at Hill of Ardbeck situated to the north of Peterculter between School Road and Culter House Road, also subject of another development bid. Culter House Road can currently be accessed from Peterculter at School Road via Bucklerburn Road. Culter House Road is a narrow unclassified road, approximately 5 metres in width.

4.11 Therefore, as an alternative to the Bucklerburn Road route an improved link through the Hill of Ardbeck site from School Road, bypassing the severed section of Bucklerburn Road, could be made to Culter House Road. Culter House Road could

readily be widened along its length to provide a dedicated access to the AWPR/A93 junction from Peterculter, as an alternative to the A93 shown in Appendix D.

4.12 Such an access could serve a large part of Peterculter north of the A93 and therefore has the potential to reduce the level of local traffic accessing onto the A93 and passing through the town centre, and thus congestion within Peterculter.

4.13 Care would have to be taken in the design of such a route that it does not become a preference for strategic traffic on the A93 in favour of the route via Milltimber junction as this would increase traffic on School Road through the residential areas. This would be achieved through the use of traffic management at the access points along the A93.

AWPR/Fastlink Cleanhill Junction – link to South Deeside Road

4.14 The additional traffic on the A93 through Peterculter created by the AWPR is the result of the re-distribution of strategic traffic from various minor routes back to the strategic road network, specifically South Deeside Road with it being the main alternative to the A93 for trips between Deeside and the City.

4.15 Access to the AWPR from South Deeside Road is also made via the A93 junction at Milltimber. It is considered that an additional link were to be provided between the South Deeside Road and the Cleanhill junction (AWPR/Fastlink) junction, no additional traffic would use the A93 to access the AWPR. An example of the link is identified in Appendix D. Bancon Developments will consult with Transport Scotland and Aberdeen City and Shire Councils regarding the feasibility of providing such a link.

5 Summary and Conclusion

5.1 In response to concerns relating to traffic levels and traffic congestion raised at public consultation events for their Development Bid proposal at Peterculter East, Bancon Developments have sought to address the concerns by commissioning WA Fairhurst to identify factors contributing to congestion, assess current and future traffic levels within Peterculter and consider potential measures to ease congestion, with a view to mitigating the impact of their development proposal.

5.2 It is concluded that there are various factors contribution to congestion within Peterculter and much of these are not exclusively the result of traffic volumes, such as:

Strategic north-south traffic using the B979 between Stonehaven and Westhill/Dyce, particularly HGV traffic, creating peak tidal flows in the opposite direction to the main tidal flows to and from the City within Peterculter;

These opposing tidal flows meeting at the substandard A93/B979 Malcolm Road junction where the B979 traffic has to turn right against the opposing A93 traffic;

The A93 also functioning as Peterculter High Street with associated use as a local retail centre, residential street, main bus route and main distributor for local accesses;

As a result of the A93 also being a functional High Street, pinch points exist on the A93 throughout Peterculter created by bus stops, parked vehicles, loading bays etc

and this is exacerbated by the high level of HGVs also using the B979 route. A high level of pedestrian movements also have to be accommodated.

5.3 Therefore, although it has been identified that traffic levels will increase on the A93 as a result of the AWPR junction located at Milltimber, there is a greater drop in traffic in the opposite direction using the B979 as a strategic route. With much of the congestion resulting from the two opposing flows, particularly HGVs, it is anticipated that despite the increase in traffic on the A93 there will be an overall reduction in congestion levels.

5.4 Whilst it is considered that this alone would support the provision of additional development to the west of Peterculter, further work is required to quantify the actual effects on road capacity and the development impact and this will be done through a full Transport Assessment carried out at the planning application stage. However, rather than rely solely on the AWPR providing the additional capacity at this stage, additional measures have also been identified which could further reduce traffic levels within Peterculter and accommodate the development, namely:

Improvements to the Malcolm Road junction to allow traffic to turn left from the A93 and B979;

Provision of an alternative access road to the AWPR Milltimber junction via Culter House Road, either via an upgraded Bucklerburn Road or via their site at Hill of Ardbeck;

Provision of an additional access at the Cleanhill (AWPR/Fastlink) junction for the South Deeside Road.

5.5 Each of these measures will require more detailed assessment, however, based on current traffic flows, the known causes of congestion and the effects of the AWPR, all have the potential to further reduce congestion within Peterculter and support additional development at Peterculter West.

Figures

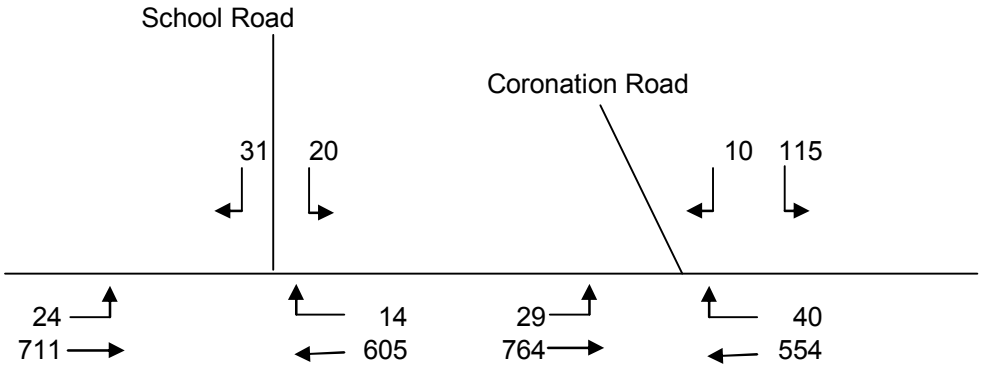


Figure 3-1 Surveyed Flows AM Peak (07:30 - 08:30)

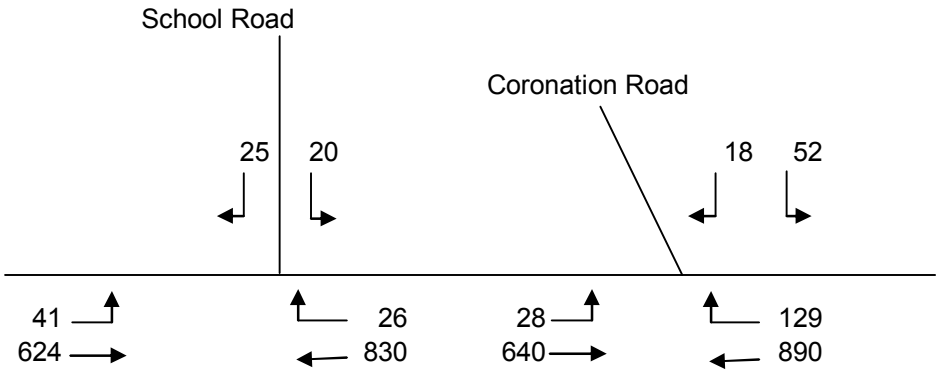
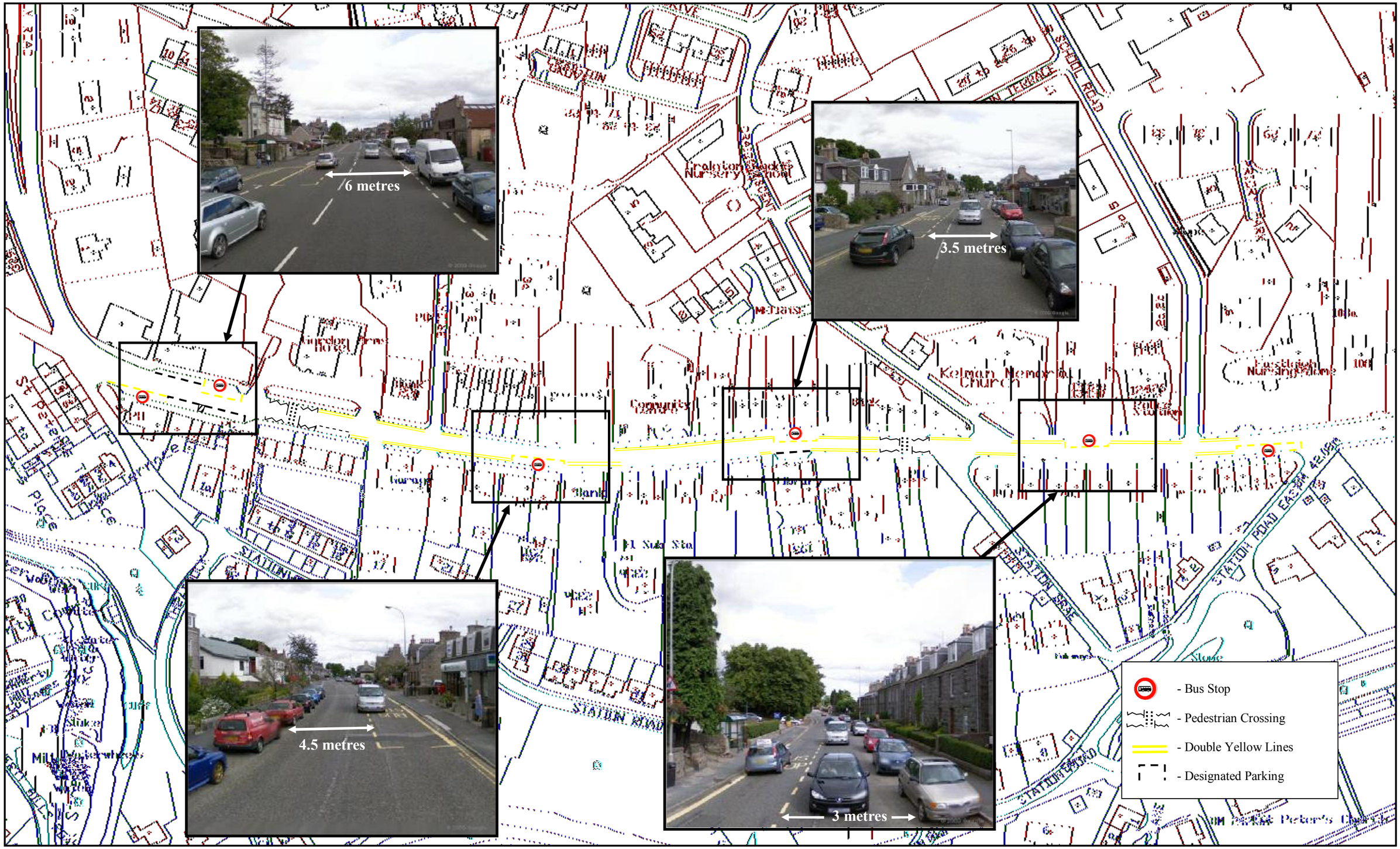


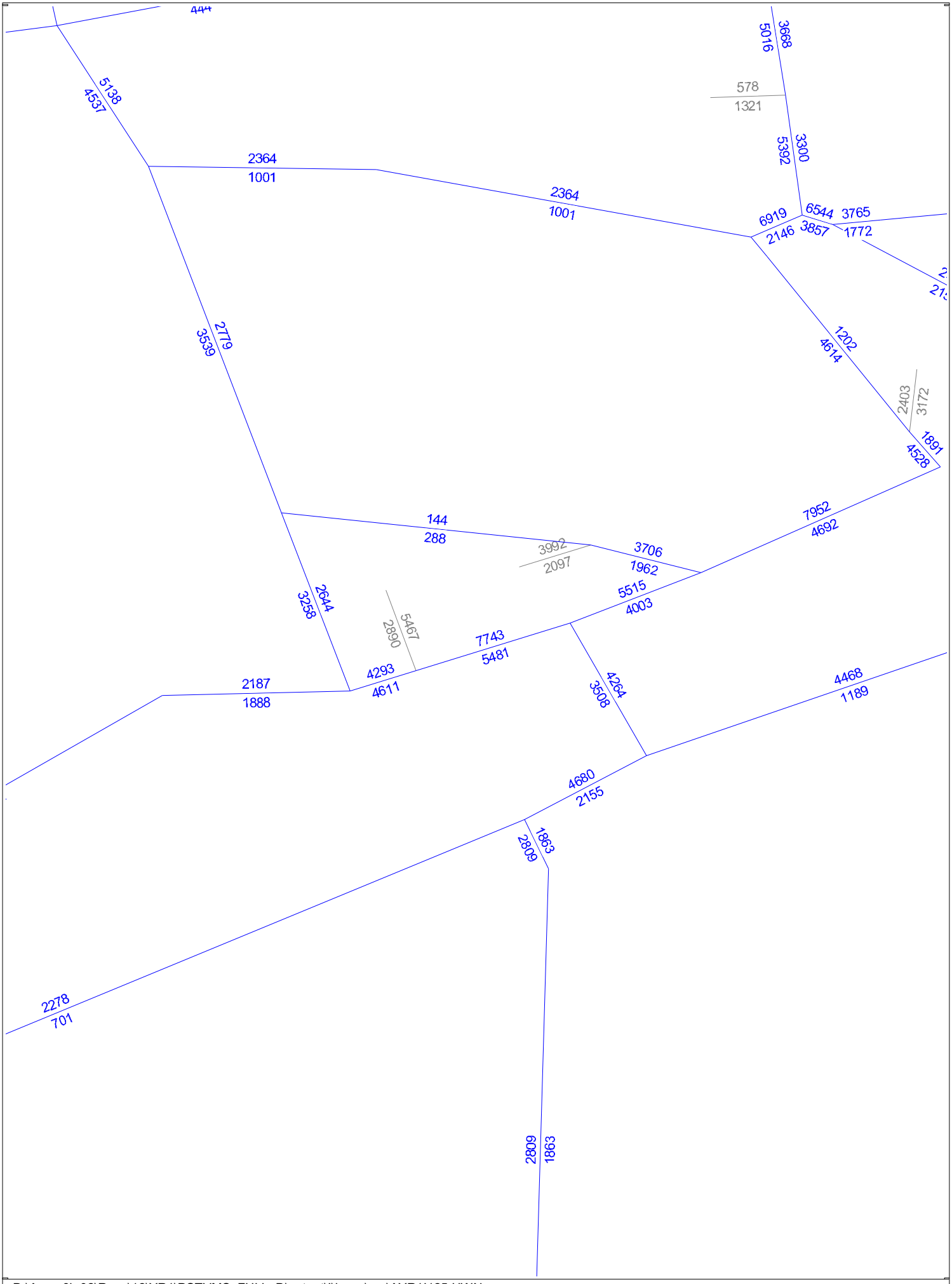
Figure 3-2 Surveyed Flows AM Peak (16:45 - 17:45)

Appendix A
Examples of Pinch Points In Peterculter

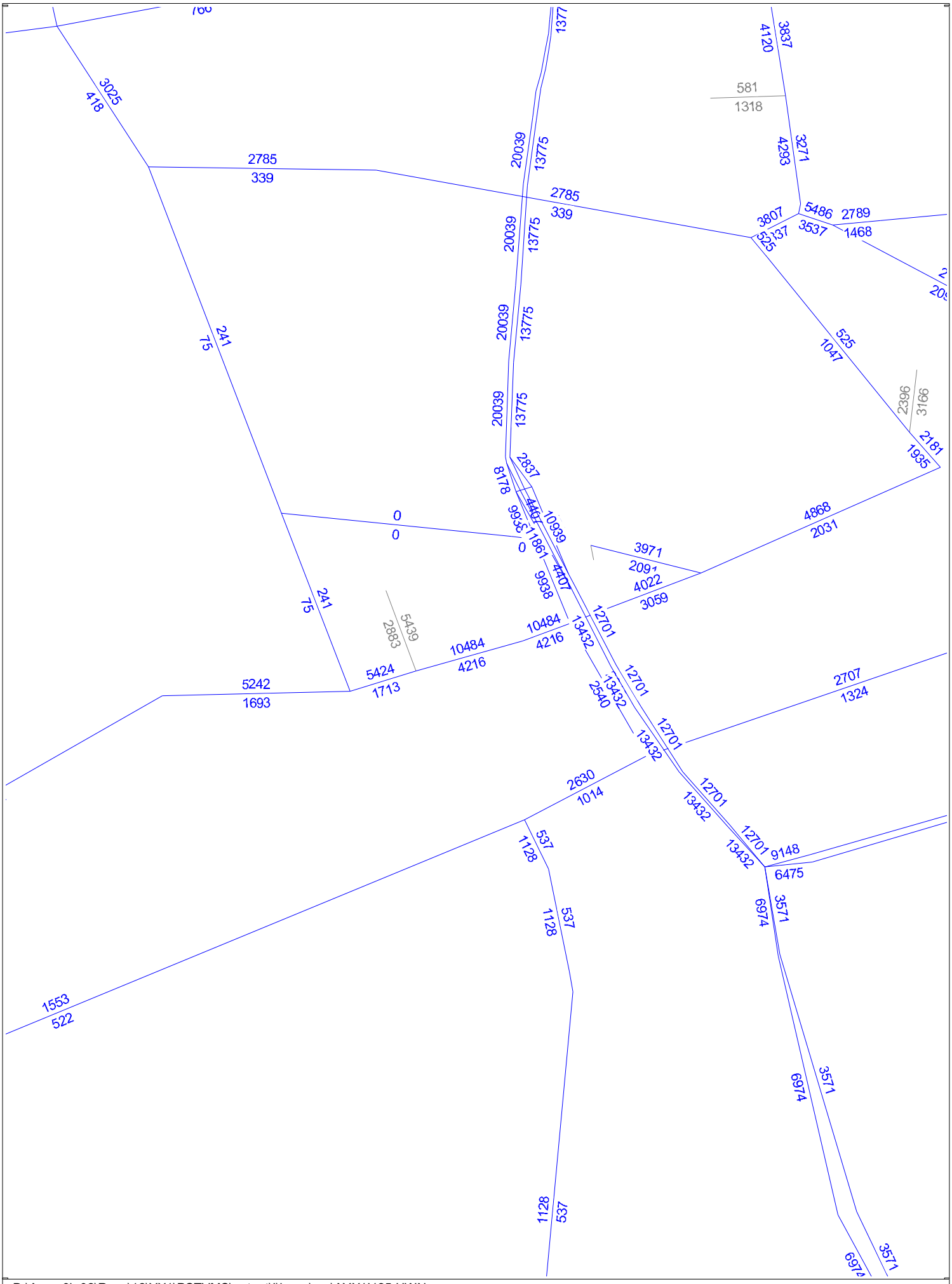
Peterculter High Steet – Pinch Point Examples



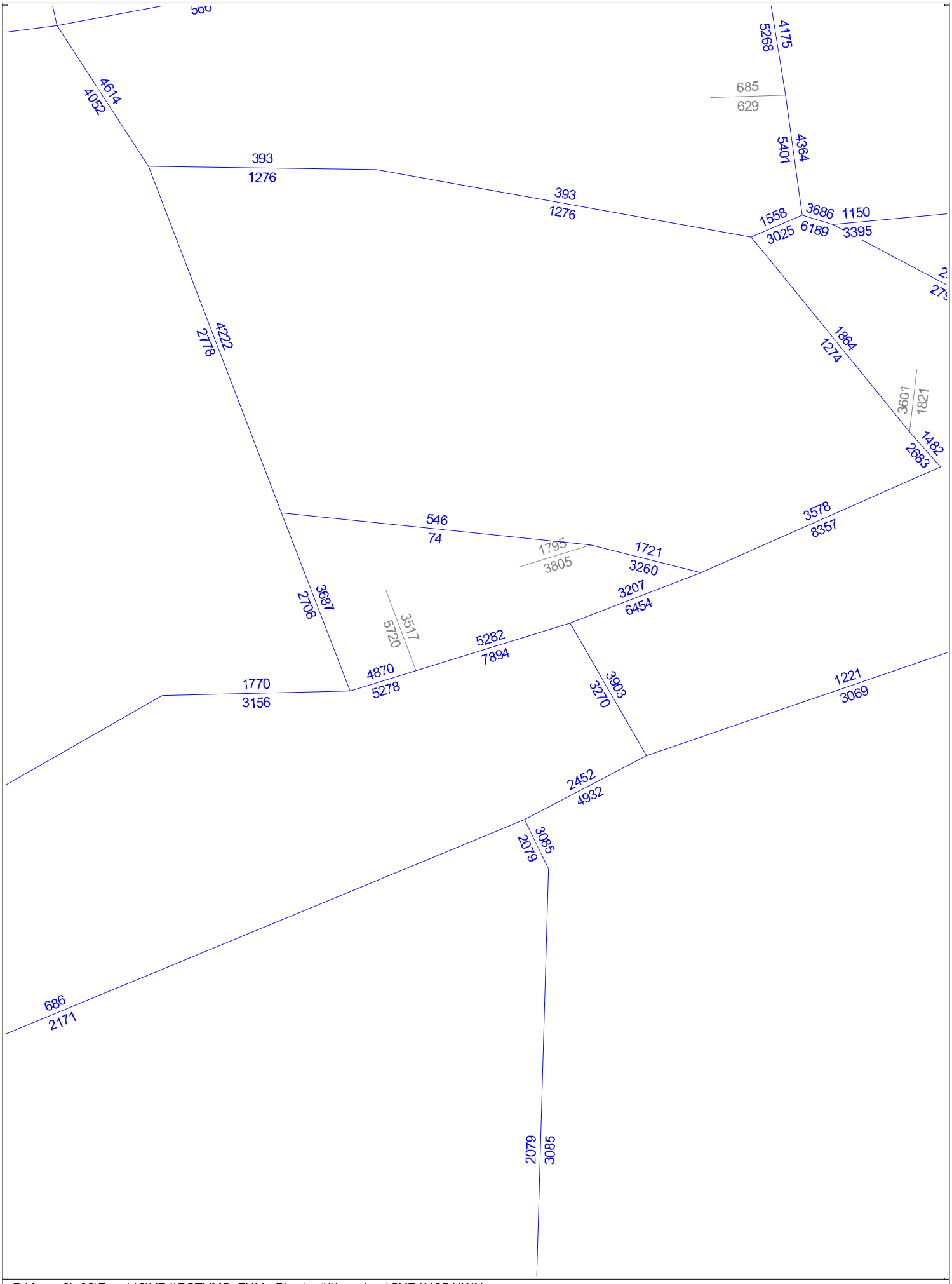
Appendix B
AWPR Traffic Flow Data



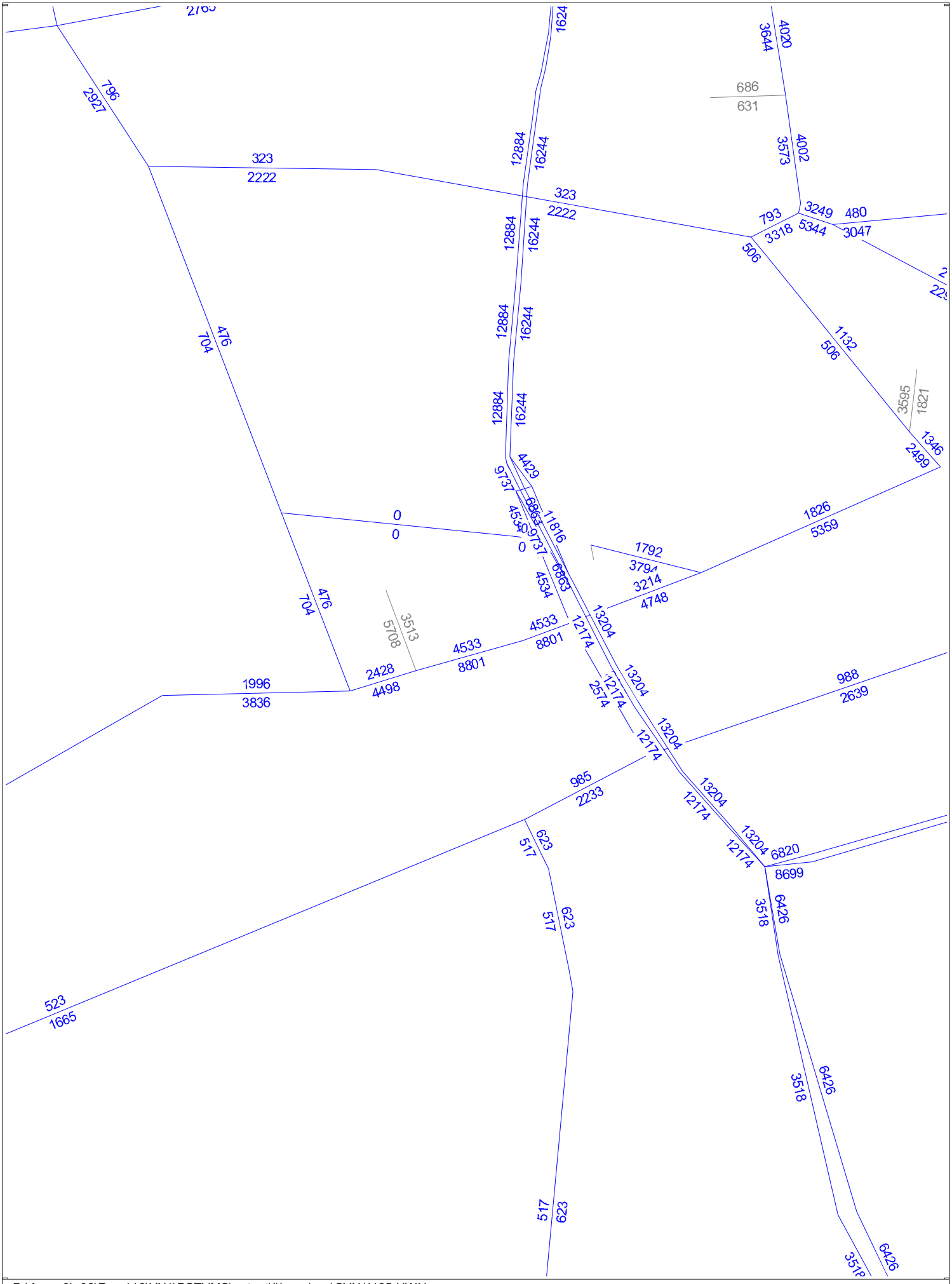
D:\Asam3b.02\Runs\12\YR1\PSTVMS_FULL_D\output\l\hway\am\AYR1l125.HWN
Car Flows (PCUs * 10)



D:\Asam3b.02\Runs\12\YX1\PSTVMS\output\l\hway\am\AYX1I125.HWN
Car Flows (PCUs * 10)



D:\Asam3b.02\Runs\12\YR1\PSTVMS_FULL_D\output\l\hway\pm\CYR1l125.HWN
Car Flows (PCUs * 10)

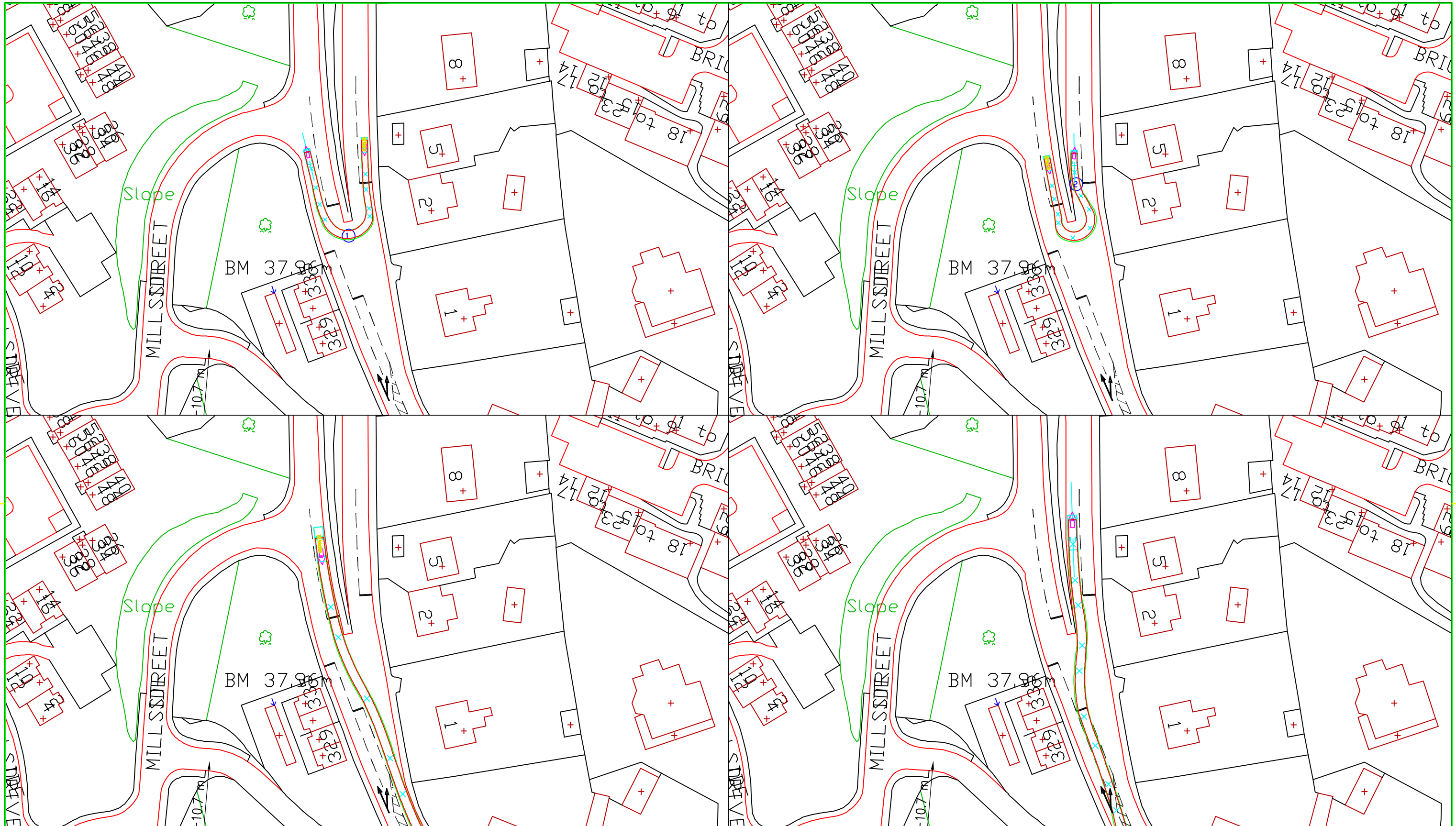


D:\Asam3b.02\Runs\12\YX1\PSTVMS\output\l\hway\pm\CYX1I125.HWN
Car Flows (PCUs *10)

Appendix C
Census Postcode Distribution Data

Destination Postcode	TOTAL	TRAIN	BUS	TAXI	CAR Driver	CAR Passenger	M/CYCLE	BIKE	FOOT	OTHER	Distribution	Route	Car %
AB14 0 (part)	779	1	54	2	231	136	4	2	339	10	24.7%	A93 E	13.9%
AB15 9	417	0	245	0	103	44	0	3	20	2	13.2%	A93 E	6.2%
AB21 7 (part); AB21 0 (part)	236	1	8	15	81	6	1	1	0	42	7.5%	A93 E	4.9%
AB21 7 (part); AB21 0 (part)					81							B979	4.9%
AB10 1	235	0	90	0	110	28	0	2	3	1	7.4%	A93 E	6.6%
AB12 3 (part)	209	0	9	0	182	11	0	2	2	3	6.6%	A93 E	11.0%
AB11 6	97	0	26	0	61	7	0	2	1	0	3.1%	A93 E	3.7%
AB25 2	80	0	5	0	65	7	1	1	1	0	2.5%	A93 E	3.9%
AB25 1	78	0	32	0	39	5	0	0	1	1	2.5%	A93 E	2.3%
AB13 0	78	0	20	0	35	18	0	0	5	0	2.5%	A93 E	2.1%
AB32 6 (part)	77	0	3	0	65	7	0	0	2	0	2.4%	B979	3.9%
AB11 5	69	0	9	1	47	4	2	0	1	5	2.2%	A93 E	2.8%
AB10 7	65	0	17	0	39	6	0	1	2	0	2.1%	A93 E	2.3%
AB15 6	57	0	2	1	50	2	1	0	1	0	1.8%	A93 E	3.0%
AB31 5 (part)	57	0	9	1	41	3	0	0	2	1	1.8%	A93 W	2.5%
AB24 3	54	0	12	0	33	2	0	0	7	0	1.7%	A93 E	2.0%
AB23 8 (part)	50	0	5	0	21	2	0	0	1	0	1.6%	A93 E	1.3%
AB23 8 (part)					21							B979	1.3%
AB10 6	40	0	10	0	25	3	0	0	2	0	1.3%	A93 E	1.5%
AB15 4	40	0	6	0	24	9	1	0	0	0	1.3%	A93 E	1.4%
AB21 9	39	0	3	0	16	3	0	1	0	0	1.2%	A93 E	1.0%
AB21 9					16							B979	1.0%
AB12 4; AB12 3 (part)	35	0	1	0	30	3	0	0	1	0	1.1%	A93 E	1.8%
AB25 3	34	0	2	0	23	6	0	1	2	0	1.1%	A93 E	1.4%
AB22 8	30	0	1	0	18	4	0	0	6	1	1.0%	A93 E	1.1%
AB24 5	29	0	9	0	18	1	1	0	0	0	0.9%	A93 E	1.1%
AB21 0 (part); AB15 8 (part)	25	0	2	1	7	5	0	0	10	0	0.8%	B979	0.4%
AB11 9	23	0	3	0	18	1	0	0	0	1	0.7%	A93 E	1.1%
AB15 5	22	0	4	0	15	2	0	0	1	0	0.7%	A93 E	0.9%
AB15 8 (part)	20	0	5	0	12	2	0	0	1	0	0.6%	B979	0.7%
AB24 4	20	0	5	0	10	3	0	0	2	0	0.6%	A93 E	0.6%
AB12 5 (part)	16	0	0	1	14	1	0	0	0	0	0.5%	A93 E	0.8%
AB39 2	14	0	0	1	12	1	0	0	0	0	0.4%	A93 E	0.7%
AB24 1	14	0	3	0	5	0	0	0	6	0	0.4%	A93 E	0.3%
AB15 7	13	0	1	1	9	1	0	0	1	0	0.4%	A93 E	0.5%
AB16 7	10	0	1	0	8	1	0	0	0	0	0.3%	A93 E	0.5%
AB24 2	8	0	1	0	7	0	0	0	0	0	0.3%	A93 E	0.4%
AB11 7	7	0	0	0	7	0	0	0	0	0	0.2%	A93 E	0.4%
AB51 4	7	0	0	0	7	0	0	0	0	0	0.2%	B979	0.4%
AB11 8	7	0	3	0	3	0	0	0	1	0	0.2%	A93 E	0.2%
AB51 5	6	0	2	0	4	0	0	0	0	0	0.2%	B979	0.2%
AB16 5	5	0	0	0	5	0	0	0	0	0	0.2%	A93 E	0.3%
AB23 8 (part); AB21 7 (part)	5	0	0	0	5	0	0	0	0	0	0.2%	A93 E	0.3%
AB51 3	4	0	0	0	4	0	0	0	0	0	0.1%	B979	0.2%
AB43 9	4	0	0	0	2	0	0	1	0	1	0.1%	A93 E	0.1%
AB51 0	4	0	1	0	2	1	0	0	0	0	0.1%	B979	0.1%
AB31 4	3	0	0	0	3	0	0	0	0	0	0.1%	A93 W	0.2%
AB39 3	3	0	0	0	3	0	0	0	0	0	0.1%	A93 W	0.2%
AB41 9	3	0	0	0	3	0	0	0	0	0	0.1%	A93 E	0.2%
AB12 5 (part)	3	0	0	0	2	0	0	1	0	0	0.1%	A93 E	0.1%
AB42 2	3	0	0	0	1	1	0	0	1	0	0.1%	A93 E	0.1%
AB16 6	2	0	0	0	2	0	0	0	0	0	0.1%	A93 E	0.1%
AB34 5	2	0	0	0	2	0	0	0	0	0	0.1%	A93 W	0.1%
AB42 3	2	0	0	0	2	0	0	0	0	0	0.1%	A93 E	0.1%
AB51 7; AB32 7	2	0	0	0	2	0	0	0	0	0	0.1%	B979	0.1%
AB52 6	2	0	0	0	2	0	0	0	0	0	0.1%	B979	0.1%
AB31 6	2	0	0	0	1	0	0	0	0	1	0.1%	A93 W	0.1%
AB30 1 (part); DD9 7 (part)	2	0	0	0	0	1	0	0	1	0	0.1%	A93 W	0.0%
AB34 4	1	0	0	0	1	0	0	0	0	0	0.0%	A93 W	0.1%
AB41 8	1	0	0	0	1	0	0	0	0	0	0.0%	A93 E	0.1%
AB45 1	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB45 2 (part); AB56 4 (part)	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB53 4	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB55 6; AB54 7 (part)	1	0	0	0	1	0	0	0	0	0	0.0%	B979	0.1%
AB35 5; AB36 8	1	0	1	0	0	0	0	0	0	0	0.0%	A93 W	0.0%
AB41 7	1	0	0	0	0	0	0	0	1	0	0.0%	B979	0.0%
AB38 7	1	0	0	0	0	0	0	0	1	0	0.0%	B979	0.0%
	3157	2	610	24	1660	337	11	18	425	69	100.0%		100.0%

Appendix D
Potential Improvement Schemes



Rev.	Date	Description	Drawn	Checked	Approved

Client:

Project Title:
DEVELOPMENT SITE AT
PETERCULTER, ABERDEEN
BANCON DEVELOPMENTS LTD

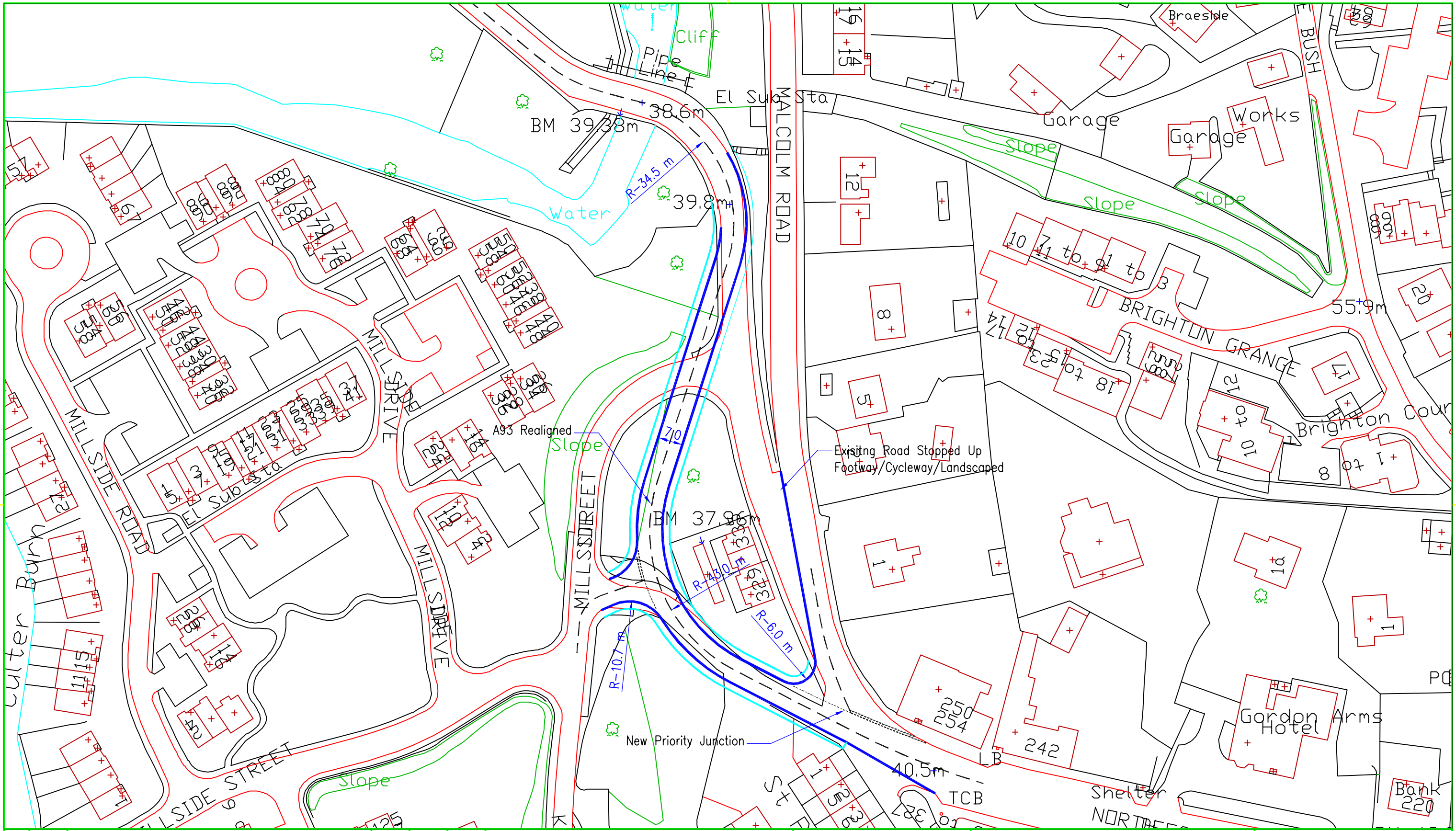
Drawing Title:
POSSIBLE SIGNALISED LAYOUT
THE A93/B979 JUNCITON,
PETERCULTER, ABERDEEN

FAIRHURST
CONSULTING STRUCTURAL AND CIVIL ENGINEERS
88 Queens Road
Aberdeen
AB15 4YQ
T: 01224 321222
F: 01224 323201

Scale at A3:	Status:	CAD File Name:
1:1000	INFORMATION	st00302-.dwg

Drawn:	Checked:	Approved:
WZ		
Date: 17/08/09	Date:	Date:

Drawing No.: 77675/00302
Revision: -



Rev.	Date	Description	Drawn	Checked	Approved

Client:

Project Title:
DEVELOPMENT SITE AT
PETERCULTER, ABERDEEN
BANCON DEVELOPMENTS LTD

Drawing Title:
POSSIBLE IMPROMENT AT
THE A93/B979 JUNCITON,
PETERCULTER, ABERDEEN

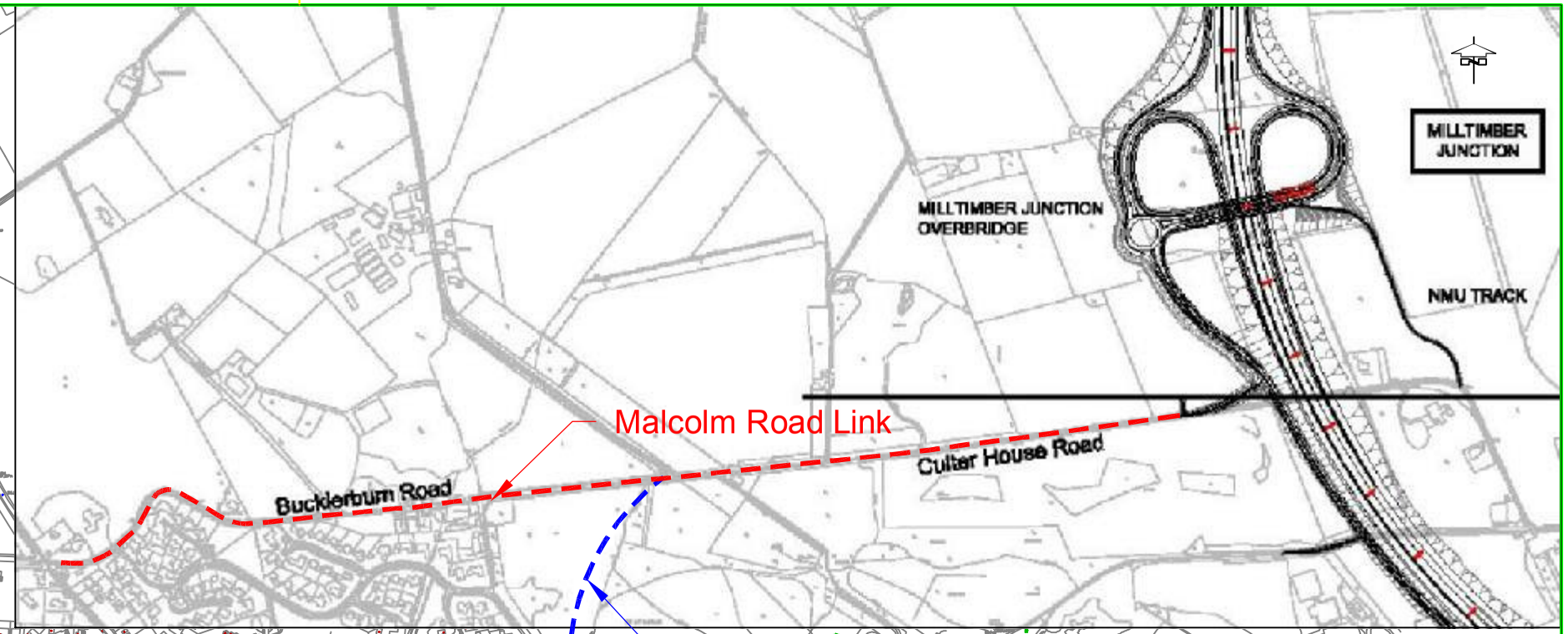
FAIRHURST
CONSULTING STRUCTURAL AND CIVIL ENGINEERS
88 Queens Road
Aberdeen
AB15 4YQ
T: 01224 321222
F: 01224 323201

Scale at A3:	Status:	CAD File Name:
1:1000	INFORMATION	st00301-.dwg

Drawn:	Checked:	Approved:
WZ		
Date: 17/08/09	Date:	Date:

Drawing No.: 77675/00301

Revision: –



Rev.	Date	Description	Drawn	Checked	Approved

Client:

Project Title:
DEVELOPMENT SITE AT
PETERCULTER, ABERDEEN
BANCON DEVELOPMENTS LTD

Drawing Title:
ACCESS LINK OPTIONS
FOR PROPOSED AWPR

FAIRHURST
CONSULTING STRUCTURAL AND CIVIL ENGINEERS
88 Queens Road
Aberdeen
AB15 4YQ
T: 01224 321222
F: 01224 323201

Scale at A3:	Status:	CAD File Name:
1:8000	PRELIMINARY	ft00501-.dwg

Drawn:	Checked:	Approved:
WZ		
Date: 23/11/09	Date:	Date:

Drawing No.: 77675/00501
Revision: -

MARYCULTER BRIDGE

B 979

RIVER DEE CROSSING

102000

KINGCAUSIE

NEW JUNCTIONS

KINCAUSIE/EASTLAND UNDERPASS

EASTLAND

Continued on Sheet 3 of 8 (Figure 4.2c)

101000

Existing Roads Upgraded

New Road

South Deeside Road - AWPR Cleanhill Junction Potential Link

A93 Realigned Arrangement
allows all movements by all vehicle types

Signalisation of Exisitng Junction
allows for left turns by car/lgv's

Note:

1. DB32 Private Car is using for the AutoTrack check Signalisation Exisitng Junction options.

Rev.	Date	Description	Drawn	Checked	Approved

New Kerb Line
New Footway
New Road Marking

Bus Stop
Pedestrian Crossing
Double Yellow Line
Designated Parking
On Road Parking

Client:

Project Title:
DEVELOPMENT SITE AT
PETERCULTER, ABERDEEN
BANCON DEVELOPMENTS LTD

Drawing Title:
POSSIBLE IMPROVEMENTS AT
A93/B979 JUNCTION AND
PINCH POINTS ALONG A93
PETERCULTER, ABERDEEN

FAIRHURST
CONSULTING STRUCTURAL AND CIVIL ENGINEERS
19 Queens Road
Aberdeen
AB15 4YL
T: 01224 321222
F: 01224 323301

Scale at A1: 1:1000	Status: INFORMATION	Old File Name: p100501-..dwg
Drawn: WZ	Checked: KC	Approved:
Date: 18/11/09	Date: 18/11/09	Job:

Drawing No: 77675/00501
Revision: –

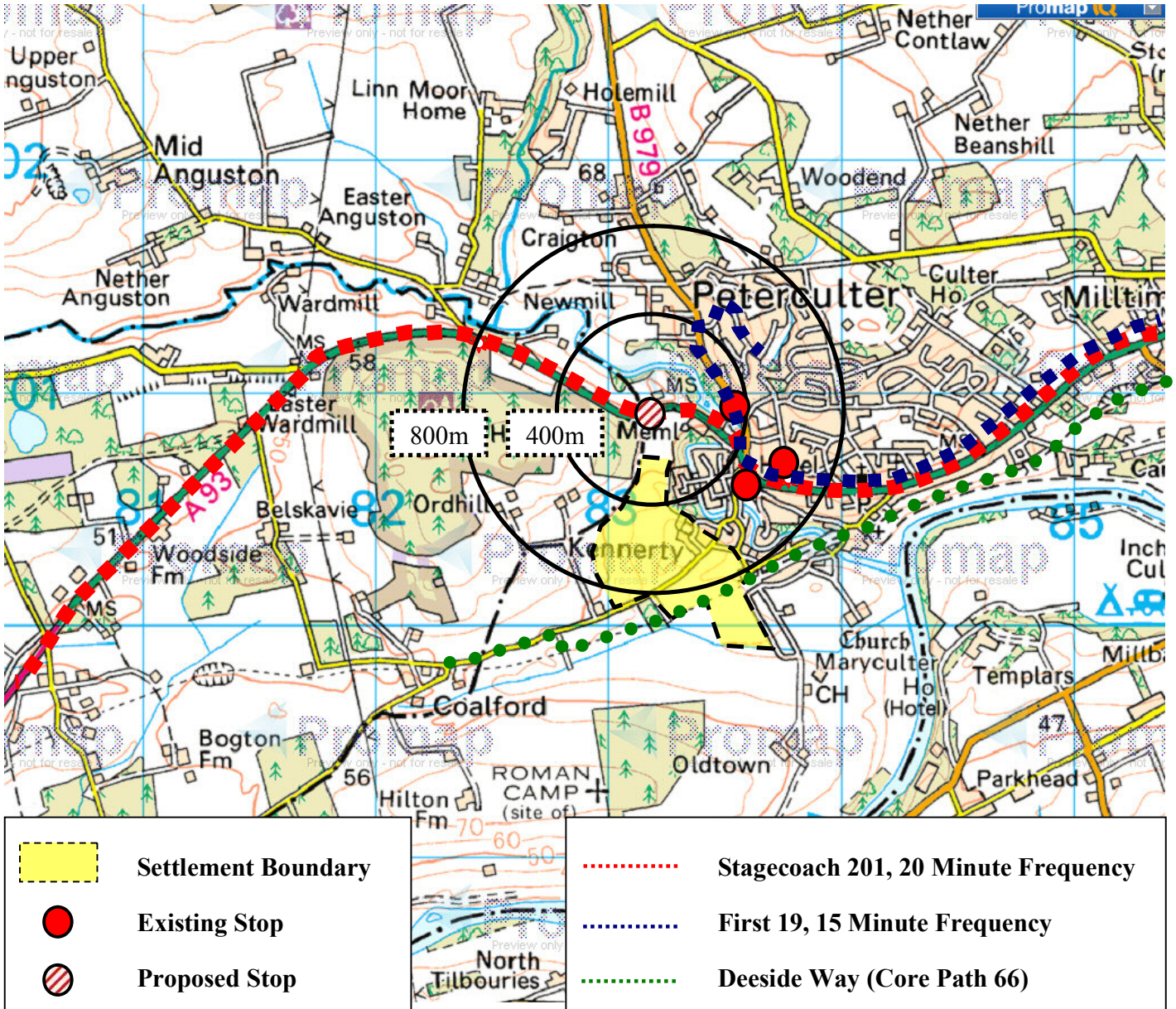


Figure 1 Accessibility Map