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# Dechmont Residential Development Transport Assessment

July 2014



**Modus**

 Transport Solutions Ltd

## Table of Contents

<b>1.</b>	Introduction .....	1
1.1	Background .....	1
1.2	Development Setting .....	1
1.3	Scoping Study .....	2
1.4	Report Structure.....	2
<b>2.</b>	Development Proposals.....	3
2.1	Site Location and development context .....	3
2.2	Site layout and sustainable infrastructure .....	4
2.3	Masterplan road hierarchy .....	4
2.4	Walking and cycling .....	4
2.5	Public transport.....	4
2.6	Vehicle access .....	5
2.7	Parking.....	5
<b>3.</b>	Policy Context .....	6
3.1	Introduction .....	6
3.2	National and Local Policy .....	6
<b>4.</b>	Accessibility Review .....	10
4.1	Introduction .....	10
4.2	Walking and cycling .....	10
4.3	Public transport access.....	14
4.4	Access by road .....	16
4.5	Accident Review .....	24
<b>5.</b>	Travel Demand .....	25
5.1	Background .....	25
5.2	Trip Generation .....	25
5.3	Multi Model Person trips.....	25
5.4	Vehicle trip distribution .....	27
<b>6.</b>	Residential Travel Plan Framework .....	28
6.1	General .....	28
6.2	Aims and Objectives.....	28
6.3	The Travel Plan .....	29

<b>7.</b>	<b>Traffic Impact Assessment</b> .....	<b>31</b>
7.1	Methodology.....	31
7.2	Base traffic flows .....	31
7.3	Traffic growth.....	31
7.4	Committed Development .....	31
7.5	Scope of assessment .....	31
7.6	Traffic impact test scenarios .....	32
7.7	Detailed assessment methodology .....	32
7.8	Junction assessment results .....	33
<b>8.</b>	<b>Summary and Conclusions</b> .....	<b>37</b>
8.1	Summary.....	37
8.2	Conclusions.....	37
	Appendix 1 – .....	39
	Appendix 2.....	40
	Appendix 3.....	41
	Appendix 4.....	42
	Appendix 5.....	43

## 1. Introduction

### 1.1 Background

Modus Transport Solutions was commissioned by Colin MacFarlane & John MacFarlane to prepare a Transport Assessment (TA) in support of a Planning Application in Principle (PPiP) for the development of up to 165 residential units with associated access arrangements, to the east of the village of Dechmont, West Lothian.

The TA was prepared in line with the guidelines set out in the Scottish Governments publication 'Transport Assessment and Implementation: A Guide' and takes account of the policies within the Scottish Planning Policy document with an assessment of the accessibility of the site by car and non-car transport modes including walking, cycling and public transport.

### 1.2 Development Setting

The village of Dechmont is located approximately 3 miles from Livingston and approximately 17 miles from Edinburgh City Centre. The village currently benefits from a number of local amenities including a primary school, community centre and a local shop and post office. These are all accessible by a comprehensive network of high quality well lit footways and it is intended that the proposed development will integrate with these existing facilities.

Dechmont also benefits from excellent bus services to Edinburgh, Linlithgow, Livingston, South Queensferry, Bo'Ness, Bathgate and Broxburn. Uphall train station is only 2 miles from the development site and provides trains to both Edinburgh and Glasgow and stations in-between. It is intended that the proposed development will integrate with these facilities thereby providing future residents with the opportunity and choice to use sustainable transport modes.

The development will provide an extension to Dechmont and complete the village's eastern boundary in a similar character and layout to the surrounding residential developments.

Two pre-application community consultations were undertaken on the 13th of February 2014 and on the 11th June 2014 at Dechmont Memorial Hall on behalf of the landowners. The pre-application consultation provided local residents with the opportunity to view and comment on the development proposals. A Masterplan for the development for subsequently prepared which responded to local residents comments and concerns raise through the community consultation. The Masterplan also considers national and local planning policy guidance, including the Scottish Governments document 'Designing Streets', placing an emphasis on sustainable travel over the private car. This Masterplan has subsequently been used within this TA.

### 1.3 Scoping Study

The scope of the TA to support the development proposals, including all technical parameters, were agreed with the West Lothian Council. A copy of the scoping correspondence is provided in **Appendix 1**.

### 1.4 Report Structure

**Chapter 2** of this report describes the development proposals for the site. **Chapter 3** provides an assessment of the development proposals in relation to current national and local transport planning policy. **Chapter 4** reviews existing transport provision and accessibility in the vicinity of the site. **Chapter 5** quantifies the travel demands associated with the development proposals and **Chapter 6** provides an outline of a Residential Travel Plan framework for the site. **Chapter 7** details the key findings of the traffic impact assessment and the summary and conclusions of the study are presented in **Chapter 8**.

## 2. Development Proposals

### 2.1 Site Location and development context

The site is located to the east of the village of Dechmont, north of the M8 and also Livingston. The site is bounded by Main Street to the north, the A899 to the east, the A89 to the south and the residential area of Craiglaw to the west. The location of the site in relation to the surrounding area is shown in **Figure 2.1**.

The indicative Masterplan for the development shows 148 units however for the purposes of the TA a maximum of 165 units has been tested. The development proposals also include a new access point from Main Street. The development proposals will provide an extension to the eastern edge to Dechmont village.

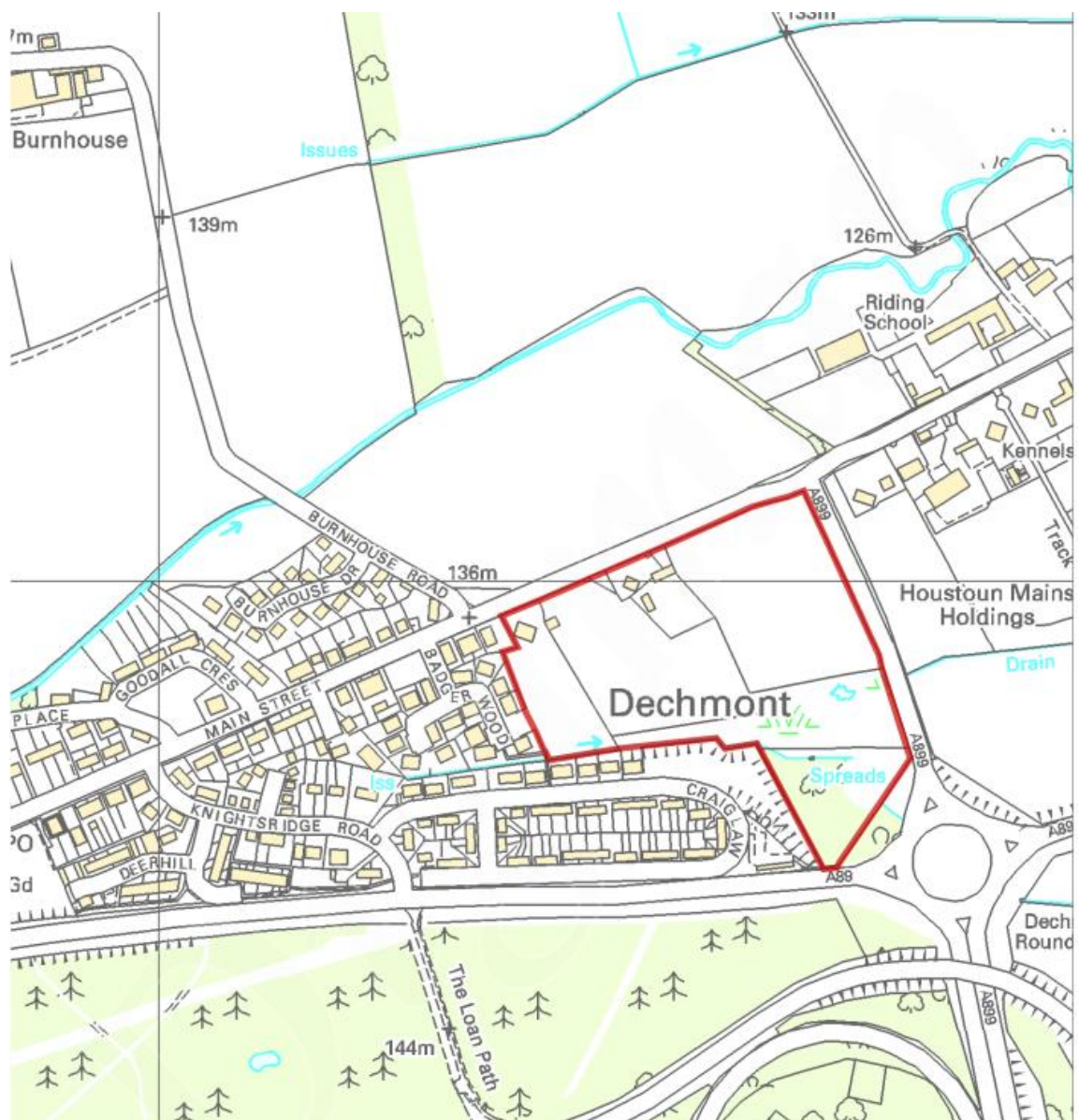


Figure 2.1: Site location plan



## 2.2 Site layout and sustainable infrastructure

An indicative Masterplan for the site has been prepared by Clarendon Planning and Development and is presented in **Appendix 2**.

The Masterplan presented in **Appendix 2** has been developed as an extension to the existing village and to reflect the requirements of Designing Streets.

The development proposals will integrate with existing walking and cycling infrastructure in the area and provide for access to public transport. This will ensure that residents of the new development are given the opportunity to make informed travel choices and will therefore hopefully be encouraged to travel by sustainable modes.

## 2.3 Masterplan road hierarchy

The Masterplan has been designed to reflect the key design principles set out within the Scottish Governments document "Designing Streets". The Masterplan has been developed such that it creates a core street network which encompasses all travel modes. The Masterplan ensures that the function of the street takes precedence and is not dominated by the requirements of the private car. The following paragraphs provide more detail on the approach to establishing the movement hierarchy.

## 2.4 Walking and cycling

The following walking and cycling routes will be provided as part of the development proposals:

- New pedestrian links will be created onto Main Street and the A899 with the potential to also provide a pedestrian connection to Craiglaw;
- A pedestrian link will be provided to the new amenity space and woodland area to the south of the development;
- The potential exists to create a cycle link through the new amenity and woodland area to connect into the existing Bathgate to Newbridge cycle path which runs on the south side of the site adjacent to the A89;
- Shared use surfacing along many of the internal residential roads will be provided to remove the dominance of the private car;

## 2.5 Public transport

The main bus stops and public transport facilities are accessed on both Main Street and the A899. The bus stops on Main Street are located approximately 350m from the centre of the site, via the proposed new access onto Main Street. The bus stop on the A899 are located approximately 250m from the centre of the site, accessed from the new pedestrian link to the east of the site.

The proposed pedestrian links to Main Street and the A899 will ensure that safe and convenient access to public transport facilities can be achieved from the site. Further information on bus services and facilities serving the site are discussed in **Chapter 4**.

## 2.6 Vehicle access

The proposed access to the site will be provided via a new junction on Main Street. The section of Main Street in front of the site is currently subject to a 40mph speed limit. As part of the development proposals and access solution for the site it is proposed that the 40mph speed limit is relocated to the east of the site on Main Street and a new gateway feature created.

The proposed location of the site access junction and new gateway feature are shown on the Masterplan in **Appendix 2** with a more detailed layout of the access proposals provided in **Appendix 3**.

The proposed site access location relative to the adjacent junctions accords with the junction criteria as set out in West Lothian Councils Standards for Development Roads. The proposed access junction also provide an appropriate carriageway width and visibility splays, again in accordance with West Lothian Councils Standards for Development Roads and Designing Streets.

## 2.7 Parking

West Lothian Councils Parking Standards for Class 9 Housing are provided in both West Lothian Councils Parking Standards and West Lothian Council Supplementary Planning Guidance - Residential Development Guide June 2013.

Based upon these parking standards Table 2.1 below sets out the parking requirements for the proposed development;

Class 9 - Houses	Car Parking Provision Location: Elsewhere	Cycle Parking Minimum Standard
General Housing and Housing Associations Up to 3 bedrooms	1 space per dwelling plus 0.5 space communal	1 per dwelling (where residents have access to a garden o garage no provision is necessary)
General Housing and Housing Associations 4 or more bedrooms	2 spaces per dwelling plus 0.5 communal space	N/A

Table 2.1: West Lothian Council Parking Standards



### 3. Policy Context

#### 3.1 Introduction

In order to demonstrate that the development of the site complies with current national and local transport planning policy, a review was undertaken of the following documents:

- Scottish Planning Policy (SPP);
- Planning Advice Note (PAN) 75 – Planning for Transport;
- Transport Assessment and Implementation: A Guide;
- Designing Streets – A Policy Statement for Scotland;
- West Lothian Council Supplementary Planning Guidance - Residential Development Guide June 2013

#### 3.2 National and Local Policy

##### Scottish Planning Policy (SPP)

The Scottish Government's planning policies are set out in a number of documents including Scottish Planning Policy (SPP), PAN 75 and Designing Streets.

The purpose of the SPP is to provide policy on land use planning and set out the Scottish Government's view of the purpose of planning. SPP seeks to set out the core principles and objectives for planning policy and provide guidance in relation to sustainable development.

SPP states that decisions in respect of the location of new developments should be such that they reduce the need to travel and prioritise sustainable travel and transport opportunities. In respect of promoting sustainable modes of transport SPP states that planning permission should not be granted for significant travel generating land uses in locations which would encourage a reliance upon the use of the private car.

Planning permission should not be granted where direct links to walking and cycling and public transport networks are not available or cannot be made available.

## **Planning Advice Note (PAN) 75 – Planning for Transport**

Planning Advice Note (PAN) 75 accompanies SPP and acts as a good practice guide on measures that planning authorities, developers and others should carry out in their policy development, proposal assessment and project delivery.

PAN 75 provides guidance on accessibility thresholds and walking distances. It recommends that walking distances to bus stops from new developments should generally be not greater than 400metres and up to 800metres for rail services. PAN 75 states that the maximum acceptable walking distance to local facilities is 1,600metres.

## **Transport Assessment and Implementation – A Guide**

This document accompanies SPP and PAN 75 and aims to provide a good practice guide for the preparation of a Transport Assessment (TA) in support of a planning application for a new development. As with PAN 75, the document sets out some general guidance in respect of accessibility criteria and thresholds while also providing guidance in the preparation of a Transport Assessment.

The document states that public transport journey times should be assessed through a combination of timetable information, maps and observed journey times to actual (or potential) bus stops serving the proposed development. The documents sets out criteria for potential door to door journey times for home to work journeys of between 30 and 45 minutes. These guidelines have been followed in the preparation of the Transport Assessment supporting the proposed Dechmont residential development.

## **Designing Street – A Policy Statement for Scotland**

Designing Streets - A Policy Statement for Scotland, places emphasis on providing well designed streets at the heart of sustainable communities and demonstrates the benefits available by assigning a higher priority to pedestrians and cyclists from good street design.

Designing Streets provides an update to the link between existing planning policy and guidance and transport policy and street design. It is based upon the Manual for Streets document published in England and Wales in 2007 while at the same time incorporating the recommendations and principles as set out in PAN 76 New Residential Streets.

Designing Streets focuses the street design process towards place making rather than a system based upon the dominance of the private car. It is intended to be used alongside the Designing Places (2001), which sets the role of the planning system in creating successful and sustainable places.

Designing Streets has now generally been adopted by most Scottish local authorities and indeed some Local Authorities have developed their own guidance in respect of Designing Streets. West Lothian Council have prepare their own supplementary guidance, Supplementary Planning Guidance - Residential Development Guide June 2013.

The core values and aspirations of Designing Streets are to create a successful place which is distinctive, safe, easy to move around and once which is welcoming. The underlying philosophy of Designing Streets is a collaboration between the developer of the place / street and the Local Authority. This collaboration is intended to start at the planning stage of a new development such that the environment, materials and future maintenance are all taken into account in the design as early as possible.

Through collaboration and good design, streets can be made to be a safe, welcoming environment delivering the needs of all users while at the same time reducing the costs associated with long term maintenance for Local Authorities through appropriate material choices and design.

### **West Lothian Council Supplementary Planning Guidance - Residential Development Guide June 2013**

The supplementary Planning Guidance (SPG) sets out to provide developers with an approach to creating residential developments which meet with the Councils aspirations in terms of creating development which have a sense of character and identity. The SPG sets out a number of criteria which are intended to guide the developer in the creation of a residential development which are of the highest quality and create sustainable and long lasting community benefits.

The SPG sets out some guidance criteria which follow in the same form as those set out in Designing Streets. New developments are required to integrate into the surrounding area and create a movement hierarchy which is inviting and safe and one which encourages people to move by more sustainable means such as walking or cycling. Barriers to movement such as dead end streets should be removed and the layout designed such that it encourages linkages through a development and thereby increasing the potential for pedestrian activity.

### **Assessment of site in relation to policy context**

The proposed development at Main Street, Dechmont complies well with the criteria as set out within SPP and PAN75 given its location to public transport facilities and its accessibility to local infrastructure such as local schools and shopping facilities. The proposed developments impact on the existing road infrastructure is minimal and can easily be accommodated with no requirement for any network upgrading.

The development is located such that it can provide easy and safe direct links for pedestrians and cyclists to existing walking, cycling and public transport infrastructure. The Residential Travel Plan which is to be provided as part of the development proposals will assist in educating future residents of the travel choices available to them and therefore potentially reduce their reliance on the use of the private car.

Internally the development site has been designed to encompass the principles set out within both 'Designing Streets' and West Lothian Council Supplementary Planning Guidance - Residential Development Guide June 2013, such that priority will be given to pedestrians and cyclists where appropriate, to achieve an appropriate balance between place and movement. Good quality links to Main Street will be provided for access to bus stops and local amenities.

The development site also accords well with West Lothian Councils Supplementary Planning Guidance - Residential Development Guide June 2013, as it well served by public transport and all the local amenities are within easy walking distance of the site. The layout of the development will also promote and help sustain walking and cycling as key elements within the development and the layout will assist in managing the dominance of the private car.

## 4. Accessibility Review

### 4.1 Introduction

This chapter provides an accessibility assessment for travel by all modes of transport and verifies the existing transport provision serving the site and the areas around the site. This assessment provides details of existing physical infrastructure as well as public transport service provision.

It is recognised that both Local and National Government Policy is to prompt and encourage walking and cycling as key sustainable modes of transport and that these modes are generally linked to travel by public transport, be it bus or rail. It should however also be recognised that the private car can also form an element of sustainable travel through its ability to provide a link to park and ride facilities and access to rail stations. On this basis this accessibility assessment will also consider elements of private car use where it can effectively contribute to an overall sustainable travel choice.

In order to undertake the accessibility review an audit of existing walking, cycling and public transport facilities in the vicinity of the development site was undertaken in March 2014. The following sections within this chapter set out the findings of this accessibility assessment.

### 4.2 Walking and cycling

The following section sets out the existing walking and cycling infrastructure provision in the vicinity of the site and sets this within the context of the overall provision within the village of Dechmont.

#### Walking

National Transport Policy sets out a reasonable walking distance to local amenities as a 20 minute or 1600m journey time / distance (PAN 75 Annex B Paragraph B13).

Figure 4.1 provides an illustration of the 20 minute (1.6Km) walking catchment from the centre of the proposed development site. As can be seen from Figure 4.1 all the local amenities within Dechmont are easily accessible on foot. These amenities include;

- Dechmont primary school;
- Local shop / Post Office;
- Local coffee shop / sandwich bar;
- Local play park
- Dobbies Garden Centre and restaurant.

National Transport Policy also sets out recommended criteria for walking distances to local bus stops and public transport facilities. This is typically 400m or a 5 minute walk.

Main Street currently has existing high quality and well lit footways on both the north and south sides of the carriageway. The full length of Main Street is traffic calmed either via carriageway narrowing along its eastern end or by speed cushions at its northern end, near to the junction with the A89. There are a number of pedestrian crossing points on Main Street in the form of double D traffic islands as well as on street parking adjacent to residential properties. The nature of the traffic calming and on street parking is such that it generally slows traffic along Main Street and improves the overall pedestrian environment.

The footways on Main Street run along its full length from the A899 mini roundabout to the junction with the A89 to the west of the village. With Main Street providing the main pedestrian route through the heart of the village it provides existing and future residents with a safe route to all the local amenities in the village centre. A number of the side streets off Main Street are subject to a 20mph speed limit with Main Street itself is subject to a temporary 20mph speed limit in the vicinity of the primary school during school start and finish times.

The A899 has short sections of pedestrian footway linking the existing bus stops to the pedestrian facilities on the A89.

As part of the development proposals, a new pedestrian link will be provided through the development to tie in with proposed new access on Main Street. This tie in to the existing pedestrian facilities on Main Street will enable residents from the new development to have a dedicated pedestrian link to the bus stops and local amenities on Main Street. In addition a pedestrian link will also be provided through the development onto the A899 to provide residents of the new development access to the existing bus stops and bus services.

The new footway on the A899 will also allow residents of the new development to walk to the existing Dobbies Garden Centre and restaurant.

As part of the accessibility audit Modus Transport Solution Ltd staff undertook on site checks to determine actual walking times to local amenities within the village of Dechmont. Starting at the entrance to the proposed development site on Main Street the time taken to walk to each individual local amenity was recorded to the nearest minute. The walking audit was undertaken by a healthy, able bodied person using all appropriate and available pedestrian amenities within Dechmont

Table 4.1 below sets out a list of local amenities and the approximate walking times from the site entrance to each individual amenity.



Destination	Approx. on-site walking journey time (minutes)
Bus stops on Main Street (west of site)	2 mins
Bus stops on A899 (Using Main Street and grass verge on A899)	5 mins
Local shop and Post Office	7 mins
Local football pitch and play area	8 mins
Dechmont Primary School	10 mins
Dobbies Garden Centre (Using Main Street and grass verge on A899)	7 mins

Table 4.1: Walking journey times to local facilities and amenities

As can be seen from Table 4.1 all local amenities within the village of Dechmont lie well within the recommended guidelines as set out in PAN 75 Annex B Paragraph B13.

Figure 4.1 shows a photo montage of the local amenities and facilities within the village.



Figure 4.1 - Local amenities and facilities within Dechmont.

## Cycling

Dechmont village, and indeed the proposed development site, are ideally placed to benefit from local dedicated cycle facilities as well as the benefits brought to cyclist within the village as a result of the traffic calmed streets.

West Lothian Council Cycle Route WLC10 - *Bathgate to Newbridge Cycle Path* and WLC31 – *Loan Path* (part of the Livingston Green Path Network) lie in close proximity to the development site and can be easily accessed by residents of the proposed development.

West Lothian Council Cycle Route 10 provides a dedicated cycle route from Bathgate to Newbridge with the majority of the route being in the form of an off road cycle path. There is a short section of the route, to the west of Dechmont, which uses the A89 due to the lack of a dedicated cycle facility. Once past the West Lothian Council boundary, to the west of Broxburn, the route continues along the A89 into the City of Edinburgh Council area where access to the South Gyle area and the City centre can be achieved.

The WLC31 route provides cyclists with direct access into the Livingston area and employment centre at Deer Park and beyond, including St John's Hospital. It is also possible for residents from Dechmont to cycle to Uphall station.

On the streets through the village of Dechmont the traffic calming measures which are currently in place provide an ideal environment for cyclists. As a result of the traffic calming vehicle speeds are lower and therefore a safer and more pleasurable cycling experience can be had by residents of the village. The potential will therefore exist for residents of the new development to access all the village's local amenities by bicycle and for children to safely cycle to the primary school.

### 4.3 Public transport access

#### Bus provision

The nearest bus stops to the development site are located on Main Street to the west of the site and on the A899 to the south east of the site.

The west bound bus stop on Main Street is provided with a bus flag, shelter and time table information. The east bound bus stop is only provided with a bus flag and time table information. Both the bus stops on the A899 are provided with bus flags and time table information only.

There are two main bus operators serving Dechmont, First Group and E & M Horseburgh Ltd. First Group provide longer distance services to Edinburgh while E & M Horseburgh provide more local services.

The west bound bus stops on Main Street are served by 5 services in the morning peak, 3 services running from Edinburgh and two local bus services. The Edinburgh services run to Bathgate typically on a 30 minute frequency. In the evening peak the west bound bus stop has six services, five services running from Edinburgh and one local service.

The east bound bus services on Main Street has the same level of service as the west bound bus stop with services running to Edinburgh as well as local destinations.

There are four bus services which use the bus stops on the A899, three First Group services and one E & M Horseburgh service. These bus services on the A899 do not include any of the services which use the Main Street stops and provide routes to Edinburgh, Livingston and Dunfermline along with interconnecting villages. The E & M Horseburgh service runs to St John's hospital and onward to South Queensferry and interconnecting villages. The A899 bus stops are served by 5 services in the morning and evening peaks.

The route map for the First Group services along with associated time tables are provided in **Appendix 4**.

A typical journey time from Dechmont to Edinburgh in the morning peak is 66 mins, with the destination being central Edinburgh near Waverly Station. A similar journey time from Edinburgh to Dechmont is possible in the evening peak, with the express service being marginally quicker.

A typical journey time from Dechmont to St John's hospital is 12 minutes during the morning peak and a similar journey time in the evening peak.

### Rail services

The closest railway station to the development is Uphall station which is located approximately 2 miles south east of Dechmont.

Services run from Uphall to Edinburgh and Glasgow Queen Street and all stations on route. Services to Edinburgh start at 05.54 and run until 23.26. The typical journey time from Uphall to Edinburgh Waverly is 19 minutes.

Services to Glasgow Queen Street start at 06.24 and run until 23.09. The typical journey time from Uphall to Glasgow Queen Street is between 50 – 58 minutes depending upon which intervening stations the service stops at. It is also possible to travel beyond Glasgow Queen Street to Helensburgh station on the west coast.

4.2 below shows the stations served from Uphall along the route to Edinburgh and Glasgow

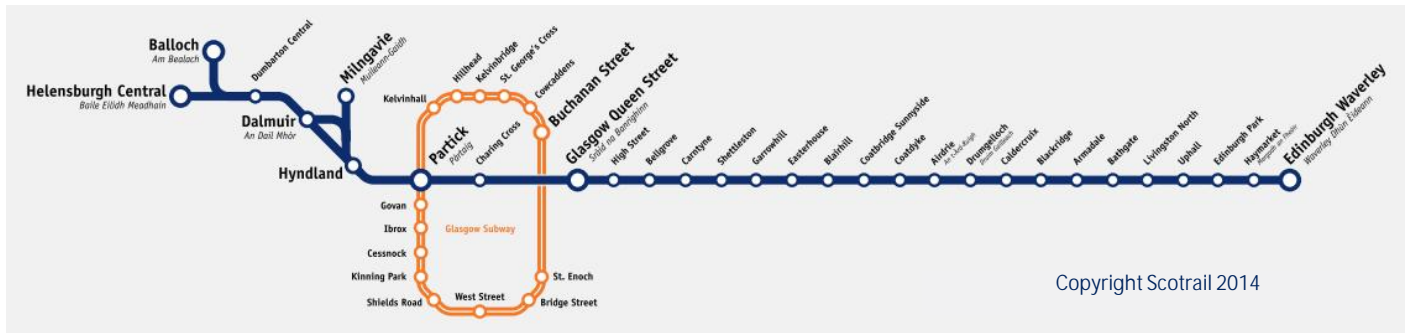


Figure 4.2 - Train services from Uphall

Uphall station has a good size well used public car park along with covered cycle parking. The station is connected to the local cycle network and is therefore easily accessible on bicycle from Dechmont.

#### 4.4 Access by road

##### Main Street

Main Street is the main access through the village of Dechmont and provides access to the residential properties on Main Street as well as the side streets. The local primary school and shop are both accessed from Main Street. Main Street has existing high quality and well lit footways on both the north and south sides of the carriageway.

Main Street joins with the A89 to the west of the village via a priority junction with a diverge slip and also joins with the A899 to the east of the village via a small mini roundabout.

Main Street typically has a 6 -7m wide running carriageway which is bounded on both sides by on street parking spaces, kerb build outs (adjacent to bus stops) and other traffic calming features. There is direct frontage access onto Main Street from the properties adjacent to Main Street. The overall impression given to drivers is therefore one of a traffic calmed residential street. Given the nature of the road layout and the traffic calming features, vehicle speeds through the village are on the whole very low and therefore other road users are provide with a safe and pleasant environment.



Main Street is subject to a 30mph speed limit along its full length through the village. There is a temporary 20 mph zone adjacent to the primary school which is active during school morning start and afternoon closing times. A number of the side streets off Main Street are subject to mandatory 20mph speed limits.

The on street parking along the full length of Main Street is well used by residents and customers using the local shop. Parents also use the available on street parking in the vicinity of the school although a notable number of children walk to school either on their own or with a parent.

Main Street is also the main bus route through the village.

There are gateway features provided at both ends of the village to inform drivers that they are entering the village and to reinforce the 30mph speed limit.

The section of Main Street adjacent to the site frontage is currently subject to a 40mph speed limit. As part of the development proposals the existing gateway feature and 30mph speed limit will be relocated to a point closer to the mini roundabout. A standard priority junction will be provided in accordance with West Lothian Council Guidelines for Development Roads. The visibility splay at the junction will be 4.5m x 70m in accordance with the amended 30mph speed limit. The location and layout of the indicative access proposals were agreed with Officers in the Development Planning department of West Lothian Council. The indicative access layout is provided in **Appendix 3**.

Figures 4.3 and 4.7 below show typical views of Main Street



Figure 4.3- Eastern entrance to the village.





Figure 4.4- Western entrance to the village.



Figure 4.5- Typical view of Main Street.



Figure 4.6- Typical view of bus top build out and on street parking.



Figure 4.7- Typical view of Main Street (development site on right)

## Burnhouse Road

Burnhouse Road is a local road which runs from the eastern end of Dechmont from Main Street north towards Linlithgow. Although a relatively minor country road it is well used by local residents and locals from the area to access Linlithgow and other local destinations.

Burnhouse Road is sign posted for access to Bangour Fishery, Linlithgow, Beecraigs Country Park, Delta Force Paintball and a local B&B at Bankhead Farm, see Figure 4.9 below.



Figure 4.8- Typical view of bus top build out and on street parking.

Burnhouse Road forms a standard priority junction with Main Street. Visibility from the junction is good and commensurate with the 30mph speed limit and traffic calmed nature of Main Street. The Burnhouse Road / Main Street junction has large corner radii, suitable for farm traffic and larger vehicles, and has sufficient space at the give-way line to enable two vehicles to stop simultaneously for either turning left or right. There is also a large pedestrian refuge island to allow pedestrians to cross the junction safely in stages.



## A899

The A899 provides the main link through Livingston, to the south of Dechmont, towards Uphall and Broxburn. The A899 is a distributor road and also provides the main link from Livingston to the M8. The A899 joins with the A89 to the south east of the site at the Dechmont Roundabout.

The A899 as it passes through Livingston is a standard dual carriageway with a central reserve. North of the Dechmont roundabout, adjacent to the site, the A899 becomes a standard single carriageway.

The A899 to the east of the site is a standard 7.3m carriageway with wide grass verges. A footway is provided from the Dechmont roundabout to the south bound bus stop on the east side of the A899. A pedestrian dropped kerb crossing point is provided from the eastern footway to the west side of the A899 to provide access to the north bound bus stop.

The section of the A899 adjacent to the eastern site frontage is currently subject to a 40mph speed limit.

The A899 is also provides the main bus route for services to Livingston, Edinburgh, Bathgate, Uphall and Broxburn.

Where the A899 meets with Main Street a three arm mini roundabout is provided. Historical mapping of the areas shows that the A899 / Main Street junction was originally a standard priority junction and at some point it was re-design to be a mini roundabout. The mini roundabout has three single lane entry approaches with a raised central island and keep left bollards on all approaches.

Figure 4.9 provides a typical view of the A899 / Main Street mini roundabout with Figure 4.10 providing a typical view of the A899 with the development site on the right hand side of the photograph.



Figure 4.9- Main Street / A899 Mini roundabout.



Figure 4.10- Typical view of A899 (development site on right).

## A89

Historically prior to the development of the M8 the A89 provided one of the main east west routes from Glasgow to Edinburgh, the other being the A8. With the completion of the M8 in 1980 the A89 was effectively downgraded to a distributor road which serves the towns and villages of Armadale, Uphall, Bathgate and Broxburn with an alternative east west route.

The A89 in the vicinity of Dechmont is a wide single carriageway with large grass verges on both sides and a combined footway / cycleway on its south side and a narrow pedestrian path on its north side. Figure 4.11 shows a typical view of the junction.

The A89 acts as a bus route from Bathgate to Livingston and Edinburgh and in the vicinity of Dechmont is subject to a 50mph speed limit.

Dechmont is effectively by-passed by the A89 which runs along the southern boundary of Dechmont.

Main Street, which runs through the centre of Dechmont, joins the A89 at a priority junction at the western most end of the village. The priority junction with the A89 is typical of a junction on a main distributor road with a 9.3m wide main carriageway, large corner radii and a deceleration lane for left turning traffic from the main road. Typically, smaller vehicles on the A89 are able to pass right turning traffic due to the width of the main carriageway.

Forward visibility on the main road is good and the visibility on the side road accords with standards for a 4.5m x 160m visibility splay or indeed a 4.5m x 215m being easily achievable from the junction.



Figure 4.11- Typical view of A89 / Main Street junction.



## 4.5 Accident Review

A review of accident data for the Dechmont area and the three junctions being considered indicates the occurrence of a very limited number of recorded accidents.

The junction of the A89 / Main Street has only two recorded accidents, a slight in 2006 and a serious in 2010 with no other reported accidents at this junction in the past 8 years. This can most likely be attributed to the relatively low volume of traffic which uses the junction from the Dechmont area and the good visibility which is achieved at the junction.

There are no reported accidents at the Main Street / Burnhouse Road junction within the village and this is most likely due to the good visibility at the junction and the traffic calmed nature of Main Street in the vicinity of the junction.

There have been only two recorded accidents at the Main Street / A89 mini roundabout, both accidents were slight with the first recorded in 2005 and the second recorded in 2011. The nature and layout of the junction and the relatively low approach speeds of vehicles is most likely the reason for the very low volume of accidents at the junction.

Overall the accidents records for Dechmont and the local roads and key junctions around the village indicated that there are no underlying road safety issues. Therefore it is reasonable to assume that the proposed development and the relatively low volume of traffic associated with it will have no material effect upon the operational safety of the local road network surrounding Dechmont.

## 5. Travel Demand

### 5.1 Background

It was agreed during the scoping discussions with West Lothian Council that information obtained from the TRICS database would be appropriate in determining the potential trip generation for the proposed residential development.

Obviously it is important to consider all transport modes used by the proposed development and therefore information taken from the Scottish Census Results Online 2011 (SCROL) data was used to establish the remaining transport modes used over and above the estimated of private car usage.

### 5.2 Trip Generation

Trip generation information was obtained from the TRICS database and a summary of the potential trip rates and trip generation for the proposed development are provided in Table 5.1 below.

	Units	Morning peak		Evening peak	
		Arrive	Depart	Arrive	Depart
TRICS 2013 Residential Trip Rates	-	0.155	0.403	0.390	0.232
Dechmont Development	165	26	65	64	38

Table 5.1: TRICS vehicle trip rates and trip generation

The traffic generation estimates as set out in Table 5.1 were subsequently used for the purposes of assessing the traffic impact of the proposed development on the local road network. This is discussed in more detail in **Chapter 7**.

### 5.3 Multi Model Person trips

The information obtained from the traffic surveys has been used to determine car based trips from the proposed development. However, in order to establish the potential trips made by walking, cycling and public transport reference has been made to the SCROL 2011 data. In particular reference has been made to the method of travel to work or study for the census standard ward for Dechmont and resident population.

Table 5.2 provides a summary of the SCROL analyser results for method of travel to work for Dechmont.

Scotland's Census 2011 - National Records of Scotland

Table QS702SC - Method of travel to work or study (1)

All people aged 4 and over who are studying or aged 16 to 74 in employment in the week before the census

Transport to place of work or study	All people	Work or study mainly at or from home	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Settlement/Locality 2010												
Dechmont (People)	444	35	0	6	77	2	238	48	1	4	31	2
Dechmont (People)	100%	7.9%	0%	1.3%	17.3%	0.5%	53.6%	10.8%	0.2%	0.9%	7%	0.5%

Table 5.2 - SCROL data for Dechmont

Based upon the total number of units proposed for the development and the number of car base trips predicted as set out in Table 5.1 an estimation of other modes of travel during the peak periods was established using the SCROL data. Table 5.3 provides a summary of the overall mode of travel for the proposed Dechmont.

Mode	%	Morning peak		Evening peak	
		Arrive	Depart	Arrive	Depart
Work from home	7.9%	0	0	0	0
Car driver	53.6%	26	66	64	38
Car passenger	10.8%	5	12	12	7
Rail	1.3%	1	2	1	1
Bus	17.3%	8	20	19	11
Taxi	0.5%	0	1	0	0
Motorcycle	0.2%	0	0	0	0
Bicycle	0.9%	0	1	1	1
Walk	7%	3	8	8	5
Other	0.5%	0	1	0	0
<b>Total People Movement (Excluding Work From Home Trips)</b>	<b>92.1%</b>	<b>45</b>	<b>113</b>	<b>110</b>	<b>65</b>

Table 5.3: Estimated multi-modal trip generation for the development

## 5.4 Vehicle trip distribution

It was agreed with West Lothian Council during the scoping exercise that traffic from the proposed development should be distributed on the local network work in accordance with existing turning movements on Main Street and the three main routes out of the village;

- West on Main Street onto the A89;
- North from Main Street onto Burnhouse Road;
- East on Main Street onto the A899.

Figure 5.1 to 5.4 in **Appendix 5** show the distribution of development traffic on the local road network for the morning and evening peaks.

It is clear from the existing turning movements that traffic patterns at the three main junctions are very tidal with commuters travelling to and from work in the peak periods.

## 6. Residential Travel Plan Framework

### 6.1 General

As part of this Transport Assessment a Travel Plan Framework has been prepared. The Travel Plan Framework within the Transport Assessment is intended to provide a framework to encourage travel by sustainable modes of transport instead of the private car for residents of the proposed development at Main Street, Dechmont. It considers the sustainable modes of transport available to future residents of the Main Street development and considers means by which residents can be encouraged to consider change their traffic behaviour.

An effective residential travel plan can achieve the following benefits;

- Educate residents with respect to their travel choices and sustainable modes of travel;
- Reduce the use of the private car and in turn reduce residents carbon footprint;
- Increase the attractiveness of a development through reduce car use, this can be done in conjunction with Designing Streets and the layout of the development;
- A sustainable development can in turn increase the attractiveness and marketability of a development to future residents;
- Encouraging residents to walk and cycle will in turn improve their overall health and wellbeing;

### 6.2 Aims and Objectives

The primary aim of the Residential Travel Plan is to assist in minimising the transport impacts of the development on the local road network through an illustration of sustainable transport alternatives through the delivery of the following objectives:

- to enable and encourage resident to access the development by sustainable modes of transport;
- to minimise the need for residents travel to and from the site by private vehicle;
- to ensure residents are aware of the health and environmental benefits of travel by non-car modes;
- to encourage a transition away from private vehicle dependence; and
- to ensure residents are aware of the Travel Plan and kept informed in its development and in the instance of change.

### 6.3 The Travel Plan

At an appropriate stage in the development of the site the Travel Plan Framework and the measures identified below will be developed into a Travel Plan Leaflet. This leaflet will set out all the sustainable travel choices for residents to the new development and will be provided to them as part of the welcome pack which is typically provided by house builders to the purchasers of new houses.

The Travel Plan Leaflet will be developed on the basis of the existing and future travel choices available to residents of the new development. Listed below are some of the measures which will be considered when preparing the Travel Plan Leaflet.

#### Walking

The proposed development will include excellent on-site pedestrian links. The internal pedestrian provision will be constructed in accordance with both Designing Streets and The West Lothian Council's Development Guidelines.

The Travel Plan Leaflet will also include measures to take full advantage of the walking links surrounding the site. There are footways linking the site to surrounding neighbourhoods and facilities. All of these routes are of a good quality and well lit.

The following measures should be included in the Travel Plan Leaflet with regard to walking:

- information in the form of leaflets or signs regarding walking distances routes and travel times;
- linking of on-site pedestrian footways to existing footpaths adjacent to the site; and
- encouraging residents to walk to local amenities or public transport interchanges (where possible) through advertising the health, social and economic benefits.

#### Cycling

There are currently good cycle provisions within the vicinity of the site with a number of West Lothian local cycle paths running near to and past the site development to the south, adjacent to the A89. With regard to cycling, the following measures should be included in the Travel Plan Leaflet;

- encouraging residents to cycle to work (where possible) through advertising the health, social and economic benefits of cycling and through the production of mapped cycle routes;
- negotiation with local cycle shops to provide a discount for new residents to the development; and
- improved signage where appropriate.



## Public Transport

As noted in **Chapter 4**, there is good public transport provisions within the vicinity of the site and indeed the SCROL 2011 data shows that over 17% of existing residents in Dechmont currently use the bus for travel to work or study. Bus services provide an excellent opportunity for sustainable travel to work in Bathgate, Livingston, Linlithgow and Edinburgh.

The proximity of Uphall station, which lies within a short drive or indeed a short cycle, also provides residents of the new development with the potential to travel to Edinburgh or Glasgow and the intervening stations. While the statistics contained within SCROL 2011 do not show travel by train to be as popular as the bus, it does provide a real alternative for residents of the new development.

The following measures should be included within the Travel Plan Leaflet to encourage further and/or potential use of public transport:

- investigate the potential to provide bus vouchers within the residents 'Welcome Park' to promote sustainable travel;
- the provision of information on how to travel to and from the development site by bus and rail, this should include timetable information, bus catchments, travel costs and pedestrian provisions to the nearest bus stops.

## Private Vehicles

It is unrealistic to expect walking, cycling and public transport to be the only travel modes to the site by residents of the proposed development. The following measures should be included in the Travel Plan Leaflet;

- provide residents with information regarding the benefits of car sharing and provide details of internet based sites such as <https://westlothian.liftshare.com>
- provide residents information in relation to their individual carbon footprint through internet based sites such as
- dedicated car share parking spaces; and
- a guaranteed ride home in emergencies.

## 7. Traffic Impact Assessment

### 7.1 Methodology

This chapter sets out the methodology used to assess the potential traffic impact of the proposed development on the local road network. The scope of the traffic impact and junctions to be considered was agreed with West Lothian Council during the scoping exercise for the development.

The assessment has been prepared in accordance with the guidance as set out in the Scottish Government's document '*Transport Assessment and Implementation: A Guide*'. An assumed completion year of 2018 for the proposed development was used for assessing the traffic impact on the local road network.

### 7.2 Base traffic flows

Classified traffic surveys were undertaken by MHC Traffic Ltd on Wednesday 6<sup>th</sup> November 2013 between 0700 to 1000 and 1430 to 1900.

From these traffic counts the peak hours on the local road network were established as follows:

- Morning peak - 07:45 – 08:45;
- Evening peak - 16:30 – 17:30.

The base traffic flows for the weekday morning and evening peak periods are provided in Figure 7.1 to 7.2 in **Appendix 5**

### 7.3 Traffic growth

During the scoping exercise for the development proposals it was agreed with West Lothian Council that low growth should be applied to the existing traffic flows as the development proposals would effectively account of any future traffic growth in the Dechmont area.

### 7.4 Committed Development

During the scoping discussions with West Lothian Council it was confirmed that there were no committed developments in the local area which need to be taken into account within the TA for the Dechmont residential development.

### 7.5 Scope of assessment

As part of the scoping exercise for the development West Lothian Council confirmed that on the basis of the traffic generation as set out in **Chapter 5** it is anticipated that the development will have very little if any material effect upon the operation of local junctions surrounding Dechmont. On this basis it was agreed that the following junctions should be assessed as part of the traffic impact assessment;

1. Main Street / A89 – Priority Junction.
2. Main Street / Burnhouse Road – Priority Junction.
3. Main Street / A899 – mini roundabout.

## 7.6 Traffic impact test scenarios

Based upon the scope of the traffic impact assessment as agreed with West Lothian Council the following test scenarios has been considered;

- 2014 AM base traffic flows;
- 2014 PM base traffic flows;
- 2018 AM base traffic flows;
- 2018 PM base traffic flows;
- 2018 AM base + development traffic flows;
- 2018 PM base + development traffic flows.

The 2014 and 2018 base flows and 2014 and 2018 base + development flows are provided in Figures 7.3 to 7.8 in **Appendix 5**.

## 7.7 Detailed assessment methodology

The capacity and performance assessment of the priority junctions on Main Street / A89 and Main Street / Burnhouse Road were undertaken using the Transport Research Laboratory software PICADY. The results of the traffic impact analysis are presented in terms of maximum Ratio of Flow to Capacity (RFC) with the corresponding vehicle queues reported as Mean Maximum Queue (MMQ).

The capacity and performance assessment of the Main Street / A899 mini roundabout was undertaken using the Transport Research Laboratory Software ARCADY. The results of the traffic impact analysis are presented in terms of maximum Ratio of Flow to Capacity (RFC) with the corresponding vehicle queues reported as Mean Maximum Queue (MMQ).

In order to prepare the ARCADY and PICADY models a site visit was undertaken in to measure and record the geometric parameters for the junction forming part of the traffic impact assessment. Where it was not possible or safe to obtain on site measurements reference was made to Ordnance Survey mapping for the area.

As part of the traffic surveys undertaken for the Transport Assessment, queue length were recorded at all the junctions identified in paragraph 7.5 above with queue surveys undertaken on a lane by lane basis, and this information was used to calibrated the ARCADY and PICADY models.

## 7.8 Junction assessment results

### Main Street / A89 – Priority Junction

Tables 7.1 and Table 7.2 below summarise the results of the PICADY assessment of the Main Street / A89 priority junction.

AM Peak	2014 Base		2018 Base		2018 + 165 Units	
	RFC	MMQ	RFC	MMQ	RFC	MMQ
Main Street	0.197	1	0.205	1	0.225	1
A89	0.010	0	0.01	0	0.010	0

Table 7.1 – AM Peak

PM Peak	2014 Base		2018 Base		2018 + 165 Units	
	RFC	MMQ	RFC	MMQ	RFC	MMQ
Main Street	0.151	1	0.160	1	0.173	1
A89	0.010	0	0.010	0	0.010	0

Table 7.2 – PM Peak

The results of the analysis show that the Main Street / A89 priority junction is predicted to operate within capacity for all scenarios tested. The addition of the traffic associated with the proposed residential development has no impact on the safe operation of the junction.

Main Street / Burnhouse Road – Priority Junction.

Tables 7.3 and Table 7.4 below summarise the results of the PICADY assessment of the Main Street / Burnhouse Road priority junction.

AM Peak	2014 Base		2018 Base		2018 + 165 Units	
	RFC	MMQ	RFC	MMQ	RFC	MMQ
Burnhouse Road	0.489	2	0.495	2	0.520	2
Main Street	0.139	0	0.141	0	0.165	0

Table 7.3 – AM Peak

PM Peak	2014 Base		2018 Base		2018 + 165 Units	
	RFC	MMQ	RFC	MMQ	RFC	MMQ
Burnhouse Road	0.170	0	0.178	0	0.199	0
Main Street	0.304	1	0.365	1	0.400	1

Table 7.4 – PM Peak

The results of the analysis show that the Main Street / Burnhouse Road priority junction is predicted to operate within capacity for all scenarios tested. The addition of the traffic associated with the proposed residential development has no impact on the safe operation of the junction.

Main Street / A899 – mini roundabout.

Tables 7.5 and Table 7.6 below summarise the results of the ARCADY assessment of the Main Street / A899 mini roundabout.

AM Peak	2014 Base		2018 Base		2018 + 165 Units	
	RFC	MMQ	RFC	MMQ	RFC	MMQ
A899 East	0.55	1	0.56	1	1	0.57
A899 South	0.73	3	0.73	3	3	0.74
Main Street	0.62	2	0.63	2	2	0.69

Table 7.5 – AM Peak

PM Peak	2014 Base		2018 Base		2018 + 165 Units	
	RFC	MMQ	RFC	MMQ	RFC	MMQ
A899 West	0.65	2	0.67	2	0.69	2
A899 South	0.87	6	0.91	8	0.96	12
Main Street	0.24	0	0.25	3	0.27	0

Table 7.6 – PM Peak

The results of the analysis show that the Main Street / A899 mini roundabout is predicted to operate within capacity for all morning peak test scenarios. The results indicated however that during the 2014 evening peak Base scenario the A899 south arm of the mini roundabout is predicted to operate marginally over capacity with an RFC of 0.87 and a queue of 6 vehicles. This predicted queue correlates with the queue survey information obtain from the traffic surveys which shows a maximum queue, over a five minute period, of 7 vehicles.

Figure 7.9 below shows the queue profile for the A899 southern arm of the mini roundabout taken from the traffic survey queue information for the evening peak period. As can be seen from Figure 7.9 the queue on the A899 south approach generally remains constant at a 3 vehicles queue within each five minute segment. It is only for one five minute segment when the queue jumps to 7 and then drops immediacy back down to 3.

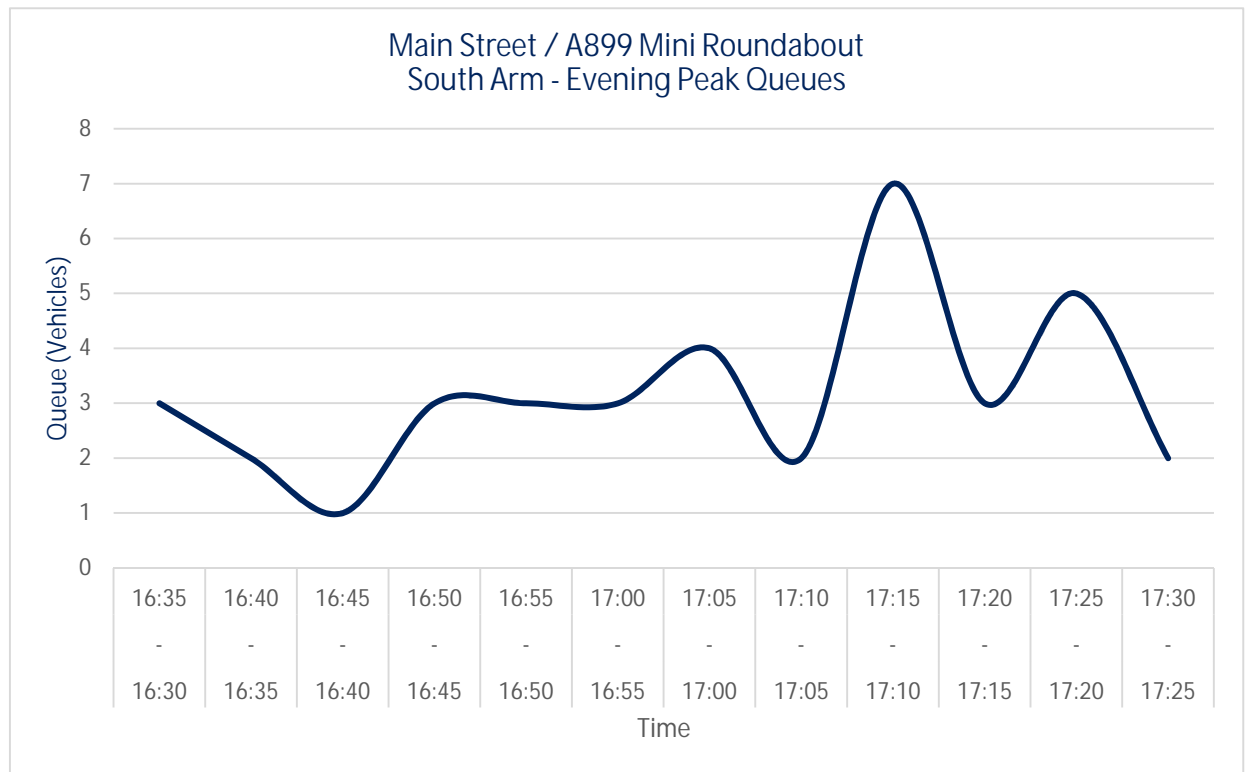


Table 7.9 – A899 South Arm Queue Profile

Based upon the information provided in Figure 7.9 it is reasonable to assume that a similar situation will occur for the other evening peak test scenarios, i.e 2018 Base and 2018 Total. The queues predicted by the model are not excessive and out with the evening peak it is reasonable to assume that the mini roundabout will operate satisfactorily and without any issues.

On this basis no mitigation is proposed for the Main Street / A899 mini roundabout given that this is an existing problem with the peak queuing occurring over a very small and the proposed development traffic having a minimal impact on the overall performance of the junction.

## **8. Summary and Conclusions**

### **8.1 Summary**

Modus Transport Solutions was commissioned by Colin MacFarlane & John MacFarlane to prepare a Transport Assessment (TA) in support of a Planning Application in Principle (PPP) for the development of up to 165 residential units, albeit the masterplan outlines capacity below this figure, with associated access arrangements, to the east of the village of Dechmont, West Lothian.

The TA was prepared in line with the guidelines set out in the Scottish Governments publication 'Transport Assessment and Implementation: A Guide' and takes account of the policies within the Scottish Planning Policy document with an assessment of the accessibility of the site by car and non-car transport modes including walking, cycling and public transport.

The scope of the Transport Assessment was agreed with West Lothian Council.

An accessibility review was undertaken to assess opportunities for travel to the site by all relevant transport modes and review the surrounding walking, cycling and public transport provision.

A Travel Plan Framework was prepared which outlines a number of measures to support sustainable travel.

The TRICS database was used to assess the potential trip generation for the proposed development. It is predicted that the development of 165 units will generate a maximum of 92 and 102 two-way vehicle trips during the morning and evening peak periods respectively.

It was agreed with West Lothian Council that the traffic impact of the proposed development should be assessed at three junctions adjacent to the site, namely the Main Street / A899 mini roundabout, the Main Street / Burnhouse Road Priority Junction and the Main Street / A89 Priority Junction.

### **8.2 Conclusions**

The site complies well with the guidance set out within current national and local transport policy as well as specific West Lothian Council policies. The site is very well located in relation to existing walking, cycling and public transport facilities and lies within close proximity to local amenities, shops and the local primary school.

A residential travel plan will be provided as part of the development proposals and this will seek to encourage residents of the new development to consider their travel choices and provide information and support to encourage them to choose sustainable modes of travel.



The traffic impact assessment demonstrates that the potential traffic generation associated with the development of up to 165 units on the site will have no detrimental impact upon the local road network or the junctions identified within the TA and can be accommodated within the existing highway infrastructure.

## Appendix 1 – Scoping Correspondence

## Duncan Birrell

---

**From:** Nicol, Chris [REDACTED]  
**Sent:** 01 April 2014 12:27  
**To:** [REDACTED]  
**Subject:** RE: Dechmont - [PUBLIC]

**DATA LABEL: PUBLIC**

Duncan

I have reviewed the scoping letter for the development at Dechmont. I would not like to see an access to the development from the A899. There is only a need for a single access and this should be from Main Street.

The committed development that should be included in the TA is the Beughburn site accessed from the A89 roundabout. The TA can be obtained from application 0527/FUL/09 dated 31 July 2009.

I look forward to receiving the full TA in due course.

Regards

Chris Nicol  
Engineer - Development Planning

[REDACTED]

[REDACTED]

[REDACTED]

---

**From:** Duncan Birrell [REDACTED]  
**Sent:** 27 March 2014 17:43  
**To:** Nicol, Chris  
**Subject:** Dechmont  
**Importance:** High

Dear Chris

Please find attached scoping letter for Dechmont. Original in the post.

I look forward to hearing from you at your earliest convenience.

Regards

Duncan

**Duncan Birrell**

---

**From:** Nicol, Chris [REDACTED]  
**Sent:** 01 April 2014 14:59  
**To:** [REDACTED]  
**Subject:** RE: Dechmont - [INTERNAL ONLY]

**DATA LABEL: INTERNAL ONLY**

The trip rates and distribution are acceptable

Chris Nicol  
Engineer - Development Planning

[REDACTED]

[REDACTED]

[REDACTED]

---

**From:** Duncan Birrell [REDACTED]  
**Sent:** 01 April 2014 13:32  
**To:** Nicol, Chris  
**Subject:** RE: Dechmont - [PUBLIC]

Dear Chris,

Thank you for your e-mail.

I assume you are satisfied with the trip rates and proposed distribution of development trips on the local road network ?

I will inform the Masterplanner regarding the single point of access, I didn't like the idea of access onto the A899 in the first place either , so your comments are welcome.

I look forward to your confirmation regarding trip rates and distribution.

Regards

Duncan

**Duncan Birrell**  
BEng(Hons), C.Eng, MICE, MCIHT

Modus Transport Solutions Ltd

[REDACTED]

Duncan Birrell

---

From: Nicol, Chris [REDACTED]  
Sent: 23 April 2014 16:10  
To: [REDACTED]  
Subject: RE: Dechmont - [PUBLIC]

DATA LABEL: PUBLIC

Duncan

I respond to your proposals below.

Visibility sightlines only 4.5 by 70 metres.

Gateway feature will not be relocated it will be moved, only the signs will be relocated.

The access location is accepted.

Referring to your previous email re committed development I thought that an outline application had been dealt with, but it was only a TA so no further developments to consider.

I thought I had an electronic copy but can't find it. There is nothing in the document that Designing Streets does not supersedes. Just use general design parameters.

Hope this helps

Regards

Chris Nicol  
Engineer - Development Planning  
[REDACTED]

---

From: Duncan Birrell [REDACTED]  
Sent: 17 April 2014 11:44  
To: Nicol, Chris  
Subject: Dechmont  
Importance: High

Dear Chris,

Please find attached an indicative layout of the access for Dechmont.

The application is for Planning Permission in Principle but I wanted to provide a bit more detail on the proposed access location.

The proposals include;

- Relocation of the gateway feature into the village;
- Relocation of the 30mph speed limit;
- Provision of a new 6m wide access with footways on both sides and 10.5m corner radii;
- 4.5m x 90m sight lines, commensurate with the relocated 30mph speed limit;
- Spacing in accordance with WLC standards, which would typically be 100m, but we achieve more.

A this stage I am just after your comments and agreement in principle to the location of the access, obviously at some point in the future when the application is progressed and the Matters Specified in Conditions are discharged there will be further work on the access proposals including an RCC but I just wanted to check there were no show stoppers at this stage.

Look forward to hearing from you soon.

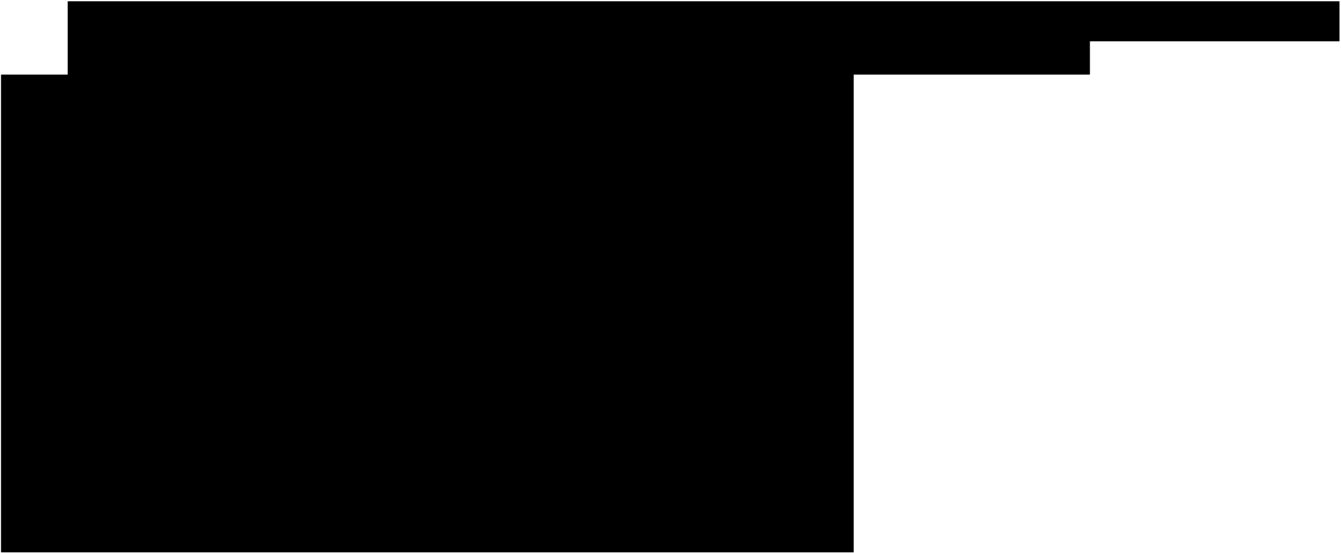
Regards

Duncan

**Duncan Birrell**

BEng(Hons), C.Eng, MICE, MCIHT

Modus Transport Solutions Ltd



## Appendix 2 – Indicative Masterplan



PROPOSED HOUSING MIX:

PRIVATE HOUSING:  
 COTTAGE FLATS: 6NO.  
 TERRACED HOUSES: 28NO.  
 SEMI-DETACHED HOUSES: 44NO.  
 DETACHED HOUSES: 47NO.  
 TOTAL PRIVATE UNITS: 125NO.

AFFORDABLE HOUSING:  
 COTTAGE FLATS: 8NO.  
 TERRACED HOUSES: 7NO.  
 SEMI-DETACHED HOUSES: 8NO.  
 TOTAL AFFORDABLE UNITS: 23NO.

TOTAL NO. OF UNITS: 148NO.

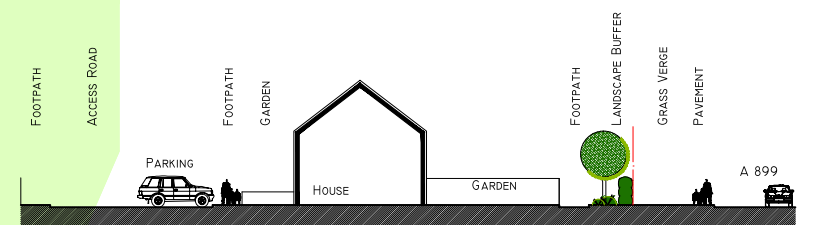
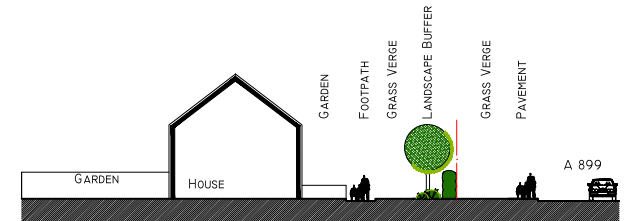
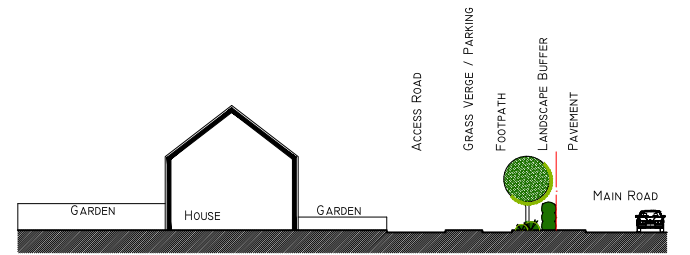
SITE AREA (GROSS): 15.36ACRES.  
 SITE AREA (NET): 10.29ACRES  
 DENSITY: 14.38BUPA.

NOTE: THESE FIGURES ARE FOR THE TOTAL SITE - INCLUDING THE AREA TO THE NORTH-WEST WITHIN THE SETTLEMENT BOUNDARY.

PARKING PROVISION:

DETACHED HOUSING WITH GARAGES: 200%

HOUSING WITH ASSIGNED PARKING SPACES: 150%



Revision A:  
 Boundary adjusted to show overall site area.  
 15/05/2014

PROJECT  
 DECHMONT, WEST LOTHIAN.

TITLE  
 PROPOSED HOUSING DEVELOPMENT

CLARENDON PLANNING AND DEVELOPMENT LTD.

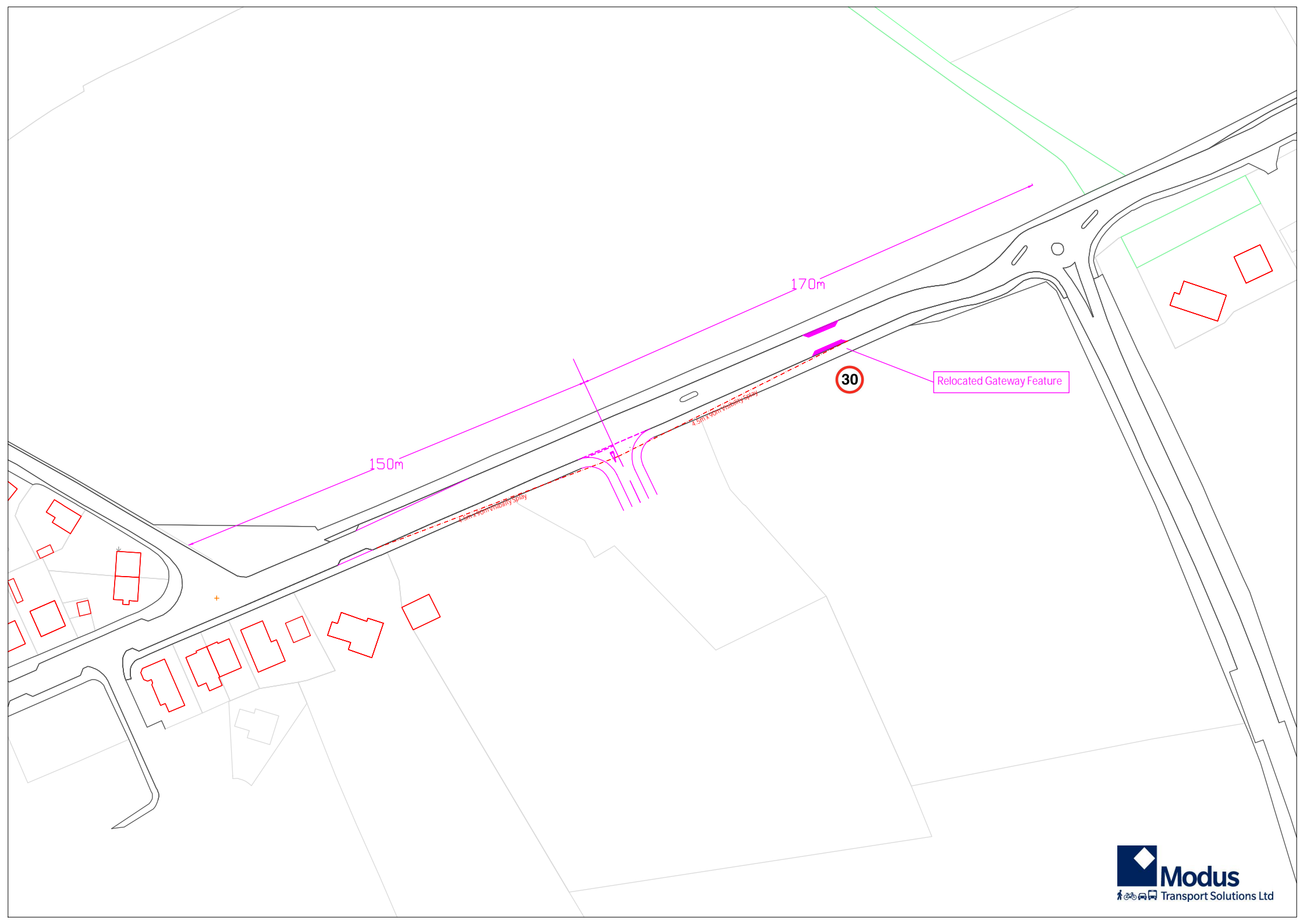
EXCHANGE PLACE 2  
 5 SEMPLE STREET  
 EDINBURGH EH3 8BL  
 T/F 0131 306 0115

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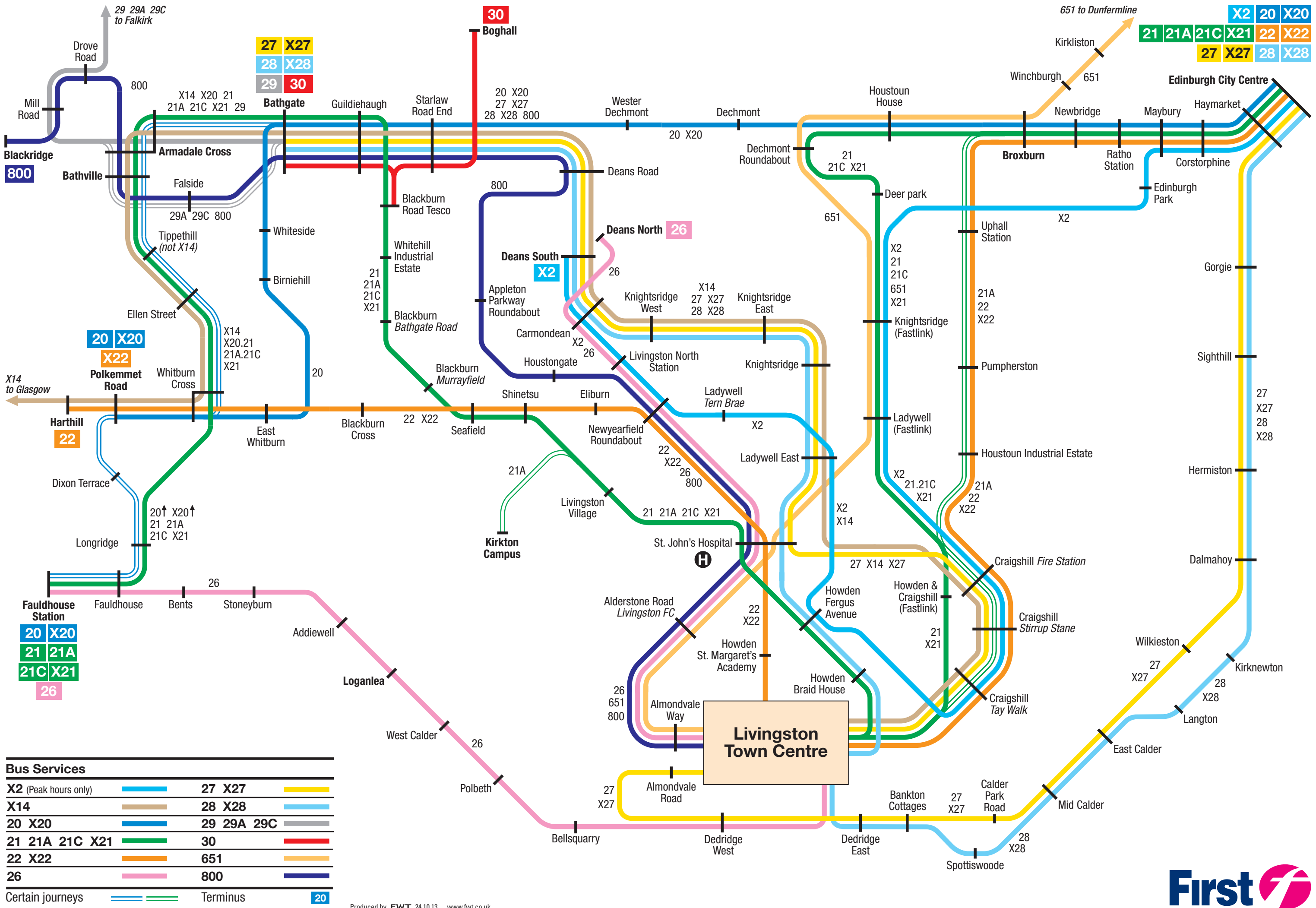




## Appendix 3 – Indicative Access



## Appendix 4 – Public Transport Information







Service No.:	43	X43	43	X4	43	X43	43	43	43	43	43	43	43	43	43
Notes:															
Edinburgh (Bus Station) [14]	1630	1645	1700	1715	1730	1745	1805	1825	1845	1905	1935	1955	2025	2125	2225
West End (Queensferry Street)	1645	1700	1715	1730	1745	1758	1818	1838	1855	1915	1945	2005	2035	2135	2235
Blackhall	1657	1712	1728	1742	1758	1810	1830	1848	1902	1922	1952	2012	2042	2142	2242
Barnton Junction	1710	1725	1742	1755	1812	1820	1840	1858	1909	1929	1959	2019	2049	2149	2249
Dalmeny Village (Bankhead Road)	1718	1733	1750	----	1820	1828	1848	1906	1917	1937	2007	2027	2057	2157	2257
Queensferry (Ashburnham Road)	1722	1737	1754	----	1824	1832	1852	1910	1921	1941	2010	2030	2100	2200	2300
Queensferry (Police Station)	1725	1740	1757	----	1827	1835	1855	1913	1924	1944	2013	2033	2103	2203	2303
Queensferry (Echline Corner)	1729	1744	1801	----	1831	1839	1859	1917	1928	1948	2017	2037	2107	2207	2307
Queensferry (Tesco, Ferrymuir)	1733	----	1805	----	----	1843	----	----	----	----	----	----	----	----	----
Queensferry (Echline Corner)	----	----	----	1810	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Opp Police Station)	----	----	----	1814	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Scotstoun Estate)	1738	1751	1810	1819	1838	1848	1905	1923	1934	1954	2023	2043	2113	2213	2313
Kirkliston (Crossroads)	----	1800	----	----	----	----	1913	1931	1942	2002	----	2051	----	----	2321
Winchburgh (Scotmid)	----	1806	----	----	----	----	1918	1936	1947	2007	----	2056	----	----	2326
Ecclesmachan	----	1814	----	----	----	----	1925	1943	1954	2014	----	2103	----	----	2333
Uphall (Hotel)	----	1817	----	----	----	----	1928	1946	1957	2017	----	2106	----	----	2336
Dechmont	----	1821	----	----	----	----	1932	1950	2001	2021	----	2110	----	----	2340
Newton (Post Office)	----	----	1820	----	----	1856	----	----	----	----	----	----	----	----	----
Blackness (Inn)	----	----	1829	----	----	1905	----	----	----	----	----	----	----	----	----
Grahamsdyke (Harbour Loan at Grange Loan)	----	----	1840	----	----	1916	----	----	----	----	----	----	----	----	----
Bo'ness (Bus Station)	----	----	1848	----	----	1924	----	----	----	----	----	----	----	----	----

Service No.:	43
Notes:	
Edinburgh (Bus Station) [14]	2325
West End (Queensferry Street)	2335
Blackhall	2342
Barnton Junction	2349
Dalmeny Village (Bankhead Road)	2357
Queensferry (Ashburnham Road)	2400
Queensferry (Police Station)	0003
Queensferry (Echline Corner)	0007
Queensferry (Tesco, Ferrymuir)	----
Queensferry (Echline Corner)	----
Queensferry (Opp Police Station)	----
Queensferry (Scotstoun Estate)	0013
Kirkliston (Crossroads)	0021
Winchburgh (Scotmid)	0026
Ecclesmachan	0033
Uphall (Hotel)	0036
Dechmont	0040
Newton (Post Office)	----
Blackness (Inn)	----
Grahamsdyke (Harbour Loan at Grange Loan)	----
Bo'ness (Bus Station)	----



- 43 Bo'ness / Dechmont / Queensferry - Edinburgh (Bus Station)  
Via Dalmeny - Barnton - Blackhall
- X43 Dechmont / Queensferry - Edinburgh (Bus Station) ( Limited Stop )  
Via Dalmeny - Barnton - Blackhall
- X4 Queensferry - Edinburgh (Bus Station) ( Limited Stop )  
Via A90 By-pass - Barnton - Blackhall

Service No.:	43	43	43	X4	43	X43	43	X43	43	43	43	43	43	43	43	
Notes:																
Bo'ness (Bus Station)	----	----	----	----	0626	----	----	----	0727	----	----	----	----	----	----	----
Grahamsdyke (Harbour Loan opp Grange Loan)	----	----	----	----	0634	----	----	----	0735	----	----	----	----	----	----	----
Blackness (Inn)	----	----	----	----	0643	----	----	----	0744	----	----	----	----	----	----	----
Newton (Opp Post Office)	----	----	----	----	0654	----	----	----	0755	----	----	----	----	----	----	----
Dechmont	0526	0551	0608	0628	----	0649	0704	----	----	----	0809	----	----	----	----	----
Uphall (Hotel)	0530	0555	0612	0632	----	0653	0708	----	----	----	0813	----	----	----	----	----
Ecclesmachan	0534	0559	0616	0636	----	0657	0712	----	----	----	0817	----	----	----	----	----
Winchburgh (opp Scotmid)	0541	0606	0623	0643	----	0705	0720	----	----	----	0825	----	----	----	----	----
Kirkliston (Crossroads)	0546	0611	0628	0648	----	0711	0726	----	----	----	0831	----	----	----	----	----
Queensferry (Scotstoun Estate)	0555	0620	0637	0657	0704	0720	0735	0750	0805	0820	0840	0900	0920	0940	1000	
Queensferry (Police Station)	----	----	----	0702	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Echline Corner)	----	----	----	0706	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Tesco, Ferrymuir) arr	----	----	----	----	----	----	----	----	----	----	----	0905	0925	0945	1005	
Queensferry (Tesco, Ferrymuir) dep	----	----	----	----	----	----	----	----	----	----	----	0906	0926	0946	1006	
Queensferry (Echline Corner)	0602	0627	0644	----	0711	0727	0742	0757	0812	0827	0847	0910	0930	0950	1010	
Queensferry (Opp Police Station)	0606	0631	0649	----	0717	0733	0748	0803	0818	0833	0852	0914	0934	0954	1014	
Queensferry (Burgess Road)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Opp Ashburnham Rd)	0609	0634	0652	----	0720	0736	0751	0806	0821	0836	0855	0917	0937	0957	1017	
Dalmeny Village (Bankhead Road)	0613	0638	0657	----	0726	0742	0757	0812	0827	0840	0859	0921	0941	1001	1021	
Barnton Junction	0621	0646	0705	0721	0734	0749	0804	0819	0834	0847	0906	0929	0949	1009	1029	
Blackhall	0628	0653	0716	0729	0747	0802	0817	0832	0847	0858	0916	0937	0957	1017	1037	
West End (Queensferry Street)	0635	0700	0728	0740	0803	0818	0833	0848	0903	0913	0928	0945	1005	1025	1045	
Edinburgh (Bus Station) [14]	0645	0710	0740	0750	0815	0830	0845	0900	0915	0925	0940	0955	1015	1035	1055	

Service No.:	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Notes:															
Bo'ness (Bus Station)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Grahamsdyke (Harbour Loan opp Grange Loan)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Blackness (Inn)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Newton (Opp Post Office)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dechmont	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Uphall (Hotel)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ecclesmachan	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Winchburgh (opp Scotmid)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Kirkliston (Crossroads)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Scotstoun Estate)	1020	1040	1100	1120	1140	1200	1220	1240	1300	1320	1340	1400	1420	1440	1500
Queensferry (Police Station)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Echline Corner)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Tesco, Ferrymuir) arr	1025	1045	1105	1125	1145	1205	1225	1245	1305	1325	1345	1405	1425	1445	1505
Queensferry (Tesco, Ferrymuir) dep	1026	1046	1106	1126	1146	1206	1226	1246	1306	1326	1346	1406	1426	1446	1506
Queensferry (Echline Corner)	1030	1050	1110	1130	1150	1210	1230	1250	1310	1330	1350	1410	1430	1450	1510
Queensferry (Opp Police Station)	1034	1054	1114	1134	1154	1214	1234	1254	1314	1334	1354	1414	1434	1454	1514
Queensferry (Burgess Road)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Opp Ashburnham Rd)	1037	1057	1117	1137	1157	1217	1237	1257	1317	1337	1357	1417	1437	1457	1517
Dalmeny Village (Bankhead Road)	1041	1101	1121	1141	1201	1221	1241	1301	1321	1341	1401	1421	1441	1501	1521
Barnton Junction	1049	1109	1129	1149	1209	1229	1249	1309	1329	1349	1409	1429	1449	1509	1529
Blackhall	1057	1117	1137	1157	1217	1237	1257	1317	1337	1357	1417	1437	1457	1517	1537
West End (Queensferry Street)	1105	1125	1145	1205	1225	1245	1305	1325	1345	1405	1425	1445	1505	1525	1545
Edinburgh (Bus Station) [14]	1115	1135	1155	1215	1235	1255	1315	1335	1355	1415	1435	1455	1515	1535	1555

Service No.:	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Notes:															
Bo'ness (Bus Station)	----	----	----	----	----	----	----	----	----	----	----	----	1901	----	----
Grahamsdyke (Harbour Loan opp Grange Loan)	----	----	----	----	----	----	----	----	----	----	----	----	1909	----	----
Blackness (Inn)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Newton (Opp Post Office)	----	----	----	----	----	----	----	----	----	----	----	----	1922	----	----
Dechmont	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Uphall (Hotel)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ecclesmachan	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Winchburgh (opp Scotmid)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Kirkliston (Crossroads)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Scotstoun Estate)	1520	1540	----	1600	1620	1640	1700	1720	1740	1800	1830	1900	1930	2030	2130
Queensferry (Police Station)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Echline Corner)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Tesco, Ferrymuir) arr	1525	1545	----	1605	1625	1645	1705	1725	1745	1805	----	----	----	----	----
Queensferry (Tesco, Ferrymuir) dep	1526	1546	----	1606	1626	1646	1706	1726	1746	1805	----	----	----	----	----
Queensferry (Echline Corner)	1530	1550	----	1610	1630	1650	1710	1730	1750	1809	1836	1906	1936	2036	2136
Queensferry (Opp Police Station)	1534	1554	----	1614	1634	1654	1714	1734	1754	1813	1840	1910	1940	2040	2140
Queensferry (Burgess Road)	----	----	1605	----	----	----	----	----	----	----	----	----	----	----	----
Queensferry (Opp Ashburnham Rd)	1537	1557	1607	1617	1637	1657	1717	1737	1757	1816	1843	1913	1943	2043	2143
Dalmeny Village (Bankhead Road)	1541	1601	1611	1621	1641	1701	1721	1741	1801	1820	1846	1916	1946	2046	2146
Barnton Junction	1549	1609	1619	1629	1649	1709	1729	1749	1809	1827	1852	1922	1952	2052	2152
Blackhall	1557	1617	1627	1637	1657	1717	1737	1757	1817	1834	1859	1929	1959	2059	2159
West End (Queensferry Street)	1605	1625	1635	1645	1705	1725	1745	1805	1825	1842	1907	1937	2007	2107	2207
Edinburgh (Bus Station) [14]	1615	1635	1645	1655	1715	1735	1755	1815	1835	1852	1917	1947	2017	2117	2217

Service No.: 43

Notes:

Bo'ness (Bus Station)	----
Grahamsdyke (Harbour Loan opp Grange Loan)	----
Blackness (Inn)	----
Newton (Opp Post Office)	----
Dechmont	----
Uphall (Hotel)	----
Ecclesmachan	----
Winchburgh (opp Scotmid)	----
Kirkliston (Crossroads)	----
Queensferry (Scotstoun Estate)	2230
Queensferry (Police Station)	----
Queensferry (Echline Corner)	----
Queensferry (Tesco, Ferrymuir) arr	----
Queensferry (Tesco, Ferrymuir) dep	----
Queensferry (Echline Corner)	2236
Queensferry (Opp Police Station)	2240
Queensferry (Burgess Road)	----
Queensferry (Opp Ashburnham Rd)	2243
Dalmeny Village (Bankhead Road)	2246
Barnton Junction	2252
Blackhall	2259
West End (Queensferry Street)	2307
Edinburgh (Bus Station) [14]	2317

# Timetables for Service Number: 20/X20



Monday to Friday  
Valid from: 27/01/2014  
Valid until further notice.

20 Edinburgh (Regent Road) - Fauldhouse (Rail Station)  
Via Corstorphine - Broxburn - Dechmont - Bathgate - Whitburn  
X20 Edinburgh (Regent Road) - Fauldhouse (Rail Station) ( Limited Stop )  
Via Corstorphine - Broxburn - Dechmont - Bathgate - Whitburn - Armadale

Service No.:	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Notes:															
Edinburgh (Regent Road)	----	----	----	----	----	----	----	----	0554	----	----	----	----	----	----
Haymarket Station	----	----	----	----	----	----	----	----	0604	----	----	----	----	----	----
Drum Brae Roundabout	----	----	----	----	----	----	----	----	0614	----	----	----	----	----	----
Ratho Station	----	----	----	----	----	----	----	----	0623	----	----	----	----	----	----
Newbridge (Edinburgh Road)	----	----	----	----	----	----	----	----	0625	----	----	----	----	----	----
Broxburn (Kilpunt Roundabout)	----	----	----	----	----	----	----	----	0630	----	----	0716	0746	0816	0846
Broxburn (opp Library)	----	----	----	----	----	----	----	----	0633	----	----	0719	0749	0819	0849
Uphall (Hotel)	----	----	----	----	----	----	----	----	0640	----	----	0727	0757	0827	0857
Dechmont	----	----	----	----	----	----	----	----	0644	----	----	0731	0801	0831	0901
Deans Road	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Deans Road	0454	0511	0538	0558	0620	0630	0633	0648	----	0656	0717	----	----	----	----
Bathgate (Fire Station)	0458	0515	0542	0602	0624	0634	0637	0652	0655	0700	0722	0742	0812	0842	0912
Bathgate (South Bridge Street) arr	0504	0521	0548	0608	0630	0640	0643	0658	0701	0706	0728	0748	0818	0848	0918
Bathgate (South Bridge Street) dep	----	----	0548	----	----	----	----	----	----	----	0729	0751	0821	0851	0921
Armadale Cross	----	----	0555	----	----	----	----	----	----	----	----	----	----	----	----
Blackridge (West End)	----	----	0603	----	----	----	----	----	----	----	----	----	----	----	----
Birniehill (Inchcross Junction)	----	----	----	----	----	----	----	----	----	----	0734	0756	0826	0856	0926
Whitburn Cross	----	----	----	----	----	----	----	----	----	----	0744	0806	0836	0906	0936
Whitburn (Polkemmet Road)	----	----	----	----	----	----	----	----	----	----	0748	0810	0840	0910	0940

Service No.:	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Notes:															
Edinburgh (Regent Road)	0834	0859	----	0929	0934	0939	----	1029	1034	----	1134	----	1234	----	1334
Haymarket Station	0848	0913	----	0943	0948	0953	----	1043	1048	----	1148	----	1248	----	1348
Drum Brae Roundabout	0859	0924	----	0954	0959	1004	----	1054	1059	----	1159	----	1259	----	1359
Ratho Station	0908	0933	----	1003	1008	1013	----	1103	1108	----	1208	----	1308	----	1408
Newbridge (Edinburgh Road)	0911	0936	----	1006	1011	1016	----	1106	1111	----	1211	----	1311	----	1411
Broxburn (Kilpunt Roundabout)	0916	0941	0946	1011	1016	1021	1046	1111	1116	1146	1216	1246	1316	1346	1416
Broxburn (opp Library)	0919	0944	0949	1014	1019	1024	1049	1114	1119	1149	1219	1249	1319	1349	1419
Uphall (Hotel)	0927	0952	0957	1022	1027	1032	1057	1122	1127	1157	1227	1257	1327	1357	1427
Dechmont	0931	0956	1001	1026	1031	1036	1101	1126	1131	1201	1231	1301	1331	1401	1431
Deans Road	----	1001	----	1031	----	1041	----	1131	----	----	----	----	----	----	----
Deans Road	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bathgate (Fire Station)	0942	----	1012	----	1042	----	1112	----	1142	1212	1242	1312	1342	1412	1442
Bathgate (South Bridge Street) arr	0948	----	1018	----	1048	----	1118	----	1148	1218	1248	1318	1348	1418	1448
Bathgate (South Bridge Street) dep	0951	----	1021	----	1051	----	1121	----	1151	1221	1251	1321	1351	1421	1451
Armadale Cross	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Blackridge (West End)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Birniehill (Inchcross Junction)	0956	----	1026	----	1056	----	1126	----	1156	1226	1256	1326	1356	1426	1456
Whitburn Cross	1006	----	1036	----	1106	----	1136	----	1206	1236	1306	1336	1406	1436	1506
Whitburn (Polkemmet Road)	1010	----	1040	----	1110	----	1140	----	1210	1240	1310	1340	1410	1440	1510

Service No.:	20	20	20	20	20	X20	20	X20	20	20	X20	20	20	20	20
Notes:															
Edinburgh (Regent Road)	----	1434	----	1534	----	1634	----	1704	----	----	1734	----	----	----	1844
Haymarket Station	----	1448	----	1548	----	1649	----	1719	----	----	1749	----	----	----	1856
Drum Brae Roundabout	----	1459	----	1601	----	1704	----	1734	----	----	1804	----	----	----	1908
Ratho Station	----	1508	----	1611	----	1714	----	1744	----	----	1814	----	----	----	1917
Newbridge (Edinburgh Road)	----	1511	----	1614	----	1719	----	1749	----	----	1819	----	----	----	1920
Broxburn (Kilpunt Roundabout)	1446	1516	1546	1619	1646	1725	1734	1755	1756	1814	1825	1834	1856	1924	1925
Broxburn (opp Library)	1449	1519	1550	1623	1650	1729	1737	1758	1759	1817	1828	1837	1859	1927	1928
Uphall (Hotel)	1457	1527	1558	1631	1658	1737	1743	1806	1805	1823	1836	1843	1905	1933	1934
Dechmont	1501	1531	1602	1635	1702	1742	1747	1810	1809	1827	1840	1847	1909	1937	1938
Deans Road	----	----	----	----	----	----	1752	----	1814	1832	----	1852	1914	1942	1943
Deans Road	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Bathgate (Fire Station)	1512	1542	1613	1646	1713	1753	----	1820	----	----	1850	----	----	----	----
Bathgate (South Bridge Street) arr	1518	1548	1619	1652	1719	1759	----	1826	----	----	1856	----	----	----	----
Bathgate (South Bridge Street) dep	1521	1551	1622	1655	1722	1800	----	----	----	----	1857	----	----	----	----
Armadale Cross	----	----	----	----	----	1808	----	----	----	----	1905	----	----	----	----
Blackridge (West End)	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Birniehill (Inchcross Junction)	1526	1556	1627	1700	1727	----	----	----	----	----	----	----	----	----	----
Whitburn Cross	1536	1606	1637	1710	1737	1817	----	----	----	----	1914	----	----	----	----
Whitburn (Polkemmet Road)	1540	1610	1641	1714	1741	1821	----	----	----	----	1918	----	----	----	----



Service No.: 20 20 20 20 20

Notes:

Edinburgh (Regent Road)	1944	----	----	----	----
Haymarket Station	1954	----	----	----	----
Drum Brae Roundabout	2004	----	----	----	----
Ratho Station	2013	----	----	----	----
Newbridge (Edinburgh Road)	2015	----	----	----	----
Broxburn (Kilpunt Roundabout)	2020	2037	2137	2237	2337
Broxburn (opp Library)	2023	2039	2139	2239	2339
Uphall (Hotel)	2029	2046	2146	2246	2346
Dechmont	2033	2050	2150	2250	2350
Deans Road	2038	----	----	----	2355
Deans Road	----	----	----	----	----
Bathgate (Fire Station)	----	2100	2200	2300	----
Bathgate (South Bridge Street) arr	----	2105	2205	2305	----
Bathgate (South Bridge Street) dep	----	----	----	----	----
Armadale Cross	----	----	----	----	----
Blackridge (West End)	----	----	----	----	----
Birniehill (Inchcross Junction)	----	----	----	----	----
Whitburn Cross	----	----	----	----	----
Whitburn (Polkemmet Road)	----	----	----	----	----

20 Fauldhouse (Rail Station) - Edinburgh (Regent Road)  
 Via Whitburn - Bathgate - Dechmont - Broxburn - Corstorphine  
 X20 Fauldhouse (Rail Station) - Edinburgh (Regent Road) ( Limited Stop )  
 Via Armadale - Whitburn - Bathgate - Dechmont - Broxburn - Corstorphine

Service No.: 20 20 20 20 X20 20 20 20 X20 20 20 20 20 20 20

Notes:

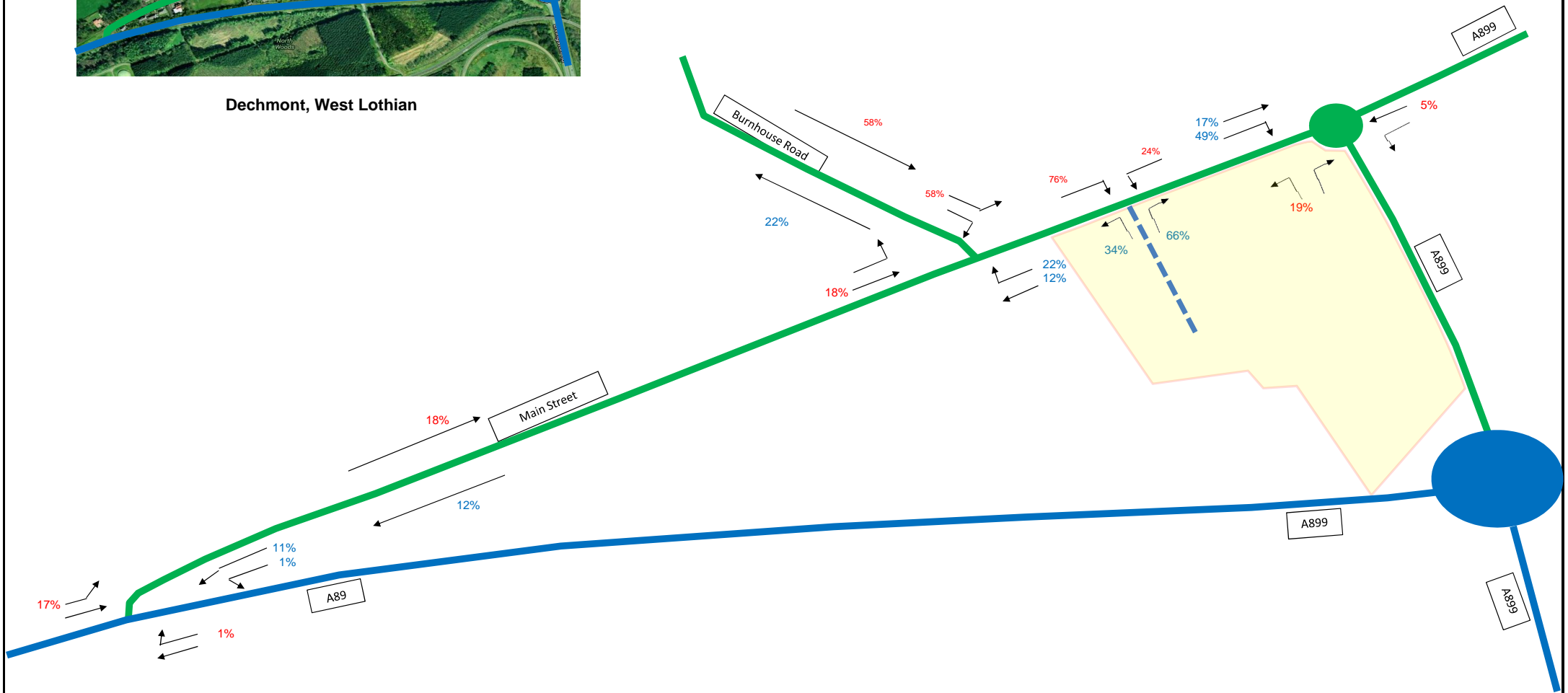
Fauldhouse (Rail Station)	----	----	----	----	----	----	----	0612	----	0657	----	----	----	----	
Whitburn (Polkemmet Road)	----	----	----	----	----	----	----	0624	----	0709	----	----	0759	0829	
Whitburn Cross	----	----	----	----	----	----	----	0628	----	0713	----	----	0803	0833	
Birniehill (Bridgend Cottages)	----	----	----	----	----	----	----	----	----	0723	----	----	0813	0843	
Blackridge (West End)	----	----	----	----	0607	----	----	----	----	----	----	----	----	----	
Armadale (Drove Rd at Burns Ave)	----	----	----	----	0615	----	----	----	----	----	----	----	----	----	
Bathville Cross	----	0514	0544	----	----	----	----	----	----	----	----	----	----	----	
Armadale Cross	----	0516	0546	----	0618	----	----	0636	----	----	----	----	----	----	
Bathgate (South Bridge Street) arr	----	0523	0553	----	0625	----	----	0644	----	0728	----	----	0818	0848	
Bathgate (South Bridge Street) dep	----	0524	0554	----	0626	----	----	0645	----	0731	----	----	0821	0851	
Bathgate (opp Fire Station)	----	0529	0559	----	0631	----	----	0651	----	0738	----	----	0827	0857	
Deans Road	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
Deans Road	0451	----	----	0617	----	0637	0645	0655	----	0725	----	0755	0825	----	
Dechmont	0456	0537	0607	0622	0640	0642	0650	0700	0701	0730	0748	0800	0830	0838	0908
Uphall (Hotel)	0500	0541	0611	0626	0645	0646	0654	0704	0705	0734	0753	0804	0834	0842	0912
Broxburn (Post Office)	0507	0548	0618	0633	0652	0653	0701	0711	0713	0741	0802	0811	0841	0850	0920
Broxburn (Kilpunt Roundabout)	0510	0551	0621	0636	0655	0656	0704	0714	0716	0744	0805	0814	0844	0853	0923
Newbridge (Edinburgh Road)	0515	----	0625	----	0700	----	----	----	0722	----	0811	----	----	----	0928
Ratho Station	0517	----	0627	----	0703	----	----	----	0727	----	0817	----	----	----	0931
Drum Brae Roundabout	0526	----	0636	----	0712	----	----	----	0739	----	0829	----	----	----	0940
Haymarket Station	0535	----	0645	----	0723	----	----	----	0752	----	0842	----	----	----	0951
Edinburgh (Regent Road)	0544	----	0654	----	0734	----	----	----	0804	----	0854	----	----	----	1002




## Appendix 5 – Traffic Diagrams



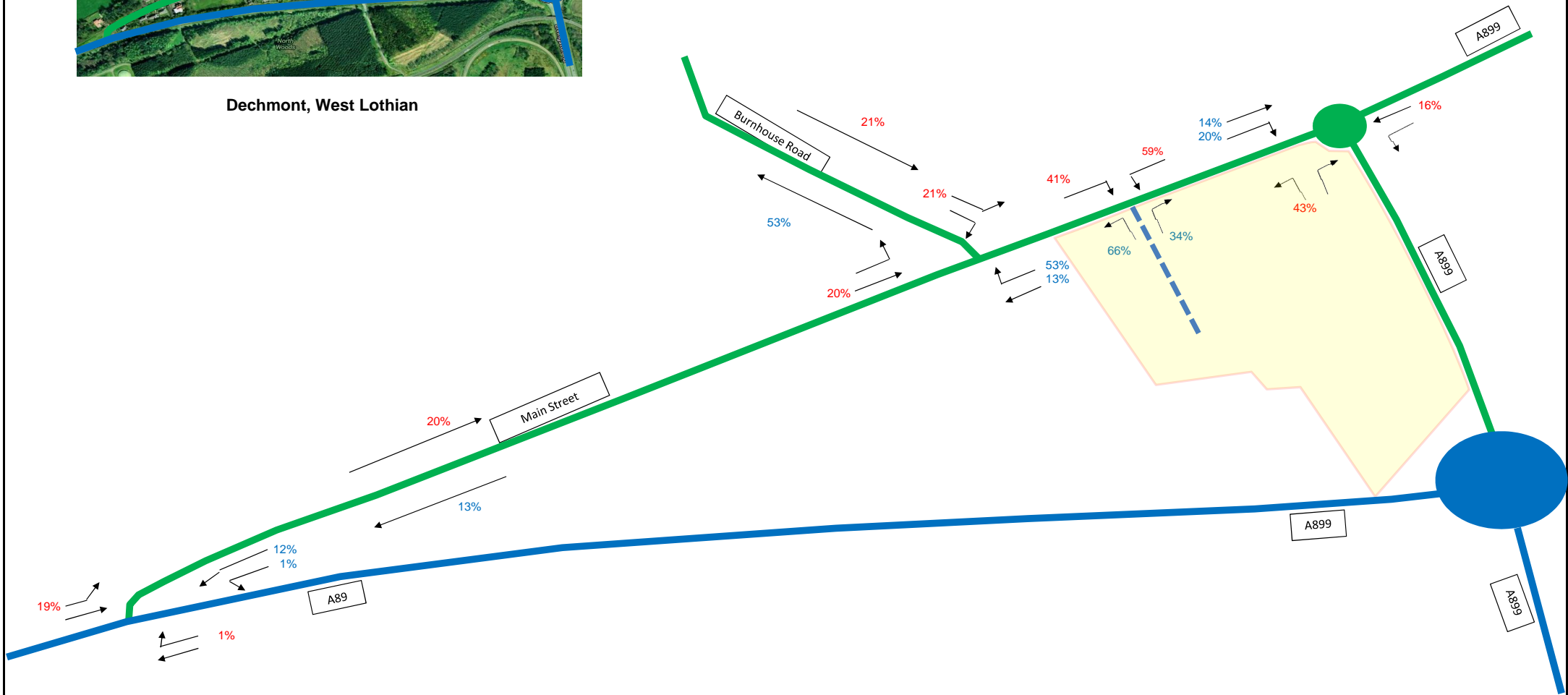
Dechmont, West Lothian




<b>Title</b>  AM Distribution  07:45 - 08:45	<b>Client</b> Colin MacFarlane & John MacFarlane	<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024	<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 5.1



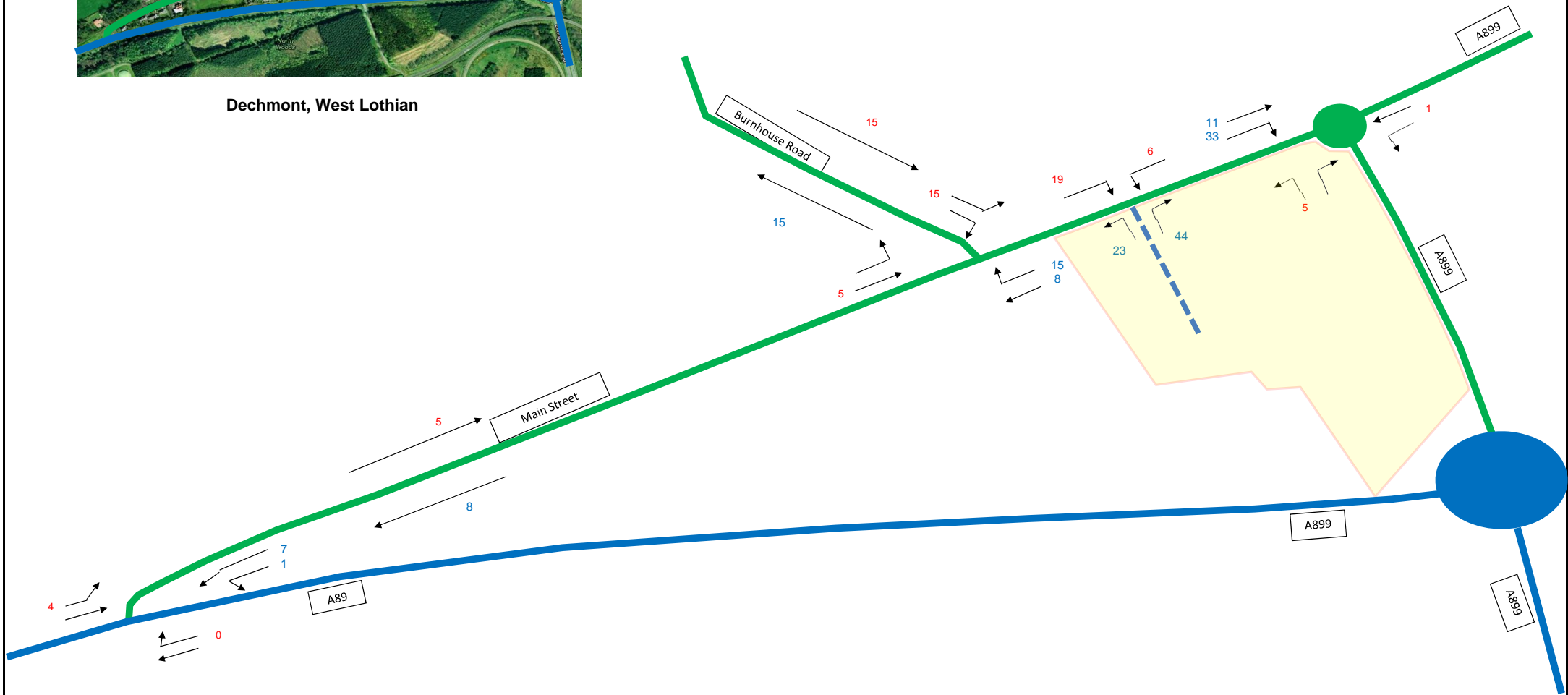
Dechmont, West Lothian




<b>Title</b>  PM Distribution 16:30 - 17:30	<b>Client</b> Colin MacFarlane & John MacFarlane	<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024	<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 5.2



Dechmont, West Lothian

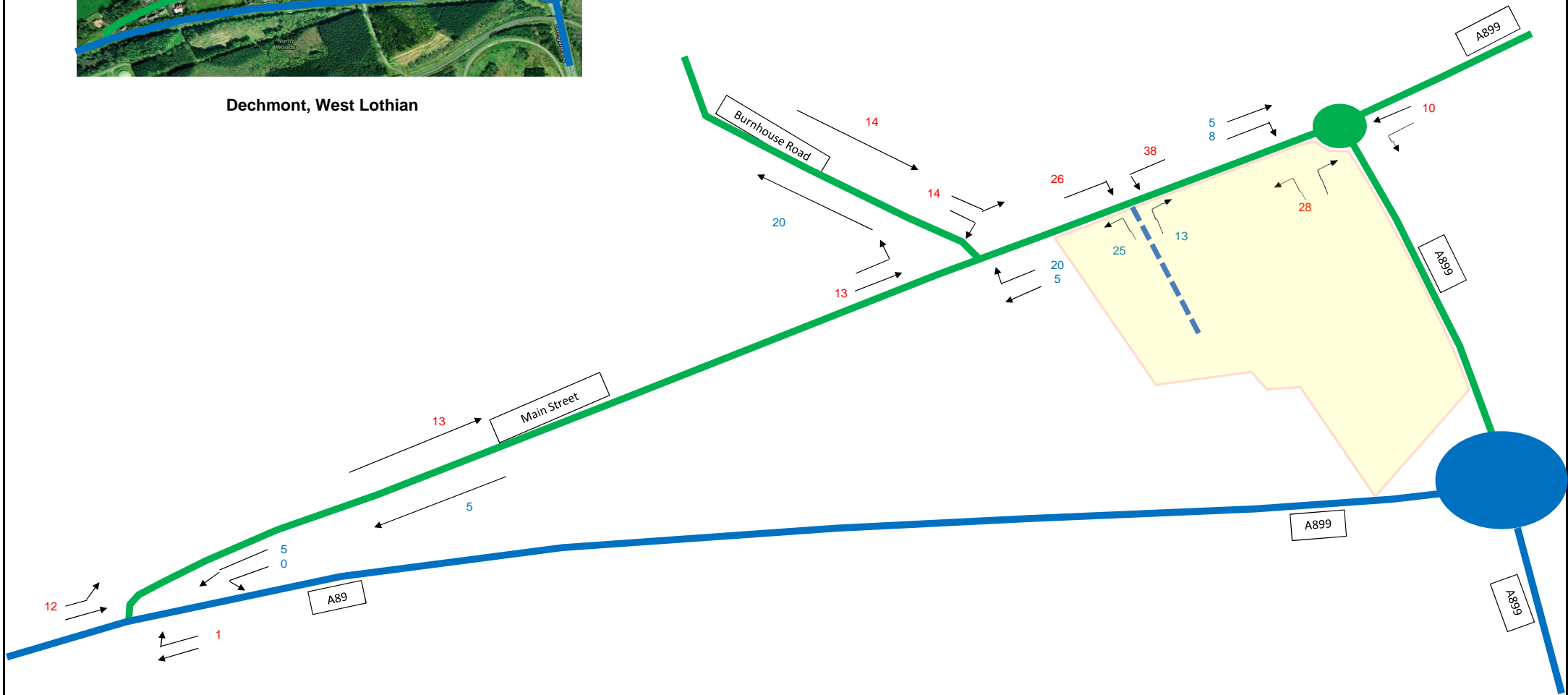



<b>Title</b>  AM Development Trips 07:45 - 08:45	<b>Client</b> Colin MacFarlane & John MacFarlane	<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024	<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 5.3





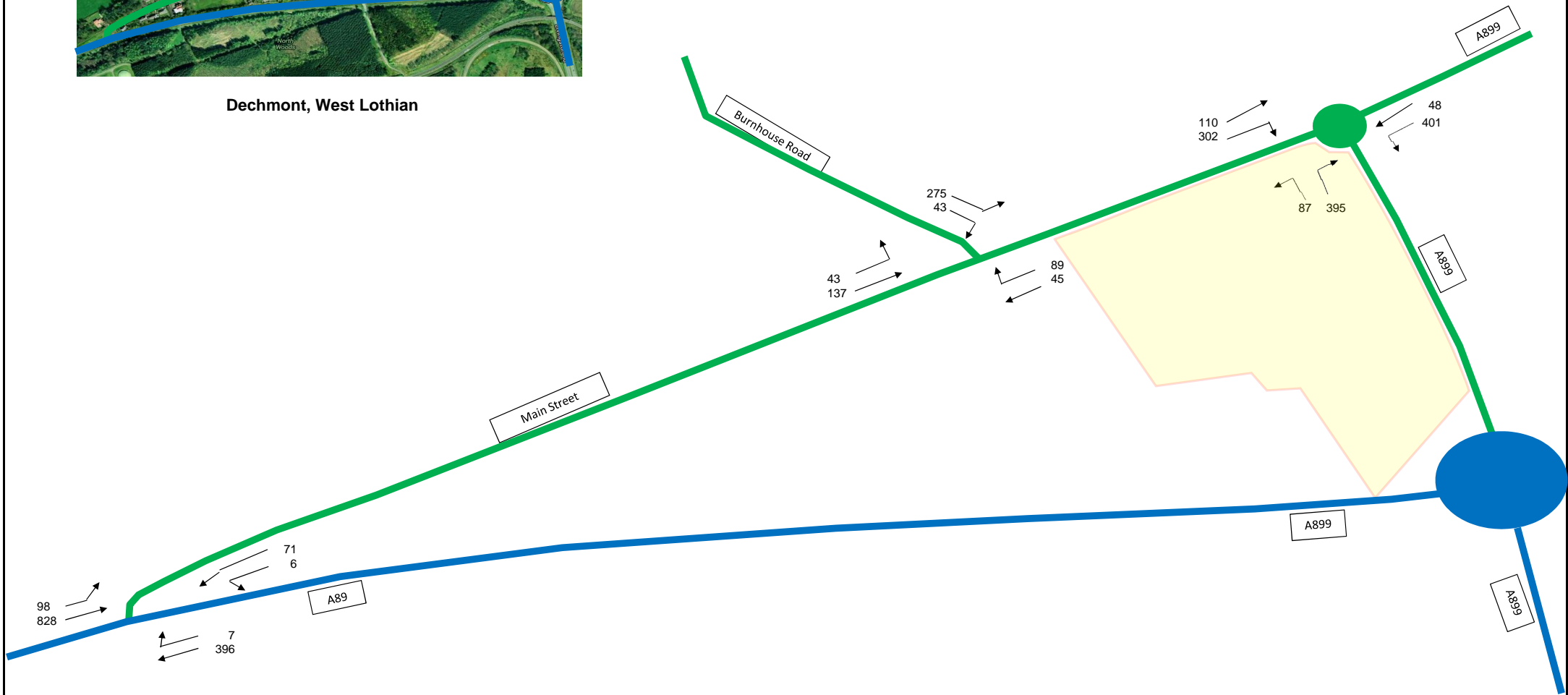
Dechmont, West Lothian




<b>Title</b>  PM Development Trips 16:30 - 17:30	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 5.4	



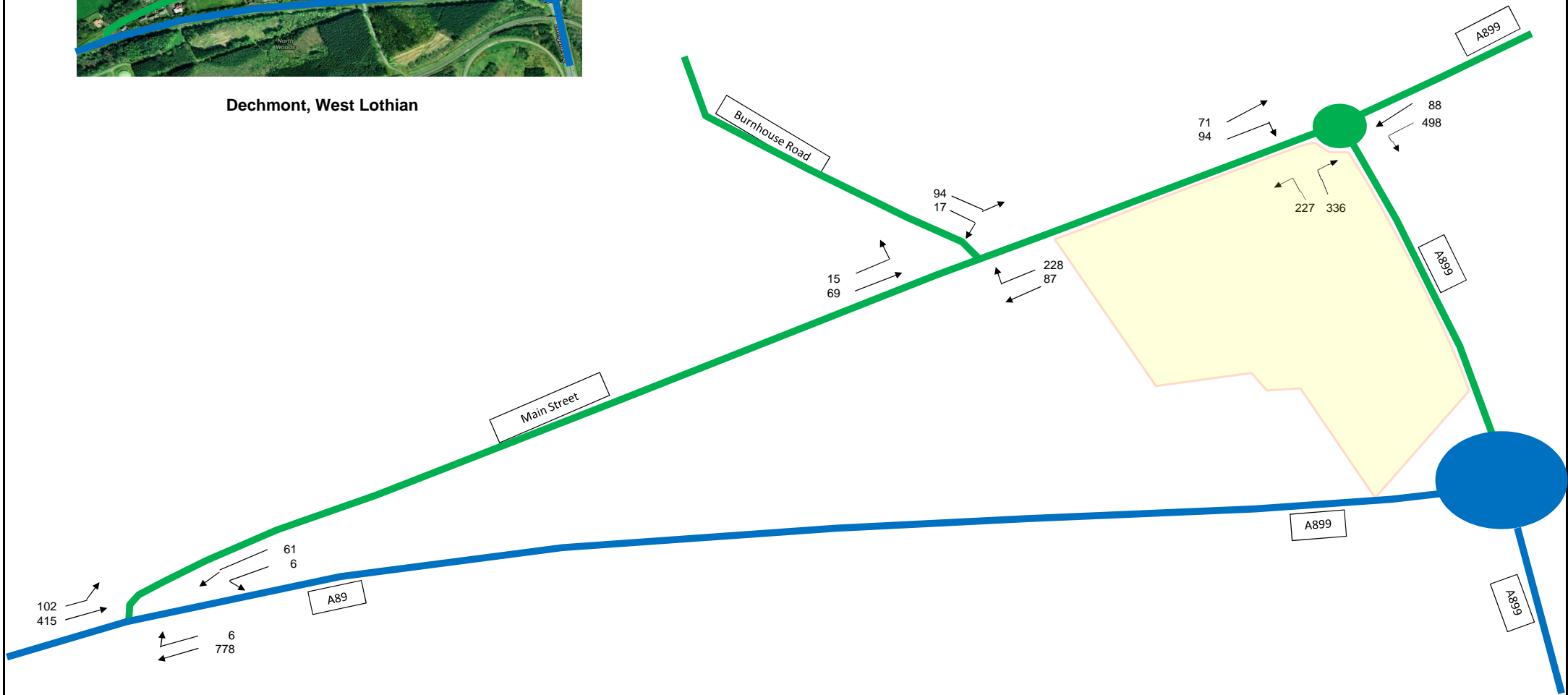
Dechmont, West Lothian




<b>Title</b>  AM 2013 Base Traffic (PCU's)  07:45 - 08:45	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 7.1	



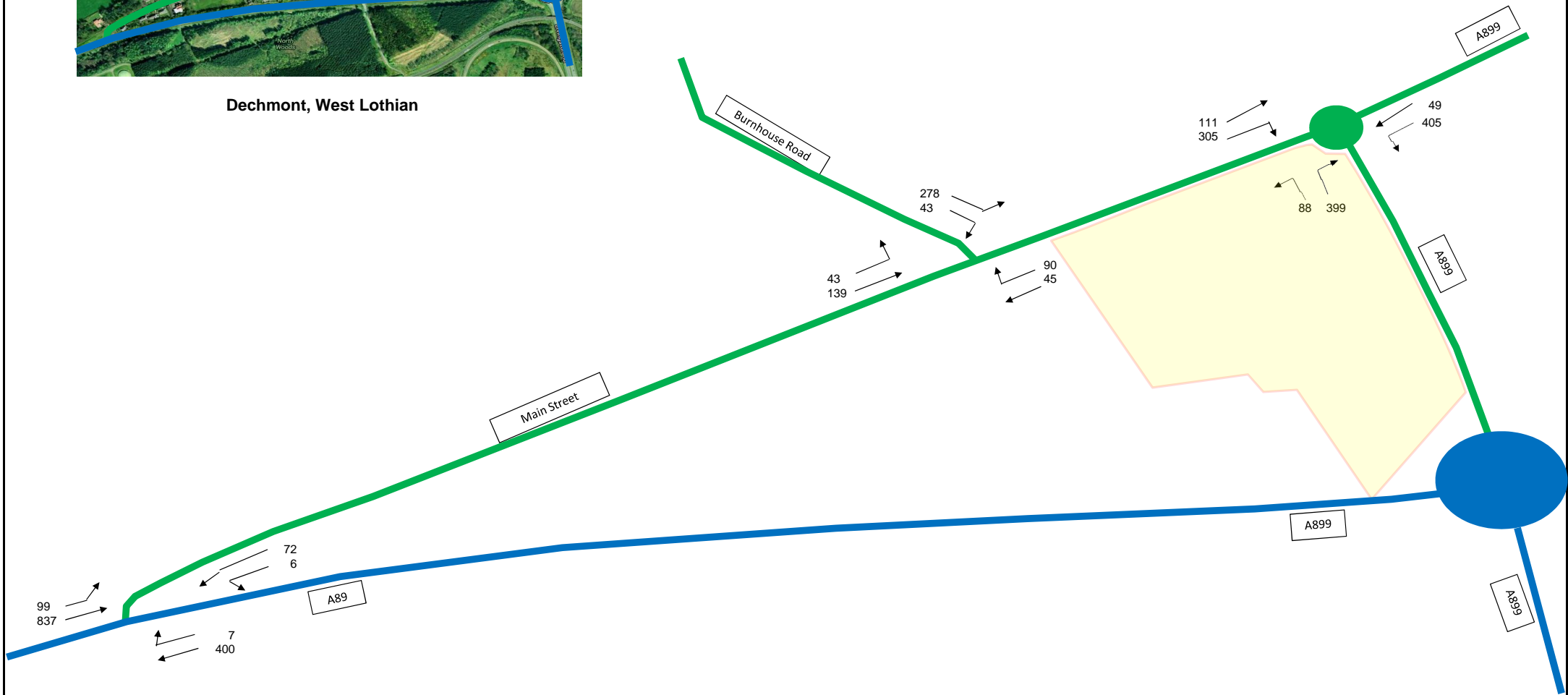
Dechmont, West Lothian



<b>Title</b>  PM 2013 Base Traffic (PCU's)  16:30 - 17:30	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 7.2	



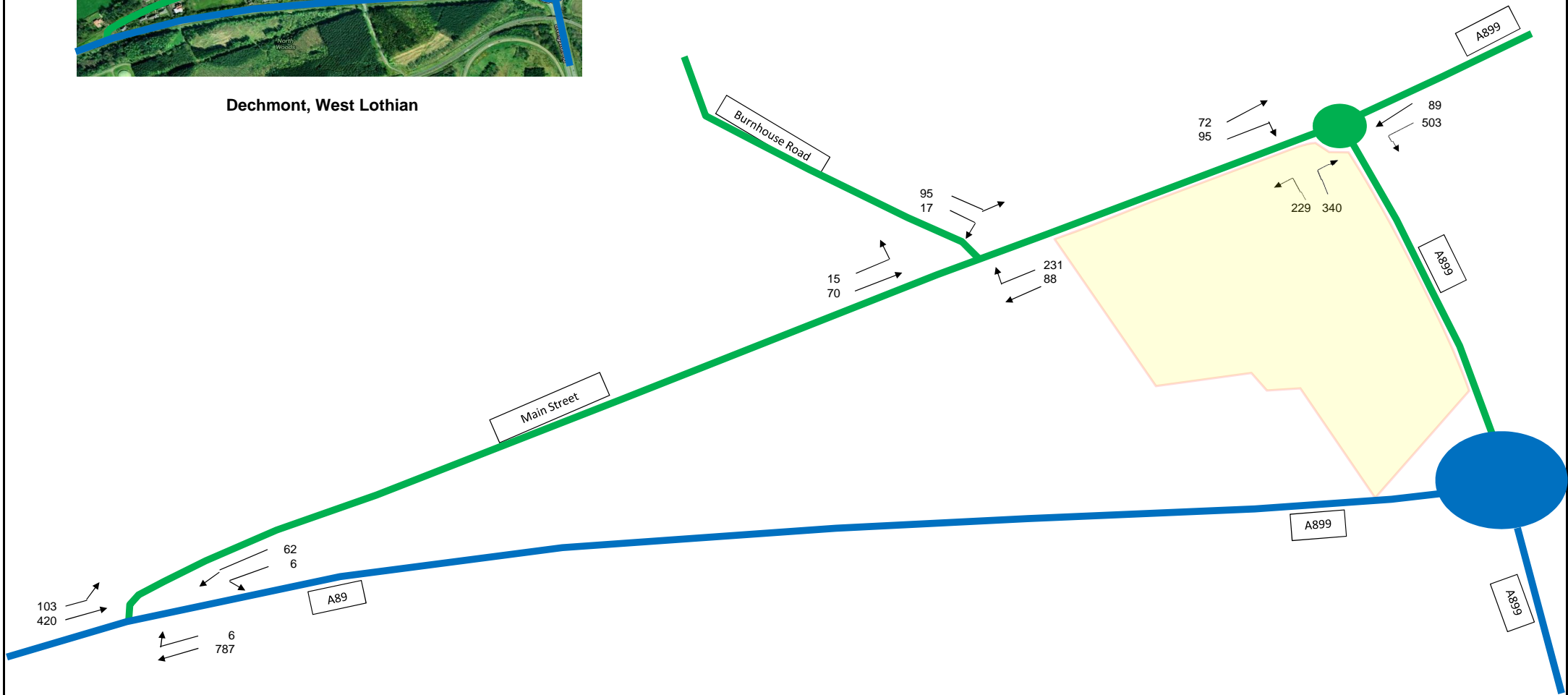
Dechmont, West Lothian



<b>Title</b>  AM 2014 Base Traffic (PCU's)  07:45 - 08:45	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 7.3	



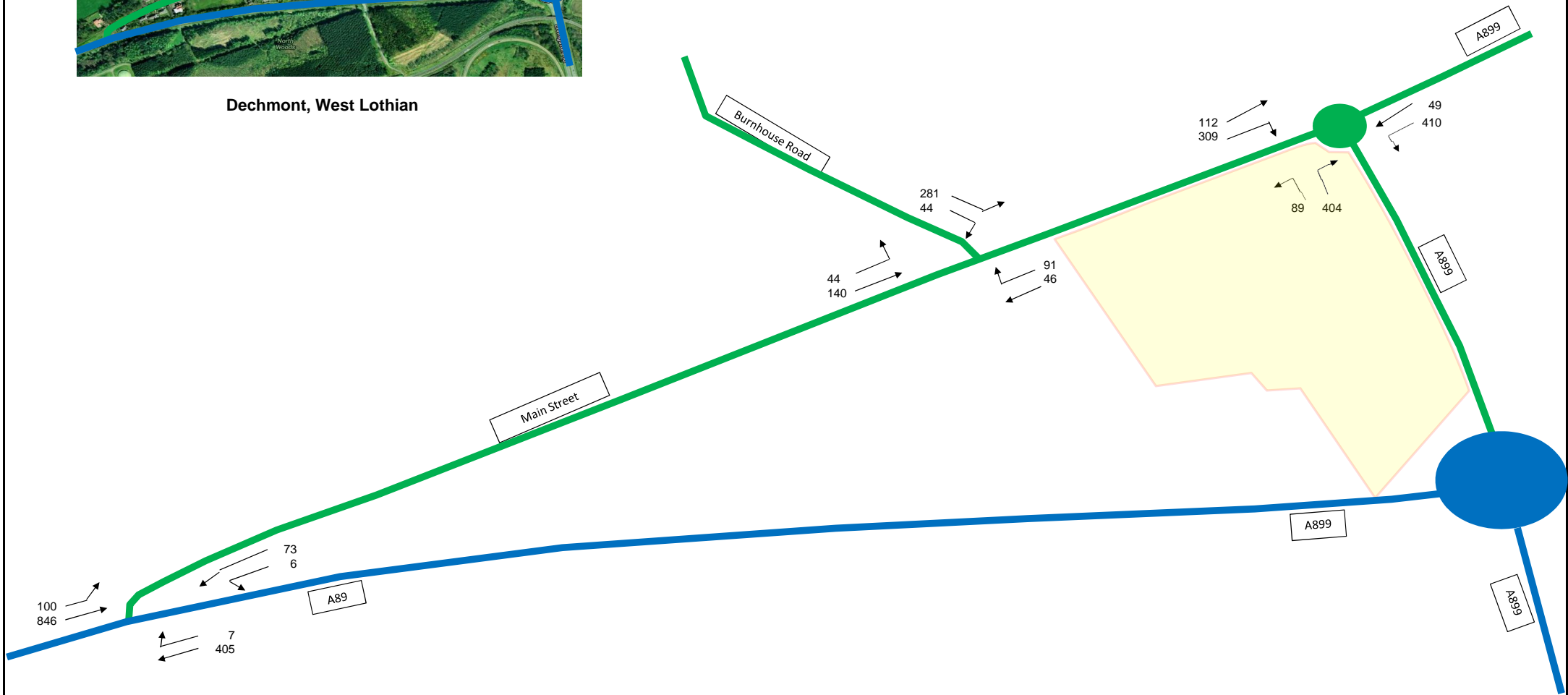
Dechmont, West Lothian




<b>Title</b>  PM 2014 Base Traffic (PCU's)  16:30 - 17:30	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 7.4	



Dechmont, West Lothian

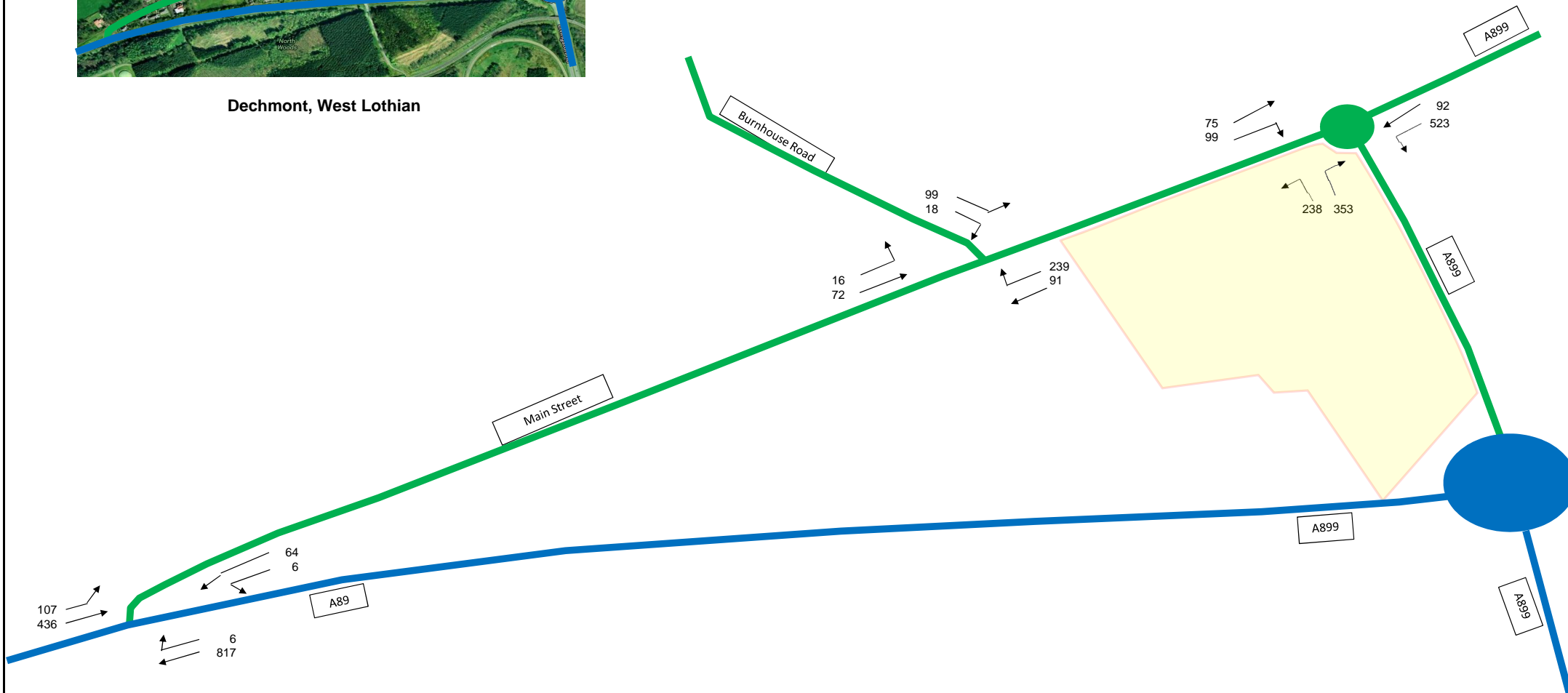


<b>Title</b>  AM 2018 Base Traffic (PCU's)  07:45 - 08:45	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 7.5	





Dechmont, West Lothian




**Title**

PM 2018 Base Traffic (PCU's)

16:30 - 17:30

**Client**  
Colin MacFarlane & John MacFarlane

**PROJECT NUMBER**  
MTS 1024



**Project**  
Dechmont, West Lothian

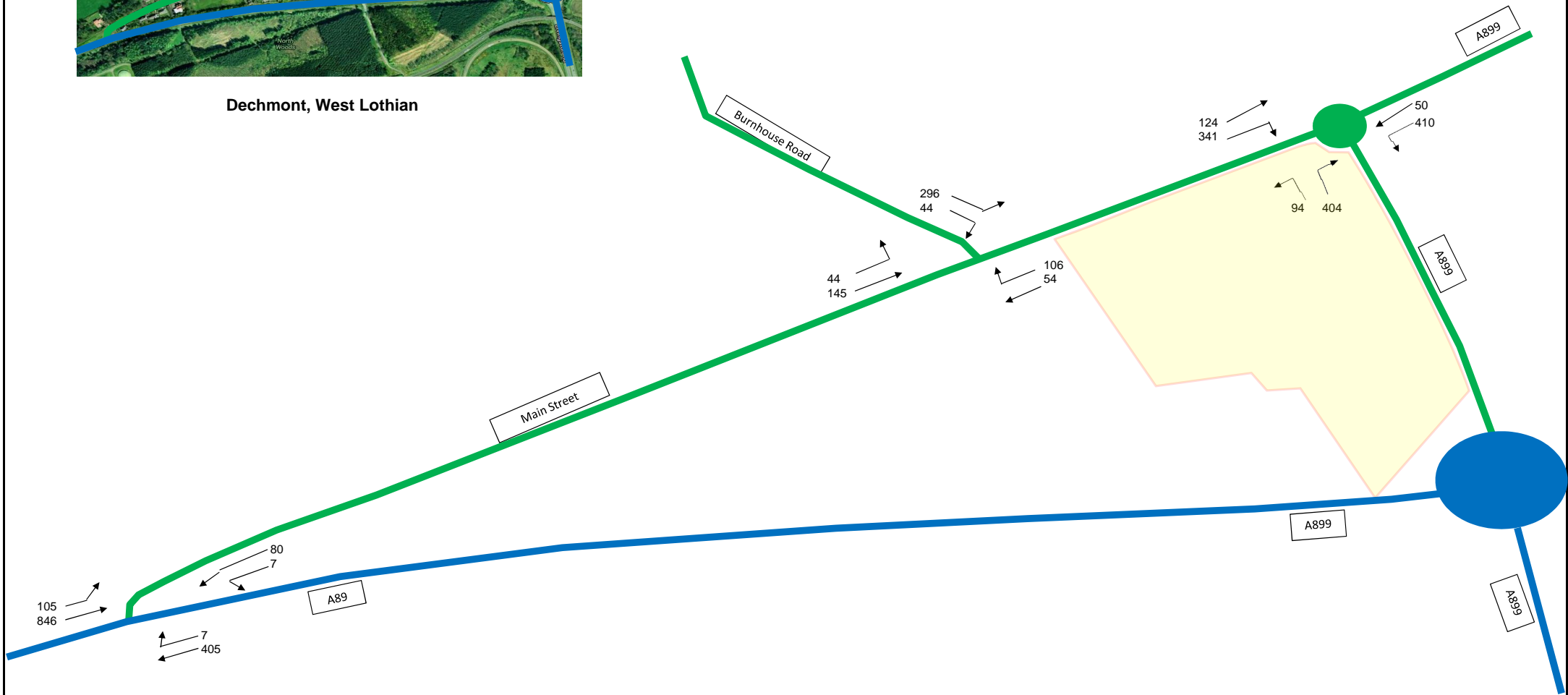
**Drawn by**  
DRB


**Date**  
July 2014

**Drawing No.**  
Figure 7.6



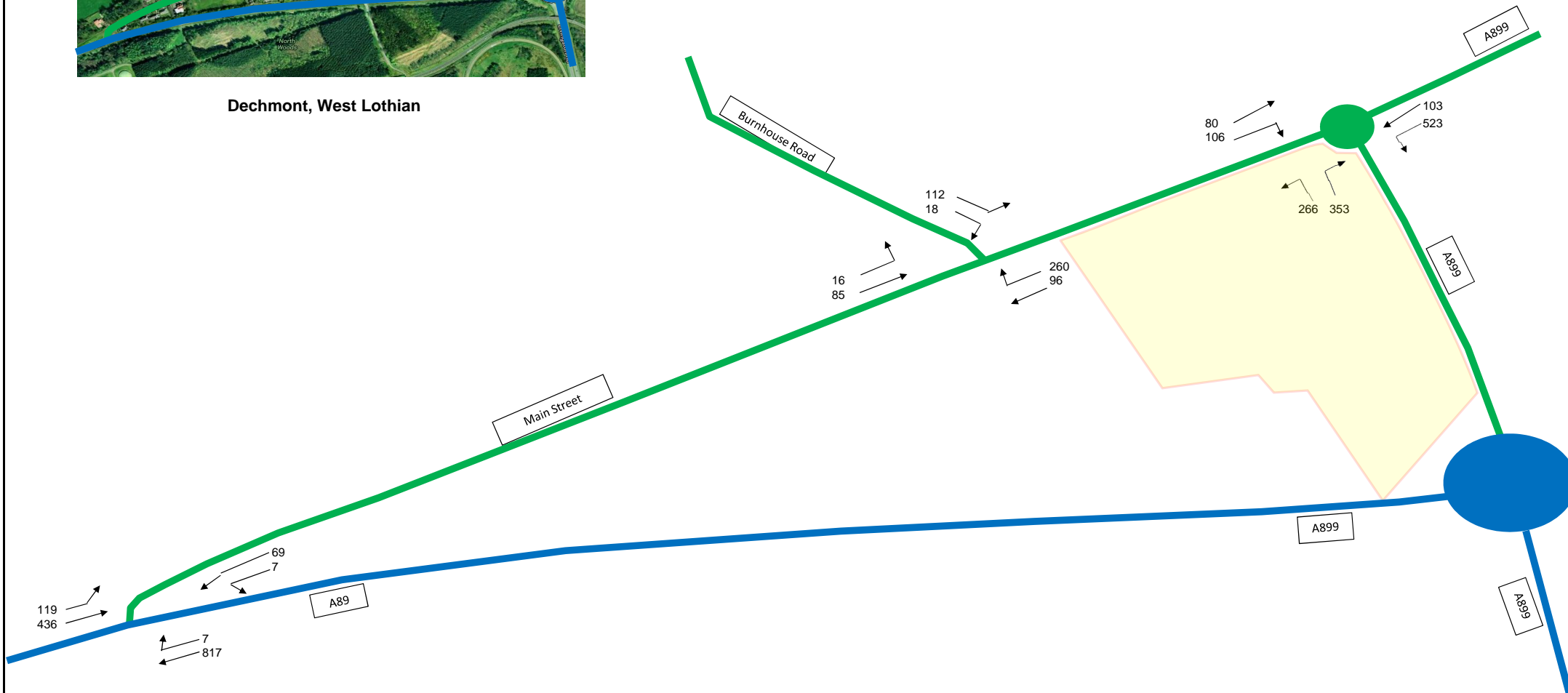
Dechmont, West Lothian



<b>Title</b>  AM 2018 Total Traffic - 165 Units (PCU's)  07:45 - 08:45	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 7.7	



Dechmont, West Lothian



<b>Title</b>  PM 2018 Total Traffic - 165 Units (PCU's)  16:30 - 17:30	<b>Client</b> Colin MacFarlane & John MacFarlane		<b>Project</b> Dechmont, West Lothian	
	<b>PROJECT NUMBER</b> MTS 1024		<b>Drawn by</b> DRB	<b>Date</b> July 2014
			<b>Drawing No.</b> Figure 7.8	