

Michael A Clynch

Spicer House Quarry, Ingbirchworth

TRANSPORT STATEMENT & ROUTING STRATEGY

July 2007

TPI

THE TRANSPORTATION CONSULTANCY

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PREPARED BY:

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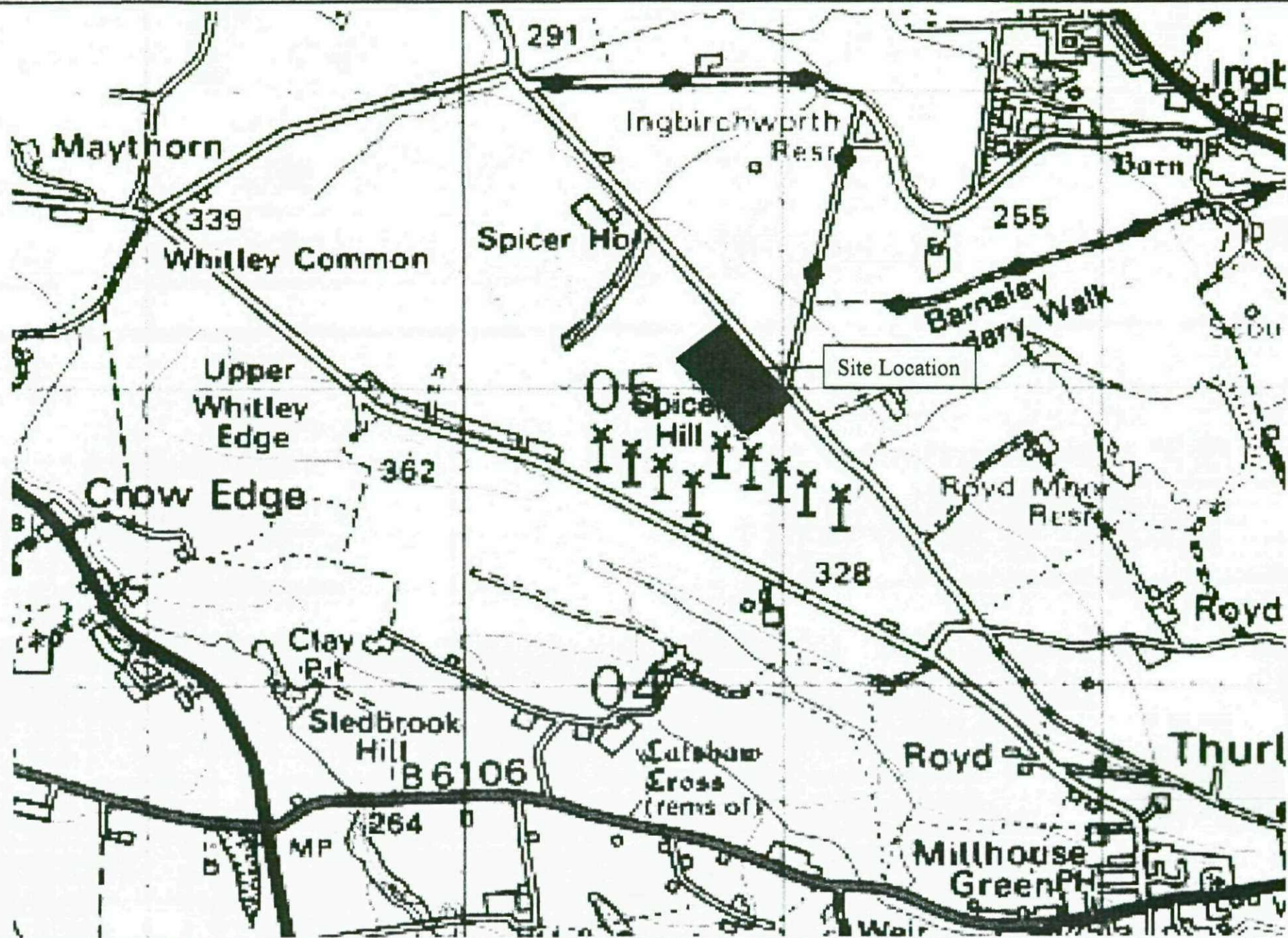
1.0 INTRODUCTION

Background

- 1.1 Transportation Planning (International) Ltd (TPi) has been appointed by Michael A Clynch to consider the transportation aspects of developing a quarry on Spicer House Lane, Ingbirchworth. Figure 1.1 shows the site location in terms of its local context.
- 1.2 The site near to Ingbirchworth is situated on Spicer House Lane which runs parallel to the A629 which links Huddersfield with Penistone and Sheffield. Spicer House Lane is a link between the A628 and A635.
- 1.3 Spicer House Quarry falls within an area that is denoted as a mineral search area in Barnsley's Unitary Development Plan and also in the Barnsley Local Development Framework. The land is not presently used as such although there has been quarrying in the past between the proposed development site and Crow Edge village.

Structure of the Transport Statement

- 1.4 Following this introduction this Transport Statement is sub-divided into 5 chapters:-
 - Chapter 2 sets out the current transport situation;
 - Chapter 3 considers the proposed development;
 - Chapter 4 considers the HGV routing and highway safety; and
 - Chapter 5 provides summary and conclusions.



2.0 CURRENT TRANSPORT SITUATION

Introduction

- 2.1 Currently Spicer House Quarry is unused as a quarry site. The proposed development site is located on the western side of Spicer House Lane about 4km to the north of Penistone. The roads in the vicinity of the site and the road along the site frontage are subject to the national speed limit.

Access

- 2.2 The existing access is in the format of a simple priority junction with Spicer House Lane. Figure 3.1 shows the site access arrangement. It is not perceived that there are any problems achieving the necessary visibility splay from the site access.

Existing Road Hierarchy

- 2.3 The South Yorkshire LTP (Figure 4.12) shows key routes in the whole of the region and this indicates that the A628 that runs close to the site through Penistone is seen as a key route. The A629 to the south of its junction with the Stocksbridge Bypass (A616) is also classified as a key route.
- 2.4 To the east of the site is the A629 that runs between Huddersfield and Sheffield. To the west runs the A616 which runs from the M1 to Huddersfield via Stocksbridge and New Mill. The A628 runs from Manchester, over the Woodhead Pass, through Penistone to Pontefract. The A635 is the northern A Road in the vicinity of the site and this runs from Manchester, over the Pennines to Holmfirth, Barnsley and to Doncaster.
- 2.5 The local roads in the vicinity of the site as unclassified and are in varying state of repair with regards to surface and width. There are no footpaths to the local roads although there are grass verges and on some of the roads close to the site there are passing places or laybys that have either been formed with use or put in place by the local Highway Authority to aid vehicle movements.

Geometric Standard of Design

- 2.6 The site is located on Spicer House however there are many links into the local highway network and this report will identify the routes that will be the most suitable for the HGV's that are going to serve the site. It is important therefore to assess the standard of the highways in the area and the ability of the junctions to cope with the HGV movements.
- 2.7 It should be noted that the geometry of the highway in the local area varies on a road by road basis with the road widths and turning radii not being of a consistent level. The local network of roads is in a poor state of repair in some areas and therefore it is critical to select routes that are the most suitable for HGV movements.

3.0 PROPOSED DEVELOPMENT

Introduction

- 3.1 The site is at present unused and is located close to a wind turbine farm that is located above the village of Crow Edge. The site is situated on Spicer House Lane which connects with the A628 and A635 and also has links available to the A629 and A616.
- 3.2 It is proposed to extract 60,000 tonnes of sandstone each year, over a ten year period, from commencement of the operation. This rate of production represents only 15 vehicles per day leaving the quarry. It is proposed that all material leaving the quarry will exit the site in a northerly direction along Spicer House Lane. There will be no use of Royd Lane on to the A628 (Manchester Road). The drivers of HGV's will follow a designated route detailed in section four of this report. This will help to improve access to the site and road safety in the area.
- 3.3 The proposed development site that will be worked is only 2.8 hectares in size.

Site Access

- 3.4 The site access will be situated on Spicer House Lane and this will be accessed from the north by the routing strategy that will be discussed further on in this report. The site access is shown in Figure 3.1
- 3.5 The site access will meet geometric standards set out in the Barnsley Highway Design Guide to accommodate movements of quarry vehicles. The visibility at the entrance is in excess of the requirements set out in national guidance in both directions. As the quarry is considered to be relatively small in terms of land volume it is proposed that smaller more suitable sized vehicles will suffice to operate within the quarry and surrounding road network. The 15 vehicles a day leaving the quarry will consist of small cargo trucks and dumper trucks.

4.0 HGV ROUTING AND HIGHWAY SAFETY AND PARKING

HGV Routing

- 4.1 Chapter three explains the road hierarchy and assesses the geometric standard of design for the junctions that would be utilised by the HGV's accessing the site.
- 4.2 The quarry operator is willing to enter into an agreement over the amount of vehicles accessing the site although it is anticipated that there will only be 15 vehicles a day doing this.
- 4.3 The quarry operator is also willing to agree with the local highway authority to set out routing for the HGV's that will access the site and also to set out movements that the vehicles will take as well as potential timings for these HGV movements so that they are not accessing the road network at the busiest times or at times that may be perceived as unsociable for any residents on the proposed routes.
- 4.4 It is anticipated that the HGV drivers and operators to the site would be handed local maps and routing instructions so that any agreement was adhered to.
- 4.5 Chapter Three looked at the geometry of the local highway network and this has identified some routes that cannot be utilised. Table 4.1 shows the roads in the vicinity of the site that are unable to cope with HGV movements.

Road	Reason for Elimination from Routing Strategy
Wall Nook Lane	Weight Limit of 7.5 tonnes.
High Bank Lane	The surfacing is inadequate and the road is not wide enough. Also the junctions with the A628 are also not suitable for HGV movements.
Royd Lane	Although the carriageway is adequate the road runs past a local housing estate and therefore it would not be desirable to route HGV's serving the quarry on this road.
Birdsedge Lane	There is a school zone that starts at its junction with the A629 so it would not be desirable to route HGV's serving the quarry on this road.
Annat Royd Lane	The carriageway is not of a sufficient standard for HGV usage.
Horn Lane	The carriageway is not of a sufficient standard for HGV usage.

Table 4.1 Roads Eliminated from the Routing Strategy

- 4.6 Photo 4.1 shows the junction of Spicer House Lane with Royd Moor Road, and High Bank Lane. As the picture shows, High Bank Lane cannot be used for traffic owing to its poor state of repair. Photo 4.2 shows High Bank Lane at its junction with the A628 again showing its unsuitability for HGV usage.



Photo 4.1 Royd Moor Road/High Bank Lane/Spicer House Lane Junction



Photo 4.2 High Bank Lane/A628 Junction

- 4.7 There is a route that could be used to the south of the site via Spicer House Lane, Royd Moor Road and then Whitley Road and Royd Lane to the A628. This route was deemed to be unsatisfactory due to the topography of the route and due to the small housing estate close to the junction of the A628 and Royd Lane. Photo 4.3 shows the junction of Royd Lane and the A628. Photo 4.4 shows the Whitley Road junction with Royd Moor Road that would be used for any movements to the south.



Photo 4.3 Royd Lane/A628 Junction



Photo 4.4 Royd Moor Road/Whitley Road Junction

- 4.8 The only Traffic Regulation Order (TRO) in the vicinity of the site is a weight limit of 7.5 tonnes on Wall Nook Lane. Therefore any HGV routing strategy would have to avoid this road. This is not a concern as there are other routes that can be utilised.
- 4.9 The routes that are therefore presented as the best choice for HGV movements to the site are shown in Table 4.2.
- 4.10 An examination of the local highway network and the wishes of the end user are that any HGV entering or exiting the site will do so from the north as this is perceived to be the fastest way on to the classified highway network. Also as Table 4.1 shows most of the roads to the south of the proposed development are not of a sufficient standard to accommodate HGV movements.

- 4.11 Figures 4.1 to 4.4 show the preferred routes and the alternative routes that it is suggested would be open for the HGV's that would access the site.

Direction	Routes
To the North	Exit/Enter Site from the north then Windmill Lane to the A629
	Exit/Enter Site from the north then Cumberworth Lane to the A629
	Exit/Enter Site from the north then the A635 to the A629
To the East	Exit/Enter Site from the north then Windmill Lane to the A629
	Exit/Enter Site from the north then Cumberworth Lane to the A629
	Exit/Enter Site from the north then the A635 to the A629
To the South	Exit/Enter Site from the north then Windmill Lane to the A629
	Exit/Enter Site from the north then Windmill Lane then Hey Stack Lane to the A616
To the West	Exit/Enter Site from the north then Windmill Lane to the A629
	Exit/Enter Site from the north then Windmill Lane then Hey Stack Lane to the A616
	Exit/Enter Site from the north then the A635

Table 4.2 HGV Routing (Preferred Route in Bold)

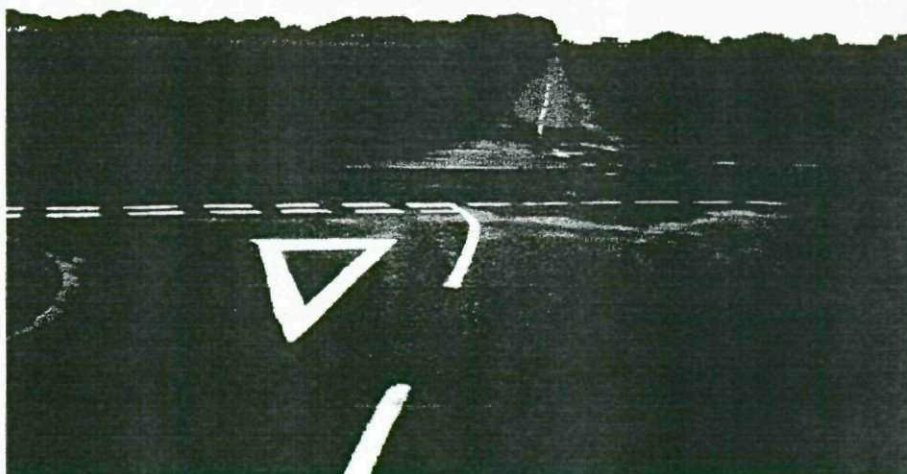
- 4.12 The preferred route to the north is for traffic to exit and enter the site from the north then use Windmill Lane to the A629. This is the shortest distance to the classified highway network. This is also preferred because there may be a problem with vehicles turning right at the junction of Cumberworth Lane, Piper Well Lane, Wall Nook Lane, Haddingley Lane and Broadstone Lane when travelling towards the site and turning left when travelling away from the site. It is also perceived that the routing via Piper Well Lane to the A635 would not be as desirable as there is quite a steep gradient downhill in the direction of the A635.
- 4.13 The preferred route to the east is for traffic to exit and enter the site from the north then use Windmill Lane to the A629. This is the shortest distance to the classified highway network. This is also preferred because there may be a problem with vehicles turning right at the junction of Cumberworth Lane, Piper Well Lane, Wall Nook Lane, Haddingley Lane and Broadstone Lane when travelling towards the site and turning left when travelling away from the site. It is also perceived that the routing via Piper Well Lane to the A635 would not be as desirable as there is quite a steep gradient downhill in the direction of the A635.
- 4.14 The preferred route to the south is for traffic to exit and enter the site from the north then use Windmill Lane to the A629. This is the shortest distance to the classified highway network. This is also preferred as the route along Windmill Lane westerly to Hay Stack Lane and Hog Close Lane to the A616 is not perceived as the best route as there is quite a steep gradient downhill towards the A616 and also some bends in the road that may cause problems for HGV movements.
- 4.15 The preferred route to the west is for traffic to exit and enter the site from the north then use Windmill Lane to the A629. This is the shortest distance to the classified highway network. This is also preferred as the route along Windmill Lane westerly to Hay Stack Lane and Hog Close Lane to the A616 is not perceived as the best route as there is quite a steep gradient downhill towards the A616 and also some bends in the road that may cause problems for HGV movements. It is also perceived that the routing via Piper Well Lane to the A635 would not be as desirable as there is quite a steep gradient downhill in the direction of the A635.
- 4.16 These routes can be agreed as a condition of the planning consent.

Junction Analysis of the key junctions and Routes used in the strategy

- 4.17 Below are some of the key junctions that are used in the routing strategy and the reasons for use.

Broadstone Rd/Windmill Lane Junction

This junction is of a sufficient standard to be used for HGV movements both straight through the junction or using Windmill Lane in either direction as Windmill Lane has laybys and passing places along its length.



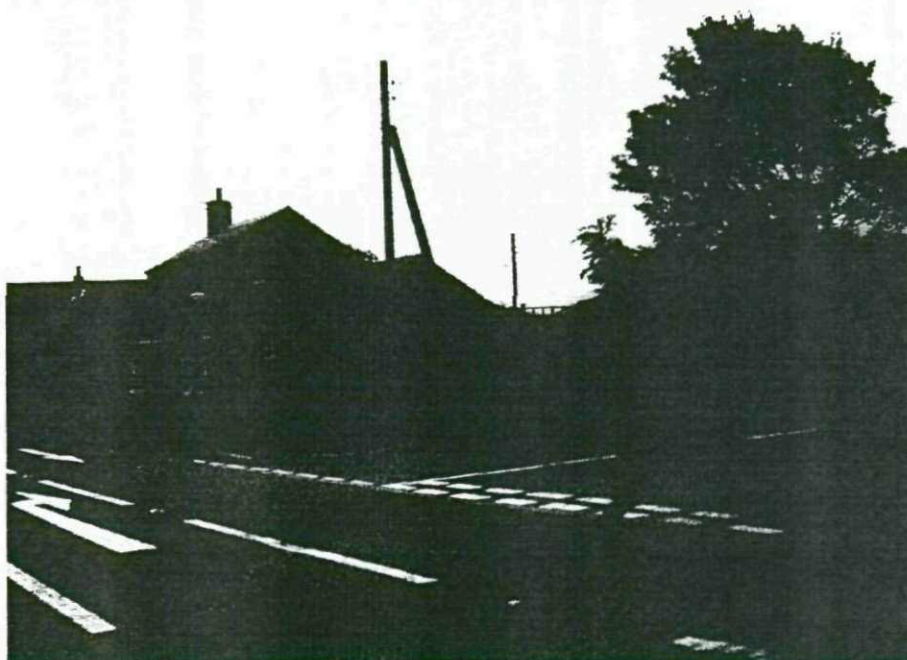
Broadstone Rd/Cumberworth Lane/Haddingley Lane/Wall Nook Lane Junction

This junction is of a sufficient standard to be used for HGV movements and is well marked out.



Windmill Lane/A629 Junction

This junction is of a sufficient standard to be used for HGV movements and is well marked out. This junction also offers the quickest route to the classified highway network. The right filter lane on the A629 is also useful for HGV turning movements



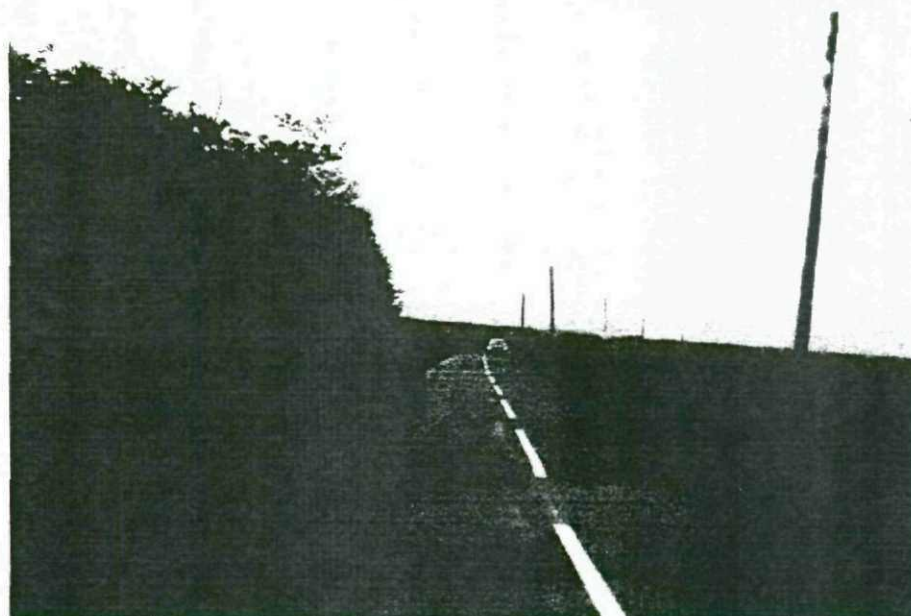
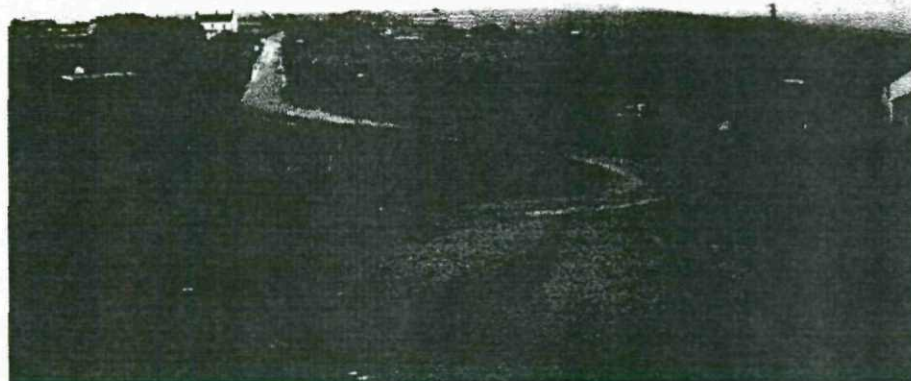
A635/Piper Well Lane Junction

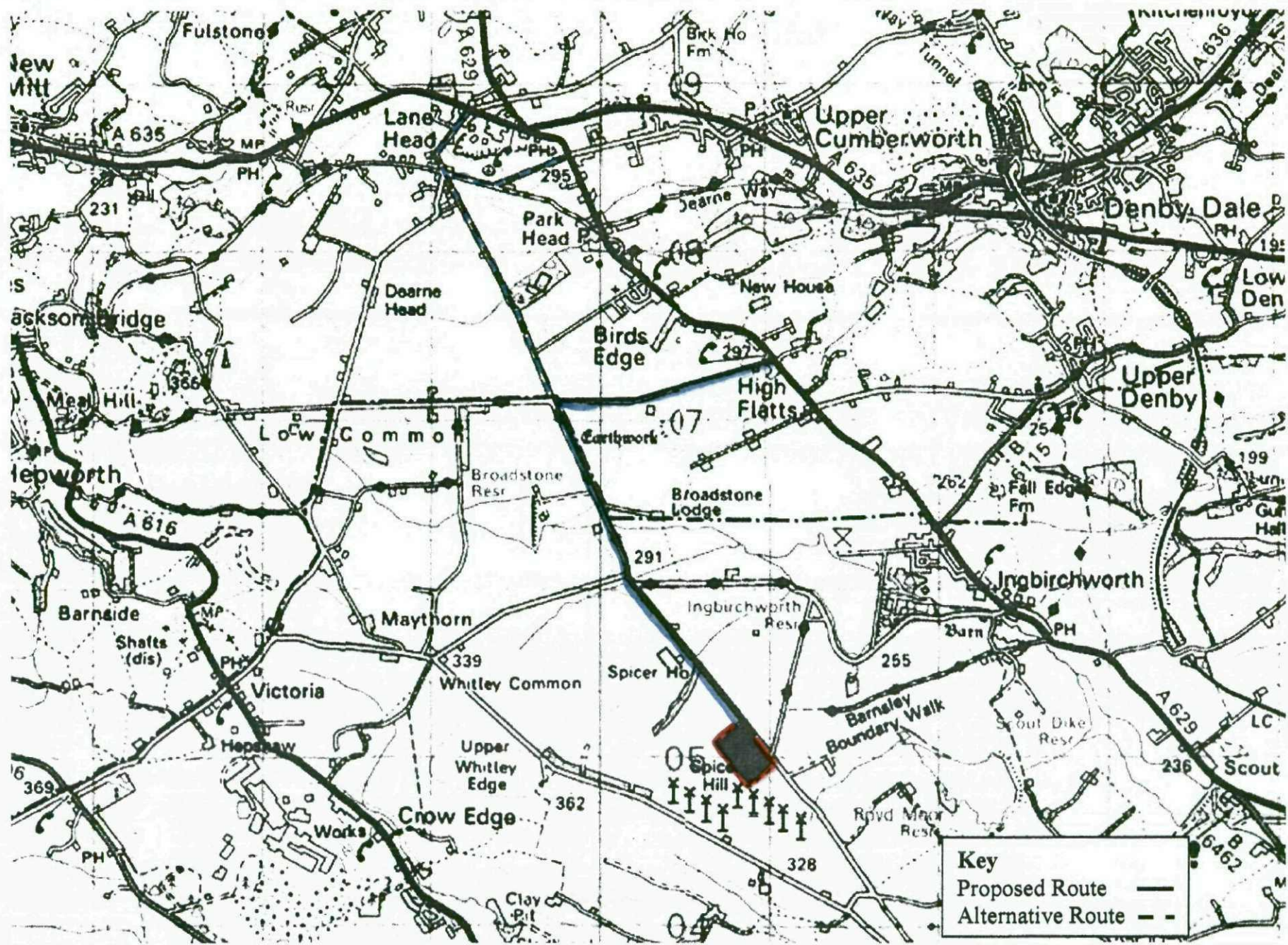
This junction is of a sufficient standard to be used for HGV movements and is well marked out. This junction also offers the quickest route to the classified highway network. The right filter lane on the A629 is also useful for HGV turning movements

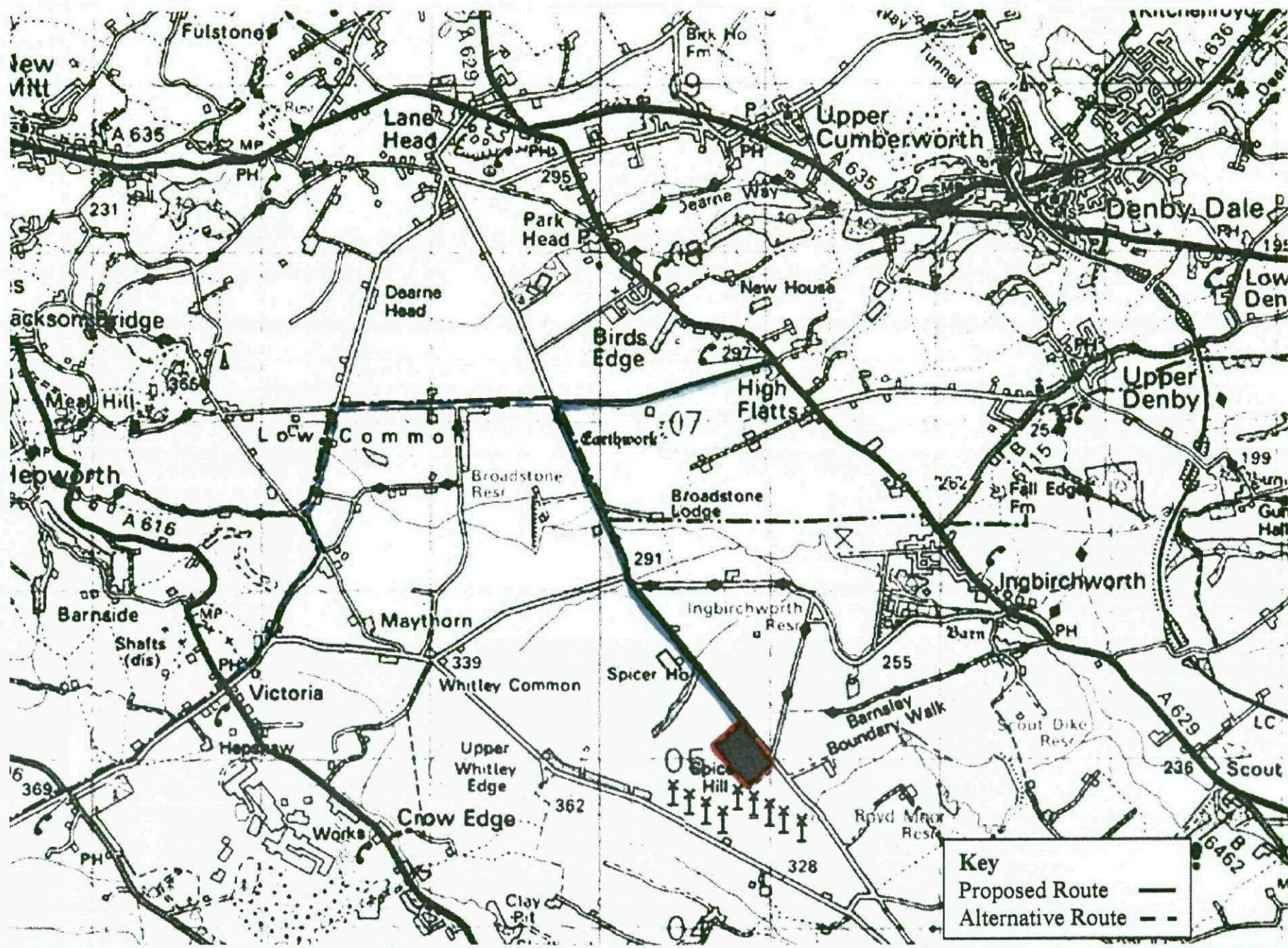


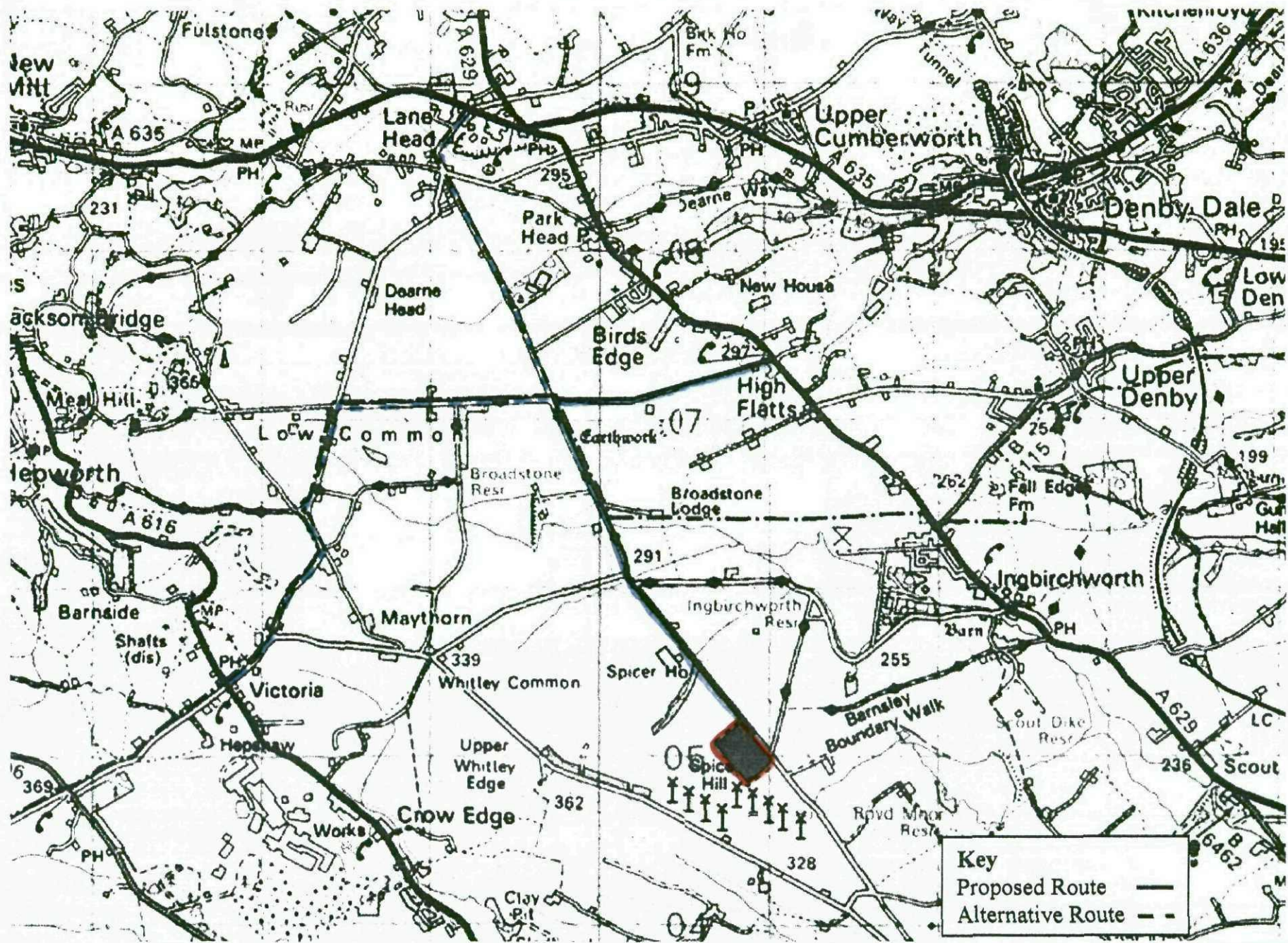
Haddingley Lane

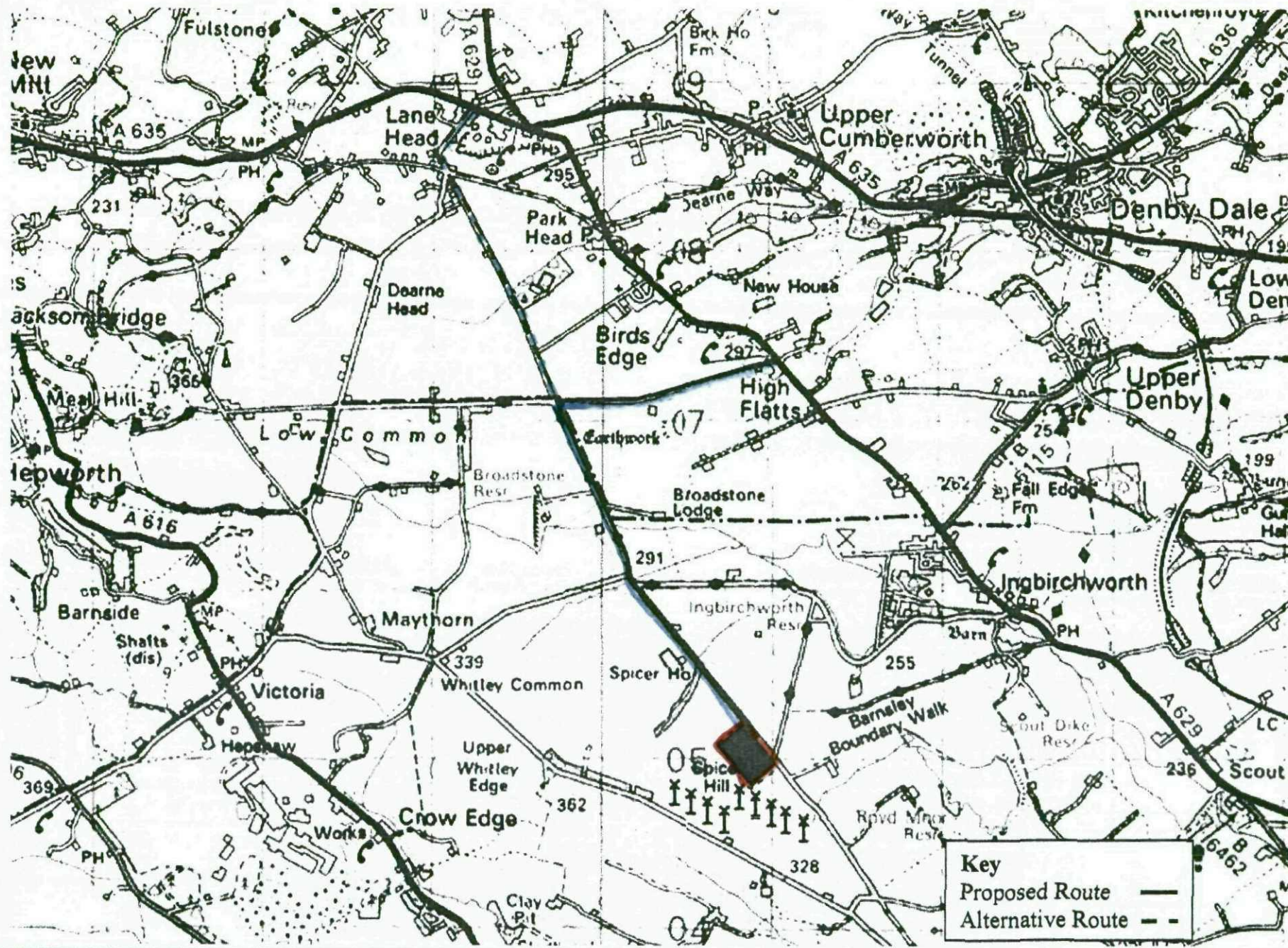
This road offers links to the A616 and was considered to be suitable for HGV movements. Below are two photos showing part of the route.











5.0 SUMMARY AND CONCLUSIONS

- 5.1 The site is at present unused and is located close to a wind farm that is located above the village of Crow Edge. The site is situated on Spicer House Lane which connects with the A628 and A635 and also has link to the A629 and A616.
- 5.2 It is proposed to extract 60,000 tonnes of sandstone each year, over a ten year period, from commencement of the operation. This rate of production represents only 15 vehicles per day leaving the quarry. It is proposed that all material leaving the quarry will exit the site in a northerly direction up Spicer House Lane. There will be no use of Royd Lane on to the A628 (Manchester Road).
- 5.3 The overall trips generated by the proposed site operation over the AM and PM peak hours are not significant. In conjunction a controlled system of arrivals where slots will be allocated will mean that the effect on the local highway network will be negligible.
- 5.4 The HGV movements to the site would be set out through the routing strategy to avoid the junctions and carriageways that would not be suitable for the HGV's.
- 5.5 The operator has indicated they are willing to abide by any reasonable condition relating to transport movements so to minimise any disruption.
- 5.6 It is considered that this statement demonstrates that the proposed development can be accommodated onto the highway network without any operational or safety problems.