Broomfield Corridor & Access to Broomfield Hospital Study

Final Report

5 January 2007

Produced for Essex County Council

Prepared by
Keith Brown
Principal Transport Planner

Waterloo Chambers Waterloo Lane Chelmsford Essex CM1 1BD UK

T 01245 247000 F 01245 247001 E keith.brown@mouchelparkman.com

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Executive Summary

1 Introduction

1.1 Background to the Study

The B1008 Broomfield Road is a major radial route connecting the settlements of Little Waltham and Broomfield to Chelmsford town centre. It also provides a major radial spine for the development areas to the north of Chelmsford. Prior to the construction of the A130/A1016 Chelmer Valley Road it formed the major radial approach road to Chelmsford from the north, providing access between Chelmsford and Braintree and Sudbury to the north.

Although the new A130/A1016 afforded a measure of traffic when constructed during the 1970s, traffic levels have continued to grow and it currently carries around 18,000 vehicles per weekday. While generally free flowing there is evidence of congestion at key locations. In the morning peak this is generally at the northern end of Broomfield, at the Valley Bridge junction and at the Corporation Road junction. In the evening peak In the evening peak delays are generally from the bottom end up to Patching Hall Lane, at Valley Bridge and in the area to the south of Broomfield Village.

In character the B1008 varies from a wide road at its northern to a narrow and tightish alignment through Broomfield Village to a wide urban corridor at its southern end. Throughout its length it provides access to a number of commercial, residential and community land uses. It also provides access to a total of six schools including three major secondary schools with wide pupil catchments.

Adjoining the B1008 at its northern end is Broomfield Hospital, which is administered by the Mid Essex Health Trust. This major health facility is currently being expanded to accommodate the consolidation of facilities from St John's Hospital, currently located in the town centre, which is programmed to be closed. Further proposals exist for a major expansion of the hospital as a Private Finance Initiative (PFI) which would see a significant expansion of healthcare facilities including the addition of new specialist services. Currently these PFI proposals have been called in by the Department for Health for review but if approved would to a significant increase in vehicle movements in the B1008 corridor, particularly at its northern end.

In the light of these hospital expansion proposals and other transport and planning initiatives to the north of Chelmsford, Essex County Council have commissioned MouchelParkman to undertake this Study covering the Broomfield Road Corridor and access to Broomfield Hospital. The Study will consider a number of issues including the expansion of Broomfield Hospital, concerns of the local Parish Councils concerning local identities and local issues as well as considering the larger strategic planning issues such as housing allocations, the need for a Chelmsford North

Eastern Bypass, proposals for Park and Ride, and proposals for a bus priority system serving north Chelmsford.

This report will deal primarily with the B1008 Broomfield Road corridor but reference will also be made to the parallel corridor comprising the A130/A1016 Essex Regiment Way and the A1016 Chelmer Valley Road. It is acknowledged that the B1008 throughout the Study area is also known variously as Braintree Road, Blansford Hill and Main Road at different locations along its length. However for conciseness throughout this report the B1008 will be referred to generically as the B1008 Broomfield Road and the A130 Essex Regiment Way and A1016 Chelmer Valley Road will be referred to as the A130/A1016 Chelmer Valley Road.

1.2 Aim of the Study

The Study is intended to review the current character and functionality of the B1008 Broomfield Road corridor and the challenges it will face in the future.

The main objectives of the Access to Broomfield Hospital Study can be summarised as follows:

- Identify problems and issues affecting the Broomfield corridor. This will include an assessment of the following:
 - Issues from the Parish Plan Group survey
 - The balance of through traffic and local traffic
 - Safety Identifying problem areas with accident plots and overall accident patterns and levels.
 - Accessibility Identifying access problems relating to signage, pedestrian and cycle facilities and public transport
 - Parking supply
 - Congestion and journey times
- 2. Identify short term solutions. These could potentially include schemes such as:
 - Traffic Management/Calming
 - Cycle and Bus priorities
 - Additional crossing facilities
 - Speed limit revisions

- · Re-phasing traffic signals
- Changes to signage
- 3. Identify and quantify long term solutions These could potentially include schemes such as:
 - Park and Ride
 - Amendments to Chelmer Valley Road / Valley Bridge
 - Amendments to Essex Regiment Way / Chelmer Valley Road
 - North East Bypass
 - Cross Valley Link to Hospital from either Chelmer Valley route or the North East Bypass

1.3 Structure of this Report

There follows an overview that includes a review of the existing function of the B1008, its character and history. There follows a review of local concerns including the results of the Broomfield Parish Survey and its Parish Plan. Then the B1008 and the A130/A1016 corridors are reviewed as parallel and potentially alternative routes. The question of schools is then covered and the educational establishments along and adjacent to the B1008 reviewed. Then Broomfield Hospital is covered, including the current state of the proposals for expansion, followed by a review of the accessibility issues. Other planning and transport issues and initiatives in north Chelmsford are then reviewed. The effects of foregoing are then summarised into some general transportation proposals followed by a summary and conclusions.

2 The B1008 Broomfield Road

2.1 The History of the B1008

In the 19th century the town of Chelmsford was relatively compact and development extend northwards only along Duke Street as far as its junction with Broomfield Road, which was then a rural route connecting together various settlements. Bishops Hall lay to the north of the area where the Chelmsford County High School for Girls now stands and to the north was the settlement of Patching Hall which lay at the junction of what is now Patching Hall Lane. Further to the north was Broomfield Place and slightly further north was the village of Broomfield. Slightly to the north of the current hospital access was the hamlet known as Blasled Hill. All these individual settlements were connected together by what is now the B1008 Broomfield Road.

By the early 20th century the northward creep of Chelmsford extended as far as just north of Patching Hall Lane. The settlements of Broomfield Place and Broomfield had merged into a single settlement and the area to the north of the hospital had become known as Wood Hall. Although there was frontage development along much of what was then the A130 Broomfield Road the individual settlements were still easily identifiable and maintained a fairly unique character.

Further development has resulted in the urban edge of Chelmsford advancing further north although an identifiable gap has been maintained between this urban edge and the village of Broomfield. Broomfield itself has extended further north in the form of ribbon development on the western side of what is now the B1008 Broomfield Road, to the extent that there is a continuous urban frontage as far north as the Hospital approach.

A significant improvement came with the bypassing of Little Waltham in ????? by a new highway alignment around the western side of the village. Later in ???? when the A130 Essex Regiment Way was opened Broomfield Road was re-designated from the A130 to the B1008 and considerable traffic relief was provided when much of the through traffic re-routed to the new A130. Hence the role of the primary access road from Braintree was largely taken over by the Chelmer Valley Route of the A130/A1016, known as Chelmer Valley Route The A130/A1016 with its wide single carriageway and lack of speed restrictions is now the preferred, and signed route into Chelmsford from the north.

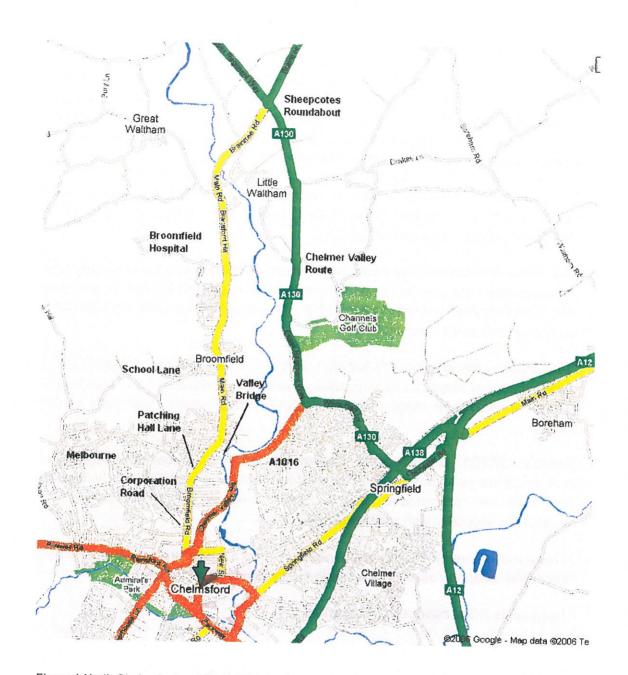


Figure 1 North Chelmsford and the B1008 Broomfield Road Corridor

2.2 The B1008 Broomfield Road Corridor - Character & Function

At its very northern end, from the Sheepcotes Roundabout southwards the B1008 is known as Braintree Road becoming Main Road as it passes to the west of Little Waltham. South of Little Waltham it is known as Blansford Hill becoming Main Road again to the north of Broomfield and all the way through the village of Broomfield to the outskirts of Chelmsford where it becomes Broomfield Road.

At its northern end the B1008 is of modern construction where it bypasses Little Waltham with carriageways of modern standards and high quality junctions at Chelmsford Road and The Street. For the rest of its length it largely reflects its origins as a rural road and hence the carriageway width varies and the alignment can be fairly tight particularly through Broomfield at Church Green. Localised capacity improvements have been provided

Speed limits vary along its length with the northern part being 50mph, the section down as far as Broomfield Village being 40mph then 30mph all the way from Broomfield Village down into Chelmsford.

The B1008 Broomfield Road varies considerably in character along its length, from a predominantly rural road at its northern end to a very urbanised road at its southern end. It also provides access to a total of six schools as well as being the sole point of access to Broomfield Hospital.

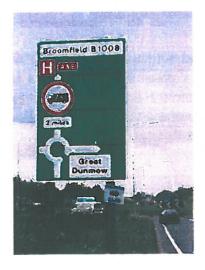
Functionally it therefore has to satisfy a number of requirements. Being developed along most of its length it has to provide access to its frontagers. It is also host to a number of businesses many of whom require frontage access ideally with on-street parking.

Hence the B1008, as well as being a thoroughfare, has a number of functions to fulfil in terms of the everyday needs of its local residents and businesses. It is important that these are not impeded and the B1008 does not become a barrier to the movement associated with satisfying these needs.

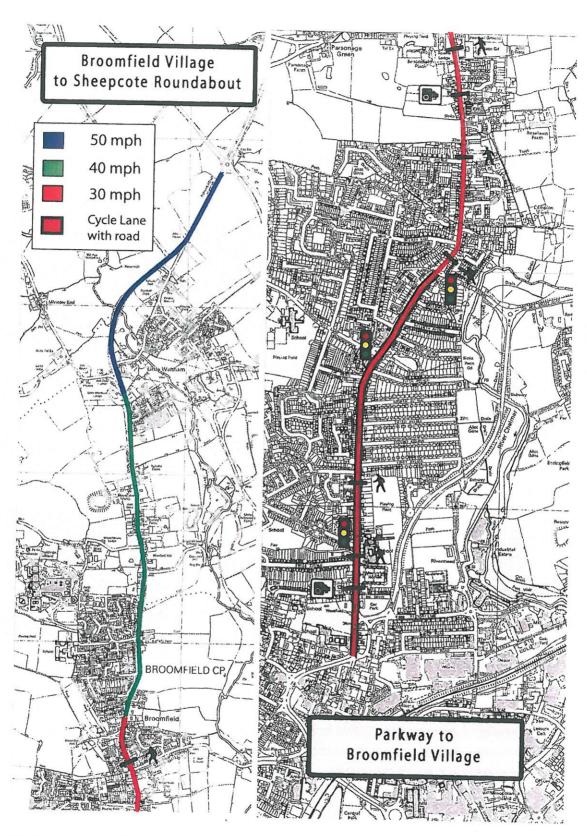
Throughout its length its character varies in nature from rural at the top, through Broomfield Village to dense urban within the Chelmsford boundary.

2.3 Sheepcotes Roundabout to Broomfield Village

The Study limits start to the junction of the B1008 with the A130 and A131 at the Sheepcotes Roundabout. At this location there is a minor signing inconsistency with the B1008 being signposted for Broomfield and Little Waltham from the A130 (north) but only for Broomfield from the A131 (north).







To the south of Sheepcotes Roundabout the aspect is open and rural on either side of the road. The speed limit at this point is 50mph. Approximately 1.25Km south there is the junction with The Street which provides access to Little Waltham.

Approximately 50m to the south of the junction with the street the speed limit becomes 40 mph.

Moving south towards Broomfield Hospital there is spasmodic ribbon development along most of the frontage to either side of the road, all with direct highway access. At the junction with Hospital Approach the road character changes and becomes more urbanised. At the junction with Hospital Approach there is a mini roundabout with a large over-run apron area.



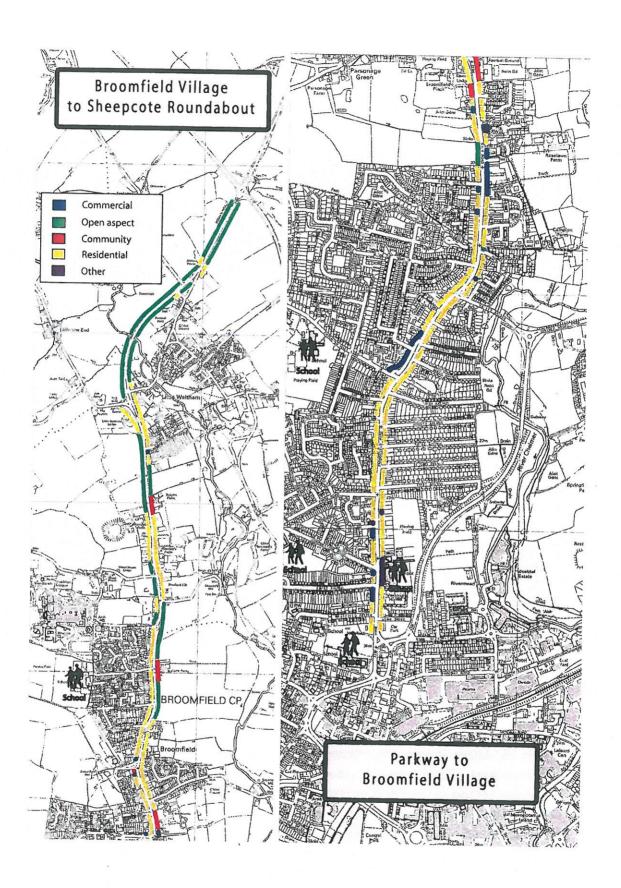
Figure 4 The roundabout at the junction of the B1008 Broomfield Road with Hospital Approach

South of Hospital Approach there is solid ribbon development to the west side of Main Road and primarily open countryside to the east. Approximately 0.75 Km further south Main Road passes enters the village of Broomfield where Church Green is considered to represent the heart of the village. Approximately 200m to the north of Church Green the speed limit becomes 30 mph.



Picture 1 Church Green Broomfield

The B1008 Main Road continues southwards through the heart of the village of Broomfield. Approximately 200m south of Church Green there is a Pelican Crossing and a further 300m south the junction of School Lane provides the commercial and communal focal point of the village.



2.4 Broomfield Village to Patching Hall Lane



Picture 2 The junction of the B1008 Main Road with School Lane in the centre of Broomfield

In the vicinity of the School Lane junction there are a number of community facilities including the Community Centre, the Recreation Ground, the Angel Inn and a convenience store. There is a zebra crossing outside the Angel Inn just to the south of the green.

South of School Lane there are a number of commercial premises, giving rise to a mixed frontage with significant on-street parking needs. A safety camera is located within this stretch of the B1008 and there is Zebra Crossing located just to the north of Erick Avenue. Moving to the south the frontage becomes predominantly residential and there is another Pelican Crossing approximately 100m north of the junction with Valley Bridge.

The traffic signal controlled junction of the B1008 Broomfield Road with Valley Bridge is a very busy one and the cause of some delays to traffic. There is a light controlled pedestrian stage for crossing Valley Bridge Road.

South of Valley Bridge, cycle lanes are marked to either side of Broomfield Road and these continue all the way to the bottom of Broomfield Road at its junction with Parkway.

South of Valley Bridge the frontage is residential to both sides of the road for approximately 250m down to the local parade of shops on the west side of Broomfield Road to the north of Patching Hall Lane. This busy local shopping centre is serviced by a one way service road to the front of the shops. The direction of flow for this service road is north to south in order to prevent rat running from Patching Hall Road into Broomfield Road northbound as a way of avoiding the signals at the junction. Anecdotally there does seem to be some abuse of this circulation system though, particularly at peak times.

The traffic signals at the junction of Patching Hall Road are another source of delay to traffic, particularly that traffic using Patching Hall Lane. Pedestrian phases are included for all movements at this junction and it is a busy focal point of activity.



2.5 Patching Hall Lane to Parkway

South from Patching Hall Lane the character is again residential with development in depth to either side of Broomfield Road. Kings Road marks the start of a slight change in character going southwards with some community and commercial uses within the frontage. There is a Zebra Crossing immediately to the south of Kings Road.

The junction with Corporation Road with Corporation Road is another traffic signal controlled junction with pedestrian stages on all arms. This is another source of significant delays to traffic, particularly northbound on Broomfield Road in the evening peak period. There is a local parade of shops at the junction which lacks formal parking or servicing facilities to the front although some forecourt parking does take place.



South of Corporation Road there is some residential frontage and a petrol filling station on the west side but the dominating uses are the County High School for Girls on the east side and at the very bottom on the west the King Edwards Grammar School. Elms Drive situated immediately to the north of the junction with Parkway provides access to the Rectory Lane (west) long stay car park.

2.6 Accidents

