

Portobello Road, Sawston

Highway Safety Review

Draft Report

May 2010

Portobello Road, Sawston, Cambridgeshire.

Highway Safety Review Final Report

22 June 2010

Notice

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1. Introduction

Atkins Transport Planning has been asked by South Cambridgeshire District Council (SCDC) to undertake an independent highways review of planning application S/1480/09/F. The application is for the demolition of a current building on the site and replacement with a new building. The application is likely to be refused on highway safety grounds.

When considering a new access the issues to be considered may be summarised as:

- Increased traffic;
- Impact on other traffic and highway network; and
- The accident risk.

The purpose of this study is to review the site access arrangements, accident history of the site and to consider whether there are substantial reasons to refuse the application.

2. The Proposal

The site is located off of Common Lane in the village of Sawston, to the south of Cambridge. The site is on the north side of Common Lane accessed via a driveway from the lane. The access arrangements are not proposed to change as a result of the development. The site is used for the storage and processing of hides and skins. The business employs 20 people, which is not anticipated to increase as a result of the application.

The application is to replace one of the existing dwellings on the site with a new building for processing the raw materials. The current building, according to the application documentation, has a gross internal floorspace of 270m² with the new building having a proposed gross internal floorspace of 200m² leading to a net loss of 70m².

Though not formally laid out there is considered to be sufficient space on site for staff to park. Loading and unloading takes place within the site and this is anticipated to remain the case. The site is operational from 0600 to 1800 Monday to Friday and all day Saturday where the workload requires.

3. Accident Review

The previous three years accident data was requested from Cambridgeshire County Council for the study area. Maps showing the location of accidents were provided by Cambridgeshire County Council, which are included as Appendix A to this report.

There were a total of 14 accidents in the study area over the three year period of 2007 to 2009 inclusive. These are summarised in Table 3.1 below.

Table 3.1 – Annual Accident Summary

Severity	2007	2008	2009	Total
Slight	4	2	5	11
Serious	1	1	1	3
Fatal	0	0	0	0

The majority of accidents (79 percent) were slight with the remaining 3 (11 percent) serious. There have been no fatal accidents recorded in the previous three years. A more detailed summary of each accident is provided in Table 3.2.

Table 3.2 – Detailed Summary of Accidents

Ref No.	Location	Casualty/ Severity	Pedestrian/ Cyclist/ MC	Car/ HGV	Surface Condition	Light / Dark
116908	New Road	1 Slight	MC		Dry	Light
191308	New Road	1 Slight	MC		Wet Damp	Light
212907	Queensway	1 Serious, 1 Slight	Cyclist	Car (Taxi)	Dry	Light
228207	Granta Road	1 Slight	Pedestrian	Car	Dry	Dark
242508	High Street	1 Serious	Pedestrian	Car	Dry	Light
418807	Sunderlands Ave	1 Slight	Pedestrian	Car	Dry	Dark
426807	High Street	1 Slight	Pedal Cycle	Car	Dry	Light
554107	Link Road	1 Slight		2 Car	Wet / Damp	Light
142309	High Street	1 Slight	Pedestrian	Car	Dry	Light
304609	High Street	1 Slight	Pedestrian	Car	Dry	Light
269709	New Road	1 Slight		2 Car	Wet/ Damp	Light
320609	Churchfield Ave	1 Slight	Cycle		Dry	Light
325609	New Road	1 Slight	MC	Car	Dry	Light
2685809	Babraham Rd	1 Serious	MC		Frost/ ICE	Dark

In summary there are 14 accidents over the three years, involving 15 casualties. Three of the casualties are classified as serious whilst the remainder are classified as slight. Many of the collisions involved vulnerable road users (five pedestrians, three pedal cyclists and four motorcyclists). Two of the accidents involved reversing cars.

It is noteworthy that none of the accidents occurred on Common Lane, the location of the site access, or within close proximity to the junction of Common Lane and High Street and none of the accidents involved heavy goods vehicles.

Vehicles from the site may be expected to use the High Street and possibly New Road, which are each the site of four accidents, but since none of the accidents involved heavy vehicles and they are remote from the site access, this is considered not to be relevant to the site access and the operation of the existing development.

4. Access Review

4.1 Site Description and Visibility

Common Lane is a cul-de-sac, which is part residential in character, and part rural. It is subject to a 30 MPH speed limit. Access to Common Lane is gained from the High Street where it forms a priority cross road junction with Shingay Lane, which also a cul-de-sac. The High Street at this point is subject to a 20 MPH speed limit.

The site access is on the north side of Common Lane. Between the site entrance and High Street is residential, with narrow footways (approximately 1m wide) on either side of carriageway between 5m and 6m wide. At the access, and immediately to the west, Common Lane is locally widened to about 8m, which is used for parking. Parking is not restricted in the vicinity of the access. The access into the site is approximately 6m wide.

Visibility is restricted by hedges and undergrowth immediately behind the footway on either side of the access. The available visibility splay only has an “X distance” (the distance back from the give way point) of about 1 m looking west and about 2 m looking east. The “Y distance” (the visible distance along the kerb line from the back of the visibility splay) is relatively unlimited as the local road alignment is fairly straight.

There are two documents which give guidance as to appropriate extent of the visibility splay, the Highways Agency’s TD 41 and the Manual for Streets. TD 41 provides standards for trunk roads, whilst the Manual for Streets gives guidance for residential streets. The Manual for Streets is therefore considered to be the most appropriate here.

The Manual for Streets recommends that an X distance of 2.4 m should normally be used, and that a minimum of 2 m may be considered in some very lightly trafficked and slow speed situations. The recommendation for Y distance is based upon Stopping Sight Distance and a distance of 43 m is recommended for a 30 MPH road, which includes an allowance for bonnet length of approaching vehicles.

Whilst the recommendation for Y Distance is achieved by the exiting site access, the recommended minimum X distance is not achieved, falling short by approximately 1m looking west. Looking east the minimum X distance is achieved. Available remedial measures are limited, but it is possible to improve upon the existing situation.

The vegetation could be cut back to provide a minimum of two metres: it appears this could be maintained on the east side. However, as it is possible that that ownership of some or all of the vegetation is not in the control of the site owners, cutting vegetation back, particularly on the west side, may not be possible. A further alternative may be to provide road markings on the carriageway to narrow the carriageway slightly and advance the give way point.

Exiting vehicles may therefore need to encroach on the carriageway slightly before being able to determine whether it is safe to enter the carriageway. As drivers of goods vehicles have a higher eye height than car drivers, and the driving position is nearer the front of the vehicle, the encroachment would probably be less than for light vehicles, as they would have greater ability to see past and over any vegetation. The restriction on X Distance will mean that vehicles will have to exit the site with caution and that occasionally vehicles on Common Lane may need to take avoiding action for vehicles exiting.

As vehicle flows and speeds may be taken as very low, and the application does not proposed to intensify the existing use, this arrangement is unlikely to lead to accidents and may be considered acceptable. This is supported by the accident record which indicates no accidents have occurred at the site access in the previous 3 years.

4.2 Wider Access

From the High Street access can be made to the wider road network, via London Road to the south, Cambridge Road to the north, Mill Lane or New Road to the west and Babraham Road to the east. All except Babraham Road then connect to the A1301, and then to the national road network, including the nearby M11 and A11. The High Street carriageway is about 6m wide. There is a local narrowing just north of Common Lane. As vehicle usage from the site is not expected to change, no adverse effects on the High Street are anticipated.

Particular concern has been expressed at the junction of Common Land with High Street. An examination of the junction shows that there are no recorded accidents at this junction. Visibility is slightly restricted northwards, but there is good visibility looking southwards from the junction. Larger vehicles may need to manoeuvre carefully to avoid any over running, but the layout and operation of this junction does not present a increased safety risk, and is supported by the accident data.

4.3 Construction Traffic

The application does not contain any details on the nature of the construction traffic that is likely to be accessing the site during the build phase. However, we have been able to approximate the typical construction vehicles that may be required to access the site to deliver materials and equipment.

The site is currently accessed by large vehicles and the arrangements for such vehicles have been explored in section 4.1. and 4.2. The level of construction vehicles is likely to limited, both in number and duration, and it is considered that these will not have a detrimental impact upon highway safety. It might be considered appropriate to condition the application to provide details of where construction works will park on site to minimise any potential on-street parking in Common Lane.

Where any unusual loads or deliveries are anticipated the contractor should put in place appropriate measures, such as temporary traffic management and banks men, and notify if necessary Cambridgeshire Constabulary to provide traffic management.

5. Conclusion

The proposed application is for a replacement building on the site, which would lead to a small reduction in floor area of 70m². Staff levels, operation times and deliveries are not expected to change as a result of the proposal, therefore there is not expected to be an intensification of use of the access or surrounding highway network.

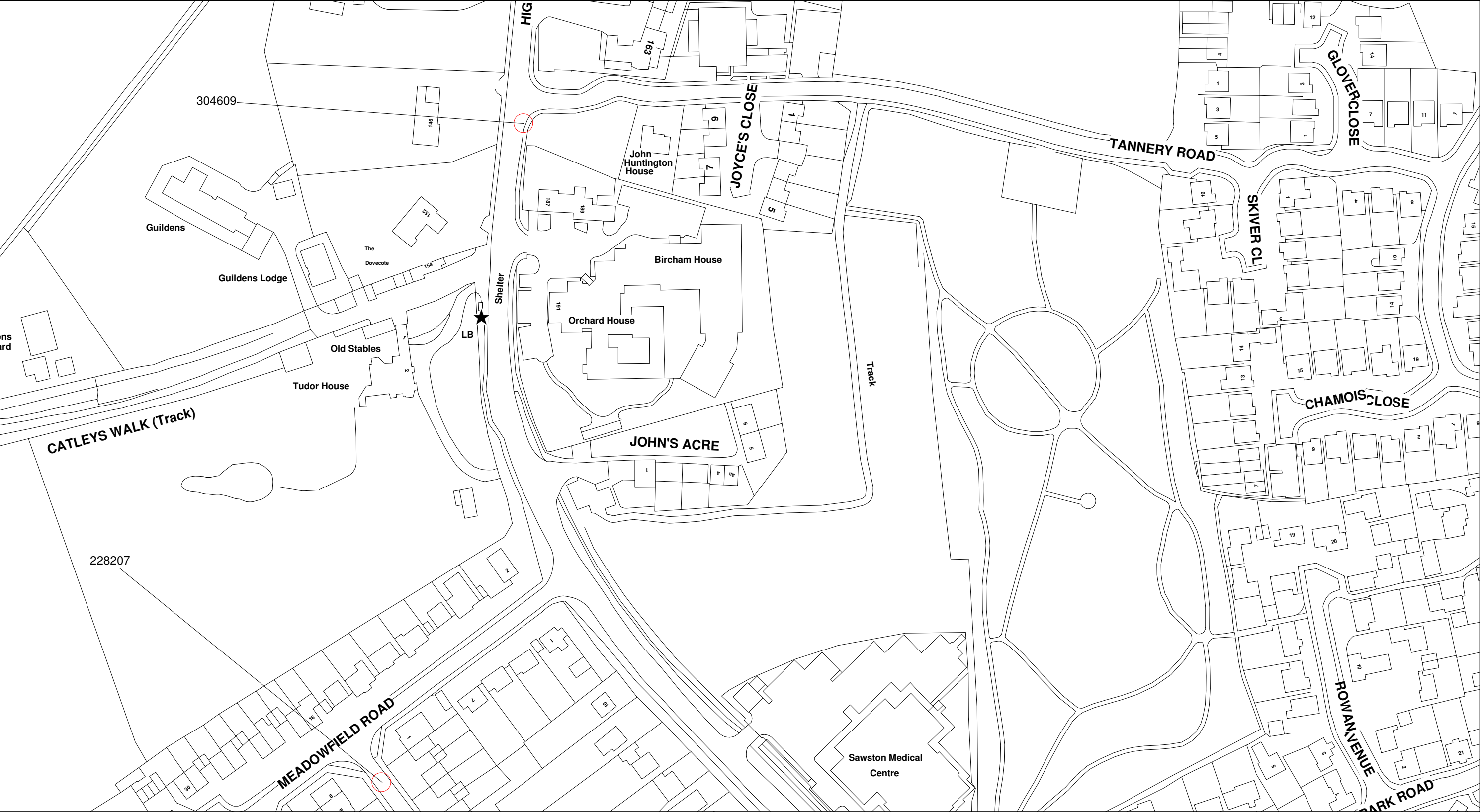
Site characteristic and accident records have been reviewed and are summarised in this note. Accident records show an average of just under 5 accidents per year in the surrounding area, which are not considered a significant accident problem. No accidents have occurred at the site access, or at the junction of Common Lane and the High Street. Additionally, none of the accidents have involved heavy vehicles.

Therefore it is considered that the site does not create an accident risk and the proposed developed will not result in an increased risk of accidents.

Having reviewed the access geometry it has been found not to present and any concerns for road safety or to adversely affect other road users. Visibility is limited, however this is not currently causing concern or resulting in accidents. Therefore, it is considered that the current access arrangement does not result in any road safety implications.

If required it is considered that improvements could be made to the access if considered necessary.

Appendix A : Accident Data Maps



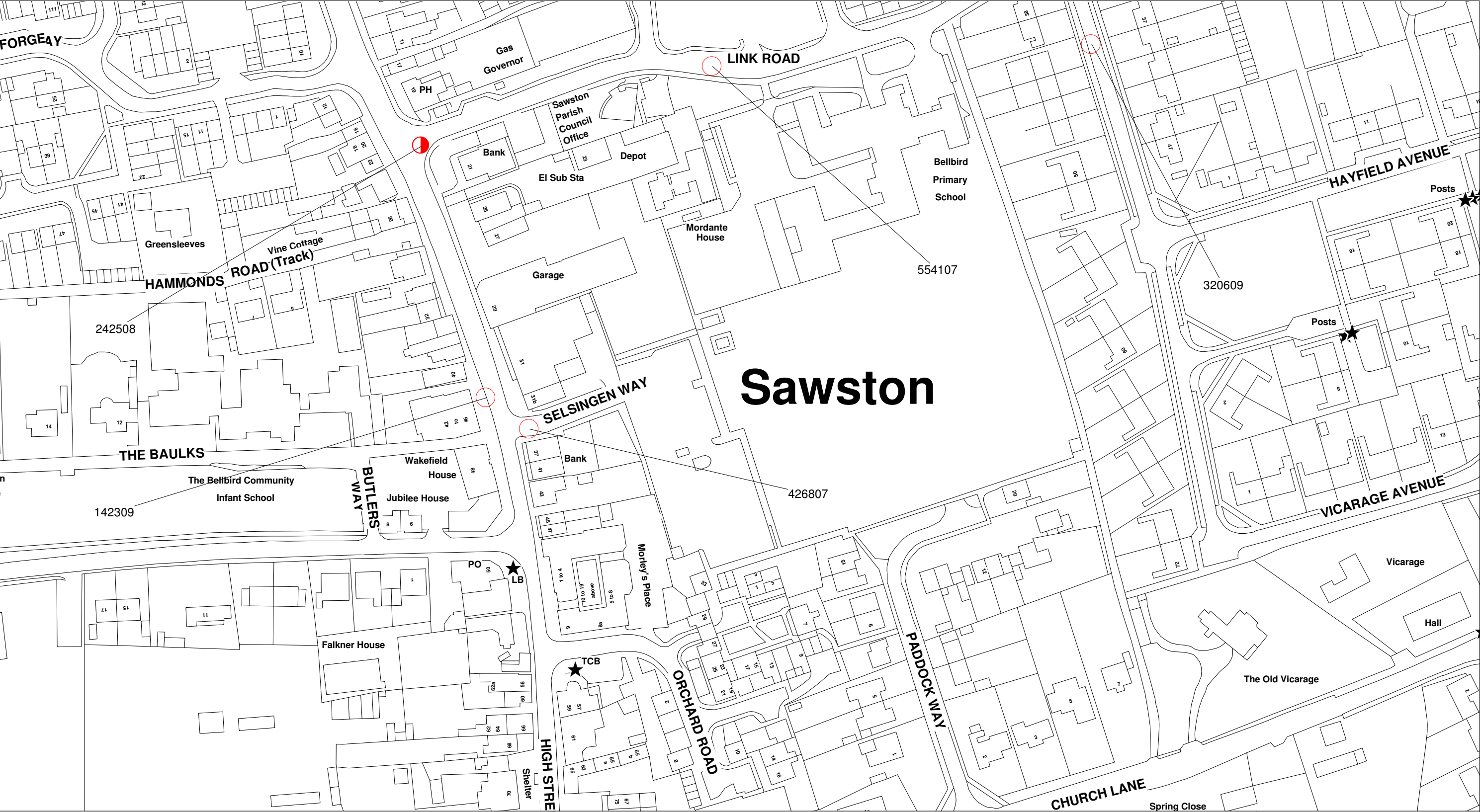
Sawston from 2007 to 2009
Part ONE

Verified Accidents	Fatal	Serious	Slight	Unverified Accidents	Fatal	Serious	Slight	Scale 1:1400	Date:07 May 2010
Environment and Community Services.									Deputy Chief Executive: Brian Smith, Cambridgeshire County Council, Cambridge

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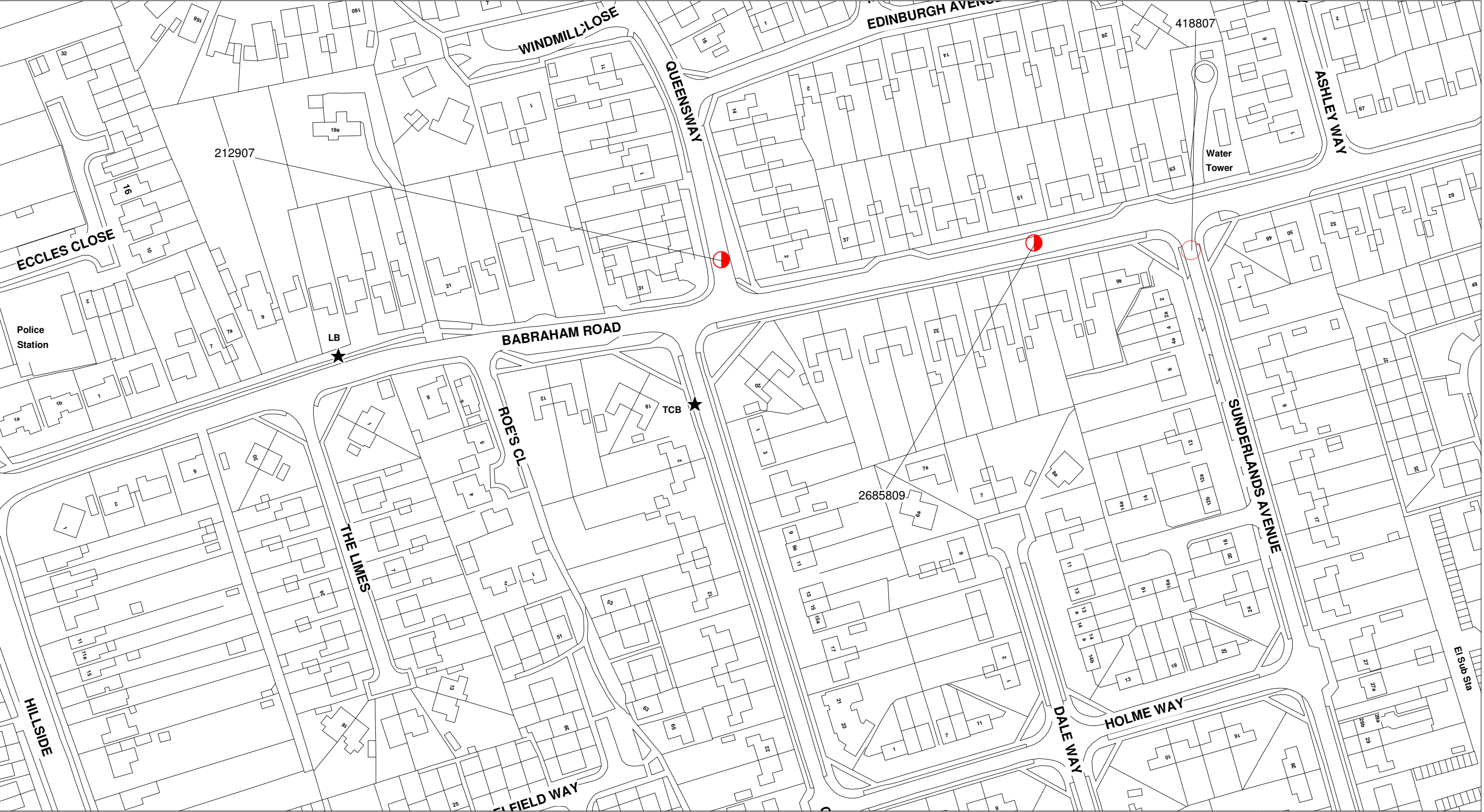


Sawston from 2007 to 2009
Part TWO

Verified Accidents	Fatal	Serious	Slight	Unverified Accidents	Fatal	Serious	Slight	Scale 1:1400	Date:07 May 2010
Environment and Community Services.									Deputy Chief Executive: Brian Smith, Cambridgeshire County Council, Cambridge

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Sawston from 2007 to 2009
Part THREE

<div>Verified Accidents</div> <div><div>Fatal</div><div>Serious</div><div>Slight</div></div>	<div>Unverified Accidents</div> <div><div>Fatal</div><div>Serious</div><div>Slight</div></div>	<div>Scale 1:1400</div> <div>Date:07 May 2010</div> <div>Environment and Community Services. Deputy Chief Executive: Brian Smith, Cambridgeshire County Council, Cambridge</div>
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Sawston from 2007 to 2009
Part FOUR

Verified Accidents	Fatal	Serious	Slight	Unverified Accidents	Fatal	Serious	Slight	Scale 1:1400	Date:07 May 2010
Environment and Community Services.									Deputy Chief Executive: Brian Smith, Cambridgeshire County Council, Cambridge

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