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Drayton Road, Abingdon

Safe Routes Review

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1 Introduction

1.1 Background

Taylor Wimpey proposes to construct a new development of 159 residential units to the south of Marcham Road, and east of Drayton Road in Abingdon, Oxfordshire. The location of the site is shown in Appendix A.

Jacobs Road Safety Team has been commissioned by Taylor Wimpey to undertake a review of road safety, predominantly for pedal cyclists and pedestrians, in the Drayton Road/ Marcham Road area of Abingdon and to consider safe routes for future school students travelling between the development site and local schools.

1.2 Appreciation of the Brief

A signal-controlled pedestrian crossing is currently located on Marcham Road to the west of the double mini-roundabout junction with Drayton Road and is used by students walking between the Caldecott area and Larkmead Secondary School, John Mason Secondary School and St Helen & St Katherine Primary School (all situated to the north of Marcham Road/ Ock Street), via Drayton Road. A short survey undertaken by Nationwide Data Collection to collect home postcodes from students travelling to school suggested that the main route travelled by students crossing Marcham Road was northwards up Drayton Road, before diverging towards the individual schools to the north. As there is an existing toucan crossing provided on Drayton Road a short distance to the north of its junction with Potenger Way, it was considered likely that students would make use of this facility to access the western footway of Drayton Road as part of their journey on foot because this is currently the most direct route to the Marcham Road crossing.

The new development is expected to increase the number of students travelling to the three schools so Taylor Wimpey have proposed the provision of an additional crossing facility on Ock Street east of its junction with Drayton Road to enable students to approach Marcham Road from the eastern side of Drayton Road. This is intended to remove the need for students to cross to the west side of Drayton Road before reaching Marcham Road, since part of the proposals include the relocation westwards of the existing crossing facility on Marcham Road, making it potentially less attractive to students on foot on their journeys to and from school.

The purpose of this study is to review safety along the route most likely to be travelled by students between Caldecott Road and the three schools to the north of Marcham Road and to consider the safety implications of changing pedestrian crossing arrangements on Marcham Road and Ock Street by providing an additional crossing to the east of the junction with Drayton Road and relocating the existing crossing westwards.



1.3 The Study Area

The study area was restricted to the Drayton Road/ Marcham Road route only and did not consider or assess other options or possible pedestrian or pedal cycle desire lines to and from the schools.

The extent of the study area is shown in Figure 1-1 below. It was restricted to the Drayton Road/ Marcham Road route only and did not consider or assess other options or possible pedestrian or pedal cycle desire lines to and from the schools. The following lengths of road were covered:

- Caldecott Road between Hermitage Road and Drayton Road;
- Drayton Road between Caldecott Road and Marcham Road;
- Spring Road between Marcham Road and Park Road;
- Ock Street between Spring Road and Conduit Road; and
- Marcham Road between Drayton Road and Colwell Drive.



Figure 1-1 Study Area

1.4 Report Structure

Section 2 presents the methodology employed to gather and assess the information required to undertake this study.

Section 3 presents the results of the desktop review of historical recorded personal injury collision (PIC) data for the five years to 31 July 2014. This analysis identified the main collision issues, with a focus on pedestrian and cyclist collisions (especially where these involved children) and highlighted areas of particular concern to be observed as part of the site visit. This section also presents the key findings and observations from the site visits. Although three local schools were contacted as part of this study and invited to provide input on any safety concerns they had, no responses were received.

A series of conclusions and recommendations with regard to the potential implications of the crossing proposals and how any potential safety issues identified might be addressed to improve safety for students travelling between the schools and the new development either on foot or by pedal cycle are set out in Section 3 of this report.



2 Methodology

2.1 Overview

This study comprised two main stages: a desktop study of background information and collision records followed by a site visit.

2.2 Stage 1: Desktop Study

A review of historical PIC data enabled the team to focus on a few particular areas where collisions had been identified, while an investigation of the websites for the three schools enabled the site visits to be scheduled during the most appropriate times to observe students on their journeys to and from school.

No additional traffic flow data or speed data was provided.

Each of the schools was contacted by email during the first week of the autumn term to request information on travel surveys and for copies of any policies with regard to walking or cycling to school, or definitions of 'safe routes'. In addition, schools were asked whether there were any specific safety concerns in the area which they would like to make us aware of and which may be pertinent to the study. A copy of this email has been included in Appendix B for reference purposes. No replies were received and so it was assumed that the schools had no current safety concerns in the area.

2.3 Stage 2: Site Assessment

Two visits were undertaken in the vicinity of Marcham Road on Tuesday 8 September 2104 between

- 8am and 10am (the library at John Mason School was open for private study from 8.15am, with students required to be on site by 8.25am). The start of the site visit was scheduled to observe students passing through the area in time to arrive at school at 8.25am
- 3pm and 4.15pm: (again although the library at John Mason School is open after the 3.10pm end of school day, it was assumed that many students depart immediately. The visit was extended beyond the end of the school day to provide time for students to travel from school to the study area

The site visits were undertaken during the second week of the autumn term. Term start dates were staggered for students in different years so the visits were planned for a time when all students were back at school and when new students would have had an opportunity to establish a route to school.

The site visits also included an assessment of crossing points, including sight lines, the level of use of existing facilities by students, the adequacy of footway widths, observations of the available provision for pedal cyclists and of the general condition of cycle lanes, footways and crossing facilities. Site photographs were taken to illustrate the report where appropriate.



3 Results of Investigations

3.1 Overview

This section presents the results of PIC analysis, the main findings from the site visit and comments on any school policy documents provided.

3.2 Review of Personal Injury Collision Data

Data for the five years to 31 July 2014 was collated for an area centred on the junction of Marcham Road/ Drayton Road and extending westwards to (but excluding) the junction with Colwell Drive, eastwards to (and including) the easternmost junction with Conduit Road), northwards along Spring Road up to and including the junction with Park Road, and south along Drayton Road to (and including the junction with Caldecott Road). In addition, the study area included a portion of Caldecott Road up to and including its junction with Hermitage Road/ Blackhall Road.

In the five years to 31 July 2014, there were a total of 31 reported PICs within the study area, of which five resulted in a serious injury collision and 26 resulted in slight injury. There were no fatalities.

Of the 31 PICs, 13 (42%) involved a pedal cyclist and three of these resulted in injury to a child under the age of 16 years. Of the three PICs that involved injury to a child pedal cyclist, two occurred on Ock Street (one resulting in serious injury) and one occurred at the junction of Spring Road/ Cemetery Road (slight injury).

Four PICs involved a pedestrian. Of the four PICs that involved a pedestrian, two resulted in injury to a pedestrian under the age of 16 years (one on Spring Road resulting in serious injury and one on Drayton Road resulting in slight injury). Both of the other two pedestrian-involved collisions occurred on Ock Street, to the west of the junctions with Victoria Street and Meadowside.

The majority of the collisions involving a pedestrian or pedal cyclist were distributed throughout the study area, although some patterns were noted, as follows:

- Two PICs involving pedal cyclists occurred on the eastbound carriageway of Ock Street:
- Two PICs involving pedal cyclists occurred on the westbound carriageway of Ock Street:
- Two PICs involving pedal cyclist and pedestrians (one PIC involved both) occurred at the junction of Cemetery Road and Spring Road – both PICs also resulted in a serious injury; and
- Three PICs involving pedal cyclists occurred on the northbound entry to the roundabout at Drayton Road and Caldecott Road.



3.3 Key issues identified during the site visit

3.3.1 Caldecott Road

Caldecott Road is a two-way, single carriageway route running east-west parallel to, and to the south of Ock Street. The route has traffic-calming features installed and a parallel service road runs to the south of the main carriageway to provide access to residential properties. The service road is separated from the main road by a wide grass verge and footways are provided on the north side of Caldecott Road only. The road is street lit and subject to a 30mph speed limit. A view of Caldecott Road is shown in Figure 3-1.



Figure 3-1 Looking east into Caldecott Road from the junction with Drayton Road

From Figure 3-1, it can be seen that traffic flows were light during the site visit (AM peak hour) and there was some parking along the route. Pedestrian and cyclist flows were also quite low. Signs provided at the western end of the road suggest that this forms part of the National Cycle Network (Route 5 signed towards Abingdon town centre) and so it would be expected that this route would be relatively well used by cyclists.

There were no obvious safety issues noted along the route itself, with footways sufficient for the level of pedestrian use observed, and traffic flows low and travelling at relatively low speeds as a result of traffic calming measures provided. This is reflected by the collision statistics, with only one reported injury collision occurring along the route between Drayton Road and its junction with Hermitage Road in the five year period to 31 July 2014. This collision occurred very close to the junction with Drayton Road after a cyclist entered Caldecott Road from the roundabout junction with Drayton Road and fell whilst attempting to access the footway, so it would be reasonable to consider this as having occurred at the junction instead.

It was concluded that there were no major safety issues likely to affect pedestrians or pedal cyclists associated with this section of the route.



3.3.2 The junction of Drayton Road and Caldecott Road

The roundabout junction with Drayton Road is a four arm junction located at the crest of an uphill approach from Caldecott Road. The approach to the junction from Caldecott Road is shown in Figure 3.2.





Figure 3-2 Looking west from Caldecott Road towards the junction with Drayton Road

The main traffic movements through the junction are north-south along Drayton Road. During the site visits very few vehicles were observed using the western arm, which provides access into an industrial area (no through route). From site observations, it appears that coloured surfacing was once provided to demarcate a route for circulating cyclists but this is now mostly worn away. The carriageway surface was also in poor condition, road markings were faded and signing was of mixed condition. These issues are illustrated in Figure 3-3.





Figure 3-3 Views of the junction of Caldecott Road with Drayton Road

Including the cyclist collision referred to in the Caldecott Road section of this report there were five reported injury collisions at this junction, of which three involved pedal cyclists and one involved a motorcyclist. This junction clearly presents issues for riders of two wheeled vehicles, but as already noted, it forms part of the signed cycle route to the town centre.

For pedestrians walking north-south past this junction, such as between the proposed development and the schools to the north, it is expected that the preferred route would be likely to be the eastern footway, simply because the walking route is slightly more direct. Pedestrians crossing Suffolk Way to the west of the roundabout are deflected westwards, off the direct desire line, by the alignment of the footway here. The northbound approaches to the junction along both sides of Drayton Road for pedestrians are shown in Figure 3-4.







Figure 3-4 Footways on Drayton Road to the south of the roundabout junction with Caldecott Road

It was concluded that measures to improve safety for pedal cyclists would be of benefit at this junction. Consideration might also be given to reducing the amount of pedestrian guard rail to improve the environment around the junction, although this would be subject to the council's own safety assessment and policy with regard to the provision of pedestrian guard railing.

3.3.3 Drayton Road

Drayton Road is a two-way single carriageway route which has street lighting and is subject to a 30mph speed limit. Footways are provided along both sides of the road and a toucan crossing facility is located to the north of the priority junction with Potenger Way, in the vicinity of the park entrance to an area known as the Ock River Walk. This walk route follows the River Ock east-west and crosses Drayton Road a short distance to the south of Marcham Road. Additional signal controlled crossing facilities are provided across Drayton Road beyond the study area, to the south of the junction with Caldecott Road.

Traffic levels in the morning peak hour were heavy and lengthy northbound queues were observed between the junction with Marcham Road and extending to the south of the crossing. This queue varied in length but cleared quickly outside the peak hour. A safety camera is located on Drayton Road in the vicinity of Ock Bridge Place, facing northbound.

Observations indicated that northbound pedestrians on Drayton Road preferred to use the eastern footway between Caldecott Road and this crossing point, before using the crossing to continue their northward journey on the western footway towards Marcham Road. A small proportion of pedestrians used the Ock River Walk route instead. The existing crossing was well used by both pedestrians and pedal cyclists.





Figure 3-5 Northbound queues on Drayton Road to the south of the junction with Marcham Road

Other than in the vicinity of the Ock River Walk which has short stretches of shared use footway/ cycleways in the vicinity of the toucan crossing and is mainly provided to facilitate east-west cyclist movements between different sections of the Ock River Walk, cyclists must use the carriageway when travelling north-south. There was evidence that cycle symbols and coloured surfacing were provided on Drayton Road across minor road junctions in the past but these were noted to be faded and in poor condition so would be unlikely to offer much in the way of safety benefit for cyclists.

Cycle provision in the vicinity of the crossing appeared confusing in places, with mixed messages provided for cyclists. In the vicinity of the toucan crossing, there is a short stretch of on-road cycle way, 'end of cycle route' signs to Diagram 965 on both footways to the north of the crossing and footways signed for shared use to the south of the crossing on Drayton Road to enable cyclists exiting the Ock River Walk to enter the carriageway to continue their journey southbound. This is shown in Figure 3-6.



Figure 3-6 Inconsistent provision for cyclists on Drayton Road

However, there is no similar facility for cyclists to safely enter the carriageway to continue northbound even though the route for cyclists is again on-carriageway and so the two routes are inconsistent.

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Between this crossing and the junction with Marcham Road to the north, the majority of school pedestrian movements were observed to be along the western footway, with both pedestrians and cyclists heading towards the existing crossing facility provided to the west of the double mini roundabout junction at Drayton Road/Marcham Road, even though this route was not signed for shared use. Footways on both sides of Drayton Road to the north of the crossing were of similar width and quality so the route chosen (east or west side of Drayton Road) would be unlikely to make any difference to the safety of pedestrians when travelling north-south to cross Marcham Road.





Figure 3-7 Northbound Cyclists using the western footway of Marcham Road

It was noted that footways were narrow on both sides of Marcham Road in the vicinity of the crossing and that a pinch point exists on the south western corner of Drayton Road and Marcham Road as a result of a low wall and pedestrian guard railing. However, cyclists were observed using this footway in preference to the carriageway: possibly because this becomes blocked by traffic queuing from Drayton Road, or because many of the cyclists were quite young and the complex nature of the double mini-roundabout junction may deterred them. Views of this pinch point are shown in Figure 3-8.





Figure 3-8 Pinch point on the southwestern corner of Drayton Road and Marcham Road

It was not obvious why the 'Cyclists Dismount' sign to Diagram 966 was provided on this corner because an 'End of Cycle Route' sign to Diagram 965 was located further to the south on the western footway of Drayton Road, for cyclists travelling northbound towards this location. Footways on both sides of Drayton Road over the bridge to the south of the junction are currently too narrow for conversion to shared use.



It is recommended that cycle markings are refreshed along Drayton Road and the provision of cycle/ pedestrian signing may be of benefit in the vicinity of the Ock River Walk crossing point. There may also be some benefit in rationalising cycle signing where the need to dismount is either very obvious, or may be ignored in any case.

3.3.4 Marcham Road/ Drayton Road/ Ock Street junction

A double mini roundabout junction is currently provided here and although this appeared to work well outside school journey times, the junction was congested and traffic blocked back on the northbound Drayton Road and westbound Ock Street approaches for periods around 8-9am and again around 3.30pm.

A pelican crossing currently provided a short distance to the west of the junction, was noted to be well used by both pedestrians and cyclists for the journey to school. Use of the crossing by students on their journey to school is seen in Figure 3-9.



Figure 3-9 Existing crossing used by pedestrians crossing Marcham Road

It was noted on site that there were a few issues associated with the crossing in its current location, as follows:

- Footways were narrow on both sides of Marcham Street at the crossing point, which restricted the available waiting space
- Footway widths on both sides of Marcham Road leading to and from the crossing were adequate for the volume of pedestrian traffic using them for the majority of the time, but were congested for very short periods during school journey times
- The lights were called frequently over short periods during school journey times, which caused a build-up of traffic travelling west from both the south, and east
- The crossing was used by cyclists even though it is not a toucan facility

To the east of the junction, a smaller number of students were observed crossing the junction between traffic queues, using the refuge island provided. Although some approached this point along the eastern footway on Drayton Road, the majority had diverted from Drayton Road to the south, onto the Ock River Walk, and approached the crossing from the east, having re-emerged onto Ock Street a short distance to the east. With students crossing between two lanes of traffic at the junction, it was surprising to note that there had been no PICs involving pedestrians at this location during the study period, as these traffic streams travelled at different speeds. High risk crossing movements at this location are shown in Figure 3-10.





Figure 3-10 Crossing movements to the east of the junction

A different walk pattern was observed for the return journey at approximately 3.30pm, however, with a much higher proportion of students choosing to cross Ock Street to the east of the double mini-roundabout junction with Drayton Road than in the morning, with many continuing their journey south via the Ock River Walk route. A small convenience store is located on the south side of Ock Street close to the entrance to the River Walk and which is open during the post-school period. A number of students used this facility on the route home from school and so could be the cause of the different travel patterns observed at this time. This is illustrated in Figure 3-11.



Figure 3-11 Increased crossing movements to the east of the junction in the post-school period

It is therefore concluded that there is a pedestrian desire line within the area of the proposed new signal-controlled crossing during the afternoon return journey from school.



3.3.5 Marcham Road

The proposals include the relocation of the existing signal-controlled crossing facility westwards, away from the junction, to the vicinity of flats Nos 9-16 on the south side of Marcham Road The approximate location of the relocated crossing is shown in Figures 3-12 and 3-13.



Figure 3-12 Looking west towards the proposed new crossing site





Figure 3-13 Visibility to the east and west from the north side of Marcham Road in the vicinity of the new crossing point

It was noted that the proposed crossing had good visibility in both directions and that the footways were wider than at the current crossing location. However, the textured surfacing on the northern footway would require resurfacing and an existing Advanced Direction sign would need to be relocated so as not to obstruct visibility of and at the crossing. Most critically, however, is that there are concerns that pedestrians travelling between Drayton Road and Spring Road would be much less likely to make use of the facility because of the length of the detour involved.

There are currently no facilities for cyclists to the west of the junction and footways are not signed for shared use, although cyclists were seen to use the northern footway to travel westbound. Of the four collisions which took place on Marcham Road to the west of the junction, one took place at the existing crossing (shunt collision resulting in slight injury but not involving any pedestrians or pedal cyclists), two took place further to the west at the junction with Ock Mill Close (one involving a pedal cyclist) and the final collision occurred at the entrance to the Unicorn School (a specialist day school for pupils aged 3 to 16) and also involved a pedal cyclist. No pedestrian injury collisions were reported.

There may be benefit in improving provision for cyclists along Marcham Road.



3.3.6 Ock Street

Ock Street is a single carriageway road with marked cycle lanes, bus stop laybys on both sides of the road, central hatching to protect vehicles turning right into Victoria Road to the north and a wide uncontrolled crossing immediately to the west of the junction with Victoria Road, which is designed to be for the use of both pedestrians and pedal cyclists, with cyclists signed across Ock Street from both sides of the crossing. There is a signed cycle route to the Ock River Walk to the south which links to Ock Street via a residential cul-de-sac on the south side of the road and the footway is signed for shared use with cyclists along the south side of Ock Street. Views of Ock Street in the vicinity of the uncontrolled crossing are shown in Figure 3-14.



Figure 3-14 Uncontrolled crossing on Ock Street: Looking north, east beyond the study area, and west towards the junction with Drayton Road respectively

Of the nine collisions which took place along Ock Street during the study period, three occurred at this crossing point, of which two involved vulnerable road users: a cyclist was seriously injured on entering the carriageway from the shared use route, and a pedestrian was slightly injured whilst crossing. The third collision at this location involved a single westbound vehicle.

Although there were two collisions at the junction with Meadowside, there were no obvious common factors in these and the remaining collisions were scattered along the route.

In all, five of the nine collisions along this stretch of Ock Street involved pedal cyclists (two involved children) so even though a signed route and on-road cycle lanes are provided, there may be a cyclist safety issue to be addressed here.

It was noted that cycle signing at the exit from the Ock River Walk route was potentially confusing, with short stretches of shared use facilities provided at either end of the uncontrolled crossing, 'give way' markings provided for cyclists and 'End of Cycle Route' signs provided on the north side of Ock Street to the west of the crossing point. It is assumed that cyclists travelling east from the Ock River Walk route would need to re-join the carriageway. For cyclists approaching the crossing from the east there are both on-road and shared use off-road facilities provided.







Figure 3-15 North side of Ock Street on the approaches to the crossing





Figure 3-16 South side of Ock Street between the Ock River Walk link and the crossing point

The provision of more specific cycle destination signing may be of benefit to cyclists following the signed routes, than the number of generic shared use and 'End of Route' signs to Diagram 965 located on the footway here.

Part of the scheme proposal includes the provision of a new signal-controlled pedestrian crossing facility on Ock Street close to the junction with Drayton Road. Site observations already suggest that a desire line exists and that the new facility would be likely to be used by school students, particularly at the end of the school day. However, the site visit raised a few concerns with the proposed location, as follows:

- The northern footway was narrow which reduced the amount of available waiting space for pedestrians
- The signal equipment associated with the crossing may reduce the available width further and potentially create an obstruction which might encourage poor crossing behaviour
- Students would be more likely to use the eastern footway of Spring Road to approach the crossing from the north, which would require them to negotiate a pinch point on the north eastern corner of the junction created by a combination of narrow footways, street furniture and overhanging vegetation, making it more likely that they would walk on the carriageway in the vicinity of the mini roundabout
- A high wall on the north-east corner of the junction restricts visibility round the corner for traffic turning left from Spring Road to Ock Street, which could increase the potential for sharp braking and shunt collisions.

Images which illustrate the concerns set out above are provided in Figure 3-17.

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Figure 3-17 narrow footways and a pinch point between Spring Road and the proposed crossing point

Footways on the south side of the road were wider however and provided an easier link to the Ock River Walk route. Although there was a property entrance on the south side of Ock Street in very close proximity to the proposed crossing point, vehicles emerging will only be able to turn left because of the proximity of the splitter island associated with the junction and so would not conflict with pedestrians using the crossing. The southern footway of Ock Street in the vicinity of the proposed crossing location can be seen in the images included in Figure 3-18.





Figure 3-18 Looking west along Ock Street towards the proposed crossing point

Other issues which were considered were the distance of the proposed crossing to the give way lines of the existing junction and the potential for the facility being located off the desire line. The Department for Transport's (DfT) 2010 miniroundabouts good practice guide recommends that signal controlled crossings on the approach to mini roundabouts should be 'used with care to avoid confusion from the green signal'. However, the distance between the crossing point and entry to the roundabout appeared sufficient in this instance but the scheme should be subject to a formal Road Safety Audit at an early stage in the design process.

With regard to the pedestrian desire line, those approaching the crossing from the south along the eastern footway of Drayton Road may attempt to take a direct route across the splitter island provided but the crossing will be on the desire line for those using the Ock River Walk or travelling via the convenience store. The provision of a textured or landscaped surface in the splitter island may encourage use of the new crossing as well as improving the attractiveness of the environment around the junction.



It is therefore concluded that a new crossing provided here would need additional footway space on the north side of Ock Street and would need careful signing so that drivers approaching from the north were made aware of the crossing before entering the junction.

3.3.7 Spring Road

As the majority of students used the controlled facility to the west of the junction for their journey to school, the majority of students continuing north along Spring Road used the western footway. However, a different pattern of movements was observed for the return journey, with numbers more evenly spread between the two footways. Both footways were of a similar width but neither was sufficiently wide along its length to enable conversion to shared pedestrian and cycle use. The difference in pedestrian movements on Spring Road in the morning and afternoon school journeys can be seen in Figures 3-19 and 3-20.



Figure 3-19 Northbound AM journeys mostly on the western footway



Figure 3-20 Southbound PM journeys along both footways

Traffic levels were relatively light on Spring Road during both site visits; although no formal crossing facilities were provided, sufficient gaps in traffic were available for students to be able to cross and no evidence of pedestrian-vehicle conflict was observed. During the five year study period, however, there was one serious collision involving a child pedestrian. This occurred to the north of the junction with Cemetery Road at the northern end of the study area. There have been no other reported PICs along Spring Road since 2010. Jacobs have been advised that a school crossing patrol is provided further to the north, beyond the study area but this was not verified on site.

A plan which highlights the main issues identified and sets out the proposed recommendations is included in Appendix C for reference purposes.



4 Summary conclusions and recommendations

4.1 Conclusions

The review of this area has led to the following conclusions:

- That the existing signal-controlled crossing facilities are well used and that there is a clear need to continue to provide a signal-controlled crossing close to the junction with Drayton Road to enable pedestrians to cross Marcham Road
- That the crossing in its current location delays traffic travelling westbound when approaching from the south and east
- Pedestrians would be less likely to use the crossing on Marcham Road to the west of Drayton Road if it was relocated westwards further from the junction
- That there was an evident pedestrian desire line to the east of the Marcham Road/ Drayton Road junction as well as to the west of it and that this is more pronounced in the afternoon post-school period. A crossing provided on Ock Street would also be likely to be used by students on their journeys to and from school

Therefore it is concluded that in terms of providing a safe route for pedestrians and cyclists to cross north-south, it would not really matter whether a facility was to be provided to the east or west of the junction with Drayton Road, but that provision of a crossing to the east of the junction with Drayton Road might cause less blocking back at the junction during busy periods.

4.2 Recommendations

With regard to ensuring that providing a crossing facility on Ock Street to the east of the junction with Drayton Road is safe for pedestrians, implementation of the following supplementary measures is recommended:

- Provide advanced warning of the new crossing to drivers approaching from Spring Road
- Provide landscaping on Ock Street at the junction with Drayton Road in conjunction with the relocated crossing, to encourage use of the crossing and discourage shortcuts using the splitter island. Increase footway width on the north side of Ock Street by the crossing to reduce pinch points and provide sufficient space to accommodate signal heads and other items associated with the new crossing

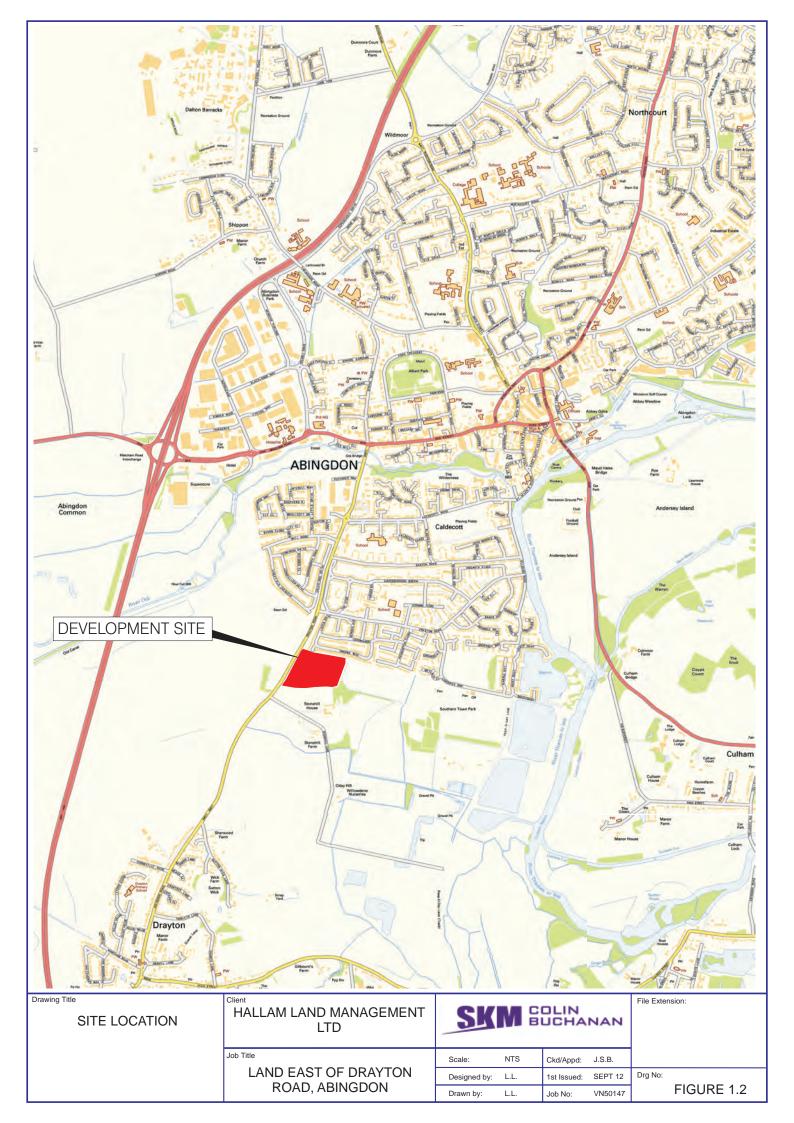


With regard to improving safety for pedestrians and cyclists within the Drayton Road/ Marcham Road/ Spring Road/ Ock Street area, the following additional recommendations are made:

- Refresh cycle markings and improve cycle signing on the Caldecott Road/ Drayton Road roundabout
- Refresh cycle markings across side roads on Drayton Road
- Provide direction signing for pedestrians and cyclists at the Ock River Walk crossing and facilitate access to on-road facilities for northbound cyclists
- Review the need for pedestrian guard railing throughout



Appendix A	Location of Development Site





Appendix B	Correspondence with Schools

Yeo, Katrina

From: Yeo, Katrina

Sent: 02 September 2014 11:18 **To:** 'communications@shsk.org.uk'

Subject: School journey assessment : Request for information

Dear sirs,

We have been commissioned to review safety of the existing school walk/ cycle routes in the vicinity of Drayton Road, Marcham Road, Ock Street and Spring Road, in connection with a proposed development on land to the east of Drayton Road. The objective of this study is to identify any possible improvements which could be made to improve the walking/ cycling environment, and review any safety issues associated with the new crossing on Drayton Road and possible relocation of the existing crossing on Marcham Road.

As St Helen and St Katherine School is close to the study area, we are writing to you primarily to let you know in advance that myself and Renata Barnes will be in the area on Tuesday 9 September between the start and end of the school day (we will be wearing high visibility jackets so should be easy to identify), but also to ask if you may be able to provide us with any information which could assist us with our safety review as follows, please:

- -Does the school have any information on the number or proportion of pupils who normally walk or cycle to school that you could share with us please? The results of any travel surveys would be particularly helpful.
- -Does the school have a Travel Plan, and if so, would it be possible to have a copy please?
- -Does the school have any policies on walking or cycling to school, or on how a 'Safe Route to School' is designated and if so, would it be possible for us to have a copy, please?

Finally, and probably most importantly, are you aware of any safety concerns or issues which either staff, pupils or parents/ guardians have expressed about the route to school and which you think should be included in our study?

Many thanks, and any information you may be able to provide would be very gratefully received. We look forward to hearing from you.

With kind regards,

Kate

Kate Yeo, MSc CMILT MCIHT MSoRSA| Jacobs | Associate | Road Safety | + 44 207 378 2883 | + 44 207 939 1418 fax | Katrina. Yeo@jacobs.com | www.jacobs.com

Yeo, Katrina

From: Yeo, Katrina

Sent: 02 September 2014 11:10

To: 'office.4125@larkmead.oxon.sch.uk'

Cc: Barnes, Renata

Subject: School journey assessment : Request for information

Dear sirs,

We have been commissioned to review safety of the existing school walk/ cycle routes in the vicinity of Drayton Road, Marcham Road, Ock Street and Spring Road, in connection with a proposed development on land to the east of Drayton Road. The objective of this study is to identify any possible improvements which could be made to improve the walking/ cycling environment, and review any safety issues associated with the new crossing on Drayton Road and possible relocation of the existing crossing on Marcham Road.

As Larkmead School is nearby, we are writing to you primarily to let you know in advance that myself and Renata Barnes will be in the area on Tuesday 9 September between the start and end of the school day (we will be wearing hi visibility jackets so should be easy to identify), but also to ask if you may be able to provide us with any information which could assist us with our safety review as follows, please:

- -Does the school have any information on the number or proportion of pupils who normally walk or cycle to school that you could share with us please? The results of any travel surveys would be particularly helpful.
- -Does the school have a Travel Plan, and if so, would it be possible to have a copy please?
- -Does the school have any policies on walking or cycling to school, or on how a 'Safe Route to School' is designated and if so, would it be possible for us to have a copy, please?

Finally, and probably most importantly, are you aware of any safety concerns or issues which either staff, pupils or parents/ guardians have expressed about the route to school and which you think should be included in our study?

Many thanks, and any information you may be able to provide would be very gratefully received. We look forward to hearing from you.

With kind regards,

Kate

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Yeo, Katrina

From: Yeo, Katrina

Sent: 02 September 2014 11:41

To: 'office.4126@johnmason.oxon.sch.uk'

Subject: School journey assessment: Request for information

Dear sirs,

We have been commissioned to review safety of the existing school walk/ cycle routes in the vicinity of Drayton Road, Marcham Road, Ock Street and Spring Road, in connection with a proposed development on land to the east of Drayton Road. The objective of this study is to identify any possible improvements which could be made to improve the walking/ cycling environment, and review any safety issues associated with the new crossing on Drayton Road and possible relocation of the existing crossing on Marcham Road.

As John Mason school is nearby, we are writing to you primarily to let you know in advance that myself and Renata Barnes will be in the area on Tuesday 9 September between the start and end of the school day (we will be wearing high visibility jackets so should be easy to identify), but also to ask if you may be able to provide us with any information which could assist us with our safety review as follows, please:

- -Does the school have any information on the number or proportion of pupils who normally walk or cycle to school that you could share with us please? The results of any travel surveys would be particularly helpful.
- -Does the school have a Travel Plan, and if so, would it be possible to have a copy please?
- -Does the school have any policies on walking or cycling to school, or on how a 'Safe Route to School' is designated and if so, would it be possible for us to have a copy, please?

Finally, and probably most importantly, are you aware of any safety concerns or issues which either staff, pupils or parents/ guardians have expressed about the route to school and which you think should be included in our study?

Many thanks, and any information you may be able to provide would be very gratefully received. We look forward to hearing from you.

With kind regards,

Kate

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Appendix C	Issues and Measures Plan

