



HIGHWAYS AND ACCESS APPRAISALS

for

St Albans City and District, Delivering
Secondary School Expansion

Prepared on behalf of
Hertfordshire County Council
Hertfordshire Property

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Section 1 - Introduction

Stomor Ltd has been commissioned by Hertfordshire Property, Hertfordshire County Council, to undertake Highways and Access Appraisals of various sites in St Albans City and District in consideration of provision of additional secondary school places in the region.

Assessments of potential school sites in Section 2 have identified the capacity of the local highway infrastructure to accommodate a new 6 to 8 form of entry (FE) secondary school. Assessments have looked into the feasibility of achieving an access into the site, pedestrian and cycle links plus existing public transport infrastructure.

Assessments of existing school sites in Section 3 have involved review of existing traffic conditions in the vicinity of the sites, the suitability of existing accesses and a review of existing pedestrian and cycle links plus existing public transport infrastructure.

The summary in Section 4 provides our overall review of the potential school sites in terms of their suitability for accommodating of a new 6-8FE school in Highways and Access terms.

The full set of associated drawings is provided in Section 5.

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Section 2 – Potential School Sites

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St Albans - Potential Site C - Land north west of St Albans Road

To be read in conjunction with drawing ST-2151-7

General

Site C is located to the northwest of the B651, St Albans Road, between St Albans and Sandridge.

Existing Road Network

The site is surrounded by agricultural uses to the northeast and northwest. The southern part of the southeast boundary abuts the rear gardens of properties on St Albans Road, with a nursery/garden centre located within the site, midway along this boundary. The northern part of the southeastern boundary abuts St Albans Road. The southwestern boundary of the site abuts a wooded area and large residential property with the railway line beyond.

St Albans Road is a 40mph road with a footway along its northwestern side. There is a level difference of approximately 800mm to 2m between the road level of St Albans Road and the footway which runs adjacent to the south eastern site boundary. The southwestern side of the road has a steep bank up to properties which are served by footways at a high level or residential service roads, also at a higher level than the road. St Albans Road appears to be in a cutting along much of its length from the nursery towards the northeast. St Helliers Road is a private road to the north east of the site on the opposite side of St Albans Road, which has a wide bellmouth in poor condition, rising steeply to provide rear access to properties along St Albans Road and also leading to an existing public footpath which runs eastwards.

To the north, St Albans Road continues into Sandridge. To the south, St Albans Road meets Sandridge Road, Beech Road and Marshalswick Lane at a signal controlled junction. Sandridge Road continues southwest towards the town centre. Beech Road runs west forming the northwestern section of the St Albans outer ring road. Marshalswick Lane runs east, forming the northeastern section of the ring road.

Strategic routes to and from the site will be taken via the signal controlled junction to the south, from Sandridge to the north, or from Sandringham Crescent which meets St Albans Road near to the southern corner of the site. Sandringham Crescent serves the Marshalswick area on the northeastern side of St Albans.

St Albans Road is relatively busy during the AM and PM peak periods as it is on a main link into St Albans from Wheathamstead, Sandridge and other villages to the north of St Albans.

The junction between St Albans Road, Marshalswick Lane, Sandridge Road and Beech Road can be very busy during the peak periods. Analysis of this junction is likely to be required to determine whether capacity is available to accommodate significant additional traffic associated with a secondary school.

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Access Arrangements

There is an existing vehicular access to the nursery which serves an associated car park for staff and visitors. In this location the site levels are slightly higher than St Albans Road levels but the access into the existing car park is easily flat enough to achieve reasonable gradients for pedestrians and vehicles.

Access to a potential school site in this location would be taken directly from the B651, St Albans Road in the location of the existing access to the nursery. Provision of a new access may be feasible if required, if the existing access is removed, but in consideration of level differences, the existing access appears to be in a suitable location.

Use of the existing access would minimise costs associated with services diversions, assuming that the underground utilities are laid at a depth suitable for the existing vehicular crossover.

Use of the existing access would also reduce impact on the existing hedgerow which runs along the frontage of the site. It would appear that suitable vision splays can be achieved without any need to remove part of the hedgerow.

Pedestrian/Cycle Access

The most suitable location for a pedestrian access to the site would be via the existing maintenance/agricultural access between numbers 116 and 118, St Albans Road, as it is likely that the majority of pedestrians will arrive from south of the school. This would enable a significant segregation between pedestrian movements and vehicle movements into and out of the site.

A pedestrian crossing point may be required on St Albans Road to the north of Sandringham Crescent, as it is likely that a significant number of pupils walking will be travelling from the Marshalswick area of St Albans, to the east of St Albans Road. There is currently no footway along the southeastern side of St Albans Road adjacent to the site, but there is unlikely to be a significant desire line along this route.

Public Transport

The nearest bus stops are located directly adjacent to the site on St Albans Road, serving routes 304 and 620.

These routes provide access to and from Colney Heath, Oaklands, Hatfield and St Albans.

Conclusion

The B651, St Albans Road would appear to be a suitable road from which to serve a secondary school although analysis of the potential impact of school traffic on the junction between St Albans Road, Marshalswick Road, Sandridge Road and Beech Road is likely to be required. As the school is on the edge of the town, there is potential for a significant car generation rate associated with staff and pupils.

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There is an existing access into the site currently serving the nursery/garden centre within the site boundary, with associated parking. Use of this access will minimise works associated with underground services and minimise impact on adjacent hedgerows.

A pedestrian access should be taken into the site between numbers 116 and 118 St Albans Road. A formal crossing facility may be required to the north of Sandridge Crescent as it is anticipated that a significant volume of pedestrians would originate from east of St Albans Road.

It would not be appropriate for vehicles to stop on St Albans Road to drop off pupils. Therefore a parking and circulation facility would need to be provided within the site.

St Albans - Potential Site D - Land south of House Lane

To be read in conjunction with drawing ST-2151-8

General

Site D is located to the south of House Lane and to the east of residential properties off Gibbons Close and Highfield Road in Sandridge.

Existing Road Network

The site is bounded by residential areas of Sandridge to the northwest and north east, with fields generally to the southwest and south east. A footpath link running directly south of the site links into the northern corner of St Albans in the Marshalswick residential area.

House Lane runs from northwest to southeast, from the B651 High Street in Sandridge to Sandringham Crescent in St Albans. From Woodcock Hill to Sandringham Crescent, the road is country lane in nature. Within Sandridge itself, the road serves a number of residential cul de sacs and crescents.

The junction between House Lane and High Street is a simple tee-junction. The Rose and Crown pub is located on the southeastern corner of the junction, abutting the rear edge of the footway. This building restricts visibility to the left significantly when exiting House Lane. Visibility to the right is reasonably good.

House Lane itself is approximately 6m wide between St Albans Road and the site, and would appear to be suitable for school traffic. To the southeast of the site the road width varies, generally between 4.5m and 4.8m wide, but with frequent much wider areas for passing. This road would not be ideal for school traffic, although could potentially accommodate a reasonable increase in traffic.

High Street is a 30mph road with a footway along both sides within the village. To the south, High Street runs into St Albans Road and meets Sandridge Road, Beech Road and Marshalswick Lane at a signal controlled junction. Sandridge Road continues southwest towards the town centre. Beech Road runs west forming the northwestern section of the St Albans outer ring road. Marshalswick Lane runs east, forming the northeastern section of the ring road.

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Access to and from the site will be taken via the signal controlled junction to the south, from Sandridge to the north, or from House Lane, via Sandringham Crescent.

High Street and St Albans Road are relatively busy during the AM and PM peak periods as they are on a main link into St Albans from Wheathamstead, Sandridge and other villages to the north of St Albans. House Lane is generally quiet although considering its country lane nature, a significant flow of vehicles was observed.

The signal controlled junction between St Albans Road, Marshalswick Lane, Sandridge Road and Beech Road can be very busy during the peak periods. Analysis of this junction is likely to be required to determine whether capacity is available to accommodate additional traffic associated with a secondary school.

The alignment of House Lane may need to be considered further in relation to the likely traffic generation along the country lane part of the road and any potential improvements that would be required. The Highway Authority has a policy against altering the nature of country lanes, but safety improvements may be acceptable.

There is an existing unclassified road link named Jersey Lane, which runs from House Lane to Sandringham Crescent through the centre of the site. Although classed as a road, access is not permitted for cars and motorcycles, so effectively provides a traffic free foot/cycle link between the Marshalswick area of St Albans and Sandridge.

Access Arrangements

There is an existing agricultural access onto the site, towards the northern corner, in the vicinity of Anson Close. This is currently gated.

The most suitable location for an access onto the site would appear to be approximately half way between Anson Close and Leonards Crescent.

Provision of a new access off House Lane will result in removal of much of the existing hedgerow which runs along the frontage of the site. Part of the hedge will need to be removed to enable construction of a relatively wide access for cars and coaches, plus associated vision splays.

Pedestrian/Cycle Access

The most suitable location for a pedestrian access to the front of the site would be in the northern corner of the site in order to link to the existing footway network. The footway along the southern side of House Lane currently terminates at the site boundary. Therefore improvements will need to be made to continue this footway into the site. As it is likely that pupils will be dropped off or picked up on House Lane in the vicinity of the site, we would recommend that footways should be continued along the frontage of the site.

It is likely that a significant number of pupils walking will be travelling from the Marshalswick area of St Albans. Jersey Lane provides a direct foot/cycle link from Sandringham Crescent to the school, so it is likely that this would be a popular route to the school. A 2m wide bitmac path is currently in place along its length with grass verges and hedges to both sides. This route is currently lit. Serious consideration will need to be given to maximising the safety and security of

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pupils using this route as it is secluded in parts and may not be desirable particularly during dark winter evenings.

Other routes on foot from St Albans to this site will be a significant distance. Therefore it is anticipated that a considerable proportion of pupils attending a school in this location will travel by car.

Public Transport

The nearest bus stops are approximately 350m – 400m from the site, located on St Albans Road. These stops serve routes 304 and 620 which provide access to and from Colney Heath, Oaklands, Hatfield and St Albans.

Conclusion

The B651, High Street and the western section of House Lane would appear to be suitable roads from which to serve a secondary school. However, we would have some concerns over the capacity of the southern half of House Lane to accommodate the likely increase in traffic flows. It is likely that this road will provide the most direct link to the school from the northeast side of St Albans. Therefore, analysis of likely traffic generation via High Street and via the southern section of House Lane will need to be undertaken, with consideration given to highway safety along House Lane and its capacity to accommodate the predicted flows. Analysis of the potential impact of school traffic on the junction between St Albans Road, Marshalswick Road, Sandridge Road and Beech Road is also likely to be required. As the school is on the edge of the town, there is potential for a significant car generation rate associated with staff and pupils.

Improvements may be required at the junction between House Lane and Sandridge Road in order to improve visibility to the left when existing House Lane. Consideration would be given to realignment of the junction to enable increased vision if practicable.

There is an existing agricultural access adjacent to the north western corner of the site. It is envisaged that a new access would be provided approximately halfway between Anson Close and Leonards Crescent.

Improved footway facilities are likely to be required along the site frontage. This, along with construction of a new access into the site would require removal of much of the existing hedgerow along the site frontage.

There is an existing foot/cycle route from Sandridge Road to House Lane, named Jersey Lane, which passes through the centre of the site. This will provide an excellent link to a potential school site and help to maximise the number of pupils walking or cycling to the school. However the route is secluded in parts, so consideration will need to be given to the safety of pupils using this link, particularly when travelling alone after normal school travel time, having attended after school clubs for example. It may be possible to make sufficient improvements, such as a higher standard of lighting and clearance of vegetation, to maximise the safety and security of pupils sufficiently.

It is unlikely that the Highway Authority will accept the principle of parents dropping off pupils on House Lane and surrounding roads within the public highway. Therefore a parking and circulation facility is likely to need to be provided within the site.

St Albans - Potential Site G - Land south of Sandpit Lane

To be read in conjunction with drawing ST-2151-10

General

Site G is located to the south of Sandpit Lane on the eastern edge of St Albans.

Existing Road Network

The site is bounded by Sandpit Lane along the northern boundary with fields to the south, east and west. Residential development is located to the north of Sandpit Lane and to the west of the adjacent fields.

Sandpit Lane runs from west to east, from the B651 Sandridge Road, north of the town centre to Coopers Green Lane and Oaklands Lane on the eastern edge of the town.

Along the northern side of Sandpit Lane a residential service road is in place which serves properties on Sandpit Lane. Turning movements into and out of private properties are therefore minimised to two locations along the main through route. Barnfield Road is a residential link road which runs from Sandpit Lane adjacent to the northeast corner of the site to The Ridgeway, which forms a loop road off Marshalswick Lane around residential areas to the north.

Jersey Lane is a former country lane which now forms a foot cycle link through the Marshalswick area of St Albans. This runs roughly parallel with Sandpit Lane, between Sandpit Lane and The Ridgeway.

Sandpit Lane is accessible from various directions but is not on one of the major routes into and out of St Albans. It is anticipated that the majority of traffic arriving at the site could approach from the west, but there are various routes to Sandpit Lane from Hatfield Road and from Sandridge Road, so traffic should be well distributed round the local road network.

Sandpit Lane itself would appear to be suitable for traffic associated with a Secondary School.

The road is within a 40mph limit along most of the frontage of the school. The 30mph limit starts near to the northwest corner of the site.

Access Arrangements

Access to a potential school site would be from Sandpit Lane, which is approximately 6.75m wide. However, the ground rises steeply from Sandpit Lane towards the south, which could result in the need for significant earthworks to achieve a suitable access and parking arrangement.

There is a gap in the tree line along the northern boundary of the site, approximately half way along the site frontage, which would appear to be the most suitable position for a site access if the level differences within the site can be overcome. Such an access position would not conflict with the two service road accesses on the opposite side of Sandpit Lane.

A segregated in/out arrangement would appear to be feasible along Sandpit Lane which would help accommodate turning movements associated with pick up and drop off.

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We would recommend that the 30mph limit be extended to east of the potential school site in order to reduce speeds in the vicinity of the school access.

Pedestrian/Cycle Access

The most suitable location for a pedestrian access would also be from Sandpit Lane. However, there is no existing footway along the south side of Sandpit Lane. This would need to be provided, with links to surrounding footway facilities if a school is provided in this location. Provision of a new access and footway facilities will have a significant impact on hedgerow and trees in along the northern boundary of the site, unless the footway could be situated slightly to the south within the site.

A formal crossing is likely to be required on Sandpit Lane to cater for pupils travelling from the Marshalswick area of the town.

There are no formal cycle lanes along Sandpit Road which would serve the school directly. However, Jersey Lane and the residential service roads along the northern side of Sandpit Lane would accommodate some cycle traffic relatively safely.

Public Transport

The nearest bus stops are located on Sandpit Lane, adjacent to Rose Walk to the west of the site. These stops serve route S3 which serves various parts of St Albans. To the north, several services are available along The Ridgeway, including route numbers S1, S2, S3, S4, 713 and 884, with route S9 available from Marshalswick Lane further to the west.

Conclusion

Sandpit Lane would appear to be a suitable road from which to provide an access to a potential secondary school site. The site is relatively well located in terms of its distance from residential areas, which would help to minimise the volume of traffic generated by travel to and from school.

There would appear to be potential for a significant distribution of traffic on the surrounding road network which would minimise the impact on any one particular location.

It is unlikely that the Highway Authority will accept the principle of parents dropping off pupils on Sandpit Lane and surrounding roads within the public highway. Therefore a parking and circulation facility is likely to be required within the site. There is scope to provide a segregated in and out arrangement which would help with the management of vehicle movements into and out of the site.

However, there is a considerable rise in levels from Sandpit Lane towards the centre of the site. As a result, we have some concerns regarding the feasibility of providing suitable access and parking arrangements relative to a school building on the northern part of the site. This will need to be clarified by means of a topographical survey in due course.

A new footway would need to be provided along the south side of Sandpit Lane adjacent to the site, with crossing facilities installed for the benefit of pupils travelling on foot from the Marshalswick area. This, along with provision of a new access could have a significant impact

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upon existing hedgerows and trees along the northern boundary of the site. It may be possible to locate the footway facilities within the site to minimise this impact.

St Albans - Potential Site K - Land south of Holyrood Crescent, St Albans

To be read in conjunction with drawing ST-2151-9

General

Site K is located to the south of Holyrood Crescent in the south west corner of St Albans.

Existing Road Network

The site is triangular in shape; bounded by Holyrood Crescent along the northern boundary and the railway line which runs from St Albans Abbey Railway Station to Park Street Railway Station along the south eastern boundary. The A414 runs along the south western boundary of the site.

Adjacent to the eastern corner of the site is the Park Street Roundabout which joins the A414, North Orbital Road with the A5183 Watling Street, the A405 North Orbital Road and the M10 Motorway.

Holyrood Crescent is approximately 6.1m wide and runs from northeast to southwest from Abbots Avenue West to Watling View.

Watling View runs northwards from Holyrood Crescent to Vesta Avenue, which links to the A5183, Watling Street. There are several existing schools served by Watling View and indirectly via Holyrood Crescent. Watling View is approximately 5.5-6m wide, with laybys and some traffic calming speed humps adjacent to the existing schools. Observations suggest that the road flows relatively well and as a result provision of a new school off Holyrood Crescent would be feasible.

Abbots Avenue West continues east to Cottonmill Lane linking to various residential roads in the southern part of St Albans.

Cottonmill Lane runs from Old London Road in the centre of St Albans, south and southeast past the site into Mile House Lane. Mile House Lane runs east and meets the A1081, London Road at a signal controlled junction. Mile House Lane winds its way through a series of buildings which were formally associated with the Sopwell Mill. Through this section, the road is very narrow, with sharp bends and very poor forward visibility, and with significant traffic flows throughout the peak travel periods. The remainder of this route up to Napsbury Lane is country lane in nature and barely wide enough for two cars to pass.

Access Arrangements

There are no vehicular access routes along the south western or south eastern boundaries, which are constrained by a trunk road and a railway, respectively.

The only feasible point of access to a potential school site would be from Holyrood Crescent, which is approximately 6.1m wide with potential for widening along its south side if necessary. The ground falls away from Holyrood Crescent towards the south, but we would consider that

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an access could be achieved between Creighton Avenue and Mitchell Close. There would be some impact upon trees along the southern side of Holyrood Crescent.

Creighton Avenue, Mandeville Drive and Abbots Avenue West experience a significant volume of parking during the peak periods associated with Mandeville JMI School. Due to the potential for staggered school start and finish times, this is not expected to significantly affect the flow of vehicles to and from the potential secondary school site, but would enforce the need for a pick up and drop off facility within the site for parents' use.

A segregated in/out arrangement would appear to be feasible along Holyrood Crescent which would help accommodate turning movements associated with pick up and drop off.

Pedestrian/Cycle Access

The most suitable location for a pedestrian access would also be from Holyrood Crescent.

Public footpath 47 runs directly from northwest to southeast through residential areas to the north of the site and across the northeastern corner of the site. This would provide a direct link to the site from a wide area. Part of this footpath runs along the frontage of Mandeville JMI school to the west of Mandeville Drive, which experiences significant levels of on street parking and pedestrian flows. A raised crossing point may be required on Creighton Drive to assist the potentially significant number of pupils crossing the road from Mandeville Drive and footway facilities adjacent to the JMI school may need to be improved.

Just to the south of the above residential area, within the site, the public footpath cuts across open grass and comprises a worn path. It then joins an unmade track further south towards the railway and becomes quite secluded. It is likely that improvement works to this section of path will be required as part of the school proposals.

The link under the railway to the east of the site may be used by pupils walking from the area immediately to the east of the railway line. Land ownerships may need to be established to determine whether there is a valid right of way under the railway as it would appear from the definitive maps that public footpath 48 to the east of the railway does not link to public footpath 47 to the west of the railway.

There is a 3m wide foot cycleway linking Park Street to the western corner of the site on Watling Street. However this passes through a 2.3m wide subway under the A414 which is lit but is isolated and may not be suitable for school pupils.

Public Transport

The nearest bus stops are located on Holyrood Crescent, directly adjacent to the site. These stops serve route S5 which serves various parts of St Albans. Routes S3 and S4 are accessible to the north.

Conclusion

Holyrood Crescent is the only location from where access can feasibly be taken into the site. This road is approximately 6.1m wide which may be suitable for the traffic associated with a secondary school.

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A significant increase in traffic along Mile House Lane could be problematic due to the limited width and poor forward visibility, particularly as it passes Sopwell Mill. However, it is expected that traffic flows to a site in this location could be well distributed between Watling Street, Cottonmill Lane, Mile House Lane and residential roads to the north of the site.

Watling View experiences significant traffic generation associated with the existing schools served by this route. However, the road is relatively wide, with laybys and traffic calming along its length. From initial observations, it would appear that Watling View and Holyrood Crescent would be capable of accommodating additional traffic associated with a secondary school.

As there is no existing secondary school in the vicinity of this site, it is anticipated that a significant proportion of pupils could originate from relatively close to the school, which could help to minimise the number of pupils travelling to school by car.

We would strongly recommend that the start and finish times associated with the secondary school are staggered away from the start and finish times associated with the surrounding schools, to minimise the impact of additional school traffic on the local roads.

There is a significant level of on street parking along Creighton Avenue associated with drop off and pick up at Mandeville JMI School during the peak periods. We would recommend that a raised crossing be provided where footpath 47 crosses Creighton Avenue to cater for the potential significant flow of pedestrians using this route to access the site off Holyrood Crescent.

The most suitable access location would appear to be between Creighton Avenue and Mitchell Close, although we have identified that a segregated in/out arrangement in the vicinity of this point of access may be most appropriate to accommodate parents' drop off and pick up within the site. The associated access points would need to be staggered with the lcu-de-sac entrances opposite. It is unlikely that the Highway Authority will accept the principle of parents dropping off pupils on Holyrood Crescent and surrounding roads within the public highway. Therefore a parking and circulation facility is likely to need to be provided within the site.

Rights of way under the railway may need to be determined along with potential for safety and security improvements along the route between Butterfield Lane and Holyrood Crescent. The Route of Footpath 47 should also be reviewed for safety and security in terms of construction, lighting and conspicuity.

St Albans - Potential Site L - Land adjoining Butterfield Lane, St Albans

To be read in conjunction with drawing ST-2151-9

General

Site L is located to the south of Butterfield Lane and to the east of the railway line which runs from St Albans Abbey Railway Station to Park Street Railway Station.

Existing Road Network

The site is bounded by Butterfield Road along the northern boundary and the railway line which runs from St Albans Abbey Railway Station to Park Street Railway Station along the western boundary. The A414 runs along the southern boundary and to the east is the River Ver.

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Butterfield Lane runs southwest from Cottonmill Lane and Mile House Lane, abutting the railway at its southwestern end. Gorham Drive runs northwards from Butterfield Lane, meeting Abbots Avenue at its northern end. Abbots Avenue meets Cottonmill Lane at its eastern end and runs west as Abbots Avenue West linking to various residential roads in the southern part of St Albans.

Cottonmill Lane runs from Old London Road in the centre of St Albans, south and southeast past the site into Mile House Lane. Mile House Lane runs east and meets the A1081, London Road at a signal controlled junction.

Immediately to the east of its junction with Cottonmill Lane and Butterfield Lane, Mile House Lane winds its way through a series of buildings which were formally associated with the Sopwell Mill. Through this section, the road is very narrow, with sharp curves and very poor forward visibility, and with significant traffic flows throughout the peak travel periods. The remainder of this route up to Napsbury Lane is country lane in nature and barely wide enough for two cars to pass.

Cottonmill Lane to the north of the site is approximately 7m wide, with some on street parking. Gorham Drive is in the region of 7.3m wide, also with on street parking.

However, Butterfield Lane is approximately 4.8m wide, which would not be suitable for significant two-way traffic flows associated with a school.

Access Arrangements

There are no vehicular access routes along the western, southern or eastern boundaries, which are constrained by a railway, a trunk road and a river, respectively.

The only feasible point of access to a potential school site would be from Butterfield Lane. However, as Butterfield Lane is only 4.8m wide, we would recommend that the access be located opposite, or in the region of Gorham Drive, so as to encourage the majority of traffic along Gorham Drive rather than Butterfield Road. A stagger would probably be preferred to avoid any issues associated with a crossroads which would be formed if the access continued directly through from Gorham Drive. It is noted that this arrangement is unlikely to be supported by the residents of Gorham Drive as there would be a significant increase in traffic expected along this residential street.

Pedestrian/Cycle Access

The most suitable location for a pedestrian access would also be from Butterfield Lane.

There are public footpath links from the south, adjacent to the River Ver, and from the west, via a track which runs under the railway line linking Butterfield Lane to Holyrood Crescent. The latter could potentially be an important link to the site as it would provide a more direct route to the school from much of the south east side of St Albans. Land ownerships may need to be established to determine whether there is a right of way under the railway as it would appear from the definitive maps that public footpath 48 to the east of the railway does not link to public footpath 47 to the west of the railway.

Just to the south of Holyrood Crescent, the public footpath cuts across open grass and comprises a worn path. It then joins an unmade track further south towards the railway and

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becomes quite secluded. It is likely that improvement works to this section of path will be required as part of the school proposals.

There would not appear to be any suitable cycle routes or lanes in the vicinity of the site.

The public footpath which runs under the A414, North Orbital Road to the south of the site would not appear to serve any specific residential area in terms of providing a route to the school. However, this links to public footpath routes which run through the centre of the site. Observations confirm that this route is currently totally unsuitable for school related use.

Public Transport

The nearest bus stops are located on Abbots Avenue. These stops serve routes S3 and S4 which serve various parts of St Albans. Route S5 is available from Holyrood Crescent to the west of the railway, accessible via the public footpaths and existing track under the railway.

Conclusion

Butterfield Lane is the only location from where access can feasibly be taken into the site. This road is only 4.8m wide which would not be suitable for the considerable volume of traffic associated with a secondary school. A significant increase in traffic along Mile House Lane could be problematic due to the limited width and poor forward visibility, particularly as it passes Sopwell Mill.

However, Cottonmill Lane and Gorham Drive are 7m and 7.3m wide respectively, and would be suitable for accommodating school traffic, although it is recognised that this would have a significant impact on the residents of Gorham Drive.

Traffic generation is likely to be split to a degree via Gorham Drive, Cottonmill Lane and Mile House Lane. Provision of an access towards the Cottonmill Lane end of Butterfield Road would have less impact on the residents of Butterfield Lane and Gorham Drive, but could encounter problems associated with its narrow width and the flood plain of the River Ver. However, it may be possible to widen Butterfield Lane in order to accommodate school traffic.

Provision of an access in the vicinity of Gorham Drive would have a significant impact on residents. It is also noted that the existing junction between Gorham Drive and Abbots Avenue West may need some improvements in order to safely accommodate the predicted increase in traffic.

There may be scope to provide an access in both locations, to help disperse traffic associated with the school, minimising the overall impact in either location.

The existing footpath to the west of the site could potentially be an important link from areas to the west of the railway line. Rights of way under the railway may need to be determined along with potential for construction, lighting, safety and security improvements along the route between Butterfield Lane and Holyrood Crescent.

Traffic generation along Mile House Lane will have to be carefully considered to determine whether the road has capacity to accommodate the predicted increase in vehicles. The Highway Authority's views on this link would need to be sought at an early stage to determine whether a potential increase in traffic in this location will be acceptable.

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It is unlikely that the Highway Authority will accept the principle of parents dropping off pupils on Butterfield Lane and surrounding roads within the public highway. Therefore a parking and circulation facility is likely to need to be provided within the site.

Harpenden - Potential Site A - Land east of Luton Road, Harpenden

To be read in conjunction with drawing ST-2152-3

General

Site A is located to the east of the A1081, Luton Road on the northern edge of Harpenden. The site is split into two areas with Cooters End Lane running between Area A and Area B. Area A is the larger of the two areas to the southeast of Cooters End Lane, bound by Luton Road to the southwest and Ambrose Lane to the northeast. Area B is located to the northwest of Cooters End Lane.

Existing Road Network

The site is bounded by Luton Road along the southwest boundary with fields to the northwest and northeast. Residential development is located to the southwest of Luton Road and along the southeast boundary of the site, associated with Bloomfield Road. The northeast side of Site A is bound by Ambrose Lane, which provides a link to Bloomfield Road and continues onto Hollybush Lane to the north of the town centre. Ambrose Lane serves a private hospital and The Kings School, which is an independent primary school.

The A1081 runs from northwest to southeast, from junction 10a of the M1 motorway in the southwest corner of Luton, running through the centre of Harpenden and continuing on to St Albans.

Luton Road is within a 40mph limit as it approaches Harpenden from the northwest. The 30mph limit begins just to the southwest of the Cooters End Lane junction. Cooters End Lane itself is within a derestricted speed limit zone.

There is an existing right turn lane facility on Luton Road serving Cooters End Lane. Wide splays are in place within the highway boundary at the entrance to Cooters End Lane, and the road is of sufficient width to accommodate two way traffic for approximately 20m from its junction with Luton Road. From this point, the road narrows to a single track country lane with passing places.

Cooters Lane runs north, northeast from Luton Road to the B653, Lower Luton Road which runs from Luton, across the northeast side of Harpenden to Wheathampstead. A fairly significant traffic flow is generated along the road at present due to the link onto the B653 and access to The Kings School. We do not consider that the road would be suitable for a significant increase in traffic and HCC highway policy does not generally allow improvements to be carried out on country lanes if they would affect the nature of the road.

There are generally no footways along the northeast side of Luton Road, except in the location of a bus stop to the northwest of the Cooters End Lane junction.

Access Arrangements

SECTION 2 – POTENTIAL SCHOOL SITES

HCC highway policy restricts the provision of new accesses off A roads within the county. Therefore a new access to serve the school off the A1081, Luton Road is unlikely to be acceptable.

As Cooters End Lane forms an existing junction, there may be scope to provide an access off the south western end of the road. Positioning of this access would need to be optimised in relation to its distance from the junction with Luton Road and avoiding any significant works on Cooters End Lane. We would anticipate that the access should be at least 30m from the junction with Luton Road, which would involve some improvements at the southwest end of Cooters End Lane.

Although it is anticipated that the majority of vehicles associated with a potential school site in this location would be likely to arrive via Luton Road, there could potentially be a significant increase in traffic along Cooters End Lane, which is not suitable for this purpose.

An alternative access could possibly be provided off Ambrose Lane in the northeast corner of the site. However access to the site could impact heavily upon residents of Bloomfield Road, Hillside Road and Ambrose Lane. Bloomfield Road is 6.1m wide and could potentially accommodate school related traffic. However, at the junction between Bloomfield Road and Luton Road, visibility to the right when exiting Bloomfield Road is poor.

The existing right turn lane junction arrangement between Luton Road and Cooters End Lane would appear to be suitable for school related traffic. Analysis of the existing junction and predicted vehicle movements would be required to determine whether any improvements are required to accommodate the predicted significant additional vehicles

Our main concern would be whether vehicles could be effectively moved into the site without hold ups which could potentially back up into Luton Road. In this respect, the site access would be better provided into site B, which would avoid right turn movements from Cooters Lane into the site. If access is provided into Site A, vehicles travelling southwest along Cooters End Lane could block vehicles turning right into the site, and with the access only 30m from the junction with Luton Road, there would be potential for vehicles to back up onto Luton Road.

It would not be acceptable for parking associated with the school to occur on the A1081, Luton Road or other adjacent roads. Therefore, a facility will need to be provided within the site to accommodate drop off and pick up movements. However, these movements will exacerbate potential issues regarding access into the site close to the junction with Luton Road.

We would recommend that the 30mph limit be extended to west of the potential school site in order to reduce speeds in the vicinity of the school access.

Pedestrian/Cycle Access

We would recommend that the pedestrian accesses to the site are segregated from the vehicular access, assuming that the vehicular access is taken from the southwest end of Cooters End Lane. There is a pedestrian crossing phase on the existing traffic signal controlled junction between Luton Road and Roundwood Lane, which would be suitable for use by school pupils. We would recommend that the main pedestrian access to the site is located near to these traffic lights in order to encourage pupils to cross Luton Road using the signal controlled junction.

SECTION 2 – POTENTIAL SCHOOL SITES

Footways along the northwest side of Luton Road will need to be improved to suit anticipated pedestrian desire lines.

It may be feasible to provide a rear pedestrian access to the school in the northeast corner of the site, to encourage pupils from the east of the school to travel on foot. However, this would potentially encourage drop offs in this location which would increase traffic flows on Ambrose Lane and Cooters End Road, which would not be recommended. Possible provision of a footway from the southwest end of Bloomfield Road running north on the east side of the A1081 Luton Road to the traffic lights and proposed pedestrian access would obviate the need for such an access on the north side of the site.

There are no formal cycle lanes adjacent to the site. However, the former Nicky Line Railway runs from northeast to southwest to the southeast of the site. There may be scope to provide a cycle lane along Luton Road, although it would be necessary to link this to nearby cycle routes and would be subject to significant safety assessments.

Public Transport

The nearest bus stops are located directly adjacent to the site on Luton Road. These stops serve routes 202, 321 and 636 which serve Dunstable, Luton and Leagrave as well as Harpenden, Watford, Rickmansworth and Hatfield.

Conclusion

Luton Road experiences high traffic flows during the AM and PM peak periods, with significant queuing at signal controlled junctions leading into the town. However, the road would be suitable for accommodating traffic associated with a school as it would have minimal impact on residential areas.

It would appear technically possible to achieve an access off Cooters End Lane, providing the Highway Authority will accept minor improvements to the southwestern end of the road to achieve a sufficient distance for the access from Luton Road. It will be necessary to ensure that any access arrangements do not generate queuing onto Luton Road. Therefore, the access route into the site should be clear of parking or turning facilities for a significant length to enable vehicles to access the site unobstructed.

It is anticipated that the majority of traffic approaching the site will travel directly along Luton Road from either direction. Therefore, analysis of surrounding junctions including the signal controlled junctions will be necessary to ensure that they can accommodate the additional flows.

We would not recommend that any access arrangements encourage vehicular use of Cooters End Lane or Ambrose Lane as these roads are not suitable for a significant increase in traffic. However, due to potential congestion on Luton Road, it is possible that the above roads could be used as a rat run avoiding congestion on the main route through Harpenden. Analysis of the surrounding junctions will identify whether the additional traffic flows will cause significant enough delay to those travelling by car that they would be likely to use Ambrose Lane and Cooters End Lane as a quicker route.

Some increase in traffic on the country lanes surrounding the site will be inevitable.

SECTION 2 – POTENTIAL SCHOOL SITES

It is unlikely that the Highway Authority will accept the principle of parents dropping off pupils on Luton Road and surrounding roads within the public highway. Therefore a parking and circulation facility is likely to need to be provided within the site.

In order to ease the flow of traffic off Cooters End Lane into the site, it would appear that access would be better provided into Area B to allow vehicles to turn directly left into the site. A right turn into the site is more likely to generate queues back onto Luton Road.

A new footway would need to be provided along the northeast side of Luton Road adjacent to the site. An existing pedestrian phase on the signal controlled junction between Roundwood Lane and Luton Road would be a suitable location for pedestrians to cross Luton Road adjacent to the site. We would recommend that a pedestrian access be located in the vicinity of this junction to avoid interaction between pedestrians and vehicles at the main vehicular access to the school site. This would also provide a pedestrian access into the site closer to the main residential areas.

We considered that provision of a pedestrian access off Ambrose Lane would encourage parents to drop off in this area and continue along the country lanes. Therefore, to avoid encouraging additional vehicles along this route, we consider that a rear pedestrian access would not be suitable.

A suitable pedestrian link will be required between Area A and Area B, which would enable pupils to move between the sites. As Cooters End Lane experiences a significant volume of traffic considering its single track nature, careful consideration will need to be given to crossing facilities, to ensure that suitable visibility can be achieved between pedestrians and vehicles. It would seem appropriate to extend the 30mph limit to the west of the site on Luton Road and along Cooters End Lane. Although provision of a speed hump would not be appropriate on Cooters End Lane as a derestricted road, it may be possible to install a raised crossing point if the 30mph limit is extended along the road.

From initial inspection, we would consider that the existing right turn lane junction between Cooters End Lane and Luton Road would be suitable for school related traffic, and would avoid disruption to normal traffic flows. However, this would be subject to detailed junction analysis.

Harpenden - Potential Site F - Land north of Lower Luton Road, Harpenden

To be read in conjunction with drawing ST-2152-4

General

Site F is located to the north of the B653, Lower Luton Road on the north east side of Harpenden. Batford is immediately to the northwest.

Existing Road Network

The site is bounded by the B653, Lower Luton Road along the southern boundary with fields to the east and north. Common Lane runs along the western boundary of the site, joining Lower Luton Road at a mini roundabout adjacent to the southwest corner of the site. Batford is located to the northwest of Common Lane.

SECTION 2 – POTENTIAL SCHOOL SITES

Common Lane runs northwards towards Kimpton, with Links to Gustard Wood and other surrounding villages. Adjacent to the site the road is in the order of 7.3m wide with direct access to residential properties along the western side of the road and two road links into Batford, via Batford Road and Milford Hill. Adjacent to the northeast corner of the site, Common Lane becomes country lane in nature as it continues north.

The B653 runs from Luton to Wheathampstead, passing through Lea Valley just to the east of the site, and continues east towards the A1M at Stanborough.

Lower Luton Road rises in level from its junction with Common Lane to the east. The high point of the road is located approximately at the southeast corner of the site.

Lower Luton Road experiences significant traffic flows during the peak periods.

On the west of the site, Lower Luton Road and Common Lane are within a 30mph speed limit zone. To the east of the junction, Lower Luton Road is within a 40mph zone towards Lea Valley.

Access Arrangements

A new access off the B653 Lower Luton Road would appear to be difficult due to limited visibility in the vertical plane. An access would need to be located far enough east to achieve sufficient stagger from Crabtree Lane and Common Lane, but vision becomes worse closer to the high point of the road at the southeast corner of the site.

An access from Common Lane would appear to be possible, to the north of its junction with Batford Road. In this location the access would be on the outside of a bend, therefore maximising vision, and there is no hedgerow along the site boundary. An access located further to the north would result in removal of existing hedgerow.

Pedestrian/Cycle Access

Pedestrian access to the site could be taken from Lower Luton Road or from Common Lane. Public Footpath 27 runs through Batford linking to Common Lane in the vicinity of the proposed vehicular access point. A controlled crossing facility may be necessary on Common Lane as the majority of pupils are likely to originate from west of the site.

There is also potential for a number of pupils on foot to travel via Crabtree Lane. Therefore, consideration may need to be given to provision of an additional crossing on Lower Luton Road. There are existing pedestrian crossings on Lower Luton Road to the west of the site and it may be necessary to link the controlled crossings to ease the flow of traffic.

There are no existing cycle lanes in the vicinity of the site.

Public footpaths 27a and 62 run along the eastern boundary of the site.

Public Transport

The nearest bus stops are located directly adjacent to the site on Lower Luton Road. These stops serve routes 45, 365, 366, 620, 636, and 866. Route 620 also runs along Common Lane.

Conclusion

SECTION 2 – POTENTIAL SCHOOL SITES

Lower Luton Road experiences high traffic flows during the AM and PM peak periods. However, the road would appear to be suitable for accommodating traffic associated with a school as it would have minimal impact on residential areas.

It would appear feasible to achieve an access off Common Lane, to the north of its junction with Bafford Road. Analysis of the junction between Lower Luton Road and Common Lane would be necessary to determine whether any junction improvements will be required in this location.

The Highway Authority are very likely to require a drop off facility within the site to minimise disruption on the surrounding highway, particularly on Lower Luton Road.

An access off Lower Luton Road does not appear to be feasible as vision is restricted in the vertical plane.

Pedestrian crossings may need to be provided on Common Lane and on Lower Luton Road, with provision of footway facilities along the eastern side of Common Lane.

Some increase in traffic on the country lanes surrounding the site will be inevitable.

Harpenden - Potential Site G - Land east of Croftwell, Harpenden

To be read in conjunction with drawing ST-2152-5

General

Site G is located to the north of Pipers Lane and to the southwest of Wheathampstead Road on the eastern side of Harpenden.

Existing Road Network

The site is bounded by Pipers Lane along the south eastern boundary and Wheathampstead Road along the northeastern boundary. To the northwest is residential development off Long Buttlers, Croftwell and Poynings Close.

Pipers Lane is country Lane in nature and would not be suitable for significant traffic flows associated with a potential secondary school site.

Wheathampstead Road runs from west to east past the site, from Piggotshill Lane in Harpenden, linking to Harpenden Road and Pipers Lane to the west of Wheathampstead. The road is 40mph along the site frontage, becoming 30mph just to the east of Leasey Bridge Lane, to the west of the site. Wheathampstead Road winds along the edge of the site. There does not appear to be any location along this road where visibility and junction stagger would be suitable to provide an access to the site. Provision of an access off Wheathampstead Road would result in significant removal of trees and hedgerow in order to achieve suitable vision.

Croftwell is a residential cul-de-sac which abuts the southwest corner of the site. The cul de sac is accessed from Meadway, which itself is accessed from Wheathampstead Road to the west of the site. Croftwell is approximately 5.0m wide, with footways on both sides of the road and a relatively wide grass verge along the southwest side of the road. Meadway is significantly wider.

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The route from Wheathampstead Road to the site boundary via Croftwell is relatively short, and serves approximately 16 properties directly. At present, the priority route within the residential area runs from Croftwell into Long Buftlers, although Croftwell continues southeast from its junction with Long Buftlers.

Access Arrangements

Provision of an access off Pipers Lane would necessitate significant improvement works along a length of the road from Wheathampstead Road. However, provision of an access off Pipers Lane would encourage a significant volume of vehicles along the narrow country lane from the south, which would not be suitable.

Provision of an access off Wheathampstead Road itself would result in removal of a significant section of trees and hedgerow in order to achieve suitable vision from the new access. It would not be appropriate for cars to stop on Wheathampstead Road to drop off or pick up pupils, therefore a circulation facility would need to be provided within the site to accommodate parents' vehicles.

From observations, it would appear debateable as to whether an access off Croftwell could be provided. It may be possible to widen Croftwell to 6.1m wide in order to accommodate coaches, although this would impact upon the existing verges and nature of the road. Provision of an access in this location would have a significant impact upon residents.

Pedestrian/Cycle Access

Pedestrian access to the site would be taken from Croftwell in order to provide the shortest route from Harpenden. However, the site is a significant distance from major residential areas which could generate a significant proportion of pupils travelling to school by car.

Existing pedestrian routes along Meadway and other surrounding roads appear to be suitable for pupils travelling from Harpenden.

Pipers Lane is classed as an advisory on road cycle route. However, due to its narrow nature and restricted width we would not recommend this as a suitable cycle route for school related cycle journeys. Byway number 33 runs parallel to Grove Avenue and Meadway and could be suitable for school related cycle journeys from Grove Road in Harpenden with links to Meadway.

There does not appear to be a suitable footpath link from Wheathampstead to the site although pupils living within Wheathampstead may be within walking distance of the site. If a significant number of pupils attending the school are expected to originate from Wheathampstead, then we would recommend that consideration would need to be given to improving footpath links.

Public Transport

The nearest bus stops are located on Meadway, served by route HA1 which covers various areas of Harpenden.

Conclusion

Pipers Lane would not be suitable for accommodating significant traffic flows associated with a secondary school. Wheathampstead Road is winding with several accesses on the opposite

SECTION 2 – POTENTIAL SCHOOL SITES

side of the road. Provision of an access into the site with suitable vision would result in significant removal of hedgerow and trees.

The only feasible point of access would appear to be from Croftwell, in the southwest corner of the site. Croftwell is accessed from Meadway, which itself is accessed from Wheathampstead Road to the north and from Grove Avenue to the southwest. Croftwell may need to be widened in order to safely accommodate coaches, which would impact upon existing grass verges on the southwest side of the road.

Existing footway facilities from Harpenden to the site are relatively good, although the site is located some distance from major residential areas which could result in a significant volume of traffic being generated.

Croftwell would not be suitable for accommodating parking associated with pick up and drop off, therefore a facility would need to be provided within the site.

If a significant number of pupils are expected to originate from Wheathampstead, consideration may need to be given to improving footpath links from Wheathampstead to the site.

It would be debateable as to whether an access off Croftwell is feasible or practical due to the potential impact on the existing road. Analysis of the junction between Meadway and Wheathampstead Road would be necessary to determine whether any improvements are required. However, from observations it would appear that this junction could have capacity to accommodate traffic associated with a secondary school site.

London Colney - Potential Site A - Land south of Napsbury Park, London Colney

To be read in conjunction with drawing ST-2151-11

General

Site A is located to the west of the B5378, Shenley Lane on the western side of London Colney.

Existing Road Network

The eastern boundary of the site abuts Shenley Lane, with a ditch running parallel to Shenley Lane between the road and the site. This site is bounded by Napsbury Park to the north, open fields and the M25 beyond to the south, and open fields with railway beyond to the west.

The B5378 Shenley Lane links from the A414 North Orbital Road and Napsbury Lane to the north, to the Harper Lane/Bell Lane roundabout to the south. A large roundabout with ICD 45m is in place to the north of the site serving the Napsbury Park development, which comprises 540 dwellings.

Shenley Lane is 6.75m wide along the frontage of the site, within a 30mph speed limit. Along the northern section of the frontage, a service road is in place to the east serving house numbers 54 through to 111.

The village of London Colney is located to the east side of Shenley Lane. Two significant link roads, Kings Road and St Annes Road connect to Shenley Lane, and run through the residential area of London Colney to the High Street. Kings Road and St. Annes Road

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accommodate bus routes, and connect to the High Street which connects to the A414 London Colney roundabout to the north, and the M25 junction 22 to the south, via Barnet Road and the A1081.

The junction of Shenley Lane on to the A414 to the north east of the site is not an all-movements junction. Traffic travelling west on the A414 can access the junction via an off-slip, and traffic in Shenley Lane wishing to access the A414 westbound can enter via an on-slip. It has been observed that vehicles entering the on-slip need to accelerate quickly in order to merge with relatively fast flowing traffic on the major road. Traffic in Shenley Lane which wants to enter the A414 eastbound can continue northwest and over the major road, turning east into the Napsbury Lane slip road. This road is two way over the majority of its length past existing properties, changing to one way as it approaches the merge.

To the north of the A414, Shenley Lane runs into Napsbury Lane proper, which runs northward over the railway and towards St Albans. This section of road is more “country lane” in nature. It then turns east into Mile House Lane and under a brick arch railway bridge, before joining London Road at a traffic signal junction. This junction comprises a staggered traffic light arrangement, which also includes St. Vincent’s Drive to the north side of London Road.

To the south of the site, Shenley Lane reduces in width to about 6.1m in the vicinity of the River Colne at Broad Colney Bridge. As it progresses south towards the Harper Lane/Bell Lane roundabout, it widens out to 7.3m as it passes over the M25 and approaches the junction. This section of road is in a 40mph speed limit zone. Beyond the junction, roads carry through to Radlett, Shenley, South Mimms and link to the M25.

The Harper Lane/Bell Lane Roundabout is a fairly small roundabout, with an Inscribed Circle Diameter (ICD) of between 25m and 28m, with 12m diameter central island. It is located just to the south of the M25.

Access Arrangements

The site is currently accessed by a track from Shenley Lane adjacent to South Farm Cottages.

Inspection of the road alignment confirms that a significant high point or “hog” is present about 98m north of St Annes Road, which would potentially impair vision for motorists if a junction was located in the vicinity. There is also a significant bend in the road alignment just to the south of South Farm Cottages.

The length of frontage available for location of an access is limited due to the above features. Therefore, in order to maximise the distances from opposite junctions with Telford Road and Walsingham Way, the proposed site access would be located centrally between the two.

Previously, 2 reports were prepared for HCC to establish the capacity of the local main road network, taking into account 2 sites to the west of Shenley Lane, one to the north of the Napsbury development and one to the south, Site A.

It was identified in these previous reports, that a trip rate of 0.583 movements per residential unit could be applied to residential development on the site. It was also identified that the local roads could potentially accommodate up to 1200 residential units on the two sites, which would generate in the region of 700 movements during the AM peak hour.

SECTION 2 – POTENTIAL SCHOOL SITES

Provision of a 2FE Primary School on land to the north could generate in the order of 250 movements during the peak hour. Proposals for this site also incorporated approximately 180 residential units alongside the 2FE primary school provision which could generate a further 100 vehicle movements.

In terms of road capacity, based upon the above discussions, the south site could still generate over 350 vehicle movements, which would be equivalent to 600 residential units.

A 6FE to 8FE school, could accommodate 900 to 1200 pupils plus, say, 300 pupils in the 6th form. A typical car use rate associated with secondary schools would be in the region of 30%, with a car share rate in the order of 1.5 pupils per car, or 2 pupils per car for 6th form vehicles. This could generate in the region of 180+45 vehicles associated with a 6FE school and up to 240+45 vehicles associated with an 8FE school, plus staff and any bus movements. As the school site is located away from the main residential area of St Albans, it is possible that the car use rate could be significantly higher than 30% which would generate a higher number of vehicles. Staff vehicles could be in the order of 100 for a 6FE school and 130 for an 8FE school, on top of the predicted pupil movements by car. It is also recognised that pupil trips by car (excluding 6th form trips) generate a vehicle movement to the school and then away from the school having been dropped off.

Excluding bus movements, therefore, the increase in vehicle movements associated with a 6FE school could potentially be in the region of $180 \times 2 + 45 + 100 = 505$, or with an 8FE school could be in the region of $240 \times 2 + 45 + 130 = 655$. It is anticipated that a proportion, say 25% of these vehicles would arrive outside of the peak hour during the morning period, resulting in 380 or 490 movements during the AM peak hour associated with a 6FE or 8FE school, respectively.

Based upon predicted traffic flows on Shenley Lane, and development of up to 800 units on the site; an appropriate access junction previously determined in accordance with TD 42/95 “Design of Major/Minor Junctions”, identified that a roundabout would be necessary to accommodate flows.

It was identified that the southern section of Shenley Lane, where it narrows to 6.1m wide would be at about 79% capacity in 2009 and about 95% capacity in 2031. Therefore, the level of residential development would be restricted by the capacity of this road. However, it is assumed that the majority of pupils attending a Secondary School in this location would originate from London Colney, St Albans and Harpenden areas to the north. Therefore, the distribution of traffic flows associated with the school are expected to be more weighted towards the north.

We would anticipate that the start and finish times associated with the Secondary school would be staggered with the proposed and existing primary schools in London Colney. This would help to distribute school related traffic throughout the peak period.

Pedestrian/Cycle Access

A continuous footway runs along the east side of Shenley Lane in the vicinity of the site, but there is no existing footway along the western side of the road.

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The Bridleway 004 runs into the site from Shenley Lane adjacent to South Farm Cottages and runs in a westerly direction across the site. Public Footpath 024 is located at the south east corner of the site.

A controlled pedestrian crossing is in place on Shenley Lane opposite a building known as The Birches, just to the north of the site. Pedestrian access to a potential school site in this location should be located as close to the existing crossing point as possible, in order to encourage pupils to use the crossing provided rather than informally cross Shenley Lane.

At present, there would not appear to be any formal Sustrans strategic cycle network routes in the area. However, a formal cycle route is located just to the north of the site at The Birches, which runs in a north west direction towards Napsbury Park. This network terminates at Coombes Road.

In view of the County Council's former proposals to identify sites to the north and south of Napsbury for both housing and JMI school uses in the St Albans LDF, we have previously been asked to explore the feasibility of providing a footbridge link over the A414, on the line of the current public footpath which links London Colney to the south with Birklands Lane to the north.

At present, pedestrians and cyclists have to negotiate the current dual 7.3m dual carriageway, and take refuge behind crash barriers in the central reserve as necessary. In the PM period, several school pupils were observed to be carrying out such a crossing. In the AM peak period, pedestrians would have to negotiate traffic which is queuing in the eastbound direction towards the London Colney roundabout.

It is considered that from a technical, safety and operational point of view, a footbridge would be extremely desirable. It would form a safe direct link between London Colney and the south of St. Albans, particularly to cater for secondary school pupils travelling to London Colney on foot or bicycle from St Albans to the site to the south of Napsbury.

We would recommend that measures such as pedestrian barriers be installed to deter pedestrians or cyclists from continuing to cross at-grade, as while the footbridge route will present a safer option, it will also generate a longer route.

Public Transport

Three bus stops are located in the vicinity of the site frontage. One about 70m north, adjacent to The Birches; one opposite number 97 about mid way along; and one to the south opposite St. Annes Road. These stops are served by route numbers 359 and 602, which serve St Albans, London Colney, Napsbury Park, Watford, Hatfield, Bushey, Radlett and Shenley.

Conclusion

Based upon discussions above, we would anticipate that a 6FE or 8FE secondary school could be accommodated on Site A, alongside development of, say, 180 residential units and a 2FE primary school on the northern site. An alternative scenario would be to provide a 2FE primary school only on the northern site, with a 6FE or 8FE secondary school alongside 180 residential units on the southern Site A. This would increase peak hour movements at the proposed roundabout junction by about 100, but it should still operate well within capacity. Overall levels of traffic on Shenley Lane should not be significantly different, and may even disperse better than if the 180 units were on the north site. School bus services would need to be

SECTION 2 – POTENTIAL SCHOOL SITES

implemented to transport a significant proportion of pupils from major catchment areas such as St Albans and Harpenden. We would consider that provision of a footbridge over the A414 will be extremely desirable to maximise the proportion of pupils travelling on foot or by bicycle.

Due to the likely catchment of pupils, we would anticipate that the majority of school related vehicles will approach the school from the north, which would limit the impact of the school on the Bell Lane roundabout to the south but could impact upon junctions and road links to the north.

Based upon the preliminary estimation of traffic flows, a roundabout would be required on Shenley Lane. However, this could unnecessarily impact upon traffic flows during school holidays and outside of the peak school travel periods.

It is unlikely that the Highway Authority will accept the principle of parents dropping off pupils on Shenley Lane and surrounding roads within the public highway. Therefore a parking and circulation facility is likely to need to be provided within the site.

In order to accommodate a secondary school and residential development on the southern site we would anticipate that the size of the school would have to be no greater than 6FE and with limited residential development.

These figures are based upon very outline calculations and full analysis of the road links and junctions would need to be undertaken based upon more robust data associated with the potential school catchment.

SECTION 3 – EXISTING SCHOOL SITES

Section 3 – Existing School Sites

Area	Description	Page Number
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<u>Harpenden</u>		
	Roundwood Park School, Harpenden	29
	St Georges School, Harpenden	32
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Townsend CoE VA School, St Albans

To be read in conjunction with drawing ST-2151-1

Existing Road Network

Townsend Church of England School is located in the north west area of the town, accessed from Sparrowswick Ride, which lies immediately to the south of the school. This road runs from east to west, with cul de sacs at each end. High Oaks joins Sparrowswick Ride at a simple tee junction with large bellmouth radii adjacent to the school and runs south to Green Lane, connecting via a simple tee junction. Green Lane connects to the A1081 Harpenden Road at its eastern end, via a tee junction with a narrow 1m wide right turning lane. At its south west end, it connects to Batchwood Drive via a further tee junction with a narrow 1m wide right turn lane.

Sparrowswick Drive is a residential road with a width in the region of 5.0m – 5.5m along its eastern leg and a narrower width of about 3m along its western leg. A footway is in place to the south side only. Small turning heads are provided at the east and west ends, which are smaller than current standards. Along the south side of the eastern leg, a moderate amount of residential parking takes place. “School Keep Clear” yellow markings are located to the north side of the road adjacent to the school access; otherwise no particular parking restrictions are currently in place in Sparrowswick Ride. A footpath link is located at the east end of the road, which links through to Cavan Drive to the south. A footpath link is also available to the west, into a sports field.

High Oaks is a residential road, which serves a small shopping parade and also the Margaret Wix JMI School. This road is traffic calmed by means of speed cushions, and is approximately 6.2m – 6.75m wide. A short length of parking lay by is provided to the west side of the road towards the north end, opposite numbers 71 – 75. Again, there would appear to be no particular parking restrictions, and there is a moderate level of residents parking along the road. Adjacent to the shopping parade on the east side, a parking lay by is in place. Footways are located to both sides, separated from the carriageway by wide grass verges.

Green Lane serves as a distributor road for the residential areas and schools to the north of Batchwood Drive and to the west of the A1081 Harpenden Road. This is also in the region of 6.2m 6.75m wide, has no particular parking restrictions and accommodates some residents parking. Footways are located to both sides, adjacent to the channel in places and separated from the carriageway by grass verges of varying widths in other locations.

The A1081 provides a major link between St Albans, Harpenden and Luton, and experiences significant traffic flows throughout the day, particularly during the AM peak period which coincides with the AM peak school travel period.

Batchwood Drive forms part of a strategic ring road network around the north and east sides of St Albans, which also experiences significant traffic flows as described above.

To the south east of the school, the A1081 Harpenden Road forms a crossroads junction with Batchwood Drive and Beech Road, known as the Ancient Briton junction. This junction is traffic light controlled.

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In addition to the main roads described above which serve the school, an additional circulatory network of roads are located in the vicinity of the school to the south. These include Toulmin Drive, Woollam Crescent, Flint Way and Maple Avenue to the west of High Oaks, and Cavan Drive, Carnegie Drive, New Greens Avenue and Partridge Road to the east. All these roads are residential in nature, have no significant parking restrictions, and have widths between 6.2m – 7.0m. Some residents' parking does occur on these roads, but at a fairly modest level. Generally, all the junctions between these roads are simple tee junctions. All the above roads are served by footways on one or both sides. It is noted that the northern section of New Greens Avenue is narrower, at about 4.8m wide, with a single footway to the west. At its northern end, there is a footway link to the east into the A1081 Harpenden Road, and a very narrow footpath link to the west towards the eastern end of Sparrowswick Ride.

At the western end of Flint Way where it meets the north end of Toulmin Drive, to the south west of the school, the previously mentioned sports field with associated pavilion and large car park is in place. This is currently accessible from the school by a footway link from the west end of Sparrowswick Drive. The simple tee junction access to this car park is located opposite number 43 Toulmin Drive.

Apart from Sparrowswick Ride, two way traffic can generally flow along the above road network with the current level of on street parking. However, the occasional larger vehicles such as coaches do require oncoming traffic to wait on some occasions, particularly in the vicinity of the Green Lane/High Oaks junction.

Access Arrangements

Vehicular access to the site is taken from Sparrowswick Drive, via two points of connection. Each connection point takes the form of a simple tee junction, both of which seem to operate as all-movement junctions. "School Keep Clear" yellow zig zag markings are in place across the eastern access and part of the road.

These junctions appear to serve a fairly small circulating facility of width 4.5m, with associated double yellow lines on both sides, but there appears to be no formal directional priority around this. From this arrangement, one could assume that parent's vehicles are not allowed into the site.

The western access also serves a small staff car park containing about 8 formally marked spaces directly to the south west of the school buildings. The approach road has double yellow lines to both sides.

The eastern access also serves larger staff car parking areas containing around 67 spaces, to the east of the school buildings. The approach road has double yellow lines to both sides.

Segregated pedestrian accesses to the school are located just to the west of the western access and just to the east of the eastern access. There would appear to be no further formal pedestrian accesses which serve the site.

Pedestrian/Cycle Access

No particular formal cycle facilities were observed in the general vicinity of the school, or further afield.

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Footways are provided in High Oaks, which run from the school and link into all the roads in the surrounding residential areas. A zebra crossing across High Oaks is located just to the south of Carnegie Road.

An independent footpath link is provided at the east end of Sparrowswick Ride. This runs south to Cavan Drive, and links with a narrow “twitchell” which links through to the north end of New Greens Avenue to the east. The latter link does not currently appear to be suitable for pupil use. A short length of footpath link runs east from the north end of New Greens Avenue and connects with the A1081.

To the west of Sparrowswick Ride, a short length of footpath connects through to the sports field and associated car park at the end of Flint Way.

Public Transport

Two school service routes operate which drop off and pick up for the school, Route 861 and 887. These services provide access to Shenley, Radlett, Park Street, Chiswell Green, Elstree and Borehamwood.

The nearest public bus stop to the school is located in High Oaks just to the north of Carnegie Road, approximately 330m south of the school entrance. Bus routes available from here are numbers 84, 301, 621 and S1, S2 and S3. The former three routes provide access to Watford, Hatfield, Potters Bar, Barnet, London Colney and South Mimms, along with various villages. Routes S1, S2 and S3 are local St Albans City Services.

Existing Traffic Conditions

Upon arrival at the site prior to the AM peak period at 730am, the A1081 was already becoming significantly busy, particularly in the south bound direction towards the Ancient Briton junction and St Albans, with a queue of up to 20 vehicles. Some minor queuing was also observed on the A1081 in the north bound direction. Batchwood Drive was also moderately busy.

The road network around the site was relatively quiet, which included Green Lane, High Oaks, Sparrowswick Ride and the other local circulatory roads.

As the school peak hour approached at between 8.00am and 8.10am, pedestrian pupils began to arrive, along with school coaches and parents' vehicles. The coaches entered the site from High Oaks/Sparrowswick Ride and used the circulation facility to drop off pupils. They then emerged and left the school to the south along High Oaks. Parents tended to drop off pupils at the north end of High Oaks, or at the Sparrowswick Ride/High Oaks bellmouth. The latter drivers tended to “u” turn and leave via High Oaks. The occasional parent was observed to enter the site and drop off. The traffic observed around this time did not appear to cause any undue problems.

At around the peak school time, school coaches continued to enter the school, drop off pupils and leave along High Oaks as before. In addition, the occasional public service bus was observed to be using the circulation route around Cavan Drive and High Oaks, running down to the south end of New Greens Avenue. These coaches/buses turned left into Green Lane, and then turned right at the junction with the A1081. By this time, the southbound queue on the A1081 had built up significantly, and extended further to the north beyond this junction and the junction with Sparrowswick Lane. The coaches/buses, due to their size and presence, seemed

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to have no undue difficulty in emerging into the main road traffic, as drivers tended to readily allow them to merge.

Some buses were observed travelling westbound along Green Lane which experienced some difficulty due to residents' parked cars along the road, particularly in the vicinity of bends in the road.

Parent related vehicle movements also increased at the north end of High Oaks, and at Sparrowswick Ride. Parents generally continued to carry out "u" turns, and the occasional vehicle used the east side of Sparrowswick Ride. These vehicles left the site via High Oaks. This increased level of traffic still did not appear to cause undue difficulties in this location.

The presence of Margaret Wix Primary School to the south of Townsend CoE School did not seem to have a significant impact on the flow and manoeuvring of traffic associated with the secondary school. This may be due to the junior school start time being later than that associated with the senior school, and general parking associated with Margaret Wix occurring in Woollam Crescent and further south on High Oaks.

At the peak time, around 6 cars and 3 minibuses were observed to use the Sports Field car park facility, with no undue difficulty, and significant capacity for additional vehicles remained available.

School related vehicles returning from the school emerged to the south into Green Lane via the various routes from the north including High Oaks and Toulmin Drive. Green Lane emerges on to the main road network as previously described at junctions with the A1081 Harpenden Road and Batchwood Drive.

Unlike the school coaches and public buses, any school related or other car traffic moving in and out of the A1081 junction with Green Lane had to rely more heavily on the courtesy of main road drivers in order to carry out their manoeuvres. Due to the queuing on the A1081, east bound queues on Green Lane in the region of about 8 -10 vehicles were observed at the peak school time.

The junction of Green Lane with Batchwood Drive was observed, and it was noted that southbound queues of about 5 – 7 cars occurred during the school peak.

Overall, parents' on street parking and drop offs on the road network in the vicinity of the school did not seem to cause undue difficulty in traffic flow terms. Continuing two way traffic flows seemed to be possible, with occasional waiting if a larger vehicle was present. However, some queuing was observed where parents' vehicles emerge into the main road network as described above. Several drive through exercises were carried out during the peak school period, and it must be said that despite these moderate queues being present, no significantly long delays were experienced associated with turning in and out of the junctions.

Conclusion

Townsend Church of England School is located at the north west side of the town, with residential development immediately to the south and south east. However, its edge of town location suggests that there is a high potential for significant car use associated with the school.

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Whilst Sparrowswick Ride is fairly narrow and will not cater for two way traffic, mainly due to residents' parking on the east side and narrow width on the west side, the general road network adjacent to the school site is generally of a high standard.

At present, the school related traffic adjacent to the school does not seem to cause any undue problems, so internal circulation of parents' vehicles would appear to be unnecessary. However, careful assessment would need to be carried out on possible additional traffic as a result of expansion, to identify if this would continue to be the case. This would depend on the likely catchment location of future pupils. If internal circulation is proved to be necessary under expansion proposals, this may be problematic, as buses currently use this facility, which may interact with cars due to limited space within the school. One alternative for a circulation facility may be to provide this on HCC owned land at the east end of Sparrowswick Ride. It is noted that there is space within the car park associated with the sports field to the west of the school for significant additional vehicles, from which point there is a short walk to the school.

The adjacent road network includes several circulation routes which allows dispersal of traffic movements associated with the school. Two alternative points of access are available for vehicles to the wider road network, at the A1081 Harpenden Road and at Batchwood Drive. From these points, routes such as Green Lane, High Oaks, Toulmin Drive, Flint Way, Woollam Crescent, Maple Avenue, New Greens Avenue, Partridge Road, Carnegie Drive, Cavan Drive provide alternative routes to the school.

Observations of the above network during the AM peak hour did not reveal any serious traffic congestions or issues, even bearing in mind the presence of the Margaret Wix JMI School High Oaks to the south.

However, it has already been observed and acknowledged that traffic flows on the A1081 Harpenden Road to the east are very high, particularly during the AM and PM peak hours. Flows remain moderately high during the day as well. Also, flows on Batchwood Drive are high in the peak hours. This aspect is of more concern, particularly if significant additional traffic is generated at these junctions due to expansion, which in turn utilises the Ancient Briton junction to the south east. Bearing in mind the edge of town location, it is anticipated that any proposals for expansion of the school would generate the need for extensive analysis of the impact of additional school related vehicles on the A1081 and Batchwood Drive.

We have investigated possible alternative access points to serve an expanded school. The only viable option appears to be an access from Toulmin Drive into the sports pitch area to the south west of the school. Suitable route are available to serve such an access, but the access would be in third party land, and vehicles would still require access to the A1081 or Batchwood Drive. It is therefore considered at this stage that this should not be pursued, unless it is proven that the current access arrangements will not be suitable.

A new access from the A1081 Harpenden Road via HCC owned land to the east is considered to be out of the question.

As a result of the above discussions, we would recommend that there may be scope to expand Townsend CoE School, due to the comprehensive network of good quality local roads which serve the site, and the choice of two possible alternative points of access to the wider road network. However, the expected number of additional vehicles generated due to the future catchment of additional pupils would have to be carefully considered due to the school's edge of

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town location. Detailed consideration and analysis of traffic, particularly in relation to the A1081 Harpenden Road and Batchwood Drive would need to be carried out, along with consideration of the Ancient Briton junction, to demonstrate to the Highway Authority that it would not have an unacceptably adverse effect on the road network.

Cumulative Impact of Expansion at Townsend School and St Albans Girls School

The impact of expansion of Townsend School on the local road network has been described in the various discussions above with respect to queuing and traffic movements around the site, and effects on the Ancient Briton junction. A separate report has also been prepared on the St Albans Girls School.

Additional traffic from a potential expanded St Albans Girls School, which is located to the south east, would generate a significant increase in traffic on the local road network at the Green Lane/A1081 junction and at the Ancient Briton junction to the south. The St Albans Girls School report casts doubt on the acceptability of expansion due to these constraining factors. Any additional traffic generated by an expansion of St Albans Girls School would add to the existing queuing, and have a cumulative effect on flows and queues at the Ancient Briton junction.

It is considered at this stage that Townsend School could potentially be expanded in its own right, mainly because it offers two main points of access to the local network and the opportunity for further dispersal of traffic on other routes in and out of St Albans. However, assessment of the Ancient Briton junction would be required in order to demonstrate its adequacy.

It is our view that expansion of the St Albans Girls School as well as the Townsend School would have a more significant and immediate effect on the Ancient Briton junction, almost certainly resulting in exceeding its capacity. We would therefore recommend that the two schools should not both be expanded together.

St Albans Girls School Business and Enterprise College, St Albans

To be read in conjunction with drawing ST-2151-2

Existing Road Network

St Albans Girls School is located in the north west area of the town, accessed from Sandridgebury Lane. Sandridgebury Lane runs from south west to north east, from a simple tee junction with the A1081 Harpenden Road to a tee junction at the end of the north section of Valley Road. The A1081 provides a major link between St Albans, Harpenden and Luton, and experiences significant traffic flows throughout the day, particularly during the AM peak period which coincides with the AM peak school travel period. Sandridgebury Lane continues in a north east direction from the northern end of Valley Road, towards the village of Sandridge.

To the south west of the school, the A1081 Harpenden Road forms a crossroads junction with Beech Road and Batchwood Drive, known as the Ancient Briton junction. This junction is traffic light controlled.

The initial section of Sandridgebury Lane adjacent to the A1081 and the school has been upgraded to a width in the region of 6.75m, to accommodate school related traffic and the current vehicular access arrangements. Footways are in place on both sides of the road at this location. Double and single yellow lines are in place, the former on the school side of the road, along with “School Keep Clear” markings adjacent to the accesses. This road width is generally wide enough to accommodate two way traffic. Beyond this point, directly to the north east, the road narrows, past residential properties to the north west side. The road appears to be about 4.8m wide or even less, and barely allows oncoming vehicles to pass. A footway is in place on this section of road on the housing side. Single and double yellow lines are also in place along this section. Beyond the housing, up to the junction with the north end of Valley Road, the road reverts to a typical country lane, with no footways. The alignment of this section is poor, with limited forward vision for drivers, and a narrowing road width. In order for two way traffic to pass, observations confirm that vehicles have to pull over to the left, running over the normal edge of the road, causing wear to the narrow verges/banks. The latter two sections of Sandridgebury Lane are not suitable for school related traffic.

A further pedestrian only access is located to the east of the school, about mid way along the northern section of Valley Road. This is accessed via an independent footpath to the south west side which connects into the junction of Valley Road with Darwin Close to the south.

The north section of Valley Road between Darwin Close and Sandridgebury Lane is a single track country lane with approximate width of about 2.7m – 3.0m, with passing places. This road is definitely unsuitable for school related traffic in its current form.

The southern section of Valley Road runs from Darwin Close and Porters Wood to the south east, connecting with the King William IV junction on Marshalswick Lane. This is a traffic light controlled junction, which has a left turn out only restriction from Valley Road. Access from/to Valley Road on to Beech Road is also available to the west, via Firbank Road.

Valley Road itself is in the region of 7.5m - 9.5m wide, and serves residential cul de sacs such as Darwin Close, Faraday Close, Melbourne Close and Potters Field, along with industrial roads such as Porters Wood and Soothouse Spring. This road can accommodate parking on both

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sides in places without unduly affecting two way traffic flows, and has no particular restrictions along the majority of its length. However, double yellow lines are in place on the outside of the bend into Porters Wood and at the Valley Road/Darwin Close junction.

To the south west of the site, Old Harpenden Road is located just to the east of the A1081. This is country lane in nature, and serves two residential cul de sacs, Tudor Road and Ellis Fields. This road connects to the A1081 at its north and south ends via simple tee junctions.

Access Arrangements

Vehicular access to the site is taken from the western end of Sandridgebury Lane, via three points of connection. The most westerly access is a simple tee junction, and would appear to serve a small staff car park containing about 14 formally marked spaces. It is apparent that in reality, more cars can be accommodated, in the region of 19 or more.

The eastern access comprises an “in only/out only” arrangement; “in” to the east side and “out” to the west side, with vehicles circulating in a clockwise direction. This access serves both a further staff car park, and also a parent drop offs/pick up facility. The staff parking is provided on a tarmac to the north east of the main school buildings, and appears to cater for about 100 cars, possibly more if some parked informally. The circulation road is quite wide, with the majority of its length being between 6.0m – 6.5m. Single yellow lines are provided on both sides of circulation road, but it would appear that parents are allowed to enter the site, drop off or pick up at the roadside, and then emerge on to Sandridgebury Lane. Four formal parking spaces are provided at the south side of the facility, one of which is a disabled bay.

As previously mentioned, the only other access to the site is pedestrian only, from Valley Road via the eastern end of Darwin Close.

Pedestrian/Cycle Access

No particular formal cycle facilities were observed in the general vicinity of the school, or further afield.

Footways are provided in Sandridgebury Lane, running from the school and linking into the A1081 Harpenden Road, and to the surrounding residential areas. A controlled crossing is in place across the A1081 about 40m south of the Sandridgebury Lane tee junction.

Pedestrian phases also appear to be available at the traffic light controlled Ancient Briton crossroads junction.

Public Transport

The nearest bus stops to the school are located on the A1081 Harpenden Road just to the north of Sandridgebury Lane, at about 100m to 140m from the school entrance. Bus routes available from these stops are numbers 84 and 321 which provide access to Watford, Rickmansworth, Harpenden, Luton, London Colney, Potters Bar and Barnet, along with various villages.

Additional stops are located in Green Lane, about a 250m walk from the school entrance. Bus routes available from these stops are numbers 304 and 621 which provides access to Wheathamstead, Hitchin and Hatfield.

Existing Traffic Conditions

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Upon arrival at the site prior to the AM peak period at 7:30am, the A1081 was already becoming busy, particularly in the south bound direction towards the Ancient Briton junction and St Albans, with a queue of up to 20 vehicles. Some minor queuing was also observed on the A1081 in the north bound direction.

The road network around the site was relatively quiet, which included Sandridgebury Lane, Valley Road, Darwin Close/Faraday Close, Porters Wood and Old Hardenden Road. No cars were observed to be parked on Sandridgebury Lane and the north section of Valley Road, and very few vehicles were parked in Darwin Close and Valley Road south.

As the school peak hour approached 8:00am, significant queuing was already occurring in the southbound direction on the A1081 towards the Ancient Briton junction. This queuing extended well beyond the Sandridgebury Lane tee junction. Significant queues were also occurring at the other arms of the Ancient Briton traffic lights, along with a moderate queue of 5 or 6 vehicles eastbound along Green Lane. At this time and beyond, parents were beginning to arrive at the school in Sandridgebury Lane from both directions, generating significant congestion and turning movements both at the tee junction and on the initial section of Sandridgebury Lane adjacent to the school. Parents were observed to be utilising the circulation facility within the site, without parking in Sandridgebury Lane.

At around the peak school time, significant circulation was taking place within the school, queuing continued southbound on the A1081, and vehicles emerging from Sandridgebury Lane were forming a queue westbound to the A1081 of between 8 – 10 vehicles backing up to the school, adding to the general congestion in the vicinity. This was not helped by between 1 and 4 vehicles being parked adjacent in Sandridgebury Lane, particularly when school buses were entering and leaving the site. Vehicle movements associated with the school at the Sandridgebury Lane/A1081 junction were inhibited by the queue on the main road.

In addition to the above, to the north east of the school, queuing was taking place at the junction between Sandridgebury Lane and the north end of Valley Road. Vehicles were also attempting to use the single track road section of Valley Road between Sandridgebury Lane and the south section of Valley Road. This was observed to be particularly difficult, as the passing spaces are inadequate to allow vehicles to pass without significant delays, reversing manoeuvres, and vehicles scraping paintwork on closely trimmed hedging along both sides.

To the south of the school, parent drop offs were observed within Darwin Close and in Valley Road, with pupils entering the school via the eastern pedestrian entrance to the school. Although this appeared to be moderately busy, parking was observed to be fairly readily available in this area, with some spare capacity. With regard to traffic flows generally, an increase in traffic to the Porters Wood industrial area was observed, but this did not seem to cause any undue problems at this location.

The junctions to the south at Firbank Road/Beech Road and the King William IV junction were observed during the peak school period, but they appeared to be operating effectively, with no significant queuing occurring.

Some limited observation was carried out at the Old Harpenden Road as the peak time was approaching, but there did not seem to be significant scope for use by parents due to the “country lane” nature of the road and walking distance from the school.

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Conclusion

The site is located at the northwest side of the town, with residential development immediately to the west, north and south. However, its edge of town location suggests that there is a high potential for significant car use associated with the school.

Traffic flows on the adjacent A1081 Harpenden Road are very high, particularly during the AM and PM peak hours. Flows remain moderately high during the day as well. As a result of any school expansion, additional traffic utilising the A1081 will not only add to the existing queuing in the southbound direction, but could significantly increase pressure on the already congested Ancient Briton traffic light junction. Very detailed investigation of current and future traffic flows at this junction would need to be carried out in order to demonstrate to the HA that the expansion could be accommodated.

The roads adjacent to the site including the north eastern sections of Sandridgebury Lane and Valley Road north are totally unsuitable for school related traffic. Roads to the south of the site including Valley Road south would appear to be suitable for school related traffic, and to a lesser extent, Darwin Close.

Within the north side of the school site, a significant parent circulation facility is in place, which in itself would appear to function satisfactorily.

However, in the light of the prevailing traffic conditions on roads to the west, south and east of the site, we would consider that the current scenario is unacceptable. We would therefore not advocate any expansion of the school which would increase flows in these areas.

With regard to possible alternative access, the only possible alternative would be an entrance from Valley Road in the vicinity of Darwin Close. This would probably result in a significantly modified junction arrangement, with access through a mature tree belt. There may also be level differences and geometric considerations to be overcome, as well as local objections.

Whilst Valley Road would appear to be a suitable access road at present, if any future proposals result in a significant increase in traffic, extensive analysis of the impact will be required. This will particularly apply at the King William IV junction with its restricted left turn out only feature, and at the Firbank Road/ Beech Road junction.

If the access to the school in Sandridgebury Lane remains in place into the future, which would seem to be very likely, then we can only see an expansion increasing traffic levels in this location. As Sandridgebury Lane is Country Lane in nature, improvements to the lane such as widening, to accommodate additional traffic are unlikely to be acceptable to the Highway Authority.

As a result of the above discussions, we would recommend that the St Albans Girls School is not suitable for expansion in highways terms unless Sandridgebury Lane can be widened and a second access can be achieved from Valley Road which would maintain the status quo at the existing main entrance or reduce vehicle usage at this location if possible. As previously mentioned, the Ancient Briton junction would also be a significant issue in any expansion proposals.

Cumulative Impact of Expansion at Townsend School and St Albans Girls School

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The impact of expansion of St Albans Girls School on the local road network has been described in the various discussions above with respect to queuing and traffic movements around the site, and effects on the Ancient Briton junction. A separate report has also been prepared on the Townsend CoE School.

Additional traffic from a potential expanded Townsend School, which is located to the north west, would generate an increase in traffic on the local road network at the Green Lane/A1081 junction adjacent to St Albans Girls School and at the Batchwood Drive/Green Lane junction to the south west. Whilst in itself this traffic could potentially be accommodated, particularly at the latter junction, this would add to the existing queuing, and have a cumulative effect on flows and queues at the Ancient Briton junction.

It is considered at this stage that Townsend School could potentially be expanded in its own right, mainly because it offers two main points of access to the local network and the opportunity for further dispersal of traffic on other routes in and out of St Albans. However, assessment of the Ancient Briton junction would be required in order to demonstrate its adequacy.

It is our view that expansion of the St Albans Girls School as well would have a more significant and immediate effect on the Ancient Briton junction, almost certainly resulting in exceeding its capacity. This appears to reinforce our current view/recommendation that the St Albans Girls School is not suitable for expansion.

Detached Playing Field

In relation to potential crossing points to access a detached playing field to the northwest of Sandridgebury Road, the most suitable location would appear to be directly adjacent to the boundary of the detached playing field site. The existing field access to the north of this point is located close to the bend and as a result visibility to pedestrians crossing from the school site will be inadequate.

Ideally the crossing would be opposite number 17 in order to maximise visibility from both directions, but there is a telegraph pole located in the centre of the footway in this location, and the footway into the playing field site would only be 1.5m beyond this. In order to maximise the safety of a crossing against the boundary of Number 19, we would recommend that the crossing be formed with a raised table, with adequate signage on the approaches, particularly from the northeast. The 30mph limit could potentially be extended northeast around the bend to reduce vehicle speeds on the approach. We would also recommend that the existing hedge around the inside of the bend be cut back or moved in order to maximise visibility to the crossing point.

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Sandringham School, St Albans

To be read in conjunction with drawing ST-2151-3

Existing Road Network

Sandringham Secondary School is located in the Marshalswick area, towards the northeastern corner of St Albans. The school is situated to the north of The Ridgeway which forms a loop off Marshalswick Lane, which itself runs from northwest to southeast between the B651 St Albans Road/Sandridge Road and Sandpit Lane.

The Ridgeway is a local distributor type road which serves a network of residential streets and cul-de-sacs. Chiltern Road runs from The Ridgeway along the eastern boundary of the school site linking to Sandringham Crescent which is a similar road to The Ridgeway running roughly parallel to it, from the B651 towards Sandpit Lane via House Lane.

Sandringham Crescent runs along the northern boundary of the school site.

To the west of the school is Wheatfields Junior Mixed School which is accessed from Downes Road off The Ridgeway. A pedestrian access into the Wheatfields School is also available off Sandringham Crescent.

The Ridgeway is subject to some on-street residents parking throughout the day although at a relatively low level. Directly outside the school on the northern channel of the road are zig zag 'School Keep Clear' markings in the vicinity of the vehicular accesses. To the east of the accesses the northern channel is marked out as bus stops with space for at least 4 coaches. To the west of the main access is another bus stop.

There are no vertical speed control measures along the length of the road, but school safety signs and road markings are in place in the vicinity of the schools. Wide verges and footways run along both sides of the road, with a 1m wide cycleway strip marked out along the channel on both sides. This cycle lane stops either side of the school allowing for on street parking and bus stops in this location. On street parking blocks the cycle lane in a number of locations along the length of the road, which forces cyclists into the main carriageway.

The junction between Chiltern Road and The Ridgeway is a simple tee junction, with a raised table on the entrance to Chiltern Road. The Chiltern Road junction with Sandringham Crescent is in the form of a simple tee junction, but with a break in the central hatching forming a very narrow right turn lane.

Quantock Close is accessed from Chiltern Road approximately one third of the way along its length from The Ridgeway. Quantock Close is formed with a large circulatory facility with parking around it and a bus stop located in the central island of the circulation area. There are two laybys on Chiltern Road between The Ridgeway and Quantock Close.

Directly opposite the school is Skys Wood Road which runs southwards towards Sherwoods Avenue, which itself forms a north to south link between The Ridgeway and Marshalswick Lane.

The Ridgeway meets Marshalswick Lane at its southern end at a mini roundabout. Sherwood Avenue also meets Marshalswick Lane at a mini roundabout. At the northern intersection with

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Marshalswick Lane, Ridgeway joins at a simple tee junction, with a signal controlled crossing to the west of The Ridgeway.

Further to the west, Marshalswick Lane meets the B651 St Albans Road/Sandridge Road at a signal controlled junction.

Access Arrangements

The site is accessed by pedestrians and vehicles from The Ridgeway. There are two points of vehicular access to the school, one near to the southwest corner of the site and one fairly central along the site frontage. These accesses serve separate parking areas within the site.

Pedestrian accesses are located in the southwest corner, central to the site frontage and in the southeast corner of the site. There is a separate pedestrian gate leading onto an independent footpath running along the eastern boundary of the site, although it is not certain whether this gate was unlocked during the peak travel periods.

There is also a pedestrian access into the site from Sandringham Crescent to the north of the school buildings. This access is used by pupils associated with Sandringham School and by parents and pupils associated with Wheatfields School.

Pedestrian/Cycle Facilities

As described above, there are various pedestrian access points into the site. A signal controlled crossing is located on The Ridgeway, between the centre vehicular access and Skys Wood Road. This links directly to the pedestrian access located centrally along the site frontage.

The pedestrian access in the southwest corner is shared with Wheatfields School.

To the east of the school is a public byway which runs from Pondfield Crescent to an unsurfaced unclassified county road to the north of Sandringham Crescent. This byway is approximately 3m wide and unlikely to take vehicular traffic. Where this byway meets Chiltern Road to the northeast of the school there is a raised zebra crossing on Chiltern Road.

Public Footpath 29a runs from this byway into the Sandringham School site and turns north towards Sandringham Crescent in the centre of the site. The link from Sandringham Crescent into the school site provides a route for both Sandringham School and Wheatfields pupils as described above.

There is also a footpath link from The Ridgeway to St Mary's Walk to the south of the school. This is Public Footpath number 29 which continues as far as Pondfield Crescent. Footpath 28 runs along the southwest boundary of Wheatfields School linking Sandringham Crescent to Downes Road.

There are on road cycle lanes along both sides of The Ridgeway except for directly adjacent to the school. An off road cycleway runs along the byway to the east of the school and along the southern side of Sandringham Crescent to the north of the school. These cycle routes provide good links to the residential areas surrounding the school.

There is a signal controlled crossing adjacent to the pedestrian access to Wheatfields School off Sandringham Crescent.

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Public Transport

The nearest bus stops are located on The Ridgeway, directly adjacent to the school site, which are served by routes S8, S9, 844 and school buses. Bus stops on Chiltern Avenue and Quantock Close, and stops further east along The Ridgeway are served by routes 713, S1, S2, S3 and S4.

Existing Traffic Conditions

The site was observed during the PM peak period, during which, background traffic on the surrounding roads was relatively low.

There were a number of cars parked on the road directly opposite the school site on the south side of The Ridgeway. To the west this parking extended towards the southwest corner of the site, although there were considerable gaps between cars. To the east, this parking generally utilised an existing layby but extended sparsely towards the southeast corner of the site.

Roads surrounding the site, including The Ridgeway, Skys Wood Road, Chiltern Road, Quantock Close Sandringham Road were observed throughout the PM period. It appeared that some of the on street parking opposite the school was associated with staff or sixth form pupils as this cleared throughout the PM peak period.

The south side of The Ridgeway filled with cars in the vicinity of the school during the peak PM period, and occasional vehicles were observed in Chiltern Road and Quantock Close. A significant number of pupils were observed walking east and west along The Ridgeway, south along Skys Wood Road and northeast via the byway onto Sandringham Crescent.

The majority of parking in the vicinity of the school appeared to be related to Wheatfields Junior Mixed School, with parking on The Ridgeway to the west of Sandringham School, on Downes Road and on Sandringham Crescent within a layby directly adjacent to the Wheatfields School site and along the southeast side of the road to the north of the layby.

The raised zebra crossing on Chiltern Road, raised junction at the southern end of Chiltern Road and signal controlled crossing on The Ridgeway appeared to be well used throughout the period.

Vehicle flows along The Ridgeway were delayed to a small degree by the parking and bus stops in the vicinity of the school. However, no real congestion was observed and the parking associated with Sandringham School appeared to be very light.

The first bus arrived at 2:35pm during which time traffic flows were very low. The peak period occurred between 3pm and 3:25pm, by which time the road was relatively clear adjacent to the school.

Flows along Sandringham Crescent were very low, and two way flows could be maintained despite parking along the southwest side of the road adjacent to Wheatfields School.

At 3:30pm, there was a significant queue from the Marshalswick Lane junction with the B651 St Albans Road/Sandridge Road, extending back as far as The Ridgeway.

Conclusion

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The site is easily accessible from surrounding areas on foot and existing base traffic generation appears to be at a relatively low level.

There does appear to be space within the surrounding road network to accommodate additional cars, particularly on Chiltern Road and further to the east of the school on The Ridgeway. There would also appear to be scope for parking on Sandringham Road if necessary without causing any significant disruption to traffic flows.

The existing queues at the Marshalswick Lane junction with the B651 St Albans Road/Sandridge Road are likely to be affected to a degree by expansion of the school. However, it is likely that traffic will generally be dispersed around the site and we would not expect a significant impact, unless the majority of additional pupils at the school are expected to arrive from the west of this junction.

A large proportion of pupils appear to travel on foot or by bicycle, or by bus and the traffic generation associated with the school appears to be at a very low level at present.

There would appear to be space within the school grounds to provide additional parking for the increase in staff associated with expansion, accessed from the western access point.

Due to the good road network surrounding the school and low base flows, particularly during the PM period, we would consider Sandringham School to be suitable for expansion.

Detached Playing Field

In relation to provision of a detached playing field to the north of the school, there is an existing uncontrolled crossing on Sandringham Crescent along the line of Public Footpath 29a. There is good visibility in both directions from this crossing point, and a refuge island in the centre of the road to assist pedestrians crossing. Therefore we would consider this to be a suitable crossing point for access to a detached playing field.

Further to the east, in the vicinity of the Sandringham Crescent junction with Chiltern Road, there is another uncontrolled crossing with central refuge island. We would consider that this would also be suitable for use for access to a detached playing field although not as suitable as the crossing point further west due to the potential confusion between pedestrians and drivers undertaking different manoeuvres at the junction. A signal controlled crossing may be suitable in this location providing there is sufficient pedestrian demand along this route.

Verulam School, St Albans

To be read in conjunction with drawing ST-2151-4

Existing Road Network

Verulam Secondary School is located to the northeast of St Albans town centre, with easy access from the A1057, Hatfield Road.

The school is located within a residential area surrounded by housing on all sides, with Brampton Road to the south, Park Avenue to the west, Jennings Road to the north and Hamilton Road to the east. The roads to the west, north and east are occupied by relatively large houses with driveways and as a result, on street residents parking is generally at a low level.

However, Brampton Road and the several roads which link this to Hatfield Road to the south have generally terraced or semi detached rows of houses without driveways, with a significant volume of residents on street parking in place throughout the day. This parking extends into the southern ends of Park Avenue and Hamilton Road.

Double yellow lines are generally in place around the bellmouths surrounding the school site. Parking on both sides of Brampton Road and roads to the south obstructs the two way flow of traffic.

Sandfield Road is located directly opposite the school frontage on Brampton Road, linking to Hatfield Road at its southern end. Parallel with and to the west of Sandfield Road is Glenferrie Road and Blandford Road. To the east is Harlesden Road.

Sunderland Road and Churchill Road run north from Jennings Road in the vicinity of the school onto Sandpit Road.

Brampton Road and Jennings Road run parallel to each other from west to east between Clarence Road and Woodstock Road North. These roads run south to Hatfield Road and north to Sandpit Lane.

Woodstock Road North and Woodstock Road South are traffic calmed with speed cushions and chicanes and contrasting surface finishes at junctions.

Access Arrangements

The site is accessed by pedestrians and vehicles from both Brampton Road and from Jennings Road, although the main access is from Brampton Road. Parking areas are accessible from both of these accesses, but the larger car park is located off Jennings Road.

There is also a separate pedestrian access in the northeast corner of the site leading onto Jennings Road.

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Pedestrian/Cycle Facilities

There are footways along both sides of the surrounding roads but no formal crossing points adjacent to the school. A zebra crossing is located on Clarence Road to the south of its junction with Brampton Road and there is a signal controlled crossing on Hatfield Road between Sandfield Road and Harlesden Road.

There are no formal cycle lanes or paths in the vicinity of the school.

Public Transport

The nearest bus stops are located on Hatfield Road to the south of the school, which are served by routes 34, 300, 301, 304, 601, 602, 620, 621, 655, S3, S7 and T5. Bus stops on Chiltern Avenue and Quantock Close, and stops further east along The Ridgeway are served by routes 713, S1, S2, S3 and S4.

St Albans Railway Station is less than 1 mile from the school to the southwest.

Existing Traffic Conditions

The site was observed during the PM peak period, during which, background traffic on the surrounding roads was relatively low.

As previously mentioned, base levels of parking on roads to the south of the school were very high, with very few gaps available for additional parking within the vicinity of the school. To the east, west and north, base parking was relatively low. A line of 9 vehicles associated with the school, possibly 6th formers or staff vehicles was located to the east of the vehicular access on Jennings Road.

Staff or visitors' vehicles started to emerge from the school into Jennings Road from 3pm and vehicles started to arrive to pick up. A few vehicles were observed to park on Jennings Road and a few in available gaps in Brampton Road. Despite the relative congestion associated with parking to the south, one vehicle arrived early and parked across the footway directly to the east of the school entrance, which not only affected the flow of vehicles but also the flow of pedestrians directly outside the school.

Jennings Road remained relatively clear until 3:15pm when it became busier with on street parking adjacent to the school. This parking did not use up all of the available space along Jennings Road and Churchill Road.

By 3:35pm pedestrian and cyclist flows out of the site were very heavy. Due to the relatively concentrated areas of footway onto which these pupils emerge, the general character of the road appeared congested. On Jennings Road vehicles and pedestrians interacted to a degree with pupils crossing Jennings Road to travel north. Of greater concern were the cycle movements which seemed to spill out into the road and negotiate vehicles pulling into and out of parking spaces.

On Brampton Road the situation appeared a lot worse. Vehicles emerging from the site have restricted visibility due to parking to the east and west of the access. The access is directly opposite Sandfield Road forming a crossroads arrangement. Sandfield Road is so heavily parked that there are very few passing places and vehicles aiming to turn into the road have to

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wait for oncoming vehicles to travel a considerable distance. The concentration of pupils emerging from the site also affects visibility and pupils cross the road between parked cars as there is no formal crossing point. Cyclists use Brampton Road and have to negotiate the vehicles pushing through the gaps between cars.

Visibility is poor when turning onto Brampton Road from any of the connecting roads.

By 4pm, Jennings Road was clear again but resident's parking remained on Brampton Road.

Conclusion

The site is very centrally located and easily accessible from surrounding areas on foot. Therefore, we would consider the site to be in a very sustainable location with good access to public transport routes and an opportunity to minimise car journeys to and from the school.

Existing traffic conditions along Jennings Road during the PM peak are bearable, and the road is of sufficient width to accommodate parking while maintaining reasonable traffic flows. There is space in the surrounding roads including the northern ends of Park Avenue and Hamilton Road, plus Churchill Road and Sunderland Avenue to accommodate additional parking. There are reasonable circulation routes around these roads which minimises the need for vehicles to turn around in the vicinity of the school, although u-turns were observed in the adjacent bellmouths.

However, traffic conditions along Brampton Road and between there and Hatfield Road were highly unsuitable for school traffic due to the level of on street parking and volume of pedestrians crossing the road. The main entrance to the school being located directly opposite Sandfield Lane caused some problems although the number of vehicles using this access was relatively low.

Implementing further parking restrictions along Brampton Road and surrounding roads would not be acceptable to residents as they have no alternative parking arrangements.

The main issues appeared to be associated with the lack of visibility at junctions due to parking along both sides of the road, lack of two way passing places and volume of pedestrians crossing the roads adjacent to the school.

As the site is located very centrally, we would be reluctant to oppose expansion of the site in highways terms as there is significant potential for the number of car trips generated to be minimal.

If this school were to be expanded we would recommend the following improvements:

- i. Provision of a formal crossing location on Brampton Road
- ii. Provision of a formal crossing on Jennings Road
- iii. Formulation of a circulation facility within the site which accommodates staff cars and parent drop off, to minimise the number of vehicles parking on the surrounding road network and reduce the temptation for parents to park on Brampton Road to pick up or drop off pupils.

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- iv. Consideration should also be given to formulating one way routes in this area. There are sufficient circulatory routes to enable this to happen, particularly in relation to the north south links between Hatfield Road and Brampton Road.
- v. Parking restrictions may need to be extended at junctions to improve visibility for emerging vehicles.

We would also recommend that consideration be given to closing or controlling the existing access off Brampton Road to vehicles, except for visitors perhaps. The access would be more suitable for pedestrian use if vehicles were not emerging from the site at the same time, particularly as drivers have to negotiate the crossroads with Brampton Road and Sandfield Road.

Nicholas Brakespear RC School, St Albans

To be read in conjunction with drawing ST-2151-5

Existing Road Network

Nicholas Breakspear Secondary School is located on the eastern side of St Albans, with easy access from the A1057, Hatfield Road and from the A414, North Orbital Road.

The school is located on the edge of a residential area surrounded by fields to the southeast and southwest. Colney Heath Lane runs along the northeast boundary of the site with residential properties beyond. The northwestern boundary abuts Butterwick Day Centre (HCC property) and Alban Way Cycle Route with some residential properties beyond. A farm track runs along the southwest boundary and a public byway, Hixberry Lane runs along the southwest boundary. Hixberry Lane is country lane in nature and serves an NHS Elderly Care Home, Countryside Management Services, Earthworks (regisetered Charity), plus the Butterwick Day Centre as well as access to residential and other uses.

To the northeast, on the opposite side of Colney Heath Lane are three cul de sacs, namely Hobbs Close, Swans Close and Boissy Close. Further north is Firwood Avenue which is a longer cul de sac in comparison to the latter roads and also serves Sewell Close. Colney Heath Lane has a 0.5m to 1m wide strip marked out by a white line on both sides of the road in the vicinity of the site.

There are no circulatory routes on the highway network in the vicinity of the site.

Colney Heath Lane runs from the A414, North Orbital Road southeast of the school to the A1057 Hatfield Road northwest of the school. To the northwest of the school, Colney Heath Lane runs over the Alban Way Cycle Route and meets Hill End Lane at a mini roundabout which itself runs southwest. Hixberry Lane meets Hill End Lane at a mini roundabout to the west of the school.

The junction between Hatfield Road and Colney Heath Lane has a right turn lane on Hatfield Road, although the lane for right turning vehicles is relatively narrow.

Access Arrangements

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The site is accessed by pedestrians and vehicles from Colney Heath Lane. There is no access to the school site from Hixberry Lane or from the farm track to the east.

The school is split into two distinct areas, with separate accesses for each. The eastern area of the school is labelled on the OS plans as an annex. This annex has circulatory in/out access arrangement with parking around the perimeter. The main school building has a similar but slightly larger access arrangement.

A segregated pedestrian and maintenance access is located centrally between the two areas.

Pedestrian/Cycle Facilities

There is a footway along the northern side of Colney Heath Lane from Hill End Lane to east of the school, but on the southern side, there is no footway along much of the road, except in the immediate vicinity of the school accesses.

Alban Way is a cycle route which runs along the former route of the Hatfield to St Albans branch line of the Great Northern Railway and forms part of Route 61 of the Sustrans National Cycle Network.

The Alban Way has a smooth surface, suitable for all users but only has lighting at the Hatfield end. It runs between Cottonmill Lane in St Albans and Wrestlers Bridge in Hatfield. The route is accessed from Colney Heath Lane to the northwest of the school and runs roughly parallel to Hatfield Road towards the southeast side of the town centre, with various access points along its route.

The link from the Alban Way Cycle Route onto Colney Heath Lane runs to the footpath on the northern side of the bridge, on the eastern footpath side. Therefore any pedestrians or cyclists using this as a route to school have to pass over the bridge, where the footway is of limited width, and then have to cross Colney Heath Lane in the vicinity of the school.

There are no formal crossing points on Colney Heath Lane in the vicinity of the school.

There is no controlled crossing on Hatfield Road despite the presence of Oaklands College to the north and Nicholas Breakspear School to the south.

Public Transport

There are bus stops located on Colney Heath Lane adjacent to the site. Routes serving the school include 34, 304 and 621. Some services utilise the western circulation facility within the main school site.

A large number of bus services operate along Hatfield Road.

Existing Traffic Conditions

The site was observed during the AM peak period. Base traffic flows along Colney Heath Lane were moderate but with significant gaps between vehicles. The main route of traffic in the vicinity of the school was from Hill End Lane towards Hatfield Road. Traffic volumes increased towards 9:00am, with queues forming from Hatfield Road back to Marconi Way by 8:35am. Queues on Colney Heath Lane from the mini roundabout with Hill End Lane towards the school

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varied, but generally dispersed quickly. It was noted that the queues described above generally occurred after the peak drop off period associated with the school.

Parents arriving to drop off pupils at the school originally dropped off in one of the two circulation areas on the site. The car park areas filled up fairly quickly, and 6th form parking was observed on Colney Heath Lane to the northwest of the main access. 10 cars remained parked on the road after the drop off period which suggests that these were related to staff, 6th form or visitors.

The circulatory areas accommodated a significant number of drop offs between 8:00am and 8:30am. A number of school buses arrived during this period, many of which arrived or returned via Colney Heath Lane to the southeast of the school. Colney Heath meanders to the south of the school and becomes too narrow for buses to pass each other on the bends. As a result, buses were observed to mount the pavement or wait for oncoming buses to pass. Some buses utilised the circulatory facility on the main site to continue back in the direction they arrived.

During the busiest drop off period, cars were parked in Colney Heath Lane mostly on the southwest side of the road. Some limited parking was also observed on the northeast side of the road. Two way flows could generally be maintained past the site. A small amount of parent parking or turning occurred in the cul-de-sacs opposite the school.

The junction between Colney Heath Lane and Hatfield Road was busy during the peak period with both vehicles and pedestrians. Vehicles travelling westbound are queuing along Hatfield Road beyond the Colney Heath Lane junction. Vehicles turning out of Colney Heath Lane have problems turning left due to the queues and problems turning right due to heavy eastbound flows on Hatfield Road.

There was a significant volume of pedestrians observed on this junction. There is a pedestrian refuge island in the centre of the junction for pedestrians travelling east to west across Colney Heath Lane, but as previously discussed, there is no crossing on Hatfield Road.

Conclusion

Nicholas Breakspear School is located on the eastern edge of St Albans, with residential development to the north and west. The site is easily accessible from the major road network serving St Albans, and peak school traffic appeared to have dispersed before significant queuing occurred on the roads in the vicinity of the school.

A significant number of pupils appear to travel by bus which helps to minimise car generation associated with the school. It was also noted that a significant number of pupils utilised the Alban Way route for walking or cycling to school.

Vehicle generation was generally accommodated within the two circulatory facilities on the site, although once these were full up, parents dropped off pupils on Colney Heath Lane. In many locations where dropping off occurs, there is no footway adjacent to the road.

Drop offs associated with the school did not appear to cause significant congestion to the two way flow of traffic along Colney Heath Lane. If the school were to be expanded we would recommend that drop off facilities and staff parking be extended to accommodate a significant

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increase in vehicles. As the site is on the edge of town, there is potential for a significant increase in traffic associated with expansion.

While the existing facilities work well, they do appear to be at capacity during the AM period, and the PM period is likely to experience longer term parking which would extend further along the surrounding roads.

There may be scope for improvements to footway facilities in the vicinity of the site, particularly between the Alban Way Cycle Route and the main entrance to the school. Consideration should be given to the introduction of a formal crossing in the vicinity of the school.

The school is not in a particularly sustainable location in terms of pupil travel to school. However, there does appear to be potential to implement improvements within the grounds of the school to minimise the impact of traffic on the adjacent roads. Extension of parking facilities on both areas of the site could provide sufficient parking for staff and sixth form vehicles which would help to reduce levels of long term parking on Colney Heath Road. Provision of additional space within the site would enable more parents to drop off within the facilities and help to avoid increasing the volume of vehicles parking on the adjacent roads.

Provision of a pedestrian and cycle access off Hixberry Lane may be worth considering, so that pedestrians and cyclists can avoid the traffic congestion in the vicinity of the school frontage. However, this could potentially attract drop offs in Hixberry Lane and Hill End Lane which would need to be carefully considered. This would be beneficial to disperse traffic away from Colney Heath Lane but could cause problems on the above two roads associated with parents parking

However, we recognise that fact that there are significant queues on Colney Heath Lane and Hill End Lane on the approach to the A1057, Hatfield Road. Although these queues appeared to occur after the peak school traffic had dispersed, analysis of the likely trip generation based upon pupil origin will need to be carried out, with analysis of how the surrounding junctions will operate following an increase in cars and buses arriving at the school. It will need to be demonstrated to the Highway Authority that proposals for expansion do not have a significant detrimental effect on the local highway network, and based upon preliminary observations there could be some doubt as to whether the road network could accommodate a significant increase in traffic in this location.

Based upon the above discussion, we consider that an increase from 6FE to 8FE may be possible depending upon the origin of the additional pupils attending the school and subject to improvements to footway facilities and parking. The road bridge which crosses the Alban Way Cycle Route is a carriageway width of approximately 5.5m wide which would accommodate the increase in traffic flows associated with the expansion, although there could be potential issues associated with the queuing on Hatfield Road, which currently causes traffic to back up to this bridge and along Hill End Lane during the peak period between 8:30am and 9:00am.

Expansion to 10FE is expected to put significant pressure on the surrounding roads and while there would appear to be space within the site to make provision for additional parked cars, we would have concerns about traffic generation on the local road network. We would also be concerned about the safety of pedestrians, in relation to an increased volume of pupils travelling on foot or by bicycle through the narrow section of footway on the bridge over the Alban Way Cycle Route.

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It is noted that the link to the Alban Way Cycle Route runs from the northeast side of the bridge, with no link on the south or west side. It is recommended that connections between the Alban Way through to the school should be investigated, possibly with a new link to the southeast, or preferably with a new link to the southwest and a footpath link into the school from this location.

A further option would be to provide a new footbridge alongside the existing bridge to increase the capacity for pedestrian movements across the bridge, particularly if traffic volumes are expected to increase.

Provision of a new school alongside Nicholas Breakspear

Provision of a new school along Colney Heath Lane, with combined capacity of up to 12 or 14FE would be of significant concern, unless improvement to the bridge over Alban Way could be implemented, along with widening of Colney Heath Lane in sections to the east of the school.

Traffic generation could potentially be more than double the existing traffic generation, which would have a significant impact on the surrounding road network.

There does not to be any suitable locations for an alternative access to the site which would help to disperse traffic away from the existing school frontage on Colney Heath Lane. Access from Hixberry Lane is unlikely to be acceptable as this is a byway and country lane in nature.

Marlborough School Science College, St Albans

To be read in conjunction with drawing ST-2151-6

Existing Road Network

Marlborough School is located on the A5183 Watling Street, on the south west side of St Albans.

Watling Street itself is a single carriageway Principal Road about 7.0m to 7.3m wide along the majority of its length, with footways to both sides which are separated from the carriageway by grass verges. In general, no traffic or parking restrictions are in place on this road, and no on street parking is apparent. A large set back service road is in place to the west side of the road about 200m to 300m south of the school entrance, known as 50 - 84 Watling Street, which is separated from the main road by a wide verge. Some double yellow lines are in place at the northern junction with the main Watling Street, but otherwise no parking restrictions were observed in this area.

At its south end, about 750m south of the school, a large 5 arm roundabout is in place which links the A414/A405 North Orbital Road, the A414 Principal Road and the southern extension of Watling Street itself. These roads link to the wider motorway network including the M1 and M25.

At its north end, about 300m north of the school, a double mini roundabout junction is in place which links the B4630 Watford Road, A5183 St Stephens Hill and King Harry Lane.

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The B4630 Watford Road is a single carriageway located to the north west of the school, and is in the region of 8m wide, with footways to both sides. Very little residents' parking was observed on this road during the day.

Various local roads are located just off Watling Street and Watford Road, and are described below in the following paragraphs:-

Robert Avenue is located to the south west of 50 – 84 Watling Street. This takes the form of a 6.3m wide loop road, which passes around the southern boundary of the school site and connects into Watford Road to the south west.

Tithe Barn Close is also located to the south west of 50 – 84 Watling Street, slightly further north. This is a residential cul de sac approximately 5.3m wide.

Vesta Avenue is located off Watling Street opposite Tithe Barn Close, and runs north east into Wilshere Avenue, adjacent to local shops. Praetorian Court is a cul de sac road which is located to the west of Wilshere Avenue, which lies behind residential development on the east side of Watling Street. A footway link is available from opposite the school entrance in Watling Street and links direct to Praetorian Court. All these roads are residential in nature.

Falstaff Gardens joins the B4630 Watford Road to the north east side of the school, about 170m south west of the double mini roundabout junction with St Stephens Hill. This is a residential cul de sac about 5.5m wide.

St Stephens Avenue joins the B4630 Watford Road, about 250m south west of the double mini roundabout. This road is residential in nature, and leads to further residential roads to the north west.

Access Arrangements

The main site access is located off Watling Street, approximately 300m south of the double mini roundabout. This takes the form of a simple tee junction, and leads to a circulating facility of about 30m diameter within the school. This facility appears to have several long parking spaces marked around its perimeter, presumably to cater for school buses. A sign is present just outside the school which states that no delivery or collection of students is permitted between 8.00am and 4.30pm.

No formal yellow lines or other parking restrictions would appear to be in place within the site. However, in Watling Street immediately to the north of the access, on the west side, post and knee rail fencing is in place over a distance of about 100m.

Staff car parks are in place within the site to the north and west of the circulating facility. The staff car park to the north would appear to have about 68 formally marked car spaces and 8 mini bus spaces. The smaller car park to the south would appear to have about 16 formally marked car spaces. It is apparent that in reality, more cars can probably be accommodated, if parked informally.

The main footway access to the site is located to the south of the access bellmouth, protected by pedestrian guard rails.

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A further pedestrian access into the site is available from the north west, via a gated alleyway direct from Watford Road. This gate was observed to be locked during the day, but open during the AM and PM school peak times.

Pedestrian/Cycle Access

Footway access is available to the school from the main access in Watling Street, and via an independent link from the north west of the school to Watford Road.

A controlled pedestrian crossing is located just to the south of the main school access in Watling Street. In addition, a further controlled pedestrian crossing is located in Watford Road, just to the south west of the alternative pedestrian school access. No particular formal cycle facilities were observed in the general vicinity of the school, or further afield.

Footways are provided on both sides of Watling Street, generally separated from the carriageway by wide grass verges. Generally, on all other roads, footways adjacent to the carriageway are provided on both sides, occasionally separated by narrow grass verges.

An independent footway link is provided from Watling Street into Praetorian Court, forming a convenient link between the school and residential areas to the east, as well as shops in Vesta Avenue.

Public Transport

The nearest public bus stops to the school are located in Vesta Avenue approximately 330m south east of the school entrance. Bus routes available from here are numbers 655 and 656, and provide access to Hatfield, Park Street, Radlett and Borehamwood.

Further bus stops are also located in Watford Road, about 170m each side of the alternative pedestrian access to the school. Bus routes available from here are numbers 321, 621, 712, 721, 724, 726, 860 and W1. These serve further destinations such as London, Watford, Luton, Abbots Langley, Harlow, and Welwyn Garden City, as well as many smaller towns and villages.

Existing Traffic Conditions

Upon arrival at the site prior to the PM peak period at 2.15pm, Watling Street and Watford Road were both already moderately busy, along with the double mini roundabout to the north of the school access. No on street parking was observed on either of these roads or on the junction. Other roads in the vicinity such as the service road at 50 - 84 Watling Street, Robert Avenue, Tithe Barn Close, Vesta Avenue, Praetorian Court, Falstaff Close and St Stephens Avenue were very quiet, with practically no residents' on street parking present.

As the school peak hour approached, prior to the main body of pupils emerging, Watling Street and Watford Road became increasingly busy generally. Some minor queues were observed at the mini roundabout junction. A few pupils began to emerge on foot just after 2.45pm, increasing steadily up to about 3.00pm.

At about this time, parents vehicles started to arrive at the site, both in the vicinity of the main entrance in Watling Street, and along Watford Road, where the secondary pedestrian access gate had been unlocked.

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The first vehicles observed to arrive at the main entrance in Watling Street did turn into the school, and it is thought these may have been parents taking advantage of the initial quiet period prior to the main school peak. In addition, vehicles started to park in the service road at 50 - 84 Watling Street and in Tithe Barn Close.

Vehicles also started to park on the south side of Watford Road and in St Stephens Crescent adjacent to the north west pedestrian access.

At around the school peak time, school related parking increased significantly on roads all around the school.

In Watling Street itself, 1 vehicle was observed to park on the carriageway, and 2 or 3 additional cars parked in the grass verge to the west side adjacent and to the south of the school entrance. Whilst additional vehicles could possibly use the main carriageway or the verge, this would be considered undesirable due to the nature of Watling Street and associated flows. The service road at 50 - 84 Watling Street became full to capacity over its entire length with parked vehicles, with no significant spare room available.

Tithe Barn Close became congested with parked vehicles, which utilised the majority of this cul de sac. Very little remaining space appeared to be available for further parking.

Robert Avenue was also parked with parents vehicles, which appeared to extend south west down to Gillian Avenue. Additional room appeared to be available further to the south west, but this progressively increases walking distances to the school.

The occasional parked parent car was noted in Vesta Avenue, at its junction with Watling Street. Additional parking room appeared to be available further north along Vesta Avenue, but again is at an increasing distance from the school.

As previously described, Praetorian Court is located to the north east of the school main entrance behind residential development, and is accessed via a footpath link. This road was observed, and a small level of parent parking was observed, perhaps 2 -3 vehicles. This area seemed to have spare parking capacity available during the peak times, and is reasonably convenient for the school.

Vicarage Close did not generally seem to attract parents vehicles, except for the one car observed. This is probably due to lack of room and restricted areas available to turn.

The east carriageway of Watford Road was significantly parked over a distance of about 75m each side of the alternative pedestrian access gate. Two way flows still appeared to be possible on the main road, and some space beyond the current level of parking appeared to be available. One car was observed in Vicarage Close to the north east.

St Stephens Avenue to the north west was fairly extensively parked by parents' vehicles, including St Stephens Close and beyond. Further parking was observed to be available at increasing distance from the school.

Overall, from our initial observations, fairly extensive on street parking was observed around the school in the peak hour, with increasing flows on the local roads. The overall traffic flows on Watling Street and Watford Road increased, but traffic still progressed on these links fairly

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easily. Queues at the min roundabout junction increased, but whilst there were some delays, these were not unduly long.

By about 3.30pm, the majority of school related traffic had ceased. For a short period, the traffic queue northbound to the mini roundabout was observed to extend just past the school entrance in Watling Street. This did, however, reduce fairly quickly.

Conclusion

Marlborough School is located on the A5183 Watling Street on the south west side of St Albans, surrounded by residential development, particularly to the north, east and west.

However, there is little development located to the south which would suggest that there could be potential for significant car use associated with the school.

The road network adjacent to the site is generally of a high standard, and the major road links including Watling Street and Watford Road are capable of dealing with significant traffic flows.

One area of particular concern is the double mini roundabout at the north end of Watling Street which links with King Harry Lane, Watford Road and St Stephens Hill. This junction was observed to be busy in the PM period as well as within the day, and conversations with the Highway Authority confirm that it currently operates above capacity in the main AM and PM peak periods. A proposal for the construction of 150 residential units on the nearby King Harry Playing Fields has recently been given approval on appeal, which will potentially add further traffic at this junction. From our initial investigations, it would appear that the current junction is located within a conservation area, with significant improvements not being possible. However, it is understood that some form of mitigation measures have been agreed with the HA, which obliges the developer to pay significant design and works contributions at the time of the 90th occupation of the dwellings. It is not clear what works are proposed, if any, and in any event, it has to be assumed that they would only deal with the current development proposal.

In the light of the above, if the school is considered for expansion, it would be necessary to investigate and understand the mitigation works proposed as part of these development proposals, and whether they would address not only the impact of the development but deliver some further capacity on the network. Detailed analysis and assessment of the local road links and junctions will then be required in order to satisfy the Highway Authority that any additional school traffic could be suitably accommodated.

At present, whilst busy for a relatively short period, traffic associated with the school peak times would appear to be reasonably catered for within the public road network.

The school has the benefit of two points of access for pupils, which will have the effect of distributing potential traffic associated with expansion. However, significant parking at both these locations has been observed associated with the current level of school use, although areas of spare capacity have been noted.

Any proposals for expansion would need to include detailed surveys of actual levels of parking occurring now along with their locations, with an accurate assessment of possible additional parking room available on the highway network to cater for possible expansion. In addition, the possibility of an on site parents' circulation facility would need to be considered, in order to

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mitigate the possible effects of future parking demand, although room may be restricted within the site.

The likely catchment of future pupils will be an important consideration in any expansion proposals, and if possible, the majority of these should come from areas well within walking distance if practicable.

As a result of the above discussions, we would recommend that there may be scope to expand Marlborough School, due to the network of good quality local roads which serve the area, and the choice of two possible alternative points of access to the wider road network. However, the expected number of additional vehicles generated due to the future catchment of additional pupils would have to be very carefully considered, particularly in the light of initial investigations in relation to the King Harry double mini roundabout junction and the fact that both Watling Street and Watford Road both pass through this junction. Detailed consideration and analysis of traffic, particularly in relation to the A5183 Watling Street and B4630 Watford Road, along with the King Harry double mini roundabout and St Stephens Hill/King Harry Lane would need to be carried out to demonstrate to the Highway Authority that it would not have an unacceptably adverse effect on the road network. It has been noted that traffic on Watford Road has the option of connecting with Watling Street via Robert Avenue around the south of the site, thus avoiding the double mini roundabout.

It is recommended that an internal circulation facility should be considered within the school, although room may be tight. Analysis of traffic levels and geometry at the school access would need careful consideration should this option be pursued.

Roundwood Park School, Harpenden

Stomor Ltd were commissioned to prepare a Brief Highways Assessment relating to the possible expansion of Roundwood Park Secondary School, with related re-provision of a 2FE Primary School on land at New Farm, Harpenden. (Report Reference: ST2142/BHA-1008)

Roundwood Park Secondary School is currently operating at 6FE and Roundwood Park Primary is operating at 1.5FE. Reports have previously been carried by Stomor Ltd out to identify the scope for expanding the secondary school to 6.6FE and expanding the Primary school to 2FE. (Report References: ST2121/TS-1006 and ST2121/STS-1006-primary)

There are a number of issues to address in order to progress any of the described options, and the Highway Authority will need to see clear evidence that the proposed improvements are achievable and practical. Expansion of the schools under any of the scenarios described will be subject to Transport Assessments or Statements, which will include an assessment of traffic generation and vehicle movements associated with the access and facilities proposed under each scenario. It is not possible at this stage to confirm whether any of the options will be acceptable to the Highway Authority following this analysis.

The following improvements have been identified in previous reports and discussions, which we recommend as a minimum for any of the proposed situations on the site.

- i. It has been identified that pedestrians waiting to cross the existing school access road at the bellmouth on Roundwood Park may be at risk from large vehicles overrunning the

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- kerb. Therefore, providing there is sufficient space within the footpath at the bellmouth, we would recommend that bollards are installed in order to protect pedestrians from turning vehicles.
- ii. Manoeuvre of buses around the bend between Park Hill and Roundwood Park can be problematic when vehicles are parked too close to the bend. Measures such as railings on the inside of the bend and provision of a layby on the outside of the bend could help to ease bus and car movements in this location.
 - iii. Installation of bollards on the verges or footways in strategic locations could help to deter drivers from mounting the kerb.
 - iv. Improvements to the junction between Roundwood Lane and Roundwood Park should be considered, with replacement of the existing speed hump to the north of the junction with a raised table across the junction. Improvements to the footways and crossing points could be established with this arrangement, while minimising speeds at this junction.
 - v. The Highway Authority has identified that improvements to parking facilities on Park Hill will need to be a fundamental concern in relation to any proposals for expansion in the area of Roundwood Park. Improvements would need to be in the form of a layby or road widening for parking at the northeast end of Park Hill, in order to enable two-way flows with parking on both sides. This is likely to impact on the extent of grass verge and existing trees on the southeast side of the road.
 - vi. Consideration may also need to be given to improving the junction geometry at the junction between Park Hill and the A1081, Luton Road. It is noted that there is a BT cabinet in the footpath on this bellmouth which may generate significant costs associated with improvement. As this junction in particular is an existing problem on the highway, the Highway Authority have indicated that there may be some part funding available from the Highway Authority to implement such improvements.
 - vii. Improved lighting and surfacing of the Nicky Line Footpath to encourage more pupils (and accompanying parents) to cycle to school
 - viii. A review of the existing School Travel Plans and emphasis on minimising the reliance upon car travel to and from school could help to mitigate against the increase in vehicles expected as a result of proposals. Key elements of the STP would be:
 - Further encouragement of a one-way system between Roundwood Lane, Roundwood Park and Park Hill. Although it is recognised that residents may be unwilling to adhere to this arrangement, if all school related vehicles respected this arrangement, traffic conditions outside the school could be significantly improved.
 - Increased emphasis on cycling to school – recommended if improvements to cycle facilities can be achieved on local roads.

We have identified ways that we think the proposals might be acceptable and in summary we would recommend the following actions will need to be taken in order to progress each of the scenarios.

Summary

Scenario 1

Secondary at 6.6FE, Primary at 2FE in current location, Pitches off Roundwood Lane.

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Would appear to be acceptable in Highways terms based upon the limited increase in traffic. A Transport Statement for expansion of the secondary school and a Supplementary Report for associated expansion of the primary school have already been prepared, which identify the need for various highway improvements in order to implement expansions. The Highway Authority has since been consulted on a preliminary basis and has confirmed that they will look for improvements on Park Hill under any expansion proposals in the Roundwood Park area.

Scenario 2

Secondary at 8FE, Primary at 2FE in current location, with or without Pitches off Roundwood Lane.

Traffic impact arising from expansion of both schools on their existing sites to 8FE secondary and 2FE primary is unlikely to be acceptable to the Highway Authority. It may be worth considering provision of a drop off facility off Falconers Lane in addition to the Highway Improvements detailed above, which may help to mitigate the increase in traffic. Scenario 2 is likely to only be achievable if a facility for pick up and drop off is provided off Falconers Field, which could potentially be combined with access to the pitches.

Scenario 3

Secondary at 8FE, Primary relocated at 2FE and accessed off Falconers Field, with or without Pitches accessed off Roundwood Lane.

The Highway Authority has concerns regarding expansion of the secondary school to 8FE. However, this scenario may be possible subject to Highway Improvements detailed above and provision for primary related coach parking on the secondary school site. Scenario 3 will have a significant impact on Roundwood Park in terms of the two way flow of secondary and primary school vehicles between the existing school access and Falconers Field. However, this scenario offers the opportunity for a combined drop off facility with the secondary school and offers significant scope for coaches associated with the primary school to be accommodated on the secondary school site.

Scenario 4

Secondary at 8FE, Primary relocated at 2FE and accessed off Roundwood Lane, with or without Pitches accessed off Roundwood Lane

The Highway Authority has concerns regarding expansion of the secondary school to 8FE. However, this scenario may be possible subject to Highway Improvements detailed above and provision for primary related coach parking on the secondary school site. Scenario 4 will have a significant impact on Roundwood Lane traffic flows but will keep traffic associated with the primary and secondary school relatively well segregated. There is scope to combine the parking for the pitches with a drop off facility for the primary school, but less scope to expect primary related coaches to collect or drop off pupils at the secondary school site. There would be less scope for a combined facility to accommodate drop off associated with the secondary school.

Scenario 5

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Secondary at 8FE, Primary relocated at 2FE and accessed off Roundwood Lane, with or without Pitches accessed off Falconers Field

The Highway Authority has concerns regarding expansion of the secondary school to 8FE. However, this scenario may be possible subject to Highway Improvements detailed above and provision for primary related coach parking on the secondary school site. This scenario will have a significant impact on Roundwood Lane traffic flows but will keep traffic associated with the primary and secondary school more segregated than other scenarios. There is scope to combine the parking for the pitches with a drop off facility for the secondary school, while providing a specific facility for drop off associated with the primary school off Roundwood Lane. Primary related coaches would have to collect or drop off pupils at the secondary school site, in order to make this scenario feasible.

Each of the scenarios has been ranked in order of preference in highways terms based upon the discussion above, as follows:

- i) Scenario 1
- ii) Scenario 5
- iii) Scenario 3
- iv) Scenario 4
- v) Scenario 2

St Georges School, Harpenden

To be read in conjunction with drawing ST-2152-1

Existing Road Network

St Georges Secondary School is located on Sun Lane, to the northeast of Harpenden town centre. The school is bounded by Sun Lane on its northwestern boundary and by Carlton Road on its southwestern boundary. Other boundaries of the site generally abut rear gardens of properties on Stewart Road, Sauncey Avenue and Fallows Green and cul-de-sacs associated with all of the above roads.

Sun Lane runs from southwest to northeast, from the A1081 High Street north of the town centre to a double mini roundabout junction with Ox Lane, Hollybush Lane and Westfield Road. To the west of the school, Sun Lane passes over the mainline railway. The road width across the bridge is approximately 5.5m wide maximum, with a footpath width of no more than 1.2m on its northern side. On the south side the brick parapet abuts the top of the kerb and on the north side the brick parapet abuts the back edge of the footway, leaving no room for improvement or widening. Carlton Road meets Sun Lane just to the east of the bridge. Visibility between vehicles on the bridge and vehicles emerging from Carlton Road is extremely poor and vehicles emerging from Carlton Road have to pull into the main carriageway of Sun Road in order to see if vehicles are coming eastbound over the bridge.

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Carlton Road runs southwards from Sun Lane towards the B652 Station Road. The junction between these two roads forms a staggered cross roads with the entrance to the Harpenden Railway Station eastern car park. There is a second car park to the west of the railway line. Carlton Road is approximately 6m wide with 2m wide parking bays along much of its length along the eastern side of the road. The resulting road width is insufficient for two cars to pass easily and drivers rely upon gaps in the parking as passing places.

To the north of the school, Hollybush Lane passes over the mainline railway towards the A1081 Luton Road, just to the west of the double mini roundabout junction. The carriageway across this bridge is approximately 5.8m wide with a 1.5m wide footway on its southern side and 0.8m wide paved strip on its northern side. At the double mini roundabouts to the east of the bridge, visibility between Sun Lane and Hollybush Lane is poor and the road surface is in poor condition.

To the south of the school Stewart Road runs from Carlton Road at its southwest end to Sauncey Avenue and Manland Way at its northeast end.

To the northeast of the school runs the northern arm of Sauncey Avenue, which runs northwest from Manland Way to Ox Lane. Ox Lane runs roughly west to east from the double mini roundabout junction with Sun Lane, Hollybush Lane and Westfield Road to Coldharbour Lane.

The area is within a controlled parking zone, and most of the on-street parking bays along Carlton Road are controlled with pay and display ticket machines adjacent. Parking on Sun Lane is restricted by double yellow lines, or by yellow zig-zag 'School Keep Clear' markings. The roads are traffic calmed with speed humps along their length, which is common among many of the roads in the vicinity of the school.

Access Arrangements

St Georges School is accessed by vehicles and pedestrians from Sun Lane and from Carlton Road. On Sun Lane, the northern access provides a route for pedestrians, a vehicular route into a staff car park and also a vehicular route into a one way system which passes between the western building blocks and emerges back onto Sun Lane via an exit only route to the south of the zebra crossing.

The access off Carlton Road links to a larger parking area and accommodates vehicular and pedestrian movements into and out of the site. There is a raising barrier inside the site along this access route which was lowered throughout the observed period.

There is a pedestrian link from Stewart Road into the school site between numbers 15 and 17 Stewart Road, via Public Footpath Number 20 which continues along the school boundary to Carlton Road to the west.

There is a strip of land between numbers 32 and 34, Sauncey Avenue which is not within the School Site ownership. This strip is currently fenced and gated but runs from the school site boundary up to the edge of Sauncey Way. It is not clear whether this has previously been used as a route through to the school site.

Pedestrian/Cycle Facilities

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In the vicinity of the school there are footways on both sides of the road on Sun Lane, with a zebra crossing located to the south of the main access. On Carlton Road there is a footway only along the eastern side of the road.

Either side of the school there are pedestrian routes across the railway line via Sun Lane and Hollybush Lane. However, as described above, the associated footways are narrow, particularly on Sun Lane where the footway is around 1.2m wide. There is a footbridge over the railway to the south of the school linking Stewart Road to Bowers Way to the west.

As described above, Public Footpath 20 runs along the southern boundary of the site linking Stewart Road and Carlton Road, and providing a link into the school site.

National Cycle Route 6 runs along the line of a former Railway to the west of Coldharbour Lane. In many parts through Harpenden, this route is off road. National Cycle Route 12 runs on road along Ox Lane from Cycle Route 6 and then links onto the former Nicky Line railway which continues west towards the Roundwood Park area of Harpenden. A spur of National Route 6 runs along Manland Way and Stewart Road towards the town centre as an on-road advisory route.

Public Transport

There are bus stops on Sun Lane which are served by routes 45, 365, 366, 620, HA1 and HA2. Harpenden Railway Station is located approximately 600m from the school access on Carlton Road.

Existing Traffic Conditions

The site was observed during the AM peak period, during which, background traffic on the surrounding roads was fairly low. No on-street parking was present on Sun Lane, and very few cars were parked on Carlton Road in the vicinity of the school.

At the start of the peak drop off period parents were dropping off pupils within the one way route through the site accessed from Sun Lane. During the busiest period school staff were present on the access route and no vehicles entered the site. This would suggest that parents are not permitted into the site to drop off on a general basis. Towards the end of the peak, once staff had moved away, further parents were observed dropping off in this area. Two Police Community Support Officers were observed patrolling in the vicinity of the school accesses and along Stewart Way, one of which was stationed directly adjacent to the Sun Lane egress route, and appeared to be making notes regarding traffic.

Some parking was observed along Sun Lane adjacent to the site, and a couple of drop offs were observed in Pigeonwick cul-de-sac to the north. This parking did not seem to be of a significant volume and as such no undue problems were observed.

On Carlton Road, parking occurred in most of the designated parking areas adjacent to the school. This parking obstructed visibility to oncoming traffic and the volume of vehicles travelling in either direction generated some significant delay as oncoming vehicles waited for each other to pass. Regularly, too many cars tried to squeeze into a small area for passing, resulting in further delays as vehicles edged past each other.

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There is a significant volume of pedestrian traffic along Carlton Road, associated with the schools and the railway station. Much of the pedestrian traffic was travelling in the opposite direction to the school pupils which appeared to be local residents on their way to the railway station or town centre. At the southern end of Carlton Road, a signal controlled pedestrian crossing on Station Road assisted pedestrians across the busy B652.

To the north of the site, it was noted that there is no footway along the northern side of Ox Lane between House Numbers 1 and 7, to the east of the mini roundabouts. As a result a significant number of pedestrians travelling from north of Ox Lane crossed the road outside Number 7, including local residents and school pupils. There is no formal crossing in this location.

To the southeast of the school, a few parents were observed dropping off pupils on Stewart Road adjacent to the footpath link into the school. No congestion was observed in this area.

Conclusion

The highway network surrounding the school site has several inadequacies, particularly in relation to footway widths and visibility on the two adjacent railway crossings on Sun Lane and Hollybush Lane. Base flows in the area are low, and as a result no major problems were observed. However, during the peak drop off period, the traffic flow in the vicinity of the school was significantly greater and particularly the junction between Sun Lane and Carlton Road became difficult to negotiate. Vehicles parking on Carlton Road to drop off caused some disruption to the flow of vehicles along the road, which provides a link to the railway station as well as the school and NHS facilities to the south.

A significant proportion of pupils appear to travel to school on foot, particularly along Carlton Road. Footway routes in this direction appear to be adequate. The footway across the railway at Sun Lane is not ideal at only 1.2m wide, but there is no scope for improvement of this without widening or replacing the bridge.

To the north of the school we would recommend that consideration be given to a crossing point in the vicinity of Number 7 Ox Lane, as a significant number of pedestrians cross in this location and traffic flows are not heavy but considerable, particularly during the peak school drop off period.

There does not appear to be scope to provide an alternative access anywhere else around the site to provide relief at the Sun Lane junction with Carlton Road and on Carlton Road itself. However, there does appear to be capacity for more vehicles to drop off pupils on Stewart Road, near to the existing pedestrian access.

As described above, some parents were observed dropping off within the one way route within the site, but use of this facility appeared to be restricted by the school.

In order to expand this school we would consider that improvements to the Sun Lane junction with Carlton Road would need to be implemented. It may be possible to achieve this utilising land within the school boundary, shifting Carlton Road east into the site to improve junction vision and alignment. However, there is likely to be considerable costs involved in achieving this.

We would also recommend that investigation be carried out into whether a suitable drop off facility could be provided within the school grounds, to minimise the congestion on Carlton

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Road. Alteration of parking restrictions on Carlton Road could provide more passing places to ease the flow of traffic.

With regard to pedestrian movements, there does not appear to be scope to improve the footway width on the Sun Lane railway crossing unless signal controls are implemented on the bridge and the carriageway narrowed to take one way traffic only. To the north of the school we would recommend further investigation into the safety of pedestrians crossing Ox Lane adjacent to house number 7.

From initial observations it would appear that expansion of St Georges School could be problematic in Highways terms unless effective improvements can be made to the adjacent Highway network.

Sir John Lawes School, Harpenden

To be read in conjunction with drawing ST-2152-2

Existing Road Network

Sir John Lawes Secondary School is located on Manland Way on the northeast side of Harpenden. The school is bounded by Manland Way on its southeastern boundary, Sauncey Avenue on its southwest boundary, Oulton Rise on its northwestern boundary and the rear gardens of properties on Ox Lane to the northwest. Manland Primary School occupies the northwestern quadrant of the overall school site, accessed from Sauncey Avenue.

There is a link from the secondary school site to Ox Lane between houses on that road. This link is currently gated with a grass strip leading into the school playing fields and some overgrown shrubbery along each side. It does not appear that this link is regularly used. The boundary between the school site and Oulton Rise is lined with trees with a significant level difference, in the region of 2-3m between the school playing fields and the road. There is no existing vehicular or pedestrian link between the school and the road in this location.

Manland Way is approximately 5.5m wide and runs from southwest to northeast between Sauncey Avenue and Cross Way. The junction between Manland Way and Cross Way is formed by a 90 degree bend. Cross Way and the southern arm of Sauncey Avenue run southeastwards from Manland Way towards Manland Avenue, which itself links to the B652 Station Road and the wider road network.

The northern arm of Sauncey Avenue which bounds the school runs northwest from Manland Way to Ox Lane. Ox Lane runs roughly west to east from a double mini roundabout junction with Sun Lane, Hollybush Lane and Westfield Road to Coldharbour Lane. Hollybush Lane and Sun Lane run towards the A1081 passing over the main line railway. The northeast end of Ox Lane runs under a former railway line which now forms part of National Cycle Route 6 from London to Milton Keynes.

Manland Way and Sauncey Avenue have zig-zag 'School Keep Clear' road markings in the vicinity of the points of access, with parking bays marked out on the street where appropriate. Double or single yellow lines are generally present on the opposite side of the road. The area is within a controlled parking zone, and most of the on-street parking bays are for Zone 1 permit holders only between 10am and 4pm. At other times of day these bays can be used by anyone.

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The roads are traffic calmed with speed humps along their length, which is common along many of the roads in the vicinity of the school. On Sauncey Avenue, a bus bay is marked out on the road to the north of the site access, with capacity for approximately 3 buses. The road is approximately 6.75m wide and two way flow can just be maintained by smaller cars with parked cars on one side.

Access Arrangements

Sir John Lawes School is accessed by vehicles and pedestrians from Sauncey Avenue and from Manland Avenue. Both vehicular access points serve substantial parking areas, with cars parked between buildings wherever space allows. The vehicular and pedestrian entrances on Sauncey Avenue are separate.

On Manland Way there is a small parking area accessed directly off the road, with space for 14 cars, stacked in two rows of 7 cars. The main car park access off Manland Way is located adjacent to the southeast corner of the buildings. A maintenance access gate is located just to the southwest of its junction with Cross Way, which provides direct access onto the hard sports pitches adjacent. This also has a pedestrian entrance gate which is open for use at the start and end of the school day.

There is no existing access point from Oulton Rise. Oulton Rise is significantly lower in level than the adjacent playing fields, so a future vehicular link is unlikely to be practicable. There is an existing maintenance access route between Ox Lane and the northern side of the site which is not currently used. There may be scope to provide some form of usable access in this location which will be discussed below.

Pedestrian/Cycle Facilities

There is a comprehensive network of footways on both sides of the roads surrounding the school and nursery. Public Footpath number 25 runs from the junction between Coldharbour Lane and Station Road to Waveney Road, and from there through to Manland Way, crossing Wroxham Way. This provides a much shorter route between Lower Luton Road and the school than the equivalent journey by car, but cycling is not permitted on this footpath.

There are no formal crossings within the residential area surrounding the school site. On Lower Luton Road there is signal controlled crossings adjacent to Pickford Hill which serves Public Footpath number 26 and its link to Footpath 25 described above.

National Cycle Route 6 runs along the line of a former Railway to the west of Coldharbour Lane and in the vicinity of the site. In many parts through Harpenden, this route is off road. National Cycle Route 12 runs on road along Ox Lane from Cycle Route 6 and then links onto the former Nicky Line railway which continues west towards the Roundwood Park area of Harpenden. A spur of National Route 6 runs along Manland Way and Stewart Road towards the town centre as an on-road advisory route.

There is a footbridge over the mainline railway line linking Stewart Road to Bowers Way to the west. Alternative footway routes from west to east across the railway line are via road bridges at Sun Street and Station Road which provide less of a direct link to the school.

Public Transport

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The bus stops on Sauncey Avenue are served by specific school services. Bus stops on Manland Way and Ox Lane are served by routes HA1 and HA2, respectively.

Existing Traffic Conditions

The site was observed during the AM peak period, during which, background traffic on the surrounding residential roads was very low. No on-street parking was present on Sauncey Avenue, and 4 cars were parked on Manland Way alongside the school. Cross Way was heavily parked by residents as houses in this location do not have driveways. Ox Lane, adjacent to the site has a moderate level of resident's on street parking present at the start of the period, particularly in the vicinity of its junction with Sauncey Avenue.

Traffic in the vicinity of the school was busy between 8:20am and 8:40am, during which time drop offs occurred mainly on Sauncey Avenue. Some drop offs were observed on Manland Way, although less space was available in this location. A member of staff was supervising pedestrian and traffic movements at the junction between Manland Way and Cross Way, where the public footpath link from Coldharbour Lane approaches the school. Visibility around the junction between Manland Way and Cross Way was very poor, particularly due to a 4x4 vehicle parked close to the corner on Cross Way, blocking the view around the corner from either direction.

Visibility was also poor emerging from the southern arm of Sauncey Avenue onto Manland Way. Visibility to the right is acceptable, but visibility to the left is obstructed by the boundary of number 24 Sauncey Avenue and an overhanging shrub.

A significantly large number of pupils were observed walking along Sauncey Avenue from Station Road. There is a zebra crossing on Station Road to the southwest of its junction with Manland Avenue, which was heavily used. From there, pupils need to cross Sauncey Avenue and cross Manland Way to get to the school. As there are no existing formal crossing points between Station Road and the school, pupils tend to cross in different locations, whenever a gap is available in the traffic. As traffic flows are generally low, this does not appear to be a problem. However, due to the number of pupils walking along this route, formal crossings would be very beneficial in improving pedestrian safety.

Along the northern arm of Sauncey Avenue, during the peak period, parents dropped off pupils generally along the northeast side of the road within the marked out parking bays. The road width of 6.75m would just allow two way flow of vehicles to occur past parked cars, if travelling with great care. However, the majority of drivers used gaps in the parking to wait for oncoming vehicles to pass.

At the northern end of Sauncey Way, coaches turning into the road from Ox Lane overrun the opposite side of the road in order to turn. A school crossing patrol officer is located on Ox Lane to the east of Sauncey Way, assisting pupils crossing from Clarendon Road towards the school. This crossing helps to control westbound flows along Ox Lane, allowing buses to turn in if nothing is emerging from Sauncey Avenue.

As the school can be approached from many different routes, there didn't appear to be a concentration of traffic on any of the local roads, except for that associated with drop off adjacent to the school.

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The large majority of pupils appeared to travel on foot, with a significant number also travelling by bus. As a result traffic conditions in the vicinity of the school were generally acceptable, except for problems with poor visibility when turning into and out of surrounding roads. Several mopeds arrived at the school and were parked on Barton Close opposite the school. It is assumed that these were associated with 6th form pupils.

The adjacent Manland Primary School generated a significant volume of parking from 8:40pm onwards. This generally occurred along Sauncey Avenue along the western side of the road and did not appear to cause any problems unless a car parked on the school side of the road. There did not to be any significant overlap between drop offs associated with Manland Primary and drop offs associated with Sir John Lawes.

Conclusion

The school is located in the centre of a fairly dense residential area with housing to the north, south, east and west of the school site. As a result, the proportion of pupils travelling to school on foot appeared to be particularly high. Despite this, there is a lack of formal crossing facilities on the main pedestrian desire line from Station Road to the school, particularly directly adjacent to the school on Manland Way.

Sauncey Avenue is suitable for drop off and pick up associated with the school, providing parents park considerately, and do not park on the opposite side of the road to allocated parking areas, or within the bus stops, double yellow lines or zig-zag markings. The existing bus bays provide a passing area when buses are not present. Although two way flow is possible adjacent to parked cars, the remaining road width is narrow and cars have to pass each other with care.

Manland Way is narrower than Sauncey Avenue and parking on one side of the road blocks the two way flow of traffic. However, large gaps in parking are present adjacent to the existing on site parking area and access road, which allows passing areas for vehicles travelling in opposite directions.

Key problems identified were associated with the limited visibility around the Manland Way junctions with Sauncey Avenue and Cross Way. This does encourage vehicles to travel slowly around the respective corners, but we would recommend that improvements be considered where feasible. At the junction with Sauncey Way, vegetation could be trimmed back along the back of the footway on Manland Way to enable further vision. At the junction with Cross Way, we would recommend that consideration be given to extending the existing double yellow lines further along Cross Way, deterring vehicles from parking close to the corner which obstructs visibility.

Based upon observations carried out during the AM period, we would consider that Sir John Lawes would be suitable for a moderate expansion, providing that the additional pupils are distributed within walking distance of the school, in order to minimise the number of additional car trips. In order to accommodate the existing and potential increase in pupils walking to school, we would recommend that improvements are needed on the adjacent roads to provide formal crossing points.

There may be scope in the future to provide a pedestrian access via the existing maintenance route off Ox Lane. This would increase the volume of parking on Ox Lane, which is a fairly

SECTION 3 – EXISTING SCHOOL SITES

popular through-route to Coldharbour Lane which links to the B653 to the northeast. However, this would help to disperse traffic away from the main entrances on Sauncey Avenue and Manland Way.

At the end of the observed period there were approximately 18 cars parked on Sauncey Avenue and Manland Way adjacent to the school, but there were at least 5 spaces still available within the parking area accessed directly off Manland Avenue. It is not clear whether the on street parking is associated with visitors, staff or 6th formers, but it would appear to be school related.

Detached Playing Fields off Roundwood Lane

In order to expand the school, additional playing fields will be required, which could potentially be located in the vicinity of the Roundwood Park Schools, on land at New Farm. It is anticipated that pupils will travel by minibus between the school and the detached playing fields. The route between the two sites would be fairly direct via Ox Lane, Hollybush Lane, a short stretch along Luton Road, then onto Park Hill or Roundwood Lane. It has been identified in previous investigations that Roundwood Lane is not ideal for coaches due to limited width in places. Minibuses will be able to travel via either route but it has been suggested that coaches may have to utilise the existing turning facility off Roundwood Park, located in the grounds of the Roundwood Park Primary and Secondary Schools.

SECTION 4 – SUMMARY

Section 4 - Summary

The table below shows the potential school sites ranked in order of deliverability, in Highways and Transportation terms only. This is based upon information available at the time of preparation. Information such as the predicted catchment of pupils may affect the order of these rankings and associated recommendations.

Potential Sites:

St Albans	Existing Highways	Topographical and site space considerations
Site G – Sandpit Lane	Preferred	Preferred in Highways terms but with possible level issues. Access would be better located to the east of the site if deliverable.
Site K – Holyrood Crescent	Suitable	Variety of routes to school through residential area.
Site C – St Albans Road	Suitable with issues	Suitable in highways terms but potentially unsuitable in terms of levels. Would look at possible improvements at junction to southwest.
Site L- Butterfield Lane	Suitable with issues	Issues with Cottonmill Lane to east of site.
Site D – House Lane	Issues	Issues with southern section of House Lane. May be potential for improvements to House Lane and B651/Beech Road junction

Harpenden	Existing Highways	Topographical and site space considerations
Site F – Common Lane, Batford	Suitable	Access feasible. May need to look at traffic flows on Lower Luton Road.
Site A – Luton Road	Suitable with issues	Review signal controls. Issue with use of surrounding country lanes.
Site G – Wheathampstead Road	Issues	Widening of Croftwell may provide suitable access route, but no other suitable points of access.

London Colney	Existing Highways	Topographical and site space considerations
Site A – London Colney	Preferred	Potentially a long way from main catchment. However, highways and access are good. Level of Residential development would need to be determined.

SECTION 4 – SUMMARY

The table below shows the existing school sites ranked in order of deliverability, in Highways and Transportation terms only. This is based upon information available at the time of preparation. Information such as the predicted catchment of pupils may affect the order of these rankings and associated recommendations.

Existing Sites:

St Albans	Existing Highways	Notes
Site 3 – Sandringham	Preferred	
Site 1 – Townsend CofE	Suitable with issues	Green Lane and Ancient Briton junction issues. AB unlikely to be improved significantly. Circulation facility recommended.
Site 5A – Verulam	Suitable with issues	Significant highway improvements required in vicinity of site, including provision of a circulation facility on site. Sustainable location.
Site 7 – Nicholas Breakspear	Suitable with issues	Improvements to footpath links may be possible. Extension to parking and circulation facilities required.
Site 8 – Marlborough	Suitable with issues	May require improvements to King Harry Lane junction and improved on site circulation facilities.
Site 2 – St Albans Girls School	Issues	Ancient Briton junction issues unlikely to be improved significantly. Also issues with Sandridgebury Lane. Potential for improved on site circulation facilities.

Harpenden	Existing Highways	Topographical and site space considerations
Site 3 – Sir John Lawes	Suitable with Issues	Improvements to crossing facilities required.
Site 1 – Roundwood Park	Suitable with Issues	Expansion to 6.6FE ok. Expansion to 8FE may require provision of a drop off facility off Falconers Field and may require movement of the primary school. Highway improvements also required on surrounding roads
Site 2 – St Georges	Issues	Would need extensive widening on surrounding roads and railway crossings. Unlikely to be feasible.

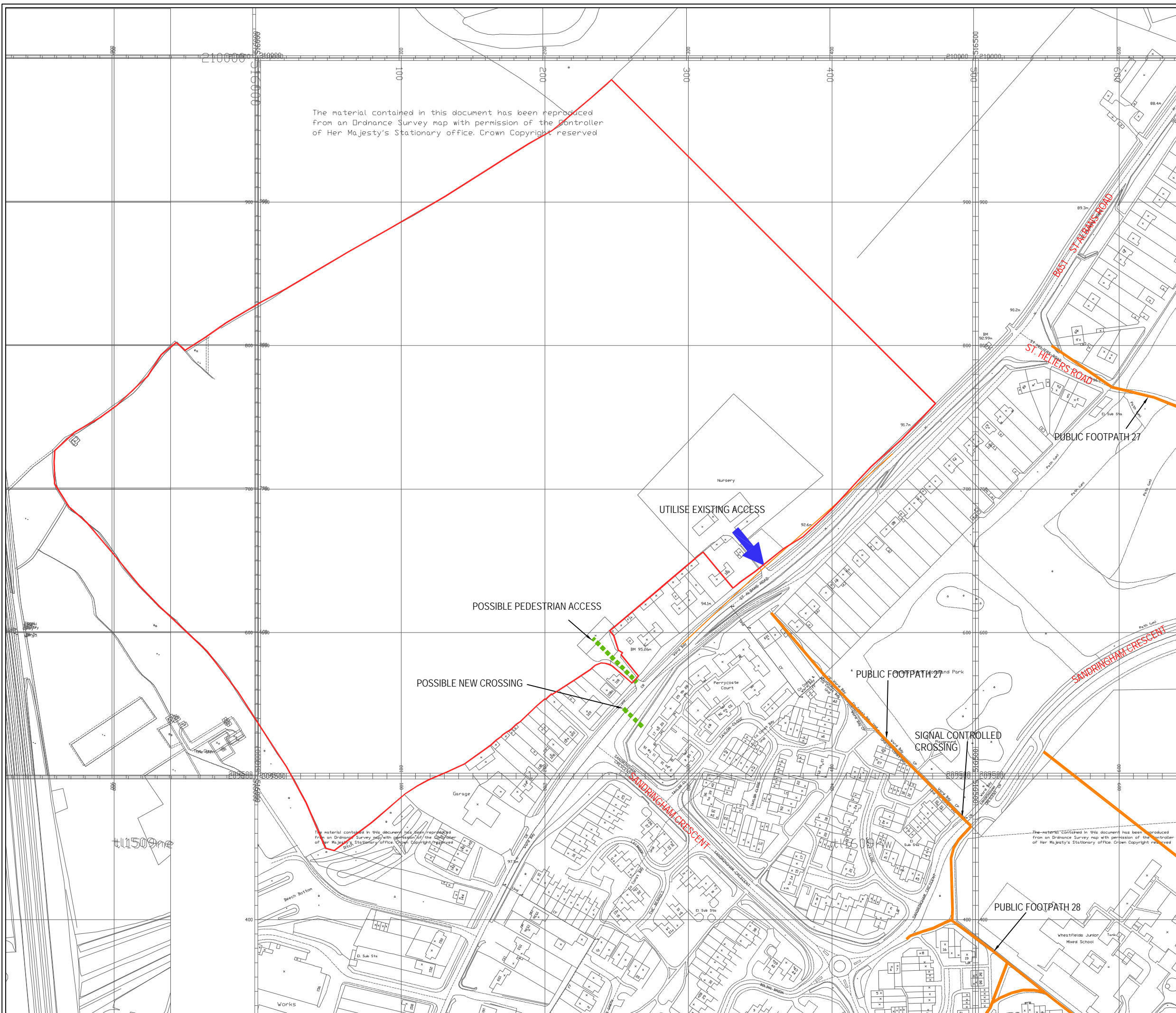
SECTION 5 – DRAWINGS

Section 5 - Drawings

Drawing Number	Description
ST-2151-7-A	St Albans - Potential Site C
ST-2151-8	St Albans - Potential Site D
ST-2151-10	St Albans - Potential Site G
ST-2151-9	St Albans - Potential Sites K and L
ST-2152-3	Harpenden - Potential Site A
ST-2152-4	Harpenden - Potential Site F
ST-2152-5	Harpenden - Potential Site G
ST-2151-11	London Colney - Potential Site A
ST-2151-1	St Albans - Townsend CoE VA School
ST-2151-2	St Albans - St Albans Girls School
ST-2151-3	St Albans - Sandringham School
ST-2151-4	St Albans - Verulam School
ST-2151-5	St Albans - Nicholas Brakespear RC School
ST-2151-6	St Albans - Marlborough School Science College
ST-2152-1	Harpenden - St Georges School, Harpenden
ST-2151-2	Harpenden - Sir John Lawes School, Harpenden

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- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
- ➔ POSSIBLE ACCESS LOCATION WITH ISSUES
- — — POSSIBLE NEW VEHICULAR LINK
- — — EXISTING PEDESTRIAN FACILITIES
- - - POTENTIAL PEDESTRIAN FACILITIES



Rev	Description	Date	Drawn	Checked
A	Site boundary adjusted to provide more suitable potential access	27/1/11	NJM	DGS



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Project: **Site C,
St Albans, Herts**

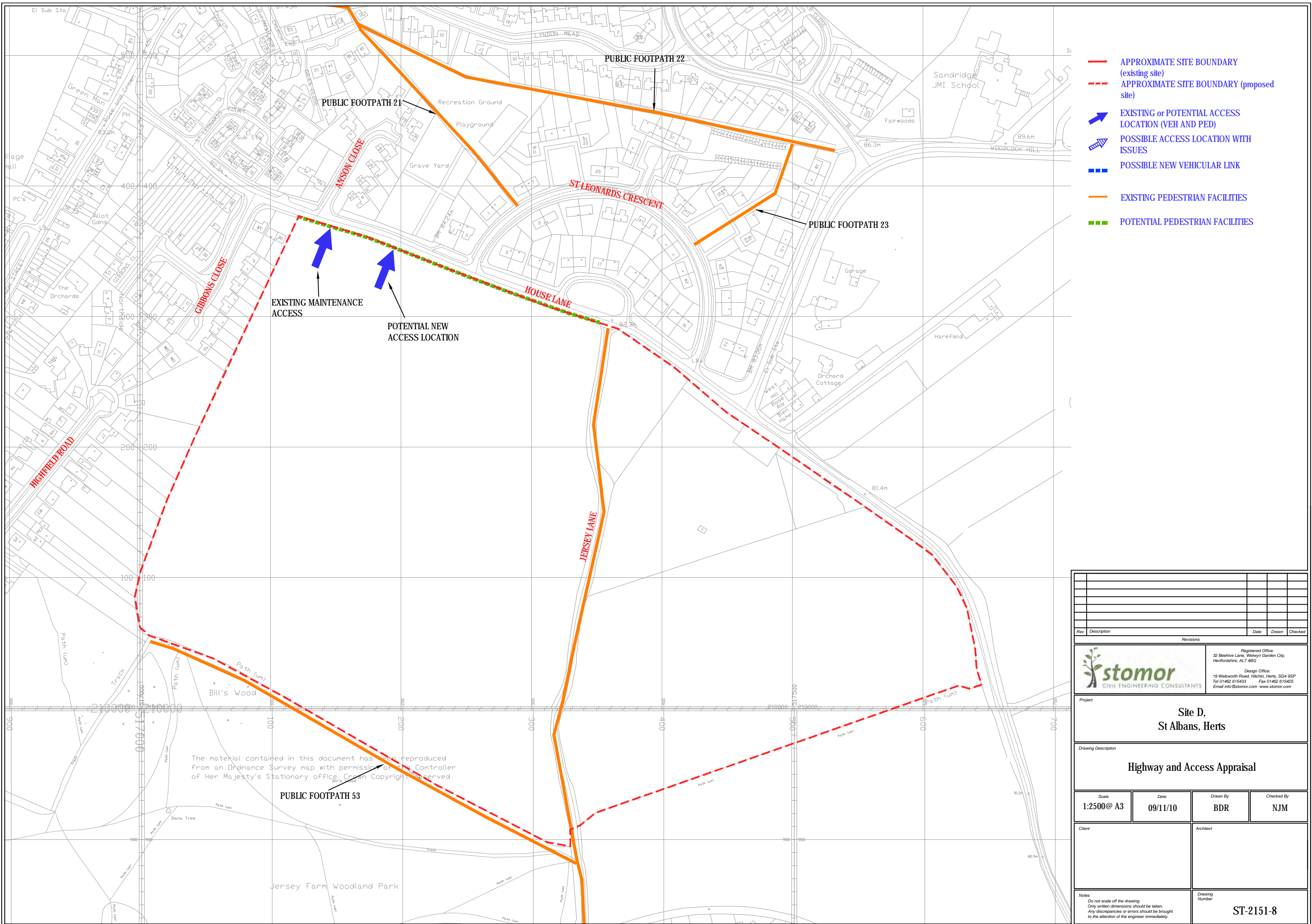
Drawing Description: **Highway and Access Appraisal**


Scale 1:2500 @ A3	Date 09/11/10	Drawn By BDR	Checked By NJM
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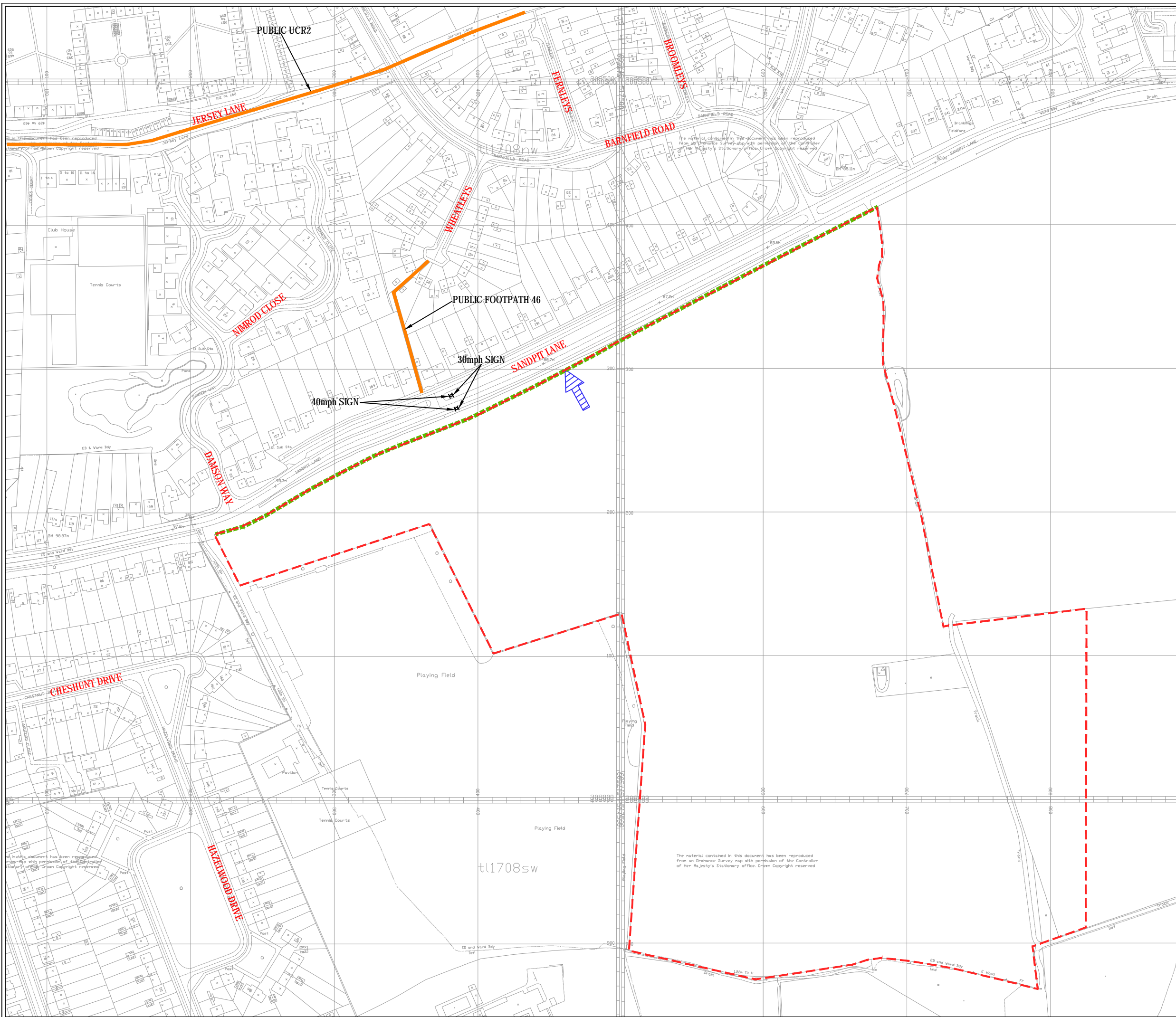
Client	Architect
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Drawing Number: **ST-2151-7-A**



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Project <p style="text-align: center;">Site D, St Albans, Herts</p>																																	
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Client		Architect																															
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- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
- ▨ POSSIBLE ACCESS LOCATION WITH ISSUES
- — — POSSIBLE NEW VEHICULAR LINK
- EXISTING PEDESTRIAN FACILITIES
- - - POTENTIAL PEDESTRIAN FACILITIES

Rev	Description	Date	Drawn	Checked



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**Site G,
St Albans, Herts**

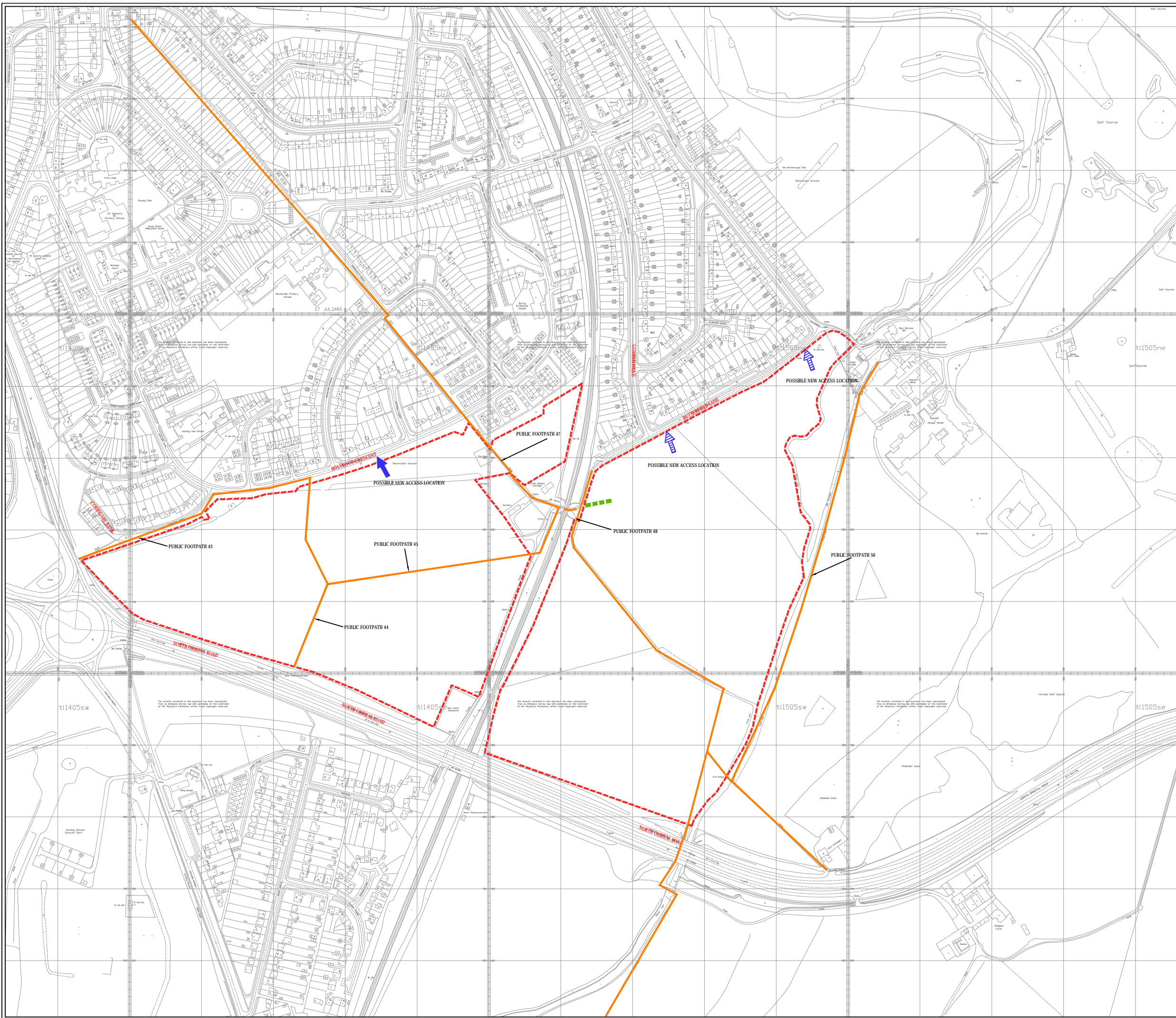
Highway and Access Appraisal

Scale 1:2500 @ A3	Date 09/11/10	Drawn By BDR	Checked By NJM
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Client	Architect

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Project

**Sites K and L,
St Albans, Herts**

Drawing Description

Highway and Access Appraisal

Scale	Date	Drawn By	Checked By
1:5000 @ A3	09/11/10	BDR	NJM

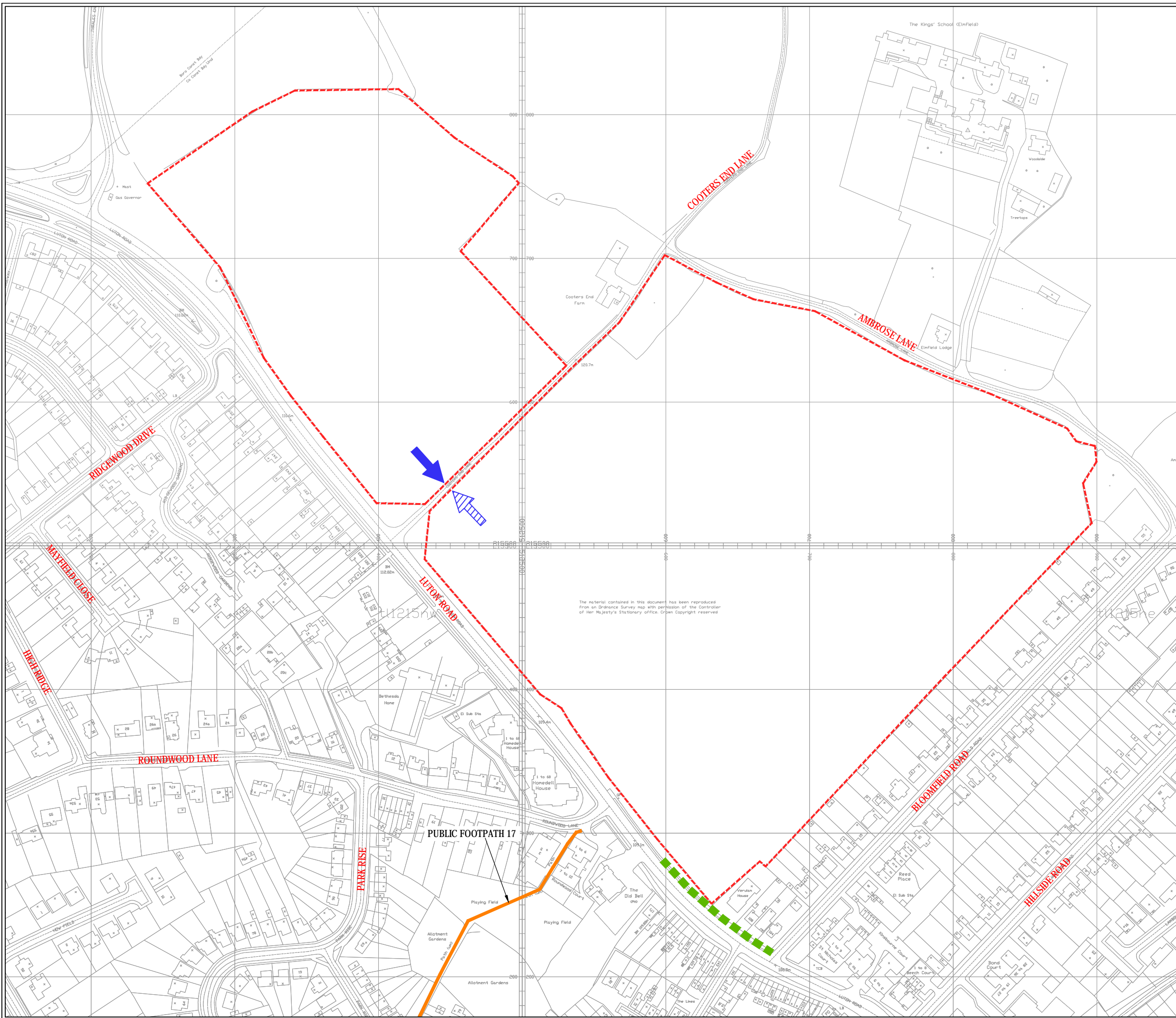
Client	Architect

Notes

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Drawing Number

ST-2151-9



- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
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**Site A,
Harpenden, Herts**

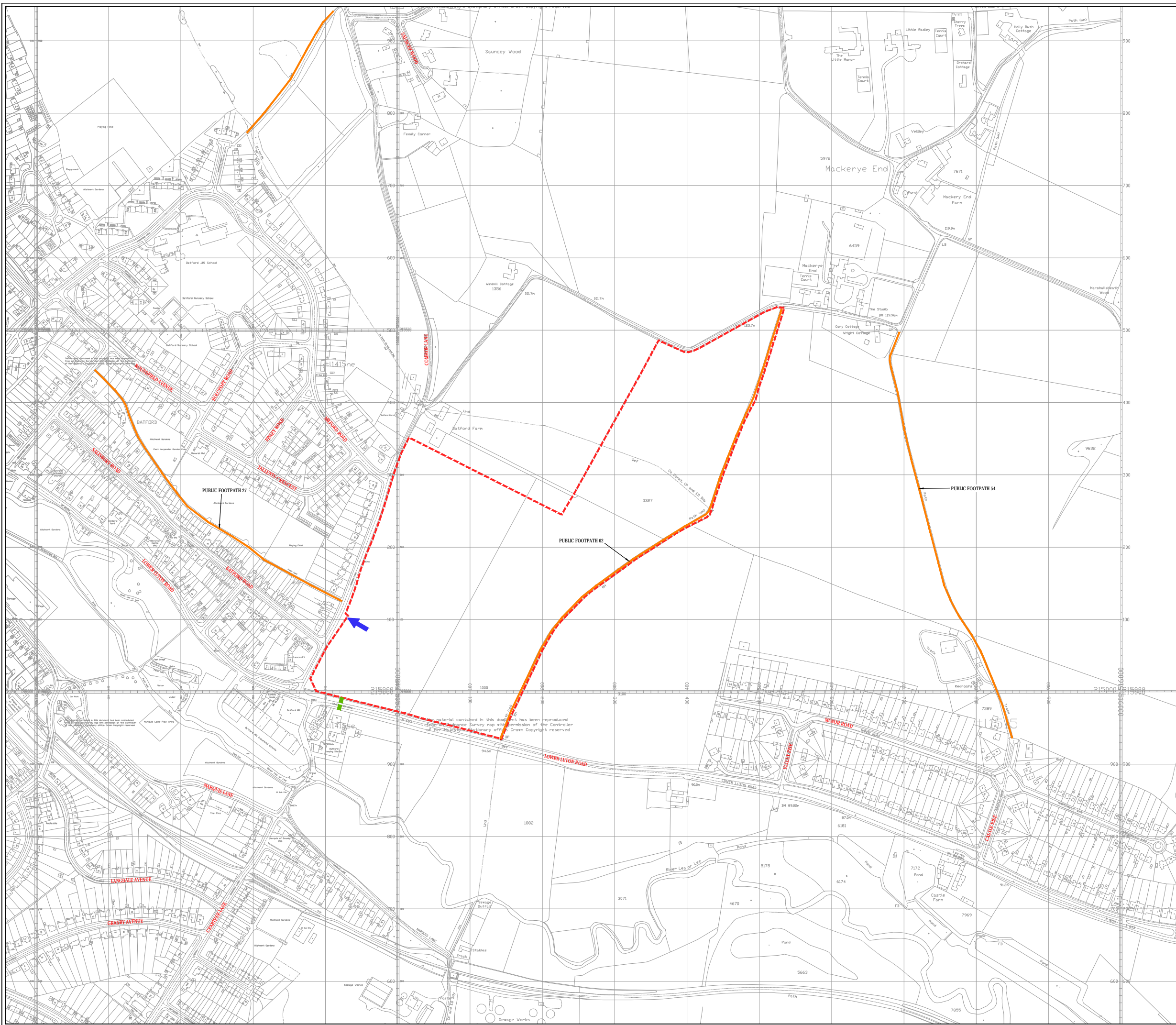
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Client	Architect
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Drawing Number
ST-2152-3



- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
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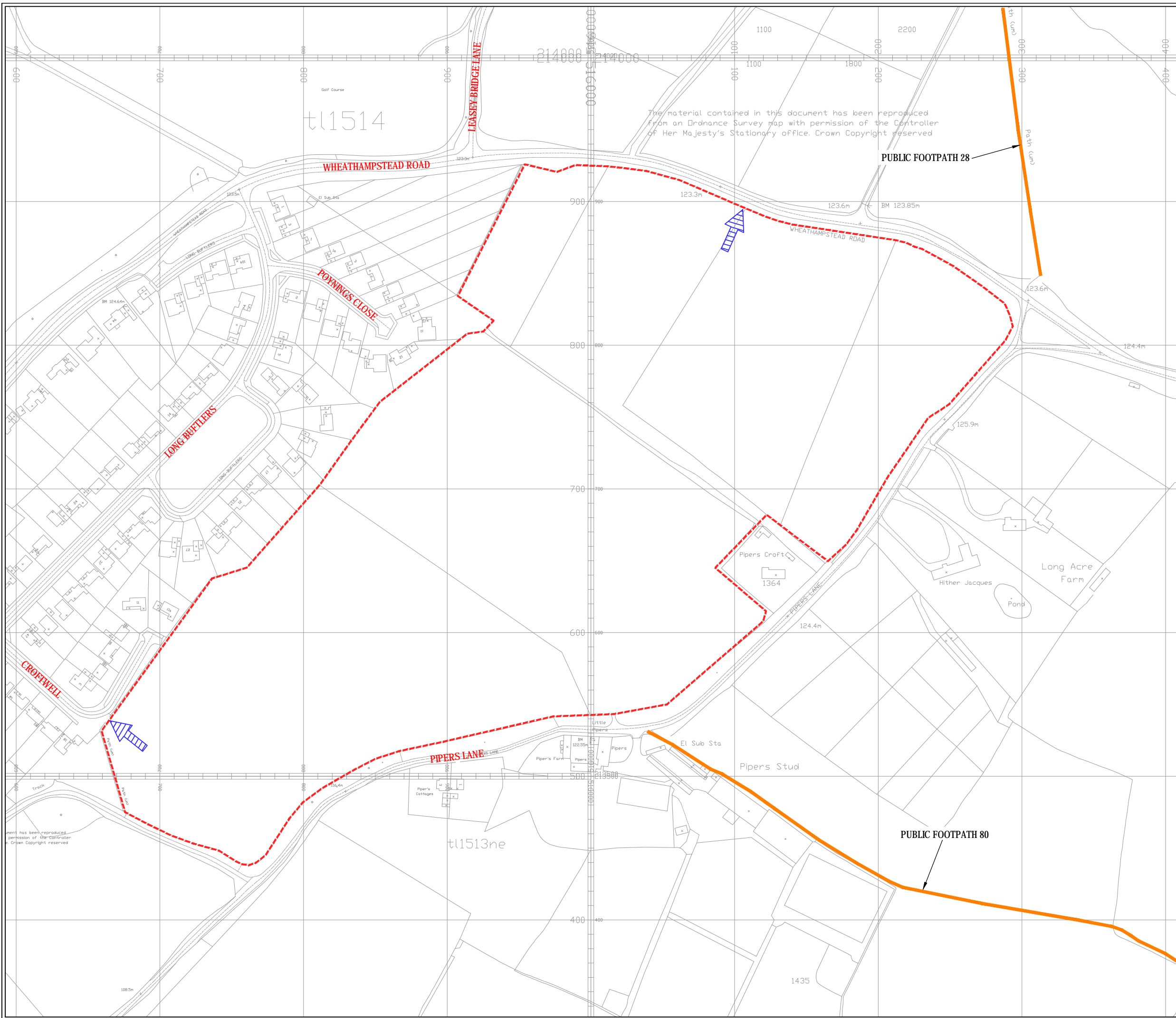
**Site F,
Harpenden, Herts**

Highway and Access Appraisal

Scale 1:5000 @ A3	Date 9/11/10	Drawn By BDR	Checked By NJM
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Client	Architect

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- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
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- ■ ■ POSSIBLE NEW VEHICULAR LINK
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**Site G,
Harpenden, Herts**

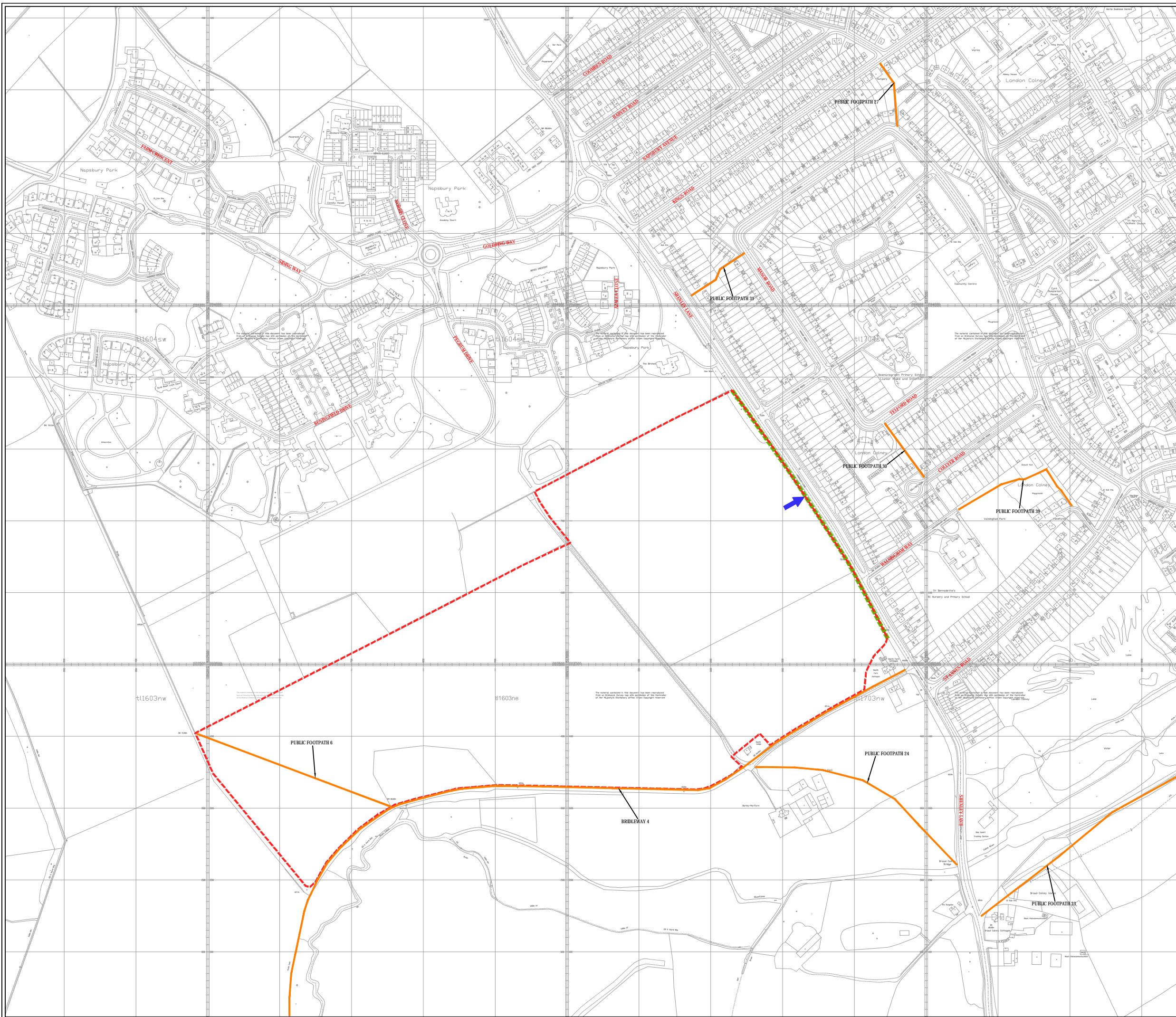
Highway and Access Appraisal

Scale 1:2500 @ A3	Date 9/11/10	Drawn By BDR	Checked By NJM
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Client	Architect
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Drawing Number
ST-2152-5



- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
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Project
Site A,
St Albans, Herts

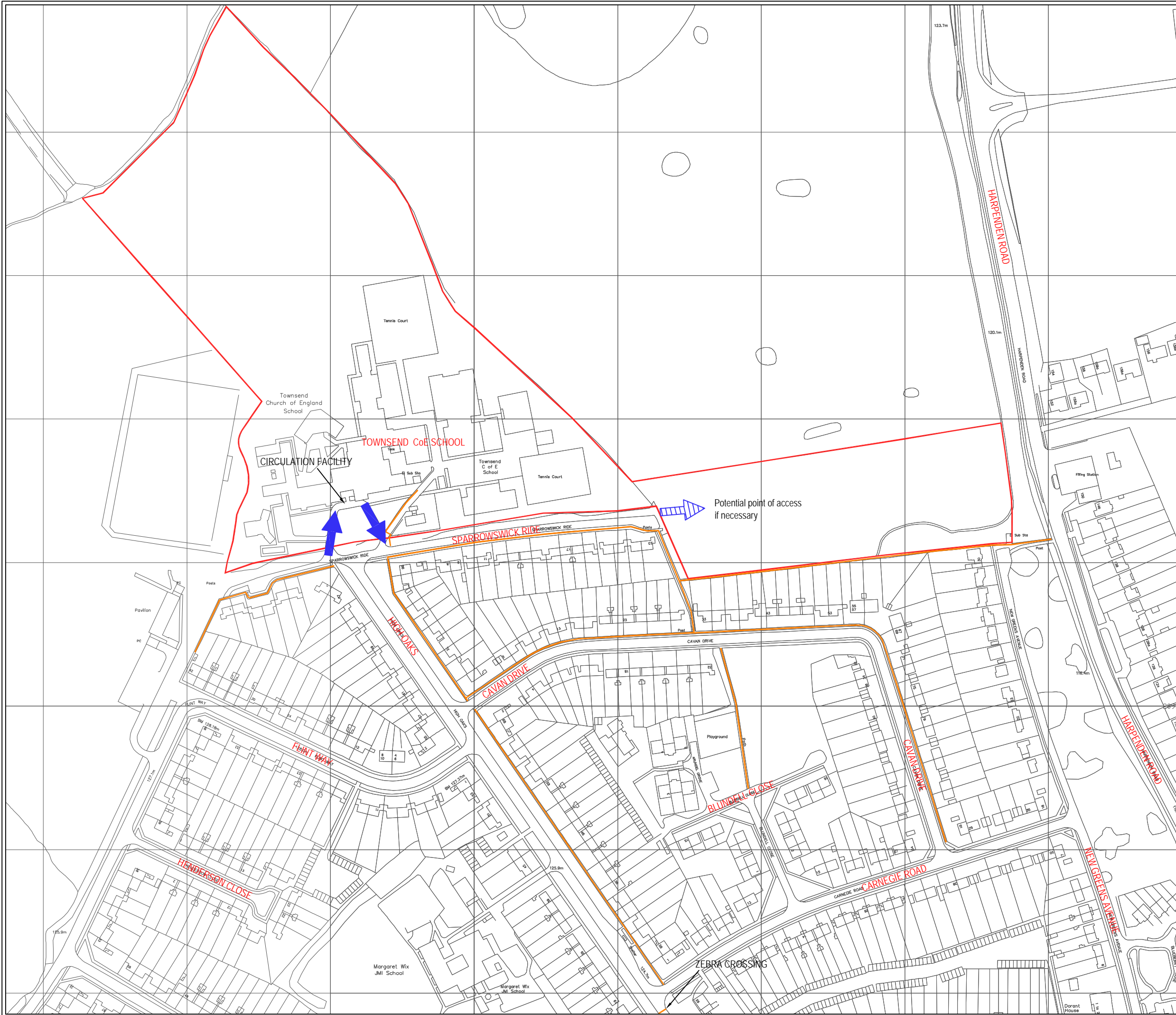
Drawing Description
Highway and Access Appraisal

Scale	Date	Drawn By	Checked By
1:5000 @ A3	09/11/10	BDR	NJM


Client	Architect

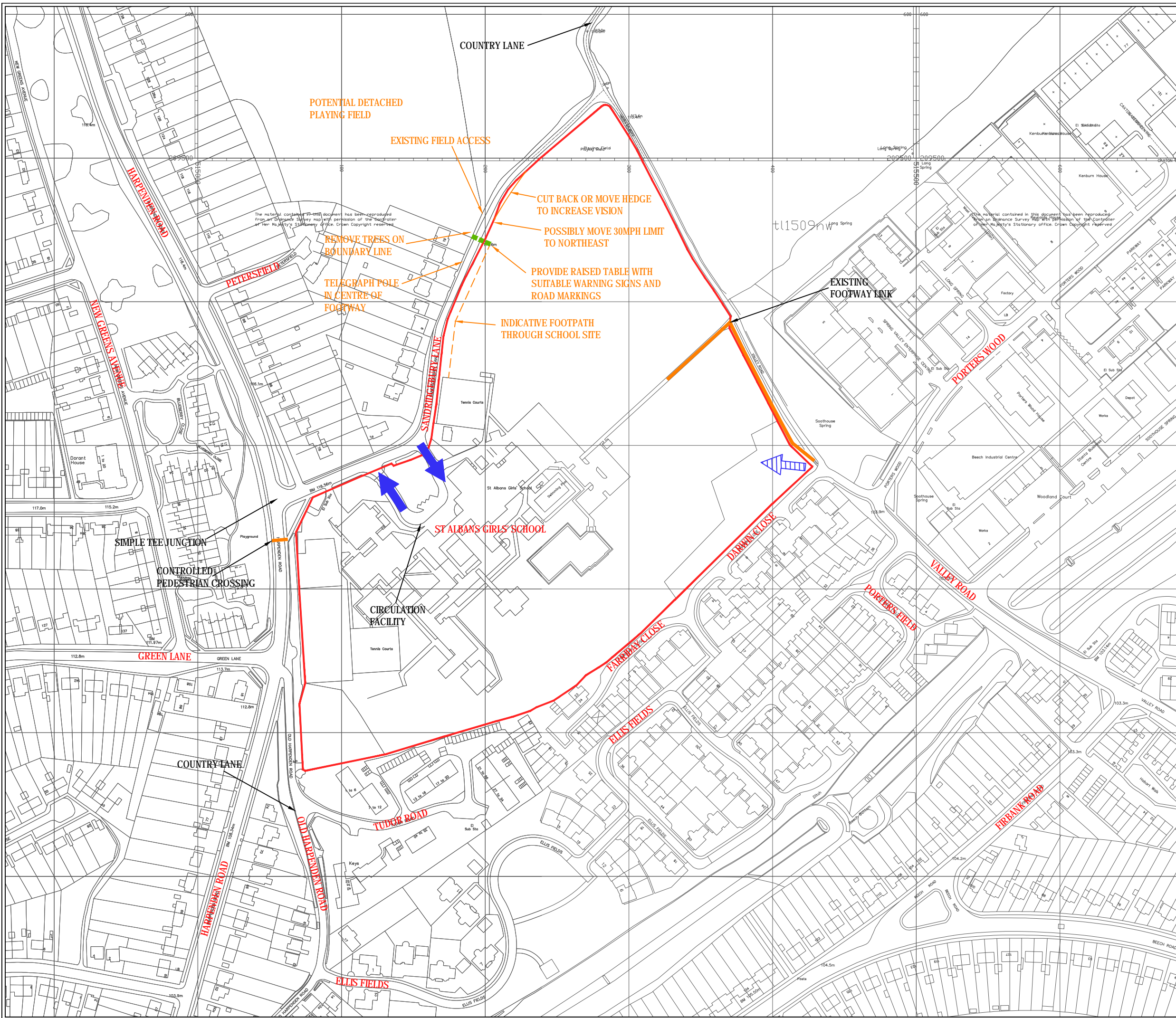
Notes
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Drawing Number
ST-2151-11



- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
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Project				
Townsend CoE School, St Albans, Herts				
Drawing Description				
Highway and Access Appraisal				
Scale	Date	Drawn By	Checked By	
1:2500 @ A3	28/9/10	BDR	NJM	
Client		Architect		
Notes				Drawing Number
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- APPROXIMATE SITE BOUNDARY (existing site)
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Rev	Description	Date	Drawn	Checked
A	Additional information added to drawing.	5.10.10	NJM	BDR

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Project: **St Albans Girls' School, St Albans, Herts**

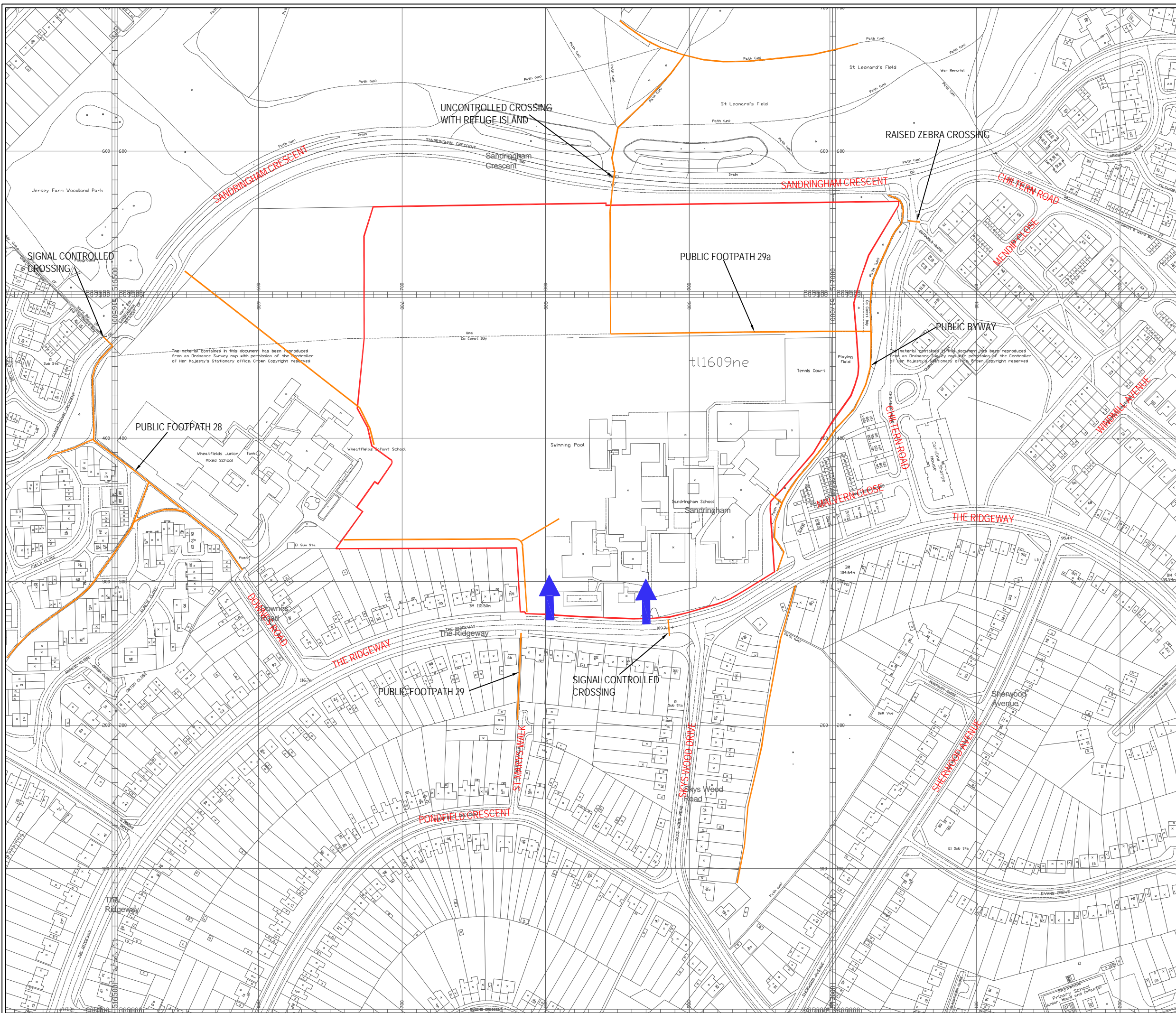
Drawing Description: **Highway and Access Appraisal**

Scale	Date	Drawn By	Checked By
1:2500 @ A3	28/9/10	BDR	NJM

Client	Architect

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Drawing Number: **ST-2151-2-A**



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- - - APPROXIMATE SITE BOUNDARY (proposed site)
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Project
**Sandringham School,
St Albans, Herts**

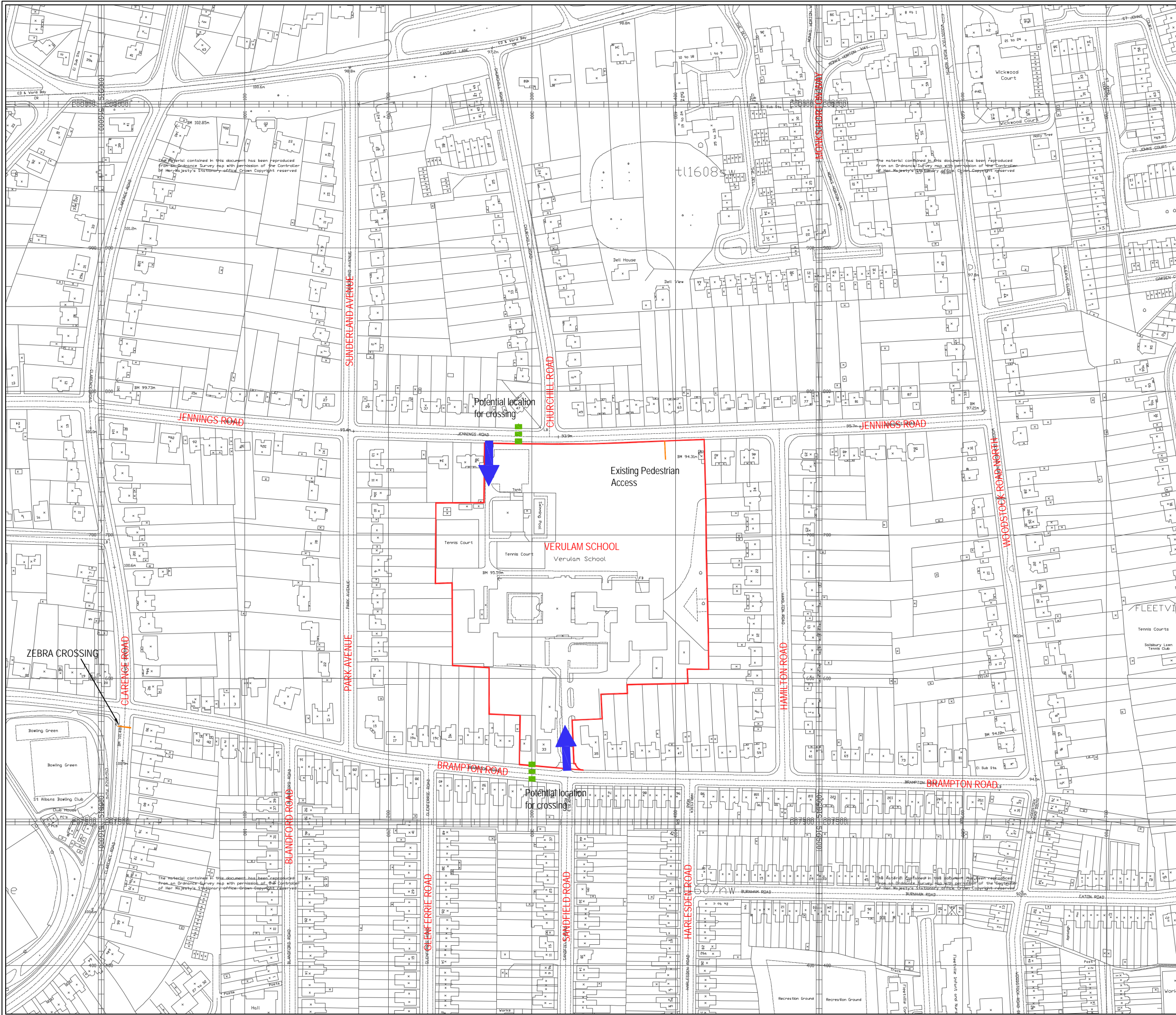
Drawing Description
Highway and Access Appraisal

Scale 1:2500 @ A3	Date 28/9/10	Drawn By BDR	Checked By NJM
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Client	Architect

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Drawing Number
ST-2151-3



- APPROXIMATE SITE BOUNDARY (existing site)
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Project

**Verulam School,
St Albans, Herts**

Drawing Description

Highway and Access Appraisal

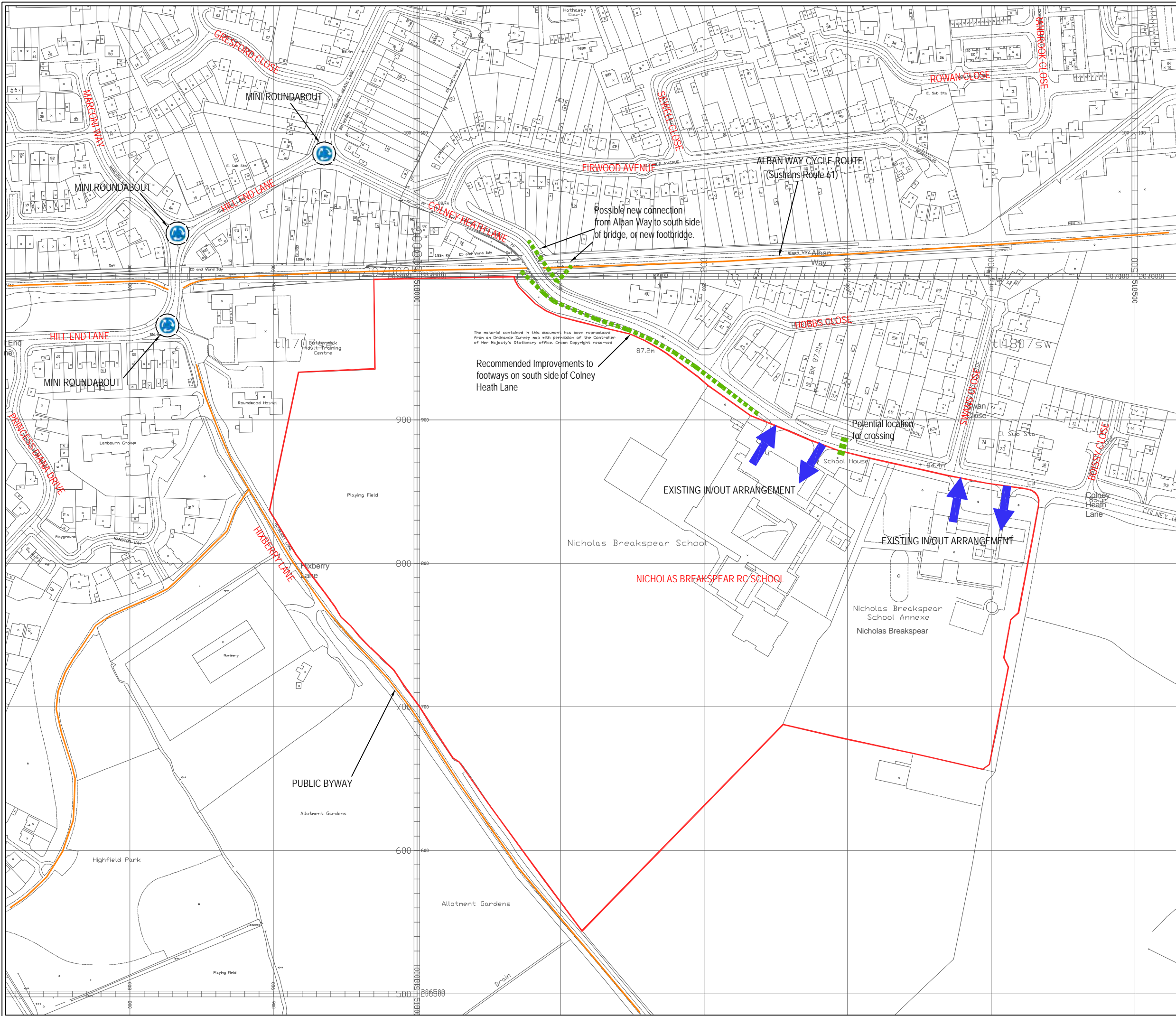
Scale	Date	Drawn By	Checked By
1:2500 @ A3	28/9/10	BDR	NJM

Client	Architect

Notes

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Drawing
Number
ST-2151-4



- APPROXIMATE SITE BOUNDARY (existing site)
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- - - POTENTIAL PEDESTRIAN FACILITIES

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Recommended Improvements to footways on south side of Colney Heath Lane

Possible new connection from Alban Way to south side of bridge, or new footbridge.

Potential location for crossing

EXISTING IN/OUT ARRANGEMENT

EXISTING IN/OUT ARRANGEMENT

NICHOLAS BREAKSPEAR RC SCHOOL

Nicholas Breakspear School Annexe
Nicholas Breakspear

PUBLIC BYWAY

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Project
**Nicholas Breakspear RC School,
St Albans, Herts**

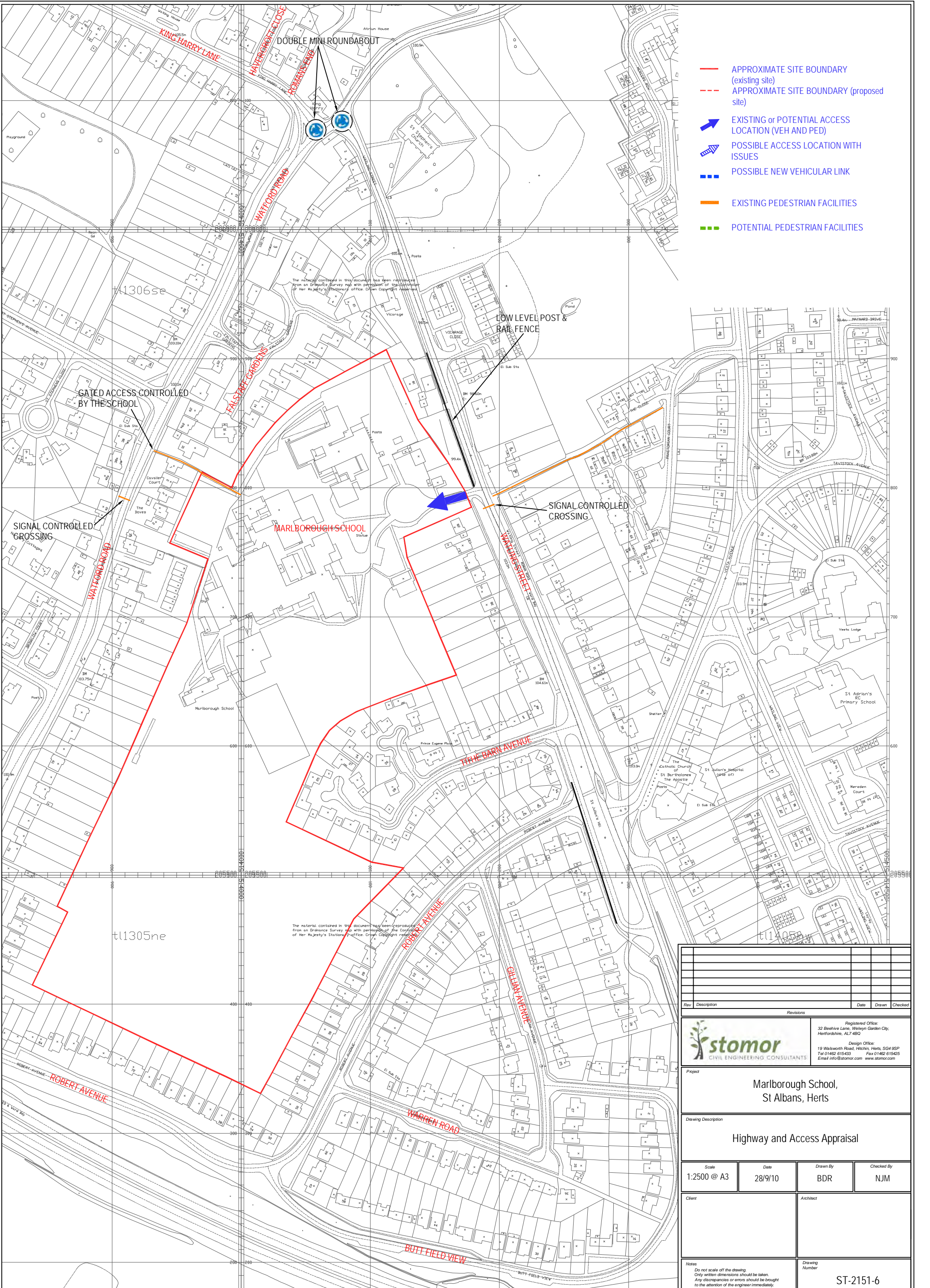
Drawing Description
Highway and Access Appraisal

Scale 1:2500 @ A3	Date 28/9/10	Drawn By BDR	Checked By NJM
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Client	Architect
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Notes
Do not scale off the drawing.
Only written dimensions should be taken.
Any discrepancies or errors should be brought
to the attention of the engineer immediately.

Drawing Number
ST-2151-5



- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
- ➔ POSSIBLE ACCESS LOCATION WITH ISSUES
- ■ ■ POSSIBLE NEW VEHICULAR LINK
- EXISTING PEDESTRIAN FACILITIES
- ■ ■ POTENTIAL PEDESTRIAN FACILITIES

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Rev	Description	Date	Drawn	Checked

 CIVIL ENGINEERING CONSULTANTS	Registered Office: 32 Beehive Lane, Welwyn Garden City, Hertfordshire, AL7 4BO
	Design Office: 19 Walkworth Road, Hitchin, Herts, SG4 9SP Tel 01462 615433 Fax 01462 615425 Email info@stomor.com www.stomor.com

Project
**Marlborough School,
St Albans, Herts**

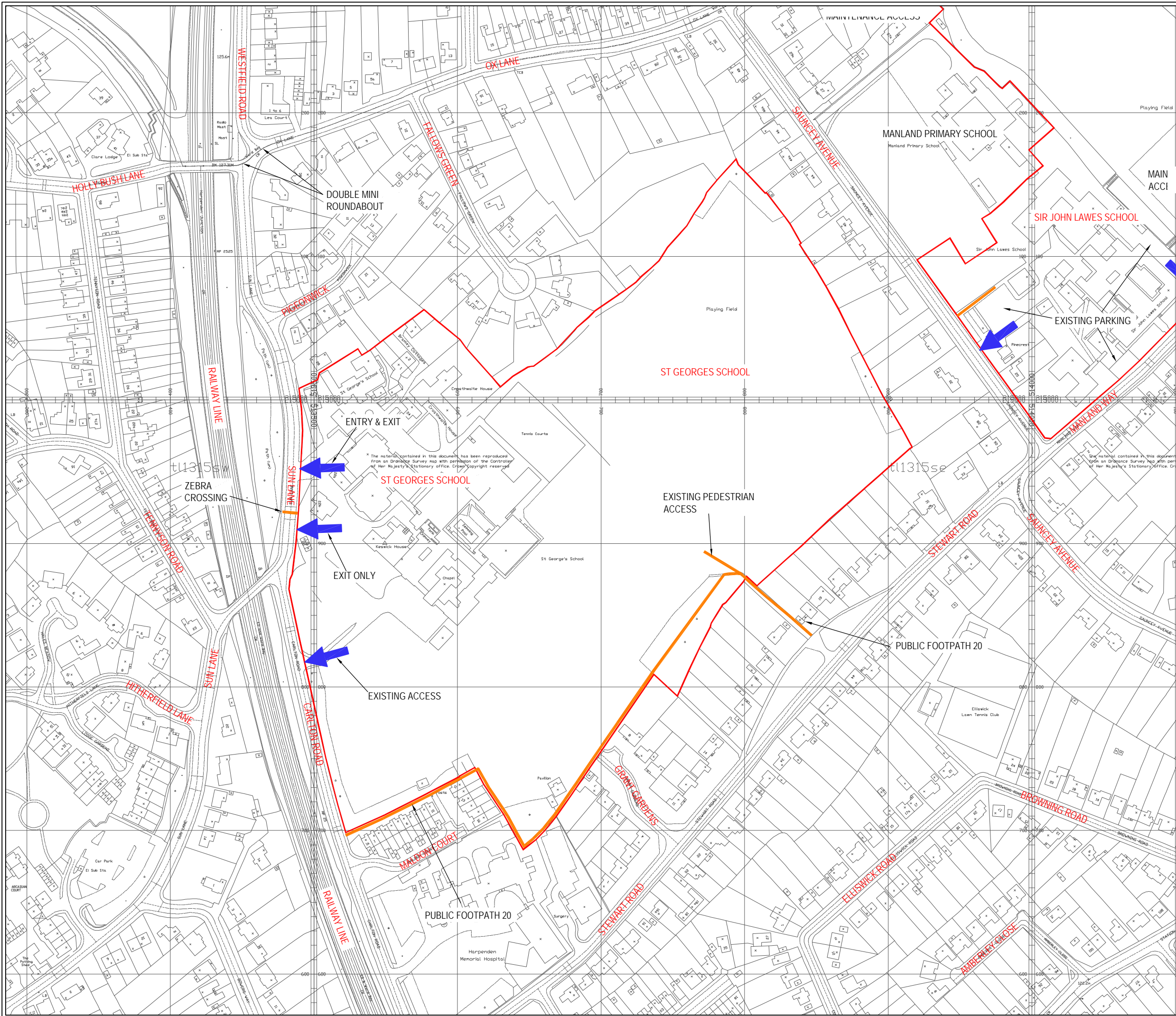
Drawing Description
Highway and Access Appraisal

Scale 1:2500 @ A3	Date 28/9/10	Drawn By BDR	Checked By NJM
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Client	Architect

Notes
Do not scale off the drawing.
Only written dimensions should be taken.
Any discrepancies or errors should be brought to the attention of the engineer immediately.

Drawing Number
ST-2151-6



- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
- ➔/ POSSIBLE ACCESS LOCATION WITH ISSUES
- - - POSSIBLE NEW VEHICULAR LINK
- EXISTING PEDESTRIAN FACILITIES
- - - POTENTIAL PEDESTRIAN FACILITIES

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Rev	Description	Revisions	Date	Drawn	Checked

stomor
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Tel 01462 615438 Fax 01462 615425
Email info@stomor.com www.stomor.com

Project
**St Georges School,
Harpenden, Herts**

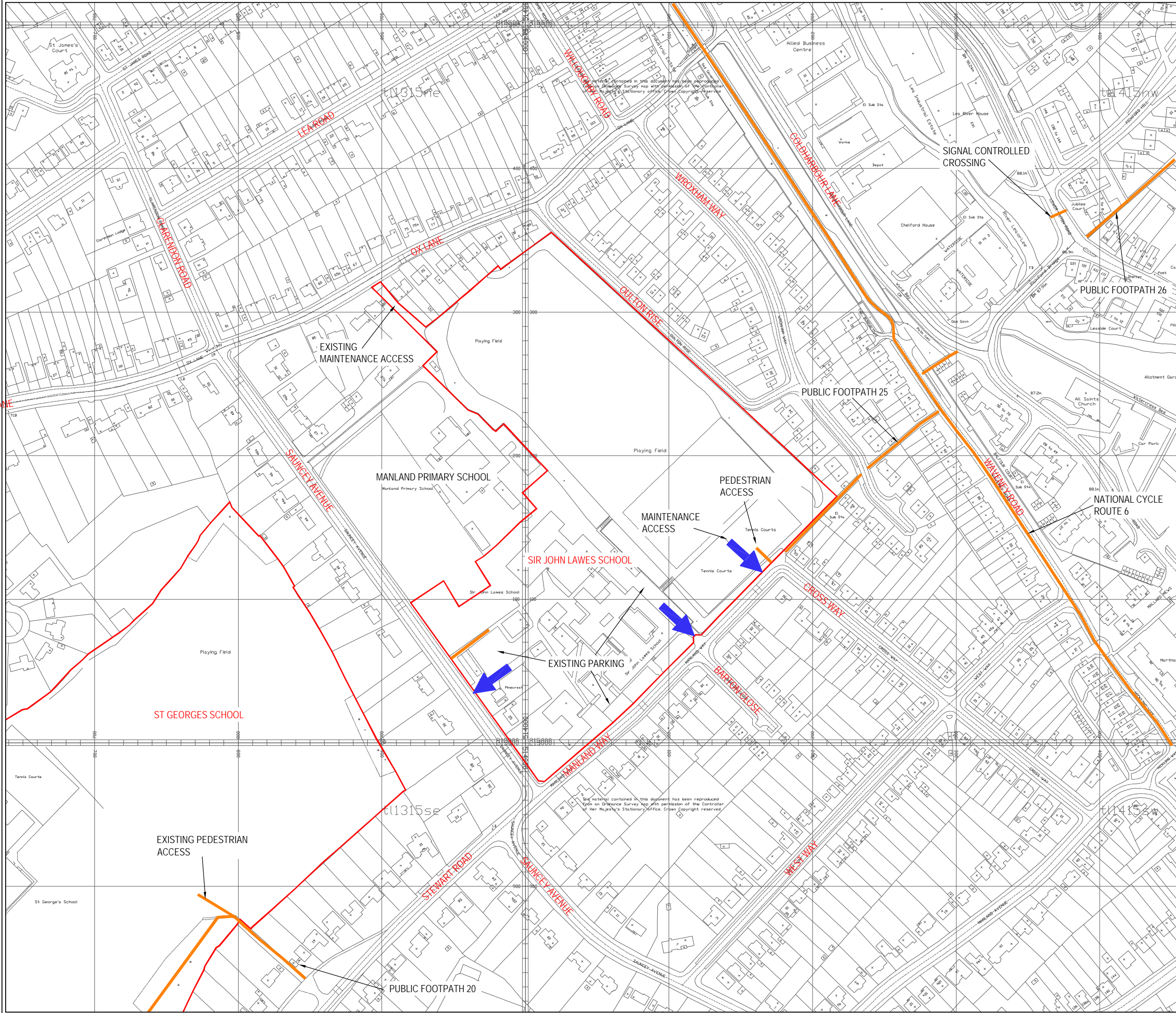
Drawing Description
Highway and Access Appraisal

Scale 1:2500 @ A3	Date 4/10/10	Drawn By BDR	Checked By NJM
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Client	Architect

Notes
Do not scale off the drawing.
Only written dimensions should be taken.
Any discrepancies or errors should be brought
to the attention of the engineer immediately.

Drawing Number
ST-2152-1



- APPROXIMATE SITE BOUNDARY (existing site)
- - - APPROXIMATE SITE BOUNDARY (proposed site)
- ➔ EXISTING or POTENTIAL ACCESS LOCATION (VEH AND PED)
- ➔ POSSIBLE ACCESS LOCATION WITH ISSUES
- — — POSSIBLE NEW VEHICULAR LINK
- EXISTING PEDESTRIAN FACILITIES
- — — POTENTIAL PEDESTRIAN FACILITIES

Rev	Description	Date	Drawn	Checked

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 Email info@stomor.com www.stomor.com

Project: Sir John Lawes School, Harpenden, Herts

Drawing Description: Highway and Access Appraisal

Scale: 1:2500 @ A3	Date: 4/10/10	Drawn By: BDR	Checked By: NJM
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Client:	Architect:
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Notes: Do not scale off the drawing. Only written dimensions should be taken. Any discrepancies or errors should be brought to the attention of the engineer immediately.

Drawing Number: ST-2152-2



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