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Project:	<b>St Nicholas CiW Primary School</b>	Job No:	<b>60607807</b>
Subject:	<b>Response to Highway Concerns</b>		
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**Version 2**

## 1. Introduction

AECOM Development Transport Planning has produced a Transport Assessment (TA) to inform the application for the proposed expansion to St Nicholas Church in Wales (CiW) Primary School (planning application reference: 2020/08874/RG3).

During the Pre-Application Consultation (PAC) process consultations were received and, the Applicant, the Vale of Glamorgan Education Department, has been made aware of local highway concerns, particularly relating to the pupil generated traffic as a result of the expansion of the school.

This Technical Note (TN) has been produced by AECOM's Development Transport Planning team to address the concerns considered to be the main issues raised. It would not be practical to respond to each and every comment individually, given that the general context and concerns are related throughout the representations. This TN therefore subsequently provides a wider response encompassing the main areas of question and comments received in the responses and provides the necessary clarification to resolve the concerns raised.

### General Procedural Matters

Prior to providing clarification on the content and findings of the TA and the design work undertaken, we have provided a summary of the steps taken leading up to the undertaking of the TA and an explanation on procedural matters:

Consultation was held with the Local Highway Authority (LHA) in advance of any commencement of work first to inform the traffic survey requirements and study area and again to discuss and agree the content of the TA. This is not always required as within the profession there is best practise that can be followed. AECOM purposely engaged with the LHA, as it always seeks to do, to ensure that the work to be undertaken is fully informed by the Authority in its experience of the local area and local issues and to ensure that the TA prepared was robust and beyond simply an adequate submission.

The LHA may have not responded within the set PAC timeframes, however, the content of the TA reflects the scoping discussions and is therefore considered to be an agreed submission. AECOM is always open to discussion with the LHA and issues or concerns can be raised with us directly at any stage of the planning process. We ensure that we consider and understand all requests, given due consideration and work to resolve any concerns, where possible.

AECOM is a world leader in consulting services and like consultants of any discipline are, for some part of their work, desk based. This enables the required study and research of issues and facilitates team work to design appropriate solutions for project specific issues and to ensure that AECOM is fully fluent, and each project is understood in as much detail as can be gained. In regard to St Nicholas Primary School scheme, we discussed this with highway officers to understand local network daily conditions and also with education officers who are experienced with management of that school. AECOM uses this

information in conjunction with third party specialist surveys and also industry software to inform its work. Site visits are carried out by experienced consultants who understand what it is they need to observe, having performed this role over many areas including a significant number of school schemes.

## **2. Proposed School site layout**

All matters relating to the design and layout of the proposed school are sought to be addressed in the following:

The internal layout of the site has been designed to include the introduction of an area for the drop off and pick up of pupils. This will also benefit from a separate entry and exit, to allow for one way movement of traffic through the site, working to reduce the likelihood of vehicular conflict.

Specific drop off spaces and mini bus parking spaces have been formally allocated, along with additional road space in a layby allocated for commercial vehicles and refuse vehicles. These types of vehicles will be accessing the school outside of school opening and closing times, therefore this layby will also be made available during school start and finish for additional parent drop off/pick up. The internal site layout provides a significant benefit to the existing situation and has been designed specifically to help reduce any potential future congestion on the local highway network along the front of the school site.

The school will manage the parking daily to ensure the internal circulatory road is kept free for the movement of vehicles entering the site to ensure School Lane and the junction of A48 / School Lane West does not become impacted.

It is proposed that Traffic Regulations Order (TRO) 'School Keep Clear' road markings will be introduced on School Lane along the site frontage from the site entry to the site exit inclusive to deter parking in this location. The school will manage the site internally to ensure there is no parking taken place across restricted areas, to ensure the steady flow of vehicles to minimise the impact on the A48 / School Lane West junction.

The designated refuse storage area has been placed immediately northwest of the grass verge located in between the western pedestrian access and the vehicular access. Refuse vehicles will attend out of school start and finish times and manoeuvre into the layby and access the bin store from this location. In this way and with this design it works to keep all large vehicle movements away from any pedestrian movements, particularly near the school building. Similarly, operational vehicles will use this layby but under the school management, these movements / deliveries will also not be undertaken during school opening and closing times. Therefore, removing any risk of vehicular / pedestrian conflict but also potentially allowing this layby to be additionally used for parental dropping off / picking up.

## **3. Parent parking / drop off**

The TA seeks to mitigate any adverse impacts relating to the proposed development and therefore in the first instance entered into a scoping discussion process with the LHA as set out in the above general procedural matters discussion. The scoping document submitted and considered to be agreed is contained in Appendix 1-1 of the TA. Item 10 specifically states that bus / parent drop off points will be considered within the TA.

In order to understand the existing operation of the site and local highway network, a site visit was undertaken during the AM peak, which provided a good understanding of the prevailing traffic conditions, including the behaviours of those parents / carers dropping off pupils via a car; this is detailed in paragraph 2.3.7 of the TA. A site visit during this time is indicative of the worst case scenario when the local highway network peak hour aligns with the school peak. This does not occur again at school closing time or in the evening network peak.

Parking along Unnamed Road and School Lane was observed, along with parents stopping outside of the school entrance temporarily to let the pupils out of the vehicles before continuing their journey along School Lane. This in turn resulted in temporary queuing along School Lane at the school entrance. As set

out earlier in this TN, the proposals include the introduction of TRO's to deter drivers from parking in the vicinity of the proposed school entrances and the area in between them, making it a traffic offence to do so. The parking situation will also be marshalled by the school to ensure no parking or stopping occurs along School Lane in the vicinity of the school.

The proposals include the introduction of an internal one way road layout within the school boundary, which will allow the School Management to better observe and help to control traffic coming to and from the school, reducing the current need for parents to utilise the surrounding on-street parking within St Nicholas. The set down and drop off areas, together with the integral loop will create more appropriate temporary parking arrangements than the local routes.

The proposed school operational times for pupils will be from 7:50 until 16:30, allowing for before and after school clubs to be run which will further reduce the traffic during the AM and school PM Peak hours. The School Management will consider specific class arrangements for when pupils can be dropped off and collected which will also seek to reduce traffic congestion.

It is also worth setting out that the methodology adopted for the traffic assessments within the TA were particularly robust. The assessments purposely assumed that the before and after school provision was not used, i.e. traffic impact was not discounted. The existing breakfast club has 50 places and is operating at capacity and as part of the proposals the breakfast club will increase capacity for up to 105 pupils, It is likely that a significant proportion of breakfast club pupils will be dropped-off for 07:50hrs, effectively shifting a proportional amount of school traffic movements to before, and out of, the weekday AM peak hour period. Furthermore, the remaining breakfast club pupils are likely to be dropped-off in the earlier part of the AM Peak hour (for example, between 08:00 and 08:30) meaning that development traffic is likely to be more spread out across the hour-long period, and less likely to occur in the half-hour prior to the school start time. This is a logical assumption given that any later than 08:30 does not achieve the aims of breakfast club to allow parents to travel to work.

After school there are clubs currently operating on the majority of the weeks days and this is reviewed on a term by term basis. The TA demonstrates that, without any pupils attending after school clubs, there is a minor impact on the local highway network during the school PM peak hour. Therefore, any pupils attending after school clubs will be expected to reduce the traffic generation of the School PM peak hour, effectively deferring trips to the following hour (16:00-17:00hr). It is considered unlikely that the trips which are deferred will result in a material impact during the hour commencing 16:00hrs.

Further information on breakfast club and after school club provision has been provided in a separate Technical Note (Before / After School Provision) provided by AECOM's Development Transport Planning team dated 04/09/2020.

This package of measures is considered to be an effective and important approach to dealing with existing and potential futures issues. These measures would be included within a Travel Plan which is proposed to be produced to accompany the planning submission.

#### **4. Proposed 'informal' one-way system during school AM and PM peak periods**

Observed vehicle speeds are slow through the immediate local highway network, with no conflicts between vehicles and pedestrians in the current situation. It is an industry wide approach to consider the existing safety record and collision data when assessing new development. The personal injury collision data obtained confirms there is not an existing safety issue associated with the highway adjacent to the school.

The TA contains a package of further mitigation to improve the current situation and to minimise the impact of additional development traffic to the site. An informal one-way system has been designed as a measure to help minimise the impact of the development traffic on the narrow carriageways of School Lane and the Unnamed Road. The one way working of School Lane and Unnamed Road will continue to allow parking to occur whilst traffic can continue to flow without conflict to on-coming vehicles along narrow carriageways. The TA included proposals for an indicative and informal one-way system that would accommodate vehicles approaching in a loop to the A48 via School Lane and onto Unnamed Road. Since

the submission of the TA, continued discussions have been taking place between the Applicant, the VoGC Planning and Highways departments, during which the potential for a formal one-way system was discussed. A formal one-way system may be introduced as a VoGC scheme and it is recommended that the one-way system be reconfigured to accommodate the potential future closer of the School Lane/A48 eastern junction to vehicular traffic. An illustration of the proposed one-way working measure is shown in **Figure 1**. This illustration is indicative of how the formal one-way system will operate and this will be developed and progressed by VoGC separate to this application. In the interim period, pending any formal highway changes the proposed informal one-way system, both the Unnamed Road and School Lane junctions will facilitate vehicles onto the A48 and will be sufficient to mitigate traffic circulation concerns.

Figure 1: Proposed One-Way System



The principals of this one-way system are as follows:

- East-bound only movements past the school site. Two-way movements along this link are known to result in difficult traffic conditions for vehicles and for pedestrians. All vehicles moving in the same way will significantly reduce conflicts.
- This ties into the school access strategy for the drop-off / collection areas, which requires access via the eastern vehicle access and exit via the western access. This removes the need for complex two-way movements past the school gates and site frontage which will improve road safety and improve pedestrian amenity.
- Once past the school, vehicles will be permitted to circulate the centre of St Nicholas via School Lane and Church Row. This will allow vehicles unable to use the formal drop-off areas within the school to find a parking space. Currently, school vehicles regularly park along Church Row.
- Egress back to the A48 is proposed via Unnamed Road only. The School Lane connection is proposed to be pedestrianised and therefore vehicle egress via this connection will not be permitted.
- Circulation routes mean that if parking is unavailable on the first loop around the village, it will not be debilitating to loop around again to find a parking space. The one-way loop is also not large enough as to be tortuous or time consuming for drivers and contribute to non-compliance.
- The direction of circulation around St Nicholas is as presented to remove complex manoeuvres / vehicle queues at the school frontage. Vehicles will only have one direction of travel at the School Lane / Church Row junction which will eliminate confusion and inefficiencies in vehicle movement.
- The one-way system is also designed to work with the active travel corridor (discussed below) so that the flow of traffic is simple at pedestrian crossings and that footways can be provided by narrowing the carriageway at certain locations.

The one-way system will be implemented from the opening of the expanded school. This will be promoted as an informal system only and will not be secured by a Traffic Regulation Order (TRO). The one-way system will be communicated to parents / guardians through the available social media platforms available to the school (such as seesaw, dojo, parent mail, twitter, school website), with an indicative plan of the suggested one-way system. At the beginning of each school year temporary signs will be placed throughout the village to guide parents / guardians along the correct routes. These will not be official traffic signs, and will not be secured via a TRO. The TMP will include additional information on the implementation of the informal one-way system by the school.

It is recognised that local residents will not be obliged to use the informal one-way system given that it is not proposed to secure this via a TRO upon opening of the new school site. However, from a traffic operation and safety perspective, and for optimum results, it is recommended that all traffic movements during the school AM and PM Peak follow the one-way system arrangement.

It is understood that VOGC are considering implementing a one-way system formally via a TRO. It is not known when this will be implemented, or what the layout of the one-way system will be. However, it is considered that it will be similar to that presented in this Addendum.

Legally enforceable parking restrictions are proposed to be provided across the school frontage, which will again deter inappropriate parking and allow School Lane to flow more effectively.

The school will be required to manage the day to day operation of the informal one-way system, which will only be recommended within the AM and School PM peaks. This represents a small section of the wider day and could benefit all users. This can be advertised and communicated to parents through the available social media platforms available to the school (i.e. seesaw, dojo, twitter, school website), with an indicative plan of the suggested one-way system. It is recognised that local residents will not be obliged to use the one-way system given that it is not proposed to secure this via a TRO, however, from a transport and safety perspective, and for optimum results, it is recommended that all traffic movements during the school AM and PM Peak follow the one way system working. It is considered, however, that many will likely choose to follow this layout given that it is the most efficient use of the local route, not an onerous route or unreasonable approach, particularly as this would be an easier option compared to travelling against the proposed prevailing flow. These will be included within the Travel Plan measures and will be provided in more detail in the Travel Plan document.

The one-way system will also improve the junctions of the A48 with School Lane (East and West) to reduce conflict of vehicles arriving/departing at those junctions. The arrival of vehicles at the A48 / School Lane West junction will allow vehicles to access the school from one direction, minimising conflict with on-coming vehicles. A junction capacity assessment has been undertaken to understand the impact of the development of this junction. Right turning traffic onto School Lane is likely to result in 1 car queuing, which is not considered to be material, given the visibility of the road.

School Lane East / Unnamed Road is considered most appropriate for vehicles leaving the site, with left turners dominating the traffic movements during the observed traffic surveys. The observed traffic turning right onto the A48 from both School Lane junctions are very small in both the AM and School PM peak. i.e. AM - 7 vehicles turning right from school Lane (combined) onto the A48 in comparison to 41 turning left onto the A48 with no collisions recorded on the audited recent history. Similarly, in the School PM peak, there were 7 vehicles turning right and 39 vehicles turning left. It is reasonably forecast that the magnitude of split will largely remain the same due to settlement orientation and catchment. School Lane East is in close proximity to the traffic signal junction A48 / Duffryn Lane, where there will be a greater opportunity for right turners to undertake their manoeuvre when traffic heading east along the A48 has stopped at the signals creating gaps.

The above traffic assessment, as explained previously, over forecast the traffic impact and do not account for the significant reduction that could occur through before and after school provision and varied start and finish times.

**5. Construction and Emergency Vehicles**

A Construction Traffic Management Plan will be prepared and approved before any construction work is undertaken. The most appropriate stage to undertake this work is post-consent, where construction details are finalised. As part of the Construction TMP, construction vehicles will not be undertaking key deliveries to / from the site during the AM and School PM peaks, to ensure congestion and conflicts between construction vehicles and pedestrians during these times are minimised.

Concerns have been raised regarding the ability of emergency vehicles accessing properties during the morning and afternoon periods. The existing situation currently has cars parked along School Lane and the Unnamed Road during the school opening and closing times. The proposals, although increasing the pupil numbers, are providing a betterment to the current situation (as detailed above), with an internal site layout to allow for parents to access the school site and drop off / park to reduce the congestion and parking on the local roads.

**6. Local Parking Issues**

Perceived parking issues at school opening and closing time is an emotive local issue. The site visit audit carried out during on 26<sup>th</sup> September 2019 investigated and considered these issues and the findings are shown in the photographs in **Figure 2**, below.

*Figure 2: Site Visit Photographs Illustrating Parking Behaviours*

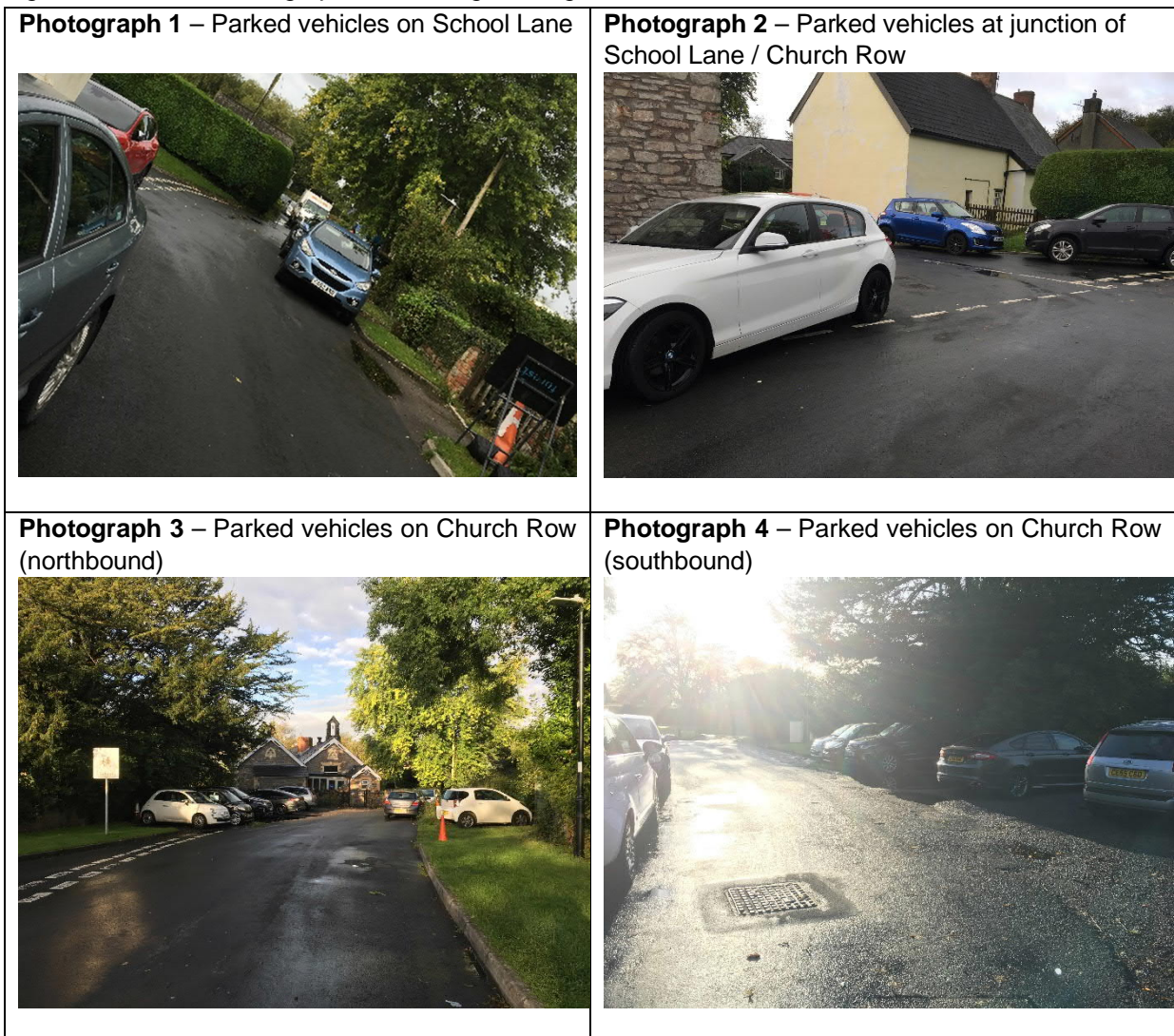
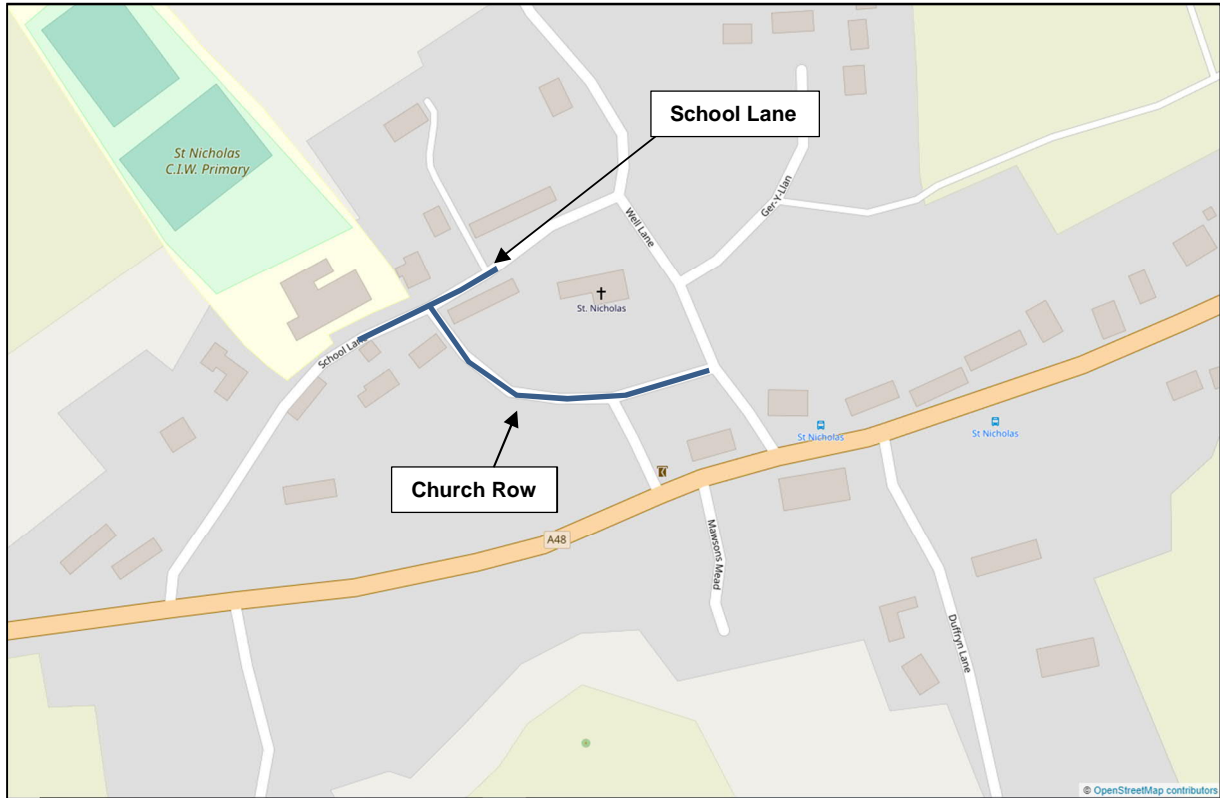


Figure 3 shows the locations of these parking areas.

Figure 3: Location of Parking Areas for School Traffic



Source: OpenStreetMap

These parking issues are general in nature and have largely been addressed through the previous sections. The proposed package of measures as part of the school redevelopment will increase the ability for traffic to flow through introduction of pick up and drop off facilities and the prevention of parking at inappropriate locations, outside of the school.

There is mention of Ger-y-Llan being used for parking and that this causes difficulties for local residents. This route was audited during the site visit and it can be confirmed that there are large expanses of carriageway which are not connected to dwelling frontages and do not have parking restrictions in place. The carriageway width is considered sufficient for two way travel as defined by national guidance on street widths. Parking on one side of the carriageway would also allow single direction travel. This is in line with street functions nationally, typical around schools, whilst it is not encouraged it is not unacceptable.