READConstruction

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

Site	Ysgol I D Hooson
Address	Heol Caradoc, Rhosllanerchrugog, Wrexham LL14 2DS
Project	Extension & Refurbishment
Application Ref	TBC

0.0 Introduction

This document has been prepared ahead of the planning application for the extension and refurbishment project at Ysgol I D Hooson, Rhosllanerchrugog. The plan is intended to address the following pre-commencement condition:

> *No part of the development shall commence until a Construction Traffic Management Plan including provisions for contractor parking has been submitted to and approved in writing by the Local Planning Authority. The plan as is approved shall be fully implemented for the life of the development.*

Please find details of the following arrangements within this document:

1) Highway and construction traffic routes, including:
   - Access for school
   - Access for construction
2) Identification of working space and extent of areas to be temporarily enclosed and secured for demolition/construction, including:
   - Site layout and proposed storage locations.
   - Siting of temporary containers.
   - Temporary roads/areas of hard standing.
   - Location of directional signage within the site.
3) Details of activity on site, including:
   - Proposed access, construction and delivery hours.
   - Programme of works and phasing (incl. start/finish times).
   - Security.
4) Managing large deliveries, including:
   - Schedule for large vehicles.
   - Manoeuvring arrangements.
5) Parking for contractors, site operatives and visitors.
6) Loading and unloading arrangements, including:
   - Details for the recycling/ storage/disposal of waste resulting from the site.
   - Storage of materials and machinery on site.
7) Environmental mitigation measures, including:
   - Noise, vibration, dust and air quality mitigation measures.
   - Details of street sweeping/street cleansing/wheel wash facilities.
   - Consideration for joining a Considerate Contractors Scheme.

Appendices

A. Swept Path Analysis for refuse vehicles to school – DPL SK005
B. Swept Path Analysis for construction vehicles through car park – DPL SK007
C. Swept Path Analysis for turnaround on construction site – DPL SK008
D. Programme review

This document is presented for the purposes of the planning application. All arrangements presented will be incorporated within our Construction Phase Plan.

1.0 Highway and construction traffic routes

1.1 Site Location

All vehicles will access the site via the only vehicular entrance off Heol Caradoc as indicated by icon O on image 1 below.

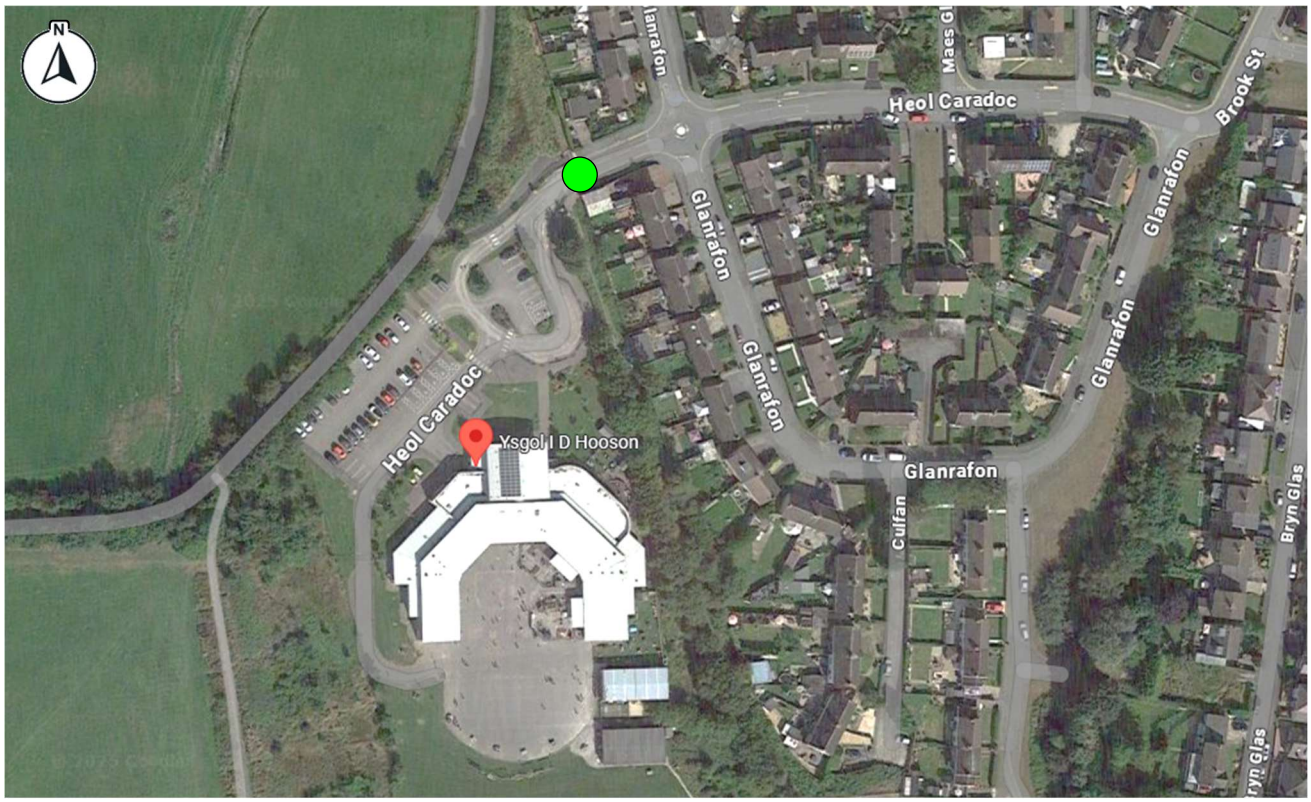


Image 1: Vehicle access points shown on satellite image.

1.2 Main Vehicle Route to/from School

Vehicle route to site shown in image 2 below from Johnstown High Street / Wrexham Road (B5605). Traffic will be directed to the B5605 from junction 3 of the A483 (alternative access available from junction 2). All traffic to turn onto Brook Street from Market Street in Rhosllanerchrugog; turn left before entering the one-way system. Follow same route when leaving site.

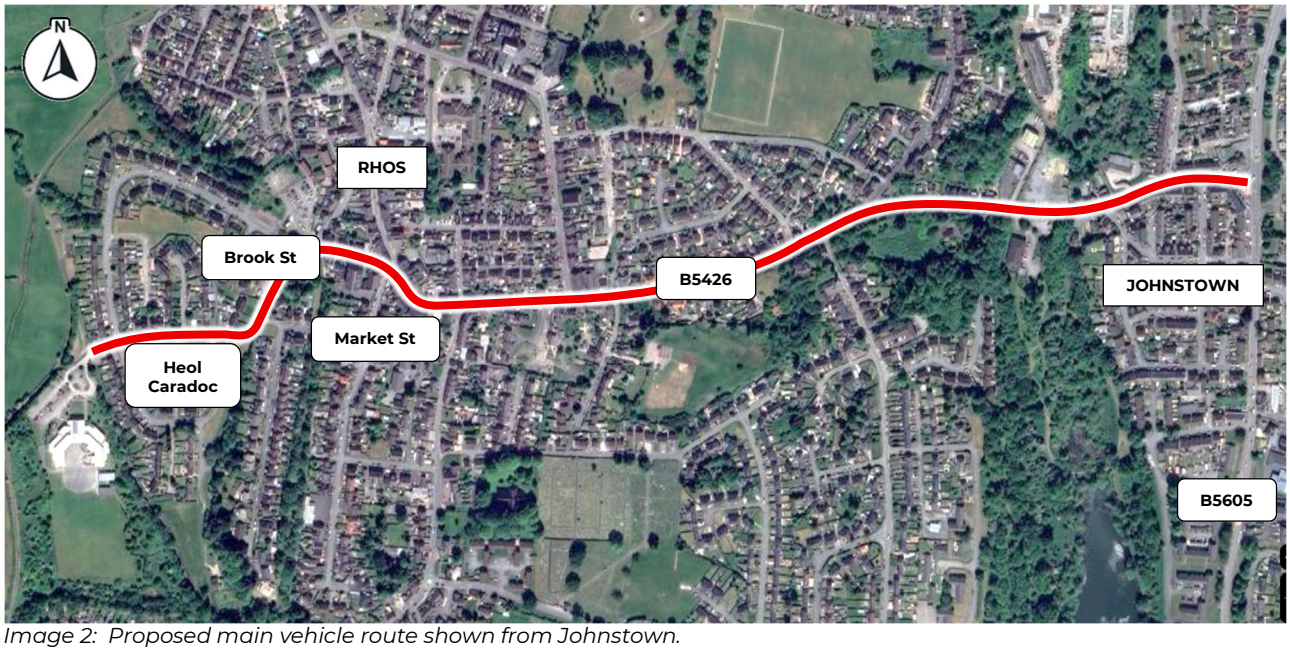


Image 2: Proposed main vehicle route shown from Johnstown.

Existing school access for vehicles and pedestrians will be maintained throughout, including the drop-off and collection area for parents.

Due to the temporary loss of external playing area at the rear of the school, a portion of the existing car park will be allocated as a temporary playground (supplemented by use of the school hall during wet weather) – this will lead to a temporary loss of 9no parking spaces. 4no temporary replacement spaces have been identified below, with a further 6no drop-off parking bays available in the temporary playground (must be vacated during school time – not for staff parking). The reallocated car park area will still be used by the school for kitchen deliveries, waste collection, etc. (to be managed directly by the school) – see appendix A showing a swept path analysis for a refuse collection vehicle.

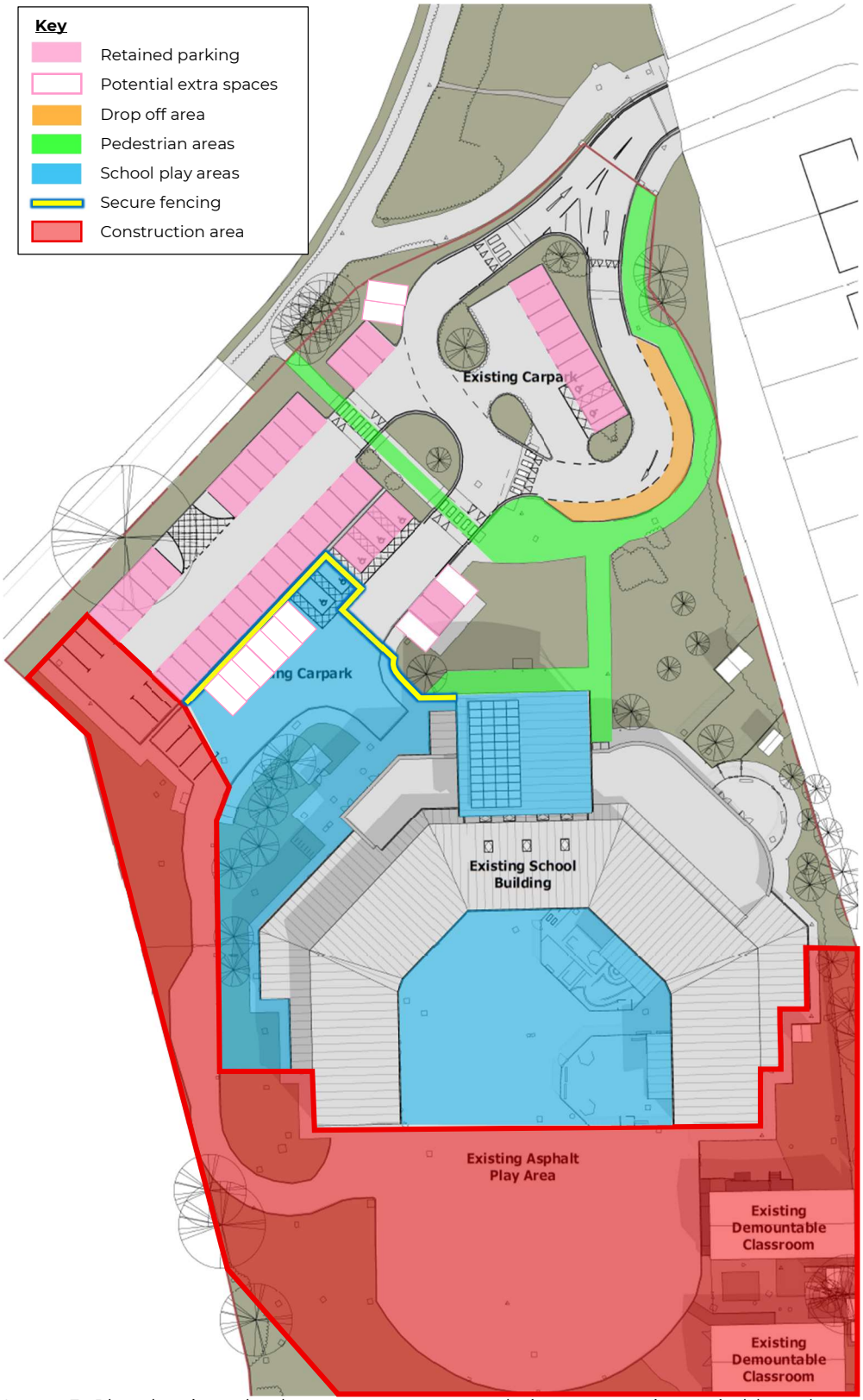


Image 3: Plan showing school access arrangements during construction period, based on existing site plan.

1.4 *Construction Access & Parking*

All vehicles will come to a stop at the site entrance and report to the site office, either to sign-in as construction workers or report to the Site Manager to coordinate delivery offload.

Standard deliveries will be offloaded at the site gates and materials transported to the site using telescopic handlers. Special deliveries will be permitted to travel on to the site for offload e.g. concrete deliveries, steel frame.

Standard site access will follow the school's existing one-way system. Special deliveries will be marshalled in from the school entrance and directed contra-flow to the one-way system to allow optimal approach.

Parking at the rear of the site will be located on the footprint of the new multi-use games area (MUGA).



Image 4: Plan showing construction access arrangements during construction period, based on proposed site plan.

1.5 *Overspill Parking*

Whilst measures will be put in place to manage the parking requirements on site, the school already use a local car park for additional/emergency parking as required. The off-site parking can be seen in image 5 below.

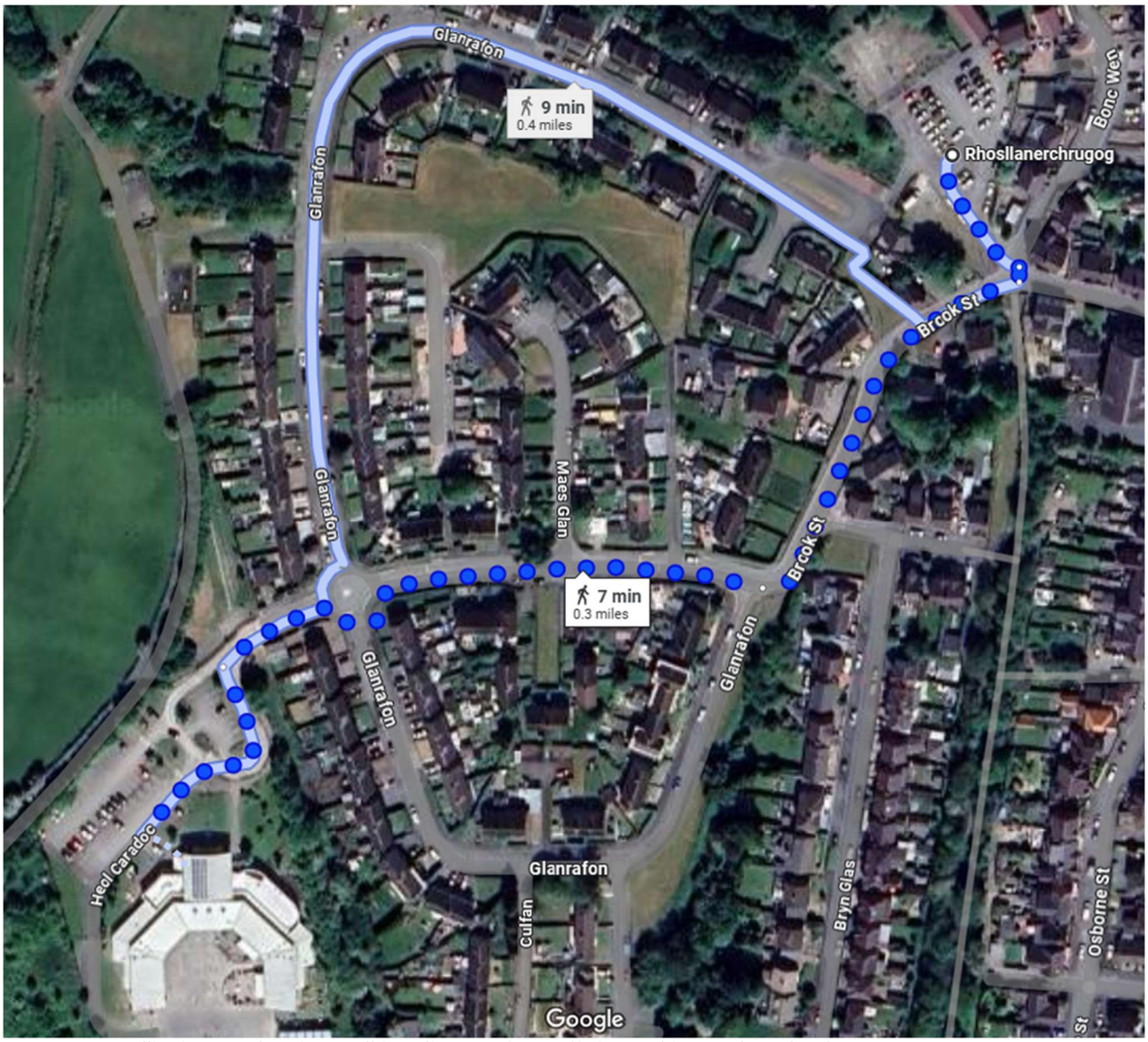


Image 5: Satellite image showing walking distance from off-site parking to the school.

1.6 *Works Requiring Application for Highways License*

There are currently no foreseeable works that will require applications for highway licenses.

2.0 Identification of working space

2.1 Site Boundary

With reference to the previous images displaying the site layout, the site boundary will be fully enclosed throughout the construction phase. Read will provide all necessary fencing to protect the public from the works and to provide security during and outside working hours.

- Existing boundary fencing will remain in place as long as possible or replaced with new.
- Temporary block and mesh fencing will be provided to the remaining boundaries.

All fencing will be removed from site upon completion of the works and making good finishes as required.

2.2 Temporary Units & Containers

With reference to the previous images displaying the site layout, welfare units will be situated adjacent to the existing car parks. Additional storage containers will be positioned on the site for secure material and equipment storage – final location to be confirmed.

2.3 Temporary Hardstanding

With reference to the previous images, most of the existing hardstanding will remain in place for the duration of the project to provide suitable surfaces for vehicles and pedestrians.

Permanent hardstanding will be developed in line with the proposed outline of the new multi-use games area, and used for construction vehicle parking and material storage.

Limited temporary hardstanding will be installed to form the welfare area.

2.4 Directional Signage

Directional signage will be provided to direct vehicles and pedestrians for both the school and the construction site.

3 Details of activity on site

3.1 Start Date

TBC

3.2 Construction Period

TBC

3.3 Hours of Work

Monday – Friday:	07:30 until 17:00 (no noisy works before 8am)
Saturday – Sunday:	08:30 until 13:30 (as required)
Bank Holidays:	No works.

Where there is a requirement for any works to take place outside the above hours, they shall be agreed with the Local Authority Planning team and communicated with the public in advance.

3.4 Programme of Works

TBC

3.5 Security

Please find example outline below of the remote monitoring fire and security system employed on Read site. The system will be designed, installed and monitored by our preferred security subcontractor.

System Overview

The proposed system will deploy 1 No. Solar Eco Tower to give HD CCTV views across the site area. Detection will be via the network of 4 intelligent wireless detectors which will be located on moveable stands to create protection for critical site assets.

Equipment Schedule

- **Site Guardian Eco Tower**
  Solar Powered Control System. Free standing with a 4 metre pole that incorporates intelligent detectors with built in incident cameras, separate high definition cameras with incident recording to the cloud, controllable white light, siren, and talkback allowing live remote viewing of the surrounding area, built in 3G transmission, and a 105dB controllable siren unit with led strobe lighting.
- **Site Guardian Wireless Detector**
  Battery powered intelligent detectors with built in incident cameras mounted on moveable security stands for perimeter and assets protection.
- **Site Guardian Fire Call Point**
  Battery powered free standing Call Point Unit with siren and strobe.
- **Site Guardian Wireless Smoke/Heat Detector**
  Battery powered linkable smoke and rising heat detector with onboard siren

System Operation

- Auto Arm/Disarm
- Remote Arming & Disarming via Control Room
- Site Arming & Disarming via Smartphone Application for multiple users if required.

Monitoring & Response

- 24/7 System Monitoring
- Out of hours Control Room Monitoring
- Mobile Response Officer to visually verified intrusion incidents and Police response request where applicable

Service & System

- ✅ 24/7 Monitoring
- ✅ Full Visual Verification
- ✅ Intelligent Detection

- ✅ Link Multiple Towers & Additional Detection
- ✅ No need for Power or Communications
- ✅ Totally Cable Free Installation
- ✅ Mobile Security Response to Incidents
- ✅ Fixed Price Contract (No hidden extras)
- ✅ No Minimum Term Contract
- ✅ Fast Efficient Service

4 Managing large deliveries

4.1 *Schedule*

The construction programme will be developed following planning approval (incl. Highways and SAB sign-off). The programme will be reviewed to identify activities which will require large vehicles. This will typically include:

- Waste removal
- Importing stone for hardstanding development
- Concrete delivery
- Timber frame delivery
- Cranes
- Delivering large quantities of materials e.g. plasterboard, insulation

See initial review of this exercise in appendix D, based on the current version of the programme. Programme dates and final contents subject to planning approval.

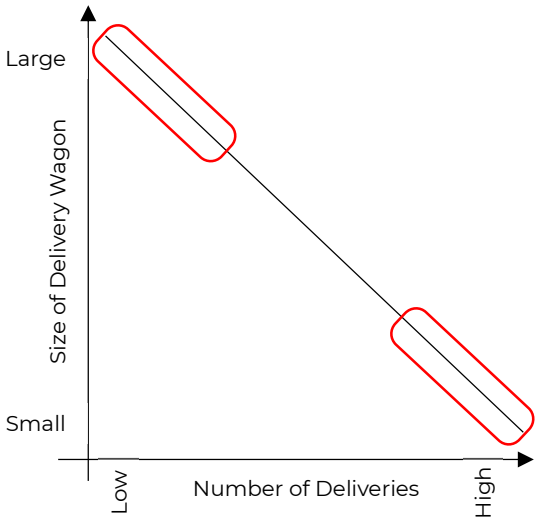
4.2 *Manoeuvring arrangements*

Read have received a swept path analysis for vehicles entering the site – please see appendix B. The analysis was based on an FTA Design Articulated Vehicle to simulate the largest vehicle type entering the site for delivery of timber frame structures. The timber frame contractor have indicated approx. 10 deliveries will be required using this type of vehicle.

Deliveries, collections and all construction-related traffic in general will be asked to avoid peak traffic times where possible.

4.3 *Managing Traffic Volume*

The area surrounding the site is residential. Caradoc Way which leads to the site from Rhosllanerchrugog is limited to 20mph and includes speed humps. As previously mentioned, the site is a live school which has periods of high traffic associated with drop off and collection times, and is serviced by deliveries and waste collection. Read will consider the appropriate balance for all deliveries using the graph to the right; the highlighted extremities will **not** be considered due to the impact on the local area (vehicles to large, too much construction traffic).



Peak traffic times for school traffic must be avoided. Strictly no HGVs accessing during the restricted times. Times outlined by the school listed below:

- **8:00am – 9:15am TBC**
- **3:00pm – 4:25pm TBC**

4.4 *Vehicle Coordination*

Read will have overall responsibility for the coordination of deliveries and will advise what times suppliers are expected to arrive on site. Specific time restrictions will be issued to all subcontractors and suppliers; the restrictions will be strictly enforced; **peak traffic times for school traffic must be avoided (see times outlined by the school above). Strictly no HGVs accessing during the restricted times.** Unauthorised arrivals will be turned away. The Site Manager is ultimately responsible for ensuring that access is safely staggered.

During busy delivery periods when a greater number of construction traffic could be expected (e.g. spoil removal, stone deliveries) the delivery suppliers will be asked to contact the Site Manager prior to the agreed delivery time to confirm that all access is clear. This will allow the Site Manager to avoid traffic build-up due to delays.

4.5 *Vehicle Segregation*

Areas will be clearly marked on site to ensure that vehicles are clearly segregated. Areas include gate/access area, holding areas, plant areas, materials area, crane positions, reversing and parking.

4.6 Turnaround and Reversing

The section of the car park which gives access to the construction site entrance includes a small hammerhead area to allow turnaround. Read will put out cones to prevent parking in this area by the school/parents.

Where construction vehicles fully pull onto the site, space will be maintained on site to allow full turnaround to leave the site travelling forward. Please refer to appendix C for swept path analysis.

Where HGVs aren't able to turn around on site, the vehicle will be marshalled back to the one-way section of the school car park and manoeuvred to enable forward travel back onto the highway.

4.7 Protecting Pedestrians

Signage will be erected along surrounding access routes to direct traffic to the correct entrance. Signage identifying Read Construction Holdings Ltd will be displayed at the site entrances, along with contact details of the site team. Safety signs will be displayed on the boundary to warn against unauthorised entry.

Existing pedestrian crossings at tactile paving points will remain open for public use. Vehicle manoeuvres will be stopped by the banksman/marshal to allow pedestrians to safely pass before continuing.

5 Parking for contractors, site operatives and visitors

5.1 Parking

There will be parking spaces available within the main compound; please see image 4 previously. No parking on highway or in school car park. Reverse parking will be encouraged on site to minimise risk to other construction staff/visitors in the main compound.

6 Loading and unloading arrangements

6.1 Delivery and Collections

Deliveries, collections and all construction-related traffic in general will be asked to avoid peak traffic times where possible, particularly in consideration of the School. **Peak traffic times for school traffic must be avoided (see times outlined by the school below). Strictly no HGVs accessing during the restricted times.**

- 8:00am – 9:15am TBC
- 3:00pm – 4:25pm TBC

All deliveries must contact the Site Manager and/or gateman to organise an arrival time and coordination with other traffic/activities. Strictly no waiting, parking or offloading on the highway. The gateman will open the site gates to allow access and egress.

6.2 Waste and Spoil Removal

Waste and spoil removal will be carried out by various methods throughout the construction period. At no time will skips or wagons be positioned on the highway or verge to accept waste material. At no time will a temporary waste deposit be positioned on the highway or verge. All methods of waste and spoil removal will be carried out within the site boundary, removed by vehicle as per the agreed traffic routes.

6.3 Gateman / Banksman

Waste removal and material deliveries will be supervised by a gateman / banksman. All vehicles arriving at either entrance must contact the gateman to open the gates; a locked gate policy will be in place.

6.4 Emergency Vehicles

The existing access to the school along will always remain clear of obstacles to facilitate emergency services' access. Where required, site gates will be opened to allow access through the site.

6.5 Client Access

Continuous access will be maintained for public use of the school, as previously outlined. The proposed compound arrangements have been outlined to minimise disruption to existing arrangements. Any further works outside the current boundary will be coordinated during holiday periods and with advance warning to the school.

6.6 Impact of Plant on the Highway

Strictly no storage of any plant or materials on the public highway, nor in any neighbouring properties. All plant and materials will be stored on the site within the compound.

6.7 Material & Waste Storage

A dedicated area of the main compound will be allocated for waste/material storage which provides a suitable fire-break distance (in line with guidance for protection from fire on construction sites). Materials will be redistributed throughout the construction area with the use of mechanical aids.

6.8 Plant Storage

All plant to be stored on impermeable surfaces where possible or protected with drip trays. Spill kits must be available in the storage area. Surface water drainage gullies which collect rainwater for the storage area will be covered with oil absorbent mats and/or bunded to prevent fuel/oil spills from entering the system.

6.9 Crane Positions

Mobile cranes and lorry-mounted cranes will be required in the construction areas. Lifting plans will be outlined by appointed persons as part of the contract lifts. It is not envisaged that the swing path will oversail the live school; appointed persons will be required to outline plans which have taken all reasonably practicable precautions to eliminate, reduce and mitigate any oversailing.

The size of the crane will depend on the lifting reach required.

7 Environmental mitigation measures

7.1 Wheel Washing

Read will ensure that adequate equipment is provided to wash down mud/detritus from tyres and tracks of vehicles leaving the site onto the highway.

It is the intention to keep the existing hard standing as intact as possible during the works to avoid generating mud. The suitability and cleanliness of the hardstanding surface will be regularly monitored throughout the project, with jet washing and/or small motorised sweepers on hand to clean the surface.

Read will establish a connection with a local road-sweeping service if emergency maintenance is required to the highway.

7.2 External Measures

Groundworks will be supported with water suppression to prevent dust becoming airborne. The site will be dampened down with sprayed water for the duration of resurfacing/excavation works to keep the production of dust to a minimum.

Any external activities (e.g. cutting) which foreseeably cause dust will also be supported with dust suppression equipment.

Materials will *not* be treated (e.g. crushed, screened) on site to reduce the risks. Materials will be sorted into waste categories as efficiently as possible, with further segregation of mixed skips off site where required.

See also previous measures for wheel washing.

7.3 Noise and Vibration

To limit impact on Noise Sensitive Receivers (NSRs), noise generating works will be limited to the working hours previously outlined. Notification will be provided in advance to neighbours of any upcoming noisy works. Works which are likely to cause vibration disturbance will only be undertaken during the permitted working hours.

To minimise noise levels for NSRs the site compound will be powered by means of a temporary electricity supply therefore generator noise is not envisaged.

To minimise noise levels for the nearest NSRs, vehicles operating on-site will operate at minimal speed to minimise noise impact, along with safety reasons. All site operatives will be briefed on relevant noise control measures, including Best Practicable Means.

To minimise noise and vibration levels throughout construction of the works, best Practicable Means should be employed. General measures should include the following as appropriate:

- Careful selection of plant, construction methods and programming. Only plant conforming with relevant national or international standards, directives and recommendations on noise and vibration emissions will be used.
- All construction plant will be maintained in good condition with regard to minimising noise output and workers exposure to harmful noise and vibration.
- Design and use of site hoardings and screens, where practicable and necessary, to provide acoustic screening at the earliest opportunity.
- Construction plant will be located, as far as is reasonably practicable, away from adjacent occupied buildings or as close as possible to noise barriers (e.g. trees, hedgerows) or site hoardings where these are located between the plant and the buildings.
- When plant is not being used it shall be shut down and not left to idle.

Read Construction will provide communication to the adjacent School of noisy activities and likely durations. The Site and Contracts Managers' contact details will provided to address any issues.

Read Construction will use best practical methods to reduce noise and vibration from the site, by following the guidance and noise levels set out in 'BS5228: Control of Noise and Vibration on Construction and Open Sites'.

7.4 Lighting

External works which require lighting will only be undertaken during the permitted working hours. Photocell security lighting will only activate based on movement detection with timer to turn off. All external lighting will be directed in towards the site. Security lighting strategy to consider existing street lighting in place along road boundary.

7.5 Complaints Procedure

Read will maintain approachability throughout the works, to ensure members of the public are able to raise concerns, complaints and feedback to the management team. Contact details will be posted at the site entrance and distributed via appropriate newsletters and social media to the public.

All matters raised by the public will be treated with respect, fairness, promptness and confidentiality.

The team will aim to address all issues amicably and as soon as possible. Where the issue requires further investigation or escalation, the team will provide acknowledgement of the concern/complaint/feedback and respond formally with details of further action within an agreed timeframe.

All concerns, complaints and feedback will be recorded to ensure transparency of the process. Records will be regularly reviewed to ensure actions are complete and identify opportunities for continuous improvement.

Contacts in case of complaints:

- Site Manager - TBC

- Stuart Hetherington (Contracts Manager)
- 07377 399 871
- stuart.hetherington@readconstruction.co.uk

- Gareth Rowlands (Senior Quantity Surveyor)
- 07770 542 365
- gareth.rowlands@readconstruction.co.uk

- Dawid Cloete (Construction Director)
- 07771 957 823
- dawid.cloete@readconstruction.co.uk

- Iolo Rhys (SHEQ Manager)
- 07989 708 562
- Iolo.rhys@readconstruction.co.uk

Additional details of security company will be displayed on the site entrance (details TBC). The security company will provide 24hr monitoring and response to any public alerts.

Appendix A

DPL SK005 - Swept Path Analysis for refuse vehicles to school

Appendix B

DPL SK007 - Swept Path Analysis for construction vehicles through car park

DPL SK008 - Swept Path Analysis for turnaround on construction site

Programme review