

The Broadway Demolition & Enabling Works Construction Logistics Plan

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This Revision				
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Status of This Revision

Sign of by Site Manager	Print Name	Signature	Date

1. Introduction

This document aims to provide practical guidance on the planning elements required in order to prevent vehicle accidents by avoiding hazards and controlling the risks arising from the use of vehicles in the demolition and enabling works at The Broadway project.

The starting point therefore is risk identification and assessment, which includes all the various aspects and elements that need to be considered, in the ongoing processes and in addition the effective planning of coordination between pedestrians and site vehicles, including mobile plant. This risk assessment and control measures are not to be limited to within the site and are to include the interfaces with the public / others.

Key objectives:

The site shall be organised in such a way that, so far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health. This project specific plan has been developed appropriate to the project, its location, the risks, the volume of pedestrians, vehicles and mobile plant, and the interface issues with the surrounding environment. Its purpose is to consider at the planning stage the arrangements to be set in place for the management of pedestrians and mobile plant / vehicles throughout the duration of the project.

Adequate consideration at an early stage can prevent expensive reactive management of traffic issues on site. The traffic and pedestrian management plan should be part of a regular review process at each of the various stages of the project.

The plan will be communicated to site personnel to ensure that it becomes a useful and meaningful document. It will be used at induction to explain the site arrangements to new personnel and displayed to allow visitors and site personnel to familiarise themselves with the site arrangements.

2. Scope of works

- Erect site hoardings, set up site welfare and offices within compound area
- Protect existing TPO tree
- Erect or modify existing access gates for pedestrians and vehicles and set up 24/7 site security
- Isolation and disconnection of existing services
- Protection of existing UKPN sub-stations and access routes + maintain 24/7 access
- Employ site environmental monitoring
- Carry out investigative surveys on existing structures
- Carry out load testing to existing structures in order to confirm proposed methodology
- Erect tower crane
- Erect encapsulation scaffolds to the Tower and Victoria Block
- Non-structural partition demolition and soft strip of existing structures
- Removal of asbestos and other hazardous materials
- Structural demolition down to existing ground floor slabs
- Make safe site for follow on contractor

3. Access to the Works

All site traffic will be controlled by dedicated traffic marshals on entering and leaving the site at all times.

Due to the close proximity of the site to numerous premises careful planning and logistics will be key to delivering the project successfully and safely and without disruption to the neighbouring properties and local businesses. *See Site Location Plan below in Fig. 1.*

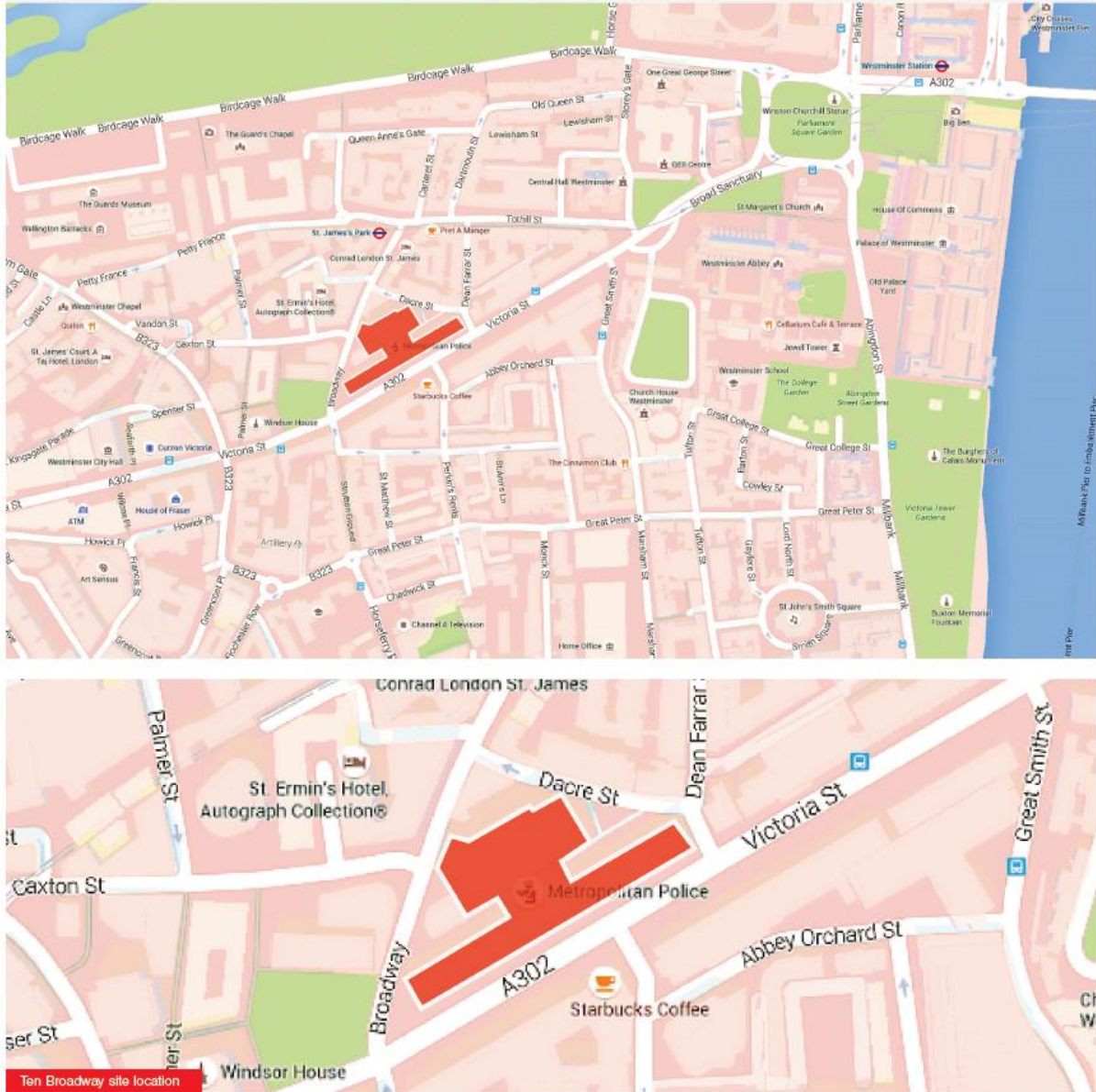


Fig.1 - Site Location Plan

We have opted to utilise multiple access/egress points in order to dissipate the vehicle impact during the demolition phase over three elevations of the site rather than concentrating the vehicle movements via one potentially congested route.

Because the preferred vehicle route into site via Victoria Street is not viable/available until the Victoria block enabling works are completed in 2016, the site traffic will therefore during the early stages of the demolition phase be accessed/egressed via two main site entrance/exits: (See Fig.2 Site Logistics Drawing 1142-SL-01 below).

- The first is the existing entrance off of Dacre Street to the east of the site and this will enable material deliveries and waste removal from the Victoria Block east wing via roll-on-roll-off bins.
- The second access/egress will be via the existing one on Broadway to the west of the site. This will enable to access the existing ground floor car park area for crane erection, asbestos DCU access, asbestos waste removal across site and general waste removal from the Victoria Block west wing via roll-on-roll-off bins.

In Early 2017 on completion of the enabling works, the site will be accessed/egressed via two main site entrance/exits: (See Fig.3 Site Logistics Drawing 1142-SL-02 below).

- The first is the constructed crossover entrance off of Victoria Street to the south of the site and this will enable material deliveries, asbestos waste removal and waste removal from the Victoria Block via roll-on-roll-off bins.
- The second access/egress will be via the constructed crossover on Dacre St. to the east of the site and this will enable asbestos waste removal, general waste removal from the Broadway Block via roll-on-roll-off bins.

Fig.2 Site Logistics Drawing -1142-SL-01

Project Logistics 2016

- Gates in use to have 2 no. Marshalls
- U/C - under construction

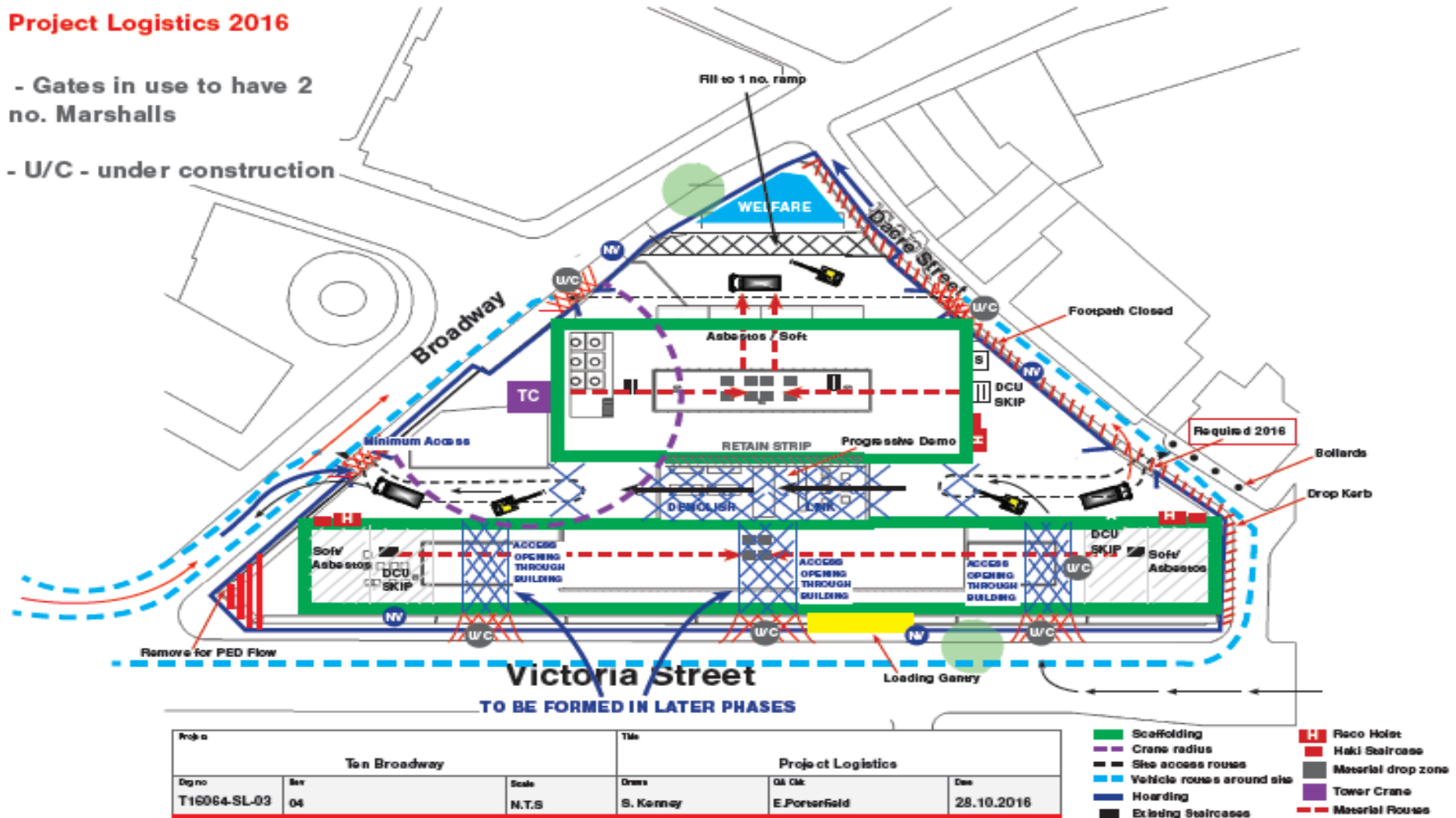
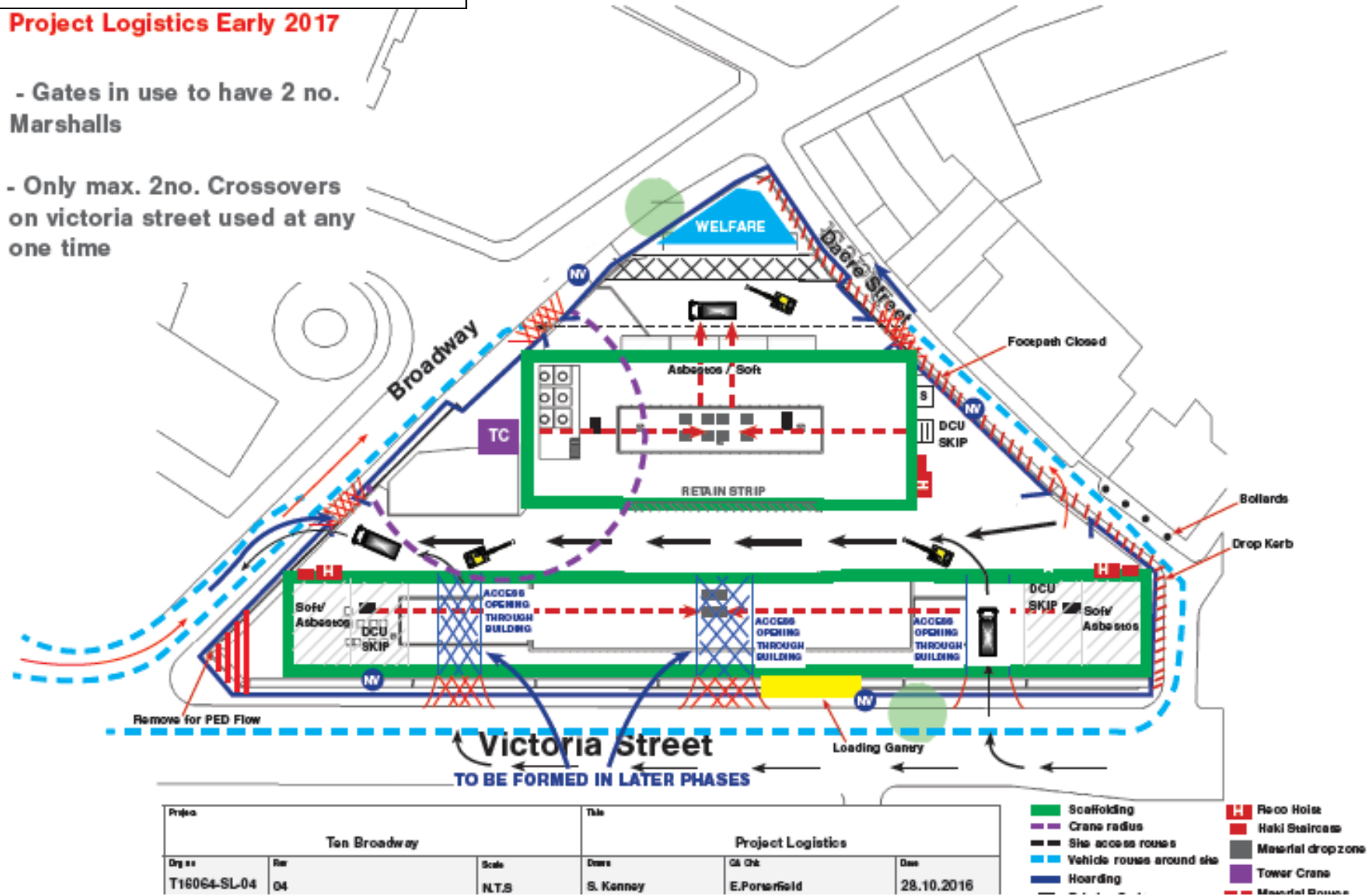


Fig.3 Site Logistics Drawing -1142-SL-02

Project Logistics Early 2017

- Gates in use to have 2 no. Marshalls

- Only max. 2no. Crossovers on victoria street used at any one time



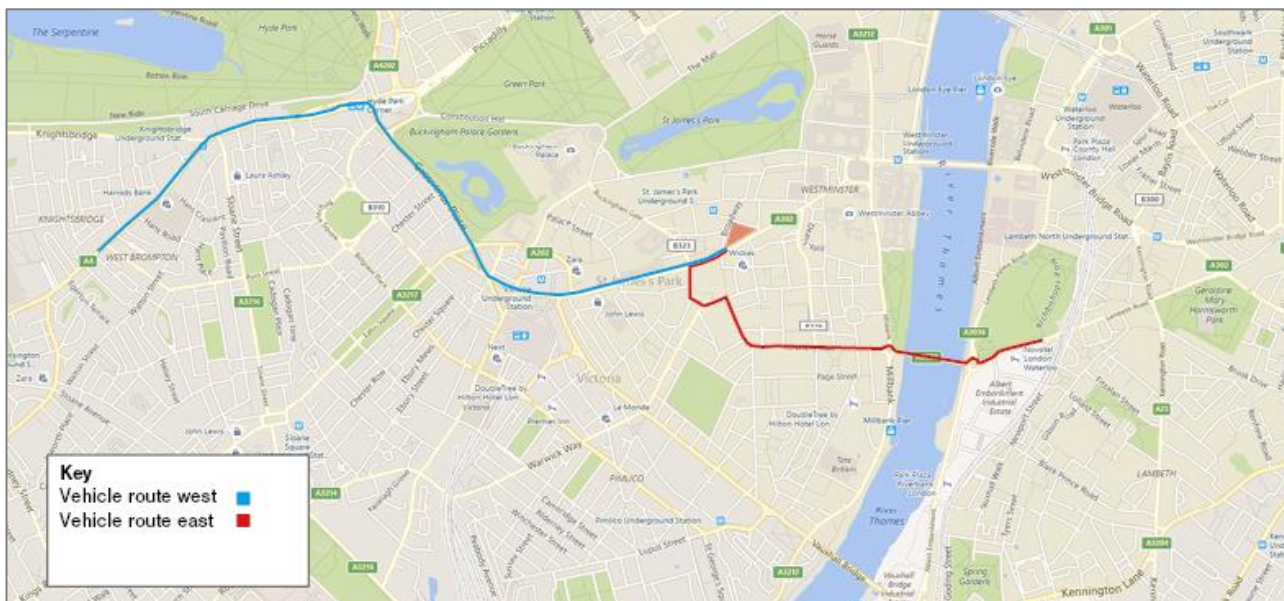
4. Routes to be used by Demolition Traffic

Site vehicle routes to and from site will generally use Victoria Street and arrive from and return back towards Victoria therefore avoiding the Westminster area. The drawing below in Fig.3. identifies the most suitable access roads to/ from the site for site vehicles and the transport of waste both easterly and westerly whilst avoiding the Westminster area.

Vehicle movements will run between the hours of 8.00am and 6pm (Mon – Fri), 8am – 1pm (Sat). Tipper lorries and roll-on-roll-off lorries will service the site on a ‘turn around’ basis which will result in vehicle movements being spread evenly throughout the day, reducing disruption to the area during the course of the works.

The anticipated vehicle deliveries/collections from site during the site set up, asbestos, removal, soft strip and demolition of the buildings will be around 10-15 vehicles per day on average for the first 12 weeks of the programme and then ramping up to around 25-30 per day on average for the remaining time on site with a peak anticipated figure of 40. The total vehicle movements anticipated is therefore double these figures.

Fig.3 – Main vehicle routes to and from site



General

Deliveries and Vehicle Movements around site

- All vehicles will be assisted into the site by at least one banksman, more for larger vehicles e.g. low loaders or longer flat beds.
- Traffic and pedestrians will be stopped as required to allow safe access for vehicles without putting third parties at risk.
- Where possible, vehicles will drive into and out of the site. Reversing will be kept to a minimum. All reversing vehicles will be under the control of at least one banksman.
- Vehicles will enter through the appropriate gate and will be escorted by a traffic marshal to the appropriate loading / unloading point as required.

- Edge protection will be encouraged on all delivery vehicles, where no edge protection is available then properly attached safety harnesses will be worn.
- Where vehicles are unloaded by excavators or skid steers then correct lifting points / attachments will be used and all lifting appliances will be certified and inspected.
- Hiab lorries will utilise outriggers at all times during lifting and all certification will be held in the vehicle cab.
- Vehicles will travel along clearly specified routes.

Loading Tipper and Roll-o-roll-off lorries

- Tipper and roll on/off lorries will be loaded by excavators within exclusion zones formed using physical barriers and signage. All lorries will be sheeted prior to leaving site.

Plant movements around site

- Plant will operate within exclusion zones, with barriers and signs erected as required. Where vehicles are travelling they will do so under the control of a banksman or again within cordoned off routes.

Pedestrian Movements

- Pedestrians will be segregated from plant and vehicles. Pedestrian routes will be formed using barriers and signage.
- Where plant is required to cross pedestrian routes, banksmen will be used.

Refuelling

- The fuelling area will be fenced off. Fuel will be stored within a bunded tank. A drip tray will be placed under the refuelling end to catch minor spillages. Hydraulic oil will be stored on a bunded tray of adequate size. Spill kits will be available for use as required. Operatives will take precautions against skin contact by keeping skin covered and wearing gloves.

Gas Bottle Storage

- Oxygen and propane will be stored within lockable cages. Fire points will be sited next to the cages. Cages will be stored at least 3m apart in the open at ground level.

Environmental considerations

- Waste will be segregated on site in dedicated processing areas, after segregation waste will be loaded in to tipper lorries or roll-on-roll-off bins for transport to waste specific facilities. Spoil, materials arising and mixed demolition will initially be spilt at the workface and stored separately ready for disposal from site. Items unsuitable for segregation will be stacked elsewhere for general waste disposal.
- This initial waste stream segregation will be followed by a similar process for the bulk clearance from site with the collection vehicles taking "waste by type" to our recycling / disposal facilities off-site by our in-house fleet as appropriate. The material clearance process and performances will be fully monitored and controlled under the Site Waste Management Plan.
- No waste will be burnt on site at any time.
- Newsletters will be distributed to interested parties to present the manner of execution of the works and the logistics and local traffic management arrangements.
- Given the fact that the existing hard surface are in place mud will not be an issue at this stage so lorry wheels will remain clean. This will be monitored on an ongoing basis to ensure that the surrounding roads remain clean, when deemed necessary, Gatemen will be in place to clean wheels of outgoing vehicles, to prevent mud going on the public highways, this will be monitored on an ongoing basis to ensure that the surrounding roads remain clean, in dry weather, operatives will make sure all hard standing areas watered down to minimise dust emission

- Keltbray operate an Internal and External Communication Procedure (including complaints) and operate a complaints form).

5. Temporary Traffic Control and Management

All site traffic will be controlled by dedicated traffic marshals on entering and leaving site. Pedestrians will be controlled by the traffic marshal using appropriate controls, when vehicles enter or exit site.

Vehicle movements will be recorded in the Vehicle Movement sheet by the Traffic Marshal. When machinery needs to enter roads, appropriate supervision will be provided to control the flow of pedestrian and vehicular traffic. Traffic Marshals will be used during the movement of heavy plant. Some items of plant will require moving on low loaders and will be timed to minimise disruption to road traffic from the nearest suitable controlled access point

- HGV drivers will be required to hold valid certificates and to have undergone the relevant safety training. Keltbray are committed to ensuring that all regular and frequent HGV class drivers attending site have attended the Safer Urban Driving Training (SUDT) course. Site records will be kept detailing all SUDT courses attended and training expiry dates;
- All vehicles shall be fully laden before leaving site to reduce vehicle movements;
- All vehicles shall be regularly maintained in accordance with the manufacturer's specifications.
- Keltbray and our subcontractors operating frequent and regular HGV trips to site will have a minimum FORS Bronze Level accreditation;
- All vehicles will be fitted with cycle safety measures as required of FORS Bronze level accreditation;
- All HGVs will be fitted with on-vehicle cyclist warning and detection measures;
- All vehicles will turn within the site in order to minimise disruption to other road users;
- Provision will be made to ensure that the loading of vehicles can be carried out on site rather than on adjacent roads;
- All HGV movements at site entrances will be managed by a competent traffic marshal at all times;
- The traffic marshal will ensure that the site gates are open for the arrival of each vehicle and pedestrian movements controlled, such that vehicles may safely enter the site from the highway without waiting on the highway to complete the required manoeuvre.
- No idling of vehicles will take place on the approach to access gates or within the site. The size of the site means that vehicles can be accommodated within the boundaries of the site, eliminating any queuing outside of the site boundaries;
- For large pre-planned loads, or abnormal loads, discussions will take place with the relevant authorities, including the Metropolitan Police, to ensure the application of appropriate guidelines and agree designated routes, so that inappropriate routes are avoided; and All diverted or replaced rights of way will be notified in advance and where appropriate, temporary routes will be provided.
- Cleaning of wheels as necessary by controlled water jet.
- Regular wet cleaning of hard-surfaced roads used to enter site with sweeper vehicle as required;
- Ensuring that dusty materials are transported appropriately (e.g. sheeting of vehicles carrying spoil and other dusty materials);

6. Parking Facilities

The parking of site vehicles on footways and double parking will be prohibited. Limited parking for plant maintenance vehicles, delivery vehicles etc. will be available on site. There will be no provision of a dedicated area on the demolition site for workforce private vehicles (other than cycles / motorcycles). There will be a provision of cycle parking onsite for 10 per cent of workforce.

7. Pavement Crossovers

Where access points are required across a public footpath or right of way, suitable pavement crossovers

will be provided. These will be maintained for safe pedestrian and public vehicle passageway over the pavement crossovers. Existing cross overs are currently in use until the construction of new crossovers. It is envisaged that 5 pavement crossovers will be constructed during the works on the Broadway Project, the location for these crossovers are marked on *Fig.2 - Site Logistics Drawing T16064-SL-03*.

Summary of crossover locations are as follow

- 1 no crossover on Broadway street
- 1 no crossover on Dacre Street
- 3 no crossover on Victoria Street.

8. Temporary Traffic Signs

Construction Site Traffic signage will be displayed at and near the site gates to inform pedestrians and road users of the fact that site vehicles should be expected.

All temporary traffic control signals (if required) will be kept clean and legible and free from overgrown vegetation at all times during the works and they will be promptly removed when their location becomes invalid during the development of the works. The signs shall be fixed securely to ensure that they do not become dislocated or detached. Regular maintenance checks to clean and re-secure signs as appropriate will be carried out.

Workforce, Visitor and Public Safety

- Clearly demised “Green” (Safe) routes - PPE not required
- Clearly demised “Red” (Workface) areas – full PPE and site operational controls mandatory
- Emergency Escape routes from the site areas clearly signposted throughout
- Site Boundaries and Workface control measures clearly signposted throughout
- All PPE controls and site safety measures form part of site specific induction process

9. Restrictions/Special Considerations

The site currently has 5No. live UKPN sub-stations within the existing demise and these must be protected and 24/7 access maintained until decommissioned or temporarily relocated.

Local residents, hotels, businesses, LUL station all within close proximity to the site.

10. Road Cleaning

Keltbray will organise road cleaning equipment as necessary to be utilised on this project. This will be in the form of a jet washer. Control of the equipment will be by the Foreman in charge or by the Site Manager. A road sweeper will be employed periodically around site if deemed necessary.

11. Traffic Marshals

- All traffic marshals will attend a site Induction and provide proof of competency. They will be briefed on the Construction Logistics Plan and site logistics.
- Traffic marshals shall ensure that the gate is open prior to vehicles arriving at site, so that wagons are not waiting to gain access.
- Traffic marshals shall ensure that the pavement is clear of pedestrians or any other personnel prior to banking wagons on site. Yellow barriers shall be extended across the pavement to prevent member of

public interface with traffic.

- A vehicle log will be kept and completed recording the registration, vehicle type and arrival time.
- All vehicles will only move under the instruction of banksmen on-site, and adhere to the speed limit.
- All wagons leaving site will be clean and will not transport mud/muck on to public roads. Jet washes can be used to clean any wagon before leaving.
- Traffic marshals shall ensure that pedestrians are stopped and aware of the site exit before banking vehicles out onto Broadway or Dacre Street. Extendable barriers will be used to stop pedestrians from meeting with site traffic.
- Vehicles will then be banked when safe, on to Broadway or Dacre Street.
- Traffic marshals to also make note in vehicle log book, time wagon leaving site.

12. Hazard Identification and Control Measures

Key Hazard Identified	Significant Risk and Who May Be Harmed	Control Measures
Restricted site access.	Striking pedestrians, cyclists and operatives.	Establishment of segregated vehicle and pedestrian/cyclist route onto and off the site.
Cyclist	Striking cyclist on or off site	Traffic marshals to control and monitor incoming and outgoing vehicles / cyclists. All vehicles to be controlled by trained and competent banksmen. Vehicle crossovers to be marshalled. Left vehicle turns are to be kept to a minimum.
Restricted road and pedestrian access around the site.	Striking site personnel and temporary/permanent structures.	Site Vehicles to comply with all traffic regulations. Establish warning signs at all entrance/exits.
Site visitors	Being struck by vehicles.	Establishment of segregated vehicle and pedestrian routes around the site. Visitors must wear high visibility garments whilst out on site. All visitors must be accompanied at all times.
Steep gradients.	Overtuning vehicles – driver/personnel injury.	Select appropriate vehicles for site conditions. Keep gradients to a minimum. This will apply when ramps are in place for demolition below ground level.
Vehicles reversing in confined areas.	Striking site personnel and other vehicles.	Where possible provide one way route through the site to eliminate reversing. Vehicles must have visual warning light on at all times. Vehicles must have audible alarm warning when reversing. Trained banksman must be in attendance.
Vehicles being unloaded adjacent to the site gates.	Injury to passing pedestrians.	Temporary road barriers must be erected when gates are left open. Banksman to be in attendance. This will be a limited activity due to the space afforded on site and it will be strictly controlled when required.
Site personnel.	Site personnel being struck by vehicles.	Establishment of segregated vehicle and pedestrian routes around the site. Pedestrian

Key Hazard Identified	Significant Risk and Who May Be Harmed	Control Measures
		<p>routes must be identified by signage etc. Operatives must wear high visibility garments whilst out on site. All site personnel must undergo a site safety induction before starting on site, which will cover vehicle segregation and site rules.</p>
<p>Vehicles entering and leaving site.</p>	<p>Striking pedestrians, site personnel and other vehicles.</p>	<p>Security to control and monitor incoming and outgoing vehicles. All vehicles to be controlled by trained and competent banksmen. Vehicle cross over will be installed at the gate. Site hoarding erected around the exposed sections of the project to deny access to the general public.</p>
<p>Vehicles picking up mud on wheels.</p>	<p>Leaving mud on the highways causing road traffic accidents and accidents to pedestrians.</p>	<p>Outgoing site vehicles must be washed where required before leaving site. Excessive mud on wheels to be removed by jet wash. Drivers / gatemen to check wheels for excessive mud before leaving site.</p>
<p>Vertical edges.</p>	<p>Falling of vehicles and vehicle loads. Injury to site personnel</p>	<p>Road barriers must be installed to vertical edge. Timber baulks or similar to be positioned at any exposed edges. Controlled speed limit.</p>
<p>Obstructions and services</p>	<p>Overtuning of vehicles. Damage to installed structure.</p>	<p>Highlight obstructions and services especially UKPN assets.</p>
<p>Securing gates at all times.</p>	<p>Gates may blow/swing open and harm public/pedestrians. Public may enter site,</p>	<p>Traffic marshals to keep gates closed at all times when not present. To be briefed on Construction Logistics Plan.</p>
<p>Noise and vibration and emissions.</p>	<p>Effects on site personnel and pedestrians.</p>	<p>Vehicles to be regularly inspected and maintained.</p>
<p>Drivers lacking competence.</p>	<p>Out of control vehicles. Striking site personnel and damage to structures</p>	<p>All site drivers to have a current certificate of training achievement and to be competent. Drivers to receive adequate supervision and monitoring. Plant department to ensure this.</p>
<p>Vehicle arrival and departure</p>	<p>Site congestion. Striking site personnel and pedestrians. Causing road traffic accidents. Vehicle drivers being struck by another vehicle or load.</p>	<p>Security to control and monitor incoming and outgoing vehicles. Drivers must wear safety helmet, safety boots and a high visibility garment when out on site.</p>
<p>Speeding vehicles.</p>	<p>Striking pedestrians and other vehicles.</p>	<p>All vehicles to observe the site speed limits.</p>
<p>Loading and unloading of vehicles.</p>	<p>Striking site personnel.</p>	<p>All loads to be unloaded under the supervision of a trained and competent banksman.</p>
<p>Disruption to the local traffic and highways.</p>	<p>Causing congestion and possible road traffic accidents.</p>	<p>Vehicles to use the designated approach roads.</p>
<p>Non site vehicles entering the site.</p>	<p>Striking pedestrians, site personnel and other vehicles.</p>	<p>Security/ gatemen to monitor incoming and outgoing vehicles.</p>
<p>Build-up of vehicles on surrounding roads.</p>	<p>Causing traffic congestion around the site</p>	<p>All deliveries to be coordinated and timed correctly to site. During waste away activities, stagger the lorry arrival times.</p>

The Broadway Driver Information Sheet

- Vehicles will only be accepted between 08:00 & 17:30 Monday to Friday and 08:00am & 1:00pm on Saturdays (no vehicles on Sundays or Bank holidays)
- Never wait outside neighbouring buildings
- On arrival follow the directions of the Keltbray gate marshal. Site speed limit is 5mph
- Drivers should be aware of the following hazards when driving onto/on site:
 - Pedestrians
 - Cyclist
 - Plant movements
 - Lifting operations
 - Excavations
 - Excessive speed
- One banksman will stop the traffic/cyclist & one will give you signals
- Two gate marshals will be controlling pedestrians
- Do not move until the vehicle banksman signals and always obey their instructions
- If directed use the waiting area outside the entrance & switch off engine – if no space you may be asked to drive off
- Relationships with our neighbours & the public are important to us – do not rev the engine; sound the horn unnecessarily; etc.
- When exiting the vehicle you will need to wear the following items of PPE:
 - Safety boots,
 - Reflective jacket,
 - Helmet,
 - Gloves &
 - Glasses.
- Enter via appropriate gate 1, 2 or 3 following advanced confirmation with site.

**THE AREA IS VERY BUSY WITH CYCLISTS & PEDESTRIANS –
EXTREME CAUTION**

