

APPENDIX 4.2

OUTLINE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN (CEMP)



AXONOMETRIC VIEW

CAMBRIDGE NORTH LABORATORIES, OFFICES AND MULTI STOREY CAR PARK
DEVELOPMENT
CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

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SECTION 1: INTRODUCTION

Prior to commencement of development a site wide Construction Environmental Management Plan (CEMP) will be submitted to and approved in writing by the Local Planning Authority.

1.1 THE SITE

This development is for

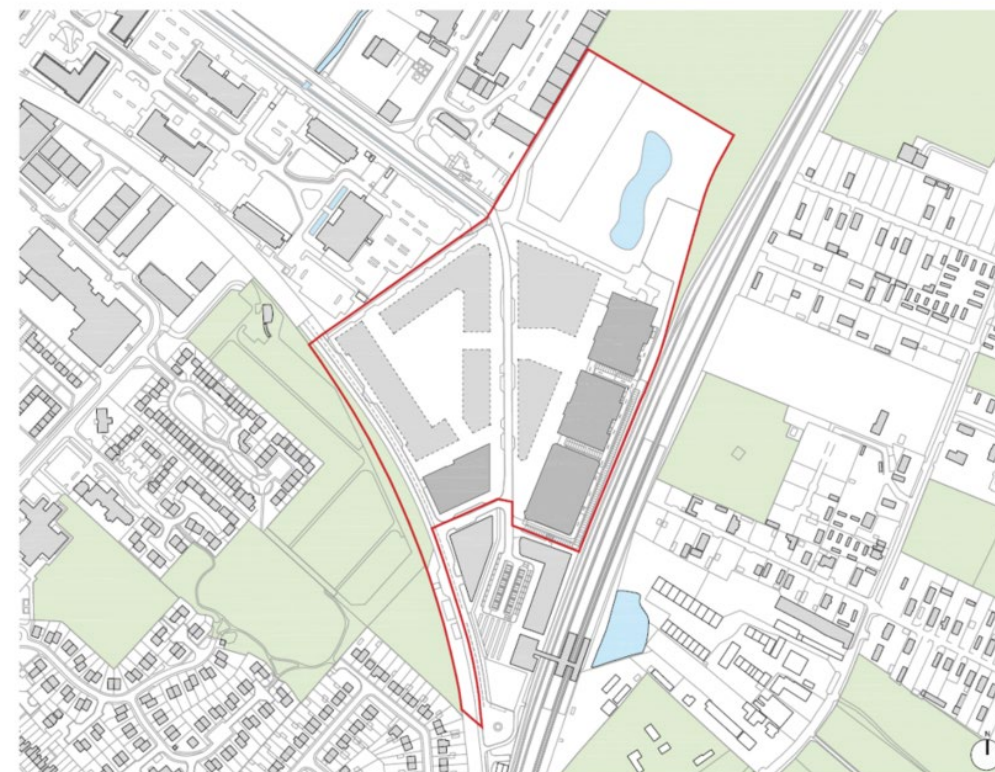
- construction of three new residential buildings of four to eight storeys, providing flexible Class E and Class F uses on the ground floor, and two commercial buildings of five storeys for Use Classes E(g) i (offices), ii (research and development), providing flexible Class E and Class F uses on the ground floor, with associated car and cycle parking and infrastructure works,
- the construction of three commercial buildings of four and seven storeys for Use Classes E(g) i (offices), ii (research and development), providing flexible Class E and Class F uses on the ground floor, with associated car and cycle parking, a multi-storey car and cycle park and associated landscaping and infrastructure works.

The sites is to the north of Cambridge, near to the existing Cambridge to Ely train line and to the south by the Cambridgeshire Guided Busway. This development follows One Cambridge Square , the first of a group of office buildings to be built in this area.

The site is accessed via Cowley Road from the north running east to west. Cowley Road then runs south to join with Milton Road where the site is located adjacent to the new Cambridge North Train station square. Milton Avenue is a new road created to link Cowley Road to Cambridge North Train station and the future Cambridge North Development site. The square will be linked to the guided bus network via a new linking road. Deliveries to the site will be provided from Cowley Road.

Cambridge North station was opened on 21st May 2017 providing a new transport hub to the north of the City centre. The site also benefits from the adjacent Cambridgeshire Guided Busway and recently improved pedestrian and cycle highway links as part of wider infrastructure development of the Chisholm Trial. One Cambridge Square will be located less than a 100m walk from the new Cambridge North Station.

SITE PLAN – RED LINE DRAWING



1.2 THE WORKS - CONSTRUCTION METHODOLOGY

ENABLING WORKS:

Prior to any works commencing, a schedule of conditions will be carried out to all surrounding elevations of the Office build and compound area. Records will be agreed with relevant parties and the records stored if required at completion.

The enabling works element of the programme commences April 2023 with the construction of a 200 space temporary rail car park and a 228 space temporary car park. Wates Office/Welfare facilities zone will be established adjacent the temporary car park. The Network Rail compound will be constructed as part of the Enabling Works and used as additional site storage.

THE WORKS - CONSTRUCTION METHODOLOGY

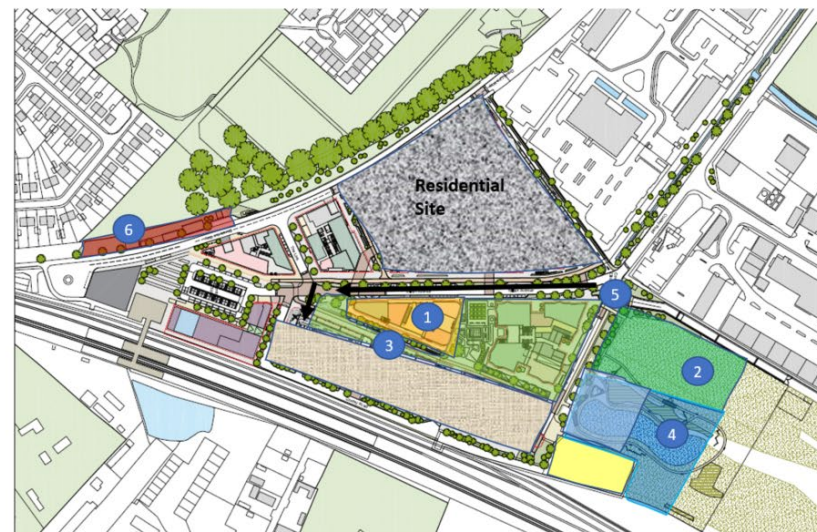
ENABLING WORKS

ENABLING WORKS - INITIAL SET UP (April 2023)



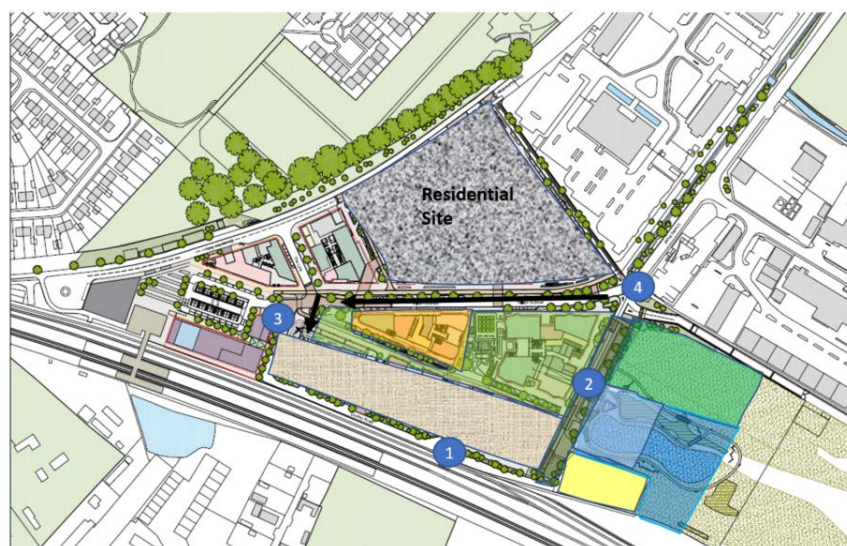
- 1 Existing Network Rail car park retained
- 2 Public Access to Network Rail Car park
- 3 Construction Access Gate
- 4 Construct 200 space temp. Rail car park
- 5 Construct 228 space temp. Rail car park
- 6 Wates Main Site Offices
- 7 Construct Network rail compound but WCL use for assed site storage

ENABLING WORKS - INITIAL SET UP (April 2023 to September 2023)



- 1 Temp 200 space temp. Rail car park
- 2 Temp 228 space temp. Rail car park
- 3 Swale Drive attenuation/ road construction
- 4 Balancing pond/ headwall and hydro brake
- 5 Extend Cowley Road and all services within
- 6 Construct foul pump chamber

ENABLING WORKS - INITIAL SET UP (September 2023)



- 1 Connections to first public drain adjacent to railway line
- 2 Swale Drive connections to Blancing Pond and first public drain
- 3 Diversion of Network Rail Car park storm drain into Swale Drive
- 4 Final Diversion of first public drain to new location

ENABLING WORKS - INITIAL SET UP (September 2023 to December 2024)



- 1 Completion of Temp 200 Space Rail car park in August 2024
- 2 Completion of Temp 228 Space Rail car park in September 2023
- 3 Public Access Temp car parks
- 4 Extended hoarding line in September 2023
- 5 Commence Mobility Hub in August 2023
- 6 Commence S6 and S7 in October 2024
- 7 Commence S4 Construction (Nov 2023) inc. temporary access road and compound

THE WORKS - CONSTRUCTION METHODOLOGY

ENABLING WORKS CONTINUED:

ENABLING WORKS - INITIAL SET UP (December 2024 to November 2027)



- 1 Mobility Hub complete December 2024
- 2 Adapt hoarding line from Mobility Hub
- 3 Public Access to Car Parks (Dec 2024)
- 4 Temp Car Park still available until S8 commences
- 5 S6 and S7 under construction until Aug 2025
- 6 S9 under construction until Nov 2027
- 7 S4 under construction until Dec 2025

MAIN CONSTRUCTION WORKS:

The indicative programme which continues to be developed currently captures a commencement on site from April 2023 and completes November 2027.

The Indicative programme shows the sequence and main durations of each phase of the works. Throughout the works we shall provide snap-shots of key elements of the programme and any activities that require prior notice of the works i.e. scaffolding, potential noisy works, tower crane erect and dismantle, larger deliveries and mobile crane activities. All will have their own method statement of access etc.

Site working hours are as per the planning requirements i.e.

| | |
|-----------------|-------------|
| Monday – Friday | 0800 – 1800 |
| Saturday | 0800 – 1300 |

There will be certain works that will need to be completed outside normal working hours noted above. This will require agreement to work at weekends or after peak hours during the week.

These works will be limited to works that could otherwise have a detrimental affect upon the public if undertaken during normal working hours or are construction critical i.e.

- Tower crane erect and dismantle
- Specialist mobile crane for specific lifting of Plant & larger steels
- Pedestrian and cycle route changes at key junctions i.e. hoardings, barriers and signs. These route changes will only be carried out after previous notice and agreement.
- Concrete finishing

SUBSTRUCTURE:

Works will commence with the site strip, preparations & installation of piling mat and the early installation of the S & FW MH's and connections across the Guided Bus Route to the respective existing pump chambers. These connections will be carried out under strict traffic controls and on a 50/50 road closure sequence.

Upon completion of the piling mat and setting out, the piling will be installed. If a sheet pile solution is viable for basement construction, the capping beam will be commenced immediately the sheet piling is signed off, however the practicalities of carrying this out whilst the any other plant is on site will be carefully assessed.

The piling will be sequenced to maintain continuity in one visit per building. Pile arising's will be removed from site as work proceeds, via suitable muck away vehicles. Piles for the tower crane will be installed, in the location as shown upon Tower Crane Plan and the base cast to allow the tower crane to be erected.

Capping beam, if not installed earlier, will now be completed allowing the basement excavation to be carried out. Once done the Sheet pile clutch welding will be completed and followed by the under slab drainage, the pile cap and basement slab. During these basement activities, the ground level pile caps and under slab drainage will be progressed. The ground floor slab will be cast up to the capping beam. The suspended Ground slab above the basement will be cast once the RC Cores have been completed.

FRAME CONSTRUCTION:

Once above ground floor the superstructure frame construction takes in the form of either a RC frame or RC cores with a structural steel frame. If the latter, the main core will be constructed in either a Jump/Slip arrangement and will be completed prior to commencement of structural steel. The tower crane will be the sole lifting Plant with concrete being pumped into position.

The multi storey car park will be either a steel or precast concrete frame erected by crawler cranes.

FACADE CONSTRUCTION:

Once sufficient levels have been released by the steel frame and suitable protection is in place, the façade works will commence with the installation of the SFS framing followed by Insulation & Cement board, Ribbon Windows and EPDM's. This will be installed from MEWPS. This operation will provide initial weather tight allowing internal finishes to commence.

Once clear of MEWP works the brickwork cladding will be installed from external scaffold erected with progress of works. The Entrance Curtain walling will all be installed from MEWPS or mast climbers.

INTERNAL FIT-OUT:

A passenger goods hoist will feed all floors for 'CAT A' finishing materials. In addition the early completion of the Cores will enable the earlier installation of all lifts. We would propose to take beneficial use of one of the new passenger lifts to supplement the temporary passenger goods hoist on the North Elevation to benefit the Fit Out programme.

Temporary additional storage areas will be provided within the retail space for a limited period only.

The internal trades, particularly MEP and partitions will commence to the riser cores and toilet areas at the earliest opportunity and in advance of the Cat A floor plate fit out from Ground Floor level and progress up the building.

The two main staircase finishes will be sequenced between floors so that temporary evacuation access routes are maintained at all times during construction. The Cat A Fit Out will commence at completion of the Ground, 1st & 2nd floor weather tight date.

High level soffit MEP support brackets will commence pre the weather tight date to provide the earliest possible start.

Roof risers will be temporarily sealed to allow the vertical services to be installed at the earliest opportunity. Roof and terrace gullies, either temp or permanent are to be installed together with the vertical RWP system as soon as possible. These are critical to keep surface water out of the building. Temporary weathering measures will also be employed to seal the Top level of the external Cement board and inner face walls at parapet level.



CAMBRIDGE NORTH LABORATORIES, OFFICES AND MULTI STOREY CAR PARK
DEVELOPMENT
TRAFFIC MANAGEMENT PLANS

SECTION 2: TRAFFIC MANAGEMENT PLAN

2.1 VEHICLE ACCESS / EGRESS

Project deliveries will follow the prescribed access / egress delivery route exiting the A14 at junction 33 heading south on Milton Road turning left onto Cowley Road leading to Cambridge North train station. These deliveries will enter the site compound area north of Milton Avenue for off-loading and distribution.

A delivery schedule will be operated by Wates to ensure multiple deliveries do not occur. All vehicles will enter site via our compound entrance off Cowley Road. On arrival the vehicle will then be directed into site and entrance gate closed.

The procedure for vehicle movements thereafter is as follows:

- The traffic marshal / signaller will direct the delivery to the segregated off-loading area within the site compound.
- The specific sub-contractor supervisor / foreman will be informed of the delivery.
- No delivery vehicles will be permitted access without prior notice / agreement.
- The delivery vehicle will be directed to the designated off-loading area by the Sub-contractor's banksman.

All deliveries by exception will be professionally and competently banked, manned and secured during these operations.

Having loaded or unloaded the vehicle, the following procedure will apply:

The driver will ensure that the load is secure (if applicable). This will be achieved using ropes, straps, netting or canvas tarpaulins. The gateman will ensure this procedure is executed prior to allowing the driver to leave the site.

The delivery vehicle will exit the site compound via Milton Avenue into Cowley Road.

Site staff and contractors will access the site following the same route however upon exiting the site vehicles will leave via Cowley Road in order to avoid unnecessary congestion to Milton Avenue junction.

Rules:

- All vehicles entering site are to be regularly maintained vehicles.
- Obey all Safety and Traffic signage.
- Beware of pedestrians and site operatives at all times.
- Signage, perimeter hoarding, traffic barrier systems and a physical barrier will be erected to keep vehicles segregated from site pedestrians.
- No parking directly outside the site is permitted.
- Beware of other vehicles on site.
- Be considerate and polite to all road users and pedestrians.
- All deliveries are to be escorted by a banksman whilst moving on site.
- 5 mph speed limit to all vehicles on site.

2.2 PEDESTRIAN / CYCLIST ROUTES

Due to the proximity of cyclist and pedestrian zones the site controls will be reviewed with Cambridgeshire County & Cambridge City Council with the following procedures to be applied:

The pedestrian zone leading along Cowley Road to Cambridge North Station will be switched to the opposite side of the carriageway to avoid any unnecessary interface with construction activities. The pedestrian zone will lead to the Station car park where a new pedestrian crossing will be introduced prior to the car park maintaining access to the Station.

The existing cycle path to Cowley Road is intended to be closed during the construction works with the existing cycle path to the guided busway maintained.

Public notices / signage to be erected as required to Cowley Road (wording to be agreed with Cambridgeshire County Council).

2.3 BUS ROUTES

GUIDED BUSWAY:

The guided busway is to be maintained during the planned construction of One Cambridge Square. A section of the busway will be reduced to single carriage to allow safe segregation of the construction activities.

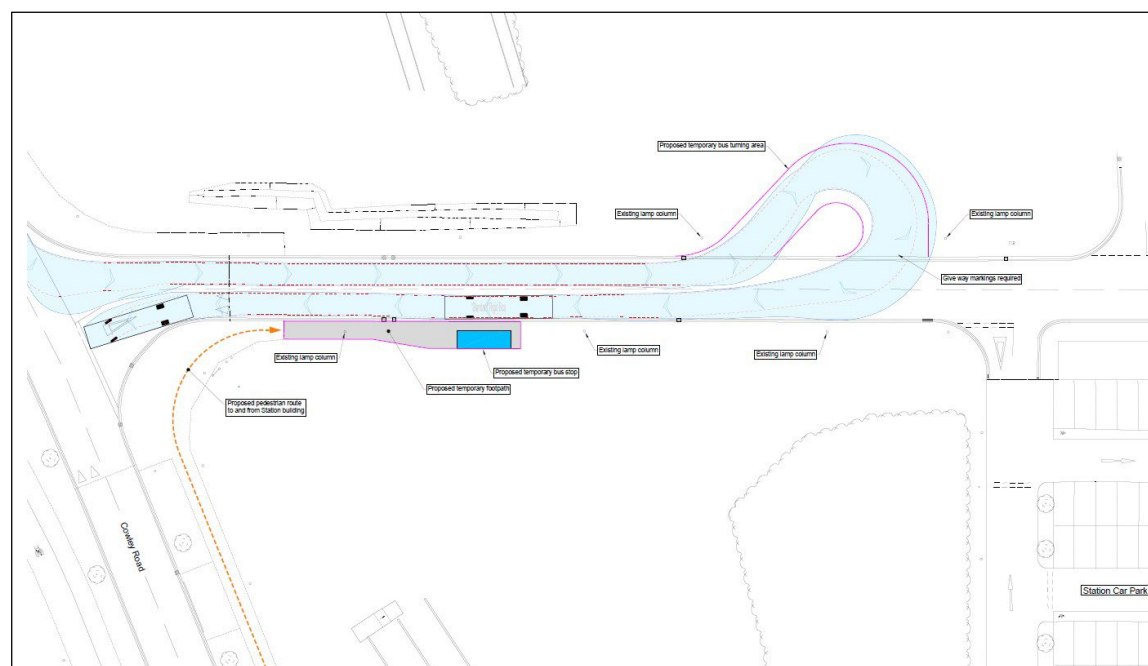
During the initial enabling works new incoming services and temporary services are required to cross the guided busway. Detailed method statements and discussions will need to be held to finalise these works in order to minimise any disruption associated.

COWLEY ROAD BUS ROUTE:

Site distribution of materials will largely be undertaken by crane lifts via the on-site tower crane with a the majority of lifts taking place over Milton Avenue. Therefore the preferred option during the construction phase is to close Milton Avenue with exception of emergency vehicle access.

Discussions have now progressed with the local Bus Companies regarding a possible temporary bus stop and roundabout. The temporary location has received verbal approval and therefore design works will be progressed.

Location B: Alternative Bus turning area, Swept path Analysis for temporary Roundabout.



4. EMERGENCY VEHICLE ACCESS / EGRESS

In order to maintain emergency vehicle access / egress, access gates within the hoarding line will be introduced at each end of Milton Avenue. In the event of an emergency construction lifting operations would cease and Milton Avenue opened to facilitate emergency access / egress.

5. PRIVATE VEHICLE ROUTES

Access to both Station car parks will be maintained during the construction of One Cambridge Square.

SECTION 3: SITE LOGISTICS / CONTROLS

3.1 SEGREGATION / SIGNAGE

Once on site, we will maintain hoardings in line with the phasing plans to allow the works to be carried out. The hoardings will be erected in accordance with Wates Professional Standards.

All work areas will be segregated by fencing, and to gain access all personnel will hold a valid CSCS (or affiliated scheme) card and have passed a site induction course. This will set out all site rules, procedures and access/escape routes and explain Wates stringent safety rules, including mandatory PPE (safety boots, helmets, high-vis vests, glasses and gloves as a minimum in all work areas).

All operations will be subject to risk assessment and method statements, which have to be approved by site management and our in house safety department before any element starts on site.

3.2 SITE SECURITY / ACCESS CONTROL

In line with our logistic proposals the site / compound area will be secured utilising a combination of portable steel fencing and solid 2.4 metre high timber hoardings.

The site compound will be manned by an SIA licenced security guard during normal working hours to control access to the site working area for authorised personnel only. CCTV will also be utilised for additional surveillance and security with a monitored wireless alarm security systems utilised outside normal working hours.

Vehicular and pedestrian traffic will always be segregated on site with separate biometric turnstiles for pedestrian access and manned vehicle gates for material deliveries. All vehicles must observe the site speed limit and comply with warning, directional and information signs.

Deliveries will be under the supervision of a gateman / banksman when reversing and be fitted with an audio/visual alarms.



3.3 SITE ACCOMMODATION / WELFARE

A modular building providing site offices and welfare facilities will be established on site with segregated pedestrian access via a biometric turnstile.

Adequate and suitable toilets, washing facilities, rest rooms and changing rooms will be provided with an open plan modular office arrangement encouraging a collaborative work environment.

The welfare arrangements will conform to the Construction (Design & Management) Regulation 2015 Schedule 2 and will:

- Be easily and safely accessible.
- Be kept clean and orderly with a cleaning programme being established by the site management team.
- Be adequately ventilated and lit
- Have a place to store normal and work clothing and dry it when wet.
- Have facilities for rest in a non-smoking atmosphere.
- Have a supply of drinking water (clearly marked).
- Have facilities for boiling water and heating food.
- Have facilities for eating food etc.
- Have facilities that will be safely maintained.
- Have separate toilet, washing and changing facilities for male and female.
- Not be used for storage of materials or plant.

3.4 MATERIAL STORAGE / DISTRIBUTION

The Tower Crane will be utilised for the vast majority of material distribution. The installation and dismantle of the Tower crane, will require careful planning and agreement. To achieve this we shall apply for the appropriate licences very early and provide a detailed methodology and lifting plan, the latter can only be fully completed when the tower crane order is placed.

A 60m Saddle (Fixed) jib tower crane with a capacity of 4.4 T at 60m will be erected along the Western Elevation of the site. An application for appropriate licences will be made for both the over sail and erection of the tower crane during the enabling period.

Due to the crane being a fixed-jib type, when left out of service it will free-swing to its maximum radius i.e. 60m. The crane pick-up point for materials is within the Northern compound on the corner of the Guided Bus Route and Milton Avenue. All materials will be lifted from this point and the load will then be trolleyed back toward the mast before the crane slews to position and then trollies the materials out to the appropriate position on site. By employing this method, no loads or materials will slew above public areas.

3.5 SITE INDUCTION / COMMUNICATION

Our processes for communicating and consulting on safe working practices are documented throughout the Health and safety procedures within our Operating Framework management system. Our procedures specify that:

- Communication/consultation on Health and Safety takes place with employees, contractors and visitors.
- Our main objectives are:
 - That all individuals are consulted on matters affecting their health and safety
 - To ensure all people working on our projects have sufficient information to enable them to follow our health & safety standards and legislation / approved codes of practice
 - That the principles of trust, respect, co-operation and joint problem solving exist between all parties
 - That 'lessons learned' and examples of best practice are communicated throughout the business.

We communicate and consult through various channels as summarised below:

PLAN RIGHT

Before starting work on site, our supply chain partners attend pre-order/pre-start meetings known as our 'Plan Right' process. These provide a structured and consistent approach for introducing our supply chain partners to the project and aligning the way they work with our standards. At this stage we will focus on communicating significant hazards associated with the project (e.g. working at height – roof work/scaffold, or manual handling – movement of solar panels etc.).

At this stage we will issue relevant Health & Safety standards to our supply chain partners. All our employees have been briefed on our Health & Safety standards via annual workshops, including refreshers and our standards are readily accessible from our company intranet.

Compliance and understanding of our standards is monitored at regular intervals by our Health, Safety & Environmental Managers and by Operational Management.

PROJECT HEALTH & SAFETY PLAN

Each project prepares a Health & Safety Plan that details a) general management arrangements, and b) how known hazards will be managed. Our plan is passed onto our supply chain partners at the tender process to allow their risk assessments and method statements to be developed.

SITE RULES

Our Project Leader will develop site-specific rules appropriate to the project. The rules are communicated at site safety inductions.

SITE INDUCTION

Our Project Leader will appoint a member of our management team to induct all persons before commencing any work. Key hazards and their methods of control are covered during our induction. Our inductions will specify the requirements for wearing personal protective equipment.

When there is a change to our site management team, we will carry out a 'project handover'. The purpose of the handover is to maintain continuity on our projects when handing over an area of responsibility to an incoming manager. The goal of an effective handover is the accurate, reliable communication of project and task-relevant information thereby ensuring continuity of safe and effective working.

RISK ASSESSMENTS / METHOD STATEMENT BRIEFINGS

These must be carried out prior to commencing work for the first time. Supply chain workforce are briefed by their line management and in such cases, we will verify this has happened at the induction stage. Directly employed operatives will be briefed by their line manager.

Requirements for using specific items of personal protective equipment will be briefed at this stage.

START RIGHT

'Start Right' is a daily communication process used by all site supervisors to identify changes to site conditions that could lead to accidents/incidents. Its aim is to:

- Reinforce safe systems of work;
- Improve communication of project interfaces;
- Empower contractor supervisors;
- Monitor change.

SITE SAFETY COMMITTEE

Projects with an excess of twenty five people on average will establish a regular health & safety committee with representation from our supply chain partners and our staff.

The purpose being to:

- Raise issues and produce solutions;
- Consult with our workforce
- Re-enforce standards;
- Review site performance.

Supply chain supervisors will then cascade the messages to their operatives via tool box talks.

TOOLBOX TALKS

These talks are carried out either by the subcontractor's representative, or by the Wates site

management team on a weekly basis. The subject of the talk is relevant to the work on the site at the time or to other issues arising elsewhere within Wates.

SITE MEETINGS

During the construction phase of the project, we act as a focal point for the exchange of health and safety information between our contractors and our client. This occurs at regular meetings and during day-to-day contact.

HEALTH & SAFETY NOTICE BOARDS

These are established in one or more locations on site. They provide our workforce with visibility of safety related messages, including details of hazards which may change on a daily basis.

NEAR MISS

Every project is encouraged to adopt our Near Miss reporting system which allows near misses to be communicated back to our site management team so that action can be taken. Near misses can be communicated anonymously by any person on site as we will locate 'pocket size' cards around site along with a secure posting box.

3.6 SCHEDULED DELIVERIES

In order to successfully manage the works with efficient deliveries Wates will operate a delivery management system to allow approved sub-contractors and supply chain suppliers to book timed delivery slots whilst avoiding instances where multiple deliveries and congestion occurs.

Site deliveries will follow the prescribed route from the A14 entering the site off Cowley Road in accordance with our logistic proposals.

Vehicular and pedestrian traffic will always be segregated on site with separate biometric turnstiles for pedestrian access and manned vehicle gates for material deliveries. All vehicles must observe the site speed limit and comply with warning, directional and information signs.

Deliveries will be under the supervision of a gateman / banksman when reversing and be fitted with an audio/visual alarms.

3.7 WASTE MANAGEMENT

Waste material generated during the course of the project will be segregated where possible within the central compound area – and at the recycling centre (off site) to attain 95% diversion from landfill.

The Site Waste Management Plan (SWMP) will outline the methods and procedures that will be employed to ensure an effective and efficient waste management service is implemented as well as identifying waste types expected.

Waste shall be stored appropriately depending on type and classification, i.e. Controlled waste, Hazardous waste and General wastes. In any event, waste storage shall be kept to a minimum and in suitable containers or locations for disposal.

Duty of care shall be applied to all waste, and it shall be ensured that all waste disposals are carried out by registered contractors and records of disposal controlled by waste transfer notes. Waste disposal containers/vehicles shall be covered during transport to prevent contents escaping.

Hazardous waste shall be controlled and disposed of following the Environmental Protection Act / Environment Agency approved procedures, and by implementing their consignment note system.

3.8 DUST / NOISE / VIBRATION

Ambient noise levels on and around the site are not as high as they will be once the Station traffic increases. The closest residential properties are to the South of the main Station and to the West past the allotments.

Existing noise and vibration levels will be recorded during the pre-construction period to assess background levels and agree limits with the Council.

They will then be monitored on site, if necessary throughout the work to ensure that they are not exceeded.

Our methodology and programme is based upon normal working hours of 08.00 to 18.00 Monday to Friday and 0800 – 1300 Saturday. Noise and pollution will be kept to acceptable levels by good working practice e.g.:

- well silenced and maintained plant and machinery
- not leaving engines running when not in use
- bunded fuel storage
- minimising use of percussive plant
- use of hoardings and screens
- not allowing vehicles to track mud onto adjacent roads
- damping down dusty materials,
- wet cutting to avoid dust
- limiting duration of noisy operations as well as prior communication
- Timing noisy works to least sensitive times of the day.

Vehicles leaving site will be carefully checked and wheels cleared of debris prior to exiting onto Cowley Road. Due to the fact that all deliveries are via the hard standing compound area, wheel debris will be at a minimum. However there will be periods i.e. substructure excavations etc. where extra vigilance will be enforced regarding wheel cleansing. Additional road sweeper/cleaning assistance will be provided during these periods when necessary.

3.9 CONSTRUCTION / FIRE / ENVIRONMENTAL PLANS

A specific Construction Health and Safety Plan for this project will be developed to ensure a commitment to zero harm is adopted across the team. The purpose of this Construction Phase Plan (CPP) is to describe how the Health and Safety Policy is implemented on site. It is specific to 'One Cambridge Square' and will be reviewed and updated as required throughout the life of the project.

Since 2009 we have continued our commitment to financially invest in developing our in-house electronic 'AIRSWEB' software that provides 'real time' performance data and allows us to identify trends. It also provides an action tracking function.

This Project Environmental Plan (PEP) will be developed in accordance with all identified local planning conditions, environmental requirements, performance targets and objectives and any client specific requirements for the Project.

The plan will outline the Wates procedures for the management and reduction of adverse impacts from the current project phase on the environment. This plan is intended to provide the focus for the management and co-ordination of environmental issues as the project evolves. Therefore, the plan will be developed or amended considering changing circumstances and standards achieved on site or as work progresses.

The production of the Fire Management Plan and Risk Assessment will ensuring specific fire and emergency arrangements are discussed with sub-contractors and / or suppliers at their pre-employment meeting.

Appointing competent staff and / or sub-contractor supervisors to undertake the following roles

- Fire Safety Co-ordinator (Responsible Person)
- Fire Marshall(s)
- First Aid Co-ordinator
- First Aiders
- Environmental Co-ordinator (Responsible Person)

These plans will be developed and amended as necessary to suit changing circumstances as the works progress.

SECTION 3: SITE LOGISTICS / CONTROLS

3.10 COMMUNICATION

To complete this project in the most efficient and expedient manor, it is vital that clear and precise communication lines are established between all parties.

To achieve this goal, once appointed we shall arrange meetings with Cambridgeshire County & City Council to agree the key personnel involved and their responsibilities and procedures to carry this forward.

These discussions will include, but not limited to, the following parties:

- Cambridgeshire County Council
- Cambridge City Council
- Greater Anglia
- Network Rail
- Guided Bus Company
- Stage coach
- McAleer & Rushe - Hotel Contractor
- Client employed Multi Utilities Contractor (MUC)
- General Public representatives
- Cyclists Groups
- Emergency services
- ESM Ltd (MUC)

Our key topics to cover within this submission include:

- Maintaining vehicle, cycle and foot traffic to and from the Station and surrounding area
- Maintaining deliveries and emergency access at all times
- No disruption to the operational services of the Station.
- Maintaining Bus access and exit
- Periodical notices and updates for construction operations
- 'Letter-Drops' / notices to local / adjacent residents regarding construction activities.

- Prior notices / licences for key elements of construction activities;
- Start of enabling works i.e. tree clearance, drainage etc.
- Start of main construction works
- Hoarding lines and adjustments
- Tower crane erection and dismantle
- Scaffold erection and dismantle
- Potential noisy works
- Construction vehicle access / exit routes
- Key completion milestones

A critical part of these early discussions will be to plan and organise the individual methodologies, sequence and timings of each of the above activities, many of which shall require their own application for licences etc.

Once the lines of communication are established between relevant parties, we shall be in daily contact with the respective on site contractors regarding programme and sequence. There will also be a series of formal meetings that will need to be scheduled, these will be structured so as to only have the required personnel attending therefore not 'wasting' attendance time.

These meetings will be tailored to suit the agreed procedure, but will be a minimum of;

1. Daily liaison between WCL appointed person and the GA/Station equivalent regarding the plan for the day and any specific requirements.
2. Weekly liaison meetings between the WCL, GA, ESM and M&R representatives to co-ordinate the site works, deliveries and any particular milestone requirements for the coming week.
3. Monthly Client meetings to discuss the overall progress and a loom ahead for the next month.

SECTION 4: ENVIRONMENTAL IMPACTS

4.1 MITIGATION OF ENVIRONMENTAL IMPACTS

We at Wates have the utmost duty to ensure that operatives and members of the public are not affected by a health or physical risk from any of our activities, below is a list of potential issues and their mitigation measures.

Visual

As the saying goes 'first impressions count', and this is certainly true for a presentation of our building sites. How our sites look is important both for setting the tone for how our workers and the general public perceive our sites and their behaviours on and around them.

Wates has strict standards as to how our sites are set up visually, from the type and colour of our hoarding, how pedestrian and vehicle entrance are set up to the type and quality of signage we display. We are committed to maintaining these standards through out the course of our projects and inspect and maintain the facades of our building sites.

Noise

Unfortunately with construction works there can be times where noise is an unavoidable by product of our activities. How we manage noise has a great effect on both the health of our operatives and nuisance to neighbours.

In order to minimise noise we look at eliminating noisy works through either alternative design, technological advances in plant, or where unavoidable mitigate it with the use of sound barriers, strict controls on the durations and times of noisy activities, monitoring, operative personal protection and ensuring that works are in line with planning requirements around working hours. We will keep our neighbours informed of upcoming activities through letter drops, external site noticeboards and offer a way for feedback and complaints.

Air quality

Two of the largest potential sources that can see a reduction in air quality during the construction process are, the burning of fossil fuels and dust. The burning of fossil fuels occurs both during construction activities and transportation to/from site. To mitigate these we promote green travel across our site, by way of identification of local public services and supporting car sharing schemes. Additionally we have begun introducing the use of HVO fuel to our site as a replacement for traditional fossil fuels for the use in plant and machinery, as it has a much lower CO2 emission rate and is also safer in terms of safe storage and flammability.

Transport

How materials and operatives are transported both to and from our sites can potentially have a great impact on the local community. We are committed to measures that minimise the impact of disruption to both the local community and wider area. Wates have minimum standards for the types of vehicles used, how they are loaded and unloaded, and their safety features. For example Lorries must; FORS accredited to a minimum of silver, have side guards, a close proximity sensor, CCTV or a Fresnel Lens and a class VI Mirror. Wates will also appoint a Plant, Vehicle and Pedestrian Co-Ordinator (PVPC) who's role it will be to ensure the same system of works around vehicle and pedestrian movements.

Water resources

As part of our environmental and BREEAM commitments we are committed to minimising and recording the use of water on site. Our site welfare facilities often come with a range of water reduction devices from timed taps, flow regulators, HIPPO water savers and rainwater harvesting. We will look at minimising the amount of water used in vehicle washing out, wet trades and dampening down works by looking, where practicable, to reducing the need, e.g trackway matting to keep wheels cleaner, alternative methods of construction and technologies.

SECTION 4: ENVIRONMENTAL IMPACTS

4.1 Cont. MITIGATION OF ENVIRONMENTAL IMPACTS

Contamination

Contamination of watercourse and ground can not only have a large environmental impact but also the financial and reputational damage can also be enormous. Wates takes its requirements in this regard very seriously ensure that they are dedicated refuelling and storage areas on site, that fuels are stored in double bunded containers, regular plant checks, the easy and quick access to environmental spill sists, use of less hazardous fuels such as HVO, segregation protection of watercourses and secure storage of potentially hazardous materials.

Ground conditions

The management of ground condition during the construction process mainly focus on the safety around construction activities. In particular for this scheme it will be around the formation of both tower crane and piling mats. Each of these elements will be designed by a temporary works engineer based on the specific site conditions and the plant and crane that will be using them. These will need to rigorously followed and tested through plate load testing and CBR determination.

Lighting

It is important that our sites are well lit to ensure the safety of those making their way either in or around them. However, we are aware that there is a potential for nuisance to neighbours and surrounding properties if this is not done correctly in the appropriate manner. We use low-power consumption LED lights for the vast majority of our temporary lighting and ensure that high level lighting is pointed directly in to site to prevent overspill. Lighting is generally on PIRs or timers so that it does not become a nuisance outside of our working hours. We will ensure pedestrian routes to and around the project are well lit and if our hoard obscures any street lighting that this is suitable mitigated with additional lighting.

4.2 LIGHTING LOCATION PLAN

The below sketch sets out the likely temporary lighting locations for the project. These will be phased as per the phasing plan shown earlier, but will be subject to site reviews to ensure adequate coverage of the working areas is in place

TEMPORARY LIGHTING POSITION



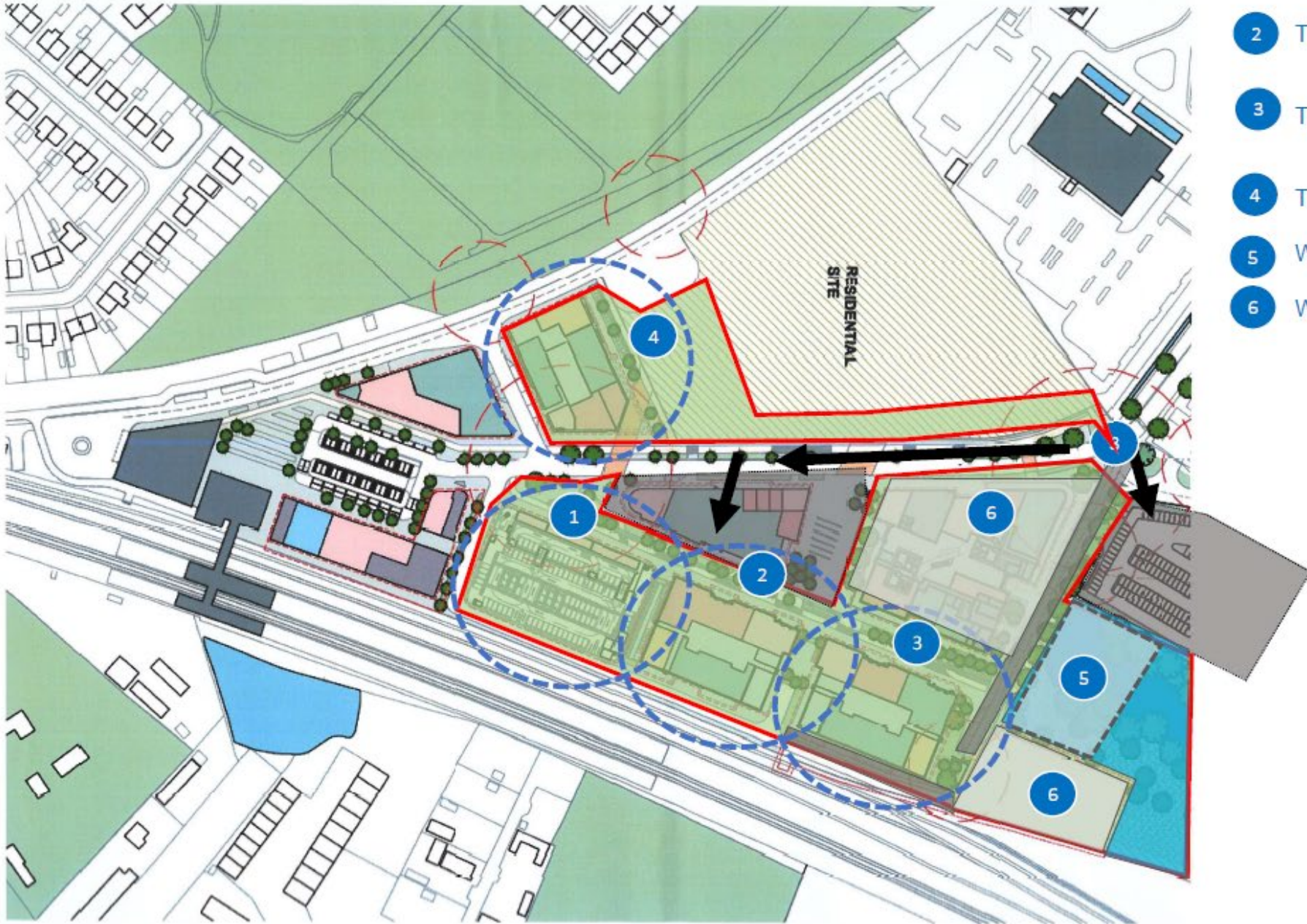
←→ Temporary light position

APPENDIX A – DETAILED SITE LOGISTIC PROPOSALS

Appendix A includes the logistic sketches for the development:

1. Potential Tower Crane Locations (November 2023 to April 2025)

POTENTIAL TOWER CRANE LOCATIONS (Nov 2023 to April 2025)



- 1 TC 1 Luffer Cranes No network rail over-sail
- 2 TC 2 Luffer Cranes No network rail over-sail
- 3 TC 3 Luffer Cranes No network rail over-sail
- 4 TC4
- 5 Wates Site offices
- 6 Wates Compounds