



Construction Environmental Management Plan

Seacom Terminal LTD



Location

Lower wharf
Lower road
Northfleet
Gravesend
DA119BD

Scope of works

Construction of replacement office building and associated mess facilities Re-arrangement of existing employee and guest parking

The current office accommodation is of a poor standard. It is very inefficient in terms of energy waste and damaging to the business in terms of customer perception and staff morale. The upgraded office/mess facilities will provide many improved facilities for both office and dock staff, in a more sustainable and energy-efficient building. Improved formalised parking will also be provided with wider site landscape enhancements to create a more pleasant environment for staff and visitors.

The relocation of the site office will improve the proximity of storage to the jetty and vehicle manoeuvrability within this part of the site.

Air quality

Plant and machinery in the form of generators, compressors, excavators, piling rigs and dumpers will be used during the initial stages, followed by the potential use of cranes and, compactors, telescopic materials handlers, and generators. There will also be delivery vehicles, site personnel and visitors' vehicles attending the site; all have the potential to impact on air quality through exhaust emissions.

We shall ensure that all our plant, equipment and vehicles are properly maintained to reduce emissions as far as is practicable. Site rules shall be set and monitored to ensure plant and equipment are not left running when it is not in use or necessary.

We shall, where practicable share vehicles transporting people to and from the site, and select local tradesmen and suppliers. We will also encourage the use of public transport to reduce travel distances and thereby emissions into air.

There shall be no burning activities on this site.

As per the construction risk assessments, all cutting works shall be undertaken with dust suppression where practicable and dust extraction systems (e.g. localised part M vacuum) to reduce dust emissions into the air. Dust suppression shall also be achieved through damping down (e.g. breaking works) and dust collection systems to equipment.

Dry-stockpiles of aggregate materials, waste materials etc. shall be covered before use or removal or if applicable damping down at regular intervals will be introduced (where they cannot be removed as generated).

Where deemed necessary by site management a browser with spray attachment shall be used to dampen down the ground in respect of plant movement creating air-borne dust.

If applicable a road sweeper will be called at regular intervals to keep the site free from dust, this will be at the Site Manager's discretion

During site activities, a Hoover or dampening down technique will be used where applicable

Noise

All plant that operates on the site will be fitted with noise suppression equipment such that noise levels do not develop over 125db 1 m beyond the perimeter of the works.

The type of plant, equipment and construction techniques are to be selected to reduce noise production.

If any operation is likely to generate noise levels above the accepted thresholds at the site perimeter and it is not possible to reduce the level, then the client and local residents will be consulted to ensure that the works are programmed to minimise disruption.

As part of the planning process for the works and to ensure that noise is kept to a minimum, the following points will be utilised to reduce the effects of noise on site:

- Ensure all mechanical equipment has silencers fitted at all times (where applicable)
- Ensure sound insulation is maintained where provided to equipment
- Locate noisy equipment behind baffles and/or away from work areas
- Liaise with the client when noisy activities are to take place
- Reduce noise levels at the source wherever possible
- Form enclosures for noisy equipment
- Regular inspection and maintenance of the plant
- Use of alternative methods where appropriate and practicable
- Provision of ear protection to operators and designate ear protection

vibration monitoring and mitigation work during piling operations

The piling work is now compacted to a few days of work now we are using concrete piles.

They will be delivered and stored within the site compound.

The machine will be fully serviced as per the manufactures recommendations and turned off when not in use

Where possible the machine will be positioned away from the current office

The work will only be undertaken during the set hours of 7:30-4:30 with no exceptions.

This will be monitored during the work and noise-softening screens will be introduced if needed,

In terms of vibration, we do not expect to exceed 15mm/s for driven piles and due to the industrial setting we feel that this will not cause an issue

Construction drainage design plan

The building will be used for offices, welfare facilities and other port-related activities. The construction of the new building will require the addition of new permanent surface water drainage and foul water drainage.

Surface Water

The existing site is an area of impermeable hardstanding currently used as a car park and storage area and is a combination of concrete slab and tarmac surfacing. The surface water currently drains via floor gullies into an existing below-ground drainage network. This network is understood to pass through a petrol interceptor before discharging through the river wall via a 600mm diameter outlet with a flap valve directly into the river Thames. The location of the outlet is adjacent to the new jetty to the North of the site.

As the construction of the new building will not increase the area of hardstanding, it is proposed for the new surface water drainage to run via gravity-fed pipework which connects to the existing below-ground drainage network. As the new building will have a brown roof at the roof level and planters on the first-floor external terrace, the flow rates into the existing system will not increase from current values, if anything the discharge volume may decrease slightly compared to the current site layout.

Foul Water

There is understood to be a 150mm diameter Southern Water foul water main beginning 200 meters south west of the site, and archive information indicate an existing foul sewer originating to the West of the site. It is presumed that the existing office block is connected into this system.

The new foul water drainage serving the new building is proposed to discharge into the same existing foul drainage system to the Northwest of the site. As the new office block will be replacing an existing two-storey office facility located to the South of the jetty approach ramp, there is expected to be no material change in the volume of foul drainage into the foul mains, and therefore no increase in the required capacity of the foul mains.

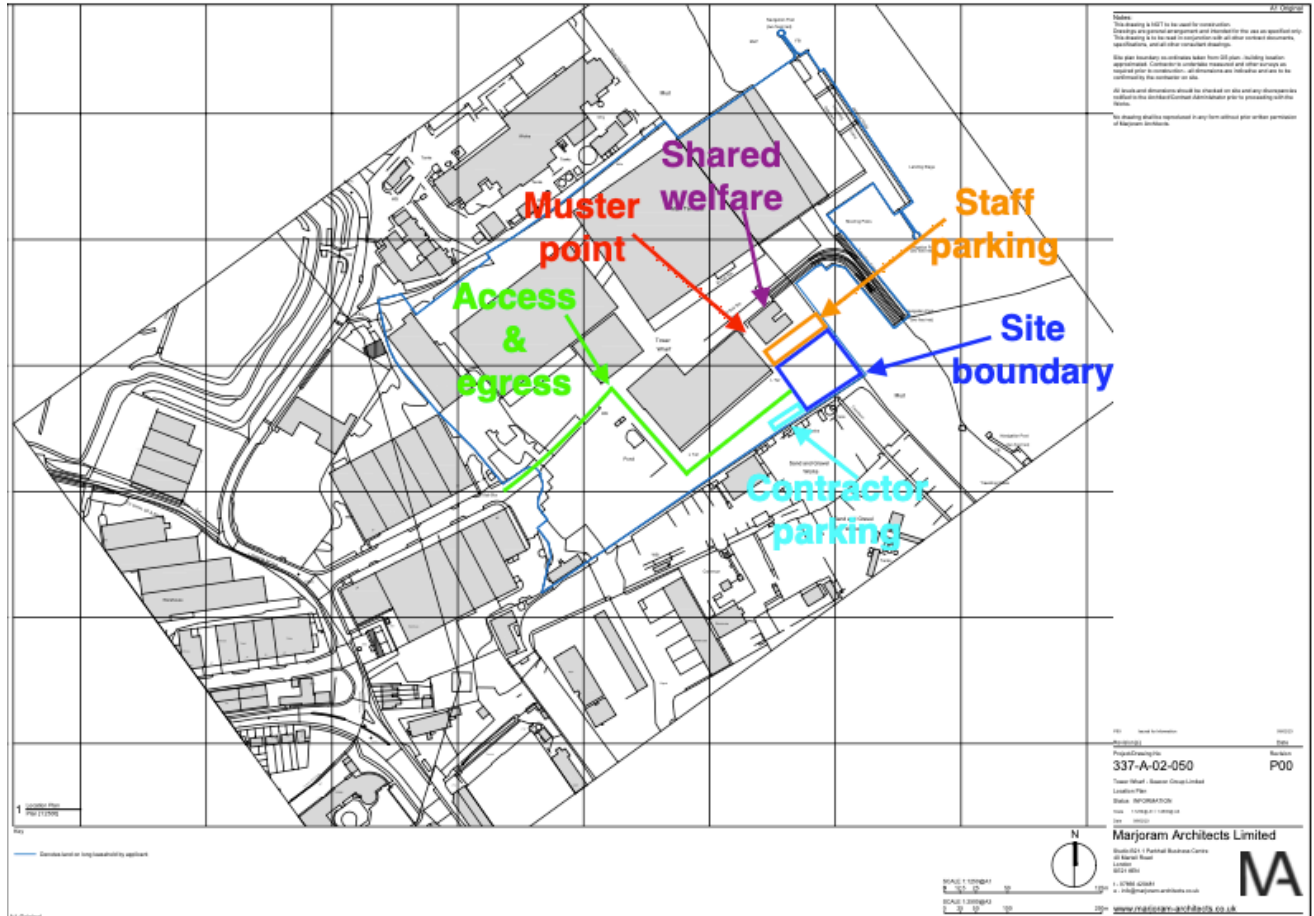
Construction traffic plan

Vehicle movement on and around the site will be managed in such a manner that it does not affect local traffic and adjacent properties.

The following measures have been put in place to achieve this.

- The site compound areas are fortunate to be large enough to incorporate ample site parking so local roads will not be affected in any way.
- A site compound will be established, and all site staff will be required to park and operate within this area.
- The site plan will be issued alongside all orders to ensure they know the site prior to attending.
- what three words will be utilized to ensure delivery and site staff are directed to the correct location.
- Ash directional arrows will be installed to assist in directing traffic to the site.
- The site is fortunate enough to have its own security guard who can also assist with directions if required.
- There shall be no off-loading or loading on the public highway.
- Wherever practicable vehicle sharing shall be introduced to reduce the number of vehicles travelling to and from the site.
- The site is fortunate to be within walking distance of the local train and bus networks which we will encourage our staff to utilize.
- Where multiple loads are necessary (e.g. muck away and concrete etc.) we shall organise the timing of delivery to avoid stacking vehicles on public roads.
- The Site Manager will be organising all deliveries in a timely manner to avoid bottlenecks.
- All large subcontractor deliveries will be scheduled through the Site Manager.

- During the construction phase, the Ash team will monitor the traffic flow/movements at regular intervals and implement new procedures if applicable.



Wheel wash

- Roads will not be affected by mud or spoiling from vehicles delivering to the site. All vehicles (muck away) shall be covered and loaded from hard standings to prevent spoiled on tyres from being transferred to roads or falling from the vehicles onto roads.
- If the above method of keeping the wheels clean fails, there shall be a stand-by portable wheel-wash system (water jet spray, pump and browser) to clean wheels, water discharging into existing drainage and larger deposits cleared away with shovels and containers.
- If applicable a road sweeper will be introduced at regular intervals to maintain the roads.

2ND PHASE

Once the main building is complete there will be a period where the current offices are moved into the new to make way for the building to be demolished

During this phase of work, a new site layout will be established with the client and we will use this for the duration of the works

Material movement

During the pre-construction and construction phase, we plan to mitigate material movement by

- Materials from demolition works shall be reused or recycled where possible.
- We shall have several skip containers on site to segregate different waste streams to enable recycling. Local companies will be used to provide these skips
- A general waste skip container shall be used with 'picking' carried out at the waste transfer station to enable recycling where possible (records to be maintained).
- Careful ordering of materials will help to avoid cutting and generation of additional waste on site.
- Waste transfer notes are to be maintained at the site level and forwarded for file collation upon completion.
- Just on-time deliveries will be utilized to ensure the material does not require additional movement around the site.
- A set-down area will be established for any deliveries that cannot be delivered on the just in time basis.
- The material will be staked in a way that they do not obstruct any vehicle or pedestrian movement, if applicable it will be enclosed in chapter 8 fencing and only moved when required.

- All large deliveries will be scheduled with our site manager a week in advance of arriving on site, This gives the site team time to prepare the site to accommodate for these deliveries preventing any adverse effect on the surrounding areas.
- Where the material is to be stockpiled, it is to be stored in a manner that does not affect vehicle or pedestrian movement, they are to be stored in separate piles if applicable.

Sustainable material

Together with the design Team, our in-house buying department will elevate the materials specified and sourced locally where possible, we will evaluate the quantities required and order on this basis to prevent over-ordering and increasing waste

The mantra is local, sustainable and eco-friendly products where possible.

We are exploring avenues whereby we use the river to transport large or large quantities of materials

Our supply train is encouraged to follow the same ethos and to reduce waste where possible

We use re-use our site equipment where possible items such as transformers, desk, fridges etc to prevent waste. These will be taken or brought to another site where applicable

Ecology and biodiversity

Seacon development is set within a busy industrial environment on the river Medway.

Our Plan aims to deliver cleaner air and water to the local area and protect threatened species and provide richer wildlife habitats throughout the delivery of the project.

During Construction:

- All waste onsite will be maintained, separated and recycled ensuring that the river is not polluted or affected by the construction

- Areas of enhancement (flower beds / Bat box) will be placed on the site where possible
- Rainwater harvesting where possible
- All fuel will be stored on a bunded tank, and all fuel refuelling shall be carried out in a designated area, with an appropriate spill kit available if needed

Through Design:

- Integrated as part of the design the building will be delivered with a green roof, which will improve biodiversity in and around development. Leaving the area with a better biodiversity score than the previous building.

We will try our hardest to provide an 'ecosystem service' that will benefit, sustain and support the well-being of people, protect and enhance biodiversity and provide a positive impact on the local ecology.

Construction lighting (L)

The construction work is due to start at the end of March which coincides with the clocks going forward meaning the work will predominantly be carried out during the daylight hours.

If construction lighting is required at any phase of the project this will be introduced by the Site Manager. This will be in the form of LED lighting connected to mains power to prevent the use of generators or stand-alone tower lighting.

When the building envelopes progress, the internal light levels will be assessed at regular intervals by the Site Manager and internal lighting will be introduced where applicable

Lighting will be positioned in such a manner that the light emitted does not affect the surrounding properties or office staff

Monitoring and review

The above document is a live document that will be reviewed at regular intervals during the construction phase, to evaluate if the processes have mitigated the planning issues mitigated.

A suggestions box will be installed at the site boundary to encourage feedback and to welcome any suggestions on how we can improve the measures put in place

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