

**Construction Environment Management Plan**

1<sup>st</sup> September 2021

HV Diversion; REV00



**Sunderland Riverside**

**Construction Management Plan**

## **Purpose**

This Construction Management Plan (CMP) describes the methodology and controls required for the diversion of the High Voltage (HV) electrical distribution infrastructure ahead of the enabling works contract for the Legal and General (L&G) Development plot, part of the wider Sunderland Riverside Site.

## **Scope**

The HV Diversion will be carried out over two phases.

Phase 1 removes the cable from the area directly behind the proposed cliff edge retaining wall. This allows the retaining wall to be constructed in a safe and efficient manner, releasing the footprint space for the two office buildings and public realm to the south.

Phase 2 then places the cable directly behind the retaining wall, placing it outside of the footprint of the buildings with suitable construction clearance.

## **Programme**

Excavation for the HV Diversion will commence on 6<sup>th</sup> September 2021 for two weeks. Northern Power Grid (NPG) will carry out regular visits during the excavation sequence to ensure geometric compliance.

NPG have booked in network outages as follows:

- Cable installation – 22nd – 24th September
- Intermediate cable Jointing – 25th September
- HV Outages for Diversions – 27th – 30th September

NPG will protect the cables prior to releasing for backfill by Sir Robert McAlpine Ltd (SRM) after jointing is complete.

## **Hours of work**

Working times at outset and throughout the project will be:

- Monday to Thursday 0800 to 1800
- Friday 0800 to 1800

## **Site Boundary**

The site boundary and localised perimeter will be established using a proprietary ballasted fencing system with open mesh fence panels.

The boundary presents a barrier between the construction site and public realm.

The barrier will be 2.1m above pavement level and offers a secure perimeter and deterrent.

Access to the development plot will be via the access gate of Cumberland Street.

### **Site accommodation**

Mobile welfare and office space will be used during the HV Diversion activities.

This will be supplemented by use of the City Hall development site facilities under agreement of B&K.

### **Sensitive receptors**

Consideration of the impact upon the immediate and wider environment follows. Construction control measures are described below and in more detail by the work package method statements. Sensitive receptors at risk of impact from the HV Diversion work are defined as follows:

- Ecology; Flora and fauna
- Neighbouring businesses
- Adjacent development (City Hall B&K)
- Highway network

### **Construction vehicles**

Construction traffic will range in size from small vans to delivery wagons and articulated lorries.

Non-road going plant will be transported to site using articulated lorries with appropriate vehicle movement order if required.

The additional volume of traffic generated by the HV Diversion work package will be very low. Traffic will be limited to the delivery and collection of non-road going plant with daily conveyance in small vans for the operatives and private cars for other staff members.

The overall traffic impact is very low for this work package.

Site plant required for the work activity will be a small excavator and a dumper where required. Operating procedures allow for the efficient use of plant and equipment, minimising engine running where possible. Use of plant and equipment will be limited to the normal operational hours defined above.

### **Excavation**

HV Diversion work involves excavation cutting across the development plot east/west.

Excavation is confined to the upper made ground strata with site won spoil stored adjacent to the trench for use as back fill. No export of material is expected.

The route of the HV Diversion is not vegetated and is within either the development plot currently occupied by B&K, or the hard landscaped public realm to the west.

A water source is available for damping down should conditions result in significant generation of airborne dust.

Wheel washing will be used at the site entrance should the weather generate muddy conditions. Road sweeping will also be used if necessary to maintain the cleanliness of the highway.

### **Noise and vibration**

Plant requirements for the HV Diversion work are not expected to create a significant impact in terms of noise and vibration beyond the immediate vicinity of the work activity. The HV Diversion within the L&G Development terminates at the site boundary on the east edge of the Keel Line. However, the trench extends towards and around the adjacent property (The Beam) under a separate scheme.

### **Flora and Fauna**

Recently planted trees in proximity can be uplifted for relocation subject to confirmation by Sunderland City Council. However, the trees are not mature or protected. The finalised development will include significant compensatory planting should the existing trees be removed.

The HV Diversion is not expected to impact wildlife in any significant way however the managing staff and tradesmen will be advised to maintain a watching brief on the work activity and react accordingly should any impact arise.

### **Management of Waste**

The HV Diversion work package is not expected to generate any waste for offsite disposal.

### **Surface water runoff**

The HV Diversion work package is not expected to create an increase in surface runoff from the site when considering the current condition of the plot and the projected condition upon commencement of the project. Therefore, no additional adverse effect will be transferred to the Roker Main rock strata and cliff.

The topography is such that the site slopes gently towards the edge of the Roker Formation with steep batters within 10m of the edge. A construction berm is present at the head of the cliff.

Existing runoff is naturally attenuated by the scrub ground conditions offering some protection to the cliff edge.

The HV Diversion work activity is not expected to increase the surface flow rate over existing site conditions.

### **Contaminated soils**

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The logo for Sir Robert McAlpine, featuring the company name in white text on a red rectangular background.

Site Investigation has identified a range of contaminants present. Environmental monitoring will be carried out during excavation and back fill to alert any contamination mobilised.

Control measures defined by the safety documentation for work activities is aligned with the remediation strategy

Environmental monitoring carried out during recent excavation activities returned zero mobilisation of hazardous contaminants.

An emergency plan will be prepared detailing the actions to be taken should hazardous substances or objects be encountered.

Russell Toogood  
**SRM**