



## Demolition Phase Plan and Risk Assessments



Hoover Factory, Pentrebach, Merthyr Tydfil CF48 4TU

Contract Number – 726

|                            |          |                          |                        |                          |                        |                        |  |                                     |  |
|----------------------------|----------|--------------------------|------------------------|--------------------------|------------------------|------------------------|--|-------------------------------------|--|
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|----------------------------|----------|--------------------------|------------------------|--------------------------|------------------------|------------------------|--|-------------------------------------|--|

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## 1) PREAMBLE

**1.1)** This document details the removal by crane of the existing footbridge, the demolition of 1 No. support structure and 2No. access towers

### **1.2) Scope of works:**

- Site set up including the provision of site welfare facilities in line with the requirements of CDM 2015 outlined below
- The erection of heras fencing exclusion zones to segregate the demolition works and provide a secure perimeter.
- The hand splitting of each bridge section
- The slinging and removal of each section under two separate track possessions from Network Rail
- The demolition of 1 No support structure and removal to 300 below ground level
- The demolition by hand and remote technique of the Candy access structure and the machine demolition of the opposite access structure

### **1.3) Works duration and site working hours**

|                                     |                                                                                      |
|-------------------------------------|--------------------------------------------------------------------------------------|
| <b>Duration of demolition phase</b> | <b>Est. 2 weeks</b>                                                                  |
| <b>Commencement Date</b>            | <b>TBC</b>                                                                           |
| <b>Site Working Hours</b>           | <b>7:30-17:00 Monday-Friday, 08:00-13:00 Sat if required<br/>Possession work TBC</b> |

## 2) Site management

|                                   |                          |              |
|-----------------------------------|--------------------------|--------------|
| <b>2.1) Managing Director</b>     | Robert Bailey            | 07973 890835 |
| <b>Operations Director</b>        | Peter Smith              | 07956 571964 |
| <b>Contracts Manager</b>          | Alex Murphy              | 07539 339565 |
| <b>Demolition Supervisor</b>      | Lea Jones                | 07399 662594 |
| <b>2.2) Demolition Operatives</b> | 4 demolition operatives  |              |
| <b>2.2.A) Plant Operatives</b>    | Rhys Meredith            |              |
| <b>2.3) First Aider's</b>         | Lea Jones, Rhys Meredith |              |

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**2.4) Location of first aid point**

The first aid post will be highlighted to all operatives during the site induction conducted by Bond Demolition and prominently highlighted on site

**All site first aiders will be trained in First Aid at Work and identified during the full site induction carried out by Bond Demolition Limited**

**2.5) Our health and safety consultants are:**

South Wales Safety Consultancy Limited

(Phil Thomas CMIOSH MIIRSM)

Tel: 02920 628763

Tel: 07770 833900

South Wales Safety have been invested executive control of our sites and have been instructed to stop works immediately should an un-safe occurrence be observed.

As part of their duties SWSC will undertake random – unannounced site audits covering the key topics of health and safety on site, these reports will be issued on site as well as being sent to head office for review at management and senior company level.

SWSC audits will be actioned in the allotted time scale, actions will then be covered by a further site audit undertaken by a senior manager.

**2.6) Emergency escape/procedures**

To aid emergency escape, escape routes will be kept clear of all obstacles allowing quick exit from the structure.

Fire escape routes will be clearly shown on fire escape plan displayed in the site welfare facilities and highlighted to all during site inductions along with the location of the emergency horn that must be pressed in the event of an emergency, on hearing the horn operatives will gather at the muster point located at the entrance gates of the site, a roll call will then be undertaken from the signing in book.

## 2.7) Offices /welfare

A welfare facility will be provided by Bond Demolition Limited on the western side of the river as follows:

- Welfare facilities will be provided from day one of the work, consisting of toilet, washing (with hot running water) and drying facilities and space for taking meals and the provision of a means to heat food and water. All facilities will comply with the requirements of CDM 2015.
- Operatives will be instructed to use the facilities in an appropriate manner and to assist in keeping them clean and tidy, a weekly cleaning roster will be drawn up on site to encourage operatives to maintain a high standard of cleanliness of the site facilities.

Welfare facilities provided on site will typically be in the format of a self-contained towable unit like the one pictured below:

Welfare facilities will also be made available within the Candy factory building.



**2.8) Considerate Constructors registration – Bond Demolition Limited is proud to be registered with the code of practice, promoting the following:**



## **Considerate Constructors Scheme**

A not-for-profit, independent organisation founded in 1997 by the construction industry to improve its image

### **Code of Considerate Practice**

- Considerate constructors seek to improve the image of the construction industry by striving to promote and achieve best practice under the Code.
- The Code of Considerate Practice outlines the Scheme's expectations and describes those areas that are considered fundamental for registration with the Scheme.
- The Code is in five parts and contains a series of bullet points. Each section of the Code contains an aspirational supporting statement and four bullet points which represent the basic expectations of registration with the Scheme.
- The Code of Considerate Practice applies to all registered sites, companies and suppliers regardless of size, type or location.

### **Care about site Appearance**

#### **Constructors should ensure sites appear professional and well managed**

- Ensuring that the external appearance of sites enhances the image of the industry.
- Being organised, clean and tidy.
- Enhancing the appearance of facilities, stored materials, vehicles and plant.

Raising the image of the workforce by their appearance Respect the **Community**

#### **Constructors should give utmost consideration to their impact on neighbours and the public**

- Informing, respecting and showing courtesy to those affected by the work.
- Minimising the impact of deliveries, parking and work on the public highway.
- Contributing to and supporting the local community and economy.
- Working to create a positive and enduring impression and promoting the Code.

### **Protect the Environment**

#### **Constructors should protect and enhance the environment**

- Identifying, managing and promoting environmental issues.
- Seeking sustainable solutions, and minimising waste, the carbon footprint and resources.
- Minimising the impact of vibration, and air, light and noise pollution.
- Protecting the ecology, the landscape, wildlife, vegetation and water courses.

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**Secure everyone's Safety****Constructors should attain the highest levels of safety performance**

- Having systems that care for the safety of the public, visitors and the workforce.
- Minimising security risks to neighbours.
- Having initiatives for continuous safety improvement.
- Embedding attitudes and behaviours that enhance safety performance.

**3) Project Detail:**

- All works will be carried out in line with BS 6187:2011 Code of Practice (CoP) for Full or Partial Demolition, the relevant sections of the CoP have been considered.
- The Construction Design and Management regulations (CDM 2015)
- The Health and Safety at Work etc Act 1974
- L143 - The Control of Asbestos regulations 2012
- HSG247 - The licenced contractors guide
- Specialist lifting plan issued by crane contractor under contract lift
- Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)
- Provision and Use of Work Equipment Regulations 1998 (PUWER)

**3.1) Plant**

1x Komatsu 240 demolition specification excavator  
Dust suppression in form of a fire hose/mist spray  
Lorries/Skips  
Sorting grab, Hydraulic shears, Hydraulic hammer  
Hand Tools  
Heras type anti-climb fencing (Double clipped and footed)  
Flame cutting equipment  
Circa 800 Ton mobile crane / 100t secondary crane provided by Baldwin cranes under a full contract lift.

**3.2) PPE - The PPE listed below will be worn by all persons:**

- White hard hat (BS EN397:2012) Company logo should not exceed 10% of the visible surface area.
- Hi-Viz jacket/vest in a clean, good condition displaying the company logo.
- Approved safety footwear (BS EN ISO 20345:2011) With ankle support, mid-sole protection, toe protection
- Personal Eye protection, compliant to BS EN 166:2002. The requirement for adequate eye protection is applicable to prescription safety glasses, which must also comply to BS EN 166, with adequate side protection. Standard spectacles ARE NOT acceptable, unless worn with a pair of suitable safety over-glasses to BS EN 166.

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Protective gloves, compliant to Cut 5 standard as per Standard EN 388 or Cut Level as per updated Standard BS EN 388:2016 **when handling glass/sharp objects or** (Reflex T or similar to EN 388), at all other times.

### 3.3) Services

All services will be cut off or contained prior to works commencing, certificates of disconnection will be issued to Bond Demolition Limited and held on site for inspection.

Any services that must remain live during works will be prominently marked on site and identified to operatives during a toolbox talk.

All services will be identified on a site plan located within the welfare facilities, this will include drainage runs, gas, water and electrical service details, throughout the works a 'treat as live' policy will be in force where unidentified services must be treated as live until proven otherwise.

|                                                                                   |                                                                                                           |       |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-------|
|  | Have you checked to make sure all services have been cut off and contained – or marked if to remain live? | Sign: |
|                                                                                   | To be signed by supervisor                                                                                | Date: |

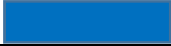
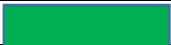
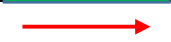
### 3.4) Site Security and Fencing

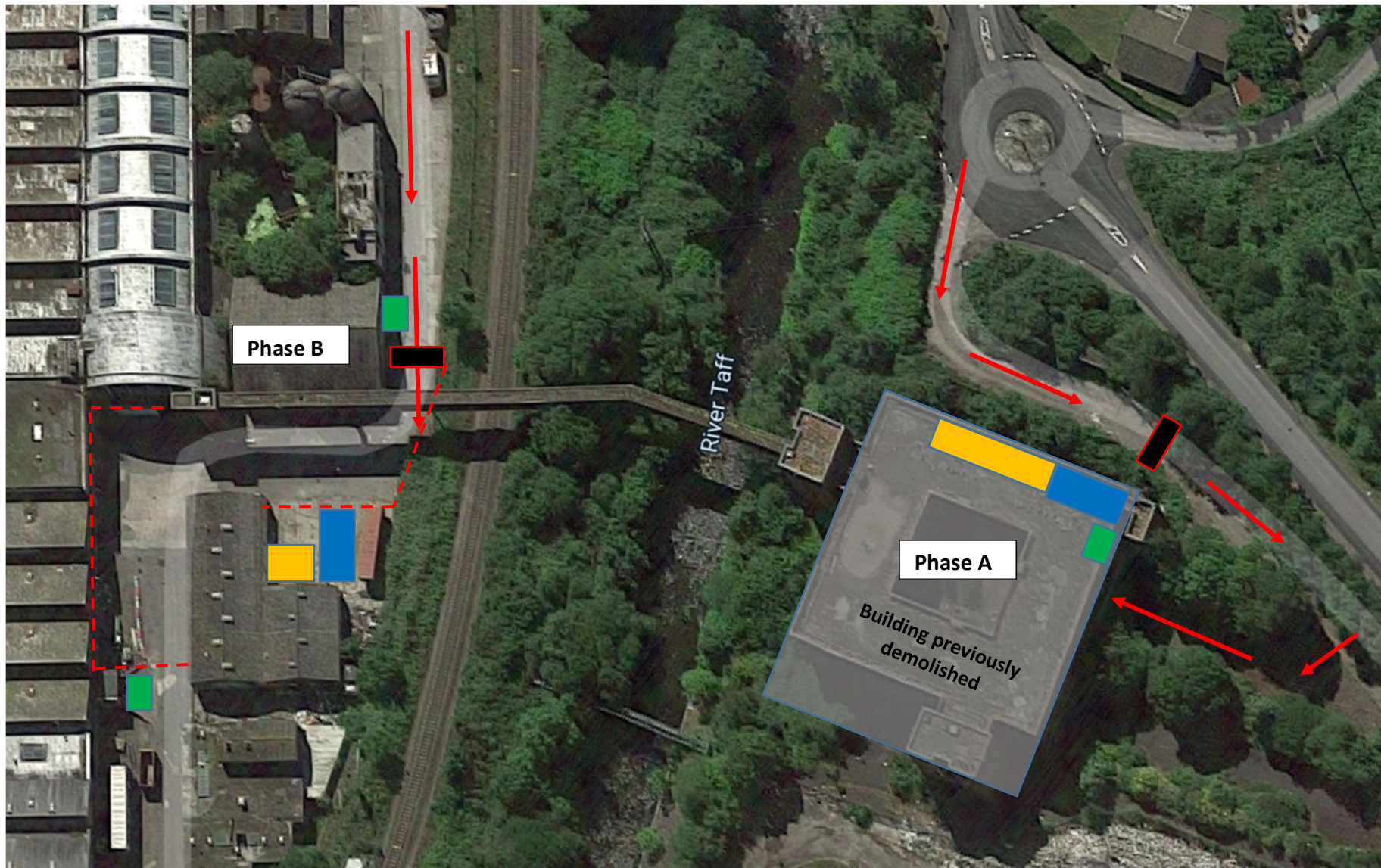
Heras type anti climb fencing will be installed by Bond Demolition Limited to provide a demolition exclusion zone - the loading compound and skip location will be secured using Heras type anti climb fencing double clipped and footed.

#### 3.4.1) Safety Signage

The Demolition site will be fenced off/enclosed by Bond Demolition Ltd and signed "Demolition Keep Out" with emergency telephone number including mandatory warning signs

#### 3.4.2) Site layout

|                                                                                     |                          |                                                                                      |              |
|-------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------|--------------|
|  | Site welfare             |  | Site Parking |
|  | Site Entrance            |  | Muster Point |
|  | Heras Fencing line (Est) |  | Site access  |



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#### **4) Site constraints and monitoring**

##### **4.1) Asbestos**

An asbestos survey ref. No. NES/JC02/0168 has been carried out on the 11<sup>th</sup> of December 2018 for the structure and has identified asbestos containing materials which have been removed by others however, the Site Supervisor will be vigilant during the demolition phase for the identification of possible unidentified ACM's in the matrix of the building.

Any suspected ACM's are to be sampled and tested by an accredited analyst with results notified to the Principal Contractor and site agent. No (actual) demolition work will commence (re-commence) until all asbestos has been removed from the structures.

##### **4.1.2) Hidden Asbestos**

All operatives will be trained in asbestos awareness and will receive a pre-start toolbox talk on the identification of asbestos and what to do if unknown asbestos is disturbed.

In the event of asbestos being uncovered operatives will isolate the works area and contact the demolition supervisor immediately, the Principal Contractor will also be contacted.

#### 4.1.3) Means of Access

All plant and transport will gain Access to Phase A via the former factory gates pictured below:



Phase B will be accessed via the live Candy factory accessed via Merthyr Road and through the factory site gates.



We will use outside of peak times for skip lorry deliveries, all loading and unloading will take place within the site boundary.

No vehicles will be allowed to reverse into or out of the site at any time.

All loading and un-loading will be undertaken within the site boundary.

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#### 4.1.4) Parking of Vehicles

Parking of vehicles will be within the site compound – no vehicles to be parked outside of site entrance or permitted to block any public entrances of element of the public highway.

The activities of the live factory must not be impeded at any point.

**All vehicles must reverse park in designated parking area**

#### 4.1.5) Storage of Plant/Materials

The bridge sections will be lifted clear of the support structure and lowered into a designated lay down area identified on the crane plan issued. Once at ground level the bridge sections will be processed by excavator and loaded into waste skips for removal.

Skips will be located adjacent to the structure being demolished allowing safe loading of the waste materials, waste will be segregated into asbestos, general waste items, scrap and hardcore.

All attachments and plant will be stored within a designated Heras fenced zone when not in use.

#### 4.1.5A) Removal of materials from site

Waste will be processed according to its classification as scrap metal, hardcore and general waste materials will be loaded into large skips for removal from site to a licenced waste facility

All loads will be accompanied by a waste consignment/duty of care note that will be retained and issued to the client at the end of each week. – KPI's will be issued weekly showing the percentage of each skip that has gone for recycling or landfill with the aim of over 95% recycling of waste materials.

#### 4.1.6) Ecology

Due to the close proximity of the bridge to be demolished to the River Taff ecological restrictions/conditions will be in place, these will be conveyed to the workforce via toolbox talk and where necessary an amendment to this document.

**4.1.7) Dust Control**

To reduce the risk of airborne dust during demolition works a water spray will be directed at the works area.

All loads will be sheeted leaving site to minimise the spread of demolition material from haulage.

**4.1.8) Surface water runoff** in order to reduce excessive water run-off hose pipes will, where possible be replaced with water mist cannons supplying a water mist spray rather than a constant flow of water.

Water courses will be identified during the site walkaround and protected where possible using debris netting/bunded material.

**4.1.7) Interface with others**

Loading and unloading material will take place inside the fenced site compound established by Bond Demolition Ltd, the site is accessed via a busy main road and the live Candy factory on one side and a main road servicing houses on the other.

The site staff must therefore be mindful that the access road is a busy route, this must be considered when deliveries are planned, and vehicles enter/exit the site

Adequate warning signs, traffic management systems and temporary barriers, etc. will be in place to minimise disruption.

The bridge also crosses over the live Merthyr railway line which will be under a track possession during works and protected when there is a need to cross to demolish the central piers.

Works will be undertaken alongside Network rail to ensure that track safety is maintained at all times.

**Health and Safety Risks include.****1. Air monitoring, quality and noise:****Noise and Vibration**

Noise levels will be controlled with regard to active, relevant legislation including the control of pollution Act 1974 and the Environmental Protection Act 1990, to the Environmental Health Officer's (EHO's) satisfaction.

Every attempt practicable will be made during the course of this contract to reduce the impact that our demolition noise and vibration has on the surrounding environment and operatives. The measures that will be taken will be within the guidance of the BSI Code Of Practice for Noise and Vibration Control on Construction and open Sites (BS 5228:2009) and will include the following.

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| Receptors                                                                                                               | Risks                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Immediate users of the Hoover factory site<br>Pedestrians accessing surrounding areas<br>Operatives<br>Visitors to site | Complaints from neighbours<br>Noise induced hearing loss<br>Vibration white finger<br>HAV – Hand Arm Vibration |

- Noise will be controlled by using modern machinery, maintained in good condition and where practicable fitted with sound deadening devices.
- Where possible the use of hydraulic breakers will be minimised to avoid disturbance to other use, hand tools will be used where possible.
- Should any work be necessary which may involve exposure by operatives to levels of vibration above the daily exposure limit or action values (ELV or EAV), a separate and specific assessment will be carried out, records will be kept by the site supervisor and maintained on site throughout the works.
- Our Site Manager will monitor all work involving exposure to vibration.

**Exposure is most likely to occur when using the following items:**

- Hydraulic Breaker – noise produced normally in excess of 107db.
- Abrasive Wheel – noise produced normally in the region of 107dB.
- Hand-held breakers – noise produced normally in excess of 100db

Throughout the contract the site manager will monitor noise generating activities to ensure that noise levels are kept within the control limits, the success of this will be assessed on whether complaints regarding noise from workers / neighbours are received, all monitoring activities will be recorded within the site diary and shall be made available for inspection on request. Should activities be undertaken that risk noise being generated in excess of 85db, breaching the following two types of hearing protection will be used when noise levels are produced:

- (i) Moulded Ear Plug  
Expanding Foam insert - SNR Value 35
- (ii) Invincible “J Muff” Blue  
“Ear” Defenders with head band, which can be adjusted to be worn whilst the user is wearing head protection (Safety Helmet) - SNR Value 24

| A-weighted noise level (dB) | Select a protector with an SNR of |
|-----------------------------|-----------------------------------|
| 85-90                       | 20 or less                        |
| 90-95                       | 20-30                             |
| 95-100                      | 25-35                             |
| 100-105                     | 30 or more                        |

When breakers are being used, the site will be designated as a “Hearing Protection Zone” and appropriate signage and controls will be implemented.

We will minimise noisy work activities wherever possible and use the latest anti – vibration equipment.

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- i. **Environmental noise monitoring:**
- ii. Background noise monitoring will be undertaken prior to the commencement of the demolition works. This will allow for comparisons to be made between the noise generated by the demolition activity in comparison to the existing noise levels.
- iii. The predicted noise levels are considered to be significant when they are:
  - (1) 5dB above the background receptor; and
  - (2) 65dB (daytime threshold)
- iv. Where the works are considered to have a significant effect, mitigation will be required.
- v. Monitoring will be undertaken at the boundary of the site throughout the works.
- vi. In the event of noise exceedances at the site boundary, or in the event of noise complaints, additional monitoring close to receptors may be undertaken. If exceedances are determined at the receptor location that can be attributed to the demolition works, alternative methodologies will be reviewed for the element of work.

#### **Mitigation measures**

Best practicable means will be employed to ensure that the level of noise generated on site is as low as reasonably practicable. In order to mitigate noise during the demolition works the following steps will be followed:

#### **Breaking of material:**

- Mechanical breaking will not commence on site until 09:00

#### **Standing generators:**

- Silenced generators will be used surrounded by proprietary noise barriers

#### **Stationary vehicles/plant:**

- Vehicles/plant will be switched off when not in use

**Air Quality**

Dust Emissions and resulting pollution

| Receptors                                     | Risks                                                                                |
|-----------------------------------------------|--------------------------------------------------------------------------------------|
| Operatives<br>Users of the live Candy factory | Inhalation<br>Silicosis<br>Lung Cancer<br>Asthma<br>Irritation to eyes<br>Dermatitis |

Due to the close proximity of the phase B work to the live factory and the adjacent river, great care will be taken in regard to the control of Dust. During our works we will ensure that the following measures will be enforced in line with our demolition method statement.

**Monitoring programme**

On-going monitoring will be undertaken by the demolition supervisor on a regular basis for visible signs of dust emissions and deposition originating from the site to ensure the adequacy of the mitigation measures being employed.

On site daily monitoring of dust emissions will be undertaken for each demolition activity which is deemed to pose a risk, with records maintained.

**The monitoring programme will record:**

- Date
- Activity/Location
- Weather Conditions
- Wind Direction and Speed

Dust suppression method(s) implemented excessively windy conditions can increase the propagation of dust.

Demolition supervisors will assess if the weather conditions are appropriate for the types of activities being undertaken.

Any complaints in relation to fugitive dust will be logged and appropriate action taken by site management in accordance with our company complaints procedure to ensure any further potential for complaint is minimised. Logs of any complaints will be made available to the Principal Contractor.

**Mitigation Measures**

- Wetting methods will be used whilst mechanical demolition is being carried out to prevent as far as practicable dust particles becoming suspended, methods include the use of a fan driven water mist cannon or jet wash bowser, water for these methods will be obtained by a near-by metred stand pipe obtained from Welsh Water.
- Disposable type 3 masks are to be worn by operatives engaged in dusty activities
- The site manager will ensure all vehicles leaving the site are sheeted to prevent material spread as far as practicable
- A toolbox talk will be carried out to ensure that all operatives are provided with information on the dangers associated with dust
- Material stockpiles will be reduced as far as practicable, where possible, waste will be loaded out as it arises.

**General measures**

- Significant demolition activities likely to generate dust such as concrete slab removal
- During dry periods
- Where dust emissions have been observed by the site management team or site operatives
- Where dust emissions or particulates are observed leaving the site boundary during routine site inspections.
- Following any dust complaints received at the site.
- Where significant dust is observed on the site surfaces and external roads during routine site inspections.

**Effectiveness of Dust Management Measures**

The effectiveness of the dust management measures will be reviewed with the project team at internal site weekly meetings.

## **Demolition methodology**

### **5) Separation of the bridge sections**

#### **Soft strip will proceed as follows:**

##### **Lighting/fluorescent tubes:**

Are to be removed with operatives working off regulative podiums, wearing gauntlets and full-face visor operatives will remove in reverse to assembly and are to be removed from the building and placed within designated receptacle prior to removal off site to an authorised AATF in accordance with the WEEE Regulations.

**Electrical equipment:** To be collected from all areas and removed off site for disposal at a licensed AATF in accordance with the WEEE Regulations

##### **M&E: including duct work, pipe work and cabling**

M&E will be removed according to its size and weight, Pipe work will be removed as follows:

Pipe work will be removed in no longer than 2 metre sections, pipe work must be cut between brackets ensuring that the element being cut is supported from the hanging brackets, when operatives are ready to remove the section it must be adequately supported, and the brackets cut in sequence.

Under no circumstances are operatives to exceed the two-meter specified length, larger sections of pipe must be cut smaller according to their weight.

**Working at height** – during the soft strip works it will be necessary to work at height, all working at height internally will be carried out from aluminium scaffolding towers erected by PASMA trained operatives.

**Slab separation** – along the length of the structure cut lines have been started between each section of the bridge in both the side wall sheeting, roof and concrete deck, to allow the crane to successfully remove each section operatives will follow the below process to completely divorce each section.

- **Roof** – operatives working from anti-surf podiums will gain access to the roof and form a cut line using reciprocating saws with steel cutting blades, wearing cut 5 gloves operatives will pull away the strip of cut metal and bitumen lowering it to concrete slab level for removal.
- **Side walls** – working from the access podiums operatives will use reciprocating saws to continue the cut line down to slab level, all waste will be pulled inwards from onto the concrete slab and removed prior to the crane operations being undertaken.
- **Concrete slab** - using handheld breakers (hydraulic pack) to break through the screed and floor slab, any re-bar will be cut either using flame cutting equipment or by the use of an abrasive wheel, waste will be removed prior to the crane operation.

**Step ladders are banned from site**

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**Separation images:**



**Some cut lines have been formed, others have only been started**

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## 5.1) Demolition methodology

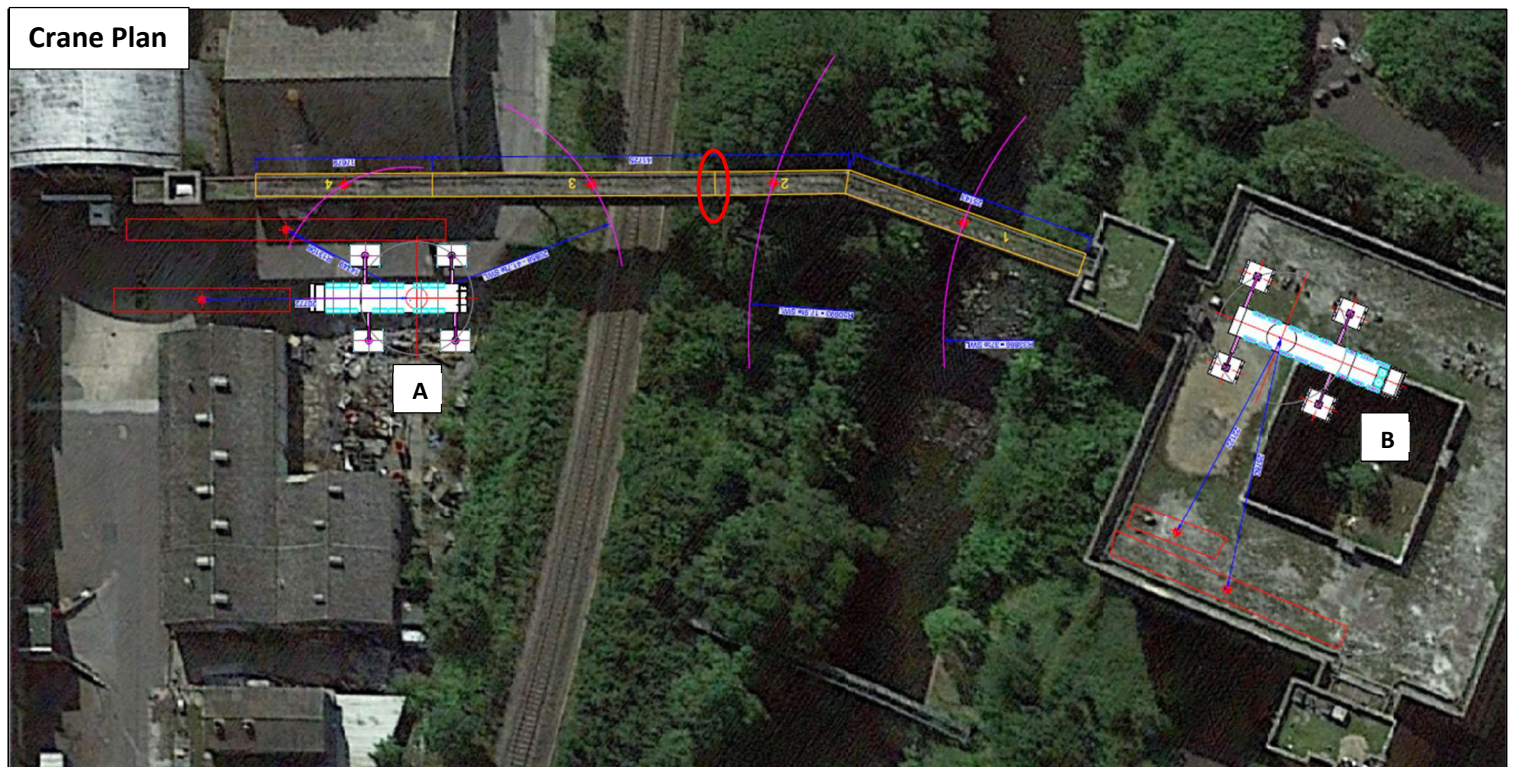
**UNDER NO CIRCUMSTANCES ARE PERSONS TO BE WITHIN OR UPON THE STRUCTURE OF A BUILDING OR WITHIN THE COLLAPSE ZONE ONCE REMOTE DEMOLITION OF IT HAS COMMENCED.**

**Demolition exclusion zones** – exclusion zones will be established using heras type anti-climb fencing which will be double clipped and footed, the working area will be controlled by a banksman in radio contact with the excavator operative, exclusion zones will be established in line with BS6187 and formed using heras type fencing installed by Bond Demolition Limited.

Throughout the demolition works the Site Supervisor will be vigilant for the identification of possible unidentified ACM's in the matrix of the building.

Any suspected ACM's are to be sampled and tested by an accredited analyst with results notified to the Principal Contractor and site agent. No (actual) demolition work will commence (re-commence) until all asbestos has been removed from the structures.

Following the separation of the bridge deck sections a crane will be mobilised to site to proceed with the removal of the bridge deck sections under a full contract lift, the cranes will set up in the below locations, lifts 3 and 4 will be undertaken from location A and lifts 1 and 2 will be undertaken from location B, as a section is lifted away from the support structure it will be lowered into the laydown area for later processing by the demolition excavator.



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**Due to the interface between sections 3 and 4 will be undertaken during a night-time track possession.**

**Bridge Section 4 – Est weight 34Ton:**

Bridge section 4 has a physical connection with the brick built access tower, prior to demolition a cut line will be formed in the roof and the side walls of the section, operatives will break the concrete at the interface between the tower and the bridge section exposing the steel floor beams but will leave them connected until the lift is to take place.

Once the crane has mobilised section 4 will be slung and the weight taken on the block.

Once the lift supervisor has confirmed that the weight has been taken operatives will gain access to the interface between the tower and the bridge section and use flame cutting equipment to sever the floor beams freeing the section for removal. Operatives will then demobilise all equipment from the tower and block the access doorway. The lift supervisor will then give the instruction to lift the bridge section which will be laid down in the designated area shown on the lift plan provided for later processing.



**Bridge section 3 Est weight 16Ton:**

Bridge section 3 sits on two concrete supports, as marked above the closest to the live factory will be retained for future use whilst the support highlighted in red on the crane plan above will be demolished.

The bridge section will be slung in line with the contract lift requirements by operatives working from a man basket suspended from a secondary crane. The section will be lifted clear of the concrete supports and lowered to the ground for later processing, it is anticipated that there is no mechanical connection between the bridge section and the concrete support, should there be, this will be assessed when clear access can be gained and a method statement issued.

Following the removal of the two sections the crane will de-mobilise allowing for bridge section to be demolished.

Working from inside the Heras fencing exclusion zone the Komatsu 24 Ton excavator will use its grab attachment to peel the steel sheeting away from the steel frame beneath, scrap material will be loaded into waste skips for removal from site, once the steel frame has been exposed the excavator will use its Quick Hitch system to switch to its cold cutting shears attachment and work from the top of the frame downwards until the concrete deck has been reached.

Switching to the concrete pulveriser attachment the excavator will work from one end of the slab working across to separate the concrete deck from the steel reinforcement, hardcore will be loaded away separately from the steel reinforcement. On completion of the demolition of one bridge deck section the second will be demolished.

**Access Tower:**

During the contract lift the steel clad section of the brick built tower will be removed, prior to lifting, the section will be prepared by forming cut lines and chain holes, once the chains have been secured to the section and the weight taken the lift supervisor will instruct the crane to take the weight on the block, once the weight has been taken the connection between the clad section and the brick tower will be cut using flame cutting equipment, operatives will move to a safe location allowing the section to be lifted away and processed by the excavator.

Scaffolding will then be erected around the tower allowing safe access for demolition and forming a shield between the tower and the warehouse structure behind.

Prior to demolition the former accessway into the Candy/Hoover factory will be permanently blocked using blockwork built inside the exiting doorway to the required specification.

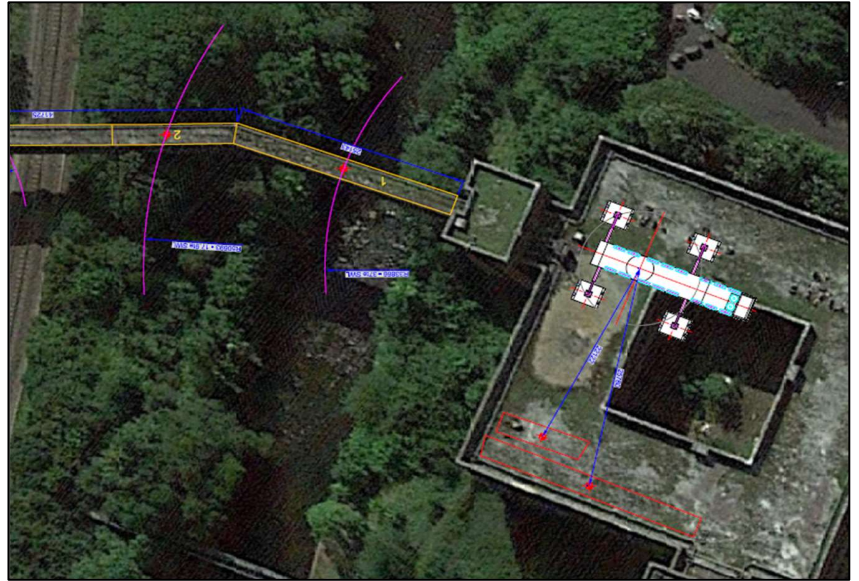
Working from the access scaffolding operatives will hand demolish the brick structure to the level of the roof using handheld breakers, materials will be allowed to fall into a designated drop zone at the base of the tower for later removal.

Once the tower is down to the roof level of the building behind, the scaffolding will be partially stripped allowing the demolition excavator to complete the demolition to ground level. As the building is being reduced in height so to will the scaffolding to minimise the amount of scaffolding free standing.

On completion of the tower removal and the demolition of the bridge deck sections we will demobilise from the Candy site and re-mobilise to the former Hoover factory site to undertake the next phase of works.

### **Phase B sections 2 Est Weight 36 Ton and 1 Est Weight 21 Ton**

Works will be undertaken from the footprint of the former office block that has since been demolished. Following mobilisation of the crane according to the lift plan section 2 will be slung by operatives working from the man basket of a secondary crane, once slung the already severed section will be lifted away from its supports and set down in the designated lay-down area.



As described with section 4, section 1 shares a physical connection with the access structure, once the weight of the section has been taken the connection will be flame cut allowing the final section to be lifted away.

During the second phase of works a demolition spec excavator will be craned across to the strip of land between the railway line and the River Taff, using its concrete pulveriser attachment the excavator will reduce the red circled T piece support to ground level, waste materials will be loaded into a waste skip that has also been craned over.

Demolition will continue until the machine has reached 300mm below ground level, the remaining below ground structure will then be covered with surrounding soil and left in place.

### **Demolition of Hoover support structure:**



Following the demolition of the bridge and the processing of the bridge sections as described above the demolition excavator will commence works on the RC framed brick clad support structure. Working from the rear of the section on the concrete slab the excavator will use its concrete pulveriser attachment to work from the top of the structure downwards removing the former roof beams and columns in turn, intermediate floor will be cleared regularly to minimise the risk of overloading, as a section of

frame is removed so to will the external brick cladding. During the demolition, materials will be allowed to fall to ground level within a designated drop zone and will be cleared regularly and placed in a hardcore bund to maintain a safe working area.

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This document is a safe system of works for the demolition of the outlined structure and is not to be used for financial reference

Continuing downwards the excavator will repeat the top down demolition process until the structure has been reduced to floor slab level.

On completion of the works the excavator and the waste skip will be craned back across.

## **5.2) Site finish**

On completion of the works all plant and equipment will be demobilised and the site will be left clear and safe for future works to be undertaken.