

## Demolition of 17 – 47 Eastford Square



## Demolition Method Statement

### Contents

**1. Introduction**

**2. Scope of the Works**

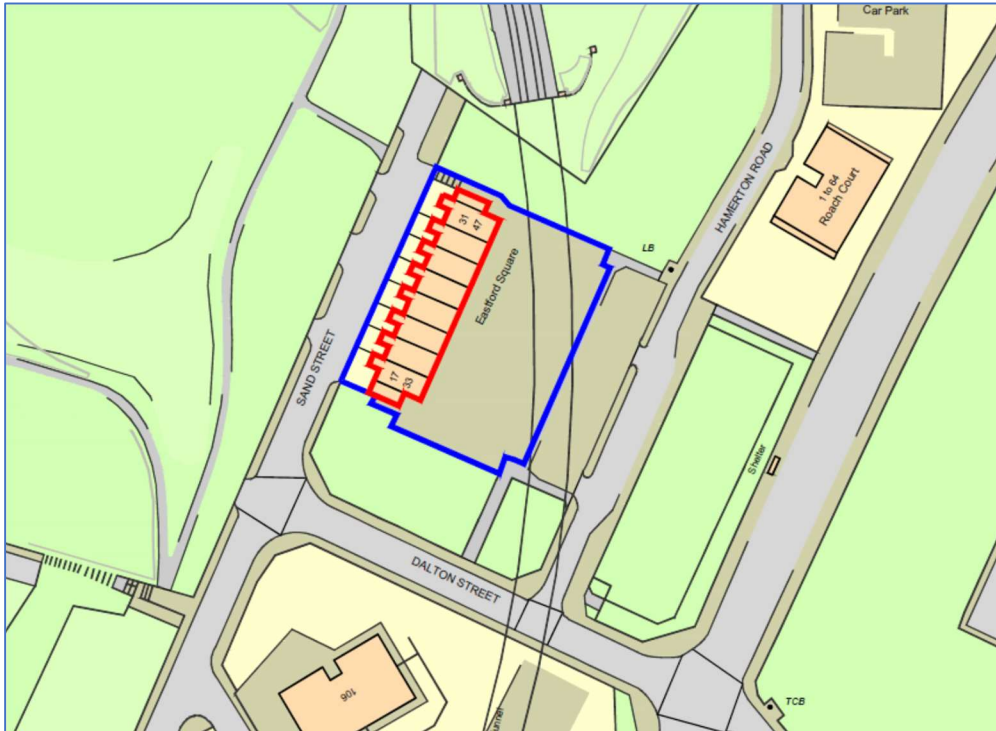
**3. Health, Safety, and the Environment**

**4. Pre-commencement Works / Checks**

**5. Methodology**

## 1.0 Introduction

The scheme is for the demolition and site treatment of 17- 47 Eastford Square, which is located off Rochdale Road in Collyhurst, North Manchester (See attached location Plan). The block is situated in close proximity to an active Metrolink tunnel and consists of a row of vacant shops on the ground floor with basements and rear access on the lower level. To the first and second floor are vacant maisonette properties.



### Location Plan

The building has largely been vacant for a number of years, with the last remaining shop recently acquired by Manchester City Council following Compulsory Purchase. All of the maisonette and shop units are now vacant / derelict, and the Council now wishes to demolish the building.

Limited background information is available on the building, but from a visual inspection it appears to date from the 1960's / 1970's. It is a three storey building with additional basements accessed from the rear of the property. It appears to be of concrete frame construction with blockwork / brickwork walls. The internal fabric throughout the building comprises a combination of concrete blockwork / brickwork, proprietary partition/glazing and timber stud partition construction and metal frame / mineral fibre board suspended ceilings.

Kaberry Construction Ltd. will act as the principal contractor for the asbestos removal and demolition works to 17 – 47 Eastford Square.

This document is a Method Statement for the works and it provides an outline of how the building will be demolished. Many of the works on site will be subject to sub-contractor RAMS and Task Sheets which will be developed, reviewed and amended as appropriate during the works

## **2.0 Scope of the Works:**

- **Site Set Up**
  - Erect site boundary fence and post signage
  - Establish a welfare area
  - Erect hoarding - (see separate RAMS)
  - Erect of scaffolding - (see separate RAMS)
- **Asbestos Removal**
  - Complete Building – on receiving the full Demolition asbestos survey report, removal of all surveyed ACM's (Asbestos Containing Materials – (see separate RAMS).
- **Demolition**
  - Complete Building approx. 869m<sup>2</sup> G.I.A. (Gross Internal Area).
  - Soft strip of the building.
  - Mechanical Demolition of the Building.
  - Hand demolition to section of the building which abuts the electrical sub-station which is to remain standing.
- **Crushing and Backfilling**
  - Crush all suitable demolition brick and concrete to 6F2 grade.
  - Site to be made good with a 150mm layer of 6F2 to required levels.
- **Site Clearance and De-mobilisation**
  - Clear all debris and arisings from site.
  - Remove all welfare arrangements and hoarding from site.
  - Hand site back to Client.

**Access** – The can be accessed from either Eastford Square, or Sand Street at the rear of the building. See Site Plan '**MCC-ZZ-GF-DR-B-001 - Location Plan - REV B**'. This will be used for accessing the site for all plant & materials / removing all debris arising from the demolition works. The access point off Sand Street is also used for maintenance access to the Metrolink line, and therefore should always be left unobstructed. There is a vehicular restriction barrier in place at this point and this will require opening and closing to enable demolition vehicles to gain access when required. A banksman will be employed to ensure safe management of the site entrance on Sand Street for plant and materials leaving and entering, for the duration of the works.

### 3.0 Health, Safety, and the Environment:

The following Health and Safety **Standard Operational Procedures (SOP's)** apply to this project.

| SOP No: | Description:                                               | Yes | No | Other Notes                                                                                      |
|---------|------------------------------------------------------------|-----|----|--------------------------------------------------------------------------------------------------|
| SOP 1   | Managing Asbestos                                          | ✓   |    | Removal of all surveyed ACM's to building. MCC to supply Asbestos demolition survey to building. |
| SOP 2   | Construction Design and Management Regulations ( CDM 2015) | ✓   |    | Kaberry Construction Ltd. will act as the Principal Contractor on this project.                  |
|         | CDM - Welfare                                              | ✓   |    | Kaberry Construction Ltd. will provide suitable welfare.                                         |
| SOP 3   | Confined Space Procedure                                   |     | ✗  |                                                                                                  |
| SOP 4   | Demolition Procedure                                       | ✓   |    | As outlined in this document.                                                                    |
| SOP 5   | Display Screen Equipment                                   |     | ✗  |                                                                                                  |
| SOP 6   | Electrical Safety Equipment                                | ✓   |    | PAT Testing & Inspections                                                                        |
|         | Isolation of Services                                      | ✓   |    | By MCC.                                                                                          |
| SOP 7   | Underground Services                                       | ✓   |    | Drawings to be provided.                                                                         |
| SOP 8   | Excavations                                                |     | ✗  |                                                                                                  |
| SOP 9   | Fire                                                       | ✓   |    | Fire and emergency plan.                                                                         |
| SOP 10  | First Aid                                                  | ✓   |    | Site Manager will be acting as first aider.                                                      |
| SOP 11  | Management of Lifting Operations                           |     | ✗  |                                                                                                  |
| SOP 12  | Manual Handling                                            | ✓   |    |                                                                                                  |
| SOP 13  | Personal Protective Equipment                              | ✓   |    |                                                                                                  |
| SOP 14  | Site Compliance Log                                        | ✓   |    |                                                                                                  |
| SOP 15  | Vibration                                                  | ✓   |    | HAVS Monitoring                                                                                  |
| SOP 16  | Working at Height                                          | ✓   |    |                                                                                                  |
| SOP 17  | Welding, Cutting & Burning Procedure                       | ✓   |    | Hot Works Permit                                                                                 |
| SOP 18  | Young Persons                                              |     | ✗  |                                                                                                  |
| SOP 19  | Security                                                   | ✓   |    | Site based security to cover out of hours.                                                       |
| SOP 20  | Occupational Health                                        | ✓   |    |                                                                                                  |

The following Health and Safety **Standard Operational Procedures (SOP's)** apply to this project.

| SOP No: | Description:                    | Yes | No | Other Notes           |
|---------|---------------------------------|-----|----|-----------------------|
| SOP 21  | Temporary Works                 |     | ✗  |                       |
| SOP 22  | C.O.S.H.H.                      | ✓   |    |                       |
| SOP 23  | Noise                           | ✓   |    |                       |
| SOP 24  | Excavator Quick Hitch Devices   | ✓   |    |                       |
| SOP 25  | Crusher                         | ✓   |    |                       |
| SOP 26  | Permit to Work                  | ✓   |    |                       |
| SOP 27  | Hot Works                       | ✓   |    | Hot Works Permits     |
| SOP 28  | Structural Integrity            | ✓   |    | Systematic Demolition |
| SOP 29  | Working on or adjacent to water |     | ✗  |                       |

The following Environmental **Standard Operational Procedures (SOP's)** apply to this project

| SOP No: | Description:                                                      | Yes | No | Other Notes                                                              |
|---------|-------------------------------------------------------------------|-----|----|--------------------------------------------------------------------------|
| SOP 1   | Air Pollution                                                     |     | ✗  |                                                                          |
| SOP 2   | Contaminated Land                                                 |     | ✗  |                                                                          |
| SOP 3   | Ecology                                                           |     | ✗  |                                                                          |
| SOP 4   | Environmental Noise & Vibration                                   | ✓   |    |                                                                          |
| SOP 5   | Delivery, Storage, Refuelling and Spillage of Fuel and Chemicals. | ✓   |    | Fuelling and lay down area will be established. Spill kits provided etc. |
| SOP 6   | Statutory Development                                             |     | ✗  |                                                                          |
| SOP 7   | Sustainable Development                                           |     | ✗  |                                                                          |
| SOP 8   | Environmental Traffic Management                                  | ✓   |    | Traffic Management Plan will be in place.                                |
| SOP 9   | Waste Management                                                  | ✓   |    |                                                                          |
| SOP 10  | Water Pollution                                                   |     | ✗  |                                                                          |
| SOP 11  | Deliveries to Site                                                | ✓   |    |                                                                          |

#### 4.0 Pre-commencement Works / Checks

| Description                                | Kaberry Construction | Client | Sub Con | Actioned |    | Date Actioned  |
|--------------------------------------------|----------------------|--------|---------|----------|----|----------------|
|                                            |                      |        |         | Yes      | No |                |
| Obtain Asbestos Survey for Building        | ✓                    |        |         | ✓        |    | See PCI        |
| Obtain Section 81                          | ✓                    |        |         | ✓        |    | Client to Send |
| Obtain Isolation Certificates              |                      | ✓      |         |          |    |                |
| Obtain All Plant Certificates              | ✓                    |        | ✓       |          |    |                |
| Obtain All Training Certificates           | ✓                    |        | ✓       |          |    |                |
| Agree Exclusion Zones                      | ✓                    | ✓      | ✓       |          |    | TBC            |
| Confirm Local Access and Egress Routes     | ✓                    | ✓      | ✓       |          |    |                |
| Confirm Emergency Access and Egress Routes | ✓                    | ✓      | ✓       |          |    |                |
| Confirm Emergency Procedures               | ✓                    | ✓      | ✓       |          |    |                |

#### 5.0 Methodology

##### Site Set Up

##### **Erect Site Boundary Fence**

On arrival to site a temporary site hoarding will be erected to enclose the demolition site. It shall be 2.4m high, constructed with hoarding panels manufactured from galvanised steel framework and sheets with a box profile for extra strength. The hoarding shall be supported on high visibility block feet. The hoarding panels shall be bolted to the adjacent panel with a minimum of 2No. anti-tamper coupler bolts (top and bottom that can only be removed with a specialist Anti-tamper tool). The hoarding panels will have supporting back stays fitted every two bays to prevent instability. It shall incorporate pedestrian / vehicle access gates as necessary and these shall be secured at the end of each working day with padlocks and chains. Hoarding will be erected as per the site boundary shown on the site plan.

Prior to erecting the site fence the site manager will verify the following:

- Task Specific RAMS are in place and operatives have been briefed on the works to take place.
- Deliveries have been arranged to avoid busy times.
- Banksman will be posted to manage the vehicular entrance on Sand Street.

### **Establish Welfare Area**

Site welfare area will be set up adjacent to the existing building.

The welfare will consist of:

Toilet – Male and Female

Office Unit

Canteen

Generator

This will be set up in accordance with current CDM Regulations.

### **Asbestos Removal**

Asbestos will be removed by a competent specialist sub-contractor in accordance with task specific RAMS that will be submitted prior to works starting on site. Asbestos works will be co-ordinated with the soft strip works so there will be no interface and risk of exposure to operatives working on site.

The location of all surveyed ACM's will be clarified by the Site Manager during the site induction. During the works operatives will be aware that some further ACM's may be found, if this is the case then:

**Works will cease and all persons will evacuate the area**

**The area will be cordoned off and access excluded**

**The Site Manager will be informed**

**The suspect material will be sampled and tested for asbestos content**

**Upon result of the testing the material the removal will be planned as appropriate**

### **Avoidance of Unplanned Collapse – Surveys**

A suitably qualified **Structural Engineer** will be employed with experience of advising and reporting on the demolition of buildings. The Structural Engineer shall carry out a survey on the former shop units and provide advice relating to –

- The age of the building
- Design codes used and the designed used,
- The type of construction,
- It's history in use, including alterations,
- Nearby buildings and structures,
- The effect of the additional weight of demolition machinery and debris on suspended floors.

**Structural Inspection** – A detailed structural inspection and assessment of the buildings to be demolished shall be carried out, prior to the works commencing on site. This survey shall identify any weak elements, supports or connections to inform the chosen methods of work and ensure that demolition activities can be carried out in such a way that the unplanned collapse of any part is avoided, by maintaining the structural stability of the remaining parts at all times.

**Development of a Traffic Management Plan** – The preparation and development of a Traffic Management Plan will be carried out. This plan shall consider all relevant items e.g. speed limits, segregation, visibility aids, trained banksman, the vehicle frequency and sizing that will be entering and leaving the site.

**Hours of Operation** – The site working hours will be 7:30 a.m. – 5:00 p.m. Monday to Friday. No weekend working shall be carried out without prior notification and approval.

## **Environmental Monitoring**

**Noise Monitoring** – To ensure compliance with the Control of Noise Regulations (2005) the Principal Contractor will allow for the following:

- **Establish Baseline Noise Levels** – To record noise levels at the site boundary prior to the demolition works commencing, to establish baseline noise levels.
- **Environmental Noise Monitoring** – Include for supplying and deploying a continuous noise monitoring system during the demolition works. The equipment shall be sufficient to take a continuous series of 'fixed duration' noise measurements at the boundary of the demolition site and to store these measurements. To report readings on a weekly basis.

**Demolition Vibration Monitoring** – To record vibration levels whilst the demolition works are carried out. Establish baseline vibration levels and deploy suitable equipment around the site with beacons, to show a visible alarm alert when pre-set vibration levels have been reached. To report readings on a weekly basis.

## **Air Quality Risk Assessment**

The demolition contractor shall allow for the following:

- Undertake an air quality risk assessment (AQRA)
- Evaluation of the potential impact of the demolition works on sensitive receptors close to the site which could be affected by high levels of air pollution or dust.

The potential for the demolition site to impact on sensitive receptors should consider the following factors (this is not an exhaustive list):

- Location of the demolition site
- Proximity to sensitive receptors
- Nature, location and size of stockpiles and length of time they are to be on-site
- Occurrence and scale of dust generating activities
- Necessity of on-site concrete crusher
- Number and type of vehicles and plant required on site
- Potential for dirt / mud to be made airborne through vehicle movements.

## **Dust Control Measures**

The demolition contractor must follow best practicable means at all times to minimise dust and emissions. Include for:

- Misting (atomisers) to suppress dust over the demolition site and nozzle lines.
- Securely cover skips and minimise drop heights – all loads entering and leaving the site to be covered
- Keep stockpiles for the shortest possible time.

**Dust Suppression Units** – Include for bringing to site and utilising specialist dust suppression equipment, to ensure that dust levels are maintained within acceptable standards on the site during the demolition works.

**Air Testing During the Demolition Works** – The Principal Contractor will employ a suitably qualified consultant to carry out air testing during the demolition works to monitor dust levels.

**Reassurance / Personal Monitoring** – A suitably qualified consultant will be employed to carry out reassurance / personal monitoring.

**Damping Down** – The demolition contractor will include for washing and damping down the section of Kylemore Lane and Grey Mare Lane. Ensure effective cleaning of haul routes and include for the use of mechanical road sweepers on a weekly basis or at more frequent intervals if the situation warrants.

**Mobile Crusher on the Demolition Site** – A track / wheel mounted mobile crusher will be brought to site incorporating jaw or impact type crusher, that allows it to crush the concrete, bricks, blocks or other forms of demolition waste, generated on site from the demolition of the buildings. Ensure careful planning, supervision, control and monitoring of the mobile crusher. A full working method statement and specific risk assessment shall be produced for all works involving the mobile crusher.

**Environmental Permit Mobile Crusher and Screening** – The Principal Contractor / demolition sub-contractor will obtain an Environmental Permit from Manchester City Council in Accordance with the Pollution Prevention and Control Act 1999 and Environmental Permitting Regulations 2016 (as amended) to operate a mobile crusher installation on the site.

Ensure compliance with the **Control of Substances Hazardous to Health Regulations 2002 (COSHH)**. Crushing on site creates high levels of dust which may contain respirable crystalline silica (RCS). Allow access to authorised and appropriately trained people only. Limit the number of people near the work. Locate the machine and stockpiles to prevent from wind. Provide water suppression jets at crushing and transfer points. Provide all necessary PPE for all operatives involved with the crushing operations. Also, provide Respiratory Protective Equipment (RPE) with a UK Standard Assigned Protection Factor (APF) of at least 20 when working on crusher platform. Fit testing is required for RPE with a tight fitting face seal. If RPE is required for extended periods e.g. longer than 1 hour continuously, use powered respirators.

**Notification of Adjacent Properties** – The Principal Contractor will notify in writing all adjacent property occupiers/owners of the intended demolition works, points of contact if any issues arise, start date, duration of works & any other relevant information. Include for doing a letter drop to The East Manchester Academy and Library, St. Brigid's R.C. Primary School, the East Manchester Leisure Centre, and residential properties in the vicinity of the demolition site, which could be affected by the works.

## **Demolition**

The building will be demolished sequentially, starting at one end of the building ensuring uncontrolled collapse is avoided. This will allow safe working methods and continuity of works throughout the project.

## **Exclusion Zones**

- Prior to commencement of the works, localised Demolition Exclusion Zones will be installed. This will consist of HERAS Type Fencing with appropriate bracing.
- A temporary closure will be put in place to the public footpath and steps located at the Northern elevation of the building.
- Mandatory signage will be posted on the fencing to warn of the works

## **Soft Stripping**

Experienced and trained CCDO Soft Strip Operatives will be use small hand tools and 110V Powered Tools to undertake the removal of materials that may hinder the hand and mechanical demolition processes. Items such as the following will be removed:

- Loose furniture.
- Fixed furniture.
- Features and fittings.
- Floor coverings.
- Suspended and false ceilings.
- M&E installations.
- Doors and frames.
- Skirting

The following controls will be put in place during soft strip works:

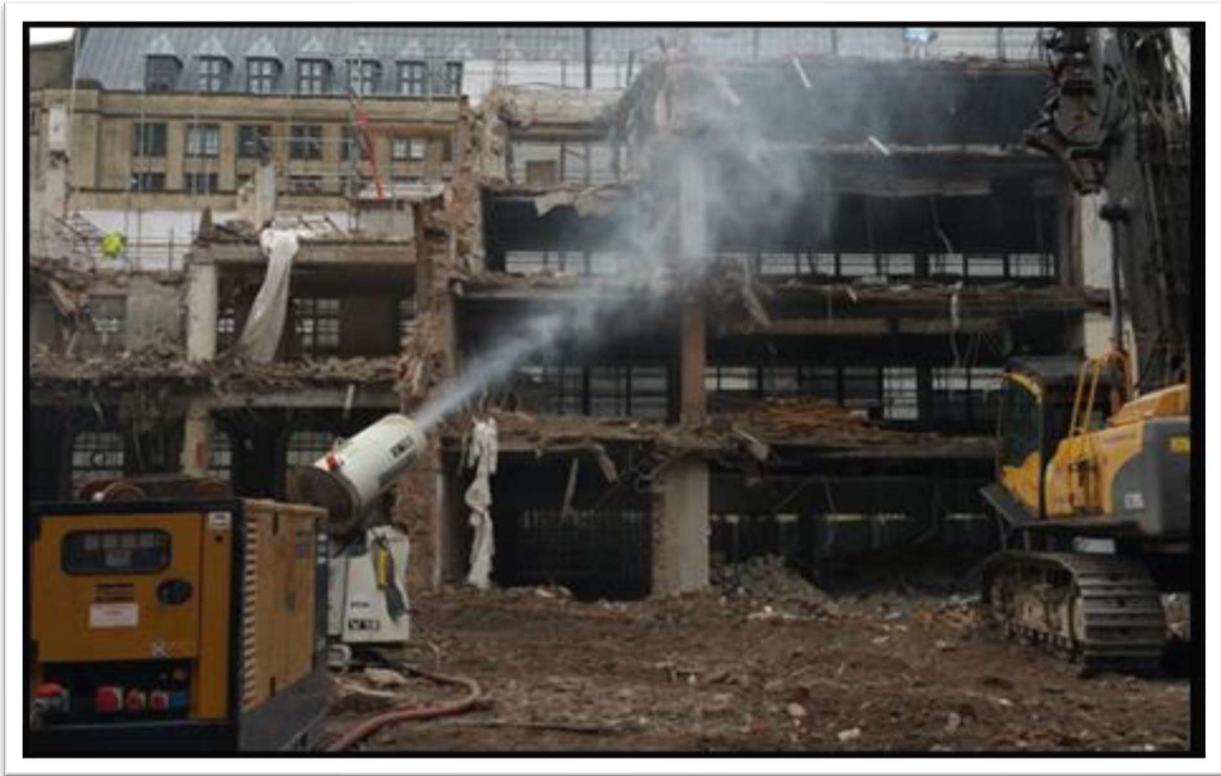
- The waste will be separated at source.
- Exclusion zones will be established, sign posted and maintained
- Safe access and egress routes will be established, sign posted and maintained
- Emergency escape routes will be established, sign posted and maintained.
- Dust, noise and vibration mitigation measures will be established and maintained
- Seddon Construction Ltd. will employ a qualified consultant to carry out air testing during the works.
- Operatives wearing full PPE will soft strip and remove waste to skips outside.

## **Superstructure Demolition**

The Demolition will be carried out in a phased manner to enable safe systems of works to be put in place and continuity of works maintained. All works will be carried out under the cover of approved RAMS and safe systems of work. CCOD and Demolition Plant Operatives will be directed by a working supervisor and site manager.

- The structure will be demolished in accordance with BS: 6187: 2015 at all times
- No structure will be left overnight in an unsafe condition.
- The structure will be demolished from the top down.
- The structures will be demolished sequentially to maintain stability.
- Dust suppression will be used at all times.

- Using a three-phase water cannon V12 & Charged fire hoses.



**Typical View of Dust Suppression During Demolition Works**

Demolition to be carried out by 22t excavator, fitted with cab guard, using demolition attachments.  
Demolition to be carried out as follows:

- All machine demolition to be carried out under supervision of a competent banksman safely located outside the control of work zone and communicating with machine operator by two-way radio.
- Demolition to start at the eastern end of the site and progress through the building bay by bay, gridline to gridline, ensuring stability of the remaining structure, working downwards and across each bay.
- Starting with the east façade, the hung tiles, glazing etc to be removed using the demolition attachment to expose the steel frame.
- Materials to be broken out and lifted using demolition attachment.
- For all demolition where there is any risk of dust arising, dust suppression spray to be operated under the direction of the Site Manager to prevent any dust arising from the work.
- Arisings to be placed directly by excavator in skips within the control of works zone, steel segregated and placed in metal skip.
- Concrete floor slab sections to be broken out and lifted with demolition attachment.

### **Crushing & Mounding**

All hardcore demolition arising's will be crushed on site to a 6F2 Grade and stockpiled for re-use on site.

- a. Crusher will be brought to site and off loaded into the works area.
- b. Crusher operator will position the crusher adjacent to the stockpile to be crushed.
- c. Water suppression will be piped to the Crusher and turned on.
- d. 22T Excavator will sit atop the processed material and begin to load the crusher. The crushed material (6F2) from the end belt will be stockpiled using the second 22T Excavator in a designated area on site.

### **Crushing Sequencing**

Once remediation works are commenced, they will be carried out by teams of suitably selected plant that will work in tandem with crushing and processing teams. The crusher will crush to 6F2 grade and then place the crushed material ready for re-use on site.

### **Site Surface on Completion / Grading Oversite**

To regrade the existing sub-base which has been exposed following removal of the floor slabs, to leave a level clean oversite. Areas as detailed on drawing No. '**MCC-ZZ-GF-DR-B-002 - Existing and Proposed Site Layout Plan - REV B**'. To grade the site to follow the levels of the adjacent areas.