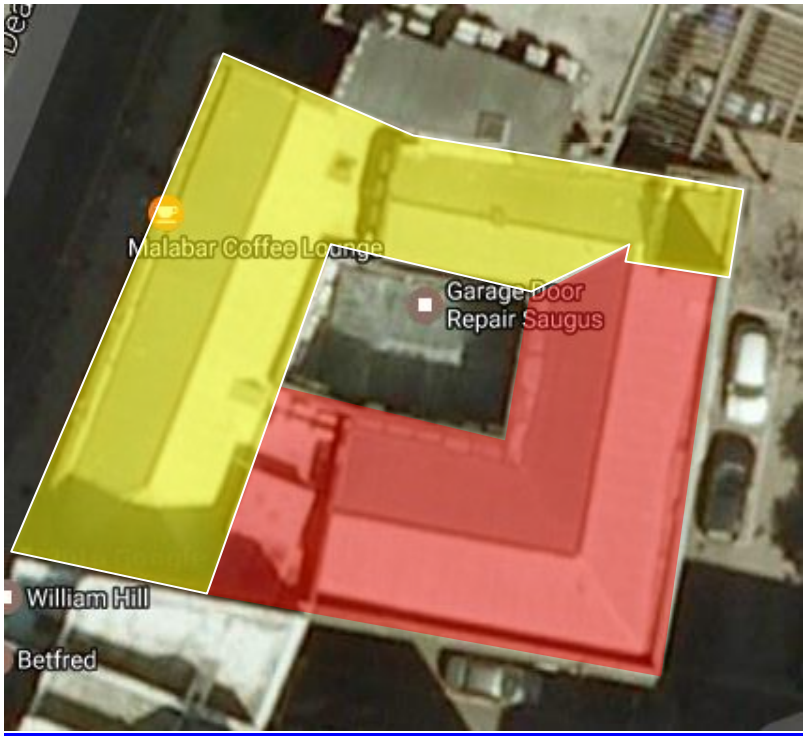
WORK ACTIVITY:	**Mechanical Demolition of 123 Deansgate**
METHOD STATEMENT No:	FDL003 (Rev.02)
PROJECT:	6731/16 Deansgate 125/123
SITE ADDRESS:	Deansgate, Manchester

INTRODUCTION	
BRIEF DESCRIPTION OF WORKS:	This set of RAMS covers the mechanical demolition of 123 Deansgate only. The extent of the mechanical demolition is highlighted in red in the photo below. ***Note:*** the hand deconstruct element of these works (highlighted in yellow) will have been carried out down to the required level prior to any mechanical demolition being carried out. Refer to RAMS FDL004 for details of the deconstruction process. 

PROGRAMME	
COMMENCEMENT DATE:	March 2017
DURATION:	2 weeks
WORKING HOURS:	0700 - 1730 (Monday to Saturday)

COMPETENCY	
INDUCTION:	All personnel involved in the project will have undergone an induction carried out by Forshaw Demolition Ltd
PERSONNEL:	Senior Contracts Manager George Steele (07973 621 648) Demolition Manager Craig Steele [07976 704031] Demolition supervisor (Paul Steele - 07803 201 142) 360 excavator operators x 2 Demolition operatives x 2 Tipper drivers
TRAINING:	CCDO demolition manager (George Steele) CCDO Demolition Supervisor Gold Card [Craig Steele]

	CCDO demolition Supervisor (Paul Steele) CCDO labourers (asbestos awareness trained) CPCS 360 excavator operator
TEMPORARY WORKS:	Forshaw Demolition TWC - George Steele Forshaw Demolition External Structural Engineer - Paul Healey Associates

MONITOR WORKS	
HEALTH & SAFETY INSPECTION:	The works area will be closely monitored by G. Steele and P. Steele. Forshaw Demolition Health & Safety Manager will conduct a written Health & Safety Inspection once a month
TEMPORARY WORKS:	All Temporary works will be entered into the Temporary works register on site. FDL TWS to inspect and monitor works on site.
BANKSMAN CONTROLLING EXCLUSION ZONES:	During the mechanical demolition access into John Dalton House service entrance will be managed by FDL banksman. FDL will employ full time banksman during this phase of the demolition. Banksman will close off and manage the demolition exclusion zone during the demolition phase. If the zone needs to be opened for deliveries, the banksman will stop works and open up the zone. Zone drawings can be found in ***Appendix 1.***

DRAWINGS / SURVEYS	
DRAWINGS:	DS02 Demolition Sequence Plan (mechanical demolition 123 Deansgate)
SURVEYS:	A Demolition & Refurbishment (D&R) asbestos survey has been undertaken. All ACM's as identified within the D&R asbestos surveys will have been removed prior to commencing mechanical demolition activities.

PPE	
MANDATORY PPE:	Hard hat (BSEN397) Safety boots (BSEN345 steel toe cap & steel midsole) Hi visibility vest or jacket (class 2) Gloves (3222) Safety Spectacles (1F)
TASK SPECIFIC:	N/A

RESOURCES	
PLANT:	360 High reach excavator 360 excavator
INSPECTION OF PLANT:	12 monthly thorough examination certificates for excavators. Weekly recorded inspections will be carried out by plant operator.
MATERIALS & EQUIPMENT:	Heras fencing panels Combination shear Demolition grab Breaker
STORAGE OF FUELS & CHEMICALS:	All fuels and oils will be stored in FDL compound - COSHH area located within the delivery yard. All fuels and oils will be stored on a bunded fuel store.

ACCESS & SECUIRTY	
ACCESS TO WORK AREA:	Access to the work areas will be as per the FDL site induction. Updated access routes will be briefed to all operatives on a daily basis via the daily activity brief (DAB) Access to the rear of the structure will be via John Dalton House service yard entrance (in agreement with John Dalton Management) Walkways must be well lit and kept clear at all times. All access gates to the works area will be closed and locked.
PUBLIC INTERFACE ARRANGEMENTS:	All works will be undertaken inside the site boundary fence that has been erected by FDL.

	Additional demolition exclusion zones will be managed by FDL banksman. Heras fencing will be erected along the elevation that has been demolished. The fence will be secured direct to the existing access gates and fence.

ENVIRONMENTAL	
WASTE:	All waste generated by the demolition activities will be loaded into skips and removed from site for recycling. All skips will be covered when leaving site.

APPROVAL, REVIEW AND BRIEFING	
REVIEWED & APPROVED BY:	David Churchward H&S Manager FDL
DAB'S	DAB'S (Daily Activity Briefs) to be undertaken by P. Steele. All personnel must attend the DAB's briefing.
TOOL BOX TALKS	TBT's to be carried out by P. Steele. At least 5 TBT's will be carried out for this task. P. Steele to determine the subject of the TBT's

PRE COMMENCEMENT WORKS	
ASBESTOS:	Prior to commencing any mechanical demolition works all Asbestos Containing Materials (ACM's) identified in the various D&R asbestos surveys will have been removed as per HSE Control of Asbestos Regulations 2012
LIVE SERVICES:	Any live services will be protected using a combination of steel road plates and 6F2 crushed materials, as required.

MONITORING	
VIBRATION:	Vibration monitoring will be undertaken during the mechanical demolition of the wall. The vibration monitor will be set up in a location as close to John Dalton House as possible. Access into John Dalton House service area will have to be agreed and approved prior to undertaking any monitoring.
NOISE:	Noise monitoring will be undertaken during the demolition phase of the works adjacent to John Dalton House. The noise monitor will be set up in the service area close to Byrons. Access into John Dalton House will have to be agreed and approved prior to undertaking any monitoring.
DUSTS:	Dusts will be controlled at source using water to supress any dusts. The high reach excavator will have a water hose directly fitted to the boom and dipper arm. The pipe will supply water direct to the area where the structure is being demolished.

PARTY WALL	
ACCESS & EGRESS:	Access into John Dalton service yard will be maintained or managed during the works.
COMMUNICATION:	FDL Site Management team will liaise with Bills restaurant and Byrons Management team throughout the contract. The meetings will cover the following topics as a minimum; • Progress • Current and future activities • Access arrangements (staff and deliveries) • Complaints • Results of any monitoring undertaken

SEQUENCE OF TASKS

The Site Supervisor/Manager will ensure this method statement and risk assessment is explained to all operatives involved in the task. All operatives will sign to confirm they have understood this method, the risks involved and the control measures put in place. Any operatives found not adhering to these RAMS may be subjected to disciplinary action.

Daily task briefings will be carried out and operatives given the opportunity to give feedback on tasks/method statements, where required changes will be made by WFL site team, these changes will be then passed onto to B&Ks team.

Pre Commencement Works (completed prior to commencing mechanical demolition activities

Pre Commencement Activity 1 –Protect all known live services

PCA1.1 The site team will study the local services drawing to ensure that any know live services within the footprint of the excavator work zone are fully protected. Geotextile materials will be laid across the area to be protected. Steel road plates will also be utilised to cover any manhole covers or ductwork. 6F2 crushed material will then be placed over the steel plates to reduce any impact on the road and ease movement of the tracked machine within the excavator work zone. The above will also eliminate any possible damage to the existing road.

Pre Commencement Activity 2 – Erect demolition exclusion zones

PCA2.1 Demolition exclusion zones will be erected as per the Demolition Sequence Plan drawings located in ***Appendix 1.***

PCA2.2 The exclusion zones will be constructed from heras fencing panels that are double clipped and secured at each end using builder's band secured at three points at each end of the fence. The fencing panels will have signage erected denoting 'CAUTION DEMOLITION – KEEP OUT'.

PCA2.3 The exclusion zone located at the entrance of the delivery area will be manned with 2 banksman at all times. In the event of deliveries the banksman will radio the plant operator and cease the demolition activities. The banksman will then assist with any deliveries to the restaurants. Once the deliveries are complete the banksman will reinstate the exclusion zone and contact the plant operator to recommence the mechanical demolition.



Sketch 1

Access gates to be managed during the mechanical demolition phase

Pre Commencement Activity 3 – Set up dust suppression

PCA3.1 Water suppression will be set up to enable a constant spray of water to be directed onto the structure during mechanical demolition. The water suppression is a direct feed water system that enables a fine mist to be sprayed close to the end of the pulveriser that is fitted to the excavator.



Sketch 2

Example of dust suppression being used on this project

Commence mechanical demolition activities

Activity 1 - Commence mechanical demolition of 123 Deansgate

A1.1 A sequence drawing of the mechanical demolition (DS02) is located within ***Appendix 1*** of this document. The sequence drawings detail the limitations of each stage of the demolition works. Sketch 3 details the direction of mechanical demolition.



Sketch 3

Direction of mechanical demolition

A1.2 A demolition specification high reach excavator will be utilised to carry out the demolition works. The high reach excavator will be accompanied by a smaller excavator to aid in the demolition of the lower levels and to aid in the process and loading of the demolition arisings.

A1.3 The excavators will be fitted with a series of attachments ranging from a combination shear, demolition grab and breaker. The experienced demolition excavator operator will change attachments to suit the structure being demolished. An area for changing attachments' will be set up in order that operatives can change attachments in a safe area.

Please note: Prior to mechanical demolition commencing the exclusion zones will be set up as per PCA2.3 above.

A1.4 The structure will be demolished in bays working from column to column.

A1.5 The demolition process will commence by pulverising small sections of the structure at the upper most floor level working left to right typewriter style. The demolition arising's will fall to ground level or will fall onto the floor beneath. The demolition arisings will be scraped off of the lower floors to prevent overloading. This process will continue until the excavator has reduced the build down to ground level. The ground level will then be scraped and cleaned off to expose the ground floor slab. The ground floor slab will then be punched through using the smaller excavator and then backfilled and compacted to

allow the excavator to track into the foot print of the building to continue the demolition. The ground floor will be punched out to its entirety, to ensure there are no voids under the excavator work zone.

A1.6 The second smaller excavator will work alongside the high reach excavator to process and load the demolition arisings.

A1.7 Heras fencing will be established along the east elevation as the wall is demolished.

MECHANICAL DEMOLITION OF 123 DEANSGATE RISK ASSESSMENTS

What are the hazards	Who might be harmed and how	Risk rating before control measures have been implemented	What control measures are in place	Risk rating after control measures have been implemented
Manual Handling	Operatives may suffer broken bones, cuts or lacerations from handling materials	**Medium**	• Operatives to wear gloves, hard hats, safety spectacles and steel toe capped boots with steel midsoles	**Low**
	Operatives may suffer back pain when manually handling materials	**High**	• 360 excavators to be utilised to demolish the structure and remove/load materials • All operatives to have undergone manual handling training • All operatives to carry out a mental manual handling risk assessment when manually moving any load	**Low**
Slips & trips	Operatives may suffer broken bones, sprains or cuts due to tripping over materials	**Medium**	• Pedestrian access routes to be kept clear of all materials • Pedestrian routes to be clearly lit • Exclusion zones to be erected to eliminate operatives walking across demolition areas containing debris • Excavator operator to track to a safe trip free area when accessing and egressing the cab of the excavator • Service yard to be cleared and cleaned on a daily basis	**Low**
Falling materials	Demolition operatives, site operatives and members of the public may suffer fatal or serious injury if struck by falling materials	**High**	• Safety helmets to be worn at all times • A series of exclusion zones consisting of heras fencing panels double clipped to be erected around and below the works area. • Ends of the heras fencing panels to be secured to walls using builders band. • Banksman & Contracts Manager to be in contact with the excavator operator via radio at all times • Demolition works to cease whilst delivery drivers are using the authorised access routes. Banksman to control the delivery area. • Service yard area to be managed and controlled using banksman	**Low**

Contact/strikes of live utility services	Operatives may suffer fatal or serious injury if electric cables or gas pipes are struck	**High**	• All utility services to be isolated/disconnected prior to commencing soft strip or mechanical demolition • Utility disconnection paperwork to be located within the CPHSP • All live utility services to be identified and marked live	**Low**
Exposure to asbestos	Site operatives and members of the public may inhale asbestos fibres if asbestos has been disturbed	**High**	• Demolition & refurbishment asbestos surveys to be undertaken in all the units highlighted for demolition • All ACM's to be removed prior to commencing mechanical demolition • Operatives to stop works if they suspect asbestos containing materials are present • All operatives to have undergone asbestos awareness training • ACM's to be removed prior to commencing	**Low**
Dust from breaking concrete	Operatives may suffer respiratory problems due to inhalation of dusts	**High**	• Water to be sprayed onto the structure to suppress any dusts	**Low**
Falls from height	Operatives may suffer fatal or serious injury if fall from height occurs when walking around other parts of the shopping Mall	**High**	• Areas leading to the proposed open edges to be fenced off to create an exclusion zone prior to commencing demolition works • Basement area to be fenced	**Low**
Collapse/damage of structure	Operatives and members of the public may suffer fatal or serious injury if structure collapses during mechanical demolition	**High**	• Methodology and sequencing to be approved by a structural engineer confirming methodology • Operatives to follow method and sequence as described in this document	**Low**
Damage to adjacent structures	Sainsbury's structure and Primark structure may be damaged by falling debris	**High**	• Facades directly adjacent to the demolition works will be deconstructed by hand • Vibration monitoring to be undertaken	**Low**
Excavator operations	Operatives on site and members of the public may suffer fatal or serious injury if struck by an excavator	**High**	• Plant operators to be trained and competent • Always approach excavator from the front & ensure operator has made contact with you prior to walking into the arc of the excavator • Never walk into the arc of the excavator • Ensure site traffic management plan is followed on site • Demolition exclusion zones to be erected around the site	**Low**

	Excavator operator may suffer fatal or serious injury due to excavator overturning	**High**	• Excavator operator to wear seat belts at all times • Excavator to be operated on firm level ground	**Low**
	Site operatives may suffer fatal or serious injury due to incorrect use of quick hitch, working under attachments or if the attachment becomes detached from excavator	**High**	• All plant operators to have undergone quick hitch training • All plant operators to use automatic double locking quick hitch as per manufactures instructions • Attachments or loads must not be manoeuvred over the top of any personnel • Separate area to be set up for changing attachments	**Low**

Section 3

I confirm I have read and understood the method statement and risks involved and will work in accordance with the method statement as described

OPERATIVE SIGNATURES			
Name	**Signature**	**Date**	**Revision No.**

AMENDMENTS		
Time/Date	Description of amendment	Signature of Manager/Supervisor

M/S PREPARED BY: D. Churchward	**DATE: 06th December 2015**

Appendix 1

Demolition Sequence Drawings

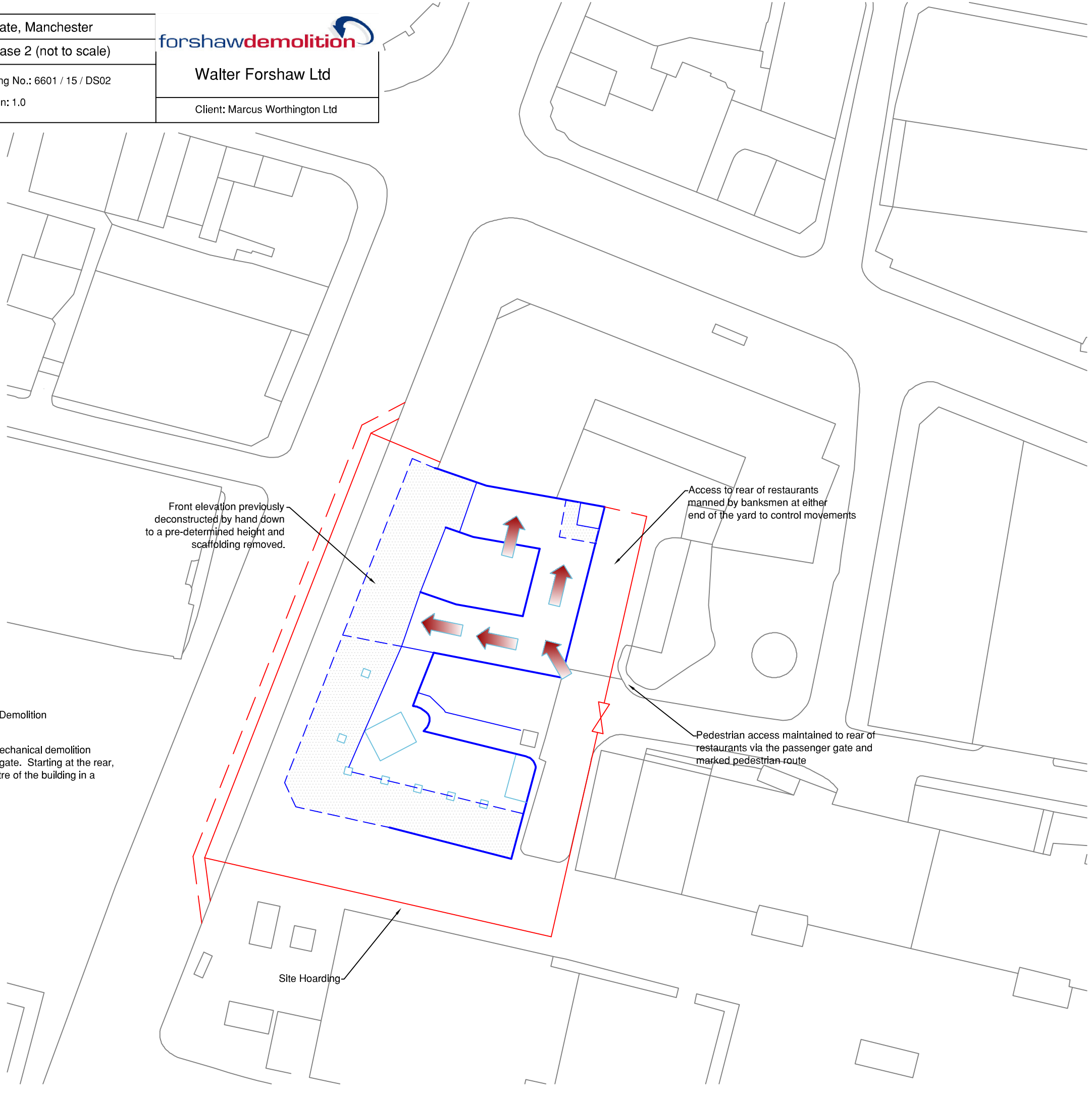
Lincoln House & 123 Deansgate, Manchester	
Demolition Sequence Plan : Phase 2 (not to scale)	
Prepared by: AJW Date: 15.09.16	Drawing No.: 6601 / 15 / DS02 Version: 1.0

forshawdemolition

Walter Forshaw Ltd

Client: Marcus Worthington Ltd

Draft - For Information Only



This phase covers the mechanical demolition sequence for 123 Deansgate. Starting at the rear, working towards the centre of the building in a systematic fashion.