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FIRE PREVENTION PLAN for MOSSDOWN ROAD TRANSFER STATION ROYTON

Prepared for

WHEELDON BROTHERS WASTE LTD
Bridge House,
Bury New Road
Bury
BL9 7HT

DOCUMENT CONTROL SHEET

SITE	OLDHAM TRANSFER STATION
	WHEELDON BROTHERS WASTE LTD
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1. GENERAL DETAILS

1.1 Purpose and Scope

- 1.1.1 The Arley Consulting Company Limited (TACCL) has been commissioned by Wheeldon Brothers Waste Limited (WB) to prepare a Fire Prevention Plan (FPP) for the transfer station at Mossdown Road, Royton, Oldham.
- 1.1.2 Assessment of the site for fire prevention has been conducted in accordance with Environment Agency (EA) guidance 'Fire Prevention Plans: Environmental Permits', last updated January 2021¹.
- 1.1.3 The site operates under Waste Management Licence WML\53932 which allows for the treatment and storage of household, commercial and industrial waste.
- 1.1.4 WB have recently acquired neighbouring land to the north-east of their site which historically operated as a scrap metal yard and later as a transfer station. A bespoke permit variation application is required to extend the WB site boundary to encompass the additional land, and also to increase the throughput of waste from 28,000 tonnes to 100,000 tonnes per year. A FPP is a requirement of the permit variation application.
- 1.1.5 The FPP contains details to demonstrate that the site can be operated to meet the three objectives stated in the EA guidance:
 - Minimise the likelihood of a fire happening;
 - Aim for a fire to be extinguished within 4 hours; and
 - Minimise the spread of fire within the site and to neighbouring sites.
- 1.1.6 This FPP forms part of the WB Environmental Management System (EMS). The FPP will be kept in hard copy in the weighbridge office.

1.2 Responsibilities

- The Operations Manager (OM) shall ensure that the requirements of the FPP are complied with by all employees and visitors to the site.
- It is the responsibility of the OM to maintain adequate fire precautions at the site and to ensure that fire drills are conducted.

¹ https://www.gov.uk/government/publications/fire-prevention-plans-environmental-permits

- The OM and/or designated Fire Marshall shall supervise the safe evacuation of the site and ensure all personnel report to the Fire Assembly Point in the event of a fire or during a drill exercise.
- The OM or nominated representative will monitor the requirements of this FPP to ensure a fire safe working environment at all times.

1.3 Site Details

- 1.3.1 The transfer station is located on Mossdown Road, Royton, Oldham. The approximate National Grid Reference for the site is SD 93626 07152. Access to the site is off Mossdown Road which is accessed by Moss Lane off Higginshaw Lane (B6194). A Site Location Plan is provided in Appendix B.
- 1.3.2 The site is bound by a combination of 2.5 m high palisade fencing and 2 m high steel walls. There are 2.5 m high lockable gates at the entrance and exit for the site. CCTV cameras cover the whole site and are monitored in the weighbridge office during operational hours, and by a security contractor out of hours (ie between 6.30 pm and 7.30 am Monday to Saturday and on Sundays).
- 1.3.3 Processing of combustible waste is carried out across two main buildings as shown on the Site Layout Plan provided in Appendix B. Other buildings at the site include the weighbridge office, workshops, storage building and welfare buildings.
- 1.3.4 The original processing building in the south of the site is an open fronted steel portal frame building which covers an area of 770 m² and benefits from double skinned walls including concrete lego block and steel panelling. Processing inside this building includes shredding and screening mixed waste. There is an enclosed double picking line adjacent to this building where waste is separated by hand into recyclable fractions, and the residual waste is then passed under an overband magnet to further separate out ferrous metals.
- 1.3.5 The processing building in the north of the site which has been recently acquired by WB is also an open fronted steel portal frame building which covers an area of approximately 1,010 m² and benefits from double skinned corrugated and steel panelling (3 m high). The layout of processing plant inside this building is still to be determined but is likely to include a shredder, screener and enclosed picking line.
- 1.3.6 The concrete lego blocks in the original processing building are in excess of the 120 mm thickness required to achieve a fire resistance rating of 120 minutes in accordance with EN1992-1-2-2004.

- 1.3.7 Bays beneath the picking line and the adjacent bays in the south of the site are fully enclosed by steel plate walls. The double skinned steel panel wall in the northern processing building is currently intermittent, however upgrade works are proposed for this processing building so that the walls will also achieve the required fire resistance rating in accordance with EN1992-1-2-2004.
- 1.3.8 The majority of the rest of the site is used for skip storage and there are some external storage bays located centrally for storage of inert waste. There is one green waste skip, and two scrap metal skips located adjacent to the southern processing building, as shown on the FPP Drawing.
- 1.3.9 The majority of yard areas are concrete surfaced. There is a small area of hardstanding located to the east of the processing building in the north as shown on the FPP Drawing. WB intend to concrete this area as part of site development works. The hardstanding area is at a higher elevation than the rest of the site, so there is no risk of any run-off water reaching the hardstanding.
- 1.3.10 The majority of the site benefits from a sealed and contained drainage system which directs surface water to interceptors before being discharged to foul sewer. Further details on site drainage are provided in Section 4.5 'Managing Firewater'.
- 1.3.11 The location of waste at the site, processing areas, site drainage, fire walls etc. are shown on the FPP Drawing in Appendix B.

1.4 Receptors

1.4.1 The location of the site in relation to potential receptors within 1 km of the site is shown on Drawing No 23015/03, provided in Appendix B. Table 1 below lists the receptors and their distance and direction from the site along with the reference as per the receptor drawing.

Ref	Receptor	from	Distance from Site Boundary (m) – approx. from closest point
	Domestic Dwelling	s	
1	Properties on Herron Street, Brownlow	NW	220
	Properties on Higginshaw Lane, Higginshaw	W	250
	Properties on Heyside, Brownlow	W	270
	Properties on Bullcote Lane, Shaw Edge	NNE	290
	Properties in Broadbent	SSE	495
	Harley Farm, near Sholver	NE	480
	Properties in Acre	S	580
	Properties in Sholver	NE	850
	Industrial/ Commerci	ial	
2	Higginshaw Industrial Estates	SW	105 - 310
	Mossdown Road Industrial Estate	N, E	Adjacent - 120
	Highway or Major Ro	ad	
3	Higginshaw Lane (B6194)	W	20
	Railways		
4	Metrolink	E	120
	Public Rights of Wa	y	
5	Footpaths	N, E, S, W	180 – 1 km
	Habitats/Designated S		
6	Royton Moss Lowland Fens (PHI)	Е	60
	Priority Woodland	SE	380
	Priority Woodland	SW	600
	Surface Water	T	
7	River Beal (channel in Royton Moss)	Е	60
	Hospitals/Nursing Homes/		
8	Stoneleigh Primary School	SSE	560
	Blackshaw Lane Primary School	NW	680
	St Theresa's Primary School	SSE	700
	Royton and Crompton School	NW	730
	St Josephs Primary School	N	850
	Watersheddings Primary School	SSE	940
	Dr Kershaws Hospice	W	850

Table 1: Location of Receptors Surrounding the Site (within 1 km)

- 1.4.2 The site is located in an industrialised area of Oldham and bound by industrial estate on all sides. The closest industrial receptors include LGF Commercial Bodybuilders adjacent to the north, HNQ Plant and Machinery adjacent to the south, and a vehicle dismantlers and scrap metal merchant adjacent to the west.
- 1.4.3 The closest residential receptors are in Brownlow, approximately 220 m to the north-west. Residences in Higginshaw are approximately 250 m to the west, and properties on Bullcote Lane in Shaw Edge to the north are approximately 290 m from the site.

- 1.4.4 There are no motorways in the vicinity of the site; the closest 'B' road is Higginshaw Lane (B6194) which is approximately 20 m to the west. The Metrolink rail line is located to the east, approximately 120 m from the site boundary.
- 1.4.5 There are a number of footpaths in the surrounding area, predominantly to the east in the mosses. Royton Moss is situated 60 m to the east and is locally designated as Priority Habitat for Lowland Fens. Woodland to the south-east (380 m) and south-west (600 m) is also designated as Priority Habitat. An ephemeral channel of the River Beal runs through Royton Moss.
- 1.4.6 There are a number of schools in the surrounding area; the closest is Stoneleigh Primary School approximately 560 m to the south-south-east. Dr Kershaws Hospice is some 850 m to the west. There are no hospitals within 1 km of the site.

2. WASTE TYPES AND OPERATIONS

2.1 Waste Operations

- 2.1.1 Mixed waste recycling will be carried out in both processing buildings, however only the southern building is operational at the time of writing. For the purpose of the fire prevention plan it is assumed that similar processing will take place in the northern building once it is operational.
- 2.1.2 Incoming waste is deposited in the reception area and any bulky items removed. Waste is then passed through a shredder, then fed into a trommel which separates out fines into two fractions (20 mm and 40 mm). The remaining waste is then fed into two picking lines for separation by hand into different recyclable fractions. Waste is then conveyed under an over band magnet to remove ferrous metals, and residual waste is stockpiled at the end of the process. Residual waste is sent through the treatment process again to maximise recovery.
- 2.1.3 Inert wastes are stored in bays in the yard as shown on the Site Layout Plan. WB are not currently processing inert wastes, although intend to commence inert waste treatment to produce aggregates once the new area of the site has been upgraded.
- 2.1.4 Green waste is stored in a 40 yard skip in the skip storage area in the southern part of the site, along with two other skips for scrap.
- 2.1.5 Fridges and freezers are stored in a storage building adjacent to the workshop in the northern processing building as shown on the Site Layout Plan.

2.2 Combustible Waste Types

- 2.2.1 In general, the following waste types present at the site are considered to be combustible materials:
 - Mixed waste
 - Wood
 - Cardboard/paper
 - Fines/lights
 - RDF
 - Ferrous metal
 - uPVC plastics
 - Green waste

2.3 Waste Acceptance Procedures

- 2.3.1 Waste acceptance procedures are detailed in the EMS and aspects are reproduced in the following sections which are considered relevant to fire prevention.
- 2.3.2 Pre-acceptance procedures are in place to provide accurate information on waste before it arrives on site. During pre-acceptance dialogue the customer will confirm the waste type, quantities and how it will be delivered to site.
- 2.3.3 Loads arriving on site are visually inspected through CCTV by the weighbridge operator for signs of steam or smoke. If acceptable the load is directed to the processing building.
- 2.3.4 Further acceptance checks are undertaken by a site operative as the load is tipped in the reception area, particularly checks for batteries or battery containing articles (eg. e-cigs). If the waste is acceptable, it is pushed into the waste for shredding stockpile. Any batteries or unwanted (bulky) items are removed for quarantine/landfill. A quarantine skip is located on the western site boundary as shown on the FPP Drawing.
- 2.3.5 Once the load has been deposited in the reception area, checks also include detection of any smouldering waste or whether the waste is considered to be a hot load. Waste would then be transferred to the quarantine area in the yard to separate out any smouldering waste and/or allow to cool prior to processing.

2.4 Storage of Combustible Wastes

- 2.4.1 Storage of combustible material will be in accordance with EA guidance on maximum stockpile sizes and separation distances, as shown on Drawing No 23015/04A. Unless separated by a firewall, a minimum of 6 m separation distance will be maintained between each combustible waste stockpile. The maximum height of stockpiles is 4 m or 1 m below the height of any firewall to help prevent the spread of fire.
- 2.4.2 The main processing building benefits from fire resistant concrete lego blocks inside the building. Storage bays under and adjacent to the picking lines are fully enclosed by steel panels. The trommels and picking lines also have fully enclosed steel walled bays beneath.

- 2.4.3 The transfer station aims to operate to a maximum of 7-day turnaround time for incoming waste. The maximum storage time for any combustible waste will be 3 months under normal operating conditions. If waste is required to be stored for longer than 3 months, for example due to a problem with the outgoing recovery route, then contingency temperature monitoring of waste will be carried out until it is removed from site. Further details on contingency actions are contained in Section 4.7.
- 2.4.4 Table 2 summarises the total amount of combustible waste and the types and forms (eg unprocessed or processed) that will be stored at any one time at the site.

Ref	Waste type	Location	Form	Max Storage Time	Maximum Waste Pile Dimensions (m) ¹ L x W x H	Maximum Waste Pile Volume ² (approx m ³)
1	Waste for shredder		Unprocessed	7 days	8 x 8 x 2	100
2	Waste for trommel	Processing Building	Unprocessed	7 days	6 x 6 x 2	51
3	Fines	(North) ³	Processed	14 days	10 x 5 x 3	100
4	Recyclable fractions		Processed	14 days	20 x 5 x 3	200
5	Waste for shredder		Unprocessed	7 days	8 x 8 x 2	100
6	Waste for trommel		Unprocessed	7 days	8 x 8 x 2	100
7	Fines	D	Processed	14 days	10 x 5 x 3	100
8	Fines	Processing Building	Processed	14 days	10 x 5 x 3	100
9	Recyclable fractions	(South)	Processed	14 days	16 x 9.5 x 2	368
10	Ferrous metals		Processed	14 days	8 x 5 x 2	125
11	Residual waste		Processed	14 days	8 x 8 x 2	200
12	Green waste	Yard	Unprocessed	14 days	6.2 x 2.4 x 2.4	35
13	Ferrous metal	Yard	Processed	14 days	6.2 x 2.4 x 2.4	35
14	Ferrous metal	Yard	Processed	14 days	6.2 x 2.4 x 2.4	35

Table 2: Maximum Waste Storage and Volumes

Notes:

- 1- Stockpile dimensions are approximate only.
- 2- Refer to stockpile calculation spreadsheet and associated stockpile volume diagrams in Appendix A for volume calculations.
- 3- Waste is currently not being processed in the northern processing building; the above details for waste processed and stored in this building is indicative only.

2.5 Stock Recording and Rotation

2.5.1 Stock will be processed on a 'First In First Out' principle by managing placement and removal of waste. Incoming waste is added to the waste stockpiles and the stockpile is pushed towards the processing plant. This creates free space at the rear of any stockpile for new additions and ensures that the oldest waste is treated first.

3. FIRE RISK ASSESSMENT AND REDUCTION CONTROLS

- 3.0.1 Potential causes of fire that have been identified are:
 - Arson or vandalism
 - Stockpiles spontaneous combustion
 - Accumulation of dust
 - Flammable and combustible liquids storage
 - Electrical equipment faults
 - Build-up of combustible material around equipment
 - Discarded smoking materials/ unauthorised smoking
 - Hot exhausts
 - Hot works (eg welding/ cutting)
 - Sparks from loading shovels/buckets
 - Hot loads deposited at the site
 - Ignition sources within mixed waste (eg batteries, e-cigs)
- 3.0.2 The FPP objectives are to:
 - minimise the likelihood of a fire happening;
 - aim for a fire to be extinguished within 4 hours; and
 - minimise the spread of fire within the site and to neighbouring sites.
- 3.0.3 This is achieved by the management controls listed in the following sections and summarised in Table 3.

3.1 Fire Detection

- 3.1.1 The main processing building (south) benefits from thermal cameras so that temperatures can be continuously monitored. A screen in the weighbridge office shows the hottest point in the building and is observed during operational hours by the weighbridge operator. Out of hours it is monitored alongside the CCTV by a security contractor.
- 3.1.2 If heat above 110°C is detected out of operational hours by the thermal cameras, an alarm is triggered and the security contractor would contact the Fire Services and the designated key holder to enact a response.
- 3.1.3 The thermal imaging system is maintained by the installer every 6 months.

- 3.1.4 There is also a manual fire alarm system in place, consisting of a combination of break glass call points and air horns, so that the alarm can be raised by site operatives; further details are provided in Section 4.2. The locations of the call points and air horns are shown on the FPP drawing.
- 3.1.5 As part of site development works, it is intended to install an automatic fire suppression system in the near future.

3.2 Monitoring/Inspections

- 3.2.1 Daily checks are conducted and recorded by the yard manager which includes fire hoses, stockpile sizes and separation distances.
- 3.2.2 A final fire check is carried out by the OM or designated representative at the end of each day, checking for heat or signs of smoulder.

3.3 Fire Suppression

- 3.3.1 The site currently operates with a manual fire suppression system which includes a mains fire hose and fire extinguishers around the site as shown on the FPP drawing.
- 3.3.2 Fire extinguishers are located throughout the site as shown on the FPP drawing, and in mobile plant. These are checked by site staff on a monthly basis and tested on a 6 monthly basis.
- 3.3.3 Two electric shredders have been purchased for the site and are awaiting installation, and these have integral fire suppression systems with temperature monitors and water deluge systems.

3.4 Mobile Plant/ Processing Plant

- 3.4.1 All mobile and static plant are checked daily for defects/spills etc. All details of defects, problems and repairs carried out will be recorded on the day and submitted to the OM for actioning as necessary. All repairs will be carried out as soon as practicably possible.
- 3.4.2 Essential spares for plant maintenance are kept on site in the workshops. In general, plant machinery and equipment are maintained in the workshop. HGVs are maintained at the WB site in Bury.
- 3.4.3 Electricity boards for processing plant are located in sealed and ventilated units to reduce the presence of dust. Control panels on plant have positive pressure systems to keep dust out.

- 3.4.4 All mobile equipment has its own extinguisher, and these are checked in accordance with manufacturer's instructions.
- 3.4.5 Mobile plant will be located away from combustible stockpiles when the site is not operational.
- 3.4.6 All vehicles entering the site will be checked at the waste reception area to ensure there are no fuels or other leaks trailing from the vehicle.
- 3.4.7 Any spills or leaks will be soaked up using absorbent material from the spill kit located in the main workshop.

3.5 Waste Management System

- 3.5.1 Waste acceptance procedures are in place to ensure that unauthorised waste or hot loads are not received. All arriving loads must be un-sheeted and are then visually checked at the weighbridge using the CCTV.
- 3.5.2 'First In First Out' principle is operated for all material. Stockpile rotation ensures that incoming unprocessed mixed waste that has been stored the longest is processed first. Also, combustible processed waste that is stored the longest will be removed off site first.
- 3.5.3 Stockpile dimensions and separation distances of all combustible waste piles will be maintained in accordance with EA Guidance, as shown on the FPP drawing.
- 3.5.4 Storage times of permitted waste will be kept below three months. The site aims to operate on a 7-day maximum waste turnaround time.

3.6 Housekeeping

- 3.6.1 Litter picking is conducted on a daily basis. If litter on site is becoming an issue, additional site operatives will carry out litter picking duties as and when required.
- 3.6.2 The picking lines are cleaned on a weekly basis.
- 3.6.3 Daily clearing of material from all mobile plant including all exhausts and clearing build-up of material on moving parts of the plant, such as conveyors and magnets.

3.7 Company Smoking Policy

3.7.1 No smoking is allowed on site, and this is enforced through signage and communicated to visitors and sub-contractors on arrival.

3.7.2 Smoking is only permitted in the dedicated smoking area located at the site entrance and metal bins are provided.

3.8 Security

- 3.8.1 The site is fully enclosed by palisade fencing and steel walls and there are lockable gates when the site is not operational to prevent unauthorised access.
- 3.8.2 The site is operational between 07:30 and 18:30 Monday to Saturday. A security contractor monitors the site by CCTV out of hours.

Hazard	Risk Management / Controls	Overall Risk
Arson &/ or Vandalism	 The site is fully enclosed by fencing and lockable gates. The gate at the entrance to the site is locked outside of operating hours. Thermal imaging cameras are in place in the processing building (south) that trigger an alarm to ASM out of hours if temperature is detected above 110C. Range of fire extinguishers around the site. CCTV is in place and monitored 24 hours and 365 days per year. 	Low
Stockpiles - Self Combustion	 Thermal imaging cameras are in place in the processing building (south). Maximum storage time of 7 working days for the majority of combustible wastes. Stock rotation system to ensure 'first in -first out' processing. All combustible stockpiles are on concrete surfacing or in skips. There will be no sources of ignition (ie heating pipes, light bulbs etc) within 6 m of combustible stockpiles. Designated quarantine area on site for removal of hot loads or stockpiles detected with high temperatures by the thermal cameras. There are a number of fire extinguishers around the site and a water hose. Staff are trained in Fire Awareness Training which includes looking for hot loads, smoke or smouldering waste. Fire suppression system will be installed as part of the site development. A final fire check is carried out by the OM or designated representative at the end of each day, checking for heat or signs of smoulder. 	Low
Accumulation of Dust	 Daily clearing material from all mobile plant including all exhausts. Clearing build-up of material on moving parts of the plant, such as conveyors and magnets. Control panels on plant have positive pressure systems to keep dust out. 	Low
Flammable and Combustible Liquids/Gas storage	 Bunded diesel fuel (6,500 L tank) stored on site for use in plant and machinery located adjacent to the welfare cabin. IBCs containing oils and adblue are stored in the workshop Gas cylinders are stored in the main workshop and welder's workshop. No ignition sources stored in these areas. 	Low

Table 3: Fire Risk Assessment and Mitigation

Hazard	Risk Management / Controls	Overall Risk
Electrical Equipment Faults	 All electrics on site are fully tested as part of the building regulations and fully certified by a qualified electrician; where any new electrical installation is required an Electrical Install Certificate will be issued. Annual inspections will then be conducted for all electrical wiring and mobile electrical equipment by a qualified electrician and an Electrical Installation Certificate Report will be issued. Staff training to ensure electrical safety awareness. Ensure all cables are kept secured and out of the way. The use of extension cables and multi-points is kept to a minimum. Any electrical faults will be fixed as soon as practicably possible. Electricity boards for processing plant are located in sealed and ventilated units to reduce the presence of dust. 	Low
Build-up of Combustible Material around Equipment	 Mobile plant will not be stored around combustible waste piles. Clearing build-up of material on moving parts of the plant, such as conveyors and magnets. 	Low
Discarded Smoking Materials/ Unauthorised Smoking	 Smoking only allowed in the designated smoking area. Metal bins are provided for cigarette butts. Staff training and awareness. 	Low
Hot Exhausts	 Monitoring of exhausts during operations by site operatives. Staff training and awareness. Thermal cameras monitor the temperatures in the processing building (south). 	Low
Hot Works (eg welding/ cutting)	 Permit to work scheme and safety induction as to the risks associated with their activities. A fire watch will be conducted during any hot works and for at least one hour following completion of works. A portable extinguisher immediately available during all hot works. Staff training and awareness. 	Low
Sparks from loading shovels/ buckets	Fire extinguishers are fitted within all vehicles.Staff training and awareness.	Low

Table 3 (cont): Fire Risk Assessment and Mitigation

Hazard	Risk Management / Controls	Overall Risk
Hot Loads deposited at the site	 Fire awareness training is provided to all new employees so they are aware to look for smoke or smouldering waste. If a load is inadvertently deposited with a high temperature it would be moved to the quarantine area to be allowed to cool prior to processing. Suspected hot loads will not be accepted into the processing buildings. 	Low
Ignition sources within mixed waste: Batteries	 Staff are trained to look for batteries when waste is first deposited, and also in the picking lines. Visual inspection on receipt of material after tipping before pushing into incoming waste stockpile. Further checking on the picking line and processing belts. There are fire extinguishers located in the picking lines. Procedure and training for machine operators on sources of ignition and looking for signs of sparks and smoke during movement of material. 	Low
Use of industrial heaters	Industrial heaters are not used at this site.	None

Table 3 (cont): Fire Risk Assessment and Mitigation

4. FIRE RESPONSE PLAN

4.1 General

- 4.1.1 The number of staff working on the site is recorded at all times and details kept in the weighbridge office. In the event of a fire, all staff should go to the designated Fire Assembly Point which is located at the site entrance as shown on the FPP drawing, and the OM or designated Fire Marshall should ensure that all staff are accounted for.
- 4.1.2 Plant that can be utilised in the fire response to help with the FRS will be maintained regularly, and always placed in the same location when not being operated and not located near combustible material. A designated location for mobile plant not in use is shown on the FPP drawing.
- 4.1.3 The FPP drawing shows the location of the fire extinguishers, fire assembly point, stockpiles of combustible materials, the quarantine area and the location of plant that can be used to assist the FRS.

4.2 Emergency Action Procedures

- 4.2.1 The following procedure is to be followed on discovering a fire:
 - Raise the alarm using the closest fire alarm call point or airhorn
 - Call the FRS immediately (999);
 - Attack the fire if it is safe to do so using equipment on site, eg an extinguisher or firehose;
 - Stop all operations at the site and stop personnel and vehicles entering the site:
 - Manually shut off the pumping stations so that any firewater can be contained;
 - Remove waste materials to the quarantine area in the yard if required;
 - Oversee the making safe of any machines/appliances/processes/power supplies that need to be stopped or isolated;
 - Notify surrounding neighbours (refer to Table 4 below). Liaise with FRS about whether evacuation of surrounding industrial areas is required;
 - Ensure operators of appropriate machinery are standing by to help create fire breaks, under the direction of the FRS when they arrive;
 - Ensure the main access route is clear; and
 - Maintain a fire watch after any incident.

Neighbour	Direction	Phone Number
	from Site	
LGF Commercial Bodybuilders	N	07912 612705
Almic Engineering	NW	01706 846343
D & M Skip Hire	NW	0161 6244891
LGM Autos	W	01706 848777
HNQ Plant and Machinery	S	01706 849892
Hopwood Gear	W	0161 6244891
Dronsfield Mercedes	N	0333 2401020

Table 4: Surrounding Neighbour Details

4.3 Fire Fighting Techniques

- 4.3.1 The following active fire-fighting techniques will be employed at the site to help a fire be extinguished within 4 hours:
 - The main access for fire engines is via the site entrance and this will remain clear of vehicles at all times;
 - In the event of a fire, mobile plant can used under the direction of the FRS to move waste around the site (eg removing unburned material to the quarantine area);
 - Fire extinguishers are available around the site for use by staff if appropriate. Staff are trained in their use, and they are maintained and inspected by a third party specialist contractor;
 - Mains water is available on site at all times for firefighting and use in cooling hot loads or unburned material that has been moved to the quarantine area;
 - Designated quarantine area is available for use in the event of a fire so that unburnt waste can be removed from buildings; and
 - Staff will be available immediately during working hours to assist FRS in firefighting and within 20 minutes out of hours as designated by the key holders. Such staff will be trained to operate site plant.

4.4 Water Supply

4.4.1 Based on the water supply required as per the EA guidance (at least 2,000 litres per minute for a minimum of 3 hours for a 300 m³ pile), and the maximum combustible waste pile on site which is the recyclable fractions under the picking line in the south (368 m³), it has been calculated that a total of 442 m³ of water would be required:

2000 L per minute for 300 m^3 300 $m^3/2000$ L = 0.15 $m^3/1$ L 368 $m^3/0.15$ m^3 = 2,453 L per minute 2,453 L x 180 mins = 441,600 L = 442 m^3 total

- 4.4.2 The nearest fire hydrant to the site is located on Mossdown Road which is approximately 40 m from the site entrance.
- 4.4.3 Mains water is available via 2 x water hoses one adjacent to the site entrance and the other in front of the main processing building as shown on the FPP drawing.
- 4.4.4 Mains water will be used in the first instance to start to fight a fire (if safe to do so). The flow rate from the hoses was measured on site was recorded to take 4 minutes to fill a 200 L drum. Therefore the flow rate from each hose will be 50 L per minute. Although this is less that the 2,453 L per minute required which is stated in 4.4.1, it constitutes a start and will help to minimise the spread of the fire until the fire service arrive.

4.5 Managing Firewater

- 4.5.1 The site benefits from containable sealed drainage systems in the north and south of the site as shown on the FPP drawing. A series of surface grids channel surface water to interceptors where it is then automatically pumped to foul sewer. The pumping stations can be manually overridden in the event of a large spill or fire so that spillage/firewater can be contained and prevented from entering the sewerage system.
- 4.5.2 There is also a 20,000 litre underground water storage tank (UST) located in the northern part of the site, associated with site drainage in this area, which would contain 20 m³ of firewater.
- 4.5.3 Firewater would be contained on site following employment of temporary booms across the site entrance and exit; containment booms will be kept in the fridge storage area. To prevent firewater from running off the site, there is a 300 mm kerb bordering the site along Mossdown Road, and the processing buildings and bays bordering the site would also act in preventing any firewater from running off site. The steel wall which borders the site in the south and east would prevent firewater from flowing offsite.
- 4.5.4 Based on the containment booms, buildings, kerbs, underground storage tank and by manually overriding the pumping stations, it has been calculated that the site could effectively contain 1,233 m³ of fire water at the site. This is more than enough to extinguish the largest stockpile on site (442 m³ water required for a 368 m³ stockpile). The calculation for firewater containment volume has been determined as follows:

Area of all yards contained by booms at entrance/exit, kerbs and buildings: 6,164 m^2 6,164 m^2 x 0.2 m 'ponding' = 1,233 m^3 Plus 20,000 litres UST = 20 m^3 Volume of firewater that could be contained = 1,253 m^3

- 4.5.5 The volume of firewater that could be contained (ie 1,253 m³) is considerably more that would be required according to the EA guidance to extinguish the largest stockpile; 442 m³ required to extinguish the largest stockpile of 368 m³.
- 4.5.6 Once a fire at the site has been extinguished, contained firewater would be removed from site to a suitably licensed facility.

4.6 Managing Waste/ Combustion Products

4.6.1 A designated quarantine area will be used in the event of a fire which is located in the yard as shown on the FPP; it is 6 m from the site boundary. Unburnt waste can be moved to this quarantine area in the event of a fire. The size of the quarantine area is sufficient to contain 50% of the largest stockpile on the site as shown in the following calculation:

Largest stockpile is 368 m^3 Quarantine area is 15 $m \times 10 \text{ m} = 150 \text{ m}^2$ Stockpiled up to 2 $m = 300 \text{ m}^3$ which is >50% of the largest stockpile

- 4.6.2 The quarantine area will be kept clear and available at all times to aid separation and management of wastes during an incident.
- 4.6.3 In the event of a fire, the waste operator will work with the EA, FRS, and the insurers to dispose of any waste combustion product material to a suitable location as quickly as possible to reduce the risk of this material causing harm to the environment. Measures to separate and contain this material to minimise its spread may include:
 - Keeping the material wet to prevent it blowing off site;
 - Covering the material to protect it from adverse weather;
 - Manually overriding the pumping stations to ensure no contaminated runoff enters the sewerage system; and
 - Bunding around the combustion product.

4.7 Contingency Plan

- 4.7.1 In the event of a significant fire at the site which requires shut down of operations, all customers with loads booked in will be contacted and informed that the site will be closed until further notice with immediate effect. Customers will be asked to inform drivers who are already enroute to site with immediate effect.
- 4.7.2 Depending on the length of time that the site remains non-operational following a fire, additional measures may be required to manage any stored waste at the site. This would include daily monitoring of combustible wastes and/or removal of combustible wastes to other treatment facilities.
- 4.7.3 Any damage to building infrastructure caused by a fire will be repaired before the site is operational again.

- 4.7.4 In the event of waste being stored for longer than three months, monitoring of the stockpiles will be conducted. This will include monitoring the temperature of waste piles by way of the thermal cameras and turning the waste stockpile if necessary. If the temperature rises above 50°C, the stockpile will be dismantled and spread out to cool.
- 4.7.5 In the event of a prolonged period of hot weather temperature monitoring will also be carried out as above.

5. STAFF TRAINING

- All staff are provided with a combination of in-house training and external training (eg NVQ's). Agency staff also go through induction and training where required. All training is controlled and approved by the company Health and Safety Officer.
- Any contractors working on the site will be given a basic induction prior to commencement of works, which will include the location of fire exits (if working within buildings) and what to do in the event of a fire.
- 5.3 Staff have had or will have fire awareness training which includes fire prevention and fire response. This training will be provided as part of the induction package. All staff will be made aware of the location of the FPP.
- All staff and site operatives will be trained so that they are familiar with the fire response plan, and there will be exercises to test how well the fire response procedures work. Practice fire drills will be conducted every 6 months.
- 5.5 Staff will have training to tackle small fires and understand the importance of ensuring control measures are carried out. All staff will be aware that they should not put themselves at risk and to call the FRS as soon as possible in accordance with the fire response plan.
- All employees will be trained to look for fires, hot loads, smoke and signs of smoulders and what action to take if they see one, such as the use of heavy mobile plant to move any suspect loads to a safe area, dousing suspect loads with fire extinguishers. This training will be conducted as part of the fire awareness training.
- 5.7 Site operatives will be trained in stockpile monitoring and management including how to detect and manage hotspots as part of the fire awareness training.

M Birkett C Gettinby
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Senior Consultant Director

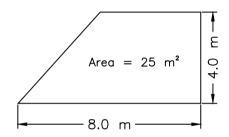
APPENDIX A

Stockpile Calculation Spreadsheet & Diagrams

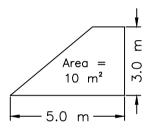
Building Ref	SP Ref	Location	Stockpile	Length	Width	Height	Stockpile Type	Other Calculations	Volume (m³)	Water Req'd (m ³)
			·				One sided			
North Processing		Free standing	Waste for				Truncated	Area of side of stockpile = 12.5 m ²		
Building	1	stockpile	shredder	8	8	2	Pyramid	12.5 m2 x 8 m = 100 m^3	100	120
							One sided			
North Processing		Free standing	Waste for				Truncated	Area of side of stockpile = 8.5 m^2		
Building	2	stockpile	trommel	6	6	2	Pyramid	$8.5 \text{ m2 x } 6 \text{ m} = 51 \text{ m}^3$	51	61.2
							One sided	2		
North Processing							Truncated	Area of side of stockpile = 10 m^2		
Building	3	Trommel	Fines	10	5	3	Pyramid	10 m2 x 10 m = 100 m^3	100	120
							One sided	2		
North Processing			Recyclable				Truncated	Area of side of stockpile = 10 m ²		
Building	4	Picking Line	fractions	20	5	3	Pyramid	10 m2 x 20 m = 200 m 3	200	240
							One sided	2		
South Processing		Free standing	Waste for				Truncated	Area of side of stockpile = 12.5 m ²		
Building	5	stockpile	shredder	8	8	2	Pyramid	12.5 m2 x 8 m = 100 m^3	100	120
							One sided	2		
South Processing		Free standing	Waste for				Truncated	Area of side of stockpile = 12.5 m ²		
Building	6	stockpile	trommel	8	8	2	Pyramid	12.5 m2 x 8 m = 100 m^3	100	120
							One sided	2		
South Processing							Truncated	Area of side of stockpile = 10 m ²		
Building	7	Trommel	Fines	10	5	3	Pyramid	10 m2 x 10 m = 100 m ³	100	120
							One sided			
South Processing							Truncated	Area of side of stockpile = 10 m ²		
Building	8	Trommel	Fines	10	5	3	Pyramid	10 m2 x 10 m = 100 m ⁴	100	120
							One sided			
South Processing			Recyclable				Truncated	Area of side of stockpile = 23 m ²		
Building	9	Picking Line	fractions	16	9.5	3	Pyramid	23 m2 x 16 m = 368 m ³	368	442
							One sided	2		
South Processing							Truncated	Area of side of stockpile = 19 m ²		
Building	10	Bay	Ferrouns metals	8	5	3	Pyramid	19 m2 x 5 m = 95 m ³	95	114
							One sided	2		
South Processing							Truncated	Area of side of stockpile = 19 m ²		
Building	11	Bay	Residual waste	8	8	3	Pyramid	19 m2 x 8 m = 152 m^3	152	182.4
								Skip dimensions =		
Yard	12	Skip	Green waste	6.2	2.4	2.4	Cube	6.2m x 2.4m x 2.4m = 35 m3	35	42
								Skip dimensions =		
Yard	13	Skip	Ferrouns metals	6.2	2.4	2.4	Cube	6.2m x 2.4m x 2.4m = 35 m3	35	42
	7							Skip dimensions =		
Yard	14	Skip	Ferrouns metals	6.2	2.4	2.4	Cube	6.2m x 2.4m x 2.4m = 35 m3	35	42

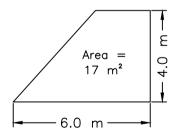
NORTHERN DRAINAGE CONTAINMENT AREA LARGEST STOCKPILE = 200m³ WATER REQUIRED TO EXTINGUISH = 240 m³

AREA OF YARD CONTAINED BY BOOMS AT ENTRANCE/EXIT 6,164 m 2 x 0.2 m 'PONDING' = 1,233 m 3 PLUS 20,000 LITRES UST = 20 m 3 VOLUME CONTAINED 1,253 m 3

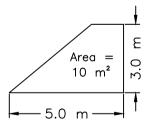


1. WASTE FOR SHREDDER: AREA $25 \text{ m}^2 \times 8 \text{ m} \text{ length} = 200 \text{ m}^3$





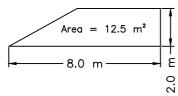
2. WASTE FOR TROMMEL: AREA 17 m^2 x 6 m length= 102 m^3



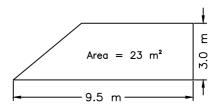
4. RECYCLABLE FRACTIONS: AREA 10 m^2 x 20 m length= 200 m^3

SOUTHERN DRAINAGE CONTAINMENT AREA LARGEST STOCKPILE = 368m³ WATER REQUIRED TO EXTINGUISH = 442 m³

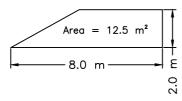
AREA OF YARD CONTAINED BY BOOMS AT ENTRANCE/EXIT 6,164 m² x 0.2 m 'PONDING' = 1,233 m³ PLUS 20,000 LITRES UST = 20 m³ VOLUME CONTAINED 1,253 m³



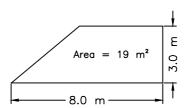
5. WASTE FOR SHREDDER: AREA 12.5 m^2 x 8 m length= 100 m^3



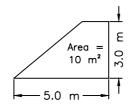
9. RECYCLABLE FRACTIONS UNDER PICKING LINE: AREA 23 m 2 x 16 m length= 368 m 3



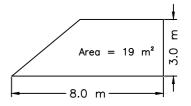
6. WASTE FOR TROMMEL: AREA 12.5 $\text{m}^2 \times 8 \text{ m} \text{ length} = 100 \text{ m}^3$



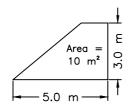
10. FERROUS METALS: AREA 19 m^2 x 5 m length= 95 m^3



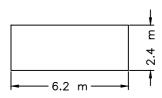
7. FINES UNDER TROMMEL AREA 10 $\mathrm{m^2}$ x 10 m length= 100 $\mathrm{m^3}$



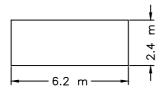
11. RESIDUAL WASTE: AREA 19 $m^2 \times 8$ m length= 152 m^3



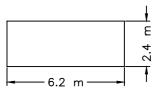
8. FINES UNDER TROMMEL AREA 10 m^2 x 10 m length= 100 m^3



12. GREEN WASTE IN SKIP: $6.2 \times 2.4 \times 2.4 \text{ m} = 35 \text{ m}^3$



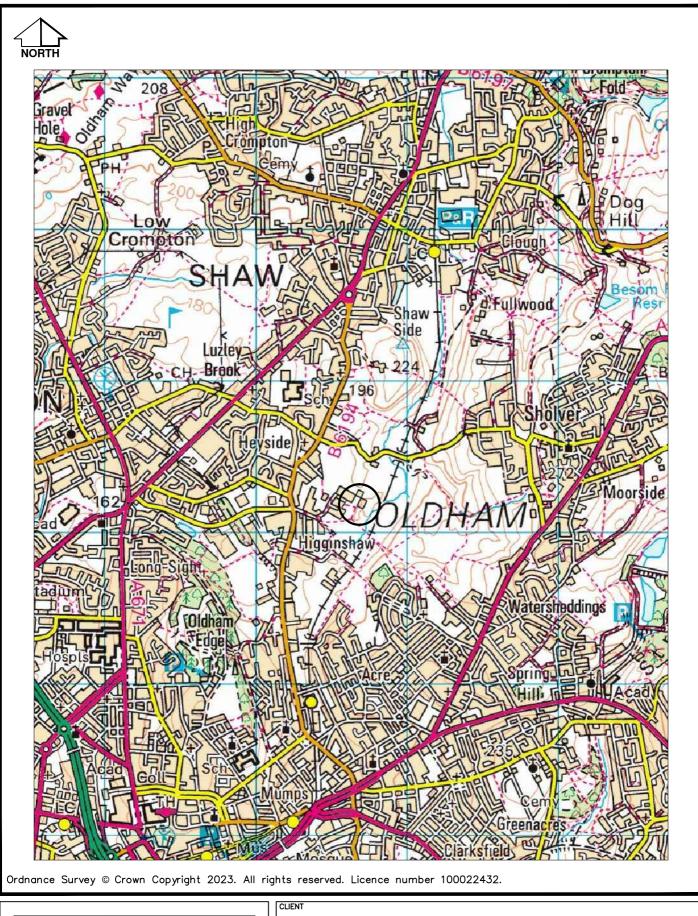
13. FERROUS METAL IN SKIP: $6.2 \times 2.4 \times 2.4 \text{ m} = 35 \text{ m}^3$



14. FERROUS METAL IN SKIP: $6.2 \times 2.4 \times 2.4 \text{ m} = 35 \text{ m}^3$

APPENDIX B

Drawings



THE ARLEY CONSULTING COMPANY LIMITED

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DRAWN BY.

M.Y.B.

APPROVED BY.

C.G.

WHEELDON BROTHERS WASTE LIMITED

JOB TITLE.

WHEELDON BROTHERS OLDHAM TRANSFER STATION

1:25,000

DRAWING TITLE.

SITE LOCATION PLAN

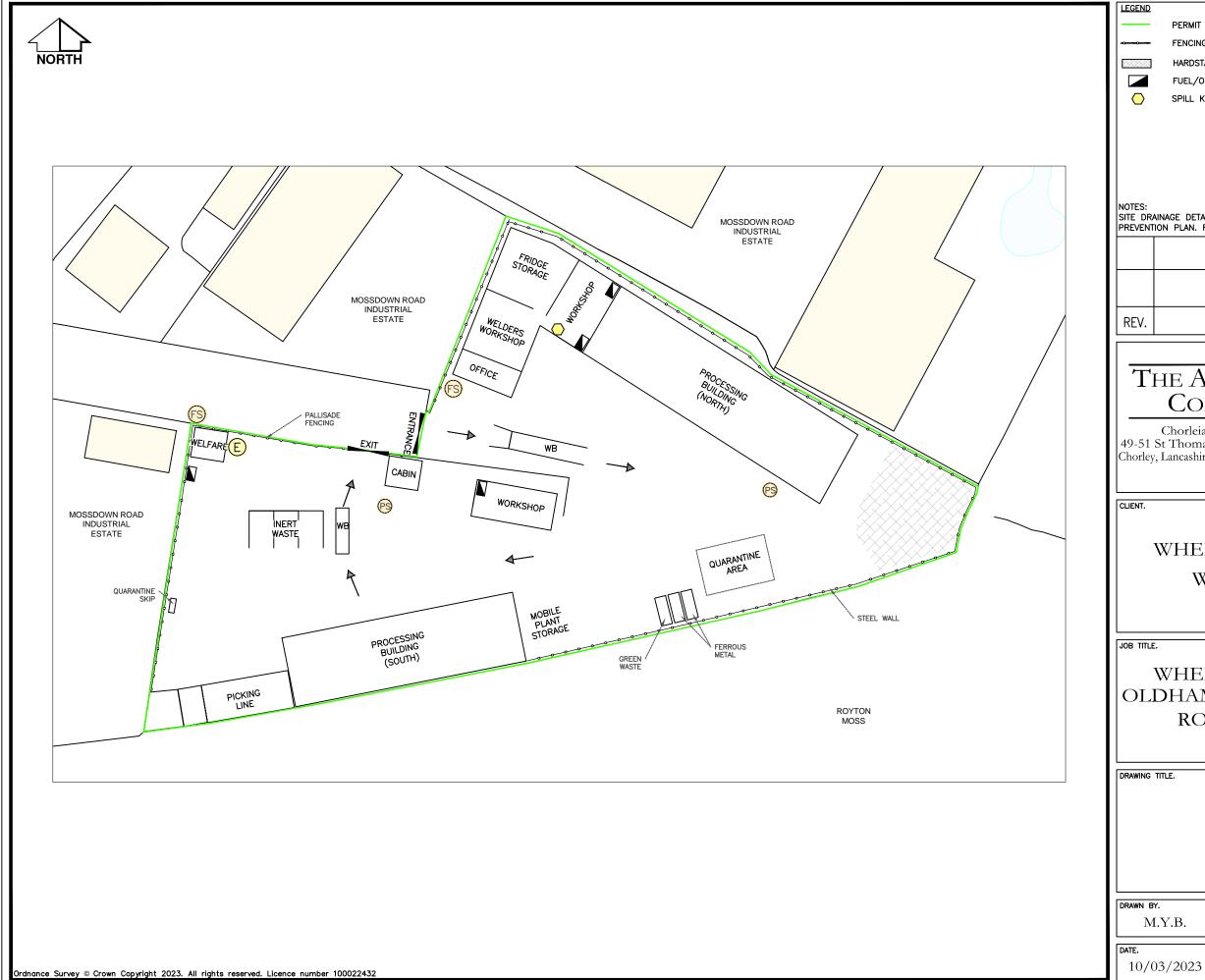
DATE.

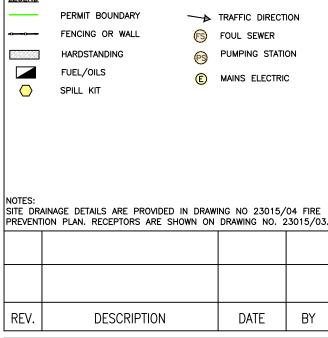
10/03/2023

SCALE.

DRAWING No.

23015/01





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WHEELDON BROTHERS WASTE LIMITED

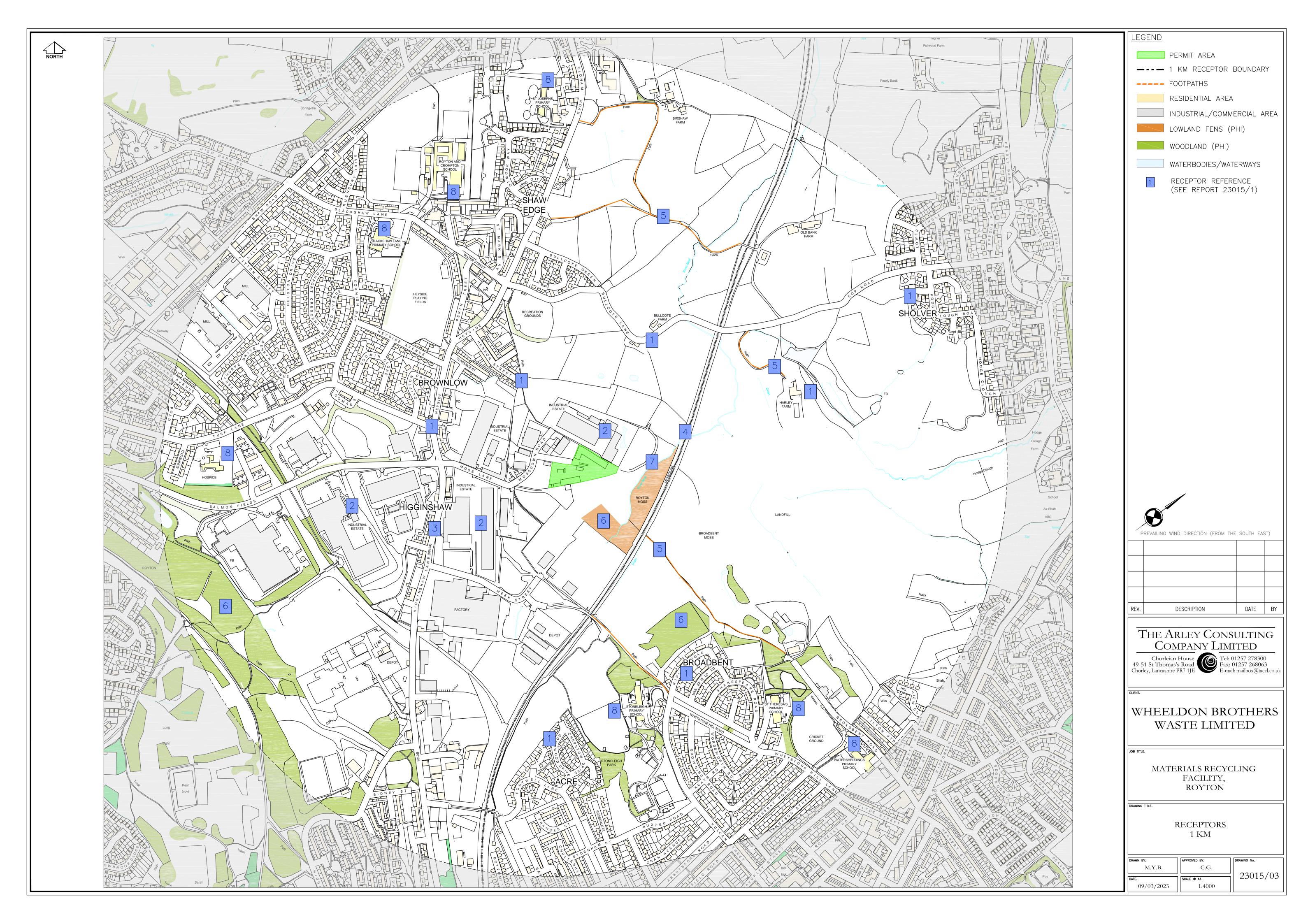
WHEELDON BROTHERS **OLDHAM TRANSFER STATION** ROYTON, OLDHAM

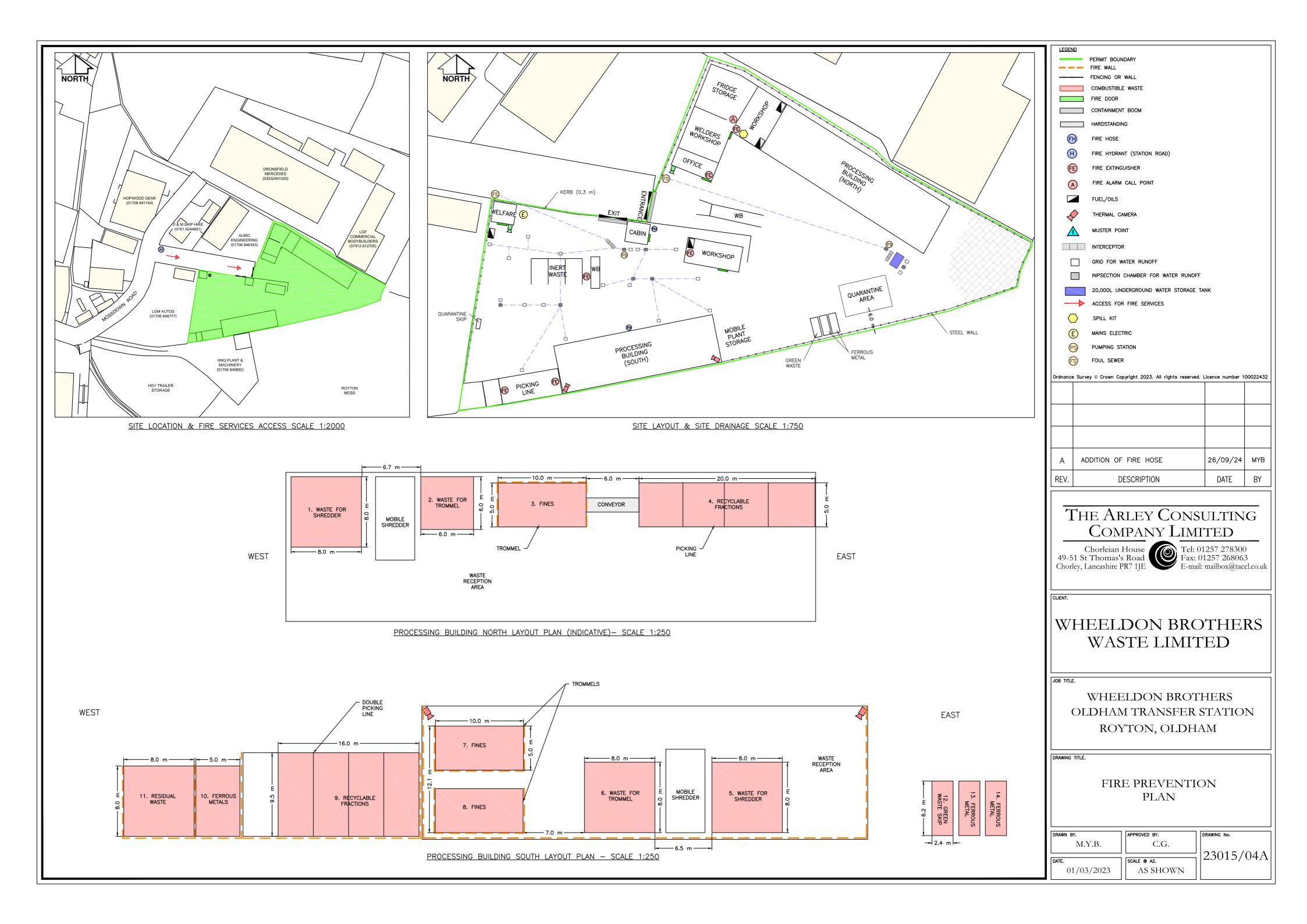
> SITE LAYOUT **PLAN**

M.Y.B.

APPROVED BY. DRAWING No. C.G.

SCALE @ A3. 1:800 23015/02





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