

# **FIRE PREVENTION PLAN**

C O'Donovan & Sons Ltd  
11 – 13 Ashfield Way  
Whitehall Industrial Estate  
Leeds  
LS12 5JB

Version 1.0 April 2021



**SJW Enviro Consulting Ltd**

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Drawing No. – COD/AW/FPP/01	Site layout plan
Drawing No. – COD/AW/FPP/02	Waste storage areas

## 1.0 Purpose

The purpose of this document is to identify potential fire hazards, detail the controls implemented to prevent fires and the actions taken to reduce the impacts should there be a fire on site.

This plan has been prepared in conjunction with the format prescribed by the Environment Agency and detailed in the Environment Agency Guidance Document – *Fire Prevention plans: environmental permits* published 29 July 2016 and updated 9 January 2020.

## 2.0 Scope and Objectives

This Fire Prevention Plan is applicable for C O'Donovan & Sons Ltd, 11 – 13 Ashfield Way, Whitehall Industrial Estate, Leeds, LS12 5JB.

The fire prevention measures in this plan have been designed to meet the following objectives:

- Minimise the likelihood of a fire happening
- Aim for a fire to be extinguished within 4 hours
- Minimise the spread of fire within the site and to neighbouring sites.

## 3.0 Management responsibilities

### 3.1 Site management

- Ensure the effective implementation of the Fire Prevention Plan;
- Allocate sufficient resources to ensure that the Fire Prevention Plan can be implemented;
- Monitor the overall effectiveness of the Fire Prevention Plan through regular site inspection and site operative liaisons;
- Regularly update the Fire Prevention Plan as required and carry out an annual review.

### 3.2 Site operatives

- Follow operating instructions and report discrepancies between these instructions and the work;
- Maintain the fire prevention controls implemented by C O'Donovan & Sons Ltd (as detailed in this plan);
- Report any activities or events that could jeopardise the fire safety strategy.

## 4.0 The Site

### 4.1 The Site Location

The site is located off Ashfield Way on the Whitehall Industrial Estate, approximately 4.5 kilometres to the west south west of Leeds City Centre. The site entrance is directly off Ashfield Way as shown by the red star in Figure 1 below.

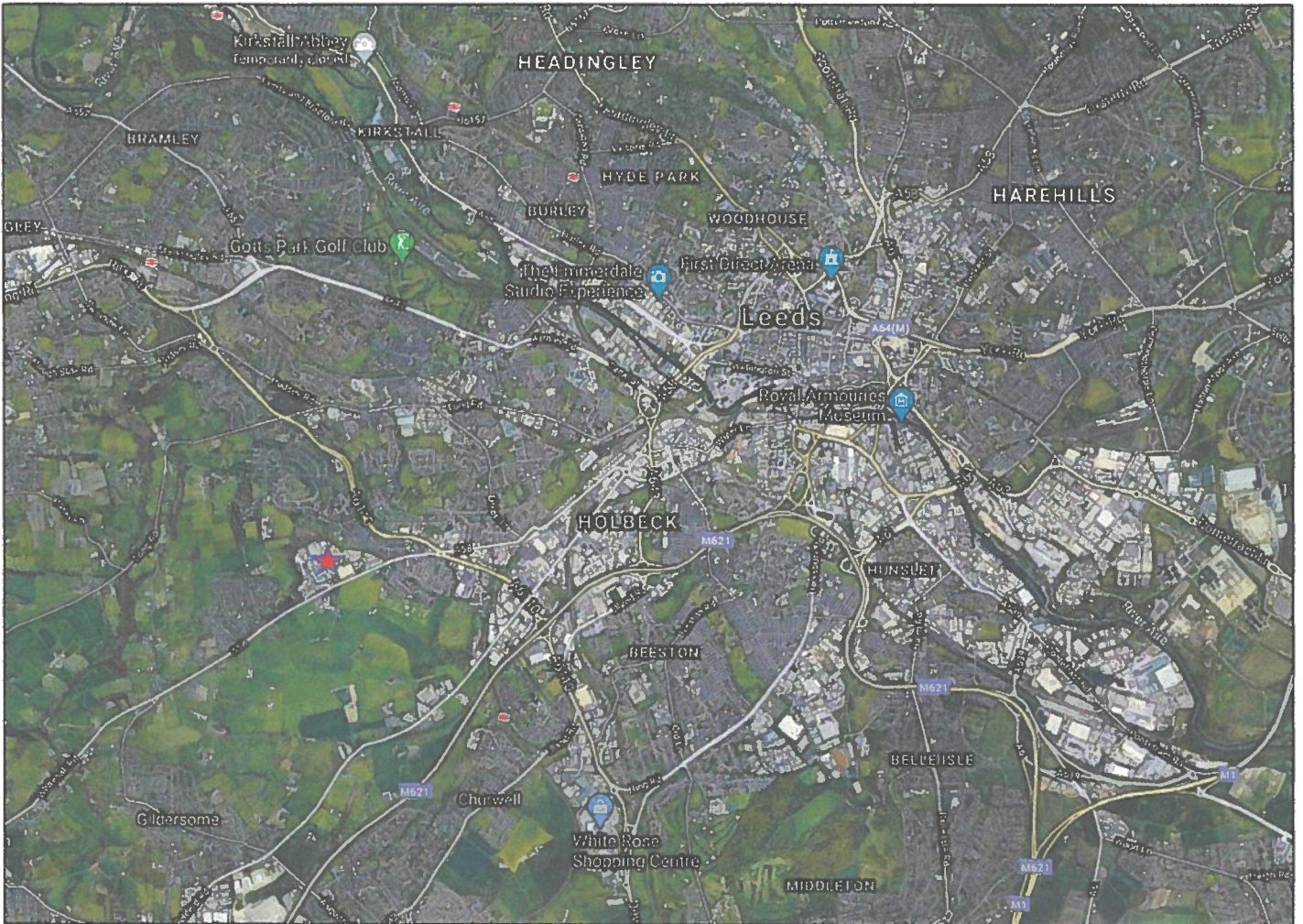
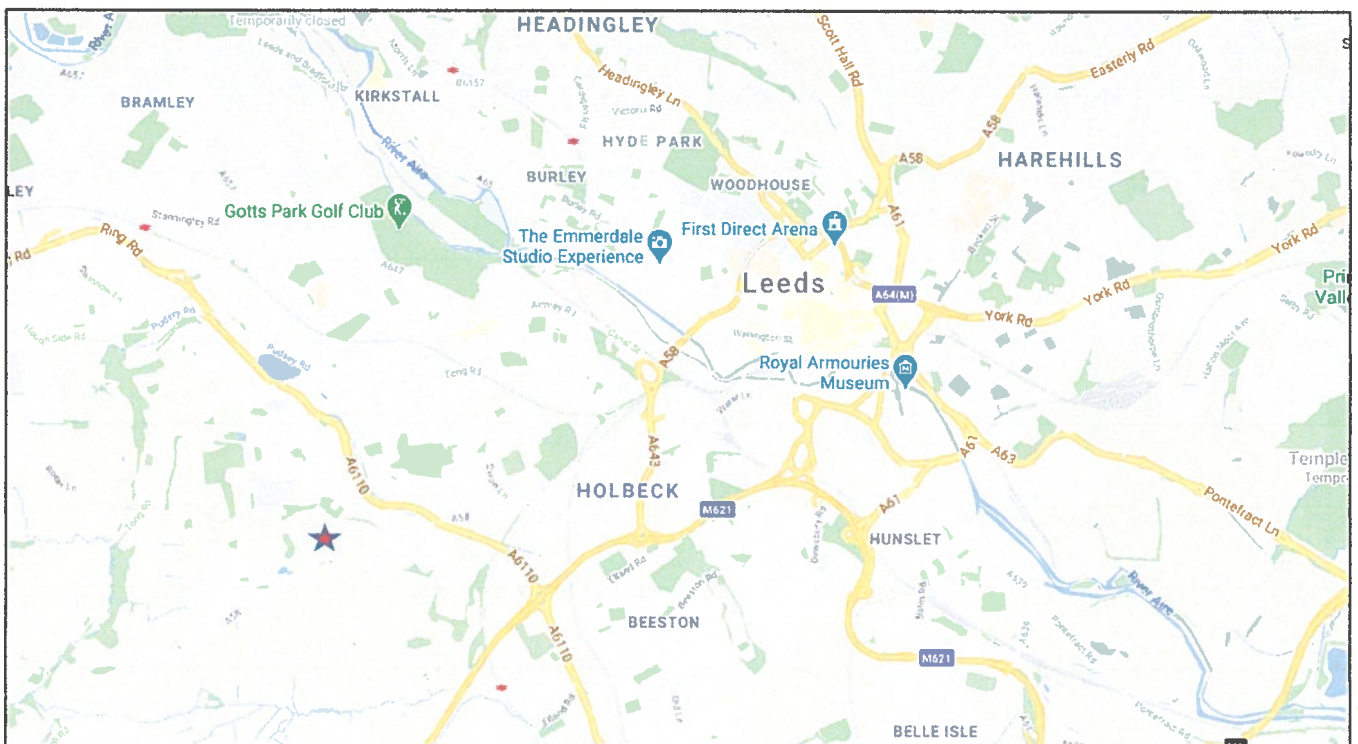


Figure 1: Location of the site





#### 4.2 Local receptors

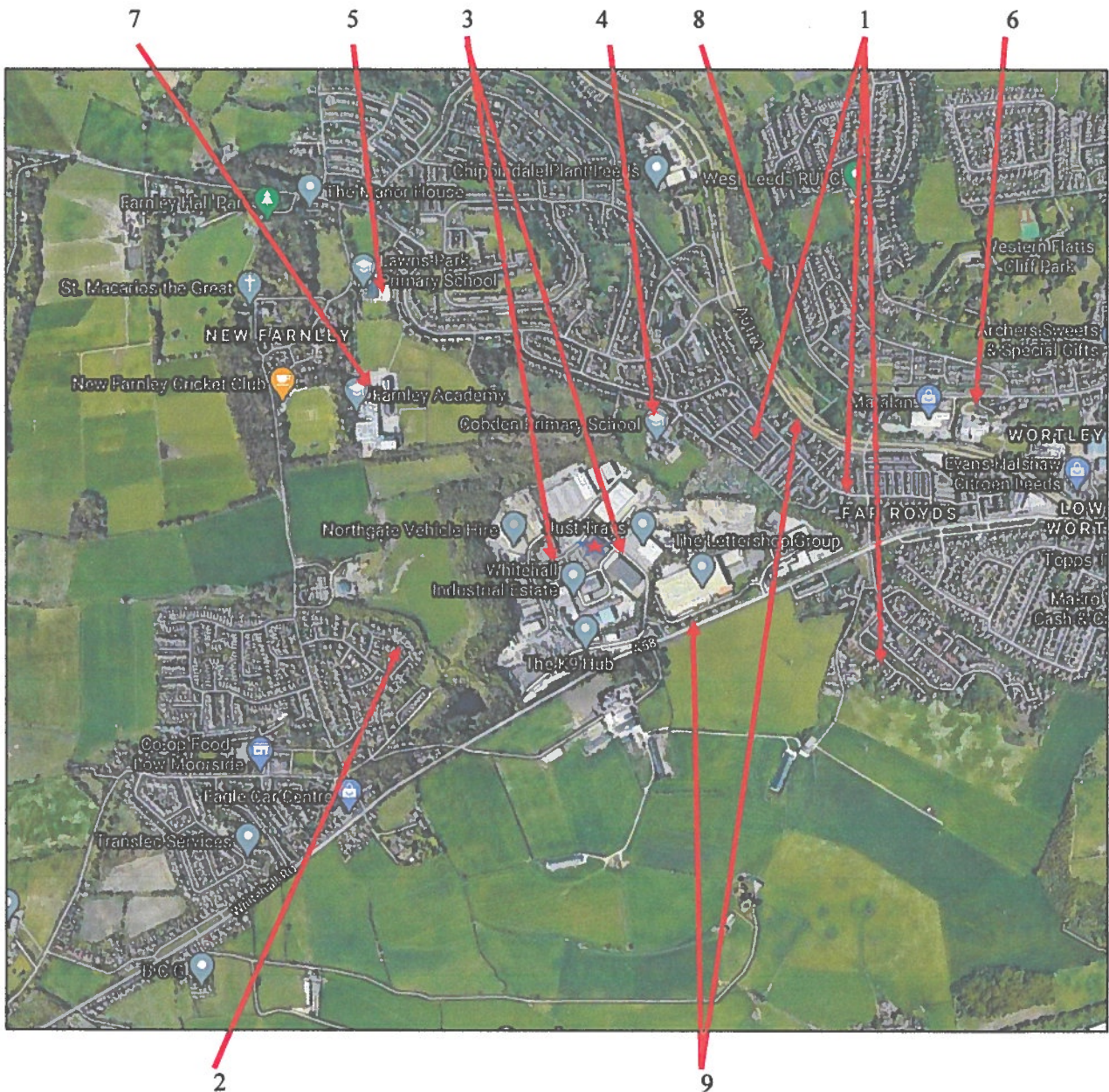
Within 1 km of the site the following key receptors are located:

- Residential property located 340 metres to the East, South East and North East of the site;
- Residential property located 470 metres to the West and South West of the site;
- Industrial, commercial and office developments located adjacent to the site on all sides;
- Cobden Primary School located 260 metres to the North East of the site;
- Lawns Park Primary School located 765 metres to the North West of the site;
- Lower Wortley Primary School located 880 metres to the East North East of the site;
- Farnley Academy located 560 metres to the North West of the site;
- Wortley Beck located 590 metres to the North East of the site;
- There are a large number of roads surrounding the site including the A58 Whitehall Road located 235 metres to the South and South East of the site and the A6110 Leeds Outer ring Road located 610 metres to the East of the site;

These local receptors would be impacted by a fire on site, however, the prevailing wind direction is south westerly thus reducing the likelihood of impact of air emissions on those receptors located to the south and west of the site.

The plan below shows the location of these sensitive receptors in relation to the site, the location of which is indicated by the red star. The numbers on the plan correspond to the following receptors:

1. Residential property located 340 metres to the East, South East and North East of the site;
2. Residential property located 470 metres to the West and South West of the site;
3. Industrial, commercial and office developments located adjacent to the site on all sides;
4. Cobden Primary School located 260 metres to the North East of the site;
5. Lawns Park Primary School located 765 metres to the North West of the site;
6. Lower Wortley Primary School located 880 metres to the East North East of the site;
7. Farnley Academy located 560 metres to the North West of the site;
8. Wortley Beck located 590 metres to the North East of the site;
9. There are a large number of roads surrounding the site including the A58 Whitehall Road located 235 metres to the South and South East of the site and the A6110 Leeds Outer ring Road located 610 metres to the East of the site;



## 5.0 Site activities

### 5.1 Permitted activities

This Fire Prevention Plan accompanies an application for an environmental permit to allow the reconditioning of metal and plastic containers and the storage and bulking up of a wide range of material. This storage allows the operator to offer a waste stop waste disposal service to its clients.

The applicant already runs a similar permitted operation at its facility on Ingram Road, Holbeck, Leeds.

## 5.2 Other non-permitted activities

As well as the permitted activities above the site also stores potentially flammable liquids that could pose a fire risk. The location of the storage areas for these non-permitted substances are shown on the attached plan Ref. COD/AW/FPP/02, site layout plan.

## 6.0 **Managing common causes of fire**

### 6.1 Arson

The permitted area is surrounded by fencing or walling to a minimum height of two metres. The entrance gate to the rear yard is a solid metal sheet which is locked shut at all times when the site is not operational.

Site boundary checks are completed weekly to ensure the site security is maintained and the risk of arson reduced.

The site has 24 hour CCTV coverage with cameras covering the yard and building areas. The cameras are monitored from the site office during working hours and can be monitored 24 hours a day by members of staff from mobile phones.

### 6.2 Plant and equipment

The only mobile plant used on site as part of the daily operations are fork lift trucks. Static plant and equipment, for example cleaning and drying machinery, is located entirely within the buildings on site and are marked on the attached drawing COD/AW/FPP/01.

Site maintenance activities are performed in accordance with operating procedures. The operators understands the importance of routine preventative maintenance. In summary, the following provisions are implemented:

- Plant maintenance schedules using the manufacturer's recommendations where vehicles are serviced after 500 hours of operation;
- Pre-use checks are completed prior to using plant and equipment daily;
- Defects are reported and actions taken based on priorities;
- All plant and equipment is visually inspected by the operator at the end of the working day for the purposes of identifying fire risks;
- Throughout the day operators are vigilant in checking vulnerable areas like exhausts and engine bays;
- Specialists contractors are used to perform maintenance outside the scope and expertise of the site management and operatives;
- All plant and equipment undergoes a thorough examination by independent insurers every 6 months as a minimum.
- All documentation relating to plant and equipment maintenance is retained in the site office for inspection.

All fork lift trucks have fire extinguishers in them and extinguishers are available on site should a small fire require fighting by site staff.



### 6.3 Electrical faults

All electrics on site, are installed by a fully qualified electrician. All portable electric appliances are PAT tested annually and certified by a fully qualified electrician. All installation and testing documentation is retained in the site office for inspection.

### 6.4 Discarded smoking materials

No smoking is permitted on any part of the site.

### 6.5 Hot works

No Oxy acetylene cutting currently takes place on site nor is there any other form of hot works cutting. This cannot therefore be a cause, or a contributory factor, to a fire on site.

### 6.6 Industrial heaters

This site does not use industrial heaters and these therefore cannot be a cause of fire.

### 6.7 Hot exhausts

While plant and equipment is in use throughout the working day and exhausts and engine bays inevitably heat up regular housekeeping takes place daily and operators continually and vigilantly monitor for potential fire risk situations.

At the end of the day mobile plant is parked away from the waste piles where possible or inside the building. Checks are made by site management on all items of plant and equipment to ensure that they do not pose any fire risk prior to closing the site for the day.

### 6.8 Ignition sources

Sources of ignition have been assessed and reduced as far as reasonably practicable. Remaining ignition sources have been identified and controlled as follows:

Smoking is not allowed on any part of the site.

Hot works in the form of cutting of metal are not carried out on site

All portable electrical appliances are PAT tested annually and certified by a fully qualified electrician. Electric lights are insulated.

There is a potential for sparks as plant regularly comes in contact with metal and concrete surfaces. The general housekeeping however makes fires from this source unlikely.

### 6.9 Batteries in end-of-life vehicles

The site does not accept end of life vehicles, nor is it permitted to do so.

### 6.10 Leaks and spillages of oils and fuel

Every attempt is made to prevent fuels and combustible liquids leaking or trailing from vehicles on site. Spill kits in the form of absorbent granules are located within the site buildings.

Should a spill occur staff are instructed to use the absorbent granules to cover the liquid and then clear up and place the contaminated material in a container awaiting removal from site to a suitably permitted facility for disposal. Spill kits are located in the site office and the washing shed.

#### **6.11 Build-up of loose combustible waste**

The site is visually inspected and cleaned daily to prevent the build-up of fragments that could cause slipping and tripping hazards. This also serves to prevent damage or punctures to vehicles using the site. As part of this process loose combustible waste is collected and stored awaiting removal from site.

The nature of the site is such that very limited amounts of loose combustible material are ever found within the permitted area.

#### **6.12 Reactions between wastes**

It is difficult to imagine any reaction between the types of waste accepted at the site, however, every load is inspected both as it arrives on site and when it is unloaded. If an adverse reaction has occurred in transit, then this would become apparent and necessary steps could be taken to deal with the situation. The site has a designated quarantine area where material can be isolated and dealt with accordingly.

#### **6.13 Deposited hot loads**

The waste acceptance procedure at the site ensures that every load is checked before it is unloaded and further checks are made when the material is cleared to be off-loaded (see waste acceptance in section 8.1). Under these circumstances, it is highly unlikely that a 'hot load' would be accepted on site.

Should such an eventuality occur and a hot load is deposited on site the material would be immediately moved to the quarantine area where site staff would monitor or deal with the situation as necessary under the guidance of site management.

### **7.0 Preventing self-combustion**

#### **7.1 Managing storage time**

On a daily basis all storage piles are visually inspected by the site manager for any anomalies, such as visual signs of heat, steam and vapour. Anomalies are actioned immediately by investigation and remedial action will be taken such as rotation of the material or damping down as deemed necessary.

Due to the nature of the business, site operators are located within the yard and building areas for the majority of the working day, they continually and vigilantly monitor the condition of all the processes for potential fire risk situations.

Storage time for waste materials is kept to a minimum where possible and it is not anticipated that waste will remain on site for more than three weeks before it is processed or removed from site.

#### **7.2 Monitoring and controlling temperatures**

There is no active physical monitoring of the temperature of the waste piles but site staff are continually monitoring the piles for any obvious signs of raised temperatures.

Out of hours, CCTV covers the whole site and this can be remotely monitored so signs of a fire on site would be identified quickly, site management would be notified and the emergency services contacted.

### 7.3 Waste bale storage

No bales are stored on site.

## **8.0 Managing waste piles**

### 8.1 Waste acceptance

All waste arriving on site, irrespective of the carrier, undergoes an initial inspection of the load by site personnel.

When the material has been accepted, the driver is directed to off load the vehicle in the appropriate area of the site. As the vehicle is unloaded site staff re-assess the material to ensure that there is nothing in the load that does not comply with the site permit. At this stage, they also check to ensure that the load is not hot or present any fire hazard. Non-permitted items are either loaded back onto the vehicle to be taken away or placed in the quarantine area awaiting further assessment.

### 8.2 Waste pile size

The height of stockpiles of material at the site is kept to a minimum wherever possible and there is a rapid turn-around of material on site. The bulk of the flammable material is made up of the ancillary wastes collected from clients along with drums and other containers.

The largest waste pile size is WEEE awaiting processing. At its maximum extent this stockpile will be 8 metres long, 8 metres wide and 2 metres high. A total of 128 cubic metres. Waste pile locations are shown on the attached drawing COD/AW/FPP/01.

Other maximum waste pile sizes for flammable material:

- Rags and cleaning cloths – 20 cubic metres (5m x 4m x 1m) in IBC's
- Oil filters – 20 cubic metres (5m x 4m x 1m) in 45 gallon drums
- Oil – 20 cubic metres (5m x 4m x 1m) in 45 gallon drums
- Fuel – 20 cubic metres (5m x 4m x 1m) in 45 gallon drums
- Plastic waste – 40 cubic metres (5m x 4m x 2m) in IBC's
- Scrap metal – 20 cubic metres (5m x 4m x 1m) in a skip

### 8.3 End of life vehicles

The site does not accept, nor is it permitted to accept end-of-life vehicles in any form.

### 8.4 Waste stored in containers

All ancillary waste materials are stored in containers (either cut up IBC's or 45 gallon drums). There is significant separation between the various waste types. While the building itself is bunded all containers which hold liquid waste are also stored inside their own bunds designed to contain 110% of the volume of the containers.

## **9.0 Preventing fires spreading**

### **9.1 Separation distances**

Significant separation distances are maintained on site between individual piles of material.

There is at least a 6 metre separation between potentially combustible material and any piles of waste or other hazards. Individual waste piles are separated by at least a six metre buffer zone.

### **9.2 Fire walls and bays**

There are no fire walls or bays on this site however the building is divided into three units. The brick walls and asbestos sheeting roof will play a significant part in reducing the spread of any fire within the building.

## **10.0 Quarantine area**

The quarantine area for this site is in the lower yard where containers are stored. There is sufficient space to store all of the combustible waste material on site in this area while still allowing access to all areas of the yard for site staff and the emergency services.

There is a separation of at least six metres between the quarantine area and the site perimeter as well as any other individual waste piles.

The quarantine area is rectangular in shape. The rectangle is 20 metres long by 10 metres wide.

The quarantine area is therefore approximately 200 square meters. As the largest waste pile has a base of 64 square metres the quarantine area is more than adequate to hold 50% of this largest pile.

## **11.0 Detecting and suppressing fires**

### **11.1 Detecting fires**

The site has 24 hour CCTV coverage with cameras monitoring both the inside of the buildings and the yard areas. Out of hours the cameras can be remotely monitored using mobile phones. All waste piles within the yard and buildings are covered by these cameras and a fire would be quickly detected.

During operational hours the site has a staffing level such that any fires would be quickly detected and remedial action could be taken if necessary.

Any fire on site would be considered an emergency and the fire service would be contacted as a matter of course.

### **11.2 Suppressing fires**

The designated incident controller, when appraised of a fire on site shall ensure:

- The emergency services are notified of the incident;
- Site senior management and technically competent managers are notified of the incident and requested to attend site if out of hours;

Fire extinguishers are available within the buildings in the unlikely event that a fire occurs. Small fires can also be dealt with using the sites own mains water.



## **12.0 Dealing with a fire on site and the aftermath**

### **12.1 Firefighting techniques**

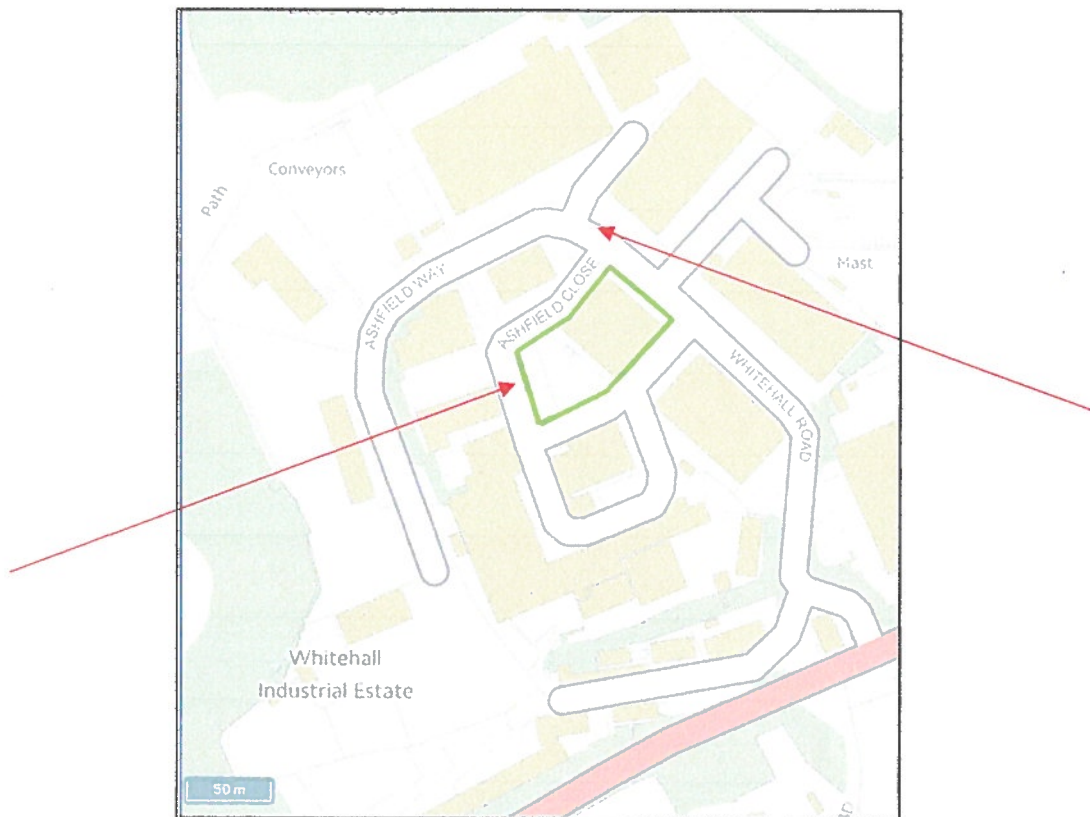
In the event of a fire the most senior member of staff on site would act as incident controller to deal with the situation.

To prevent an incident escalating and to reduce the spread of fire, there is a possibility to move unburnt material with the machines to an alternative area of the site, preferably the quarantine area. The initiation of this action would be taken by the incident controller and would always consider the safety of the employees. The assessment as to the feasibility of moving unburnt material would consider

- The safety of the operator inside the machine;
- The direction of the smoke;
- The heat of the fire;
- The means of escape for the operator;
- The likelihood of the machine catching fire due to radiated heat.

In the case of a small fire there is the option of using one of many fire extinguishers placed around the site to attempt to bring it under control. Again, the factors relating to the health and safety of the operatives must be taken into account and at no point should a site operative compromise his health and safety.

## 12.2 Water supplies



There are two fire hydrants located within 20 metres of the site, the first near the site entrance on Ashfield Way and the second close to the rear yard on Ashfield Close. The location of the hydrants are shown by the red arrows on the plan above.

West Yorkshire Fire and Rescue Service have confirmed that both hydrants can deliver water at 1800 litres per minute. This equates to a total of 648,000 litres over a three hour period which is comfortably enough to extinguish the largest waste pile on site.

The site has a mains water supply with a flow of 12 litres per minute and a water pressure of 1.5 bar. While this is inadequate to deal with a significant incident on site it can be used to deal with small fires.

The largest waste pile on site, WEEE, has a maximum volume of 128 cubic metres. Fire prevention guidance states that a water supply of 853.3 litres per minute for 3 hours is sufficient to deal with a waste pile of 128 cubic metres in volume. Therefore, a maximum of 153,600 litres of water would be required to deal with a fire in the largest pile.

## 12.3 Managing fire water

The whole of this site is surfaced with an impermeable pavement and bunded to a height of 15cm throughout. All liquid in the rear yard drains to a sump which is pumped out when required and the contents removed from site for treatment. No flammable waste material is stored in the external yard.

The building is split into three individual units and is also bunded. Water from the drum washing facility is collected in a sump in the building and removed from site. In the

event of a fire within the building fire water would be retained within the units by the bunds.

The buildings cover an area of approximately 2,350 square metres. With a 15cm bund around it the area could retain 352,500 litres of water. This is more than enough capacity to retain all the fire water required to put out a fire in the largest waste pile.

Following a fire on site the water would be pumped from the sump and the building and removed from the site to a suitably permitted facility.

#### **12.4 During and after a fire**

In the event of a fire at this site incoming vehicles would be diverted to the operators other site at Ingram Road, Holbeck, Leeds or other facilities outside the control of the permit holder in the Leeds area and continue until such time as it is deemed acceptable to recommence waste acceptance at the site.

In the event of a fire, site staff will be made available to contact local residents and businesses to make them aware of the situation. Deployment of staff will be at the site management and emergency services discretion. Should evacuation of the surrounding area be necessary then site staff would be in place to assist this process as well as to provide site specific information to the emergency services.

The Environment Agency will be informed of any fire on site within 4 hours of the incident.

Following any incident any fire damaged waste will be removed from site for handling and processing at another site. Any fire damaged property will be repaired or removed from site as necessary. Any clearance of debris from the site, including clearance of access routes will be undertaken before the site is declared fit for operation again. The sump will be emptied, and the contents removed for treatment at a suitably permitted facility. The site will not re-open without the agreement of the Environment Agency and the fire service.

### **13.0 Staff training**

All site staff are trained in the site operating procedures, maintenance procedures, the use of fire-fighting equipment and emergency plans, including this fire prevention plan.

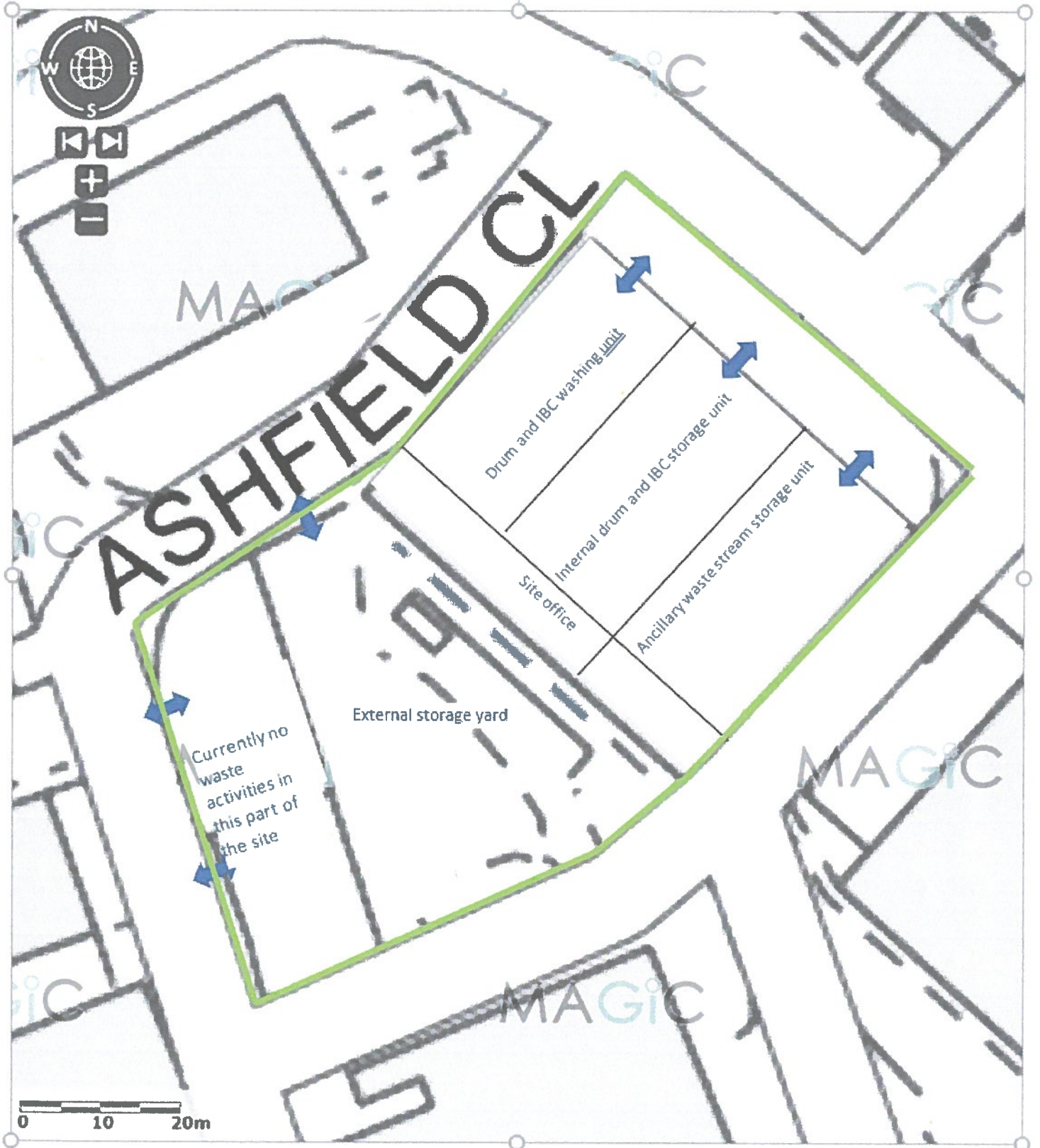
Refresher training and updates are given to site staff as and when required and the effectiveness of the training is tested through six monthly fire drills.

All training is documented, and the records are available for scrutiny on site. Each member of staff has their own training record where specific training sessions are documented.

### **14.0 Continual Improvement**

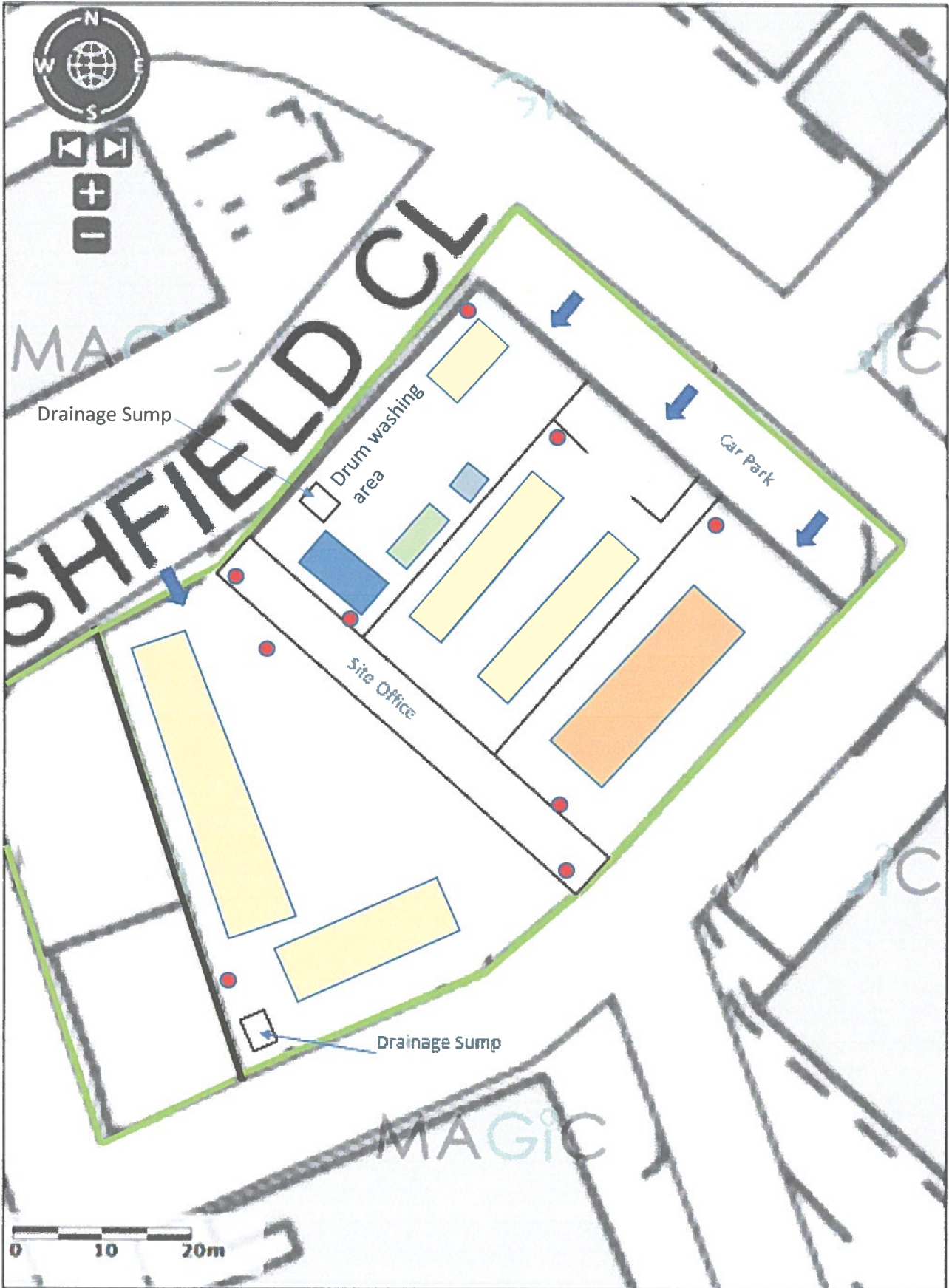
C O'Donovan & Sons Ltd are dedicated to continually improving site operations through investment and modification in staff and infrastructure. This Fire Prevention Plan is due for review before the end of April each year. The next review is to be carried out prior to 30 April 2022. Any amendments made to this plan will be sent to the Environment Agency for their consideration and incorporation.

Drawing No. – COD/AW/FPP/01 Site layout plan













Drawing No. – COD/AW/FPP/02 Waste storage areas



**KEY:**

-  Permit boundary
-  Access points
-  Dirty drums and containers awaiting washing.
-  Bunded storage area for liquids and fuel
-  Residual waste storage in IBC's or steel drums (WEEE, rags, oil filters etc.)
-  Fire extinguishers
-  Scrap plastic
-  Scrap metal