



JWitt is a trading name for J W Waste Recycling

Fire Prevention Plan

Reference: EMS-FPP-03

Environmental Permit EB3607KW

SR2015 No6 75kte

Household, commercial and industrial waste transfer station with treatment

Newbury Works
Coleford, Radstock
Somerset BA3 5RX



Fire Prevention Plan

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DOCUMENT CONTROL SHEET

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1 INTRODUCTION

This is the Fire Prevention Plan for the J Witt (J W Waste Recycling Ltd.) Site at Newbury Works, Coleford, Somerset, BA3 5RX.

1.1 Purpose

The primary purpose of this Fire Prevention Plan (FPP) is to guide staff and contractors in the prevention of fire. This FPP also confirms the actions to be taken in the event of fire in order to control it (where appropriate) and to minimise any impact on the environment.

In the event of a fire, this FPP will be issued to the Fire Brigade to aid their firefighting.

1.2 Scope

This FPP has been prepared in accordance with Environment Agency guidance.¹ It covers combustible wastes that are collected as part of the operator's business.

The site does not handle liquids, End of Life Vehicles (ELV's), WEEE or hazardous wastes. The scope of the FPP therefore covers the following wastes that are currently accepted at the site:

- *Non hazardous waste such as cardboard, metal and plastic (storage, separation and treatment).*
- *uPVC windows (Note: uPVC as a material acts as a fire retardant, which means it's not readily combustible).*
- *Glass*
- *Black Bag Waste*
- *Green Waste*

Small quantities of tyres are handled on-site as part of ongoing lorry maintenance. Similarly, fuel and lubricating oils are required and these are stored correctly in limited quantities in the Workshop Area.

Should the site proceed with a plan to use bio-stimulants, for rapid aerobic digestion of non-recyclable waste then there will also be dry storage of SRF (Solid Recovered Fuel), the location for which has to be finalised but the quantities will be small.

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

1.3 Objectives

The objectives of the Fire Prevention Plan are:

- To minimise the likelihood of a fire occurring.
- To aim for a fire to be extinguished within 4 hours (This is desirable although not strictly necessary as it is not close to sensitive receptors).
- To minimise the spread of fire within the operational facility, the wider Newbury Works site, and to neighbouring locations.

1.4 Site Location

The site occupied by JW Waste Recycling Ltd. at Newbury Works is a remote location in the middle of the Somerset countryside well away from any potentially sensitive environmental receptors. The nearest house is 0.3km away, and the closest “medical” facility, a retirement home, is 1.2km away. Both are upwind of the prevailing winds (from the SW). Neither are there any public water abstraction points (surface or underground) and surface water drainage is to a small brook which could be dammed in the unlikely event of any potentially contaminated run-off escaping the site. (It runs for 250m before entering a small tributary of the Mells Stream). There are no sensitive zones for groundwater in the area.

There is good access for the local fire brigade stationed 15 minutes away in nearby Frome BA11 1JG).

Newbury Works is an industrial estate sited at the headworks of an old coal mine of the same name. The area occupied is clearly identifiable by comparison between the satellite view shown in Annexe A and the drawing of the Fire Brigade’s access routes (shown in Annexe B) where the area is shown circumscribed by the solid grey line (i.e. Land Registry parcel no. WS73452 whereas ST78675 is the remainder of Newbury Works).

The site also has another operational area at the Works which is known as the Stone Yard where concrete and brick from demolition operations is handled and stored. Empty Waste skips are also stored there (See Annexe A, last page)

1.5 Roles and Responsibilities

The Director has the responsibilities referred to in the table below, but in relation to this FPP, has specific responsibility for:

- Ensuring the adequate training of staff and contractors working on site regarding the content of these procedures. Ensuring all contractors are fully inducted and aware of the site rules.
- Ensuring the continued testing and maintenance of the Fire Alarm systems.

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- *Ensuring the adequate provision of resources such as personal protective equipment (PPE).*
- *Ensuring the provision and maintenance of hand-held fire extinguishers and other firefighting equipment at the site is adequate.*
- *Ensuring that the Fire Prevention Plan remains readily accessible at the site at all times.*
- *Ensuring that the Yard Foreman completes daily walk-round checks which include temperature monitoring of waste piles and shredders with a thermal imaging camera.*
- *Ensuring all CCTV and remote access equipment is maintained and in good use for monitoring the site especially whenever it is not manned.*

Table 1 below covers the staff who will be working daily at the facility. All operational staff will be trained and understand the fire prevention plan. In addition to this they will be trained to tackle fires where safe to do so, and to understand hot works permitry to ensure processes are followed and thus reduce fire risk.

Table 1 – Staff on-site

<i>Staff Position</i>	<i>Responsibility</i>	<i>Number</i>
<i>Director</i>	<i>Overall responsibility for compliance and management of the facility in line with Environmental Permit, Health & Safety and internal operating standards</i>	<i>1</i>
<i>General Manager</i>	<i>Day to day responsibility for compliance and management of the facility in line with Environmental permit, Health & Safety and internal operating standards. Supervision of Refuse Collection Vehicle, Skip Truck, and Haulage Drivers, and their assistants</i>	<i>1</i>
<i>Yard Foreman</i>	<i>Responsibility for overall housekeeping & all staff compliance in Yard area, as well as for 2 Yard operatives. Responsible for checking material into the site for treatment to ensure compliance with the Environmental Permit, H&S standards, running treatment processes, completing relevant paperwork</i>	<i>1</i>

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<i>Refuse Collection Vehicle & Skip Truck, and Haulage Drivers and their assistants</i>	<i>Proper handling and collection of wheelie bin contents and of commercial and domestic skips.</i>	8
<i>Yard Operatives</i>	<i>Responsible for segregating waste, identifying and storage of recyclables, emptying and refreshing recycling/waste bins, regular checks on the condition of equipment. Safe running and operation of plant and equipment. Driving telehandler/loading shovels and the midi-excavator, loading / unloading vehicles, baling cardboard.</i>	2
<i>Transport Manager</i>	<i>Managing transport fleet, vehicle compliance</i>	1 (Part-time)
<i>Mechanic and Assistant</i>	<i>Servicing of transport fleet to ensure vehicle compliance. Maintenance of site mechanical plant and equipment</i>	2
<i>Office Staff</i>	<i>Office functions, accounts, payroll, invoicing, sales and supervising use of the on-site weighbridge. The role includes Duty of Care (DoC) checking, booking loads out to third parties, and assigning EWC waste codes</i>	3

1.6 Process Overview & Plant and Equipment

The majority of waste is received onto site straight into the Main Building. The waste is immediately spread out and processing begun using a midi-excavator fitted with a waste handling grab. This process is the first line of defence in identifying any potential sources of ignition such as smouldering material or discarded Lithium batteries. As good practice dictates, processing is undertaken immediately, and no previously unspread waste is left overnight. Much of the waste arriving is processed straightaway for outside storage. It is combined with material such as wood, glass or metal arriving outside in the Yard already pre-sorted and placed into bays. The remainder, which is either Black Bag waste or Card remains in the building for shredding or in the latter case, for compaction.

These non-hazardous wastes are received from a variety of domestic or commercial sources. These are either received in skips, the Company's own Refuse Collection Vehicles or in other bulk loads of non-hazardous or combustible wastes such as wood / paper or card, compost etc. (Food waste is separately collected and delivered directly to a biogas plant near Warminster).

No waste electrical equipment of any of the WEEE categories is received at the facility.

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Should any Lithium Primary (Metal) or Lithium Secondary (Ion) batteries be inadvertently received onto site then they will be stored in a designated waterproof metal bin external to the Main Building and well away from combustible waste piles. Such batteries will be then be sent to specialist recyclers and shipped in accordance with Carriage of Dangerous Goods Regulations.

The waste treatment processes carried out on site include the following:

- *Compacting (by loading shovel or grab)*
- *Sorting (with loading shovel, 3600 midi-excavator with grab/bucket or by hand (only on the picking line)*
- *Screening/separation (by using appropriate plant and equipment i.e. trommel screen)*
- *Shredding (mostly using the ARJES Impaktor 250 mobile shredder)*
- *Baling and compaction*

Waste oils and sludges from site maintenance operations are stored in drums on bunded drip-trays in the Workshop Unit.

All electrical equipment is installed and maintained by qualified industrial electricians under contract. No electrical maintenance is carried out by site staff.

1.7 Strategic Plant and Equipment

The table below details the plant/equipment on site in relation to the waste operations on site. Only trained operators will be permitted to drive/operate the plant/equipment listed below.

Item	Number	Function
<i>Weighbridge</i>	<i>1</i>	<i>Determine load weights in/out</i>
<i>Loading Shovels/Telehandlers</i>	<i>2</i>	<i>Loading/unloading/movement/sorting</i>
<i>360° midi-excavator</i>	<i>1</i>	<i>Loading/unloading/movement/sorting</i>
<i>Picking Line</i>	<i>1</i>	<i>Conveyor belt system for hand sorting of mixed waste</i>
<i>Baler</i>	<i>1</i>	<i>Baling of paper / cardboard</i>
<i>Mobile Shredder</i>	<i>1</i>	<i>Size reduction of various mixed wastes</i>

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Note: The plant/equipment on site may vary and additional equipment may be hired-in to cope with busy periods, larger jobs or jobs with specific requirements.

All plant will be stored on site and will only be operated by trained personnel.

1.8 Relevant Non-Waste Items

The steel banded white diesel fuel tank (of 5,500 litres capacity) is positioned in the southern end of the Main Building behind a wall of concrete interlocking 'Lego' Blocks to provide fire protection. (It is sited here for fire security reasons) The tank itself is fitted with a Piusi Cube 70MC Fuel Management System which provides fuel security by only giving authorised users access to the banded diesel tank's contents. Each driver has a specially coded key fob for use when dispensing fuel. It is fitted with fill-level shut-offs similar to those at a petrol station.

1.9 Hours of operation

Site operations are limited to Monday to Friday, commencing at 0400hrs for egress of RCV's for their rounds, arrival of Office and Yard staff at 0730hrs and closure at 1700hrs. Exceptionally there may be urgent maintenance work conducted outside of these times.

1.10 Sensitive Receptors

As mentioned above in Section 1.4, Newbury Works is a remote location in the middle of the Somerset countryside well away from any potentially sensitive environmental receptors. The nearest house is 0.3km away, and the closest "medical" facility, a retirement home, is 1.2km away. Both are upwind of the prevailing winds (from the SW). Neither are there any public water abstraction points (surface or underground) and surface water drainage is to a small brook which could be dammed in the event of any potentially contaminated run-off escaping the site. There are no sensitive zones for groundwater in the area, nor any Habitats within the locality requiring assessment under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. (The Mells Valley Special Area of Conservation (SAC) for the Horseshoe Bat is over 2 miles away to the SWW as the bat flies). J Witt's site lies within Band C of the guidance document 'Bat Consultation Zone', indicating that bats from the SAC may be present in the local area at a low density and may therefore make some limited use of the local area for commuting or foraging.)(Given the unchanged nature of the site with respect to bats no action has been required).

Table 2 – Location of Sensitive Receptors (Also shown in Annexe B)

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Closest to the site, apart from adjacent units on the Newbury Works industrial estate, are 11 houses. These are 0.3km upwind. They could be notified by asking the neighbouring staff at

<i>Establishment</i>	<i>Address</i>	<i>Tel.No.</i>	<i>Opening Hours</i>
Vobster Cast Stone	Newbury Works	01373 812441	0800 -1630

to do so.

Upwind also are several dozen houses along Highbury Street Coleford. These could be notified by telephoning the following establishments

<i>Establishment</i>	<i>Address</i>	<i>Tel.No.</i>	<i>Opening Hours</i>
Coleford Village Shop	Highbury Street, Coleford, BA3 5NJ	01373 812309	0700 - 2100
Mendip Country Practice	Church St; Coleford BA3 5NQ	01373 812244	0800 – 1830 Mon-Fri
The Eagle Inn	Highbury Street, Coleford,BA3 5NT	01373812440	Currently closed

The shop has staff on the premises earlier in the day than shown.
The local doctors' surgery is known as the Mendip Country Practice
The Eagle Inn has now closed and it is not known if it will re-open.

Not upwind but also in the "less likely to be affected" category is the Livery Stables at

<i>Establishment</i>	<i>Address</i>	<i>Tel.No.</i>	<i>Opening Hours</i>
Luckington Manor Farm	Dark Lane, BA11 3RQ	01373 813207	24/7

There are a number of houses and a school in the "most probable" downwind direction in Tinkers Lane Newbury .450m away. Included among them are Newbury Cottage, Berrybrae, Page Barn, Page House Farm, Mandalay, The Brambles and Kanda Cottage, all at BA11 3RG. If needed we would alert these by calling Page Barn on 01373 800010

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<i>Establishment</i>	<i>Address</i>	<i>Tel.No.</i>	<i>Opening Hours</i>
Newbury Manor School	Mells, BA11 3RG	01373 814980	24/7

Newbury Manor School is an independent specialist day and residential school for young people aged 7 to 19 with autistic spectrum disorders who have moderate to severe learning difficulties. Clearly therefore, it is continuously occupied.

To the East and in the “probable” sector is a group of houses known as Mells Cottages. Upper Vobster Farm is at the same postcode.

<i>Establishment</i>	<i>Address</i>	<i>Tel.No.</i>	<i>Opening Hours</i>
Upper Vobster Farm	Upper Vobster, BA3 5SA	01373 812 166 <i>(Office)</i>	24/7
		07970 137 999 <i>(Manager’s Mobile)</i>	
		07563 945 237 <i>(Farm Mobile)</i>	

In the same locality is Vobster Quay Diving Centre, Upper Vobster, BA3 5SD Tel. No. 01373 814666

A map showing the location of the main key receptors relative to J Witt is included in Annexe B.

To minimise the impact on the local area and associated receptors from a fire on site, this document details mitigation measures which will decrease the likelihood of a fire occurring on site and limit the size and duration of a fire if it does occur (as per Section 1.1 above). These measures will ensure the potential impact on any of the surrounding land is as small as practicably possible.

1.11 Common Causes of Fire

Table 3 Likely Causes of Fire applicable to the Site

Figures quoted in (blue) below are from the Waste Industry Safety and Health Forum’s “Reducing fire risk at waste management sites Issue 3 – March 2020” [The unattributed 19% were caused the remainder of other smaller “likely causes” also listed]

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Source	Applicability to the Site & Risk	Specific Mitigation
<i>Arson or vandalism</i>	<i>Yes – Deliberate ignition of wastes by intruder(s) and/or vandalism of site infrastructure, plant and/or machinery which may give rise to malfunction or compromise the integrity of waste storage or containment measures</i>	<i>See section 2.5 Security</i>
<i>Mobile plant/equipment</i> <i>(5% of fires due to Hot Surfaces)</i>	<i>e.g. spillages of fuel, plant overheating & getting hot enough to ignite oil or other contaminants, sparks from machinery or malfunction caused by ineffective maintenance</i>	<i>Mobile plant/equipment will be kept 6m away from combustible waste out-of-hours and each item will be visually inspected prior to use for the presence of leaks and its suitability.</i> <i>All plant / equipment is included in a Planned Preventative Maintenance Programme (See Section 2.6)</i> <i>Housekeeping is completed to ensure site is kept clean and in good order</i>
<i>Overheating & Self-Combustion (24% of fires)</i>	<i>Yes – Combustible waste materials may self heat under their own weight or because of bacterial activity</i>	<i>The “safe” assumption is made that any combustible materials stored on site are liable to self-heat.</i> <i>Storage times are kept low (invariably much less than 3 months) and end-of-day daily storage fire-watch checks** are made with a thermal imaging camera to monitor temperatures.</i> <i>All wastes will be isolated from sources of ignition and heat and flammable materials, and Black Bag wastes will be kept out of</i>

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		<p><i>direct sunlight and stored in covered areas where possible.</i></p> <p><i>Recognising that hot and hazardous materials and items can 'smoulder' in a stack of waste for some time before causing a full fire, a look-out will be made for 'steam' from stored materials releasing water vapour and a check made that it is not actually smoke.</i></p>
<p><i>Electrical faults (7% of fires)</i></p>	<p><i>Yes – Electrical faults causing fires. Faulty cabling or incorrect wiring causing fires</i></p>	<p><i>All electricians on site are fully certified by a qualified electrician and with written procedures in place that set out the regular maintenance.</i></p> <p><i>Any potential ignition sources from suspected electrical faults should be isolated and an electrician should be contacted immediately to rectify the situation. Where possible, staff should immediately remove any stored wastes from the vicinity of the fault area or cable traverse if safe to do so.</i></p>
<p><i>Discarded smoking materials</i></p>	<p><i>No - Risk of ignition of stored wastes from smoking materials which have not been fully extinguished</i></p>	<p><i>The main operational site has a strict "No Smoking" policy.</i></p>
<p><i>Naked Lights/Flames</i></p>	<p><i>No</i></p>	<p><i>None permitted onsite</i></p>
<p><i>Gas canisters</i></p>	<p><i>Yes - e.g. gas cylinders, fuel tanks, aerosols or combustible liquids and chemicals on site.</i></p>	<p><i>Oxy-acetylene equipment for welding is kept within the site workshop. Only exceptionally is welding or cutting done elsewhere and under a Hot Works permit.</i></p> <p><i>An LPG cage is provided for e.g. empty cylinders received in</i></p>

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		waste skips and this is sited more 6m from combustible or flammable materials.
<i>Hot Works On-site (5% of fires)</i>	<i>Yes – Hot works may create sparks from cutting / welding / grinding which may spread to combustible materials if not properly managed</i>	<p><i>Hot Works are only completed in accordance with hot works permit. There is a standing permit for the Workshop area as only the Site Mechanic and his nominated assistant are designated to complete any cutting / welding / grinding works.</i></p> <p><i>Should such works be conducted elsewhere on site e.g. by competent contractors then a separate permit will be required by them and their work supervised by site staff.</i></p>
<i>Open burning onsite or on adjacent sites</i>	<i>No – No burning onsite of any material</i>	<p><i>All staff trained that this is not a permitted activity.</i></p> <p><i>Neighbours are aware of this policy.</i></p>
<i>Friction & Impact (9% of fires)</i>	<p><i>Impact: hand tool, power tool, metal in footwear, moving vehicle (incl loading buckets/shovels).</i></p> <p><i>Rubbing: belt, conveyor, roller, brake, operation of compactor, clutch on machinery, skidding of Refuse Collection Vehicle (RCV).</i></p> <p><i>Friction and impact: thermite reaction e.g. biogas or petrol-air mixtures meeting a friction "spark" produced by</i></p>	<p><i>Awareness raised by training of staff</i></p> <p><i>Particular attention to cleanliness so as to be certain there is no paper catching and packing around motors or conveyor parts.</i></p> <p><i>Note: Fire extinguishers are fitted in the cab of all loading plant and operational vehicles.</i></p>

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	<i>impacts involving aluminium and rusty mild steel.</i>	
<i>Overhead power lines</i>	No	<i>There are no overhead powerlines located in close proximity to the site.</i>
<i>Hot loads (31% of fires)</i>	<i>Yes - Imported wastes which may contain materials which are above ambient temperature</i>	<i>All loads are inspected in accordance with strict waste acceptance procedures. If such loads arrive at site they are intercepted by site operatives who will refuse to accept the waste. If found following tipping, they will be consigned to the quarantine area to ensure the material does not pose a concern/fire risk to the site. The material will, if required, be treated to ensure the risk of fire is completely negated.</i>
<i>Leaks and Spillages</i>	<i>Yes - Combustible/Flammable material may be moved around site leading to ignition and fire</i>	<i>This risk is covered by training.</i>
<i>Fuel</i>	<i>Yes – Handling of fuel onsite could initiate fire spreading to storage areas</i>	<i>Fuel is stored on site in a self-bunded tank.. Those dispensing fuel are trained to minimise static, and to prevent sparks or overfilling of the fuel tanks of vehicles.</i>

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Any spillages of fuel would be cleaned up immediately and there is a fuel spill kit adjacent.

*End-of-day daily fire-watch checks***

Within the industry it is recognised that a significant number of waste site fires occur after working hours. To reduce this risk, at the JWitt site, checks are also made:

- *for over-run of shredders, conveyors, screens, balers and similar to ensure that they are as empty of waste as practical; and*
- *to ensure that:*
 - *there is clearance around equipment and machinery w.r.t. debris and dusts which may have accumulated under and around equipment during the day.*
 - *any flammable materials such as fuels have been secured*
 - *electrical power to plant and other equipment has been shut-off and locked-off*
 - *other electrical items are shut-off particularly the Workshop space heater*
 - *parking of vehicles and mobile plant has been in their designated "safe" locations*
 - *fire detection systems have been activated and are working*
 - *security systems have been activated and that gates and doors are secure*

2 FIRE PREVENTION MEASURES

These have already been covered in part under “Mitigation” in the Common Causes of Fire table above.

2.1 Site Plan(s)

The site plan and its associated detail are shown in Annexe A

2.2 Storage Bays/Separation Distances

The majority of waste on site is stored outside in bays. These are shown in the Plan at Annexe A, along with the Quarantine Area. They are 5m wide and 10m deep surrounded by Concrete Interlocking 'Lego' Blocks stacked three high, occasionally 4 high in an effort to maintain a 'freeboard' space of 1m to prevent fire spreading over and around the walls.

(The blocks conform to BS EN 1992-1-1:2004 Design of Concrete Structures)

(Note: Stock rotation is not required, as throughputs are such that piles in bays are emptied every two weeks, approximately. The only exception being the free-form piles of crushed demolition material (concrete, bricks & tiles) which is stored in the Stone Yard shown in Annexe A]

Despite the Company's prohibition on placing asbestos, Japanese knotweed, oils, paints, solvents, batteries and other potentially hazardous or intractable items such as fridges or gas cylinders some of the latter are occasionally received in incoming waste. These are either returned to the hirer of the skip or stored upright in a cage. This has no roof, and its sides and doors are manufactured from steel wire mesh, to ensure ventilation. Its location varies but it is always stood on an impermeable surface within the Yard area and at least 6m from any combustible material.

2.3 Quarantine Area

The Quarantine Area is a dedicated zone/bay with a clear area of 15m width and 10m depth. Either side of it are 5m wide storage bays containing non-combustible material surrounded by Concrete Interlocking 'Lego' Blocks which in turn provide fire protection to any combustible content in adjacent bays.

(See Annexe A below)

Here, any waste that is smouldering or alight can be placed safely until extinguished, the risk to receptors has subsided and the waste is safe to remove from site.

The Quarantine Area has been sized based on storing a full container or the maximum pile size in line with the FPP Guidance. (It is over twice the volume of any of the combustible waste “piles” that can be found on site.)

If safe to do so, any container holding waste on fire can be lifted into the Quarantine Area. For loose waste, again if safe to do so, it would be moved to the quarantine area. In both cases Telehandler/Loading Shovels or the Midi-excavator will be used.

2.4 Training, Awareness and Visitors

All staff and contractors working on-site will be and will understand its contents.

Through site inductions and on-going staff awareness and training, J Witt will ensure that all relevant staff and contractors are aware of this FPP and will:

- Understand what they must do during a fire.*
- Know where the fire prevention plan is kept.*
- Participate in regular exercises to test the efficacy of this FPP and their understanding of it.*

In addition:

- Fire alarms will be tested weekly*
- An Fire Drill will be carried every 6 months to test the effectiveness of the evacuation plan*
- A nominated member of staff will be trained to act as Site Fire Marshal.*

For visitors to the site:

- They will be escorted at all times following signing in.*
- They will understand that there is a strict “No Smoking” policy for the site.*
- When signing in, information on the Muster Point will be provided*

Regarding non-routine work only that which has been properly assessed for safety and fire implications may be undertaken on site.

2.5 Security

The site is overseen by CCTV security cameras. These provide a good measure of protection against intruders and potential arsonists.. As well as giving the Company video footage of any events which may happen, they also act as a visible deterrent.

The surveillance cameras are accessible remotely from the smartphone of the Duty Manager. This will allow him to check in on the business wherever he is. All the security cameras are motion activated, recording footage when any motion triggers them.

The Duty Manager will liaise with Emergency Services as appropriate.

All functions of security will be checked on a daily basis and information recorded on a daily inspection form

As well as the site’s own main gate, there is separate main gate to the whole Newbury Works area which is locked at the end of each working day. All buildings are locked overnight.

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2.6 Planned Preventative Maintenance

A programme of routine planned maintenance is provided for each item of plant and machinery, in order to prevent breakdowns or faults which may pose a fire risk

The Planned Preventative Maintenance Programme includes:

- *Items of plant and equipment to be maintained*
- *Frequency of maintenance (dependent on manufacturer's instructions)*
- *Person responsible for maintenance or arranging maintenance*
- *Actions to be taken in the discovery of a problem. This will include:*
 - *All faults which require corrective action will be reported to the General Manager who will record them and ensure requisite rectification occurs.*

Plant and equipment subject to service agreements with the manufacturer, supplier, or contractor includes a 24 hour call out arrangement wherever possible.

All plant and machinery is subject to daily checks prior to use by trained staff.

There is a workshop on site and maintenance staff available during the operational hours

2.7 Contingency

Waste arrives to the JW Waste Recycling operation via three main routes:

1. *Frequent collections in the Company's refuse collection vehicles (RCV's) from commercial premises in the Bristol, Bath, Wells and Frome areas.*
2. *Recovery to the Transfer Station of skips that have been filled by local businesses, mainly builders, operating in the same general areas as 1) above.*
3. *Delivery of*
 - a. *filled skips by other skip operators,*
 - b. *green waste from local garden maintenance companies and*
 - c. *cardboard or plastic packaging materials from local businesses delivering directly.*

The need for contingency plans relates to solely materials in 1) above. Material in 2) could be diverted to other Transfer Stations in the locality, and items in 3) could be refused.

Where J Witt had to honour contracts committed to for collection of other wastes whilst having had its usual avenues for disposal cut off then it holds:

- *A list of primary licensed sites that will take the waste.*
- *A list of alternative licensed facilities to take the waste.*
- *A list of plant hire companies to source alternative equipment if required.*

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In the event of a fire at the site, the General Manager will be responsible for invoking these alternative routes and for any waste currently in transit to the site, will notify:

- *all Company drivers to divert to another waste facility immediately via mobile phone.*
- *other incoming waste hauliers of the problem and require them to divert elsewhere.*

2.8 Seasonality

Using experience from both Newbury Works (and the previous site at Tunley, near Bath) the operation will not have large seasonal variations of incoming, and therefore outgoing waste. The only two real variants are an increase in summer construction work in the area resulting in an increase of about 25% in overall incoming waste tonnage and a slight increase around Christmas time (perhaps 10%) of General Waste and recyclables from the hotel industry. It is not considered that these peaks require any contingency planning as they will not result in waste being stockpiled.

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3 Fire Detection and Management

3.1 Fire-fighting - General

J Witt has a strong 'early detection is a paramount' approach. Employees are encouraged to be vigilant. The 'STOP Fire' message is drummed in to everyone:

:

- **S** – sensors, whether in the Main Building, or office smoke alarms, these are fitted
- **T** – tested, at designated frequency to make sure they're working
- **O** – obvious dangers - be aware of obvious dangers, ignition sources etc.
- **P** – plan, be aware of escape routes should a fire start

Whilst all staff are trained in the use of fire extinguishers, it is well understood that it is foolhardy to try to extinguish a raging fire. Fires are only to be tackled if they don't present a significant, immediate danger to personnel.

3.2 Fire Fighting – Sensors

The Office building is fitted with smoke detector.

The Main Building has heat and smoke detection fitted (and maintained by) by Avon Fire Alarms Ltd

The Yard are has heat and flame detection fitted on the Card Compactor wing.

3.3 Fire Fighting – Access & Escape

Escape routes are obvious in all areas and are kept clear for use by rigorous housekeeping.

Access for Fire & Rescue Vehicles is maintained at all times (obviously so as the haulage vehicles used by the company are of a similar size). [One of the firm's lorries fitted with a 40 cubic yard, roll on roll off bin is 4.2m high which is above the largest height of any of FRS's regularly used vehicles (e.g. High Reach vehicle at 4m)]

3.4 Firefighting – Fire Extinguishers

Around site are various fire extinguishers of 4 types. Safety instructions provided showing the use of each extinguisher

Classification of fire risk	CYLINDER COLOUR CODING AND CONTENTS				
	WATER	DRY POWDER	FOAM	CO ₂	WET CHEMICAL
A Paper, wood, textile & fabric	✓	✓	✓		✓
B Flammable liquids		✓	✓	✓	
C Flammable gases		✓			
F Oil & fats					✓
⚡ Electrical hazards		✓		✓	
🚗 Vehicle protection		✓	✓		

COLOUR CODING IN ACCORDANCE WITH BS EN3: 1996 - PORTABLE FIRE EXTINGUISHERS
FLAMMABLE GAS FIRES MUST BE EXTINGUISHED BY THE EMERGENCY SERVICES ONLY

For any small quantities of un-piled waste wood, plastic, or metal, the water extinguishers will be used.

Foam extinguishers would be used on any flammable liquids in the event of a fire.

For any batteries, a powder extinguisher would be used. (Staff are trained to understand that water should not be used on lithium metal battery fires unless there is sufficient water to completely quench the fire). For other batteries e.g. 12v then sand may be used also.

In the Site Office, foam and CO₂ extinguishers are provided given that most office fires involve electrical equipment at some stage.

3.5 Fire Fighting - Inert Material & Soil

(For fires that prove uncontrollable by use of handheld extinguishers)

During the original permitting process for the site it was recognised that it was deficient in water supply compared with most similar sites. The fire-fighting approach decided upon was to use suppression and extinguishment using soil, sand or crushed stone to starve the fire of oxygen.

This method was also favoured as one which will not create any fire water run-off. Residues will be dealt with appropriately, (commentary on the disposal of fire residues is provided below).

The nearest adjacent stockpile of inert materials available for this purpose is 50m away and is maintained by J Witt's immediate estate neighbour Vobster Architectural which is a bespoke cast stone manufacturer. Maintenance of this is clearly paramount for them as resource for their manufacturing process so this ensures that there is always plenty of material available for J Witt's emergency use, as previously agreed.

Should this stock run short for any reason then there are ample quantities of crushed stone available in J Witt's own Stone Yard, 250m distant on the same estate. (See Annexe A)

3.6 Firefighting – Movement of Material

Wherever possible burning material will be moved ('pushed' as this is the quickest means) to a safe distance from the fire, (circa 20m) to a location where its temporary storage does not compromise access for firefighting purposes or give risk to potential pollution risk. The preferred location will be the Quarantine Area (See Annexe A below).

There is sufficient existing plant on site which can move material rapidly; i.e. with two telehandler/loading shovels with two 7.5m³ buckets, and one 2m³ bucket available for the midi-excavator. (Both shovels have a fire retardant hydraulics as opposed to conventional rubber hydraulics to allow the plant to operate in a heated environment, with breathing apparatus for the drivers.)

3.7 Firefighting - Water Supply

Use of water on any substantial fire would be by the FRS and at their discretion. It is most likely that should the FRS decide to enter the Main Building to fight a fire then they would use water.

There is no fire hydrant on site and water company supply amounts to not much more than a 22mm feed to the J Witt area. However the Company has installed two 25,000 litre tanks which are interconnected and which feed an appropriate installed connector for the local fire brigade [Devon and Somerset Fire and Rescue Service (FRS) based at Frome Fire Station. (Keyford, Frome BA11 1JG) (01392 872200)] to couple their hoses to.

This facility provides water at approximately 1bar pressure so the FRS would use one of their fire pumps to increase the pressure to their desired figure.

In addition this and any water the fire brigade would supply, it is anticipated that fire water will be recirculated to reduce the overall volume of water required.

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The supply of water would be enough to tackle combustible waste stored in the Main Building. (Calculation based on EA figures, 40m³ max waste stored, at 267 litres/minute for 3hrs = 48,000 litres)(Compared with 50,000 litres in the tanks).

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4 Detecting and Suppressing Fires & response procedure

All staff are trained to be vigilant in terms of fire detection. If a fire is detected they should notify the General Manager or Yard Foreman to raise the alarm. The fire response procedure should then be followed.

Each staff member will undergo training on this at least annually or if any changes are made to the FPP.

Ongoing Toolbox talks will be completed periodically to remind staff of the FPP.

As mentioned above, full simulation of the use of this procedure will be completed once every 6 months to ensure all staff are aware and competent in its use.

Fire Response Procedure		
Action		Responsible Person
1.	Raise the alarm (if not already done by another member of staff)	General Manager/Yard Foreman
2.	Initiate evacuation of all visitors and start evacuation of all staff and role call pending assessment of the fire with relevant staff	General Manager
3.	<p>Small scale fire – Cordon off the area and direct employees to a safe area. Move container to the Fire Quarantine Area. Attempt to control the fire using the appropriate equipment kept on site. If fire can be controlled skip to point 5. If it becomes clear that the fire cannot be dealt with safely and effectively by site personnel, evacuate the site and contact the Fire Brigade on 999; or</p> <p>Large scale fire – Do not attempt to control the fire. Evacuate all personnel from the site and contact the Fire Brigade on 999.</p>	Yard Foreman
4.	Notify Director & General Manager if they have not been already notified. Notify neighbours.	General Manager
5.	Ensure access routes are clear for fire brigade. Where possible and safe to do so move combustible material away from fire to create additional fire breaks	Yard Foreman

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6.	Engage with fire brigade upon their arrival and direct to fire and nature of material and site. Supply them with FPP	General Manager/Director
7.	Ensure FPP is followed and no fire water is released to the environment	General Manager/Director
8..	Follow instructions from fire brigade	All staff
9.	Notify the Environment Agency	General Manager
10.	Maintain control measures until fire is extinguished	General Manager/ Yard Foreman
11.	Begin clean up operation after fire brigade have instructed it is safe to return to the site and site is handed back to operator	General Manager
12.	Samples of fire water sent as urgent to third parties or sample loads arranged. N.B. Nature of materials in fire will need to be identified e.g. to confirm if POP's are present.	Director / General Manager
12.	Record the fire using the Incident Record Sheet and Site Diary	General Manager

The contact list of emergency numbers in Annexe C will be retained in the Site Office and updated as required by the General Manager.

5 Additional resources / Infrastructure to enable fire fighting

5.1 Out of Hours

Given that the major firefighting technique will use sand and soil to starve burning waste piles of oxygen then staff will be required to come in to operate the necessary equipment. Therefore a list of qualified drivers and their contact details will be kept by the Duty Manager.

5.2 Containment of Fire Water Run Off

The whole of the Yard is surfaced with concrete and is essentially impermeable. (Groundwaters are therefore protected.) It has surface water drains serving it and the Operations Building roof waters. If required these drains can be stopped using plugs held on site. There are also firewater booms (e.g. The Darcy 100 metre poly spill land boom Product Code: 0419/500/100) that can be deployed if necessary. (Note: Darcy Spillcare Manufacture Ltd was previously known as Drizit Ltd)

If it was raining or the amount of water used to extinguish the fire was excessive then firewater might well spill over and find its way via the surface water drainage system to the small stream (shown Annex B along with paths of the small streams in the area). This would then be dammed using plastic film and straw bales (held on site) so as to limit spread of contaminated water off site.

5.3 Incident Management

In the event of an incident, all waste will be diverted as set out in the Contingency section above.

In the event of a fire related incident the Emergency and the Environment Agency will be contacted. In addition, depending on the nature/location of the fire, the emergency contact details list will be used to notify affected parties.

The incident will be managed onsite by a designated person on the day. Responsible people are; The Director, General Manager, and Yard Foreman. They are to ensure no fire water is discharged to the environment and the FPP is followed. Any breaches in control measures will be notified to the Environment Agency by the General Manager immediately.

5.4 Post-Incident Management

Once the fire has been extinguished and the site has been deemed safe to enter, an assessment of the fire damage will be made.

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All plant and equipment will be checked by the manufacturer to ensure that it remains fit for purpose. Any repairs will be made by the manufacturer and the commissioning phase will need to be signed off by the manufacturer before waste processing recommences.

The detection system will also be checked by the installers to ensure that it is fit for purpose. Any repairs will be made in accordance with the manufacturers recommendations.

The cause of the fire will be investigated to understand what occurred and what measures need to be in place to prevent a recurrence.

5.5 Recovery procedure

After the fire has been extinguished the following additional actions would need to be completed. This would be the responsibility of the General Manager;

- *Replenishment of any fire extinguishers used*
- *Confirm in writing to the environment agency within 3 days the outcome of the fire, the actions taken by BKP and emergency services to control the fire and any other information deemed relevant*
- *Review of the FPP. (Advice will be sought from the Fire Service and this Fire Prevention Plan updated accordingly. Learning from staff members will be incorporated).*
-
- *Review of all staff training*

5.6 Clean Up

A tanker will be hired in to remove fire water. Any fire residues will be loaded into containers and removed from the site for disposal once they have been sampled, characterised and a disposal facility has been identified.

After all fire water is removed, the site will be cleaned by road sweeper. Any sweepings or other residues will be suitably disposed of.

Drainage channels / gullies / bunds buildings will be cleaned to remove contaminants

Site will be jetted down

Any buildings that have been damaged would be subject to review by independent structural engineers prior to use.

Once clean-up has been completed this will be signed off by the Director prior to site being deemed decontaminated and surface water being uncontaminated.

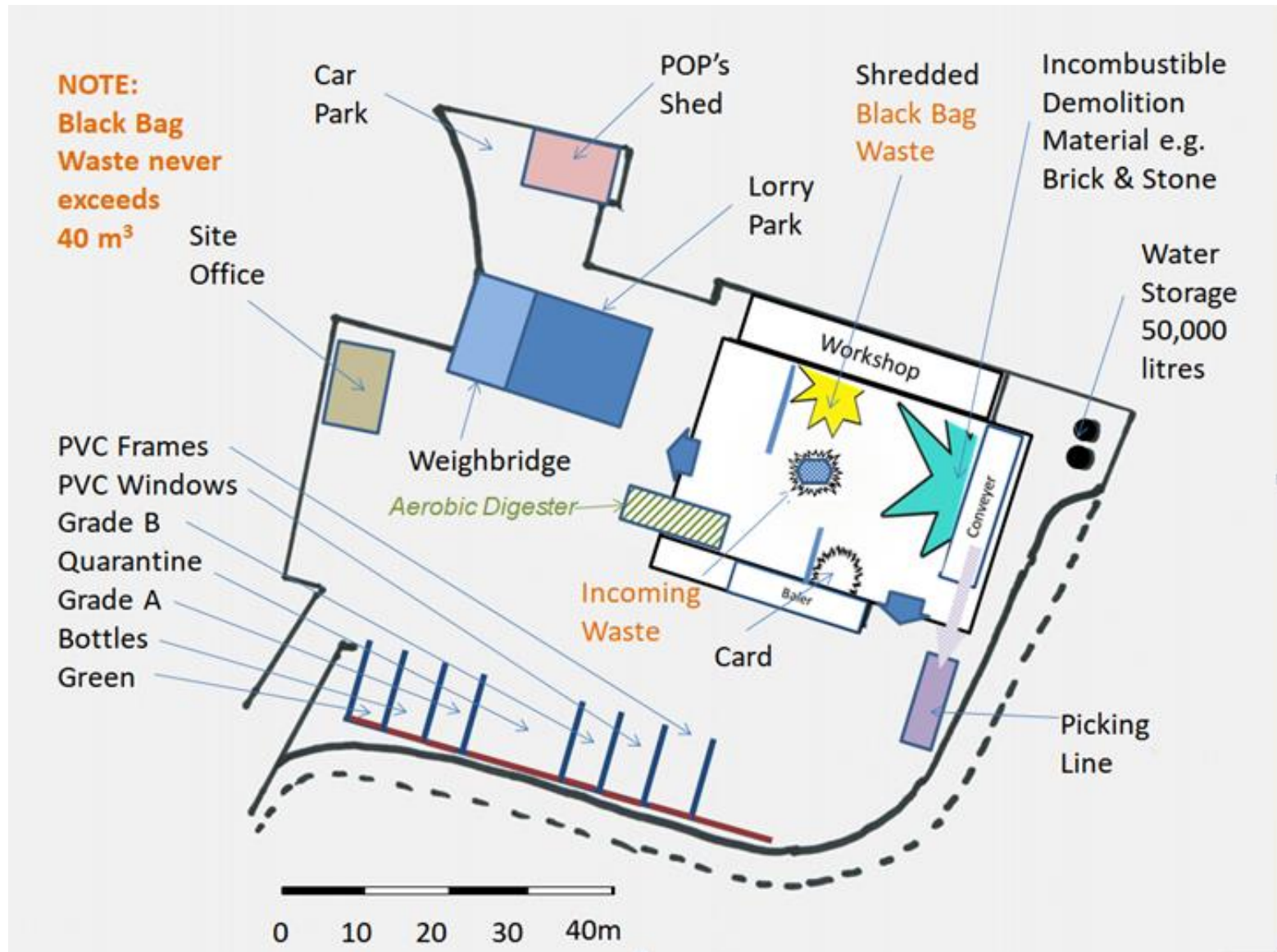
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Annexe A: Drawing Of Site - Main Building, Office Building & Yard

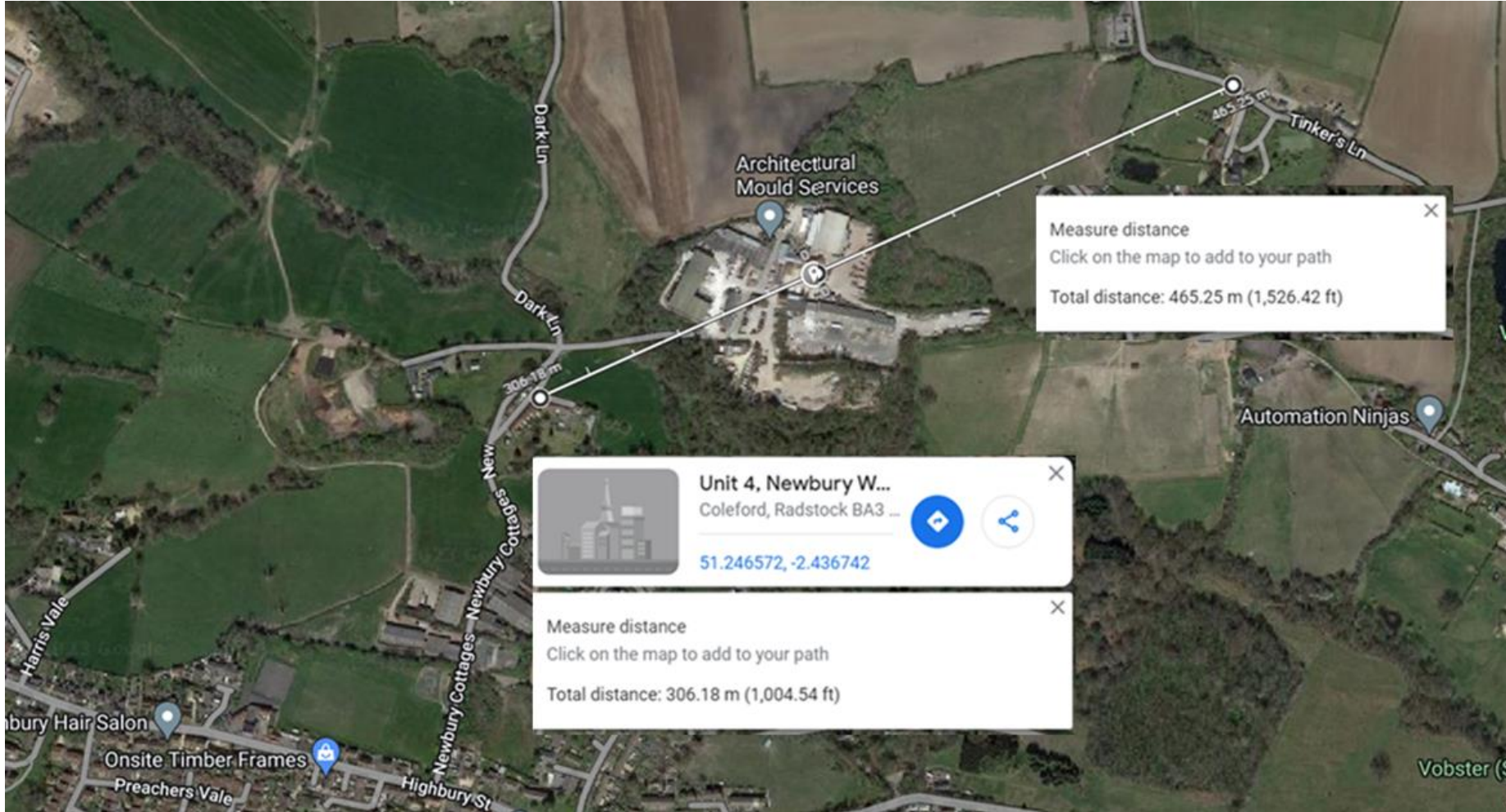


Annexe A: Stone Yard



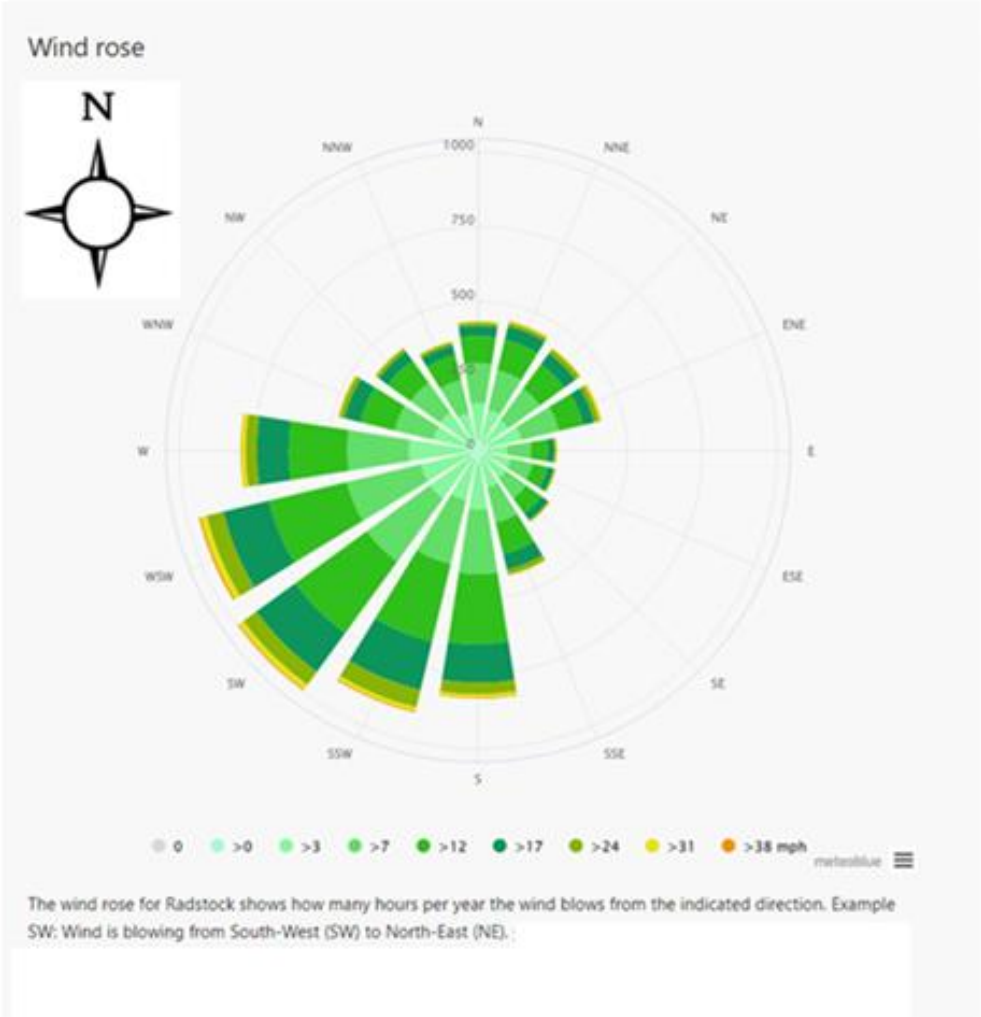
Annexe B: Location of Key Receptors within 1 km of the site

Wind Direction According to the UK Met Office, the prevailing wind direction in the area is South-Westerly².

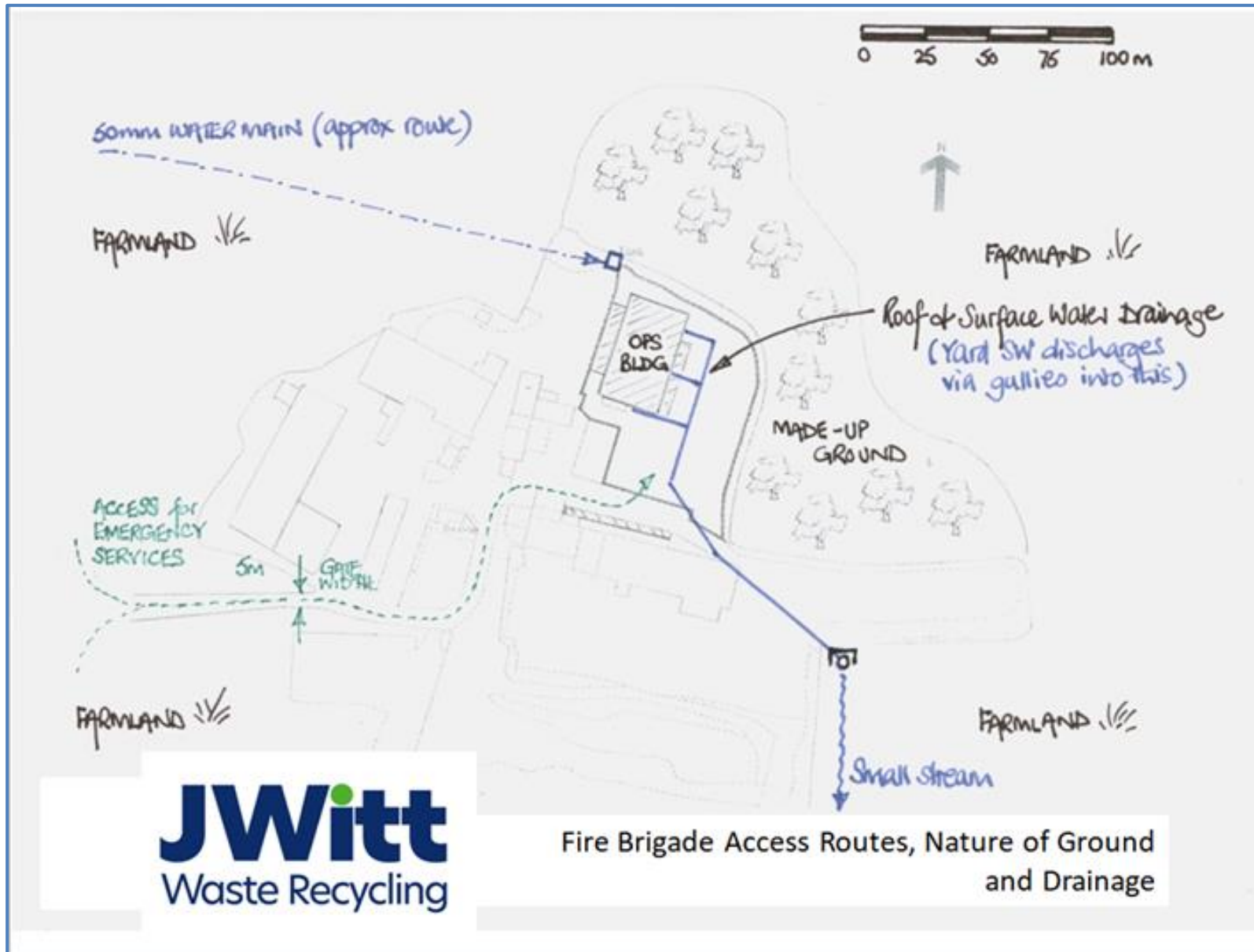


²<http://www.metoffice.gov.uk/climate/uk/regional-climates/so>

Annexe B: Compass rose showing north and the prevailing wind direction for locality



Annexe B: Fire Brigade Access Routes, Nature of Ground and Drainage



Annexe B: Routes of Local Small Streams



Annexe C: Emergency Contact Numbers

Name & Address		Telephone Number
Environment Agency	Hayley Peters	07584003228
Electricity Supplier & mains switch location	National Grid	General enquiries 0800 096 3080
Gas supplier & shut off valve location	No gas onsite	
Water supplier & shut off valve location	Wessex Water	03456003600
Local Authority Emergency Services	Westfield Police and Fire Station	
Insurance Company and policy number	GM Insurance	Policy no. CENN-005373-1
Nearest Hospital	A&E – RUH, Bath Minor Injuries – Frome	Bath – 01225 428331 Frome – 01373 454740

Annexe D Daily Inspection Sheets

Waste Management Daily/Weekly Site Inspection

J W Waste Recycling : Newbury Works, Coleford, Radstock, BA3 5RX

Inspection to be carried out before works at the start of the working day on a Daily/Weekly basis. If any action is required to complete the inspection, please report this and the necessary requirements to the Director Jamie Witt.

Date of Inspection:..... Time:.....

A. Personal Protective Equipment		Acceptable	Needs Attention	Not Applicable
A1.	Hard Hats for protection from falling objects			
A2.	Proper gloves for the type of work being Performed			
A3.	Suitable footwear			
A4.	Suitable Eye protection			
A5.	High Visibility Safety Vest			
A6.	Suitable Hearing Protection (if required)			
A7.	There is an adequate supply of new/replacement PPE			

Based on the hazard assessment completed for the Plant, the above are kept on-site and are used as required for each specific job.

B. Housekeeping		Acceptable	Needs Attention	Not Applicable
B1	Floors clean, dry, free of defects, spills/puddles			
B2.	Permanent aisles are clearly marked and clear of material			
B3.	Stairs are clear of debris and in good repair			
B4.	Supply storage areas are neat and orderly			
B5.	All doors function and lock properly			
B6.	Line sorter stations are kept clear of material/debris			
B7.	All exits and way of exits access are kept clear of debris			
B8.	Electrical panels kept closed and free of dirt and debris			
B9.	Bales Stacked Safely. (4 Bales high = maximum permitted)			

C. Conveyors, Balers, Compactors, Etc.		Acceptable	Needs Attention	Not Applicable
C1.	Balers, Conveyors, and Compactors are properly guarded at points where personnel could be pinched, caught, or injured when within 7 feet of floor or working surface.			
C2.	Machines in fixed locations are securely anchored and kept clean and properly maintained.			
C3.	Conveyors, balers, compactors, and other equipment are capable of being locked out for servicing or repair.			
C4.	Conveyors, balers, compactors, and other equipment are cleared of any loose recyclates after use			

D. Electrical Safety		Acceptable	Needs Attention	Not Applicable
D1	Permanent wiring, boxes, switches, outlets, and lights are secure and free from defects. Permanent wiring abandoned in place is tagged or otherwise identified.			
D2	Clear working space in front of electrical panels/breaker boxes are maintained at no less than 36 inches deep and 30 inches wide.			
D3	Wiring for extension cords, portable lights, and tools are free of cuts, kinks, wear – used properly and plugs intact.			
D4	Lighting is sufficient for all working areas and around service equipment, switchboards, and panel-boards.			

E. Machines, Equipment, and Tools		Acceptable	Needs Attention	Not Applicable
E1.	Appropriate warning signs are posted (and visible) at or near equipment with moving parts, such as balers, conveyors, compressors, compactors, etc.			
E2.	Hand tools are in good repair – no burrs, loose/cracked handles, heads not mushroomed.			

F. Fire Protection		Acceptable	Needs Attention	Not Applicable
F1.	Exits are properly marked.			
F2.	Exits and aisles leading to exits are visible, clearly marked, kept clean and with a pathway at least 28" wide.			
F3.	Portable fire extinguishers are of the proper type and are kept in designated places at all times. Inspections are current and up to date (accessible, mounted, charged, pinned, sealed and tagged).			
F4.	Combustibles are safely stored away from flames and sparks.			
F5.	Access to the Firewater Storage tanks is clear, they are full, in operable condition and free of leaks or corrosion.			
F6.	Fire detection systems are in operable condition and are inspected regularly by outside-qualified contractor. Inspection is current, and this has been recorded.			
F7.	Director is advised of any work or situation that is likely to result in the impairment of the fire protection system.			
F8.	All material bays are more than 2.5 m away from the boundary fence and materials are contained in bays.			

E. General Safety		Acceptable	Needs Attention	Not Applicable
E1.	Rest rooms are clean and sanitary.			
E2.	Hand soap, warm water, and hand towels or other means of drying hands are available.			
E3.	First Aid supplies are available and maintained. No items are expired.			
E4.	Eyewash stations are clean, operable, and accessible.			
E5.	All company rules and regulatory postings are up to date.			
E6.	The Material Safety Data Sheet (MSDS) folder is up-to-date, prominently located and readily available to workers.			
E7.	Overhead doors and controls are in good working order.			
E8.	Lighting is adequate inside and outside the building.			
E9.	All safety compliance training is documented and up-to-date			

(In addition to items already listed)

G. Workshop				
G1.	Hot Work Permits are being used.			

Once the site survey/inspection has been completed and all actions (if necessary) have been reported to Jamie Witt, please sign and date below.

Signed.....
Position.....

Full Name.....

If any actions are needed – list them below: