

# BMBC Council & Trade Waste Facility

## Fire Prevention Plan

<b>Site Address:</b>	Smithies Lane Depot, Smithies Lane, Smithies, Barnsley, S71 1NL
<b>Client:</b>	Barnsley Metropolitan Borough Council
<b>Report Ref:</b>	AC00165/BMBC/FPP V1.0
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## REPORT LIMITATIONS

This Management Plan has been produced by AC Environment Solutions Limited, (AC Environment Solutions) for the site that is to be known as the BMBC Council and Trade Waste Facility, located at/within Smithies Lane Depot, Smithies Lane, Smithies, Barnsley S71 1NL on behalf of the client, Barnsley Metropolitan Borough Council, (BMBC) via the Association for Public Service Excellence (APSE); solely for the use of the client and their professional advisors with whom the assignment has been agreed.

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AC Environment Solutions and/or BMBC and their professional advisors retain the right to review, and, if warranted, to modify and update the Plan accordingly to ensure it remains relevant to site operations whilst the Permit remains in force in accordance with the review procedure contained within this Plan.

AC Environment Solutions knows of no conflict of interest in the production of this Plan.

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Date: August 2019

## BMBC Council & Trade Waste Facility, Smithies Depot – Fire Prevention Plan

**Operator: Barnsley Metropolitan Borough Council - Environment and Transport Place**

**Directorate**

**Site Location: Smithies Lane Depot, Smithies Lane, Smithies, Barnsley S71 1NL**

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# 1 Introduction

## Executive Summary

- 1.1 AC Environment Solutions Limited (AC Environment Solutions), has been appointed by Barnsley Metropolitan Borough Council (BMBC) via the Association for Public Service Excellence, (APSE), to prepare a Fire Prevention Plan (FPP) for a proposed new Council and Trade Waste operation at Smithies Depot, Smithies Lane, Smithies, Barnsley S71 1NL. This FPP accompanies an application to the Environment Agency for a Bespoke Environmental Permit. The location of the depot is indicated on the plan at Appendix A. The only site access is via the depot entrance off Smithies Lane to the south of the site.
- 1.2 Smithies Lane is BMBC's main operational depot, which has been subject to recent master planning to facilitate a series of improvements, and a programme of ongoing redevelopment of areas of the wider depot has commenced at the time of writing of this Plan. Two operational areas are to be included in the permitted area (known as upper and lower), with two small separate oil storage and battery storage areas situated to the east and south of the Fleet Services Garage also included within the permit boundary. Redevelopment of the lower site area to be occupied by the proposed waste facility is also already in progress.
- 1.3 This FPP has been completed in conjunction with representatives from BMBC, with input from engineering and safety teams, and personnel based at the site who will eventually be directly involved in its day to day running. Fire prevention advice has been formulated following detailed operational assessment, alongside the council's existing policies on fire prevention and management, and in accordance with the requirements of the Environment Agency's '*Fire prevention plans: environmental permits' guidance*', last updated on 04 May 2018. The Plan also contains a Policy Statement covering management commitment to the plan and communication training, audit and review procedures.
- 1.4 This FPP is a stand-alone document which will form part of the waste facility's integrated Management System (MS), and it will also feed into the '*Fire Precautions Plan*' for the entire depot. This should enable BMBC to more effectively manage their on-site processes to meet the following objectives:
- reduce and/or mitigate against the likelihood of a fire occurring;
  - where necessary, aim for the fire to be extinguished within 4 hours;
  - minimise the spread of fire within the permitted areas and to neighbouring sites.
- 1.5 It should be noted that the Environment Agency's guidance is intended to **supplement, not replace**, any statutory requirements for sites controlled under local acts of parliament, the Regulatory Reform (Fire Safety) Order 2005 or any other applicable legislation.
- 1.6 It is noted that the guidance states that: '*If the fire prevention measures presented in the FPP are not put in place and used in the permitted areas, the Environment Agency may take enforcement action*'.

## Who the FPP Guidance Applies to

- 1.7 This guidance applies to waste operators that store any amount of '*combustible*' waste.
- 1.8 It applies to operators from the following sectors:

- waste metals (end of life vehicle (ELV) sites and scrap metal);
- non-hazardous waste.

1.9 It also applies to operators in any of the following sectors:

- biowaste treatment (open windrow, in-vessel composting and dry anaerobic digestion);
- agriculture (intensive farming only);
- incineration;
- combustion;
- paper and pulp;
- cement lime and minerals.

### **Who the FPP Guidance Does Not Apply to**

1.10 The guidance does not apply to:

- landfilling;
- biowaste treatment (wet anaerobic digestion);
- biowaste use (land spreading).

1.11 This guidance also does not apply to the storage of coal, materials, or wastes that are:

- hazardous wastes – excluding waste electrical and electronic equipment (WEEE), but including hazardous waste batteries accepted as a separate waste stream, which is covered by Sector Guidance Note 5.06;
- dangerous substances stored under the Control of Major Accident Hazards Regulations;
- liquids.

1.12 This guidance doesn't apply to non-waste materials such as gas cylinders, aerosols and combustible liquids. These are covered by '*Guidance for the storage and treatment of aerosol canisters and similar packaged wastes*'. However, these wastes must still be considered in the FPP (if applicable) because they may cause or increase the impact of fire on a site.

### **Types of Combustible Waste**

1.13 Types of combustible wastes include (this list should not be regarded as exhaustive):

- paper or cardboard;
- plastics;
- rags and textiles;
- scrap metals contaminated or mixed with other waste such as oils or plastics;
- de-polluted and un-depolluted ELVs;
- refuse derived fuel (RDF) and solid recovered fuel (SRF);
- compost and plant material;
- biomass;
- mixed waste containing any combustible wastes;
- rubber (natural or synthetic, including whole tyres, baled tyres, tyre shred crumb and fibre);
- wood (including planks, boards, sawdust, shavings, logs, firewood or chips or wood joined to form crates, pallets, casks or barrels);
- fragmentiser waste (from processing of ELVs, plastics and metal wastes from materials recovery facilities);

- WEEE e.g. refrigerators, computers and televisions containing combustible materials such as plastic and any batteries.

### Permit Details

- 1.14 This Management Plan accompanies an application to the Environment Agency for a Bespoke Environmental Permit based upon Standard Rules SR2015 No 6: 75kte household, industrial and commercial waste transfer station with treatment.
- 1.15 The waste arisings will comprise mainly '*trade waste*' from local businesses although the facility will also deal with a proportion of wastes generated internally by the local authority, particularly inert materials generated from street works.
- 1.16 BMBC intends to accept and treat up to 74,799 tonnes per year of non-hazardous wastes, including some combustible waste types, with these activities being confined to the lower yard area to the south-west. N.B. the upper yard to the north comprises the non-biodegradable materials processing and storage area which will account for the majority of the non-hazardous/inert waste types being stored on site at any one time. This area is considered to present a lower overall risk to fire.
- 1.17 A small proportion of hazardous wastes (up to 200 tonnes per annum / no more than 25 tonnes stored on site at any one time), will also be accepted for bulking up and onward transfer to other third-party specialist recovery facilities. The majority of the hazardous wastes will be stored either within the separate gas cylinder store to the south-east of the entrance to the northern site area, or within the waste oil or battery storage areas located to the east and south of the Fleet Services Garage.
- 1.18 Plans showing the layout of the wider depot site and the two main operational areas are included at Appendix B.

## 2 Fire Prevention Plan Policy Statement

### Management Commitment

2.1 BMBC is committed to ensuring that all site operations on the site at Smithies Lane Depot are fully and responsibly managed as far as is practicably possible to reasonably prevent, detect, suppress, mitigate against and contain fires. BMBC will demonstrate their commitment to prevention and mitigation against fires by maintaining detailed assessments of all our operations to comply with the requirements of the Regulatory Reform (Fire Safety) Order 2005 and other applicable legislation and to satisfy the Environment Agency that:

- the likelihood of fire;
- the impact from emissions during or after a fire on local people, critical infrastructure and the environment;
- the resources required by the Environment Agency and other emergency responders during an incident; and post incident clean-up and remediation costs; are equivalent or less than would be incurred, if the site followed the minimum standards set out within the Environment Agency's guidance Fire prevention plans: environmental permits - updated 4 May 2018 (and subsequent versions);
- this Fire Prevention Plan (FPP) will be incorporated into the MS for site operations and the 'Fire Precautions Plan' for the wider depot;
- consultation will take place as necessary with fire and environmental professionals, other authorities and regulators, employees, customers and the local community in order to improve site operations and mitigate against and prevent fire risk;
- they will review the FPP policies and procedures on a frequent basis to maintain and improve effectiveness of the prevention and mitigation measures.

2.2 It is recognised that the processing of the waste types handled at this facility may present potential for increased fire risk. BMBC is committed to mitigating against potential risk of fire by designing the site layout and operations such that they minimise any potential risks. It is the primary purpose of this Management Plan to explain the policies and management procedures to minimise fire risk. The training of site personnel is key to ensuring that good site management practices are maintained, and that staff know what to do in the event of a fire occurring. This is a priority to BMBC.

2.3 Successful implementation and continuous achievement of this policy requires the co-operation of all personnel employed by BMBC, contributing directly to the continual improvement of the business and site operations and our relationships with regulators, other authorities and the local community. BMBC will ensure that all site personnel (including site contractors), are aware of the FPP and have an understanding of its contents, that they are appropriately trained (or inducted) where necessary and are provided with appropriate resources with which to continuously maintain and improve site management operations and practices.

**Signed:** .....

(On behalf of BMBC Environment and Transport Place Directorate)

**Date:** .....

## Communication, Training, Audit and Review Procedures

- 2.4 A copy of this FPP will be kept at the following locations at all times:
- Depot Main Office Reception / Depot Managers Office
  - Weighbridge Office
- 2.5 As stated in the Fire Prevention Plan Policy, this FPP will be integrated into the waste site's MS, and it will also form part of the '*Fire Precautions Plan*' for the entire Smithies Depot, which has been developed over time in collaboration with South Yorkshire Fire and Rescue. This FPP is a live document which will be reviewed and updated as may be necessary on an annual basis, or immediately following an incident or accident, a change in operations or a change in legislation.
- 2.6 In addition, the Council and Trade Waste Facility (CaTWF) will be included in periodic independent fire safety audits by South Yorkshire Fire and Rescue which cover the wider depot site. The '*Fire Precautions Plan*' and associated fire risk assessments are reviewed annually by BMBC or sooner as described in the previous paragraph.
- 2.7 All records relating directly to general fire safety and the formal audit will be maintained both electronically and in a dedicated Fire Safety Record Book / File which the external fire specialists have indicated that they will advise upon and supply.
- 2.8 A formal meeting, audit and review of the effectiveness of all aspects of the '*Fire Precautions Plan*', and this FPP, will also be held at least annually (or more frequently if deemed necessary), which will include representatives from the site operations team, BMBC's Management Team and the external fire specialists.
- 2.9 It is proposed to that the first full annual review meeting will be held on the first anniversary of the issue of the permit and opening of the facility. The formal audit and review process will identify the need for and programming in of any refresher training and practices for evacuation drills and emergencies, the details of which will be recorded.
- 2.10 All new waste management staff and contractors will be trained in the requirements of the '*Fire Precautions Plan*' and this FPP as part of the induction process and will be familiarised with the actions and procedures they must follow to assist in the prevention of fire. They will also be briefed on what they must do if a fire breaks out on site, and the procedures they must follow in an emergency.
- 2.11 Specific areas of training for which training records will be kept are:
- general fire awareness/fire maintenance requirements;
  - sources of ignition, waste types, waste acceptance, storage procedures and monitoring;
  - safe use, maintenance and storage of specialist tools and equipment;
  - safe use of cutting equipment / when and how to conduct a fire watch;
  - use of specialist detection firefighting equipment / when and how to conduct a fire watch;
  - fire warden training / fire evacuation and drill procedures; and,
  - emergency procedures / assistance to Fire & Rescue Service and EA / drainage procedures including deployment of sandbags and other measures to prevent the escape of fire water.
- 2.12 Staff and contractors will be regularly briefed of any changes or updates and how the changes impact upon their role.

- 2.13 There will be a need to carry out regular checks, monitoring and audits by the deputy manager and / or the site manager (both level 4 TCM qualified), to ensure various activities are being carried out in compliance with the MS, the FPP and ultimately the permit, at the prescribed frequencies as indicated in the table (Table 1) below. Records specifically designed for inclusion into the MS will be completed and kept of these checks:

<b>Details of Checks and Audits</b>	<b>Suggested Frequency</b>
Waste acceptance.	Daily
Waste/containers are not overstocked and piles/storage oversized. Appropriate separation distances are being maintained (as applicable).	Daily
Interceptor is not covered.	Daily
Detection equipment alarms are functioning correctly.	Daily
Fire watch (plant and equipment/end of shift).	Daily
Fire watch (cutting operations).	Daily (when in progress)
All waste types are being stored correctly.	Weekly
Ignition sources are being appropriately managed.	Weekly
Firefighting equipment is available in the buildings and a supply of sandbags are appropriately stored and fit for use.	Monthly
Waste storage times / stock rotation.	Monthly
Staff surveillance.	Monthly (or as audits dictate)
Nominal temperature monitoring / need for restacking.	Quarterly
Review of FPP, emergency procedures and drill practice.	Annually (or following an incident)

- 2.14 Should amendments to the FPP be necessary, draft changes would be made and submitted to the Environment Agency for approval. Once changes are approved, controlled copies will be updated, and superseded documents will be archived for reference purposes.

### 3 Site Background Information

#### Site Location and Topography

- 3.1 The proposed area to be permitted is sited within the larger Smithies Depot, located approximately 1.4 kilometres to the north of Barnsley Town Centre, as shown on the location plan provided at Appendix A.
- 3.2 An approximate National Grid Reference for the centre of the site is (SE) 434682 408302. The site lies at a minimum of 52.0m above Ordnance Datum (AOD) within the lower yard area to the south-west rising to approximately 56.0m AOD at its northernmost point.
- 3.3 The site is approximately 1.72 hectares in aerial extent and will be divided into two main areas of operation and two much smaller ones. The permit boundary is shown outlined in green on the Schematic Layout Plans for the new facility at Appendix B.

#### Site Access for Emergency Responders

- 3.4 Site access for fire and rescue services and other emergency responders is achieved by entering the south-eastern entrance (the only entrance) which leads off from Smithies Lane. Smithies Lane is located off the western side of the A61 Wakefield Road just beyond the Trust Ford vehicle showroom.
- 3.5 There is no perimeter road access to any of the operational waste areas because the road to the west terminates at the entrance to the Traveller site.
- 3.6 There are two Fire Stations within a 3-mile radius of the site:
- Broadway (2.4 miles).
  - Cudworth (2.7 miles).

#### Waste Types and Quantities / Fuel / Hazardous Waste Storage

- 3.7 For details of the waste types and quantities to be accepted, treated and stored, please refer to paragraphs 1.14 to 1.18.
- 3.8 Locations of the hazardous waste storage points (gas bottles, waste oil, batteries) are also included in these paragraphs).
- 3.9 The depot refuelling station is located on the left side of the access road before the entrance to the lower waste transfer and treatment area. Please refer to the plan at Appendix B1 for details of all of the above.

#### Combustible Waste Storage

- 3.10 Non-hazardous combustible waste is stored either in open bays, skips or in the waste transfer and treatment building in the lower waste transfer and treatment area.
- 3.11 It should be noted that a logs storage and a wood chip storage area is also located in the north-west corner of this area. A concrete fire wall 0.6m thick is to be constructed between the barn containing the wood chips and the waste treatment barn. Please refer to the plan at Appendix B3 for details of all of the above.



## Areas of Natural and Unmade Ground

- 3.12 The lower waste transfer and treatment area is surfaced with concrete and tarmac, as are the areas beneath the waste oil and battery storage areas. There is a small area of unmade ground to the east of the waste treatment barn and beneath the gas bottle store.
- 3.13 The upper raised area is hardcore hardstanding over made ground comprising an old colliery waste tip. There is less risk of a fire relating to waste processing in this area.

## Sensitive Receptors

- 3.14 Sensitive receptors and neighbouring occupancies located within a 1km radius of the site have been identified for the purposes of the Bespoke Permit application MS (including individual management plans covering fire prevention (FPP), Odour Management (OMP) and Dust and Fugitive Emissions (DFEMP)). They are presented in the comprehensive table below (Table 2) and on the plan at Appendix C:

No.	Description of Sensitive Receptors / Neighbouring Occupancies	Distance / Direction
Waterways, watercourses, lakes, groundwater boreholes, wells or springs (supplying water for human consumption), and/or otherwise environmentally sensitive receptors:		
1.	River Dearne (including nearby tributary streams and drainage)	15m N / 300m SW
2.	Fleets Lake	500m SSE
3.	Fishing Pond	150m S
Roads, bus stations, railways, airports, pylons (on or immediately adjacent to the site), other above ground utilities etc:		
4.	A61 Wakefield Road	200m E
5.	Smithies Lane	200m SSE
6.	A633 Rotherham Road	600m E
7.	B6132 Carlton Road	380m SE
8.	Burton Road	950m SSE
9.	Railway Line – Barnsley to Leeds	800m SW
10.	Electricity Pylons	0m (On Site)
Schools, hospitals, nursing and care homes, residential areas, and significant places of work:		
11.	Athersley South Primary School	600m NW
12.	Part of Richard Newman Primary School	800m NNW
13.	Burton Road Primary School	950m SSE
14.	Part of Linwood Nursing Home, New Lodge	820m NNW
15.	New Lodge Housing Estate	450m NNW
16.	Athersley South Housing Estate	550m NW
17.	Honeywell Housing Estate	450m SSW
18.	Devonshire Drive and part of Barnsley High School Housing Estate	720m WSW
19.	Smithies Housing Estate	200m SW / 200m E
20.	Housing Estate North of Honeywell Lane	800m SE
21.	Monk Bretton Housing Estate	500m SE
22.	Travellers' Housing Site	10m SW
23.	Barnsley MBC Smithies Depot and Offices (including housing along depot southern site boundary)	0m Adjacent
24.	Asda Superstore	900m S
25.	Wickes DIY Store	100m SSE
26.	BMB Buildbase	130m E
27.	Stagecoach Bus Depot	150m NE
28.	Trust Ford Showroom	380m SE
29.	New Lodge Club and Industrial Estate	400m N
30.	Industrial/Commercial Units on Wakefield Road	500m SE
31.	Industrial Units West of Old Mill Lane	900m SSE
32.	Part of Barnsley College Campus	1000m SSW
33.	Barnsley MBC Smithies Lane Public Waste Recycling Centre	50m SSE
34.	Residential properties adjacent to the south-eastern boundary of the Depot on Smithies Lane	150m SE to 200m SSE

- 3.15 As depicted on the plan and highlighted above, there are six main sensitive receptors in close very proximity to the waste facility of concern in the event of fire:
- 22 – Travellers housing site (residents since the 1960s).
  - 1 – River Dearne (controlled waters inc nearby tributary stream / drainage).
  - 2 – Fleets Lake (controlled waters).
  - 3 – Fishing Pond (controlled waters).
  - 10 – National Grid/Yedl pylon and associated overhead electricity apparatus.
  - 33 – Public Waste Recycling Centre.
- 3.16 23 Smithies Depot Council Offices and 34 Residential properties at the depot entrance south of the site are also worthy of note as both may be impacted by firefighting activities in the event of a fire.
- 3.17 Any of the identified receptors could be sensitive to impacts relating to the occurrence of smoke and fumes arising from a fire occurring at the site depending upon their proximity, and direction, as influenced by inclement weather conditions at the time.

### **Groundwater Vulnerability**

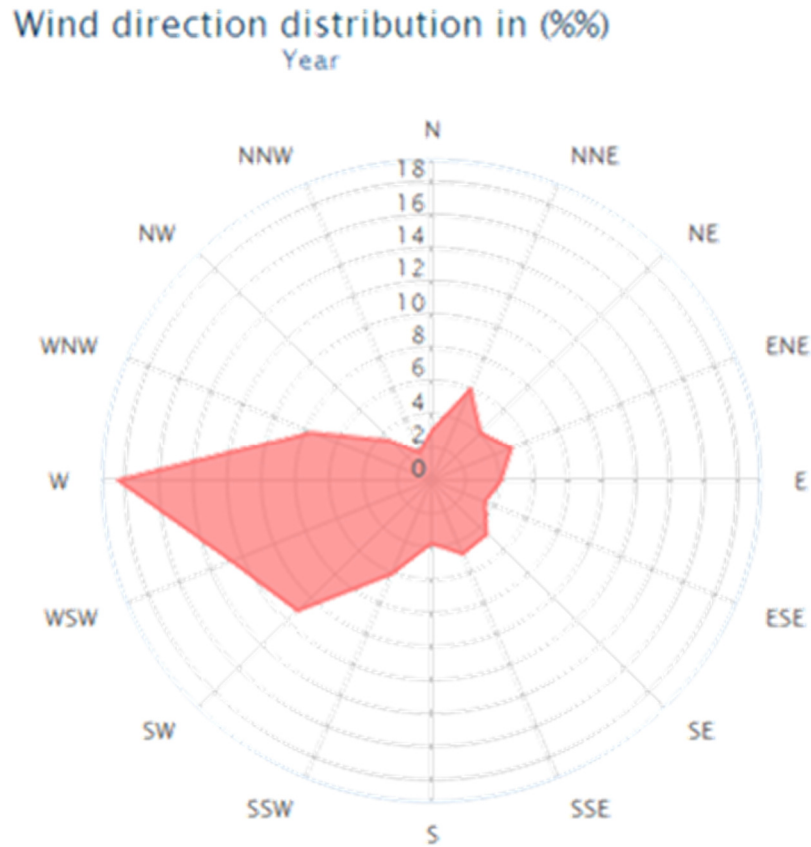
- 3.18 The site is not directly underlain by superficial deposits; however, the Groundsure Enviro Insights Report designates the aquifer within superficial geology as Secondary A Aquifer (formerly a minor aquifer) at a location 124 metres south-west of the site.
- 3.19 The bedrock aquifer designation directly beneath the site is Secondary A Aquifer.
- 3.20 Secondary aquifers include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage capabilities. Secondary A aquifers have permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.
- 3.21 There are no Groundwater Abstraction Licences including Environment Agency licensed groundwater abstractions within 1 km of the site.
- 3.22 There are no Source Protection Zones within 500m of the site.
- 3.23 There are no Source Protection Zones within the Confined Aquifer within 500m of the site.

### **Prevailing Wind Direction**

- 3.24 Extreme meteorological conditions with high winds dispersing dust may increase the risk of local receptors being impacted by smoke.
- 3.25 The prevailing wind directions in the UK are usually in the segment between south and west. However, the direction of the prevailing winds can be modified by local topography. In general, it is the case that the more pronounced the topography, then the greater the potential influence upon local wind directions.
- 3.26 The prevailing wind direction for the Council and Trade Waste Facility located within Smithies Depot is from the west-north-west to south-south-west, although it is understood from other wind data closer to Barnsley researched from the internet that it is also from the south. The Operations Depot Purchasing and Supplies Manager has also indicated that the open land to the north-west also appears to have an effect upon the wind direction reaching the depot.

3.27 A wind rose has been supplied by BMBC to provide indicative average strength and direction for 2014 (See figure 1 below):

**Figure 1: Wind Rose Summary Chart for Sheffield/Rotherham (2014)**



Month of year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
	01	02	03	04	05	06	07	08	09	10	11	12	1-12
Dominant wind direction	➤	➤	➤	➤	➤	➤	➤	➤	➤	➤	➤	➤	➤
Wind probability >= 4 Beaufort (%)	44	45	41	40	47	30	36	37	36	32	38	45	39
Average Wind speed (kts)	11	11	10	10	11	9	10	10	10	9	10	11	10
Average air temp. (°C)	4	5	7	10	12	15	17	16	15	11	7	5	10

## 4 Managing the Common Causes of Fire

### Assessment of Ignition Sources and Control Measures

- 4.1 The following table (Table 3) lists the possible sources of ignition which could lead to a fire breaking out on site and the control measures which have been put in place to mitigate these risks.

Ignition Source	Description	Control Measures
Arson or vandalism	Waste sites can attract problems with intruders on site particularly outside of operational hours. Some materials on site are perceived to have value and this can present issues.	The site is surrounded by a minimum 2m security fence to all sides. The security fence nearest to the waste transfer bays is 3 metres in height and it is not possible to see inside the site. CCTV is in operation at the site and links to an outside security firm who have fast responder units across the town should an incident occur. During day light hours there is on site security at the security office. Potentially valuable materials are stored in lockable containers. Potential combustible wastes will not be stored adjacent to one another. Where these wastes are not stored in skips, they are to be enclosed within a concrete wall surrounded on three sides to reduce the risk of fire spreading should one occur. Given that the prevailing wind is west to south west, the logs and mulch will be stored at the north end of the site in the undercover barn, surrounded by 5m high steel-cladding to the walls on the north, west and east sides. There will be an intermediate 0.6m wide concrete wall constructed between the mulch storage and the area where waste processing occurs. The whole length of the barn will be fitted with a sprinkler system. Should a fire occur here then it will be contained in this area to some extent and reduce the risk of it spreading to other areas of the depot. There are no buildings or combustible items in the immediate vicinity of the log and mulch storage areas.
Plant or equipment failure	During daylight hours the site operates large plant and machinery which could potentially ignite combustible material following a mechanical or electrical failure. Plant is kept away from the TWRC at night in the "night shed".	Plant and machinery on site are serviced at regular intervals to ensure full working order. Any faults, including leaks of fuels and oils are rectified immediately by trained people on site at the Fleet Services Garage or externally if required. Machines are regularly cleaned to prevent build-up of dust and fluff.
Naked lights	Use of naked lights on site without proper controls could give rise to a fire.	BMBC does not permit the use of any naked lights in the depot without hot work permits. Contractor activities, which are most likely to use naked lights, must submit a method statement specific to the works that will be undertaken and including suitable and sufficient fire prevention measures to cover their activities. The relevant manager approves these method statements before any work takes place and checks are made to ensure the work is progressing in accordance with the procedures.
Hot works	Welding or cutting.	Similar to above, BMBC does not permit any hot works in the depot without hot permits to work. Contractors, most likely to undertake such work, must submit a method statement for the works that will be undertaken and include suitable fire prevention measures to cover their activities. The relevant manager approves these method statements before any work takes place.

Ignition Source	Description	Control Measures
Hot exhausts	Hot exhausts from vehicles could potentially ignite highly combustible material.	Vehicles are instructed to either tip directly into appropriate bunkers or where the waste is in manageable sizes they would be manually lifted into appropriate bunkers. Machines should not be parked up in close proximity to waste materials at any time. Machines to be regularly maintained and kept free of dust and fluff.
Damaged or exposed electrical cables, or electrical faults	Any damage or exposed electrical cables have the potential to cause fire or harm to personnel.	All cables are positioned in safe locations, either underground or in protected areas. Any reports of damaged or exposed cables are raised immediately with BMBC's electrical team for repair by a qualified electrician. Full hardwire tests are carried out every 5 years or following any major works to the electrical infrastructure of the site.
Neighbouring site activities	Other functions and activities occur within the depot.	The waste activities take place in isolated areas of the depot which provides a buffer from activities carried out elsewhere in the depot. The trade waste transfer bunkers are constructed of concrete walls and the site can be secured by gates at either end out of working hours. There are currently no routine activities carried out by neighbouring businesses that may present a fire risk to the site or wider depot, however staff remain vigilant to changes and appropriate action will be taken to mitigate risks should they arise in future.
Incompatible wastes	Non-permitted wastes which may give rise to fire due to reactions between materials.  Incompatible storage arrangements	The site will operate a strict waste acceptance protocol for all material entering the facility and any waste which either doesn't comply with the permit or is deemed to present a risk to safety on site (including fire safety) will be rejected. If any materials are inadvertently disguised in loads and found present a risk, they will be removed to the quarantine area (refer to site layout plan) immediately until an appropriate disposal outlet can be found. Staff on the weighbridge will be trained to identify non-permitted waste types, including hazardous wastes in addition to the operational staff supervising waste treatment and storage once in the waste transfer area. Incompatible wastes will not be stored together e.g. batteries, gas bottles and waste oils have their own dedicated storage areas and containers.
Self-combustion	Decomposing or stored wastes Generating heat at a faster rate than it can be lost to the environment which may lead to self-combustion of certain materials within the waste streams.	All mixed wastes (general household and residual trade) will be removed from site within 5 days of arrival. A first in, first out system will be in place to rotate waste and ensure no waste exceeds this storage time limit. Green waste will be stored separately to all other wastes in a concrete bunker or steel roll on/roll off type container to prevent the heat from these materials putting other waste streams at risk of combustion. Wastes such as metals and tyres Shall not be stored in large quantities e.g. in piles or stacks.
Smoking and discarded smoking materials	Potential for a fire caused by discarded cigarettes etc in to waste piles or containers.	Smithies Lane depot is a no smoking site. Anyone found to be smoking on site is asked to leave. Staff on site are subject to disciplinary action if they are found to be smoking on site. Notices are visible around the site reminding the workforce of these restrictions.
Open burning	Any open fires or open burning on site or on land adjacent to the site may pose a fire risk.	There are no fires or burning of any materials permitted on site. Any fires on neighbouring land will be reported to relevant authorities. There is no uncontrolled waste land in the vicinity of the site which helps to minimise the risk of such an occurrence. There is no road access to the site perimeter.

Ignition Source	Description	Control Measures
Sparks from loading buckets	Sparks caused by contact between loading bucket and the ground surface resulting in an ignition source that could lead to a fire.	The materials the loading shovel comes into contact with are not generally wastes that will ignite from a spark. However, we recognise that there may be potential risks posed by general wastes, dust and fluff. To avoid these risks, drivers are trained to use minimal ground contact force when pushing waste and angle loading buckets to reduce friction and therefore the potential to create sparks. This also assists in prolonging the life of wear-plates and is therefore actively promoted.
Hot loads deposited at the site	Any load which contains waste with an increased temperature. Such waste may ignite itself or cause other materials to ignite.	No hot loads are accepted on to site. If a load was to be tipped and then found to contain hot waste, this would be immediately isolated and moved using the loading shovel to the quarantine area for further action (which would depend on the waste type and quantity). Such occurrences would require recording in an incident log and/or site diary and the company who brought the load informed and accordingly reprimanded. The fire brigade and the Environment Agency may also need to be informed depending upon the nature of the incident.

### Further Measures to Prevent, Detect, Suppress, Mitigate and Contain Fires

- 4.2 The following arrangements are also in place at the depot to further manage the common causes of fire:

#### Security

- 4.3 The depot has a minimum 2m high security fence around its perimeter. There is a 24-hour CCTV system linked to, and monitored by, the Council's internal security department during opening hours, and by an external response company outside of operational hours should the need arise.
- 4.4 An intruder detection system is also installed around the perimeter, and office buildings have alarms installed that are also linked to the Council's internal security department.
- 4.5 During operational hours there are members of staff on site at all times, with access and egress restricted to the main gates leading on to Smithies Lane.

#### Plant and Equipment

- 4.6 There is static plant on site as well as mobile machines, two loading shovels and a 360° excavator. The mobile machines have internal servicing and maintenance contracts in place. The 360° excavator has a fire extinguisher on board.
- 4.7 One loading shovel is parked adjacent to the material storage area, and one is parked in the overnight parking area known as the '*Night Shed*'. (See drawing at Appendix B1 for locations). The loading shovels are always parked in a position that allows them to be moved without the need to move other vehicles or equipment. This allows the machines to be deployed quickly in the event of a fire – Available Plant (Table 4).

Activity	Process and Equipment Details
Transfer of wastes on and off site	2 x Loadall loading shovels and 360° tracked excavator
Sorting (Manual only)	Manual sorting by operatives
Separation, screening, crushing and compacting	360° tracked excavator and hired aggregate crusher and screener

- 4.8 In addition, the loading shovels can be fitted with forks to facilitate the unloading of some palletted deliveries.
- 4.9 A mobile jet wash is available at the site for cleaning down vehicles and plant. This is not used in conjunction with detergents as these may mobilise oils in oil water separators / petrol interceptors.
- 4.10 There is a dedicated vehicle wash bay on site where detergents may be used.

### **Fire Watch**

- 4.11 A fire watch is to form part of the daily checks routine carried out by staff at the end of their shift. Waste acceptance from third party sources will cease approximately one hour before the site closes each day. All work involving waste materials ceases approximately 30 minutes before the end of the shift to enable operatives to carry out a final site inspection, to check all combustible waste materials for signs of potential fire / risks of fire and that the site is safe prior to leaving the site.
- 4.12 A fire check on vehicles is carried out whenever they are parked up for a period of time during the day or at the end over shift. Checks will also be made to ensure that no waste materials have become entangled on the vehicle which could potentially cause a fire. Exhausts check for dust accumulation or combustible materials wrapping around them. This is in addition to the daily checks on vehicles which are made for defects damage all faults so the vehicle can be called in for repairs.
- 4.13 Contractors undertaking any significant hot works must submit a method statement which must be approved by the Council's health and safety team or appropriate manager prior to a permit to work being issued and any work taking place. This will include fire prevention measures or fire checks as appropriate to the work activity, but a fire watch lasting 45 minutes after the activity has finished must be completed as a minimum. Smaller scale hot works, such as minor skip repairs also require a permit to work which is issued by the site manager following a discussion about the method of work which will be undertaken and what cautions and control measures are to be put in place.

### **Leaks and Spillages of Oils and Fuels**

- 4.14 The depot has a diesel and gas oil refuelling station for use in Council vehicles. There is also a dedicated waste oil store to the east of the Fleet Services Garage (included within the permitted area) for automotive oils/fuels delivered by third party customers.
- 4.15 Tanks used for the storage of oils and fuels meet current regulations and are inspected and serviced periodically by approved contractors.
- 4.16 Vehicles are parked overnight in designated parking bays. Any vehicles which are found to have an oil or fuel leak are immediately isolated in a safe location away from any sources of combustible materials. All surface water drainage from hard standing in the lower site waste transfer and treatment area runs to an interceptor before leaving site via the combined sewer which is consented by Yorkshire Water plc.
- 4.17 Any spillages on site are dealt with promptly by staff to contain and remove the hazard as soon as is reasonably practicable following the procedure set out in the Management System (MS).

- 4.18 The site has a number of 240 litre spill kits (See plan at Appendix B3 for locations) for use on large scale spillages which includes the following equipment:
- 7 x oil spill socks.
  - 150 x oil spill pads.
  - 10 x oil spill pillows.
  - 12 x blue disposal bags with tie for hydrocarbon-based oils, fuels and petroleum-based liquids.
  - 1 x Safety glasses.
  - 1 x Protective disposable gloves.
  - 1 x Leak plugging compound.
  - In addition, the site has a stock of absorbent '*spill dry*' granules.
- 4.19 Spill kits will be checked periodically to ensure equipment is available and remains effective (e.g. within any use by dates, no signs of deterioration etc.). Used spillage equipment will need to be disposed of as hazardous waste if the spillage is hazardous e.g. oils or fuels.

### **Housekeeping**

- 4.20 Site operatives will carry out regular housekeeping duties including sweeping, litter picking on site, restacking materials etc. during the course of the day to prevent the build-up of combustible wastes, litter type waste or dust/debris which may pose a fire or other risk.
- 4.21 Litter picking will be carried out around the perimeter of the site at least once per week or more often if required (for example in particularly high winds).
- 4.22 Litter or waste debris, dust and fluff will be removed from plant and machines each time they are parked up during the day or immediately if the material is identified as posing a risk (either a fire risk or a risk of damaging the machine).
- 4.23 Grounds maintenance work around the site is carried out by site operatives as required to ensure that overgrown vegetation doesn't restrict access, signage or overhang buildings and roadways or present a fire risk.



## 5 Preventing Self Combustion

### Storage Locations and Times

- 5.1 All wastes accepted at the site will be managed to ensure quick turnaround times, particularly the combustible wastes.
- 5.2 The throughput of the waste in the waste transfer and treatment area is expected to be rapid, as there is generally quite limited storage space, which will mean that most waste types will rarely spend more than a few days on site. No waste is stored in bales.
- 5.3 No waste will ever remain on site for longer than six months and it is not expected that that any of the waste types will remain for anything like that sort of timescale.
- 5.4 Longer storage times could potentially be attributed to the non-biodegradable non-flammable non-hazardous / inert type wastes that are to be received and processed in the upper part of the site.
- 5.5 The lower site is to accept a limited number of waste types, at least to begin with. Details of the anticipated storage times for specific wastes are set out in the following paragraphs, and the proposed site layout is shown on the drawing at Appendix B3. The overall layout may not change but the arrangement of the individual containers may alter depending upon the types of waste brought in regularly and in the largest quantities. Consideration will always be given to the arrangement of the containers to minimise the impact of fire.

### General Residual Waste

- 5.6 Residual waste is the fraction remaining when all the recoverable wastes have been separated out. A policy of first in first out will be adopted and a system of strict rotation will ensure waste stored in piles and then skips will not be left longer than is absolutely necessary. As soon as the dedicated roll-on roll-off skip is full it will be removed from site and exchanged. For general residual waste, the maximum time that the waste will remain on site which allows for absence of collections and/or site closures on bank holidays (5 days).

### Green Waste

- 5.7 Green waste is to be unloaded into a dedicated concrete open bunker / bay each day. The bay is to be fully cleared on a daily basis to prevent older waste material being left at the back. Given the size of the bay and the relatively short time before the container is full and is exchanged, there is little opportunity for the temperatures to rise and self-combustion to occur. The waste is to be loaded into an open-topped roll-on roll-off container for storage prior to being taken off site for recycling. Maximum storage time estimate (5 days).

### Wood Waste

- 5.8 Wood waste is to be unloaded directly from vehicles or separated from mixed waste loads in the treatment building prior to being placed in the open-topped wood container. The container is accessible on foot via a ramp and larger items may also be transferred by machine. Containment of the wood allows for transfer of the skip into the quarantine area (if safe to do so) in the event of a fire where it can be extinguished, with the assistance of the fire brigade if necessary. Maximum storage time estimate (5 days).

**Paper and Cardboard**

- 5.9 Paper and Cardboard is to be transferred to an easily accessible one tonne skip which will leave the site once full. This skip will remain sheeted when not in use, during windy weather and overnight to prevent any of the material from escaping or a suitable enclosed skip will be used. Maximum storage time estimate (5 to 10 days).

**Mixed Construction (including Sanitary and Glass)**

- 5.10 This waste stream has a dedicated large roll-on roll-off container, accessible by a ramp with waste materials being transferred to it immediately on arrival at site. The waste is not combustible waste and therefore does not present a fire risk. The container will be Exchanged once full. Maximum storage time estimate (5 to 10 days). Sanitary = porcelain, tiles and ceramics.

**Street Sweepings**

- 5.11 Street sweepings will be discharged onto concrete base within the end bay and allowed to drain via the sealed drainage system which is connected to an interceptor, and attenuation storage with a Hydrobrake providing timed release to the combined sewer. Collected by an external contractor and not combustible. Estimated storage time (5 to 10 days).

**Plasterboard and Gypsum**

- 5.12 Plasterboard and Gypsum would be transferred directly into a large roll-on roll-off container to be exchanged once full. Not readily combustible. Estimated storage time (5 to 30 days).

**Tyres on and off of Rim**

- 5.13 Tyres on the rim will be placed in a bunker/bay and tyres off rim into a roll-on roll-off container – problem waste if they catch fire therefore full containers will be removed promptly. Rims will be recovered to non-ferrous or alloy scrap. Estimated storage time (5 to 30 days).

**Ferrous and Non-Ferrous Metals**

- 5.14 Ferrous and non-ferrous scrap may be placed in accessible 1 tonne skips and may be transferred daily to larger ones which will be sent for recovery once full; (waste types may be interchangeable within bays, depending upon the types of wastes regularly coming in and there is a spare bay). Estimated storage time (5 to 30 days).

**Plastics**

- 5.15 A large roll-on roll-off container is to be provided for recovery of plastics for immediate removal once full. Estimated storage time (5 to 30 days).

**Mixed Waste**

- 5.16 Mixed waste is to be deposited on the concrete base within the barn with the operatives manually sorting the various recoverables and transferring them to their respective storage units on a daily basis. Waste materials will not remain in the building overnight.

## Monitoring and Control of Temperature

5.17 It is not considered necessary to monitor sub-surface temperatures with a probe or other device, as the waste is not being stored in piles where maximum pile sizes apply. However, the risk of self-combustion is fully acknowledged and appreciated. The following situations and actions will contribute to the strategy for ensuring that the temperatures within combustible wastes are appropriately controlled:

- Relatively quick throughput of the most combustible materials (often within five days).
- Outside storage resulting cooling for much of the year.
- No increased temperatures through shredded or chipping (manual separation only is undertaken).
- Daily checks including fire watch and checks steam, smoke, and warm containers (especially those not attributed to being in sunlight).
- Rotation of green waste (as described in paragraph 5.5).
- Un-stacking of skips to check for increased temperature on a weekly basis (only if waste remains on site longer than specified / operatives not to be put at risk by climbing on skips).
- Removal of skip to quarantine area, emptying and turning of waste prior to re-stacking. Fire extinguishers and water supply available (See paragraph 6.10).

## 6 Managing Waste Piles

- 6.1 The outside waste storage area within the lower waste transfer and treatment area is in the process of being purpose built to accommodate skips and containers accessible by ramps to facilitate the waste materials being easily transferred into them.

### Separation Distances

- 6.2 A distance of at least 1m to the site boundary is maintained for all combustible waste piles. The storage area has a concrete base with sealed drainage and the bunkers are precast concrete 'L' shaped units forming a 3m high periphery wall. Two open bays at the south-western corner are separated by 0.6m wide concrete Lego-type blocks to help prevent fire spreading.
- 6.3 As stated in paragraph 3.10, a concrete fire wall 0.6m thick is also to be constructed between the barn containing the wood chips and the waste treatment barn.

The construction work has been carried out in accordance with the '*Specification for Highway Works*' (See the drawing at Appendix B3 for details. Further details can also be found on drawing HS/SLD/LBA/900/01 which also accompanies the application).

### Waste Stored in Containers

- 6.4 The facility will utilise roll-on roll-off containers and skips for the majority of combustible wastes whilst they are being stored on site. Most containers will be open top and are therefore easily accessible till the Fire Service in the event of a fire. Close containers have large rear doors which can be closed off to reduce air supply to a fire, or as an access point for the Fire Service to tackle the fire.
- 6.5 Containers can quickly and easily be moved by the loading shovel which has a specialist hook attachment for this purpose. The vehicle itself is fitted with a fully automated fire suppression system to keep the driver safe when undertaking such operations.

### Maximum Pile Sizes (Skip and Container Capacities)

- 6.6 The table below (Table 5) provides the maximum skip and container capacities as opposed to '*pile sizes*' which are able to be stored on site within the waste transfer and treatment area. These sizes have been calculated using the maximum available space in each storage location, however realistically material storage should never reach these limits as it would undermine the operational capacity of the site.

Waste Material	Container Type	Maximum Dimensions
General residual waste	RoRo	2.7m (h) x 2.25m (w) x 6.1m (d) = 37m <sup>3</sup>
Green waste	RoRo	2.7m (h) x 2.25m (w) x 6.1m (d) = 37m <sup>3</sup>
	Open bunker	3m (h) x 10m (w) x 5m (d) = 150m <sup>3</sup>
Plasterboard and gypsum	RoRo	2.7m (h) x 2.25m (w) x 6.1m (d) = 37m <sup>3</sup>
Ferrous and non-ferrous	Small 1 tonne skip	0.76m (h) x 1.2m (w) x 0.91m (d) = 0.82m <sup>3</sup>
Paper and cardboard	Small 1 tonne skip	0.76m (h) x 1.2m (w) x 0.91m (d) = 0.82m <sup>3</sup>
Wood and timber products	RoRo	2.7m (h) x 2.25m (w) x 6.1m (d) = 37m <sup>3</sup>

Waste Material	Container Type	Maximum Dimensions
Mixed construction including sanitary and glass	RoRo	2.7m (h) x 2.25m (w) x 6.1m (d) = 37m <sup>3</sup>
Tyres off rim	RoRo	2.7m (h) x 2.25m (w) x 6.1m (d) = 37m <sup>3</sup>
Tyres on rim	Open bunker	3m (h) x 10m (w) x 5m (d) = 150m <sup>3</sup>
Hardcore and rubble	Small 1 tonne skip	0.76m (h) x 1.2m (w) x 0.91m (d) = 0.82m <sup>3</sup>
Plastics	RoRo	2.7m (h) x 2.25m (w) x 6.1m (d) = 37m <sup>3</sup>
Street sweepings	Open bunker	3m (h) x 10m (w) x 5m (d) = 150m <sup>3</sup>

- 6.7 The collective arrangements ensure that the volumes of waste being stored well below the maximum recommended pile sizes and heights, and the individual locations are easily accessible so the containers can be moved and isolated, and a fire extinguished quickly if necessary. There is a sizeable open area in front of the storage area in which to work, however, not all the waste types being stored in this location are combustible. A quarantine area is located within the southern part of the lower site area.

### Quarantine Area

- 6.8 The quarantine area is to be 20m long x 6.5m wide and will accommodate one of the larger roll-on roll-off skips in the event of a fire.
- 6.9 The quarantine area is also to be constructed from precast concrete 'L' shaped units forming a 3m high barrier to its rear and sides, giving protection from the prevailing wind direction. The nearest building is located 15m to the south-east beyond the rear wall. The area is isolated from any other combustible waste streams and provides a safe location to isolate any burning waste, whether in containers or otherwise, whilst appropriate steps are taken to extinguish it and make it safe.
- 6.10 The quarantine area will have a water supply to it, and when not in use it will be utilised as a 'water only' rapid wash down area for Council gully tankers and street sweeping vehicles following unloading in the adjacent bunker / bay. There is, however, a separate vehicle wash facility elsewhere in the depot where detergents / traffic film removers may be used if necessary. The washing facility would not be used as such in the event of a fire and waste acceptance would cease temporarily until the fire had been dealt with and the area cleared and made safe.
- 6.11 The quarantine area is also to be fitted with a fire extinguisher station and a spill kit.

## **7 Detecting Fires**

### **Fire Detection Methods and Equipment**

- 7.1 The following measures are in place or will be in place when the site opens:
- CCTV system in place with good visibility of all waste storage areas and monitored 24 hours a day.
  - Fire detection systems in existing buildings including break points for anyone on site to raise an audible alarm on discovering a fire. The system automatically alerts the Council's 24-hour security team who will then contact Fire Service if required.
  - Daily visual checks including fire watch checks during and at the end of the shift and the strategy for monitoring and control of temperatures within the waste.

## **8 Suppressing Fires**

- 8.1 A UKAS accredited contractor will design, install and maintain a commercial fire suppression system in the waste treatment barn.
- 8.2 The contractor shall be a member of the British Automatic Fire Sprinkler Association Certified to BS EN 9001. The design of sprinkler system shall meet the requirements of BS EN 12845 and BS 9251 and shall be submitted to the EA together with the respective certification for EA approval.
- 8.3 The sprinkler system shall be installed by the same company or by an LPC Approved Contractor LPS 1048 Level 4.

## 9 Fire-fighting Techniques

### Site Design

- 9.1 The layout of the lower site where the combustible wastes are to be kept has two points of entry (that would normally operate a one-way traffic system), to enable BMBC and/or the Fire Service to access the waste storage areas in order to tackle a fire. The site has been designed such that the site is enclosed around its perimeter, but a larger open concourse area is available in the centre of the site allowing access to all areas.
- 9.2 It is considered that the overall risk is relatively to and the measures to assist in firefighting should enable any worst-case scenario fire on site to be extinguished within a maximum of 4 hours.

### Available Resources

- 9.3 The site has staff qualified to operate plant machinery available all day during normal operational hours. The available plant is listed in Table 4 (below paragraph 4.7).
- 9.4 In the event of a fire, it is possible for staff members to be called into site to operate plant machinery and provide information / assistance as may be necessary to emergency responders, particularly the Fire Service.
- 9.5 Outside of normal hours staff and manager contact details are available to the Council's internal security department which operates 24 hours. Once alerted a member of operational staff and an available manager can attend site within 1 hour.
- 9.6 The council has access to finances in the event of an emergency.

### Water Supply

- 9.7 Two fire hydrants are available on site (See drawing at Appendix B2 for locations):
- Adjacent to site entrance on Smithies Lane.
  - Within the Neighbourhood Services compound 45m to the south of the lower site area.
- 9.8 There will also be a mains water supply in the quarantine area and two water bowsers are available which are filled from a large roof water tank within the depot which may be useful for cooling. Other alternative water points are also said to be available for the Fire Service to use and these are apparently known to BMBC staff if needed – overall depot '*Fire Precautions Plan*'.

### Firefighting Techniques

- 9.9 Protecting the health and safety of the people on site would be the Council's first priority and would only allow council staff to become involved in firefighting with the appropriate training and under the direction of the Fire Service.
- 9.10 Suggested fire-fighting techniques that would be considered are:
- Applying water to cool unburned material and other hazards.
  - separating unburned material from the fire using appropriate plant.
  - separating burning material from the fire to quench it with hoses.
  - Suffocating the fire with soil, sand, crushed brick or gravel (if readily available).

## 10 Site Drainage and Managing Fire-Fighting Water

### Arrangement of Site Drainage Systems

- 10.1 The waste storage area in the lower site area is to have an impermeable surface with a sealed drainage system connected to a below ground interceptor tank. Prior to entering the combined sewer system that traverses the site from north to south, drainage will be attenuated by series of eight boxed culverts 4.2m long x 2.1m wide x 2.1m deep (storage capacity of 120 cubic metre for a 1 in 100 year storm) before passing through a Hydrobrake flow control chamber which will limit the flow of water into the combined sewer to a rate of 5 l/s. (See Drainage Plan at Appendix D and Application Site Condition Report for further details).
- 10.2 The whole of the concourse area where waste transfer takes place will have surface water run-off draining into this system which has been specifically designed to mitigate the risk of fire-fighting water and contaminated waters from entering local lakes and watercourses or directly into the ground.
- 10.3 The outfall of the Birco drainage channels and low point of the whole concourse area is to be located at the south-western end of the site where a fire water holding area will be located. The holding area will be surrounded by 3m high precast concrete 'L' shaped units on a concrete base, so it remains in keeping with the remainder of the boundary walls. In addition, a catch pit will be constructed in the holding area that will have triple gully grating. Should any of the gully grating become blocked during a fire then the holding area and the lower concourse area will be sufficient to contain up to 4 hours of fire-fighting water.
- 10.4 If Yorkshire Water advises on any circumstances where fire-fighting water should not be released, the gully's could be blocked off to prevent the water escaping from the holding area and the water removed from the above ground holding area / concourse using the Council's vacuum tanker based at Smithies Depot (backed up by contractors if necessary).
- 10.5 Extinguishing of individual containers would be likely to take place in the quarantine area which has an impermeable base and walls will incorporate a concrete bund to the front of the bunker. Once deemed safe (fully extinguished), any fire related debris will be loaded into roll-on roll-off or other suitable container for transport to an alternative authorised disposal facility – the container may need to be quarantined temporarily if the waste requires to be sampled to allow waste characterisation in order to legitimately assign a suitable waste code.
- 10.6 Fire water arisings are also able to be removed directly from the quarantine area using the vacuum tanker and transported to an authorised disposal facility.
- 10.7 In the event that fire water contained in the quarantine area overflows the bund, the natural fall of the site would allow it to enter the holding area and leave the site via the closed drainage system that connects to the interceptor tank via the storage attenuation culvert and into the foul sewer system.
- 10.8 The vacuum tanker may also be utilised at short notice for other areas of the site in an emergency.
- 10.9 The Environment Agency would be informed of a fire at the earliest opportunity and kept updated with all developments including engagement in consultation on the details of the clean-up operation following the incident.



## 11 During and After an Incident

11.1 In the event of a fire, the following contingency arrangements would be adopted with immediate effect:

- Following a quick assessment of the situation, contact the Fire Service via 999 immediately.
- Wardens carry out wardens duties. All internal Council and third-party customers using the site to be redirected to the Council's dedicated car park as a holding area / position. Third party customers may choose to leave so they can dispose of their waste at an alternative permitted facility, or if they have other work to attend to, but they must be reminded to give priority to the Fire Service and other emergency responders and not to block routes for access and egress.
- Conduct roll call.
- Alert Site/Deputy Manager (as necessary), Weighbridge, Gatehouse and BMBC Office.
- Assess whether any of the nearby sensitive receptors are potentially being affected by smoke and either call them or deploy a team member to inform them personally of the situation and ask them to close all doors and windows.
- Provide information and assistance to Fire Service on arrival e.g. location of hydrants etc and deploy sandbags (as necessary).
- Contact the Environment Agency Hotline on 0800 80 70 60 and ask for Yorkshire Area, Waste Team for Barnsley area or contact your local officer direct as the Environment Agency may also need to attend.
- Following a briefing (preferably by the Site/Deputy Site Manager), a press release would be made by the Council's Communications Department to all local media. Information about the fire would also be posted on the Council's website to keep local residents informed of the situation and to pass on any advice from the emergency services. In addition, social media (Facebook, Twitter) would be used to provide regular updates and information on the incident.  
Managers and site staff will be on hand to keep residents the immediate vicinity informed in conjunction with any advice and guidance given by the Fire Service.

11.2 Once the fire is extinguished:

- Site staff and managers will inspect any damage and assist with all necessary clean up and repair works, to restore the site to operational as soon as possible. Other departments within the Council could be called upon to provide additional resource or expertise as required.
- Where possible and under the direction and advice of the Fire Service, certain areas of the site which are unaffected by the incident may be re-opened to reduce the impact on other sites and to allow other operations to continue.
- Once deemed safe (fully extinguished), any fire related debris will be loaded into roll-on roll off containers for transport to an authorised disposal facility – the container may need to be quarantined temporarily if the waste requires to be sampled to allow waste characterisation in order to legitimately assign a suitable waste code.
- Depending upon Yorkshire Water advice, fire water may need to be sampled prior to release or tankering. All area's impacted by fire would be fully hosed down if it has been established that it is safe to allow the water to enter the combined sewer system.
- There may be a requirement to forward appropriate information to the Environment Agency within 24 hours if required 'Notifications' section of the permit.
- An Incident Investigation will need to be fully completed and arrangements made for procedures to be reviewed. Further information may also be required by the Environment Agency to supplement the original notification.

**Appendix A**  
Location Plan

**Appendix B1**

Depot Layout/Signing & Lining Plan [HS-SLD-LBA-1100-05]

## **Appendix B2**

Schematic Layout Plan [HS-SLD-LBA-100-04] – Inert Waste Storage & Treatment Area

### **Appendix B3**

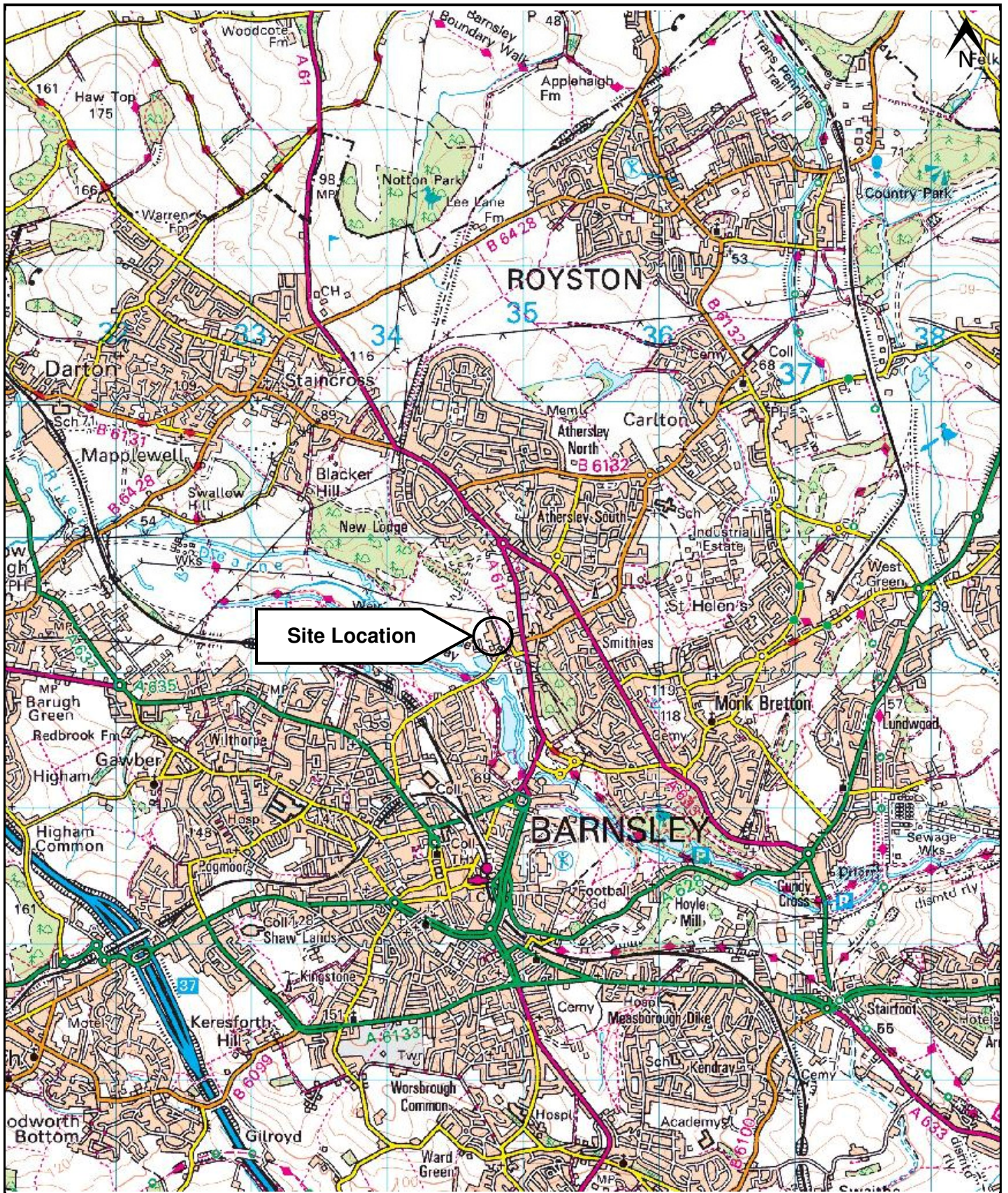
Schematic Layout Plan [HS-SLD-LBA-100-05] – General Waste Transfer & Treatment Area

## **Appendix C**

### Sensitive Receptors and Neighbouring Occupancies Plan

**Appendix D**  
Sealed Drainage Strategy Detail [HS-SLD-LBA-500-03]  
General Waste Transfer & Treatment Area





**Site Address:** Smithies Lane Depot, Smithies Lane, Smithies, Barnsley, S71 1NL

**Title:** Location Plan

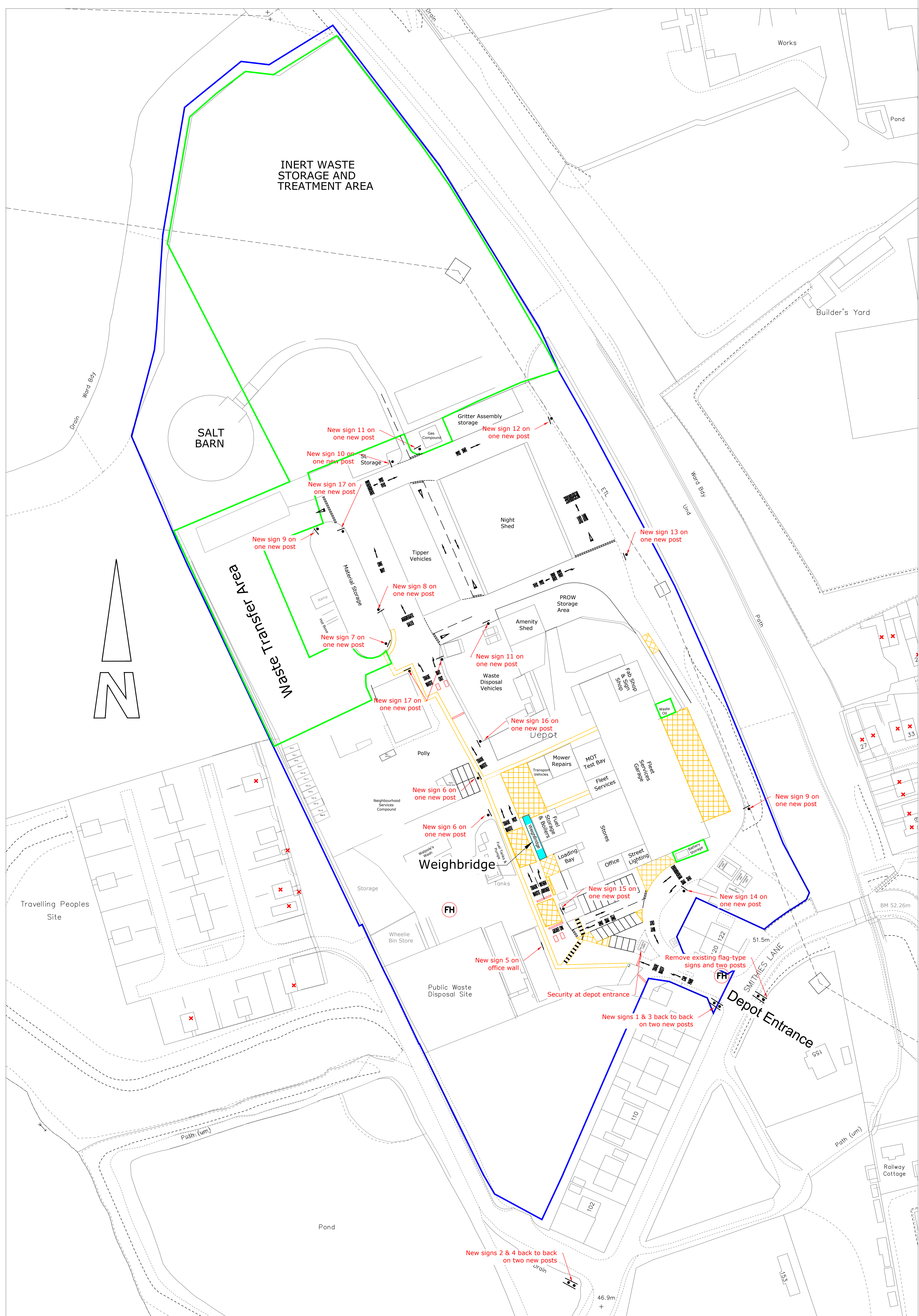
**Client:** Barnsley Metropolitan Borough Council

**Printed Scale:** NTS

**Date:** August 2019







**KEY:**

Depot Boundary

Environmental Permit Boundary

FH Fire Hydrant

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Rev.	By	Amendments	Date



**Project**  
SMITHIES LANE DEPOT  
COUNCIL AND TRADE WASTE FACILITY

**Drawing title**  
Proposed Depot  
Signing & Lining Layout

Scale	Drawn	Checked	Date
NTS	LR	RK	07 / 2019
Drawn No.	Revision	File	
HS/SLD/LBA/1100/05	6		

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**New Sign 1**  
Barnsley M. B. C. Smithies Lane Depot Public Weighbridge Trade Waste Testing Station

**New Sign 2**  
Barnsley M. B. C. Smithies Lane Depot Public Weighbridge Trade Waste Testing Station Household waste

**New Sign 3**  
Barnsley M. B. C. Smithies Lane Depot Public Weighbridge Trade Waste Testing Station Household waste

**New Sign 4**  
Household waste

**New Sign 5**  
Trade Waste Weighbridge

**New Sign 6**  
Trade Waste Report to Staff

**New Sign 7**  
Trade Waste Report to Staff

**New Sign 8**  
Rubble Aggregate Sales

**New Sign 9**  
Way out Weighbridge

**New Sign 10**  
Rubble Aggregate Sales

**New Sign 11**  
Way out Weighbridge

**New Signs 12 & 13**  
Way out Weighbridge

**New Sign 14**  
Way out Weighbridge

**New Signs 15 & 16**  
Way out Weighbridge

**New Sign 17**  
Way out Weighbridge



INERT MATERIALS KEY:

- 16 - Metal Skip (Unprocessed)
- 17 - Topsoil (Processed)
- 18 - Stock piled planings (Processed)
- 19 - Grit sand (Processed)
- 20 - 20mm stone (Processed)
- 21 - Crushing pile (concrete slabs, lamp posts etc. Unprocessed)
- 22 - Mixed construction rubble (Unprocessed)
- 23 - Type 1 material (Processed)
- 24 - Mixed subsoil (Unprocessed)
- 25 - Type 2 material (Processed)
- 26 - Sand (Virgin Material)
- 27 - Pipe bedding (Virgin Material)
- 28 - Mixed clay (BMBC Waste only for onward Disposal)
- 29 - Fuel Tank (Double Bunded)
- 30 - Extec E72 heavy duty screening machine (Crusher and 360 loading plant hired in)



Key:

- █ Depot Boundary
- █ Environmental Permit Boundary
- FE Fire Extinguisher
- SK 240Ltr Spill Kit

Rev.	By	Amendments	Date

**BARNLSLEY**  
Metropolitan Borough Council

Project: Smithies Lane Depot Council and Trade Waste Facility

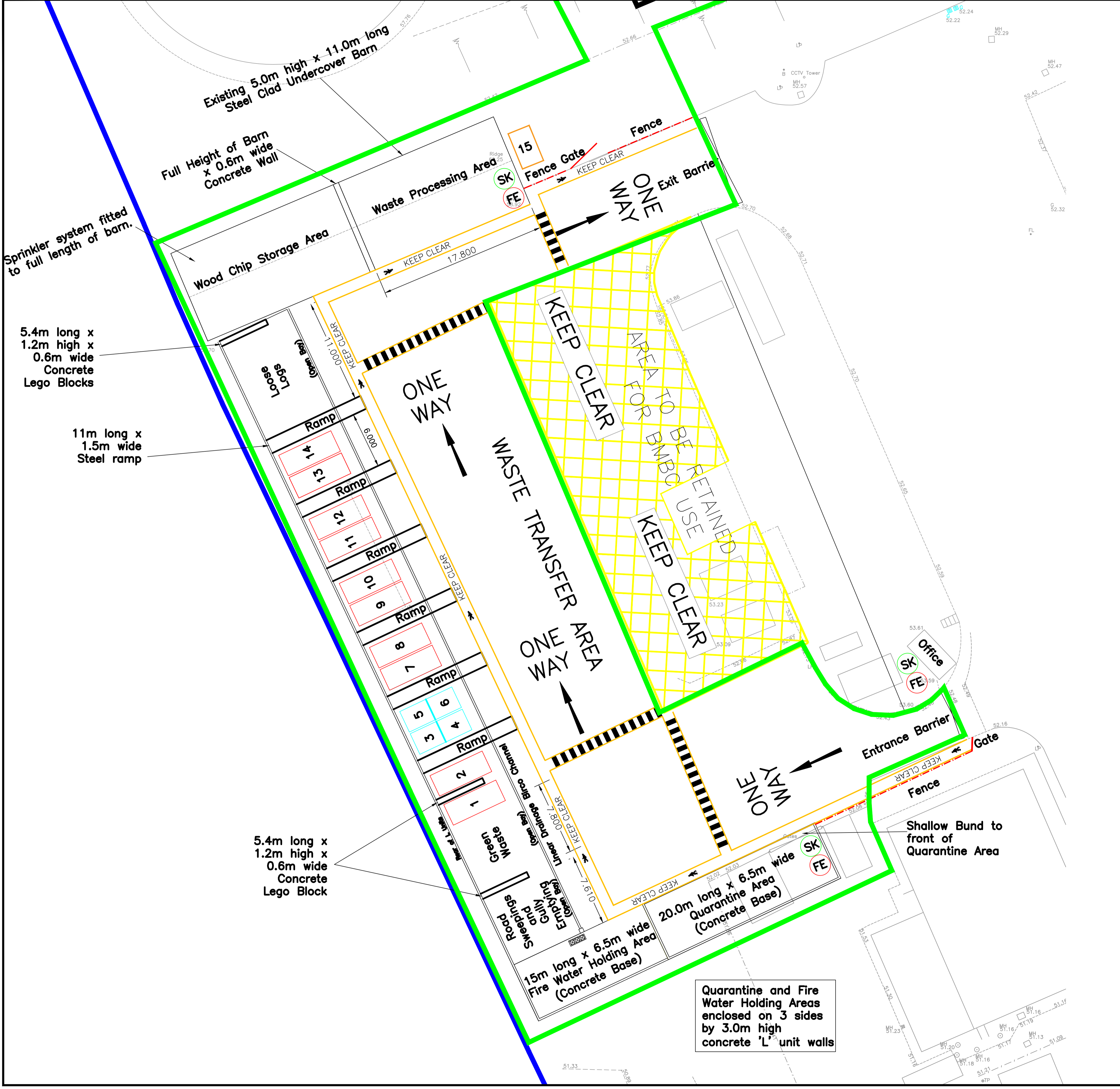
Drawing title: Inert Waste Storage and Treatment Area

Scale	Drawn	Checked	Date
NTS	LR	RK	08/19

Drawing No. HS/SLD/LBA/100/04

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**Key:**

- █ Depot Boundary
- █ Environmental Permit Boundary
- FE Fire Extinguisher
- SK 240Ltr Spill Kit

**Waste Bays Key:**

- 1 Denotes Roll On / Off Skip  
11.0m long x 2.4m wide x 2.69m high
  - 2 Denotes 1 tonne Skip
  - 15 Shipping container with freezer
- 1 – Green Waste (Open Bay)
  - 2 – Mixed Rubble including Sanitary and Glass
  - 3 – Yard Rubble
  - 4 – Paper and Card
  - 5 – Ferrous
  - 6 – Non-Ferrous
  - 7 – Landfill
  - 8 – Plastics
  - 9 – Wood
  - 10 – Residual Waste
  - 11 – Tyres on Rim
  - 12 – Tyres off Rim
  - 13 – Plaster Board
  - 14 – Spare
  - 15 – Road Kill / Dead Domestic Pets

Rev.	By	Amendments	Date



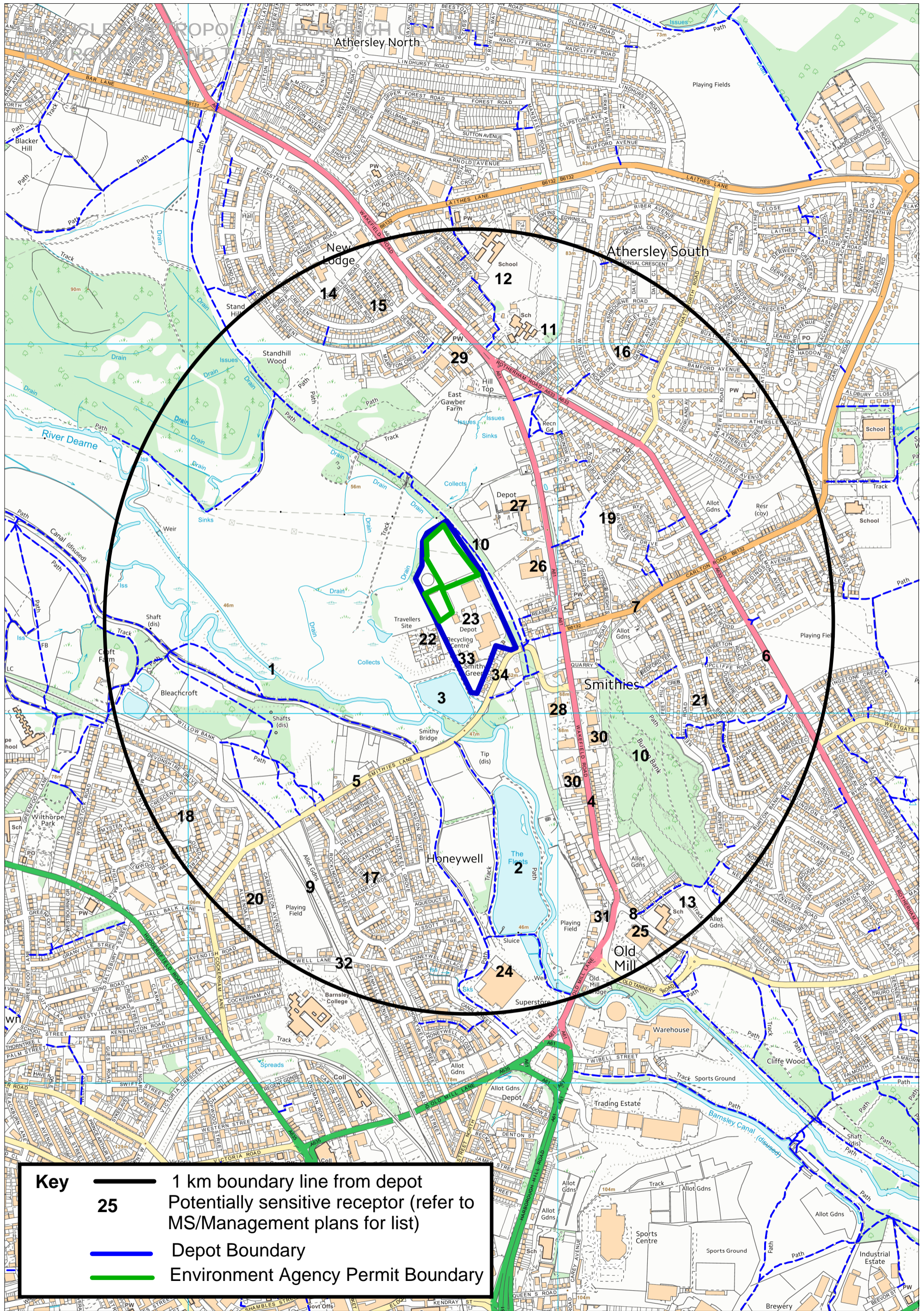
Project  
Smithies Lane Depot  
Council & Trade Waste Facility





Drawing title  
Waste Transfer Area  
Signing and Lining & Waste Storage Layout

Scale 1:200 @A1	Drawn SCa	Checked RK	Date 06/2019
Drawing No. HS/SLD/LBA/100/05			File

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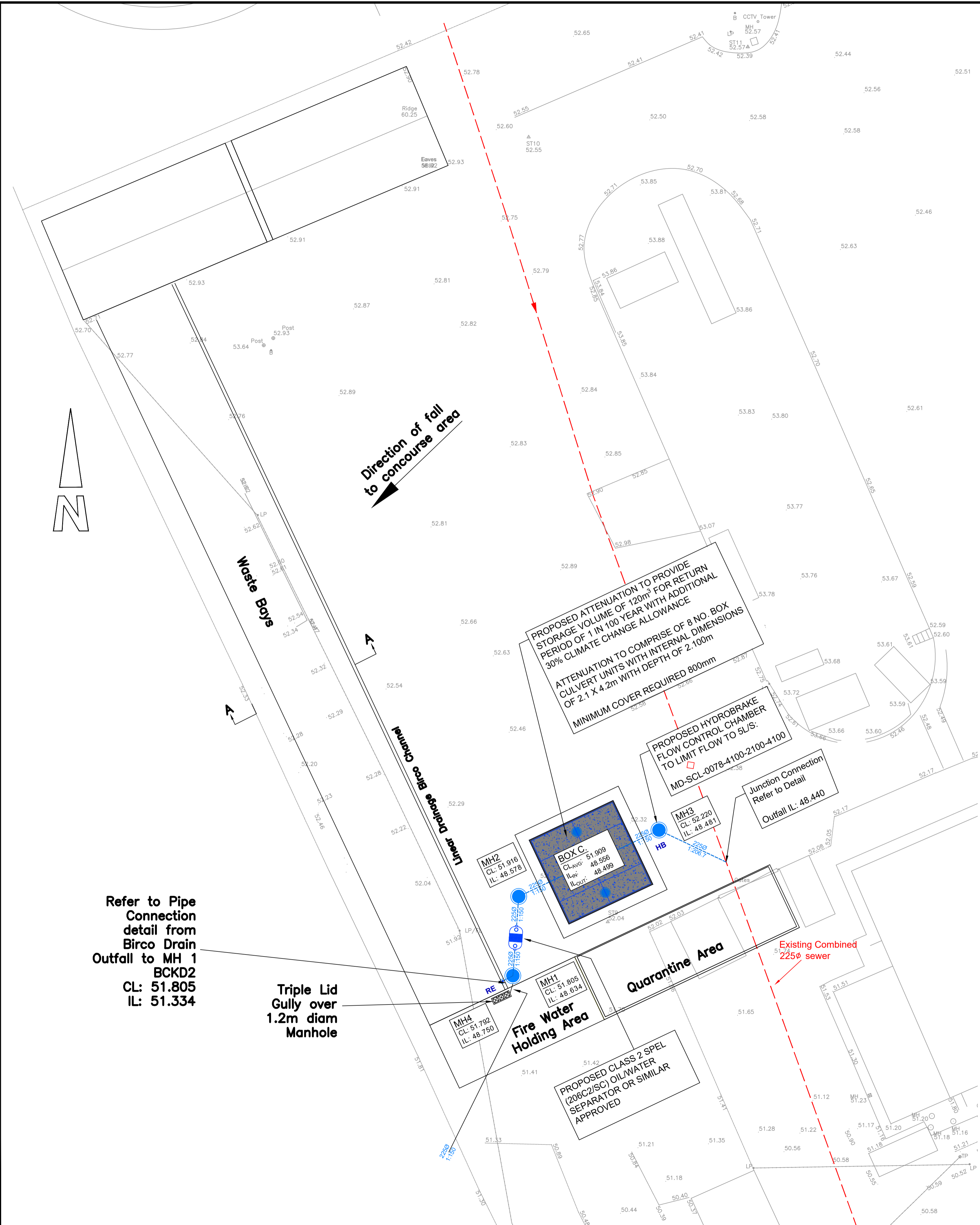




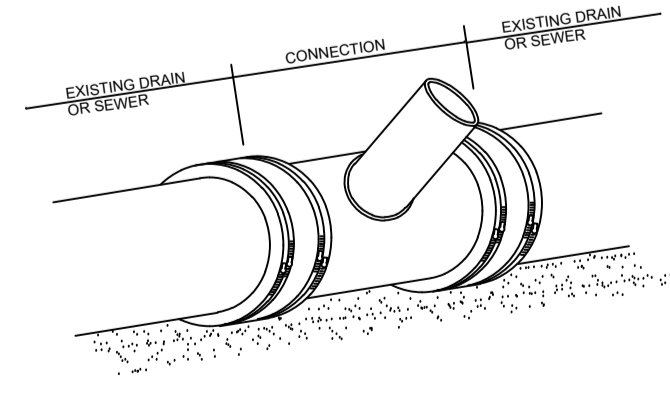
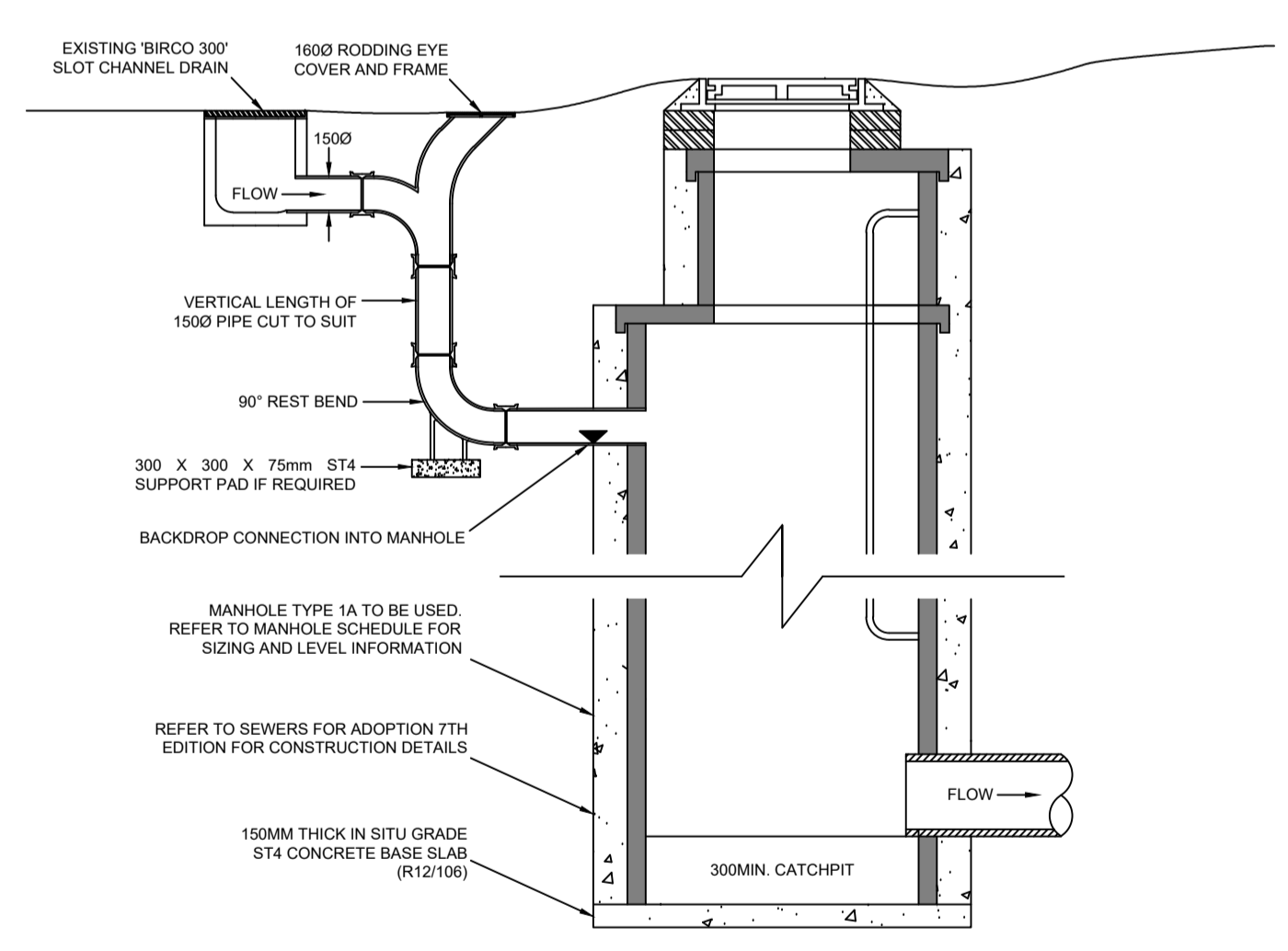
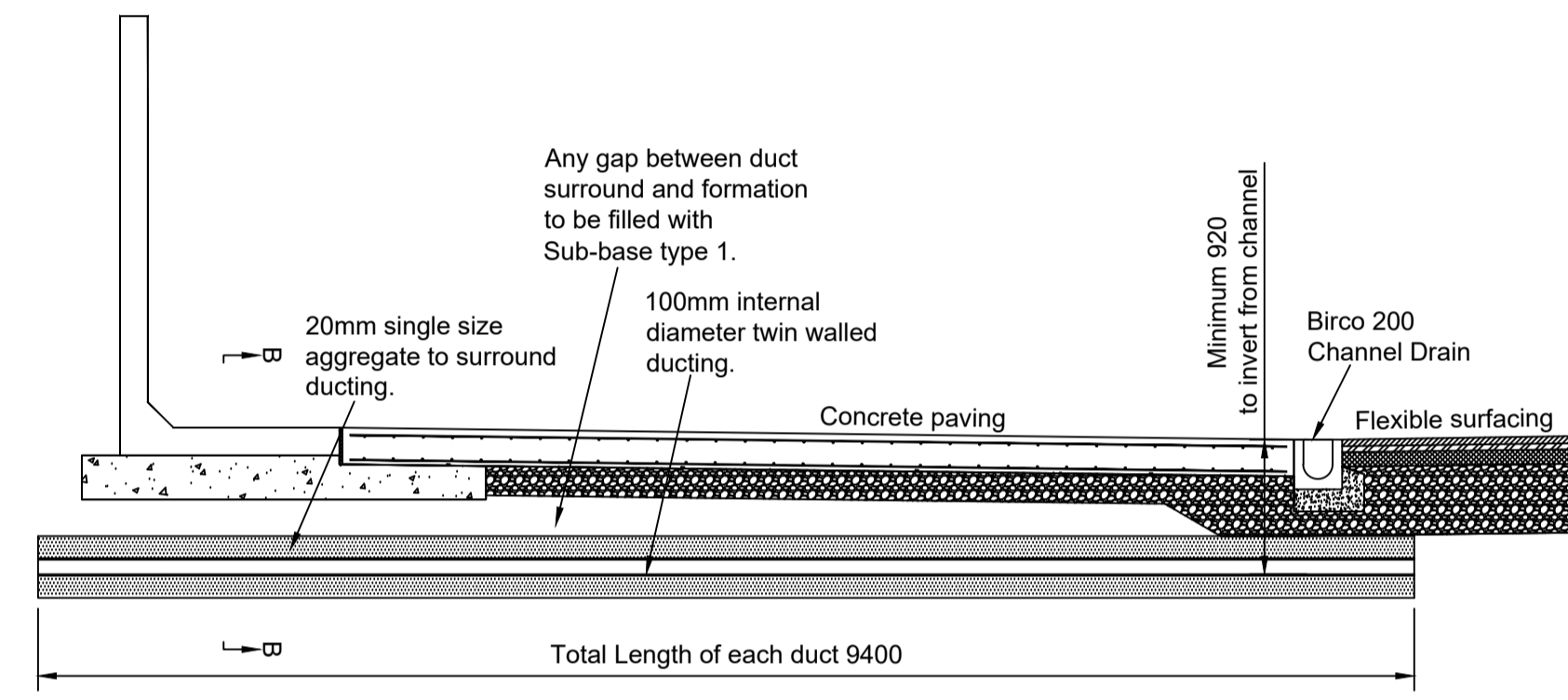
Key	
	1 km boundary line from depot
	Potentially sensitive receptor (refer to MS/Management plans for list)
	Depot Boundary
	Environment Agency Permit Boundary

### BARNSELY MBC - COUNCIL AND TRADE WASTE FACILITY SENSITIVE RECEPTORS AND NEIGHBOURING OCCUPANCIES





PIPE NETWORK AND MANHOLE SCHEDULE															
RUN FROM	RUN TO	UPSTREAM EASTING (#)	UPSTREAM NORTHING (#)	LAYOUT (North)	TYPE (#)	DIAMETER (mm)	PIPE LENGTH (m)	MANHOLE ID (#)	COVER LEVEL (m)	INVERT LEVEL (m)	BACKDROP LEVEL (m)	COMMENT (#)	TYPE (#)	LOAD CLASS (#)	DIAMETER (mm)
BCKD1	BCKD2	434650.429	408311.668	-	-	-	-	BCKD1	52.685	52.214				E600	-
BCKD2	MH1	434678.707	408252.043	-	-	-	-	BCKD2	51.805	51.334		RODDING EYE ACCESS	-	E600	-
MH1	MH2	434680.229	408252.791	○	PP	225	7.437	MH1	51.805	48.634	51.334	CATCHPIT 300 MIN.	PCC	E600	1200
MH2	BOX C.	434681.001	408260.188	+	PP	225	3.283	MH2	51.916	48.578			PCC	E600	1200
BOX C.	MH3	434694.307	408265.996	○	PP	225	2.835	MH3	52.220	48.481		HYDRO BRAKE	PCC	E600	1200
MH3	OUTFALL	434701.844	408262.128	-	PP	-	8.472	OUTFALL	-	48.440			-	-	-
MH 4	MH 1	434676.200	408250.000	○	PP	225	2.000	MH 1	51.792	48.750			PCC	E600	1200



- A. CONNECTION JUNCTION SHALL MATCH DIAMETERS OF EXISTING DRAIN OR SEWER AND THE PROPOSED PIPE CONNECTING TO IT.
- B. PROPRIETARY COUPLINGS SHALL BE FITTED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
- C. SLEEVES (AND BUSHINGS IF REQUIRED) SHALL BE MADE FROM SYNTHETIC ELASTOMER CONFORMING TO THE PERFORMANCE REQUIREMENTS OF B.S.2484.
- D. CLAMPING BANDS SHALL BE MANUFACTURED FROM 300 SERIES AUSTENITIC STAINLESS STEEL.

Rev.	By	Amendments	Date



Project  
Smithies Lane Depot  
Council & Trade Waste Facility

Drawing title  
Waste Transfer Area  
Proposed Drainage Strategy

Scale	Drawn	Checked	Date
As Shown	SCa		06/2019

Drawing No. HS/SLD/LBA/500/03

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