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ENERGY AND CLIMATE CHANGE
ENVIRONMENT AND SUSTAINABILITY
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LAND AND PROPERTY
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WASTE RESOURCE MANAGEMENT

VALENCIA WASTE MANAGEMENT LTD

HEATHFIELD WTS VARIATION APPLICATION (EPR/CB3909CW)

OPERATING TECHNIQUES

APRIL 2024

Wardell Armstrong
Sir Henry Doulton House, Forge Lane, Etruria, Stoke-on-Trent, ST1 5BD, United Kingdom
Telephone: +44 (0)1782 276 700 www.wardell-armstrong.com

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OPERATING TECHNIQUES

APRIL 2024

PREPARED BY:

Arabella Sharrock	Principal Waste Permitting Consultant	

REVIEWED BY:

Dominiqua Drakeford-Allen	Principal Waste and Resources Consultant	

APPROVED BY:

Alison Cook	Technical Director	

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APPENDICES

DRAWINGS	TITLE	SCALE
ECL.9983.D01.004	Proposed Site Layout with MRF Extension	1:1000 @ A1
ECL.9983.D01.005	Proposed Building Elevation	Varies

1 INTRODUCTION

1.1.1 Wardell Armstrong has been appointed to prepare an application to vary the permit for the Heathfield Household Waste Transfer Station, Pioneer Yard, John Acres Land, Fosterville, Devon, TQ12 3GP. The site is operated by Roseland Heathfield Limited (Valencia) under permit number EPR/CB3909CW.

1.1.2 The site is currently permitted for the importation of non-hazardous skip waste (construction, demolition and excavation waste and commercial/industrial waste such as wood, plastic, soil, hardcore, glass and pottery) which will then be sorted for recycling.

1.1.3 Valencia is seeking to prevent recyclable and recoverable wastes from going to disposal, in accordance with the principles of the waste hierarchy. The variation will allow mixed non-hazardous waste arriving at the adjacent Heathfield landfill to be treated to recover metals, wood and plastics for recycling, and to remove non-combustible material to prepare the combustible wastes for energy recovery off-site. The residual non-combustible waste will be utilised in landfill engineering or will be placed in the landfill.

1.1.4 Section 2 sets out the new activities to be undertaken at the site, whilst Section 3 sets out the waste acceptance procedures for the treatment process.

1.1.5 Section 4 describes the waste treatment activity and the way in which it is managed and section 5 describes the measures in place to minimise any impacts on the amenity of the locality from the new activity. Otherwise, the site will continue to operate in accordance with the agreed management system and plans set out in the Environmental Permit.

1.1.6 The location of the MRF building is shown on drawing 0316.101.

2 NEW ACTIVITIES

2.1.1 A new installation will be included in the permit, listed under Section 5.4 A(1) (b) (ii), i.e. a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration.

2.1.2 The activities and their relevant waste disposal and waste recovery codes are set out in Table 2.1, below.

Table 2.1: Waste Activities

Activity	D or R Code
Separation of combustible waste from non-combustible waste where EfW has R1 status	**R3** Recycling/reclamation of organic substances that are not used as solvents
Separation of wood and plastic for recycling.	**R3** Recycling/reclamation of organic substances that are not used as solvents
Separation of ferrous metal and non-ferrous metal from mixed waste pending recycling elsewhere	**R4** Recycling/reclamation of metals and metal compounds
Separation of stone, brick, glass etc for use in roads etc	**R5** **R**ecycling/reclamation of other in-organic materials
Storage of incoming waste and storage of treated wastes pending transfer to R1 status EfW facility, metal recycling site.	**R13** storage of waste pending any of the operations numbered R1 to R12
Storage of waste pending transfer to landfill	**D15** storage of waste pending any of the operations D1 to D14.

2.1.3 The wastes that may be stored or treated in the MRF building would be as listed in Appendix 1. These wastes will undergo mechanical treatment to recover metals and inert materials and prepare the waste for incineration.

3 WASTE ACCEPTANCE

3.1.1 Up to 350,000 tonnes of waste may be accepted at the site each year with approximately 350,000 tonnes being treated through the recycling plant. Waste for treatment will mainly comprise those waste streams already accepted at the adjacent landfill in order to recover materials for recycling or energy recovery and move waste up the waste hierarchy.

3.1.2 There will be an element of hand sorting of wastes at the front end, depending on the waste load and the most effective method of recovering recyclate. Such waste would be move directly to the appropriate bay or container ready to be taken off site.

3.1.3 The recycling plant may operate for up to 12 hours a day, dependent on planning restrictions. It is anticipated that it will outperform the figures given in the plant specification.

3.1.4 Assuming the initial period of operation is successful Valencia may expand the plant at a later date to further improve recycling rates.

3.1.5 The waste types are very similar to those already accepted on site and waste will continue to be accepted much in line with existing procedures. However new pre-acceptance and acceptance procedures are set out below.

3.2 Waste Pre-acceptance

3.2.1 All waste will be received at the site by pre-arrangement. At the pre-acceptance stage the customer will be asked to provide details of the waste type, waste quantities and other pertinent information so that it can be assessed by a trained member of staff.

3.2.2 Staff assessing wastes for acceptance will have the appropriate training and qualifications to make an informed decision on whether the waste will meet the requirements of the environmental permit and whether it is most appropriate for it to be treated through the MRF or to be delivered direct to the landfill. Decisions will be made in accordance with a written procedure for waste enquiries.

3.2.3 Where waste is listed under a mirror entry in the List of Wastes, the customer must provide adequate sampling results to confirm that the waste is non-hazardous. The waste assessors will confirm whether appropriate sampling and testing has taken place and check that the results of testing show the waste is non-hazardous.

3.2.4 A record will be kept of all waste enquiries, including the following information:

- date and source of enquiry (name, date and telephone number);

- name of person dealing with enquiry;
- name, address and SIC code of the waste producer;
- waste type, quantity and form of load;
- six figure waste catalogue code;
- whether sampling and analysis is required;
- copy of analysis (where required);
- agreed date(s) and time(s) for delivery or reason for rejection;
- whether the waste is to be accepted for treatment or landfill; and
- name and telephone number of the waste carrier.

3.2.5 The assessor will record their decision, with reasons for rejecting the waste if necessary, and this information will be communicated clearly to weighbridge staff.

3.3 Waste Acceptance Procedures

3.3.1 Clear signage will be provided directing all vehicles to the weighbridge to be weighed in.

3.3.2 All customers' vehicles will be weighed before and after discharging their load, unless the tare weight of the vehicle is recorded, so that loads need only be weighed on entry. Records will be kept regarding the vehicle delivering the waste, the waste type and quantity, any special requirements and whether the waste is destined for the MRF or the landfill.

3.3.3 Where possible the waste will be subject to visual inspection at the weighbridge to ensure that it appears in accordance with the pre-acceptance information.

3.3.4 A waste transfer note, including a waste description must be provided for each load (unless part of a series of deliveries under an approved season ticket). A check will be made against the waste transfer note and pre-acceptance information to ensure that the waste is as expected and is suitable for deposit on site. The driver will then be directed to the waste reception area.

3.3.5 A final visual inspection of all loads will be carried out prior to and during tipping by a suitably competent member of staff. This will identify any non-conforming materials which could have been hidden in the body of the waste container, a bulk vehicle or skip.

3.3.6 In the event that non-conforming material is identified at the weighbridge the vehicle will be directed to park until further checks can be made. This will include contacting the site manager and the carrier's base where necessary, to further confirm the nature of the waste. If these checks confirm the waste is acceptable within the terms of the permit the lorry will be allowed to proceed to the appropriate tipping point. If there is any doubt that the waste is acceptable the waste will be rejected.

3.3.7 If non-conforming waste is identified following tipping, the following action will be taken:

- the site manager will be informed;
- the waste will be moved to the quarantine area;
- the site manager will examine the waste transfer note and any other documentation and the waste to determine whether it is non-conforming waste;
- if the site manager is satisfied that the description of the waste is appropriate and there has been no contravention of the permit, he/she will authorise the continued treatment/disposal;
- if the site manager is not satisfied that the material conforms to the above requirements, he/she will reject the load;
- where possible the waste will be reloaded onto the delivery vehicle and returned to the waste producer;
- Where this is impractical or unsafe the waste will be kept in the quarantine area pending disposal at an appropriately permitted site.

3.3.8 For the MRF the quarantine area will comprise a skip, ensuring adequate containment of the waste.

3.3.9 A separate fireproof container will be provided for the storage of any lithium ion batteries that are handpicked from incoming loads of mixed waste in order to minimise fire risk.

3.3.10 Manual sorting will also ensure that large fractions including metal, wood and hard plastic are removed prior to shredding to protect the machinery.

3.3.11 Where waste is rejected, a record will be made in the site log and the Environment Agency will be informed.

4 MECHANCIAL TREATMENT

4.1.1 Non-hazardous waste arriving at the site will be received inside a building to provide a form of containment for litter, dust, noise and odour. Waste will be unloaded inside the building with the doors closed and placed in the dedicated waste reception bay.

4.1.2 Waste is to be sorted into a range of different waste streams for recycling or recovery. Appendix 2 provides the specification of the waste sorting equipment to be used on site, and Appendix 3 provides a process flow diagram. A written description of the process is given below.

4.1.3 Wastes to be treated through the MRF should be in fraction sizes less than 300mm in any direction. To facilitate this, a shredder will be provided and, where necessary, waste will be treated through the shredder to ensure the correct particle size entering the plant. As an additional safeguard, a long part separator will be placed between the shredder and the other MRF equipment to remove any long pieces of material that might damage the plant. Long parts will be sent to the landfill.

4.1.4 The waste will then pass via a combi screen which will separate the waste into three sizes:

- <10mm fines, treated as residual waste with no further sorting;
- 10 - 60mm, sent to a 2-way density separator via an overband magnet;
- 60 - 300mm, sent to the 4-way separator.

4.1.5 The 10 - 60mm fraction will pass on a conveyor under an overband magnet in order to remove ferrous metal. Ferrous metals will be placed in a dedicated bay pending removal to a permitted metal recycling site.

4.1.6 The 10 - 60mm fraction then passes through a 2-way density separator, which will separate waste be weight, producing a light fraction and a heavy fraction. The 10 - 60mm light fraction will be collected as residual waste.

4.1.7 The heavier waste will pass through an eddy current separator with magnet drum to separate any ferrous and non-ferrous metal from the remaining heavy waste. Ferrous and non-ferrous metal will be directed to dedicated storage bays pending removal to a metal recycling site. Following mechanical treatment, the remaining heavy waste will pass through a picking station to allow final quality control on the outputs.

4.1.8 The larger material (50-300mm) will pass to a 4-way separator. This will separate waste by weight, producing a super light fraction, a light fraction, a mid-heavy fraction

and a heavy fraction. The super light fraction will be sent off site as high calorific value (CV) RDF.

4.1.9 The light fraction will be sent to an optical sorter, which will separate plastics from the residual waste. The residual fraction will be sent off site a low CV RDF. The plastics will undergo picking and quality control to separate any remaining non-plastic into a separate storage bay. Plastic will be sent off site for recycling.

4.1.10 The 60-300mm mid-heavy fraction will be sent to an optical sorter to separate wood and rigid plastic from the remaining residual waste. These two waste streams will pass through a picking station for quality control and will then be stored in dedicated bays pending being sent off site for recycling.

4.1.11 The residuals will pass via a magnet to segregate any ferrous metal for recycling, with remaining residual waste sent to the landfill.

4.1.12 The 60-300mm heavy fraction will pass via an inline magnet where ferrous metal will be collected in a dedicated bay pending removal to a metal recycling site. The remaining heavies will join the 10-60mm heavies for picking and quality control.

4.1.13 Plastic, wood, residual waste and heavy waste that passes through the picking station will be sorted by hand by trained site operatives to remove any materials remaining in the wrong stream and ensure it is directed to the correct storage bay.

4.1.14 Where it is confirmed to be non-hazardous all residual waste will be placed in the landfill.

4.1.15 The heavy fraction is expected to contain a high content of grit, stone, glass etc it will be used within the adjacent landfill for maintaining site roads and for daily cover.

4.1.16 Once it has been evidenced that it is non-hazardous, the <10mm fines and the residual waste will be placed in the landfill or where appropriate used as landfill cover. Any hazardous fines will be sent off site to a permitted hazardous waste facility.

5 OUTGOING WASTES

5.1 Fate of Sorted Materials

5.1.1 Ferrous and non-ferrous metals will be stored in dedicated bays or containers and then will be loaded into a vehicle and removed to a permitted metal recycling site. Metals will not be stored for more than 1 month.

5.1.2 The heavy material is expected to be largely inert. This material will be stored in a dedicated bay or may be stockpiled on the landfill awaiting use in engineering works. Heavy material will not be stored for more than a month.

5.1.3 High CV RDF and Low CV RDF will be stored in dedicated bays and then loaded onto vehicles for direct transfer to the Energy from Waste Plant (EfW). As the material is loose RDF, it will be removed daily and all such waste will be transferred to the EfW within 48 hours of being received on site.

5.1.4 Wood and plastic will be stored in dedicated storage bays before being loaded into vehicle and sent off site for recycling. Wood and plastic will not be stored for more than 1 month.

5.1.5 Fines and residual waste will be removed to the landfill within 72 hours except where they need to be held for a longer period pending results from the laboratory to confirm their classification. Should any fines be classed as hazardous waste they will be loaded onto a vehicle and removed to a permitted hazardous waste site. A consignment note will be completed. Non-hazardous fines may be used as landfill cover providing that they are not dusty or odorous. Any other fines/residual waste will be landfilled.

5.1.6 All fines and residual waste will be stored in a dedicated bay inside the building until they are moved for final disposal.

5.2 Testing of Fines

5.2.1 There is an expectation that as only non-hazardous wastes are proposed to be treated on site, the fines will also be non-hazardous. However, 19 12 12 is a mirror entry in the list of waste codes and it is known that some screener fines classify as hazardous waste.

5.2.2 To ensure the quality of the outputs, only permitted non-hazardous wastes will be treated through the combi-screen. The composition of the fines is therefore expected to be relatively consistent.

5.2.3 To ensure the fines are properly classified, 2 samples per day will be taken during the first month of operation. The waste types accepted over this month of operation are anticipated to be representative of the average feedstock to be processed throughout the operational life of the facility. The samples will be subject to testing in line with the Environment Agency's WM3 guidance to confirm their classification.

5.2.4 If the results show that the wastes are non-hazardous throughout this period, testing will cease after the first month. Thereafter, one sample of trommel fines will be taken each year to assess whether anything has changed.

5.2.5 Should any samples within the first month return a result showing that the fines are hazardous an assessment will be made to determine whether the results are statistically significant and, where necessary, a sampling programme will be drawn up to ensure that all wastes are correctly classified and disposed of legally going forward.

5.2.6 Likewise, should there be a significant change in the waste source(s) used as a feedstock to the facility identified (e.g. during pre-acceptance checks) as potentially impacting the composition and classification of the trommel fines, additional sampling and testing will be undertaken to assess whether anything has changed and to ensure that all wastes are correctly classified and disposed of legally going forward.

6 ENVIRONMENTAL PROTECTION

6.1 General

6.1.1 The main purpose of the variation is to prevent recyclable and recoverable wastes from going to disposal, following the principles of the waste hierarchy. There will therefore be an overall environmental benefit in reduced use of raw materials (by recycling metals) and reduced carbon emissions (by recycling metals and recovering energy from combustible waste).

6.1.1 Nevertheless, it is important that this is carried out without harm to the local environment. In order to minimise emissions, the activities will take place inside a building.

6.1.2 The site will be kept tidy and will be inspected on a daily basis to make sure that no pollution is occurring. Any significant emissions of dust, odour, litter or noise will be investigated and remedied.

6.1.3 All plant and equipment will be properly maintained so that it is fit for purpose and operates without excessive noise.

6.1.4 The site will be managed by a technically competent manager in accordance with Valencia's written Environmental Management System.

6.1.5 As the majority of receptors are more than 200m away, potential emissions of dust, noise or odour are not expected to cause a nuisance or harm to sensitive habitats or human receptors. The facility has been designed to prevent emissions of dust and minimise potential impacts on nearby sensitive receptors, as demonstrated by the Environmental Risk Assessment accompanying the permit application.

6.2 Contaminated Run-Off

6.2.1 Waste is unloaded, treated and stored inside the building and therefore it is protected from precipitation and run-off will be minimal.

6.2.2 The building is provided with an impermeable reinforced concrete floor, ensuring that no leachate will enter soils under the site. The seam between the MRF building walls and floor is sealed, and 0.12m sleeping policeman are placed at the MRF entrances and exits, preventing the escape of any emissions to land or water. The floor is designed hold up to 309m^3, which will capture any leachate should a load with any free liquid be received. The building is also designed to capture fire water in its footprint in the event of a fire.

6.3 Litter

6.3.1 Measures will be in place to prevent litter. Waste will be unloaded inside the waste MRF building. Lorries and vehicles will be sheeted when entering and exiting the site to prevent egress of fugitive litter.

6.3.2 Waste will be stored in dedicated storage bays or containers.

6.3.3 Daily inspections will made and any loose waste noted lying around will be collected and transferred to the appropriate bay or container.

6.3.4 Incoming and outgoing vehicles will be enclosed or have appropriate sheeting to contain any waste.

6.4 Dust

6.4.1 To minimise emissions of dust incoming and outgoing vehicles will be enclosed or have appropriate sheeting to contain any waste.

6.4.2 Waste types accepted at the facility do not include those that are anticipated to be a risk of generating excessive dust.

6.4.3 Waste will be unloaded inside the MRF building.

6.4.4 Localised air extraction is provided for the density separators and optical sorters. This will draw air from the separator via a dust filter before returning air inside the building.

6.4.5 There are no point source emissions to atmosphere external to the building.

6.4.6 Daily inspections will be made to ensure that dust is not being emitted from the building. Where emissions of dust are noted, the cause will be investigated and remedied.

6.5 Odour

6.5.1 Waste will be accepted and dispatched in enclosed or sheeted vehicles.

6.5.2 There is no intention to treat putrescible waste. Household waste and similar materials, with a high proportion of food waste or other putrescible material, will be identified at the pre-acceptance stage and will be directed to the landfill. Only wastes with a low putrescible content, such as construction and demolition wastes and some commercial and industrial wastes, will be directed to the MRF.

6.5.3 Waste will be dealt with on a first in first out basis and will be turned round within 72 hours to minimise the risks of odour and vermin. All bays will be emptied on a regular basis.

6.5.1 Waste will be unloaded inside the MRF building. The building will be fitted with fast acting roller shutter doors which will, as far as possible, be kept closed except for allowing vehicle access and egress.

6.5.2 A daily olfactory inspection will be made and if there is any noticeable odour at the site boundary, the source will be investigated and remedial action will be taken. Odorous loads will be prioritised for removal from site.

6.6 Vermin and Pests

6.6.1 Waste will be stored unloaded and stored inside the building to limit access to pests and vermin.

6.6.2 Wastes containing a high level of putrescible waste will not be treated.

6.6.3 Waste will be turned round within 72 hours to prevent conditions that would allow pests to become established.

6.6.4 A pest control contractor will be retained and will make routine inspections, taking appropriate action to control vermin and pests.

6.6.5 The daily inspection will include assessing the presence of rats, flies or other pests. Where there is an indication that there is an infestation the pest contractor will be contacted to attend site as soon as possible to manage the problem.

6.7 Noise

6.7.1 The site is not expected to cause any noise issues as the nearest sensitive receptors as the building is in an industrial setting and the majority of receptors are over 200m away, it is considered unlikely that the cumulative noise from the operation will adversely impact local human or habitat receptors. The new activities will take place inside a building giving a degree of attenuation.

6.7.2 Plant and equipment will be properly maintained so that it operates without excessive noise.

7 RECORD KEEPING

7.1.1 The records described below will be maintained at the site office and will be made available to warranted officers of the Environment Agency on request.

- The pre-acceptance record for each waste stream and copies of related transfer notes.
- Details of all waste taken off site with a copy of the appropriate transfer note.

7.1.2 A site log will be maintained with the results of daily amenity inspections and any actions taken as a consequence and a record of attendance by the technically competent manager.

7.1.3 A copy of the preventative maintenance programme showing plant has been properly inspected and maintained and when.

7.1.4 A log will be maintained detailing any complaints received and the actions taken to resolve them.

7.1.5 A log will be maintained of any pollution incidents and the action taken to remediate them.

7.1.6 Records will also be kept regarding staff training.

7.1.7 Records will be kept for a minimum of two years and in line with any statutory requirements. Records of pollution incidents will be maintained indefinitely in order to inform any eventual surrender application.

APPENDICES

APPENDIX 1

EWC Code List

PROPOSED PERMITTED WASTE TYPES Heathfield MRF	
Maximum quantity	**The total quantity of waste accepted at the site for the above activity shall be no more than 450,000 tonnes a year.**
Waste Code	**Description**
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	Wastes from mineral excavation
01 01	Wastes from mineral metalliferous excavation
01 01 02	Wastes from mineral non-metalliferous excavation
01 04	Wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	Waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	Waste sand and clays
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
10 12	Wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 06	Discarded moulds
10 12 08	Waste ceramics, bricks, tiles and construction products (after thermal processing)
10 12 10	Solid wastes from gas treatment other than those mentioned in 10 12 09
10 12 12	Wastes from glazing other than those mentioned in 10 12 11
10 13	Wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	Waste concrete
12	WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS
12 01	Wastes from shaping and physical and mechanical surface treatment of metals and plastics
12 01 01	Ferrous metal filings and turnings
12 01 03	Non-ferrous metal filings and turnings
12 01 05	Plastics shavings and turnings
12 01 13	Welding wastes
12 01 17	Waste blasting material other than those mentioned in 12 01 16
12 01 21	Spent grinding bodies and grinding materials other than those mentioned in 12 01 20
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	Packaging (including separately collected municipal packaging waste)
15 01 01	Paper and cardboard packaging
15 01 02	Plastic packaging
15 01 03	Wooden packaging

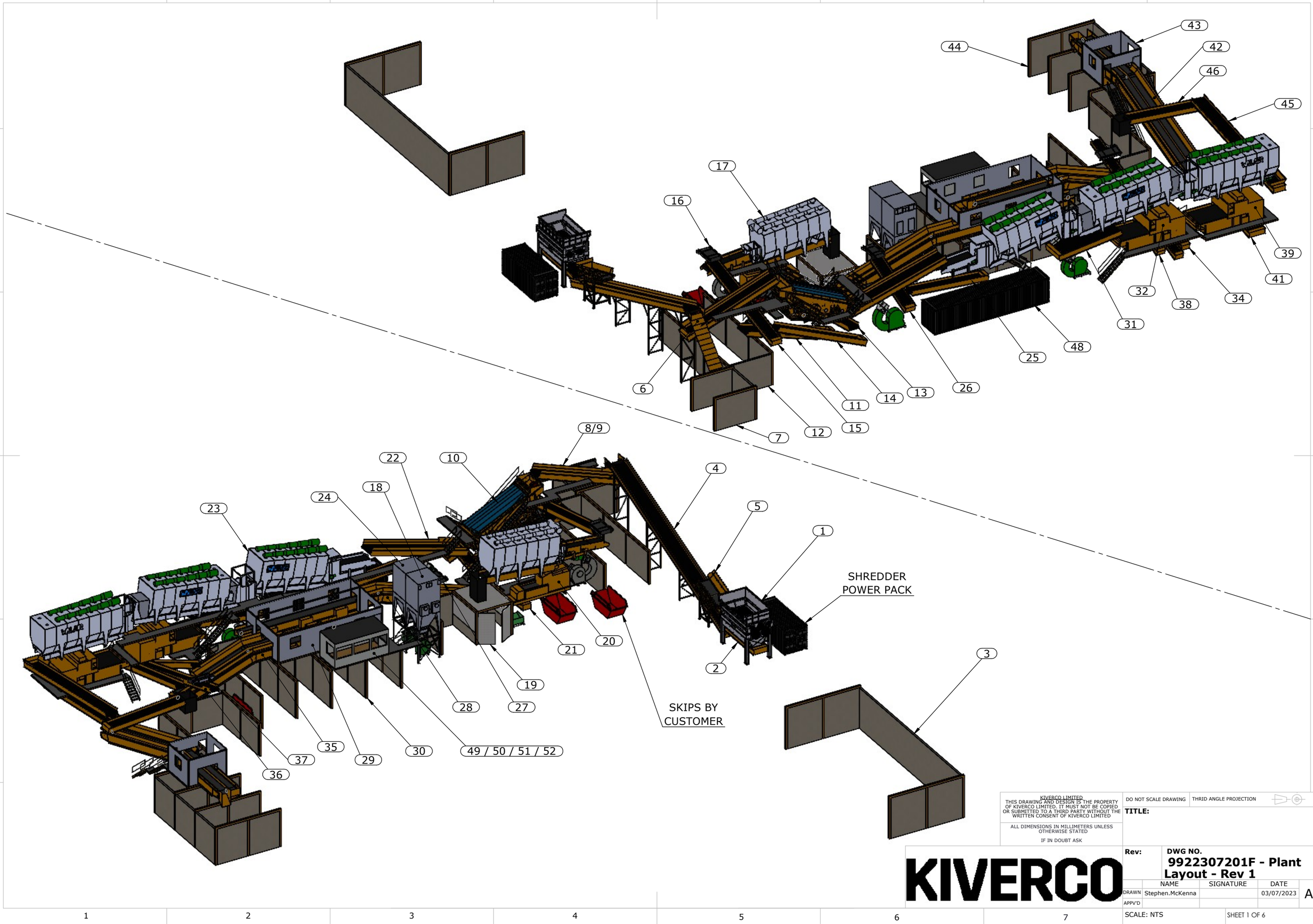
PROPOSED PERMITTED WASTE TYPES Heathfield MRF	
Maximum quantity	**The total quantity of waste accepted at the site for the above activity shall be no more than 450,000 tonnes a year.**
Waste Code	**Description**
15 01 04	Metallic packaging
15 01 05	Composite packaging
15 01 06	Mixed packaging
15 01 07	Glass packaging
15 01 09	Textile packaging
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	Concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	Tiles and ceramics
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	Wood, glass and plastic
17 02 01	Wood
17 02 02	Glass
17 02 03	Plastic
17 03	Bituminous mixtures, coal tar and tarred products
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01
17 04	Metals (including their alloys)
17 04 01	Copper, bronze, brass
17 04 02	Aluminium
17 04 03	Lead
17 04 04	Zinc
17 04 05	Iron and steel
17 04 06	Tin
17 04 07	Mixed metals
17 04 11	Cables other than those mentioned in 17 04 10
17 05	Soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	Soil and stones other than those mentioned in 17 05 03
17 09	Other construction and demolition wastes
17 09 04	Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

PROPOSED PERMITTED WASTE TYPES Heathfield MRF	
Maximum quantity	**The total quantity of waste accepted at the site for the above activity shall be no more than 450,000 tonnes a year.**
Waste Code	**Description**
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL USE
19 01	Wastes from incineration or pyrolysis of waste
19 01 02	Ferrous materials removed from bottom ash
9 02	Wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)
19 02 03	Premixed wastes composed only of non-hazardous wastes
19 02 10	Combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 04	Vitrified waste and wastes from vitrification
19 04 01	Vitrified waste
19 12	Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 01	Paper and cardboard
19 12 02	Ferrous metal
19 12 03	Non-ferrous metal
19 12 04	Plastic and rubber
19 12 05	Glass
19 12 07	Wood other than that mentioned in 19 12 06
19 12 08	Textiles
19 12 09	Minerals (for example sand, stones)
19 12 10	Combustible waste (refuse derived fuel)
19 12 12	Other waste (including mixtures of materials) from mechanical treatment of waste other than those mentioned in 19 12 11.
19 13	Wastes from soil and groundwater remediation
19 13 02	Solid wastes from soil remediation other than those mentioned in 19 13 01
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	Separately collected fractions (except 15 01)
20 01 01	Paper and cardboard
20 01 02	Glass
20 01 38	Wood other than that mentioned in.20 01.37
20 01 39	Plastics

PROPOSED PERMITTED WASTE TYPES Heathfield MRF	
Maximum quantity	**The total quantity of waste accepted at the site for the above activity shall be no more than 450,000 tonnes a year.**
Waste Code	**Description**
20 01 40	Metals
20 02	Garden and park wastes (including cemetery waste)
20 02 02	Soil and stones
20 03	Other municipal wastes
20 03 01	Mixed municipal waste
20 03 02	Waste from markets
20 03 07	Bulky waste

APPENDIX 2

Plant List



DO NOT SCALE DRAWING | THRID ANGLE PROJECTION

TITLE:

KIVERCO

Rev:

DWG NO. 9922307201F - Plant Layout - Rev 1

	NAME	SIGNATURE	DATE
DRAWN	Stephen.McKenna		03/07/2023
APPV'D			

A3

SCALE: NTS

SHEET 1 OF 6

Item	Detail	Width (m)	Length (m)	Item Installed Power (kW)	Control
1	M&J PreShred 6000S			501.1	Metso Control Panel
2	Shredder Collection Conveyor	1.40	5.50	7.5	Kiverco Control Panel
3	Shredded Bulky Waste Bay				
4	Incline Conveyor	1.40	22.00	7.5	Kiverco Control Panel
5	Belt Feeder Conveyor 1.2m x 4m	1.20	4.00	2.2	Kiverco Control Panel
6	Long Part Separator			1.5	Kiverco Control Panel
7	Longs Bay				
8	Screen Feed Conveyor	1.40	10.00	7.5	Kiverco Control Panel
9	Belt Weighing Scales				
10	Combi Screen	2.40	7.0	45	Kiverco Control Panel
11	0-10mm Collection Conveyor	1.60	10.00	5.5	Kiverco Control Panel
12	Fines Bay				
13	10-60mm Collection Conveyor	1.00	3.50	5.5	Kiverco Control Panel
14	10-60mm Transfer Conveyor	1.00	10.00	5.5	Kiverco Control Panel
15	10-60mm Transfer Conveyor 2	1.00	12.00	5.5	Kiverco Control Panel
16	Magnapower Inline Overband Magnet			3	Kiverco Control Panel
17	Walair 2-Way Drum Separator			50.2	Kiverco Control Panel
18	Walair Dust Filter			1.24	Kiverco Control Panel
19	10-60mm Lights & FE Metals Bays				
20	Magnapower Eddycurrent Separator			7.9	Kiverco Control Panel
21	ECS Residue Collection Conveyor	0.80	4.00	5.5	Kiverco Control Panel
22	+60mm Collection Conveyor	1.60	10.50	5.5	Kiverco Control Panel
23	Walair 4-Way Drum Separator			147.6	Kiverco Control Panel
24	Walair Dust Filter			1.24	Kiverco Control Panel
25	+60mm Heavies Collection Conveyor	1.00	8.00	5.5	Kiverco Control Panel
26	+60mm Heavies Transfer Conveyor	1.00	6.50	5.5	Kiverco Control Panel
27	Magnapower Inline Overband Magnet			4	Kiverco Control Panel
28	Heavies Picking Station Conveyor			4	Kiverco Control Panel
29	3 Bay Double Sided Picking Station Cabin			7.68	Kiverco Control Panel
30	Picking Station Bays				
31	Mid-Heavies Collection Conveyor	2.40	6.50	5.5	Kiverco Control Panel
32	Mistral+ 2800 Connect Full package			11.75	
33	Walair Dust Extraction - Optical Sorter			5.5	Kiverco Control Panel
34	Rigid Plastics Conveyor	0.80	10.50	5.5	Kiverco Control Panel
35	Mid-Heavies Picking Station Conveyor			4	Kiverco Control Panel
36	Residue Collection Conveyor	0.80	16.00	5.5	Kiverco Control Panel
37	Magnapower Overband Magnet			3	Kiverco Control Panel
38	Wood Collection Conveyor	0.80	9.50	5.5	Kiverco Control Panel
39	Mistral+ 2800 Connect Full package			12.45	
40	Walair Dust Extraction - Optical Sorter			5.5	Kiverco Control Panel
41	Lights Optical Collection Conveyor	1.60	11.00	5.5	Kiverco Control Panel
42	Lights Picking Station Conveyor			4	Kiverco Control Panel
43	1 Bay Double Sided Picking Station Cabin			3.03	Kiverco Control Panel
44	Lights Picking Bays				
45	Super Lights Collection Conveyor	1.20	15.00	7.5	Kiverco Control Panel
46	Super Lights Stockpile Conveyor	1.20	8.00	5.5	Kiverco Control Panel
47	Stair Access & Walkways				
48	Compressed Air System			73.3	Airwise Control Panel
49	Plant Electrical Control Room			0.03	Distribution Board
50	Control Panel				
51	Control Room Air Conditioning			12.6	Distribution Board
52	CCTV Camera System				
53	Plant Paint Colour - Kiverco Tan				
		Total Installed Power		1018.82	kW

DO NOT SCALE DRAWING | THRID ANGLE PROJECTION

TITLE:

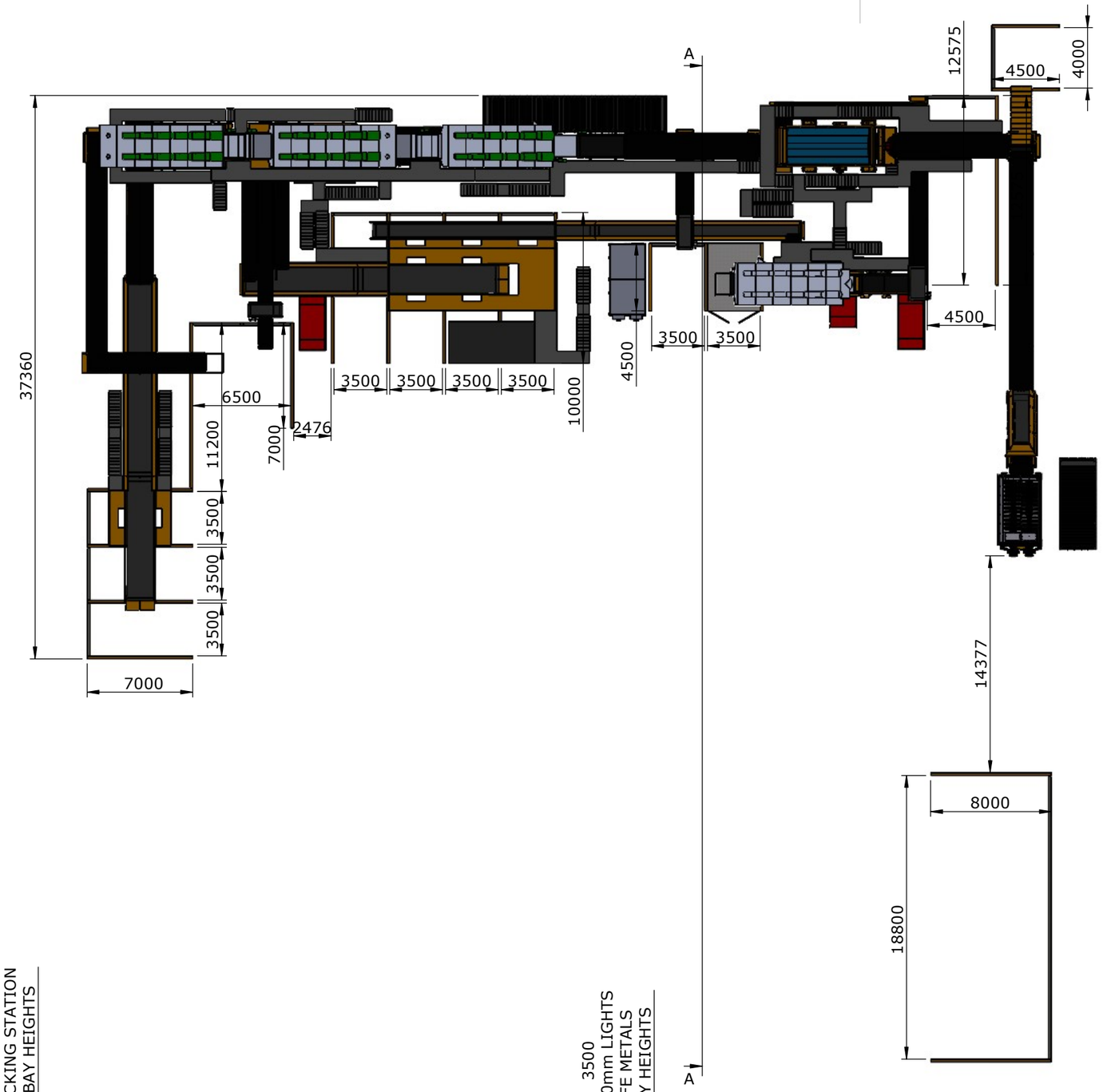
KIVERCO

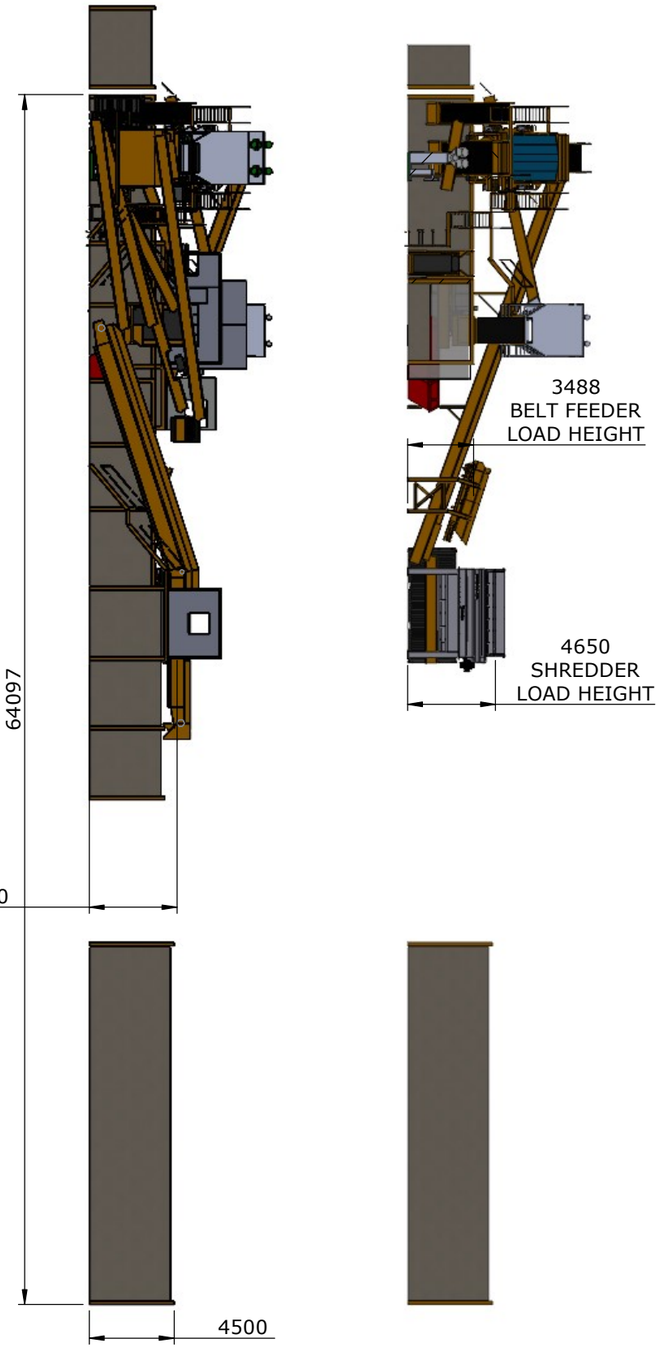
Rev: | **DWG NO.**

	NAME	SIGNATURE	DATE
DRAWN	Stephen.McKenna		03/07/2023
APPV'D			

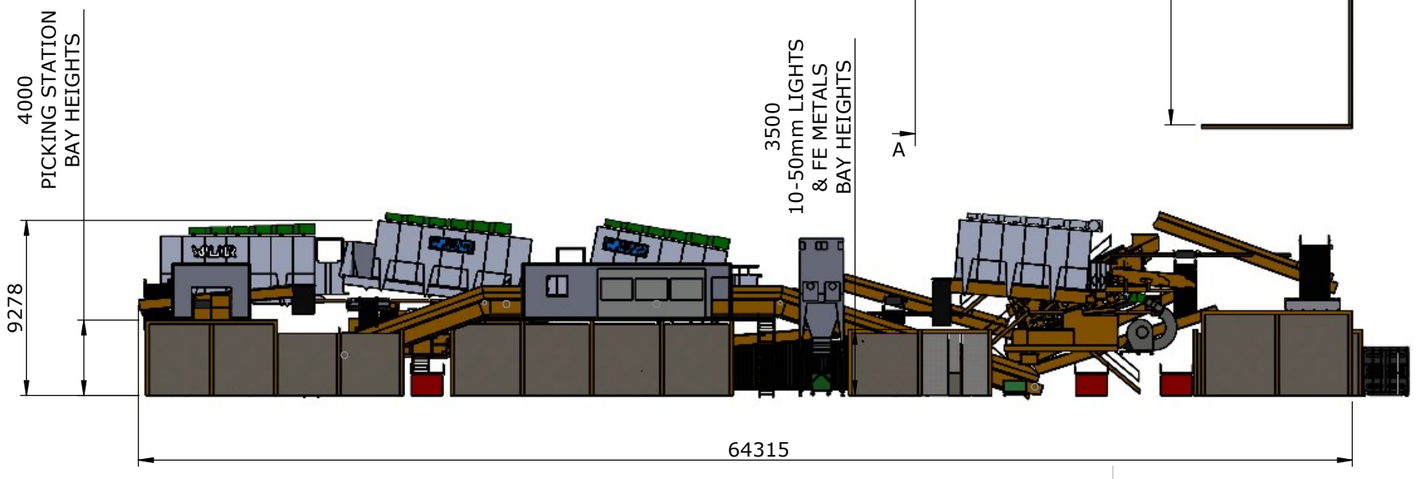
A3

SCALE: NTS





SECTION A-A



DO NOT SCALE DRAWING | THRID ANGLE PROJECTION

TITLE:

KIVERCO

Rev:

DWG NO. 9922307201F - Plant Layout - Rev 1

	NAME	SIGNATURE	DATE
DRAWN	Stephen.McKenna		03/07/2023
APPV'D			

A3

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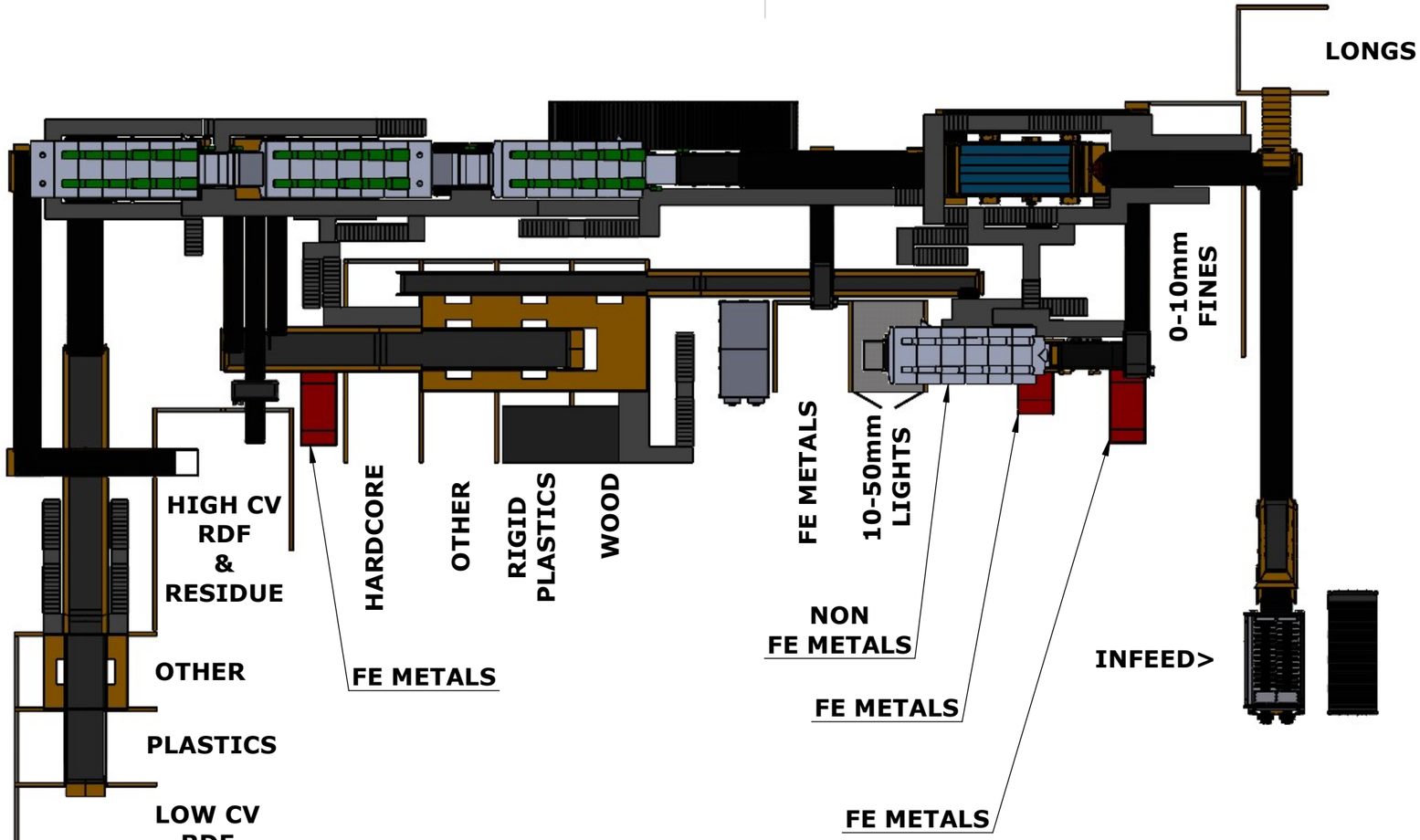


BULKY WASTE

DO NOT SCALE DRAWING | THRID ANGLE PROJECTION

TITLE:

KIVERCO

Rev:

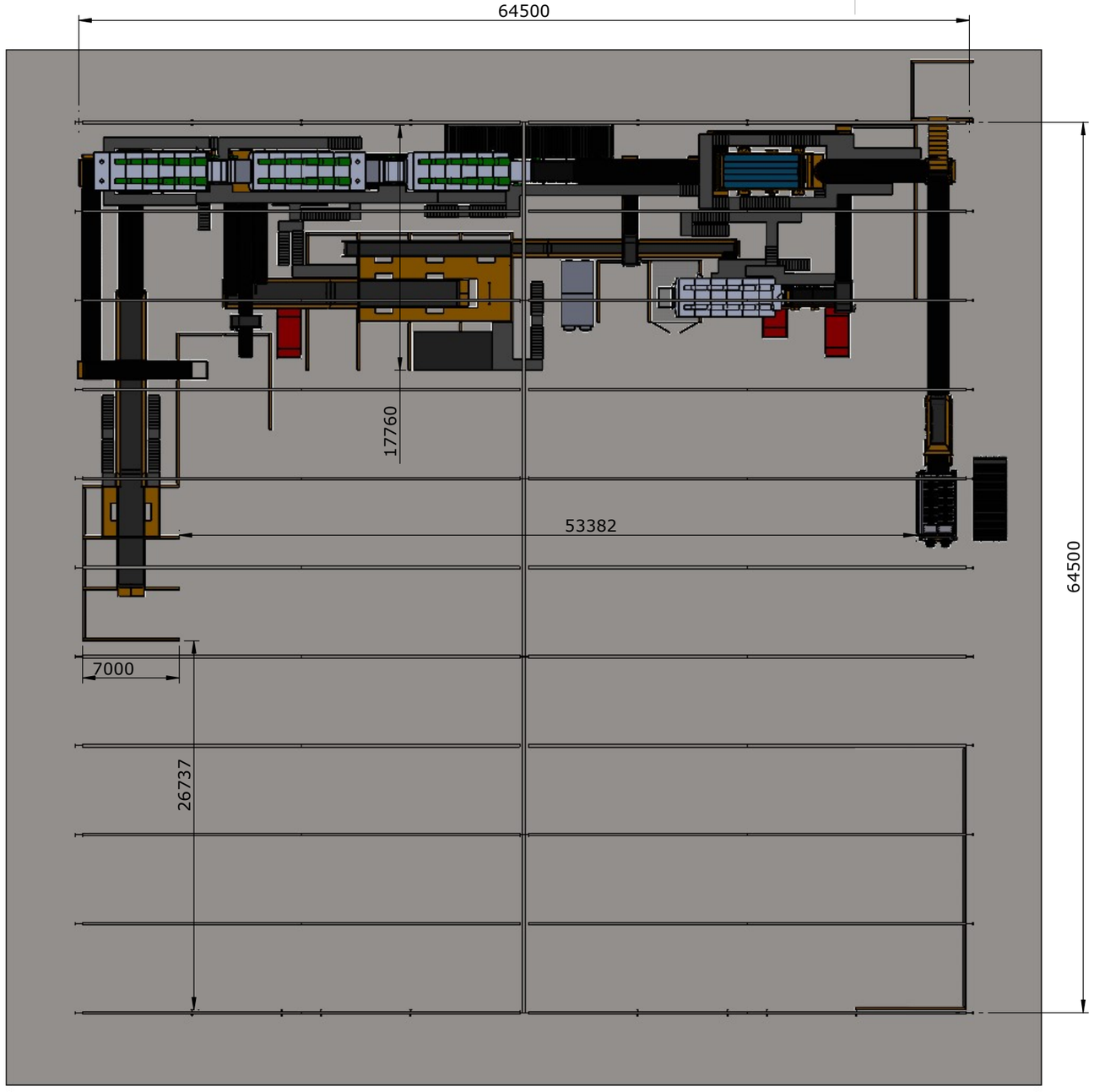
DWG NO. 9922307201F - Plant Layout - Rev 1

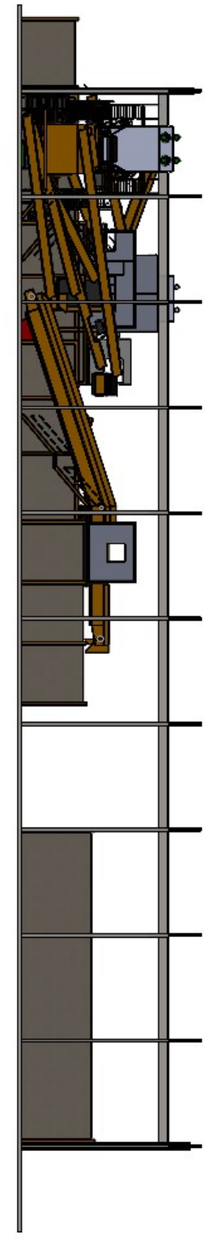
	NAME	SIGNATURE	DATE
DRAWN	Stephen.McKenna		03/07/2023
APPV'D			

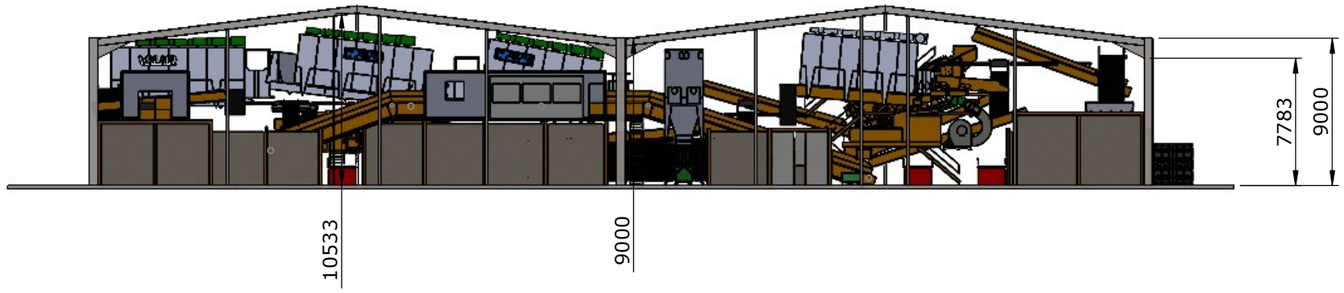
A3

SCALE: NTS

SHEET 4 OF 6







DO NOT SCALE DRAWING | THRID ANGLE PROJECTION

TITLE:

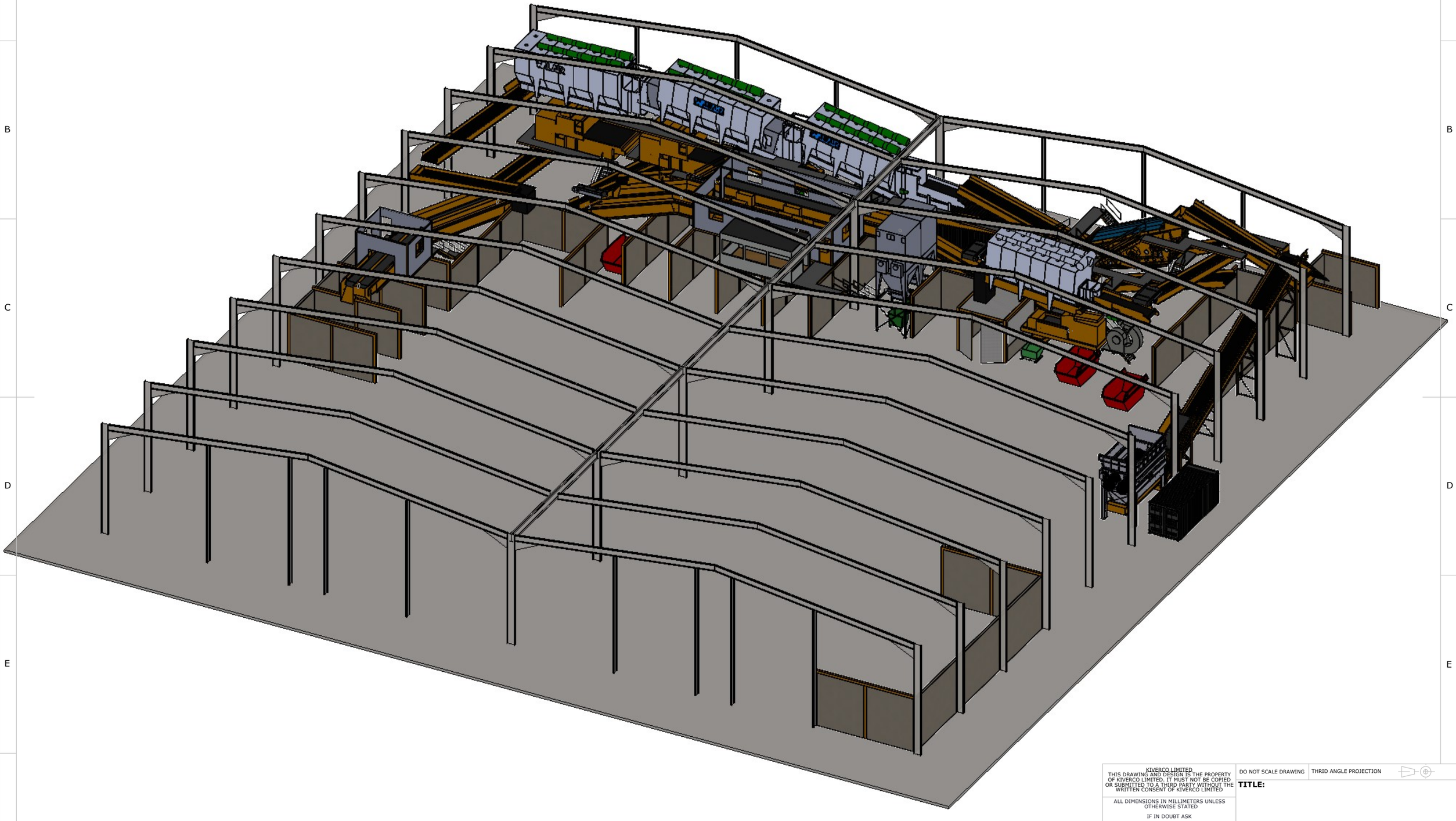
KIVERCO

Rev: **DWG NO.** **9922307201F - Plant Layout - Rev 1**

	NAME	SIGNATURE	DATE
DRAWN	Stephen.McKenna		03/07/2023
APPV'D			

A3

SCALE: NTS



ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE STATED

IF IN DOUBT ASK

DO NOT SCALE DRAWING | THRID ANGLE PROJECTION

TITLE:

KIVERCO

Rev:

DWG NO.
9922307201F - Plant Layout - Rev 1

	NAME	SIGNATURE	DATE
DRAWN	Stephen.McKenna		03/07/2023
APPV'D			

A3

SCALE: NTS

APPENDIX 3

Process Flow Diagram

9922307201F- Process Flow – Rev 1

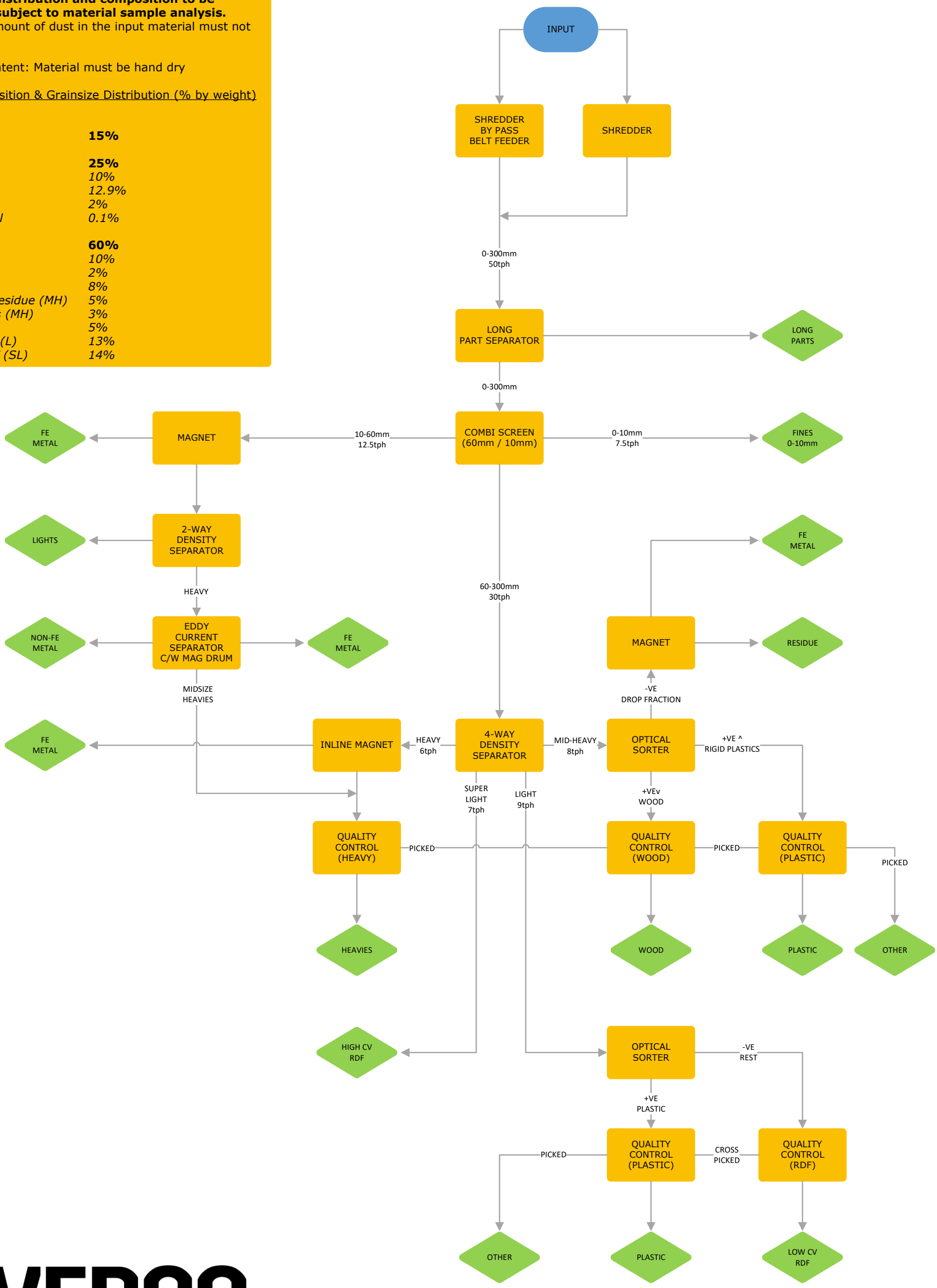
Material Type: C&D Residue
Bulk Density: 250 kg/m3
Throughput: up to 50 tonnes per hour
Operating Hours: 8 hours/1 shifts/5 days/50 wks = 2,000 hrs/year

Grain size distribution and composition to be confirmed subject to material sample analysis.
Maximum amount of dust in the input material must not be >3%

Moisture Content: Material must be hand dry

Input composition & Grainsize Distribution (% by weight) Assumed:

0-10mm	**15%**
10-60mm	**25%**
Heavy	*10%*
Light	*12.9%*
FE Metal	*2%*
Non-FE Metal	*0.1%*
60-300mm	**60%**
Hardcore (H)	*10%*
FE Metal (H)	*2%*
Wood (MH)	*8%*
Mid Heavy Residue (MH)	*5%*
Rigid Plastics (MH)	*3%*
Plastics (L)	*5%*
Low CV RDF (L)	*13%*
High CV RDF (SL)	*14%*



DRAWINGS

Notes

1. Survey information provided by Valencia Waste Management Ltd.
2. All levels in metres Above Ordnance Datum Newlyn.
3. Do not scale from this drawing.
4. Any anomalies on this drawing should be brought to the attention of Egniol Consulting Ltd.
5. Refer to 'ECL.9983.D01.005' for Proposed MRF building extension dimensions.
6. Key.

Site Boundary

Land Ownership Boundary

Rev	Modification	By	Chk	App	Date

Egniol Consulting Limited
Unit 7, Llys Onnen, Ffordd y Llyn
Parc Menai, Bangor,
LL57 4DF
Telephone: 01248 355996
Email: info@egniol.com

Valencia Waste Management Ltd

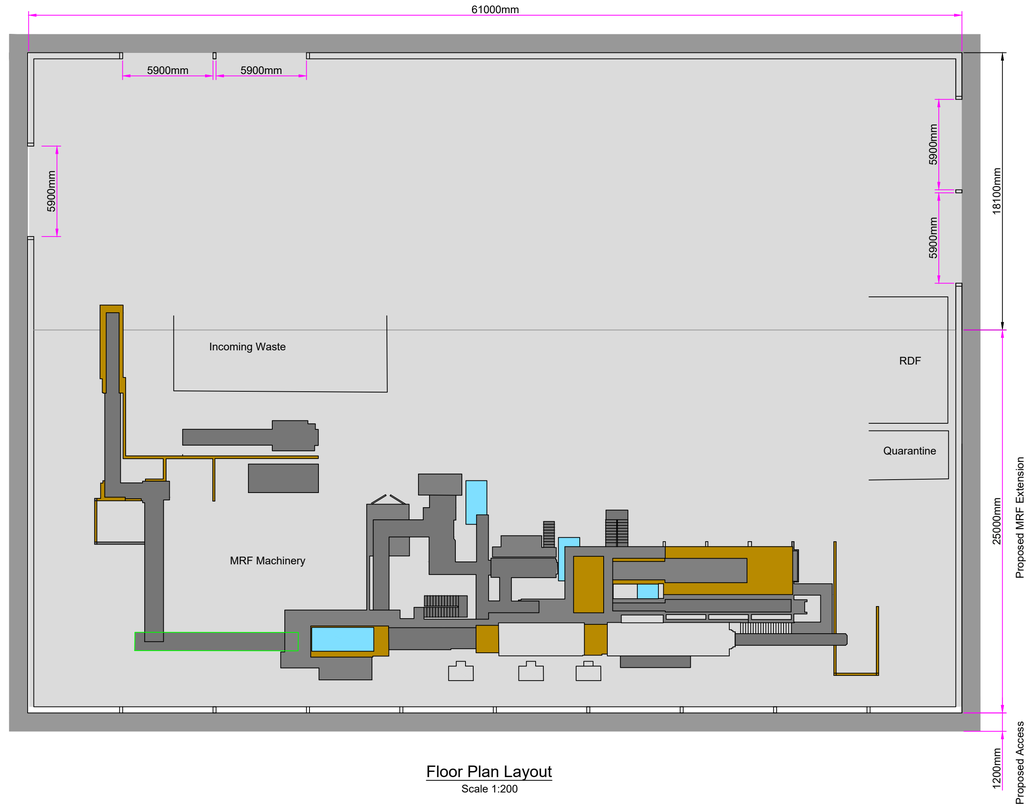
Heathfield Landfill Site MRF Extension

Proposed Site Layout with MRF Extension

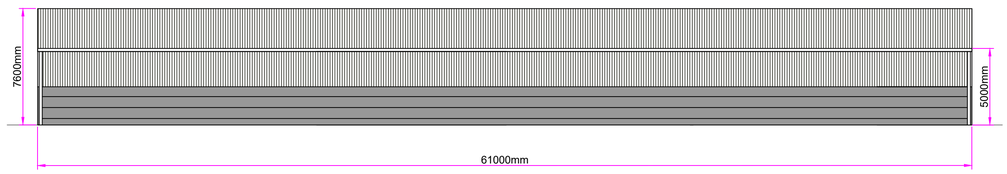
Drawn by	Checked by	Approved by
LE	GOJR	GOJR
Date	Date	Date
09.02.2024	09.02.2024	09.02.2024

Status	Scale @ A1
Draft	1:1000

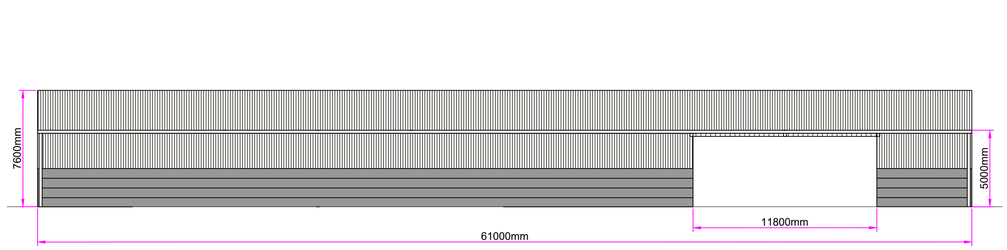
Drawing Number	Revision
ECL.9983.D01.004	-



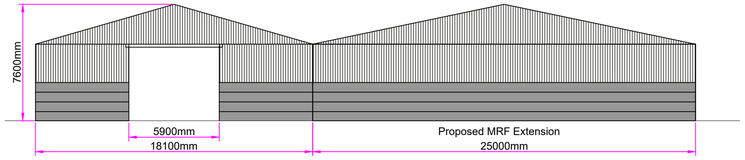
Floor Plan Layout
Scale 1:200



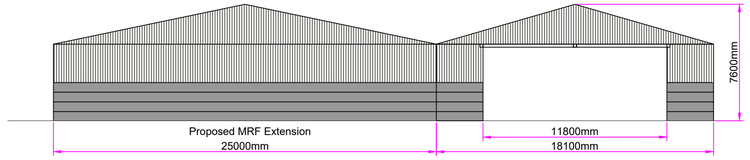
West Elevation
Scale 1:200



East Elevation
Scale 1:200



North Elevation
Scale 1:200



South Elevation
Scale 1:200

Notes

1. Survey information provided by Valencia Waste Management Ltd.
2. All dimensions in millimetres.
3. Do not scale from this drawing.
4. Any anomalies on this drawing should be brought to the attention of Egniol Consulting Ltd.

Rev	Modification	By	Chk	App	Date
A	Revised Building Layout	LE	GR	GR	03.04.24

Egniol Consulting Limited
Unit 7, Llys Onnen, Ffordd y Llyn
Parc Menai, Bangor,
LL57 4DF
Telephone: 01248 355996
Email: info@egniol.com

Valencia Waste Management Ltd

Heathfield Landfill Site
MRF Extension

Proposed Building Elevations

Drawn by	Checked by	Approved by
LE	GOJR	GOJR
Date	Date	Date
09.02.2024	09.02.2024	09.02.2024
Status		Scale @ A1
Draft		AS SHOWN

Drawing Number	Revision
ECL.9983.D01.005	A

CAD File Ref:C:\Users\OwJones\OneDrive - Valencia Waste Management Limited\Documents\Surveys\Valencia\Heathfield\Task 24040301 MRF detail drawings\Heathfield MRF - Proposed Building Elevations.dwg

wardell-armstrong.com

STOKE-ON-TRENT
Sir Henry Doulton House
Forge Lane
Etruria
Stoke-on-Trent
ST1 5BD
Tel: +44 (0)1782 276 700

BIRMINGHAM
Two Devon Way
Longbridge Technology Park
Longbridge
Birmingham
B31 2TS
Tel: +44 (0)121 580 0909

BOLTON
41-50 Futura Park
Aspinall Way
Middlebrook
Bolton
BL6 6SU
Tel: +44 (0)1204 227 227

BRISTOL
Temple Studios
Temple Gate
Redcliffe
Bristol
BS1 6QA
Tel: +44 (0)117 203 4477

BURY ST EDMUNDS
Armstrong House
Lamdin Road
Bury St Edmunds
Suffolk
IP32 6NU
Tel: +44 (0)1284 765 210

CARDIFF
Tudor House
16 Cathedral Road
Cardiff
CF11 9LJ
Tel: +44 (0)292 072 9191

CARLISLE
Marconi Road
Burgh Road Industrial Estate
Carlisle
Cumbria
CA2 7NA
Tel: +44 (0)1228 550 575

EDINBURGH
Great Michael House
14 Links Place
Edinburgh
EH6 7EZ
Tel: +44 (0)131 555 3311

GLASGOW
24 St Vincent Place
Glasgow
G1 2EU
Tel: +44 (0)141 428 4499

LEEDS
36 Park Row
Leeds
LS1 5JL
Tel: +44 (0)113 831 5533

LONDON
Third Floor
46 Chancery Lane
London
WC2A 1JE
Tel: +44 (0)207 242 3243

NEWCASTLE UPON TYNE
City Quadrant
11 Waterloo Square
Newcastle upon Tyne
NE1 4DP
Tel: +44 (0)191 232 0943

TRURO
Baldhu House
Wheal Jane Earth Science Park
Baldhu
Truro
TR3 6EH
Tel: +44 (0)187 256 0738

International office:

ALMATY
29/6 Satpaev Avenue
Hyatt Regency Hotel
Office Tower
Almaty
Kazakhstan
050040
Tel: +7(727) 334 1310

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