



**Valencia Waste Management Ltd**

## **Proposed Pilsworth South Material Recovery Facility**

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### **Flood Risk Assessment Addendum**

**ECL.9595.R05.001 Rev: -**

**March 2025**

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**Prepared for**  
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## Document Review

| Rev | Date       | Prepared By | Reviewed By | Approved By |
|-----|------------|-------------|-------------|-------------|
| -   | 31.03.2025 | DJH         | DES         | DES         |
|     |            |             |             |             |

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## 1.0 INTRODUCTION

- 1.1 Egniol Consulting Limited ('Egniol') of 1 Canon Harnett Court, Warren Park, Milton Keynes have been commissioned by Valencia Waste Management Ltd ('Valencia') to prepare a Flood Risk Assessment Addendum (the 'Addendum') for the proposed Material Recovery Facility (MRF) at Pilsworth South Landfill site located east of Bury, Lancashire.
- 1.2 The Addendum has been prepared in support of the planning application (reference no. 71273) for the proposed MRF and access arrangements (the 'Site') and follows the submission of the Flood Risk Assessment (FRA) dated June 2023.
- 1.3 The Addendum seeks to address Condition 3 of the 19<sup>th</sup> March 2025 planning permission relating to surface water drainage details; the full condition is provided below:

*'Prior to first use of the building hereby approved, details of surface water drainage proposals shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall be in accordance with the principles set out in the submitted Flood Risk Assessment and must be based on the hierarchy of drainage options in the National Planning Practice Guidance and be designed in accordance with the Non-Statutory Technical Standards for Sustainable Drainage Systems (March 2015). This must include assessment of potential SuDS options for surface water drainage with appropriate calculations and test results to support the chosen solution. Details of proposed maintenance arrangements should also be provided. The scheme shall take account of the size and location of the existing building and shall include calculations which confirm the adequacy of the attenuation pond. Any infiltration elements included in the design shall take account on the findings of the Phase II Ground Investigation Report by providing appropriate infiltration testing.'*

- 1.4 The new MRF building and associated hardstandings has already been constructed and the discharge of the planning Condition No. 3 is retrospective.

## **2.0 SITE DETAILS**

### **2.1 Site Location**

- 2.1.1 The address of the Site is given as:  
Viridor Pilsworth South Landfill  
Pilsworth Rd, Unsworth, Bury BL9 8QZ
- 2.1.2 The centre of the Site is given as:  
X = 382266.550  
Y = 409011.963
- 2.1.3 The location of the Site is shown on the Proposed MRF Location plan in Appendix 1.

### **2.2 Site background**

- 2.2.1 The Site is an active landfill site which commenced accepting waste in January 2006. An existing surface water management system (SWMS) consisting of lagoons, ditches and drains runs mainly to the north-west and south-west perimeter of the Site; the system was constructed over two stages. The first, including the north network, was constructed circa 2005 prior to the commencement of operations at the Site. The south network was constructed later, presumably as landfill operations progressed; this was established between 2005 and 2009.
- 2.2.2 The central zone of the landfill has essentially been filled and capped; raised to or near to the proposed restoration levels. There is further landfill cells planned immediately adjacent to the MRF and also to the east of the site (i.e. 6B, 9A and 9B); preparatory works to these cells are presently ongoing.

### **2.3 Site Topography**

- 2.3.1 The levels within the area of the new MRF development are approximately 100m AOD. There is a gentle fall from north to south towards the existing office/compound.
- 2.3.2 Immediately to the east of the new MRF is the landfill perimeter access road, this road heads north along the northern boundary and also south and eastward. Beyond the access road to the east is the new operational landfill cell 6B; further east are cells 9A and 9B. The excavation works are complete leaving circa 15m deep excavations with associated lining.

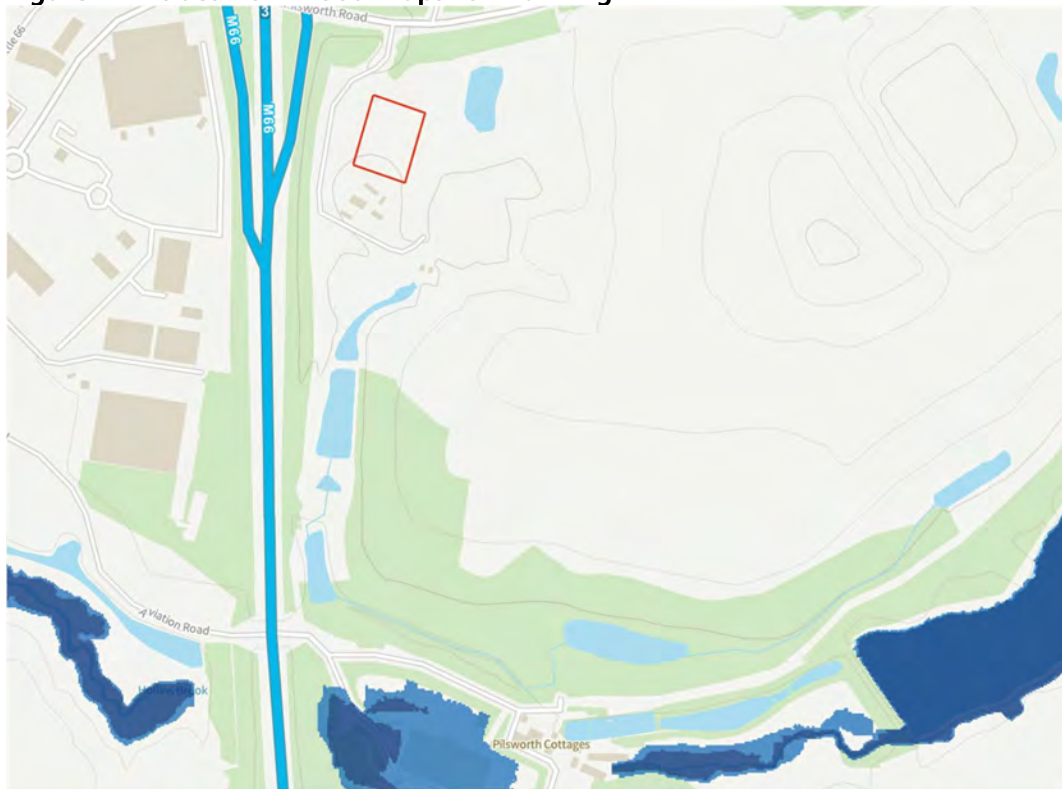
### **2.4 Waterbodies**

- 2.4.1 The existing drainage system serving the office and compound area drains south and into the existing Lagoon No. 2; surface water (SW) runoff is conveyed southward via a series of lagoons and at the boundary discharges (via monitoring PSW1SW) into an ordinary watercourse running parallel to the M66 which in turn drains into a main river to the south namely Hollins Brook. Full details are represented on the MRF Drainage Plan.
- 2.4.2 According to the Environment Agency's (EA) Statutory Main River Mapping, the nearest main river to the Site is Brightley Brook which runs, for the most part, along

the southern boundary of the Site; this is a tributary to the Hollins Brook.

- 2.4.3 The Site is categorised as being in Flood Zone 1 according to the FMFP as shown in Figure 1 overleaf. Hollins Brook is characterised as having areas of higher flood risk (i.e. flood zone 3), suggesting the brook floods during periods of heavy rainfall. And circa 1.2km further west of the Site the main river, River Roch, is characterised with notable areas of flood plain (i.e. flood zone 3).

**Figure 1: Extract from Flood Maps for Planning**



## 2.5 Geology

- 2.5.1 In terms of geology, data has been retrieved from the British Geological Survey (BGS) portal, see below.
- 2.5.2 The bedrock geology according to BGS is characterised as:
- PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE
- 2.5.3 The superficial deposits according to BGS is characterised as:
- HUMMOCKY (MOUNDY) GLACIAL DEPOSITS, DEVENSIAN - DIAMICTON
- 2.5.4 Magic Maps portal indicates that the Site is located within a Secondary A Aquifer with respect to bedrock and superficial deposits; and the area's groundwater vulnerability risk level is predominantly medium to low.

### 3.0 POLICY, LEGISLATION AND GUIDANCE

#### 3.1 Local Policy

3.1.1 Key local policy and guidance is identified in Table 1 below for background information.

**Table 1 – Local Policy**

| Local Policy                                                        | Key Provisions                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Policy JP-S4: Flood Risk and the Water Environment                  | An integrated catchment-based approach required to protect the quantity and quality of water bodies with reference to the North West River Basin Management Plan and manage flood risk.                                                                                                                                                                         |
| Greater Manchester Strategic Flood Risk Management Framework (2018) | Provides spatial framework for FRM across Greater Manchester, highlighting the key strategic flood risks including cross-boundary issues within and outside the City Region and recommending key priorities for intervention taking account of previous, existing and planned interventions delivered or to be delivered by Risk Management Authorities (RMAs). |

#### 3.2 National Policy

3.2.1 The relevant national policy has been identified and set out in Table 2 below for background information.

**Table 2 – National Policy**

| Policy/Regulations                       | Key Provisions                                                                                                                                                                                                                                                                        |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| National Planning Policy Framework       | The aims of planning policy on development and flood risk are to ensure that flood risk is considered at all stages in the planning process to avoid inappropriate development in areas at risk of flooding, and to direct development away from areas at highest risk.               |
| Guidance - Flood risk and coastal change | The guidance advises how to take account of and address the risks associated with flooding and coastal change in the planning process. Accessed at: <a href="https://www.gov.uk/guidance/flood-risk-and-coastal-change">https://www.gov.uk/guidance/flood-risk-and-coastal-change</a> |
| Water Resources Act 1991                 | The Environment Agency (EA) is empowered under this Act to maintain and improve the quality of 'controlled' waters.                                                                                                                                                                   |
| Flood and Water Management Act 2010      | The aim is to implement the findings of the 2007 Pitt Review and co-ordinate control of drainage and flood issues. It sets out responsibilities relating to adoption of Sustainable                                                                                                   |

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                              | Drainage Systems (SuDS) features and the role of the EA to expand on the mapping data they provide.                                                                                                                                                                                                                                                                                                                         |
| Guidance - Flood risk assessments: climate change allowances | Guidance on the application of climate change allowances is given here:<br><a href="https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances">https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances</a><br><a href="https://data.gov.uk/dataset/climate-change-allowances-for-peak-rainfall-in-england">Climate change allowances for peak rainfall in England (data.gov.uk)</a> |

### 3.3 Guidance

3.3.1 Finally key relevant guidance has been identified and set out in Table 3 below; it is a list of standards and best practice considered in preparing the FRA.

**Table 3 – Guidance**

| <b>Standards</b>                                                                  | <b>Key Provisions</b>                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BS 8533: 2017 Assessing and managing flood risk in development – Code of Practice | This BS gives recommendations and guidance on the appropriate assessment and management of flood risk in developments. It is intended to provide practical assistance to address flood risk associated with a proposed development. |
| BS 8582: 2013 Code of Practice for surface water management for development sites | The focus of this BS is on the sustainable management of flood risks arising from surface water runoff on development sites, although criteria relating to the management of a wider suite of environmental risks is given.         |
| Ciria The SuDS Manual (Cira 753)                                                  | General guidance to sustainable drainage and best practice.                                                                                                                                                                         |

## **4.0 PROPOSED MRF DEVELOPMENT**

### **4.1 Overview**

- 4.1.1 The MRF building including access road and building drainage, have already been constructed. The drainage works constructed are limited to building drainage to connect roof down pipes, carrier pipework and outfall to the existing surface water drainage network.
- 4.1.2 The latest drainage proposals are reflected on the Proposed MRF Drainage Plan within Appendix 2. The impermeable area of the MRF facility comprises of building roof and a small amount of additional concrete hardstanding; the finished floor level (FFL) of the MRF is circa 100.00m AOD.
- 4.1.3 The building includes internal building drainage intercepting leachate, this outfalls to the existing leachate system to the south. Given the SW runoff is primarily from the roof there is no additional interceptor fitted with the new SW drainage.
- 4.1.4 With regards to water quality, over 90% of the new impermeable area is the building roof; new hardstanding is limited given the building is directly linked to the existing site office compound. The interception of fines or hydrocarbons is achieved by utilisation of the existing surface water drainage which is understood to be served by an existing interceptor.

## **5.0 FLOOD RISK**

### **5.1 Flood Maps for Planning**

- 5.1.1 The Environment Agency's online resource, "Flood Map for Planning" indicate that the Site is located within Flood Zone 1, an 'area with a low probability of flooding'; and is described as 'Land having a less than 1 in 1,000 annual probability of river or sea flooding.'

## 6.0 SURFACE WATER DRAINAGE

### 6.1 Site wide drainage system

- 6.1.1 The existing site wide SWMS comprises of the northern and southern networks; both networks serve the landfill whereas the northern network only serves the site office, associated car parking and the new MRF.
- 6.1.2 SW model included in this assessment covers both the northern and southern networks. Note the MRF drainage discharges into the northern network which drains southward, via existing Lagoon No. 2 through to No. 5; refer to the Existing Surface Water Management System plan in Appendix 3 for further information.
- 6.1.3 The northern and southern network are required to discharge via the primary outfall to the south-west in accordance with the environmental permit EPR/BS7951B; an extract from the permit is provided below in Figure 2. The northern network is to comply to strict discharge rate requirements, namely 5,000m<sup>3</sup>/day (average rate 57.9l/s).

**Figure 2: Extract from environmental permit EPR/BS7951B**

| Table S3.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements                                                                                                                                                                   |                      |                                                                                                                                                                                                                                             |                        |                  |                      |                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emission point Ref. & Location                                                                                                                                                                                                                                                | Parameter            | Source                                                                                                                                                                                                                                      | Limit (including unit) | Reference Period | Monitoring Frequency | Monitoring Standard or Method                                                                                                                                                                                                    |
| Surface Water discharge points:<br><br>PSW1SW and PSW2SW                                                                                                                                                                                                                      | Suspended Solids     | Site drainage consisting of the run-off derived from the Landscape Buffer Zone, restored landfill and water collected within the void created by the former quarry excavation and uncontaminated run off from the Waste Recycling Facility. | 40 mg/l                | Spot Sample      | Monthly              | Monitoring to be carried out in accordance with Environment Agency Guidance Document 'Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water (LFTGN02)', unless otherwise agreed in writing with the Agency. |
|                                                                                                                                                                                                                                                                               | pH                   |                                                                                                                                                                                                                                             | >6 and <9 pH units     | Spot Sample      | Monthly              |                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                               | Oil or grease        |                                                                                                                                                                                                                                             | No visible discharge   | Observation      | Monthly              |                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                               | Ammoniacal nitrogen  |                                                                                                                                                                                                                                             | 2.0 mg/l (3)           | Spot Sample      | Monthly              |                                                                                                                                                                                                                                  |
|                                                                                                                                                                                                                                                                               | Chloride             |                                                                                                                                                                                                                                             | 250 mg/l               | Spot Sample      | Monthly              |                                                                                                                                                                                                                                  |
| PSW1SW                                                                                                                                                                                                                                                                        | Maximum daily volume |                                                                                                                                                                                                                                             | 5000 m <sup>3</sup>    | Continuous       | Daily                |                                                                                                                                                                                                                                  |
| (1) Monitoring points are as shown on drawing PWS3000.<br>(2) Receiving waters are an un-named tributary of Long Lodge, itself a tributary of Hollins Brook.<br>(3) Assessed against a rolling average concentration derived from the three most recent consecutive datasets. |                      |                                                                                                                                                                                                                                             |                        |                  |                      |                                                                                                                                                                                                                                  |

- 6.1.4 The existing site wide SWMS is presently ongoing assessment with a view to undertake maintenance works; this will primarily focus on the removal of silt/sediment build up in the lagoons and ditches. These works are important to ensure storage capacity within the network; this works will commence in 2025. The SW model prepared is based on the lagoons being free of such build-up and have a low-level pipe outlet; details discussed further in Section 6.3 below.
- 6.1.5 It is assumed that the existing lagoons, to avoid a pathway to the aquifer given potential ammoniacal nitrogen risk, do not infiltrate.

### 6.2 Proposed MRF drainage system

- 6.2.1 The SW runoff from the new MRF building will be intercepted by guttering, building downpipes and entrance channel drains. Flows will be conveyed via a pipe network to the existing SW drainage system which outfalls to the existing Lagoon No.2 as described above.
- 6.2.2 The MRF's SW runoff will need to be managed within the context of the existing site wide environmental permit's 5,000m<sup>3</sup>/day limit (and related derivatives). This daily volume is effectively the permitted discharge rate.

### 6.3 Modelling Parameters

6.3.1 The SW modelling has been undertaken in accordance with the following design parameters.

#### **Rainfall**

6.3.2 Rainfall based on FEH rainfall data; extract provided in Appendix 4.

6.3.3 The EA's Climate Change Allowances portal indicates the following allowances:  
3.33% AEP for 2070s epoch – 40%  
1.00% AEP for 2070s epoch – 45%

#### **Permitted discharge**

6.3.4 The associated permitted discharge for the MRF is governed by the landfill's environmental permit's 5,000m<sup>3</sup> per day. For reference only the associated greenfield runoff is provided below.

#### **Runoff coefficient**

6.3.5 The landfill zone is characterised with an impermeable liner at basal level and also capping level. The result of the liners causes higher SW runoff than greenfield runoff. To allow for low level percolation between the cells, evaporation and transpiration the landfill zone impermeable area is calculated using a specific runoff coefficient. This value is 0.375; only applied to landfill cell areas. All other areas are categorised as fully hard surface.

#### **Impermeable area**

6.3.6 The MRF impermeable area measures 5300m<sup>2</sup>; this however fits within the wider network of the landfill site. A full summary of the northern network catchment is summarised in Table 4 below:

**Table 4 – Northern network impermeable areas**

| <b>Zone</b>         | <b>Gross area (hectares)</b> | <b>Runoff characteristics</b> |
|---------------------|------------------------------|-------------------------------|
| Landfill cells      | 8.700                        | Reduced by 0.375              |
| Office and compound | 0.970                        | All hard surface              |
| Existing roads      | 0.710                        | All hard surface              |
| New MRF building    | 0.530                        | All hard surface              |
|                     | <b>10.910</b>                |                               |

6.3.7 The southern network catchment is presently 2.9ha however this is not relevant in relation to assessing the MRF drainage provisions.

#### **Return periods**

6.3.8 The modelling simulations that have been run are as follows:  
1:100 year return period + 45% climate change;  
1:100 year return period + 0% climate change;  
1:30 year return period + 40% climate change  
1:2 year return period

#### **Greenfield runoff rate**

6.3.9 For information, a comparable greenfield runoff assessment using IH124 is provided below in Figure 2. The Q<sub>BAR</sub> value is 105.6l/s for the northern catchment; this value is well in excess of the existing permit discharge limit requirements

which are 57.9l/s if taken as a daily average.

**Figure 3: Extract from Infodrainage showing greenfield runoff**

The screenshot shows the 'UK and Ireland Rural Runoff Calculator' interface. The 'Method' is set to 'IH 124'. The 'Area (ha)' is 10.91, 'SAAR (mm)' is 1099.0, 'Soil' is 0.470, and 'Region' is 'Region 1'. The 'Additional Options' section shows 'Urban' as 0.000, 'Return Period (years)' as 0, and 'Growth Curve' as '(None)'. The 'Calculate' button is visible. Below the input fields, the 'Results' table is displayed.

| Region   | QBAR Rural (L/s) | QBAR Urban (L/s) | Q 1 (years) (L/s) | Q 30 (years) (L/s) | Q 100 (years) (L/s) |
|----------|------------------|------------------|-------------------|--------------------|---------------------|
| Region 1 | 105.6            | 105.6            | 89.7              | 199.4              | 261.8               |

6.3.10 To make allowance for additional pumped groundwater flows, there is a base pumped flow of 5l/s from the east; this in addition to the landfill zone areas.

## 6.4 Surface water modelling

### Design criteria summary

6.4.1 A summary of the design criteria for sizing the network to serve the MRF is given below:

- Flood mitigation and ditch networks are to be designed to 1:100 year return period plus 45% climate change.
- For information other lesser return periods included are 1:2 year, 1:30 year + 40% climate change and 1:100 year + 0% climate change.
- Associated pipe network is to be designed to 1:30 plus 40% climate change.
- The permitted surface water discharge rate for the whole landfill site is 5,000m<sup>3</sup>/day, or 57.9l/s average rate per day.
- Storm durations to include 30 minute up to 7220 minute.
- Infiltration systems are not suitable for a landfill site.
- The modelling is to utilise FEH rainfall data.
- Total impermeable area for both north and south catchments is 13.81ha with a steady 5l/s base flow.

### Output

6.4.2 The modelling MRF development is provided in Appendix 5; this includes the north portion of the landfill. The modelling demonstrates that the existing SMWS, once downstream lagoons are cleared of silt/sediment, will have sufficient capacity to ensure attenuation for storms up to 1:100 year return period plus 45% climate change.

## **7.0 FOUL WATER DRAINAGE**

### **7.1 General**

- 7.1.1 There are no requirements for foul water drainage. Internal building drainage is provided however this is used to intercept and convey potential leachate to the existing landfill leachate system to the south of the MRF and not to a public foul water sewer.

## **8.0 MAINTENANCE**

### **8.1 General**

- 8.1.1 A recent site-wide Surface Water Management Plan Review (reference 10322-ECL-XX-XX-RP-C-0500) has been undertaken; observations showed the existing SWMS across both the north and south networks does require substantial maintenance. The existing lagoons along the western boundary, in particular, were found to have thick vegetation and substantial silt. An extract from the review is provided in Appendix 6; this summary represents broadly the required maintenance works which are planned to be carried out over the next 12 months.
- 8.1.2 The maintenance works are to be carried out initially in accordance with the review's recommendations and supported in due course with the site's operational Surface Water Management Plan (SWMP) requirements. It is responsibility of the operator to maintain the landfill in accordance with the approved SWMP.

## **9.0 REFERENCES**

### **9.1 General**

9.1.1 The references included are as below:

- INNOV8PLANNING Limited's Pilsworth MRF Flood Risk Assessment date June 2023.
- Egniol's Surface Water Management Plan Review reference 10322-ECL-XX-XX-RP-C-0500 revision C and dated 27<sup>th</sup> March 2025.
- Valencia's Surface Water Management Plan (Environmental Permit Ref. BS7951IB) dated 5<sup>th</sup> September 2024.

## **10.0 CONCLUSION**

- 10.1 This FRA has been produced in support of the planning application for the proposed MRF building and associated works; this new facility is located within the existing Pilsworth South Landfill site and is sited adjacent existing site office buildings and access.
- 10.2 The MRF development comprises of roof and access; the associated impermeable area of the new MRF measures 0.53ha. The runoff is directed into the existing SW network which according to the site-wide SW modelling has sufficient capacity to convey flows to the nearby lagoons (i.e. flood mitigation).
- 10.3 The site wide SW model including the MRF demonstrates that the site's flood mitigation, in the form of existing Lagoon No.2 to No 5, can accommodate the MRF building. This is subject to necessary maintenance works being carried out on the existing lagoons in accordance with the March 2025 Surface Water Management Plan Review recommendations.
- 10.4 The long term maintenance of the landfill site to be in accordance with Valencia's SWMP dated 5<sup>th</sup> September 20024.



## **Valencia Waste Management Ltd**

Proposed Pilsworth South Material Recovery Facility

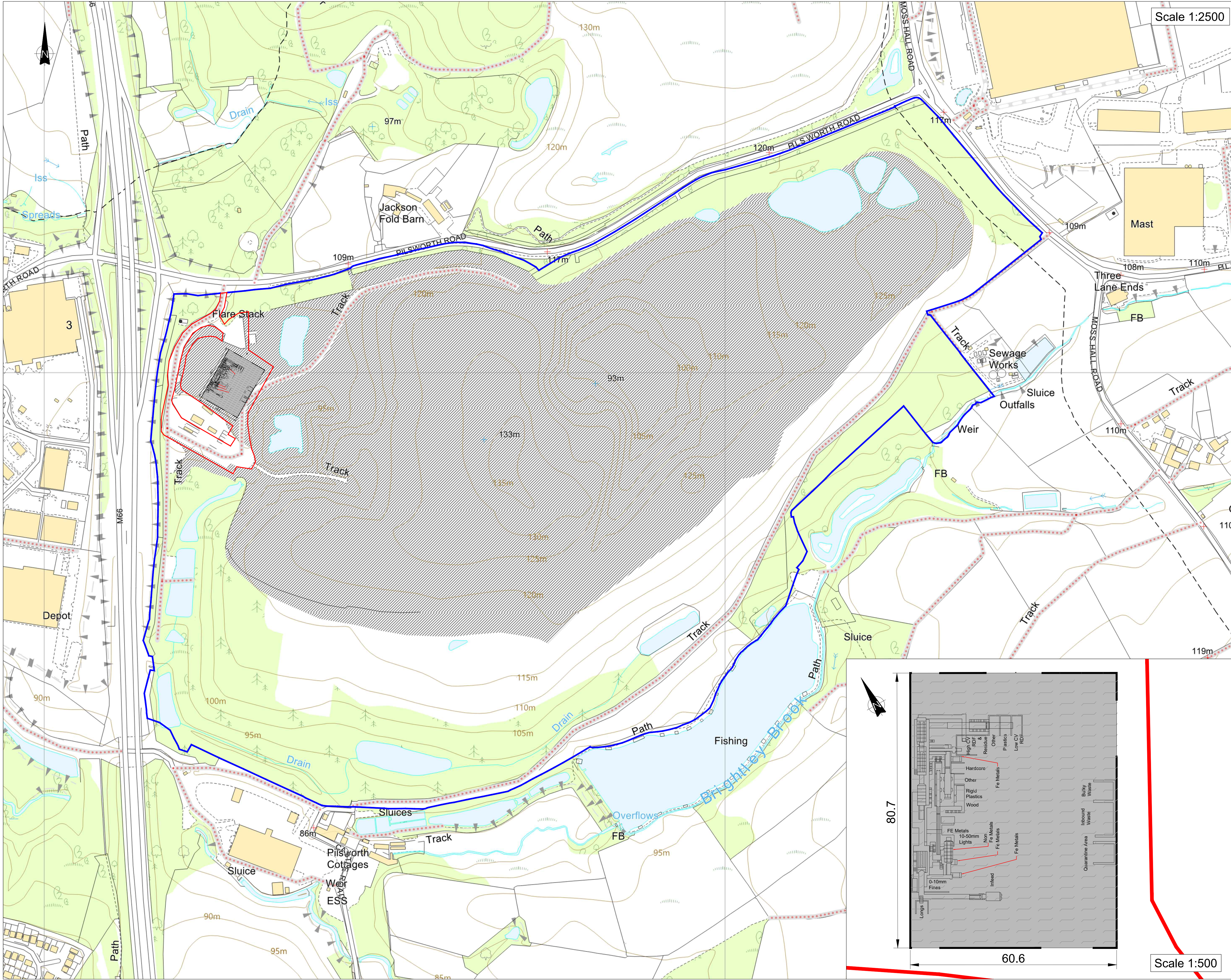
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Flood Risk Assessment Addendum  
ECL.9595.R05.001 Rev -

March 2025

# Appendix 1

Location Plan



Scale 1:2500

Notes

1. Reproduced from the Ordnance Survey Map. With permission of the Crown Copyright Ordnance Survey, License no. AC0000849896.
2. All dimensions in Metres and 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. Key,

- Land under the control of the Applicant
- Application Site

|     |                             |    |     |     |          |
|-----|-----------------------------|----|-----|-----|----------|
| C   | Updated Building Location   | LE | GR  | GR  | 12.09.24 |
| B   | Updated Building Dimensions | LE | GR  | GR  | 20.05.24 |
| A   | Issued as Final             | LE | GR  | GR  | 12.07.23 |
| Rev | Updated Site Boundary       | LE | GR  | GR  | 12.07.23 |
|     | Updated Ownership Boundary  | LE | GR  | GR  | 12.07.23 |
|     | Modification                | By | Chk | App | Date     |



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Valencia Waste  
Management Ltd

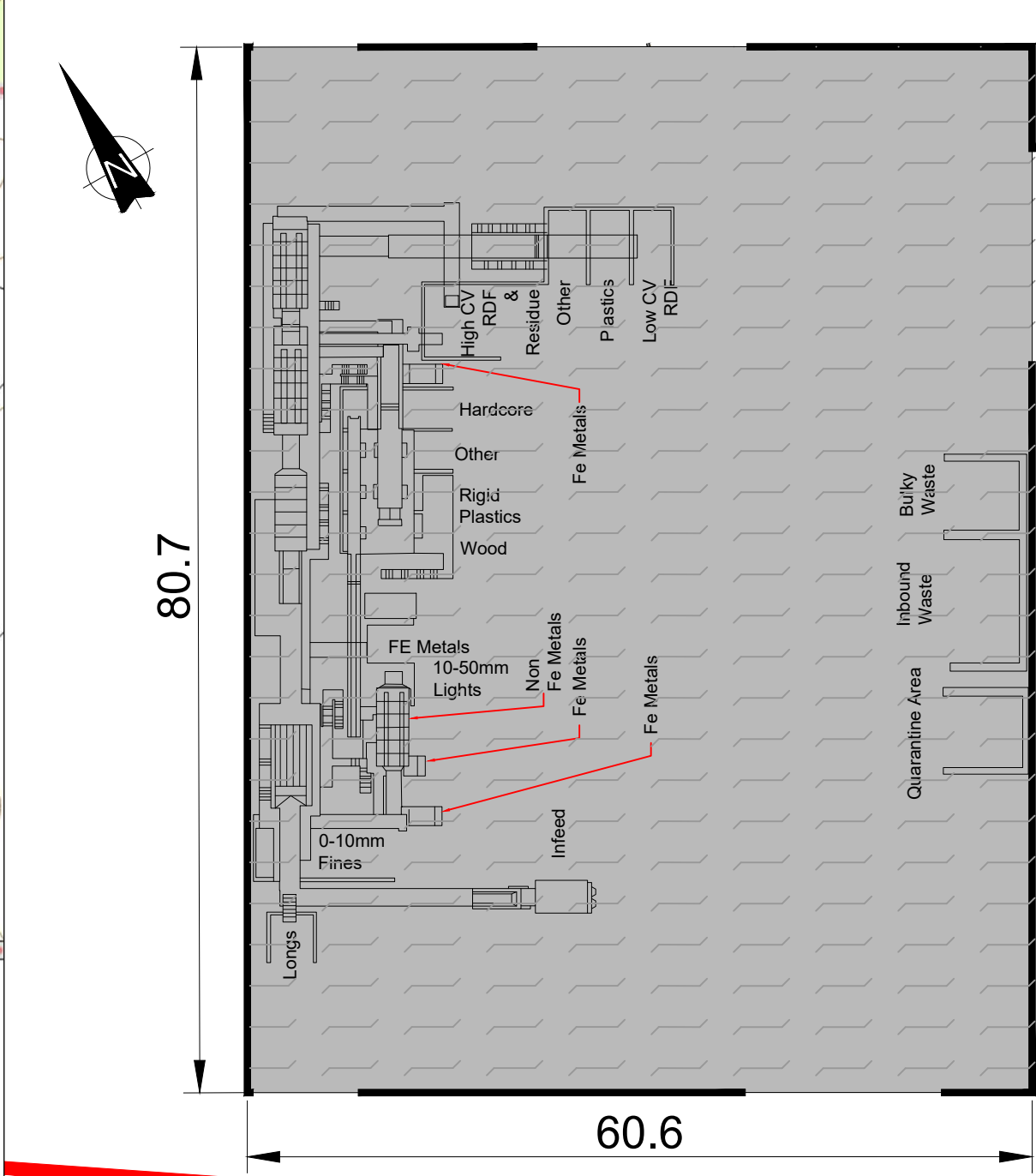
Pilsworth Landfill Site

Proposed MRF Location

|            |            |             |
|------------|------------|-------------|
| Drawn by   | Checked by | Approved by |
| LE         | GOJR       | PD          |
| Date       | Date       | Date        |
| 18.01.2023 | 18.01.2023 | 07.10.2024  |
| Status     |            | Scale @ A1  |
|            |            | AS SHOWN    |

|                  |          |
|------------------|----------|
| Drawing Number   | Revision |
| ECL.9595.D01.002 | C        |

Scale 1:500





## **Valencia Waste Management Ltd**

Proposed Pilsworth South Material Recovery Facility

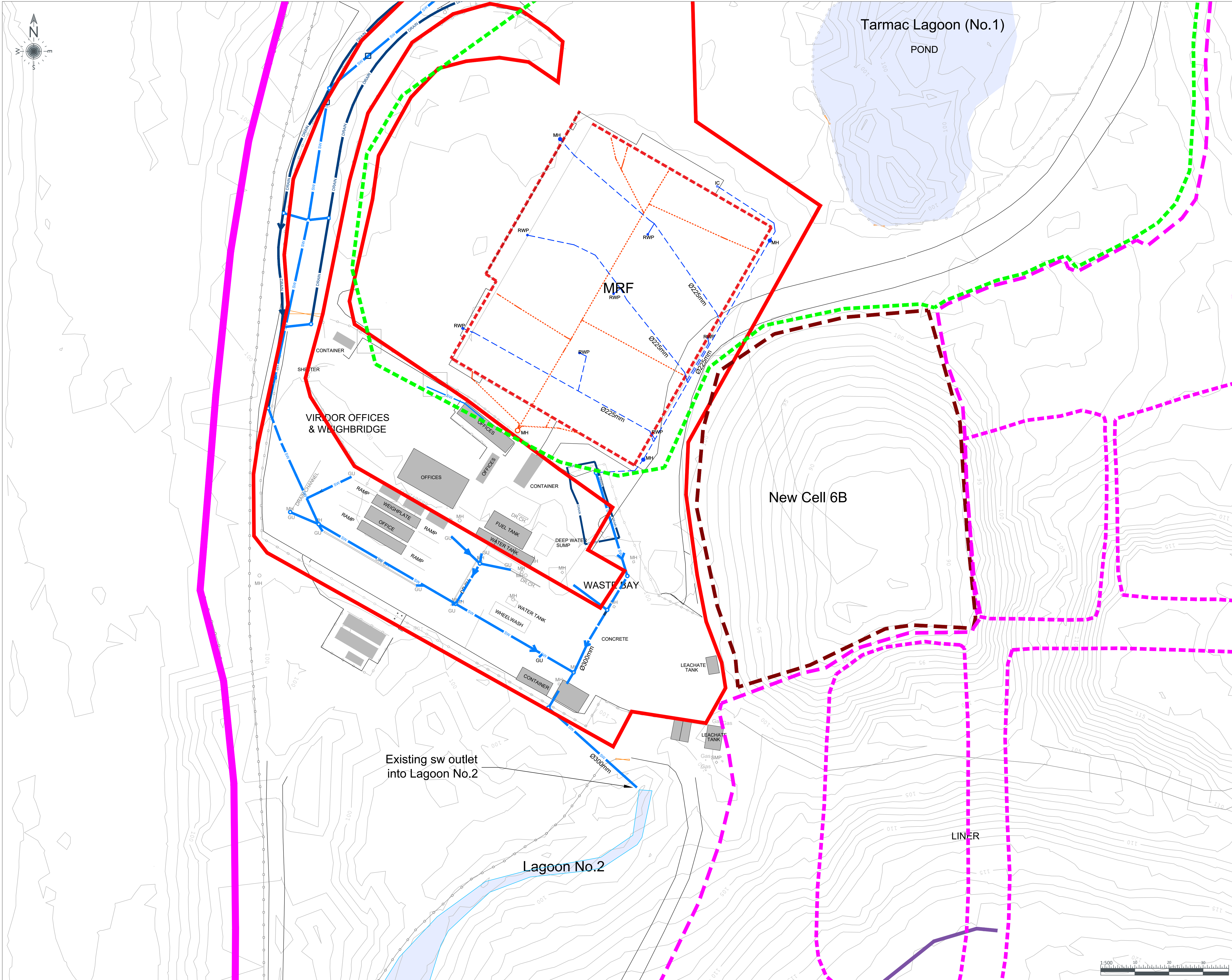
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Flood Risk Assessment Addendum  
ECL.9595.R05.001 Rev -

March 2025

# Appendix 2

Proposed MRF Drainage Plan



- Notes
1. This drawing has been produced to support the review of the existing surface water management system.
  2. This drawing is produced to National Grid coordinates with all levels in metres Above Ordnance Datum (m AOD) Newlyn.
  3. The topographical survey information included is provided by Valencia; data included within the drawing includes the following:  
MRF as built drainage survey (21/02/25)  
2024 SEPT PILS DRONE SURVEY (for mrf area)  
July 2024 annual topographical survey Rev A  
PWS1500 - May 2024 - DU - SW and GW management
  4. OS mapping is provided under licence 100035207.

- Key:
- Land under the control of the Applicant
  - Application Boundary
  - MRF Building
  - RWP Building Downpipe
  - SW Drain
  - SW Manhole
  - RWP SW IC
  - Leachate Pipe
  - Existing SW drain
  - Existing SW lagoon

Permit Notes:

Maximum rate of surface water discharge from landfill based on maximum daily volume 5000m<sup>3</sup> or 57.9l/sec in accordance with Pilsworth South Environmental Permit EPR/BS7951B (application EPR/BS7951B/V012)

| Rev | Modification | By | Chk | App | Date |
|-----|--------------|----|-----|-----|------|
|     |              |    |     |     |      |



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Valencia Waste Management Ltd.

Pilsworth South Surface Water Management Review

| MRF Building Drainage |            |             |
|-----------------------|------------|-------------|
| Drawn by              | Checked by | Approved by |
| LG                    | DJH        | -           |
| Date                  | Date       | Date        |
| 19/03/25              | 19/03/25   | 19/03/25    |
| Status                | Scale @ A1 |             |
| PLANNING              | 1:500      |             |
| Drawing Number        | Revision   |             |
| ECL.9595.D01.014      | P01        |             |