

DMP Metals - Kirby Hall Estate, Corby Road, Gretton Corby Northamptonshire, NN17 3AS.

## Construction Management Scheme (CMS)

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## 1 Introduction

- 1.1 DMP Metals Ltd is proposing to design and construct a purpose-built non-ferrous metals upgrade business at Kirby Hall Estate, Corby Road, Gretton Corby Northamptonshire, NN17 3AS. The site is presently leased to Beechwood Recycling Corby Limited, and is currently used for composting purposes however due to various operational constraints it has been decided that the continued operation of the composting business is no longer financially viable.
- 1.2 Groundworks supported by GP Planning have held a pre-application planning meeting with Northamptonshire County Council to discuss the proposed repurposing of the site to accommodate the metal recycling facility and the outcome was generally supportive.
- 1.3 The proposed development will utilise the existing site buildings, which generally comprise a large fibre cement clad steel portal frame type building, 5 No reinforced concrete compost sanitisation tunnels together with an additional central covered area that joins the above structures by means of simply supported roof truss assemblies covered in profiled metal cladding. This central area is presently open at both ends. The remainder of the site is generally concrete hardstanding area which was previously utilised as compost maturation and storage bay. In addition, the new facility will utilise the existing weighbridge structure and site access roads.
- 1.4 To assist in identifying the effects arising during the construction phase, this statement establishes the key construction parameters that will be used to bring forward the construction of the scheme. At this stage, a contractor has not yet been appointed to undertake the construction works. However, the information and parameters within this document will form part of any tender documentation issued and the appointed contractor will be required to comply with the outline methodology described
- 1.5 This statement describes the anticipated programme of site preparation and construction works and the key activities that will be undertaken on the site in relation to the development.
- 1.6 The broad principles of a framework site wide Construction Environmental Management Plan (CEMP) are identified in Section 5.0 of this report with the main contractors will be required to demonstrate how they intend to comply with the CEMP including provision of documentation required to demonstrate this compliance.

## 2 Programme of Works

### 2.1 Timetable – Project Schedule

2.2 This is a relatively simple project and requires the minimum modifications to building necessary to accommodate the repurposing of the site. Given this the expected timescale from start to completion of building modifications/remedial works and upgrades to support the subsequent installation of the metals reprocessing plant and equipment is anticipated to last no more than 6 months. The construction work is expected to unobtrusive as most of the activities will be inside the existing buildings and will mainly involve installation and erection of mechanical and electrical plant which has been pre-manufactured offsite. The scope also includes the installation of a modular office/welfare accommodation; the installation of two new fire water tanks, necessary to meet EA Permitting requirement; and the installation of a new security fence. Additionally, there will be some minor remedial works required to bring the existing building up to an acceptable standard including replacement of damaged cladding panels evident in both walls and roof sections. A small quantity of parallel earthworks will be necessary to reinforce some areas of the existing boundary embankments which had been previously been reinforced with lime enhanced soil stabilisation technique. All activities will be broadly continuous.

2.3 A broad timetable for all works is identified in Table 2.1 below.

**Table 2.1 Sequence of works for the development**

Activity	Works Date	Detail
1	October 2020 (Week 0)	Site Establishment/Site Mobilisation
2	Week 1	<ul style="list-style-type: none"> <li>• Remediate existing Building, repair damaged cladding, reinstate existing fire escape, and form new escapes if required.</li> <li>• Update building electrics commences</li> <li>• Delivery of main mechanical equipment to site and commence installation</li> </ul>
	Week 2-6	<ul style="list-style-type: none"> <li>• Modification to Central Reception Hall including erection of L-Block Feedstock storage facility.</li> <li>• Installation of mechanical equipment including trommel, shredder, conveyor systems, over belt magnets and eddy current separators.</li> <li>• Delivery of modular office units and install on foundation pads completed in parallel.</li> <li>• Installation of fire water tanks and associated pipework and delivery system.</li> <li>• Upgrade existing electrical building roof (GRP membrane and waterproof skim of walls)</li> <li>• Remediate earth embankments and erect security fencing</li> <li>• Modify existing drainage systems to reflect fire suppressions systems attenuation requirement.</li> </ul>
	Week 7	<ul style="list-style-type: none"> <li>• Installation of electrical systems and control equipment, including cabling and fire detection/activation system.</li> </ul>
	Week 8	<ul style="list-style-type: none"> <li>• Complete mechanical and electrical plant installation and energise electrical systems</li> </ul>
	Weeks 9-12	<ul style="list-style-type: none"> <li>• Complete System Tests and Cold Commissioning</li> <li>• Delivery of first Feedstock to support commissioning.</li> </ul>
	Week 12-14	Hot Commissioning and Performance testing
	Week 15	Single Shift Commercial Operations Commence
	Tba	Two shifts Commercial Operation Commence

## 3 Description of Works

The following provides a broad description of the likely nature of activities for the construction of the DMP Metals Facility at Corby

### 3.1 Earthworks

The existing embankment around the site has suffered in recent years from landslips to the extent that these are now compromising the operation of the embankment toe French drain. The works will involve reinstating the embankment to the existing profile using the lime stabilisation process used in the existing construction. Alternatively, gabion walls will be considered to retain the areas of slippage to enable the French drain to be reinstated. Additional herringbone French drain will be installed where slippage has previously occurred.

### 3.2 Fencing

A two meter high post and wire security fencing with 3 rows of barbed wire inward facing will be constructed around the operational site to secure the operational site.

### 3.3 Excavations

It is not envisaged that there will any major excavations required. However subject to the final proposal for the drainage design there may be minor earthworks required to modify the existing drainage system, which whilst suitable for the composting business will require some modifications to support the future operations of the metals processing facility. This will include modifying the drainage system to ensure that adequate retention of fire water can be facilitated in the unlikely event that the fire deluge system is called into operation. It is expected that existing underground tanks can be utilised however depending on volume it may be necessary to construct a retention pond in the area adjacent to the site entrance with a penstock arrangement to prevent overflow to the adjacent stream in the event of a fire. Other minor excavation required to support service installation may also be required.

### 3.4 Site Preparation

During site preparation, appropriate temporary security fencing will be erected to maintain site security and safety around the construction areas. This will be Heras fencing, or similar, to segregate construction workers from moving plant creating safe zones. The fencing will be maintained throughout the construction of the works to ensure safety of the public and visitors.

Temporary welfare and office accommodation will be provided at site using existing portacabin type building which will then be removed once construction activities are completed.

### 3.5 Utilities and Services

The new development will make use of the existing utilities serving the site as follows:

- 3.5.1 HV Power Supplies - DMP will contract with Western Power Distribution to upgrade the existing power supply to site to secure increased capacity. No on-site works are expected however WPD must replace some offsite cabling.
- 3.5.2 Water Supply - The site is serviced by a mains water connection which is to be retained.
- 3.5.3 Drainage – Foul Water drainage is by means of an existing septic tank which is located adjacent to the existing car park. This will be retained to provide the foul drainage connection for the project
- 3.5.4 Drainage – Surface water discharges - the existing building roof areas are connected to the external French drain which runs around the operational area perimeter and down the west side of the access road before discharging into the Gretton Brook
- 3.5.5 Drainage – Operational hardstanding area – Presently all runoff from operational hardstanding areas (Leachate ) is retained in two holding tanks, one underground tank at the rear of the main building (West) and one larger tank adjacent to the listed barn as marked on the site drawing. It is anticipated that the present arrangements will be modified to enable surface water from the hardstanding areas to be discharged via an oil interceptor and additional attenuation pond to the Gretton Brook. Final design to be submitted for approval prior to construction commencing.

### **3.6 Demolition**

- 3.6.1 The existing leachate tank will either be removed, and a retention pond constructed to meet the requirements of the revised drainage plan will be re purposed to provide the necessary retention capacity.
- 3.6.2 Removal of the leachate tank, if required, will involve cutting up the steel tank and removal from site for recycling, the demolition of the existing block work bund area will then allow construction of the retention pond. This work will be carried out in accordance with relevant legislation and utilising standard industry procedures.

### **3.7 Construction**

- 3.7.1 Building works will be limited to the repair and upgrading of the existing steel framed portal building to bring it up to an acceptable condition. This will involve repairs to the existing fibre cement cladding which has been damaged and general updating of the building electrical services. It is also envisaged that some structural repairs to internal concrete push walls will be required to remediate areas of concrete damage.
- 3.7.2 Construction work is expected to unobtrusive as most of the activities will be undertaken inside the existing buildings and will mainly involve installation and erection of mechanical and electrical plant together with the associated permanent maintenance access walkways, all of which will be pre-manufactured offsite.
- 3.7.3 The scope includes the installation of a single storey modular office/welfare accommodation approximate dimension 12.5m long by 6.1m wide, the installation of two new GRP fire water tanks (approximate dimensions 7m high by 4m diameter (to be confirmed) required to comply with EA Permitting requirements. Other new structures will include the installation of dust suppression module to the west or south of the main building. This will be a vertical column assembly measuring 2m x 2m in plan and approximately 8m high. This will be connected to dust extraction pipework within the building and is intended to remove fine particles of dust from the process area and capture them in bag filters. The material captured will be recycled

- 3.7.4 The main plant installation within the building is as detailed on the draft 3D model. This includes a shredder, trommel, over belt magnetic separators, Eddy Current separators and associated interconnecting conveyor systems together with a prefabricated cabin required for final quality control/inspection, a control room to accommodate the PLC control system, all associated cable tray and cable installation together with a finished product bagging area and waste recycling area.
- 3.7.5 The sequence of construction will be planned to support working from the rear of the building or west end of the building working towards the main access door. The plant will be erected in a defined sequence to ensure safe working practises are always observed. The main plant and support structures will be delivered by road either as prefabricated units or piece small (in the case of support steelwork) and erected within the building using mobile cranes and other suitable lifting equipment. Detailed construction methodology will be developed as part of the construction management plan. All construction plant will be delivered by road and offloaded either directly into the main process building or offloaded and stored on the existing hardstanding area. Mobile working platform, Scissor Lifts and temporary scaffolding will be utilised to provide safe access and egress to plant installation areas prior to the erection of the permanent maintenance access platform. Large components such as the Shredder and the Trommel may require to be delivered by specialist heavy haulage transport. If required, this will be coordinated by the suppliers to ensure all necessary permissions are in place. All specialist tools and equipment required to support installation will be provided by the main contractor.
- 3.7.6 External construction activities including offloading of the modular office block accommodation and erection of the Dust Extraction unit will use mobile crane or other similar lifting devices to ensure safe installation of the plant.
- 3.7.7 Construction activities will take between 8 to 10 weeks to complete and are expected to commence around the end of October 2020. Commissioning activities are therefore expected to commence Q1 2021 with commercial operation expected after an initial 4-week commissioning period. Feedstock to support commissioning activities will be required during the later part of Q4 2020.
- 3.7.8 All deliveries to site will be prearranged to ensure adequate crange is available for immediate offloading.
- 3.7.9 Vehicle movement during the construction period will be low with the expected maximum deliveries per day averaging 8 -12 HGV vehicles at peak/day
- 3.7.10 Modification to drainage system if required will be undertaken using standard construction plant and equipment, including JCB backhoe, trench support systems and light compaction equipment
- 3.7.11 No road modification will be required as all internal access roads will be used including existing weighbridge.
- 3.7.12 Construction working hours will generally be 0700 to 1900 Monday to Friday and 0800 to 1700hrs at weekends. It is expected that construction working pattern will involve weekend working on a 12-day fortnight basis. Noise levels are expected to be extremely low and considered insignificant as most activities will be contained within the existing building structure.

## 4 Environmental Management

### 4.1 Construction Environmental Management Plans (CEMP)

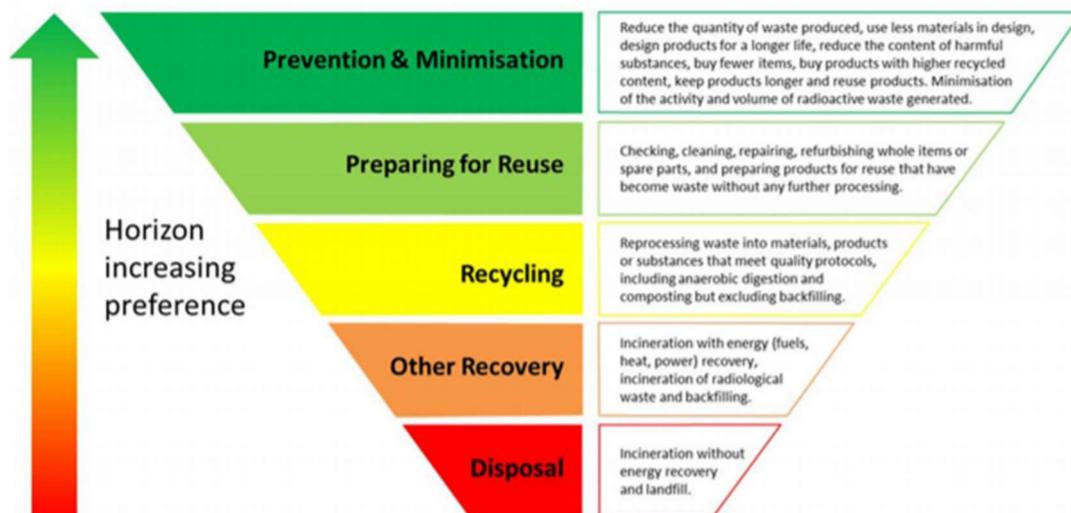
- 4.1.1 A CEMP is a delivery document that details how the practical execution of the construction works will be planned, managed, and controlled to meet the requirements of necessary consents, legislation, and common good practices.
- 4.1.2 The appointed construction contractors will be required to prepare a CEMP to cover their works in accordance with the agreed requirements.
- 4.1.3 CEMP will be reviewed and accepted by DMP-GW before the commencement of activities relevant to the construction works the site.

**4.2 Construction Lighting**

- 4.2.1 Site lighting will primarily be provided to ensure safe working conditions and to maintain security on all construction sites, while having regard to any local receptors or nearby occupied residential properties.
- 4.2.2 Lighting will be positioned and directed so as not to spill unnecessarily from the construction site. Lighting will be switched off when not required to ensure safe working conditions and site security.
- 4.2.3 Construction site lighting will, as far as practicable, be designed to ensure that any artificial light emitted from a site does not prejudice health or create a nuisance, as required by the Environmental Protection Act 1990

**4.3 Waste management and minimisation**

- 4.3.1 DMP-GW will manage all materials and waste for the project during construction in an integrated approach in accordance with good industry practise relating to waste and materials management. It is proposed to apply a waste hierarchy (as set out in figure below) which encourages proactive management of materials to reduce the amount that is discarded and seeks to recover the maximum value from the wastes that are produced with disposal as a final option



#### 4.4 Protection of watercourses

- 4.4.1 DMP-GW will ensure suitable procedures are in place to provide protection for watercourses such as appropriate control measures and resources to manage the risk of spills and accidents during the construction period.
- 4.4.2 Measures will be taken to prevent the deposition of silt or other material arising from work operations in existing watercourses or catchment areas. The measures will accord with the principles set out in industry guidelines, including Guidance for Pollution Prevention: Works and Maintenance in or near water: GPP 5
- 4.4.3 Adequate drainage systems exist on site to control discharges during the construction works with appropriate treatment prior to discharge. The existing leachate system is designed to prevent contamination of the adjacent water course by retaining all discharges in storage tanks prior to removal from site for disposal by road tanker. DMP-GW intends to modify the system to remove the need to tanker leachate offsite. This will include sediment treatment and the inclusion of oil separators where necessary. The drainage system will be appropriately maintained throughout the works such that it remains efficient
- 4.4.4 Measures will be taken with regard to any works required within a watercourse to restrict the release of suspended sediment and solids into the water course, as far as practicable.
- 4.4.5 Oil interceptors will be provided to areas of hardstanding where there is a potential risk from oil/fuel contamination (e.g. at car parking areas).
- 4.4.6 DMP-GW will ensure protection measures to control the risk of pollution to surface water will be adopted, including the following.
- All deemed requirements of the Environmental Permitting (England and Wales) Regulations 2016.
  - Any containers of contaminating substances on site will be leak-proof and kept in a safe and secure building or compound from which they cannot leak, spill or be open to vandalism. The containers will be protected by temporary impermeable bunds (or drip trays for small containers) with a capacity of 110% of the maximum stored volume.
  - Areas for transfer of contaminating substances (including refuelling areas) will be similarly protected and have appropriate spill kits.
  - In addition, any permanent oil storage tanks and temporary storage of over 200 litres of oil in drums and mobile bowers, as well as ancillary pipe work, valves, filters, sight gauges and equipment will be stored within secondary containment, e.g. bunding or drip trays (Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016) with a capacity of at least 110% of the maximum contents of an oil tank, mobile bower or intermediate bulk container.
  - No fuel, oil or chemical substances will be stored within 15m of a watercourse.
  - All refuelling will take place above drip trays or on impermeable surfaces (e.g. plant nappy) to provide protection to underground strata and watercourses, and away from drains as far as is reasonably practicable. Vehicles and plant will not be left unattended during refuelling. Appropriate spill kits will be easily accessible during these activities.
  - All construction equipment and vehicles will be maintained in line with manufacturer's instructions to ensure it is in good working order. Should any oil or fuel leaks occur, corrective action will be taken.

- Drip trays will be placed below static mechanical plant.
- All washing-down of vehicles (including wheel washing) and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses and groundwater in accordance with the Environment Agency's GPP 13 [RD31].