Margam Connection; Margam Substation Extension

WASTE MANAGEMENT PLAN

Prepared by: Laing O'Rourke
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Waste Management Plan
S5 – For review and acceptance
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Rev	Author	Reviewed by	Approved by	Date approved	Reason for issue
P01	M.Wisdom	R.Jones	M.Richards	8/10/2024	First issue
P02	E.Hutchings	R.Jones	R.Jones	21/02/2025	Update
P03	M.Wisdom	R.Jones	R.Jones	25/07/2025	Revised and renamed to Margam Substation

This Construction Waste Management Plan is distributed to registered copy holders both within and outside the Company.

Where the need arises, unregistered copies of the Plan may be distributed, provided approval is obtained from the Project Leader.

This version of the Resource Management Plan has been issued to:

National Grid Electricity Transmission
Local Authority Planning Authority

For record purposes and circulation, issue and revision list will be held and maintained via the Document Control system.

Laing O'Rourke, as principal contractor, and the Project Leader (i.e. the "person in charge of the project") will take all reasonable steps to ensure that:-

(i) 'waste' is minimised and 're-use and recycling' are maximised, in order that materials are handled efficiently and waste is managed appropriately.

(ii) all waste from the project will be dealt with in accordance with all applicable national waste duty of care laws and regulations

Contents

1. Project Details and Commitments

These details are required for learning and some environmental assessment method purposes in order to confirm KPI performance and appropriate levels of responsibility. This document will be updated as an when new information from the supply chain becomes available but at no less than six monthly intervals.

Project Name	**Client**	**Estimated Value**	
Margam Connection – Margam Substation Extension	National Grid Electricity Transmission	£200m	
Short Description of Project			
The Contract is a two-stage contract for a collaborative process to develop the project, including design and planning for construction before the main construction stage. The project includes the extension to the existing Margam 275kV substation which will be reconfigured with new GIS. Existing overhead line circuits and SGT HV connections will be modified and diverted to new bays within the GIS.			
Project Waste Benchmarks			
Waste recycled (%)	75%	Diversion from Landfill (%)	99%
Site Waste Champion		Construction Manager	
Person directly responsible for ensuring waste licences are up to date (Sections 4.0 and 10.0)		Environmental Manager	
Person directly responsible for recording project waste arisings in LOR waste data system (Waste Tracker):		Environmental Manager	
Project team members likely to have responsibility for supporting delivery of project's waste objectives:			
Project Leader	Richard Skone		
Project Manager	Rob Jones		
Technical Leader	Ali Sehat		
Design Consultants	Baker Hicks		
Commercial Manager	Paul Jones		
Procurement Manager	Vikram Chopra		
Construction Manager	TBC		
Planning	Lloyd Lewis		
Sustainability Manager	Rhdori Davies		

2. Bid and Design Stage Planning for Waste Minimisation

Design, planning and procurement for waste elimination and minimisation should start as early as possible in the pre-construction phases of the project. This section should be used to record any major decisions that may have been taken to minimise waste at bid or design stages.

Techniques and strategies for waste minimisation can involve offsite manufacturing, modular and standardised building components, design consolidations to match standard dimensions, volumetric components, balanced cut and fill earth movements, just in-time deliveries, supply chain engagement to minimise packaging requirements, arrangement for packaging take-back, and steps to avoid damage to products.

Design feature/ activity/ package	Decisions taken to reduce waste	Impact on waste reduction (which materials, and estimate quantities if possible)
Offsite manufacturing	DFMA to be adopted where possible within delivery	Prioritise factory manufacture to allow more controlled construction environment – minimising on site wastage. Investigate potential to utilise moulds and stillages for multiple use
Substructures	Minimise pile mat to reduce requirements	Modify design of pile mats and temporary works to prevent materials becoming waste
Foundations	Utilise displacement piling methods	Amend approach to piling works to use displacement piling techniques that do not allow waste to be generated
CoSHH waste	Design focus on specifying non-hazardous alternatives where available	Reduce the volume of hazardous waste on site.
Supply Chain Engagement	Engage with the supply chain to identify further waste reduction opportunities	Target supply chain reduction opportunities particularly with turn key packages

3. Waste Management Actions

This plan identifies what will happen to waste from every waste-producing activity on site including office and Welfare waste. The table will be continually updated, with new actions when they are identified.

Waste data will be retrieved from each waste contractor, with spot checking against the WTNs provided. All waste data will be recorded on LOR's environmental reporting portal on a monthly basis to inform performance against KPIs, including waste minimisation and diversion from landfill rates.

Performance will be reported to National Grid.

The following table is indicative and will be reviewed and update during the development of the detailed design and engagement with relevant subcontractors.

WASTE IDENTIFICATION INFORMATION					
Activity/ Package	Waste Materials (row for each)	Estimated volume (m3)	Waste minimisation actions	Onsite reuse or recycling actions	Offsite reuse or recycling actions
Enabling works	Soils & Stones	200	Minimise site footprint for temporary works	None	Recycle via permitted facility
Enabling works	Concrete	100	Maximise DfMA solutions	Reuse of concrete in temporary works and blinding	Recycle via permitted facility
Canteen & office waste	Canteen waste	200	reuse of office materials	Segregation of waste	Recycle via permitted facility
Vegetation clearance	Plant tissue waste	50	Retain vegetation on site	Identify opportunities to retain cut vegetation on site	Identify reuse opportunities on adjoining sites
Main Works (groundworks)	Pile arisings	500	n/a	Reuse of concrete in temporary works and blinding	Identify opportunities for beneficial reuse
Substructure	Concrete	110	Maximise DfMA solutions	Reuse of concrete in temporary works and blinding	Recycle via permitted facility
Substructure	Rebar	4	Maximise DfMA solutions	n/a	Recycle via permitted facility
Substructure / superstructure	COSHH waste	9	Identify non-hazardous alternatives		Recycle via permitted facility
Substructure / super structure	Mixed construction waste	5000	Promotion of reuse of materials	Segregation of waste	Recycle via permitted facility

For all works, contractors and waste providers on the project, the waste hierarchy will be applied, prioritising reduction of materials brought to site (as detailed in the above table from Section 4), and only allowing waste to landfill as a last possible option.

4. Waste Arrangements

Details of Waste Storage Area:
To be included within the construction logistics plan
Details of Waste Segregation Arrangements, bins, and colour coding of bins:
During the excavation and enabling works, all muck away materials will be segregated into the categories: gravel, inert, concrete, and tarmac, to allow further processing and reuse. Hazardous waste containers to be located on site.

√	Waste Type (Tick all that apply	**Colour**
√	**Hazardous**	orange
√	**Inert**	grey
√	**Metal**	blue
	Gypsum	white
√	**Wood**	green
√	**Packaging**	brown
	Glass	
√	**Mixed**	Black

Details of Storage areas for off-cuts and materials, to minimise waste (such information should help inform contractors where to store off-cuts and where to find materials)
N/A until trades commence pre-start process.

Hazardous Waste Premises Code:	**To be registered prior to commencement**

Details of project-specific waste management permits and exemptions: (Tick all that apply, and ensure that these are secured, and kept in the Project Waste file)		
√		**Details**
	Permit required for operating soil remediation equipment (NRW)	N/A
	Permit required for operating a waste transfer station (NRW)	N/A
√	Exemption required for re-use of waste on-site (Subject to various conditions) (NRW)	U1 Exemption to be applied for if required
	Exemption required for temporary storage of waste on-site (NRW)	N/A
	Others (please describe…):-	N/A

5. Contractors

All contractors and partners should be engaged in the aims of the Resource Management Plan. Depending on the site arrangements defined in section 5 and also how the packages have been procured, sub-contractors could have responsibility for delivering waste to Project controlled waste area; removing some of their own waste with their own waste contractor (common for plasterboard); or even ensuring waste can be collected by a project appointed waste management company. Whichever option has been agreed should be registered below for all major waste producers.

P Will be producing waste through on-site activities.

T Responsible for transferring their waste to the on-site waste facilities.

F Responsible for the provision of on-site waste facilities (typically apples to waste management company only)

D Waste removed by their waste own contractor - (all such contractors must supply copies of up-to-date waste carriers' licences and the waste management licences for the facilities to which the waste is taken)

Additional rows will be added as contractors are identified.

Contractors:	Package / Activity	Contact Name:	Contact Details:	Responsibility (P/T/F/D):
LOR	General works	As above	As above	P/T/F/D
Expanded	Enabling Works	TBC	TBC	P/T/D
Expanded Piling	Piling	TBC	TBC	P/T
Expanded	Excavation	TBC	TBC	P/T/D
Expanded	Substructure	TBC	TBC	P/T/D
Expanded	Superstructure	TBC	TBC	P/T/D
GE Verona	GIS works	TBC	TBC	P/T/D
RSK	Ecological / Vegetation Mitigation	Gemma Williams	GWilliams@rsk.co.uk	P/D

6. Communication and Training

In ensuring that this plan is implemented, the following communication and training activities will be undertaken. Project Team to complete table as appropriate.

Activity	Details	Person(s) responsible
Define the Site Waste Rules, display prominently on site, and ensure all staff are aware of them.	The rules and should define the principles all should follow in managing waste (waste minimisation, appropriate segregation, 'don't walk by', 'reporting problems), and specific relevant to the site's arrangements	Construction Manager
Induction for all staff and operatives, to ensure correct actions and policing of correct actions on site	Explain the priority of minimising waste and waste management procedures on site, labelling of waste facilities, minimising waste and appropriate use of waste facilities by staff, including segregation.	Project Leader
Ensuring attendance at induction	Integrated into compulsory site induction course on Health, Safety & Environment	Construction Manager
Toolbox talks /Briefings	Especially when persistent issues arise, to ensure all relevant staff are aware of responsibilities to contribute to waste management activities	Construction Manager
Regular engagements with contractors	Waste minimisation and waste management is a regular item at regular contractor meetings and/or monthly contract review meetings	Package Mangers
Project Team meetings	Waste minimisation and waste management is covered where key issues arise. Performance to be monitored.	Project Leader
Noticeboards in canteen/welfare area	To be used to communicate any new waste management procedures, and report waste performance	Construction Manager
Training	Whatever training is considered appropriate for implementation of the plan. It is recommended that site security personnel are trained regarding inspection and documentation procedures for waste leaving site.	Project Leader
Site Environmental Inspection	Monthly Environmental Inspection covers waste compliance corrective action as required.	Sustainability Manager

7. Continual Improvement

Record any good practice or new or innovative methodologies implemented by any contractor or Laing O'Rourke during the project.

Activity	Details	Person responsible
Invite all contractors to contribute ideas for how they can minimise waste arisings and waste sent to landfill, at tender stage, pre-start agenda and weekly subcontractor meetings	Define how such actions are identified, recorded, implemented, and checked	Project Leader with Environmental Manager

8. Permits

With respect to the waste management companies (including those removing waste on behalf of sub-contractors directly) that will be removing waste from site, the following table must be completed prior to the removal of waste. The table outlines the waste management permits, waste carrier licences and exempt site permits that have been checked and verified for use. Copies of the licences and permits should be kept in the Environmental Management Folder.

This section to be updated in line with contractor appointments.

Company Name	Permit Address	Permit No.	Waste Carriers	Expiry	Services
Laing O'rourke	Margam Substation, Cefn Gwrgan Road, Margam, Port Talbot, SA13 2BZ	WME108089		27/03/2028	U1 - Use of waste in construction
		WME107679		17/03/2028	D1 - Deposit of waste from dredging of inland waters
Gavin Griffiths	JR Works Bryntwod, Langyfelach, Swansea, SA5 7LE	EB3397TU	CBDU6001	05/05/2028	Skip Hire Muck Away Vac Ex Soil Testing
Browns Waste Management	Taybrite Works, Heol Y Bwlch, Bynea, Llanelli, Carmarthenshire, SA14 9ST	XB3893HN	CBDU017087	18/02/2026	Skip Hire Trade Waste
Joe Dunn Plant Limited	Thornfalcon Works, Henlade, Taunton, TA35DN		CBDU516096	04/01/2027	Haulage
Chipmunk (South West) Limited	Chipmunk South West, Thornfalcon Works, Henlade, Taunton, TA35DN				T8 - Treating waste wood and waste plant matter by chipping, shredding, cutting or pulverising - 25/10/2027
Garic Limited	Kingfisher Park Aviation Road Bury BL9 8GD		CBDU566612	20/01/2028	Wet Service Cabin Hire

9. Final Performance

These tables are a summary of the waste produced from start to finish of the project and uses the data provided by our waste contractors.

Project Value (section 1)		**Total Waste m3/100k**	
Waste recycled %		**Diversion from Landfill (%)**	

Waste Type	**Waste Category** (demo /cons /haz /total)	**Estimated pre-project** (based on estimates in Section 4) (m^3)	**Actual quantities of waste produced (m^3)** (from IMPACT)	**Comment** (e.g. differing categorisation / material movement not waste)
170102 Bricks				
170101 Concrete / Binders				
170604 Insulation				
170904 Mixed Waste (Non-Haz)				
1501 Packaging				
170201 Timber				
1602 Electrical and Electronic Equipment				
200301 Canteen / Office				
1301 Oils				
1703 Asphalt and Tar				
170103 Tiles and ceramics				
1701 Inert				
1704 Metals				
170802 Gypsum (e.g. plasterboard)				
170203 Plastics				
200307 Furniture				

170202 Glass				
170601* Insulation Containing Asbestos				
1705 Muck Away / Excavated Spoil Off Site (Non-Haz)				
(Relevant EWC) Liquid Waste / Effluent / Grey Water (Non-Haz)				
(Relevant EWC) Hazardous				
(Relevant EWC) Floor Coverings				
(Relevant EWC) Architectural Features (e.g. roof tiles)				
Other				
Total		**0**	**0**	