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APPLICATION DOCUMENT | **3.15**

SITE WASTE MANAGEMENT PLAN

ARCADIS

www.otterpoolpark.org

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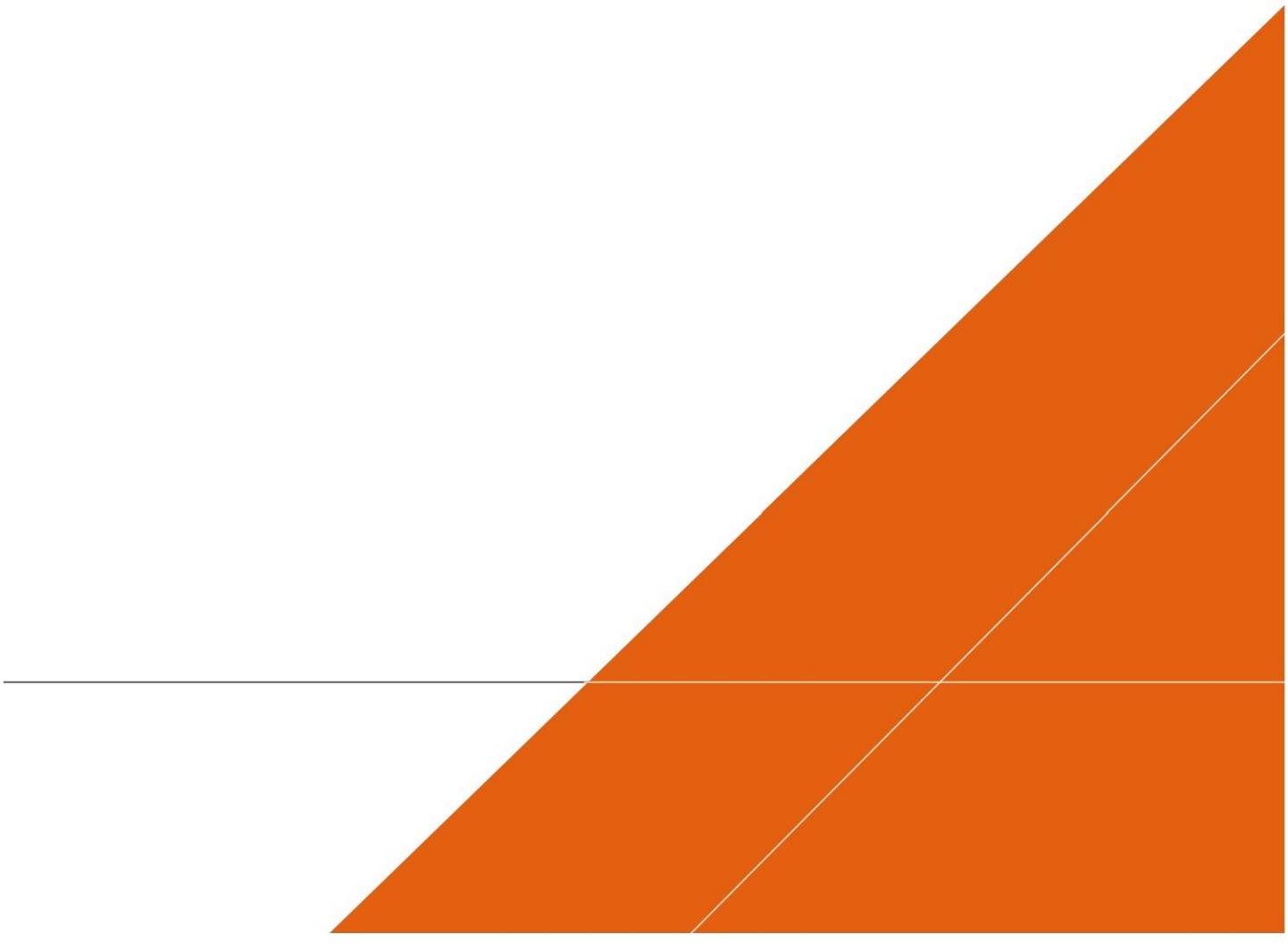
Outline Site Waste Management Plan

FEBRUARY 2019



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APPENDICES

APPENDIX A

WRAP Outline SWMP Template

Outline Site Waste Management Plan

1. Introduction

1.1 This outline Site Waste Management Plan (SMWP) has been developed by Arcadis (UK) Limited (herein referred to as 'Arcadis') to reflect the Otterpool Outline Planning Application (herein referred to as the 'Project') and the associated quantities of waste of construction, demolition and excavation (CD&E) that are anticipated to be generated by the Otterpool Project.

1.2 This report has been developed to reflect the Project's design and the associated quantities of waste that are anticipated to be generated by the Project.

2. Project Description

2.1 Otterpool Park will be adjacent to the existing settlements of Lympne and Sellindge, and takes in Westenhanger, Barrow Hill and Newingreen hamlets as well as some ribbon development along local roads and the A20. It embraces the former Folkestone Racecourse, Westenhanger Castle and Train Station, and the Link Park Industrial Estate. The northern border is formed by the M20 and railway line and the eastern by the A20 and the edge of the Kent Downs Area of Outstanding Natural Beauty. The southern border is formed by the B2067 Aldington Road. The western border is formed by Harringe Lane and Harringe Brook Woods.

2.2 The Otterpool Park development has a phased construction over a 25-year plan, completing in approximately 2044. There will be 8,500 residential dwellings (at a ratio of 70/30 houses to flats). The development will also include commercial and retail space, schools, healthcare facilities, community spaces, sports facilities and a hotel.

3. Purpose of the SWMP

3.1 The Outline SWMP has been developed in accordance with the Waste and Resources Action Programme (WRAP)SWMP Template. Although SWMPs are no longer a statutory requirement, the Otterpool project has committed to develop and implement the SWMP on the Project to facilitate good industry practice, a record of Duty of Care (DoC) information and by that preventing waste crimes, such as fly tipping. Therefore, the SWMP has been prepared in accordance with the revoked SWMP Regulations 2008. This would demonstrate that the Project has given consideration to the potential impacts that CD&E waste arisings may have on the environment and where possible minimise waste and where not possible, to have in place systems which maximise the beneficial use and recycling of materials.

3.2 The intention of this Outline SWMP is to reflect the Project's envisaged design, the associated quantities of waste arisings that are anticipated to be generated and enable better control over material resources and waste arisings throughout the duration of the CD&E phases of the Project.

3.3 This Outline SWMP has also been developed to provide a consistent framework for managing and documenting material resources used and waste arisings during the CD&E phases, meeting regulatory control, reducing waste disposal costs and recording decisions that demonstrate good and best practice in materials use and waste minimisation and management.

- Estimates material resources use and waste arisings during the CD&E phases and identify actions to reduce waste arisings and cost;
- Provide an initial indication as to whether material resources and waste arisings have the potential to be reused, recycled, recovered or disposed; and
- Propose end destinations for waste arisings.

3.4 The main phases for this Outline SWMP include:

- The preparation stage – which is the responsibility of the Designer prior to construction; and
- The construction stage – which is the responsibility of the Contractor from when construction begins.

3.5 The SWMP is a live document that should be updated throughout the CD&E phases by the Contractor. The Outline SWMP has been utilised to record the information below that would be updated as the Project progresses:

- Information on the Project such as the Designer, Contractor and Project's start and end dates and approximate construction value;
- Estimate waste that is anticipated to be produced during the Project, recorded using the appropriate European List of Waste (LoW) Codes and waste description;
- Details on waste management actions; and
- Register of waste carriers and their carrier registration number and details of the site the waste would be taken to.

4. Regulatory Framework

4.1 Table 1 below provides a brief description of the main European and national legislation impacting on construction waste management in the UK (relevant to England).

Table 1: Relevant European and National Waste Management Legislation

Legislation / Policy	Summary of Requirement
EU Landfill Directive (Directive 1999/31/EC on the landfill of waste)	Establishes a framework for the management of waste across the European Community. It also defines certain terms, such as 'waste', 'recovery' and 'disposal', to ensure that a uniform approach is taken across the EU.
EU Waste Framework Directive (Directive 2006/12/EC on waste)	The Waste Framework Directive (WFD; Directive 2006/12/EC on waste) contains the definition of waste. This definition is used to establish whether a material is a waste or not. It sets targets for recycling non-hazardous construction and demolition waste (70% by weight by 2020: Article 10).
The Clean Neighbourhoods and Environment Act 2005	It is the responsibility of everyone working in the construction industry to ensure that all waste is disposed of properly. All employees need to be made aware that if they are tasked with waste disposal this must be carried out in accordance with the law, or they risk being fined.
Environmental Permitting (England & Wales) Regulations 2016	The Environmental Permitting (England and Wales) Regulations (EPR) were created to standardise environmental permitting and compliance in England and Wales to protect human health and the environment.
The Hazardous Waste (England and Wales) Regulations 2005, Statutory Instrument 2005 No. 894 and 2009 amendment SI 507	Under the Hazardous Waste Regulations 2005 Regulations, 'it is an offence to produce hazardous waste at premises, or remove that waste from premises, unless those premises are either registered with the Environment Agency or are exempt.'
Waste (England and Wales) Regulations 2011, and 2012 amendment	The Waste Regulations transpose the Waste Framework Directive into English law. The Regulations require businesses to confirm that they have applied the waste management hierarchy, introduce a new waste hierarchy permit condition and a two-tier system for waste carrier and broker registration.
Waste Strategy for England 2011 (WSE 2011)	This strategy builds on the Waste Strategies for 2000 and 2007. The strategy contains actions and commitments, which set a clear direction towards a zero-waste economy.
National Planning Policy for Waste (Department for Communities and Local Government, 2014)	Sets out detailed waste planning policies. States that: ''when determining planning applications for non-waste development, local planning authorities should ensure that the likely impact of proposed, non-waste related development on existing waste management facilities, and on sites and areas allocated for waste management, is acceptable and does not prejudice the implementation of the waste hierarchy and/or the efficient operation of such facilities; the handling of waste arising from the construction and operation of development maximises reuse/recovery opportunities, and minimises off-site disposal.'
The Definition of Waste: Development Industry Code of Practice, Contaminated Land (CL:AIRE), 2011	This Code of Practice (CoP) provides best practice for the development industry to use when assessing if materials are classified as waste, or not, and determining when treated waste can cease to be waste for a particular use.

5. Roles and Responsibilities

5.1 The Contractor shall be responsible for adopting, implementing and updating the Outline SWMP to ensure the Works meet the following key objectives:

- **Environmental Protection:** SWMPs help to manage and reduce the amount of waste produced, and therefore disposed of at landfill. Additional environmental benefits include: less harm to the local environment, reduced energy consumption and greater opportunities for reusing and recycling materials.
- **Cost Saving:** Managing materials more efficiently will immediately cut costs. Better storage and handling of materials will reduce waste and enable better recovery. Reusing and recycling materials cuts disposal costs.
- **Legal Requirements:** the SWMP will support the Project to adhere to relevant waste related legislation including their Duty of Care obligations.

5.2 The key roles and associated responsibilities for delivery of the SWMP are summarised below. These roles and responsibilities are based on those required by the now revoked SWMP Regulations 2008.

The client will:

- Appoint a Principal Contractor/s;
- Ensure that the SWMP is implemented;
- Provide necessary direction to contractors e.g. setting contractual obligations;
- Review, revise and refine the SWMP as necessary in liaison with the Contractors; and
- Be ultimately responsible for ensuring that all waste from the site is dealt with in accordance with the waste Duty of Care in Section 34 of the Environmental Protection Act 1990 and the Waste (England and Wales) Regulations 2011.

The Principal Contractor will:

- Regularly review this SWMP and the WRAP SWMP Template to ensure that it accurately reflects the progress of the Works and update it where necessary;
- Ensure all procedures within this SWMP are followed;
- Ensure all contractors are suitably qualified and experienced in dealing with SWMP and environmental issues, and that the SWMP tasks are contained within the terms of contracts to facilitate understanding and accountability;
- Ensure that all legal and contractual requirements relating to the SWMP and the environment are met by implementing adequate and realistic plans/procedures, and obtaining relevant licences/permits and certificates;
- Support the Project's commitments and targets and ensure subcontractors are required to:
  - Assist with required inputs, providing forecasts of waste to be produced through their activities as necessary;
  - Measure and report progress for waste and waste reused and recycled;
  - Report performance for construction waste streams separately, measured in tonnes/m^3;
  - Within three months of work being completed, confirm that this SWMP and the WRAP SWMP Template has been monitored (and updated) on a regular basis throughout the Works; compare the actual waste quantities against the forecasted quantities of each waste type; and provide an explanation of any deviation from the plan;
  - Record any lessons learnt within the WRAP SWMP Template that can be incorporated into future SWMPs; and
  - Maintain all records relevant to WRAP SWMP Template.

Contractors / Subcontractors will:

- Carry out the relevant waste management tasks detailed in this SWMP and the WRAP SWMP Template;
- Assist with required inputs, providing forecasts of waste to be produced through their activities when requested;
- Measure and report progress for waste and waste reused and recycled in tonnes/m^3; and
- Report performance for construction and excavation waste streams separately, measured in tonnes/m^3.

The Principal Designer will:

- Support the Contractors to identify, prioritise and implement ways of meeting the Works targets for waste and specifically, through the Works of a commercially and technically viable design by:
  - identifying methods to reduce total waste;
  - identifying opportunities to increase reused and recycled content (where there is no impact on cost or performance); and
  - Reporting to the Contractors on the opportunities identified and the financial and practical implications of implementing the recommended actions.
- Work with the wider Project's team to ensure that design actions to reduce construction waste and increase reused / recycled content are implemented; and
- Support the development/implementation of the SWMP from an early design stage, including the provision of waste forecasts.

General Subcontractors and **Material Suppliers** will:

- Work with the Project Team to identify methods to eliminate, reuse, recycle and recover high volume wastes or those difficult to divert from landfill (including packaging waste), providing additional costs or savings achieved by these methods;
- Support the development/implementation of the SWMP and work in full compliance with the methods detailed within the SWMP – in particular complying with all actions to reduce and reuse waste and increase levels of recovery;
- Provide an accurate forecast of the types and tonnes/m3 of waste that will be produced by their elements of the contract (inclusive of packaging waste);
- Identify the wastage rate applied to each material, explaining the need for this level of wastage allowance;
- Participate in site briefings / toolbox for operatives on materials handling and waste disposal;
- Inform the Project Team (in advance) of deviations from the SWMP with justification;
- Identify additional ways to reduce and reuse waste and/or increase recovery and inform the Project Team;
- Comply with the site waste segregation strategy, including the avoidance of cross-contamination of segregated (non-mixed) skips;
- Ensure that materials and waste are stored in a safe and tidy manner and that waste is disposed of (in appropriate skip or other agreed receptacle) at the earliest opportunity;
- Contribute to the project review to identify what could be improved and what worked well;
- Ensure all necessary data is provided to the Project Team;
- Provide written evidence of the recycled content level of specified materials in the form of invoice / delivery notes along with datasheets for the materials;
- Keep to a minimum packaging of materials and, where practicable, use returnable packaging; and
- Comply with the specific requirements for waste management companies (see below) where the Subcontractor has responsibility for removal of construction waste.

Waste Management Contractors will:

- Provide a copy of their Waste Carrier's Licence to the Project Team before starting work;
- As necessary, provide permit or exemption notification authorising the use of mobile plant, i.e. crushing / screening plant, Waste Carriers Licence(s), Environmental Permit(s), Notification of Waste Exemption(s), copies of all Waste Transfer Notes (WTNs) (for inert and non-hazardous waste); and copies of all Hazardous Waste Consignment Notes (HWCNs);
- Identify ways to increase the recovery rate of materials by finding end destinations, diverting 100% of waste from landfill;
- Advise on the most appropriate waste management actions;
- Provide details of the end-destination of all waste removed from site, including the following information: name and address of destination, type of facility, Environmental Permit number and recovery rate for that material;
- Report on the different types of waste managed, and the split of each different type of waste according to the waste management method (reuse, recycling, recovery) and, in the case of reuse, recycling and recovery, whether this has taken place on or off site;
- Monitor and report monthly (within 2 weeks of the end of the reporting period) the quantities in tonnes/m^3 and percentage recovery rates for construction and excavation waste streams separately; and
- Use a systematic process to record and check waste, recovery and recycling data and make available for inspection on request.

6. Types of Waste

6.1 Waste streams categorised as either excavation (E) or demolition (D) are those which exist within the Project footprint already, such as topsoil, subsoil, vegetation and demolition materials etc.

6.2 Imported materials are those which are imported to site for inclusion into the temporary and permanent construction works (such as concrete, construction aggregates, asphalt and cabling etc.) which also produce a waste stream. Included within this waste stream is an estimated quantity of product packaging. This waste stream is produced from a range of potentially avoidable activities such as damaged materials and the over ordering of materials. This waste stream is described as construction (C) waste within the SWMP.

6.3 In order to assist the management and segregation of waste, estimations have been made of the types and quantities that will be generated during the construction phase of the Project. For this the WRAP Outline SWMP Excel template has been utilised (Appendix A).

6.4 For all CD&E waste, there are several considerations to be implemented in terms of management; such as waste reduction, segregation of waste, disposal of waste, financial impacts of waste disposal and recording, monitoring, education and reviewing data (see Section 7).

6.5 The following sections discuss the main waste streams anticipated as a result of the Project construction phase (covering CD&E). This list is non-exhaustive; however, it forms a basis for the SWMP based on the envisaged design. Any additional streams will be included in the plan as part of the updates.

Construction and Demolition Wastes (C&D)

6.6 Construction and demolition wastes will largely consist of inert material and concrete. Construction waste figures are included in the WRAP Outline SWMP Template (Appendix A). These approximate figures have been generated by calculating the percentage of imported material that will become a waste. These are calculated by using the WRAP industry standard wastage rates for imported material.

6.7 Currently the Outline SWMP does not account for workforce waste streams, for example Waste Electrical and Electronic Equipment (WEEE) and organic waste or any operational waste. Once details of workforce are known such waste streams are to be incorporated into the Outline SWMP.

6.8 Any waste produced through the importation of materials needs to be monitored and included in the Outline SWMP as the Project progresses. Where possible, consideration will be given to the use of recycled imported material such as concrete or those with a higher recycled content.

6.9 Demolition waste figures are also included within the WRAP Outline SWMP Template (Appendix A). Demolition figures are calculated based on the assumption that all materials generated as a result of the demolition works will be waste. Demolition works consist primarily of residential buildings with a smaller number of farm buildings and disused grandstands.

6.10 It has been assumed that all construction and demolition wastes will be disposed of via local and regional waste facilities. Demolition waste may be reused during the construction phase, but this would need to be determined at the time of demolition to grade the materials to ensure adequacy for use in specific works.

Excavated Materials

6.11 In relation to materials removed from site it is anticipated the majority of the material would be excavated material, for which beneficial uses would be sought. Appropriately experienced staff, familiar with working on brownfield sites and with the contaminant groups anticipated will supervise the excavation works to manage the segregation of spoil materials. Site-derived materials of a similar nature will be stockpiled together and any changes in the physical and/or chemical properties will prompt further segregation.

6.12 Where possible alternatives have been exhausted there will be a requirement to dispose of excavated material, by licensed waste carriers to licensed landfill sites. The material will be handled in accordance with the Waste (England and Wales) Regulations 2011.

Hazardous Waste

6.13 It is anticipated that a small amount of hazardous material will be produced from CD&E activities. Hazardous waste including any contaminated excavated spoil and ballast will be identified, removed and kept separate and secure in receptacles in line with the Waste (England) Regulations 2011. Doing so will also act to reduce cross contamination. The waste will then be removed from site and treated in accordance with all applicable legislation.

6.14 During demolition and construction activities, additional streams of hazardous waste are anticipated, including oils and grease from equipment maintenance, batteries, waste paint and solvents. Quantities of this waste stream have not been estimated at this stage, once plant set up is established this waste stream should be accounted for and disposed of in accordance with the Hazardous Waste Regulations 2005.

7 Waste Forecast

Overview

7.1 One of the initial stages of completing the SWMP is to forecast anticipated waste arisings. This allows for early stages of designing out waste to be incorporated into the Project.

7.2 The waste estimates produced are formulated from available data for the Project including current envisaged design and cost estimates. Details used are consistent with other application documents.

7.3 The SWMP waste forecast tab (Appendix A) set out the current estimates of waste types and quantities that are anticipated. This list is not exhaustive and additional waste streams shall be added when they occur.

7.4 The SWMP forecast waste tab (Appendix A) provides important information such as identifying the waste activity, the waste stream, description of waste, the List of Wastes (LOW) Code, quantity and the management methods.

7.5 This information is duplicated in subsequent sections within the WRAP SWMP (Appendix A). Actual waste movements are completed by the Project's Team during construction, which feed into the key performance indicators (KPIs) tab.

7.6 Demolition waste and excavation materials quantities are calculated as a whole for an activity, i.e. assuming all of the material is classified as a waste and generally based on estimated volumes.

7.7 In addition, the following tools and data sets have been used to estimate the waste quantities that would be potentially generated from each of the components identified in the Bill of Quantities:

- Net Waste Tool, Wrap, 2015
- Net Waste Tool, Demolition Bill of Quantities Estimator, 2015
- Net Waste Tool Reference Guide, WRAP, May 2008
- Managing packaging waste on your construction site (GG606), Envirowise, 2006

7.8 The quantities of waste estimated to be generated from the Project are presented in the Forecast Waste tab (Appendix A) of the Outline SWMP. As well as determining where waste has been generated there are other considerations to waste management such as waste reduction, segregation of waste, disposal of waste and the financial impacts of waste disposal which are completed further into the Project and discussed in subsequent sections of the Outline SWMP.

Estimated Waste Arisings

7.9 Table 2 below presents the estimated quantities of CD&E waste.

Table 2: Estimated Waste Quantities

Activity	Estimated Waste Quantities (Converting between m^3 and tonnes)	
	m^3	Tonnes
Construction	52,177	25,688
Demolition	53,387	35,939

8 Waste Management Options and Implementation Plan

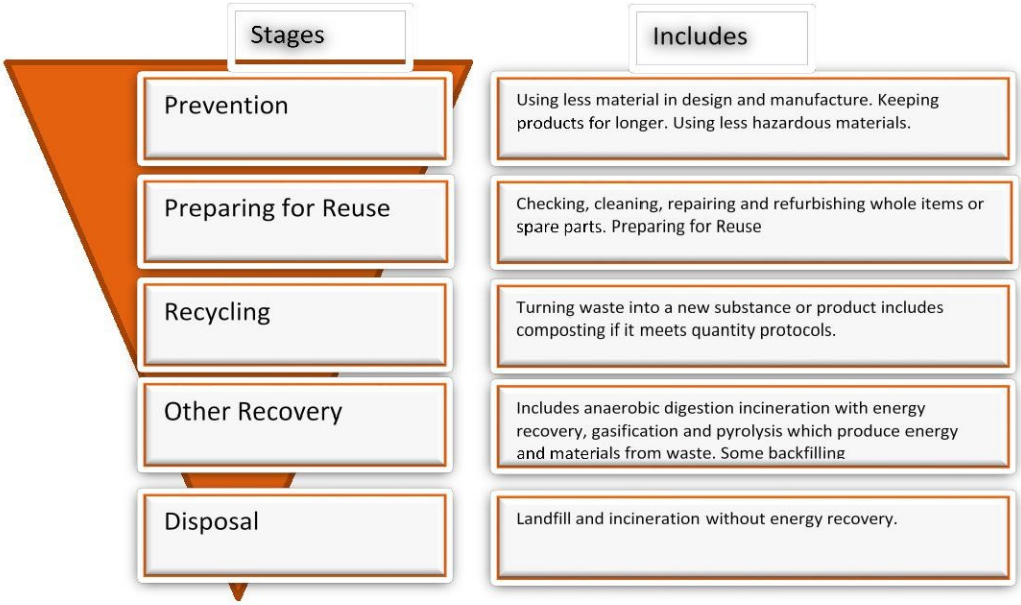
8.1 This section of the Outline SWMP presents an outline approach for managing waste minimisation and recycling of construction waste from the Project.

Waste Hierarchy

8.2 It is necessary to have a structured methodology for minimising the quantity of construction waste disposed of to landfill. The methodology outlined herein is not prescriptive; rather it sets out the guiding principles that would be adopted and as such is sufficiently flexible to accommodate site-specific issues that may not have been anticipated at present.

8.3 The waste management hierarchy presented in Figure 1 below sets out the order in which options for waste management should be considered based on environmental impact. The remaining sub-sections set out how the hierarchy can be applied to the construction of this Project.

Figure 1 Waste Hierarchy



Waste Prevention and Minimisation

8.4 Waste minimisation is at the pinnacle of the waste hierarchy and is essentially concerned with avoiding the production of waste in the first place. Whilst complete avoidance of waste is impossible, adopting certain waste minimisation practices would ensure that the overall quantity of materials not beneficially used onsite are kept to a minimum.

8.5 Designers can greatly influence the waste produced onsite and must be encouraged to consider the issue of waste in their design. For example, this can be achieved by:

- Designing to suit component sizes;
- Reducing the need for temporary work;
- Setting the level of the construction to reduce excavations; and
- Reusing spoil to form landscaping features and for backfilling.

8.6 Overall, the following practices would be adopted to help to minimise waste onsite:

- Improved precautions in handling of materials onsite can have a major impact on the reduction of waste onsite. Wherever possible materials would be kept in locked and covered storage, until time of use, to avoid damage from vandalism, theft, vehicle movements, weather, etc;

- 'Just in time' delivery of materials when they are required to prevent spoilage;
- Ordering the correct materials as specified;
- Maintaining a record of materials delivered onsite and dispatched – recording the number of skips used so that the amount of material consumed, sent for landfill or recycling can be determined;
- Packaging is designed to protect raw materials and wherever feasible would be kept on until the last moment. Material suppliers would be asked to collect packaging for reuse;
- Avoidance of over-ordering materials according to the stage of construction need; and
- Responsibility for overseeing waste minimisation activities would be assigned to specific site personnel (e.g. construction site manager) who would monitor the progress and smooth running of waste minimisation activities.

8.7 If there are any surplus materials from the CD&E works, it may be possible to use these on other projects, either through contact with the buyer, or by advertising them. Materials could also be donated to local community projects or charities. These options avoid the cost of disposing of surplus material resources as waste.

8.8 Waste that cannot be eliminated or reduced falls into one of the following four management categories:

- Reuse
- Recycling
- Other recovery
- Disposal

Preparation for Re-use

8.9 By implementing a SWMP from design stage it is possible to reduce the amount of waste produced as part of the Project. The Principal Contractor would maximise opportunities for the potential for reuse and recycling of all waste streams onsite.

8.10 Over-purchasing can lead to significant wastage and will be avoided in the first place. Ensuring materials are ordered for delivery shortly before they are used on the Project would also avoid possible damage and therefore wastage. Construction waste, or waste arising from imported material may be minimised through careful product specification and use. A continual review of the type of surplus materials being generated onsite will aid in identifying approaches to reduce the amount produced.

8.11 Materials delivered to the Project would be received and controlled by the Principal Contractor. Materials will be stored to minimise the potential of damage or wastage. Measures will include off-ground storage e.g. on pallets, remaining in original packaging, protection from rain damage or collision by plant or vehicles. The materials storage area will be secured during out of hours to prevent unauthorised access.

8.12 Where avoidance of excess materials onsite is not feasible, all available materials would be recorded and considered for possible reuse onsite before recycling. Excess materials that cannot be reused onsite would be considered for reuse elsewhere – if they can still be used in their present form, they would be classified as materials which can be reused off-site. Materials such as timber, bricks, tiles, paving blocks and top soil would be stored separately onsite within the existing footprint and would all be considered for reuse elsewhere. The purpose of storing reuse materials in separate skips / areas is to reduce the potential for contamination and to encourage the reuse of materials by offering clean material streams from which to choose.

8.13 Options for reuse include:

- use of reclaimed materials (where appropriate);
- onsite reprocessing of materials; and
- reuse of packaging materials in limited circumstances.

8.14 The use of a data-recording sheet would allow construction site managers to keep a record of all available materials onsite, hopefully reducing the need to over order and increase opportunities for reuse where possible.

Table 3: Waste Minimisation Measures

Waste Minimisation Measures
Monitor, audit and measure site waste through implementation of SWMP
Investigate options for recovering site won materials for reuse on site
Standardise room heights to match plasterboard dimensions
Ensure that floor to ceiling heights are consistent to encourage off-site fabrication
Minimise the number of 'bespoke' design solutions and maximise the number of standardised units and design details (e.g. Bathrooms)
Specify houses that tie in with brick dimensions
Ensure that floor to ceiling heights are consistent to encourage off-site fabrication
Retail top soil, treat it onsite with compost (or other remediation) and use for soft landscaping etc.
Use existing soft landscape that can't be retained (trees, shrubs) as compost and soft landscape top mulch
Use recycle aggregates (either onsite or off site) in concrete mix, as fill, etc.
Reuse packaging by returning to supplier/ manufacturer or using it for other purposes (e.g. Timber packaging pallets can be chipped and used for landscaping top mulch
Embed all of the design options to be pursued into project briefings and procurement
Use an on-site baler to compact paper, card and plastic packaging to take up less space ready for recycling
Use the national colour coding scheme for waste containers to ensure waste is separated efficiently
Order materials in bulk where appropriate with minimal/ reusable packaging where possible
When incorporating requirements for waste reduction in procurement documents, refer to WRAP guidance on model wording
Put in place Material Logistic Plan looking at supply routes, handling, storage and security for main construction phase of the project
Supplier take back schemes to be set up with all pre-fabricated pods
Setup an off-cut area for plasterboard, all plasterboard to be sent to specific plasterboard recycling centre
Use recycled material in sub-base
Incorporate rainwater harvesting into the design
Supplier to provide block paviour construction for thinner construction
Specify biodegradable packaging where possible

Waste Minimisation Measures
Specify the use of ceramic tiles with high percentage of recycled content
Specify the use of reconstituted faced stones with a high percentage of recycled content
Specify the use of reconstituted slates with a high percentage of recycled content
Specify the use of street furniture made with recycled plastic
Specify the use of recycled material in compost
Specify the use of windows with recycled PVC
Suppliers remove and process waste, e.g. paint
Specify recycled content in hard landscaping, e.g. eco kerb 75% quarry waste
Specify recycled plant pots or root ball wrapping
Specify street furniture made with stainless steel (for long life)
Combine utilities in single trench
Minimise number of house types
Specify houses that tie in with brick dimensions
Order components as required for individual plots
Specify windows that could be recyclable in future

Recycling

8.15 If excess materials cannot be reused in their present form but could be used onsite in a different form they are classified as recycled onsite (provided they were processed onsite). If the material cannot be reused onsite in any form, it may be classified as recycled off-site, e.g. non-returnable pallets reprocessed off-site to make chipboard.

8.16 Successful recycling relies upon early planning, clear responsibility and space within a compound for segregation and storage. Shelter may be needed to prevent some materials such as cardboard and paper from deteriorating while being sorted or awaiting collection.

8.17 Enclosed and lockable skips prevent deterioration of waste and also stops unauthorised access to the skips. Recycling and waste receptacles (e.g. skips) are to be kept clean and clearly marked in order to avoid contamination of materials.

8.18 Differently coloured skips (or sufficiently clear labelling) would be used to ensure that workers are clear about where to put each type of waste. This would reduce the levels of contamination in the skips and increases the likelihood that a load would not subsequently be rejected once the waste stream has been sent off-site for reprocessing. In cases where the load is rejected, the likely destination would be landfill (which would increase the costs of the Project).

8.19 Typical segregated skip categories and management methods include:

- wood (red/yellow);
- plastic (orange);
- cardboard/paper (no colour coding specified); and
- general waste (no colour coding specified).

8.20 Space within the compounds would need to be identified to accommodate skips and storage of reusable materials. Individual waste streams would be kept separate including the use of an excavated material only area.

8.21 For all waste management options within the Project, consideration would need to be given to identifying whether waste exemptions or permits are required to enable the storage and treatment of waste materials.

8.22 Waste management options would be supported by the identification of appropriately permitted waste management and recycling facilities within an acceptable proximity to the Project.

8.23 Audits would be undertaken of Waste Contractors (by the Principal Contractor) to ensure that waste from the Project is being managed in an appropriate manner.

Other Recovery

8.24 Where it is not possible to reuse or recycle materials, the residual fraction of waste would be taken to an appropriate residual treatment facility or landfill site. Recovery of waste, rather than disposal to landfill, would be prioritised where material types are suitable for recovery and the Waste Management contractor has access to competitively priced recovery capacity. The same procedure would also apply to hazardous wastes onsite.

8.25 Recovery mainly refers to energy recovery (e.g. reuse as fuel) or biological recovery (e.g. composting).

Disposal

8.26 Disposal of waste is at the bottom of the waste hierarchy as this is the least sustainable method of waste management.

8.27 For excavated materials, suitable treatment, recycling and disposal facilities within a reasonable proximity of the Project would be identified by the Principal Contractor. For construction and demolition waste, suitable treatment, recycling and disposal facilities within a reasonable proximity of the Project would also be identified by the Principal Contractor.

8.28 The Landfill Directive requires that disposal sites are classified into one of three categories dependent on the chemical composition of the material; these are hazardous, non-hazardous or inert. The ability for waste to be deposited at these sites would be dependent on the available space and the conditions imposed on the Project through the relevant licence/permit.

8.29 For excavated materials that are confirmed to be non-hazardous or inert, there are a number of reuse and recycling options that could be explored, both on and off-site.

8.30 For any vegetation removed, consideration would be given to mulching and/or composting. Reuse of such materials would be considered where possible i.e. mulch or compost to be reused back in the Project for landscaping purposes.

8.31 The Principal Contractor would further identify and appoint appropriate Waste Carriers and Waste Management Facilities prior to the construction elements of the works commencing.

Onsite Waste Management

8.32 For all CD&E waste, there are several considerations to be implemented in terms of management; such as waste reduction, segregation of waste, disposal of waste, financial impacts of waste disposal and recording, monitoring, education and reviewing data.

8.33 The management of separate waste streams onsite requires consideration of additional storage space for waste and recycling, usually in the form of skips. As a result of the waste generated onsite, labelled skips would be required for the following construction waste streams:

- Plastics;
- Mixed inert (e.g. concrete);
- Hazardous (e.g. machine oils);
- Mixed non-hazardous (welfare waste and general waste);
- Metal (e.g. steel);
- Wood (e.g. timber);
- Paper and cardboard (office waste); and
- WEEE (e.g. cables, disused electrical appliances and equipment)

8.34 For excavation waste, a clearly designated stockpile area would be required. Appropriately experienced staff, familiar with working on brownfield sites and with the contaminant groups anticipated, would supervise the excavation works to manage the segregation of spoil materials. Site-derived materials of a similar nature would be stockpiled together and any changes in the physical and/or chemical properties would prompt further segregation.

8.35 Inert waste arisings from the demolition phase would also need to be stored in a designated stockpile area. Once verified by testing, the non-contaminated inert waste arisings would be reused or recycled following further processing (for example through crushing).

8.36 Where possible alternatives have been exhausted, there would be a requirement to dispose of excavated material, by licensed waste carriers to licensed landfill sites. The material would be handled in accordance with the Waste (England and Wales) Regulations 2011.

8.37 In developing the SWMP prior to commencement of construction, the Principal Contractor would need to consider the waste minimisation and waste recycling targets, as detailed in Section 2.1.

Off-site Waste Management

8.38 As described above, off-site waste recycling, treatment and disposal would be undertaken by a suitably qualified Waste Management Contractor who specialise in reprocessing and recovery of construction waste arisings.

8.39 For the purposes of the Project, the transportation of material resources and waste arisings would take place by road and rail to and from material suppliers and waste management facilities.

8.40 The Principal Contractor would be responsible for identifying and procuring one or more waste management companies to provide the containers (skips), collection, transportation and management of waste produced at the site. Skips would be collected using a standard skip vehicle or a roll-on roll-off vehicle for larger skips.

8.41

8.42 Table 4 and Table 5 below identify the Waste Carriers and Waste Management Facilities proposed for the Project (this list is not exhaustive). The Principal Contractor would further identify and appoint appropriate Waste Carriers and Waste Management Facilities prior to the construction elements of the works commencing.

Table 4: Proposed Waste Carrier Facilities

Waste Carrier Company	Registration Number	Expiry Date	Address
Roland Barton Transport	CBDU162982	24/02/2020	Unit C3 Lympne Industrial Park, Otterpool Lane, Lympne, the, CT214LR
Alcaline UK Ltd	CBDU117730	11/07/19	Lympne Industrial Estate, Hythe, CT21 4LR
Trident Waste Management	CBDU179333	22/06/20	Woodacre, Asford, TN25 7JB
Browns Construction Ltd	CBDU170977	31/03/20	31, The Esplanade, Folkstone, CT20 3EA
Parade Estates Ltd	CBDU163272	23/03/20	47A, Castle Road, Hythe CT21
East Kent Recycling Ltd	CBDU94333	05/04/19	Intex House, Cooting Road, Aylesham Ind. Est., Kent, CT33EL

Table 5: Proposed Waste Management Facilities

Facility Name	Facility Type	Permit Number	Post Code
Ridham Waste Transfer Station	Material Recycling Treatment Facility	EA/EPR/PB3931RK/A001	ME9 8SR
Hermitage Quarry	Physical Treatment Facility	EA/EPR/XP3898HM/V008	ME16 9NT
Richborough Park	Household and CI Waste Transfer Station	EA/EPR/ZP3292EL/A001	CT13 9NW
Richborough Hall Waste Transfer and Recycling Centre	Household and CI Waste Transfer Station	EA/EPR/MP3898HW/V003	CT13 9NW
Berth 6, Chatham Dockyard	Physical Treatment Facility	EA/EPR/AB3007XN/V003	ME4 4SR
Pelican Reach	Material Recycling Treatment Facility	EA/EPR/TP3495HH/V007	ME2 4NF
Waste Transfer Station at Ridham Dock	Transfer Station taking Non-Biodegradable Wastes	EA/EPR/CB3704FX/A001	ME9 8SR
Medway Materials Recycling Facility and Waste Transfer Station	Household and CI Waste Transfer Station	EA/EPR/BP3396LD/A001	ME2 4DZ
Brett Aggregates Ltd	Physical Treatment Facility	EA/EPR/FB3731RA/A001	ME9 8SR
Aylesford Recycling Facility	Household and CI Waste Transfer Station	EA/EPR/DB3104KP/V003	ME20 7PA

9 Monitoring

9.1 Under the Waste (England and Wales) Regulations 2011 and in line with DoC, the Principal Contractor has a number of responsibilities which it would execute as follows:

- to ensure that suitable storage is made available, including correct signage;
- to check the waste carrier has the appropriate waste carrier licenses; and
- to retain Waste Transfer Notes / Consignment Notes for 2/3 years as appropriate.

9.2 Responsibility for waste management lies with the Principal Contractor unless a contractual agreement with subcontractors to manage their own waste arisings exists – the Principal Contractor would still ensure that the DoC process is in place when this situation occurs.

Training

9.3 The Principal Contractor would provide training to employees on the Project on use of the SWMP, roles and responsibilities and DoC requirements.

9.4 Onsite instruction and training covering appropriate waste separation, handling, storage, recycling, and reuse and return methods to be used by all parties (e.g. subcontractors), at all appropriate stages of the Project would be provided by the Principal Contractor.

9.5 Training would consist of an initial toolbox talk that would form part of the site induction process that introduces and explains the requirements of the SWMP and the concept of the waste hierarchy, as well as regular toolbox talks that provide updates on wider environmental issues. Workshops and other forms of training may be utilised where appropriate. Appropriate staff would be identified to attend these.

9.6 The Project would appoint a Waste Champion to act as a point of contact to deal with any waste queries from staff, promote best waste management practice and be responsible for the upkeep of the SWMP.

Waste Recording

9.7 DoC details are to be logged. Details are to include the waste management licenses, waste carrier licenses and exempt site licenses for waste management contractors employed on the Project. All waste management contractors' licences must be checked and verified before any waste movement occurs.

9.8 All WTN would be safely stored for two years in accordance with the Waste Regulations 2011. Consignment notes for the transport of hazardous waste would be held for three years in accordance with the Hazardous Waste Regulations 2005. The Project may consider using electronic transfer notes rather than paper based. An example of such a system is Department for Environment Food & Rural Affair's Electronic DoC (Defra Edoc).

9.9 In addition to monitoring and recording the performance of contractors, waste management facilities may be monitored periodically through the lifespan of the contract. This would ensure that high standards of compliance and environmental performance are maintained throughout the supply chain, including accurate recording of waste types and the origin/destinations of wastes.

9.10 Waste monitoring would be included as an agenda item at construction progress meetings. In addition, the SWMP would be communicated to the whole Project's team at regular management meetings.

9.11 Throughout the duration of the works, the Principal Contractor would be responsible for reviewing the performance of all parties which are involved in the management of waste at the Project.

9.12 Progress towards the commitments contained in the Outline SWMP would be reported regularly and performance would be reviewed and monitored in line with the SWMP guidance.

9.13 A comparison of forecast and actual waste streams with key associated notes should be documented. This information could consist of explanation for diversion, lessons learnt and revision of plans.

Actual Quantities

9.14 Within the Outline SWMP a record of the types and quantities of waste actually being produced and including the eventual fate of the waste would be kept.

9.15 Maintaining these records would also help to identify which waste streams are not achieving anticipated recycling potentials so that alternative methods to handle that waste stream can be explored for the remainder of the Project.

9.16 The actual quantities table would be completed during construction phase and data taken from the amounts recorded on waste transfer notes and hazardous waste consignment notes.

9.17 This information can then feed into Key Performance Indicators, which details key commitment information such as the amount of recycled, reused/beneficially reused and diverted from landfill quantities.

Review

9.18 The SWMP would be reviewed on a regular basis, with waste data being entered frequently i.e. fortnightly or monthly. Further reviews would take place where any significant changes occur. A log would be kept of when the plan has been reviewed and the outcomes.

9.19 An appropriate monitoring regime of the waste objectives and targets would be put in place.

Post Project Completion

9.20 At the end of the works, the Principal Contractor is responsible for reviewing, revising and refining the SWMP as necessary, to ensure best practice and to identify if lessons could be learned for the next time a similar project is undertaken. This review would aim to identify the following:

- confirmation that the SWMP has been monitored and updated within the defined timescales;
- an explanation of any deviation from the original plan;
- a comparison of the estimated quantities of each waste type against the actual quantities generated; and
- an action plan to address the lessons that have been learnt from the Project that could be implemented for the next project.

9.21 An estimation of the cost savings (if any) that have been achieved through the measures undertaken to minimise, reuse, recycle or recover waste arisings rather

10 Summary

10.1 This report complies with the WRAP's SWMP template and provides a review of CD&E waste arisings and management methods for the proposed Project. It is estimated that the Project is likely to produce in the region of 25,688 tonnes of waste.

10.2 The intention of this Outline SWMP is to reflect the Project's envisaged design, the associated quantities of waste arisings that are anticipated to be generated and enable better control over material resources and waste arisings throughout the duration of the CD&E phases of the Project.

10.3 The project should have comprehensive controls on their waste monitoring processes and follow where appropriate the hierarchy of waste management.

10.4 The waste minimisation recommendations should follow on as necessary

10.5 Waste management practices have been identified which can assist in minimising waste generation for the Project. Where waste is generated, the document identifies management methods to aid material reuse or recycling prior to waste disposal.

10.6 Provision of a suitable area onsite for the management and storage of waste would assist in reducing waste disposal and the environmental impacts of disposal.

10.7 It is recommended that the construction contractor monitors material delivery and waste generation onsite to identify opportunities for waste minimisation and reuse. Monitoring of waste activities would also help to ensure materials are recycled where viable and therefore the environmental impacts of the Project are minimised.

APPENDIX A

WRAP Outline SWMP Template

Site Waste Management Plan

Version 3.1

Click here for help ?

Introduction

A Site Waste Management Plan (SWMP) is used to plan, implement, monitor and review waste minimisation and management on construction sites.

WRAP's SWMP Template is a tool that enables you to identify good and best practice opportunities to drive down waste and potentially reduce costs.

This tool will help you to:

- produce an effective SWMP;
- set actions to prevent, reduce and recover waste;
- identify waste reductions at the design stage;
- forecast the waste arisings;
- record waste carriers and waste management facilities;
- prepare waste management actions;
- record actual waste movements;
- benchmark against Standard, Good and Best Practice; and
- review and compare waste figures across projects.

Guidance

Please click on the questions below for more information on the SWMP template.

- Why use the SWMP template?
- What is a SWMP used for?
- Who should use the SWMP template?
- How to use the SWMP template?
- How to maximise the effectiveness of the SWMP?
- What are the benefits of using the WRAP SWMP?
- What are the alternatives to the SWMP template?
- Additional advantages

Document control

Revision number	Review Date (DD/MM/YY)	User / Name	Summary of actions / amendments	Project stage
1	11/01/2019	Arcadis (UK) Limited	Outline SWMP issued for comments	Design

Why use the SWMP template?

Back to top

The SWMP facilitates the identification and implementation of waste minimisation at the design stage and reuse and recycling opportunities during on site operations, reducing the quantities of construction waste sent to landfill.

To understand why populating a SWMP is important, it is useful to refer to the SCSGBP levels t in this tool. It details the standard, good and best practice levels for waste management and recovery throughout all project stages. It also lists potential opportunities at each project stage and offers guidance on how to achieve improved project waste performance.

What is the SWMP used for?

Back to top

A SWMP is used to:

- record decisions taken to prevent waste through concept and design;
- forecast waste produced on site;
- plan how to reduce, reuse and then recover the forecasted waste;
- implement and monitor the planned activity; and,
- review the SWMP and record lessons learnt.

Who should use the SWMP and when?

Back to top

A SWMP can be used on any construction site. The client and the principal contractor will work together to develop and maintain the SWMP with input from the project team. A SWMP should be started as early in the project as possible to achieve the greatest benefit.

The diagram on the Project Homepage ows the project stages at which each sheet should be completed. There are also links to guidance on how to complete each sheet and why.

How to use the SWMP?

Back to top

The Template is presented in a series of 6 stages that cover the construction project cycle from policy and setup to project completion and use:

- setup: administration details and setting targets;
- preparation and concept design: initial concept and design decisions to reduce waste;
- detailed design: waste forecasts and waste reduction actions;
- pre-construction: waste carriers, waste destinations, waste management and recovery actions;
- construction: recording actual waste movements, and;
- post completion and use: KPIs, reporting, and comparing actual quantities with estimates.

The inputs required to complete the tool include:

- project targets;
- basic waste forecast (WRAP's Net Waste Tool can be used to generate this data); and,
- actual waste data.

Users should work through the tool stage by stage. Completing the Template should take a few hours, depending on the project size. Further time may be required to implement actions determined in the SWMP, although savings in materials and waste disposal should more than offset the invested time.

All sheet tabs coloured in blue are for information and guidance, all others require data entry from the user.

How to maximise the effectiveness of the SWMP?

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The Client and the Principal Contractor should update the SWMP when any waste is removed from site and state:

- the identity of the person removing the waste;
- the waste carrier registration number;
- a copy of, or reference to, the written description of the waste required by section 34 of the Environmental Protection Act 1990;
- the site that the waste is being taken to; and,
- whether the operator of that site holds a permit under the Environmental Permitting (England and Wales) Regulations 2007 or is registered under those Regulations as a waste operation exempt from the need for such a permit.

The SWMP should be reviewed and updated regularly to ensure that it is representative of the project. Alongside this, effective co-ordination and co-operation among contractors at work during the construction phase is needed. A site induction and any further information and training needed for work to be carried out within the terms of the SWMP should be provided to every worker

Effectiveness of the SWMP is improved by making arrangements to enable the principal contractor and the workers to co-operate effectively in promoting and developing measures to ensure that any waste arising on site is managed within the terms of the SWMP.

Both the client and the principal contractor must take reasonable steps to ensure that sufficient site security measures are in place to prevent the illegal disposal of waste from the site

The SWMP should be kept at the site office or on site and available to any contractor carrying out work described in the plan.

What are the benefits of using the WRAP template?

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The WRAP SWMP template:

- can facilitate substantial reductions in waste arisings and deliver associated cost and environmental gains;
- is applicable to all sizes of project and all types of construction;
- enables users to identify and demonstrate a progression from Standard to Good and Best Practice;
- requires minimum data entry by automatically pulling through data and using a predetermined list of waste;
- allows the transfer of data from WRAP's Net Waste Tool to forecast waste arisings sheet;
- enables calculation of KPIs on waste and materials for projects; and
- allows for easy identification of areas where you can improve.

What are the alternatives to the SWMP template?

Back to top

This SWMP template is a comprehensive tool that is applicable to all sizes of project and all types of construction.

There is a SWMP Lite which is a simplified version of this SWMP tool aimed at the smaller contractors and tradesmen. As well as CD&E activities it includes options for Fit out, Refurbishment, Retrofit and Strip out projects.

http://www.wrap.org.uk/content/site-waste-management-plan-template-lite

Additional advantages

Back to top

The SWMP Template can be used in conjunction with other WRAP tools:

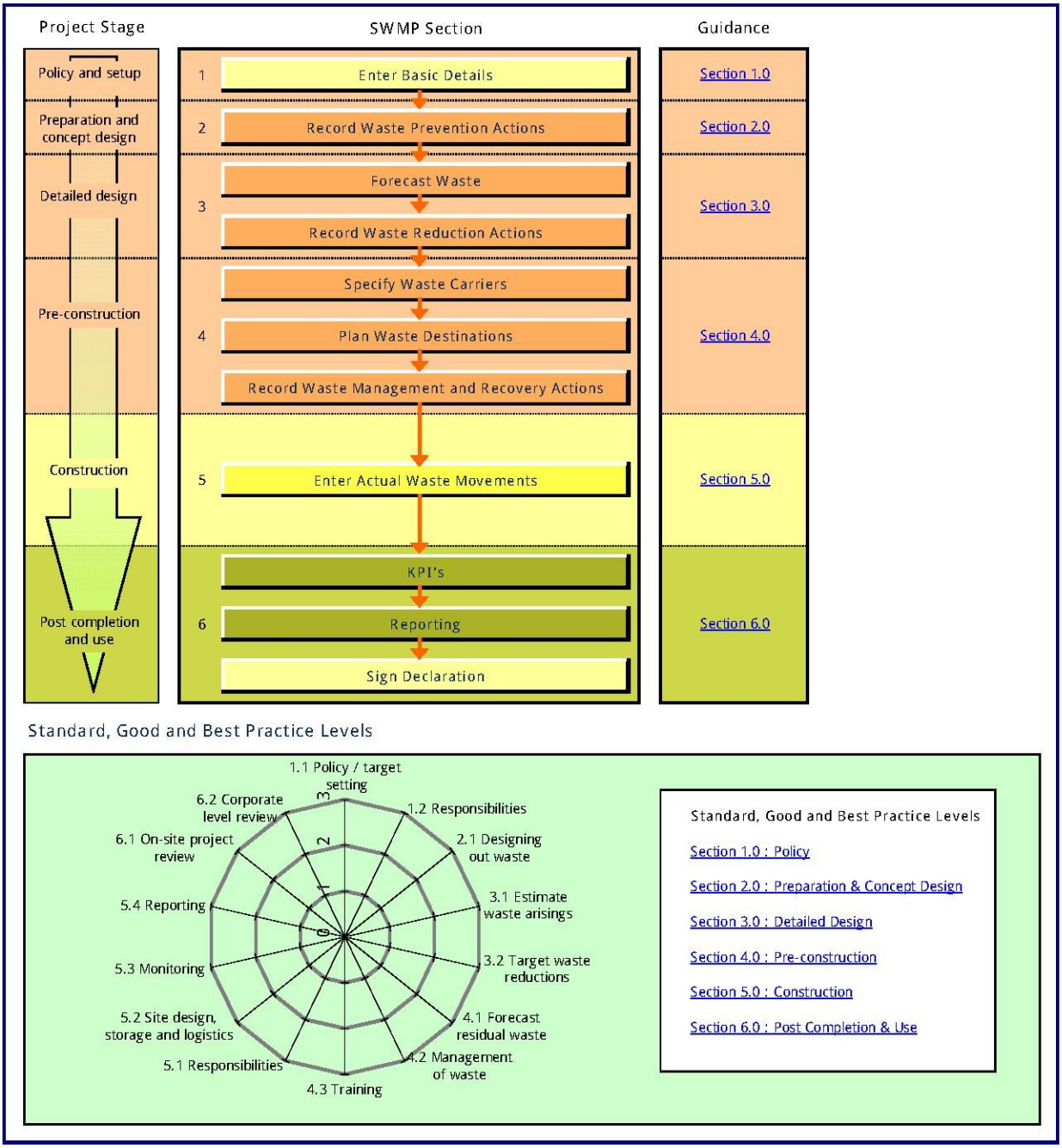
The Net Waste Tool: Waste forecast data generated in the Net Waste Tool can be automatically loaded into the WRAP SWMP Template (nwtool.wrap.org.uk).

The Waste to Landfill Reporting Portal: Actual recordings of waste performance can be uploaded from the SWMP Template into the Waste to Landfill Reporting Portal (reportingportal.wrap.org.uk) - useful if you have signed up to the Construction Commitments, or need to collate SWMP performance across a number of sites for corporate reporting

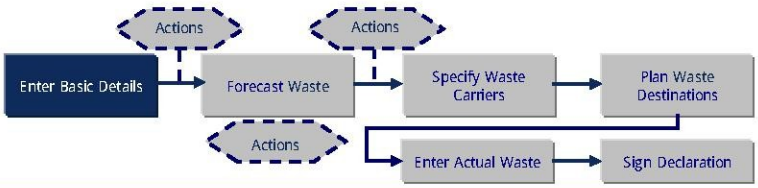
Site Waste Management Plan

Version 3.0

Project title : Otterpool Park



Standard, Good and Best Practice Levels



What to enter? Enter details of the project client, principal contractor, location and value . Select the metrics for the project (e.g. floor area) and record any project targets (e.g. waste to landfill, waste arisings, etc).

When? The basic details, metrics, project targets and the schedule sections of this sheet should be completed at the onset of a project. The sign off, explanation of deviation from the plan and lesson learnt sections should be completed at the end of the project.

Basic Details

Client name :	Folkestone & Hythe District Council
Principal contractor :	TBC
Owner of document :	Arcadis Consulting (UK) Limited
Project title :	Otterpool Park
Project Reference :	10011914 (Arcadis (UK) Limited)
Project location :	Otterpool
Project postcode :	
Construction value :	
Type of construction :	Mixed use developments
Activity :	New construction

Metrics

Please select metrics applicable to your project. These metrics are then used in the KPI sheet to track your progress.

Metric	Amount	Unit
Footprint (m2) of site		m2

Project targets

Please select project targets applicable to your project

KPI	Phase	Target	Unit
Waste recovery	Construction		%
Waste recovery	Demolition		%
Waste recovery	Excavation		%

Schedule

Start date :	22-Apr-19	dd/mm/yy
Completion date :	31-Dec-24	dd/mm/yy

Site Waste Management Plan Sign Off		
Position	Name	Contact Details
Client	Folkestone & Hythe District Council	
Principal Contractor	TBC	
Site Waste Management Plan Drafter	Arcadis Consulting (UK) Limited	George.rowberry@arcadis.com
Others (optional)		
Client WM Representative (if applicable)		
Project Manager		
Waste Management Coordinator/Champion		
Design Coordinator		
Document Controller / Secretary		

This is stage 6.3 of the template. Complete this declaration at the end of the construction project.

Confirmation that the plan has been monitored on a regular basis to ensure that work is progressing to plan and that the plan was updated.	
Signed by:	
Organisation:	
Position:	
Date:	
Signed by:	
Organisation:	
Position:	
Date:	

Explanation of any deviation from the plan	
1	
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7	
Where relevant, drawing on any lessons learnt, an action plan to address these for the next project	
1	
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7	

wrap

Tell me about:
2 Waste Prevention Actions
3 Waste Reduction Actions
4 Waste Management and Recovery Actions

What to enter? Record relevant details including the action taken, action owner and waste impact for each of the following:
- the waste prevention actions taken before the development of the SWMP. This could include decisions taken at the design stage such as specifying modular units or standard sizes;
- any actions identified to reduce the forecast waste. The information is added to the waste prevention actions; and
- planned site practices, to record any actions that impact on project waste recovery. This could be actions such as on site practice or the segregation requirements of the waste contractor.

When? This worksheet should be populated during the preparation and concept design stage. Subsequently, actions identified to reduce the forecast waste during the detailed design stage should be added to the table. Finally, the actions for project waste recovery arising during pre-construction should be entered here too.

Why? This information forms an action log that is built up throughout the development of the SWMP / duration of the project and can be printed out for use on site.

Waste Actions

Enter actions in the next available row below

Number	Type of Waste Action	Action Taken	Action owner	Reference to project document /	Waste stream	Material type	Estimated Cost Saving	Waste reduced (m^3)	Waste reduced (tonnes)	Date for completion (dd/mm/yyyy)	Status
1	Waste Management and Recovery Action	Monitor, audit and measure site waste through implementation of SWMP	Project Team		All	All					
2	Waste Management and Recovery Action	Investigate options for recovering site won materials for reuse on site	Design Consultants		Inert - Soil & stones	soil and stones other than those mentioned in 17 05 03					
3	Waste Prevention Action	Standardise room heights to match plasterboard dimensions	Architect		Mixed C&D waste (17 09 04)	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03					
4	Waste Prevention Action	Ensure that floor to ceiling heights are consistent to encourage off-site fabrication	Design Consultants		Mixed Hazardous - C&D waste (17 09 03*)	other construction and demolition wastes containing dangerous substances					
5	Waste Prevention Action	Minimise the number of 'bespoke' design solutions and maximise the number of standardised units and design details (e.g. Bathrooms)	Design Consultant		Mixed C&D waste (17 09 04)	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03					
6	Waste Prevention Action	Specify houses that tie in with brick dimensions	Architect		Inert - mixture of concrete, bricks, tiles etc.	bricks					
7	Waste Prevention Action	Ensure that floor to ceiling heights are consistent to encourage off-site fabrication	Design Consultant		Mixed Hazardous - C&D waste (17 09 03*)	other construction and demolition wastes containing dangerous substances					
8	Waste Reduction Action	Retail top soil, treat it onsite with compost (or other remediation) and use for soft landscaping etc.	Principle Contractor		Inert - Soil & stones	soil and stones (inert) other than those mentioned in 17 05 03					
9	Waste Reduction Action	Use existing soft landscape that can't be retained (trees, shrubs) as compost and soft landscape top mulch	Principle Contractor		Wood	wood					
10	Waste Prevention Action	Use recycle aggregates (either onsite or off site) in concrete mix, as fill, etc.	Principle Contractor		Inert - mixture of concrete, bricks, tiles etc.	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06					
11	Waste Reduction Action	Reuse packaging by returning to supplier/ manufacturer or using it for other purposes (e.g. Timber packaging pallets can be chipped and used for landscaping top mulch	Principle Contractor		Packaging	mixed packaging					
12	Waste Prevention Action	Embed all of the design options to be pursued into project briefings and procurement	Principle Contractor								
13	Waste Management and Recovery Action	Use an on-site baler to compact paper, card and plastic packaging to take up less space ready for recycling	Principle Contractor		Packaging	mixed packaging					
14	Waste Management and Recovery Action	Use the national colour coding scheme for waste containers to ensure waste is separated efficiently	Principle Contractor		Other C&D segregated waste						
15	Waste Management and Recovery Action	Order materials in bulk where appropriate with minimal/ reusuable packaging where possible	Principle Contractor		Packaging	mixed packaging					
16	Waste Prevention Action	When incorporating requirements for waste reduction in procurement documents, refer to WRAP guidance on model wording	Principle Contractor								
17	Waste Prevention Action	Put in place Material Logistic Plan looking at supply routes, handling, storage and security for main construction phase of the project	Principle Contractor								
18	Waste Prevention Action	Supplier take back schemes to be set up with all pre-fabricated pods	Principle Contractor								
19	Waste Prevention Action	Setup an off cut area for plasterboard, all plasterboard to be sent to specific plasterboard recycling centre	Principle Contractor		Gypsum (17 08 02)	gypsum-based construction materials other than those mentioned in 17 08 01					
20	Waste Prevention Action	Use recycled material in sub-base	Principle Contractor		Inert - Soil & stones	soil and stones (inert) other than those mentioned in 17 05 03					
21	Waste Prevention Action	Incorporate rainwater harvesting into the design	Design consultants		Other C&D segregated waste						
22	Waste Prevention Action	Supplier to provide block paviour construction for thinner construction	Principle Contractor		Inert - mixture of concrete, bricks, tiles etc.	concrete					
23	Waste Prevention Action	Specify biodegradable packaging where possible	Principle Contractor		Packaging	mixed packaging					
24	Waste Prevention Action	Specify the use of ceramic tiles with high percentage of recycled content	Architect		Inert - mixture of concrete, bricks, tiles etc.	tiles and ceramics					
25	Waste Prevention Action	Specify the use of reconstituted faced stones with a high percentage of recycled content	Architect		Inert - Soil & stones	soil and stones (inert) other than those mentioned in 17 05 03					
26	Waste Prevention Action	Specify the use of reconstituted slates with a high percentage of recycled content	Architect		Inert - mixture of concrete, bricks, tiles etc.	tiles and ceramics					

wrap

Tell me about:
2 Waste Prevention Actions
3 Waste Reduction Actions
4 Waste Management and Recovery Actions

What to enter? Record relevant details including the action taken, action owner and waste impact for each of the following:
- the waste prevention actions taken before the development of the SWMP. This could include decisions taken at the design stage such as specifying modular units or standard sizes;
- any actions identified to reduce the forecast waste. The information is added to the waste prevention actions; and
- planned site practices, to record any actions that impact on project waste recovery. This could be actions such as on site practice or the segregation requirements of the waste contractor.

When? This worksheet should be populated during the preparation and concept design stage. Subsequently, actions identified to reduce the forecast waste during the detailed design stage should be added to the table. Finally, the actions for project waste recovery arising during pre-construction should be entered here too.

Why? This information forms an action log that is built up throughout the development of the SWMP / duration of the project and can be printed out for use on site.

Waste Actions

Enter actions in the next available row below

Number	Type of Waste Action	Action Taken	Action owner	Reference to project document /	Waste stream	Material type	Estimated Cost Saving	Waste reduced		Date for completion (dd/mm/yyyy)	Status
								(m^3)	(tonnes)		
27	Waste Prevention Action	Specify the use of street furniture made with recycled plastic	Design consultants		Metals	mixed metals					
28	Waste Prevention Action	Specify the use of recycled material in compost	Design consultants		Mixed C&D waste (17 09 04)						
29	Waste Prevention Action	Specify the use of windows with recycled PVC	Architect		Other C&D segregated waste						
30	Waste Management and Recovery Action	Suppliers remove and process waste, e.g. paint	Principle Contractor		Segregated Haz Waste						
31	Waste Prevention Action	Specify recycled content in hard landscaping, e.g. eco kerb 75% quarry waste	Architect		Inert - Soil & stones						
32	Waste Prevention Action	Specify recycled plant pots or root ball wrapping	Architect		Other C&D segregated waste						
33	Waste Prevention Action	Specify street furniture made with stainless steel (for long life)	Design consultants		Metals	mixed metals					
34	Waste Prevention Action	Combine utilities in single trench	Design consultants		Other C&D segregated waste						
35	Waste Prevention Action	Minimise number of house types	Architect		Other C&D segregated waste						
36	Waste Prevention Action	Specify houses that tie in with brick dimensions	Architect		Inert - mixture of concrete, bricks, tiles etc.	bricks					
37	Waste Prevention Action	Order components as required for individual plots	Principle Contractor		Mixed C&D waste (17 09 04)	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03					
38	Waste Prevention Action	Specify windows that could be recyclable in future	Architect		Other C&D segregated waste						
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?

Tell me about this sheet

Folkestone & Hythe District Cc
TBC
Arcadis Consulting (UK) Limite

Otterpool Park

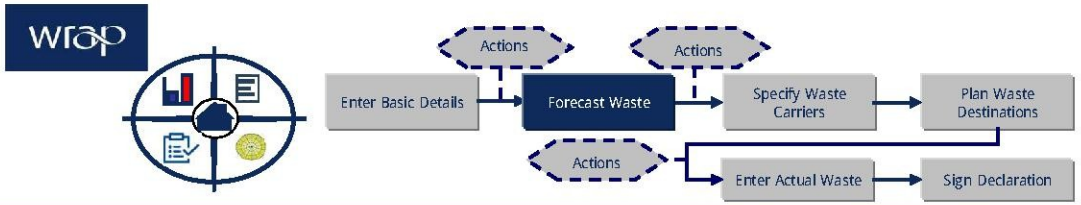
What to enter? Enter your forecast for each waste material using the included pre-determined list of wastes. The template will automatically convert your estimate from tonnes to m^3, or m^3 to tonnes.

When? This worksheet should be completed by the project team during the detailed design stage.

Why? This worksheet is key to planning how to reduce, reuse and recover waste. Data entered here is used within the reporting sheet to measure forecast vs. actual performance.

Forecast Waste

						Forecast Quantities		Calculated Quantities (Converting between m^3 and t)		
C, D or E Activity	Waste Stream	Material Type	Further description of waste - optional	Suggested LOW Code	Waste or Re-Use	(m^3)	(tonnes)	(m^3)	(tonnes)	Forecast provided by
Excavation	*Packaging*	*plastic packaging*	*plastic packaging*	*15 02 02*	*Off-site destination*	*###*	*###*	*###*	*###*	*A.N Other*
Construction	Bricks	bricks	bricks	17 01 02	Off-site segregated		2002.27	1668.56	2002.27	SmartWaste
Construction	Tiles and Ceramics	tiles and ceramics	tiles and ceramics	17 01 03	Off-site segregated		141	239.35	141.22	SmartWaste
Construction	Concrete	concrete	concrete	17 01 01	Off-site segregated		2,831	2229.20	2831.09	SmartWaste
Construction	Inert	soil and stones (inert) other than those mentioned in 17 05 03	soil and stones (inert) other than those mentioned in 17 05 03	17 05 04	Off-site segregated		7,681	6145.01	7681.27	SmartWaste
Construction	Insulation Materials (Non hazardous)	insulation materials other than those mentioned in 17 06 01 and 17 06 03	insulation materials other than those mentioned in 17 06 01 and 17 06 03	17 06 04	Off-site segregated		119	477.45	119.36	SmartWaste
Construction	Metals	mixed metals	mixed metals	17 04 07	Off-site segregated		353	840.59	353.05	SmartWaste
Construction	Packaging Materials	mixed packaging	mixed packaging	15 01 06	Off-site segregated		694	3306.30	694.32	SmartWaste
Construction	Plasterboard / Gypsum	gypsum-based construction materials other than those mentioned in 17 08 01	gypsum-based construction materials other than those mentioned in 17 08 01	17 08 02	Off-site segregated		817	2475.90	817.05	SmartWaste
Construction	Binders	concrete	concrete	17 01 01	Off-site segregated		30	23.83	30.26	SmartWaste
Construction	Plastic (excluding packaging waste)	baled plastic	baled plastic	17 02 03	Off-site segregated		477	2075.88	477.45	SmartWaste
Construction	Timber	wood	wood	17 02 01	Off-site segregated		2,189	6437.89	2188.88	SmartWaste
Construction	Floor coverings (soft)	textiles	textiles	20 01 11	Off-site segregated		13	49.81	13.45	SmartWaste
Construction	Electrical and electronic equipment (Non hazardous)	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	20 01 36	Off-site segregated		10	40.00	10.00	SmartWaste
Construction	Furniture	Furniture and bulky items	Furniture and bulky items	20 03 07	Off-site segregated		2	9.34	1.68	SmartWaste
Construction	Canteen / Office / Adhoc waste	mixed municipal waste	mixed municipal waste	20 03 01	Off-site segregated		222	1056.74	221.91	SmartWaste
Construction	Liquids	aqueous liquid wastes containing dangerous substances	aqueous liquid wastes containing dangerous substances	16 10 01*	Off-site segregated		13	14.94	13.45	SmartWaste
Construction	Oils	other hydraulic oils	other hydraulic oils	13 01 13*	Off-site segregated		2	1.87	1.68	SmartWaste



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Arcadis Consulting (UK) Limite
Otterpool Park

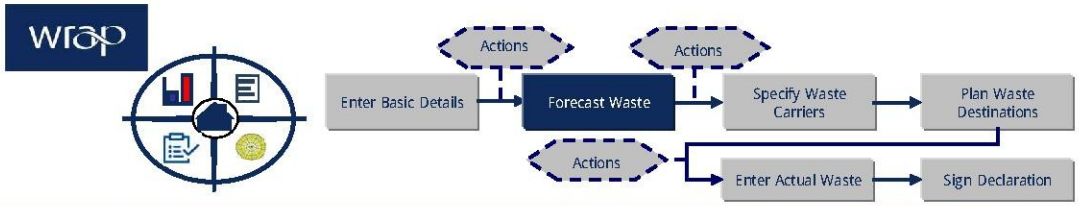
What to enter? Enter your forecast for each waste material using the included pre-determined list of wastes. The template will automatically convert your estimate from tonnes to m^3, or m^3 to tonnes.

When? This worksheet should be completed by the project team during the detailed design stage.

Why? This worksheet is key to planning how to reduce, reuse and recover waste. Data entered here is used within the reporting sheet to measure forecast vs. actual performance.

Forecast Waste

						Forecast Quantities		Calculated Quantities (Converting between m^3 and t)		
C, D or E Activity	Waste Stream	Material Type	Further description of waste - optional	Suggested LOW Code	Waste or Re-Use	(m^3)	(tonnes)	(m^3)	(tonnes)	Forecast provided by
Construction	Bituminous mixtures (Non hazardous e.g. asphalt)	bituminous mixtures other than those mentioned in 17 03 01	bituminous mixtures other than those mentioned in 17 03 01	17 03 02	Off-site segregated		156	190.67	156.35	SmartWaste
Construction	Hazardous waste	other construction and demolition wastes containing dangerous substances	other construction and demolition wastes containing dangerous substances	17 09 03*	Off-site segregated		175	647.56	174.84	SmartWaste
Construction	Other waste	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	17 09 04	Off-site segregated		671	2096.21	670.79	SmartWaste
Construction	Mixed construction and/or demolition waste	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	17 09 04	Off-site segregated		7,088	22149.41	7087.81	SmartWaste
Demolition	Inert - mixture of concrete, bricks, tiles etc.	bricks		17 01 02	Off-site segregated		2,710	2257.94	2709.53	SmartWaste
Demolition	Inert - mixture of concrete, bricks, tiles etc.	tiles and ceramics		17 01 03	Off-site segregated		175.69	297.78	175.69	SmartWaste
Demolition	Inert - mixture of concrete, bricks, tiles etc.	concrete		17 01 01	Off-site segregated		4502.1	3544.96	4502.10	SmartWaste
Demolition	Inert - mixture of concrete, bricks, tiles etc.	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06		17 01 07	Off-site segregated		10071.32	8122.03	10071.32	SmartWaste
Demolition	Mixed C&D waste (17 09 04)	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03		17 09 04	Off-site segregated		171.96	537.38	171.96	SmartWaste
Demolition	Metals	mixed metals		17 04 07	Off-site segregated		491.87	1171.12	491.87	SmartWaste
Demolition	Packaging	mixed packaging		15 01 06	Off-site segregated		902.64	4298.29	902.64	SmartWaste
Demolition	Gypsum (17 08 02)	gypsum-based construction materials other than those mentioned in 17 08 01		17 08 02	Off-site segregated		1128.94	3421.03	1128.94	SmartWaste
Demolition	Mixed C&D waste (17 09 04)	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03		17 09 04	Off-site segregated		38.69	120.91	38.69	SmartWaste



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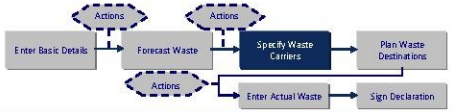
What to enter? Enter your forecast for each waste material using the included pre-determined list of wastes. The template will automatically convert your estimate from tonnes to m^3, or m^3 to tonnes.

When? This worksheet should be completed by the project team during the detailed design stage.

Why? This worksheet is key to planning how to reduce, reuse and recover waste. Data entered here is used within the reporting sheet to measure forecast vs. actual performance.

Forecast Waste

						Forecast Quantities		Calculated Quantities (Converting between m^3 and t)		
C, D or E Activity	Waste Stream	Material Type	Further description of waste - optional	Suggested LOW Code	Waste or Re-Use	(m^3)	(tonnes)	(m^3)	(tonnes)	Forecast provided by
Demolition	Mixed C&D waste (17 09 04)	mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03		17 09 04	Off-site segregated		612.19	1913.09	612.19	SmartWaste
Demolition	Wood	wood		17 02 01	Off-site segregated		2998.24	8818.35	2998.24	SmartWaste
Demolition	Inert - mixture of concrete, bricks, tiles etc.	tiles and ceramics		17 01 03	Off-site segregated		41.37	70.12	41.37	SmartWaste
Demolition	Other C&D segregated waste	discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35		20 01 36	Off-site segregated		14.67	58.68	14.67	SmartWaste
Demolition	Other C&D segregated waste	Furniture and bulky items		20 03 07	Off-site segregated		7.89	43.83	7.89	SmartWaste
Demolition	Other C&D segregated waste	mixed municipal waste		20 03 01	Off-site segregated		287.09	1367.10	287.09	SmartWaste
Demolition	Other C&D segregated waste	edible oil and fat		20 01 25	Off-site segregated		2.48	4.06	2.48	SmartWaste



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What to enter? Enter the details of each waste carrier and each waste management facility you intend to use.

When? This sheet should be completed by the person responsible for the SWMP during the pre construction phase.

Why? The template uses this information in subsequent sheets to enable you to match waste streams with waste facilities and actual waste movements. Entering the data on this sheet avoids repetitive data entry on subsequent sheets within the tool. It also helps to:
- identify all persons removing the waste; and

The Client and the Principal Contractor must take all reasonable steps to ensure that:

- they have a copy of, or reference to, the written description of the waste required by section 34 of the Environmental Protection Act 1990;
- all waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990(3) and the Environmental Protection (Duty of Care) Regulations 1991(4); and
- materials will be handled efficiently and waste managed appropriately.

Specify Waste Carriers

Name	Contact Details	Date checked with Environment Agency (dd/mm/yyyy)	Registration Number	Expiry Date (dd/mm/yyyy)
Roland Barton Transport	Unit C3 Lympne Industrial Park, Otterpool Lane, Lympne, Hythe, CT21 4LR	26 Sep 2018	CBDU162982	24 Feb 2020
Alcaline UK LTD	ALCALINE UK LTD, LYMPNE INDUSTRIAL ESTATE, HYTHE, CT21 4LR	26 Sep 2018	CBDU117730	11 Jul 2019
Trident Waste Management Ltd	Woodacre, Ashford, TN25 7JB	26 Sep 2018	CBDU179333	22 Jun 2020
Browns construction Ltd	31, The Esplanade, Folkstone, CT20 3EA	27 Sep 2018	CBDU170977	31 Mar 2020
Parade Estates Ltd.	47A, Castle Road, Hythe, CT21 / Henwood House, Henwod, Ashford, Kent, TN24 8DH	27 Sep 2018	CBDU163272	23 Mar 2020
East Kent Recycling Ltd	Intex House, Cooting Road, Aylesham Ind. Est, Kent CT33EL	27 Sep 2018	CBDU94333	05 Apr 2019

Specify Waste Management Facilities

Name	Type of facility	% reused if known	% recycled if known	% energy recovery if known	% total all forms of recovery	Overall diverted from landfill /	Date checked with Environment Agency (dd/mm/yyyy)	Licence / Exemption Number	Location of relevant documentation, e.g. WTN	C, D or E Activity (Leave blank if same facility & recovery rate are used for different waste streams)	Waste Stream
						0%				Construction	Metals
						0%				Construction	Gypsum (17 08 02)
						0%				Construction	Inert - mixture of concrete, bricks, tiles etc.
						0%				Construction	Other C&D segregated waste
						0%				Construction	Wood
						0%				Construction	Packaging
						0%				Construction	Segregated Haz Waste
						0%				Construction	Mixed Hazardous - C&D waste (17 09 03*)
						0%					
						0%					
						0%					
						0%					
						0%					
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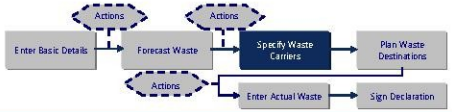

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What to enter? Enter the details of each waste carrier and each waste management facility you intend to use.

When? This sheet should be completed by the person responsible for the SWMP during the pre construction phase.

Why? The template uses this information in subsequent sheets to enable you to match waste streams with waste facilities and actual waste movements. Entering the data on this sheet avoids repetitive data entry on subsequent sheets within the tool. It also helps to:

- identify all persons removing the waste; and

The Client and the Principal Contractor must take all reasonable steps to ensure that:

- they have a copy of, or reference to, the written description of the waste required by section 34 of the Environmental Protection Act 1990;
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- materials will be handled efficiently and waste managed appropriately.

Specify Waste Carriers

Name	Contact Details	Date checked with Environment Agency (dd/mm/yyyy)	Registration Number	Expiry Date (dd/mm/yyyy)

Specify Waste Management Facilities

Name	Type of facility	% reused if known	% recycled if known	% energy recovery if known	% total all forms of recovery	Overall diverted from landfill /	Date checked with Environment Agency (dd/mm/yyyy)	Licence / Exemption Number	Location of relevant documentation, e.g. WTN	C, D or E Activity (Leave blank if same facility & recovery rate are used for different waste streams)	Waste Stream
						0%					
						0%					
						0%					
						0%					

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What to enter? Enter a waste management action for each different waste type. The template consolidates the material types into a pre-determined list of waste streams and allows you to select a waste management facility and disposal cost for each waste stream.

When? This sheet should be completed during the pre-construction phase.

Why? Plan Waste Destinations' performs one simple task ¯ it allows you to match up your forecast waste streams with expected waste management facilities (entered in

The Client and the Principal Contractor must take all reasonable steps to ensure that:
ê they have a copy of, or reference to, the written description of the waste required by section 34 of the Environmental Protection Act 1990;
ê all waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990(3) and the Environmental Protection (Duty of Care) Regulations 1991(4); and
ê materials will be handled efficiently and waste managed appropriately.

Total estimated forecast waste	Total (m^3)	Total (t)
Total from Waste Streams	119975.30	53945.41
Total Reused on site	0.00	0.00

Plan Waste Destinations

Construction
Demolition
Excavation

Construction

	Forecast				Cost of waste disposal			
Waste sent offsite	Estimated Volume (m^3)	Estimated Weight (t)	Proposed Destination	% Diverted from landfill	£ / m^3	£ / t	Cost Forecast	Comments
Gypsum	2475.90	817.05	Weir Waste Services Ltd (Construction Gypsum (17 08 02))	#N/A			FALSE	
Metals	840.59	353.05	Weir Waste Services Ltd (Construction Metals)	#N/A			FALSE	
Wood	6437.89	2188.88	Weir Waste Services Ltd (Construction Wood)	#N/A			FALSE	
Packaging	3306.30	694.32	Weir Waste Services Ltd (Construction Packaging)	#N/A			FALSE	
Inert - Building rubble	4160.95	5004.84	WasteCare Ltd (Construction Inert - mixture of concrete, bricks, tiles etc.)	#N/A			FALSE	
Mixed Hazardous - C&D waste	647.56	174.84	WasteCare Ltd (Construction Mixed Hazardous - C&D waste (17 09 03*))	#N/A			FALSE	
Mixed C&D waste	24245.62	7758.60	Weir Waste Services Ltd (Construction Other C&D segregated waste)	#N/A			FALSE	
Segregated Haz Waste	16.81	15.13	WasteCare Ltd (Construction Segregated Haz Waste)	#N/A			FALSE	
Other C&D segregated waste	3899.89	1000.21	Weir Waste Services Ltd (Construction Other C&D segregated waste)	#N/A			FALSE	
	46031.52	18006.92					£ 0.00	

	Forecast	
Retained on site	Estimated Volume (m^3)	Estimated Weight (t)
	0.00	0.00

Demolition

	Forecast				Cost of waste disposal			
Waste sent offsite	Estimated Volume (m^3)	Estimated Weight (t)	Proposed Destination	% Diverted from landfill	£ / m^3	£ / t	Cost Forecast	Comments
Gypsum	3421.03	1128.94		0%			FALSE	
Metals	1171.12	491.87		0%			FALSE	
Wood	8818.35	2998.24		0%			FALSE	
Packaging	4298.29	902.64		0%			FALSE	
Inert - Building rubble	14492.70	17747.85		0%			FALSE	
Mixed Hazardous - C&D waste	121.81	32.89		0%			FALSE	
Mixed C&D waste	35391.81	11325.38		0%			FALSE	
Other C&D segregated waste	6228.67	1310.68		0%			FALSE	
	73943.79	35938.49					£ 0.00	

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What to enter? Enter a waste management action for each different waste type. The template consolidates the material types into a pre-determined list of waste streams and allows you to select a waste management facility and disposal cost for each waste stream.

When? This sheet should be completed during the pre-construction phase.

Why? Plan Waste Destinations' performs one simple task ¯ it allows you to match up your forecast waste streams with expected waste management facilities (entered in

The Client and the Principal Contractor must take all reasonable steps to ensure that:
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ê all waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990(3) and the Environmental Protection (Duty of Care) Regulations 1991(4); and
ê materials will be handled efficiently and waste managed appropriately.

Total estimated forecast waste	Total (m^3)	Total (t)
Total from Waste Streams	119975.30	53945.41
Total Reused on site	0.00	0.00

Plan Waste Destinations

Construction
Demolition
Excavation

Retained on site	Forecast Estimated Volume (m^3)	Forecast Estimated Weight (t)
	0.00	0.00

Excavation

Waste sent offsite	Forecast Estimated Volume (m^3)	Forecast Estimated Weight (t)	Proposed Destination	% Diverted from landfill	Cost of waste disposal £ / m^3	Cost of waste disposal £ / t	Cost Forecast	Comments
	0.00	0.00					£0.00	

Retained on site	Forecast Estimated Volume (m^3)	Forecast Estimated Weight (t)
	0.00	0.00

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What to enter? Enter the details of each waste movement (using the pre-determined list of wastes) and its destination for your project. Note - the template pulls through waste carrier and waste management facility data entered earlier in tab 4-Specify Waste Carriers (to avoid repetitive data input). Enter your data in the 'Actual Waste Movements' table starting at cell C30. The summary 'Waste totals' table will update accordingly.

When? Record your actual waste movements once the construction team has mobilised on site.

Waste Totals

Display summary as:
Tonnes

Waste Stream	Total waste arising (Tonnes)	Total material retained on site (Tonnes)	Total waste sent offsite (Tonnes)	Total waste to landfill (Tonnes)	Total waste recovered offsite (Tonnes)	Cost of waste disposal
Inert - Soil & stones						0.00
Hazardous - Soil & stones						0.00
Non Haz (Non Inert) - Dredgings						0.00
Segregated Haz - Soil & stones						0.00
Gypsum						0.00
Metals						0.00
Wood						0.00
Packaging						0.00
Inert - Building rubble						0.00
Inert - Glass						0.00
Mixed Hazardous - C&D waste						0.00
Mixed C&D waste						0.00
Segregated Haz Waste						0.00
Other C&D segregated waste						0.00
Total						0.00

Actual Waste Movements

Movement Number	C, D or E Activity	Waste Stream	Material Type	Further description of waste (optional)	LOW Code used	On or off site destination	Off site carrier	Off site destination	On site reuse explanation (optional)	Overide facility recovery rate for individual skip	Overall diversion from landfill / recovery (further detail on Sheet 4)	Date of Movement(s) (dd/mm/yyyy)	Waste Totals (m³)	Waste Totals (tonnes)	Waste Totals Actual Cost	Waste Totals £/m³	Waste Totals £/t
1											100%						
2											100%						
3											100%						
4											100%						
5											100%						
6											100%						
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Actual Waste Movements

Movement Number	C, D or E Activity	Waste Stream	Material Type	Further description of waste (optional)	LOW Code used	On or off site destination	Off site carrier	Off site destination	On site reuse explanation (optional)	Overide facility recovery rate for individual skip	Overall diversion from landfill / recovery (further detail on Sheet 4)	Date of Movement(s) (dd/mm/yyyy)	Waste Totals				
													(m^3)	(tonnes)	Actual Cost	£ / m^3	£ / t
36											100%						
37											100%						
38											100%						
39											100%						
40											100%						
41											100%						
42											100%						
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1.0 Policy

Step 1.1	Explanation	Practice Level	How to achieve	Guidance available to help
Policy / target setting	At this early stage it is advisable that high level targets are set which will govern and inform company strategy. These targets will then be incorporated into each construction project as they progress along the project lifecycle (and through the RIBA or equivalent stages).	Standard	Set high level qualitative aspirational policy goals for company performance on reducing waste arisings and increasing waste recovery.	WRAP have produced a number of Model Procurement clauses which can be incorporated into procurement documents to help meet these requirements. The model wording relates to policy documents, invitation to tender documents, pre- qualification questionnaires or contractual appointment documents. Actions 1A, 1B and 1C contain model wording that helps clients and principal contractors to set corporate, high level and project specific targets for achieving resource efficiency in construction projects. The guidance can be found here: http://www.wrap.org.uk/content/approach-procurement-resource-efficiency
		Good	Insert quantified company wide targets for reducing waste arisings and increasing waste recovery into company policy documents.	
		Best	Process to insert quantified project specific waste reduction targets based on industry Best Practice benchmarks or previous project experience for reducing waste arisings and increasing waste recovery into company policy documents.	

Practice level targeted (please select)	Action (use to record more detail if you wish)
None	

Step 1.2	Explanation	Practice Level	How to achieve	Guidance available to help
Responsibilities (for the SWMP)	There are a number of required responsibilities for early stage coordination of the Site Waste Management Plan (SWMP). Responsibilities for the operation of the SWMP are listed below in section 5.1.	Standard	Meet requirements for identifying the client, principal contractor and person drafting the Site Waste Management Plan.	WRAP have produced a number of Model Procurement Requirements to help incorporate these requirements into prequalification questionnaires and invitation to tender documents The guidance can be found here: http://www.wrap.org.uk/content/approach-procurement-resource-efficiency
		Good	Involve all members of the project team and ensure everyone knows about SWMP and how it affects them.	
		Best	Include SWMP responsibilities as an agenda item at project team meetings, ensuring all team members are involved and contribute to project waste reduction and recovery actions.	

Practice level targeted (please select)	Action (use to record more detail if you wish)
None	

2.0 Preparation and Concept design

It is advisable that early on in the design process waste planning is included in the agenda of client and design team meetings. The design guidance document, Designing out Waste, identifies the process that can be applied to further achieve this aim:

Step 2.1	Explanation	Practice Level	How to achieve	Guidance available to help
Designing Out Waste	There are numerous opportunities to reduce waste during the design process. Designing out waste before it arises is one of the most efficient ways to reduce project waste arisings. However, as such decisions need to be taken early, engagement with the design team early on in the life of a project is key.	Standard	Capture decisions made that may have an impact on waste. These decisions may not have been taken with waste reduction in mind, but may have an effect on project waste arisings nonetheless.	WRAP provide regeneration and demolition guidance that can be found here: http://www.wrap.org.uk/construction/tools_and_guidance/regeneration.html WRAP provide guidance on Designing Out Waste, which can be found here: http://www.wrap.org.uk/designingoutwaste
		Good	Discuss with the project team at an early design stage how it might be best to reduce waste arisings through making changes to the design.	
		Best	Systematically identify, prioritise and implement waste reduction actions at the design stage. Consider cost, programme and waste reduction potential.	

Practice level targeted (please select)	Action (use to record more detail if you wish)
None	

3.0 Detailed Design

Step 3.1	Explanation	Practice Level	How to achieve	Guidance available to help
Estimate waste arisings	edcf	Standard	Standard practice is to estimate waste arisings at the pre-construction stage.	WRAPs freely available Net Waste Tool allows you to enter simple project details and forecast likely waste arisings, together with suggesting waste reduction and segregation opportunities and recycled content material substitutions. The Net Waste Tool can be accessed here: http://nwtool.wrap.org.uk/
		Good	Forecast waste arisings for each component using industry data.	
		Best	Forecast waste arisings for each component using modified wastage rates based on past company experience.	

Practice level targeted (please select)	Action (use to record more detail if you wish)
None	

Step 3.2	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Target waste reductions	This Step involves identifying and recording waste reduction methods to reduce the quantity of waste estimated in Step 3.1.	Standard	Identify waste management action for each of the different waste types forecast to arise on the construction project, including re-using, recycling, recovery and disposal.	WRAPs freely available Net Waste Tool allows you to enter simple project details and forecast likely waste arisings, together with suggesting waste reduction and segregation opportunities and recycled content material substitutions. The Net Waste Tool can be accessed here: http://nwtool.wrap.org.uk/ WRAP also provide guidance on logistics planning that can be found here: http://www.wrap.org.uk/construction/how_do_i_reduce_waste/logistics.html	None	
		Good	Target waste arisings for each construction component using industry standard actions			
		Best	Target waste arisings for each construction component. As an example these actions could be to target accurate ordering (accurate material requirements, realistic wastage rates), logistics planning (delivery strategy, adequate storage, efficient movement of materials to the workface) or installation elements (efficient working and installation and storage of offcuts for reuse).			

4.0 Pre-construction

Step 4.1	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Forecast residual waste	In addition to designing out waste at (Step 2.1), and estimating outline waste arisings (Step 3.1), it is required to forecast residual waste arisings before going to site. This final residual waste forecast is the last and most detailed waste forecast that is done before site mobilisation. Once this final waste forecast is completed, waste management and recovery options can be implemented to ensure the waste is recycled, reused or recovered.	Standard	Forecast waste according to general estimates, fulfilling requirement to identify each waste type expected to be produced in the course of the project.	WRAPs freely available Net Waste Tool allows you to enter simple project details and forecast likely waste arisings, together with suggesting waste reduction and segregation opportunities and recycled content material substitutions. The Net Waste Tool can be accessed here: http://nwtool.wrap.org.uk/ WRAP have produced a number of Model Procurement Requirements to help incorporate these requirements into prequalification questionnaires invitation to tender documents, and appointment contracts. The guidance can be found here: http://www.wrap.org.uk/content/approach-procurement-resource-efficiency	None	
		Good	Good practice relates to forecasting waste arisings at the detailed design stage. Refer to Step 3.1. Good practice for Step 4.1 relates to forecasting residual waste arisings in conjunction with the principal contractor and agreeing the waste reduction and recovery standards to be achieved on the project.			
		Best	Building on Good Practice, hold talks with the rest of the supply chain (waste management contractors, sub-contractors) to determine waste reduction and recovery actions for the project.			

Step 4.2	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Management of Waste	This step relates to the efficient management of waste once it has been created on site. Step 4.2 which deals with the management of waste on site should be implemented in line with any targets identified in sections 1.0, 2.0 and 3.0 above. As noted above in Step 2.1, off-cuts should be stored safely on site for reuse.	Standard	Identify waste management action for each waste stream	WRAPs freely available Net Waste Tool allows you to enter simple project details and forecast likely waste arisings, together with suggesting waste reduction and segregation opportunities and recycled content material substitutions. The Net Waste Tool can be accessed here: http://nwtool.wrap.org.uk/ WRAP also provide guidance on developing and implementing a material logistics plan. The logistics plan guidance can be found here: http://www.wrap.org.uk/construction/how_do_i_reduce_waste/logistics.html The Building Research Establishment's BREMAP online tool allows you to enter the postcode of your site and pin point waste management facilities and materials/products suppliers within a region or radius of your chosen http://www.bremap.co.uk/	None	
		Good	Identify recycling and recovery options for each waste stream for which recycling and recovery is viable			
		Best	Maximise opportunities for resource efficiency through following the waste hierarchy (prevention, minimisation, reuse, recycling, recovery, disposal)			

Step 4.3	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Training	It is necessary that all site workers are trained on the Site Waste Management Plan, providing information on how it affects them. Training prospects should be seen as opportunities to engage with the supply chain and gain buy-in from them - as it will be the supply chain who will be able to significantly contribute to any project resource efficiency targets.	Standard	The principal contractor should provide training to every construction worker needed for the particular work to be carried out within the terms of the site waste management plan. This can be in the form of toolbox talks.	WRAP provide a wealth of background information on waste reduction and recovery, including guidance documents, case studies and best practice guides. General WRAP construction guidance can be found here: http://www.wrap.org.uk/construction/tools_and_guidance/index.html WRAP also provide a short guidance note for small and medium sized contractors on reducing construction waste. It can be downloaded here: http://www.wrap.org.uk/sites/files/wrap/W676%20Actions%20to%20reduce%20waste%20in%20construction%20projects%20and%20minor%20works_FINAL.pdf	None	
		Good	Building on standard practice, provide bespoke training to all subcontractors and identify waste reduction actions where they can contribute.			
		Best	Building on good practice and share experience from previous projects or sites. Use the training exercise to inform continual improvement.			

5.0 Construction

Step 5.1	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Responsibilities (on site)	Once the SWMP has been developed it must be implemented on site. This Step outlines how to assign responsibility for ensuring the SWMP is delivered.	Standard	Meet requirements for identifying the client, principal contractor and person drafting the Site Waste Management Plan	WRAP have produced a number of Model Procurement Requirements to help incorporate these requirements into prequalification questionnaires and invitation to tender documents The guidance can be found here: http://www.wrap.org.uk/content/approach-procurement-resource-efficiency	None	
		Good	Waste champion is appointed for the whole site.			
		Best	Building on Good Practice, individuals and sub contractors should be made responsible for specific waste streams, with the waste champion holding these project members to account.			

Step 5.2	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Site design, storage and logistics	Space permitting, key waste streams should be segregated. The segregation scheme should include appropriate training, monitoring and enforcement with clear signage and using the National Colour Coding Scheme.	Standard	Meet requirement that all waste from the site is dealt with in accordance with the Environmental Protection Act and Environmental Protection (Duty of Care) Regulations.	WRAP have produced a number of Model Procurement Requirements to help incorporate these requirements into prequalification questionnaires and invitation to tender documents The guidance can be found here: http://www.wrap.org.uk/construction/achieving_resource_efficiency/model_procurement_requirements/index.html	None	
		Good	Before work starts on site consider layout and skip locations. Use segregated containers at the workface			
		Best	Ensure separate containers are provided for Hazardous Waste, material storage areas are clearly located and signed or arrange for just in time delivery and prevent double handling.			

Step 5.3	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Monitoring	Monitoring progress against the actions in the site waste management plan more often that every six months can inform ongoing site achievement of the planned waste reduction and recovery actions. It can be part of the live review process and inform continual improvement. Once data is collected, it will form a baseline against which clients can evaluate and improve on resource efficiency performance. Step 5.3 should therefore be linked with Step 6.2.	Standard	Monitor and update the Site Waste Management Plan not less than every six months	WRAP provide guidance on measurement and reporting on construction projects. It can be found here: http://www.wrap.org.uk/construction/tools_and_guidance/reporting_portal.html	None	
		Good	Principal contractor to review the construction schedule and set appropriate project review and monitoring dates with the client.			
		Best	Building on Good Practice, review site progress against the Site Waste Management Plan and implement changes to revise site activities based on performance where necessary.			

Step 5.4	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
Reporting	Reporting is an integral part of the Site Waste Management Plan process. Good and best practice relate to recording and reporting waste arisings in increasing levels of detail. WRAP provide a method note that defines the standard by which the construction industry has agreed to record and report waste arisings. The link to this guidance is	Standard	Ensure the Site Waste Management Plan is kept at the site, and that the Plan is available for two years after completion of the construction project.	WRAPs Reporting Portal has been developed to allow the construction industry to report on its progress in implementing Site Waste Management Plans and record actual site achievements. It can be found here: http://www.wrap.org.uk/construction/tools_and_guidance/reporting_portal.html	None	
		Good	Report waste generation, recovery and disposal arising by construction phase (construction, demolition and excavation).			
		Best	Report lessons learnt through the project, including the good and best practice levels achieved			

6.0 Post-completion

Step 6.1	Explanation	Practice Level	How to achieve	Guidance available to help	Practice level targeted (please select)	Action (use to record more detail if you wish)
On-site project review	The on-site project review is an opportunity for the site project team to review their progress post completion. Good and best practice items relate to the process of continuous review and learning.	Standard	Meet requirements to compare Site Waste Management Plan forecast versus actual performance, and record any deviations from the Plan	WRAPs National Reporting Portal has been developed to allow the construction industry to report on its progress in implementing Site Waste Management Plans and record actual site achievements. It can be found here: http://www.wrap.org.uk/construction/tools_and_guidance/reporting_portal.html	None	
		Good	Building on Standard Practice, review the Site Waste Management Plan to identify any improvements that could have been made (e.g. to improve waste reduction or recovery, or the accuracy of the forecast)			
		Best	Building on Good Practice, hold a post completion project team meeting to debrief and learn lessons from the Site Waste Management Plan process that can be used to inform future practice.			

Step 6.2	Explanation	Practice Level	How to achieve	Guidance available to help
Corporate level review	The corporate level review uses the SWMPs produced on individual sites to compare construction projects against company baseline performance. If a baseline does not exist, then the first project will become the baseline against which performance in future projects will be measured against.	Standard	Meet requirements to compare Site Waste Management Plan forecast versus actual performance, and record any deviations from the Plan.	WRAPs Reporting Portal has been developed to allow the construction industry to report on its progress in implementing Site Waste Management Plans and record actual site achievements. It can be found here: http://www.wrap.org.uk/construction/tools_and_guidance/reporting_portal.html
		Good	Record project performance in the following areas: cost savings achieved, total waste arisings, total waste to landfill, total waste reductions achieved and recycled content used.	
		Best	Use data collected in Step 6.1 standard practice to benchmark performance across your portfolio of projects, using the data to inform continual improvement. Using the data gathered and lessons learnt, set company policy on expected metrics (cost savings, waste arisings, waste reductions, total waste to landfill) for similar project types going forward. Integrate lessons learnt into	

Practice level targeted (please select)	Action (use to record more detail if you wish)
None	

My targets

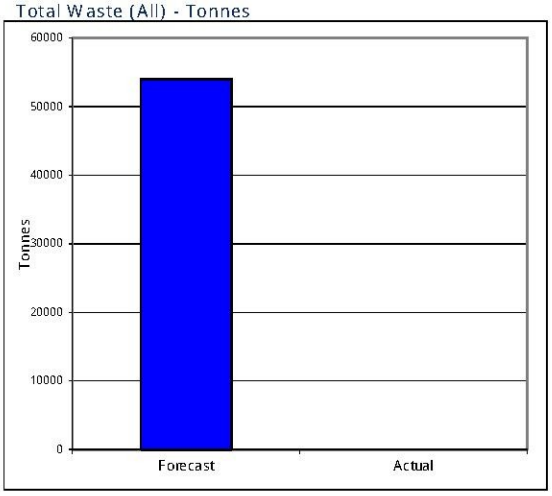
KPI	Target
Waste recovery (Construction)	%
Waste recovery (Demolition)	%
Waste recovery (Excavation)	%

KPI Report

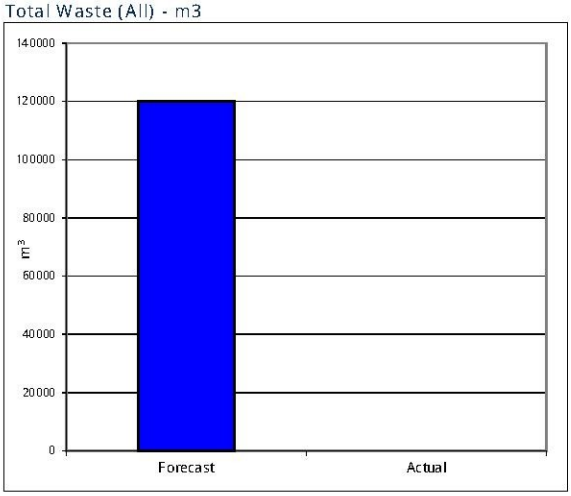
Select Metric :	Total
Select Phase :	All

	Forecast		Actual	
	m^3	Tonnes	m^3	Tonnes
Total Waste	119975.30	53945.41	0.00	0.00
Total Waste to landfill	#N/A	#N/A	0.00	0.00
% Waste diverted from landfill	#N/A	#N/A	#DIV/0!	#DIV/0!
% Material reused on site	0%	0%	#DIV/0!	#DIV/0!

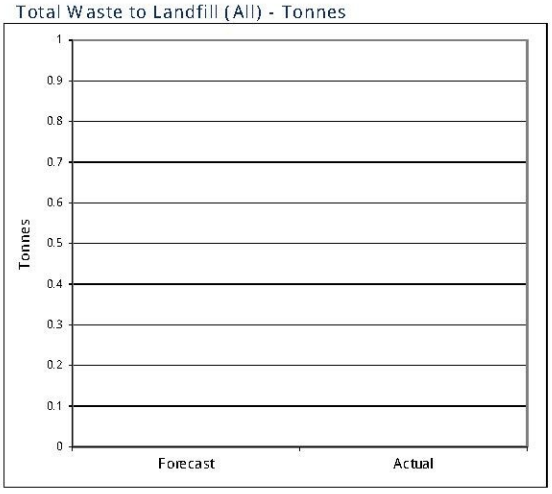
Total Waste (All) - Tonnes



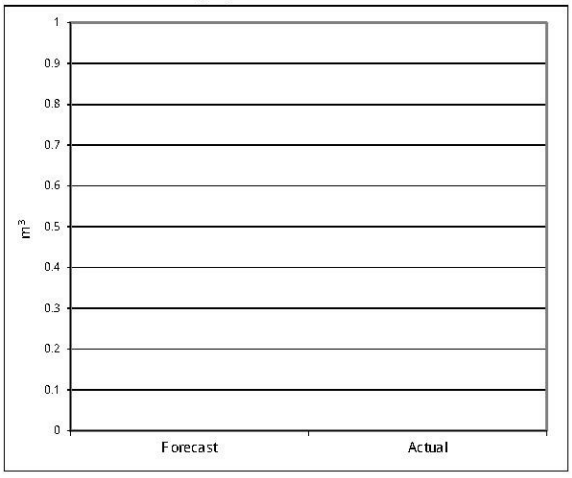
Total Waste (All) - m3



Total Waste to Landfill (All) - Tonnes



Total Waste to Landfill (All) - m3



Folkestone & Hythe District Council
TBC
Arcadis Consulting (UK) Limited
Otterpool Park

View data in: tonnes

Reporting

Combined stages C, D and E

Construction

Demolition

Excavation

	Forecast		Actual	
	m³	Tonnes	m³	Tonnes
Total Waste	#####	53945.41	0.00	0.00
Total Waste to landfill	#N/A	#N/A	0.00	0.00
% Waste diverted from landfill	#N/A	#N/A	#DIV/0!	#DIV/0!
% Materials reused on site	0%	0%	#DIV/0!	#DIV/0!

Combined stages C, D and E

		Waste and material arisings		Waste sent offsite		Materials kept onsite		Sent to landfill		Diverted from landfill		Cost of waste disposal (offsite)	
Forecast/Actual		F	A	F	A	F	A	F	A	F	A	F	A
Unit		tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	£	£
Total		#####		#####				#N/A		#N/A			
Class	Non Haz (Inert)	#####		#####				#N/A		#N/A			
	Haz	222.86		222.86				#N/A		#N/A			
	Non Haz (Non Inert)	#####		#####				#N/A		#N/A			
Assigned Waste Stream	Inert - Soil & stones												
	Non Haz (Non Inert) - Soil & stones												
	Non Haz (Non Inert) - Dredgings												
	Segregated Haz - Soil & stones												
	Gypsum	1,945.99		1,945.99				#N/A		#N/A			
	Metals	844.92		844.92				#N/A		#N/A			
	Wood	5,187.12		5,187.12				#N/A		#N/A			
	Packaging	1,596.96		1,596.96				#N/A		#N/A			
	Inert - Building rubble	#####		#####				#N/A		#N/A			
	Inert - Glass												
	Mixed Hazardous - C&D waste	207.73		207.73				#N/A		#N/A			
	Mixed C&D waste	#####		#####				#N/A		#N/A			
	Segregated Haz Waste	15.13		15.13				#N/A		#N/A			
	Other C&D segregated waste	2,310.89		2,310.89				#N/A		#N/A			
List of Waste (LOW) Code	17 01 11*												
	08 01 12												
	08 01 13*												
	08 01 14												
	edcf												
	08 03 18												
	13 01 12*												
	13 01 13*	1.68		1.68									
	13 05 01*												
	13 05 03*												
	13 05 06*												
	13 07 01*												
	14 06 01*												
	14 06 02*												
	14 06 03*												
	14 06 04*												
	14 06 05*												
	15 01 01												
	15 01 02												
	15 01 03												
	15 01 04												
	15 01 05												
	15 01 06	1,596.96		1,596.96									
	15 01 07												
	15 01 09												
	15 01 10*												
	15 01 11*												
	15 02 02*												
	15 02 03												
	16 01 03												
	16 01 07*												
	16 02 09*												
	16 06 01*												
	16 06 02*												
	16 06 03*												
	16 06 04												
	16 07 08*												
	16 10 01*	13.45		13.45									
	17 01 01	7,363.45		7,363.45									
	17 01 02	4,711.80		4,711.80									
	17 01 03	358.28		358.28									
	17 01 06*												
	17 01 07	#####		#####									
	17 02 01	5,187.12		5,187.12									
	17 02 02												
	17 02 03	477.45		477.45									
	17 02 04*												
	17 03 01*												
	17 03 02	156.35		156.35									
	17 03 03*												
	17 04 01												
	17 04 02												
	17 04 03												
	17 04 04												
	17 04 05												
	17 04 06												
	17 04 07	844.92		844.92									
	17 04 09*												
	17 04 10*												
	17 04 11												
	17 05 03*												
	17 05 04	7,681.27		7,681.27									
	17 05 05*												
	17 05 06												
	17 05 07*												
	17 05 08												
	17 06 01*												
	17 06 03*												
	17 06 04	119.36		119.36									
	17 06 05*												
	17 08 01*												
	17 08 02	1,945.99		1,945.99									
	17 09 01*												
	17 09 02*												
	17 09 03*	207.73		207.73									
	17 09 04	#####		#####									
	19 13 01*												
	20 01 01												
	20 01 08												
	20 01 11	13.45		13.45									
	20 01 21*												
	20 01 23*												
	20 01 25	2.48		2.48									
	20 01 35*												
	20 01 36	24.67		24.67									
	20 01 99												
	20 02 01												
	20 03 01	1,507.55		1,507.55									
	20 03 03												
	20 03 04												
	20 03 06												
	20 03 07	9.57		9.57									
	08 01 19												
	13 01 11*												
	13 02 08*												
	16 05 07*												
	10 11 03												
	20 01 02												
	20 01 39												

		Recovery of materials and wastes											
		Re-used				Recycled				Energy recovery			
		off-site		on-site		off-site		on-site		off-site		on-site	
Forecast/Actual		F	A	F	A	F	A	F	A	F	A	F	A
Unit		tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes
Total		#N/A				#N/A				#N/A			
Class	Non Haz (Inert)	#N/A				#N/A				#N/A			
	Haz	#N/A				#N/A				#N/A			
	Non Haz (Non Inert)	#N/A				#N/A				#N/A			
Assigned Waste Stream	Inert - Soil & stones												
	Non Haz (Non Inert) - Soil & stones												
	Non Haz (Non Inert) - Dredgings												
	Segregated Haz - Soil & stones												
	Gypsum	#N/A				#N/A				#N/A			
	Metals	#N/A				#N/A				#N/A			
	Wood	#N/A				#N/A				#N/A			
	Packaging	#N/A				#N/A				#N/A			
	Inert - Building rubble	#N/A				#N/A				#N/A			
	Inert - Glass												
	Mixed Hazardous - C&D waste	#N/A				#N/A				#N/A			
	Mixed C&D waste	#N/A				#N/A				#N/A			
	Segregated Haz Waste	#N/A				#N/A				#N/A			
	Other C&D segregated waste	#N/A				#N/A				#N/A			

Construction		Waste and material arisings		Waste sent offsite		Materials kept onsite		Sent to landfill		Diverted from landfill		Cost of waste disposal (offsite)	
Forecast/Actual		F	A	F	A	F	A	F	A	F	A	F	A
Unit		tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	£	£
Total		#####		#####				#N/A		#N/A			
Class	Non Haz (Inert)	5,004.84		5,004.84				#N/A		#N/A			
	Haz	189.97		189.97				#N/A		#N/A			
	Non Haz (Non Inert)	#####		#####				#N/A		#N/A			
Assigned Waste Stream	Inert - Soil & stones												
	Non Haz (Non Inert) - Soil & stones												
	Non Haz (Non Inert) - Dredgings												
	Segregated Haz - Soil & stones												
	Gypsum	817.05		817.05				#N/A		#N/A		FALSE	
	Metals	353.05		353.05				#N/A		#N/A		FALSE	
	Wood	2,188.88		2,188.88				#N/A		#N/A		FALSE	
	Packaging	694.32		694.32				#N/A		#N/A		FALSE	
	Inert - Building rubble	5,004.84		5,004.84				#N/A		#N/A		FALSE	
	Inert - Glass											FALSE	
	Mixed Hazardous - C&D waste	174.84		174.84				#N/A		#N/A		FALSE	
	Mixed C&D waste	7,758.60		7,758.60				#N/A		#N/A		FALSE	
	Segregated Haz Waste	15.13		15.13				#N/A		#N/A		FALSE	
	Other C&D segregated waste	1,000.21		1,000.21				#N/A		#N/A		FALSE	
List of Waste (LOW) Code	08 01 11*												
	08 01 12												
	08 01 13*												
	08 01 14												
	08 01 18												
	08 03 18												
	13 01 12*												
	13 01 13*	1.68		1.68									
	13 05 01*												
	13 05 03*												
	13 05 06*												
	13 07 01*												
	14 06 01*												
	14 06 02*												
	14 06 03*												
	14 06 04*												
	14 06 05*												
	15 01 01												
	15 01 02												
	15 01 03												
	15 01 04												
	15 01 05												
	15 01 06	694.32		694.32									
	15 01 07												
	15 01 09												
	15 01 10*												
	15 01 11*												
	15 02 02*												
	15 02 03												
	16 01 03												
	16 01 07*												
	16 02 09*												
	16 06 01*												
	16 06 02*												
	16 06 03*												
	16 06 04												
	16 07 08*												
	16 10 01*	13.45		13.45									
	17 01 01	2,861.35		2,861.35									
	17 01 02	2,002.27		2,002.27									
	17 01 03	141.22		141.22									
	17 01 06*												
	17 01 07												
	17 02 01	2,188.88		2,188.88									
	17 02 02												
	17 02 03	477.45		477.45									
	17 02 04*												
	17 03 01*												
	17 03 02	156.35		156.35									
	17 03 03*												
	17 04 01												
	17 04 02												
	17 04 03												
	17 04 04												
	17 04 05												
	17 04 06												
	17 04 07	353.05		353.05									
	17 04 09*												
	17 04 10*												
	17 04 11												
	17 05 03*												
	17 05 04	7,681.27		7,681.27									
	17 05 05*												
	17 05 06												
	17 05 07*												
	17 05 08												
	17 06 01*												
	17 06 03*												
	17 06 04	119.36		119.36									
	17 06 05*												
	17 08 01*												
	17 08 02	817.05		817.05									
	17 09 01*												
	17 09 02*												
	17 09 03*	174.84		174.84									
	17 09 04	7,758.60		7,758.60									
	19 13 01*												
	20 01 01												
	20 01 08												
	20 01 11	13.45		13.45									
	20 01 21*												
	20 01 23*												
	20 01 25												
	20 01 35*												
	20 01 36	10.00		10.00									
	20 01 99												
	20 02 01												
	20 03 01	221.91		221.91									
	20 03 03												
	20 03 04												
	20 03 06												
	20 03 07	1.68		1.68									
	08 01 19												
	13 01 11*												
	13 02 08*												
	16 05 07*												
	10 11 03												
	20 01 02												
	20 01 39												

Recovery of materials and wastes													
Re-used				Recycled				Energy recovery					
off-site		on-site		off-site		on-site		off-site		on-site			
F	A	F	A	F	A	F	A	F	A	F	A		
tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes		
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					
#N/A				#N/A				#N/A					

Demolition

		Waste and material arisings		Waste sent offsite		Materials kept onsite		Sent to landfill		Diverted from landfill		Cost of waste disposal (offsite)	
Forecast/Actual		F	A	F	A	F	A	F	A	F	A	F	A
Unit		tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	£	£
Total		#####		#####				#####					
Class	Non Haz (Inert)	#####		#####				#####					
	Haz	32.89		32.89				32.89					
	Non Haz (Non Inert)	#####		#####				#####					
Assigned Waste Stream	Inert - Soil & stones												
	Non Haz (Non Inert) - Soil & stones												
	Non Haz (Non Inert) - Dredgings												
	Segregated Haz - Soil & stones												
	Gypsum	1,128.94		1,128.94				1,128.94				FALSE	
	Metals	491.87		491.87				491.87				FALSE	
	Wood	2,998.24		2,998.24				2,998.24				FALSE	
	Packaging	902.64		902.64				902.64				FALSE	
	Inert - Building rubble	#####		#####				#####				FALSE	
	Inert - Glass											FALSE	
	Mixed Hazardous - C&D waste	32.89		32.89				32.89				FALSE	
	Mixed C&D waste	#####		#####				#####				FALSE	
	Segregated Haz Waste											FALSE	
	Other C&D segregated waste	1,310.68		1,310.68				1,310.68				FALSE	
List of Waste (LOW) Code	08 01 11*												
	08 01 12												
	08 01 13*												
	08 01 14												
	08 01 18												
	08 03 18												
	13 01 12*												
	13 01 13*												
	13 05 01*												
	13 05 03*												
	13 05 06*												
	13 07 01*												
	14 06 01*												
	14 06 02*												
	14 06 03*												
	14 06 04*												
	14 06 05*												
	15 01 01												
	15 01 02												
	15 01 03												
	15 01 04												
	15 01 05												
	15 01 06	902.64		902.64									
	15 01 07												
	15 01 09												
	15 01 10*												
	15 01 11*												
	15 02 02*												
	15 02 03												
	16 01 03												
	16 01 07*												
	16 02 09*												
	16 06 01*												
	16 06 02*												
	16 06 03*												
	16 06 04												
	16 07 08*												
	16 10 01*												
	17 01 01	4,502.10		4,502.10									
	17 01 02	2,709.53		2,709.53									
	17 01 03	217.06		217.06									
	17 01 06*												
	17 01 07	#####		#####									
	17 02 01	2,998.24		2,998.24									
	17 02 02												
	17 02 03												
	17 02 04*												
	17 03 01*												
	17 03 02												
	17 03 03*												
	17 04 01												
	17 04 02												
	17 04 03												
	17 04 04												
	17 04 05												
	17 04 06												
	17 04 07	491.87		491.87									
	17 04 09*												
	17 04 10*												
	17 04 11												
	17 05 03*												
	17 05 04												
	17 05 05*												
	17 05 06												
	17 05 07*												
	17 05 08												
	17 06 01*												
	17 06 03*												
	17 06 04												
	17 06 05*												
	17 08 01*												
	17 08 02	1,128.94		1,128.94									
	17 09 01*												
	17 09 02*												
	17 09 03*	32.89		32.89									
	17 09 04	#####		#####									
	19 13 01*												
	20 01 01												
	20 01 08												
	20 01 11												
	20 01 21*												
	20 01 23*												
	20 01 25	2.48		2.48									
	20 01 35*												
	20 01 36	14.67		14.67									
	20 01 99												
	20 02 01												
	20 03 01	1,285.64		1,285.64									
	20 03 03												
	20 03 04												
	20 03 06												
	20 03 07	7.89		7.89									
	08 01 19												
	13 01 11*												
	13 02 08*												
	16 05 07*												
	10 11 03												
	20 01 02												
	20 01 39												

Recovery of materials and wastes													
Re-used				Recycled				Energy recovery					
off-site		on-site		off-site		on-site		off-site		on-site			
F	A	F	A	F	A	F	A	F	A	F	A		
tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes		

Excavation

		Waste and material arisings		Waste sent offsite		Materials kept onsite		Sent to landfill		Diverted from landfill		Cost of waste disposal (offsite)	
Forecast/Actual		F	A	F	A	F	A	F	A	F	A	F	A
Unit		tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	£	£
Total													
Class	Non Haz (Inert)												
	Haz												
	Non Haz (Non Inert)												
Assigned Waste Stream	Inert - Soil & stones											FALSE	
	Non Haz (Non Inert) - Soil & stones											FALSE	
	Non Haz (Non Inert) - Dredgings											FALSE	
	Segregated Haz - Soil & stones											FALSE	
	Gypsum											FALSE	
	Metals											FALSE	
	Wood											FALSE	
	Packaging											FALSE	
	Inert - Building rubble											FALSE	
	Inert - Glass											FALSE	
	Mixed Hazardous - C&D waste											FALSE	
	Mixed C&D waste											FALSE	
	Segregated Haz Waste											FALSE	
	Other C&D segregated waste											FALSE	
List of Waste (LOW) Code	08 01 11*												
	08 01 12												
	08 01 13*												
	08 01 14												
	08 01 18												
	08 03 18												
	13 01 12*												
	13 01 13*												
	13 05 01*												
	13 05 03*												
	13 05 06*												
	13 07 01*												
	14 06 01*												
	14 06 02*												
	14 06 03*												
	14 06 04*												
	14 06 05*												
	15 01 01												
	15 01 02												
	15 01 03												
	15 01 04												
	15 01 05												
	15 01 06												
	15 01 07												
	15 01 09												
	15 01 10*												
	15 01 11*												
	15 02 02*												
	15 02 03												
	16 01 03												
	16 01 07*												
	16 02 09*												
	16 06 01*												
	16 06 02*												
	16 06 03*												
	16 06 04												
	16 07 08*												
	16 10 01*												
	17 01 01												
	17 01 02												
	17 01 03												
	17 01 06*												
	17 01 07												
	17 02 01												
	17 02 02												
	17 02 03												
	17 02 04*												
	17 03 01*												
	17 03 02												
	17 03 03*												
	17 04 01												
	17 04 02												
	17 04 03												
	17 04 04												
	17 04 05												
	17 04 06												
	17 04 07												
	17 04 09*												
	17 04 10*												
	17 04 11												
	17 05 03*												
	17 05 04												
	17 05 05*												
	17 05 06												
	17 05 07*												
	17 05 08												
	17 06 01*												
	17 06 03*												
	17 06 04												
	17 06 05*												
	17 08 01*												
	17 08 02												
	17 09 01*												
	17 09 02*												
	17 09 03*												
	17 09 04												
	19 13 01*												
	20 01 01												
	20 01 08												
	20 01 11												
	20 01 21*												
	20 01 23*												
	20 01 25												
	20 01 35*												
	20 01 36												
	20 01 99												
	20 02 01												
	20 03 01												
	20 03 03												
	20 03 04												
	20 03 06												
	20 03 07												
	08 01 19												
	13 01 11*												
	13 02 08*												
	16 05 07*												
	10 11 03												
	20 01 02												
	20 01 39												

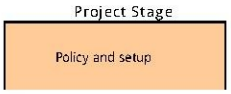
		Recovery of materials and wastes											
		Re-used				Recycled				Energy recovery			
		off-site		on-site		off-site		on-site		off-site		on-site	
Forecast/Actual		F	A	F	A	F	A	F	A	F	A	F	A
Unit		tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes
Total													
Class	Non Haz (Inert)												
	Haz												
	Non Haz (Non Inert)												
Assigned Waste Stream	Inert - Soil & stones												
	Non Haz (Non Inert) - Soil & stones												
	Non Haz (Non Inert) - Dredgings												
	Segregated Haz - Soil & stones												
	Gypsum												
	Metals												
	Wood												
	Packaging												
	Inert - Building rubble												
	Inert - Glass												
	Mixed Hazardous - C&D waste												
	Mixed C&D waste												
	Segregated Haz Waste												
	Other C&D segregated waste												
List of Waste (LOW) Code	08 01 11*												
	08 01 12												
	08 01 13*												
	08 01 14												
	08 01 18												
	08 03 18												
	13 01 12*												
	13 01 13*												
	13 05 01*												
	13 05 03*												
	13 05 06*												
	13 07 01*												
	14 06 01*												
	14 06 02*												
	14 06 03*												
	14 06 04*												
	14 06 05*												
	15 01 01												
	15 01 02												
	15 01 03												
	15 01 04												
	15 01 05												
	15 01 06												
	15 01 07												
	15 01 09												
	15 01 10*												
	15 01 11*												
	15 02 02*												
	15 02 03												
	16 01 03												
	16 01 07*												
	16 02 09*												
	16 06 01*												
	16 06 02*												
	16 06 03*												
	16 06 04												
	16 07 08*												
	16 10 01*												
	17 01 01												
	17 01 02												
	17 01 03												
	17 01 06*												
	17 01 07												
	17 02 01												
	17 02 02												
	17 02 03												
	17 02 04*												
	17 03 01*												
	17 03 02												
	17 03 03*												
	17 04 01												
	17 04 02												
	17 04 03												
	17 04 04												
	17 04 05												
	17 04 06												
	17 04 07												
	17 04 09*												
	17 04 10*												
	17 04 11												
	17 05 03*												
	17 05 04												
	17 05 05*												
	17 05 06												
	17 05 07*												
	17 05 08												
	17 06 01*												
	17 06 03*												
	17 06 04												
	17 06 05*												
	17 08 01*												
	17 08 02												
	17 09 01*												
	17 09 02*												
	17 09 03*												
	17 09 04												
	19 13 01*												
	20 01 01												
	20 01 08												
	20 01 11												
	20 01 21*												
	20 01 23*												
	20 01 25												
	20 01 35*												
	20 01 36												
	20 01 99												
	20 02 01												
	20 03 01												
	20 03 03												
	20 03 04												
	20 03 06												
	20 03 07												
	08 01 19												
	13 01 11*												
	13 02 08*												
	16 05 07*												
	10 11 03												
	20 01 02												
	20 01 39												

E-learning: A full e-learning module can be found on the WRAP website. This will show you how to complete the template and work through an example.
http://www.wrap.org.uk/content/site-waste-management-plan-tools-video-tutorials

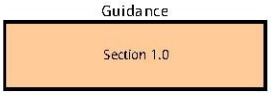
Welcome to the WRAP Site Waste Management Plan Template. This short help page has been provided to guide you through how to use the template.
You may find it easier to use Excel Full Screen view to navigate around the SWMP Template.

Project Homepage

This is the main part of the SWMP Template and allows you navigate to all worksheets in the Template. The buttons on the homepage as shown here allow you to navigate through the document. Start at the top with Enter Basic Details and end at the declaration, each button is also accompanied by guidance as shown.

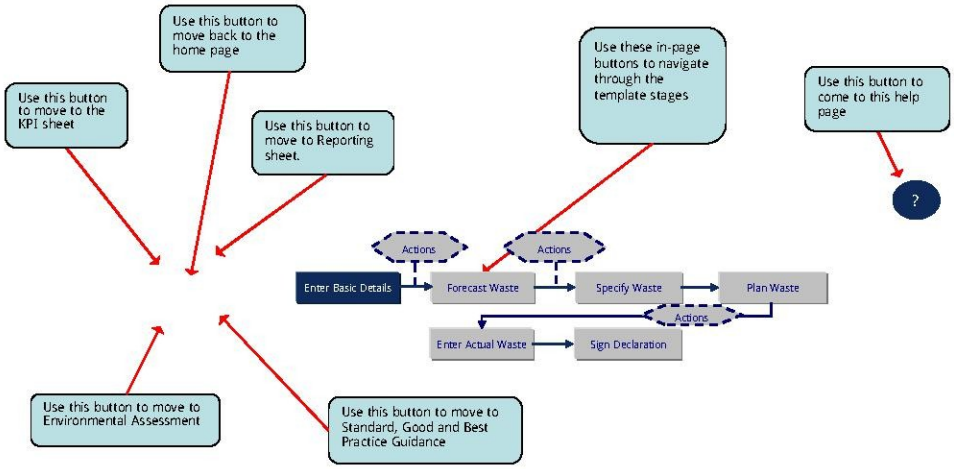


The template follows the project stages to help you find where you are in your project.

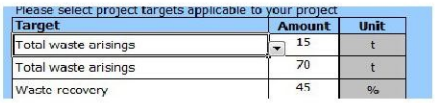


Each Step is accompanied by guidance that explains how to use an SWMP to achieve Good and Best Practice waste reduction and recovery on site.

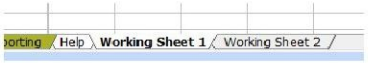
The 'Tell me about your sheet' tab tells you what each sheet is for and how to use it. If you get stuck hover over the box and it will tell you what to do.



There is more guidance on each sheet, hover over a box where you see a red triangle in the corner.



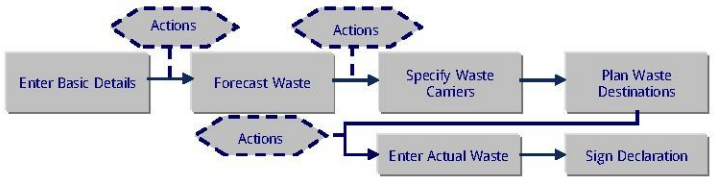
When you click on a box you will see that some you enter using a drop down list and others use free entry. Look for the arrow on the right side of the box. If there is one there click it and select from the menu.



There are two working sheets provided for you to carry out your own calculations.

SWMP Tracker
The SWMP Tracker can be used to collate and analyse data from multiple SWMP Templates. Data can also be transferred directly from the Tracker to the Waste to Landfill Reporting Portal.

Access the SWMP Tracker http://swmptracker.wrap.org.uk
SWMP Tracker User Guide http://swmptracker.wrap.org.uk/Documents/SWMPTrackerUSERGUIDE.pdf



?

Tell me about this sheet

Environmental Assessment Methods

An advantage of using the SWMP template is to meet requirements for Environmental Assessment Methods such as BREEAM and CEEQUAL.

This page helps users who are striving towards achieving requirements of these Environmental Assessments to draw out the information they require.

It should be noted that:

ê not all projects require an Environmental Assessment but those that do can use this sheet for guidance; and

ê users should check the relevant assessment manuals (if) applicable to their project for compliance with waste management requirements.

Common Requirements for Environmental Assessment Methods (EAMs)

There are some requirements with regards to Site Waste Management Planning that are common to many EAMs. The following is a suggested list of good practice which may be required for compliance. Users should check the guidance for the relevant assessment method for exact requirements.

ê Compliance with Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) Regulations 1991(4).
ê Regular updating of the SWMP and evidence of review and implementation.
ê Determine and follow a formal waste minimisation plan.
ê Set targets to reduce, re-use and / or recycle waste.
ê Active monitoring of targets for the duration of the project.
ê Report % of inert waste material that has been segregated (on or off-site) and diverted from landfill.
ê Report % by volume of non-hazardous waste material that has been segregated (on or off site) and diverted from landfill.

BREEAM

A Site Waste Management Plan is required to achieve credits under the BREEAM issue relating to construction waste management. There are certain aspects that must be included in a SWMP. The checklist below summarises some of these.

It is important to note that either mass or volume can be recorded for BREEAM and users are advised to choose the unit that suits their project and targets most appropriately.

Checklist

Does your SWMP include the following?	Completed?	Notes
Target benchmark for resource efficiency i.e. m^3 of waste per 100m^2 or tonnes of waste per 100m^2	No	
Procedures and commitments for minimising non-hazardous waste in line with the benchmark	No	
Procedures for minimising hazardous waste	No	
Procedures for monitoring, measuring and reporting hazardous and non-hazardous site waste	No	
Procedures for sorting, reusing and recycling construction waste into defined waste groups (see additional guidance section), either on site or through a licensed external contractor	No	
The name or job title of the individual responsible for implementing the above.	No	

	Forecast		Actual	
	Total (m^3)	Total (t)	Total (m^3)	Total (t)
Construction waste per 100m^2 GIFA	No GIFAm2 entered	No GIFAm2 entered	No GIFAm2 entered	No GIFAm2 entered

Diversion of non-hazardous waste from landfill	Volume (%)	Tonnage (%)	Volume (%)	Tonnage (%)
Non-demolition %	No waste	No waste	No waste	No waste
Demolition %	0.00%	0.00%	No waste	No waste

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