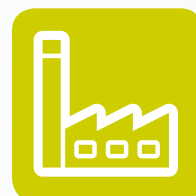
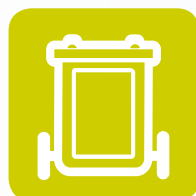


Draft Supplementary Guidance 19

Waste Management: Requirements for Development Sites





Draft Supplementary Guidance 19

Supplementary Guidance on Waste Management for Development Sites

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Document Overview

This document is Statutory Supplementary Guidance to the Stirling Local Development Plan (LDP), Proposed Plan and sets out the requirements that must be considered at planning application stage for waste management in new development. It is one of a suite of policies and supplementary guidance all of which must be taken into consideration. In particular these requirements must be considered alongside policies that encourage good design and placemaking on the site and wider area.

It provides detailed waste management advice and operational guidance in relation to all residential, commercial, industrial and retail development. This document must be considered during the design and planning of all appropriate development and prior to the submission of an associated planning application.

This document includes waste management requirements for:

- Residential Development
- Commercial, Industrial and Retail Development

It is important to note that these are minimum standards for provision. These requirements are based on good practice but other innovative methods of waste management incorporated into new development are also encouraged.



1.0 Introduction

This Supplementary Guidance is statutory because it sets out how future development will achieve waste segregation and work towards meeting the zero waste objectives and stipulates financial contributions that may be required of developers. Without such a commitment Scottish Government landfill diversion targets may not be met. The document seeks to ensure that waste and recycling issues are taken fully into account as early as possible in the planning process.

The objectives of this Supplementary Guidance are:

- To support the implementation of Stirling LDP, Proposed Plan, Primary Policy 8 - Resource Use and Waste. All new development will be required to demonstrate that it will minimise waste at source during construction and operational phases. The Guidance will set out detailed guidance on the sorting, storage and collection of waste for different types of development and encourage the use of reused or recycled materials.
- To support Zero Waste objectives, particularly minimising the life-cycle resource requirements of development: recycling construction materials and making efficient use of existing and new infrastructure
- To ensure that a scale appropriate site waste management plan is undertaken for Major Development and encourage operational and construction waste to be minimised for Local Development.
- To identify developer contributions that will be sought towards waste management infrastructure directly needed by the development, and justify this.
- To assist the provision of an effective and efficient recycling and waste collection service.

The waste management needs of different types of development vary but all require consideration of storage capacity, location and where to present bins for vehicle collection. Guidance for all development and specific guidance for residential, commercial/ retail/ industrial development is set out below. The guidance notes specific requirements that must only be complied with where applicable. Additional guidance that relates to general waste management practice, rather than planning, is clearly identified.

2.0 Policy Context

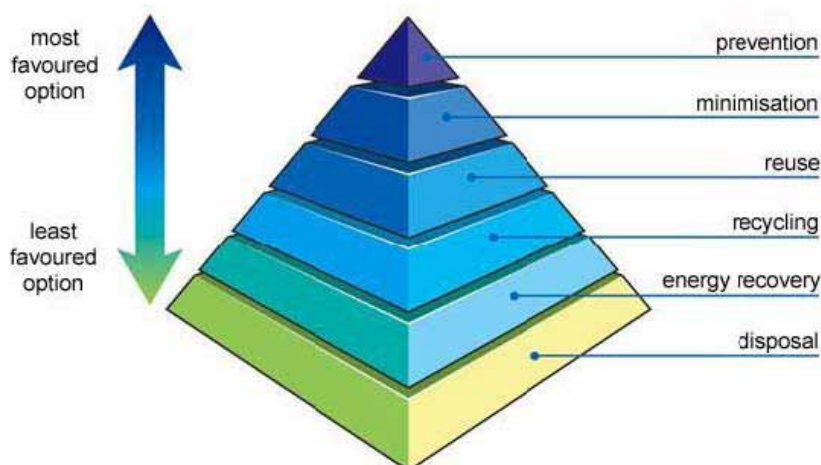
Primary Policy PP8 - Resource use and waste management (extract)

In order to minimise resource use and waste new development that reuses vacant, derelict and other brownfield land will be encouraged. Development on land that is contaminated will require to be preceded by remediation to a standard commensurate with its new use. All new development should minimise waste at source during construction and operational phases, should wherever possible reuse materials on site, and include appropriate facilities for composting and for the sorting, storage and collection of waste. Where appropriate, Site Waste Management Plans will be required. Development of waste management infrastructure on new or existing sites will demonstrate how it conforms to and meets the needs and objectives identified in the Zero Waste Plan. (Further advice and guidance on waste management is contained in SG19)



Primary Policy 8 requires all new development to demonstrate that it has addressed a wide series of issues, including good design and placemaking and the requirements for waste management. The requirements for waste management in new development cannot be applied in every case and site specific negotiation at development management stage will ensure that development is appropriate to its context and the place in which it is proposed. The requirements set out in the guidance are subject to policy 1, site requirements, which will ensure that the wider built form, layout and design of the development make an appropriate and positive addition to the site and surrounding area.

The waste hierarchy ranks the different ways in which waste can be disposed of, in order of sustainability or relative environmental benefits. In line with the Zero Waste Strategy waste management must move waste up the waste hierarchy and recognise waste as a resource.



The Waste Hierarchy

Considerable progress has been made in the Council area over recent years to reduce the reliance on the landfilling of municipal waste, with one of the highest recycling and composting rates in Scotland. This has been achieved through a comprehensive recycling service and measures to increase the number and types of materials that are able to be recycled. A kerbside recycling collection is provided to the vast majority of households, and a network of Household Waste Recycling Centres and recycling Bring Sites throughout the Council area helps to achieve and exceed targets set by the Scottish Government and the EU.

In order to continue improving and meeting and exceeding the national landfill diversion targets that are set, it is essential that existing facilities are upgraded and new facilities for separating and processing waste are introduced as required to deal with the increasing demand for waste management generated by new development.

It is crucial that development takes proper consideration of its potential impact on the existing waste management infrastructure and on the recycling/landfill diversion targets set by the Scottish Government and EU Directives.



3.0 Key Issues for All Development Types

There are a number of key issues to address in connection with waste management on development sites that apply to all types of development:

Separation of waste for recycling: Incorporating recycling facilities/waste collection service arrangements at the design stage helps to ensure that waste diversion is easy and convenient to implement.

Access: It is important to design safe, easy and convenient access for both users of waste facilities and those who collect waste

Pollution: Waste materials can be hazardous, create odours, noise and/or attract vermin. It is essential that any design and layout considers this potential impact

Safety: Waste storage can create a fire hazard and if not stored properly can have an impact on human health. Waste storage must be addressed at the design stage to ensure that any negative impact on human health is minimised

Visual Impact: Wheeled bins, recycling boxes and commercial waste bins all have an impact on the street scene and local landscape quality, which can detract from the amenity of the area

4.0 General Guidelines for Waste In Residential Development

Residential development varies in scale and type from single houses, flats or development sites. The waste management needs of these vary but all types of residential development require consideration of storage capacity, location and where to present bins for vehicle collection. Residential development also places additional demand on Household Waste Recycling Centres and recycling bring points. Additionally, in more rural areas Strategic Road End Collection Points are utilised to increase service efficiency. Detailed requirements and guidance on these issues are considered below.

4.1 Storage Capacity in Residential Development

It is essential that adequate provision is made for waste segregation, storage and collection to encourage participation in effective waste management and to act as a frontline tool in waste education. However, this approach must be pragmatic and address actual needs of a particular development without sacrificing valuable space unnecessarily.

The Environmental Protection Act 1990 places various waste management duties on Local Authorities. Under Section 46 (Receptacles for Household Waste) a Local Authority will require:

- Waste of certain types to be stored separately so that they can be recycled
- Developers to provide a financial contribution towards the provision of containers of a specified type for the storage of waste
- A financial contribution towards the provision of additional containers for the separate storage of recyclable waste
- Locations where containers should be placed for emptying to be agreed



The requirements for storage capacities in this section are applicable to all residential development, whether a single house or multi occupancy dwellings (such as blocks of flats/apartments). The availability of adequate secure storage at source is important. Requirements will vary across property types but it is essential that in all cases, development satisfy the Building Standards for solid waste storage, particularly for domestic development, see Appendix 1. For further details on domestic and commercial storage dimensions see Appendix 2. Appendix 2 – Domestic and Commercial Storage Container Dimensions

Where the need for an exception to the following general requirements can be justified, under LDP Policy 1 Site Requirements and Supplementary Guidance 1 Placemaking, innovative proposals may be considered. However opportunities are limited by the operational design of Council domestic collection vehicles and Waste Services must be consulted on any proposals for exceptions, early in the process.

STORAGE CAPACITY – RESIDENTIAL DEVELOPMENT	
Key Consideration	Requirement
Internal Storage Capacity	* Sufficient internal capacity to allow segregation of residual waste, recyclable waste and, where appropriate, food waste.
External Storage Capacity	* Appropriate amount of space to fit the required external storage containers for domestic waste (2 x 55l blue recycling boxes, in addition to 10l food waste caddies and 1 x 55l brown box for cardboard collection where applicable).
	** In the case of communal bin stores – individual lockable bin suites to be provided for each property with adequate space to house the required receptacles
Additional Points	* Developer contributions are required for provision of external containers
	* Arrangements to be made to ensure waste containers are in place on occupation of properties to enable collection service to commence
	** In the case of housing extension – where extension results in removal of existing container storage areas, an alternative storage area must be designated as part of the proposed development in line with guidelines
<i>Additional General Waste Management Practice Points (not planning related)</i>	** <i>In the case of communal bin stores – clear signage to be put in place outlining collection arrangements, including collection day, presentation times, collection points, clear instructions on materials accepted and which flat numbers/block are entitled to use the bin store</i>
	** <i>Clauses to be written into tenancy contracts to ensure that tenants comply with waste collection arrangements and commit to segregating and sending their waste for recycling</i>

* Applies to all residential development ** Must be complied with where applicable

4.2 Storage and Collection Points – Residential Development

Waste is typically taken from its point of generation to a temporary storage point outside the building and then moved to a previously agreed point for collection. As such, storage points and collection points should be convenient for both the user and the service crews to access without presenting a risk to health and safety. This includes dropped kerbs being provided as necessary.



This will ensure the provision of safe and convenient waste collection in addition to positively promoting the logistics of the development to prospective householders.

Collection points should be hard surfaced and should be of a size that will be capable of accommodating the required number of bins/recycling boxes so there is no overflow onto the public right of way. These collection points should be highlighted during the planning pre-application process.

In the case of flats/apartments, temporary storage of waste is unlikely to occur immediately outside each flat/apartment. Waste is generally transferred to a communal storage area and from there to the agreed collection point.

Where the need for an exception to the following general requirements can be justified, under LDP Policy 1 Site Requirements and Supplementary Guidance 1 Placemaking, innovative proposals may be considered. However opportunities are limited by the operational design of Council domestic collection vehicles and Waste Services must be consulted on any proposals for exceptions, early in the process.

STORAGE AND COLLECTION POINTS - RESIDENTIAL DEVELOPMENT	
Key Consideration	Requirement
Residential Storage Points	* All waste containers should be stored within the boundaries of the property until presentation for collection
	* Each property must have adequate storage space for allocated individual receptacles (1 x 240l grey bin, 1 x 240l brown bin and 2 x 55l blue recycling boxes, in addition to 10l food waste caddies and 1 x 55l brown box for cardboard collection where applicable).
	* All waste containers must be housed within a designated area or structure as appropriate
	* All waste containers must be easily accessible to the occupier
	* Waste containers should not have to be moved through a building to the collection point
	* All waste containers must be located in a well ventilated, shaded area away from windows
	* For flats only: Although this type of development may make use of communal storage areas, each property must have adequate storage space for allocated individual receptacles
	** In the case of communal bin stores – individual lockable bin suites to be provided for each property with adequate space to house the required receptacles
	** For managed high-density residential development, including multi-occupancy, it may be appropriate to provide covered accommodation for additional storage space for bulky household items
	* For single houses only: Residents should not have to move waste more than 15m to any designated storage area within the boundaries of the property

Residential Storage and Collection Points – Distances and Gradients	* For flats only: Residents should not have to move waste more than 30m (excluding vertical distance) to any designated storage area within the boundaries of the property.
	* Any designated storage area within the boundaries of the property should not be more than 20m distance from the collection point, to minimise the distance householders need to move their waste
	* Collection crews should not have to carry individual waste containers or move wheeled containers in order to facilitate their collection. (This requirement excludes the provision of assisted services where appropriate)
	* Passage of a wheeled container should avoid steps, but where not possible should avoid transfer over more than 3 steps
	* In all cases, gradients should not exceed 1:12
	* Collection points for residents' use should be identified at planning application stage.
Collection Points	* The location where bins are presented for collection should be situated 2.5m from any adjacent structure in order to cater for the arc of the side-mounted lifting arm
Composting	** Consideration should be given to composting facilities within new development. Private or communal gardens/ amenity areas should, where possible, be laid out so that sufficient space is allowed for home composting
Additional Points	** In the case of housing extension – where extension results in removal of existing container storage areas, an alternative storage area must be designated as part of the proposed development in line with guidelines
	** In the case of communal bin stores – clear signage to be put in place outlining collection arrangements, including collection day, presentation times, collection points, clear instructions on materials accepted and which flat numbers/block are entitled to use the bin store
	* Chutes must not be included in apartment/flatted development due to the problems they can create for segregating and storing waste for recycling
	* Communal bins will not be issued to domestic residents irrespective of the residence type, i.e. flats/apartments

* Applies to all residential development ** Must be complied with where applicable

Figure 1 An Example of Poorly thought out bin storage at flatted development

Figure 2 An Example of Well Designed individual bin storage for flatted development

Figure 3 A (recycling) Refuse lorry in use at a well laid out collection point

(TO BE ADDED)



4.3 Road End/Communal Street Collection Points

Road end and/or communal street collection points should be established in order to preclude the need for vehicles to travel on poor quality private roads and extensive farm tracks, etc. In addition, communal on-street collection points will optimise collection operations making services both more efficient and economical.

Refuse and recycling collection points would, therefore, be established at road ends and on-street where access to a specific collection point is deemed to be problematic or where the development proposal will require the collection of domestic wastes and/or recyclables on the basis of the following:

Where the need for an exception to the following general requirements can be justified, under LDP Policy 1 Site Requirements and Supplementary Guidance 1 Placemaking, innovative proposals may be considered. However opportunities are limited by the operational design of Council collection vehicles and Waste Services must be consulted on any proposals for exceptions, early in the process.

ROAD END/COMMUNAL STREET COLLECTION POINTS	
Key Consideration	Requirement
Road End Collections	* Where the road surface is in a poor state of repair and/or is not asphalt (or a similar bound surface)
	* Where there are health and safety risks to recycling and waste collection vehicles and employees arising from road conditions such as adverse cambers, poor visibility at bends, at risk of flooding, unprotected steep embankments, and long-term health risk to the crew e.g. resulting from frequent exposure to whole-body vibration
	* Where development is in a location where recycling and waste collection vehicles are travelling for distances greater than 1km to collect bins from fewer than eight households
	* Where it is deemed to be operationally optimal to establish a road end collection point
Communal Street Collection Points (where on-street bin collection is being considered in relation to 6+ individual households)	* Specific on-street collection points must be identified at planning application stage
	* The collection points should be established for bin multiples of 2 - a minimum of three pairs to a maximum of 5 pairs per collection point
	* The maximum distances that any one household should be required to move a receptacle in this regard will be 50m
	* Bin and box collection points should be separate of each other within the on-street locations established
<i>Additional General Waste Management Practice Points (not planning related)</i>	<i>* For Communal Street Collection Points - Parking should be excluded from these locations during collection days and all residents must be aware of this requirement</i>

* Applies to all road end collections/communal street collection points



Figure 4 A Good Example of a Road End Collection Point (TO BE ADDED)

4.4 Centralised Facilities for Waste Recycling (Bring Sites)

Bring Sites are centralised facilities for residents to deposit waste for recycling or recovery. They are an essential element of the Council’s waste strategy, extending residents’ choice by providing additional recycling opportunities for a range of materials.

Bring Sites are generally located in publicly accessible areas, such as supermarkets or public car parks, and typically comprise a number of containers allowing separate collection of materials for recycling. They are serviced on or on behalf of the Local Authority.

There are currently 39 Bring Sites operating within the Council area, serving 37555 households (2008). A range of materials for recycling including glass, paper, textiles, books and CDs and cans are collected there. The Council pays commercial operators to provide containers and collect the materials. Continued development in the area will the provision of further Bring Site infrastructure.

CENTRALISED FACILITIES FOR WASTE RECYCLING (BRING SITES)	
Key Consideration	Requirement
Provision of Bring Sites in Future Development	** Developers should take into account the impact of their proposals on existing Bring Site facilities and in particular where the development creates or increases the need for such facilities in the local area. (See Section 7 for further details)
	** Developers may be required to provide additional Bring Site facilities, upgrade existing facilities in the locality or, in accordance with Section 75, pay a reasonable contribution to the Local Authority for provision or upgrade of facilities. (See Section 7 for further details)
Location of Bring Sites	** Bring Site facilities should be suitable located so as to be easily and conveniently accessible to users but should be at least 30m distance from the nearest dwelling to prevent disturbance to residents
	** In terms of servicing, Bring Sites must be accessible to service vehicles by adoptable roadways and footways, and situated so as to avoid damage to overhead services during servicing. The location of such facilities must be identified to the Local Planning Authority at the planning stage
Additional General Waste Management Practice Points (not planning related)	** Variation from the maximum recommended densities may be considered where a developer can demonstrate to the satisfaction of the Local Planning Authority (such as through a waste audit) that the needs of the occupiers of the development are adequately met
	** Supermarket and retail development may find it beneficial to provide a public recycling bring point within the development, and the provision of this public recycling bring point should be outlined where applicable. Details on access requirements and footprints of recycling banks can be provided by Waste Services.

** Must be complied with where applicable



Figure 5 An example of a well sited Bring Site (TO BE ADDED)

4.5 Household Waste Recycling Centres

A network of Household Waste Recycling Centres(HWRC) is provided by Stirling Council (responsible as the Waste Disposal Authority). The sites are positioned in strategic locations and enable the public to bring and deposit bulky wastes and other waste types that are not generally taken as part of the normal collection round.

As required by the Refuse Disposal (Amenity) Act 1978, each Local Authority must provide sites for the reception of excess household and garden waste free of charge. It follows that provision should be sufficient for the needs of the locality. There are currently two Household Waste Recycling Centres in the Stirling LDP Area at Lower Polmaise and Balfroon (and one more at Callander in the Loch Lomond and the Trossachs National Park Area that serves the detached northern area of Ardeonaig). The development of these Recycling Centres has been a huge success and has contributed to Stirling Council achieving one of the highest recycling rates in Scotland.

The Stirling Local Development Plan proposes 10100 new dwellings in the Stirling Local Development Plan Area. This development falls within the catchment of the Lower Polmaise HWRC so this facility needs upgraded to accommodate it. The local services at the Callander and Balfroon HWRC supplement the service provided at Lower Polmaise HWRC. However contributions will not be taken towards upgrading these facilities (at Callander and Balfroon) as they have limited opening hours and cater for a limited range of materials.

Continued development in the area will require development of the network through the provision of further infrastructure.

HOUSEHOLD WASTE RECYCLING CENTRES	
Key Consideration	Requirement
Contribution to Upgrading Lower Polmaise HWRC.	<p>** Developers should take into account the impact of their proposals on the need to upgrade the Lower Polmaise Household Waste Recycling Centre. (See Section 7 for further details)</p> <p>** Developers may be required, in accordance with Section 75 agreements, to pay a reasonable contribution to the Local Authority for provision or upgrade of facilities in the local area. (See Section 7 for further details)</p>

** Must be complied with where applicable



Figure 6 The Household Waste Recycling centre at Lower Polmaise (TO BE ADDED)

5.0 General Guidelines for Waste In Commercial, Retail and Industrial Development

All businesses have a legal responsibility to ensure that they produce, store, transport and dispose of controlled waste without harming the environment and a statutory duty to dispose of their waste via a licensed waste carrier. This is defined as a Duty of Care within Section 34 of the Environmental Protection Act (1990).

As commercial premises differ greatly in the volumes and types of waste produced, it is essential that consideration is given to waste arisings (both volumes and types) in order to establish the appropriate level of storage and presentation capacity within the development.

This will ensure the provision of safe and convenient waste collection in addition to positively promoting the logistics of the development to prospective businesses.

5.1 Storage Capacity – Commercial Development

The amount of waste storage required for any given development type is determined by a number of factors including:

- Volume and composition of waste
- Segregation
- Any on-site treatment
- Collection frequency

It is essential that adequate provision is made for waste segregation, storage and collection to encourage participation in effective waste management. However, this approach must be pragmatic and address actual needs of a particular development without sacrificing valuable space unnecessarily.

Where the need for an exception to the following general requirements can be justified, under LDP Policy 1 Site Requirements and Supplementary Guidance 1 Placemaking, innovative proposals may be considered. However opportunities are limited by the operational design of local service provider collection vehicles and Waste Services must be consulted on any proposals for exceptions, early in the process.



STORAGE CAPACITY – COMMERCIAL DEVELOPMENT	
Key Consideration	Requirement
Internal Storage Capacity	Sufficient internal capacity to allow segregation of residual waste, recyclable waste and, where appropriate, food waste
External Storage Capacity	* It is essential that consultation is undertaken with the relevant authority as to anticipated waste arisings (both volumes and types) in order to establish the appropriate level of storage and presentation capacity within the development
	*Appropriate amount of space must be available to fit the required number and type of external storage containers for commercial waste
Additional Points	*Arrangements to be made to ensure waste containers are in place on occupation of properties to enable collection service to commence
<i>Additional General Waste Management Practice Points (not planning related)</i>	**In the case of skip containers and waste compaction systems – where these are being considered, evaluation must be given to servicing, specifically infrastructure requirements for vehicle manoeuvring and serviceability by the local market. The Local Authority transport and waste services must always be consulted where the use of skip containers and waste compaction systems is being considered.

* Applies to all commercial development ** Must be complied with where applicable

5.2 Storage and Collection Points – Commercial Premises

As commercial properties differ greatly in the volumes and types of waste produced, it is essential that consultation is undertaken with the relevant authority as to anticipated waste arisings (both volumes and types) in order to establish the appropriate level of storage and presentation capacity within the development.

This will ensure the provision of safe and convenient waste collection in addition to positively promoting the logistics of the development to prospective businesses.

Where the need for an exception to the following general requirements can be justified, under LDP Policy 1 Site Requirements and Supplementary Guidance 1 Placemaking, innovative proposals may be considered. However opportunities are limited by the operational design of local service provider collection vehicles and Waste Services must be consulted on any proposals for exceptions, early in the process.



STORAGE AND COLLECTION POINTS – COMMERCIAL PREMISES	
Key Consideration	Requirement
Commercial Storage and Collection Points	**In the case of mixed use development – commercial bin store area to be separate from domestic bin store area
	*All waste containers must be housed within a designated area or structure as appropriate
	*All waste containers must be easily accessible to the user
	*All waste containers must be located in a well ventilated, shaded area away from windows
	*Storage points and collection points should be convenient for both the user and the service crews to access without presenting a risk to health and safety. This includes dropped kerbs being provided as necessary
	*Collection points should be hard-surfaced and should be of a size capable of accommodating the required number of bins so there is no overflow onto the public right of way
	*The location of collection points should be identified at planning application stage
	*All waste containers should be stored within the boundaries of the property until presentation for collection

* Applies to all commercial development ** Must be complied with where applicable

Figure 7 An Example of Poorly thought out bin storage at commercial development

Figure 8 An Example of Well Designed individual bin storage for commercial development

(to be added)



6.0 General Guidance for Waste in All Types of Development

This section addresses the issue of how to deal with waste during the construction stage of development, as well as the dealing with the reuse and recycling of construction materials on site. It also sets out guidance for communal or commercial storage compounds and highlights the relationship between collection and road design.

6.1 Construction Waste and Site Waste Management Plans

There are many benefits to effective site waste management practice during construction phase, this includes:

- Reduce waste destined for landfill
- Meet legislative requirements
- Meet client expectations
- Greater reuse/recycling of materials on site resulting in reduction in raw materials cost
- Reduced waste disposal costs

It is recommended that builders and developers use locally sourced recycled or reused material for development where possible. By taking this approach sustainable development is encouraged. For example, paths and driveways can be made from recycled aggregate or timber chips. Recycled bricks or stone could add character to a building.

Site waste management plans should be submitted with all Planning Applications for major development, defined in Scottish Planning Series Circular 5 2009: Hierarchy of Developments, and should detail the following:

- Waste expected to be produced and how materials will be recycled/reclaimed
- Steps to minimise waste and maximise the use of recyclates
- Management of waste on site and leaving the site
- Relevant evidence of waste carrier/waste transfer

Site waste management plans relating to major development will be assessed by the local Planning Authority following consultation with Waste Services.

CONSTRUCTION WASTE AND SITE MANGEMENT PLANS	
Key Consideration	Requirement
Site Waste Management Plan	**A Site Waste Management Plan, should be undertaken for all Major Development
General Site Waste Management, including Construction Waste	** General site waste management should be encouraged for Local Development, with the exception of minor or permitted development. The waste expected to be produced, how materials will be recycled/reclaimed and steps to minimise waste should be considered.
	**Options should be considered to maximise the use of reclaimed and recycled construction materials, in line with materials specifications
	**The recycling of suitable spoil, demolition materials, prunings, and surplus construction materials arising from the works on site should also be considered to avoid the need to transport materials off site
Additional General Waste Management Practice Points (not planning related)	**The segregation of different material types of waste as they are generated using different skips should be considered where possible (given the space available). As a minimum there should be skips for wood, inert and mixed materials, although a skip for metals may generate some income. Where this is not possible due to a shortage of space, licensed waste management companies are available locally who may be able to recover recyclate materials from mixed skips

** Must be complied with where applicable



Figure 9 A wall made of recycled stone

Figure 10 A Good example of on Site Waste Management a pile of topsoil on a site

(to be added)

6.2 Storage Compounds – Residential and Commercial Premises

Where waste is collected on a communal or commercial basis it is good practice to construct a storage compound to house the waste containers. Any such compounds must be fit for purpose, robustly constructed and fully functional, allowing ease of use by those resident/working at the property and those servicing it, the general principles being:

- Adequate space for function
- Use of suitable building materials
- Health and Safety
- Security
- Environmental protection

At its most basic, a waste storage compound may comprise a slatted fence surround with hardstanding, including suitable drainage (open-air compound). At the opposite end of the scale, a storage compound may comprise an enclosed structure (enclosed compound).

Where the need for an exception to the following general requirements can be justified, under LDP Policy 1 Site Requirements and Supplementary Guidance 1 Placemaking, innovative proposals may be considered. However opportunities are limited by the operational design of Council or local service provider collection vehicles and Waste Services must be consulted on any proposals for exceptions, early in the process. In all storage areas, it must be clearly demonstrated that the following requirements are complied with:



STORAGE COMPOUNDS – RESIDENTIAL AND COMMERCIAL PREMISES	
Key Consideration	Requirement
Minimum Specifications for Waste Storage Compounds	*Appropriate amount of space to fit the required external storage capacity for each domestic property, or commercial waste.
	*Sufficient clearance to allow full opening of the container lid
	*150mm clear space between and around containers
	*Minimum working headroom of at least 2m (where compound is covered)
	*Layout such that any one receptacle can be accessed without having to move any other receptacle
	*Storage areas must have adequate lighting – natural and/or artificial
	*Permanent ventilation must be provided at both top and bottom
	*Flooring must be constructed using hardstanding and impervious materials
	*Walls must be of a hard, impervious material that is capable of being washed down
	*Adequate drainage must be provided
Additional Points	**In some cases, it may be more apt to construct a number of smaller storage areas within close proximity to different blocks/retail units as opposed to one large communal bin store area to comply with distances and gradients stated previously
	**Domestic bin storage areas and commercial bin storage areas should be kept separate in all development, not contained within the same bin store area. In the case of mixed use development, separate stores should be provided for the commercial and residential aspects of the development
	**It is preferable that storage areas are covered
	*The location of bin storage areas should take into account risk from fire and the impact of smells/noise in relation to adjoining residential properties
	*Under no circumstances will the storage of any waste/waste containers be permitted on the public road or footway
<i>Additional General Waste Management Practice Points (not planning related)</i>	<i>**It is the responsibility of the occupants/caretaker/management company (or similar) to ensure that access is not restricted on collection day, for example by parked cars</i>

* Applies to all development ** Must be complied with where applicable

Figure 11 A Good Example of a Communal Bin Storage Area (To be added)



6.3 Waste Collection and Road Design

The road design and layout of development must take account of the Council's access requirements for refuse and recycling collection vehicles where applicable. Development should address the transportation requirements set out below. Development Control Guidelines provide guidance for development on local access and transportation but with regards to waste collection, information on vehicle dimensions, turning circles, etc. can be found in Appendices 3&4. The Scottish Government's Design Manual for Roads and Bridges, provides guidance for development that has a potential impact on a trunk road, it sets the standards applicable to trunk roads.

The Local Planning Authority assesses transportation issues relating to development, after consulting with Environment Services (Roads and Transport). Transport Scotland provides guidance on potential impacts on the trunk road network.

WASTE COLLECTION & ROAD DESIGN	
Key Consideration	Requirement
Clear Working Space	* Stirling Council uses a variety of vehicle types to provide their waste collection and recycling service. Clear space around all vehicle types (domestic and/or commercial vehicles) must be sufficient to allow efficient operation. (Vehicle dimensions and turning circles can be found in Appendix 3)
	* A minimum working area of 3.5m width and 4m in length should be sufficient where emptying of containers takes place
Construction	* In general terms, the foundations and surfaces of any road should be hardwearing and capable of withstanding the maximum anticipated fully loaded gross vehicle weight. (Vehicle weights can be found in Appendix 3)
	* Any covers over manholes and gully gratings (and other such infrastructure) should also be formed from materials capable of withstanding the maximum anticipated fully loaded gross vehicle weight. (Vehicle weights can be found in Appendix 3)
Tracking (Swept Path Analysis)	* A minimum street width is required for Stirling Council waste collection vehicles. Consideration should also be made with regard to tree overhang, cables, balconies, barriers and archways, etc.
	* The appropriateness for function of carriageways should be evidenced to the Planning Authority by way of a swept path analysis for all development
Routing	* Routes should permit collection vehicles to continue mainly in a forward direction and should minimise the reversing manoeuvres required in order to deliver waste collection services
	* The collection vehicles should operate in a forward gear only where possible, with adequate turning facilities large enough to accommodate the refuse collection vehicle where the vehicle is unable to drive a circuitous route
Commencement of Collection Service	* Local Authority waste collection will not commence until road surfaces have been approved for access by the Planning Authority (Roads Development Control) and access is unhindered by ongoing construction work and materials delivery. Where this is not the case and a development requires a waste collection service, provision may have to be made by the developer at their cost.

* Applies to all development

** Must be complied with where applicable



7.0 Developer Contributions

Primary Policy 5, and Supplementary Guidance 16 set the context for all developer contributions required to facilitate development.

Developer contributions will be sought towards on-site and off-site facilities for the provision, storage, collection and recycling of household waste. The types of contributions sought are set out below. On-site facilities are considered to be normal development costs but are listed as they involve a financial or 'in kind' contribution.

Circular 5 2009: Hierarchy of Developments defines Major developments, including residential, and retail. It defines major residential development as over 50 dwellings (flats and/ or houses) and on a site of 2ha or over. Retail development are defined as major if (a) The gross floor space of any building, structure or erection constructed as a result of such development is or exceeds 5,000 square metres; or (b) The area of the site is or exceeds 2 hectares.

Financial Contribution towards Receptacle Provision

This applies to all residential schemes. Contributions will be sought for the provision of wheeled bins, boxes, food waste containers for all residential development, on-site. Payment will be required once each dwelling has been sold. The number and range of containers may change as the implementation of national waste management strategy changes in the future. Future replacement and any special needs receptacles will be provided by the Council.

Contribution per dwelling towards receptacle provision = £ 56.49

Land Provision for Bring Site provision

This applies to Major residential schemes, with more than 50 dwellings and/or on a site of more than 2ha, and Major retail development. It also applies to smaller planning applications if they form part of a Major residential scheme. In order to facilitate the development of additional Bring Site facilities the developer may be required to make land available on the development site for this purpose. Guidance on the amount of land required would be provided on a case by case basis.

Financial Contribution towards Bring Site provision

This applies to Major residential schemes, with more than 50 dwellings and/or on a site of more than 2ha. It also applies to smaller planning applications if they form part of a Major residential scheme. Contributions will be sought to assist with the costs of either upgrading existing facilities off-site or providing new Bring Site facilities on-site or off-site. Payment will be required once each dwelling has been sold. The Council provides hard standing after payment.

Contribution per dwelling (where applicable) towards Bring Site = £1.80

Financial Contribution towards Household Waste Recycling Centre (HWRC) provision

This applies to Major residential schemes with more than 50 dwellings and/or on a site of more than 2ha. It also applies to smaller planning applications if they form part of a Major residential scheme. Payment will be required when each dwelling on the site has been sold. This will be used to upgrade the existing Lower Polmaise HWRC.

Contribution per dwelling towards Lower Polmaise HWRC (where applicable) = £45 per house

The costs per dwelling are at August 2011 and will be subject to change as they will be index linked.



The following table summarises the developer contributions for different types of development

Development Type	On-Site Provision of Domestic Receptacles (as specified by the Local Authority)	On-Site Land Provision for a Bring Site	On and/or Off-Site Financial Contribution to Bring Site Provision	Off-Site Financial Contribution to Lower Polmaise HWRC
Residential scheme with 1-49 dwellings and on a site of less than 2ha.				
Residential scheme with more than 50 dwellings and/or on a site of more than 2ha.				
Major retail development				

8.0 Contacts and Further Information

Further Details:

For enquiries relating to Planning or Building Standards please contact the Development Management Section and/or the Building Standards Section, in the Economy, Planning, and Regulation Service.

For enquiries relating to waste or transportation please contact the Waste Services Section or the Development Control (Transport) Section in the Environment Service.

Website: www.stirling.gov.uk

Telephone: 0845 277 7000 (24 hours a day all year)

Email: info@stirling.gov.uk

For enquiries on potential impact on the trunk road network please contact Transport Scotland

Website: www.transportscotland.gov.uk

Telephone: **0141 272 7100**

E-mail info@transportscotland.gsi.gov.uk

Further Information:

- **Waste Aware Construction**

On this website you will find information about the National Colour Coding scheme for the source segregation of recyclable materials, links to other sources of information and ways Construction & Demolition companies are able to Reduce, Reuse and Recycle their waste. A poster creator tool following the national colour coding scheme is available to assist with the labeling of material types.

<http://www.zerowastescotland.org.uk/category/audience/construction/>



- **wrap**

Contains a section on Construction Materials with information on a range of construction materials, including plasterboard, insulation and aggregates, and reuse/recycling options for each, helping your organisation to reduce waste

http://www.wrap.org.uk/construction/construction_materials/index.html

- **Sustainability in Construction**

This support package has been produced to help SMEs in construction to benefit from implementing SWMPs and to get prepared for future supply chain pressure and potential future legislation to implement a SWMP, including a SWMP template for main contractors and sub-contractors

http://www.sustainabilityinconstruction.org/index.php?option=com_content&task=view&id=756&Itemid=642

- **Site Waste Management Plans: Guidance for Construction Contractors and Clients**

This document provides guidance on Site Waste Management Plans and how best to use them to improve and manage operations at all stages of site activity.

<http://www.smartwaste.co.uk/> www.wrap.org.uk/downloads/WRAP_SWMP_Template_v2.3.2.6b88a334.10346.xls

- **Scottish Environment Protection Agency (SEPA)**

Waste Minimisation can be applied to the whole construction project chain. This site contains Waste Minimisation Tips for the Construction Sector as well as legislative requirements and good waste minimisation resources.

http://www.sepa.org.uk/waste/resource_efficiency/sector_specific_information/construction__demolition.aspx

- **Scottish Government, Circular 5/2009: Hierarchy of Developments.**

<http://www.scotland.gov.uk/Publications/2009/07/03153122/0>

- **Netregs**

Details of all the legislation and process guidance relevant to the Construction & Demolition can be obtained from the NetRegs website. This is a joint agency website containing the legislation for all four of the home nations in the UK. It covers legislation and guidance for all major industry sectors.

www.netregs.gov.uk

- **Buildings Research Establishment**

This advises on where to get locally sourced recyclable materials.

www.bre.co.uk



Appendix 1 – Extract from current Building Standards, Technical Standards, Domestic Section, Solid Waste Storage.

Standard, 3.25 – Mandatory

Every building must be designed and constructed in such a way that accommodation for solid waste storage is provided which:

- (a) permits access for storage and for the removal of its contents;
- (b) does not threaten the health of people in and around the building; and
- (c) does not contaminate any water supply, ground water or surface water.

Limitation: This standard applies only to a dwelling.

Appendix 2 – Domestic and Commercial Storage Container Dimensions.

Domestic Storage Container Dimensions

Container Type	Height (mm)	Width (mm)	Depth (mm)
120 litre bin	1062	480	555
240 litre bin	1070	580	730
55 litre recycling box	310	560	430
10 litre food waste caddy	300	230	240

Commercial Storage Container Dimensions

In addition to 120 litre and 240 litre bins, Stirling Council also provide commercial waste receptacles in the following sizes:

Container Type	Height (mm)	Width (mm)	Depth (mm)
360 litre bin	1100	480	880
660 litre bin	1320	1265	740
1100 litre bin	1380	1270	1000

Appendix 3 – Domestic and Commercial Collection Vehicle Dimensions.

Domestic Refuse Collection Vehicle Dimensions

The majority of Stirling Council streets are serviced by Hufferman side-loading vehicles for collection of their domestic waste, both mixed waste (grey bin) and cardboard/garden waste (brown bin). A typical domestic refuse collection vehicle has the following specifications:

- Hufferman Refuse Compaction Vehicle (side-loading), including press box – 3 axle
- 26 tonnes gross vehicle weight
- Length of 9.35 metres
- Width of 2.50 metres
- Operating height of 4.20 metres
- Wall to wall turning circle of 15.79 metres

Note: The location where bins are presented for collection should be situated 2.5m from any adjacent structure in order to cater for the arc of the (side mounted) lifting arm.



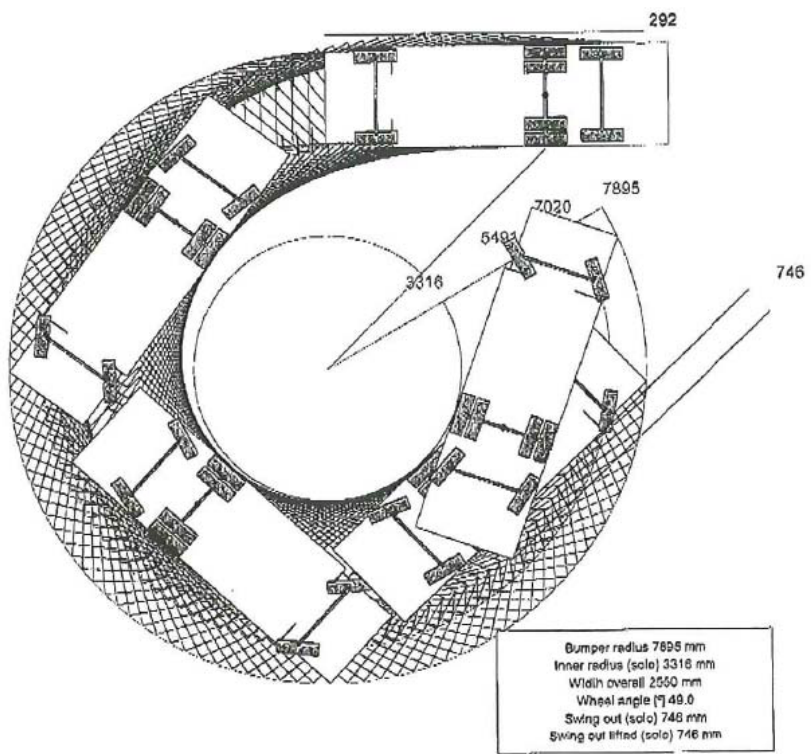
Domestic Recycling Collection Vehicle Dimensions

The majority of Stirling Council streets are serviced by Urban Articulated Tractor Units for collection of their kerbside recycling. The recycling is hand-sorted at source into material-specific stillages. A typical domestic kerbside recycling collection vehicle has the following specifications:

- Urban Articulated Tractor Unit
- 3.23 tonnes gross vehicle weight
- Length of 4.70 metres
- Width of 2.34 metres
- Height of 2.31 metres
- Wall to wall turning circle of 8.3 metres

Commercial Refuse Collection Vehicle Dimensions

Appendix 4 – Example of Vehicle Swept Path Analysis (Huffman)



Further Information

Please contact:

Economy, Planning and Regulation
Planning Services
Stirling Council
Viewforth
Stirling
FK8 2ET

Telephone: 01786 442515

E-mail: planning@stirling.gov.uk

If you need help or this information
supplied in an alternative format
please call 0845 277 700.



Stirling Council Viewforth Stirling FK8 2ET

email: info@stirling.gov.uk text: 0771 799 0001 phone: 0845 277 7000 web: www.stirling.gov.uk