

PROJECT APPRAISAL



Project Ref/Title:	SGIP 02 Millerhill Energy Recovery Centre
Workshop Date:	22nd April, 2015
Venue:	A+DS, Bakehouse Close, Edinburgh
Workshop ref/ Series	Workshop 03 Series 01
Workshop Type:	Appraisal
Issue Date:	6th May 2015
Planning Authority:	Midlothian Council
Planning Status/ Ref:	Application for Detailed Planning Permission / Ref. 15/00285/DPP
Client / Developer:	The City of Edinburgh and Midlothian Councils Zero Waste Team / FCC Environment
Lead Designer(s):	Garry Stewart Design Associates Ltd.
Project/ Category:	Infrastructure / Public Realm
Location Type:	Edge of Settlement
Previous Workshops:	Workshop 01 – 21st January 2015 Interim Meeting – 24th February 2015 Workshop 02 – 11th March 2015

1. Introduction

(This summarises project status and background information that was indicated to A+DS prior to the workshop or clarified by the parties during the workshop. In the event that any of the statements made in this introduction are considered incorrect A+DS should be advised and the report will be amended.)

- 1.1 This report forms a Project Appraisal for a detailed planning application for a proposed Recycling and Energy Recovery Centre (RERC) at Millerhill, Midlothian. The project was considered by Design Forum as a National and Strategic Project, in line with ambitions and targets for renewable energy development identified by the Scottish Government. It is also of local significance within Midlothian Council who is responsible for determining the application.
- 1.2 The proposed site is the former Millerhill Marshalling Yards, located 6km south-east of Edinburgh City Centre within Midlothian Council. The proposed development is for a facility capable of processing around 230,000 tonnes per annum of mainly, but not only, residual household waste and comprises: Mechanical Biological Treatment (MBT), Energy from Waste (EfW) (7.5 MW Combined Heat and Power Plant) facility, and an Anaerobic Digestion (AD) facility. Consent was previously granted for the AD component of the project, now under construction at the north end of the site. The areas to the west of the site has been granted outline planning permission for Shawfair, a new town development with associated masterplan including housing, office, education and industrial uses.
- 1.3 The project was discussed with a Panel over a series of forum workshops beginning with an initial site visit and workshop held in East Lothian on 21st January 2015. An interim meeting was held in Edinburgh in February with the Project Team, A+DS staff, Midlothian Council and SNH to review design progress following the initial session and towards a second Panel workshop, which was subsequently held on 11th March 2015.

2. Workshop Scope

(This section of the report sets out the intended purpose of the workshop as agreed prior to the workshop or as adjusted, by common consent, during the course of the workshop.)

- 2.1 As the final workshop in the series the session offered an opportunity to discuss the developed designs following on from the previous workshop, and to give A+DS's concluding appraisal of the project as submitted for detailed planning consent to Midlothian Council on 31st March 2015.
- 2.2 Proposed topics for discussion were as follows:
 - A Articulation of design vision/narrative
 - B Handling of connectivity with wider and adjacent communities including:
 - Relationship to Shawfair
 - Potential for heat generation and networks
 - C Handling of site layout and landscape response
 - Security lines and landscape circulation/cycling and pedestrian path network
 - Visitor centre layout, access and parking

- Handling of noise
 - Detailed development for SUDS and ornamental ponds
- D Detailed articulation solution for RERC including:
- Overall articulation of massing, form, proportion and scale
 - Relationship to surrounding and wider context and views
- E Sustainability

3. Appraisal Outcomes

(This section of the workshop note records the advice of A+DS arising from discussion at the workshop and subsequently consolidated in order to provide a clear statement of advice, pertinent to the stage in design development that the project has reached. It begins with a summary of the appraisal by A+DS including the overall rating given for design at the conclusion of the Design Forum process, considering in particular whether buildings and environs have been successfully designed to meet the needs of users and the wider community.)

3.1 Summary

3.1.1 The Project Team has engaged constructively and positively throughout the forum series. Considerable improvements have been made to the design in a number of key areas including the form and articulation of the proposed buildings, their overall setting in the landscape and the level of amenity being provided for the adjacent and wider community as part of the proposals. There are still some detailed aspects of the design that we suggest would benefit from further development, and additional information required by the Planning Authority to be submitted to support the application. In particular the detail of the landscape proposition is undefined and needs to be significantly developed. This will be critical in terms of the creating a successful setting for the RERC.

3.1.2 Based on the forum process carried out to date, and subject to further detailed work as suggested below being carried out, A+DS would find the project 'well considered and supported'.

3.2 Vision

3.2.1 The Team has developed the vision and narrative for the project effectively. The potential for the design to demonstrate the positive aspects of the facility as source of future sustainable power for the surrounding communities is being clearly articulated through the concept of creating a heavier 'plinth' at lower level developed as an object that sits in and opens up to the landscape, with a transparent box above forming a positive 'lantern' in the landscape. The RERC is of major significance both in terms of its scale and as an essential part of meeting EU, national and local legislative requirements for low carbon energy production and elimination of landfill. Going forward the Team are encouraged to embrace the positive credentials of the project - as a state of the art source of green energy for Edinburgh and the Lothians - and to work this through with conviction as part of the developing narrative for the project.

3.3 Connectivity and amenity

3.3.1 The potential for creating a positive interface between the facility and the proposed neighbouring community at Shawfair has been significantly improved through an increased level of landscape amenity space being provided for the

adjacent area and by the Team's willingness to move the security fence further into the site to open the landscape to the south and west. Following the last workshop this has been further improved by pulling the security line closer in towards the visitor parking to allow a multi-use path to be incorporated along the west and north site boundary.

3.3.2 The Panel suggested potential further scope for reducing the amount/overall cost of security fencing required along the western edge of the site by allowing edges of the Bale Storage and Visitor Centre buildings to form a secure boundary and bringing the security fencing up to abut to the facades of the buildings. The Visitor Centre and associated parking will form the main interface between the RERC and the public and therefore it will be important to create as pleasant and welcoming an environment as possible in this area. It was suggested that, with some fine-tuning, the Visitor Centre building could be modified to incorporate a secure openable partition/door that could allow views from the car park/entrance through the building to the ornamental pond and landscape beyond during the day, and which could be closed down to give the required security at night. At the moment some of the potential quality in this area is being lost by the creation of a pond around the visitor parking. The Team were encouraged to look at potential solutions for how this might be simplified and opened up to the west to better connect the car park to the landscape and form a more pleasant external environment for visitors and staff.

3.3.3 As noted at previous workshops the Team are encouraged to continue to work with local residents to encourage connectivity between sites, particularly with the proposed Shawfair development, who will need to react to the RERC proposals.

3.4 Site layout and landscape response

3.4.1 Landscape design and specification

As noted above, the general site layout and landscape design has been greatly improved over the course of the forum series to create a more usable and open landscape setting for the RERC, and associated buildings, and an improved sense of arrival into the site. We would generally expect to see considerably more detailed landscape proposals at this stage of a project however these have not yet been developed and so we are unable to comment on this aspect at this stage. The detailed design and selection of suitable plant species will be of substantial importance in terms of the overall success of the project, and for how the landscape of the site provides setting for the buildings and ties into the surrounding context. The Council advised that this information will be required to be submitted as part of the detailed planning submission.

3.4.2 The detailed planting plan and specification will be of considerable interest. Species selection, the size of plant material, ground preparation etc. will all affect the length of time for the landscape to reasonably quickly reach a stage of maturity required to match the size and scale of the buildings. In developing this in further detail it was suggested that the Team consider the targeted use of large planting and fast growing species that can grow in a hostile environment.

3.4.3 SUDS

The gradients of slopes to the SUDS ponds require detailed design consideration. The outline levels as drawn currently appear fairly steep (approx. 1 in 3 slope). This could reduce the potential visual quality of the SUDS areas and the likely

rise and fall in water levels (due to their function of surface and roof water attenuation) and could be potentially problematic, leading to requirements for a fence to be put up around them for health and safety reasons. Establishment of detailed water levels will be fundamental to making or breaking the scheme in this respect. Further sectional information showing the depth of the SUDS area will be critical in helping to assess this. Again, the Council are requiring further information to be submitted in relation to this detailed aspect as part of the application.

- 3.4.4 At the previous workshop the Panel queried whether there was potential for coordination of multiple access routes with the adjacent site to the north. The Team confirmed that, although not possible to share vehicular access, the multi-purpose path proposed along the north boundary could be shifted further north and shared with the adjacent AD facility, thus negating the need for a fence on both sides of the path and freeing up additional planting width along this edge. The Panel commented that it will be difficult for mature trees to grow in this zone and suggested the idea of creating a living/landscaped wall along the security fence between vehicle and HGV road accesses as a more viable, robust and attractive planting solution.
- 3.4.5 The Team have adjusted the layout of the perimeter HGV route in the southeast corner of the site to help reduce the constraint in this area caused by a reduction in the width of the site. The 33kv substation is to be accessed from within the site, allowing for a continuous landscape strip to be maintained from the main access road to the east.

3.5 Articulation of form, materiality and external appearance

- 3.5.1 The building designs have developed considerably over the course of the workshop series, clearly manifested as two major volumes – a plinth at lower level with a light, transparent box above. Tying back to the vision for the project, the concept of creating a subtle lantern in the landscape is being expressed explicitly through the treatment of the upper portion of the building, allowing light from within the plant to emanate out through areas of a translucent skin. This transparency is an important part of the proposals and the Team are encouraged to retain the clarity of the lantern concept throughout the delivery of the project.
- 3.5.2 Following the last workshop the cladding design on the upper portion of the west elevation has been revised from being opaque to transparent to allow the clarity of the lantern concept to be maintained around the perimeter of the building. However the Team advised that this remained under review relative to acoustic performance criteria and noise levels required for the housing currently proposed within the Shawfair development on the site's western boundary. Suggestions were made for addressing this issue. The Council advised that there may be scope to condition the design of the south and west elevations to allow those facades to be simplified should the nature of use change on the adjacent site. Alternatively, should the housing remain as proposed, it was suggested that a similar lantern effect might be achieved by lighting a void between a transparent outer skin and solid inner panel behind. There may also be opportunities for relocating housing further away from the RERC, by relocating any required open space within the housing site into the northwest corner.

3.5.3 Photomontages/visualisations

The Panel queried the photomontages that have been produced in support of the application and was of the view that these could be improved with better photography. The Team were encouraged to follow generic aspects of SNH guidance (Visual representation of Windfarms) in terms of correct representation for required landscape and visual impact analysis, viewing angles and print size. Additional photomontage visualisations were recommended to illustrate how the RERC would appear at night (including security lighting around the buildings) and requested by the Council to be submitted in support of the application. Such a study could help support the lantern concept and calibrate ambient lighting levels around the building to tune the proposals as a piece of the landscape. A graduation of views was also requested to help demonstrate the effects of changing light, and foliage, through different seasons, to show the different transparent and reflective qualities of the building, and to support the proposed colour of the plinth. Key views suggested included the gateway view of the building approaching Edinburgh along the A1, views from adjacent villages, such as Old Craighall, and key views from East Lothian.

- 3.5.4 As noted in the previous workshop the Team and Council are encouraged to explore opportunities for involving artists to grow and develop the lighting concept further over time once the surrounding area is more developed, for example in expressing the amount of energy used in buildings and housing in the community through creative use of light/colour.

3.6 Sustainability

- 3.6.1 The Panel continue to encourage the potential for the project to inform broader energy and landscape networks as part of a strategic joined up approach between the relevant local authorities, and in establishing a wider vision for the area. There is a requirement to make heat from the RERC available but it has yet to be established where and how the heat is going to benefit the community. This is a major aspect of the project, and the development of short and long terms strategies for creating a heat network that will deliver heat to the local community are critical so that this opportunity is not lost.
- 3.6.2 The Project Team advised that a BREEAM rating of 'Very Good' is being targeted. The Team were encouraged to consider the use of sustainable materials that are recycled and recyclable as part of the detailed design development of the RERC, to let the narrative and vision for the project to continue to be articulated through the tender process, its delivery on site and into its ultimate use.