LEEDS BECKETT UNIVERSITY SUSTAINABLE TECHNOLOGIES AND LANDSCAPE RESOURCE CENTRE DESIGN BRIEF & CALL FOR ENTRIES



This is an ideas competition for the Sustainable Technologies and Landscape Resource Centre (STaLRC) at Leeds Beckett University, open to all alumni of Leeds School of Architecture and Landscape Architecture.

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Project Office is a design and research collaboration of staff and students. It is an architecture consultancy concerned with ethical, social and resilient architecture and design. We work with likeminded communities, organisations and individuals.

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Craig Stott | Simon Warren | Graham Davey

"What is the use of a building if you don't have a decent planet to put it on"

Tights

@ savers

Picture Credit: Landscape Architec

Henry David Thoreau



This design guide is the result of collaboration between Leeds Beckett architecture students, Project Office, The Landscape Resource Centre (LRC) and Leeds Sustainability Institute (LSi).

Due to the University's commitment to become one of the most sustainable in the UK, it has pledged to update facilities at the ground breaking Landscape Resource Centre based at Leeds Beckett's Headingley Campus. In addition to this the success of Leeds Sustainability Institute has led to a need for a materials testing laboratory for the advancement of new technologies.

Due to the unique nature of this project, the University has approached Project Office in order to engage with its Alumni to find a bespoke design solution that mirrors the ambition of this programme.

This document is the design guide to be read in conjunction with the competition rules. Competitors are invited to provide the client with architectural and landscape design concepts.

01// Executive Summary

"Architecture isn't just about creating new buildings, sometimes its about retuning what's already there."

John Pawson

<u>02 //Introduction</u>

Competition Aim

The existing LRC classroom is to be demolished and replaced with a new building in collaboration with the LSi. This project will result in a new Sustainable Technology and Landscape Resource Centre (STaLRC). The building will accommodate researchers from LSi, and provide improved teaching space for the Landscape Architecture course.

This Project is to be built, starting on site in early 2017 and will be completed for the start of teaching in the 2017/18 academic year. Project Office are the architects and will lead the design team. This ideas competition, for the concept design of a building and immediate landscape, is open to previous graduates (alumni) from Leeds Beckett University's Architecture and Landscape courses. The client encourages proposals from teams consisting of both architecture and landscape disciplines, although this is not essential.

Budget And Restraints

The client wishes to maintain the natural charm of the existing site and minimise the impact on the wider landscape.

As the completed building will be used by the LSi to research sustainable technologies and the landscape courses which have an emphasis on sustainable ecologies, the design should reflect this position and be as ecologically conscious as possible.

The total budget for the project is £750,000 including VAT, design team fees, and statutory expenses. The construction budget therefore is approximately £500,000.

Due to the role the STaLRC will play within Leeds Beckett, the wider city region and internationally, designers are expected to be expansive in their concepts and produce a truly inspirational addition to the university campus and repertoire.

This competition is a fantastic opportunity for Leeds Beckett Alumni to enhance and develop their creative portfolio by working collaboratively with Project Office to deliver this unparalleled project.

This design guide outlines the brief for the STaLRC. Covering contextual factors and background information to help the designers in their thinking. All stakeholders have been consulted in the production of this document such that their requirements and needs are clearly defined in this document.



<u>03 // The Landscape Resource Centre (LRC)</u>

Nestled in the woods in the picturesque Headingley Campus the existing Landscape Resource Centre (LRC) is the only UK based teaching and research space that accommodates Landscape Architecture students. With bio wildlife habitats, mature and freshly created experimental gardens students can gain valuable experience working with plants, ecology, environmental art and construction.

It is located at the far end of the campus and currently accessed by an unmade road known as Queens Walk. The track terminates at Victoria Arch in what is now dense woodland.

The existing LRC is hidden away in the woodland. People lucky enough to stumble across the beautiful serenity of the gardens find themselves in one of Leeds' most charming and enigmatic spaces.

The well-loved existing classroom, built as a temporary structure over 40 years ago, is to be demolished and replaced with the STaLRC.

"I'm not an environmentalist, I'm a cultural repairman. It's all about efficient and restorative use of resources to make the world secure, prosperous and life-sustaining."

A SCORE

Amory Lovins

04 // The Client: Leeds Sustainability Institute(LSi)

The LSi, based at Leeds Beckett University, conducts research focused upon energy consumption and thermal performance of buildings, specialising in:

- The development of building pathology and practical research to understand new, existing and retrofit buildings, on a domestic and commercial scale.
- Understanding the physics and operation of buildings and their designs, testing construction models and evaluating there performance in realworld situations.

The LSi's consultancy and business services are making a significant impact and through established networks provide a knowledge base that has clear benefit to its partners. Areas of research expertise include: -

- Building and the Environment
- Business Practice
- Design and Ecological Engineering
- Energy
- Information and Communication Technologies
- Infrastructure
- People and Places

LSi's work with communities is having a direct impact on the policy and regulation that will pave the way to a low carbon built environment. The practices developed are being adopted across Europe and impacting on the way we test and monitor buildings to ensure performance. Feedback from the research has resulted in new industry standards, taking a step closer to the zero carbon and low impact solution.

To this end the LSi require a facility to test a range of building materials to understand how they perform in differing climatic situations. The STaLRC building will provide this laboratory space will associated office.



05 // Landscape Architecture

Landscape Architecture is a creative course combining art, science, design and the environment in order to improve the quality of people's lives. The course, which is accredited by the Landscape Institute, aims to develop creativity through exciting design-based projects taught by an academic team with a wide range of professional expertise. Part of this requires exploring landscapes to learn how to design in response to natural processes, historical approaches, planning and urban design, and the human response to these environments.

The Landscape resource centre hosts experimental gardens, a wide variety of tree and plant species and a construction area for show gardens to be produced. It is also known that there are fox families and associated wildlife.

Ihe existing LRC has become an integral part of the student learning environment at this University.





06 // Site Analysis

Location of The Existing LRC

Churchwood Ave. Entrance

St. Chads Drive Entrance





Greenhouses/Poly tunnels

5

Storage Shed

Boundary Fence

Access Road



Ground Maintenance Sheds

22121

Existing LRC Classroom (to be demolished)









30.-





















Site Arrangement



Existing LRC Classroom

The LRC existing classroom will be demolished





1. North Elevation



4. West Elevation









2. East Elevation



A

Ν

3. East Elevation

Key Trees on Site

The Existing LRC is used as an experimental growing space and is home to many tree species.

Competitors are to take note of the locations of key plant infrastructure, noted on this page, so that they are retained in the new proposal.



Portuguese Laurel

Rhododendron





Silver Birches







Yew Hedges

Zoning and Suggested Location

The Existing LRC is broadly divided by its main access routes and structural evergreens into 6 loose character areas.

- A: Buildings and Works
- B: Wildlife and Native Planting
- C: Formal Terraces
- D: Specialist Gardens
- E: Open Meadow
- F: Boardwalk and Woodland

Many of the principal views within the LRC also follow these paths.

It is possible to see in and out of the LRC from all points around the perimeter fencing.







C

Entrance to site

Proposed Location for STaLRC

In order to minimise the impact on the existing landscape, and for ease of access, it is suggested that the STaLRC be placed within the area indicated.

However if a strong rationale is presented, the new building may be placed elsewhere.



1: View to Ground Maintenance Sheds (outside of project demise)







07// Client Requirements

The overall site is to retain its function as a Landscape Architecture teaching space and environment whilst providing a new home for the LSi's research function. The new building must complement its beautiful setting, but also enhances it, enabling the landscape architecture course to be taught in an immersive way whilst providing the LSi with functional and inspiring research space:

Physical Requirements:

- 70m² Landscape Architecture Teaching Space flexible classroom with direct access to the landscape
- 65m² LSi Laboratory Space to include one Environmental Chamber and external door providing 2.5m x 2.5m clear opening • -
- 50m² Shared Office for 4 people to include ancillary functions Shared Kitchenette, Toilets and shower •
- 25m² Storage space can be provided through refurbishing the existing Storage Shed on site

Site Access: At present the site is accessed by a small uneven road. Access to the site can be reconsidered if there is a compelling reason to do so as part of a design strategy.

Siting: The location of the current LRC classroom is shown on the maps in this document. The building will be demolished and recycled outside of the scope of the competition. The STaLRC is to be sited in the area previously highlighted, unless a strong rationale is proposed for it to be located elsewhere.

Energy Usage: The building needs to be as low energy as possible within the budget. Clearly expressed ideas for minimising both cost and energy consumption during construction and in-use will be favourably considered.

Materiality: Materials need to have a low impact on the environment, have longevity and be low maintenance.

Grounds Maintenance Sheds: The site sits next to the grounds maintenance department, a neighbourly relationship needs to be considered in your proposal. However it is not part of the site nor the project.

Usage: The intended use for the building is as a teaching space, office and laboratory. However, the client intends that this building will become a flagship for the University. Beyond the stated aims of the brief, competitors are asked to consider how their project can deliver income through activities outside of the University programme. An example might be as a venue for 'away days' or school groups. In essence some flexibility of use is desired through the quality of the architecture and landscape design.

Storage: The existing shed will provide good storage and therefore this building will be retained, that is unless your concept demands relocation of this storage area.

External Space: The STaLRC provides a teaching space relating to the Landscape in which it sits, how does your concept address this? Consider the weather...

Environmental Chamber: The Lab space must house an Environmental Chamber which is 7.6m long, 2.7m wide, 3m high and requires 1.2m clear access all around (including above but not underneath)

Name: STaLRC is a 'work in progress'. Each entry should provide a name for the competition that might be adopted as the name for the building in due course.







Year 2 BA Students Preparing the Design Guide on their work placement, January 2016

08// Credits

With Thanks to;

Leeds Beckett University Professor Mohammad Dastbaz Leeds Sustainability Institute: Professor Chris Gorse Leeds Beckett Enterprise: Janet Mulcrone Leeds Beckett Estates Team Adrian Appleyard Leeds Beckett Landscape Architecture: Trudi Entwistle Steve Heywood Jo Jolley Emma Oldroyd Work Placement Students: Jamil Dossa Adam Maqsood Razan Ismail Alex Spencer -Will Ton Project Office: Simon Warren Craig Stott Graham Davey

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