

BACHELOR OF SCIENCE (HONOURS) IN ARCHITECTURE

ARCHITECTURE DESIGN STUDIO IV

(ARC60206)

PROJECT 2

AUGUST 2017



Image: Future Recycling Center, by 3XN

<http://gxn.3xn.com/#/projects/by-year/192-future-recycling-centre>



SCHOOL OF ARCHITECTURE, BUILDING & DESIGN

Centre for Modern Architecture Studies in Southeast Asia

Bachelor of Science (Honours) in Architecture

ARCHITECTURE DESIGN STUDIO IV

(ARC60206)

Prerequisite: Architecture Design Studio III

Project 2: COMMUNITY RECYCLING, REPURPOSING & RECLAIMING CENTER

80% of final marks (individual)

Submission dates:

Component A: Site Analysis Presentation (10%) : Week 5 (28 September 2017)

Interim Presentation : Week 8 (26 October 2017)

Component B: Design Proposal Presentation (20%): Week 11 (13 & 16 November 2017)

Final Submission : Week 14 (6 December 2017)

Component C: Final Presentation (50%) : Week 14 (7 December 2017)

Introduction

The project calls for a design of a COMMUNITY RECYCLING, REPURPOSING AND RECLAIMING CENTER in a suburban park area with some complexity that includes the complexity of site topography and vegetation and existing activities. Students are required to provide full design proposal incorporating precedent study and site analysis at appropriate level of presentation. It explores design solution that responds to the program, context of the site and conditions for human and environment sustainability. Students explore design solutions that reduce environmental impact utilizing clustered spatial typology and passive energy. The design should contribute to and merge harmoniously with nature and the site, and provide the best of experiences for the users.

Objectives of Project

The objectives of this project are as follow:

1. To develop awareness of environmental sustainability in architectural design
2. To develop the student's ability to meet the imperative and inter-related environmental and social needs, as well as make poetry with the buildings
3. To emphasize on space planning of clusters of buildings

Learning Outcomes of this Project

1. Design and create architectural spaces with consideration of environmental poetics in relation to the basic natural context and existing built context which impact on users' experiences
2. Combine the environmental needs, the site (site topography, history and socio-cultural events), and the users' experiences within simple building design in the open landscape/suburban context.
3. Produce drawings (both 2D and 3D), modelling and verbal presentation to communicate and visualize architectural design and ideas based on clustered spatial typology.

Site Location: Taman Desa

The proposed Recycling, Repurposing and Reclaiming Center will be located within a small neighborhood park in the Taman Desa, a mature neighborhood which built in the 1970s. The site sits within the vicinity of commercial developments, residential areas and the local High School; all the generic components of a typical Klang Valley suburb. A small recycling center operated by the Tzu Chi Foundation and a small playground set are the only facilities in the park.

How can the proposed Center rejuvenate and reanimate the park and its surroundings through the acts of Recycling, Repurposing and Reclaiming? Can building and park be woven into one? The proposed center would not only have to address the physical conditions of the site (topography, vegetation etc.), but also contribute to existing activities and enhance the surrounding context.

Image source:
Google Earth

Program: Recycling + Repurposing + Reclaiming



Recycling centers are normally nothing more than sheds with colorful containers marked 'GLASS', 'PAPER' and 'PLASTIC'. There is usually nothing architecturally interesting about recycling centers and the structures that contain them do not promote or even communicate the act of recycling. Recycling centers are also not normally seen as an important part of the community, being simply places where we drop off items that are considered waste and no longer belong in our homes.

This brief propose a COMMUNITY RECYCLING, REPURPOSING AND RECLAIMING CENTER. The main difference from the typical recycling center is the addition of the acts of repurposing and reclaiming into the program of the center. In addition to the typical function of recycling, the act of repurposing and reclaiming used materials and pre-loved items implies an active communal usage of the center, beyond acting as a point of collection and storage towards a form of education and informal activism. Programmatically and spatially, the three programmatic components could be understood as such:

Recycling:

The collection of recyclable waste materials as well as unwanted items. This implies the need for spaces of collection, sorting out, storage and recollection of the items delivered to the center.

Repurposing:

The act of converting used items into a different function, which could be undertaken communally. Spatially this implies workshops for repurposing and storage spaces for delivered and repurposed items.

Reclaiming:

The act of taking ownership of repurposed or preloved items which could occur in the form of events (flea markets, barter trade day etc.) implying spaces for the displaying and trading of these items.

In addition to the above components, the Center should incorporate other programs and spaces relating to the promotion and advocacy of environmental awareness and also enhance and contribute to the activities existing on site.

The main objectives of this project will be:

- To investigate and propose ways in which architecture can address and promote the importance of recycling centers as an integral part of the community not only in terms of

waste management but in educating the community on our responsibilities to the environment.

- To integrate the proposal with the natural environment and activities on site, thereby promoting a holistic understanding of sustainability.

Image sources: <http://1.bp.blogspot.com/-Li4kxN9VWws/Tm1JyY1wJ7I/AAAAAAAAABOc/owSqQtik-yU/s1600/Pusat%2BKitar%2BSemula%2BSWM%2BDi%2BJusco%252C%2BSeremban2.JPG>
http://www.vozdeguanacaste.com/sites/default/files/styles/carousel_display_main_image/public/3771.jpg?itok=InragPFd

Project Spatial Requirements:

Usage	:	COMMUNITY RECYCLING, REPURPOSING AND RECLAIMING CENTER
Building Siting	:	Setbacks as per authority requirements (where applicable)
Building Height	:	2 - 3 Storeys.
Approximate Floor Area	:	Approximately 8,000 sqft
Facilities	:	To provide a facility to accommodate: <ul style="list-style-type: none">- For recycling<ul style="list-style-type: none">• Delivery / Collection areas- For repurposing<ul style="list-style-type: none">• Workshop spaces (for community workshops)- For reclaiming<ul style="list-style-type: none">• Gallery / Display area• Open / sheltered spaces for events (flea markets, barter trade etc.)- Storage spaces for the above components.- Main lobby / entrance- Classrooms / amphitheatre (indoor/outdoor). For talks, discussions, lectures etc.- Resource Center- Re:Play – Outdoor Playscape (Incorporated from Project 1)- Administrative spaces: management office, meeting rooms etc.- Supporting facilities area (toilets etc.)
Vehicle	:	Services Access and Parking
Occupants	:	Consideration for disabled (wheelchair) access
Public Access	:	Consideration to the Public/Private accesses and separation
Pedestrian Circulation	:	Consideration of the pedestrian circulation around the site

Other service facilities to be provided as per required. The above spatial requirements should be taken as recommendations and may be modified as per the design approach.

Final Submission requirements

Each student is to submit the following:

1. Diagrams clearly illustrating translation of conceptual ideas into spatial design
2. Precedent Studies Diagrams
3. Site Plan – to show proposed building roof plan together with adjacent buildings and landscape (Scale no smaller than 1:500)
4. Plans, Sections, Elevation 1:100 (indicating strong relationship with the physical environment/site)
5. 4 key perspectives – interior & exterior - demonstrating poetics generated by relationship between environment and architectural space (To demonstrate actual use of space)
6. An exploded axonometric drawing demonstrating the relationship between building components in a cluster arrangement.
7. A beautifully crafted final model (1:100) indicating spatiality, materiality and relationship with the context.
8. Evidence of design process and thoughts through a series of models vignettes (Scale 1:200)

Format: Final drawings presentation is to be composed on 6 – 8 A1 panels – landscape format (To print separately)

Assessment Criteria

1. Conceptual thinking (ability to generate ideas based on environmental poetics)
2. Programmatic response (fulfilling criteria of the required programme; design respond to user needs)
3. Poetic response (consideration of the qualities of the environment to inform the user experiences of the architecture)
4. Contextual response (consideration of environmental and socio needs which informed architectural spaces and form)
5. Level of craft and quality of model and drawings
6. Verbal presentation to communicate and visualize architectural design and ideas

SCHEDULE

Date/Week	Lecture/Presentation	Discussion/ Tutorial	Self-directed Study
	Hours	Hours	Hours
18 September Monday	PROJECT 2 BRIEFING: Community Recycling, Repurposing and Reclaiming Center Lecture 2: Site Analysis (Alvin)	Tutorial - Site Visit Preparation	Research on Program
21 September Thursday	Project 2 Site Visit	Data Collection	Data Collection
Week 4	2	8	8
25 September Monday	-	Site Analysis	Site Analysis
28 September Thursday	Project 2 Component A: Site Analysis Presentation (10%)	Presentation	Precedent Study
Week 5	2	8	8
2 October Monday	Lecture 3: Concept And Programming (Kim) Lecture 4: Precedent Study (Shahira)	Tutorial - Conceptual Development from Response to Site and Program / Discussion on Precedents	Precedent Study / Conceptual Development (Drawings + Models)
5 October Thursday	-	Tutorial - Conceptual Development from Response to Site and Program / Discussion on Precedents	Precedent Study / Conceptual Development (Drawings + Models)
Week 6	2	8	8
9 October	ACTIVITY WEEK		Conceptual Development
12 October Thursday	ACTIVITY WEEK		Conceptual Development
Week 7	2	8	8

16 October to 20 October	(Non-contact Week) Mid-Semester Break	16 hours of self-directed study	Conceptual Development (Drawings + Models)
23 October Monday	Lecture 5: Cluster Spatial Typology (Alina) Guest Lecture 2 (TBC)	Tutorial - Conceptual Development from Response to Site and Program	Conceptual Development (Drawings + Models)
26 October Thursday	Interim Presentation – Design Proposal	Presentation – Finalization of Concept	Conceptual Development (Drawings + Models)
Week 8	2	8	8
30 October Monday	Lecture 6: Contextual Architecture (Raihana)	Tutorial – cluster planning, environment consideration	Design Development (Drawings + Models)
2 November Thursday	-	Design development: building science design consideration	Design Development (Drawings + Models)
Week 9	2	8	8
6 November Monday	Lecture 7: Form vs Function (Ari Methi)	Design Development Tutorial	Design Development (Drawings + Models)
9 November Thursday	-	Progress Check Design development: building science design consideration	Design Development (Drawings + Models)
Week 10	2	8	8
13 November Monday	Project 2 Component B: Design Proposal Presentation (20%) (Group A)	Presentation: Finalization of design scheme	Design Development (Drawings + Models)
16 November Thursday	Project 2 Component B: Design Proposal Presentation (20%) (Group B)	Presentation: Finalization of design scheme	Design Development (Drawings + Models)
Week 11	2	8	8

20 November Monday	Lecture 9 : 'WOW' Factor (Izwan)	Design Development Tutorial	Design Development (Drawings + Models)
23 November Thursday	-	Design Development Tutorial	Design Development (Drawings + Models)
Week 12	2	8	8
27 November Monday	Presentation Workshop	Final Presentation Tutorial	Final Production of Drawings & Model
30 November Thursday	-	Final Presentation Tutorial	Final Production of Drawings & Model
Week 13	2	8	8
6 December Wednesday (TBC)	Submission of Final Presentation	-	-
7 December Thursday (TBC)	Project 2 Component C: Final Presentation (50%)	-	-
Week 14		4	8
	Submission of e-portfolio		
Week 15		-	-
	Exam Week		
Week 16		-	-

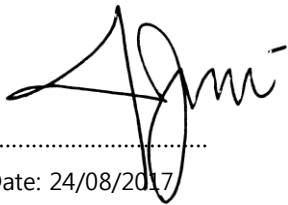
References:

1. Assemble Studio:
<http://assemblestudio.co.uk/>
2. ROTOR:
<http://rotordb.org/>
3. Rural Studio:
<http://www.ruralstudio.org/>
4. Playground Design on Dezeen:
<https://www.dezeen.com/tag/playgrounds/>

5. Nosara Recycling Center:
http://www.vozdeguanacaste.com/i/archives/12_11/12_11_regional_06.html
6. Future Recycling Center:
<http://gxn.3xn.com/#/projects/by-year/192-future-recycling-centre>
7. Smestad Recycling Center:
<http://www.archdaily.com/785900/smestad-recycling-centre-longva-arkitekter>
8. Copenhagen Recycling Station:
<http://www.archdaily.com/601048/big-designs-danish-recycling-center-as-neighborhood-asset>
9. Local Disposal Center:
<http://afasiaarchzine.com/2015/07/marte-marte-2/>
10. Cyberjaya Recycling Center:
http://www.atsa.com.my/green_buildings_recycle_centre.html

Prepared by:

Ahmad Nazmi Anuar



.....
Date: 24/08/2017

Module Coordinator:

Email: AhmadNazmi.MohamedAnuar@taylor.edu.my (Design Studies)

Checked by:

Prince Favis Isip



.....
Date: 25/08/2017

Stream Coordinator

Approved by:

Mohd Adib Ramli



.....
Date: 28/08/2017

Programme Director

Remarks:

1. The project brief is to be distributed to the students in the first week of the semester.
2. Any changes to the project brief shall be communicated (in writing) to the Programme Director and the approved revised version must be communicated to the students

PROJECT 2 FINAL SUBMISSION (50% of final marks)

ASSESSMENT RUBRIC

CRITERIA	Design translation (able to generate concept and translate the concept into building design)	Programmatic response (fulfilling criteria of the required programme; design respond to user needs)	Poetic response (consideration of the qualities of the environment to inform the user experiences of the architecture)	Contextual response (consideration of environmental and socio needs which informed architectural spaces and form)	Level of craft and quality of model and drawings
GRADE & MARKS					
A (75 – 100%) – Evidence of outstanding demonstration	7.5 - 10	7.5 - 10	7.5 - 10	7.5 - 10	7.5 - 10
B (60 – 74 %) – Evidence of good demonstration	6 – 7.4	6 – 7.4	6 – 7.4	6 – 7.4	6 – 7.4
C (50 – 59%) – Evidence of some demonstration	5 – 5.9	5 – 5.9	5 – 5.9	5 – 5.9	5 – 5.9
D (40 – 49%) - Evidence of nearly demonstration but not quite acceptable	4 – 4.9	4 – 4.9	4 – 4.9	4 – 4.9	4 – 4.9
F (0 – 39%) – Insufficient evidence	0 – 3.9	0 – 3.9	0 – 3.9	0 – 3.9	0 – 3.9