

Studio Staff

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ARCHITECTURE

SEMESTER TWO

BAR 314: Architectural Design 02 | 04
ZOGHORE RESOURCE CENTRE - VOI, TAITA-TAVETA COUNTY

INTRODUCTION

The National Vision 2030 laid down strategies of achieving National goals and objectives for socio cultural and Economic development for the Country, Kenya. Voi Town, chosen alongside other towns to be a tourist centre, as an inland container deport, hub for mineral business, to house SGR's third largest station which will offer connectivity to northern Tanzania and great lakes region. These and many other local programs clearly setting up Voi town and the county in general for socio-economic take off.

In its plans to fit in the National vision 2030, The County Government of Taita Taveta, through its various ministries has embarked on vigorous programs to develop human resource necessary to meet projected demands.

Currently, The County has very few primary and secondary schools. Taita Taveta University College, a constituent college of JKUAT and Coast Institute of Technology are the only tertiary institutions supported by 6 Village polytechnics. Plans are underway to increase the number of comprehensive schools to 120, two tertiary institutions and four resource centers spread throughout the County.

Similar efforts are in place to ensure an integrated approach to human resource development in other ministries e.g. Health services, Social Services etc.

THE TASK

The County Government of Taita Taveta (CGTT) in association with development partners USAID has approached you to design Zoghore Resource Centre in Voi Sub County. The Centre should in all its aspects be a symbol of the Taita Taveta People. It should be inspirational, a source of employment and business, the pride of the citizenry.

It will be world class Centre, *in tandem* with similar developments around the globe. The Centre will have the following spaces:

- Library (mid-level) and information centre
- Auditorium for 800 pax
- 4 meeting rooms
- Amphi-theatre for 400 pax
- Cafeteria & Kitchen
- 4 class rooms
- Administration offices & 3 – Shops (Curio shop, bookshop, souvenir shop etc)
- Maintenance department
- Ancillary facilities, landscaped spaces etc.
- Open spaces: fields, amphitheatre, courts,

The Centre will compliment all educational facilities around the County, through providing quality and affordable support resources.

In search for this dream Centre, the developers are keen to maintain The County's identity; a sense of community and belonging, environmentally sound and heavily reliant on local technology & materials and labor.

Upon its completion, the Centre is envisaged to exemplify good design, demonstrate the value that thoughtful and sustainable architecture can have for the education and mentoring of children, youth and generally the well being of a community.

The CGTT & USAID further wishes that, this being a public private partnership owned facility; the facilities should be adequate and available, from time to time, to host activities of the CGTT as an alternative to the CGTT Headquarters.

THE OBJECTIVES

This project is a buildup of previous projects, intending to employ lessons gathered thereof; of site analysis, form making, space making etc. However, the specific objectives are designing in a complex socio – economic context, exploring opportunities, challenges and possibly obstacles presented there in. These include:

1. To explore 'critical regionalism' as an Architectural expression.
2. To introduce design of public spaces, relevance, accessibility, utility among others.
3. Sustainability in Architecture (Environmentally & Culturally) i.e. incorporate green technology, local building technology, sensitivity to cultural aspects of space design and disposition etc.
4. To explore
 - Space in buildings & between buildings.
 - Phenomenology and Meaningful architecture
 - Landscape design (*utilitarian, ornamental or both*)

THE PROCESS

Part of your immediate task is to develop a deed plan for the centre (from Google maps) and a detailed brief for approval in the format given in appendix I

This project will be done in two parts:

- Part Ia (2 weeks), in groups (*to be decided in studio*): Site Analysis, Case studies (2- local i.e. East African region & 2- International cases, especially those meaningful to our socio cultural context, you will find some useful information on AKAAs website), Functional analysis.
- Part Ib (1 ½ weeks), Conceptualization and master plan
- Part II (3 weeks), individually you will prepare preliminary designs/ scheme proposals and sector plans i.e. the Centre complete with its ancillary facilities.
- Part III (3 weeks), Prepare working drawings for a section of the centre.
- Part IV (1 ½ weeks), Project Report esp. compilation

BACKGROUND RESEARCH; ANALYSIS OF CASES, ACTIVITIES & SITE/ NEIGHBORHOOD

You are required to carry out relevant local case studies of similar developments. This will help in concretizing clients brief and formulating design concepts. For each case study that you undertake, a clear demonstration of the significant lessons and feature drawn to be applied in your proposal.

CONCEPT DEVELOPMENT

Concept formulation and development is about developing an idea(s). The key mission is to create quality spaces that are meaningful, based on the delicate interplay between several factors of: function, aesthetics, and clients (the employer & the user-public) expectations. Concept development requires one to explore volumes and area, functional inter-relationships of various parts of the project, organizational principles, movement through space; both horizontal and vertical and the visuals of space through scale and proportion.

For this project, it is expected; you show specific sensitivity to site orientation, the existing activities on and around the site, its peri-urban setting, pedestrian and vehicular circulation, environmental factors and existing architectural character and heritage of the site. Your design concept will follow the stages given below:

- Detailed brief development
- Activity studies & analysis
- Functional relationships and analysis

Outputs for this stage include;

- Sketch models
- Thumb nail perspectives studies of interior/ exterior space character
- Adjacency/ bubble diagrams
- Massing/ block diagrams illustrating spatial relationships of various functions.

DESIGN DEVELOPMENT

It involves synthesis of innumerable factors, using work produced previously in conceptual phase to develop it to greater detail to quantifiable aspects of the project. For example physical extents, features of spaces such as vaulted/ angled ceilings, window type and location, doorways connecting interior spaces shown.

In this stage through your design decision, you will demonstrate an understanding of how volume, area, material etc of a building are assembled. This task requires a mastery of building and construction technology, structural systems among others.

Outputs for this stage include;

- Floor plans, sections and elevations all annotated with general partition types, fittings, furniture and finishes
- Visual representation of the spaces through models
- Axonometric projections and other artistic impression methods
- Sketches of construction details.

PRESENTATION

Part of the process is selecting appropriate presentation media/tools that can most succinctly describe the proposed building concepts. Your final work is expected to contain a story line with important concepts given more prominence.

- Background information: Site analysis, climatic analysis, case studies, activity analysis, concepts & master plan.
- Location plans 1 : 500
- Site plan 1 : 200
- Ground floor plans 1 : 100
- Upper floor(s) plans 1 : 100
- Roof plans 1 : 100
- Several sections through the critical spaces 1 : 100
- 2 no. Sections 1 : 100 one across the Assembly hall & Administration block
- 2 no. Part Sections 1 : 50/ 1 : 20 showing the staircase, foundations and roof
- 4 no. Elevations 1 : 100
- 3D CAD models showing both interiors and exterior
- 2 no. Physical final model (one block 1: 500 model and 1: 200) and a lot more of Marquette

REFERENCES

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BAR 314: Architectural Design 05 Part I
 ZOGHORE RESOURCE CENTRE - VOI, TAITA-TAVETA COUNTY

PROJECT 05 Part I_SCHEDULE

WK	Date	Activity	Remarks
I	20.01.2015 MONDAY	INTRODUCTION Program introduction	3 RD YEAR STUDIO, with studio staff.
	21.01.2015 TUESDAY	Self directed studio session CASE STUDIES	All students 3 RD YEAR STUDIO, with studio staff.
	23.01.2015 THURSDAY	Activity studies, case studies, accommodation schedule and functional relationship diagrams	
	24.01.2015 FRIDAY	Self directed studio session	All students
II TUESDAY JAN 27, 2015 – SATURDAY JAN 31, 2015: SITE VISIT – VOI, TAITA-TAVETA COUNTY			
III	02.02.2015 MONDAY	Group constitution: Sharing the Tasks Deed plan presentation (Google maps) General Brief formulation	Yr. Master briefing on the process: Case studies (2 – local, 2 – International) Site Analysis Analysis of Functions Master planning concepts
	03.02.2015 TUESDAY	Group discussions	Plan of Voi Town Existing school plan layout
	05.02.2015 THURSDAY	Group discussions Master plan ideas, zoning logic, land use ideas.	Group Brainstorm session Existing school plan layout
	06.02.2015 FRIDAY	Group discussions Master plan ideas, zoning logic, land use ideas.	Group Brainstorm session Existing school plan layout
IV	09.02.2015 MONDAY	Group Crit Case studies Site Analysis Analysis of Functions Master planning concepts	All groups 3 RD YEAR STUDIO, with studio staff.
	10.02.2015 TUESDAY	- Ditto- <u>Stage Crit: Pin up WIP - Group work</u>	All groups 3 RD YEAR STUDIO, with studio staff.
	12.02.2015 THURSDAY	Case studies, Site Analysis Analysis of Functions Master planning concepts	All groups 3 RD YEAR STUDIO, with studio staff.
	13.02.2015 FRIDAY	Conceptualization/ Preliminary Design Disposition of functions, scheme designs: plans, sections, elevations, models (CAD and Physical models)	All students 3 RD YEAR STUDIO, with studio staff.
V	16.02.2015 MONDAY	PRELIMINARY DESIGN Disposition of functions, scheme designs: plans, sections, elevations, models (CAD and Physical models)	Selected students to present (based class list) It is assumed students work 24/7

	17.02.2015 TUESDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.
	19.02.2015 THURSDAY	<u>INTERIM PIN UP I</u>	Selected students to present (based class list) 3 RD YEAR STUDIO, with studio staff.
	20.02.2015 FRIDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.
VI	23.02.2015 MONDAY	SCHEME DESIGN I Detail design, materials, space exploration, circulation, levels, etc	Selected students to present (based class list)
	24.02.2015 TUESDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.
	26.02.2015 THURSDAY	INTERIM PIN UP II	Selected students to present (based class list) 3 RD YEAR STUDIO, with studio staff.
	27.02.2015 FRIDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.
	02.03.2015 MONDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.
VII	03.03.2015 TUESDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.
	05.03.2015 THURSDAY	<u>PENULTIMATE PIN UP</u> SCHEME DESIGN II Detail design, materials, space exploration, circulation, levels, etc	All students
	06.03.2015 FRIDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.
	VIII	09.03.2015 MONDAY	DETAILED DESIGN Detail design, materials, space exploration, circulation, levels, etc
10.03.2015 TUESDAY		Self directed studio session	All students
12.03.2015 THURSDAY		Self directed studio session	All students
13.03.2015 FRIDAY		Self directed studio session	All students
IX		16.03.2015 MONDAY	<u>GRADING - PIN UP at 9.00am</u> PRESENTATION Final presentation Presentation: A-family paper size

NB. Program for Part III will be communicated later.

Appendix 1: Sample accommodation schedule

<u>Description/ Activity</u>	<u>Space</u>	<u>Area sq. m</u>	<u>Facilities</u>
Learning spaces			
Classrooms – 2000 pax	45 no.		
Labs -50pax	12		
Library-600pax	1 no.		
Administration Facilities			
Staff room/meeting room – 45pax	1 no.		
Reception Staff library-15 pax	1 no.		
Administration offices	10 no.		
Recreational facilities			
Auditorium – 600pax	1 no.		
Break out rooms -50pax	2 no.		
Cafeteria-600 pax	1 no.		
The Information Centre			
Computer workstations	150-200 pax		
Reception area			
Bookshop	1 no.		
Ancillary facilities (service spaces)			
Kitchen and stores			
Swimming pool areas			
Amphitheatre			
Parking for guest and staff			
Workshop			
Wet areas			
Playground			
Health clinic/ sanatorium			
Multi purpose hall			

Note: This schedule is just an example

