UNIVERSITY OF NAIROBI COLLEGE OF ARCHITECTURE & ENGINEERING SCHOOL OF THE BUILT ENVIRONMENT DEPARTMENT OF ARCHITECTURE

Studio Staff

Arch. Adnan Mwakulomba - Y M

Arch. Dr. Laban Shihembetsa

Arch. Kamau Karogi

Arch. Mohammed Mwacharo

Arch. Margaret Mweru

YEAR 2013 - 2014

3

ARCHITECTURE

SEMESTER TWO

BAR 314: Architectural Design 02 | 05 CONFERENCE LODGE - VOI, TAITA-TAVETA COUNTY

INTRODUCTION

Following Promulgation of the New Constitution in Kenya in August 2010 and Election of a new Government in 2013; a new chapter has opened for Kenya which focuses on Devolved system of government. The way forward however, is not very clear, both operationally and its physical infrastructure.

As Architects and other professionals in the building industry, it is our responsibility to lead Kenya and the citizenry to this devolved future. Of giving form to all structures/ spaces accommodating the new system of government; in spirit, physical terms, symbolism, meaning, identity etc. as defined/ enshrined in the constitution.

The Taita-Taveta County Government is in the process of procuring Architectural and building construction services to establish the county hall, staff Housing, conference lodges, County Hospitals, Youth resource centers, etc. you may have seen tenders in the national dailies for some of these facilities.

THE BRIEF

The County government has acquired land adjacent to the staff housing scheme, located about 8km from The Taita-Taveta County Headquarters. You have been tasked to design a Conference lodge in Voi.

Upon its completion, it is envisaged to host major conferences within the county. Its proximity to Tsavo National park, the busy Nairobi – Mombasa highway, Taita-Taveta University College etc is strategic. A clear addition to existing accommodation space within the National tourist circuit. It should also be strategic in the promotion of local tourism.

The County Government wishes to have the following spaces:

The Conference facility, The Restaurants

The Accommodation spaces including a governor's suite

The Business centre, Ancillary facilities, landscaped spaces etc

Part of your immediate task is to develop a detailed brief for approval in the format given in appendix I

THE OBJECTIVES

Again, the 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 of which are designing in a complex socio – economic context, exploring opportunities, challenges and possibly obstacles presented there in. These include:

- 1. To introduce design of Civic spaces, relevance, accessibility, utility among others
- 2. To explore 'critical regionalism' as an Architectural expression
- 3. Sustainability in Architecture (Environmentally & Culturally)
- 4. To explore
 - Space development in buildings & between buildings.
 - Phenomenology and Meaningful architecture
 - Landscape design (utilitarian versus ornamental)

THE PROCESS

CASE STUDIES & ANALYSIS

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 will be applied in your proposal.

Like in our previous project, you will explore:

- Site Analysis and investigation
- Measured drawings of existing buildings
- Detailed brief Formulation
- Materiality and Technology in general
- Third dimension, additive and subtractive space making
- Sensorial stimulation
- Social, visual and Physical Controls in urban space
- Perception, among others

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 and 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 the 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 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 various factors, using work produced 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 support 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 etc.
- Location plans 1:500
- Site plan 1:200
- Ground floor plans 1: 100
- Upper floor plans 1: 100
- Typical floor plans 1: 100
- Roof plans 1: 100
- 2 no. Sections 1 : 100 one across the Assembly hall
- 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 model (one block 1: 500 model and 1: 200)

REFERENCES

- 1. Ching, Francis D. K. Architecture: Form space and Order. New York: John Wiley & sons, 1996
- 2. Ching, D K Francis, Drawing: a creative process, New York, Van Nostrand Reinhold, 1990.
- 3. Meiss, Pierre Von, Elements of Architecture: From form to space, Taylor and Francis, 1990.
- 4. Bernard Leupen et al, Design and Analysis, 010 Publishers, 1997
- 5. Corbusier, L. (1986). *Towards a new Architecture*. New York: Dover Publications.
- 6. Edwards, B. (2008). *Understanding Architecture through Drawing (2nd Ed.)*. Milton Park, Abingdon, Oxon: Taylor & Francis.
- 7. Fleming, E. (2005). *Construction Technology: An illustrated introduction*. Oxford, UK: Blackwell Publishing Ltd.
- 8. Frederick, M. (2007). 101 things I learnt in Architecture School. London: THE MIT PRESS.
- 9. Guthrie, P. (2003). The Architect's portable Handbook (3rd ed.). New Delhi: McGraw-Hill.
- 10. Urban Land Institute. Urban Spaces: The design of Public space.

Appendix 1

Description/ Activity	<u>Space</u>	Area sq. m	<u>Facilities</u>
The Conference Facilities			
The Conference Hall – 150pax	1		
Break out rooms -20pax	3		
Break out rooms -10pax	2		
Lobby area			
Wet Areas			
The Accommodation Spaces			
Governors suite	1		
Delux suite	3		
Standard room	30		
Ensure the physically challenged are			
The Restaurants			
Main restaurant			
Private dinning	15pax		
Verandah area			
Wet areas			
The Business Centre			
Computer workstations	150-200 pax		
Reception area			
Bookshop / Convenient stores	2 no.		

Ancillary facilities, External Spaces

Kitchen and stores

Swimming pool areas

Amphitheatre

Parking for guest and staff

Note: This schedule is just an example

PROJECT 05 Part 1_SCHEDULE

WK	Date	Activity	Remarks		
ı	27.01.2014 MONDAY	INTRODUCTION Program introduction and site visit.	3 RD YEAR STUDIO, with studio staff.		
	28.01.2014 TUESDAY	Self directed studio session	All students		
	30.01.2014 THURSDAY	CASE STUDIES Activity studies, case studies, accommodation schedule and functional relationship diagrams	3 RD YEAR STUDIO, with studio staff.		
	31.01.2014 FRIDAY	Self directed studio session	All students		
Ш	MONDAY FEB 03, 2014 – FRIDAY FEB 07, 2014: SITE VISIT – VOI, TAITA-TAVETA COUNTY				
Ш	10.02.2014 MONDAY	Desk Crit	Selected students to present (based class list)		
	11.02.2014 TUESDAY	Desk Crit	Selected students to present (based class list)		
		PIN UP - CASE STUDIES, ANALYSIS ETC			
	13.02.2013 THURSDAY	Activity studies, case studies, accommodation schedule and functional relationship diagrams	Peer review session All students with studio staff.		
	14.01.2014 FRIDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.		
IV	17.02.2014 MONDAY	CONCEPT FORMULATION I Disposition of functions, scheme designs: plans, sections, elevations, models (CAD and Physical models) CONCEPT FORMULATION II	All students 3 RD YEAR STUDIO, with studio staff.		
	18.02.2014 TUESDAY	Disposition of functions, scheme designs: plans, sections, elevations, models (CAD and Physical models)	All students 3 RD YEAR STUDIO, with studio staff.		
	20.02.2014 THURSDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.		
	21.02.2014 FRIDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.		
V	24.02.2014 MONDAY	SCHEME DESIGN I Detail design, materials, space exploration, circulation, levels, etc	Selected students to present (based class list)		
	25.02.2014 TUESDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.		
	27.02.2014 THURSDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.		
	28.02.2014 FRIDAY	Desk Crit	3 RD YEAR STUDIO, with studio staff.		
VI	03.03.2014 MONDAY	SCHEME DESIGN II Detail design, materials, space	Selected students to present (based class list)		

exploration	on. circu	llation.	levels	. etc
capiorati	on, chice	,	IC V C IS	,

	04.03.2014 TUESDAY 06.03.2014 THURSDAY 07.03.2014 FRIDAY	Desk Crit Desk Crit Desk Crit	3 RD YEAR STUDIO, with studio staff. 3 RD YEAR STUDIO, with studio staff. 3 RD YEAR STUDIO, with studio staff.
VII	10.03.2014 MONDAY 11.03.2014 TUESDAY 13.03.2014 THURSDAY	Desk Crit Desk Crit SCHEME DESIGN III Detail design, materials, space	3 RD YEAR STUDIO, with studio staff. 3 RD YEAR STUDIO, with studio staff. All students
	14.03.2014 FRIDAY	exploration, circulation, levels, etc Desk Crit	3 RD YEAR STUDIO, with studio staff.
VIII	17.03.2014 MONDAY	DETAILED DESIGN Detail design, materials, space exploration, circulation, levels, etc	Selected students to present (based class list)
	18.03.2014 TUESDAY	Self directed studio session	All students
	20.03.2014 THURSDAY 21.03.2014	Self directed studio session	All students
	FRIDAY	Self directed studio session	All students
IX	24.03.2014 MONDAY	GRADING - PIN UP at 9.00am PRESENTATION Final interim presentation Presentation: A2 paper size	All students