

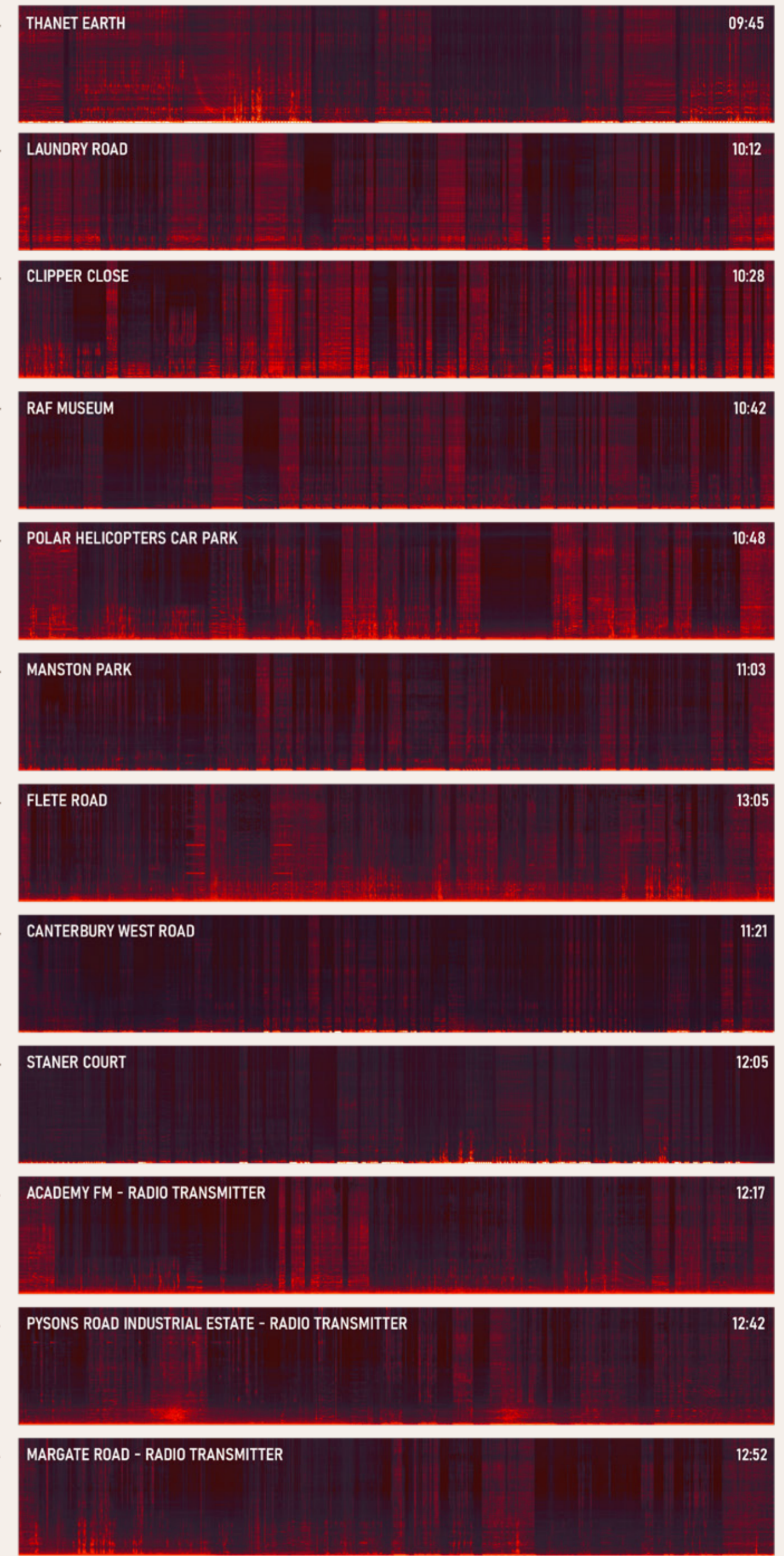
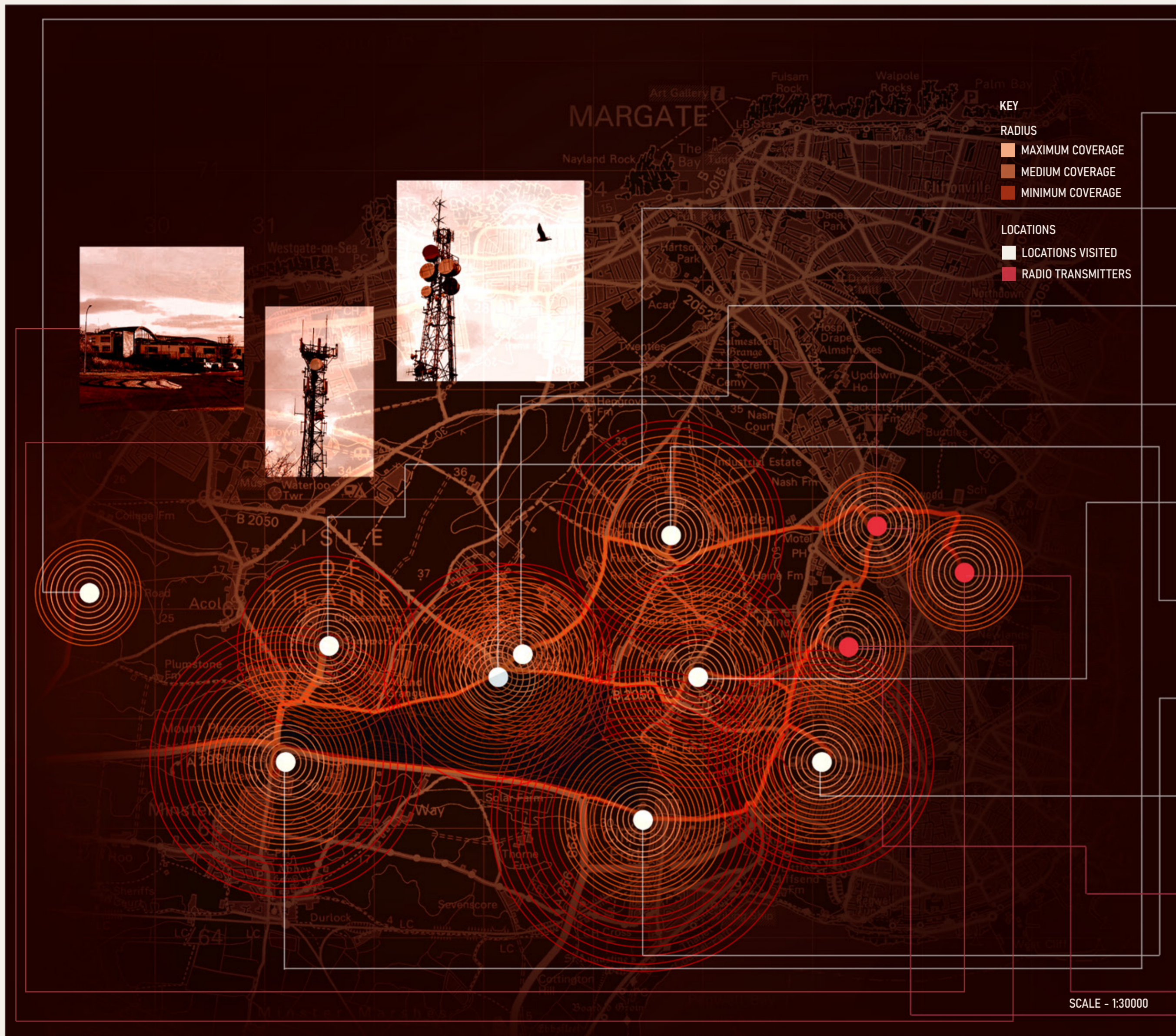


# MANSTON MODULATION

A PROPOSAL FOR THANET'S FIRST DEPLOYABLE COMMUNITY RADIO STATION THAT HELPS REDEVELOP MANSTON AIRPORT INTO A RESIDENTIAL LANDSCAPE.

# OVERALL STRATEGY





**RADIO COVERAGE MAPPING FROM SITE VISIT**

A COMPILATION OF MAPPING DIFFERENT RADIO STATIONS CAPTURED FROM MY CAR IN DIFFERENT LOCATIONS IN THANET. SPECTROGRAPHS OF THE AUDIO TAKEN OF ME CHANGING BETWEEN DIFFERENT RADIO STATIONS IN DIFFERENT LOCATIONS ARE ALSO REPRESENTED.





**SPREADSHEET OF CAPTURED RADIO STATIONS**

	LOCATIONS VISITED											
RADIO STATIONS	THANET EARTH	LAUNDRY ROAD	CLIPPER CLOSE	RAF MUSEUM	POLAR HELICOPTERS	MANSTON PARK	CANTERBURY WEST RD	STANER COURT	ACADEMY FM	PYSONS RD RADIO TOWER	MARGATE RD RADIO TOWER	FLETE ROAD
ACADEMY FM	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8	107.8
BBC KENT	104.2 + 97.6	104.2 + 97.6	97.6	104.2 + 97.6	104.2	104.2	104.2 + 97.6	104.2 + 97.6	104.2	104.2	104.2	104.2
BBC R2	90.0	90.0 + 88.5 + 88.7 + 89.7 + 88.1	90.0 + 89.7	90.0 + 88.1	90.0 + 88.1 + 89.7	90.0 + 88.4	90.0 + 88.5	90.0 + 88.7	90.0	90.0	90.0	90.0 + 88.1 + 88.5 + 98.6
BBC R3	92.4	92.4 + 92.0	92.4 + 91.9	92.4 + 90.3	92.4 + 90.3	92.4 + 90.3 + 90.6 + 91.9	92.4 + 90.6 + 90.7	92.4	92.4	92.4	92.4	92.4 + 90.3 + 90.7 + 91.9
BBC R4	94.4	94.4 + 94.1 + 93.1 + 95.3	94.4 + 93.5	94.4	94.4 + 94.1	94.4 + 93.1	94.4 + 92.9	94.4 + 93.1	94.4	94.4	94.4	94.4 + 92.9 + 93.5 + 94.1
CLASSIC FM	101.5	101.8 + 100.3 + 101.5	101.8	100.9	101.8	101.8	101.8 + 100.3	101.8	100.9	101.8 + 100.9	101.8	101.8 + 100.9 + 101.5
BBC R1		99.5	99.5	99.5 + 97.7	99.5	99.5 + 98.0	99.5	99.5	99.5	99.5 + 98.3 + 98.8	99.5	99.5
HEART		102.8		95.9 + 97.0 + 103.1	95.9 + 103.1	95.9 + 103.1	95.9	95.9 + 103.1	95.9	95.9 + 103.1	95.9	95.9 + 97.0
KMFM		106.8		106.0 + 106.8 + 107.2	107.2	107.2	107.2 + 106.0	107.2 + 108.0	107.2	107.2	107.2	107.2
BLEUNORD	106.2	95.5		106.2	106.2	95.5	106.2	106.2				106.2 + 95.5
MUSIQUE		89.4		89.4	89.4	89.4	89.4	89.4 + 88.7				89.4
INTER		104.7		103.3	104.7	103.3	104.7	104.7				104.7
KISS	106.4	106.4		106.4	106.4							106.4
BBC ESSEX		95.3		95.3	95.3	95.3						95.3
HEART SX				96.3 + 102.6	96.3	96.3	96.3					96.3
INFO		105.6			106.5	106.5		105.6				105.6
RTL2		99.2			99.2		99.2	99.2				99.2
RFM		102.5		102.5	102.5			102.5				102.5
BBC R6		92.0				92	92					
VIRGIN						91.5	91.5	91.5				
CULTURE		99.9					99.9	99.9				
RIRE & ...						93.3	93.3					
BBC SUSSX		104.5					104.5					
FUNKY SX				103.7								
SKYROCK								92.7				
CAPITAL SOUTH EAST								102.4				
ABSOLUTE RADIO								105.2				

■ RADIO STATIONS HOUSED IN THANET

SCALE - 1:30000

**MAPPING RADIO STATIONS**

A COMPILATION OF MAPPING DIFFERENT RADIO STATIONS HOUSED IN THANET AND A SPREAD SHEET OF THE RADIO STATIONS CAPTURED DURING THE SITE VISIT, RESULTING IN FINDING WHAT RADIO STATIONS SEEMS TO BE MORE PROMINENT IN THANET.

KEY

CONTEMPORARY HITS

- KMFM THANET
- BBC R1
- BBC R2
- VIRGIN
- CAPITAL SOUTH EAST
- HEART
- HEART SX
- ABSOLUTE RADIO

MUSIC DEDICATED

- MUSIQUE (FRENCH)
- BBC R3
- BBC R6
- CLASSIC FM
- RIRE & CHANSONS (FRENCH)
- KISS
- SKYROCK (FRENCH)

FRENCH RADIO STATIONS

- FRANCE INTER
- MUSIQUE (FRENCH)
- RTL2 (FRENCH)
- RIRE & CHANSONS (FRENCH)
- FRANCE CULTURE
- FRANCE BLEU NORD
- RFM
- RTL2
- FRANCE INFO
- SKYROCK

COMMUNITY

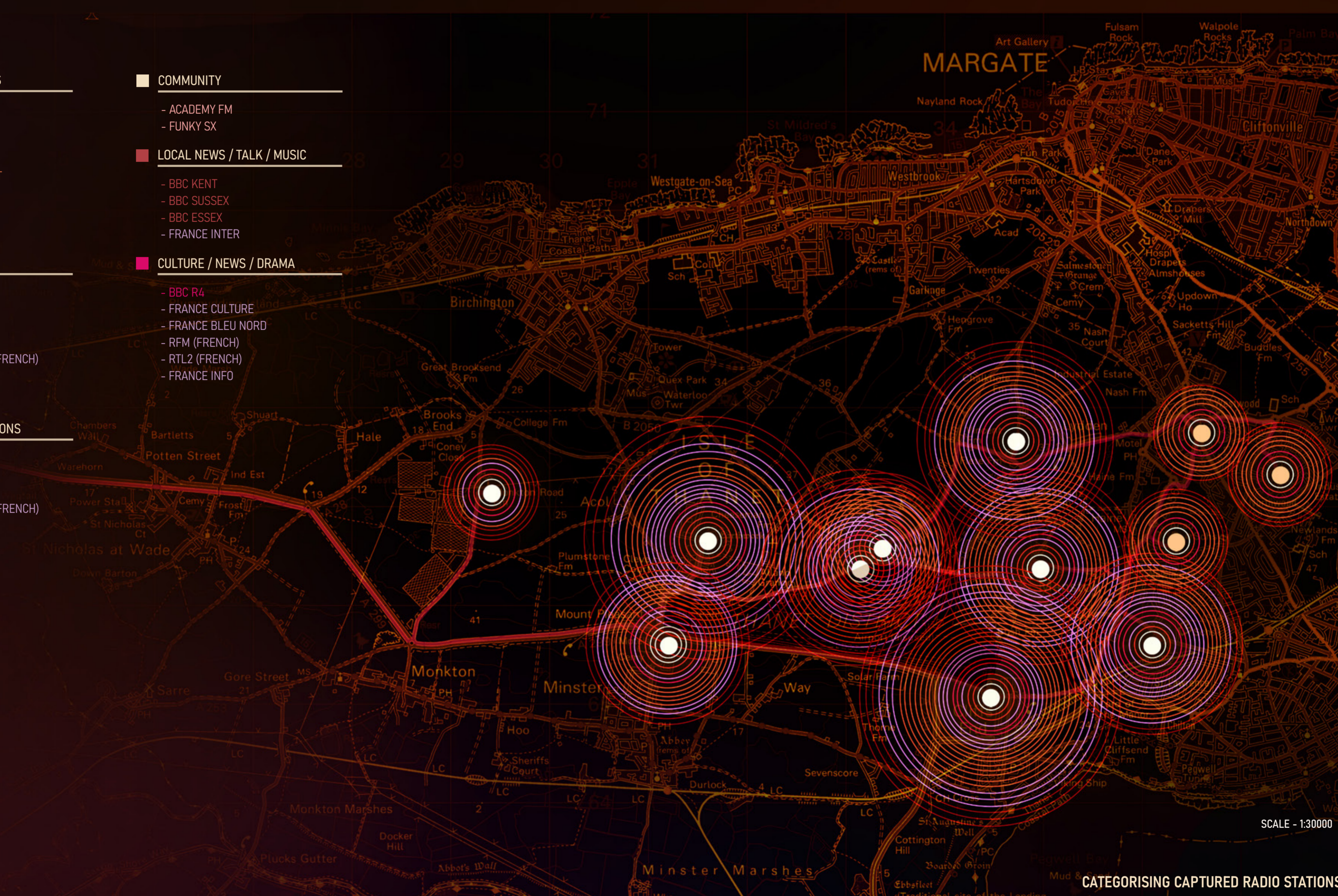
- ACADEMY FM
- FUNKY SX

LOCAL NEWS / TALK / MUSIC

- BBC KENT
- BBC SUSSEX
- BBC ESSEX
- FRANCE INTER

CULTURE / NEWS / DRAMA

- BBC R4
- FRANCE CULTURE
- FRANCE BLEU NORD
- RFM (FRENCH)
- RTL2 (FRENCH)
- FRANCE INFO



SCALE - 1:30000

CATEGORISING CAPTURED RADIO STATIONS

I STARTED TO CATEGORISE EACH RADIO STATION CAPTURED TO FIND OUT THE PROMINENT GENRES IN RADIO STATIONS. THIS LEAD TO SOME INTERESTING CONCLUSIONS WHERE I FOUND FRENCH RADIO STATIONS BEING MORE PROMINENT AND THERE BEING A LACK OF COMMUNITY RADIO STATIONS IN THANET.

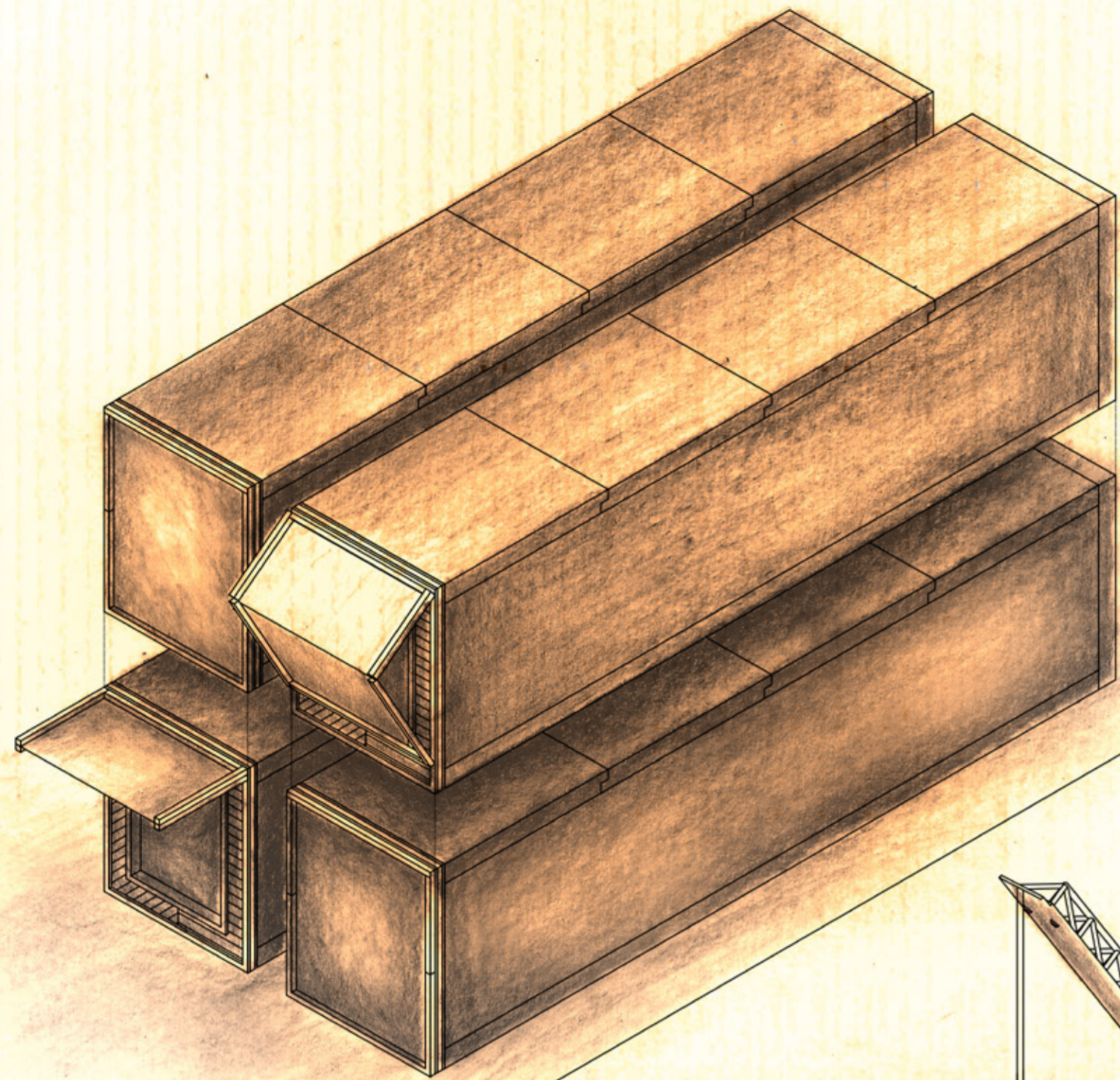
An aerial night photograph of a large outdoor festival. In the foreground, a radio station is situated on a dark, tiled roof, illuminated by bright spotlights that create a lens flare effect. The station's facade features a black and white checkered pattern. Beyond the roof, a vast festival grounds is visible, filled with a dense crowd of people, numerous colorful tents, and various illuminated structures. A prominent Ferris wheel is visible in the upper right quadrant, and a large circular stage or performance area is lit up in the center. The overall atmosphere is vibrant and festive, with warm yellow and orange lights dominating the scene.

107.8

MANST **ON AIR**

FM

TUNE IN TO THANET'S  
FIRST MOBILE  
RADIO STATION  
FOR THE COMMUNITY

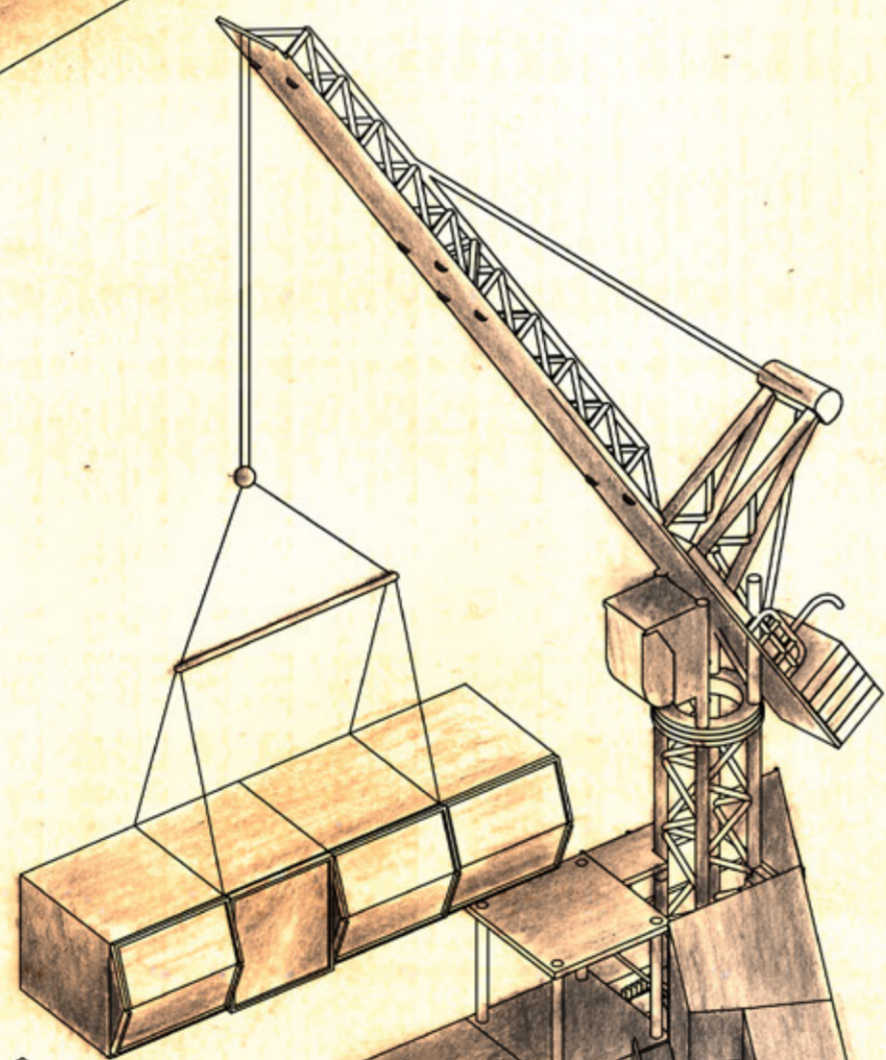


SCALE- 1:100

**DEPLOYABLE MODULES - COMMUNITY RADIO STATION**

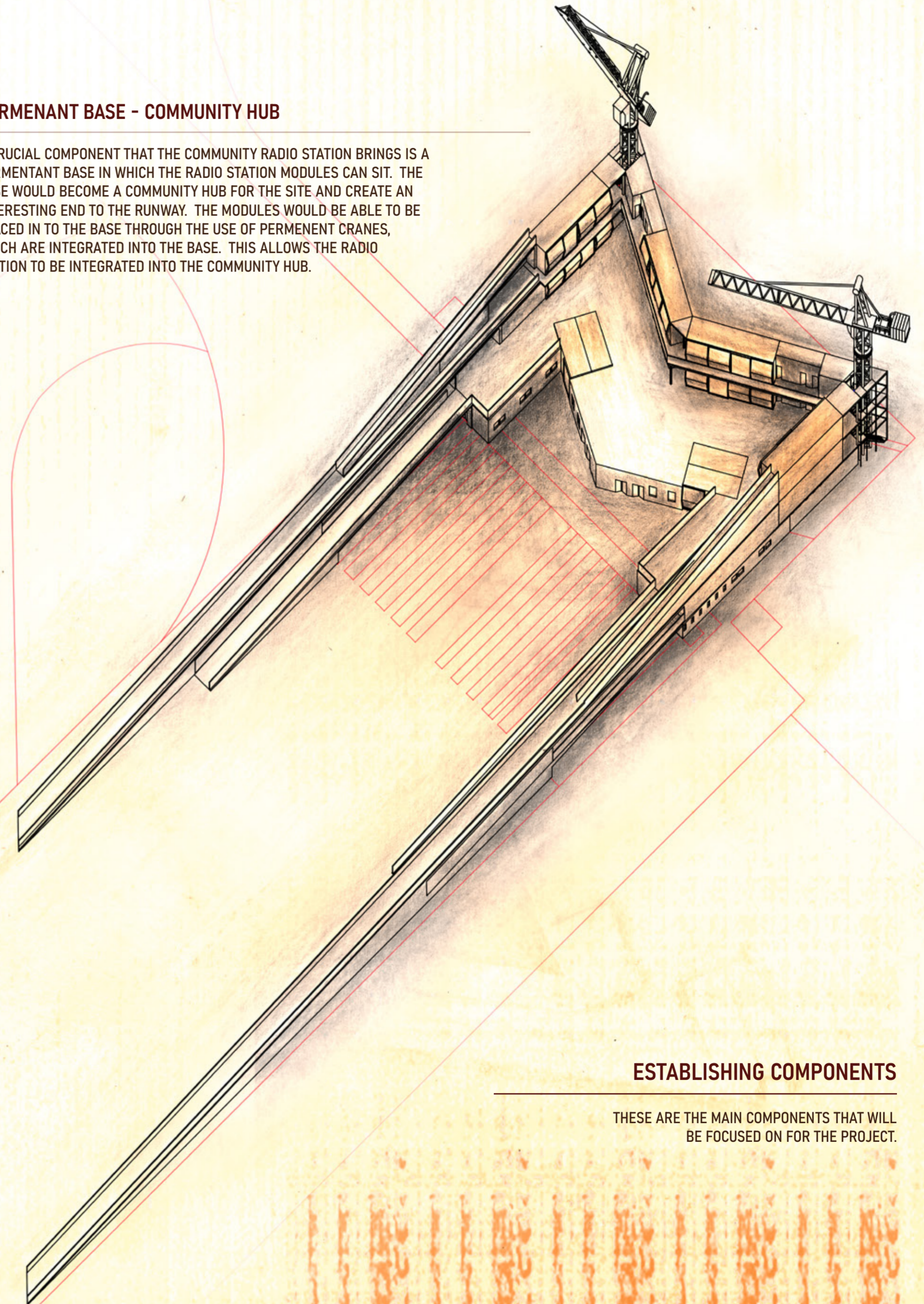
THESE MODULES WOULD HOUSE THE DIFFERENT PROGRAMS OF THE RADIO STATION SUCH AS RECORDING ROOMS AND THE DIFFERENT OFFICES. THESE MODULES CAN ALSO HOUSE FESTIVAL PROGRAMS SUCH AS VIP ROOMS AND A CONTROL ROOM FOR STAGE SHOWS.

SCALE- 1:200



**PERMANENT BASE - COMMUNITY HUB**

A CRUCIAL COMPONENT THAT THE COMMUNITY RADIO STATION BRINGS IS A PERMANENT BASE IN WHICH THE RADIO STATION MODULES CAN SIT. THE BASE WOULD BECOME A COMMUNITY HUB FOR THE SITE AND CREATE AN INTERESTING END TO THE RUNWAY. THE MODULES WOULD BE ABLE TO BE PLACED IN TO THE BASE THROUGH THE USE OF PERMANENT CRANES, WHICH ARE INTEGRATED INTO THE BASE. THIS ALLOWS THE RADIO STATION TO BE INTEGRATED INTO THE COMMUNITY HUB.



**ESTABLISHING COMPONENTS**

THESE ARE THE MAIN COMPONENTS THAT WILL BE FOCUSED ON FOR THE PROJECT.

Control Station Program Breakdown	Radio Station (Private)	Radio Station (Semi-Private)	Emergency (Private)	Flexible (Public)
All Programs				
Production Manager				
Production Producer				
Music Director				
Studio Manager Office				
General Management Team				
Marketing Department				
Traffic Team				
Financial Team				
Sponsorship Team				
HR Team				
Equipment Room				
Meeting Room				
Storage Area				
Lounge Room				
Recording Studio - Morning				
Recording Studio - Evening				
Rentable Recording Studio				
Recording Studio - Performance Room				
REACT Team				
RELAY Team				
REACT + RELAY Team Manager				
Experimental Plazas				
Reception				
Cafe				
Community Club Rooms - could merge with stage				
Auditorium - Expandable - Changed into a stage				
Sky Bar				
Space for Food Trucks/ Pop-up Shops				

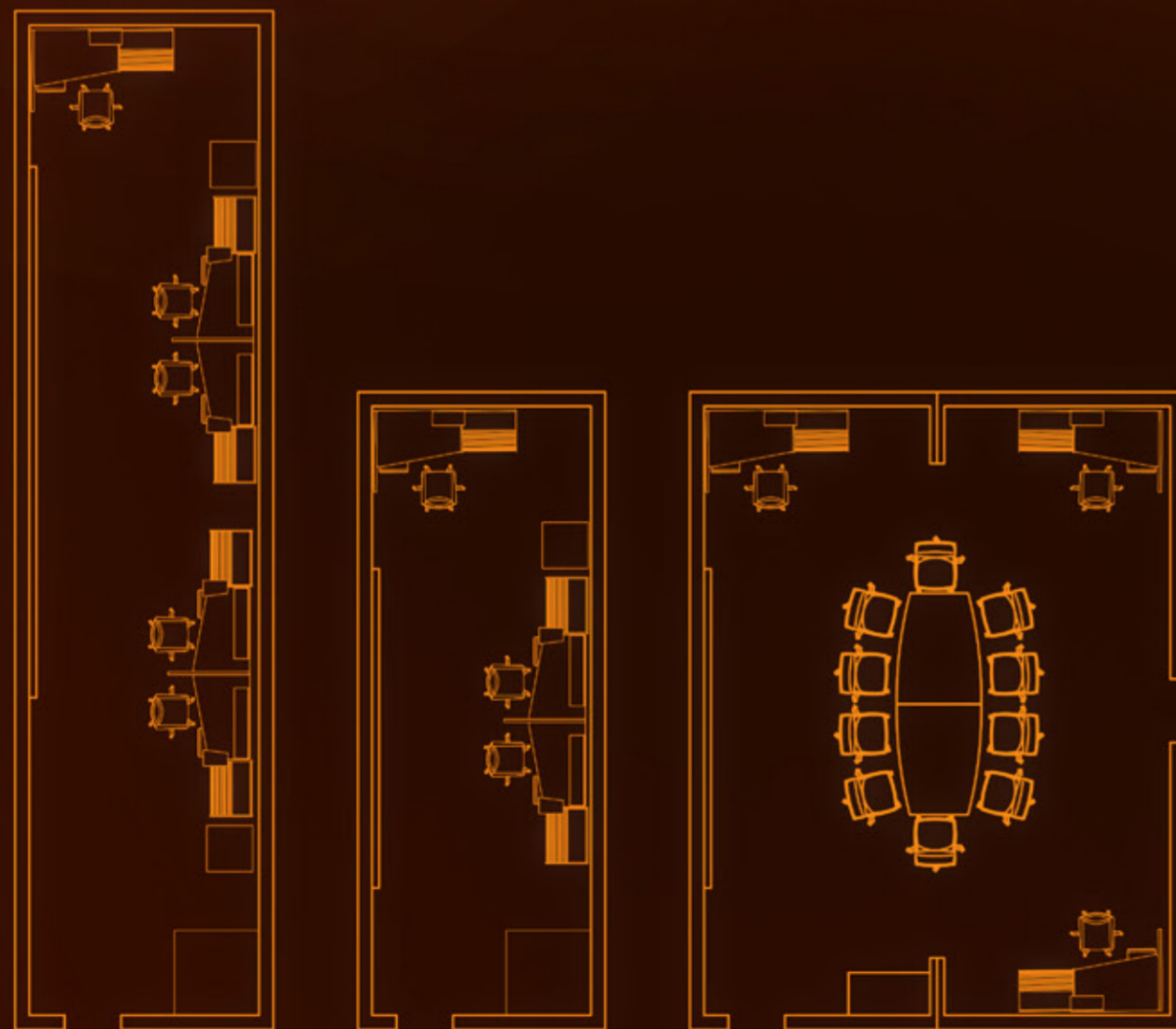


AXONOMETRIC  
SCALE - 1:140

### PROGRAM DEVELOPMENT FOR MODULES

THIS PAGE CONSISTS OF A COMPLETE BREAKDOWN OF PROGRAMS FOR THE COMMUNITY RADIO STATION. THE MODULES WOULD CATER TOWARDS THE DIFFERENT PROGRAMS AND DIFFERENT LAYOUTS ARE ESTABLISHED.

#### STANDARD LAYOUTS



RADIO STATION MODULES

FESTIVAL MODULES

GENERAL MANAGEMENT TEAM/ HR  
FINANCE/ SPONSORSHIP TEAM  
MARKETING/ TRAFFIC TEAM

CONCESSIONS/ HOSPITALITY TEAM  
TICKETING TEAM

#### CUSTOM LAYOUTS



RADIO STATION MODULES

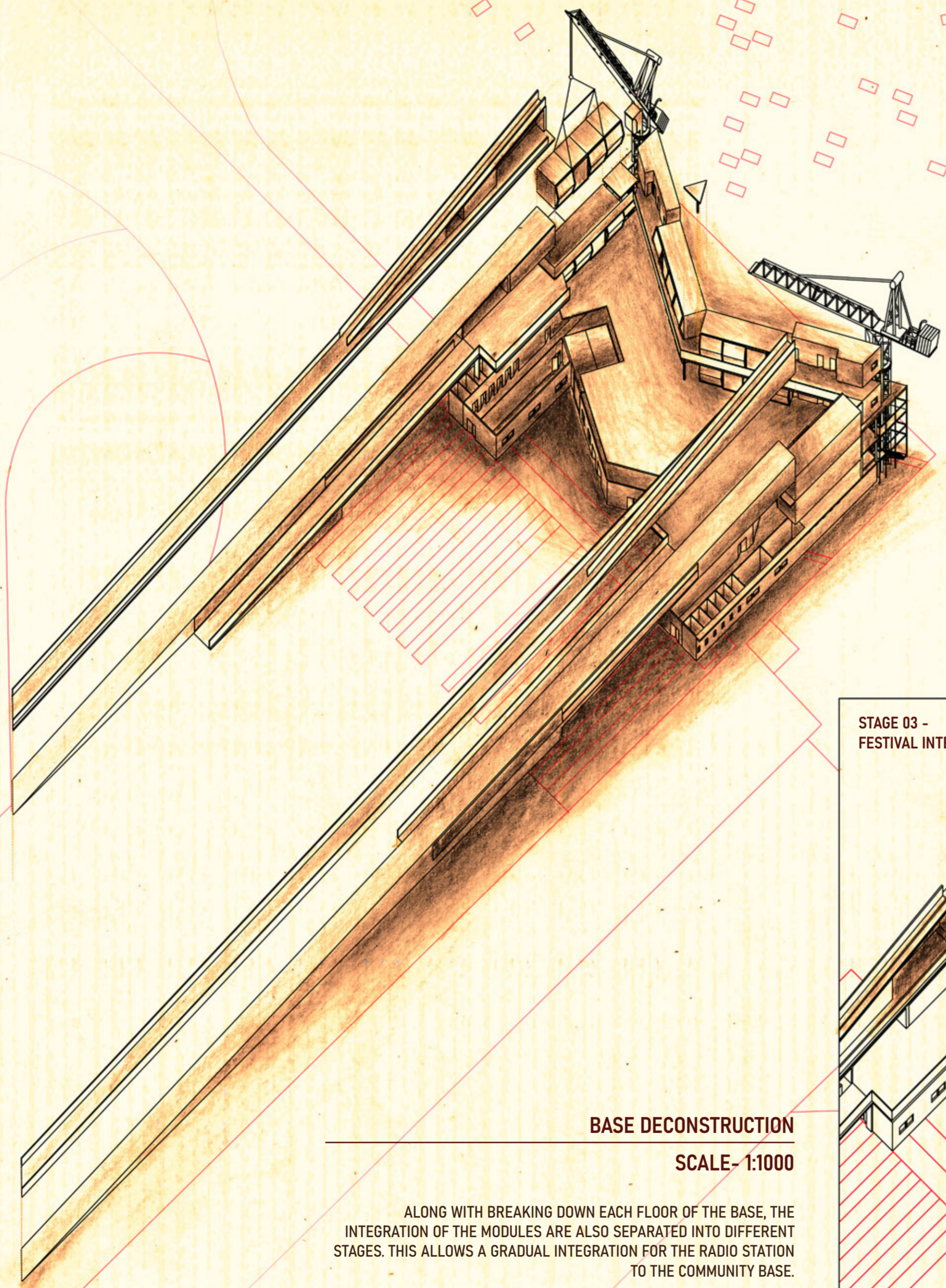
MUSIC DIRECTOR/ PRODUCTION  
PRODUCER/ PRODUCTION MANAGER

FESTIVAL MODULES

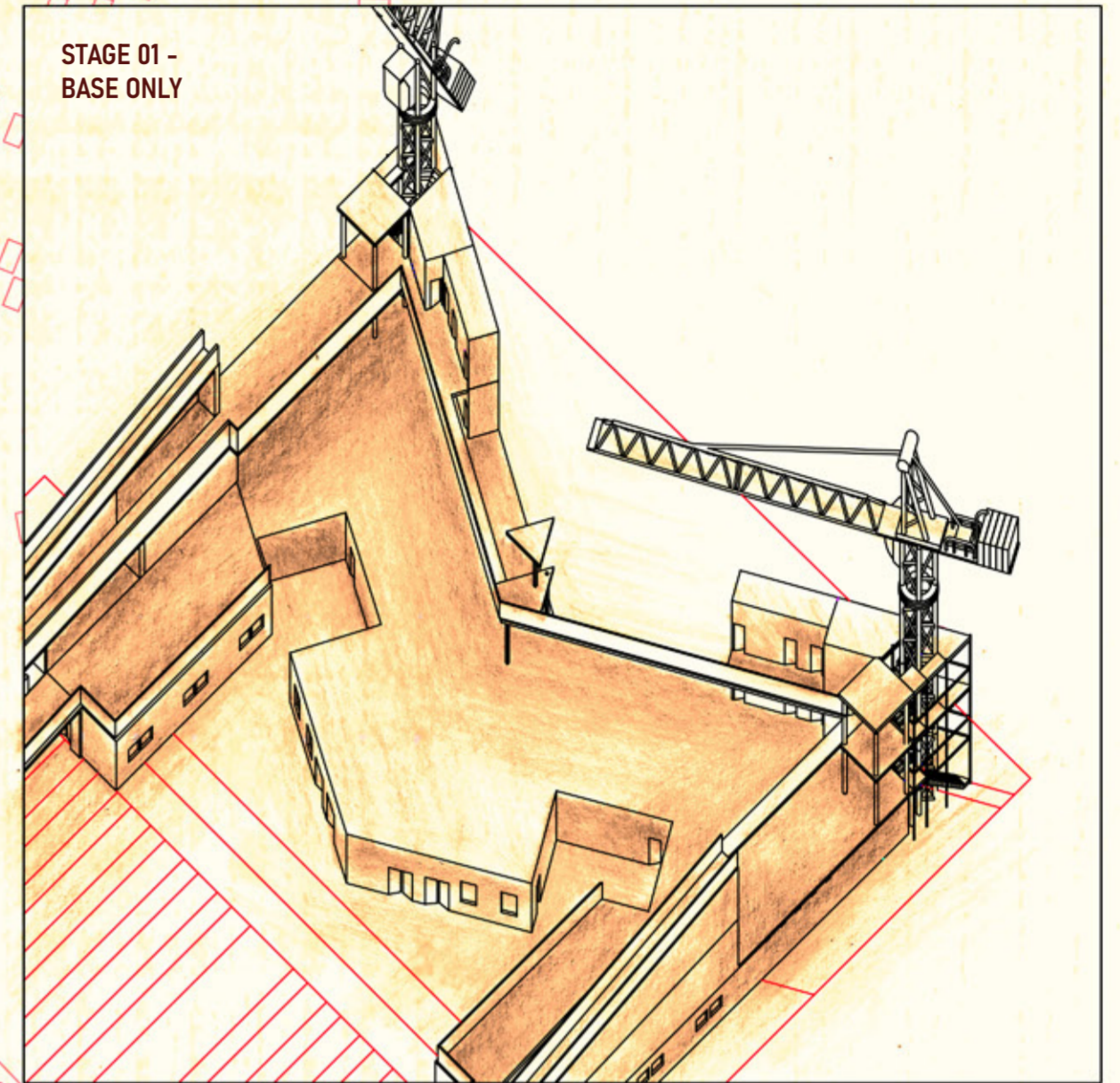
STAGE

VIP ROOMS FOR FESTIVAL SHOW

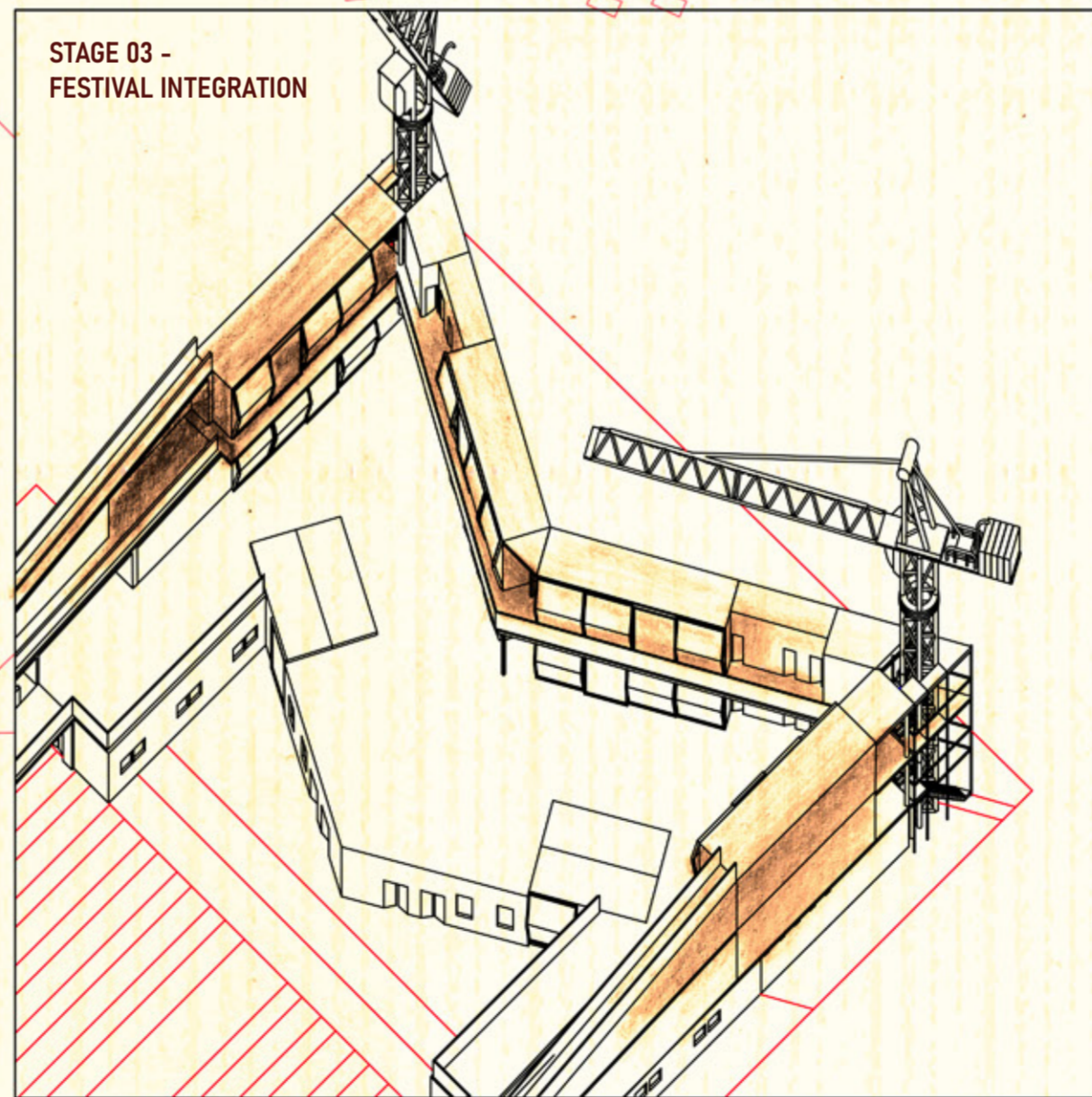




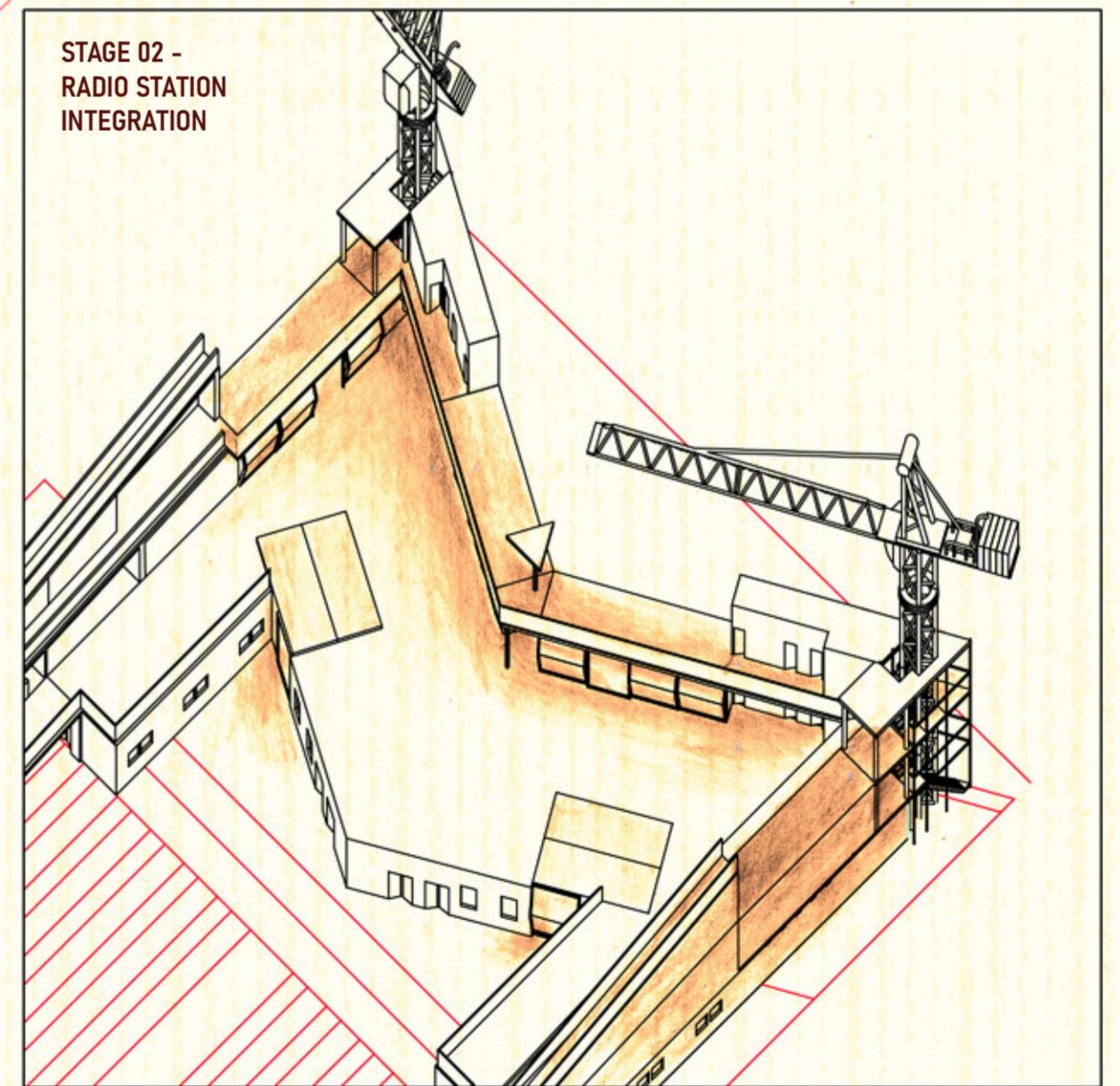
AXONOMETRIC BREAKDOWN OF COMPONENTS  
SCALE- 1:700



STAGE 01 -  
BASE ONLY



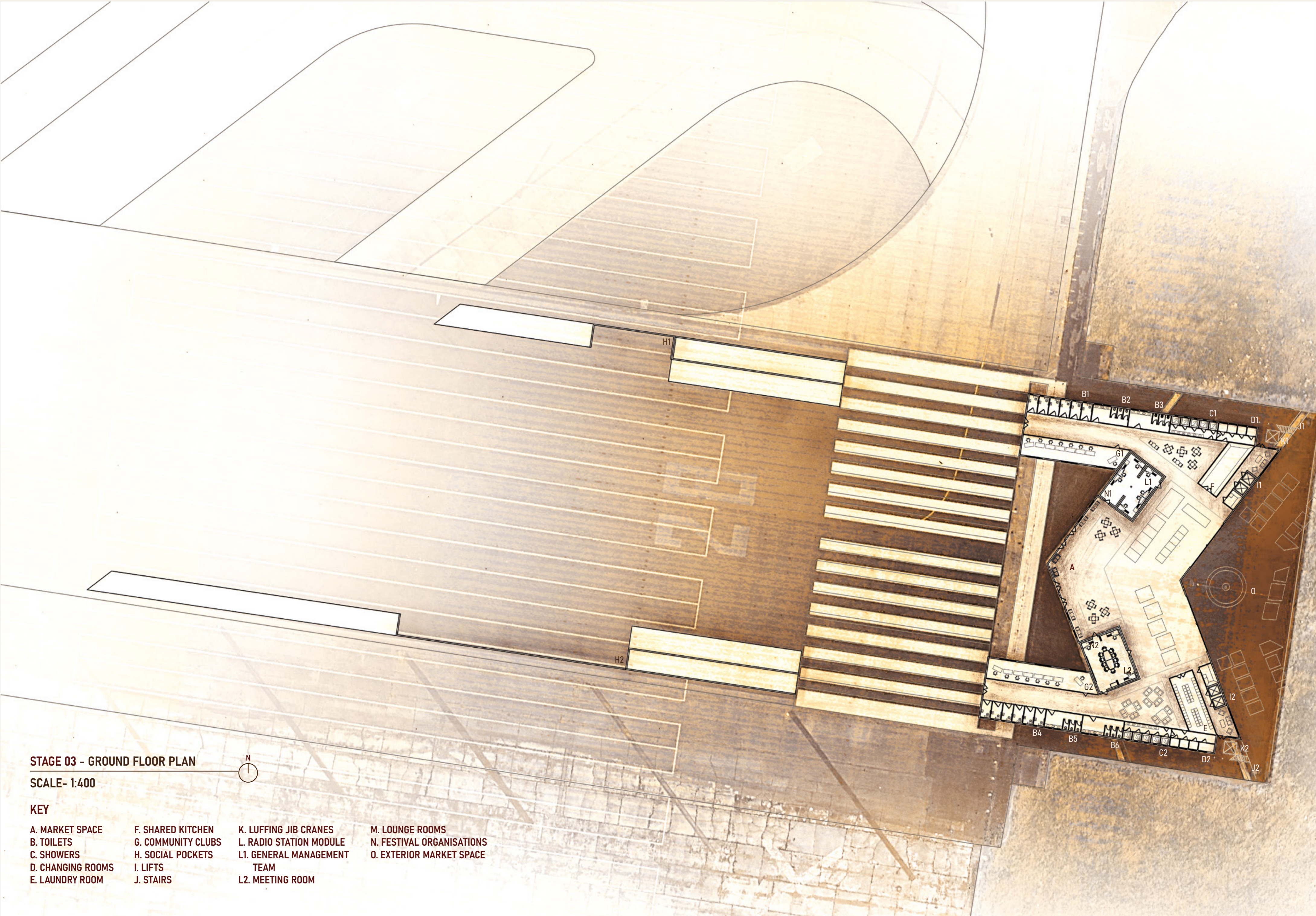
STAGE 03 -  
FESTIVAL INTEGRATION



STAGE 02 -  
RADIO STATION  
INTEGRATION

BASE DECONSTRUCTION  
SCALE- 1:1000

ALONG WITH BREAKING DOWN EACH FLOOR OF THE BASE, THE INTEGRATION OF THE MODULES ARE ALSO SEPARATED INTO DIFFERENT STAGES. THIS ALLOWS A GRADUAL INTEGRATION FOR THE RADIO STATION TO THE COMMUNITY BASE.



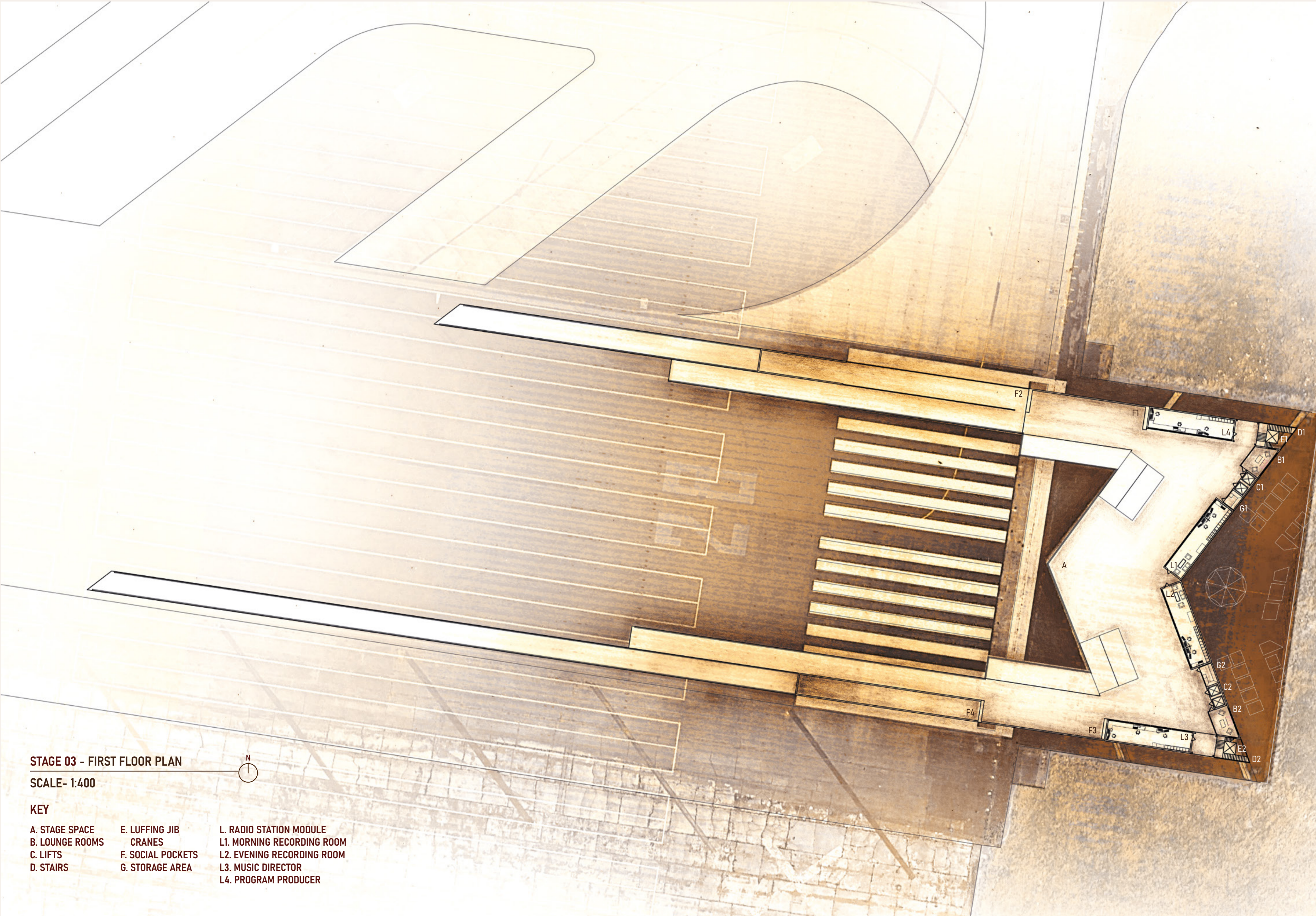
**STAGE 03 - GROUND FLOOR PLAN**

SCALE- 1:400



**KEY**

- |                   |                    |                             |                           |
|-------------------|--------------------|-----------------------------|---------------------------|
| A. MARKET SPACE   | F. SHARED KITCHEN  | K. LUFFING JIB CRANES       | M. LOUNGE ROOMS           |
| B. TOILETS        | G. COMMUNITY CLUBS | L. RADIO STATION MODULE     | N. FESTIVAL ORGANISATIONS |
| C. SHOWERS        | H. SOCIAL POCKETS  | L1. GENERAL MANAGEMENT TEAM | O. EXTERIOR MARKET SPACE  |
| D. CHANGING ROOMS | I. LIFTS           | L2. MEETING ROOM            |                           |
| E. LAUNDRY ROOM   | J. STAIRS          |                             |                           |



**STAGE 03 - FIRST FLOOR PLAN**

SCALE- 1:400



**KEY**

- |                 |                          |                            |
|-----------------|--------------------------|----------------------------|
| A. STAGE SPACE  | E. LUFFING JIB<br>CRANES | L. RADIO STATION MODULE    |
| B. LOUNGE ROOMS | F. SOCIAL POCKETS        | L1. MORNING RECORDING ROOM |
| C. LIFTS        | G. STORAGE AREA          | L2. EVENING RECORDING ROOM |
| D. STAIRS       |                          | L3. MUSIC DIRECTOR         |
|                 |                          | L4. PROGRAM PRODUCER       |

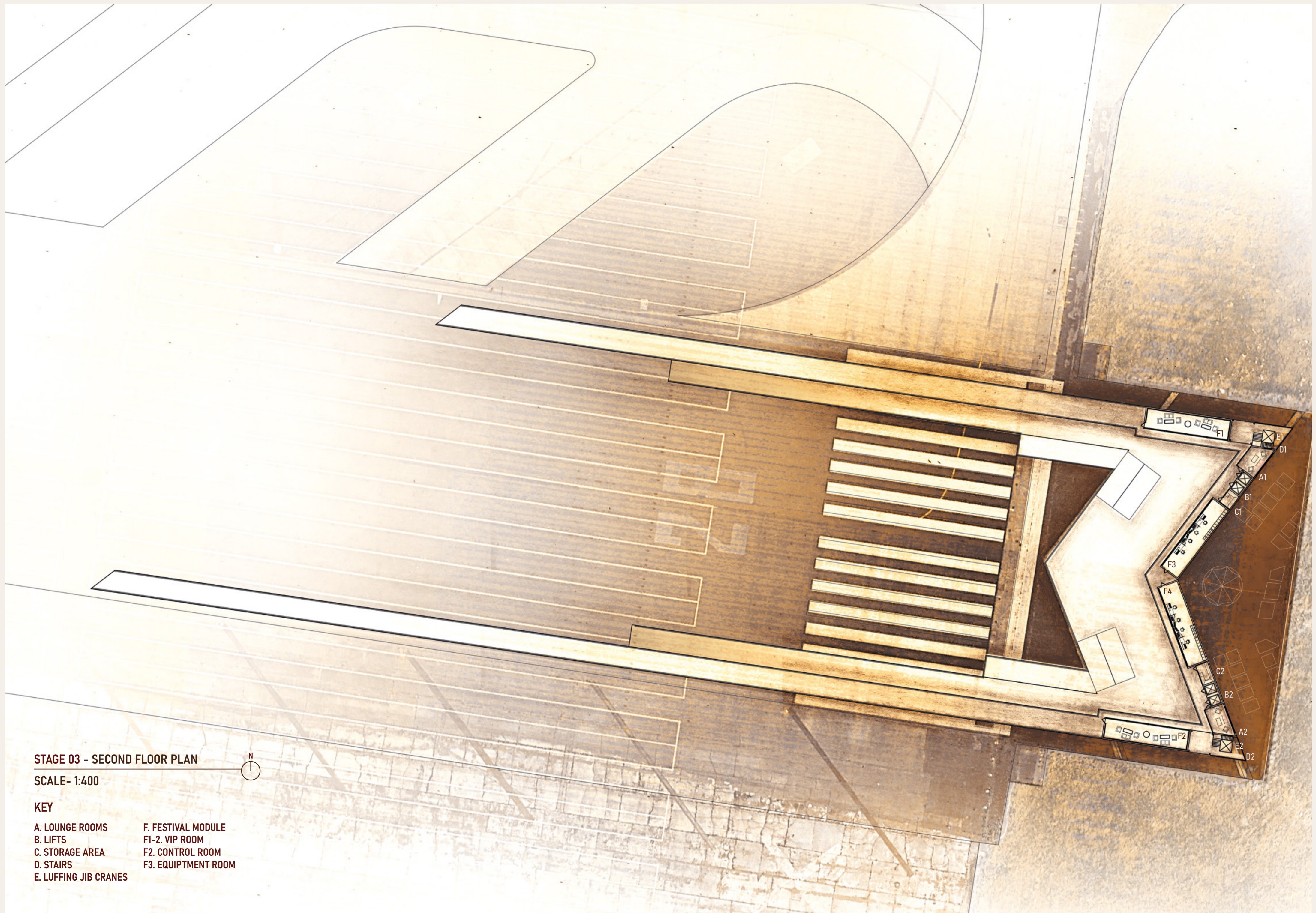
STAGE 03 - SECOND FLOOR PLAN

SCALE- 1:400



KEY

- |                       |                    |
|-----------------------|--------------------|
| A. LOUNGE ROOMS       | F. FESTIVAL MODULE |
| B. LIFTS              | F1-2. VIP ROOM     |
| C. STORAGE AREA       | F2. CONTROL ROOM   |
| D. STAIRS             | F3. EQUIPMENT ROOM |
| E. LUFFING JIB CRANES |                    |

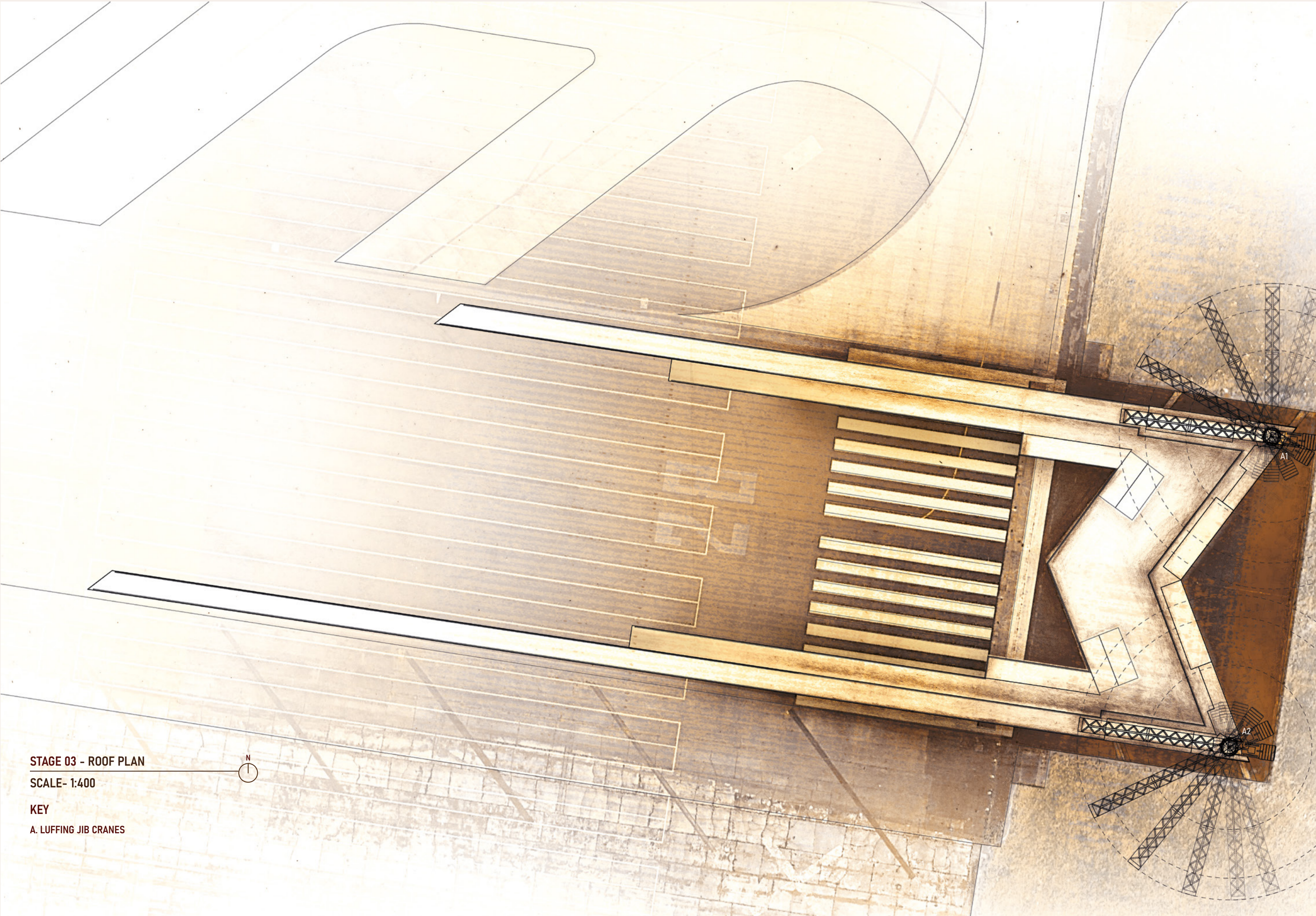


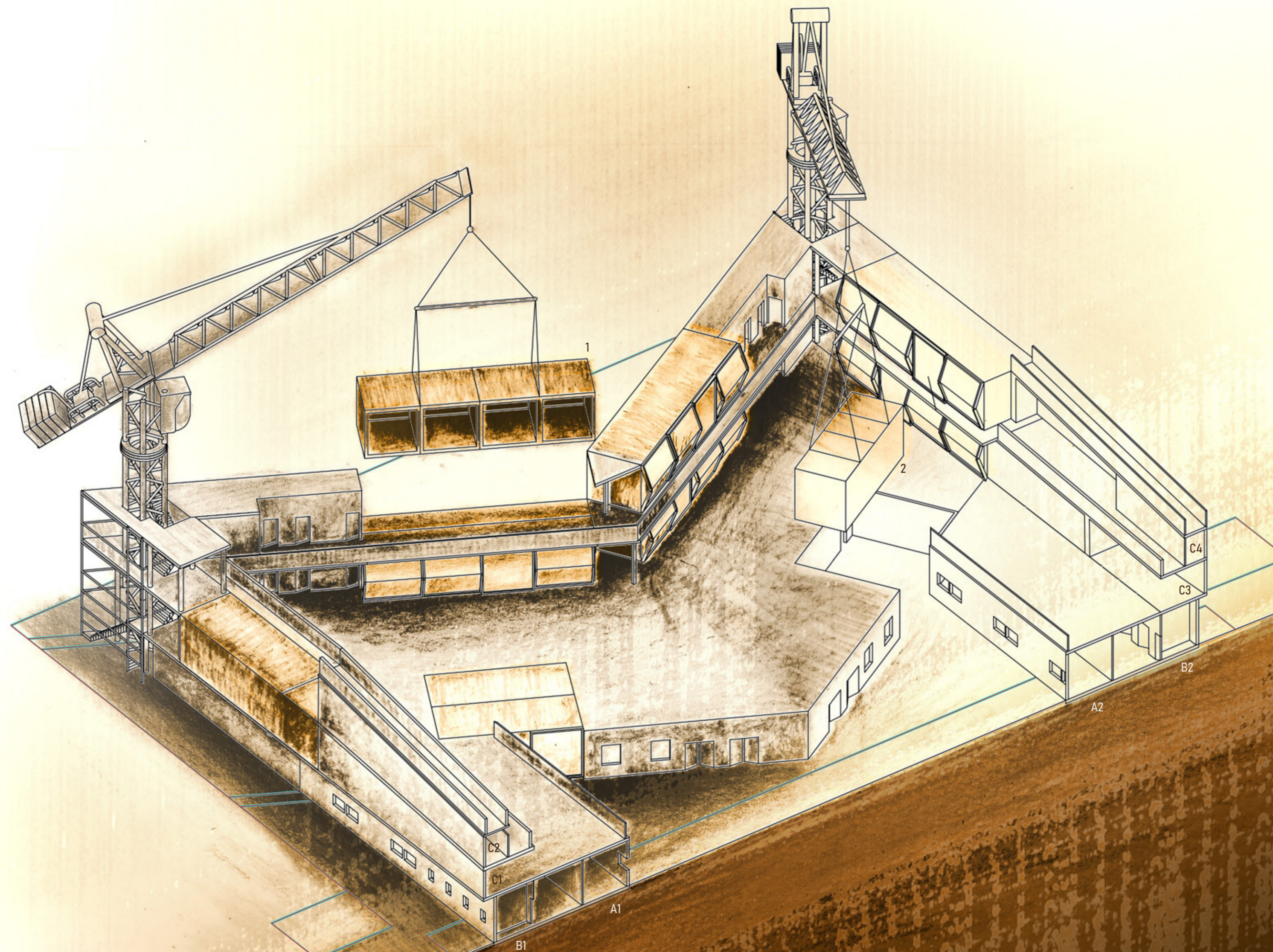
STAGE 03 - ROOF PLAN

SCALE- 1:400

KEY

A. LUFFING JIB CRANES

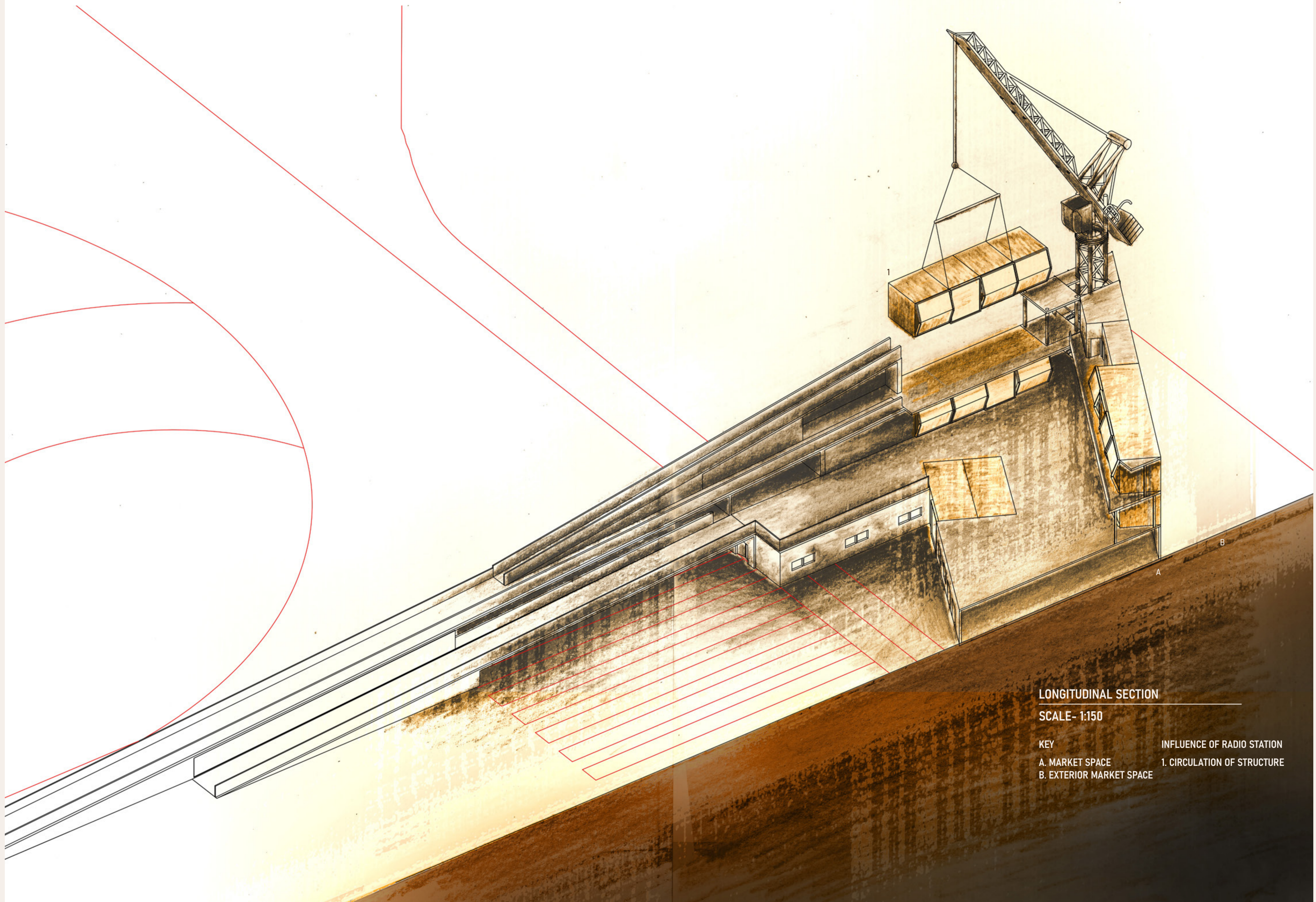




TRANSVERSAL SECTION

SCALE- 1:150

KEY	INFLUENCE OF RADIO STATION
A. COMMUNITY CLUB SPACE	1. VERICALITY OF THE BASE
B. TOILETS	2. COMPLETION OF STAGE
C. SOCIAL POCKET	



LONGITUDINAL SECTION

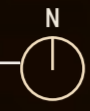
SCALE- 1:150

- KEY
- A. MARKET SPACE
  - B. EXTERIOR MARKET SPACE
- INFLUENCE OF RADIO STATION
- 1. CIRCULATION OF STRUCTURE

# MASTERPLAN STRATEGY

## ESTABLISHING THE FIRST BASE

THE COMMUNITY RADIO STATION WOULD ESTABLISH IT'S FIRST BASE, DEFINING THE END OF THE RUNWAY.



SCALE- 1:8000

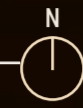




## MASTERPLAN STRATEGY

### POTENTIAL AREAS FOR MODULES WITHOUT BASE

THE RADIO STATION WOULD BE ABLE TO TRAVERSE TO DIFFERENT POINTS, AND MAY NOT NEED TO ESTABLISH A PERMENENT BASE FOR EACH POINT. OVERTIME, THE RADIO STATION WOULD START TO ESTABLISH DIFFERENT COMMUNITIES AND CREATES CLUSTERS OF HOUSES THROUGHOUT THE SITE.



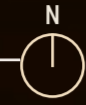
SCALE- 1:8000



## MASTERPLAN STRATEGY

### ESTABLISHING THE LAST BASE

THE RADIO STATION WOULD LASTLY ESTABLISH ITS LAST BASE AT THE BEGINNING OF THE RUNWAY. THIS CAUSES THE PERMENT BUSES TO BECOME BOOKENDS TO THE RUNWAY, COMPLETING THE SITE. OVERALL, THIS REDEVELOPS THE SITE INTO A RESIDENTIAL LANDSCAPE AND A COMMUNITY HUB.



SCALE- 1:8000



LAST COMMUNITY BASE



POTENTIAL SPACES FOR MODULES



POP-UP STORES



POTENTIAL HOUSING



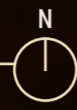
SERVICE STATIONS



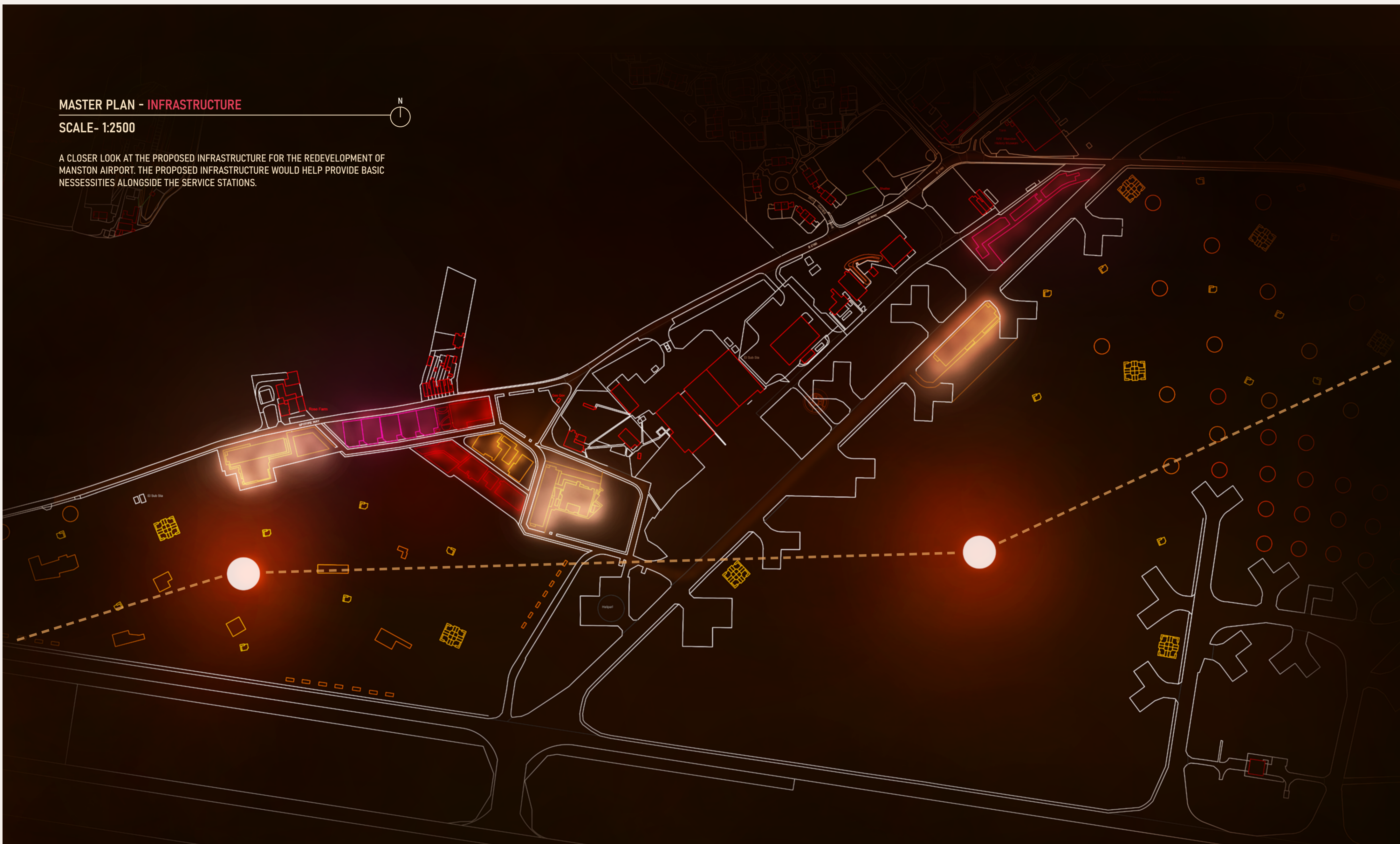
COMMUNITY BASE

# MASTER PLAN - INFRASTRUCTURE

SCALE- 1:2500



A CLOSER LOOK AT THE PROPOSED INFRASTRUCTURE FOR THE REDEVELOPMENT OF MANSTON AIRPORT. THE PROPOSED INFRASTRUCTURE WOULD HELP PROVIDE BASIC NECESSITIES ALONGSIDE THE SERVICE STATIONS.



- COMMERCIAL (SHOPS)
- RECREATIONAL (GYM, RESTAURANTS, BARS)
- LEISURE (HOTELS)
- CULTURAL (COMMUNITY CLUBS)

Spitfire And Hurricane  
Memorial Museum

39.4m

41.3m

44.7m

8.050

44.7m

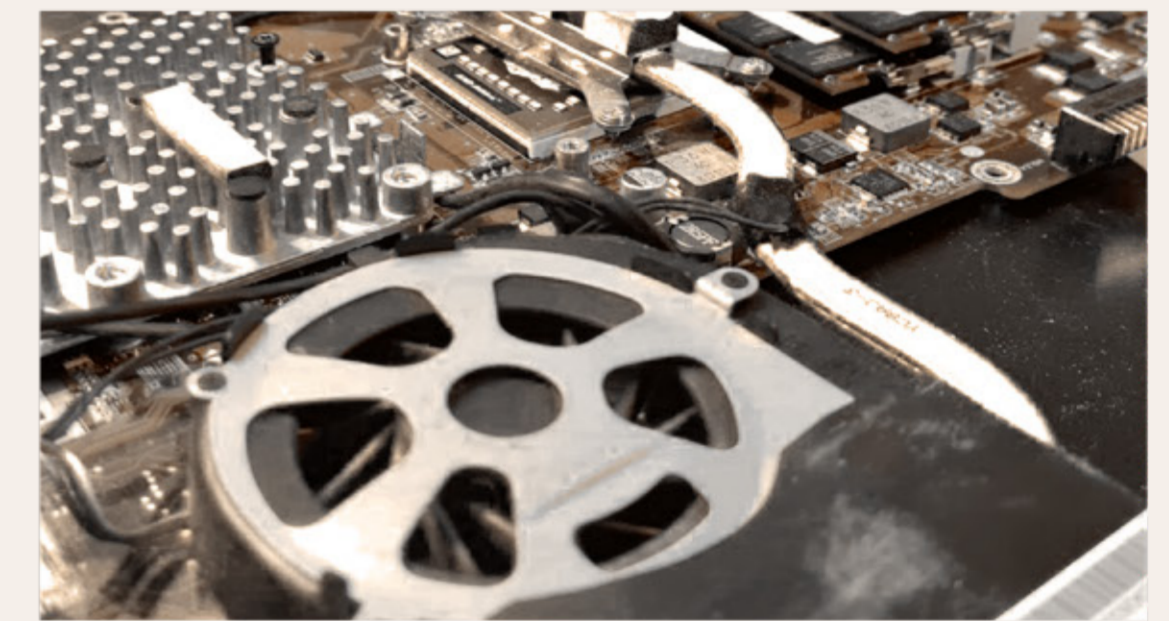
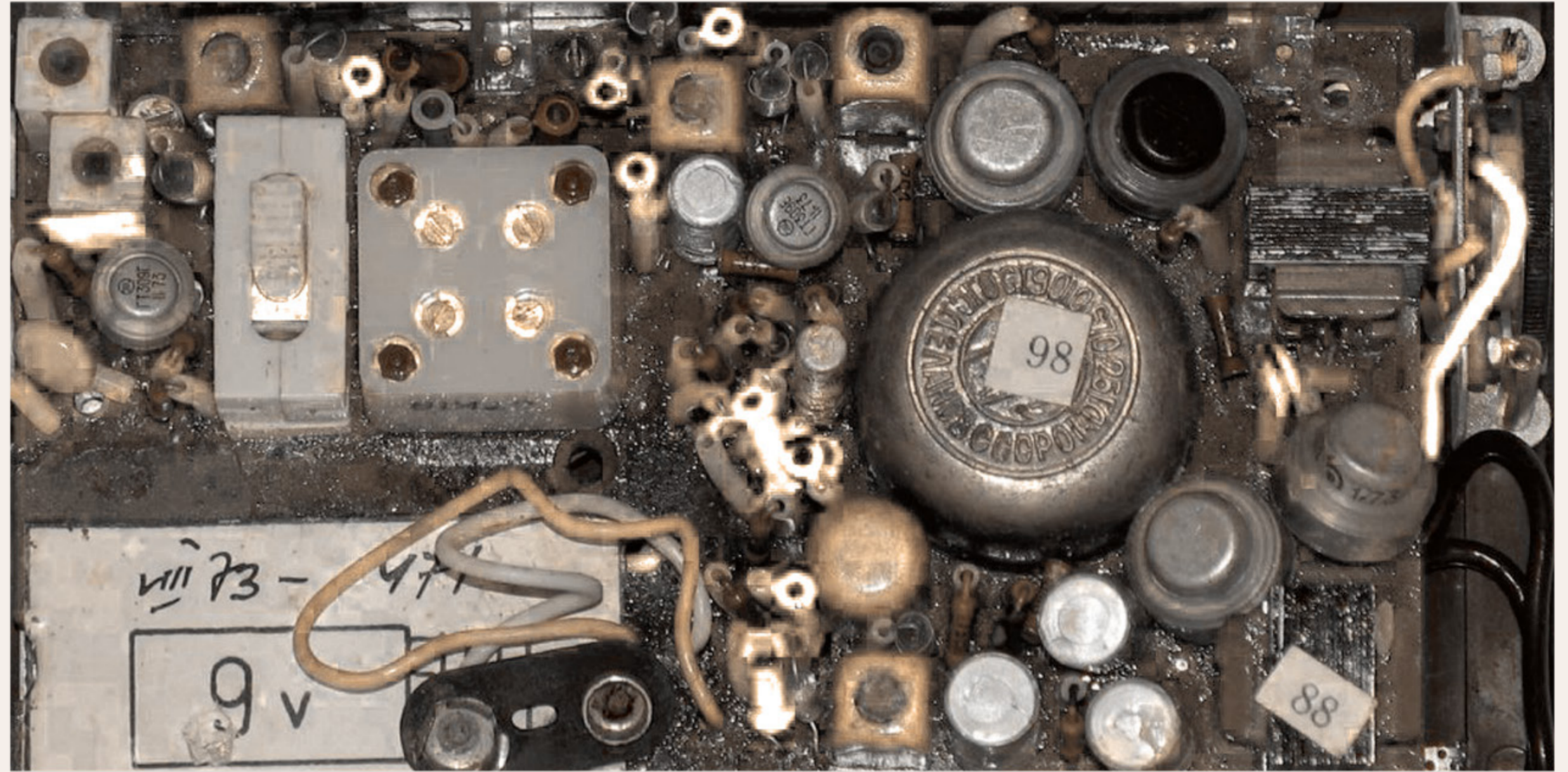
Lighting Tower

# PARS PRO TOTO

A DEVELOPMENT OF STRUCTURAL, MATERIAL, TECHNICAL AND ENVIRONMENTAL SYSTEMS,  
LAYERS AND COMPONENTS OF THE DESIGN PROJECT.



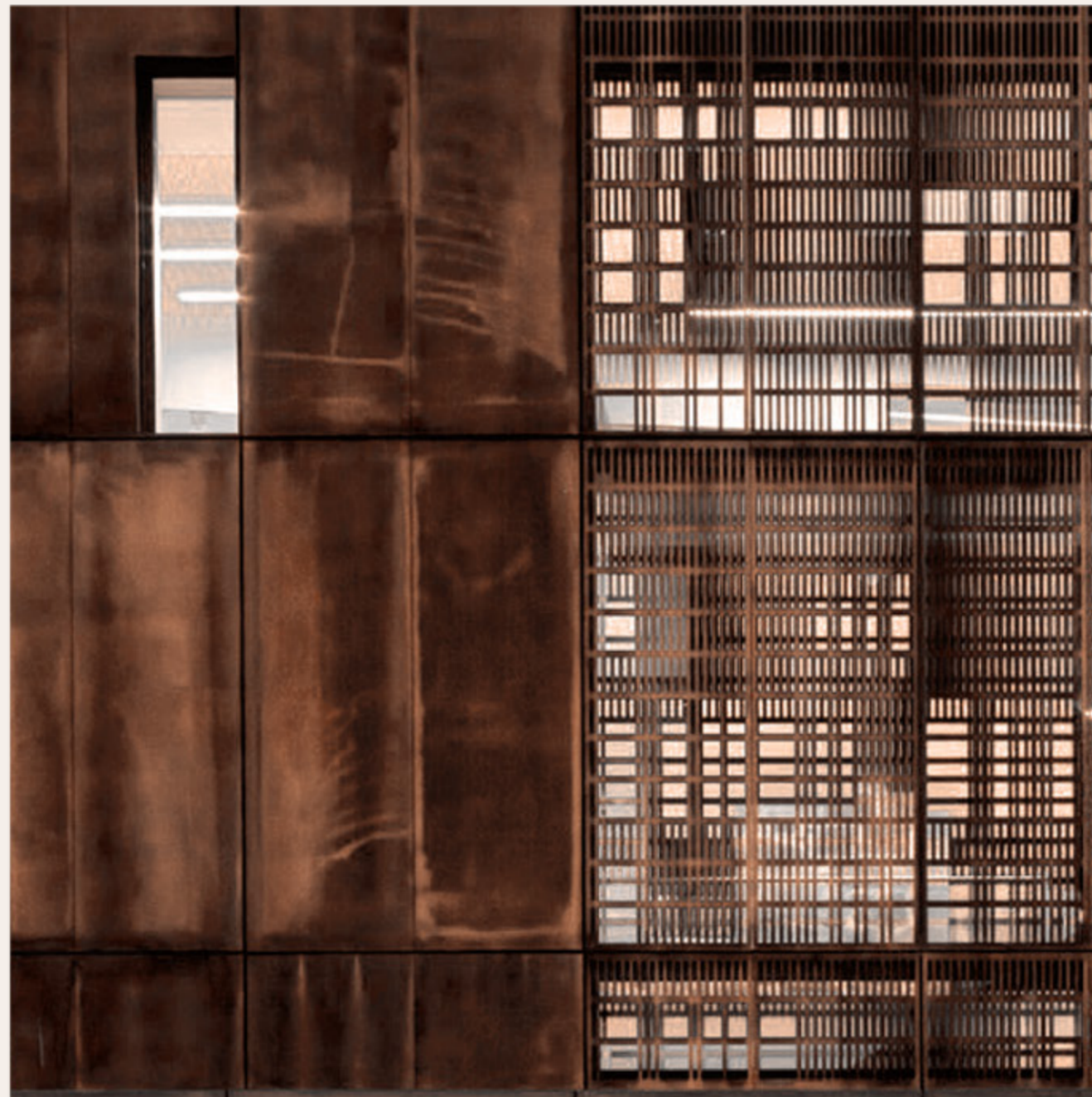
INITIAL PRECEDENT - INSIDE RADIO



THE COLOURFUL AND CLUSTERED COMPONENTS HOUSED INSIDE OF RADIOS FOR MY STRUCTURES SERVED AS AN INSPIRATION FOR THE TECHNOLOGICAL ASPECTS OF MY DESIGN PROJECT. EACH COMPONENT HAS A UNIQUE FORM, SERVING A PURPOSE FOR COMMUNICATION AND ENTERTAINMENT.



EXTENSION TO ABERDEEN COUNCIL HQ - MOXON ARCHITECTS



KALVEBOD FÆLLED SCHOOL - LUNDGAARD & TRANBERG ARKITEKTER

**MATERIALITY PRECEDENT - PERFORATED METAL FACADE**

TO ELICIT THE FEELING OF ENTERING ONE OF THE TECHNOLOGICAL COMPONENTS OF AN ANALOGUE RADIO, I WANTED TO MAKE MY STRUCTURE LOOK RUSTIC TO HIGHLIGHT THE ANALOGUE PRESENCE OF RADIO.



NU BUILD MODULAR SYSTEM - NU LIVING



FAV PAVILION - REPUBLICA PORTÁTIL

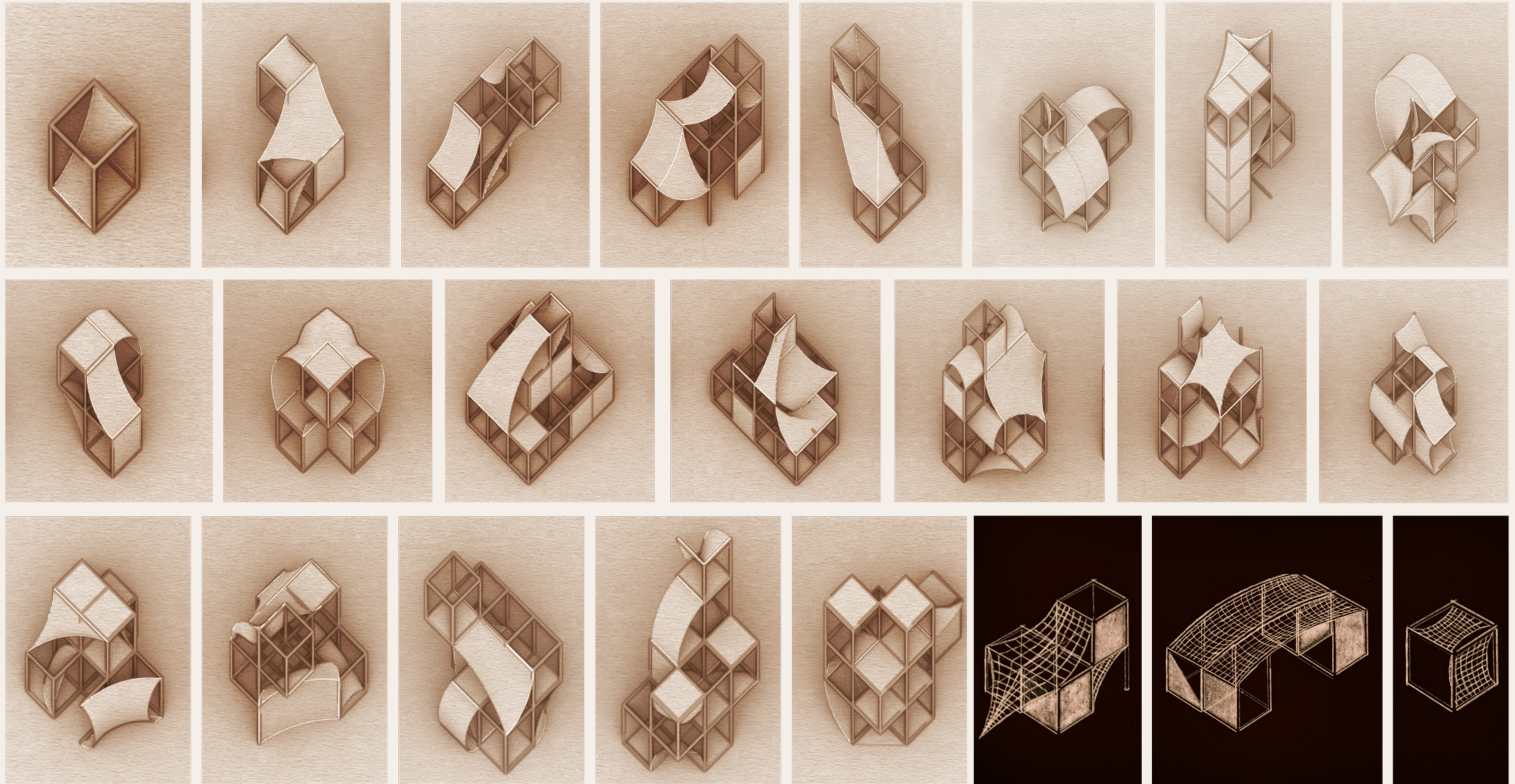


PROJECTION MAPPING IN TENT STRUCTURES

## PRECEDENTS

### COMBINATIONS OF MODULAR STRUCTURES AND TENT STRUCTURES

IN THE SPIRIT OF CREATING A MOBILE RADIO STATION, I WANTED TO LOOK INTO TEMPORARY ARCHITECTURE. THESE INCLUDE EXPLORING MODULES AND INTEGRATING FABRIC WITHIN THE STRUCTURE. MODULE ARCHITECTURE WOULD HAVE A QUICKER CONSTRUCTION PERIOD FROM THE USE OF CRANES THROUGH BRINGING SIMPLICITY IN CONSTRUCTION. TENSILE ARCHITECTURE FITS WITH THE THEME OF TEMPORARITY STRONGLY, FROM THE VERSITILITY OF HOW THE FABRIC CAN BE USED, FROM SOLAR SHADING TO BECOMING A SCREEN TO PROJECT LIGHTS AND VIDEOS.



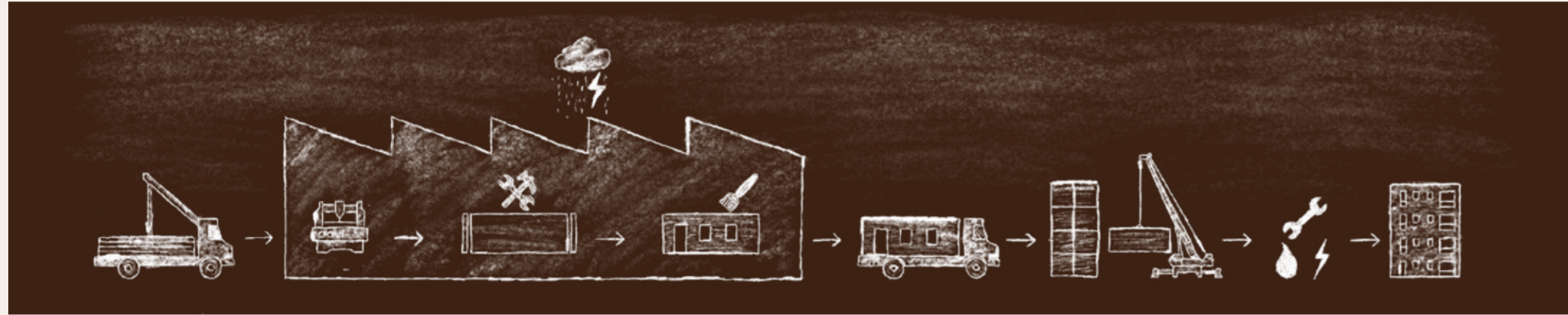
**FURTHER EXPLORATION OF TENT STRUCTURES**

THIS PAGE SHOWCASES AN EXPLORATION OF HOW TENSILE STRUCTURES COULD BE INTEGRATED INTO MODULAR FRAMEWORKS. THIS WAS ACHIEVED THROUGH ITERATIVE DIGITAL MASSING AND SKETCHES.



## ESTABLISHING ARCHITECTURAL SYSTEMS - NU BUILD MODULAR SYSTEM

### PROCESS

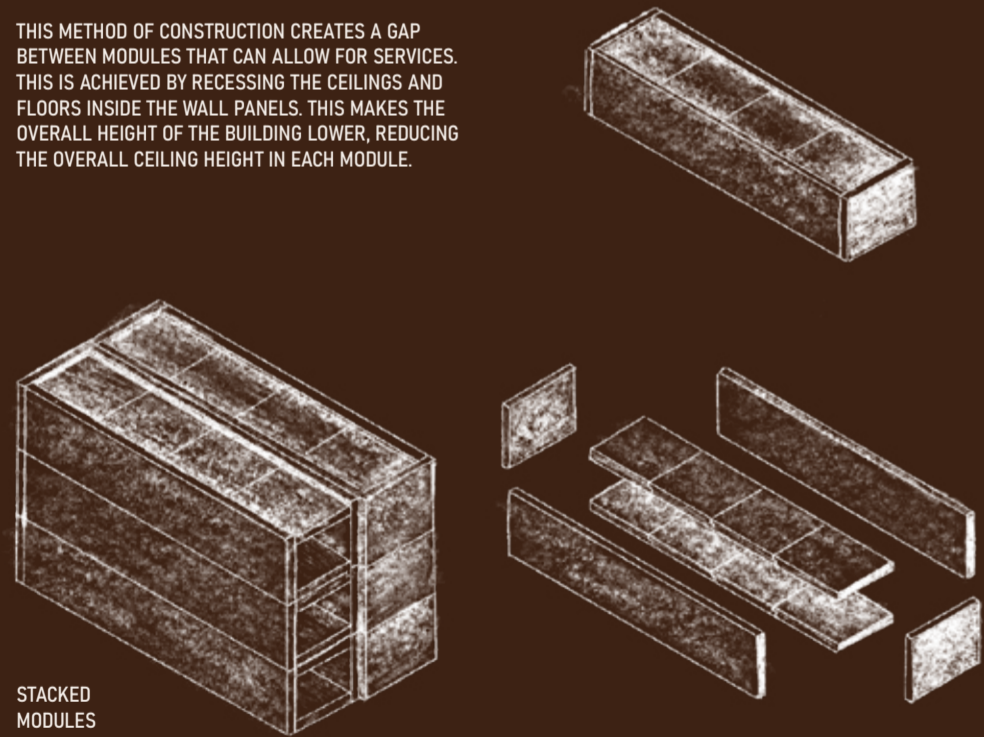


THE MODULAR, PANELISED CONSTRUCTION PROCESS CONSISTS OF CLT PANELS BEING SHIPPED TO THE FACTORY, WHERE THEY WOULD BE CUT TO SPECIFICATION AND CONSTRUCTED AS MODULES. THIS LEADS TO MODULES BEING TRANSPORTED TO THE REQUIRED SITE, WHERE CRANES WOULD LIFT AND STACK THE MODULES. CLT PANELS ARE PROCESSED USING AUTOMATIC PROFILING AND CNC-CONTROLLED JOINERY MACHINES. DATA FROM BIM MODELS ARE FED INTO CNC MACHINES TO CUT OUT PENETRATIONS. WASTE FROM CLT PANELS IS USED TO MAKE WOOD CHIPS, WHICH COULD HEAT THE FACTORY. OVERALL, THIS PANELISED SYSTEM CAN OFFER THE QUALITIES OF A TRADITIONAL BUILD WITH THE ADVANTAGES OF OFFSITE PRODUCTION.

### CONSTRUCTION TYPES

#### BALLOON CONSTRUCTION

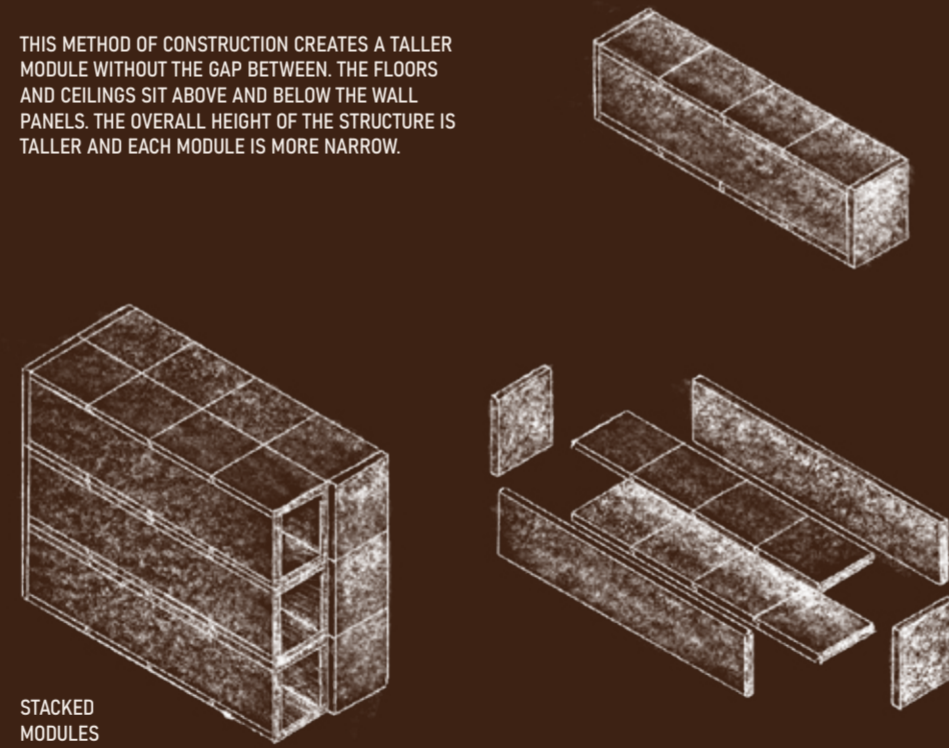
THIS METHOD OF CONSTRUCTION CREATES A GAP BETWEEN MODULES THAT CAN ALLOW FOR SERVICES. THIS IS ACHIEVED BY RECESSING THE CEILINGS AND FLOORS INSIDE THE WALL PANELS. THIS MAKES THE OVERALL HEIGHT OF THE BUILDING LOWER, REDUCING THE OVERALL CEILING HEIGHT IN EACH MODULE.



STACKED MODULES

#### PLATFORM CONSTRUCTION

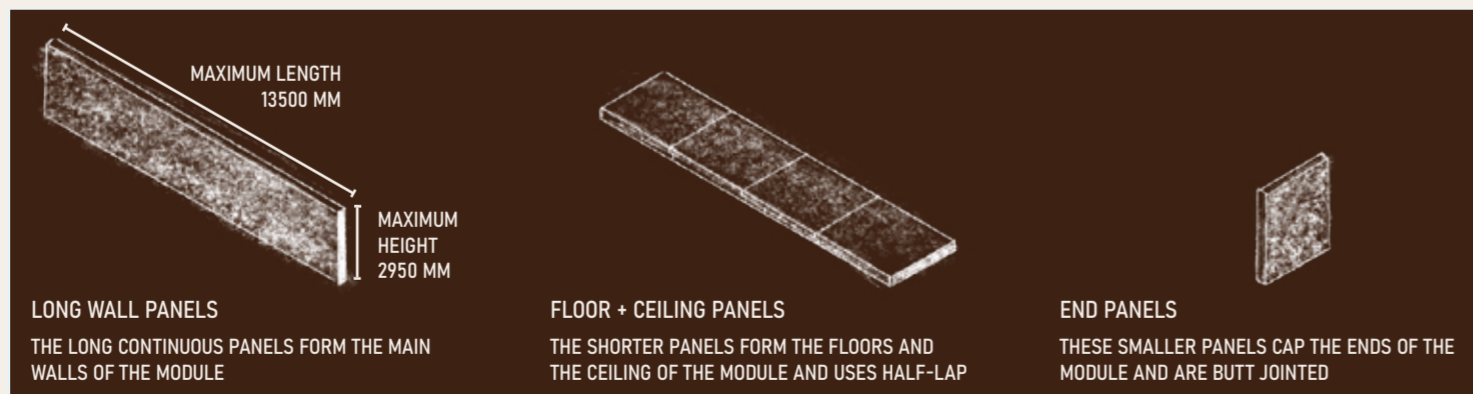
THIS METHOD OF CONSTRUCTION CREATES A TALLER MODULE WITHOUT THE GAP BETWEEN. THE FLOORS AND CEILINGS SIT ABOVE AND BELOW THE WALL PANELS. THE OVERALL HEIGHT OF THE STRUCTURE IS TALLER AND EACH MODULE IS MORE NARROW.



STACKED MODULES

### PANEL TYPES IN SYSTEM

THERE ARE THREE PANEL TYPES USED IN THE NU BUILD SYSTEM. PANELS ARE CONSTRUCTED FROM 50-350MM CLT, DECREASING IN THICKNESS BY STOREY IN ORDER TO REDUCE LOADING AND OVERALL WEIGHT.



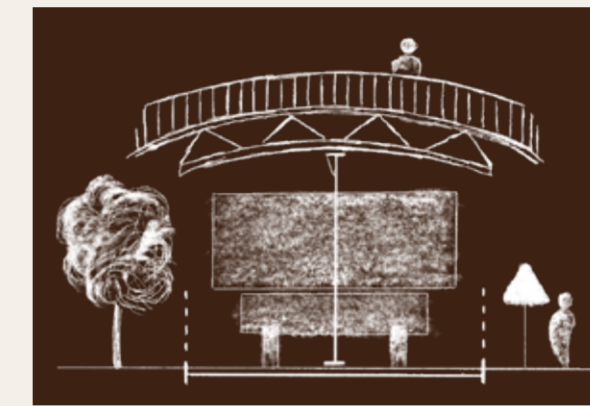
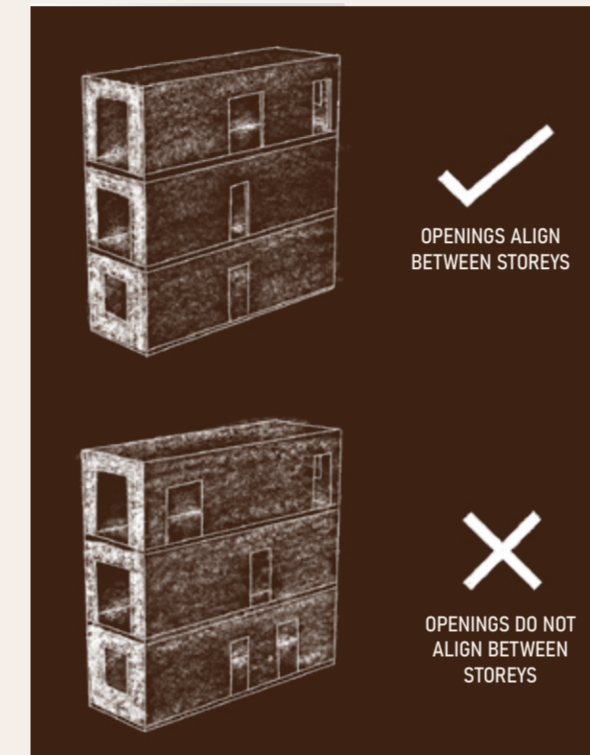
LONG WALL PANELS  
THE LONG CONTINUOUS PANELS FORM THE MAIN WALLS OF THE MODULE

FLOOR + CEILING PANELS  
THE SHORTER PANELS FORM THE FLOORS AND THE CEILING OF THE MODULE AND USES HALF-LAP

END PANELS  
THESE SMALLER PANELS CAP THE ENDS OF THE MODULE AND ARE BUTT JOINTED

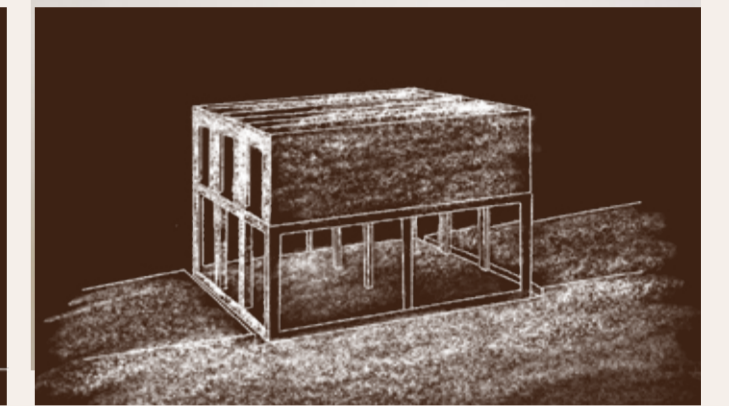
### RESTRICTIONS AND CONSIDERATIONS TO NOTE WITHIN SYSTEM

#### ALIGNMENT OF OPENINGS FOR MODULES



#### TRANSPORTATION OF MODULES

TRANSPORTATION RESTRICTIONS WOULD DETERMINE THE OVERALL SIZE RESTRICTIONS OF THE MODULE WHERE THE EXTERNAL WIDTH CAN BE A MAXIMUM OF 3.85M AND THE EXTERNAL HEIGHT WOULD BECOME 3650M. THIS COULD ALSO CREATE A LIMITATION OF THE SPAN OF THE MODULE. HOWEVER, IT IS POSSIBLE TO PRODUCE MODULES IN HIGHER SIZE AND SPAN, THEY WOULD BE CLASSED AS ABNORMAL LOADS.



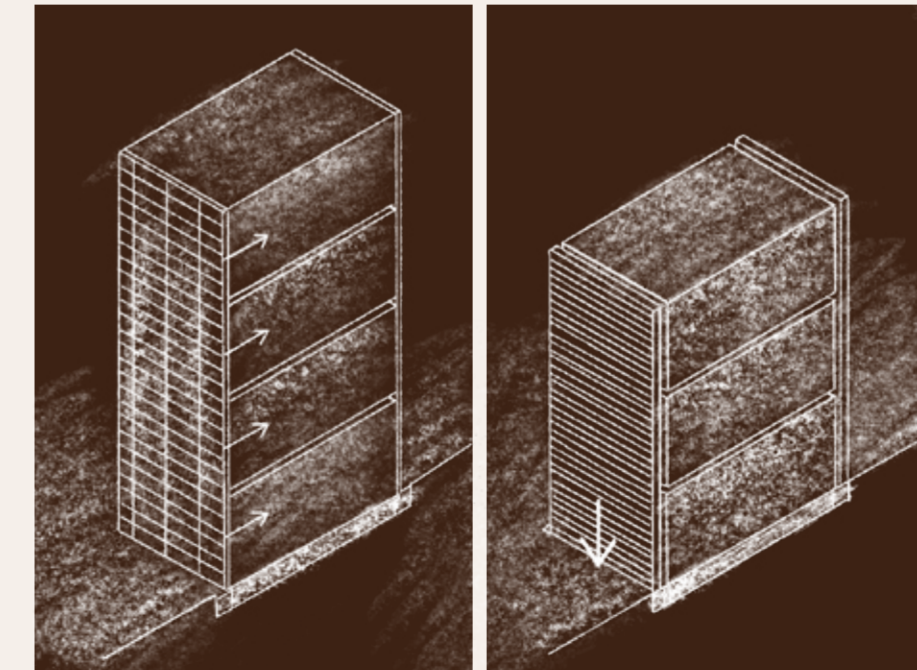
#### THE NEED FOR A CONCRETE/ STEEL FRAME TO CREATE AN OPEN SPACE FOR GROUND FLOOR

A CONCRETE PODIUM/ STEEL FRAME PODIUM WOULD BE CONSTRUCTED TO CREATE AN OPEN SPACE FOR THE GROUND FLOOR. THIS PODIUM WOULD SUPPORT THE MODULES ABOVE AND HELP KEEP THE MODULES DRY.

### PERMANENCE WITHIN SYSTEM

#### FACADE SYSTEMS FOR MODULES

ANOTHER PERMANENT FACTOR FOR THE NU BUILD SYSTEM WOULD BE THE CURRENTLY PROPOSED FACADE SYSTEMS, THE RAINSCREEN, AND LOAD-BEARING FACADE SYSTEM. WITH THE USE OF THESE SYSTEMS, IT COULD BECOME HARDER TO MOVE AND REARRANGE THE MODULES AS CONCEPTUALISED AS ADJUSTING THE FACADE SYSTEM IN ACCORDANCE WITH DIFFERENT LAYOUTS WOULD BECOME COSTLY OVER TIME. THERE WOULD ALSO BE AN INCREASED RISK OF SAFETY AND ERRORS DUE TO THE FACADE SYSTEMS BEING CONSTRUCTED ON-SITE.

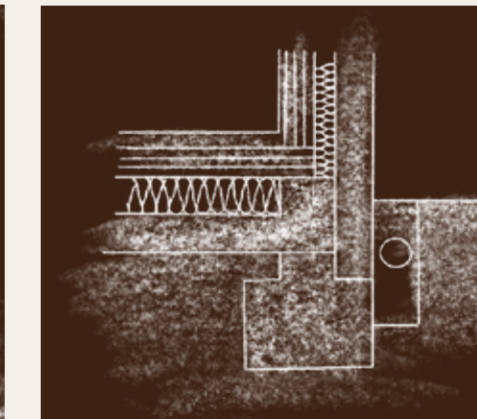


RAINSCREEN SYSTEM

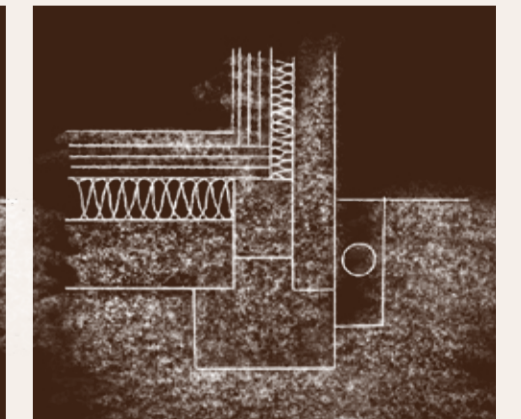
LOAD-BEARING SYSTEM

#### FOUNDATIONS FOR MODULES

THERE ARE CURRENTLY TWO TYPES OF FOUNDATIONS BEING USED FOR THE NU BUILD SYSTEM, A CONCRETE SLAB AND A VENTILATED CONCRETE SLAB. THESE ARE USED TO KEEP THE MODULES DRY AS A MAJOR WEAKNESS OF CLT PANELS WOULD BE THEIR MOISTURE TOLERANCE. THE USE OF A CONCRETE FOUNDATION WOULD CLASH WITH MY CONCEPT OF BUILDING A TEMPORARY STRUCTURE, SO AN ALTERNATIVE MOBILE FOUNDATION SYSTEM IS NEEDED.



CONCRETE SLAB



CONCRETE VENTILATED SLAB

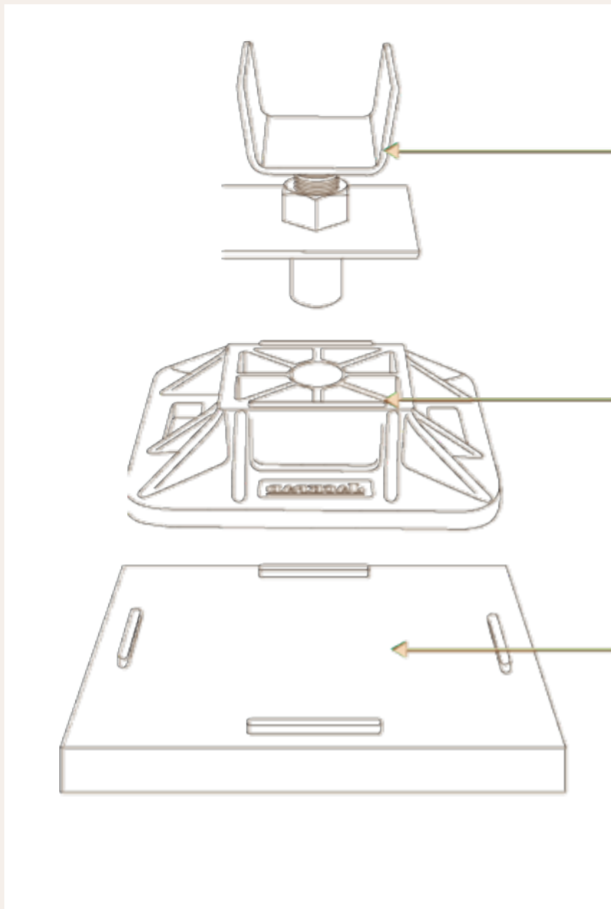
## ESTABLISHING ARCHITECTURAL SYSTEMS - ALTERNATIVE SYSTEMS TO WORK WITH NU BUILD SYSTEM

### ALTERNATIVE FOUNDATION SYSTEM - JACK PAD FOUNDATION



JACKPAD FOUNDATIONS ARE CATERED TOWARDS TEMPORARY MODULAR BUILDINGS, THEY ARE BUILT TO BE RE-USED MULTIPLE TIMES AND ENVIRONMENTALLY FRIENDLY. THESE TYPES OF FOUNDATIONS WOULD SUIT MY CONCEPT FOR A TEMPORARY MODULAR STRUCTURE NOT ONLY FROM THE REUSABILITY BUT FROM THE SPEED OF INSTALLATION AND HOW THE FOUNDATION OFFERS THE FLEXIBILITY OF CRANE SIZE AND POSITION.

#### THE SYSTEM



##### ADJUSTER

A PAINTED STEEL ADJUSTER PROVIDES THE FINAL ADJUSTMENT OF THE SYSTEM. BASE PLATE UNIVERSAL TO ALL APPLICATIONS.

##### JACKPAD 400 SUPPORT BLOCK (300MM X 360MM X 80MM)

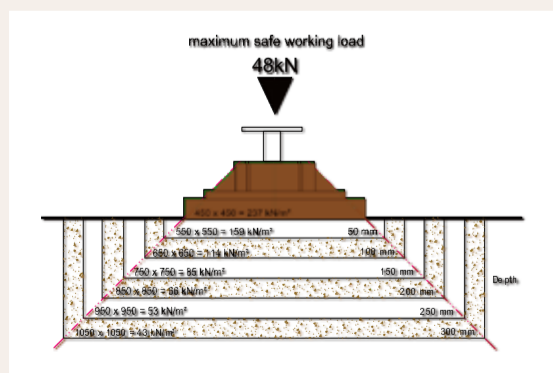
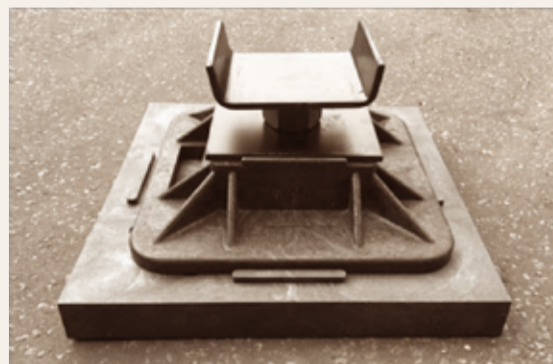
SUPPORT BLOCK TAKES VERTICLE LOAD AND DISPERSES THROUGH ITS BASE. SUPPORT BLOCK IS MANUFACTURED FROM RECYCLED PLASTIC AND IS 100%.

##### INCREMENTAL PACKERS (300MM X 360MM X 80MM)

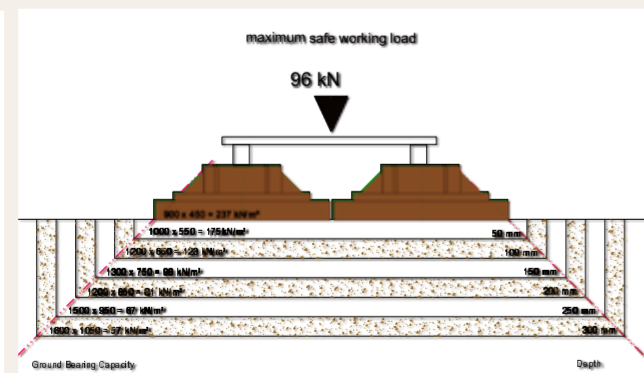
ALSO MANUFACTURED FROM RECYCLED PLASTIC, THE PACKER PROVIDES A SIMPLE SOLUTION TO OVERCOME FALL OF GROUND. FITTED WITH INTERLOCKING LUGS, THE PACKERS ARE STABLE WHEN IN MULTIPLE USES.

#### DIFFERENT FOUNDATIONS FOR DIFFERENT LOADS

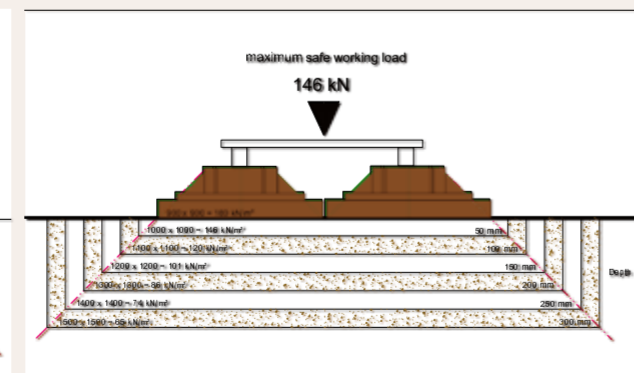
**SINGLE POSITION**  
PROOF TESTED 60KN - SWL 48KN



**DOUBLE POSITION**  
PROOF TESTED 120KN - SWL 96KN



**QUADRUPLE POSITION**  
PROOF TESTED 182KN - SWL 146KN

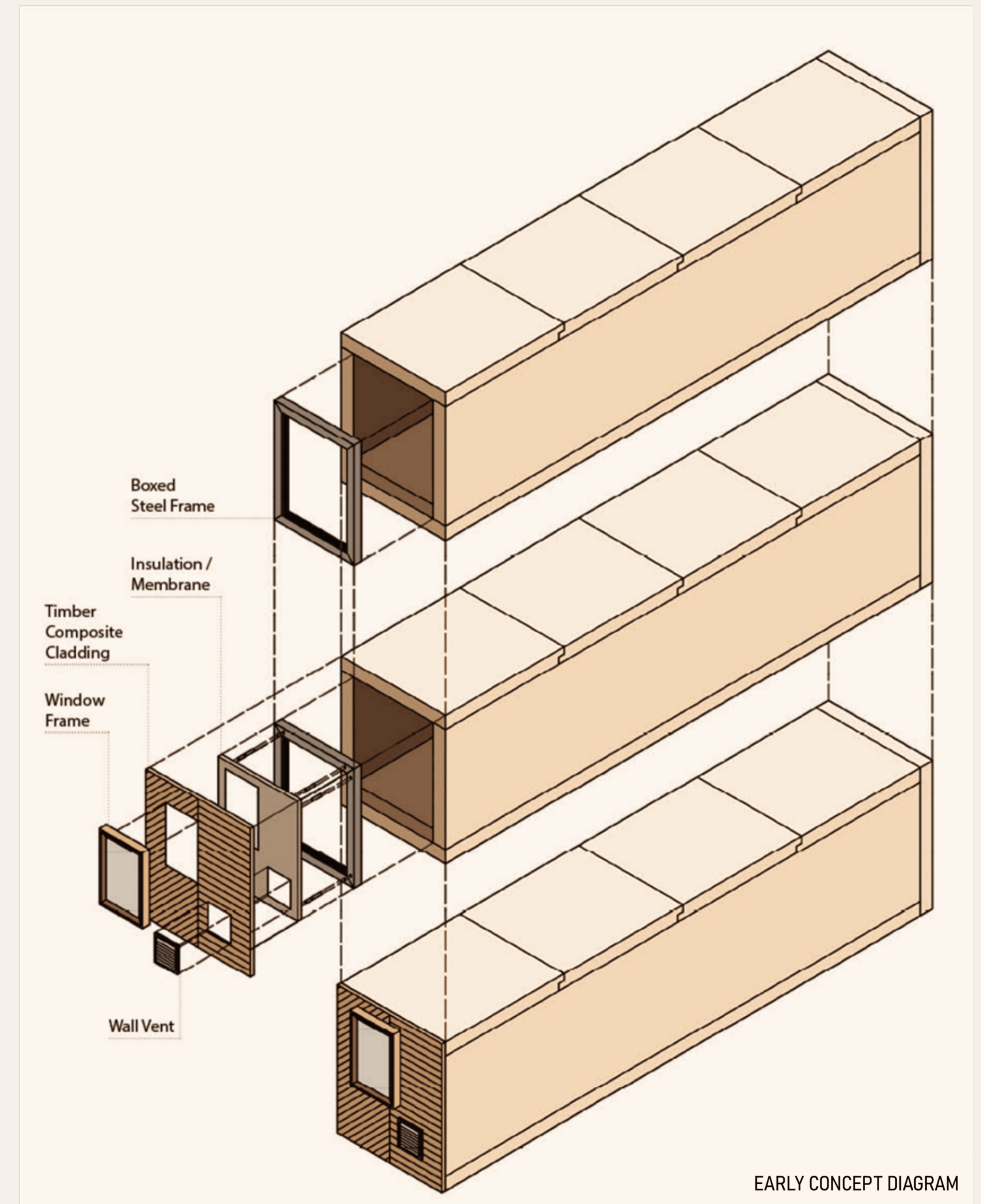


**BEAM SET UP**  
PROOF TESTED 385KN - SWL 295KN



THIS FOUNDATION COULD BE UTILISED WHEN THE RADIO STATION IS TRAVELING TO DIFFERENT POINTS IN THE SITE, IN BETWEEN THE FIRST AND LAST BASE.

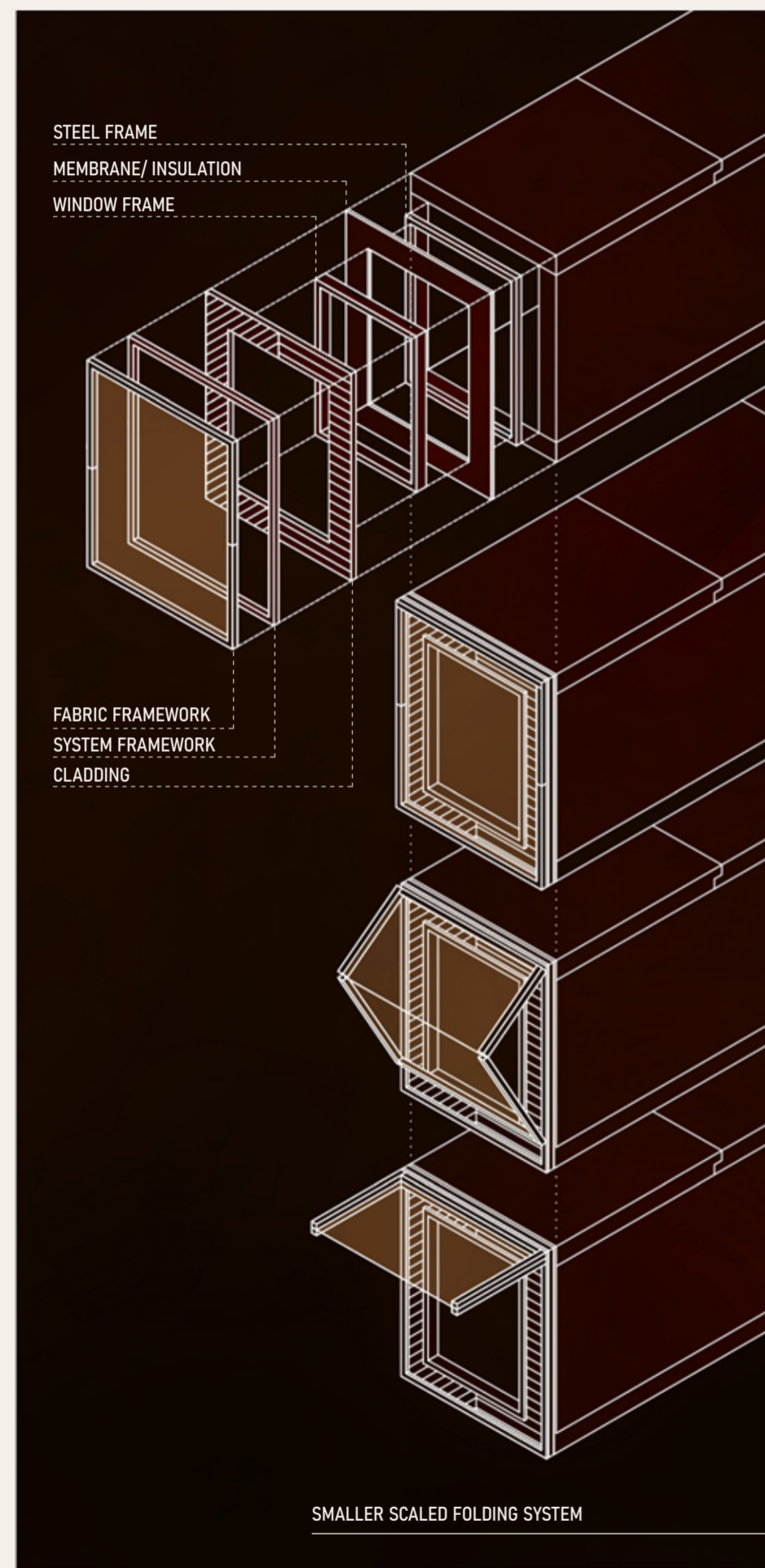
### ALTERNATIVE FRAME SYSTEM - NU-FRAME SYSTEM



EARLY CONCEPT DIAGRAM

# ESTABLISHING ARCHITECTURAL SYSTEMS - MODULATING FACADE SYSTEM

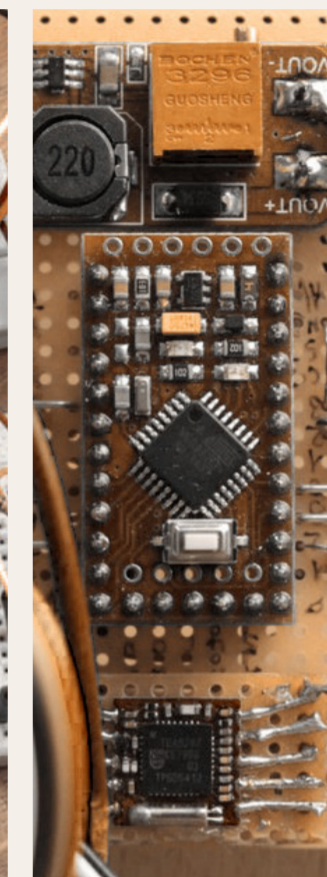
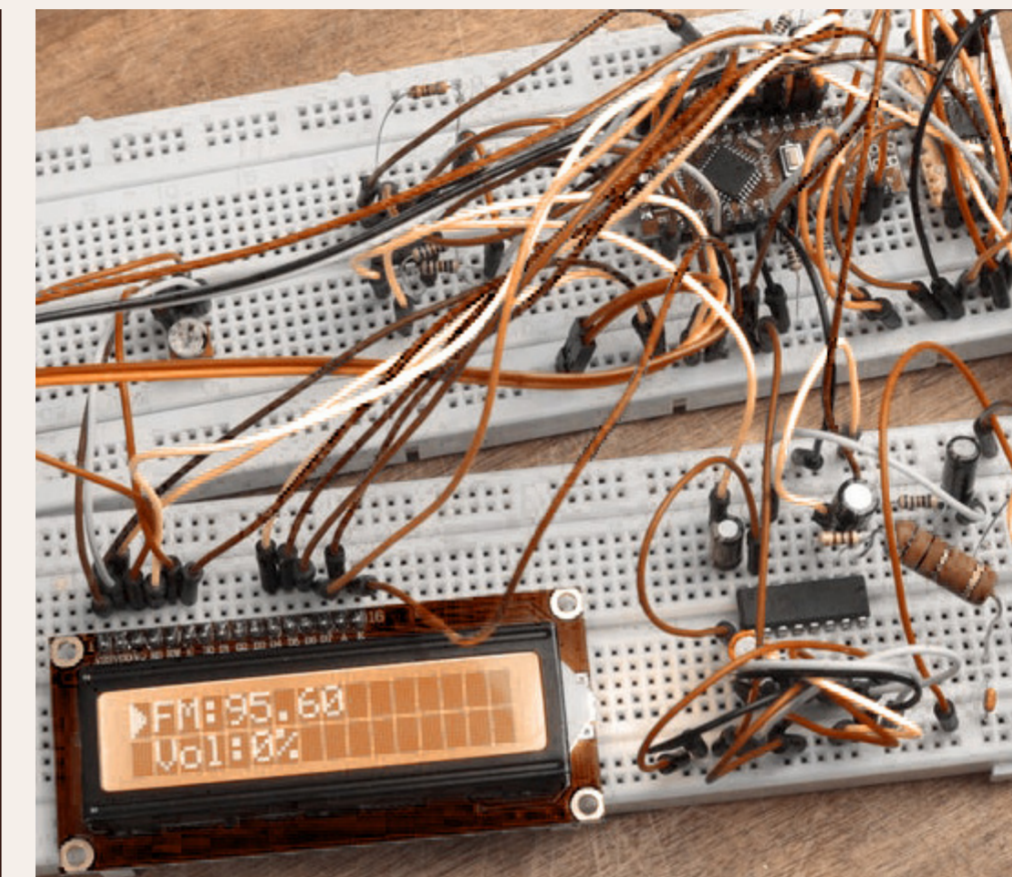
## FACADE SYSTEM BREAKDOWN



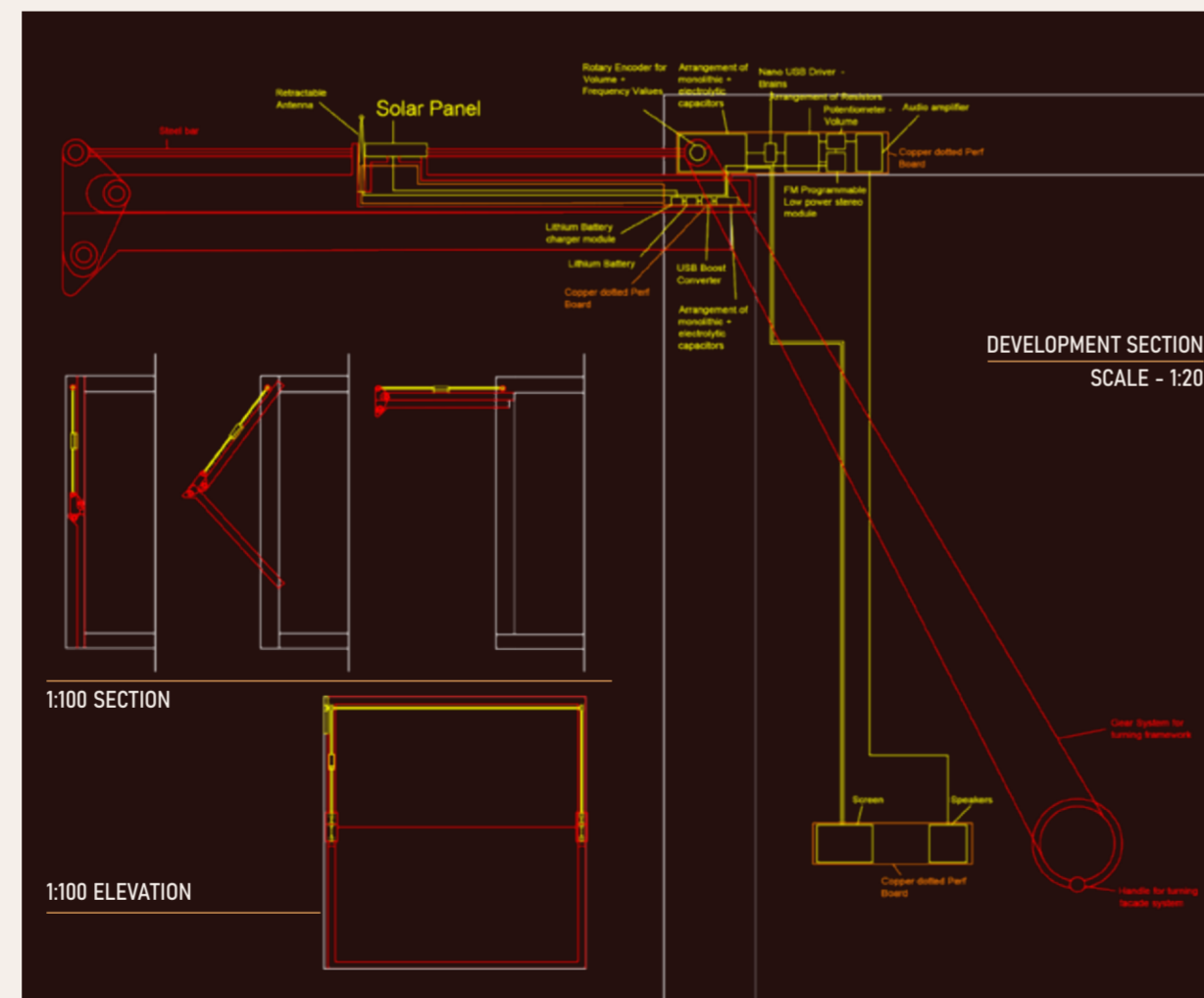
SCALE - 1:100

## POTENTIAL MATERIALS TO USE FOR MEMBRANE

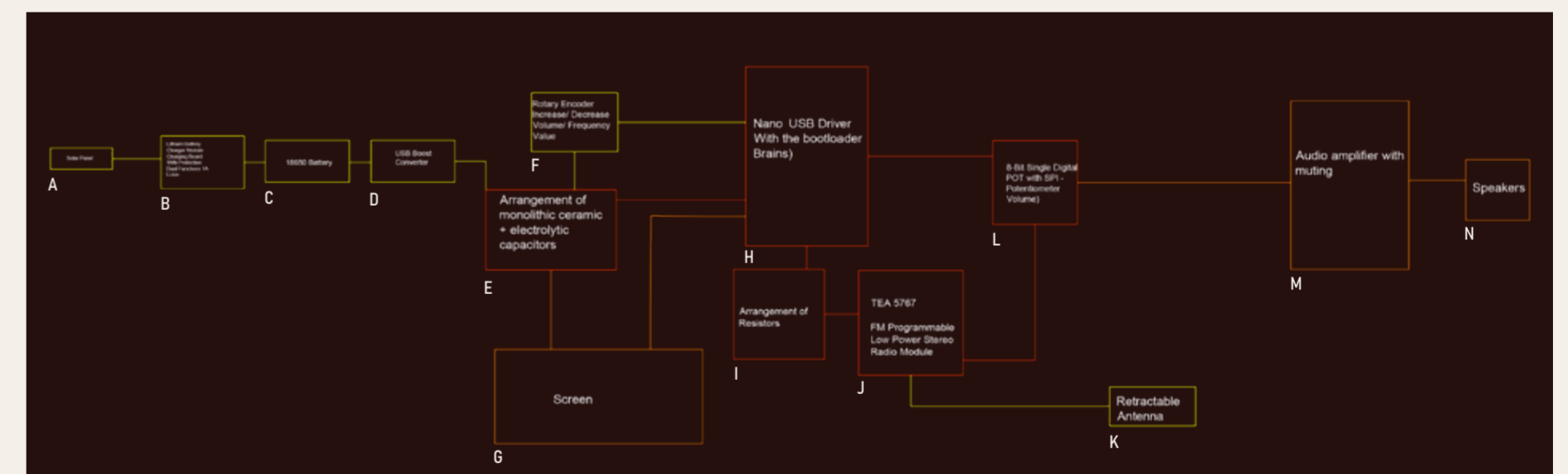
MESH FABRICS	PVC COATED POLYESTER	ETFE FILM
<p>PROS</p> <ul style="list-style-type: none"> <li>- BETTER VENTILATION</li> <li>- REDUCES INTERNAL CONDENSATION</li> <li>- COULD BECOME A BREATHABLE FACADE</li> <li>- LESS MAINTENANCE</li> </ul> <p>CONS</p> <ul style="list-style-type: none"> <li>- NOT GOOD INSULATORS</li> </ul>	<p>PROS</p> <ul style="list-style-type: none"> <li>- EXCELLENT STRENGTH, FLEXIBILITY, TRANSLUCENCY</li> <li>- AFFORDABILITY</li> <li>- INCLUDES UV STABILIZERS</li> <li>- LOW MAINTENANCE</li> <li>- SIGNIFICANT LIFESPAN</li> <li>- CAN BE MANUFACTURED IN VARYING LEVELS OF TRANSPARENCY</li> </ul> <p>CONS</p> <ul style="list-style-type: none"> <li>- NEGATIVE EFFECT ON RECYCLING PRECESS OF PVC MATERIALS</li> <li>- NOT NATURALLY BREATHABLE</li> </ul>	<p>PROS</p> <ul style="list-style-type: none"> <li>- THERMAL INSULATION</li> <li>- VERY TRANSPARENT (DEPENDENT ON USAGE)</li> <li>- LESS MAINTENANCE</li> <li>- MORE RESTISTANCE TO MILDEW AND RIPS</li> <li>- GOOD ALTERNATIVE TO GLASS</li> <li>- RECYCLABLE</li> </ul> <p>CONS</p> <ul style="list-style-type: none"> <li>- NOT NATURALLY BREATHABLE</li> <li>- CAN DETERIORATE + LOSE COLOUR OVERTIME</li> </ul>



I WANTED TO PROPOSE A FACADE SYSTEM THAT BECOMES MORE TEMPORARY AND DEPLOYABLE COMPARED TO THE COMMON RAINSCREEN FACADES THAT ARE CURRENTLY BEING USED. THE FACADE SYSTEM WOULD CONSIST OF A FABRIC FRAMEWORK THAT WOULD PROVIDE ADJUSTABLE SHADING, PRIVACY AND BECOME A SCREEN TO PROJECT LIGHT AND VIDEOS FOR DIFFERENT FESTIVALS. THIS WOULD BE ABLE TO BE ACHIEVED THROUGH THE FRAMEWORK FOLDING INTO THE WALL, WHICH COULD BECOME A CANOPY. RADIO WOULD ALSO BE INTEGRATED INTO THE FACADE SYSTEM, CHANGING THE ROLE OF THE FACADE INTO A RADIO DIAL.



## PROPOSED RADIO CIRCUIT



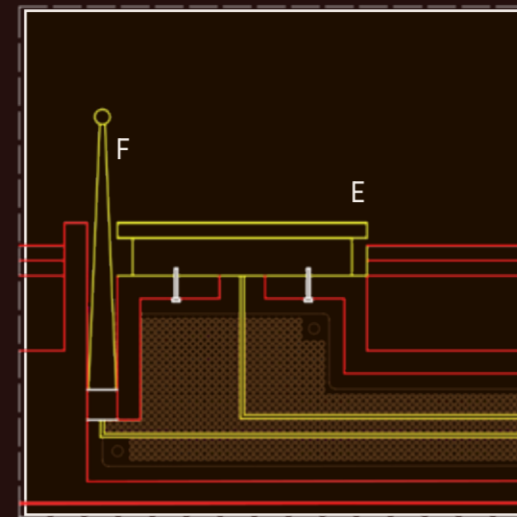
## ANNOTATION

- |   |  |
|---|--|
| A. SOLAR PANEL  | I. ARRANGEMENT OF RESISTORS                |
| B. LITHIUM BATTERY CHARGER MODULE                     | J. FM PROGRAMMABLE LOW POWER STEREO MODULE |
| C. LITHIUM BATTERY                                    | K. RETRACTABLE ANTENNA                     |
| D. USB BOOST CONNECTOR                                | L. POTENTIOMETER                           |
| E. ARRANGMENT OF MONOLITHIC + ELECTROLYTIC CAPACITORS | M. AUDIO AMPLIFIER                         |
| F. ROTARY ENCODER                                     | N. SPEAKERS                                |
| G. SCREEN   |  |
| H. NANO USB DRIVER                                    |  |

## MODULATING FACADE SYSTEM BREAKING DOWN RADIO SYSTEM

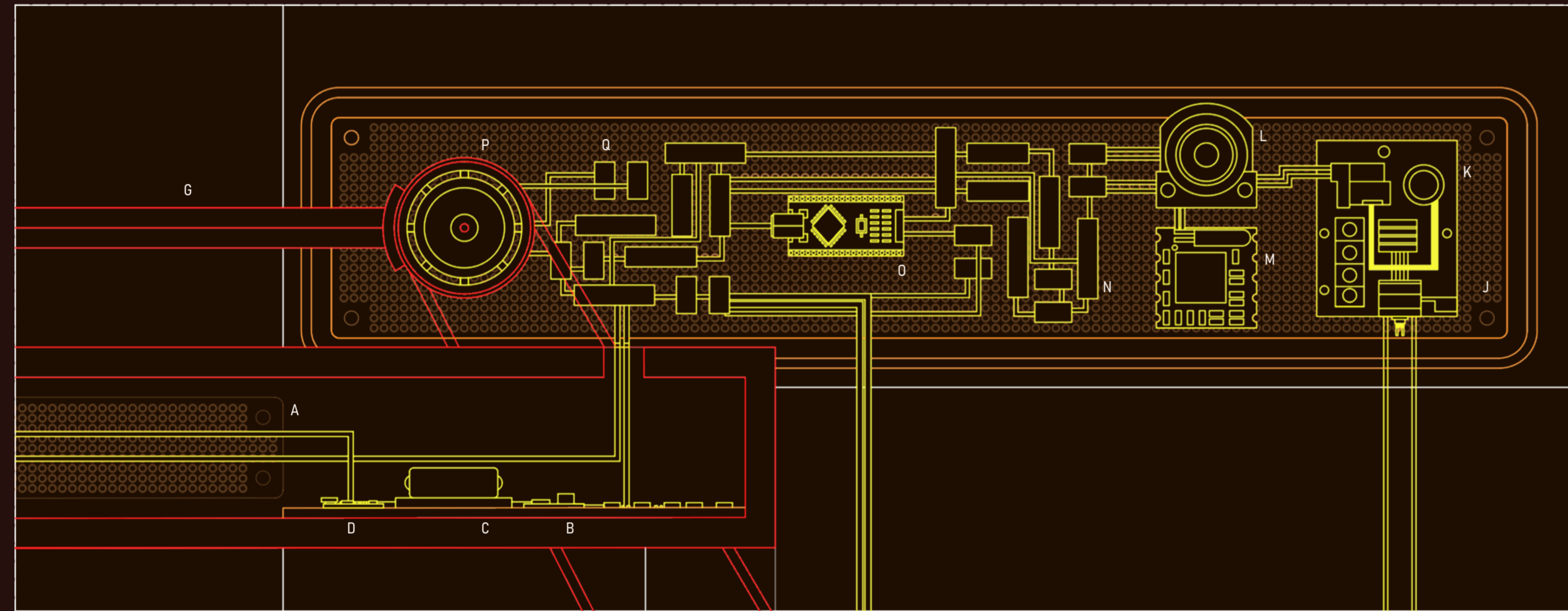
THIS PAGE CONSISTS OF A DETAILED BREAKDOWN OF THE RADIO COMPONENT WITHIN THE FRAMEWORK SYSTEM. THIS PAGE HIGHLIGHTS THE DIFFERENT ELEMENTS OF THE RADIO CIRCUIT, OVERALL MAKING A FULLY FUNCTIONAL RADIO SYSTEM.

RADIO COMPONENT PT1



SCALE - 1:5

RADIO COMPONENTS PT2



SCALE - 1:2

### ANNOTATION

#### RADIO COMPONENT PT1

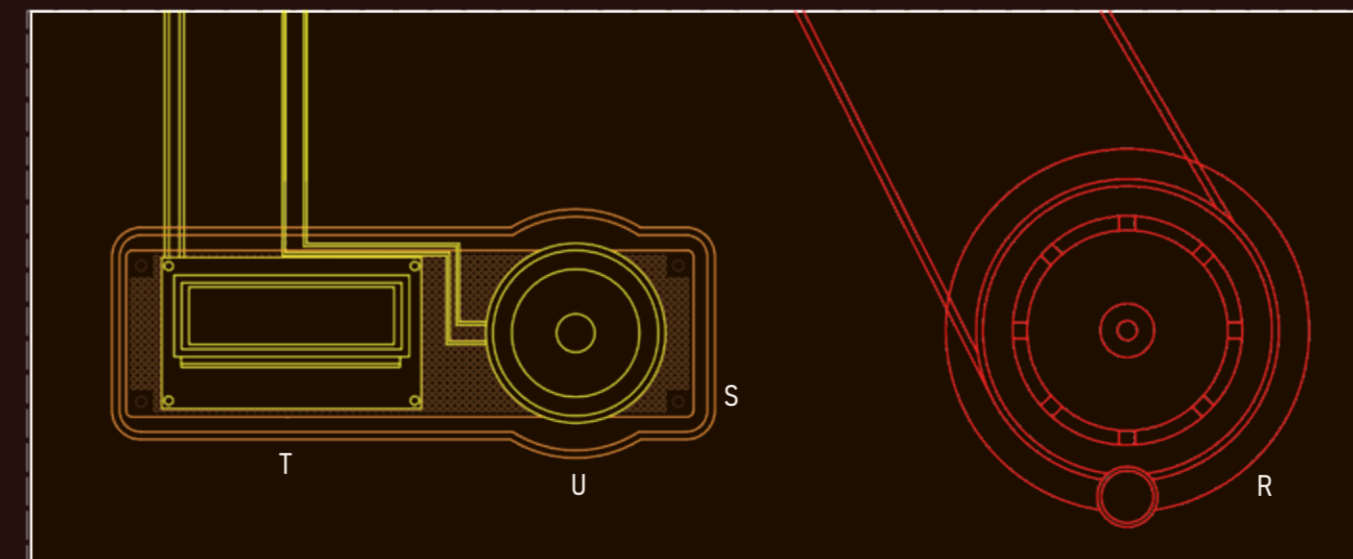
- A. COPPER DOTTED PERF BOARD
- B. USB BOOST CONVERTER
- C. LITHIUM BATTERY
- D. LITHIUM BATTERY CHARGER MODULE
- E. PORTABLE SOLAR PANEL
- F. RETRACTABLE ANTENNA

- G. STEEL BAR FOR CONNECTION
- H. 4 AXIS FOLDING SYSTEM
- I. CONNECTING HINGE FOR TIMBER FRAMEWORK

#### RADIO COMPONENT PT2

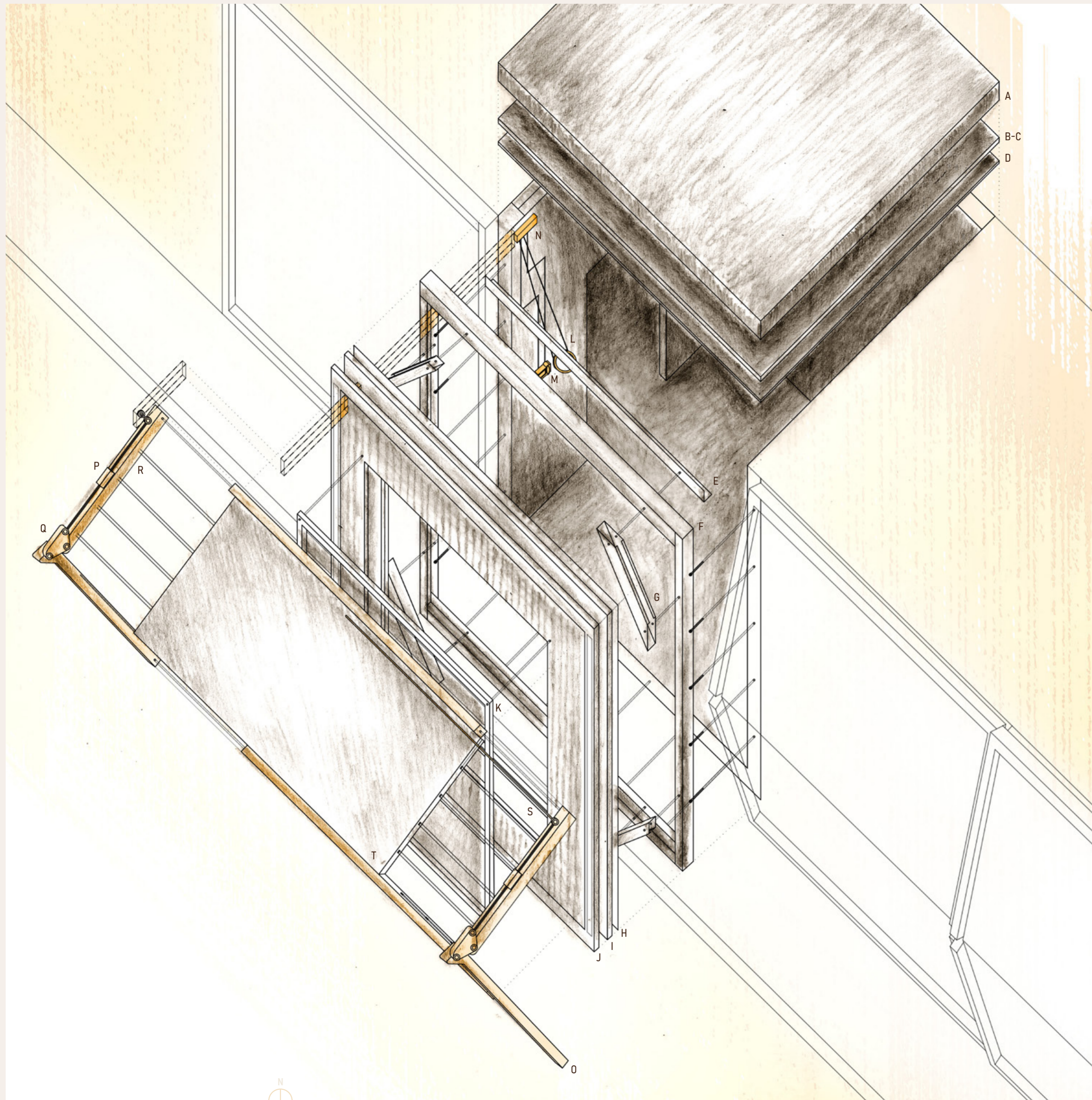
- J. COPPER DOTTED PERF BOARD
- K. AUDIO AMPLIFIER
- L. POTENTIOMETER (VOLUME ADJUSTMENT)
- M. FM PROGRAMMABLE LOW POWER STEREO MODULE
- N. ARRANGEMENT OF RESISTORS
- O. NANO USB DRIVER
- P. ROTARY ENCODER FOR VOLUME + FREQUENCY VALUES
- Q. ARRANGEMENT OF MONOLYTHIC + ELECTROLYTIC CAPACITORS

### USER INTERACTION



SCALE - 1:5

SECTION  
SCALE - 1:10



## MODULATING FACADE SYSTEM BREAKDOWN

AXONOMETRIC

SCALE- 1:30

THIS DIAGRAM IS A BREAKDOWN OF A MODULE WALL, HIGHLIGHTING EACH ELEMENT INVOLVED. THESE INCLUDE THE NU-FRAME SYSTEM, WALL BREAKDOWN, AND THE RADIO COMPONENT TO THE FACADE SYSTEM.

### ANNOTATION

#### ROOF BREAKDOWN

- A. CLT PANEL
- B. VAPOUR BARRIER
- C. RIGID INSULATION
- D. INTERIOR CLT PANEL

#### NU-FRAME SYSTEM

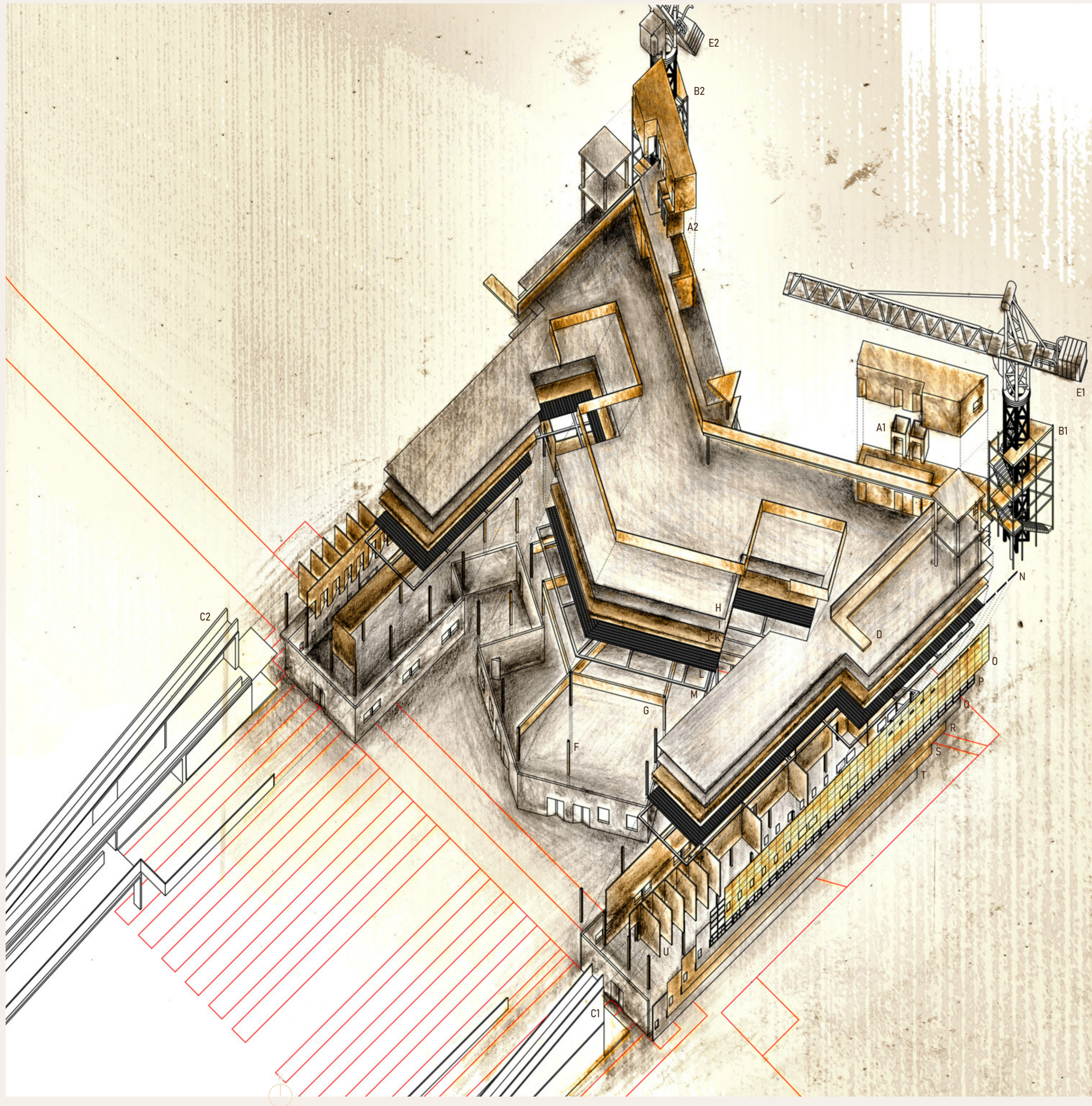
- E. SUPPORTING STEEL FRAME FOR LIFTING MODULE
- F. ASSEMBLED PREFABRICATED STEEL FRAME
- G. SUPPORTING PREFABRICATED STEEL HAUNCHES CONNECTED WITH SCREWS AND NAIL PLATES

#### WALL BREAKDOWN

- H. WATERPROOF MEMBRANE
- I. RIGID INSULATION
- J. TIMBER CLADDING WITH SLIDING INSERTS
- K. PVCU WINDOWS

#### RADIO COMPONENT

- L. HANDLE FOR ADJUSTING VOLUME + FREQUENCY
- M. SCREEN + SPEAKERS
- N. CUSTOM RADIO SYSTEM
- O. TIMBER FRAMEWORK CONNECTED WITH SCREWS
- P. PORTABLE SOLAR PANEL + ANTENNA
- Q. FOUR BAR + PARALLELOGRAM FOLDING MECHANISM
- R. INTEGRATED RADIO SYSTEM
- S. DIAL EXTENSION TO CONNECT MOVEMENT OF OPPOSING FOLDING MECHANISM
- T. FABRIC CONNECTED TO FRAME WORK THROUGH STAPLE APPLICATION



## LAYERS + COMPONENTS

AXONOMETRIC

SCALE- 1:300

THE FOLLOWING DIAGRAM BREAKS DOWN THE TECHNOLOGICAL ELEMENTS OF THE PROPOSAL INTO DIFFERENT LAYERS. THESE LAYERS INCLUDE VERTICAL CIRCULATION, STRUCTURE, FLOOR, LOAD BEARING WALLS AND NON BEARING WALLS.

### ANNOTATION

#### VERTICAL CIRCULATION

- A. LIFTS
- B. STAIRS
- C. RAMP STRUCTURE
- D. WALKWAYS
- E. CRANES

#### STRUCTURE

- F. STEEL COLUMNS
- G. STEEL TRUSS

#### FLOOR

- H. PRE-CAST CONCRETE
- I. RIGID INSULATION
- J. VAPOUR BARRIER
- K. ACOUSTIC MAT
- L. STEEL DECK
- M. STEEL FRAME

#### LOAD BEARING WALLS

- N. WINDOWS
- O. WEATHERED STEEL PANELS
- P. SUPPORTING SUB-STRUCTURE
- Q. INSULATION
- R. VAPOUR BARRIER
- S. ACOUSTIC MEMBRANE
- T. PRE-CAST CONCRETE SLABS

#### NON BEARING WALLS

- U. PRECAST CONCRETE PANELS



PERSPECTIVE TEST  
MATERIALITY

The image is a dark brown architectural site plan of Manston. A golden grid is overlaid on the plan, with a bright white sun-like glow at its center. The grid consists of vertical lines with decorative, wavy patterns at the bottom, and horizontal lines with circular patterns at the top. A dashed white line runs diagonally across the site. A circular area is labeled 'Helipad'. The overall aesthetic is technical and futuristic.

# SCENES OF MANSTON MODULATION

A COMPILATION OF PERSPECTIVES THAT SHOWCASES THE PROGRAMS FOR THE COMMUNITY BASE AND THE PROPOSED MODULES.





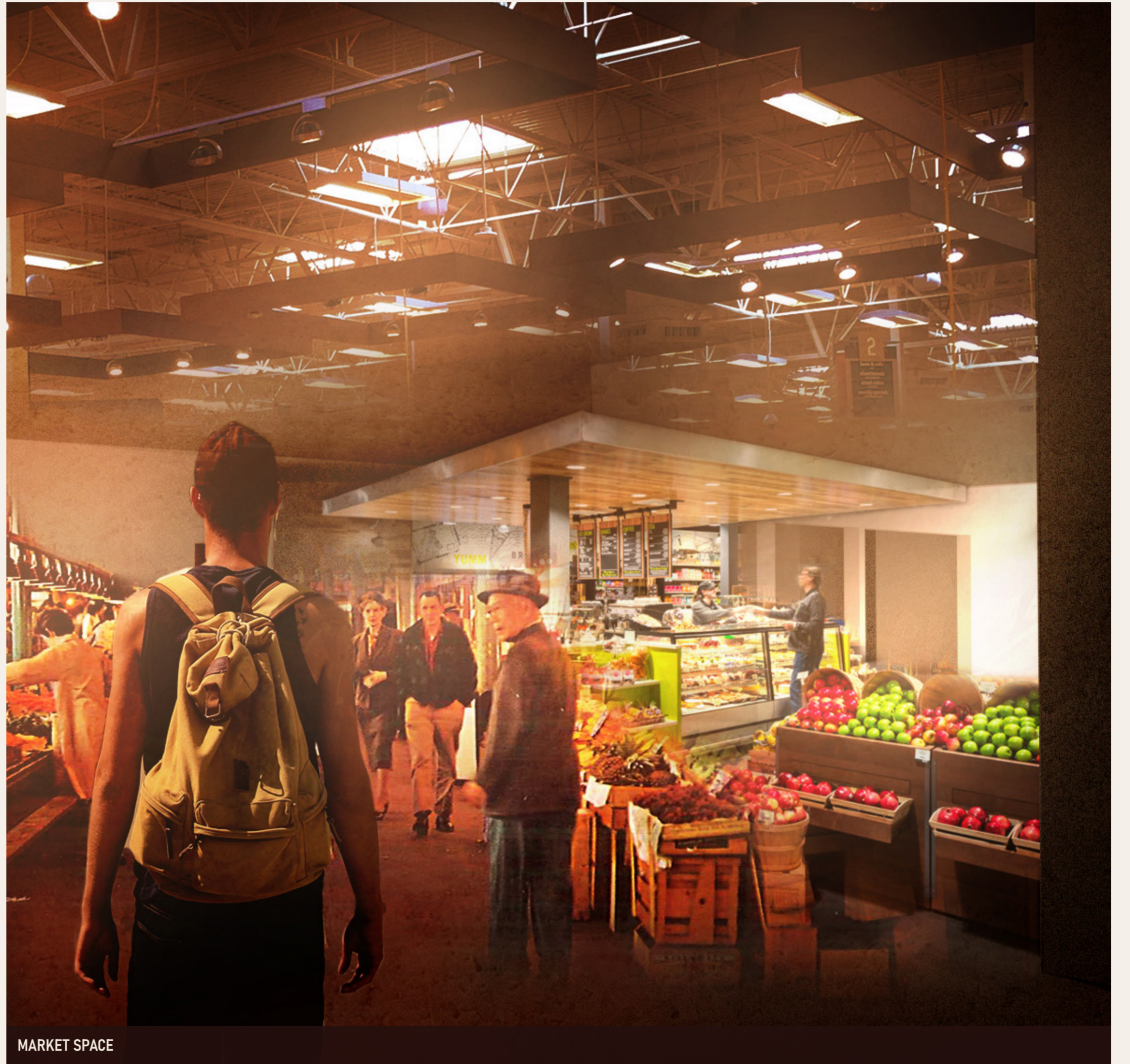
CONSTRUCTING MODULES

EXTERIOR MARKET SPACE

EXTERIOR PERSPECTIVES

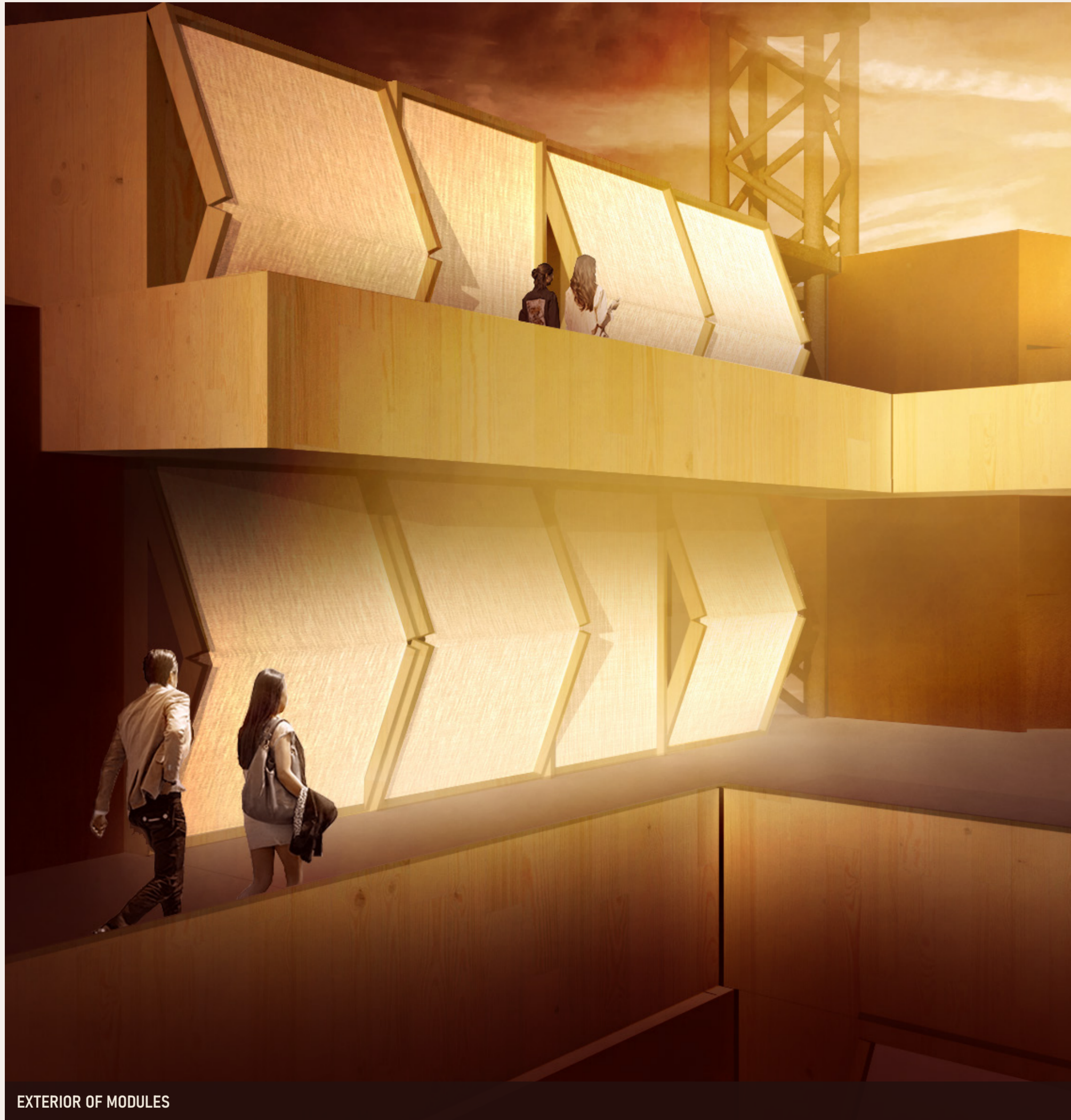


SOCIAL POCKET



MARKET SPACE

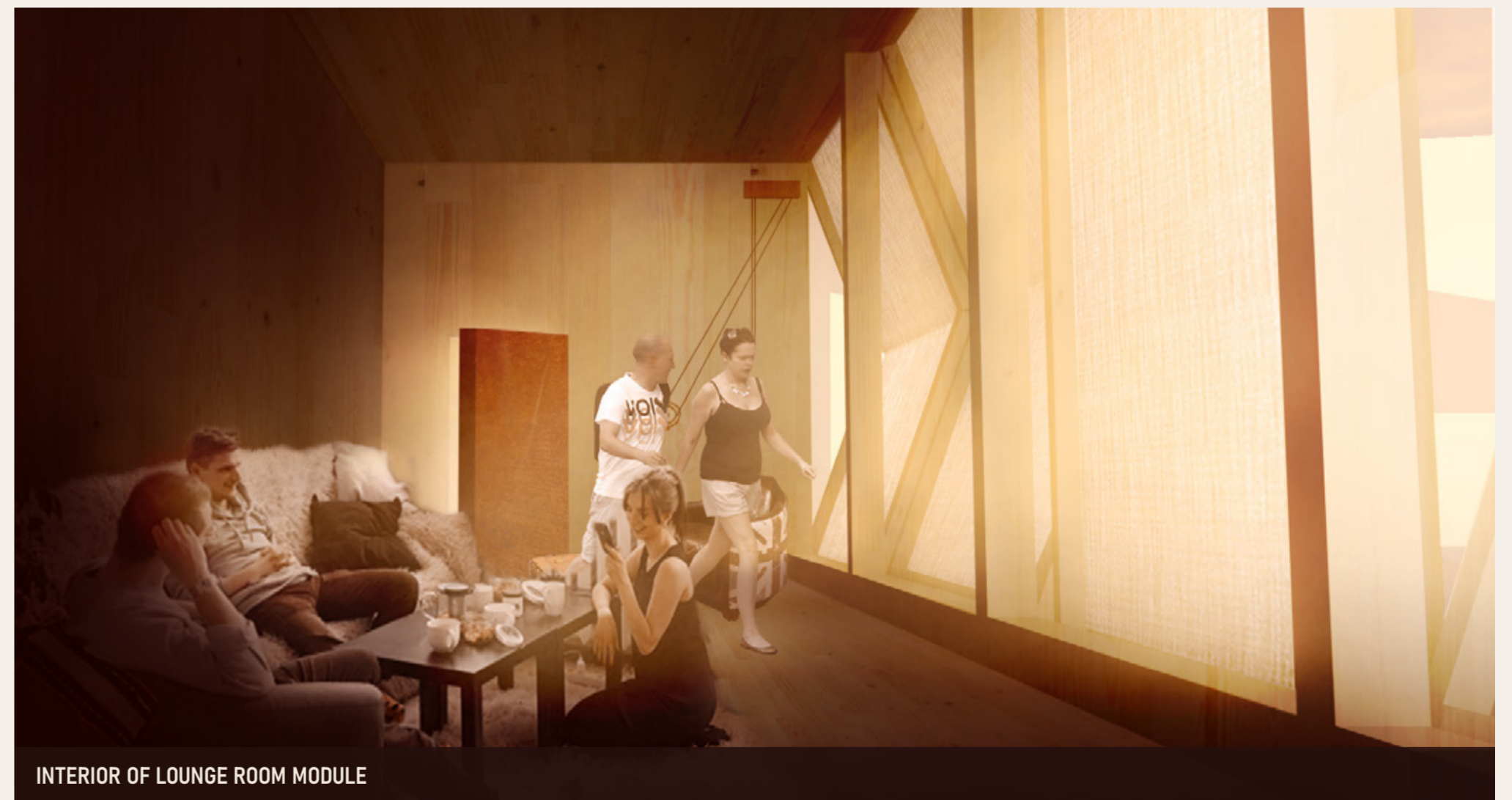
INTERIOR PERSPECTIVES



EXTERIOR OF MODULES



INTERIOR OF OFFICE MODULE



INTERIOR OF LOUNGE ROOM MODULE

MODULE PERSPECTIVES



INTERIOR OF RECORDING ROOM MODULE

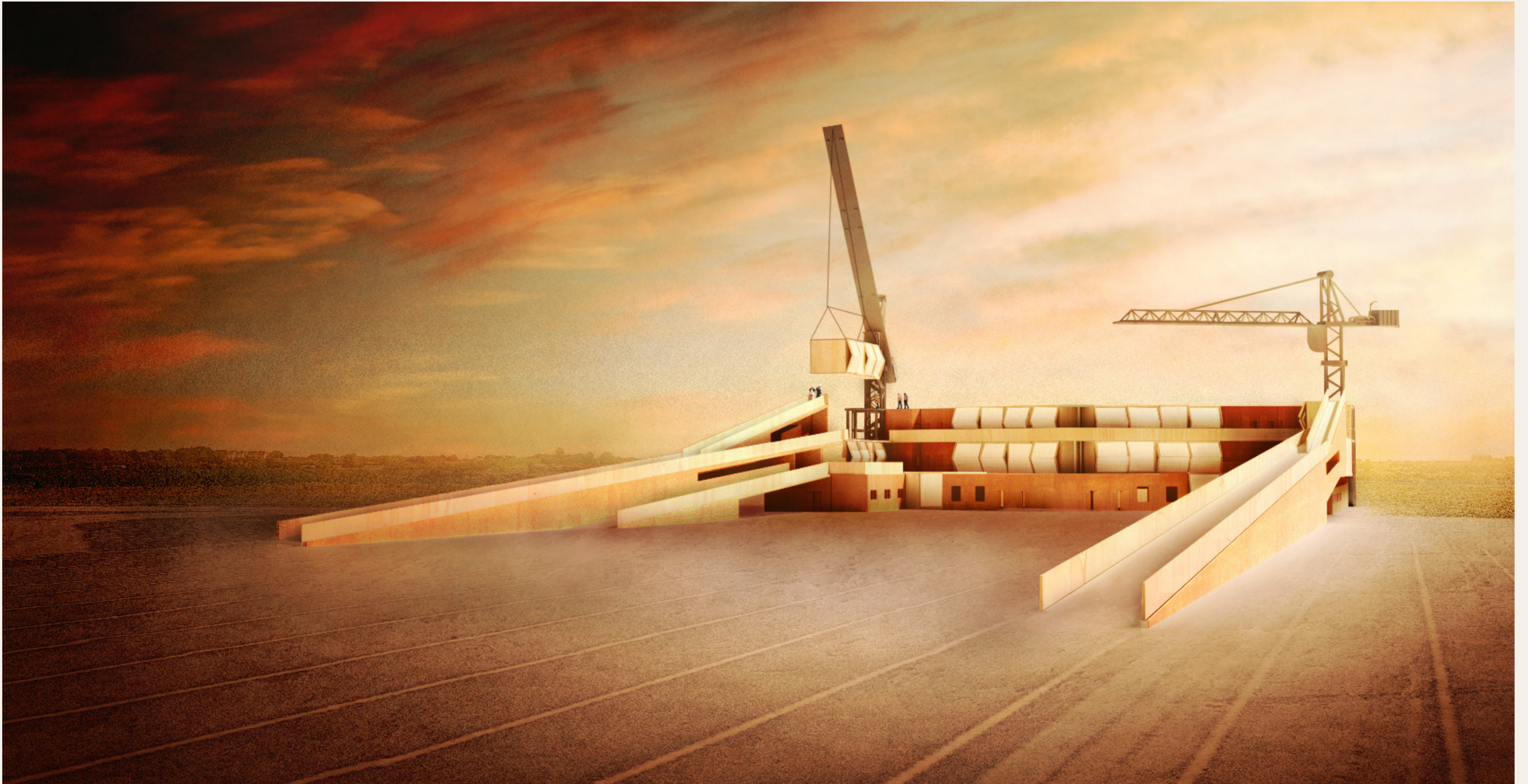


EXTERIOR OF MODULES

MODULE PERSPECTIVES



EXTERIOR PERSPECTIVES



EXTERIOR PERSPECTIVES



EXTERIOR PERSPECTIVES



EXTERIOR PERSPECTIVES





FILM STILLS - "MANSTON MODULATION"

THIS PAGE COMPILES MANY STILLS FROM THE FILM CREATED FOR THE PROPOSAL. THE FILM FOCUSES ON SHOWCASING THE JOURNEY OF THE RADIO STATION FROM THE FIRST BASE TO THE SECOND BASE, FORMING THE OVERALL MASTER PLAN STRATEGY.



FILM STILLS - "MANSTON MODULATION"

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FILM STILLS - "MANSTON MODULATION"

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FILM STILLS - "MANSTON MODULATION"



# MANSTON MODULATION

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A PROPOSAL FOR THANET'S FIRST DEPLOYABLE COMMUNITY RADIO STATION THAT HELPS REDEVELOP MANSTON AIRPORT INTO A RESIDENTIAL LANDSCAPE.