



Scott Lenton & Chelcie Akon



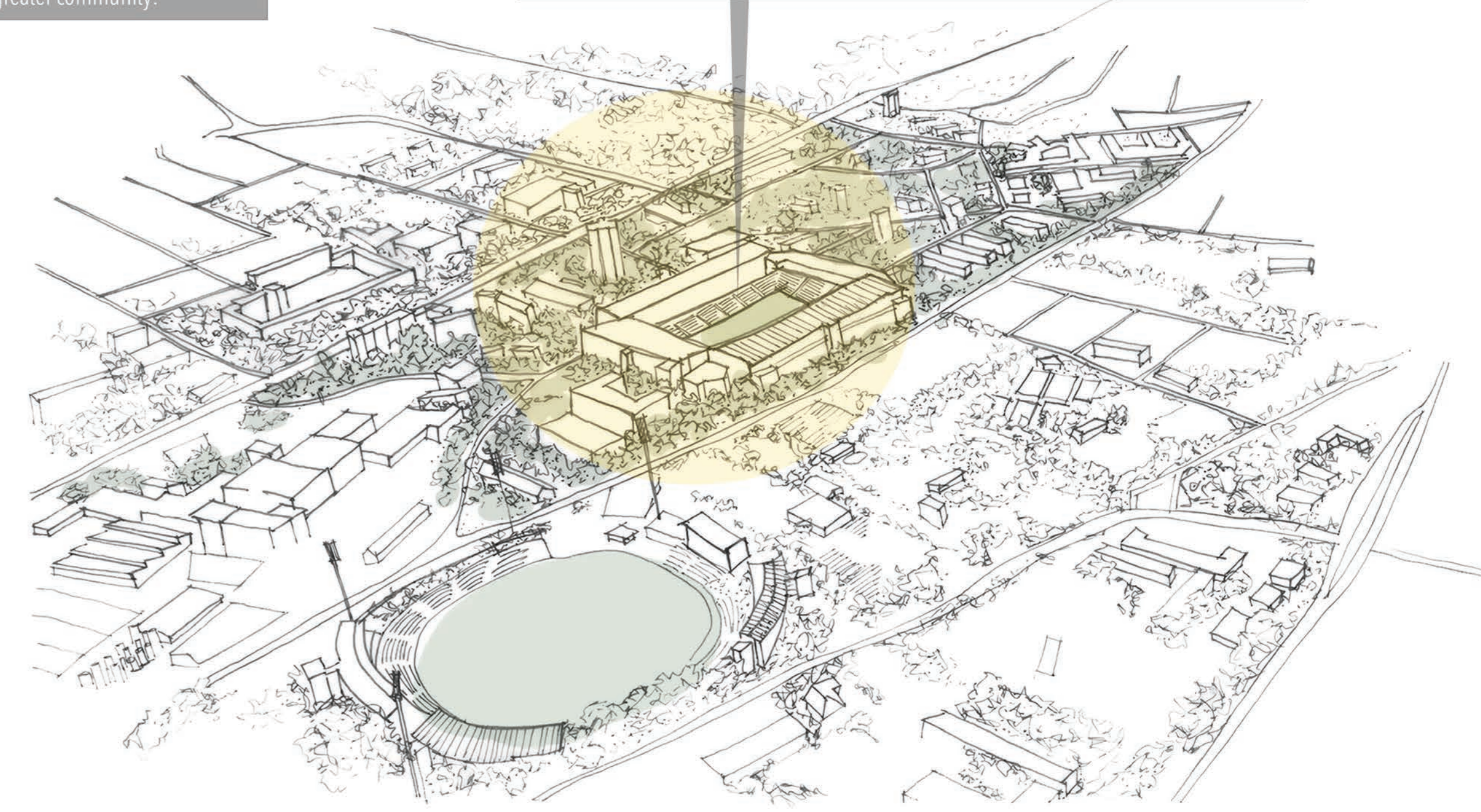
01 | CONCEPT & STORY...

We are a middle-class family of five who would like to be within proximity to schools for our three children, as well as parks, sports facilities and universities as we see this as being our home in which we will bring up our children until they enroll into university. Being active is also important to us, so we would like to be close to recreational, outdoor activities.

We want to live in a safe, suburban neighborhood to raise our children & feel integrated within a greater community!



The City of Cape Town will be relocating all provincial rugby from the Newlands Stadium to the Green Point Stadium by the year 2020. As a result of this, the iconic Newlands Stadium, which is the second-oldest rugby stadium in the world, presents the opportunity for a redevelopment into a residential entity, which will enhance the existing fabric of the historical suburban neighborhood. With its quiet tree-lined streets and the mountain close by, Newlands provides the easiest access to the city and students have UCT right on their doorstep. The residential complex could provide homes for a diverse demographic; families, university students & young professionals, as well as include additional public spaces for the larger community which will enhance the nature of the suburb.



TIMBER COMPETITION

THE ADAPTIVE REUSE OF A SOUTH AFRICAN ICON THROUGH THE INNOVATIVE USE OF CROSS LAMINATED TIMBER

SUBMITTED BY: SCOTT LENTON + CHELCIE AKOM



WHAT? A residential development composed of modules (units)

WHERE? The Newlands Rugby Stadium, Cape Town

WHO? A middle - income family of five

AIM:

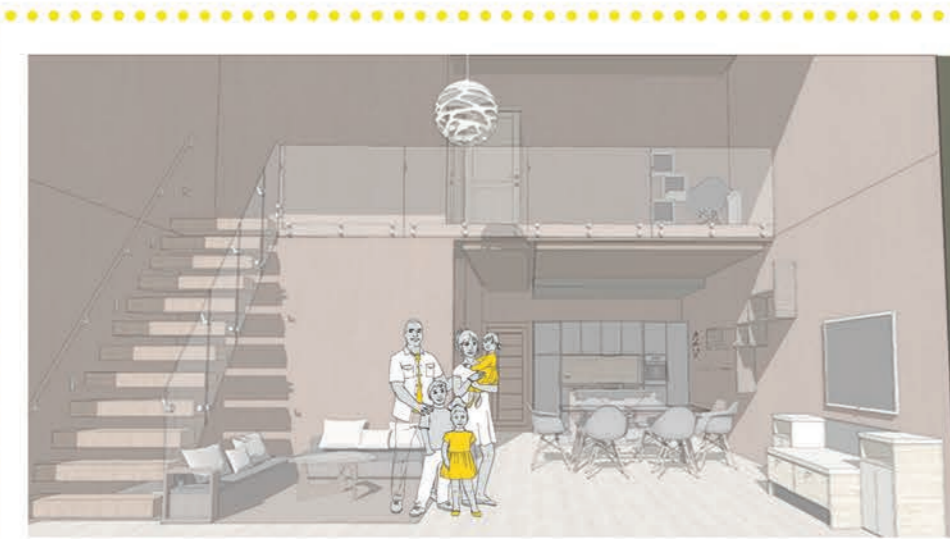
TO DESIGN A SUSTAINABLE & AFFORDABLE HOME FOR JOHN & AMY WHICH EXPLORES THE CAPABILITIES OF CROSS LAMINATED TIMBER WHEN APPLIED TO AN EXISTING STRUCTURE.

- THE DESIGN WILL PROVIDE A PRECEDENT FOR THE INNOVATIVE CAPABILITIES OF CROSS LAMINATED TIMBER (CLT) WHEN APPLIED TO THE ADAPTIVE REUSE OF AN UNOCCUPIED (OR DERELICT) STRUCTURE.
- THE USE & TECHNICAL CONSIDERATIONS OF CLT WHEN COMBINED WITH VARIOUS EXISTING MATERIALS WILL BE EXPLORED.
- CREATIVE MEANS OF SUSTAINABILITY WILL BE INVESTIGATED, AS WELL AS HOW AN EXISTING STRUCTURE CAN CONTRIBUTE TO THIS.
- EXPLORE THE CONCEPT OF MODULAR DESIGN WHEN USING CLT.
- EXPLORE HOW CLT CAN BE USED (NOT ONLY IN THE DESIGN OF HOMES OR UNITS) BUT ALSO COMMUNAL FACILITIES.

THE CONCEPT OF JOHN & AMY'S HOME

JOHN & AMY'S HOME WILL BE A UNIT WHICH WILL FORM PART OF A LARGER SCHEME WITHIN THE DEVELOPMENT.

THE DEVELOPMENT WILL PROVIDE COMMUNAL FACILITIES, USING CLT, WHICH JOHN & AMY HAVE ACCESS TO. IN ADDITION, THE DEVELOPMENT WILL CONTRIBUTE TO THE EXISTING FABRIC OF NEWLANDS BY PROVIDING A NUMBER OF FACILITIES WHICH CAN BE USED BY THE PUBLIC.



PERSPECTIVE VIEW



LOWER PLAN



UPPER PLAN

JOHN & AMY'S UNIT LOCATED IN COMPLEX

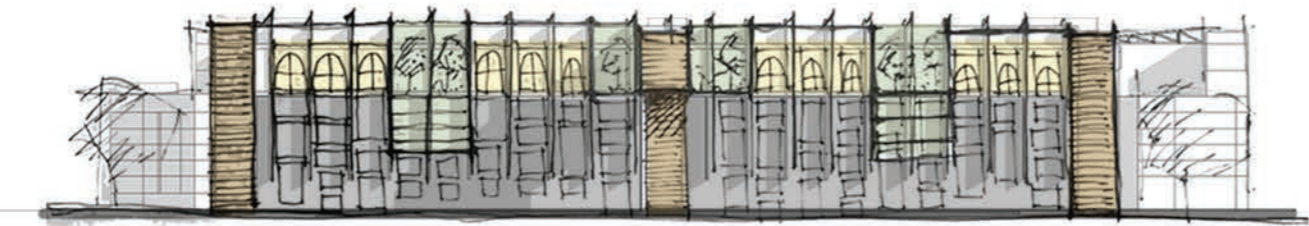
THE DEVELOPMENT WILL COMPRISE OF THE FOLLOWING UNIT TYPES:

- 1 BED
- 2 BED
- DUPLEXES

Newlands is the ideal suburb to raise our children and fulfills all of our needs. We are excited to be part of a historical suburb which has a strong emphasis on community.



GARDENS
CIRCULATION
DUPLEXES
1/2 BED UNITS



CONCEPTUAL ELEVATION- WEST BLOCK



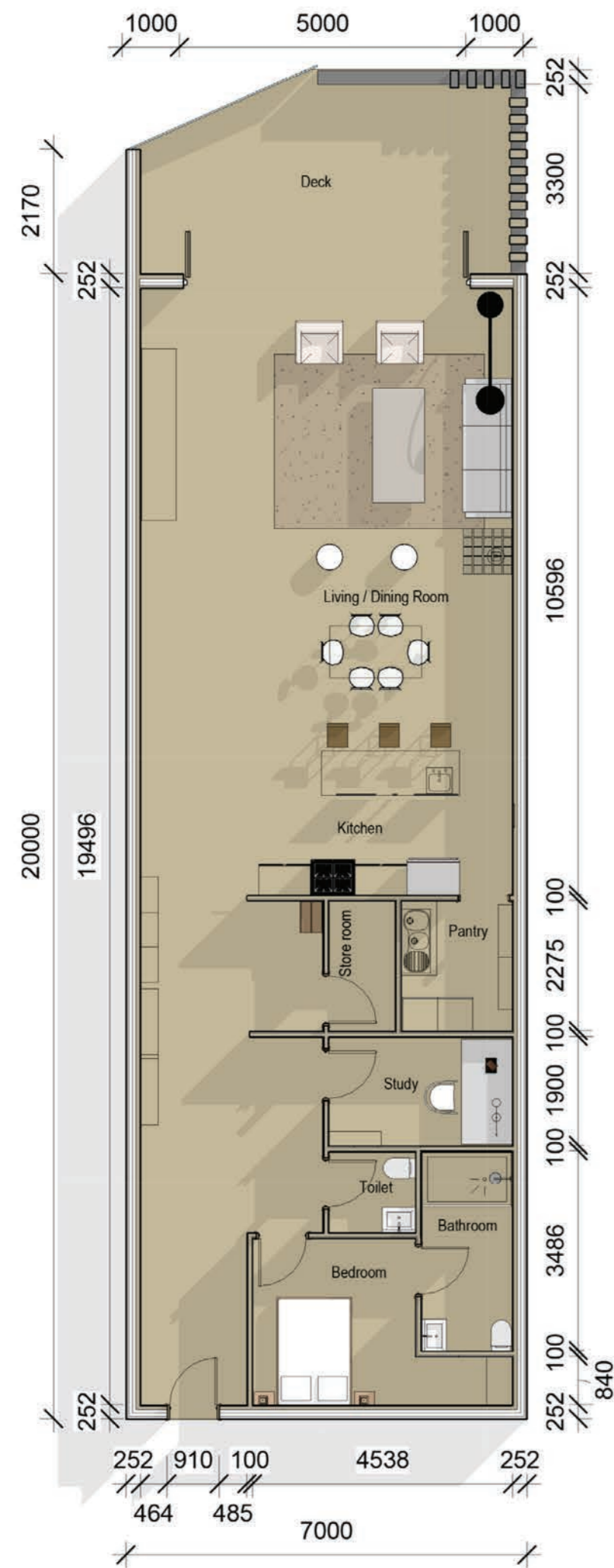
03 | FINAL PROPOSAL...

03a. Architectural drawings & detailing

03b. Artistic representations

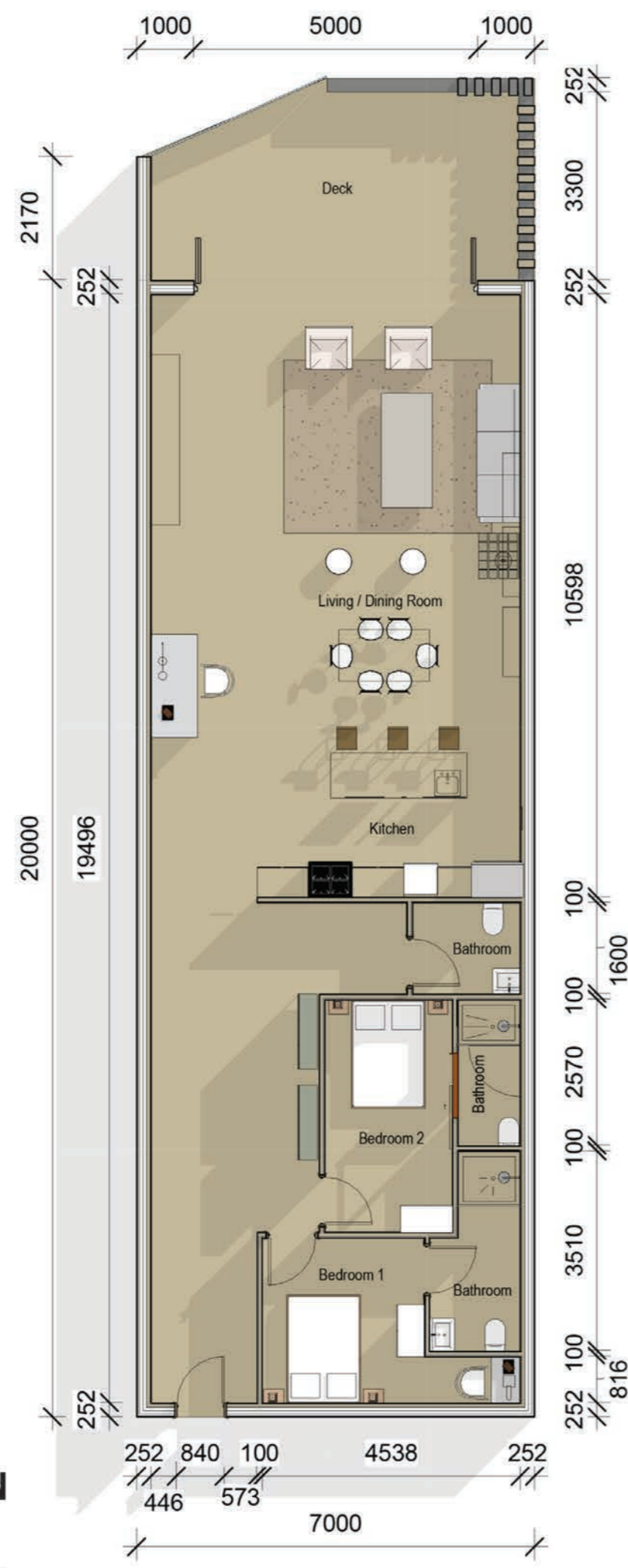


1 BED UNIT
 MODULE: 7 x 20m
 1 BEDROOMS
 1.5 BATHROOMS
 STORE ROOM
 PANTRY
 STUDY
 KITCHEN
 LIVING / DINING ROOM
 DECK



1 BED UNIT : PLAN
 SCALE 1:100

2 BED UNIT
 MODULE: 7 x 20m
 2 BEDROOMS
 2.5 BATHROOMS
 KITCHEN
 LIVING / DINING ROOM
 DECK



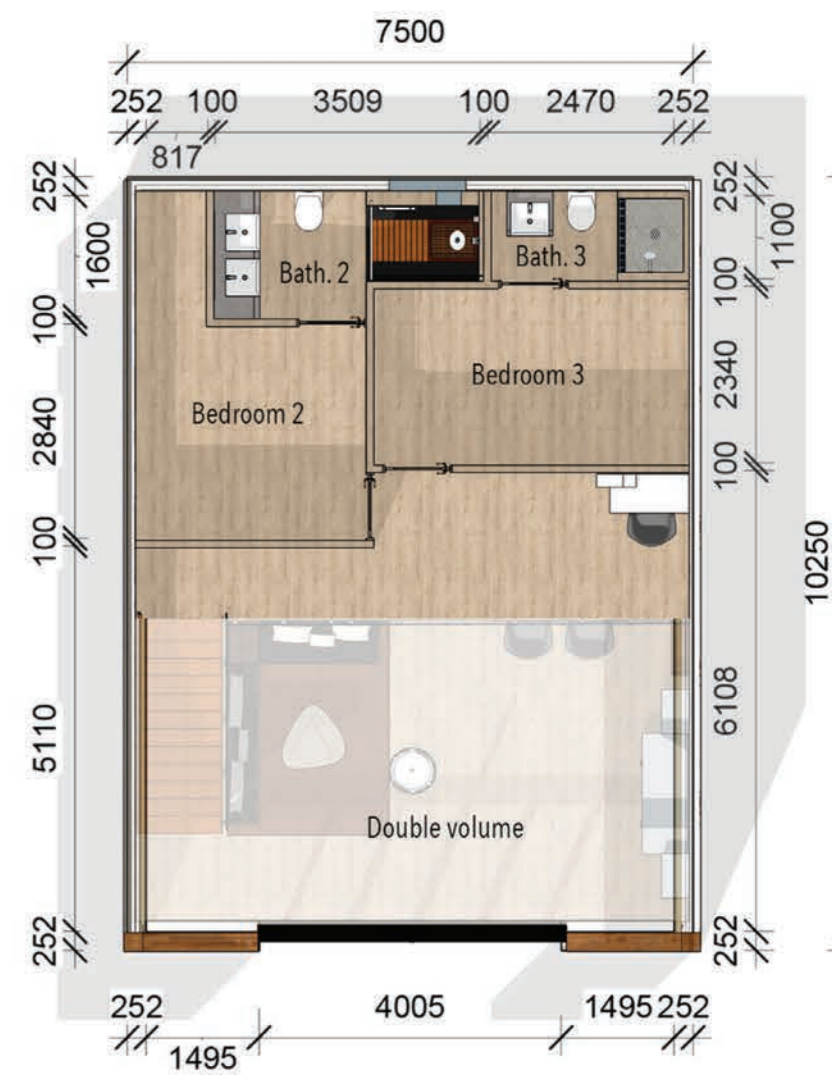
2 BED UNIT : PLAN
 SCALE 1:100

DUPLEX UNIT | JOHN & AMY'S UNIT
 MODULE: 7 x 20m

3 BEDROOM
 3 BATHROOM
 STUDY
 KITCHEN
 LIVING / DINING ROOM
 DECK



DUPLEX UNIT :
GROUND FLOOR PLAN
 SCALE 1:100



DUPLEX UNIT :
MEZZANINE LEVEL
 SCALE 1:100

Refer to door & window schedule on the next page for door & window numbers.



1 BED UNIT : LONGITUDINAL SECTION
SCALE 1:100



1 BED UNIT : CROSS SECTION
SCALE 1:100



2 BED UNIT : LONGITUDINAL SECTION
SCALE 1:100



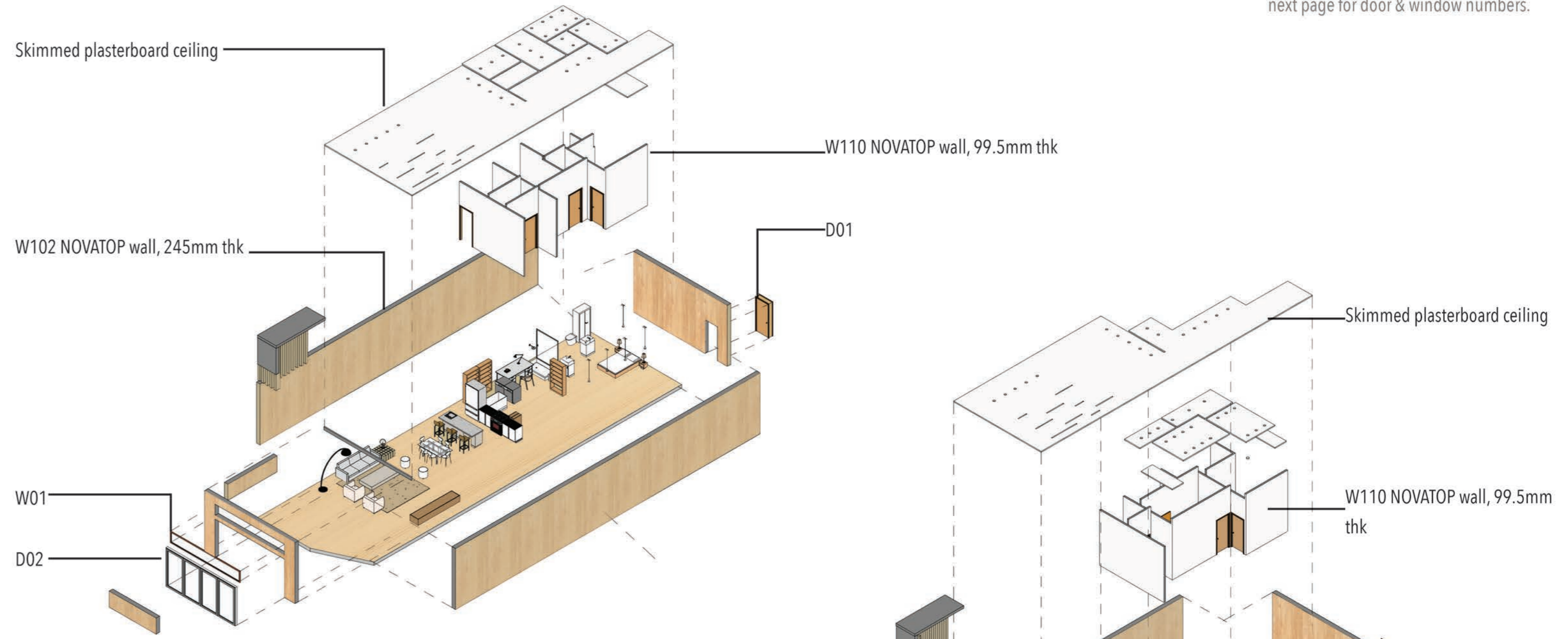
2 BED UNIT : CROSS SECTION
SCALE 1:100



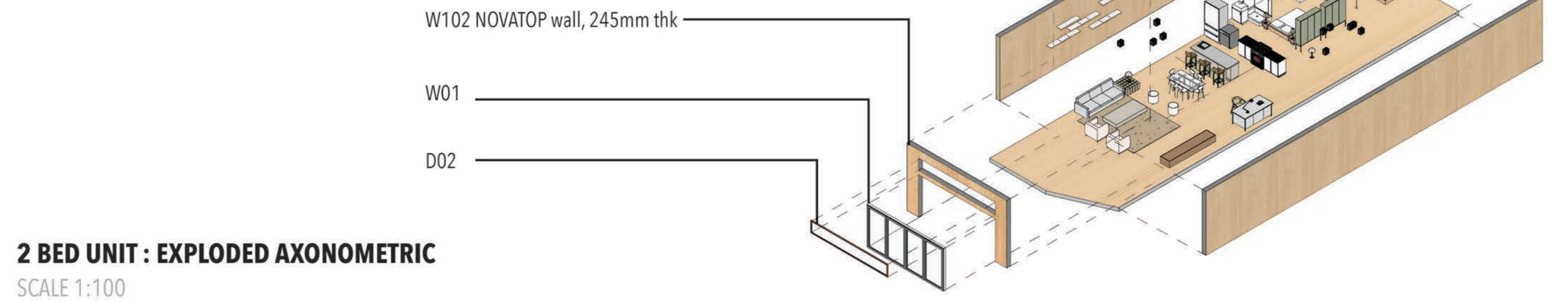
DUPLEX UNIT : LONGITUDINAL SECTION
SCALE 1:100



DUPLEX UNIT : CROSS SECTION
SCALE 1:100

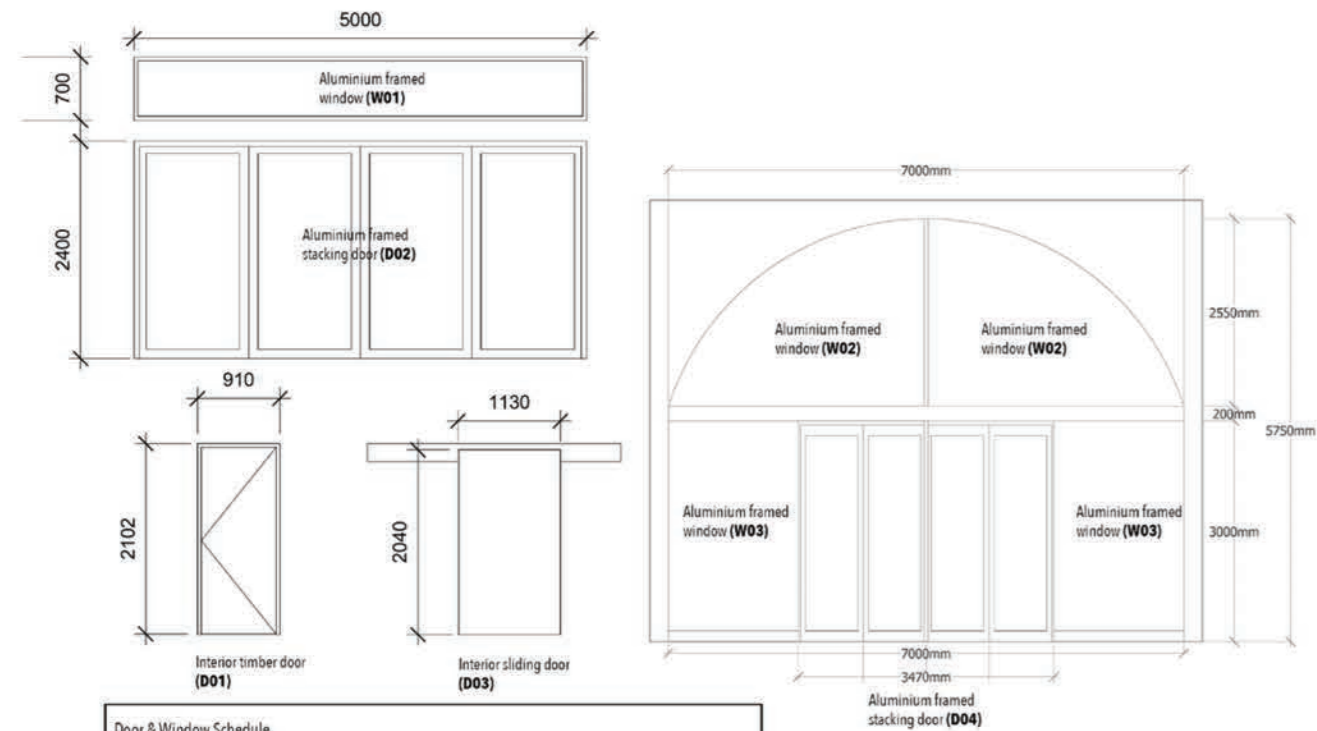


1 BED UNIT : EXPLODED AXONOMETRIC
SCALE 1:100



2 BED UNIT : EXPLODED AXONOMETRIC
SCALE 1:100

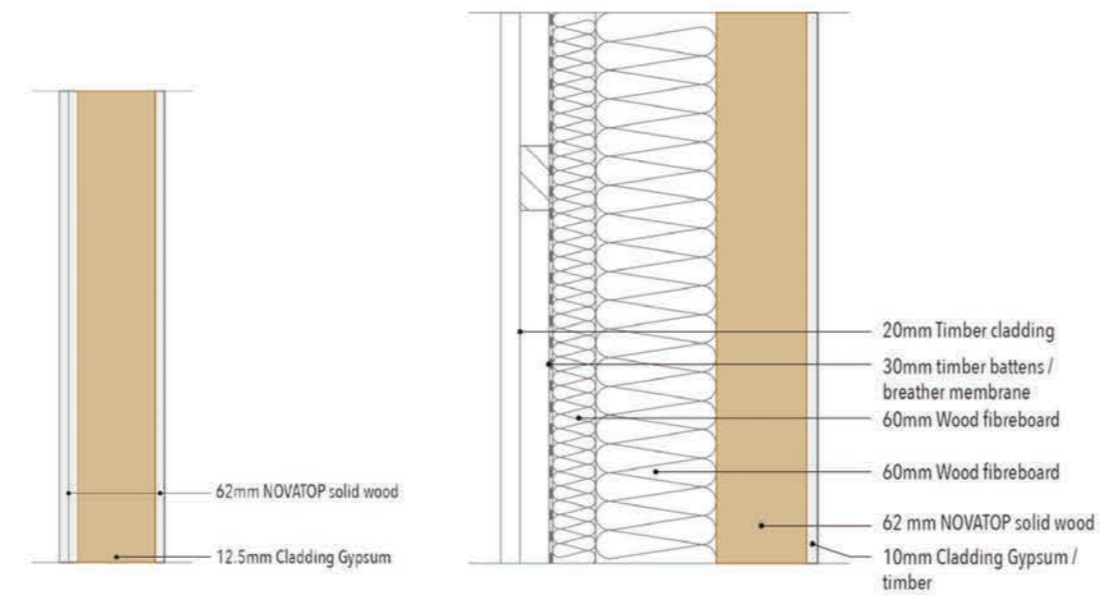
WINDOW & DOOR SCHEDULE:



Door & Window Schedule				
Type	Dimensions	Count per 1 x 1 bed	Count per 1 x 2 bed	Count per 1 x duplex
Interior timber door (D01)	910 x 2100	6	5	6
Aluminium framed stacking door (D02)	2400 x 5000	1	1	0
Interior sliding door (D03)	2040 x 1130	0	1	0
Aluminium framed stacking door (D04)	3470 x 3000	1	0	0
Aluminium framed window (W01)	700 x 1500	1	1	0
Aluminium framed window (W02)	3500 x 2400	2	0	0
Aluminium framed window (W03)	1765 x 3000	2	0	0

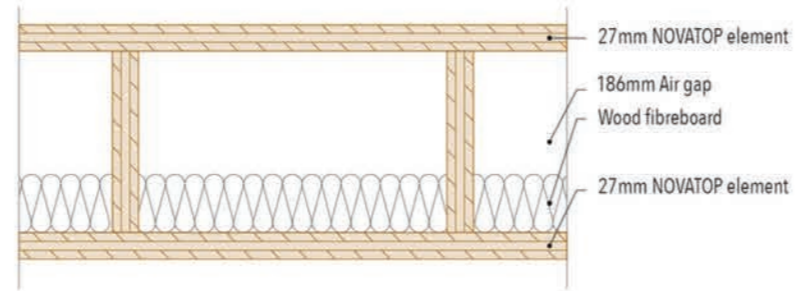
NOVATOP SYSTEMS USED:

WALL SYSTEMS
 W102 242mm thk wall
 W110 99.5mm thk wall

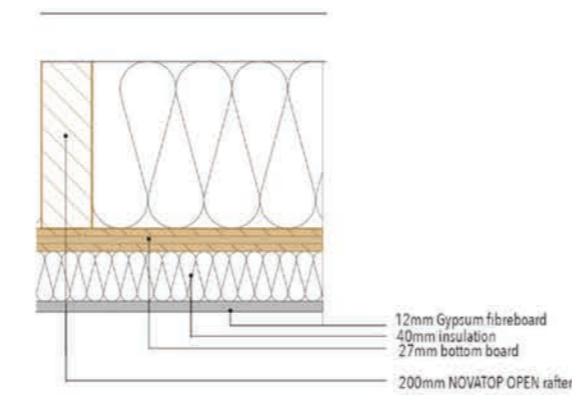


W110

W102



F200



R300 (2)

CEILING
 F200 CEILING SYSTEM

ROOFS
 R300 ROOF SYSTEM

NOVATOP DETAILS USED:

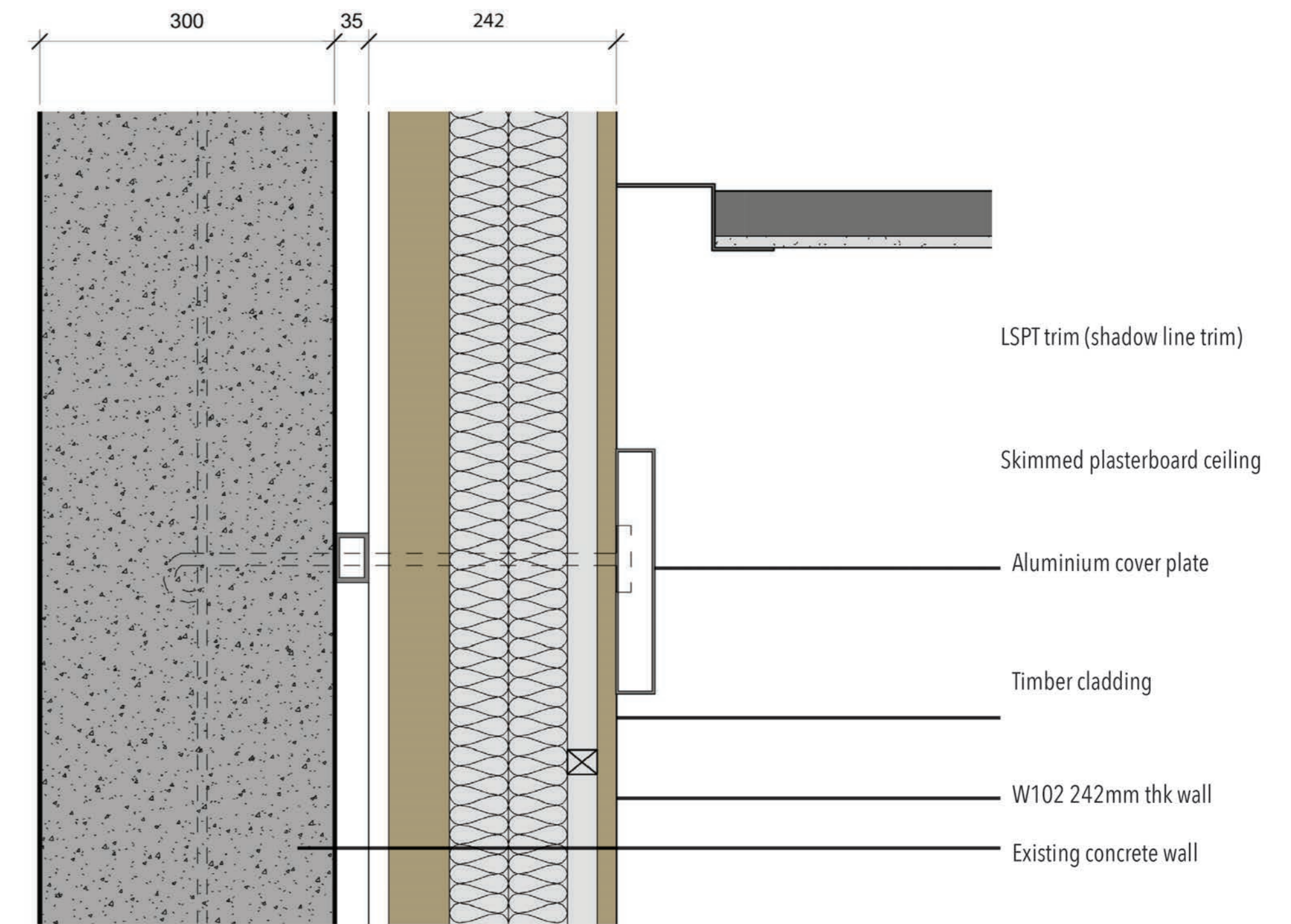
ND200 CEILING TO EXTERNAL WALL DETAIL

ND117 VENTILATED FACADE DETAIL

Outside corner EW 62

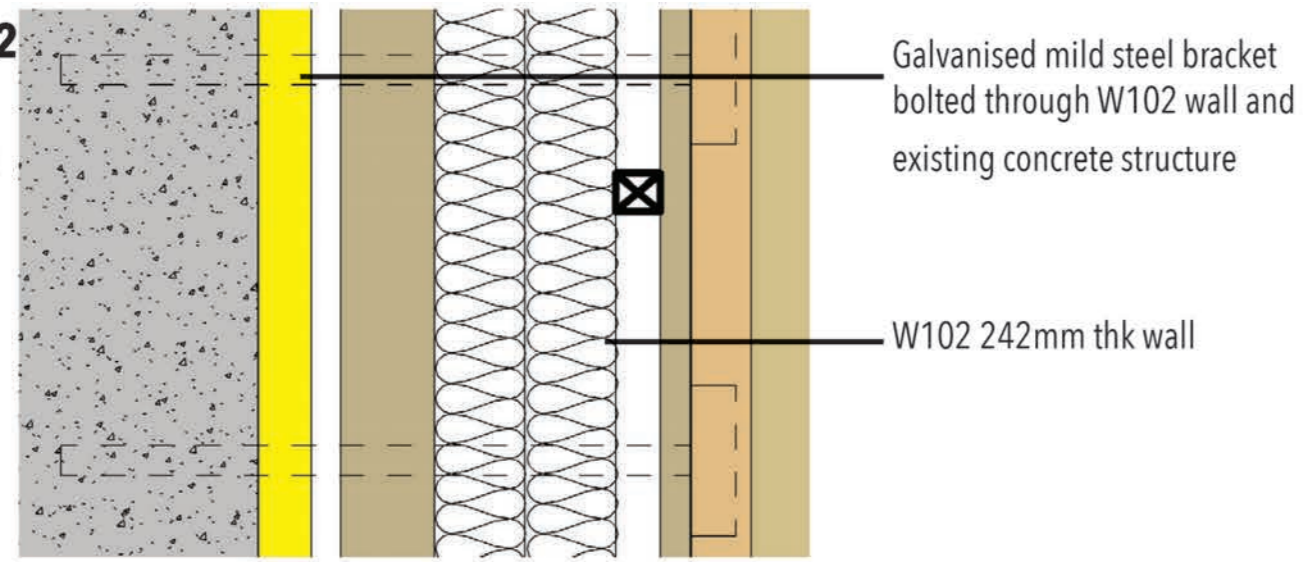
CT01: CONNECTION TYPE 01

CONNECTION EXISTING WALL TO CEILING

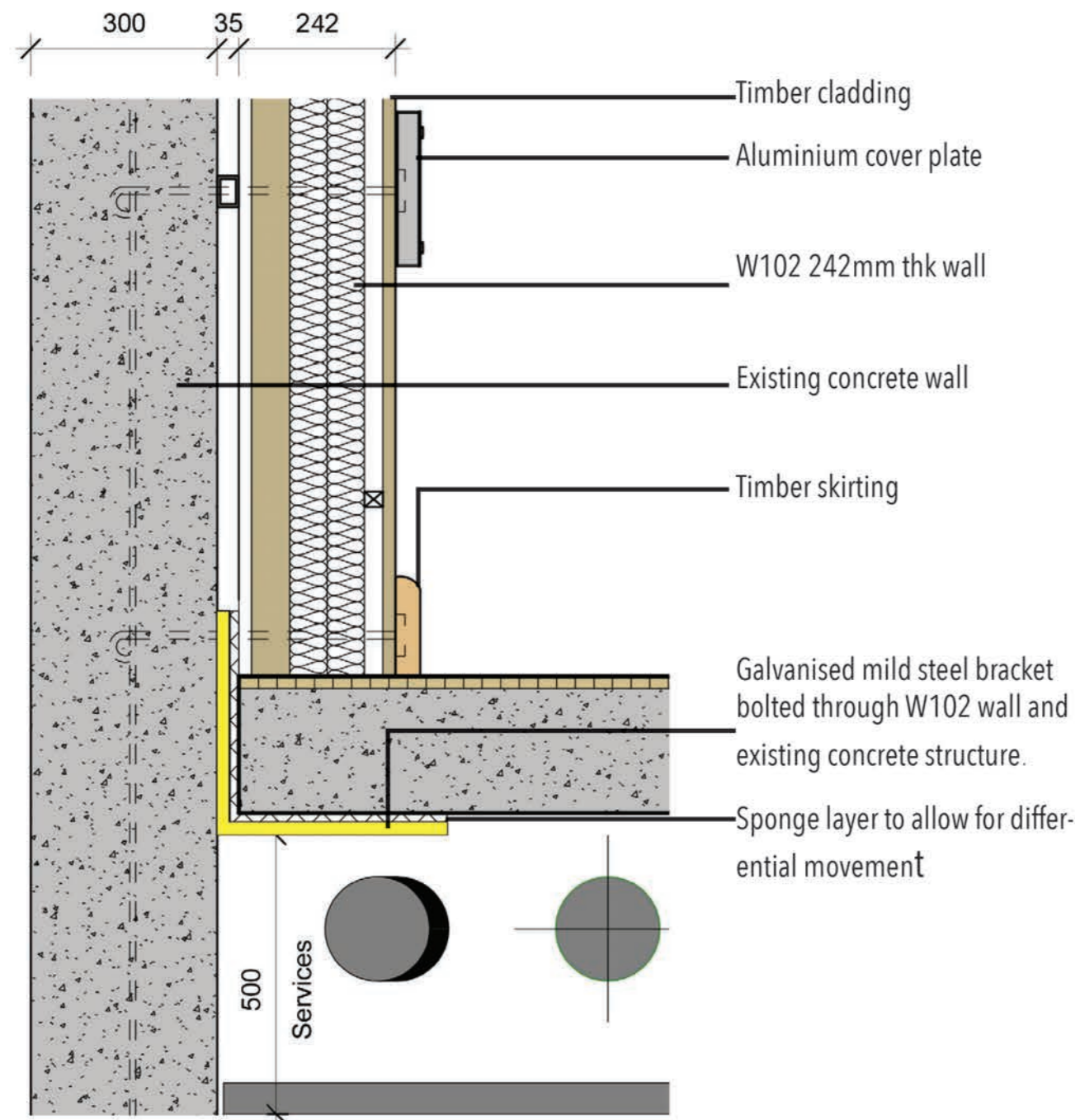


CT02: CONNECTION TYPE 02

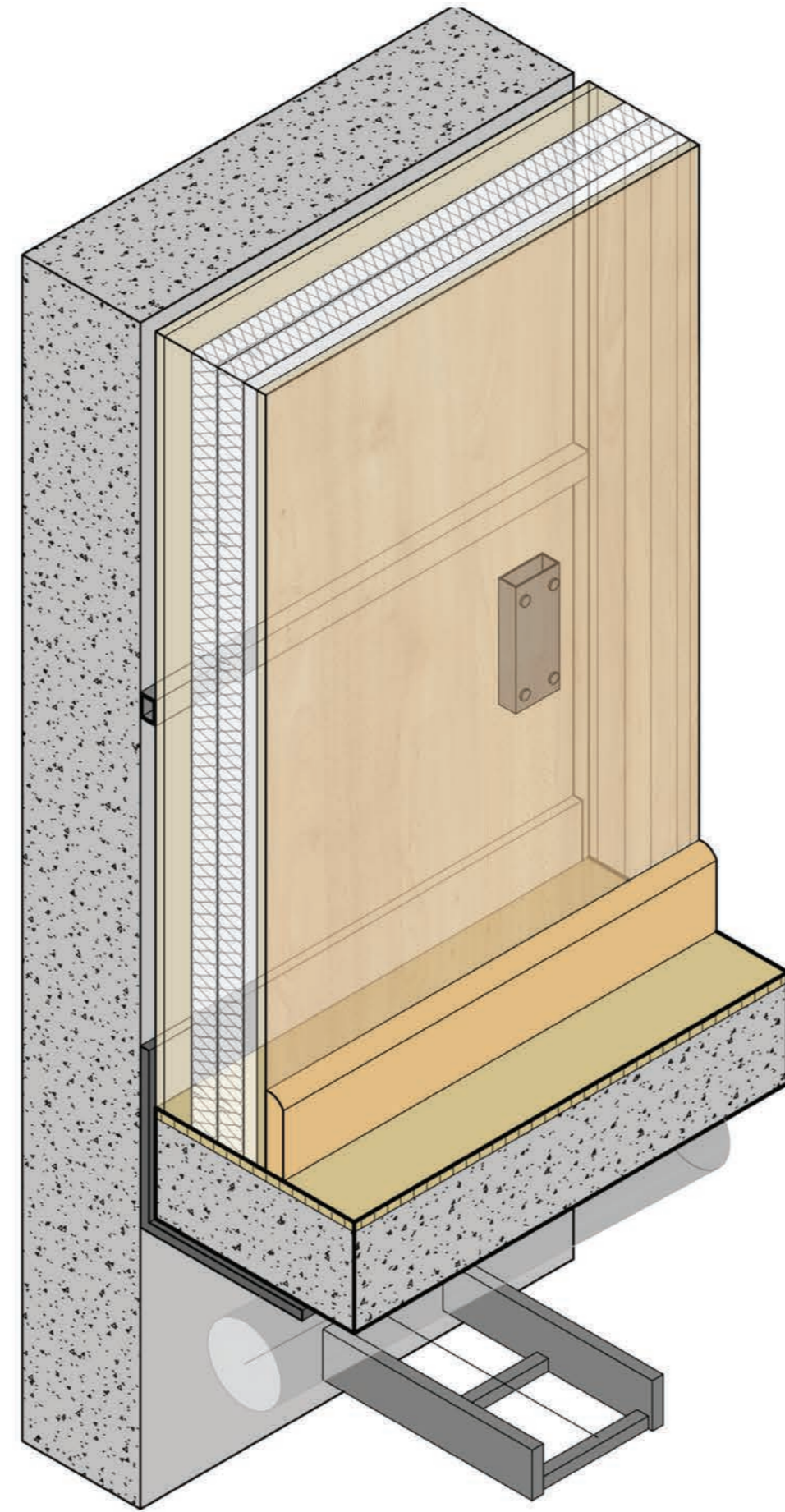
CONNECTION FROM EXISTING CONCRETE WALL TO CLT WALL



CT02 PLAN
SCALE 1:5



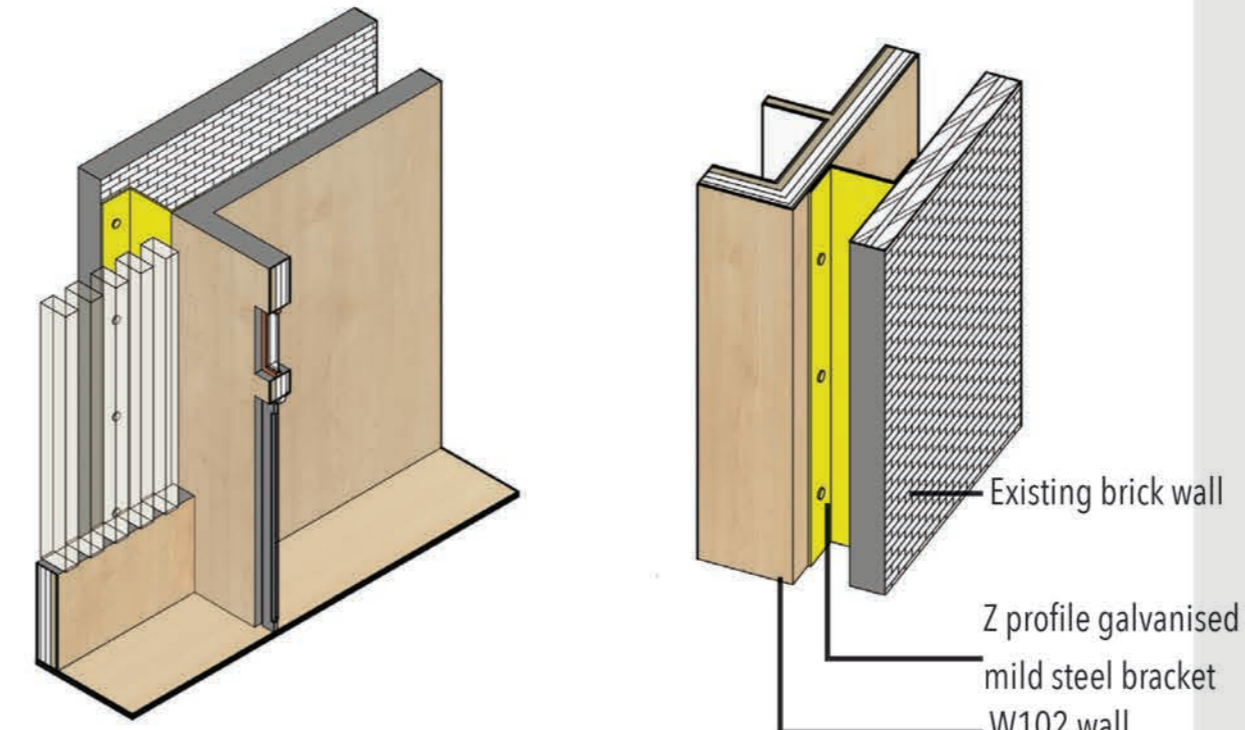
CT02 SECTION
SCALE 1:10



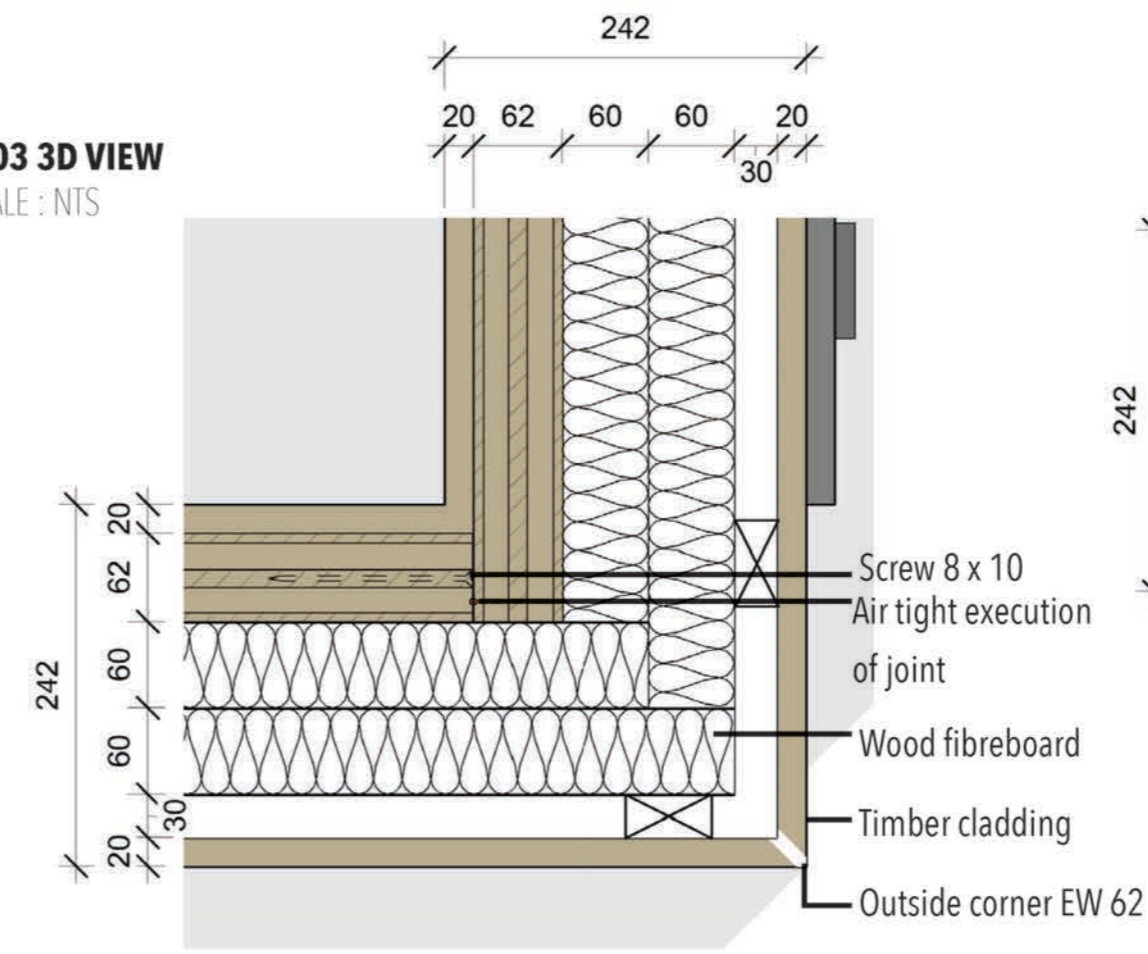
CT02 3D VIEW
SCALE 1:5

CT02: CONNECTION TYPE 03

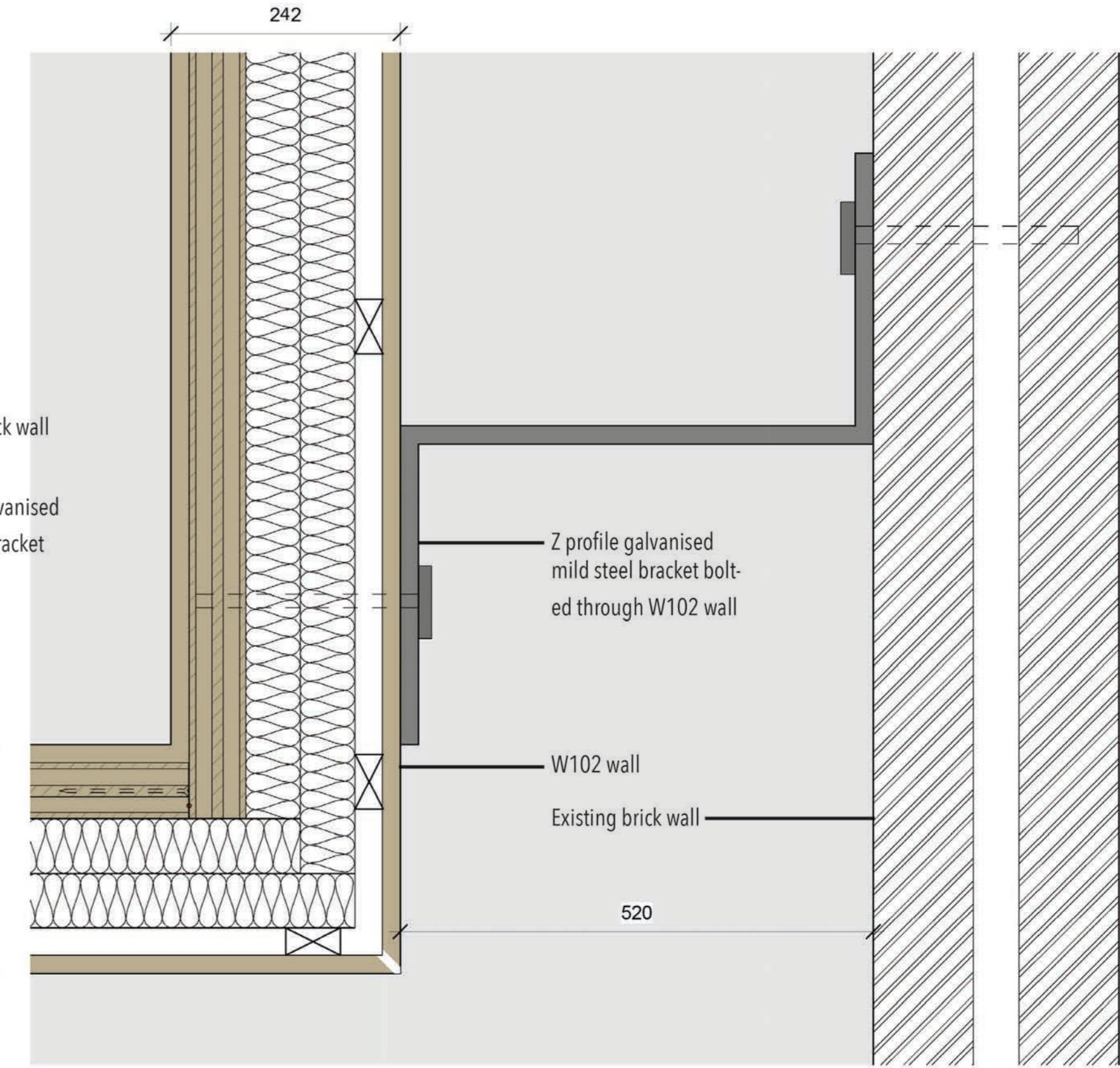
CONNECTION FROM EXISTING BRICK WALL TO CLT WALL TO CREATE A SHADOW LINE BETWEEN ELEMENTS



CT03 3D VIEW
SCALE : NTS



CT03 TYPICAL CORNER DETAIL
SCALE 1:5



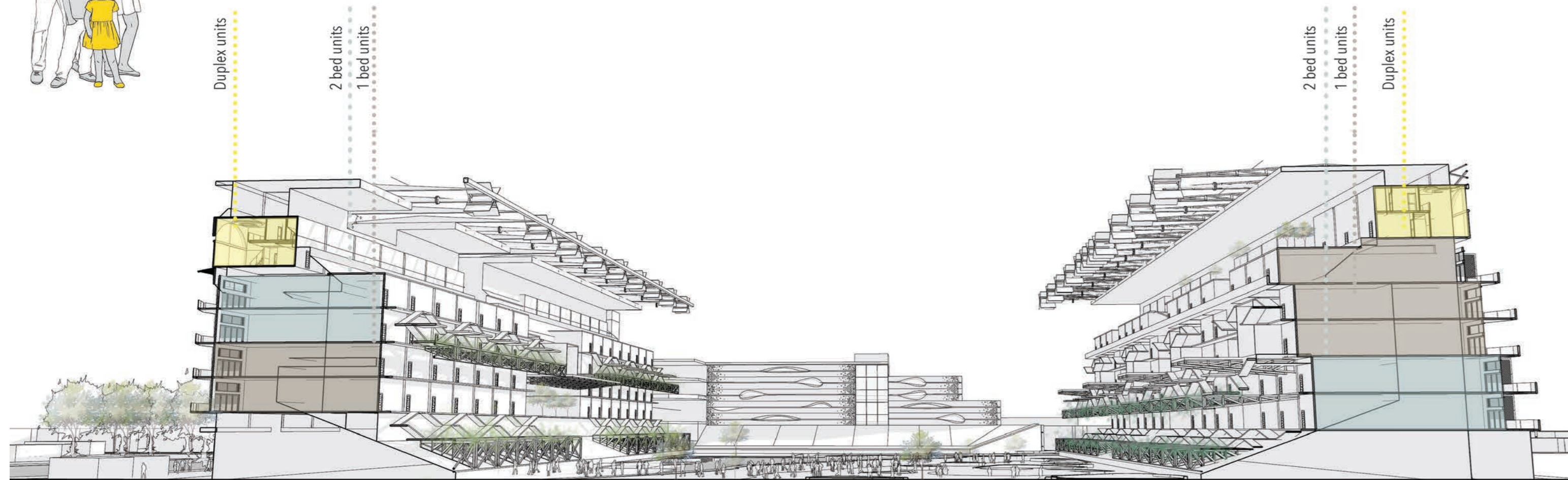
CT03 PLAN
SCALE 1:5

03 | FINAL PROPOSAL...

03a. Architectural drawings & detailing

03b. Artistic representations

Our family of five will be moving into a duplex apartment with views over the new urban park, recreational area and waterway, which was part of this redevelopment!



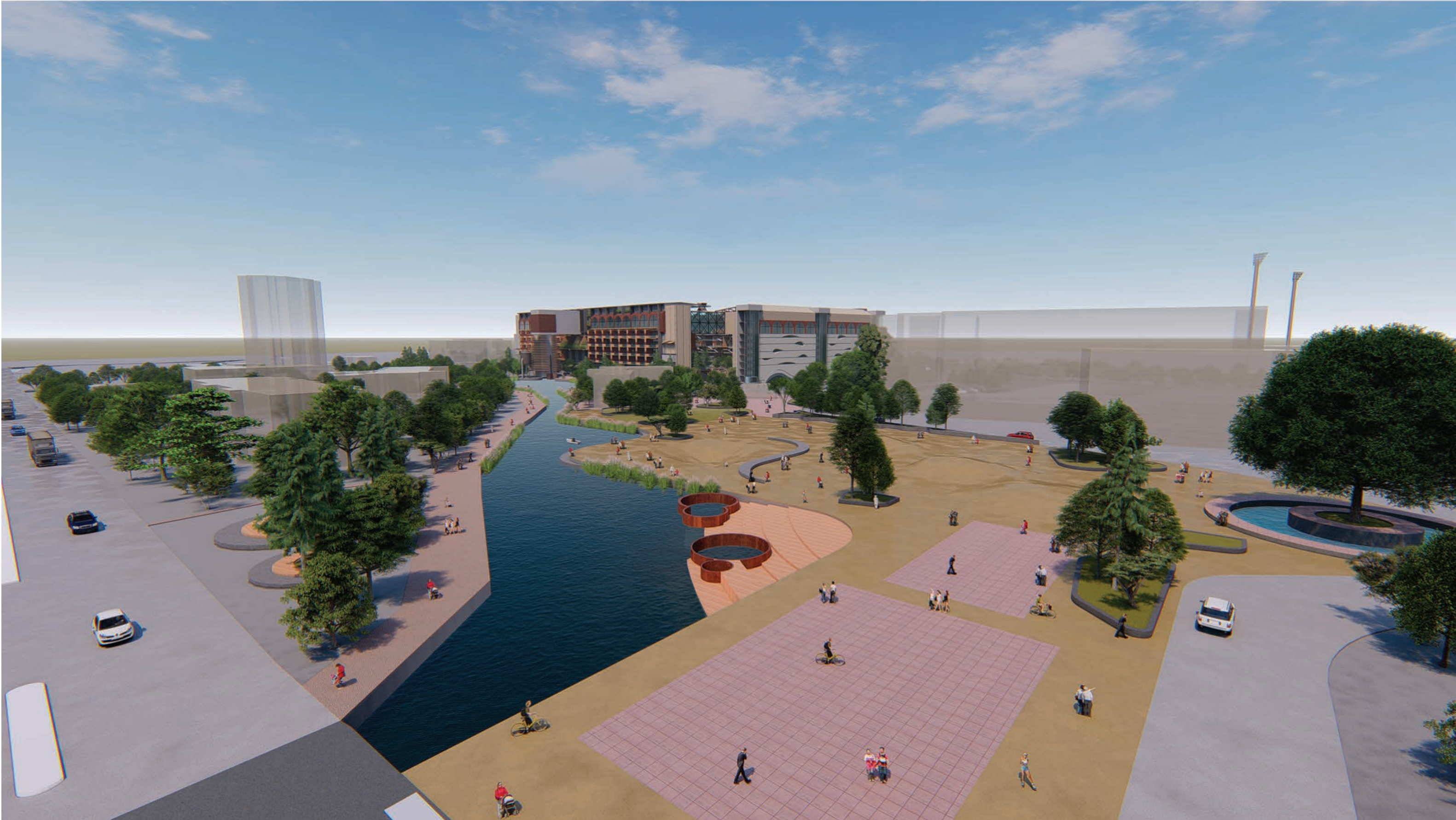
NEWLANDS SPATIAL DEVELOPMENT FRAMEWORK

A VISION FOR HOW A NEW SUBURBAN PUBLIC PARK, INTEGRATED WITH THE CLT DESIGN PROPOSAL CAN MAKE BETTER COMMUNAL SPACES.



NEWLANDS SPATIAL DEVELOPMENT FRAMEWORK

THE EXISTING CANALISATION OF THE LIESBEECK RIVER IS RE-IMAGINED TO BRING ATTENTION TO THE EXISTING NATURAL SYSTEMS IN NEWLANDS.



ARRIVAL INTO RESIDENTIAL COMPLEX

THE PRECEDING FORECOURTS ALLOW FOR EASY MOVEMENT INTO THE PROPOSAL.



ORGANISATION OF CLT MODULES

EXISTING STRUCTURAL ELEMENTS DEFINE CERTAIN PARAMETERS IN THE SCHEME, RESULTING IN A MODULARISATION OF UNITS.



COURTYARD OVERVIEW

BOTH NATURAL SYSTEMS (WATER & TOPOGRAPHY) ARE EMPHASISED THROUGH THEIR CELEBRATION IN THE COURTYARD. TABLE MOUNTAIN HAS BEEN OUTLINED ON THE WATER'S EDGE.



ORGANISATION OF UNITS ALONG RIVER EDGE

THE ORGANISATION OF THE UNITS ALONG THE WATER EDGE CREATES UNOBSTRUCTED VIEWS OF THE MOUNTAINS. HYDRO-ELECTRIC POWER IS GENERATED & USED THROUGHOUT THE COMPLEX.



COURTYARD SIDE FUNCTIONS

OPEN AIR CIRCULATION HAS BEEN PLACED OVERLOOKING THE COURTYARD, WITH ALL UNITS HAVING ACCESS TO PUBLIC SPACES WHICH ALLOW FOR GROWING OF VEGETABLES & PLANTING. BUILT INTO THE EXISTING ROOF STRUCTURE ARE CUSTOM DESIGNED WIND TURBINES THAT WILL CONTRIBUTE TO GENERATING POWER.



ATMOSPHERE & PRESENCE

THE WATER AND ENCLOSURE PROVIDED BY THE EXISTING ELEMENTS CREATE AN INTIMATE SENSE OF COMMUNITY, SAFETY & SERENITY.



PLATFORM GARDENS

EACH UNIT'S OWNER HAS ACCESS TO THEIR OWN GARDEN SPACE. PART OF LIVING IN THIS DEVELOPMENT WOULD BE THE ENCOURAGEMENT OF SUSTAINABLE LIVING.



ACCESSIBILITY & CONNECTIVITY

THE SITE IS EASILY ACCESSED FROM THE MAIN ROAD, WHILE STILL MAINTAINING A HIGH LEVEL OF CONNECTIVITY WITH THE EXISTING URBAN FABRIC OF CAPE TOWN.



3D VIEW | DUPLEX UNIT



3D VIEW | DUPLEX UNIT



3D VIEW | DUPLEX UNIT



3D VIEW | 1/2 BED UNIT



3D VIEW | 1/2 BED UNIT

