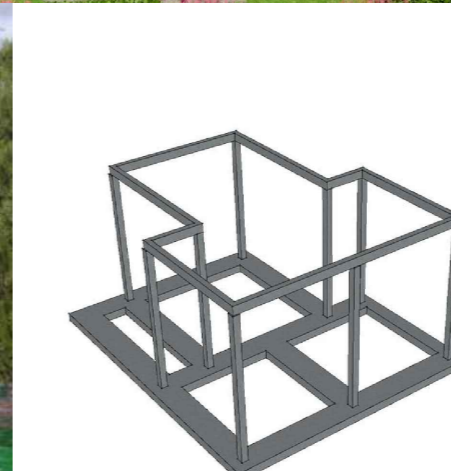
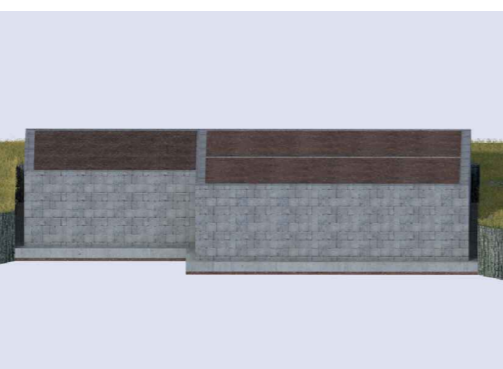
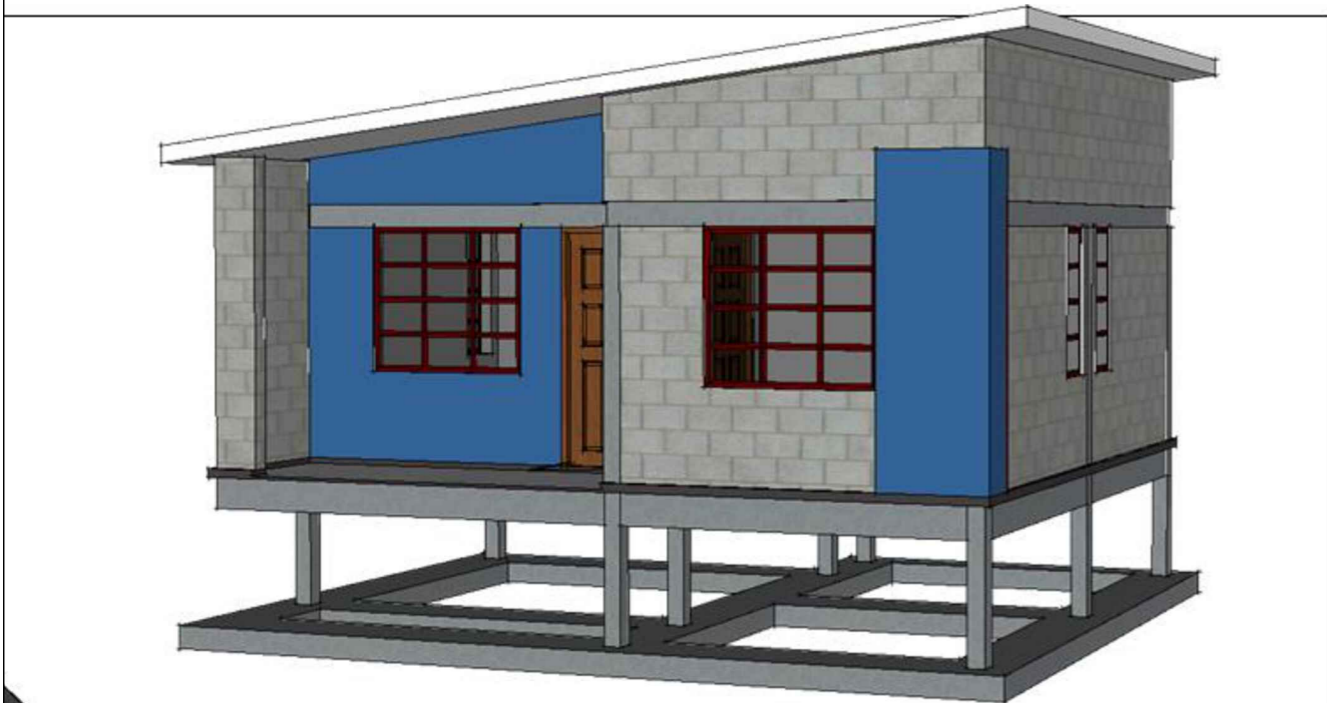
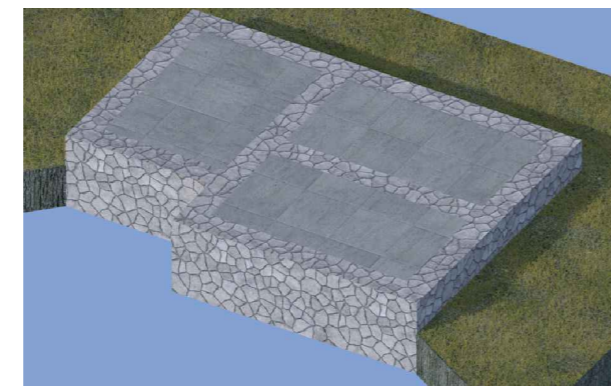
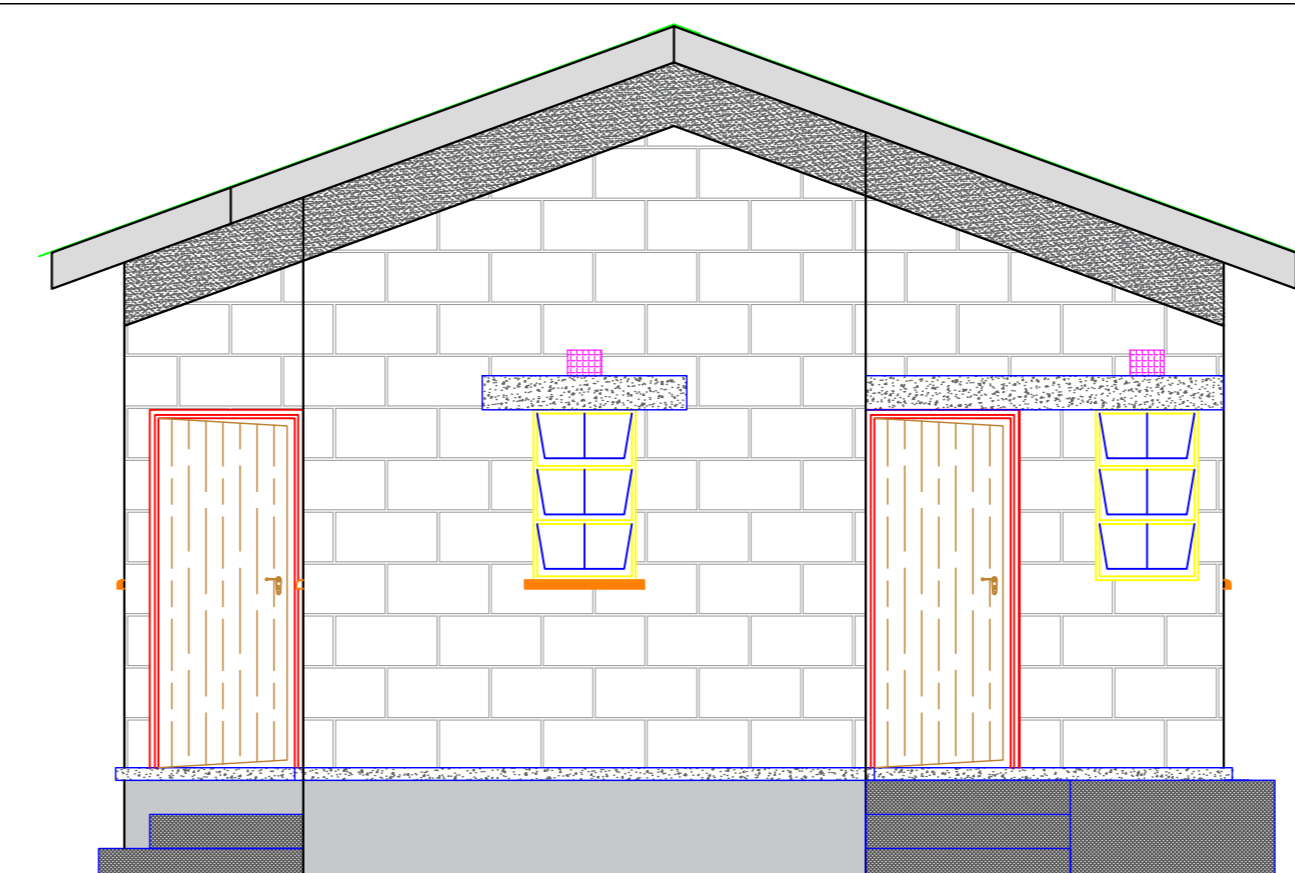
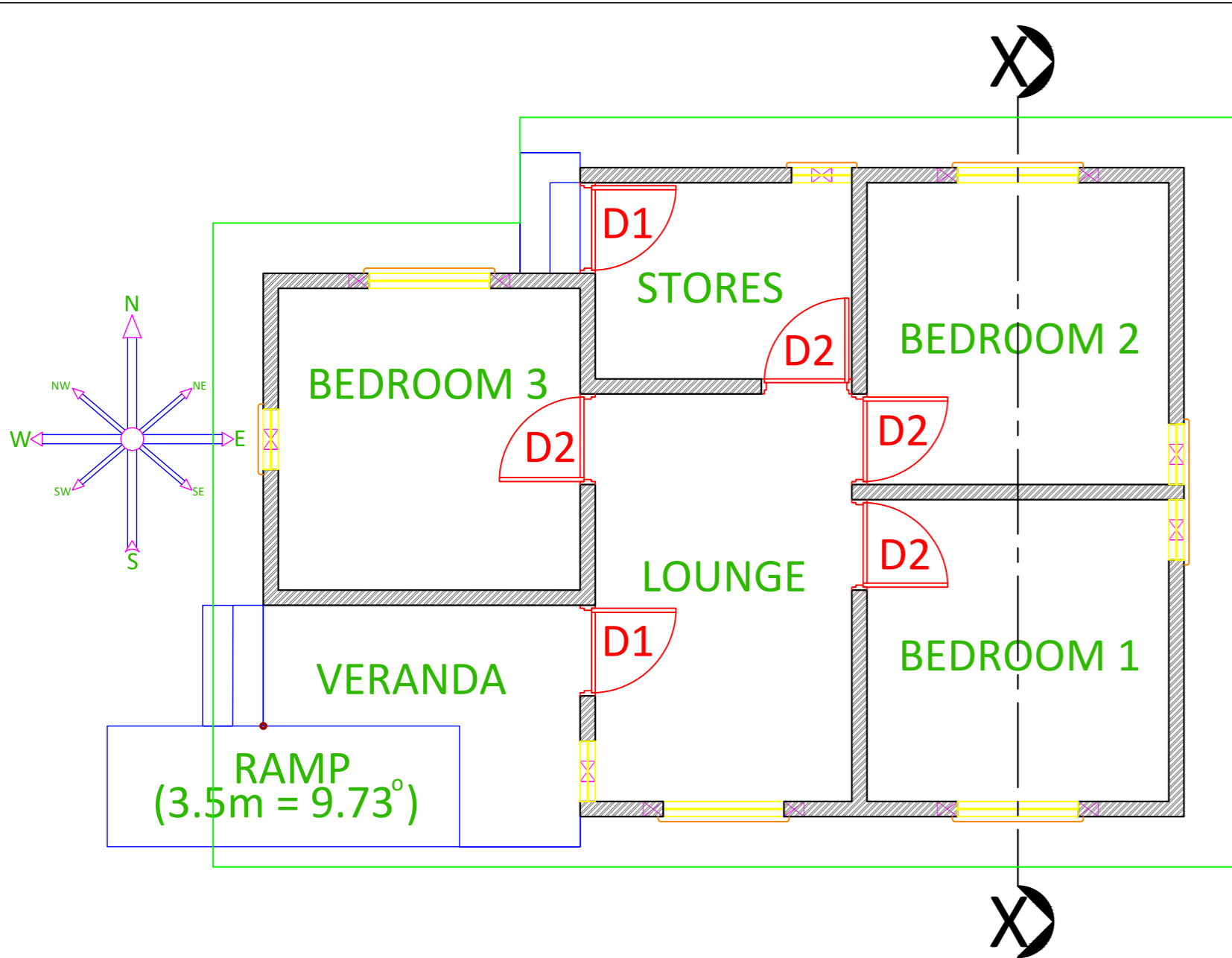
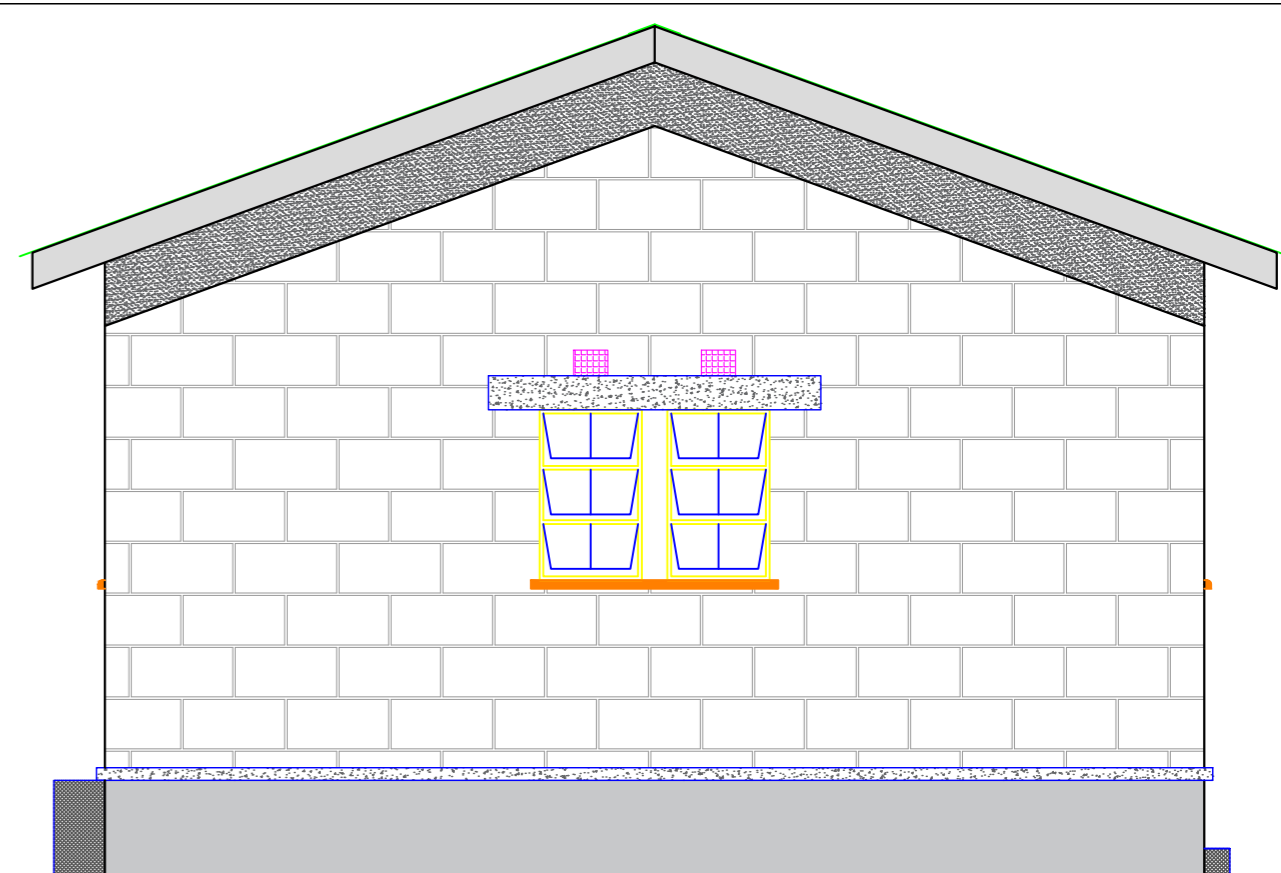


MALAWI AFFORDABLE DISASTER RISK REDUCTION RESPONSE RURAL HOUSE DESIGNS

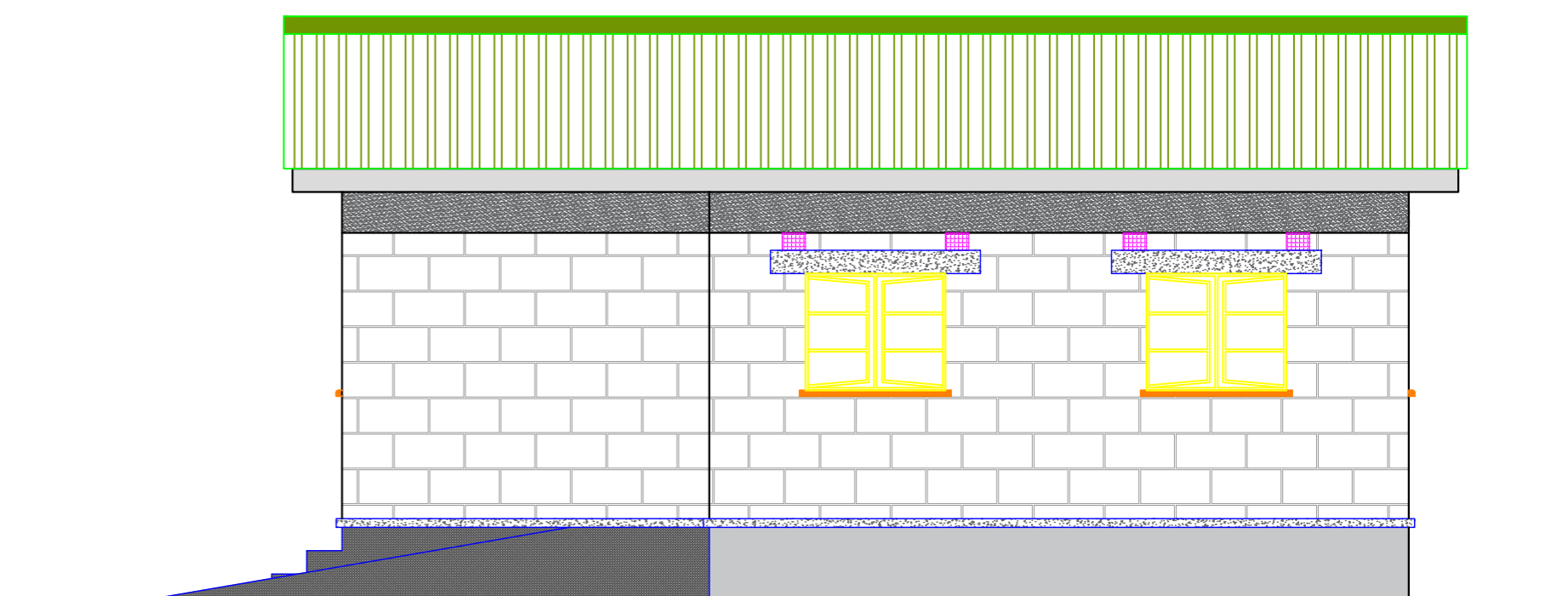




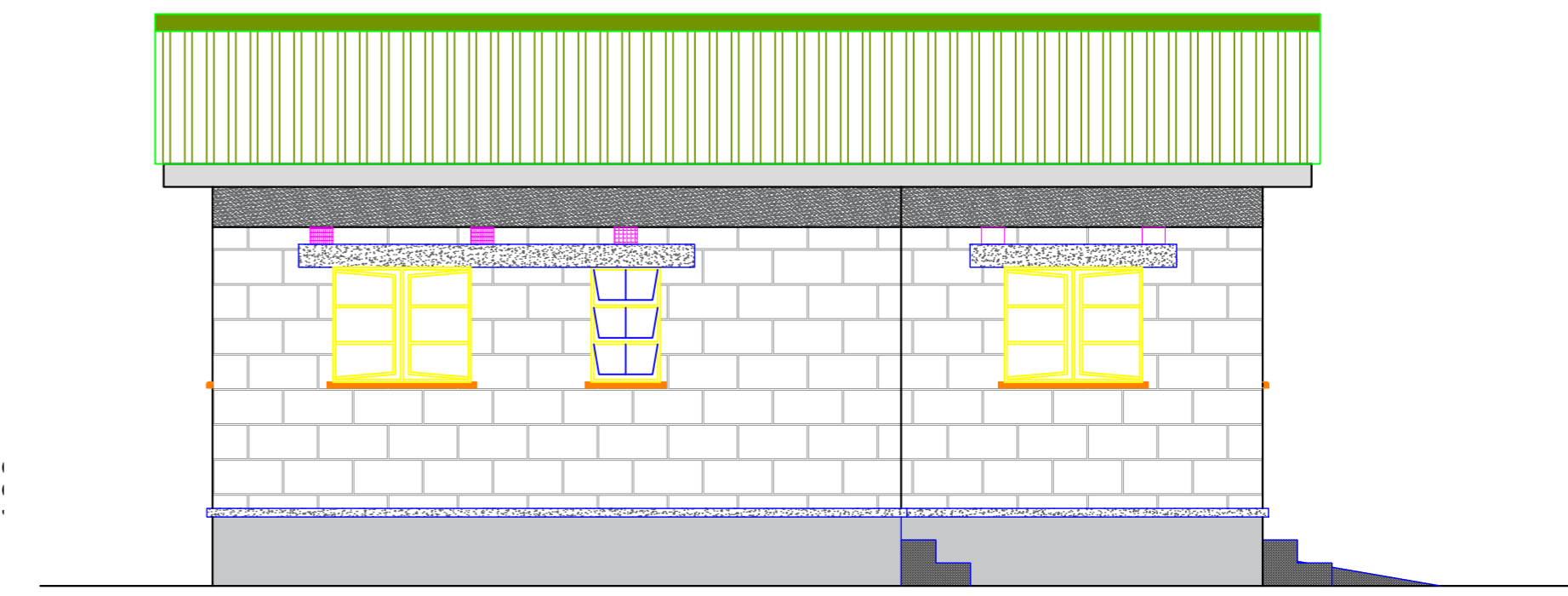
WESTERN ELEVATION



EASTERN ELEVATION



SOUTHERN ELEVATION

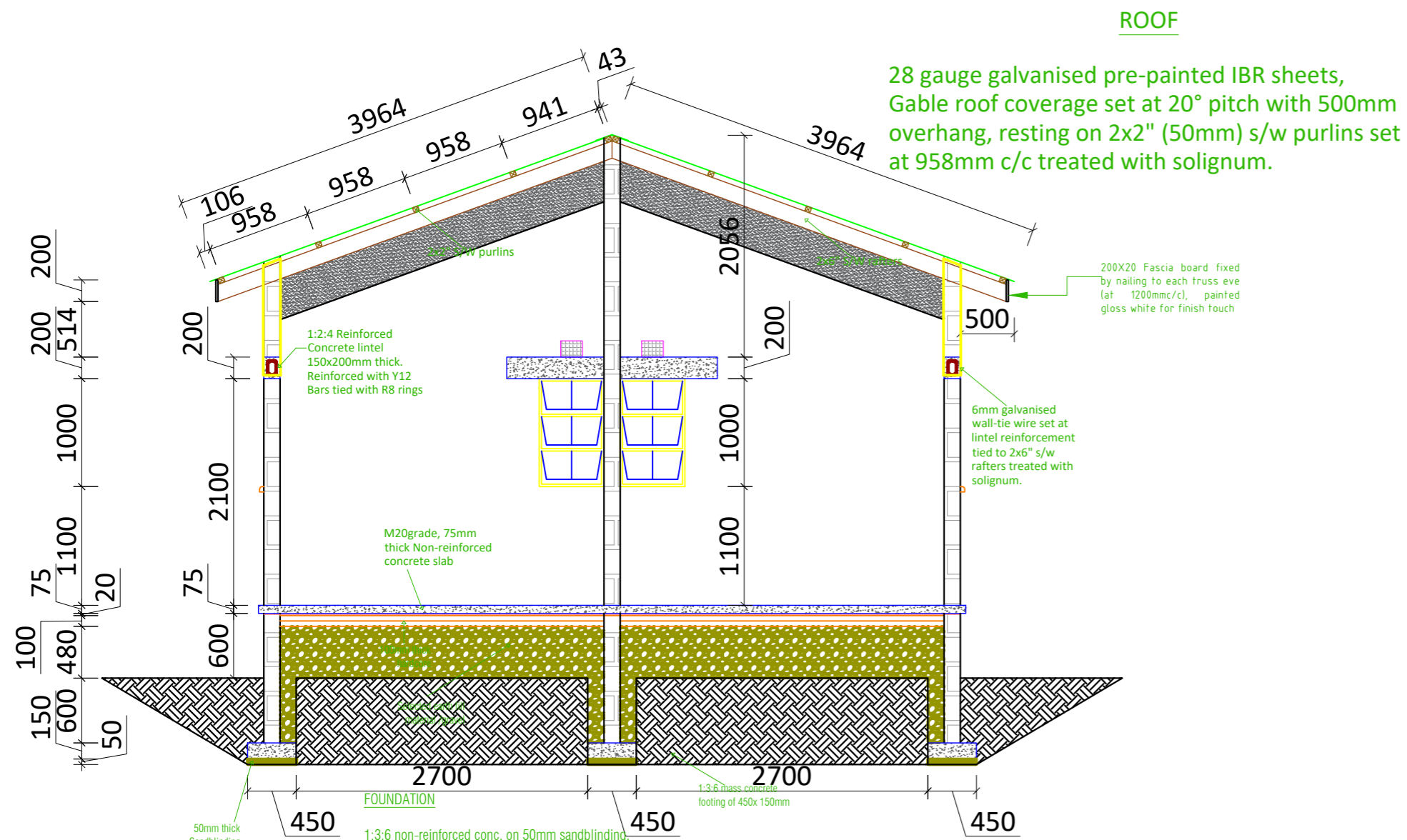


NORTHERN ELEVATION

MORDENISED RURAL SSB / CEMENT BLOCK HOUSE PLAN

- House is of 60m² Area
- 3 bedrooms with single 6 glass window, with mullion, and another 3glass window each
- Ditto with Sitting room windows
- Stores with a 3 glass window and a back exit door
- 1 Front Veranda with stair case and ramp
- 1 back door positioned at the Lounge
- IBR design gable roof with rafters for framing. Roof pitch set at 20°
- Minimum housing surrounding area to be of 21x17meters plot = 357m²

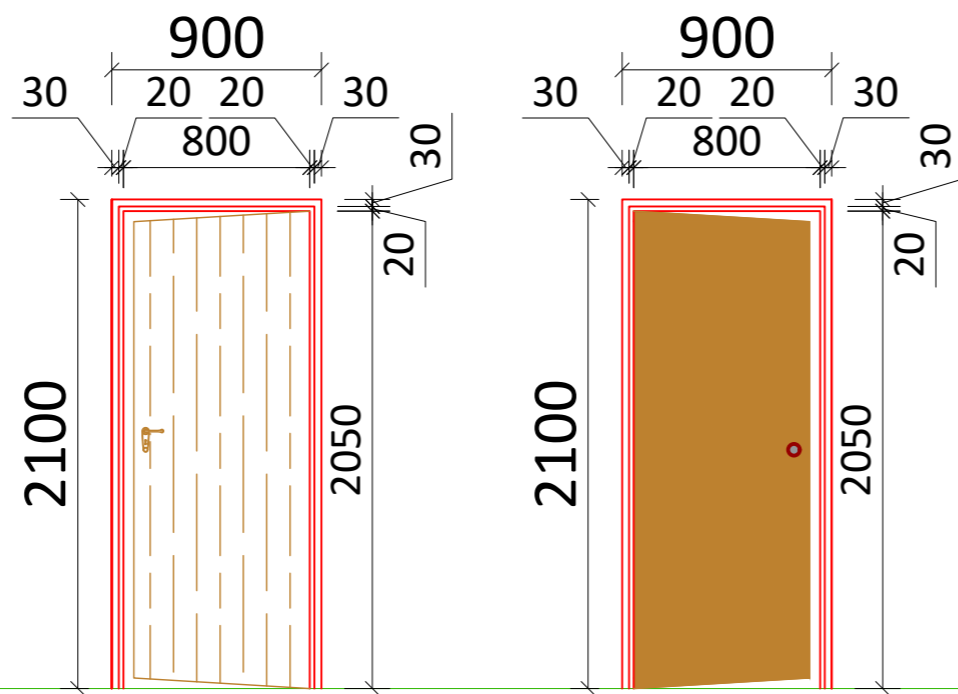
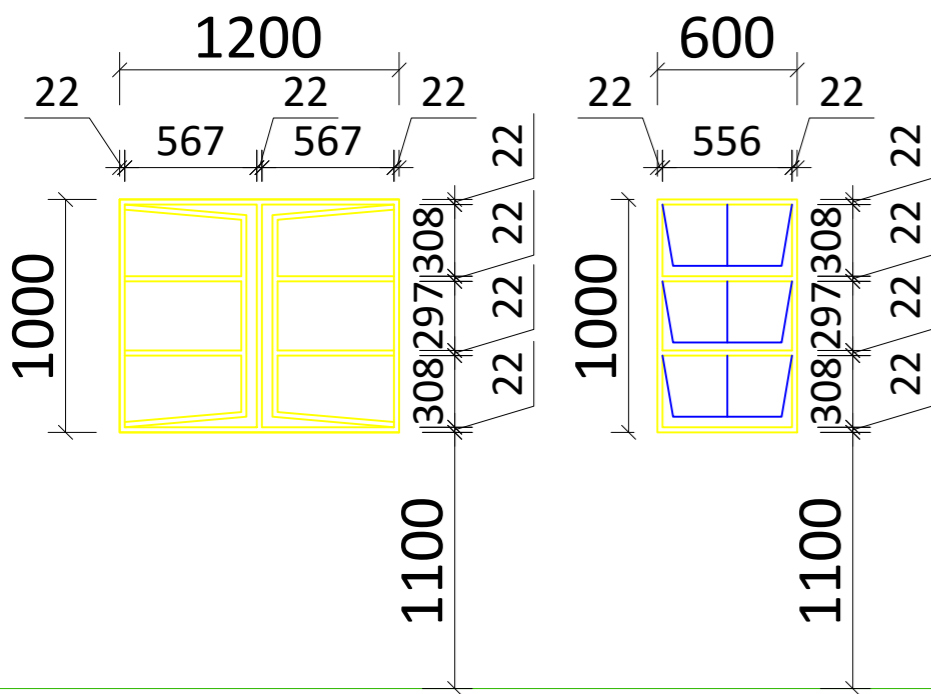
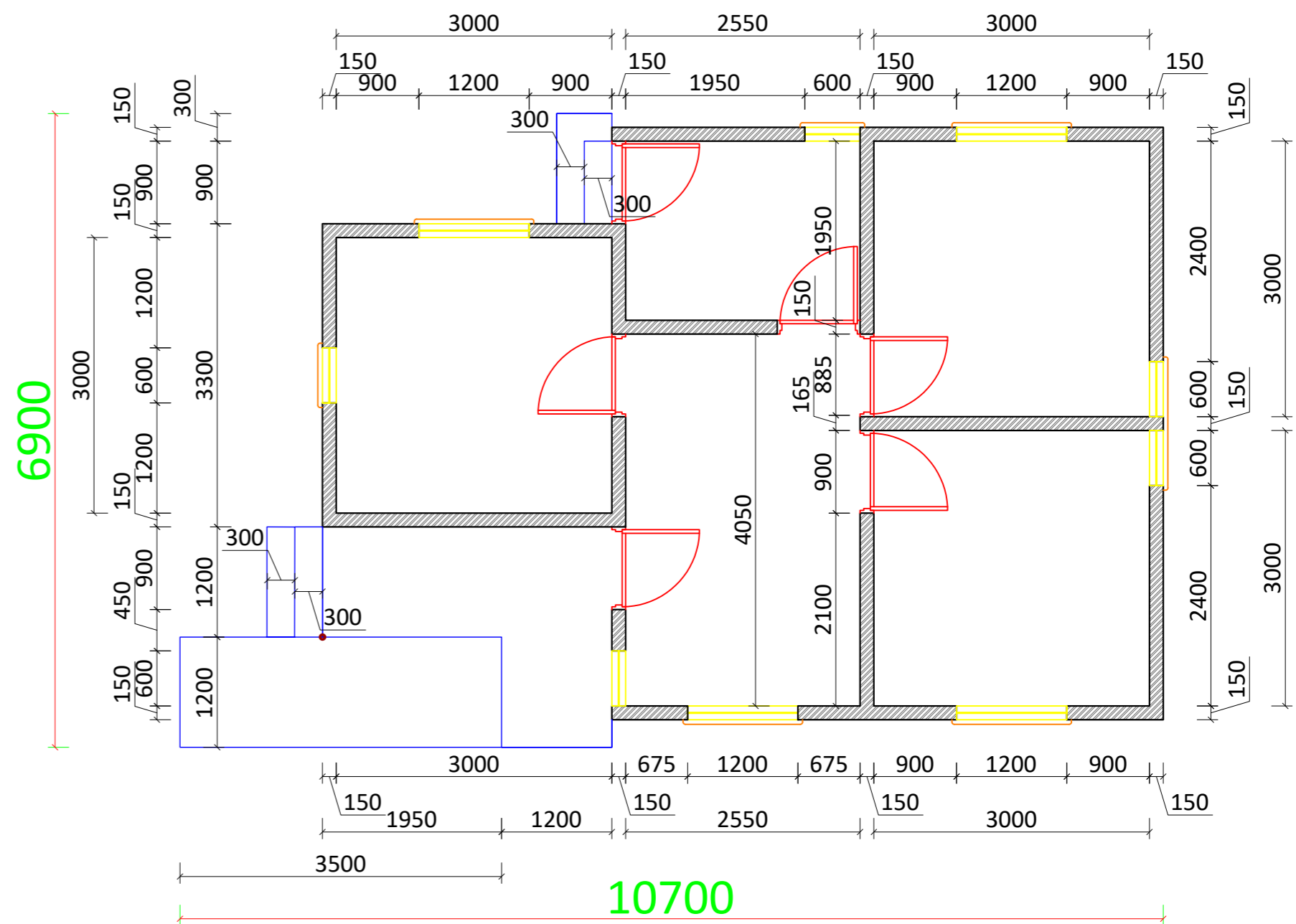
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|--|--|--|--|---|--|--|--|
| | This drawing and the information herein are the property of Habitat for Humanity Malawi and The Ministry of Lands. Hence, may not be used for other than the purpose for which it is created without explicit written permission from the two. | | PROJECT LOCATION MALAWI URBAN and RURAL | <i>Drafted & Designed by</i> HFHM on June/2023 <i>Checked by</i> Gr. Arch. William Kachikopa <i>Approved by</i> | Prototype 1 - 3Rooms + Lounge & Stores ELEVATIONS and PLAN | DRAWING NUMBER SC: 1:100 HFHM/MWD/2023/01-01 | |
| | | | | | | | |



ROOF
 28 gauge galvanized pre-painted IBR sheets,
 Gable roof coverage set at 20° pitch with 500mm
 overhang, resting on 2x2" (50mm) s/w purlins set
 at 958mm c/c treated with solignum.

FOUNDATION
 1:3:6 non-reinforced conc. on 50mm sandblinding
 Fdn wall of 150x200x400mm hollow cement block bedded with 1:4 mortar mix jointed
 10mm apart, reinforced with brickforce wire every second course.
 Fdn walls (plinth) of 1200mm height from footing to underside of slab.
 1:4 cement mortar plaster to external skirting and painted bituminous black as a finishing.

CROSS SECTION X-X



Window 1

No. REQUIRED: 4
 LOCATION: LOUNGE & BEDROOMS
 FRAMES: Purpose made steel 6glass window with Transom in the middle with a top casement opening. Dimensions as shown
 GLASS: 4mm clear glass set with silicone and finished with putty
 IRONMONGERY: Standard brass stoppers handles and stays
 FINISH: Industrial prefabricated finish (red oxide), then painted gloss white

Window 2

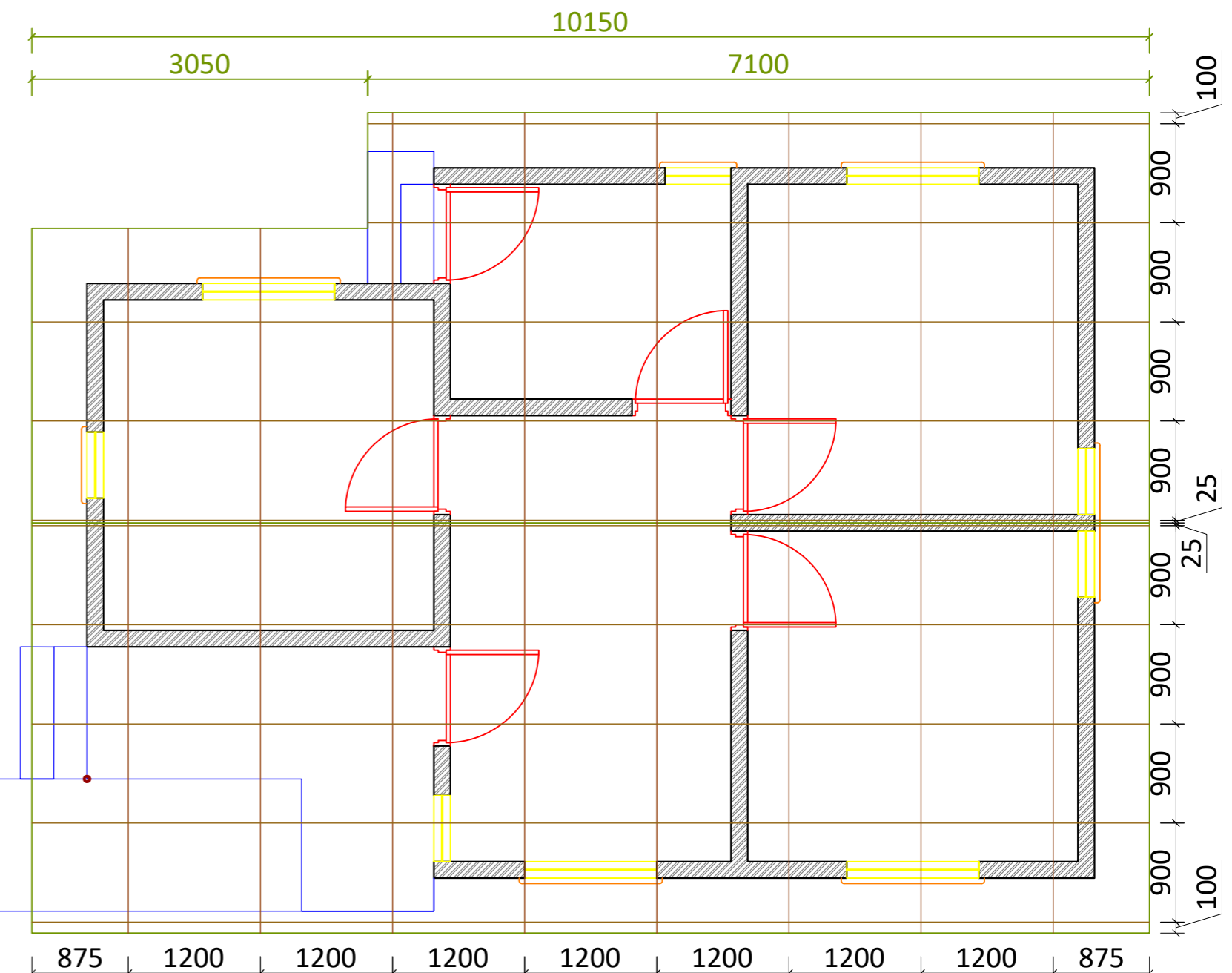
No. REQUIRED: 5
 LOCATION: LOUNGE, BEDROOMS, and STORES
 FRAMES: Purpose made steel 3glass window
 GLASS: 4mm clear glass set with silicone and finished with putty
 IRONMONGERY: Standard brass stoppers handles and stays
 FINISH: Industrial prefabricated finish (red oxide), then painted gloss white

Door 1

No. REQUIRED: 2
 LOCATION: LOUNGE & STORES
 FRAMES: Purpose made pressed steel frames 1mm thick
 DOORS: Purpose made treated H/W door
 FINISH: Varnished 2coates with clear glass vanish
 IRONMONGERY: SABS 3-lever mortice lock
 IRONMONGERY HINGES: As per supplied by supplier

Door 2

No. REQUIRED: 4
 LOCATION: BEDROOM 1, 2, 3, & STORES
 FRAMES: Purpose made pressed steel frames
 DOORS: Core flash door
 FINISH: Painted pink primer and finished with mist grey
 IRONMONGERY: SABS 3-lever mortice lock
 IRONMONGERY HINGES: As per supplied by supplier

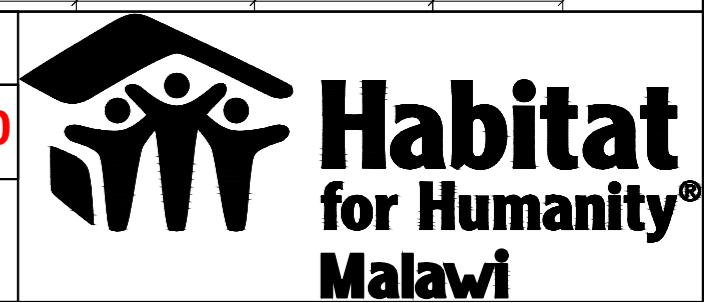


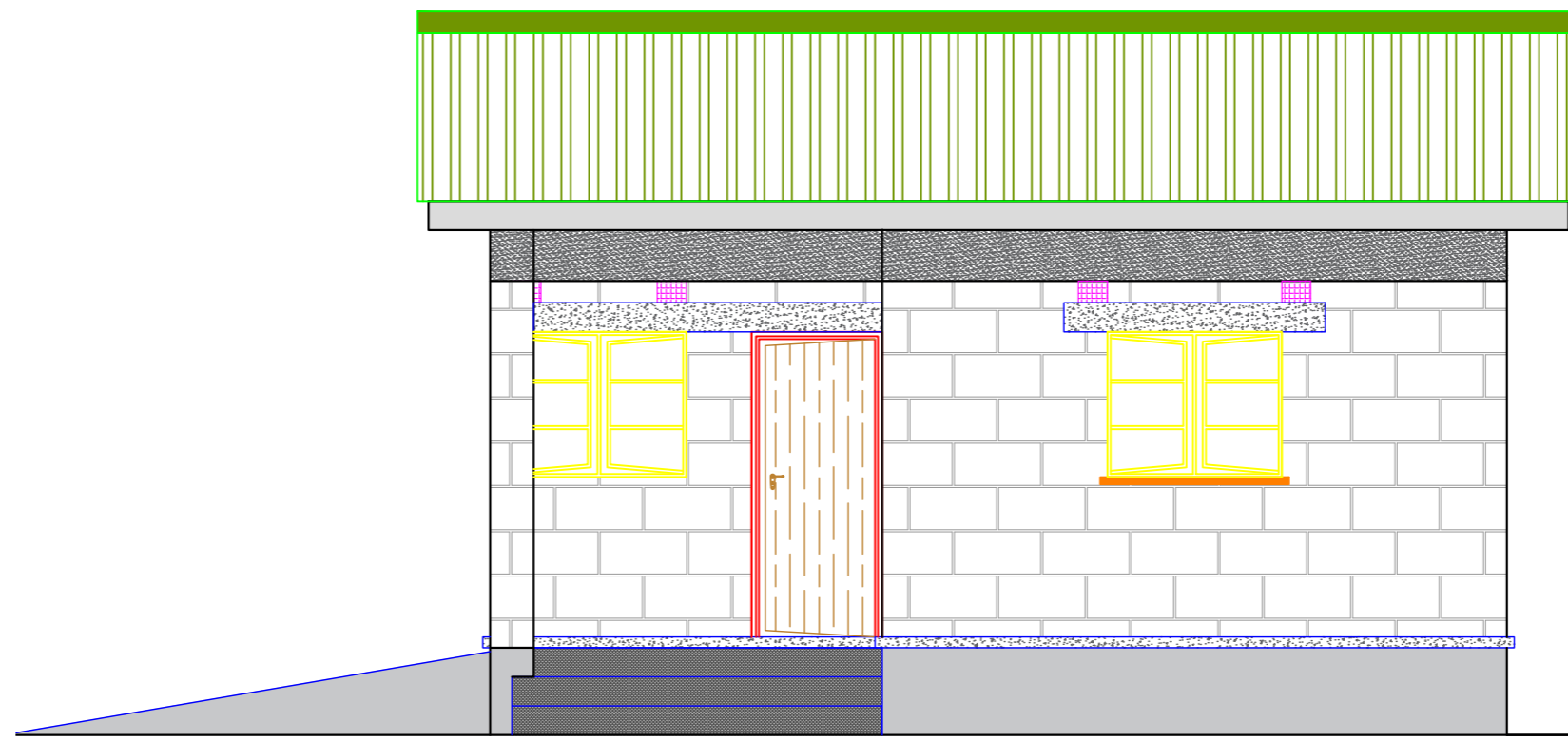
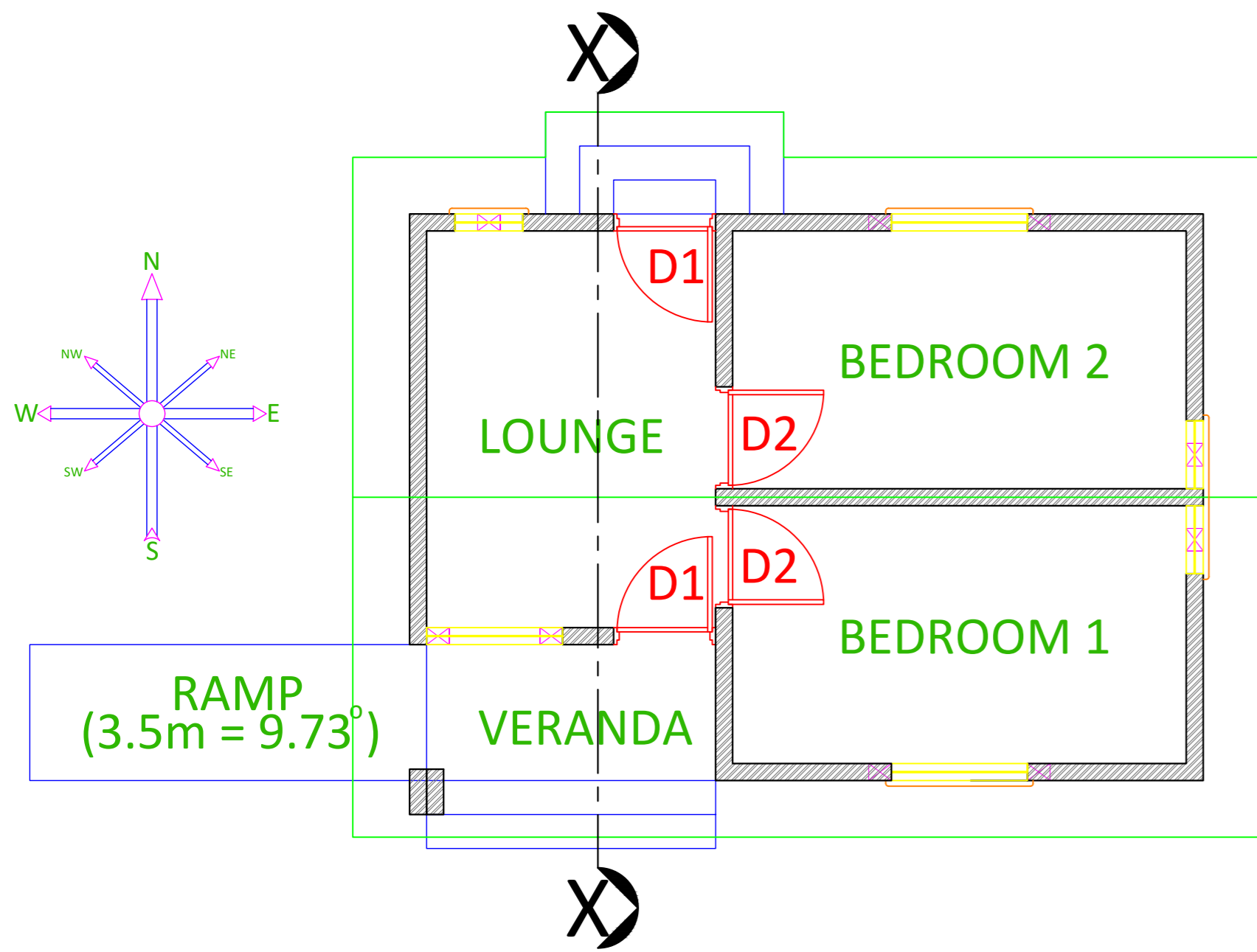
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PROJECT LOCATION
 MALAWI
 URBAN and RURAL

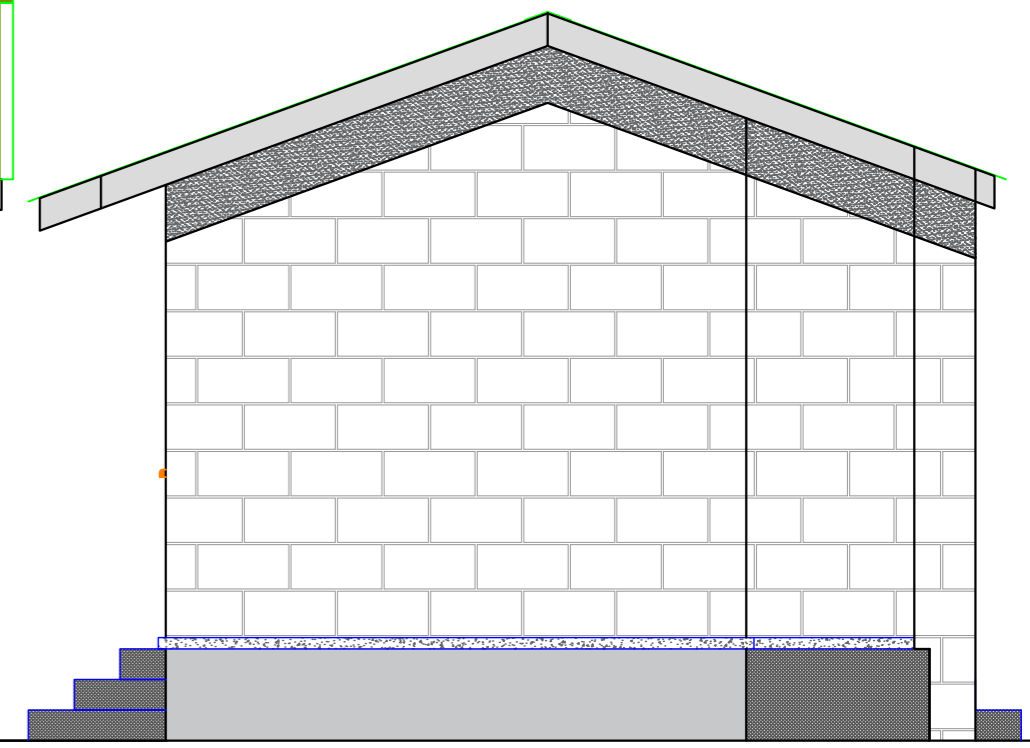
Drafted & Designed by
 HFHM on June/2023
Checked by
 Gr. Arch. William Kachikopa
Approved by

Prototype 1 - 3Rooms + Lounge & Stores
 X- SECTION, SCHEDULES, DIM & PLAN
DRAWING NUMBER SC: 1:100
 HFHM/MWD/2023/01-02





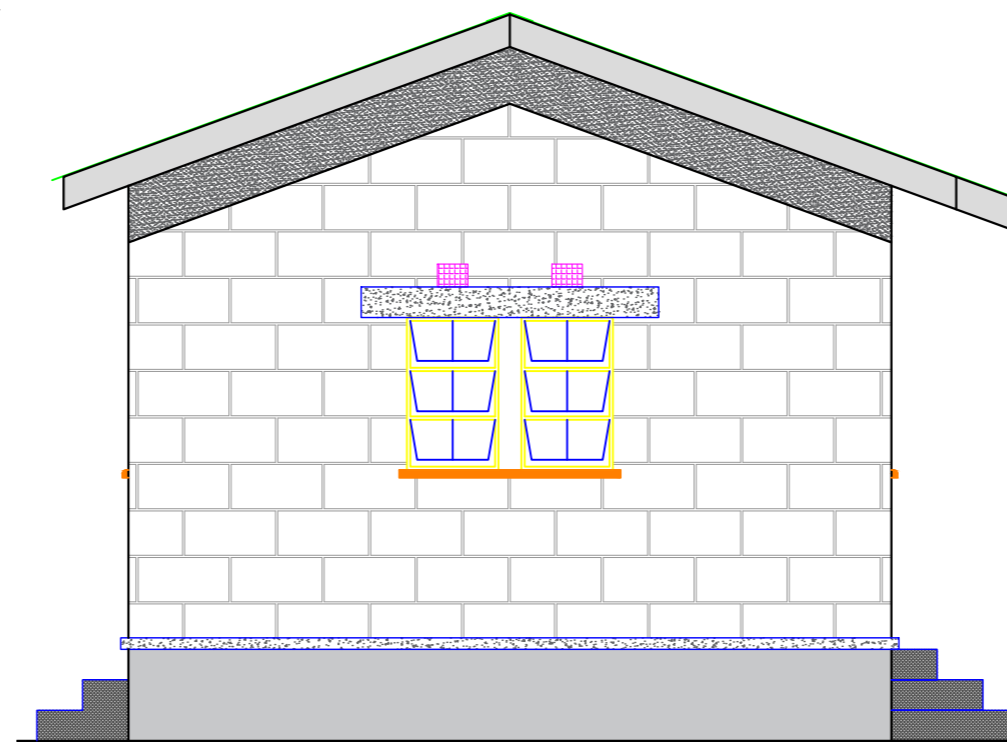
SOUTHERN ELEVATION



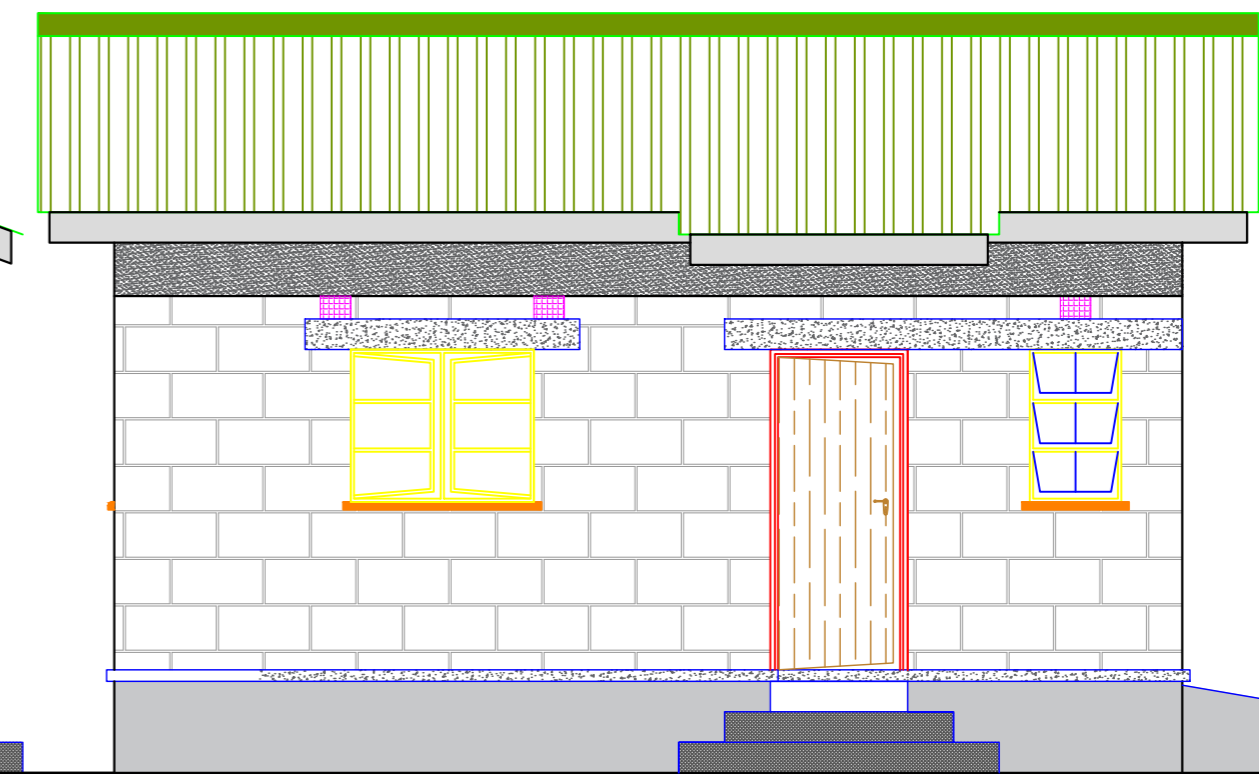
WESTERN ELEVATION

MORDENISED RURAL SSB / CEMENT BLOCK HOUSE PLAN

- House is of 35m² Area
- 2 bedrooms with single 6 glass window, with mullion, and another 3 glass window each
- Ditto with Sitting room windows
- 1 Front Veranda with stair case and ramp
- 1 back door positioned at the Lounge
- IBR design gable roof with rafters for framing. Roof pitch set at 20°
- Minimum housing surrounding area to be of 20x15meters plot = 300m²



EASTERN ELEVATION



NORTHERN ELEVATION



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PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by
HFHM on **June/2023**
Checked by
Gr. Arch. William Kachikopa
Approved by

Prototype 2 - 2Rooms + Lounge
ELEVATIONS
and
PLAN

DRAWING NUMBER **SC: 1:100**
HFHM/MWD/2023/02-01

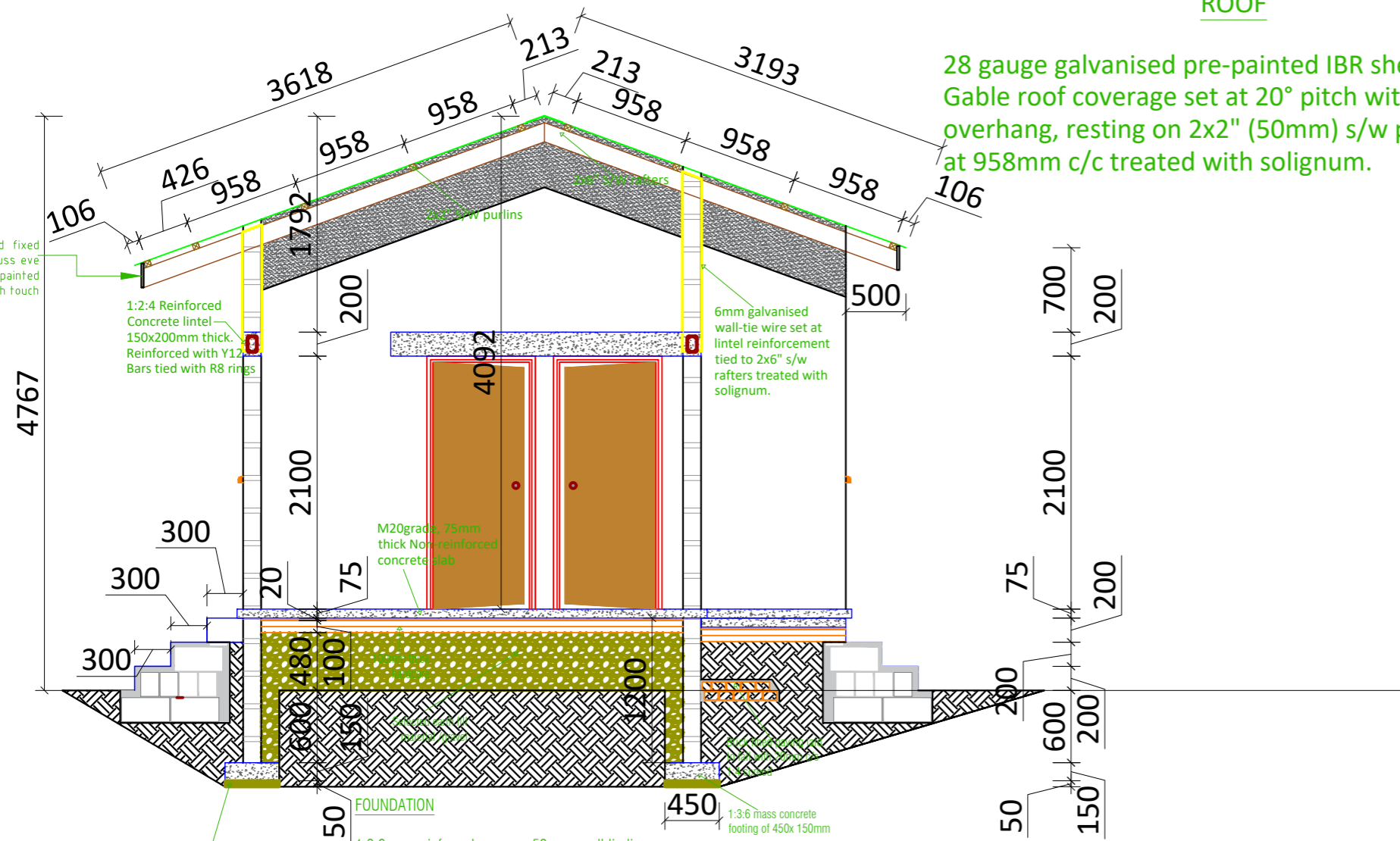


Habitat
for Humanity
Malawi

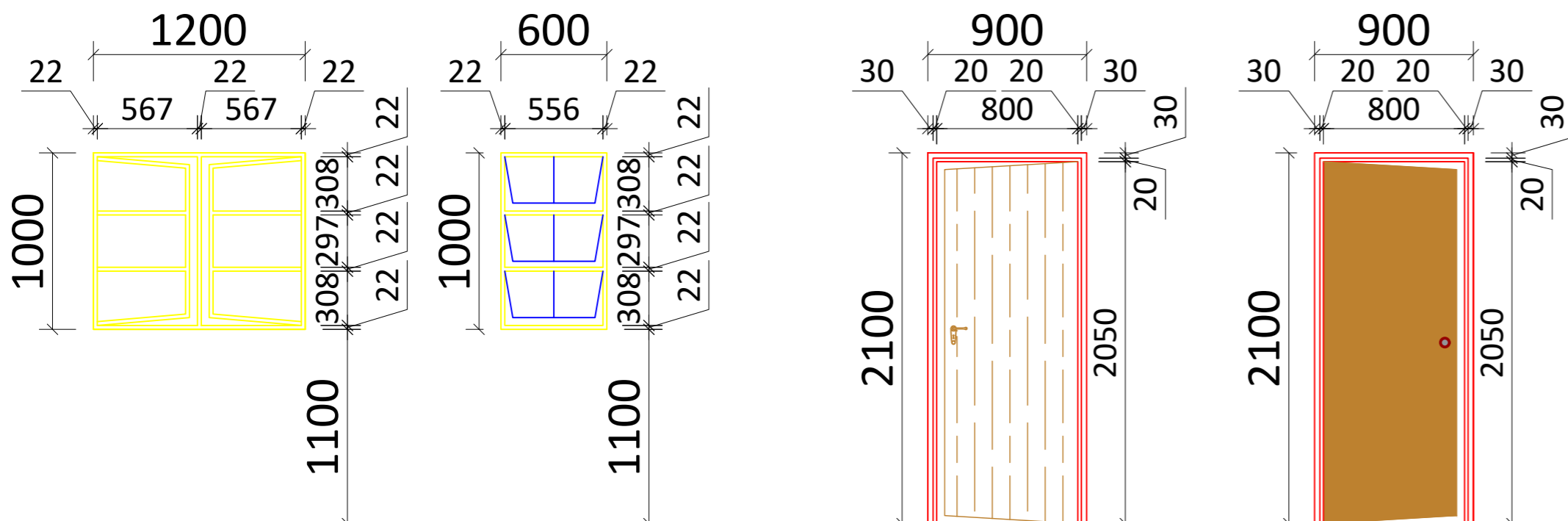
ROOF

28 gauge galvanised pre-painted IBR sheets,
Gable roof coverage set at 20° pitch with 500mm
overhang, resting on 2x2" (50mm) s/w purlins set
at 958mm c/c treated with solignum.

200X20 Fascia board fixed
by nailing to each truss eave
(at 1200mm/c), painted
gloss white for finish touch



CROSS SECTION X-X



Window 1

No. REQUIRED: 3

LOCATION: LOUNGE & BEDROOMS
FRAMES: Purpose made steel 6glass window with Transom in the middle with a top casement opening. Dimensions as shown
GLASS: 4mm clear glass set with silicone and finished with putty
IRONMONGERY: Standard brass stoppers handles and stays
FINISH: Industrial prefabricated finish (red oxide). then painted gloss white

Window 2

No. REQUIRED: 3

LOCATION: LOUNGE & BEDROOMS
FRAMES: Purpose made steel 3glass window
GLASS: 4mm clear glass set with silicone and finished with putty
IRONMONGERY: Standard brass stoppers handles and stays
FINISH: Industrial prefabricated finish (red oxide). then painted gloss white

Door 1

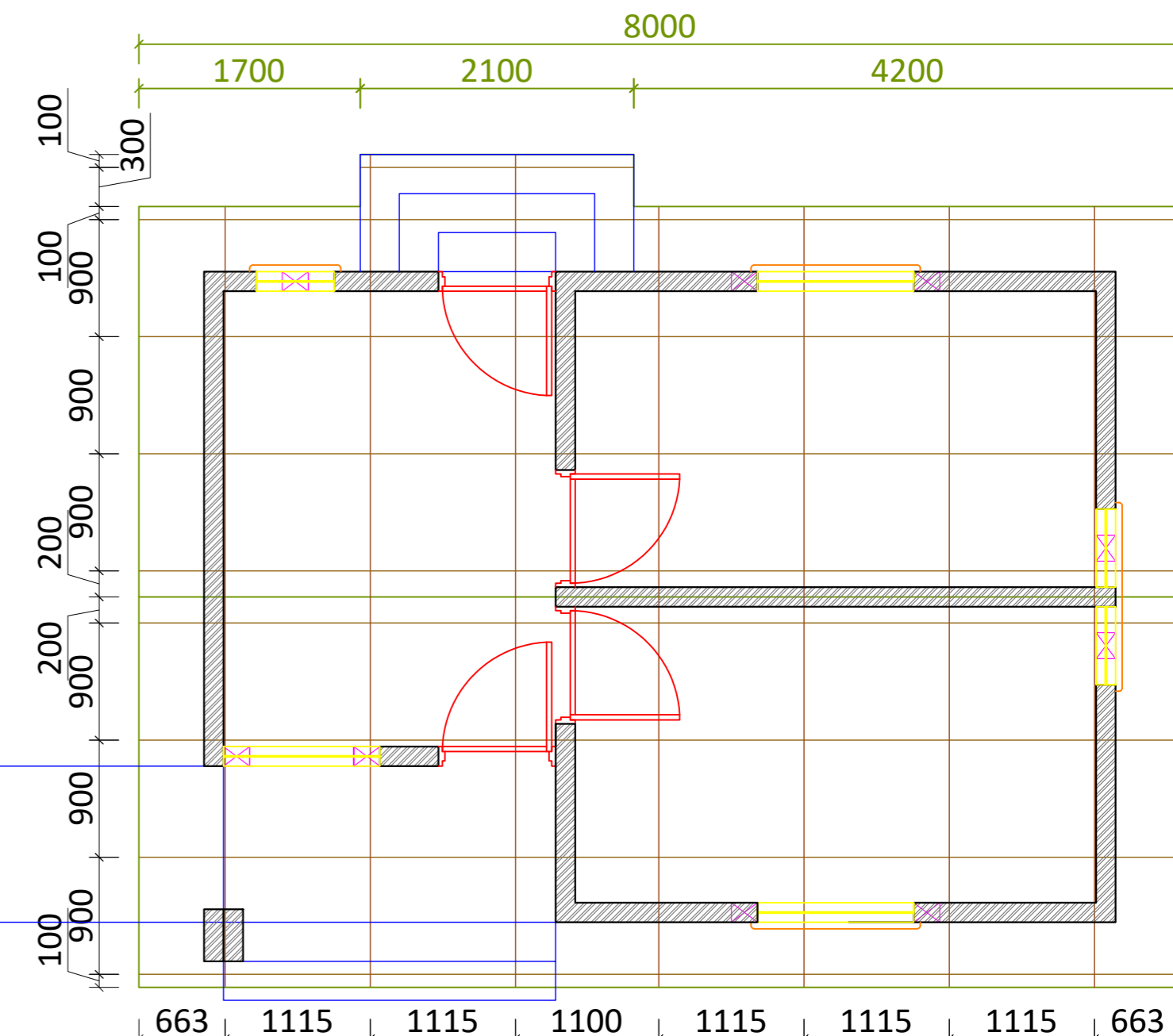
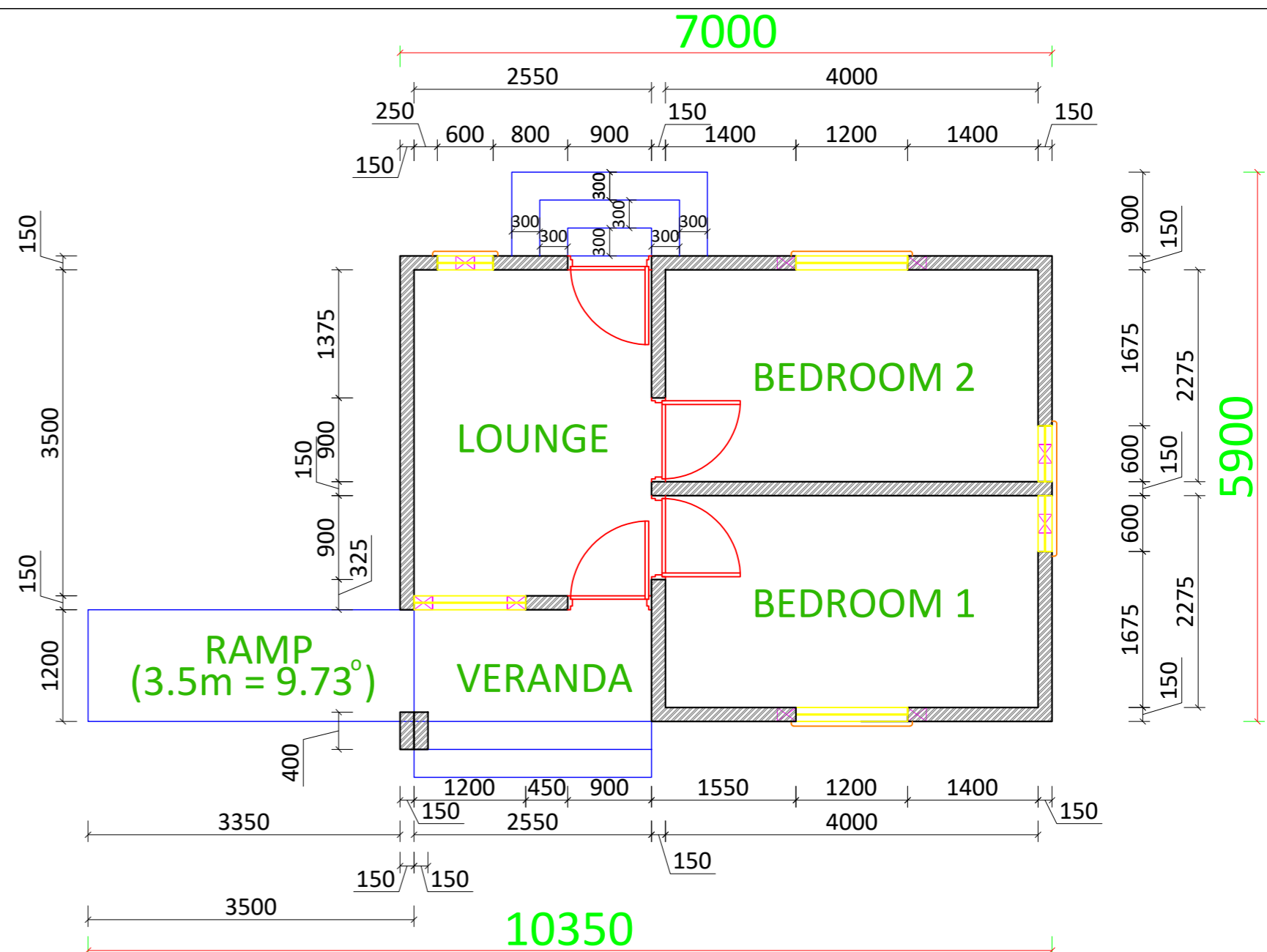
No. REQUIRED: 2

LOCATION: LOUNGE
FRAMES: Purpose made pressed steel frames 1mm thick
DOORS: Purpose made treated H/W door
FINISH: Varnished 2coates with clear glass vanish
IRONMONGERY: SABS 3-lever mortice lock
IRONMONGERY HINGES: As per supplied by supplier

Door 2

No. REQUIRED: 2

LOCATION: BEDROOM 1 & 2,
FRAMES: Purpose made pressed steel frames
DOORS: Core flash door
FINISH: Painted pink primer and finished with mist grey
IRONMONGERY: SABS 3-lever mortice lock
IRONMONGERY HINGES: As per supplied by supplier



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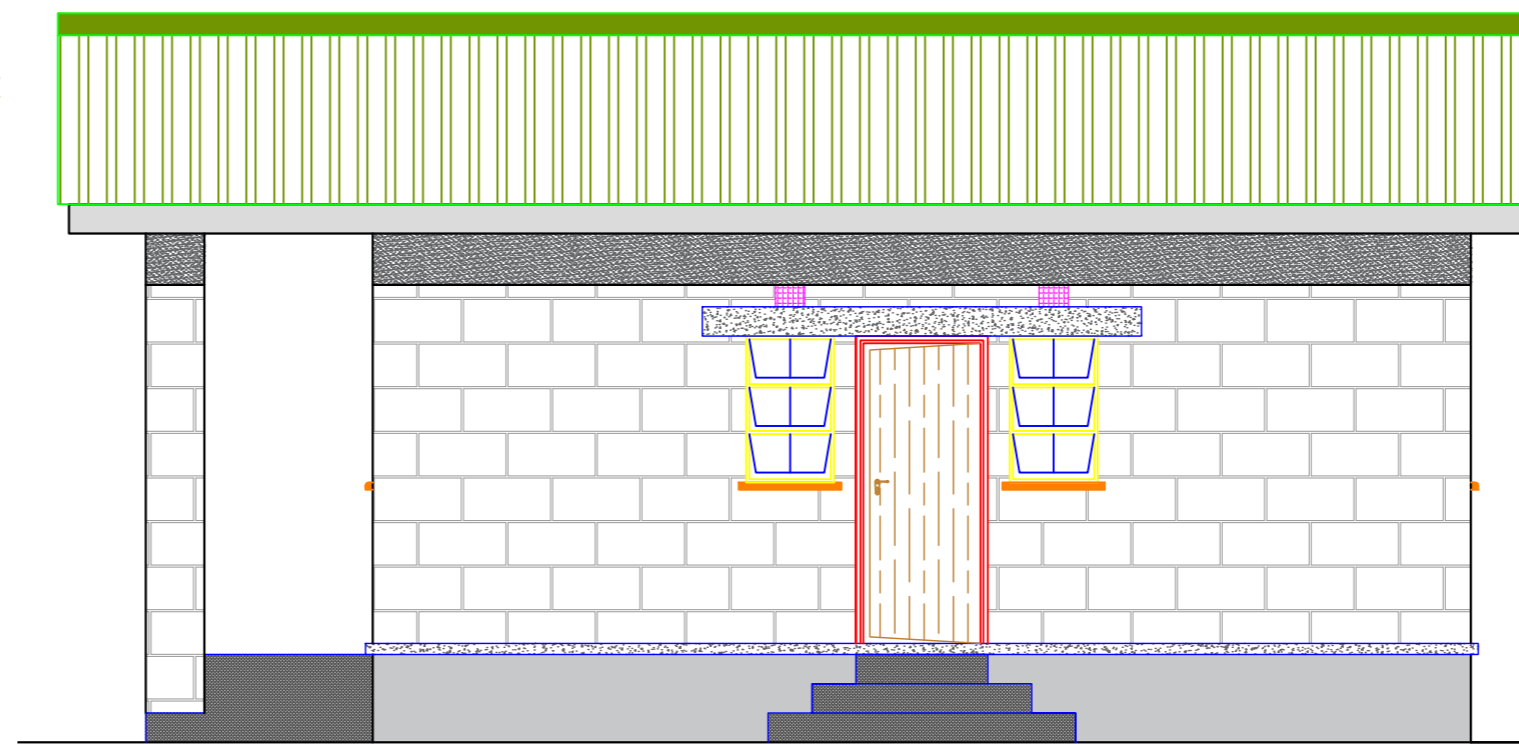
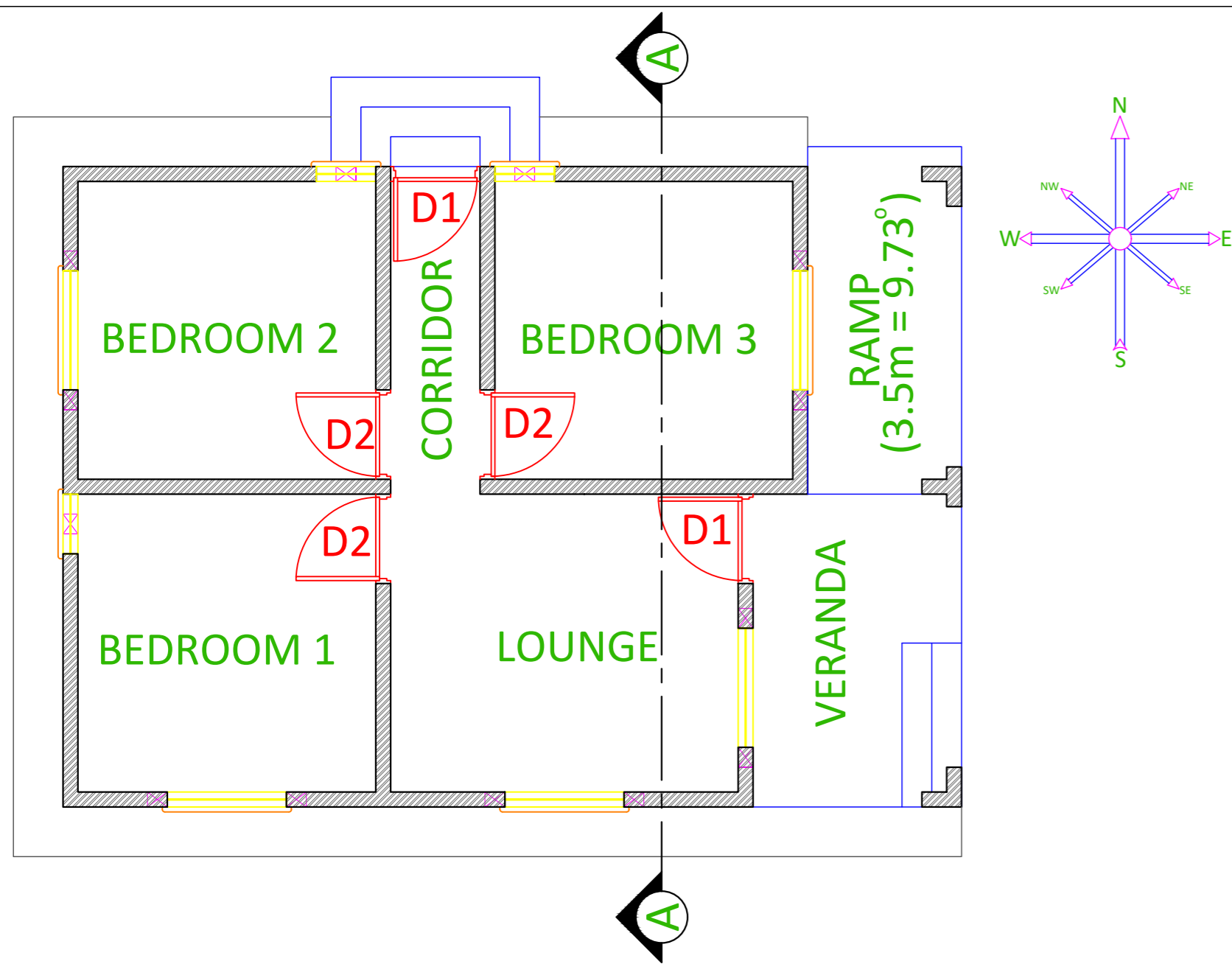
PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by
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Checked by
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Approved by

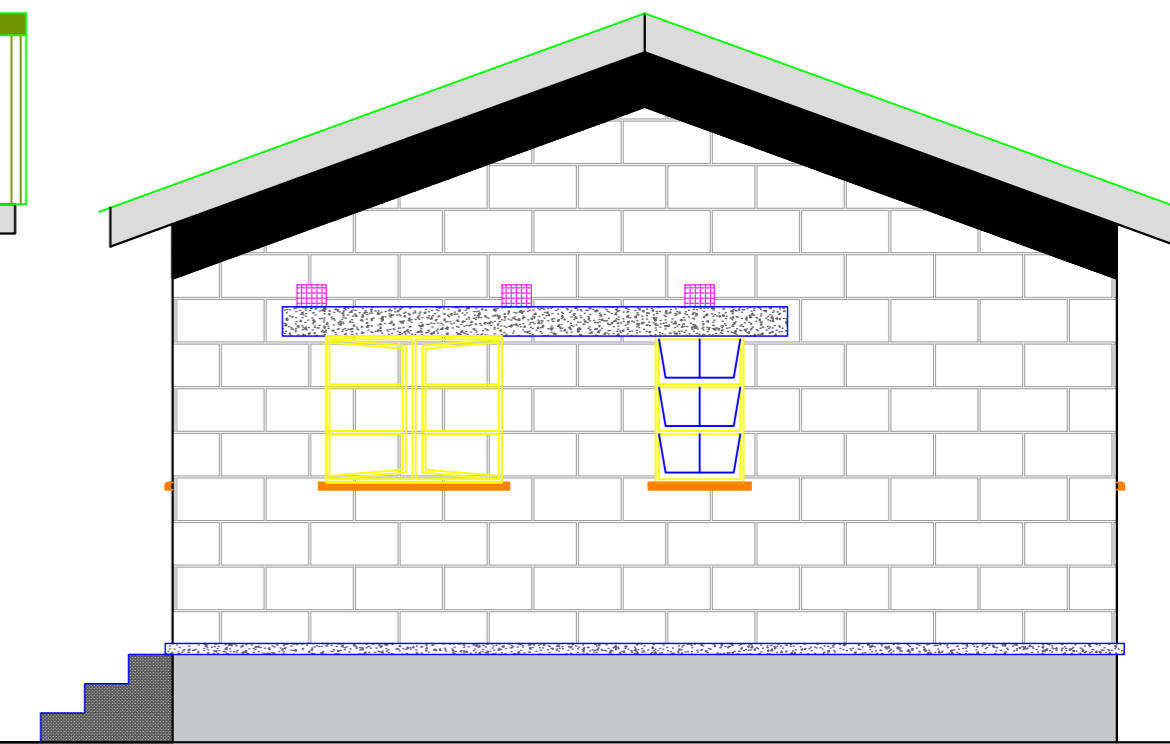
Prototype 2 - 2Rooms + Lounge
X- SECTION,
SCHEDULES,
DIM & PLAN

DRAWING NUMBER **SC: 1:100**
HFHM/MWD/2023/02-02

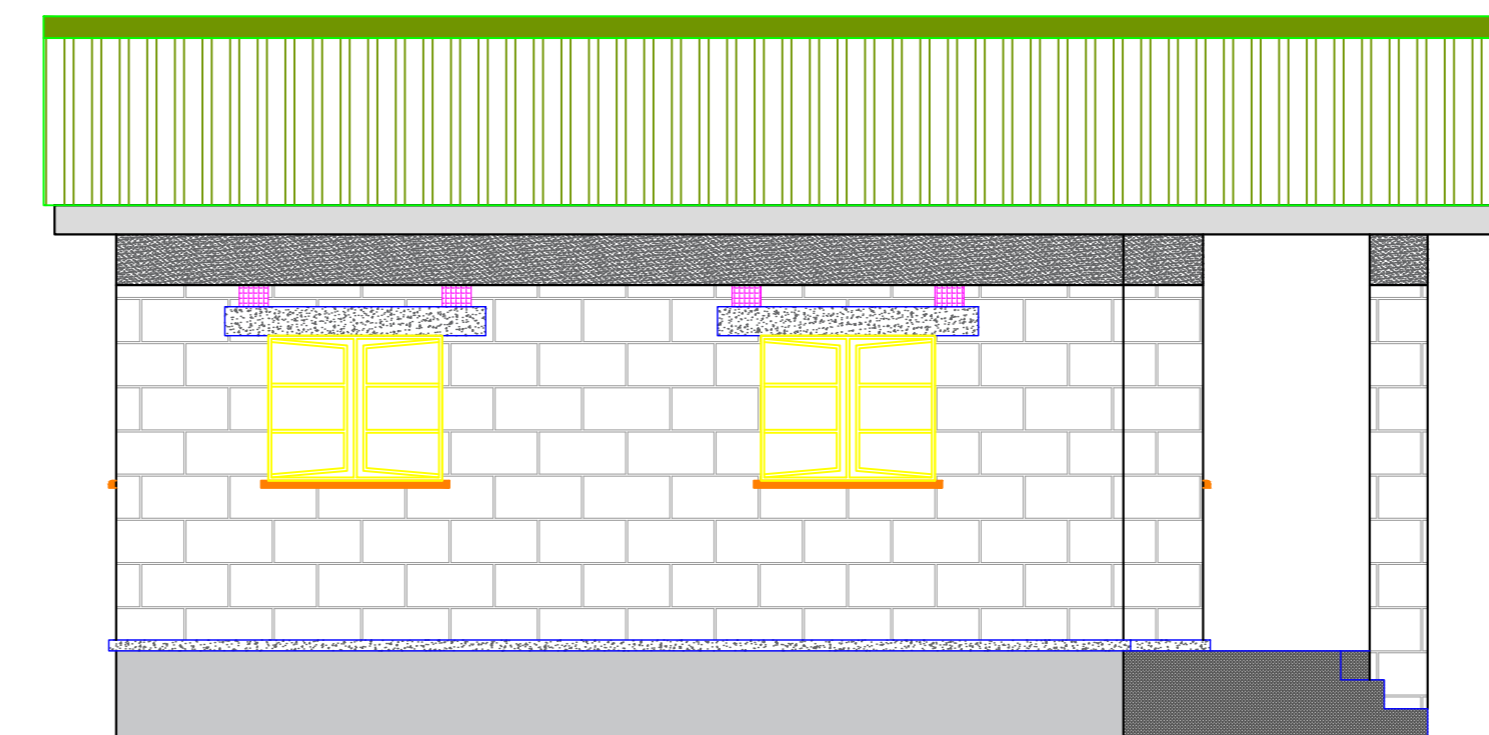




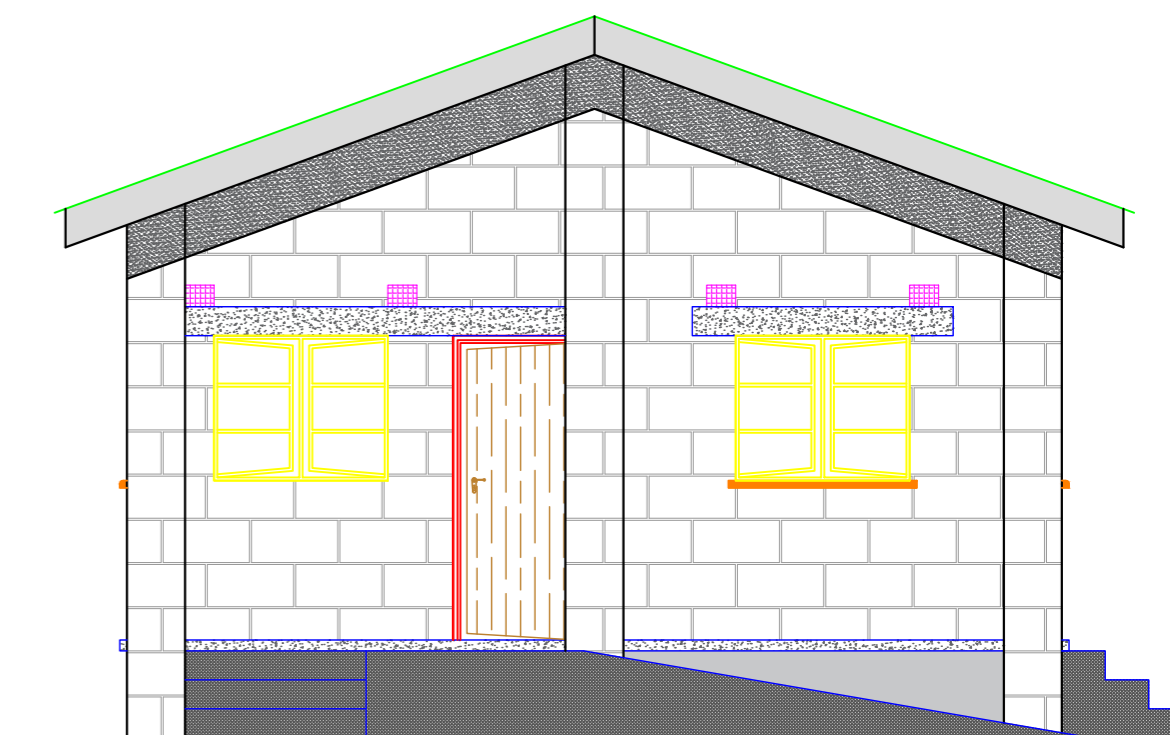
NORTHERN ELEVATION



WESTERN ELEVATION



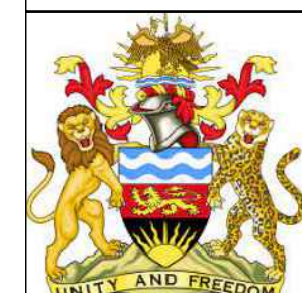
SOUTHERN ELEVATION



EASTERN ELEVATION

MORDENISED RURAL SSB / CEMENT BLOCK HOUSE PLAN

- House is of 60.57m² Area
- 3 bedrooms with single 6 glass window, with mullion, and another 3glass window each
- Lounge with 2No. 6glass windows
- Corridor with a back exit door
- 1 Front Veranda with stair case and ramp
- 1 back door positioned at the Lounge
- IBR design gable roof with rafters for framing. Roof pitch set at 20°
- Minimum housing surrounding area to be of 21x18meters plot = 378m²



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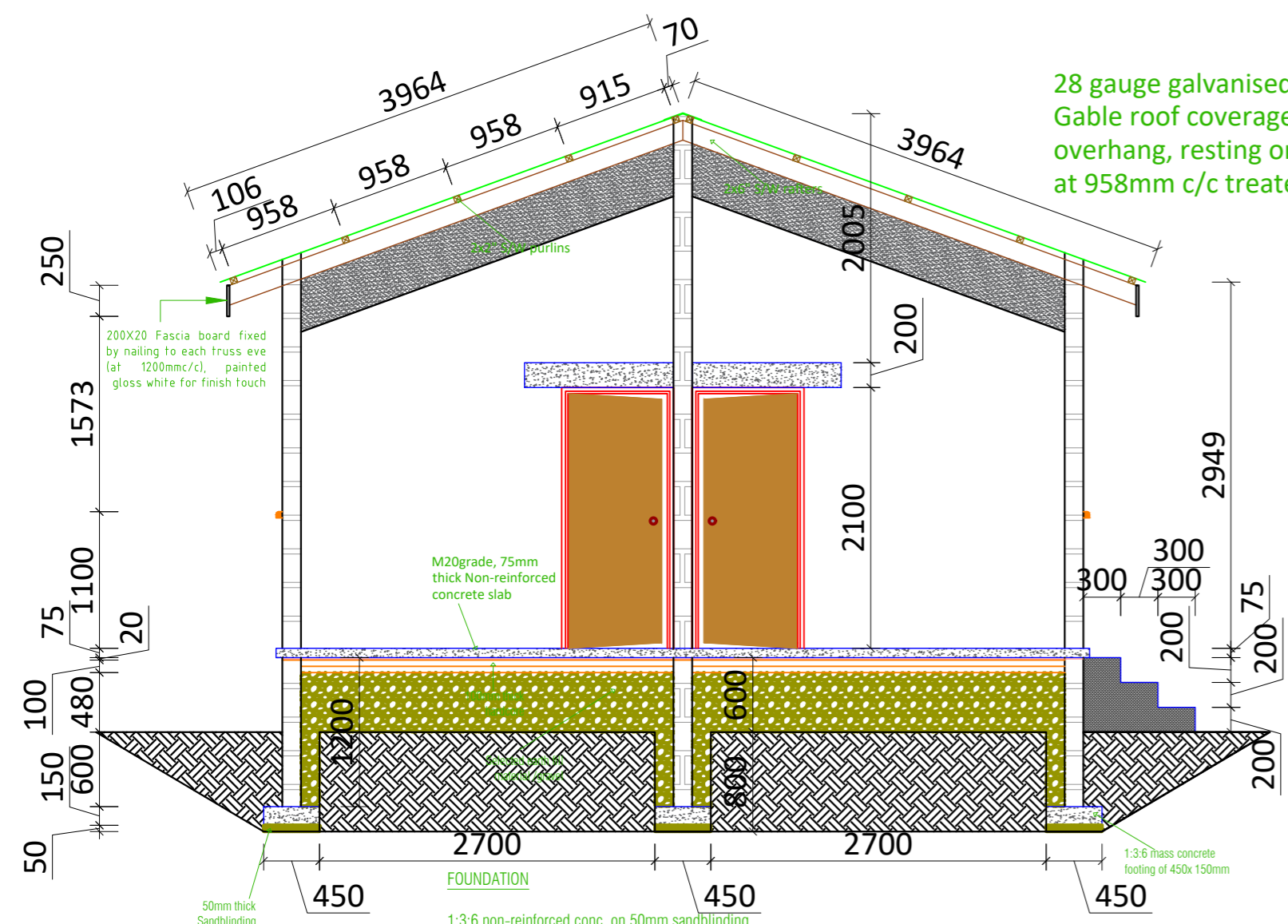
PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by
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Gr. Arch. William Kachikopa
Approved by

Prototype 3 - 3Rooms + Lounge
ELEVATIONS
and
PLAN

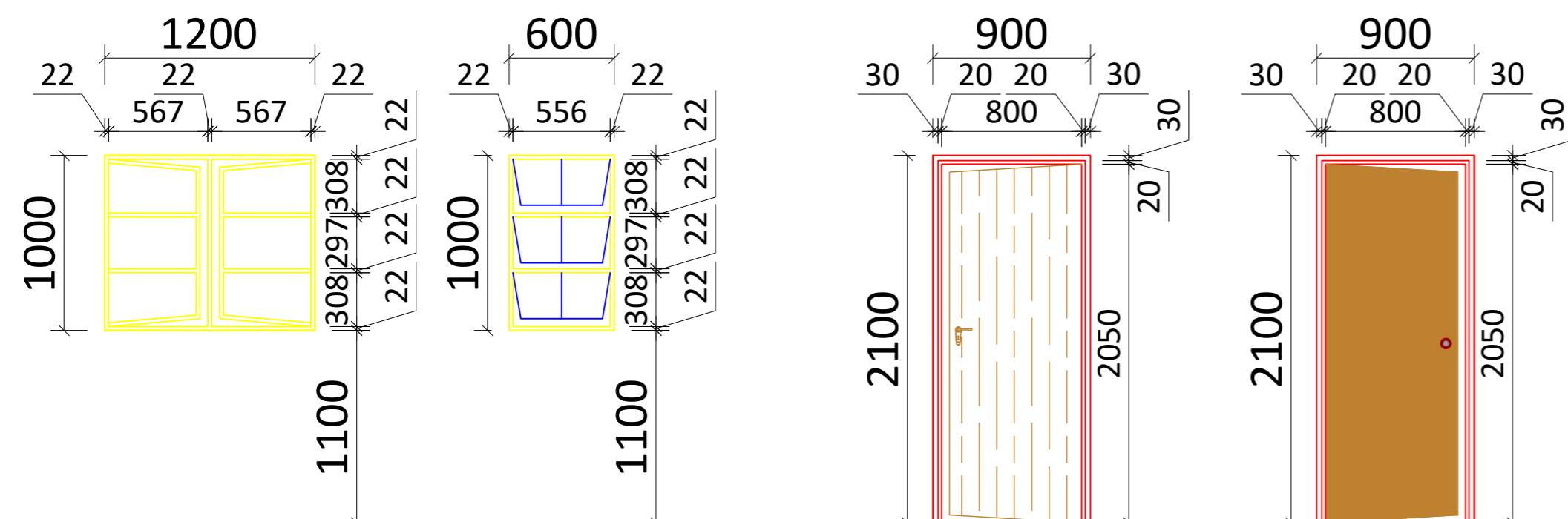
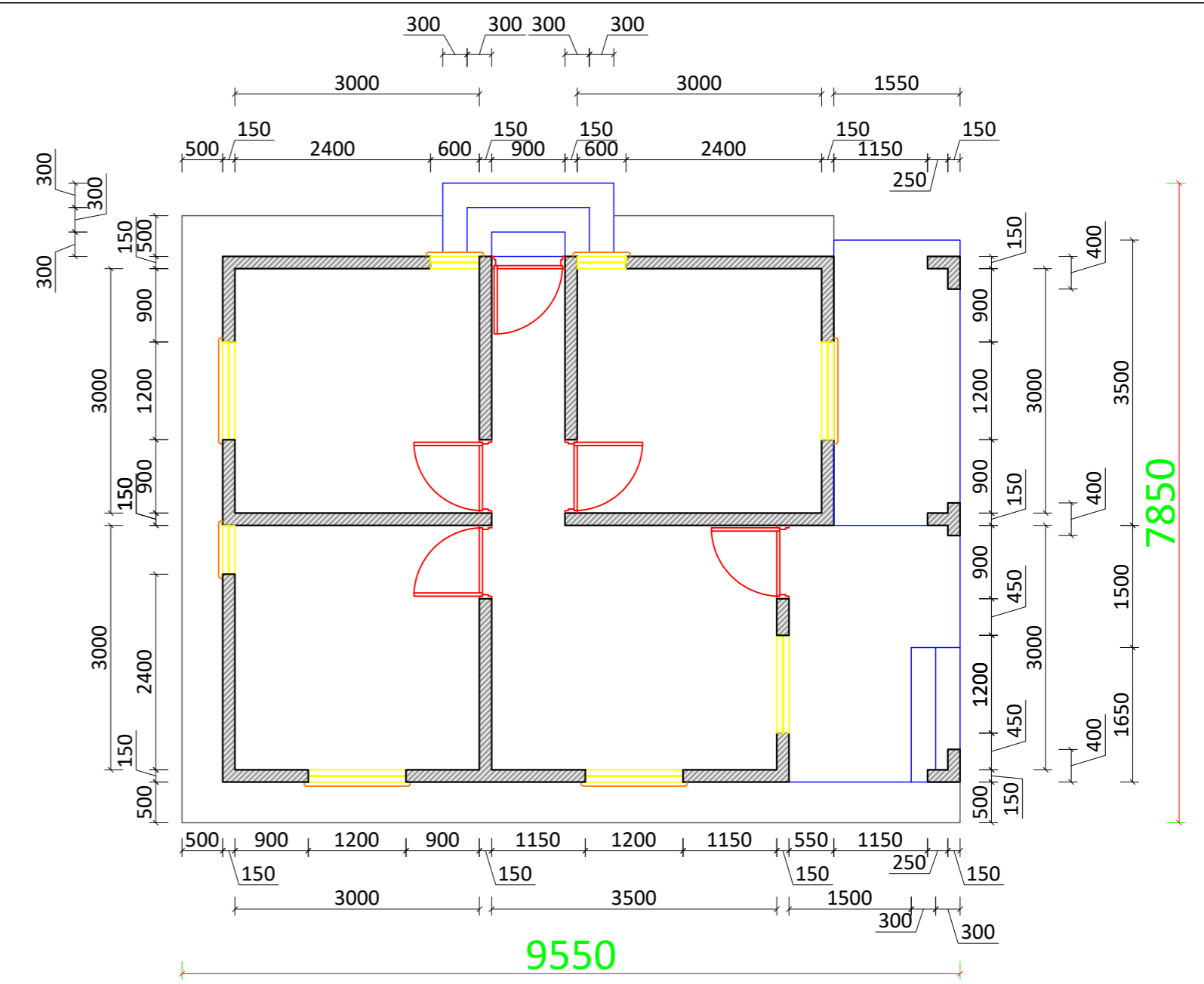
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HFHM/MWD/2023/03-01





ROOF
 28 gauge galvanized pre-painted IBR sheets,
 Gable roof coverage set at 20° pitch with 500mm
 overhang, resting on 2x2" (50mm) s/w purlins set
 at 958mm c/c treated with solignum.

CROSS SECTION A-A



Window 1
 No. REQUIRED: 3

LOCATION: BEDROOMS
FRAMES: Purpose made steel 6glass window with Transom in the middle with a top casement opening. Dimensions as shown
GLASS: 4mm clear glass set with silicone and finished with putty
IRONMONGERY: Standard brass stoppers handles and stays
FINISH: Industrial prefabricated finish (red oxide), then painted gloss white

Window 5
 No. REQUIRED: 5

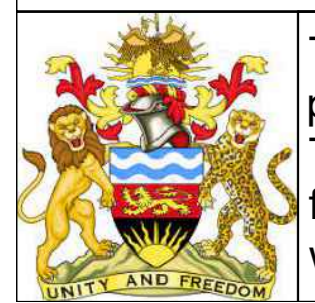
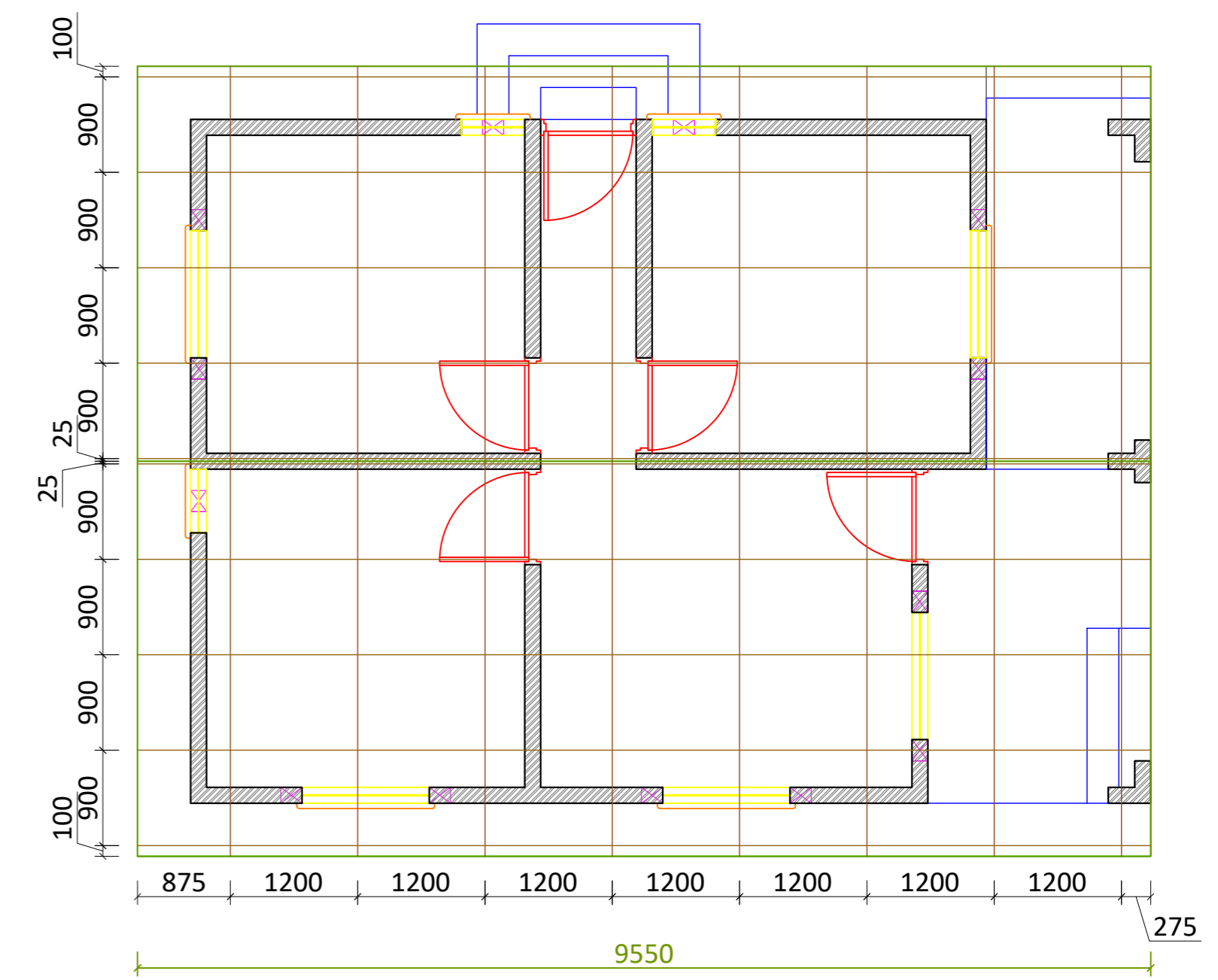
LOCATION: LOUNGE & BEDROOMS
FRAMES: Purpose made steel 3glass window
 Dimensions as shown
GLASS: 4mm clear glass set with silicone and finished with putty
IRONMONGERY: Standard brass stoppers handles and stays
FINISH: Industrial prefabricated finish (red oxide), then painted gloss white

Door 1
 No. REQUIRED: 2

LOCATION: LOUNGE & CORRIDOR
FRAMES: Purpose made pressed steel frames 1mm thick
DOORS: Purpose made treated H/W door
FINISH: Varnished 2coates with clear glass vanish
IRONMONGERY: SABS 3-lever mortice lock
IRONMONGERY HINGES: As per supplied by supplier

Door 2
 No. REQUIRED: 3

LOCATION: BEDROOM 1, 2, & 3
FRAMES: Purpose made pressed steel frames
DOORS: Core flash door
FINISH: Painted pink primer and finished with mist grey
IRONMONGERY: SABS 3-lever mortice lock
IRONMONGERY HINGES: As per supplied by supplier



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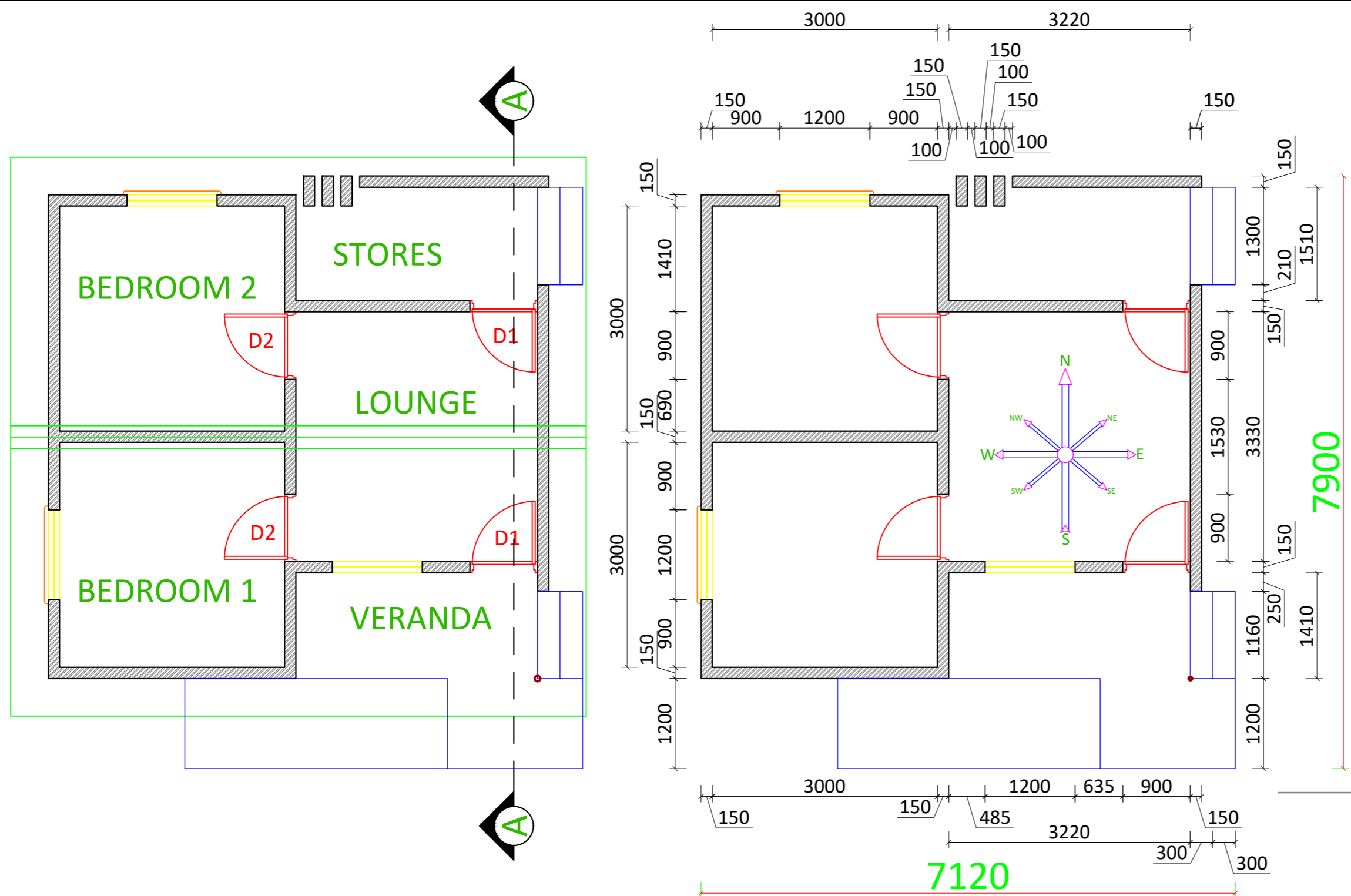
PROJECT LOCATION
 MALAWI
 URBAN and RURAL

Drafted & Designed by
 HFHM on June/2023
Checked by
 Gr. Arch. William Kachikopa
Approved by

Prototype 3 - 3Rooms + Lounge
 X- SECTION,
 SCHEDULES,
 DIM & PLAN

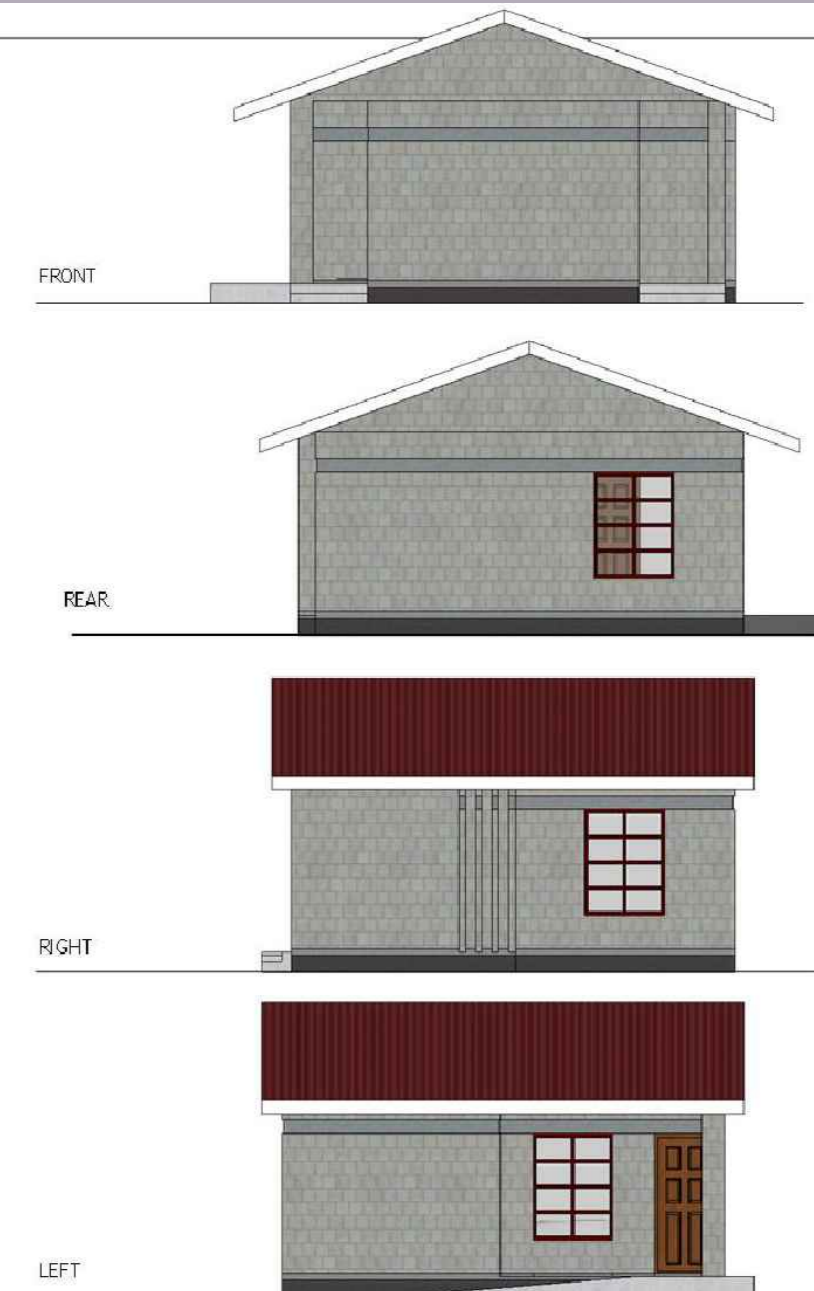
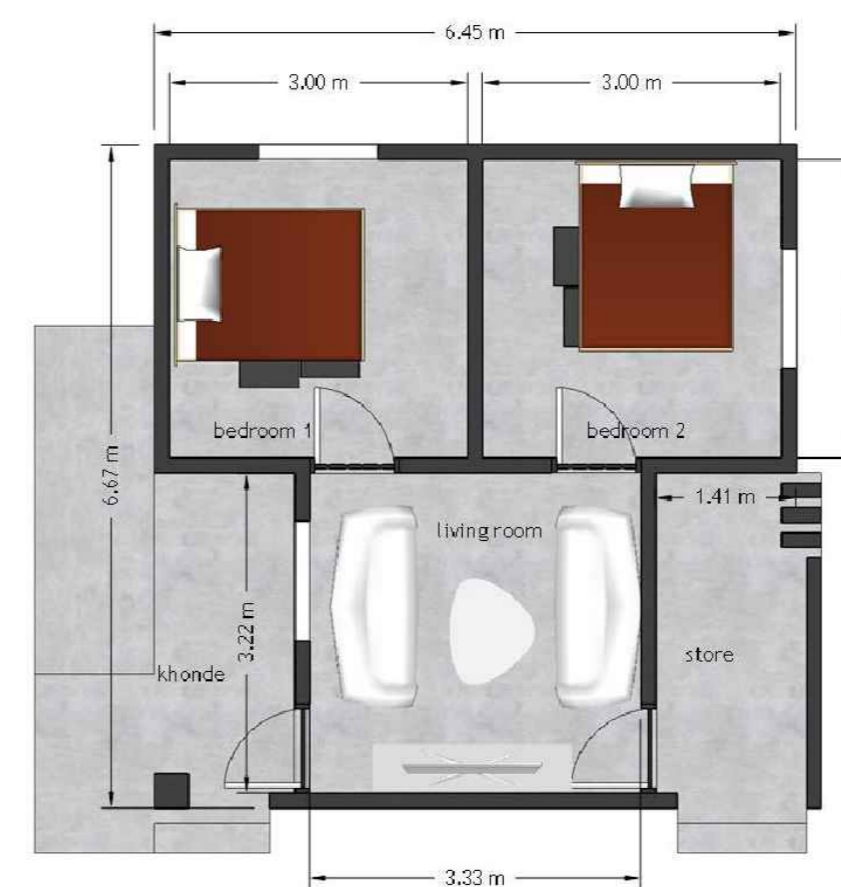
DRAWING NUMBER SC: 1:100
 HFHM/MWD/2023/03-02





MORDENISED RURAL SSB / CEMENT BLOCK HOUSE PLAN

- House is of 51.30m² Area
- 2 bedrooms with single 6 glass windows each
- Sitting room with a single 6 glass window
- Stores with vents and no closure
- 1 Front Veranda
- IBR design gable roof with rafters for framing. Roof pitch set at 20°
- Minimum housing surrounding area to be of 17.6x17.1meters plot = 300.96m²



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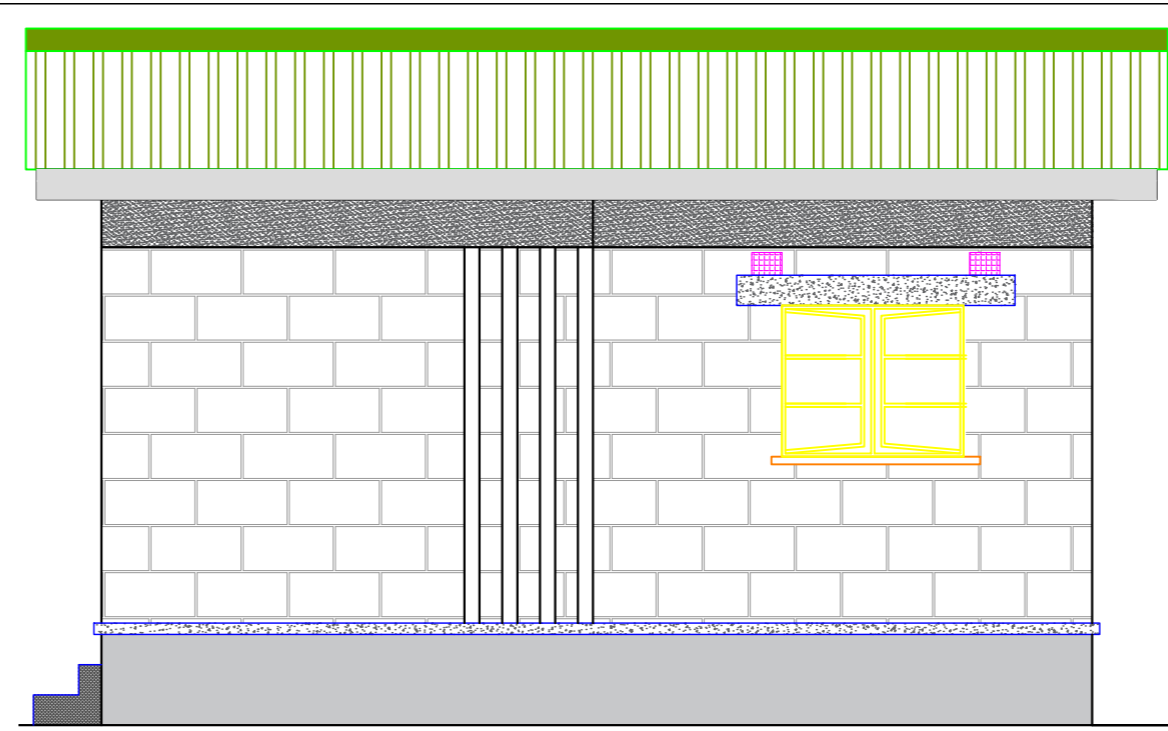
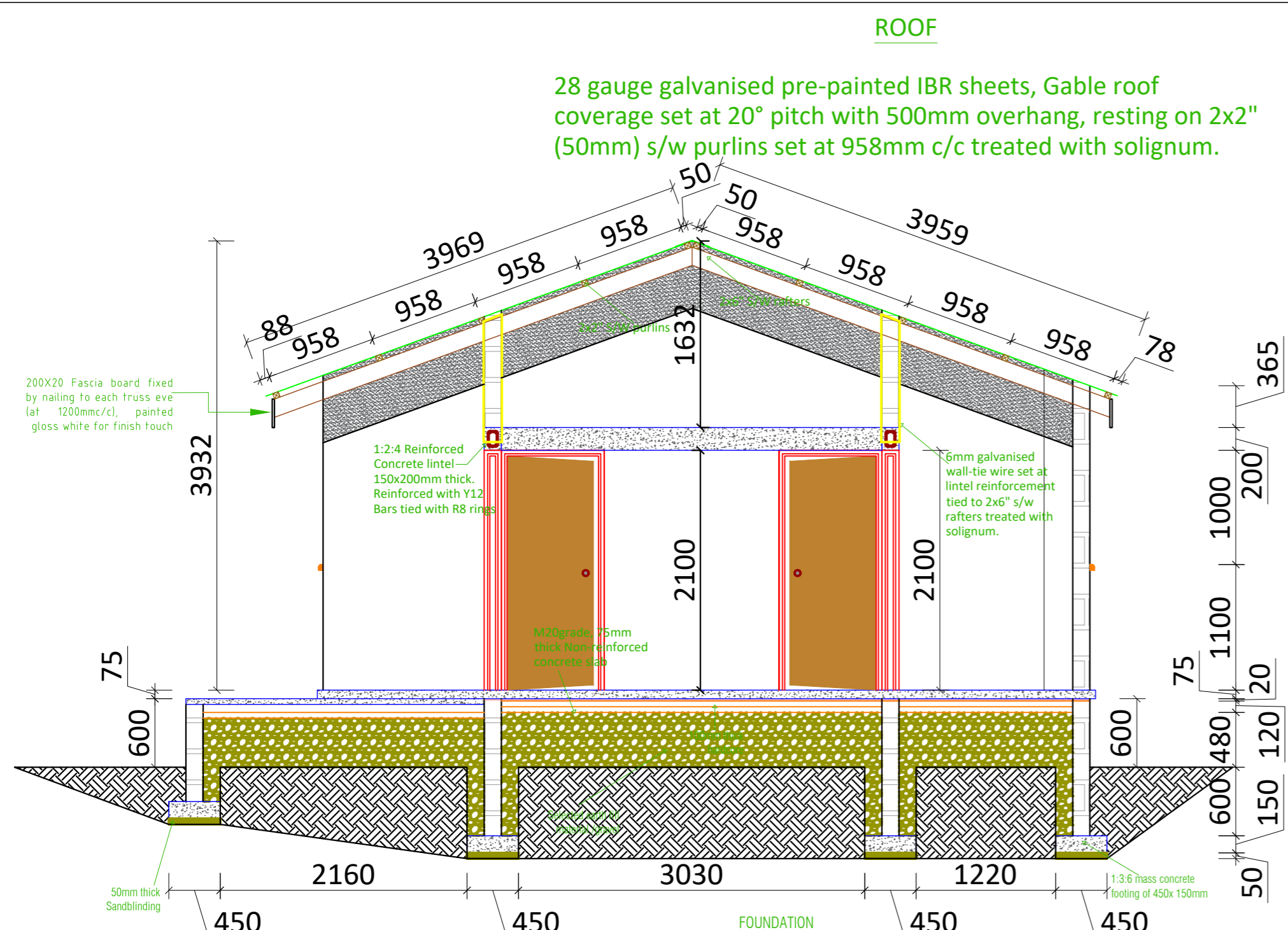
PROJECT LOCATION
MALAWI
URBAN and RURAL

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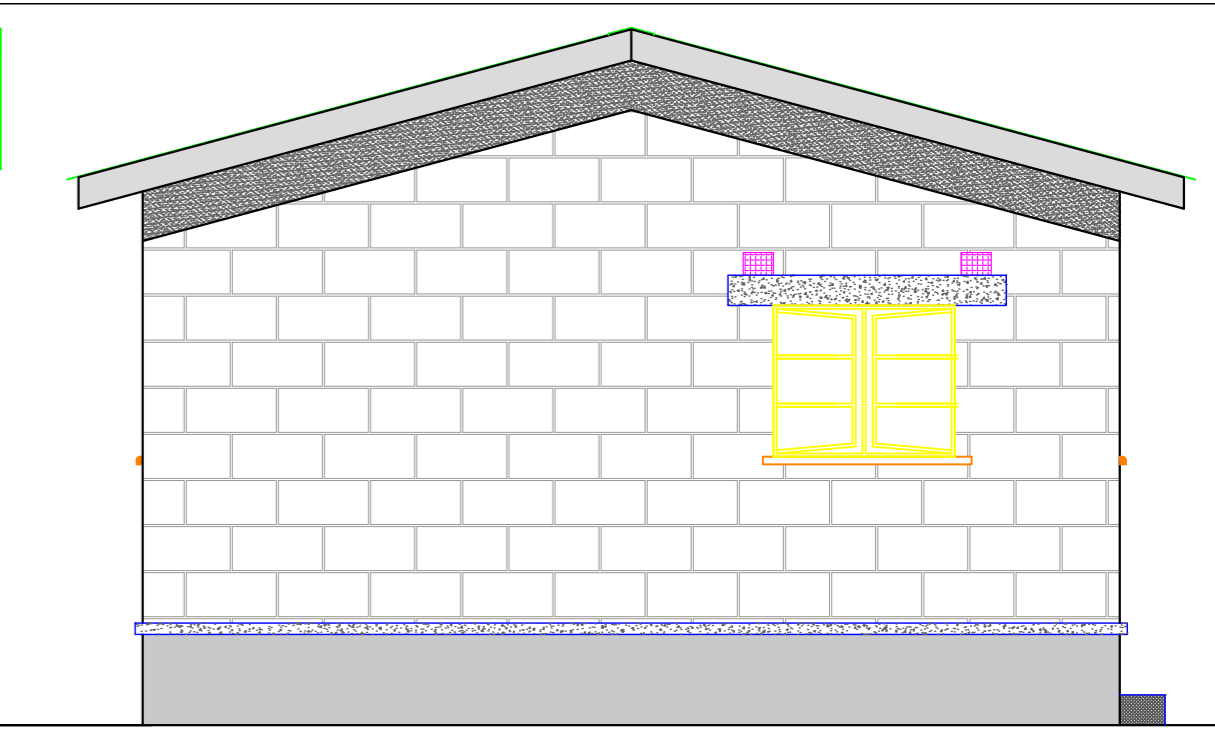
Prototype 4 - 2Rooms + Lounge, Stores
OVERVIEW
and
PLAN & DIM

DRAWING NUMBER SC: 1:100
HFHM/MWD/2023/04-01

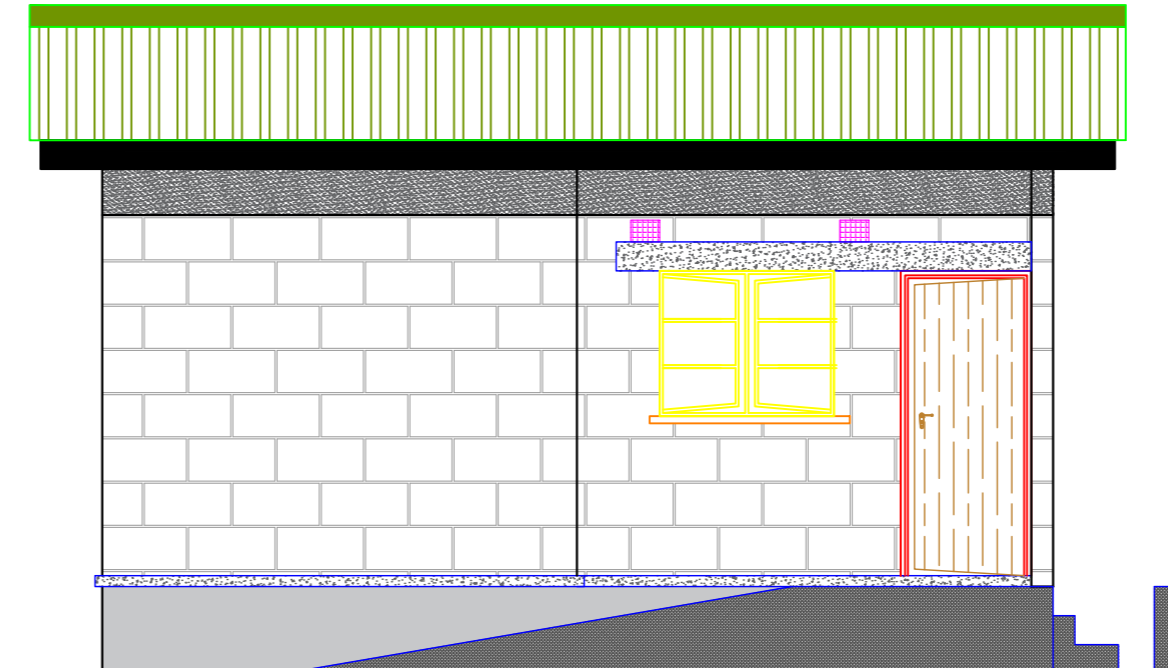




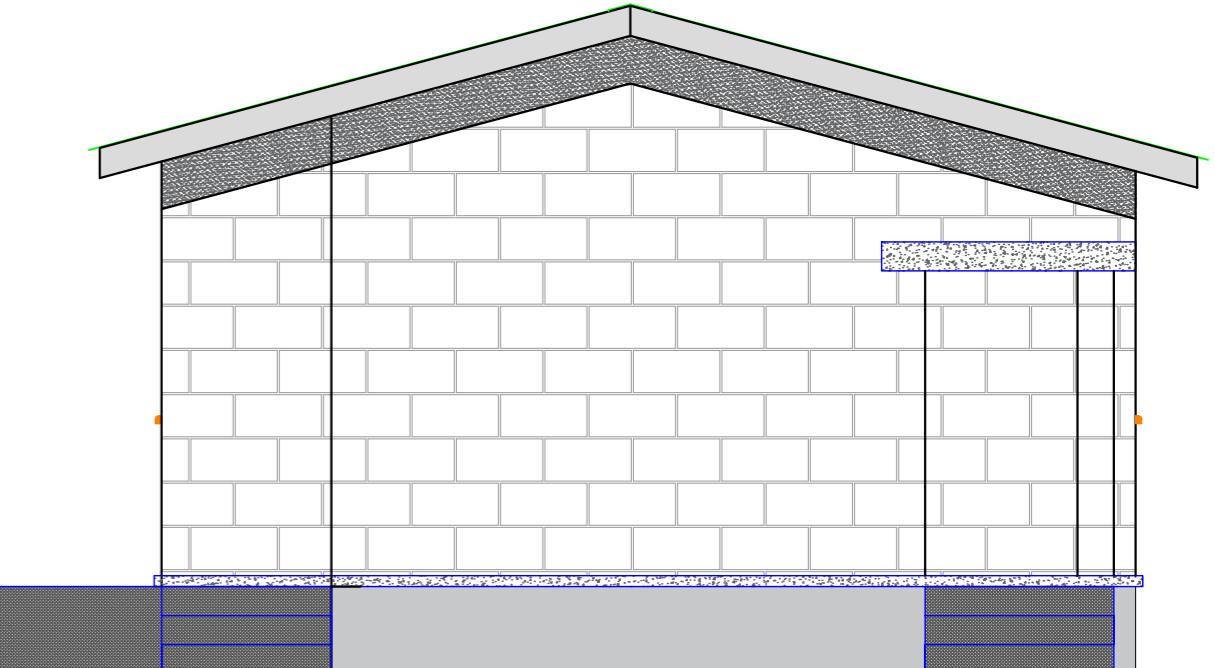
NORTHERN ELEVATION



WESTERN ELEVATION

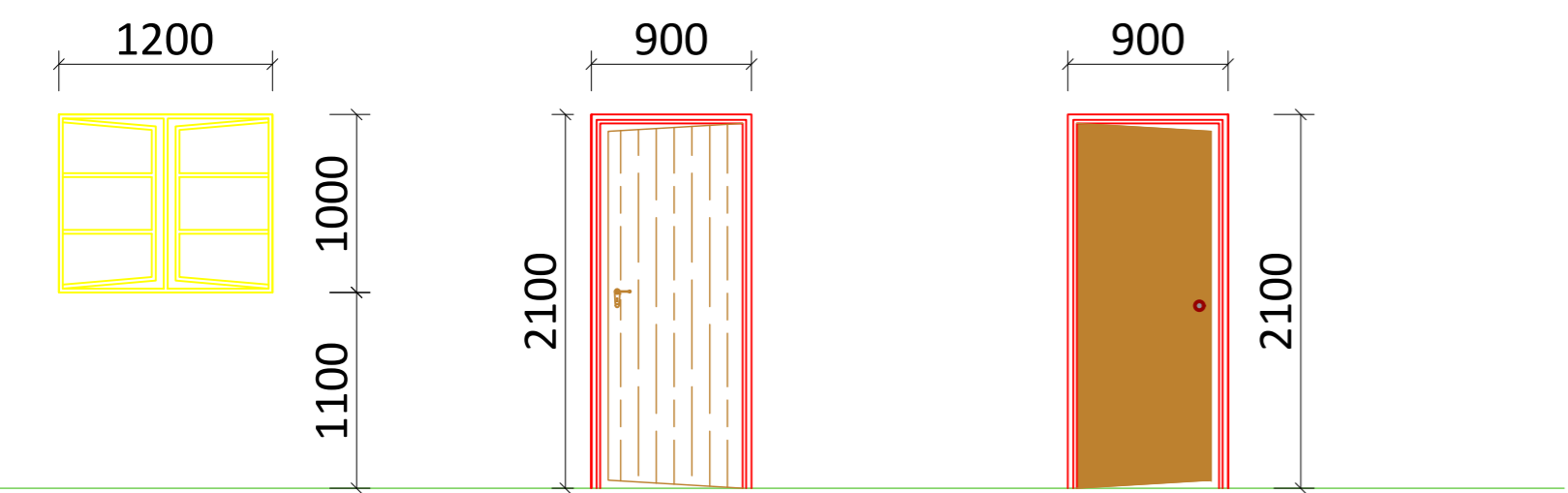


SOUTHERN ELEVATION

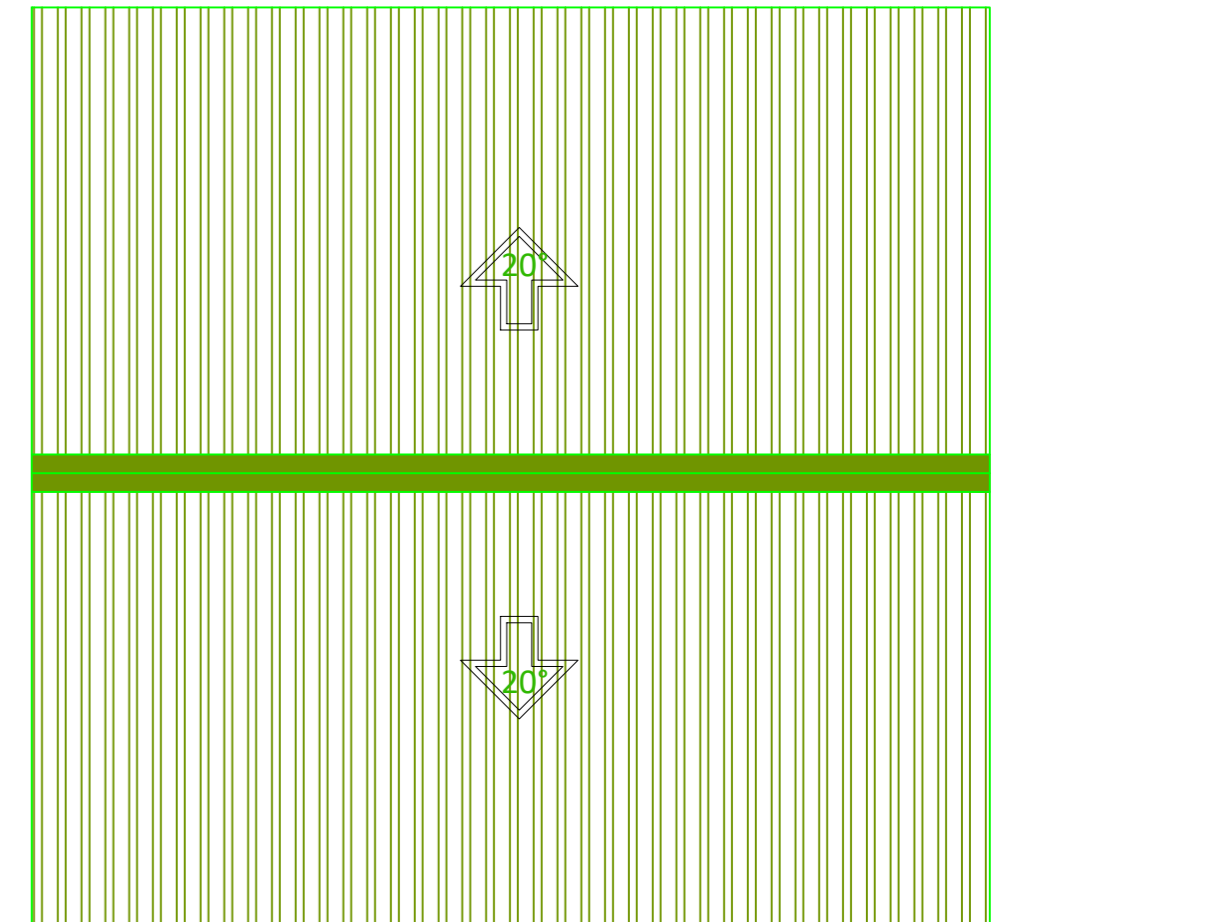
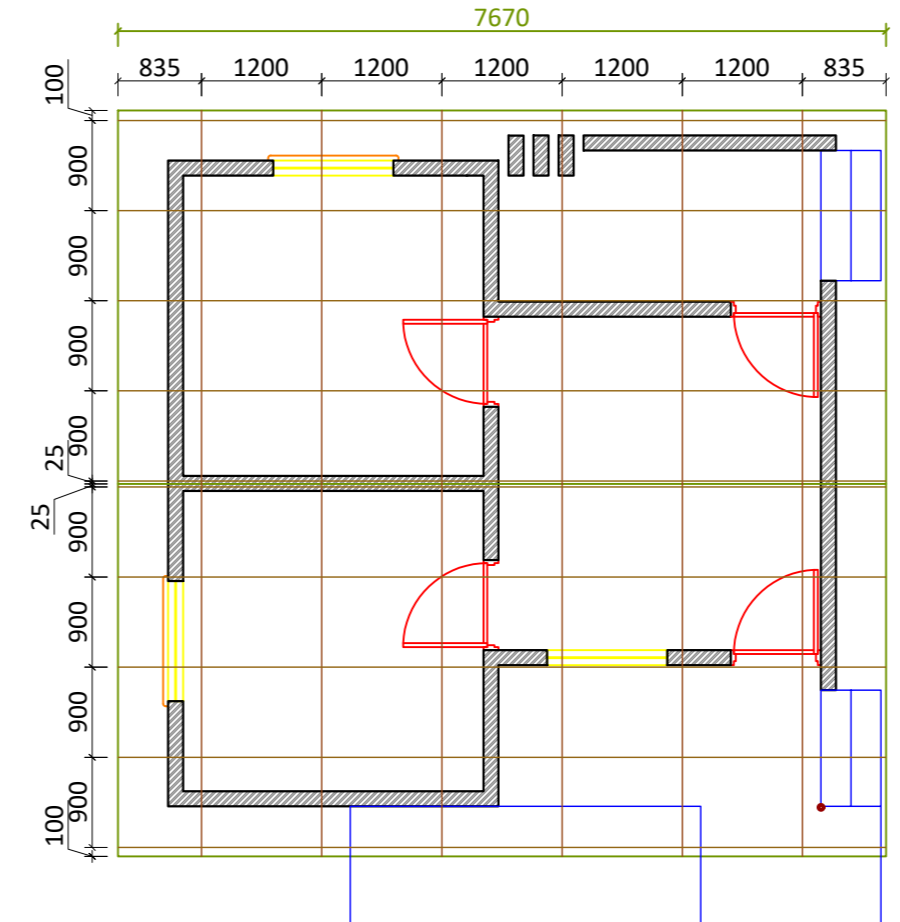


EASTERN ELEVATION

CROSS SECTION A-A



| Window | Door 1 | Door 2 |
|--|---|---|
| No. REQUIRED: 3 | No. REQUIRED: 2 | No. REQUIRED: 2 |
| LOCATION: LOUNGE & BEDROOMS | LOCATION: LOUNGE | LOCATION: BEDROOMS 1, & 2 |
| FRAMES: Purpose made steel 6glass window with Transom in the middle with a top casement opening. Dimensions as shown | FRAMES: Purpose made pressed steel frames 1mm thick | FRAMES: Purpose made pressed steel frames 1mm thick |
| GLASS: 4mm clear glass set with silicone and finished with putty | DOORS: Purpose made treated H/W door | DOORS: Core flash door |
| IRONMONGERY: Standard brass stoppers handles and stays | FINISH: Varnished 2coats with clear glass vanish | FINISH: Painted pink primer and finished with mist grey |
| FINISH: Industrial prefabricated finish (red oxide), then painted gloss white | IRONMONGERY: SABS 3-lever mortice lock | IRONMONGERY: SABS 3-lever mortice lock |
| | IRONMONGERY HINGES: As per supplied by supplier | IRONMONGERY HINGES: As per supplied by supplier |



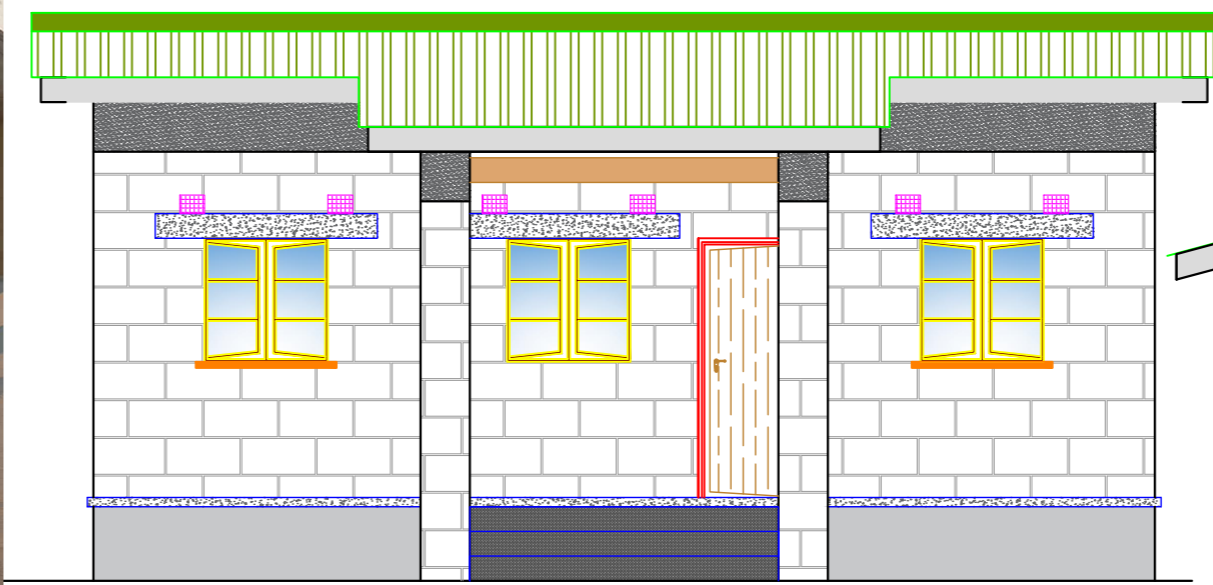
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PROJECT LOCATION
MALAWI
URBAN and RURAL

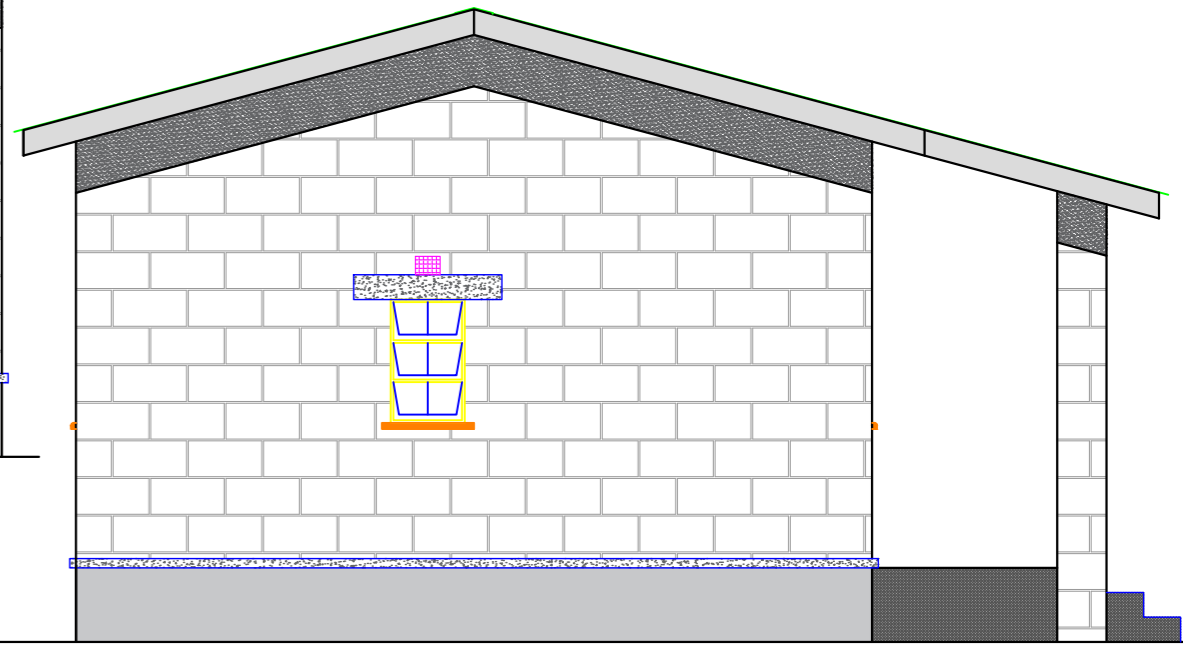
Drafted & Designed by
HFHM on **June/2023**
Checked by
Gr. Arch. William Kachikopa
Approved by

Prototype 4 - 2Rooms + Lounge, Stores
X- SECTION, SCHEDULES, DIM & PLAN
DRAWING NUMBER SC: 1:100
HFHM/MWD/2023/04-02

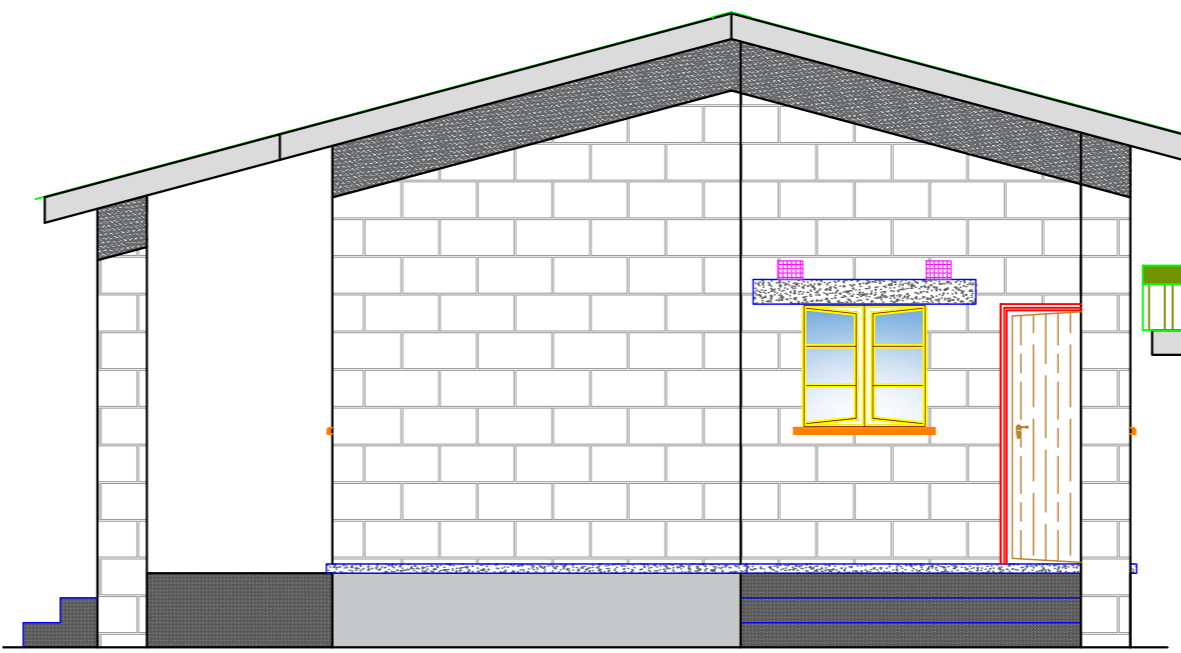




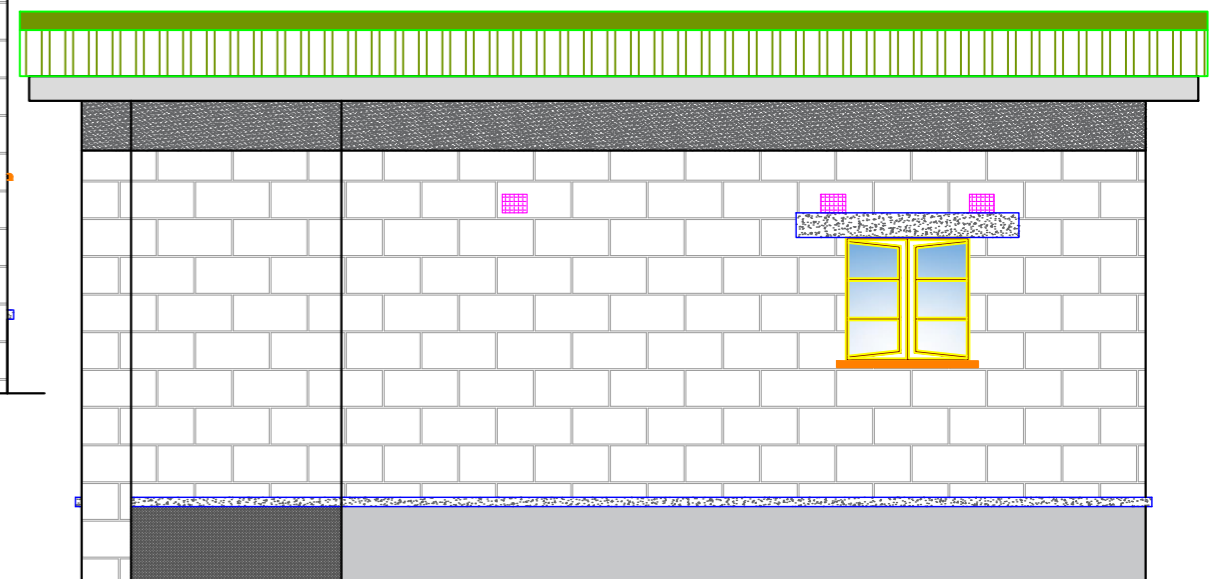
SOUTH ELEVATION



WESTERN ELEVATION



EASTERN ELEVATION



NORTH ELEVATION

SEMI-URBAN CEMENT BLOCK / SSB MODERN HOUSE DESIGN

- The housing area is 62.24 square meters (inclusive of the veranda)
- All walls to be built of cement hollow blocks of 150x200x400mm finished with a recess point.
- Locally burnt clay bricks to be used for angle paving to protect the walls from running water at ground level.
- Both block and bricks to be laid with cement mortar of 1:6 mix ratio.
- Slab to be cast at a ratio of 1:2:4 without reinforcements.
- All timbers to be treated with solignum
- All rafter resting point in the walls to be tied with 6mm galvanised wall tie jointly with a 2x3" wall plate timber.
- Footing to be of Non-reinforced concrete strip design mixed at 1:3:6 ratio



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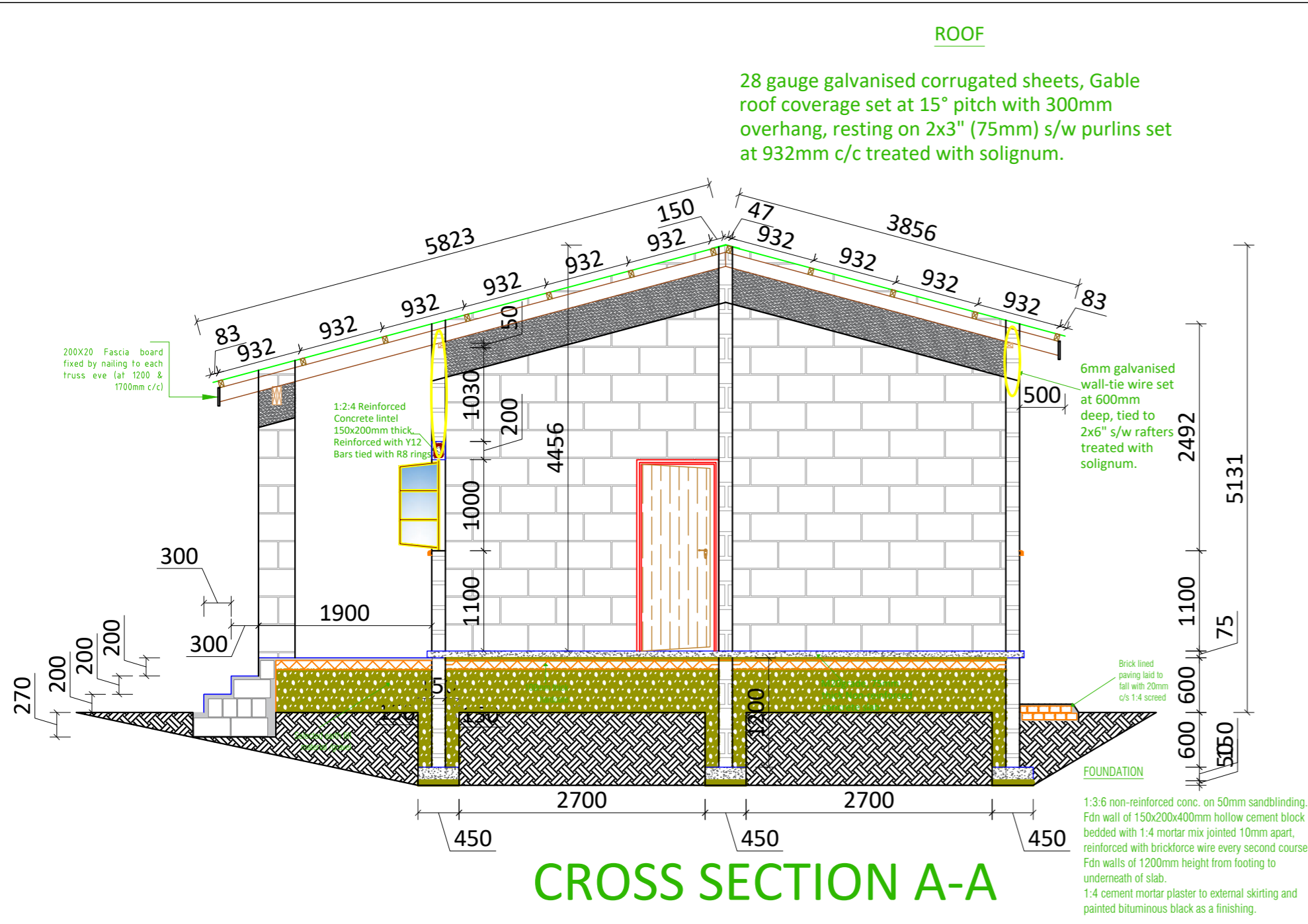


PROJECT LOCATION
MALAWI
URBAN and RURAL

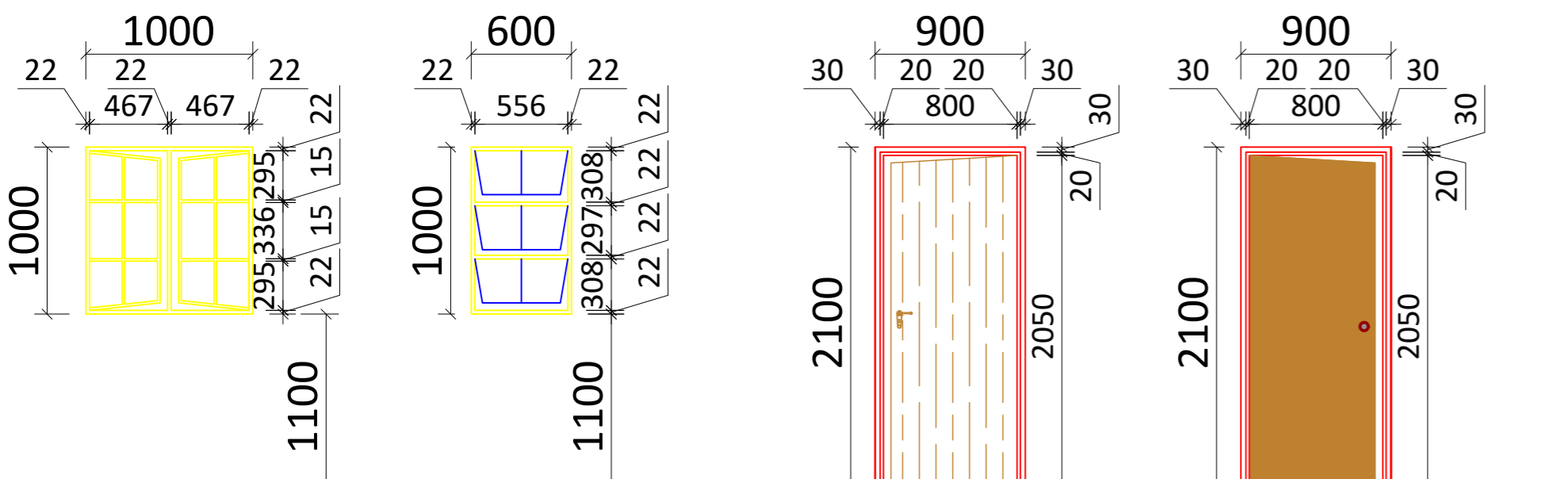
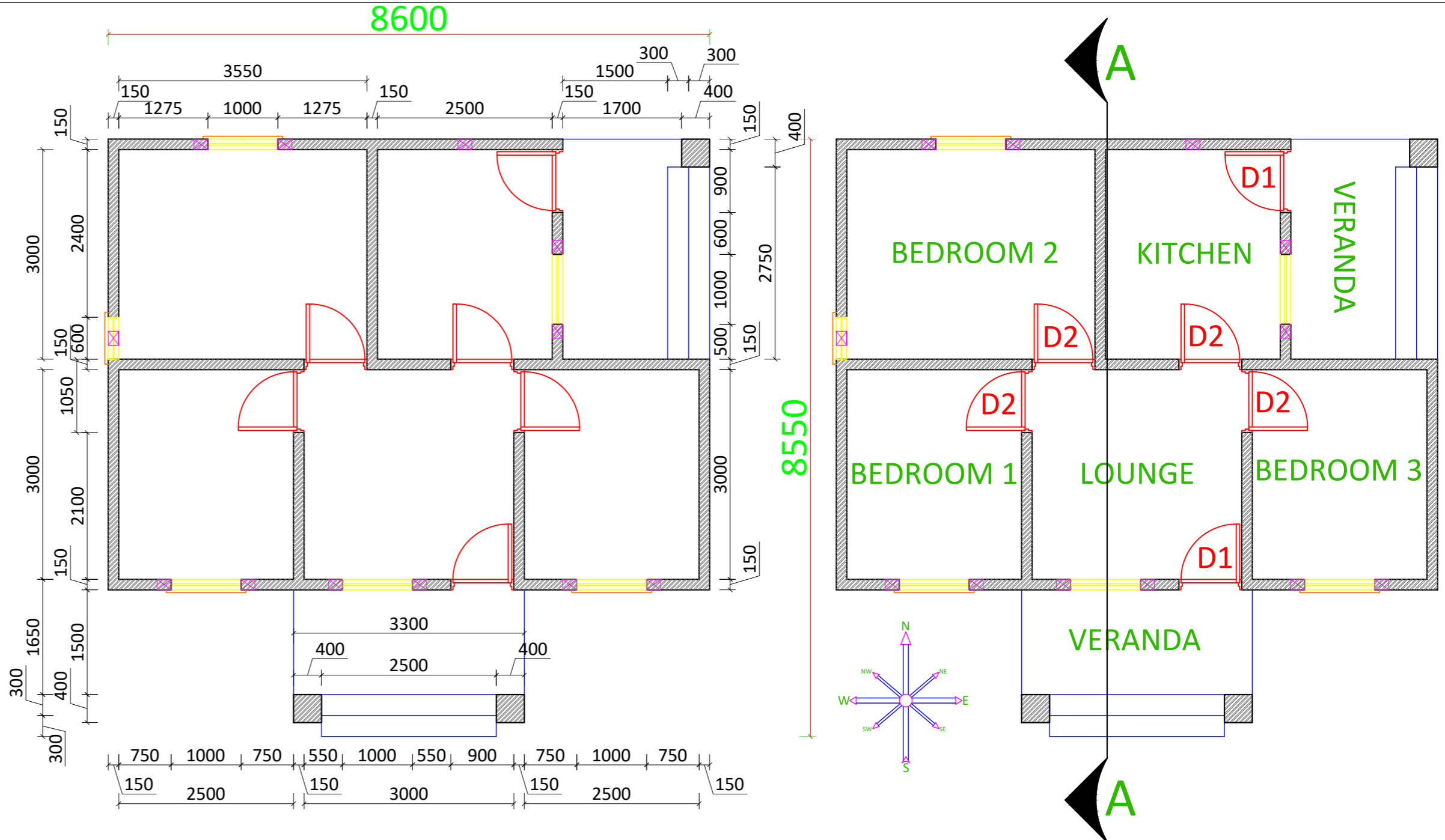
Drafted & Designed by
HFHM on **June/2023**
Checked by
Gr. Arch. William Kachikopa
Approved by

Prototype 5 - 3Rooms + Lounge, Kitchen
OVERVIEW
and
ELEVATIONS
DRAWING NUMBER **SC: 1:100**
HFHM/MWD/2023/05-01

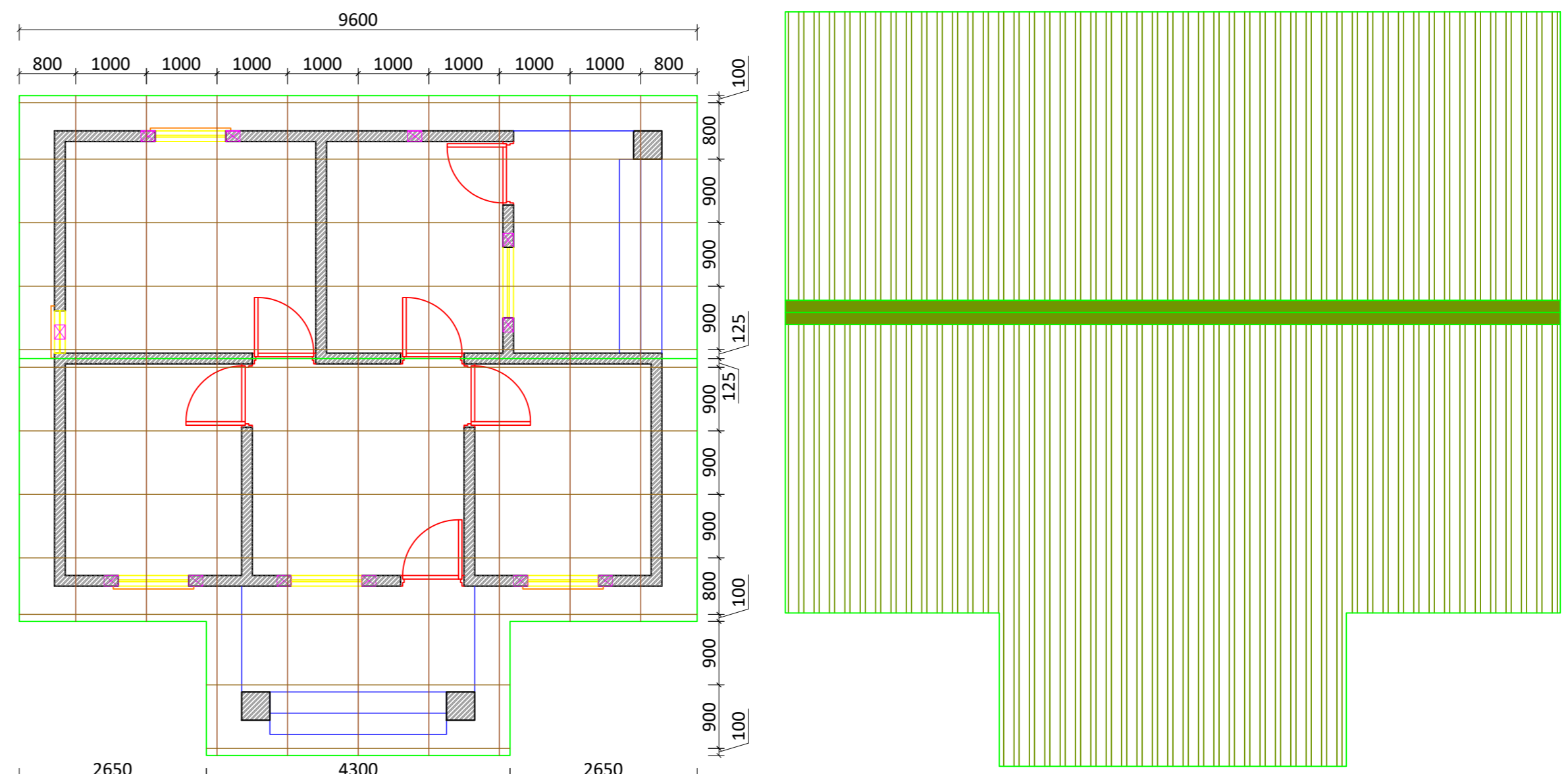




CROSS SECTION A-A



| Window 1 | Window 2 | Door 1 | Door 2 |
|---|---|---|---|
| No. REQUIRED: 5 | No. REQUIRED: 1 | No. REQUIRED: 2 | No. REQUIRED: 4 |
| LOCATION: LOUNGE, BEDROOMS, and KITCHEN | LOCATION: BEDROOM 2 | LOCATION: LOUNGE and KITCHEN | LOCATION: BEDROOMS 1, 2, 3 and KITCHEN |
| FRAMES: Purpose made steel 6glass window with side casements opening. Dimensions as shown | FRAMES: Purpose made steel 3glass window Dimensions as shown | FRAMES: Purpose made pressed steel frames 1mm thick | FRAMES: Purpose made pressed steel frames 1mm thick |
| GLASS: 4mm clear glass set with silicone and finished with putty | GLASS: 4mm clear glass set with silicone and finished with putty | DOORS: Purpose made treated H/W door | DOORS: Core flash door |
| IRONMONGERY: Standard brass stoppers handles and stays | IRONMONGERY: Standard brass stoppers handles and stays | FINISH: Varnished 2coates with clear glass vanish | FINISH: Painted pink primer and finished with mist grey |
| FINISH: Industrial prefabricated finish (red oxide). then painted gloss white | FINISH: Industrial prefabricated finish (red oxide). then painted gloss white | IRONMONGERY: SABS 3-lever mortice lock | IRONMONGERY: SABS 3-lever mortice lock |
| | | IRONMONGERY HINGES: As per supplied by supplier | IRONMONGERY HINGES: As per supplied by supplier |



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PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by
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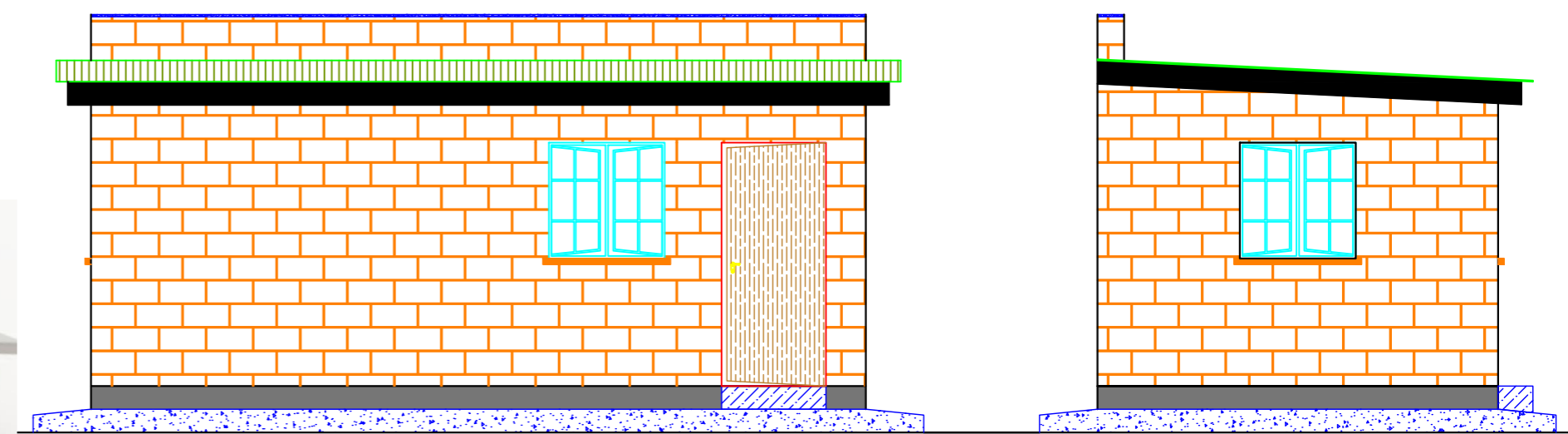
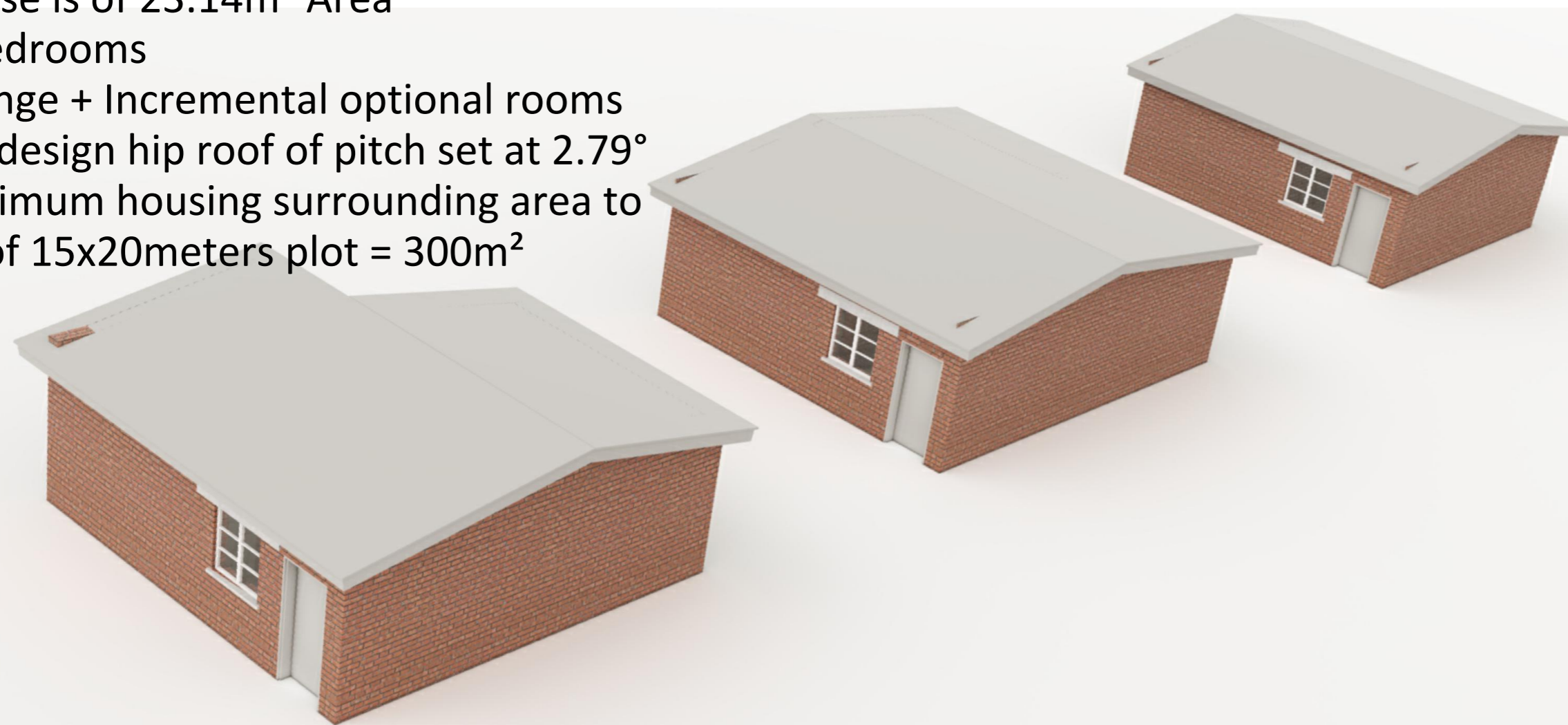
Prototype 5 - 3Rooms + Lounge, Kitchen
X- SECTION, SCHEDULES, DIM & PLAN
DRAWING NUMBER SC: 1:100
HFHM/MWD/2023/05-02





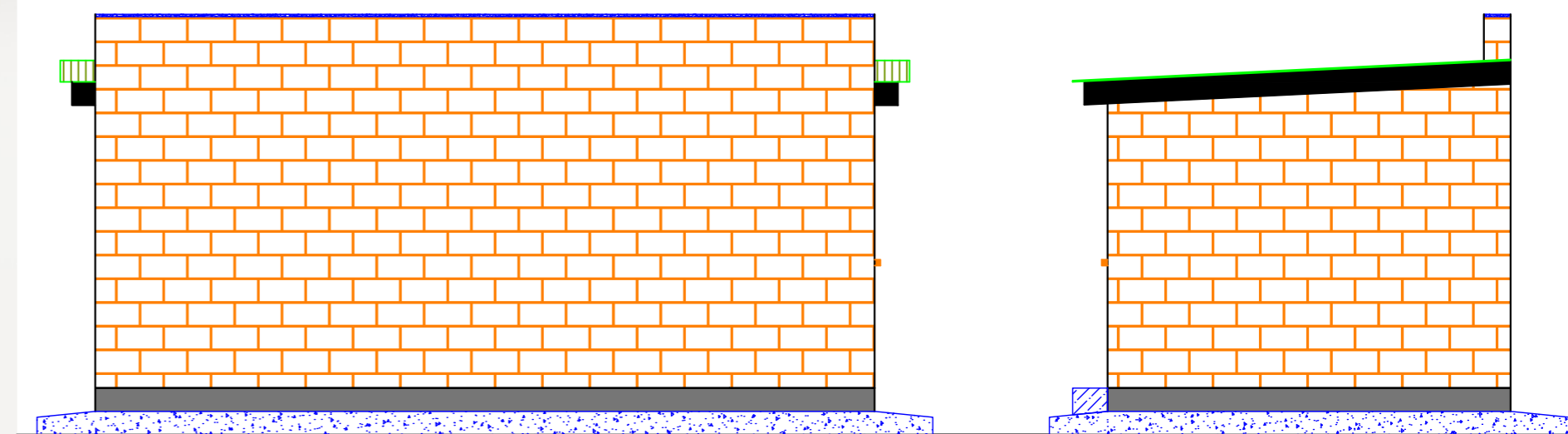
**SEMI-URBAN INCREMENTAL HOUSE PLAN
OF EITHER SSB OR CEMENT BLOCKS**

- House is of 23.14m² Area
- 1 bedrooms
- Lounge + Incremental optional rooms
- IBR design hip roof of pitch set at 2.79°
- Minimum housing surrounding area to be of 15x20meters plot = 300m²



FRONT VIEW (SOUTH)

SIDE VIEW (WEST)



BACK VIEW (NORTH)

SIDE VIEW (EAST)



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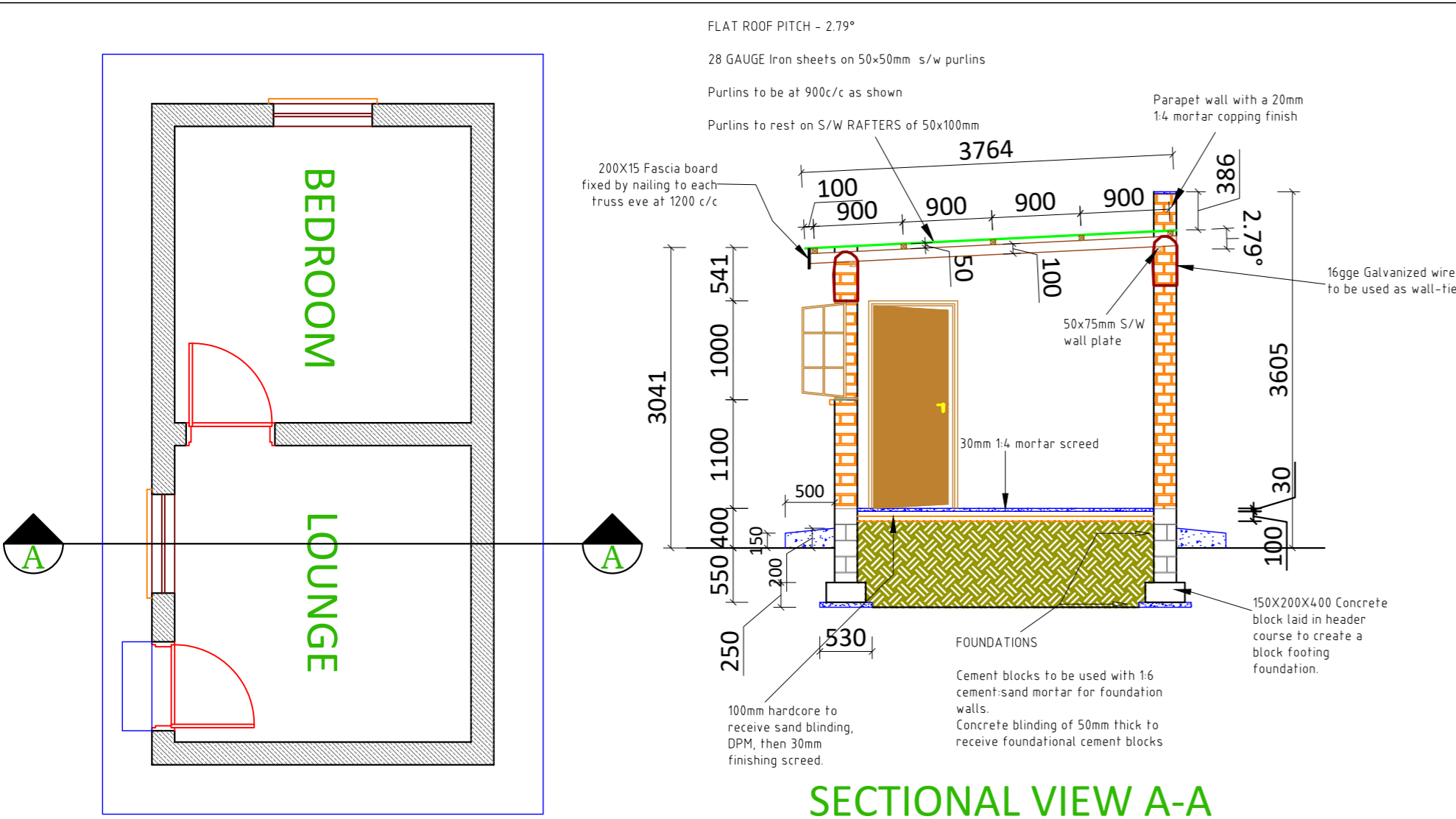
PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by
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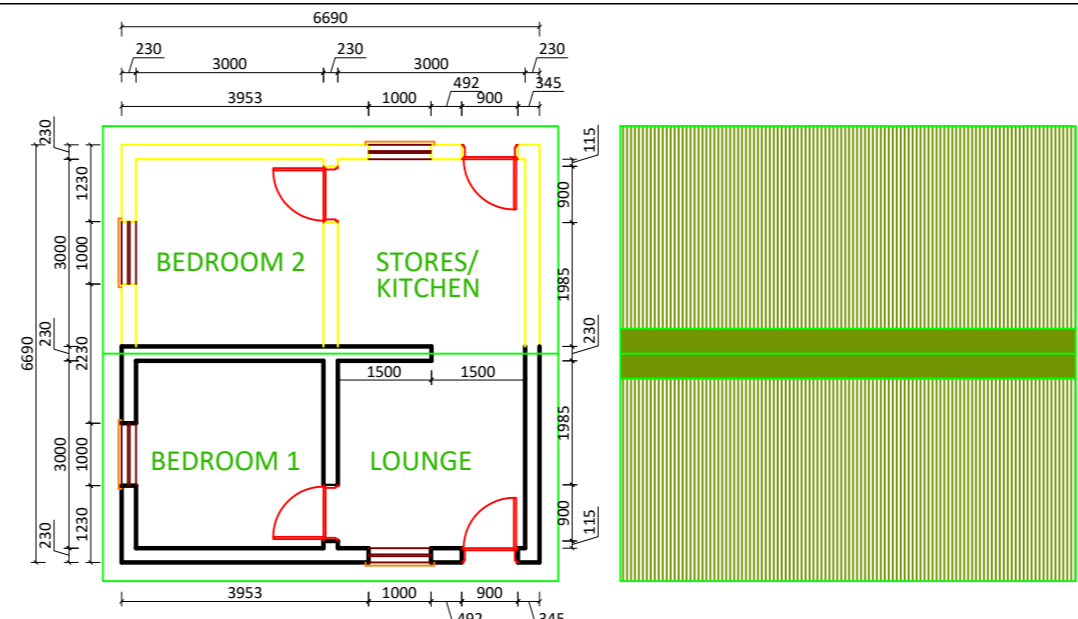
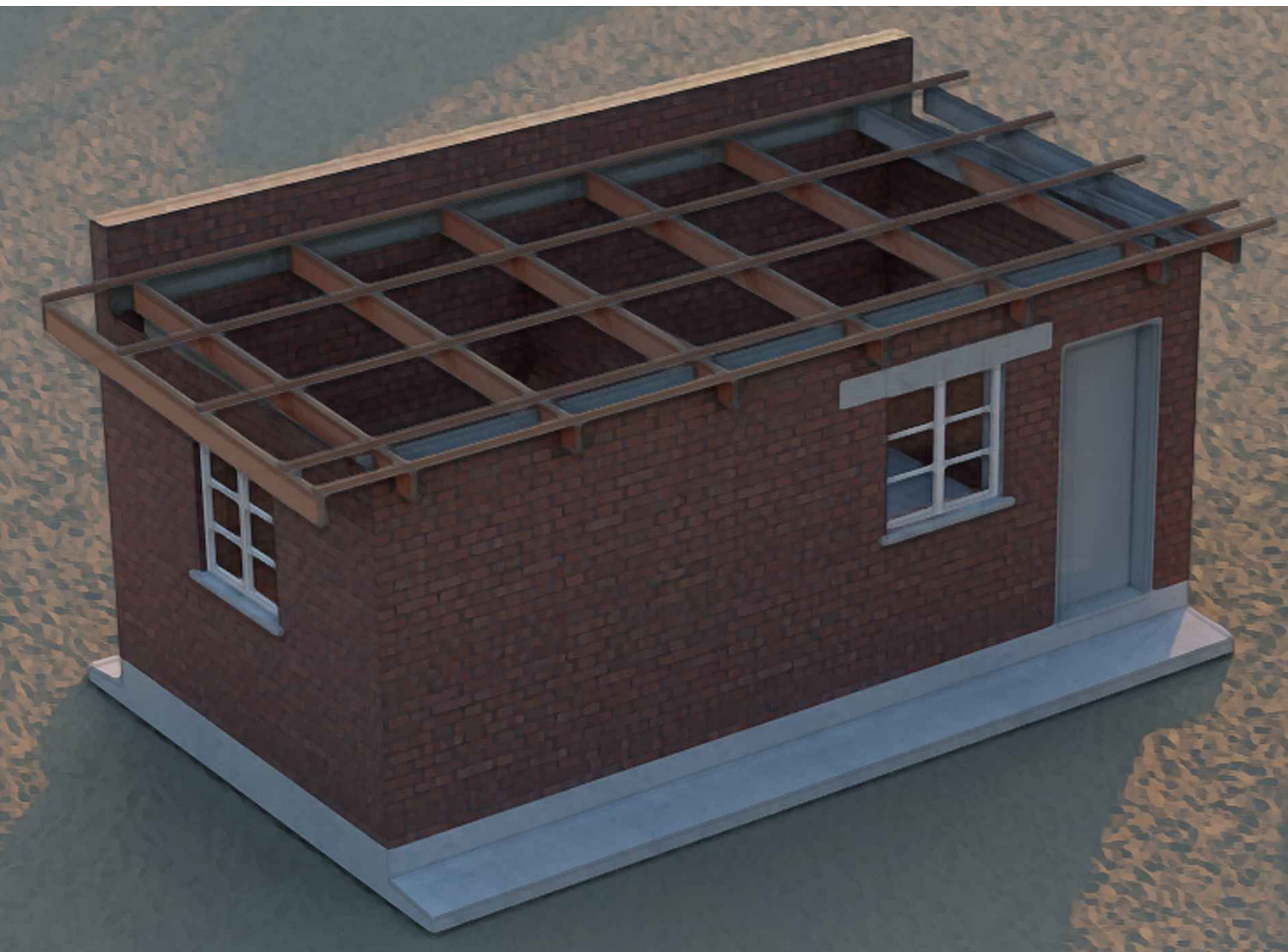
Prototype 6 - 1Room + Lounge
OVERVIEW
and
ELEVATIONS

DRAWING NUMBER **SC: 1:100**
HFHM/MWD/2023/06-01

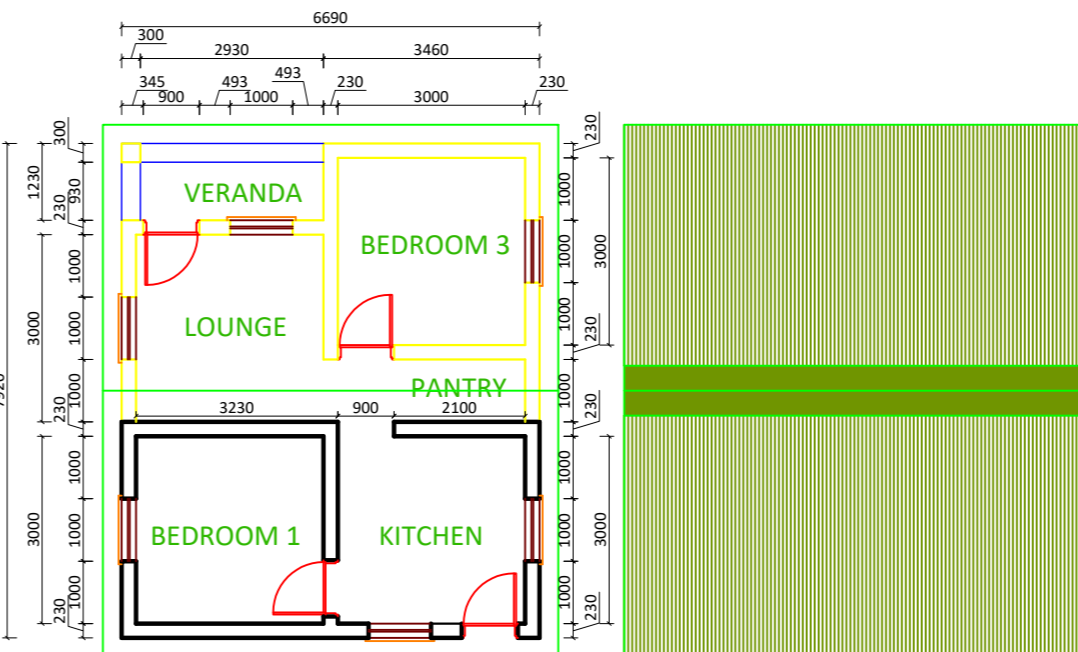




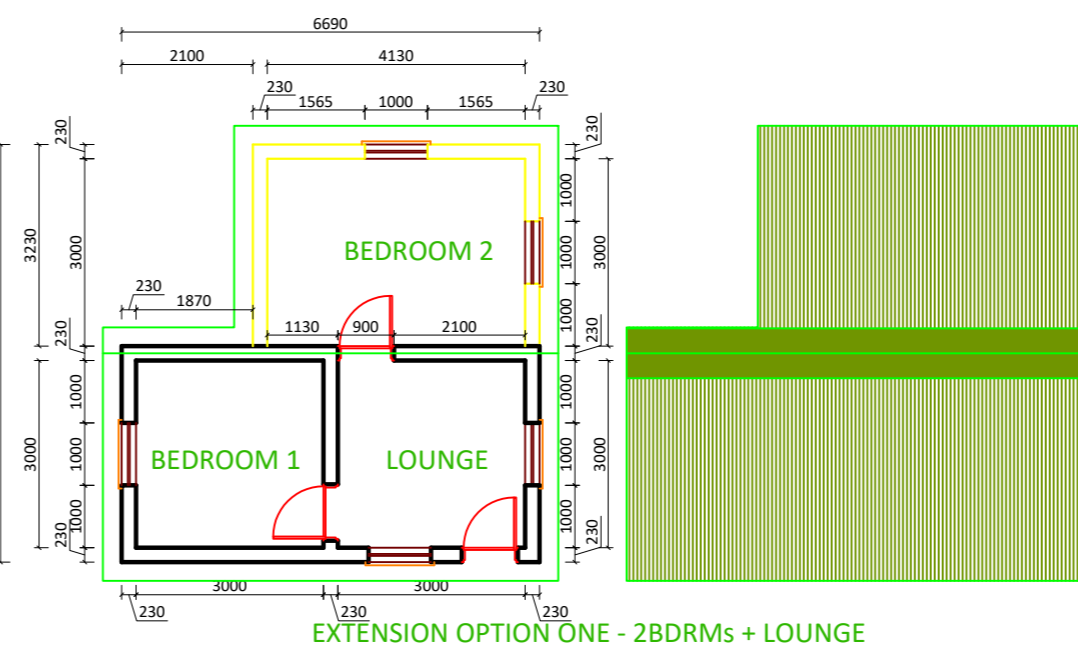
SECTIONAL VIEW A-A



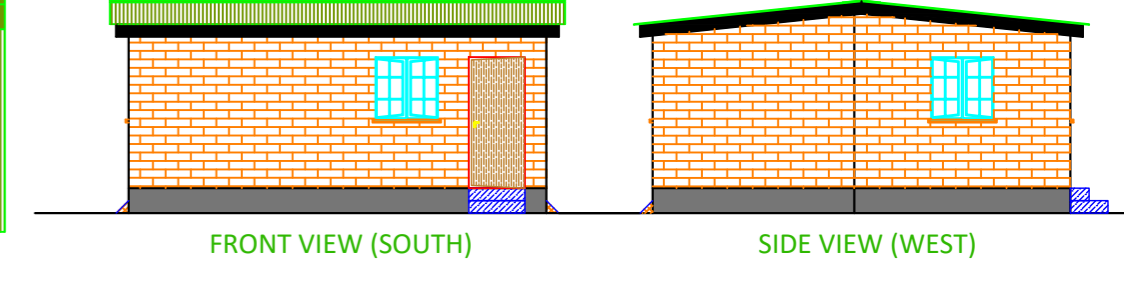
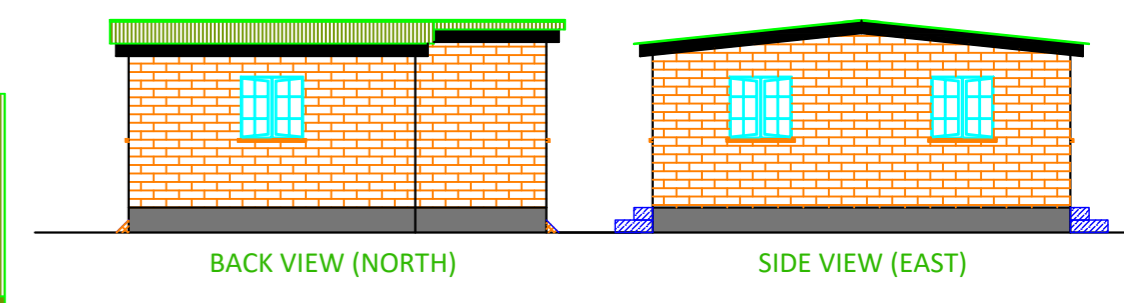
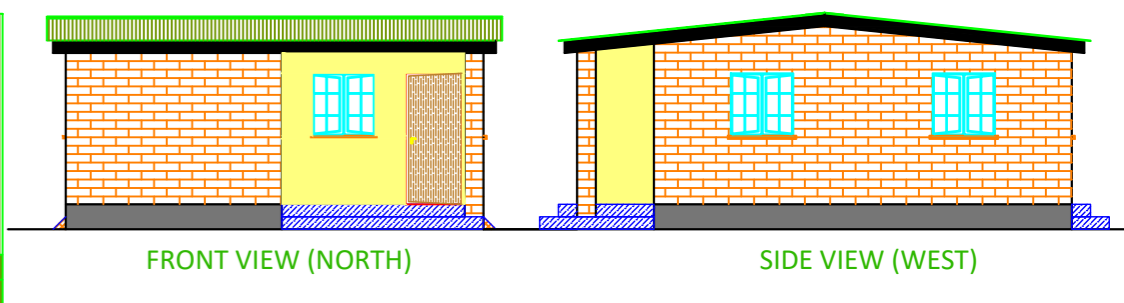
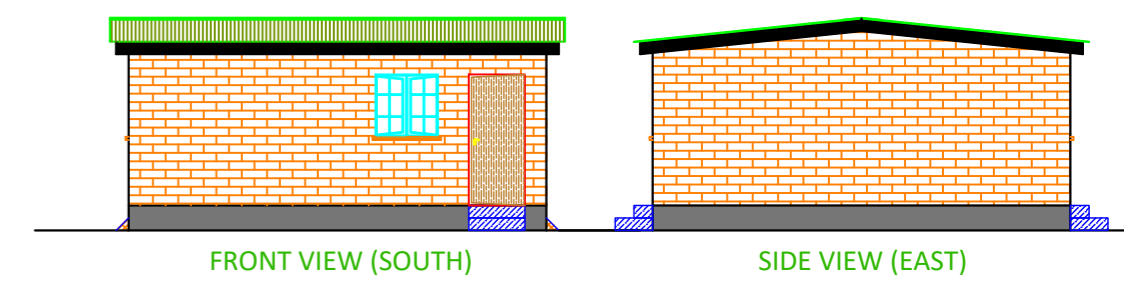
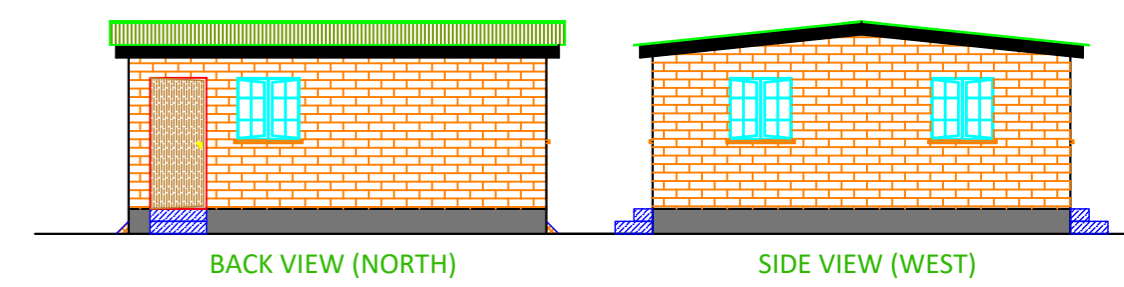
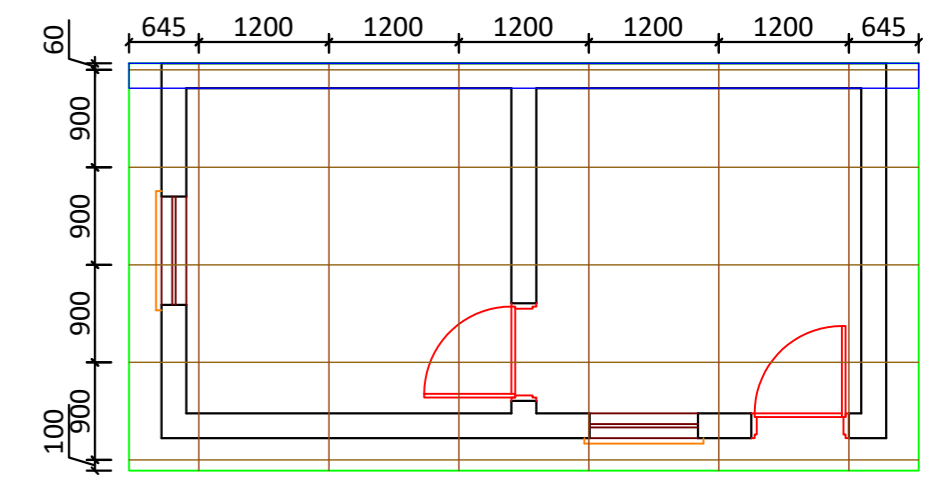
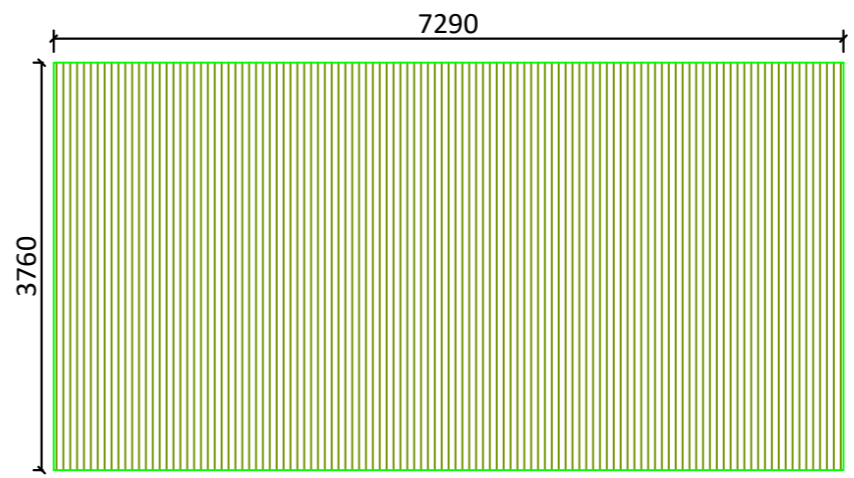
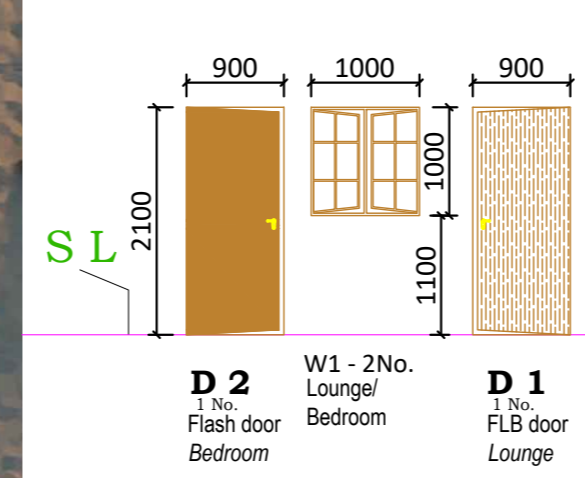
EXTENSION OPTION THREE - 2BDRMs + LOUNGE + KITCHEN / STORES



EXTENSION OPTION TWO - 3BDRMs + LOUNGE & PANTRY



EXTENSION OPTION ONE - 2BDRMs + LOUNGE



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PROJECT LOCATION
 MALAWI
 URBAN and RURAL

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Prototype 6 - 1Room + Lounge
 X- SECTION,
 SCHEDULES,
 DIM & PLAN

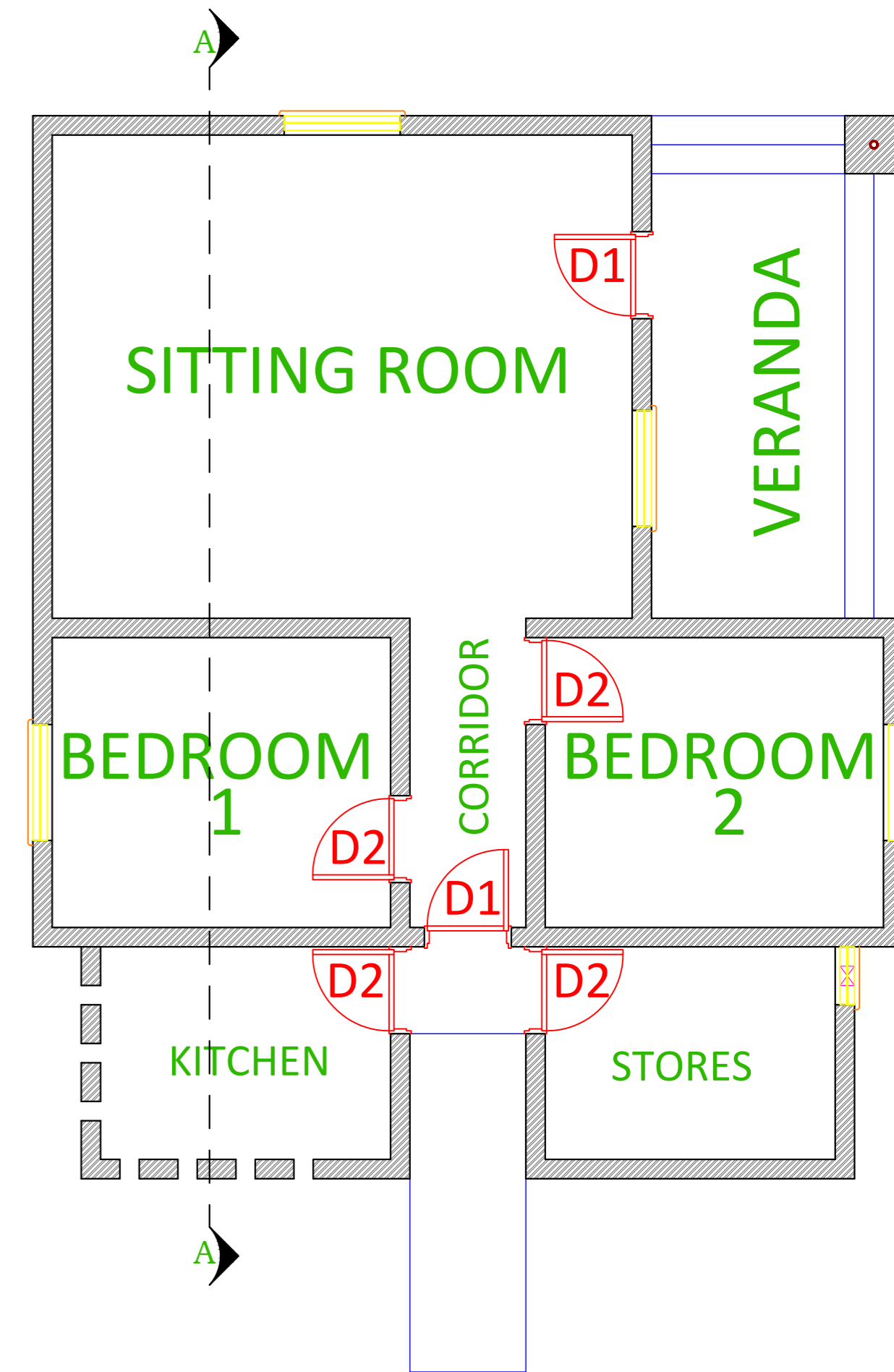
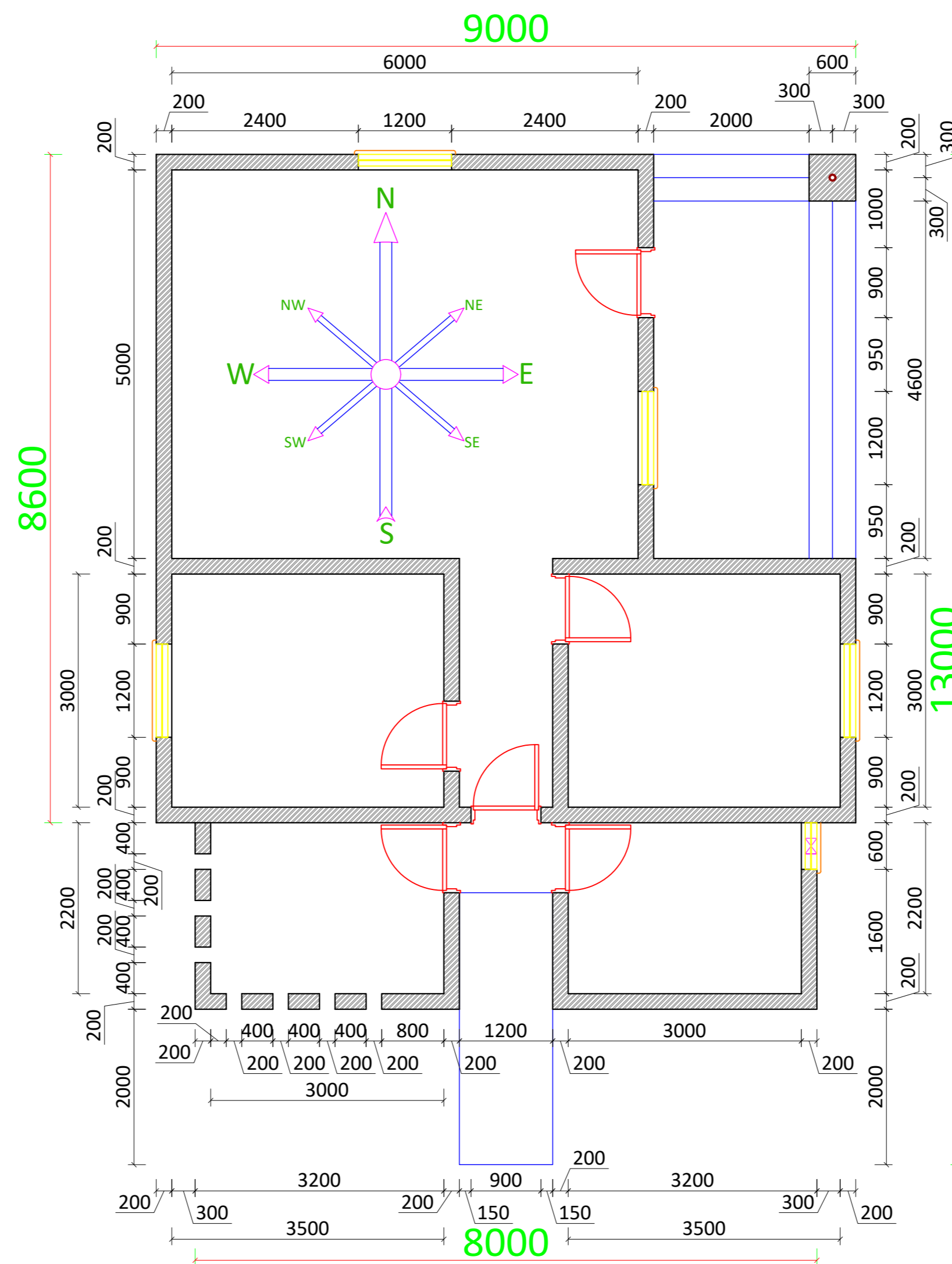
DRAWING NUMBER **SC: 1:100**
 HFHM/MWD/2023/06-02





MORDENISED RURAL SSB / CEMENT BLOCK HOUSE PLAN

- House is of 90m² Area
- 2 bedrooms with single 6 glass window, with mullion
- Lounge with 2No. 6glass windows
- Corridor with a back exit door
- 1 Front Veranda
- 1 back door positioned at the Ramp
- 1 kitchen and 1 stores accessible from outside house
- IBR design gable roof with rafters for framing. Roof pitch set at 20°
- IBR design flat roof with rafters for framing, pitch set at 3.59°
- Minimum housing surrounding area to be of 20x25meters plot = 500m²



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PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by
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Prototype 7 - 2Rooms + Lounge, Annex

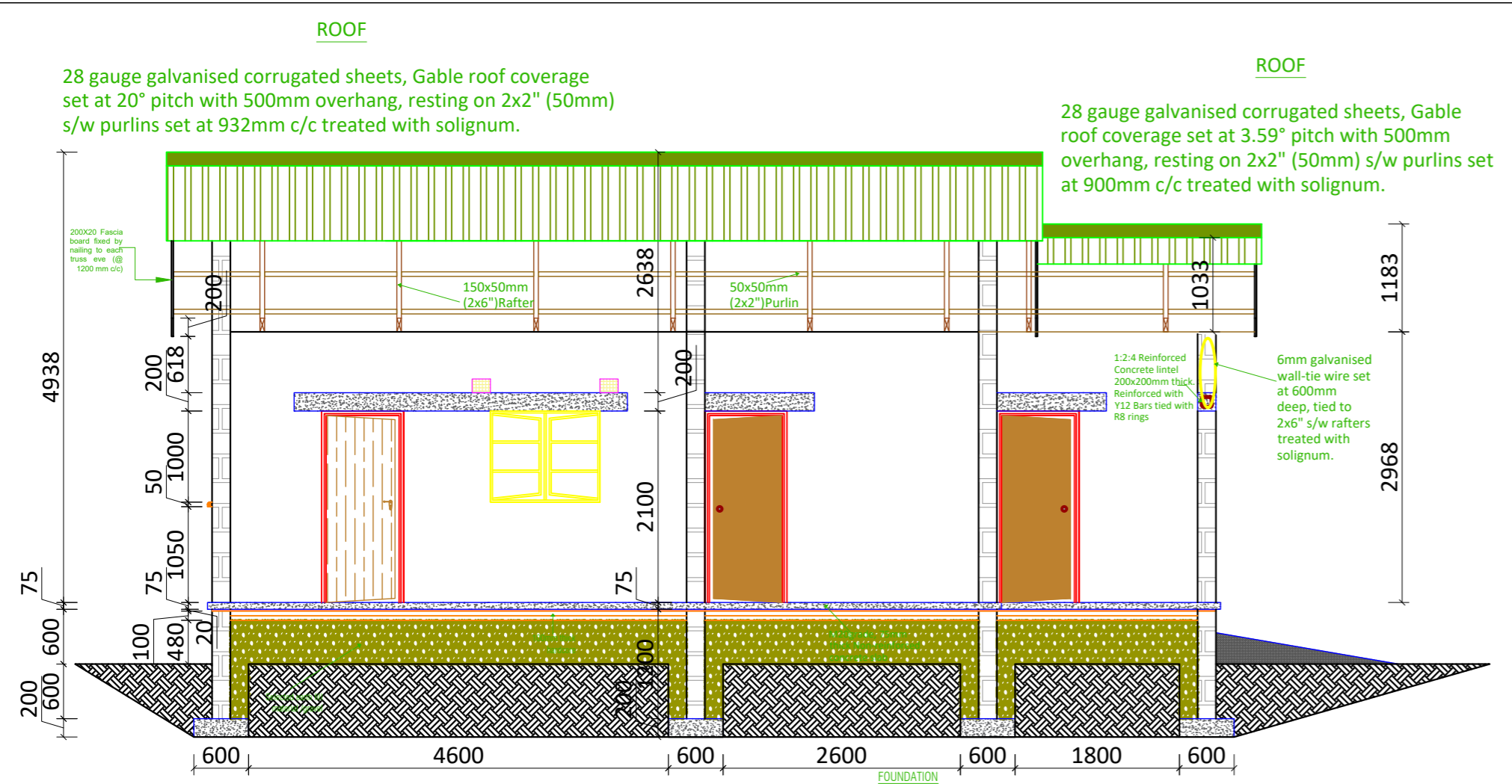
OVERVIEW,
PLAN & DIM

DRAWING NUMBER **SC: 1:100**

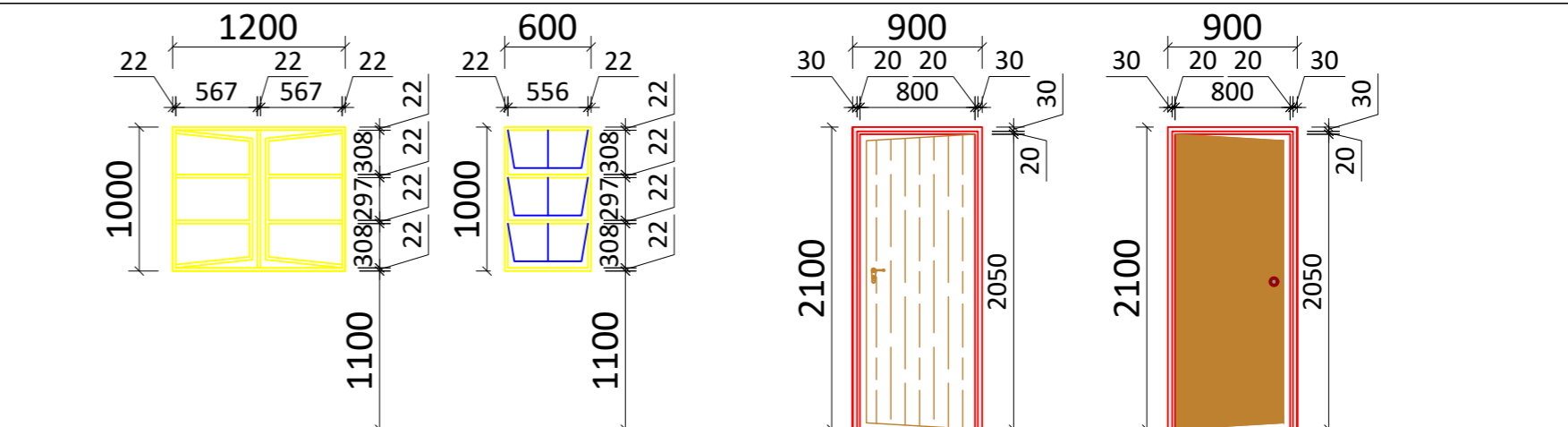
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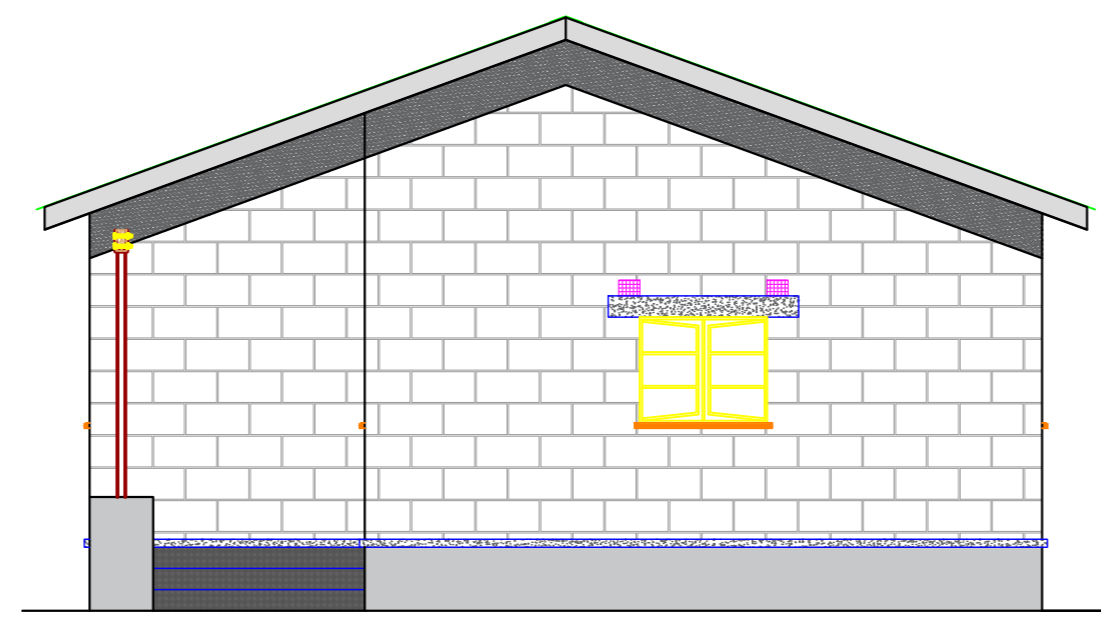
Habitat
for Humanity
Malawi



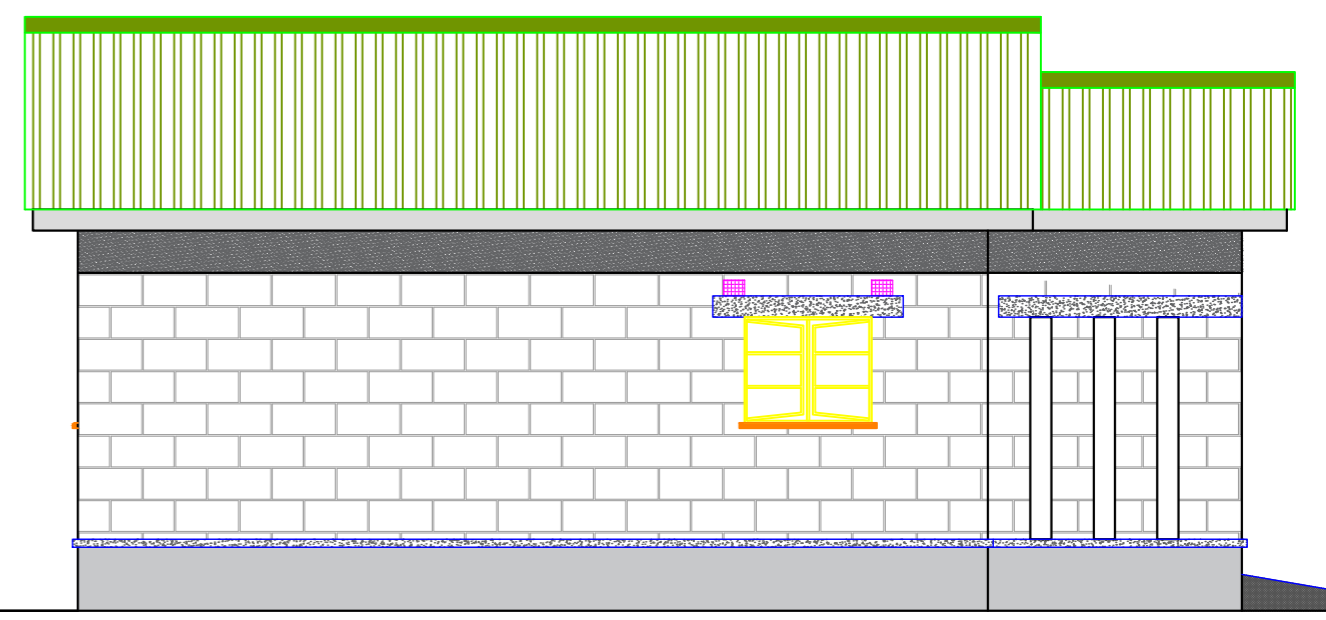
CROSS SECTION A-A



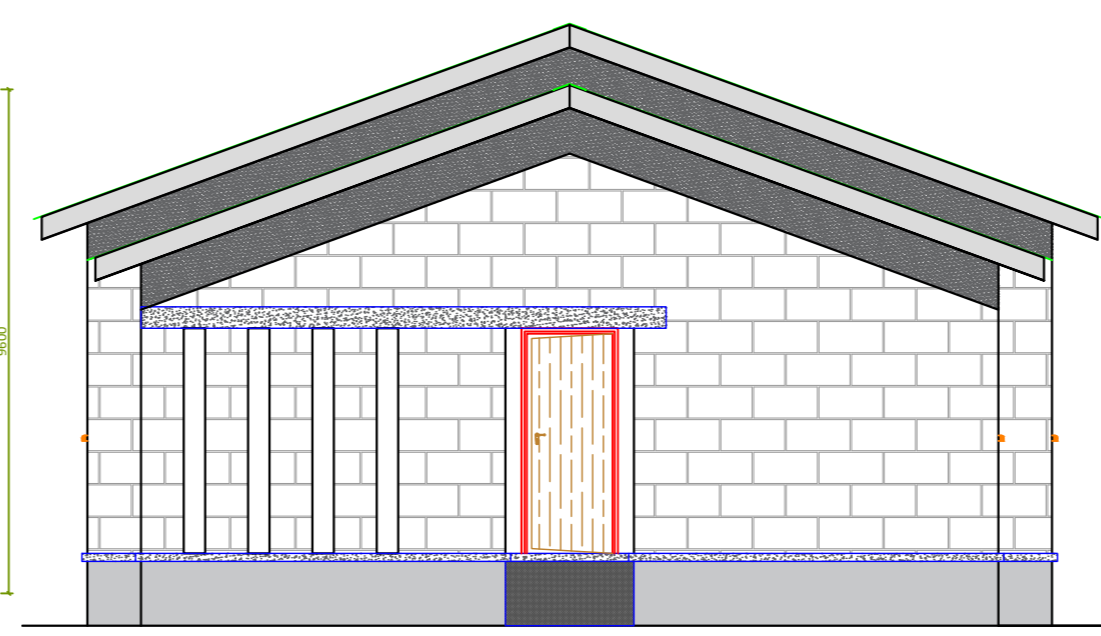
| Window 1 | Window 1 | Door 1 | Door 2 |
|--|---|---|---|
| No. REQUIRED: 4 | No. REQUIRED: 1 | No. REQUIRED: 2 | No. REQUIRED: 4 |
| LOCATION: BEDROOMS & LOUNGE | LOCATION: STORES | LOCATION: LOUNGE & CORRIDOR | LOCATION: BEDROOMS, KITCHEN, & STORES |
| FRAMES: Purpose made steel 6glass window with Transom in the middle with a top casement opening. Dimensions as shown | FRAMES: Purpose made steel 3glass window | FRAMES: Purpose made pressed steel frames 1mm thick | FRAMES: Purpose made pressed steel frames |
| GLASS: 4mm clear glass set with silicone and finished with putty | GLASS: 4mm clear glass set with silicone and finished with putty | DOORS: Purpose made treated H/W door | DOORS: Core flash door |
| IRONMONGERY: Standard brass stoppers handles and stays | IRONMONGERY: Standard brass stoppers handles and stays | FINISH: Varnished 2coates with clear glass vanish | FINISH: Painted pink primer and finished with mist grey |
| FINISH: Industrial prefabricated finish (red oxide), then painted gloss white | FINISH: Industrial prefabricated finish (red oxide), then painted gloss white | IRONMONGERY: SABS 3-lever mortice lock | IRONMONGERY: SABS 3-lever mortice lock |
| | | IRONMONGERY HINGES: As per supplied by supplier | IRONMONGERY HINGES: As per supplied by supplier |



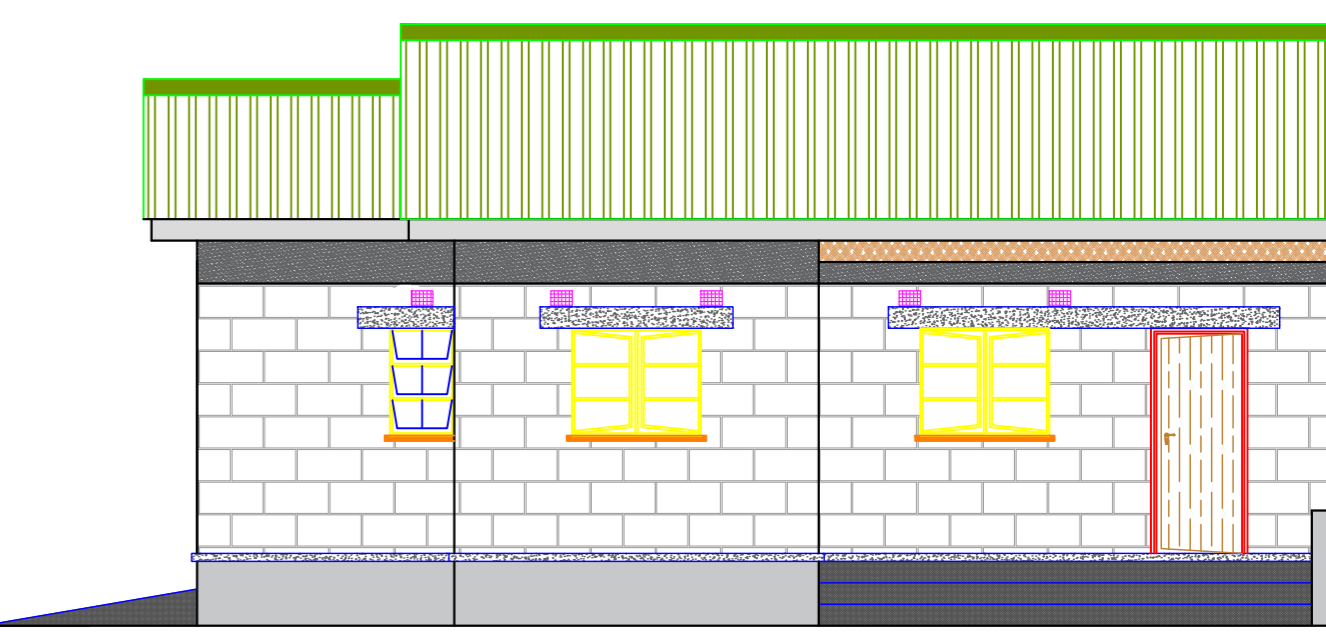
NORTHERN ELEVATION



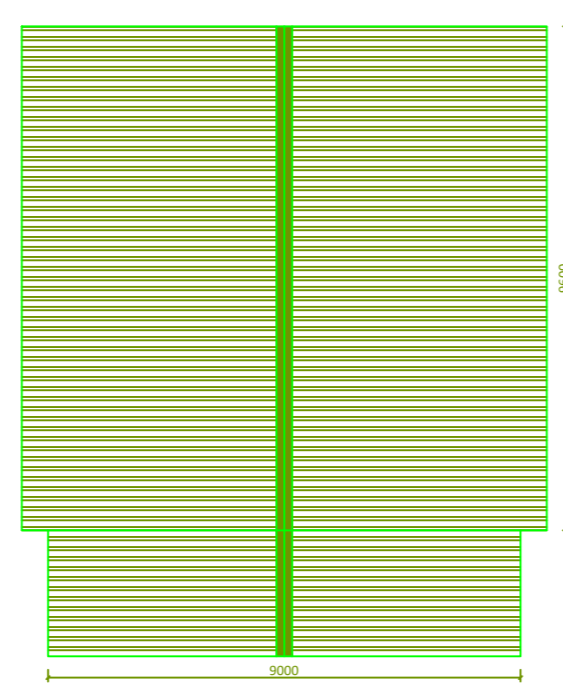
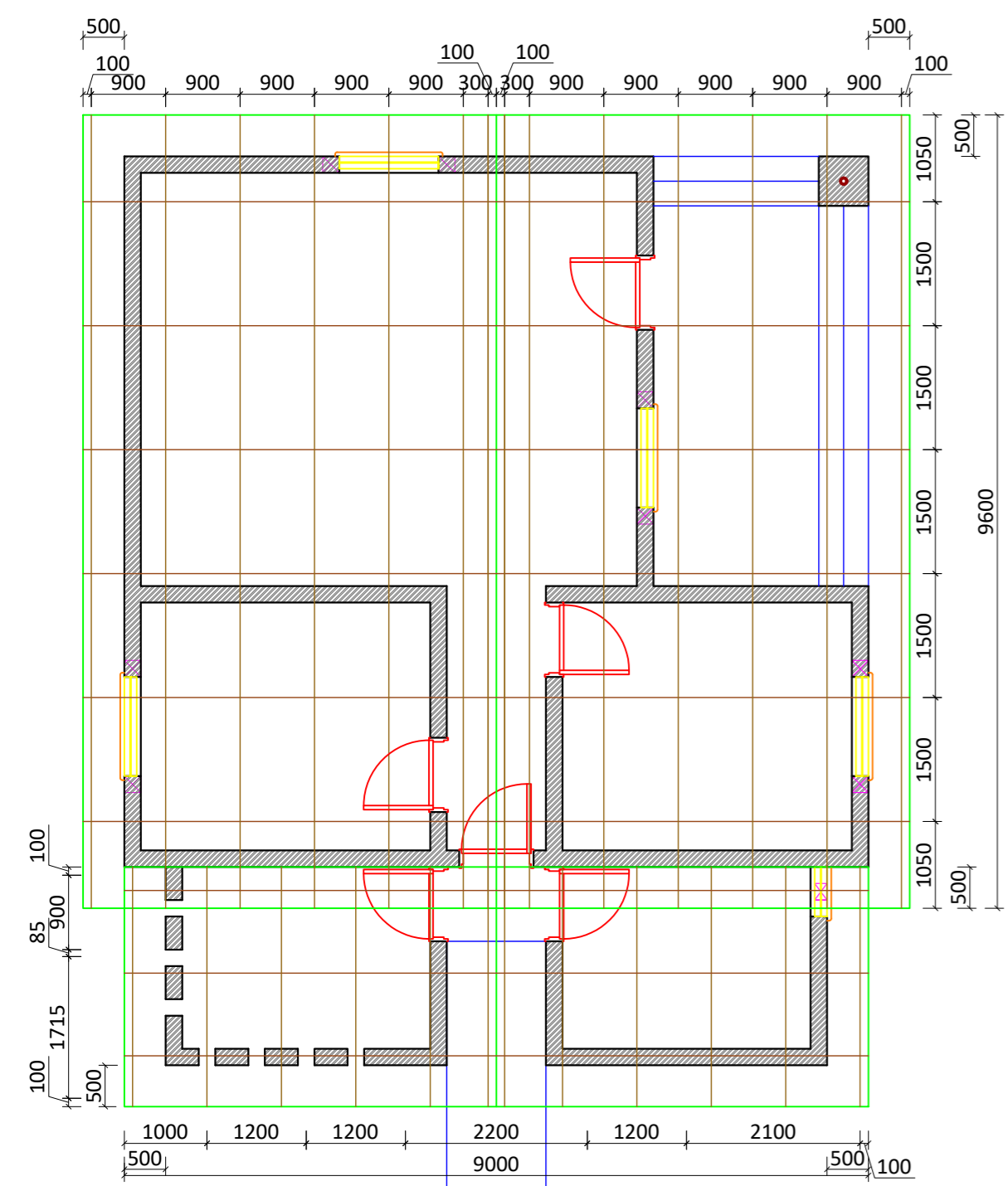
WESTERN ELEVATION



SOUTHERN ELEVATION



EASTERN ELEVATION



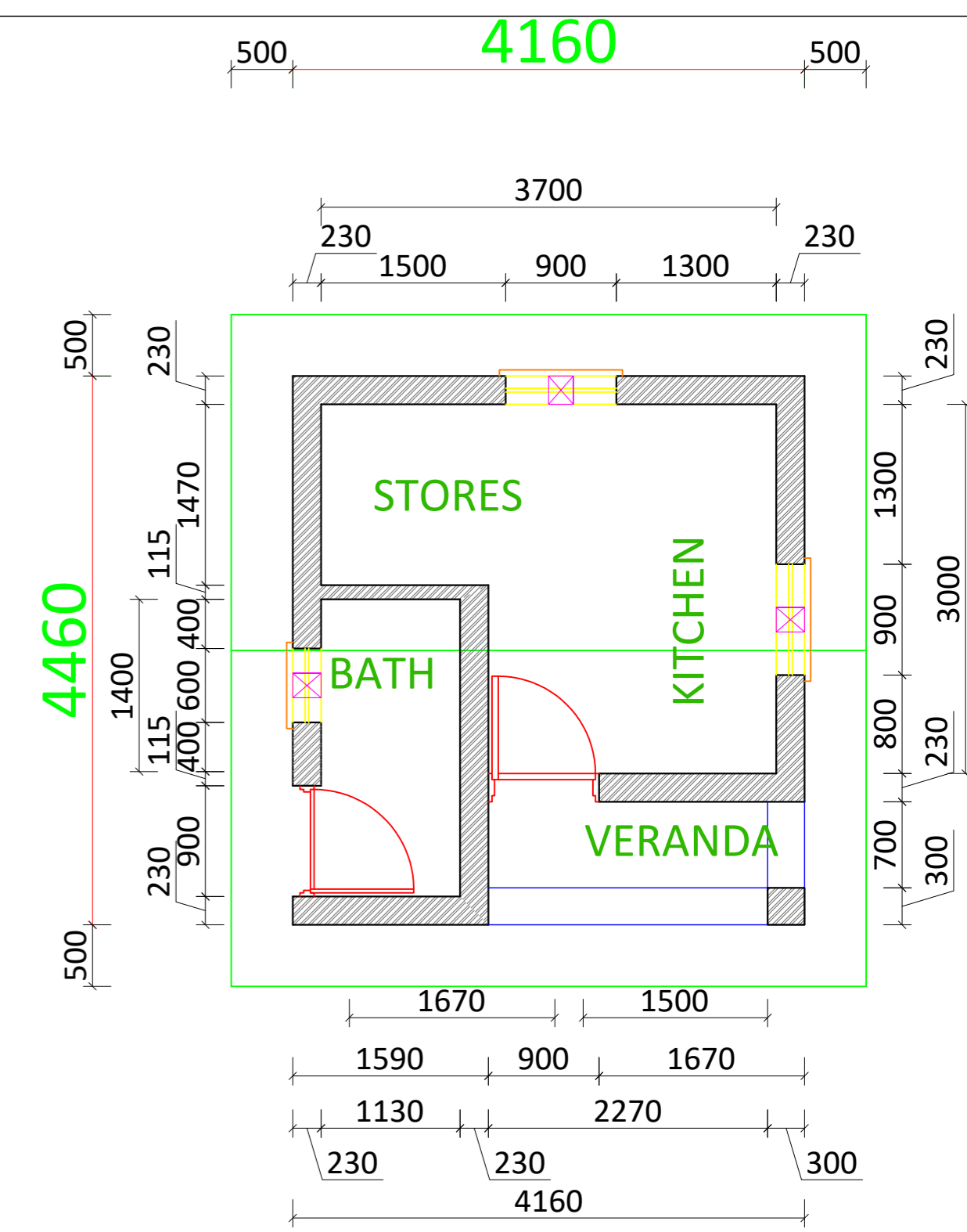
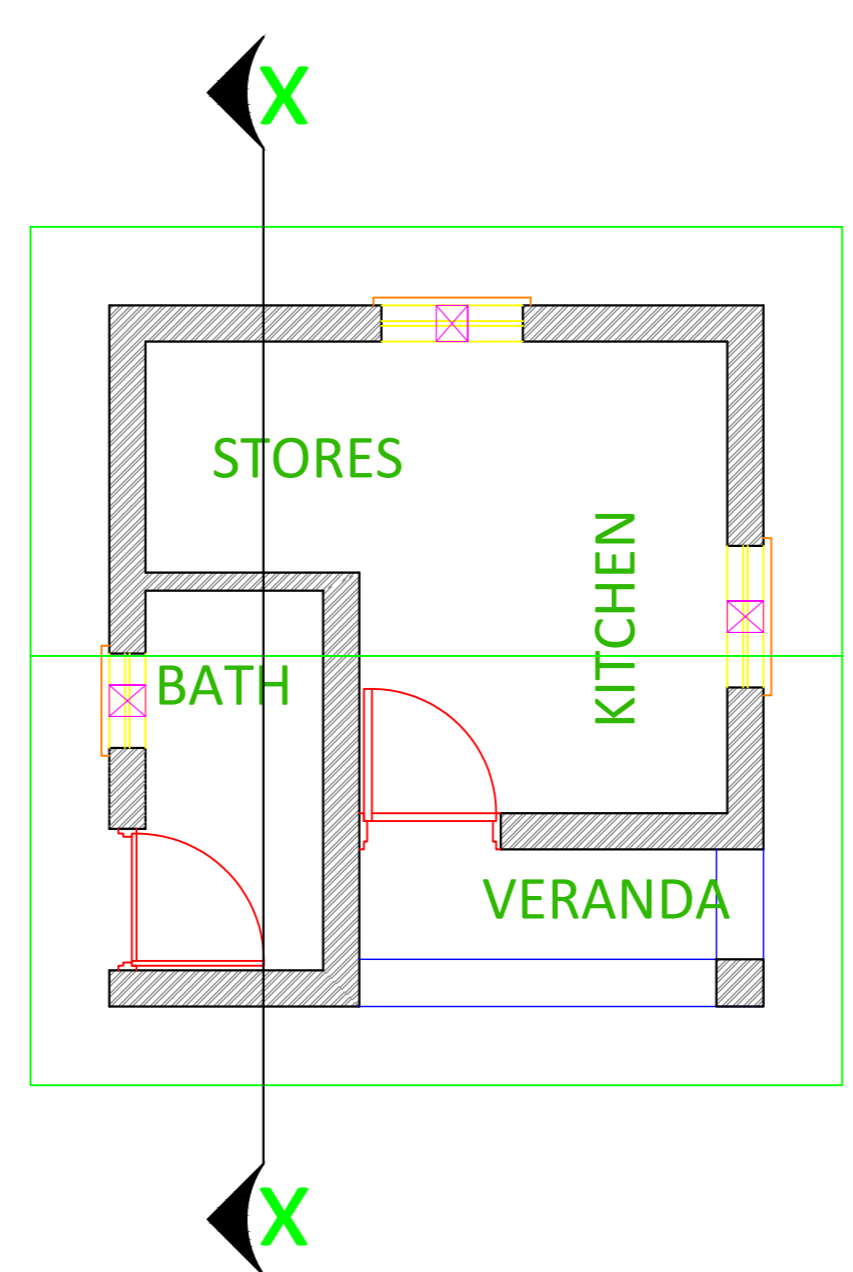
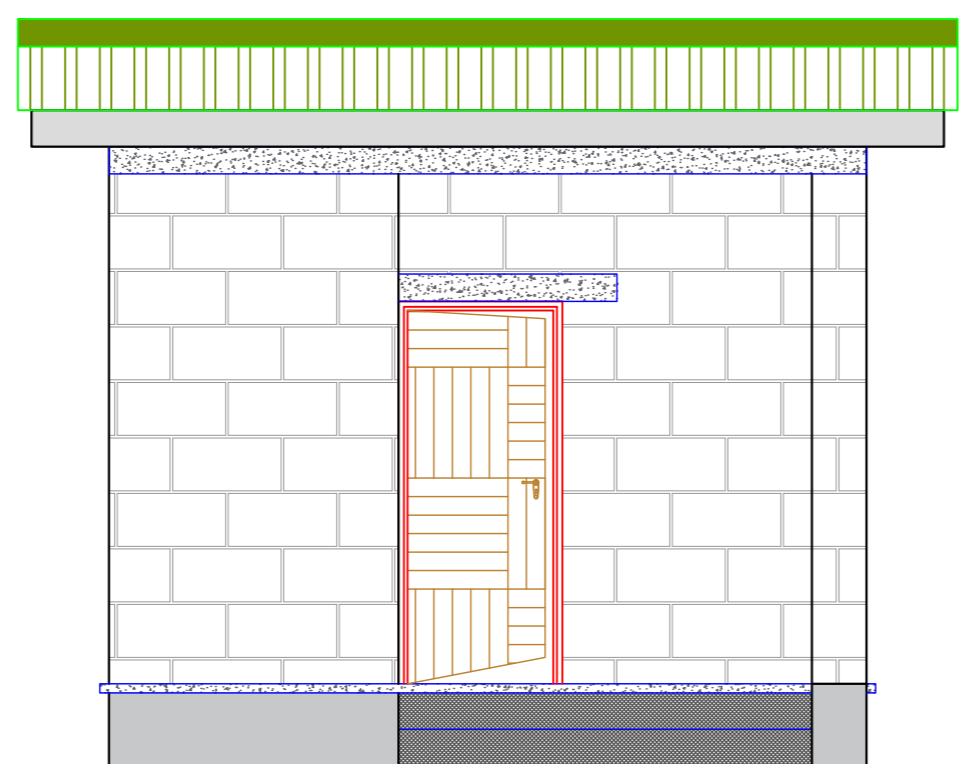
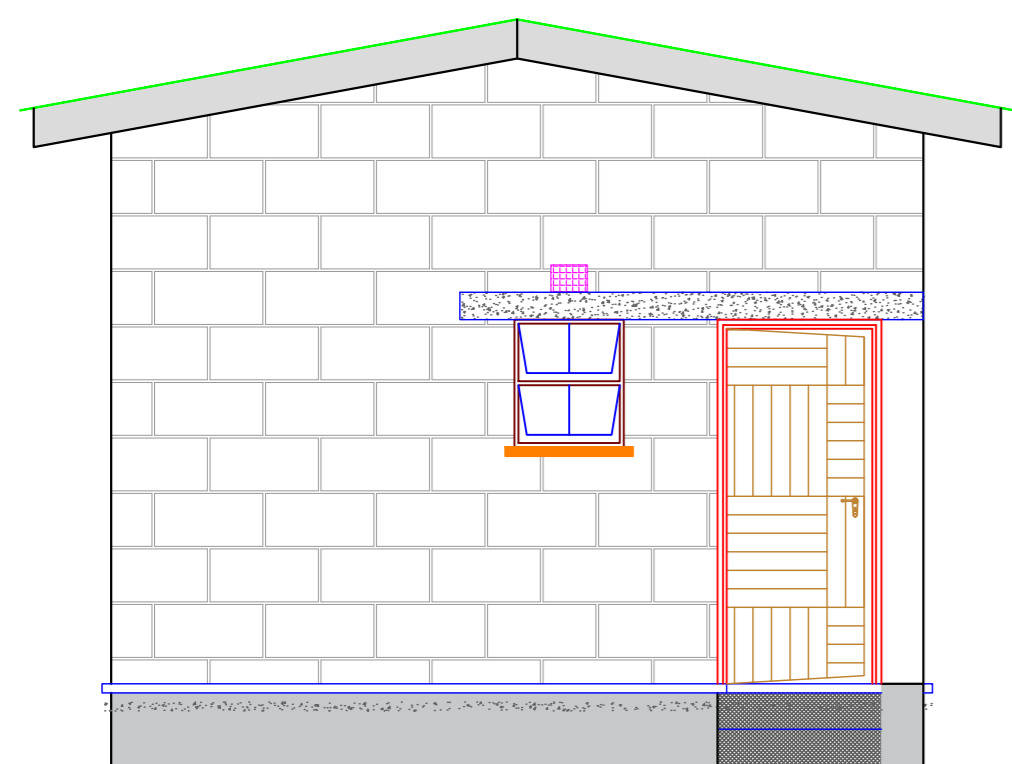
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PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by
HFHM on **June/2023**
Checked by
Gr. Arch. William Kachikopa
Approved by

Prototype7 - 2Rooms + Lounge, Annex
X- SECTION, SCHEDULES, ELEV & ROOF
DRAWING NUMBER **SC: 1:100**
HFHM/MWD/2023/07-02

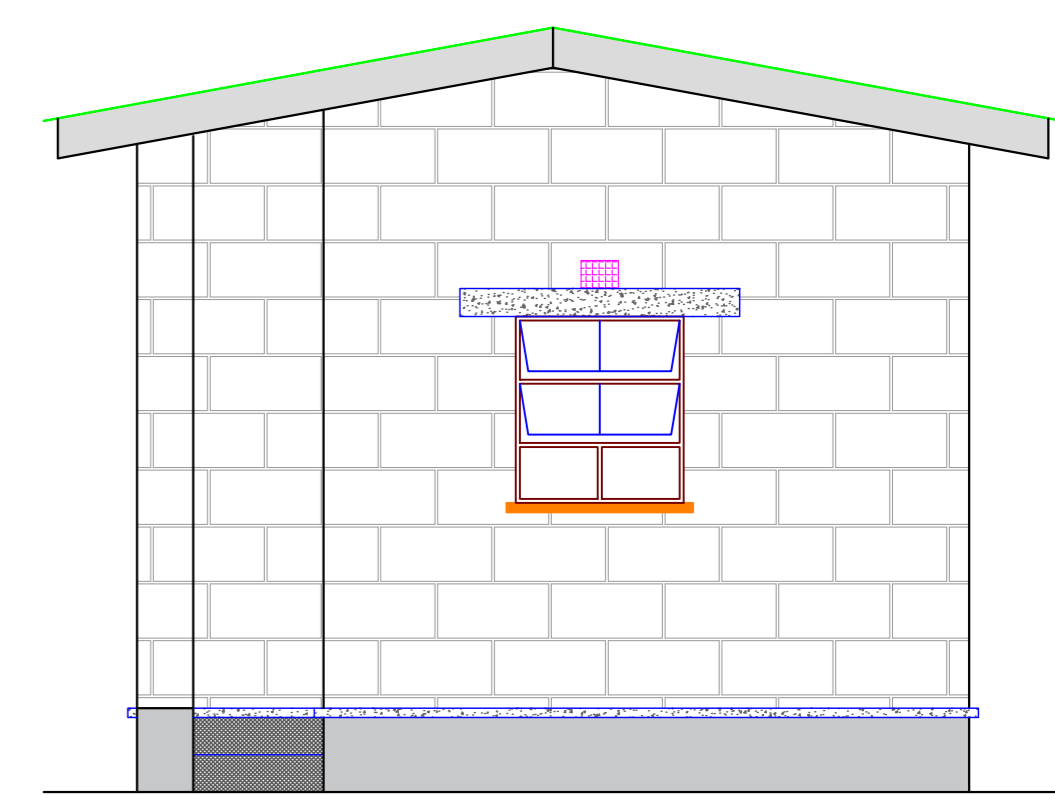
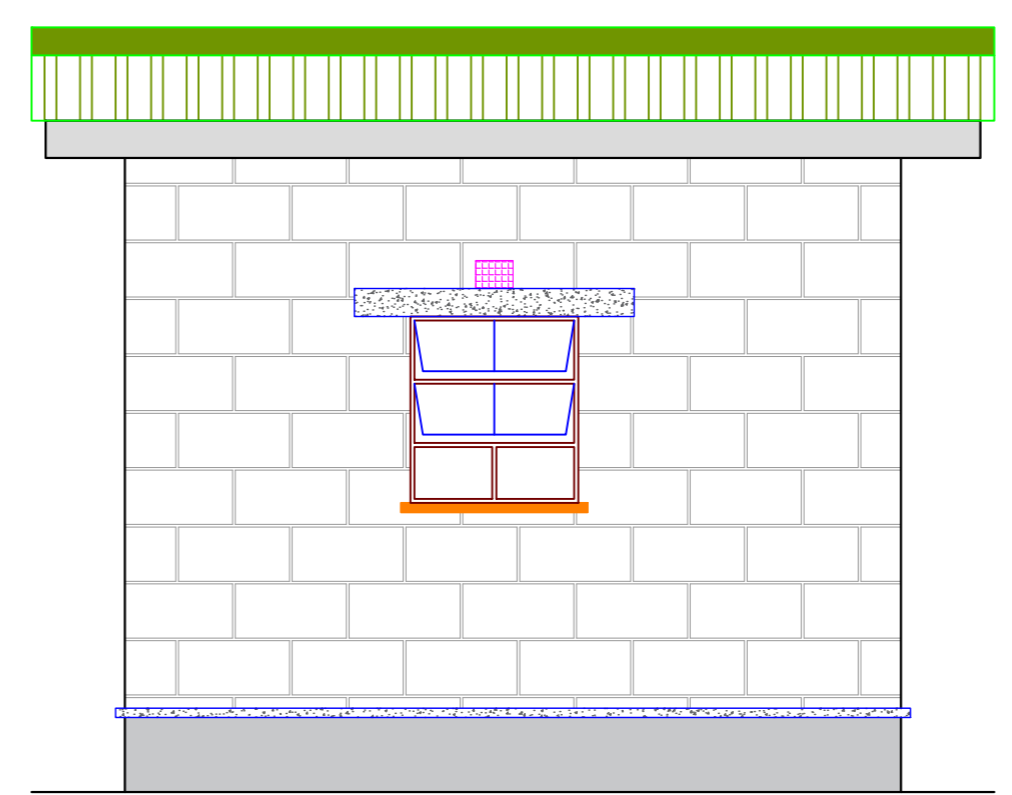







WEST ELEVATION SOUTH ELEVATION

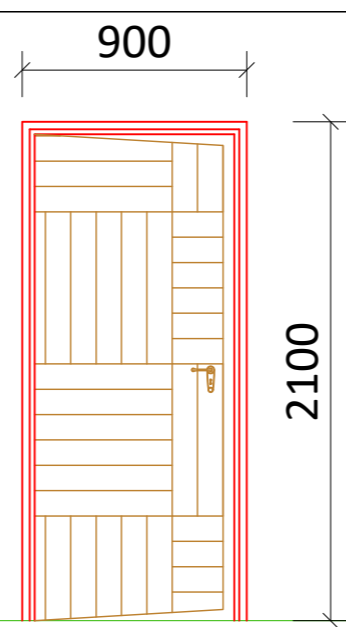
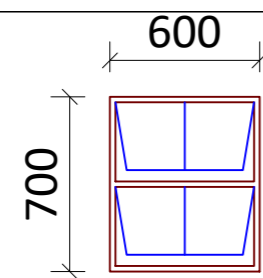
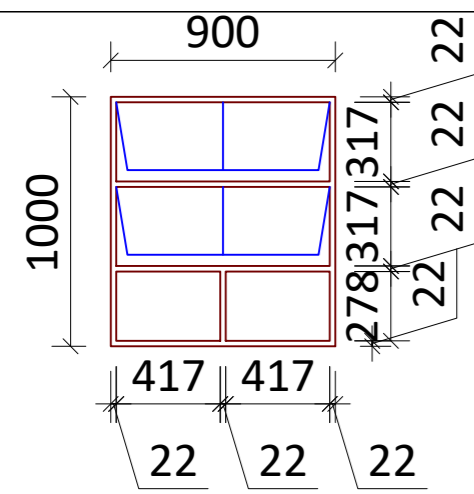
RURAL KITCHEN AND BATHROOM OF SSB OR BURNT BRICKS

- Unit is of 18.55m² Area
- 1 kitchen, plus stores
- 1 bathroom
- Kitchen with chimney
- IBR design gable roof of pitch set at 10.38°
- Minimum housing surrounding area to be of 20x20meters plot = 400m²



NORTH ELEVATION EAST ELEVATION

| | | | | |
|--|---|---|--|---|
|  <p>This drawing and the information herein are the property of Habitat for Humanity Malawi and The Ministry of Lands. Hence, may not be used for other than the purpose for which it is created without explicit written permission from the two.</p> |  <p>PROJECT LOCATION MALAWI URBAN and RURAL</p> | <p><i>Drafted & Designed by</i> HFHM on June/2023</p> | <p>Prototype 8 - Kitchen + Stores, Shower</p> |  |
| | | <p><i>Checked by</i> Gr. Arch. William Kachikopa</p> <p><i>Approved by</i></p> | <p>ELEVATIONS PLAN & DIM</p> <p>DRAWING NUMBER SC: 1:100 HFHM/MWD/2023/08-01</p> | |



W1

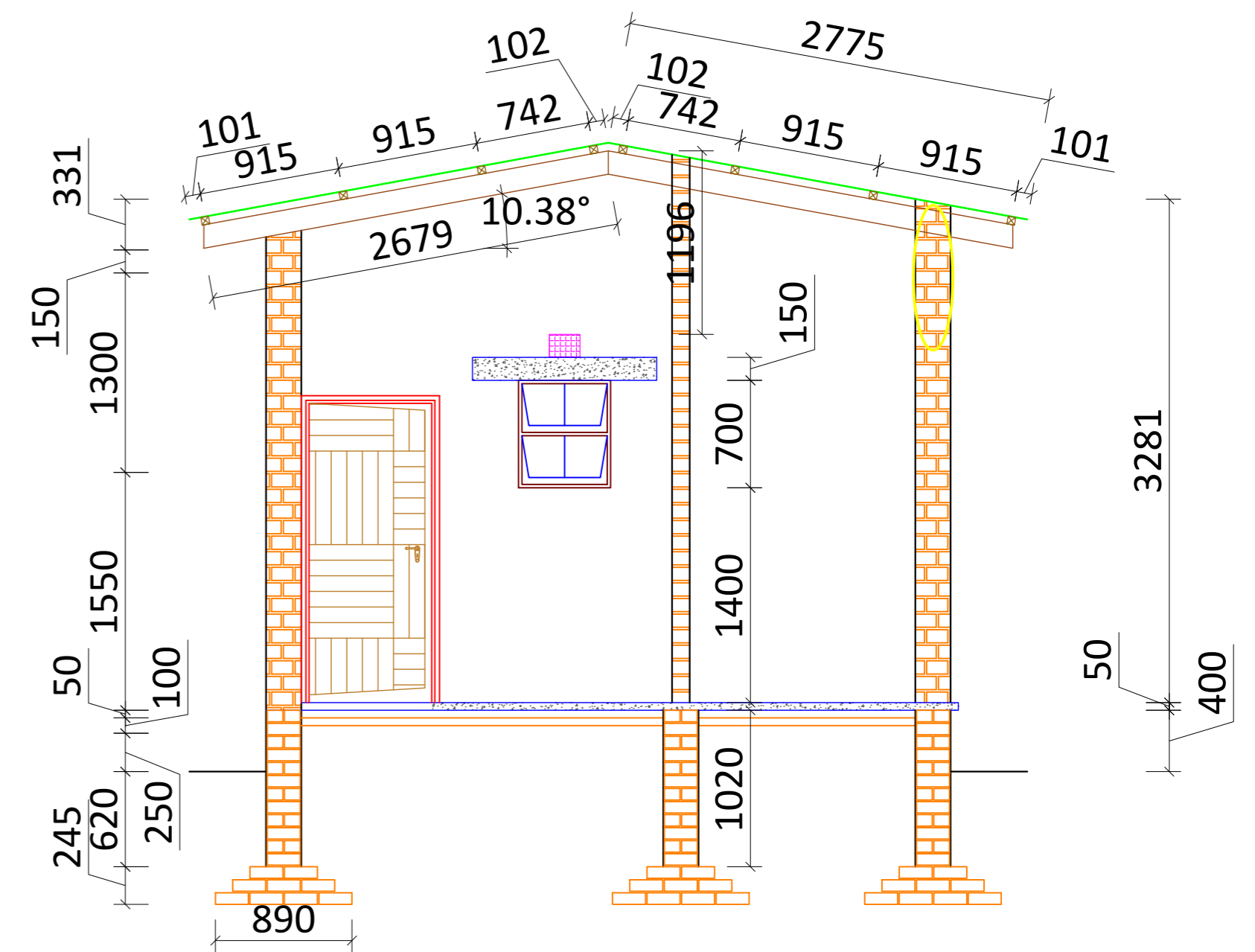
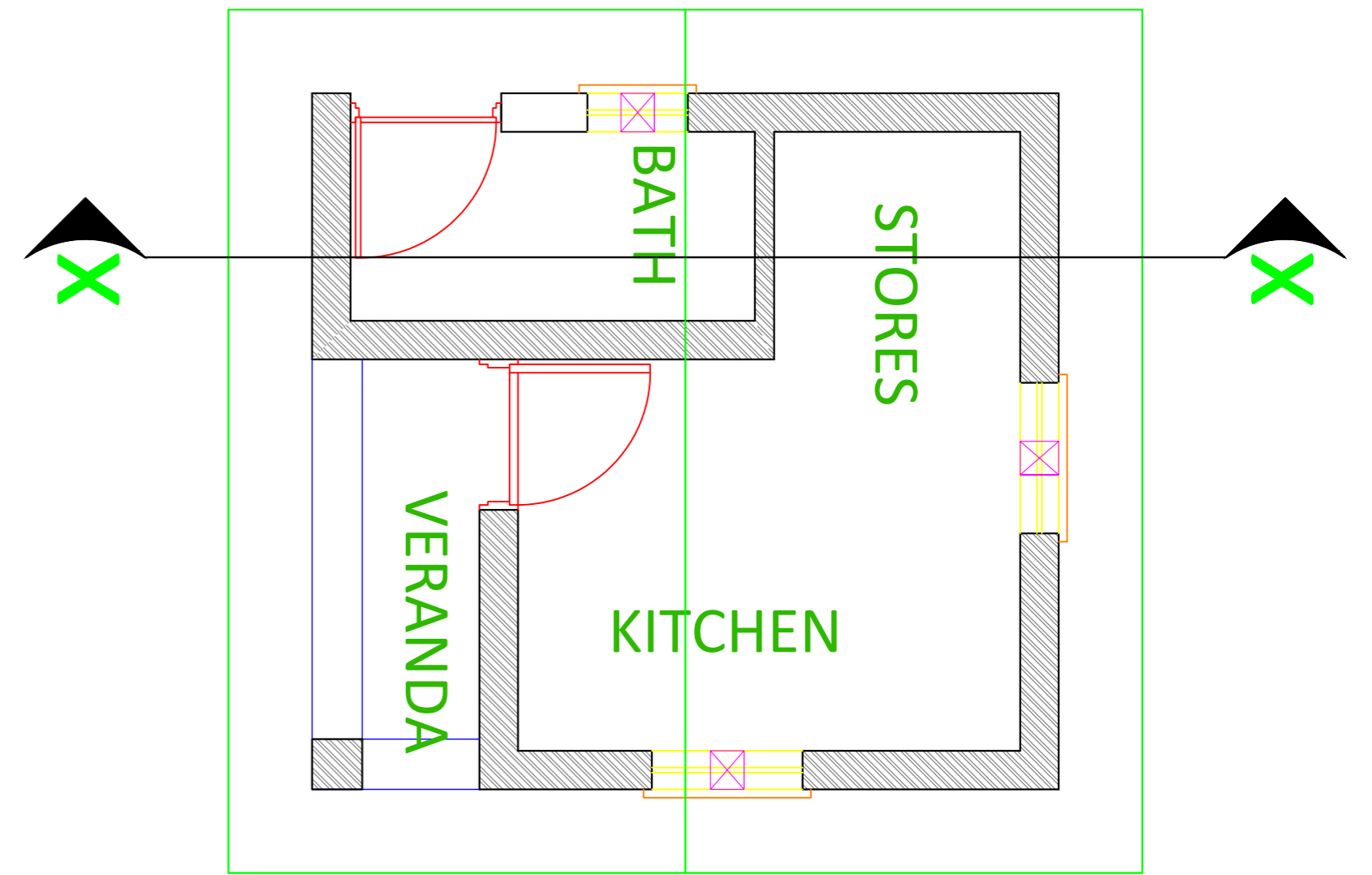
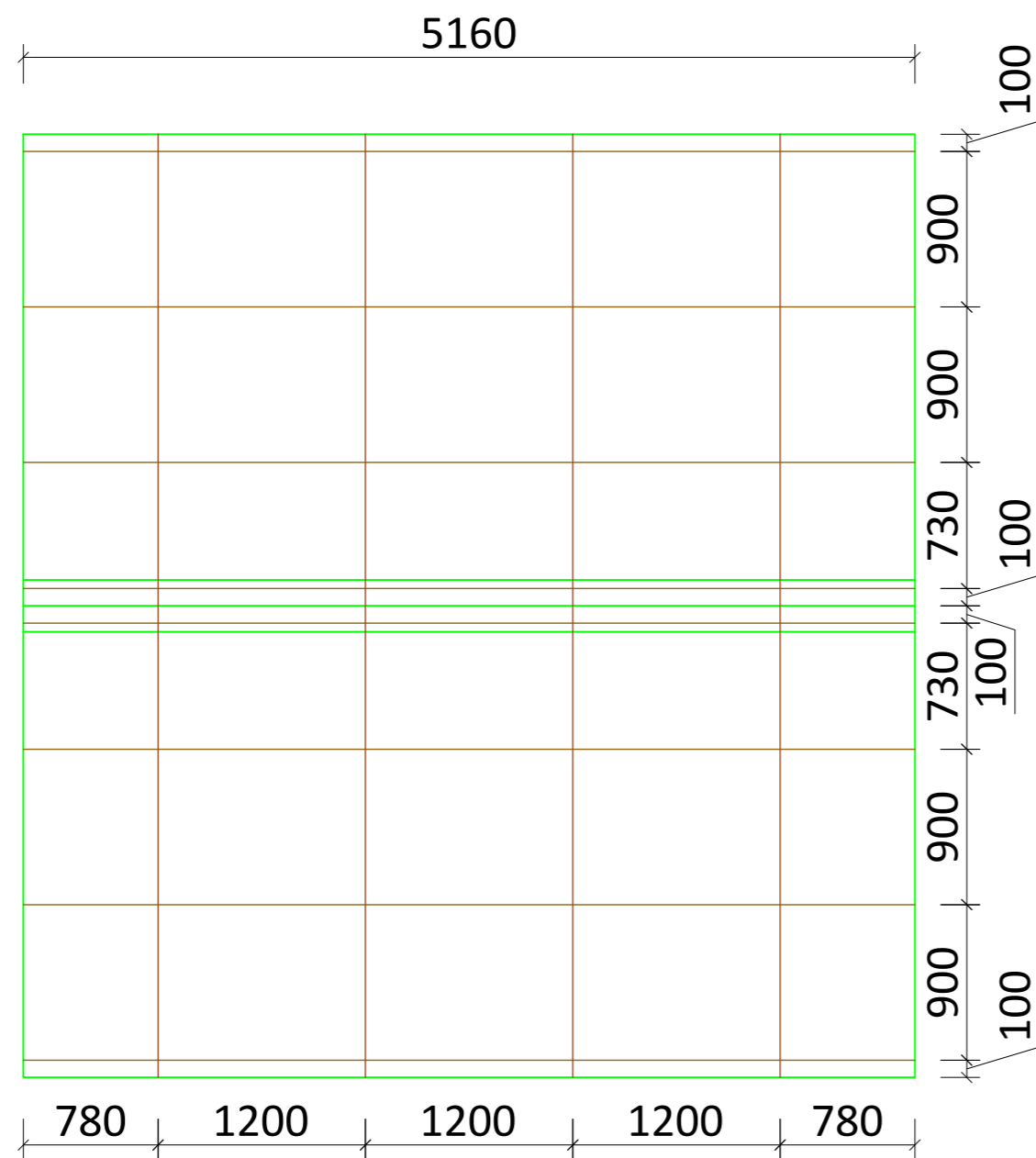
No. REQUIRED: 2
 LOCATION: Kitchen and Stores
 FRAMES: Purpose made steel frames dim as shown
 GLASS: 4mm clear glass for top panel 6mm obscure glass for bottom panel
 IRONMONGERY: Standard brass handles & stays
 FINISH: Frames painted 3coats gloss enamel in approved color
 CILLS: Internal Conc. window cill covered with 150x50mm thick HW/glulam bluegum stool with 2coats polyurethane vanish, Apron &trim with laminated bluegum.

W2

No. REQUIRED: 1
 LOCATION: Bathroom
 FRAMES: Purpose made steel frames dim as shown
 GLASS: 4mm clear glass for top panel 6mm obscure glass for bottom panel
 IRONMONGERY: Standard brass handles & stays
 FINISH: Frames painted 3coats gloss enamel in approved color
 CILLS: Internal Conc. window cill covered with 150x50mm thick HW/glulam bluegum stool with 2coats polyurethane vanish, Apron &trim with laminated bluegum.

D2

No. REQUIRED: 2
 LOCATION: Kitchen & Bathroom
 FRAMES: Purpose made treated H/W frames
 DOORS: Purpose made treated H/W doors
 FINISH: Varnished 2coats with clear glass vanish
 IRONMONGERY: ISEO swing dead lock with roller catch, type HA5027 and Kafli lever handle (HA605Z)
 HINGES: As per supplied by supplier



CROSS SECTION X-X



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PROJECT LOCATION
 MALAWI
 URBAN and RURAL

Drafted & Designed by
 HFHM on June/2023
Checked by
 Gr. Arch. William Kachikopa
Approved by

Prototype 8 - Kitchen + Stores, Shower
 X- SECTION, SCHEDULES, and ROOF
DRAWING NUMBER SC: 1:100
 HFHM/MWD/2023/08-02



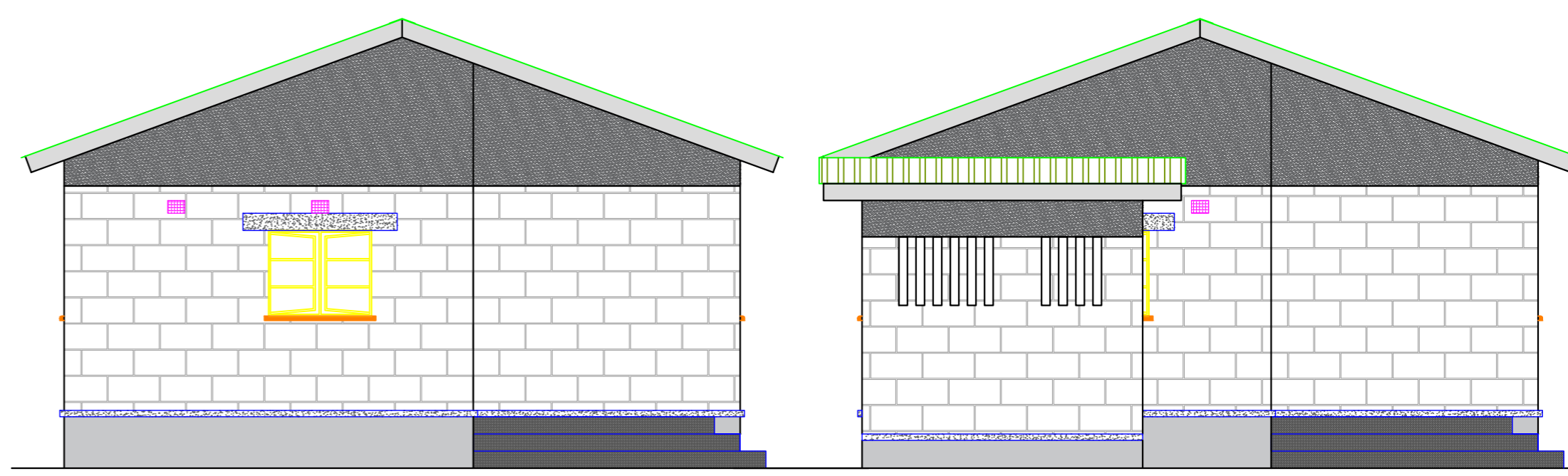


WESTERN ELEVATION

EASTERN ELEVATION

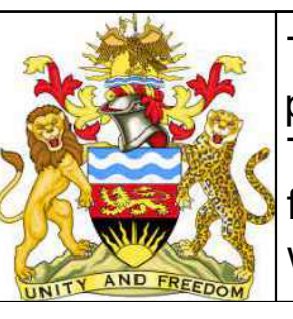
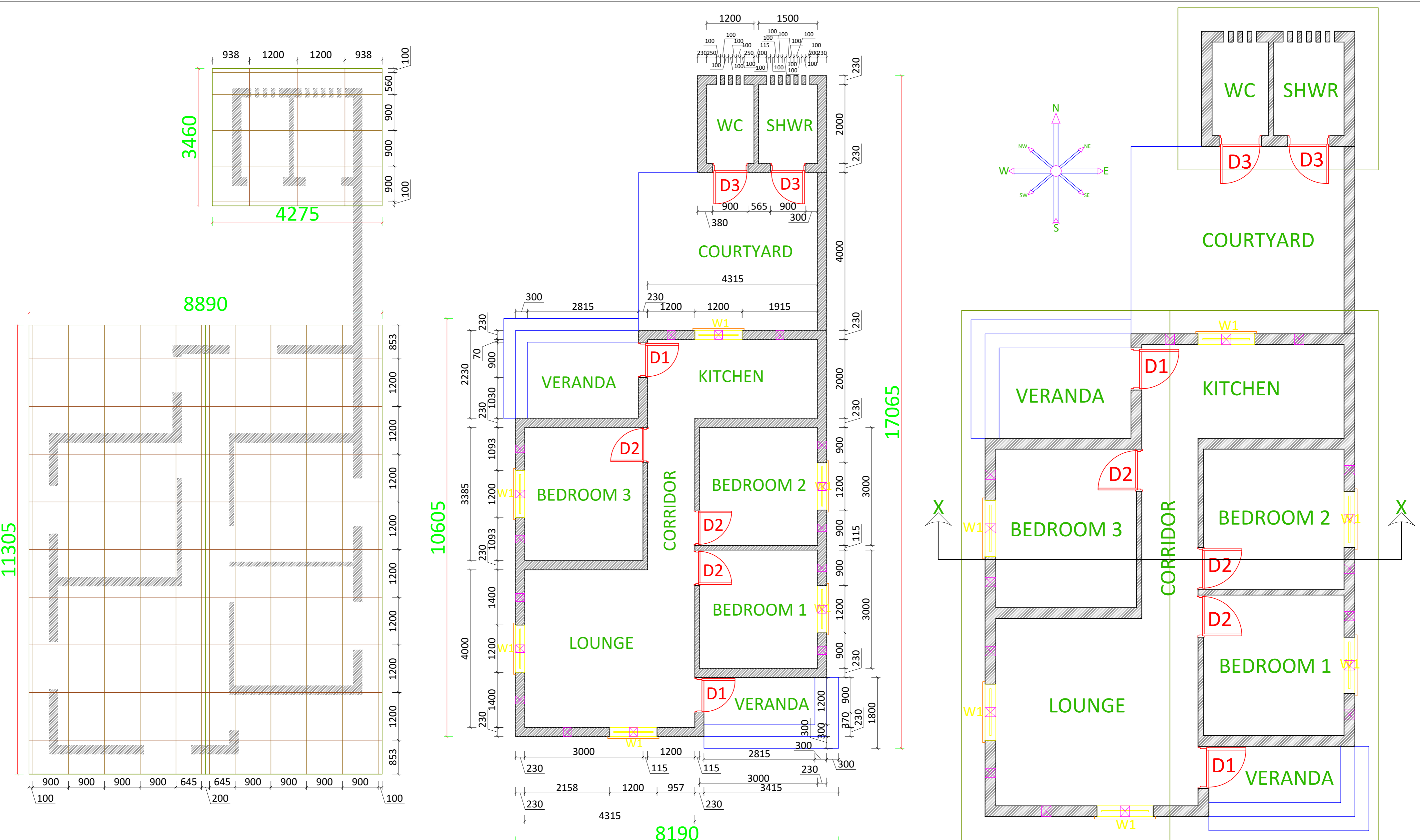
MORDENISED RURAL SSB / CEMENT BLOCK HOUSE PLAN

- House is of 139.80m² Area
- 3 bedrooms with single 6 glass window each
- Lounge with 2No. 6glass windows
- Corridor with a kitchen back exit door
- 1 Front and back Veranda
- A courtyard and latrine plus bathroom annex.
- IBR design gable roof with rafters for framing. Roof pitch set at 20°
- Minimum housing surrounding area to be of 15x30meters plot = 450m²



SOUTHERN ELEVATION

NORTHERN ELEVATION



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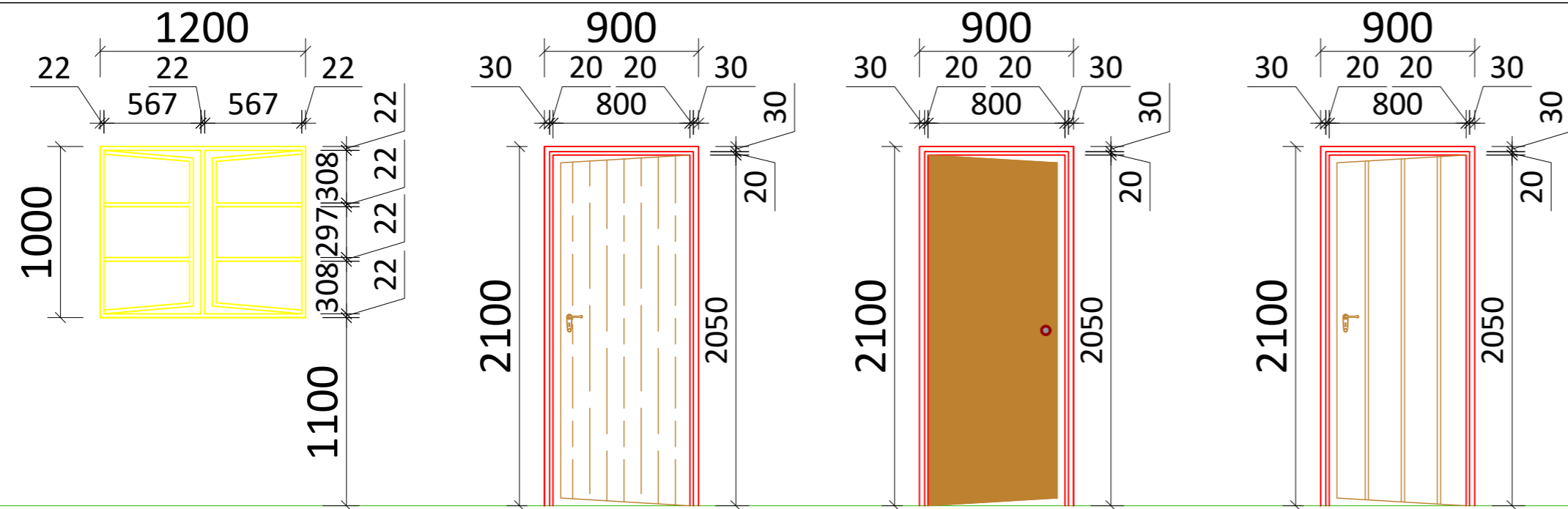


PROJECT LOCATION
MALAWI
URBAN and RURAL

Drafted & Designed by HFHM on **June/2023**
Checked by Gr. Arch. William Kachikopa
Approved by

Prototype 9 - 3Bedrooms, Lounge, Kitchen + Outdoor
FLOOR PLAN, DIMENSION & TRUSS - ROOF
DRAWING NUMBER SC: 1:100
HFHM/MWD/2023/09-02





Window 1

No. REQUIRED: 6
 LOCATION: BEDROOMS
 FRAMES: Purpose made steel 6glass window with 4mm clear glass set with silicone and finished with putty
 GLASS: Standard brass stoppers handles and stays Industrial prefabricated finish (red oxide). then painted gloss white
 IRONMONGERY: Standard brass stoppers handles and stays Industrial prefabricated finish (red oxide). then painted gloss white
 FINISH: Standard brass stoppers handles and stays Industrial prefabricated finish (red oxide). then painted gloss white

Door 1

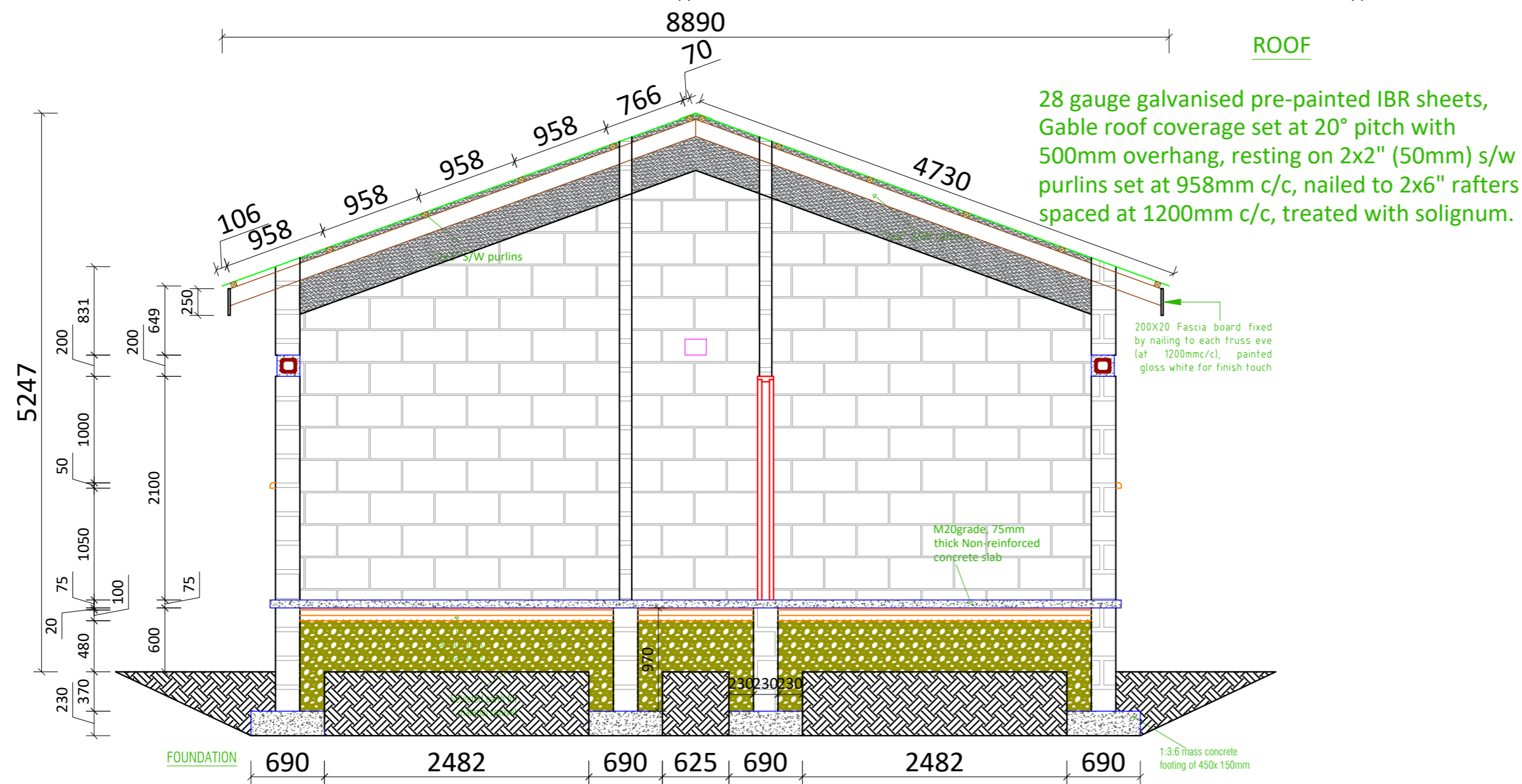
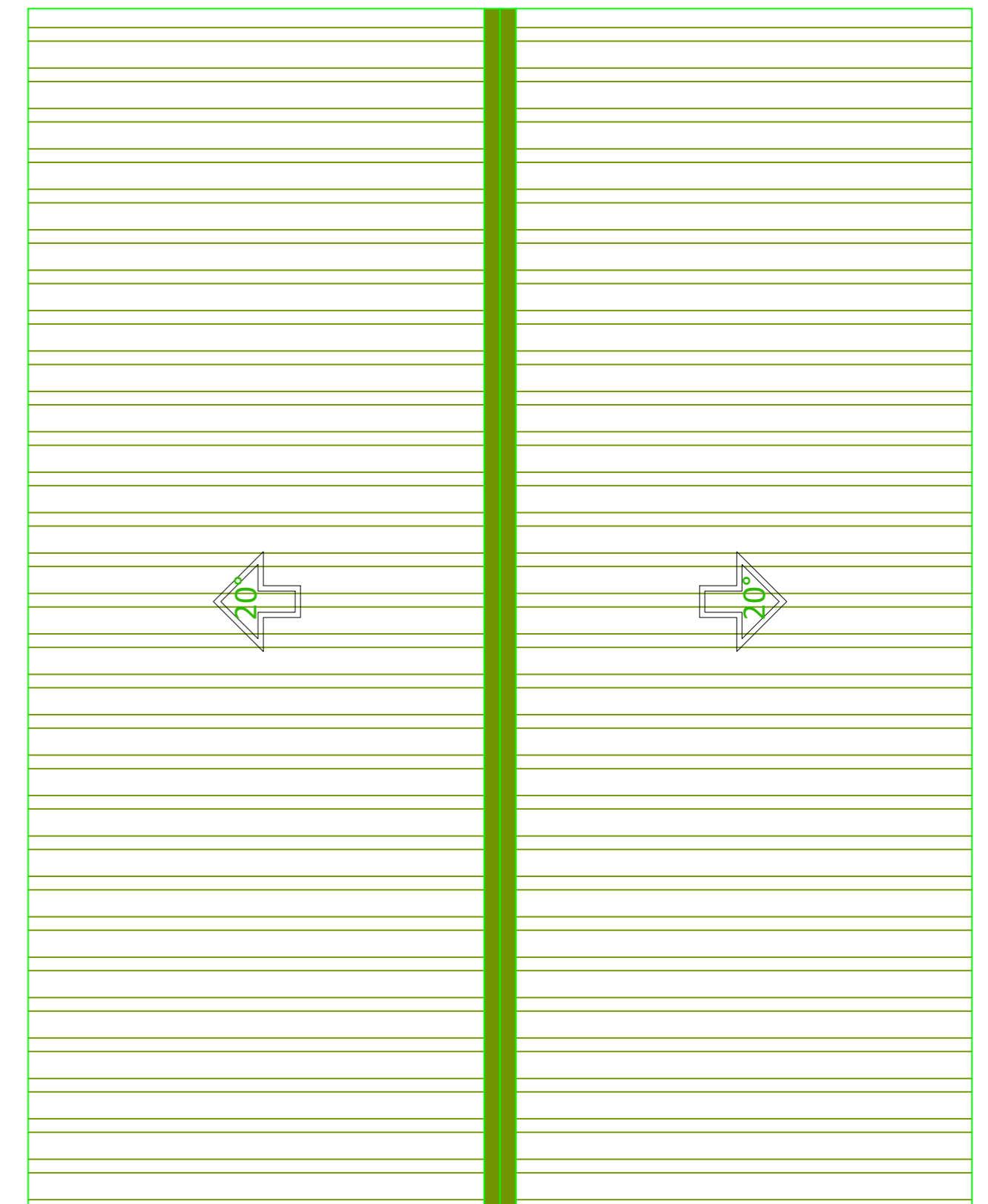
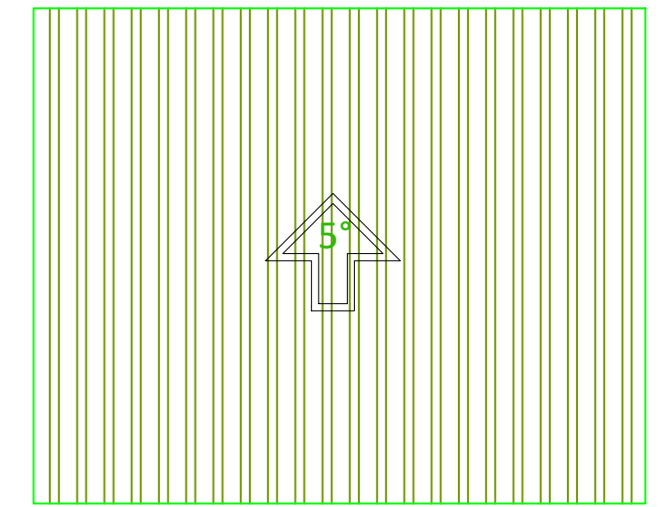
No. REQUIRED: 2
 LOCATION: LOUNGE & CORRIDOR
 FRAMES: Purpose made pressed steel frames 1mm thick
 DOORS: Purpose made treated H/W door FLB
 FINISH: Varnished 2coates with clear glass vanish
 IRONMONGERY: SABS 3-lever mortice lock
 IRONMONGERY HINGES: As per supplied by supplier

Door 2

No. REQUIRED: 3
 LOCATION: BEDROOM 1, 2, & 3
 FRAMES: Purpose made pressed steel frames
 DOORS: Core flash door
 FINISH: Painted pink primer and finished with mist grey
 IRONMONGERY: SABS 3-lever mortice lock
 IRONMONGERY HINGES: As per supplied by supplier

Door 3

No. REQUIRED: 2
 LOCATION: LATRINE & SHOWER
 FRAMES: Purpose made pressed steel frames 1mm thick
 DOORS: Purpose made treated H/W door
 FINISH: Varnished 2coates with clear glass vanish
 IRONMONGERY: SABS 3-lever mortice lock
 IRONMONGERY HINGES: As per supplied by supplier



CROSS SECTION X-X



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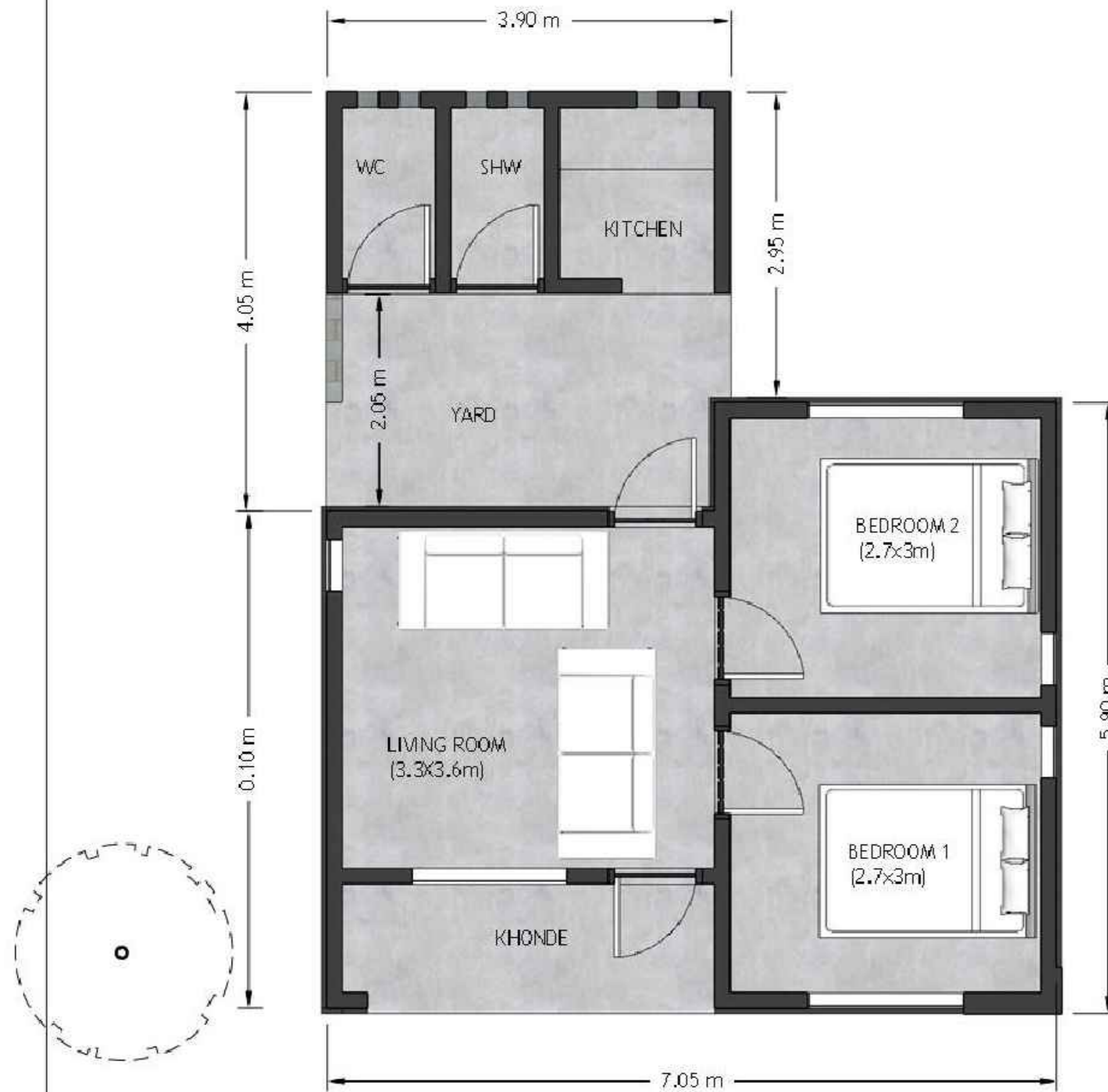


PROJECT LOCATION
 MALAWI
 URBAN and RURAL

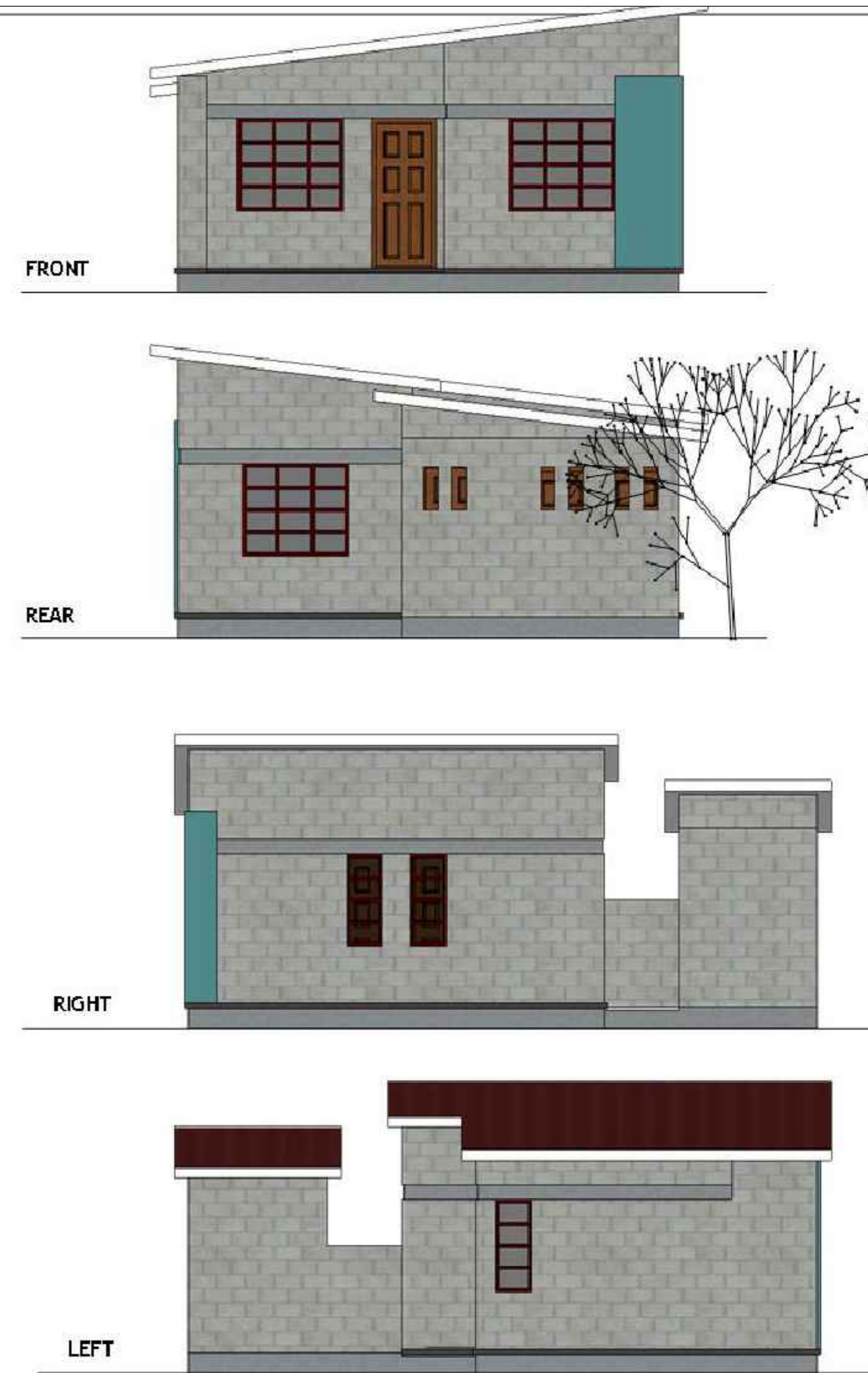
Drafted & Designed by HFHM on **June/2023**
Checked by Gr. Arch. William Kachikopa
Approved by

Prototype 9 - 3Bedrooms, Lounge, Kitchen + Outdoor
 X- SECTION, SCHEDULES, DIM & PLAN
DRAWING NUMBER SC: 1:100
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FLOOR PLAN



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PROJECT LOCATION
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Prototype 10 - 1 Room + Kitchen, Lounge
OVERVIEW
and
PLAN
DRAWING NUMBER **SC: 1:100**
HFHM/MWD/2023/10-01

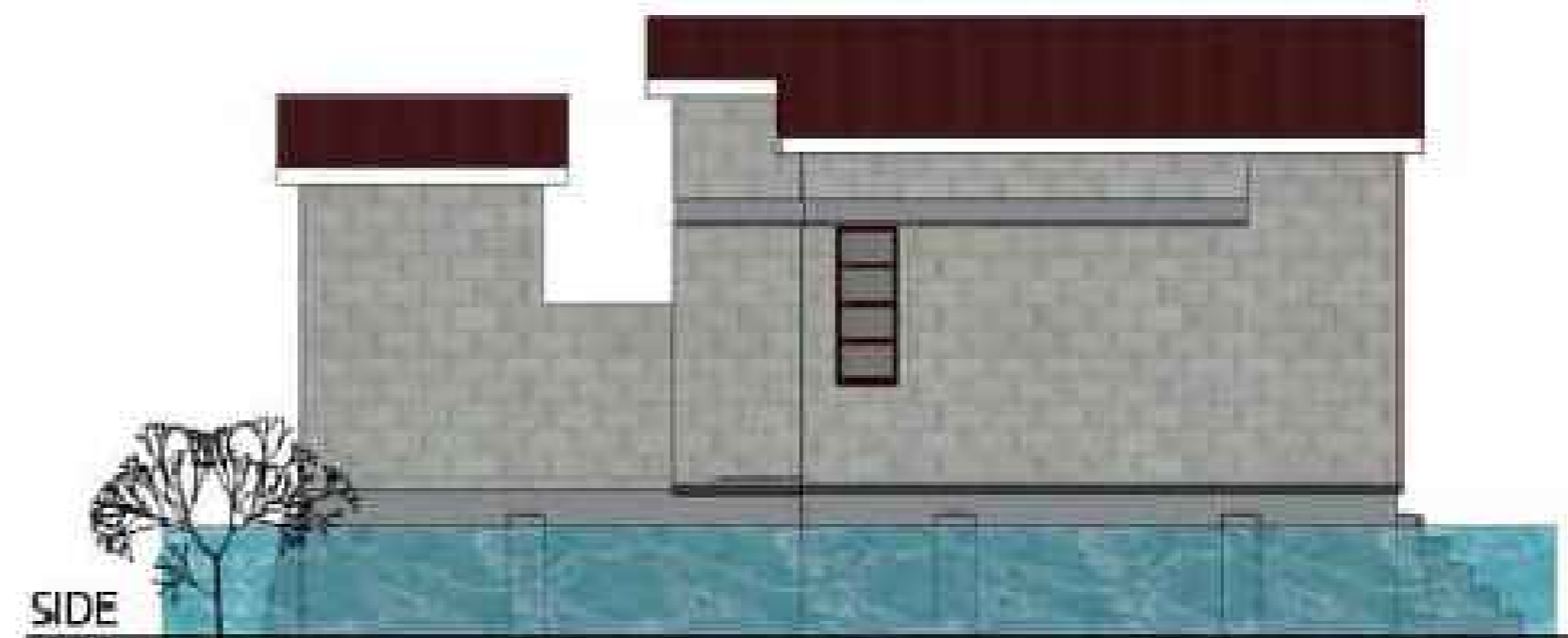




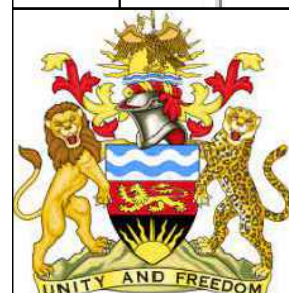
FRONT



REAR



SIDE



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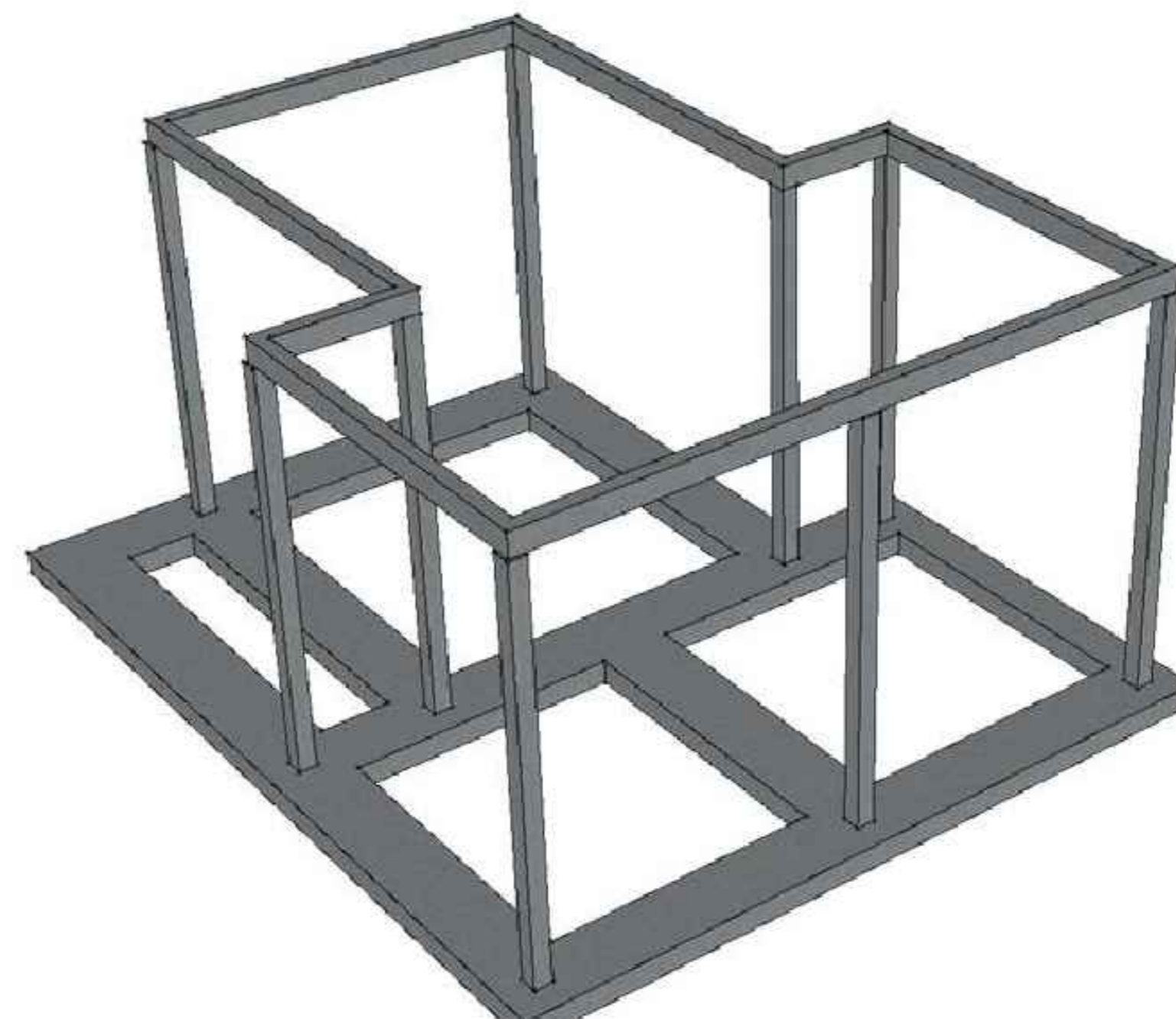
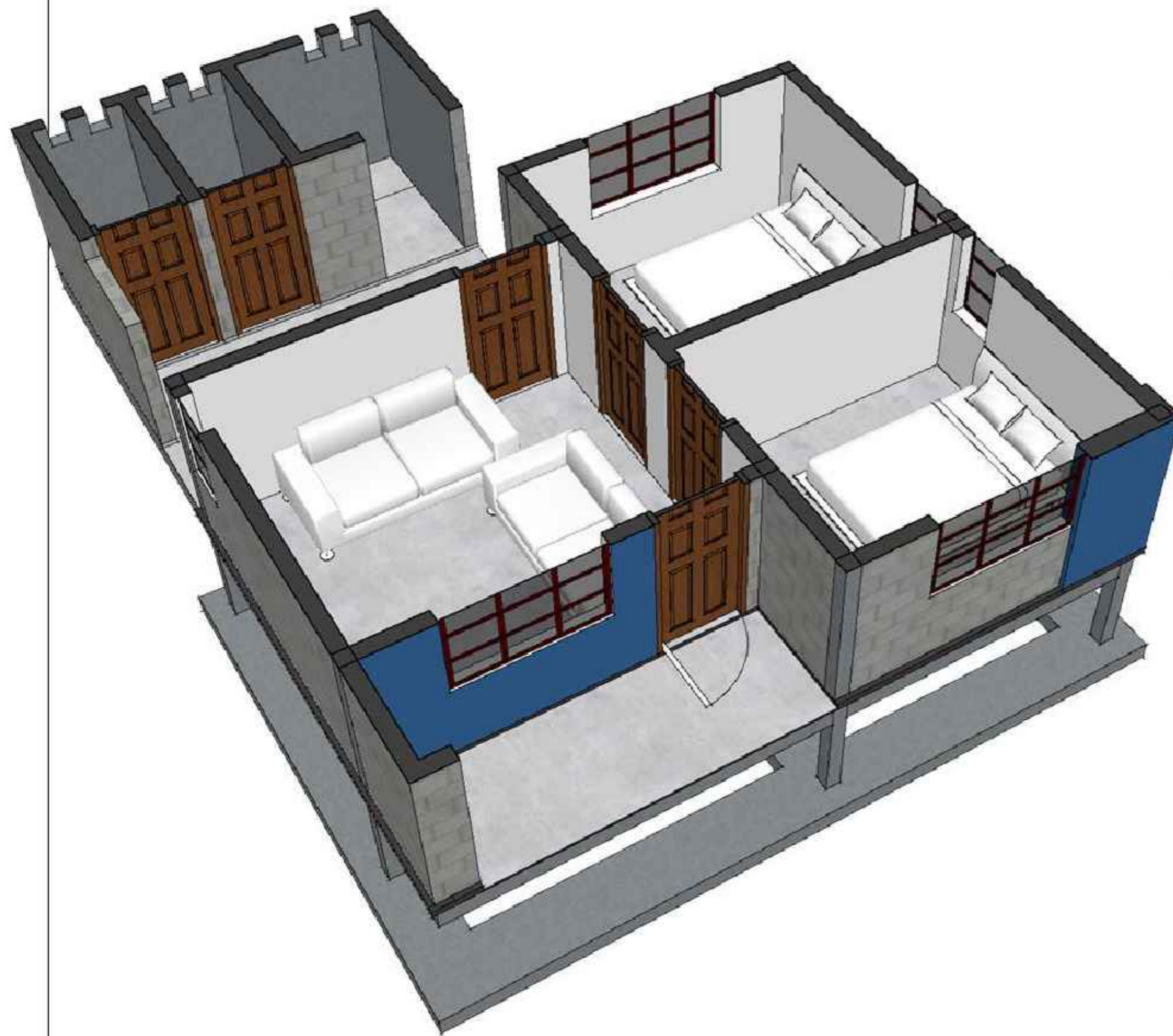
PROJECT LOCATION
MALAWI
URBAN and RURAL

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Prototype 10 - 1 Room + Kitchen, Lounge
OVERVIEW
and
PLAN
DRAWING NUMBER **SC: 1:100**
HFHM/MWD/2023/10-02



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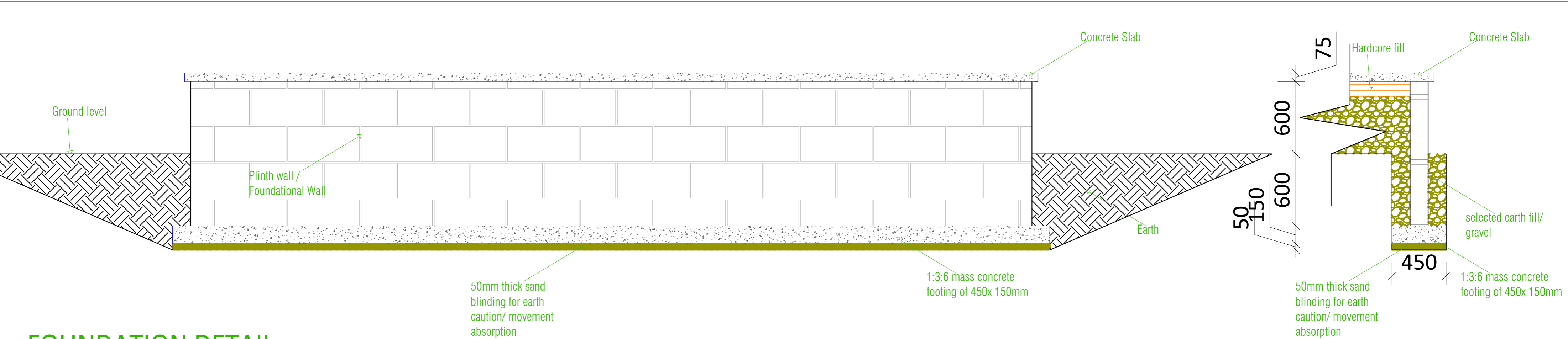
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Prototype 10 - 1 Room + Kitchen, Lounge
OVERVIEW
and
PLAN

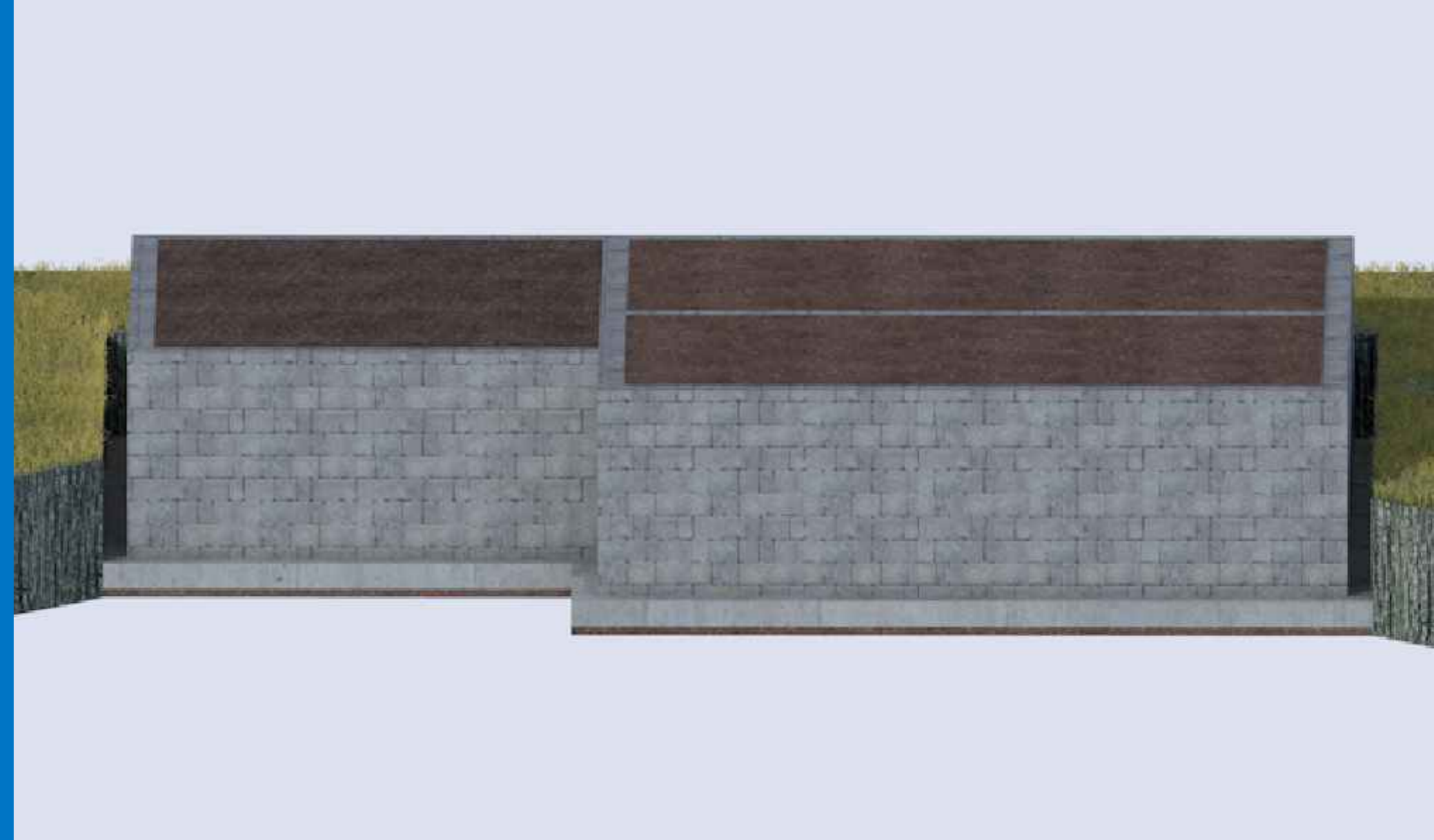
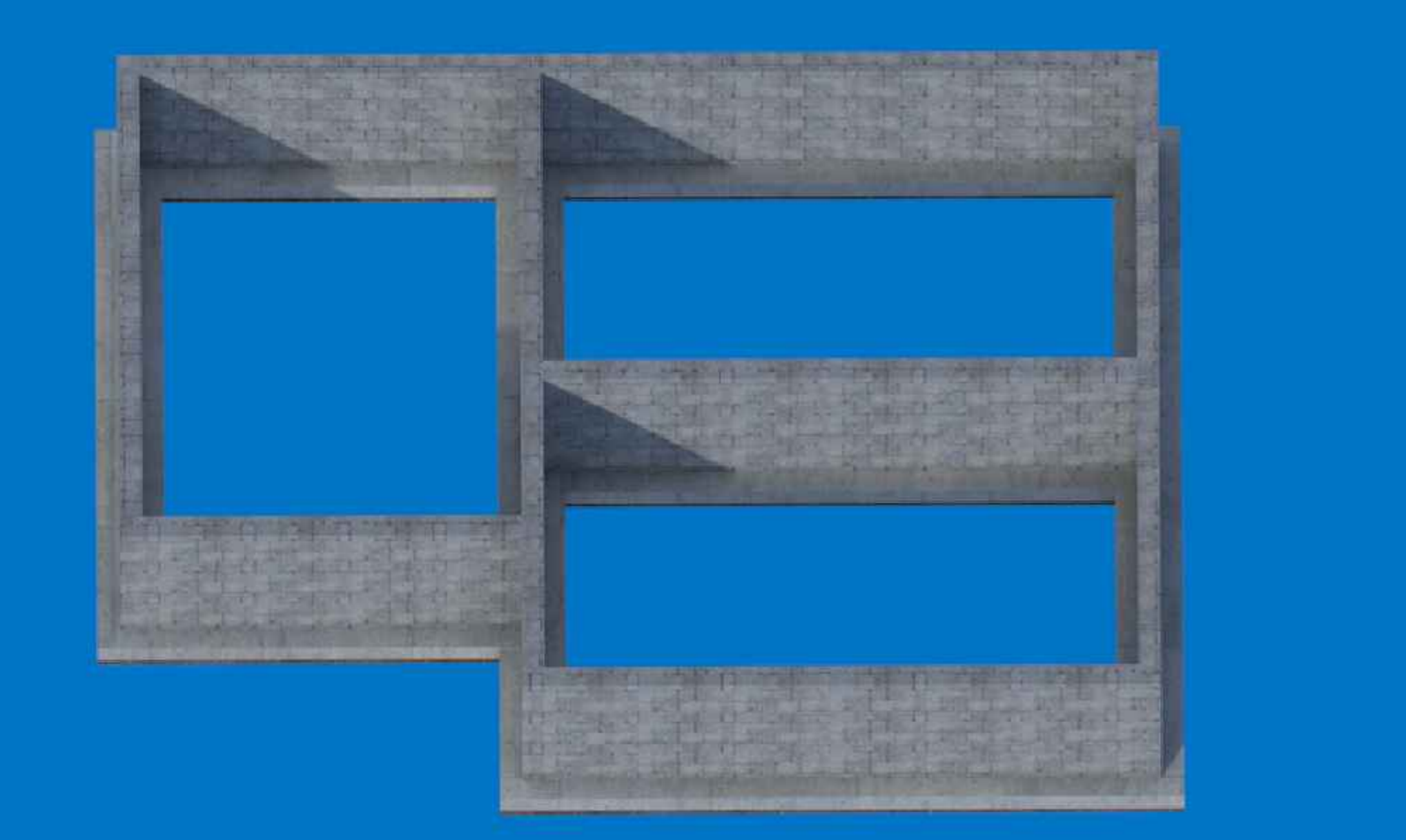
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HFHM/MWD/2023/10-03






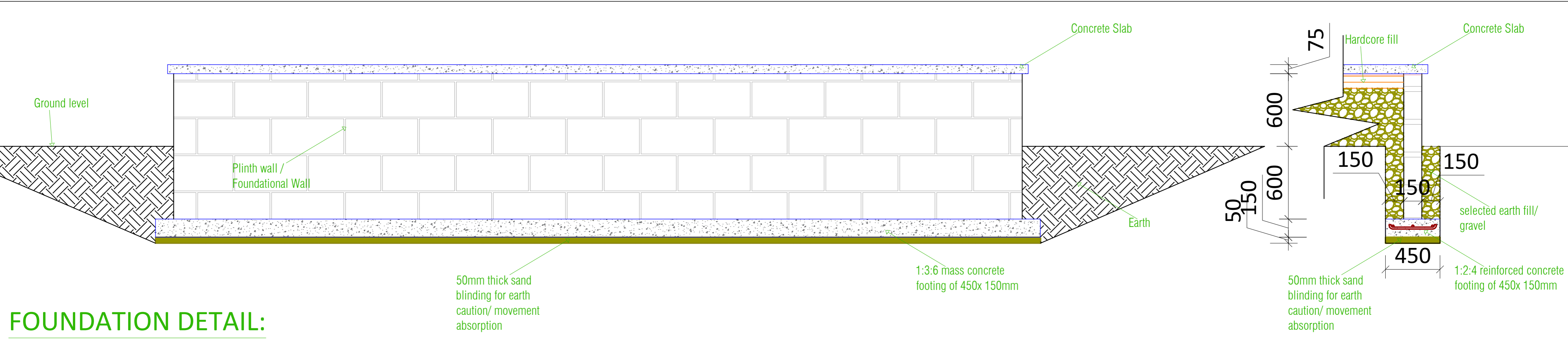
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FOUNDATION DETAIL:
 Non-reinforced Concrete Strip foundation of 150x450mm, with a plinth wall of 1200mm receiving a 75mm concrete floor slab.
 Footing to be cast on 50mm sand blinding, and to be of mix ratio of 1:3:6.

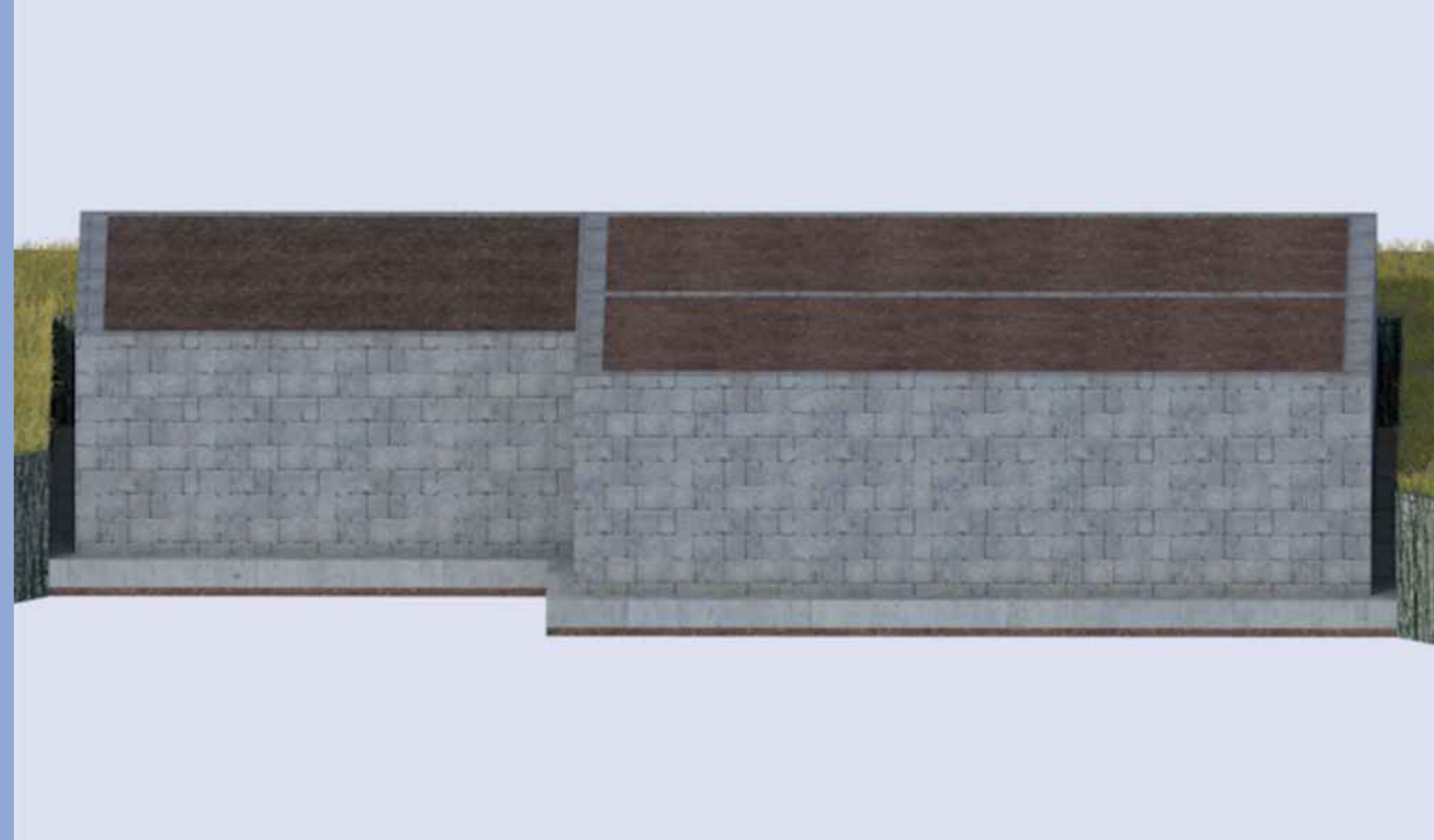
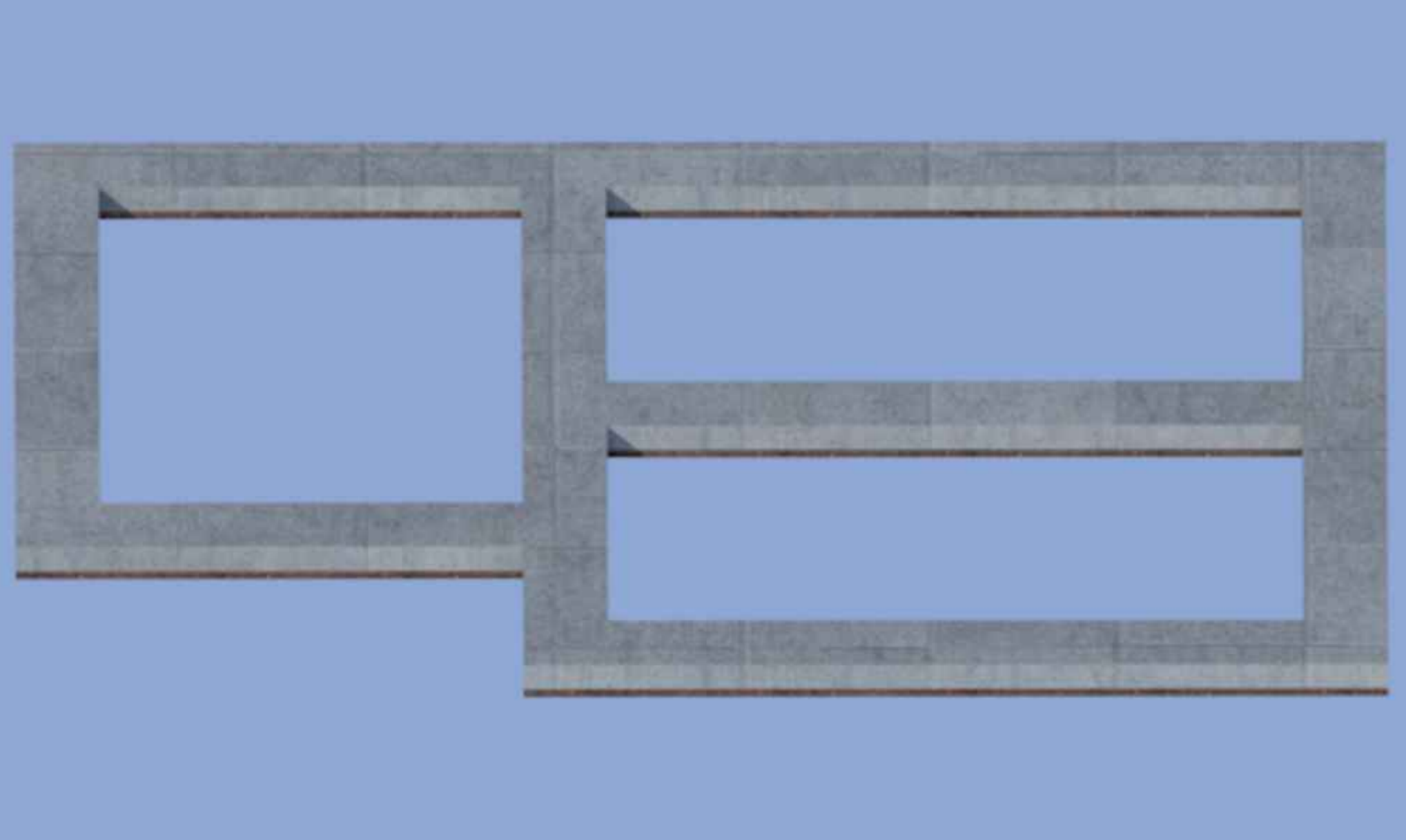





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| | | <p><i>Checked by</i> Gr. Arch. William Kachikopa</p> | <p>STRIP FOUNDATION</p> | <p>DRAWING NUMBER SC: 1:100</p> | |
| | | <p><i>Approved by</i></p> | | | |

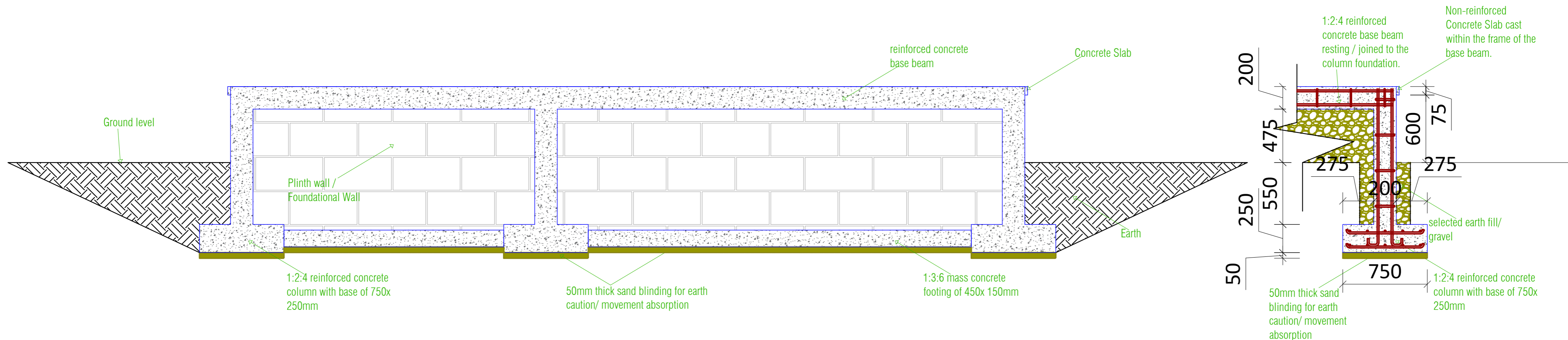


FOUNDATION DETAIL:

Reinforced Concrete Strip foundation of 150x450mm, with a plinth wall of 1200mm receiving a 75mm concrete floor slab.
 Footing to be cast on 50mm sand blinding, and to be of mix ratio of 1:2:4, reinforced with Y12 bars.



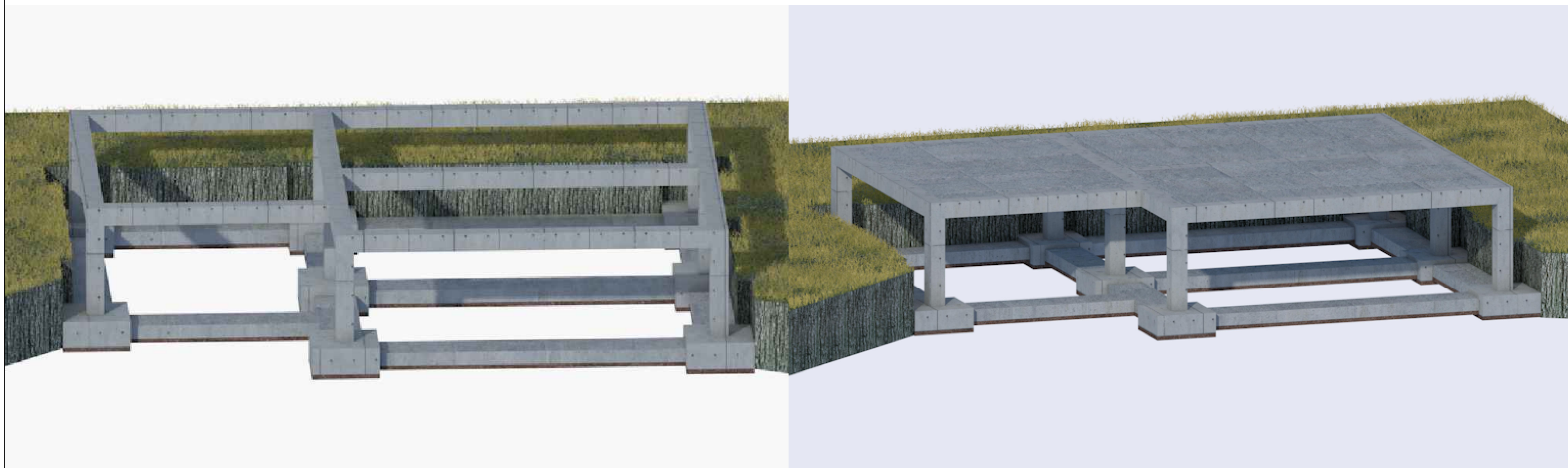
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| | | <p><i>Checked by</i> Gr. Arch. William Kachikopa</p> <p><i>Approved by</i></p> | <p>REINFORCED STRIP FOUNDATION</p> | <p>DRAWING NUMBER SC: 1:100</p> <p>HFHM/MWD/2023/11/fndB</p> | |






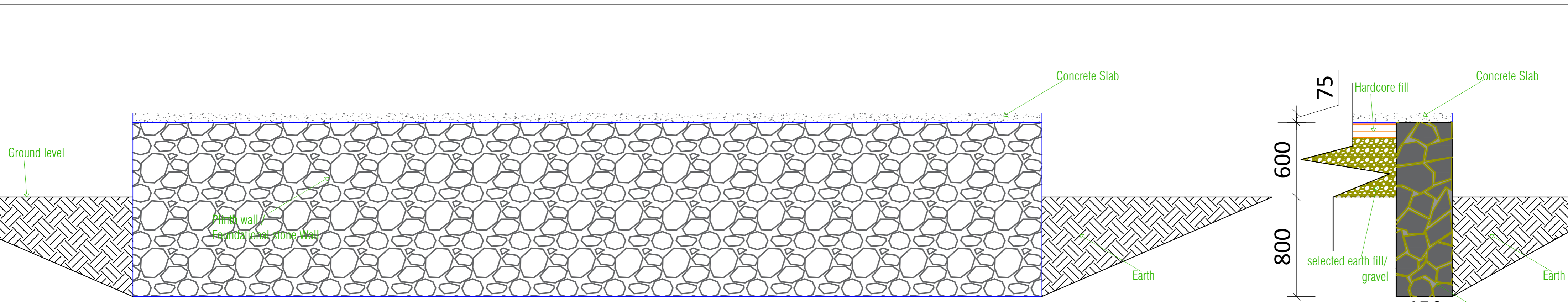
FOUNDATION DETAIL:

Reinforced Column-based foundations with Reinforced Concrete base beam, done concurrently with non-reinforced strip foundation. Excavation of 850mm deep, and 0.56 square meters for base in class 0-1500mm foundation.

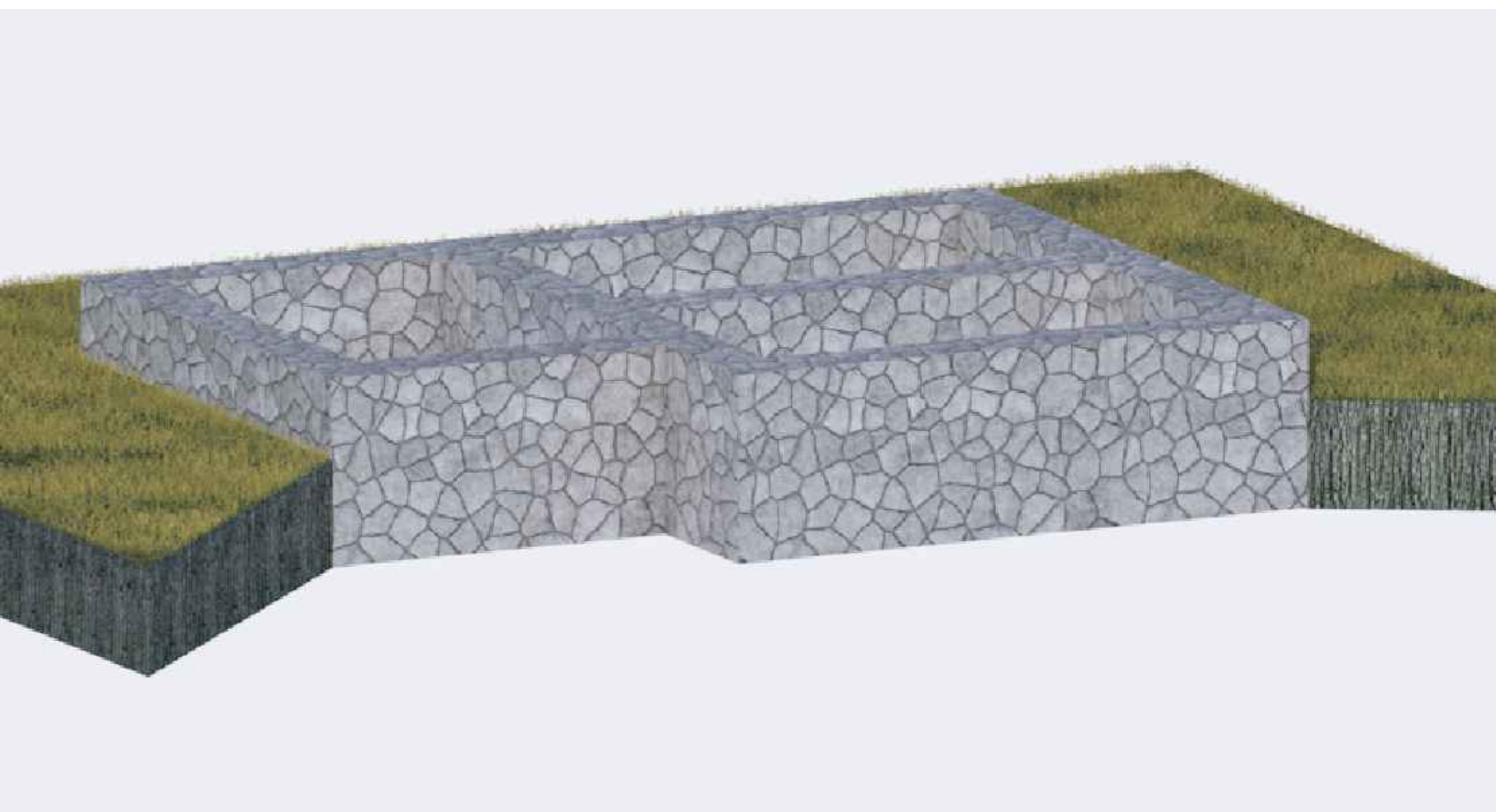
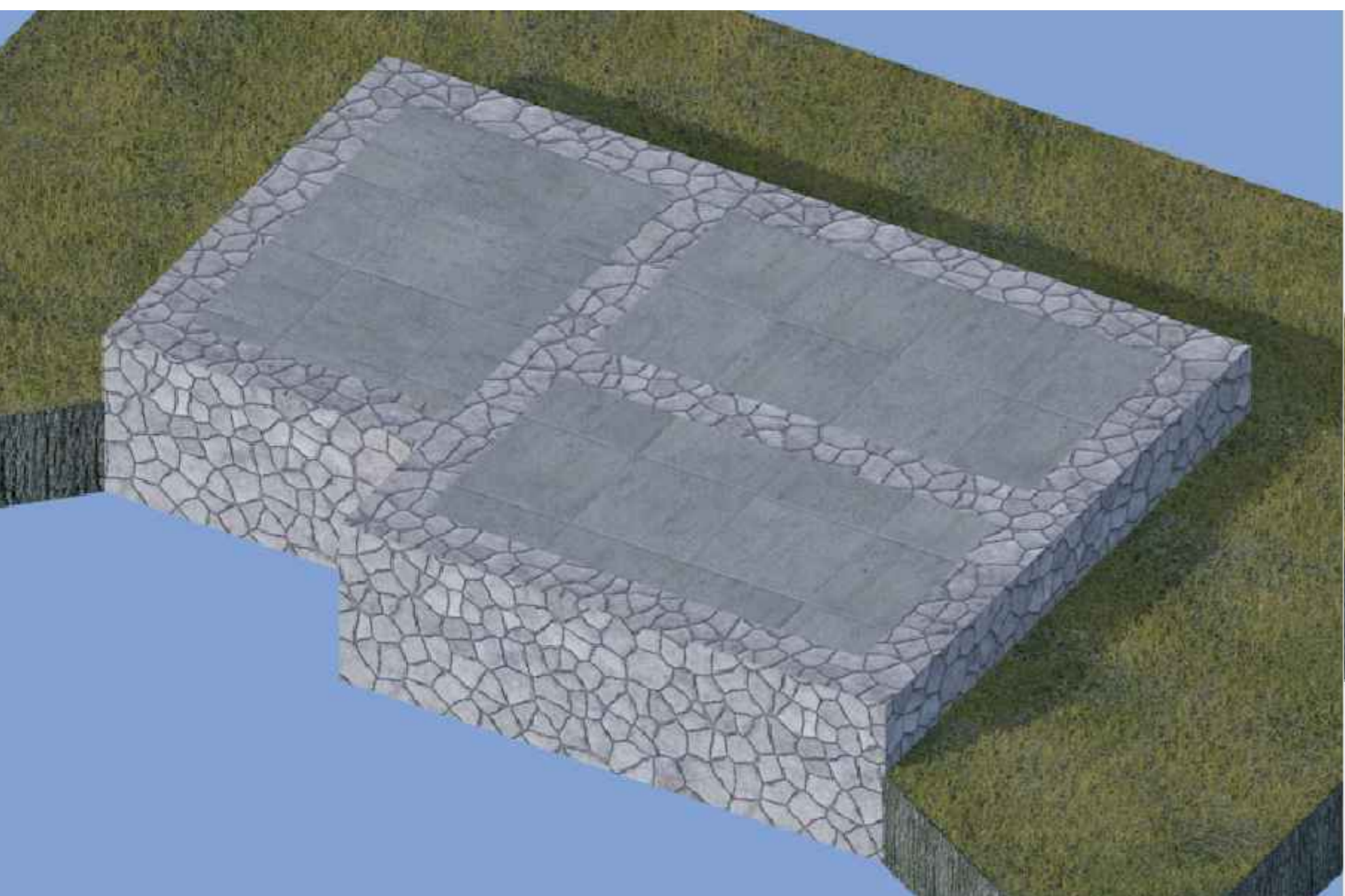
Column mortar to be cast on 50mm sand blinding, and to be of mix ratio of 1:2:4, with Y16 bars






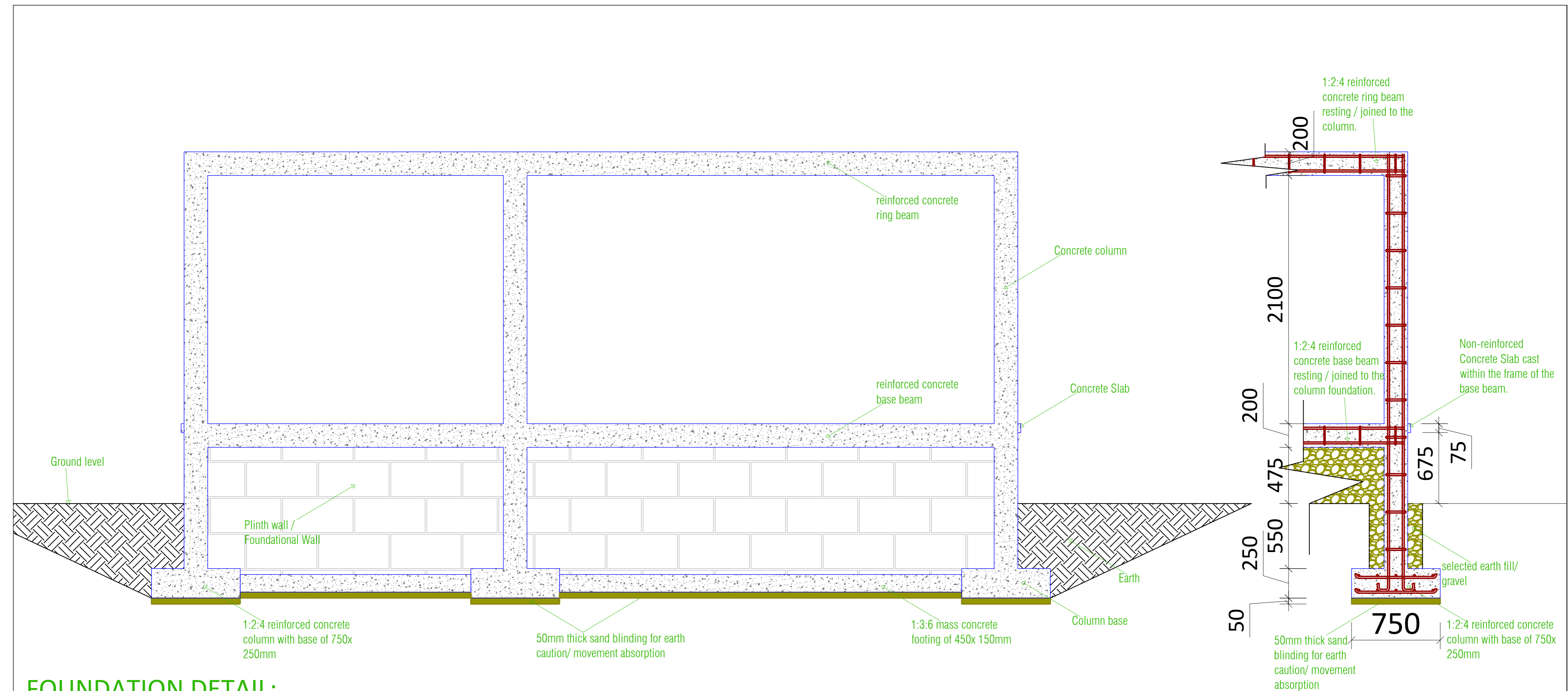
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| | | <p><i>Checked by</i> Gr. Arch. William Kachikopa</p> <p><i>Approved by</i></p> | <p>STRIP FOUNDATION, Fdn COLUMNS & BASE BEAMS</p> | <p>DRAWING NUMBER SC: 1:100</p> <p>HFHM/MWD/2023/11/fndC</p> | |



FOUNDATION DETAIL:
 Mass masonry foundation of 1200x450mm thick wall receiving a 75mm concrete floor slab.



| | | | | | |
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| | | <p><i>Checked by</i> Gr. Arch. William Kachikopa</p> <p><i>Approved by</i></p> | <p>STONE / MASONRY FOUNDATION</p> | <p>DRAWING NUMBER SC: 1:100</p> <p>HFHM/MWD/2023/11/fndD</p> | |



FOUNDATION DETAIL:

Reinforced Column foundations with Reinforced Concrete base beam, done concurrently with non-reinforced strip foundation. Excavation of 850mm deep, and 0.56 square meters for base in class 0-1500mm foundation. Column proceeded to ring beam forming a portal framing.

Column mortar to be cast/rest on 50mm sand blinding, and to be of mix ratio of 1:2:4, with Y16 bars



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PROJECT LOCATION
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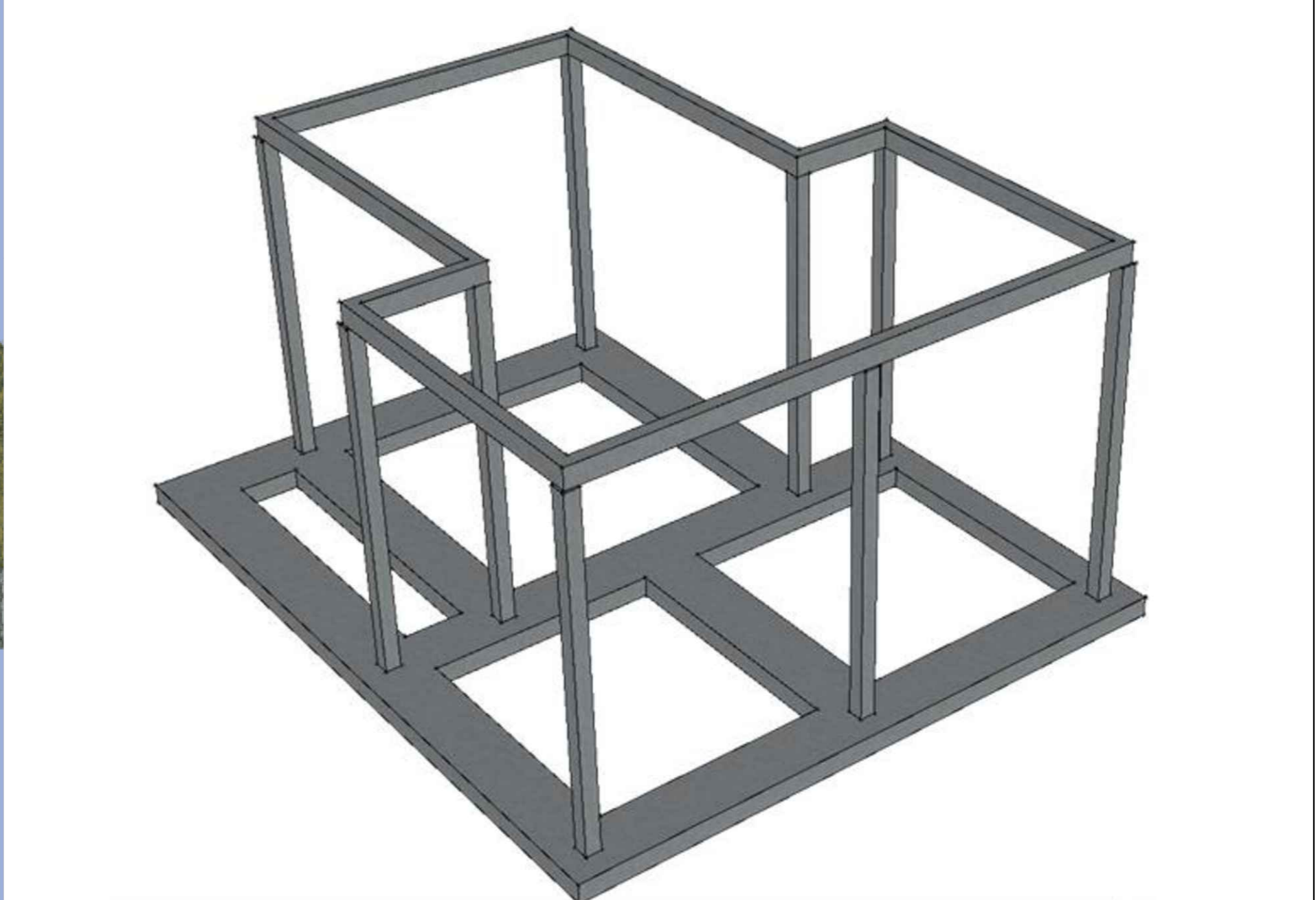
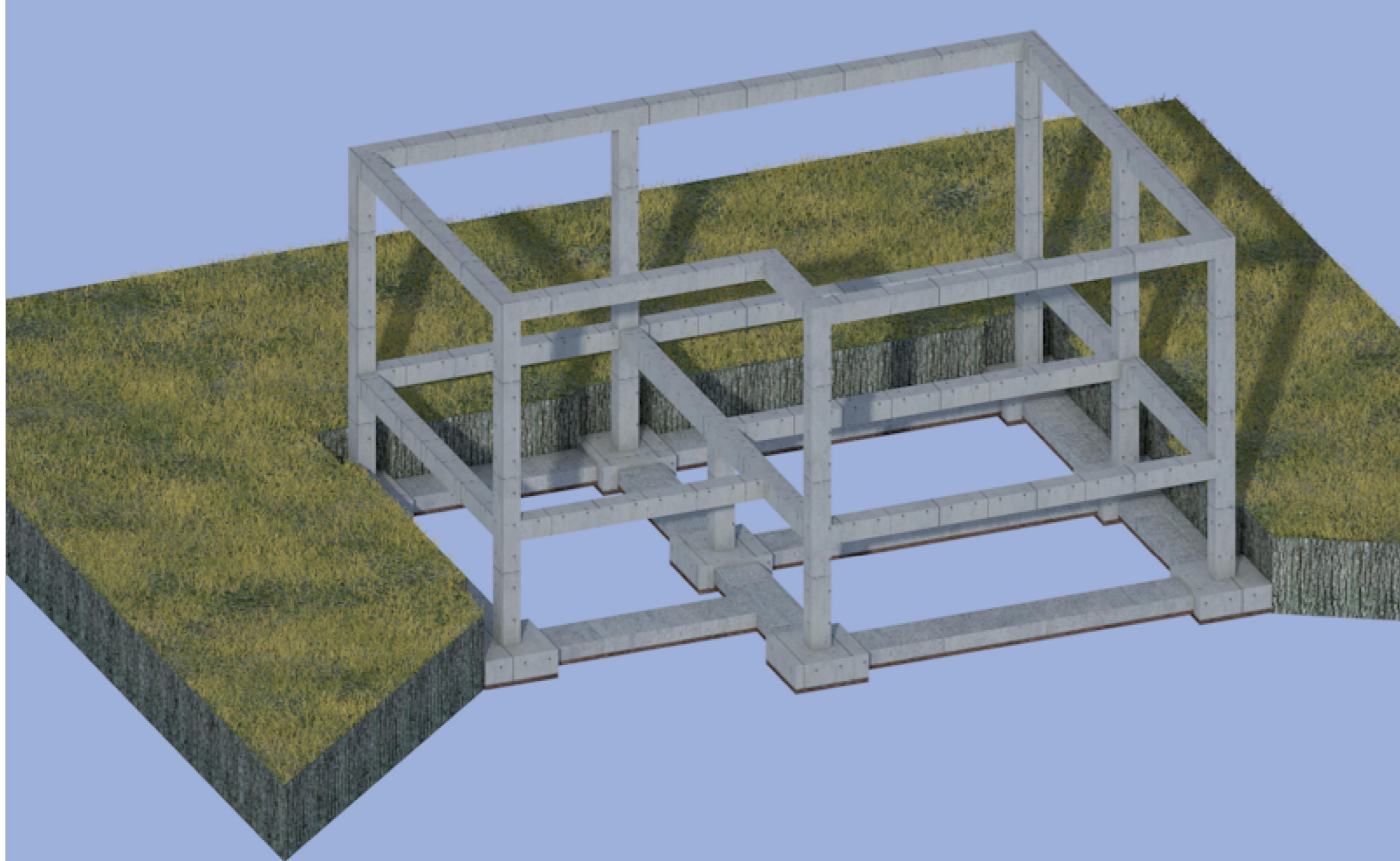
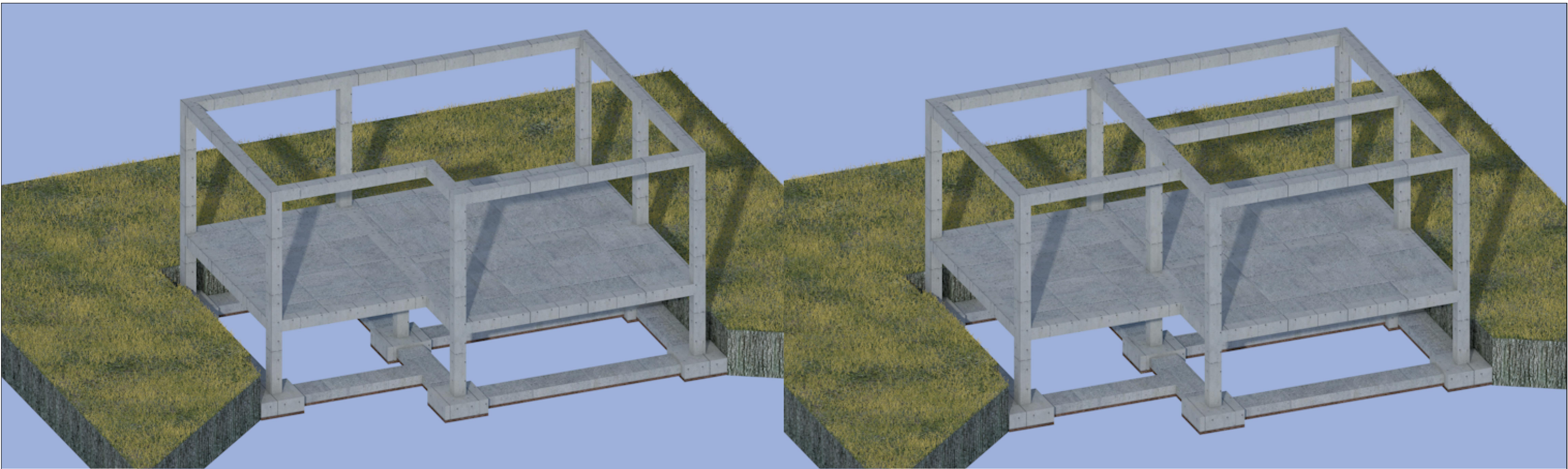
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Prototype ALL - FOUNDATIONS
STRIP
FOUNDATION,
COLUMNS, BASE &
RING BEAMS

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Prototype ALL - FOUNDATIONS

STRIP
FOUNDATION,
COLUMNS, BASE &
RING BEAMS

DRAWING NUMBER **SC: 1:100**
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FOUNDATION NOTES

- **STRIP CONC. FOOTING**
 - Non-reinforced 1:3:6 ratio concrete footing cast in a min thickness of 150mm.
 - Suitable for normal ground bearings and soil conditions
 - Best used for ground floor structures
- **REINFORCED STRIP CONC. FOOTING**
 - Reinforced 1:2:4 ratio concrete footing cast in a min thickness of 150mm.
 - Minimum reinforcement bars of Y12 are to be used
 - Suitable for abnormal ground bearings and soil conditions
 - Best used for ground floor structures in expansive soils
- **STRIP CONC. FOOTING WITH BASE BEAM & FOUNDATION COLUMNS**
 - Non-reinforced 1:3:6 ratio concrete footing cast in a min thickness of 150mm.
 - 1:2:4 ratio Concrete foundation columns with bases of 250mm minimum thickness are cast to receive base beam.
 - Minimum reinforcement bars of Y12, and R8 rings are to be used for the columns and their bases.
 - 1:2:4 Concrete base beams of 200x200mm min thickness
 - Minimum reinforcement bars of Y12, and R8 rings are to be used for the base beams
 - Best used for ground floor structures in expansive soils, loose soils, and earthquake zones.
- **STRIP CONC. FOOTING WITH BASE BEAM, COLUMNS, & RING BEAM**
 - Non-reinforced 1:3:6 ratio concrete footing cast in a min thickness of 150mm.
 - 1:2:4 Concrete foundation columns with bases of 250mm minimum thickness are cast to receive base beam.
 - Minimum reinforcement bars of Y12, and R8 rings are to be used for the columns and their bases.
 - 1:2:4 Concrete base beams of 200x200mm min thickness, and ring beams of a min of 150x200mm thickness
 - Minimum reinforcement bars of Y12, and R8 rings are to be used for the both ring and base beams
 - Best used for structures with a heavy load bearing (ground floor +), in expansive soils, loose soils, in earthquake, high wind pressures, and flooding zones.
- **MASONRY FOUNDATION**
 - Mass Masonry foundation wall build of boarder-stones and cement mortar interlocking each other to a minimum of 450mm thickness
 - The cement mortar is to be a mix of 1:4 ration for homogenous bonding with the hard rocks
 - River bed rocks can also be used for the same foundation methodology
 - Ideal for loose soil conditions, flood prone areas, and high wind pressure zones.



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PROJECT LOCATION

MALAWI
URBAN and RURAL

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Prototype ALL - FOUNDATIONS

NOTES

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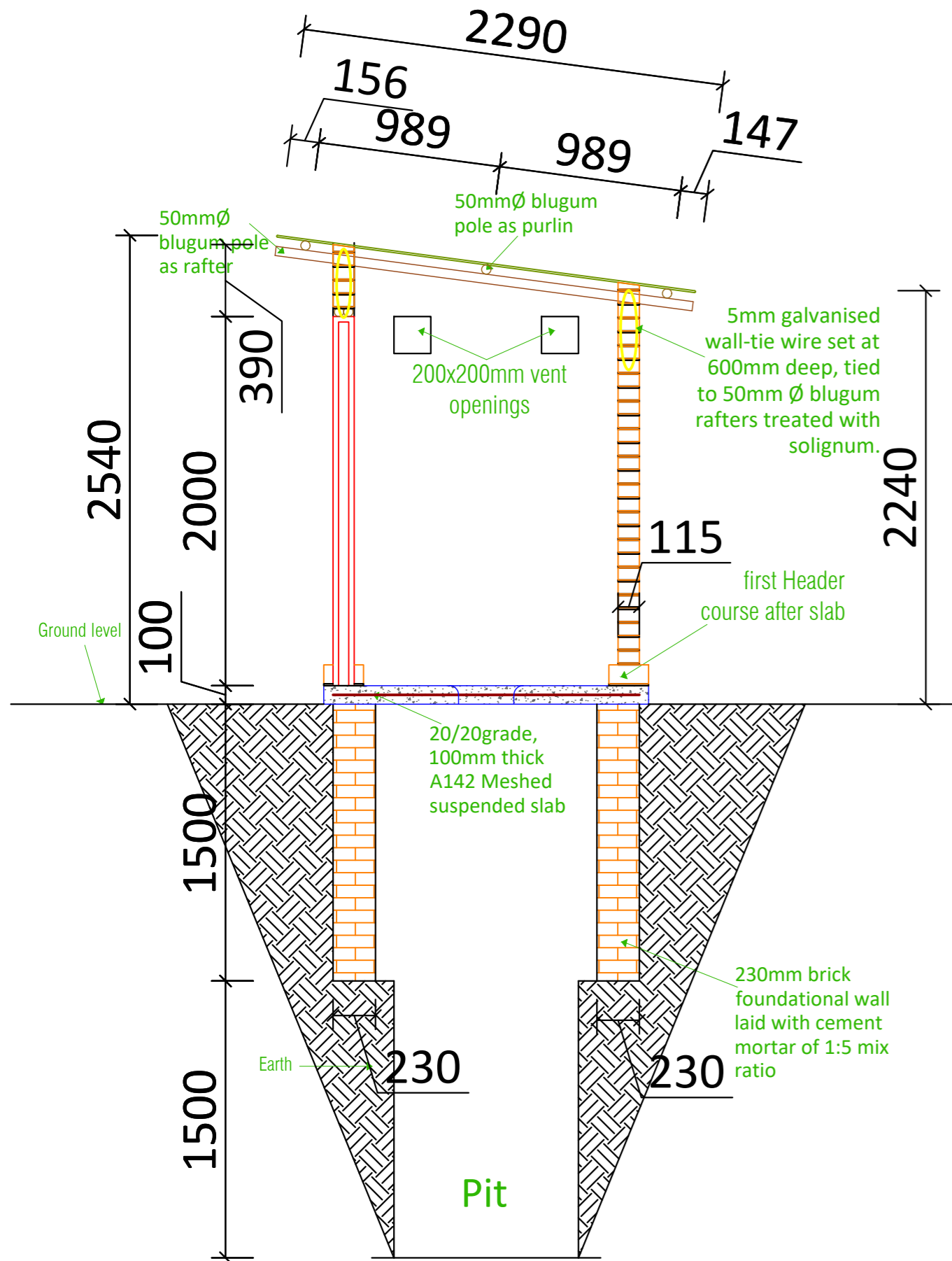
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ROOF

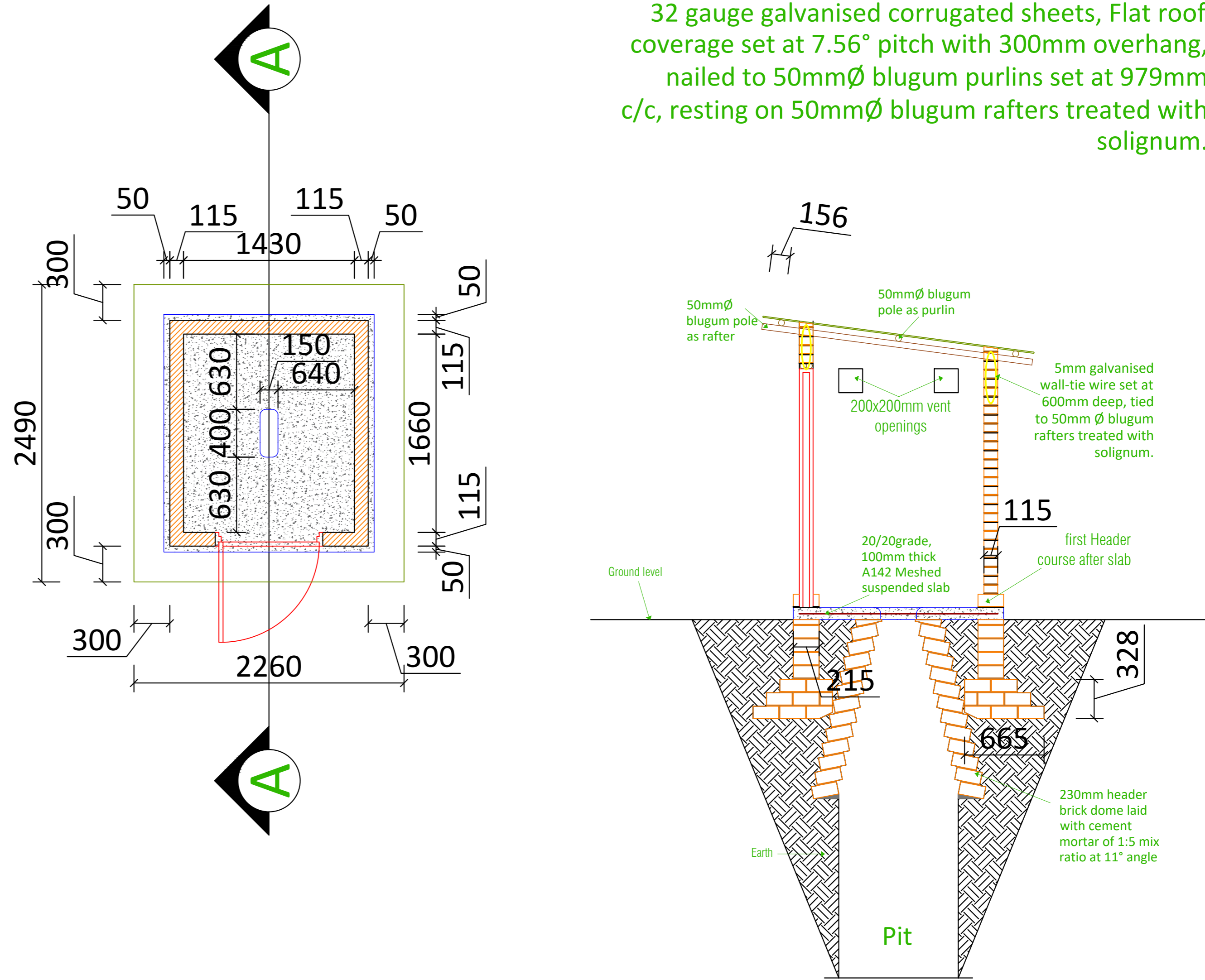
32 gauge galvanised corrugated sheets, Flat roof coverage set at 7.56° pitch with 300mm overhang, nailed to 50mmØ blugum purlins set at 979mm c/c, resting on 50mmØ blugum rafters treated with solignum.



TRANSITIONAL PIT LATRINE

ROOF

32 gauge galvanised corrugated sheets, Flat roof coverage set at 7.56° pitch with 300mm overhang, nailed to 50mmØ blugum purlins set at 979mm c/c, resting on 50mmØ blugum rafters treated with solignum.



CORBELLED PIT LATRINE



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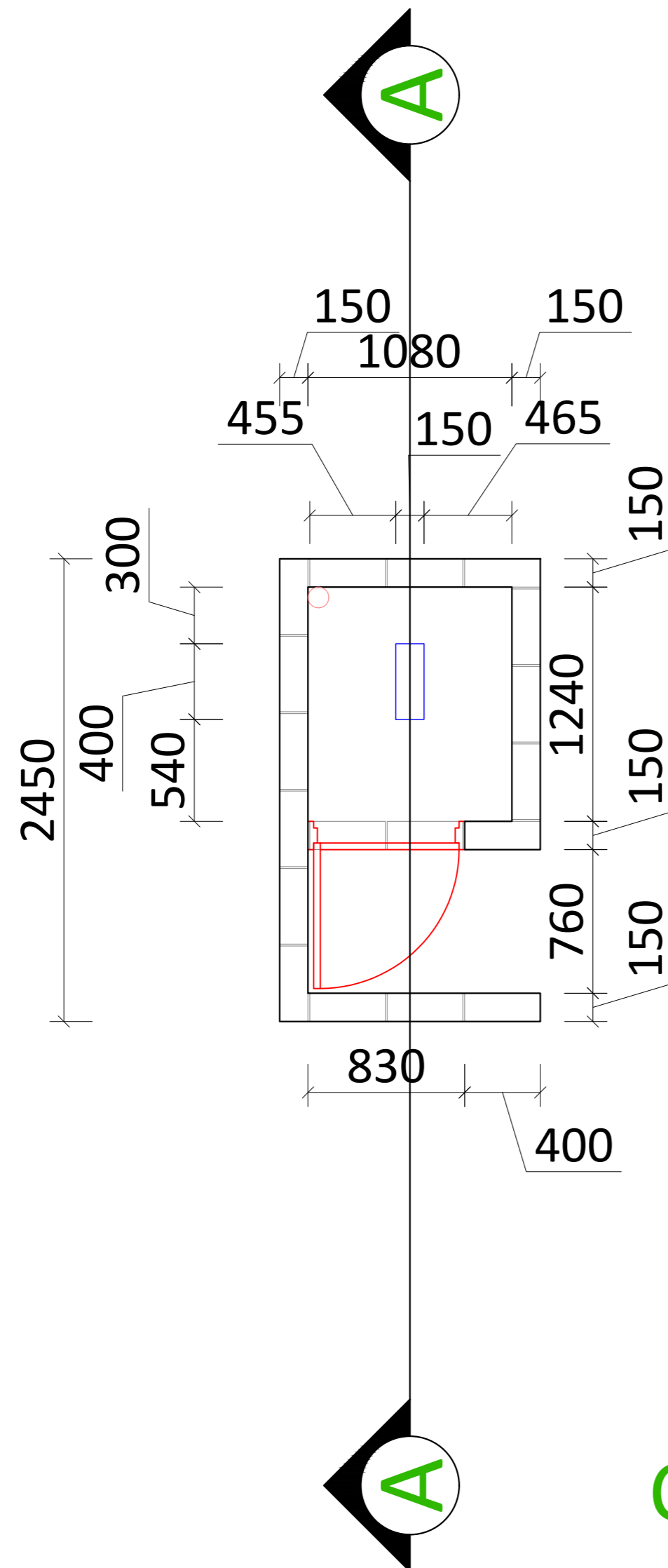
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Prototype ALL - LATRINE

NOTES

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ROOF

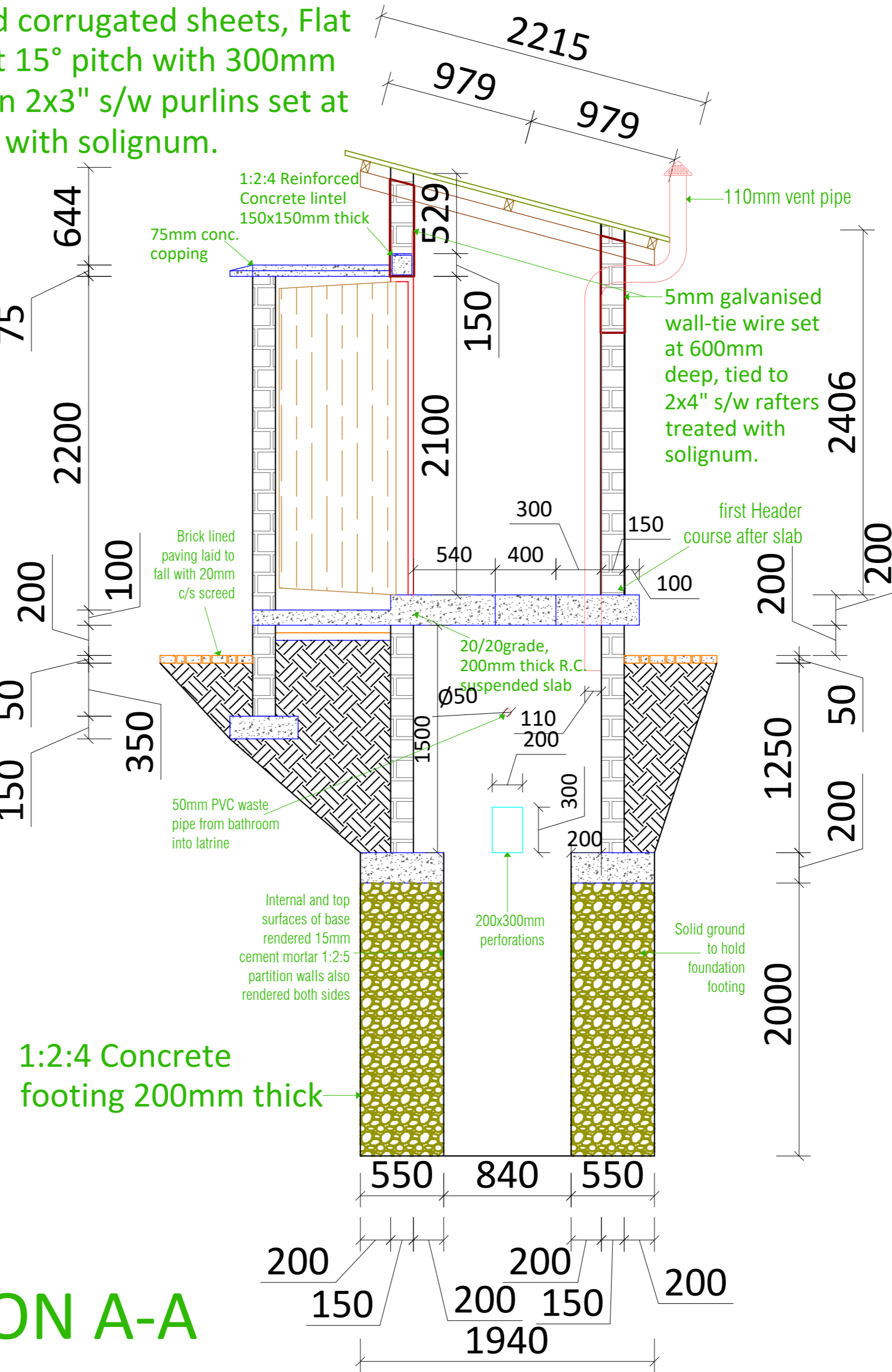
28 gauge galvanised corrugated sheets, Flat roof coverage set at 15° pitch with 300mm overhang, resting on 2x3" s/w purlins set at 979mm c/c treated with solignum.

FOUNDATION

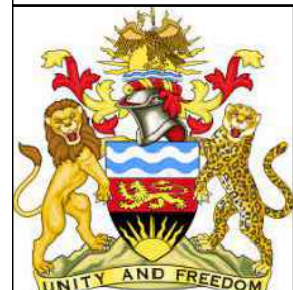
1:3:6 reinforced conc. base (or brick stepped footing) on 1:5 mix burnt cement block foundation walls on 200mm concrete base

minimum foundation depth for curtain wall - 500mm

1:4 c/s plaster of external skirting and painted to approval finish



CROSS SECTION A-A



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Prototype ALL - LATRINE

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