



Centre of Excellence for Food Processing and Fisheries- Education Block Ha. Dhidhdhoo

ARCHITECTURAL & STRUCTURAL DRAWINGS

Ministry of Higher
Education

Sheet Index					
Layout ID	Layout Name	Revision	Issued	Published	Remark
	Cover		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Sheet Index		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.1.1	Site Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.1.2	Building Allocation Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.2.01	Ground Floor Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.2.02	First Floor Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.2.03	Second Floor Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.2.04	Roof Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.2.05	Roof level 2		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.3.01	Section 1		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.4.01	Elevation 1 & 2		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.4.02	Elevation 3 & 4		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.5.01	All Opening Schedule		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.5.02	All Opening Schedule		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.5.03	All Opening Schedule		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.5.04	All Opening Schedule		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.5.05	All Opening Schedule		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
A.5.06	All Opening Schedule		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.1.1	Structural Notes 01		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.1.2	Structural Notes 02		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.1.3	Structural Notes 03		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.2.01	Column Layout		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.2.02	Foundation Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.3.01	First Floor Beam Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.3.02	Second Floor Beam Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.3.03	Roof Beam Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.3.04	Roof Beam Level 2		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.4.1	First Floor Slab Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.4.2	Second Floor Slab Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.4.3	Roof Slab Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B.4.4	Roof Slab Level 2		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.1.1	Structural Details 01		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.1.2	Structural Detail 02		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.1.3	Structural Deatils - 03		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.1.4	Window Construction Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.1	Staicase Ground Floor		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.2	Staircase Ground Floor		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.3	Staircase Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.4	Balcony Details		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.5	Canopy Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.6	Curtain Wall Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.7	Screen Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.8	Screen Detail 2		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.9	Auditorium plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.10	Auditorium Structural Plan		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.11	Auditorium Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.12	Lift Spec		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.13	Lift Reinforcement Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.14	Boundary Wall Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C.2.15	Gate Detail		<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries–
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

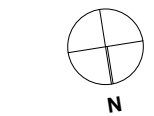
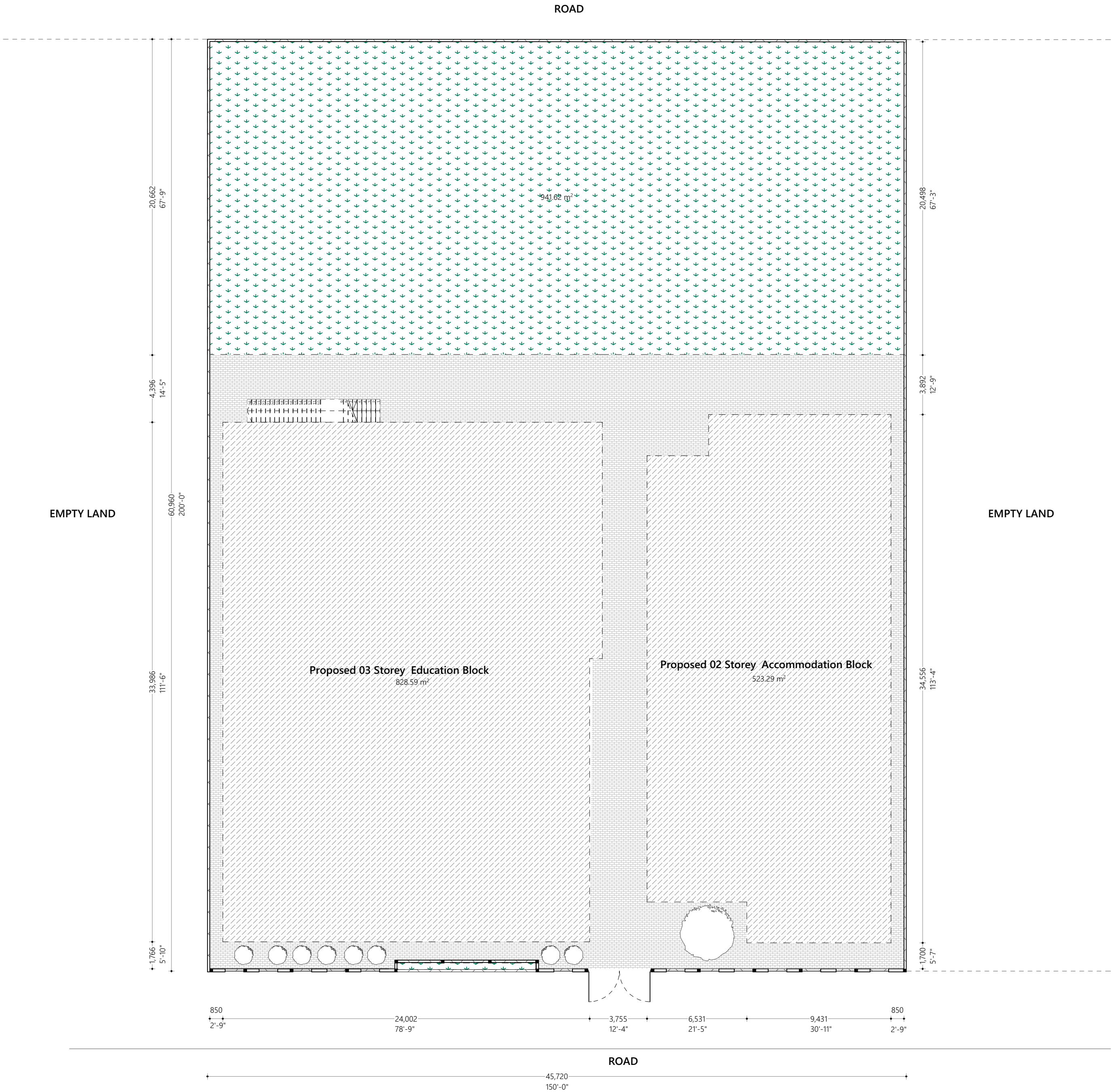
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 **E** info@epoch.associates
W epoch.associates **A** G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:



Site Plan
1:200

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo
Client
Ministry of Higher Education
30/11/2021
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

EPOCH
P (+960) 33 33 528 E info@epochassociates
W epochassociates A Gilman Way 3rd Floor,
Huraa/Heena Magu, Malé, Maldives

Rev: Page:
A.1.1

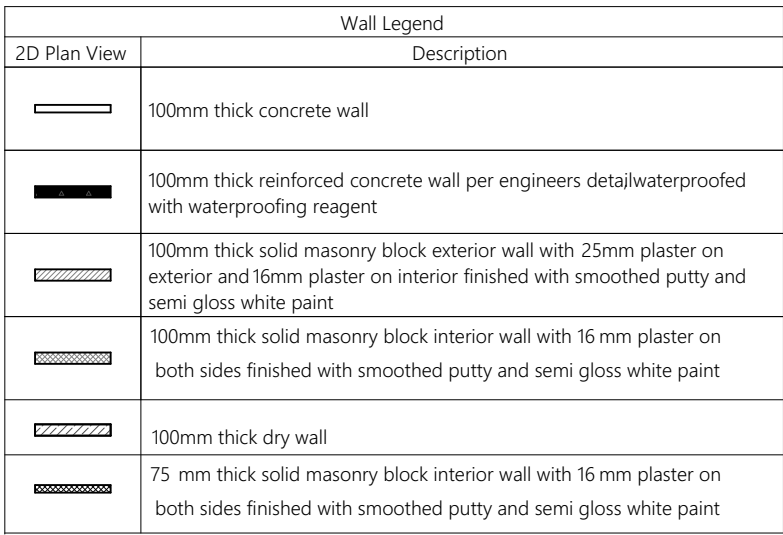


Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo
Client
Ministry of Higher Education
30/11/2021
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Alshath Shadhny Afzal**

EPOCH
P (+960) 33 33 528 E info@epochassociates
W epochassociates A Gilmary West 3rd Floor,
Hunnuheena Magu, Malé, Maldives
Rev: Page:
A.1.2

Building Allocation Plan
1:200





Proposed

**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client
Ministry of Higher Education

30/11/2021

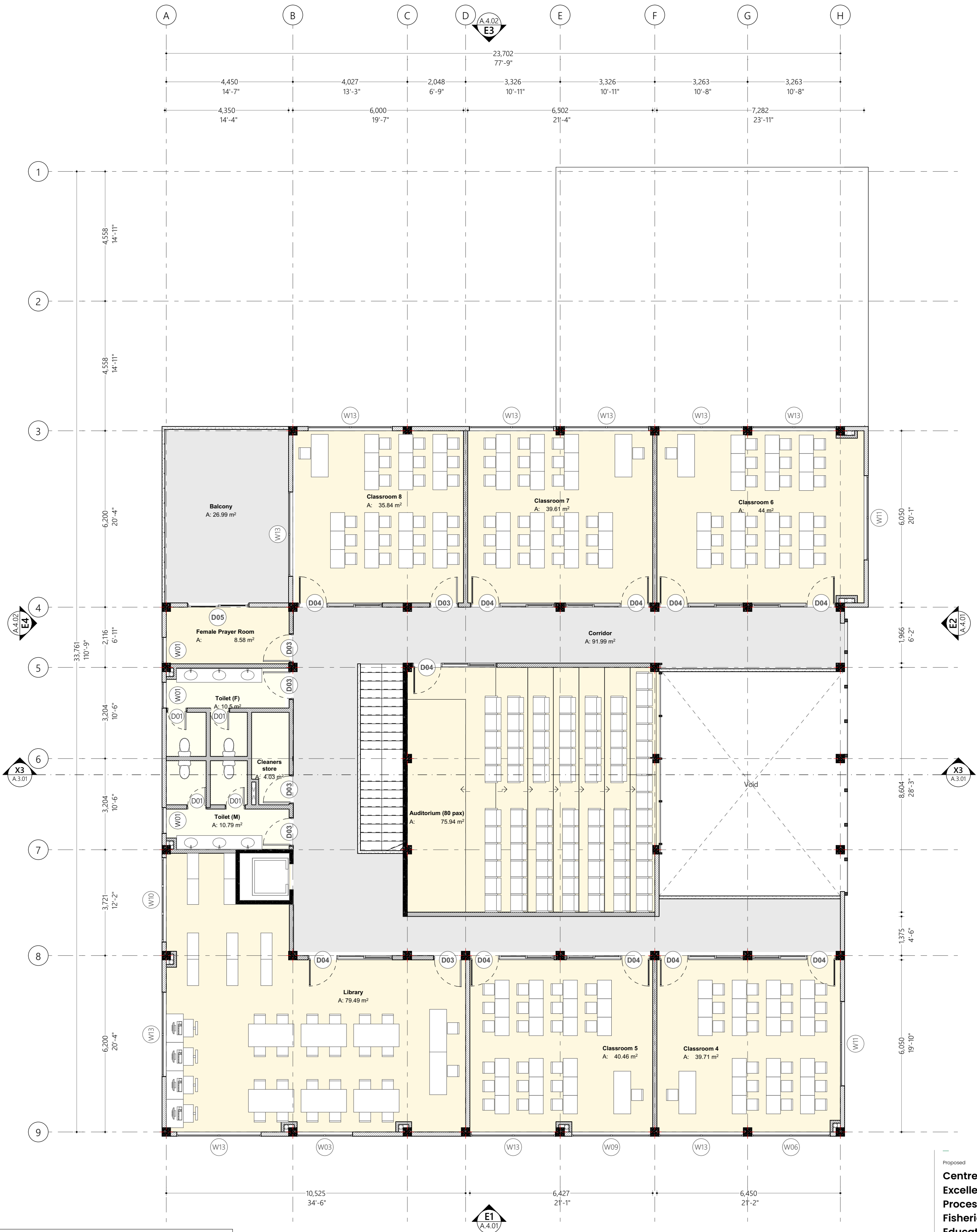
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**









P (+960) 33 33 528 **E** info@epoch.associates
W epoch.associates **A** G.Rosary West 3rd Floor,
Husseinbeena Maanu, Male', Maldives

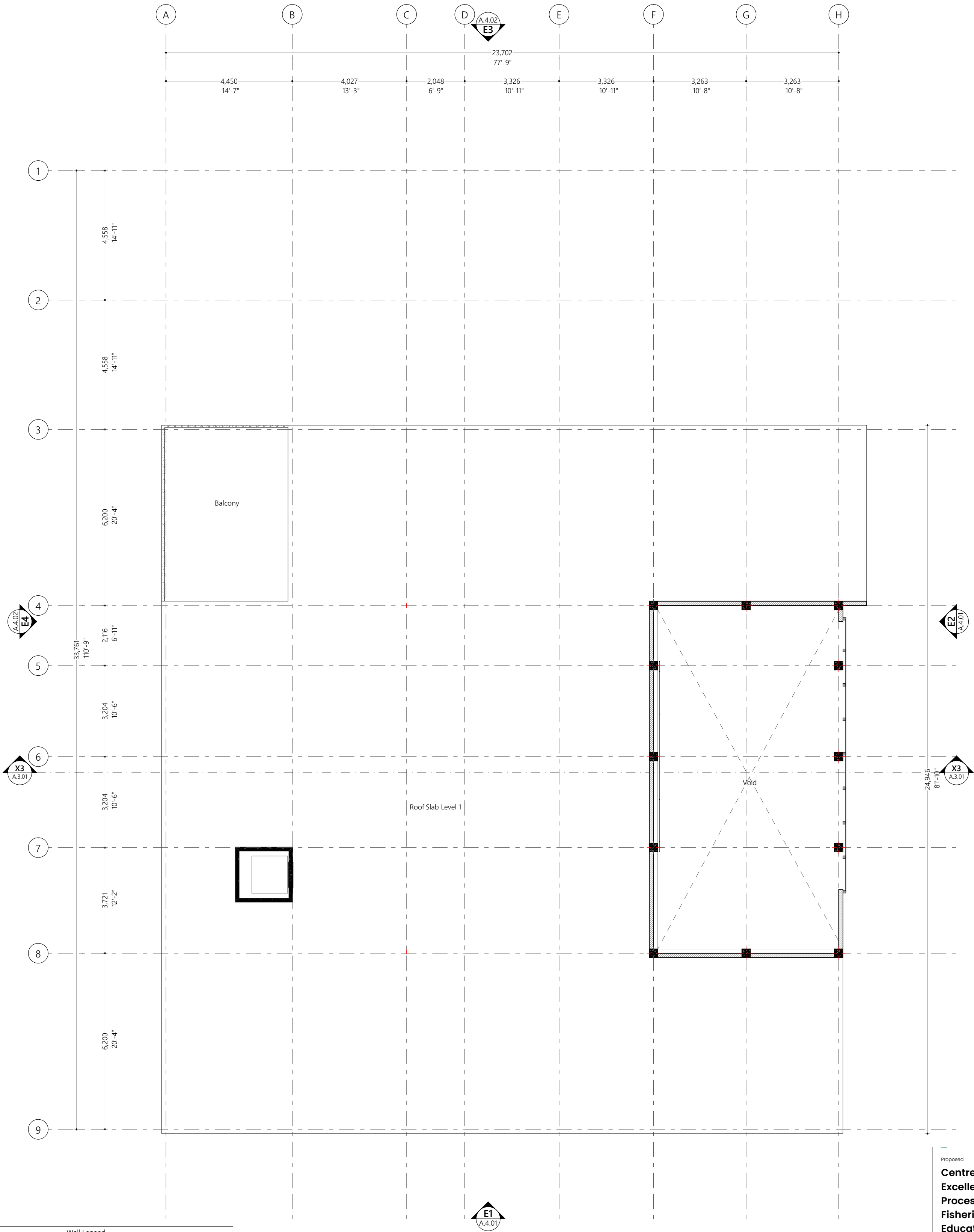
Rev: Page:
A.2.02

Wall Legend	
2D Plan View	Description
	100mm thick concrete wall
	100mm thick reinforced concrete wall per engineers detailwaterproofed with waterproofing reagent
	100mm thick solid masonry block exterior wall with 25mm plaster on exterior and 16mm plaster on interior finished with smoothed putty and semi gloss white paint
	100mm thick solid masonry block interior wall with 16 mm plaster on both sides finished with smoothed putty and semi gloss white paint
	100mm thick dry wall
	75 mm thick solid masonry block interior wall with 16 mm plaster on both sides finished with smoothed putty and semi gloss white paint









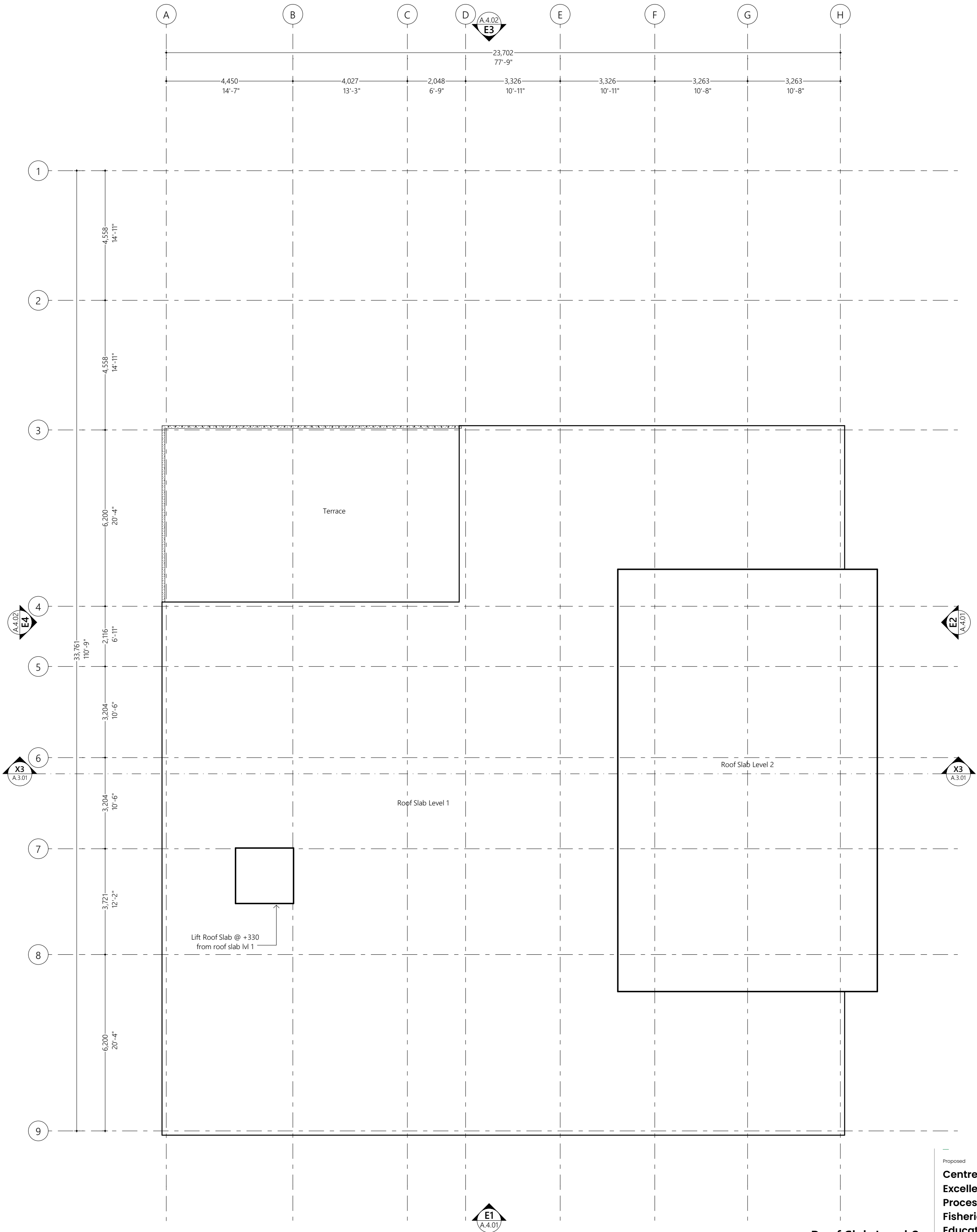
Second Floor Plan
1:100

Wall Legend	
2D Plan View	Description
	100mm thick concrete wall
	100mm thick reinforced concrete wall per engineers detailwaterproofed with waterproofing reagent
	100mm thick solid masonry block exterior wall with 25mm plaster on exterior and 16mm plaster on interior finished with smoothed putty and semi gloss white paint
	100mm thick solid masonry block interior wall with 16 mm plaster on both sides finished with smoothed putty and semi gloss white paint
	100mm thick dry wall
	75 mm thick solid masonry block interior wall with 16 mm plaster on both sides finished with smoothed putty and semi gloss white paint



Roof Slab Level 1
1:100

Wall Legend	
2D Plan View	Description
	100mm thick concrete wall
	100mm thick reinforced concrete wall per engineers detailwaterproofed with waterproofing reagent
	100mm thick solid masonry block exterior wall with 25mm plaster on exterior and 16mm plaster on interior finished with smoothed putty and semi gloss white paint
	100mm thick solid masonry block interior wall with 16 mm plaster on both sides finished with smoothed putty and semi gloss white paint
	100mm thick dry wall
	75 mm thick solid masonry block interior wall with 16 mm plaster on both sides finished with smoothed putty and semi gloss white paint



Roof Slab Level 2
1:100



Building Section
1:100

Proposed
**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client
Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

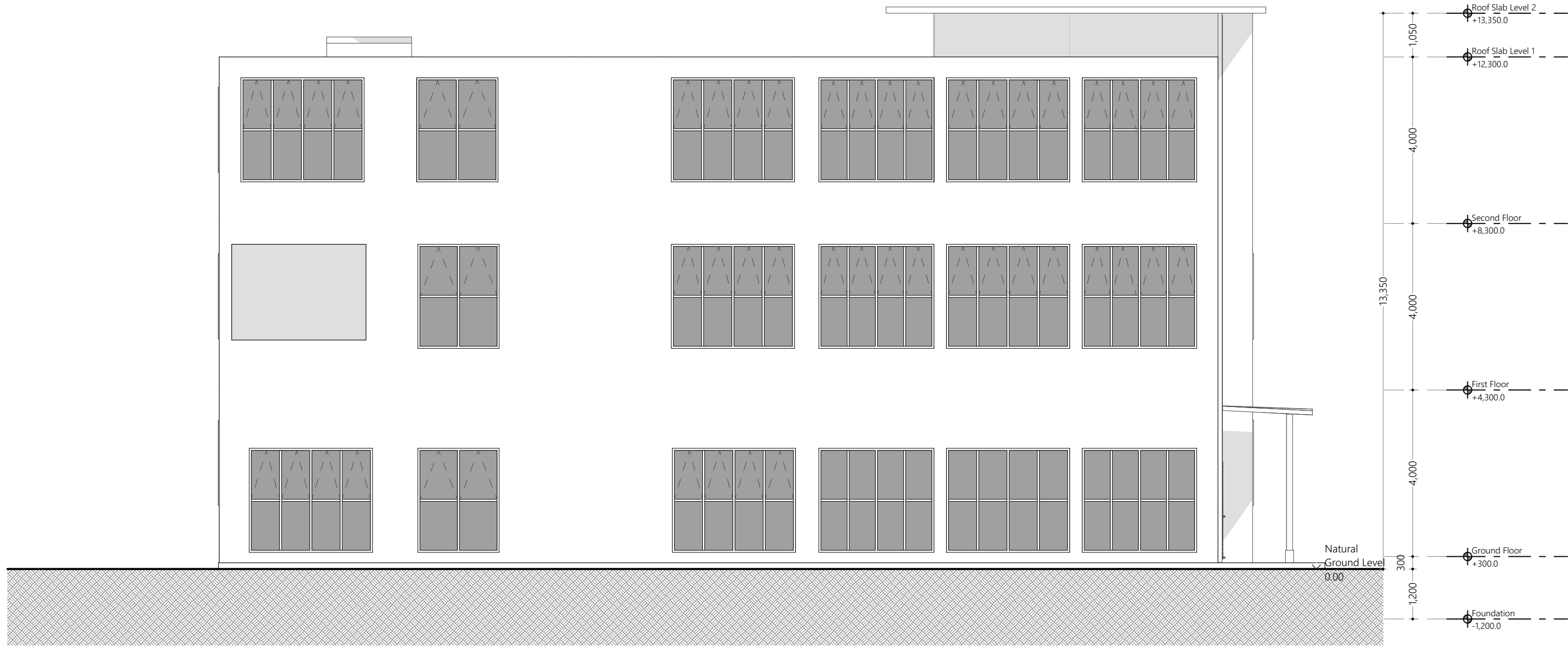


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

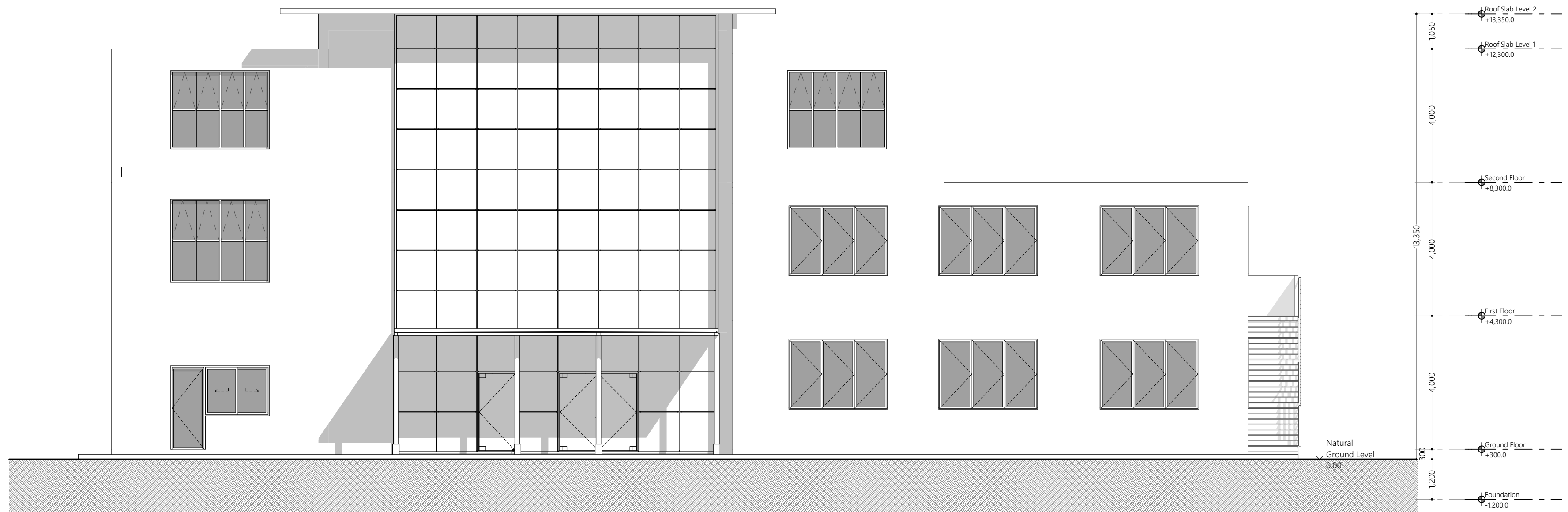
Rev:

Page:

A.3.01



Elevation E1
1:100



Elevation E2
1:100

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo

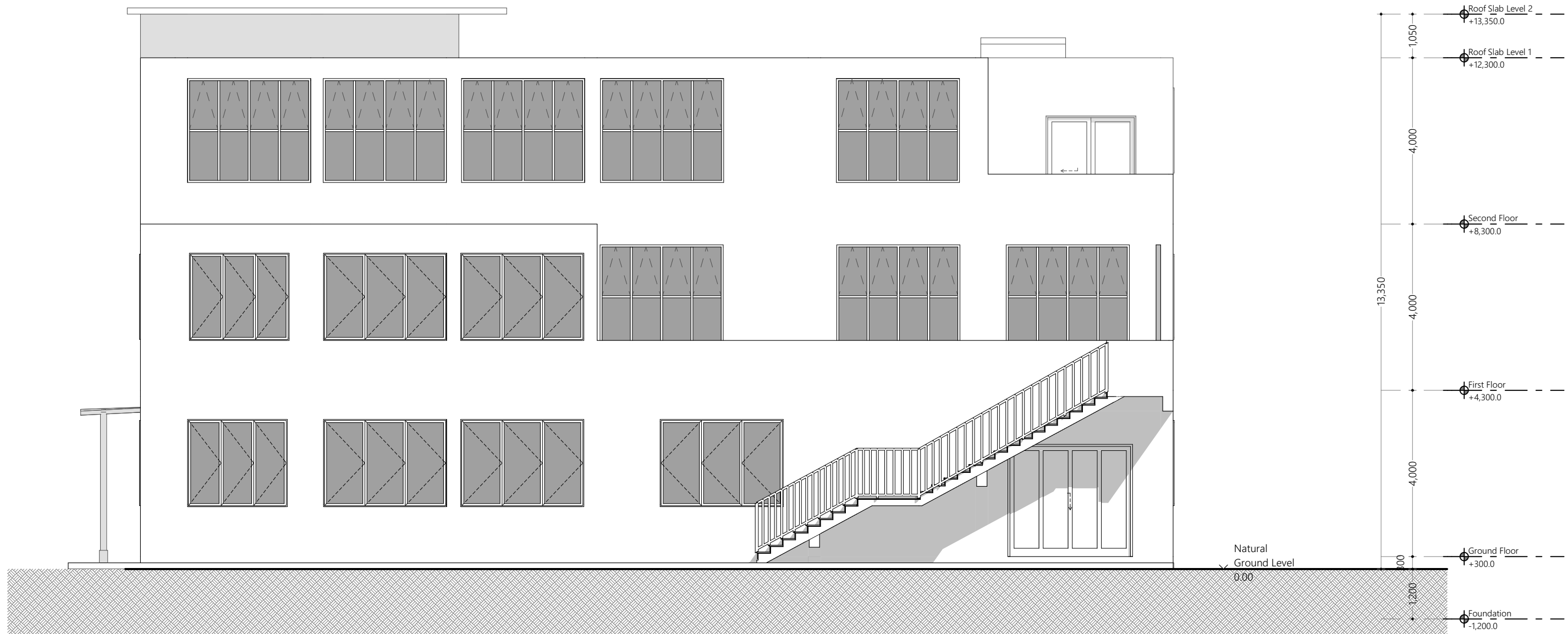
Client
Ministry of Higher Education

30/11/2021

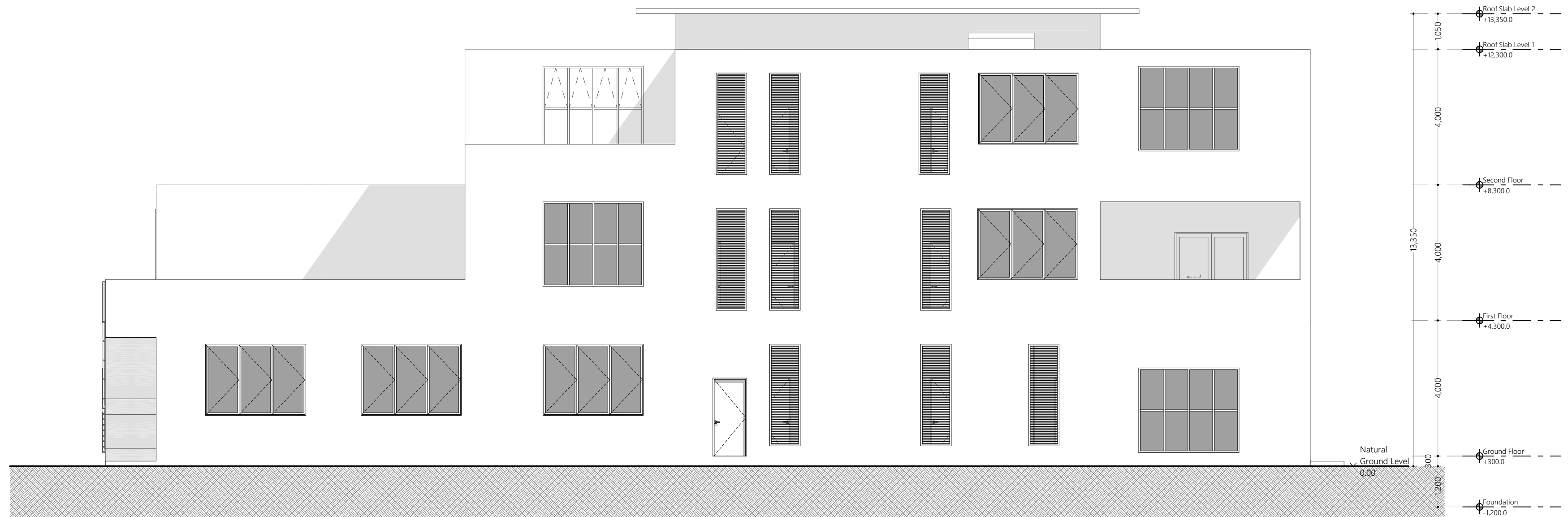
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epochassociates
W epochassociates A Gilman West 3rd Floor,
Huraa/Heena Magu, Malé, Maldives



Elevation E3
1:100

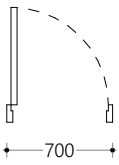
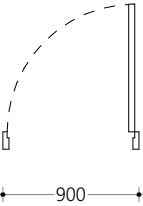
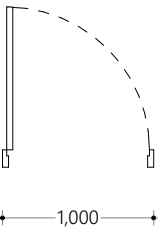
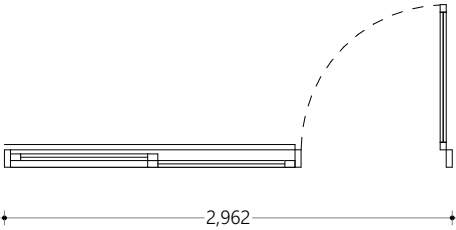
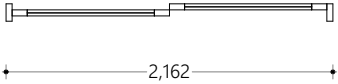
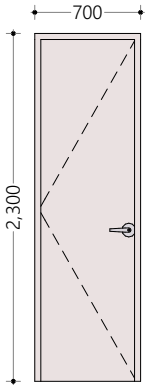
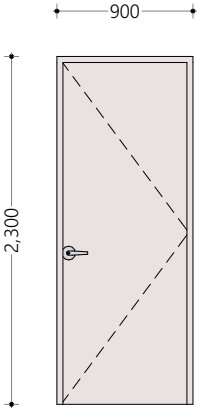
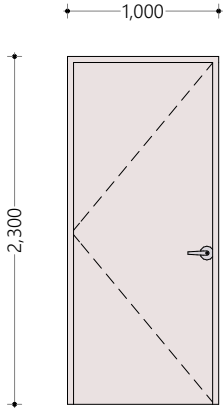
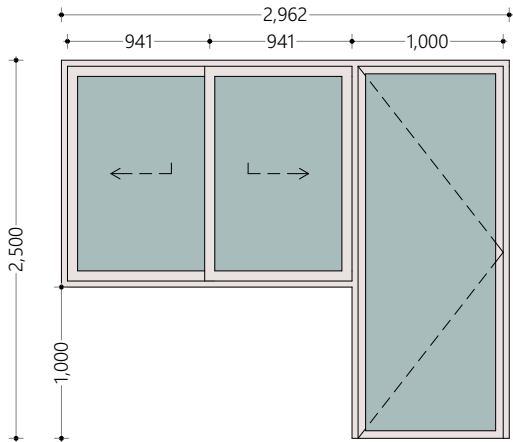
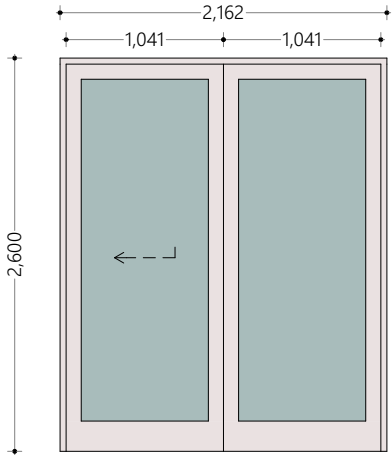


Elevation E4
1:100

Proposed
**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**
Client
Ministry of Higher Education
30/11/2021
Architect **Fathmath Ikhda Amir**
Engineer **Muawiyath Abdul Sattar**
Drawn By **Alshath Shadhny Afzal**

EPOCH
P (+960) 33 33 528 E info@epochassociates
W epochassociates A Gilmary West 3rd Floor,
Huraaheena Magu, Malé, Maldives

Rev: Page:
A.4.02

All Openings Schedule					
Element ID	D01	D02	D03	D04	D05
Quantity	12	17	25	22	2
W x H Size	700×2,300	900×2,300	1,000×2,300	2,962×2,500	2,162×2,600
Sill height	0	0	0	0	0
Head height	2,300	2,300	2,300	2,500	2,600
2D Symbol					
View from Side Opposite to Opening Side					
Frame	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour
Door Leaf	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour
Window Sash	---	---	---	---	---
Glazing	(No Glazing)	(No Glazing)	(No Glazing)	01 Reflective Glass	01 Reflective Glass

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door leaf thicknesses are 35mm
All window sash thickness are 25mm
All frame edges shal be trimmed 3mm
All wooden components should be wood stained finish
All aluminum components to be powder coated (min. 60 microns)

All aluminum panels should be of 6mm thick unless specified
All glazing should be of 6mm unless specified

External units must comply the following weather conditions:
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant
and the wedges trimmed with 12X12mm hardwood beading fixed to
frames by brass nails

Sealent shall be provided at all joints while fabrication

All hardware should be provided for the performance of al functions
of the units
Hinges shall confirm to

1) Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets

2) Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets
Door knobs shall be1000mm above FFL

All Openings Schedule

1:1

Proposed

Centre of Excellence for Food Processing and Fisheries– Education Block Ha. Dhidhdhoo

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev: Page:

A.5.01

All Openings Schedule				
Element ID	D06	W01	W02	W03
Quantity	2	9	1	2
W x H Size	3,000×2,700	904×3,000	1,954×2,500	1,954×2,500
Sill height	0	300	100	1,000
Head height	2,700	3,300	2,600	3,500
2D Symbol				
View from Side Opposite to Opening Side				
Frame	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour
Door Leaf	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	---	---	---
Window Sash	---	50mm Thick powder coated (60 microns) Aluminum louvers of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour
Glazing	01 (No Glazing)	01 Reflective Glass	01 Reflective Glass	01 Reflective Glass

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door leaf thicknesses are 35mm
All window sash thickness are 25mm
All frame edges shal be trimmed 3mm
All wooden components should be wood stained finish
All aluminum components to be powder coated (min. 60 microns)

All aluminum panels should be of 6mm thick unless specified
All glazing should be of 6mm unless specified

External units must comply the following weather conditions:
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant
and the wedges trimmed with 12X12mm hardwood beading fixed to
frames by brass nails

Sealent shall be provided at all joints while fabrication

All hardware should be provided for the performance of al functions
of the units
Hinges shall confirm to

1) Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets

2) Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets
Door knobs shall be1000mm above FFL

All Openings Schedule
1:1

Proposed
Centre of Excellence for Food Processing and Fisheries– Education Block Ha. Dhidhdhoo

Client
Ministry of Higher Education

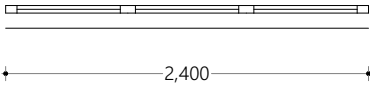
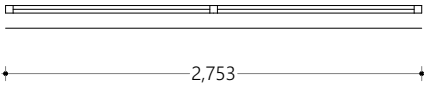
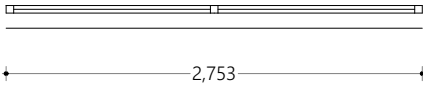
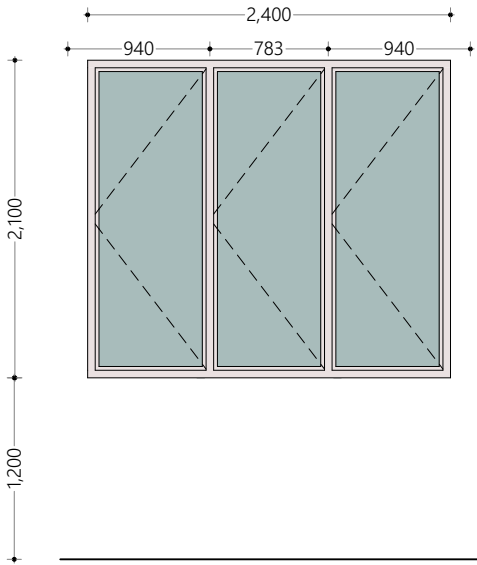
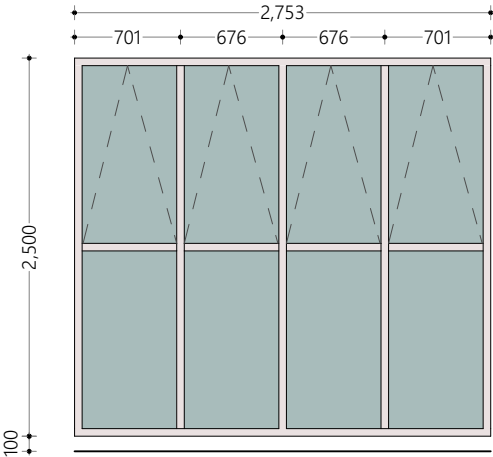
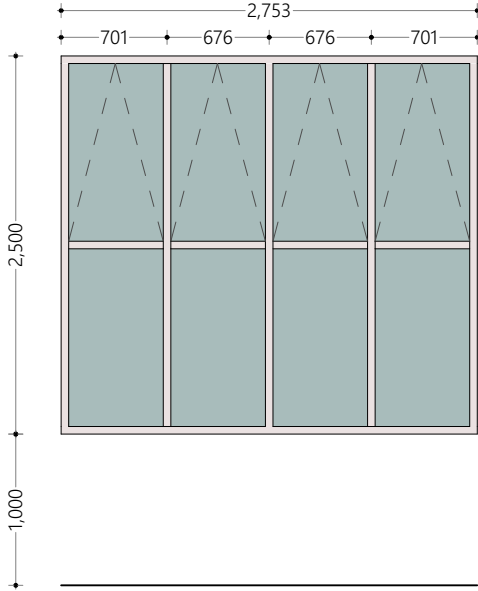
30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev: Page:

All Openings Schedule			
Element ID	W04	W05	W06
Quantity	2	1	2
W x H Size	2,400×2,100	2,753×2,500	2,753×2,500
Sill height	1,200	100	1,000
Head height	3,300	2,600	3,500
2D Symbol			
View from Side Opposite to Opening Side			
Frame	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour
Door Leaf	---	---	---
Window Sash	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour
Glazing	01 Reflective Glass	01 Reflective Glass	01 Reflective Glass

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door leaf thicknesses are 35mm
All window sash thickness are 25mm
All frame edges shal be trimmed 3mm
All wooden components should be wood stained finish
All aluminum components to be powder coated (min. 60 microns)

All aluminum panels should be of 6mm thick unless specified
All glazing should be of 6mm unless specified

External units must comply the following weather conditions:
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant
and the wedges trimmed with 12X12mm hardwood beading fixed to
frames by brass nails

Sealent shall be provided at all joints while fabrication

All hardware should be provided for the performance of al functions
of the units
Hinges shall confirm to

1) Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets

2) Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets
Door knobs shall be1000mm above FFL

All Openings Schedule
1:1

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

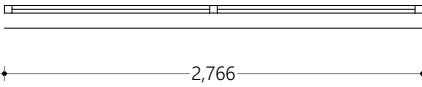
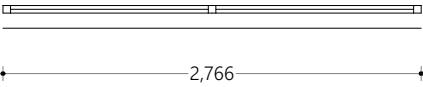
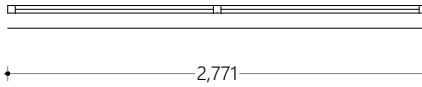
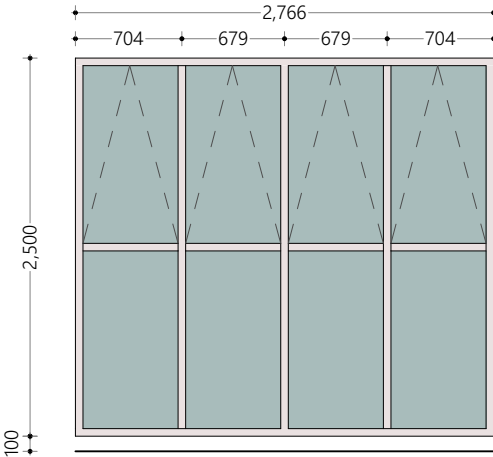
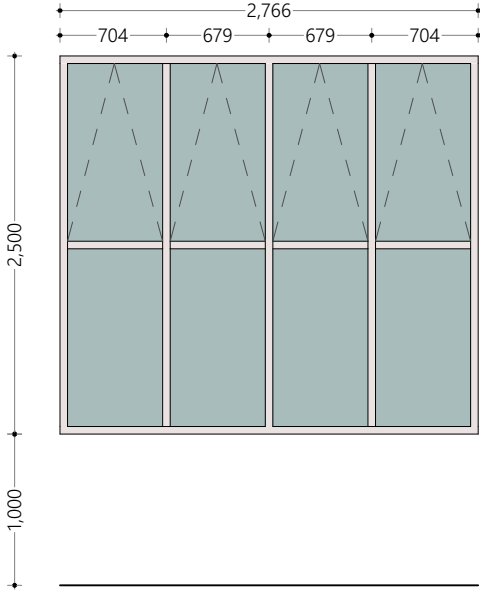
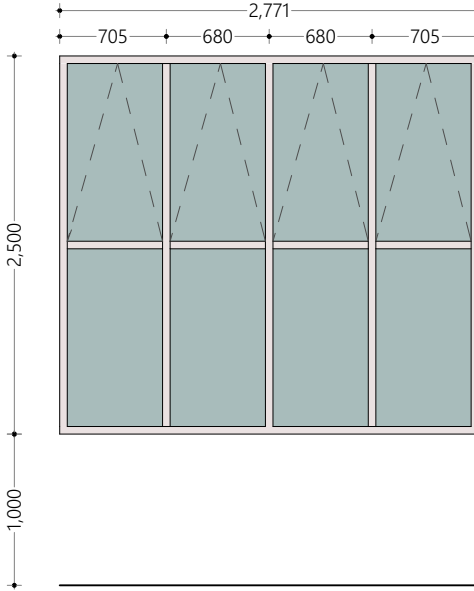
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

All Openings Schedule			
Element ID	W07	W08	W09
Quantity	1	1	1
W x H Size	2,766×2,500	2,766×2,500	2,771×2,500
Sill height	100	1,000	1,000
Head height	2,600	3,500	3,500
2D Symbol			
View from Side Opposite to Opening Side			
Frame	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour
Door Leaf	---	---	---
Window Sash	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour
Glazing	01 Reflective Glass	01 Reflective Glass	01 Reflective Glass

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door leaf thicknesses are 35mm
All window sash thickness are 25mm
All frame edges shal be trimmed 3mm
All wooden components should be wood stained finish
All aluminum components to be powder coated (min. 60 microns)

All aluminum panels should be of 6mm thick unless specified
All glazing should be of 6mm unless specified

External units must comply the following weather conditions:
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant
and the wedges trimmed with 12X12mm hardwood beading fixed to
frames by brass nails

Sealent shall be provided at all joints while fabrication

All hardware should be provided for the performance of al functions
of the units
Hinges shall confirm to

1) Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets

2) Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets
Door knobs shall be1000mm above FFL

All Openings Schedule

1:1

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries–
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

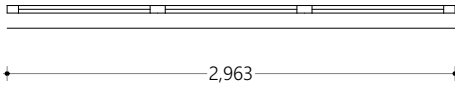
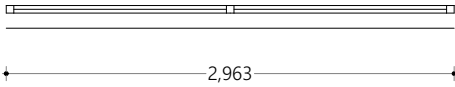
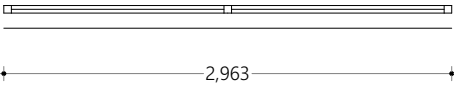
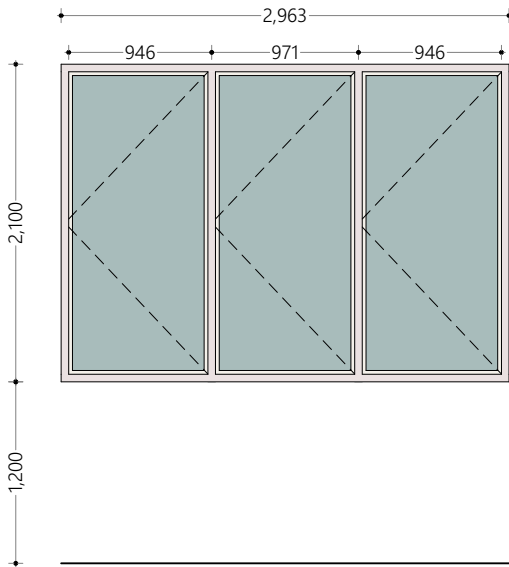
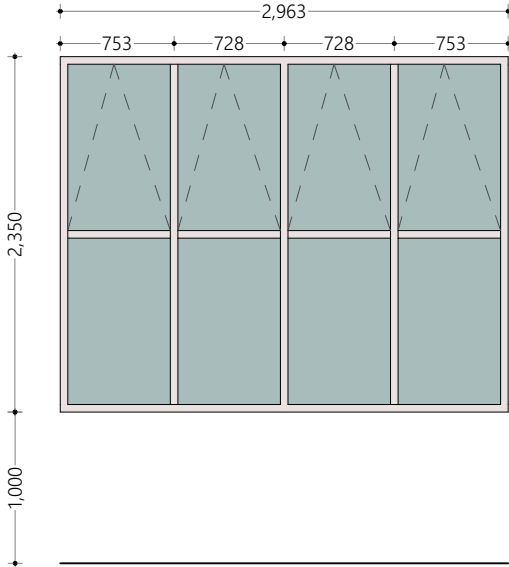
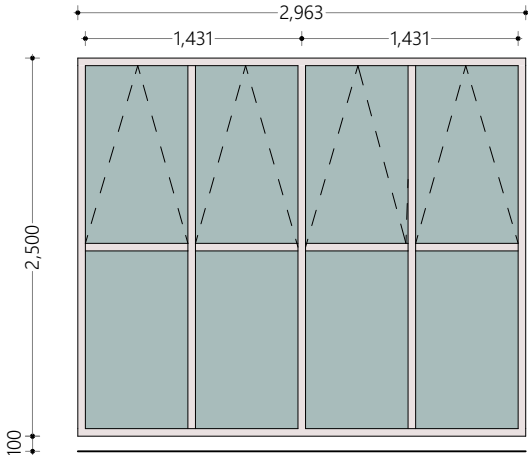
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

All Openings Schedule			
Element ID	W10	W11	W12
Quantity	16	2	4
W x H Size	2,963×2,100	2,963×2,350	2,963×2,500
Sill height	1,200	1,000	100
Head height	3,300	3,350	2,600
2D Symbol			
View from Side Opposite to Opening Side			
Frame	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour	50mm Thick powder coated (60 microns) Aluminum frame of selected colour
Door Leaf	---	---	---
Window Sash	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour	50mm Thick powder coated (60 microns) Aluminum panel of selected colour
Glazing	01 Reflective Glass	01 Reflective Glass	01 Reflective Glass

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door leaf thicknesses are 35mm
All window sash thickness are 25mm
All frame edges shal be trimmed 3mm
All wooden components should be wood stained finish
All aluminum components to be powder coated (min. 60 microns)

All aluminum panels should be of 6mm thick unless specified
All glazing should be of 6mm unless specified

External units must comply the following weather conditions:
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant
and the wedges trimmed with 12X12mm hardwood beading fixed to
frames by brass nails

Sealent shall be provided at all joints while fabrication

All hardware should be provided for the performance of al functions
of the units
Hinges shall confirm to

1) Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets

2) Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets
Door knobs shall be1000mm above FFL

All Openings Schedule
1:1

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries–
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

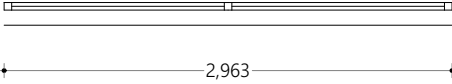
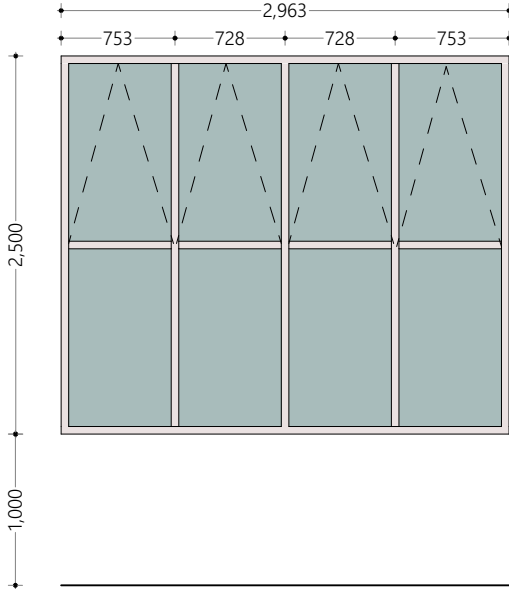
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

All Openings Schedule	
Element ID	W13
Quantity	17
W x H Size	2,963×2,500
Sill height	1,000
Head height	3,500
2D Symbol	
View from Side Opposite to Opening Side	
Frame	50mm Thick powder coated (60 microns) Aluminum frame of selected colour
Door Leaf	---
Window Sash	50mm Thick powder coated (60 microns) Aluminum panel of selected colour
Glazing	01 Reflective Glass

Door and Window Notes

Dimensions shown on DWG indicate effective openings of frame

All frame depths are 100mm
All door leaf thicknesses are 35mm
All window sash thickness are 25mm
All frame edges shal be trimmed 3mm
All wooden components should be wood stained finish
All aluminum components to be powder coated (min. 60 microns)

All aluminum panels should be of 6mm thick unless specified
All glazing should be of 6mm unless specified

External units must comply the following weather conditions:
Wind pressure: 200 kg/sqm
Water tightness: 25 kg/sqm

All external frames / wall joints must be sealed with silicon sealant
and the wedges trimmed with 12X12mm hardwood beading fixed to
frames by brass nails

Sealent shall be provided at all joints while fabrication

All hardware should be provided for the performance of al functions
of the units
Hinges shall confirm to

1) Door size more than 700X1900mm
WD: 125mm X2 sets
SD: 150mm X3 sets

2) Door size less than 700X1900mm
WD: 100mm X2 sets
SD: 125mm X2 sets

Locks shall be cylindrical with master key sets
Door knobs shall be1000mm above FFL

All Openings Schedule

Proposed


Centre of Excellence for Food Processing and Fisheries– Education Block
Ha. Dhidhdhoo

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

**EPOCH**

P (+960) 33 33 528 **E** info@epoch.associates
W epoch.associates **A** G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

A.5.06

1. General notes

- 1.1. Do not scale the drawings. All dimensions shall be read from the drawing or computed. Elevations are in millimeters, distances and reinforcement bar sizes are in millimeters.
- 1.2. In the interpretation of these drawings, indicated dimensions shall govern and distances or sizes shall not be scaled for construction purposes.
- 1.3. The contractor shall coordinate with the arse, ee and other utility and equipment plans for the exact size number and locations of all sleeves or openings through floor slabs, beams and walls. Any discrepancies or conflict in the setting out lines, levels, details, locations, sizes, reinforcement etc. Of the structural member shall be brought to the attention of the engineer prior to commencement of work.
- 1.4. All reinforced concrete work shall be done in accordance with the british structural code bs 8110 or ec-en2 building code.
- 1.5. All structural steel work shall be done in accordance with the british structural code bs 5950 parts 1 to 9 and ec-en3 in so far as they do not conflict with the local building code requirements.
- 1.6. All slabs, beams and other structural elements which are not indicated, detailed, designated or inadvertently omitted but are necessary to be coordinated with architectural and other allied engineering plans as well as to complete the structural works in accordance with the intent of the plans and specifications shall be brought up during pre-bids/meetings/negotiations. It is understood that the contractor has provided and included all these items in his bid.
- 1.7. The contractor shall produce shop drawings and schedules as required for completion of the works and record drawings of the as-built and builder works for the consultant's approval.
- 1.8. Contractor shall do full coordination between structural, architectural and MEP drawings in wet areas to allow for drainage pipes.
- 1.9. All discrepancies shall be brought to the attention of the consultant engineer proceeding with the work on site.
- 1.10. All materials to be used in conjunctions shall comply with the requirements of the specified codes, standards and ordinance of relevant building authorities unless noted otherwise in the project specification and /or drawings.
- 1.11. All dimensions and levels shown on the drawings shall be verified by the contractor. Any discrepancies shall be brought to consultants attention prior to construction.
- 1.12. The contractor shall ensure that during construction no part of the structure is overstressed by excessive construction loads until their completion. Temporary bracing and propping to be provided where required.
- 1.13. Once the excavation is done to a specified depth, the bearing capacity of the soil shall be confirmed by relevant test, if the value is less than the design bearing capacity the engineer is to be informed immediately.
- 1.14. The contractor shall submit a method statement for all elements of work and shall not proceed until consultant's written approval is given. The method statement shall provide the contractor's preferable options where such options are available.
- 1.15. The contractor shall comply with all requirements of the local regulations and requirements of all concerned authorities.
- 1.16. Quality of concrete finish for all non-plastered columns and beams is to be in accordance with fair-faced concrete as reflected on the architectural drawings and specifications.
- 1.17. Any structural requirements specified by relevant authorities, which are not covered in notes and specifications are assumed to be duly considered by the contractor.
- 1.18. All typical details and notes shown on drawings shall apply unless noted otherwise. Typical detail may not necessary be indicated on the plans but shall still apply as shown or described in the details where particular details are noted on the drawings; the specified details shall be used.
- 1.19. The design life of the structure of this project shall maintain a minimum of 50 years life period. The primary structural components are to be designed and detailed to satisfy this requirement. Concrete mix supplier shall submit a life cycle analysis which reflects a 50 years design life without maintenance, inspection and repair requirement during this period.

2. Concrete

- 2.1. All concrete works shall conform to the BS 8110 or EC-EN, a grade of C25/30 indicates that concrete shall have a f_{cu} compressive strength of 30 N/mm² established from test cubes at 28 days equivalent to a compressive strength of 25 N/mm² established from cylinder tests at 28 days.
- concrete mix design shall comply with BS 5500-1:2006 as follows:
- | Mix Number | 1 | 2 | 3 | 4 |
|---|---------|-----------|---------|----------|
| Grade | C30/37 | C25/30 | C25/30 | C16/20 |
| Min cement content (kg/m ³) | 380 | 340 | 340 | 300 |
| Cement Type | SRC | SRC / OPC | OPC | SRC |
| Max free W/C ratio | 0.4 | 0.45 | 0.45 | 0.55 |
| Slump | 75 ± 25 | 75 ± 25 | 75 ± 25 | 100 ± 25 |
| Aggregate | 20 | 20 | 20 | 20 |
- mix 1 - used in reinforced concrete works for structures at sea/exposed to sea, water retaining structures and tank structures.
- mix 2 - used in reinforced concrete works for ground level and below (sub-structure) or any reinforced concrete works in contact with soil or water.
- mix 3 - used in reinforced concrete works above ground floor level (superstructure) for horizontal members (beams/slabs) and vertical members (columns/walls).
- mix 4 - used for plain concrete blinding and mass fill.

- 2.2. Contractor shall implement a trial mix in accordance with the project specifications & authority requirements. Trial mix results shall be submitted for engineer's review & approval prior to commencing concreting.
- 2.3. Contractor shall submit the details of additives, plasticizers, micro silica, curing compounds, waterproofing agents, etc. Application should follow strictly the manufacturer recommendation. It is contractors responsibility to ensure that all constituents of concrete are compatible to each other.

- 2.4. Maximum percentage (by weight) of salt contents permissible in aggregates used for concrete, hollow blocks & hourdi blocks, etc, shall be as follows:
- a) acid soluble chlorides in aggregate - (fine 0.03%, coarse 0.02%)
 - b) acid soluble sulphate in aggregate - (fine 0.3%, coarse 0.2%)

- 2.5. Concrete shall be cured by an approved means in accordance with the specifications.

- 2.6. Aggregates shall be from approved source and in accordance with the specifications.

- 2.7. Openings, sleeves:
- a) no holes, sleeves or penetrations be placed vertically or horizontally through beams unless approved by the engineer.
 - b) no holes to be made in slabs unless approved by the engineer.

- 2.8. Construction joints:
- a) the contractor shall submit to the engineer for approval a plan marked up showing the location of all construction joints
 - b) horizontal construction joints shall not be made in beams, unless approved by the consultant or engineers.
 - c) vertical construction joints may be located at midspan of slabs or beams after reviewed and approved by the engineers.
 - d) contractor shall submit shear friction and the additional required reinforcement calculation of construction joint at any location) for engineers review and approval.

3. Reinforcement

- 3.1. The reinforcement used in the reinforced concrete shall be round, deformed type 2 bars marked as (t) to indicate high yield strength of 460 N/mm² to BS 4449 or type 500b to EC-EN. The carbon equivalent of rebars should not exceed 0.51 for grade 460.
- 3.2. Reinforcement details shown are indicative. The contractor shall prepare detailed shop drawings & full bar schedules in accordance with the design drawings and shall be cut and bent in accordance with BS 8666 and ACI 315-09 for the engineer's approval at least four weeks prior to commencement of reinforced concrete work and after coordinating with all concerned parties.
- 3.3. Lap lengths and anchorage lengths of reinforcement shall be as per BS 8110 and EC-EN. Additional lapping if required to be provided with engineer's approval. The minimum lap length of reinforcement shall be the maximum of (45 bar dia in general and 50 dia for tension) or the values of the table a.

Table a : schedule of lap splices

Bar dia	lap splices length (mm)
10	500
12	600
16	800
20	1000
25	1250

- 3.4. Spacer bars in beams shall be a minimum 125 or the size of bar if greater at 1000 mm c/c; chairs in slabs shall be a minimum 12 @ 1000 mm c/c; and minimum ties in walls shall be 8 @ 1000 mm c/c.

- 3.5. Clear cover to reinforcement including links, stirrups, and ties shall be as follows:

A) structure in contact with ground

- Footings = 55 mm
- Wall and column = 50 mm
- Ground beam = 50 mm
- Slab at ground level = 50 mm

B) super structure

- Columns = 40 mm
- Beams = 35 mm
- Slabs = 30 mm
- Walls = 40 mm
- All concrete elements in contact with water/splash zone = 75 mm

- 3.6. Reinforcement bars to be cut, bent or adjusted to clear all openings and interfering structures to suit at site to the approval of the consultant or engineer.

- 3.7. For holes in slabs up to 300x300 sq., reinforcement is to be cut and replacement bars fixed adjacent to the hole extending 50x bar diameter beyond the hole.

4. Fire resistance

- 4.1. All structural concrete members between units on boundaries are designed to maintain fire resistance of 2 hours.

Proposed

Centre of Excellence for Food Processing and Fisheries– Education Block Ha. Dhidhdhoo

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

B.1.1

5. Cracking

5.1. The cracking of the structural concrete in general is restricted to 0.30mm.

6. Earthwork & foundations

6.1. Foundation detail design is based on the assumed safe allowable bearing capacity has been taken as 150kpa. The actual requirement for the foundation design is to be verified based on final geotechnical report for the project.

6.2. Excavations for foundations down to formation level shall be carried out by mechanical means, except for the last 100mm of excavation which is to be carried out by manual methods and recommended by geotechnical consultant.

6.3. The formation level of foundation is to be inspected and approved by the geotechnical engineer before commencement of the work.

6.4. Engineering fill (unless specified otherwise as a higher quality material) shall be selected well graded granular material approved by the engineer with a minimum soaked cbr of 15% compacted not exceeding 250mm in layers to 95% maximum dry density as per geotechnical investigation report recommendations in accordance with the specification. However, a minimum cover of 250mm back fill material shall be provided at the top of foundations below the blinding to cast against.

6.5. Efficient site drainage during and after construction of the project should be provided by the contractor.

6.6. Site inspection by a qualified engineer should be carried out after completion of the excavation works and after preparation of the proposed foundation level to ensure that the contact surface is free from any loose/soft layer and properly prepared for the foundation.

7. Concrete workmanship

7.1. All concrete without plaster shall be fair finish unless noted otherwise.

7.2. All concrete surface to have plaster are to be hacked to have an adequate surface key.

7.3. All concrete is to be cured by an approved method-water pounding or curing compound.

7.4. All types of construction joints in concrete shall be at a specified locations and approved by the engineers.

7.5. All substructure concrete works shall be protected with water proofing as per standard details & specifications.

7.6. All concrete shall be compacted using a mechanical vibration process.

7.7. 25x25mm chamfers to external corners and edges shall be provided in accordance with specifications and directed by the engineer.

8. Structural steel

8.1. All structural steel works shall be in accordance with bs 5950 parts 1 to 9 or ec-en3.

8.2. Maximum dimension of holes shall be in accordance with bs 5950 : part 1 : 2000 table 35, unless indicated otherwise.

8.3. The contractor shall provide whatever temporary ties or bracing necessary for a safe and proper erection of the steel structures.

8.4. Welding shall comply with bs en 1011-1: 2009, bs en 1011-2 : 2001 and bs bs en 1011-8 : 2004.

8.5. Contractor shall do a detailed design for aluminum shades and to submit full design calculations and detailed shop drawings for all steel sections and connections to the engineer for approval prior to commencement of fabrication.

8.6. All rolled products and plates shall conform to bs en 10025-2. Cold form welded structural hollow sections shall conform to bs en 10219-1. Hot finish hollow sections shall conform to bs 10210-1 unless noted otherwise on drawings.

8.7. All connections shall be made with minimum 2nos. Galvanized grade 8.8 to bs 3692 with a minimum diameter of 20mm and minimum yield strength of 627mpa and minimum ultimate strength of 765mpa and electrodes to bsd 639, unless noted otherwise.

8.8. Unless noted otherwise on the drawings, all connections shall be in accordance with the following minimum requirements:

- A) all welds shall be at least 6mm continuous fillet welds all around.
- B) all structural bolted connections should be galvanized minimum 85 micron and with a minimum of 2 bolts per connection. Purlin bolts shall be in accordance with the suppliers recommendations.
- C) all gusset plates shall be at least 4mm thick.
- D) all cap plates shall be at least 4mm thick.
- E) all base plates shall be at least 4mm thick.

8.9. As minimum all structural steel members shall be shot blasted to sa 2.5, galvanized, primed & painted as below unless noted otherwise:

- A) hot galvanization (dft 200micron)
- B) primer coat to contain 2 coats of zinc rich epoxy primer (dft 75 micron)
- C) top coat to contain 2 coats of polyurethane enamel paint (dft 125 micron)

8.10. All structural steel work shall be corrosion protected in accordance with the structural specifications.

8.11. All steel should conform to the following:

- A) shs, rhs and chs sections bsen 10210 s275 fy=275mpa
- B) all angles and channels u.n.o bsen 10025 s275 fy=275mpa

8.12. All steel columns to be central on grids or equally spaced between grids unless noted otherwise.

8.13. All steel beams to be central on grids or equally spaced between grids unless noted otherwise.

8.14. All steel dimensions are to center line of section unless noted otherwise.

8.15. All bracing is to be set out on the centroids of bracing members and on the center line of beams and columns unless noted otherwise.

8.16. Where bracing is shown offset from center of members the contractor shall design and provide all necessary stiffeners.

8.17. Contractor to provide all leader railing as required to support free edges not trimmed with cold formed or mild steel work. To be provided in accordance with architect’s drawings.

8.18. Location of any connections, splices not shown in the drawings shall be submitted with design for engineer’s approval. No splices shall be made unless shown in the drawings and as approved by the engineers.

8.19. Contractor shall do a full coordination between architecture and structural drawings for the steel support for shade elements, locations and sizing connections with structural concrete elements and sections. Care shall be taken to prevent dissimilar metal corrosion.

9. Masonry blocks

9.1. Design and construction of all blocks shall comply with bs 5628 : parts 1.2 & 3 : 1992 or en-ec6. The contractor shall submit a construction method statement prior to commencing the works.

9.2. Wall ties in accordance with bs 1248 - cp 121 part 1.73.

9.3. All block wall joints to manufacturers specifications.

9.4. All block work walls are to be considered as non-load bearing partitions unless noted otherwise in drawings.

9.5. Block walls shall be reinforced horizontally and vertically as per manufacturers requirements.

9.6. Masonry wall mechanical properties

young's modulus	= 3.5e+006 kn/m 2
poisson's ratio	= 0.25
density	= 20kn/m3
min.compressive strength	= 3.5 mpa

10. Design & loading

10.1. Consultant design

design and construction of reinforced concrete structural members, shall be in accordance with bs8110 & ec-en2 and the structural steel members to bs 5950 & ec-en3.

10.2. Contractor design

the contractor is responsible for the design of all temporary works. (shoring for excavation, signage... Etc) and the following items of permanent secondary works. (subjected to engineers review and approval)

- a) precast concrete elements
- b) architectural facade and support steelwork
- c) non load bearing feature columns
- d) all secondary steel works
- e) structural steelwork connections
- f) structural support for mep services
- g) shade structures
- h) balustrade and crash barrier
- i) structural glass
- j) interior signage

the design of the primary structure is considering the interfaces with these structures) loading reactions, opening...etc.) And were detailed to accommodate these elements into the design.

the contractor shall submit a full detail design for the wall and boundary wall foundation, also the contractor to do full coordination between the structural foundation for villas (including the water tanks, and the boundary wall for clashes, the contractor shall produce shop drawings for the boundary walls for engineer’s approval.

10.3. Loading

- a) superimposed (dead loads & live loads) as per bs 6399 or en-ec1.
- b) self-weight & densities as per bs 648 or en-ec1.
- c) wind loads as per bs 6399 or en-ec1 (mean wind speed = 25m/s).

11. Timber

11.1. All timbers shall be in accordance with bs 5268 or ec-en5

11.2. All timber members sizes are indicative. Contractor shall coordinate with supplier and submit detail designs for all prefab timber structure for approval.

Proposed

Centre of Excellence for Food Processing and Fisheries– Education Block Ha. Dhidhdhoo

Client

Ministry of Higher Education


30/11/2021

Architect

Engineer

Drawn By

Fathmath Ihudha Amir
Muaviyath Abdul Sattar
Aishath Shadhny Afzal



P (+960) 33 33 528 **E** info@epoch.associates
W epoch.associates **A** G.Rosary West 3rd Floor, Hunsuheena Magu, Male', Maldives

Rev:

Page:

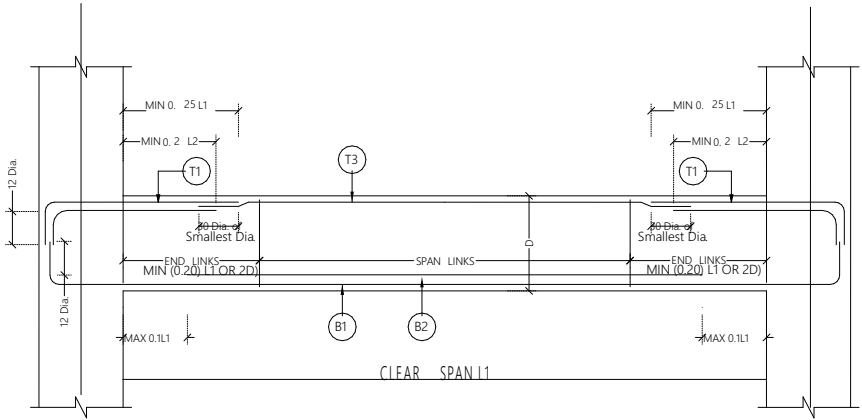
B.1.2

Notes:

1. First stirrups location shall be ≥ 2 from the face of the column/ support
2. Place one b bar in each bottom corner and one t bar in each top corner of the stirrup cage.
3. Condition shown is at columns Where beams and girder intersect use typical interior girder section.
4. All bottom bars and top bars shall be placed in one layer unless two layers are noted in the beam schedule Where to layers are noted provide 25 mm clear between layers If two layers are noted place bar b1 above bar b and bar t above t1.
5. Length of exterior top bars are given only when straight bar occurs otherwise hooked bars are required.
6. Where a member is supported by a column but has another member running perpendicular to it at the same column the first stirrup spacing shall start from the face of the column and not from the face of the transverse beam
7. Top & bottom reinforcement lapping of both main rebars can be ignored if the main rebars at left and right side of lapping location are identical
8. For 'column width less or equal 2m $l^* = \text{'column width'}/2$. For 'column width' greater than 2m, $l^* = 1\text{m}$

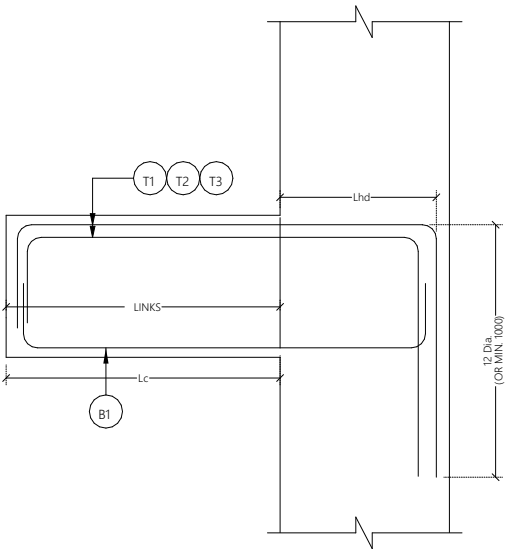
Supplementary abbreviations

- B1 - continuous bottom bars
B2 - additional bottom bars
CE - cantilevered end
D - depth of member, mm
EE - each end
EF - each face
FL - full length
EW - each way
H - aci standard hook
ITB - interior top bar
LE - left end
LG - length
P - paired stirrups
RE - right end
REM - remainder
S - side bars
T1 - top bars at internal supports
T2 - top bars at mid-span
T3 - top bars at end support
W - width of member, mm



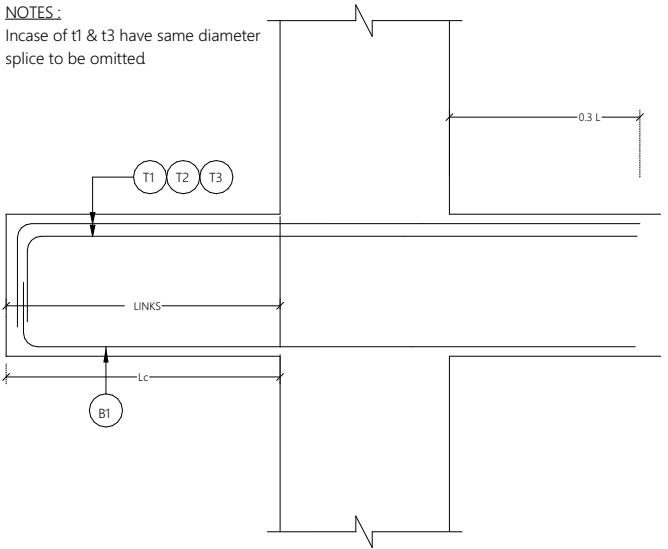
SIMPLE BEAM DETAILS

NTS



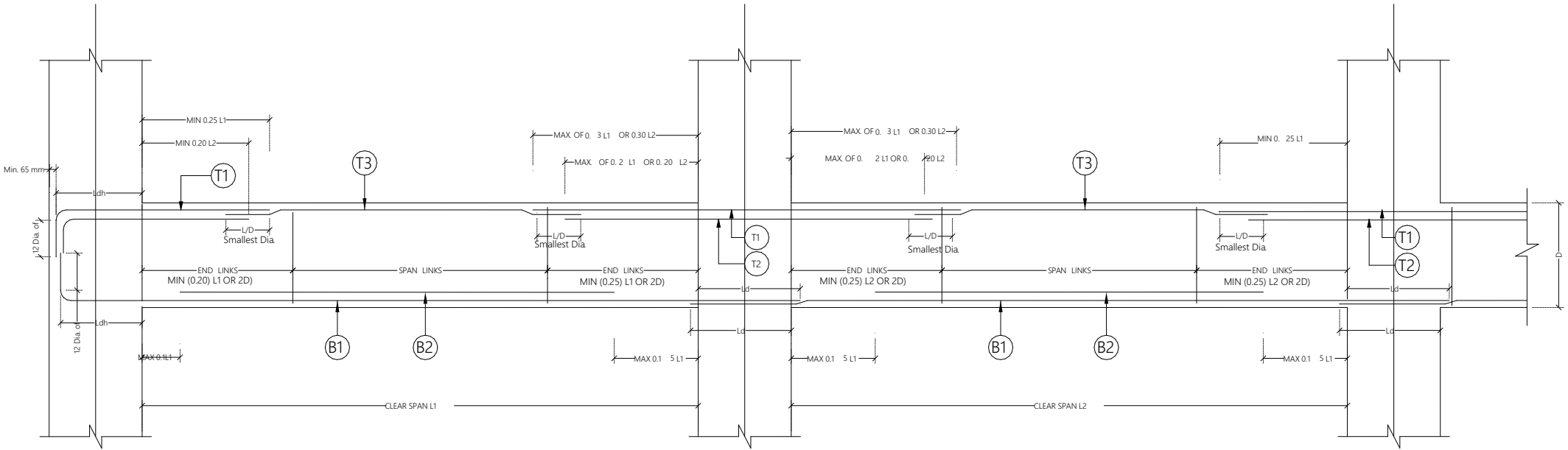
TYPICAL CANTELEVER BEAM FROM COLUMN

NTS



TYPICAL CANTELEVER BEAM CONTINUOUS

NTS



CONTINUOUS BEAM DETAILS

NTS

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

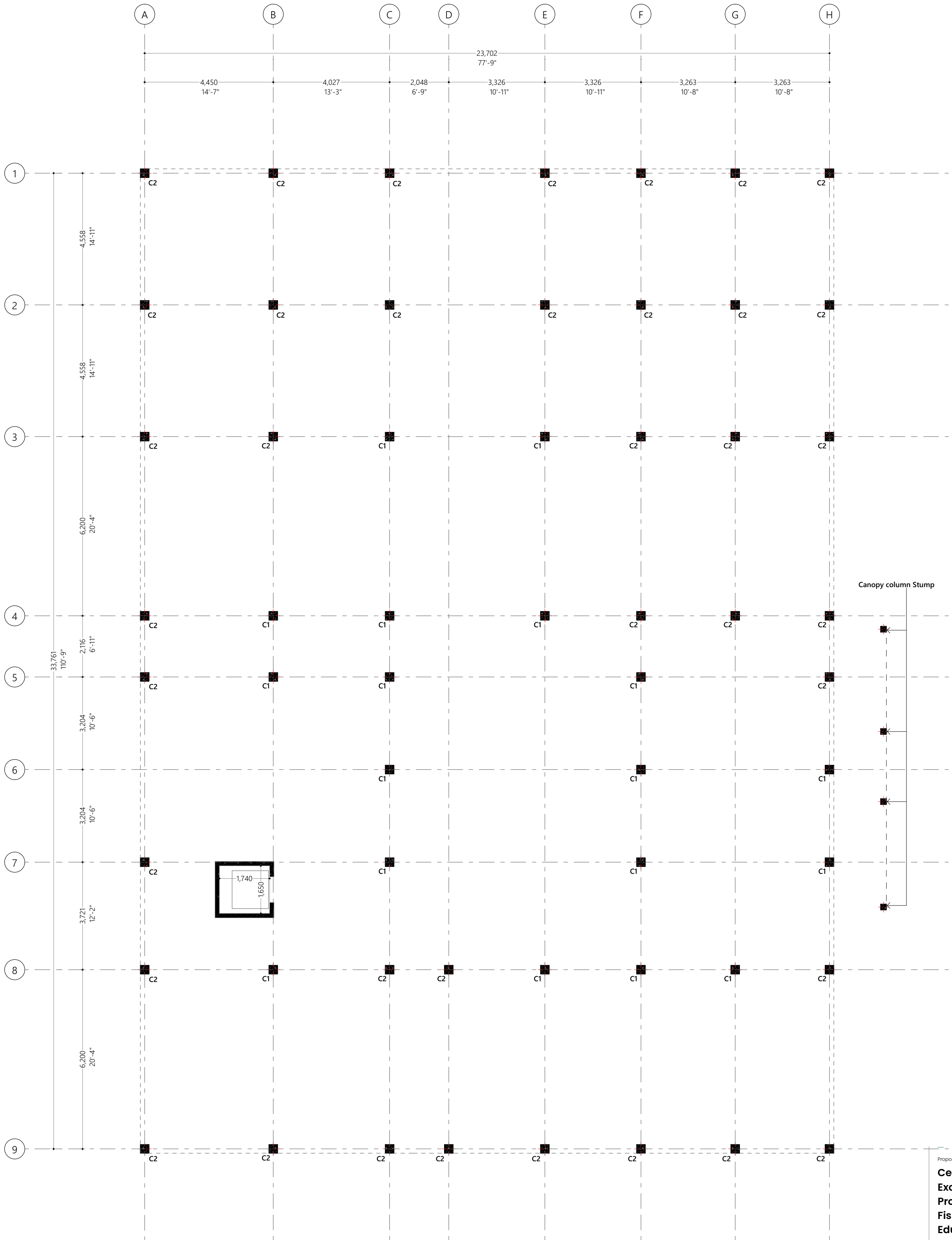


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

B.1.3



Column Layout
1:100

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo

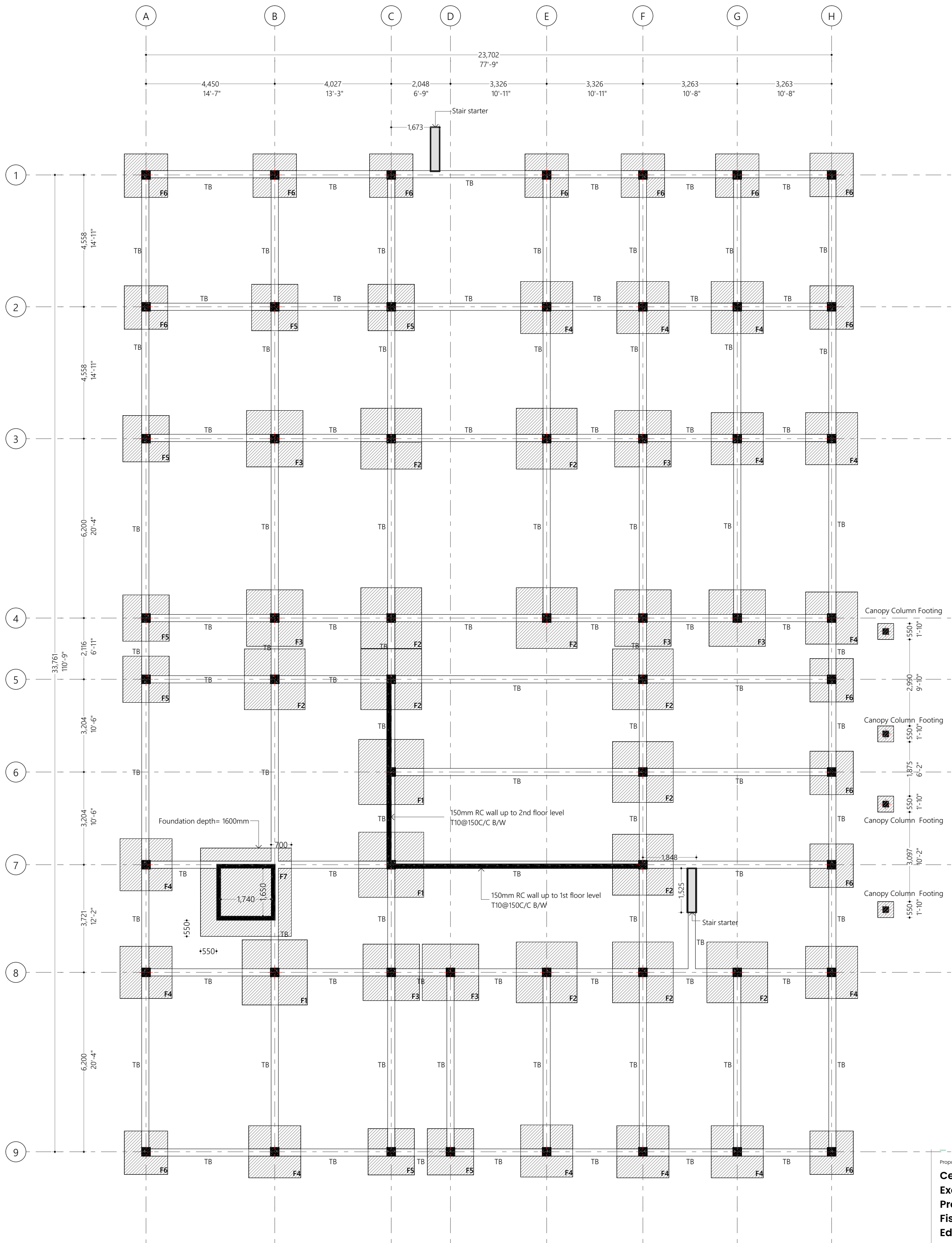
Client
Ministry of Higher Education

30/11/2021

Architect: **Fathmath Ihudha Amir**
Engineer: **Muoviath Abdul Sattar**
Drawn By: **Aishath Shadhin Alzai**



P (+960) 33 33 528 E info@epochassociates
W epochassociates A G.Rosary West 3rd Floor,
Hunnuheena Magu, Male', Maldives

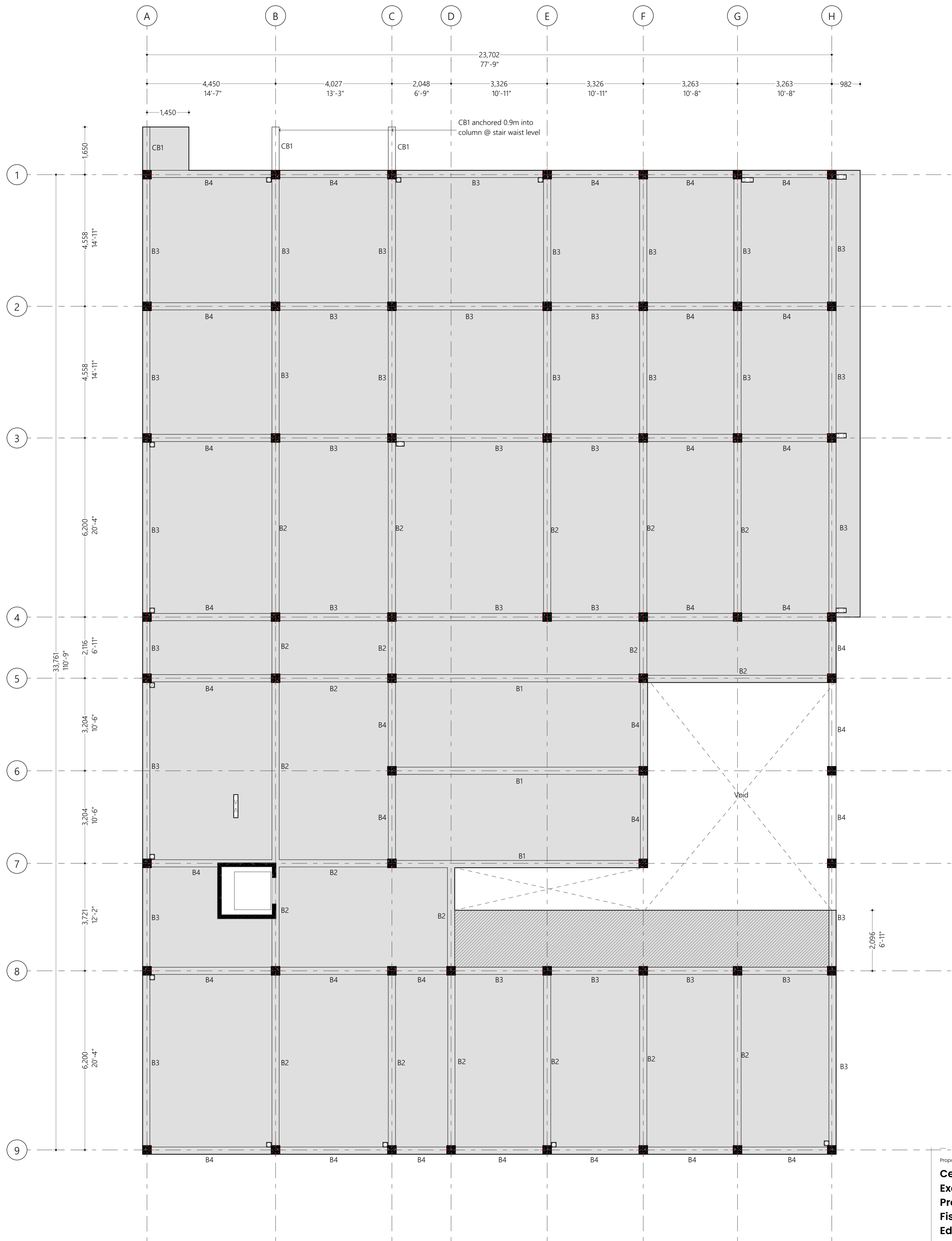


Foundation Details:

	Dimensions	Reinforcement
F1	2250x2250x400	T12@125C/C B/W (B)
F2	2100x2100x400	T12@125C/C B/W (B)
F3	1950x1950x400	T12@125C/C B/W (B)
F4	1800X1800X400	T12@150C/C B/W (B)
F5	1600X1600X400	T12@150C/C B/W (B)
F6	1500x1500x400	T12@150C/C B/W (B)
F7	3140x2900x400	T12@125C/C B/W (T&B)

Foundation Depth = 1200mm unless stated
Ground Slab = 100mm thick RC slab on fill reinforced with T10@200C/C (B/W)
All Footings are to be laid on top of 50mm thick lean concrete
Apply waterproofing to all substructure (below ground elements)

Foundation Plan
1:100



First Floor Beam Plan
1:100

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo

Client
Ministry of Higher Education

30/11/2021

Architect: **Fathmath Ihudha Amir**
Engineer: **Muoviath Abdul Sattar**
Drawn By: **Aishath Shadhin Alzai**

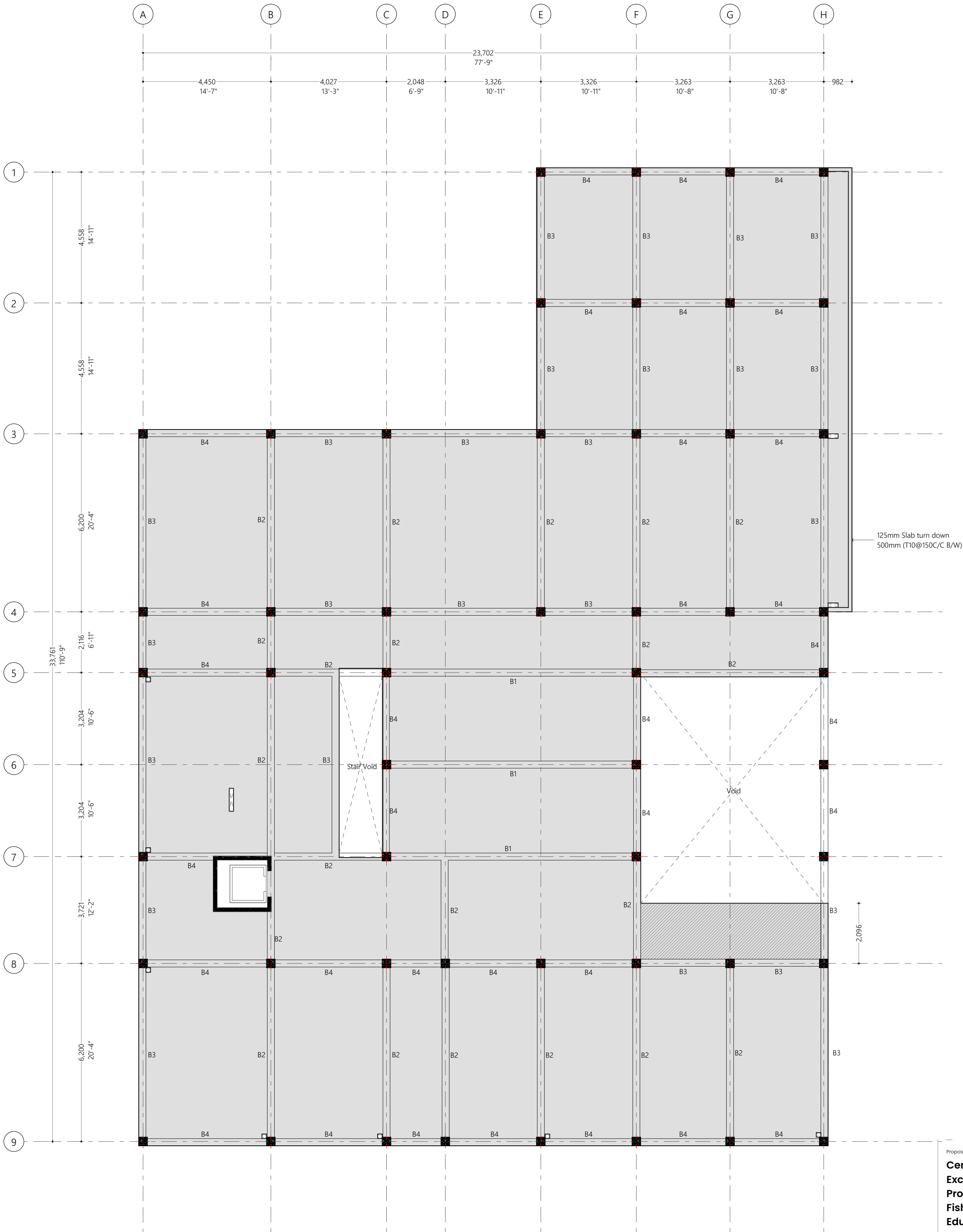


P (+960) 33 33 528 E info@epochassociates
W epochassociates A G.Rosary West 3rd Floor,
Hunnuheena Magu, Male', Maldives

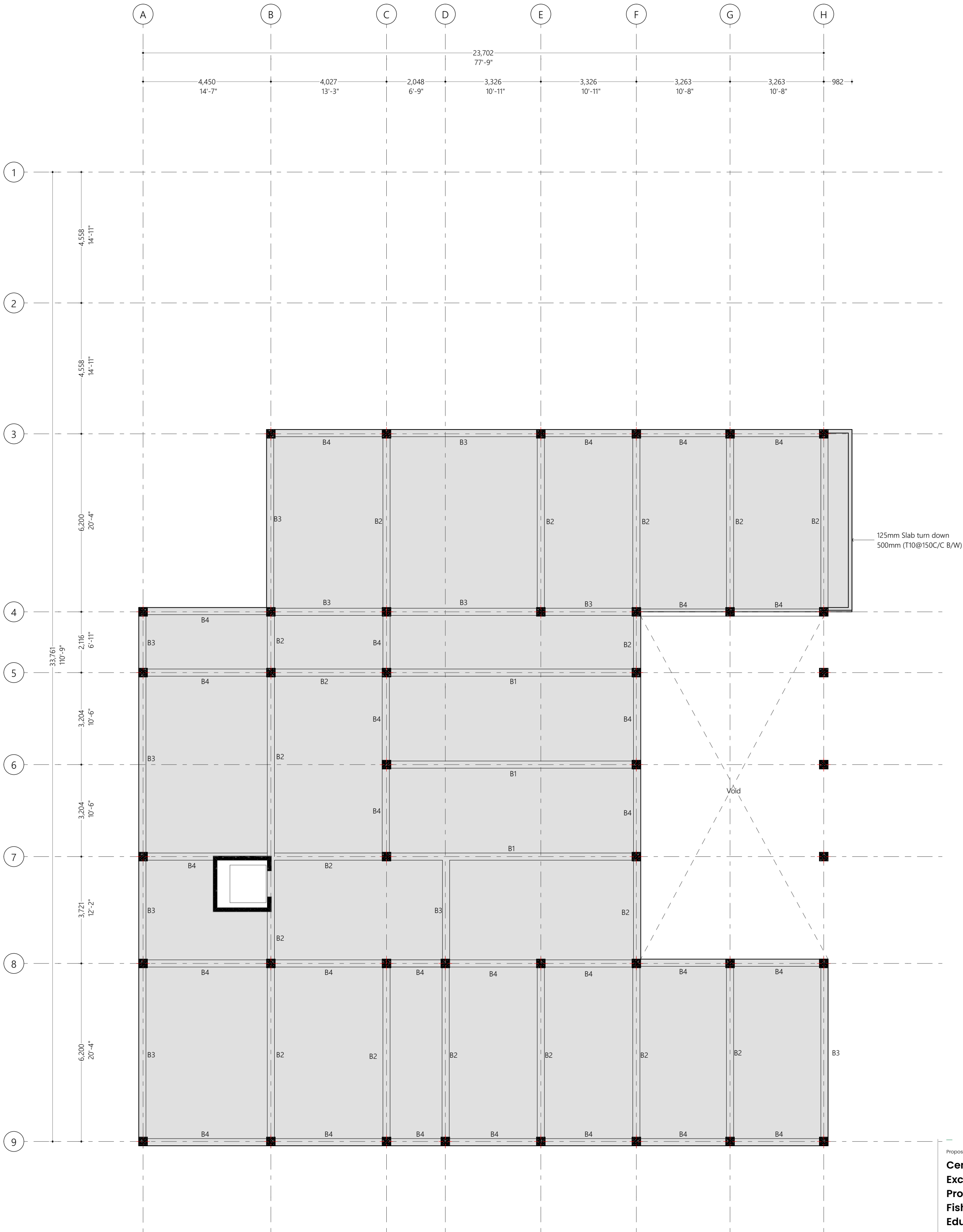
Rev:

Page:

B.3.01



Second Floor Beam Plan
1:100



Roof Beam Plan
1:100

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo

Client
Ministry of Higher Education

30/11/2021

Architect: **Fathmath Ikhutha Amir**
Engineer: **Muaviyath Abdul Sattar**
Drawn By: **Aishath Shadhny Alzai**

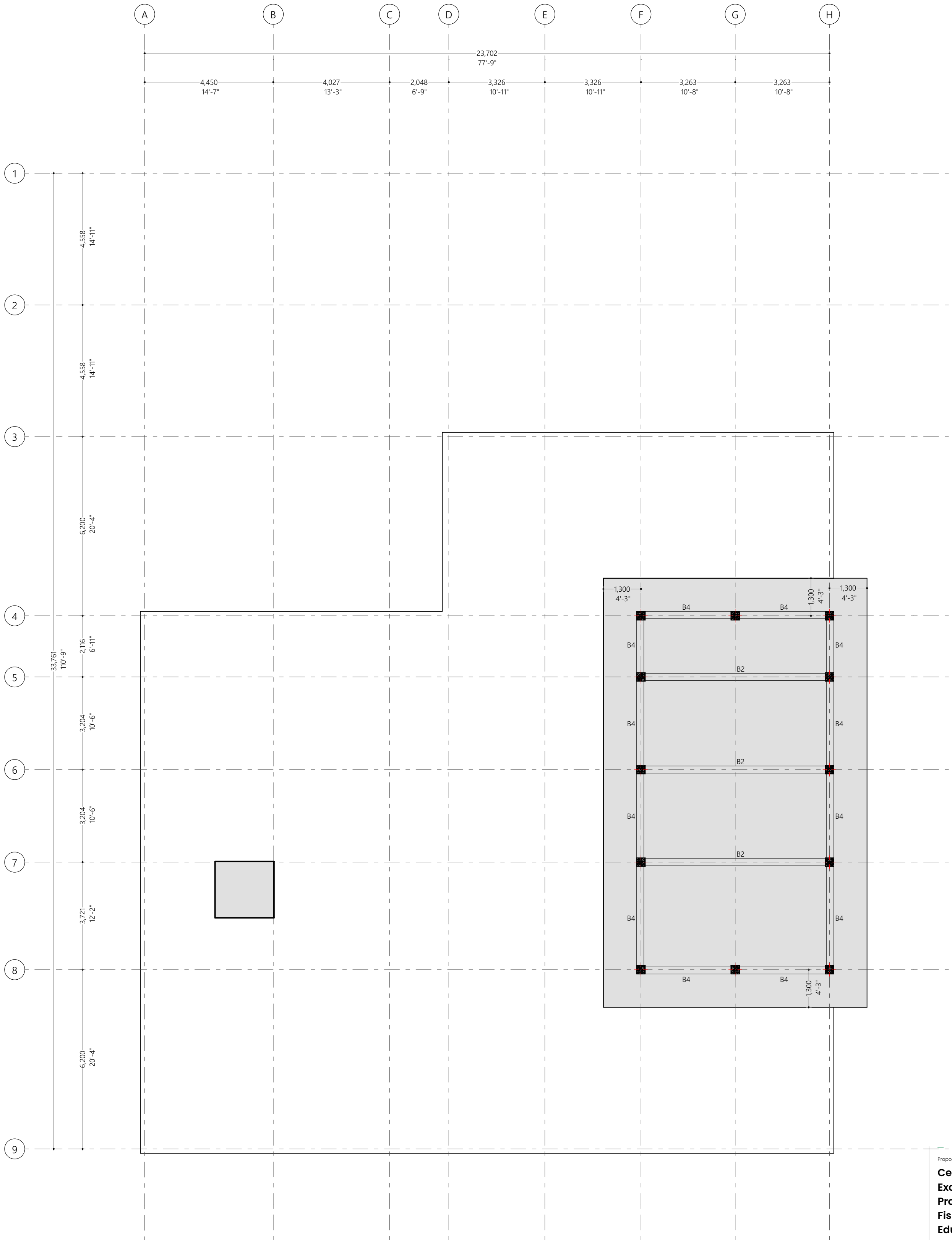


P (+960) 33 33 526 E info@epoch.assoociates
W epoch.assoociates A G.Rosary West 3rd Floor,
Hunnuheena Magu, Male', Maldives

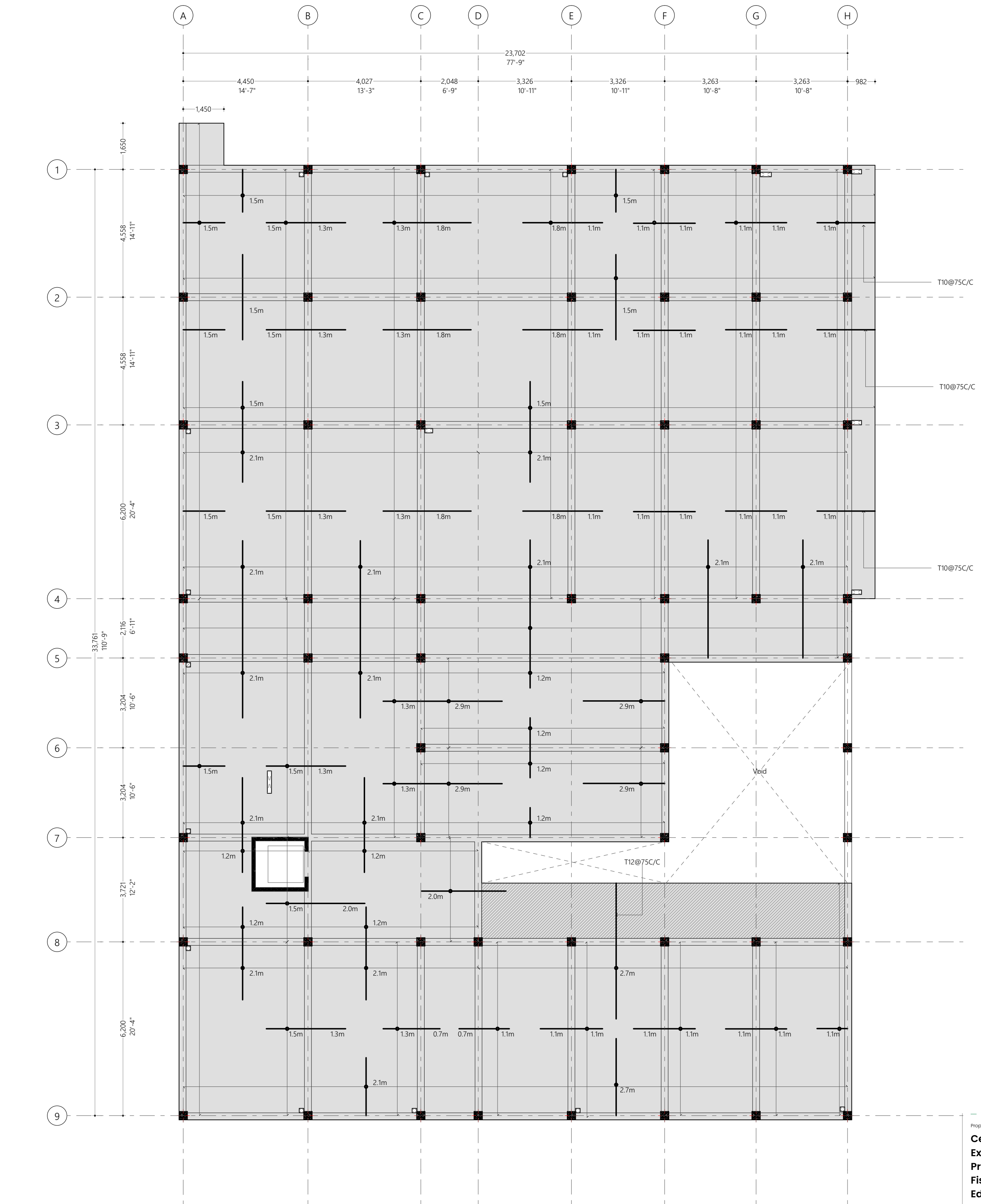
Rev:

Page:

B.3.03



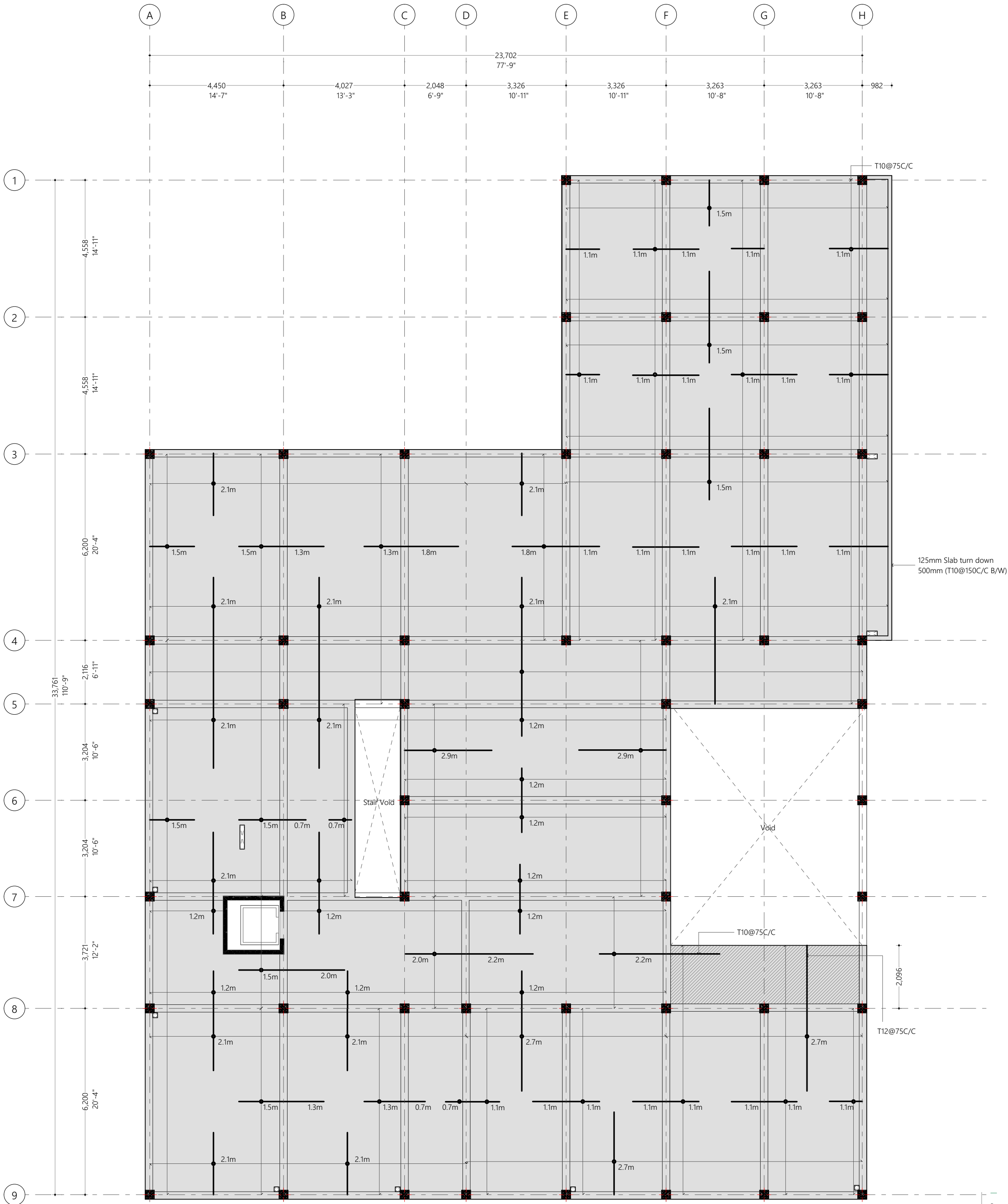
Roof Slab Level 2 Beam Plan
1:100



First Floor Slab Reinforcement Plan
1:100

Notes:

- Slab thickness: 150mm
- Shaded area slab thickness: 215mm
- Bottom Reinf. - T10@150 C/C B/W throughout(not shown)
- Top Reinf. - T10@150C/C (as shown, unless stated)
- Top Dist. Steel - T10@150 C/C (unless stated)
- Extra Bars - 3T10@45C/C T&B
- Reinforcement discontinuous at voids
- Provide 30mm cover

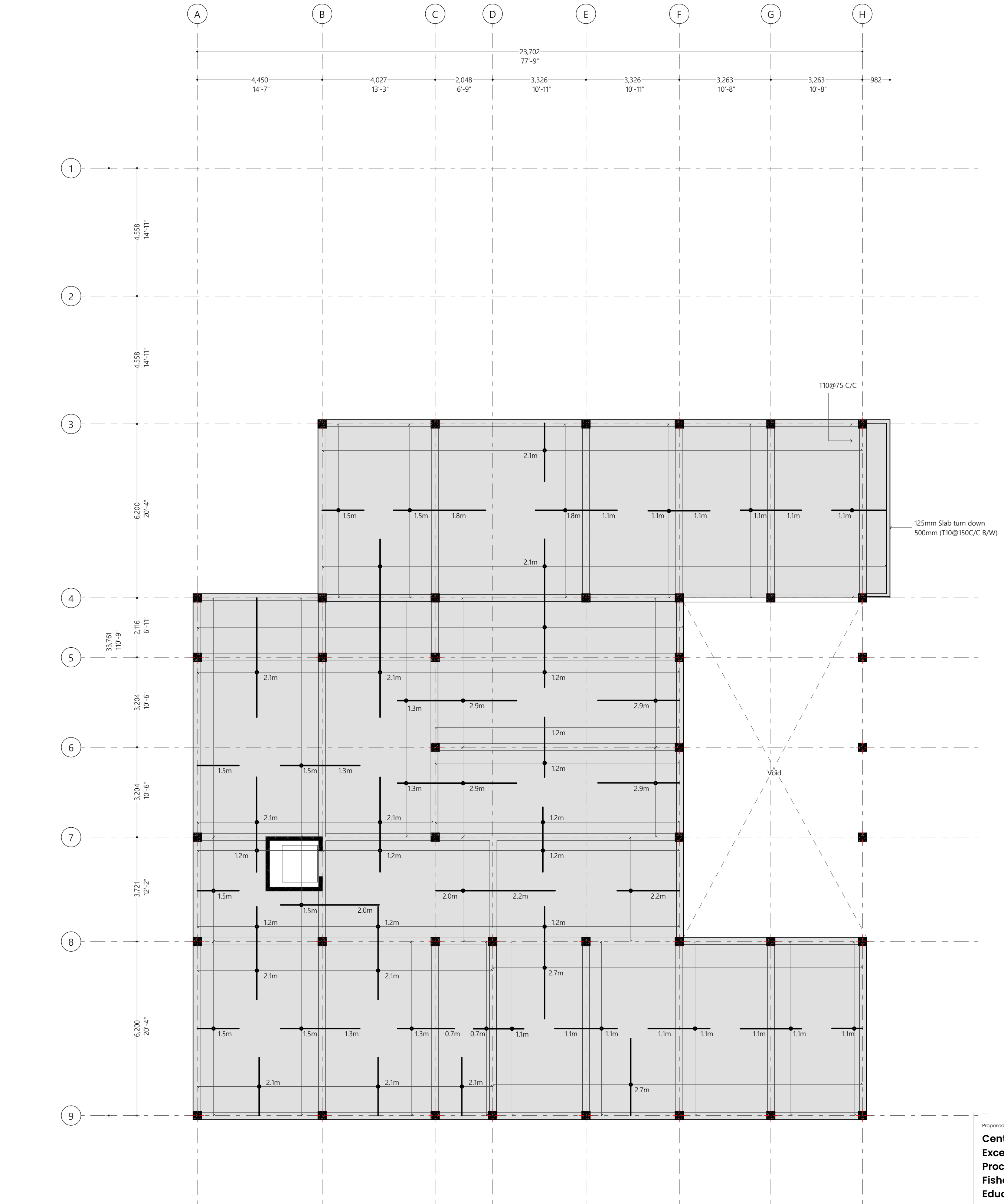


Second Floor Slab Reinforcement Plan
1:100

Notes:

- Slab thickness: 150mm
- Shaded area slab thickness: 215mm

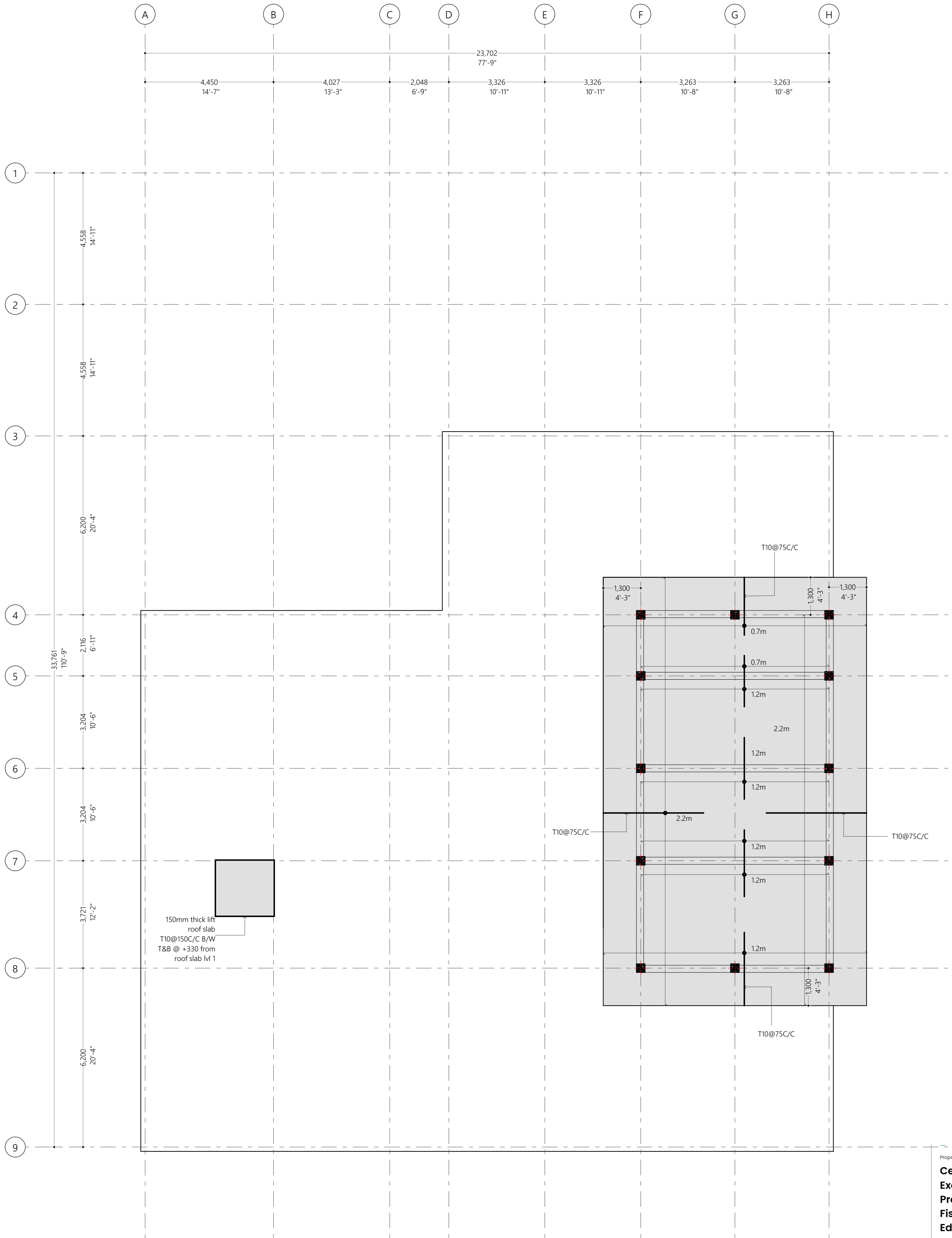
Bottom Reinf. - T10@150 C/C B/W throughout(not shown)
Top Reinf. - T10@150C/C (as shown, unless stated)
Top Dist. Steel - T10@150 C/C (unless stated)
Extra Bars - 3T10@45C/C T&B
Reinforcement discontinuous at voids
Provide 30mm cover



Roof Slab Reinforcement Plan
1:100

Notes:

- Slab thickness: 150mm
- Shaded area slab thickness: 215mm
- Bottom Reinf. - T10@150 C/C B/W throughout(not shown)
- Top Reinf. - T10@150C/C (as shown, unless stated)
- Top Dist. Steel - T10@150 C/C (unless stated)
- Extra Bars - 3T10@45C/C T&B
- Reinforcement discontinuous at voids
- Provide 30mm cover



Roof Slab Level 2 Reinforcement Plan
1:100

Notes:

Slab thickness: 150mm

Bottom Reinf. - T10@150 C/C B/W throughout(not shown)
Top Reinf. - T10@150C/C (as shown, unless stated)
Top Dist. Steel - T10@150 C/C (unless stated)
Extra Bars - 3T10@45C/C T&B
Reinforcement discontinuous at voids
Provide 30mm cover

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo

Client
Ministry of Higher Education

30/11/2021

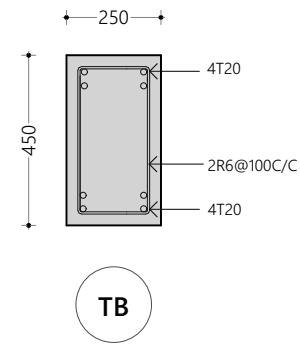
Architect: **Fathmath Imdha Amir**
Engineer: **Muoviath Abdul Sattar**
Drawn By: **Aishath Shadhin Alzai**

EPOCH

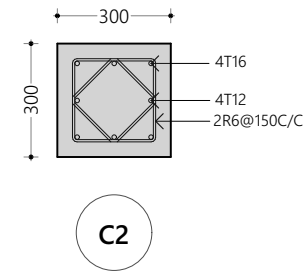
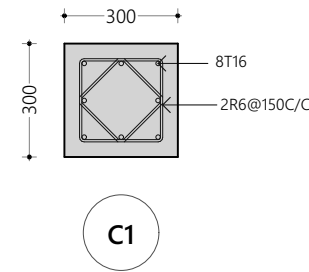
P (+960) 33 33 528 E info@epochassociates
W epochassociates A G.Rosary West 3rd Floor,
Hunnuheena Magu, Male', Maldives

Rev: Page:

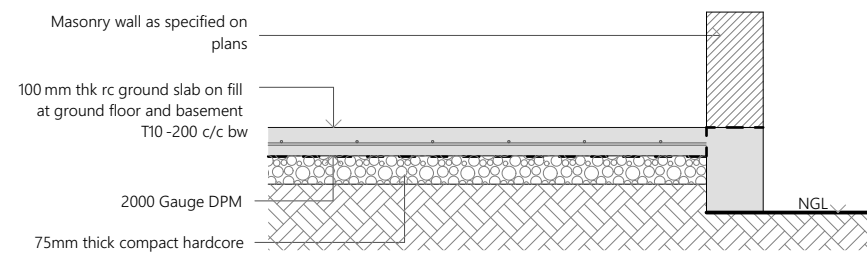
B.4.4



Tie Beam Details
1:20



Column Detail
1:20

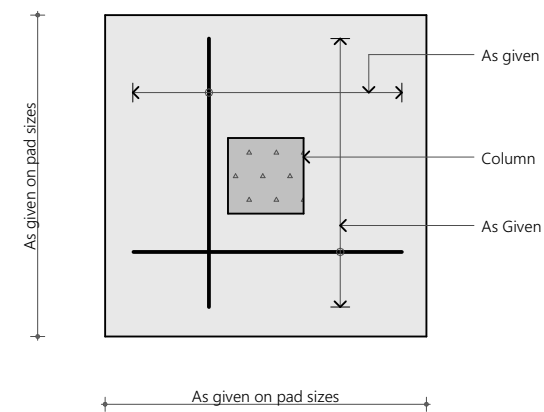


Note :

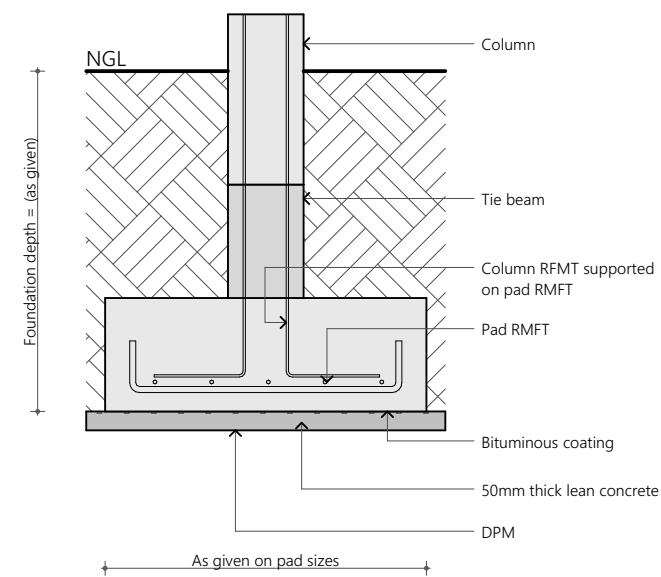
All cover blocks shall be casted using grade C 25 / 30 concrete with 5-10 mm aggregates

For slab, rebar spacer chairs spacing shall be minimum 1m spacing or 1 no. per 1 sqm

Typical Ground Slab Construction Detail
1:20



Plan View



Sectional View

Foundation Details:

	Dimensions	Reinfrocement
F1	2250x2250x400	T12@125C/C B/W (B)
F2	2100x2100x400	T12@125C/C B/W (B)
F3	1950x1950x400	T12@125C/C B/W (B)
F4	1800X1800X400	T12@150C/C B/W (B)
F5	1600X1600X400	T12@150C/C B/W (B)
F6	1500x1500x400	T12@150C/C B/W (B)
F7	3140x2900x400	T12@125C/C B/W (T&B)

Foundation Depth = 1200mm unless stated
Ground Slab = 100mm thick RC slab on fill reinforced with T10@200C/C (B/W)

All Footings are to be laid on top of 50mm thick lean concrete
Apply waterproofing to all substructure (below ground elements)

Typical Footing Detail
1:20

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

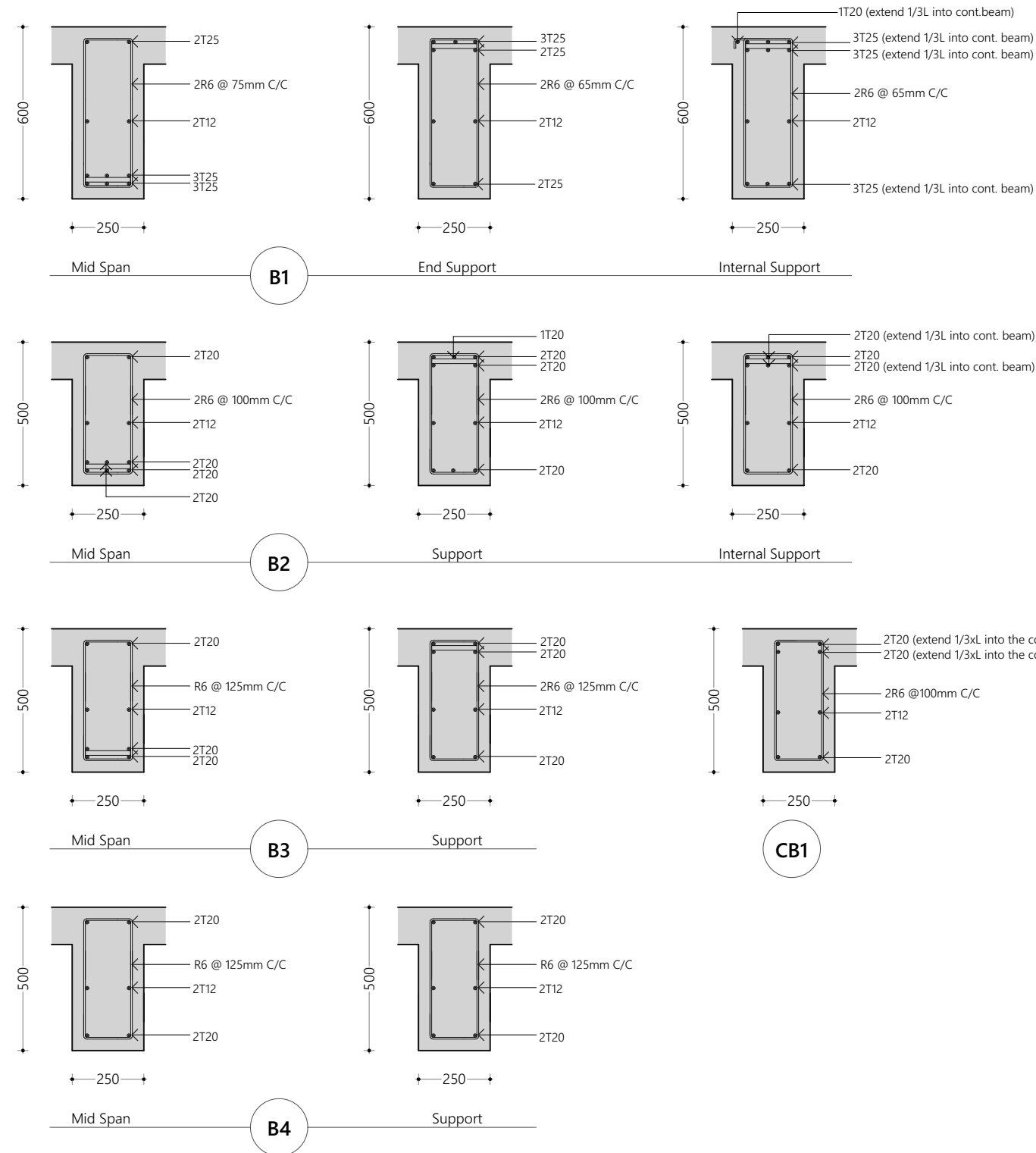
EPOCH

P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

C.1.1



Notes:

Cover to foundations = 55mm
 Cover to floor slabs = 30mm
 Cover to floor beams = 35mm
 Cover to columns = 40mm
 Laps = 45Dia (Dia=Bar Diameter)
 Mid bars = 0.85 x Span
 Sup bars = 1/3 x Span
 Concrete mix = 1:2:3 (C:S:A)
 Lean concrete mix = 1:2:5

Beam Details

1:20

Proposed

Centre of Excellence for Food Processing and Fisheries- Education Block Ha. Dhidhdhoo

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
 Engineer **Muaviyath Abdul Sattar**
 Drawn By **Aishath Shadhny Afzal**

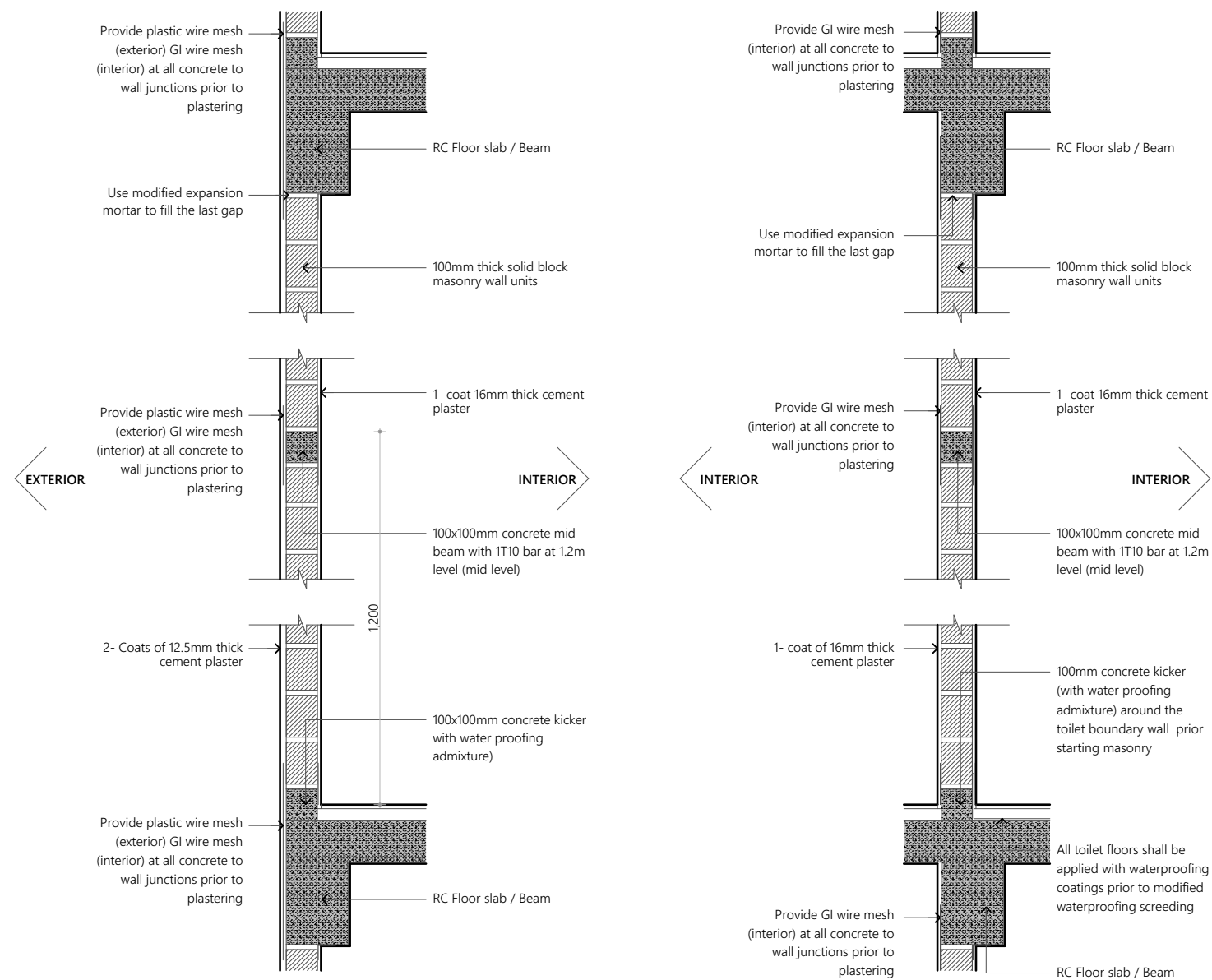


P (+960) 33 33 528 E info@epoch.associates
 W epoch.associates A G.Rosary West 3rd Floor,
 Hulsnuheena Magu, Male', Maldives

Rev:

Page:

C.1.2



Note:

- * Concrete surfaces shall be thoroughly cleaned with water & applied with mastercast 141 or equivalent bonding mortar prior to plastering.
- * Plastering mortar mix shall be 1:4 (cement: sand) ratio.
- * Plaster mix shall be modified using fibre wool & mastercast 141 or equivalent plasticisers as per manufacturer's specification.
- * Height of placing blocks shall be maximum 1.2m per day.
- * After initial coat of plastering, water curing shall be provided for minimum 3 days & after final coat water curing shall be provided for 7 days.

Typical Wall construction detail

1:20

Proposed

Centre of Excellence for Food Processing and Fisheries- Education Block

Ha. Dhidhdhoo

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

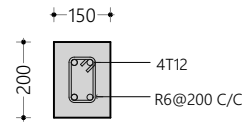


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

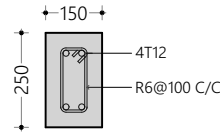
Page:

C.1.3



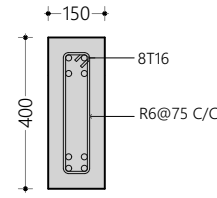
LT1

LINTELS OVER ALL DOORS, WINDOWS
(THAT DOES NOT RISE TO BEAM LEVEL)
LT1 FOR WINDOWS < 1.5M



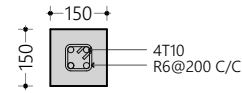
LT2

LINTELS OVER ALL DOORS, WINDOWS
(THAT DOES NOT RISE TO BEAM LEVEL)
LT2 FOR WINDOWS > 1.5M & <3.0M



LT3

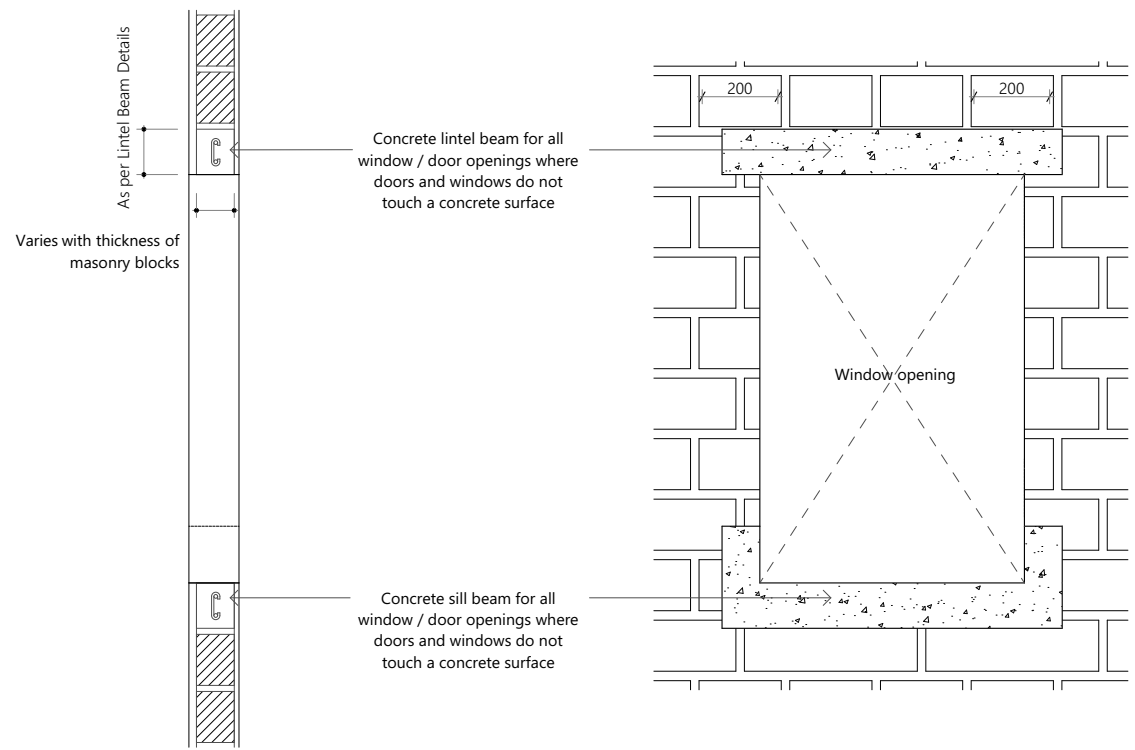
LINTELS OVER ALL DOORS, WINDOWS
(THAT DOES NOT RISE TO BEAM LEVEL)
LT3 FOR WINDOWS > 3.0M & <6.0M



LB1

Sill Beam Detail
1:20

Lintel Beam Detail
1:20



Typical Window
Construction Detail

Window Construction Detail
1:20

Proposed
**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client
Ministry of Higher Education

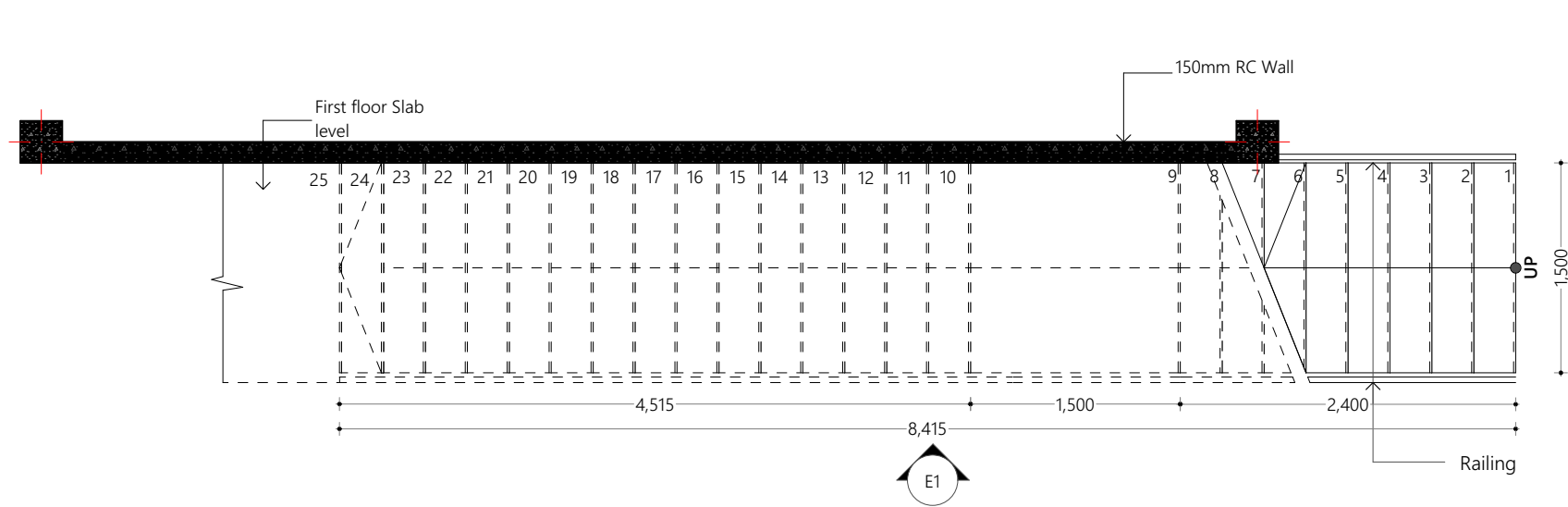
30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

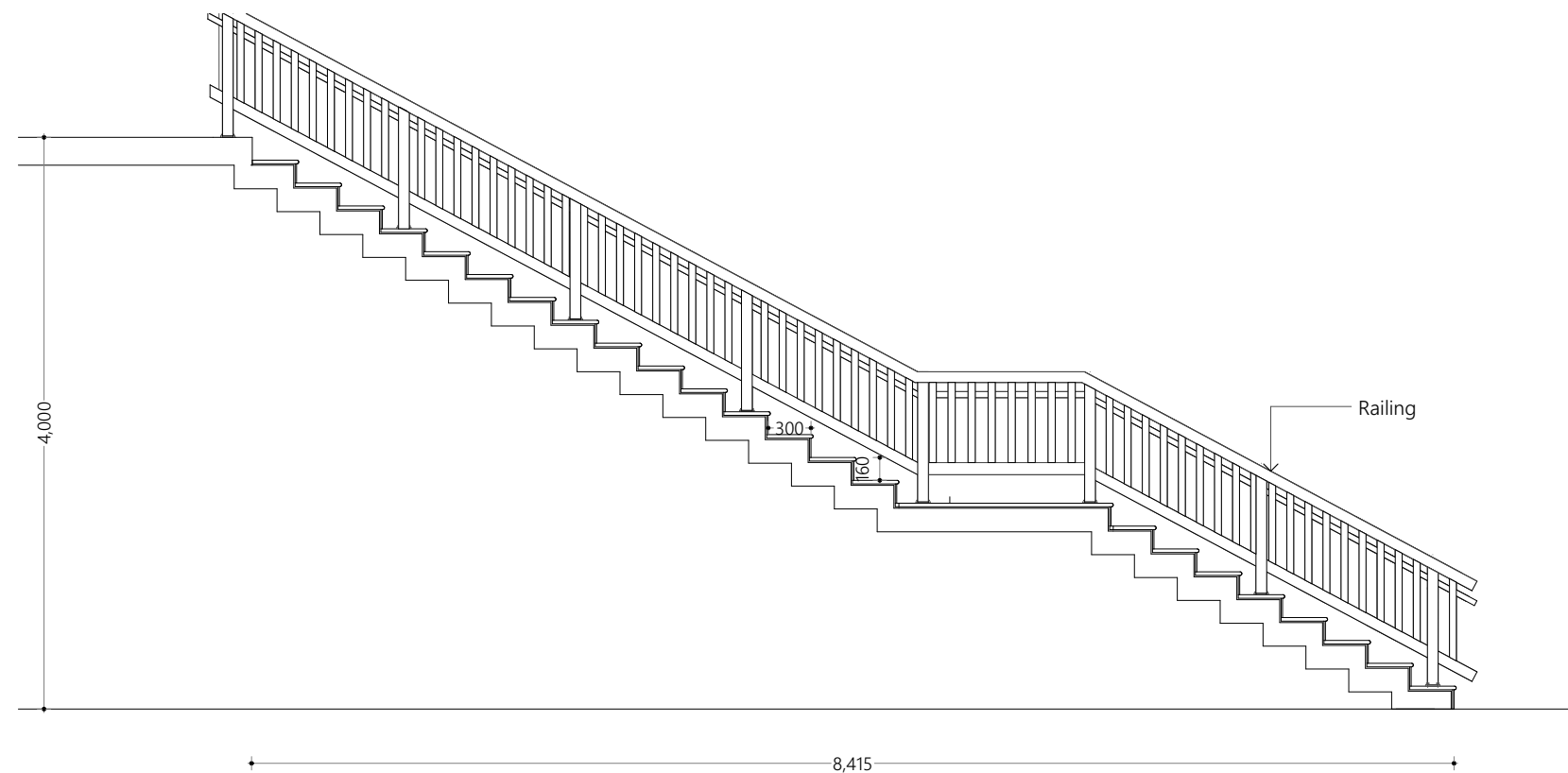


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

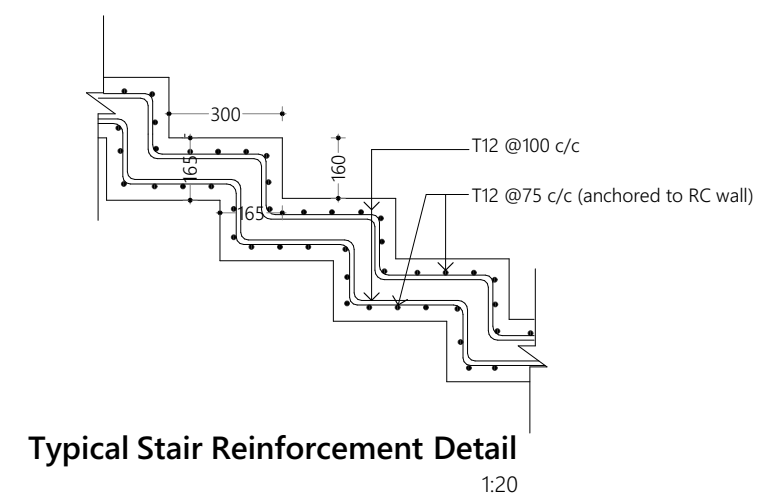
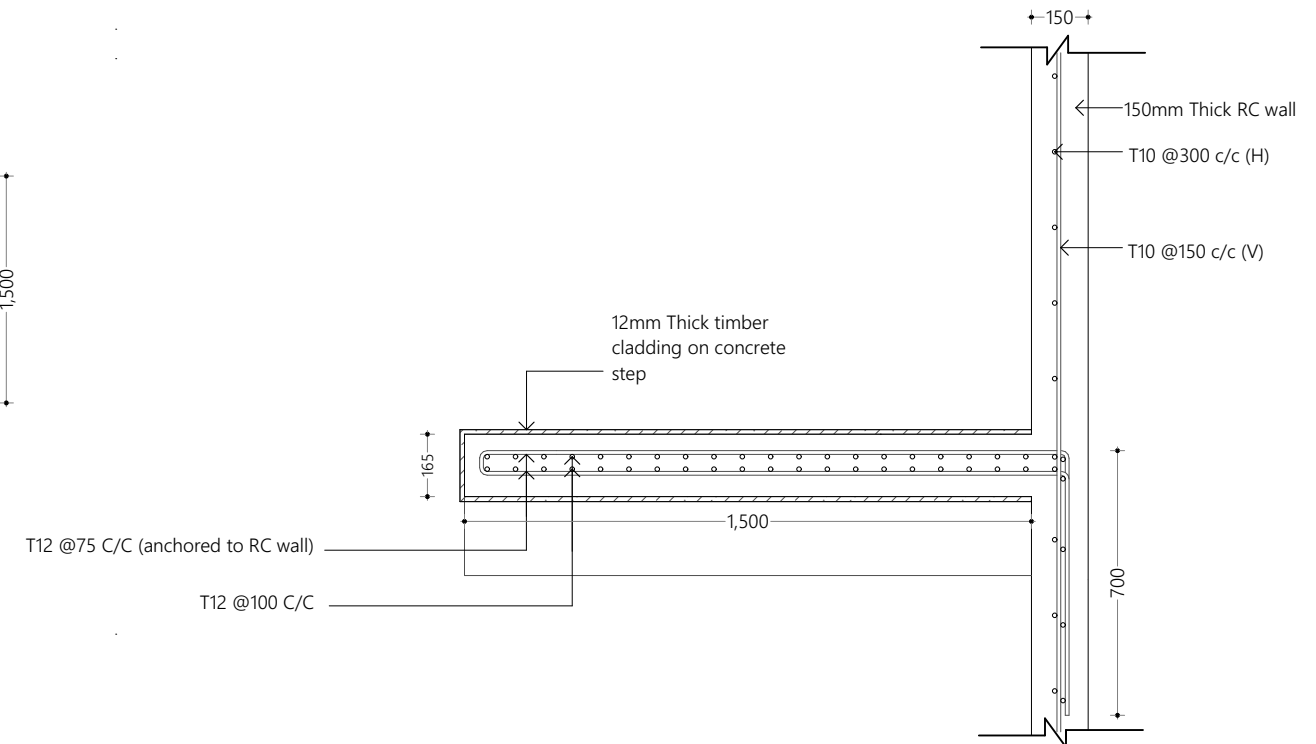
Rev: Page:



GROUND FLOOR STAIRCASE PLAN VIEW
1:50



GROUND FLOOR STAIRCASE ELEVATION VIEW
1:50



Typical Stair Reinforcement Detail
1:20

Staircase Reinforcement Detail
1:50

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

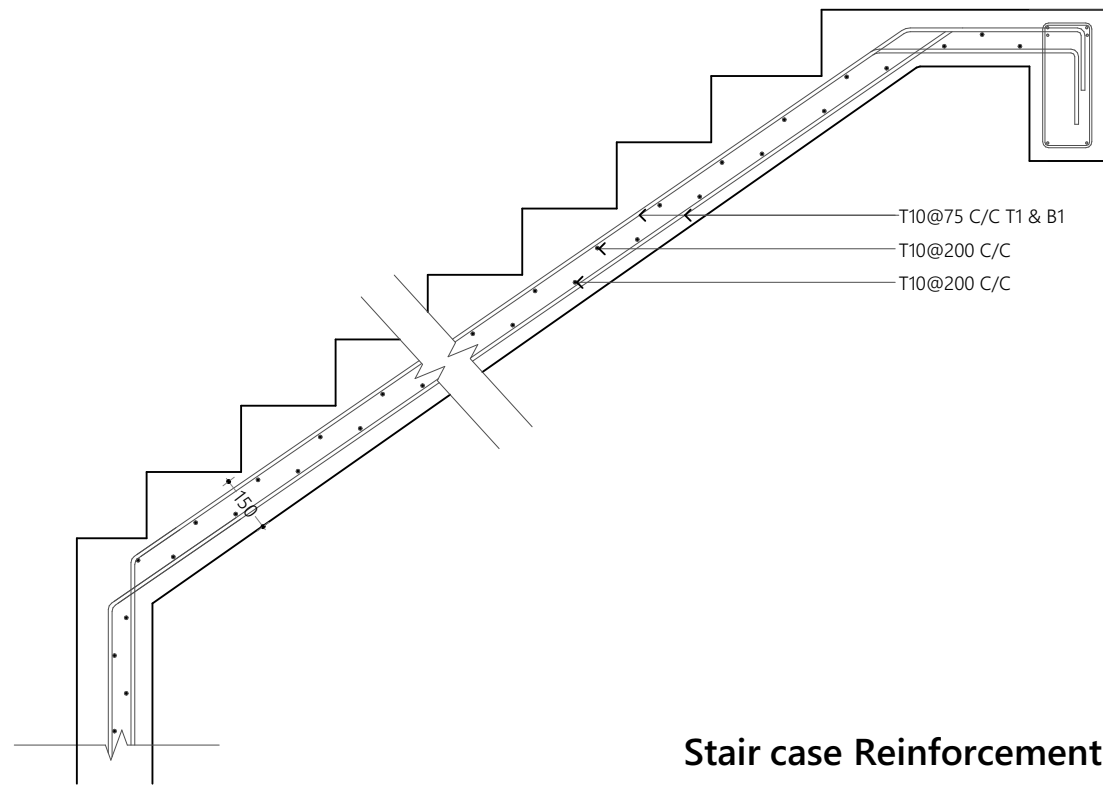


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

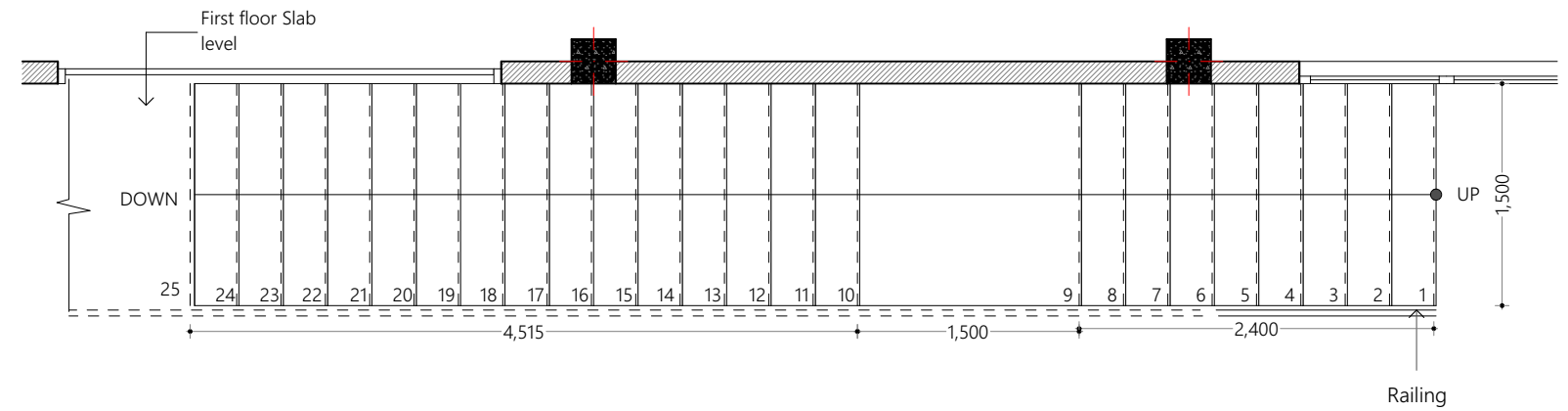
Rev:

Page:

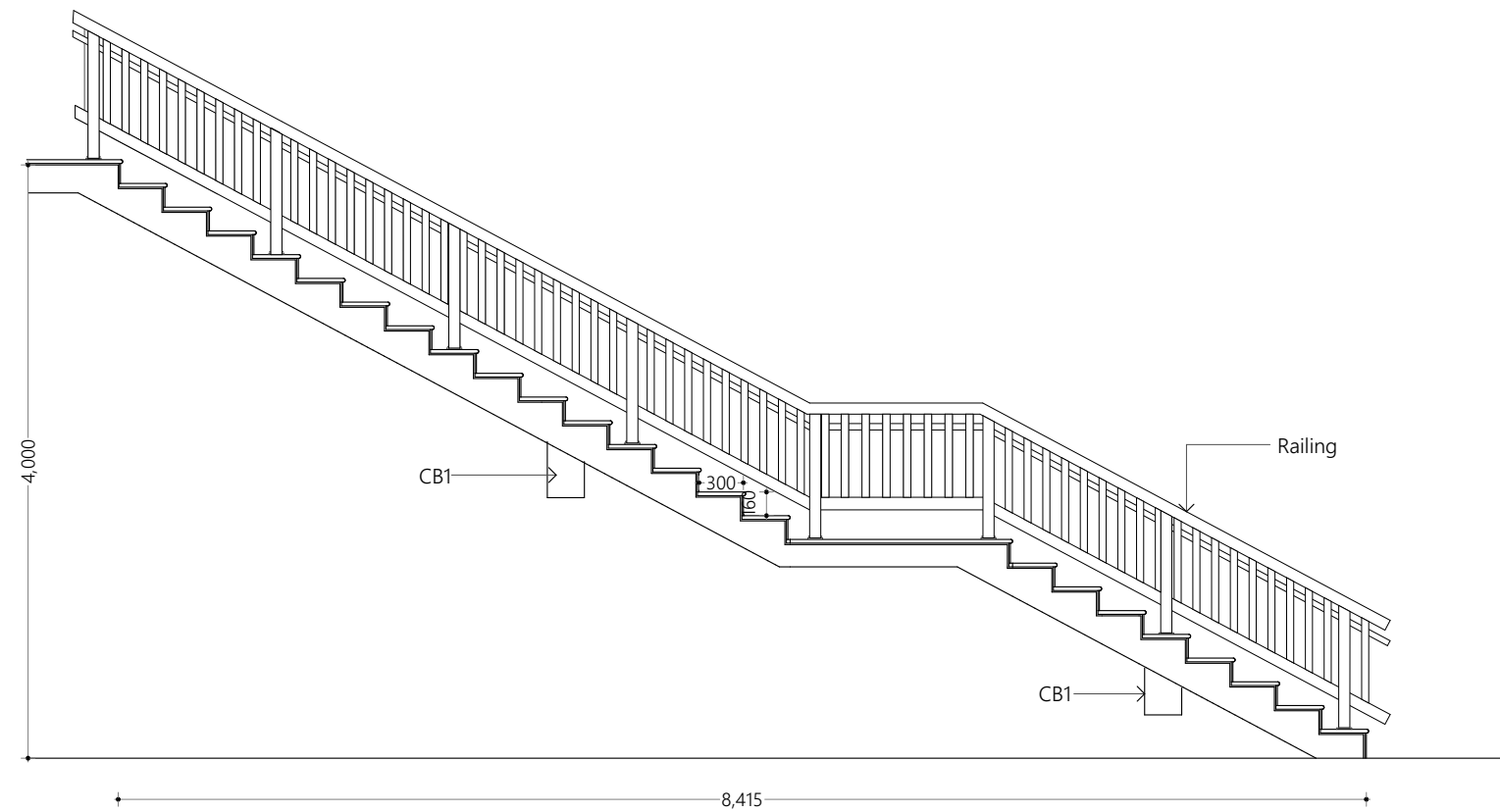
C.2.1



Stair case Reinforcement Detail
1:20



GROUND FLOOR OUTSIDE STAIRCASE PLAN VIEW
1:50



GROUND FLOOR OUTSIDE STAIRCASE ELEVATION VIEW
1:50

Staircase Detail
1:50

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo

Client
Ministry of Higher Education

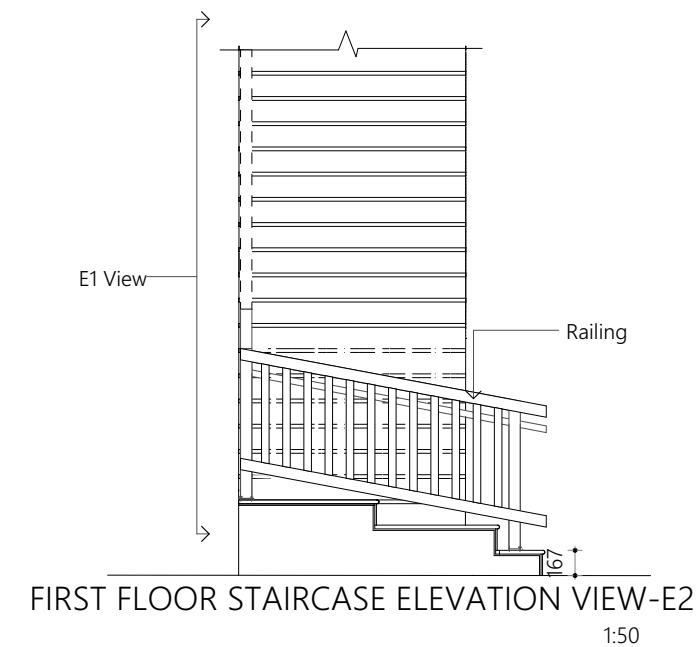
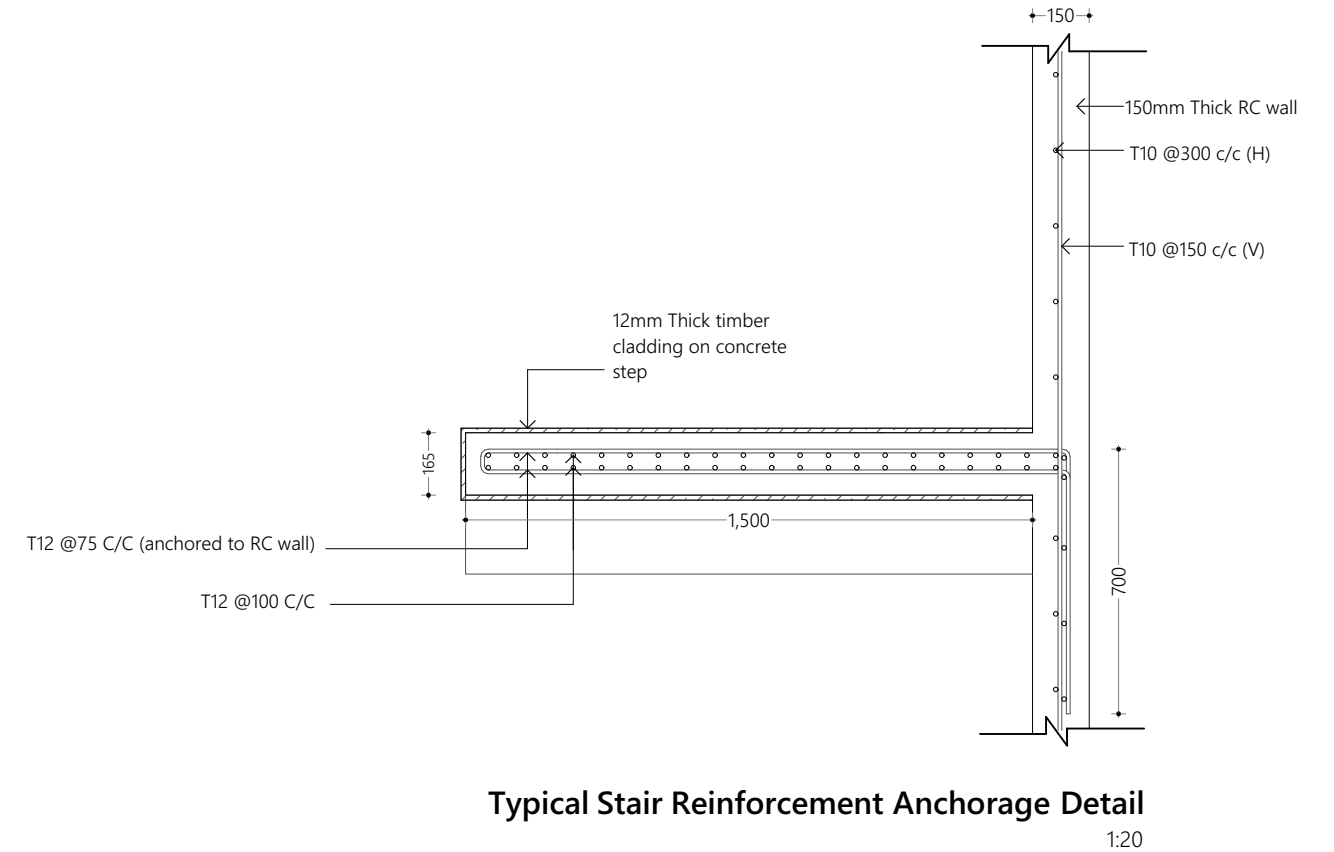
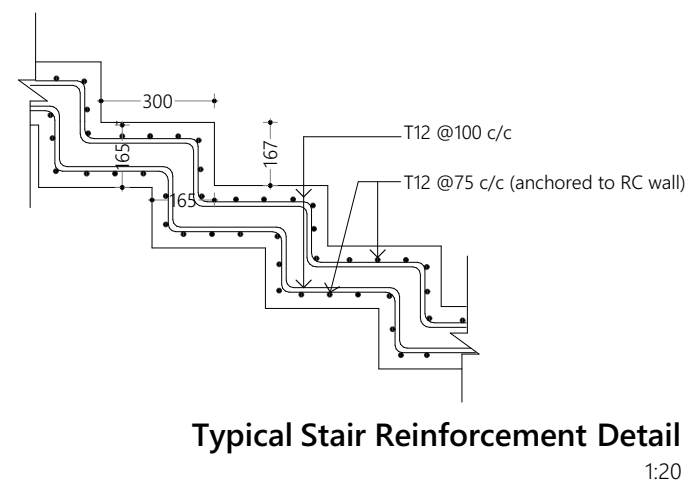
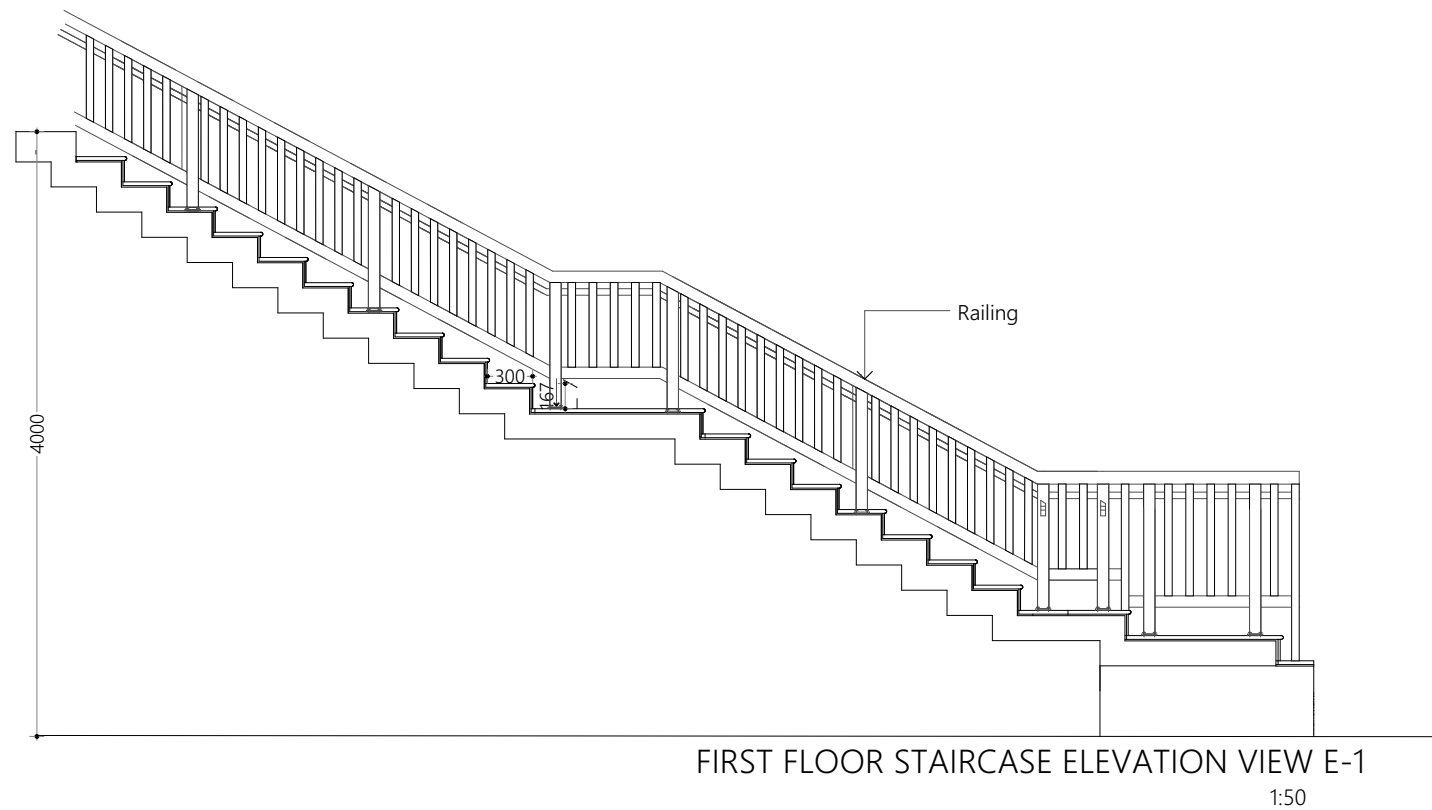
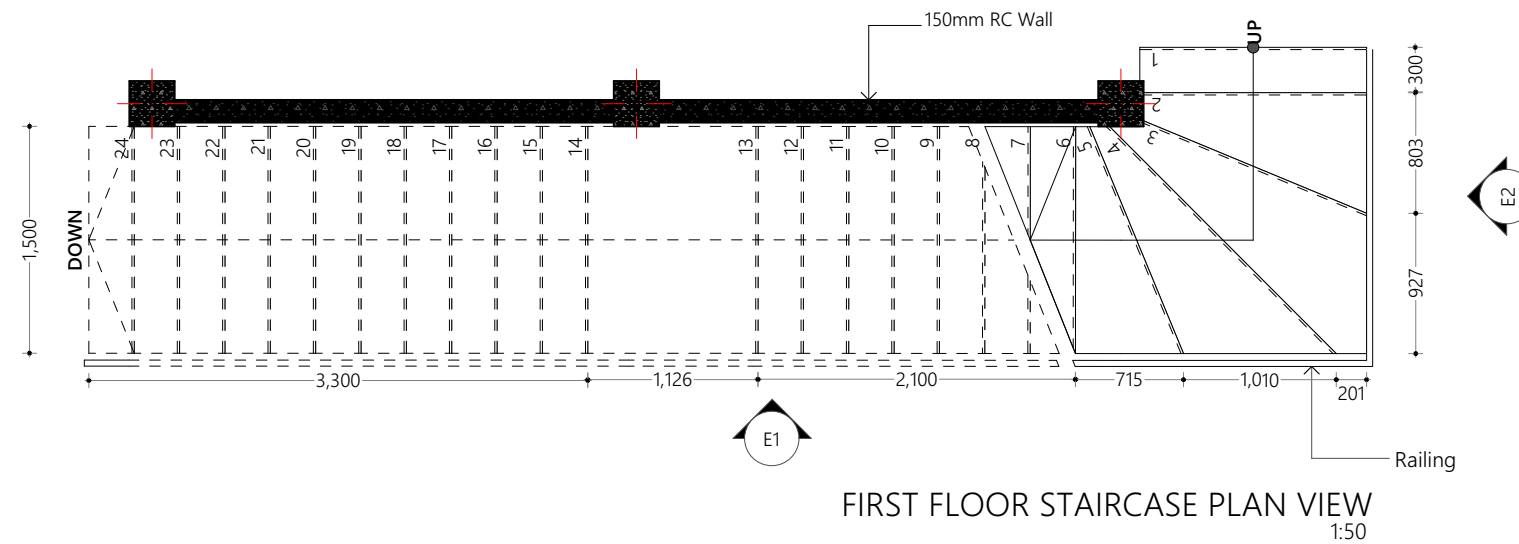
30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

EPOCH

P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev: Page:
C.2.2



Proposed

Centre of Excellence for Food Processing and Fisheries- Education Block
Ha. Dhidhdhoo

Client

Ministry of Higher Education

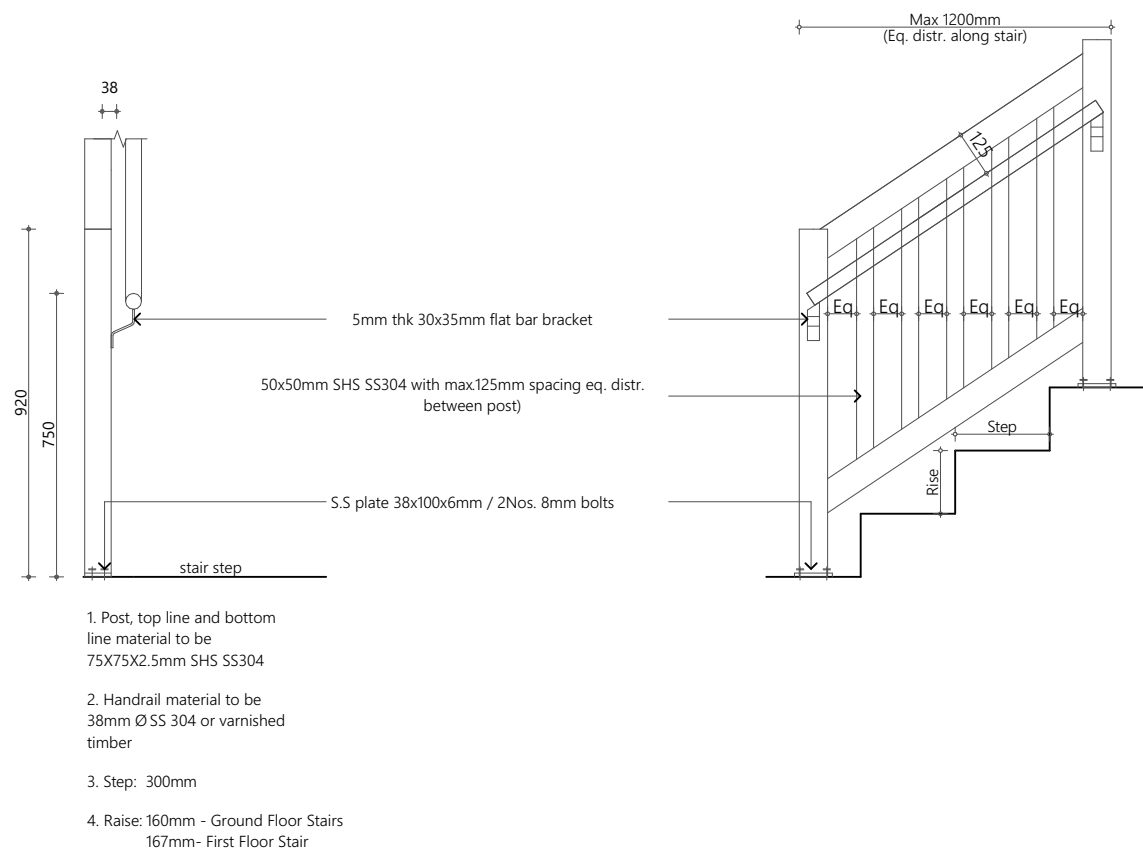
30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

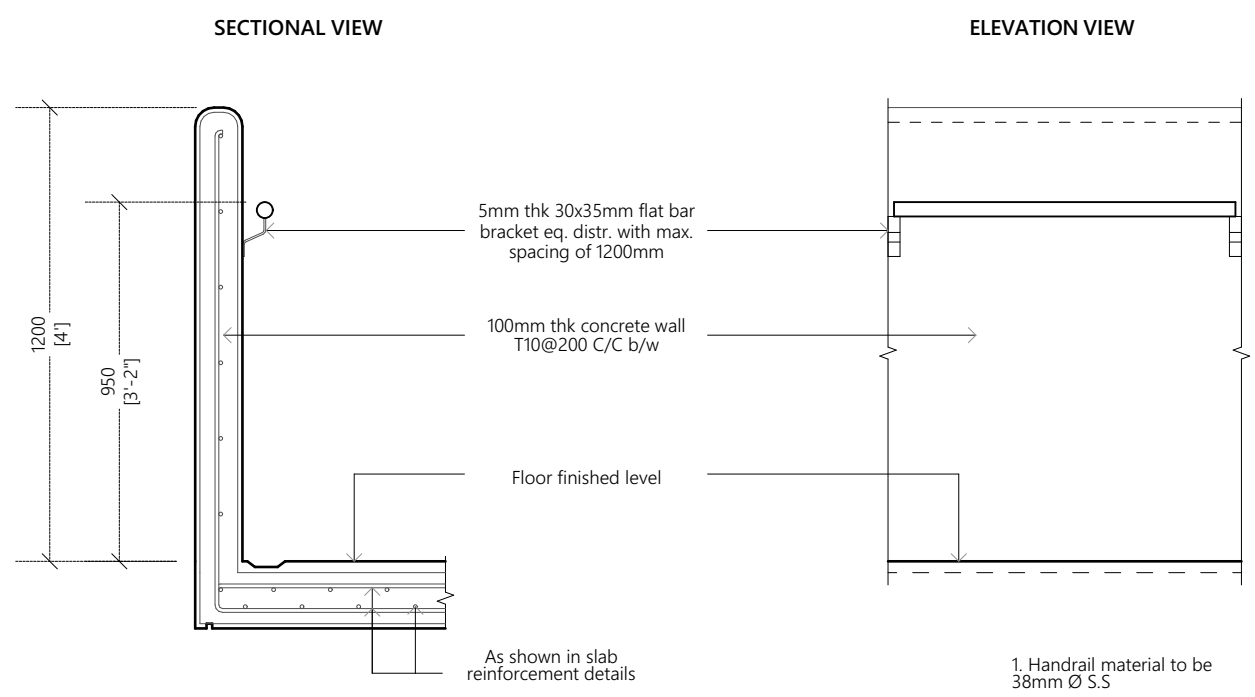
EPOCH

P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

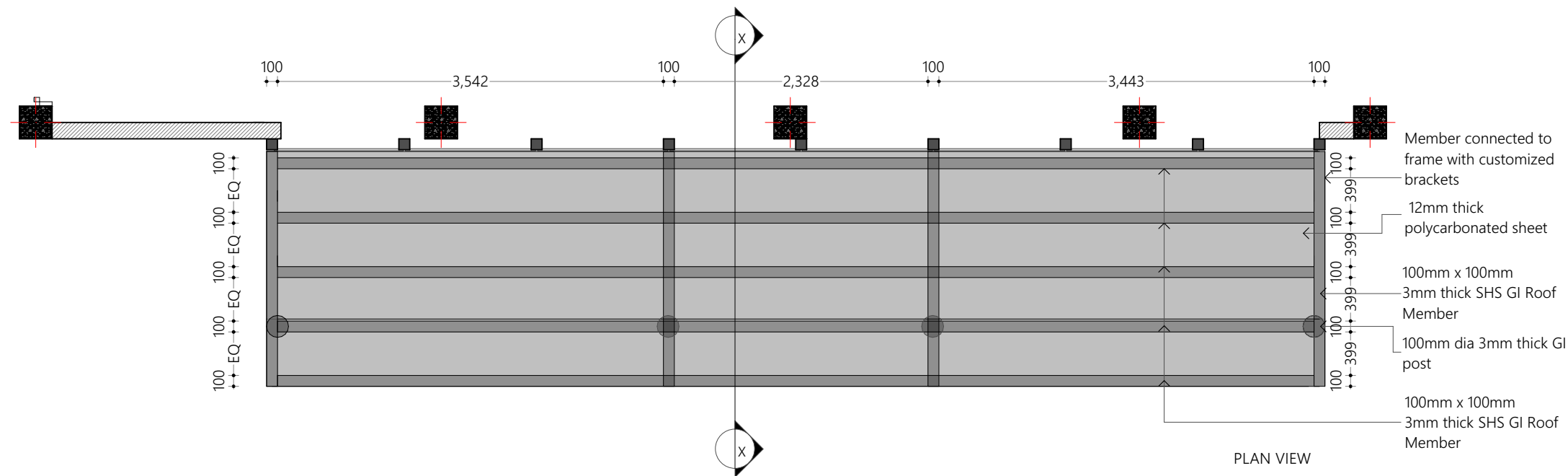
Rev: Page:
C.2.3



Staircase Railing Detail
1:20



1.2m High RC Wall Detail
1:20

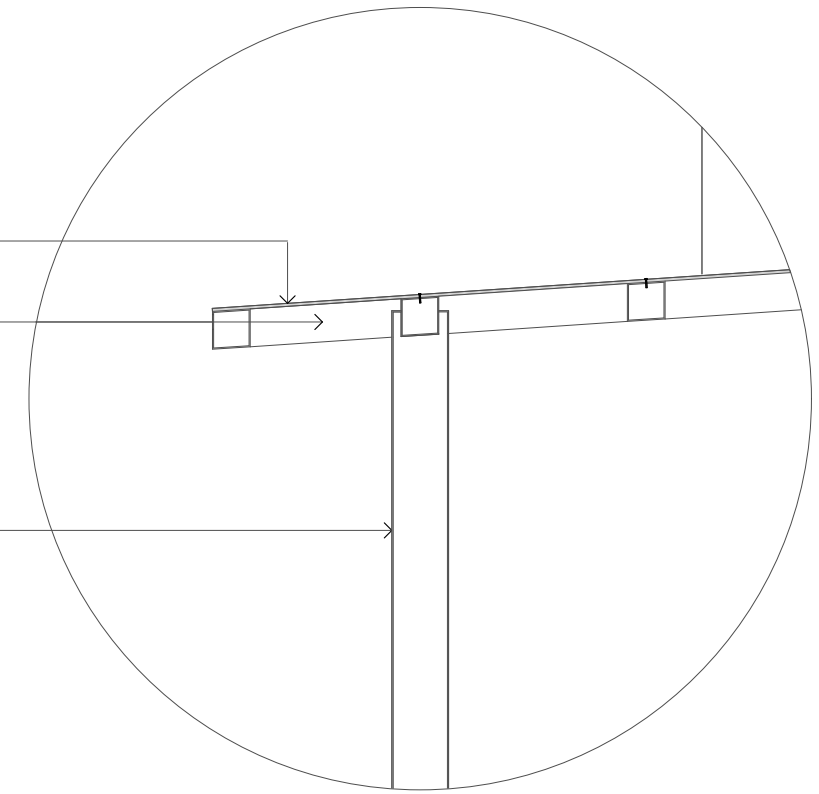


Canopy Detail
1:50

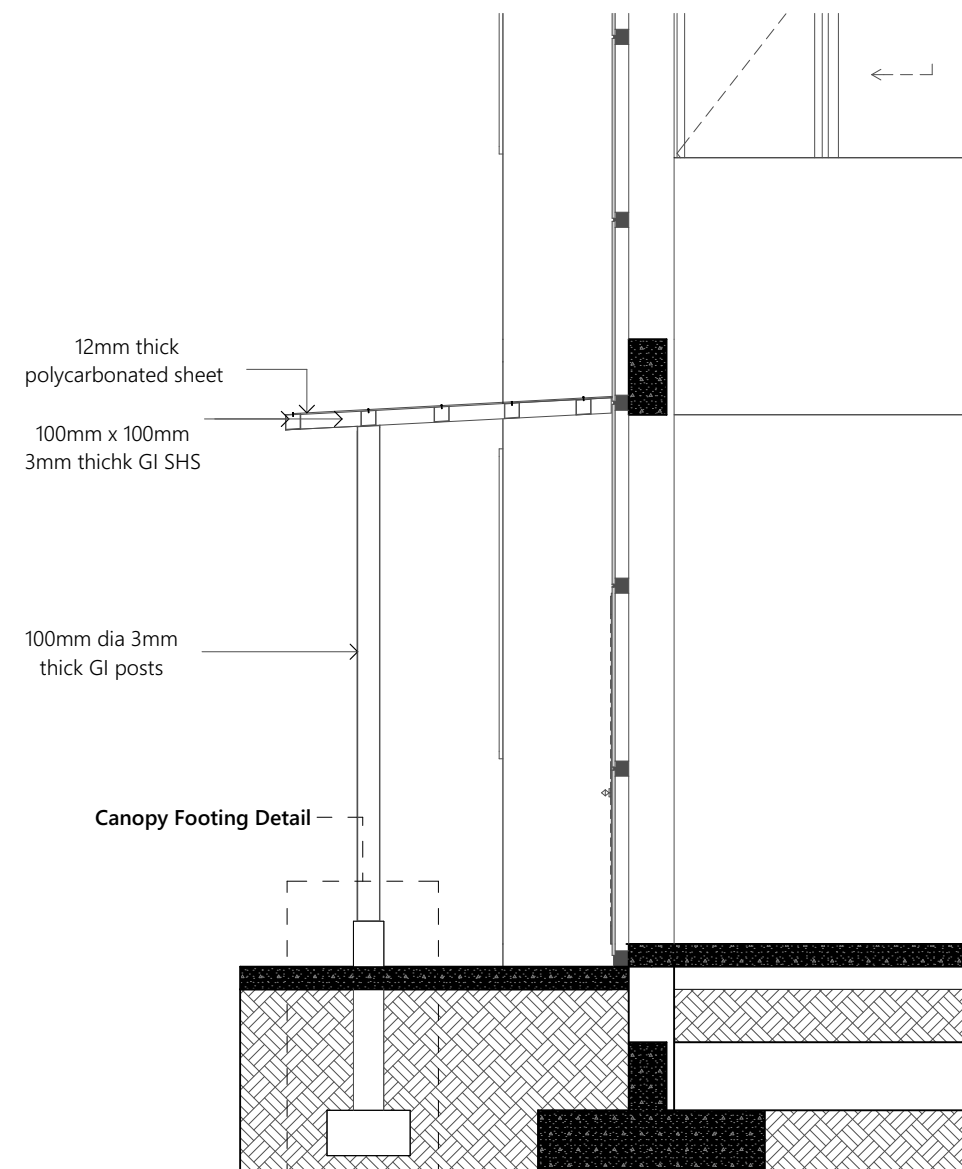
12mm thick polycarbonated sheet fixed with SS grasketed screws

100mm x 100mm 3mm thick SHS roof member

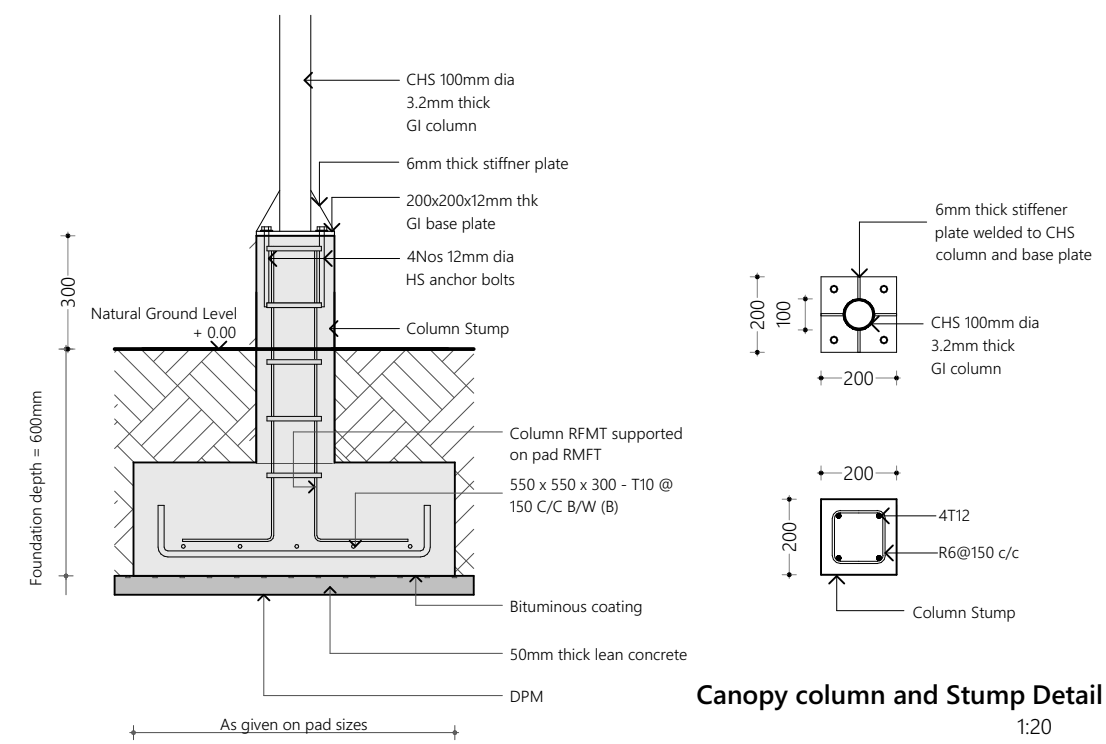
100mm dia 3mm thick GI section column welddd to roof member



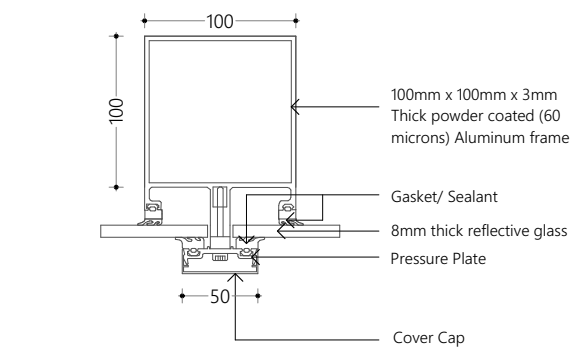
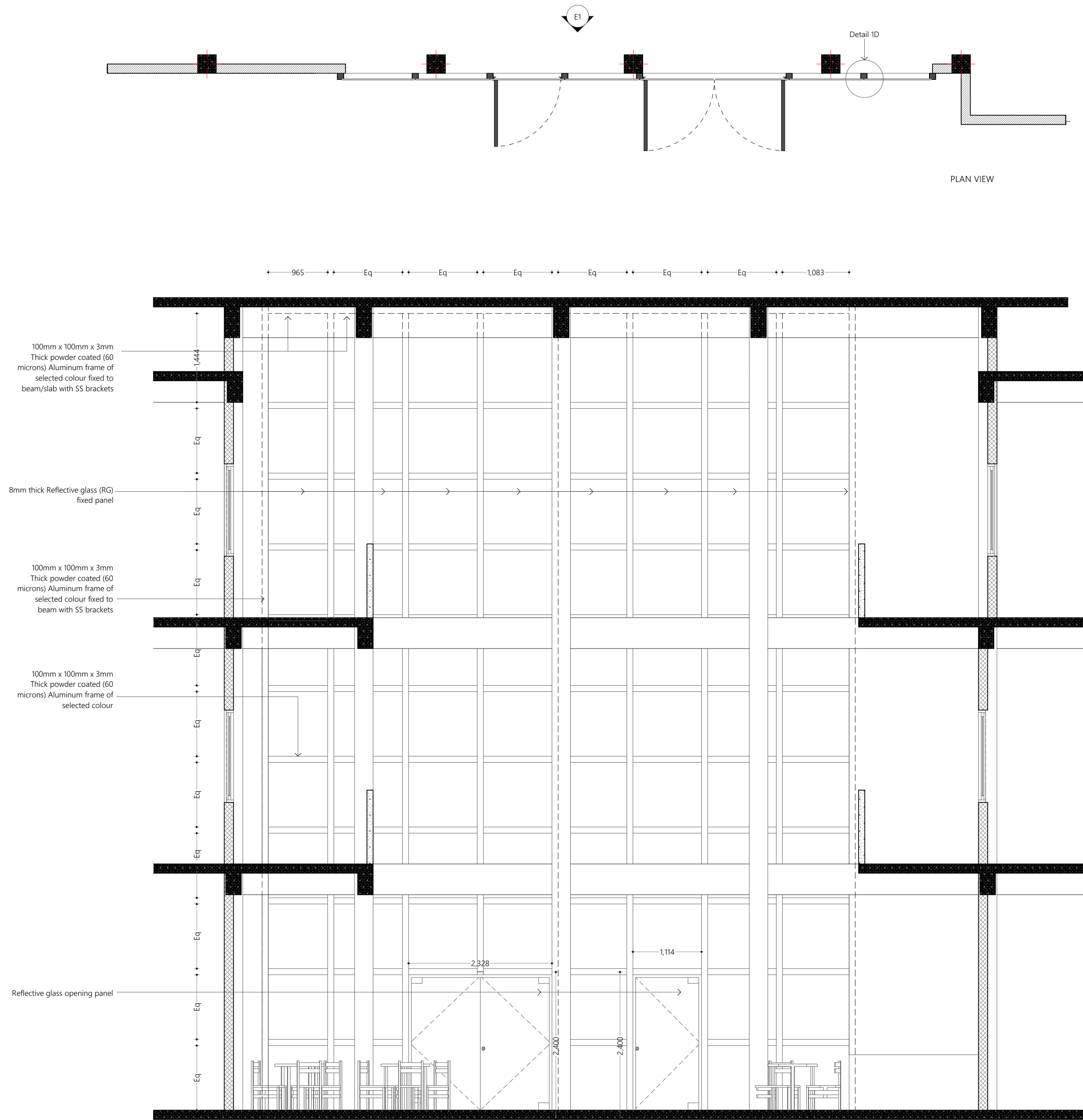
Detail-02
1:20



Canopy Detail
1:50

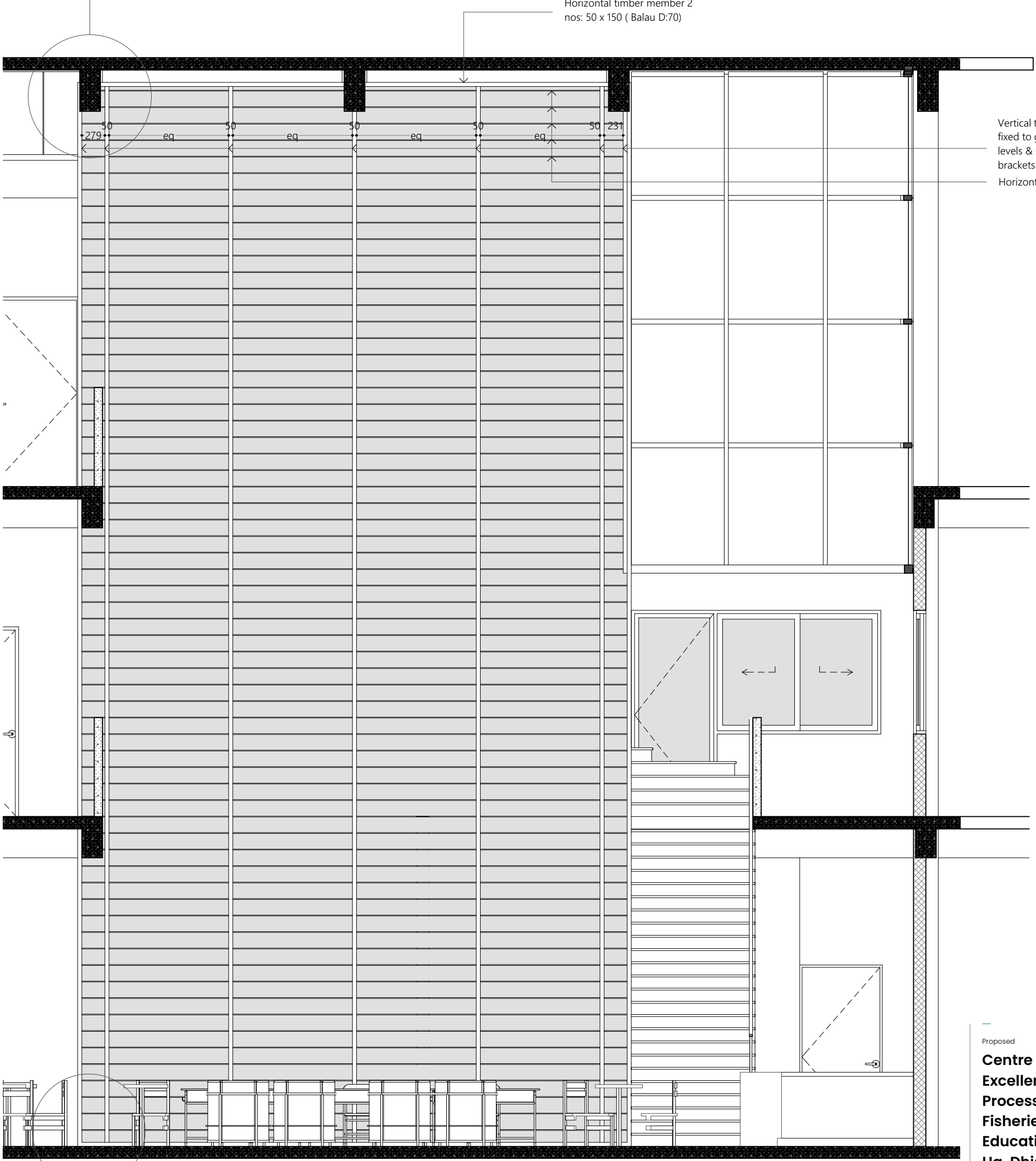
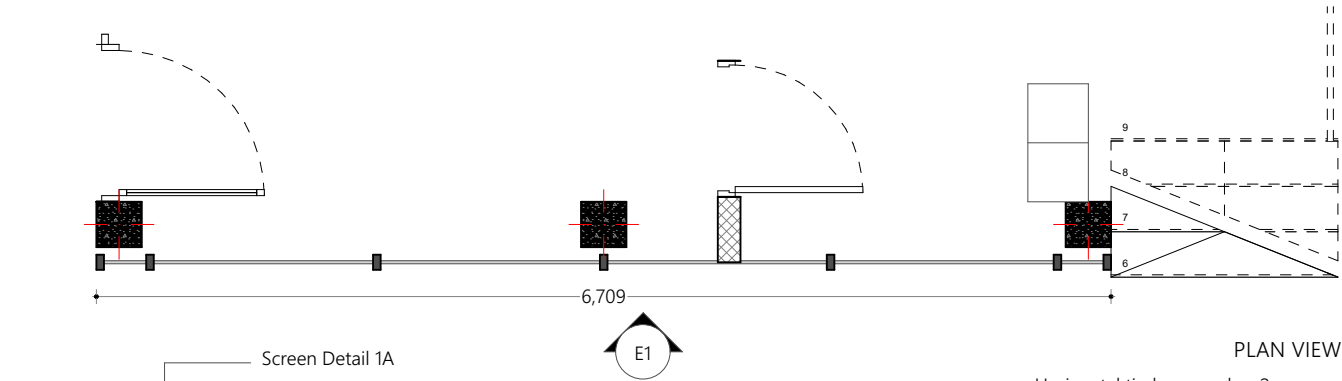


Canopy Footing Section Detail
NTS



Curtain Wall Connection Detail 1D
1:5

ELEVATION E1
Curtain Wall Detail
1:50



Vertical timber members
fixed to ground slab , beam
levels & slab soffit with SS
brackets
Horizontal timber members

SCREEN DETAIL
ELEVATION E1

Screen Detail
1:50

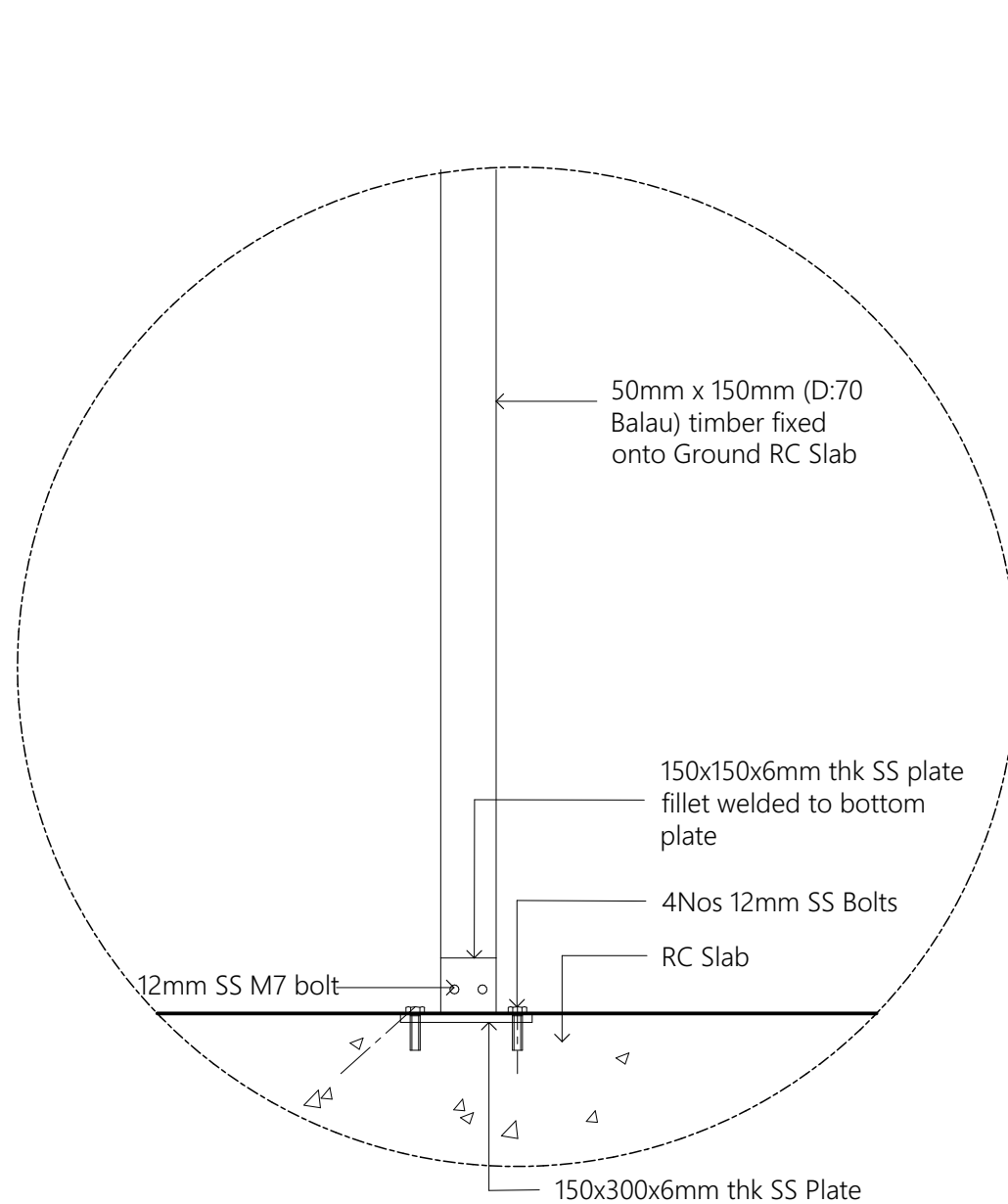
Proposed
**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client
Ministry of Higher Education

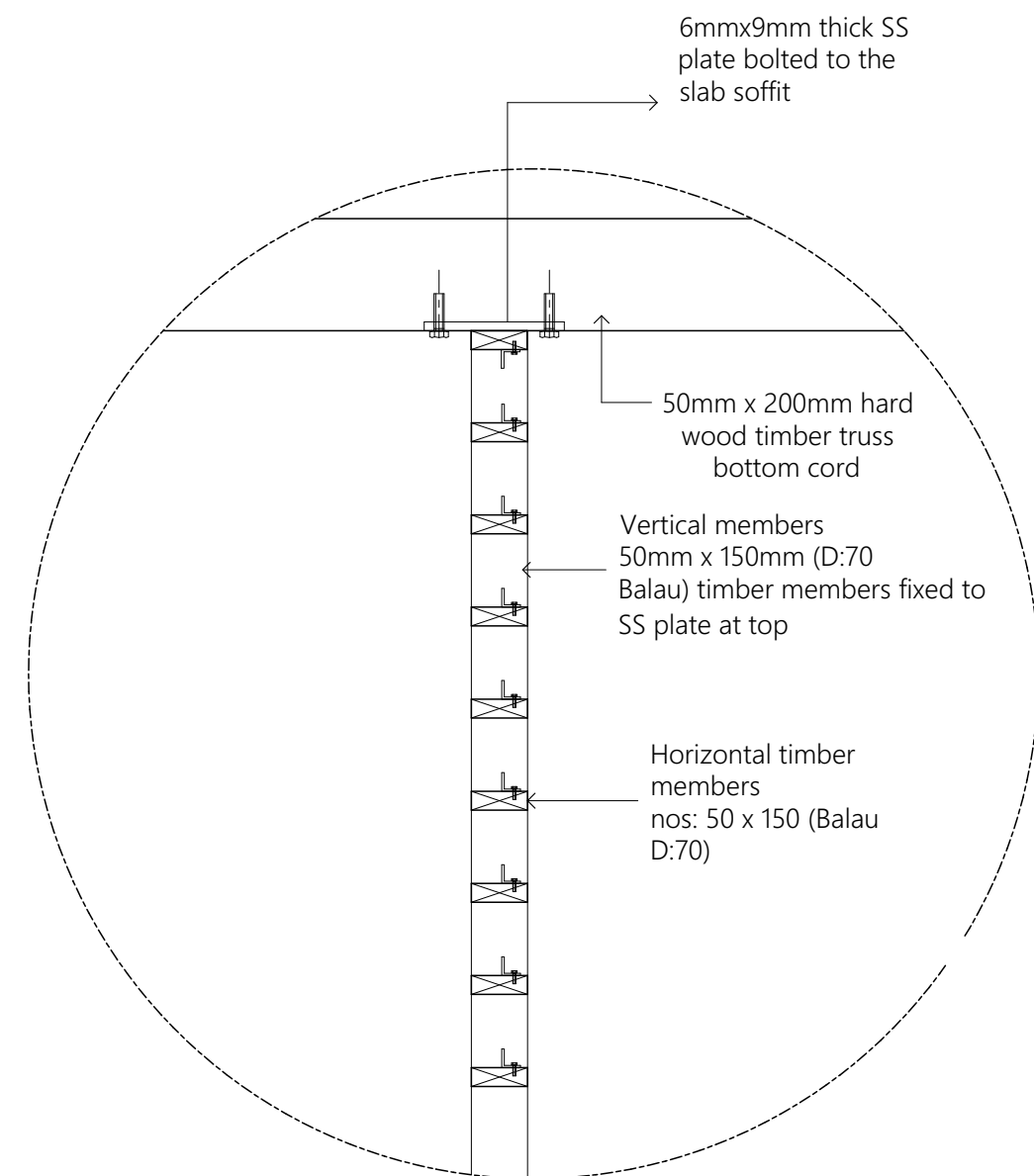
30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

EPOCH
P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives



DETAIL 1A
1:20



DETAIL 1B
1:20

Screen Fixing Detail 1:20

Proposed

Centre of Excellence for Food Processing and Fisheries- Education Block Ha. Dhidhdhoo

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

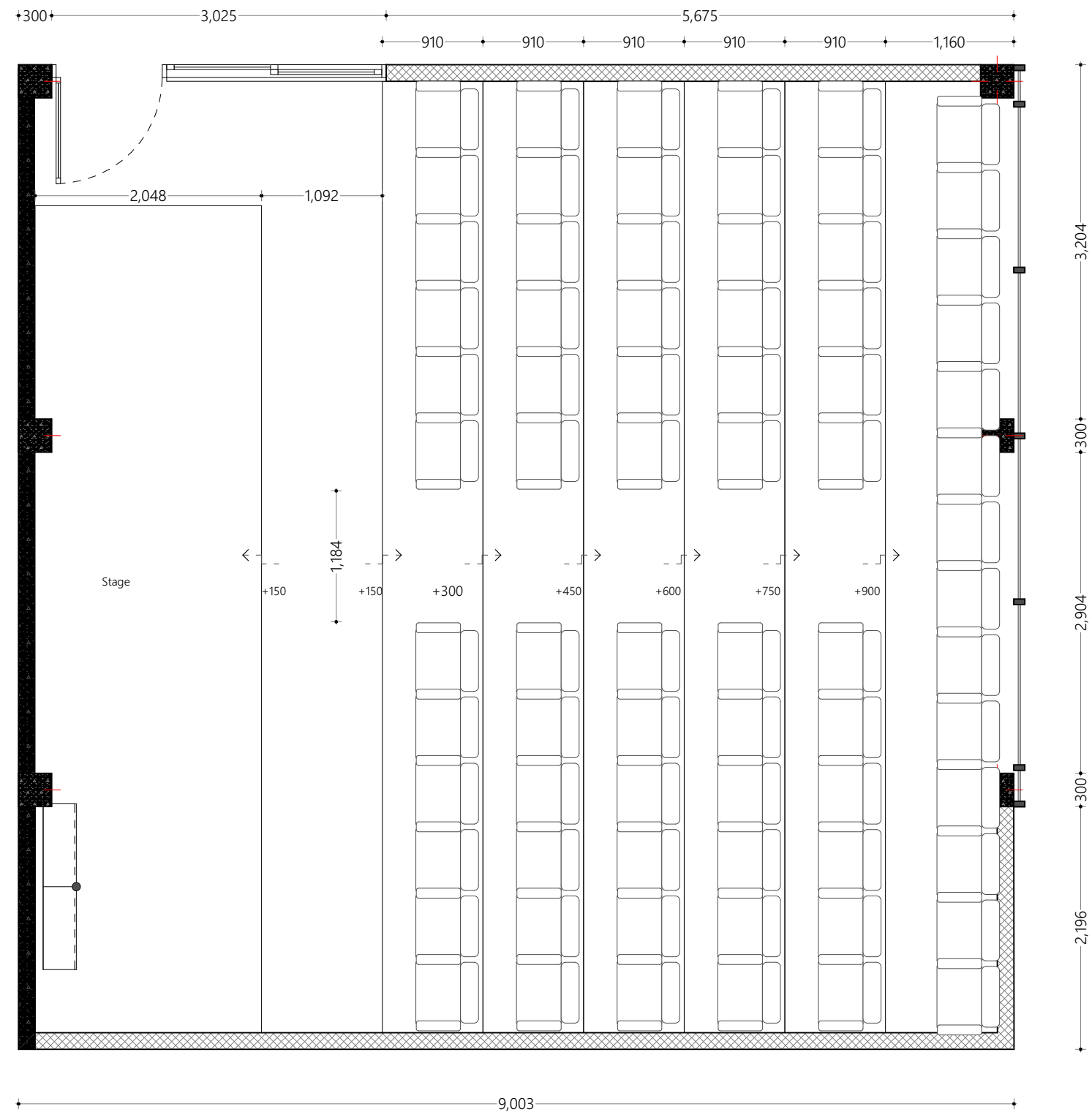


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

C.2.8



Auditorium Plan
1:50

Proposed

**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

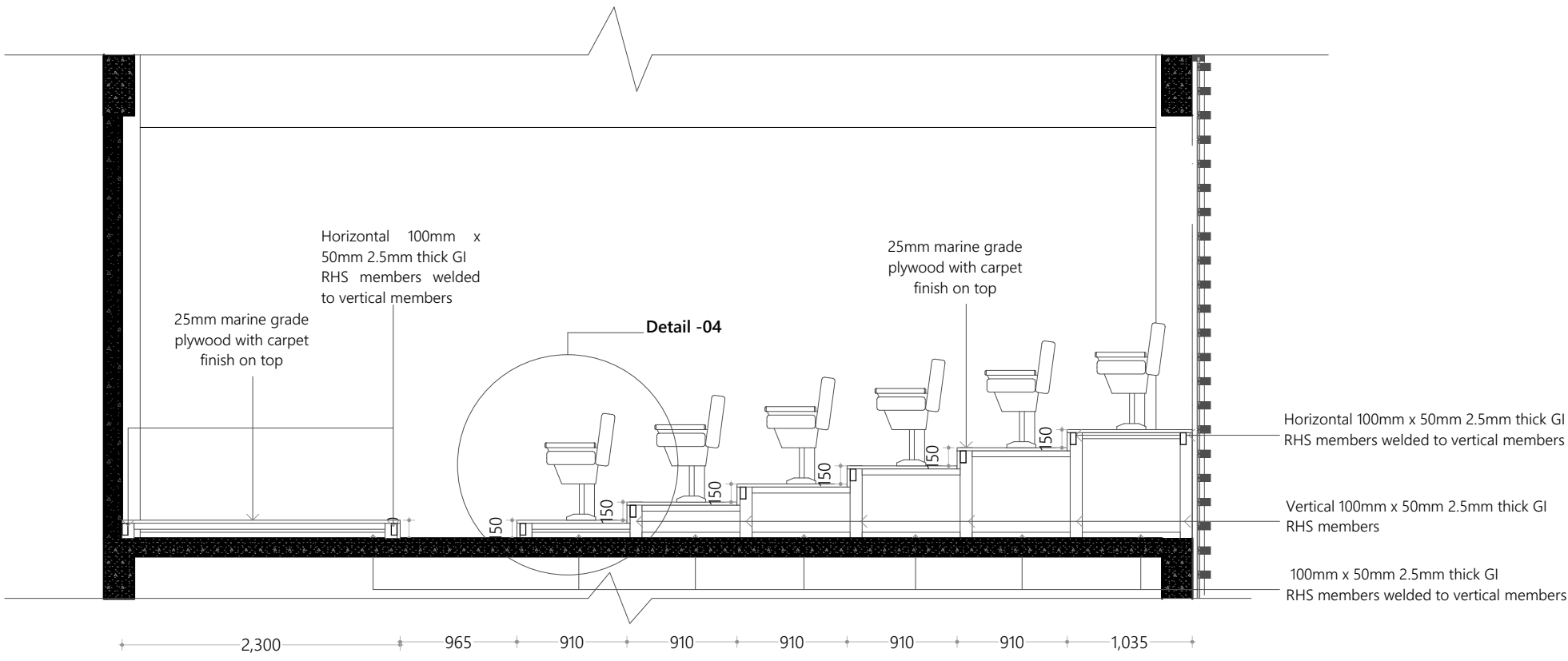


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

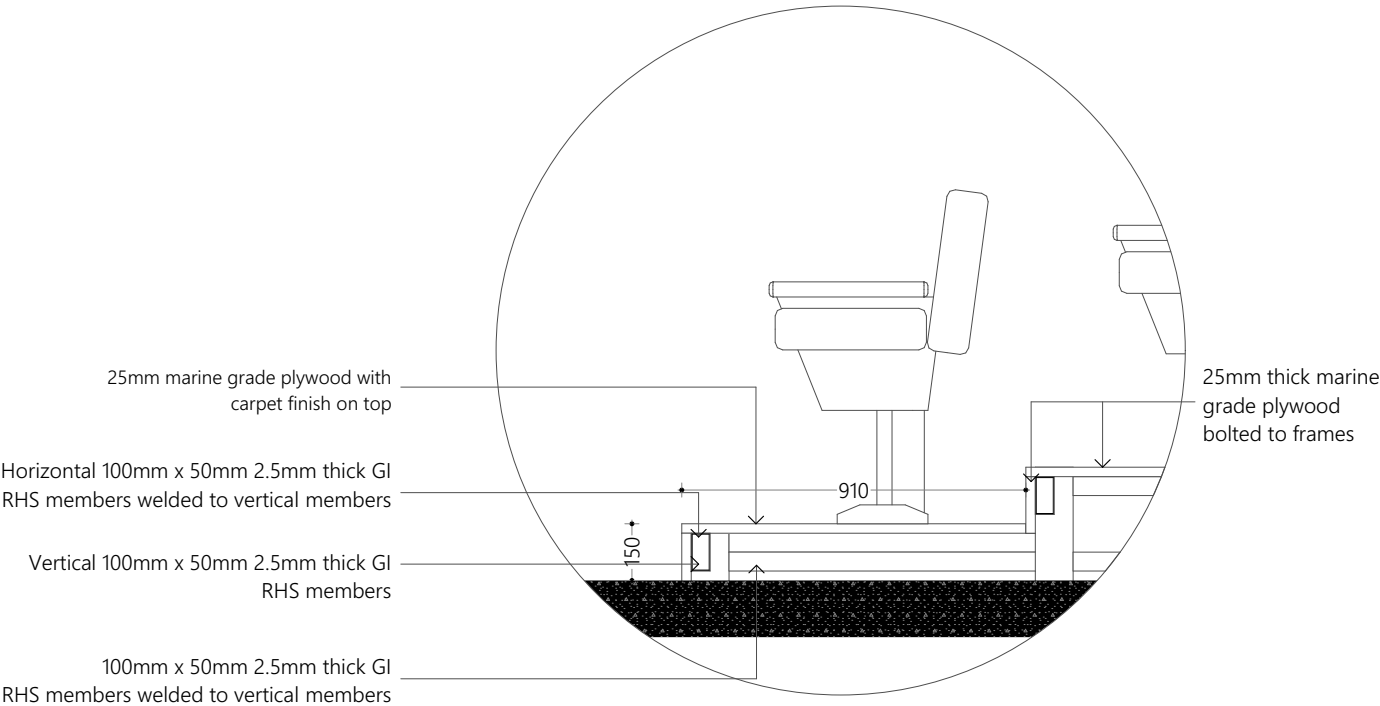
Rev:

Page:

C.2.9



Auditorium Section
1:50

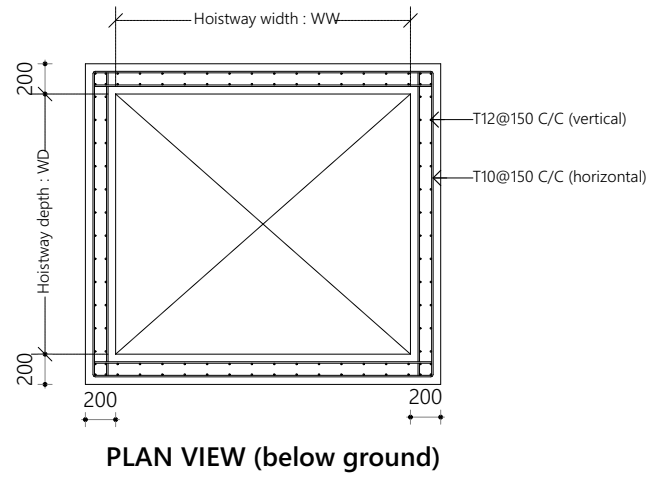
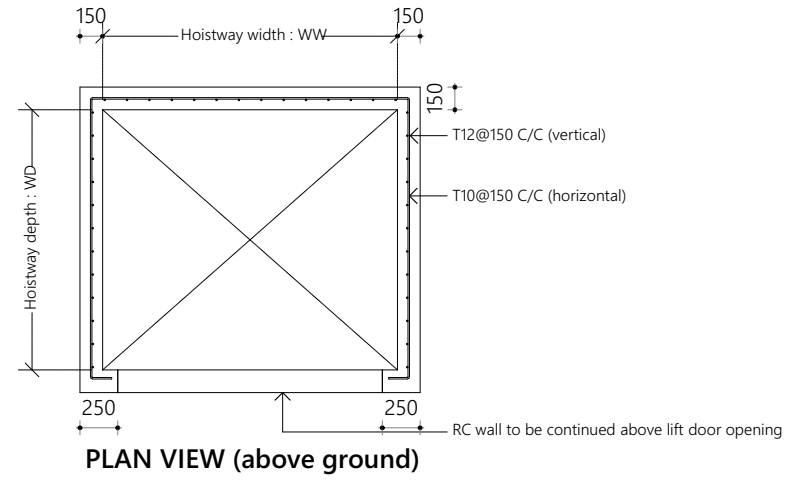
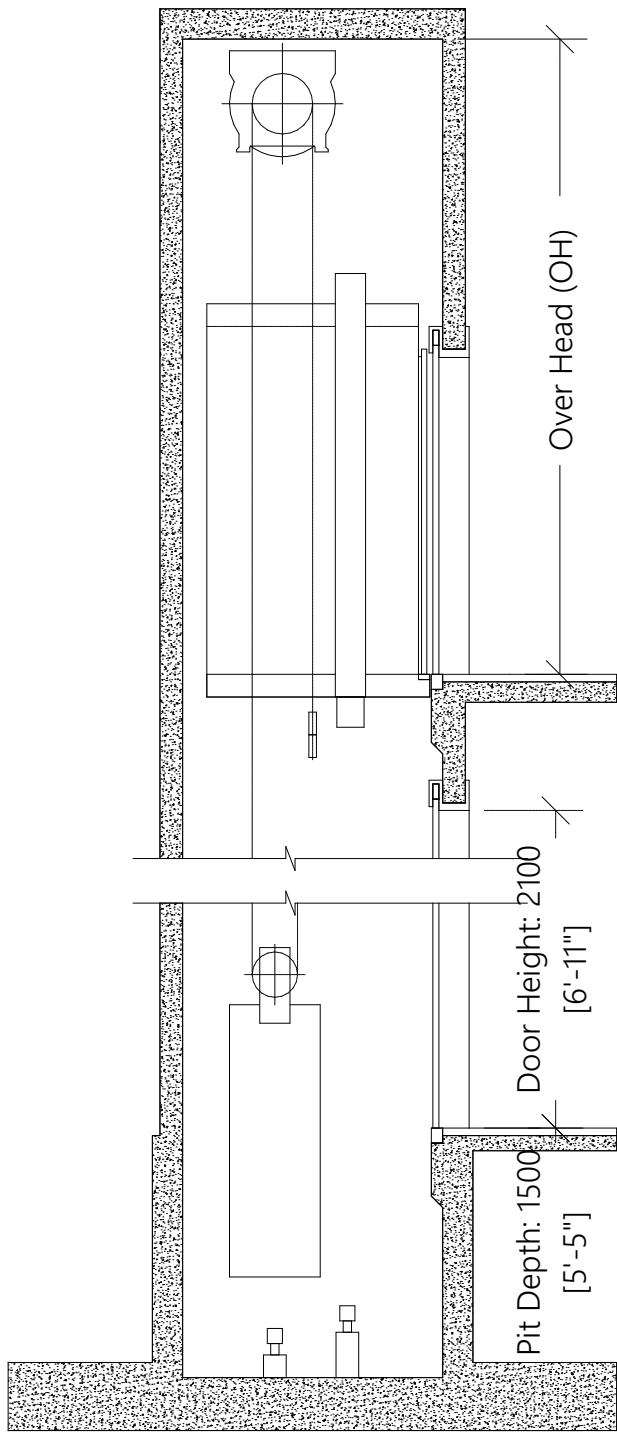


Auditorium Detail
1:20

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block Ha. Dhidhdhoo
Client
Ministry of Higher Education
30/11/2021
Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

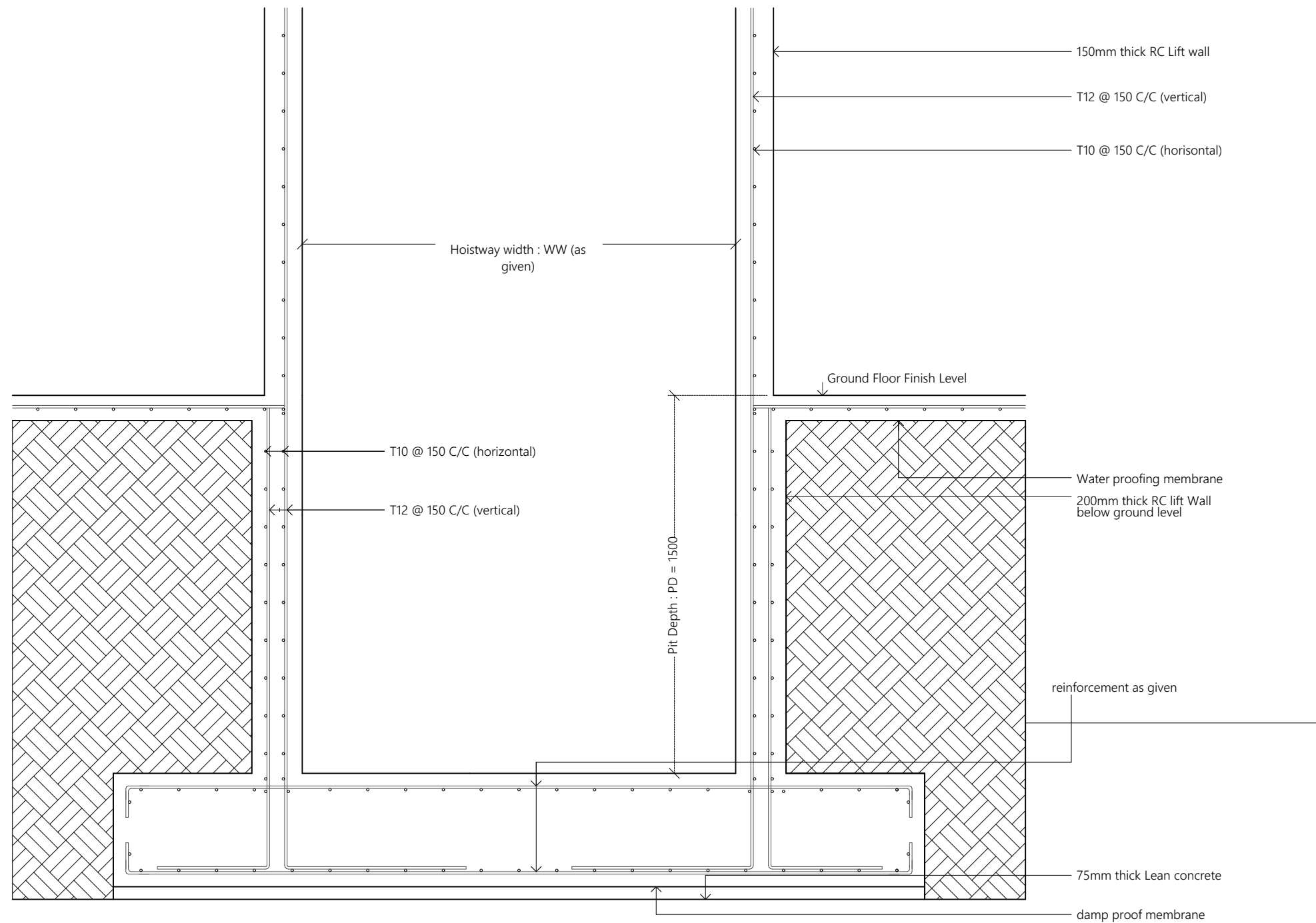


Notes:
Lift specifications and sizes to be verified by the manufacturer

KONE N MONOSPACE LIFT SPEC							
Persons/ Rated Load (kg)	Rated speed (m/sec)	Travel (m)	Door type	Entrance width (mm) LL	Car Type	Car internal dimensions (mm) BB x DD	Hoist way dimensions (mm) WW x WD
6/450	≤ 1.75	≤ 65	SO	900	SEC	1100 x 1150	1650 x 1740

LIFT SPECIFICATIONS

1:50



Lift Reinforcement Detail
1:20

Proposed
Centre of Excellence for Food Processing and Fisheries- Education Block Ha. Dhidhdhoo

Client
Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**

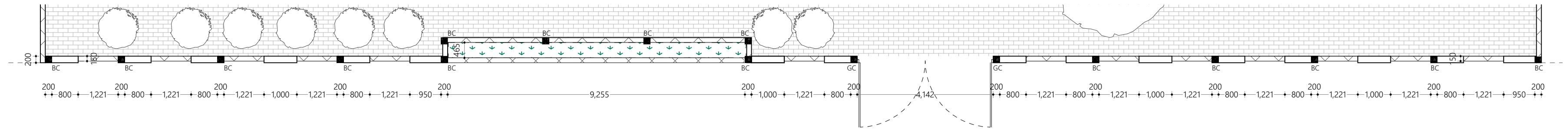


P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

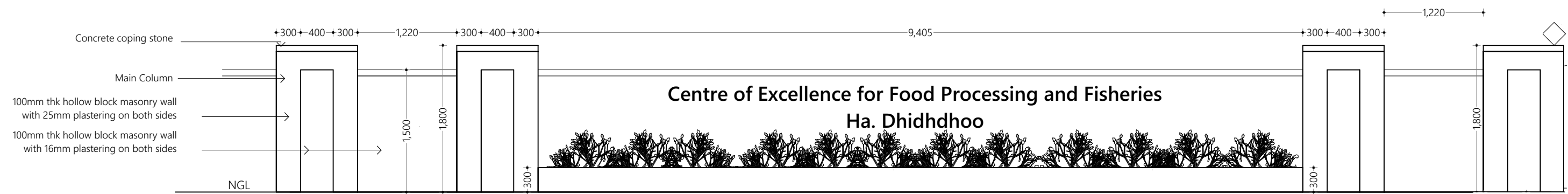
Rev:

Page:

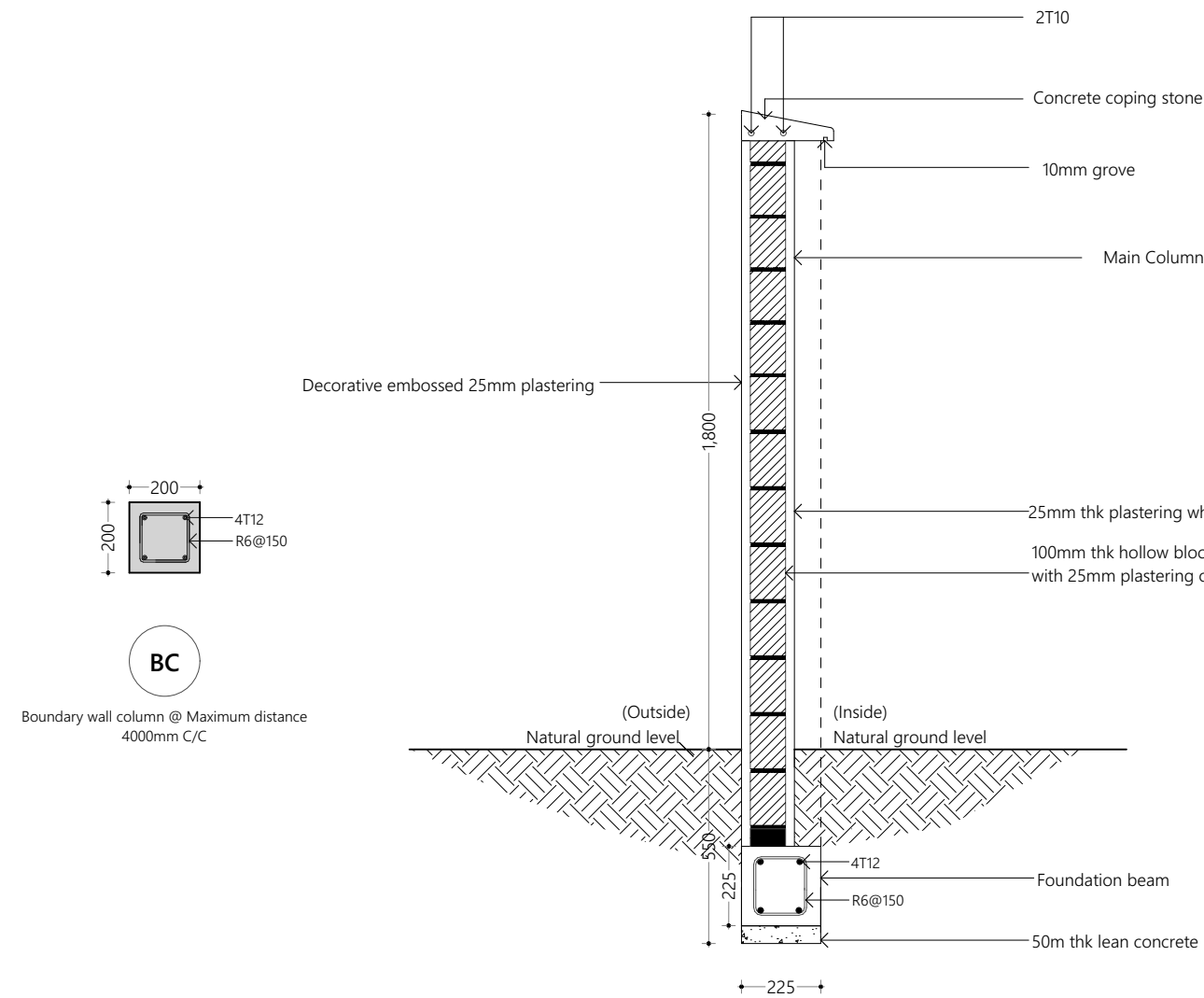
C.2.13



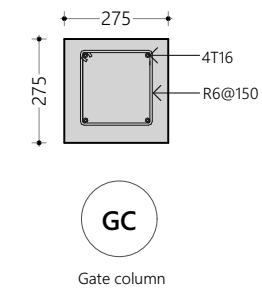
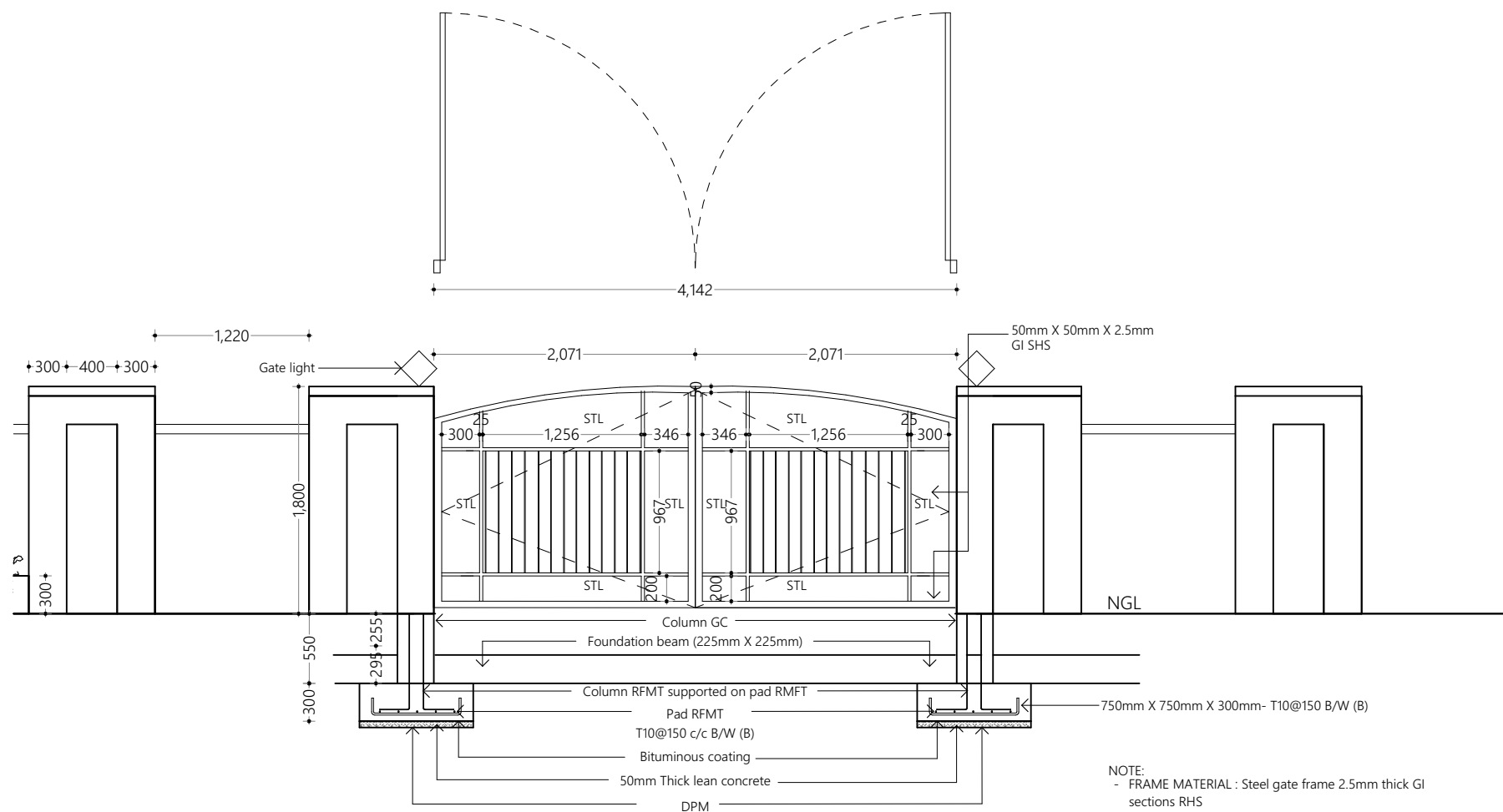
Plan View



Elevation



Boundary Wall Detail
1:50



Proposed

**Centre of
Excellence for Food
Processing and
Fisheries-
Education Block
Ha. Dhidhdhoo**

Client

Ministry of Higher Education

30/11/2021

Architect **Fathmath Ihudha Amir**
Engineer **Muaviyath Abdul Sattar**
Drawn By **Aishath Shadhny Afzal**



P (+960) 33 33 528 E info@epoch.associates
W epoch.associates A G.Rosary West 3rd Floor,
Husnuheena Magu, Male', Maldives

Rev:

Page:

C.2.15

Gate Detail
1:50