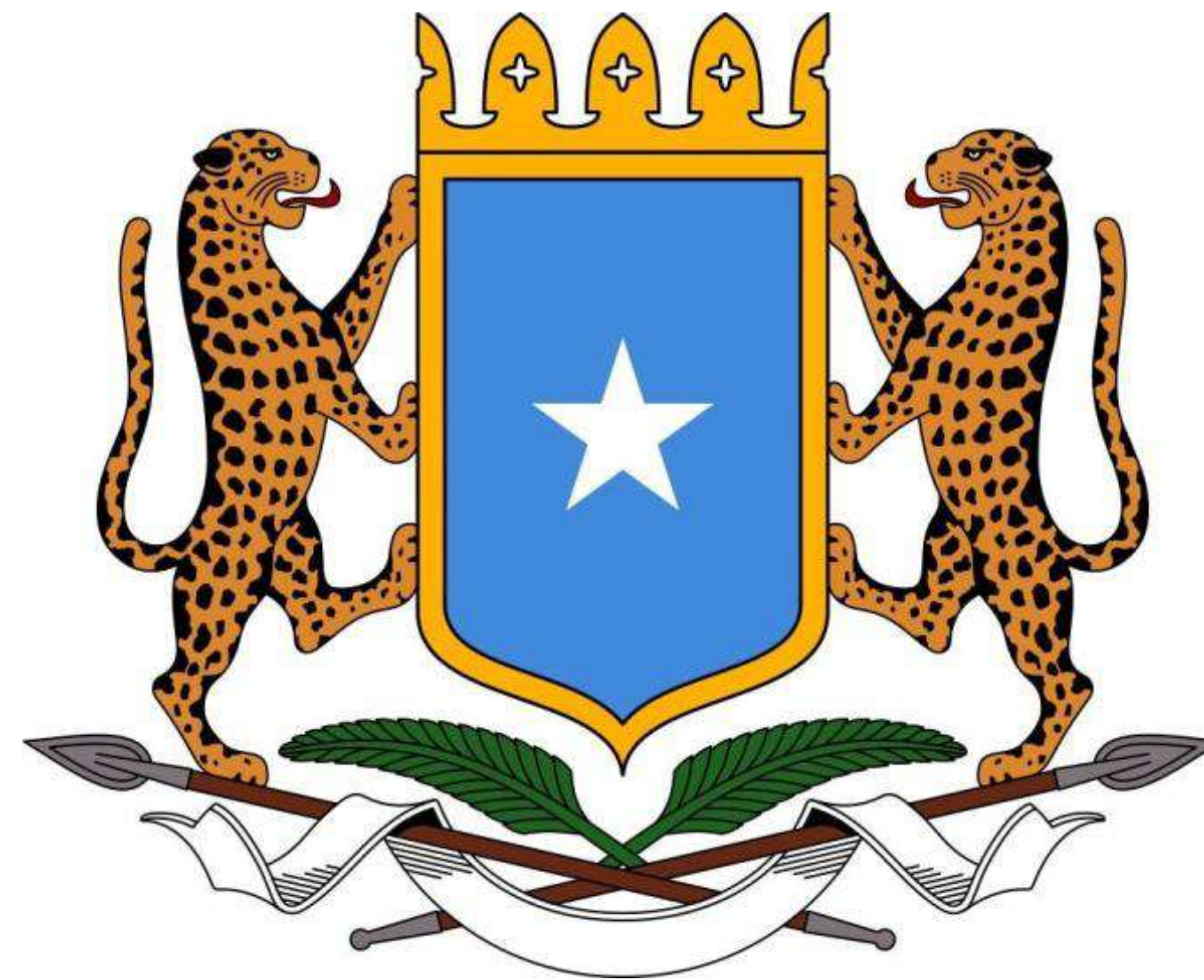




FEDERAL GOVERNMENT OF SOMALIA

SOMALIA SUSTAINABLE FISHERIES DEVELOPMENT PROJECT (SSFDP)

Ministries of Fisheries and Blue Economy FMS

PROPOSED CONSTRUCTION OF BANADIR REGIONAL ADMINISTRATION FISHERIES DEPARTMENT

DESIGN DRAWINGS



THE WORLD BANK



ARCHITECTURAL DESIGN DRAWINGS

CLIENT

FEDERAL GOVERNMENT OF SOMALIA

MINISTRIES OF FISHERIES FGS & FMS

PROJECT

**PROPOSED CONSTRUCTION OF BANADIR REGIONAL
ADMINISTRATION FISHERIES DEPARTMENT**

CONCEPT DESIGN BRIEF

Total Site Area

17m x 17m = 289 square metres

Landscaped Site Area

= 139 square metres

Building Plinth Site Area

= 150 square metres

GROUND FLOOR SPACES

1. Conference Hall/ Meeting/ Boardroom
2. Reception
3. Waiting Bay
4. Shared Offies
5. Shared Workspace
6. Shared Prayer Room

FIRST FLOOR SPACES

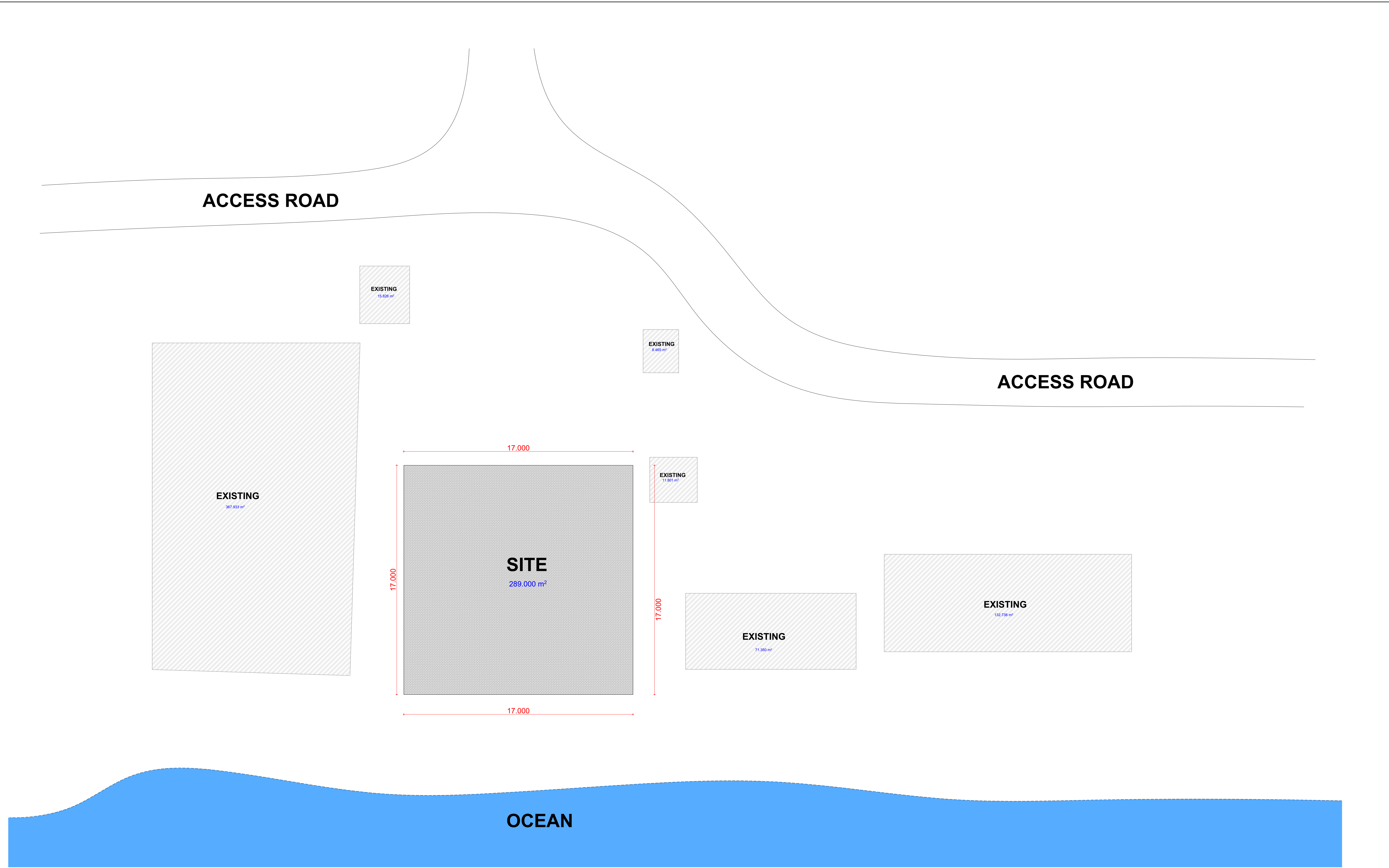
1. Executive Office 1
2. Shared Offices
3. Balcony
4. Store/ Archives Room
5. Executive Offices 1, 2.

LANDSCAPE OUTDOOR SPACES

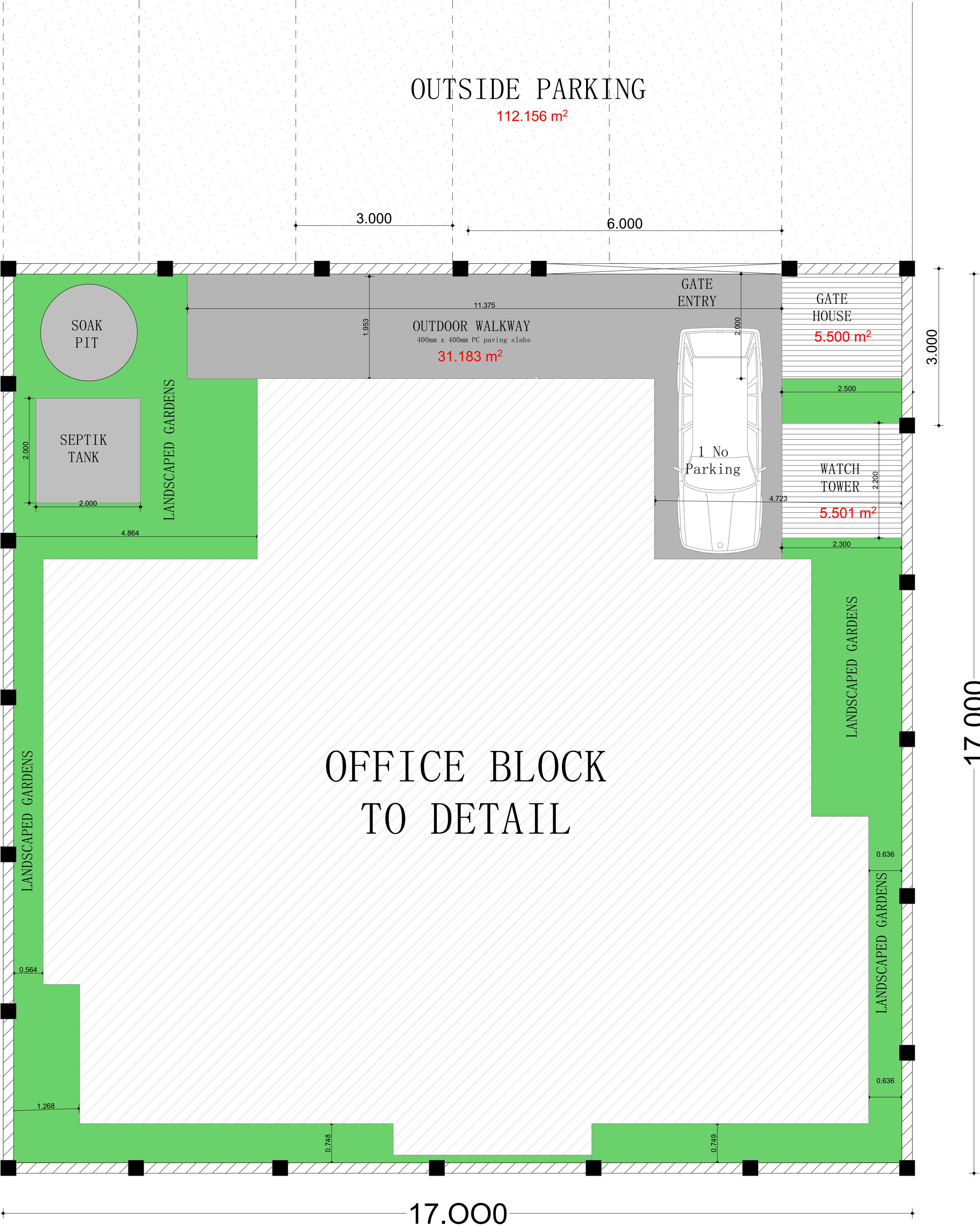
1. Landscaped Gardens
2. Circulation, Walkways
3. Parking Space
4. Gate House
5. Watch Tower
6. Septic Tank
7. Soak Pit
8. Boundary Wall
9. Access Gate

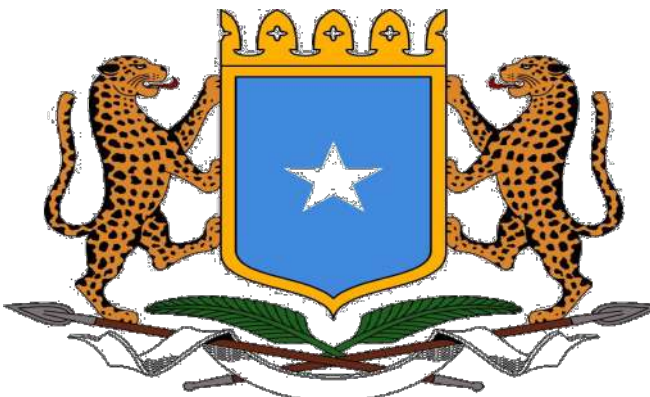


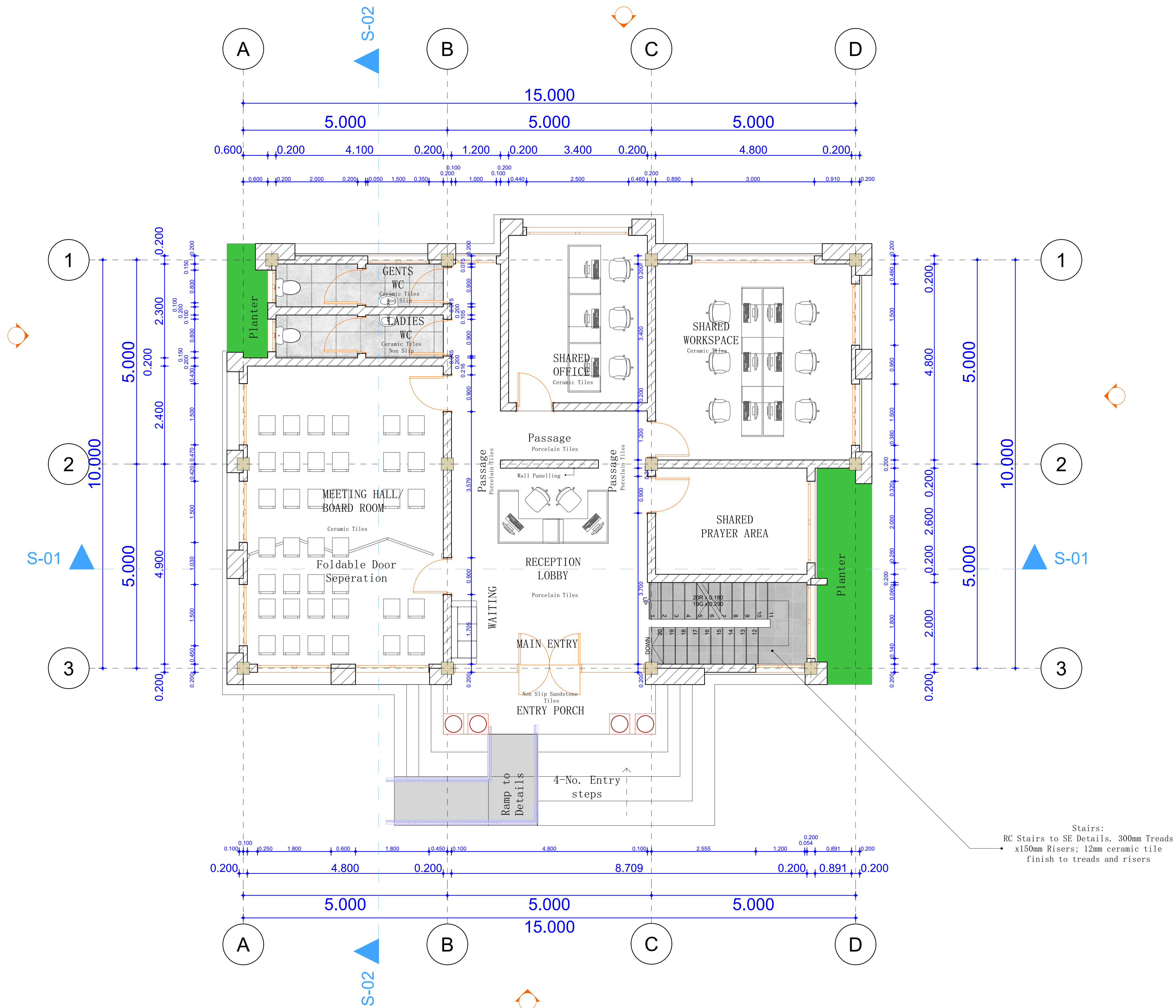
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	Client						Date		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026		A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By	Reviewed By	P178032		
						Mohamed Abdi Ahmed Saahid				

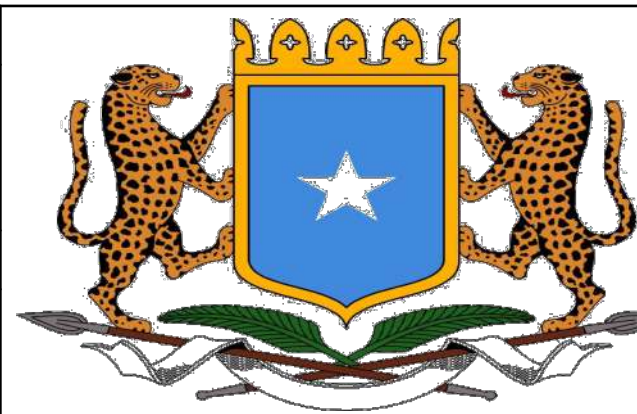


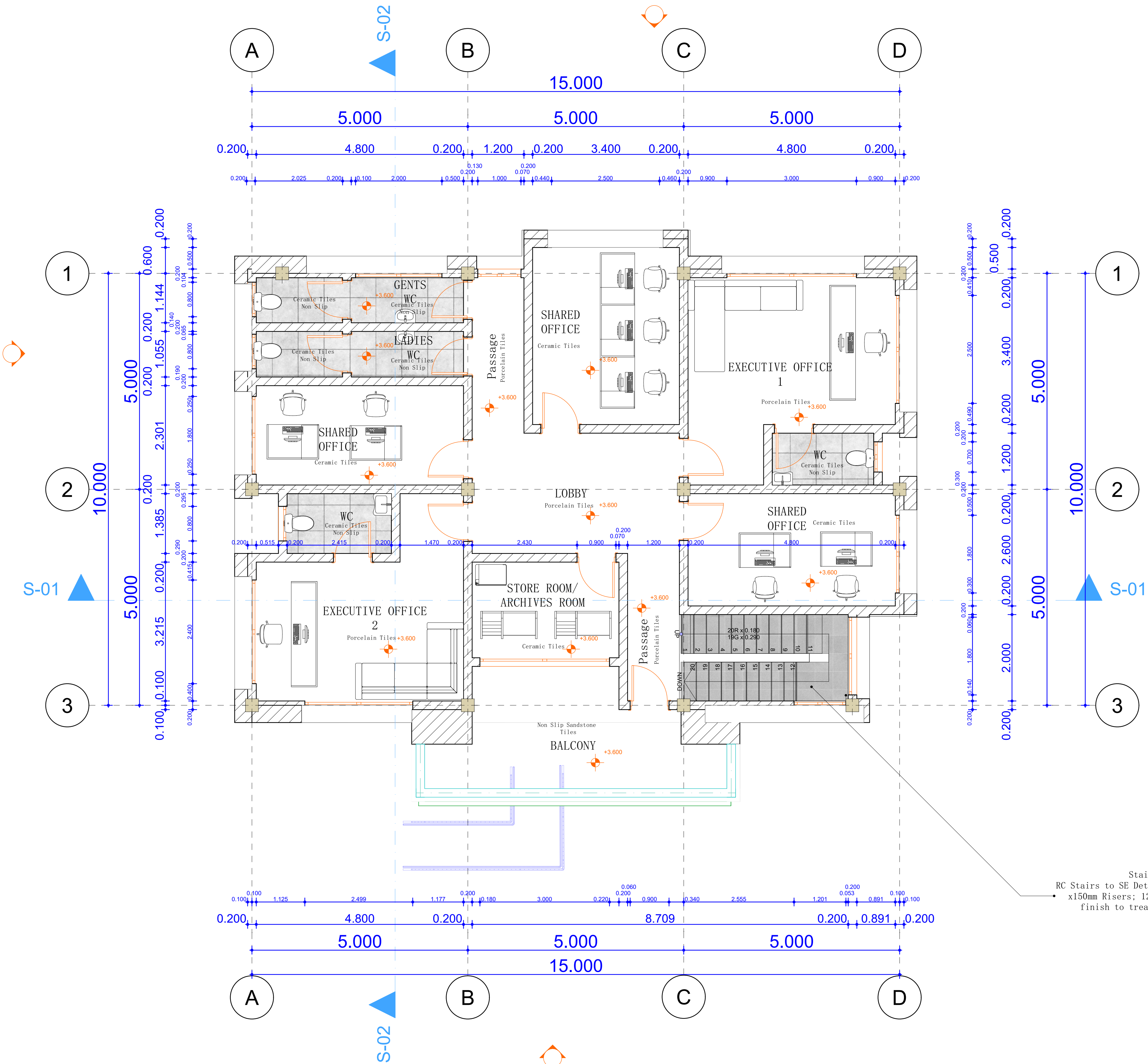
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	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026		A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.			Drawn By		Reviewed By	
							Mohamed Abdi Ahmed Saahid		P178032	



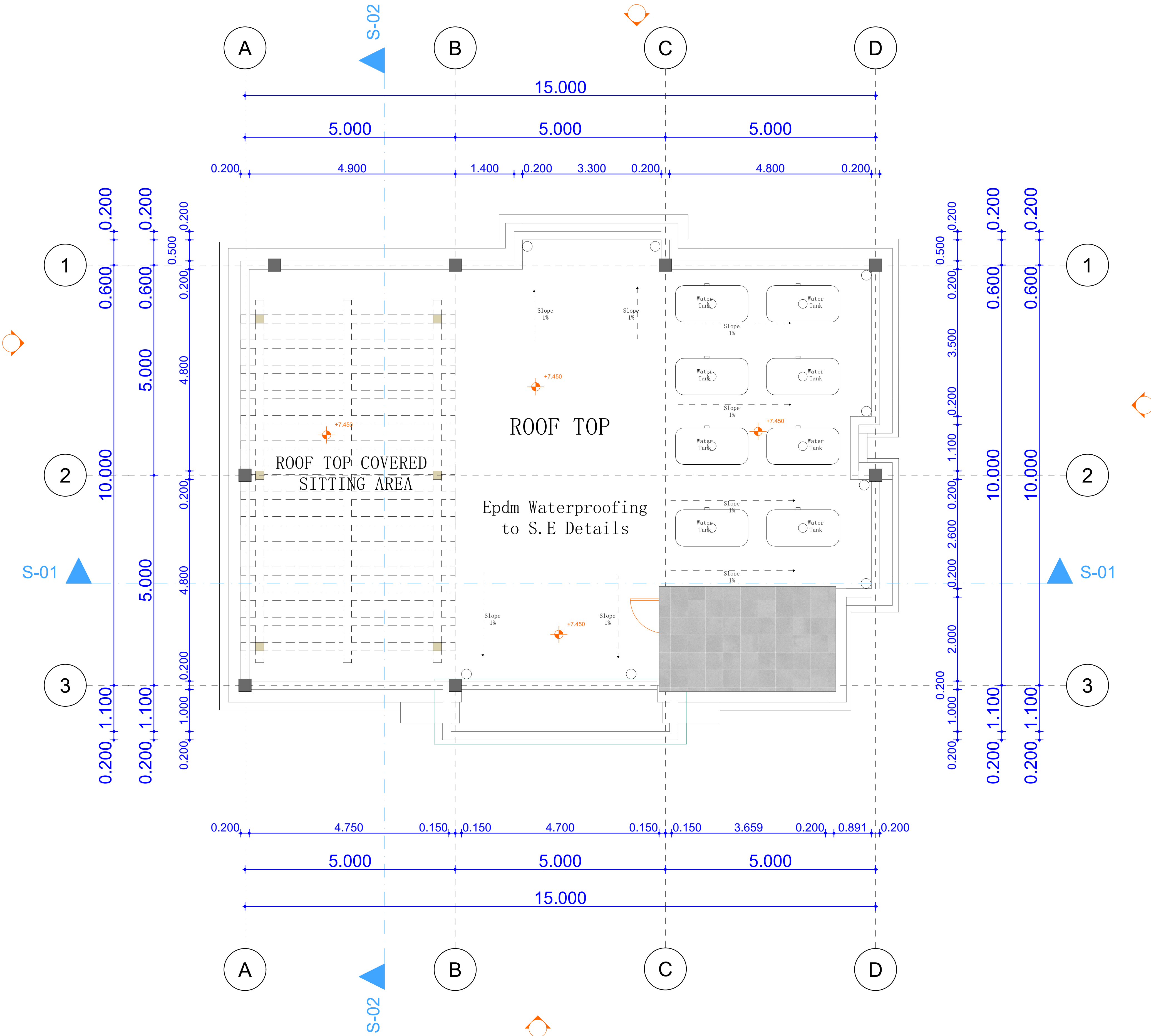
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	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Site Plan	
	Client						Date	Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026	A1	Project No:
								Drawn By	Reviewed By
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Mohamed Abdi Ahmed Saahid			



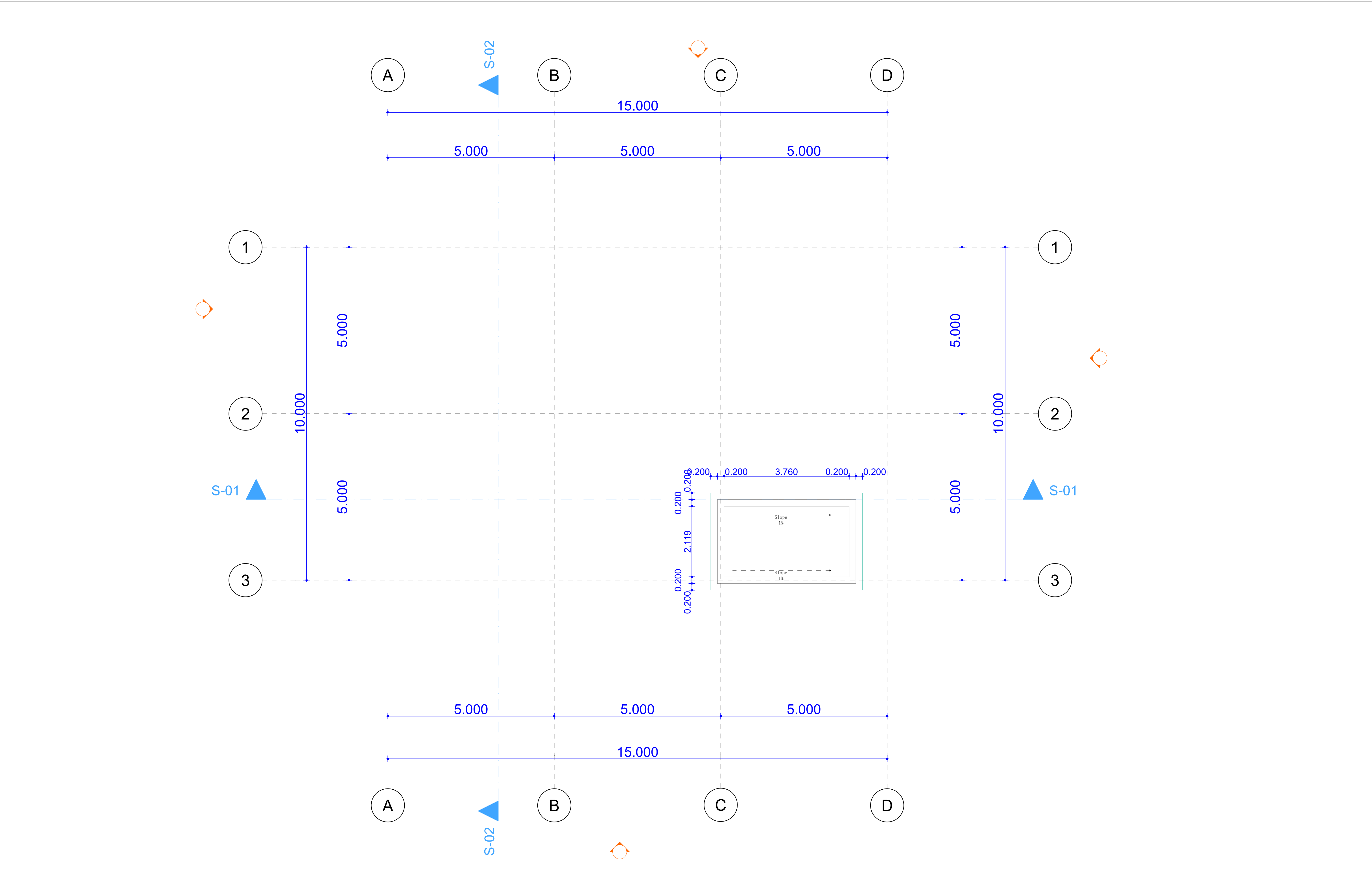
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Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB:		Date	13-03-2026	Sheet No.	Project No:		
1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.				Drawn By	Reviewed By		P178032		
				Mohamed Abdi Ahmed Saahid					

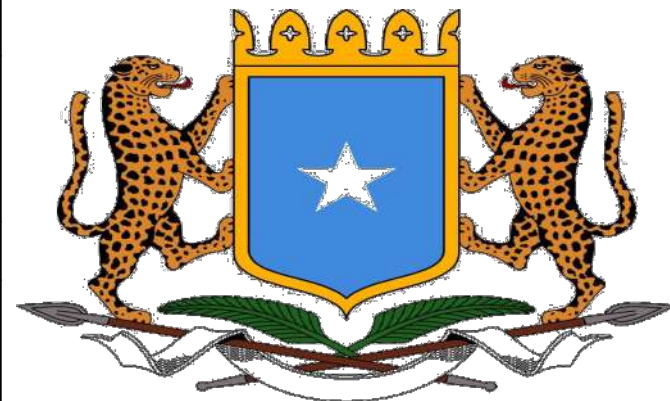


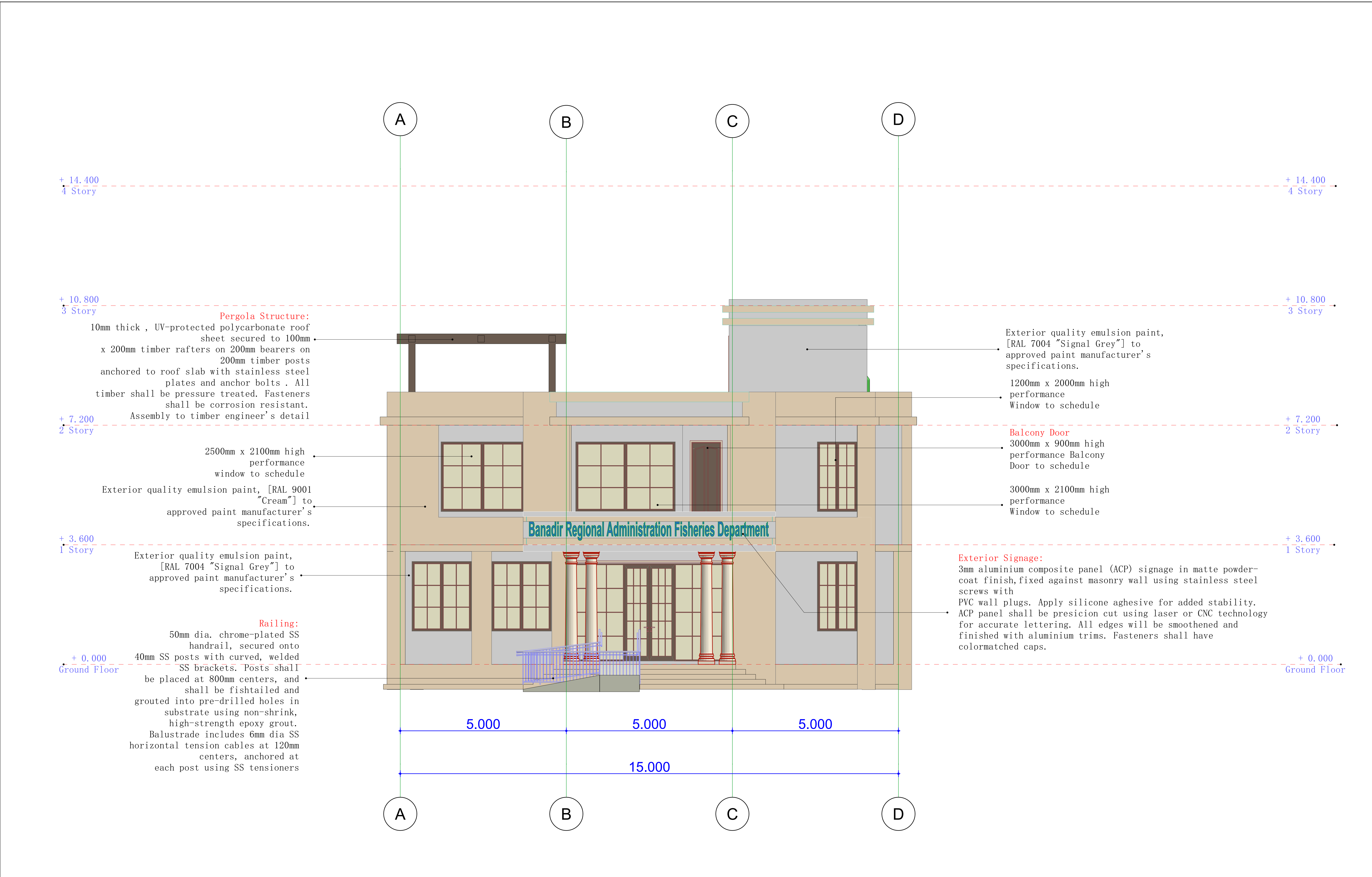
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Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB:		Date		Sheet No.			
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				Drawn By		Reviewed By			
				Mohamed Abdi Ahmed Saahid		P178032			



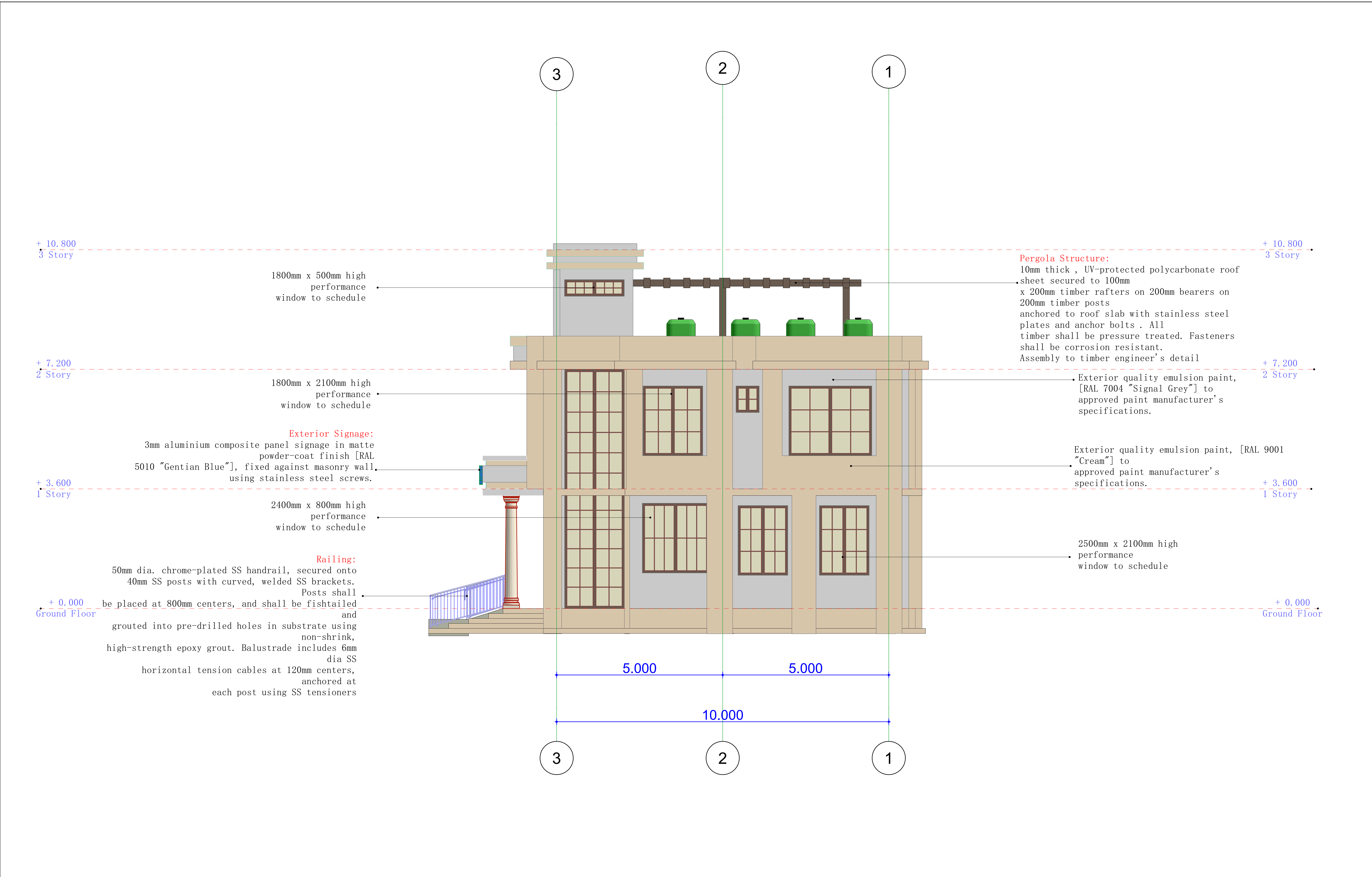
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Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia			NB:		Date	Sheet No.		
		1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		13-03-2026	A1	Project No:			
				Drawn By	Reviewed By	P178032			
				Mohamed Abdi Ahmed Saahid					



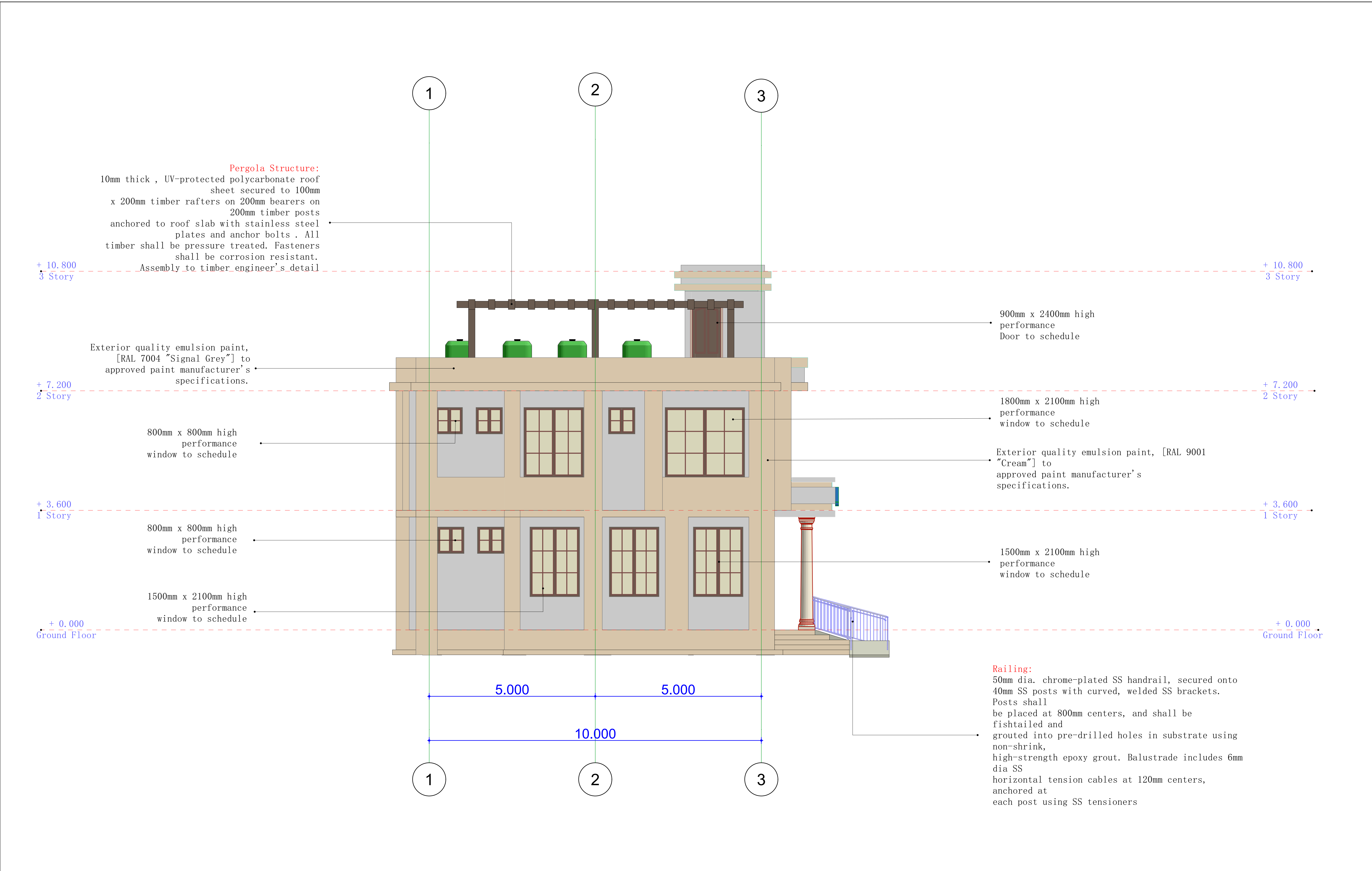
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	Client						Date		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026		A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By	Reviewed By	P178032		
				Mohamed Abdi Ahmed Saahid						



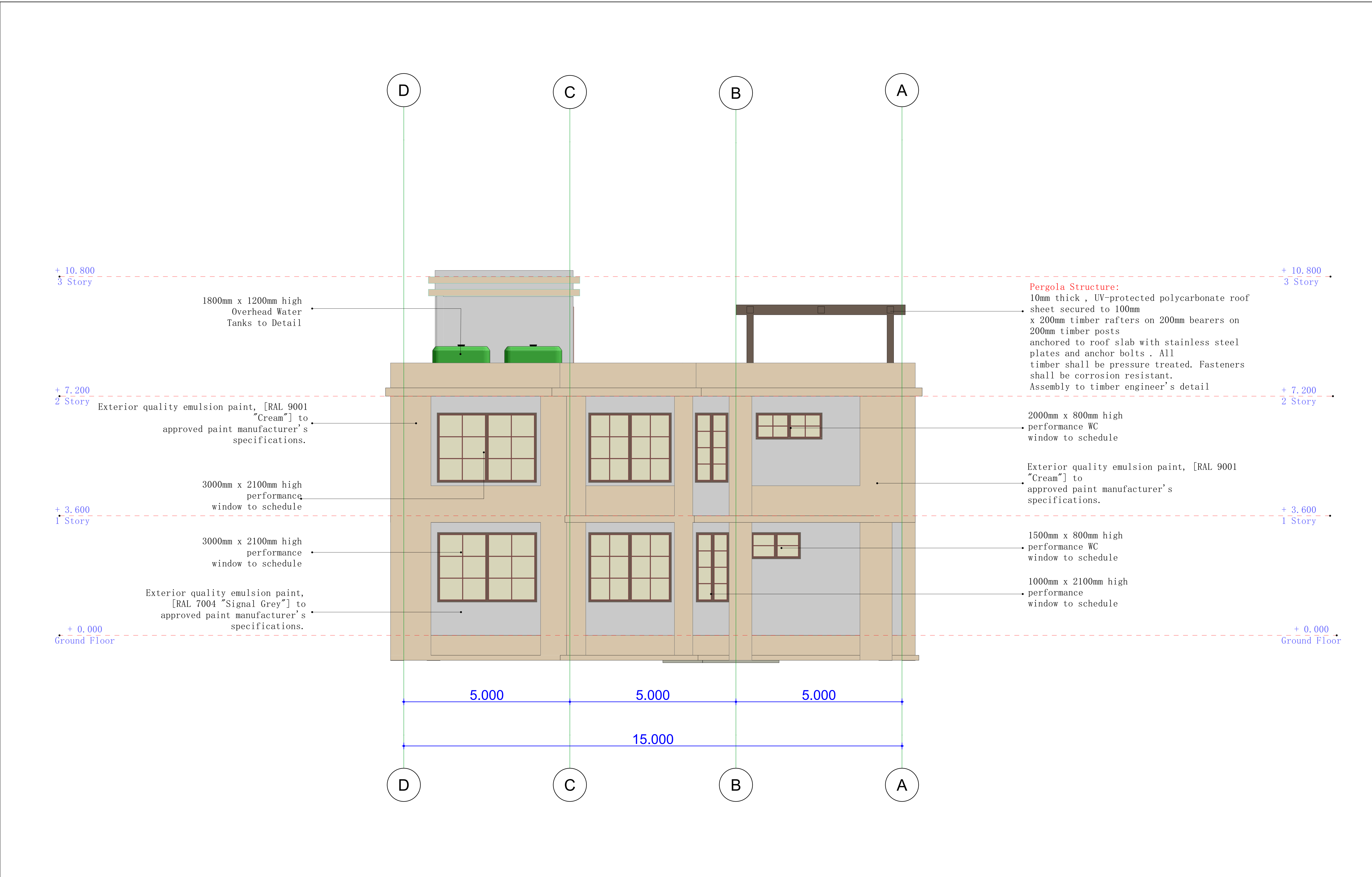
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Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Date	13-03-2026	Sheet No.			
				Drawn By	Mohamed Abdi Ahmed Saahid	Project No: P178032			
						Reviewed By			



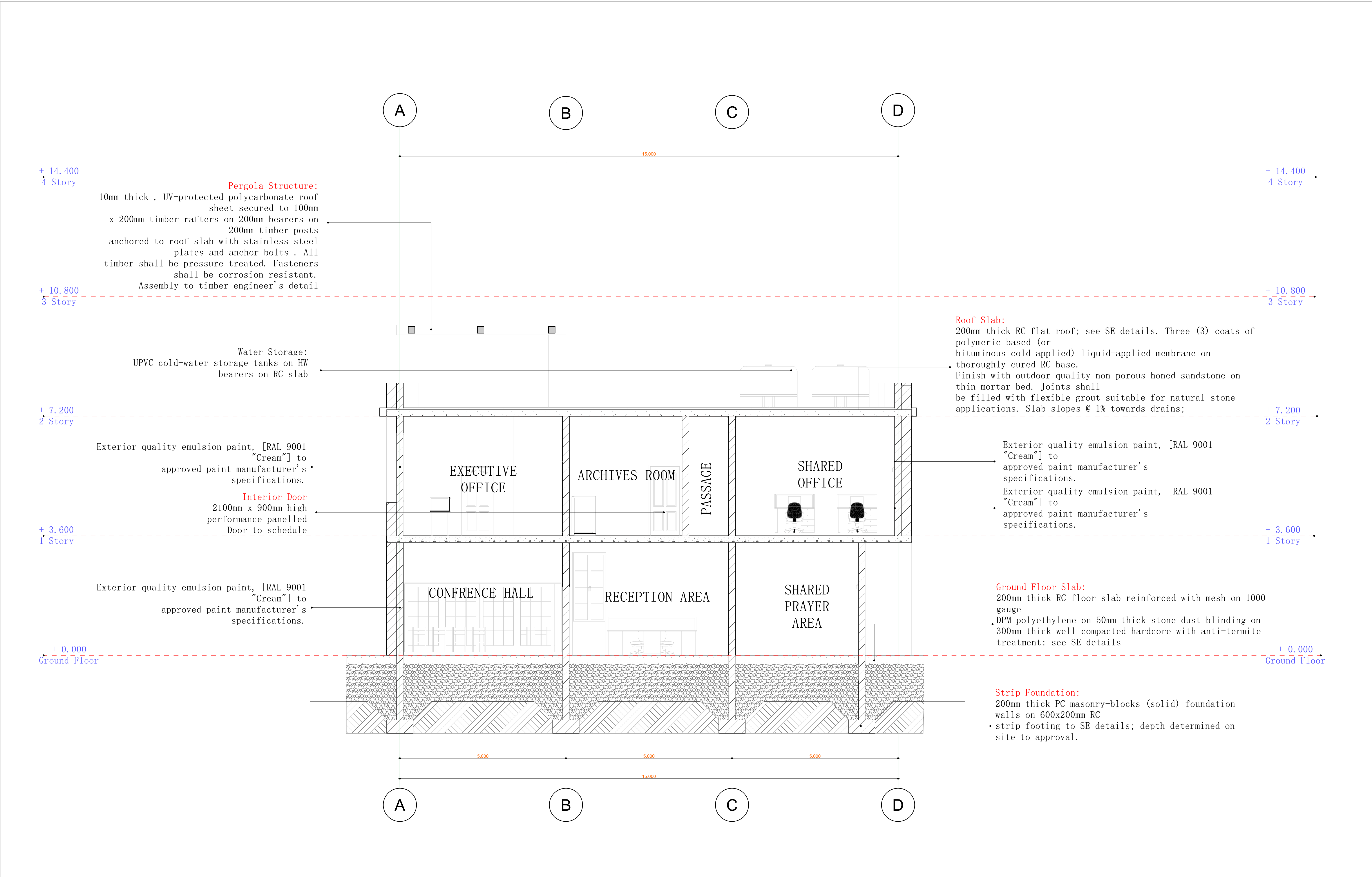
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	Client						Date		Sheet No.	
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				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By	Reviewed By		P178032	
						Mohamed Abdi Ahmed Saahid				



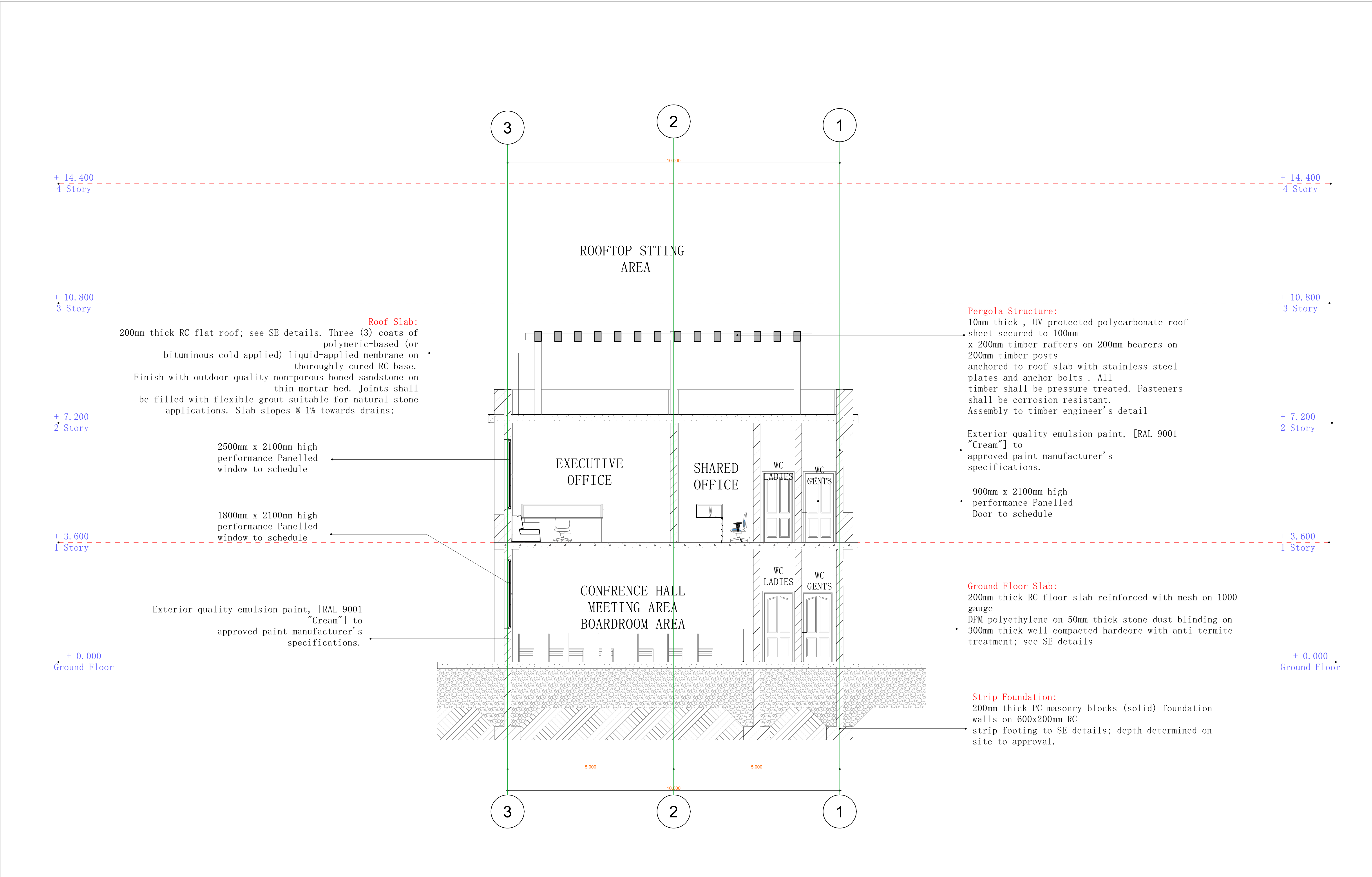
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Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By	Reviewed By	Project No: P178032				
				Mohamed Abdi Ahmed Saahid						



Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title			
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					NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By		Reviewed By	P178032
						Mohamed Abdi Ahmed Saahid				

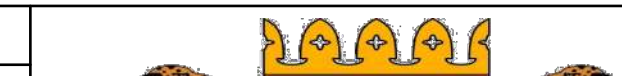
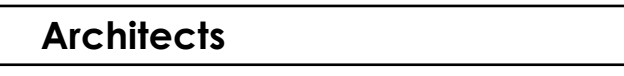


Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title		
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Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	Date		Sheet No.		Project No:			
		13-03-2026		A1		P178032			
		NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By		Reviewed By			
				Mohamed Abdi Ahmed Saahid					



Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Cut Section 2	
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	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026	A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.			Drawn By	Reviewed By	P178032
							Mohamed Abdi Ahmed Saahid		



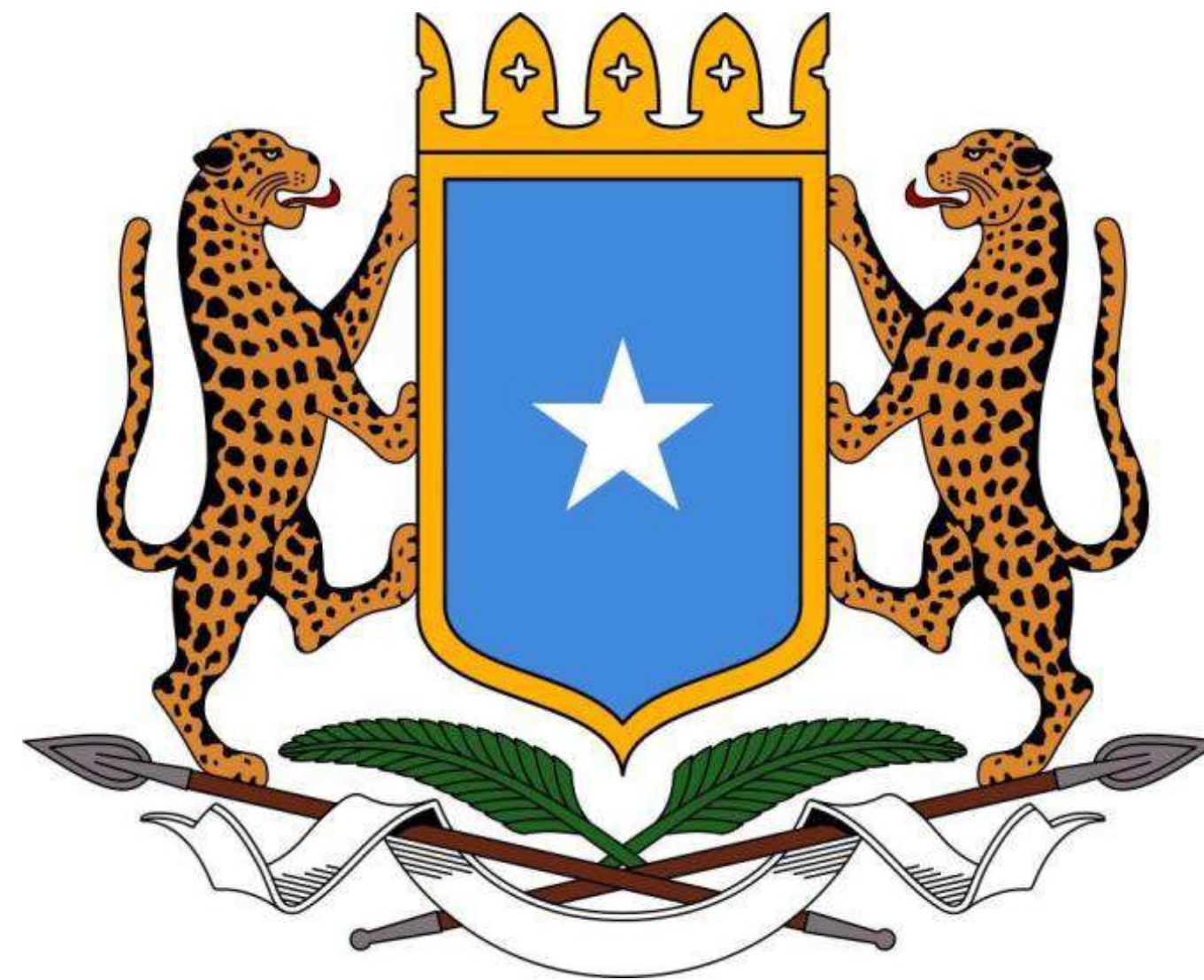
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	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026	A1	Project No:
							NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By
						Mohamed Abdi Ahmed Saahid		P178032	



Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	NA	
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				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By	Reviewed By	Project No:
						Mohamed Abdi Ahmed Saahid		P178032



Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	NA	BANADIR 3D Illustration 3	
Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Date	Sheet No.				
				13-03-2026	A1	Project No:			
				Drawn By	Reviewed By		P178032		
				Mohamed Abdi Ahmed Saahid					



FEDERAL GOVERNMENT OF SOMALIA

SOMALIA SUSTAINABLE FISHERIES DEVELOPMENT PROJECT (SSFDP)

Ministries of Fisheries and Blue Economy FMS

PROPOSED CONSTRUCTION OF BANADIR REGIONAL ADMINISTRATION FISHERIES DEPARTMENT

DESIGN DRAWINGS



THE WORLD BANK



REFLECTED CEILING PLANS DRAWINGS

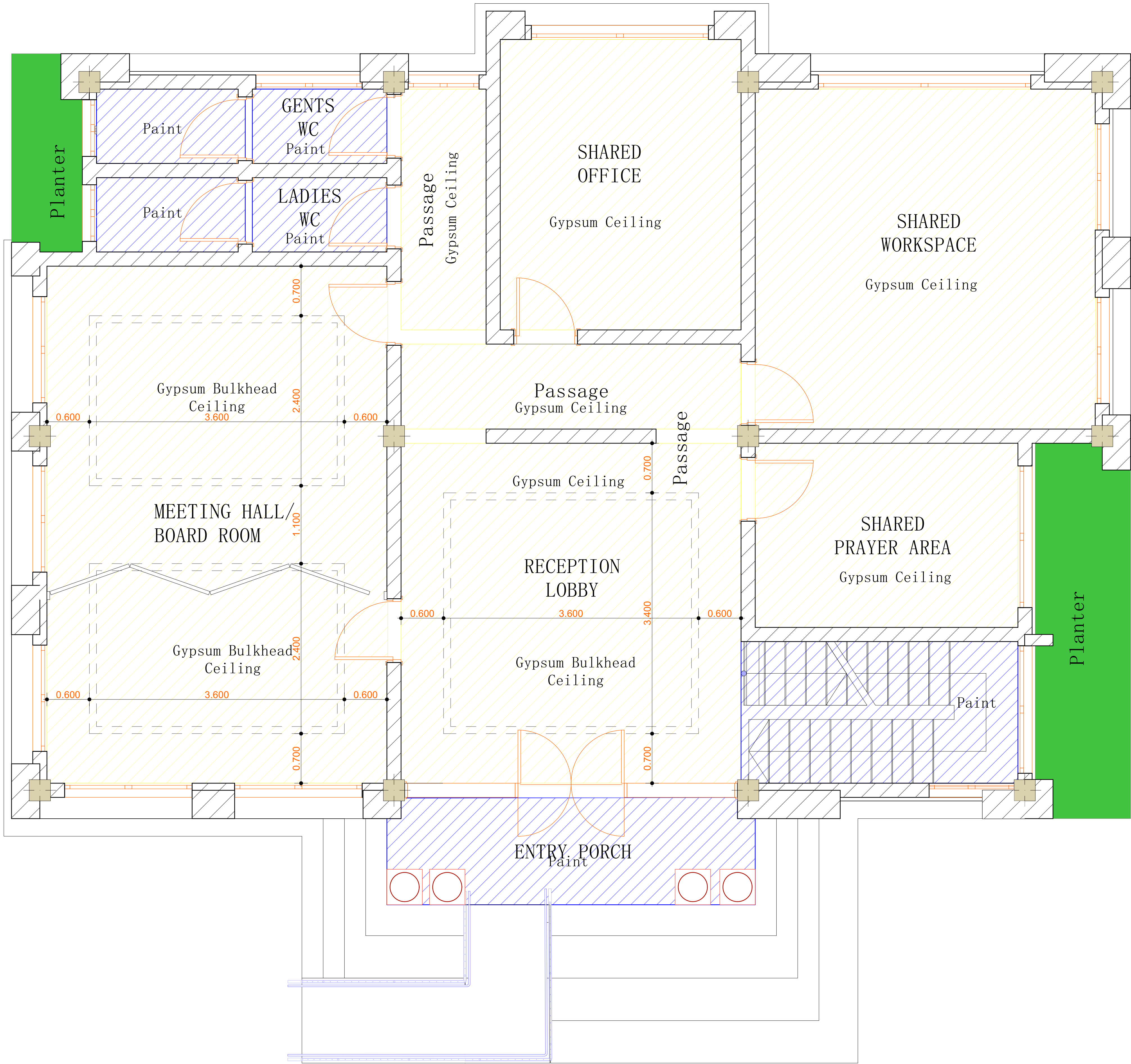
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FEDERAL GOVERNMENT OF SOMALIA

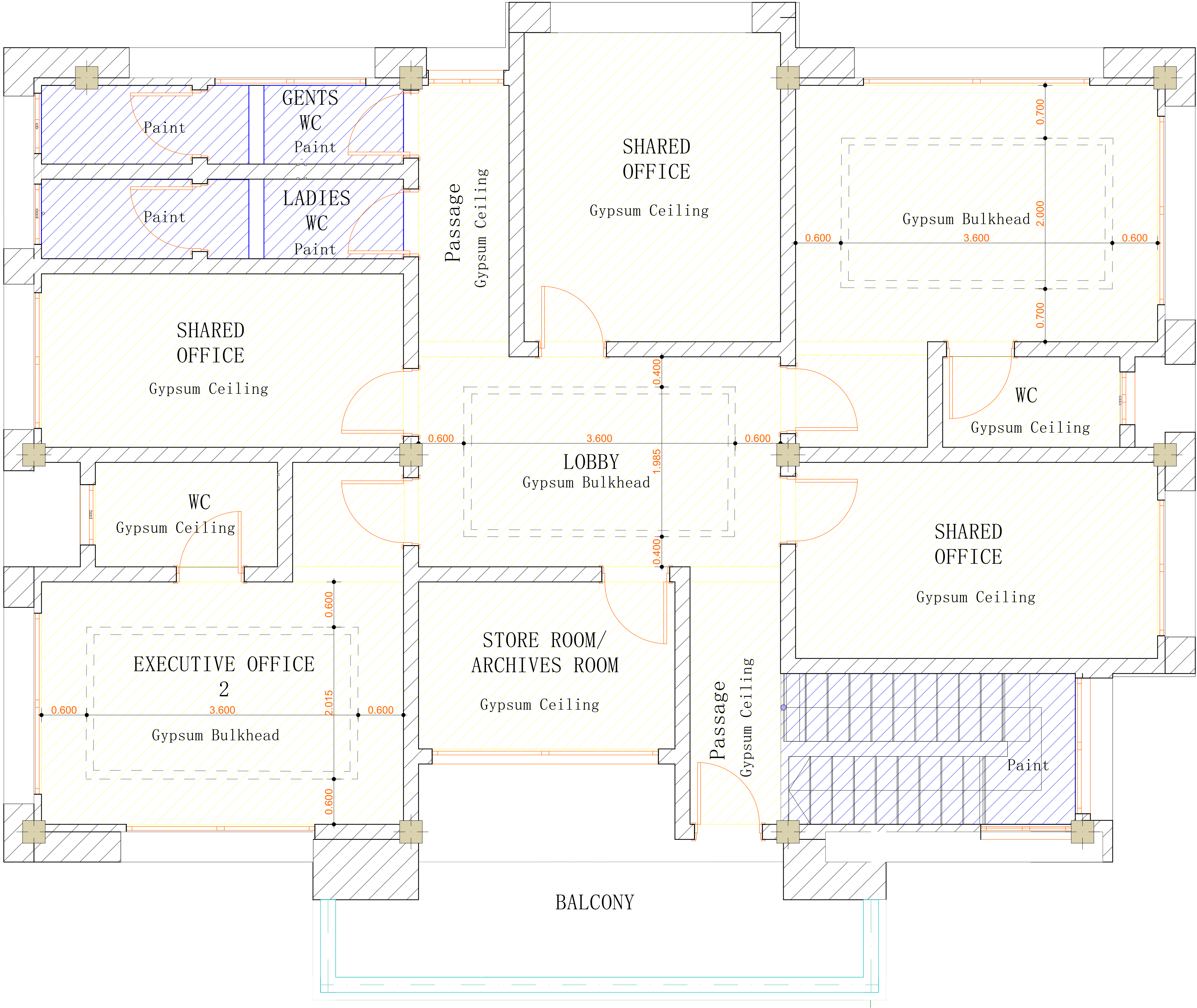
MINISTRIES OF FISHERIES FGS & FMS

PROJECT

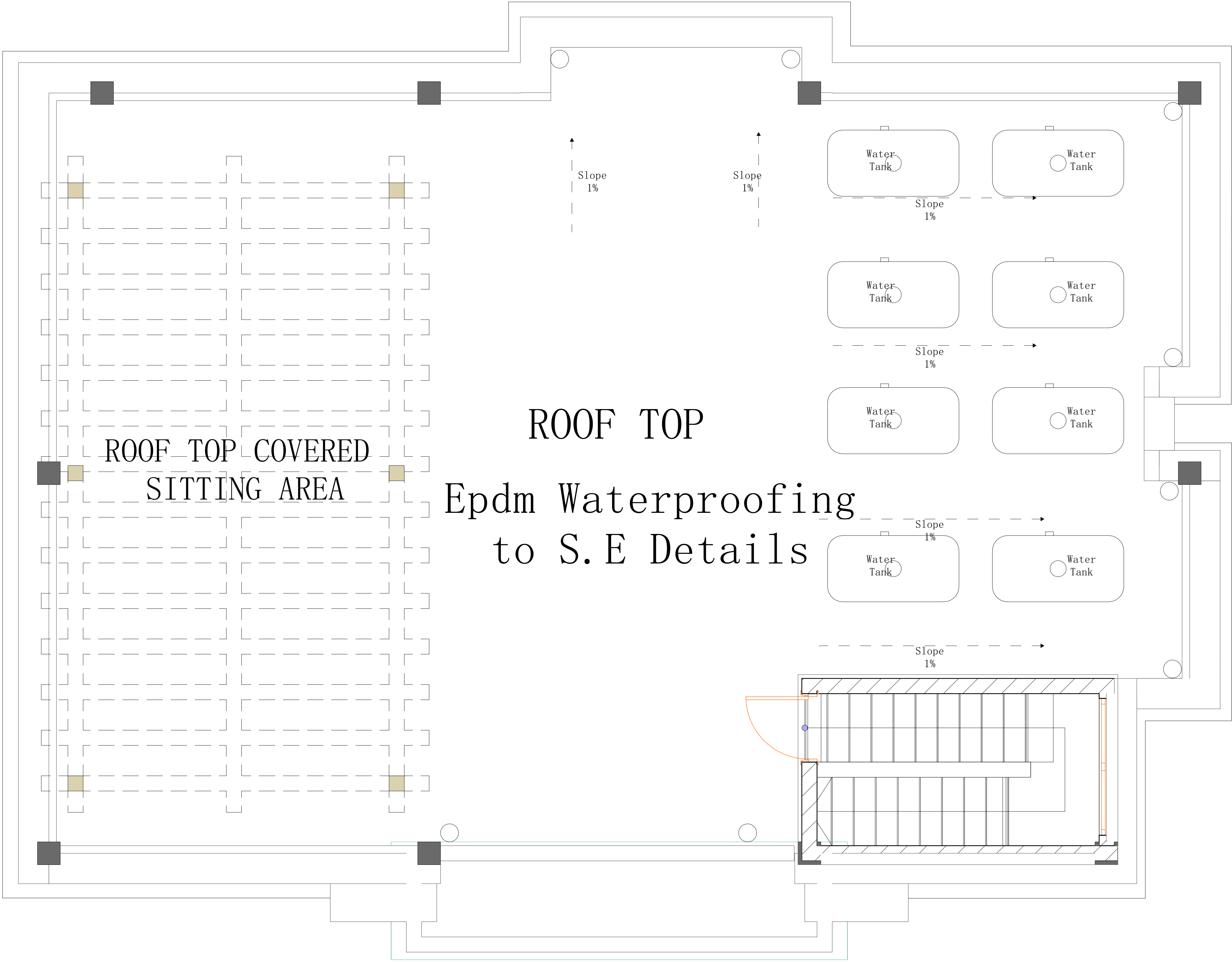
**PROPOSED CONSTRUCTION OF BANADIR REGIONAL
ADMINISTRATION FISHERIES DEPARTMENT**

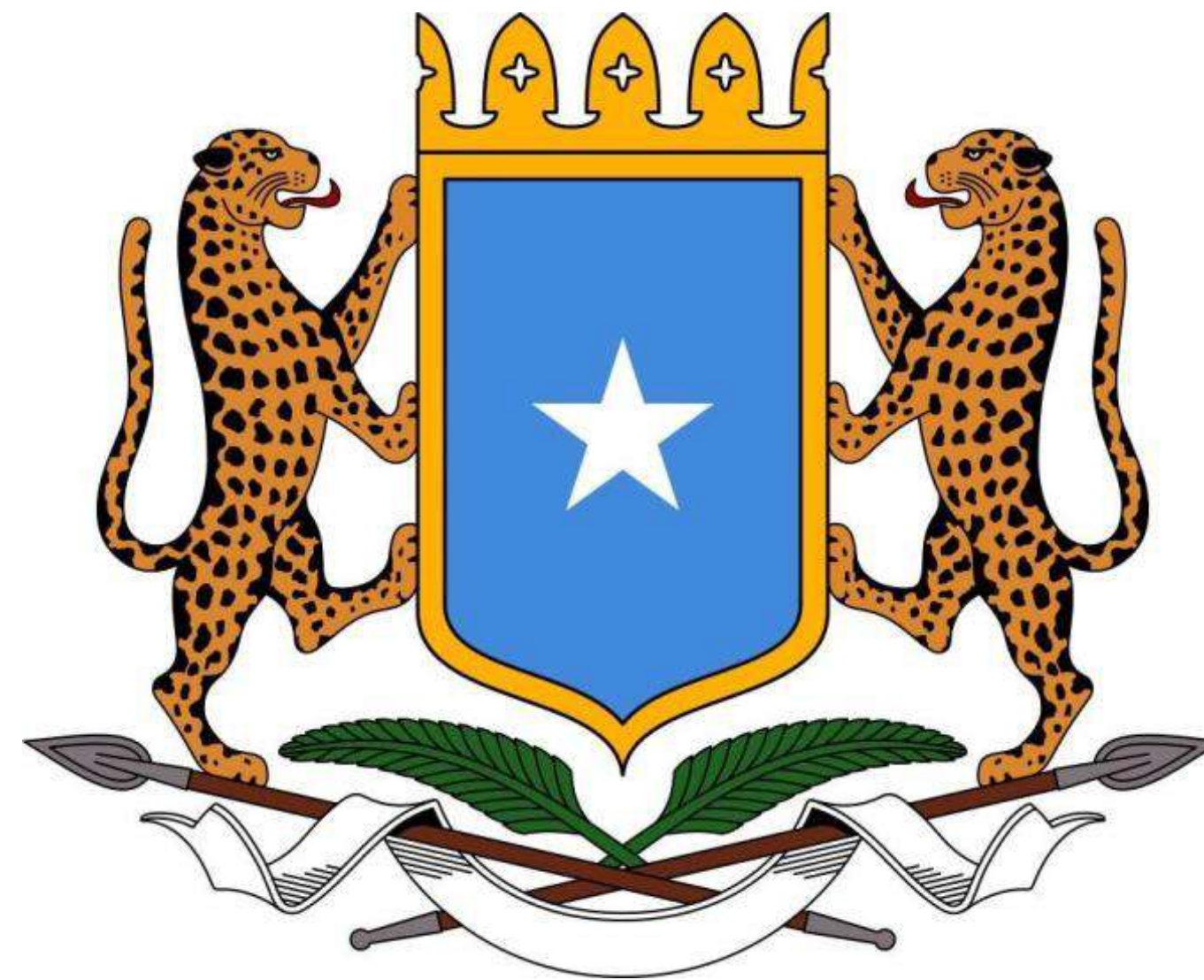


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	Client						Date		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026		A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.			Drawn By		Reviewed By	
						Mohamed Abdi Ahmed Saahid		P178032		



Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title			
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:30		BANADIR First Floor RCP Plan	
	Client						Date		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026		A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.			Drawn By		Reviewed By	P178032
							Mohamed Abdi Ahmed Saahid			





FEDERAL GOVERNMENT OF SOMALIA

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Ministries of Fisheries and Blue Economy FMS

PROPOSED CONSTRUCTION OF BANADIR REGIONAL ADMINISTRATION FISHERIES DEPARTMENT

DESIGN DRAWINGS



THE WORLD BANK



SCHEDULES DRAWINGS

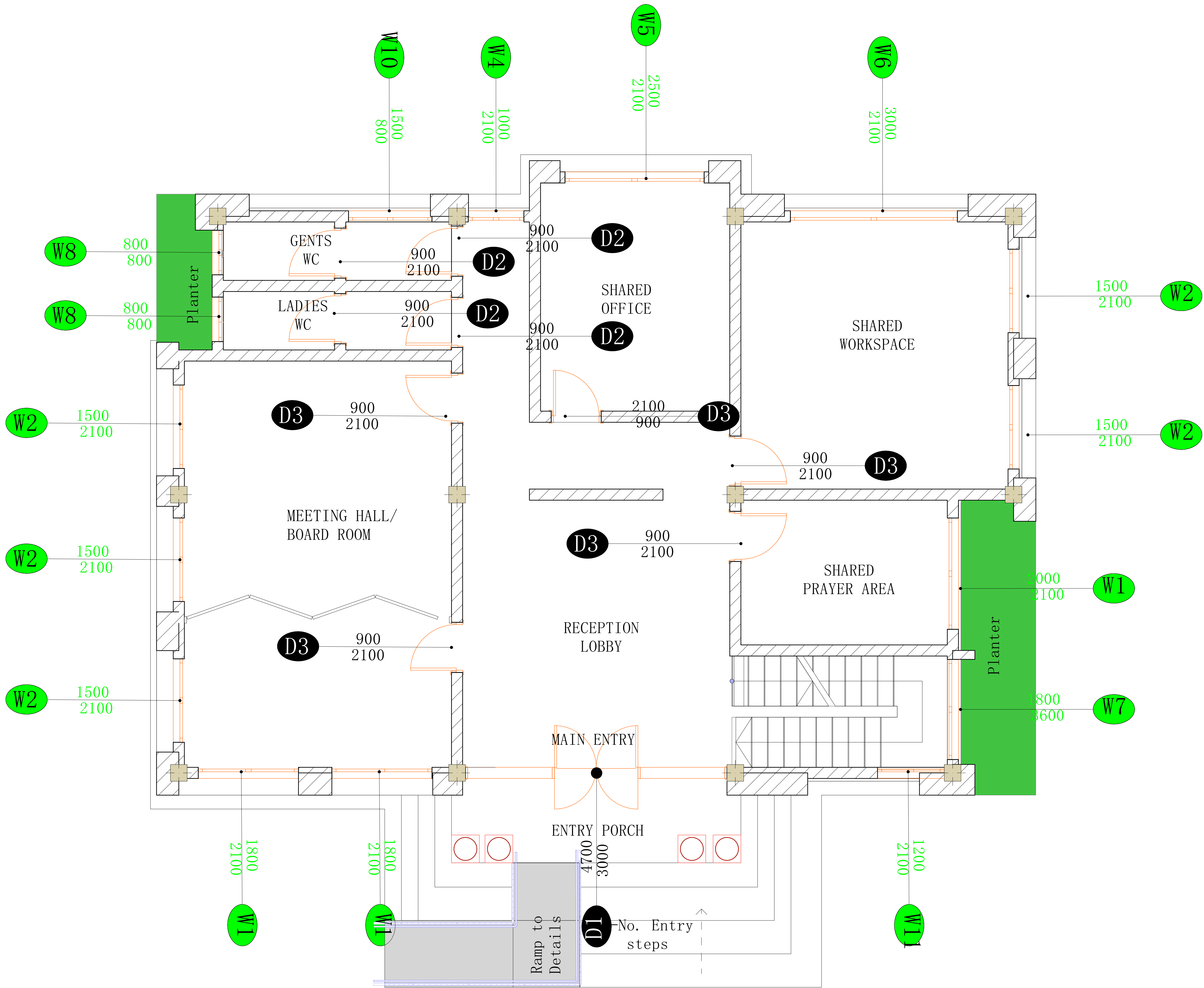
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FEDERAL GOVERNMENT OF SOMALIA

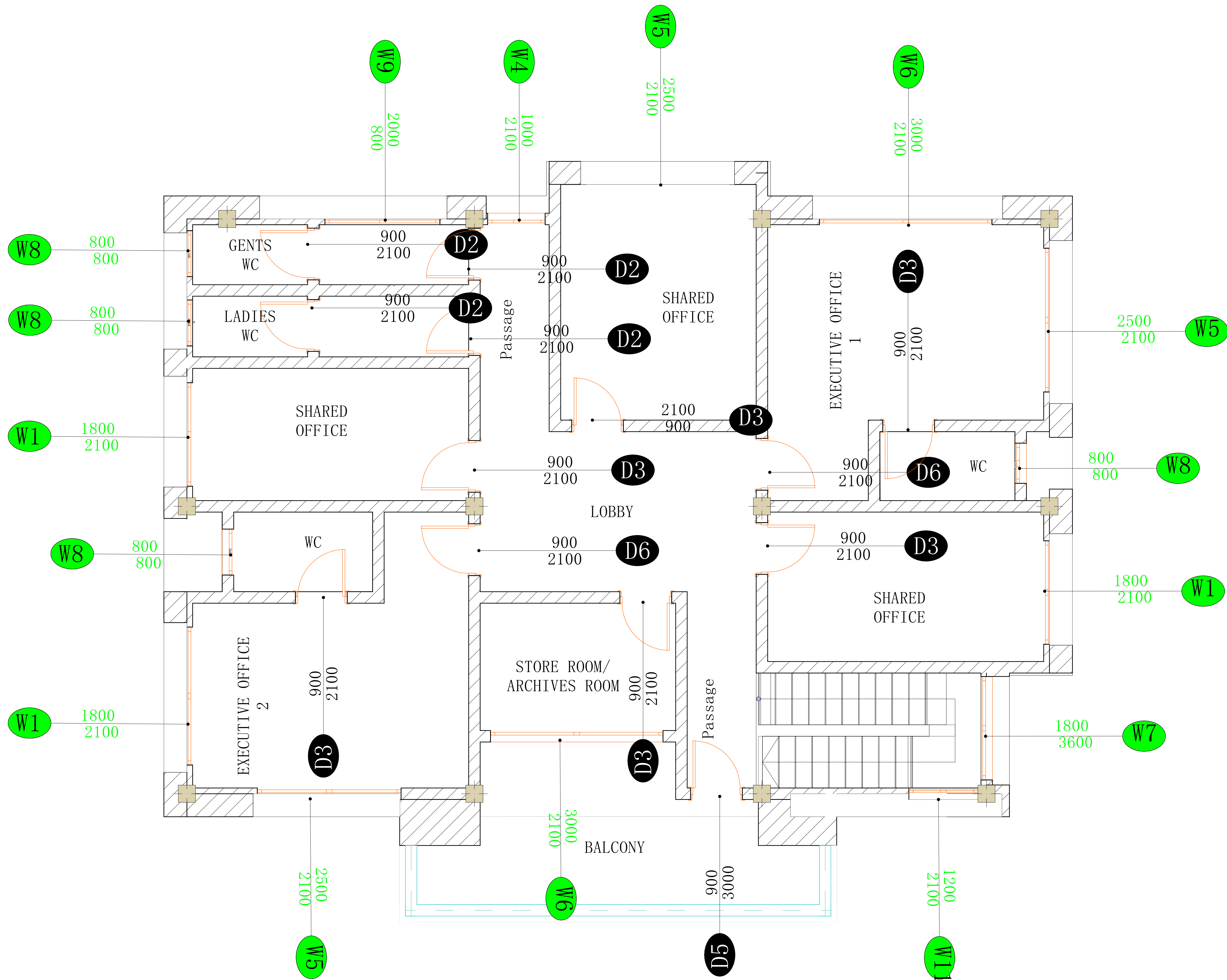
MINISTRIES OF FISHERIES FGS &FMS

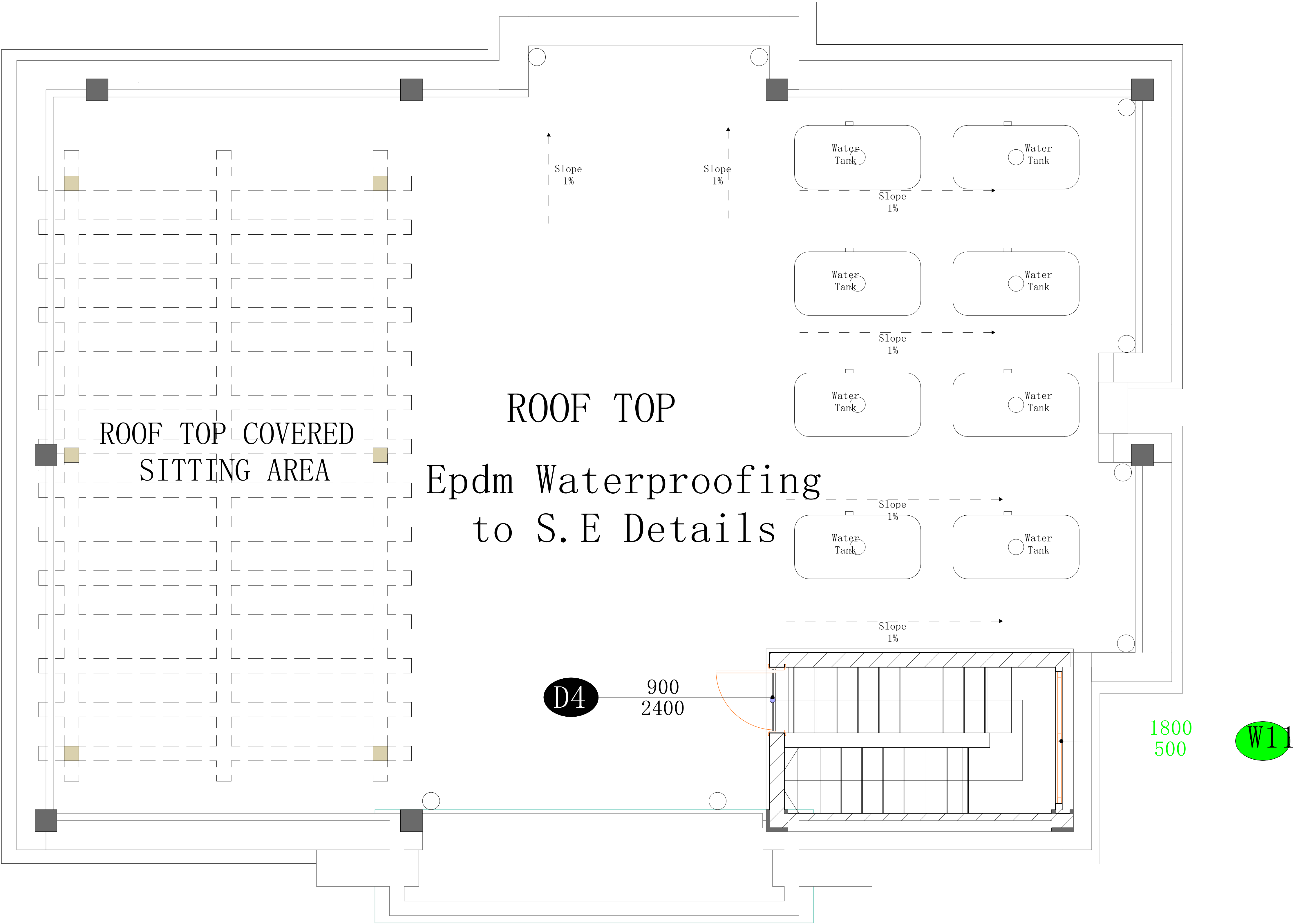
PROJECT

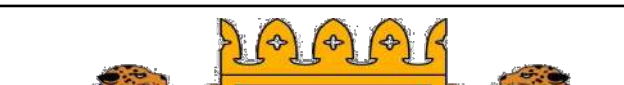
**PROPOSED CONSTRUCTION OF BANADIR REGIONAL
ADMINISTRATION FISHERIES DEPARTMENT**

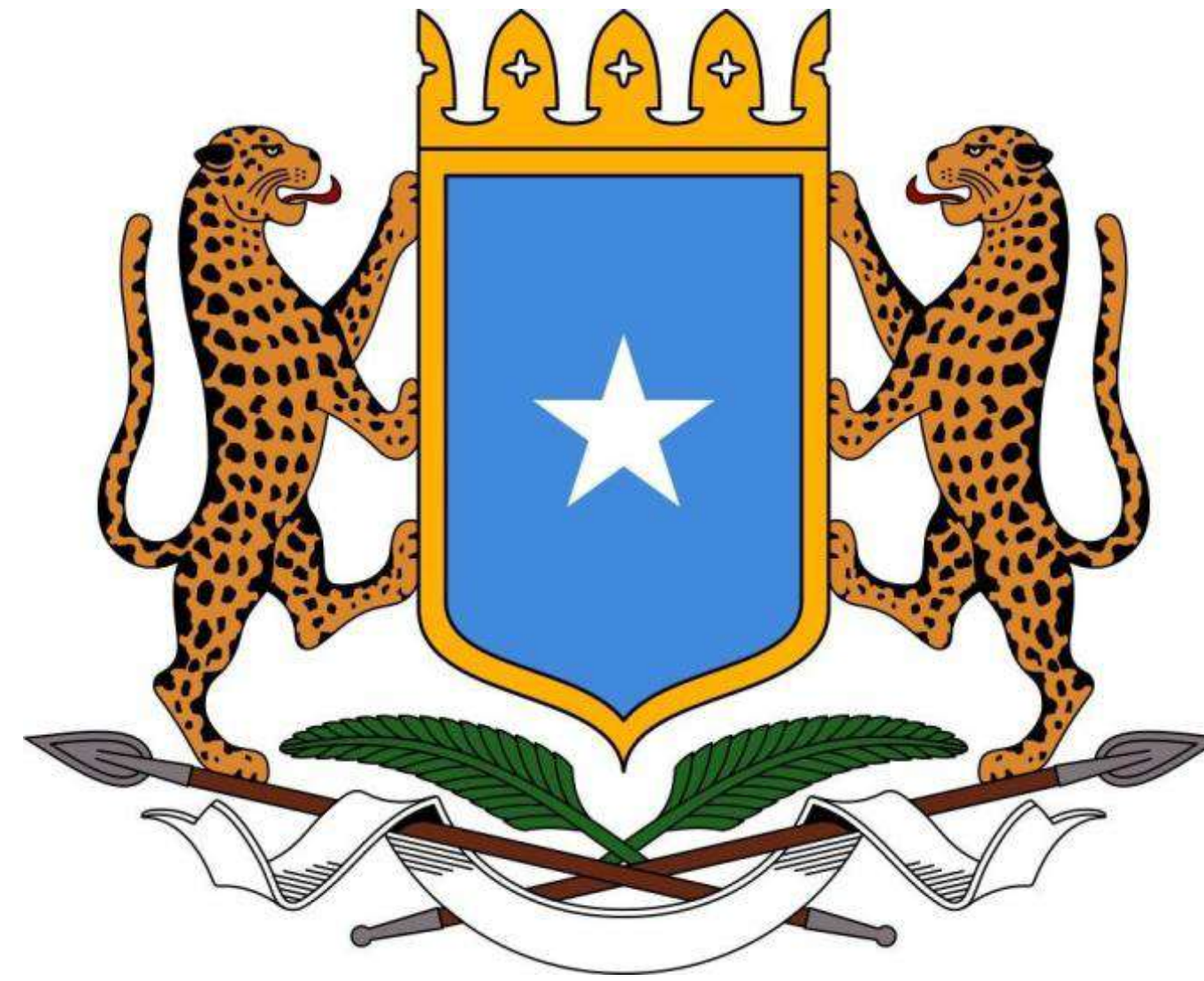


Architects	Project Title			Revisions		Scale	Drawing No. & Title			
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							Date	Sheet No.		
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				Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.			Drawn By	Reviewed By
				Mohamed Abdi Ahmed Saahid						





Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	BANADIR Roof Top Schedules Plan	
	Client						Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						Project No:	
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By	Reviewed By	P178032
						Mohamed Abdi Ahmed Saahid		



FEDERAL GOVERNMENT OF SOMALIA

SOMALIA SUSTAINABLE FISHERIES DEVELOPMENT PROJECT (SSFDP)

Ministries of Fisheries and Blue Economy FMS

PROPOSED CONSTRUCTION OF BANADIR REGIONAL ADMINISTRATION FISHERIES DEPARTMENT

DESIGN DRAWINGS



THE WORLD BANK



FLOOR FINISHES PLAN DRAWINGS

CLIENT

FEDERAL GOVERNMENT OF SOMALIA

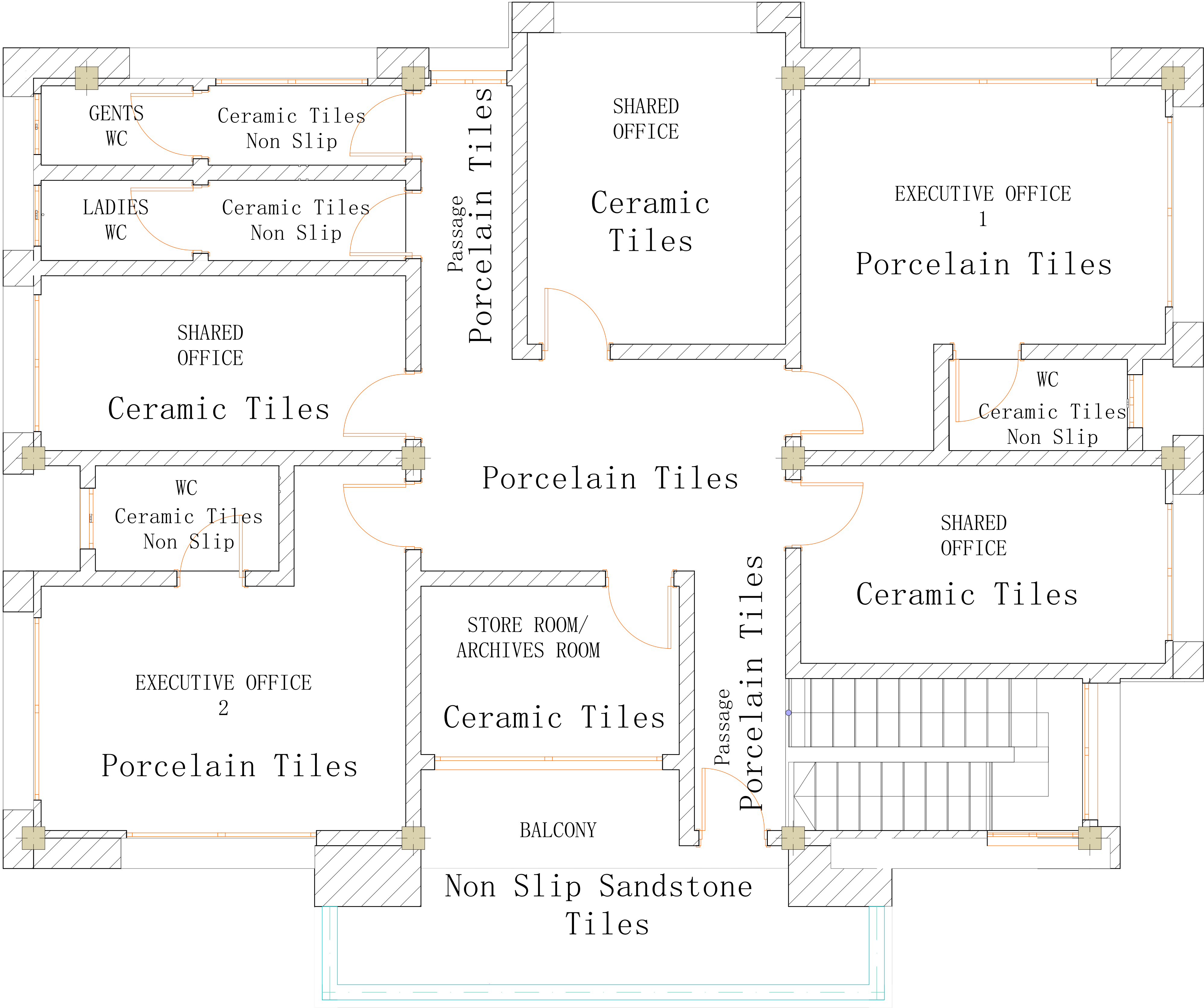
MINISTRIES OF FISHERIES FGS &FMS

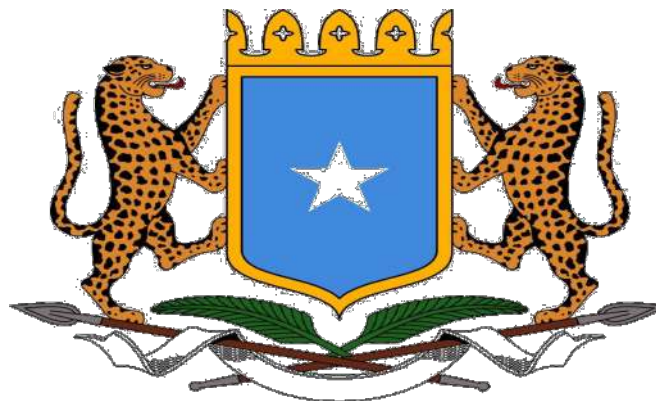
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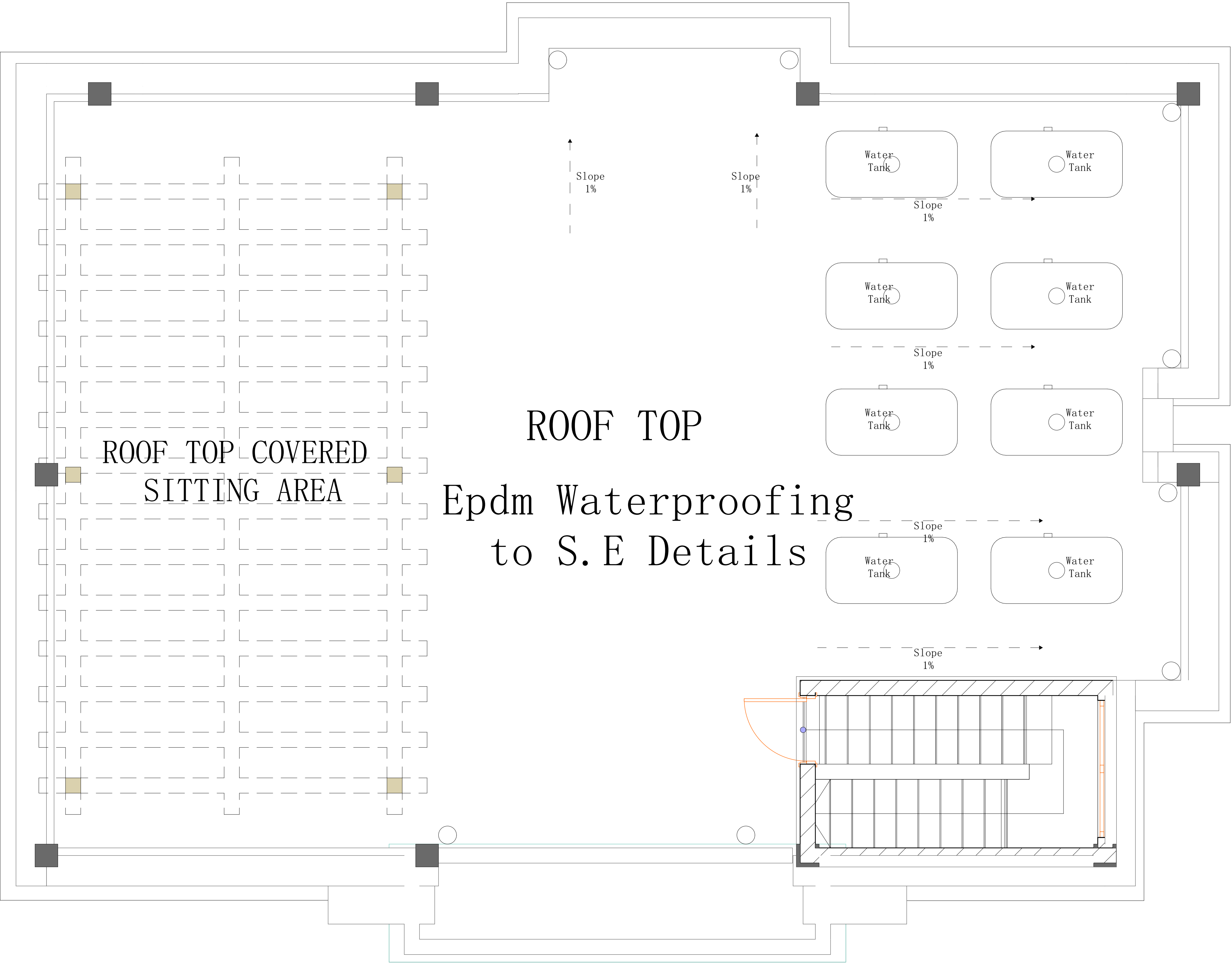
**PROPOSED CONSTRUCTION OF BANADIR REGIONAL
ADMINISTRATION FISHERIES DEPARTMENT**



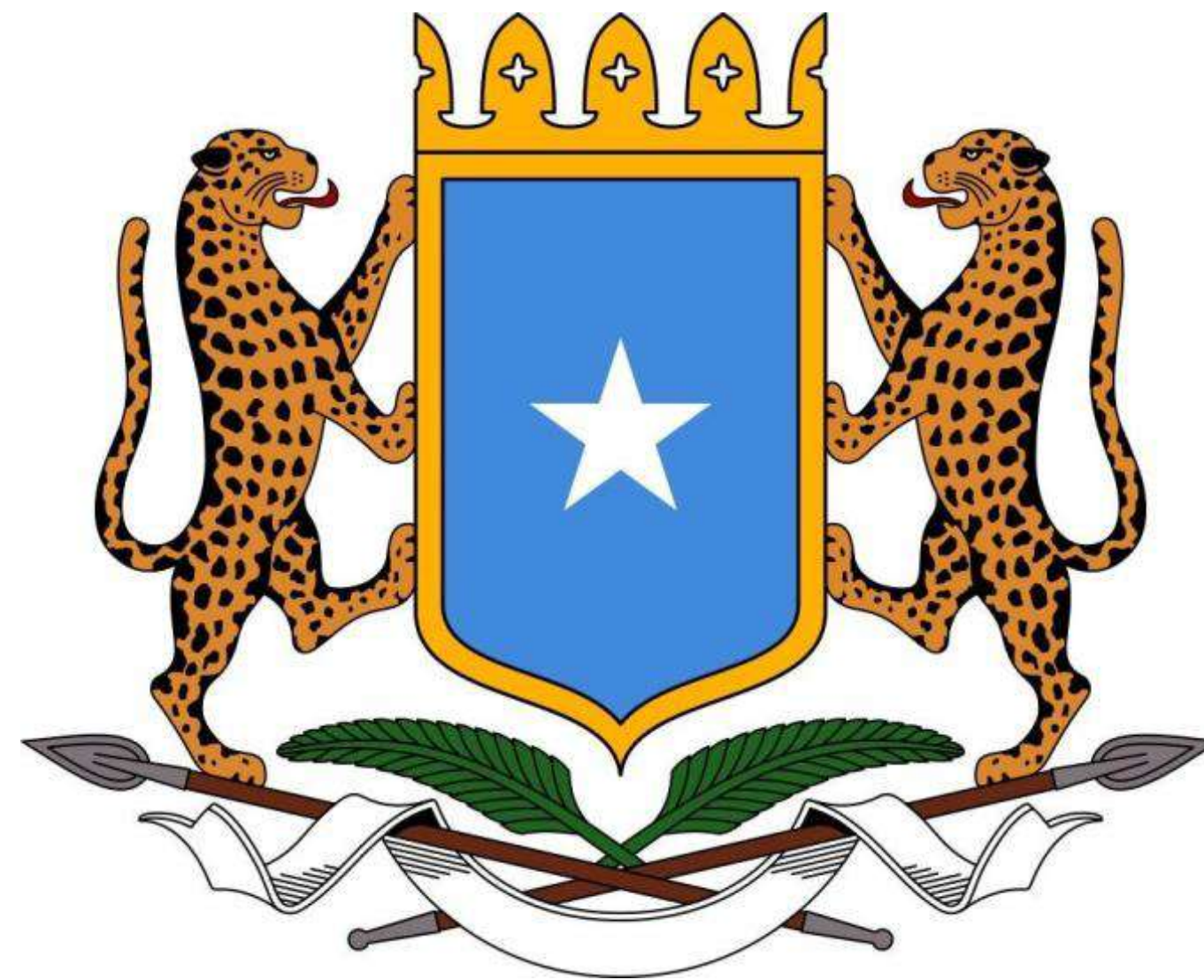
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	Client					Date	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia					13-03-2026	
			NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Drawn By	Reviewed By	Project No:
					Mohamed Abdi Ahmed Saahid		P178032



Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title			
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:30		BANADIR First Floor Finishes Plan	
	Client						Date		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						13-03-2026		A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.			Drawn By	Reviewed By	P178032	
							Mohamed Abdi Ahmed Saahid			



Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:30	BANADIR Roof Top Finishes Plan	
	Client						Date	Sheet No.	
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								Drawn By	Reviewed By
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Mohamed Abdi Ahmed Saahid			



FEDERAL GOVERNMENT OF SOMALIA

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Ministries of Fisheries and Blue Economy FMS

**PROPOSED CONSTRUCTION OF BANADIR REGIONAL
ADMINISTRATION FISHERIES DEPARTMENT**

FOOTING LAYOUT DRAWINGS



THE WORLD BANK



STRUCTURAL LAYOUTS DRAWINGS

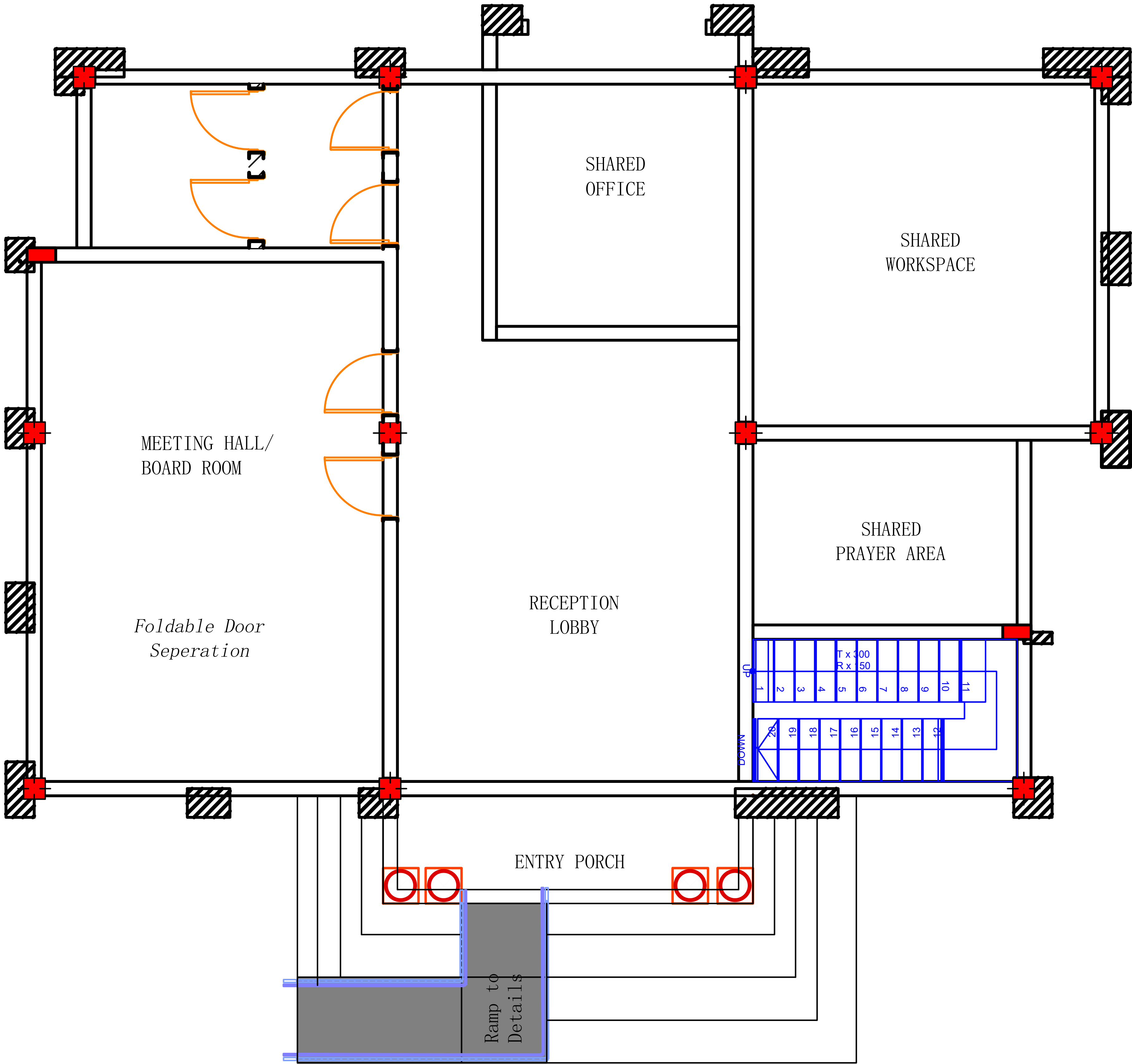
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FEDERAL GOVERNMENT OF SOMALIA

MINISTRIES OF FISHERIES FGS &FMS

PROJECT

**PROPOSED CONSTRUCTION OF BANADIR REGIONAL
ADMINISTRATION FISHERIES DEPARTMENT**



GROUND FLOOR LAYOUT

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED - ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

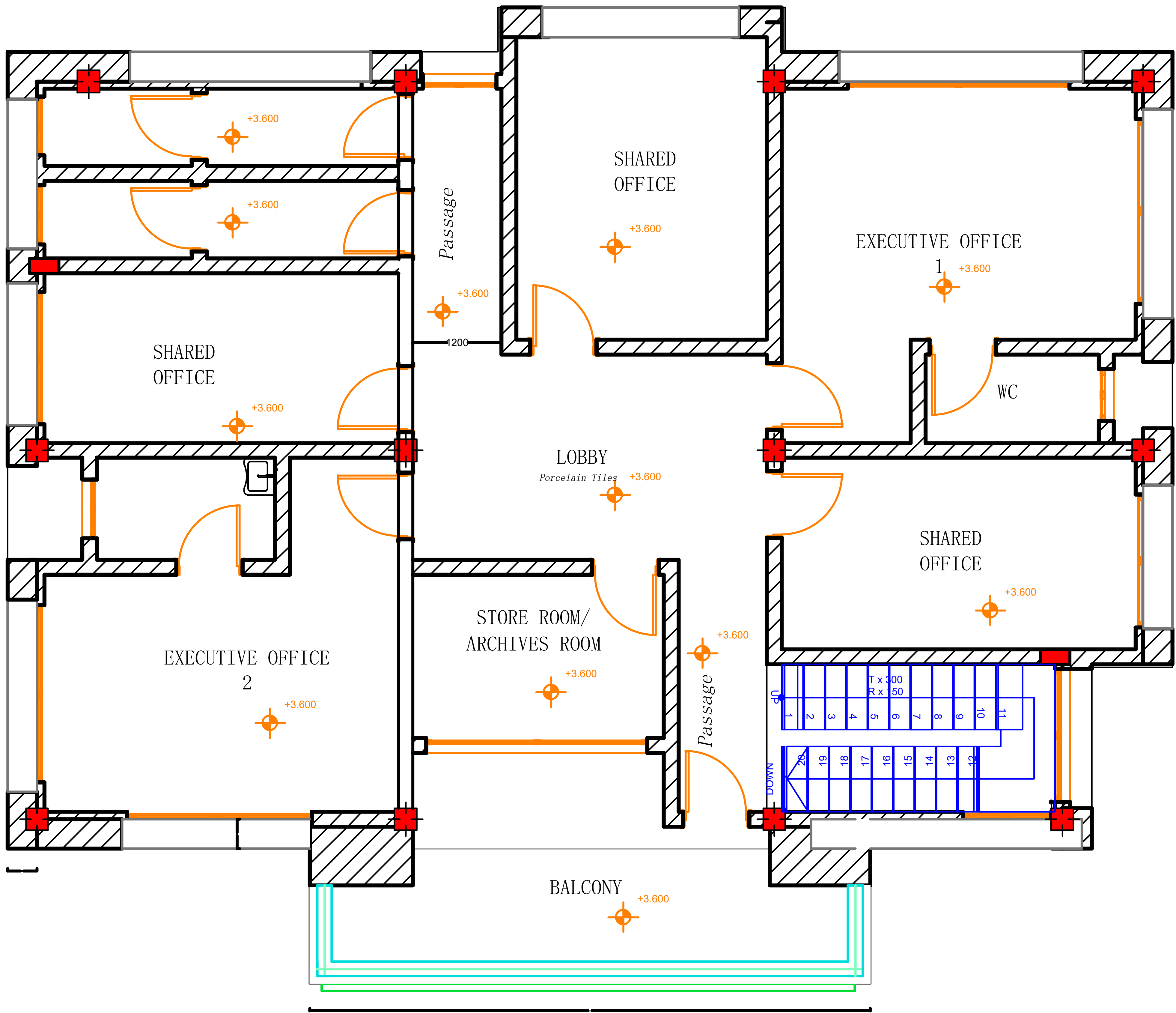
CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
11. SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
12. READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
13. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
14. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
15. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
16. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
17. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPa AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
18. LOCATION OF LAPS:-
A. BOTTOM FOOTING:-
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT THE SPAN/LESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS:- TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN:- LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.
19. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
20. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
21. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
staircase-20mm	
footing -50mm	

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

Architects	Project Title	  THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions	Scale	Drawing No. & Title	
 Somali Sustainable Fisheries Development Project	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Beam Reports	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	23-03-2026	A1	Project No:
			NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Designed By Eng. Sead Guleed	Drawn By: Gerald Nyanjua	Reviewed By: Eng. Mohamed Saahid



GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED - ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
- MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATIONS ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPa AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- LOCATIONS OF LAPS:-
A) BOTTOM BARS:-
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT THE SPAN/LESS OTHERWISE SHOWN ON DWG.
B) BEAMS AND SLABS:- TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN:- LIMIT STATE METHOD OF DESIGN AS PER BS EN 304.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

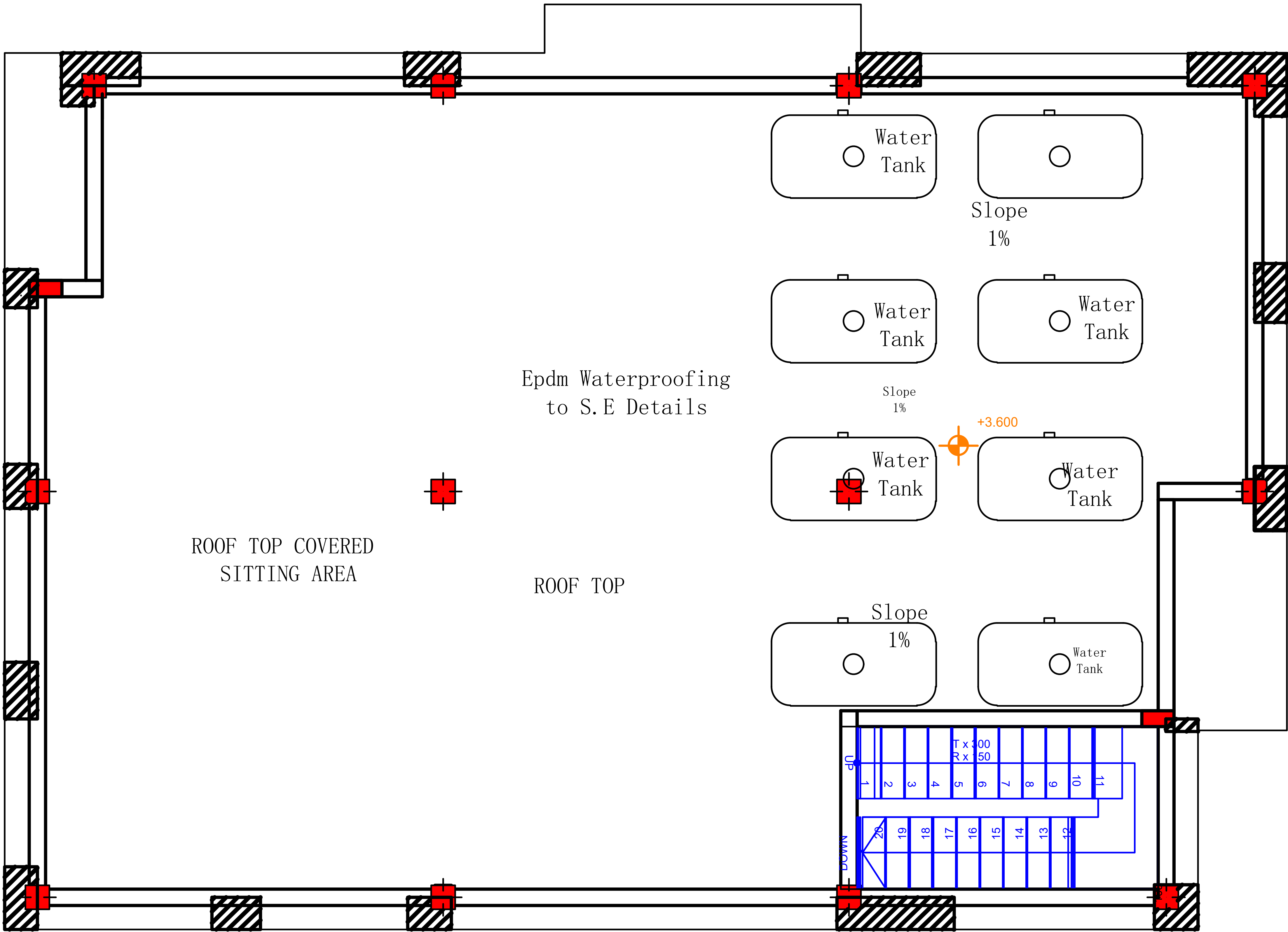
COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing-50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
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R3	
R4	

FIRST FLOOR LAYOUT

Architects	Project Title	 	Revisions	Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Beam Reports	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	23-03-2026	A1	Project No:
			NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Designed By Eng. Sead Guleed	Drawn By: Gerald Nyanjua	Reviewed By: Eng. Mohamed Saahid



GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II, WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.
- 7.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

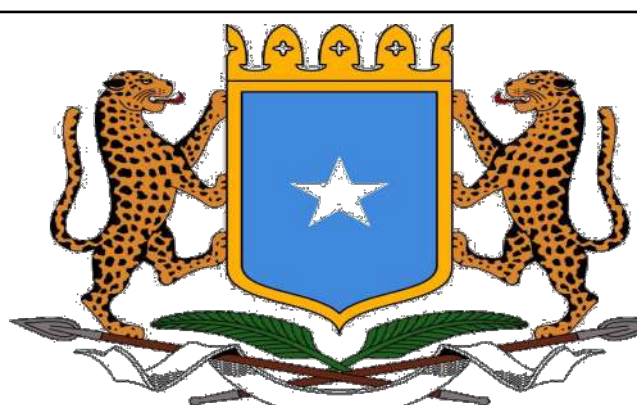
8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
9. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
10. SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
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16. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).

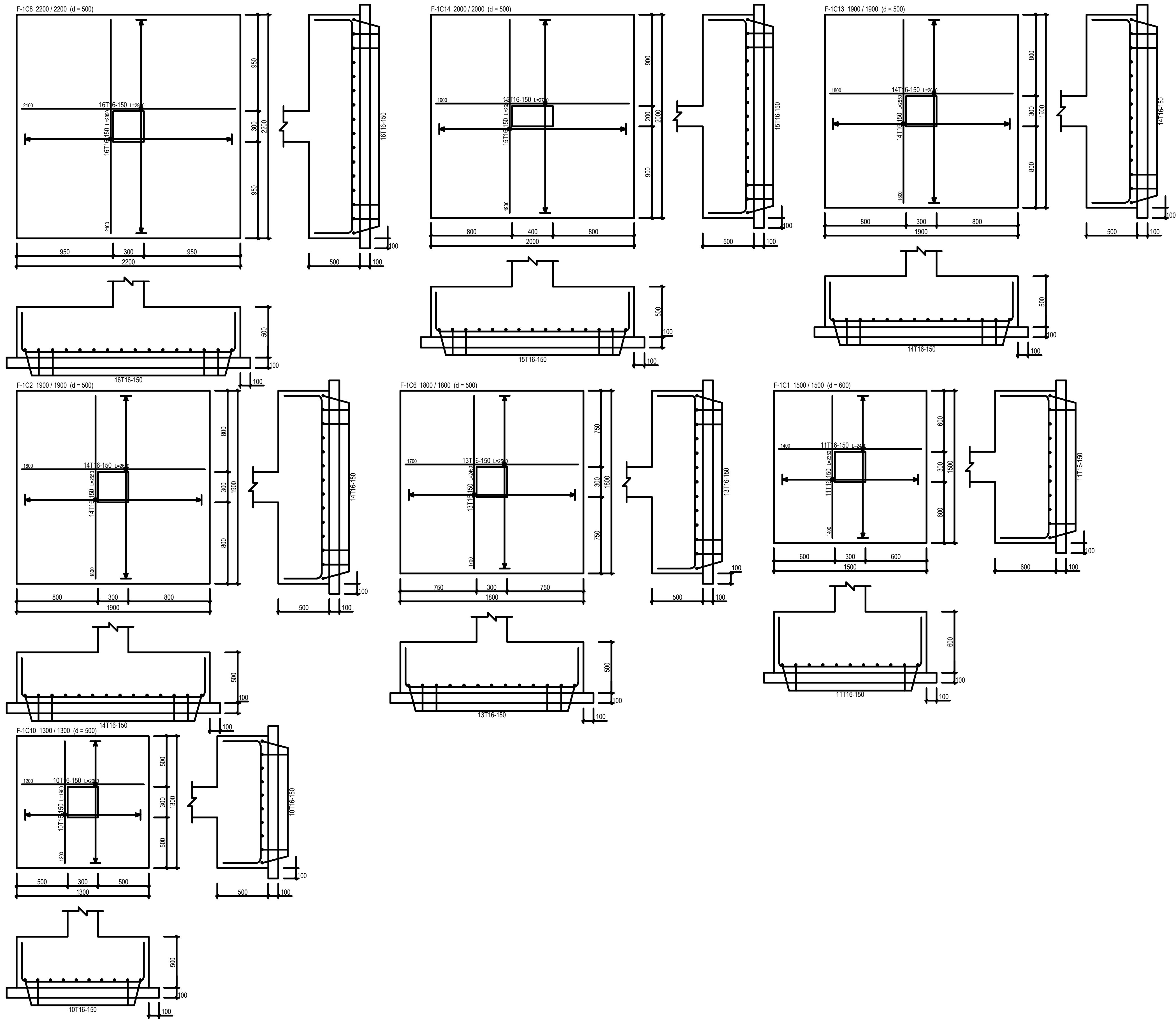
17. LOCATIONS OF APPLICABLE REVISIONS SHALL BE SHOWN IN COLUMNS/WALLS. BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN. BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING. METHOD OF DESIGN AND CONSTRUCTION OF DESIGN AS PER IS 456:2000.
18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
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COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
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R4	

ROOF FLOOR LAYOUT

Architects	Project Title			Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports	
	Client								
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						Date	Sheet No.	
							23-03-2026	A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Designed By	Drawn By:	Reviewed By:	
						Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid	



DETAILS OF FOOTINGS

GENERAL NOTE

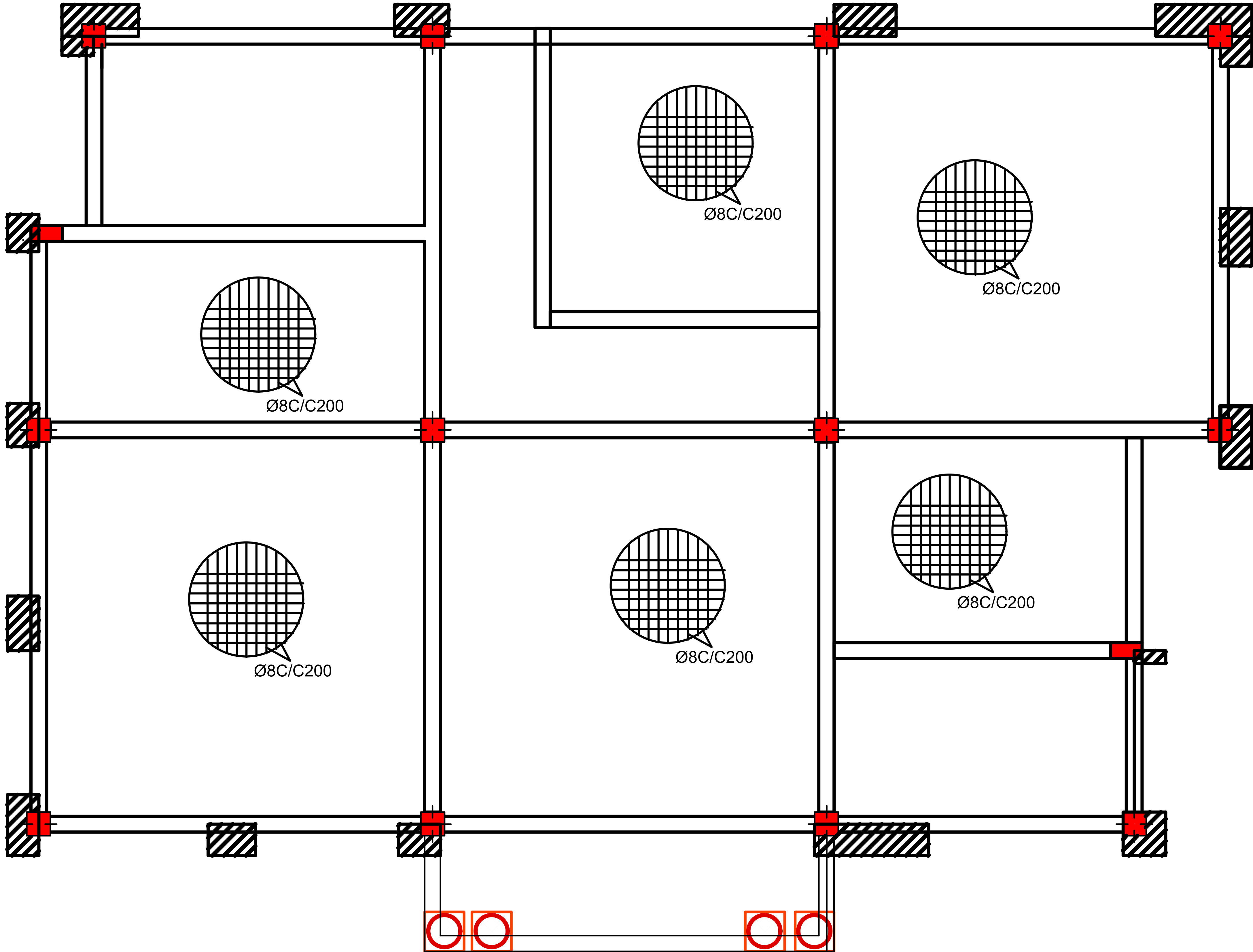
- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
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- FOR SETTING OUT - COLUMN LAYOUT DRAWINGS WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE I WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)

CONCRETE :- (f'ck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER-CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPa AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- LOCATIONS OF LAPS:-
A. BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. TOP BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
C. BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DWG.
D. TOP BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DWG.
E. METHOD OF DESIGN AND STATEMENT OF DESIGN AS PER IS 456:2000.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER	
COLUMN-30mm	
BEAMS-30mm	
slabs-20mm	
staircase-20mm	
footing -50mm	

REVISION NO.	REVISED DATE
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BRC MESH SLAB 200MM T8-200C/C B1,B2

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
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7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

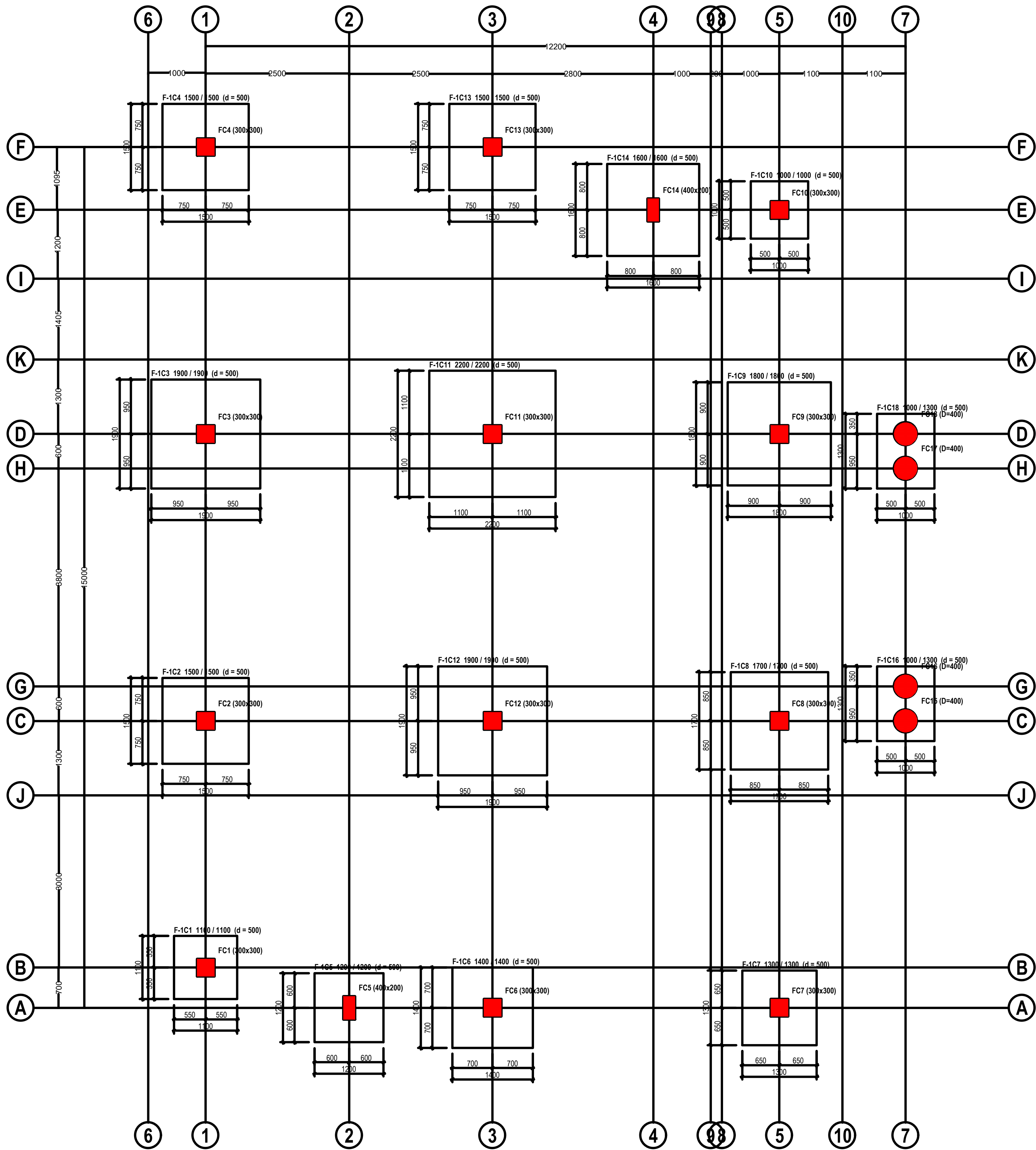
CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
11. SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
12. READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
13. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS.
14. WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
15. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
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19. LOCATIONS OF LAPS:-
20. TOP BARS SHALL BE LAPED AT COLUMNS / WALLS.
21. BOTTOM BARS SHALL BE LAPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
22. BEAMS AND SLABS:- TOP BARS SHALL BE LAPED AT MIDSPAN.
23. BOTTOM BARS SHALL BE LAPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
24. METHOD OF DESIGN LAY OUT AND METHOD OF DESIGN AS PER IS 456:2000.
25. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
26. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
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COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions	Scale	Drawing No. & Title	
 Somali Sustainable Fisheries Development Project	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	1:50	BANADIR Beam Reports	
	Client			Description	Date	Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia				23-03-2026	A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Designed By Eng. Sead Guleed	Drawn By: Gerald Nyanjua	Reviewed By: Eng. Mohamed Saahid



LAYOUT OF FOOTING PLAN

GENERAL NOTE

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5. USE 12B/150C AND 11B/150C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 400N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
11. SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
12. READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
13. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
14. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
15. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
16. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
17. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5Mtr FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
18. LOCATIONS OF LAPS.
19. TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
20. BOTTOM BARS SHALL BE LAPPED AT TWO SPAN LENGTHS OTHERWISE SHOWN ON DWG.
21. REBAR SHALL BE LAPPED AT TWO SPAN LENGTHS OTHERWISE SHOWN ON DWG.
22. BOTTOM BARS SHALL BE LAPPED AT TWO SPAN LENGTHS OTHERWISE SHOWN ON DWG.
23. METHOD OF CASTING SHALL BE DETERMINED BY THE ENGINEER.
24. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
25. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
26. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
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GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED - ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. THE OTHER INFORMATION CONTAINED HEREIN, INCLUDING THE SPECIFICATIONS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. USE 12mm RING OUT - COLUMN DRAWING WITH ARCHITECTURAL DRAWINGS
5. USE 12mm/150mmC AND 12mm/150mmC DISTRIBUTION BARS AND MAIN BARS OF SLABS
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM TENSILE STRENGTH OF 460 N/mm² (MINIMUM TENSILE STRENGTH OF 460 N/mm² OF COEFFICIENT) 1. MAXIMUM DOWN SIDE TOLERANCE ON APPAREL CROSS SECTION SHALL BE ± 3%.

<u>CONCRETE :- (fck cube) :</u>	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
-FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

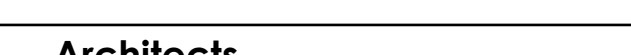
8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm
FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL
HAVE A MAXIMUM WATER ABSORPTION OF 2%.
9. REFER SPECIFICATIONS TO THE CONTRACT ON CONCRETE.
10. SLUMP AT SITE SHALL BE 100mm, MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE
OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
11. RETARDER TO BE USED IN CONCRETE WITHIN 90 MINUTES FROM THE TIME OF
BATCHING.
12. RETARDER OR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS
WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL NOT BE MORE THAN 10 HOURS.
13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP
BETWEEN CASTS OF RETAINING WALLS SHALL BE 24 HOURS OR LESS THAN 3 DAYS.
14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING
BUCKET WITH FLEXIBLE PUCK CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS
LAYERS. IN LAYERS OF 1.5M TO 2.0M. THE MAXIMUM PERMISSIBLE SETTING TIME
PREVIOUS LAYER IS VIBRATED AND COMPLETED FULLY.
15. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION
OF ANY PART. THE DESIGNER SHALL BE RESPONSIBLE FOR THE 200KPA AT A DEPTH OF 1.5Mm
FROM NATURAL GROUND LEVEL (CURRENT AND/OR CONTRACTOR IS RESPONSIBLE GEO TECHNICAL
TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE
A 150MM FILL FOOTING) AND 200KPA AT A DEPTH OF 1.5Mm FROM NATURAL GROUND LEVEL

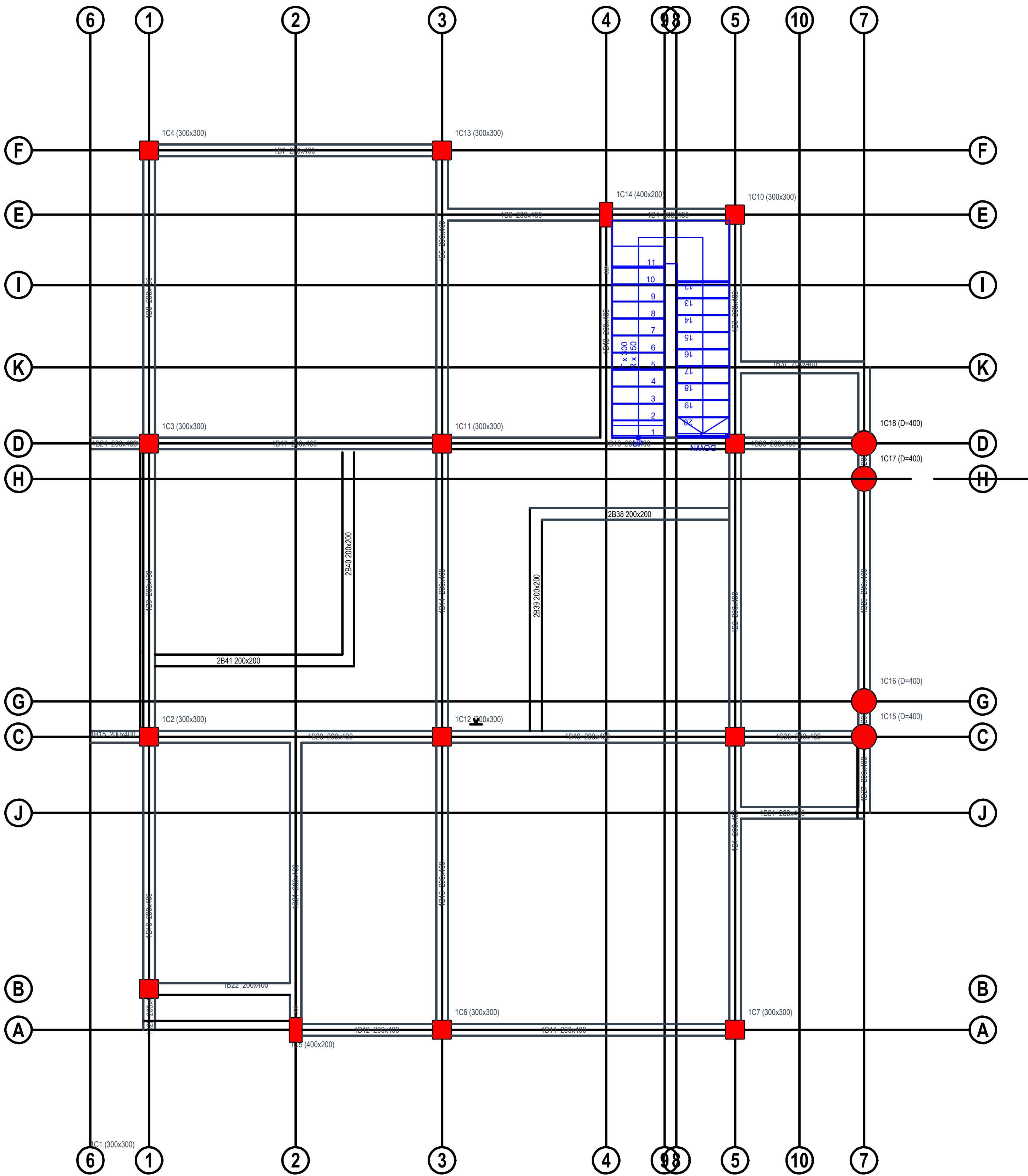
7. LOCATIONS OF LAPS:-
A. TOP OF ROOF SLAB:-
 TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
 BOTTOM BARS SHALL BE LAPPED AT SPAN UNLESS OTHERWISE SHOWN ON DRAWING.
B. BEAMS AND LAIRS:- TOP BARS SHALL BE LAPPED AT JOINTS.
 BOTTOM BARS SHALL BE LAPPED AT JOINTS UNLESS OTHERWISE SHOWN ON DRAWING.
 METHOD OF DESIGN / LIFT STATEMENT OF WORK SHALL BE APPLIED.
 18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
 19. STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
 20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION AT THE PROJECT SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
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Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title			
 Somali Sustainable Fisheries Development Project	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports		
								Date	Sheet No.	
								23-03-2026	A1	Project No:
Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB:		Designed By	Drawn By:	Reviewed By:				
		1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid				



GENERAL NOTE

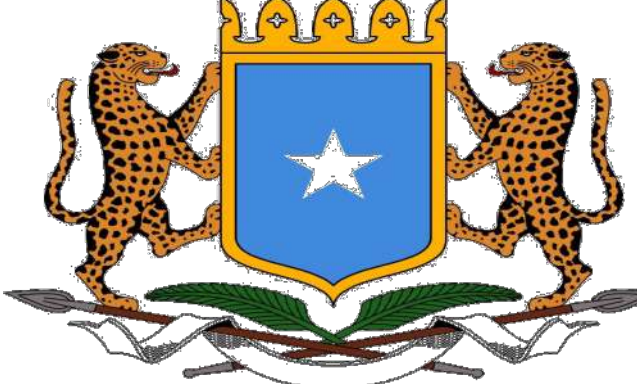
- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE 12@150C/C AND 12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)

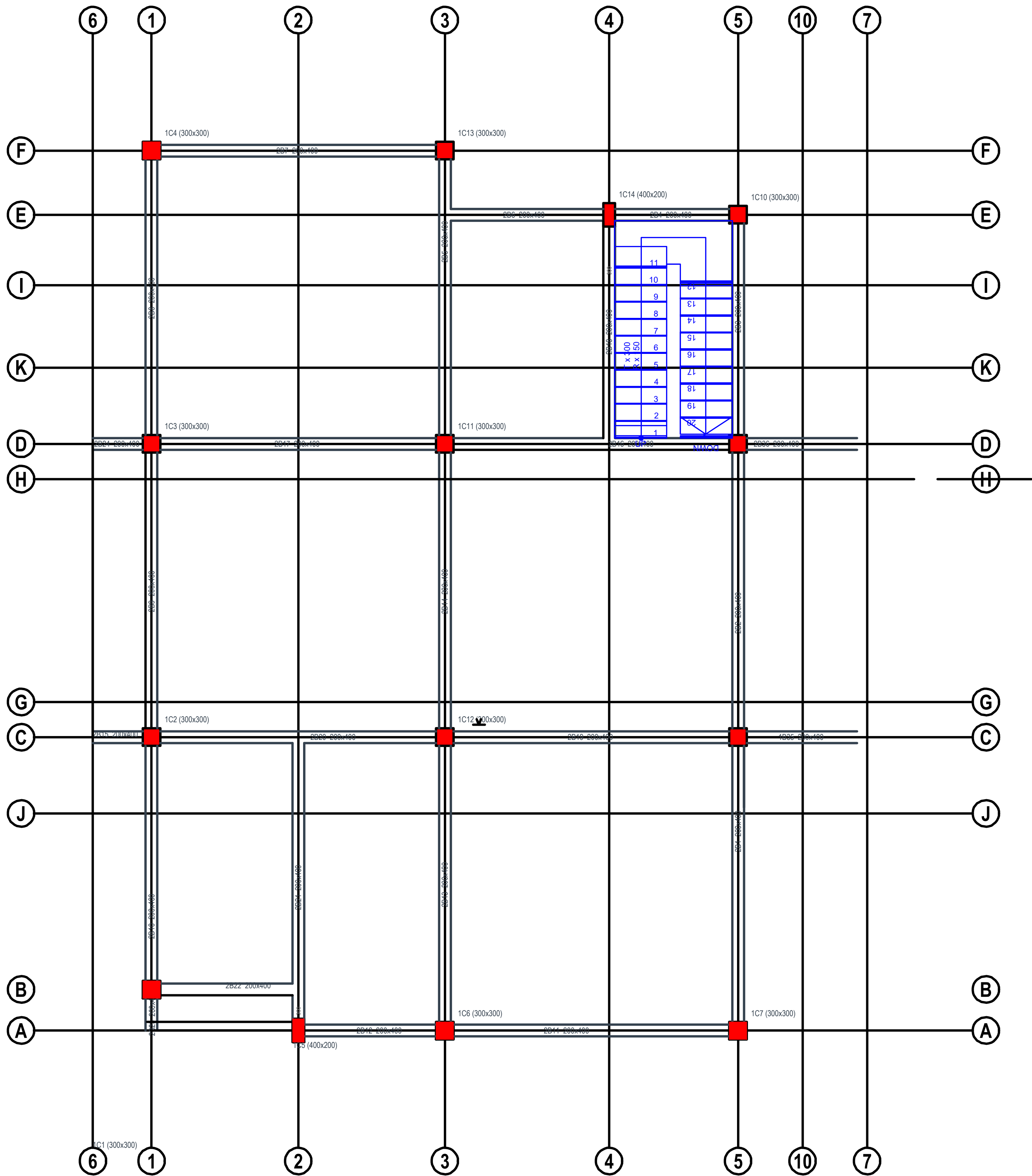
CONCRETE :- (fck cube) :-	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER-CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 400 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPa AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- LOCATIONS OF LAPS:-
A. MAIN REINFORCING BARS
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. DISTRIBUTION BARS
TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN UNIT STATE METHOD OF DESIGN AS PER BS 8110.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing-50mm

LAYOUT OF FIRST FLOOR BEAM

Architects	Project Title	 	Revisions	Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Beam Reports	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	23-03-2026	A1	Project No:
			NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Designed By Eng. Sead Guleed	Drawn By: Gerald Nyanjua	Reviewed By: Eng. Mohamed Saahid



LAYOUT OF SECOND FLOOR BEAM

GENERAL NOTE

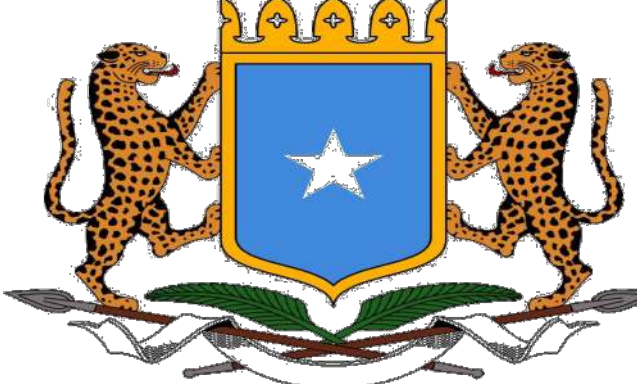
- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

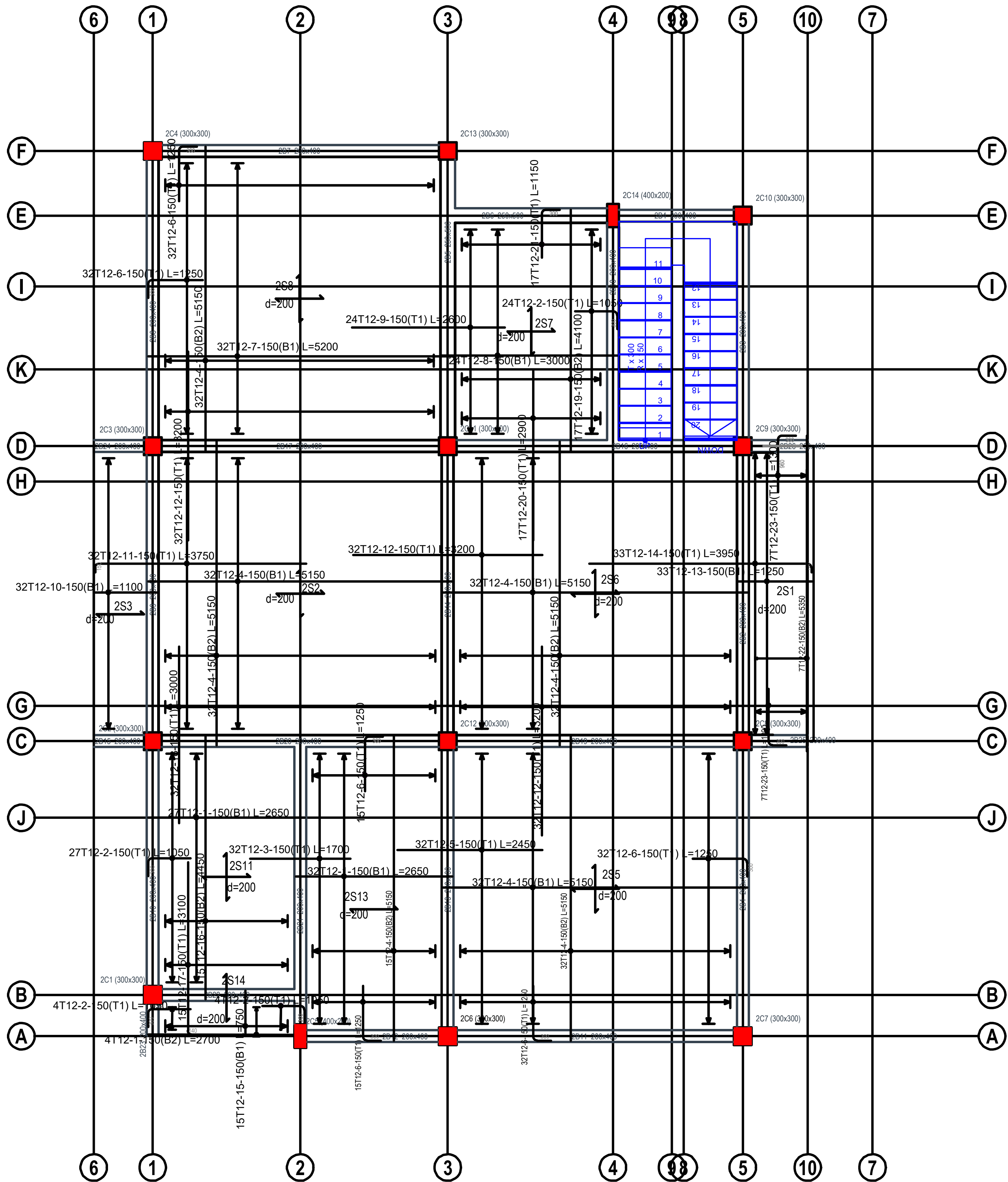
CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- LOCATIONS OF SLABS.
- ALL REINFORCEMENT SHALL BE CASTED IN PLACE.
- TOP BARS SHALL BE LAPPED AT 40D MIN. UNLESS OTHERWISE SHOWN ON DWG.
- BOTTOM BARS SHALL BE LAPPED AT 40D MIN. UNLESS OTHERWISE SHOWN ON DWG.
- REINFORCEMENT SHALL BE CASTED AT SUPPORT UNLESS OTHERWISE SHOWN ON DWG.
- METHOD OF DESIGN LIMIT STATE METHOD OF DESIGN AS PER IS 800.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
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R4	

Architects	Project Title	 	Revisions	Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Beam Reports	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	23-03-2026	A1	Project No:
				Designed By	Drawn By:	Reviewed By:
				Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid



DETAIL OF FIRST FLOOR PLAN

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C and T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION).
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
11. SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
12. READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
13. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
14. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
15. COLUMNS, BEAMS AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
16. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
17. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
18. LOCATIONS OF SLABS.
19. ALL REINFORCEMENT SHALL BE CASTED IN COLUMNS, WALLS, BEAMS, GRADE SLAB, TOP BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
20. BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
21. METHOD OF DESIGN LIMIT STATE METHOD OF DESIGN AS PER BS 8110.
22. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
23. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
24. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
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Architects	Project Title			Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports	
	Client					Date	Sheet No.		
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia					23-03-2026	A1	Project No:	
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Designed By	Drawn By:	Reviewed By:	
						Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid	



GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. IF ANY OTHER INFORMATION IS OFFERED TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. COLUIMN LAYOUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150/C/C AND T12@150/C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH 40% MIN. YIELD STRESS OF 415 N/MM² (MIN. 60 KSI) (SEE SPECIFICATION).
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm
FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHEET
HAVE A MAXIMUM WATER CEMENT RATIO OF 25%
9. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
10. SLUMP AT PUMP SHALL BE 100mm, MIN AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF
CONCRETE SHALL BE 30°C.
11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME
OF BATCHING.
12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS
WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 6.0M IN LENGTHS. MINIMUM TIME GAP
BETWEEN CASTINGS SHALL BE 24 HOURS.
14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING
BUCKET WITH FLEXIBLE PIVOT CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS
LIFTS IN 3 LAYERS. THE FIRST LAYER SHALL BE 1/3 OF THE TOTAL HEIGHT OF THE
PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
15. IF THERE IS ANY DISCREPANCY PLEASE REFER TO THE DESIGN ENGINEER BEFORE CONSTRUCTION.
16. THE MINIMUM SOIL BEARING CAPACITY OF THE BEARING CAPACITY OF 200KPAAT A DEPTH OF 1.5M
FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL
TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE
A 150MM THICK 1:2:4 GRAVELLY SAND FILL OVER THE SOIL TO INCREASE THE SOIL BEARING

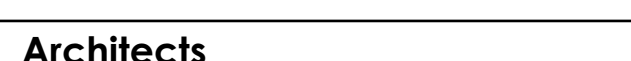
17. LOCATIONS OF LAPS:-

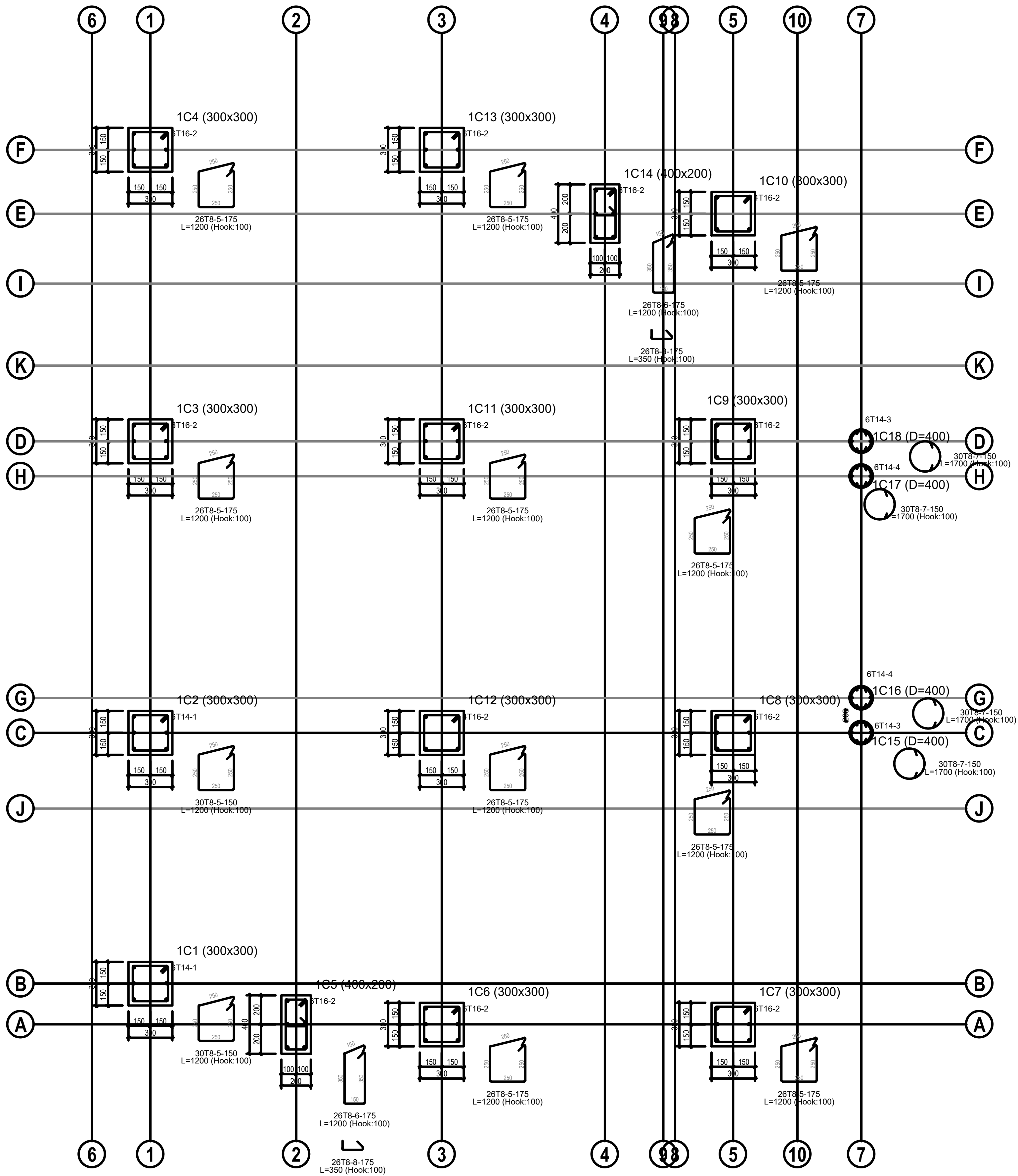
- FOR BASE SHALL BE LAPPEDED AT CORNERS / WALLS.
BOTTOM BARS SHALL BE LAPPEDED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
3. BEAMS AND LAPS: TOP BARS SHALL BE LAPPEDED AT MIDSPAN.
BOTTOM SHALL BE LAPPEDED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN LIMIT STATE METHOD OF DESIGN AS PER IS 456:2000.
18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER
WELL BEFORE THE EXECUTION.
19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF
THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
20. THE ONE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION
OF WORKS AT SITE.

<u>COVER</u> COLUMN-30mm BEAMS-30mm slabs-20mm staircase-20mm footing -50mm	
REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

A1	Project No:
Drawn By:	Reviewed By:
Gerald Nyanjua	Eng. Mohamed Saah

Architects	Project Title	 	Revisions		Scale	Drawing No. & Title															
	Somali Sustainable Fisheries Development Project (BADMAAL)		<table><tr><th>No.</th><th>Description</th><th>Date</th></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></table>	No.	Description	Date													1:50	BANADIR Beam Reports	
	No.		Description	Date																	
Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Date	Sheet No.																	
			23-03-2026	A1	Project No:																
			Designed By	Eng. Sead Guleed	Drawn By:	Reviewed By:															
					Gerald Nyanjua	Eng. Mohamed Saahid															



DETAIL OF COLUMNS FIRST FLOOR

GENERAL NOTE

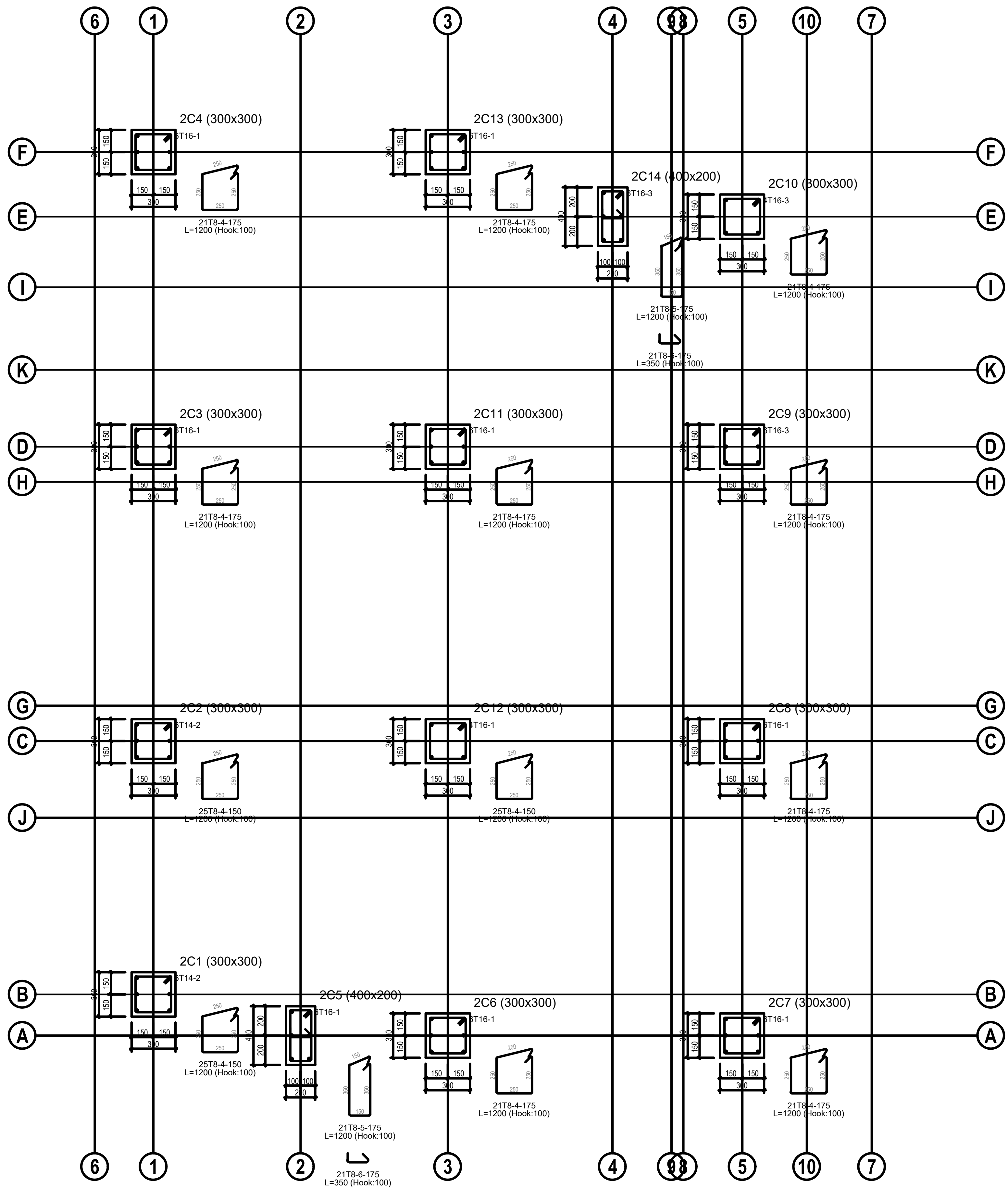
- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- LOCATIONS OF SLABS.
- ALL REINFORCEMENT SHALL BE LAPPED AT 40D.
- TOP BARS SHALL BE LAPPED AT 40D. BOTTOM BARS SHALL BE LAPPED AT 40D UNLESS OTHERWISE SHOWN ON DWG.
- REINFORCEMENT SHALL BE LAPPED AT 40D. TOP BARS SHALL BE LAPPED AT 40D. BOTTOM BARS SHALL BE LAPPED AT 40D UNLESS OTHERWISE SHOWN ON DWG.
- METHOD OF DESIGN LIMIT STATE METHOD OF DESIGN AS PER BS 8110:2004.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	



DETAIL OF COLUMNS SECOND FLOOR

GENERAL NOTE

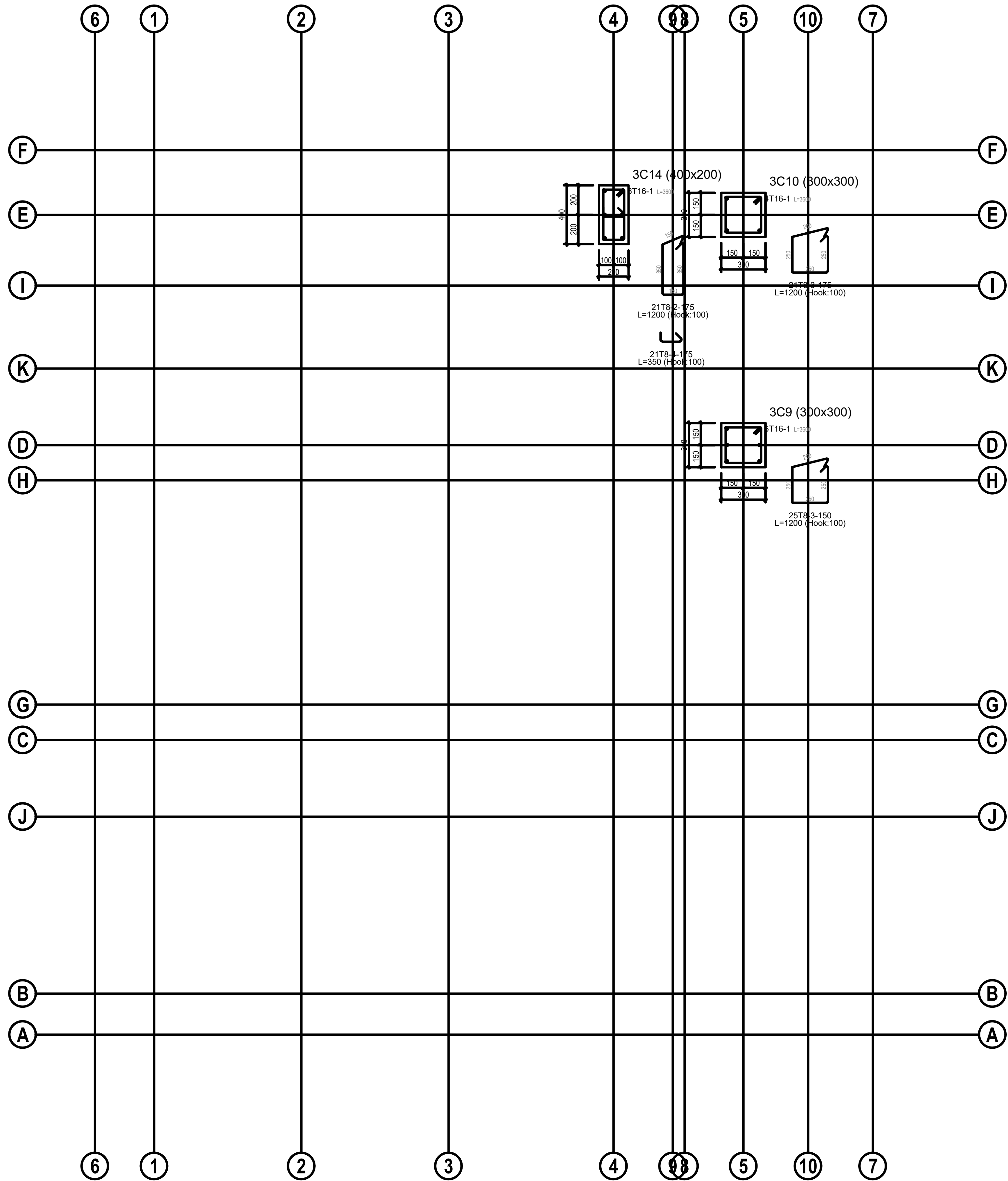
- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING, SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
- MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (+) 3%.

CONCRETE :- (fck cube) :-	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 6.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.
- LOCATIONS OF LAPS:-
- TOP BARS SHALL BE LAPPED AT COLUMNS WALLS.
- BOTTOM BARS SHALL BE LAPPED AT WALLS UNLESS OTHERWISE SHOWN ON DWG.
- REINFORCEMENT SHALL BE LAPPED AT MIDSPAN.
- BOTTOM SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
- METHOD OF JOINTS, LAPS AND SPACING SHALL BE AS PER BS 8110:2003.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	



DETAIL OF COLUMNS ROOF FLOOR

GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
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- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

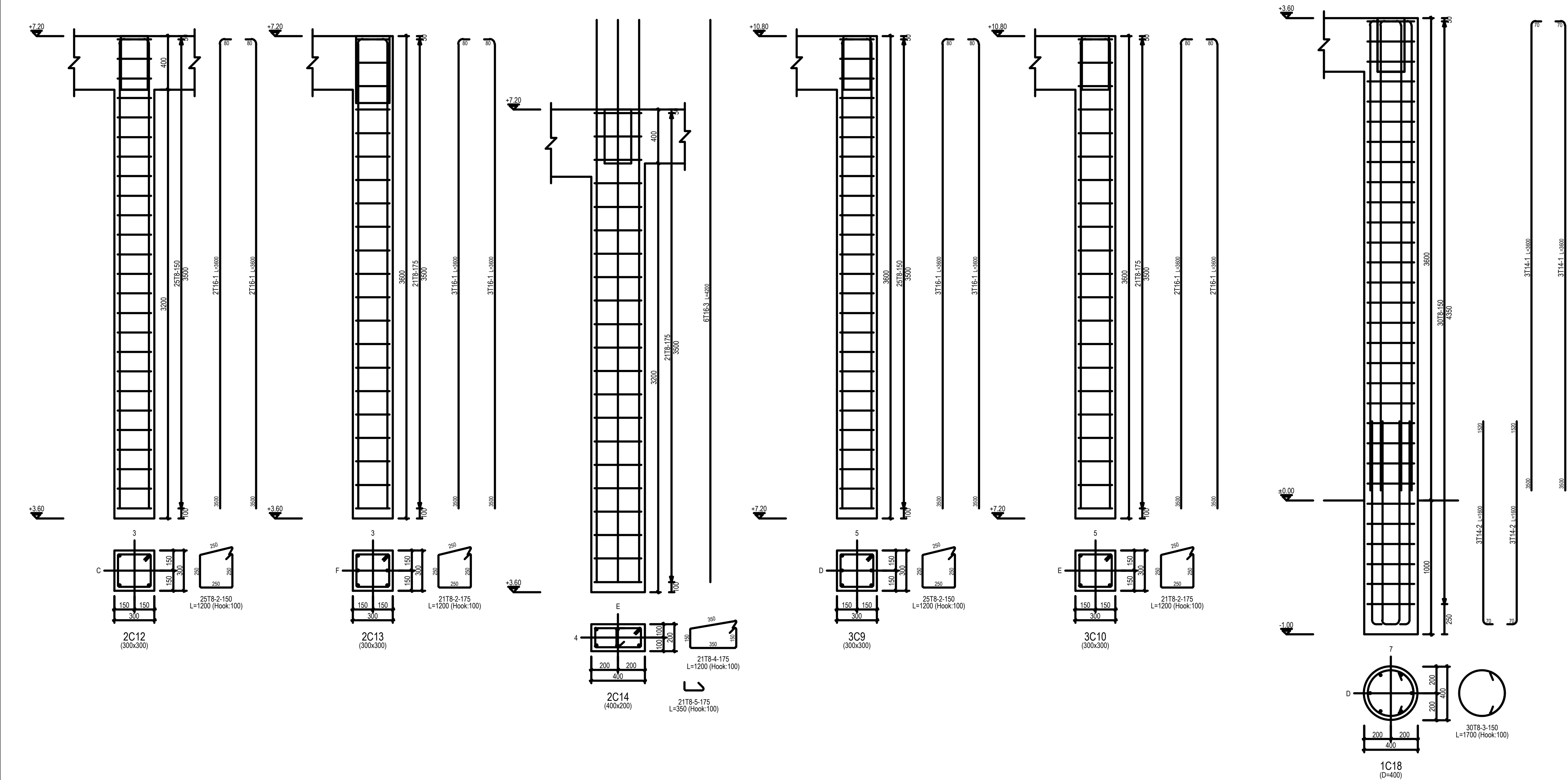
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.

17. LOCATIONS OF SLABS:
A. RAFT FOUNDATION
TOP BARS SHALL BE LAPPED AT COLUMNS. WALLS
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. GRADE SLAB: TOP BARS SHALL BE LAPPED AT MID SPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN LIMIT STATE METHOD OF DESIGN AS PER IS 8000.
18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

Architects	Project Title			Revisions		Scale	Drawing No. & Title			
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports		
	Client							Date	Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia							23-03-2026	A1	Project No:
					NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.			Designed By	Drawn By:	Reviewed By:
					Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid			



GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
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- USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

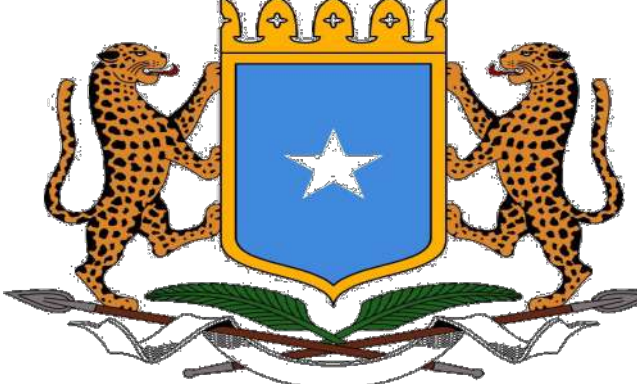
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS.

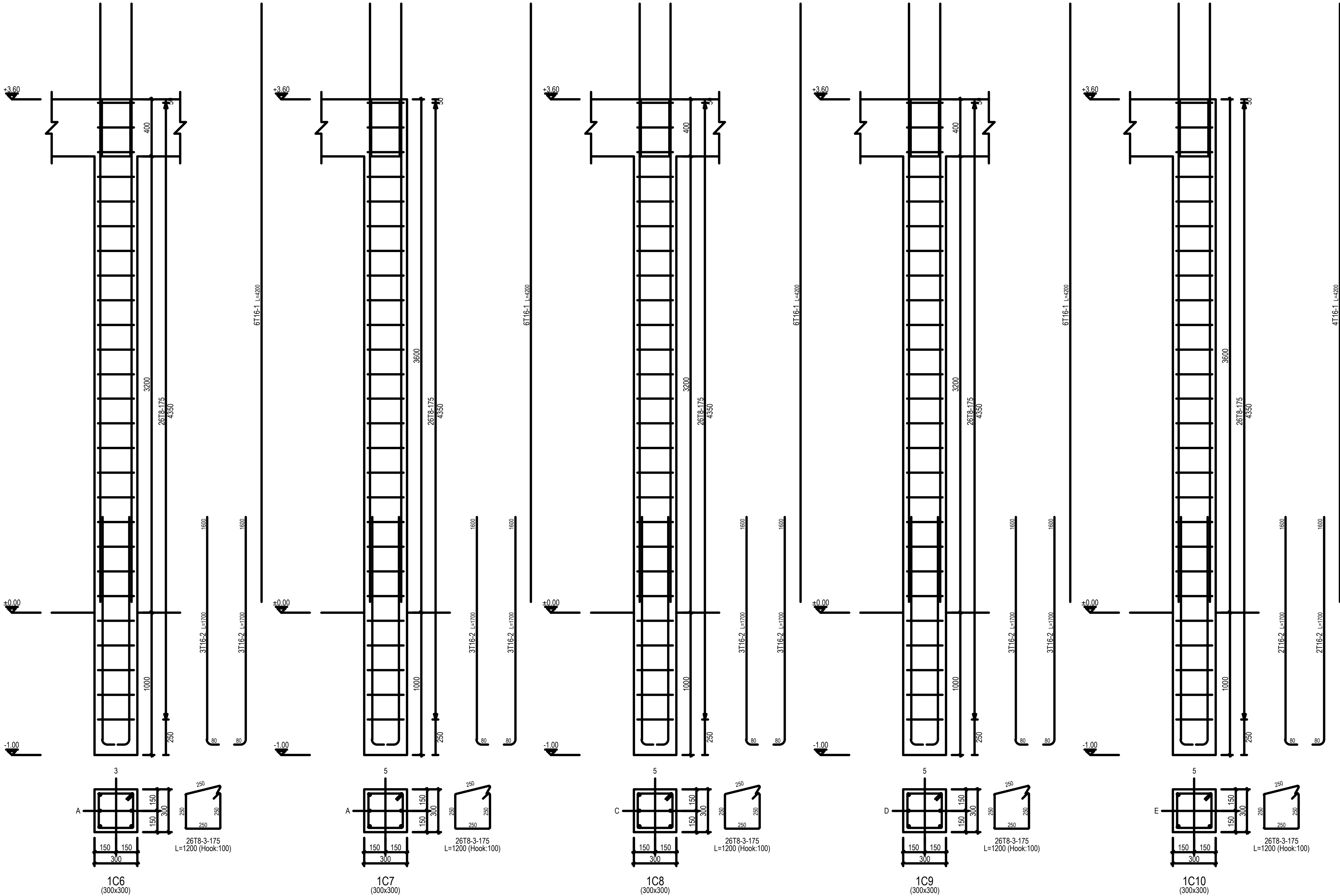
- LOCATIONS OF SLABS:
A. BEAMS SHALL BE CAST AT COLUMNS.
B. BEAMS SHALL BE CAST AT COLUMNS.
C. BEAMS SHALL BE CAST AT COLUMNS.
D. BEAMS SHALL BE CAST AT COLUMNS.
E. BEAMS SHALL BE CAST AT COLUMNS.
F. BEAMS SHALL BE CAST AT COLUMNS.
G. BEAMS SHALL BE CAST AT COLUMNS.
H. BEAMS SHALL BE CAST AT COLUMNS.
I. BEAMS SHALL BE CAST AT COLUMNS.
J. BEAMS SHALL BE CAST AT COLUMNS.
K. BEAMS SHALL BE CAST AT COLUMNS.
L. BEAMS SHALL BE CAST AT COLUMNS.
M. BEAMS SHALL BE CAST AT COLUMNS.
N. BEAMS SHALL BE CAST AT COLUMNS.
O. BEAMS SHALL BE CAST AT COLUMNS.
P. BEAMS SHALL BE CAST AT COLUMNS.
Q. BEAMS SHALL BE CAST AT COLUMNS.
R. BEAMS SHALL BE CAST AT COLUMNS.
S. BEAMS SHALL BE CAST AT COLUMNS.
T. BEAMS SHALL BE CAST AT COLUMNS.
U. BEAMS SHALL BE CAST AT COLUMNS.
V. BEAMS SHALL BE CAST AT COLUMNS.
W. BEAMS SHALL BE CAST AT COLUMNS.
X. BEAMS SHALL BE CAST AT COLUMNS.
Y. BEAMS SHALL BE CAST AT COLUMNS.
Z. BEAMS SHALL BE CAST AT COLUMNS.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

ELEVATION OF COLUMNS

Architects	Project Title	  THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions	Scale	Drawing No. & Title	
 Somali Sustainable Fisheries Development Project	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Beam Reports	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	23-03-2026	A1	Project No:
			Designed By	Eng. Sead Guleed		Reviewed By:
					Drawn By:	Eng. Mohamed Saahid
					Gerald Nyanjua	



GENERAL NOTE

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- USE T20@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

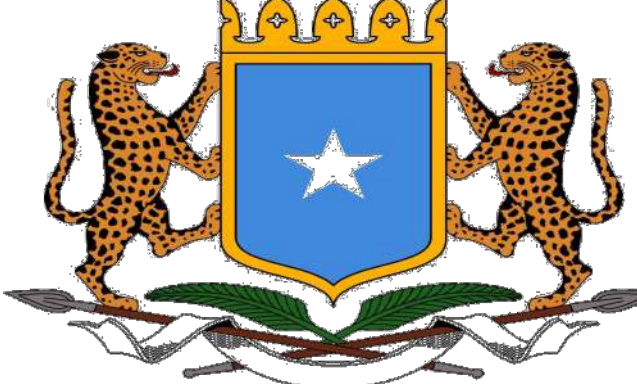
CONCRETE :- (f'ck cube) :-	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

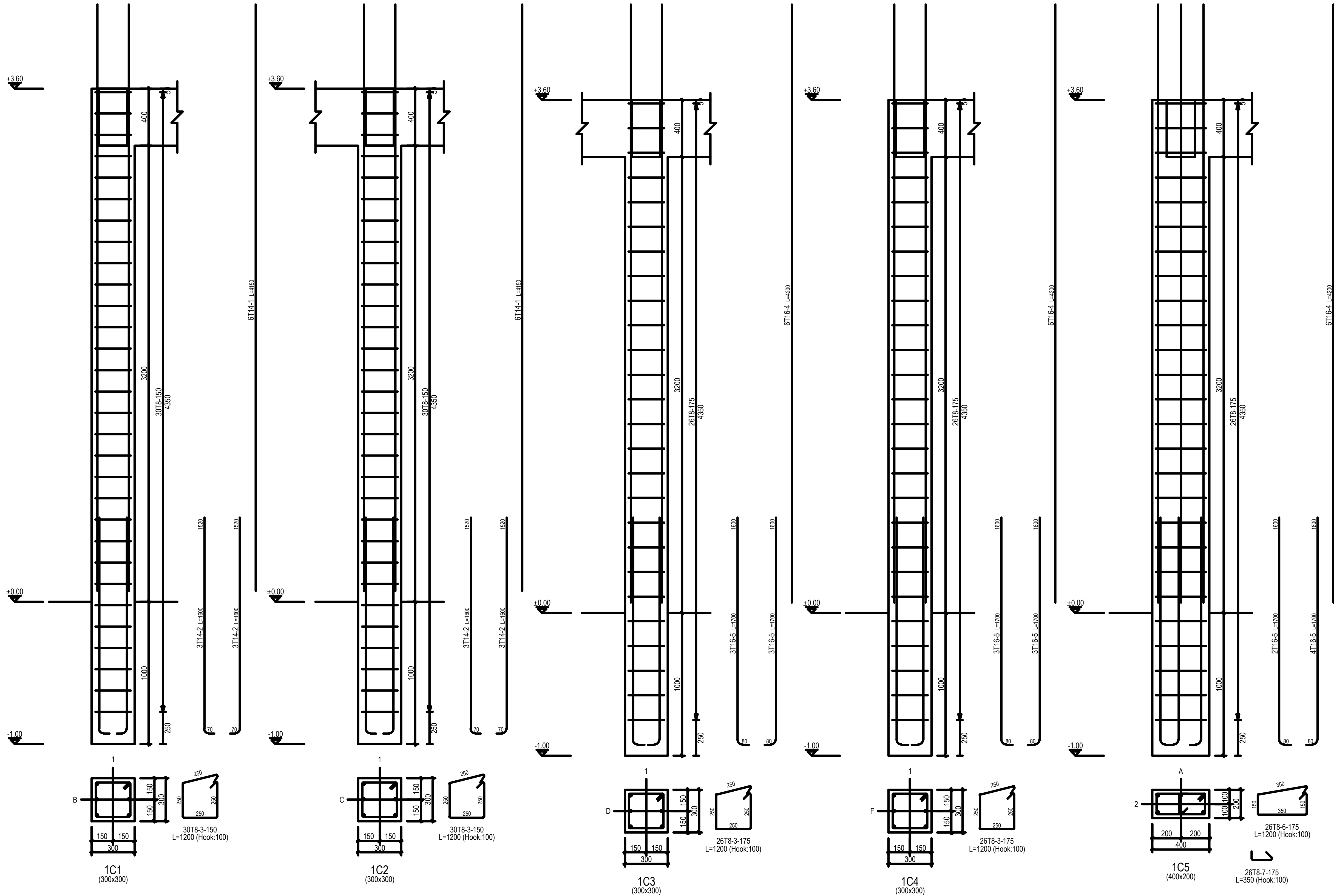
- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
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- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5mtr FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DRAW.
BUTTER BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF JOINTS AND STITCHES OF 1500mm AS PER BS 8004.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

ELEVATION OF COLUMNS

Architects	Project Title	 	Revisions	Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Beam Reports	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	23-03-2026	A1	Project No:
			NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Designed By Eng. Sead Guleed	Drawn By: Gerald Nyanjua	Reviewed By: Eng. Mohamed Saahid



GENERAL NOTE

- ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
- DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
- FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING. THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
- MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

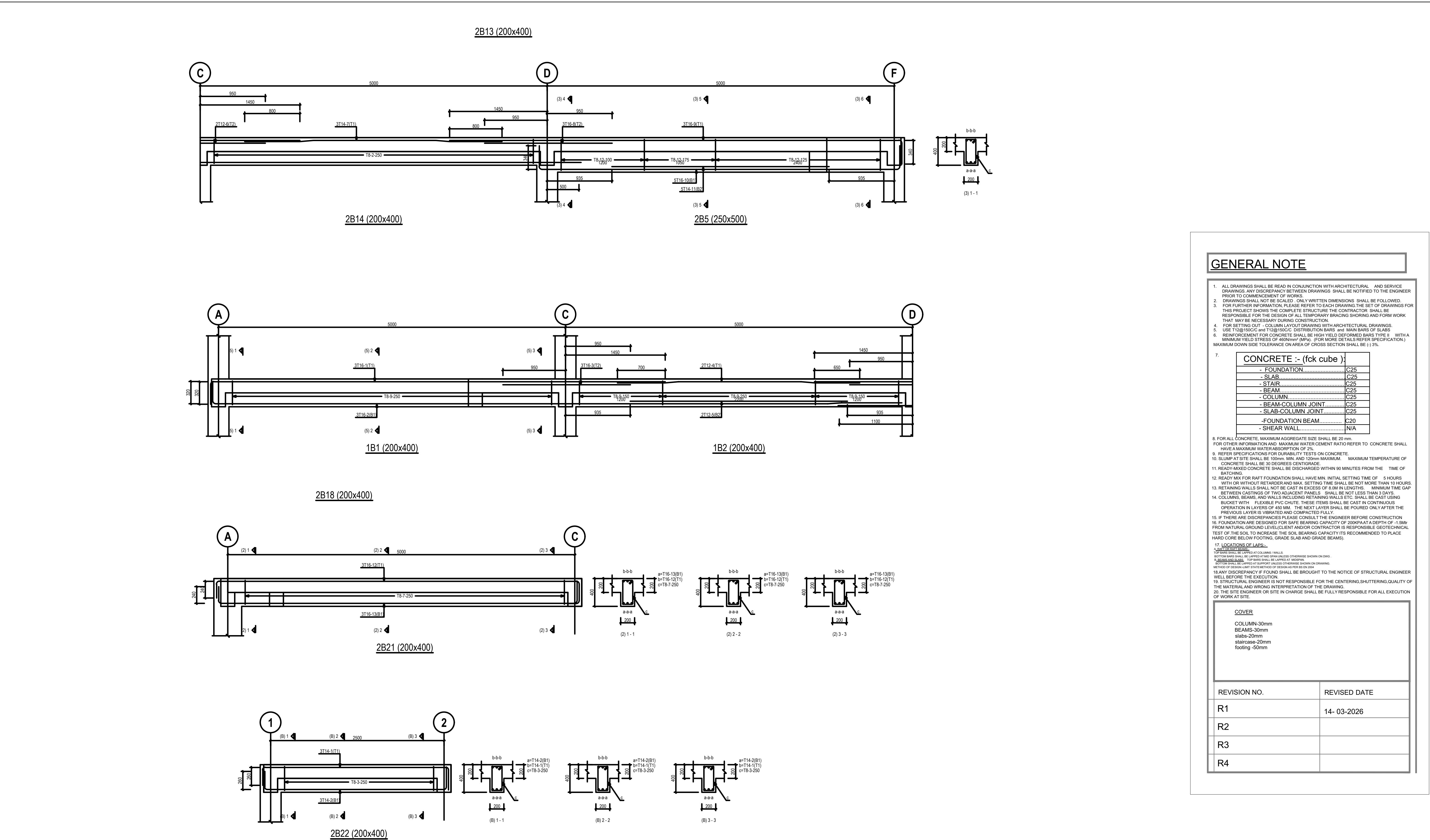
CONCRETE :- (fck cube):	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm MIN AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION
- FOUNDATIONS ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPA AT A DEPTH OF -1.5M FROM NATURAL GROUND LEVEL. CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAP:-
A. Joints of column
B. Joints of beam
C. Joints of slab
D. Joints of wall
E. Joints of footing
F. Joints of staircase
G. Joints of retaining wall
H. Joints of pile
I. Joints of pile cap
J. Joints of pile shaft
K. Joints of pile head
L. Joints of pile toe
M. Joints of pile cap
N. Joints of pile shaft
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AA. Joints of pile head
AB. Joints of pile toe
AC. Joints of pile cap
AD. Joints of pile shaft
AE. Joints of pile head
AF. Joints of pile toe
AG. Joints of pile cap
AH. Joints of pile shaft
AI. Joints of pile head
AJ. Joints of pile toe
AK. Joints of pile cap
AL. Joints of pile shaft
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CB. Joints of pile toe
CC. Joints of pile cap
CD. Joints of pile shaft
CE. Joints of pile head
CF. Joints of pile toe
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EP. Joints of pile shaft
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ER. Joints of pile toe
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COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

ELEVATION OF COLUMNS

Architects	Project Title			Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports	
	Client								
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						Date	Sheet No.	
							23-03-2026	A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Designed By	Drawn By:	Reviewed By:	
						Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid	



DETAIL OF BEAMS

GENERAL NOTE

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- FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
- USE T12@150C/C AND T12@150C/C DISTRIBUTION BARS AND MAIN BARS OF SLABS.
- REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.) MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

CONCRETE :- (fck cube)	
- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

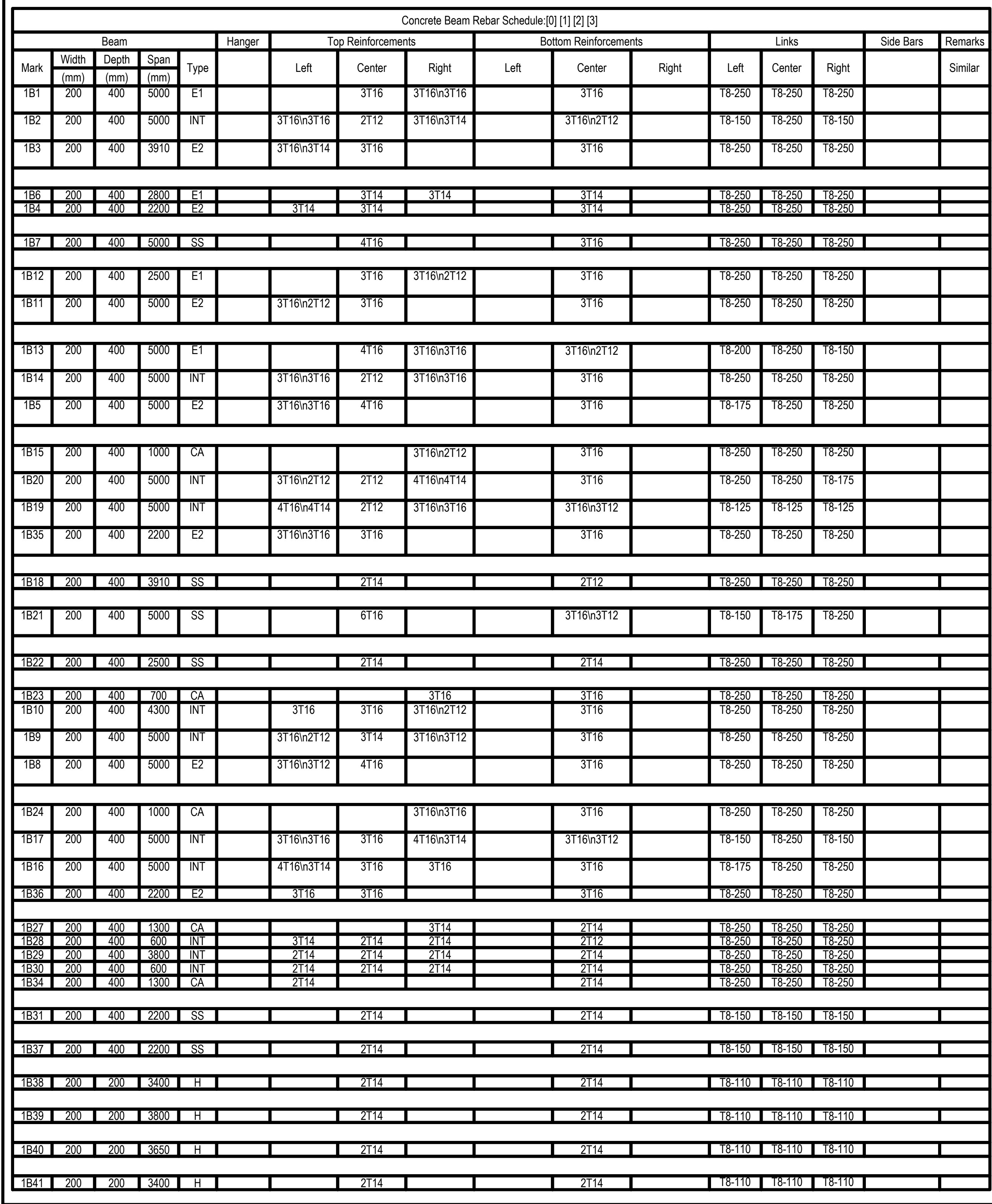
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- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
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- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
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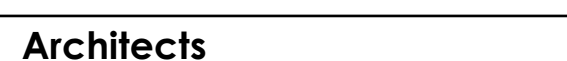
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COVER
COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

Architects	Project Title	 	Revisions	Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Beam Reports	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	23-03-2026	A1	Project No:
			NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Designed By Eng. Sead Guleed	Drawn By: Gerald Nyanjua	Reviewed By: Eng. Mohamed Saahid

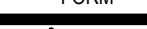
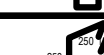


Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title			
 Somali Sustainable Fisheries Development Project	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports		
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FORM PLANS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T12	0.889		3,575.5	3,178.2	
			T.WEIGHT (kg)	3,178.2	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	12	63	2650	166.95	
2	12	213	1050	223.65	
3	12	32	1700	54.40	
4	12	290	5150	1493.50	
5	12	32	2450	78.40	
6	12	255	1250	318.75	
7	12	25	2950	73.75	
8	12	25	2550	63.75	
9	12	71	2350	166.85	
10	12	32	1100	35.20	
11	12	32	3750	120.00	
12	12	96	3200	307.20	
13	12	15	750	11.25	
14	12	15	4450	66.75	
15	12	15	3100	46.50	
16	12	32	3000	96.00	
17	12	17	4100	69.70	
18	12	17	2900	49.30	
19	12	34	1100	37.40	
20	12	26	1450	37.70	
21	12	26	2250	58.50	

FORM PLANS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T12	0.889		3,299.5	2,932.9	
T.WEIGHT (Kg)			2,932.9		
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	12	63	2700	170.10	
2	12	87	1050	91.35	
3	12	32	1700	54.40	
4	12	239	5150	1230.85	
5	12	32	2450	78.40	
6	12	237	1250	296.25	
7	12	32	5200	166.40	
8	12	24	3000	72.00	
9	12	24	2600	62.40	
10	12	32	1100	35.20	
11	12	32	3750	120.00	
12	12	96	3200	307.20	
13	12	33	1250	41.25	
14	12	33	3950	130.35	
15	12	15	750	11.25	
16	12	15	4450	66.75	
17	12	15	3100	46.50	
18	12	32	3000	96.00	
19	12	17	4100	69.70	
20	12	17	2900	49.30	
21	12	34	1150	39.10	
22	12	7	5350	37.45	
23	12	21	1300	27.30	

FORM PLANS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T12	0.889		235.0	208.9	
			T.WEIGHT (Kg)	208.9	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	12	25	2350	58.75	
2	12	75	1050	78.75	
3	12	13	4200	54.60	
4	12	39	1100	42.90	

COLUMN APPLICATIONS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T8	0.395		87.8	34.7	
T16	1.580		57.6	91.0	
T.WEIGHT (Kg)				125.7	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	16	16	3600	57.60	
2	8	21	1200	25.20	
3	8	46	1200	55.20	
4	8	21	350	7.35	

PAD FOOTINGS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T16	1.580		681.6	1077.2	
			T.WEIGHT (Kg)	1077.2	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	16	19	3768	71.59	
2	16	21	3536	74.26	
3	16	34	3068	104.31	
4	16	34	3036	103.22	
5	16	18	2468	44.42	
6	16	14	2308	32.31	
7	16	24	2036	48.86	
8	16	18	1908	34.34	
13	16	16	2868	45.89	
14	16	16	2836	45.38	
17	16	14	2768	38.75	
18	16	14	2736	38.30	

STAIR QUANTITY TAKE-OFF					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T12	0.889		592.6	526.8	
T.WEIGHT (Kg)			526.8		
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	12	104	1000	104.00	
2	12	32	5600	179.20	
3	12	28	1250	35.00	
4	12	6	1400	8.40	
5	12	24	3750	90.00	
6	12	24	2800	67.20	
7	12	16	1600	25.60	
8	12	16	1450	23.20	
9	12	16	1950	31.20	
10	12	16	1800	28.80	

COLUMN ELEVATIONS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T8	0.395		174.7	69.0	
T14	1.210		69.0	83.5	
T16	1.580		106.2	167.8	
			T.WEIGHT (Kg)	320.3	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	14	12	4150	49.80	
2	14	12	1600	19.20	
3	8	112	1200	134.40	
4	16	18	4200	75.60	
5	16	18	1700	30.60	
6	8	26	1200	31.20	
7	8	26	350	9.10	

COLUMN ELEVATIONS QUANTITY TAKE OFF - STOREYS -					
SIZE	UNIT WEIGHT (Kg/m)		LENGTH (m)	T.WEIGHT (Kg)	
T8	0.395		126.0	49.8	
T16	1.580		106.8	168.8	
T.WEIGHT (Kg)				218.5	
NO	SIZE	QUA	LENGTH (mm)	TOTAL	FORM
1	16	18	3600	64.80	
2	8	105	1200	126.00	
3	16	10	4200	42.00	

Codes		
BS8110-1997, BS6399, EN1991-1-4 (2005), BS 5950		
Soil Parameters		
Soil Bearing Capacity (kN/m2)	126.00	
Subgrade Reaction (kN/m3)	50000.000	
Material Properties (Default)		
	Material	Rebar Grade
Columns	C20/25	Grade 460 (Type 2)
	C20/25	Grade 460 (Type 2)
Walls	Long. Web Rebar	Grade 460 (Type 2)
	Lat. Web Rebar	Grade 460 (Type 2)
Beams	C20/25	Grade 460 (Type 2)
Slabs	C20/25	Grade 460 (Type 2)
Ribs	C20/25	Grade 460 (Type 2)
Footings	C25/30	Grade 460 (Type 2)
Links	-	Grade 460 (Type 2)

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CONCRETE :- (fck cube)

- FOUNDATION.....	C25
- SLAB.....	C25
- STAIR.....	C25
- BEAM.....	C25
- COLUMN.....	C25
- BEAM-COLUMN JOINT.....	C25
- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

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- LOCATIONS OF LAPS:-
 - 1. BOTTOM BARS BEING LAPPED AT COLUMNS / WALLS
 - 2. TOP BARS SHALL BE LAPPED AT MIDSPAN
 - 3. BEAMS AND SLABS: TOP BARS SHALL BE LAPPED AT MIDSPAN
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COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -30mm

REVISION NO.

R1

R2

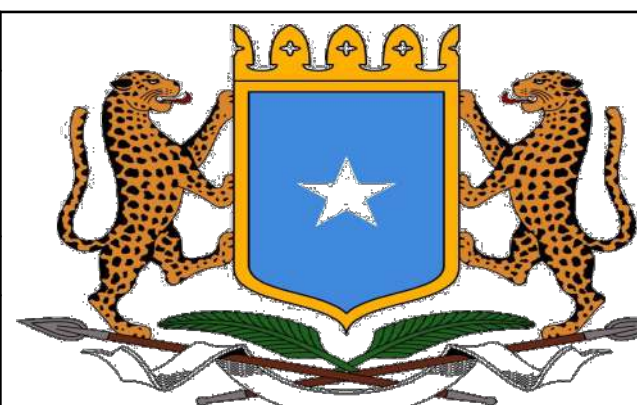
R3

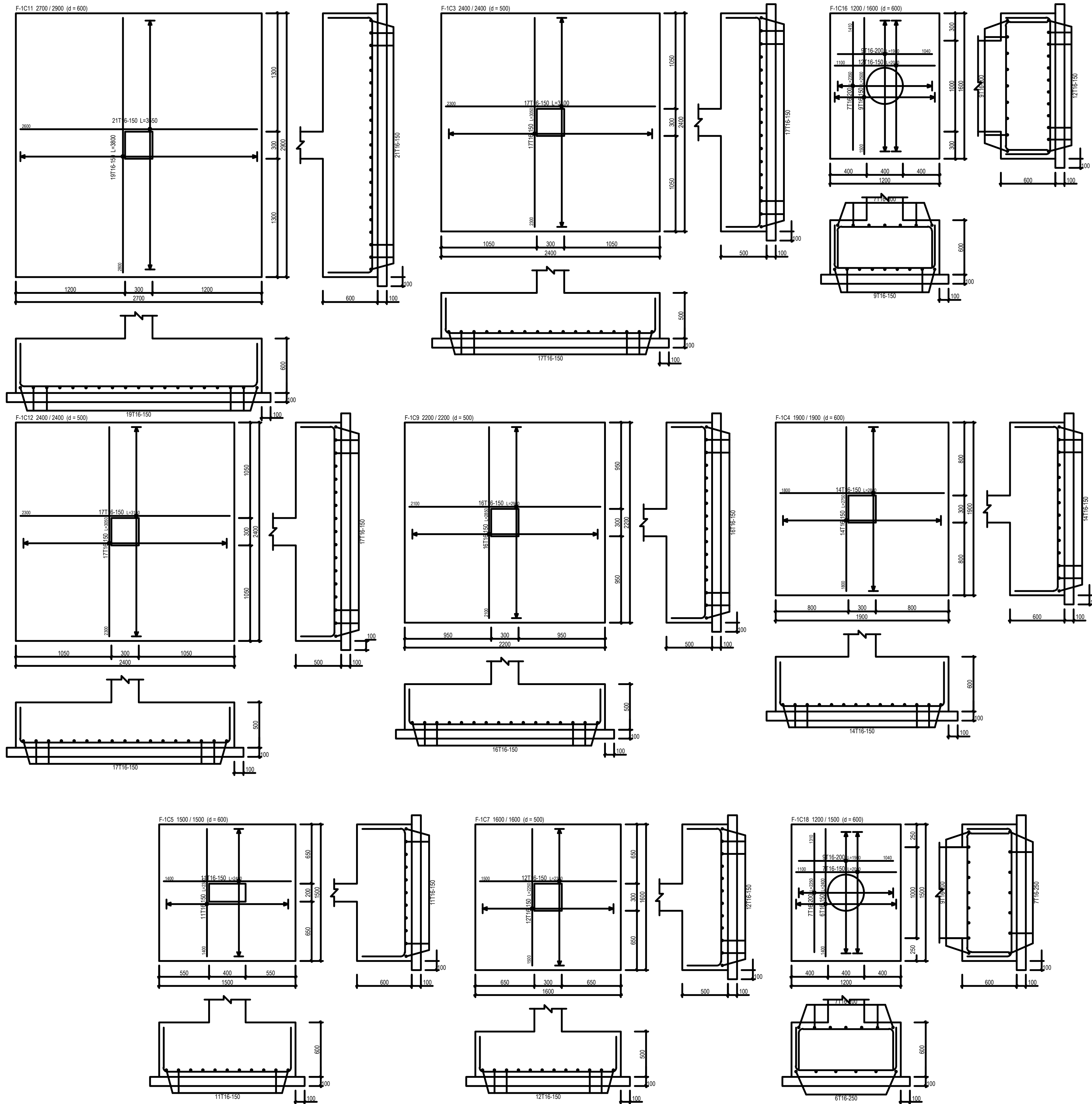
R4

REVISED DATE

14- 03-2026

STEEL BAR QUANTITY OF SLAB, BEAM, STAIR-CASE, COLUMNS AND FOOTING IN KG

Architects	Project Title			 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)				No.	Description	Date	1:50	BANADIR Beam Reports	
	Client								Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia								23-03-2026	A1
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							Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid	



DETAILS OF FOOTINGS

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- SLAB-COLUMN JOINT.....	C25
- FOUNDATION BEAM.....	C20
- SHEAR WALL.....	N/A

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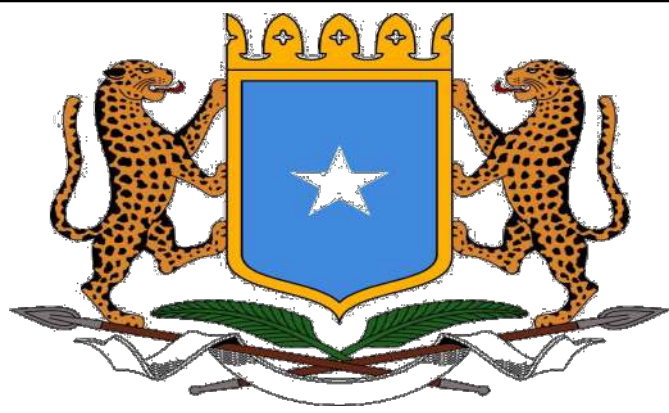
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REVISION NO. REVISED DATE

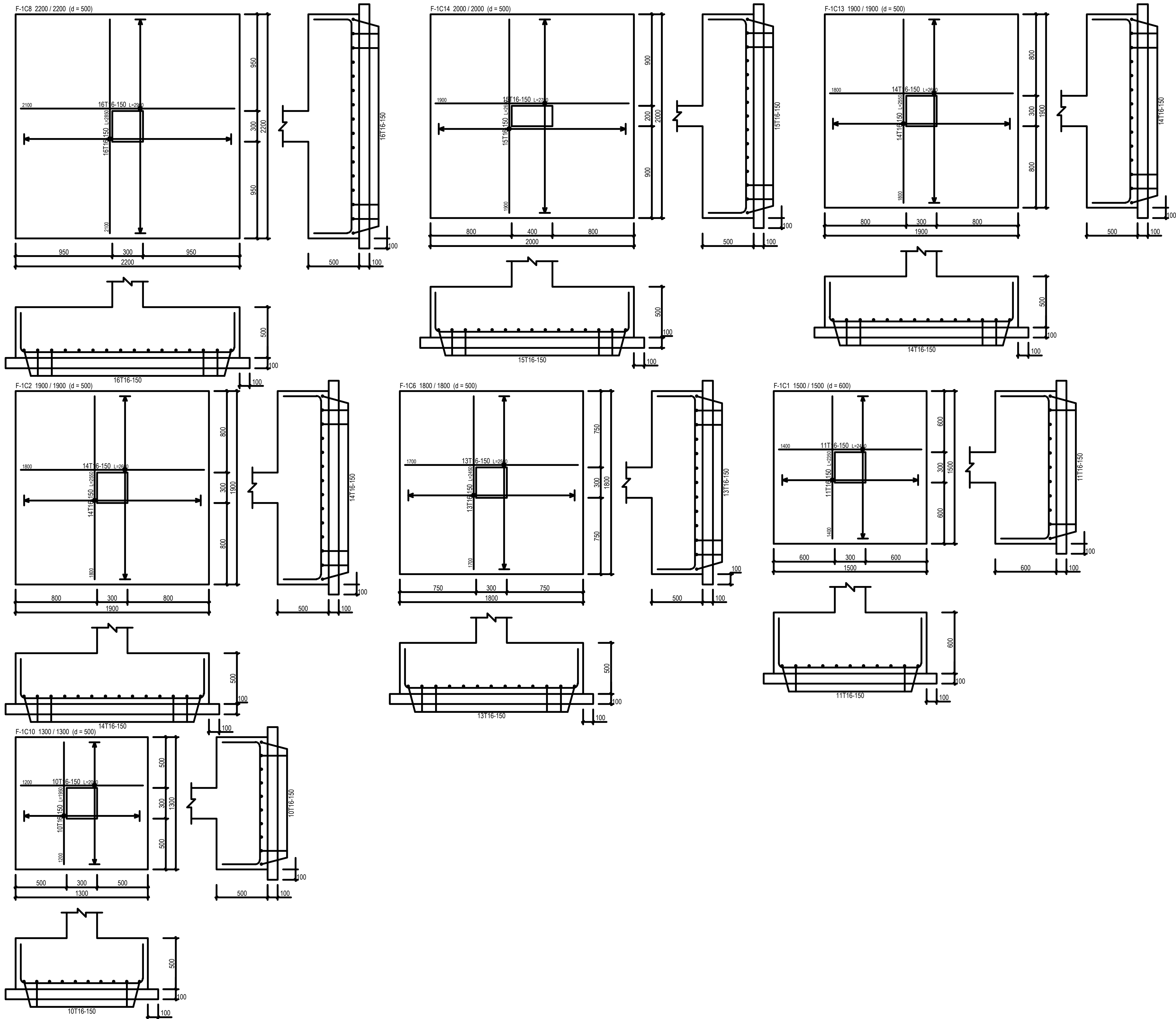
R1	14- 03-2026
R2	
R3	
R4	

Architects	Project Title
	Somali Sustainable Fisheries Development Project (BADMAAL)
	Client
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia



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Drawn By:		Eng. Mohamed Saahid	
Gerald Nyanjua			



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- FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.
- FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SHALL HAVE A MAXIMUM WATER ABSORPTION OF 2%.
- REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
- SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
- READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
- READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
- RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
- COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
- IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
- FOUNDATIONS ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200KPa AT A DEPTH OF 1.5M FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
- LOCATIONS OF LAPS:-
A. RAFT OR RAFT BEAMS
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED IN MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. BEAMS AND SLABS
TOP BARS SHALL BE LAPPED AT MIDSPAN.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN/LIMIT STATE METHOD OF DESIGN AS PER BS EN 2004.
- ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
- STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
- THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.

REVISED DATE

R1

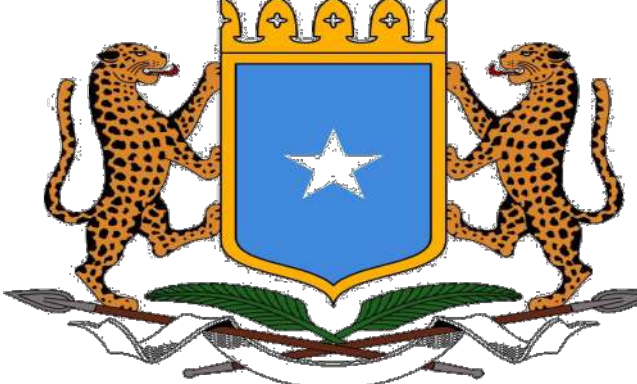
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R2

R3

R4

DETAILS OF FOOTINGS

Architects	Project Title	 	Revisions	Scale	Drawing No. & Title	
	Somali Sustainable Fisheries Development Project (BADMAAL)		No.	1:50	BANADIR Footing Layout	
	Client		Description		Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia		Date	18-03-2026	A1	Project No:
			NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.	Drawn By Gerald Nyanjua Amolo	Reviewed By Eng. Mohamed Abdi Ahmed Saahid	Approved By: Eng. Sead Guleed

FOOTING SCHEDULE (C20/25:Fy460)

FOOTING NUMBERS	COLUMN NUMBERS	FOOTING TYPE	FOOTING DIMENSION					FOOTING REINFORCEMENT	
			STEP	L	B	D1	D2	TOP AND BOTTOM	
								ALONG B	ALONG L
F1	1 PCS	Pad	-	1200	1200	500	-	T16@150 C/C	T16@150 C/C
F2	3 PCS	Pad	-	1500	1500	500	-	T16@150 C/C	T16@150 C/C
F3	2 PCS	Pad	-	1900	1900	500	-	T16@150 C/C	T16@150 C/C
F10	1 PCS	Pad	-	1100	1100	500	-	T16@150 C/C	T16@150 C/C
F5	2 PCS	Pad	-	1300	1300	500	-	T16@150 C/C	T16@150 C/C
F6	1 PCS	Pad	-	1600	1600	500	-	T16@150 C/C	T16@150 C/C
F7	1 PCS	Pad	-	1800	1800	500	-	T16@150 C/C	T16@150 C/C
F8	1 PCS	Pad	-	2200	2200	500	-	T16@150 C/C	T16@150 C/C
F9	1 PCS	combined	-	1400	1000	500	-	T16@150 C/C	T16@150 C/C
F10	1 PCS	combined	-	1300	1000	500	-	T16@150 C/C	T16@150 C/C

GENERAL NOTE

1. ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS. ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORKS.
2. DRAWINGS SHALL NOT BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR THIS PROJECT SHOWS THE COMPLETE STRUCTURE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.
4. FOR SETTING OUT - COLUMN LAYOUT DRAWING WITH ARCHITECTURAL DRAWINGS.
5. USE T12@150C/C and T12@150C/C DISTRIBUTION BARS and MAIN BARS OF SLABS
6. REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE II WITH A MINIMUM YIELD STRESS OF 460N/mm² (MPa). (FOR MORE DETAILS REFER SPECIFICATION.)
7. MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.
8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm. HAVE A MAXIMUM WATER ABSORPTION OF 2%.
9. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE.
10. SLUMP AT SITE SHALL BE 100mm. MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREES CENTIGRADE.
11. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF BATCHING.
12. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. INITIAL SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL BE NOT MORE THAN 10 HOURS.
13. RETAINING WALLS SHALL NOT BE CAST IN EXCESS OF 8.0M IN LENGTHS. MINIMUM TIME GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.
14. COLUMNS, BEAMS, AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING BUCKET WITH FLEXIBLE PVC CHUTE. THESE ITEMS SHALL BE CAST IN CONTINUOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPACTED FULLY.
15. IF THERE ARE DISCREPANCIES PLEASE CONSULT THE ENGINEER BEFORE CONSTRUCTION.
16. FOUNDATION ARE DESIGNED FOR SAFE BEARING CAPACITY OF 2000KPa AT A DEPTH OF 1.5Mtr FROM NATURAL GROUND LEVEL (CLIENT AND/OR CONTRACTOR IS RESPONSIBLE GEOTECHNICAL TEST OF THE SOIL TO INCREASE THE SOIL BEARING CAPACITY ITS RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).
17. LOCATIONS OF LAPS:-
A. RAFT OR RIGID FOUNDATION
TOP BARS SHALL BE LAPPED AT COLUMNS / WALLS.
BOTTOM BARS SHALL BE LAPPED AT MID SPAN UNLESS OTHERWISE SHOWN ON DWG.
B. GRADE BEAMS:- TOP BARS SHALL BE LAPPED AT JOINTS.
BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DRAWING.
METHOD OF DESIGN: LIMIT STATE METHOD OF DESIGN AS PER BS EN 204.
18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER WELL BEFORE THE EXECUTION.
19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION OF WORK AT SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.

REVISED DATE

R1

14- 03-2026

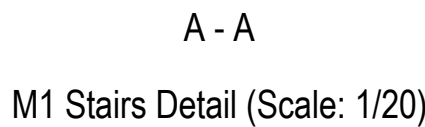
R2

R3

R4

FOOTING SCHEDULES (C20/25:Fy460)

Architects	Project Title			Revisions		Scale	Drawing No. & Title		
	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports	
	Client						Date	Sheet No.	
	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia						23-03-2026	A1	Project No:
				NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Designed By	Drawn By:	Reviewed By:	
						Eng. Sead Guleed	Gerald Nyanjua	Eng. Mohamed Saahid	



ALL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL AND SERVICE DRAWINGS ANY DISCREPANCY BETWEEN DRAWINGS SHALL BE NOTIFIED TO THE ENGINEER IMMEDIATELY.

DRAWINGS SHALL NOT BE SCALED UNLESS WRITTEN DIMENSIONS SHALL BE FOLLOWED. FOR FURTHER INFORMATION, PLEASE REFER TO EACH DRAWING THE SET OF DRAWINGS FOR PROJECT NO. 07-06-00000.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL TEMPORARY BRACING SHORING AND FORM WORK THAT MAY BE NECESSARY DURING CONSTRUCTION.

CONCRETE SHALL BE PLACED ACCORDING TO THE ARCHITECTURAL DRAWINGS.

USE 1120/1500C AND 1120/1500C DISTRIBUTION BARS AND MAIN BARS OF SLABS

REINFORCEMENT FOR CONCRETE SHALL BE HIGH YIELD DEFORMED BARS TYPE I WITH A MINIMUM TENSILE YIELD STRENGTH OF 60,000 PSI. REINFORCING STEEL SHALL BE REFERENCE TO MAXIMUM DOWN SIDE TOLERANCE ON AREA OF CROSS SECTION SHALL BE (-) 3%.

8. FOR ALL CONCRETE, MAXIMUM AGGREGATE SIZE SHALL BE 20 mm.

9. FOR OTHER INFORMATION AND MAXIMUM WATER CEMENT RATIO REFER TO CONCRETE SLAB WITH MAXIMUM RATIO OF 0.45.

10. REFER SPECIFICATIONS FOR DURABILITY TESTS ON CONCRETE

11. SLUMP AT SITE SHALL BE 100mm, MIN. AND 120mm MAXIMUM. MAXIMUM TEMPERATURE OF CONCRETE SHALL BE 30 DEGREE CELSIUS.

12. READY-MIXED CONCRETE SHALL BE DISCHARGED WITHIN 90 MINUTES FROM THE TIME OF ORDERING.

13. READY MIX FOR RAFT FOUNDATION SHALL HAVE MIN. SETTING TIME OF 5 HOURS WITH OR WITHOUT RETARDER AND MAX. SETTING TIME SHALL NOT BE MORE THAN 10 HOURS.

14. RETAINING WALLS SHALL BE CONSTRUCTED WITH 100mm MINIMUM JOINTS, HAVING THE GAP BETWEEN CASTINGS OF TWO ADJACENT PANELS SHALL BE NOT LESS THAN 3 DAYS.

15. COLUMNS, BEAMS AND WALLS INCLUDING RETAINING WALLS ETC. SHALL BE CAST USING 10mm FLEXIBLE JOINTS.

16. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS OPERATION IN LAYERS OF 450 MM. THE NEXT LAYER SHALL BE POURED ONLY AFTER THE PREVIOUS LAYER IS VIBRATED AND COMPLETED FULLY.

17. FOUNDATION AND SUBSTRUCTURE SHALL BE DESIGNED BY AN ENGINEER BEFORE CONSTRUCTION.

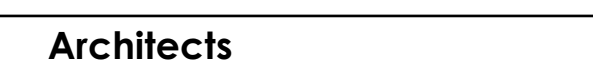
18. FOUNDATIONS ARE DESIGNED FOR SAFE BEARING CAPACITY OF 200kN/A AT DEPTH OF 1.5mtr FROM NATURAL GROUND LEVEL (EITHER AND/OR CONTRACTOR IS RESPONSIBLE FOR GEOTECHNICAL INVESTIGATION AND REPORTING OF THE SAME). THE FOUNDATIONS ARE RECOMMENDED TO PLACE HARD CORE BELOW FOOTING, GRADE SLAB AND GRADE BEAMS).

17. LOCATIONS OF LAPS:-
ALL TYPE OF LAPS
 TOP BARS SHALL BE LAPPED AT COLLARS & WALLS.
 BOTTOM BARS SHALL BE LAPPED AT SPAN UNLESS OTHERWISE SHOWN ON DWG.
 8. BARS AND 8. BARS. TOP BARS SHALL BE LAPPED AT MIDSPAN.
 BOTTOM BARS SHALL BE LAPPED AT SUPPORT UNLESS OTHERWISE SHOWN ON DWG.
 METHOD OF DESIGN - LAMP STATE METHOD OF DESIGN AS PER IS 8004
 18. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF STRUCTURAL ENGINEER
 WELL BEFORE THE EXECUTION.
 19. STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR THE CENTERING, SHUTTERING, QUALITY OF
 THE MATERIAL AND WRONG INTERPRETATION OF THE DRAWING.
 20. THE SITE ENGINEER OR SITE IN CHARGE SHALL BE FULLY RESPONSIBLE FOR ALL EXECUTION
 OF WORK ON SITE.

COVER

COLUMN-30mm
BEAMS-30mm
slabs-20mm
staircase-20mm
footing -50mm

REVISION NO.	REVISED DATE
R1	14- 03-2026
R2	
R3	
R4	

Architects	Project Title		 THE WORLD BANK IBRD • IDA WORLD BANK GROUP	Revisions		Scale	Drawing No. & Title		
 Somali Sustainable Fisheries Development Project	Somali Sustainable Fisheries Development Project (BADMAAL)			No.	Description	Date	1:50	BANADIR Beam Reports	
							Date	Sheet No.	
							23-03-2026	A1	Project No:
Client	Ministry of Fisheries and Blue Economy (MFBE) Federal Republic of Somalia	NB: 1. All measurements are shown in millimeters. Measurements should not be scaled off the drawing. 2. The contractor must check and verify all levels and dimensions before commencing any work.		Designed By Eng. Sead Guleed	Drawn By: Gerald Nyanjua	Reviewed By: Eng. Mohamed Saahid			