

Structural Drawings



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No.	Description	Date

Mahmoud K Elhessi

Revit Project

Cover Letter

Project number	1	S.1	
Date	17/12/2021		
Drawn by	Mahmoud Elhessi		
Checked by	Dr. Mazen Abualtayef	Scale	1 : 100

12/18/2021 3:17:14 PM

List of Drawings	
Cover Letter	1
List of Drawings	2
General Notes	3
Columns Axes with Columns Cross Sections	4
Foundations	5
Foundations Details	6
Ground Beams	7
Ground Floor Slab with Cross Sections	8
B2 beam Details	9
General Details	10
Stair Reinforcement	11

1 List of Drawings
1 : 25



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List of Drawings

Project number	1	S.2
Date	17/12/2021	
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Scale		1 : 25

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GENERAL STRUCTURAL NOTES

I- Soil Properties:-

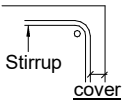
- Soil Type : Sandy Soil
- Actual Bearing Capacity is 2.0kg/cm2
- Foundations and Columns are Designed for:
<<\Ground + Hall+ 3 Typical Floors (5 Floors)>>
- Minimum Excavation Depth : As Per Site Conditions

II- Concrete Properties:-

- Concrete Compressive Strength (fc')
- For Foundations..... (B200)
- For Columns..... (B240)
- For Ground Beams.... (B200)
- For Staircase..... (B200)
- For Slabs..... (B200)

III- Concrete Cover:-

- For Sub-Structure Elements....= 7.5 cm
- For Columns.....= 3.0 cm
- For Slabs & Beams.....= 3 cm
- For Other Elements.....= 2.5 cm



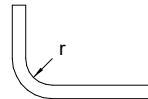
IV- Concrete Casting & Curing :-

- Mechanical Vibrator Must Be Used in All Casting.
- Curing Time is: 3-7 Days, Directly After Casting.
- Shutter Removal:-
 - For Slabs : 14 Days
 - For Other Elements : 2 Days

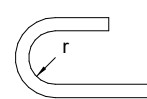
V- Reinforcement Properties:-

- Steel Yield Strength (fy) :
- Deformed Steel Bars = 4200 kg/cm2
- Standard Radii of Bends and Hooks as Given
Below to Be Used Unless Specially Shown.

BENDS



HOOKS



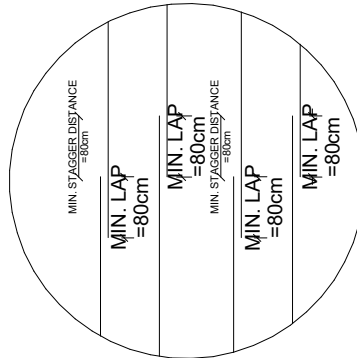
Bar Size		grade 4200
d		r
6		18
8		24
10		30
12		36
14		42
16		48
18		54
20		60
25		100

- Any Changing in Structural Elements Will
Cancel The Responsibility of The Designer.

IV- Reinforcement Symbols:-

- Steel Strength:
 - (□) : Hot Rolled High Yield Deformed Steel Bars.
 - (R) : Hot Rolled Mild Steel Bars.
- Steel Position:
 - (ST) : Top Reinforcement.
 - (SB) : Bottom Reinforcement.

- If Needed; Steel Bars Shall Be Lapp Spliced @ 60 Times
Bar Diameter at Least, and Shall be Made Staggered.



General Splice Staggered Rule

1

General Notes

1 : 100



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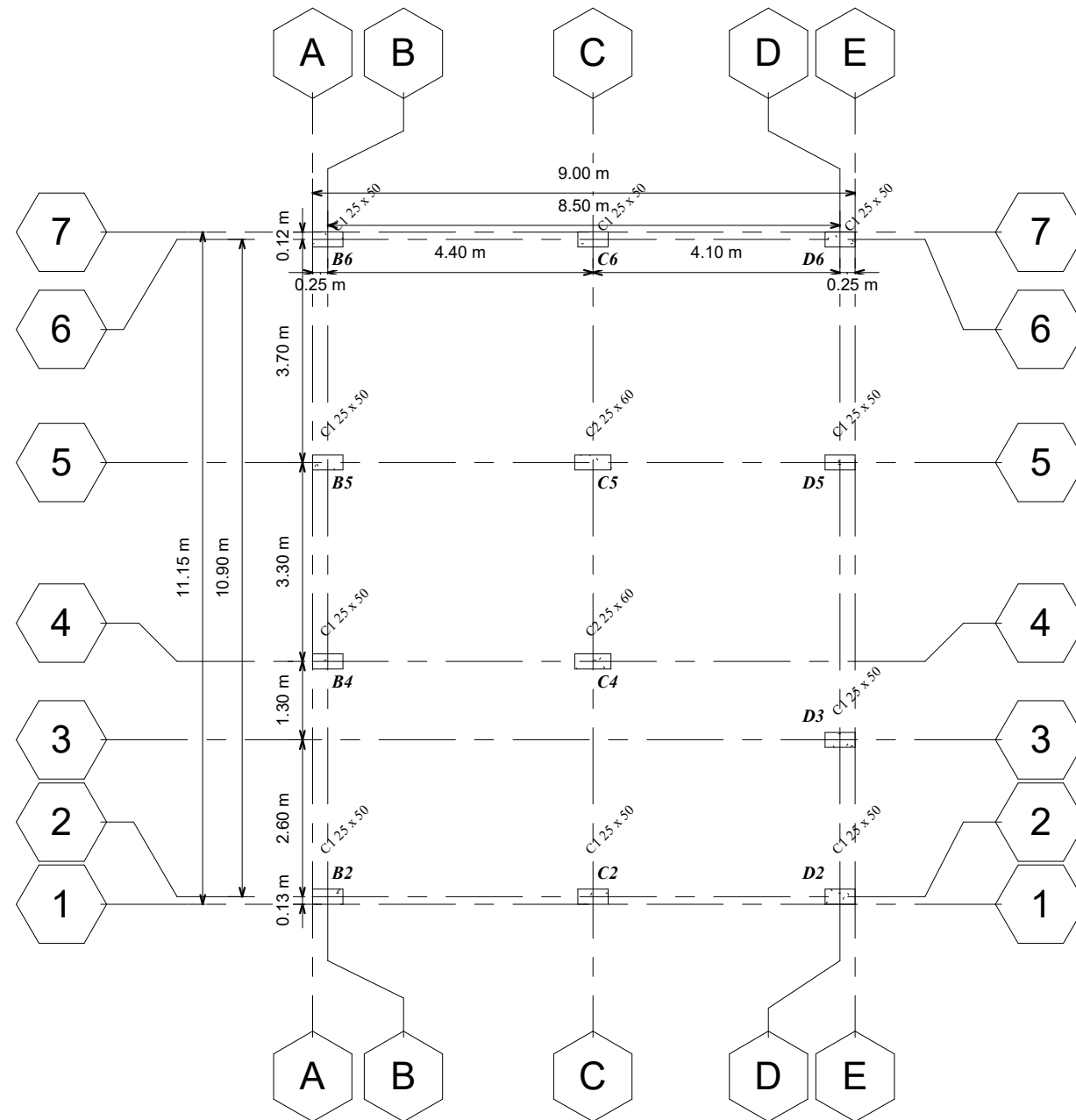
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General Notes

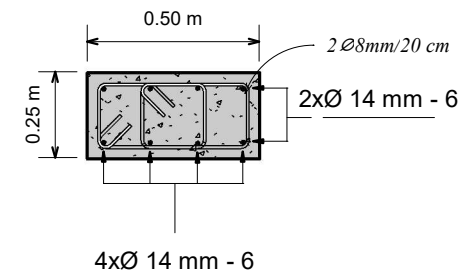
Project number	1	S.3	
Date	17/12/2021		
Drawn by	Mahmoud Elhessi		
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1 Columns Axes

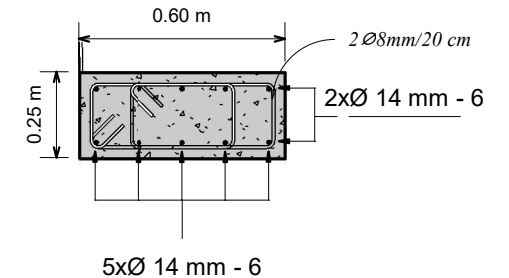
1 : 100



2

Columns - C1

1 : 20



3

Columns- C2

1 : 20

Columns Table	
C1	B2,B4,B5,B6,C2,C6,D2,D3,D5,D6
C2	C4,C5

4

Columns Table

1 : 50



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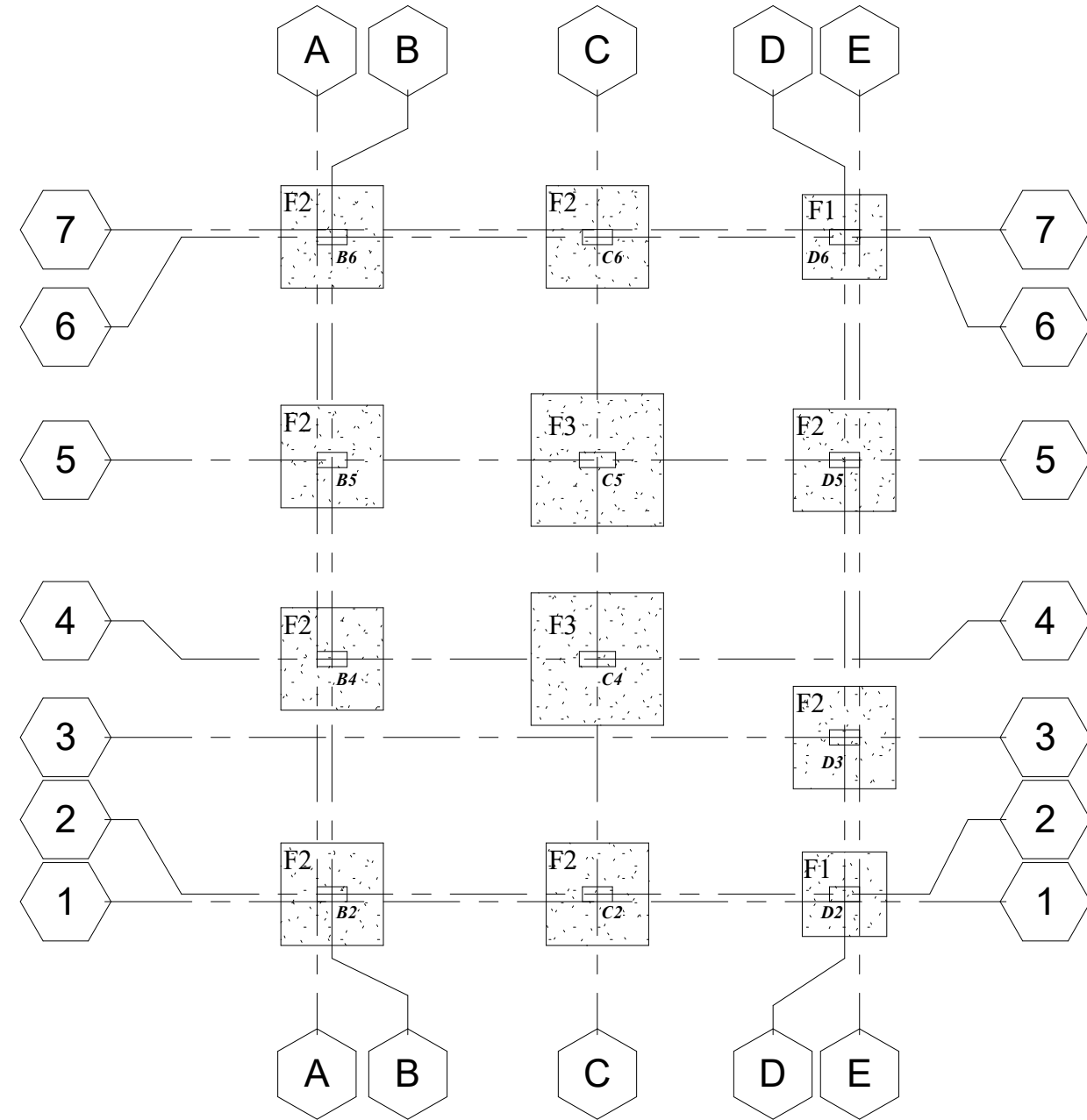
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Columns Axes

Project number	1	S.4
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1 Foundations
1 : 100



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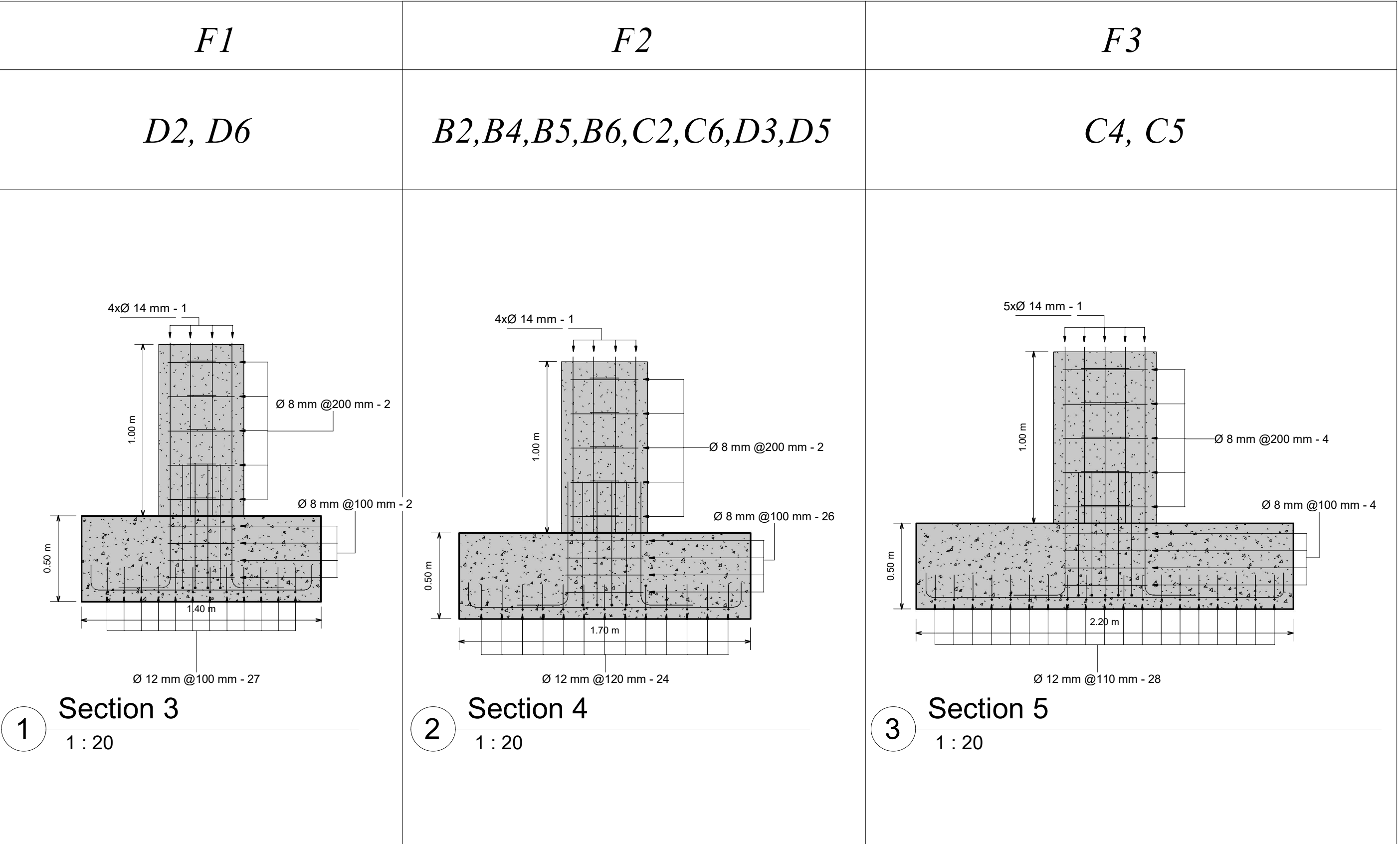
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Foundations

Project number	1	S.5
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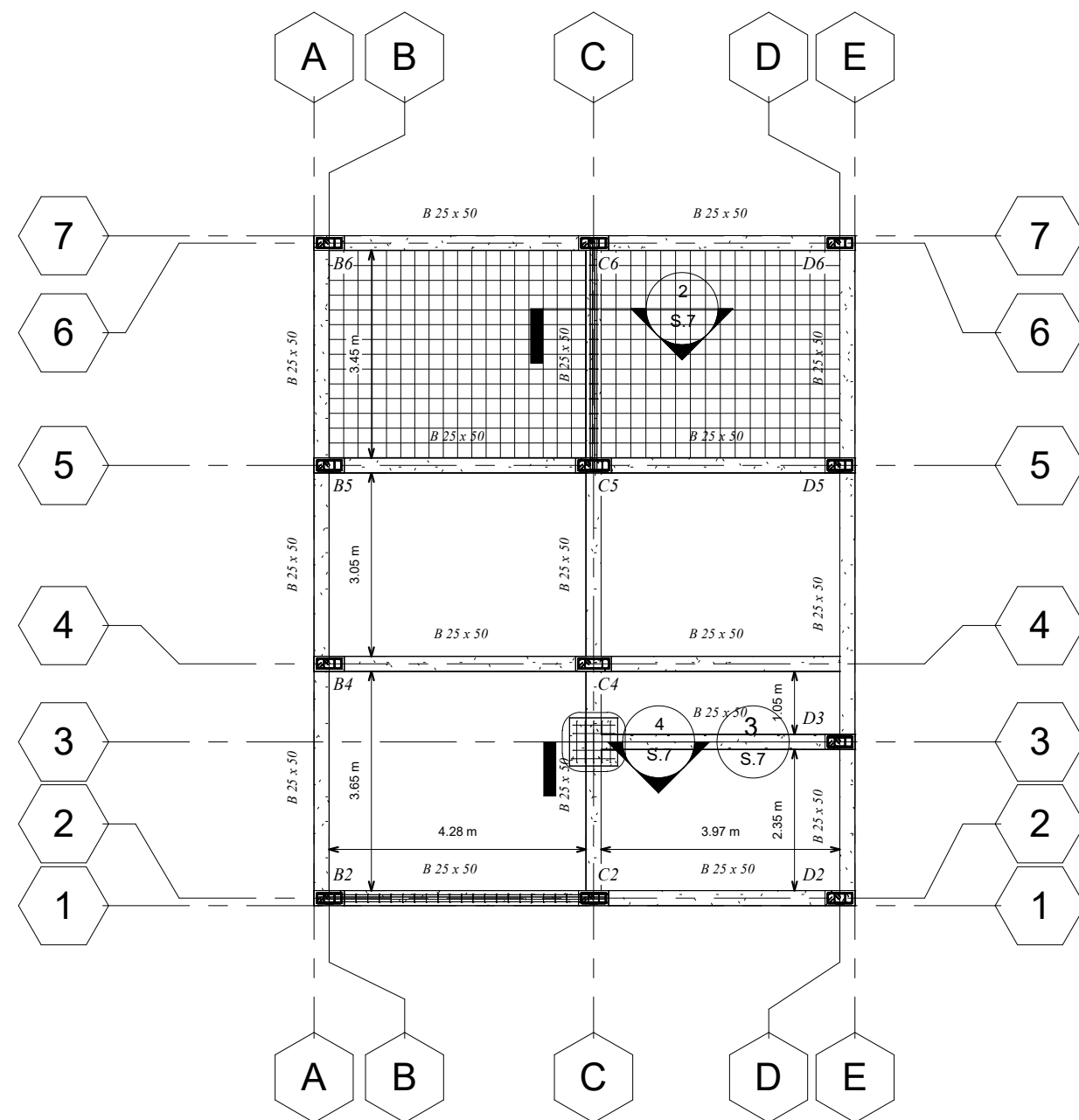
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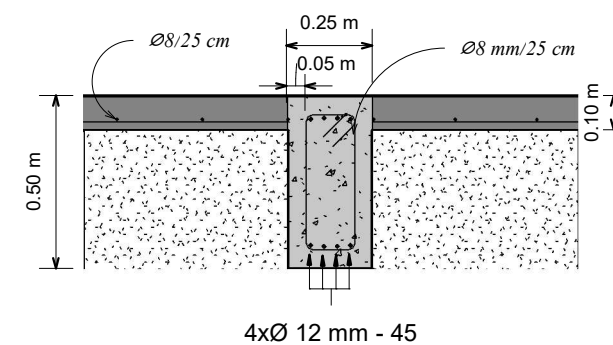
Foundations Details

Project number	1	S.6
Date	17/12/2021	
Drawn by	Mahmoud Elhessi	
Checked by	Checker	Scale
		1 : 20

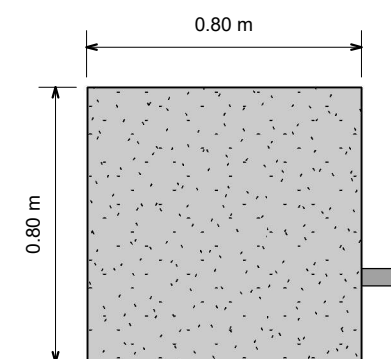
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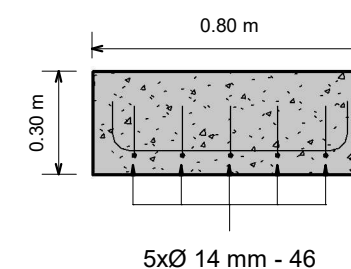
1 Ground Beams
1 : 100



2 Section 1
1 : 20



3 Top-Small Footing
1 : 20



4 Section 2
1 : 20



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No.	Description	Date

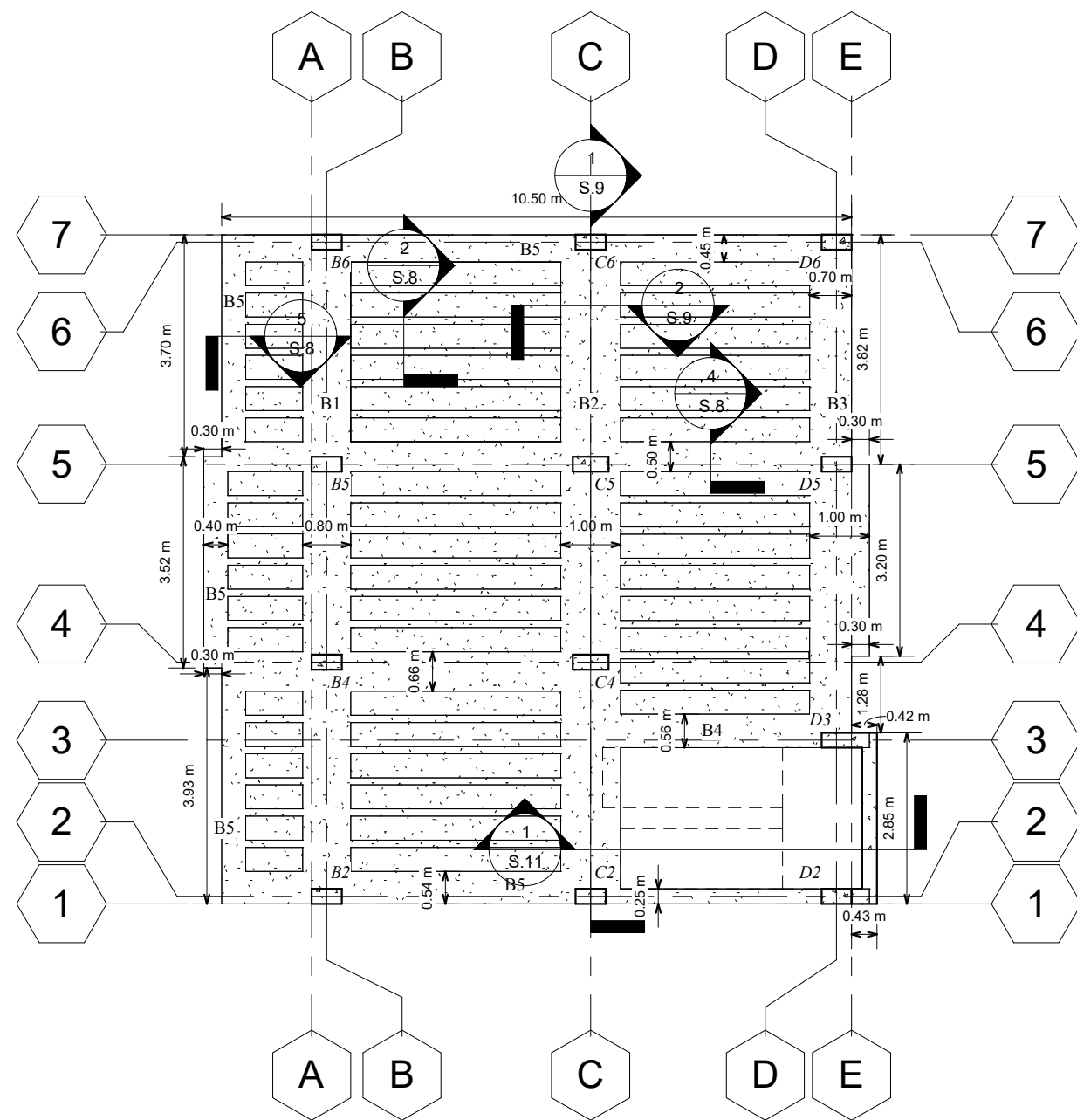
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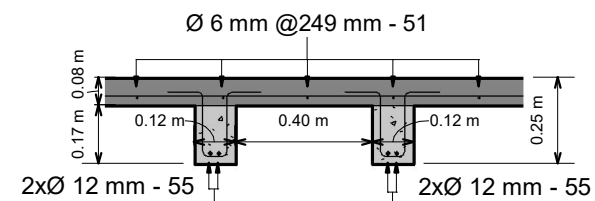
Ground Beams

Project number	1	S.7
Date	17/12/2021	
Drawn by	Mahmoud Elhessi	Scale
Checked by	Checker	
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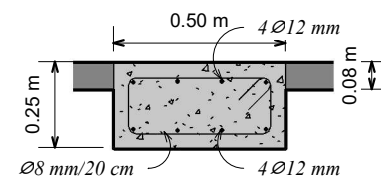
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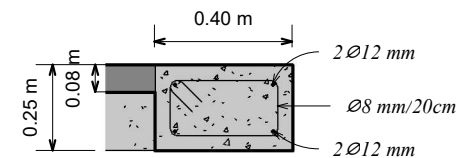
1 Rib Slab
1 : 100



2 Section 6
1 : 20



4 Section 8
1 : 20



5 Section 9
1 : 20



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No.	Description	Date

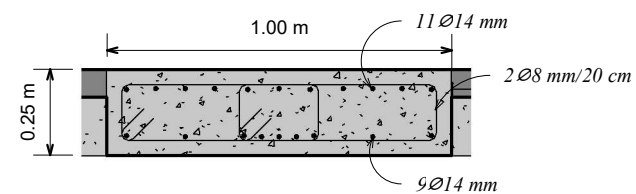
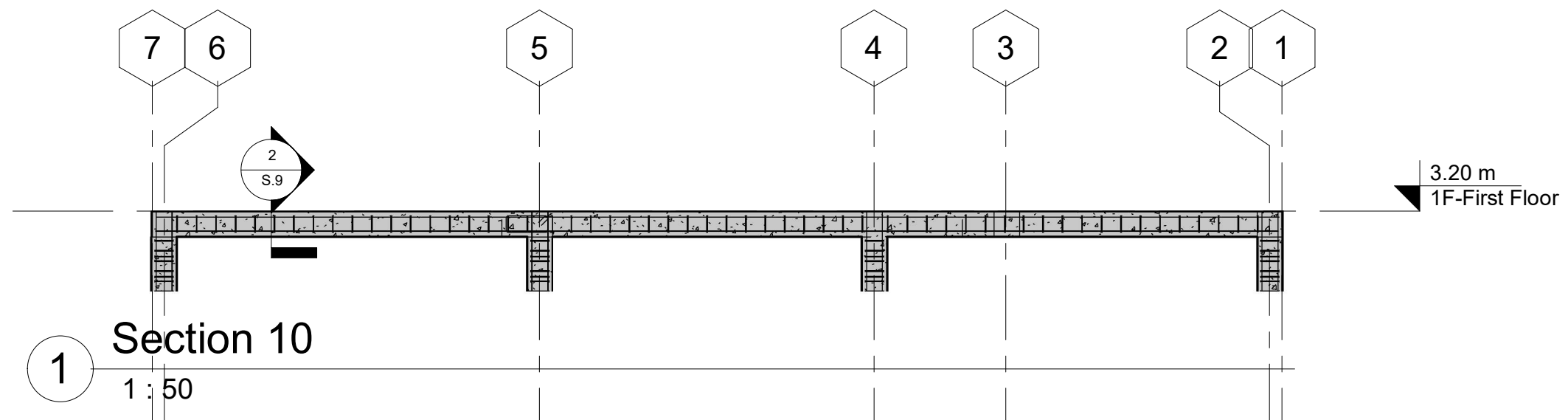
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Ground Floor Slab

Project number	1	S.8
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Drawn by	Mahmoud Elhessi	Scale
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2 Section 7
1 : 20



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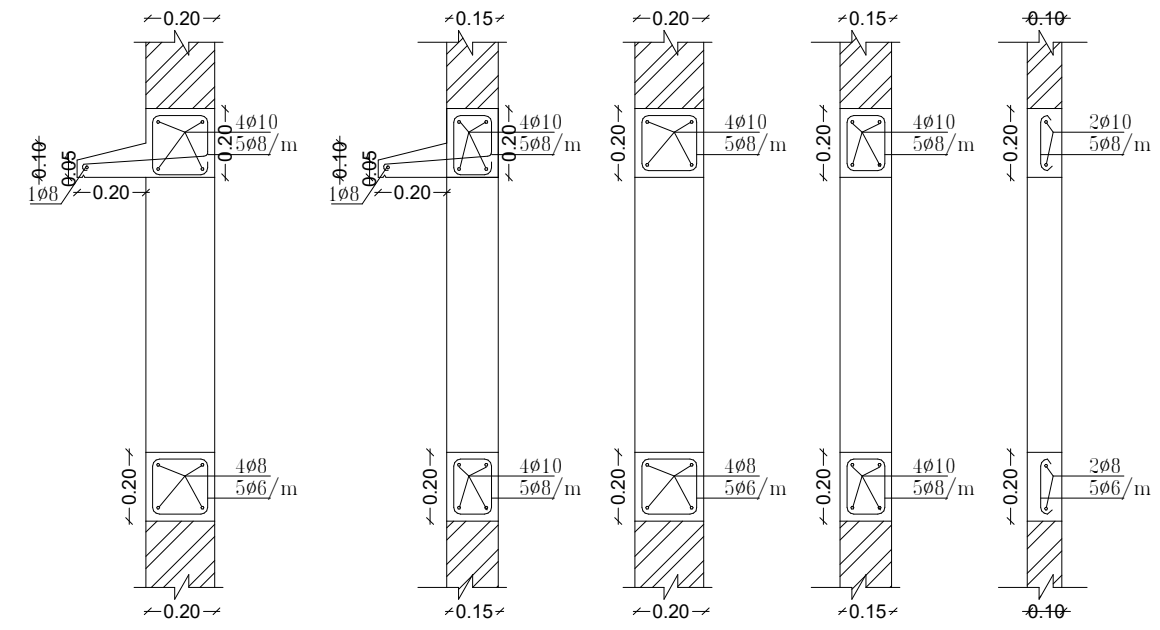
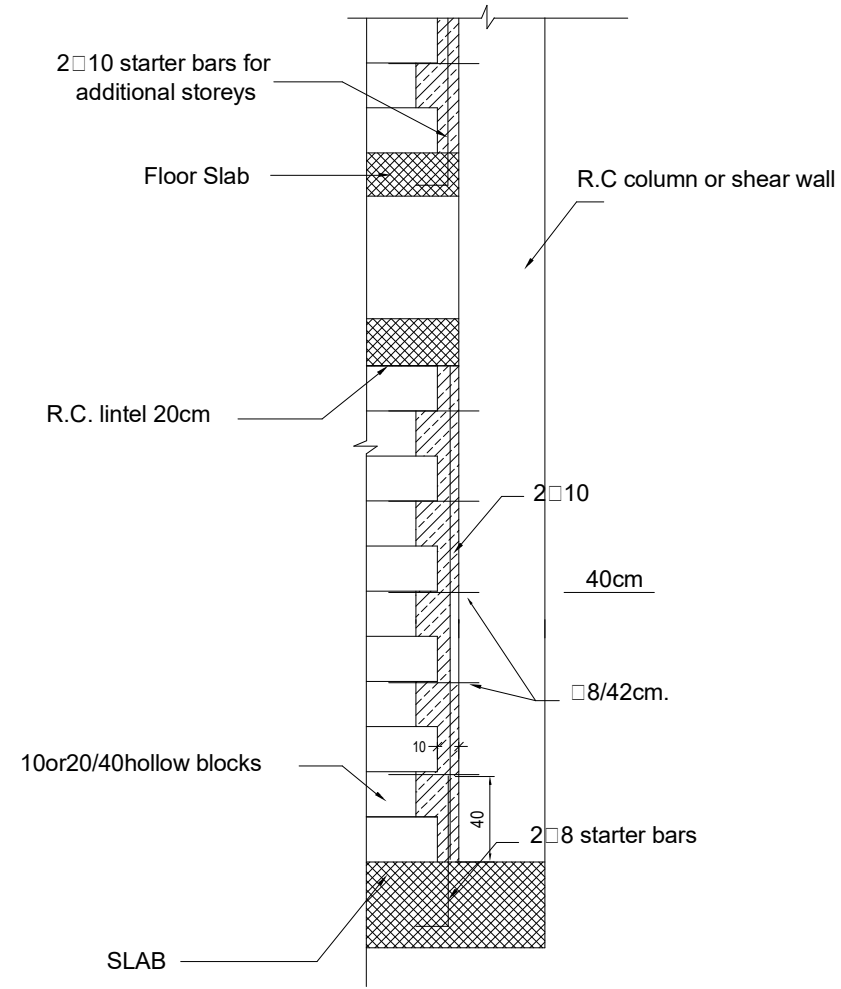
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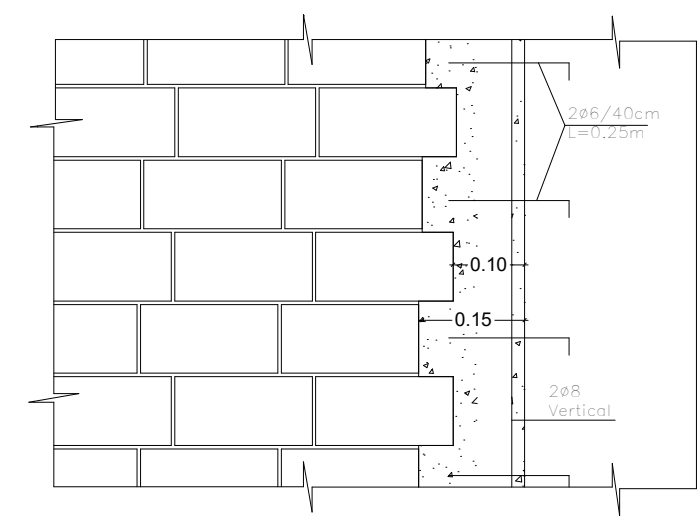
Beam (B2) Details

Project number	1	S.9
Date	17/12/2021	
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LINTELS DETAILS



1 General Details
1 : 100



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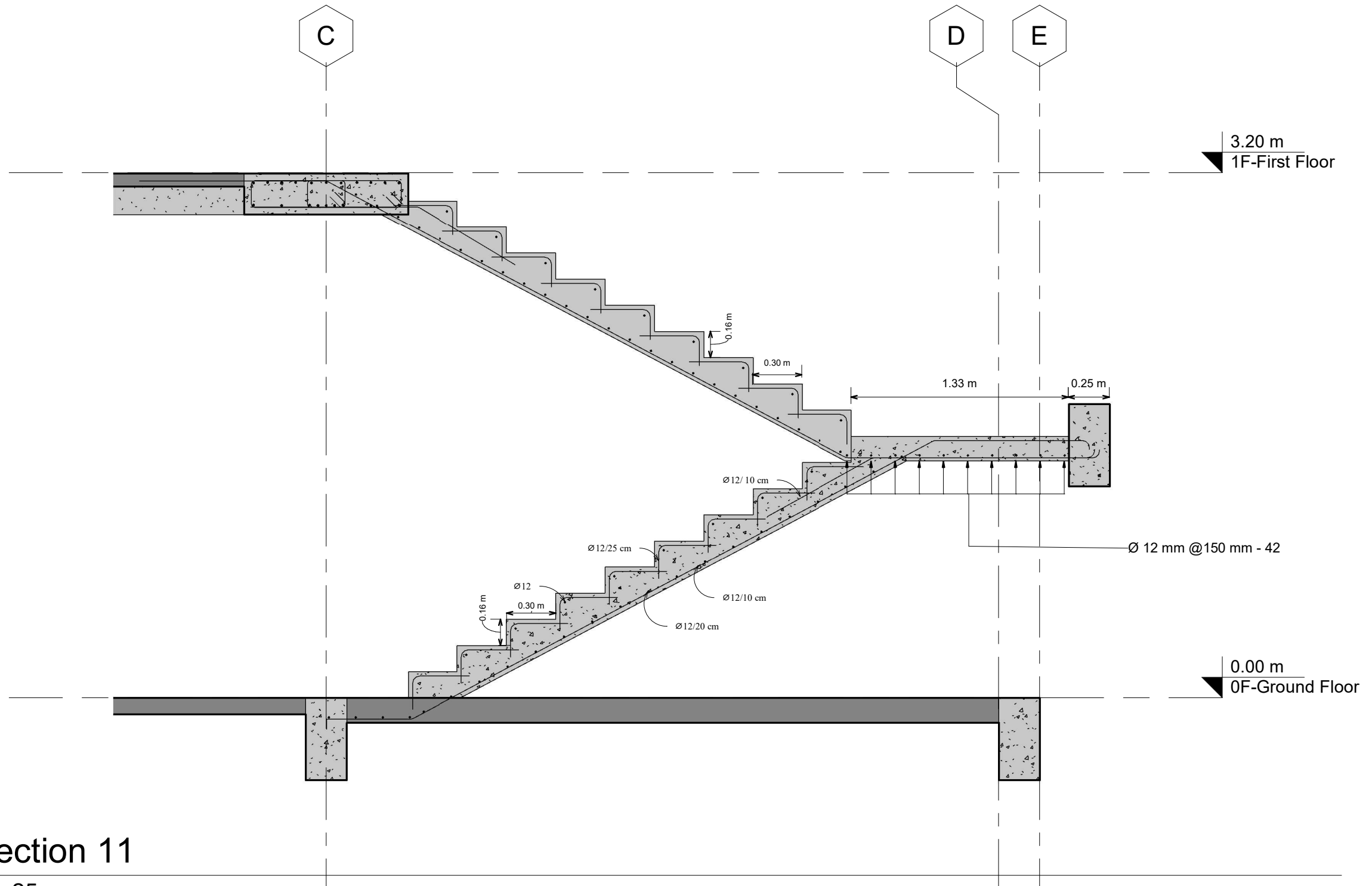
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General Details

Project number	1	S.10
Date	17/12/2021	
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1 Section 11
1 : 25



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Stair Reinforcement

Project number	1
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S.11

Scale 1 : 25

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