

1 3D Model-SW

Summary & Project Overview

Project Location: 32 St., Gisha, Tehran

Number of Floors:
2 floors underground
7 floors above ground

Total Square Footage: 2892 sq. meters
Land Area: 510 sq. meters
Number of Parking Lots: 21 parking lots on two levels
Type of Soil: Type Two soil

Structural Design:
X Lateral Bearing System: Intermediate reinforced concrete bending frame
Y Lateral Bearing System: Intermediate reinforced concrete bending frame

Dimensions of the Largest Floor: 16.3 x 8 meters
Roof System: 37 cm thick double-sided waffle slab

Project Overview

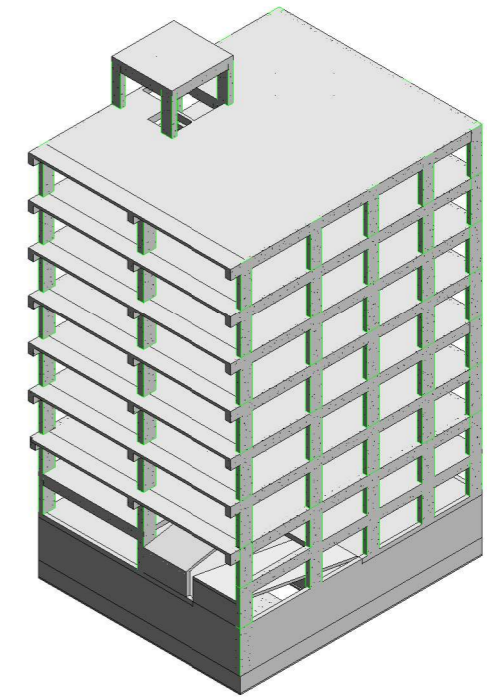
The project located at 32 St., Gisha, Tehran, encompasses a total area of 2892 square meters, constructed on a 510 square meter plot. This ambitious structure includes two underground floors and seven floors above ground, providing a comprehensive urban solution.

Key features of this building include a parking capacity of 21 lots spread over two levels, catering to both residential and commercial needs. The soil type for the construction site is classified as type two, necessitating robust structural integrity.

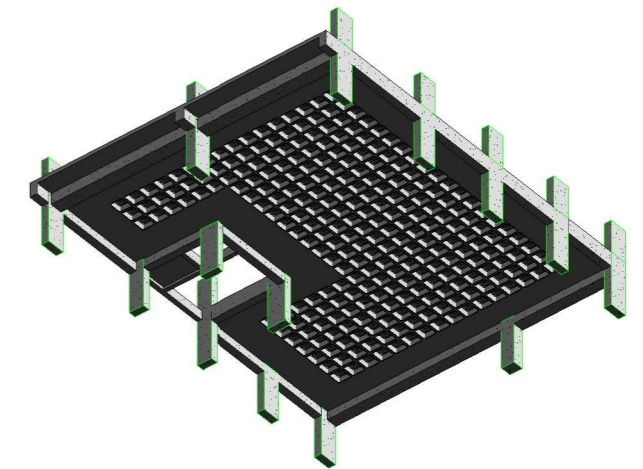
The building employs intermediate reinforced concrete bending frames for both X and Y lateral bearing systems, ensuring stability and durability. The largest floor spans an area of 16.3 x 8 meters, optimized for space utilization.

A significant architectural highlight is the 37 cm thick double-sided waffle slab used for the roof system, offering enhanced structural support and aesthetic appeal.

This project exemplifies innovative design and meticulous planning, set to become a landmark in the Gisha area of Tehran.

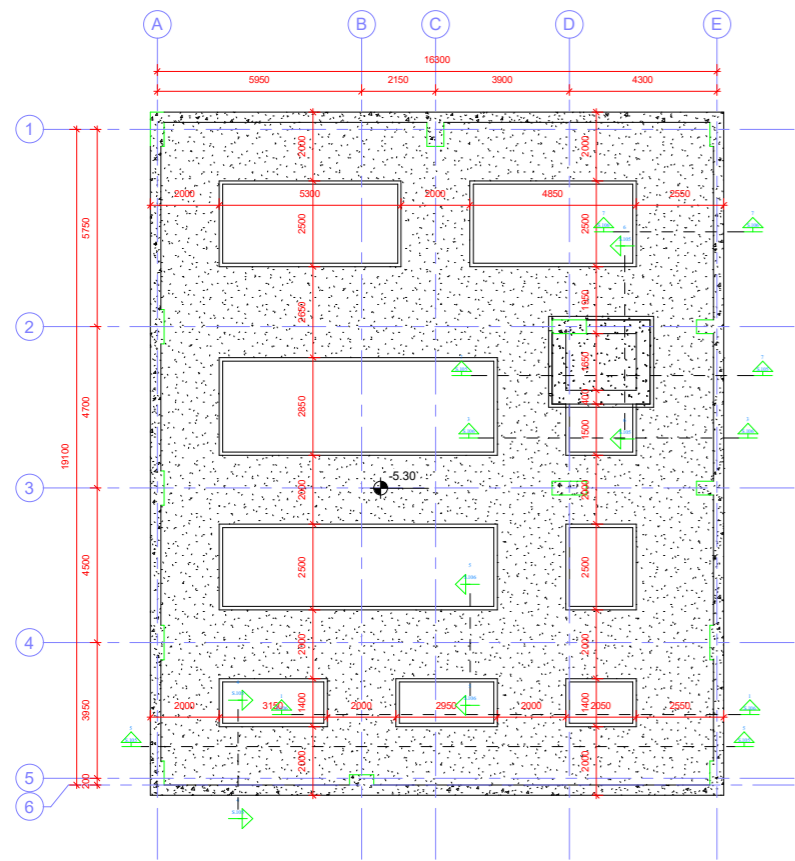


2 3D Model-NW

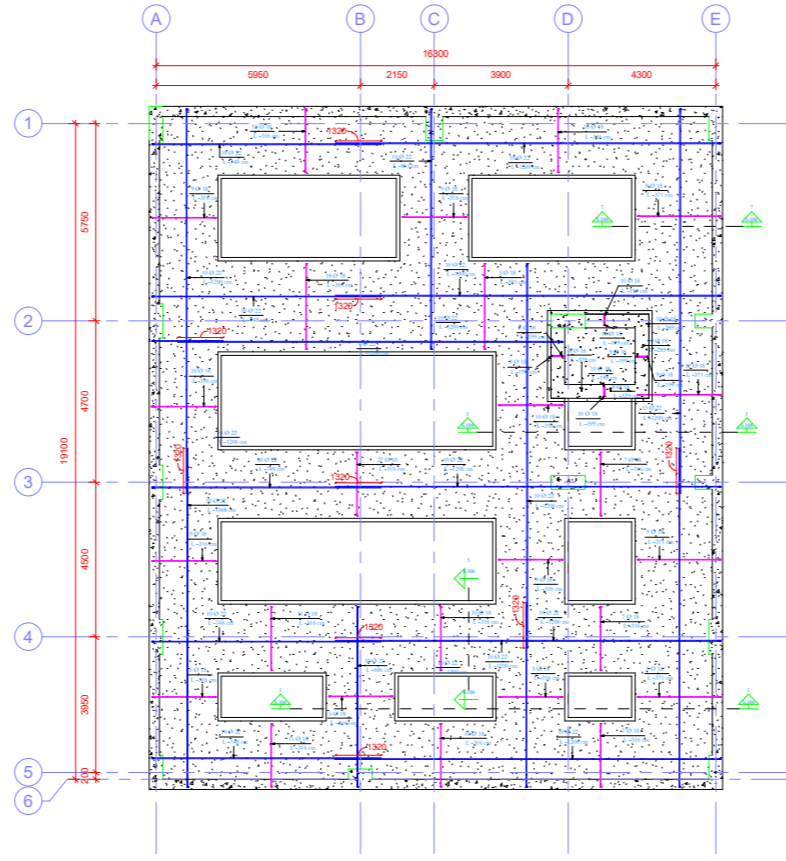


3 Floor System

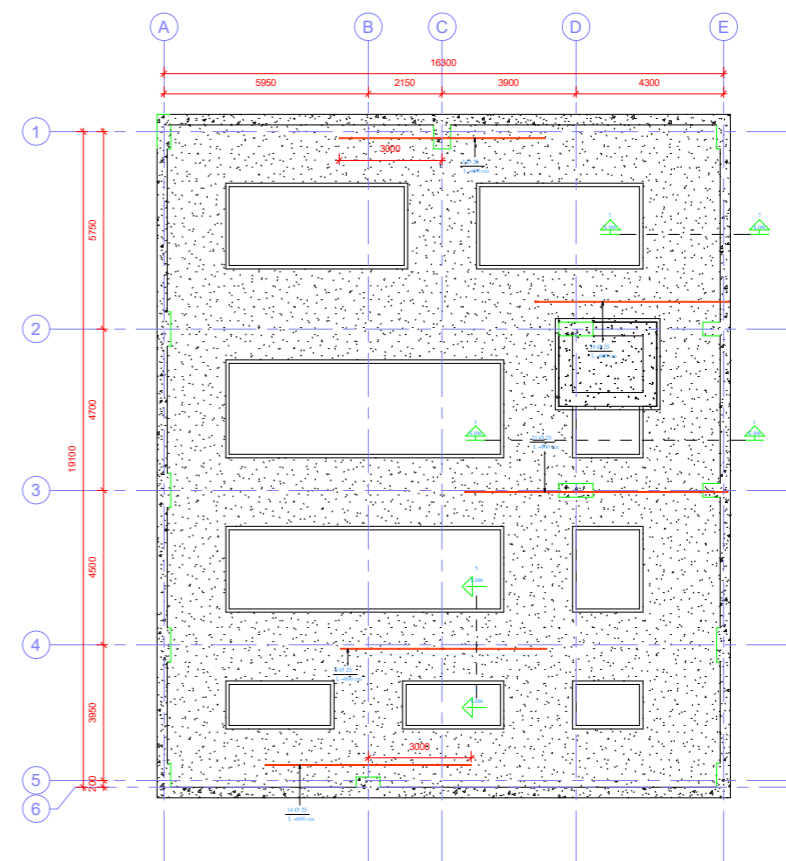
Revision Number	Revision Description	Revision Date
Revision Schedule		
Project Information		
Project:	Project Name	
Client:	Owner	
Architectural Consultant:		
Structural Consultant:		
Geotechnical Consultant:		
Drawing Title:		
Cover Sheet		
Proj. No.:	Project Number	
Date:	Issue Date	
DES: Designer	DRW: Author	
APP: Approver	CHK: Checker	
Field: Structure	Sheet No.: S.104	



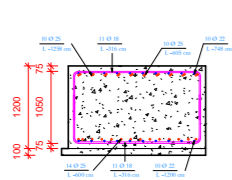
① Foundation Plan
1 : 100



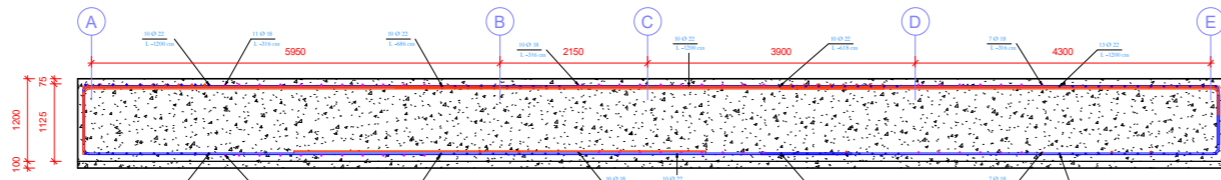
② Foundation Main Rebars (Bott.)
1 : 100



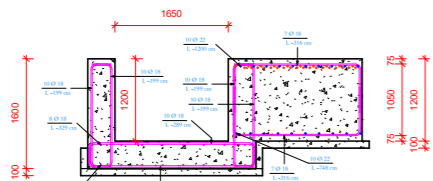
③ Foundation Add Bars Bott. X.Dir
1 : 100



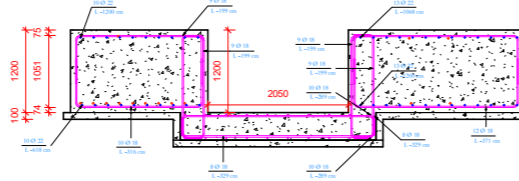
④ Foundation Section 01
1 : 50



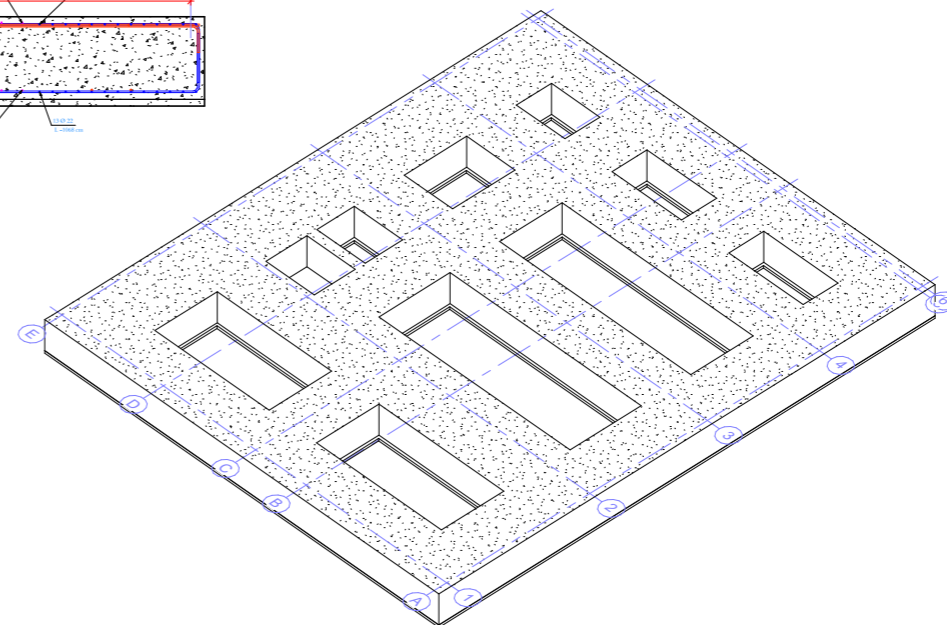
⑤ Foundation Section 02
1 : 50



⑥ Elev. Pit 01
1 : 50

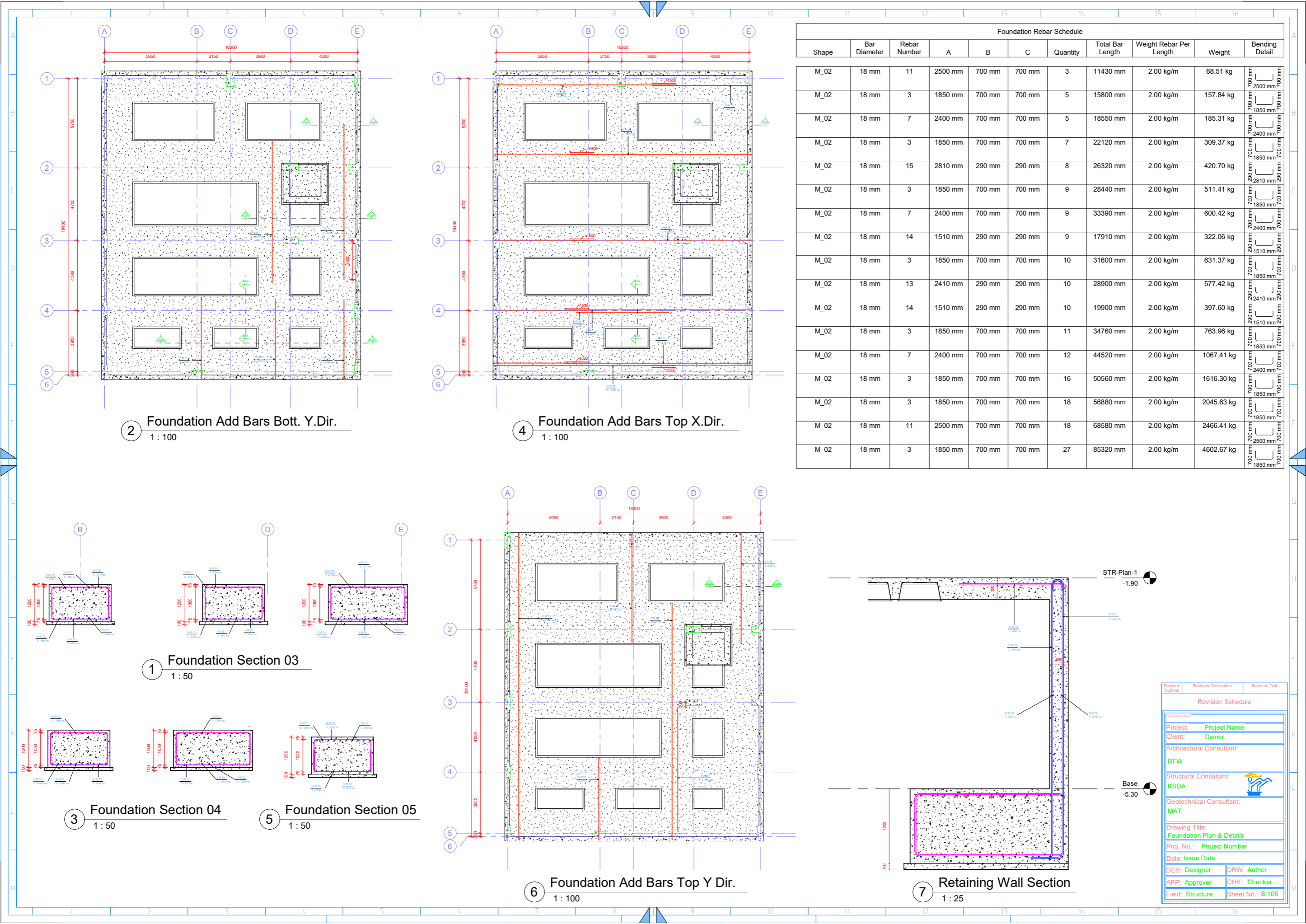


⑦ Elev. Pit 02
1 : 50



⑧ 3D Foundation

Revision Number	Revision Description	Revision Date
Revision Schedule		
Project: Project Name		
Client: Owner		
Architectural Consultant:		
RFW		
Structural Consultant:		
KSDA		
Geotechnical Consultant:		
MAT		
Drawing Title:		
Foundation Plan & Details		
Proj. No.: Project Number		
Date: Issue Date		
DES: KSDA	DRW: Kourosh	
APP: TCEO	CHK: TCEO	
Field: Structure	Sheet No.: S.105	



② Foundation Add Bars Bott. Y.Dir.
1 : 100

④ Foundation Add Bars Top X.Dir.
1 : 100

① Foundation Section 03
1 : 50

③ Foundation Section 04
1 : 50

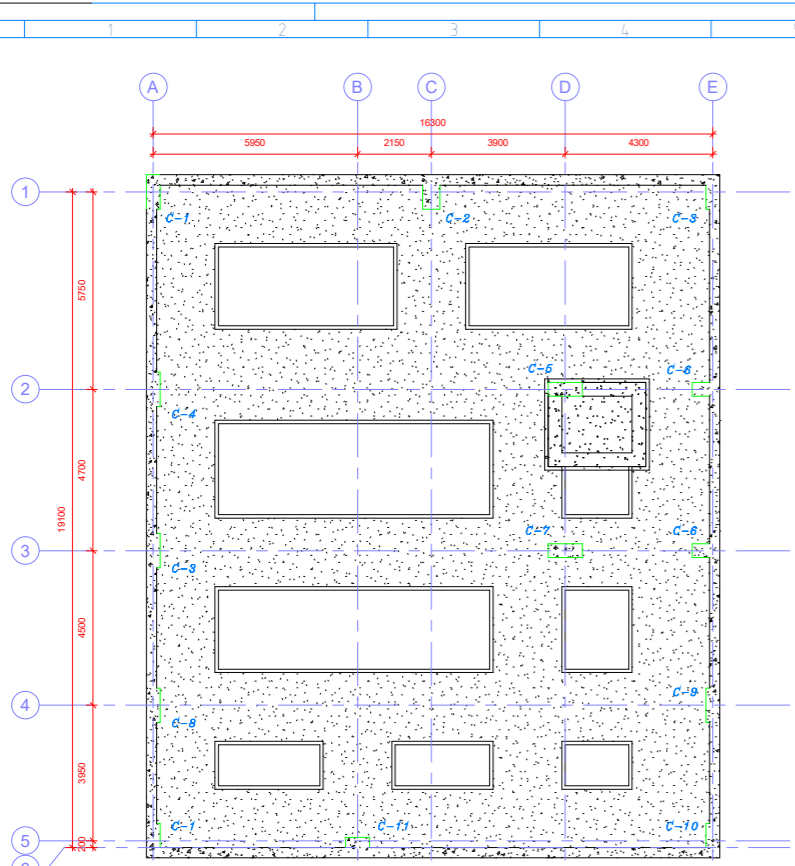
⑤ Foundation Section 05
1 : 50

⑥ Foundation Add Bars Top Y Dir.
1 : 100

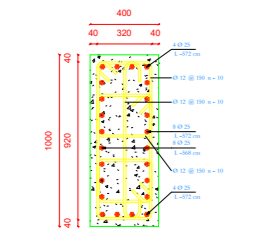
⑦ Retaining Wall Section
1 : 25

Foundation Rebar Schedule										
Shape	Bar Diameter	Rebar Number	A	B	C	Quantity	Total Bar Length	Weight Rebar Per Length	Weight	Bending Detail
M_02	18 mm	11	2500 mm	700 mm	700 mm	3	11430 mm	2.00 kg/m	68.51 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	5	15800 mm	2.00 kg/m	157.84 kg	
M_02	18 mm	7	2400 mm	700 mm	700 mm	5	18550 mm	2.00 kg/m	185.31 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	7	22120 mm	2.00 kg/m	309.37 kg	
M_02	18 mm	15	2810 mm	290 mm	290 mm	8	26320 mm	2.00 kg/m	420.70 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	9	28440 mm	2.00 kg/m	511.41 kg	
M_02	18 mm	7	2400 mm	700 mm	700 mm	9	33390 mm	2.00 kg/m	600.42 kg	
M_02	18 mm	14	1510 mm	290 mm	290 mm	9	17910 mm	2.00 kg/m	322.06 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	10	31600 mm	2.00 kg/m	631.37 kg	
M_02	18 mm	13	2410 mm	290 mm	290 mm	10	28900 mm	2.00 kg/m	577.42 kg	
M_02	18 mm	14	1510 mm	290 mm	290 mm	10	19900 mm	2.00 kg/m	397.60 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	11	34760 mm	2.00 kg/m	763.96 kg	
M_02	18 mm	7	2400 mm	700 mm	700 mm	12	44520 mm	2.00 kg/m	1067.41 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	16	50560 mm	2.00 kg/m	1616.30 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	18	56880 mm	2.00 kg/m	2045.63 kg	
M_02	18 mm	11	2500 mm	700 mm	700 mm	18	68580 mm	2.00 kg/m	2466.41 kg	
M_02	18 mm	3	1850 mm	700 mm	700 mm	27	85320 mm	2.00 kg/m	4602.67 kg	

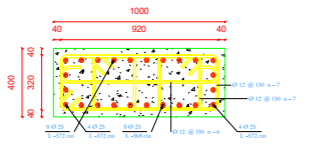
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Revision Schedule		
Project: Project Name		
Client: Owner		
Architectural Consultant: RFW		
Structural Consultant: KSDA		
Geotechnical Consultant: MAT		
Drawing Title: Foundation Plan & Details		
Proj. No.: Project Number		
Date: Issue Date		
DES: Designer	DRW: Author	
APP: Approver	CHK: Checker	
Field: Structure	Sheet No.: S.106	



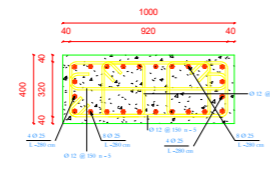
1 Column LAYOUT Plan
1 : 100



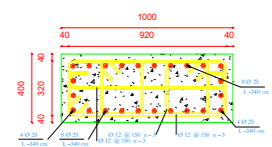
4 C1-Section1
1 : 20



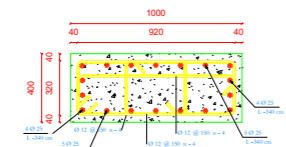
5 C1-Section2
1 : 20



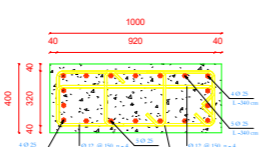
6 C1-Section3
1 : 20



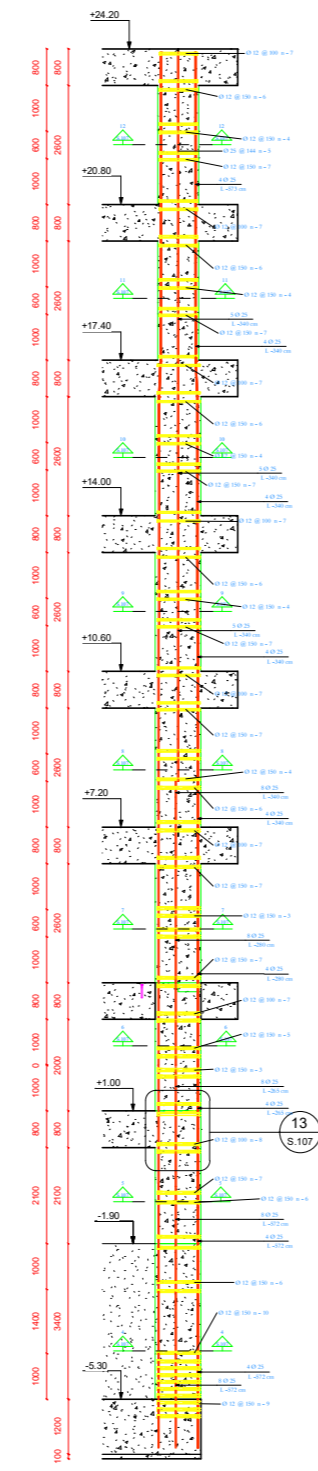
7 C1-Section4
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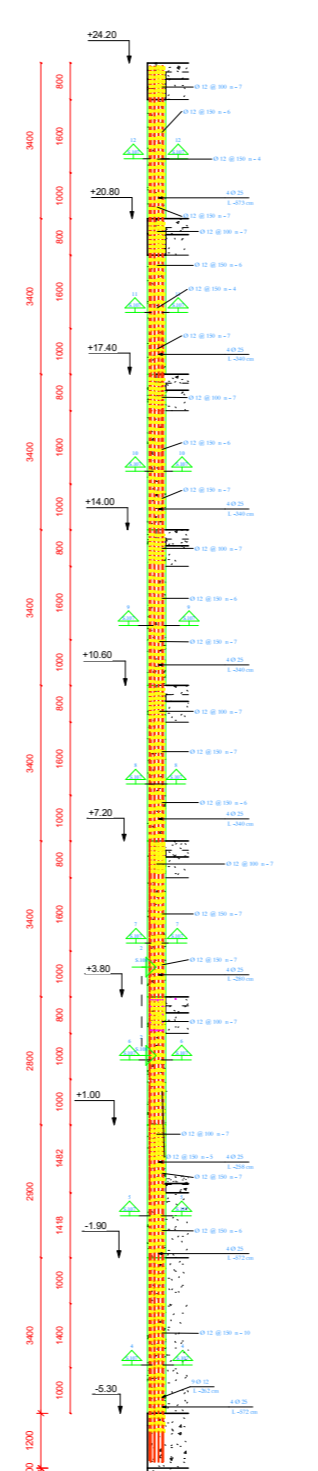
8 C1-Section5
1 : 20



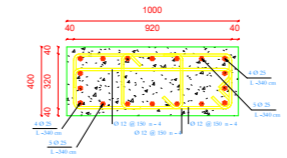
9 C1-Section6
1 : 20



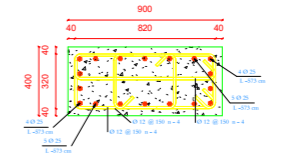
2 Elevation E/W C-1
1 : 75



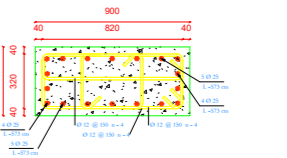
3 Elevation N/S C-1
1 : 75



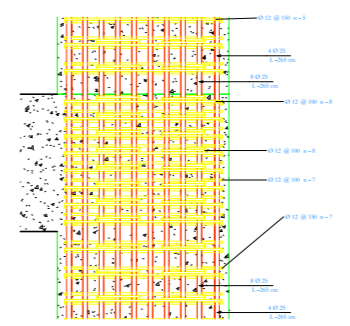
10 C1-Section7
1 : 20



11 C1-Section8
1 : 20



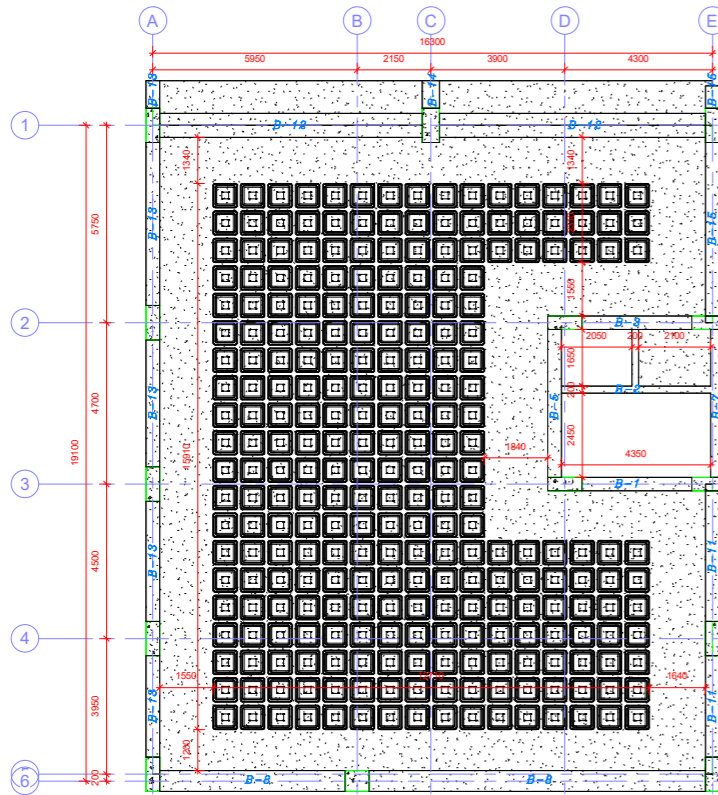
12 C1-Section9
1 : 20



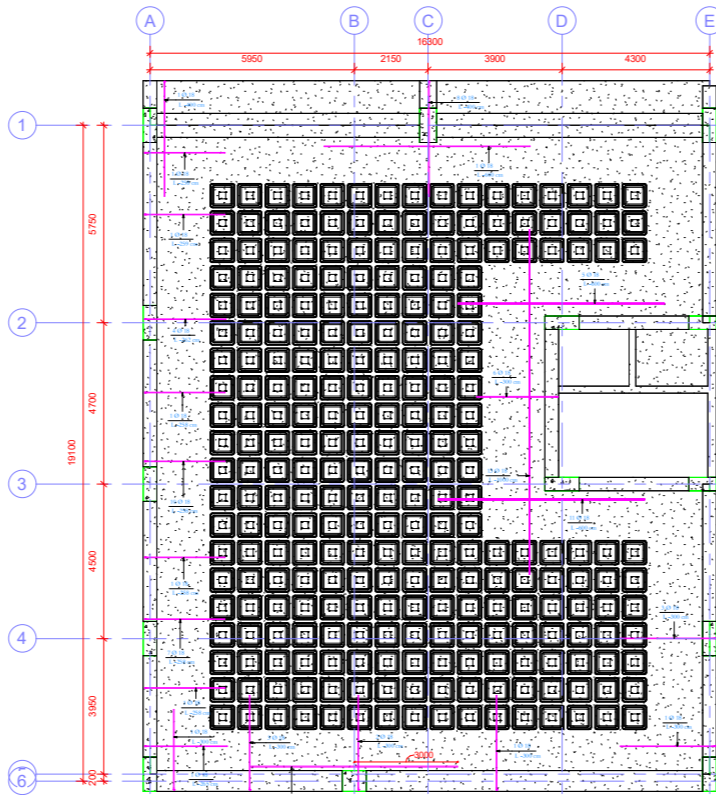
13 C1-Joint Detail
1 : 20

Rebar Schedule (Column C1)											
Shape	Bar Diameter	Rebar Number	A	B	C	D	Quantity	Total Bar Length	Weight Rebar Per Length	Weight	Bending Detail
M_00	25 mm	46	2580 mm	0 mm	0 mm	0 mm	4	10320 mm	3.85 kg/m	159.05 kg	2580 mm
M_00	25 mm	47	2650 mm	0 mm	0 mm	0 mm	4	10600 mm	3.85 kg/m	163.37 kg	2650 mm
M_00	25 mm	51	2800 mm	0 mm	0 mm	0 mm	4	11200 mm	3.85 kg/m	172.61 kg	2800 mm
M_00	25 mm	55	3400 mm	0 mm	0 mm	0 mm	4	13600 mm	3.85 kg/m	209.60 kg	3400 mm
M_00	25 mm	75	5720 mm	0 mm	0 mm	0 mm	4	22880 mm	3.85 kg/m	352.63 kg	5720 mm
M_00	25 mm	82	5730 mm	0 mm	0 mm	0 mm	4	22920 mm	3.85 kg/m	353.24 kg	5730 mm
M_00	25 mm	55	3400 mm	0 mm	0 mm	0 mm	5	17000 mm	3.85 kg/m	327.51 kg	3400 mm
M_00	25 mm	82	5730 mm	0 mm	0 mm	0 mm	5	28650 mm	3.85 kg/m	551.94 kg	5730 mm
M_00	25 mm	41	5680 mm	0 mm	0 mm	0 mm	8	45440 mm	3.85 kg/m	1400.64 kg	5680 mm
M_00	25 mm	46	2580 mm	0 mm	0 mm	0 mm	8	20640 mm	3.85 kg/m	636.21 kg	2580 mm
M_00	25 mm	47	2650 mm	0 mm	0 mm	0 mm	8	21200 mm	3.85 kg/m	653.47 kg	2650 mm
M_00	25 mm	51	2800 mm	0 mm	0 mm	0 mm	8	22400 mm	3.85 kg/m	690.46 kg	2800 mm
M_00	25 mm	55	3400 mm	0 mm	0 mm	0 mm	8	27200 mm	3.85 kg/m	838.41 kg	3400 mm
M_00	25 mm	75	5720 mm	0 mm	0 mm	0 mm	8	45760 mm	3.85 kg/m	1410.51 kg	5720 mm
S-1-6	25 mm	80	1600 mm	780 mm	1020 mm	0 mm	4	13600 mm	3.85 kg/m	209.60 kg	1600 mm

Revision Number	Revision Description	Revision Date
Revision Schedule		
Project: Project Name		
Client: Owner		
Architectural Consultant: RFW		
Structural Consultant: KSDA		
Geotechnical Consultant: MAT		
Drawing Title: Column Layout Plan & Column Details		
Proj. No.: Project Number		
Date: Issue Date		
DES: KSDA	DRW: KSDA	
APP: TCEO	CHK: MR.Dehghan	
Field: Structure	Sheet No.: S.107	

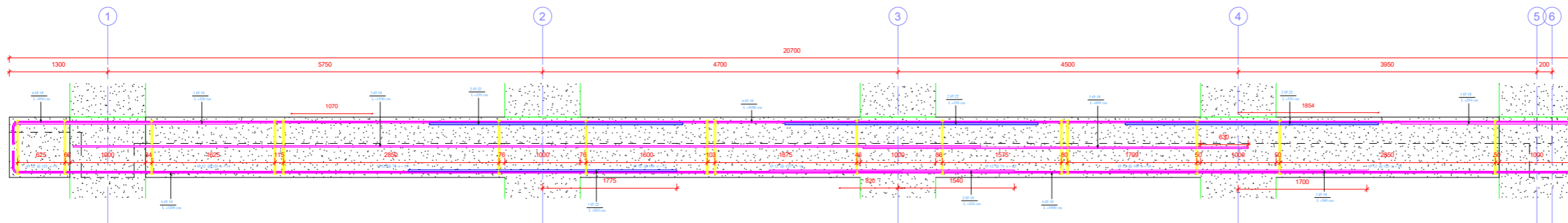


1 STR-Plan-3 - Framing Plan @ Elev.+3.80
1 : 100

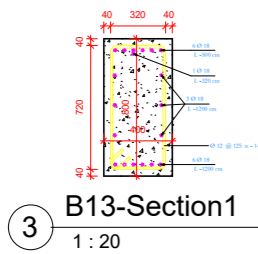


11 STR-Plan-3 - Slab Add. Bars
1 : 100

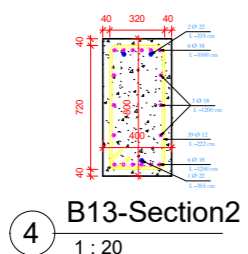
Rebar Schedule B-13										
Shape	Bar Diameter	Rebar Number	A	B	C	Quantity	Total Bar Length	Weight Rebar Per Length	Weight	Bending Detail
L-T1	18 mm	87	4760 mm	290 mm	0 mm	6	30000 mm	2.00 kg/m	359.64 kg	
L-T1	18 mm	86	11760 mm	290 mm	0 mm	6	72000 mm	2.00 kg/m	863.14 kg	
M_00	18 mm	88	10000 mm	0 mm	0 mm	6	60000 mm	2.00 kg/m	719.28 kg	
L-T1	18 mm	89	9680 mm	290 mm	0 mm	6	59520 mm	2.00 kg/m	713.53 kg	
L-T1	18 mm	90	9760 mm	290 mm	0 mm	6	60000 mm	2.00 kg/m	719.28 kg	
L-T1	18 mm	92	2260 mm	290 mm	0 mm	1	2500 mm	2.00 kg/m	5.00 kg	
M_00	22 mm	93	3350 mm	0 mm	0 mm	2	6700 mm	2.98 kg/m	39.99 kg	
M_00	22 mm	93	3350 mm	0 mm	0 mm	2	6700 mm	2.98 kg/m	39.99 kg	
M_00	22 mm	93	3350 mm	0 mm	0 mm	2	6700 mm	2.98 kg/m	39.99 kg	
L-T1	18 mm	94	2960 mm	290 mm	0 mm	1	3200 mm	2.00 kg/m	6.39 kg	
M_00	18 mm	95	3400 mm	0 mm	0 mm	1	3400 mm	2.00 kg/m	6.79 kg	
M_00	18 mm	96	3240 mm	0 mm	0 mm	2	6480 mm	2.00 kg/m	25.89 kg	
M_00	22 mm	97	3550 mm	0 mm	0 mm	1	3550 mm	2.98 kg/m	10.59 kg	
M_00	18 mm	99	12000 mm	0 mm	0 mm	3	36000 mm	2.00 kg/m	215.78 kg	
M_00	18 mm	99	12000 mm	0 mm	0 mm	3	36000 mm	2.00 kg/m	215.78 kg	
M_00	18 mm	100	5090 mm	0 mm	0 mm	3	15270 mm	2.00 kg/m	91.53 kg	
M_00	18 mm	100	5090 mm	0 mm	0 mm	3	15270 mm	2.00 kg/m	91.53 kg	



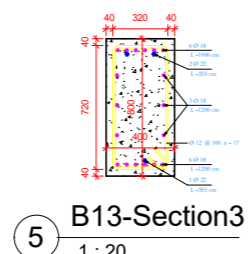
2 Elevation B-13
1 : 30



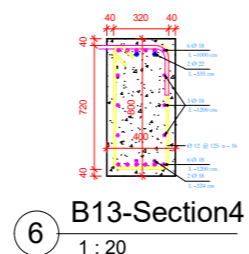
3 B13-Section1
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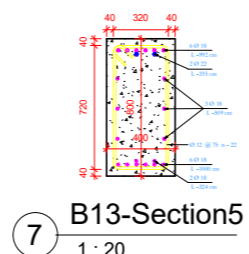
4 B13-Section2
1 : 20



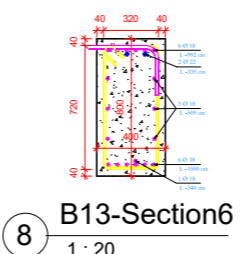
5 B13-Section3
1 : 20



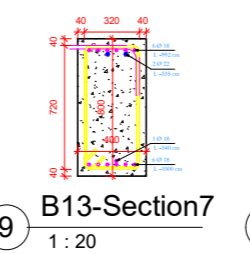
6 B13-Section4
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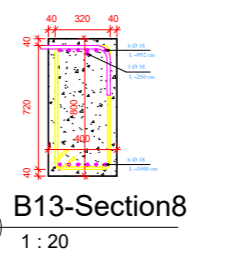
7 B13-Section5
1 : 20



8 B13-Section6
1 : 20



9 B13-Section7
1 : 20



10 B13-Section8
1 : 20

Revision Number	Revision Description	Revision Date
Revision Schedule		
Project: Project Name		
Client: Owner		
Architectural Consultant:		
Structural Consultant:		
Geotechnical Consultant:		
Drawing Title: Framing Plan @ Elev.+3.80		
Proj. No.: Project Number		
Date: Issue Date		
DES: Designer	DRW: Author	
APP: Approver	CHK: Checker	
Field: Structure	Sheet No.: S.108	