STRUCTURAL DRAWINGS

GENERAL CONSTRUCTION NOTES

GENERAL

A1. ALL STRUCTURAL DRAWINGS AND SKETCHES MUST BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTS AND SERVICES ENGINEERS AND SPECIALIST DRAWINGS. WHERE DISCREPANCIES OCCUR, THESE ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS AND/OR ENGINEERS FOR RESOLUTION PRIOR TO EFFECTING CONSTRUCTION.

A2. WORK TO FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE TO BE CHECKED ON SITE.

A3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.

A4. FOR DETAILS OF FLOOR SCREED AND FINISHES, WATERPROOFING E.T.C. AND CONCRETE FINISHES, SEE ARCHITECTS DETAILS.

A5. THE STRUCTURAL ENGINEER SHALL NOT BE HELD LIABLE/RESPONSIBLE FOR ANY DRAWINGS NOT SUPERVISED BY HIM.

REINFORCEMENT

B1. STEEL TO HAVE A MINIMUM YIELD STRESS OF BAR AS DESIGNATED:
Y = 410 N/mm^2
BARS DESIGNATED "Y" TO BE THE DEFORMED TYPE BARS.
ACCORDING TO BS 4449 AND BARS ARE IN MILLIMETER SIZE.
"Y" DENOTES DEFORMED HIGH BOND HOT-ROLLED HIGH YIELD STRESS REINFORCEMENT TO BS 4449 AND 4461.

B2. NOTATIONS USED AS FOLLOWS: 11 - Y10 - 09 - 150 c/c B, IMPLY
11 - NUMBER OF BARS
Y10 - TYPE AND DIAMETER OF BARS
09 - BAR MARK
150 C/C - SPACING OF BARS IN MILLIMETRES
B - LOCATION OF BAR E.G. B - BOTTOM, T - TOP.

B3. WHERE HOLES, FIXING, ETC. ARE REQUIRED, BARS MAY BE DISPLACED SLIGHTLY TO ACCOMODATE THESE BUT THEY MUST NOT BE CUT OR REMOVED.

B4. WHERE TOP REINFORCEMENTS ARE REQUIRED ON SLABS, AND THERE EXISTS NO SPECIFICATIONS ON THE SLAB DETAILS, THE FOLLOWING GUIDES SHALL BE FOLLOWED:

B4.1. FOR MAIN TOP BARS, USE DIA. 12mm BARS SPACED AT 150mm c/c

B4.2. FOR SECONDARY TOP BARS, USE DIA, 12mm BARS SPACED AT 200mm c/c

CONCRETE

D1. ALL STRUCTURAL CONCRETE TO BE GRADE .....25..... IN FOUNDATIONS.
ALL STRUCTURAL CONCRETE TO BE GRADE .....25..... IN COLUMNS.
ALL STRUCTURAL CONCRETE TO BE GRADE .....25..... IN ALL OTHER SUPERSTRUCTURAL ELEMENTS, UNLESS OTHERWISE STATED.

D2. MINIMUM CEMENT AGGREGATE RATIO TO BE 1:6. MAXIMUM SIZE OF COARSE AGGREGATE TO BE 20MM.

D3. ALL AGGREGATE TO BE SUITABLY GRADED AND APPROVED BY THE ENGINEER PRIOR TO USE IN CONSTRUCTION.

D4. ALL CONCRETE TO BE SUITABLY AND FULLY COMPACTED AND CURED IN AN APPROVED MANNER TO THE SATISFACTION OF THE ENGINEER.

D5. MINIMUM CONCRETE COVER TO MAIN REINFORCEMENT TO BE AS FOLLOWS:

FOUNDATION :	.....	50MM,	COLUMNS :	.....	25MM,
BEAMS :	.....	25MM,	SLABS :	.....	20MM,
STAIRCASES, ETC.....		20MM,	UNLESS OTHERWISE STATED.		

D6. ALL MASS CONCRETE TO BE 1 : 3 : 6 MIX (CEMENT - SAND - COARSE AGGREGATE)
ALL BLINDING TO BE 1 : 6 MIX (CEMENT- SAND AGGREGATE).

D7. IN WATER-TIGHT CONSTRUCTION, JOINTS IN CONCRETE WORK ARE TO HAVE WATER BAR AND CONTRACTOR IS TO TAKE SPECIAL CARE WITH THE CONCRETE SO AS TO PRODUCE A WATER-TIGHT CONSTRUCTION.
AN ADMIXTURE OF A PROPRIETARY BRAND MAY BE USED IF AGREED BY THE ENGINEER. HOWEVER, IF USED ADEQUATE CARE SHOULD BE EXERCISED THAT IT IS PLACED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

D8. ALL CONSTRUCTION JOINT POSITIONS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO CASTING WHERE NOT INDICATED ON THE DRAWING. THESE SHOULD NOT EXCEED 10.0m APART.

D9. CONCRETE SHALL NOT BE POURED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES. HOPPERS, VERTICAL CHUTES OR TRUNKS SHALL BE USED IN SUFFICIENT NUMBERS SO THAT THE FREE UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 1800mm & TO ENSURE THAT THE CONCRETE IS KEPT LEVEL AT ALL TIMES.

D10. BEFORE FRESH CONCRETE IS POURED AGAINST CONCRETE IN-PLACE, THE CONTACT SURFACES OF CONCRETE IN-PLACE SHALL BE THOROUGHLY CLEANED, ALL LAITANCE SHALL BE REMOVED & THE CONTACT SURFACES SHALL BE THOROUGHLY SLOSHED WITH GROUT CONSISTING OF ONE PART SAND TO ONE PART CEMENT WITH A MINIMUM AMOUNT OF WATER.

D11. CONCRETE CAST ON SLOPED SURFACES SHALL BEGIN AT THE LOWEST ELEVATION & CONTINUE MONOLITHICALLY TOWARD THE HIGHER ELEVATION UNTIL THE INTENDED POUR IS COMPLETED.

FOUNDATION

H1. THE ALLOWABLE SOIL BEARING CAPACITY IS ...75... kN/M2. FROM THE SOIL REPORT.

H3. SITE PREPARATION AND TREATMENT TO BE CONFIRMED ON SITE BY SUPERVISING ENGINEER AT COMMENCEMENT OF FOUNDATION CONSTRUCTION.

H4. RELATIONSHIP OF THE GROUND FLOOR SLAB, EXISTING GROUND LEVEL AND THE FOUNDATION FORMATION LEVEL ARE TO BE CONFIRMED ON SITE AND APPROVED PRIOR TO CONSTRUCTION OF THE FOUNDATION.

BLOCKWORK

E1. CAVITIES OF HOLLOW BLOCKWALLS BELOW GROUND SLAB LEVEL ARE TO BE FILLED WITH MASS CONCRETE. BACKFILLING TO EXCAVATED TRENCHES ARE TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES OF WALL.

E2. THE WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 25mm.

E3. THE MINIMUM CRUSHING STRENGTH OF THE NON-LOAD BEARING HOLLOW SANDCRETE BLOCKS IS TO BE 2.1 N/mm2 OF THE GROSS AREA OF BLOCK AT 28 DAYS.

E4. BLOCKWORK TIES BETWEEN BLOCKWALLS AND COLUMNS/STANCHIONS ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6mm BAR STRAPS 700mm LONG INTO THE BLOCKWORK.

E5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCKWORK TO BE 2 COURSES AT A TIME.

E6. ALL LOAD-BEARING SANDCRETE HOLLOW BLOCKWALLS TO HAVE A MINIMUM STRENGTH OF 2.76 N/MM2 OF NETT AREA OF BLOCKWALL AT 28 DAYS.

E7. BLOCKWORK INDICATED THUS ▨ ON THESE DRAWINGS ARE LOAD BEARING AND ARE TO BE CONCRETE FILLED TO THE SPECIFIED OR SHOWN LEVEL(S) WITH CONCRETE AS IN D1 WITH 10MM MAXIMUM COARSE AGGREGATE SIZE.

E8. BLOCKWORK INDICATED THUS ▨ ON DRAWINGS ARE LOAD BEARING, CONCRETE FILLED AS IN D1 WITH 10MM MAX. COARSE AGGREGATE SIZE, AND WITH CAVITIES REINFORCED AS SPECIFIED.

E9. CONCRETE FILLED LOAD-BEARING BLOCKWORKS ARE TO ACHIEVE A MINIMUM CRUSHING STRENGTH OF 6.5 N/MM2.

EARTHWORK

G1. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR SHORING AND BRACING OF THE BUILDING EXCAVATIONS & EMBANKMENTS, INCLUDING EXCAVATION FOR UTILITIES, AND IS ALSO FULLY RESPONSIBLE FOR THE DESIGN & PERFORMANCE OF SHORING AND BRACING DURING CONSTRUCTION.

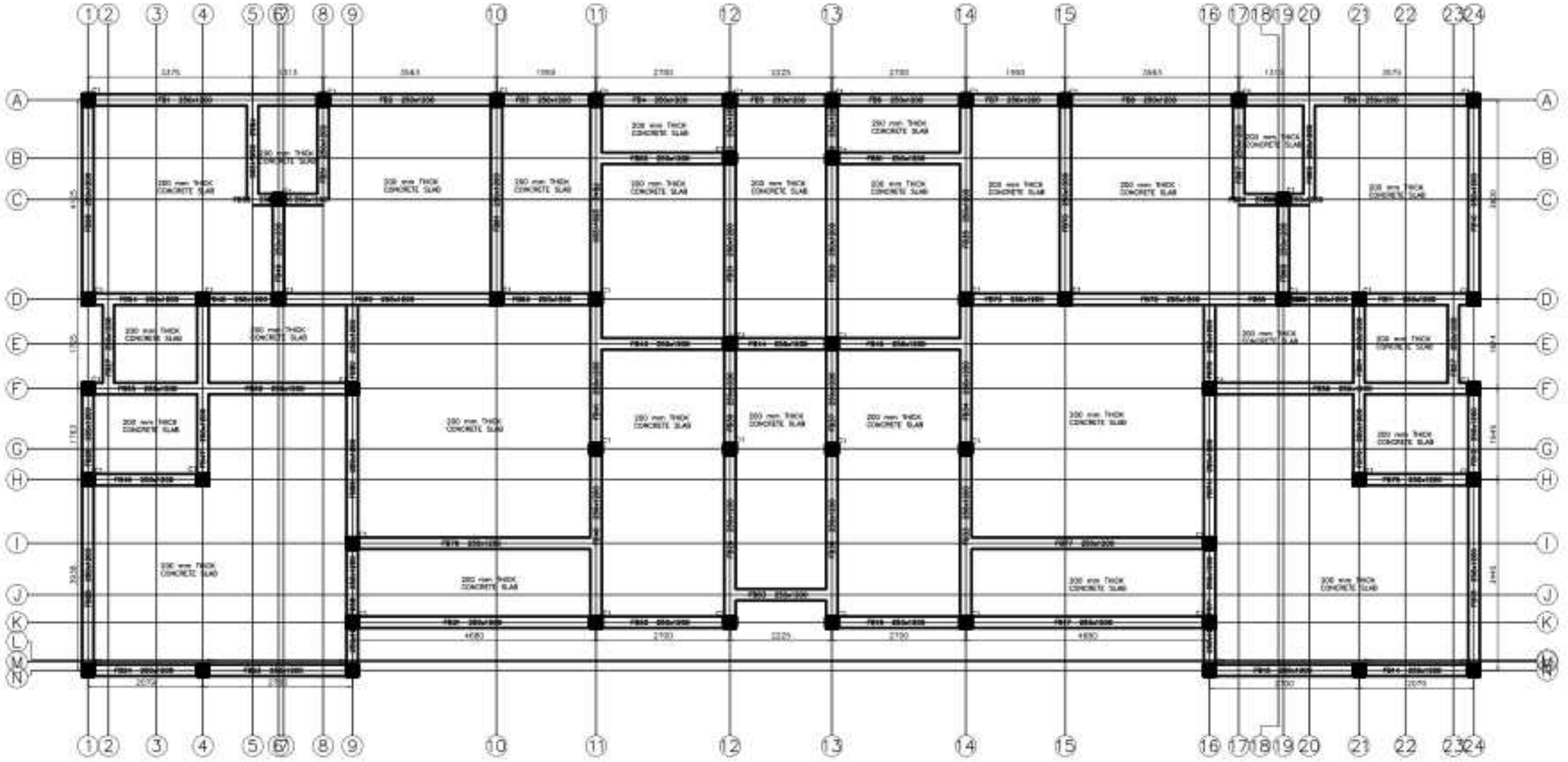
G2. CONTRACTOR SHALL COORDINATE THE EXTENT OF THE EXCAVATION, SHORING AND BRACING WITH CIVIL DRAWINGS. CONTRACTOR SHALL ALSO REFER TO CIVIL DRAWINGS, SPECIFICATIONS & GEOTECHNICAL REPORT FOR DEWATERING AND RELATED INFORMATION NOT COVERED IN THE STRUCTURAL DRAWINGS.

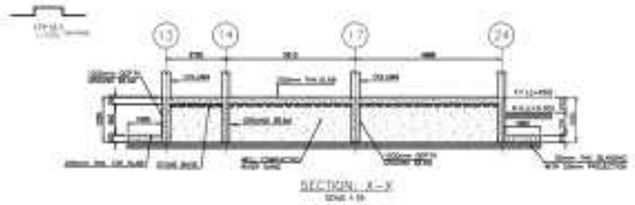
G3. EARTHWORK COMPACTION SHALL BE IN ACCORDANCE WITH CIVIL DRAWINGS AND SPECIFICATIONS AS WELL AS WITH THE GEOTECHNICAL REPORT.

SITE PREPARATION

J1. REMOVE ALL EXISTING TOPSOIL UNDER SLABS, PROVIDE 150mm WELL RAMMED

J2. WHERE BAD GROUND IS ENCOUNTERED BELOW FOUNDATION LEVEL, THE DIFFERENCE IN LEVEL BETWEEN APPROVED BEARING STRATUM AND ORIGINAL LEVEL IS TO BE MADE UP USING MASS CONCRETE TO THE APPROVAL OF THE SUPERVISING ENGINEER.

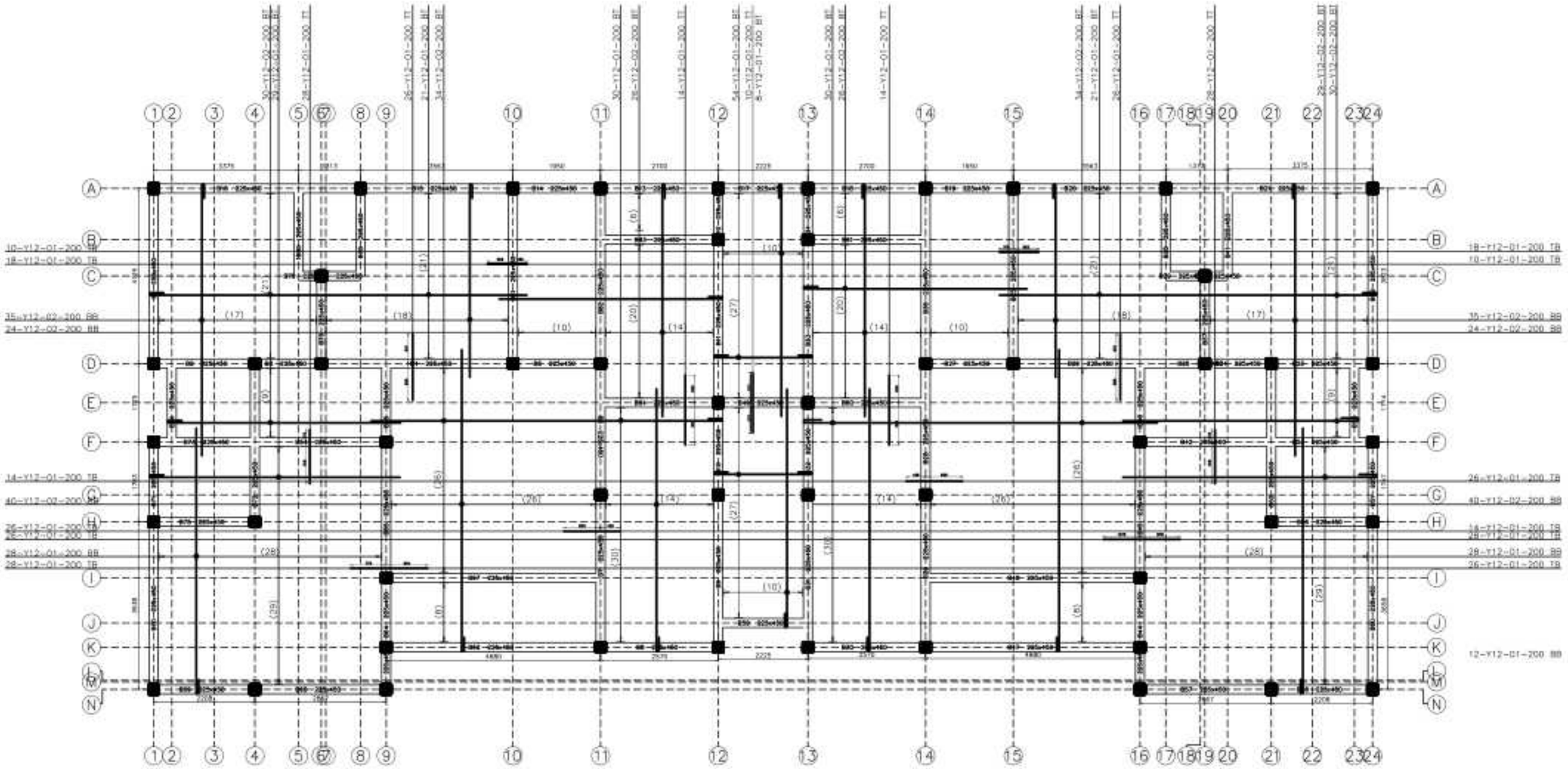




RAFT FOUNDATION LAYOUT

CLIENT: **PORTFOLIO**	NOTES: • All dimension are in 'mm' except stated otherwise • Do not scale drawings • All drawings should be read in conjuction with other relevant drawings • Depth of Foundation to be determined on site	PROJECT: **PORTFOLIO**	TITLE: STRUCTURAL DRAWINGS DRWG. TITLE: RAFT FOUNDATION LAYOUT AYOOLA.S / ENGR. TAIWO.I DESIGNED BY: / CHECKED BY: / APPROVED BY: DRAWN: AYOOLA.S / DATE: MAY / SCALE: 1:100 / SHT. 01 DWG. No: / REV:
			CONSULTING ENGINEERS:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
2. REINFORCEMENT COVER FOR BEAMS AND COLUMNS IS 35 mm AND SLAB IS 25 mm
3. CHARACTERISTIC STRENGTH OF CONCRETE C25/30 N/mm²
4. STEEL REINFORCEMENT SHALL BE HIGH YIELD STRENGTH BARS (410 N/mm²)
5. BLINDING CONCRETE SHALL BE OF GRADE 20 N/mm²
6. ALL REINFORCEMENT LAP LENGTH FOR BEAMS, COLUMNS AND FOUNDATIONS MUST HAVE A MINIMUM LENGTH OF 50 MULTIPLES BY THE DIAMETER OF BAR. (50 x 4BAR)
7. THE REINFORCEMENT LAP LENGTH FOR SLAB SHALL BE 25% OF THE CORRESPONDING SPAN LENGTH.
8. ALL DPC SLAB THICKNESS SHALL BE 150mm UNLESS OTHERWISE STATED.



RAFT FOUNDATION SLAB REINFORCEMENT DETAIL

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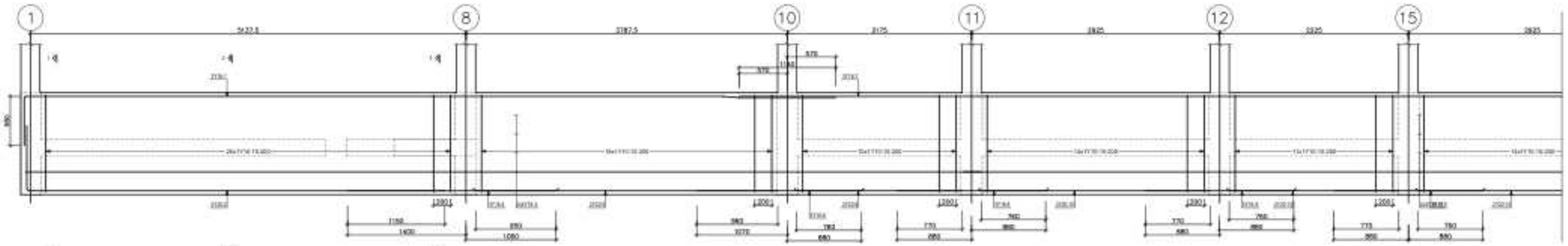
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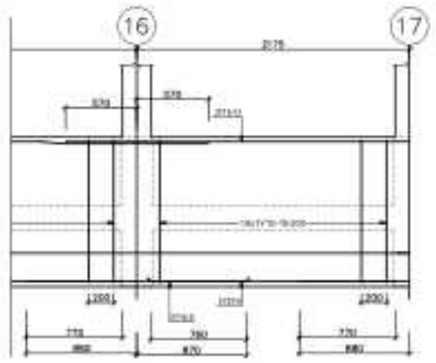
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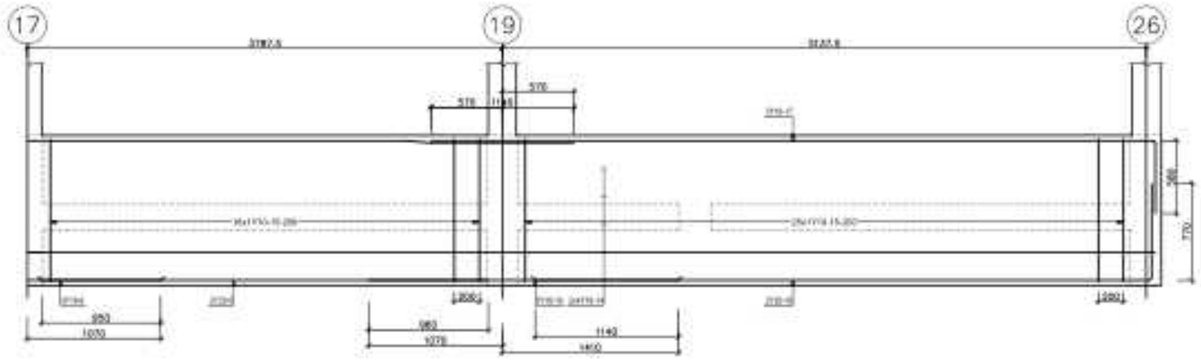
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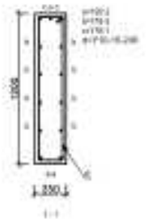
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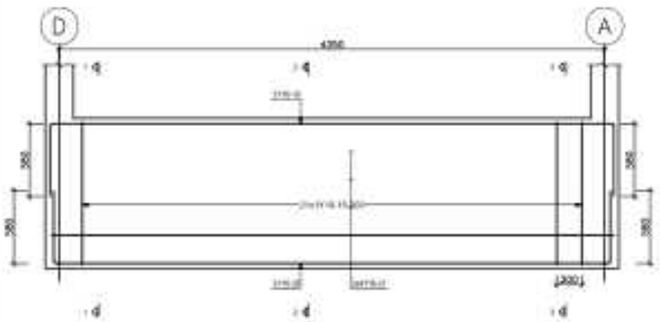
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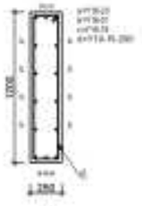


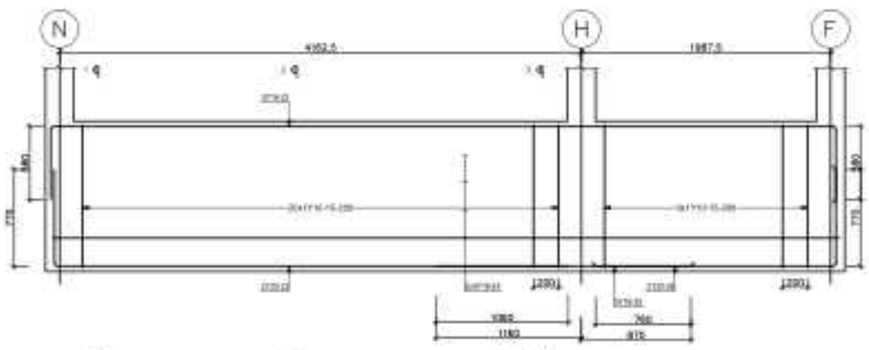


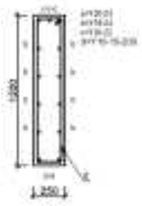


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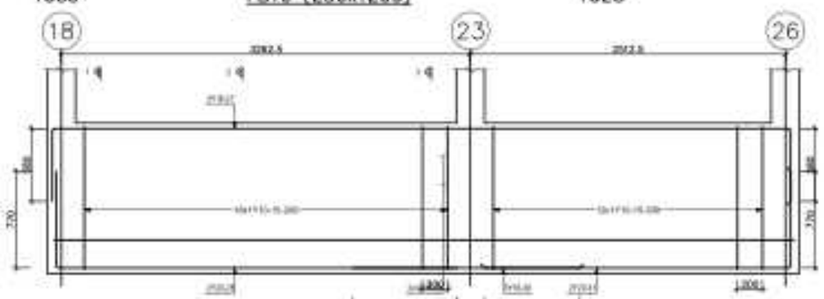


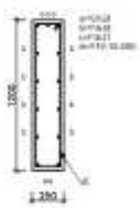






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CLIENT:

PORTFOLIO

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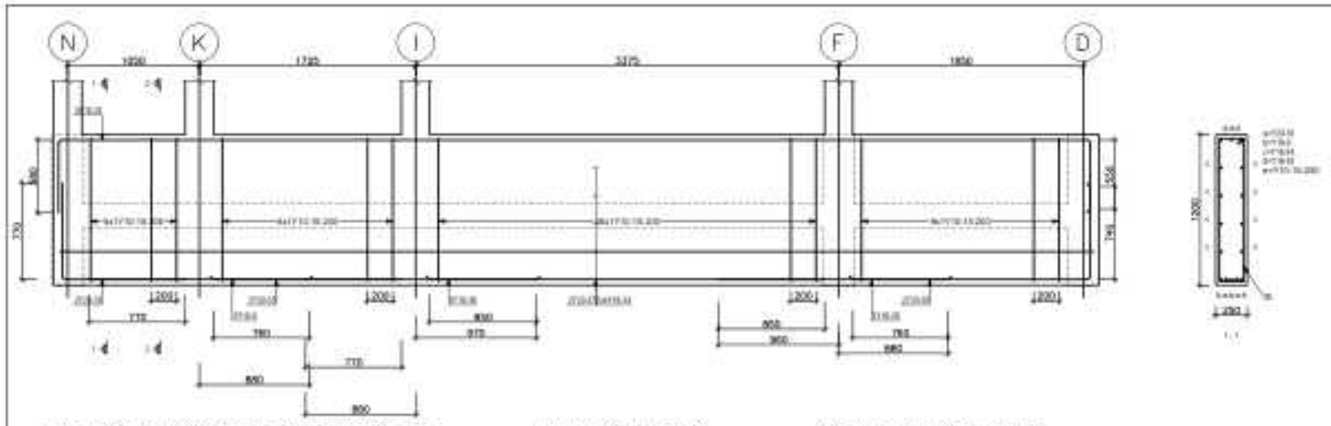
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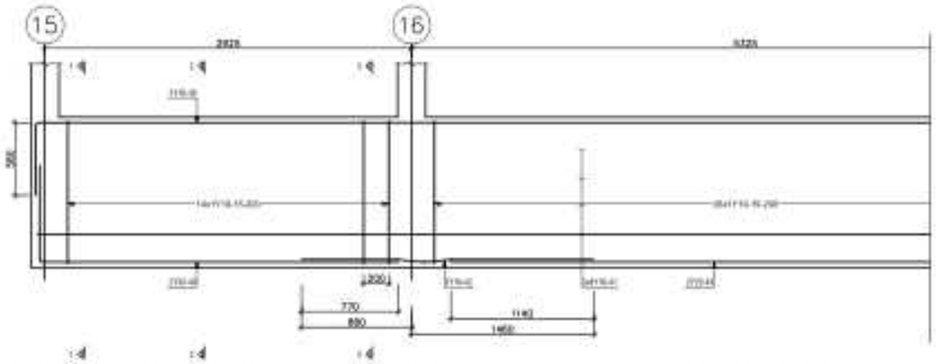
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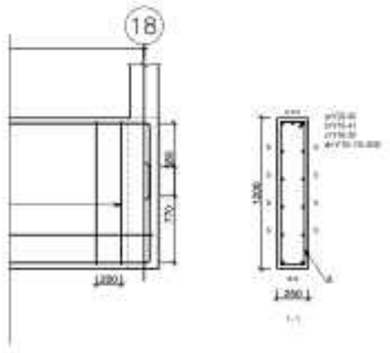
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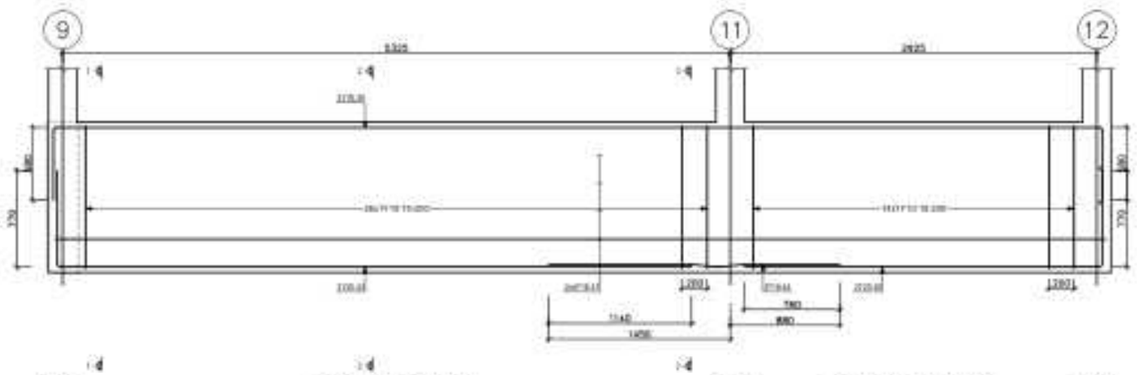


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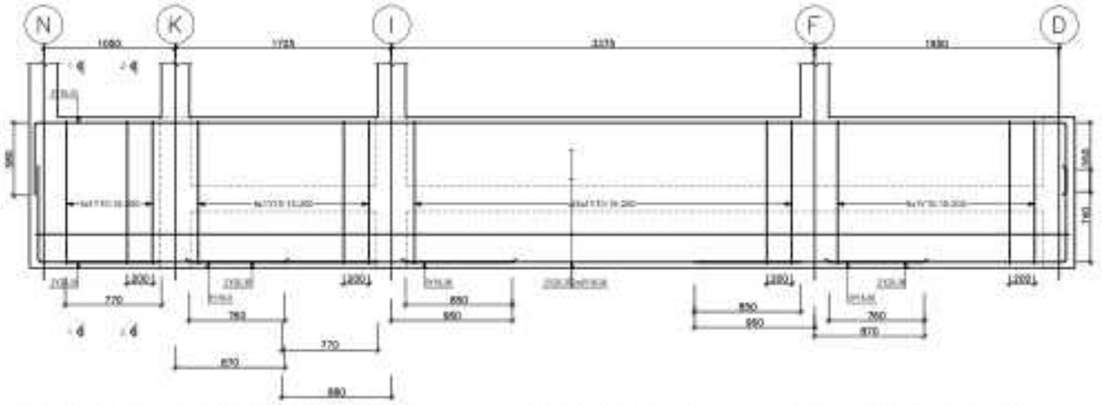


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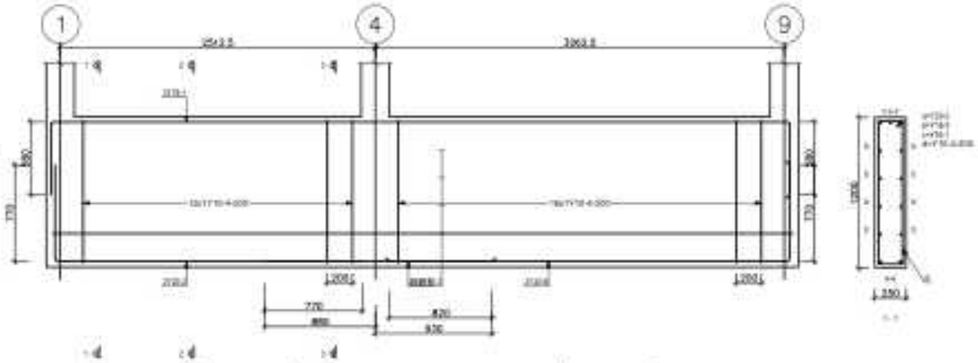




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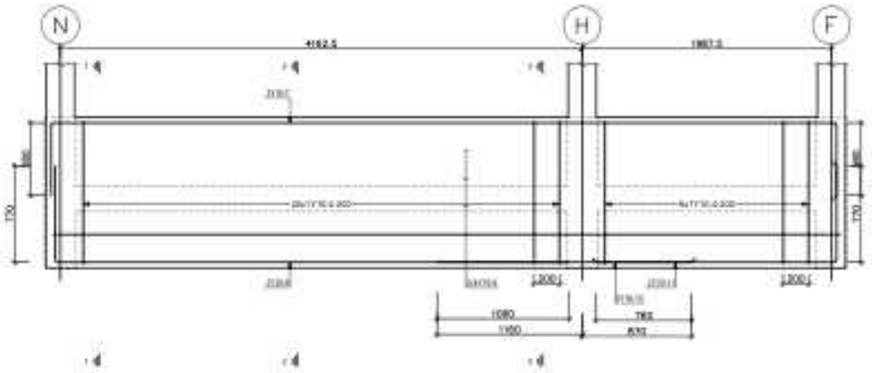
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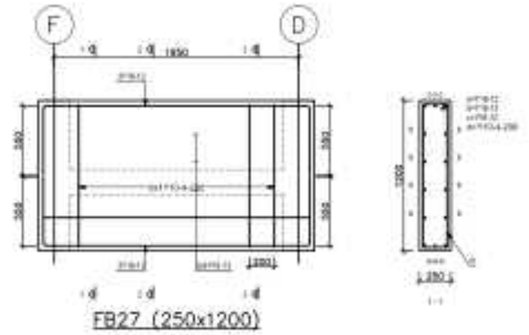
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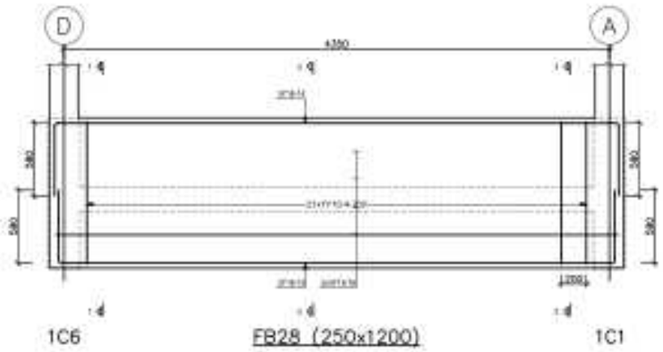
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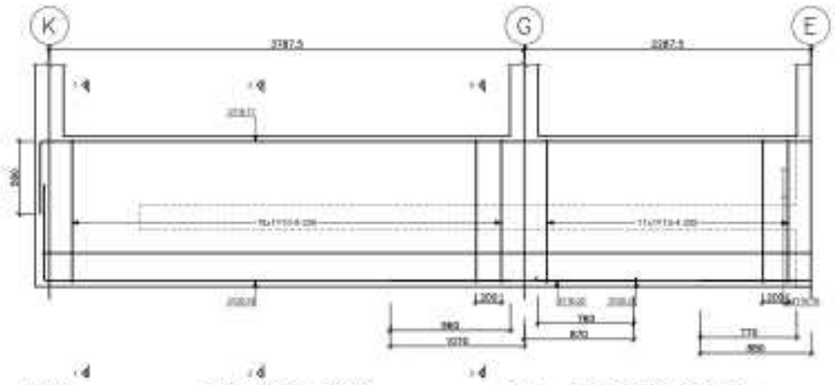
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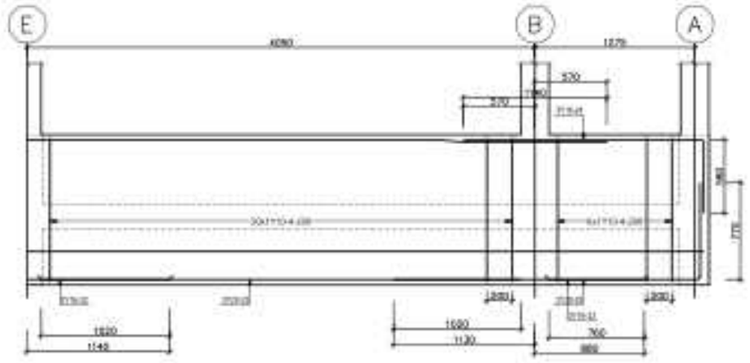
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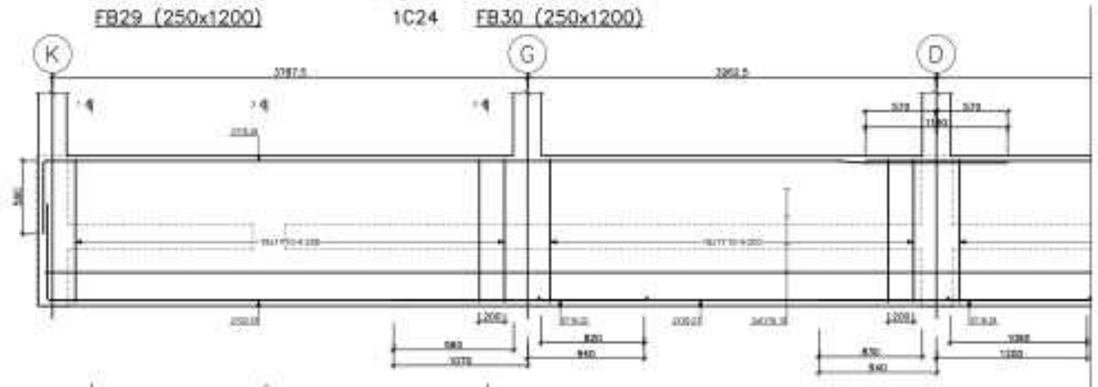
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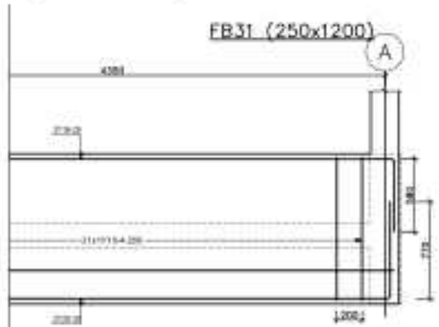
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CLIENT:

PORTFOLIO

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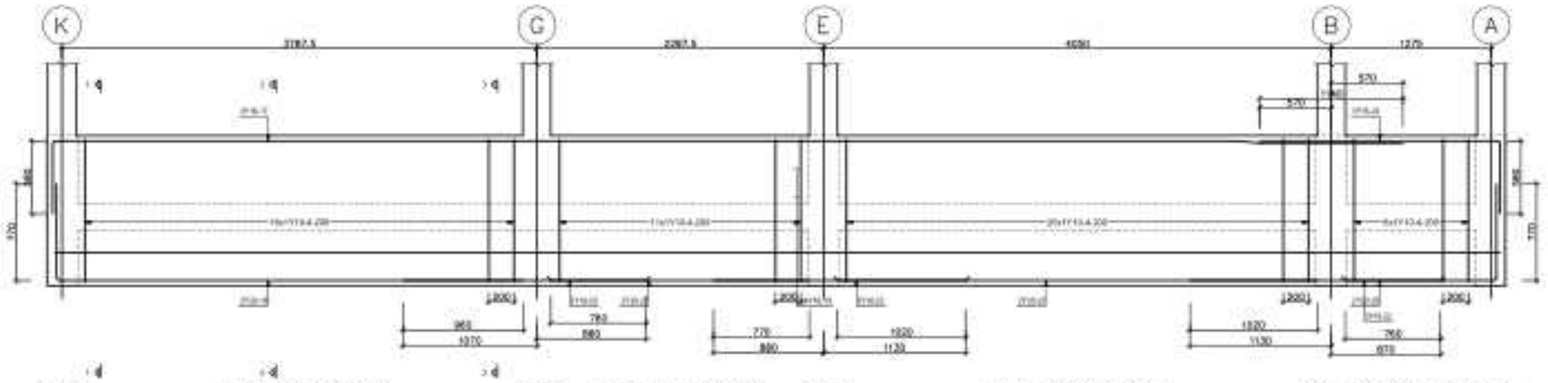
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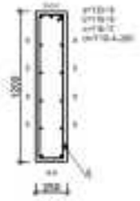
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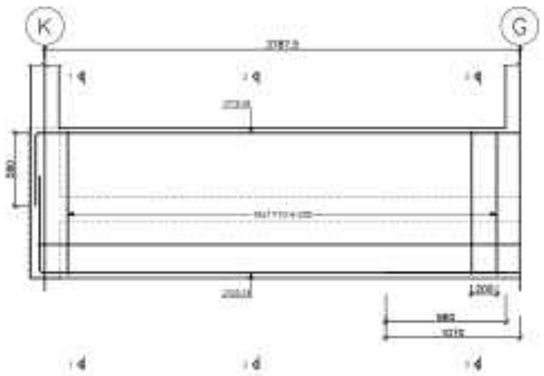
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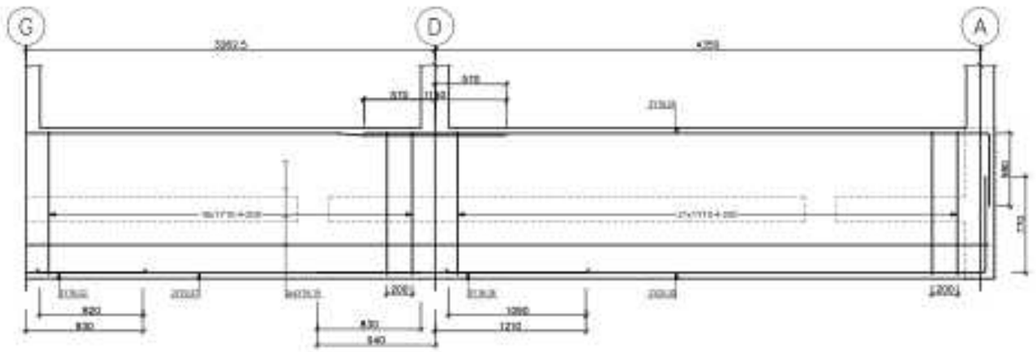
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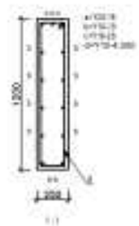




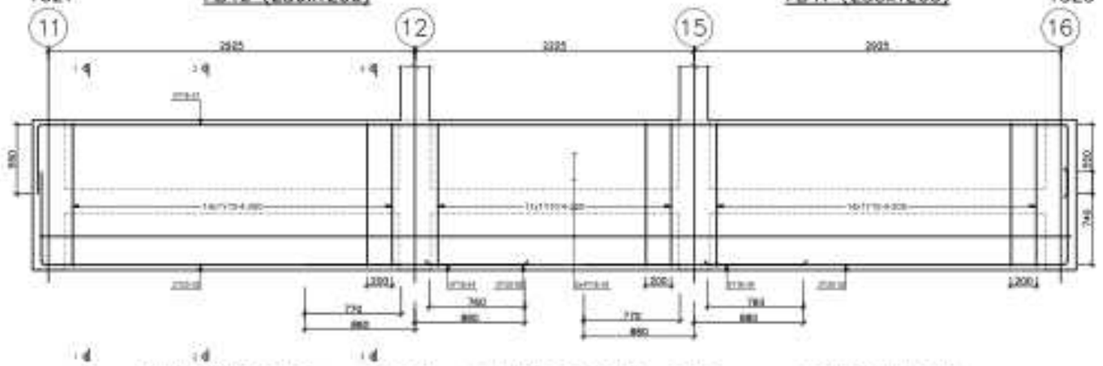
1C52 FB36 (250x1200) 1C51 FB37 (250x1200) 1C38 FB38 (250x1200) 1C39 FB39 (250x1200) 1C32

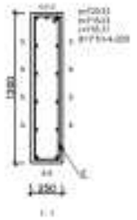


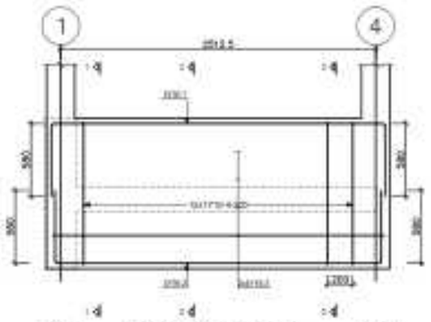


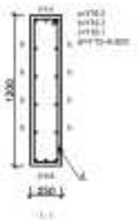


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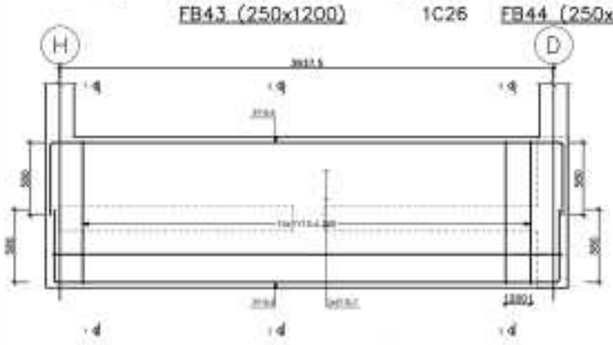


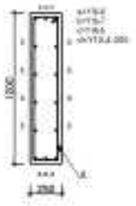


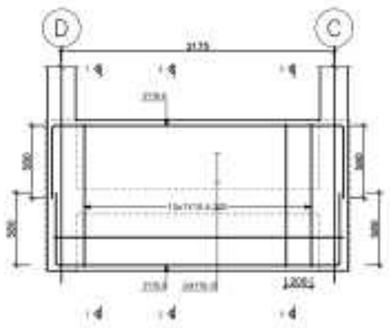


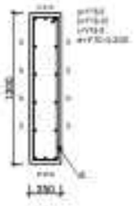
FB43 (250x1200) 1C26 FB44 (250x1200) 1C38 FB45 (250x1200)

1C9 FB46 (250x1200) 1C15









1C15 FB47 (250x1200) 1C16 1C17 FB49 (250x1200) 1C18

CLIENT:

PORTFOLIO

NOTES:
- All dimension are in 'mm' except stated otherwise
- Do not scale drawings
- All drawings should be read in conjuction with other relevant drawings
- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

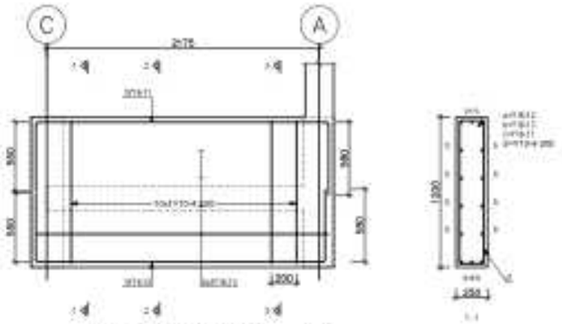
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DRWG. TITLE: RAFT BEAM DETAILS

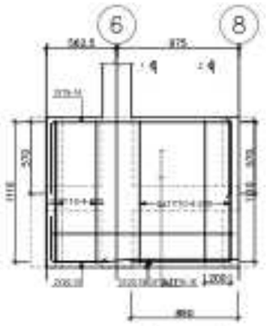
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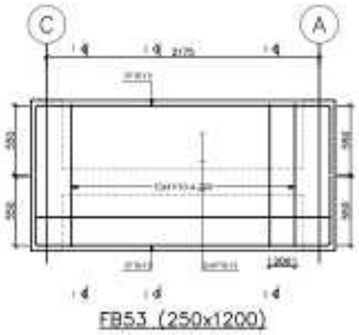
AYOOLA.S	ENGR. TAIWO /	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100
DWG. No:		REV:

SHT. 06

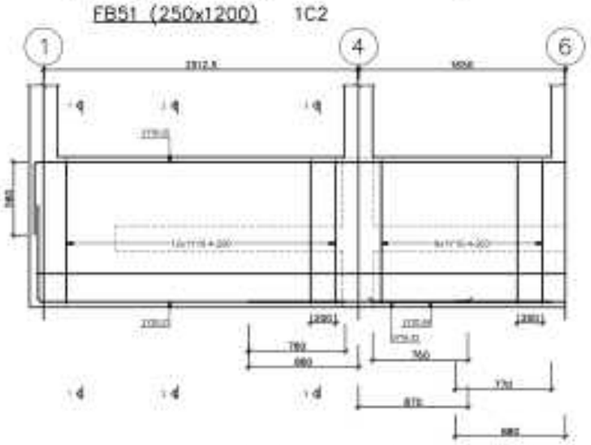


FB51 (250x1200) 1C2

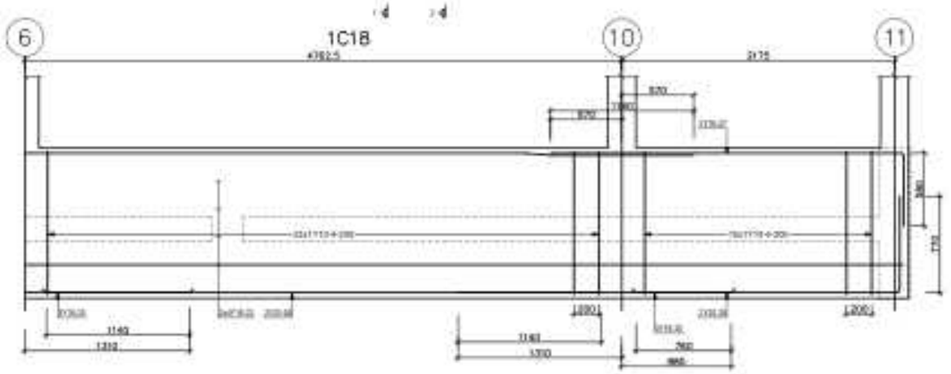




FB53 (250x1200)



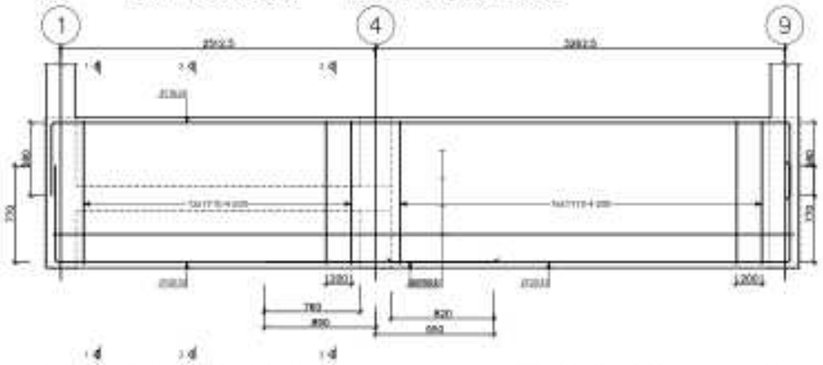
1C6 FB54 (250x1200) 1C16 FB48 (250x1200)



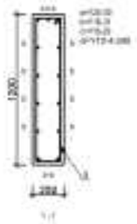
1C18 FB62 (250x1200) 1C19

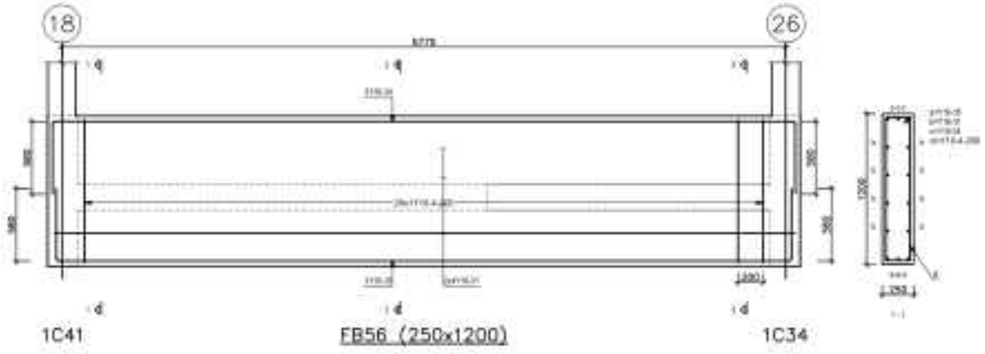


FB63 (250x1200) 1C20

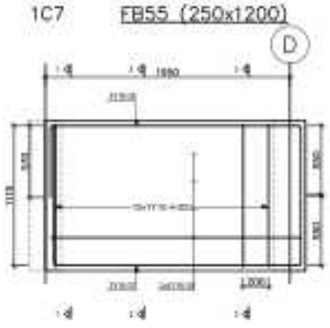


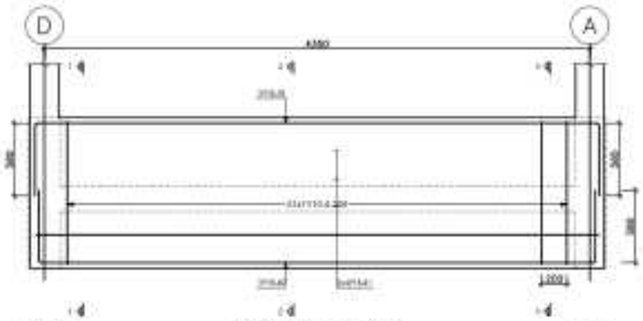
1C7 FB55 (250x1200) FB60 (250x1200) 1C14





1C41 FB56 (250x1200) 1C34





1C19 FB61 (250x1200) 1C3

CLIENT:

PORTFOLIO

NOTES:
- All dimension are in 'mm' except stated otherwise
- Do not scale drawings
- All drawings should be read in conjuction with other relevant drawings
- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

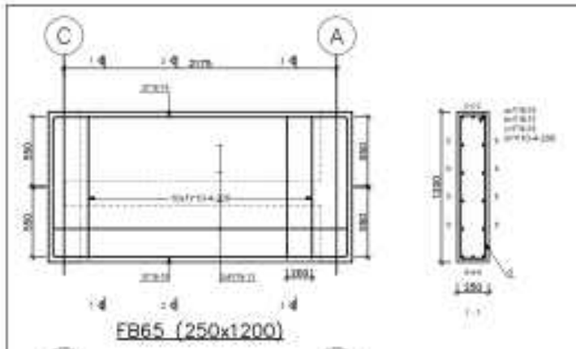
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DRWG. TITLE: RAFT BEAM DETAILS

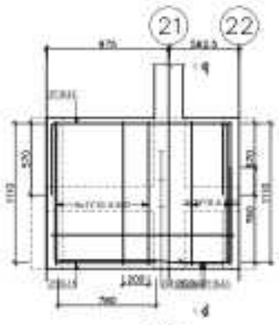
CONSULTING ENGINEERS:

DESIGNED BY:	CHECKED BY:	APPROVED BY:
AYOOLA.S	ENGR. TAIWO .I	

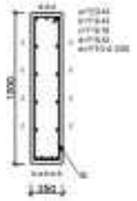
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DWG. No:			REV:

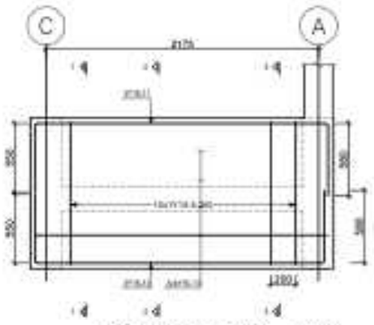


FB65 (250x1200)

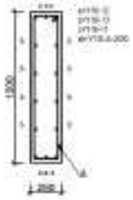


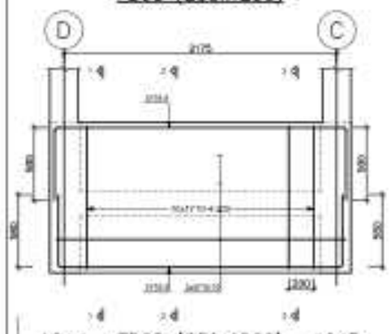
1C45



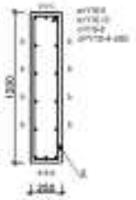


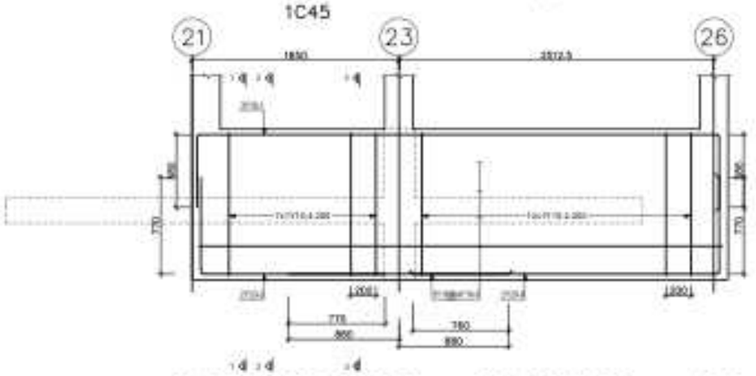
FB67 (250x1200) 1C29



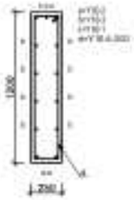


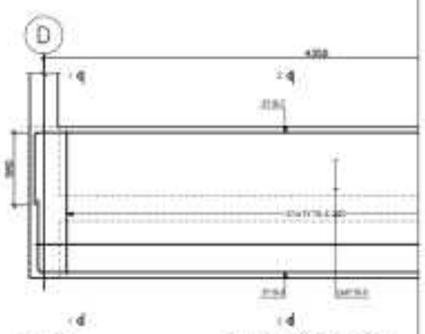
1C44 FB68 (250x1200) 1C45



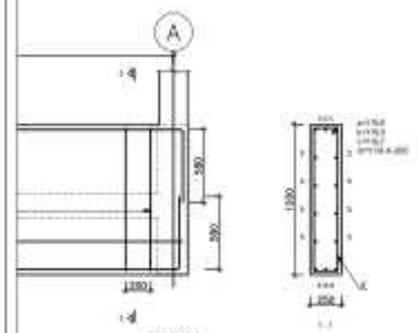


1C44 FB69 (250x1200) 1C43 FB11 (250x1200) 1C33

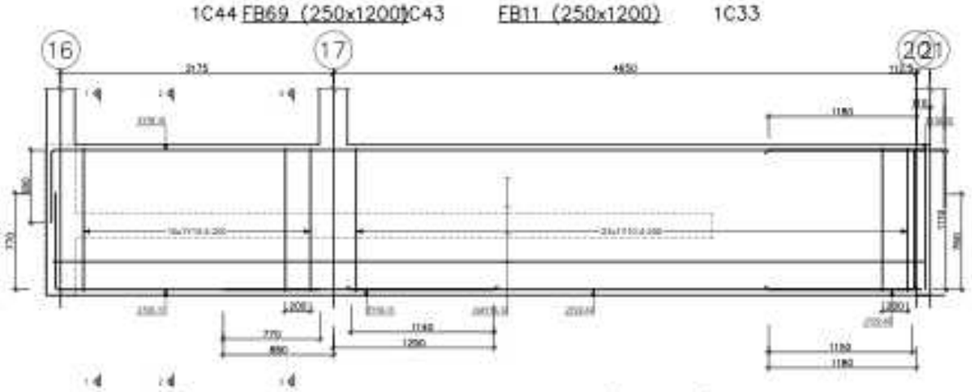




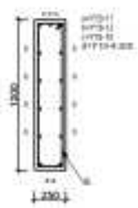
1C46 FB70 (250x1200)

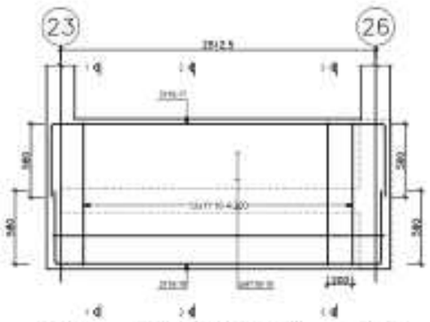


1C30

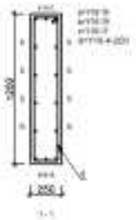


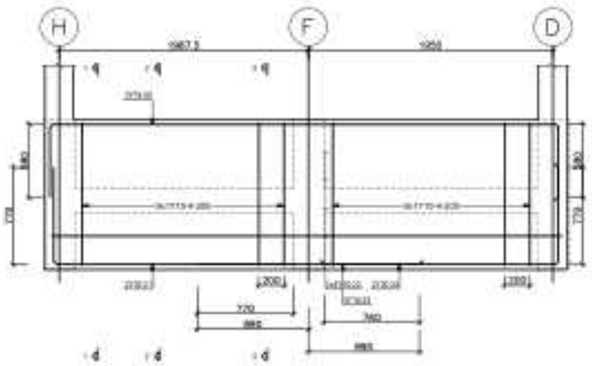
1C47 FB73 (250x1200) 1C46 FB72 (250x1200) 1C44



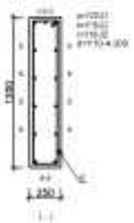


1C42 FB75 (250x1200) 1C36





1C42 FB76 (250x1200) FB84 (250x1200) 1C43



CLIENT:

PORTFOLIO

NOTES:
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PROJECT:

PORTFOLIO

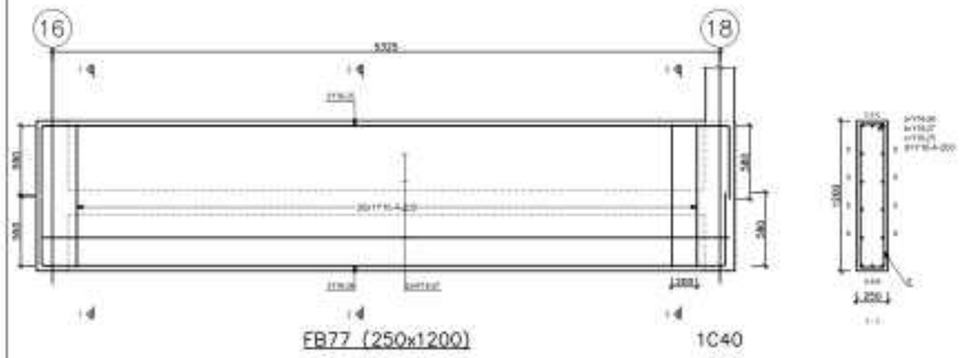
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DRWG. TITLE: RAFT BEAM DETAILS

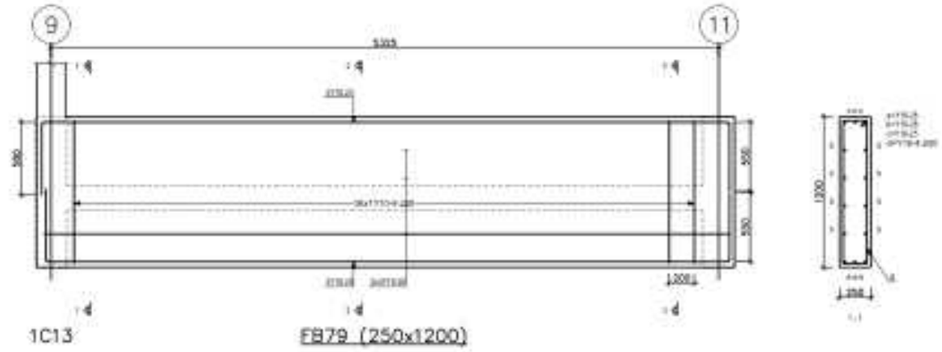
CONSULTING ENGINEERS:

AYOOLA.S	ENGR. TAIWO.I	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA .S	DATE: MAY	SCALE: 1:100
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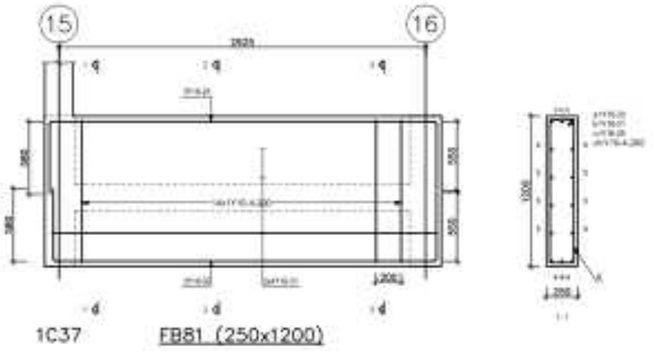
SHT. 08



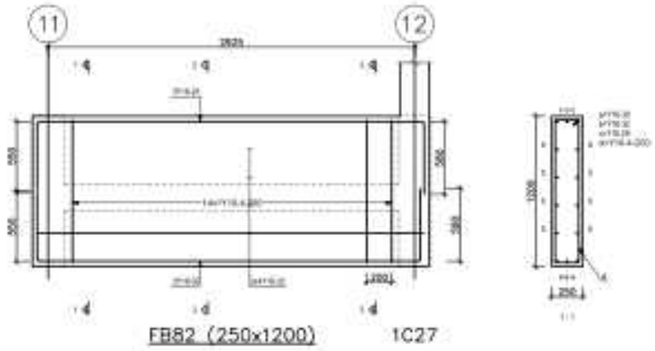
FB77 (250x1200)



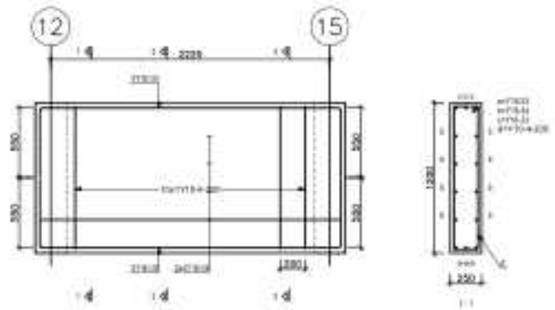
FB79 (250x1200)



FB81 (250x1200)



FB82 (250x1200)



FB83 (250x1200)

CLIENT:

PORTFOLIO

NOTES:
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- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

TITLE: STRUCTURAL DRAWINGS

DRWG. TITLE: RAFT BEAM DETAILS

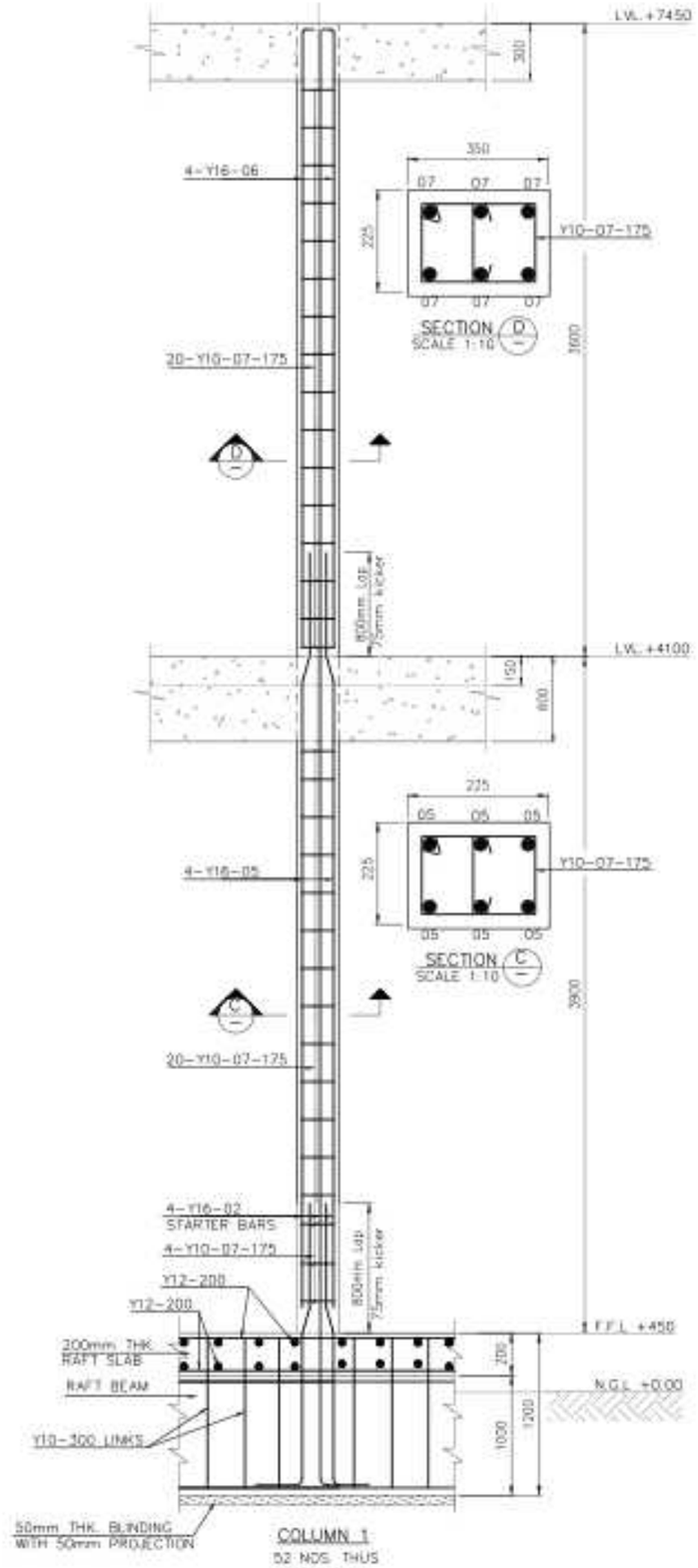
CONSULTING ENGINEERS:

AYOOLA.S	ENGR. TAIWO J	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100

SHT. 09

DWG. NO:

REV:



CLIENT:

PORTFOLIO

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- All drawings should be read in conjuction with other relevant drawings
- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

TITLE: STRUCTURAL DRAWINGS

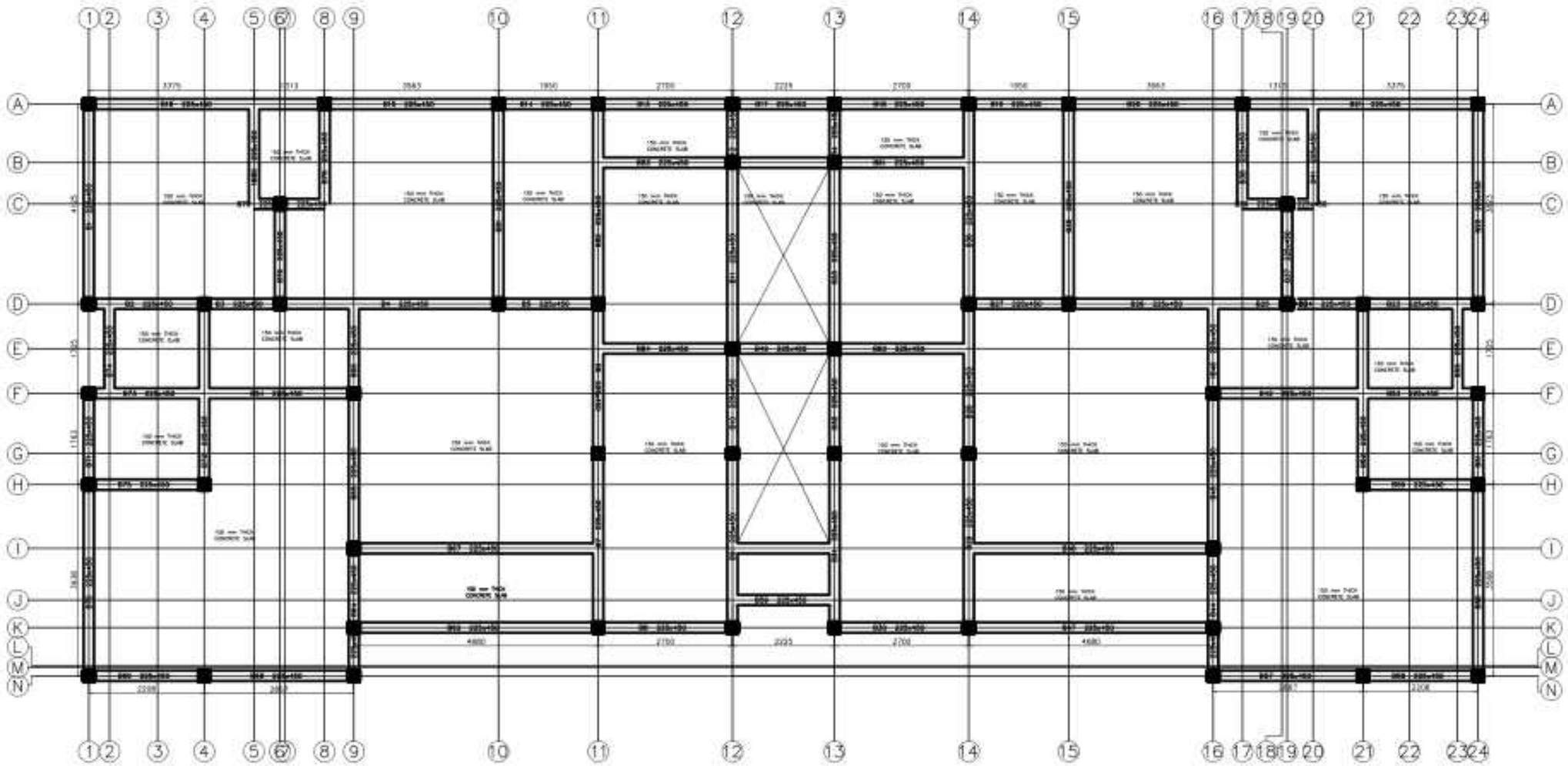
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CONSULTING ENGINEERS:

AYOOLA.S	ENGR. TAIWO /	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100

SHT. 10

DWG. No: REV:



FLOOR SLAB, BEAM AND COLUMN LAYOUT

CLIENT:

PORTFOLIO

NOTES:
- All dimension are in 'mm' except stated otherwise
- Do not scale drawings
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- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

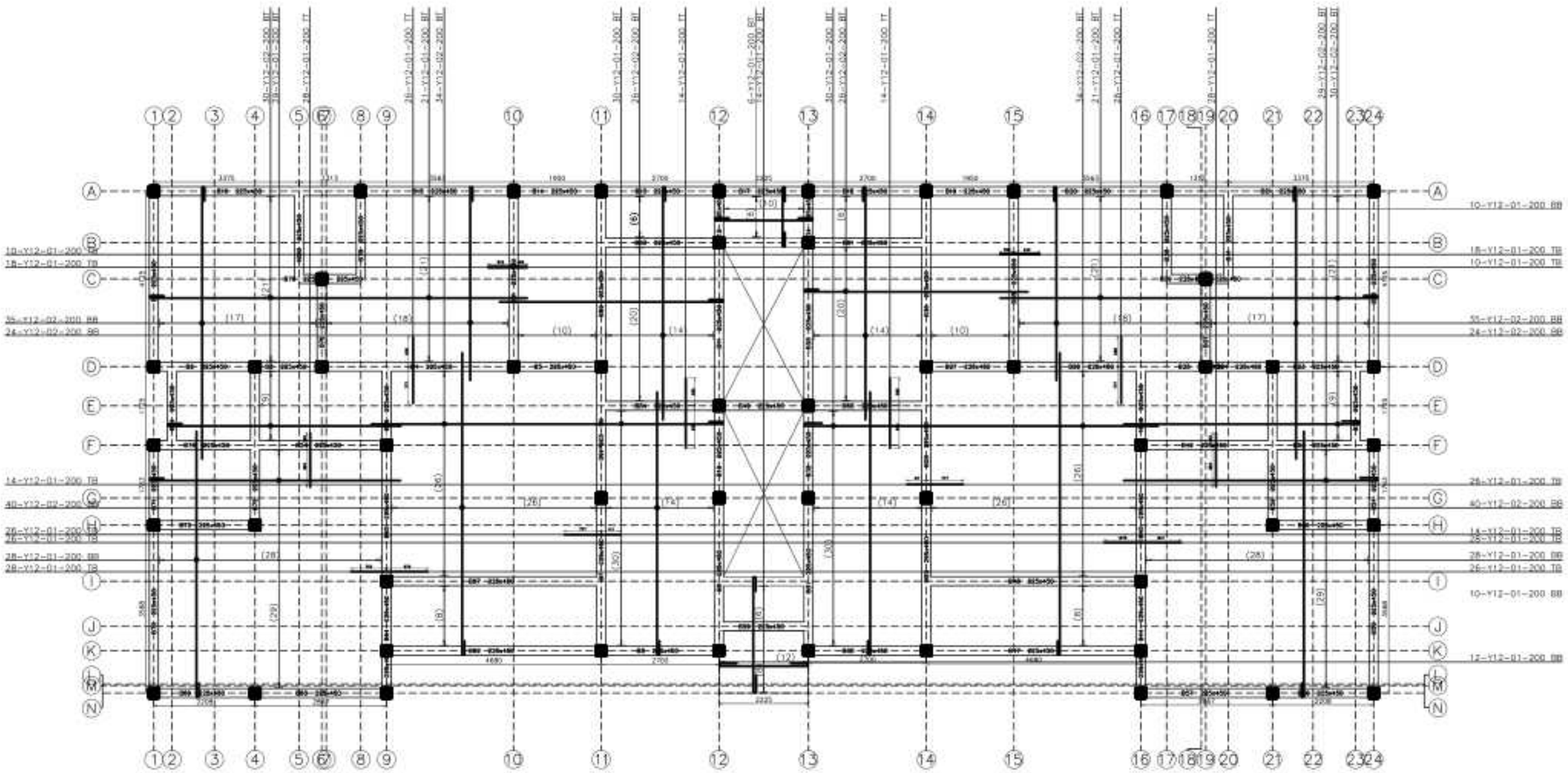
TITLE: STRUCTURAL DRAWINGS

DRWG. TITLE: FIRST FLOOR LAYOUT

AYOOLA.S	ENGR. TAIWO /	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA .S	DATE: MAY	SCALE: 1:100
DWG. No:		REV:

CONSULTING ENGINEERS:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
2. REINFORCEMENT COVER FOR BEAMS AND COLUMNS IS 25 mm AND SLAB IS 20 mm
3. CHARACTERISTIC STRENGTH OF CONCRETE C25/30 N/mm²
4. STEEL REINFORCEMENT SHALL BE HIGH YIELD STRENGTH BARS (410 N/mm²)
5. BLINDING CONCRETE SHALL BE OF GRADE 20 N/mm²
6. ALL REINFORCEMENT LAP LENGTH FOR BEAMS, COLUMNS AND FOUNDATIONS MUST HAVE A MINIMUM LENGTH OF 50 MULTIPLIED BY THE DIAMETER OF BAR, [50 x ø(BAR)]
7. THE REINFORCEMENT LAP LENGTH FOR SLAB SHALL BE 25% OF THE CORRESPONDING SPAN LENGTH
8. ALL RPC SLAB THICKNESS SHALL BE 150mm UNLESS OTHERWISE STATED.



SLAB REINFORCEMENT DETAILS

CLIENT:

PORTFOLIO

NOTES:
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- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

TITLE: STRUCTURAL DRAWINGS

DRWG. TITLE: SLAB DETAILS

AYOOLA.S	ENGR. TAIWO /	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100

SHT. 12

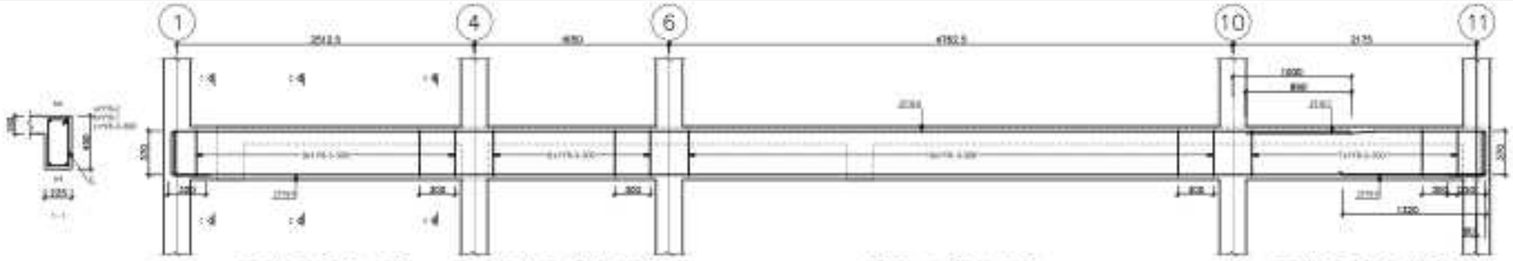
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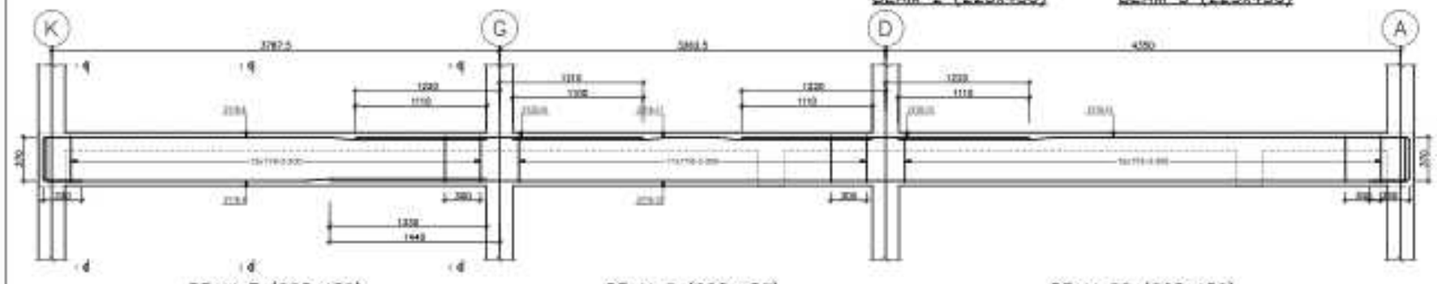
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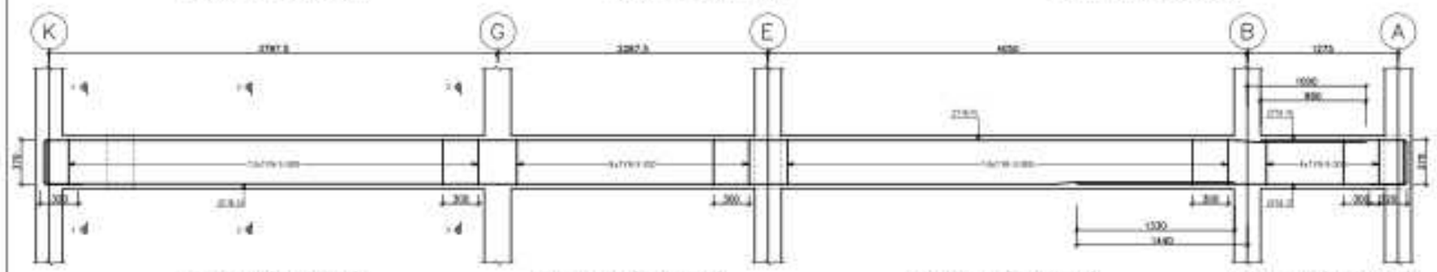
BEAM 1 (225x450)



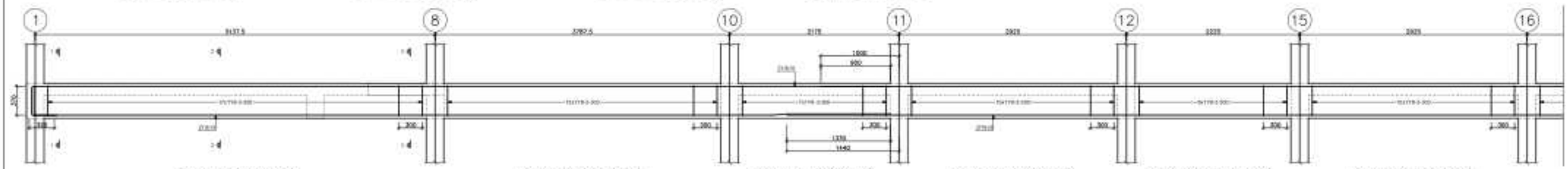
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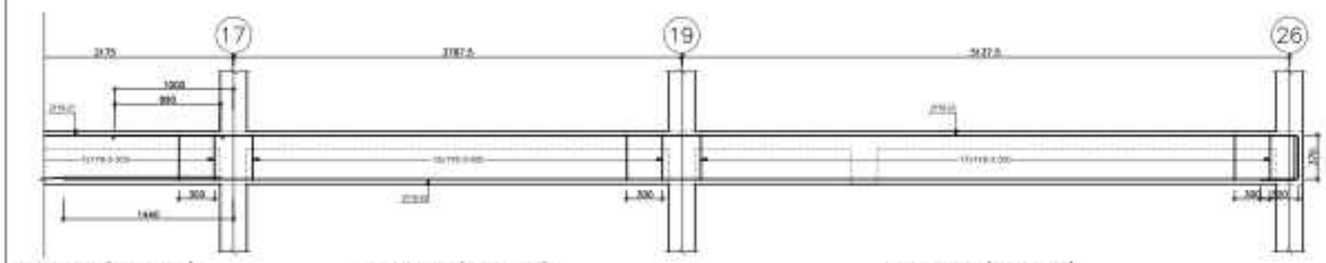
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BEAM 9 (225x450) BEAM 10 (225x450) BEAM 11 (225x450) BEAM 12 (225x450)



BEAM 16 (225x450) BEAM 15 (225x450) BEAM 14 (225x450) BEAM 13 (225x450) BEAM 17 (225x450) BEAM 18 (225x450)



BEAM 19 (225x450) BEAM 20 (225x450) BEAM 21 (225x450)

FLOOR BEAM REBAR DETAIL

CLIENT:
PORTFOLIO

NOTES:
- All dimension are in 'mm' except stated otherwise
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- All drawings should be read in conjuction with other relevant drawings
- Depth of Foundation to be determined on site

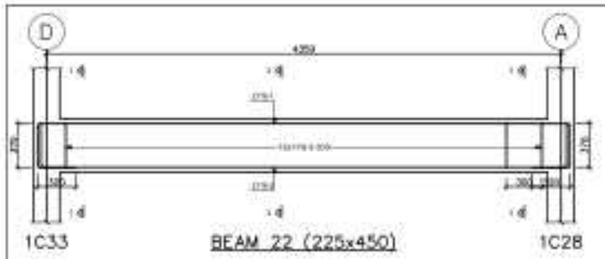
PROJECT:
PORTFOLIO

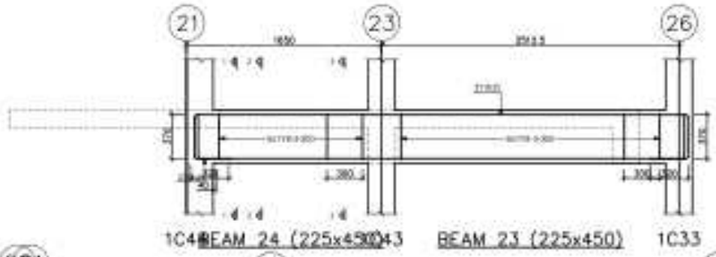
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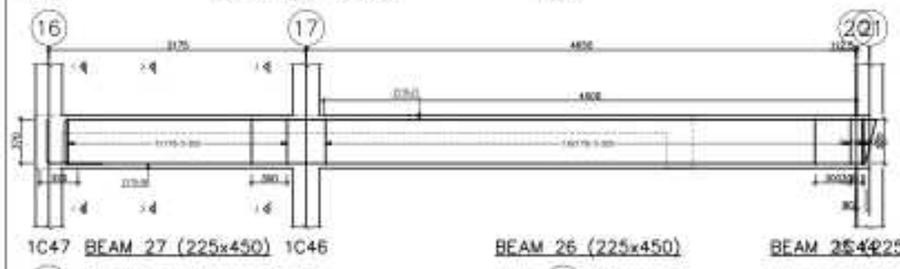
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FLOOR BEAM DETAILS

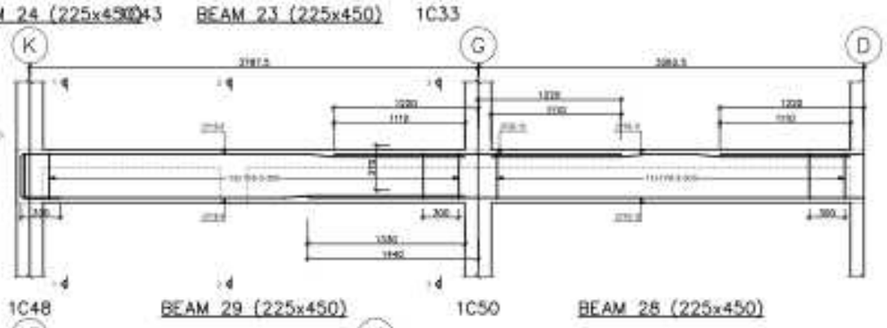
AYOOLA.S	ENGR. TAIWO .	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA .S	DATE: MAY	SCALE: 1:100 SHT. 13
DWG. No:		REV:

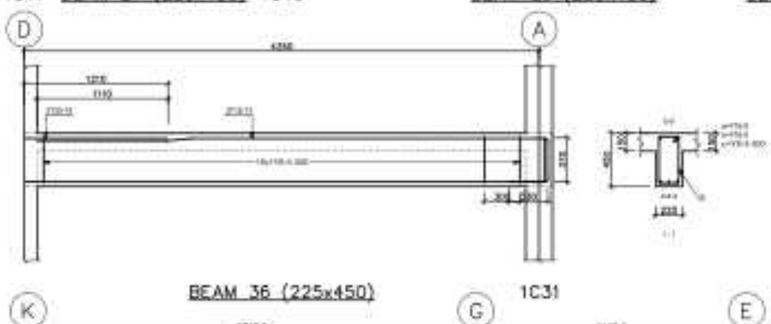
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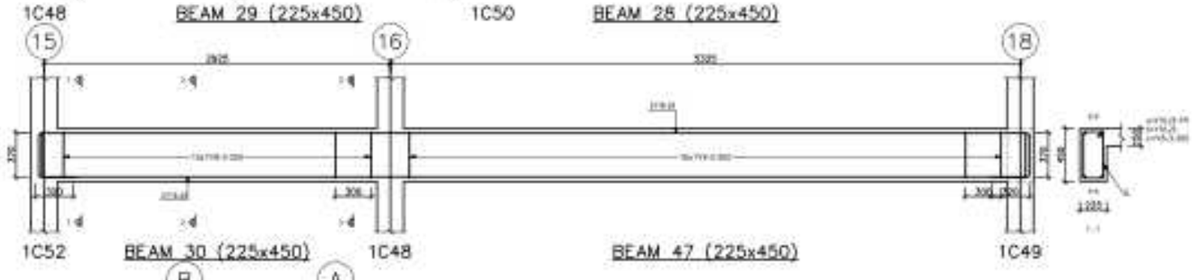


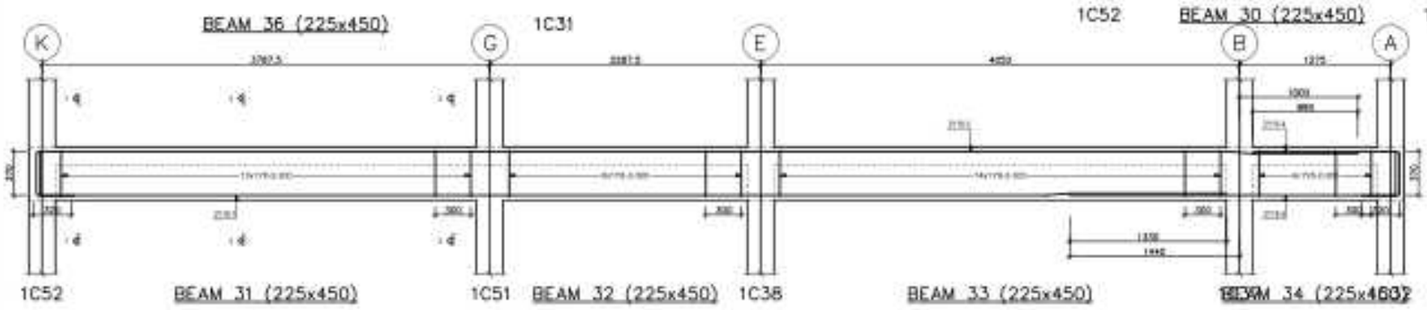


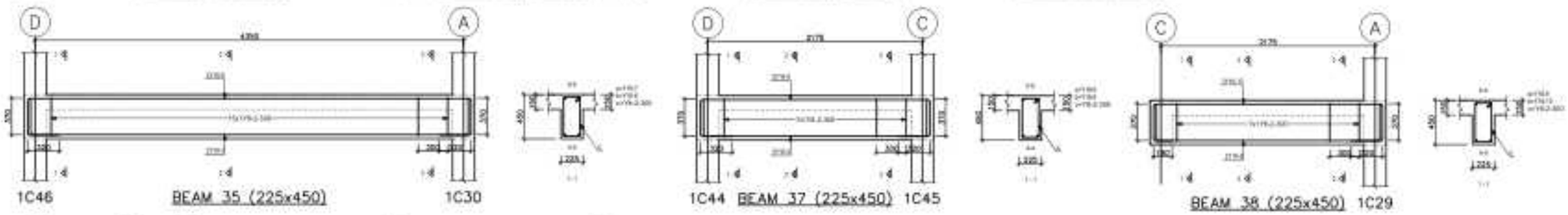


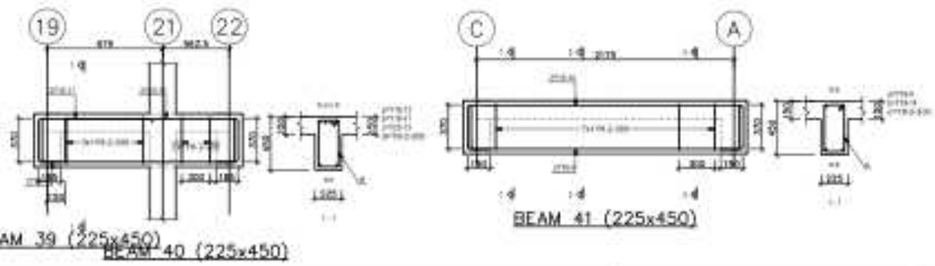












FLOOR BEAM REBAR DETAIL

CLIENT:
PORTFOLIO

NOTES:
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PROJECT:
PORTFOLIO

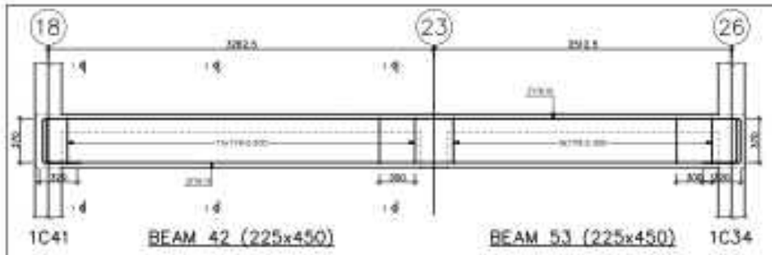
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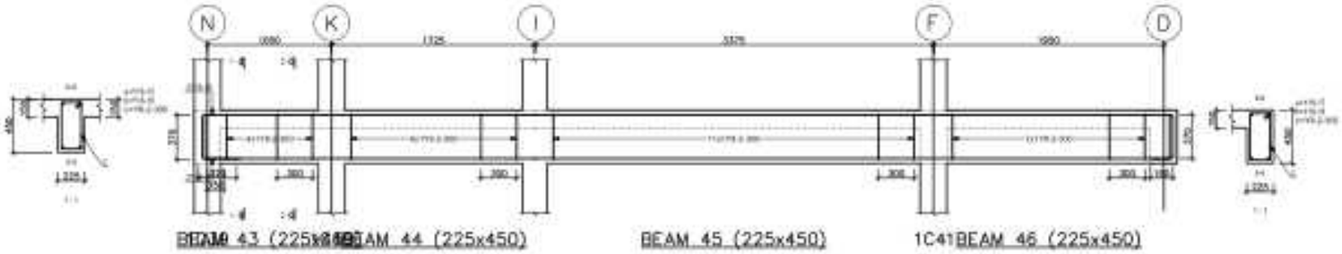
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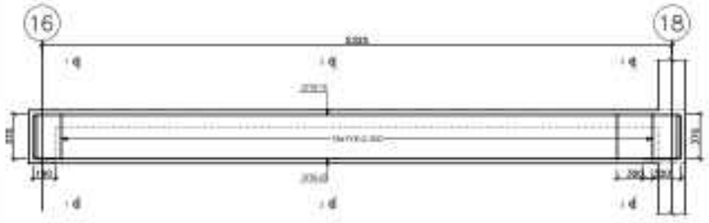
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AYOOLA.S	ENGR. TAIWO I	

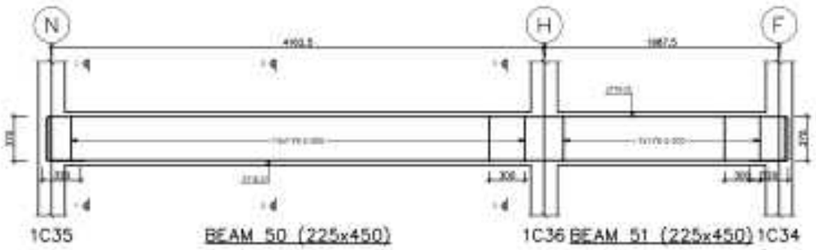
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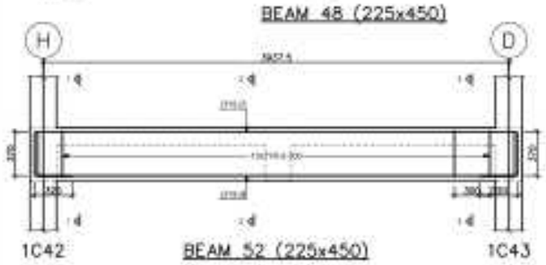
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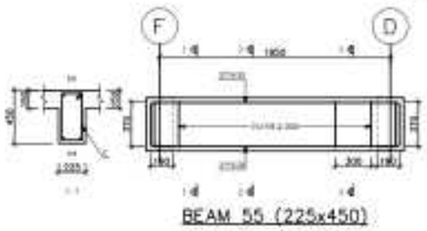


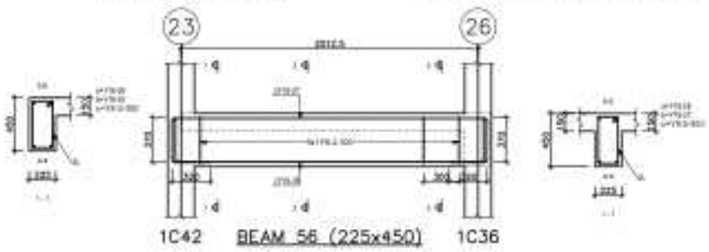


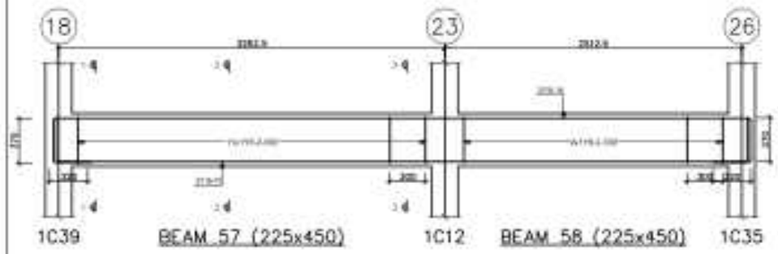


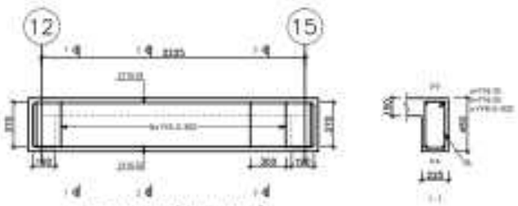


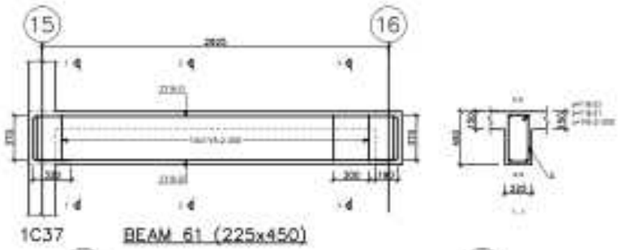


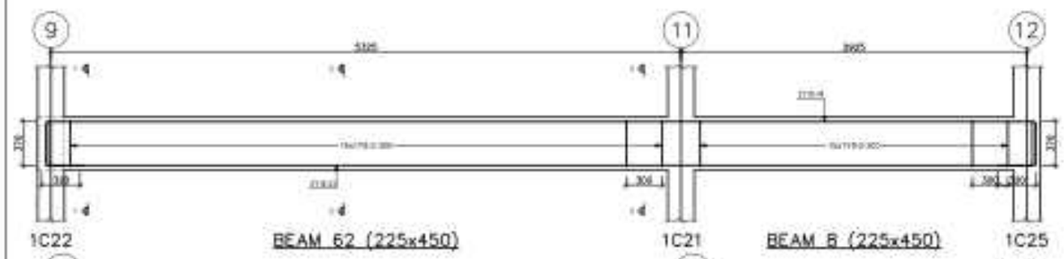


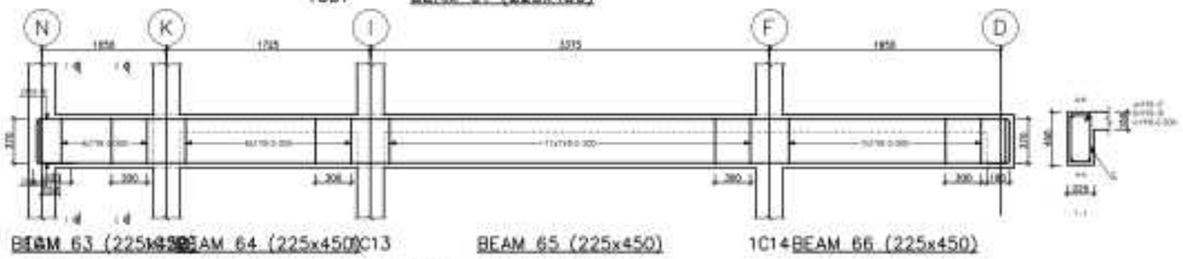




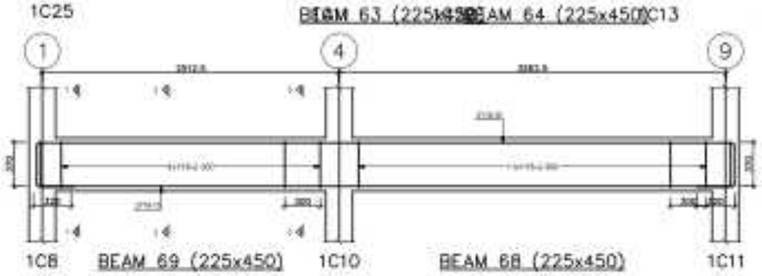












FLOOR BEAM REBAR DETAIL

CLIENT:

PORTFOLIO

NOTES:
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PROJECT:

PORTFOLIO

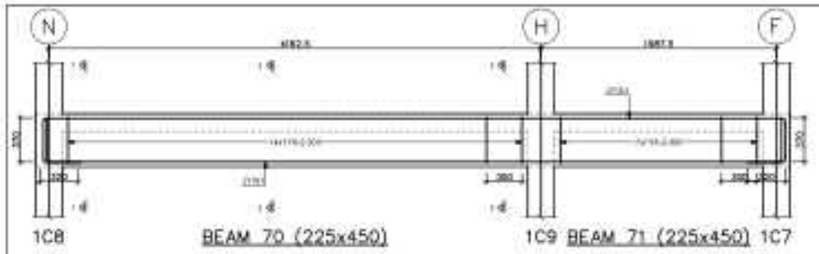
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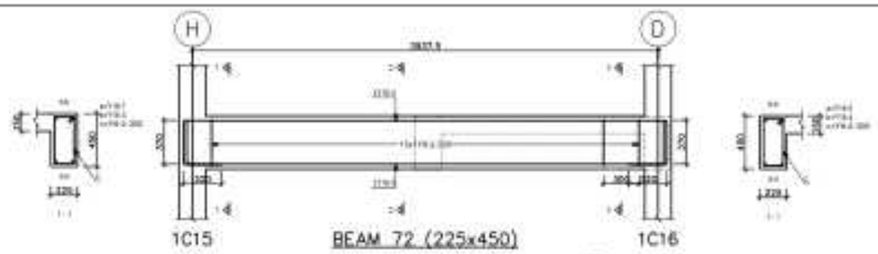
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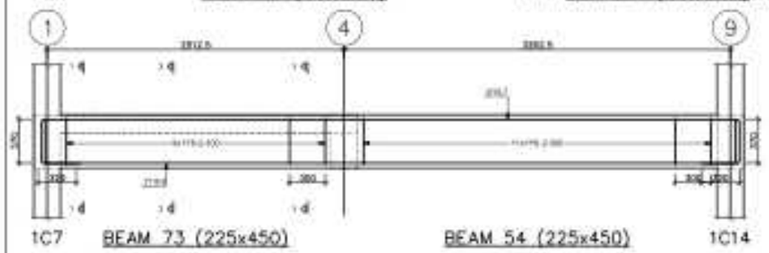
AYOOLA.S	ENGR. TAIWO.I	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA .S	DATE: MAY	SCALE: 1:100
DWG. NO:		REV:

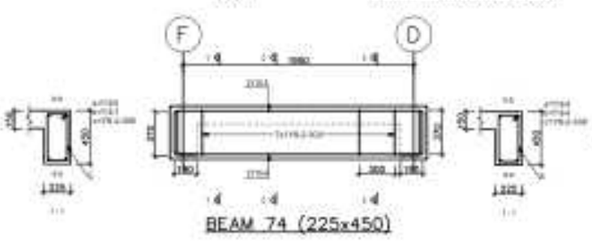
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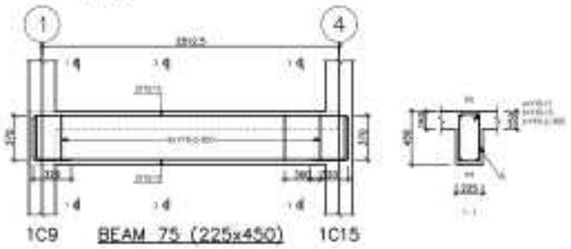
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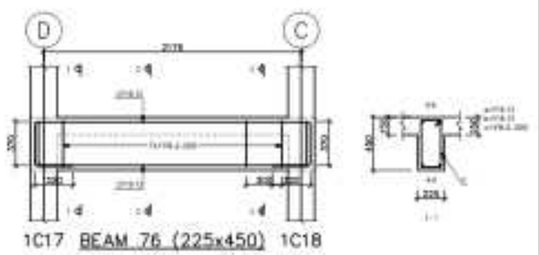


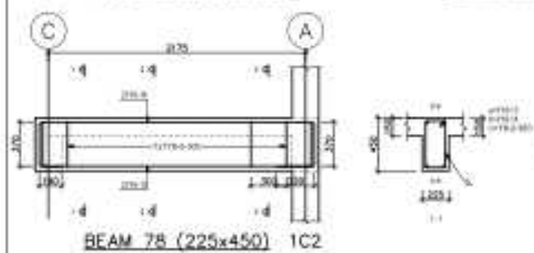


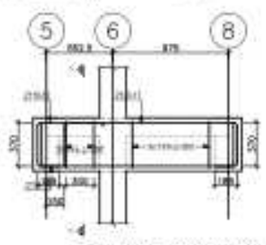


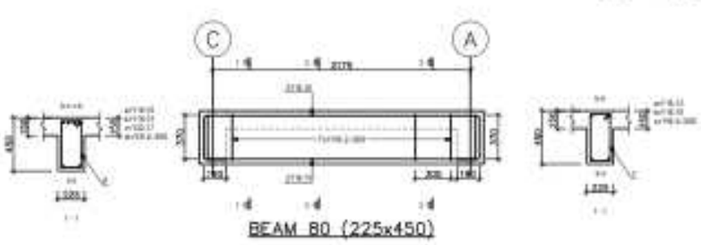


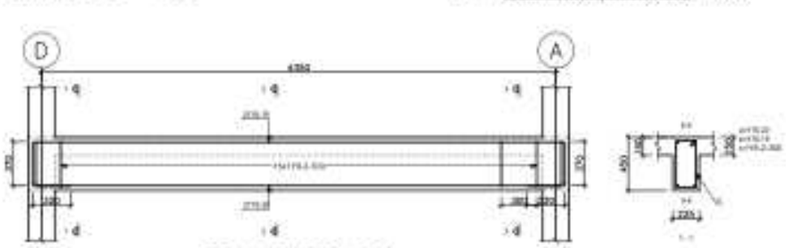




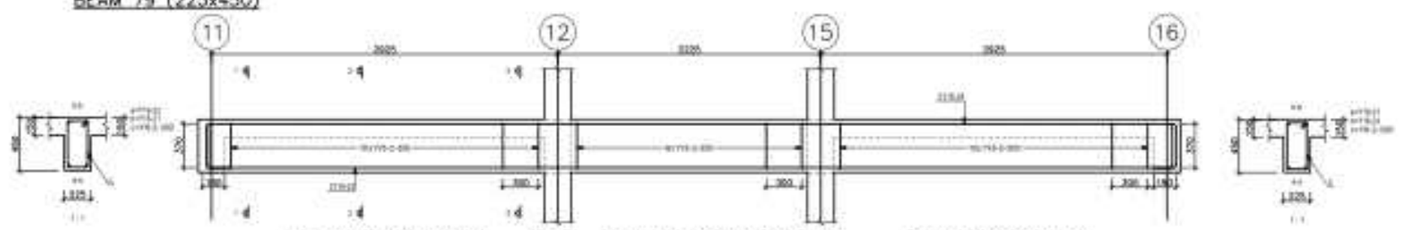












FLOOR BEAM REBAR DETAIL

CLIENT:
PORTFOLIO

NOTES:
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PROJECT:
PORTFOLIO

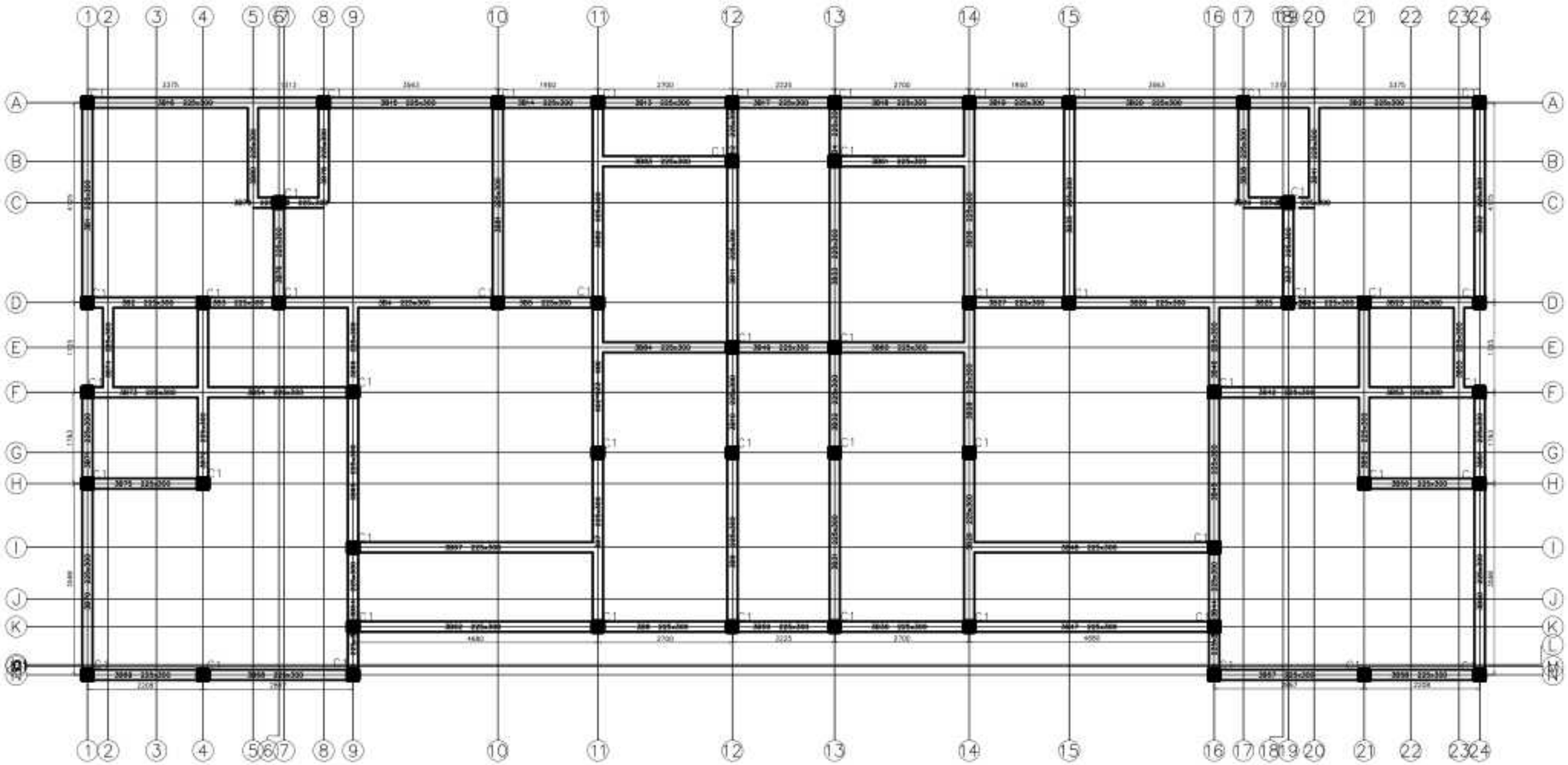
TITLE:
STRUCTURAL DRAWINGS

DRWG. TITLE:
FLOOR BEAM DETAILS

DESIGNED BY:	CHECKED BY:	APPROVED BY:
AYOOLA.S	ENGR. TAIWO.I	

DRAWN: AYOOLA.S | DATE: MAY | SCALE: 1:100 | SHT. 16 | REV:
DWG. No:

CONSULTING ENGINEERS:



ROOF BEAM AND COLUMN LAYOUT

CLIENT:
PORTFOLIO

NOTES:
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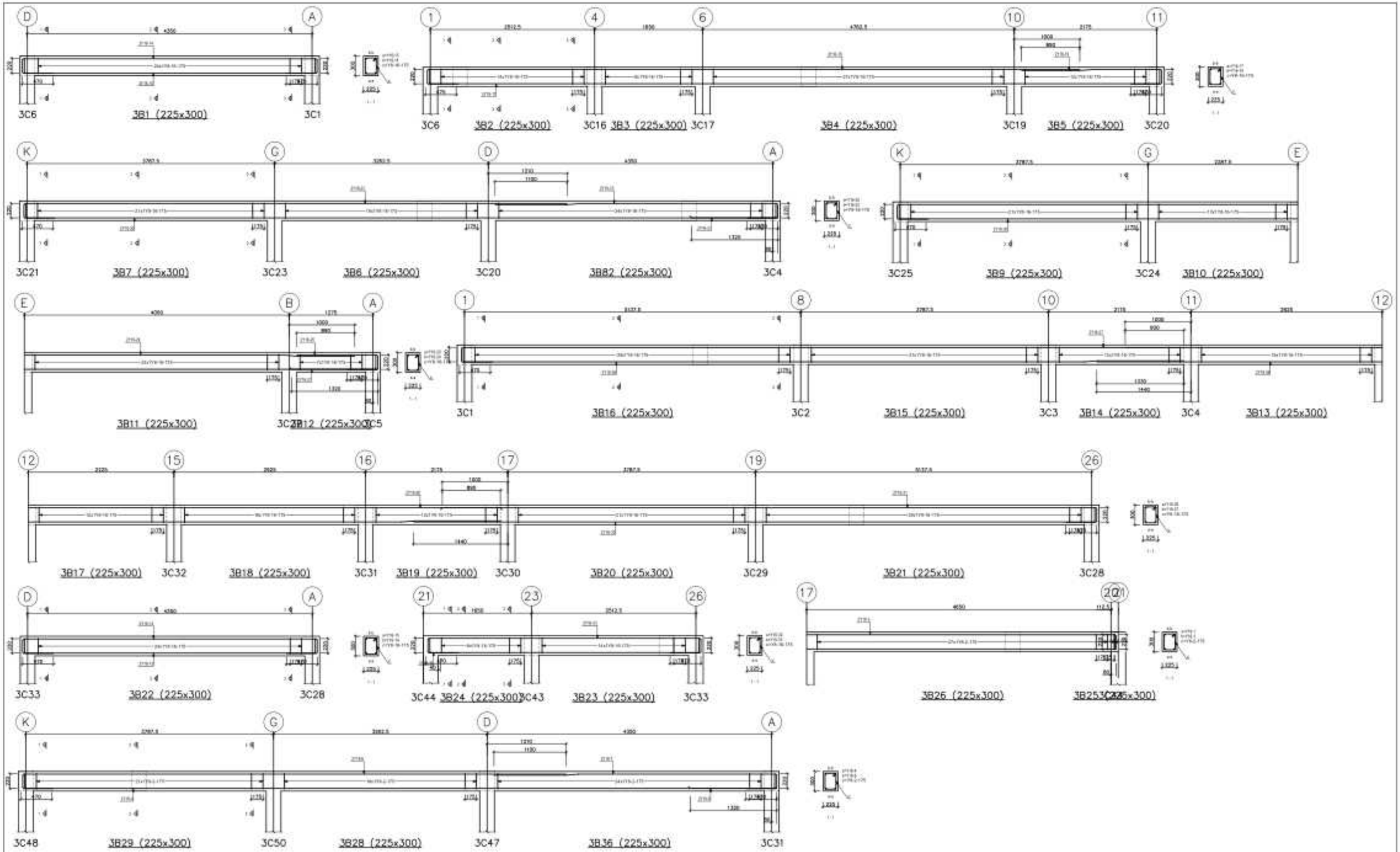
PROJECT:
PORTFOLIO

TITLE: STRUCTURAL DRAWINGS

DRWG. TITLE: ROOF BEAM AND COLUMN LAYOUT

CONSULTING ENGINEERS:

AYOOLA.S	ENGR. TAIWO.I	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100 SHT. 17
DWG. NO:		REV:



CLIENT:

PORTFOLIO

NOTES:

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- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

TITLE: STRUCTURAL DRAWINGS

DRWG. TITLE: ROOF BEAM DETAILS

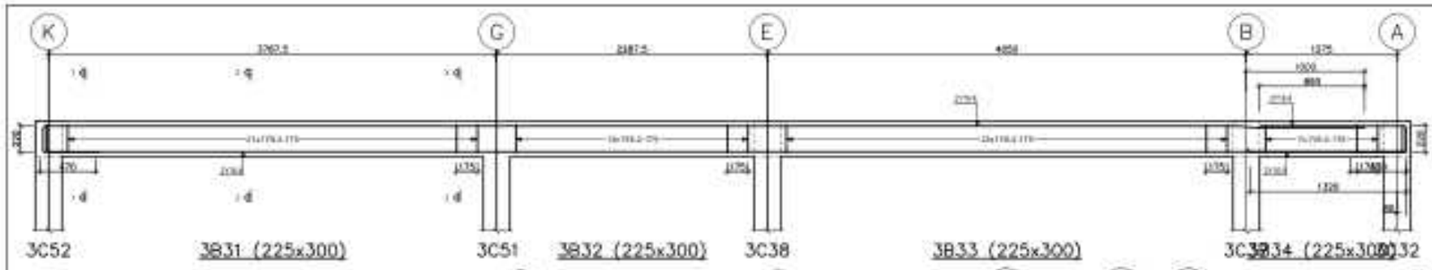
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DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100

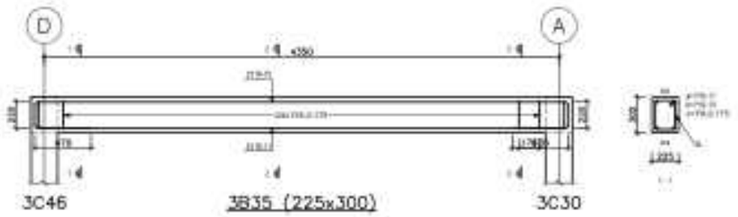
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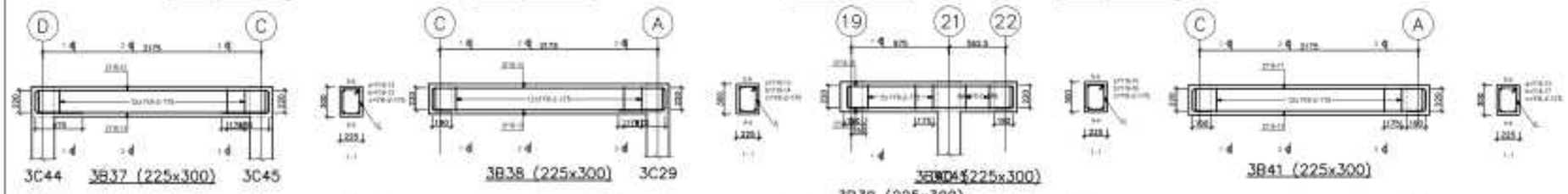
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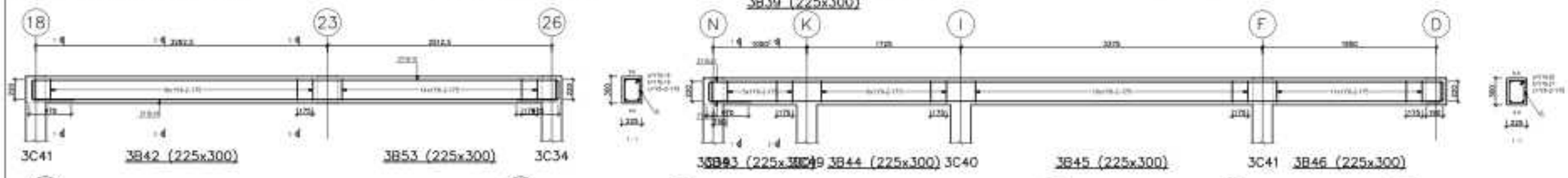
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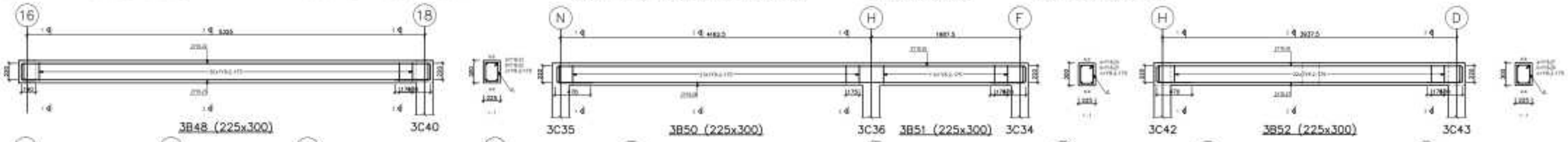
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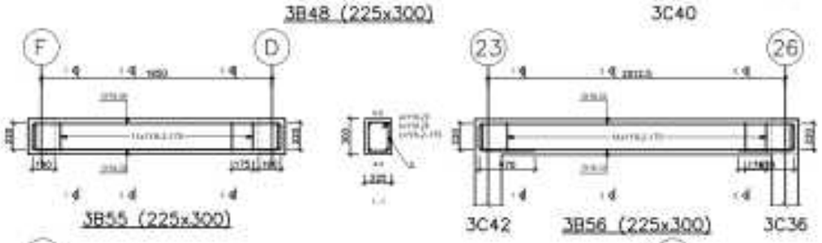


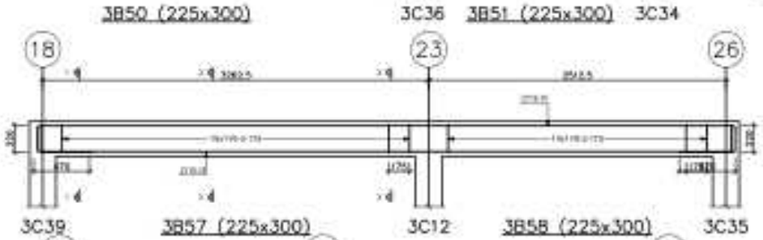


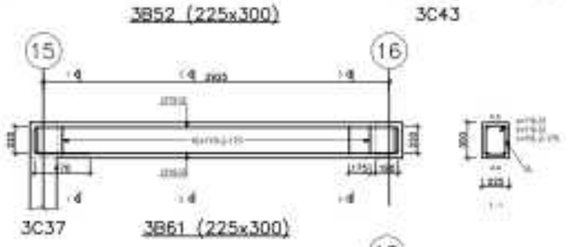


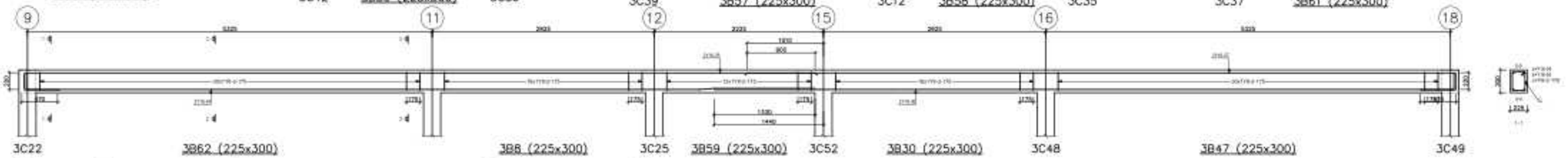












CLIENT:

PORTFOLIO

NOTES:
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PROJECT:

PORTFOLIO

TITLE:

STRUCTURAL DRAWINGS

DRWG. TITLE:

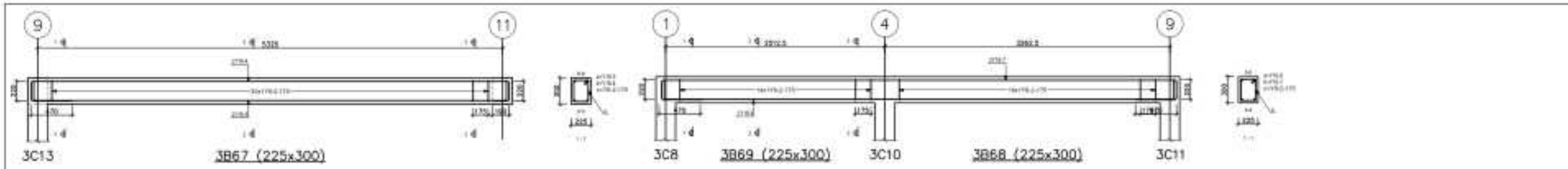
ROOF BEAM DETAILS

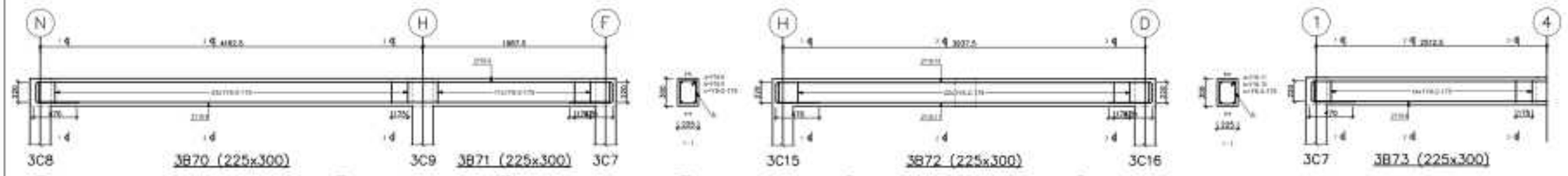
DESIGNED BY:	CHECKED BY:	APPROVED BY:
AYOOLA.S	ENGR. TAIWO.I	

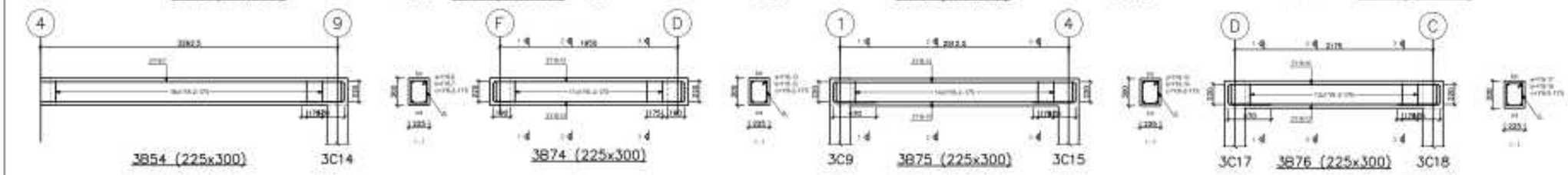
DRAWN: AYOOLA .S | DATE: MAY | SCALE: 1:100 | SHT. 19 | REV:

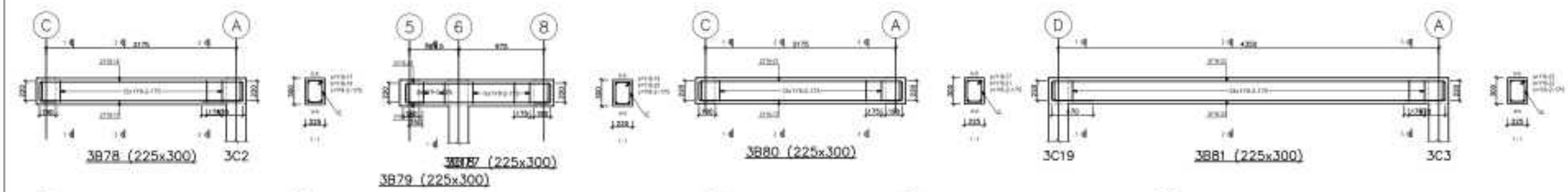
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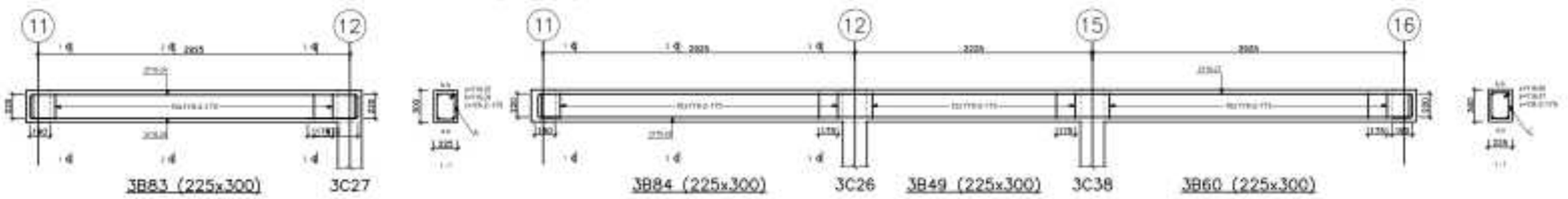
CONSULTING ENGINEERS:











CLIENT:

PORTFOLIO

NOTES:
- All dimension are in 'mm' except stated otherwise
- Do not scale drawings
- All drawings should be read in conjuction with other relevant drawings
- Depth of Foundation to be determined on site

PROJECT:

PORTFOLIO

TITLE:

STRUCTURAL DRAWINGS

DRWG. TITLE:

ROOF BEAM DETAILS

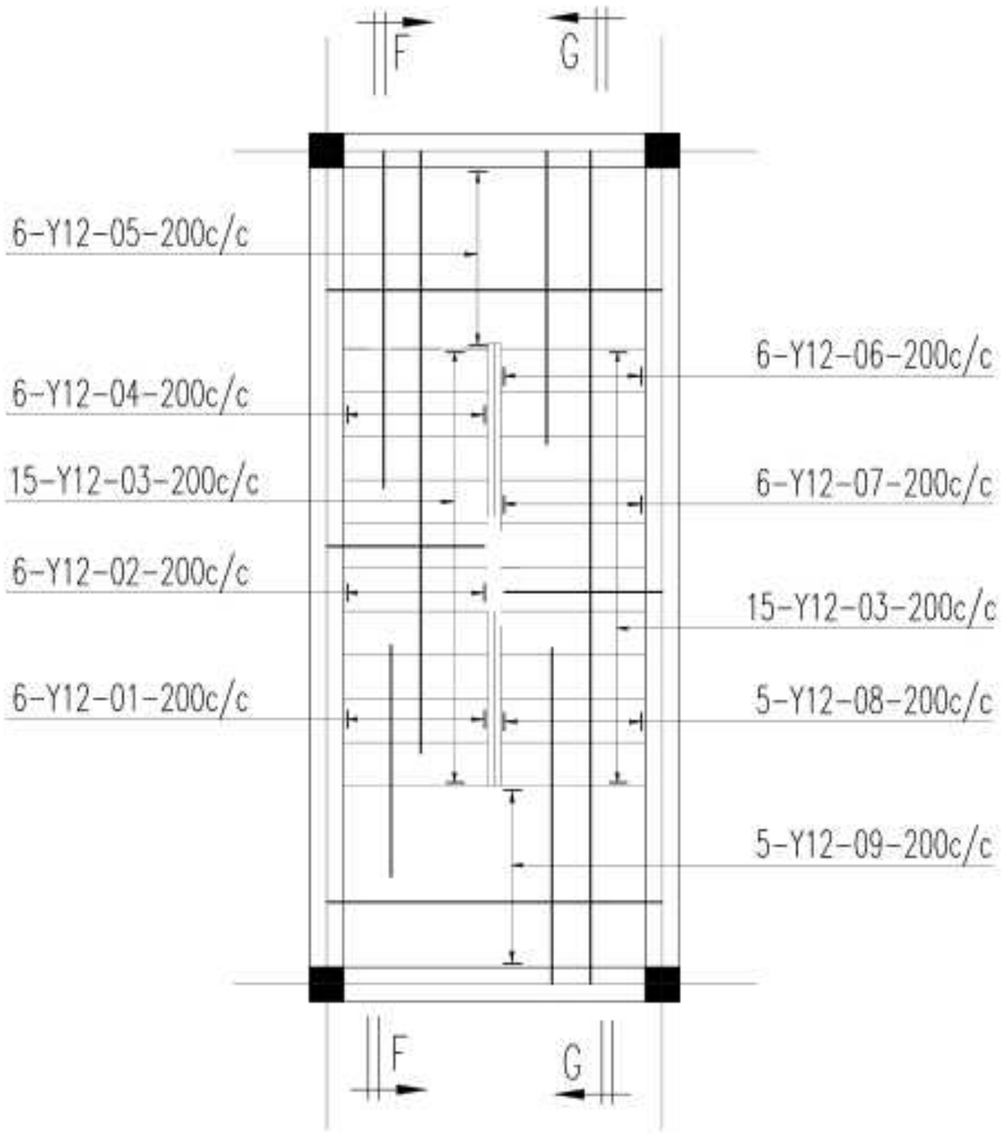
AYOOLA.S	ENGR. TAIWO J	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100

SHT. 20

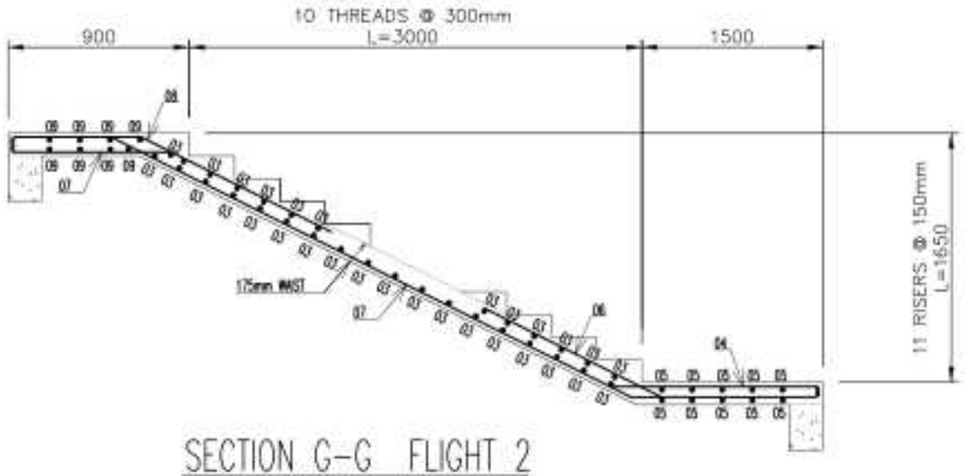
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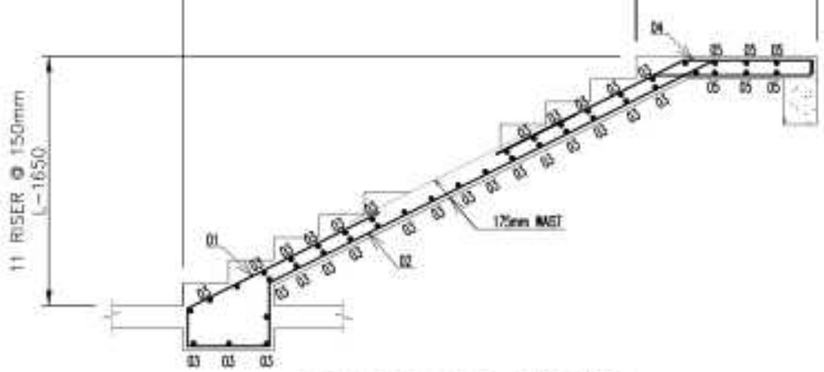
CONSULTING ENGINEERS:



STAIRCASE PLAN



SECTION G-G FLIGHT 2



SECTION F-F FLIGHT 1

CLIENT:

PORTFOLIO

NOTES:

- ALL DIMENSION ARE IN 'MM' EXCEPT STATED OTHERWISE
- DO NOT SCALE DRAWINGS
- ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS
- DEPTH OF FOUNDATION TO BE DETERMINED ON SITE

PROJECT:

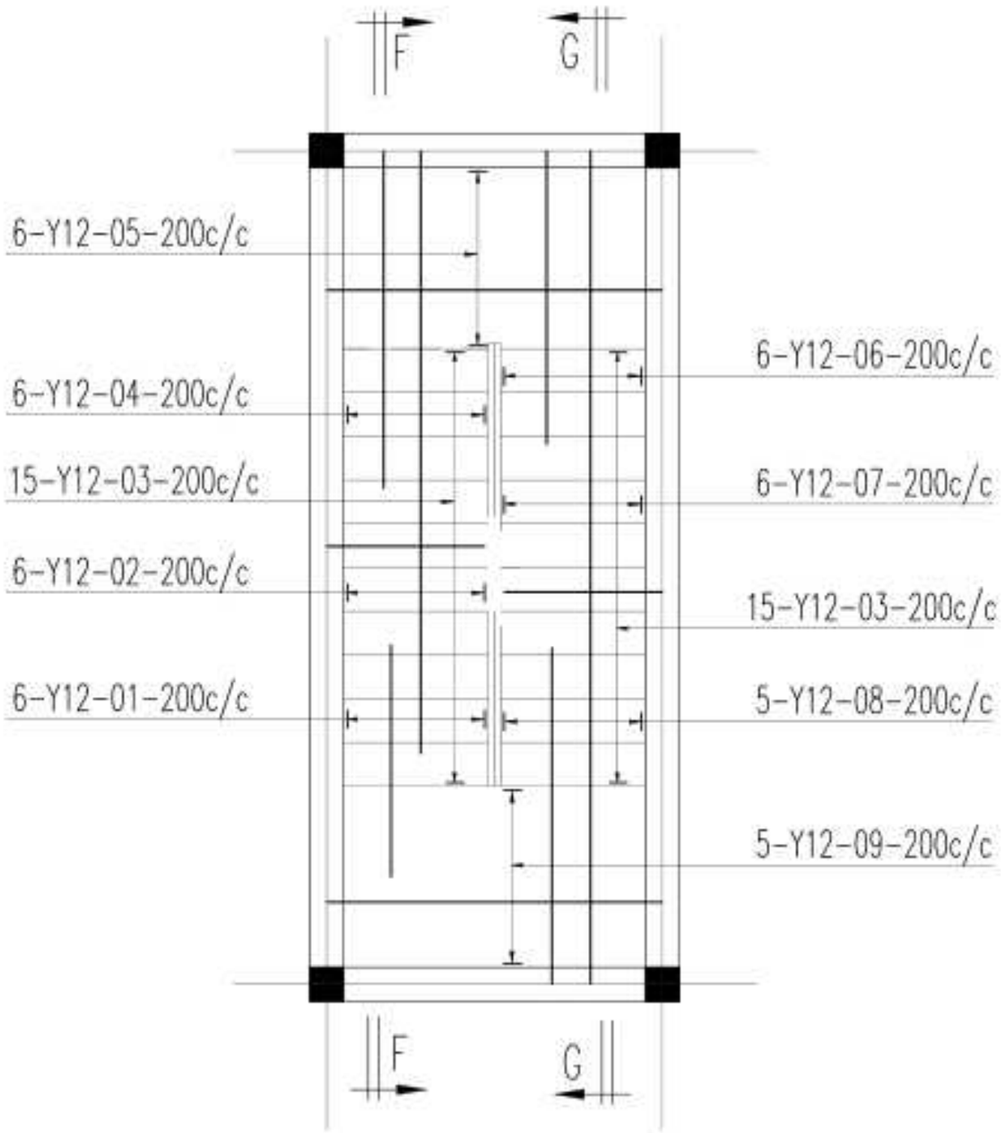
PORTFOLIO

TITLE: STRUCTURAL DRAWINGS

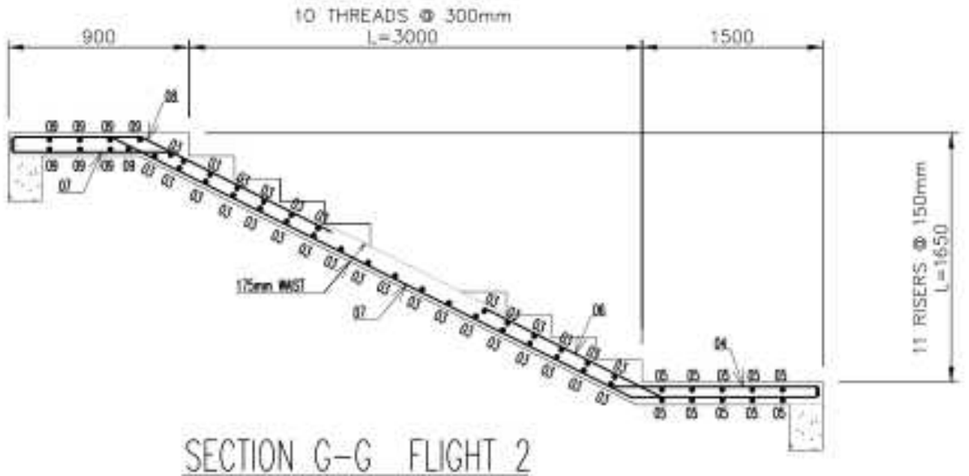
DRWG. TITLE: FIRST R.C STAIRCASE DETAIL

AYOOLA.S	ENGR. TAIWO.I	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100	SHT. 21
DWG. No:		REV: 0

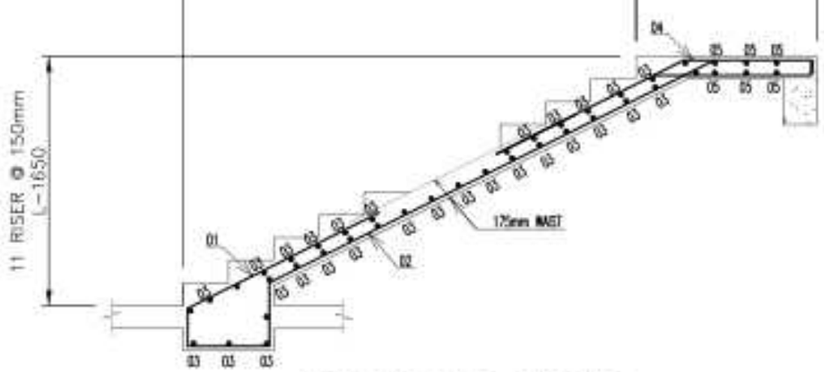
CONSULTING ENGINEERS:



STAIRCASE PLAN



SECTION G-G FLIGHT 2



SECTION F-F FLIGHT 1

CLIENT:

PORTFOLIO

NOTES:

- ALL DIMENSION ARE IN 'MM' EXCEPT STATED OTHERWISE
- DO NOT SCALE DRAWINGS
- ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH OTHER RELEVANT DRAWINGS
- DEPTH OF FOUNDATION TO BE DETERMINED ON SITE

PROJECT:

PORTFOLIO

TITLE: STRUCTURAL DRAWINGS

DRWG. TITLE: SECOND R.C STAIRCASE DETAIL

AYOOLA.S	ENGR. TAIWO.I	
DESIGNED BY:	CHECKED BY:	APPROVED BY:
DRAWN: AYOOLA.S	DATE: MAY	SCALE: 1:100	SHT. 22
DWG. No:		REV: 0

CONSULTING ENGINEERS: