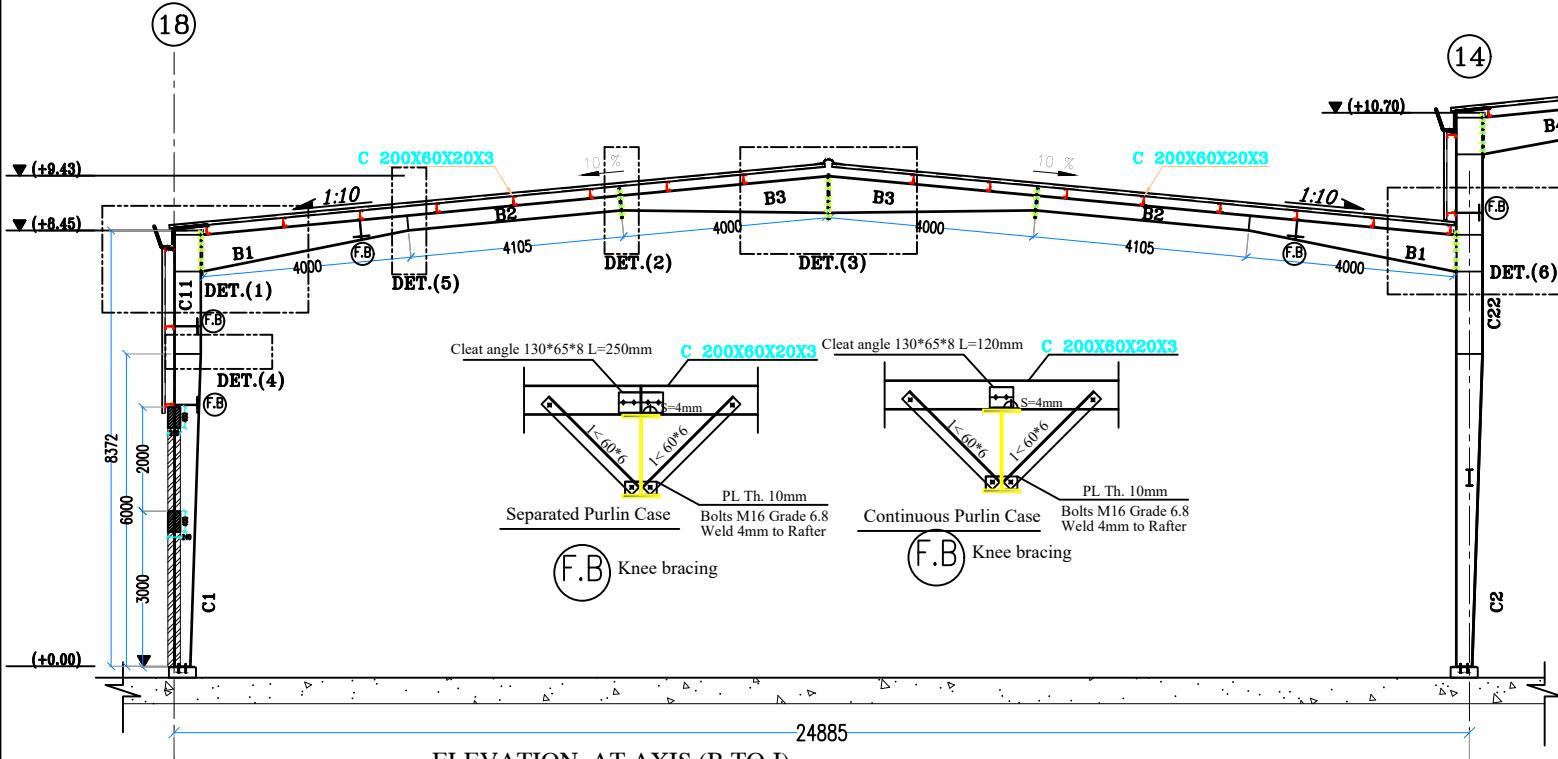
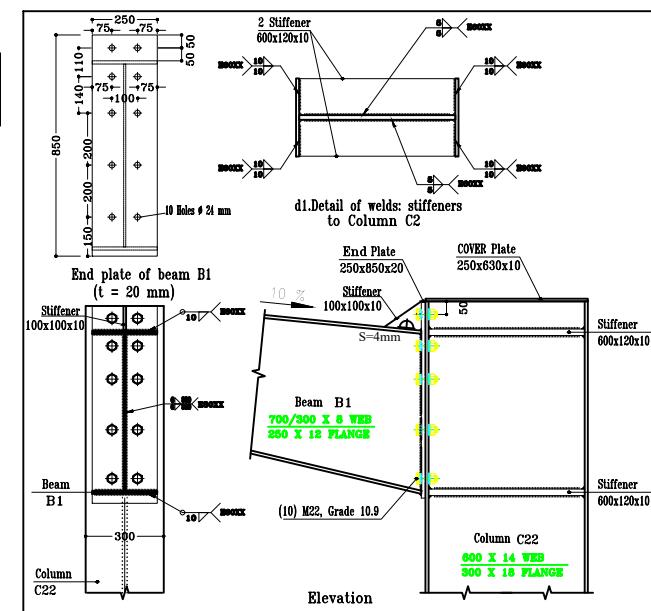


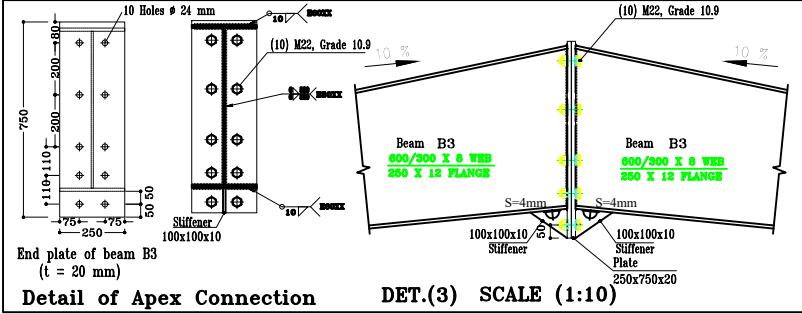
18



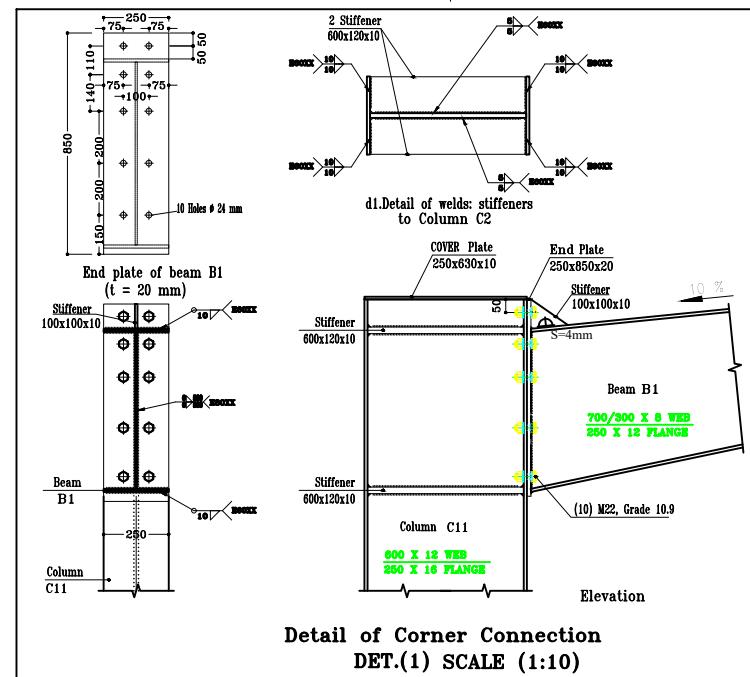
14



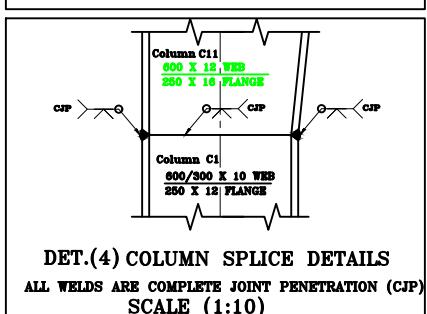
ELEVATION AT AXIS (B TO J)
SCALE 1:100

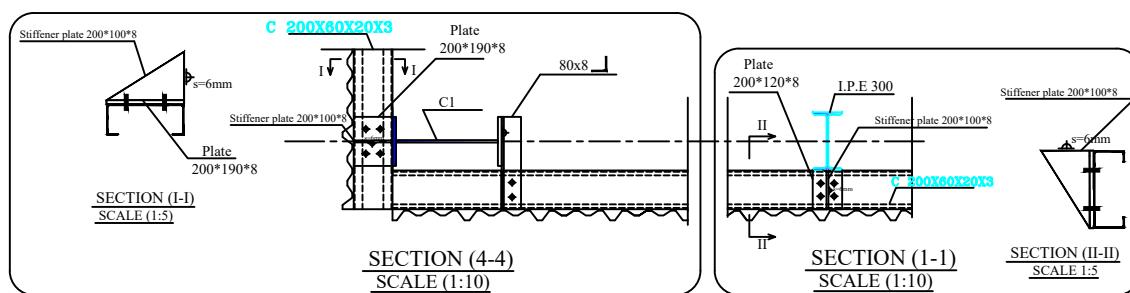
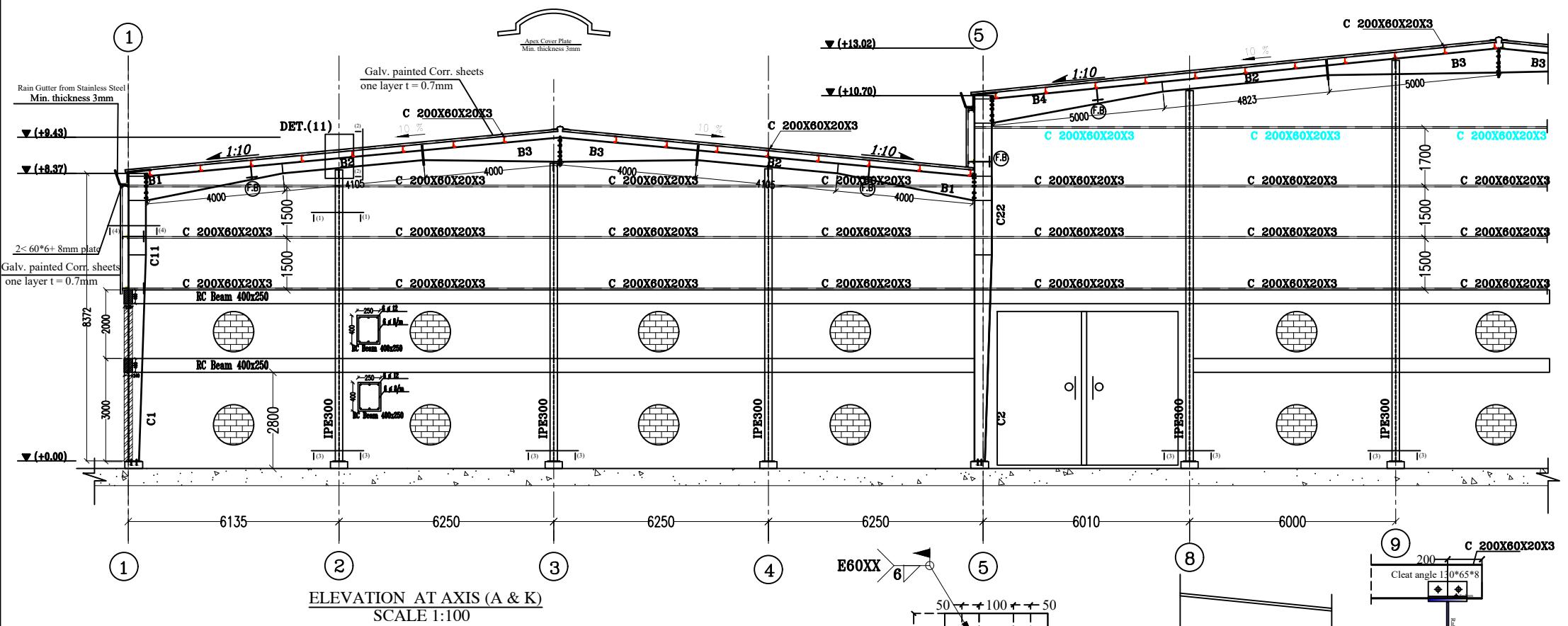


DET.(2) BEAM SPLICE DETAILS SCALE (1:10)



Detail of Corner Connection DET.(1) SCALE (1:10)





Base Plate for Column C3 (I.P.E 300)
BASE PLATE B.PL(3) 35x20x2cm

Short Column 45x30 cm

Anchor Bolts (4φ20)

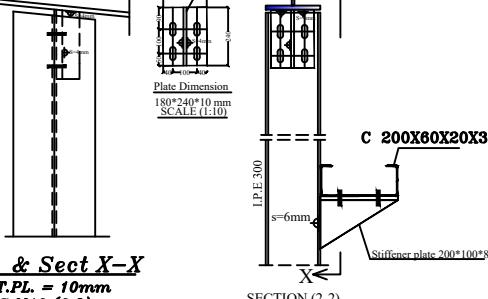
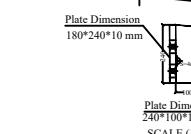
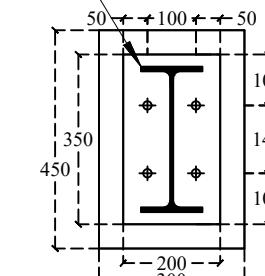
Scale 1:10

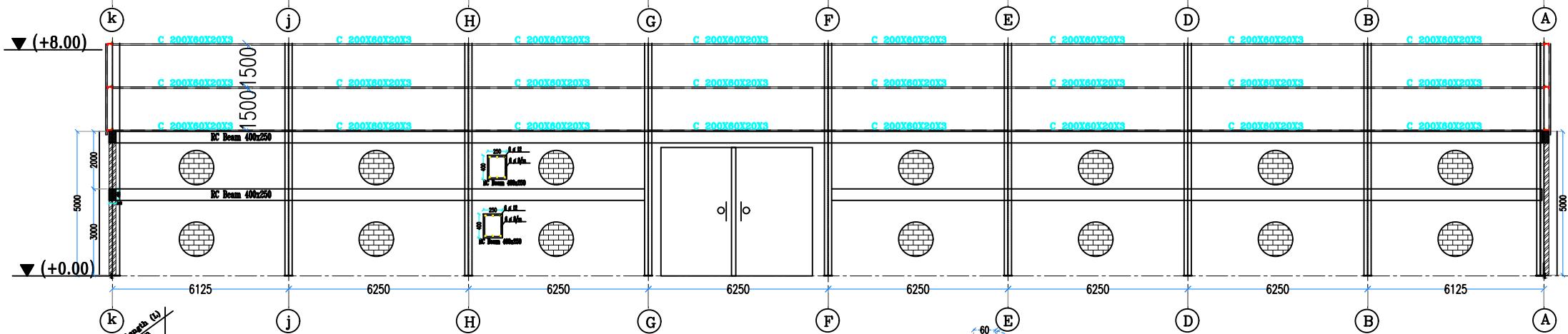
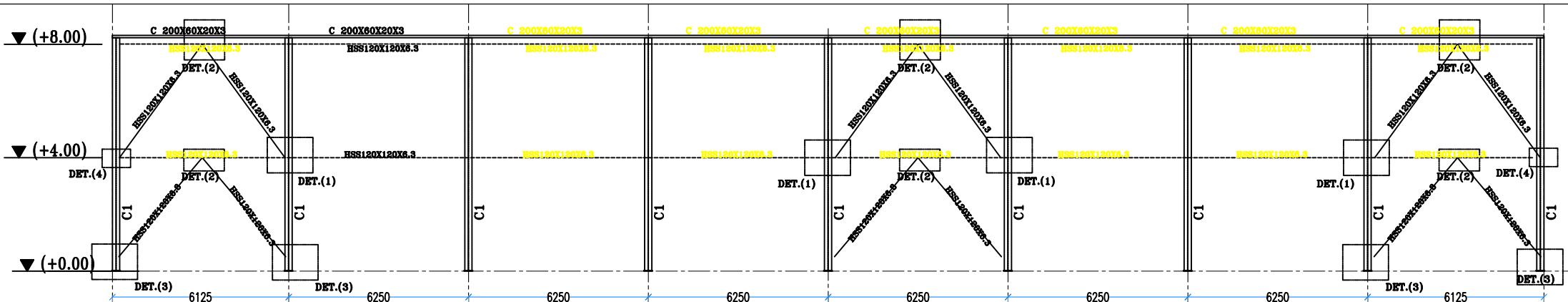
B.PL(3)

Sect. 3-3

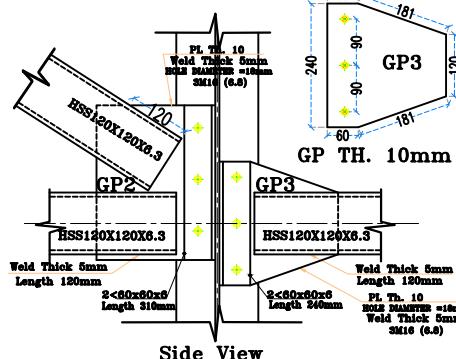
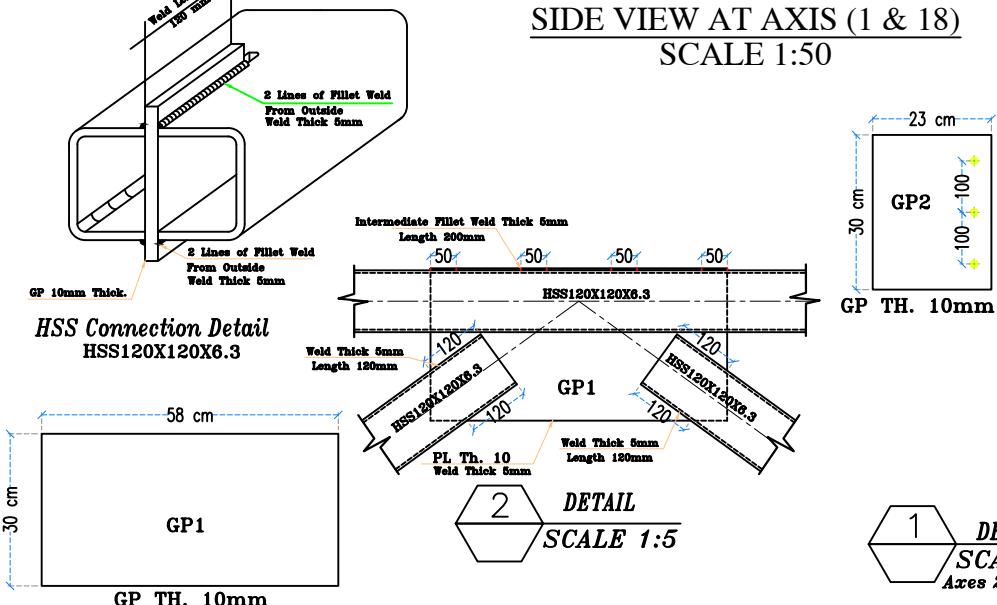
Detail 11 & Sect X-X
THK. OF ST.PL. = 10mm
ORD.BOLTS M16 (6.8)
HOLES : slotted

SECTION (2-2)
SCALE (1:10)

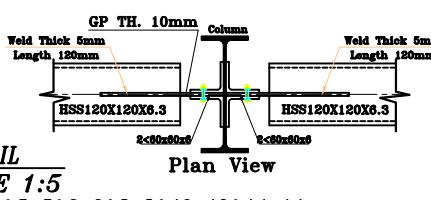




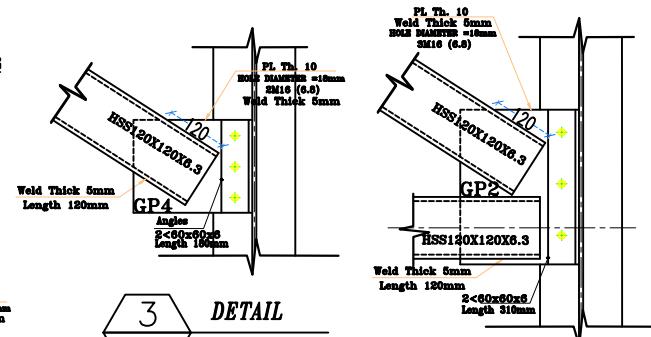
SIDE VIEW AT AXIS (1 & 18)
SCALE 1:50



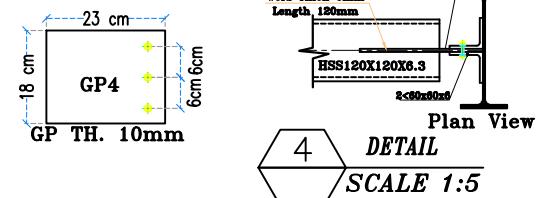
3 DETAIL
SCALE 1:5

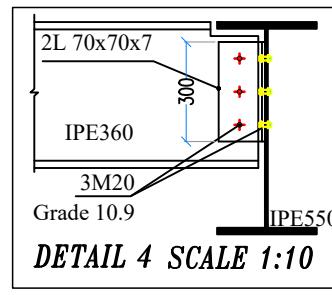
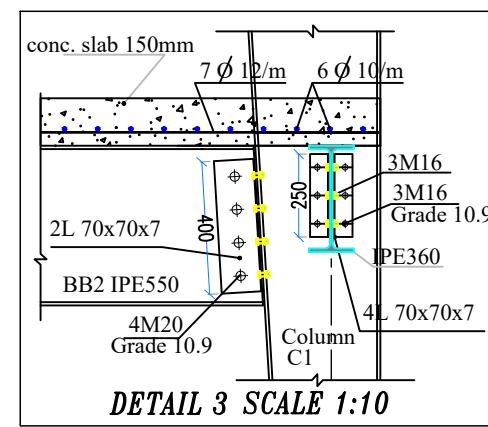
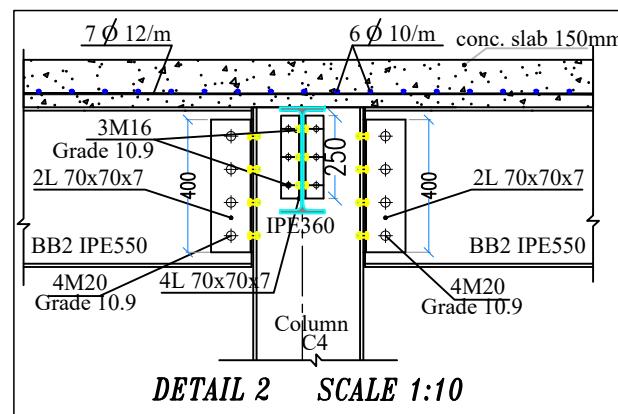
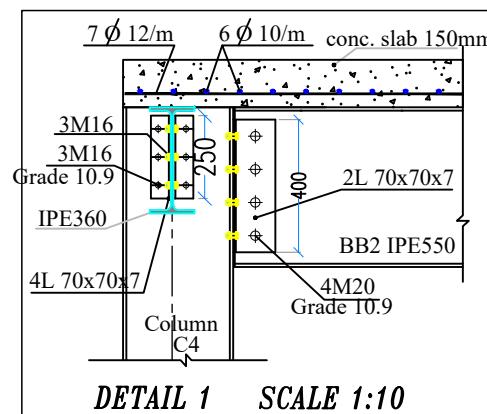
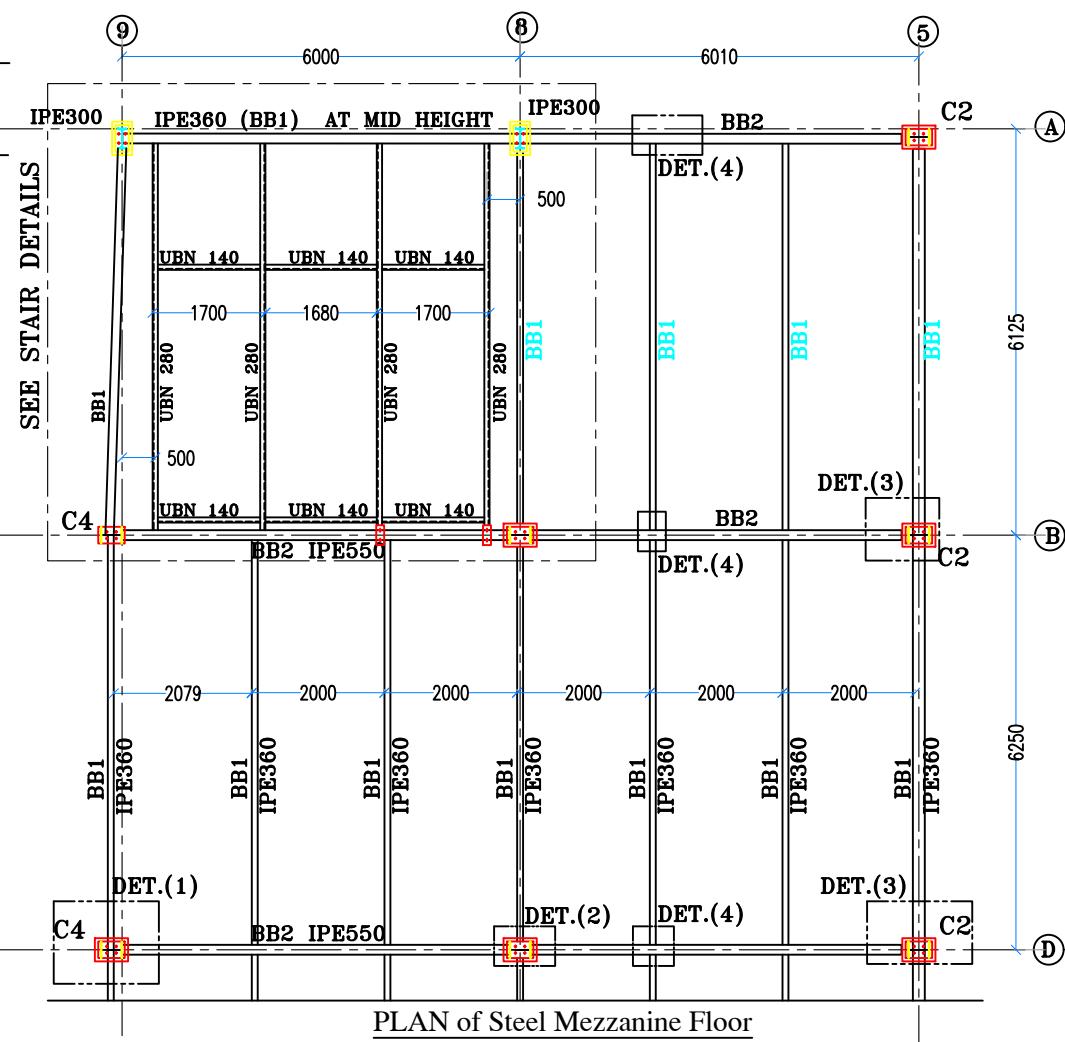
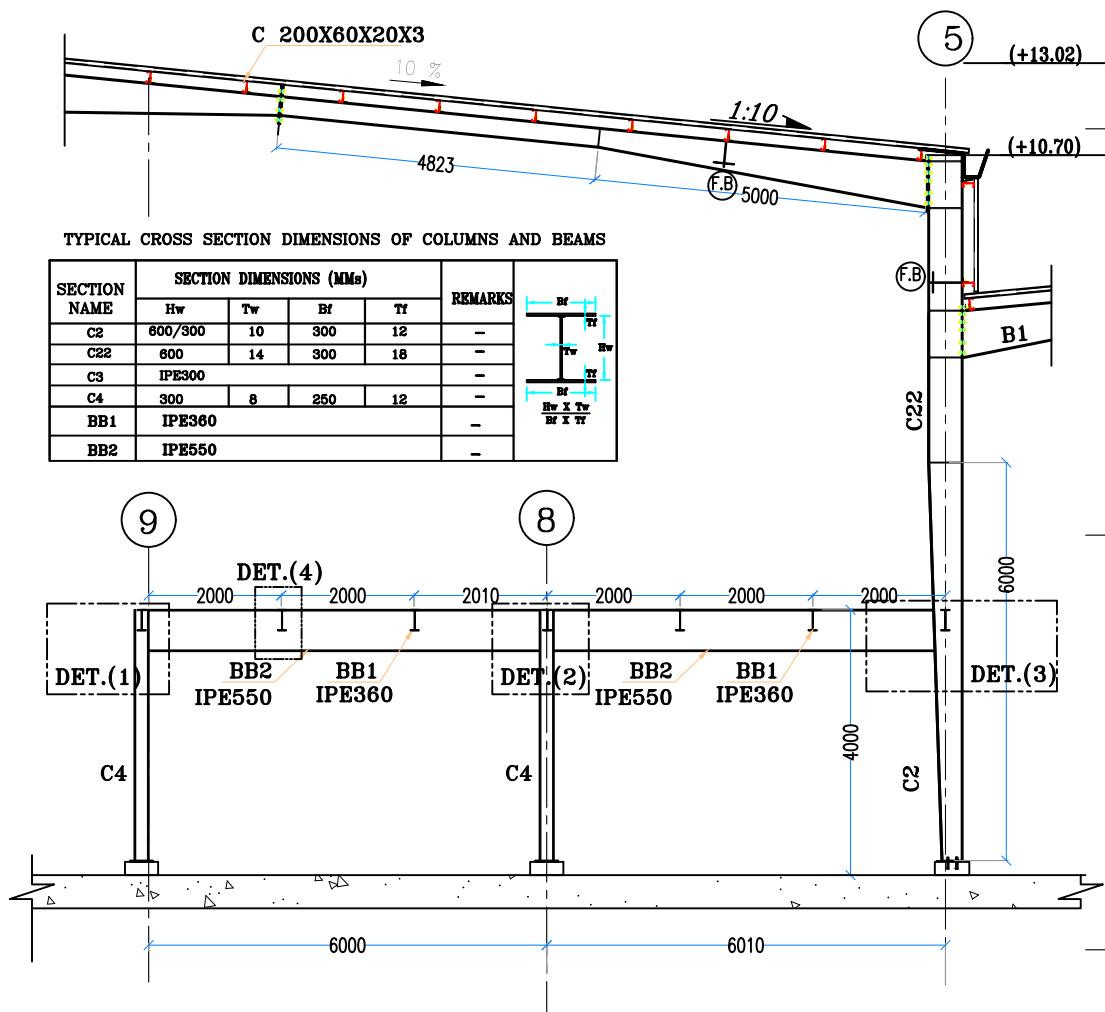


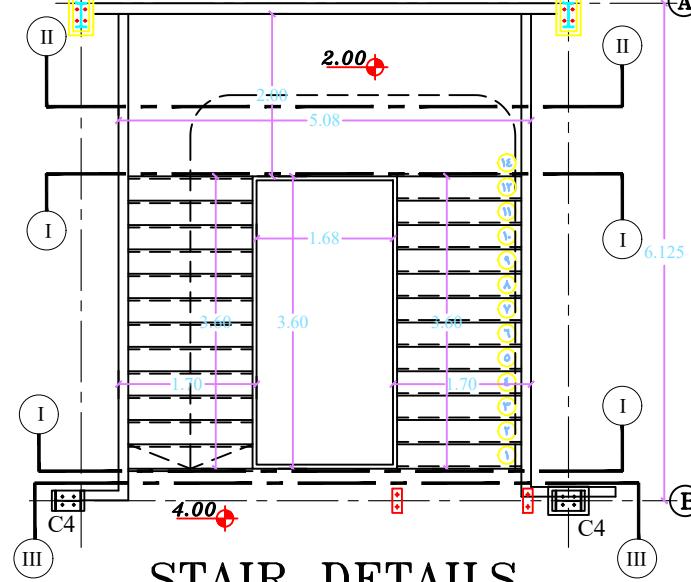
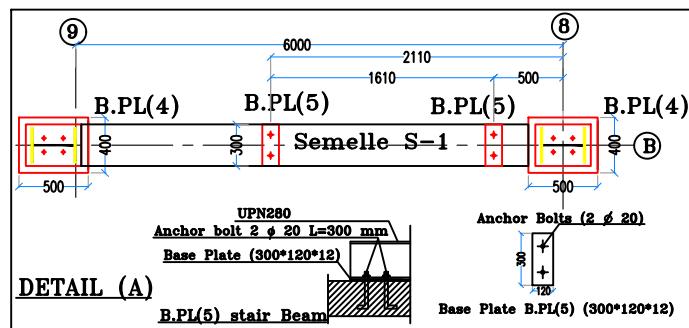
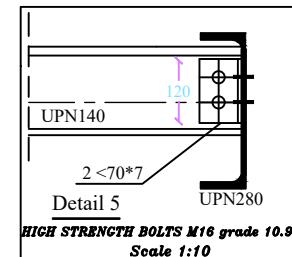
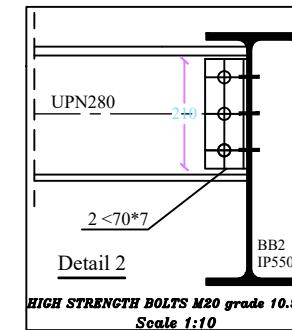
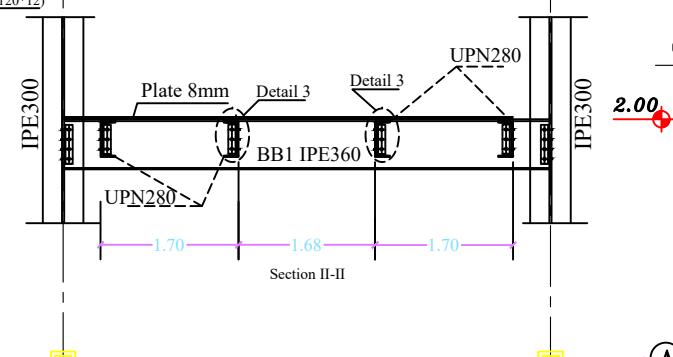
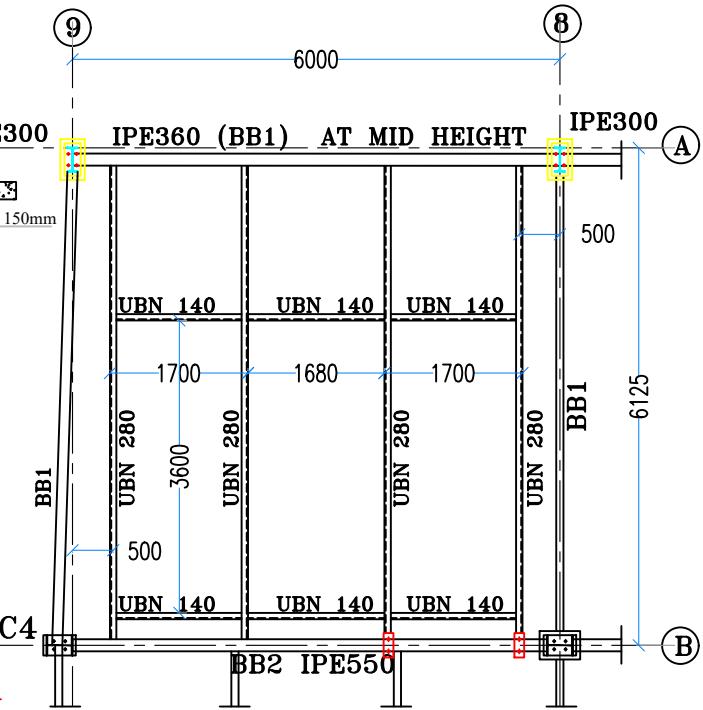
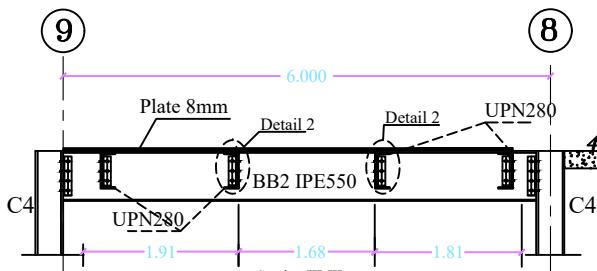
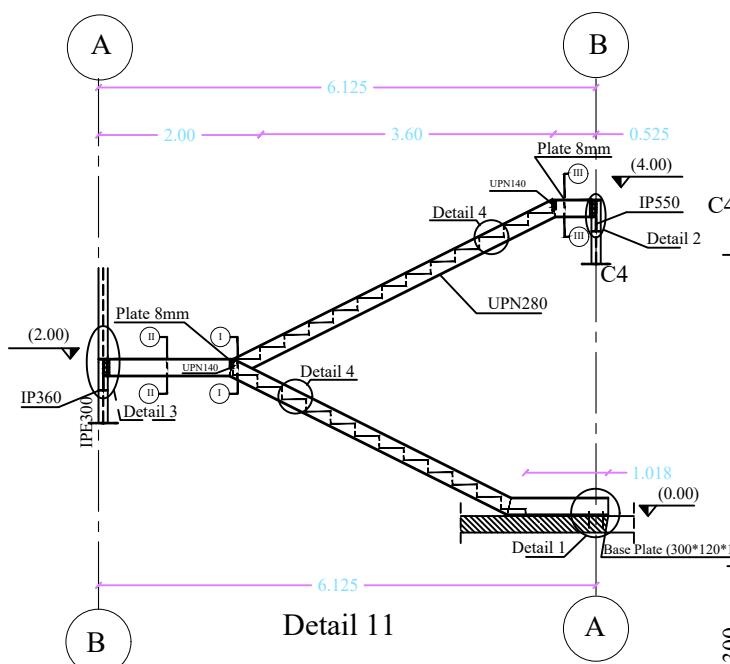
1 DETAIL
SCALE 1:5
Axes 2-2&5-5&6-6&8-8&10-10&14-14

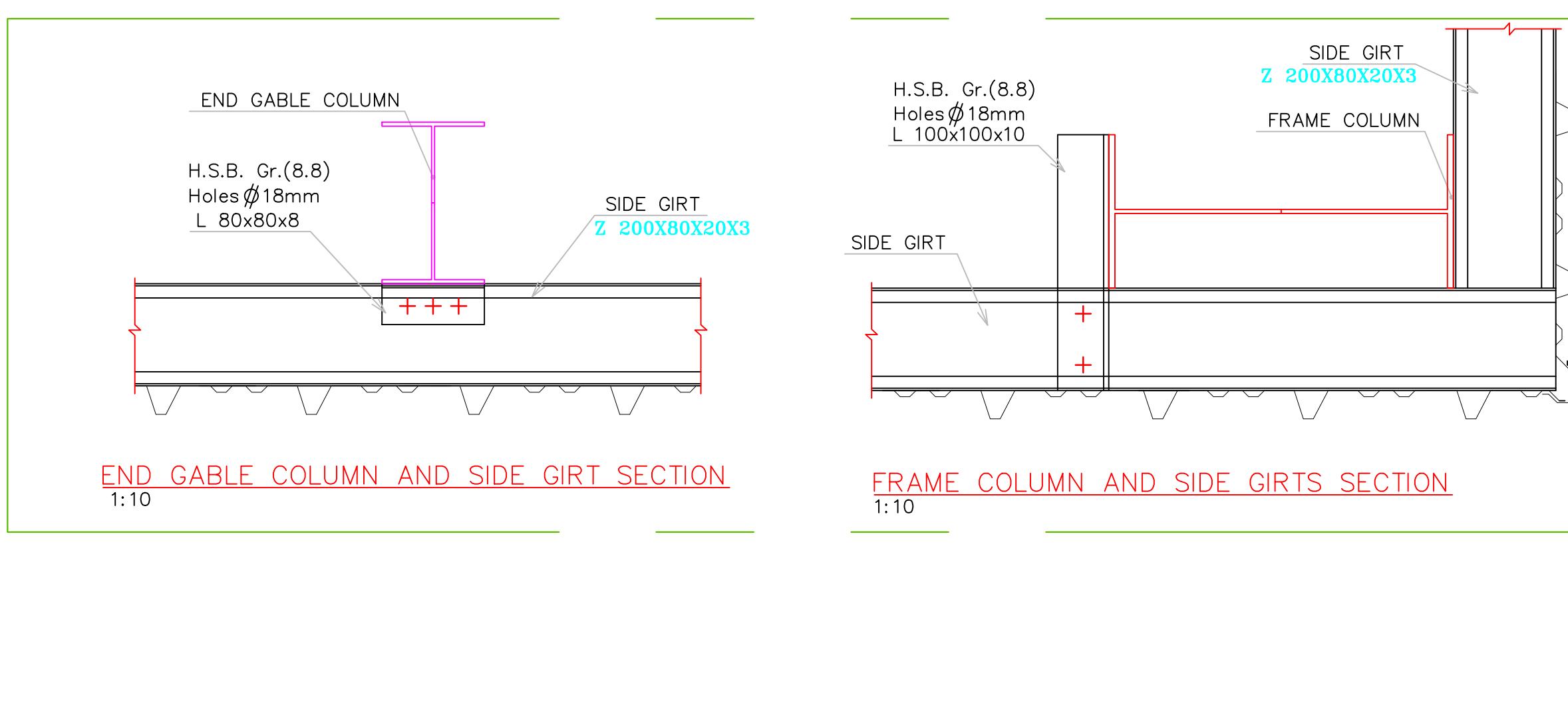
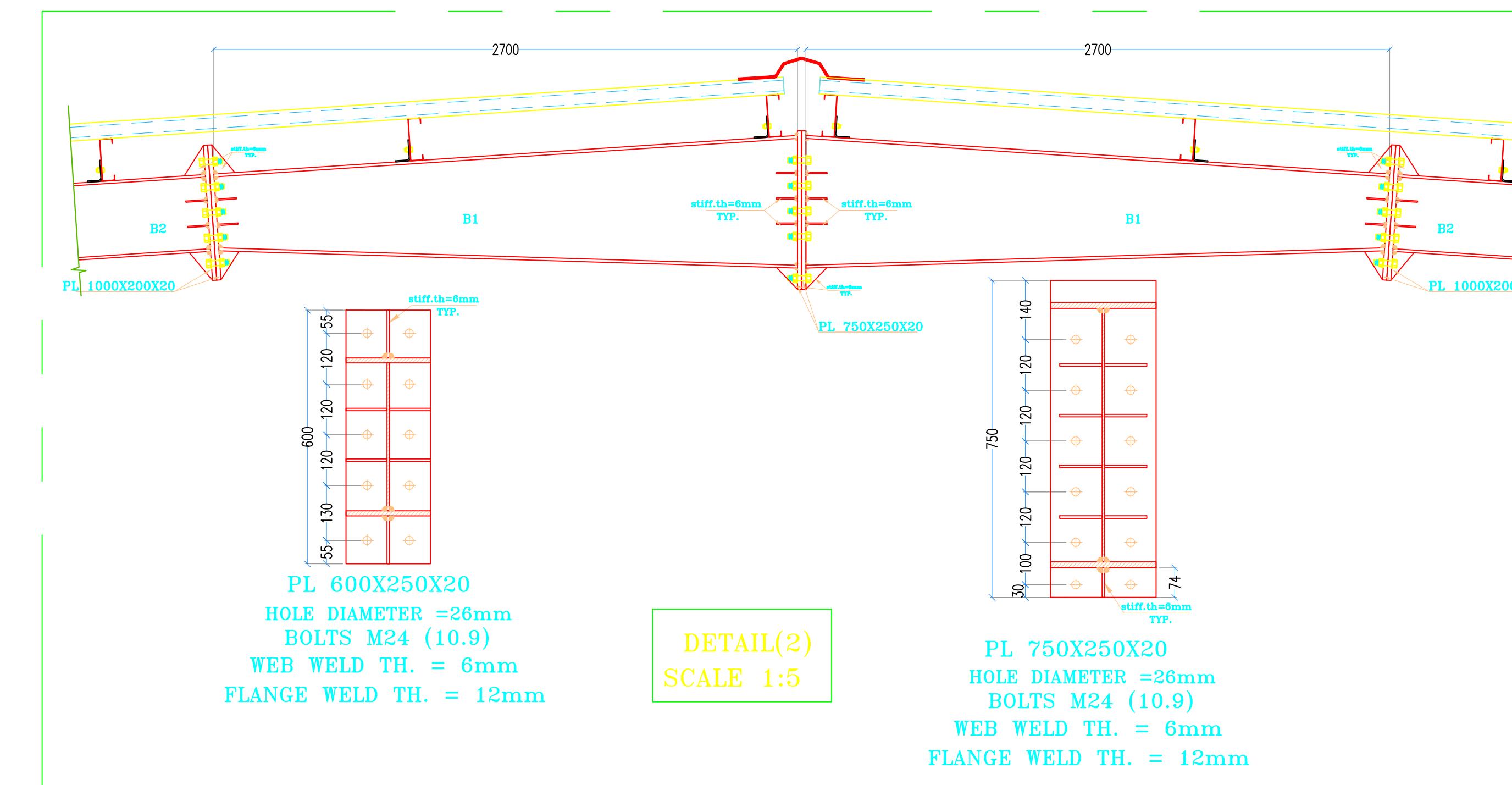
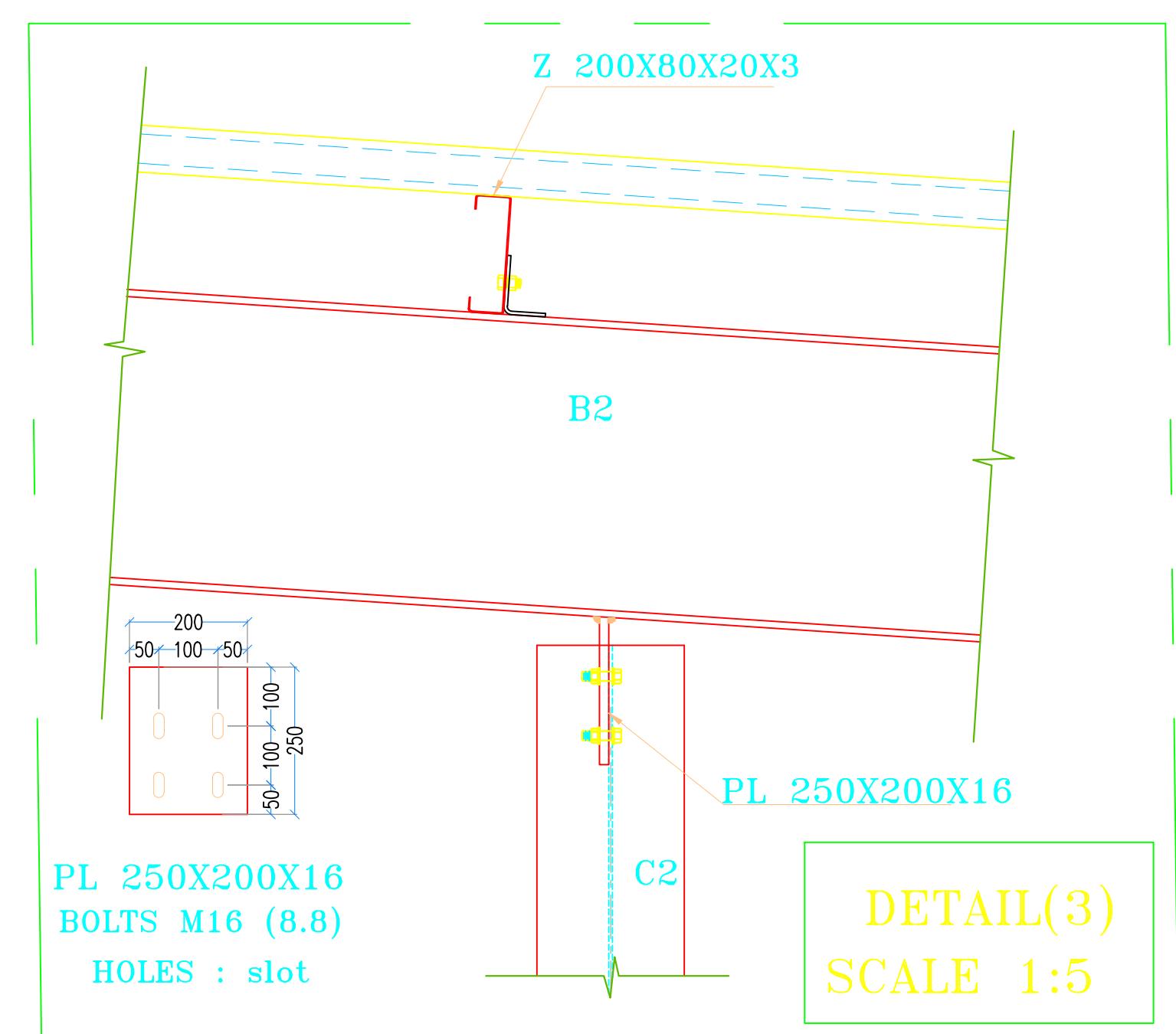
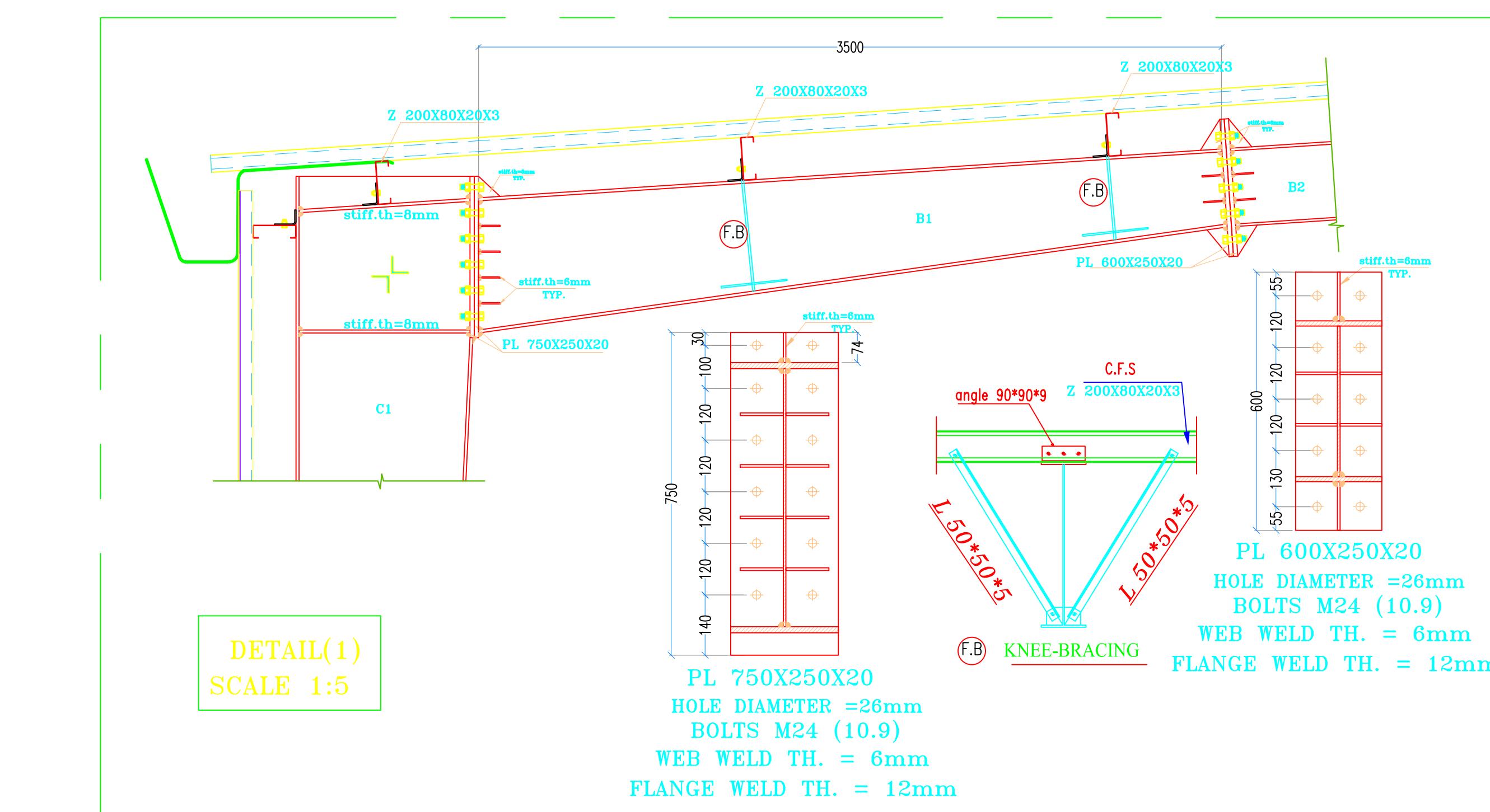
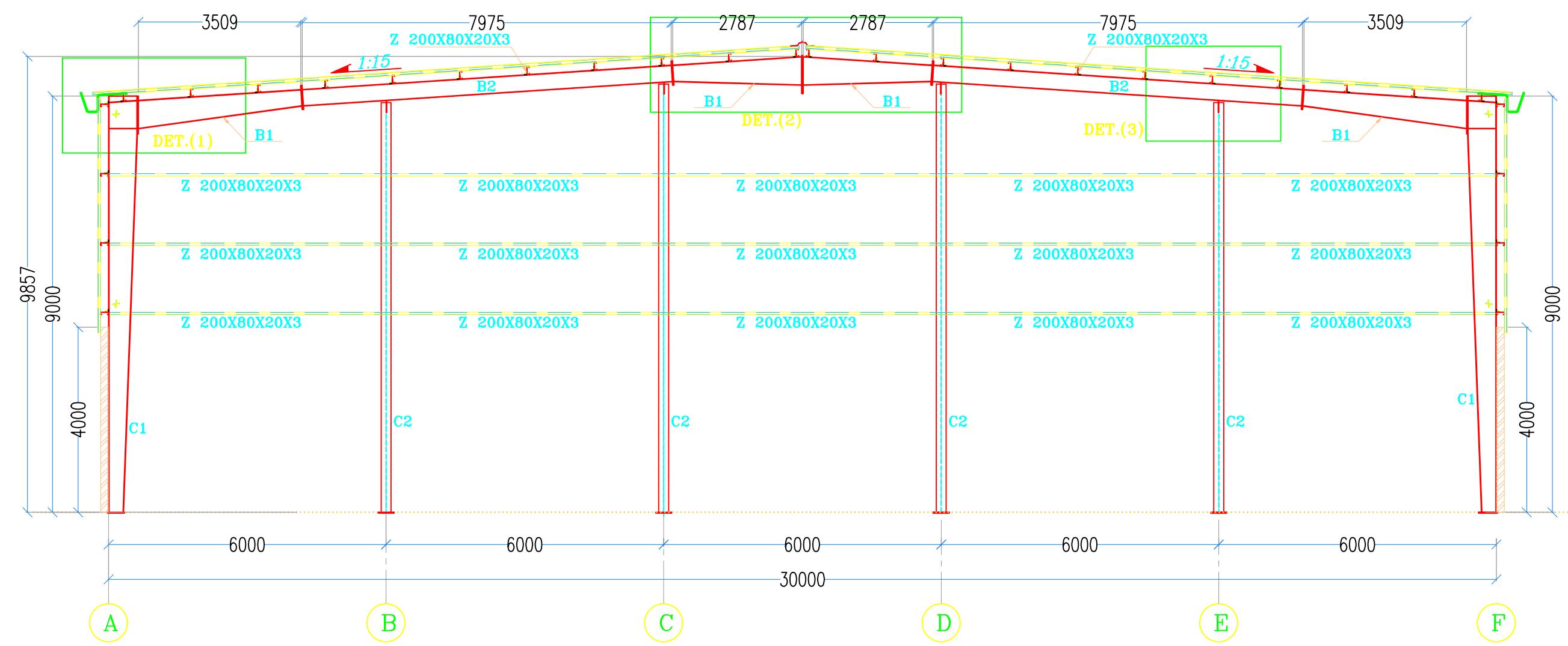


4 DETAIL
SCALE 1:5
Axes 1-1&9-9&15-15



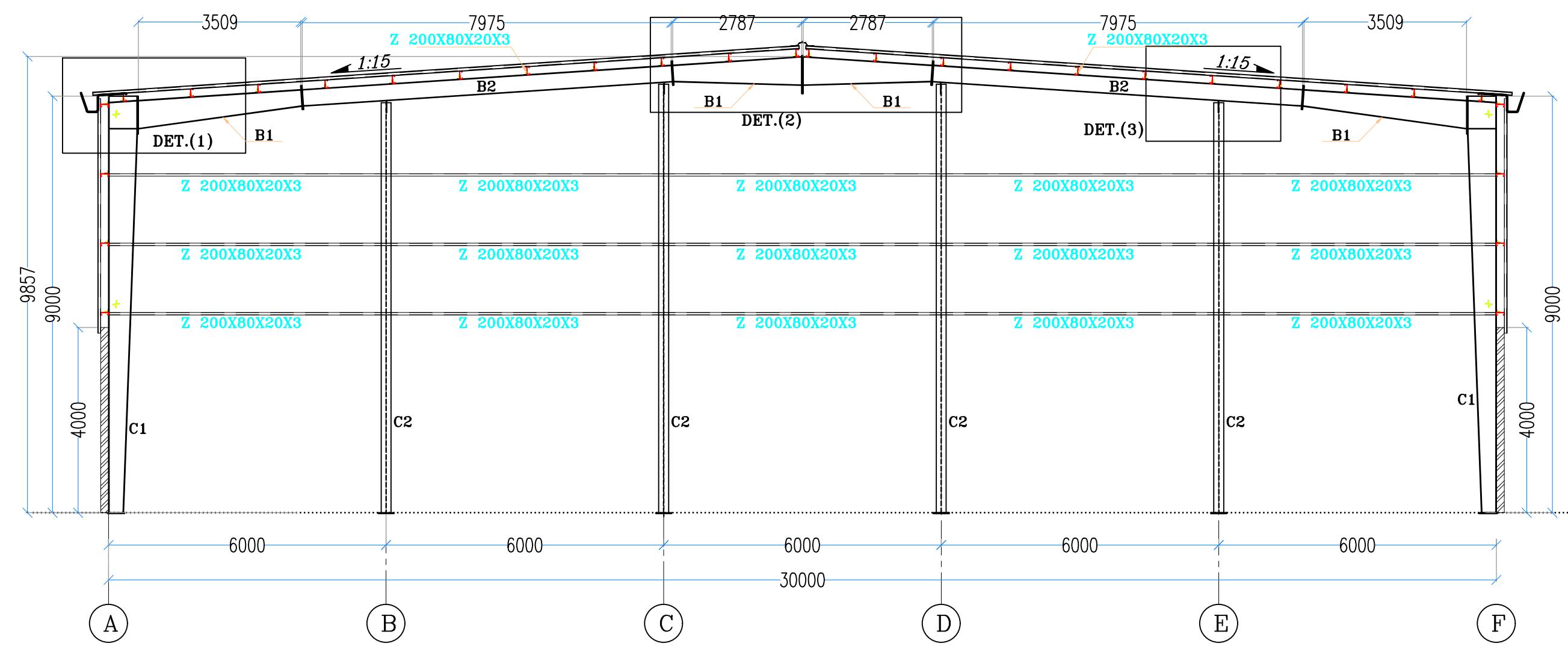




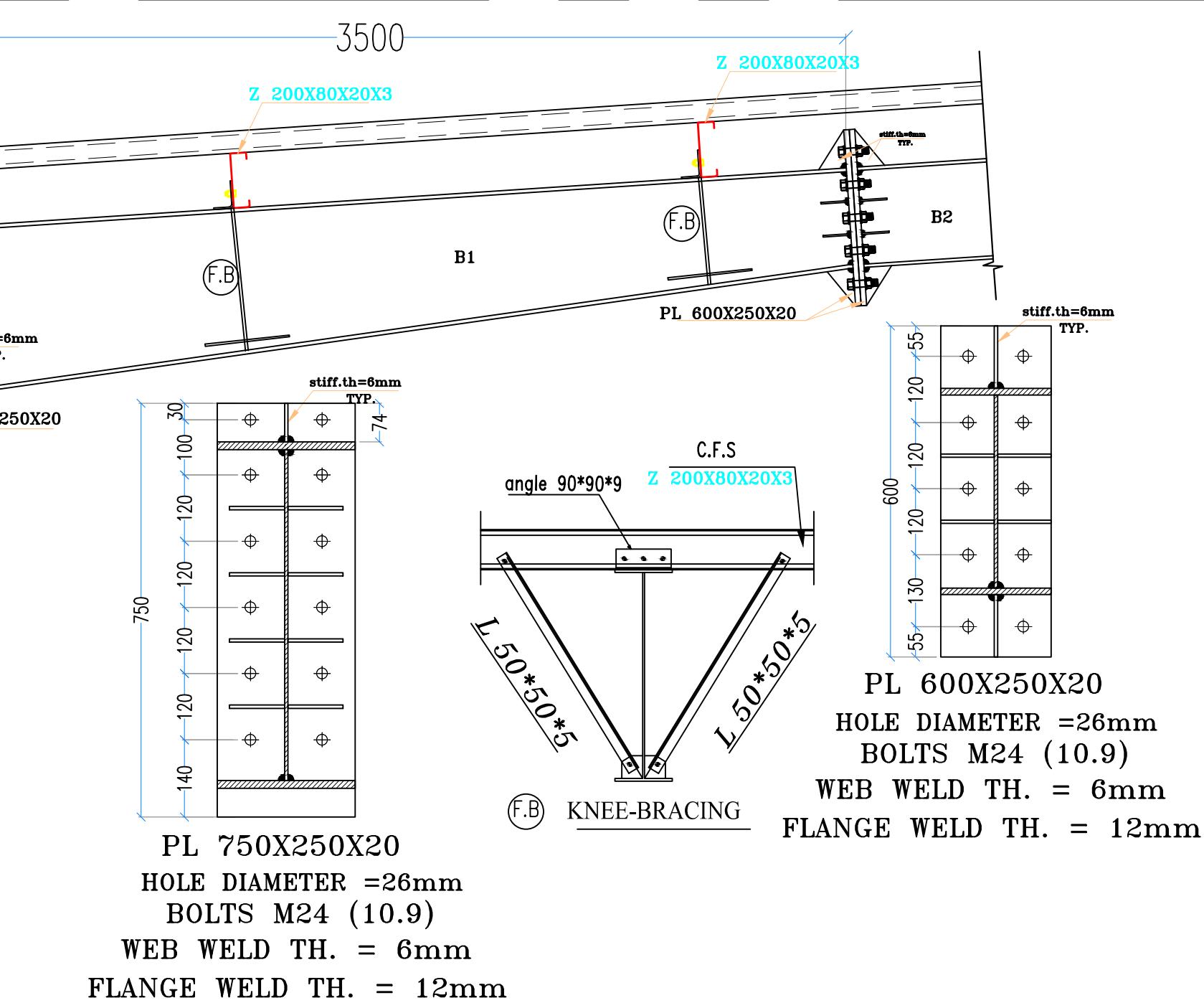


| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tf | |
| C1 | 600/300 | 8 | 250 | 12 | — |
| C2 | 300 | 6 | 200 | 10 | — |
| C3 | 300 | 6 | 200 | 12 | — |
| C4 | 200 | 6 | 150 | 6 | — |

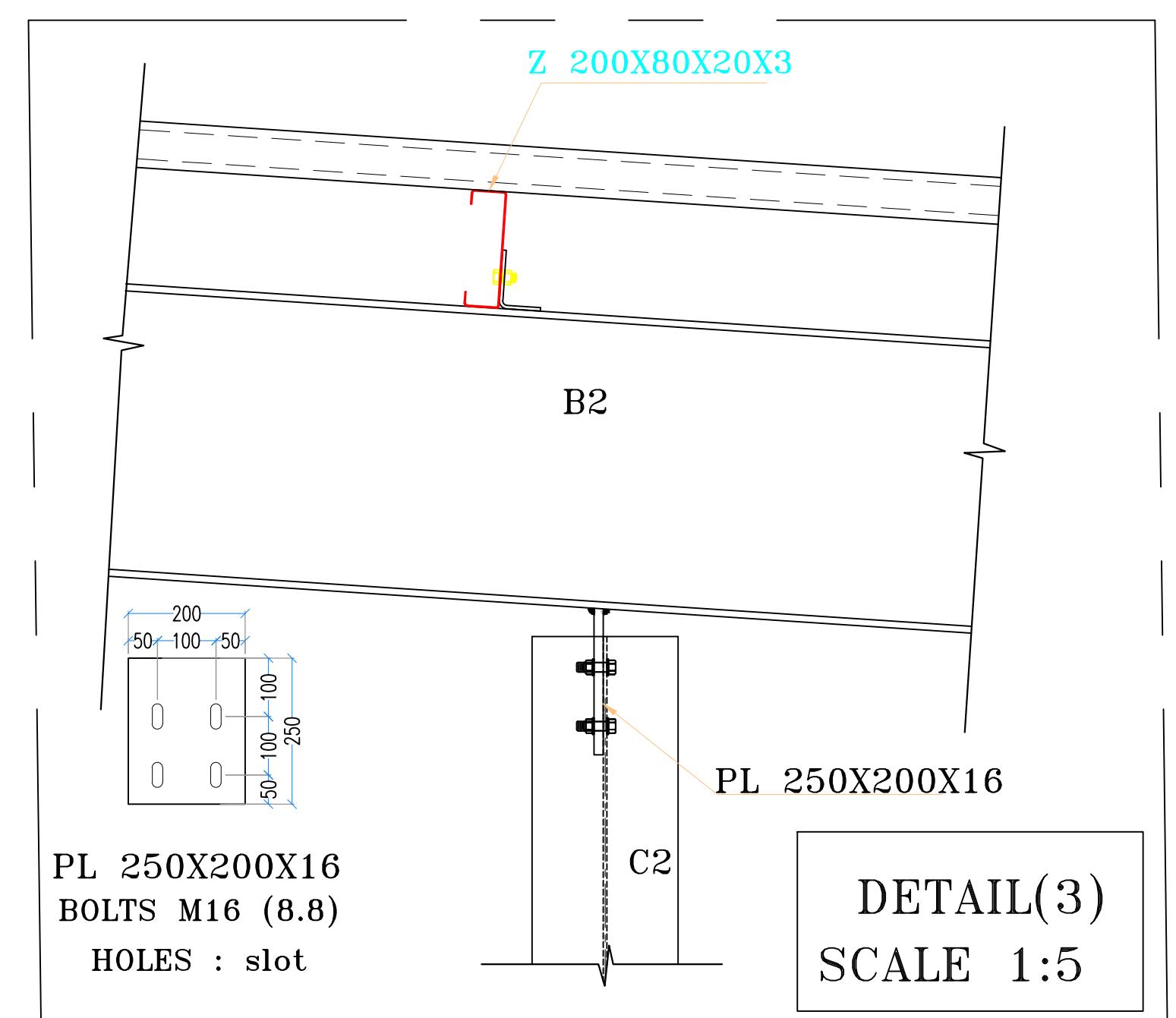
| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tf | |
| B1 | 600/350 | 6 | 250 | 12 | — |
| B2 | 350 | 6 | 250 | 12 | — |
| B3 | 750 | 10 | 280 | 16 | — |
| B4 | 300 | 6 | 120 | 8 | — |



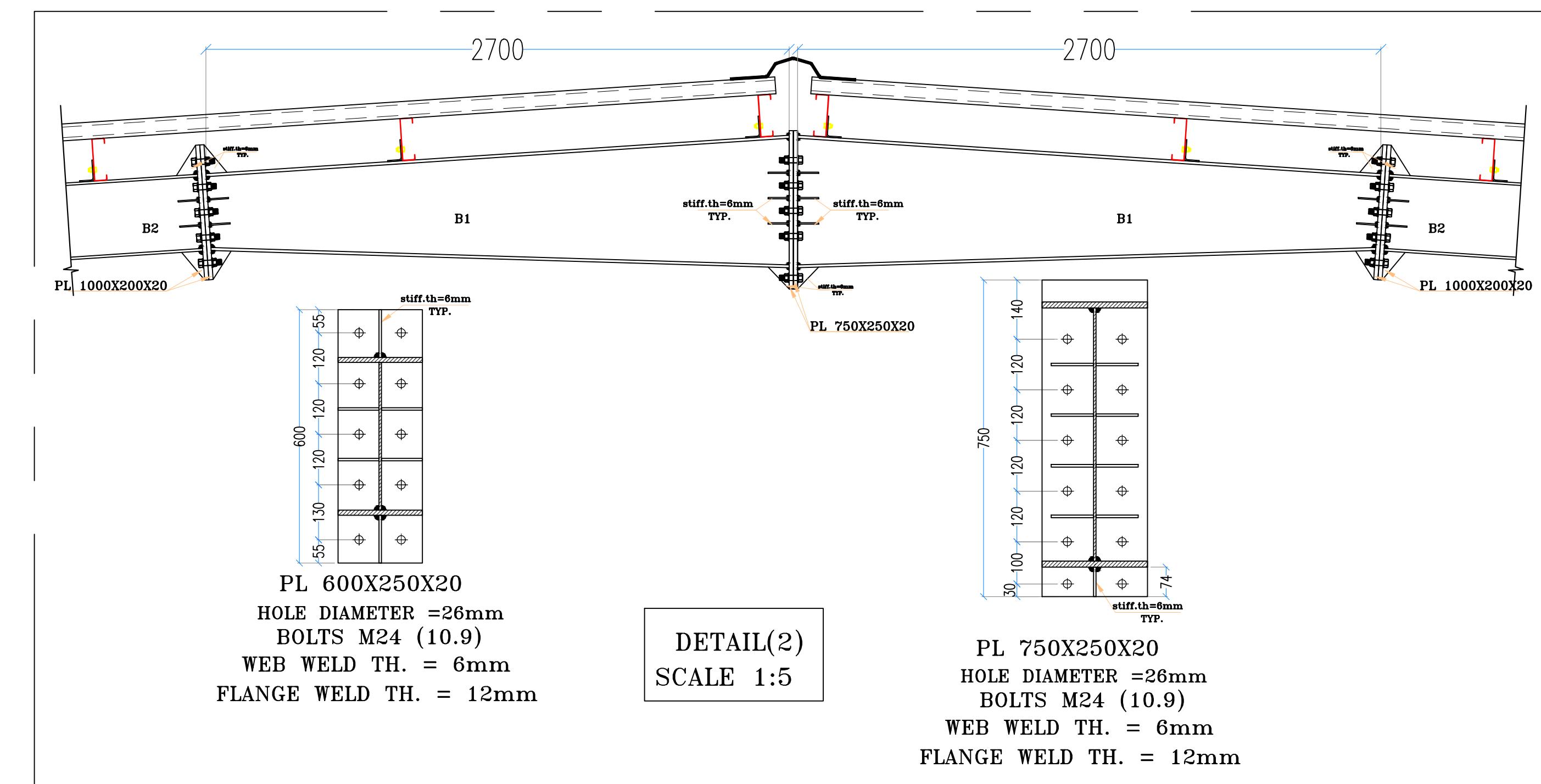
DETAIL(1)
SCALE 1:5



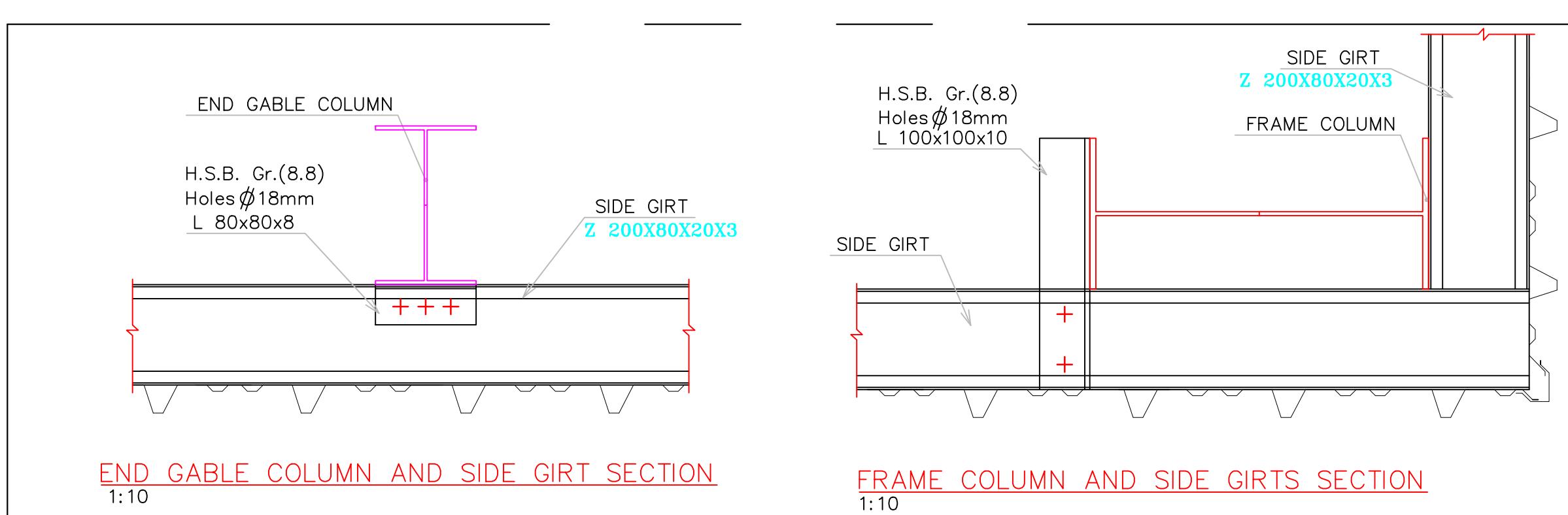
PL 750X250X20
HOLE DIAMETER =26mm
BOLTS M24 (10.9)
WEB WELD TH. = 6mm
FLANGE WELD TH. = 12mm



DETAIL(3)
SCALE 1:5



PL 750X250X20
HOLE DIAMETER =26mm
BOLTS M24 (10.9)
WEB WELD TH. = 6mm
FLANGE WELD TH. = 12mm

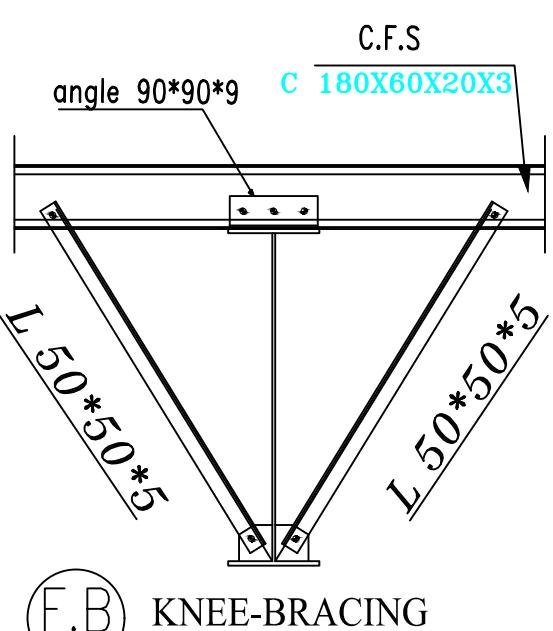
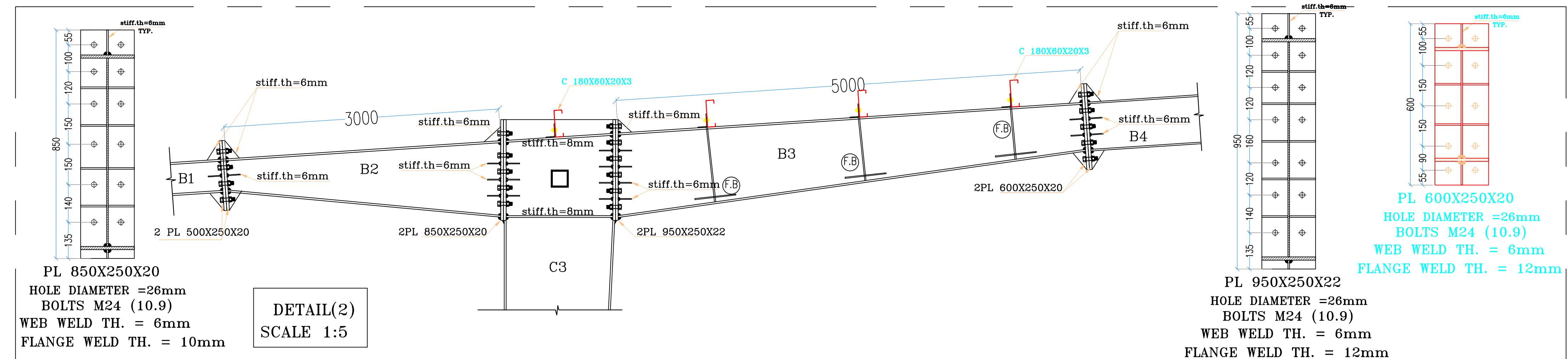
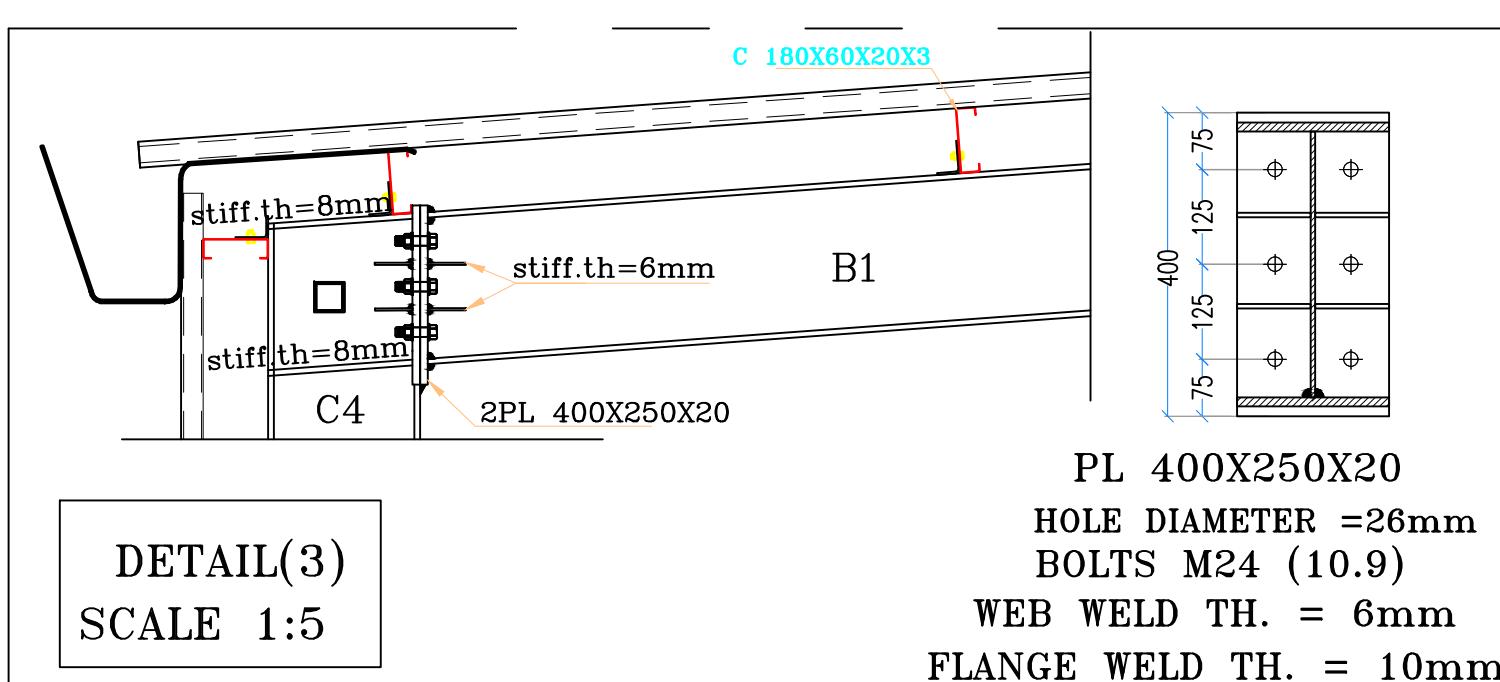
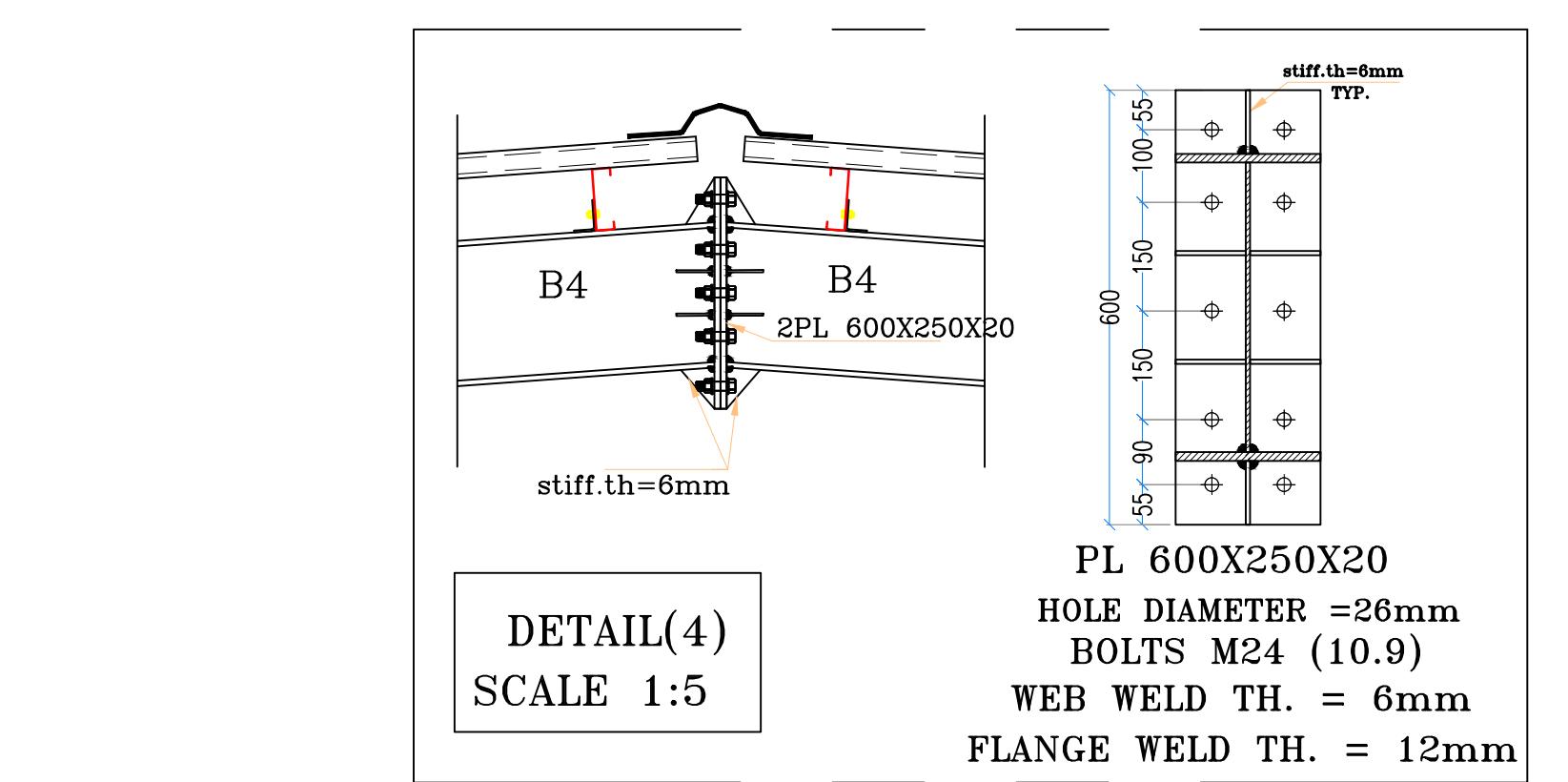
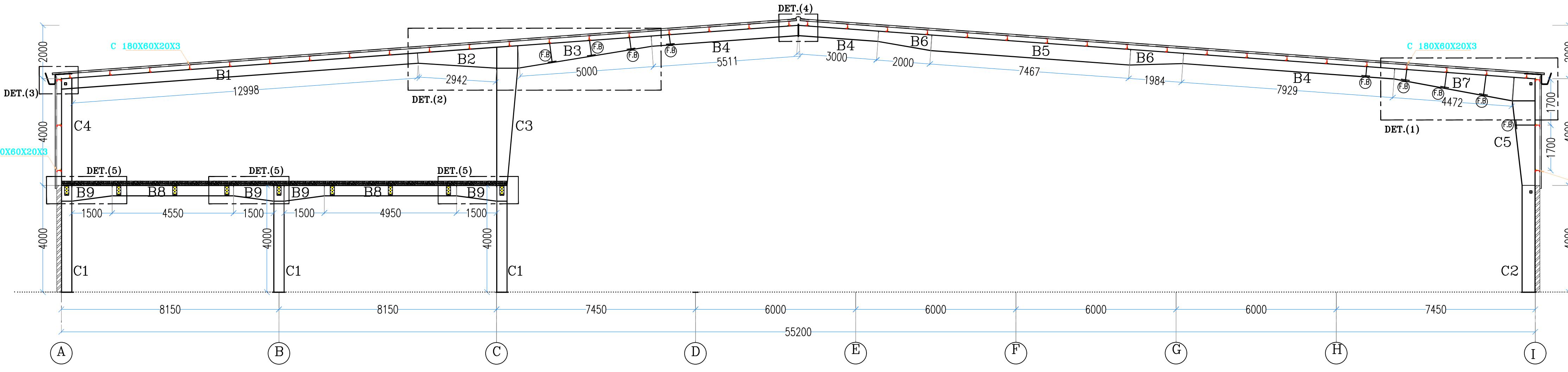
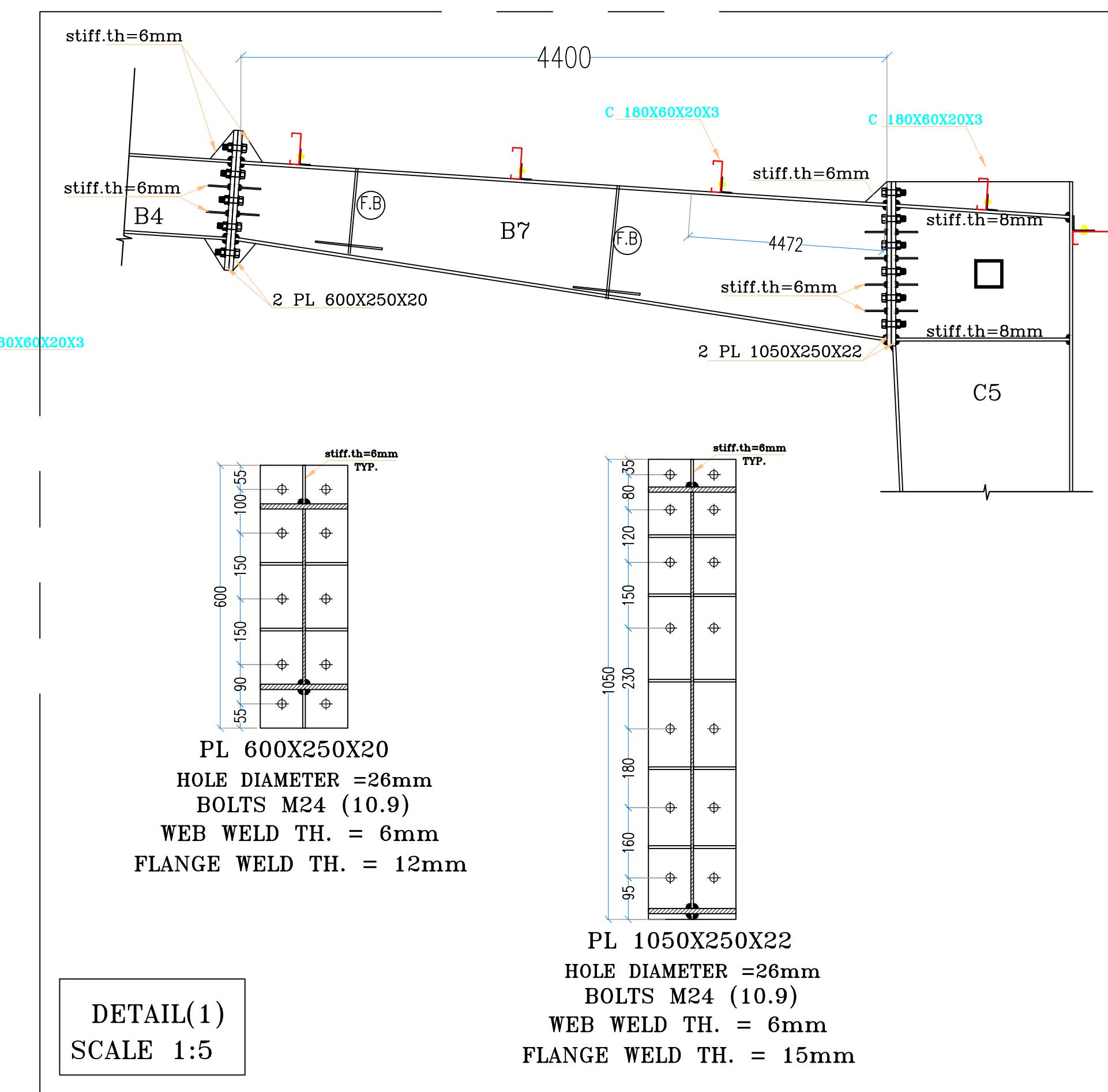
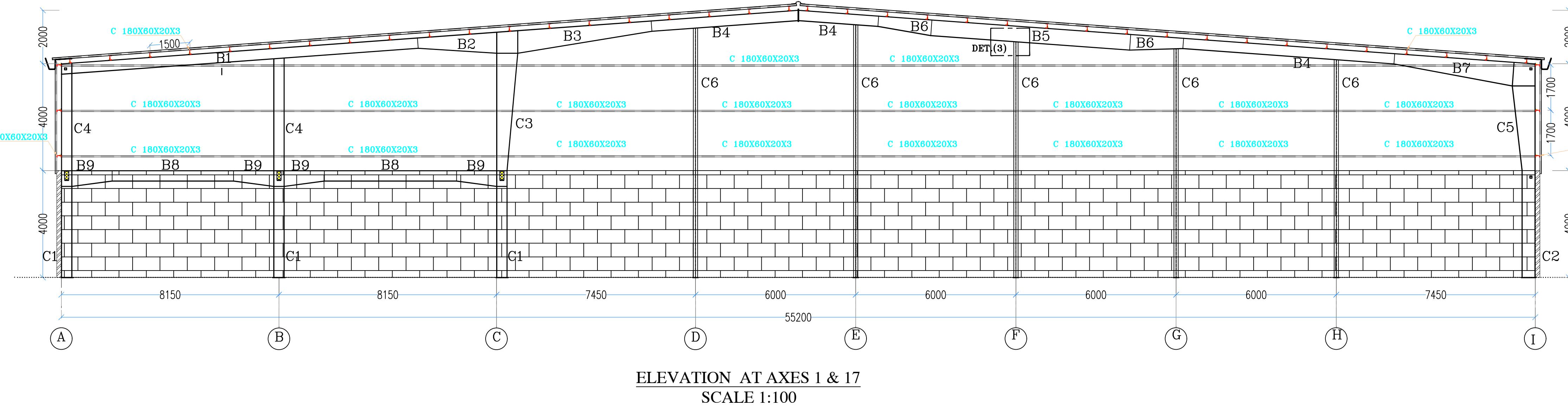


TYPICAL CROSS SECTION DIMENSIONS OF COLUMNS

| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tf | |
| C1 | 600/300 | 8 | 250 | 12 | — |
| C2 | 300 | 6 | 200 | 10 | — |
| C3 | 300 | 6 | 200 | 12 | — |
| C4 | 200 | 6 | 150 | 6 | — |

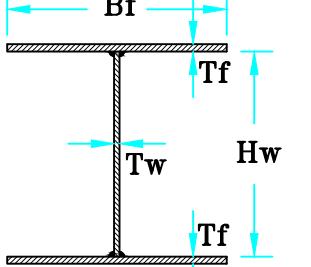
TYPICAL CROSS SECTION DIMENSIONS OF BEAMS

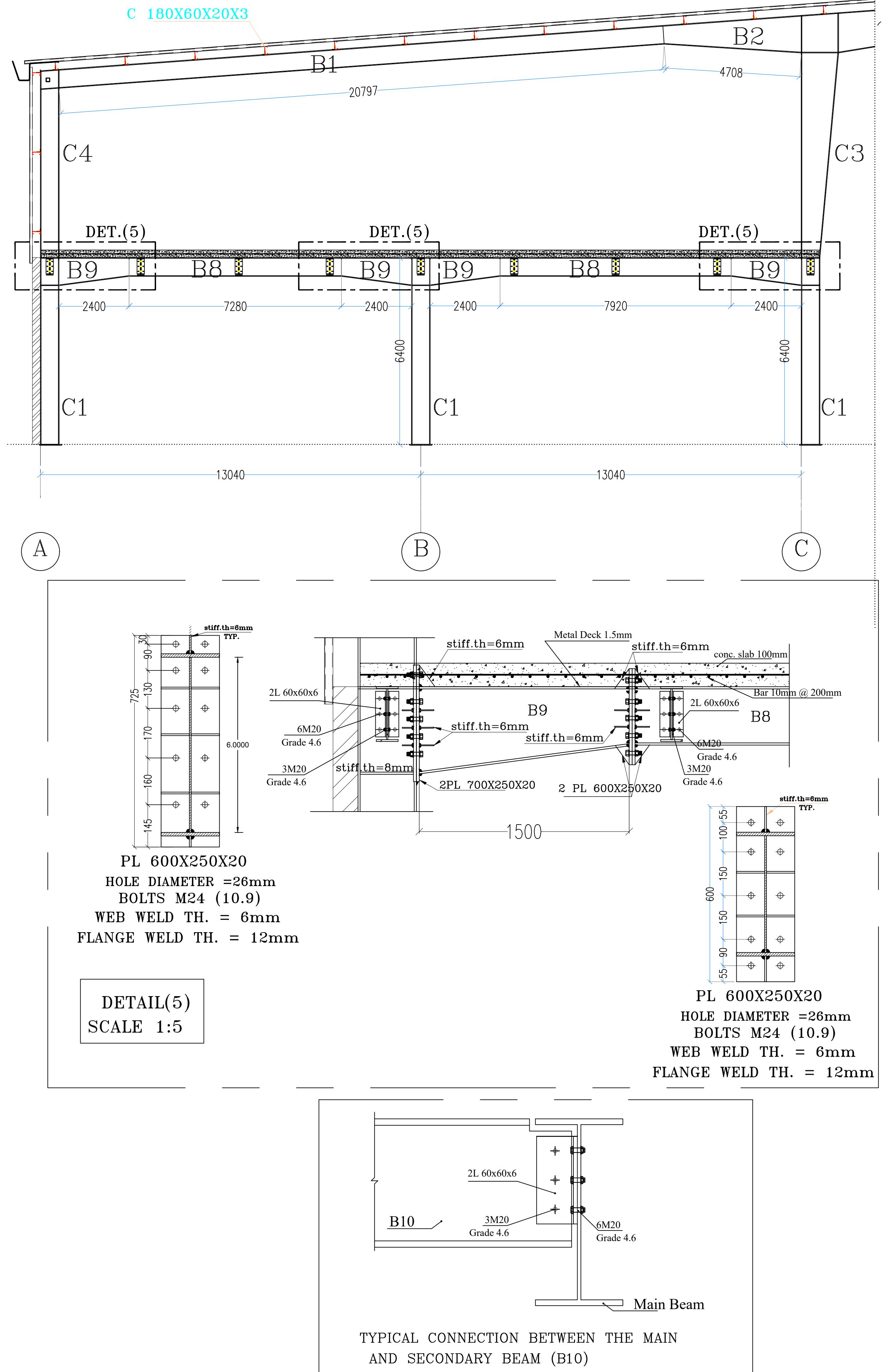
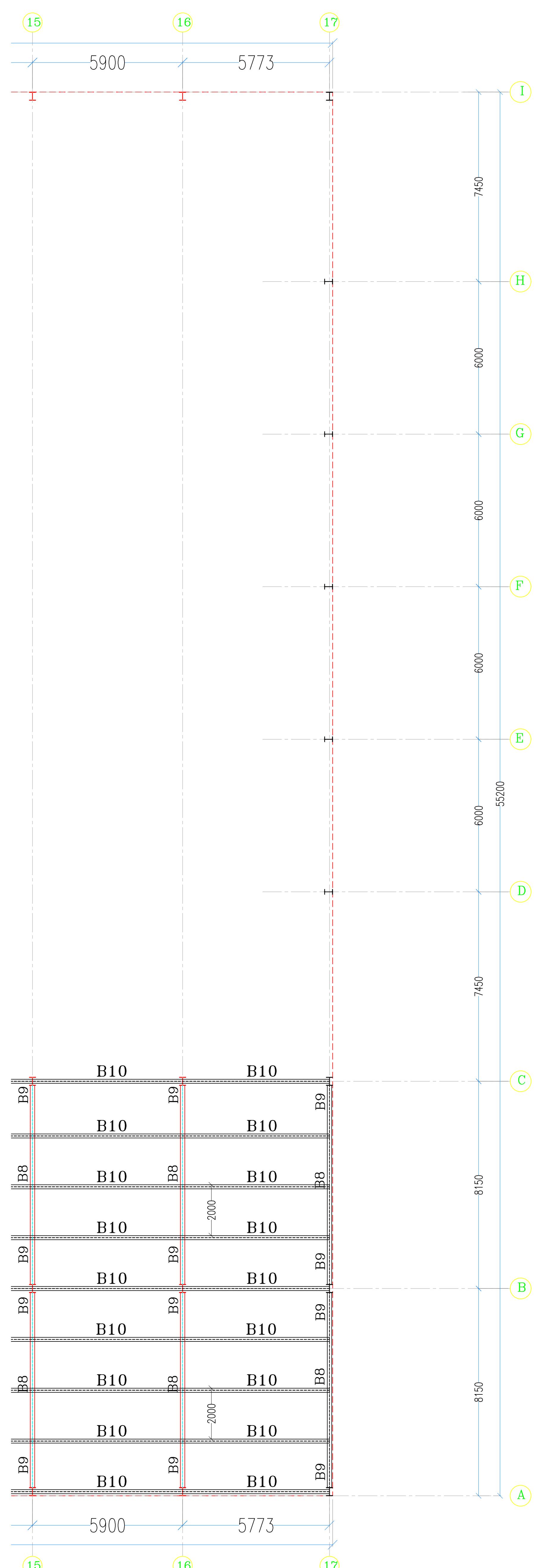
| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tf | |
| B1 | 600/350 | 6 | 250 | 12 | — |
| B2 | 350 | 6 | 250 | 12 | — |
| B3 | 750 | 10 | 280 | 16 | — |
| B4 | 300 | 6 | 120 | 8 | — |



TYPICAL CROSS SECTION DIMENSIONS OF COLUMNS AND BEAMS

| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tf | |
| C1 | 400 | 6 | 250 | 12 | — |
| C2 | 500 | 6 | 250 | 12 | — |
| C3 | 400/800 | 10 | 250 | 12 | — |
| C4 | 400 | 5 | 160 | 8 | — |
| C5 | 500/900 | 10 | 250 | 15 | — |
| C6 | 300 | 5 | 160 | 8 | — |
| B1 | 300 | 5 | 160 | 8 | — |
| B2 | 300/800 | 8 | 200 | 12 | — |
| B3 | 400/800 | 10 | 250 | 12 | — |
| B4 | 400 | 6 | 250 | 12 | — |
| B5 | 600 | 8 | 250 | 12 | — |
| B6 | 400/600 | 8 | 250 | 12 | — |
| B7 | 400/900 | 10 | 250 | 15 | — |
| B8 | 400 | 5 | 200 | 10 | — |
| B9 | 400/600 | 5 | 200 | 10 | — |
| B10 | 300 | 5 | 160 | 8 | — |

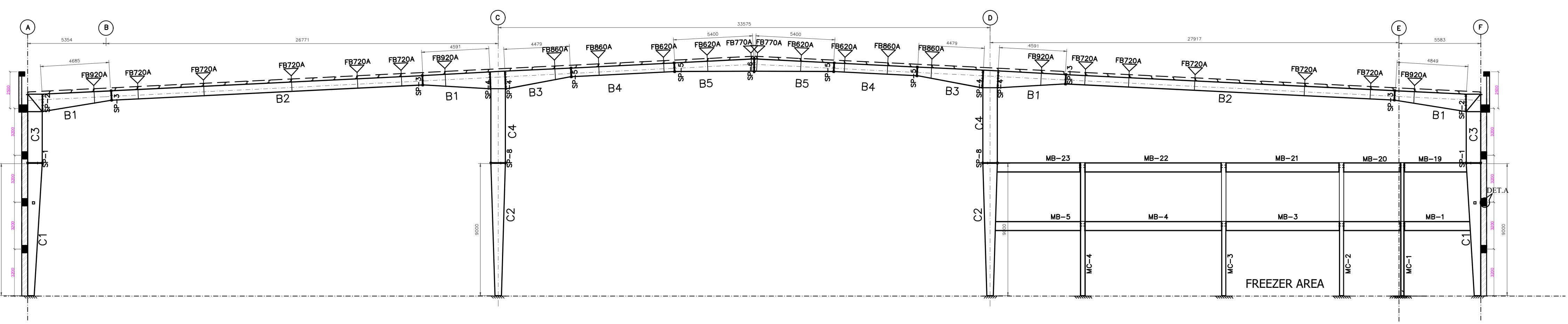




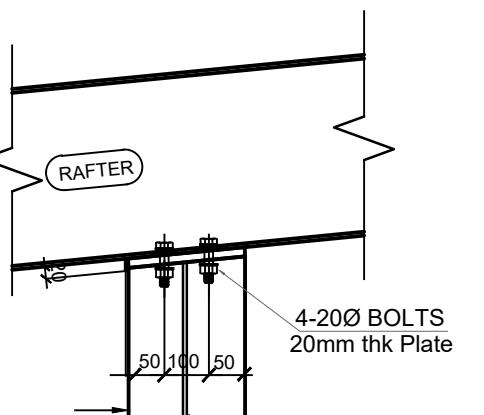
TYPICAL CROSS SECTION DIMENSIONS OF COLUMNS AND BEAMS

| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tf | |
| C1 | 400 | 6 | 250 | 12 | — |
| C2 | 500 | 6 | 250 | 12 | — |
| C3 | 400/800 | 10 | 250 | 12 | — |
| C4 | 400 | 5 | 160 | 8 | — |
| C5 | 500/900 | 10 | 250 | 15 | — |
| C6 | 300 | 5 | 160 | 8 | — |
| B1 | 300 | 5 | 160 | 8 | — |
| B2 | 300/800 | 8 | 200 | 12 | — |
| B3 | 400/800 | 10 | 250 | 12 | — |
| B4 | 400 | 6 | 250 | 12 | — |
| B5 | 600 | 8 | 250 | 12 | — |
| B6 | 400/600 | 8 | 250 | 12 | — |
| B7 | 400/900 | 10 | 250 | 15 | — |
| B8 | 400 | 5 | 200 | 10 | — |
| B9 | 400/600 | 5 | 200 | 10 | — |
| B10 | 300 | 5 | 160 | 8 | — |

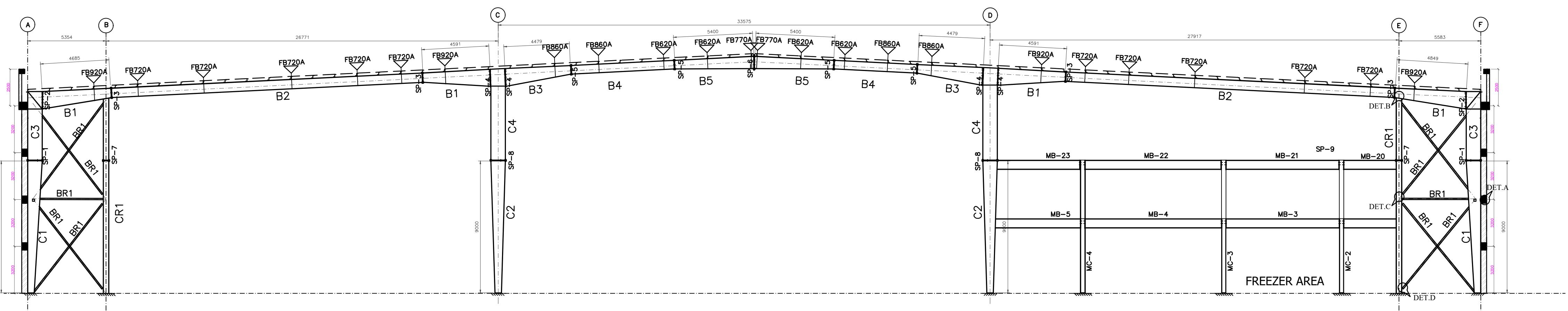
Diagram illustrating section dimensions: Hw (flange height), Tw (web thickness), Bf (flange width), Tf (fillet thickness). A formula $\frac{Hw \times Tw}{Bf \times Tf}$ is provided.



COLUMN LATERAL SUPPORT CONN.
DETAIL-A

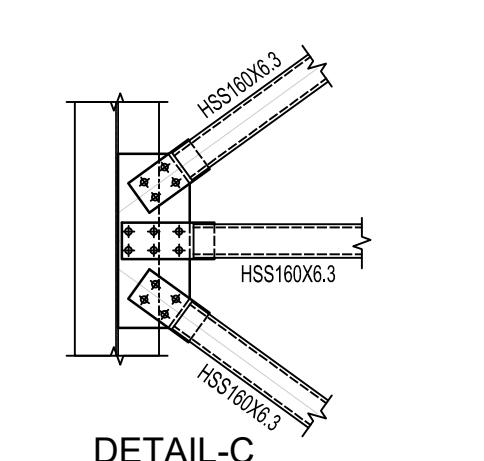


COLUMN CONN.
DETAIL-B

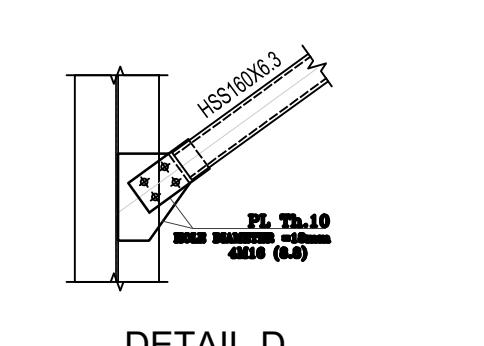


▽ FLANGE BRACES: Both Sides(U.N.)
FBxxA(1): xx=length(mm)
A - L-50x3

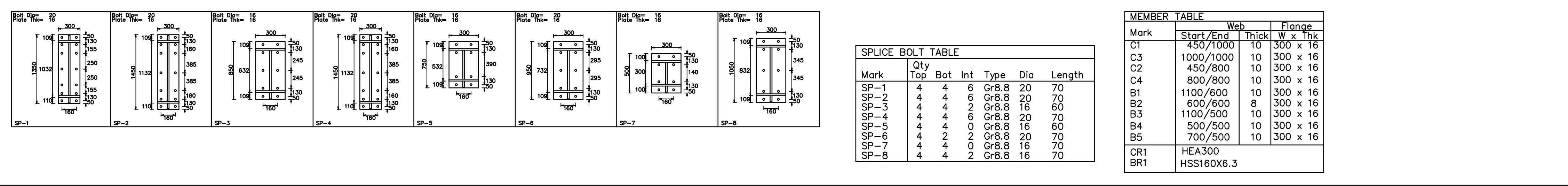
| MEMBER TABLE | | | | | |
|--------------|------------|-----|----------|---------|--|
| Mark | Start/End | Web | Flange | W x Thk | |
| C1 | 450/1000 | 10 | 300 x 16 | | |
| C3 | 1000/1000 | 10 | 300 x 16 | | |
| C2 | 450/800 | 10 | 300 x 16 | | |
| C4 | 800/800 | 10 | 300 x 16 | | |
| B1 | 1100/600 | 10 | 300 x 16 | | |
| B2 | 600/600 | 8 | 300 x 16 | | |
| B3 | 1100/500 | 10 | 300 x 16 | | |
| B4 | 500/500 | 10 | 300 x 16 | | |
| B5 | 700/500 | 10 | 300 x 16 | | |
| CR1 | HEA300 | | | | |
| BR1 | HSS160X6.3 | | | | |



DETAIL-C



DETAIL-D



▽ FLANGE BRACES: Both Sides(U.N.)
FBxxA(1): xx=length(mm)
A - L-50x3

| MEMBER TABLE | | | | | |
|--------------|-----------|-----|----------|---------|--|
| Mark | Start/End | Web | Flange | W x Thk | |
| C1 | 450/1000 | 10 | 300 x 16 | | |
| C3 | 1000/1200 | 10 | 300 x 16 | | |
| C2 | 450/900 | 10 | 300 x 16 | | |
| C4 | 900/900 | 10 | 300 x 16 | | |
| B1 | 1200/700 | 10 | 300 x 20 | | |
| B2 | 700/700 | 8 | 300 x 20 | | |
| B3 | 1200/500 | 10 | 300 x 20 | | |
| B4 | 500/500 | 10 | 300 x 16 | | |
| B5 | 700/500 | 10 | 300 x 16 | | |

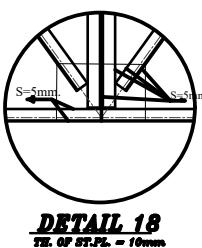
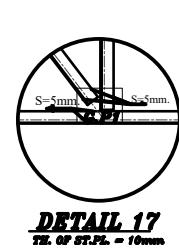
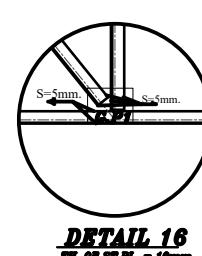
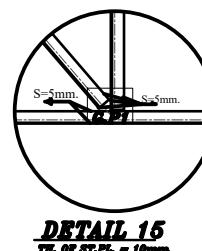
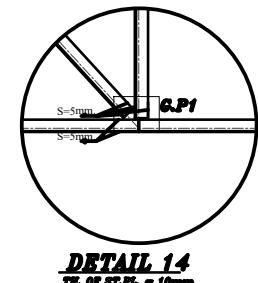
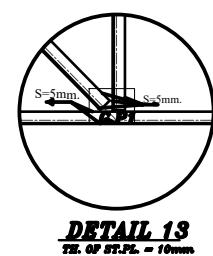
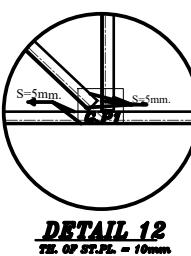
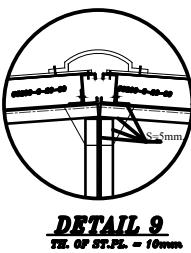
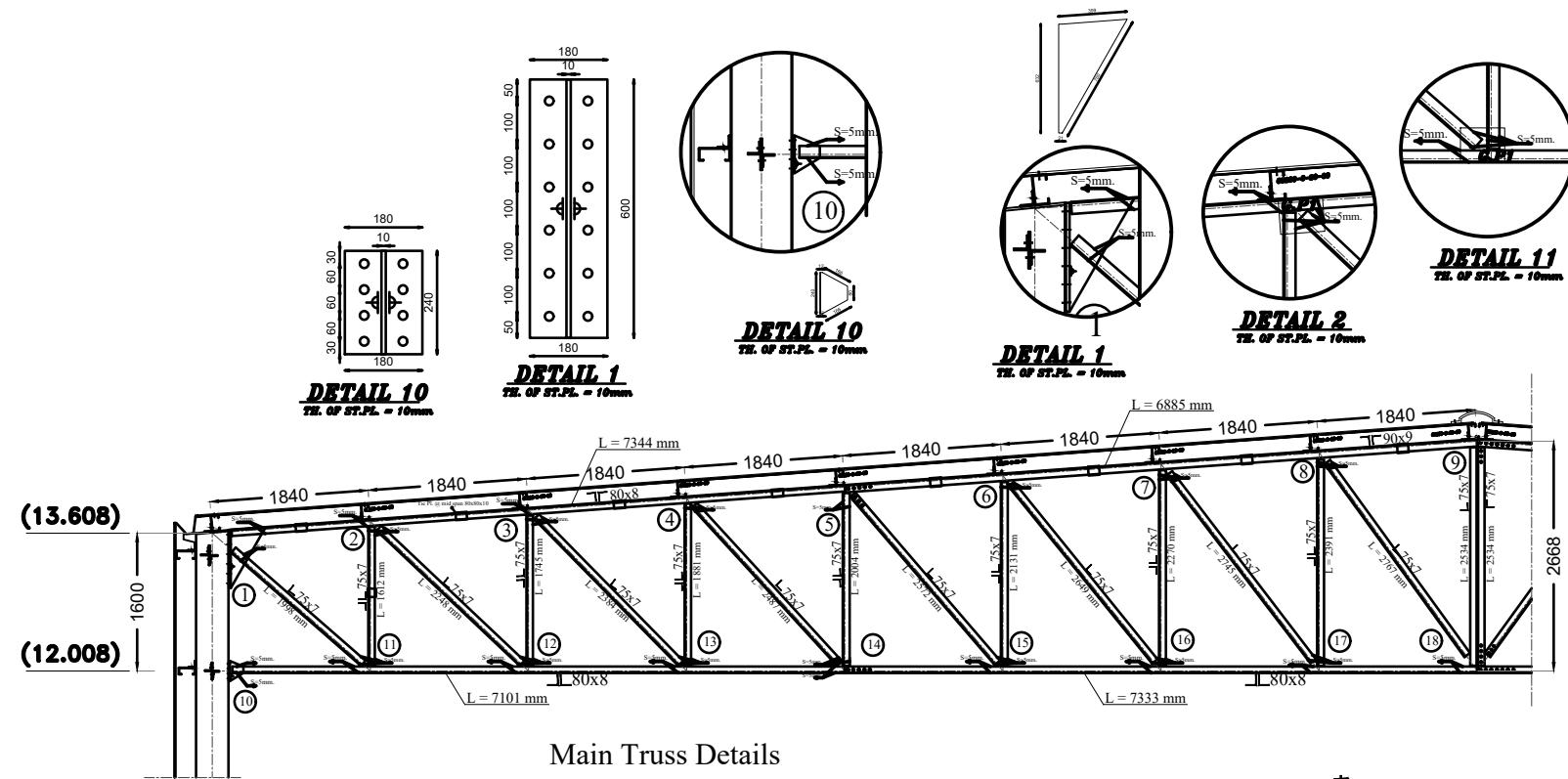
NOTES :
1. ALL DIMENSIONS ARE IN MILLIMETER UNLESS NOTED OTHERWISE.
2. DRAWINGS ARE DRAWN NOT TO SCALE. USE NUMERIC VALUES ONLY.
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH OTHER DRAWINGS.
4. REFER TO WELD MAP (AM-ENG-GL-001, R01) FOR WELDING SCHEDULES.

DRAWING TITLE:

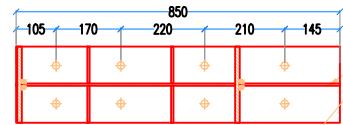
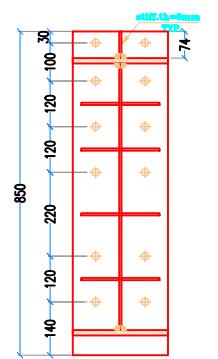
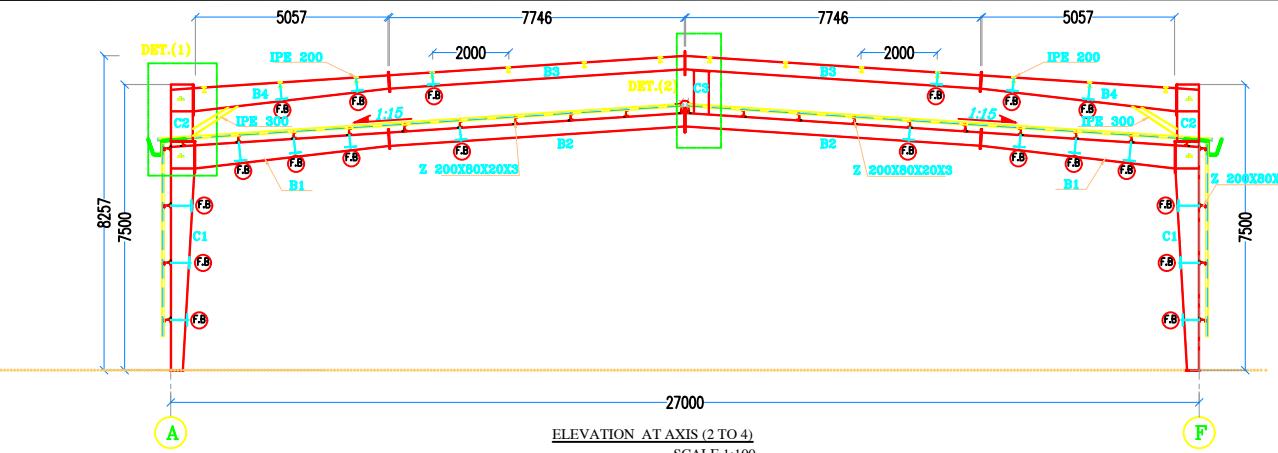
RIGID FRAME (PART 2)

General notes :

- 1) ALL DIM. AND AXES MUST BE CHECKED WITH ARCH DRAWINGS.
- 2) ALL DIMENSIONS ARE IN mm UNLESS INDICATED OTHERWISE.
- 3) STEEL USED ARE STRUCTURAL STEEL 37 with $F_u = 3.6 \text{ t/cm}^2$

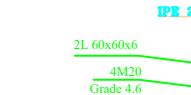
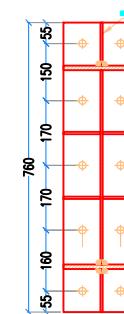
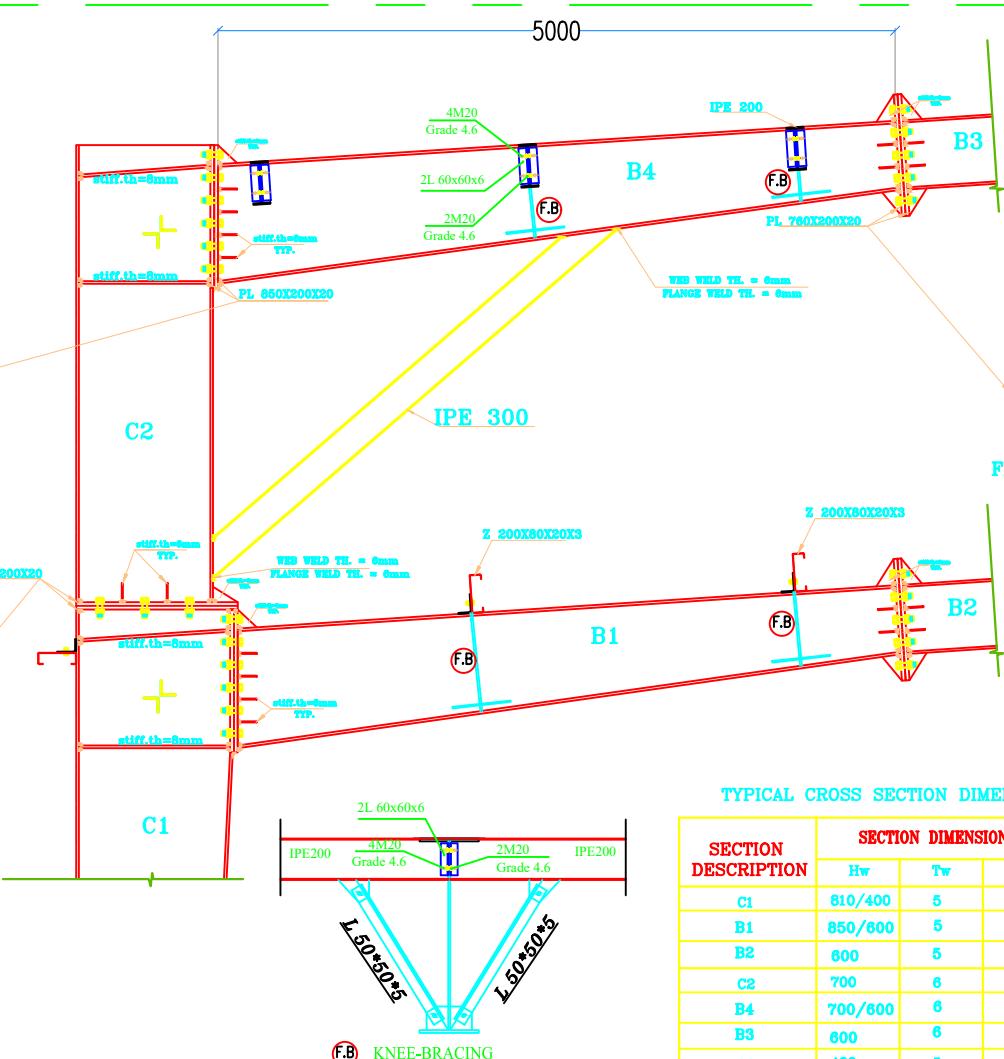


Truss Details



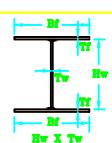
PL 850X200X20
HOLE DIAMETER =26mm
BOLTS M24 (10.9)
WEB WELD TH. = 6mm
FLANGE WELD TH. = 12mm

DETAIL(1)
SCALE 1:5



TYPICAL CROSS SECTION DIMENSIONS OF COLUMNS AND BEAMS

| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tl | |
| C1 | 810/400 | 5 | 270 | 12 | - |
| B1 | 850/600 | 5 | 180 | 10 | - |
| B2 | 600 | 5 | 180 | 6 | - |
| C2 | 700 | 6 | 200 | 12 | - |
| B4 | 700/600 | 6 | 200 | 12 | - |
| B3 | 600 | 6 | 200 | 12 | - |
| C3 | 400 | 5 | 200 | 10 | - |



GENERAL NOTES:-

- 1) STEEL USED IS STRUCTURAL STEEL 37 with $F_u = 37 \text{ kN/mm}$ and $F_y = 24 \text{ kN/mm}$.
- 2) STRUCTURAL DESIGN FOR STEEL BUILDINGS IN ACCORDANCE WITH EGYPTIAN CODE OF PRACTICE FOR STRUCTURAL DESIGN OF STEEL FRAMES AND RESISTANCE FACTOR DESIGN LOADS - EGYPTIAN STATE STANDARDS.
- 3) THICKNESS OF THE WELD AT ANY CONNECTIONS IS GIVEN IN THE DETAILS. IF IT IS NOT GIVEN, THEN TAKE THE MINIMUM WELD THICKNESS OF THE WELD - THE SMALLER THICKNESS OF THE PLATE TO BE JOINED OR 4 MM - WHICHEVER IS GREATER.
- 4) LIVE LOADS MUST BE TAKEN DEPENDING ON THE ACTUAL USE AND THE ACTUAL WEIGHT OF THE MACHINES TAKING INTO ACCOUNT THE DYNAMIC VIBRATION PLUS 300 KG/MM ON THE REST AREA OF THE SURFACE AND NOT LESS THAN 600 KG/MM OF AVERAGE LOAD.
- 5) HIGH STRENGTH BOLTS (GRADE 10.9) ARE REQUIRED FOR ALL CONNECTIONS OF MAIN STRUCTURE SYSTEM WITH A TORQUE OF 7 KNm SHOULD BE APPLIED TO ROTATE EACH BOLT BY 10%.
- 6) FOR M6 (GRADE 10.9), THE HOLE IN STEEL PLATE MUST BE WITH CLEARANCE 2.0MM.
- 7) FOOT STEEL SHEET PLATE THICKNESS USED FOR PLATES IS 8 MM WITH ENDSLASH (E).
- 8) SOUND PROOF MUST BE TAKEN FOR S-BEAM WALL AS A SANDWICH PANEL OR INSULATION MATERIAL WITH THICK PVC OR SOUND PROOF SHEET WALL BETWEEN AXES (2-4&8-10).

Table of Beams

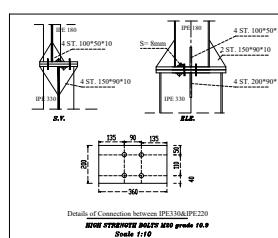
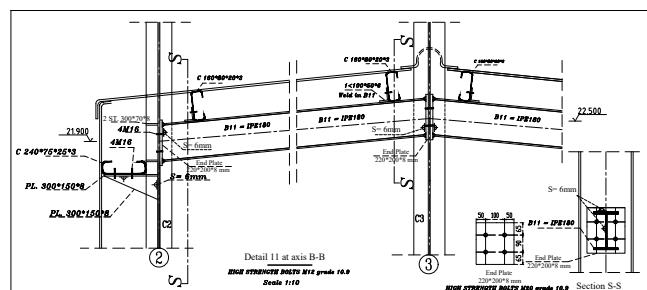
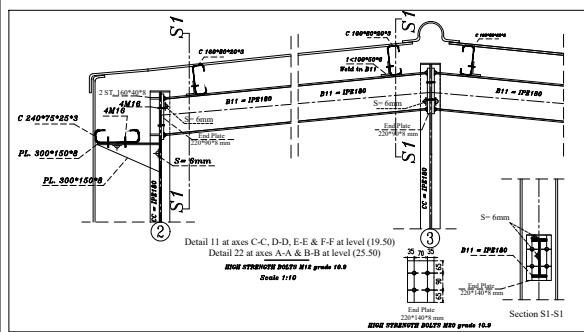
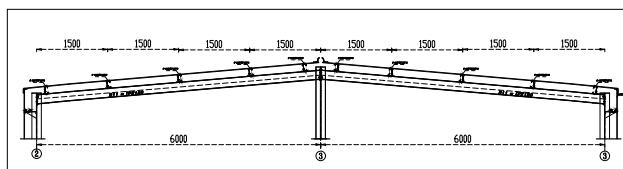
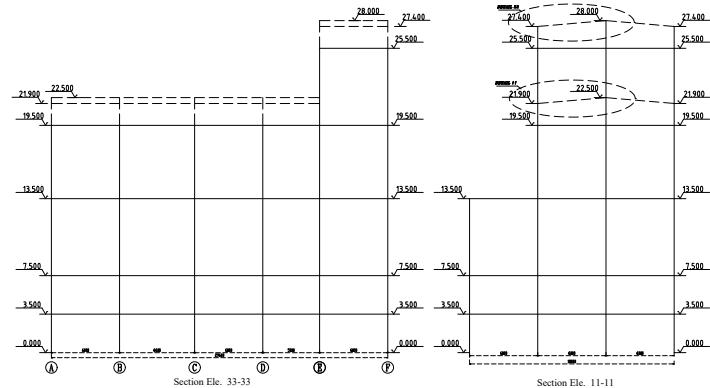
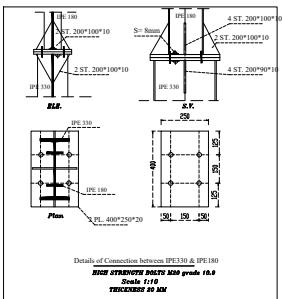
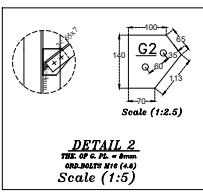
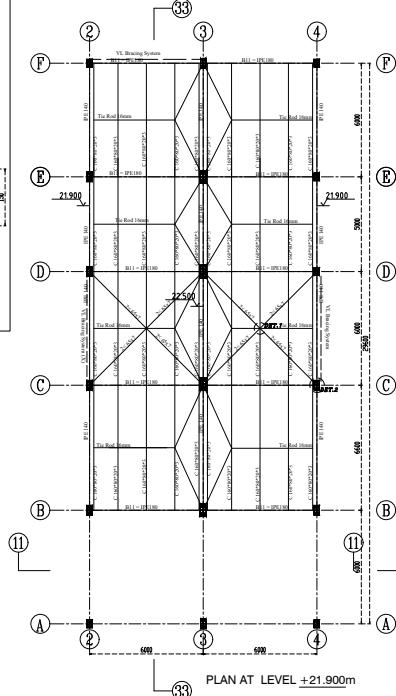
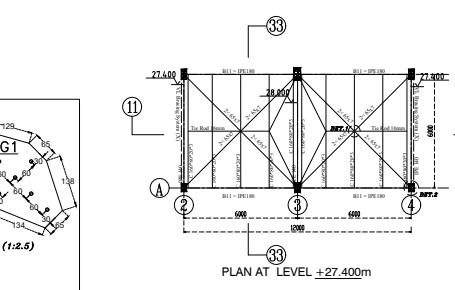
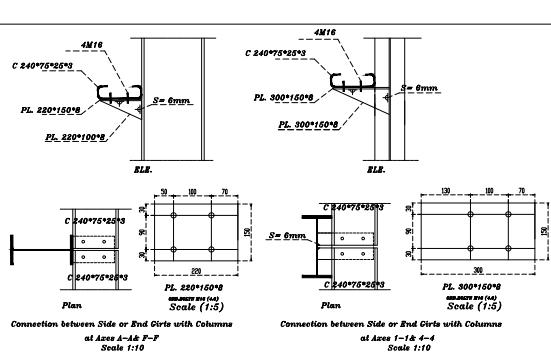
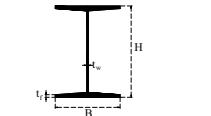
| Name | Section NO. |
|------|-------------|
| B0 | 1-S0*8 |
| B11 | IPE 180 |
| B1 | IPE 240 |
| B2 | IPE 330 |
| B3 | IPE 450 |

Table of Columns

| Name | From level (0.0 to 6.50/7.50) | From level (6.50/7.50 to 13.5) | From level (13.5 to 25.5) |
|------|---|-----------------------------------|------------------------------|
| C1 | IPE 330 | IPE 330 | IPE 330 |
| C11 | IPE 360 | IPE 330 | IPE 330 |
| C2 | IPE 450 | IPE 330 | IPE 330 |
| C3 | IPE 550 | IPE 450 | IPE 330 |
| CC | IPE 180 [From level (17.20 to 19.50)] | | |

Table of Steel Sections

| Name | H (mm) | B (mm) | t _w (mm) | t _f (mm) |
|---------|-----------|-----------|------------------------|------------------------|
| IPE 140 | 140 | 73 | 4.7 | 6.9 |
| IPE 180 | 180 | 91 | 5.3 | 8.0 |
| IPE 240 | 240 | 120 | 6.2 | 9.8 |
| IPE 330 | 330 | 160 | 7.5 | 11.5 |
| IPE 360 | 360 | 170 | 8.0 | 12.7 |
| IPE 450 | 450 | 190 | 9.4 | 14.6 |
| IPE 550 | 550 | 210 | 11.1 | 17.2 |



Details of Connection between IPE330 & IPE180
HIGH STRENGTH BOLTS HSS grade 10.9
THICKNESS 6 MM

| | |
|--------------|--|
| CLIENT | Damietta & Belkas Rice Mills Company |
| PROJECT | 8~10TPH FLOATING FISH LINE |
| Drawing Name | SUB STRUCTURE-ROOF LEVEL +21.900/+27.400m |
| Consultant | |
| Signature | |
| No. | Final ST.D. 12 Date |

GENERAL NOTES:-

- 1) STEEL USED IS STRUCTURAL STEEL ST 37 with $\sigma_u = 271 \text{ N/mm}^2$ and $\sigma_y = 241 \text{ N/mm}^2$.
- 2) STRUCTURAL DESIGN FOR STEEL BRIDGES IN ACCORDANCE WITH EGYPTIAN CODE OF PRACTICE FOR STEEL CONSTRUCTION (THE LOAD AND RESISTANCE FACTOR DESIGN) LDPC - 2005 - MINISTERIAL DECREE 10-2005-2007.
- 3) THICKNESS OF THE PLATES AT ANY CONNECTIONS IS GIVEN IN THE DETAILS. IF IT IS NOT GIVEN, THEN TAKE THE MINIMUM PLATE THICKNESS OF THE PLATE - THE SMALLER THICKNESS OF THE PLATES TO BE JOINED ON 1 MM.
- 4) LIVE LOADS MUST BE TAKEN DEPENDING ON THE ACTUAL USE AND THE ACTUAL WEIGHT OF THE MACHINES TRAVELING BY ACCOUNT THE DYNAMIC VIBRATION PLUS 300 KG/M ON THE GROSS AREA OF THE SURFACE AND NOT AT LEAST THAN 200 KG/M OF AVERAGE LOAD.
- 5) EACH SPANNING BEAM (UNIQUE SLAB) ARE REQUIRED FOR ALL CONNECTIONS OF MAIN STRUCTURE SYSTEM WITH A TORQUE OF 100 NM SHOULD BE APPLIED TO EATACH BOLT OR HEAD.
- 6) FOR NEW (GRADE 12.5), THE HOLES IN STEEL PLATE MUST BE WITH CLEARANCE 1MM.
- 7) FOOT STEEL SHEET PLATE THICKNESS USED FOR FLOORS IS 8MM WITH INCLINATION 45°.
- 8) SOUND PROOF MUST BE TADED FOR 8-MILLIMETER WALL AS A SMOOTH PANEL OR INSULATED MATERIAL. THE THICK YCH OR SOUND PROOF BLOCK WALL BETTER USES (2-400-C).

Table of Beams

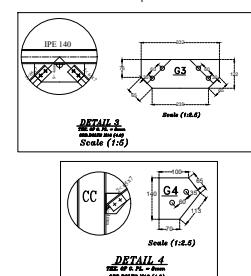
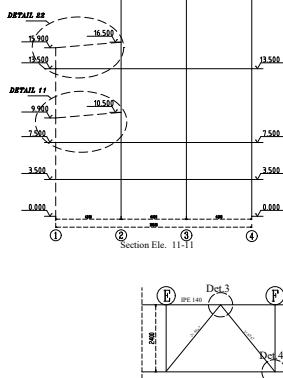
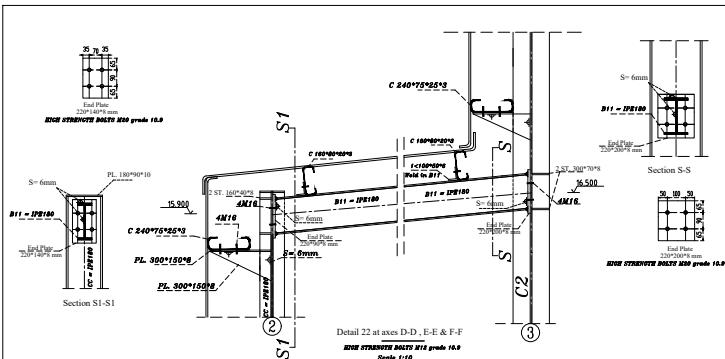
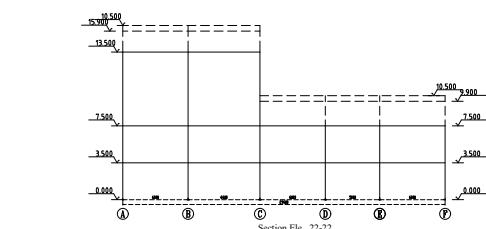
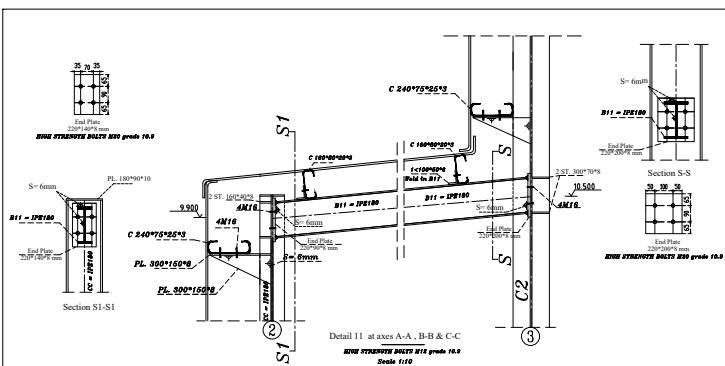
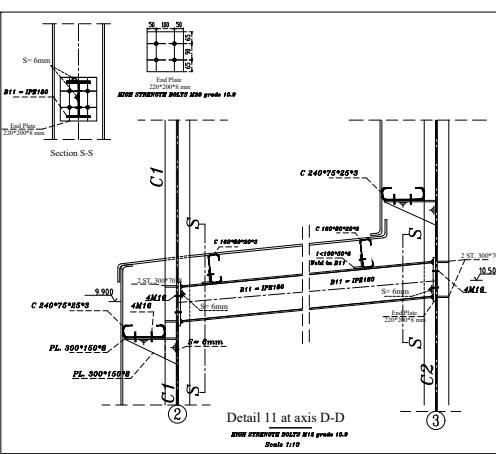
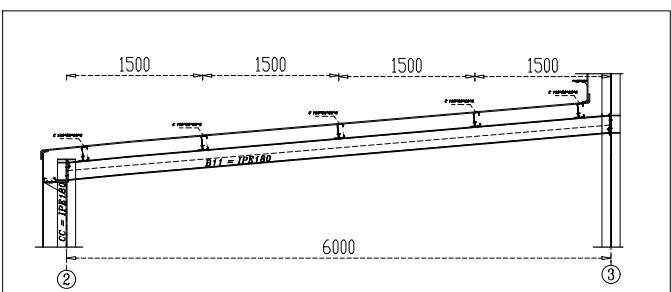
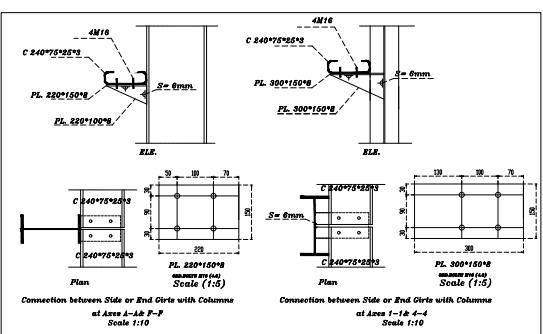
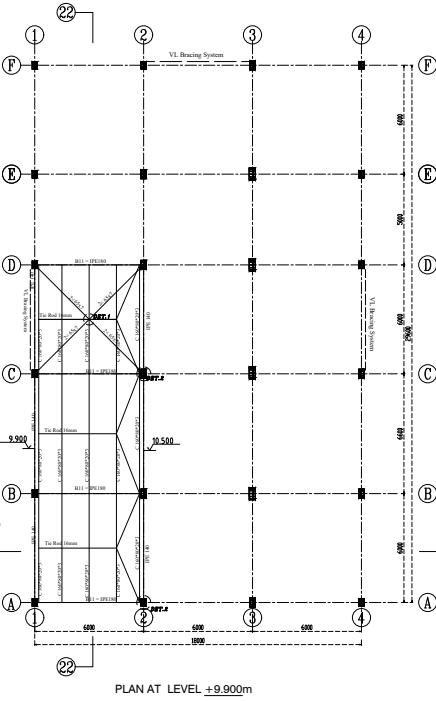
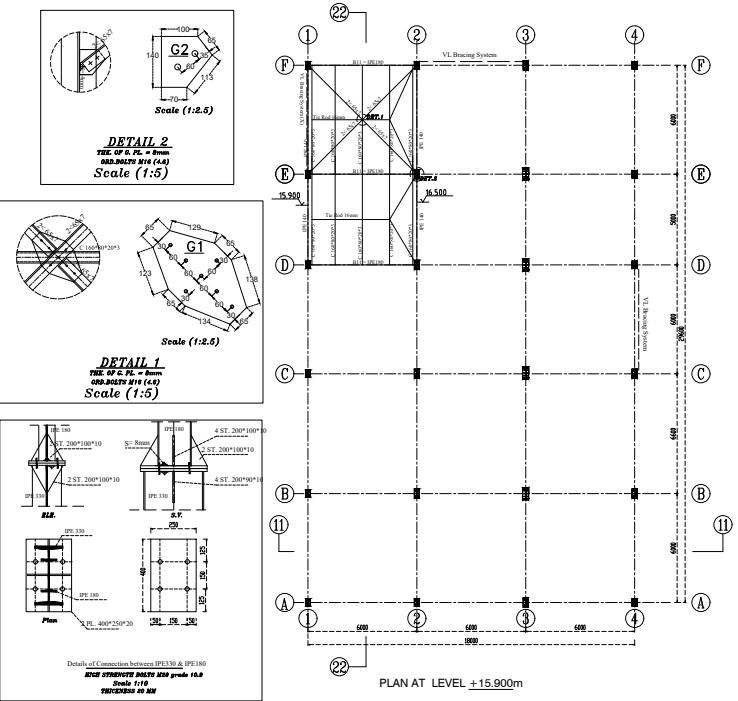
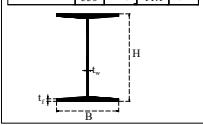
| Name | Section NO. |
|------|-------------|
| B0 | 1<80*8 |
| B11 | IPE 180 |
| B1 | IPE 240 |
| B2 | IPE 330 |
| B3 | IPE 450 |

Table of Columns

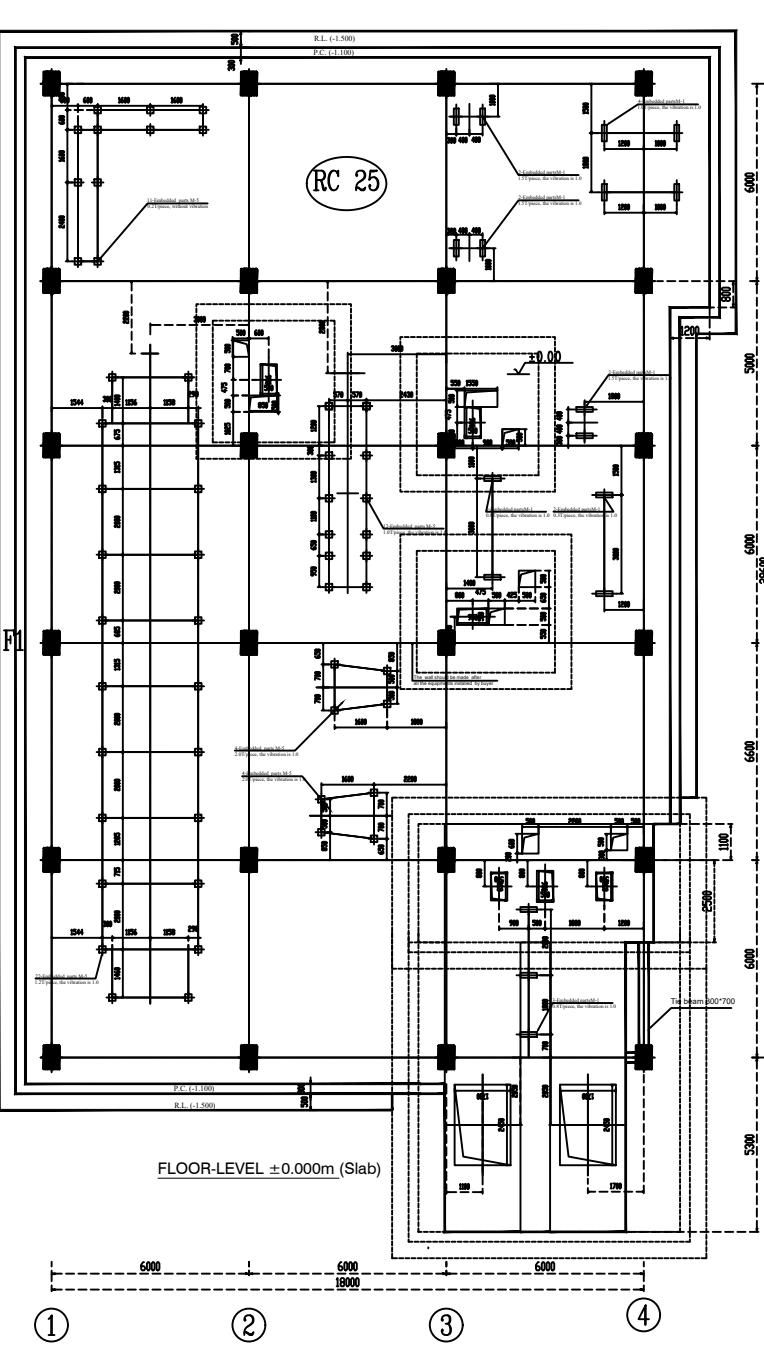
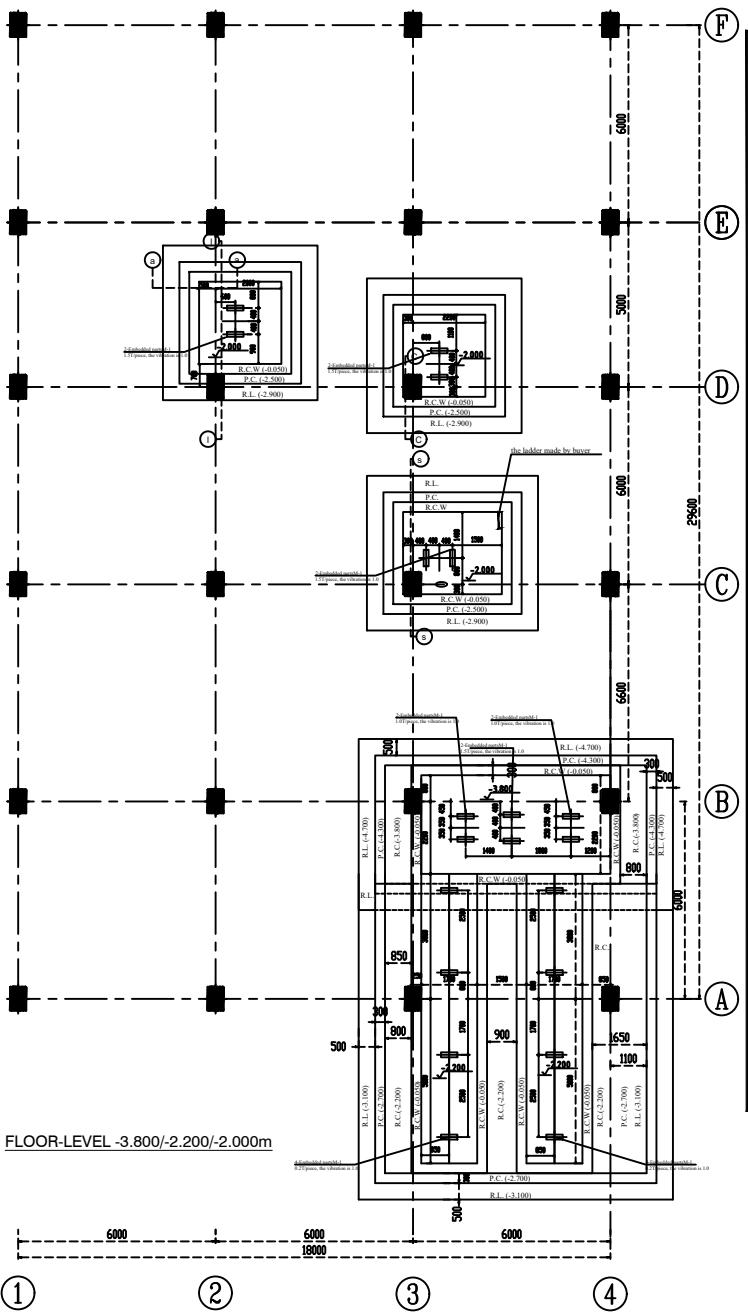
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|------|---------------------------|--------------------------------|---------------------------|
| C1 | IPE 330 | IPE 330 | IPE 330 |
| C11 | IPE 360 | IPE 330 | IPE 330 |
| C2 | IPE 450 | IPE 330 | IPE 330 |
| C3 | IPE 550 | IPE 450 | IPE 330 |
| CC | IPE 180 | From level (17.20 to 19.50) | |

Table of Steel Sections

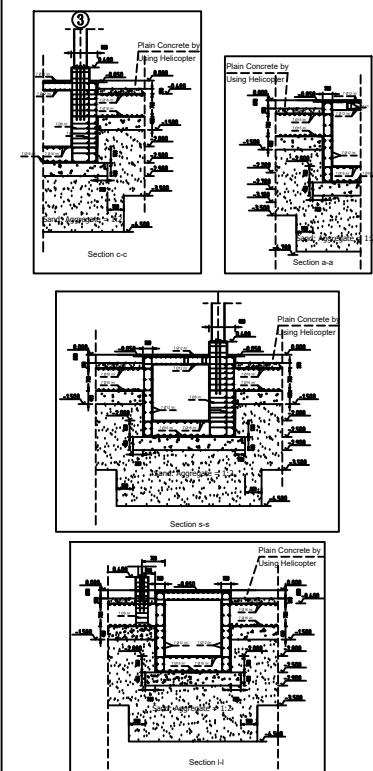
| Name | H (mm) | B (mm) | t_w (mm) | t_f (mm) |
|---------|--------|--------|----------|----------|
| IPE 140 | 140 | 73 | 4.7 | 6.9 |
| IPE 180 | 180 | 91 | 5.3 | 8.0 |
| IPE 240 | 240 | 120 | 6.2 | 9.8 |
| IPE 330 | 330 | 160 | 7.5 | 11.5 |
| IPE 360 | 360 | 170 | 8.0 | 12.7 |
| IPE 450 | 450 | 190 | 9.4 | 14.6 |
| IPE 550 | 550 | 210 | 11.1 | 17.2 |



| | |
|--------------|-------------------------------------|
| CLIENT | Damieta & Belkas Rice Mills Company |
| PROJECT | 8~10TPH FLOATING FISH LINE |
| Drawing Name | SUB STRUCTURE-ROOF |
| Consultant | LEVEL +9.900/+15.900m |
| Signature | |
| No. | Final ST.D. 13 Date |

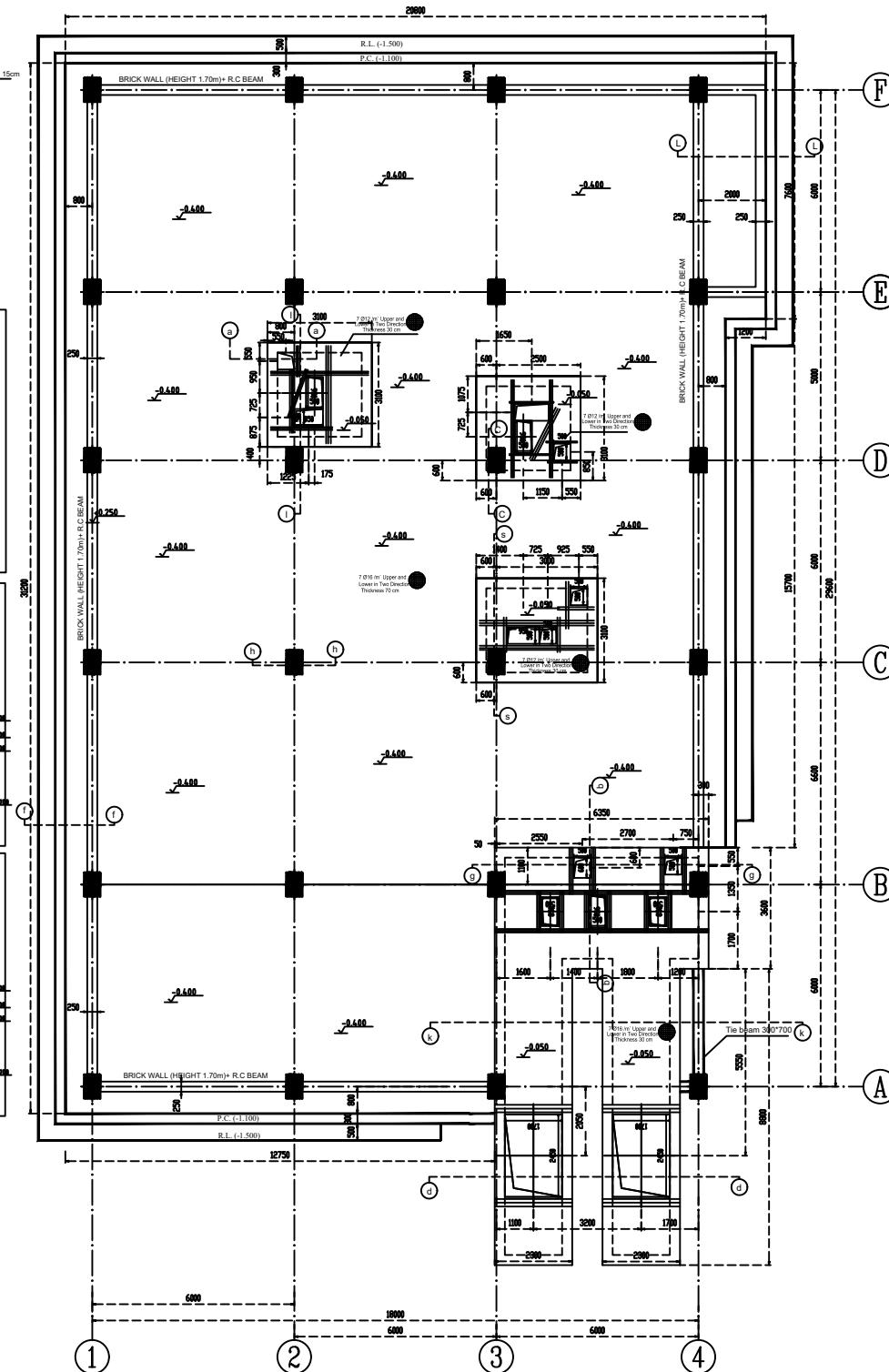
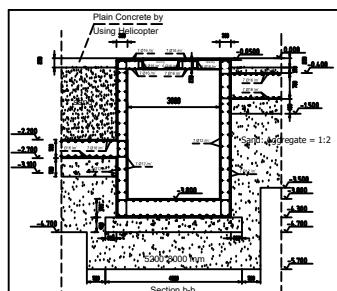
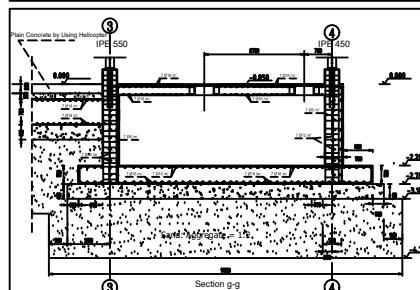
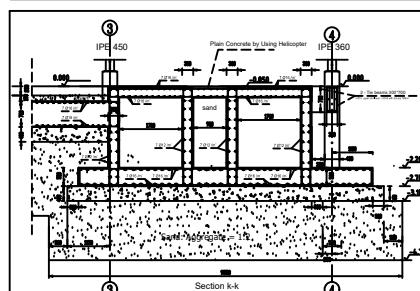
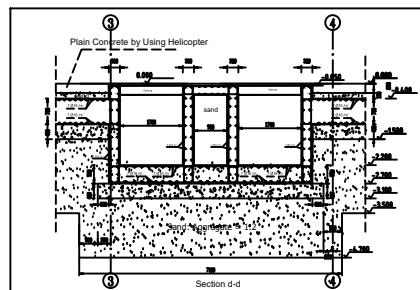
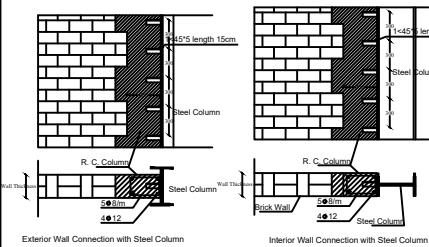


| | |
|--------------|---|
| CLIENT | Damietta & Belkas Rice Mills Company Belkas - Dakahlia - Egypt |
| PROJECT | 8~10TPH FLOATING FISH LINE |
| Drawing Name | Details of Foundation and Position of Machines' Base Plates |
| Consultant | |
| Signature | |
| No. | Final ST.D. 2 |
| Date | |



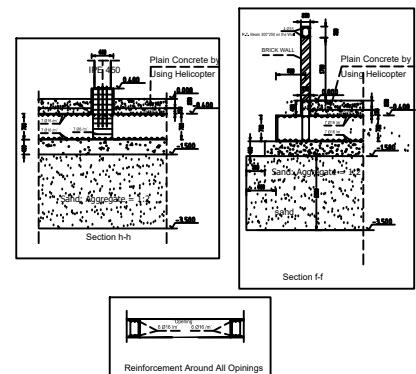
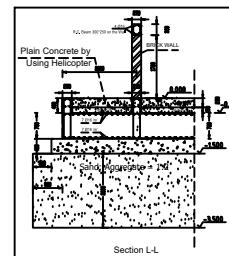
RECOMMENDATIONS AND NOTES:-

- STEEL USED IS STRUCTURAL STEEL, 37 WITH $F_u = 3.7 \text{ t/cm}^2$ AND $F_y = 2.4 \text{ t/cm}^2$.
- STRUCTURAL DESIGN FOR STEEL BUILDINGS IS IN ACCORDANCE WITH EGYPTIAN CODE OF PRACTICE FOR STEEL CONSTRUCTIONS (THE LOAD AND RESISTANCE FACTOR DESIGN LRFD -2005- MINISTERIAL DECREE NO.356-2007).
- THICKNESS OF THE WELDS AT ANY CONNECTIONS IS GIVEN IN THE DETAILS. IF IT IS NOT GIVEN, THEN TAKE THE MINIMUM WELD THICKNESS OF THE WELD = THE SMALLER THICKNESS OF THE PLATES TO BE JOINED OR 4 MM.
- ACCORDING TO EGYPTIAN CODE OF PRACTICE FOR LOADING -201-2008, LIVE LOADS MUST BE TAKEN DEPENDING ON THE ACTUAL USE AND THE ACTUAL WEIGHT OF THE MACHINES TAKING INTO ACCOUNT THE DYNAMIC VIBRATION PLUS 300 KG/M2 ON THE REST AREA OF THE SURFACE AND NOT LESS THAN 600 KG/M2 OF AVERAGE LOAD.
- HIGH STRENGTH BOLTS M20 (GRADE 10.9) ARE REQUIRED FOR ALL CONNECTIONS OF MAIN STRUCTURE SYSTEM WITH A TORQUE OF 8 KNm SHOULD BE APPLIED TO ROTATE EACH NUT OR HEAD.
- THE REQUIRED CONCRETE STRENGTH IS 300 KG/CM2 WITH STEEL REINFORCEMENT GRADE 35/62 FOR R.C. SHORT COLUMN UNDER STEEL BASE PLATES.
- FOR M20 (GRADE 10.9), THE HOLES IN STEEL PLATE MUST BE WITH CLEARANCE 2.0MM.
- LAYER REPLACEMENT UNDER FOUNDATION CONSISTS OF SAND AND AGGREGATE BY RATIO 1:2.
- PLAIN CONCRETE WITH STRENGTH EQUAL TO 300 KG/CM2 USING CEMENT (SEA/WATER) WITH AMOUNT 300 KG/M3 IN CONCRETE MIX.
- HELICOPTER MACHINE IS USED TO GIVE THE SMOOTH SURFACE FOR PLAIN CONCRETE AT LEVEL 0.00 IN CONCRETE MIX.
- THE BEARING CAPACITY OF THE SOIL IS 0.5 KG/CM2 ACCORDING SOIL REPORT FROM SOIL LAB IN FACULTY OF ENGINEERING - EL-MANSOURA UNIVERSITY.
- SOUND PROOF MUST BE TAKEN FOR S-BRICK WALL AS A SANDWICH PANELS OR SKELETON MATERIAL WITH THICK 7CM OR SOUND PROOF BRICK WALL BETWEEN AXES (3-4&3-C).

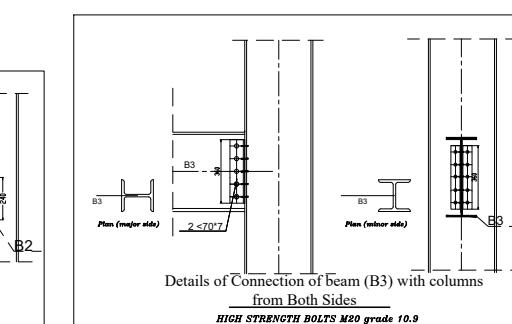
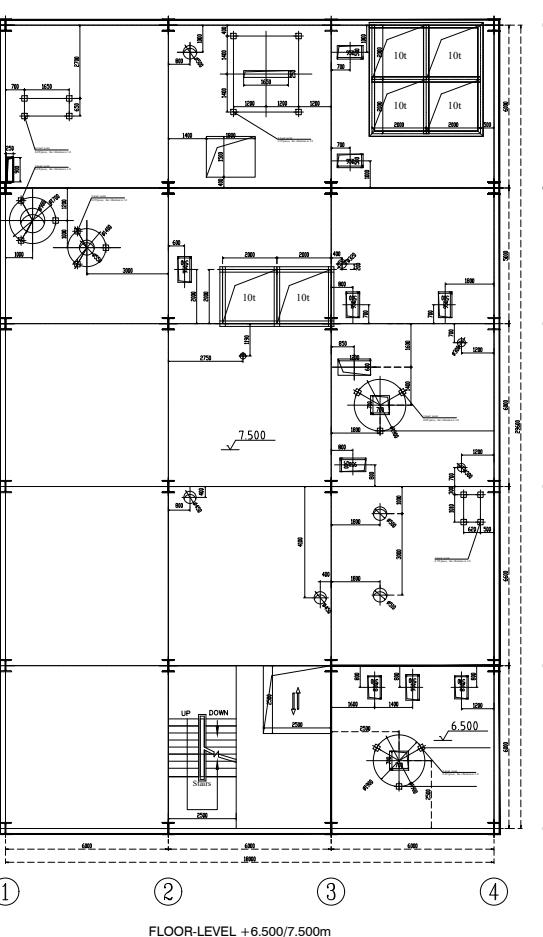
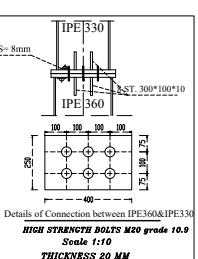
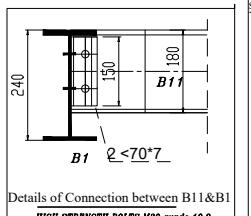
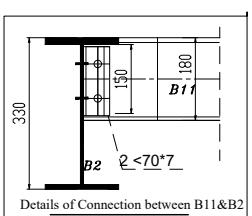
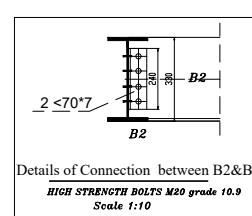
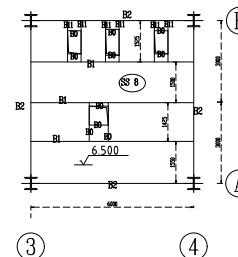
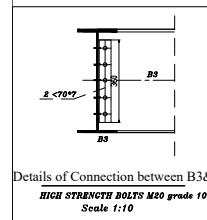
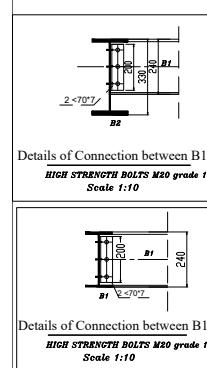
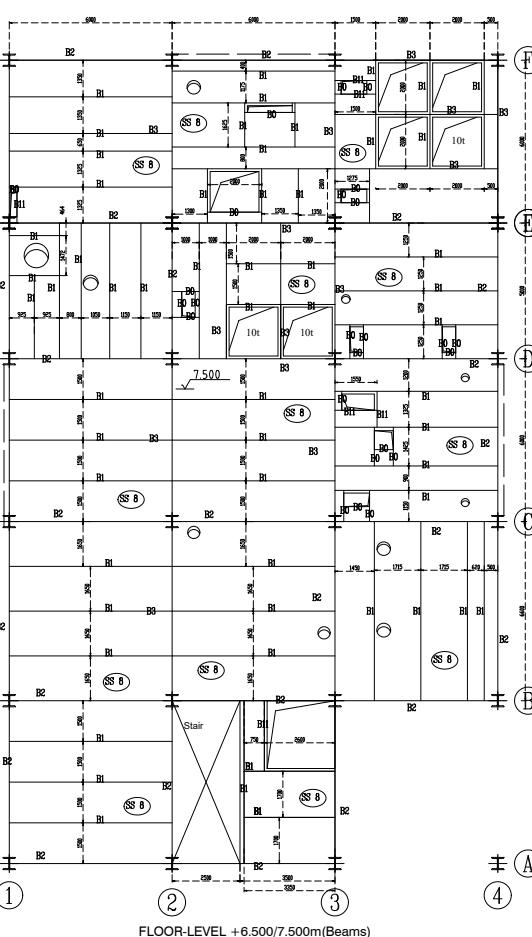
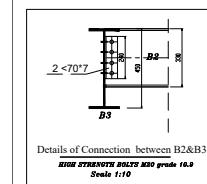


RECOMMENDATIONS AND NOTES:-

- 1) STEEL USED IS STRUCTURAL STEEL 37 WITH $F_u = 3.7 \text{ t/cm}^2$ AND $F_y = 2.4 \text{ t/cm}^2$.
- 2) STRUCTURAL DESIGN FOR STEEL BUILDINGS IS IN ACCORDANCE WITH EGYPTIAN CODE OF PRACTICE FOR STEEL CONSTRUCTIONS (THE LOAD AND RESISTANCE FACTOR DESIGN) LRFD -205 - MINISTERIAL DECREE NO.359 -2007.
- 3) THICKNESS OF THE WELDS AT ANY CONNECTIONS IS GIVEN IN THE DETAILS. IF IT IS NOT GIVEN, THEN TAKE THE MINIMUM WELD THICKNESS OF THE WELDS = THE SMALLER THICKNESS OF THE PLATES TO BE JOINED OR 4 MM.
- 4) ACCORDING TO EGYPTIAN CODE OF PRACTICE FOR LOADING -201-2008, LIVE LOADS MUST BE TAKEN DEPENDING ON THE ACTUAL USE AND THE ACTUAL WEIGHT OF THE MACHINES TAKING INTO ACCOUNT THE DYNAMIC VIBRATION PLUS 300 KG/M² ON THE REST AREA OF THE SURFACE AND NOT BE LESS THAN 600 KG/M² OF AVERAGE LOAD.
- 5) HIGH STRENGTH BOLTS M20 (GRADE 10.9) ARE REQUIRED FOR ALL CONNECTIONS OF MAIN STRUCTURE SYSTEM WITH A TORQUE OF 67 K.G.M SHOULD BE APPLIED TO ROTATE EACH NUT OR HEAD.
- 6) THE REQUIRED CONCRETE STRENGTH IS 30 KG/CM² WITH STEEL REINFORCEMENT GRADE 36/52 FOR R.C. SHORT COLUMN UNDER STEEL BASE PLATES
- 7) FOR M20 (GRADE 10.9), THE HOLES IN STEEL PLATE MUST BE WITH CLEARANCE 2.0MM
- 8) LAYER REPLACEMENT UNDER FOUNDATION CONSISTS OF SAND AND AGGREGATE BY RATIO 1:2
- 9) PLAIN CONCRETE WITH STRENGTH EQUAL TO 200 KG/CM² USING CEMENT (SEA/WATER) WITH AMOUNT 300 KG/M³ IN CONCRETE MIX
- 10) HELICOPTER MACHINE IS USED TO GIVE FINE SOUNDRY SURFACE FOR PLAIN CONCRETE AT LEVEL 0.00
- 11) THE STRENGTH OF R.C. FOUNDATION IS EQUAL 300 KG/CM² USING 400 KG/M³ CEMENT (SEA/WATER) IN CONCRETE MIX
- 12) THE BEARING CAPACITY OF THE SOIL IS 0.5 KG/CM² ACCORDING SOIL REPORT FROM SOIL LAB IN FACULTY OF ENGINEERING - EL-MASOURA UNIVERSITY
- 13) SOUND PROOF MUST BE TAKEN FOR S-BRICK WALL AS A SANDWICH PANELS OR SKELETON MATERIAL WITH THICK 7CM OR SOUND PROOF BRICK WALL BETWEEN AXES (2-4&B-C)



| | | |
|--------------|---|------|
| CLIENT | Damietta & Belkas Rice Mills Company Belkas - Dakahlia - Egypt | |
| PROJECT | 8~10TPH FLOATING FISH LINE | |
| Drawing Name | Foundation Details | |
| Consultant | | |
| Signature | | |
| No. | Final ST.D. 3 | Date |



GENERAL NOTES:-

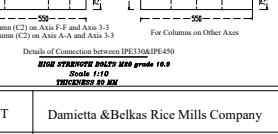
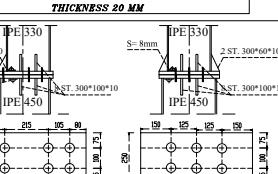
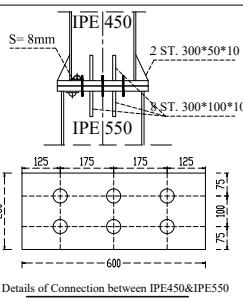
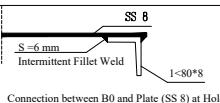
- STEEL USED IS STRUCTURAL STEEL 37 with $P_u = 3.7 \text{ kN/cm}^2$ and $P_y = 2.4 \text{ kN/cm}^2$.
- STRUCTURAL DESIGN FOR STEEL BUILDINGS IS ACCORDING WITH EGYPTIAN CODE OF PRACTICE FOR STEEL CONSTRUCTIONS (THE LOAD AND RESISTANCE FACTOR DESIGN) LRFD - 2005 - MONTEFIR DEC. NO.359-2007.
- THICKNESS OF THE WELDS AT ANY CONNECTIONS IS GIVEN IN THE DETAILS. IF IT IS NOT GIVEN, THEN TAKE THE MINIMUM WELD THICKNESS OF THE WELD = THE SMALLER THICKNESS OF THE PLATES TO BE JOINED OR 4 MM.
- LIVE LOADS MUST BE TAKEN DEPENDING ON THE ACTUAL USE AND THE ACTUAL WEIGHT OF THE MACHINES TAKING INTO ACCOUNT THE DYNAMIC VIBRATION PLUS 100 KG/M² ON THE BEST AREA OF THE SURFACE AND NOT BY 600 KG/M² OF AVERAGE LOAD.
- HIGH STRENGTH BOLTS M20 (GRADE 10.9) ARE REQUIRED FOR ALL CONNECTIONS OF MAIN STRUCTURE SYSTEM WITH A TORQUE OF 67 KNm SHOULD BE APPLIED TO ROTATE EACH NUT OR HEAD.
- FOR IPE 120 (GRADE 10.9), THE HOLES IN STEEL PLATE MUST BE WITH CLEARANCE 2.0MM.
- FOOT STEEL SHEET PLATE THICKNESS USED FOR FLOORS IS 8MM WITH INDICATION SS 8.
- ROUND PEEP MUST BE TAKEN FOR S-SHANK WALL AS A SANDWICH PANELS OR SKELETON MATERIAL WITH THICK PCP OR ROUND PEEL BACK WALL, BETWEEN AXES (1-4&2-5).

Table of Beams

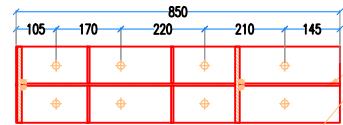
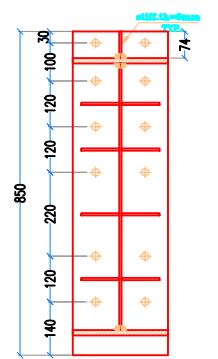
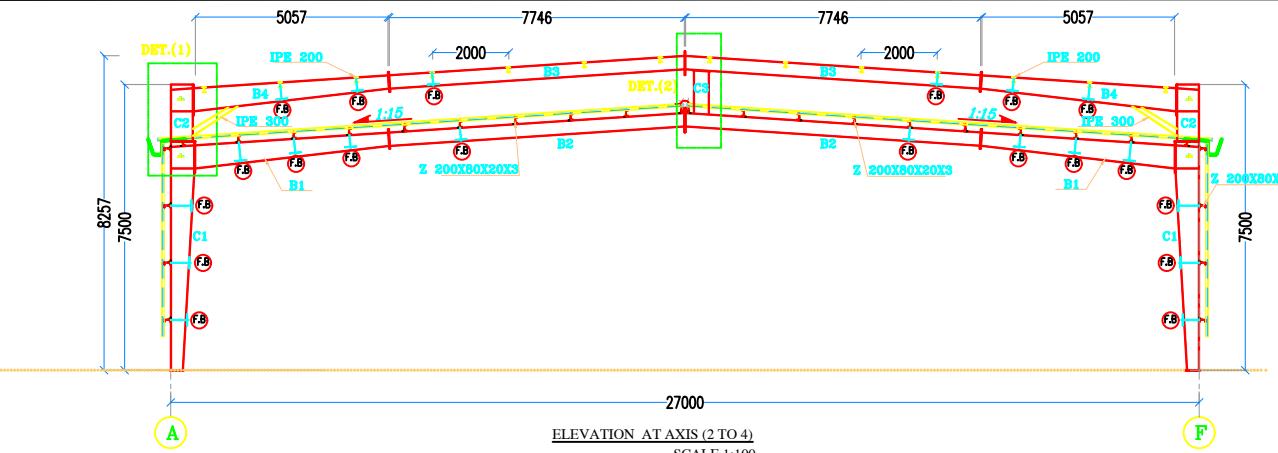
| Name | Section NO. |
|------|-------------|
| B0 | 1<80*8 |
| B11 | IPE 180 |
| B1 | IPE 240 |
| B2 | IPE 330 |
| B3 | IPE 450 |

Table of Columns

| Name | From level (0.0 to 6.50/7.50) | From level (6.50/7.50 to 13.5) | From level (13.5 to 25.5) |
|------|---|--------------------------------|---------------------------|
| C1 | IPE 330 | IPE 330 | IPE 330 |
| C11 | IPE 360 | IPE 330 | IPE 330 |
| C2 | IPE 450 | IPE 330 | IPE 330 |
| C3 | IPE 550 | IPE 450 | IPE 330 |
| CC | IPE 180 [From level (17.20 to 19.50)] | | |



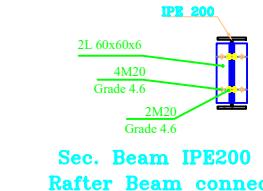
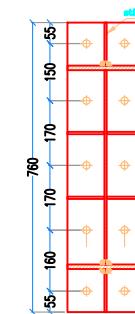
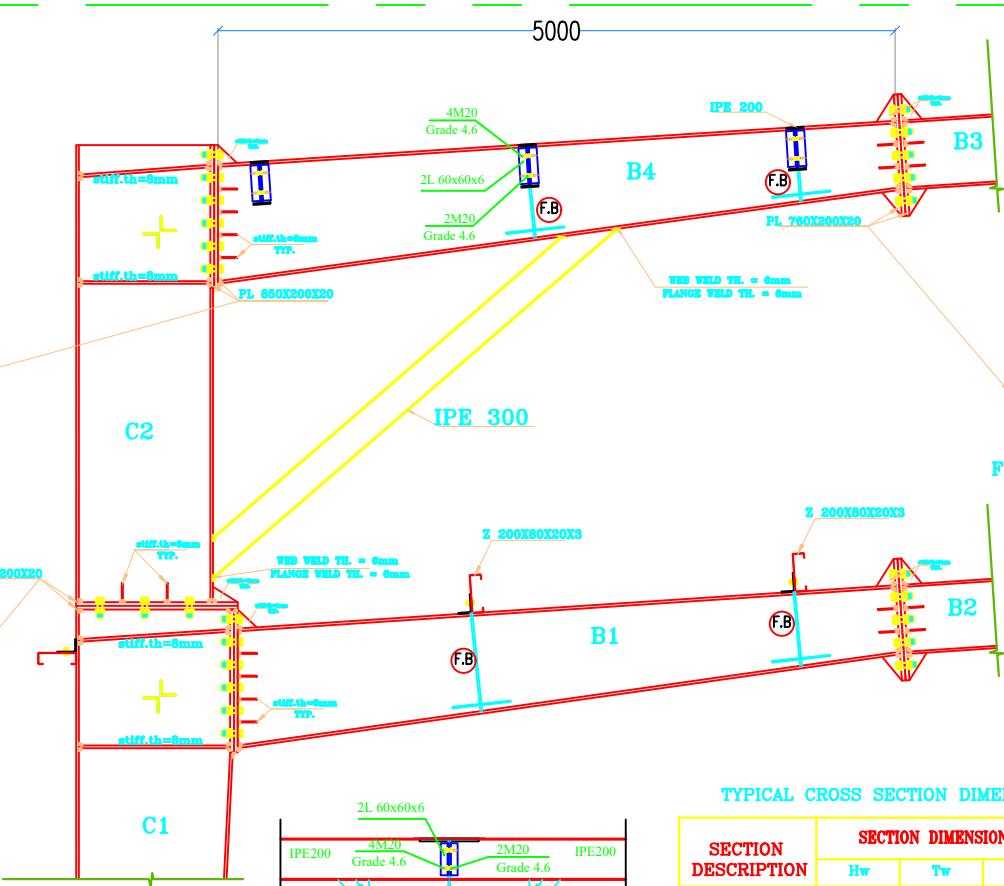
| | |
|--------------|--------------------------------------|
| CLIENT | Damietta & Belkas Rice Mills Company |
| PROJECT | 8~10TPH FLOATING FISH LINE |
| Drawing Name | FLOOR-LEVEL +6.500/7.500m |
| Consultant | Prof.Dr. Saad M. Abdabou |
| Signature | |
| No. | Final ST.D. 5 Date |



PL 850X200X20
HOLE DIAMETER =26mm
BOLTS M24 (10.9)
WEB WELD TH. = 6mm
FLANGE WELD TH. = 12mm

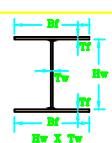
DETAIL(1)

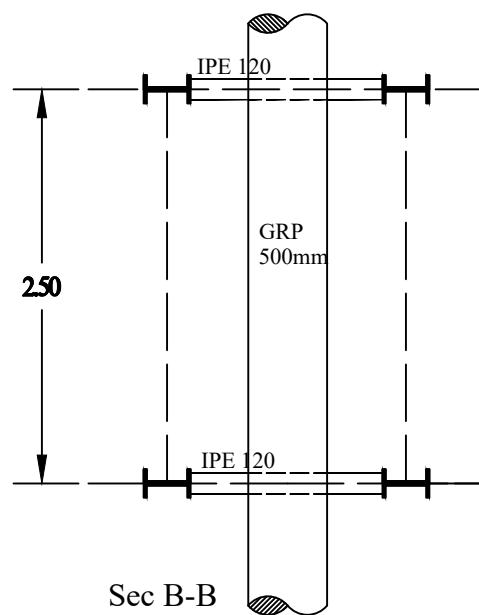
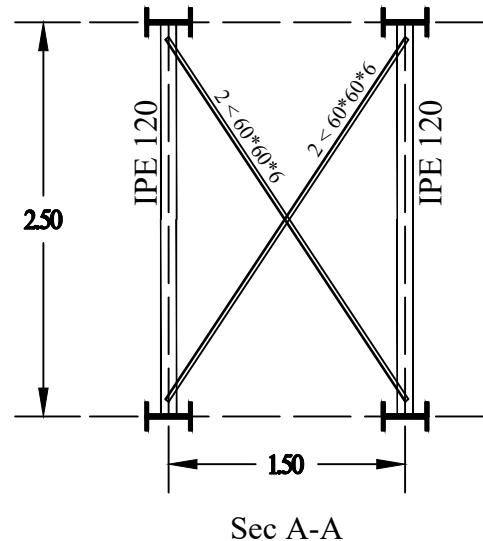
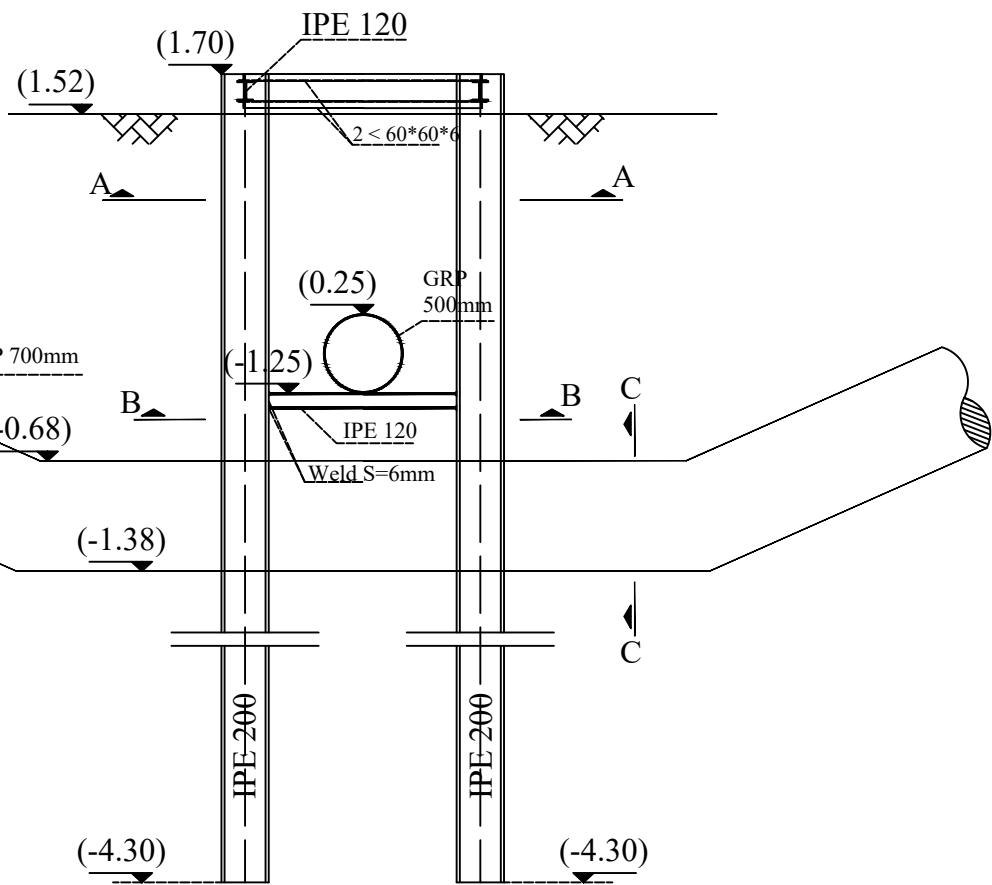
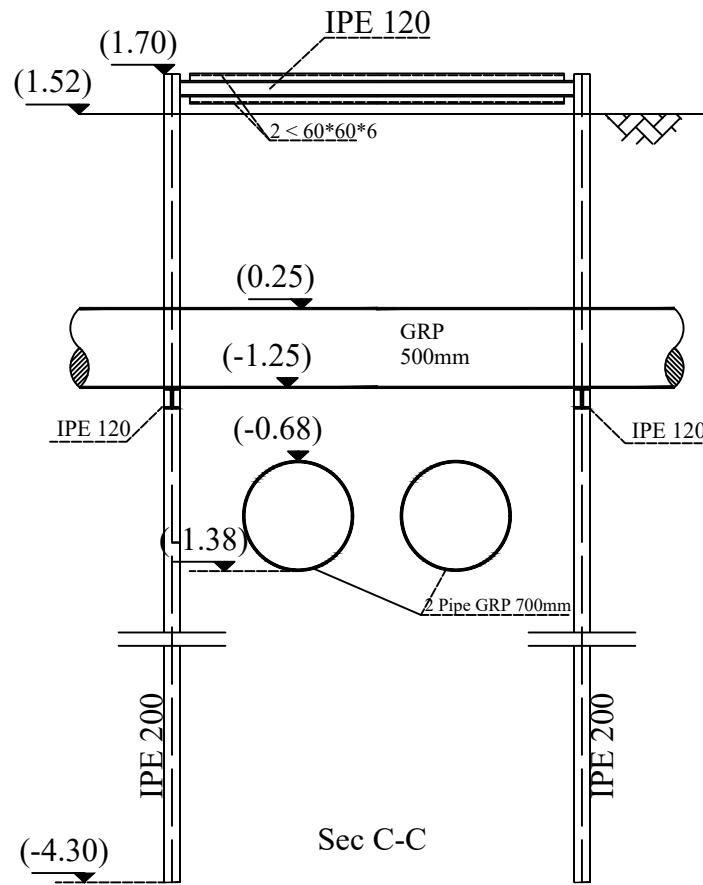
SCALE 1:5



TYPICAL CROSS SECTION DIMENSIONS OF COLUMNS AND BEAMS

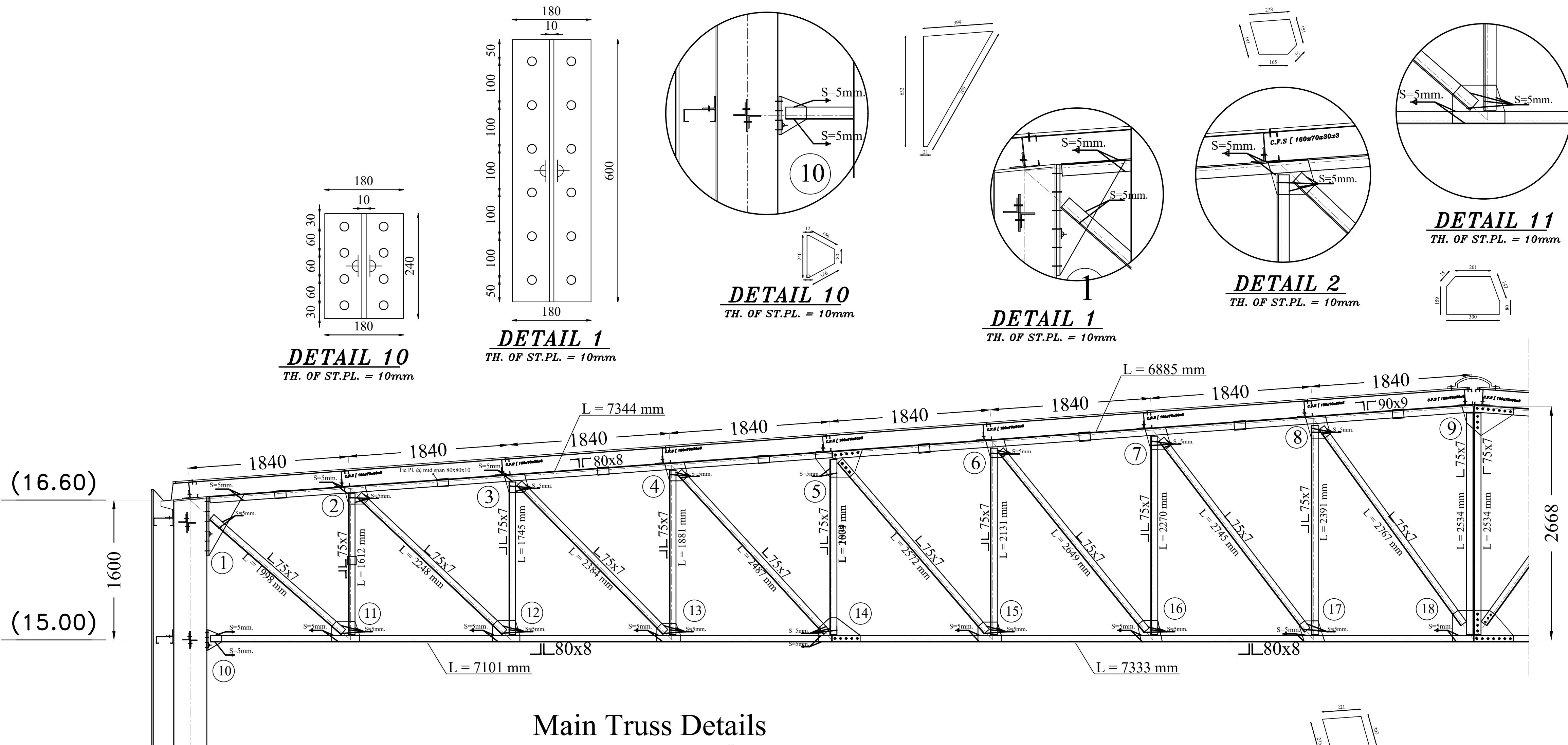
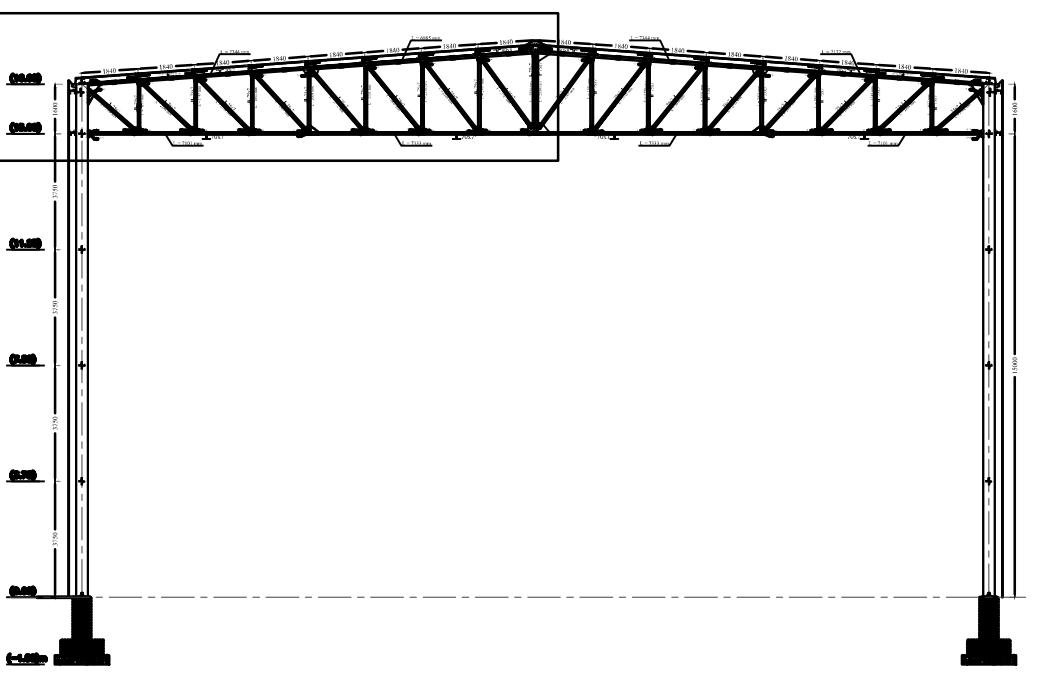
| SECTION DESCRIPTION | SECTION DIMENSIONS (MMs) | | | | REMARKS |
|---------------------|--------------------------|----|-----|----|---------|
| | Hw | Tw | Bf | Tl | |
| C1 | 810/400 | 5 | 270 | 12 | - |
| B1 | 850/600 | 5 | 180 | 10 | - |
| B2 | 600 | 5 | 180 | 6 | - |
| C2 | 700 | 6 | 200 | 12 | - |
| B4 | 700/600 | 6 | 200 | 12 | - |
| B3 | 600 | 6 | 200 | 12 | - |
| C3 | 400 | 5 | 200 | 10 | - |





General notes :

- 1) ALL DIM. AND AXES MUST BE CHECKED WITH ARCH DRAWINGS.
- 2) ALL DIMENSIONS ARE IN mm UNLESS INDICATED OTHERWISE.
- 3) STEEL USED ARE STRUCTURAL STEEL 37 with $F_u = 3.6 \text{ t/cm}^2$



HS.BOLTS M16 (8.8)
HOLES Ø 18

