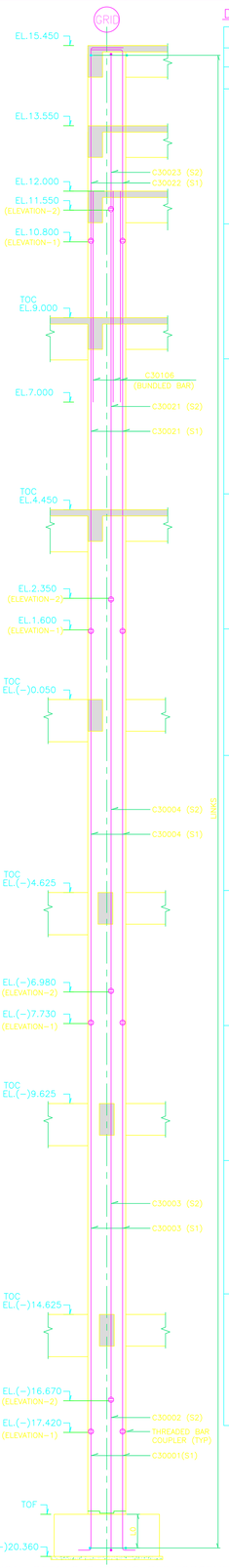
TOP_TITLE1

TOP_TITLE2

TOP_TITLE1

DETAILS OF COLUMN REINFORCEMENTS

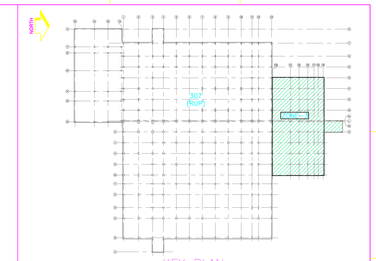
GROUP NO.	COLUMN NO.	SIZE N-S	SIZE E-W	LONGITUDINAL REINFORCEMENT S1 FROM EL.	S1 TO EL.	S1 BAR DIA. & BAR MARK	S2 FROM EL.	S2 TO EL.	S2 BAR DIA. & BAR MARK	LO	BAR-TEC COUPLER ELEVATION "ELEVATION-1" FOR (S1)	BAR-TEC COUPLER ELEVATION "ELEVATION-2" FOR (S2)	BUNDLED BARS FROM EL.	BUNDLED BARS TO EL.	BUNDLED BARS DESCRIPTION	LINKS N-S	LINKS E-W	SECTIONAL DETAIL	SECTIONAL DETAIL FOR BUNDLED BARS
1	C3001, C3008, C3021, C3058	600	900	TOF	-17.420	8-Y28-C30001	TOF	-16.670	8-Y28-C30002	1250	EL. (-)17.420	EL. (-)16.670	TOF EL. (-)4.300	EL. (-)16.900 EL. 4.450	16-Y25-C30101 16-Y25-C30102	248-Y12-4LEGGED @ 100	248-Y12-6LEGGED @ 100		
				-17.420	-7.730	8-Y28-C30003	-16.670	-6.980	8-Y28-C30003		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	8-Y28-C30004	-6.980	2.350	8-Y28-C30004		EL. 1.600	EL. 2.350							
				1.600	4.450	8-Y28-C30005	2.350	4.450	8-Y28-C30006		–	–							
2	C3015, C3045	600	900	TOF	-17.420	6-Y36-C30007	TOF	-16.670	6-Y36-C30008	1250	EL. (-)17.420	EL. (-)16.670	EL. (-)1.550	EL. 4.450	12-Y32-C30103	248-Y8-5LEGGED @ 100	248-Y8-5LEGGED @ 100		
				-17.420	-7.730	6-Y36-C30009	-16.670	-6.980	6-Y36-C30009		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	6-Y36-C30010	-6.980	2.350	6-Y36-C30010		EL. 1.600	EL. 2.350							
				1.600	4.450	6-Y36-C30011	2.350	4.450	6-Y36-C30012		–	–							
3	C3021, C3027, C3033, C3039	600	900	TOF	-17.420	6-Y32-C30013	TOF	-16.670	6-Y32-C30014	1250	EL. (-)17.420	EL. (-)16.670	EL. (-)1.550	EL. 4.450	12-Y32-C30103	293-Y8-5LEGGED @ 100	293-Y8-5LEGGED @ 100		
				-17.420	-7.730	6-Y32-C30015	-16.670	-6.980	6-Y32-C30015		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	6-Y32-C30016	-6.980	2.350	6-Y32-C30016		EL. 1.600	EL. 2.350							
				1.600	9.000	6-Y32-C50017	2.350	9.000	6-Y32-C30018		–	–							
4	C3003, C3010, C3016, C3046, C3053, C3060	750	900	TOF	-17.420	8-C30013	TOF	-16.670	8-C30014	1250	EL. (-)17.420	EL. (-)16.670	TOF EL. (-)3.300	EL(-)16.850 EL. 4.450	16-Y32-C30104 16-Y32-C30105	248-Y12-5LEGGED @ 100	248-Y12-5LEGGED @ 100		
				-17.420	-7.730	8-C30015	-16.670	-6.980	8-C30015		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	8-C30016	-6.980	2.350	8-C30016		EL. 1.600	EL. 2.350							
				1.600	4.450	8-Y32-C30019	2.350	4.450	8-Y32-C30020		–	–							
5	C3034, C3040	900	600	TOF	-17.420	8-C30001	TOF	-16.670	8-C30002	1250	EL. (-)17.420	EL. (-)16.670	EL. 7.000	EL. 12.000	16-Y28-C30106	358-Y8-6LEGGED @ 100	358-Y8-4LEGGED @ 100		
				-17.420	-7.730	8-C30003	-16.670	-6.980	8-C30003		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	8-C30004	-6.980	2.350	8-C30004		EL. 1.600	EL. 2.350							
				1.600	10.800	8-Y28-C30021	2.350	11.550	8-Y28-C50021		EL. 10.800	EL. 11.550							
				10.800	15.450	8-Y28-C30022	11.550	15.450	8-Y28-C30023		–	–							
6	C3022, C3028	900	600	TOF	-17.420	7-C30013	TOF	-16.670	7-C30014	1250	EL. (-)17.420	EL. (-)16.670	–	–	–	293-Y8-6LEGGED @ 100	293-Y8-4LEGGED @ 100	-----	
				-17.420	-7.730	7-C30015	-16.670	-6.980	7-C30015		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	7-C30016	-6.980	2.350	7-C30016		EL. 1.600	EL. 2.350							
				1.600	9.000	7-C30017	2.350	9.000	7-C30018		–	–							
7	C3004, C3005, C3017, C3018, C3047, C3048, C3049, C3061, C3062	750	900	TOF	-17.420	9-C30013	TOF	-16.670	9-C30014	1250	EL. (-)17.420	EL. (-)16.670	EL. (-) 4.600	EL. 3.600	18-Y32-C30107	293-Y12-5LEGGED @ 100	293-Y12-6LEGGED @ 100		
				-17.420	-7.730	9-C30015	-16.670	-6.980	9-C30015		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	9-C30016	-6.980	2.350	9-C30016		EL. 1.600	EL. 2.350							
				1.600	9.000	9-C30017	2.350	9.000	9-C30018		–	–							
8	C3011, C3012, C3013, C3018, C3054	750	900	TOF	-17.420	9-C30007	TOF	-16.670	9-C30008	1250	EL. (-)17.420	EL. (-)16.670	TOF EL (-) 1.850	EL (-)17.600 EL 2.700	18-Y32-C30108 10-Y32-C30109	293-Y12-5LEGGED @ 100	293-Y12-6LEGGED @ 100		
				-17.420	-7.730	9-C30009	-16.670	-6.980	9-C30009		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	9-C30010	-6.980	2.350	9-C30010		EL. 1.600	EL. 2.350							
				1.600	9.000	9-Y36-C30024	2.350	9.000	9-Y36-C30025		–	–							
9	C3006, C3063	750	900	TOF	-17.420	9-C30013	TOF	-16.670	9-C30014	1250	EL. (-)17.420	EL. (-)16.670	EL. (-)1.900	EL. 2.700	18-Y25-C30110	248-Y8-5LEGGED @ 100	248-Y8-6LEGGED @ 100		
				-17.420	-7.730	9-C30015	-16.670	-6.980	9-C30015		EL. (-)7.730	EL. (-)6.980							
				-7.730	1.600	9-C30016	-6.980	2.350	9-C30016		EL. 1.600	EL. 2.350							
				1.600	4.450	9-C30019	2.350	4.450	9-C30020		–	–							
10	C3002, C3055, C3059	750	900	TOF	-17.420	8-C30001	TOF	-16.670	8-C30002	1250	EL. (-)17.420	EL. (-)16.670	TOF	EL. (-) 18.000	16-Y25-C30111	203-Y10-5LEGGED @ 100	203-Y10-5LEGGED @ 100		
				-17.420	-7.730	8-C30003	-16.670	-6.980	8-C30003		EL. (-)7.730	EL. (-)6.980							
				-7.730	-0.050	8-Y28-C30026	-6.980	-0.050	8-Y28-C30027		–	–							

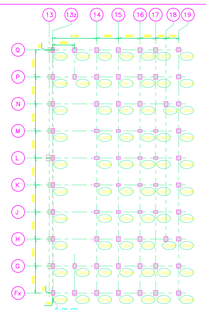


TYPICAL DETAILS SHOWING REINFORCEMENT ARRANGEMENT IN COLUMN

(ELEVATION DRAWN FOR COLUMN NO. C3034)

1:50





PLAN AT TOC EL (-)0.050

(SHOWING COLUMN LOCATIONS)

1:400

LEGENDS:

TYP. — TYPICAL
UNO — UNLESS NOTED OTHERWISE
EL. — ELEVATION LEVEL
C/L — CENTRE LINE
TOF — TOP OF FOOTING
BAR MARK
ZONE NO.
COLUMN
TOC — TOP OF CONCRETE
UN — UNLESS NOTED
⊙ — COUPLER
COL — COLUMN
LD — DEVELOPMENT LENGTH IN COMPRESSION

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND ELEVATIONS IN METERS UNLESS NOTED.
2. CLEAR COVER TO THE MAIN REINFORCEMENT SHALL BE AS FOLLOWS:-
   COLUMN = 50 MM (MIN).
3. ALL THE STRUCTURAL CONCRETE BELOW GRADE LEVEL (EL 0.000) SHALL BE OF GRADE M45 AND ABOVE GRADE LEVEL (EL 0.000) SHALL BE OF GRADE M35.
4. REINFORCING STEEL SHALL BE OF GRADE Fe 550D TMT, CONFORMING TO I.S. 1786.
5. FOR CONSTRUCTION JOINT LOCATIONS REFER DWG. NOS. FRFCF/62160/GA/2171,2172,2173.
6. ALL BAR POSITIONS ARE MARKED TO THE CENTRE LINES OF BARS UNO.
7. REINFORCEMENT, IF REQUIRED, MAY BE MARGINALLY SHIFTED OR BENT TO CLEAR OPENINGS / EMBEDMENTS, ETC. BUT IN NO CASE, IT SHALL BE CUT WITHOUT PRIOR APPROVAL OF ENGINEER.
8. BUNDLED BARS SHALL BE TIED TOGETHER WITH SPIRAL BINDING WIRE TO ENSURE THE BARS REMAIN TOGETHER AS A BUNDLE.
9. THREADED BAR COUPLERS SHALL BE USED FOR EXTENSION OF BARS AT LOCATIONS SHOWN IN THE DRAWING.
10. TO MAINTAIN CORRECT POSITION OF REINFORCING BARS & TO PREVENT DISPLACEMENT OF BARS DURING PLACING & COMPACTION OF CONCRETE, COVER BLOCKS, SPACERS & CHAIRS CONFORMING TO IS : 2502 SHALL BE USED.
11. HOOKS OF COLUMN LINKS FOR ALTERNATE SETS OF LINKS SHALL BE PLACED AT OPPOSITE CORNERS AS SHOWN BELOW TO AVOID CONGESTION AT ONE CORNER. MAIN BARS SHALL HAVE 135° HOOK WITH 10 DIAMETER EXTENSION.

12. LAP LENGTH AS PER IS13920:
   AT BEAM COLUMN JUNCTIONS, THE TIES OF COLUMN SHALL BE CONTINUED.
13. LAP LENGTH SHALL NOT BE LESS THAN 50 TIMES DIAMETER OF BAR.
14. REINFORCEMENT BARS, WHEREVER SHOWN IN SINGLE / ENDING, SHALL BE LAP SPLICED AT SITE, BASED ON LENGTH OF BARS AVAILABLE. ALL SPLICES SHALL BE STAGGERED SO THAT NOT MORE THAN 50% BARS ARE SPLICED AT SAME LOCATION. CLEAR DISTANCE BETWEEN SUCH STAGGERED SPLICES SHALL NOT BE LESS THAN 1.3 TIMES LAP LENGTH. SPLICE LENGTH SHALL BE EQUAL TO DEVELOPMENT LENGTH OF BAR IN TENSION.

	ENGINEERING REFERENCE DRAWING (TITLE)	DRAWING NO.	REV. NO.
1.	PLOT PLAN: PACKAGE-3	FRFCF/62000/PL/2109	C
2.	EQUIPMENT LAYOUT FOR REPROCESSED URANIUM OXIDE PLANT (RUP)	FRFCF/62000/GA/2111 SH: 1 OF 3	D
3.	EQUIPMENT LAYOUT FOR REPROCESSED URANIUM OXIDE PLANT (RUP)	FRFCF/63500/GA/2111 SH: 2 OF 3	D
4.	EQUIPMENT LAYOUT FOR REPROCESSED URANIUM OXIDE PLANT (RUP)	FRFCF/63500/GA/2111 SH: 3 OF 3	D
5.	EQUIPMENT LAYOUT-SECTIONS FOR REPROCESSED URANIUM OXIDE PLANT	FRFCF/62000/GA/2113 SH: 1 OF 2	D
6.	EQUIPMENT LAYOUT-SECTIONS FOR REPROCESSED URANIUM OXIDE PLANT	FRFCF/63500/GA/2113 SH: 2 OF 2	D
7.	REPROCESSED URANIUM OXIDE PLANT (RUP) ARCHITECTURAL GROUND FLOOR PLAN	FRFCF/62100/AL/2101	D
8.	REPROCESSED URANIUM OXIDE PLANT (RUP) ARCHITECTURAL ROOF PLAN	FRFCF/62100/AL/2105	D
9.	FOUNDATION LAYOUT DWG FOR RUP BUILDING ZONE-3	FRFCF/62150/GA/2135	C
10.	COLUMN LAYOUT & ELEVATION DRAWING FOR RUP BUILDING ZONE-3 SECTION-1 TO SECTION-7	FRFCF/62160/GA/2171	A
11.	COLUMN ELEVATION DRAWING FOR RUP BUILDING ZONE-3 SECTION-8 TO SECTION-13	FRFCF/62160/GA/2172	A
12.	COLUMN ELEVATION DRAWING FOR RUP BUILDING ZONE-3 SECTION-14 TO SECTION-18	FRFCF/62160/GA/2173	A
13.	COLUMN REINFORCEMENT DETAILS FOR RUP BUILDING ZONE-3 (SHEET 2 OF 2)	FRFCF/62160/DD/2253	A

CONSTRUCTION REFERENCE:

NIL

FRFCF	CHECKED STAGE-1	CHECKED STAGE-2	APPROVED STAGE-1	APPROVED STAGE-2
CIVIL				
MECH				
PROCESS				

FRFCF	CHECKED STAGE-1	CHECKED STAGE-2	APPROVED STAGE-1	APPROVED STAGE-2
ELEC				
I&C				

FRFCF'S ACCEPTANCE

DO NOT SCALE

CLIENT :

PROJECT :

TITLE: COLUMN REINFORCEMENT DRAWING

DESD.	DATE	22-05-11
DESN CHD.	DATE	22-05-11
DRN.	DATE	22-05-11
DRG. CHD.	DATE	22-05-11
APPD.	DATE	22-05-11
SCALE.	1:25	DV-CV

ORIGINATING AGENCY

PROJECTION

DRG.NO. FRFCF/XXXXX/XX/XXXX

REV PO

FILE NAME :FILE_NAME

ISSUE No.	DRAWING RELEASED FOR	DATE	REV. NO.
0	FIRST ISSUE	22-05-11	A

ISSUE BLOCK

REV. NO.	DESCRIPTION	DRAWN BY	DESD. BY	DESN CHD BY	PROCESS	CIVIL	ELEC.	MECH/ SP.PRO.	I&C	APPROVED
A	FOR REVIEW AND COMMENTS	RAK	ERK	ASD		MVS				

REVISION BLOCK

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