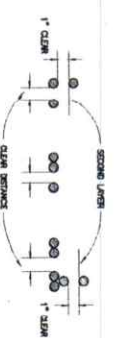
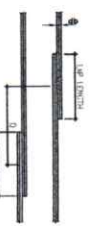


STRUCTURAL NOTES



REINFORCEMENT TYPE	TYPE NUMBER	CLEAR DISTANCE
DEVELOPED BARS	AS SHOWN	AS SHOWN
MINIMUM BARS	AS SHOWN	AS SHOWN

MINIMUM BAR SPACING



1.0 - GOOD CONTACT TO CENTER OF LAP SPACED LONGER THAN 150mm. FOR BARS WITH LAP LENGTHS OF 150mm OR MORE, BARS SHALL BE TIGHTENED AT DEVELOPER'S DISCRETION TO MAINTAIN LAP LENGTHS.

2. FOR BARS WITH LAP LENGTHS OF 150mm OR MORE, BARS SHALL BE TIGHTENED AT DEVELOPER'S DISCRETION TO MAINTAIN LAP LENGTHS.

LAP DISTANCE

MISCELLANEOUS REINFORCEMENT DETAIL

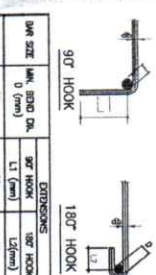


HOOPS & CROSS TIE BAR PLACEMENT DETAIL



BAR SIZE	MIN. BEND D (mm)	HOOK L1 (mm)	HOOK L2 (mm)
#10	40	120	60
#12	50	150	75
#16	75	210	105
#20	100	280	140
#25	125	350	175
#32	160	450	225

FOR STRUPTUPS AND TIE REINFORCEMENTS



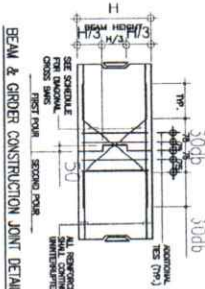
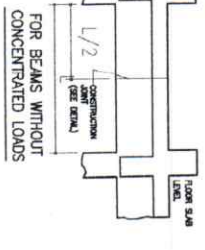
BAR SIZE	MIN. BEND D (mm)	HOOK L1 (mm)	HOOK L2 (mm)
#10	40	120	60
#12	50	150	75
#16	75	210	105
#20	100	280	140
#25	125	350	175
#32	160	450	225

FOR MAIN REINFORCEMENTS

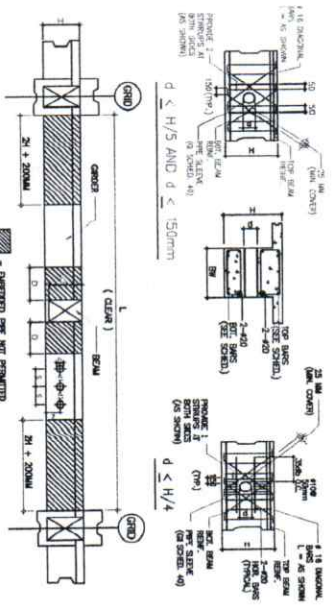
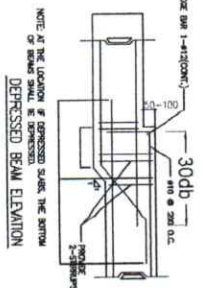
SCHEDULE OF DIAGONAL CROSS BARS	BEAM WIDTH
2 - #16	UP TO 175mm
2 - #20	175mm TO 200mm
2 - #25	200mm TO 250mm
2 - #32	250mm TO 300mm

NOTES ON HORIZONTAL JOINTS

1. LOCATE CONSTRUCTION JOINT BETWEEN L/3 TO L/2 BUT NOT WITHIN H/4 OR 500mm.
2. SLAB REINFORCEMENT SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.
3. PROVIDE ALTERNATE REINFORCEMENT FOR CONSTRUCTION JOINTS ON EACH FLOOR LEVEL.
4. DO NOT USE ANY HORIZONTAL JOINT REINFORCEMENT ON BEAMS WITH CONCENTRATED LOADS.



CONC. BEAM & GIRDER CONSTRUCTION JOINT



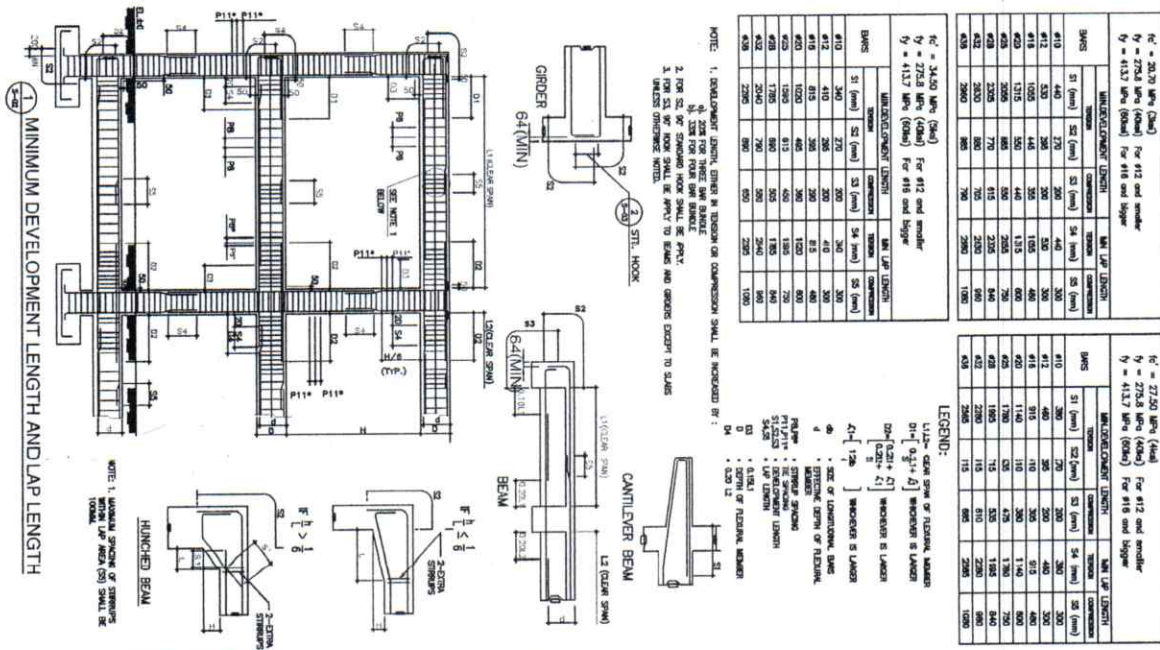
NOTES

1. WHERE REINFORCEMENT ARE SPACED UNUSUALLY.
2. FOR 2, 0/10 OR 2, 0/10mm SPACING.
3. REINFORCEMENT SHALL BE NOT BE PLACED TO FACE OF BEAM.
4. OPENING SHALL BE NOT BE PLACED AT 1/3 DISTANCE FROM END OF INTERSECTING BEAM.

WHERE

H = TOTAL HEIGHT OF GIRDER
 D = TOTAL BEAM DEPTH
 L = TOTAL LENGTH OF GIRDER
 L1 = CENTER TO CENTER OF GIRDER
 L2 = FACE TO FACE OF GIRDER
 L3 = FACE TO FACE OF GIRDER

5 = ALTERNATE SPACING OF REINFORCEMENT
 2 = LEFT (L) + RIGHT (R)
 Y = ALTERNATE LOCATION OF REINFORCEMENT
 Y max. = 1/3



BAR SIZE	MIN. DEVELOPMENT LENGTH (mm)	MIN. LAP LENGTH (mm)
#10	300	300
#12	350	350
#16	450	450
#20	550	550
#25	650	650
#32	750	750

BAR SIZE	MIN. DEVELOPMENT LENGTH (mm)	MIN. LAP LENGTH (mm)
#10	300	300
#12	350	350
#16	450	450
#20	550	550
#25	650	650
#32	750	750

BAR SIZE	MIN. DEVELOPMENT LENGTH (mm)	MIN. LAP LENGTH (mm)
#10	300	300
#12	350	350
#16	450	450
#20	550	550
#25	650	650
#32	750	750

NOTE: 1. DEVELOPMENT LENGTH GIVEN IN TABLE OR COMPRESSION SHALL BE INCREASED BY:

1. 20% FOR STEEL BAR GRADE 60.
2. 10% FOR STEEL BAR GRADE 80.
3. 10% FOR STEEL BAR GRADE 100.

2. FOR SLAB OR GIRDER JOINTS SHALL BE PROVIDED TO SLABS UNLESS OTHERWISE NOTED.

PREPARED BY: **ROBBLON STATE UNIVERSITY**

DESIGNED BY: **JASON E. RUDON**

PROJECT TITLE: **REHABILITATION AND FURNISHING OF OLD/EXISTING UNIVERSITY BUILDING**

PREPARED BY: **AS SHOWN**

CAD OPERATOR: **BSCG / SLM**

OFFICE OF PHYSICAL PLANT AND FACILITIES

PR No: 0245472 Date: 3/11/21

APPROVED BY: **JASON E. RUDON**

DATE: 3/11/21

DATE: 3/11/21

DATE: 3/11/21

STRUCTURAL NOTES

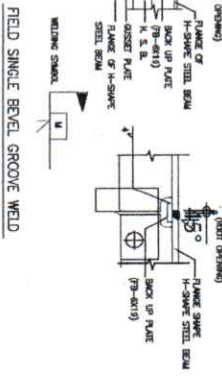
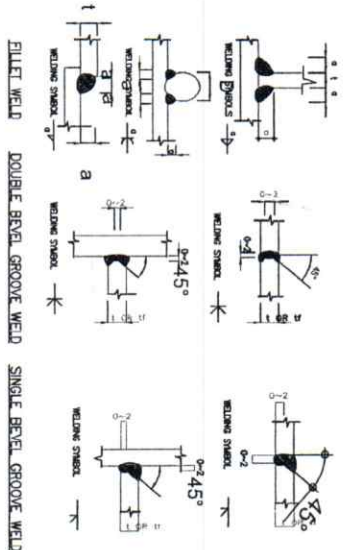
GENERAL NOTES ON STRUCTURAL STEEL

1. ALL MATERIALS SHALL BE COMPARED TO THE FOLLOWING UNLESS OTHERWISE NOTED:
 STRUCTURAL STEEL : ASTM A572 OR APPROVED EQ.
 STRUCTURAL STEEL PIPE : ASTM A53 6-CLASS OR APPROVED EQ.
 HIGH STRENGTH BOLT : ASTM A325 GRADE A OR APPROVED EQ.
 ORDINARY STRUCTURAL BOLT : ASTM A307 TYPE A OR APPROVED EQ.
 STANDARD ELEC. POINT : ASTM A518 OR APPROVED EQ.
 ELECTRODES : ASTM E7011 EXXX OR APPROVED EQ.
2. HIGH STRENGTH BOLTS
 (a) HIGH STRENGTH BOLTS SHALL BE USED IN BRACING TYPE CONNECTIONS.
 BOLTS SHALL BE SNIP-TIGHT.
 (b) FOLLOWING DIMENSIONS SHALL BE APPLIED UNLESS OTHERWISE NOTED.
 BOLT HOLE DIAMETER (IN) : 1/8" OVER NUT & W/2
 STANDARD BOLT PROX. (IN) : 1/8" OVER NUT & W/2
 STANDARD EDGE DISTANCE (IN) : 1 1/2" OVER NUT & W/2
3. ORDINARY STRUCTURAL BOLTS
 (a) BOLT THREAD AND NUT SHALL BE CONFORM TO AISI B1.1 (1982) AND AISI B18.2 (1983) OR ISO 262.
 (b) DIMENSIONS OF BOLT HOLE DIAMETER, STANDARD BOLT PROX. AND STANDARD EDGE DISTANCE SHALL BE SAME TO THAT OF HIGH STRENGTH BOLTS.
4. LEG LENGTH OF FLAT WELD FOR GUSSET PLATE, OR PLATE BENT PLATE AND STANDARD POINT UNLESS OTHERWISE NOTED.
 PLATE THICKNESS (IN) : 1/2" OVER NUT & W/2
 LEG LENGTH (IN) : 1 1/2" OVER NUT & W/2
5. FABRICATION AND ERECTION TOLERANCES SHALL BE CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
6. PAINTING
 STRUCTURAL STEEL HAS BEEN SURFACE PREPARED AND PAINTED IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATION.

REFERENCE GUIDE SYMBOLS

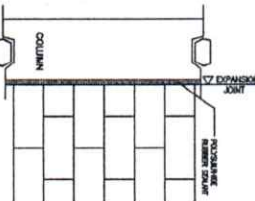
- FOR THE PURPOSE OF GIVING FURTHER DETAILS, SECTIONAL VIEWS AND STANDARDIZED TYPES TO BE REFERRED TO BY REFERENCE GUIDE SYMBOLS AS DESCRIBED BELOW ARE USED IN THE RELEVANT DIMENSIONING DRAWINGS TO MAKE THE REFERENCE RELATION SIMPLE AND CLEAR.
- SYMBOL** : COLUMN EXPLANATION
- 1) SYMBOL TO GUIDE STANDARD DETAIL
 - 2) SYMBOL TO GUIDE NONSTANDARD DETAIL OR SECTIONAL VIEW WHICH ARE NOT STANDARDIZED

GENERAL NOTES ON STRUCTURAL STEEL



THK. OF PLATE	WELDING TYPE	WELDING SYMBOLS
1/2" & 3/4"	FLLET WELD	
1/2" & 3/4"	SINGLE BEVEL GROOVE WELD	
1/2" & 3/4"	DOUBLE BEVEL GROOVE WELD	

STANDARDIZED WELDS



MISCELLANEOUS DETAIL

(WALL EXPANSION JOINT)

PREPARED BY: ROMBLON STATE UNIVERSITY
 OFFICE OF PHYSICAL PLANT AND FACILITIES

CIVIL ENGINEER: [Signature]
 DESIGNER: [Signature]

PROJECT TITLE: REHABILITATION AND FURNISHING OF OLD/EXISTING UNIVERSITY BUILDING

DATE: 2/11/21

CHECKED BY: [Signature]
 APPROVED BY: [Signature]

PROJECT TITLE: REHABILITATION AND FURNISHING OF OLD/EXISTING UNIVERSITY BUILDING

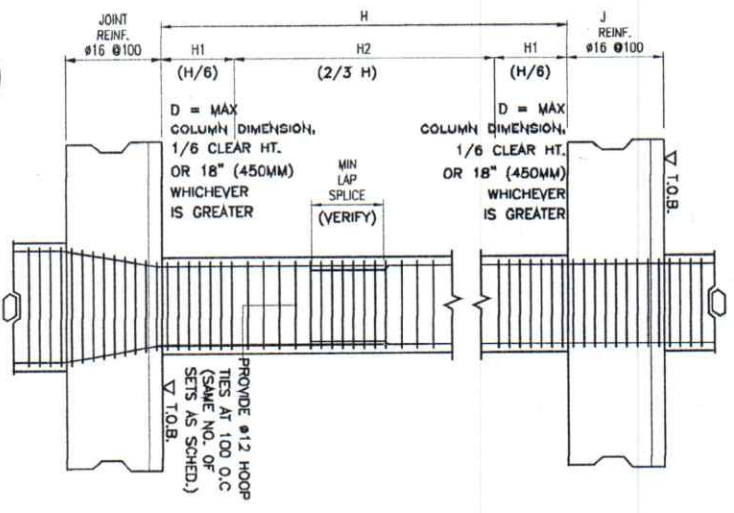
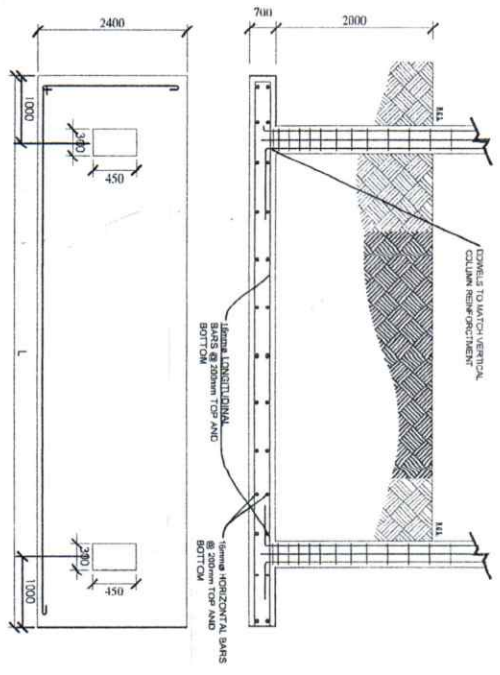
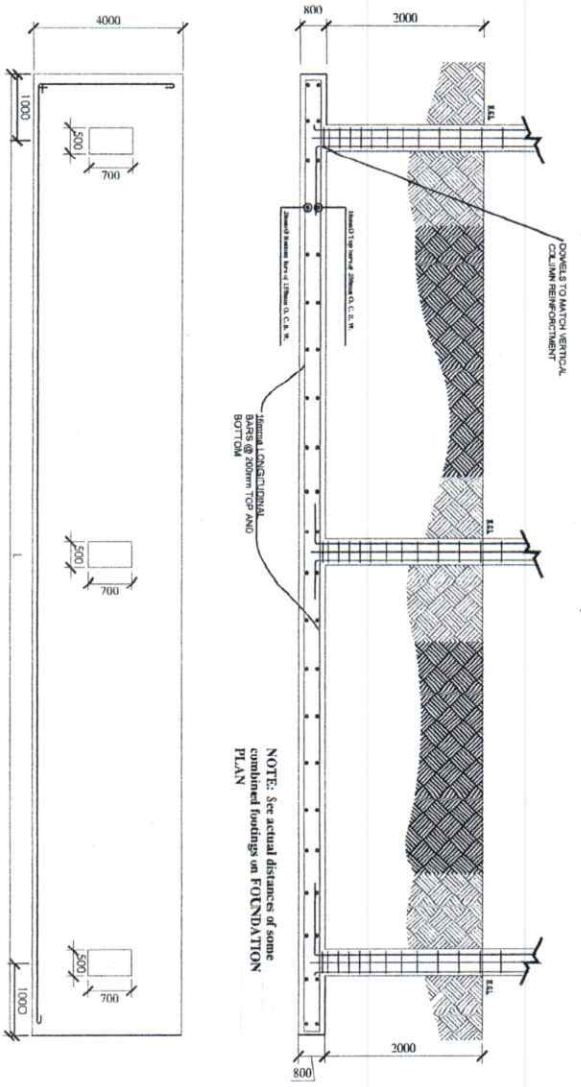
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CAD OPERATOR: BSCG / SIM

JOB NO.: [Blank]

DATE: [Blank]

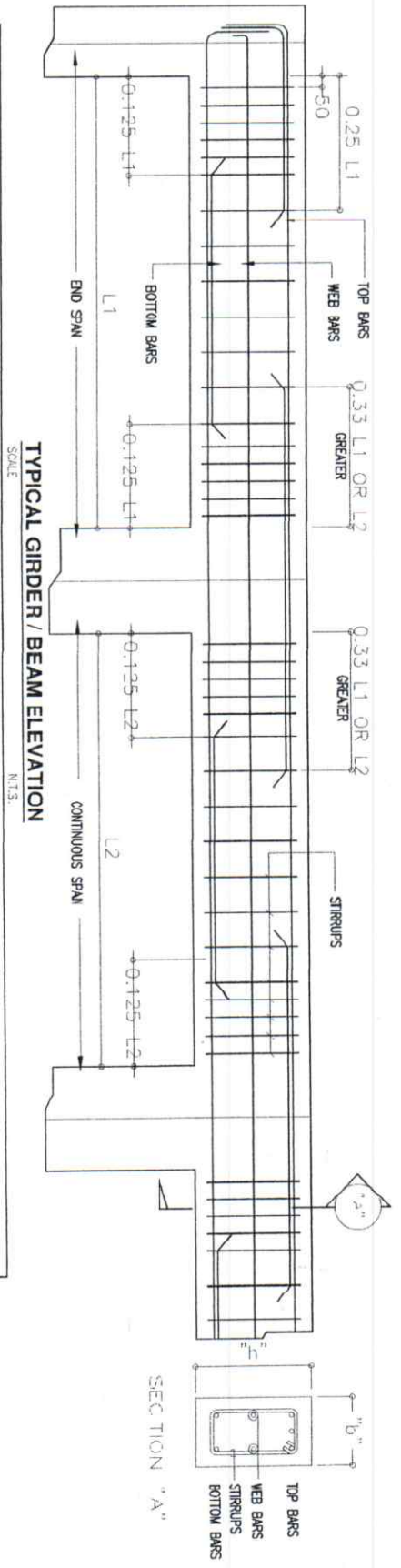


1
COMBINED COLUMN FOOTING DETAILS
 SCALE NTS

MARK	FOUNDATION TO ROOF LEVEL	DIMENSION (B X D)	VERTICAL BARS	TIES	SPACING
C-1		500 X 700	4#-25mmØ	H1: 2-12mmØ H2: 2-12mmØ	H1: 1 @ 50, 10 @ 100 H2: REST @ 150
C-2		300 X 450	12-20mmØ	2-12mmØ	1 @ 50, 10 @ 100 REST @ 200

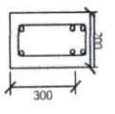
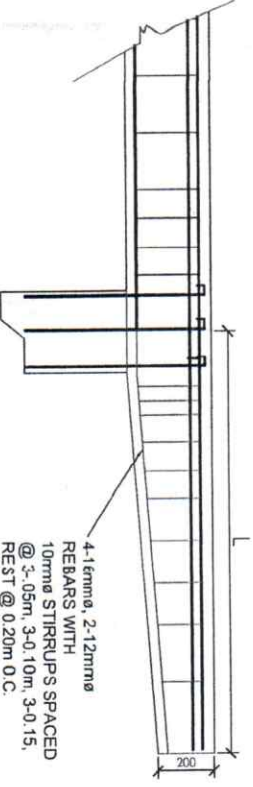
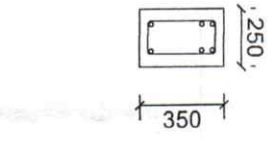
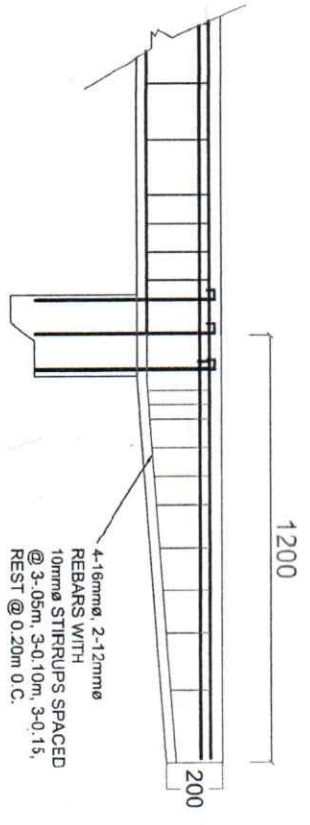
2
TYP. COLUMN DETAIL
 SCALE 1:30

PREPARED BY: ROMBLON STATE UNIVERSITY OFFICE OF PHYSICAL PLANT AND FACILITIES	OTHER ENGINEER: TITLE: ENGINEER	CHECKED BY: TITLE: DESIGNER	PROJECT TITLE: REHABILITATION AND FURNISHING OF OLD/EXISTING UNIVERSITY LIBRARY
PTR. NO.: 0242147 Date: 2/1/21	PROC. REG. NO.: 0242147 Date: 9-5-21	APPROVED BY: TITLE: DESIGNER	SHEET CONTENT: AS SHOWN
PREPARED BY: BCSC / SLM	CHECKED BY: BCSC / SLM	CAD OPERATOR: BCSC / SLM	PREPARED BY: BCSC / SLM
DATE:	JOB NO.:	DATE:	DATE:



R. C. GIRDER/BEAM SCHEDULE

MARK	SIZE (mm)	REINFORCEMENTS				WEB BARS EACH FACE	STIRRUPS TYPES		REMARKS
		LEFT SUPPORT	MID-SPAN	RIGHT SUPPORT	SPACING				
FB-1	300X500	4-Ø25	4-Ø25	4-Ø25	4-Ø25	1-Ø16	10Ø50, 11Ø100, RESTØ150 TO CL		
FB-2	200X400	5-Ø16	3-Ø16	5-Ø16	3-Ø16	1-Ø12	10Ø50, 11Ø100, RESTØ150 TO CL		
RB-1	250X400	5-Ø16	3-Ø16	5-Ø16	3-Ø16	1-Ø12	10Ø50, 11Ø100, RESTØ150 TO CL		
FTB	300X450	4-Ø25	4-Ø25	4-Ø25	4-Ø25	1-Ø12	10Ø50, 12Ø100, RESTØ150 TO CL		



1 CB 1 DETAILS
SCALE 1:20

2 CB 2 DETAILS
SCALE 1:20

PREPARED BY: ROMBLON STATE UNIVERSITY	CIVIL ENGINEER	CHECKED BY: JASON S. RUBON	PROJECT TITLE: REHABILITATION AND FURNISHING OF OLD/EXISTING UNIVERSITY BUILDING	SHEET CONTENT: AS SHOWN	PREPARED BY:
OFFICE OF PHYSICAL PLANT AND FACILITIES	<i>[Signature]</i>	<i>[Signature]</i>			CAD OPERATOR: BSC / SLM
PRC REG. NO. 012201	DATE: 9-5-21	APPROVED BY: <i>[Signature]</i>			JOB NO.:
PR No: 0206/21	DATE: 9/1/21	DATE: 9/1/21			DATE:

S-7

