SUPPLEMENTAL/BID BULLETIN



Republic of the Philippines SOUTHERN LEYTE STATE UNIVERSITY Main Campus Sogod, Southern Leyte

COMPLETION OF ENGINEERING & TECHNOLOGY (MECHATRONICS) BUILDING

ADDENDUM NO. 01

This Addendum No. 01 is issued to modify or amend items in the Bid Documents. This shall form an integral part of the Bid Documents.

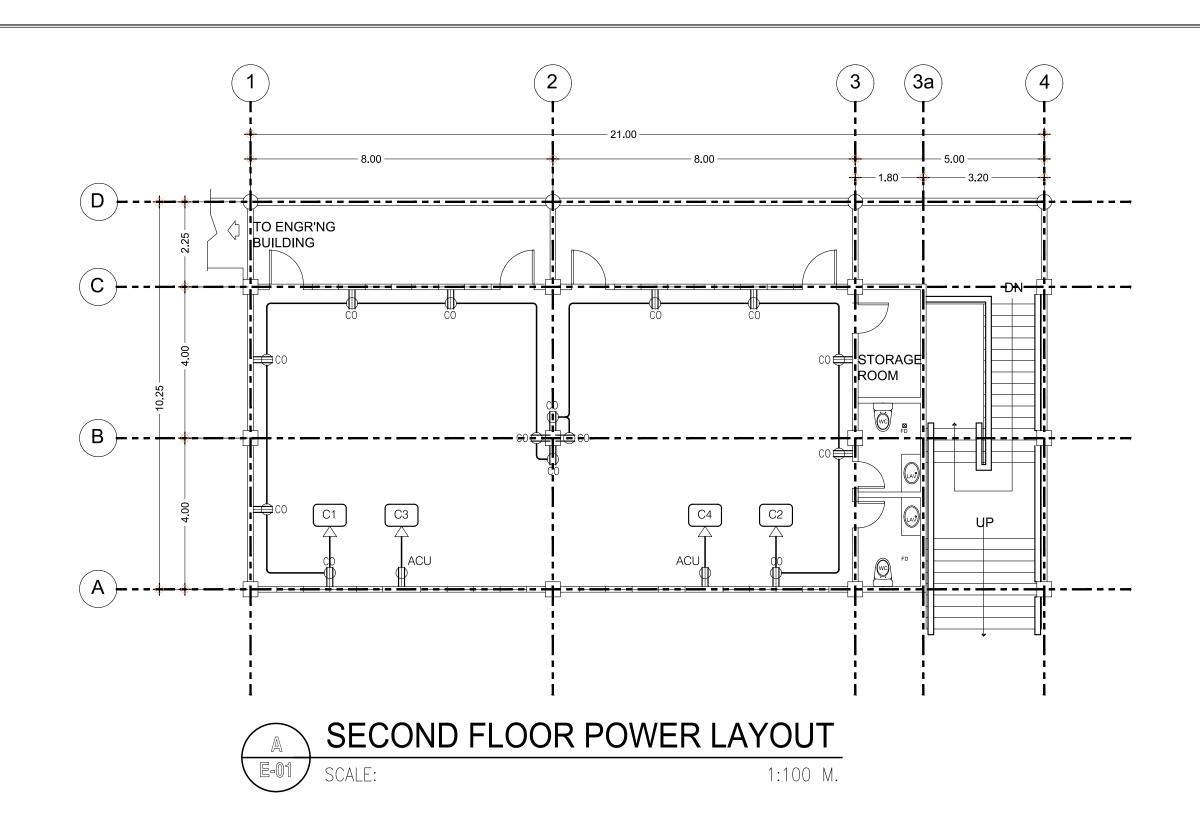
ORIGINAL SPECIFICATION:	NEW SPECIFICATION:			
ITEM No. 6 TILE WORKS 6.2 COMFORT ROOM 16" x 16" (400mm x 400mm) textured floor tiles & glazed premium wall tiles	ITEM NO. 6 TILE WORKS 6.2 COMFORT ROOM 16" x 16" (400mm x 400mm) textured floor tiles 8 glazed premium wall tiles 16" x 16" textured unglazed floor tiles			
BILL OF QUANTITIES ITEM No. 12 – RAILINGS AND OTHER ARCHITECTURAL 2" x 6" x 5.7mm x 6.0m Tubular (standard) 1" x 3" x5.7mm x 6.0m Tubular (standard) 2" x 2" x 5.7mm x 6.0m Tubular (standard)	BILL OF QUANTITIES ITEM No. 12 — RAILINGS AND OTHER ARCHITECTURAL 2" x 6" x 1.5mm x 6.0m Tubular (standard) 1" x 3" x 1.5mm x 6.0m Tubular (standard) 2" x 2" x 1.5mm x 6.0m Tubular (standard)			
Drawing	DRAWING E-01 AND S-01 (PLEASE ATTACHMENT)			

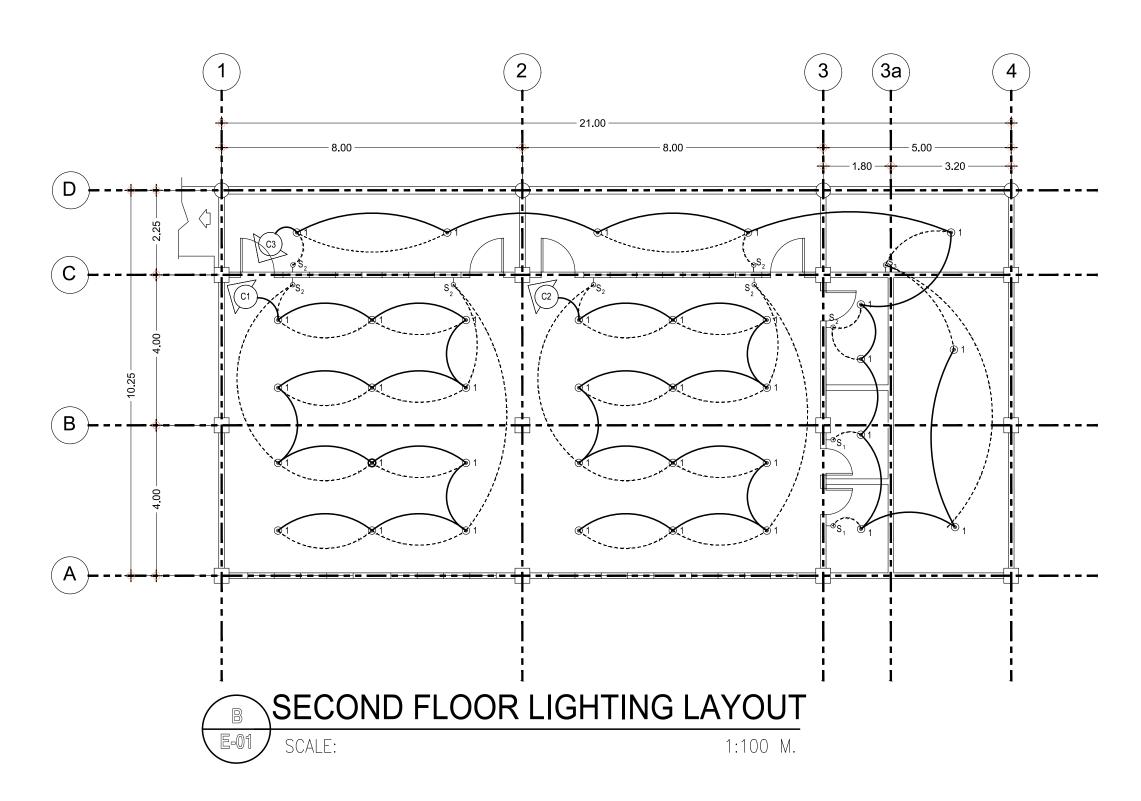
For guidance and information of all concerned.

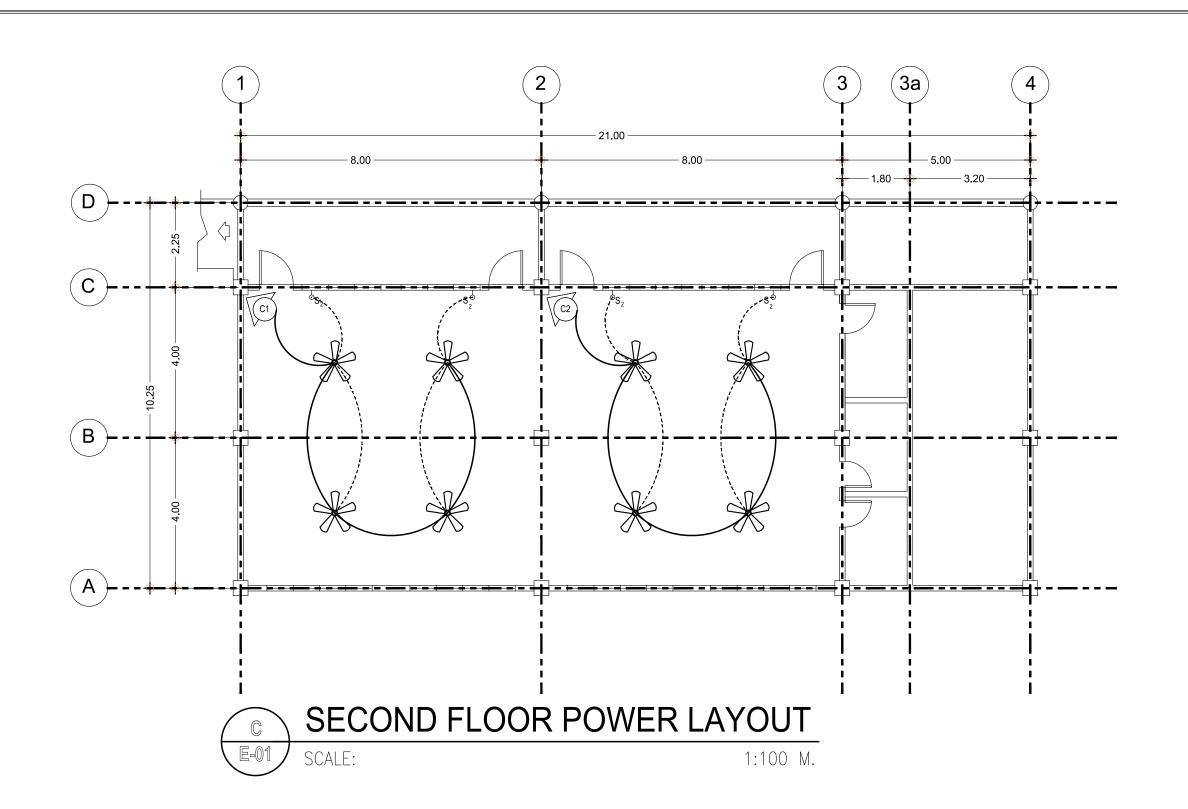
EPHRAIM L. CALOPE

BAC Vide - Chair

Date: 27 June 2018





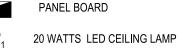


- 1. THE ELECTRICAL INSTALLATION HEREIN, SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, REQUIREMENTS OF THE LOCAL POWER COMPANY, RULES AND REGULATIONS OF THE
- 2. ALL ELECTRICAL WORKS HEREIN SHALL BE EXECUTED BY EXPERIENCED MEN UNDER THE
- 3. THE CONTRACTOR SHALL VERIFY AND ORIENT THE ACTUAL LOCATION OF SERVICE ENTRANCE FOR CONNECTION TO POWER SUPPLY.
- 4. THE TYPE OF POWER TO BE SUPPLIED SHALL BE, 220VAC, SINGLE PHASE, TWO WIRE PLUS GROUND, 60 HERTZ.
- 5. UNLESS OTHERWISE SPECIFIED, THE MINIMUM SIZE OF WIRE SHALL BE 3.55QMM THHN/THWN AND THE CONDUIT SHALL BE 15 mm@ RSC AND 20 mm@upvC.
- 4. ALL MATERIALS TO BE USED SHALL BE NEW AND OF THE APPROVED TYPE FOR THE LOCATION AND PURPOSE.
- 7. UNLESS OTHERWISE INDICATED ON THE DRAWING, POLYVINYL CHLORIDE[PVC] CONDUIT SHALL BE USED FOR EMBEDDED WIRING & RIGID STEEL CONDUIT (RSC) FOR EXPOSED WIRING.
- 8. ALL WIRE SHALL BE COPPER AND THERMOPLASTIC INSULATED TYPE "THHN/THWN" UNLESS OTHERWISE INDICATED IN THE PLANS, THE MINIMUM SIZE FOR POWER AND LIGHTING SHALL BE 3.550mm AND SHALL BE MANUFACTURED BY PHELPS DODGE OR DURAFLEX OR WITH ISO CERTIFICATES.
- 9. ALL OUTLET BOXES SHALL BE GALVANIZED GAGE NO. 16, DEEP TYPE WITH FACTORY
- 10. THE CIRCUIT BREAKERS SHALL BE WITH ISO CERTIFICATES AND SHALL BE PLUG-IN TYPE WITH UL LISTED ENCLOSURE.
- 11. ALL MOUNTING HEIGHTS ARE SUBJECT TO ARCHITECT'S APPROVAL PRIOR TO INSTALLATION.
- 12. PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) FOR ALL CONVENIENCE OUTLET LOCATED IN THE LAUNDRY AREA OR IN OUTDOOR USE AS WELL AS IN THE LAVATORY
- 13. CONDUCT INSULATION RESISTANCE TEST PRIOR FOR TERMINATION OF DEVICES AS WELL AS OTHER NECESSARY ELECTRICAL TESTING STANDARDS.
- 14. SWITCHES SHALL BE FLUSH MOUNTED AND LOCATED 200mm FROM THE EDGE OF THE DOOR JAMB TO THE CENTER OF THE SWITCH OR 150mm FROM THE EDGE OF THE DOOR JAMB TO THE EDGE OF THE SWITCH.
- 15. CONTRACTOR WILL PROVIDE THE OWNER WITH TWO[2] SETS OF AS-BUILT PLANS WITH E-FILE AND DULY SIGNED BY THEIR REGISTERED LICENSED ELECTRICAL ENGINEER.

LEGEND & SYMBOLS



KILO-WATT HOUR METER



12 WATTS LED CEILING LAMP

12 WATTS LED WALL LAMP 36 WATTS FLUSH MOUNTED LED

PANEL LIGHT, 595MM X 595MM

T5 FLOURESCENT DUPLEX CONVENIENCE OUTLET

3 - PHASE RECEPTACLE OUTLET

AIR-CONDITIONING UNIT OUTLET

FAN COIL UNIT

AIR COOLED CONDENSING UNIT

✓ ACCU-P AIR COOLED CONDENSING UNIT PANEL



56" INDUSTRIAL CEILING FAN

12" CEILING TYPE EXHAUST FAN

1 GANG SWITCH

TWO GANG SWITCH

THREE GANG SWITCH

THREE WAY SWITCH (3 GANG)

CEILING FAN CONTROL SWITCH

EXHAUST FAN CONTROL SWITCH DISTRIBUTION PANEL

POWER PANEL-GROUND FLOOR POWER PANEL-SECOND FLOOR LIGHTING PANEL-GROUND FLOOR

LIGHTING PANEL-SECOND FLOOR POWER PANEL 3 PHASE

PREPARED BY: PROJECT: OWNER: APPROVED AS PER PLAN: SHEET CONTENT SHEET NO. SOUTHERN LEYTE STATE PROPOSED CONSTRUCTION OF MECHATRONICS AS SHOWN UNIVERSITY RYAN A. MACUTO ROBERTO B. PARANAS SOUTHERN LEYTE STATE UNIVERSITY BUILDING (PHASE II) REG. CIVIL ENGINEER REG. CIVIL ENGINEER PROSE IVY G. YEPES, Ed. D. SOGOD, SOUTHERN LEYTE UNIVERSITY PRESIDENT CHECKED DRAWN SCALE RAYMART BULAGSAC LIZANDRO C. BITANG LOCATION: SLSU-MAIN CAMPUS, SAN ROQUE, SOGOD SOUTHERN LEYTE ADDRESS: SOGOD, SOUTHERN LEYTE PROJ. NO. APPROVED: DATE AS SHOWN @ 20x30 REG. CIVIL ENGINEER REG. ELECTRICAL ENGINEER

GENERAL STRUCTURAL/CONSTRUCTION NOTES AND SPECIFICATIONS

(A) GENERAL REQUIREMENTS

- . ALL STRUCTURAL MATERIALS AND WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL STRUCTURAL CODE OF THE PHILIPPINES
- VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING
- WORK, NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. NOTES AND DETAILS ON THE DRAWINGS TAKE PRECEDENCE OVER THE GENERAL
- NOTES AND TYPICAL DETAILS IN €ASE OF CONFLICT. WHERE CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, SUCH DETAILS SHALL BE THE SAME AS FOR SIMILAR WORK SHOWN ON THE
- . PIPES, DUCTS, SLEEVES, CHASES, ETC. SHALL NOT BE PLACED IN SLABS, BEAMS, OR WALLS UNLESS SPECIFICALLY SHOWN OR NOTED NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR PIPES, DUCTS, ETC. UNLESS SPECIFICALLY SHOWN, OBTAIN PRIOR WRITTEN APPROVAL FROM THE ENGINEER FOR INSTALLATION OF ANY ADDITIONAL PIPES, DUCTS, ETC. LOCATE AND PROTECT UNDERGROUND OR CONCEALED CONDUIT, PLUMBING OR
- OTHER UTILITIES WHERE NEW WORK IS BEING PERFORMED. 6. LOCATE AND PROTECT UNDERGROUND OR CONCEALED CONDUIT, PLUMBING OR
- OTHER UTILITIES WHERE NEW WORK IS BEING PERFORMED.
- Z. TAKE NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION, NEITHER THE OWNER NOR ARCHITECT/ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ADEQUATE SHORING AND BRACING OF THE STRUCTURE FOR ALL THE LOADS THAT MAYBE IMPOSED DURING CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
- BORDAIN PRIOR WRITTEN APPROVAL FROM THE ENGINEER IN CASE OF CHANGES TO THE WORKING DRAWINGS.

(B) DESIGN CRITERIA

--- REFER TO STRUCTURAL COMPUTATIONS

(C) FOUNDATION

- FOOTINGS SHALL BEAR ON SOLID UNDISTURBED EARTH (CONTROLLED, COMPACTED STRUCTURAL FILL OR BOTH) AT LEAST 450MM BELOW LOWEST ADJACENT FINISHED
- 2. FOOTING IS DESIGNED FOR ASSUMED ALLOWABLE SOIL/FOUNDATION PRESSURE OF 3000 KP2 [144 pc]
- SUB-GRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH THE RECOMMENDATIONS GIVEN IN THE SOILS REPORT OR AS DIRECTED BY THE SOILS
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER FOOTING EXCAVATION HAVE BEEN COMPLETED AND PRIOR TO CONCRETING TO CONFIRM THE DESIGN
- I. ROOF AND AREA DRAINAGE SHALL BE DIRECTED AWAY FROM THE FOUNDATIONS.
- & EXCAVATIONS SHALL BE PROPERLY BACKFILLED. BACKFILL FOR WALLS SHALL BE PERVIOUS MATERIAL ACCEPTABLE TO THE GEOTECHNICAL ENGINEER. DO NOT PLACE BACKFILL BEHIND WALLS BEFORE THEY HAVE ATTAINED THEIR DESIGN STRENGTH. SHORE AND PROTECT WALLS FROM LATERAL LOADS UNTIL THE SUPPORTING MEMBERS ARE IN PLACE AND HAVE DEVELOPED SPECIFIED STRENGTHS.

(D) REINFORCED CONCRETE

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH THE PROVISIONS SET BY THE NSCP 2001.
- ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS WITH CORRESPONDING MAXIMUM SLUMP AND MAXIMUM SIZE AGGREGATE AS

STRUCTURAL MEMBER A. SLABON GRADE

B. ALL OTHERS (SLABS, BEAMS,

COLUMNS, ETC.)

28 DAY STRENGTH MAX. SLUMP MAX. SIZE AGG.

- ALL REINFORCING STEEL BARS SHALL CONFORM TO ASTM A615 GRADE 46 FOR 12MM@AND-SMALLER BARS WHILE BARS 16MMM @AND LARGER SHALL BE GRADE 60
- ALL FABRICATION, DETAILING AND PLACING SHALL CONFORM TO THE PROVISIONS SET BY THE NSCP 2001 EDITION
- CLEAR DISTANCE SPACING BETWEEN PARALLED BARS IN A LAYER SHALL NOT BE LESS THAN 1.50 TIMES THE NOMINAL DIAMETER OF THE BAR, OR 1.33 TIMES MAXIMUM SIZE AGGREGATE, NOR LESS THAN 38MM (12)

MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

FOOTINGS (CAST AGAINST & EXPOSED TO EARTH)..... WHERE CONCRETE IS EXPOSED TO EARTH BUT POURED AGAINST FORMS

40MM (1 1/2") COLUMN TIES OR SPIRALS AND BEAM STIRRUPS..... 40MM (1 1/2") 20MM (3/4") SUSPENDED SLABS.

75MM (3")

50MM (2")

- I. SPLICES SHALL BE SECURELY WIRED TOGETHER AND SHALL LAP AT LEAST 40 TIMES DIAMETER OR SOOMM WHICHEVER IS GREATER. STAGGER BOTTOM AT LEAST 1.50M FROM SPLICES IN OTHER BOTTOM REINFORCEMENT. STAGGER SPLICES FOR TOP
- & ALL ANCHOR BOLTS, DOWELS, AND OTHER INSERTS SHALL BE PROPERLY POSITION AND SECURED IN PLACE PRIOR TO PLACING OF CONCRETE.
- * ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF I CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF CURING COMPOUNDS, OR OTHER

10. STRIPPING OF FORMS AND SHORES: SUSPENDED SLAB EXCEPT WHEN

(E) CAMBER REQUIREMENTS

- 1. UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS CAMBER ALL RE BEAMS AT LEAST 10mm FOR EVERY 4000mm OF CLEAR SPAN EXCEPT CANTILEVERS WHICH WHICH SHALL BE 50mm FOR EVERY 3000mm OF CLEAR SPAN.
- 2. UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS CAMBER ALL SLABS 3mm PER 3000mm OF SHORTER SPAN AND 14mm FOR EVERY 2000mm OF SLABS

(F) MASONRY AND CONCRETE BLOCKS

- 1. CONCRETE HOLLOW BLOCKS, UNLESS OTHERWISE SPECIFIED SHALL BE 190MM THICK, LOAD BEARING BLOCKS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 750 PSI (5.175 MP2) WHILE NON-LOAD BEARING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 400 PSI (2.76 MPa)
- 2. PROVIDE 1-16MMG VERTICAL BARS AT CORNERS, INTERSECTIONS, END-OF WALLS, EACH SIDE O
- 3. LINTEL BEAMS SHALL BEAR AT LEAST 200MM (87) ON EACH SIDE OF MASONRY WALL
- 4. WALL REINFORCEMENTS SHALL BE AS FOLLOWS:

WALL THICKNESS VERTICAL BARS HORIZONTAL BARS . 12MMØ @ 400MM 10MMØ @ 600MM 8 IN. (200 mm) 6 IN (150 mm) 10MMØ @ 400MM 10MMØ @ 600MM 4 IN. (100 mm) 10 MMØ @ 400MM 10MMØ @ 600MM

5. BLOCK WALL REINFORCING BARS SHALL BE LAPPED OF 30 BAR DIAMETERS WHERE SPLICED, HORIZONTAL VERTICAL DOWELS FROM FOOTINGS, COLUMNS/WALLS OR SLABS SHALL EXTEND INTO THE BLOCK WALL A MINIMUM OF 30 BAR DIAMETERS OR A MINIMUM OF 400MM WHICHEVER IS LONGER AND DOWELS TO MATCH VERTICAL REINFORCEMENTS OF WALL.

(G) STRUCTURAL STEEL

- 1. ALL STRUCTURAL STEELS SUCH AS ANGLES, WIDE FLANGE SECTIONS, PIPES, STIFFENER PLATES, BASE PLATES, ETC. SHALL CONFORM TO ASTM A-36.
- 2. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED BASED ON THE SPECIFICATION FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL GIVEN BY THE NATIONAL STRUCTURAL CODE OF THE PHILIPPINES (NSCP).
- 3 CONNECTION BOLTS (TROUND, UNLESS SHOWN OTHERWISE) SHALL CONFORM TO ASTM A-325. ANCHOR BOLTS (EMBEDDED IN MASONRY OR CONCRETE) SHALL CONFORM TO ASTM A300 UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- 4. ALL STRUCTURAL STEEL SHALL BE CLEAN, RUST FREE AND SHOP COATED WITH THE APPROPRIATE PAINT. STRUCTURAL STEEL AND ANCHOR BOLTS SHALL BE MINIMUM ASTM A-36 DOMESTIC, LATEST REVISION.
- 5. NON SHRINK GROUT PRE-MIXED, NON-METALLIC, CEMENT-BASED GROUT, MEETING THE REQUIREMENT OF ASTM C821, ASTM C105 & CRD-C621, WITH A MINIMUM
- COMPRESSIVE STRENGTH OF 2000asi AT 28 DAYS. \$ PROVIDE MISCELLANEOUS PLATES, ANGLES AND ANCHORS AS SHOWN OR NOTED ON
- I. ALL CUTTING AND BLOCKING OF STEEL SHALL BE SHOWN ON SHOP DRAWINGS AND
- 8. PROVIDE TEMPORARY BRACING AS REQUIRED FOR A SAFE STRUCTURE UNTIL ALL FINAL CONNECTIONS ARE MADE.

SCHEDULE OF FOOTINGS

MARK	FOOTING DIMENSIONS			EMBEDMENT	TOP BARS		BOTTOM BARS		REMARKS
	WIDTH, B:	LENGTH, L	THICKNESS t(m)	(FROM NGL)	BARS ALONG WIDTH, B	BARS ALONG LENGTH, L	BARS ALONG WIDTH, B	BARS ALONG LENGTH, L	KEIWAKNO
F1/F2	1.50	1.50	8.49	1.5	NONE	NONE	8-20MMØ	\$-20MM Ø	ISOLATED FOOTING

ALLOWABLE SOIL PRESSURE: MATERIAL SPECIFICATIONS: 1c' = 21 MPa (3,900 psi) qa = 144 kPa (3,000 psf)

1y = 276 MPa (40,000 psi) FOR 12MMØ BARS AND BELOW Ty = 414 MPa (60,000 psi) FOR 16MMØ BARS AND ABOVE

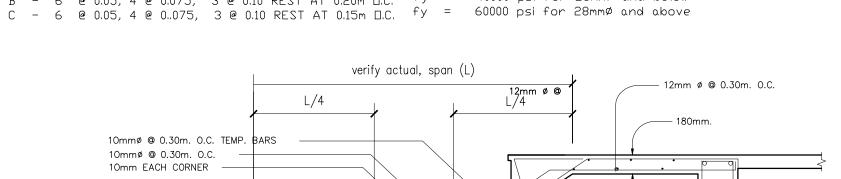
SCHEDULE OF REINFORCED CONCRETE COLUMNS

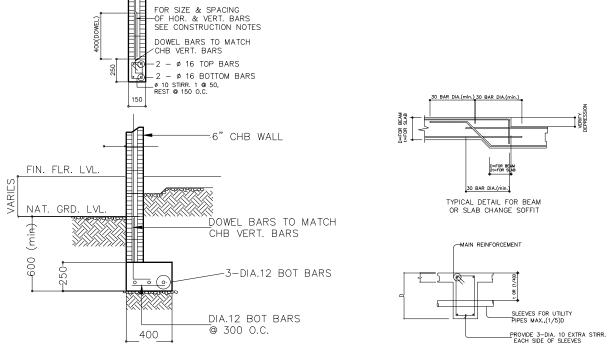
MARK	FOUNDATION TO	SECOND FLOOR		
IMACK	SECOND FLOOR	ROOF BEAM		
C f	4 90 mm 4 90 mm	480mm 480mm		
\$IZE	460 mm x400 mm	400 mm x 400 mm		
VERT. BARS	8 - 20mm Ø	3-20mm Ø		
TIES/SPIRAL	19-9.10m, 19mmØ	16 - 0.10m, 10mmØ		
	6-0.15m, 19mmØ, rest @ 0.2m	6-9.15m, 10mmØ, rest @ 9.2m		
C2				
\$IZE	4 00 mm Ø	400 mm x 40 mm		
VERT. BARS	8 - 20mm Ø	3-20mm Ø		
TIES (SDIES)	20 0 20m 20mm	10-9:19m, 19mmØ		
TIES/SPIRAL	10 - 0.19m, 19mmØ	ieerietif letitiims		

BEAM SCHEDULE

BEAM	DIMENSION	LEFT SUPPORT		MIDSPAN		RIGHT SUPPORT		OTTDDUDG.
MARK	B×D (m.)	TOP BARS	B□T. BARS	TOP BARS	B□T. BARS	TOP BARS	B□T. BARS	STIRRUPS
SECON	ID FLOOR BEA	М						
2B-1	0.30×0.40	5-16mm	2-16mm	2-16mm	4-16mm	5-16mm	2-16mm	С
ROOF BEAM								
RB-1	0.20×0.40	5-16mm	2-16mm	2-16mm	4-16mm	5-16mm	2-16mm	С
STAIR,	STAIR/RAMP BEAM							
SRB-1	0.20×0.30	4-16mm	2-16mm	2-16mm	4-16mm	4-16mm	2-16mm	С

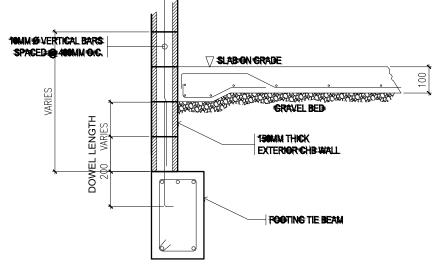
A - 5 @ 0.05, 3 @ 0.075, 2 @ 0.10, REST AT 0.25m \Box .C. fc' = 3000 psi B - 6 @ 0.05, 4 @ 0.075, 3 @ 0.10 REST AT 0.20m \Box .C. fy = 40000 psi for 25mmø and below



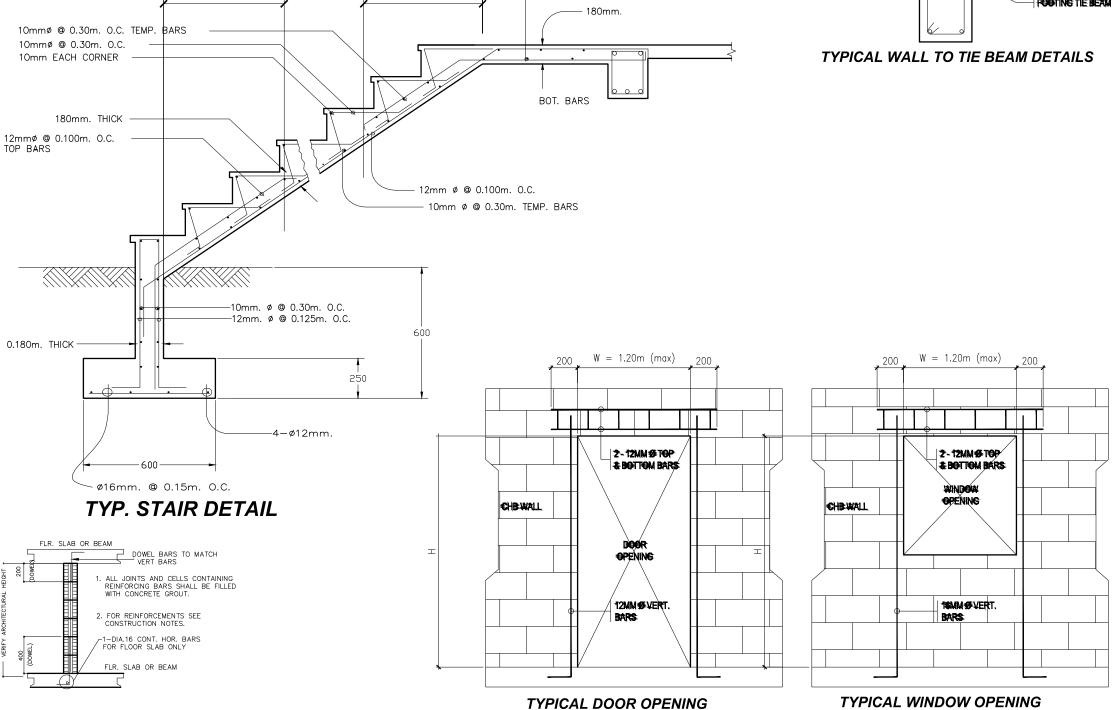


TYPICAL CHB WALL FOOTING

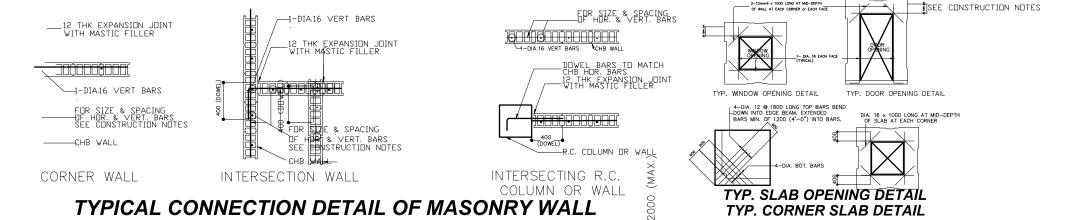
TYPICAL DETAIL FOR SLEEVES THRU CONCRETE BEAM



WITH LINTEL BEAM



WITH LINTEL BEAM



SOUTHERN LEYTE STATE UNIVERSITY SOGOD, SOUTHERN LEYTE

PREPARED BY :			PROJECT:	OWNER:	APPROVED AS PER PLAN :	AS SHOWN		SHEET NO.
E	RYAN A. MACUTO REG. CIVIL ENGINEER	ROBERTO B. PARANAS REG. CIVIL ENGINEER PROPOSED CONSTRUCTION OF MECHATE BUILDING (PHASE II)		SOUTHERN LEYTE STATE UNIVERSITY	PROSE IVY G. YEPES, Ed. D.			S-01
	RAYMART BULAGSAC REG. CIVIL ENGINEER	LIZANDRO C. BITANG REG. ELECTRICAL ENGINEER	LOCATION: SLSU-MAIN CAMPUS, SAN ROQUE, SOGOD SOUTHERN LEYTE	ADDRESS: SOGOD, SOUTHERN LEYTE	UNIVERSITY PRESIDENT	CHECKED : DRAWN : APPROVED : DATE :	SCALE AS SHOWN @ 20x30	PROJ. NO.

TYPICAL SECTION OF MASONRY

PARTITION REINFORCEMENTS