

Project: PROPOSED COMPLETION OF UNIVERSITY LIBRARY AT
Location: SLSU-MAIN CAMPUS, SOGOD, SOUTHERN LEYTE
Owner: SOUTHERN LEYTE STATE UNIVERSITY

ITEMS

I MOBILIZATION	
1.0	Mobilization/Demobilization/Site Clearing
2.0 Temporary Facilities	
II EARTHWORKS	
1.0	Excavation
2.0	Backfilling Materials
3.0	Lines and grades
III CONCRETING WORKS	
1.0	Concrete
1.1	Footing (Stairs and Ramp)
1.1.1	Cement
1.1.2	Sand
1.1.3	Gravel
1.1.4	Mixture
1.2	Tie Beam
1.2.1	Cement
1.2.2	Sand
1.2.3	Gravel
1.2.4	Mixture

1.3	Slab-L1 (Ramp & Stair Area)
1.3.1	Cement
1.3.2	Sand
1.3.3	Gravel
1.3.4	Mixture
1.4	Column GFL
1.4.1	Cement
1.4.2	Sand
1.4.3	Gravel
1.4.4	Mixture
1.5	Beam L2
1.5.1	Cement
1.5.2	Sand
1.5.3	Gravel
1.5.4	Mixture
1.6	Stair - L1 to L2
1.6.1	Cement
1.6.2	Sand
1.6.3	Gravel
1.6.4	Mixture
1.7	Ramp - NGL to L2
1.7.1	Cement
1.7.2	Sand
1.7.3	Gravel
1.7.4	Mixture
2.0	Rebars
2.1	Footing (Stairs and Ramp)
2.1.1	Reinforcing Bars
2.1.2	Material
2.1.3	Typical Plan
2.2	Tie Beam
2.2.1	Reinforcing Bars
2.2.2	Material
2.2.3	Typical Plan

2.3	Slab-L1 (Ramp & Stair Area)
2.3.1	Reinforcing Bars
2.3.2	Material
2.3.3	Typical Plan
2.4	Column GFL
2.4.1	Reinforcing Bars
2.4.2	Material
2.4.3	Typical Plan
2.5	Beam L2
2.5.1	Reinforcing Bars
2.5.2	Material
2.5.3	Typical Plan
2.6	Stair - L1 to L2
2.6.1	Reinforcing Bars
2.6.2	Material
2.6.3	Typical Plan
2.7	Ramp - NGL to L2
2.7.1	Reinforcing Bars
2.7.2	Material
2.7.3	Typical Plan
IV FORM WORKS	
1.0	Formworks & Shoring
1.1	Formworks-Column Footing
1.1.1	Material Specification
1.2	Formworks-Beam
1.2.1	Material Specification
1.3	Formworks-Suspended Slab
1.3.1	Material Specification
1.4	Formworks-Ramp Slab & Stairs
1.4.1	Material Specification
1.5	Shoring
1.5.1	Material Specification
V CEILING AND PARTITION WORKS	
4.1	Ceiling
4.1.1	Wall Angle
4.1.2	Double Furring
4.1.3	Carrying Channel
4.1.4	Single Furring
4.1.5	Accessories
4.1.6	Sheeting
4.2	Toilet Cubicle&urinal privacy screen

4.2	Toilet Cubicle
4.3	Urinal Privacy Screen
VII DOORS AND WINDOWS	
1.0	Door
1.1	Male and Female Toilet
1.2	Door 2
1.3	Door 6
1.4	Door 6
1.5	Door 6
2.0	Door Accessories
3.1	Lecture Room/Faculty/Conference
3.2	Lockset
3.0	Windows and Fixed Glass
3.1	Male and Female Toilet (Window 5)
3.2	Male and Female Toilet (Window 4)
3.3	(Window 3)
3.4	(Window 2)
3.5	(Window 1)
3.6	Discussion Area
3.7	E-LIB Room Hallway
3.8	E-LIB Room & Photocopy Area
3.9	E-LIB Room & Photocopy Area
3.11	E-LIB Room
3.12	Discussion Area
3.13	Librarian's Office
3.14	Graduate studies Section
4.0	Fixed Glass and Glass Door with Sensor
4.1	Lobby Entrance

VIII TILE WORKS	
1.0	Tile Works
1.1	Hallway Basement,Stair lobby entrance
1.2	Floor tiles Male & Female Toilet
1.3	Wall tiles Male & Female Toilet
1.4	Ground Floor
1.4.1	Terminations
1.4.2	Nosing
IX PAINTING WORKS	
1.0	Painting Works
1.1	Interior Wall
1.1.1	Color
1.2	Eaves and Ceiling Vent
1.2.1	Color
X SANITARY	
1.0	Pipes and Fittings-Waterline
2.0	Pipes and Fittings-Sanitaryline
3.0	Plumbing Fixtures
3.1	Water Closet
3.2	Lavatory
3.2	Counter Top
3.3	Lavatory Faucet
3.4	Foot Faucet
3.5	Urinal
3.6	Floor Drain
XI RAILINGS AND OTHER ARCHITECTURAL	
1.0	Railings
2.0	Others
2.1	Others
XII ELECTRICAL	
1.0	Roughing Ins
1.1	Circuit Breaker and Branch
1.2	Conduits - Main Line
1.3	Conduits Powerline
1.4	Conduits Lighting line
1.5	Conduits - ACU
1.6	Wiring Mainline
1.7	Wiring Lightingline

1.8	Wiring Powerline
1.9	Wiring Rough-ins
2.0	Finishing
2.1	Switches
2.2	Outlets
3.0	Fixtures
3.1	Main Library
3.2	Lobby Area
3.3	Toilet
3.4	Main Library Lounge
3.5	G/F (refer to plan)
3.6	G/F (refer to plan)
3.7	G/F (refer to plan)
3.8	Comfort room
XIII MECHANICAL	
1.0	Automatic water sprinkler system, fire hose cabinet and fire alarm system
XIV ELECTRICAL	
1.0	Testing
1.1	Concrete
1.2	Rebar
1.3	Waterline

Prepared by:

ROBERTO B. PARANAS

Civil Engineer

RYAN A. MACUTO

Civil Engineer

Recommending Approval:

VALERIO B. CABALO, Ph. D.

VP Admin and Finance

SECTION IV: TECHNICAL SPECIFICATION

SOGOD CAMPUS

DETAILS

Contractor shall mobilize and put into operation all equipment and plants required to undertake the Bid Documents, which is the Bill of Quantities and all associated work items. Demobilization includes the clean-up of the site and the removal of materials, debris, waste, etc., and making good damages or temporary alterations, restoration of damages to the surrounding area (including vegetation, minor structures etc) resulting from the construction or construction-related activities.

Contractor shall, as a priority in all his activities, undertakings and endeavors, ensure the continued and continuous safety of the public and all persons directly or indirectly associated with the Works. During the entire process of constructing the Works -- including preparation of the site and final clean up upon completion -- the Contractor shall exercise the utmost care in order to prevent damage to the environment and adjoining properties. Due precautions shall be taken by the Contractor, at his own cost, to ensure the safety and protection against accidents of all staff and labor engaged on the Works and the public in the vicinity of the Works. The Contractor will be responsible for the safety of the public legitimately passing through the site. All excavations and items of potential danger to the public must be barricaded and sign-posted to the satisfaction of the Engineer, and the Contractor must provide sufficient watchmen to ensure the safety of the public at all times.

Labor only. Volume of footing, wall footing if any

Labor only. All excavations shall be backfilled immediately as work permits. Filling materials shall be made in layers not to exceed 15cm and thoroughly tamped before the next fill is placed

Labor only. Operation shall start from areas affected by the construction to limits indicated by the Owner and or as specified.

Maximum Compressive Strength at 28 days = 21 MPa (3000psi),

Portland Cement (Type1) in 40kgs. Use one brand of cement all through-out acceptable to the Engineer -in-charge.

Washed Sand. Uncoated granules, strong, durable, reasonably clean and free from organic matter

Crushed Gravel (3/4"). Uncoated granules, strong, durable, reasonably clean and free from organic matter

Class AA concrete mixture (1 : 1-1/2 : 3 ratio) , 0.53 water / cement ratio

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Deformed type reinforcing bars with minimum yield strength, FY = 420 MPa (Grade 60)

20mm X 6.0m Deformed Rebars, G.I. Tie Wire # 16

Refer to Structural plans for details

Deformed type reinforcing bars with minimum yield strength, FY = 420 MPa (Grade 60)

25mm X 6.0m Deformed Rebars, 12mm X 6.0m Deformed Rebars, G.I. Tie Wire # 16

Refer to Structural plans for details

Deformed type reinforcing bars with minimum yield strength, FY = 230 MPa (Grade 33)

10mm X 6.0m Deformed Rebars, G.I. Tie Wire # 16

Refer to Structural plans for details

Deformed type reinforcing bars with minimum yield strength, FY = 420 MPa (Grade 60)

28mm X 6.0m Deformed Rebars, 12mm x6.0m Deformed bar, G.I. Tie Wire # 16

Refer to Structural plans for details

Deformed type reinforcing bars with minimum yield strength, FY = 420 MPa (Grade 60)

25mm X 6.0m Deformed Rebars, 12mm x6.0m Deformed bar, G.I. Tie Wire # 16

Refer to Structural plans for details

Deformed type reinforcing bars with minimum yield strength, FY = 420 MPa (Grade 60)

16mm X 6.0m Deformed Rebars, 12mm x6.0m Deformed bar, G.I. Tie Wire # 16

Refer to Structural plans for details

Deformed type reinforcing bars with minimum yield strength, FY = 420 MPa (Grade 60)

16mm X 6.0m Deformed Rebars, 12mm x6.0m Deformed bar, 10mm x6.0m Deformed bar, G.I. Tie Wire # 16

Refer to Structural plans for details

2" x 2" x 8' cocolumber, 1/2" Plywood, Common Nail 3"

2" x 2" x 10' cocolumber, 2" x 2" x 8' cocolumber, 1/2" Plywood, Common Nail 2", Common Nail 3"

2" x 2" x 8' cocolumber, 1/2" Plywood, Common Nail 3"

2" x 2" x 8' cocolumber, 1/2" Plywood, Common Nail 3"

2" x 3" x 12' cocolumber, Common Nail 3"

Light Metal Frame, 0.60m

25mm x 25mm x 0.4mm thick, 2.40m, Ga 26, wall angle fastened to wall

19mm x 50mm x 0.4mm thick, 5m, Ga 26, double furring at board terminations only

12mm x 38mm x 0.80mm thick, 5m, Ga 22 carrying channel with double furring clip (W-clip) to fasten carrying channel and double furring spaced at 1.20m O.C.

19mm x 25mm x 0.4mm, 5m, Ga 26 thick single furring spaced at 0.60m O.C.

Double Furring Clips, Hardi Screws (6mm dia. X 3/4"), Blind Rivets (1/8" dia. X 1/2"), Fanhead Screws for Wall Angle to Furring Connection, Concrete Nail 1" for Wall Angle to Wall Connection

3.5mm thick fiber cement board (4' x 8'). Allow 5mm gap in all terminations

Blade Mounted Overhead Braced (new graphite color) in 13mm Compact Laminate. With Total Privacy Solution. Door Furniture to be surface mounted Diecast Zinc, Alloy ZP3 (Satin Matte Black) Easy-Glide Slide Lock & indicator with Concealed Screw Fix. Aluminium to be Square Clear Anodised. Screw fixing.

Wall mouted urinal privacy screen (new graphite color) in 13mm Compact Laminate. Aluminium to be Square Clear Anodised

1.00m x 2.10m panel Door-7 w/ door jamb and design (mahogany)

Double Swing Glass Door (1.80m. x 2.10m.)w/ 1¼"x 3" Powder Coated Frame & concealed heavy duty door close

Swing Glass Door (0.90m. x 2.10m.)w/ 1¼"x 3" Powder Coated Frame & concealed heavy duty door close

Frameless glass door lock single door double unlock stainless steel office door lock with 3pcs keys

Ordinary Cylindrical Lockset, (3½"x 4") Loose Pin Hinges

0.60x1.60m Awning Window-5, glass with Powder Coated Frame

0.60x2.40m Awning Window-4, glass with Powder Coated Frame

Hidden Frame Glass Curtain Wall with Awning window (1/4"xW-3.00m.xH-1.50m.)w/ 2 1/2"x 6" Powder Coated Frame & Sealant

Hidden Frame Glass Curtain Wall with Awning Window (1/4"xW-5.00m.xH-1.50m.)w/ 2 1/2"x 6" Powder Coated Frame & Sealant

Hidden Frame Glass Curtain Wall with Awning Window (1/4"xW-6.00m.xH-1.50m.)w/ 2 1/2"x 6" Powder Coated Frame & Sealant

Frameless Tempered Fixed Glass (1/2"thk. x W-1.40m. x H-2.825m.) with complete fittings & Accessories including installation

Frameless Tempered Fixed Glass (1/2"thk. x W-1.40m. x H-2.675m.) with complete fittings & Accessories including installation

Frameless Tempered Fixed Glass (1/2"thk. x W-0.25m. x H-2.30m.) with complete fittings & Accessories including installation

Frameless Tempered Fixed Glass (1/2"thk. x W-0.40m. x H-2.30m.) with complete fittings & Accessories including installation

Frameless Tempered Glass Door and Partition (1/2"thk. x W-4.30m. x H-2.675m.) with complete fittings & Accessories including installation

Frameless Tempered Glass Door and Partition(1/2"thk. x W-10.15m. x H-2.675m.) with complete fittings & Accessories including installation

Frameless Tempered Glass Door and Partition(1/2"thk. x W-6.10m. x H-2.675m.) with complete fittings & Accessories including installation

Frameless Tempered Glass Door and Partition (1/2"thk. x W-23.50m. x H-2.825m.) with complete fittings and Accessories including installation

Automatic sliding Frameless Tempered Glass Sensor Operated Door and Fixed glass Partition, with complete fittings and Accessories including fabrication and installation

24" x 24" (600mm x 600mm) textured floor tiles

24" x 24" (600mm x 600mm) textured floor tiles

24" x 24" (600mm x 600mm) ceramic floor tiles

31" x 31" (800mm x 800mm) polished floor tiles

Grout Termination, White

Stair Nosing 1½" x 3m.

1 coat skimcoat (Primer), 2 coats semi-gloss latex Use # 120 sandpaper

White

Epoxy adhesive, 2 coats semi-Flat Wall Enamel Use # 120 sandpaper

White

1/2" x 3 meters PVC Blue Pipe, 1/2" PVC Blue Plain Tee, 1/2" PVC Blue Threaded Elbow, 1/2" PVC Blue Plain Elbow, 1/2" PVC Blue Threaded Tee, 1/2" PVC End Cap, Teflon Tape 1/2", Solvent Cement (400 cc), Male Adapter 1/2"

4" X 3.00m PVC Orange pipe S-1000, 2" X 3.00m PVC Orange pipe S-1000, 2" X 3.00m PVC Orange pipe S-1000, PVC Orange Elbow, Wye, Tee, (Refer to Plumbing drawings for connections), PVC Orange Bushing Reducer 4" X 2", PVC Orange P-trap 2", PVC Orange clean out with 4" cap

Water Closet with Sensor Operated Concealed Toilet flush valve & comp. Accessories (Soap & Tissue Holder)

Counter top lavatory with flexible hose, angle valve, P-trap, drainage pipe and bracket

Granite Counter Slab, 0.60m x 2.40m Galaxy black

Chrome plated faucet

Plain Bibb Faucet (1/2" x 4") - Chrome

Urinal with Concealed Sensor urinal flush valve & comp. Accessories

4" x 4" (100mm x 100mm) Stainless floor drain

Prefab Stair railings to basement (38mmØ 304 Stainless pipe

20mmØ Stainless Steel Plain Round bar (standard)

Welding Rod Stainless

Wall mounted inverter model, 3 HP cooling capacity, Electrical Rating 230V/ 1 ph / 60 Hz

Refer to Electrical details and design analysis

PVC Utility Box 2"x4", PVC Junction Box 4"x4", service entrance cap 1½" Ø

PVC Rigid Conduit 3/4" x 3m, 3/4" Long Elbow

1/2" Polyflex, PVC Rigid Conduit 1/2" x 3m, 1/2" Long Elbow

PVC Rigid Conduit 1/2" x 3m, 1/2" Long Elbow, 1/2" Long Elbow

200 mm², THHN Wire (Stranded)

3.5 mm², THHN Wire (Stranded)

5.5 mm ² , THHN Wire (Stranded), 8.0 mm ² , THHN Wire (Stranded) (ACU)
PVC Utility Box 2"x4", PVC Junction Box 4"x4", service entrance cap 1½" Ø
Switch, Flush Type, Single-Gang, 2-Gang "Wide series" 3-Gang "Wide series"
Duplex Convenience Outlet, Flush Type "Wide series", ACU Outlet, Flush Type, 1-Gang "Wide series"
LED Downlight, 18 Watts (Flush Mounted)(Day Light)
LED Circular Downlight, 18 Watts (Flush Mounted)(Day Light)
LED Circular Downlight, 12 Watts (Flush Mounted)(Day Light)
LED-PANEL Light, 600mmx600mm, 36w-220V(Day Light)(Flush Mounted)
LED-PANEL Light, 600mmx600mm, 36w-220V(Day Light)(Surface mounted)
LED Downlight, 18 Watts, (Surface mounted) (Day Light)
Flexible Waterproof LED Strip light, AC220V with EU power plug, 120 led/m. 2835 SMD High brightness (Warm White)
Hand Dryer
Shall consist of furnishing and installation of automatic water sprinkler, inclusive of all pipings and pipe fittings connections, valves, controls, electrical wiring and connection and all other accessories ready for service in accordance to plan
Contractor is required to submit test certificate prior to concrete pouring
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All waterline shall undergo flood and leak testing prior to finishing and before acceptance.

RAYMART BULAGSAC
Civil Engineer

LIZANDRO C. BITANG
Electrical Engineer

Approved by:

PROSE IVY G. YEPES, Ed. D.
University President