



Republic of the Philippines
CAVITE STATE UNIVERSITY
Don Severino de las Alas Campus
Indang, Cavite, Philippines
☎ (046) 889-6373
www.cvsu.edu.ph

INVITATION TO SUBMIT QUOTATION
Proposed Filipino-Chinese Friendship Arch (Straight Contract)

1. The Cavite State University (CvSU) invites interested firms/supplier to submit quotation for the project "**Proposed Filipino-Chinese Friendship Arch (Straight Contract)**" with an Approved Budget for the Contract (ABC) **Five-Hundred Seventy-Three Thousand Eight Hundred Twenty-Three Pesos Only and 13/100 (PhP 573,823.13)**. Quotation received in excess of the ABC shall be automatically rejected at the opening.

Item No.	Quantity	Unit	Description	Unit Cost	Total Cost
1.	1	Lot	Proposed Filipino-Chinese Friendship (Straight Contract)	573,823.13	573,823.13
			(See attached Bill of Quantities and Plan)		
TOTAL AMOUNT					573,823.13

2. Contract duration: **60** calendar days from the receipt of contract.
3. Price quotations must be valid for a period of sixty (60) calendar days from date of submission and shall include all taxes, duties and/or levies payable. Bidders shall also indicate the brand and model of the items being offered.
4. The offer must be submitted to the Procurement Office through mail, fax or email at the contact details listed below **on or before 5:00 PM of July 1, 2024**.

Address : Procurement Office, Administration Building
Cavite State University
Indang, Cavite
E-mail : svpinframain@cvsu.edu.ph
Telefax : (046) 889-6373

5. The CvSU reserves the right to reject any or all quotations and/or proposals and waive any formalities/informalities therein and to accept such bids it may consider as most advantageous to the agency and to the government. CvSU neither assumes any obligation for whatsoever losses that may be incurred in the preparation of bids, nor does it guarantee that an award will be made.


MICHELLE A. SANTOS
BAC Secretary, Infrastructure Projects



Republic of the Philippines
CAVITE STATE UNIVERSITY
 Don Severino Delas Alas Campus
 Indang, Cavite

BILL OF QUANTITIES

NAME OF PROJECT: PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH (BY STRAIGHT CONTRACT)					
ABC: ₱ 573,823.13			Bill of Quantities		
COLLEGE/UNIT/CAMPUS: CvSU INDANG CAMPUS					
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	Earthworks (Pesos _____ _____ and _____ centavos)				
II	Formworks (Pesos _____ _____ and _____ centavos)				
III	Concrete and Masonry Works (Pesos _____ _____ and _____ centavos)				
IV	Tile Works (Pesos _____ _____ and _____ centavos)				
V	Plumbing and Electrical Works (Pesos _____ _____ and _____ centavos)				
VI	Painting Works (Pesos _____ _____ and _____ centavos)				

VII	Miscellaneous Works (Pesos _____ _____ and _____ centavos)				
GRAND TOTAL _____					
Write grand total in words _____ _____ _____					

Submitted by: _____ Date: _____

Name of Bidder/Bidder's Representative: _____

Position: _____

Construction Company/Contractor: _____

SCOPE OF WORKS:

A. PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH

1. The project must be finished in 60 working days.
2. Actual site inspection is a must.
3. The area should be cleared before and after the construction work at least twelve meters away from the job site. Unusable formworks, excessive soil fill and all other unwanted debris of rehabilitation works should be disposed properly.

B. TECHNICAL DESCRIPTION

I. Earthworks

1. Mobilization/demobilization of tools, equipment and manpower including billboard, bunkhouse, site enclosure and etc.
 - a. The scope involves mobilization and demobilization of equipment/manpower upon the start and completion of the project.
 - b. Securing the site by putting temporary enclosure to ensure the safety of the workers and other personnel.
 - c. Installation of signage/billboard for project information.
 - d. Construction of temporary bunkhouse

2. Demolition
 - a. There is an existing concrete structure for total demolition and clearing.
 - b. Use necessary tools and equipment for the demolition of structure
 - c. Consult the end user/project inspector for the disposal of all demolished structure

3. Excavation. This work will include:
 - a. Footing
 - b. Wall footing

- c. Floor slab
 - d. Staircase footing
 - e. Water supply pipeline
 - f. Power supply pipeline
4. Additional Fill. This work will include:
- a. Spreading, leveling and compacting of 0.05 m. thick gravel fill on prepared compacted earth soil bedding.
 - b. Provide 0.05 m. gravel fill on slab on fill and footings.
 - c. Leveling and Compacting. This work will include:
 - c.1 Floor slab
 - c.2 Steps/stairs
 - c.3 Fountain area
5. Hauling of Debris
- a. This work will include hauling of debris and cleaning of area prior to accomplishment of the project

II. Formworks

- 1. Use appropriate materials for formworks.

III. Concrete and Masonry Works

1. Concrete Works

- a. Concrete works include columns, footings, floor slab, stairs and all other concrete component indicated in the plan and needed to complete the structure.
 - a.1 Column Footing
 - a.1.1 Footing size is 300mm (D) x 1200mm (L) x 1500mm (W)
 - a.1.2 Concrete mixture is Class A
 - a.1.3 Provide 50mm aggregates
 - a.1.4 Reinforcement
 - a.1.4.1 Provide 16mm ϕ reinforcement steel bar spaced at every 100mm, bothways, o.c.b.w.
 - a.2 Column
 - a.2.1 Column size is 400mm (L) x 400mm (W) x 4.574m (H) (approx.)
 - a.2.2 Concrete mixture is Class A
 - a.2.3 Reinforcement
 - a.2.3.1 Provide 4-16mm ϕ long reinforcement steel bar and 10mm ϕ reinforcement steel bars as stirrups spaced at every 2-50mm, 4-75mm, 6-100mm and rest @ 200mm o.c.
 - a.2.4 Plain cement finished
 - a.3 Wall Footing (including staircase area)
 - a.3.1 Wall footing size is 100mm (D) x 400mm (W) x 18.75m (L) (approx.)
 - a.3.2 Concrete mixture is Class A
 - a.3.3. Provide 50mm aggregates
 - a.3.4 Reinforcement
 - a.3.4.1 Provide 3-100mm reinforcement steel bar at horizontal reinforcement.
 - a.4 Pedestal
 - a.4.1 Column size is 625mm (L) x 400mm (W)
 - a.4.2 Concrete mixture is Class A
 - a.4.3 Reinforcement
 - a.4.3.1 Provide 6-16mm ϕ long reinforcement steel bar and 10mm ϕ reinforcement steel bars as stirrups spaced at every 2-50mm, 4-75mm, 6-100mm and rest at 200mm o.c.
 - a.4.4 Sand blasted finished

- a.6 Floor Slab
 - a.6.1 Floor slab size is 100mm (D) x 2.70m (L) x 2.70m (W)
 - a.6.2 Concrete mixture is Class A
 - a.6.3 Provide 50mm aggregates
 - a.6.4 Reinforcement
 - a.6.4.1 Provide 10mm ϕ reinforcement steel bar spaced at every 100mm, bothways, o.c.b.w..1
- a.7 Fountain Area
 - a.7.1 Floor slab size is 100mm (D) x 2.70m (L) x 1.95m (W)
 - a.7.2 Concrete mixture is Class A
 - a.7.3 Provide 50mm aggregates
 - a.7.4 Reinforcement
 - a.7.5 Provide 10mm ϕ reinforcement steel bar spaced at every 100mm, bothways, o.c.b.w.
- a.8 Concrete Roof
 - a.8.1 Concrete Roof size is 1.5m x 3.60m
 - a.8.2 Concrete mixture is class a.
 - a.8.3 Provide 50mm aggregates
 - a.8.4 Reinforcement
 - a.7.5 Provide 10mm ϕ reinforcement steel bar spaced at every 100mm, bothways, o.c.b.w.
- b. All concrete works must be plain cement finished.
- c. See plan for the details, specification of concrete/rebar and extent of works.
- d. Provide necessary tools and equipment needed for the completion of works.

2. Masonry Works

- a. Installation of CHB at staircase and fountain area
 - a.1 CHB Laying
 - a.1.1 Laying of 4" concrete hollow blocks
 - a.1.2 Adapt Class B mortar and plaster mixture
 - a.2 Reinforcement
 - 1.2.1. Use 10mm ϕ corrugated steel bar as vertical reinforcement spaced at every 800mm and horizontal reinforcement spaced at every 400mm
- b. All masonry works including the interior wall of the fountain's water tank must be plain cement finished.

IV. Tile Works

- 1. Floor Tiles
 - a. Installation of floor tiles including steps and riser
 - a.1 Use 600mm x 600mm ceramic tiles (homogeneous) for flooring including steps and riser
 - a.2 Consult project inspector/end-user for tile design, color and reference
 - a.3 Tiles will be subjected to inspection and approval before installation by the project inspector/end user of the project
 - a.4 Provide 3-5mm tile spacing for floor tiles and 2-3mm tile spacing for wall tiles
 - b. Apply tile grout
 - b.1 Use suitable color for grouting
 - b.2 Clean residue prior to accomplishment of the project
- 2. Decorative Stone
 - a. Installation of decorative stone at fountain area (exterior wall only)
 - a.1 Consult project inspector/end-user for tile design, color and reference
 - a.2 Deco stone will be subjected to inspection and approval before installation by the project inspector/end user of the project.

V. Plumbing and Electrical Works

- 1. Plumbing Works

- a. Roughing-in
 - a.1 Installation of water supply pipeline at fountain area.
 - a.1.1 Use 20mm Ø PP-R pipe, PN 10, for water supply pipeline.
 - a.1.2 Install 20mm PP-R gate valve/compact gate valve.
 - a.1.3 Use suitable PP-R water supply fittings and appropriate tools and equipment upon installation
 - a.1.4 Tap from the nearest/existing water supply.
 - a.2 Installation of storm drain pipeline.
 - a.2.1 Use 34mm Ø PPR pipe, PN 20, for storm drain pipeline
 - a.2.2 Use suitable PP-R fittings and appropriate tools and equipment upon installation.
 - a.2.3 Tap to the nearest/existing catch basin.
 - b. Installation of plumbing fixtures:
 - b.1 Installation of 60 Watts submersible pump motor with filter and 3 nozzle fountain set.
2. Electrical Works
- a. Roughing-in
 - a.1 Installation of power supply line at the fountain area and at the proposed arch.
 - a.1.1 See E-1 for General Notes and Specifications
 - b. Installation of lighting fixtures and wiring devices
 - b.1 Fountain Area
 - b.1.1 Installation of 8 sets of 3-5 Watts LED submersible (IP-68) light, warm white
 - b.2 Proposed Arch
 - b.2.1 Installation of 2 sets of 9-11 Watts LED floor mounted outdoor lamp (IP-67), warm white, in front of the Chinese Foo Dog statue.
 - b.2.2 Installation of 2 sets of 20 Watts LED spotlight (IP-67), warm white, in each side of the arch's columns.
 - b.3 Installation of 2P surface-type panel board with enclosure (NEMA 3R) with 4 branches including 1-30 AT CB (main), 3- 20 AT and spare, bolt-on
 - c. Tap to the nearest/existing power supply source.

VI. Painting Works

- 1. Painting of columns, pedestals, ornaments and fountain
 - a. Use pre-mix waterproofing elastomeric paint
 - b. Painting Schedule:
 - b.1 Surface Preparation
 - b.1.1 Allow new concrete to cure for at least four (4) weeks. All surfaces should be sound, clean, dry and free from loose and flaking material, dust, dirt, oil, efflorescence, laitance, and other contaminants. Treat with concrete neutralizer and let dry before dusting off the formed white crystalline deposits.
 - b.2 Painting Application
 - b.2.1 Number of Coats:
 - b.2.1.1. Apply at least three (3) coats of pre-mix elastomeric waterproofing paint by brush, roller or airless spray.
 - b.2.1.2. See attached plan for details and reference.
- 2. Painting of steel trusses
 - a. Use pre-mix quick drying enamel (chocolate brown) for second and top coat
 - b. Painting Schedule:
 - b.1 Surface Preparation
 - b.1.1 Wipe the surface with rag soaked in paint thinner to remove dust, dirt, grease, oil, wax and other foreign matter
 - b.2 Painting Application
 - b.2.1 Prime bare metal with red oxide primer. Let dry eight (8) hours before recoating. Topcoat with 2-3 coats of quick drying enamel. Let dry overnight before recoating.

VII. Miscellaneous Works

1. Supply and Installation of decorative tubular lattice,
2. Supply and Installation of two-precast Chinese Foo Guarddog concrete sculpture.
3. Supply and Installation of Mythical beast sculpture (twin dragon) at roofing
4. Supply and Installation of Chinese Elm Tree Penjing with vessel.
5. Supply and Installation of Signage.

VIII. Note

1. See approved plans and consult end-user/project inspector for details/extent of work. The silence of specification, plans special provision and supplementary specifications as to any detail, or the apparent commission therein of the detailed description or definition of the quality of materials and workmanship shall be regarded to mean that only materials and workmanship of first class quality are to be used or employed.
2. All works will be facilitated by the contractor.
3. All tools and equipment necessary for executing the work will be provided by the contractor.
4. Works that are necessary but are not cited in the above specifications will be facilitated by the contractor.
5. Materials that are necessary but are not included in the above program of works will be provided by the contractor.
6. No modifications will be done without the approval of end-user, project inspector and implementor.
7. Verify actual measurement on site.



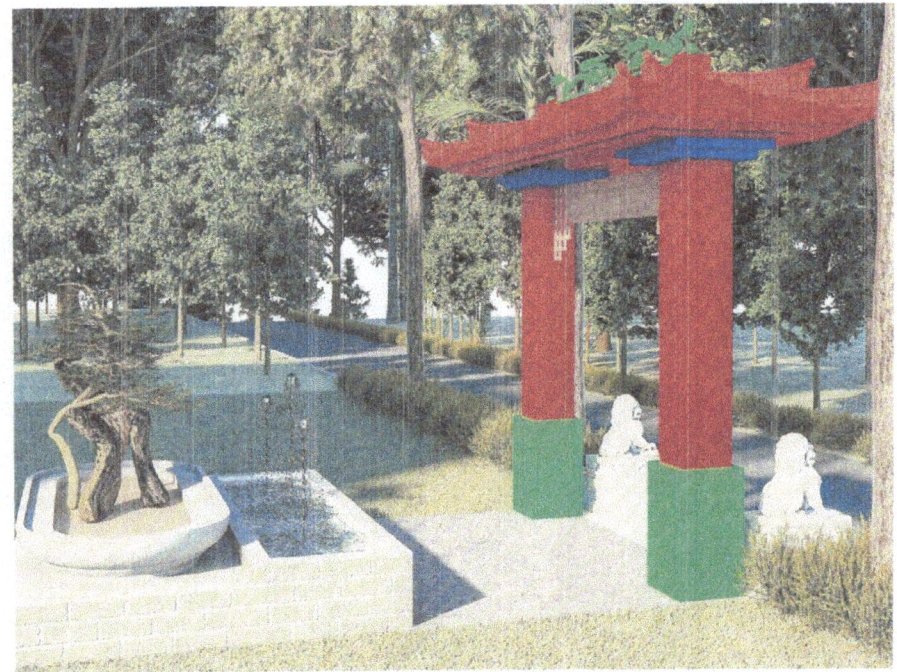
LOCATION MAP



SCALE:

NTS

	PREPARED BY: <i>M.N. GATDULA</i> PPG O/PPG	END-USER: <i>B.A.F. ILACAN</i> DEAN OGS	REVIEWED BY: <i>E.N. RODEROS JR.</i> ARCHITECT POU	ENDORSED BY: <i>S.B. BAYOT JR.</i> HEAD POU	ENDORSED BY: <i>S.B. DELOS REYES</i> DIRECTOR POG	RECOM. APPROVAL: <i>M.J.D. TEPORA</i> V/PPG C/SU	APPROVED BY: <i>J.X.B. NERON MUÑOZ</i> C/SU	APPROVED BY: <i>H.D. ROBLES</i> PRES C/SU	PROJECT TITLE: PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL	AGENCY: CvSU	SHEET NO.: A-01
	CAVITE STATE UNIVERSITY MARI CAMPUS										


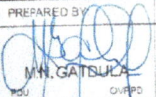
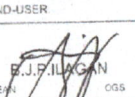
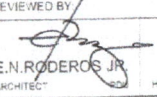
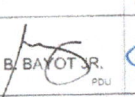

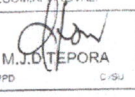
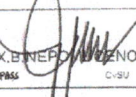
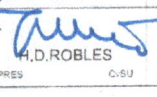


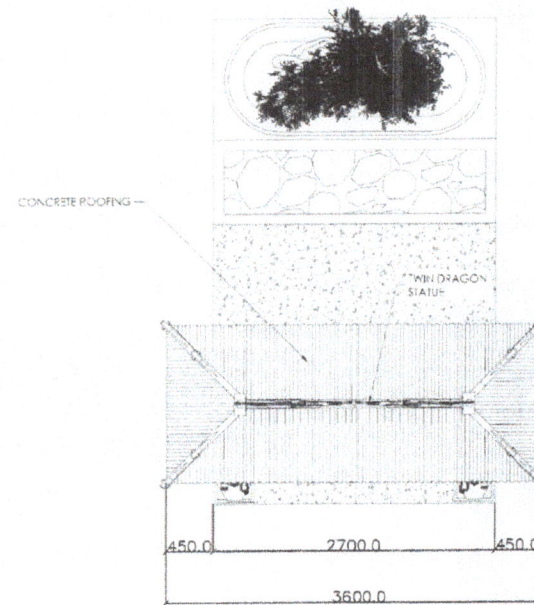
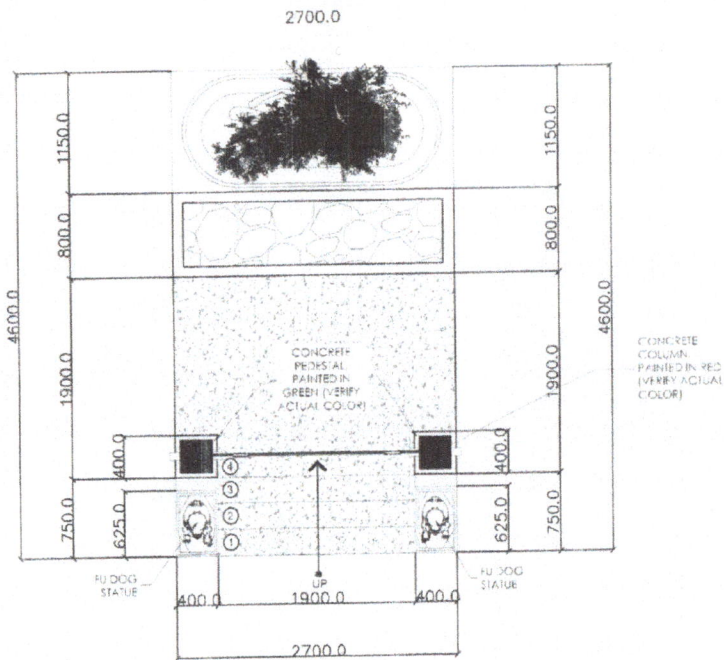
PERSPECTIVE



SCALE:

NTS

	PREPARED BY:	END-USER:	REVIEWED BY:	ENDORSED BY:	RECOM. APPROVAL:	APPROVED BY:	PROJECT TITLE:	AGENCY:	SHEET NO.:
	 M.N. GATSULA <small>PDU</small>	 E.J.F. ILAGAN <small>DEAN</small>	 E.N. RODEROS JR. <small>ARCHITECT</small>	 S.B. BAYOT JR. <small>HEAD</small>	 Q.B. DE LOS REYES <small>DIRECTOR</small>	 M.J. DITEPORA <small>UPPD</small>	 J.X.B. NEPES <small>VP&C</small>	 H.D. ROBLES <small>PRES.</small>	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CAVITE STATE UNIVERSITY MAIN CAMPUS




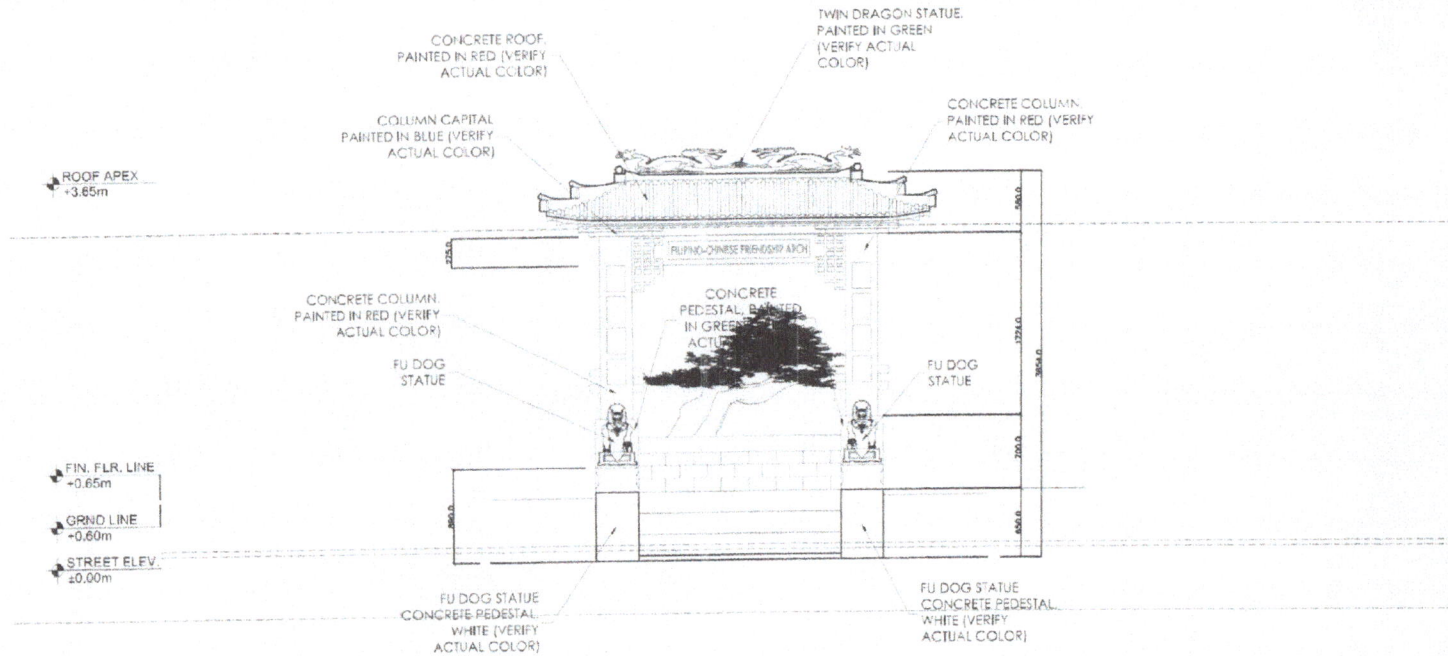
FLOOR PLAN

A 01 SCALE: 1:50 MTS

ROOF PLAN

A 02 SCALE: 1:50 MTS

	PREPARED BY	END-USER	REVIEWED BY	ENDORSED BY	RECOM. APPROVAL	APPROVED BY	PROJECT TITLE	AGENCY	SHEET NO.
	M.N. GATDULA PCU	B. J.P. MAGAN DEAN	E.N. RODRIGOS JR. ARCHITECT	S. B. BAYOT JR. HEAD	O.B. DELLOS REYES DIRECTOR	M.J.B. TEFORA V.P.D.	J.X.B. NARVAZUELO C.SU	H.D. ROBLES PRES	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CvSU

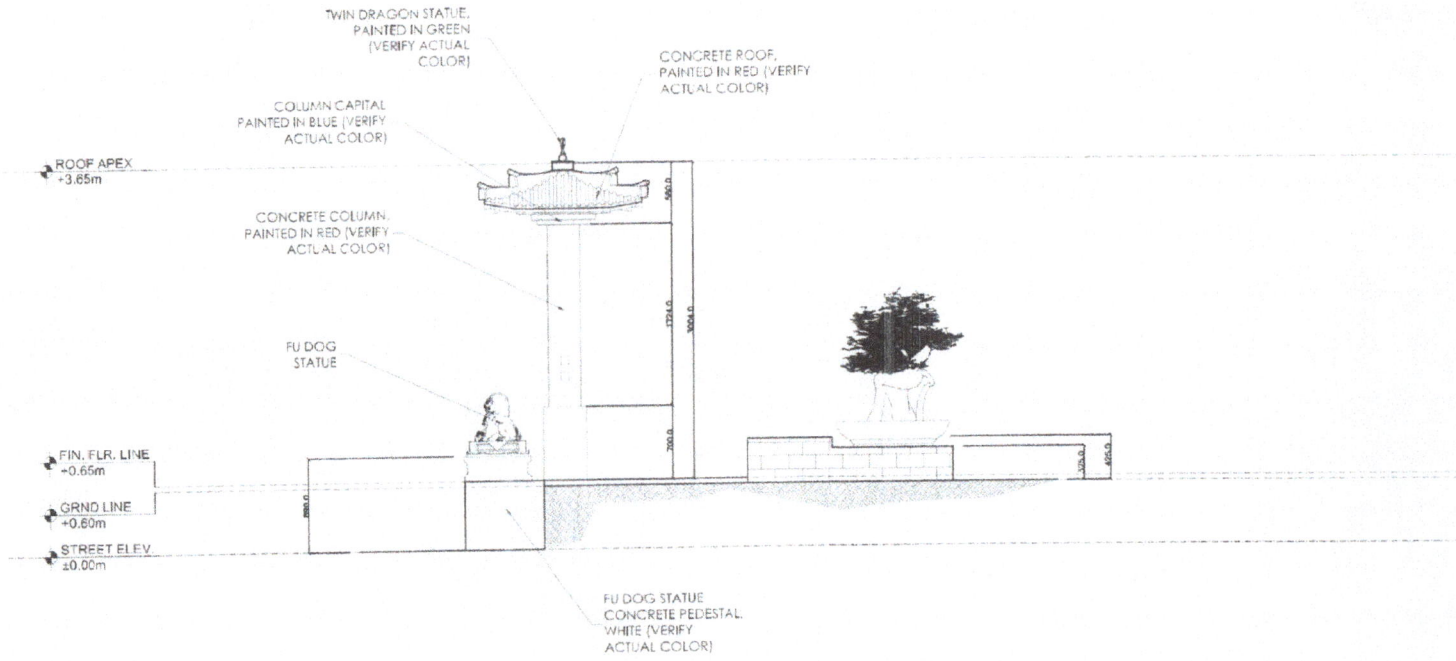


FRONT ELEVATION



SCALE: 1:50 MTS

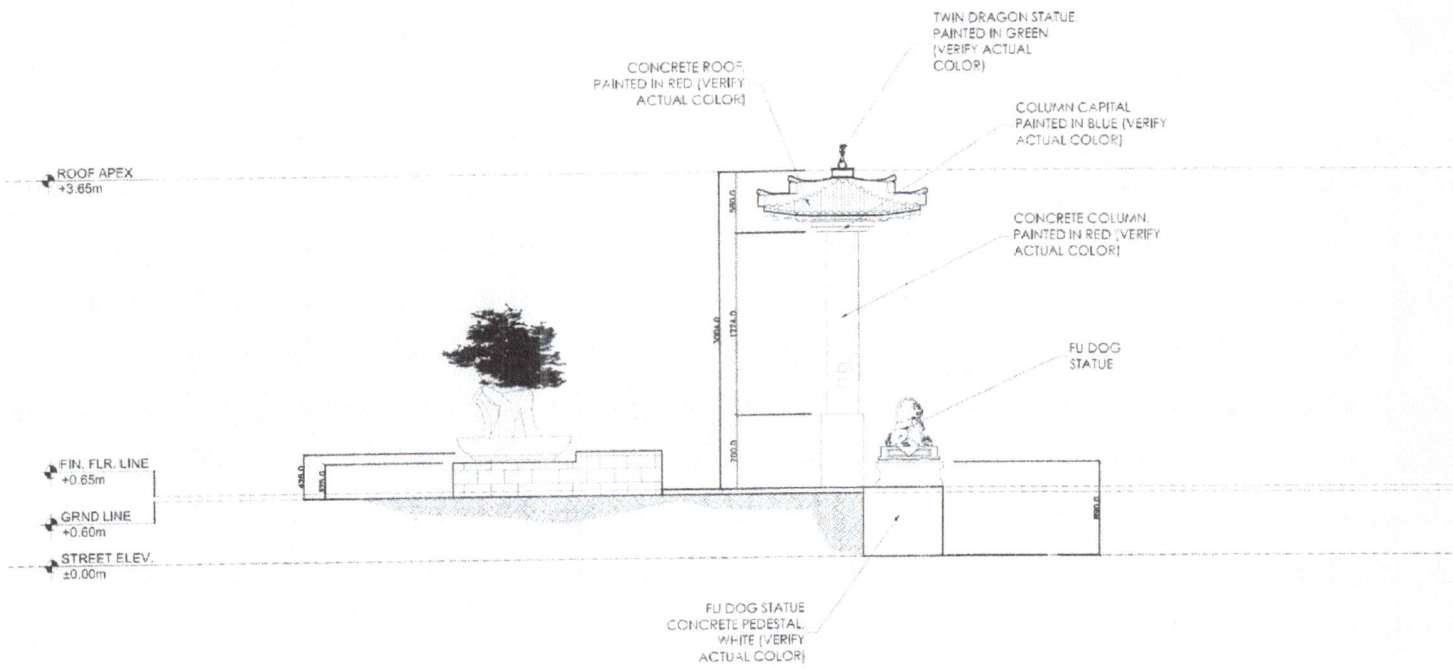
	PREPARED BY	END-USER	REVIEWED BY	ENDORSED BY	RECOM. APPROVAL	APPROVED BY:	PROJECT TITLE:	AGENCY:	SHEET NO:
	 M.N. GATDULA PDU OVP/PC	 B.P. MAGAN DEAN OGS	 E.N. RODEROS JR. ARCHITECT PDU	 S.B. BAYOT JR. PDU HEAD	 O.B. DELOS REYES DIRECTOR PDU	 M.J.C. TEPORA C/SU	 J.X. SENERO C/SU	 H.D. ROBLES PRES C/SU	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CAVITE STATE UNIVERSITY MAIN CAMPUS



RIGHT SIDE ELEVATION

SCALE: 1:50 MTS

	PREPARED BY:	END USER:	REVIEWED BY:	ENDORSED BY:	RECOM. APPROVAL:	APPROVED BY:	PROJECT TITLE:	AGENCY:	SHEET NO.:
	 M.N. GATDULA PDU O/PRC	 B.J. MILLIGAN DEAN DGS	 E.N. RODEROS JR. ARCHITECT PDU INBAG	 S.B. BAYOT JR. PDU	 O.B. DELOS REYES DIRECTOR PDU	 M.J.B. TEPORA C/SU VPD	 J.A. SENERO C/SU PRES	 H.D. ROBLES C/SU PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CAVITE STATE UNIVERSITY MAN CAMPUS	CvSU



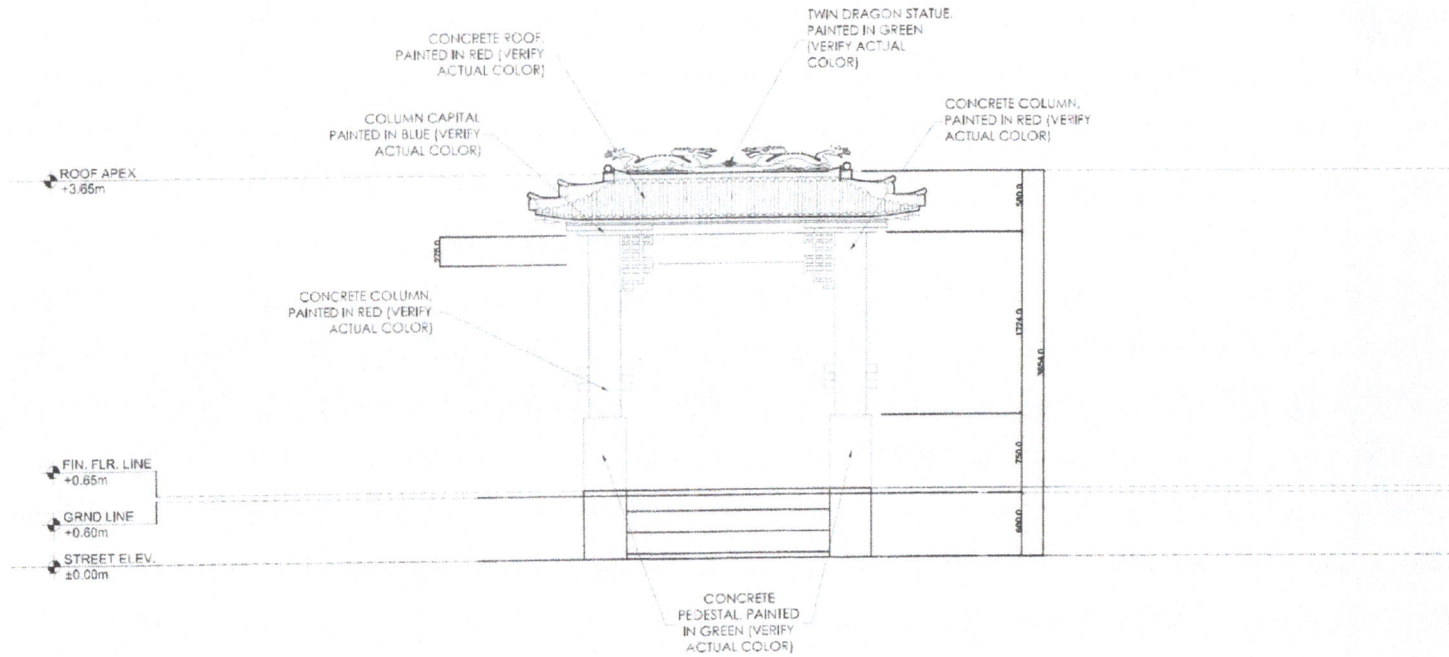
LEFT SIDE ELEVATION



SCALE:

1:50 MTS

	PREPARED BY:	END-USER:	REVIEWED BY:	ENDORSED BY:	RECOM. APPROVAL:	APPROVED BY:	PROJECT TITLE:	AGENCY:	SHEET NO.:
	 M.N. GATEOLA PDU CHIEF	 E.J.P. LAGAN DEAN	 E.N. RODEROS JR. ARCHITECT	 S.B. BAYOT JR. PDU HEAD	 G.B. DELOS REYES DIRECTOR	 M.J.D. TEJERA C/SU	 J.X. SENERA C/SU	 H.D. ROBLES PRES	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CvSU CAVITE STATE UNIVERSITY MAIN CAMPUS


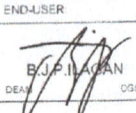
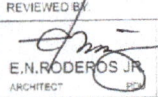
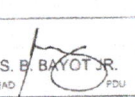
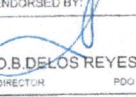
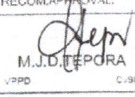
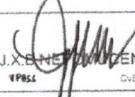
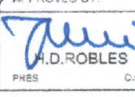


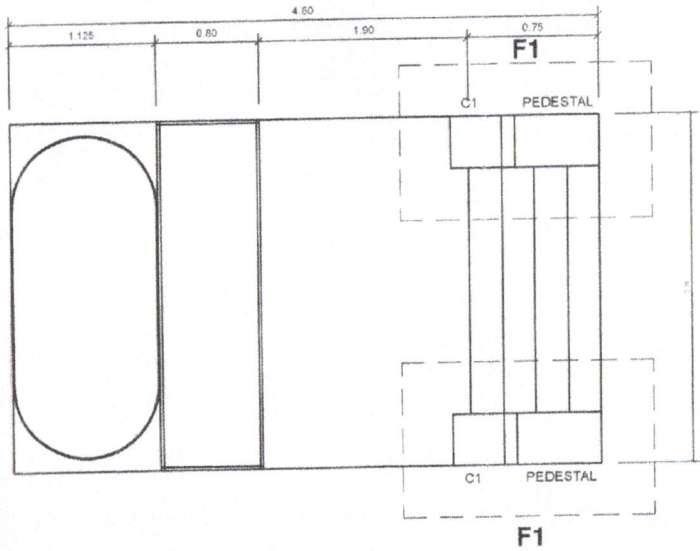
REAR ELEVATION



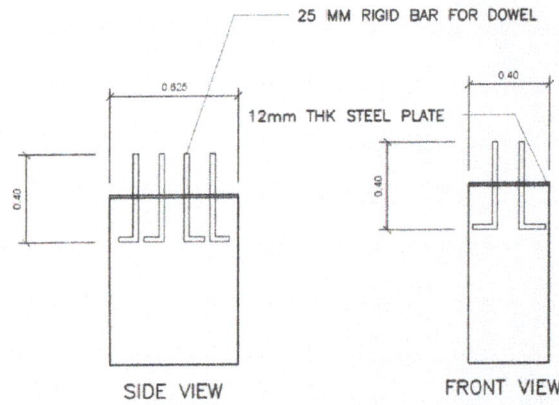
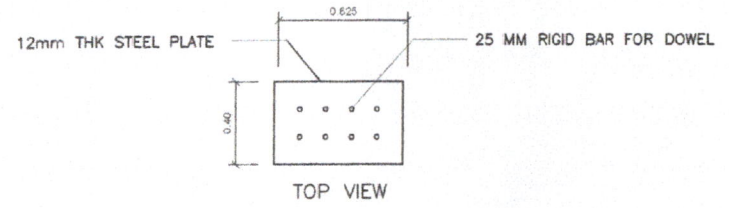
SCALE:

1:50 MTS

PREPARED BY:	END-USER:	REVIEWED BY:	ENDORSED BY:	RECOM. APPROVAL:	APPROVED BY:	PROJECT TITLE:	AGENCY:	SHEET NO.:	
 M.N. GATDULA <small>PDU</small>	 B. P. ILAGAN <small>DEAN</small>	 E. N. RODEROS JR. <small>ARCHITECT</small>	 S. B. BAYOT JR. <small>HEAD</small>	 O. B. DELOS REYES <small>POD</small>	 M. J. D. LEFORA <small>VPPD</small>	 J. X. S. TANZENO <small>CVSU</small>	 J. D. ROBLES <small>PHES</small>	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CVSU CAVITE STATE UNIVERSITY MAIN CAMPUS	A-07

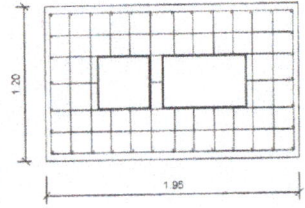


FOUNDATION PLAN
SCALE 1:40 MTS

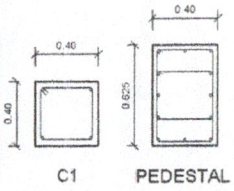


CONNECTION DETAILS BEAM TO ROOFING
SCALE NTS

SCHEDULE OF FOOTINGS							
NAME	TYPE	THICKNESS	SIZE (LxW)	DEPTH	REINFORCEMENT		
					TOP	BOTTOM	
					ALONG L	ALONG W	
F1	ISOLATED	300 MM	1200 x 1950 MM	1500 MM	---	---	7-16 MM Ø @ 150 MM 13-16 MM Ø @ 150 MM



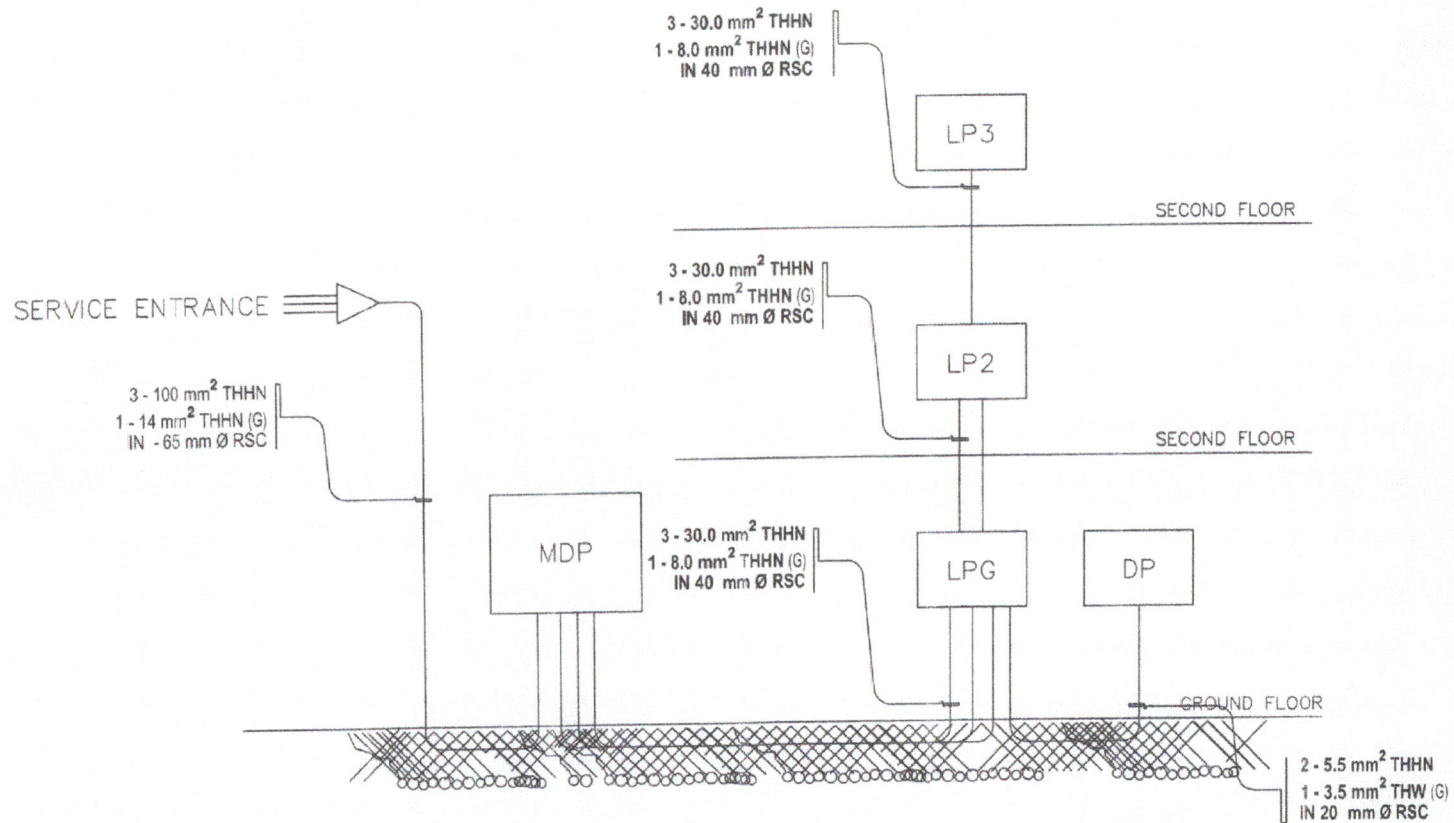
COLUMN	DIMENSION	REINFORCEMENT	NO. OF TIES & SPACING
C1	400 MM X 400 MM	4 - 18 mm Ø R.S.B. 4 - 12 mm Ø R.S.B.	1 SET OF 10mm Ø TIES @ 2-50mm, 4-75mm, 6-100mm, REST @ 200mm C.C.
PEDESTAL	625 MM X 400 MM	12 - 16mm Ø R.S.B.	1 SET OF 10mm Ø TIES @ 2-50mm, 4-75mm, 6-100mm, REST @ 200mm C.C.



CONCRETE SERVICE ENTRANCE PEDESTAL DETAILS
SCALE NTS

COLUMN DETAILS
SCALE NTS

	PREPARED BY:	CIVIL ENGINEER:	END USER:	REVIEWED BY:	ENDORSED BY:	REC. APPROVAL:	APPROVED BY:	PROJECT TITLE/ LOCATION:	IMPLEMENTING AGENCY:	SHT NO.:
	R. FASCUAL PPU OVPPD	L. E. ROCELA PPU OVPPD	B. J. PILARAN DEAN OQS-OLC	S. B. BAYOT JR. PPU OVPPD	C. B. DELOS REYES DIRECTOR PLANNING OFFICE	M. J. D. TEPORA VPPD CVSU	J. X. B. NEPOMOCENO VPASS CVSU	H. D. ROBLES PRES CVSU	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH CAVITE STATE UNIVERSITY MAIN CAMPUS	CAVITE STATE UNIVERSITY



SINGLE LINE DIAGRAM



SCALE:







NTS


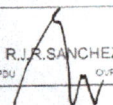
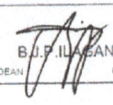
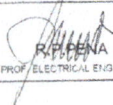
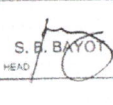

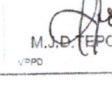
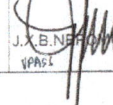
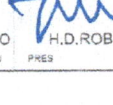
PREPARED BY:	END-USER:	REVIEWED BY:	ENDORSED BY:	RECOM APPROVAL:	APPROVED BY:	PROJECT TITLE:	AGENCY:	SHEET NO.:	
 R.R. SANCHEZ PDI / CVPPD	 E.J.P. LAGAN DEAN / OGS	 R.P. ORENA PROF. ELECTRICAL ENGINEER	 S. B. BAYOT, JR. HEAD / PDU	 G.B. DELOS REYES DIRECTOR / PDO	 M.J. DTEPORA UPPD / CBSU	 J.X.B. NEPOMUCENO VPNS / CBSU	 H.D. ROBLES PRES / CBSU	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CAVITE STATE UNIVERSITY MAIN CAMPUS	CvSU E-04

GENERAL NOTES AND SPECIFICATIONS

1. ALL WORK HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. ELECTRICAL WORKS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, MUNICIPAL/CITY LAWS AND ORDINANCES AND THE REGULATIONS FO THE LOCAL POWER AND TELEPHONE COMPANY.
3. THE JOB SHALL BE EXECUCED IN THE MOST THOROUGH PROMPT AND WORKMANLIKE MANNER EMPLOYING STANDARD TOOLS, EQUIPMENT, METHODS AND GOOD ENGINEERING PRACTICE. THE JOB SHALL BE DONE IN ALL ASPECTS AS REQUIRED PER PLANS AND SPECIFICATIONS AND READY FOR OPERATION.
4. THERE SHALL BE ONLY ONE SERVICE DROP IN A BUILDING WITH 230 VOLTS, 3 WIRE (LINE) PLUS 1 WIRE (GROUND), 3 PHASE, 60 CYCLE.
5. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PERSENT A GENERAL LAYOUT AND BROAD OUTLINE/DESCRIPTION OF THE PROJECT, BUT DO NOT NECESSARILY INDICATE OR DESCRIBE ACTUAL LOCATIONS, LEVELS AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENTS AT THE JOBSITE THAT ARE GOVERNED BY ACTUAL FIELD CONDITION.
6. SERVICE VOLTAGE TO THE BUILDING FROM THE POWER SOURCE SHALL BE 230V.
7. SERVICE ENTRANCE WIRING SHALL BE RIGID STEEL CONDUIT (RSC).
8. FEEDER WIRING SHALL BE ELECTRICAL METALLIC TUBING (EMT).
9. BRANCH CIRCUIT WIRING ELECTRICAL METALLIC TUBING (EMT).
10. BRANCH CIRCUIT WIRING EMBEDDED IN CONCRETE SHALL BE IN PVC PIPE WITH ADEQUATE GROUND WIRE FOR EQUIPMENT GROUNDING.
11. LIGHT SWITCHES SHALL BE 15A, 230VAC.
12. ALL MATERIALS SHALL BE BRAND NEW AND OF APPROVED TYPE FOR LOCATION AND PURPOSE INTENDED.
13. DEVICES, FIXTURES LOCATED OUTDOOR SHALL BE WEATHERPROOF TYPE.
14. ANY DESCRIPANCY BETWEEN THE PLANS AND SPAECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION OR DECISION.
15. THE ENTIRE WORK SHALL BE DONE UNDER THE DIRECT SUPERVISION OF DULY REGISTERED ELECTRICAL ENGINEER.
16. REFER TO SHEET E--2 FOR EXACT NUMBER AND LOCATION OF DEVICES/EQUIPMENT FOR ELECTRICAL SYSTEM. ANY CONFLICT ON QUANTITY AND/OR LAYOUT MUST BE VERIFIED AND CONFIRMED TO DESIGNER/CONSULTANT.
17. REFER TO LOAD SCHEDULE FOR THE RATING OF INDIVIDUAL ENCL, ACB'S IN NEMA-3R.
18. ALL ELECTRICAL CONDUITS AND TELEPHONE SERVICE ENTRANCE THAT INSTALLED BELOW THE GROUND SHALL BE IN CONCRETE ENCASEMENT.
19. ANY DEVICES OR EQUIPMENT NOT REFLECTED OR SHOWN ON PLANS BUT REQUIRED TO COMPLETE THE SYSTEM MUST BE INCLUDED ON SCOPE OF WORK.
20. REQUEST FOR TEMPORARY POWER INTERRUPTION SHOULD BE COORDINATED TO OWNER'S REPRESENTATIVE OR DESIGNER.

LEGEND AND SYMBOLS

	SPOT LIGHT (IP67)
	LIGHTING (SUBMERSIBLE-IP68)
	LIGHTING (FLOOR-MOUNTED-IP67)
	CIRCUIT HOMERUN
	CIRCUIT NUMBER
	PANEL BOARD

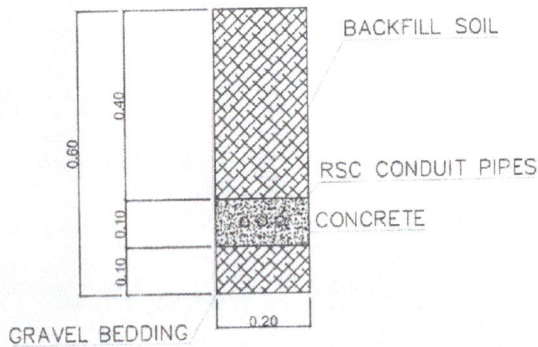
	PREPARED BY:	END-USER:	REVIEWED BY:	ENDORSED BY:	RECOM. APPROVAL:	APPROVED BY:	PROJECT TITLE:	AGENCY:	SHEET NO.:
	 R.J.R. SANCHEZ PDU O/PPD	 B.J.P. ILIASAN DEAN OGS	 R. P. PENA PROF. ELECTRICAL ENGINEER	 S. B. BAYOT, JR. HEAD PDU	 O. B. DELOS REYES DIRECTOR PDU	 M. J. D. TEPORA V/PPD C/SU	 J. X. B. NEPOMUCENO V/PASL C/SU	 H. D. ROBLES PRES C/SU	PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL CAVITE STATE UNIVERSITY MAIN CAMPUS

SCHEDULE OF LOADS AND COMPUTATIONS

PANEL : DP (DISTRIBUTION PANEL)		CABLE: 2 - 5.5 SQMM THHN + 1 - 3.5 SQMM THW			MAIN: 30 AT, 50 AF, 2P, 230V, MCCB						
PHASE: 1		CONDUIT: RSC, 20 MM DIA.			ENCLOSURE : NEMA 3R						
VOLTS: 230		LOCATION: OUTDOOR			MOUNTING: SURFACE						
CKT NO	CIRCUIT DESCRIPTION	NUMBER OF OUTLET	LOAD IN RATING			CIRCUIT PROTECTION		Size of Conductor		Size Of Conduit in MM ø	Color Code
			Volt- Amp	VOLT	AMPERES			THHN	THW		
1	WATER PUMP (60 W)	1	100	230	5.00	20 AT, 2P, 230V, MCCB	2 - 3.5	G 1-2.0	RSC, 20	1R,1B,G	
2	LIGHTING (IP67)	4	400	230	1.74	20 AT, 2P, 230V, MCCB	2 - 3.5		RSC, 20	1R,1B	
3	LIGHTING (IP68)	8	800	230	3.48	20 AT, 2P, 230V, MCCB	2 - 3.5		RSC, 20	1R,1B	
4	SPARE										
TOTAL			1300	230	10.22	30 AT 50 AF, 2P, 230V, MCCB	2 - 5.5 + 1 - 3.5 G		RSC, 20	1R,1B,G	

MAIN FEEDER and CURRENT PROTECTION COMPUTATION:			
NOTE	$I_{FL} = 10.22 \times (25\% \times \text{Im}) =$	11.47	Amperes
	$I_{BR} = 10.22 \times (250\% \times \text{Im}) =$	22.72	Amperes
G - Means Ground Wire 1R- Color RED 1B- Color BLACK 1G- Color GREEN			
use: 2 - 5.5 SQMM THHN + 1 - 3.5 SQMM THW IN 20 MM DIA. RSC use: 30 AT, 50 AF, 2P, 230V, MCCB			
This Electrical Design is good only for the above connected loads. Any additional electrical load connection in the future is not allowed. Except redesign of electrical load system will be done.			

CONCRETE ENCASEMENT RACEWAY



LPG (CIRCUIT 15)

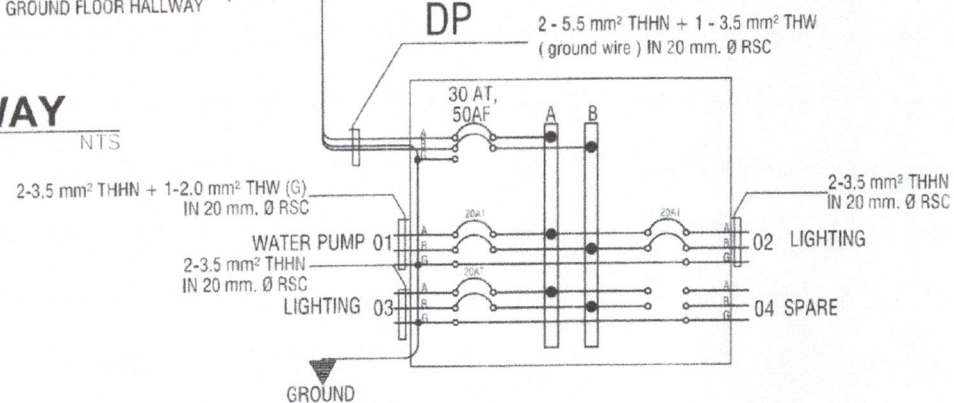
OGS BUILDING GROUND FLOOR HALLWAY

CONCRETE ENCASEMENT RACEWAY



SCALE:

NTS



PANEL BOARD DETAILS



SCALE:

NTS

	PREPARED BY: R.V.R. SANCHEZ PDU, CUPPD	END-USER: E.J.P. MAGAN DEAN, OGS	REVIEWED BY: R.P. PENA PROF. ELECTRICAL ENGINEER	ENDORSED BY: S. B. BAYOT JR. HEAD, PDU	RECOM. APPROVAL: O.B. DELOS REYES DIRECTOR, PDU	APPROVED BY: M.J.D. TEJERA V.P.P.D., C/SU	APPROVED BY: J.V.B. NERSON MUCENO C/SU	APPROVED BY: H.D. ROBLES PRES., C/SU	PROJECT TITLE: PROPOSED FILIPINO-CHINESE FRIENDSHIP ARCH AT GRADUATE SCHOOL	AGENCY: CvSU	SHEET NO.: E-03
									CAVITE STATE UNIVERSITY MAN CAMPUS		