

SCHEDULE OF LOADS

CIRCUIT NUMBER	DESCRIPTION	LIGHTING OUTLET	CONV OUTLET	SWITCHES				VOLT	AMPERE	VOLT-AMP	SIZE OF WIRE in sq. mm (TW Cu.)	SIZE OF CONDUIT in mm dia. (PVC)	CB RATING	
				S1	S2	S3	S3W						POLE	AMP-TRIP
1	LIGHTING OUTLET	10		2	2			230	4.35	1000	2.0	20	2	15
2	LIGHTING OUTLET	13		1	3			230	5.65	1300	2.0	20	2	15
3	LIGHTING OUTLET	12		2	3			230	5.22	1200	2.0	20	2	15
4	CONVENIENCE OUTLET		8					230	6.96	1600	3.5	20	2	20
5	CONVENIENCE OUTLET		8					230	6.96	1600	3.5	20	2	20
6	3.5kW Water Heater		1					230	15.20	3500	3.5	20	2	20
7	1 hp A.C.U.		1					230	8.00	1840	3.5	20	2	30
8	0.75 hp A.C.U.		1					230	6.90	1587	3.5	20	2	20
9	SPARE							230	-	-	-	-	-	-
10	SPARE							230	-	-	-	-	-	-
TOTAL		35	16	5	8			230	59.24	13627				

NOTE: 1 UNIT WEATHER PROOF (WP) CONVENIENCE OUTLET FOR CIRCUIT NO.4 & CIRCUIT NO.6

GUIDE FOR WIRE TYPES

TW = moisture resistant thermoplastic for dry & wet
 THHN = heat resistant thermoplastic for dry only
 THW = moisture & heat resistant thermoplastic for dry & wet
 T = thermoplastic for dry & wet
 RHW = moisture & heat resistant rubber for dry & wet

COMPUTATION

$I = 59.24 \text{ A}$
 $I_{TOTAL} = [(I + 0.25 (I_{HRM})) \times 0.80 \text{ DF}]$
 $I_{TOTAL} = 48.99 \text{ A}$

SIZE OF CONDUCTOR

Therefore use **2- 8 sq mm THW Cu WIRE**
 inside 25 mm diameter RSC with
 Grounding Conductor **5.5 sq mm Copper**

RATING OF MAIN CIRCUIT BREAKER

$I_B = I + 1.5 (I_{HRM})$
 $= 59.24 + 1.5 (8)$
 $= 71.24 \text{ A}$

Therefore use **2P, 80 AT Circuit Breaker**

TYPE OF SERVICE

SINGLE PHASE, 2W, 230V, 60 Hz

WHERE:

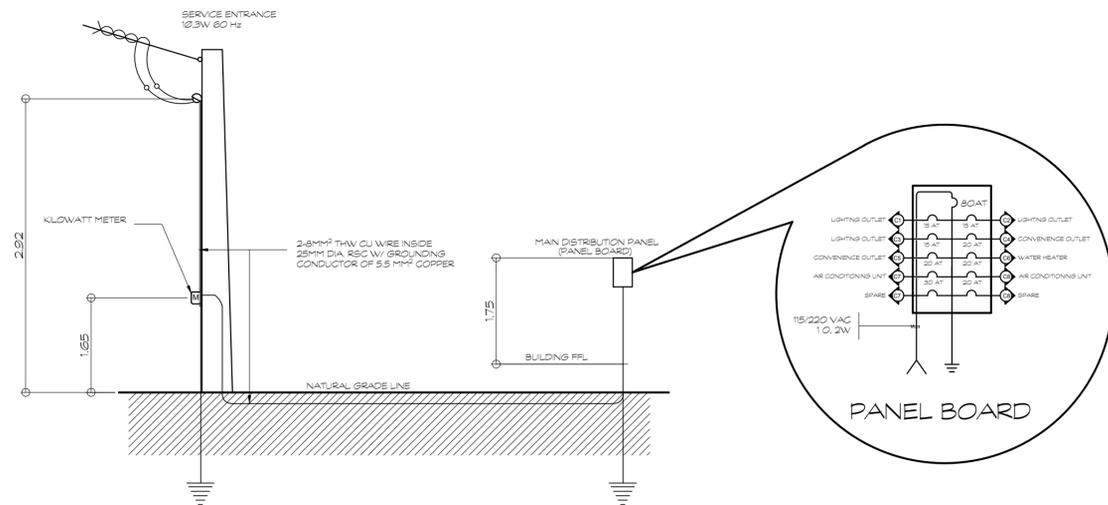
DF DEMAND FACTOR
 I CURRENT
 P POWER
 E NOMINAL VOLTAGE
 I_{HRM} CURRENT HIGHEST RATING MOTOR
 I_F FEEDER CURRENT
 I_B BREAKER CURRENT

LEGEND:

- CIRCULAR FLOURESCENT
- INCANDESCENT BULB OR DAYLIGHT SAVING BULB
- FLUORESCENT LAMP
- CHANDELER
- METER
- DUPLEX CONVENIENCE OUTLET
- WEATHERPROOF CONVENIENCE OUTLET
- S1 SINGLE POLE WALL SWITCH
- S2 DUPLEX WALL SWITCH
- MAIN DISTRIBUTION PANEL
- SERVICE ENTRANCE
- POWER LINE
- SWITCH LINE
- CIRCUIT NO.
- TELEPHONE UNIT
- WATER PUMP
- AIR CONDITIONING UNIT

GENERAL NOTES AND SPECIFICATIONS

- ALL ELECTRICAL WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE PHIL. ELECTRICAL CODE, ORDINANCE OF THE CITY/MUNICIPALITY CONCERNED AS WELL AS THE REQUIREMENTS OF THE LOCAL POWER COMPANY.
- ALL ELECTRICAL WORKS SHALL BE SUPERVISED BY A DULY LICENCED ELECTRICAL PRACTITIONER.
- THE TYPE OF SERVICE SHALL BE 1ϕ, 2W, 230V, 60Hz.
- THE TYPE OF WIRING SHALL BE:
 A) POLYVINYL CHLORIDE (PVC) - USED WHEN EMBEDDED IN CONCRETE SLAB OR MASONRY.
 B) RIGID STEEL CONDUIT (RSC) - USED IN EXPOSED OR WET LOCATIONS, OR IN HOLLOW PORTIONS OF THE WALL. THIS WILL ALSO BE USED IN SERVICE ENTRANCE.
- MOUNTING HEIGHT SHALL BE AS FOLLOWS:
 WALL SWITCHES - 1.37 m FROM THE FLOOR FINISH TO THE CENTER
 CONVENIENCE OUTLETS - 0.30 m ABOVE THE FLOOR FINISH.
 PANEL BOARD - 1.70 m FROM THE FLOOR LINE FINISH TO THE TOP OF THE PANEL BOARD.
- ALL OUTLET BOXES/UTILITY BOXES SHALL BE PRESSED, GALVANIZED STEEL "DEEP TYPE" GAUGE NO. 18 AND WITH FACTORY KNOCKOUT.
- THERE SHALL BE ONLY ONE SERVICE DROP TO THE BUILDING.
- WIRING DEVICES SHALL BE AS FOLLOWS:
 WALL SWITCHES - 15 AMPS, 220V, FLUSH TYPE.
 CONVENIENCE OUTLETS - 15 / 25 A, 230V, FLUSH TYPE.
- ALL ELECTRICAL MATERIALS SHALL BE NEW AND APPROVED TYPE FOR LOCATION AND PURPOSES.
- DIRECTORY OF ALL THE BRANCH CIRCUITS IN THE PANEL BOARD SHALL BE PROVIDED.



ELECTRICAL ENGINEER:		PROJECT TITLE:	OWNER:	CAD BY:	REVISIONS:	SHEET CONTENTS:	SHEET NO.:
PRC / REG NO:		A PROPOSED BUNGALOW TYPE RESIDENCE	MR. & MRS. GUILLERMO M. MONTERO JR.	SUNNY B. OJEDA, R-PP		SCHEDULE OF LOAD, COMPUTATION LEGEND, GEN. NOTES & SPECIFICATIONS RISER DIAGRAM, AND VICINITY MAP	E-1
DATE OF EXPIRATION:				DESIGNED BY:			
PLACE:				CHECKED BY:			
PTR NO:		LOCATION: BRGY. CALAMPITAO, MIAG-AO, ILOILO		ARCHT. BOLLESER			