

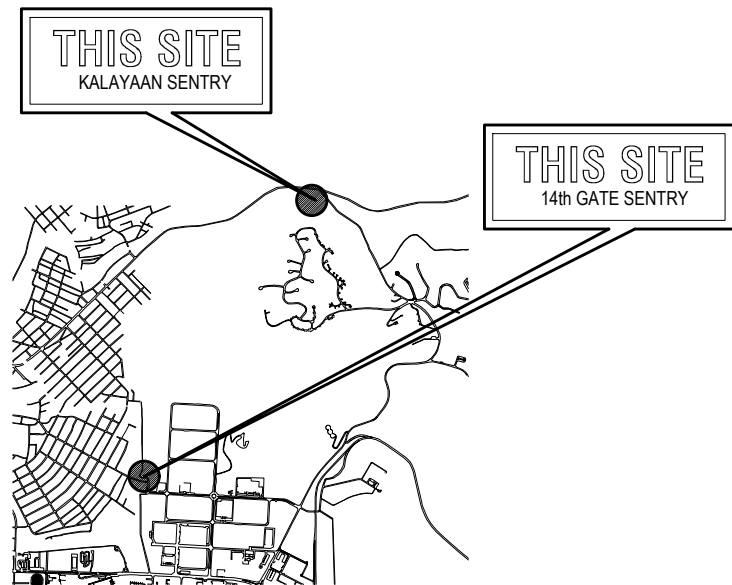
# 1 GENERAL NOTES

ALL ELECTRICAL WORKS HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE COMPANY.

- SERVICE POWER SHALL BE SINGLE PHASE, TWO WIRES W/ GROUND, 230 VOLTS, 60 HERTZ SYSTEM.
- ALL WIRING METHOD FOR LIGHTING, POWER, TELEPHONE AND CATV SHALL BE DONE IN PVC PIPE FOR ALL EMBEDDED IN CONCRETE SLAB AND RSC PIPE FOR FIRE ALARM SYSTEM, EXPOSED CONDUIT LAYOUT, FEEDER DISTRIBUTION AND MAJOR POWER CONDUIT RISER.
- SMALLEST BRANCH CIRCUIT WIRE SHALL BE 3.5 mm THHN FOR POWER AND LIGHTING SYSTEM IN RACEWAY 15 mm# TRADE SIZE CONDUIT. WIRE SHALL BE INSULATED FOR 600 VOLTS.
- ALL BRANCH CIRCUIT HOMERUN SHALL BE INSTALLED AS INDICATED IN THE PLAN. EXPOSED CIRCUIT RUN SHALL BE INSTALLED PARALLEL TO OR PERPENDICULAR WITH THE BUILDING LINE AND SUPPORTED BY CONDUIT CLAMPS EVERY 1.5 METERS, DIAGONAL CONDUIT RUN SHALL NOT BE ACCEPTED.
- ALL PANELBOARD SHALL BE PROVIDED WITH GROUNDING TERMINALS FOR SOLID AND NEUTRAL, GROUNDING WIRE SHALL BE CONNECTED TO A GROUND ROD.
- ALL BRANCH CIRCUIT HOMERUN FOR POWER AND LIGHTING SHALL NOT BE COMBINED IN THE SAME RACEWAY.
- ALL METALLIC CONDUIT, CABINET, BOXES AND EQUIPMENT SHALL BE PROPERLY GROUNDING AND BONDED.
- ALL MATERIALS TO BE USED SHALL BE NEW AND APPROVED FOR THE LOCATION AND PURPOSES.
- ALL MOLDED CASE CIRCUIT BREAKERS FOR PUMPS AND MOTORS SHALL BE INDUSTRIAL TYPE.
- ALL RECEPTACLE OUTLET SHALL BE PROPERLY GROUNDING TO THE BOX BY MEANS OF GROUNDING LUGS.
- MOUNTING HEIGHT NOT SHOWN ON SCHEDULE ARE AS FOLLOWS:
  - LIGHT CONTROLLED SWITCHES: 1.40 METER ABOVE FLOOR FINISH @ CENTER
  - DUPLEX CONVENIENCE OUTLET: 0.30 METER ABOVE FLOOR FINISH @ CENTER UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS.
  - TELEPHONE OUTLET: 0.30 METER ABOVE FLOOR FINISH @ CENTER UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS.
  - PANELBOARD / DISCONNECT: 1.40 METER ABOVE FLOOR FINISH @ CENTER UNLESS OTHERWISE INDICATED BY THE FIELD CONDITIONS.
- ALL WIRES AND CABLES SHALL BE COLOR CODED AS FOLLOWS:
 

PHASE A	RED
PHASE B	BLACK
GROUND	GREEN
- ALL ELECTRICAL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT AND IMMEDIATE SUPERVISION OF A DULY QUALIFIED LICENSED ELECTRICAL ENGINEER.

# 3 LOCATION MAP



### PANEL "LP" KALAYAAN

CKT NO.	LOAD DESCRIPTION	VOLT	VOLT-AMPERE	AMPERE LOAD	NUMBER & SIZE			WIRE	CONDUIT
					AT	AF	P		
1	4-20W LED T5 & 3-20W LED FLOODLIGHT	230	140	0.61	20	100	2	2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN	20mm DIA. PVC
2	2-CONVENIENCE OUTLET & 4-9W PL	230	396	1.72	20	100	2	2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN	20mm DIA. PVC
3	PROVISION FOR RFID	230	1000	4.35	20	100	2		
4	SPARE	230	1200	5.22	20	100	2		

TOTAL CONNECTED LOAD: **1200 11.90**

$$IL @ 100\% D.F. = (11.90 \times 100\% DF) + (25\% OF 0)$$

$$= 11.90 + 0$$

$$= 11.90 A$$

USE : 2-8.0mm<sup>2</sup> THW & 1-5.5mm<sup>2</sup> TW IN 20m DIA. RSC

MAIN : 40AT, 100AF, 2P, 240V, 60HZ CKT BRK

### PANEL "LP" 14 ST.

CKT NO.	LOAD DESCRIPTION	VOLT	VOLT-AMPERE	AMPERE LOAD	NUMBER & SIZE			WIRE	CONDUIT
					AT	AF	P		
1	4-20W LED T5 & 3-20W LED FLOODLIGHT	230	140	0.61	20	100	2	2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN	20mm DIA. PVC
2	2-CONVENIENCE OUTLET & 3-9W PL	230	387	1.68	20	100	2	2-3.5mm <sup>2</sup> THHN & 1-3.5mm <sup>2</sup> THHN	20mm DIA. PVC
3	PROVISION FOR RFID	230	1000	4.35	20	100	2		
4	SPARE	230	1200	5.22	20	100	2		

TOTAL CONNECTED LOAD: **1200 11.86**

$$IL @ 100\% D.F. = (11.86 \times 100\% DF) + (25\% OF 0)$$

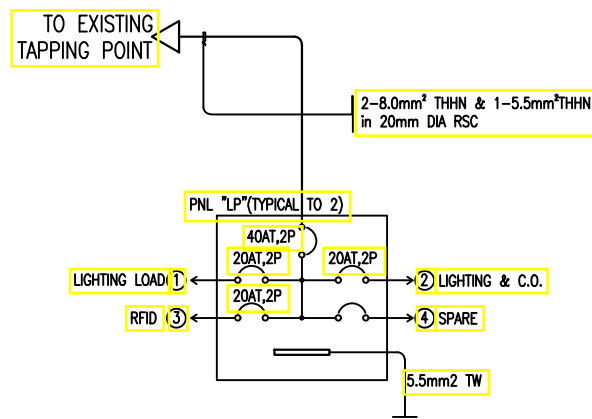
$$= 11.86 + 0$$

$$= 11.86 A$$

USE : 2-8.0mm<sup>2</sup> THW & 1-5.5mm<sup>2</sup> TW IN 20m DIA. RSC

MAIN : 40AT, 100AF, 2P, 240V, 60HZ CKT BRK

# 2 LOAD SCHEDULE



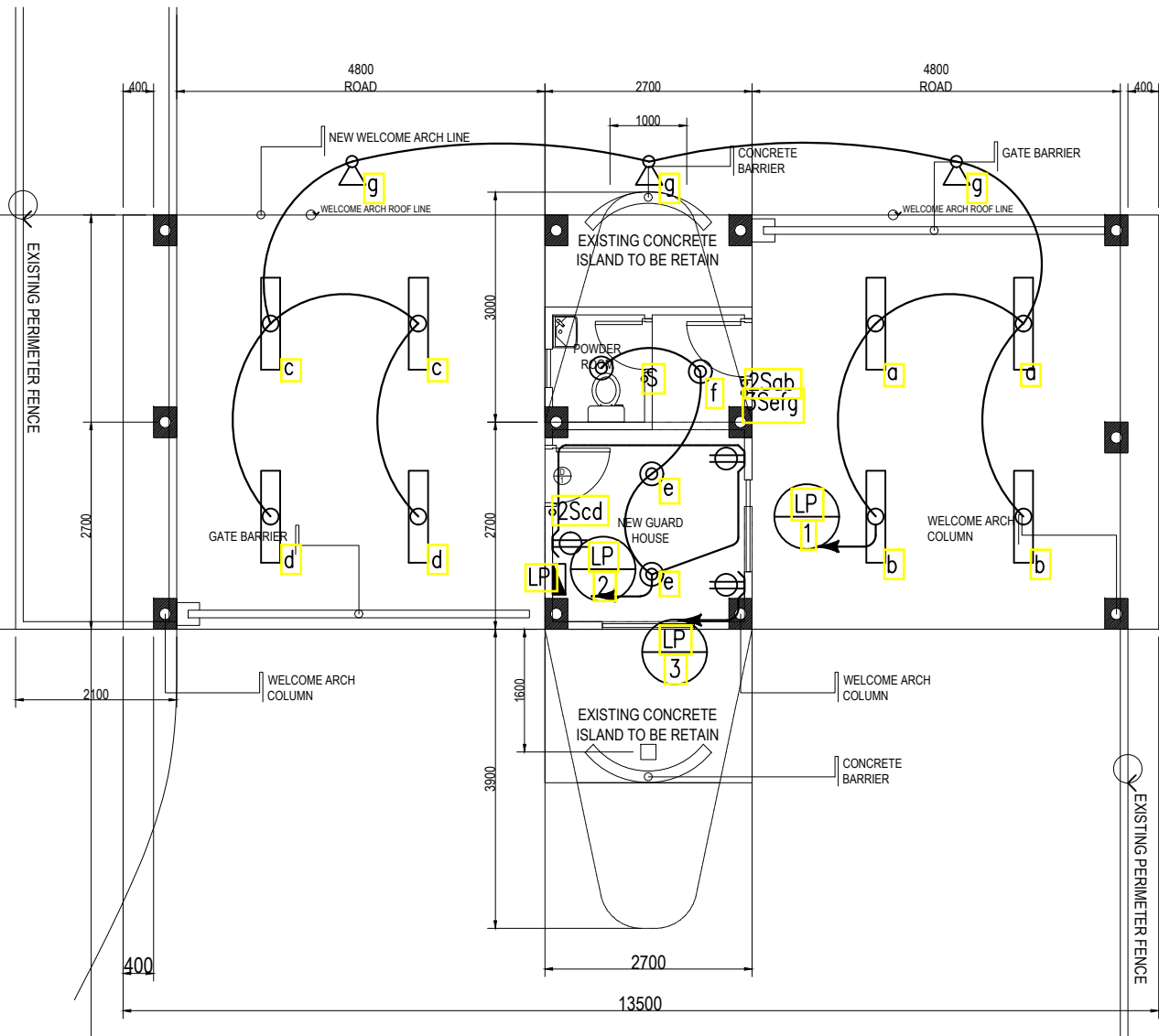
# 4 POWER SYSTEM SINGLE LINE DIAGRAM

# 5 LEGEND & SYMBOLS

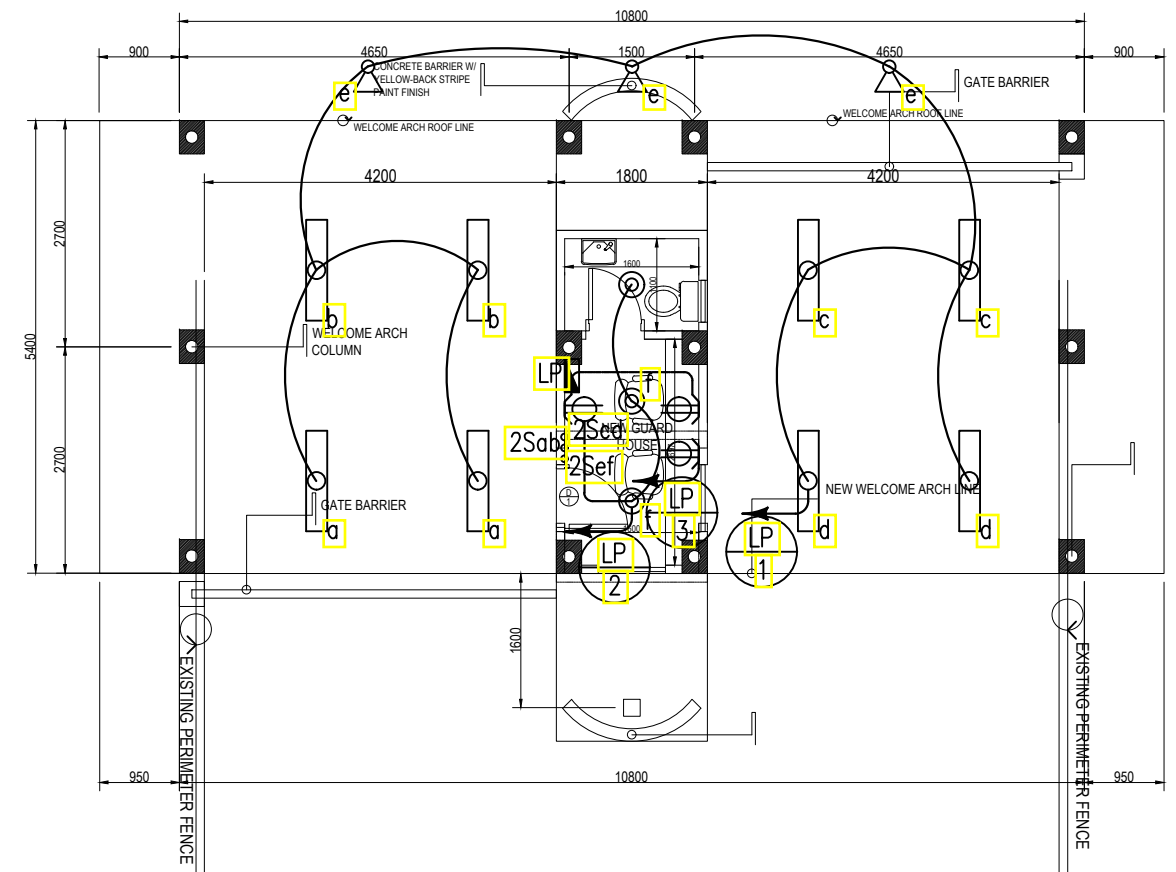
- CONDUIT RUN EMBEDDED OR CONCEALED IN CONCRETE FLOOR SLAB OR WALL
- CONDUIT BRANCH CIRCUIT HOMERUN TO PANELBOARD
- CIRCUIT HOMERUN DESIGNATION. UPPER PART DENOTES POWER SOURCE OF THE CIRCUIT WHILE LOWER HALF DENOTES CIRCUIT DESIGNATION.
- POWER AND LIGHTING PANEL
- CIRCUIT BREAKER, RATING AS INDICATED
- WALL MOUNTED DUPLEX CONVENIENCE OUTLET, 15A, PARALLEL SLOTS, GROUNDING TYPE
- 12W LED PINLIGHTS, RECESSED MOUNTED
- 20W LED FLOODLIGHTS
- 18W LED T5 SURFACE MOUNTED LAMP
- SINGLE TUMBLER SWITCH / THREE WAY SWITCH
- TWO GANG TUMBLER SWITCH, NUMBER DENOTES NUMBER OF GANG IN A PLATE, SMALL LETTER DENOTES LIGHT CONTROLLED
- PULLBOX
- JUNCTION BOX
- LOCAL AREA NETWORK OUTLET
- TELEPHONE OUTLET

SATISFACTORY TO:

**ALFREDO P. AGUSTIN JR.**  
MANAGER, LAW ENFORCEMENT DEPT.



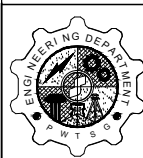
**1**  
KALAYAAN SENTRY  
LIGHTING & POWER LAYOUT  
1:50MM



**2**  
14TH STREET SENTRY  
LIGHTING & POWER LAYOUT  
1:50MM

SATISFACTORY TO:

**ALFREDO P. AGUSTIN JR.**  
MANAGER, LAW ENFORCEMENT DEPT.



**ENGINEERING DEPARTMENT**  
PUBLIC WORKS & TECHNICAL SERVICES GROUP  
BLDG. 255 BARRYMAN ROAD, SUBIC BAY FREEPORT ZONE

DRAFT/CADD: NVC  
DESIGNED BY: NVC

CHECKED BY: **EDISON D. ICO**  
DIV CHIEF III, PDD

REVIEWED BY: **GARY P. FERNANDEZ**  
MANAGER, ENGINEERING DEPT

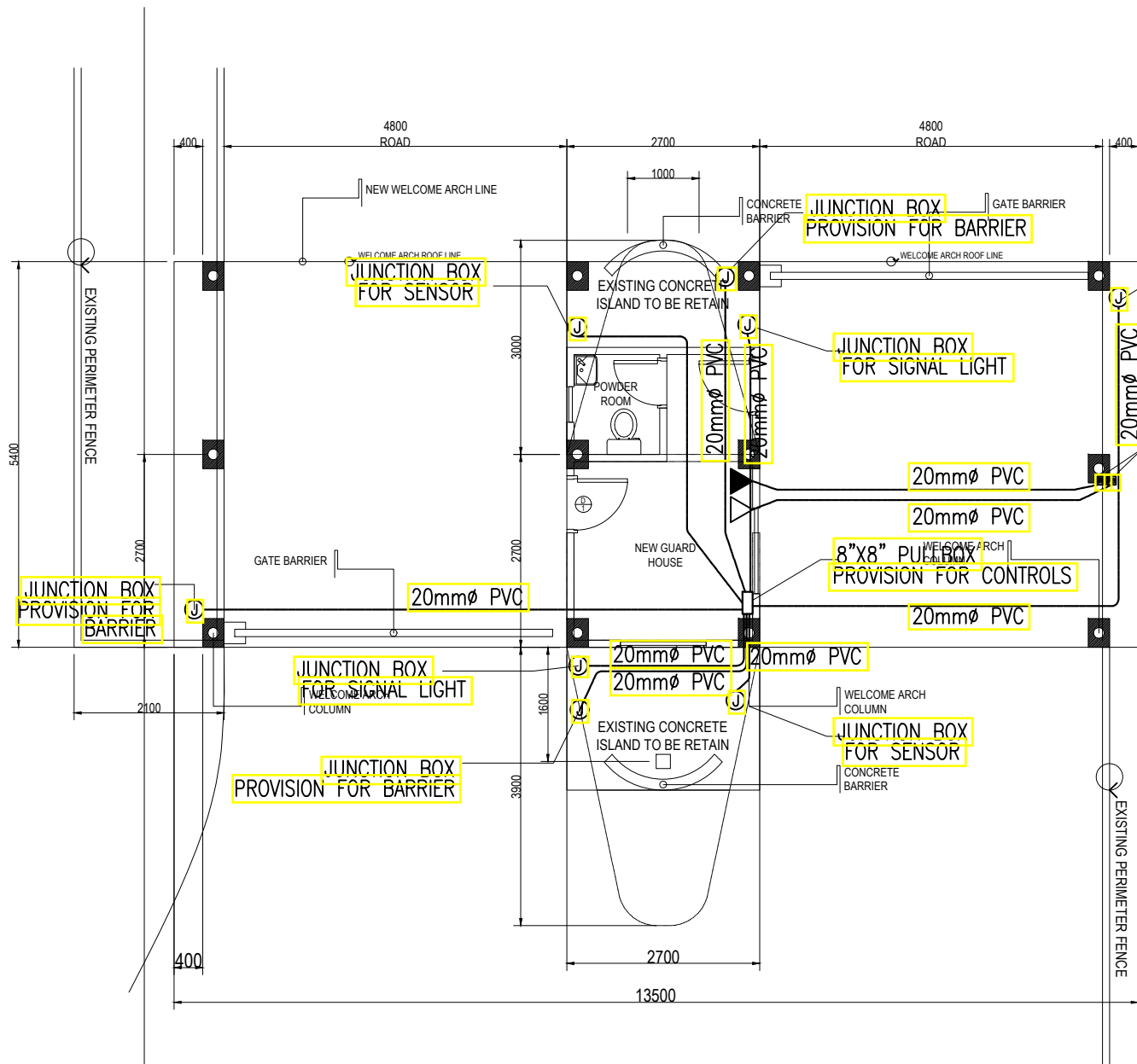
REVIEWED BY: **MARCO A. ESTABILLO**  
DA FOR PWTSG

APPROVED BY: **ROLEN C. PAULINO**  
CHAIRMAN & ADMINISTRATOR

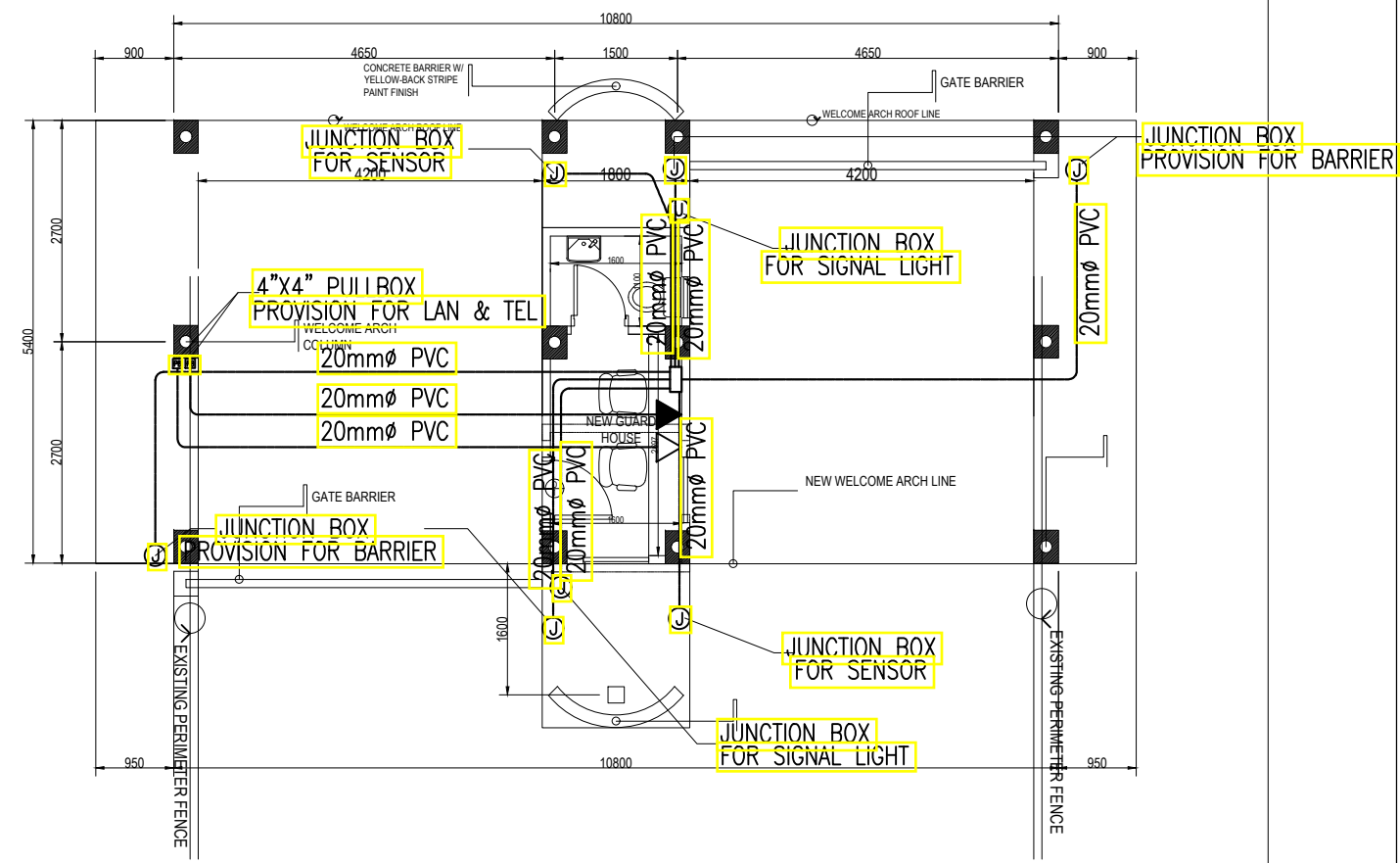


PROJECT TITLE: CONSTRUCTION OF WELCOME ARCHES AT KALAYAAN AND 14TH STREET GATES  
LOCATION: KALAYAAN & 14TH ST. GATE, SUBIC BAY FREEPORT ZONE

SHEET NO. **E2**  
19 of 21



**1**  
KALAYAAN SENTRY  
AUXILIARY LAYOUT  
1:50MM  
E3 E3



**2**  
14TH STREET SENTRY  
AUXILIARY LAYOUT  
1:50MM  
E2 E2

SATISFACTORY TO:	SATISFACTORY TO:	SATISFACTORY TO:
<b>VIRGIL JOSEPH G. LANSANGAN</b> MANAGER, MANAGEMENT INFORMATION SYSTEMS OFFICE	<b>EDDIE L. VENTURA</b> MANAGER, TELECOMS DEPARTMENT	<b>ALFREDO P. AGUSTIN JR.</b> MANAGER, LAW ENFORCEMENT DEPT.



DRAFT/CADD: NVC	CHECKED BY: EDISON D. ICO DIV CHIEF III, PDD	REVIEWED BY: GARY P. FERNANDEZ MANAGER, ENGINEERING DEPT	REVIEWED BY: MARCO A. ESTABILLO DA FOR PWTSG	APPROVED BY: ROLEN C. PAULINO CHAIRMAN & ADMINISTRATOR
DESIGNED BY: NVC				



PROJECT TITLE: CONSTRUCTION OF WELCOME ARCHES AT KALAYAAN AND 14TH STREET GATES	SHEET NO. <b>E3</b>
LOCATION: KALAYAAN & 14TH ST. GATE, SUBIC BAY FREEPORT ZONE	20 of 21