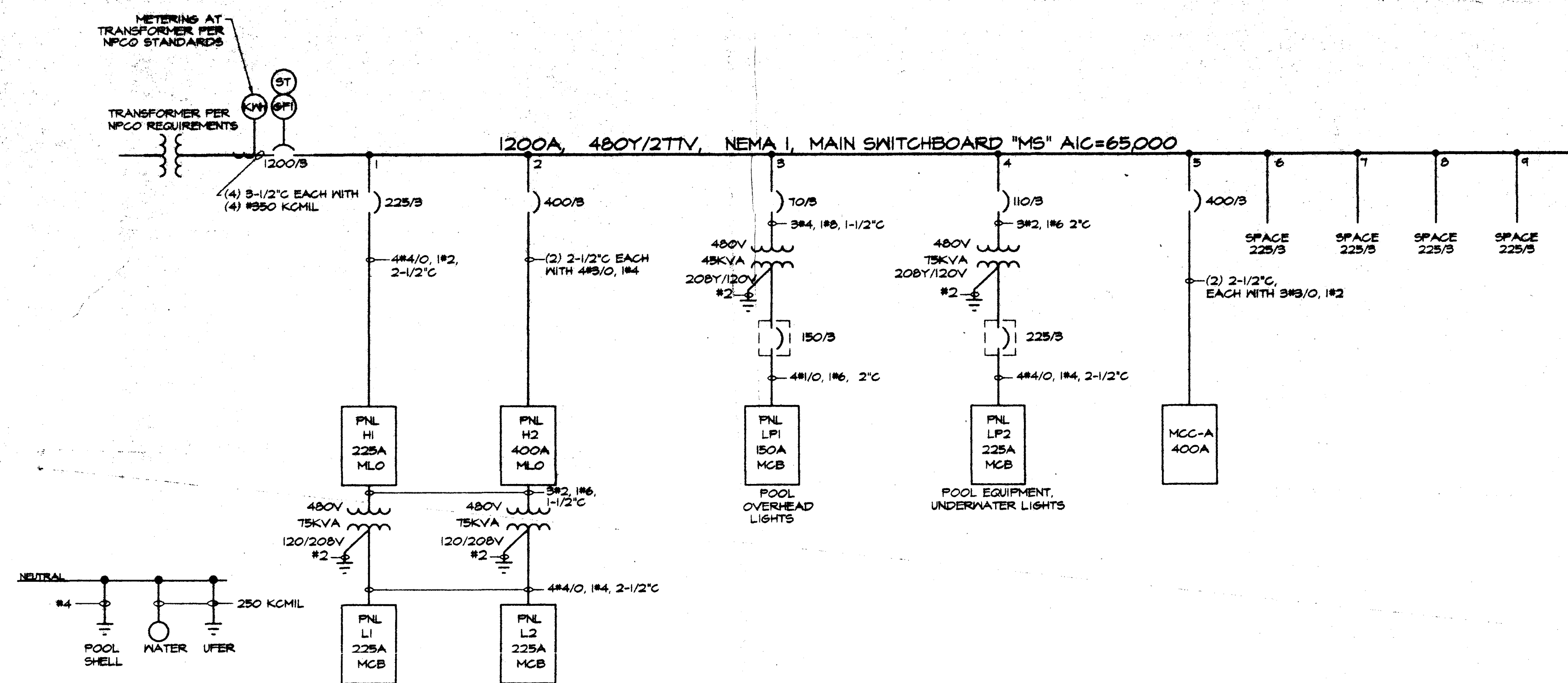




ONELINE DIAGRAM

SCALE: NONE

ELECTRICAL LOAD CALCULATION
DULA POOL

	LOAD	DF	DEMAND
SITE LIGHTING - 10 X 460W =	4,600 VA	1.25	5,750 VA
BATH HOUSE - 10,960 SF			
LIGHTING: 10,960 SF X 3.0 WATTS/SF =	32,880 VA	1.25	41,100 VA
POWER: 10,960 SF X 2.0 WATTS/SF =	21,920 VA	1.00	21,920 VA
HVAC:			
AC - 1	14,280 VA	1.00	14,280 VA
AC - 2	10,560 VA	1.00	10,560 VA
AC - 3	10,840 VA	1.00	10,840 VA
AC - 4	8,640 VA	1.00	8,640 VA
AC - 5	10,560 VA	1.00	10,560 VA
AC - 6	8,550 VA	1.00	8,550 VA
EF - 4 @ 2 HP	11,300 VA	1.00	11,300 VA
HWP - 1-1/2 HP	9,100 VA	1.00	9,100 VA
			146,740 VA
POOL HOUSE - 22,000 SF			
LIGHTING: 22,000 SF X 3.0 WATTS/SF =	66,000 VA	1.25	82,500 VA
POWER: 22,000 SF X 1.0 WATTS/SF =	22,000 VA	1.00	22,000 VA
HVAC:			
AH - 1	49,200 VA	1.00	49,200 VA
AH - 2	49,200 VA	1.00	49,200 VA
UNDERWATER LIGHTS: 56 X 500W =	28,000 VA	1.25	35,000 VA
POOL DECK LIGHTS 24 X 1,450W =	34,800 VA	1.25	43,500 VA
POOL CIRC. PUMP (50HP, 460V, 3 PH) =	51,740 VA	1.25	64,675 VA
POOL EQUIPMENT:			
22,000 VA (PFR DWS)	22,000 VA	1.25	27,500 VA
			348,500 VA
			490,240 VA
			490,240 / 480 X 1.732 = 540 AMPS
			USE 1200A SERVICE

ELECTRICAL LEGEND:

PANELBOARD SURFACE MOUNTED PANELBOARD FLUSH MOUNTED SWITCHBOARD TRANSFORMER PULLBOX MOTOR STARTER COMBINATION MOTOR STARTER COMBINATION MOTOR STARTER VENDOR FURNISHED CIRCUIT BREAKER DISCONNECT SWITCH "F" INDICATES FUSIBLE DISCONNECT SWITCH VENDOR FURNISHED CONTACTOR CONTACTOR VENDOR FURNISHED TELEPHONE TERMINAL BOARD 4 X 8 X 3/4" FIRE TREATED PLYWOOD FLUORESCENT FIXTURE - LETTER DENOTES TYPE (LOWER CASE LETTER DENOTES SWITCHING), NUMBER DENOTES CIRCUIT WALL MOUNTED FIXTURE (FLUORESCENT SHOWN) - LETTER DENOTES TYPE HID OR INCANDESCENT FIXTURE - LETTER DENOTES TYPE FLUORESCENT STRIP FIXTURE - LETTER DENOTES TYPE TRACK LIGHTING - LETTER DENOTES TYPE EMERGENCY LIGHTING UNIT - LETTER DENOTES TYPE EXIT FIXTURE - SHADED AREA DENOTES LIGHTED FACE, ARROWS DENOTE DIRECTION - LETTER DENOTES TYPE EMERGENCY OR NIGHT LIGHT CONNECTED FIXTURE (FLUORESCENT SHOWN) - LETTER DENOTES TYPE LIGHTPIPE POLE MOUNTED HID AREA LIGHT - LETTER DENOTES TYPE SINGLE RECEPTACLE 15" AFF UNLESS NOTED OTHERWISE DUPLEX RECEPTACLE 15" AFF UNLESS NOTED OTHERWISE FLOOR MOUNTED DUPLEX RECEPTACLE QUADRUPLEX RECEPTACLE 15" AFF UNO ISOLATED GROUND TYPE (ORANGE) DUPLEX RECEPTACLE AT 15" AFF UNO ISOLATED GROUND TYPE (ORANGE) QUADRUPLEX RECEPTACLE AT 15" AFF UNO COUNTER HEIGHT RECEPTACLE (VERIFY HEIGHT) GFI DUPLEX RECEPTACLE 15" AFF UNLESS NOTED OTHERWISE SWITCHED DUPLEX RECEPTACLE 15" AFF UNLESS NOTED OTHERWISE ELECTRIC SHEET NOTE DESIGNATION MECHANICAL EQUIPMENT CROSS REFERENCE SPECIAL PURPOSE RECEPTACLE - NUMBER REFERS TO RECEPTACLE SCHEDULE CLOCK OUTLET MULTIOUTLET ASSEMBLY - ARROW HEADS INDICATE EXTENT, NUMBERS INDICATE SPACINGS IN INCHES SINGLE POLE SWITCH 48" AFF UNO THREE WAY SWITCH 48" AFF UNO FOUR WAY SWITCH 48" AFF UNO KEY OPERATED SWITCH DIMMER OPERATED SWITCH SWITCH WITH PILOT LIGHT MANUAL MOTOR STARTER CONTROL STATION TELEPHONE OUTLET 15" AFF UNO PAY TELEPHONE OUTLET 48" AFF UNO FLOOR MOUNTED TELEPHONE OUTLET COMPUTER OUTLET OR SPECIAL PURPOSE COMMUNICATIONS RADIO OUTLET PHOTOELECTRIC CELL TIME CLOCK	BRANCH CIRCUIT CONSISTING OF 2" MINIMUM SIZE CONDUIT NOT INCLUDING GROUND WIRE HOME RUN TO PANELBOARD OR DEVICE - NUMBER OF ARROW HEADS INDICATES NUMBER OF CIRCUITS BRANCH CIRCUIT - SHORT SLASHES INDICATE NUMBER OF PHASE OR SWITCH LEGS, LONG SLASHES INDICATE NUMBER OF NEUTRALS, LONG SLASH IV A DOT INDICATES A SEPARATE ISOLATED GROUND WIRE. CONDUIT IN SLAB OR UNDERGROUND CONDUIT SEALING FITTING (USED FOR CLARITY ONLY) INTERRUPTER SWITCH FUSE CIRCUIT BREAKER KWH DEMAND METER TRANSFORMER MOTOR OUTLET SPEAKER-CEILING SPEAKER-HORN MICROPHONE MOTION DETECTOR TV OUTLET WALL MOUNT PULL STATION FLOW SWITCH TAMPER SWITCH HORN HORN / STROBE STROBE FIRE ALARM CONTROL PANEL FIRE ALARM ANNUNCIATOR DOOR HOLDER SMOKE DETECTOR LETTER (X) INDICATES TYPE D DUCT MOUNT I IONIZATION P PHOTOELECTRIC R RATE OF RISE F FIXED TEMPERATURE HEAT DETECTOR LETTER (X) INDICATES TYPE D DUCT MOUNT I IONIZATION P PHOTOELECTRIC R RATE OF RISE F FIXED TEMPERATURE SMOKE DAMPER CONTROL DEVICE LETTERS INDICATE TYPE: FLS = FLOAT SWITCH, FS = FLOW SWITCH FTS = FOOT SWITCH, LS = LIMIT SWITCH PE = PNEUMATIC SWITCH, PS = PRESSURE SWITCH TS = TEMPERATURE SWITCH THERMOSTAT JUNCTION BOX (USED FOR CLARITY ONLY) RELAY OR CONTROL DEVICE, NUMBER REPRESENTS STANDARD DEVICE FUNCTION SHUNT TRIP GROUND FAULT INTERRUPTER
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ABBREVIATIONS:

AFF ABOVE FINISHED FLOOR	J-BOX JUNCTION BOX
AFS ABOVE FINISHED GRADE	KVA KILOVOLT AMPS
AL ALUMINUM	KW KILOWATT
BKR BREAKER	LTS LIGHTING
C CONDUIT	NTS NOT TO SCALE
GKT CIRCUIT	PNL PANEL
G.O. CONDUIT ONLY	PWR POWER
CU COPPER	TYP TYPICAL
DWG DRAWING	UNO UNLESS NOTED OTHERWISE
ELEC ELECTRICAL	V VOLTS
EXT EXISTING	VA VOLT AMPS
GFI GROUND FAULT INTERRUPT	WP WEATHER PROOF
GND GROUND	XF TRANSFORMER

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ELECTRICAL LEGEND
AND ONELINE DIAGRAM
MUNICIPAL POOL AT DULA CENTER

job no:
7115/LEGEND
date:
12-1-97
drawn by:
DSN/DRS
checked by:
TOM KROB

issued for
PLAN REVIEW

sheet no.
EG1.01
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AS BUILT

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