GENERAL NOTES AND REQUIREMENTS

1. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE 2004 FLORIDA BUILDING CODE AND ALL ITS CURRENT AMMENDMENTS AND 2005 N.F.P.A. 70 ELECTRICAL CODE. SIX SHOPDRAWINGS OF ALL MAJOR EQUIPMENT SHALL BE REQUIRED PRIOR TO ORDERING EQUIPMENT.
2. WORK SHALL INCLUDE ALL LABOR, MATERIALS, PERMITS AND COSTS FOR INSTALLATION OF A COMPLETE ELECTRICAL SYSTEM.
3. ALL EQUIPMENT, FIXTURES, ETC., SHALL BE STARTED, TESTED, ADJUSTED AND PLACED IN SATISFACTORY OPERATING CONDITION BY THIS CONTRACTOR WHO SHALL GUARANTEE ALL WORKMANSHIP, MATERIALS AND EQUIPMENT TO BE FREE OF DEFECTS FOR A PERIOD OF (1) ONE YEAR FROM DATE OF OWNER ACCEPTANCE, AND SHALL REPAIR SUCH DEFECTS WITHOUT COST TO THE OWNER. ALL EQUIPMENT SHALL BE COVERED FOR THE DURATION OF THE MANUFACTURER'S GUARANTEE OR WARRANTY, AND THIS CONTRACTOR SHALL FURNISH THE OWNER WITH ALL MANUFACTURER'S GUARANTEES AND WARRANTIES.
4. ALL CONDUCTORS, BUSSING, ETC. SHOWN ARE TO BE COPPER (UNLESS NOTED OTHERWISE).
5. NO "WAFER" OR "PIGGYBACK" BREAKERS PERMITTED.
6. THE ELECTRICAL CONTRACTOR IS TO INSTALL METERING OF A TYPE APPROVED BY THE UTILITY COMPANY AND U.L. LISTED. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING ALL METER CANS AND EQUIPMENT IN AN APPROVED MANOR
7. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE MOUNTING HEIGHT AND EXACT LOCATIONS OF DEVICES AND LIGHT FIXTURES ABOVE COUNTER TOPS, WALL FURNITURE, ETC., WITH THE ARCHITECTURAL PLANS AND/OR CLIENT/OWNER.
8. THE ELECTRICAL CONTRACTOR, HVAC, PLUMBING, FIRE PROTECTION & GENERAL CONTRACTOR/S SHALL STRICTLY ADHERE TO THE FOLLOWING ITEMS WHEN DEALING WITH ELECTRICAL CLEARANCES:
   a. NO PIPING OF ANY KIND, OR DUCTWORK, SHALL BE INSTALLED ABOVE AN ELECTRICAL SWITCHBOARD OR PANELBOARD. THIS AREA TO REMAIN CLEAR FROM THE EQUIPMENT TO 25' ABOVE OR TO THE BOTTOM OF THE STRUCTURAL SLAB OR FLOOR.
   b. A CLEARANCE OF 36" MINIMUM SHALL BE MAINTAINED IN FRONT OF ELECTRICAL EQUIPMENT FOR THE ENTIRE WIDTH OF THE EQUIPMENT, PLUS 12" EACH SIDE, AND FROM FLOOR TO SLAB ABOVE. EQUIPMENT OVER 1200 AMPS OR 6 FEET OR GREATER IN WIDTH WITH OVERCURRENT DEVICES REQUIRES A 72" CLEARANCE.
9. NOTICE TO CONTRACTOR: REVISIONS TO THESE DRAWINGS AND CERTIFICATION THERETO, WHICH MAY BE REQUIRED BY THE APPLICABLE INSPECTION AUTHORITY, BECAUSE OF CONTRACTOR OPTED REVISIONS SHALL BE COMPENSATED TO THE ENGINEER BY THE REQUESTING CONTRACTOR. PAYMENT WILL BE REQUIRED AT TIME OF CERTIFICATION DELIVERY.
10. ALL "WP" RECEPTACLES & SWITCHES SHALL BE INSTALLED WITH LONG SIDE HORIZONTAL WITH A WEATHER SHIELDING COVER.
11. ALL ELECTRICAL CONDUITS NOT CONTAINING SPECIFIED CONDUCTORS SHALL HAVE A PULL WIRE INSTALLED.
12. DO NOT SCALE THE ELECTRICAL DRAWINGS, REFER TO THE ARCHITECTURAL PLANS FOR EQUIPMENT LOCATIONS, CABINETRY, CEILING GRIDS, DOOR SWINGS, ETC.
13. IT IS NOT THE PURPOSE OF THESE PLANS TO SHOW ALL DETAILS OF CONSTRUCTION, ONLY THE INTENT. THE ELECTRICAL CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS SUCH AS HARDWARE, J-BOXES, CONDUIT FITTINGS, ETC., AS NECESSARY FOR A COMPLETE ELECTRICAL SYSTEM IN WORKING ORDER.
14. NO RECEPTACLE OR WALL SWITCHES SHALL BE INSTALLED "BACK TO BACK" IN RATED WALLS, INSURE THAT SUCH LOCATIONS HAVE WALL STUDS BETWEEN BOXES.
15. WIRING TO BE:
   - ■ "PVC" CONDUIT AND CONDUCTORS UNDERGROUND AND IN SLAB
   - ■ "MC" CABLE WITH ALL HVAC CIRCUITS IN CONDUIT
   - ■ "NMC" (ROMEX) FOR WIRING WITHIN WALLS AND IN ANY AREA ALLOWABLE BY CODE

SPECIFIC NOTES

2. VERIFY ROUGH-IN LOCATIONS, TYPE OF CONNECTION, AND AMPACITY REQUIRED FROM APPLICABLE EQUIPMENT DRAWINGS PRIOR TO INSTALLING ANY CONDUIT, CONDUCTORS, OR BOXES. THIS EQUIPMENT IS FURNISHED AND PHYSICALLY INSTALLED BY "OTHERS", ALL ELECTRICAL CONNECTIONS EXTERNAL TO THE EQUIPMENT SHALL BE MADE BY THE ELECTRICAL CONTRACTOR. WIRE, CONDUIT, LUGS, RECEPTACLES, PIG TAILS, DISCONNECTS, AND ECT., AS MAY BE REQUIRED SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. **NOTE: INCLUDE WORSE CONDITION IN PRICING.
3. CHASE VERTICAL AT THIS POINT TO FEED EQUIPMENT, LIGHT FIXTURES AND/OR DEVICES LOCATED ABOVE OR BELOW AS APPLICABLE.
5. PROVIDE A SERVICE GROUND ACCORDING TO N.E.C. ARTICLE 250.52 OF THE N.E.C. MINIMUM INSTALLATION TO INCLUDE: BUILDING FOOTER/FOUNDATION REINFORCING STEEL (20' OF #4 MIN. SIZE), TURNED UP OR OTHERWISE EXPOSED AT THE SERVICE WITH APPROVED CONNECTORS BONDING A GROUNDING CONDUCTOR SIZED PER TABLE 250.66 TO THE STEEL AND (2) DRIVEN ROD GROUND (MIN. 5/8" X 8' DEEP) WITH #6 COPPER GROUNDING CONDUCTOR. IF AVAILABLE ON PREMISES, ALSO BOND: METAL COLD WATER PIPING, AND METAL BUILDING FRAME, WITH JUMPERS SIZED FROM 250.66.
10. WALL TELEPHONE OUTLET. INSTALL PLASTER RING
   - ■ NO COVER PLATE – DEVICES TO BE PROVIDED BY EQUIPMENT VENDER
   - ☐ MODULAR (RJ-45) DEVICE IN COVER PLATE
   - ☐ MODULAR (RJ-25) DEVICE IN COVER PLATE
   - ☐ 2-PAIR TELEPHONE "STATION" WIRE HOMERUN TO TELEPHONE TERMINAL BOARD
   - ☐ "CAT-5E" CABLE (4 PAIR TWISTED #22 AWG)
   - ☐ CABLE RUN "LOOSE"
   - ☐ CABLE IN 3/4" EMT CONDUIT FROM BOX TO TERMINAL BOARD/AREA
   - ☐ HOMERUN EACH OUTLET TO SERVICE TERMINAL BOARD/J-BOX
   - ■ 3/4" EMT TO ACCESSIBLE CEILING SPACE
11. 20 AMP GROUND FAULT INTERRUPTER TYPE RECEPTACLE.
16. HVAC MAINTENANCE RECEPTACLE, LOCATE WITHIN 6'-0" OF EACH CONDENSING UNIT.
18. WALL TELEVISION OUTLET, PROVIDE PLASTER RING WITH TYPE "F" MALE JACK.
   - ☐ EMPTY 1/2" EMT CONDUIT TO TELEVISION TERMINAL BOARD
   - ☐ 1/2" EMT CONDUIT WITH RJ-6 COAXIAL CABLE TO TELEVISION TERMINAL BOARD
   - ☐ RG-6 COAXIAL CABLE HOMERUN EACH OUTLET TO SERVICE TERMINAL BOARD/J-BOX. DISTRIBUTION AND CONNECTION BY OTHERS. I.D. EACH RUN.
   - ☐ RUN CABLE "LOOSE"
   - ■ 3/4" EMT TO ACCESSIBLE CEILING SPACE

   DEVICE PLATE TO MATCH POWER AND LIGHTING DEVICE PLATES, HEIGHT TO BE 18" ABOVE FINISHED FLOOR TO BOTTOM.
21. THE CONTRACTOR IS TO VERIFY ACTUAL FP&L/LCEC AVAILABLE FAULT CURRENT AT TIME OF INSTALLATION. COORDINATE SERVICE EQUIPMENT FAULT CURRENT RATINGS ACCORDINGLY. PROVIDE COST DIFFERENTIAL IN WRITING TO OWNER AND CREDIT/S ACCORDINGLY.

ABBREVIATIONS LEGEND

A/C	AIR CONDITIONING	LT/S	LIGHT/S
AFF/G	ABOVE FINISH FLOOR/GRADE	LV	LOW VOLTAGE
AHU	AIR HANDLING UNIT	MC	METAL CLAD CABLE
AIC	AMPS INTERRUPTING CAPACITY	MS	MOTION SWITCH
CB	CIRCUIT BREAKER	N1	NEMA 1 (INDOOR ENCLOSURE)
Cu	COPPER	N3R	NEMA 3R (RAIN TIGHT ENCLOSURE)
CU	CONDENSER UNIT	N/NEUT	NEUTRAL
DISC	DISCONNECT	NMC	NONMETALLIC CABLE (ROMEX)
EF	EXHAUST FAN	NP	NON-PROTECTED
EM	EMERGENCY	OC	OVER COUNTER
EMT	ELECTRICAL METALLIC TUBING (THIN WALL)	O/H	OVER HEAD
		P	POWER
EX	EXIT	PC	PHOTO CELL
F/A	FIRE ALARM	RECEPT	RECEPTACLE/S
FC	FAN COIL	RS	RIGID STEEL CONDUIT
FPL	FLORIDA POWER & LIGHT	S	SOUND
FS	FUSED SWITCH	S/N	SOLID NEUTRAL
GCO	GROUNDED CONVENIENCE OUTLET	TC	TIME CLOCK
GFI	GROUND FAULT INTERRUPTER	T/TEL	TELEPHONE
HGT	HEIGHT	TV	TELEVISION
HTR	HEATER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
IC	INTERCOM		
IG	INDEPENDENT GROUND/ ISOLATED GROUND	UC	UNDER COUNTER
		UG	UNDERGROUND
JB	JUNCTION BOX	UL	UNDERWRITERS LABORATORIES
LC	LIGHTING CONTACTOR	WP	WEATHER PROOF
LCEC	LEE COUNTY ELECTRIC COOPERATIVE		

ELECTRICAL SYMBOL LEGEND

- LIGHT FIXTURE, RECESS MOUNTED
- LIGHT FIXTURE, WALL MOUNT
- $ $3 $4 WALL TOGGLE SWITCH 1-POLE, 3 OR 4 WAY, SPECIFICATION GRADE 20 AMP.
- RECEPTACLE – WALL DUPLEX – 120V – SPECIFICATION GRADE 20 AMP.
- RECEPTACLE – WALL DUPLEX – 120V – SPECIFICATION GRADE 20 AMP, 42" AFF
- RECEPTACLE – WALL SINGLE – SPECIFICATION GRADE 20 AMP DEVICE.
- EXHAUST FAN. IF NOT ON FIXTURE SCHEDULE, FAN PROVIDED AND INSTALLED BY MECHANICAL, CONNECTED BY ELECTRICAL
- POWER PANEL (FLUSH/SURFACE) SEE SCHEDULES
- SPECIFIC NOTE RELATIVE TO SINGLE CALL OUT – SEE SPECIFIC NOTE LEGEND.
- ELECTRICAL JUNCTION BOX – SIZE AS REQUIRED IF NOT SHOWN.
- TELEPHONE/DATA OUTLET – SEE SPECIFIC NOTE 10
- DISCONNECT SWITCH, DEAD FRONT MOLDED CASE SWITCH (IF 60 AMPS OR LESS) NON-PROPTECTED, NEMA 1 OR NEMA 3R AS REQUIRED
- TELEVISION OUTLET – WALL – SEE SPECIFIC NOTE 18
- EMX COMBINATION EMERGENCY LIGHT AND EXIT SIGN WITH BATTERY BACKUP
- EMERGENCY LIGHT WITH BATTERY BACKUP

GATEHOUSE PANEL LOAD SUMMARY

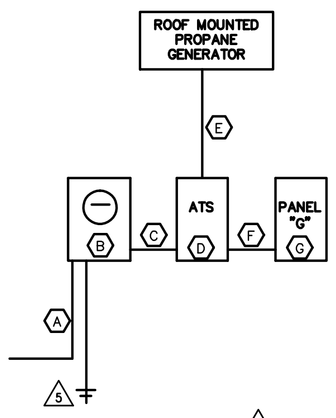
INTERIOR LIGHTING		960	@125%
EXHAUST FAN		155	@125%
MICROWAVE		1630	
EXTERIOR LIGHTS		750	@125%
EXTERIOR RECEPTACLE		180	
INTERIOR RECEPTACLE		2160	
U.C. REFRIG		180	
SECURITY, PHONES ETC.		1600	
GATE, OPERATOR (1/2 HP)		1415	@125%
	TOTAL VA	9,030	
HEAT LOAD	6532 W	4,246	65% DEMAND
A/C LOAD 2 tons	3,588 VA	0	0 DEMAND
(BLOWER MOTOR ADDED TO HEAT AND AC 414 VA)			
VOLT–AMPERES		**13,276**	VA
DEMAND LOAD AMPERES		**55**	@ 240V
NEUTRAL DEMAND AMPERES		**33**	

PANEL "GATE"

EQUAL TO: SQUARE "D" — TYPE: LOADCENTER NEMA 1 — MOUNTING: FLUSH — VOLTAGE: 120/240V, 1ø, 3W. — MAINS: 150A — TYPE MAINS: MAIN BREAKER

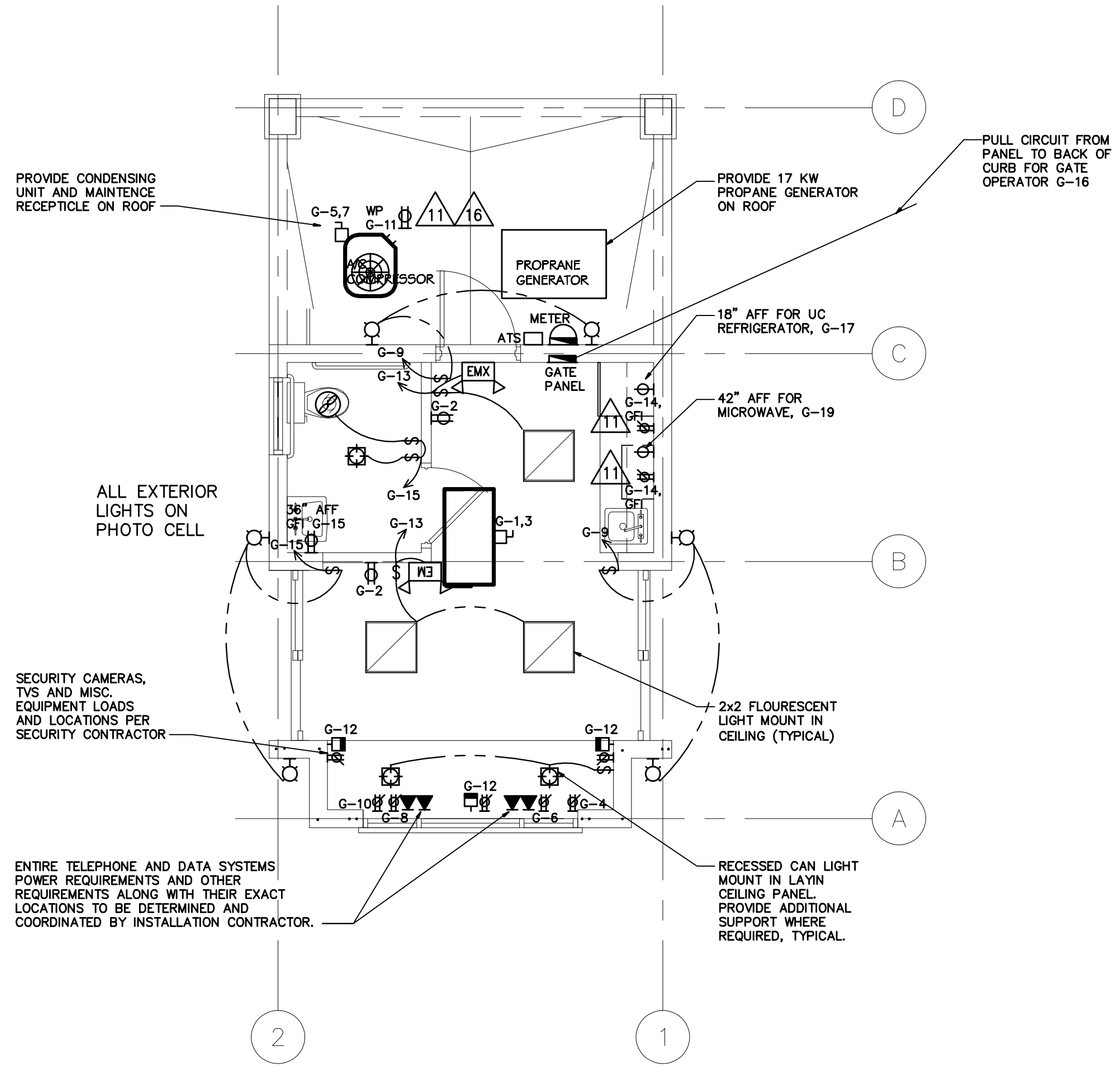
	CIR. NO.	DESCRIPTION	"A" V.A.	"B" V.A.	TRIP AMPS	POLE	WIRE	COND.	COND.	WIRE	POLE	TRIP AMPS	"A" V.A.	"B" V.A.	DESCRIPTION	CIR. NO.
*	1	AHU (5 kw + 0.5 fan)	3270		30	2	10	–	–	14	1	15	–		RECEPTICLES	2
	3	" "		3270	30	–	10	–	–	14	1	15		–	RECEPTICLES	4
*	5	CU (2 ton)	1800		20	2	12	–	–	12	1	15	–		RECEPTICLES	6
	7	" "		1800	20	–	12	–	–	12	1	20		–	RECEPTICLES	8
**	9	EXTERIOR LIGHTS	–		20	1	12	–	–	12	1	20	–		RECEPTICLES	10
	11	EXTERIOR RECEPTICLES		–	20	1	12	–	–	12	1	20		–	SECURITY TVs	12
	13	INTERIOR LIGHTS	–		20	1	12	–	–	12	1	20	–		KITCHEN RECEPTICLES	14
	15	BATHROOM		–	20	1	12	–	–	12	1	20		–	GATE OPERATOR (1/2 HP)	16
	17	U.C. REFRIGERATOR	–		20	1	12	–	–	–	–	–	–		SPACE	18
	19	MICROWAVE		–	20	1	12	–	–	–	–	–		–	SPACE	20
	21	SPACE	–		–	–	–	–	–	–	–	–	–		SPACE	22
	23	SPACE		–	–	–	–	–	–	–	–	–		–	SPACE	24
	25	SPACE	–		–	–	–	–	–	–	–	–	–		SPACE	26
	27	SPACE		–	–	–	–	–	–	–	–	–		–	SPACE	28
	29	SPACE	–		–	–	–	–	–	–	–	–	–		SPACE	30
		SUB–TOTAL KVA/ø	0.00	0.00									0.00	0.00	SUB–TOTAL KVA/ø	

* OVERCURRENT PROTECTION PER MANUFACTURERS RECOMMENDATIONS
** TO BE TIED TO PHOTO CELL AND TIME CLOCK



ELECTRICAL RISER 21

- (A) SERVICE ENTRANCE: UNDERGROUND AS SPECIFIED AND SUPPLIED BY POWER COMPANY
- (B) 200 AMP, 240 VOLT, SINGLE PHASE METER CAN AS APPROVED BY THE POWER COMPANY.
- (C) CONDUCTOR: (1) 2" PVC CONDUIT WITH (3) #4 AND (1) #6 CU CONDUCTORS
- (D) AUTOMATIC TRANSFER SWITCH – 120/240 VOLTS– 100 AMP NEMA 3R ENCLOSURE
- (E) CONDUCTOR: (1) 2" PVC CONDUIT WITH (3) #4 AND (1) #6 CU CONDUCTORS
- (F) CONDUCTOR: (1) 2" PVC CONDUIT WITH (3) #4 AND (1) #6 CU CONDUCTORS
- (G) 150 AMP, MAIN BREAKER PANEL, 30 CIRCUITS, TO BE INSTALLED INSIDE BUILDING, USE SQUARE "D" QO130M150, SEE PANEL SCHEDULE FOR BREAKERS AND ELECTRICAL FLOOR PLAN FOR LOCATION.



ELECTRICAL PLAN

1/4" = 1'-0"

PREPARED BY:

ART CONCEPTS, Inc.

AA 26000601

1919 TRADE CENTER WAY SUITE 2
NAPLES FLORIDA
PHONE 239-593-4633 FAX 239-514-7338

JACK GILLILAND ARCHITECT
AR 0009984

THIS PLAN HAS BEEN REVIEWED, ENGINEERED AND SUPERVISED BY:

J.C. KOSINSKI ENGINEERING, INC.
JOSEPH C. KOSINSKI, PE

135 GULFVIEW AVE.
FORT MYERS BEACH, FL 33931
(239) 872-2179
(239) 463-2780 FAX

THE OWNER OR CONTRACTOR:
SHALL BE TOTALLY RESPONSIBLE FOR THE CONSTRUCTION PHASE OF THIS PROJECT AND STRICTLY FOLLOW THE LOCAL BUILDING CODES AND ORDINANCES. THEY SHALL ALSO NOTIFY THE ARCHITECT IN WRITING FOR ANY ERRORS, OMMISSIONS, OR NON-CONFORMANCE OF SUCH CODES AND ORDINANCES IN THE CONSTRUCTION DOCUMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

THE ARCHITECT RECORD:
HAS NOT BEEN RETAINED AND IS NOT RESPONSIBLE FOR THE COORDINATION OF THE TRADE OR THEIR CONSTRUCTION METHODS, FIELD SUPERVISION, JOB SAFETY (OSHA) OR LIEN/LABOR LAW REQUIREMENTS AND ALL SUCH MATTERS SHALL BE THE ABSOLUTE RESPONSIBILITY OF THE OWNER, GENERAL CONTRACTOR, OR THEIR DESIGNEE.

THESE CONSTRUCTION DOCUMENTS:
WERE PREPARED FOR THE SOLE PURPOSE OF OBTAINING A PERMIT AND AS A CONSTRUCTION GUIDE AND ARE NOT APPROVED UNLESS SIGNED AND SEALED IN THE SPACE PROVIDED.

ISSUED FOR: DATE:

DESCRIPTION	00.00.2008
PERMIT SUBMITTAL	06.05.2008

PREPARED FOR:

Barefoot Beach Master Assoc. Inc.
No.1 Barefoot Beach Blvd.
Naples, Florida

PROJECT TITLE:
BAREFOOT BEACH MARINE & GUARDHOUSE

LOCATION:
Barefoot Beach Blvd
Naples, Florida

OWNER:
Barefoot Beach Assoc.

DRAWING TITLE:
RISER DIAGRAM PANEL SCHEDULE AND NOTES

JOB NUMBER:	2008-XXX
SCALE:	AS NOTED
DATE:	JUNE, 2008
BY:	K. MINZEY
CHECKED BY:	J. KOSINSKI

DRAWING No.:

E-1.0 A