# Royal Palm Beach Commons for the village of Royal Palm Beach

900 ROYAL PALM BEACH BLVD., ROYAL PALM BEACH, FL 33411

ZONING: PO (PUBLIC OWNERSHIP)

LAND USE: PUBLIC PARK

SIZE OF SITE: 163.47 ACRES

REQUIRED PARKING (SITE TOTAL): PROVIDED 213

OCCUPANCY: "F1" OCCUPANCY

BUILDING TYPE:

PROPOSED BUILDING TOTAL GROSS FLOOR AREA: 12,750 SQUARE FEET

BUILDING B

1200 SQUARE FEET

BUILDING C

1560 SQUARE FEET

OCCUPANCY LOAD 12,750 / 100 = 127.5 PERSONS OPEN STRUCTURE - ROOF ONLY

PLUMBING FIXTURE CALCULATIONS BUILDING A 127.5 PERSONS / 2 = 63 FEMALE AND 63 MALE REQUIRED 1 WC 1 LAV PROVIDED 1 WC 1 LAV

REOUIRED 1 WC 1 LAV

PROVIDED 1 WC 2 LAV 1 URINAL

**Project Architect** IBI Group, Inc.

2200 Park Central Blvd. N Suite 100 Pompano Beach, Florida 33064 (954) 974-2200

**Consulting Architect** Stephen A. Brock Architects, Inc. 4189 Elm Avenue Palm Beach Gardens, Florida 33410 (561) 622-4480

**December 01, 2008 BID SET** 

#### Index of Drawings

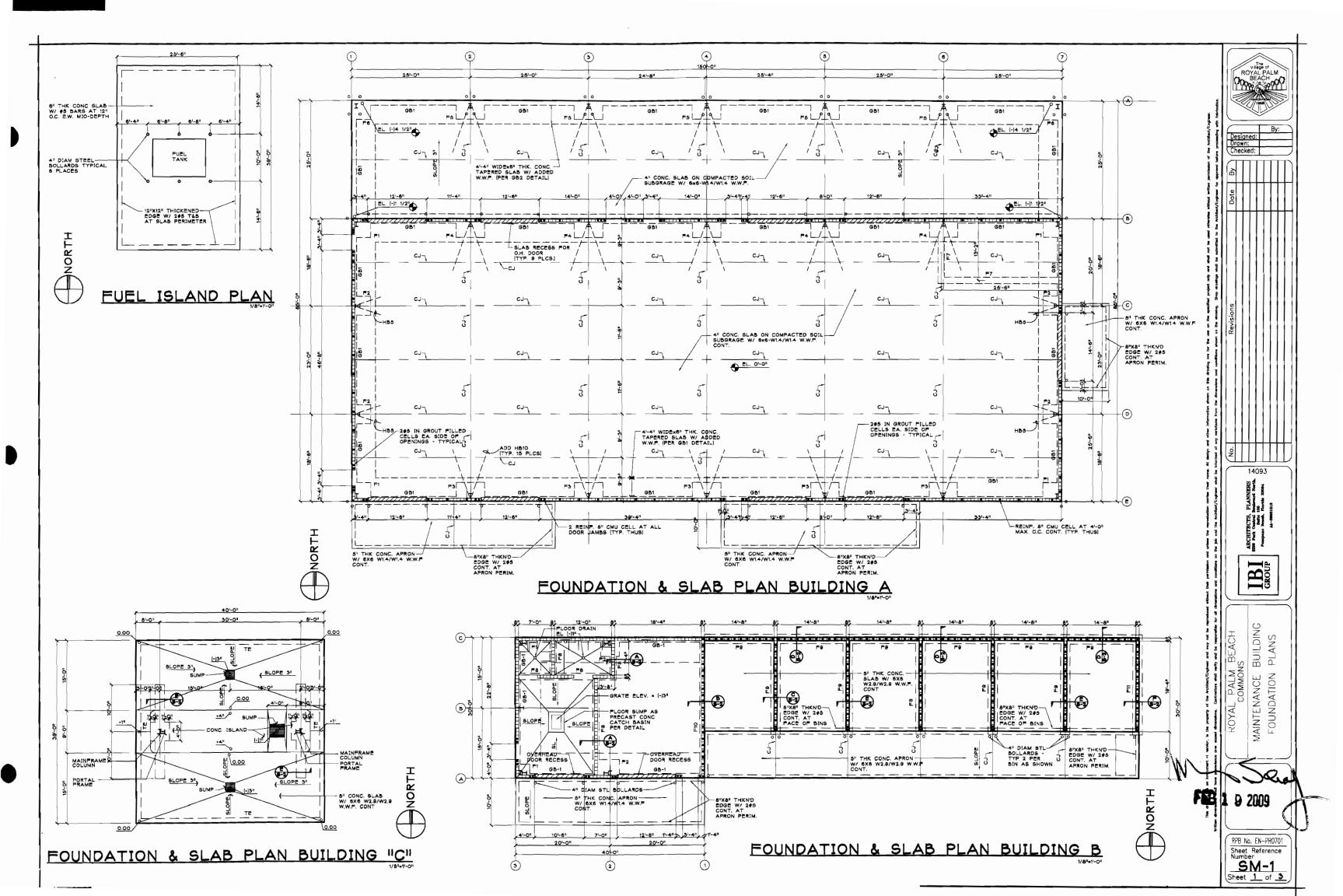
SECTIONS AND NOTES FOUNDATION DETAILS BUILDING FLOOR PLANS BUILDING ELEVATIONS OFFICE CEILING PLAN / DETAIL OFFICE PLAN SCHEDULES, INTERIOR ELEVATIONS

FOUNDATION PLAN

WALL SECTIONS
WALL SECTIONS PLUMBING PLANS
PLUMBING RISERS, NOTES, DETAILS

HVAC PLAN, DETAILS, NOTES ELECTRICAL SITE PLAN, NOTES, SCHEDULES BUILDING ELECTRICAL PLANS

SITE



#### GENERAL NOTES:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE WITH 2006 SUPPLEMENTS AND REGULATIONS OF OSHA.

BOTTOM OF FOOTINGS TO BEAR ON NATIVE SOILS OR CONTROLLED COMPACTED FILL CAPABLE OF SAFELY SUSTAINING 2500 PSF SOIL BEARING PRESSURE.

FILL USED OR ENCOUNTERED UNDERNEATH FOUNDATIONS AND SLABS SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY, ALL FILL SHALL BE PORQUS MATERIAL

CONTRACTOR SHALL ADEQUATELY PROTECT EXISTING FOUNDATIONS, SLABS, AND ADJOINING BUILDINGS FROM EROSION AND OTHER DAMAGE DURING CONSTRUCTION

CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. SLABS AND FOUNDATIONS SHALL HAVE A MAX SLUMP OF 6" CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENT OF THE ACT BUILDING CODE | ACT 318 |, DETAILING MANUAL | ACT 318 |, AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS ( ACT 30) |.

REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM A615, GRADE 60 WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

BAR SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE U.N.O.

MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT AS FOLLOWS:
CONCRETE CASI AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH - 3"
CONCRETE EXPOSED TO EARTH OR WEATHER
2" FOR \$6 STHROUGH \$18 BARS
1:1/2" FOR \$5 BARS AND SMALLER
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
3/4" FOR SLABS, WALLS, AND JOISTS
1:1/2" BEAM AND COLUMN PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS

6) INTERIOR SLABS SHALL HAVE A STEEL TROWEL FINISH. EXTERIOR SLABS, APRONS, AND PADS SHALL HAVE A LIGHT BROOM FINISH.

BUILDING SLAB SHALL BE TREATED FOR SUBTERRANEAN TERMITES USING ONE OF THE LISTED MATERIALS

OURSBAN TO - APPLY 1% SOLUTION AT THE RATE OF 1 GAL, PER 10 SQUARE FEET OF SLAB AREA ACCORDING TO MANUFACTURER'S PRINTED INSTRUCTIONS PREVAIL FT - APPLY 0.30% SOLUTION AT THE RATE OF 1 GAL. PER 10 SQUARE FEET OF SLAB AREA ACCORDING TO MANUFACTURER'S PRINTED INSTRUCTIONS DESIGN LDADS

ROOF - 20 PSF LIVE 20 PSF DEAD

20 PSF DEAD
PER FLORIDA BLDG, CODE, CHAPTER 16
WIND VELOCITY = 140 MPH
EXPOSURE "B"
IMPORTANCE FACTOR = 10
FULLY ENCLOSED STRUCTURE
INTERNAL PRESSURE COEPFICIENT = 0.18
MPAN ROOF HEIGHT = 15-0"

MEAN ROOF HEIGHT = 15'-0"

BASIC VELOCITY PRESSURE = 29.9 PSF

- ) FURNISH ALL MATERIALS, TOOLS AND LABOR TO INSTALL VARIOUS MASONRY UNITS SHOWN AND/OR NOTED ON DRAWINGS.
- 2) ALL MASONRY WORK TO BE INSTALLED BY SKILLED CRAFTSMEN WITH PROFESSIONAL QUALITY WORK NOT APPROVED BY ARCHITECT WILL BE REMOVED AND REPLACED CORRECTLY AT CONTRACTOR EXPENSE WITHOUT DELAYS.
- CONTRACTOR EXPENSE WITHOUT DELATE.

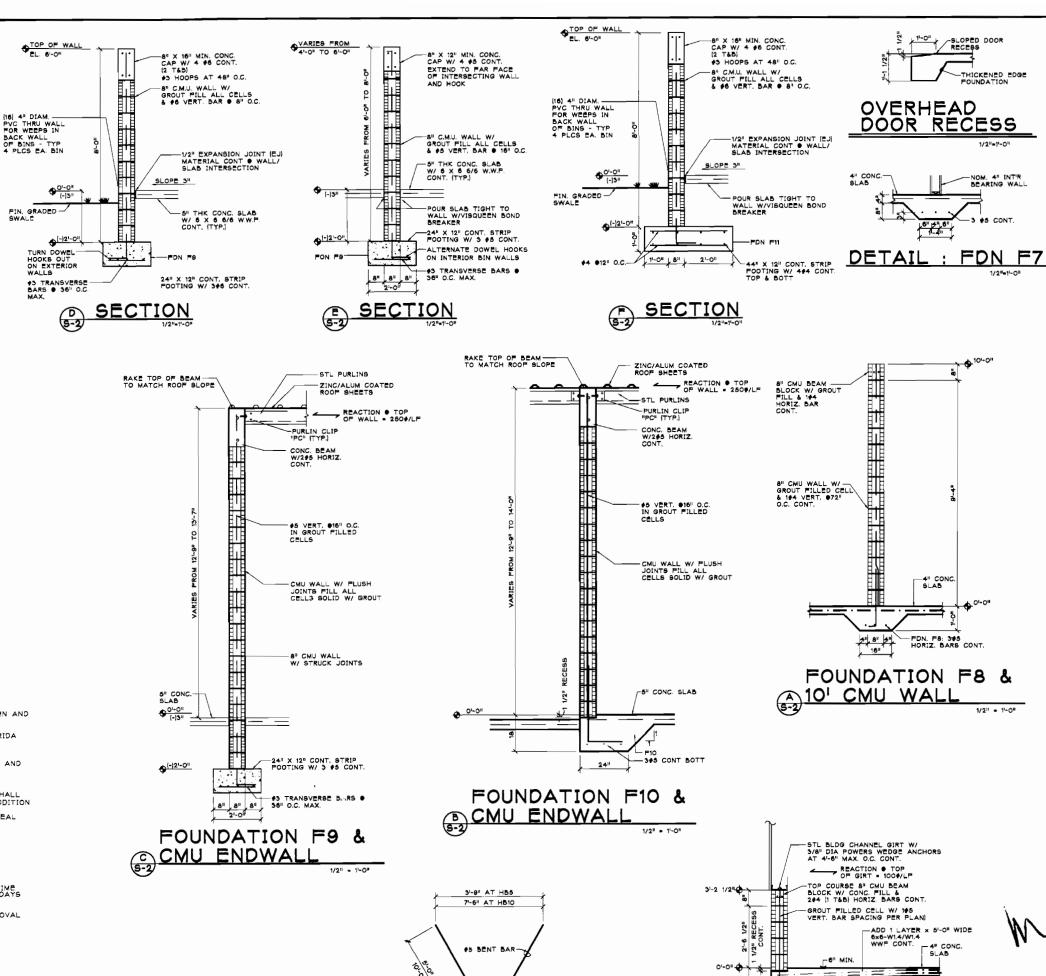
  SCHAPES AND SIZES FOR EACH APPLICATION BROKEN, CRACKED, CHIPPED, OR WARPED UNITS WILL BE REJECTED ALONG WITH UNITS NOT HAVING UNIFORM AGGREGATE FACES.

  4) USE CLEAN SAND AND WATER WITH TYPE "M" OR "S" PORTLAND CEMENT MIXED TO PROPER CONSISTANCY AND PROPORTIONS TO ACHIEVE BEST BOND BETWEEN UNITS USED.
- 5) BRACE WALLS AS REQUIRED DURING CONSTRUCTION UNTIL WALLS ARE PERMANENTLY TIED TO STRUCTURE AND/OR CURED TO DESIGN STRENGTHS.
- INSTALL GALVANIZED LADDER-TYPE DEFORMED HORIZONTAL BED JOINT REINFORCING AT 16" O.C. VERTICALLY AND AT CORNERS AND INTERSECTIONS OF WALLS.
- 7) INSTALL VERTICAL STEEL REINFORCING RODS IN CMU CORES FILLED FULL WITH GROUT FULL HEIGHT OF WALL FROM FOOTINGS, PER DRAWINGS.
- 8) SET ALL MASONRY IN FULL BED AND HEAD MORTAR JOINTS, SHOVING UNIT INTO PLACE, SQUEEZING MORTAR OUT OF JOINTS AND EXCESS MORTAR IMMEDIATELY STRUCK SMOOTH WITH MASONRY UNIT FACES. VOIDS IN ANY MORTAR JOINTS WILL BE REJECTED AND UNITS REMOVED AND REPLACED WITHOUT DELAYS AT CONTRACTOR EXPENSE. LAY UNITS PLUMB AND LEVEL.
- 9) EXPOSED MASONRY SHALL HAVE FLUSH FINISH OR STRUCK JOINTS AS NOTED ON THE PLANS. 10)CONCRETE MASONRY ASSEMBLIES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f/m) AT 28 DATS

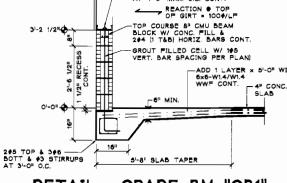
- 1) THE STRUCTURE SHALL BE A CLEAR SPAN RIGID FRAME WITH VARIABLE DEPTH COLUMN AND RAFTER SECTIONS OF SHOP WELDED STEEL PLATES.
- 2] ALL DESIGN LOADS SHALL BE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE WITH 2006 SUPPLEMENTS.
- 3) BUILDING COMPONENTS SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE AISC AISI SPECIFICATIONS (LATEST EDITIONS) AND MBMA LOW RISE BUILDING SYSTEMS MANUAL.
- 4) FABRICATION AND ERECTION DRAWINGS PREPARED BY THE MANUFACTURER SUBMITTED TO THE FOR REVIEW AND APPROVAL PRIOR TO ANY FABRICATION, THEY SHALL INDICATE ALL CONNECTION DETAILS, OPENINGS, AND DTHER PERTINENT DETAILS IN ADDITION TO THE MAGNITUDE AND LOCATION OF BUILDING REACTIONS UNDER ALL DESIGN LOAD COMBINATIONS, DESIGN CALCULATIONS AND DRAWING SUBMITTALS SHALL BEAR THE SEAL AND SIGNATURE OF A FLORIDA REGISTERED PROFESSIONAL ENGINEER.
- MANUFACTURER SHALL PROVIDE COMPONENTS SUCH AS ROOF SHEETS, WALL SHEETS, AND TRIM DESIGNED FOR THE SPECIFIED WIND LOADING.
- 6 ALL ANCHOR BOLTS AND EXPANSION BOLTS SHALL BE HOT DIPPED GALVANIZED

#### SHOP DRAWINGS

- 1) SHOP DRAWINGS ARE TO BE SUBMITTED IN A TIMELY MANNER ALLOWING ADEQUATE TIME FOR PROCESSING. AN AVERAGE SUBMITTAL WILL BE REVIEWED WITHIN TEN WORKING DAYS OF RECEIPT.
- 2) ALL SHOP DRAWINGS MUST BEAR EVIDENCE OF THE CONTRACTOR'S REVIEW AND APPROVAL PRIOR TO SUBMISSION TO THE ENGINEER.



DETAIL: BARS "HB5" & "HB10"



DETAIL : GRADE BM "GB1" & STEMWALL

MAIN FENANCE ROYAL SECTI 9 2009

> Sheet Reference Number SM-2

BEACH WY

14093

PLANNERS Bodierard North 106 Floride, 33094

ST

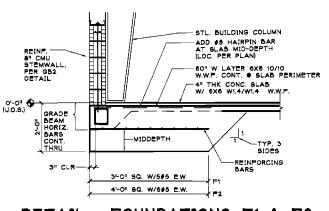
E SO

BUILDING

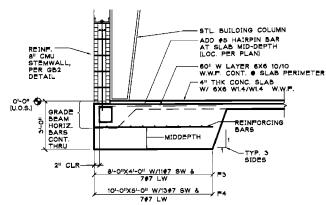
 $\approx$ 

Designed:

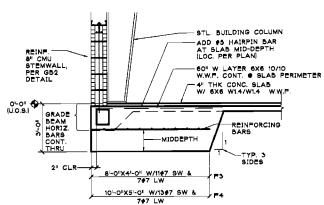
Sheet \_2 of \_3



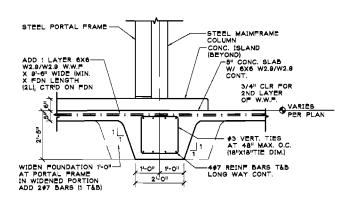
# DETAIL : FOUNDATIONS F1 & F2



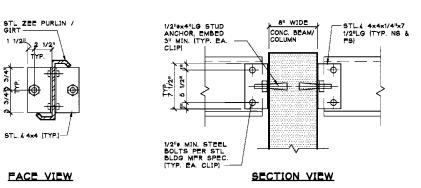
DETAIL : FOUNDATIONS F3 & F4



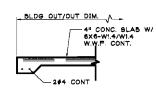
DETAIL : FOUNDATIONS F3 & F4



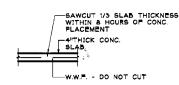
# A SECTION 1/2"=1"-0"



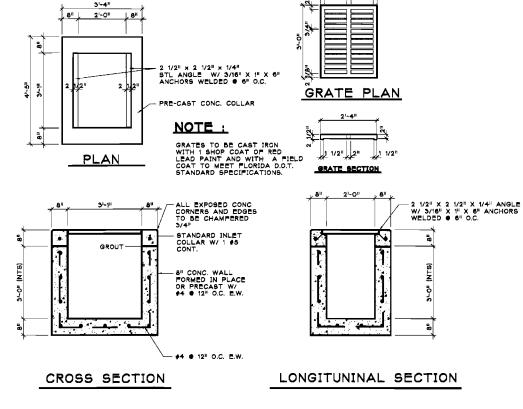
DETAIL : PURLIN CLIP "PC"



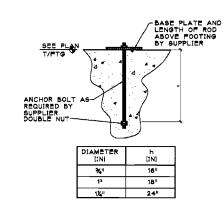
DETAIL : THICKENED EDGE (TE)



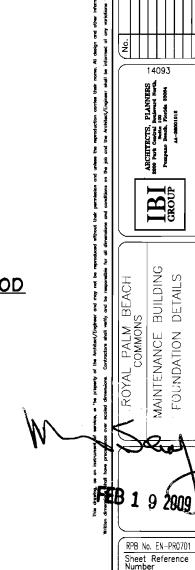
DETAIL : CONTROL JOINT (CJ)



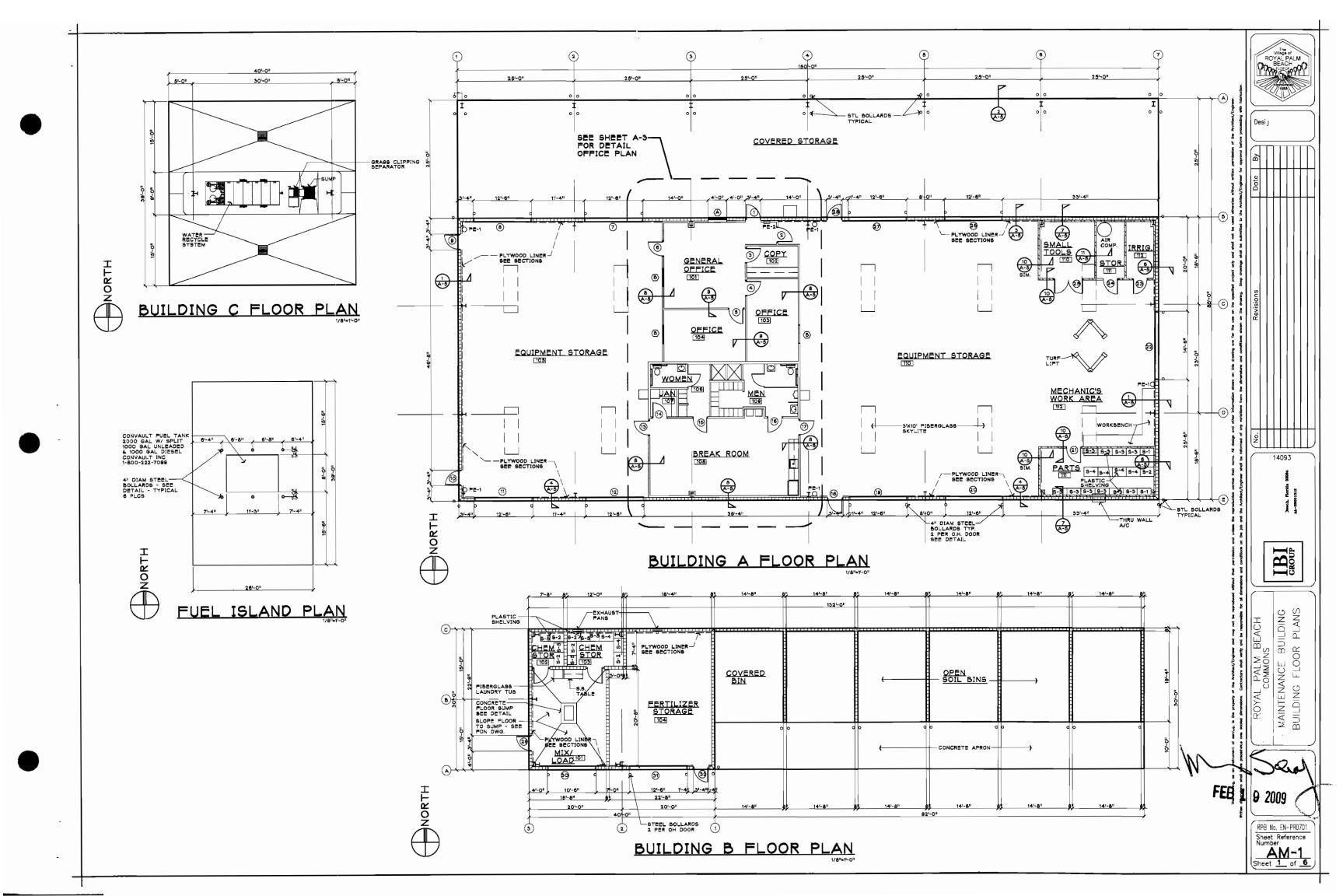
TYPE "C" CATCH BASIN DETAILS

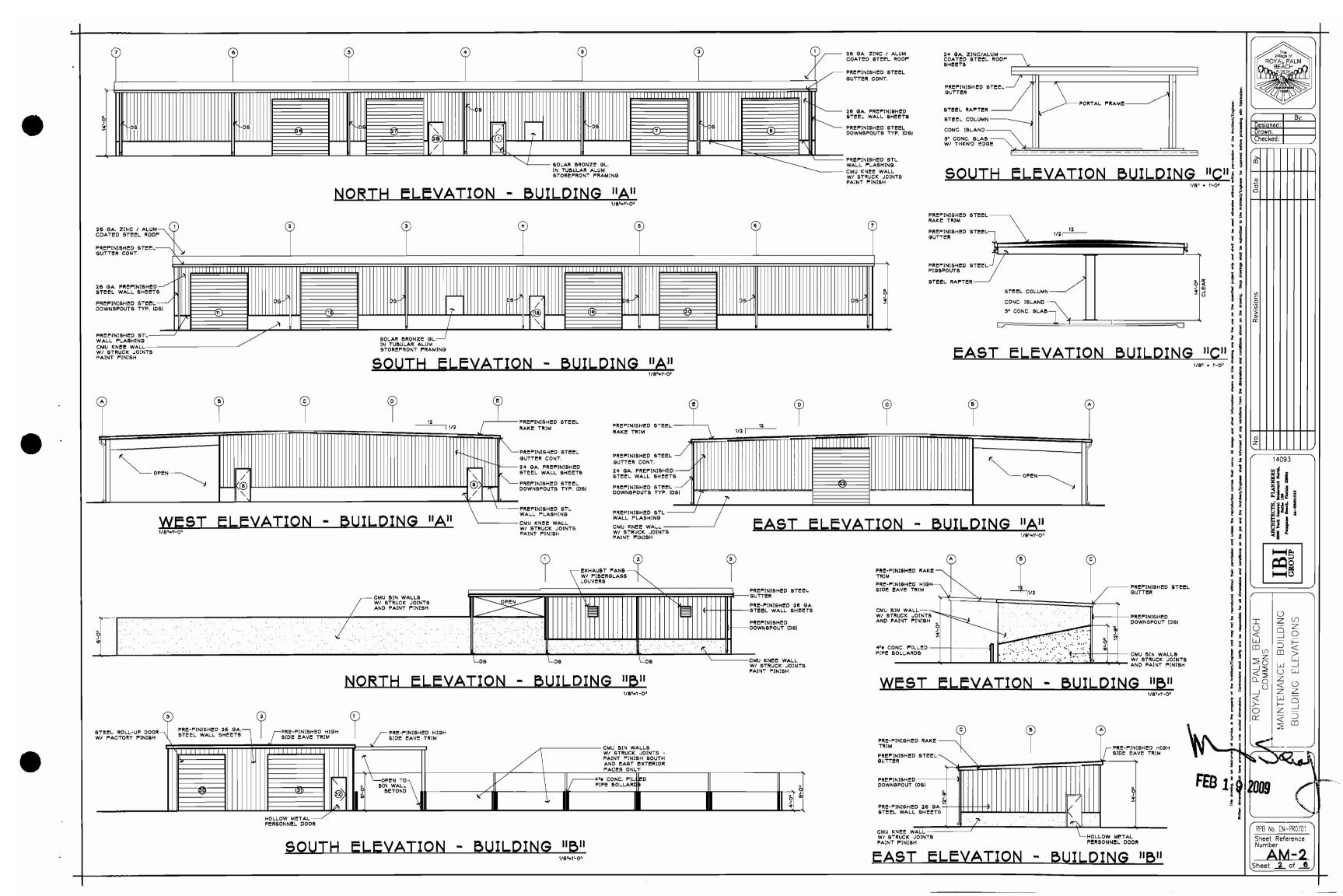


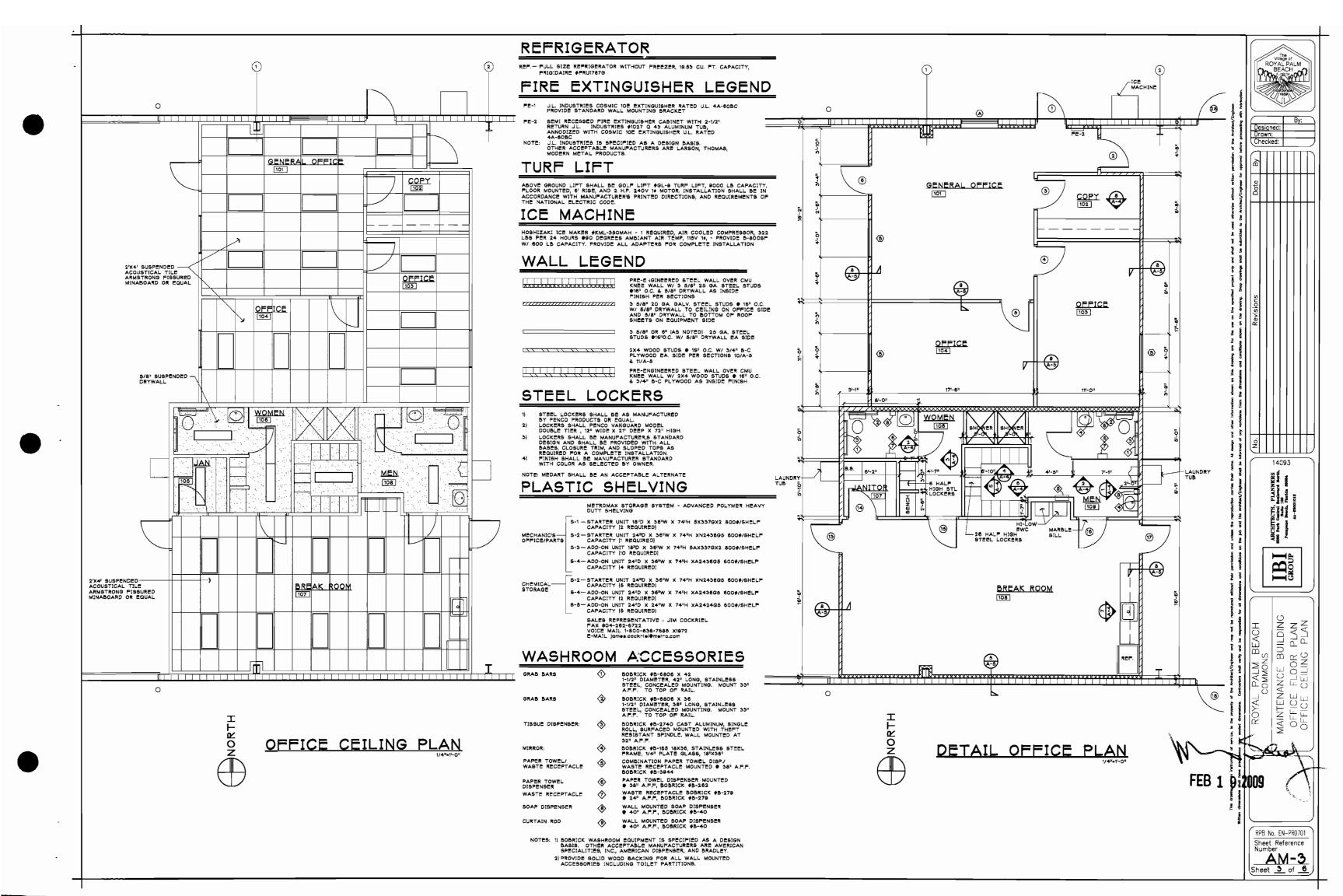
TYPICAL THREADED ROD EMBEDMENT DETAIL

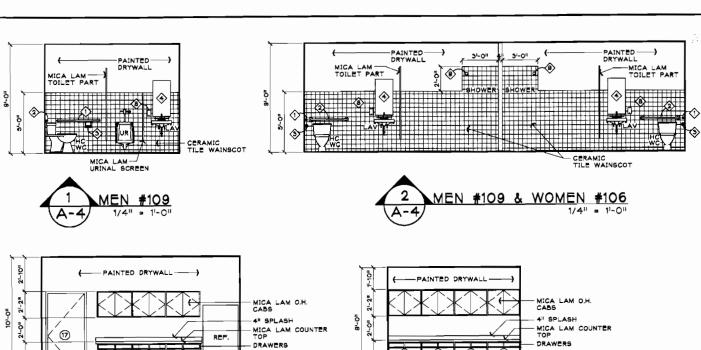


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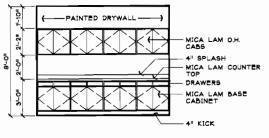






MICA LAM BASE CABINET

4º KICK



NOTE !

ALL EXTERIOR WINDOWS AND STOREFRONT DOORS SHALL BE IMPACT RATED ASSEMBLIES. CONTRACTOR SHALL FURNISH PRODUCT APPROVAL SHOWING SPECIFIC INSTALLATION REQUIREMENTS FOR THIS PROJECT.

BENCH-

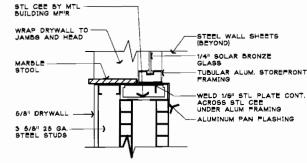
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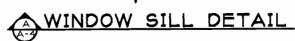
PAINTED ---

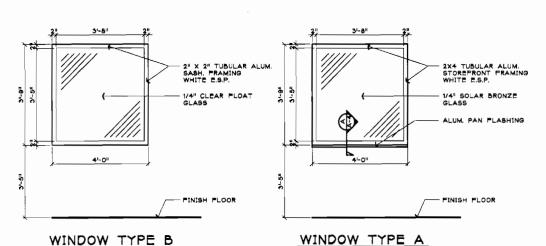
CERAMIC TILE WAINSCOT

STEEL LOCKERS

WOMEN #106







PAINTED -

5 MEN #109

1/4" = 1-0

PAINTED -

MEN #109

STEEL-

6

## WINDOW ELEVATIONS

PAINTED -

MEN #109

NO.	NAME	FLOOR	BASE	WA	LLS		EILING	REMARKS	
140.	1401412			MATERIAL	PINISH	MATERIAL	PINISH	HT.	NSWARKS
		BUILDIN	IG "A"						
101	GENERAL OFFICE	CARPET	VINYL	DRYWALL	PAINT	ACOUST TILE	FISSURED	8-0"	
102	COPY	CARPET	VINYL	DRYWALL	PAINT	ACOUST TILE	FISSURED	8'-O"	
103	OFFICE	CARPET	VINYL	DRYWALL	PAINT	ACOUST TILE	FISSURED	9'-0"	
104	OFFICE	CARPET	VINYL	DRYWALL	PAINT	DRYWALL	PAINT	8'-O1	
105	EQUIP. STORAGE	SEALED CONCRETE	VINYL	OPEN STRUCTURE	NOTE 12 NOTE 15	OPEN STRUCTURE	NOTE 15	VAR.	VINYL BASE & DRYWALL ONL' NOTE 17
106	WOMEN	CERAMIC TILE	CERAMIC TILE	DRYWALL	PAINT	DRYWALL	PAINT	8'-O"	CERAMIC TILE WAINSCOT TO 5'-0" ALL WALLS
107	JAN	VCT	VINYL	DRYWALL	PAINT	DRYWALL	PAINT	8 <sub>1</sub> -0 <sub>11</sub>	
108	BREAK ROOM	VCT	VINYL	DRYWALL	PAINT	ACOUST TILE	FISSURED	<b>9</b> '-0"	
109	MEN	CERAMIC TILE	CERAMIC TILE	DRYWALL	PAINT	DRYWALL	PAINT	10'-0"	CERAMIC TILE WAINSCOT TO 5'-0" ALL WALLS
110	EQUIP. STORAGE	SEALED CONCRETE	VINYL	OPEN STRUCTURE	NOTE 12 NOTE 15	OPEN STRUCTURE	NOTE 15	VAR.	VINYL BASE @ DRYWALL ONL NOTE 17
111	PARTS	SEALED CONCRETE	VINYL	DRYWALL	PAINT			10'-0"	
112	MECH	SEALED CONCRETE		PLYWOOD	PAINT	OPÉN STRUCTURE	NOTE 15	VAR.	
113	IRRIG	SEALED CONCRETE		PLYWOOD	PAINT	WOOD JOISTS	PAINT	10'-0"	
114	STOR	SEALED CONCRETE		PLYWOOD	PAINT	WOOD JOISTS	PAINT	10'-0"	
115	SMALL TOOLS	SEALED CONCRETE		PLYWOOD	PAINT	WOOD STEIOL	PAINT	10'-0"	
		BUILDIN	IG "B"	_					
201	MIX/ FILL	PAINTED CONCRETE		OPEN STRUCTURE	NOTES 8, 12, 15, 18	OPEN STRUCTURE	NOTE 15	VAR.	
202	CHEM STORAGE	PAINTED CONCRETE		OPEN STRUCTURE	NOTES 8, 12, 15, 18	OPEN STRUCTURE	NOTE 15	VAR.	
203	CHEM STORAGE	PAINTED CONCRETE		OPEN STRUCTURE	NOTES 8, 12, 15, 18	OPEN STRUCTURE	NOTE 15	VAR.	
204	FERT. STORAGE	PAINTED CONCRETE		OPEN STRUCTURE	NOTES 8, 12, 15, 18	OPEN STRUCTURE	NOTE 15	VAR.	

MK	D	OOR		FR	AME	TUBECU	WIND	REMARKS		
MIL	SIZE	MATERIAL	FINISH	MATERIAL	FINISH	THRESH.	PRESSURES	REMARKS		
①	31-011X71-011X1 3/411	ALUM / GL	ESP	ALUM	ESP	ALUM	+33.6 / (-)36.5	IMPACT / STOREFRONT		
2	31-011X71-011X1 3/411	н.м	PAINT	H,M.	PAINT			6"X24" LITE		
3	31-01X71-01X1 3/411	н.м.	PAINT	H.M.	PAINT					
4	3'-0"X7'-0"X1 3/4"	H.M.	PAINT	H.M.	PAINT					
5	31-0"X7-0"X1 3/4"	H.M.	PAINT	H.M.	PAINT					
6	31-0"X71-0"X1 3/4"	н.м.	PAINT	н.м.	PAINT			6"X24" LITE		
7	12'-0"X11'-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)32.1			
8	12'-0"X11'-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)35.0			
8	3'-0"X7'-0"X1 3/4"	H.M.	PAINT	H.M.	PAINT	ALUM	+33.6 / (-)43.2			
10	31-0"X71-0"X1 3/4"	Н.М.	PAINT	Н.М.	PAINT	ALUM	+33.6 / (-)43.2			
11	121-0"X111-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)35.0			
12	121-011X111-011	STEEL	PAINT	STEEL	PAINT	RECE98	+29.1 / (-)32.1			
13	31-011X71-011X1 3/411	H.M.	PAINT	H.M.	PAINT			6"X24" LITE		
14	3'-0"X7'-0"X1 3/4"	н.м.	PAINT	H.M.	PAINT					
15	3'-0"X7'-0"X1 3/4"	н.м.	PAINT	H.M.	PAINT					
16	3'-0"X7'-0"X1 3/4"	н.м.	PAINT	H.M.	PAINT					
17	31-0"X7'-0"X1 3/4"	н.м.	PAINT	H.M.	PAINT			6"X24" LITE		
18	3'-0"X7'-0"X1 3/4"	H.M.	PAINT	н.м.	PAINT	ALUM	+33.5 / (-)35.5			
19	12'-0"X11'-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)32.1	3		
20	121-0"X11"-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)32.1	11.0		
21	31-0"X71-0"X1 3/4"	H.M.	PAINT	H.M.	PAINT					
22	121-011X111-011	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)32.1	- 11		
23	31-011X71-011X1 3/411	H.M.	PAINT	H.M.	PAINT					
24	31-0"X71-0"X1 3/4"	H.M.	PAINT	н.м.	PAINT					
25	3'-0"X7'-0"X1 3/4" PR.	H.M.	PAINT	н.м.	PAINT			<u>'</u>		
26	12'-0"X11'-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)32.1			
27	12'-0"X11'-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)32.1			
28	3'-0"X7'-0"X1 3/4"	H.M.	PAINT	H.M.	PAINT	ALUM	+33.6 / (-)36.5			
29	3'-0"X7'-0"X1 3/4"	н.м.	PAINT	H.M.	PAINT	ALUM	+33.6 / (-)43.8			
30	10'-0"X11'-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.6 / [-]35.8			
31	12'-0"X11'-0"	STEEL	PAINT	STEEL	PAINT	RECESS	+29.1 / (-)32.1			
32	3'-0"X7'-0"X1 3/4"	H.M.	PAINT	H.M.	PAINT	ALUM	+33.6 / (-)43.8	li .		

PAN SEACH 14093 PLANNERS
Boulemard Marth,
100
Parida 33004 Central Central Butle Butle Beach. ARCHITI IB GROU HEDULES NOTES BUILDING SCHEDULE: BEACH

ROYAL PALM I COMMONS MAINTENANCE NISH & DOOR NITFRIOR ELEV.

9 2009

RPB No. EN-PR0701 Sheet Reference Number

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# BREAK ROOM #108

DOOR AND FINISH NOTES :

- 1) HOLLOW METAL DOORS SHALL BE GALVANIZED WITH FACTORY PRIMER 2) EXTERIOR HOLLOW METAL DOORS SHALL BE 18 GAUGE WITH 16 GAUGE FRAME INTERIOR HOLLOW METAL DOORS SHALL BE 20 GAUGE WITH 16 GAUGE FRAME 3) EACH EXTERIOR HOLLOW METAL DOOR SHALL BE PROVIDED WITH THE FOLLOWING FINISH HARDWARE:

- A YALE LOCKSET \$5407LN, S.S., ENTRANCE FUNCTION, US32D
  B: YALE DEADLOCK, \$3812, SINGLE CYLINDER WITH THUMB-TURN
  INSIDE, US26D
  C: PEMKO THRESHOLD \$179A
  D: PEMKO \$319CN WEATHER STRIPPING
  E: SILENCERS
  F: 1-1/2 PR HAGAR HINGES \$ 1/2" X \$ 1/2", S.S., DALL BEARING, NON-REMOVEABLE
  PIN BR1/27A
- PIN BB1279
  G: CLOSER LCN 1460 SERIES W/ HOLD OPEN AND BACK CHECK
- 4) EACH INTERIOR HOLLOW METAL DOOR SHALL BE PROVIDED WITH THE FOLLOWING FINISH HARDWARE:
- FINISH HARDWARE:

  A: YALE LOCKSET \$5407LN, S.S., ENTRANCE FUNCTION, US\$2D

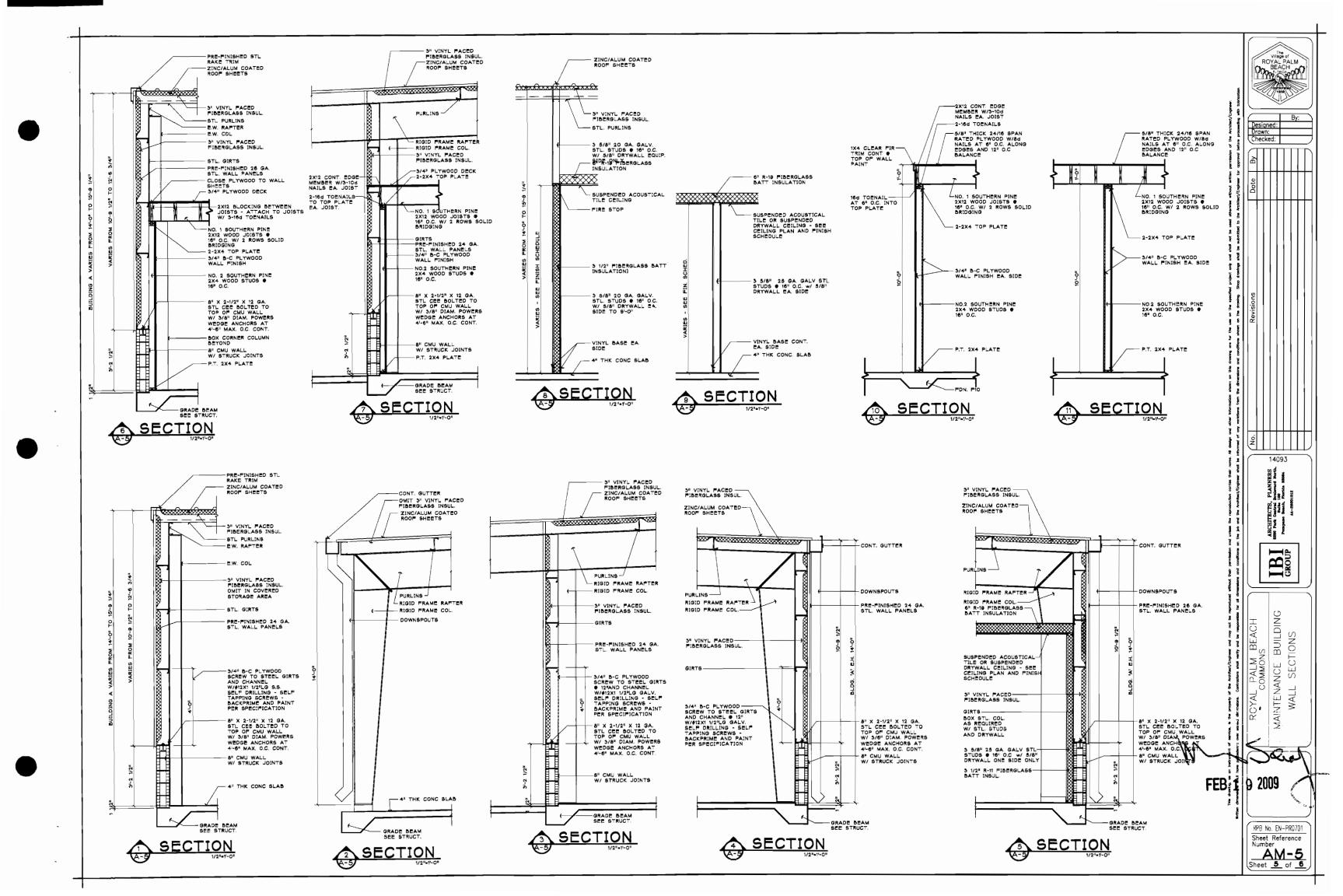
  SILENCERS

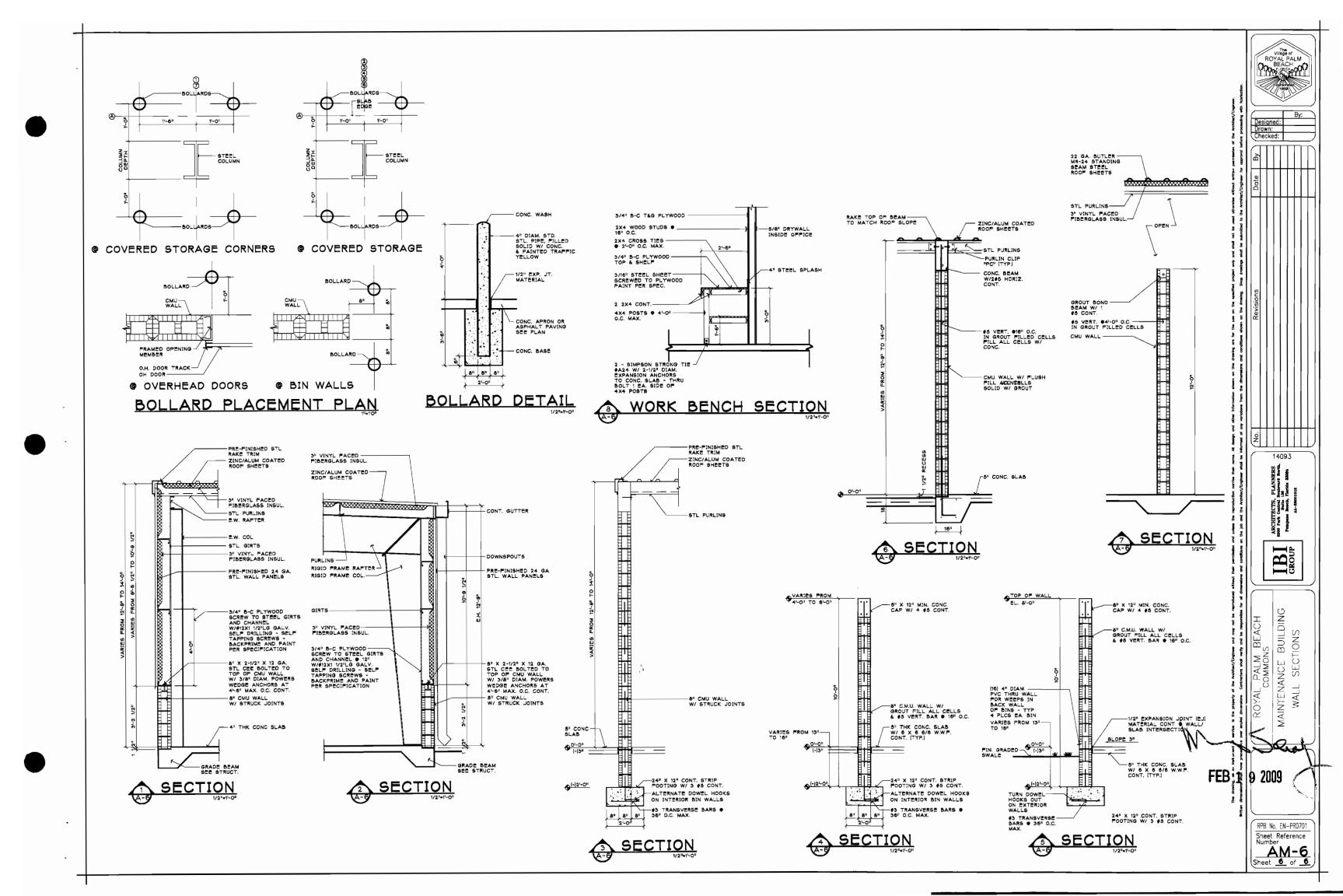
  C: 1-1/2 PR. HAGAR HINGES \$ 1/2" X \$ 1/2", S.S., BALL BEARING, NON-REMOVEABLE
  PIN, BB1279

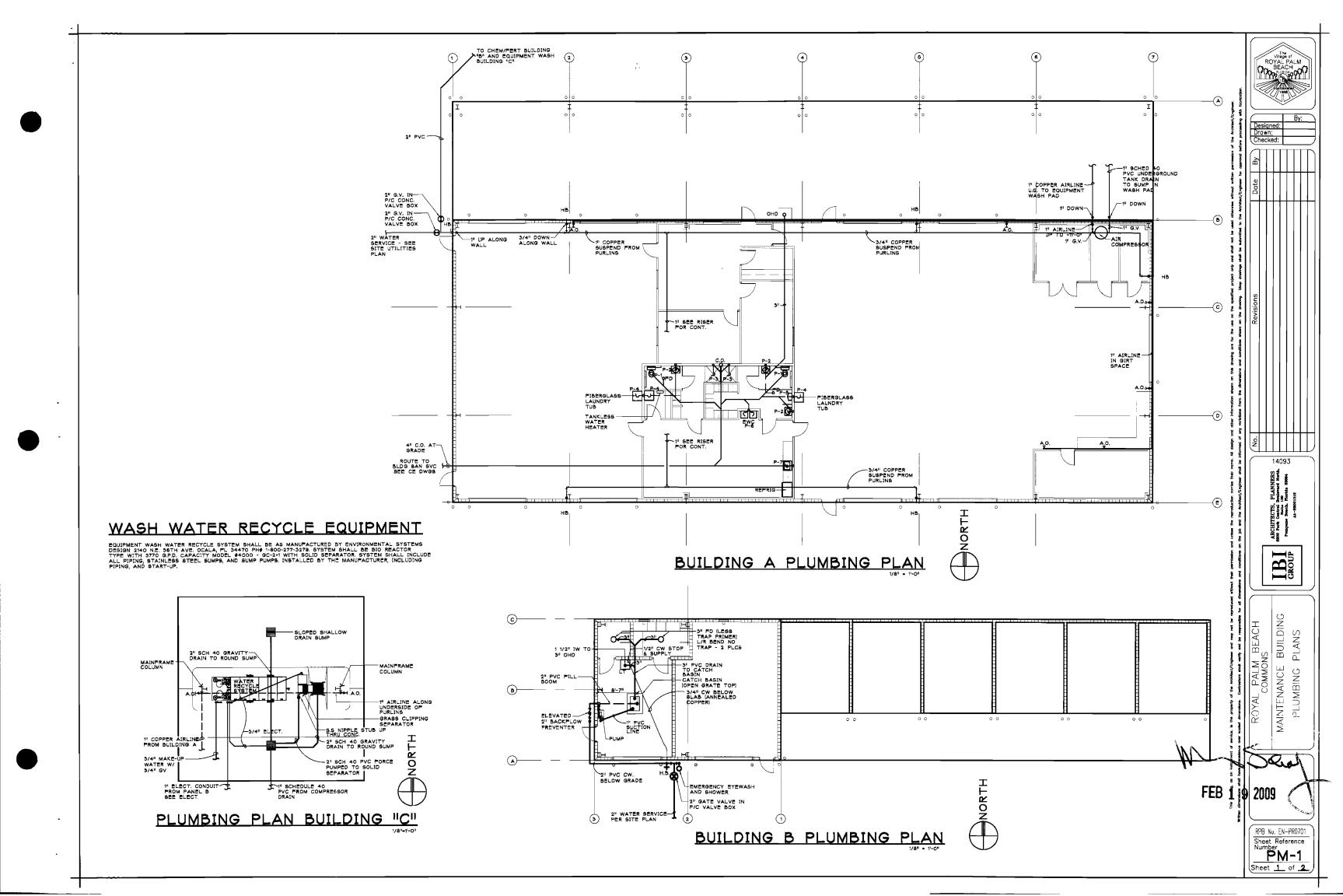
  D: PROVICE WALL OR FLOOR STOP AS CONDITIONS REQUIRE.
- 5) PROVIDE PUSH, PULL, KICK PLATES AND PRIVACY LOCK ON TOILET DOORS
- PERSONNEL DOORS, FRAMES, EXTERIOR OF OVERHEAD DOORS, BOLLARDS, AND OTHER EXTERIOR EXPOSED STEEL SHALL RECEIVE 2 COATS PITTSBURG # 6-274 GLOSS ALKYD ENAMEL OVER FACTORY PRIME
- 7) ITEMS NOT FACTORY PRIMED SHALL RECEIVE 1 COAT COMPATABLE PRIMER.
- BUILDING "B" FLOOR, INTERIOR OF CATCH BASIN IN BUILDING "B", AND INTERIOR OF CMU WALLS OF BUILDING "B" SHALL BE COATED WITH ANTI-HYDRO \$152 TWO PART EPOXY APPLIED PER MANUFACTURERS PRINTED SPECIFICATIONS.

  INSTALL TWO PART EPOXY TO SEAL ALL JOINTS INSIDE CATCH BASIN & CONTAINMENT AREA
- 9) NEW FLOOR SLABS SHALL BE COATED WITH ANTI HYDRO ACURICON CURING COMPOUND WHEN SLAB HAS HARDENED ENOUGH TO PREVENT MARRING. APPLY IN ACCORDANCE WITH MANUFACTURERS PRINTED SPECIFICATIONS.
- 10) PRIOR TO CERTIFICATE OF OCCUPANCY NEW FLOOR SLABS SHALL RECEIVE 2 COATS OF ANTI HYDRO ARMORTOP SURFACE HARDENING AGENT. APPLY PER MANUFACTURER'S PRINTED SPECIFICATIONS, OMIT HARDNER IN DEFICE AREA AND BUILDING B
- 11) ALL INTERIOR DRYWALL PARTITIONS AND CEILINGS SHALL RECEIVE 2 FINISH COATS PITTSBURGH \$6-411 LOW LUSTER LATEX ENAMEL OVER 1 COAT PITTSBURGH \$6-2 PRIMER.
- FRIME.

  12) ALL EXPOSED PLYWOOD SHALL BE PAINTED WITH 2 COATS PITTSBURGH #6-90 ALKYD ENAMEL OVER PITTSBURGH #6-2 PRIMER.
- 13) METAL BUILDING INSULATION SHALL BE FACED WITH ALPHA-TEMP (SCRIM BASE) VRP-3.
- 14) ALL EXTERIOR EXPOSED CONCRETE BLOCK AND CONCRETE SHALL RECIEVE 1 COAT PITTSBURGH \$6-7 SPEEDHIDE BLOCK FILLER W/ 2 COATS PITTSBURGH SPEEDHIDE \$6-610 ACRYLIC HOUSE PAINT
- 15) INTERIOR STRUCTURAL STEEL INCLUDING PRE- ENGINEERED STEEL BUILDING AND MISCELLANEOUS STEEL SHALL RECEIVE 2 COATS PITTSBURGH # 6-150 SEMI-GLOSS DRY FOG ALKYD ENAMEL OVER FACTORY PRIME.
- 16) INSTALL 3/4" B/C PLYWOOD AS INTERIOR FINISH FROM 3'-2 1/2" AF.F. TO +/- 7'-3" A.F.F. IN BUILDING "A" MECHANICS WORK AREA AND EQUIPMENT STORAGE EXTERIOR WALLS PAINT PER NOTE 12
- 17) INSTALL 3/4" B/C PLYWOOD AS INTERIOR FINISH FROM 3'-2 1/2" A.F.F. TO +/- 7'-3" A.F.F. IN BUILDING "B" MIX/FILL, CHEMICAL STORAGE AND FERTILIZER STORAGE EXTERIOR WALLS PAINT PER NOTE 12







#### PLUMBING NOTES

1.ALL WORKMANSHIP AND MATERIALS SHALL SE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.

2.PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.

3.ALL MATERIALS SHALL BE NEW.

4.REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.

5.PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTIONS AND TESTS, FLUMBING CONTRACTOR TO GBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR MUST BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.

6.DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING AND EQUIPMENT.

TALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERPERENCE WITH THE PROGRESS OF CONSTRUCTION REPORT ANY DISCREPANCY TO ENGINEER/ARCHITECT PRIOR TO BEGINNING CONSTRUCTION.

S.DOMESTIC WATER PIPE SHALL BE TYPE "L" COPPER WITH NO LEAD SOLDER 10.801L, WASTE, VENT, & STORM PIPING SHALL BE CAST IRON OR SCH 40 PVC IF CODE PERMITS.

11.DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL IN PIPING AND EQUIPMENT CONNECTIONS.

12.ISOLATE COPPER PIPE FROM HANGER OR SUPPORTS WITH ISDLATOR PAD. 13.ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED BY FILLING VOIDS BETWEEN PIPE AND WALL/FLOOR SLEEVES

14.PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE IN YEAR FROM DATE OF ACCEPTANCE BY OWNER CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED.

16.PROVIDE CHROME PLATED COMBINATION COVER PLATE AND CLEAN OUT PLUG OR ACCESS PANEL FOR ALL WALL CLEAN OUT.

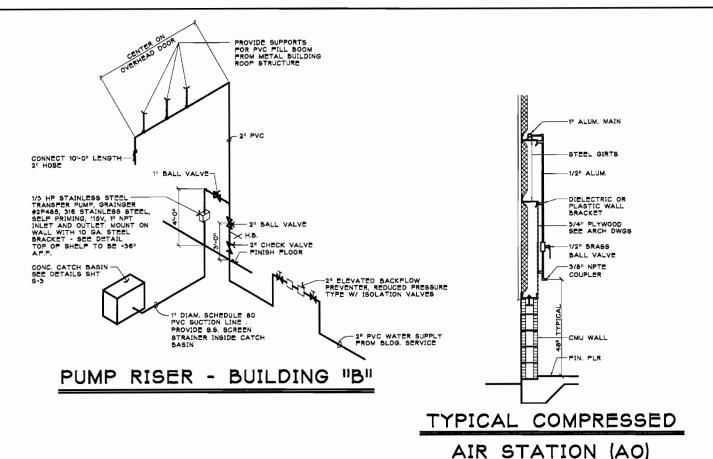
17.ALL CONTROL VALVES SHALL BE TAGGED AND MARKED. A REPRODUCIBLE DIAGRAM LOCATING ALL VALVES SHALL BE PROVIDED FOR OWNER/OPERATOR

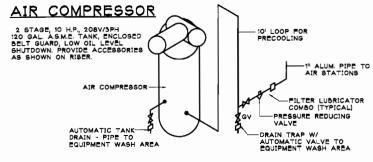
INTEST DOMESTIC WATER TO HYDROSTATIC PRESSURE DF 100 PSI AND REMAIN LEAK FREE FOR 24 HOURS-PROVIDE ALL NECESSARY TEST COLUMENTY, PERFORM TEST IN PRESENCE DF 00 WONER'S REPRESENTATIVE. ENTER TEST RESULTS IN GENERAL CONTRACTOR JOB LOGSTERLIZE WATER PIPING WITH SOLUTION CONTAINING NOT LESS THAN 50 PARTS PER MILLION OF CHLORINE AND ALLOW TO REMAIN IN SYSTEM FOR A PERIOD OF SIGHT, SHOULS, FLUSH SYSTEM AFTER STERLIZATION. ALL COST FOR STERLIZATION AND EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR.

21ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.

22.PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUTOFF.

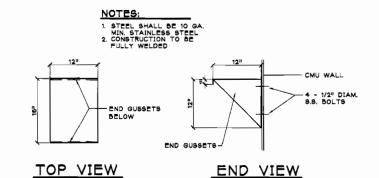
23. THE DESIGN & INSTALLATION OF THE PLUMBING SYSTEM & ALL APPURTEN ANCES SHALL COMPLY STRICTLY WITH THE APPLICABLE PROVISIONS OF THE FLORIDA BUILDING CODE



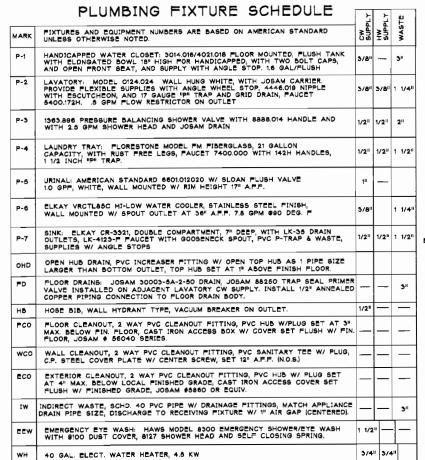


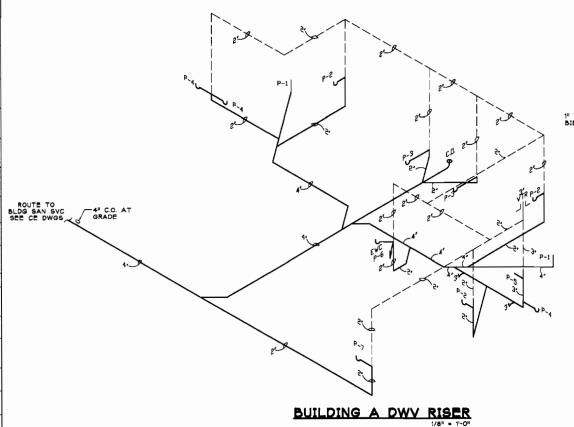
### COMPRESSED AIR RISER DIAGRAM

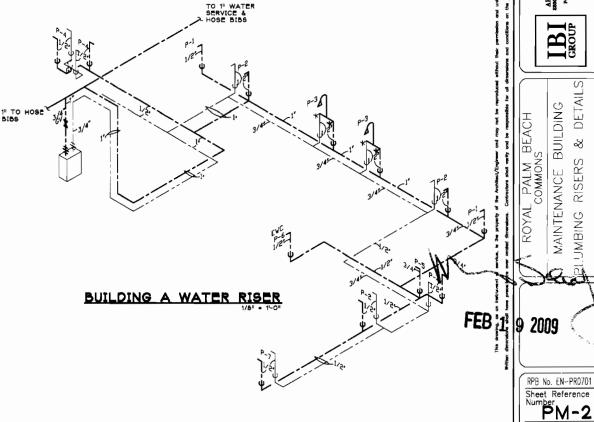
COMPRESSED AIR PIPING SHALL BE LEGRIS ALUMINUM PIPING PER EN 755.2, 755.8, & 573.3 STANDARDS, POLYAMIDE FIBERGLASS REINFORCES FITTINGS, NPT THREADED FITTINGS W/ TEFLON TAPE JOINT SEALS. PRESSURE FOR THOUS SYSTEM W/ DRY NITROGEN OR COMPRESSED AIR AT 175 P.S.I.G. P.S.I.G. STATIC PRESSURE FOR THOUS MINIMUM WITH NO LOSS OF TEST PRESSURE. SPECIAL CARE SHALL BE TAKEN TO MINIMUM SEPARATION OF METALS BY USING DIELECTRIC UNIONS AND BRACKETS TO CONTROL GAVANIC ACTION.



PUMP MOUNTING BRACKET

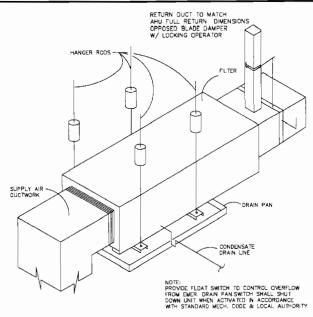




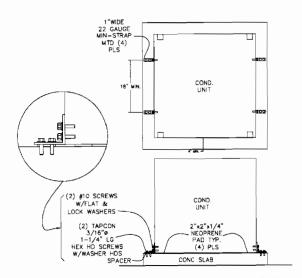


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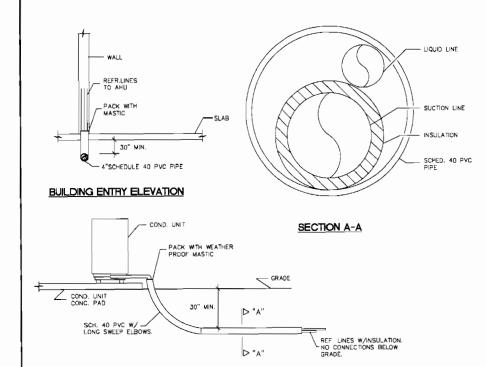
Sheet **\_2**\_ of **\_2**\_



HORIZONTAL AHU DETAIL NTS



CONDENSING UNIT GROUND MOUNTING DETAIL



UNDERGROUND REFRIGERANT LINES DETAIL NTS

#### MECHANICAL LEGEND



24X24 PERFORATED CELING DIFFUSES

SIDEWALL SUPPLY AIR REGISTER (SAR)

WALL MOUNTED THEFMOSTAT BOD DUCTWORK

FLEXIBLE DUCTWORK

#### AIR DISTRIBUTION SCHEDULE-BASED ON TITUS

MATERIAL DEVICE REMARKS LOCATION
ALIJANIAN CELNIO DEFUEER W/OBD DRY WALL CELNIO
ALIJANIAN CURVED BLADE CD
ALIJANIAN BUFFLY W/OED XXXXX
ALIJANIAN RETURN W/OED XXXXX

C.O. PLUG

RETURN BEND W/C.O

CONDENSATE PIPING DETAIL NTS

DRYWELL DETAIL nts

10\*6 HT=14" 24×24 GRILLE 24x24 GRILLE TRANSFER DUCT DETAIL

12" ABOVE TOP
MOST DRAIN
PAN TERMINATE
VENT WITH PERFORATED
CAP (LOOSE)

24" Ø - 360" PERF. C.M.P. - 4'-0" LENGTH & HAVE A MIN. OF 156 HOLES/LINEAL FT., 1/4" TO 3/8" MAX.

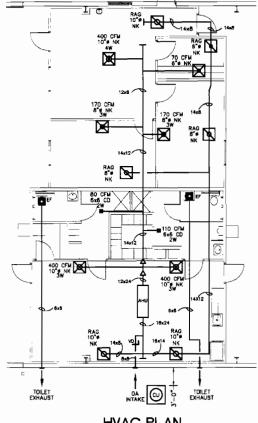
18" Ø - 360" PERF. C.M.P. - 4'-0" LENGTH & HAVE A MIN. OF 156 HOLES/LINEAL FT., '/4" TO 3/8" MAX.

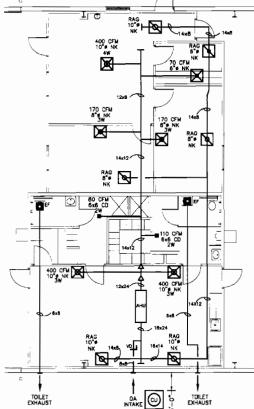
WASHED ROCK, TYPICAL.

#### SPLIT SYSTEM AIR CONDITIONING SCHEDULE-BASED ON TRANE SERVICE SYSTEM AHU MODEL CFM HP/FLA HEAT KW @208V FILTERS 4TEE3F65A1 WEIGHT-LBS CONDENSING UNIT MODEL DD FAN FLA COMP FLA FUSE ELEC 4TTX5060B SOB-1 PHASE SYSTEM

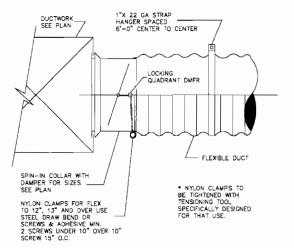
1" DEEPER THAT FAN STATIC PRESSURE



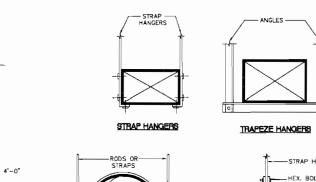


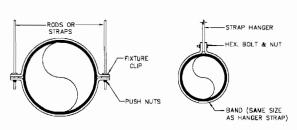


**HVAC PLAN** 



#### DUCT TAKE-OFF DETAIL NTS





ROUND DUCT HANGERS

**DUCT HANGER DETAILS** SCALE: NTS GENERAL MECHANICAL NOTE

LYBIT THE SITE BEFORE SUBMITTING A BID. DETERMINE THE CHARACTERISTICS OF EXISTING FACILITIES WHICH WILL AFFECT PERFORMANCE OF THE WORK BUT WHICH ARE NOT SHOWN ON THE DRAWNOR OR THE SPECIFICATIONS.

28-TOP DRAWINGS OR FILLLY DESCRIPTINE CATALOG DATA SHALL BE SUBMITTED BY THE CONTRACTOR FOR ALL INDES OF MATERIAL AND EQUIPMENT FURSHED AND INSTALLED UNDER THE CONTRACT. THE CONTRACTOR SHALL SHART TO THE ARCHITECT A BUFFLOST IN MASED OF COPES OF ALL SUCH SHOP DRAWINGS OR CATALOG DATA TO PROVIDE HIM WITH AS MANY REVIEWED COPES AS HE MAY NEED, FULS TWO (2) COPES FOR RETERTION BY THE ARCHITECTS AND ENGINEERS.

SALL CUTTING, PATICHING, STRUCTURAL STEEL, WEATHER PROOFING, PAINTING, AND WALL OPENINGS SHALL BE BY THE GENERAL CONTRACTOR

AALL OPENING IN BULDING STRUCTURE FOR DUCTWORK, PPINO, ETC, TO BE 1/2 LARCER (ON ALL BIDES) THAN THE CUTSIDE DIAGRASIONS. PILL VODE WITH FIVE INSTANDAT BULCOME FOAM (I.E. CHASE-FOAM CTC PR-855 BY CHASE TECHNOLOGY COPP.).

SCONTRACTOR SHALL CUARANTEE ALL MATERIALS AND WORKMANSHEP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (I) YEAR FROM DATE OF ACCEPTANCE, COMPECTION OF ANY DEFECTS SHALL SE COMPLETE WITHOUT ADDITIONAL CHARGE AND SHALL ACCUSE REPLACEMENT OR REPAR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE SEEN DAMAGED

GENERAL HVAC NOTES

WHIT THE SITE PRIOR TO BUSINITING A BID. DETERMINE THE CHARACTERISTICS OF EXISTING FACILITIES WHICH WILL AFFECT PERFORMANCE OF THE WORK, BUT WHICH ARE NOT BHOWN ON

2PROVIDE ALL LABOR PERMITS, MATERIAL TOOLS, SUPPLES, ECUPMENT TO INSTALL A COMPLETE AND OPERATING AIR CONDITIONING SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL COORS

SPAY ALL CORTS OF PERMIT INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.

ACONTRACTOR SHALL SUBMIT, FOR APPROVAL FIVE ISI COPIES OF MANUFACTURERS DRAWNOS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT.

SALL CONDITIONED AR DUCTNORK 8-HALL BE FERFEQLARS, RH40 MIN. EXHAUST + OUTSIDE AR DUCTNORK 8-HALL BE GALLYAKEED STEELALL BENDO GREATER THAN 6 DECORESE BHALL HAVE TURNO VAMED CONTRACTOR SHALL HAVE THAN O VAMED CONTRACTOR SHALL HAVE THE FOR FIELD CONDITIONS PRIOR TO CONSTRUCTING ANY DUCTNORK ALL DUCT SIZES ARE CLEAR MEDIE DIABRICIONS INSTALL ALL DUCTNORK FER APPROPRIATE SIMICION STANDARD.

SITE CONTRACTOR SHALL FLENSH A WRITTEN WARRANTY THAT SHALL CULARATTER ALL WORKDAMER AND MATERIALS FOR ONE (I) YEAR FROM THE DATE OF FIRST, ACCESTANCE BY THE ARCHITECT, ANY BREAK-TOOM COCUPEN IN THE FIRST YEAR SHALL HE REPARED AT NO COST TO THE OWNER, AND COMPRESSIONS SHALL HAVE A 5 YEAR GUARANTEE.

7.PROVIDE + INSTALL ALL CONTACTORS, RELAYS, AND CONTROLS.

BHYAC CONTRACTOR SHALL PROVIDE A TEST AND BALANCE REPORT FOR ALL MECHANICAL SYSTEMS AND SHALL NOLLDE AR GUARTITES FOR ALL BUPLY ORIGINE, RETURN GRILLS, AND ENVIRON OR LLS AND THE LEAWING AND ENTERNIO ART TEMPERATURE OF PROM AT EACH ENAPORATOR COLLINGLIDE ALL YOLLDE ALL YOLLDE AND AMPERAGE FOR EACH MOTOR. THE REPORT RALL SEE DONE BY AN INCEPTIONAL THE CONTRACTOR.

RAIL AR DEVICES (DIFFUSERS, REGISTERS AND OFFLICE) SHALL SE ALL ALLAMAN CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE SAKED SHAME. PRISH OR AS SPECIFED BY ARCHITECT, DEVICES SHALL SE TITUS OR METALAPE.

IDALL GRANCH TAKE OFFS TO BE PROVIDED W/ MANUAL, VOLUME DAMPER ALL ELBOWS AND TEES MUST BE FURNISHED W/TURNING VAREN, PROVIDE MANUAL VOLUME DAMPERS WITH EXTRACTOR AT ALL FLEX TAKE OFFS. TLAIR HANDLING UNIT SHALL, BE OPERATED WITH FILTERS IN PLACE PRIOR TO C.O. NEW FILTER SHALL BE INSTALLED AT C.O. PROVIDE 5 ADDITIONAL FILTERS.

IS. ALL PENETRATIONS OF FIRE RESISTINE ASSEMBLES INCLLONG PLOOR ASSEMBLES SHALL BE PROTECTED BY AN APPROVED THROUGH STOP ASSEMBLY AND INSPECTED FOR COMPLIANCE PRIOR TO CLOSE IN.

IA. THE DEBIGN + INSTALLATION OF THE MECHANICAL SYSTEMS + ALL APPURITEH-ANDES SHALL COMPLY STROTLLY WITH THE APPLICABLE PROMISCHS OF THE FLORDA BIALDING MECHANICAL CODE + THE LOCAL AMERICANISTS TO THE FLORDA BILLDING MECHANICAL CODE

15/PROVIDE A 10 POOT MINIMUM CLEARANCE FROM ALL VENTS THROUGH ROOF (VTR) AND EXHAUST PANS TO CUTSEDE AR INTAKES.

ISALL STORAGE ROOMS, TOLLETS, ETC., WILL HAVE UNDERCUT DOORS TO PROVIDE VENTILATION REQUIRED WHEN DOOR OR TRANSFER ORILLES ARE NOT SHOWN

07.A/C CONTRACTOR BHALL BE RESPONSIBLE TO COORDINATE HIS WORK FOR 82%, LOCATION, CLEARANCE, ACCESS AND ELECTRICAL CHARACTERISTICS WITH ALL OTHER TRACES AND TO PROVIDE BYOF DRAWNOS TO THE ENGAINE FOR REVIEW BEFORE NOTALLATION OF DUCTWORK OR BOUPMENT. SHOP DRAWNOS WILL INCLIDE BEAM OR STRUCTURE ELEVATION + REQUIRED EQUIPMENT ACCESS AREAS.

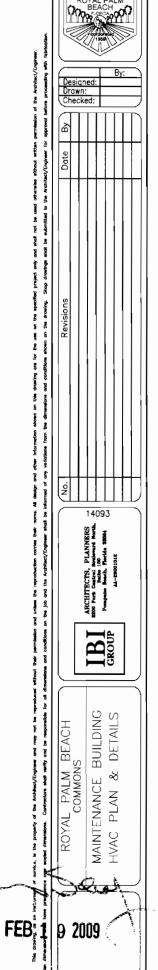
SECONDINATE LOCATION OF CELLING DIFFUSERS, CRILLES AND REGISTERS IN THE FIELD WITH LIGHTS AND ARCHITECTURAL ELEMENTS.

20MECHANCAL PLANS IN CIBERIAL ARE DIAGRAMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH AND CHESTIMAL, PLANSING, ELECTRICAL AND STRUCTIVAL PLANS. DUCT BEIGG AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND NATULA, A COMPLETE PRACTICIANS, PRISTISM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CHINES.

2LFAN DRIVER SHALL BE ADJUSTED TO DELIVER THE SPECIFIED OF M AGAINST THE ACTUAL STATIC PRESSURE OF THE INSTALLATION.

22.ALL OUTSIDE EQUIPMENT BHALL BE SECURED TO WITHSTAND 140 MPH.

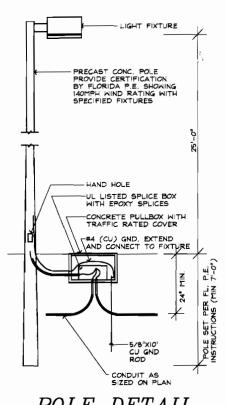
24.411 UNITS SHALL BE PROVIDED W/ HONEYWELL ELECTRONIC PROOF



RPB No. EN-PR0701 Sheet Reference \_MM-1 Sheet <u>1</u> of <u>1</u> ----ELECTRICAL NOTES-----

- CODES. ALL ELECTRICAL WORK SHALL COMPLY WITH THE DRAWINGS AND SPECIFICATIONS, THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES, WHICHEVER IS MORE STRINGENT.
- CONDUCTORS. ALL CONDUCTORS ARE TO BE COPPER THAN UNLESS OTHERWISE SHOWN OR REQUIRED BY CODES.
- RACEWAYS. RIGID GALV CONDUIT AND ELECTRICAL METAL TUBING ARE TO BE USED IN INTERIOR SPACES. DO NOT USE AC CABLES OR NON-METALLIC TUBING.
- HVAC THE ELECTRICAL CONTRACTOR IS TO COORDINATE WITH THE HVAC. THE ELECTRICAL CONTRACTOR IS TO COORDINATE WITH THE HEATING, VENTILATING AND AIR CONDITIONING (HVAC) TRADE TO MAKE CERTAIN ALL POWER CIRCUITS, CONTROL CIRCUITS AND CONDUITS ARE INCLUDED IN THE BIDS. ALL HVAC EQUIPMENT IS TO BE PROTECTED WITH FUSES DUAL ELEMENT) SIZED EXACTLY IN ACCORDANCE WITH THE EQUIPMENT LABELS. SPLIT SYSTEM AIR HANDLERS AND CONDENSING UNITS ARE TO BE CONNECTED WITH CONTROL CIRCUITS. UNDER NO CONDITIONS WILL OWNER PAY ADDITIONAL CHARGES FOR HVAC FLECTEICAL WORKE
- SHOP DRAWINGS. SHOP DRAWINGS SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL FOR ALL ELECTRICAL MATERIALS.
- POWER COMPANY. THE ELECTRICAL CONTRACTOR IS TO COORDINATE ALL SERVICE REQUIREMENTS WITH THE POWER COMPANY BEFORE BIDDING TO BE CERTAIN ALL WORK NECESSARY TO MEET POWER COMPANY SPECIFICATIONS IS IN THE BID. REFER TO EXTENSIVE NOTES ON RISER. ALL ELECTRICAL GEAR SHALL BE APPROVED BY THE POWER COMPANY. THE ELECTRICAL CONTRACTOR SHALL MEET WITH THE POWER COMPANY PRIOR TO BIDDING TO DETERMINE ALL FEATURES, FUNCTIONS AND LOCATIONS OF SERVICE. FURTHERMORE, THE ELECTRICAL CONTRACTOR IS TO MAINTAIN CONTINUOUS CONTACT WITH THE POWER COMPANY DURING THE PROJECT, AND IS TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY CHANGE PROPOSED. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE SERVICE THOROUGHLY AND DOCUMENT THE COORDINATION. FAILURE OF THE ELECTRICAL CONTRACTOR TO COORDINATE AND DOCUMENT THE SERVICE SHALL RESULT IN THE ELECTRICAL CONTRACTOR BEARING ALL COSTS OF SERVICE CHANGES.
- TELEPHONE COMPANY. THE ELECTRICAL CONTRACTOR IS TO INSTALL TELEPHONE CONDUITS AND CABLES (8#24 CATEGORY 5 CABLE) TO TELEPHONE OUTLET POINTS THROUGHOUT THE PROJECT. ALL CABLES ARE TO BE RADIAL --WITH INDIVIDUAL HOME RUNS TO TELEPHONE BACKBOARD OR TERMINAL. DO NOT "LOOP" FROM OUTLET
- DRAWINGS. THE ELECTRICAL CONTRACTOR IS TO OBTAIN A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING, AND IS TO BECOME THOROUGHLY FAMILIAR WITH THE ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL AND LANDSCAPING FEATURE OF THE PROJECT. PRIOR TO BIDDING, THE ELECTRICAL CONTRACTOR IS TO HAVE A COMPLETE UNDERSTANDING OF CELLING CONFIGURATIONS, WIRING SPACES, FIRE RATED SURFACES, STRUCTURAL FEATURES, AIR CONDITIONING WORK, TEMPORARY POWER REQUIREMENTS, PIPING, PLUMBING AND ALL OTHER FEATURES WHICH BEAR ON THE ELECTRICAL WORK. UNDER NO CONDITIONS IS THIS PROJECT TO BE BID WITHOUT A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS.
- SCALES. DO NOT SCALE OR TAKE DIMENSIONS FROM ELECTRICAL
- UNDERGROUND WORK. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT ROUTES OF ALL UNDERGROUND WORK. ROUTES SHOWN ARE APPROXIMATE. POWER, TELEPHONE, CABLE COMPANIES AND ALL OTHER UTILITY COMPANIES SHALL BE CONSULTED, AND LINES SHALL BE STAKED. DIGGING BY HAND IS REQUIRED AROUND EXISTING UTILITIES.
- TVSS POWER SERVICE TO BE PROTECTED FROM LIGHTNING WITH SURGE SUPPRESSORS AT SERVICE THROUGH A 30A BREAKER (INTERMATIC IGA803YEH) KEEP ALL LEADS SHORT.
- PANELBOARD SPARES. EVERY PANELBOARD OR LOAD CENTER IS TO BE EQUIPPED WITH TWO (2) 20 AMP - IP SPARE BREAKERS.
- SHORT OUTAGE. THE EXISTING SERVICE TO THE MAINTENANCE BUILDING IS TO BE REMOVED AND CONNECTED TO NEW SERVICE <u>EARLY</u> IN THE PROJECT WITH MINIMUM OUTAGE TIME. SCHEDULE WELL IN ADVANCE FOR THE CONVENIENCE OF CHINER. TAKE NOTE THAT EXISTING SERVICE MUST REMAIN UNTIL NEW SERVICE CAN BE ENERGIZED.
- GROUND WIRES, EVERY CONDUIT/RACEWAY THIS PROJECT TO CONTAIN A GROUND WIRE SIZED PER NEC 250.

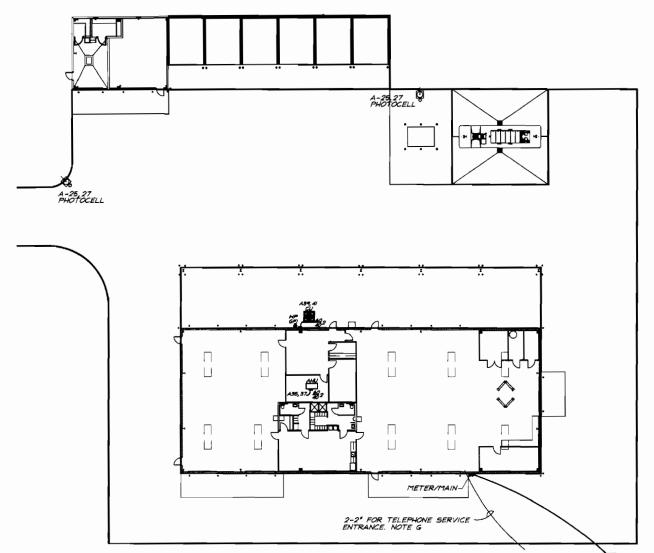
LIGHT FIXTUR	RES	
4	100HPS	OUTDOOR WALLS WALL PACKS-INSTALL AT +12' ABOVE FLOOR SPAULDING #BNI-100 HPS-120V
9	2-F96HO	FERTILIZER BUILDING/WASH PAD/EQUIPMENT 8' FLUOR ENCLOSED AND GASKETED FIXTURE CLIPPED TO ROOF STRUCTURE METALUX #VT2-246-T8-HO-DR-WL
c	2F32	FERTILIZER BUILDING 4' FIXTURE LIKE 'B' METALUX #VT2-232-DR-WL
D	3F <b>34</b>	OFFICES LAY-IN 2x4 TROFFER ACRYLIC PRISMATIC METALUX #2GP-3F34-LE3
E	LED	EXIT LT UNIVERSAL ARROWS UNIVERSAL MOUNTING BATTERY BACKUP SURE LITE #LPX-7-0-R-WH
F	2-96FH0	EOUIPMENT ROOMS 8' FLUORESCENT INDUSTRIAL OPEN WITH 100% DOWN REFLECTOR CLIP TO ROOF STRUCTURE METALUX #EIVM-296T8HO
G	2F34	ELEC/STOR SAME AS 'F' BUT 4' RS METALUX #EIVM-248
Н	2-9W	EMERGENCY LIGHT SURE LITE #CC-4
•		EMERGENCY LIGHT/EQUIP STOR WET AREA DUALITE #N4x4
1		EXIT LT/FERT. BLDG WET AREA SURE LITE #UMX-7
K	2F34	LOCKERS/TOILETS SURFACE MOUNT WRAPAROUND METALUX #W240AI20LE3GL



POLE DETAIL

Lummalı	re Schedu	le		
Prajec	t: All Pro.	ects		
Oty	Label	Description	LLF	Lunens
2	A	COOPER #: GSM-AM-400-MH-MT-3V-SG / MOUNTED AT 25' AFG	0.750	36000

PANELBOARD SCHEDULE A



ELECTRICAL SITE PLAN

#### PANELBOARD SCHEDULE C

1 711	DOAND O	OIILDOLL A		1 71 12 22	OAND O
BUS AMPS LOAD DESCRIPTION	WIRES POLES AMPS I BUS	AMP5 POLES WIRES LOAD DESCRIPTION	BUS AMPS A B C A B C	LOAD DESCRIPTION	WIRES POLES AMPS H BUS
6 RECEPTACLES		2 20 1 12 LIGHTING-SHOP		HOP RECEPTACLES	12 1 20 1
7 RECEPTACLES		4 20 1 12 6 20 1 12		ELDER	12 1 20 3 B 2 50 5
9 RECEPTACLES		8 20 1 12 1		1	1 1 2 2
S COPIER		D 20 1 12 TELEPHONE BOARD		ELDER	8 2 50 9
5 RECEPTACLES		2 20 1 12 REFRIGERATOR	<del>                                      </del>		<del>                                     </del>
5 RECEPTACLES	<del></del>	4 20 1 12 EDF		HOP RECEPTACLES	12 1 20 13
8 BREAK RM APPLIANCES		6 20 1 10 FUEL PUMP (EPO)		OP RECEPTACLES	12 1 20 15
B BREAK RM APPLIANCES		8 20 1 10 FUEL PUMP (EPO)		HOP RECEPTACLES	12 1 20 17
RECEPTACLES		10 20 1 10 OUTDOOR LIGHTING (T/C)		HOP RECEPTACLES	12 1 20 18
LIGHTING		2 20 1 12 OUTDOOR LIGHTING (T/C)		HOP RECEPTACLES	12 1 20 21
XX 13 LIGHTING		4 20 2 12 IGE MACHINE		HOP RECEPTACLES	12 1 20 23
5 X PARKING LOT LIGHTING		6 1 1 1 1	10 XX 32 XX A	IR COMPRESSOR	8 3 60 25
X 5 X 1 1 1		8 30 2 10 WATER HEATER	<b>⋈19</b> ⋈ ⋈52⋈		27
XX 189 PANELBOARD C			19 💢 52 -		1 1 1 29 1 ♦
161	31 + 2	2 100 2 3 PANELBOARD B		PACE	31
186 🗸 🛨 🔟	1 1 1 33 ++ 3	)4	$\bowtie$ 88 $\bowtie$ $\bowtie$ $\bowtie$		33
27 AIR HANDLER	8 2 40 35 + 3	6 20 1 12 OUTDOOR LIGHTING (T/C)			35
27 XX ± ±	⊥ ⊥ 1 37 <del>+   3</del>	8 100 3 3 PANELBOARD GC			37
22 COND. UNIT	8 7 40 39	10	$\bowtie \bowtie \bowtie \bowtie$		39
XX 22 ± ±		12 1 1 1 1			41
RATED VOLTAGE: # 120/208	7277/480 3PH. 4 WIRE	BRANCH POLES:   12   20   30	RATED VOL	TAGE: 120/208	277/480 3PH. 4 WIRE
RATED AMP8:   100   225	H00 D	CABINET: SURFACE   FLUSH	RATED AME	9: 00 <b>1</b> 225 40	00 🗆
FULL NEUTRAL BUS GROUND	BUS HINGED DOOR	KEYED DOOR LATCH PANELS IN PA	RALLEL FULL NEUT	RAL BUS GROUND B	JB HINGED DOOR
□FUSED ■ CIRCUIT BREAKERS	BRANCH DEVICES	THROUGH FEED LUGS REC		CIRCUIT BREAKERS	BRANCH DEVICES
MAIN LUGS ONLY MAIN 400		FUSED SWITCH 3,5,7,22 TO BE GFI BRE			MP DREAKER
		CUIT AIC OF 22,000 AMPS SYMMETRICAL		CERS MUST BE RATED TO	
ALL DREAKERS MUST DE RATEU TI	O MILERADE I A SHOKI CIK	DOLL MIG OF TY DOO WELD STAME KICKE	ALL DISEASE	TEND HOU! DE RATED TO	ATTENDED A SHOKE U

PA	NEL	SCHE	EDUL	E B	— ELECTRICAL I	CAR SUMMARY
AMPS LOAD DESCRIPTION	WIRES POLES AMP	BUS C	AMPS POLES	WIRES LOAD DESCRIPTION F	AMPS ELECTRICAL I	LOAD SUMMARY
S EXHAUST FAN S	12 2 15 1 1 2 1 20 12 1 2 15 12 2 15 12 2 20 1 12 2 20 1 20 1 20 1 20	3 4 5 5 6 7 8 9 10 0 11 12 13 14	20 1 15 1 20 1 20 1 30 1 40 2	12 RECEPTACLES 12 PUMP 12 WASH PAD LIGHTING 12 WASH PAD RECEPTACLES 10 WASH PAD SUMP PUMP	I   I   I   I   I   I   I   I   I   I	6.7 KW 9.2 KW 4.6 KW 5.4 KW 12.1 KW 15.3 KW 8.7 KW 5.0 KW 1.8 KW
RATED VOLTAGE: 120/208  RATED AMPS: 100   150   PULL NEUTRAL BUS	BUS HING BRANCH DEV	ICES	CABINE  KEYED D  TUSED SWI	DOOR LATCH PANELS IN PARALL THROUGH FEED LUGS REQUIRED VITCH TO BE GFI BREAK	12 TOTAL 90.500 W 3 301	108.80 KW

32 V	HOP RECEPTACLES HOP RECEPTACLES	12	1	_			C	×l^	MPS	POLES	WIRES	LOAD DESCRIPTION	<b>A</b>	3	١c
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RATED VOL	TAGE: 120/208	7277	/480	3PH.	4	WIR	e		T a	RANG	CH P	OLES: [712 [720 [750	T	42	=
RATED AM							_		_	ABIN		SURPACE   FLUSH	_		_
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MAIN	.UGS ONLY MAINA	MP	- (	□ BR	EAK	ER		FU	JSED	SW	1тсн	10.12 TO BE GFI BREA	KER	3	

EL	ECTRICAL LEGEND
SYMBOL	DESCRIPTION
0	DUPLEX RECEPTICAL OUTLET NEMA 5-20R
0	DUPLEX RECEPTICAL OUTLET NEMA 5-20R SPLIT WIRED
O∞c	DUPLEX RECEPTICAL OUTLET NEMA 5-20R OVER COUNTER
0	SPECIAL PURPOSE OUTLET MUST MATCH EQUIP. PLUG
0	FLOOR OUTLET W/ BRASS PLATE & CARPET RING
\$	SPST SWITCH
\$.	3-WAY SWITCH
\$.	4-WAY BWITCH
\$.	SPST SWITCH W/ PILOT LIGHT
Φ	DIMMER SWITCH WATTAGE AS NOTED
\$ / \$	LIGHT FIXTURE (BURFACE / RECESSED)
ф.	LIGHT FIXTURE WALL MOUNTED
	PLUORESCENT LIGHT FIXTURE (SURFACE / RECESSED)
	FLUORESCENT LIGHT FIXTURE (SURFACE / RECESSED)
	FLUORESCENT STRIP LIGHT FIXTURE
4_4	EMERGENCY BATTERY PACK LIGHT FIXTURE W/ [2] 25W LTE
18: / 9L	EXIT SIGN, UNIVERSAL MOUNTING DOUBLE / SINGLE FACE ARROWS AS INDICATED
	FUSED SWITCH, 30A SWITCH, 20A FUSES,2 POLES
⊠ v₁	MOTOR STARTER, NEMA SIZE 1
X POLE	SWITCH/STARTER, 30A, NEMA 1, 3 POLE
	PANELBOARDS, SEE SCHEDULES
D TC	TIME CLOCK SWITCH, 4 SETS OF 40A CONTACTS
_	MOTOR
⊗===	STRIP HEATER W/ INTEGRAL CONTACTOR
AHU	AIR HANDLING UNIT
. CU	CONDENBING UNIT
WP	WATER PROOF
9FI	GROUND FAULT INTERRUPTER
4	PHONE OUTLET, 4x4x2 BOX W/ 1 GANG PLATE AND 3/4" EC TO ACCESSIBLE CEILING SPACE
Ю	DATA OUTLET, 4x4x2 BOX W/ 1 GANG PLATE AND 3/4" ÉC TO ACCESSIBLE CEILING SPACE

тс GC  $\bigcirc$ C В 400 - TV65 SEE NOTE 4 \$3/0 & \$6G · 2°C-SUND TO WATER PIPE AND SUILDING STEEL & 10' X 3/4" COPPER CLAD GROUND RCD 4 #500 MCM IN 3 1/29C 3 #3 & #89 - 1 1/4"C

ELECTRICAL RISER

14093

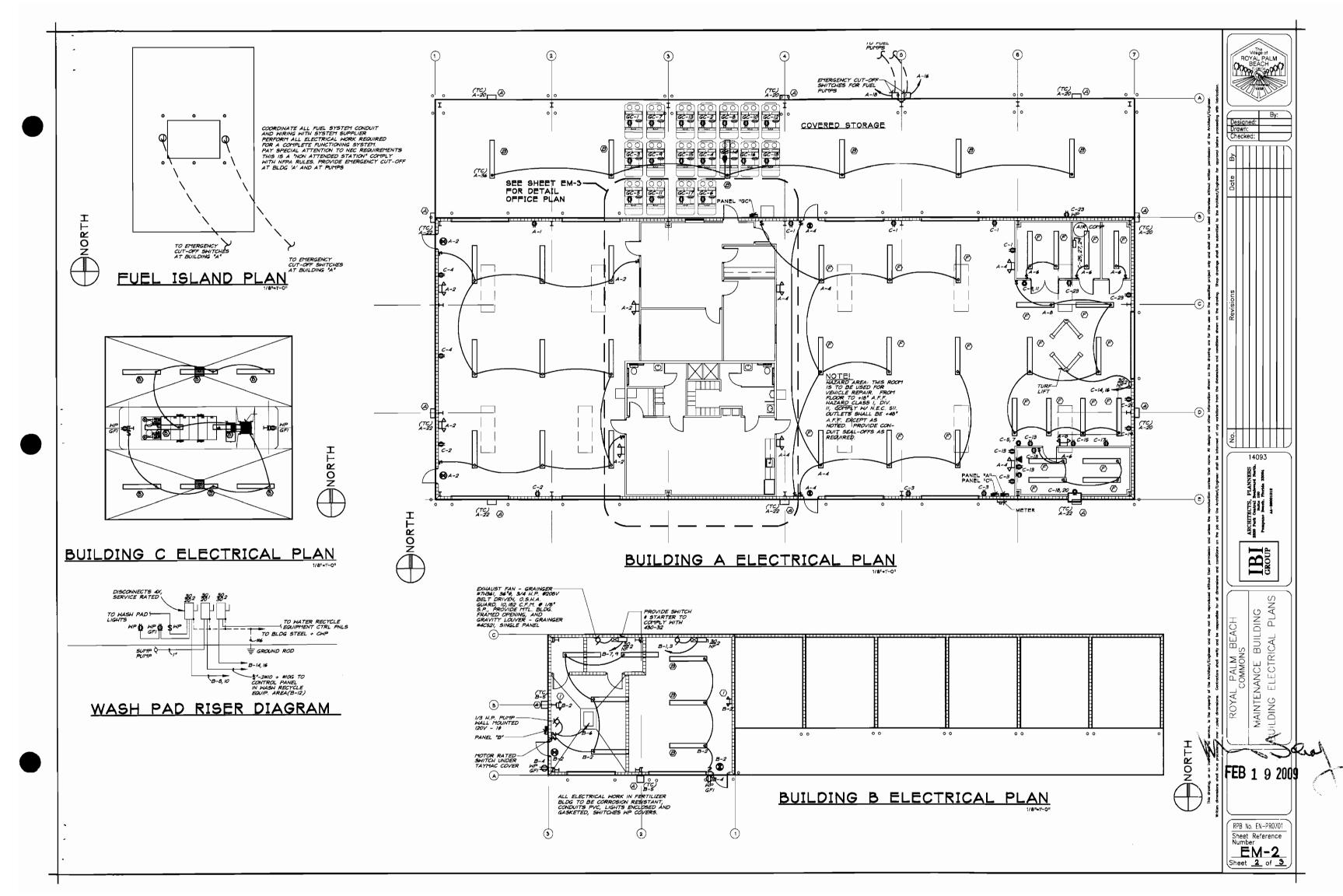
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MAINTENANCE BUILDING ELECTRICAL SITE PLAN, NOTES & SCHEDULES

FEB 1 9 2009

RPB No. EN-PR0701 Sheet Reference Number

EM-1 Sheet <u>1</u> of <u>3</u>



#### ELECTRICAL SPECIFICATIONS

GENERAL PROVISIONS. PROVIDE ALL LABOR, MATERIALS, TOOLS, SUPPLIES EQUIPMENT AND TEMPORARY POWER FACILITIES TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND SPECIFICATIONS. ALL SYSTEMS ARE TO BE COMPLETELY OPERATIONAL. ALL ELECTRICAL WORK SHALL COMPLY WITH THE DRAWINGS AND SPECIFICATIONS, THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES, WHICHEVER IS MOST STRINGENT.

SPECIAL COORDINATION, THE CONTRACTOR IS ADVISED TO PERFORM ALL POSSIBLE COORDINATION WITH THE REVERSE OSMOSIS ENGINEER (GLEN MILLER) AND CONTRACTOR.

OPERATING CLEARANCES. INSTALL ALL WORK NEATLY SO AS TO BE PROPERLY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR.

JOB SITE VISIT. VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID. VERIFY ALL DIMENSIONS SHOWN ON DRAWINGS AND DETERMINE THE CHARACTERISTICS OF EXISTING FACILITIES WHICH WILL AFFECT THE PERFORMANCE OF THE WORK, INCLUDING THOSE NOT SHOWN ON DRAWINGS OR SPECIFICATIONS.

SUBSTITUTIONS. ALL EQUIPMENT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO BIDDING.

TEMPORARY LIGHT AND POWER. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING ALL MATERIAL AND EQUIPMENT REQUIRED TO PROVIDE LIGHT AND POWER TO PERFORM ALL WORK OF ALL TRADES DURING CONSTRUCTION, AND UNTIL WORK IS COMPLETE. COST OF ALL POWER CONSUMED DURING CONSTRUCTION SHALL BE PAID BY THE PARTY DESIGNATED BY THE PRIME CONTRACTOR

MATERIAL SUBMITTALS. SUBMIT SIX (6) SETS OF SHOP DRAWINGS AND EQUIPMENT DESCRIPTIONS FOR ALL ELECTRICAL WORK PRIOR TO ORDERING. ELECTRICAL MATERIALS FOUND ON THE PROJECT WHICH DO NOT HAVE THE EMISTER'S APPROVAL MUST BE REMOVED AND REPLACED AT THE ELECTRICAL CONTRACTOR'S EXPENSE.

TRENCHING AND BACKFILLING. EXCAVATION OR DRILLING, BACKFILLING AND REPAIRING OF PAVING AND GRASSING IS TO BE IN THE BID OF THE ELECTRICAL CONTRACTOR. THE ACTUAL WORK NEED NOT BE PERFORMED BY THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, DRILLING, DEWATERING, BACKFILLING, TAMPING AND REPAIR OF PAVEMENTS AND GRASSING REQUIRED IN SUPPORT OF ELECTRICAL WORK. LOCATE AND PROTECT EXISTING UTILITIES AND OTHER UNDERGROUND WORK IN A MANNER WHICH WILL ENSURE THAT NO DAMAGE OR SERVICE INTERRUPTION WILL RESULT FROM EXCAVATING OR BACKFILLING, PROTECT PERSONS FROM INJURY AT BYCAVATIONS BY BARRICADES WITH MARNINGS AND ILLUMINATION. IN THE EVENT, IT IS SUSPECTED THAT ACTIVE ELECTRICAL LINES ARE BURIED IN THE AREA OF WORK, POWER IS TO BE DISCONNECTED.

TESTS. CONDUCT OPERATING TESTS FOR APPROVAL. THE SYSTEMS SHALL BE DEMONSTRATED TO OPERATE IN ACCORDANCE WITH THE REQUIREMENTS OF THESE SPECIFICATIONS. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER OR AN AUTHORIZED REPRESENTATIVE. FURNISH ALL ITEMS REQUIRED TO PERFORM

DIVISION OF WORK. ALL POWER WIRING IS TO BE BY THE ELECTRICAL CONTRACTOR.
THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF DISCONNECTS,
STARTERS, THERMOSTATS, FIRESTATS, CONTROL TRANSFORMERS, SWITCHES, ETC.,
WITH THE OTHER CONTRACTORS TO MAKE CERTAIN NO ITEMS ARE LEFT OUT OF THE
BIDS. THE PRIME CONTRACTOR SHALL MAKE ANY SPECIAL DECISIONS REGARDING
THE DIVISION OF WORK BETWEEN CONTRACTORS. IN NO EVENT SHALL SUCH WORK
BECAUSE ADDITIONAL EXPENSE TO THE CAMPED. REQUIRE ADDITIONAL EXPENSE TO THE OWNER.

SERVICE. TAKE SPECIAL NOTE OF 13,000 VOLT CONDUITS AND PULL BOXES BEING INSTALLED FOR FPL ON THIS PROJECT.

FAILURE OF THE ELECTRICAL CONTRACTOR TO COORDINATE AND DOCUMENT THE SERVICE MAY RESULT IN THE ELECTRICAL CONTRACTOR BEARING ALL COSTS OF

LOCATIONS. THE ENGINEER MAY MOVE ANY ELECTRICAL DEVICES BY AS MUCH AS SIX (6') FEET PRIOR TO ROUGH-IN AT NO ADDITIONAL COST.

CIRCUITS. ALL OUTLETS, LIGHT FIXTURES AND OTHER ITEMS OF EQUIPMENT SHOWN ON DRAWINGS ARE TO BE CIRCUITED.

BIDDING FROM A FULL SET OF DRAWINGS. THE ELECTRICAL CONTRACTOR IS TO OBTAIN A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS PRIOR TO BIDDING, AND IS TO BECOME THOROUGHLY FAMILIAR WITH THE ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL AND LANDSCAPING FEATURES OF THE PROJECT.

PRIOR TO BIDDING, THE ELECTRICAL CONTRACTOR IS TO HAVE A COMPLETE UNDERSTANDING OF CEILING CONFIGURATIONS, WIRING SPACES, FIRE RATED SURFACES, FOUNDATIONS, AIR CONDITIONING DUCTWORK, SPRINKLER PIPING, PLUMBING AND ALL OTHER FEATURES WHICH BEAR ON THE ELECTRICAL WORK. UNDER NO CONDITIONS IS THIS PROJECT TO BE BID WITHOUT A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS.

FIRE RATED SURFACES. FIRE WALL, CEILING AND FLOOR PENETRATIONS ARE TO BE MADE WITH METALLIC RACEWAYS IN A U.L. APPROVED MANNER. DO NOT KNOCK HOLES INTO VOID SPACES OR OTHERWISE DEGRADE FIRE WALLS. ALL PASSAGES INTO OR THROUGH FIRE WALLS ARE TO BE PERFORMED IN A MANNER ACCEPTABLE TO THE BUILDING DEPARTMENT ONE (I) HOUR FIRE WALLS ARE TO BE PENETRATED IN EACH STUD CAVITY FROM ONLY ONE (I) SIDE IN A U.L. APPROVED MANNER

#### BASIC MATERIALS AND METHODS

U.L. APPROVALS. ALL ELECTRICAL MATERIALS ARE TO BE APPROVED BY THE UNDERWRITER'S LABORATORIES.

GALVANIZED RIGID CONDUITS. RIGID STEEL CONDUITS (GRC) AND FITTINGS ARE TO BE SCHEDULE 40 MILD STEEL PIPE, GALVANIZED. UNDERGROUND GRC CONDUITS ARE TO BE COATED WITH ASPHALT EMULSION TO RESIST CORROSION.

ELECTRICAL METAL TUBING, TUBING 'EMT' SHALL BE STEEL TUBING, ZINC-COATED INSIDE AND OUTSIDE. FITTINGS SHALL BE ZINC-COATED. BENDS WHICH TURN UP OUT OF CONCRETE SHALL BE TREATED WITH ASPHALT EMULSION TO RESIST CORROSION.

PYC CONDUITS. NON-METALLIC CONDUITS SHALL BE POLYVINYL CHLORIDE (PYC.), U.L. APPROVED FOR 90C, HEAVY WALL, SCHEDULE 40 RIGID. (EXCEPTION: FPL CONDUITS.)

NON-METALLIC TUBING. ENT MAY NOT BE USED.

RACEWAY LOCATIONS. LOCATION REQUIREMENTS SET FORTH BY THE BUILDING DEPARTMENT RACEMAY LOCATIONS. LOCATION REQUIREMENTS SET FORTH BY THE BUILDING DEPARTMENT SHALL PREVAIL IF MORE STRINGENT. ALL CONDUITS SHALL BE GRC EXCEPT WHERE OTHERWISE SHOWN ON DRAWINGS, AND AS FOLLOWS: EMT MAY BE USED ONLY INDOORS, IN DRY LOCATIONS, OUT OF SOIL, WHERE NOT PHYSICALLY SUBJECT TO DAMAGE FLEXIBLE CONDUIT SHALL BE USED ONLY IN SHORT LENGTHS FOR MAKING EQUIPMENT CONNECTIONS. PVC CONDUIT SHALL BE USED ONLY UNDERGROUND, IN CONCRETE FLOORS, OR CORROSIVE AREAS. METALLIC RACEMAYS ARE REQUIRED IN CELLING SPACES WHICH SERVE AS RETURN AIR PLENUMS. CONDUITS SHALL NOT BE RUN ABOVE ROOFS.

RACEMAY INSTALLATION. WHERE CONDUITS CROSS EXPANSION JOINTS, INSTALL OFFSET EXPANSION JOINTS OR SLIDING EXPANSION JOINTS WITH BONDING STRAPS AND CLAMPS. EXPOSED RUNS OF CONDUIT OR TUBING SHALL BE INSTALLED WITH RUNS PARALLEL OR PERPENDICULAR TO WALL, SRUCTURAL MEMBERS OR INTERSECTIONS OF VERTICAL PLANES AND CEILINGS, WITH RIGHT ANGLE TURNS. CONDUITS IN STRUCTURAL SLABS SHALL BE PLACED BETWEEN THE UPPER AND LONER LAYERS OF REINFORCING STEEL. CONDUIT RUNS SHALL ALWAYS BE CONCEALED EXCEPT WHERE INDICATED ON PLANS. A PULL WIRE SHALL BE INSTALLED IN ALL EMPTY CONDUITS. WHERE CONDUITS ARE RUN INDIVIDUALLY, THEY SHALL BE SUPPORTED BY APPROVED PIPE STRAPS, SECURED BY MEANS OF TOGGLE BOLTS ON METAL SURFACES, AND WOOD SCREWS ON WOOD CONSTRUCTION. THE SUSE OF PERFORATED STRAP OR WIRES WILL NOT BE PERMITTED. UNDERSOUND CONDUITS NOT UNDER CONCRETE SLABS ARE TO BE BURIED AT LEAST TWO (2) FEET BELOW FINISHED GRADE FOR CIRCUITS RATED 600 VOLTS OR LESS. (AND DEEPER FOR FPL)

CABINETS. CABINETS FOR OUTDOOR SWITCHES, PANELBOARDS, BREAKERS, WIREWAYS, RECEPTACLES, ETC, SHALL BE RATED WEATHERPROOF. NON-METALLIC IS PREFERRED.

MAIN DISCONNECTS. UNLESS SPECIFICALLY SHOWN OTHERWISE, ALL MAIN DISCONNECTS
ARE TO BE HEAVY DUTY FUSED SWITCHES. GENERAL DUTY SWITCHES SHALL BE REMOVED
AND REPLACED AT THE ELECTRICAL CONTRACTOR'S EXPENSE. FUSES SHALL BE REJECTION TYPE, U.L. CLASS RKI, UNLESS SHOWN OTHERWISE.

SHORT CIRCUIT DESIGN. THE DESIGN CALLS FOR A NUMBER OF SPECIAL CONDITIONS IN ORDER TO HANDLE THE SHORT CIRCUITS AVAILABLE THROUGHOUT THE ELCTRICAL SYSTEM. UNDER NO CONDITIONS MAY THE ELECTRICAL CONTRACTOR DEVIATE FROM THE DESIGN IN TYPES OF SWITCHES, FUSES, CONDUCTORS, BREAKERS OR AIC RATING OF INTERRUPTING

WIRING DEVICES GENERAL. WIRING DEVICES SHALL BE RATED FOR CURRENT, VOLTAGE AND PHASES AS APPLICABLE FOR THE LOADS. WHERE BOXES ARE TO BE MOUNTED ON OPPOSITE SIDE OF A WALL, A MINIMUM SEPARATION OF TWELVCE (12") SHALL BE MAINTAINED. NO THROUGH BOXES ARE PERMITTED. BOXES SHALL BE MOUNTED LEVEL

SWITCHES ARE TO BE SILENT TYPES, SIDE-WIRED, 20A, 120V.

ONE POLE TWO POLE 3-WAY <u>4-WAY</u> 1124-1 HUBBELL BRYANT GE P # S ||2|-| 5<del>95</del>|-2 1122-1 //23-/ 5953-2

(IVORY COLORS SHOWN. SUPPLY COLORS AS SELECTED BY ARCHITECT.)

RECEPTACLES. NEMA 5-20R RECEPTACLES SHALL BE USED EXCEPT WHERE SPECIAL RECEPTACLES ARE SHOWN, AND WHERE SINGLE RECEPTACLES ARE ON A 20A CIRCUIT. SPECIAL RECEPTACLES ARE TO MATCH EQUIPMENT PLUGS AS COORDINATED BY THE ELECTRICAL CONTRACTOR IS TO FURNISH AND INSTALL PLUGS AND CORDS ON WATER HEATERS, DISH-MASHERS, DISPOSALS, CLOTHES WASHERS, DRYERS, ETC., UNLESS PROVIDED BY OTHER TRADES. COORDINATE PRIOR TO BIDDING.

FACE PLATES. PLASTIC FACE PLATES ARE REQUIRED IN INTERIOR SPACES. COLORS ARE TO BE SELECTED BY THE ARCHITECT. OUTSIDE PLATES AND COVERS SHALL BE MOUNTED PLUMB, STRAIGHT, AND FIT FLUSH WITH FINISHED SURFACES WITHOUT THE USE OF SHIMS OR MATS. PLATES SHALL NOT SUPPORT WIRING DEVICES. COMMON GANGED PLATES ARE TO BE EMPLOYED WHEREVER TWO (2) OR MORE DEVICES ARE SHOWN ON THE DRAWINGS IN THE SAME LOCATIONS.

PANELBOARDS. PANELBOARDS SHALL BE DEAD-FRONT, CIRCUIT BREAKER TYPE. DIRECTORIES SHALL BE COMPLETE AND TYPEWRITTEN. LOADCENTERS ARE PERMITTED.

MOLDED CASE CIRCUIT BREAKERS. BREAKERS SHALL BE THERMALMAGNETIC OPERATED, WITH SHORT CIRCUIT RATINGS IN SYMMETRICAL AMPERES EQUAL TO OR GREATER THAN THE AIC RATING SHOWN ON THE DRAWINGS.

MOTOR PROTECTION. ALL MOTORS ON THIS PROJECT ARE TO BE FULLY PROTECTED IN ACCORDANCE WITH THE NEC. EVERY MOTOR IS TO BE PROTECTED FROM OVERCURRENTS BY THE INSTALLATION OF FUSED SWITCHES LOCATED IN SIGHT OF MOTORS. EACH AIR HANDLING UNIT IS TO BE FED WITH A FUSED SWITCH FOR THE HEATER, AND A SECOND FUSED SWITCH FOR THE MOTOR (MOTOR SWITCH MAY BE ELIMINATED II THE AHU IS EQUIPPED WITH INTEGRAL PROTECTION COORDINATED PRIOR

IN APPLICATIONS WITH MOTORS OVER ONE (I) HORSEPOWER, AND WHERE CONTROLS OTHER THAN MANUAL 'ON' AND 'OFF' ARE REQUIRED, MAGNETIC COIL OPERATORS ARE REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR PROPER VOLTAGES, ENCLOSURE TYPES AND START-STOP OR HAND-OFF-AUTO SWITCHES AS REQUIRED BY THE APPLICATION. OVERLOAD ELEMENTS ARE REQUIRED FOR EVERY LEG ABOVE GROUND. STARTERS SHALL BE ALLEN-

CONDUCTORS, CONDUCTORS SHALL BE RATED FOR 600 VOLTS. ALL CONDUCTORS ARE TO BE COPPER. INSULATION SHALL BE TYPE THHN, EXCEPT WHERE SHOWN OTHERWISE.

LIGHTING

LIGHTING LIGHT FIXTURES SHALL BE INSTALLED USING APPROVED
FASTENERS, STEMS, CHAINS, ETC., TO MEET THE REQUIREMENTS OF
THE ENGINEER ALL MOUNTING PROVISIONS ARE TO BE THE RESPONSIBILITY
OF THE ELECTRICAL CONTRACTOR. LIGHT FIXTURES SHALL BE RATED FOR
TEMPERATURES SPECIFIED BY THE FIXTURE MANUFACTURER, AND IN MO
EVENT FOR LESS THAN 9CC. FIXTURES MOUNTED IN FIRE RATED SURFACES
SHALL BE INSTALLED WITH THE SURFACE MATERIAL SURROUNDING THE
BACK AND SIDES IN ACCORDANCE WITH U.L. PROCEDURES. SUCH FIXTURES
ARE TO BE MANUFACTURED SPECIFICALLY TO HANDLE THE RESULTANT
BUILD-UP OF HEAT, NITHOUT UNDUE LESSENING OF BALLAST OR LAMP
LIFE. FIXTURES INSTALLED IN CELLINGS WHICH ARE INSULATED SHALL
BE SPECIALLY RATED BY U.L. FOR DIRECT CONTACT WITH INSULATION.
FIXTURES ARE TO BE GROUNDED. FLUCRESCENT BALLASTS SHALL BE
U.L. APPROVED, RATED BY THE CERTIFIED BALLAST MANUFACTURERS A
ASSOCIATION, HIGH PONET FACTOR TYPE, WITH MAXIMUM NOISE LEVEL
OF 24DB RELATED TO 0,0002 MICROBARS AS MEASURED BY THE ENGINEER
CLASS A NOISE LEVEL REQUIRED. OUTDOOR BALLASTS SHALL BE RATED
FOR COLD TEMPERATURE INSTALLATION (ZERO (O) DEGREES FAHRENHEIT).
A COMPLETE SET OF LAMPS SHALL BE INSTALLED THROUGHOUT THE PROJECT
AT THE THIS OF FINAL ACCEPTANCE. METAL HALIDE LAMPS SHALL BE
COLOR CORRECTED AND MANUFACTURED BY SYLVANIA. COLOR CORRECTED AND MANUFACTURED BY SYLVANIA.

#### SPECIAL SYSTEMS

TELEPHONES. INSTALL CONDUITS, BOXES AND CABLES AS SHOWN. TELEPHONE OUTLET BOXES ARE TO BE 4x4x1-1/2 INCH MINIMUM WITH SINGLE GANG PLATES. CONDUITS ARE TO BE LONG RADIUS TYPES WITH PULL WIRES.

#### PANELBOARD SCHEDULE GC

