birse design inc + architecture + interior design + planning

5300 woodland lakes drive palm beach gardens, fl 33418

phone 561-249-4001 fax 772-409-8684 AA26001615

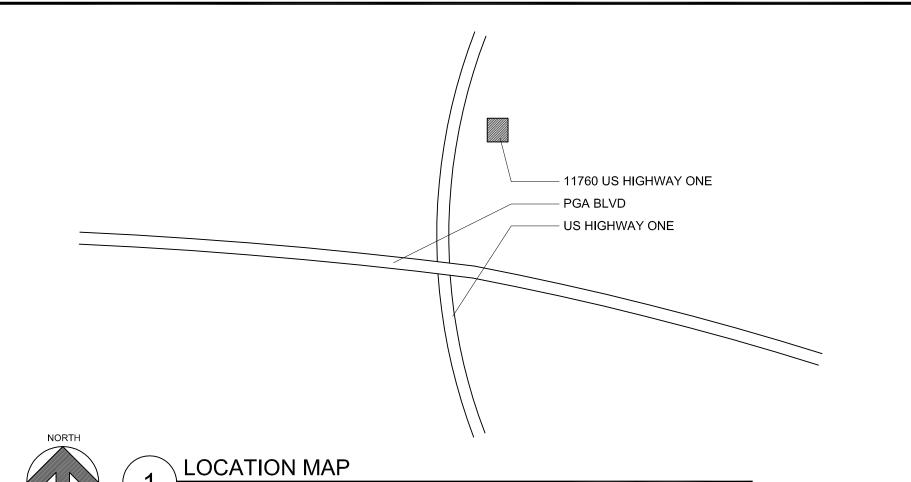
MECHANICAL ENGINEER / ELECTRICAL / PLUMBING



Gilman & Associates

MECHANICAL & ELECTRICAL ENGINEERS

129 N. FEDERAL HWY. SUITE 211 LAKE WORTH, FL 33460 (561) 582-0210 P.E. 37933



INDEX OF SHEETS:

TITLE SHEET

ARCHITECTURAL SHEETS

EXISTING/DEMO PLANS

PROPOSED PLANS

DETAILS / ELEVATIONS

MECHANICAL/ELECTRICAL/PLUMBING SHEETS

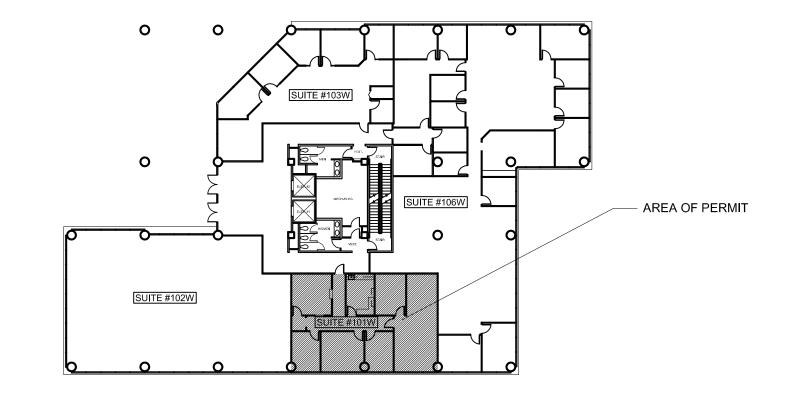
MECHANICAL PLANS

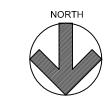
MECHANICAL NOTES

PLUMBING PLANS

PLUMBING NOTES ELECTRICAL PLANS

PANEL SCHEDULES







* AREA FOR THIS PERMIT IS HATCHED * AREA FOR THIS PERMIT = 1,704 SF

SYMBOL INDEX:

- ROOM NAME ROOM NUMBER

DOOR MARK/NUMBER

WINDOW MARK/NUMBER

WALL SECTION/SHEET NUMBER



BUILDING SECTION/SHEET NUMBER

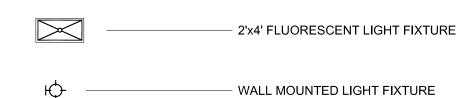


ELEVATION TARGET/SHEET NUMBER



(8'-6") - CEILING HEIGHT

FIRE EXTINGUISHER



RECESSED LIGHT DOWN FIXTURE

COPYRIGHT NOTE:

THESE PLANS AND SPECIFICATIONS PREPARED BY BIRSE DESIGN, INC. AND ARE INSTRUMENTS OF SERVICE THAT ARE PROTECTED BY COPYRIGHT LAW. THEY MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT APPROVAL FROM BIRSE DESIGN, INC. AND MAY NOT BE USED IN SUBSEQUENT PROJECTS WITHOUT APPROVAL FROM BIRSE DESIGN, INC. THE DRAWINGS AND SPECIFICATIONS REMAIN THE PROPERTY OF BIRSE DESIGN, INC.

PROJECT DATA:

* PROJECT ADDRESS: GOLDEN BEAR PLAZA 11760 US HWY ONE #101 PALM BEACH GARDENS, FL

* EXISTING BUILDING IS TYPE II "B"

* EXISTING BUILDING IS A 4 STORY BUILDING

* PROPOSED CLASSIFICATION IS GROUP "A-3" * LEVEL 2 ALTERATION PER "EXISTING BUILDING CODE 2007"

* 1ST FLOOR IS A MULTI TENANT FLOOR

* SUITE #101 = 1,704 SF

* SUITE #101 = 1,704 SF/50 = 34 OCCUPANTS * DESIGN OCCUPANT LOAD = 34 OCCUPANTS

PROJECT NOTES:

REFERENCE STANDARDS:

THIS PROJECT IS DESIGNED IN ACCORDANCE WITHE FOLLOWING CODES:

1. THE FLORIDA BUILDING CODE (FBC), 2007 EDITION WITH 2009 SUPPLEMENTS (BUILDING, MECHANICAL, PLUMBING, FUEL GAS, EXISTING BUILDING).

2. NATIONAL ELECTRIC CODE (NEC), 2008 EDITION.

3. FLORIDA FIRE PREVENTION CODE, 2007 EDITION.

4. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 101, LIFE SAFETY CODE, 2006 EDITION.

5. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 1, UNIFORM FIRE CODE, 2006 EDITION.

GENERAL NOTES:

. THE CONTRACTOR SHALL AS A PART OF THIS CONTRACT FURNISH ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, TRANSPORTATION, AND INSURANCE NECESSARY TO PROPERLY EXECUTE AND COMPLETE THE WORK ACCORDING TO THE PLANS AND SPECIFICATIONS.

2. THE CONTRACTOR IN THE WORK OF ALL TRADES SHALL PROTECT ALL EXISTING BUILDING AND PROPERTY FROM DAMAGE CAUSED BY THE ACTIVITIES OF THE CONTRACTOR AND SUBCONTRACTORS. THE CONTRACTOR SHALL REPAIR AND RESTORE THE JOB SITE AND SURROUNDING AREAS TO IT'S ORIGINAL CONDITION. OWNER TO VERIFY SATISFACTION.

3. THE CONTRACTOR SHALL VISIT THE JOB SITE TO VERIFY ALL EXISTING CONDITIONS PRIOR TO BID. CONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCIES, INCONSISTENCIES OR OMISSIONS BEFORE PROCEEDING WITH ANY WORK.

4. THE CONTRACTOR SHALL MAKE NO CHANGES TO THE CONSTRUCTION DRAWINGS WITHOUT WRITTEN APPROVAL FROM THE ARCHITECT.

5. ALL CONSTRUCTION SHALL CONFORM WITH THE LATEST CODES AND ORDINANCES.

6. THESE CONSTRUCTION DOCUMENTS ARE DIAGRAMATIC AND ARE TO CONVEY DESIGN INTENT. IT IS NOT THE INTENT OF THESE CONSTRUCTION DRAWINGS TO SHOW ALL DETAILS OF THE EXISTING CONDITIONS. THE CONTRACTOR SHALL VISIT THE SITE TI VERIFY DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION.

7. EACH CONTRACTOR SHALL ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR MECHANICAL, ELECTRICAL, AND PLUMBING WITH THE

8. ALL INDICATED UTILITY AND STUB-IN LOCATIONS ARE FOR REFERENCE ONLY. THE EXACT LOCATIONS SHALL BE VERIFIED ON THE JOB SITE.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ENGINEERING AND THE ARCHITECTURAL DRAWINGS FOR THE ACTUAL PLACEMENT OF THE WORK RELATIVE TO FIELD CONDITIONS.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE OBTAINING INSTALLATION REQUIREMENTS FOR ALL BUILT-IN APPLIANCES, FIXTURES, AND

EQUIPMENT. VERIFY EXACT ROUGH-IN DIMENSIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO ROUGH-IN FRAME.

11. THE COST OF ADDITIONAL DESIGN WORK DUE TO ERRORS OR OMMISIONS IN CONSTRUCTION SHALL BE BORNE BY THE RESPECTIVE

10. DETAILS ON THE STRUCTURAL DRAWINGS (IF PROVIDED) ARE TYPICAL. VERIFY ALL DIMENSIONS WITH THE STRUCTURAL DRAWINGS.

12. CONTRACTOR TO BE RESPONSIBLE FOR CHECKING STRUCTURAL CALCULATIONS FOR SPECIFIC REQUIREMENTS OF STRUCTURAL CONNECTIONS. SUBMIT STEEL TRUSS CALCULATIONS AND SHOP DRAWINGS OF ALL STRUCTURAL STEEL AND MISCELLANEOUS METAL FABRICATION BEFORE COMMENCING FABRICATION.

13. BIRSE DESIGN, INC. SHALL IN NO WAY BE RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNOLOGIGES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. (THESE ARE SOLELY THE CONTRACTORS

RESPONSIBILITY UNDER THE CONTRACT FOR CONSTRUCTION. 14. EACH CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY BRACING, SHORING, GUYING, OR OTHER MEANS TO AVOID EXCESSIVE

STRESSES AND TO HOLD STRUCTURAL ELEMENTS ASSOCIATED WITH WORK IN PLACE DURING CONSTRUCTION.

15. PROVIDE PORTABLE FIRE EXTINGUISHERS DURING CONSTRUCTION AS REQUIRED BY LOCAL CODES.

16. SPRINKLER SYSTEM: INSTALL FULL BUILDING SPRINKLER SYSTEM IN COMPLIANCE WITH THE REQUIREMENTS OF NFPA 13. SHOP DRAWINGS MUST BE APPROVED BEFORE INSTALLATIONS. PROVIDE OWNER WITH 2 COPIES OF PERMIT SETS.

7. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR MEETING THE REQUIREMENTS OF ALL CURRENT APPLICABLE BUILDING CODES AND ENFORCEMENT AGENCIES, FIRE MARSHALL, OR ANY OTHER BUILDING CODE ENFORCEMENT OFFICER AT NO EXTRA COST TO THE OWNER. NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPHANCIES PRIOR TO SUBMITTING A BID FOR THE PROJECT.

18. BASE BID SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:

A. ALL PERMITS AND FEES FOR ALL

1. BUILDING AND TRADE PERMITS. 2. ALL ACCESSORY AND SITE IMPROIVEMENT PERMITS.

B. ALL FILL REQUIRED TO MEET MINIMUM FINISHED FLOOR SLAB ELEVATION

AND COMPACTION.

WATER METER HOOK-UP AND METER DEPOSITS. - OWNER RESPONSIBILITY D. HOOK-UP AND FEES FOR UNDERGROUND SERVICE FROM FPL

LOCAL PHONE & CABLE T.V. - OWNER RESPONSIBILITY

E. SOIL, CONCRETE AND ANY OTHER NECESSARY TESTING. F. ENGINEERING STAKE OUTS AND SURVEYS INCLUDING FINAL TIE - IN SURVEY.

G. CLEARING, GRUB, AND SITE PREPARATION, INCLUDING GRADING.

H. ALL BIDDERS AND THEIR SUBCONTRACTORS SHALL BE CURRENTLY LICENSED IN THE STATE OF FLORIDA.

I. THE OWNER RESERVES THE RIGHT TO REJECT ANY BIDS.

J. THE G.C. SHALL PROVIDE AN ESTIMATE OF TIME FOR COMPLETION. K. THE GENERAL CONTRACTOR SHALL PROVIDE PROOF OF INSURANCE FOR WORKMANS' COMPENSATION AND ANY OTHER INSURANCES REQUIRED BY

GENERAL CONTRACTOR OR BY HIS SUBCONTRACTORS. THE CONTRACTOR SHALL CLEARLY LIST ANY WORK NOT

INCLUDED IN HIS BID. M. PROVIDE FIRE DEPARTMENT KNOX BOX ADJACENT TO FRONT DOOR OF BLDG.

THE OWNER FOR ALL EMPLOYEES EITHER DIRECTLY EMPLOYED BY THE

N. CONTRACTOR TO PROVIDE AS BUILT DRAWINGS. PROVIDE TWO COPIES OF PERMIT SET TO OWNER



__ design

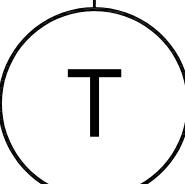
ALLEN S BIRSE

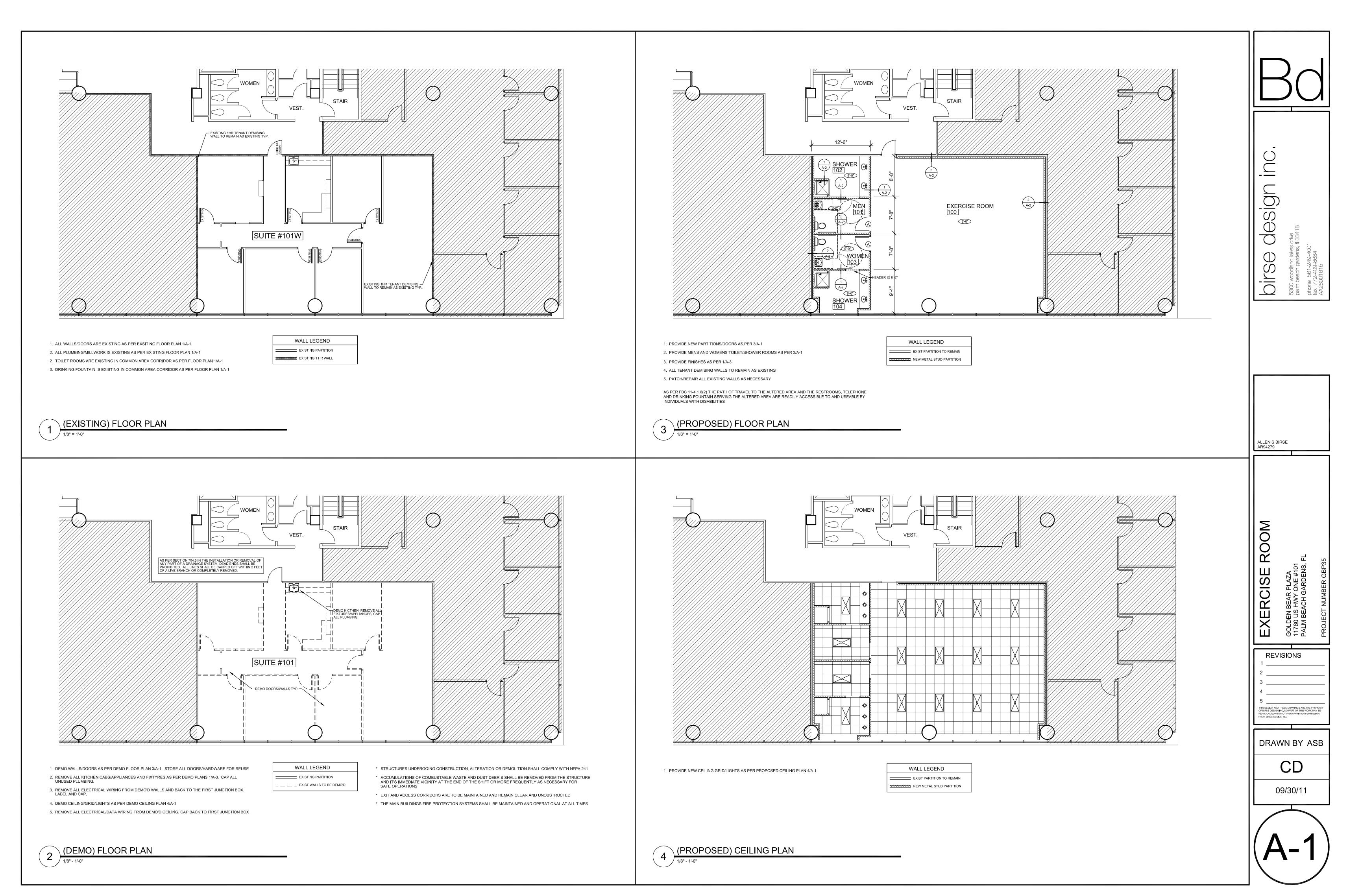
REVISIONS

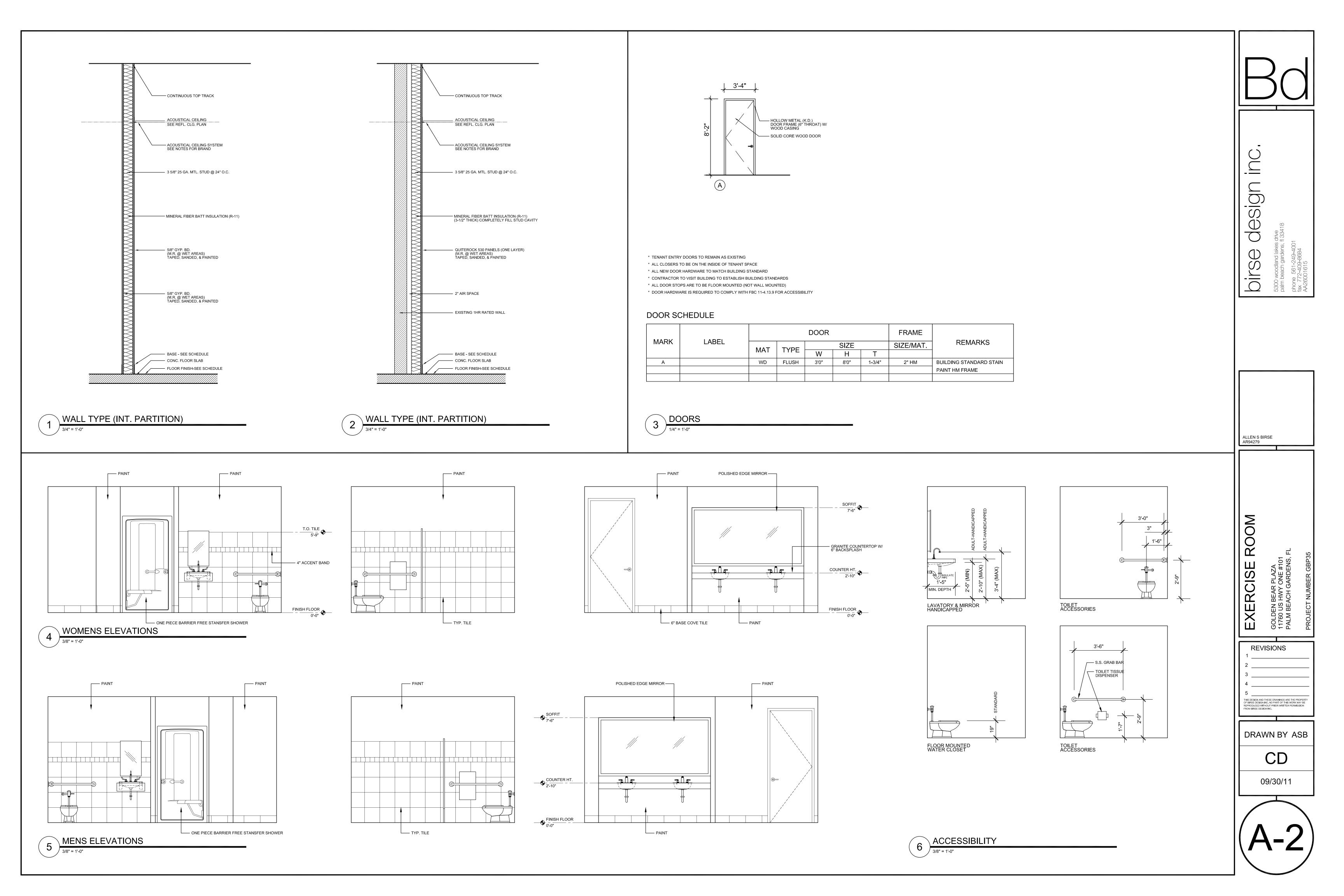
FROM BIRSE DESIGN INC.

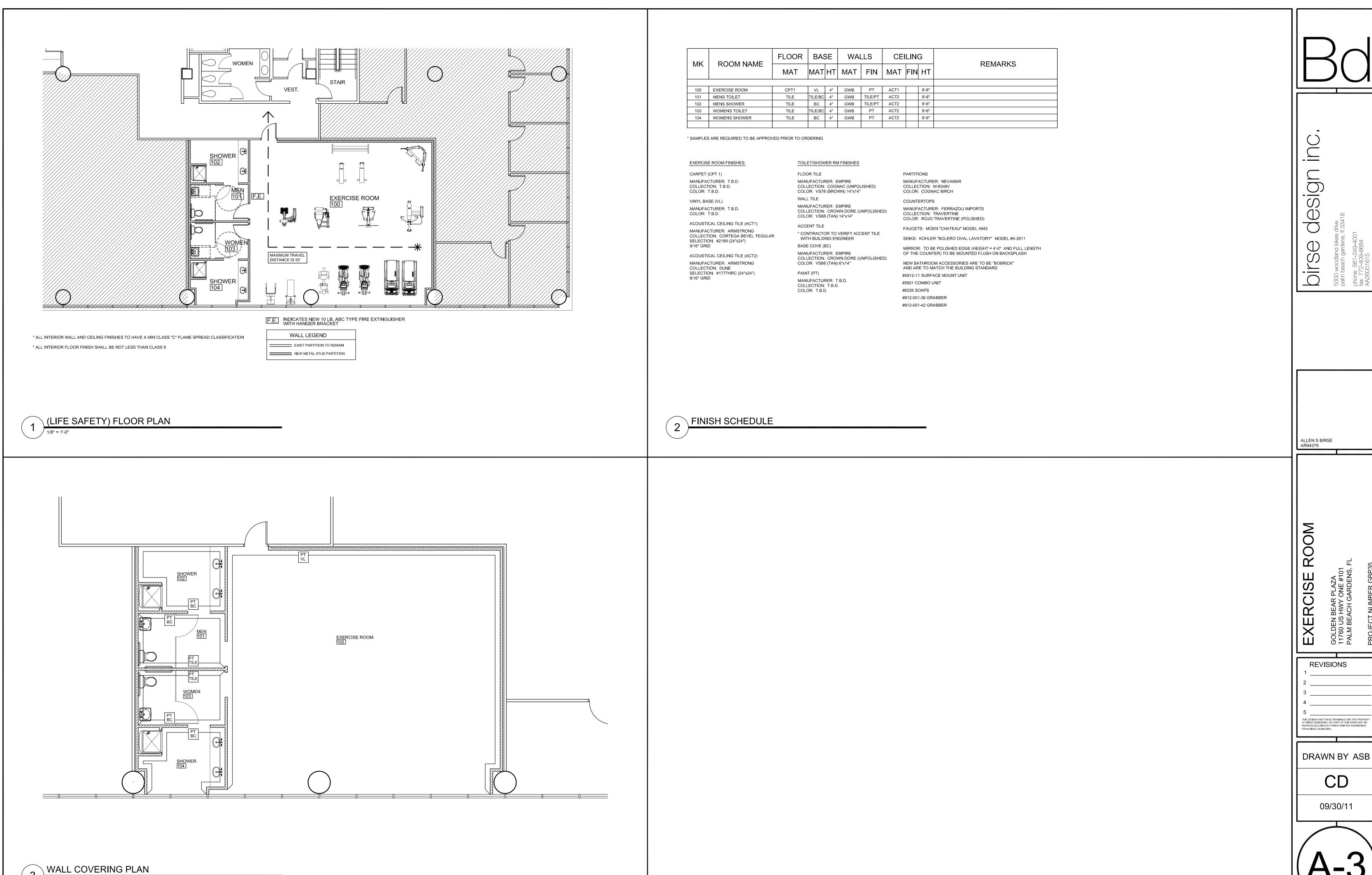
DRAWN BY ASB

09/30/11









MECHANICAL GENERAL NOTES:

- THESE DRAWINGS ARE DIAGRAMMATIC. ALL OFFSETS, FITTINGS, TRANSITIONS AND ACCESSORIES ARE NOT SHOWN. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL ITEMS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM. DO NOT SCALE DRAWINGS FOR INSTALLATION.
- 2. ALL WORK SHALL BE PERFORMED IN A FIRST CLASS WORKMANLIKE MANNER BY LICENSED CONTRACTORS.
- THE CONTRACTOR SHALL OBTAIN AT HIS EXPENSE ALL NECESSARY FEES PERMITS, AND TESTS.
- ALL WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES. NO CONTRACTOR SHALL BID UNLESS FAMILIAR WITH THESE CODES.
- CORRECTION OF DEFECTS TO THIS WORK SHALL BE MADE PROMPTLY WITHOUT CHARGE TO THE OWNER. REPAIR AND REPLACEMENT FOR DAMAGE CAUSED BY THIS CONTRACTOR SHALL BE MADE PROMPTLY WITHOUT CHARGE TO THE OWNER.
- ALL WORK OF THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID ANY INTERFERENCES THAT MAY DELAY PROGRESS OF CONSTRUCTION.
- THE CONTRACTOR SHALL INCLUDE THE WORK OF ALL REQUIRED SUB-CONTRACTORS, SUCH AS ELECTRICAL, INSULATING, TEST & BALANCE, ETC., AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- EQUIPMENT SHALL BEAR A U.L. OR OTHER RECOGNIZED LABEL, NAMEPLATES, WIRING DIAGRAMS, AND ENERGY RATINGS AS APPLICABLE.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND ACCESSORIES TO BE READLY ACCESSIBLE FOR SERVICING, TESTING, BALANCING, AND REPLACEMENT.
- 10. THE CONTRACTOR SHALL PROVIDE A WRITTEN GUARANTEE AGAINST DEFECTS IN ALL MATERIALS AND WORKMANSHIP FOR ONE YEAR FROM ACCEPTANCE, WITH FOUR ADDITIONAL YEARS OF WARRANTY ON COMPRESSORS.
- 11. THE CONTRACTOR SHALL PROVIDE THREE COPIES OF SUBMITTAL DATA, SHOP DRAWINGS, AND AT COMPLETION OF THE PROJECT TWO SETS OF OPERATION AND MAINTENANCE MANUALS FOR ALL PROJECT ITEMS.
- 12. PROVIDE ALL CONTROLS, STARTERS, CONTROL WIRING, DISCONNECTS, AND OTHER ELECTRICAL EQUIPMENT AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- 13. THE HVAC CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, ON SITE, A DETAILED AS-BUILT PLAN SHOWING ACTUAL INSTALLATIONS. THE CONTRACTOR IS TO PROVIDE A NEATLY DRAWN COMPREHENSIVE AS-BUILT SET OF PLANS UPON COMPLETION, WHICH ARE SUITABLE FOR SUBMISSION TO THE BUILDING DEPARTMENT AND TO THE OWNER.
- 14. PRIOR TO ACCEPTANCE BY THE OWNER THE SYSTEMS SHALL BE TESTED AND BALANCED BY THE CONTRACTOR. PROVIDE A WRITTEN REPORT.
- 15. SUPPLY AND INSTALL DUCT MOUNTED SMOKE DETECTORS AS REQUIRED.
- 16. COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH LIGHTS AND ARCHITECTURAL ELEMENTS.
- 17. ALL GRILLES TO BE TITUS OR METALLAIRE UNLESS OTHERWISE NOTED, SIZES AS SHOWN ON PLANS. ALUMINUM CONSTRUCTION.
- 18. ALL DUCT WORK SHALL BE BUILT AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS AND LOCAL BUILDING CODES.
- 19. ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
- 20. ALL OUTSIDE AIR DUCTWORK SHALL BE SHEETMETAL WITH EXTERIOR R-6 INSULATION. PROVIDE BLANKET TYPE INSULATION IN CONCEALED SPACES, AND BOARD TYPE IN EXPOSED AREAS.
- 21. ALL EXHAUST AIR DUCT SHALL BE GALVANIZED SHEET METAL CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS.
- 22. FLEXIBLE DUCT, WHERE SHOWN, SHALL BE U.L. CLASS 1, R-6 INSULATION.
- 23. LOW PRESSURE SUPPLY AND RETURN RECTANGULAR DUCTWORK IS RIGID DUCTBOARD, 1 IN. THICK, R-4.2 INSULATION.
- 24. PROVIDE ELBOW TURNING VANES IN ALL RECTANGULAR DUCTS WHERE TURNS ARE GREATER THAN 45 DEGREES.
- 25. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST FANS.
- 26. VERIFY ALL THERMOSTAT LOCATIONS WITH THE LANDLORD.
- 27. CONDENSATE DRAIN PIPING SHALL BE ABOVE GRADE COPPER DRAIN, WASTE AND VENT FITINGS. INSULATE ALL CONDENSATE PIPING W/3/4" IMCOA IMCOLOCK PIPE INSULATION.

GENERAL DEMOLITION NOTES

- UNLESS OTHERWISE NOTED, ALL EQUIPMENT AND DUCTWORK IN THE PROJECT AREA WHICH IS NOT INDICATED TO REMAIN, IS TO BE REMOVED. THE CONTRACTOR SHALL INVESTIGATE THE PROJECT AREA PRIOR TO BID TO DETERMINE ALL REQUIRED
- 2. EXISTING CONDITIONS SHOWN ON THIS DRAWING ARE TAKEN FROM ORIGINAL DRAWINGS AND FIELD INVESTIGATION. ALL EXISTING CONDITIONS MUST BE VERIFIED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN.
- DEMOLITION WORK IS NOT SPECIFICALLY IDENTIFIED ON THESE PLANS, AND MAY BE DESCRIBED ON THE ARCHITECTS PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED DEMOLITION WHETHER SHOWN ON THE PLANS OR NOT.
- 4. ALL MECHANICAL SYSTEMS SERVING OTHER SPACES OR FLOORS, THAT RUN THROUGH THE PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION, SO AS NOT TO CAUSE ANY DISRUPTION TO THESE OTHER SPACES.
- 5. ALL ITEMS REMOVED UNDER THIS PROJECT SHALL BE DISPOSED OF OR TURNED OVER TO THE OWNER AT THE OWNER'S DISCRETION.
- 6. PROPERLY REMOVE AND DISPOSE OF ALL HVAC DUCTWORK AND AIR DISTRIBUTION DEVICES WHICH ARE TO BE REMOVED. CONSULT WITH OWNER AND OBTAIN THE OWNER'S APPROVAL PRIOR TO DISPOSAL OF REMOVED MATERIAL.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL PIPING AND DUCTS, NEW OR EXISTING, WITHIN THE PROJECT AREA, ARE PROPERLY SUPPORTED.
- 8. ALL OCCUPIED SPACES ARE TO REMAIN OPERATIONAL DURING BUSINESS HOURS THROUGHOUT THE DEMOLITION AND CONSTRUCTION PERIOD. COORDINATE ALL WORK AS DESCRIBED IN THE ARCHITECTS DOCUMENTS.

SYMBOL LEGEND

- EQUIPMENT AS NOTED
- EXISTING EQUIPMENT AS NOTED
- SUPPLY AIR DIFFUSER AS NOTED
- RETURN/TRANSFER GRILLE AS NOTED — DUCTWORK AS NOTED
- EXISTING DUCTWORK TO REMAIN
- **DUCT TRANSITION**
- TYPE B FIRE DAMPER W/ACCESS DOOR.
- MANUAL VOLUME DAMPER
- THERMOSTAT AS NOTED

FLEXIBLE DUCT, U.L. CLASS 1

- CONNECTION TO EXISTING EQUIPMENT
- TAKE-OFF WITH VOLUME DAMPER FOR FLEXIBLE DUCT

ABBREVIATIONS

- VAV VARIABLE AIR VOLUME
 - SUPPLY AIR
- R/A RETURN AIR
- O/A OUTSIDE AIR
- EXHAUST AIR
- CUBIC FEET PER MINUTE.
- MANUAL VOLUME DAMPER (OPPOSED BLADE TYPE).
- FIRE DAMPER
- AIR HANDLING UNIT
- CONDENSING UNIT
- **EXISTING**
- RE-LOCATE

THE CEILING SPACE THROUGHOUT THIS PROJECT IS A RETURN AIR PLENUM. NO COMBUSTIBLE OR TOXIC MATERIALS ARE ALLOWED ABOVE THE CEILING.

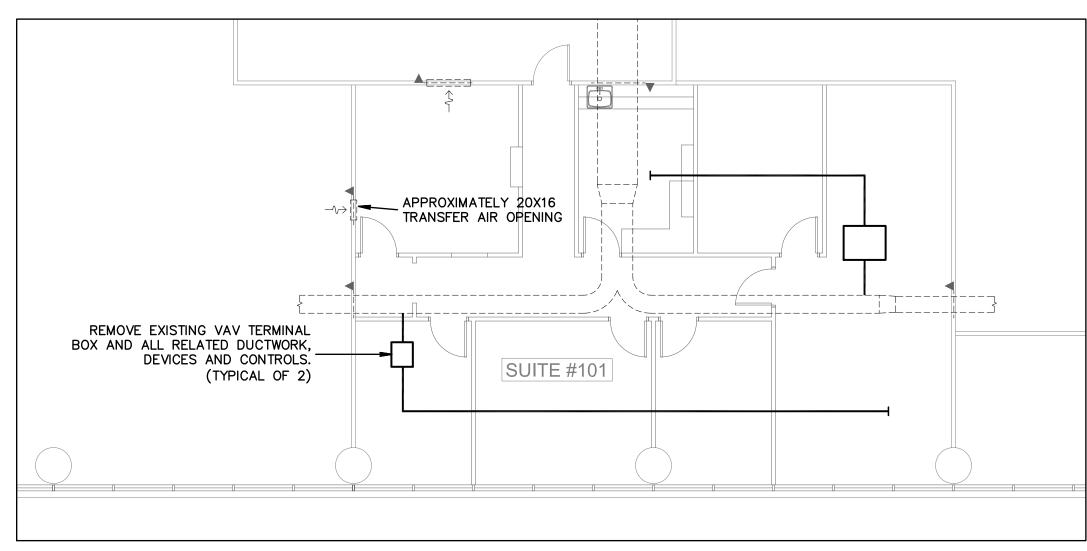
OUTSIDE AIR CALCULATIONS

AREA TYPE	HEALTH CLUB
SQUARE FEET OF AREA	1,200
CFM/SQ.FT. REQUIRED	0.06
OCCUPANTS/1000 SQ.FT.	10
TOTAL OCCUPANTS	12
CFM/PERSON REQUIRED	20
CFM REQUIRED	312

ABOVE PER ASHRAE 62.1, 2007

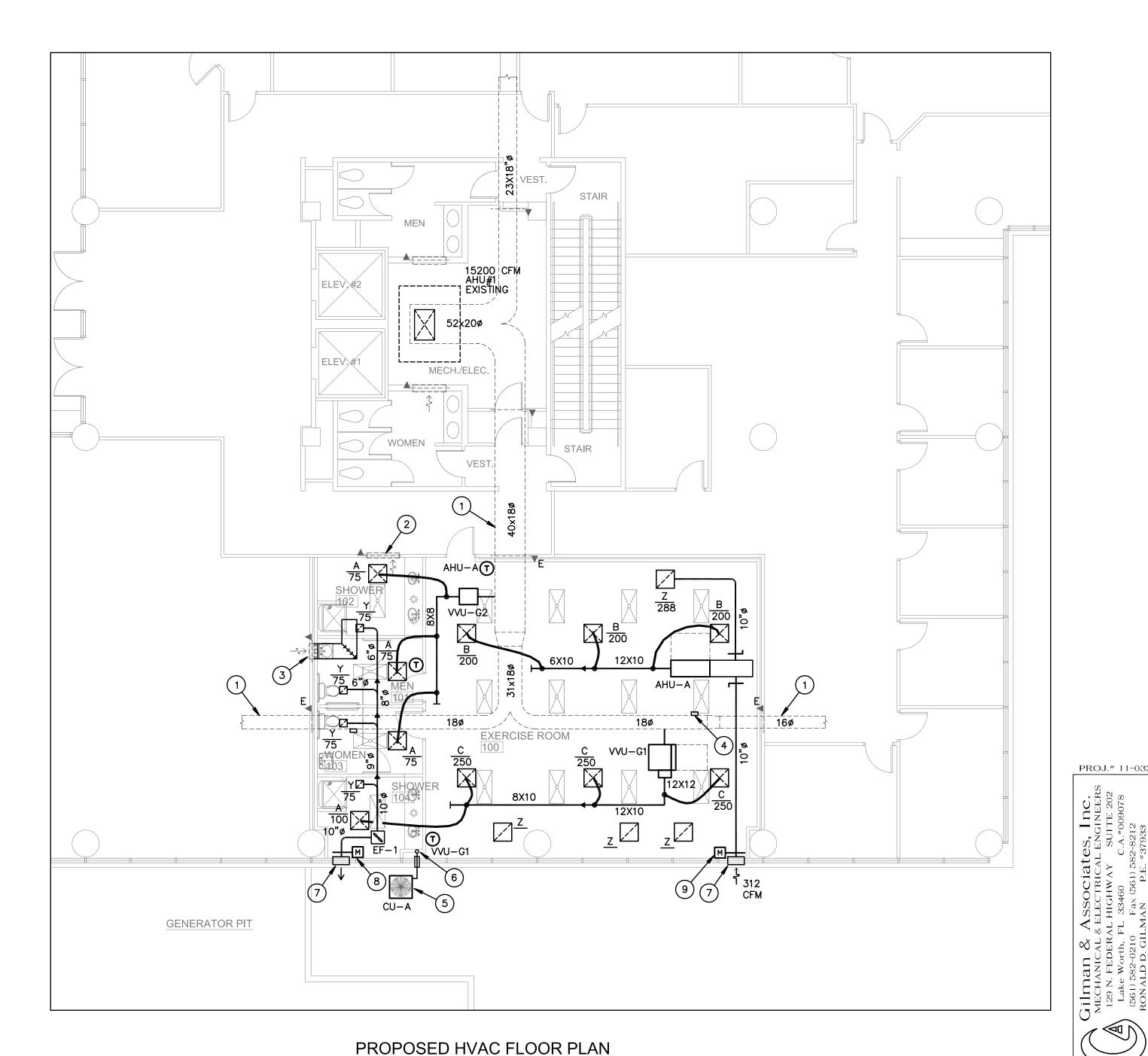
DRAWING KEYNOTES:

- (1) EXISTING MAIN SUPPLY AIR DUCT TO REMAIN AS IS.
- (2) EXISTING MAIN RETURN AIR OPENING TO REMAIN AS IS.
- 3 EXISTING R/A TRANSFER OPENING ABOVE CEILING, WITH FIRE DAMPÉR, TO REMAIN. PROVIDE SECURITY BARS AND DUCTBOARD SOUND ATTENUATION BOOT AS SHOWN. (DUCT SIZE TO MATCH OPENING, FIELD VERIFY EXACT SIZE)
- PROVIDE SHEETMETAL CAP AND SEAL TAKE-OFF IN MAIN SUPPLY AIR DUCT AFTER DEMOLITION (TYPICAL).
- 5 AIR COOLED CONDENSING UNIT ON GROUND BELOW, FIELD VERIFY EXACT LOCATION AND COORDINATE WITH LANDLORD.
- (6) REFRIGERANT PIPING UP FROM GARAGE LEVEL BELOW
- 18X18 LOUVER ABOVE CEILING, VERIFY SPECIFICATION AND MOUNTING DETAILS WITH ARCHITECT.
- 8 MOTORIZED EXHAUST AIR DAMPER TO BE INTERLOCKED WITH $^\prime$ EXHAUST FAN FOR SIMULTANEOUS OPERATION.
- 9 MOTORIZED OUTSIDE AIR DAMPER TO BE INTERLOCKED WITH AHU-A FAN FOR SIMULTANEOUS OPERATION.



EXISTING HVAC FLOOR PLAN

SCALE: 1/8" = 1'-0"

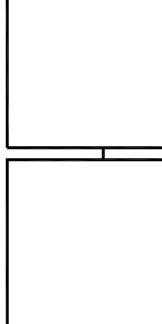




SCALE: 1/8" = 1'-0"



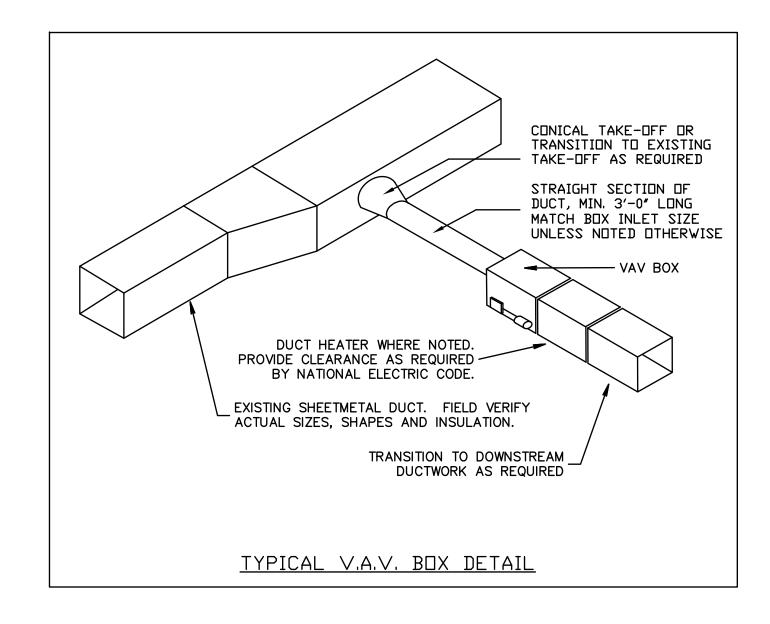
__ \overline{S} \bigcirc $\overline{}$

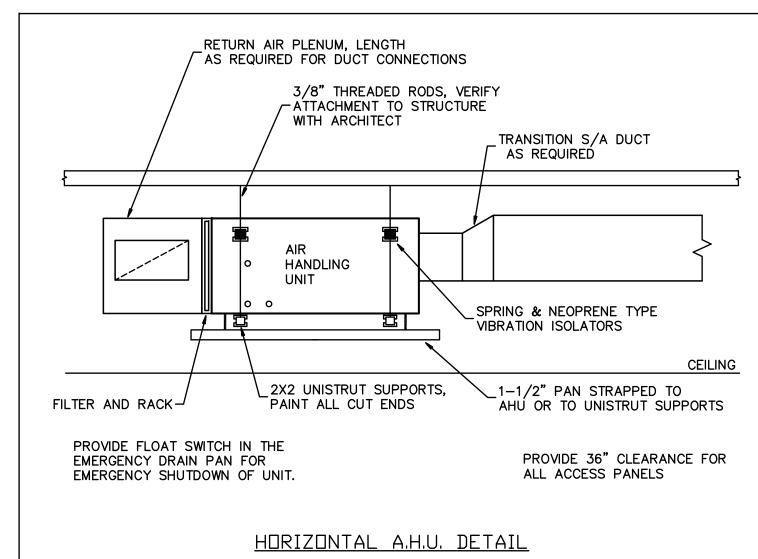


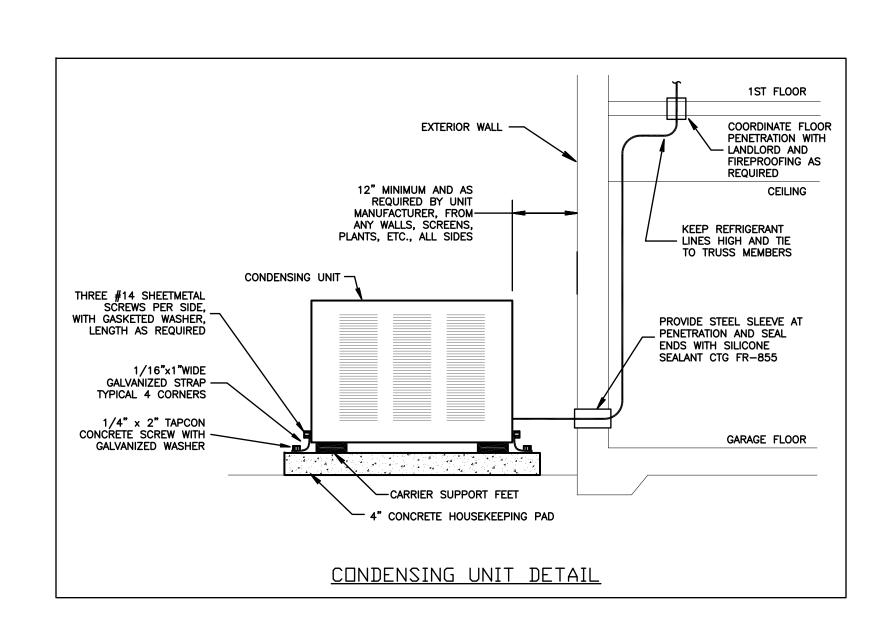
REVISIONS THIS DESIGN AND THESE DRAWINGS ARE THE PROPER OF BIRSE DESIGN INC. NO PART OF THIS WORK MAY BE E REPRODUCED WITHOUT ROM BIRSE DESIGN INC.

DRAWN BY GD









SPLIT SYSTEM SCHEDULE AIR COOLED CONDENSING UNIT SYSTEM DATA AIR HANDLING UNIT DIM. (IN) ELECTRICAL WT MARK MODEL DIM. (IN) COMPRESSOR FAN ELECTRICAL MCA FUSE WT CAPACITY CONTROL SEER MARK MODEL MANUF. SUPPLY FLA HP HXWXL MCA MOCP VOLTS-PH-HZ KW AHU NO. CFM LBS ACCU NO. HXWXL QTY. TONS FLA QTY FLA VOLTS-PH-HZ 39X31X31 1 2 10.3 1 0.7 208/1/60 13.6 20 237 27.0 13.2 16.5 THERMOSTAT & HUMIDISTAT A FV4CNF003 CARRIER 150 A 24APA724 600 | 4.3 | 3/4 | 21X22X54 | 5.4 | 15 | 208/1/60

SPLIT SYSTEM NOTES:

DUCT TRANSITIONS

- OUTSIDE AIR DESIGN CONDITIONS: 91°FDB/79°FWB. SYSTEM
- CAPACITY SHOWN IS AT 82°DB/72°WB PROVIDE A/C UNITS WITH COOLING AND DEHUMIDIFYING
- WALL MOUNT CARRIER INFINITY CONTROLLER
- SIZE AND RUN REFRIGERANT PIPING PER MANUFACTURER'S
- PUBLISHED RECOMMENDATIONS. PROVIDE PROPER VIBRATION ISOLATORS PER ISOLATION
- MANUFACTURER'S RECOMMENDATIONS. 5. PROVIDE BUILT-IN DISCONNECT WITH AIR HANDLING UNIT.
- INSULATE REFRIGERANT SUCTION LINES WITH 3/4" FIRE RETARDANT ARMAFLEX. INSTALL FACTORY FILTER DRYER AND STRAINER IN REFRIGERANT LIQUID LINES.
- PROVIDE THERMOGUARD FIELD APPLIED FIN-GUARD COATING ON CONDENSER COILS. PROVIDE MANUFACTURERS STANDARD FILTER RACK UPSTREAM OF R/A OPENING FOR EASY FILTER REPLACEMENT.
- AIR HANDLING UNIT HAS MODULATING ECM FAN MOTOR.
- CONDENSING UNIT HAS 2 SPEED SCROLL COMPRESSORS WITH CRANKCASE HEATER.
- PROVIDE CARRIER HARD-SHUTOFF TXV, COMPRESSOR START ASSIST KIT, AND CONDENSING UNIT SUPPORT FEET. 13. AHU FAN MOTOR STARTER IS TO BE INTERLOCKED WITH A CONTACT CLOSURE FROM THE BUILDING MANAGEMENT SYSTEM.
- SEE NOTE #4 IN THE VAV BOX SCHEDULE, WHICH SHALL APPLY TO THE SPLIT SYSTEM.

	FAN SCH	EDULE
15'	MARK	EF #1
	TYPE	IN-LINE
AIR	SERVICE	TOILETS
FLOW	MANUFACTURER	GREENHECK
	MODEL NO.	CSP-A410
DIVERGING FLOW	CFM	300
	S.P.	0.38
	HP	135 WATTS
	VOLT-PH-HZ	120-1-60
15°	DRIVE	D
	MOTOR R.P.M.	_
AIR {	FAN R.P.M.	1000
FLOW	WEIGHT (LBS)	36
	SONES	2.0
	ROOF OPENING	_
CONTRACTION FLOW	NOTES	1
	NOTES	•
	FAN IS TO BE CONT EXISTING BUILDING M	

EXISTING BUILDING MANAGEMENT SYSTEM. VERIFY ALL REQUIREMENTS WITH THE BMS PROVIDER AND INCLUDE IN THE BID. SEE NOTE #4 IN THE VAV SCHEDULE, WHICH SHALL APPLY TO THE EXHAUST FAN EF-1.

6"O.C. NON REMOVABLE (TACK WELD) BOLT OR WELD TO DUCT WALL 12 IN. O.C. AROUND ENTIRE FRAME 1/2" DIA. COLD ROLLED STEEL RODS (BOTH DIRECTION)
SECURITY BARRIER DETAIL

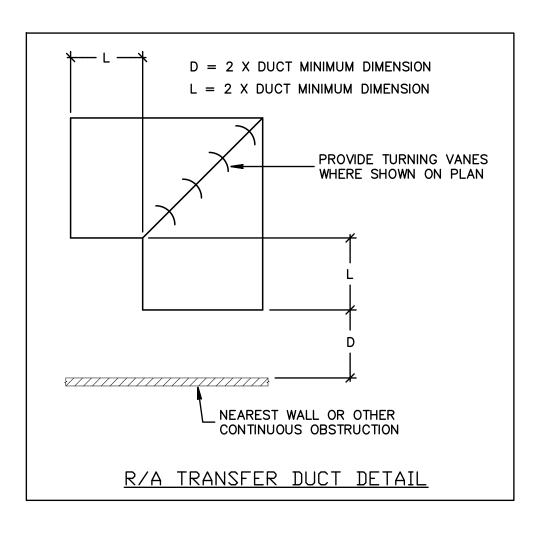
	VAV TERMINAL BOX SCHEDULE											
MARK	MANUFACTURER	MODEL NO.	INLET	CFM MAX	CFM MIN	FAN CFM	HEATING FAN HP	KW	STEP	VOLT-PH-HZ	NOTES	
VVU-G1	CARRIER	45M-3	8 " ø	850	0	600	1/10	5	1	277-1-60	1 THRU 5	
VVU-G2	CARRIER	35E	5 " ø	225	100	-	_	_	_	277–1–60	1 THRU 4	

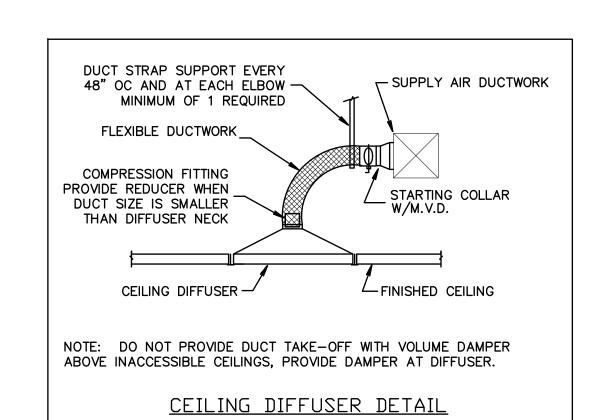
SCHEDULE NOTES

- PROVIDE FIELD MOUNTED ALERTON VAV-SD CONTROLLER COMPATIBLE WITH EXISTING BUILDING MANAGEMENT SYSTEM PROVIDE ELECTRIC ACTUATOR COMPATIBLE WITH DDC CONTROLLER AND TRANSFORMER AS REQUIRED.
- 2. PROVIDE ALERTON BACTALK MICROTOUCH WALL MOUNTED ROOM TEMPERATURE SENSOR/THERMOSTAT WITH EXTERNAL SETPOINT ADJUSTMENT.
- 3. TRANSITION FROM INLET SIZE TO SUPPLY DUCT SIZE AS SHOWN ON FLOOR PLAN. PROVIDE SUPPLY DUCT SIZED TO MATCH VAV BOX INLET UNLESS SHOWN OTHERWISE.
- 4. AIR CONDITIONING CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONTROL'S, CONTROL WIRING & CONDUIT, POWER WIRING AND CONDUIT, AND ALL OTHER ITEMS NECESSARY FOR COMPLETE INSTALLATION AND CONTROL OF TERMINAL BOXES. SOFTWARE PROGRAMMING MODIFICATIONS OF THE EXISTING BUILDING MANAGEMENT SYSTEM IS TO BE PROVIDED AS DIRECTED BY THE BUILDING MANAGEMENT COMPANY FOR EACH TERMINAL BOX. FIELD VERIFY SCOPE OF WORK AND COORDINATE WITH THE BUILDING MANAGEMENT COMPANY PRIOR TO BID.
- PROVIDE FACTORY SINGLE-STAGE HEATER, WITH COMPLETE CONTROLS, MERCURY CONTACTORS, INTERLOCKING DOOR AND FAN, FUSED DISCONNECT SWITCH, U.L. LISTED AND LABELED.

			AIR DI	STRIB	UTION S	CHED	ULE			
MARK	MAKE	MODEL	SIZE	NECK	MATERIAL	BORDER TYPE	MOUNTING TYPE	DAMPER	THROW	FINISH
Α	TITUS	PAS-AA	24X24	6"ø	ALUMINUM	3	LAY-IN	AG-100	4 WAY	WHITE
A1	TITUS	PAS-AA	12X12	6 " ø	ALUMINUM	1	SURFACE	AG-100	4 WAY	WHITE
В	TITUS	PAS-AA	24X24	8"ø	ALUMINUM	3	LAY-IN	AG-100	4 WAY	WHITE
С	TITUS	PAS-AA	24X24	10 " ø	ALUMINUM	3	LAY-IN	AG-100	4 WAY	WHITE
Y	TITUS	3F	8X8	1	ALUMINUM	1	SURFACE	-	_	WHITE
Z	TITUS	PAR-AA	24X24	22X22	ALUMINUM	3	LAY-IN	-	_	WHITE

PROVIDE INTEGRAL VOLUME DAMPERS WHERE SHOWN ON PLAN OR WHERE DAMPER IN DUCTWORK IS NOT ACCESSIBLE ABOVE CEILING. PROVIDE SQUARE TO ROUND ADAPTERS WHERE REQUIRED FOR ROUND DUCT CONNECTION. PROVIDE FLEXIBLE DUCT SIZED TO MATCH S/A DIFFUSER NECK UNLESS NOTED OTHERWISE.





PROJ.# 11-032 ASSOciates,

& ELECTRICAL ENG
RAL HIGHWAY SUI
FL 33460 C.A.*(

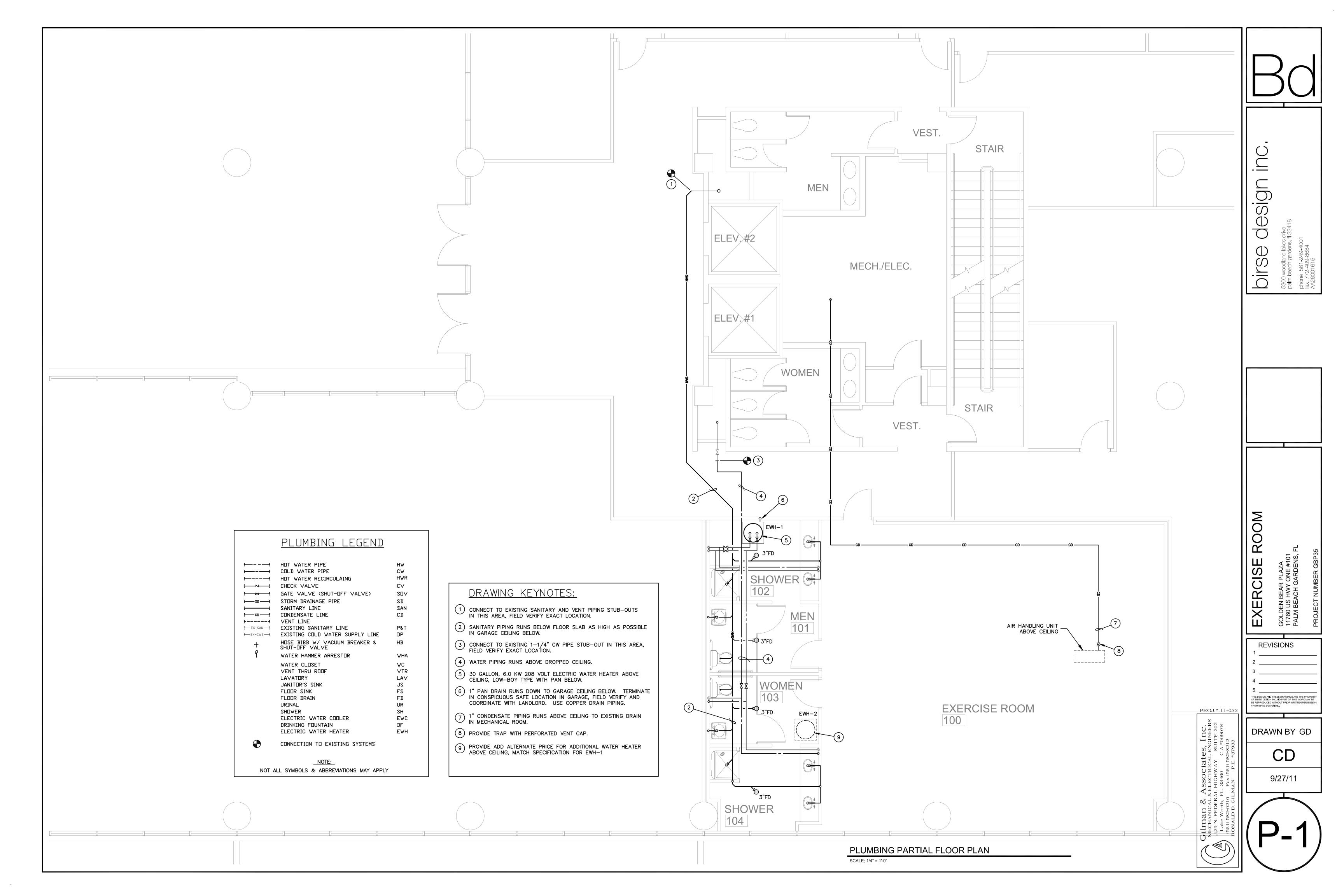


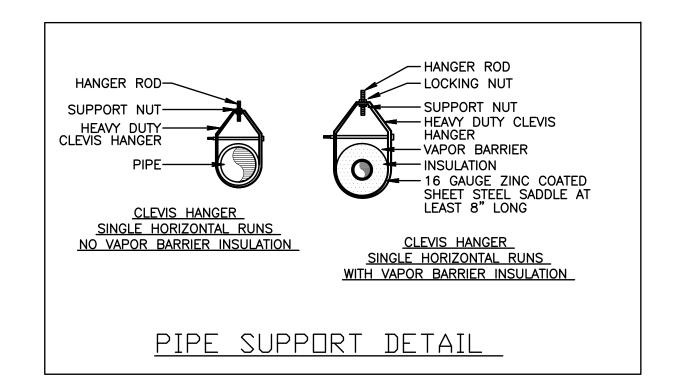
__ $\overline{\mathcal{O}}$ <u>Q</u>

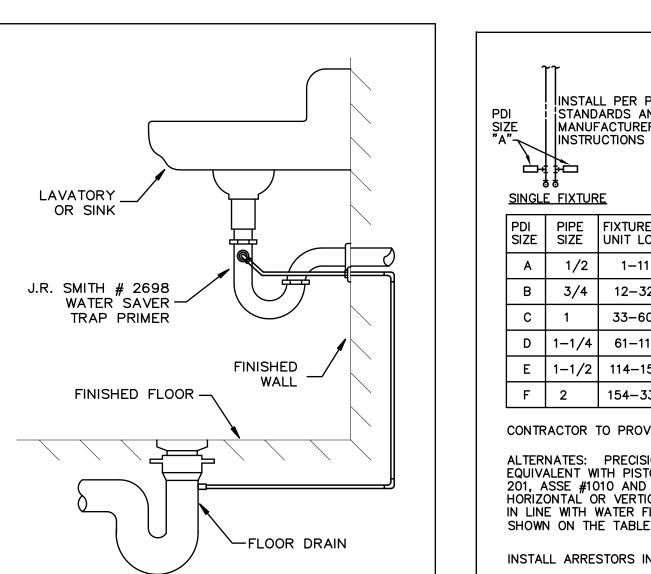
ROOM RCISE

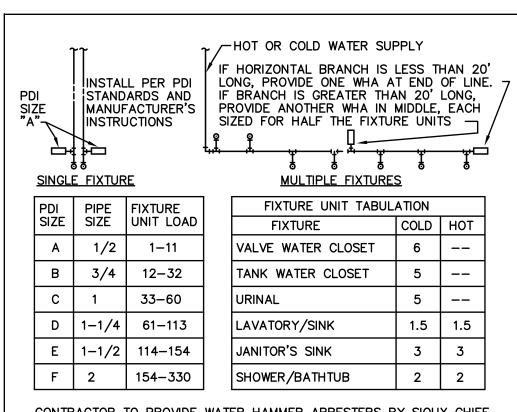
REVISIONS THIS DESIGN AND THESE DRAWINGS ARE THE PROPERTY OF BIRSE DESIGN INC. NO PART OF THIS WORK MAY BE BE REPRODUCED WITHOUT PRIOR WRITTEN PERMISSION FROM BIRSE DESIGN INC.

DRAWN BY GD







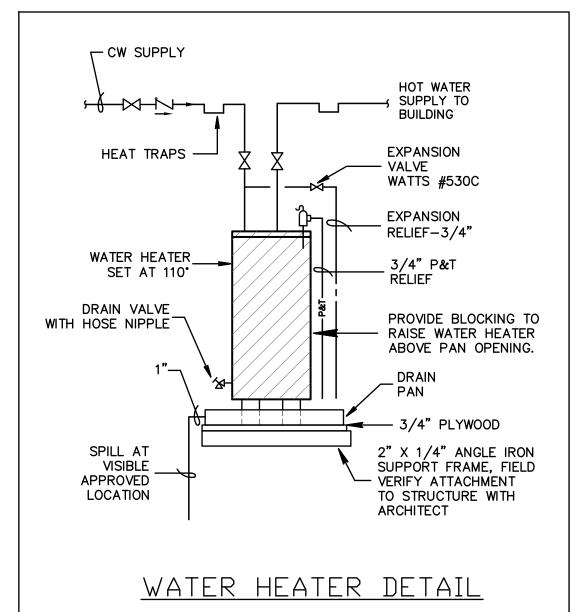


CONTRACTOR TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF.

ALTERNATES: PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION. INSTALL IN THE HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE TABLES ABOVE. PROVIDE SEPARATE ISOLATION VALVE.

INSTALL ARRESTORS IN AN ACCESSIBLE LOCATION OR WITH ACCESS PANEL

WATER HAMMER ARRESTORS



TYPICAL CLEAN-DUT

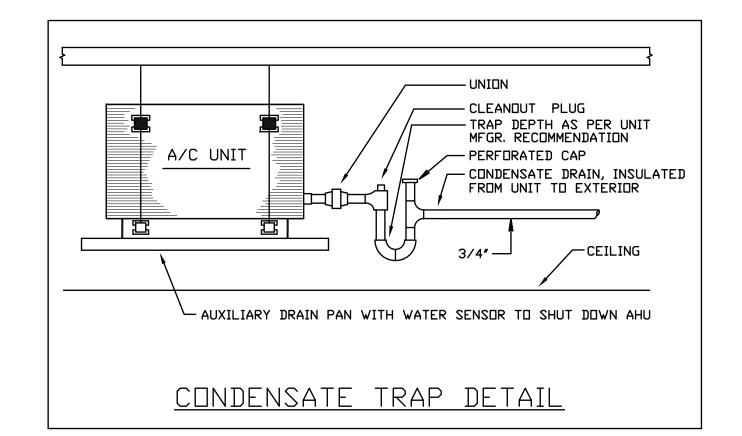


- 1. ALL WORKMANSHIP AND MATERIAL SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
- CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.

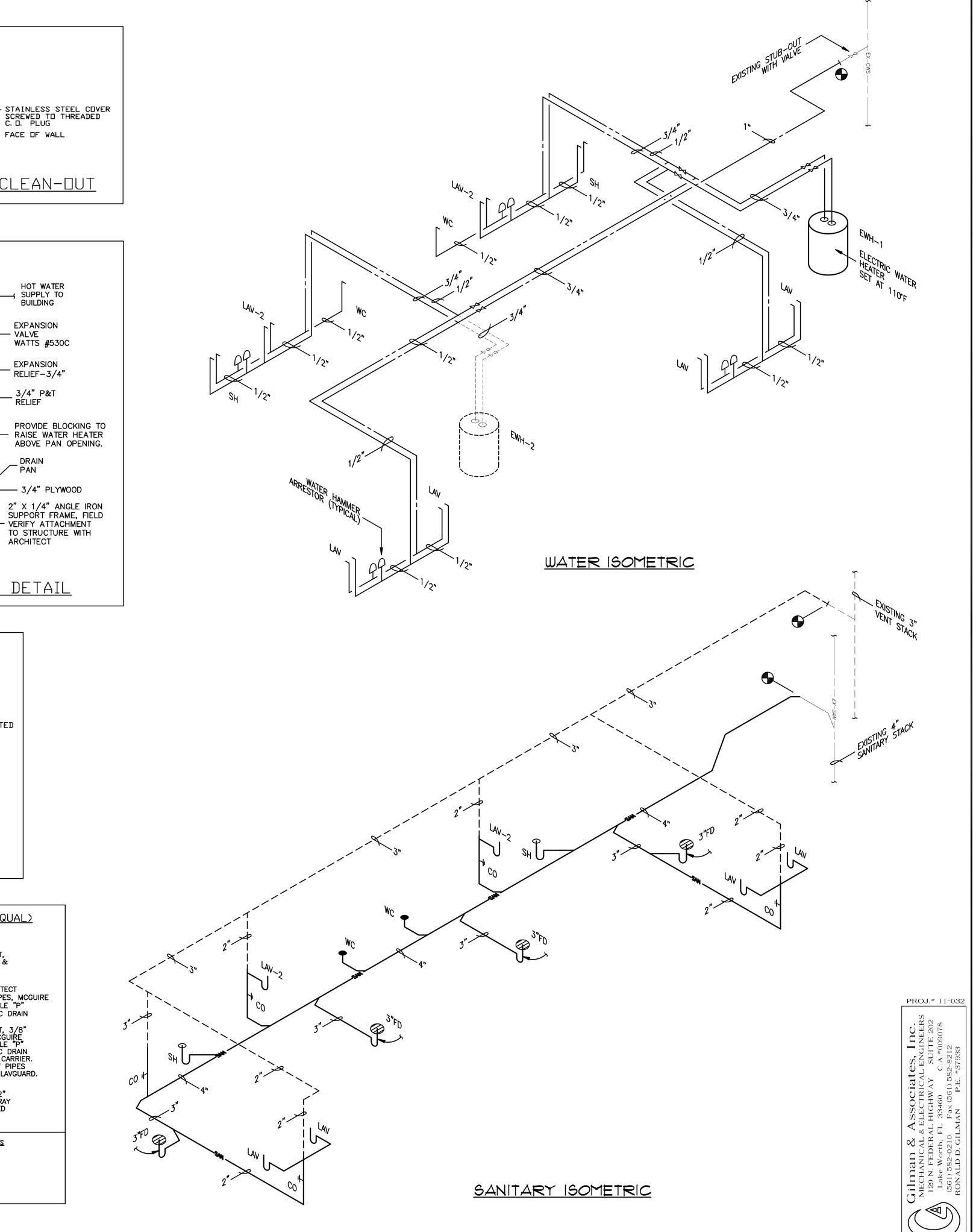
SPACES WHERE USED AS RETURN AIR PLENUMS.

TRAP PRIMER DETAIL

- 3. ALL MATERIAL SHALL BE NEW. 4. ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE
- FULLY OPERATIVE. 5. NO COMBUSTIBLE MATERIAL TO BE USED IN MECHANICAL ROOMS OR IN CEILING
- REQUIRED INSURANCE SHALL BE PROVIDED BY THE CONTRACTOR FOR PROTECTION
- AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF WORK. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTION & TESTS.
- DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING, EQUIPMENT, ETC.
- 9. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ENGINEER/
- ARCHITECT PRIOR TO BEGINNING CONSTRUCTION. 10 VERIFY LOCATION, SIZE, AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING
- CONSTRUCTION. ADVISE ENGINEER OF ANY DISCREPANCIES.
- WATER PIPING SHALL BE TYPE "L" COPPER.
- 12 SOIL, WASTE, VENT AND STORM DRAIN PIPING SHALL BE CAST IRON NO HUB
- 301-72 ABOVE GRADE AND SCH. 40 PVC BELOW GRADE. 13. FURNISH AND INSTALL APPROVED SHOCK ARRESTORS AT EACH PLUMBING FIXTURE
- GROUP AND AT QUICK CLOSING VALVES. 14. INSULATE PER A.D.A. ALL EXPOSED HANDICAP LAVATORIES DRAIN PIPING AND HOT &
- COLD STOP AND SUPPLIES. COVERS SHALL BE SOFT, REMOVABLE AND UPC APPROVED. MANUFACTURE: PLUMBEREX HANDY-SHIELD, TRU-BRO OR PRO-SERIES.
- 15. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS & APPROPRIATELY MARKED ACCESS PANELS. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR
- 16. PROVIDE CHROME PLATED COMBINATION COVER PLATE & CLEANOUT PLUG OR ACCESS PANEL FOR ALL WALL CLEANOUTS ZURN ZS-1469 SERIES C.O. OR OTHER APPROVED ACCESS PANEL.
- 17. DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL IN PIPING AND EQUIPMENT CONNECTIONS.
- 18. ISOLATE COPPER PIPE FROM HANGER OR SUPPORTS WITH ISOLATOR PAD. (HAIR FELT LINING).
- 19. ÀLL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING VOIDS BETWEEN PIPE &
- WALL/FLOOR SLEEVES WITH U.L. APPROVED FIRE/SMOKE/WATER SEALANT. 20. CONTRACTOR SHALL GUARANTEE ALL MATERIALS & WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) 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. 21. PROVIDE ACCESS PANELS FOR ALL CONCEALED VALVES AND ALL WATER HAMMER ARRESTERS. ACCESS PANELS IN RATED WALLS MUST MAINTAIN THE SAME RATING
- & MUST MATCH THE FINISH OF THE WALL IN WHICH IT IS INSTALLED. CONDENSATE DRAIN TO BE COPPER DRAIN, WASTE & VENT FITTINGS. INSULATE ALL CONDENSATE EXCEPT UNDERGROUND.
- 23. PROVIDE 1/2" TRAP PRIMER LINE FOR ALL FLOOR DRAINS FROM THE NEAREST PLUMBING FIXTURE OR PROVIDE SIOUX CHIEF #695 TRAP PRIMER.
- 24. NO COMBUSTIBLE MATERIAL TO BE USED IN MECHANICAL ROOMS OR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.



NAME	FIXTURE	MODEL #		ACCESSURIES		
<u>INAME.</u>	FIXTURE	MUDEL #		ACCESSURIES		
WC	WATER CLOSET (H.C. TANK)	CADET # 2386 ELONGATED WA (1.6 G.P.F.)	.010 TER SAVER	CHURCH OPEN FRONT SEAT, SUPPLY PIPE ANGLE STOP & 2 BOLT CAPS		
LAV	DROP—IN LAVATORY	VERIFY WITH AF	RCHITECT	VERIFY FAUCET WITH ARCHITECT 3/8" FLEXIBLE SUPPLY PIPES, MCGI ANGLE STOPS & ADJUSTABLE "P" TRAP WITH MCGUIRE 155WC DRAIN		
LAV-2	WALL HUNG LAVATORY	LUCERNE #035	5.012	RELIANT #2385.004 FAUCET, 3/8" FLEXIBLE SUPPLY PIPE, MCGUIRE ANGLE STOPS & ADJUSTABLE "P" TRAP WITH MCGUIRE 155WC DRAIN AND JOSAM 17100 FLOOR CARRIER. INSULATE DRAIN & SUPPLY PIPES WITH WHITE KIT, TRUEBRO LAVGUARD		
SH	SHOWER	SYMMONS #96-	-500-B30-LV	1/2" SUPPLY PIPES AND 2" FLOOR DRAIN. SHOWER TRAY AND STALL TO BE SELECTED BY ARCHITECT		
FIXTU	<u>RE</u>	WATER PIPE SIZE	NOMINAL SAN, SIZE	MAXIMUM FLOW RATES		
	CLOSET TYPE)	1/2"	3"	3" 1.6 GPF		
LAVAT	ORY	1/2"	1 1/4"	0.5 GPM		
SHOW	FR	1/2"	2"	3.0 GPM		





__ \overline{S} 0

CISI

REVISIONS THIS DESIGN AND THESE DRAWINGS ARE THE PROPERT OF BIRSE DESIGN INC. NO PART OF THIS WORK MAY BE BE REPRODUCED WITHOUT PRIOR WRITTEN FROM BIRSE DESIGN INC.

DRAWN BY GD

LOW VOLTAGE OUTLET DETAIL

NEW FIRE ALARM DEVICES ARE TO BE COMPATIBLE WITH EXISTING SYSTEM. PROVIDE ADDITIONAL POWER SUPPLIES AS REQUIRED. PROVIDE ADDITIONAL HORNS AND STROBES AS REQUIRED TO MEET AUDIBLE AND VISIBLE REQUIREMENTS OF NFPA 72, ADA, AND NFPA 101. VERIFY EXISTING POINT OF CONNECTION TO EXISTING SYSTEM.

FIRE ALARM LEGEND

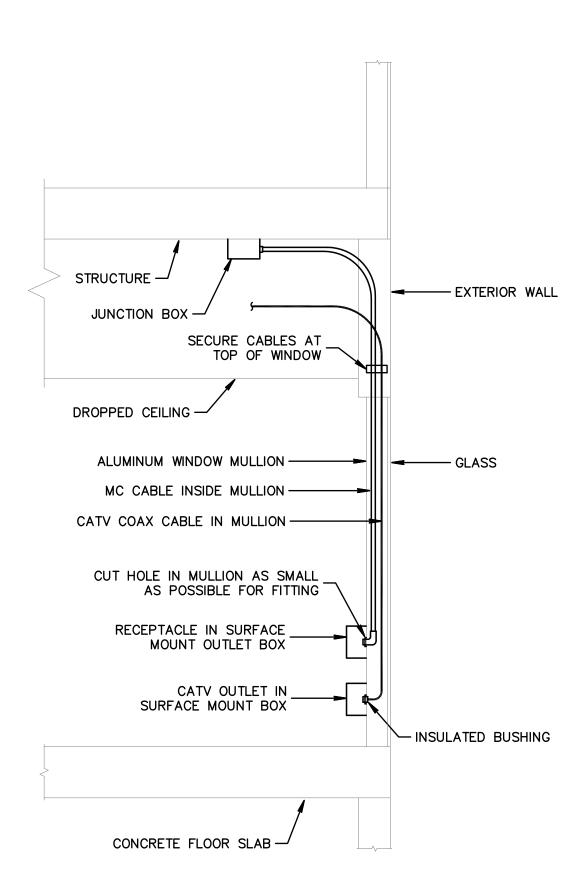
F MANUAL PULL STATION 48" AFF

WALL MOUNT HORN/STROBE 80" AFF TO BOTTOM

ADA COMPLIANT STROBE LIGHT ADA COMPLIANT S....

ACCORDANCE WITH FBC 11-4.28.3.

AUDIBLE ALARMS SHALL HAVE A MINIMUM LEVEL OF 15 DBA IN EXCESS OF THE AMBIENT SOUND LEVEL OF THE ROOM, AND SHALL OTHERWISE BE IN ACCORDANCE WITH FBC 11-4.28.2. VISUAL ALARMS SHALL HAVE A MINIMUM LEVEL OF 75 CANDELA AND SHALL OTHERWISE BE IN



OUTLET DETAIL AT EXTERIOR WALL NO SCALE

ELECTRICAL LEGEND

LIGHTING FIXTURE IDENTIFICATION

RECTANGULAR LIGHTING FIXTURE - AS NOTED

RECTANGULAR LIGHTING FIXTURE - EXISTING AS NOTED

ROUND LIGHTING FIXTURE

DIRECTIONAL LIGHTING FIXTURE

OH WALL MOUNTED LIGHTING FIXTURE

├── LINEAR STRIP LIGHTING FIXTURE

● EXIT LIGHT WITH EMERGENCY BATTERY BACKUP

EMERGENCY LIGHTING FIXTURE WITH BATTERY BACKUP

RECTANGULAR LIGHTING FIXTURE ON EMERGENCY POWER CIRCUIT.

ROUND LIGHTING FIXTURE ON EMERGENCY POWER CIRCUIT

DUPLEX RECEPT - 20 AMP (18" A.F.F.)

SINGLE RECEPT - 20 AMP (18" A.F.F.)

DUPLEX RECEPT MOUNTED ABOVE COUNTER - 20 AMP (42" A.F.F.)

O DUPLEX RECEPT FLUSH FLOOR MOUNTED - 20 AMP

SPECIAL PURPOSE RECEPT (18" A.F.F. - MATCH EQUIPMENT PROVIDED)

QUAD-PLEX RECEPT - 20 AMP (18" A.F.F.)

SINGLE POLE TOGGLE SWITCH, 48" AFF

 $\$_3$ 3-WAY TOGGLE SWITCH, 48" AFF

 $\$_{\mathtt{D}}$ slide type dimmer switch, wattage as required, 48" aff

JUNCTION BOXES

 $3\frac{100}{100}$ The fusible disconnect (switch poles, amps/fuses as shown)

\$m MOTOR RATED SWITCH (WITH OVERLOADS)

ELECTRICAL PANELBOARD

MOTOR LOAD

CIRCUIT HOME RUN TO PANELBOARD OR OTHER DEVICE AS INDICATED

CONDUIT CONCEALED

EXISTING CIRCUIT AS NOTED

E CAPPED CONDUIT

TELEVISION OUTLET (12" A.F.F.)

▼ TELEPHONE/DATA OUTLET (18" A.F.F.)

TEL/DATA DUTLET FLUSH FLOOR MOUNTED

EXISTING DUPLEX RECEPTACLE DUTLET BOX TO REMAIN.

▼ EXISTING TELEPHONE/DATA OUTLET BOX TO REMAIN

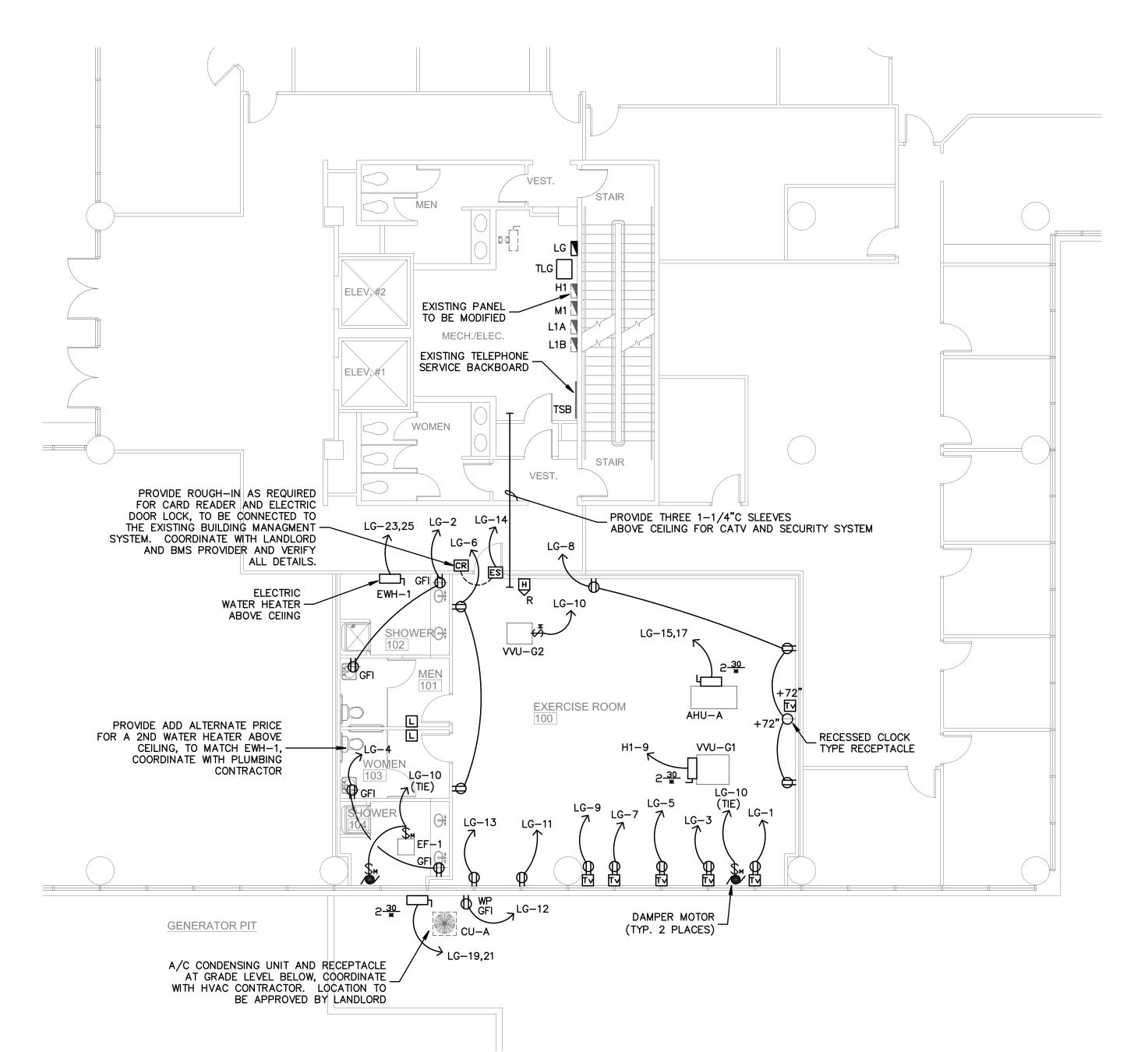
E EXISTING DEVICE TO REMAIN, UNLESS NOTED OTHERWISE

R EXISTING DEVICE, RELOCATED AS SHOWN

D EXISTING DEVICE TO BE DEMOLISHED OR RELOCATED

OCCUPANCY SENSOR WITH MANUAL SWITCH, HUBBELL LHMTS1, 48" AFF

O DCCUPANCY SENSOR, CEILING MOUNT, HUBBELL OMNI DT-2000



PROPOSED ELECTRICAL FLOOR PLAN

SCALE: 1/8" = 1'-0"

__ <u></u> 0

ROOM RCISE

REVISIONS THIS DESIGN AND THESE DRAWINGS ARE THE PROPERTY OF BIRSE DESIGN INC. NO PART OF THIS WORK MAY BE BE REPRODUCED WITHOUT PRIOR WRITTEN PERMISSION FROM BIRSE DESIGN INC.

DRAWN BY GD

PROJ.# 11-032

GENERAL ELECTRICAL NOTES

- DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT. CONFIRM WITH OWNERS REPRESENTATIVE.
- 2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE NFPA-70 (2008), THE LIFE SAFETY CODE NFPA-101 (2006), THE NATIONAL FIRE ALARM CODE NFPA-72 (2002), AND THE FLORIDA BUILDING CODE (FBC 2007 WITH 2009 SUPPLEMENTS).
- MINIMUM WIRE SIZE SHALL BE #12 A.W.G., EXCLUDING CONTROL WIRING. UNLESS OTHERWISE NOTED ALL CONDUCTORS SHALL BE COPPER WITH THWN
- 4. DUTLET BOXES SHALL BE SHEET STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET OR DAMP LOCATIONS AND SPECIAL ENCLOSURES AS REQUIRED FOR OTHER CLASSIFIED AREAS.
- 5. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK-MAKE, QUICK-BREAK, WITH ENCLOSURES AS REQUIRED BY EXPOSURE.
- 6. MOTOR STARTERS SHALL BE MANUAL OR MAGNETIC, WITH OVERLOAD RELAYS IN EACH HOT LEG.
- 7. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM, AND FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
- 8. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE LATEST EDITION OF THE N.E.C.
- 9. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE.
- 10. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. BE FULLY OPERABLE, AND ACCEPTED BY ENTHREERMAREMETER SYSTEM SHALL
- 11. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGESS OF CONSTRUCTION.
- 12. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
- 13. 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 THEREBY.
- 14. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILTY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
- 15. CONTRACTOR SHALL PAY FOR ALL PERMITS, FEES, INSPECTIONS, AND
- 16. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER AND TELEPHONE COMPANIES.
- 17. FURNISH AND INSTALL DISCONNECT SWITCHES AND WIRING FOR AIR CONDITIONING SYSTEM AS PER MANUFACTURERS RECOMMENDATIONS. CONTROLS ARE TO BE SUPPLIED BY AIR CONDITIONING CONTRACTOR AND CONNECTED BY ELECTRICAL CONTRACTOR.
- 18. ALL RACEWAYS UNDERGROUND SHALL BE A MINIMUM OF 3/4" CONDUIT.
- 19. ALL CIRCUIT BREAKERS, TWO AND THREE POLE, TO BE COMMON TRIP. NO TIE HANDLES, OR TANDEMS WILL BE ACCEPTED.
- 20. ALL FUSES , UNLESS NOTED ON DRAWING, SHALL BE CURRENT LIMITING (C.L.) RATED FOR 200,000 A.I.C.
- 21. ALL ELECTRICAL EQUIPMENT, DEVICES, WIRE, ETC., SHALL BE LISTED, FOR THE INTENDED USE, WITH UNDERWRITER'S LABORATORIES, INC. (UL), WHERE STANDARDS HAVE BEEN ESTABLISHED BY UL.
- 22. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN, ON SITE, A DETAILED AS-BUILT PLAN SHOWING ACTUAL INSTALLATIONS. THE CONTRACTOR IS TO PROVIDE A NEATLY DRAWN COMPREHENSIVE AS-BUILT SET OF PLANS UPON COMPLETION, WHICH ARE SUITABLE FOR SUBMISSION TO THE BUILDING DEPARTMENT AND THE OWNER.
- 23. ALL WIRING IS TO BE IN CONDUIT. METAL CLAD CABLES MAY BE USED FOR 30 AMP MAXIMUM, 120/208 VOLT WIRING WITHIN THE SUITE ONLY.

GENERAL DEMOLITION NOTES

TO BID TO DETERMINE ALL REQUIRED DEMOLITION.

CAUSE ANY DISRUPTION TO THESE OTHER SPACES.

OVER TO THE OWNER AT THE OWNER'S DISCRETION.

APPROVAL PRIOR TO DISPOSAL OF REMOVED MATERIAL.

UNLESS OTHERWISE NOTED. ALL EQUIPMENT, WIRING DEVICES, LIGHT FIXTURES. CONDUIT AND WIRE IN THE PROJECT AREA WHICH IS NOT INDICATED TO REMAIN, IS TO BE REMOVED. THE CONTRACTOR SHALL INVESTIGATE THE PROJECT AREA PRIOR

2. EXISTING CONDITIONS SHOWN ON THIS DRAWING ARE TAKEN FROM ORIGINAL DRAWINGS AND FIELD INVESTIGATION. ALL EXISTING CONDITIONS MUST BE

ALL REQUIRED DEMOLITION WHETHER SHOWN ON THE PLANS OR NOT.

4. ALL CONDUITS SERVING OTHER SPACES OR FLOORS, THAT RUN THROUGH THE

5. ALL ITEMS REMOVED UNDER THIS PROJECT SHALL BE DISPOSED OF OR TURNED

6. PROPERLY REMOVE AND DISPOSE OF ALL ELECTRICAL EQUIPMENT, CONDUIT AND

7. IT IS THE CONTRACTOR'S RESPONSIBLITY TO ENSURE THAT ALL CONDUITS, NEW OR EXISTING, WITHIN THE PROJECT AREA, ARE PROPERLY SUPPORTED AND PROVIDED

WITH BONDING BUSHINGS IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE.

WIRING WHICH IS TO BE REMOVED. CONSULT WITH OWNER AND OBTAIN THE OWNERS

3. DEMOLITION WORK IS NOT SPECIFICALLY IDENTIFIED ON THESE PLANS, AND MAY

PROJECT AREA SHALL REMAIN ACTIVE DURING CONSTRUCTION, SO AS NOT TO

BE DESCRIBED ON THE ARCHITECTS PLANS. THE CONTRACTOR IS RESPONSIBLE FOR

VERIFIED PRIOR TO BID. FIELD CONDITIONS SHALL GOVERN.

	KVA	KVA	POLE		**111.	KET I KKO	NO.		ND.		WINE	DUIT	POL		KVA
İ		1.5	20-1	1/2	12	TREADMILL	1		2	GYM MENS ROOM RECEPT.	12	1/2	20-	1 0.4	
Ī		1.5				TREADMILL	3		4	GYM WOMENS RECEPT.				0.4	
		1.2				STATIONARY BIKE	5		6	GYM RECEPTACLES				0.4	
		1.2				STATIONARY BIKE	7		8	GYM RECEPTACLES				0.5	
		1.0				GYM EQUIPMENT	9		10	VAV CONTROL/ EX. FAN				0.2	
		0,5				GYM EQUIPMENT	11			EXTERIOR RECEPT.				0.2	
		0,5	*	†	 	GYM EQUIPMENT	13		14	DOOR LOCK	†	<u> </u>		0.2	
$ 4\rangle$		1.1	15-2	1/2	12	AHU-A	15		16	SPARE					
						L	17		18						
		2.3	20-2	1/2	12	CU-A _	19	—	20	<u> </u>					
						L	21	—	22						
4		6.0	30-2	1/2	10	WATER HEATER	23	-	24						
						L	25		26						
		6.0				SPARE	27	-	28						
						L	29		30	•			<u> </u>		
		22.8												2.2	
						TOTAL DEMAND LOA	D:		25.	0 KVA = 69 AMPS					

PANEL LG

CKT. CKT.

REMARKS

DEM. K∨A	OTHER KVA	TRIP- POLE		WIRE	REMARKS	CKT.	CK		REMARKS	WIRE	CON- DUIT		THER	1
1.1		20-1			CORE LIGHTING	1	_	_	LIGHTING - SUITE 100			20-	<u>. </u>	2.
2.8		20-1			LIGHTING - SUITE 100	3	٦,	4	LIGHTING - SUITE 100					2.
2.8		20-1			LIGHTING - SUITE 100	5	1	5 ;	SUITE 100 INSTA-HOT				4.2	
1.7		20-1	1/2	12	GYM LIGHTING	7	1	3	LIGHTING - SUITE 100					2.
	5.0	30-1	1/2	10	VAV-G1 HEAT	9	1	0 :	SPARE					
						11	18	2 :	SUITE 103 LIGHTING					2.
	25.0	50-3	_	_	TRANSFORMER/PANEL LG	13	14	4 :	SUITE 106 LIGHTING					2.
						15	16	5 3	SUITE 106 LIGHTING			V		2.
		20-1			SPARE	17	18	3 :	SPACE			•		
		20-1			SPARE	19	2	0						
					SPACE	21	28	2						
						23	2,	4						
						25	26	5						
						27	28	3						
						29	3	0						
						31	38	0						
						33	34	4						
						35	36	5						
						37	38	3						
						39	4	0						
						41	48	2	<u> </u>					
8.4	30.0								25 = 31.5 KVA				4.2	16

WESTINGHOUSE WH

EXISTING PANEL

PANEL SCHEDULES KEYNOTES

(1) EXISTING CIRCUIT TO REMAIN AS IS.

CUTLER HAMMER CH

REMARKS

SERVICE: 120/208, 3ø, 4W

DEM. | OTHER | TRIP-|CON-|WIRE |

MOUNTING: SURFACE

POLES: 30

- (2) EXISTING CIRCUIT TO BE DEMOLISHED
- (3) PROVIDE NEW CIRCUIT BREAKER, MATCH EXISTING BREAKERS.
- (4) PROVIDE CONTACTOR AND CONNECTION TO BUILDING ENERGY MANAGEMENT SYSTEM FOR CONTROLS. VERIFY ALL DETAILS AND COORDINATE WITH THE BUILDINGS EMS SERVICE PROVIDER. THE CONTRACTOR IS RESPONSIBLE FOR A COMPLETE AND OPERATION CONTROL SYSTEM, INCLUDING ANY SOFTWARE PROGRAMMING MODIFICATIONS REQUIRED FOR THE EMS.

	LIGHTING POWER COMPLIANCE (PER TABLE 13-415.2.B, FBC CHAPTER 13)										
SPACE TYPE	TOTAL AREA (SQ.FT.)	ALLOWANCE PER SQ.FT.	SUB-TOTAL ALLOWANCE	DESIGN							
EXERCISE AREA AREAS	1,230	0.9	1.107	1,104							
RESTROOMS	400	0.9	360	350							
TOTALS			1,467	1,454							

MAIN BUS: 100 AMP

| WIRE | CON- | TRIP- | OTHER | DEM.

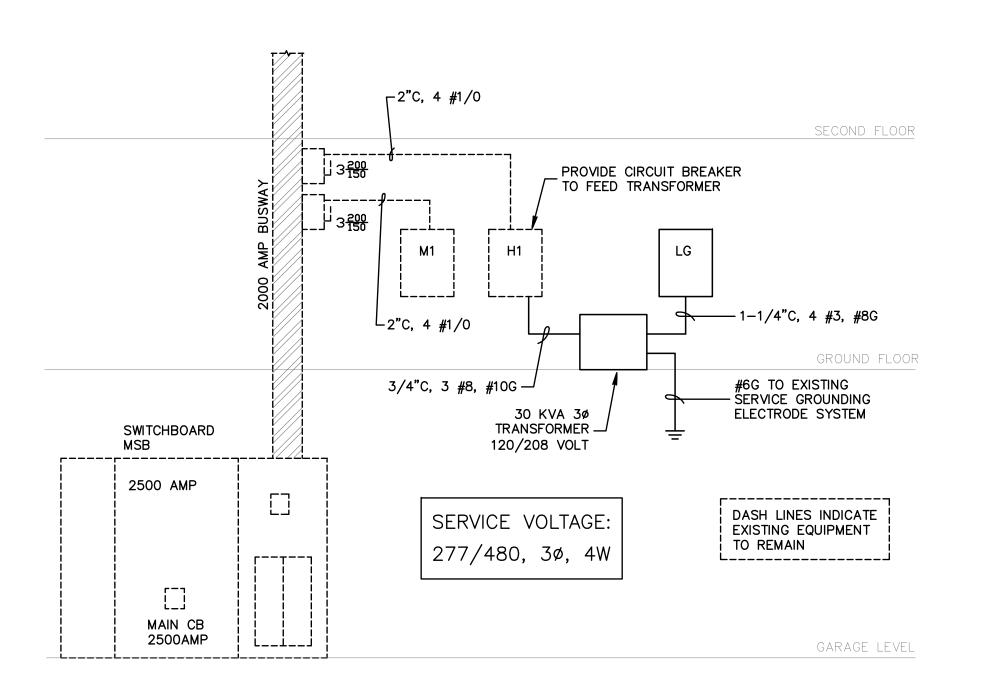
10K

100A CKT.BKR.

NEUTRAL: FULL

:2NIAM

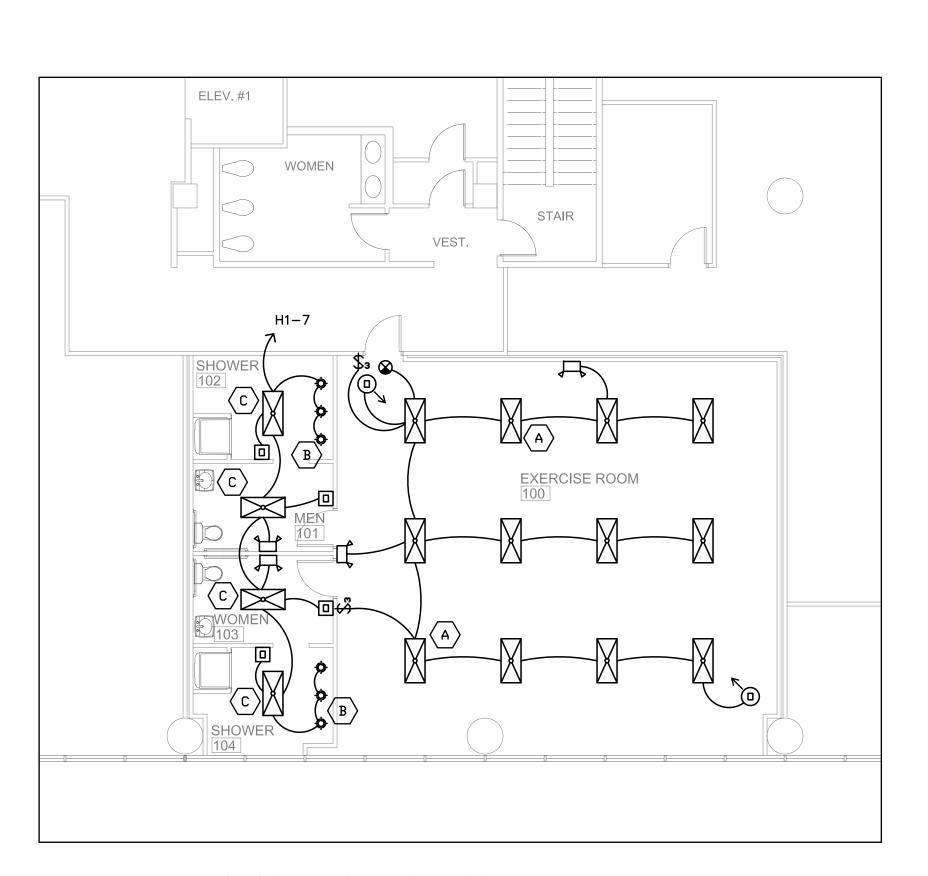
A.I.C.



PARTIAL POWER RISER DIAGRAM

				\ 								
	LIGHTING FIXTURE SCHEDULE											
MARK	TYPE	MOUNT	LAMP	VOLT	MANUFACTURER	CATALOG	NOTES					
A	PARABOLIC TROFFER	RECESSED	(3)F032 T8/35K	M∨	COLUMBIA	P4D24-332G-MA36- S-3EPU-GLR	92 WATTS MAXIMUM					
B	LENSED DOWN LIGHT	RECESSED	(1)13WTT 35K	120	PRESCOLITE	CFQ613EB-STF602CL	17 WATTS MAXIMUM					
(C)	LENSED TROFFER	RECESSED	(2)F032 T8/35K	M∨	COLUMBIA	JT824-232G-FA-A19- EU	62 WATTS					
8	EXIT LIGHT	SURFACE	BY MFGR.	M∨	DUAL LITE	LXURWE	1)2					
	EMERGENCY LIGHTING	SURFACE	BY MFGR.	M∨	DUAL LITE	LZ2	2					

- 1 PROVIDE SINGLE OR DUAL FACE, WALL OR CEILING MOUNT, AS SHOWN ON PLANS. CONNECT FIXTURES TO UNSWITCHED HOT LEG OF LOCAL EMERGENCY LIGHTING CIRCUIT.
- 2 PROVIDE BATTERY/INVERTER BACKUP FOR 90 MINUTES IN ACCORDANCE WITH NFPA REQUIREMENTS. CONNECT FIXTURES TO UNSWITCHED HOT LEG OF LOCAL LIGHTING CIRCUIT.



PROPOSED LIGHTING FLOOR PLAN

SCALE: 1/8" = 1'-0"



MAIN BUS: 225 AMP

KVA | KVA

2.8 (1

2.8

2.8

2.8 (1

2.8

2.8

4.2 | 16.8

__ \mathcal{O} \bigcirc

 $\overline{}$

ROOM

REVISIONS THIS DESIGN AND THESE DRAWINGS ARE THE PROPER OF BIRSE DESIGN INC. NO PART OF THIS WORK MAY BE E REPRODUCED WITHOUT ROM BIRSE DESIGN INC.

DRAWN BY GD

PROJ.# 11-032