EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY FLORIDA

SYMBOL LEGEND

MATERIAL SYMBOLS

EARTH
GRANULAR FILL
CONCRETE
CONCRETE MASONRY UNIT
BRICK
FINISHED WOOD
ROUGH WOOD (CONTINUOUS)
ROUGH WOOD (NOT CONTINUOUS)
PLYWOOD
ACOUSTICAL OR CERAMIC TILE
GUSB/PLASTER/ STUCCO/GROUT
RIGID INSULATION
FIRE SAFING/ COMP FILLER
BATT INSULATION
LATH
BIT DAMPROOFING

GENERAL SYMBOLS

DETAIL NUMBER 4 / SHEET REFERENCE A8.1 — DETAIL (SCALE: 1"=1'-0") — DETAIL TITLE
SECTION NUMBER 9 / SHEET REFERENCE A5.1 — BUILDING SECTION
SECTION NUMBER 14 / SHEET REFERENCE A9.1 — SECTION CUTS
NAME (NUMB) — ROOM NAME / ROOM NUMBER
12'-4" — FINISH FLOOR ELEVATION
101 — DOOR MARK
8 — INTERIOR ELEVATION
B — WINDOW MARK
2 / A — COLUMN REFERENCE AND GRID LINES
W3 — WALL TYPE MARK

ABBREVIATIONS

#	AT	FDN	FOUNDATION	OC	ON CENTER(S)
ACT	ACOUSTICAL TILE	FE	FIRE EXTINGUISHER	OD	OUTSIDE DIAMETER
AD	AREA DRAIN	FEC	FIRE EXTINGUISHER CABINET	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
AE	ARCHITECT/ENGINEER	FF	FINISHED FLOOR		
AFF	ABOVE FINISHED FLOOR	FHC	FIRE HOSE CABINET	OFOI	OWNER FURNISHED OWNER INSTALLED
AHU	AIR HANDLING UNIT	FIN	FINISH(ED)		
APPROX	APPROXIMATE	FIXT	FIXTURE	OFOR	OWNER FURNISHED CONTRACTOR ROUGH IN
ARCH	ARCHITECTURAL(E)	FL	FLOOR		
		FO	FACE OF	OH	OVERHEAD
BD	BOARD	FT	FOOT/FEET	OPH	OPPOSITE HAND
BIT	BITUMINUS	FTG	FOOTING	OPP	OPPOSITE
BLDG	BUILDING				
BLK	BLOCK	GA	GAGE/GAUGE	PL	PLATE
BLKG	BLOCKING	GALV	GALVANIZED	PLAM	PLASTIC LAMINATE
BM	BEAM	GL	GLASS/GLAZING	PR	PAIR
BOT	BOTTOM	GWB	GYPSUM WALL BOARD	PT	PRESSURE TREATED
BRG	BEARING	GYP	GYPSUM		
BRK	BRICK			QT	QUARRY TILE
BUR	BUILT UP ROOFING	HA	HANDICAP ACCESSIBLE		
		HDW	HARDWARE	R	RISER/RADIUS
CEM PL	CEMENT PLASTER	HM	HOLLOW METAL	RD	ROOF DRAIN
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	HR	HOUR	REC	RECESSED
		HT	HEIGHT/HIGH	REINF	REINFORCED(EXING)
CHEM	CHEMICAL	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	REQ	REQUIRED
CJ	CONTROL JOINT/ CONSTRUCTION JOINT			RES	RESILIENT
				REV	REVISE(D)(ION)
CL	CENTER LINE	ID	INSIDE DIAMETER	RM	ROOM
CLG	CEILING	IN	INCH	RO	ROUGH OPENING
CMU	CONCRETE MASONRY UNIT	INSUL	INSULATED(ION)		
COL	COLUMN	INT	INTERIOR	S	SOUTH
CONC	CONCRETE			SC	SOLID CORE
CONF	CONFERENCE	JT	JOINT	SECT	SECTION
CONT	CONTINUE(OUS)			SIM	SIMILAR
CPT	CARPET(ED)	L	LENGTH	SPEC	SPECIFICATION(S)
CT	CERAMIC TILE	LAV	LAVATORY	SQ	SQUARE
		LF	LINEAL FEET	SS	STAINLESS STEEL
DEMO	DEMOLISH(ION)			STRUCT	STRUCTURAL
DET	DETAIL			SYS	SYSTEM
DF	DRINKING FOUNTAIN	MAX	MAXIMUM		
DIA	DIAMETER	MECH	MECHANICAL	T	TREAD
DIM	DIMENSION	MET	METAL	THK	THICKNESS)
DIV	DIVISION	MFR	MANUFACTURER(S)	TO	TOP OF
DN	DOWN	MIN	MINIMUM	TYP	TYPICAL
DR	DOOR	MISC	MISCELLANEOUS		
DWG	DRAWING(S)			UC	UNDERCUT
		N	NORTH	UL	UNDERWRITERS LABORATORY
E	EAST	NA	NOT APPLICABLE	UON	UNLESS OTHERWISE NOTED
EA	EACH	NIC	NOT IN CONTRACT		
EJ	EXPANSION JOINT	NO	NUMBER	VCT	VINYL COMPOSITION TILE
EL	ELEVATION	NOM	NOMINAL	VERT	VERTICAL
ELEC	ELECTRIC(AL)	NTS	NOT TO SCALE	VTR	VENT THRU ROOF
ELEV	ELEVATOR			VWC	VINYL WALL COVERING
EQ	EQUAL				
EQUIP	EQUIPMENT			W	WEST/WIDTH
EWC	ELECTRIC WATER COOLER			W/	WITH
EXIST	EXISTING			W/O	WITHOUT
EXP	EXPOSED			WPT	WORK POINT
EXT	EXTERIOR				

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CODES REFERENCED IN THESE DOCUMENTS AND AS ADPOTED AND SUPPLEMENTED BY LOCAL REGULATIONS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL BUILDING PERMITS FROM THE LOCAL BUILDING DEPARTMENTS AS REQUIRED BY CITY/COUNTY REGULATIONS. FEES FOR SUCH PERMITS SHALL BE PAID BY THE CONTRACTOR AND A SET OF APPROVED DRAWINGS AND ORIGINAL PERMITS SHALL BE RETAINED ON SITE FOR THE DURATION OF THE PROJECT.

3. THE DESIGN INFORMATION SHOWN ON THE DRAWINGS PROVIDES OVERALL DIMENSIONAL PARAMETERS AND DESCRIBES ELEMENTS TO BE CONSTRUCTED. THE CONTRACTOR SHALL ADJUST DIMENSIONS AND DETAILS AS REQUIRED TO FIT EXISTING CONDITIONS. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED OF ALL PROPOSED MODIFICATIONS.

4. NO CHANGES TO THE INFORMATION SHOWN ON THE DRAWINGS SHALL BE MADE WITHOUT THE SPECIFIC WRITTEN APPROVAL OF THE ARCHITECT OR ENGINEER, AS APPICABLE.

5. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES ON THESE DOCUMENTS.

6. ALL EXTERIOR COMPONENTS SHALL HAVE FLORIDA APPROVAL NUMBERS.

7. EXTERIOR GLAZING SHALL BE IMPACT RATED WHEN REQUIRED BY THE LOCAL AHJ.

8. EXTERIOR DOORS SHALL BE IMPACT RATED WHEN REQUIRED BY THE LOCAL AHJ.

9. FIRE SPINKLER / FIRE ALARM IF REQUIRED SHALL BE DESIGNED BY OTHERS AS REQUIRED TO MEET FBC 2020, NFPA, & FLORIDA FIRE PREVENTION CODE WHEN REQUIRED BY THE LOCAL AHJ.

SHOP DRAWINGS

COPIES OF ALL SHOP DRAWINGS FOR STRUCTURAL OR LIFE SAFETY RELATED COMPONENTS SHALL BE SUBMITTED TO THE ARCHITECT & OWNER FOR APPROVAL.

THE CONTRACTOR SHALL SUBMIT DETAILED FABRICATION AND INSTALLATION DRAWINGS AND PRODUCT LITERATURE FOR THE FOLLOWING ITEMS. ARCHITECT REVIEW OF SHOP DRAWING IS FOR COMPLIANCE OF THE PRODUCT WITH THE DESIGN CONCEPTS DELINEATED IN THESE DOCUMENTS. THE CONTRACTOR AND/OR PRODUCT MANUFACTURER SHALL BE RESPONSIBLE FOR THE ACCURACY AND PERFORMANCE OF THE PRODUCT AND ITS COORDINATION WITH THE OTHER TRADES.

1. STRUCTURAL STEEL
2. METAL STUD FRAMING
3. ROOF TRUSSES, LVL, & PRE-ENGINEERED BEAMS
4. REINFORCING STEEL
5. CONCRETE DESIGN MIXES
6. WATERPROOF MEMBRANES
7. RAILINGS & HANDRAILS
8. ARCHITECTURAL PRE-CAST OR PRE-FORMED COLUMNS
9. APPLIED FOAM TRIM, WINDOW/DOOR HEADS, AND ARCHITECTURAL DETAILING
10. BATHROOM ACCESSORIES & MIRRORS
11. ALL FOOR, WALL , AND CEILING FINISHES
12. ALL CABINETRY
13. ELEVATORS
14. STAIRS AND HANDRAILS
15. ALL HEATING & VENTILATING EQUIPMENT
16. ELECTRICAL FIXTURES & EQUIPMENT
17. ALL PLUMBING FIXTURES
18. DOORS, WINDOWS, AND ALL HARDWARE
19. FIREPLACES
20. APPLIANCES

BUILDING DESIGN DATA

APPLICABLE CODES

2023 FLORIDA BUILDING CODE, BUILDING, 8TH EDITION
2023 FLORIDA BUILDING CODE, ACCESSIBILITY, 8TH EDITION
2023 FLORIDA BUILDING CODE, ENERGY CONSERVATION, 8TH EDITION
2023 FLORIDA BUILDING CODE, PLUMBING, 8TH EDITION
2023 FLORIDA BUILDING CODE, MECHANICAL, 8TH EDITION,
2023 FLORIDA BUILDING CODE, FUEL GAS, 8TH EDITION
FLORIDA FIRE PREVENTION CODE
NATIONAL ELECTRICAL CODE 2017
NFPA 101 LIFE SAFETY CODE 2020 W/ AMENDMENTS
FLORIDA STATUTES
FLORIDA ADMINISTRATIVE CODE
REFER TO OTHER DRAWINGS FOR OTHER APPLICABLE CODES

PROJECT DATA

METAL BUILDING - EQUIPMENT STORAGE AND OFFICE SPACE
TOTAL SF = 9,600 SF

NOTE:

THIS PROJECT IS A PRE-MANUFACTURED METAL BUILDING (PEMB). THE PEMB MANUFACTURER IS RESPONSIBLE FOR ALL STRUCTURAL DESIGN ELEMENTS INCLUDING WIND LOADING AND LATERAL BRACING, WALL AND ROOF FRAMING, ALL FRAMING ELEMENTS FOR WINDOW AND DOOR OPENINGS, INCLUDING THE OVERHEAD DOORS ETC. REFER TO STRUCTURAL DOCUMENTS FOR FOUNDATION DESIGN. THE PEMB SUPPLIER SHALL SUBMIT FULL SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER, ARCHITECT, AND THE LOCAL AHJ'S. THESE SHOP DRAWINGS SHALL INCLUDE ALL REACTIONS AND DESIGN PRESSURES FOR EXTERIOR COMPONENTS. THESE SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA.

PERFORMANCE STANDARDS

ALL MATERIALS, PRODUCTS AND THEIR INSTALLAITON SHALL MEET THE PRODUCT APPROVAL OF AND BE INSTALLED IN ACCORDANCE WITH THE STANDARDS ESTABLISHED BY THE FOLLOWING AGENCIES, AS APPICALBE:

ASTM AMERICAN SOCIETY OF TESTING MATERIALS
ACI - AMERICAN CONCRETE INSTITUE
AF&PA - AMERICAN FOREST & PAPER ASSOCIATION
AISC - AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AWI - AMERICAN WOODWORK INSTITUTE
AWPB - AMERICAN WOOD PERSERVATIVES BUREAU
ANSI - AMERICAN NATIONAL STANDARDS INSTITUTE
AAMA - ARCHITECTURAL ALUMINUM MANUFACTURER'S ASSOCIATION
FBC - FLORIDA BUILDING CODE
GA - GYPSUM ASSOCIATION
LSC - LIFE SAFETY CODE
NER - NATIONAL EVALUATION SERVICE INC
NFPA - NATIONAL FIRE RPOTECTION ASSOCIATION
NDU - NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION
OSHA - OCCKUPATIONAL SAFETY AND HEALTH ACT
SJI - STEEL JOIST INSTITUE
TCA - TILE COUNCIL OF AMERICA
UL - UNERWRITER'S LABORATORIES

NOTE:

ARCHITECT NOT RESPSONBLE FOR ANY CIVIL WORK, SITE WORK, LANDSCAPE DESIGN, FIRE SUPPRESSION SYSTEMS, OR ANY OTHER WORK NOT SPECIFICALLY ADDRESSED BY THESE DOCUMENTS.

INDEX OF DRAWINGS

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BIDDING DOCUMENTS
11.17.23

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DATE
DRAWN | REVIEWED
REVISIONS
NO. | DATE
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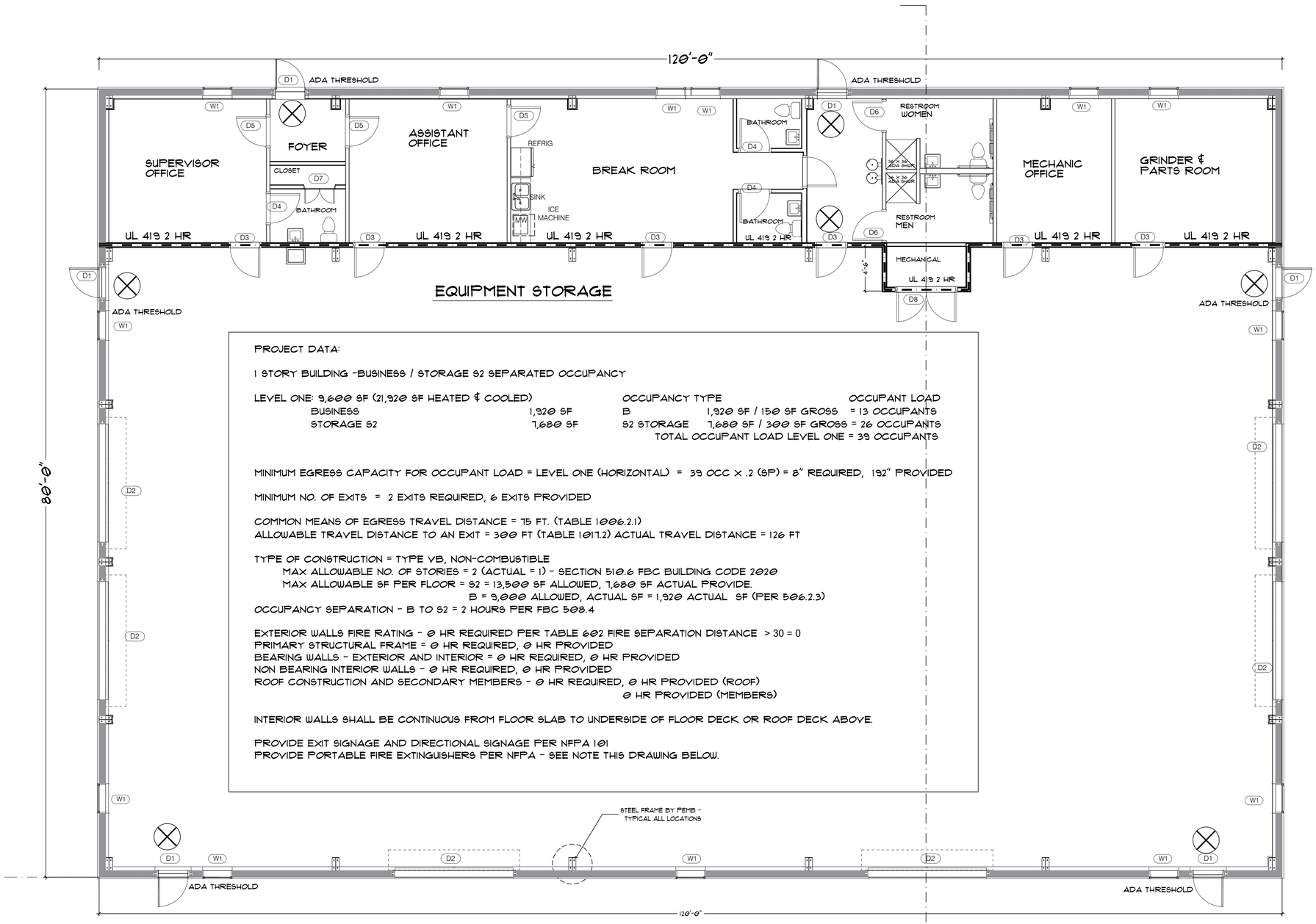
EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FLORIDA

STATE OF FLORIDA — RUSSELL A JOHNSON — AR0012593 — REGISTERED ARCHITECT

A - 100



PROJECT DATA:

1 STORY BUILDING -BUSINESS / STORAGE S2 SEPARATED OCCUPANCY

LEVEL ONE: 9,600 SF (21,920 SF HEATED & COOLED)		OCCUPANCY TYPE		OCCUPANT LOAD
BUSINESS	1,920 SF	B	1,920 SF / 150 SF GROSS	= 13 OCCUPANTS
STORAGE S2	7,680 SF	S2 STORAGE	7,680 SF / 300 SF GROSS	= 26 OCCUPANTS
		TOTAL OCCUPANT LOAD LEVEL ONE = 39 OCCUPANTS		

MINIMUM EGRESS CAPACITY FOR OCCUPANT LOAD = LEVEL ONE (HORIZONTAL) = 39 OCC X .2 (SF) = 8" REQUIRED, 192" PROVIDED

MINIMUM NO. OF EXITS = 2 EXITS REQUIRED, 6 EXITS PROVIDED

COMMON MEANS OF EGRESS TRAVEL DISTANCE = 75 FT. (TABLE 1006.2.1)
ALLOWABLE TRAVEL DISTANCE TO AN EXIT = 300 FT (TABLE 1017.2) ACTUAL TRAVEL DISTANCE = 126 FT

TYPE OF CONSTRUCTION = TYPE VB, NON-COMBUSTIBLE
MAX ALLOWABLE NO. OF STORIES = 2 (ACTUAL = 1) - SECTION 510.6 FBC BUILDING CODE 2020
MAX ALLOWABLE SF PER FLOOR = S2 = 13,500 SF ALLOWED, 7,680 SF ACTUAL PROVIDE.
B = 9,000 ALLOWED, ACTUAL SF = 1,920 ACTUAL SF (PER 506.2.3)
OCCUPANCY SEPARATION - B TO S2 = 2 HOURS PER FBC 508.4

EXTERIOR WALLS FIRE RATING - 0 HR REQUIRED PER TABLE 602 FIRE SEPARATION DISTANCE > 30 = 0
PRIMARY STRUCTURAL FRAME = 0 HR REQUIRED, 0 HR PROVIDED
BEARING WALLS - EXTERIOR AND INTERIOR = 0 HR REQUIRED, 0 HR PROVIDED
NON BEARING INTERIOR WALLS - 0 HR REQUIRED, 0 HR PROVIDED
ROOF CONSTRUCTION AND SECONDARY MEMBERS - 0 HR REQUIRED, 0 HR PROVIDED (ROOF)
0 HR PROVIDED (MEMBERS)

INTERIOR WALLS SHALL BE CONTINUOUS FROM FLOOR SLAB TO UNDERSIDE OF FLOOR DECK OR ROOF DECK ABOVE.

PROVIDE EXIT SIGNAGE AND DIRECTIONAL SIGNAGE PER NFPA 101
PROVIDE PORTABLE FIRE EXTINGUISHERS PER NFPA - SEE NOTE THIS DRAWING BELOW.

FIRE EXTINGUISHER NOTE: FIRE EXTINGUISHER TYPES, SIZES, AND LOCATIONS SHALL BE IN COMPLIANCE W/ APPLICABLE CODES AND AS APPROVED BY THE AUTHORITY HAVING JURISDICTION. PROVIDE COMPLETE SUBMITTAL FOR APPROVAL BY THE AHJ.

1 / A104

DESIGNATED EXITS

INDICATES 2 HR WALL ASSEMBLY UL 419 OR APPROVED EQUAL

LIFE SAFETY PLAN
FLOOR PLAN

SCALE: 3/16" = 1'-0"

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AR0012593
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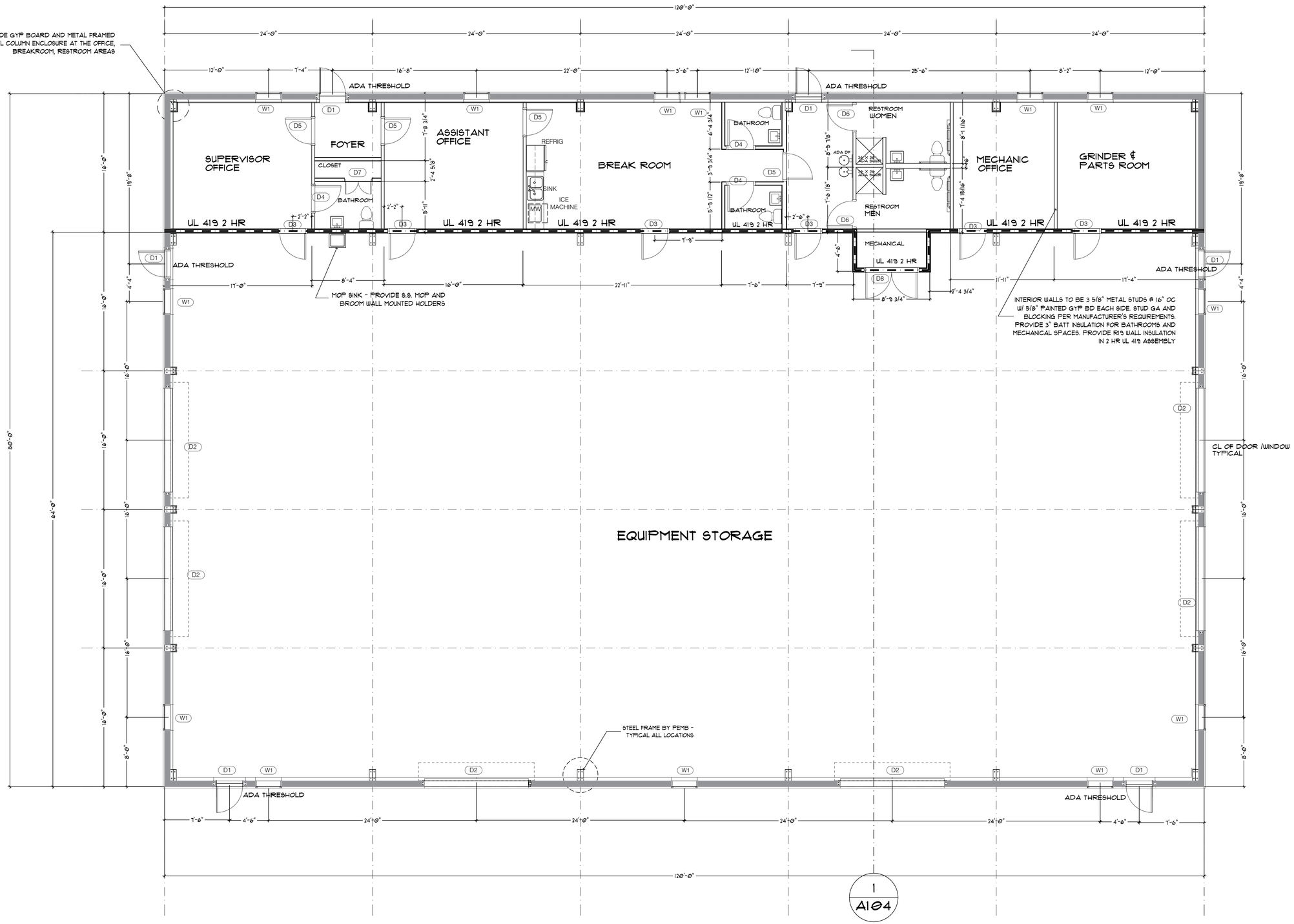
A - 101



INDICATES 2 HR WALL ASSEMBLY
UL 419 OR APPROVED EQUAL

FLOOR PLAN

SCALE: 3/16" = 1'-0"

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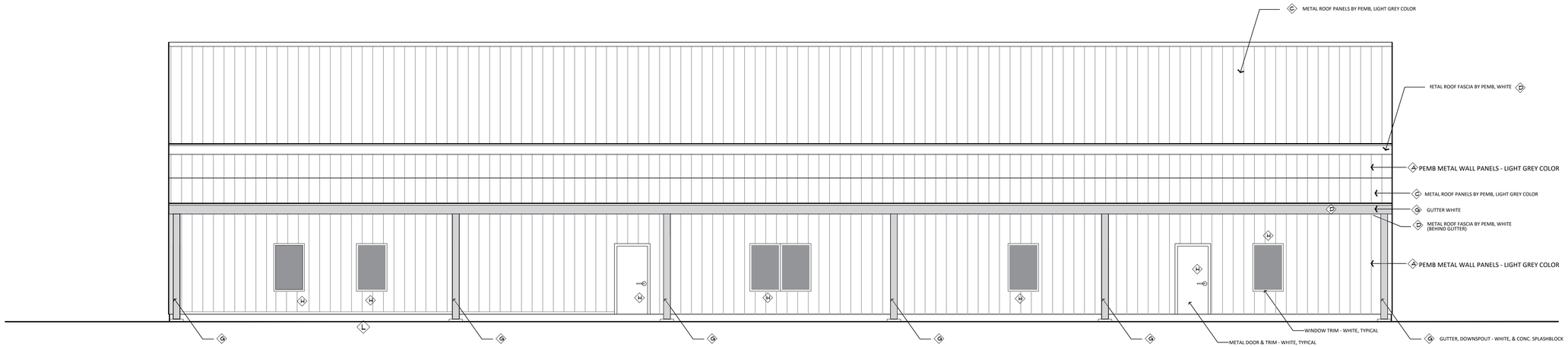
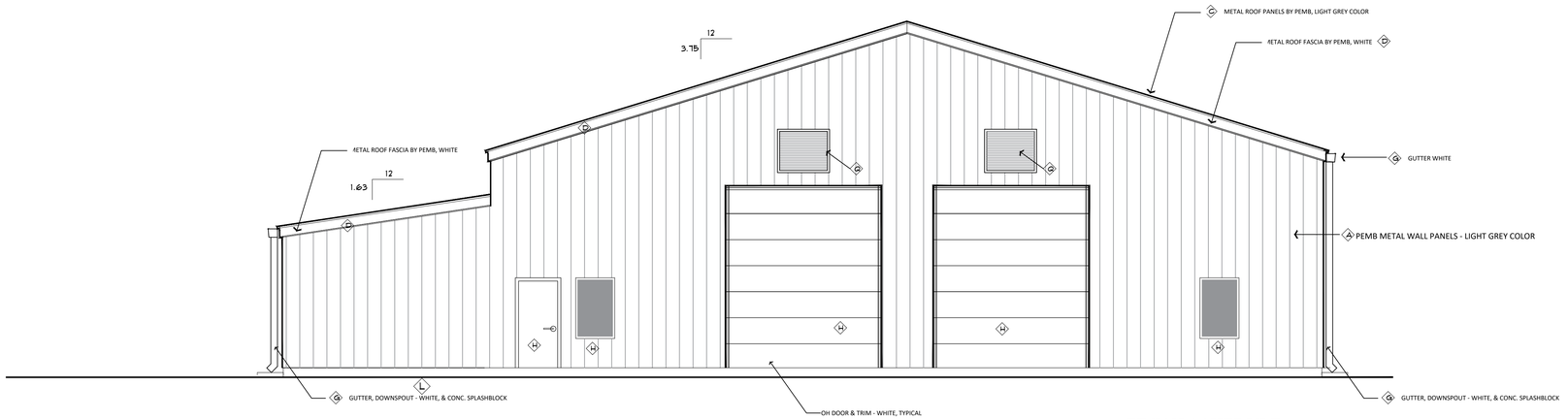
A - 101.5



FRONT ELEVATION



WINDOW SCHEDULE

CODE	DESCRIPTION
W1	3'-4" W X 4'-8" H SINGLE HUNG

NOTE: THE BASIS OF DESIGN FOR THE WINDOWS SHALL BE ALUMINUM FIXED "KAWNEER" SERIES 8400TL- FRAME COLOR WHITE AS SELECTED BY OWNER FROM MANUFACTURER'S STANDARD COLORS. APPROVED EQUALS ARE ACCEPTED IF APPROVED BY OWNER.

LEGEND

- A — PEMB METAL WALL PANELS - LIGHT GREY COLOR
- B — STEEL PEMB FRAME
- C — METAL ROOF PANELS
- D — ROOF FASCIA BY PEMB, WHITE
- E — PEMB Z-GIRTS
- F — WALL INSULATION W/ VAPOR RETARDER - IN COMPLIANCE W/ FBC ENERGY CODE - PROVIDE OWNER WITH A DEDUCT ALTERNATE TO DELETE THE WALL INSULATION IN THE EQUIPMENT STORAGE AREA ONLY - ONLY THE THREE EXTERIOR WALLS - NOT THE 2 HR WALL SEPARATION
- G — GUTTER, DOWNSPOUT, & CONC. SPLASHBLOCK
- H — WINDOW OR DOOR - WHITE TRIM
- I — ROOF INSULATION W/ VAPOR RETARDER - IN COMPLIANCE W/ FBC ENERGY CODE -
- J — 8 FT H METAL PANELS BY PEMB IN STORAGE AREA
- K — CEILING - 5/8" TYPE X PAINTED GYP BD, COORDINATE W/ OWNER ON 6" 18 GA CEILING JOISTS @ 16" OC. TYPICAL ALL SPACES EXCEPT MAIN STORAGE AREA BRACE TO STRUCTURE ABOVE AS REQUIRED
- L — CONCRETE FOUNDATION - REFER TO STRUCTURAL
- M — 3-5/8" METAL STUDS (6" @ PLUMBING WALLS IF REQUIRED) @ 16" OC W/ 5/8" TYPE X PAINTED GYP BD METAL STUD GAUGE, BRACING, ETC SHALL BE PER SIGNED AND SEALED SHOP DRAWINGS FROM THE METAL STUD MANUFACTURER PROVIDE 3.5" BATT INSULATION ALL INTERIOR WALLS THAT ABUTT THE MAIN STORAGE AREA AND ALL MECHANICAL AND BATHROOMS. PROVIDE 2 HOUR WALL ASSEMBLY WHERE INDICATED ON PLAN
- N — CONCRETE FLOOR SLAB - REFER TO STRUCTURAL, PROVIDE VAPOR BARRIER
- O — 2 HOUR WALL ASSEMBLY
- P — PROVIDE UL APPROVED FIRE CAULKING SYSTEM MATCHING FIRE RATING OF WALL @ STEEL BEAM PENETRATIONS
- Q — LOUVERS - COORDINATE W/ MECHANICAL DRAWINGS
- R — PROVIDE UL APPROVED 2HR ASSEMBLY UL I 506 OR APPROVED EQUAL (2) LAYERS 5/8" TYPE ULIX GYP BD, LOOSELY LAID ON TOP OF MIN 6" D STEEL JOISTS @16" OC AND (3) LAYERS TYPE ULIX GYP BD ATTACHED TO THE BOTTOM OF THE STEEL CEILING JOISTS.

RIGHT SIDE ELEVATION

FINISH SCHEDULE

INTERIOR WALLS -
OFFICES / BREAK ROOMS / RESTROOMS ETC. PAINTED GYP BD, MOISTURE RESISTANT GYP BD IN RESTROOMS. PROVIDE PRIME COAT, (2) COATS OF FINISH, COLOR PER OWNER, EPOXY PAINT IN RESTROOMS, MECH SPACES, AND SURFACES EXPOSED TO STORAGE AREA REQUIRING PAINTING.

STORAGE AREA - 8 FT HIGH METAL PANELS BY PEMB MANUFACTURER - EXPOSED METAL STRUCTURAL AND OTHER FRAMES TO BE PAINTED AFTER REMOVING ALL RUST - USE PRIMER AND PAINT DESIGNED FOR METAL - SUBMIT PAINT TO OWNER FOR APPROVAL

INTERIOR DOOR FRAMES TO RECEIVE TNEMEC "GRAY COURT" #GR22 OR APPROVED EQUAL

CEILINGS - PAINTED GYP BD, 1 COAT PRIMER 2 COATS FINISH - USE EPOXY PAINT ON MOISTURE RESISTANT GYP BD IN RESTROOMS. (EXCEPT STORAGE AREA)

FLOORING - (OFFICES, BREAK ROOM, BATHROOMS, HALLWAY, ETC) VINYL COMPOSITION TILE EQUAL TO TARKETT VCT II, COLOR BY OWNER FROM MANUFACTURER'S STANDARD COLORS
BASE - EQUAL TO MERCER 1/8" 4" VINYL COVE BASE - FROM STANDARD COLORS

STORAGE AREA FLOORS - SEALED CONCRETE W/ A NON-SLIP FINISH - BASIS OF DESIGN SHALL BE TS210 BY "CONCRETE SEALERS USA" OR AN APPROVED EQUAL. INSTALL AND FINISH CONCRETE SURFACE PER MANUFACTURER'S SPECIFICATIONS.
(REFER TO ROOM FINISH NOTES)

NOTE: FINISHES SHALL BE COORDINATED WITH OWNER PRIOR TO PURCHASING AND CONSTRUCTION. SUBMIT SAMPLES FOR OWNER APPROVAL. APPROVED ALTERNATES ARE ACCEPTABLE.

NOTE: PROVIDE 3" SOUND BATT IN BATHROOM AND MECHANICAL ROOM WALLS.

DOOR SCHEDULE

SYMBOL	TYPE	SIZE	DESCRIPTION	REMARKS
D1	EXTERIOR DOOR	3-0 W, 6-8 H	PAINTED GALV STEEL, HM FRAME MINERAL FIBER INSULATION	W/ CLOSERS & ADA COMPLIANT LOCKSETS/HANDLES KEYED ON THE EXTERIOR SIDE W/ PRIVACY TURN BUTTON ON INTERIOR SIDE
D2	OH DOOR - ELECTRIC	12-0 W, 14-0 H	PAINTED GALV STEEL, HM FRAME	SEE NOTE BELOW FOR BASIS OF DESIGN
D3	PERSONEL DOOR, INTERIOR	3-0 W, 6-8 H	PAINTED METAL, HM FRAME MINERAL FIBER INSULATION	1.5 HOUR FIRE RATED UL ASSEMBLY W/ CLOSERS & ADA COMPLIANT LOCKSETS/HANDLES, SMOKE GASKET, DOOR SWEEP KEYED ON THE EXTERIOR SIDE W/ PRIVACY TURN BUTTON ON INTERIOR SIDE
D4	BATHROOM DOOR	3-0 W, 6-8 H	PAINTED METAL, HM FRAME INSULATED	W/ CLOSERS & ADA COMPLIANT LOCKSETS/HANDLES PRIVACY PUSH BUTTONS, INSIDE PUSH BUTTON LOCKS OUTSIDE LEVER PROVIDE COAT HOOK
D5	OFFICE DOOR, INTERIOR	3-0 W, 6-8 H	PAINTED METAL, HM FRAME INSULATED	ADA COMPLIANT LOCKSETS/HANDLES, SMOKE GASKET, DOOR SWEEP KEYED ON THE EXTERIOR SIDE W/ PRIVACY TURN BUTTON ON INTERIOR SIDE
D6	RESTROOM DOOR	3-0 W, 6-8 H	PAINTED METAL, HM FRAME INSULATED	ADA COMPLIANT LOCKSETS/HANDLES PROVIDE COAT HOOK PRIVACY PUSH BUTTON ON INSIDE. INSIDE BUTTON LOCKS OUTSIDE LEVER. TURNING INSIDE LEVER RELEASES INDIDE BUTTON AND UNLOCKS LOCKSET.
D7	CLOSET DOOR	(2)1-6 W, 6-8 H	PAINTED WOOD, WD FRAME	ADA COMPLIANT LOCKSETS/HANDLES
D8	MECH CLOSET	(2) 3-0 W, 6-8 H	PAINTED METAL, HM FRAME MINERAL FIBER INSULATION	1.5 HOUR FIRE RATED UL ASSEMBLY W/ ASTRAGAL W/ CLOSERS & ADA COMPLIANT LOCKSETS/HANDLES, SMOKE GASKET, DOOR SWEEP KEYED ON THE EXTERIOR SIDE W/ PRIVACY TURN BUTTON ON INTERIOR SIDE

ROOM FINISH NOTES:
1. ALL FLOOR FINISHES SHALL BE IN COMPLIANCE W/ FBC ACCESSIBILITY CHAPTER 3. EXPOSED / POLISHED CONCRETE SHALL HAVE SLIP-RESISTANT FINISHES IN COMPLIANCE W/ FBC ACCESSIBILITY AND THE CONCRETE POLISHING COUNCIL. ALL FLOORING SHALL MEET OR EXCEED THE FLOOR DYNAMIC COEFFICIENT OF FRICTION (DCOF) AS PER ACCESSIBILITY CODES FOR NON-SLIP / SLIP RESISTANT STANDARDS.
2. ALL GYP BD SHALL BE 5/8" MIN. THICKNESS. ALL EXPOSED GYP BD SHALL BE PAINTED. MOISTURE RESISTANT GYP BD SHALL BE "FROROC" BY CERTAINEED OR APPROVED EQUAL. FOR ALL MOISTURE RESISTANT CEILINGS, PROVIDE 2 X BLOCKING @ 12" OC E.W.
3. INTERIOR WALLS AND CEILINGS IN THE RESTROOMS SHALL BE PAINTED AS FOLLOWS SHALL BE PAINTED WITH EPOXY PAINT AND PRIMER. INSTALL PER THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
4. CHANGES IN LEVEL: ALL FLOOR CHANGES IN LEVEL SHALL MEET FBC 2010 ACCESSIBILITY CODE. VERTICAL CHANGES IN LEVEL BETWEEN 1/4" HIGH MAX ARE PERMITTED TO BE VERTICAL . CHANGES IN LEVEL BETWEEN 1/4" HIGH AND 1/2" HIGH MAX SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2 CHANGES IN LEVEL GREATER THAN 1/2" HIGH SHALL BE RAMPED AND SHALL COMPLY W/ SECTIONS 405 & 406.

DOOR & WINDOW NOTES:
1. REFER TO STRUCTURAL NOTES FOR WIND PRESSURES - COMPONENTS AND CLADDING NOTES
2. PROVIDE DOOR AND WINDOW SUBMITTALS FOR OWNER APPROVAL.
3. ALL EXTERIOR HARDWARE TO BE STAINLESS STEEL, COMMERCIAL GRADE HARDWARE
4. ALL HARDWARE TO BE COMMERCIAL GRADE 1.
5. ALL EXTERIOR COMPONENTS SHALL BE A COMPLETE WEATHER TIGHT ASSEMBLY AND SHALL BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS AND RECOMMENDATIONS.
6. COORDINATE DOOR KEYING WITH OWNER.
7. ALL DOOR THRESHOLDS SHALL BE ADA COMPLIANT

NOTE: THE BASIS OF DESIGN FOR THE OVERHEAD DOORS SHALL BE ROLLING STEEL DOOR MODEL 610 AS MANUFACTURED BY "OVERHEAD DOOR COMPANY", STANDARD GALVANIZED STEEL CURTAIN , WHITE, INSULATED, ELECTRIC OPERATION WITH CYLINDER LOCKS. FRAME TO BE COLOR WHITE AS SELECTED BY OWNER FROM MANUFACTURER'S STANDARD COLORS. APPROVED EQUALS ARE ACCEPTABLE IF APPROVED BY OWNER .

ELEVATIONS

SCALE: 3/16" = 1'-0"

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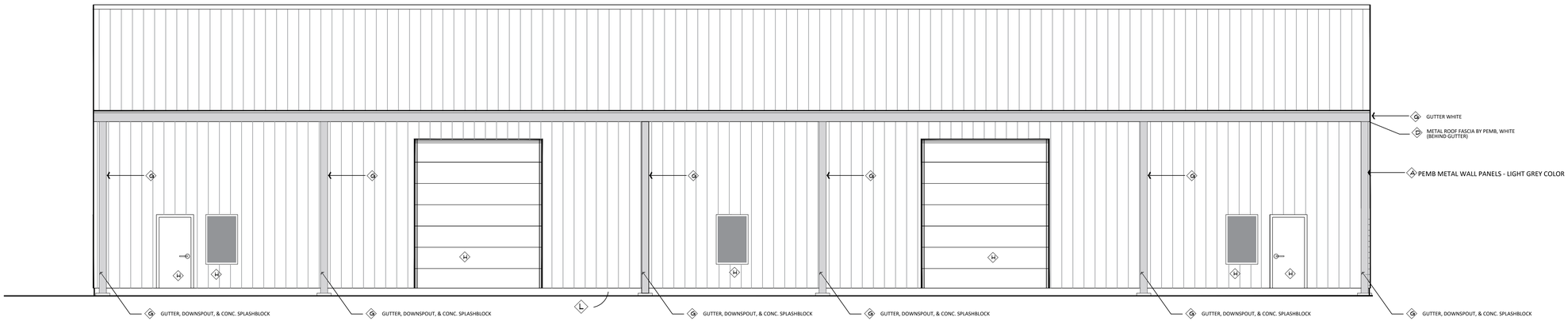
ARCHITECTURE
850 630 4483

DATE
DRAWN
REVIEWED
REVISIONS
NUM DATE
PROJECT #

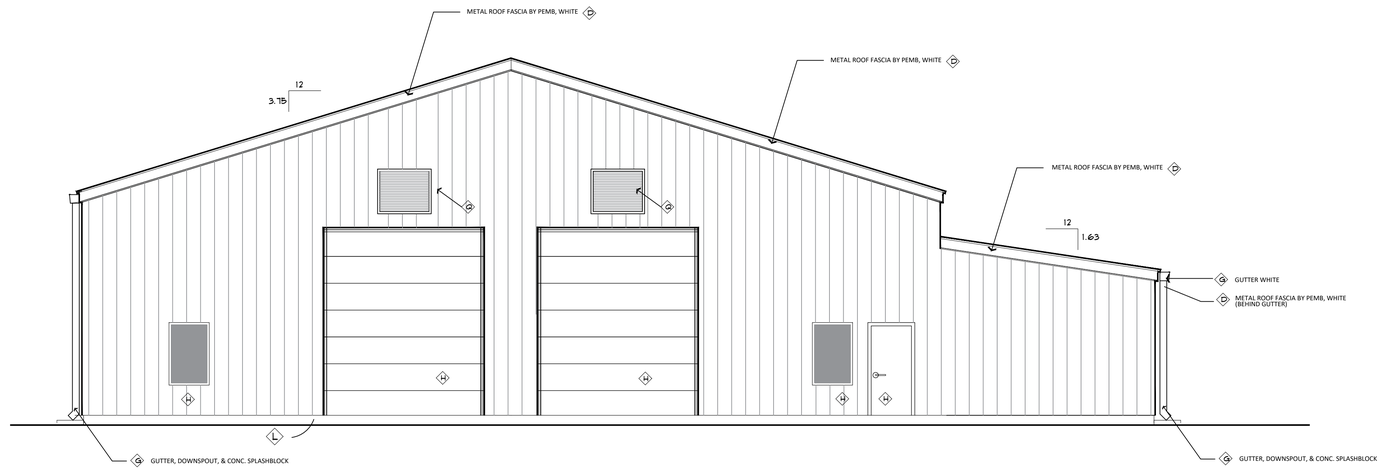
EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FLORIDA

STATE OF FLORIDA
RUSSELL A JOHNSON
AR0012593
REGISTERED ARCHITECT

A - 102



REAR ELEVATION



LEFT SIDE ELEVATION

INSULATION SYSTEM

1. INSULATION SYSTEM SHALL BE "SIMPLE SAVER SYSTEM" DOUBLE LAYER W/ OSHA COMPLIANT FALL PROTECTION OR APPROVED EQUAL
2. INSULATION SHALL BE IN COMPLIANCE W/ FBC 2023 ENERGY CODE FOR METAL BUILDING, CLIMATE ZONE 2, ALL OTHER CATEGORY.
3. PROVIDE ROOF AND WALL INSULATION PER TABLE C402.1.3 FOR THE STORAGE PORTION OF THE FACILITY.
4. PROVIDE A DEDUCTIVE ALTERNATE FOR DELETING THE WALL INSULATION IN THE EXTERIOR WALLS OF THE STORAGE PORTION OF THE FACILITY.

TABLE C402.1.3 OPAQUE THERMAL ENVELOPE

CLIMATE ZONE	1		2	
	All other	Group R	All other	Group R
Insulation entirely above roof deck	R-20ci	R-25ci	R-25ci	R-25ci
Metal building[a, b]	R-19 + R-11 LS	R-19 + R-11 LS	R-19 + R11 LS	R-19 + R-11 LS
Attic and other	R-38	R-38	R-38	R-38
Mass	R-5.7ci[c]	R-5.7ci[c]	R-5.7ci[c]	R-7.6ci
Metal building	R-13+ R-6.5ci	R-13 + R-6.5ci	R13 + R-6.5ci	R-13 + R-13ci

LEGEND

- A — PEMB METAL WALL PANELS - LIGHT GREY COLOR
- B — STEEL PEMB FRAME
- C — METAL ROOF PANELS
- D — ROOF FASCIA BY PEMB, WHITE
- E — PEMB Z-GIRTS
- F — WALL INSULATION W/ VAPOR RETARDER - IN COMPLIANCE W/ FBC ENERGY CODE - PROVIDE OWNER WITH A DEDUCT ALTERNATE TO DELETE THE WALL INSULATION IN THE EQUIPMENT STORAGE AREA ONLY - ONLY THE THREE EXTERIOR WALLS - NOT THE 2 HR WALL SEPARATION
- G — GUTTER, DOWNSPOUT, & CONC. SPLASHBLOCK
- H — WINDOW OR DOOR - WHITE TRIM
- I — ROOF INSULATION W/ VAPOR RETARDER - IN COMPLIANCE W/ FBC ENERGY CODE -
- J — 8 FT H METAL PANELS BY PEMB IN STORAGE AREA
- K — CEILING - 5/8" TYPE X PAINTED GYP BD, COORDINATE W/ OWNER ON 6" 18 GA CEILING JOISTS @ 16" OC. TYPICAL ALL SPACES EXCEPT MAIN STORAGE AREA BRACE TO STRUCTURE ABOVE AS REQUIRED
- L — CONCRETE FOUNDATION - REFER TO STRUCTURAL
- M — 3-5/8" METAL STUDS (6" @ PLUMBING WALLS IF REQUIRED) @ 16" OC W/ 5/8" TYPE X PAINTED GYP BD METAL STUD GAUGE, BRACING, ETC SHALL BE PER SIGNED AND SEALED SHOP DRAWINGS FROM THE METAL STUD MANUFACTURER PROVIDE 3.5" BATT INSULATION ALL INTERIOR WALLS THAT ABUTT THE MAIN STORAGE AREA AND ALL MECHANICAL AND BATHROOMS. PROVIDE 2 HOUR WALL ASSEMBLY WHERE INDICATED ON PLAN
- N — CONCRETE FLOOR SLAB - REFER TO STRUCTURAL, PROVIDE VAPOR BARRIER
- O — 2 HOUR WALL ASSEMBLY
- P — PROVIDE UL APPROVED FIRE CAULKING SYSTEM MATCHING FIRE RATING OF WALL @ STEEL BEAM PENETRATIONS
- Q — LOUVERS - COORDINATE W/ MECHANICAL DRAWINGS
- R — PROVIDE UL APPROVED 2HR ASSEMBLY UL I 506 OR APPROVED EQUAL (2) LAYERS 5/8" TYPE ULIX GYP BD, LOOSELY LAID ON TOP OF MIN 6" D STEEL JOISTS @16" OC AND (3) LAYERS TYPE ULIX GYP BD ATTACHED TO THE BOTTOM OF THE STEEL CEILING JOISTS.

ELEVATIONS

SCALE: 3/16" = 1'-0"

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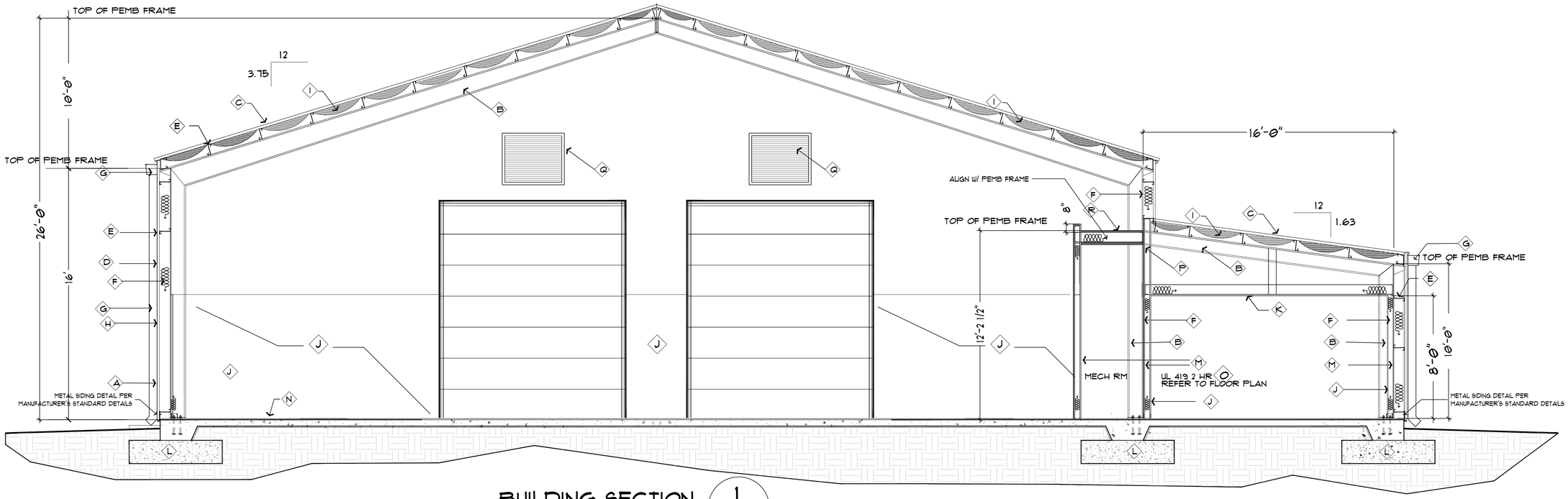

BUILDING SECTION 1 / A104

LEGEND

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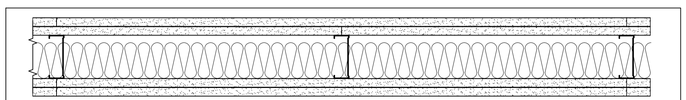
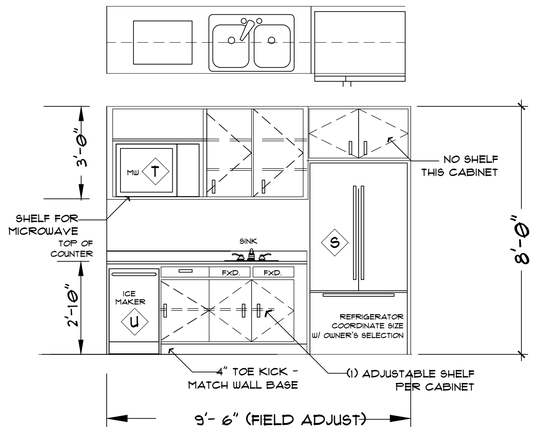
APPLIANCE SCHEDULE:
COORDINATE W/ OWNER FOR FINAL SELECTIONS.
APPROVED EQUALS ARE ACCEPTABLE

- S — GE 27.8 cu ft FRENCH DOOR REFRIGERATOR w/ Ice Maker Stainless Steel Model #PFE28KYNFS
- T — GE Profile 2.2 cu. ft. Countertop Sensor MICROWAVE OVEN Stainless Steel Model # PES7227SLSS
- U — EDGESTAR IB250SS 15" wide 20 lb Built-In ICE MAKER Stainless Steel Model # IB250SS



DEMISING WALL - U419 OR APPROVED EQUAL

1. 3 5/8 " METAL STUDS - @ 16" OC - GAUGE AND BLOCKING PER MANUFACTURER'S REQUIREMENTS - 25 GA MIN.
2. (2) LAYERS OF 5/8 " SHEETROCK FIRECODE CORE PANELS EACH SIDE OF WALL - PROVIDE R19 INSULATION.
3. PROVIDE UL APPROVED FIRE RATED ASSEMBLY AT ALL VOIDS ¢ PENETRATIONS



BREAK ROOM CABINET ELEVATIONS

SCALE: NTS

NOTE:
1. COORDINATE CABINET DESIGN WITH OWNER - SUBMIT SHOP DRAWINGS FOR OWNER APPROVALS PRIOR TO PURCHASE / CONSTRUCTION OF CABINETS.
2. CABINETS TO BE PLASTIC LAMINATE OVER 3/4" PLYWOOD.
3. HARDWARE TO BE STAINLESS STEEL, COMMERCIAL GRADE

BUILDING SECTION
NTS

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BATHROOM ACCESSORY PRODUCT SELECTION SCHEDULE

NOTE: Specified products listed are for design intent/quality control, approved equals are accepted as approved by owner. Submit complete shop drawings and specs for owner review and approval.

COAT HOOK Bobrick B-6707 satin finished stainless steel finished single utility/coat hook.

GB; Bobrick B-6806.99 series peened satin stainless steel finished grab bars for accessible toilet size 42" L side wall, 36" L back wall

Mirror - Bobrick B-292 1830 seried welded satin stainless steel finish framed mirror with 5" shelf, 18" x 30".

PTC; Bobrick B-262 classic series satin stainless steel finished surface mounted paper towel cabinet for folded paper.

SDISP, Bobrick B-2111 classic series surface mounted soap dispensers with satin stainless steel finish.

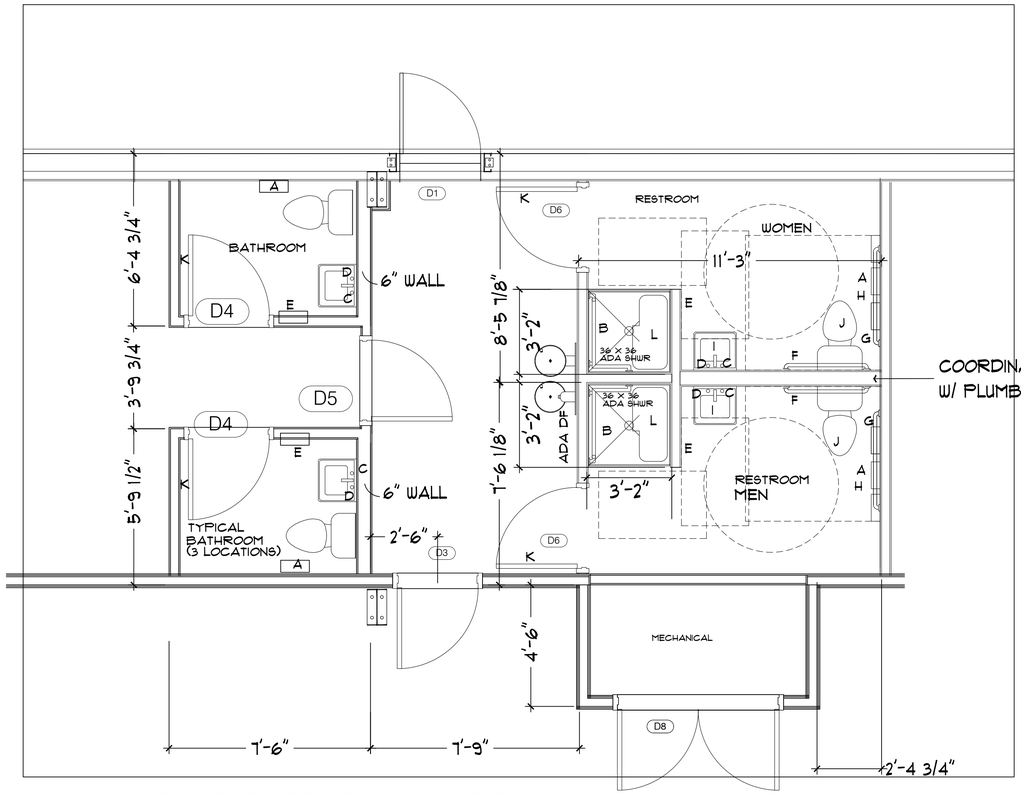
TPH; Bobrick B-6867 classic series surface mounted satin stainless steel finish two roll toilet paper holder.

ADA COMPLIANT LAV (exposed piping shall be insulated per ada requirements)

ADA COMPLIANT WATER CLOSET -

ADA COMPLIANT WALL MOUNTED URINAL - kohler Steward Hybrid K-5244-ET-0 or owner approved equal

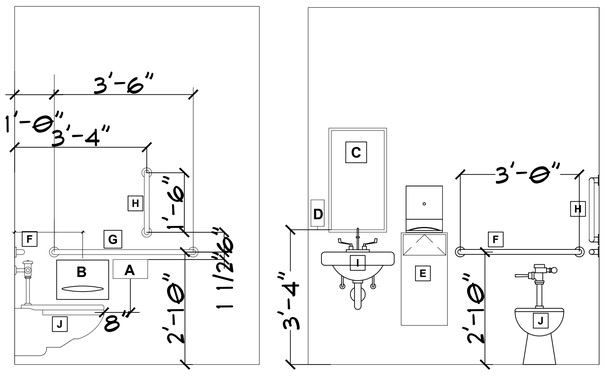
Bobrick B 2260 satin stainless steel floor standing waste receptacle



COORDINATE WALL THICKNES W/ PLUMBING DRAWINGS (MIN. 6")

ENLARGED RESTROOM FLOOR PLAN

3/8" = 1'-0"



BATHROOM - MOUNTING HEIGHTS

TOILET ACCESSORIES

A TOILET TISSUE DISPENSER

B ADA SHWR GRAB BARS

C ADA MIRROR

D SOAP DISPENSER

E PAPER TOWEL DISPENSER & WASTE RECEPTACLE

F 36" ADA GRAB BAR

G 42" ADA GRAB BAR

H 18" VERTICAL ADA GRAB BAR

I ADA LAVATORY

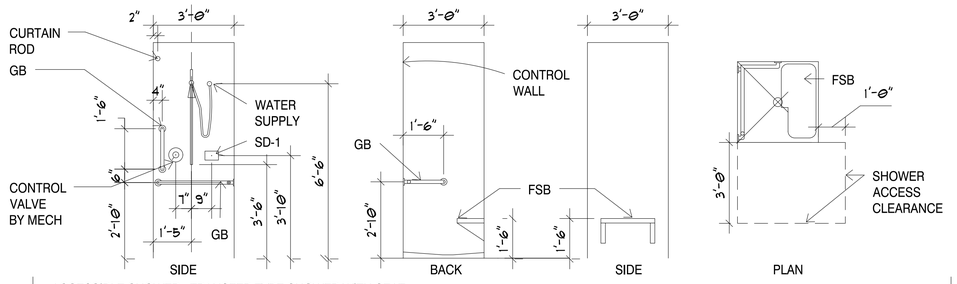
J ADA WC

K COAT HOOK, S.S.

L ADA FOLDING SEAT

NOTES:

1. COORDINATE TOILET ACCESSORIES WITH OWNER. SUBMIT FULL SHOP DRAWINGS / CUT SHEETS FOR OWNER APPROVAL DURING BIDDING.
2. COORDINATE MOUNTING HEIGHTS OF ACCESSORIES WITH MANUFACTURER'S DATA FOR ADA COMPLIANCE.



ACCESSIBLE SHOWER - TRANSFER TYPE SHOWER WITH SEAT

1. 36" X 36" CLEAR ACCESSIBLE TRANSFER TYPE SHOWER. DIMENSIONS ARE ABSOLUTE CLEAR INSIDE INCLUDING FINISHES.
2. PROVIDE HAND HELD SHOWER WITH SLIDE BAR, ADJUSTABLE MECHANISE AND BE OPERABLE WITH ONE HAND WITHOUT TIGHT GRASPING OR TWISTING OF THE WRIST. MAX. 5 LB FORCE TO OPERATE.
3. GB BLKG TO BE DESIGNED FOR 250 LB LAT. AND DEAD LOADS.
4. HAND HELD SHOWER MUST HAVE A NON-POSITIVE SHUT OFF AND A HOSE THAT IS 59" LONG MIN.

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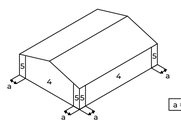
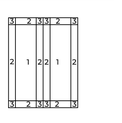
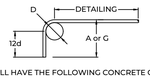






STRUCTURAL GENERAL NOTES

ABBREVIATIONS

AB	ANCHOR BOLT
ADDL	ADDITIONAL
ALT	ALTERNATE
ALUM	ALUMINUM
ARCH	ARCHITECTURAL or ARCHITECT
B/	BOTTOM OF
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOS	BOTTOM OF STEEL
BRG	BEARING
B/S	BOTTOM SIDE
BTM or (B)	BOTTOM, "BOT" SIM
BTW	BETWEEN
CB	CARRIAGE BOLT
CFS	COLD FORMED STEEL
CIP	CAST IN PLACE
C.J.	CONTROL JOINT
CL or (℄)	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
C.O.	CASED OPENING
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUE or CONTINUOUS
CSJ	CONSTRUCTION JOINT
CTR	CENTERED, "CNTR'd" SIM
DET	DETAIL
DBL	DOUBLE
DIA or (ø)	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIR	DIRECTION
D.L.	DEAD LOAD
DN	DOWN
DWG	DRAWING
DWL	DOWEL
EA	EACH
E.E.	EACH END
E.F.	EACH FACE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EMBED	EMBEDDED or EMBEDMENT
EOS	EDGE OF SLAB
E.G.	EXISTING GRADE
E.S.	EACH SIDE
EQ	EQUAL
E.W.	EACH WAY
EX	EXISTING
EXPB	EXPANSION BOLT
EXT	EXTERIOR
F.F.	FAR FACE
FFE	FINISHED FLOOR ELEVATION
F.G.	FINISHED GRADE
FIN	FINISH
FL	FLOOR
FLG	FLANGE
FND	FOUNDATION
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FP	FULL PENETRATION
F/S	FAR SIDE
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRADE BEAM
GDR	GIRDER
GP	GUSSET PLATE
HAS	HEADED ANCHOR STUD
HD	HOLDOWN
HDG	HOT DIP GALVANIZED
HDR	HEADER
HK	HOOK
HORZ	HORIZONTAL
HSB	HIGH STRENGTH BOLT
H.S.S.	HEADED SHEAR or "NELSON" STUD
HSS	HOLLOW STL SECTION or TUBE
I.F.	INSIDE FACE
IN	INCH OR INCHES
INT.	INTERIOR
INV	INVERT
JST	JOIST
JT	JOINT
K	KIP (1,000 POUNDS)
LB	POUNDS
L.E.	LEFT END
L.L.	LIVE LOAD
LLD	LONG LEG DOWN
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG	LONGITUDINAL
LVL	LAMINATED VENEER LUMBER
LWC	LIGHT WEIGHT CONCRETE
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MFGR	MANUFACTURER
MID or (M)	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
M.R.D.	METAL ROOF DECK
MTL	METAL
MTRL	MATERIAL
N.F.	NEAR FACE
NOM	NOMINAL
NO.	NUMBER OR #
N/S	NEAR SIDE
NS	NON-SHRINK
N.T.S.	NOT TO SCALE
NWC	NORMAL WEIGHT CONCRETE
O.C.	ON CENTER, "C.C." SIM
O.D.	OVERALL DIM. "O/O" SIM
O.F.	OUTSIDE FACE
OPP	OPPOSITE
OVS	OVERSIZED
PCC	PRECAST CONCRETE
PEN	PENETRATION
PERP	PERPENDICULAR
P.L.	POINT LOAD
PL	PLATE
PSL	PARALLEL STRAND LUMBER
PT	POINT
P.T.	PRESSURE TREATED or POST-TENSION
P.U.	RIGHT END
REINF	REINFORCING
REF	REFERENCE
RET	RETURN
REQ	REQUIRED
R.L.L.	ROOF LIVE LOAD
R.O.	ROUGH OPENING
SC	SLIP CRITICAL
SCHED	SCHEDULE
S.D.N.	STRUCTURAL DESIGN NOTES
SIM	SIMILAR
SOG	SLAB ON GRADE
S.E.	STUD PACK
SPECS	SPECIFICATIONS
SQ	SQUARE
SS	STAINLESS STEEL, "S.S." SIM
STAG	STAGGERED
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STR	STRUCTURAL, "STRUCT" SIMILAR
S.W.	SHEAR WALL
SYM	SYMMETRICAL
T or (T)	TOP
T&B	TOP AND BOTTOM
T&S	TEMPERATURE & SHRINKAGE REINF.
T/	TOP OF
T/S	TOP SIDE
TDR	THREADED ROD
TEMP.	"T&S" FOR REINF, ELSE TEMPORARY
THK	THICK OR THICKNESS
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE, "U.N.O." SIM
UWA	UNDER WALL ABOVE, "U.W.A." SIM
VERT	VERTICAL
W/	WITH
WF	WIDE FLANGE
WP	WORKING POINT
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

1. GENERAL NOTES:

1.1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH PROJECT SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR OPENINGS, DEPRESSIONS, EQUIPMENT WEIGHTS AND LOCATIONS, EMBEDDED ITEMS AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

1.2. DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

1.3. NO STRUCTURAL MEMBER OR COMPONENT SHALL BE CUT, NOTCHED, OR OTHERWISE ALTERED UNLESS APPROVED IN WRITING BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS INCURRED BY THE ENGINEER OF RECORD FOR REVIEW OF ANY SUCH DEVIATIONS.

1.4. DO NOT SCALE DRAWINGS.

1.5. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, AND TIEDOWNS.

1.6. DETAILS LABELED "TYPICAL DETAILS" ON THE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. THE APPLICABILITY OF THE DETAIL TO ITS LOCATION ON THE DRAWINGS CAN BE DETERMINED BY THE TITLE OF DETAIL. SUCH DETAILS SHALL APPLY WHETHER OR NOT THEY ARE REFERENCED AT EACH LOCATION. QUESTIONS REGARDING APPLICABILITY OF TYPICAL DETAILS SHALL BE DETERMINED BY THE ENGINEER OF RECORD.

1.7. THE GENERAL CONTRACTOR SHALL COMPARE THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, CIVIL AND STRUCTURAL DRAWINGS AND REPORT ANY DISCREPANCIES BETWEEN EACH SET OF DRAWINGS AND WITHIN EACH SET OF DRAWINGS TO THE ARCHITECT AND ENGINEER OF RECORD PRIOR TO THE FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.

1.8. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, AND DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, SEQUENCE AND SAFETY. THE ENGINEER DOES NOT HAVE CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

1.9. THE REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR ALSO SHALL BE RESPONSIBLE FOR MEANS, METHOD, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.

1.10. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF ATLAS ENGINEERING AND CONSULTING, LLC IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHALL NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK.

1.11. ALL STRUCTURES REQUIRE PERIODIC MAINTENANCE TO EXCEED LIFE SPAN AND TO ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. A PLANNED PROGRAM OF MAINTENANCE SHALL BE ESTABLISHED BY THE OWNER. THIS PROGRAM SHALL INCLUDE ITEMS SUCH AS, BUT NOT LIMITED TO, PAINTING OF STRUCTURAL STEEL, PROTECTIVE COATINGS FOR CONCRETE, SEALANTS, CAULKED JOINTS, EXPANSION JOINTS, CONTROL JOINTS, SPALLS AND CRACKS IN CONCRETE, AND PRESSURE WASHING OF EXPOSED STRUCTURAL ELEMENTS EXPOSED TO SALT ENVIRONMENT OR OTHER HARSH CHEMICALS.

1.12. STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR THE DESIGN OF STEEL STAIRS, HANDRAILS, CURTAIN WALL/WINDOW WALL SYSTEMS, COLD-FORMED STEEL FRAMING, OR OTHER SYSTEMS NOT SHOWN IN THE STRUCTURAL DOCUMENTS. SUCH SYSTEMS SHALL BE DESIGNED, FURNISHED, AND INSTALLED AS REQUIRED BY OTHER PORTIONS OF THE CONTRACT DOCUMENTS.

1.13. ALL CONSTRUCTION SHALL CONFORM TO THE FLORIDA BUILDING CODE 7TH EDITION (2020). REFERENCE TO OTHER CODES OR STANDARD SPECIFICATIONS REFER TO THE LATEST EDITION OF SUCH CODES OR SPECIFICATIONS, UNLESS STATED OTHERWISE.

1.14. NO PROVISIONS HAVE BEEN MADE FOR VERTICAL OR HORIZONTAL EXPANSION EXCEPT AS SHOWN ON CONTRACT DOCUMENTS.

1.15. FINISH FLOOR ELEVATION (FIRST FLOOR) OF 0"-0" IS USED AS A REFERENCE ELEVATION. SEE CIVIL DRAWINGS FOR ACTUAL ELEVATION.

1.16. THE USE OF REPRODUCTIONS OF THESE CONTRACT DOCUMENTS AND USE OF CAD FILES BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS IS PROHIBITED UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM ENGINEER OF RECORD.

1.17. IN THE EVENT THAT THE STRUCTURAL CONTRACTS DRAWINGS AND SPECIFICATIONS CONFLICT ON INFORMATION, THE STRUCTURAL CONTRACT DRAWINGS SHALL SUPERSEDE THE SPECIFICATIONS.

2. CODE DESIGN:

2.1. STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE.

2.2. GRAVITY LOADS

2.2.1. UNIFORM FLOOR LIVE LOADS (REDUCED AS ALLOWED BY THE BUILDING CODE):

ATTICS W/O STORAGE	10 PSF
ATTICS W/ STORAGE	20 PSF
SLEEPING AREAS	30 PSF
ROOMS (OTHER THAN SLEEPING)	40 PSF
BALCONIES	40 PSF
GARAGES	40 PSF
STAIRS	40 PSF

2.2.2. UNIFORM ROOF LIVE LOADS (REDUCED AS ALLOWED BY THE BUILDING CODE):

ROOF	20PSF

PONDING AND DRIFT EFFECTS HAVE BEEN INCLUDED IN DESIGN.

2.3. WIND LOADS (ASCE 7-16):

BASIC WIND SPEED = 134 MPH (INTERPOLATED VALUE)
STRUCTURAL RISK CATEGORY = II
WIND EXPOSURE CATEGORY = B
ENCLOSURE CLASSIFICATION = ENCLOSED
INTERNAL PRESSURE COEFFICIENT = 0.18 +/-

COMPONENTS AND CLADDING (PER ASD)						
ROOF: (LOADING IN PSF)	ZONE 1 (INTERIOR)		ZONE 2 (EDGE)		ZONE 3 (CORNER)	
TRIBUTARY AREA (SQFT)	(+)	(-)	(+)	(-)	(+)	(-)
10	12.21	34.13	12.21	45.09	12.21	59.19
20	11.13	29.35	11.13	38.94	11.13	50.70
100	9.60	18.23	9.60	24.63	9.60	31.00
WALLS: (LOADING IN PSF)	ZONE 4 (INTERIOR)		ZONE 5 (EDGE/CORNER)			
TRIBUTARY AREA (SQFT)	(+)	(-)	(+)	(-)		
10	18.48	20.04	18.48	24.74		
20	17.64	19.21	17.64	23.07		
100	15.71	17.28	15.71	19.21		

a = 8.00 ft

2.4. FLOOD DESIGN DATA:

FLOOD ZONE = X
BFE = N/A
PANEL NO = 12131C0260G

2.5. ROOF RAIN LOAD DESIGN DATA:

RAIN LOAD = 5 PSF
RAIN INTENSITY (*i*) = 4.5 IN/HR

3. FOUNDATIONS:

3.1. THE FOUNDATIONS ARE DESIGNED FOR AN ANTICIPATED ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF ON COMPACTED FILL IF GEOTECHNICAL INVESTIGATION HAS NOT BEEN CONDUCTED.

3.2. REGARDLESS OF WHETHER OR NOT A GEOTECHNICAL INVESTIGATION IS PERFORMED, NO WARRANTIES, EXPRESSED OR IMPLIED, ARE MADE BY ATLAS ENGINEERING AND CONSULTING, LLC FOR THE PERFORMANCE OF THE FOUNDATION.

3.3. AT A MINIMUM, SITE PREPARATION WORK SHALL INCLUDE:

3.3.1. STRIPPING AND GRUBBING OF THE BUILDING FOOTPRINT PLUS A MARGIN OF 5 FEET AROUND THE BUILDING, REMOVING ALL ORGANIC MATERIALS.
3.3.2. PROOF ROLLING THE BUILDING SITE TO LOCATE ANY UNFORESEEN SOFT AREAS. ANY SOFT AREAS SHALL BE\ EXCAVATED AND REPLACED WITH CLEAN FILL. A DENSITY OF AT LEAST 95% FOR A DEPTH OF 2 FEET IS REQUIRED UNDER THE BUILDING FOOTPRINT.
3.3.3. ALL FILL SHALL BE CLEAN SAND AND FREE OF ORGANIC MATERIALS. COMPACT FILL IN 12 INCH (UNCOMPACTED THICKNESS) LIFTS TO A MINIMUM OF 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY VALUE.
3.3.4. EXCAVATIONS FOR FOUNDATIONS SHALL BE COMPACTED TO 95% FOR A DEPTH OF AT LEAST 2 FEET BELOW THE BOTTOM OF THE FOUNDATION.
3.3.5. DEWATERING MAY BE REQUIRED TO ACHIEVE THE REQUIRED COMPACTION VALUES, AND IF USED, SHOULD DRAW DOWN THE WATER LEVEL TO AT LEAST 2 FEET BELOW THE BOTTOM OF THE EXCAVATION.

3.4. SLABS ON GRADE SHALL BE PLACED OVER A 15 MIL, CLASS "B" VAPOR RETARDER. VAPOR RETARDER SHALL BE LAPPED A MINIMUM OF 6", OR AS RECOMMENDED BY THE MANUFACTURER (WHICHEVER IS GREATER) AND TAPED AT ALL JOINTS. ALL PUNCTURES IN THE VAPOR RETARDER SHALL BE REPAIRED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. ALL PENETRATIONS THROUGH THE VAPOR RETARDER (COLUMNS, PLUMBING, CONDUITS, ETC) SHALL BE SEALED PER MANUFACTURER'S WRITTEN INSTRUCTIONS. VAPOR RETARDER SHALL BE CONTINUOUS UNDER WALL FOUNDATIONS OR SEALED TO EXTERIOR WALLS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

4. CONCRETE:

4.1. CONCRETE SHALL BE PLACED AND CURED ACCORDING TO ACI STANDARDS AND SPECIFICATIONS.

4.2. UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL BE NORMAL WEIGHT AND HAVE THE FOLLOWING MINIMUM 28 DAY COMPRESSIVE STRENGTHS:

4.2.1.	FOUNDATIONS & SLAB-ON-GRADE	3,000 PSI
4.2.2.	STRUCTURAL SLABS	4,000 PSI
4.2.3.	CIP BEAMS, COLUMNS & WALLS	4,000 PSI
4.2.4.	EXTERIOR RETAINING WALLS	4,000 PSI

4.3. SUBMIT PROPOSED MIX DESIGN WITH RECENT FIELD CYLINDER OR LAB TESTS FOR REVIEW PRIOR TO USE. MIX SHALL BE UNIQUELY IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION. MIX SHALL MEET THE REQUIREMENTS OF ASTM C33 FOR COARSE AGGREGATE.

4.4. CONCRETE SHALL COMPLY WITH THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED.

4.5. THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED ONE AND ONE HALF (1-1/2) HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY THAN THAT STATED ABOVE, THE CONCRETE SHALL BE DISCARDED. IT SHALL BE THE RESPONSIBILITY OF THE TESTING LAB TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE CONTRACTOR OF ANY NONCOMPLIANCE WITH THE ABOVE.

4.6. CALCIUM CHLORIDES SHALL NOT BE UTILIZED; OTHER ADMIXTURES MAY BE USED ONLY WITH THE APPROVAL OF THE ENGINEER.

4.7. CONCRETE MIX DESIGNS SHALL INCLUDE A WRITTEN DESCRIPTION INDICATING WHERE EACH PARTICULAR MIX IS TO BE PLACED WITHIN THE STRUCTURE.

4.8. CONDUITS, PIPES AND SLEEVES SHALL BE PLACED AND SPACED IN ACCORDANCE WITH ACI 318, 20.6.

4.9. CONCRETE DESIGN MIX SUBMITTALS SHALL INCLUDE TESTED, STATISTICAL BACK-UP DATA AS PER 26.4.4 OF ACI 318.

4.10. CONCRETE SLABS ON GRADE SHALL BE REINFORCED WITH 6x6 W1.4xW1.4 STEEL MESH OR SYNTHETIC FIBERS AT A MINIMUM RATE OF 3.0 LBS/CY, OR AS RECOMMENDED BY THE FIBER MANUFACTURER FOR CONTROL OF TEMPERATURE AND SHRINKAGE/CRACKING, WHICHEVER IS GREATER. UNLESS NOTED OTHERWISE.

4.11. WHEN WATER-BASED ADHESIVE ARE BEING USED ON CONCRETE SURFACES, THE CONTRACTOR SHALL VERIFY THAT THE WATER CONTENT OF THE CONCRETE IS WITHIN THE ALLOWABLE RANGE BEFORE INSTALLATION.

4.12. CHAMFER OR ROUND ALL EXPOSED CORNERS A MINIMUM OF 3/4".

5. REINFORCING STEEL

5.1. SHALL BE ASTM A615 GRADE 60 DEFORMED BARS, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAM AND PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS.

MINIMUM LAP SPLICE LENGTH (IN.) - 3000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
FOOTINGS (HORIZ.)	21	23	29	37	50	-
VERT. DOWELS	22	29	36	43	63	72
MINIMUM LAP SPLICE LENGTH (IN.) - 4000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
BEAMS/SLABS	-	-	-	-	-	-
- TOP BARS	22	29	36	43	63	72
- OTHER	21	21	26	31	39	51
COLUMNS	16	18	19	22	37	45
C.I.P. WALLS	-	-	-	-	-	-
- VERT. (1 MAT)	21	21	22	25	39	51
- VERT. (2 MATS)	16	18	19	22	34	43
- HORIZONTAL	16	19	27	37	60	74
MINIMUM LAP SPLICE LENGTH (IN.) - 1500 PSI NORMAL WEIGHT CMU						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
6-in CMU WALL	19	25	39	81	-	-
8-in CMU WALL	19	25	31	57	79	113
12-in CMU WALL	19	25	31	53	61	75

RECOMMENED END HOOKS ANCHORAGE LENGTH (IN.) - 3000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
D	2.25	3.00	3.75	4.50	5.25	6.00
A or G	6	8	10	12	14	16
RECOMMENED END HOOKS ANCHORAGE LENGTH (IN.) - 4000 PSI CONCRETE						
	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
D	2.25	3.00	3.75	4.50	5.25	6.00
A or G	7	10	12	15	17	19

5.2. REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE CLEAR COVER UNO (PER ACI 318-05 PAR.7.7.1)

5.2.1. CONCRETE CAST AGAINST EARTH: 3"

5.2.2. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:
2" (#6 BARS & LARGER)
1-1/2" (#5 BARS & SMALLER)

5.2.3. CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
3/4" (SLABS)
1" (WALLS)
1-1/2" (STIRRUPS & TIES)

5.3. SECURE APPROVAL OF SHOP DRAWINGS PRIOR TO COMMENCING FABRICATION.

5.4. PROVIDE STANDARD HOOKS AT DISCONTINUOUS ENDS OF ALL TOP BARS.

5.5. WHERE REINFORCING IS SHOWN CONTINUOUS, SPLICE BOTTOM BARS OVER SUPPORTS AND TOP BARS AT CENTER OF SPAN. ALL OTHER LAP SPLICES SHALL BE IN ACCORDANCE WITH SPLICE TABLES AND DETAILS SHOWN ON DRAWINGS.

5.6. PROVIDE DOWELS INTO FOOTINGS, PILE CAPS, SUPPORT BEAMS, ETC. TO MATCH VERTICAL BARS WITH CLASS B TENSION LAP SPLICES, U.N.O.

5.7. WHERE HOOKS ARE SHOWN ON THE PLANS OR DETAILS, HOOKS SHALL BE DETAILED TO EXTEND DEEP ENOUGH INTO SUPPORTING STRUCTURE TO DEVELOP THE FULL STRENGTH OF THE HOOKED BAR. PROVIDE ADDITIONAL TIES OR STIRRUPS IN SUPPORTING STRUCTURE AS REQUIRED TO SATISFY ACI 318 HOOK DEVELOPMENT, CONFINEMENT, AND ANCHORAGE CRITERIA.

5.8. ALL REINFORCEMENT SHALL BE BENT COLD, UNLESS OTHERWISE APPROVED BY THE STRUCTURAL EOR.

5.9. SHOP DRAWINGS SHOWING ALL FABRICATION DIMENSIONS AND LOCATIONS FOR PLACING REINFORCING STEEL IN MAT SLABS, CAST-IN-PLACE WALLS, AND STRUCTURAL SLABS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

5.10. ALL CONCRETE REINFORCEMENT SHALL BE DETAILED, FABRICATED, LABELED, SUPPORTED AND SPACED IN FORMS AND SECURED IN PLACE IN ACCORDANCE WITH THE PROCEDURES AND REQUIREMENTS FOR REINFORCED CONCRETE, "ACI 318" AND THE "MANUALS OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES," ACI 315 (LATEST EDITION).

5.11. ALL REINFORCING STEEL AND EMBEDMENTS SHALL BE SECURELY TIED AND SUFFICIENTLY SUPPORTED TO MAINTAIN THE POSITION WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES. "WET STICKING" DOWELS INTO CONCRETE IS NOT PERMITTED.

5.12. CONTINUOUS REINFORCEMENT SHALL BE PROVIDED WHEREVER POSSIBLE. REINFORCEMENT SHALL BE SPLICED ONLY AS SHOWN OR NOTED IN THE STRUCTURAL CONTRACT DOCUMENTS. STAGGER SPLICES WHERE POSSIBLE; USE FULL TENSION SPLICE (CLASS "B") UNLESS NOTED OTHERWISE. DOWELS SHALL MATCH THE SIZE AND SPACING OF THE SPECIFIED REINFORCEMENT AND SHALL BE LAPPED WITH FULL TENSION SPLICES (CLASS "B") UNLESS NOTED OTHERWISE. TERMINATE BARS WITH STANDARD HOOKS.

5.13. REINFORCING STEEL SHALL NOT BE WELDED OR TACK WELDED UNLESS APPROVED BY THE STRUCTURAL EOR.

5.14. ALL STEEL REINFORCING USED IN SLAB-ON-GRADE CONSTRUCTION IS REQUIRED TO BE SUPPORTED IN THE CENTER TO UPPER ONE THIRD OF THE SLAB.

6. WELDED WIRE FABRIC:

6.1. SHALL CONFORM TO ASTM A-185, FREE FROM OIL, SCALE AND RUST AND PLACED IN ACCORDANCE WITH THE TYPICAL PLACING DETAILS OF ACI STANDARDS AND SPECIFICATIONS.

6.2. MINIMUM LAP SHALL BE ONE SPACE PLUS TWO INCHES.

6.3. ALL WELD WIRE MESH USED IN SLAB-ON-GRADE CONSTRUCTION IS REQUIRED TO BE SUPPORTED IN THE CENTER TO UPPER ONE THIRD OF THE SLAB.

7. WOOD:

7.1. STRUCTURAL GLUED LAMINATED TIMBER SHALL BE PRODUCED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC). MINIMUM ALLOWABLE BENDING STRESS SHALL BE 2,400 PSI (DRY CONDITIONS).

7.2. PROVIDE DRESSED SEASONED LUMBER, S4S, WITH A MAXIMUM MOISTURE CONTENT OF 19% AT TIME OF DRESSING AS LISTED BELOW.

7.2.1. INTERIOR AND EXTERIOR LOAD-BEARING WALLS:
SOUTHERN PINE, NO. 2 GRADE.

7.2.2. LINTELS, FLOOR JOISTS AND BEAMS:
SOUTHERN PINE, NO. 2 GRADE.

7.2.3. WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE FOUNDATION GRADE PRESSURE-TREATED. USE GALVANIZED NAILS IN PRESSURE-TREATED WOOD. THE PROTECTIVE COATING ON LIGHT GAUGE STEEL CONNECTIONS IN CONTACT W/ PRESSURE-TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURERS RECOMMENDATIONS.

7.3. ENGINEERED LUMBER PRODUCTS

7.3.1. PARALLEL STRAND LUMBER (PSL) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS	F/B = 2900 PSI
COMPRESSION PERPENDICULAR TO GRAIN	F/C⊥ = 750 PSI
COMPRESSION PARALLEL TO GRAIN	F/C|| = 2900 PSI
HORIZONTAL SHEAR	F/V = 290 PSI
MODULUS OF ELASTICITY	E = 2,000,000 PSI

7.3.2. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS	F/B = 2600 PSI
COMPRESSION PERPENDICULAR TO GRAIN	F/C⊥ = 750 PSI
COMPRESSION PARALLEL TO GRAIN	F/C|| = 2510 PSI
HORIZONTAL SHEAR	F/V = 285 PSI
MODULUS OF ELASTICITY	E = 2,000,000 PSI

7.3.3. LAMINATED STRAND LUMBER (LSL) SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS	F/B = 1700 PSI
COMPRESSION PERPENDICULAR TO GRAIN	F/C⊥ = 710 PSI
COMPRESSION PARALLEL TO GRAIN	F/C|| = 1835 PSI
HORIZONTAL SHEAR	F/V = 425 PSI
MODULUS OF ELASTICITY	E = 1,300,000 PSI

7.3.4. GLULAM BEAMS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS	F/B = 3000 PSI
COMPRESSION PERPENDICULAR TO GRAIN	F/C⊥ = 805 PSI
TENSION PARALLEL TO GRAIN	F/T|| = 1350 PSI
HORIZONTAL SHEAR	F/V = 300 PSI
MODULUS OF ELASTICITY	E = 2,100,000 PSI

7.3.5. PRESERVED GLULAM BEAMS SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE STRESSES AND PROPERTIES:

ALLOWABLE BENDING STRESS	F/B = 2400 PSI
COMPRESSION PERPENDICULAR TO GRAIN	F/C⊥ = 740 PSI
HORIZONTAL SHEAR	F/V = 300 PSI
MODULUS OF ELASTICITY	E = 1,800,000 PS

7.4. STRUCTURAL PANELS

7.4.1. FLOOR PANELS SHALL BE CONSTRUCTED WITH TONGUE AND GROOVE APA RATED, EXPOSURE 1, $^{23}/_{32}$" PLYWOOD. FLOOR PANELS SHALL BE GLUED AND NAILED W/ 10d RING SHANK NAILS @ 4" O/C AT PANEL EDGES AND AT 6" O/C IN THE FIELD.

7.4.2. WALL PANELS SHALL BE CONSTRUCTED WITH APA RATED, EXPOSURE 1, $^{15}/_{32}$" SHEATHING, SHEATHING SHALL BE ATTACHED WITH 10d COMMON NAILS @ 3" O/C AT PANEL EDGES AND 6" O/C IN THE FIELD. ALL PANEL EDGES SHALL BE BLOCKED.

7.4.3. ROOF PANELS SHALL BE CONSTRUCTED WITH APA RATED, EXPOSURE 1, $^{19}/_{32}$" SHEATHING. SHEATHING SHALL BE ATTACHED WITH 10d RING SHANK NAILS @ 4" O/C AT PANEL EDGES AND AT 6" O/C IN THE FIELD. ALL PANEL EDGES SHALL BE BLOCKED OR ATTACHED WITH SIMPSON PSCA PANEL SHEATHING CLIPS. NAIL HEADS SHALL NOT PENETRATE THE OUTER SURFACE OF SHEATHING.

7.5. FABRICATED WOOD TRUSSES

7.5.1. DESIGN OF WOOD TRUSSES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SUBMIT SHOP DRAWINGS, DESIGN LOAD DATA, AND SUPPORT REACTIONS SEALED BY AN ENGINEER LICENSED IN THE PROJECT STATE. REVIEW OF SHOP DRAWINGS SHALL BE FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS WITH REGARD TO TRUSS CONFIGURATION, AND THE CONTRACTOR'S INTERPRETATION OF DESIGN LOADS AND DETAILS. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF THE FULL RESPONSIBILITY FOR THE DESIGN OF THE TRUSSES OR TRUSS CONNECTIONS NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS.

7.5.2. ERECTION AND TEMPORARY BRACING OF PREFABRICATED WOOD TRUSSES SHALL BE IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE TRUSS MANUFACTURER AND THE TRUSS PLATE INSTITUTE'S "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS".

7.5.3. SECURE EACH COMMON ROOF TRUSS/RAFTER TO TOP PLATE WITH SIMPSON H-10 OR H-7 HURRICANE CLIP AT ALL BEARING POINTS. USE SIMPSON H-7 AT GIRDER TRUSSES. PROVIDE A MINIMUM OF TWO STUDS UNDER GIRDER TRUSS END BEARING.

7.5.4. TRUSSES ON SITE PRIOR TO INSTALLATION SHALL BE STORED IN A VERTICAL POSITION WITH SUPPORT POINTS PROVIDED AT FINAL BEARING POINTS AND BRACED TO AVOID TIPPING.

7.5.5. INSTALLATION OF ALL TRUSSES SHALL BE DONE USING A SPREADER BAR WITH A THREE POINT VERTICAL PICK AND CARE IS TO BE USED IN LIFTING TO MINIMIZE HORIZONTAL BENDING.

7.5.6. IMPROPER HANDLING OF THE TRUSSES AS NOTED ABOVE AND IN THE SPECIFICATIONS SHALL MEAN REMOVAL OF THE TRUSSES FROM THE JOB SITE.

7.5.7. DOUBLE TRUSSES SHALL BE NAILED TOGETHER W/ 10d @12" O.C. EACH SIDE, TOP AND BOTTOM CHORDS & WEBS.

7.5.8. TRUSS TO TRUSS CONNECTIONS SHALL BE VERIFIED BY THE TRUSS DESIGNER.

7.5.9. CONTRACTOR TO REFER TO "STANDARD FOR HURRICANE RESISTANT CONSTRUCTION SSTD 10-99 FOR FRAMING REQUIREMENTS OF WOOD FRAMED WALL SYSTEMS.

7.5.10. FLOOR TRUSS LOADS:

FLOOR TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS UNLESS A SPECIAL LOADING PATTERN IS PROVIDED BY THE STRUCTURAL ENGINEER OF RECORD.

TOP CHORD LIVE LOAD	40 PSF
TOP CHORD DEAD LOAD	20 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
TOTAL	70 PSF

7.5.11. ROOF TRUSS LOADS:

ROOF TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS UNLESS A SPECIAL LOADING PATTERN IS PROVIDED BY THE STRUCTURAL ENGINEER OF RECORD.

TOP CHORD LIVE LOAD	20 PSF
TOP CHORD DEAD LOAD	20 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
TOTAL	40 PSF

7.6. CONNECTIONS

7.6.1. CONNECTIONS FOR STRUCTURAL TIMBER SHALL BE GALVANIZED STRONG TIE CONNECTORS BY THE SIMPSON COMPANY OR APPROVED EQUAL. CONNECTORS SHALL FOLLOW MANUF. CORROSION PROTECTION RECOMMENDATIONS.

7.6.2. THE NUMBER OF FASTENERS PER CONNECTION SHALL BE THE MAX. ALLOWED FOR THAT PARTICULAR FASTENER.

8. TIE-DOWN NOTES:

8.1. ANCHOR TIE-DOWN RODS SHALL HAVE A MINIMUM SHAFT DIAMETER OF 1/2" (ONE HALF INCH) U.N.O.

8.2. TIE-DOWN RODS MAY BE CONNECTED DIRECTLY TO THE PLAN SPECIFIED 5/8" ANCHOR BOLTS USING A SIMPSON CNW5/8"-1/2" TRANSITION COUPLER NUT ABOVE THE REQUIRED BP3-5/8" AND 5/8" NUT ATOP THE SILL PLATE.

8.3. TIE-DOWN DIRECT CONNECTION MAY BE USED BY UTILIZING SIMPSON SET ANCHORAGE ADHESIVE WITH MINIMUM ROD EMBEDMENT OF 6" WHEREVER CAST-IN-PLACE ANCHOR BOLTS ARE SPECIFIED FOR COUPLED EXTENSION TO ABOVE.

8.4. ANY PLACE WHERE A TIE-DOWN LOCATION IS FILLED WITH STUDS; USE A SIMPSON LTTI31 OR HDU5 HOLDOWN CONNECTED AT THE TOP AND BOTTOM OF A MINIMUM 2PLY STUD PACK TO PRESERVE TENSION LOAD PATH TO FLOORS ABOVE AND/OR BELOW. RESUME INDICATED TIE-DOWN ROD PATH AT ENDS OF STUD PACK IF POSSIBLE.

8.5. SIMPSON LTTI31 & HDU5 HOLDOWNS SHALL BE ANCHORED INTO GROUT FILLED CMU WALLS OR PIERS WITH A SIMPSON SB5/8 OR SSTB ANCHOR BOLT WITH EMBEDMENT PER MFGR. RECOMMENDATION.

8.6. RODS SHALL INSTALLED PLUMB. THE MAXIMUM ALLOWABLE ROD DRIFT FROM PLUMB SHOULD NOT EXCEED 1.33 DEGREES OR MAXIMUM CENTERLINE OFFSET DISTANCE OF 1.75" PER FLOOR.

8.7. TIE-DOWN RODS SHALL HAVE A SIMPSON BP-3 WITH NUT ATOP THE TERMINAL TOP PLATE. RODS AT SLOPED OR RAKED PLATES SHALL REQUIRE HILLSIDE WASHERS BETWEEN BP-3 AND NUT TO LEVEL.

8.8. ALL RODS ARE TO BE TIGHTENED AT EACH FLOOR AND THE TOP PLATE CONNECTION AFTER ROOF IS FULLY LOADED, JUST PRIOR TO GYPSUM BOARD INSTALLATION. ALL RODS WITH BP AND NUT CONNECTIONS TO THE BOTTOM SIDE OF THE FIRST FLOOR FRAMING SHALL BE TIGHTENED AT THE END OF THE CONSTRUCTION PROCESS PRIOR TO C.O. OPTIONAL: CONTRACTOR MAY INSTALL A SIMPSON BPRTUD AND RTUD TAKE-UP DEVICE AT THE TERMINAL TOP PLATE CONNECTION TO REMOVED UNWANTED SYSTEM SLACK DUE TO STRUCTURE SETTLING OR CREEP.

9. MASONRY WALLS:

9.1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530/ASCE 5/TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND ACI 530.1/ASCE 6/TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES", LATEST EDITION.

9.2. MASONRY UNITS SHALL MEET ASTM C-90 FOR HOLLOW LOAD BEARING TYPE MASONRY WITH UNIT STRENGTH OF 1900 PSI ON THE NET AREA (f'm = 1500 PSI). MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C-270.

9.3. GROUT SHALL BE 3000 PSI MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C-476 AND HAVE A SLUMP BETWEEN 8" AND 11" WITH WATER CM RATIO OF 0.55 MAXIMUM AND WITH 3/8" MAXIMUM AGGREGATE.

9.4. PROVIDE HOOKED DOWELS IN FOUNDATIONS FOR VERTICAL REINFORCING ABOVE. REFER TO TABLE FOR SPLICE LENGTH.

9.5. BLOCK CELLS SHALL BE GROUT FILLED WITH VERTICAL REINFORCING BARS AT CORNERS, INTERSECTIONS, EACH SIDE OF OPENINGS AND AS SHOWN ON THE DRAWINGS.

9.6. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE ABOVE AND/OR BELOW, UNLESS NOTED OTHERWISE.

9.7. USE METAL LATH, MORTAR OR SPECIAL UNITS TO CONFINE CONCRETE AND GROUT TO AREA AS REQUIRED.

9.8. MASONRY SHALL BE LAID IN RUNNING BOND PATTERN UNLESS NOTED OTHERWISE. AT FILLED CELLS LAY UNITS WITH FULL BED JOINTS AROUND CELLS.

9.9. PROVIDE 9 GAUGE GALVANIZED HORIZONTAL JOINT REINFORCING AT ALTERNATE BLOCK COURSES. LADDER TYPE IS RECOMMENDED WITH REINFORCED FILLED CELLS. PROVIDE PREFABRICATED "TEE" OR CORNER SECTIONS AT WALL INTERSECTIONS.

9.10. CONTROL JOINTS SHALL BE CONSTRUCTED IN CONCRETE MASONRY CONSTRUCTION AT A MAXIMUM HORIZONTAL SPACING BETWEEN JOINTS OF 25'-0" AND NOT MORE THAN 12'6" FROM CORNERS. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS. CONSTRUCT INTERIOR CONTROL JOINTS AT A MAXIMUM HORIZONTAL SPACING OF 32'-0" OR 16'-0" FROM CORNERS. NO JOINTS SHALL BE LOCATED WITHIN 2'-0" OF STEEL BEAM BEARINGS. HORIZONTAL WALL REINFORCING SHALL BE STOPPED EACH SIDE OF CONTROL JOINTS. SEE ARCHITECTURAL DRAWINGS FOR SEALANT REQUIREMENTS AT CONTROL JOINTS.

9.11. SUBMIT PROPOSED GROUT MIX DESIGNS FOR REVIEW PRIOR TO USE. MIX NUMBER OR OTHER POSITIVE IDENTIFICATION SHALL UNIQUELY IDENTIFY MIX.

9.12. USE OF SUPERPLASTICIZER IS PROHIBITED.

9.13. CELLS TO BE GROUT FILLED SHALL HAVE VERTICAL ALIGNMENT SUFFICIENT TO MAINTAIN A CLEAR, UNOBSTRUCTED, CONTINUOUS VERTICAL GROUT SPACE.

9.14. CLEANOUT OPENINGS SHALL BE PROVIDED AT THE BOTTOM OF CELLS TO BE GROUT FILLED IN EACH POUR IN EXCESS OF 5 FEET IN HEIGHT. AFTER INSPECTION AND BEFORE GROUTING, THE REBAR SHALL BE TIED AT THE CLEANOUTS AND THE CLEANOUTS SHALL BE SEALED.

9.15. ANY OVERHANGING MORTAR OR OTHER OBSTRUCTION OR DEBRIS SHALL BE REMOVED FROM THE INSIDES OF SUCH CELL WALLS.

9.16. VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 192 BAR DIAMETERS.

9.17. ALL CELLS SHALL BE FILLED SOLIDLY WITH GROUT (U.N.O). SAMPLE AND TEST GROUT PER ASTM C1019.

9.18. GROUT SHALL BE POURED IN LIFTS OF 4 FEET MAXIMUM HEIGHT. GROUT SHALL BE CONSOLIDATED AT TIME OF PLACING BY VIBRATING AND RECONSOLIDATED LATER BY VIBRATING BEFORE PLASTICITY IS LOST.

9.19. WHEN TOTAL GROUT POUR EXCEEDS 5 FEET IN HEIGHT, (HIGH LIFT GROUTING), THE GROUT SHALL BE PLACED IN 4-FOOT LIFTS WITH A MINIMUM OF A 30 MINUTE DELAY BETWEEN LIFTS. MINIMUM CELL DIMENSION SHALL BE IN ACCORDANCE WITH TABLE 5 OF ACI 530.1 (3" X 3" FOR COARSE GROUT, 12 FT. MAXIMUM POUR HEIGHT).

9.20. WHEN THE GROUTING IS STOPPED FOR ONE HOUR OR LONGER, HORIZONTAL CONSTRUCTION JOINTS SHALL BE MADE BY STOPPING THE POUR OF GROUT NOT LESS THAN 1-1/2 INCH BELOW THE TOP OF THE UPPERMOST UNIT GROUTED.

9.21. MASONRY WALLS MARKED AS "LOAD BEARING" ARE DESIGNED TO CARRY FLOOR GRAVITY LOADS AND MUST BE CONSTRUCTED TO SUPPORT THE CONCRETE FLOOR SLAB CONCURRENTLY WITH CONCRETE COLUMN CONSTRUCTION.

9.22. MASONRY WALLS INDICATED AS "INFILL" ARE DESIGNED TO RESIST LATERAL LOADS AND MUST BE CONSTRUCTED AFTER THE CONCRETE SLAB IS CAST AND POST TENSIONING OPERATION IS COMPLETED. INFILL WALLS SHALL BE CONSTRUCTED STARTING AT THE FOUNDATION LEVEL AND WORKING UPWARD ONE LEVEL AT A TIME. DO NOT START NEXT HIGHER LEVEL OF WALL PRIOR TO COMPLETION OF WALL BELOW. ALLOW A MINIMUM OF 3 DAYS CURING FOR GROUT OF WALL BELOW PRIOR TO STARTING WALL ABOVE.

9.23. SINGLE STORY MASONRY WALLS INDICATED AS "PARTITION WALLS" SHALL BE CAST ON THICKENED SLAB FOUNDATIONS AND ARE NOT DESIGNED TO CARRY ANY LOADS FROM THE MAIN BUILDING STRUCTURES. ISOLATE TOP OF PARTITION WALLS FROM UNDERSIDE OF CONCRETE SLAB WITH A MINIMUM 1/2" THICK COMPRESSIBLE MATERIAL.

9.24. SUBMIT WRITTEN CONSTRUCTION SEQUENCES AND PROCEDURES PRIOR TO THE START OF MASONRY CONSTRUCTION.

10. CHEMICAL (ADHESIVE) ANCHORS:

10.1. SHALL BE A TWO PART EPOXY POLYMER INJECTION SYSTEM, SUCH AS HILTI HIT HY150, HILTI RE500, OR SIMPSON SET ADHESIVE SYSTEM, OR ENGINEER APPROVED SUBSTITUTION.

10.2. EPOXY TYPES AND BRANDS VARY IN THEIR BOND STRENGTH AND SUITABILITY OF USE, DEPENDING ON TYPE OF LOADING, ANCHOR SPACING, ETC. WHEN A PARTICULAR TYPE OF EPOXY IS SPECIFIED IN THESE DRAWINGS, A UNIQUE CALCULATION HAS BEEN MADE BASED ON THE PROPERTIES OF THAT SPECIFIC TYPE OF EPOXY FOR THE SPECIFIC CONDITION SHOWN IN THE DETAIL. SUBSTITUTION OF EPOXY TYPE IS NOT ALLOWED WHERE DETAIL SPECIFIES ONLY ONE TYPE OF EPOXY, WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER OF RECORD. NOT ALL EPOXY BRANDS OR TYPES WILL BE ALLOWED AS SUBSTITUTES.

10.3. SUBSTITUTION OF EPOXIES IN ONE CONDITION SHALL NOT BE CONSTRUED AS APPROVAL TO MAKE SIMILAR SUBSTITUTION OF EPOXIES IN OTHER DIFFERING CONDITIONS. EACH SUBSTITUTION MUST RECEIVE PRIOR WRITTEN APPROVAL BY THE ENGINEER OF RECORD.

10.4. INSTALL IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

10.5. THE MANUFACTURER'S REPRESENTATIVE SHALL TRAIN INSTALLERS.

10.6. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL HOLE CLEAN-OUT REQUIREMENTS ARE FULLY COMPLETED BY THE INSTALLERS PRIOR TO INJECTING EPOXY INTO THE HOLES.

10.7. NO LOAD SHALL BE APPLIED TO THE EPOXY ANCHORS UNTIL THE EPOXY HAS FULLY CURED AND HAS ACHIEVED IT'S SPECIFIED STRENGTH.

10.8. IF DETAIL SHOWS EPOXY ANCHORS IN SLOTTED HOLES, IT IS IMPERATIVE THAT ANY EXCESS EPOXY IS CLEANED UP FROM AROUND THE ANCHOR ROD, SO THAT IT DOES NOT INTERFERE WITH ADJUSTABILITY OF ANCHOR ROD IN SLOTTED HOLE.

11. MECHANICAL ANCHORS:

11.1. SHALL BE EITHER HEAVY DUTY CONCRETE SCREW ANCHOR (SUCH AS POWERS WEDGE-BOLT, SIMPSON TITEN HD, OR HILTI HUS-H) OR WEDGE TYPE EXPANSION ANCHOR (SUCH AS POWERS POWER-STUD, SIMPSON WEDGE-ALL, OR HILTI KWIK BOLT 3).

11.2. TYPE OF ANCHOR SHALL BE AS SPECIFIED ON THE DRAWINGS, WHILE BRAND AND MODEL OF ANCHOR MAY BE SELECTED FROM THE ABOVE LISTED ANCHORS. SUBSTITUTION ANCHORS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVED IN WRITING BY THE ENGINEER OF RECORD PRIOR TO USE.

11.3. IN SOME CASES OF CRITICAL LOADING OR GEOMETRIC CONDITIONS, ONLY SPECIFIC ANCHORS WILL BE ALLOWED, AS NOTED ON THE DRAWINGS. IN THESE CASES, THE SPECIFIED BRAND AND MODEL OF ANCHOR MUST BE USED.

11.4. INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

11.5. THE MANUFACTURER'S REPRESENTATIVE SHALL TRAIN INSTALLERS.

11.6. MINIMUM EMBEDMENT DEPTH OF 1/4" TAPCONS INSTALLED IN CONCRETE SHALL BE 1.25" AND INSTALLED INTO MASONRY SHALL BE 1.5". SELECT ANCHOR LENGTH AS REQUIRED TO ACHIEVE THE SPECIFIED MINIMUM EMBEDMENT DEPTH.

11.7. TAPCON SCREWS MAY BE REPLACED W/ 0.157" SHANK DIAMETER PAF ANCHORS (HILTI X-U OR EQUAL) ON A 1:1 SUBSTITUTION BASIS. MINIMUM EMBEDMENT DEPTH SHALL BE 1.25" WHEN INSTALLED INTO CONCRETE OR GROUTED MASONRY. FOLLOW MANUFACTURER'S INSTALLATION RECOMMENDATIONS, MINIMUM EDGE DISTANCES, AND PLACEMENT LIMITATIONS (RELATIVE TO MORTAR JOINTS IN MASONRY).

12. STRUCTURAL STEEL:

12.1. STEEL WORK SHALL BE NEW AND CONFORM TO THE ANSI/AISC 360-05 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.

12.2. MATERIAL SHALL CONFORM TO THE FOLLOWING, EXCEPT AS NOTED:

WIDE FLANGE SHAPES	ASTM A992 (Fy=50 KSI)
ANGLES, CHANNELS AND PLATES	ASTM A36 (Fy=36 KSI)
RECTANGULAR HSS ASTM	A500, GRADE B (Fy=46 KSI)
HIGH STRENGTH BOLTS	ASTM A325 OR A490
THREADED RODS	ASTM A36 (Fy=36 KSI)
HEAVY HEX NUTS	ASTM A563
HARDENED STEEL WASHERS	ASTM F436
ANCHOR RODS	ASTM F1554 GR. 36 (Fy=36 KSI)

12.3. CONNECTIONS:

12.3.1. BOLTS SHALL BE HIGH-STRENGTH, BEARING TYPE IN SNUG TIGHT CONDITION, U.N.O. TIGHTEN BY AN AISC APPROVED METHOD.

12.3.2. WELDING ELECTRODES SHALL BE PER AWS D1.1. RETURN FILLET WELDS FOR FRAMED CONNECTIONS 1/2" AT EACH END.

12.3.3. FIELD CONNECTIONS SHALL BE BOLTED, EXCEPT AS NOTED OTHERWISE.

12.3.4. DETAIL FLOOR AND ROOF FRAMING CONNECTIONS FOLLOWING THE REQUIREMENTS SHOWN IN THE TYPICAL CONNECTION SCHEDULES SHOWN IN THESE DRAWINGS, BASED ON THE BEAM OR GIRDER SIZE.

12.3.5. FOR THE PURPOSE OF CORRECTLY INTERPRETING THE CONNECTION SCHEDULES, GIRDERS SHALL BE CONSIDERED AS ANY FLOOR OR ROOF BEAM WHICH CARRIES OTHER FLOOR OR ROOF BEAMS, OR ANY FLOOR OR ROOF BEAM WHICH CARRIES STEEL COLUMNS.

12.3.6. DETAIL DIAGONAL BRACING CONNECTIONS AS SHOWN IN THE DETAILS. IF NO DETAIL IS PROVIDED, DETAIL CONNECTION TO DEVELOP THE FULL TENSION CAPACITY OF THE DIAGONAL BRACING MEMBER.

12.4. HIGH STRENGTH BOLTS IN BEARING CONDITION SUPPORTING SIMPLE SPAN BEAMS NOT SUBJECT TO AXIAL LOADS MAY BE INSTALLED TO "SNUG TIGHT" CONDITION IF NORMAL, OR SHORT SLOTTED HOLES ARE USED. THE ENGINEER OF RECORD WILL BE THE ULTIMATE AUTHORITY IN THE USE OF "SNUG TIGHT" BOLTS. IF LONG SLOTTED OR OVERSIZED HOLES ARE USED, BOLTS MUST BE FULLY PRETENSIONED AND SLIP CRITICAL. PROPER SURFACE PREPARATION IS REQUIRED FOR SLIP CRITICAL BOLTS, INCLUDING OMISSION OF PRIMER OR FIRE PROOFING, AS APPROPRIATE.

12.5. BOLTS SHARING LOAD WITH WELDS IN A CONNECTION SHALL BE FULLY PRETENSIONED AND SLIP CRITICAL.

12.6. WHERE FULLY PRETENSIONED OR SLIP CRITICAL BOLTS ARE REQUIRED, TIGHTENING SHALL BE ACHIEVED USING EITHER TWIST-OFF TENSION CONTROL BOLTS OR DIRECT TENSION INDICATING WASHERS.

12.7. ALL STRUCTURAL STEEL EXPOSED TO EXTERIOR CONDITIONS SHALL BE HOT DIPPED GALVANIZED PER ASTM A123 AND ALL FASTENERS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED PER ASTM A153.

12.8. GROUT UNDER BEARING PLATES SHALL BE NON-METALLIC, NON-SHRINK TYPE WITH A COMPRESSIVE STRENGTH OF AT LEAST 5,000 PSI IN 28 DAYS.

12.9. THE CAMBER OF STEEL MEMBERS SHALL BE VERIFIED IN THE SHOP AND THE FIELD. WHEN NO CAMBER IS INDICATED, TURN THE MEMBER NATURAL CAMBER UP.

12.10. APPLY FIREPROOFING TO STEEL STRUCTURE CALCULATING THE THICKNESS OF FIREPROOFING BY COMPARING THE ACTUAL MEMBER SIZE TO THE MEMBER SIZE USED IN THE DESIGNATED UL RATING AND ADJUSTING APPROPRIATELY.

13. RAILINGS AND HANDRAILS:

13.1. ENGINEERED RAILING SYSTEM AND CONNECTION OF SAME TO THIS STRUCTURE SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA.

13.2. THE CONFIGURATION OF THE RAILING SYSTEM SHALL BE AS SHOWN ON THE ARCHITECTURAL DRAWINGS.

13.3. RAILING SYSTEM AND CONNECTIONS SHALL BE DESIGNED FOR APPLICABLE LOADS AS INDICATED ON THE DRAWINGS AND IN THE BUILDING CODE.

13.4. THE LOADS SHALL BE CLEARLY INDICATED ON SHOP DRAWINGS AND SHALL COMPLY WITH ALL APPLICABLE CODES.

13.5. SHOP DRAWINGS SHALL SHOW AND SPECIFY CONNECTIONS UTILIZED WITHIN THE RAILING SYSTEM AS WELL AS CONNECTIONS TO AND LOADS IMPOSED UPON THE STRUCTURAL SYSTEM SHOWN ON THESE DRAWINGS.

13.6. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA.

14. STRUCTURAL SUBMITTALS

14.1. SHOP DRAWINGS OR REPORTS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD PRIOR TO FABRICATION OR CONSTRUCTION (AS APPLICABLE) U.N.O.

14.1.1. PILE INSTALLATION QUALITY CONTROL
14.1.2. PILE INSTALLTION MONITORING LOG
14.1.3. CONCRETE ADMIXTURES
14.1.4. CONCRETE STRENGTH TESTS
14.1.5. CONCRETE DETAILING
14.1.6. ENGINEERED FILL COMPACTION TESTING
14.1.7. ENGINEERED ROOF AND FLOOR TRUSSES
14.1.8. STEEL JOISTS
14.1.9. STRUCTURAL STEEL
14.1.10. HANDRAILS AND STAIRS

WALTON COUNTY DESIGN CERTIFICATION

I CERTIFY THAT THE PLANS AND SPECIFICATIONS FOR THIS CONSTRUCTION ARE IN COMPLIANCE WITH THE CRITERIA ESTABLISHED BY THE 2020 FLORIDA BUILDING CODE. THIS BUILDING AND/OR STRUCTURE IS DESIGNED TO WITHSTAND A WIND VELOCITY OF 137 MPH. THE WIND DESIGN IS IN ACCORDANCE WITH CHAPTER 16 OF THE FLORIDA BUILDING CODE.

ALSO, UPON COMPLETION OF THIS BUILDING AND/OR STRUCTURE, I WILL CERTIFY THAT THE BUILDING AND/OR STRUCTURE HAS COMPLIED WITH THIS SPECIFIC BUILDING DESIGN. THIS MUST BE ON FILE AT THE WALTON COUNTY BUILDING DEPARTMENT BEFORE RECEIVING AN INSPECTION FOR POWER.

I UNDERSTAND THAT ANY CHANGE IN DESIGN OR SPECIFICATION MUST BE SUBMITTED IN WRITING BY ME TO THE BUILDING DEPARTMENT.

NOT FOR CONSTRUCTION

RELEASE RECORD	
REVIEW ONLY / N.F.C.	06/23/2022

DESIGNER:	RSL
REVIEWED BY:	CLH
PROJECT NO:	22-101-006
SHEET SCALE:	N.T.S.

ATLAS
ENGINEERING AND CONSULTING
455 HARRISON AVE, SUITE B
PANAMA CITY, FLORIDA 32401
PHONE: (850) 257-5316 EMAIL: INFO@ATLASENGINEERINGFL.COM REGISTRY NO. 34399

NEW PRE-ENGINEERED BUILDING FOUNDATION
EAGLE SPRINGS
GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FLORIDA

SHEET TITLE
STRUCTURAL GENERAL NOTES

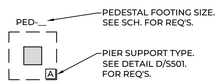
SHEET NO.
S001

PLAN LEGEND

- DENOTES CIP PIER SUPPORT. SEE DETAIL D/SS01 FOR REQ'S (TYP)
- DENOTES THICKENED SLAB @ WALL BEARING & SLAB STEP DOWN LOCATIONS.
- DENOTES FOOTER OUTLINE BELOW.
- DENOTES SLAB TURNDOWN OUTLINE.

NOTE: PRELIMINARY DESIGN ONLY. SUBJECT TO CHANGE UPON RELEASE OF FINAL BUILDING REACTIONS & COLUMN PLACEMENT. PEMB TO BE DESIGNED TO RESIST 140 MPH WIND SPEED (MIN.)

TYP. C.I.P. PIER & FOOTING CALLOUT



PEDESTAL FOOTING SCHEDULE

DESIGNATION	TYPE	DIMENSIONS	LONGITUDINAL REINF. (T&B)	TRANSVERSE REINF. (T&B)
PED-72	PEDESTAL FTG.	18" D x 72" SQR.	(8) #5 BARS EQ. SPACED	(8) #5 BARS EQ. SPACED

CONTINUOUS FOOTING SCHEDULE

DESIGNATION	TYPE	DIMENSIONS	CONTINUOUS REINF.	TRANSVERSE REINF.
TD-24	TURN DOWN	16" D x 24" W	(3) #5 BARS	#5 BARS x 18" @ 18" O.C.
TS-24	THICKENED SLAB	12" D x 24" W	(3) #5 BARS	#5 BARS x 18" @ 18" O.C.

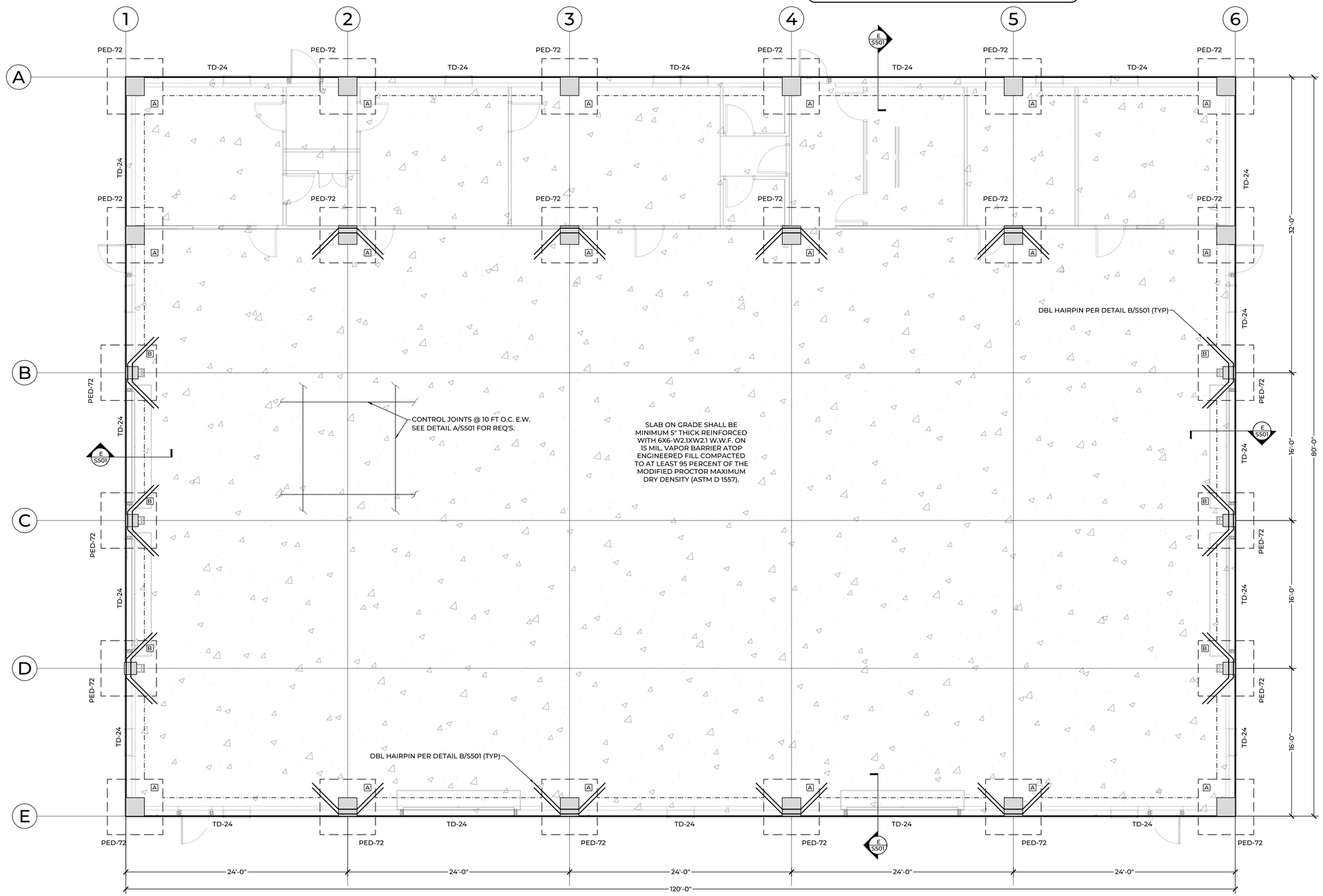
FOOTING NOTES

1. TOPS OF ALL FOOTINGS (EXCEPT TURNDOWNS) MUST BE COVERED WITH A MINIMUM OF 12" OF FINISH GRADE MATERIAL, (U.N.O.).
2. BOTTOMS OF ALL FOOTINGS MUST BEAR ATOP UNDISTURBED SOIL OR ENGINEERED FILL COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR A MINIMUM OF 12" BELOW EXISTING GRADE UNLESS PROPER PROVISIONS HAVE BEEN MADE FOR THE USE OF ENGINEERED FILL BASED ON A SITE SPECIFIC GEOTECHNICAL EVALUATION (BY OTHERS).
3. ALL CONTINUOUS FOOTINGS & PEDESTALS MUST BE CENTERED ON THE WALL/PIER UNLESS SPECIFICALLY NOTED AS ECCENTRIC FOOTING.
4. VERTICAL DOWEL HOOKS SHOULD EXTEND 9" IN TO FTG'S, BELOW & RUNNING PERPENDICULAR TO FLEXURAL REINF.
5. NO "WET STICK" SETTING OF REINFORCING WILL BE APPROVED.
6. ALL VERTICAL REINFORCING MUST BE IN PLACE & TIED TO FOOTING REINF. PRIOR TO POUR.
7. COORDINATE ALL FOOTING LOCATIONS WITH CIVIL, PLUMBING, AND ELECTRICAL DRAWINGS. CONTRACTOR SHALL PROVIDE PIPE SLEEVES BELOW OR ABOVE CONTINUOUS WALL FOOTINGS.
8. SEE ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN. IF A CONFLICT EXISTS, THE ARCH. DIMENSIONS SHALL GOVERN. BOTH ENGINEER AND ARCHITECT OF RECORD SHALL BE NOTIFIED IN WRITING OF ALL CONFLICTS.

SCHEDULE OF INSPECTIONS TO BE CONDUCTED BY E.O.R.

1. FOUNDATION ELEMENTS:
   - REVIEW OF GENERAL LAYOUT, ELEMENT SIZES, AND REINFORCING
   - ALL VERT. DOWEL REINF. MUST BE IN PLACE & TIED
2. MASONRY:
   - FOUNDATION STEM WALLS AND PIERS VERT. REINF., HORZ. REINF. & TIES
   - REINF. FOR CMU WALLS, PARTITIONS, SITE WALLS & RETAINING WALLS
   - REINF. REVIEW FOR LINTELS, BOND BEAMS, WALL TOP-OUT'S
   - SPECIAL INSPECTION REQUIRED FOR ALL REINF. NOT CENTERED WITHIN CELLS.
3. CAST IN PLACE CONCRETE ELEMENTS:
   - REINF. FOR WALLS & COLUMNS PRIOR TO CLOSING FORMWORK
   - REINF. IN ALL C.I.P. BEAMS, & STRUCTURAL SLABS

NOTES:
- A $300 FEE WILL BE ACCESSED PER INSPECTION.
- CONTRACTOR IS RESPONSIBLE FOR ALL INSPECTION FEE'S.
- CONTRACTOR TO PROVIDE E.O.R. 24 HR ADVANCED NOTICE (MIN) PRIOR TO INSPECTION.



NOT FOR CONSTRUCTION

RELEASE RECORD	
REVIEW ONLY / N.F.C.	06/23/2022

DESIGNER:	RSL
REVIEWED BY:	CLH
PROJECT NO:	22-101-006
SHEET SCALE:	1/4"=1'-0" U.N.O.

ATLAS
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PHONE: (850) 257-5316 EMAIL: INFO@ATLASENGINEERINGFL.COM REGISTRY NO. 34399

NEW PRE-ENGINEERED BUILDING FOUNDATION

EAGLE SPRINGS GOLF COURSE

MAINTENANCE BUILDING

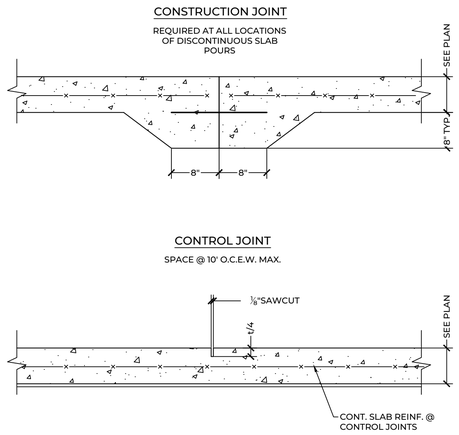
WALTON COUNTY, FLORIDA

SHEET TITLE

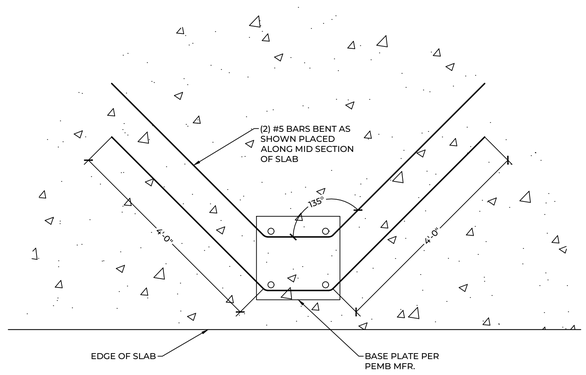
FOUNDATION PLAN

SHEET NO.

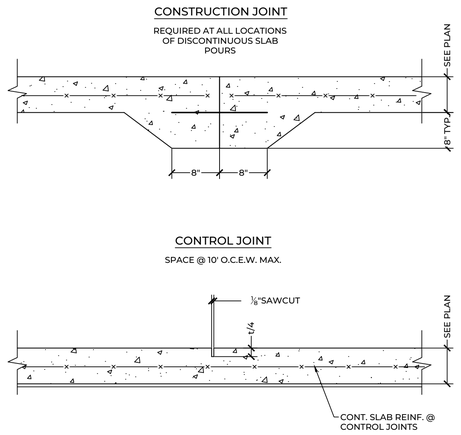
S101



A TYP. SLAB FINISHING DETAIL
SCALE : 1" = 1'-0"



B TYP. HAIRPIN DETAIL
SCALE : 1" = 1'-0"



C TYP. SLAB FINISHING DETAIL
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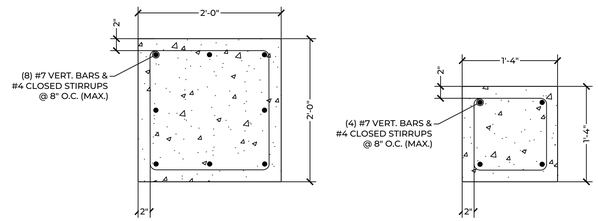
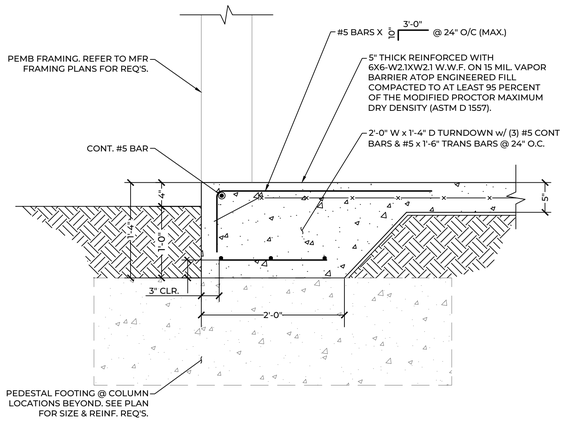


PIER "A" - SECTION VIEW

PIER "B" - SECTION VIEW

D TYP. CONCRETE PIER DETAIL
SCALE : 1" = 1'-0"



E TYP. TURNDOWN DETAIL
SCALE : 1" = 1'-0"

NEW PRE-ENGINEERED BUILDING FOUNDATION

EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING

WALTON COUNTY, FLORIDA

NOT FOR CONSTRUCTION

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PROJECT INFORMATION	
DESIGNER:	RSL
REVIEWED BY:	CLH
PROJECT NO:	22-101-006
SHEET SCALE:	SEE DETAIL

RELEASE RECORD	
REVIEW ONLY / N.F.C.	06/23/2023

SHEET TITLE: STRUCTURAL CONSTRUCTION DETAILS

SHEET NO.: S501

HEAT PUMP SPLIT SYSTEM SCHEDULE

AIR HANDLING UNIT															CONDENSING UNIT – AIR COOLED											
SPECIFICATIONS										ELECTRICAL																
MARK	TYPE	COOLING CAP.	HEATING CAP.	CFM	OA	ESP	FAN #	FAN HP	AUX. HEAT KW	VOLT.	∅	# CIRCUITS	MCA	MOCP	MODEL	MARK	SEER/ EER	VOLT.	∅	COMPRESSOR #	COMPRESSOR RLA (EA)	FAN #	FAN HP (EA)	FAN FLA (EA)	UNIT WIRING MCA	UNIT WIRING OVER CURRENT	MODEL
AHU-2	CONVERTIBLE AIR HANDLER	47,100	46,500	1600	200	▭	1	3/4	10.8/ 14.4	208/ 230	1	2	51/60 22/25	58/60 25/25	TRANE 4TEM4A48	AC-1	14	208/ 230	1	1	19.6	1	1/5	1.1	26	45	TRANE 4TWR4048G1

NOTES: 1) MIN. SEER SHALL BE ASHRAE 90.1 OR FBC COMPLIANT

ACCESSORIES: HARDWIRED REMOTE WALL MOUNTED THERMOSTATS, ANTI-SHORT CYCLE TIME, SEA COAST PROTECTION, 4" FILTER SECTION (2" FILTER), VERIFY REGFRIGERANT REQUIREMENTS IF R-32 REQ'D OR SIMILAR – PROVIDE SUITABLE MODEL EQUIP, OSA DAMPER CLOSES WHEN UNIT OFF

EQUALS: YORK, CARRIER, RHEEM

EXHAUST FAN SCHEDULE

MARK	SERVICE	CFM	SP	TYPE	OPENING	OUTLET	INTERLOCKED	ACCES.	MOTOR HP	VOLT	ϕ	MODEL
EF-1	BATHROOM	50	0.1"	CEILING	13-¾" x 10-⅝"	6"ø	OCC SENSOR	1,2,3,4	FRAC	115	1	GREENHECK SP-A50
EF-2	BATHROOM	50	0.1"	CEILING	13-¾" x 10-⅝"	6"ø	OCC SENSOR	1,2,3,4	FRAC	115	1	GREENHECK SP-A50
EF-3	BATHROOM	50	0.1"	CEILING	13-¾" x 10-⅝"	6"ø	OCC SENSOR	1,2,3,4	FRAC	115	1	GREENHECK SP-A50
EF-4	BATHROOM	70	0.1"	CEILING	13-¾" x 10-⅝"	6"ø	OCC SENSOR	1,2,3,4	FRAC	115	1	GREENHECK SP-A70
EF-5	BATHROOM	70	0.1"	CEILING	13-¾" x 10-⅝"	6"ø	OCC SENSOR	1,2,3,4	FRAC	115	1	GREENHECK SP-A70
EF-6	GRINDER ROOM	500	0.3"	WALL PROPELLER	20.5X20.5	20.38	WALL SWITCH	1,2,4,5	1	115	1	GREENHECK AER-2--VG
EF-7,8	STORAGE AREA HEAT AND FUME	5000	0.65"	WALL PROPELLER	38.5X38.5	▭	WALL SWITCH	1,2,4,5,6	½	208	1	GREENHECK SBE-3H36-10

ACCESSORIES: 1) BACKDRAFT DAMPER 2) DISCONNECT 3) CEILING GRILLE 4) SPEED CONTROL 5)WALL SLEEVE 6) DAMPER AND 120V MOTOR

EQUALS: ACME, PENN, COOK, CARNES NOTE: EF-7,8 FOR COMPLIANCE IF STORED VEHICLES EXCEED FUELING LIMITS – AFTER BID OWNER MAY PRECLUDE USE IF IN COMPLIANCE WITH FUELING REQUIREMENTS

HIGH VOLUME LOW SPEED FAN SCHEDULE

NO.	SERVICE	CFM	SP	HP	VOLTAGE	ROOM SERVED	TYPE	INTERLOCKED	ACCESS.	GREENHECK FAN MODEL
HVLS-1,2	AREA VENT	29,000	—	1/4	115V	WORK BAYS	CEILING PROPELLER	DDC, VFD SPEED CTRL	1,2,3	BASE 6-12'

ACCESSORIES: 1)DISCONNECT 2)INTERNAL OVERLOAD PROTECTION 3) VFD WITH CONTROLLER 4) HANG KIT

EQUALS: BIG ASS

HVAC GENERAL NOTES

1. REFRIGERANT LINES FROM OUTDOOR CONDENSING UNITS SHALL BE EXTENDED FROM UNIT THRU WALL TO INDOOR UNITS. REFRIGERANT LINES SHALL BE SIZED AS PER MANUFACTURER'S RECOMMENDATIONS.
2. RECT. DUCT DIMENSIONS ARE METAL-TO-METAL SIZES AND INCLUDE AN ALLOWANCE FOR THE 1" DUCT LINER.
3. CENTER GRILLES, DIFFUSERS, & REGISTERS IN LAY-IN CEILING TILES.
4. ROUND DUCT DIMENSIONS ARE METAL-TO-METAL SIZES AND SHALL BE EXTERNALLY WRAPPED WITH 2" INSULATION.
5. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL CONCRETE CONDENSING UNIT PADS.
6. 24V DAMPER OPERATOR TO OPEN WHEN FAN OPERATES, CLOSE WHEN FAN STOPS.

HVAC LEGEND

- RECTANGULAR DUCT WITH 2" DUCT WRAP
- RECTANGULAR DUCT WITH 1" LINER
- ROUND DUCT WITH 2" DUCT WRAP
- ROUND DUCT WITH 2" DUCT WRAP
- FLEX DUCT
- SUPPLY DUCT UP
- SUPPLY DUCT DOWN
- RETURN/EXHAUST DUCT UP
- RETURN/EXHAUST DUCT DOWN
- SQUARE ELBOW WITH TURNING VANES - RECT. DUCT
- ROUND ELBOW - 5 PIECE 90, 3 PIECE 45
- ROUND ELBOW (12" OR LESS) - 5 PIECE 90, 3 PIECE 45
- MANUAL VOLUME DAMPER
- MOTORIZED VOLUME DAMPER
- CEILING DIFFUSER (FLOW DIRECTION INDICATED)
- RETURN AIR GRILLE
- THERMOSTAT (CONTROLLER LOCATION)
- THERMOSTAT (BULB LOCATION)
- STATIC PRESSURE SENSOR
- EQUIPMENT TAG
- DIFFUSER/GRILLE TAG
- NOT IN CONTRACT (NO WORK)
- CUBIC FEET PER MINUTE
- CUBIC FEET PER MINUTE
- ROUND DUCT
- THERMOSTAT

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EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA

NOTES, SCHEDULES, ABBREVIATIONS

6/28/2023

LAWRENCE E. STEPHENS LICENSE NO. 63259 STATE OF FLORIDA PROFESSIONAL ENGINEER

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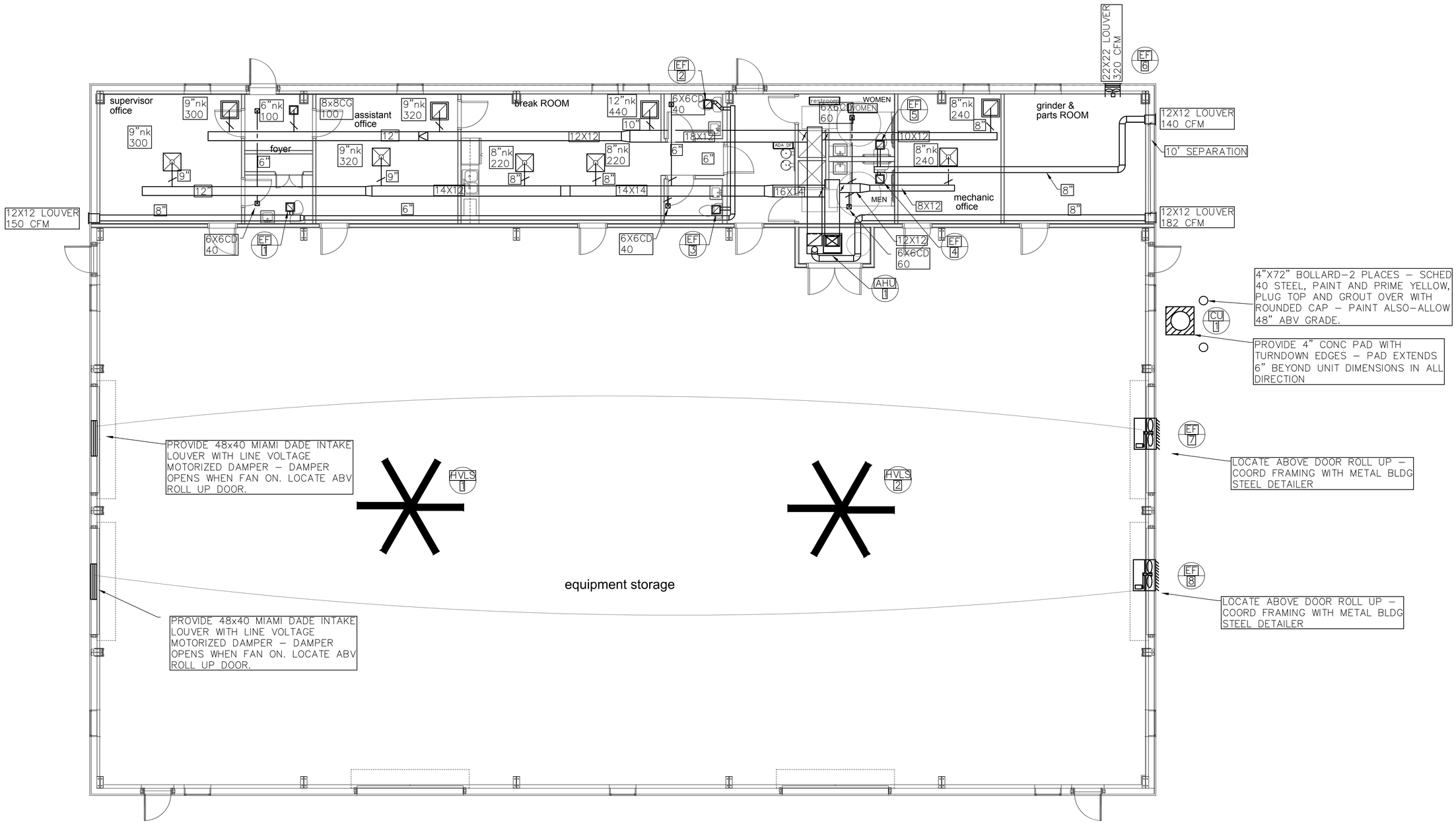
2302	6/5/2023	LES	LES	LES

SHEET NUMBER

M001

SHEET COUNT

1 OF 4



1 HVAC PLAN

SCALE : 3/16" = 1'-0"

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EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA

HVAC PLAN

6/28/2023

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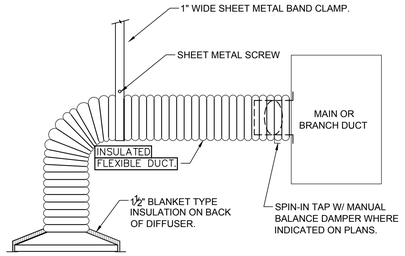
SHEET NUMBER

M100

SHEET COUNT

1 OF 4

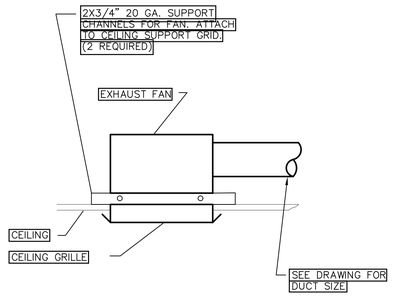
DATETIME



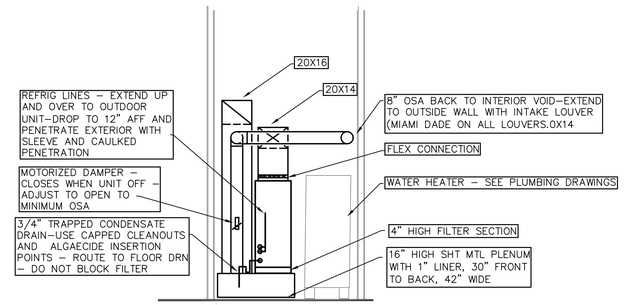
FLEXIBLE DUCT NOTES

1. FLEX DUCT MAX LENGTH 5'-0".
2. SPACE HANGERS SO THAT DUCT SAG IS LESS THAN ½" PER FOOT.
3. SECURE FLEX DUCT TO SPIN-IN FITTING AND DIFFUSER WITH ½" GALVANIZED ADJUSTABLE BAND CLAMP WITH CADMIUM PLATED BUCKLE AND SCREW. PLACE BAND CLAMP BETWEEN THE WIRES OF LAST SPIRAL OF THE FLEX DUCT.

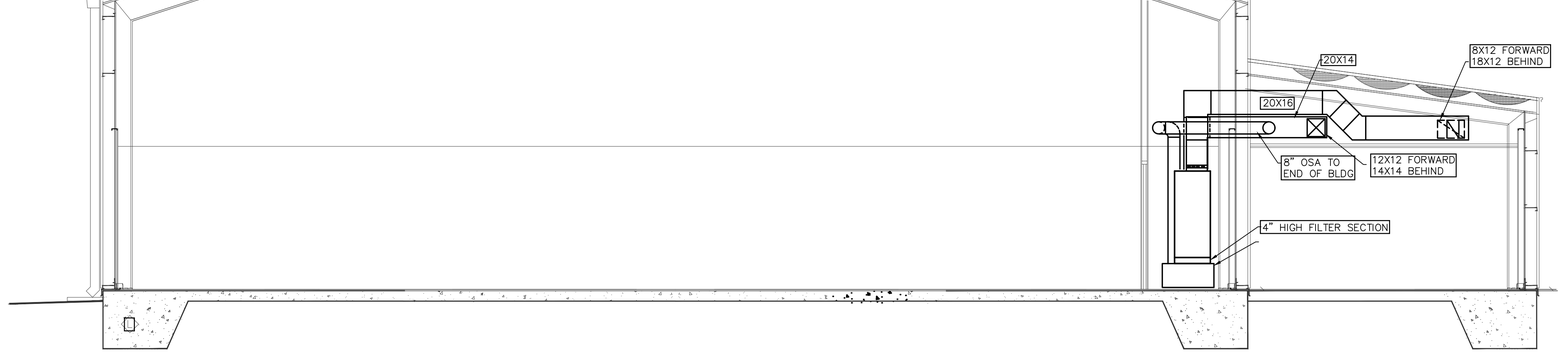
1 FLEXIBLE DUCT TAP SCHEMATIC ELEVATION VIEW
SCALE : N.T.S.



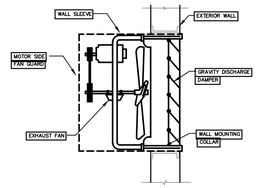
2 EXHAUST FAN DETAIL
SCALE :NONE



3 HP-1 INSTALLATION SCHEMATIC
SCALE : 1/4" = 1'-0"



2 ELEVATION VIEW - HVAC
SCALE : 1/4"=1'-0"



4 EF-7,8 INSTALLATION SCHEMATIC
SCALE : NTS

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HVAC ELEVATION AND DETAILS

6/28/2023

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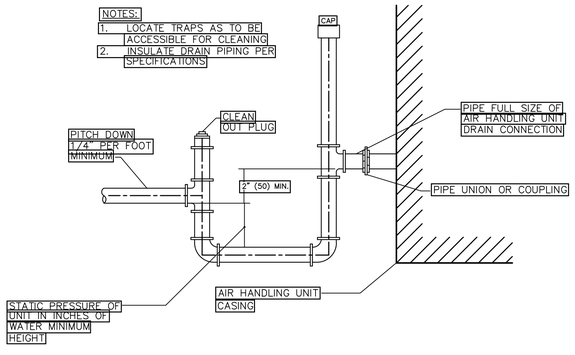
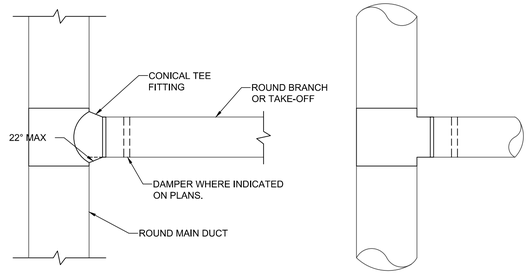
FL AUTHORIZATION NO: 00003095



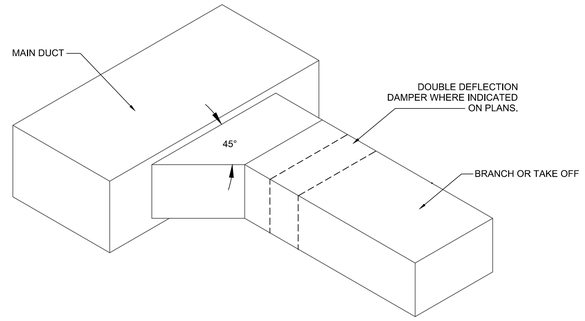
1 CONDENSATE TRAP SCHEMATIC

SCALE : N.T.S.



2 ROUND DUCT TAP SCHEMATIC - PLAN VIEW

SCALE : N.T.S.



3 RECTANGULAR DUCT TAP SCHEMATIC - ISOMETRIC VIEW

SCALE : N.T.S.

Ventilation Sizing Summary for BLOCK LOAD

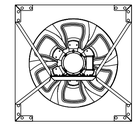
1. Summary

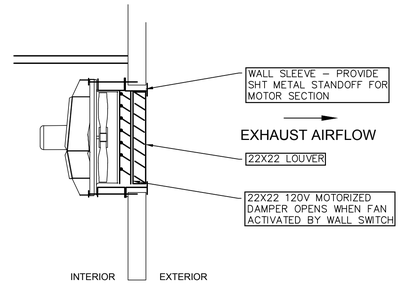
Ventilation Sizing Method ASHRAE Std 62.1-2013
Design Condition Heating operation
Occupant Diversity (D) 1.000
Uncorrected Outdoor Air Intake (Vou) 182 CFM
System Ventilation Efficiency (Ev) 0.831
Outdoor Air Intake (Vot) 218 CFM

2. Space Ventilation Analysis

Zone Name / Space Name	Mult.	Supply Air (CFM) (Vpz)	Space Floor Area (ft²) (Az)	Area Outdoor Air Rate (CFM/ft²) (Ra)	Time Averaged Occupancy (Occupants) (Pz)	People Outdoor Air Rate (CFM/person) (Rp)	Air Distribution Effectiveness (Ez)	Space Outdoor Air (CFM) (Voz)	Breathing Zone Outdoor Air (CFM) (Vbz)	Space Ventilation Efficiency (Evz)
Zone 1										
SUPERVISOR	1	316	118.0	0.06	1.0	5.00	0.8	**15**	*12*	1.043
ASSISTANT	1	315	239.0	0.06	1.0	5.00	0.8	**24**	*19*	1.014
BREAK ROOM	1	467	336.0	0.12	5.0	5.00	0.8	**82**	*65*	0.916
FOYER	1	39	52.0	0.06	1.0	5.00	0.8	**10**	*8*	0.831
GRINDER & PARTS	1	355	236.0	0.06	2.0	5.00	0.8	**30**	*24*	1.005
MECHANIC OFFICE	1	289	175.0	0.06	2.0	5.00	0.8	**26**	*21*	1.002
MENS	1	85	78.0	0.06	1.0	5.00	0.8	**12**	*10*	0.947
TOILET LOBBY	1	92	117.0	0.06	1.0	5.00	0.8	**15**	*12*	0.928
WOMEN	1	50	88.0	0.06	1.0	5.00	0.8	**13**	*10*	0.834
Totals (incl. Space Multipliers)		**2008**							**182**	**0.831**

DRAWING VIEWED FROM INTERIOR





WALL OPENING 20.53 SQ.
MOTOR IS ACCESSIBLE FROM INTERIOR OF BUILDING

6 EF-6 INSTALLATION SCHEMATIC

SCALE : N.T.S.

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EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA

HVAC DETAILS

6/28/2023

LAWRENCE E. STEPHENS LICENSE NO. 63259 STATE OF FLORIDA PROFESSIONAL ENGINEER

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LAWRENCE STEPHENS PE 63259
FL AUTHORIZATION NO: 00003095

DATETIME

PLUMBING FIXTURE SCHEDULE

FIXTURE	MARK	TRAP	WASTE	VENT	CW	HW	REMARKS
WATER CLOSET	WC-1		4"	3"	1/2"		TANK TYPE FLOOR MOUNTED
WATER CLOSET	WC-2		4"	3"	1/2"		TANK TYPE FLOOR MOUNTED - ADA COMPLIANT
LAVATORY	L-1	1¼"	2"	1½"	1/2"	1/2"	WALL HUNG
LAVATORY	L-2	1¼"	2"	1½"	1/2"	1/2"	WALL HUNG - ADA COMPLIANT
KITCHEN SINK	KS-1	1½"	2"	2"	1/2"	1/2"	STAINLESS STEEL, COUNTER MOUNT, DOUBLE COMPARTMENT
DRINKING FOUNTAIN	EDF-1	1¼"	1½"	1½"	1/2"		WALL HUNG, DUAL HEIGHT FOR ADA, BOTTLE FILLER
SHOWER	SH-2	2"	2"	2"	1/2"	1/2"	MIXING VALVE, ADA COMPLIANT
WATER HEATER	WH-1				3/4"	3/4"	SEE WH SCHEDULE
HOSE BIBB	HB-1				3/4"	3/4"	BOX MOUNTED, FREEZE PROOF, VACUUM BREAKER
FLOOR DRAIN	FD-2	3"	3"	2"			TYPE A - STRAINER
FLOOR DRAIN	FD-1	3"	3"	2"	1/2"		TYPE A - STRAINER, W/ TRAP PRIMER
MOP SINK	MS-1	3"	3"	2"	1/2"	1/2"	3X3X12, CHECK VALVE FAUCET W/STOPS, PAIL HOOK, MOP HOOKS, S.S. SHIELD ON BACK WALL - MIN 24" HIGH WITH FOLDED EDGES.
NOTES:							

WATER HEATER SCHEDULE

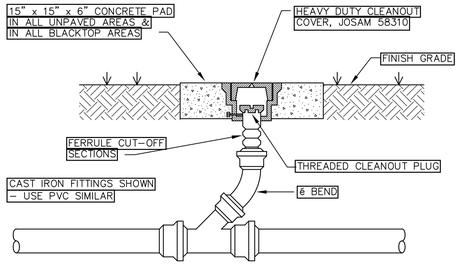
MARK	LOCATION	MIN. STORAGE	MIN. RECOVERY	TEMP. SETTING	TEMP RISE	ELECTRICAL				REMARKS
						VOLT.	PHASE	INPUT	ELEMENTS	
		GAL	GPH	°F	°F	V	ø	KW	#	
WH-2	MECH CLOSET-MAIN BAY	50	40	140	60	208	3	4.5	2	
NOTES: USE SAFETY PAN BELOW HEATER ON FLOOR WITH DRAIN DIRECTED TO FLOOR DRAIN, DIRECT T&P TO FLOOR DRAIN, PROVIDE INLINE CIRCULATOR FOR RETURN - 6GPM @ 12FT, 120V, PROVIDE WITH TIMER TO STOP DURING UNOCCUPIED PERIODS										

WATER HAMMER ARRESTOR SCHEDULE

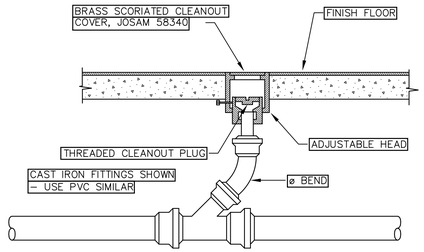
SIZE	FIXTURE UNITS	PDI STANDARD
1/2"	1-11	A
3/4"	12-32	B
1"	33-60	C
1-1/2"	61-113	D
1-3/4"	114-154	E
2"	155-330	F

PLUMBING LEGEND

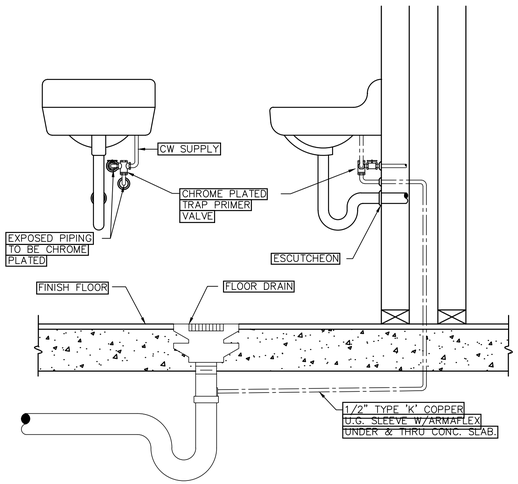
SS	SANITARY SEWER
	SOIL OR WASTE PIPING (W.)
	VENT PIPING
	COLD WATER PIPING (CW)
	HOT WATER PIPING (HW)
	HOT WATER RETURN PIPING (HWR)
	EXIST. HOT WATER PIPING RETURN PIPING (HWR)
F.F.C.O.	FINISH FLOOR CLEANOUT
F.G.C.O.	FINISH GRADE CLEANOUT
VTR	VENT THRU ROOF
EXIST.	EXISTING
ELEV.	ELEVATION
U.G.	UNDERGROUND
ABV.	ABOVE
CLG.	CEILING
CONC.	CONCRETE
FIN.	FINISH
O.C.	ON CENTER
	GATE VALVE (G.V.)
	BALL VALVE (B.V.)
oz.	OUNCES
(TYP.)	TYPICAL
DWN	DOWN
SAN.	SANITARY
BLDG	BUILDING
AFF.	ABOVE FINISH FLOOR



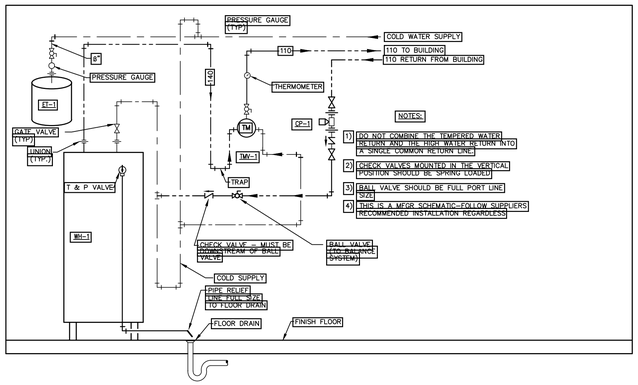
1 FINISH GRADE CLEANOUT DETAIL
SCALE : NTS



2 FINISH FLOOR CLEANOUT DETAIL
SCALE : NTS



3 TRAP PRIMER INSTALLATION DETAIL
SCALE : NTS



4 WATER HEATER DETAIL
SCALE : NTS

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MECHANICAL ENGINEERING LLC.

EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA
NOTES, SCHEDULES, ABBREVIATIONS, DETAILS

6/28/2023

LAWRENCE E. STEPHENS LICENSE NO. 63259 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	DATE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
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SHEET NUMBER
P001

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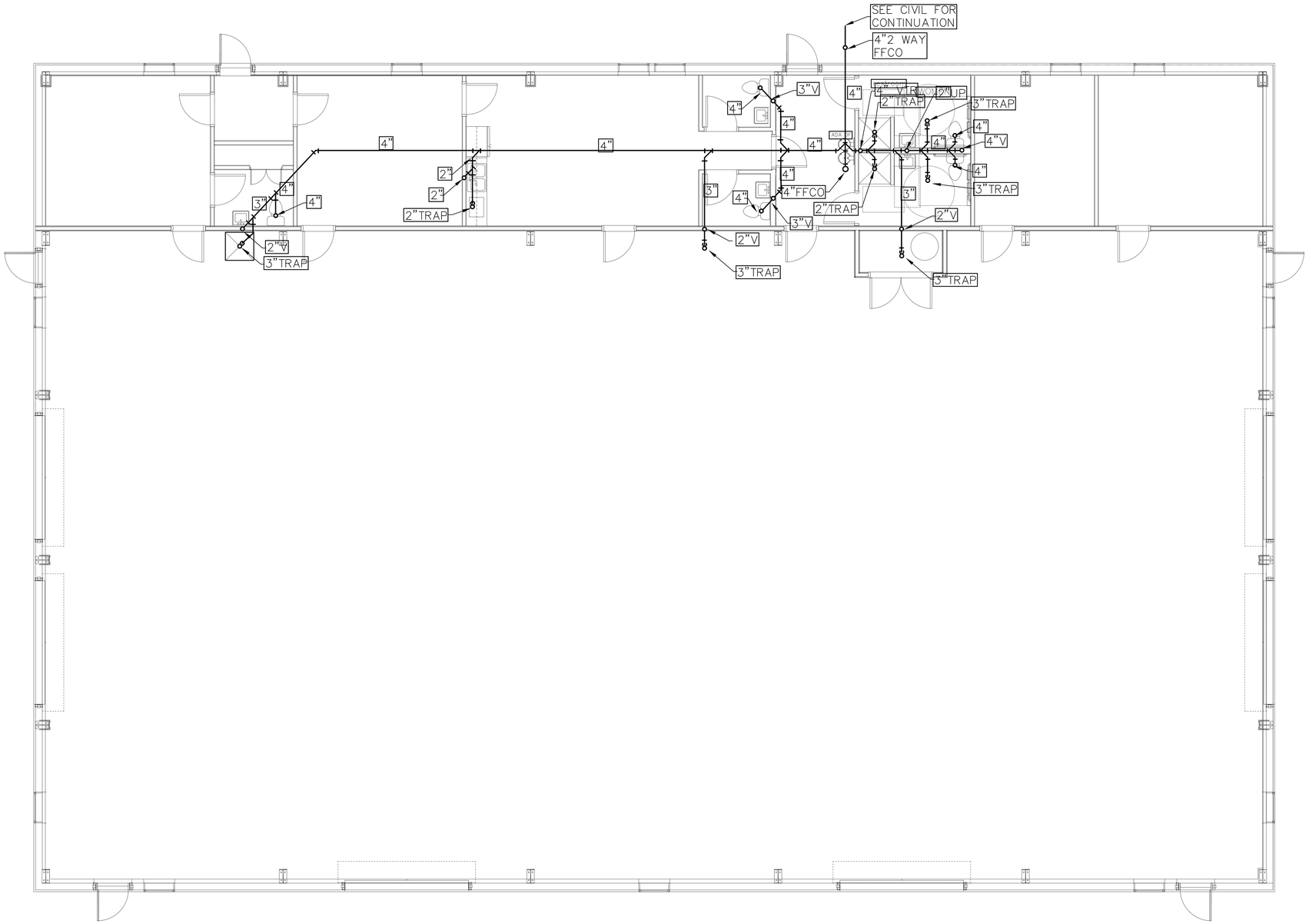
1 OF 4

DATETIME



1 BELOW FLOOR SANITARY WASTE

SCALE : 3/16" = 1'-0"

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EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA

BELOW FLOOR WASTE SYSTEM

6/28/2023

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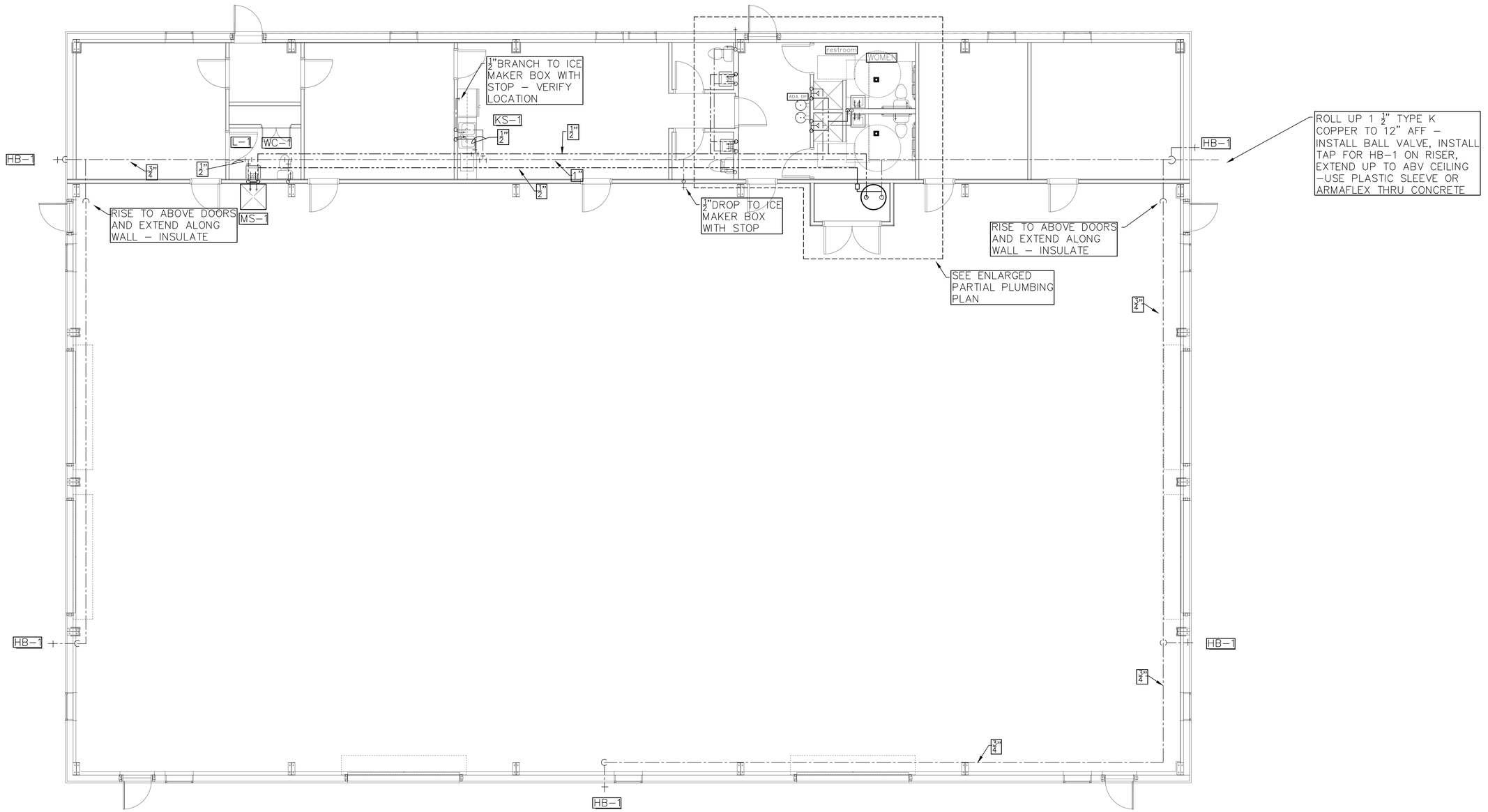

1 ABOVE FLOOR PLUMBING PLAN

SCALE : 3/16" = 1'-0"

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EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA

ABOVE FLOOR PLUMBING PLAN

6/28/2023

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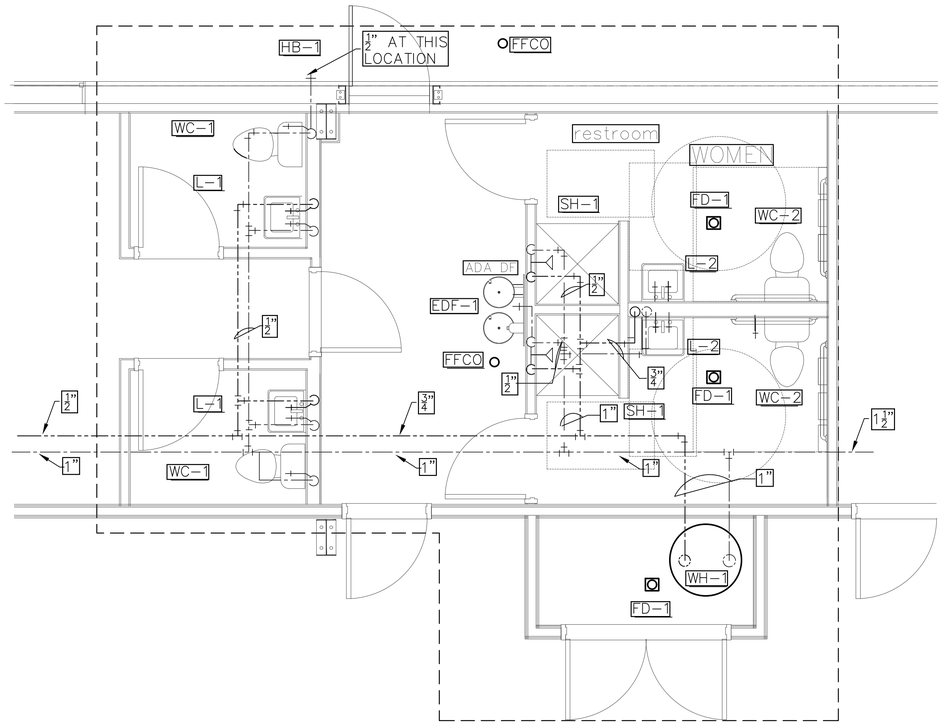
SHEET COUNT

1 OF 4

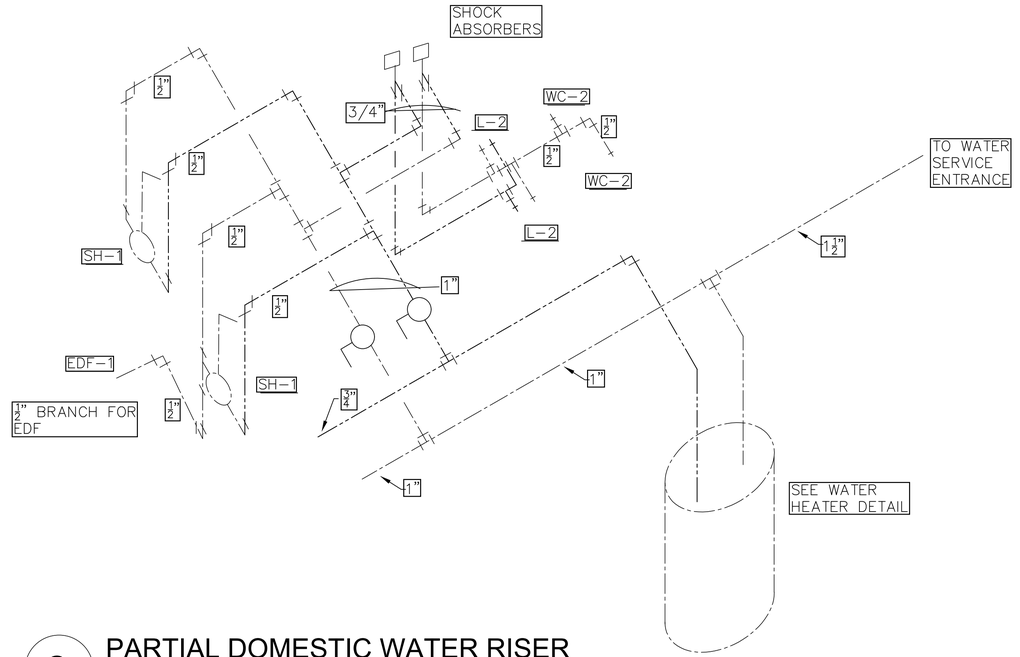
STEPHENS
MECHANICAL ENGINEERING LLC.

925 TOMMY MUNRO DR., STE B
BILOXI, MS 39532
228 207 3322 FAX 228 207 3346
LAWRENCE STEPHENS PE 63259
FL AUTHORIZATION NO: 00003095



1 ENLARGED PLUMBING PLAN

SCALE : 1/4" = 1'-0"



2 PARTIAL DOMESTIC WATER RISER

SCALE : NTS

STEPHENS
MECHANICAL ENGINEERING LLC.
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LES@STEPHENSMECHENG.COM

EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA

PARTIAL PLUMBING PLAN AND DOMESTIC RISER

6/28/2023

LAWRENCE E. STEPHENS LICENSE NO. 63259 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOB NO.	DATE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
23021	6/5/2023	LES	LES	LES

SHEET NUMBER

P102

SHEET COUNT

1 OF 4

STEPHENS MECHANICAL ENGINEERING LLC.
925 TOMMY MUNRO DR., STE B
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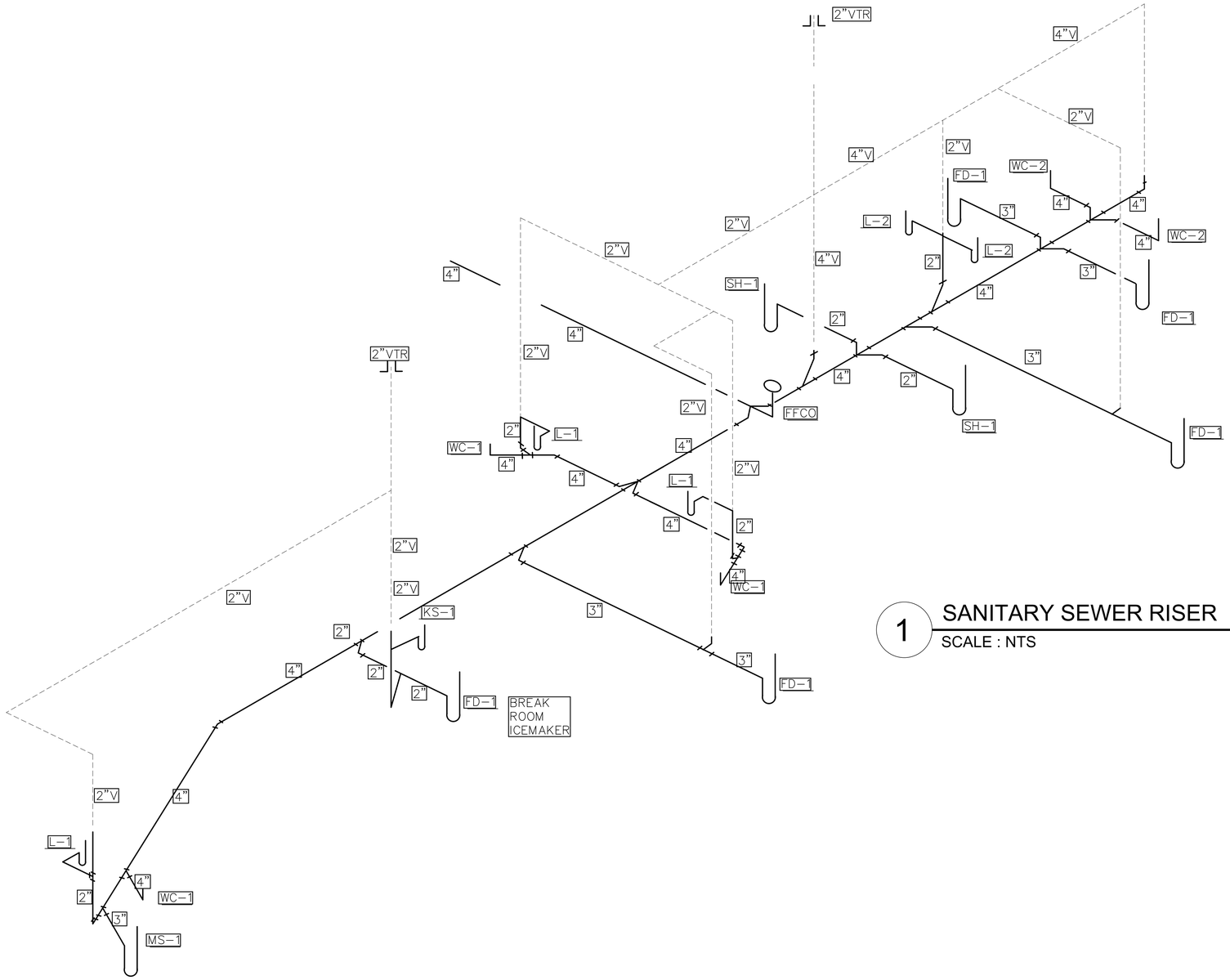
FL AUTHORIZATION NO: 00003095



1 SANITARY SEWER RISER

SCALE : NTS

STEPHENS
MECHANICAL ENGINEERING LLC.
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EAGLE SPRINGS GOLF COURSE
MAINTENANCE BUILDING
WALTON COUNTY, FORT WALTON, FLA

SANITARY SEWER RISER

6/28/2023

LAWRENCE E. STEPHENS LICENSE NO. 63259 STATE OF FLORDA PROFESSIONAL ENGINEER

JOB NO.	DATE:	DRAWN BY:	DESIGNED BY:	CHECKED BY:
23021	6/5/2023	LES	LES	LES

SHEET NUMBER

P103

SHEET COUNT

1 OF 4

STEPHENS
MECHANICAL ENGINEERING LLC.
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LAWRENCE STEPHENS PE 63259
FL AUTHORIZATION NO: 000030951

ELECTRICAL LEGEND

LIGHTING

- SURFACE MOUNT, WRAP FIXTURE
- RECESSED CEILING FIXTURE
- SURFACE/STRUCTURE HI-BAY FIXTURE
- BATTERY BACKUP EMERGENCY/EGRESS FIXTURE

SWITCHES

- SINGLE POLE SWITCH – 20A, 120/277V, +18" AFF, UNLESS NOTED
- THREE WAY SWITCH – 20A, 120/277V +18" AFF, UNLESS NOTED
- FOUR WAY SWITCH – 20A, 120/277V +18" AFF, UNLESS NOTED
- MOTION SENSOR SWITCH, WALL MOUNT 48" AFF
- SINGLE POLE FAN SWITCH – 20A, 120/277V, +18" AFF, UNLESS NOTED
- PHOTO ELECTRIC CONTROL, MOUNT AT BUILDING FACADE, UNLESS NOTED
- MOTORIZED DOOR OPEN/CLOSE CONTROL

SWITCHGEAR

- NON FUSED SAFETY SWITCH, NEMA 3R AT WET LOCATIONS
- FUSED SAFETY SWITCH, NEMA 3R AT WET LOCATIONS
- COMBO MOTOR STARTER/SAFETY SWITCH
- LIGHT AND POWER PANELBOARD
- METER
- TVSS – TRANSIENT VOLTAGE SURGE SUPPRESSOR
- SPECIAL ELECTRICAL CONNECTION
- WH – WATER HEATER ELECTRICAL CONNECTION
- EF – EX. FAN ELECTRICAL CONNECTION
- AHU – AIR HANDLING UNIT ELECTRICAL CONNECTION
- CU – CONDENSING UNIT ELECTRICAL CONNECTION

CONDUIT AND WIRE

- FLEXIBLE CONDUIT, SEALTITE AT WET LOCATIONS
- CONDUIT CONCEALED IN WALL OR ABOVE CEILING
- CONDUIT BELOW FLOOR OR CONCEALED IN WALL
- CONDUIT EXPOSED
- CIRCUIT CONDUCTORS IN CONDUIT
- MULTIPLE CIRCUIT CONDUCTORS IN CONDUIT WITH NEUTRALS
- GROUND CONDUCTORS IN CONDUIT
- CONDUIT UP
- CONDUIT DOWN
- XX–XX – CIRCUIT HOMERUN TO PANEL BOARD, XX–XX DENOTES PANEL NAME AND CIRCUIT NUMBER
- CONTINUATION OF CONDUIT RUN

DEVICES

- DUPLEX RECEPTACLE – 20A, 120V
- GFI DUPLEX RECEPTACLE – 20A, 120V
- GFI, WEATHER RESISTANT DUPLEX RECEPTACLE – 20A, 120V WITH IN–USE WEATHERPROOF COVER
- SINGLE RECEPTACLE – 30A, 250V, 2W, G
- SINGLE RECEPTACLE – 30A, 250V, 2W, G WITH IN–USE WEATHERPROOF COVER
- SINGLE RECEPTACLE – 50A, 250V, 2W, G
- 20A, 120V, CORD CAP, 250V, 2W, G MOUNTED FROM CEILING K&H INDUSTRIES RHT3L–WW–B12K, OR EQUAL
- 30A, 120V, CORD CAP, 250V, 2W, G MOUNTED FROM CEILING K&H INDUSTRIES RHT3L–WW–B10G, OR EQUAL

MOUNT ALL DEVICES AT +18" AFF, UNLESS NOTED OTHERWISE.

COMMUNICATIONS

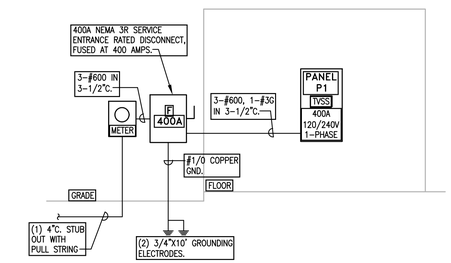
- TELEPHONE OUTLET +18" AFF, UNLESS NOTED
- COMBO DATA/TELEPHONE OUTLET +18" AFF, UNLESS NOTED
- TELEPHONE/TELEVISION TERMINAL BOARD 3/4" 2'X2' FIRE RATED PLYWOOD

LUMINAIRE SCHEDULE

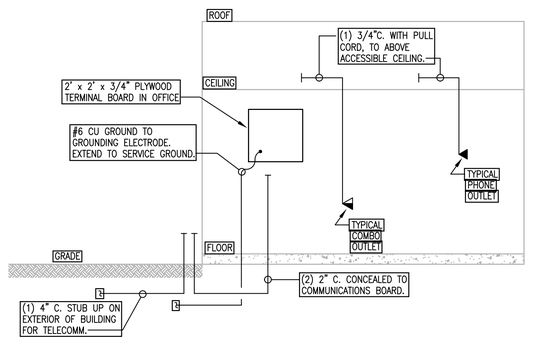
MARK	LAMPS	MOUNTING	DESCRIPTION	MANUFACTURER	EQUALS
C1	LED	RECESSED CEILING	LED, 6" RECESSED WAFER LIGHT	LITHONIA WF6-LED-35K-MVOLT	OR APPROVED EQUAL
EWP	LED	WALL; ABOVE DOOR	EMERGENCY/EGRESS FIXTURE, EXTERIOR	ISOLITE OWL-EM-BZ-MB	OR APPROVED EQUAL
F1	LED	SURFACE CEILING	LED, LOW PROFILE WRAPAROUND FIXTURE	LITHONIA LBL4-4800LM-80CRI-35K-MVOLT	OR APPROVED EQUAL
F1E	LED	SURFACE CEILING	LED, LOW PROFILE WRAPAROUND FIXTURE, W/EMERGENCY	LITHONIA LBL4-4800LM-80CRI-35K-MVOLT-EL14L	OR APPROVED EQUAL
H1	LED	SUSPENDED AT STRUCTURE	LED, ROUND HI-BAY FIXUTRE, SWITCHABLE LUMENS	LITHONIA CPRB-ALO13-UVOLT-SWW9-80CRI-DWH-12000/15000/18000	OR APPROVED EQUAL
W1	LED	WALL; (VERIFY)	LED, EXTERIOR WALL PACK	LITHONIA TWX1-LED-ALO-40K-MVOLT-DDBTXD	OR APPROVED EQUAL
W2	LED	WALL; (VERIFY)	LED, EXTERIOR WALL PACK	LITHONIA TWX2-LED-ALO-40K-MVOLT-DDBTXD	OR APPROVED EQUAL
XE	RED LED	WALL/CEILING	COMBO EXIT/EMERGENCY EGRESS - 1 SIDE - ALUMINUM HOUSING	ISOLITE DCL-R-U-BA-BA-MTEBP	OR APPROVED EQUAL

NOTE: LUMINAIRES WITH "E" DESIGNATION SHALL HAVE INTEGRAL EMERGENCY BALLAST. CONNECT EMERGENCY BALLAST ONLY AHEAD OF ANY SWITCHING. NORMAL BALLAST TO BE SWITCHED AS INDICATED, UNLESS NOTED OTHERWISE.

PANEL	BUSS: 400 AMP	VOLT: 120/240V, 1 PHASE, 3 WIRE						AIC RATING: 22,000			
P1	MAINS: 400A MLO	MOUNT: SURFACE, NEMA 1						LOCATION: GRINDER & PARTS ROOM			
CKT.	BKR.	DESCRIPTION	FEEDER	LOAD (AMPS) A	LOAD (AMPS) C		LOAD (AMPS) A	LOAD (AMPS) C	FEEDER	DESCRIPTION	BKR.	CKT.
1	20/1	EXTERIOR LIGHTS	2-12, 1-12G	8			13.2		2-12, 1-12G	EQUIP. STOR. LIGHTS	20/1	2
3	20/1	LIGHTS	2-12, 1-12G		10			8.8	2-12, 1-12G	EQUIP. STOR. LIGHTS		4
5	20/1	EXHAUST FAN	2-12, 1-12G	5.8			6		2-12, 1-12G	REC. - GRINDER/PARTS ROOM	20/1	6
7	20/1	REC. - COMM. BOARD	2-12, 1-12G		3			7.5	2-12, 1-12G	REC. - MECH. OFFICE	20/1	8
9	20/1	REC. - RESTROOMS	2-12, 1-12G	7.5			6		2-12, 1-12G	REC. - DRINKING FOUNTAINS	20/1	10
11	20/1	REC. - BREAK ROOM	2-12, 1-12G		4.5			4.5	2-12, 1-12G	REC. - BREAK ROOM	20/1	12
13	20/1	ICE MACHINE	2-12, 1-12G	10			3		2-12, 1-12G	REC. - BREAK ROOM.	20/1	14
15	20/1	REC. - BREAK ROOM REFRIG.	2-12, 1-12G		8			12	2-12, 1-12G	REC. - ASSIST. OFFICE	20/1	16
17	20/1	REC. - SUPERVISOR OFFICE	2-12, 1-12G	10.5			7.5		2-12, 1-12G	REC. - EQUIP. STORAGE	20/1	18
19	20/1	REC. - EQUIP. STORAGE	2-12, 1-12G		9			1.5	2-12, 1-12G	REC. - EQUIP. STOR. CORD REEL	20/1	20
21	20/1	REC. - EQUIP. STORAGE	2-12, 1-12G	9			5.8		2-12, 1-12G	EQUIP. STOR. FAN	20/1	22
23	20/1	EQUIP. STOR. FAN	2-12, 1-12G		5.8			5	2-12, 1-12G	ROLL UP DOOR	20/1	24
25	20/1	ROLL UP DOOR	2-12, 1-12G	5			5		2-12, 1-12G	ROLL UP DOOR	20/1	26
27	20/1	ROLL UP DOOR	2-12, 1-12G		5			5	2-12, 1-12G	ROLL UP DOOR	20/1	28
29	20/2	EF-7 AND LOUVER	3-12, 1-12G	8			5		2-12, 1-12G	ROLL UP DOOR	20/1	30
31					8					SPARE	20/1	32
33	30/2	REC. - EQUIP. STORAGE	2-10, 1-10G	15			8		3-12, 1-12G	EF-8 AND LOUVER	20/2	34
35					15			8				36
37	30/2	REC. - EQUIP. STORAGE	2-10, 1-10G	15			15		2-10, 1-10G	REC. - EQUIP. STORAGE	30/2	38
39					15			15				40
41	30/2	REC. - GRINDER/PARTS	2-10, 1-10G	15			15		2-10, 1-10G	REC. - EQUIP. STORAGE	30/2	42
43					15			15				44
45	30/2	REC. - EXTERIOR	3-10, 1-10G	20			15		2-10, 1-10G	REC. - GRINDER/PARTS	30/2	46
47					20			15				48
49	20/1	SPARE					20		2-10, 1-10G	ICE MACHINE	30/2	50
51	20/1	SPARE						20				52
53	30/2	AHU-1 #2	2-10, 1-10G	22			18.75		2-10, 1-10G	WH-1	30/2	54
55					22			18.75				56
57	50/2	CU-1	2-8, 1-10G	26			51		2-6, 1-10G	AHU-1 #1	60/2	58
59					26			51				60
				176.8	166.3		194.3	187.1				
			CONNECTED LOADS PER PHASE				A phase	371.1		amps		
							C phase	353.4		amps		



1 POWER RISER DIAGRAM
E100 SCALE: NONE



2 COMMUNICATIONS RISER DIAGRAM
E100 SCALE: NONE

WELCON
ELECTRICAL CONSULTANTS
14116 CUSTOMS BOULEVARD, SUITE #111
GULFPORT, MISSISSIPPI 39503
228.822.8000

Project Name and Address
EAGLE SPRINGS GOLF COURSE MAINT. BUILDING
WALTON COUNTY, FLORIDA

Sheet Title
ELECTRICAL LEGEND, LUMINAIRE SCHEDULE, PANELBOARD SCHEDULE AND DETAILS

No.	Revision	Date

Seal
GREGORY P WYROSDICK LICENSE No. 80 STATE OF FLORIDA PROFESSIONAL ENGINEER
06/27/23

Project No.	23-SM-03
Date	06/27/2023
Drawn By	WH
Checked By	GPW
Scale	AS SHOWN

Drawing No.
E100
1 of 3 Sheets

ELECTRICAL GENERAL NOTES AND SPECIFICATIONS

BASIC ELECTRICAL REQUIREMENTS

1. ALL ELECTRICAL WORK TO CONFORM TO CURRENT EDITIONS OF THE FLORIDA BUILDING CODES, AND OTHER APPLICABLE LOCAL, STATE, AND FEDERAL LAWS, ORDINANCES, AND REGULATIONS. WHERE DRAWINGS OR SPECIFICATIONS EXCEED CODE REQUIREMENTS, THE DRAWINGS AND SPECIFICATIONS SHALL GOVERN. NO WORK SHALL BE INSTALLED WHICH IS LESS THAN MINIMUM LEGAL STANDARDS.
2. ALL WORK PERFORMED UNDER THIS DIVISION SHALL BE INSPECTED AND APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
3. CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING WORK. NO ADDITIONAL SCOPE WILL BE AUTHORIZED DUE TO LACKING OF UNDERSTANDING ON EXISTING CONDITIONS.
4. CONTRACTOR SHALL VERIFY WITH UTILITY COMPANIES FOR SERVICE ENTRANCE REQUIREMENTS TO THE BUILDING/FACILITY. SERVICE ENTRANCES TO BE INSTALLED PER RESPECTIVE UTILITY COMPANY REQUIREMENTS.
5. PROVIDE FOR ALL PERMITTING AND INSPECTIONS. INCLUDE PAYMENT OF ALL PERMIT AND INSPECTION FEES APPLICABLE THE WORK IN THIS DIVISION.
6. PROVIDE ONE YEAR WARRANTY, RECORD (AS-BUILT) DRAWINGS, AND OPERATION/MAINTENANCE MANUALS ON ALL ELECTRICAL EQUIPMENT AND LIGHTING.
7. DURING CONSTRUCTION, THE CONTRACTOR SHALL EXERCISE CARE AND TAKE APPROPRIATE PRECAUTIONARY MEASURES TO PREVENT ANY DAMAGE TO THE EXISTING STRUCTURES, SIDEWALKS, UTILITIES, COMMUNICATIONS, ETC. DURING THE PROJECT. THE CONTRACTOR SHALL CORRECT ALL DAMAGE CAUSED BY OR DURING THE PROJECT. CONTRACTOR SHALL PROVIDE NOT LESS THAN (2) AND NOT MORE THAN (10) WORKING DAYS ADVANCE WRITTEN, ELECTRONIC, OR TELEPHONIC NOTICE OF THE COMMENCEMENT, EXTENT, LOCATION AND DURATION OF THE EXCAVATION WORK TO LOCAL OR STATE ONE-CALL SYSTEMS AND ANY NONMEMBERS OPERATOR(S) OF ANY UNDERGROUND UTILITY LINES OR UNDERGROUND FACILITIES IN AND NEAR THE EXCAVATION AREA, SO THAT OPERATOR(S) AND ANY NON-MEMBER OPERATOR(S) MAY LOCATE AND MARK THE LOCATION OF UNDERGROUND UTILITY LINES AND UNDERGROUND FACILITIES IN THE EXCAVATION AREA.
8. PROVIDE FOR AND INSTALL TEMPORARY LIGHTING AND POWER. COORDINATE WITH OWNER OR UTILITY COMPANY FOR CONNECTIONS. ALL TEMPORARY LIGHTING AND POWER SHALL CONFORM TO OSHA STANDARDS AND ALL CODE REQUIREMENTS.
9. WORKERS POSSESSING THE SKILLS AND EXPERIENCE OBTAINED IN PERFORMING WORK OF SIMILAR SCOPE AND COMPLEXITY SHALL PERFORM THE WORK OF THIS DIVISION.
10. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND THE SIZE AND LOCATION OF EQUIPMENT IS INDICATED TO SCALE WHENEVER POSSIBLE. VERIFY CONDITIONS, DIMENSIONS, INDICATED EQUIPMENT SIZES, AND MANUFACTURER'S DATA AND INFORMATION AS NECESSARY TO INSTALL THE WORK OF THIS DIVISION. COORDINATE LOCATION AND LAYOUT WITH OTHER WORK.
11. DRAWINGS INDICATE REQUIRED SIZE AND POINTS OF TERMINATION OF CONDUITS, NUMBER AND SIZE OF CONDUCTORS, AND DIAGRAMMATIC ROUTING OF CONDUIT. INSTALL CONDUITS WITH MINIMUM NUMBER OF BENDS TO CONFORM TO STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM, KEEP OPENINGS AND PASSAGEWAYS CLEAR, AND COMPLY WITH APPLICABLE CODE REQUIREMENTS.
12. OUTLET LOCATIONS SHALL BE COORDINATED WITH ARCHITECTURAL ELEMENTS PRIOR TO START OF CONSTRUCTION. LOCATIONS INDICATED ON THE DRAWINGS MAY BE DISTORTED FOR CLARITY. WHERE INSTALLED AT MILLWORK, OUTLETS SHALL BE LOCATED IN KNEE SPACE OR ABOVE COUNTERTOP.
13. COORDINATE ELECTRICAL WORK WITH ALL OTHER WORK.
14. THE SCOPE OF THE ELECTRICAL WORK INCLUDES FURNISHING, INSTALLING TESTING AND WARRANTY OF ALL ELECTRICAL WORK AND COMPLETE ELECTRICAL SYSTEMS SHOWN ON THE ELECTRICAL DRAWINGS AND SPECIFIED HEREIN.
15. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL ELECTRICAL SYSTEMS TO PROVIDE A COMPLETE PACKAGE AS INDICATED BY THE CONTRACT DOCUMENTS. THE DOCUMENTS ARE INTENDED TO PROVIDE AN OUTLINE FOR THE REQUIRED INSTALLATIONS. THE CONTRACTOR SHALL ULTIMATELY PROVIDE A COMPLETE AND OPERATIONAL SYSTEM AT THE CONCLUSION OF THE PROJECT.
16. DETAILS ARE PROVIDED AS THEY RELATE TO THE INSTALLATION. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MISCELLANEOUS COMPONENTS, PARTS, MATERIALS, FASTENERS, SPLICES, AND ANY OTHER INCIDENTAL ITEMS NECESSARY TO PROVIDE A COMPLETE INSTALLATION.
17. ELECTRICAL CONNECTIONS INDICATED ON DRAWINGS SHALL INCLUDE WIRING, INSTALLATION, CONNECTION AND ADJUSTMENT. REQUIRED ELECTRICAL CONNECTIONS SHALL BE PERFORMED FOR SUCH EQUIPMENT AND APPLIANCES. WORK SHALL INCLUDE FURNISHING AND INSTALLING SUITABLE OUTLETS, DISCONNECTING DEVICES, STARTERS, PUSH-BUTTON STATIONS, SELECTOR SWITCHES, CONDUIT, JUNCTION BOXES, AND WIRING NECESSARY FOR A COMPLETE ELECTRICAL INSTALLATION.
18. PROTECT MATERIALS AND EQUIPMENT FROM DAMAGE AND PROVIDE ADEQUATE AND PROPER STORAGE FACILITIES DURING PROGRESS OF THE WORK. DAMAGED MATERIALS AND/OR EQUIPMENT SHALL BE REPLACED. REMOVE RUBBISH, DEBRIS AND WASTE MATERIALS AND LEGALLY DISPOSE OF OFF THE PROJECT SITE.
19. REMOVE GREASE AND OIL SPOTS WITH SOLVENT. SUCH SURFACES SHALL BE WIPED AND CORNERS AND CRACKS SCRAPED OUT. EXPOSED ROUGH METAL SHALL BE SMOOTH, FREE OF SHARP EDGES, CAREFULLY STEEL BRUSHED TO REMOVE RUST AND OTHER SPOTS, AND LEFT IN PROPER CONDITION TO RECEIVE FINISH PAINTING.
20. ADVISE THE GENERAL CONTRACTOR OR ARCHITECT BEFORE STARTING THE WORK OF THIS DIVISION.
21. EXPOSED CONDUITS SHALL BE PAINTED TO MATCH THE SURFACES ADJACENT TO INSTALLATION. REFER TO PAINTING AND COATING SECTION OF SPECIFICATIONS.
22. VERIFY ALL DIMENSIONS AND CLEARANCES WITH ARCHITECT AND OWNER.
23. SEAL ALL WALL PENETRATIONS WITH AN APPROVED CAULK COMPOUND EQUAL TO 3M FIRE BARRIER CAULK.
24. COORDINATE PHASING OF WORK WITH ARCHITECTURAL DRAWINGS AND OTHER TRADES / DISCIPLINES FOR ELECTRICAL INSTALLATIONS.
25. NOTIFY THE ENGINEER IMMEDIATELY OF ANY PLAN DISCREPANCIES PRIOR TO PROCEEDING WITH ROUGH-IN OR TRIM OUT.

BASIC ELECTRICAL MATERIALS, BOXES, CONDUIT, WIRING, AND GROUNDING

1. BOXES INSTALLED IN CONCEALED WORK SHALL BE GALVANIZED STEEL, PRESSED, OR WELDED TYPE, WITH KNOCKOUTS.
2. BOXES SHALL BE 4-INCH OCTAGON, 4-INCH SQUARE, 2-1/8 INCHES DEEP OR LARGER, DEPENDING UPON NUMBER OF CONDUCTORS OR CONDUITS THEREIN, UNLESS NOTED OTHERWISE. PLASTER OR TILE RINGS SHALL BE FURNISHED FOR SUITABLE MOUNTING OF LIGHT FIXTURE. PROVIDE SUITABLE COVERS FOR ALL BOXES.
3. JUNCTION AND PULL BOXES, IN ADDITION TO THOSE INDICATED, SHALL ONLY BE USED IN COMPLIANCE WITH CODES, RECOGNIZED STANDARDS, AND CONTRACT DOCUMENTS. PROVIDE NEMA 3R WHERE INSTALLED OUTDOORS OR SUBJECT TO MOISTURE. PROVIDE POLYMER CONCRETE PULL BOXES AS NOTED WHERE INSTALLED AT GRADE LEVEL. PROVIDE SUITABLE COVERS FOR ALL BOXES.
4. ALL CONDUIT IN SLAB AND UNDERGROUND TO BE PVC SCH. 40.
5. ALL INTERIOR CONDUITS CONCEALED IN WALLS, ABOVE CEILINGS, OR IN EXPOSED STRUCTURE SHALL BE EMT WITH COMPRESSION FITTINGS FOR CONDUITS 1" AND SMALLER, CONDUITS 1-1/4" AND ABOVE SHALL HAVE STEEL SET-SCREW FITTINGS. METAL-CLAD (MC) CABLE MAY ONLY BE USED FOR FLEX CONNECTIONS TO LIGHT FIXTURES WHERE INSTALLED ABOVE LAY-IN ACOUSTICAL CEILINGS OR WHERE INSTALLED CONCEALED WITHIN BUILDING PURLING AT ROOF.
6. ALL EXPOSED CONDUITS SHALL BE GALVANIZED RIGID TO 10 FEET ABOVE FINISHED FLOOR WHEN INSTALLED IN AREAS SUSCEPTIBLE TO DAMAGE.
7. ALL CONDUITS SHALL BE INSTALLED PARALLEL AND PERPENDICULAR TO BUILDING STRUCTURE. DO NOT INSTALL CONDUITS AT "ANGLED" / "STRAIGHT-RUNS" BETWEEN BOXES.
8. FEEDER CONDUITS SHALL BE PVC BELOW GRADE, GRC ELBOWS AND RISERS UP TO PANELS FROM BELOW GRADE, OR EMT WHERE INSTALLED OVERHEAD AND COMPLETELY INDOORS, UNLESS NOTED OTHERWISE.
9. ALL WIRING SHALL BE COPPER.
10. ALL WIRING SHALL BE #12 AWG MINIMUM, THHN/THWN, UNLESS NOTED OTHERWISE.
11. ALL WIRING SHALL BE CONDUCTOR TYPE THHN OR THWN INSULATED WITH POLYVINYL CHLORIDE AND COVERED WITH A PROTECTIVE SHEATH OF NYLON, RATED AT 600 VOLTS. WIRES SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL) FOR INSTALLATION IN ACCORDANCE WITH ARTICLE 310 OF THE NATIONAL ELECTRICAL CODE (NEC). CONDUCTORS MAY BE SOLID OR STRANDED COPPER FOR 12 AWG AND SMALLER CONDUCTORS, AND STRANDED COPPER FOR 10 AWG AND LARGER CONDUCTORS. CONDUCTORS SHALL BE INSULATED WITH PVC AND SHEATHED WITH NYLON.
12. GROUNDING SHALL BE INSTALLED PER NEC SECTION 250.
13. METALLIC OBJECTS ON THE PROJECT SITE THAT ENCLOSE ELECTRICAL CONDUCTORS, OR THAT ARE LIKELY TO BE ENERGIZED BY ELECTRICAL CURRENTS, SHALL BE EFFECTIVELY GROUNDED.
14. METAL EQUIPMENT PARTS, SUCH AS ENCLOSURES, RACEWAYS, AND EQUIPMENT GROUNDING CONDUCTORS, AND EARTH GROUNDING ELECTRODES SHALL BE SOLIDLY JOINED TOGETHER INTO A CONTINUOUS ELECTRICALLY CONDUCTIVE SYSTEM.
15. METALLIC SYSTEMS SHALL BE EFFECTIVELY BONDED TO THE MAIN GROUNDING ELECTRODE SYSTEM.
16. ELECTRICAL CONTINUITY TO GROUND METAL RACEWAYS AND ENCLOSURES, ISOLATED FROM EQUIPMENT GROUND BY INSTALLATION OF NON-METALLIC CONDUIT OR FITTINGS, SHALL BE PROVIDED BY A GREEN INSULATED GROUNDING CONDUCTOR OF REQUIRED SIZE WITHIN EACH RACEWAY CONNECTED TO ISOLATED METALLIC RACEWAYS, OR ENCLOSURES AT EACH END. EACH FLEXIBLE CONDUIT OVER 6 FEET IN LENGTH SHALL BE PROVIDED WITH A GREEN INSULATED GROUNDING CONDUCTOR OF REQUIRED SIZE.
17. COLD WATER, OR OTHER UTILITY PIPING SYSTEMS, SHALL NOT BE UTILIZED AS GROUNDING ELECTRODES DUE TO THE INSTALLATION OF INSULATING COUPLINGS AND NON-METALLIC PIPE IN SUCH INSTALLATIONS.
18. NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT, PANELS, EQUIPMENT CABINETS, AND METAL FRAMES OF BUILDINGS SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED. PROVIDE A NEC SIZED GROUNDING CONDUCTOR IN EVERY RACEWAY.
19. NEUTRAL OF SERVICE CONDUCTORS SHALL BE GROUNDED AS FOLLOWS: NEUTRAL SHALL BE GROUNDED AT THE SERVICE PANELBOARD, OR MAIN SWITCH, EQUIPMENT AND CONDUIT GROUNDING CONDUCTORS SHALL BE BONDED TO THAT GROUNDING POINT, FEEDER NEUTRALS SHALL BE BONDED AT SERVICE ENTRANCE POINT ONLY, NEUTRALS OF SEPARATELY DERIVED SYSTEMS SHALL BE BONDED AT THE SOURCE ONLY.
20. WITHIN EVERY BUILDING, THE MAIN PANELBOARD, SHALL BE BONDED TO THE COLD WATER LINE. METALLIC PIPING SYSTEMS SUCH AS GAS, FIRE SPRINKLER, OR OTHER SYSTEMS SHALL BE BONDED TO THE COLD WATER LINE.
21. GROUNDING ELECTRODES SHALL BE COPPER-CLAD STEEL GROUND RODS, MINIMUM 3/4 INCH DIAMETER BY 10 FEET LONG. INSTALL ADDITIONAL ELECTRODES WHERE GROUND REMAINS HIGHER THAN 25 OHMS. INSTALL GROUNDING ELECTRODES AS NOTED ON DRAWINGS.
22. GROUNDING CONDUCTORS SHALL BE COPPER, #12 MINIMUM WITH GREEN INSULATION, UNLESS NOTED OTHERWISE.
23. GROUND TAILS SHALL BE COPPER, #12 MINIMUM WITH GREEN INSULATION, INSTALLED IN ALL METALLIC JUNCTION BOXES WHERE DEVICES ARE BEING INSTALLED. BRANCH CIRCUIT GROUND, JUNCTION BOX, AND DEVICES SHALL BE BONDED AT EACH JUNCTION BOX.

WIRING DEVICES

1. RECEPTACLES SHALL COMPLY WITH NEMA WD 1, NEMA WD 6, AND UL 498.
2. SWITCHES SHALL COMPLY WITH NEMA WD 1 AND UL 20.
3. DUPLEX RECEPTACLES SHALL BE HEAVY-DUTY SPECIFICATION GRADE, GROUNDING TYPE. TERMINAL SCREWS SHALL BE BACK AND SIDE WIRED WITH INTERNAL SCREW PRESSURE PLATES. MOUNTING STRAP SHALL FEATURE HEAVY-DUTY BRASS CONSTRUCTION. RECEPTACLE BACK BODY SHALL BE PVC. RECEPTACLE FACE SHALL BE IMPACT RESISTANT NYLON. RECEPTACLES SHALL HAVE TRIPLE WIPE BRASS POWER CONTACTS.
4. PROVIDE SPECIFICATION GRADE GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) TYPE RECEPTACLES IN ACCORDANCE WITH UL STANDARDS. GFCI RECEPTACLES SHALL HAVE A TRIP INDICATION LIGHT. RECEPTACLE TERMINAL SCREWS SHALL BE BACK AND SIDE WIRE WITH INTERNAL SCREW PRESSURE PLATES. TEST AND RESET BUTTONS SHALL MATCH DEVICE BODY IN COLOR. GFCI RECEPTACLES SHALL BE MANUFACTURED IN STANDARD CONFIGURATION FOR INSTALLATION WITH STAINLESS STEEL SMOOTH PLATES. EXTERIOR MOUNTED RECEPTACLES SHALL BE MOUNTED INSIDE WEATHERPROOF ENCLOSURE.
5. FOR EQUIPMENT RECEPTACLES, PROVIDE 2-WIRE OR 3-WIRE, GROUNDING TYPE, RATED 30 OR 50 AMPS AT 125/250 VOLTS, NEMA RATING AS NOTED ON DRAWINGS OR AS REQUIRED FOR EQUIPMENT, WITH 2-GANG STAINLESS STEEL PLATES.
6. PROVIDE LOCAL SWITCHES, HIGH STRENGTH THERMOPLASTIC TOGGLE, SPECIFICATION GRADE, RATED 20 AMPS AT 120-277 VOLTS AC ONLY, WITH PLASTER EARS, EXTERNAL SCREW PRESSURE PLATE BACK AND SIDE WIRED, AND STANDARD SIZE COMPOSITION CUPS WHICH FULLY ENCLOSE MECHANISM. SWITCHES SHALL BE APPROVED FOR INSTALLATION AT CURRENTS UP TO FULL RATING ON RESISTIVE, INDUCTIVE, TUNGSTEN FILAMENT LAMP AND FLUORESCENT LAMP LOADS, AND FOR UP TO 80 PERCENT OF RATING FOR MOTOR LOADS. SWITCHES SHALL HAVE OVERSIZED SILVER ALLOY CONTACTS FOR LONG LIFE AND BETTER HEAT DISSIPATION. PROVIDE SWITCHES AS SINGLE POLE, DOUBLE POLE, 3-WAY, 4-WAY, NON-LOCK TYPE.
7. WHERE NOTED, PROVIDE OCCUPANCY SENSOR SWITCHES (CEILING OR WALL MOUNT). SWITCHES SHALL BE DUAL TECHNOLOGY WITH INPUT VOLTAGE AND LOAD CHARACTERISTICS SUITABLE FOR LOADS BEING SERVED.
8. PROVIDE STAINLESS STEEL FACEPLATE ON ALL DEVICES.
9. WHERE DEVICES ARE TO BE INSTALLED AT MILLWORK OR ABOVE COUNTERS, COORDINATE WITH ARCHITECT FOR DEVICE HEIGHTS AND LOCATIONS PRIOR TO ROUGH-IN. INSTALL OUTLETS TO BE IN KNEE SPACE AREA OR IN AREA THAT WILL BE ACCESSIBLE AFTER MILLWORK IS COMPLETED.

PANELBOARDS AND SAFETY SWITCHES

1. PROVIDE ENGRAVED NAMEPLATE LABEL FOR ALL PANELBOARDS, SWITCHES (WHERE NOTED), DISCONNECTS, STARTERS, AND ANY EQUIPMENT NOTED OR REQUIRING NAMEPLATE IDENTIFICATION.
2. ALL ELECTRICAL PANELS SHALL BE COPPER BUSSING, PANELBOARDS AND CONSTRUCTED TO NATIONAL ELECTRIC CODE, ARTICLE 408, UL 67, PANELBOARDS; UL 50, CABINETS AND BOXES; UL 943, GFCI; UL 489, MOLDED CASE CIRCUIT BREAKERS; NEMA PB1; AND FEDERAL SPECIFICATIONS W-P-115C AND WC-375B. LOAD CENTERS NOT ALLOWED UNLESS NOTED OTHERWISE.
3. PANELBOARDS SHALL BE WALL-MOUNTED, ENCLOSED SAFETY TYPE WITH 120/240 VOLT, 3-WIRE SOLID NEUTRAL MAINS AS INDICATED ON DRAWINGS OR SPECIFIED. FIRST PANELBOARD OF EACH BUILDING SHALL BE PROVIDED WITH MAIN OR SUB-FEEDER CIRCUIT BREAKERS WHERE INDICATED. PROVIDE NEMA 3R PANEL ENCLOSURES WHERE INSTALLED OUTDOORS OR WHERE SUBJECT TO MOISTURE OR WHERE NOTED ON DRAWINGS.
4. SURGE SUPPRESSORS SHALL BE INSTALLED WHERE INDICATED ON DRAWINGS, PROVIDE TRANSIENT VOLTAGE SURGE SUPPRESSORS AS SEPARATELY INSTALLED OF PANELBOARDS. PANELBOARDS SHALL BE COMPLETE WITH FULLY RATED COPPER NEUTRAL BUS, GROUND BUS AND ISOLATED GROUND BUS. SURGE SUPPRESSORS SHALL BE AS FOLLOWS: SURGE CAPACITY: SERVICE ENTRANCE SPDS SHALL BE ANSI/UL LISTED TYPE 1 SPD WITH A 160 KA SURGE RATING PER MODE, WITH FIELD REPLACEABLE SURGE MODULES. DISTRIBUTION OR BRANCH PANELS SHALL BE UL LISTED TYPE 1 SPD WITH A 80 KA SURGE RATING PER MODE. SURGE SUPPRESSION UNITS SHALL MEET UL 1449 3RD EDITION SUPPRESSED VOLTAGE RATING. MOVS SHALL BE THERMALLY PROTECTED FOR LOW CURRENT FAULTS AND SHALL BE FUSED WITH SURGE-RATED FUSES. THE SURGE-RATED SURGE CURRENT PASSES AND CLEARS THE CIRCUIT SAFELY IF THE SURGE CAPACITY IS EXCEEDED. ENHANCED DIAGNOSTICS SHALL CONTINUOUSLY MONITOR THE UNIT'S STATUS AND SHALL INCLUDE LEDS TO SIGNAL A REDUCTION IN SURGE CAPACITY OR THE LOSS OF A SUPPRESSION CIRCUIT. AN AUDIBLE ALARM, WITH TEST AND SILENCE FEATURES, SHALL BE FURNISHED IN DIAGNOSTIC PACKAGE.
5. SINGLE POLE BRANCHES SHALL BE MOLDED CASE, THERMAL MAGNETIC CIRCUIT BREAKERS WITH INVERSE TIME DELAY, TRIP FREE, QUICK-MAKE, QUICK-BREAK MECHANISM AND SILVER ALLOY CONTACTS. CIRCUIT BREAKERS SHALL BE FULLY RATED, WITH AMPERE RATING MARKED ON HANDLE AND SHALL INDICATE ON/OFF AND TRIPPED POSITIONS. GROUND FAULT INTERRUPTERS SHALL BE INCORPORATED INTO CIRCUIT BREAKERS WHERE INDICATED. THEY SHALL BE LISTED BY UL, OR OTHER NRTL AS GROUND FAULT DEVICES. PROVIDE APPROPRIATE LUG KIT OF SUFFICIENT SIZE TO ACCOMMODATE THE FEEDERS.
6. TWO-POLE BRANCHES SHALL BE ENCLOSED, AND SHALL BE THERMAL MAGNETIC CIRCUIT BREAKERS WITH INVERSE TIME DELAY, TAMPER-PROOF, AMBIENT COMPENSATED, SINGLE HANDLE, INTERNAL COMMON TRIP, AND QUICK-MAKE, QUICK-BREAK MECHANISM WITH SILVER ALLOY CONTACTS. CIRCUIT BREAKERS SHALL BE FULLY RATED OR AS OTHERWISE INDICATED ON THE DRAWINGS.
7. MAIN AND SUBFEEDER CIRCUIT BREAKERS SHALL BE ENCLOSED, THERMAL MAGNETIC TYPE WITH INVERSE TIME DELAY, SINGLE HANDLE COMMON TRIP, QUICK-MAKE, QUICK-BREAK MECHANISM, CORROSION-RESISTANT BEARINGS AND SILVER ALLOY CONTACTS. AMPERE FRAME SIZE AND TRIP RATING SHALL BE AS INDICATED ON DRAWINGS. VOLTAGE RATING SHALL BE AS INDICATED ON DRAWINGS. BRANCH MOUNTED MAINS ARE NOT ACCEPTABLE.
8. CIRCUIT BREAKERS SHALL BE FULLY RATED AND OF ONE-PIECE, BOLT-ON TYPE AND SHALL MEET SHORT-CIRCUIT INTERRUPTING CAPACITY REQUIREMENTS INDICATED ON DRAWINGS.
9. INTERNAL PHASE AND GROUND BUSS SHALL BE COPPER.
10. PROVIDE A NEATLY TYPEWRITTEN PANELBOARD SCHEDULE WITH NUMBER OR NAME OF ROOM OR AREA, OR LOAD SERVED BY EACH PANELBOARD CIRCUIT. SCHEDULE SHALL ALSO INDICATE PANEL DESIGNATION, VOLTAGE AND PHASE, BUILDING AND DISTRIBUTION PANEL OR SWITCHBOARD FROM WHICH IT IS FED. SCHEDULE SHALL BE INSTALLED IN A FRAME UNDER TRANSPARENT PLASTIC ON INSIDE OF EACH PANELBOARD DOOR.
11. ALL ELECTRICAL DISCONNECTS SHALL BE HEAVY DUTY AND RATED FOR VOLTAGE AND AMPACITY OF EQUIPMENT BEING SERVED, UNLESS NOTED OTHERWISE. PROVIDE FUSES BASED ON EQUIPMENT RATINGS WHERE NOTED. PROVIDE NEMA 3R ENCLOSURES WHERE INSTALLED OUTDOORS OR WHERE SUBJECT TO MOISTURE OR WHERE NOTED ON DRAWINGS.
12. INSTALL ALL ELECTRICAL EQUIPMENT WITH CODE REQUIRED CLEARANCES.

LIGHTING

1. LIGHT FIXTURES MODEL NUMBERS WERE DETERMINED AT THE TIME THIS SPECIFICATION WAS WRITTEN; MODEL NUMBERS MAY NEED TO BE MODIFIED, OR MAY REQUIRE THE ADDITION OR DELETION OF OPTIONS TO FULLY MEET SPECIFICATION REQUIREMENTS.
2. DESIGN OF LIGHTING FIXTURES, ACCESSORIES, SUPPORTS, AND METHOD OF FIXTURE INSTALLATION SHALL COMPLY WITH REQUIREMENTS OF CEILING TYPE WHICH FIXTURE IS INSTALLED.
3. PROVIDE SUSPENSION POINTS AT NO MORE THAN 2 FEET FROM FIXTURE ENDS. SPACING BETWEEN SUPPORTS SHALL NOT EXCEED 8 FEET.
4. PROVIDE ALL NECESSARY COMPONENTS TO INSTALL FIXTURES IN CEILING TYPES BEING INSTALLED. SURFACE MOUNT FIXTURES SHALL BE ATTACHED TO STRUCTURE. TOGGLE BOLTS ARE NOT PERMITTED. PROVIDE BACKING WHERE REQUIRED.
5. COMPONENTS AND FIXTURES SHALL BE LISTED AND APPROVED FOR THE INTENDED APPLICATION BY UNDERWRITER'S LABORATORIES (UL), OR OTHER NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).
6. LIGHTING FIXTURES SHALL BE THE TYPE INDICATED ON DRAWINGS AND AS SPECIFIED. FIXTURES OF SAME TYPE SHALL BE OF ONE MANUFACTURER.
7. FIXTURES SHALL BE OF THE TYPES AND MANUFACTURERS DESCRIBED IN THE LUMINAIRE SCHEDULE OF THE DRAWINGS, WITH LAMPS, WATTAGE AND VOLTAGE AS INDICATED OR APPROVED EQUAL. SUBMIT TO ENGINEER FOR ANY SUBSTITUTION APPROVALS PRIOR TO PURCHASE AND INSTALLATION.
8. ALL FIXTURE SHALL BE HIGH EFFICIENCY, HAVE SUITABLE BALLASTS OR DRIVERS TO MATCH LAMP TYPES, AND BE RATED FOR VOLTAGE BEING SUPPLIED.
9. ALL LAMPS SHALL BE AS NOTED ON DRAWINGS. PROVIDE LAMPS FOR ALL FIXTURES AS NOTED.
10. WHERE EMERGENCY BATTERY PACKS ARE INSTALLED, PROVIDE CONSTANT HOT FOR EMERGENCY FIXTURES. UNLESS NOTED OTHERWISE, WHEN POWERING UNIT INVERTER POWER PACKS, USE THE SAME CIRCUIT THAT POWERS THE SWITCHED BALLAST TO POWER THE INVERTER.
11. WHERE EMERGENCY BALLAST(S) ARE SPECIFIED WITHIN THE FIXTURE, PROVIDE CONSTANT HOT FOR THE BALLAST(S). NONEMERGENCY BALLASTS WITHIN THE SAME FIXTURE SHALL BE SWITCHED AS INDICATED, UNLESS NOTED OTHERWISE.
12. CHECK AND ADJUST FIXTURES FOR REQUIRED ILLUMINATION. REPLACE DEFECTIVE LAMPS AND BALLASTS. TEST AND ADJUST LIGHTING CONTROL EQUIPMENT FOR PROPER OPERATION.

COMMUNICATIONS

1. COMMUNICATIONS DEVICES AND SYSTEMS SHALL BE ROUGH-IN ONLY, WITH 4" SQUARE DEEP BOX WITH APPROPRIATE EXTENSION RING. STUB (1) 3/4" MINIMUM CONDUIT FOR DATA/TEL DEVICES TO ABOVE CEILING UNLESS NOTED OTHERWISE.
2. ALL COMMUNICATIONS CONDUITS SHALL BE TERMINATED WITH PLASTIC BUSHING ON ENDS OF CONDUITS.
3. PROVIDE PULL STRINGS IN ALL EMPTY CONDUITS.
4. INSTALL CONDUITS BELOW GRADE AS NOTED ON PLANS FROM EDGE OF BUILDING TO THE TELECOM BACKBOARD. STUB UP AT BASE OF BACKBOARD, UNLESS NOTED OTHERWISE ON PROJECT DETAILS.
5. PROVIDE AND INSTALL GROUNDING BUSHING WITH GROUND WIRE AS NOTED BACK TO SERVICE ENTRANCE GROUND.

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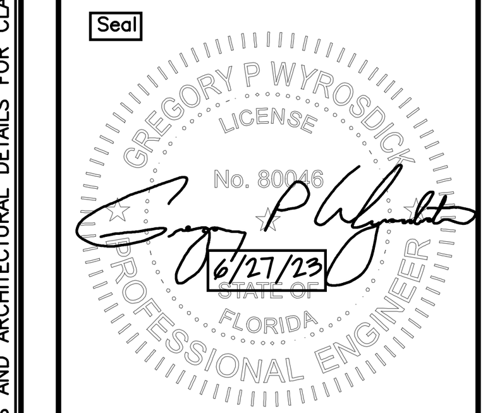
EAGLE SPRINGS GOLF
COURSE MAINT. BUILDING
WALTON COUNTY, FLORIDA

Sheet Title
ELECTRICAL GENERAL NOTES &
SPECIFICATIONS

No.	Date	Revision

Seal



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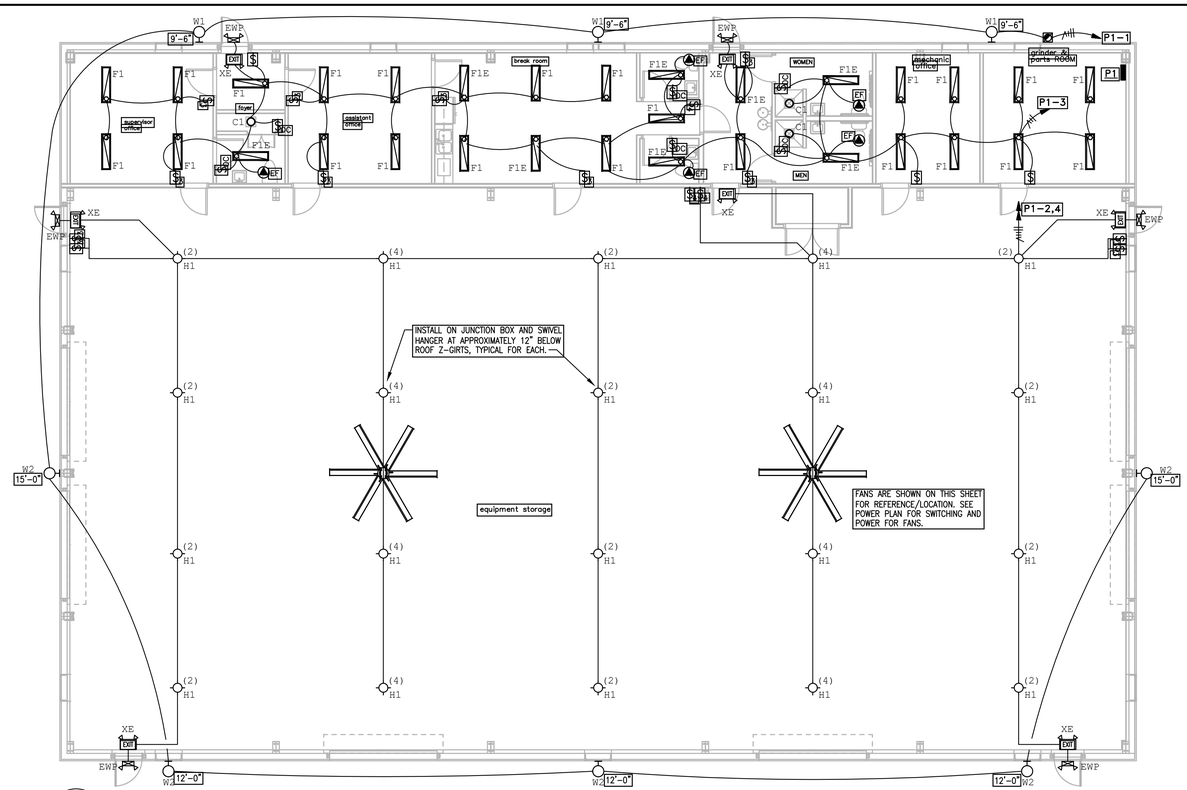
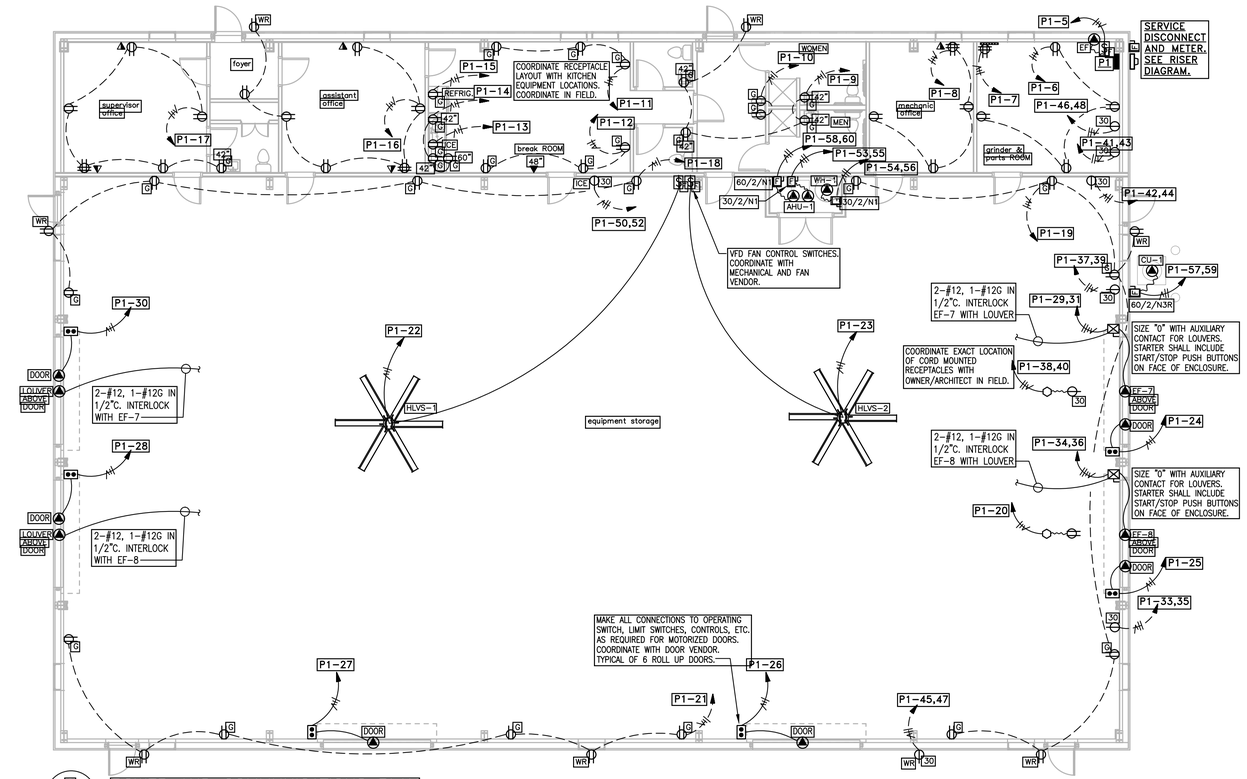
Checked By	GPW
Scale	AS SHOWN

Drawing No.
E101
2 of 3 Sheets



1 LIGHTING PLAN
E102 SCALE: 1/8" = 1'-0"



2 POWER AND COMMUNICATIONS PLAN
E102 SCALE: 1/8" = 1'-0"

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Sheet Title
ELECTRICAL PLANS

No.	Revision	Date

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GREGORY P WYROSDICK
LICENSE
No. 80048
STATE OF FLORIDA
PROFESSIONAL ENGINEER
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