

BUILDING CODE ANALYSIS - 2017 FLORIDA BUILDING CODE

CODE S	SUMMARY	(APPLICABLE CODES)	
. BUILDING CODE:	2017 FLORIDA BU	IILDING CODE	
. PLUMBING CODE:	2017 PLUMBING	CODE	

2017 FLORIDA ENERGY CONSERVATION CODE 3. ENERGY CODE: AND AMMENDMENTS 2017 FLORIDA MECHANICAL CODE 4. MECH. CODE:

2017 NFPA 101, 2015 EDITION 5. LIFE SAFETY: 2017 FLORIDA FIRE PREVENTION CODE 6. FIRE CODE: 2011 NATIONAL ELECTRIC CODE 7. ELEC. CODE:

8. ACCESSIBILITY 2017 FLORIDA BUILDING CODE, ACCESSIBILITY CODE REFERENCE: FHA - FAIR HOUSING ACCESSIBILITY GUIDELINES ANSI A11.7.1, 2003 EDITION

9. NFPA 101, STANDARD FOR PORTABLE FIRE EXTINGUISHERS, 2014 **EDITION**

GENERAL CODE PARAMETERS MAINTENANCE								
DESCRIPTION	REQUIRED OR ALLOWABLE	THIS PROJECT	REFERENCE FBC 2014					
CONSTRUCTION TYPE	TYPE V (B)	TYPE V (B)	TABLE 503					
USE / OCCUPANCY	U	U	CH. 3					
FIRE RATING	0	0	TABLE 601					
OCCUPANCY SEPARATION	N	N	TABLE 508.4					
SPRINKLER	NO	NO	SEC 903.2.1.3					
MIN NO. OF EXITS	1	1	TABLE 1021.2					
MIN. CORRIDOR WIDTH	-	-	SEC 1005.1 TABLE 1018.2					
MAX. NO STORIES	1	1	TABLE 503					
HEIGHT LIMIT	40'	19' 6"	TABLE 503					
MAX FLOOR AREA	5500 SF	1312 SF	TABLE 503					
WIND SPEED	130-140 MPH	130-140 MPH	SEC. 1609					
SEISMIC ZONE	-	-	-	SEE STRUCT.				

E		TOTAL	EGRESS	WIDTH PER PER	RSON SERVED (REQ'D.)	EGRESS	EGRESS WIDTH PROVIDED			
OCCUPANTS (F		OCCUPANTS (PER OCCUPANT LOAD CALC.)	STAIRWAYS (IN. PER OCCUPANT)		EXIT DOOR WIDTH (INCHES PER OCCUPAN	T) STAIRWAYS	EXIT DOOR WIDTH			
E	A-3	150 (WORST CASE)	0.3 (0 OCCU	IPANTS) =	0.2 (150 OCCUPAN = 30"	ΓS) 0	99"			
		MEAN	IS OF EC	BRESS -	- [IBC TABLE	1016.1 & NFPA	7]			
	OCCUPANCY CLASSIFICATION				TRAVEL DISTANCE EXIT (ALLOWABLE)	MAX. TRAVEL DISTAN (ACTUAL - WORST CAS				
OLAGOII IOATION		LOOK	UNSPRINK.		SPRINK.	(NOTOAL TWONOT OAK	JE) REWARKO			
	A-3	MAINTENAN	ICE	200'	250'	20'-0"				

PLUMBING FIXTURES REQ'D - IBC 2012 TABLE 2902.1									
OCCUPANCY CLASSIFICATION LOCATION		WATER CLOSETS (URINALS 419.2)				ORIES	DRINKING		
OLAGGII IOATION	LOOKHON	MALE	FEMALE	URINALS	MALE	FEMALE	FOUNTAIN	SERVICE SINK	
A-3	CLUBHOUSE	1 PER 125	1 PER 65		1 PER 200	1 PER 200	1 PER 500	1	
TOTAL OCCUPANTS = 1	150	75	75		75	75			
FIXTURES REQUIRED	ED 1 2 - 1 1 1						1		
FIXTURES PROVIDED	•	1	2	-	1	2	1 HI /1 LOW	1	

15 NET

15 NET

300 GROSS

50 GROSS

E 1004.1.1	-	MINIMUM FLAM	IE SPRE	AD INTERIO	R FINISH	<u>1ES</u>
AREA PER OCCUPANT	OCCUPANT	SPACE DESCRIPTION NONSPRINKLERED	WALLS AND	NOTE	FLOORS	NOTE
5 NET	25	EVIT FAIGURES FAIT PARCA OF MANG	CEILINGS	NONE IN PROJECT	OLAGO II	NONE IN PRO
100 GROSS	2	EXIT ENCLOSURES-EXIT PASSAGEWAYS CORRIDORS	A A	NONE IN PROJECT NONE IN PROJECT	CLASS II CLASS II	NONE IN PRO
100 GROSS	2	ROOMS AND ENCLOSED SPACES	С		DOCFF-1	"PILL TEST"
100 GROSS	2					
100 GROSS	2					
15 NET	18	FROM TABI	<u> E 705.8 - [FBC 2014</u>	<u>41</u>		
15 NET	44	MAXIMUM AREA OF	EXTERIOR WALL C	PENINGS:		

ANCILLAR'	Y BUILDING	GROSS ARE	A LEGEND
BUILDING	ENCLOSED AREA	COVERED UNENCLOSED AREA	TOTAL AREA
MAINTENANCE	692 SF	620 SF	1312 SF

OCCUPANT LOAD TABLE 1004.1

FLOOR AREA

122 SF

169 SF

128 SF

140 SF

169 SF

257 SF

655 SF

116 SF

441 SF

11 SF

757 SF

MAINTENANCE

FUNCTION OF SPACE

BUSINESS

BUSINESS

BUSINESS

ASSEMBLY -

ASSEMBLY -

ASSEMBLY -UNCONCENTRATE

MECHANICAL

EXERCISE ROOM

SPACE NAME

COVERED PATIO

INTERIOR FINISH REQUIREMENTS

ALL INTERIOR FINISHES SHALL COMPLY W/ FBC 2017, CHAPTER 8. GROUP A-3 OCCUPANCY SHALL BE REQUIRED TO BE CLASS-C FOR ALL ROOMS & ENCLOSED SPACES PER FBC TABLE 803.9 & SHALL COMPLY W/ CLASS-C REQUIREMENTS AS DEFINED IN FBC SECTION 803.

FROM T	ABLE 705.8 - [FBC 2014]							
MAXIMUM AREA OF EXTERIOR WALL OPENINGS:								
FIRE SEPARATION DISTANCE	DEGREE OF OPENING PROTECTION	<u>ALLOWABLE /</u>	<u>AREA</u>					
30' OR GREATER	UNPROTECTED, SPRINKI FRED	NO I IMIT						

SPRINKLERED

SPRINKLERED

FIRE-RESISTANCE RATING REQUIREMENTS (PER TABLE 601)

REQUIRED PROVIDED

CLUBHOUSE - TYPE V(B)

STRUCTURAL FRAME: INCLUDING COLUMNS, GIRDERS, TRUSSES

EXTERIOR (PER TABLE 602)

NONBEARING WALLS AND PARTITIONS: EXTERIOR (PER TABLE 601/602)

INTERIOR (PER SECTION 602)

FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS

SEPARATION DISTANCE (PER TABLE 602)

10' ≤ X < 30' TYPE V(A)

NO LIMIT

NOT REQUIRED

ROOF CONSTRUCTION

BEARING WALLS:

INTERIOR

NERGY CONSERVATIO)
<u>REQUIREMENTS</u>	
2017 F.B.C ENERGY CONSERVATION	

CHAPTER 402.4

20' TO LESS THAN 25'

THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR

DIFFERENTIAL EXPANSION AND CONTRACTION. THE FOLLOWING SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED WITH AN AIR BARRIER MATERIAL, SUITABLE FILM OR SOLID MATERIAL:

3- OPENINGS BETWEEN WINDOWS AND DOOR ASSEMBLIES AND THEIR RESPECTIVES JAMBS AND 4- UTILITY PENETRATIONS.

1- ALL JOINTS, SEAMS AND PENETRATIONS 2- SITE-BUILT WINDOWS, DOORS AND SKYLIGHTS.

- 5- DROPPED CEILINGS OR CHASES ADJACENT TO THE THERMAL ENVELOPE. 6- KNEE WALLS.
- 7- WALLS AND CEILINGS SEPARATING A GARAGE FROM CONDITIONED SPACES.
- 8- BEHIND TUBS AND SHOWERS ON EXTERIOR WALLS
 9- COMMON WALLS BETWEEN DWELLING UNITS.
- 10- ATTIC ACCESS OPENINGS.
- 11- RIM JOIST JUNCTION. 12- OTHER SOURCES OF INFILTRATION.

	<u> AINTENANCE)</u>					
CATEGORY / SUBCATEGORY	MANUFACTURER	PRODUCT DESCRIPTION	DESIGN PRESSURE +/-	WIND BORNE DEBRIS PROTECTION	APPROVAL NUMBER(S)	
A. EXTERIOR DOORS						
SWINGING	WINDSOR REPUBLIC DOORS	STEEL EXT. DOOR DL416	+65 / -65	NO	FL 14963	
SWINGING FRENCH	MASONITE	GLASS	+43.0 / -45.0	NO	FL 4940.	
B. WINDOWS						
DOUBLE HUNG	JELD-WEN WINDOWS	DOUBLE HUNG V-4500	+50.0 / -50.0	NO	FL 16309.1	
FIXED	JELD-WEN WINDOWS	FIXED V-4500	+50.0 / -50.0	NO	FL 14784.3	
C. PANEL WALL						
SIDING	JAMES HARDIE	HARDIE PLANK LAP SIDING	N/A	NO	FL 13192.2-R	
METAL PANELS	BERRIDGE	THIN LINE WALL PANEL	+187 / -135	NO	FL 14669.9-R	
STOREFRONT	KAWNEER NA	TRIFAB 350 STOREFRONT	+30 / -30	NO	FL 10388.1	
SOFFITS	JAMES HARDIE	HARDIE SOFFITS	N/A	NO	FL 13265-R1	
SIDING	JAMES HARDIE	HARDIE PANEL SIDING	N/A	NO	FL 1322.2-R	
D. ROOFING PRODUCTS						
UNDERLAYMENTS	W.R. GRACE	ICE & WATER SHIELD HT	N/A	NO	FL 298.1	
METAL SOFFITS	BERRIDGE	THIN LINE WALL PANEL	+187 / -135	NO	FL 14669.9-R	
ROOF VENT	OWENS CORNING	VENT SURE ROOF VENTILATION	N/A	NO	FL 10758.3 R	
ROOF VENT	THOMPSON ARCH METAL	OFF RIDGE VENT	N/A	NO	FL 5219.1 R-	
ROOFING	OWENS CORNING	TRUE DEFINITION DURATION	N/A	NO	FL 10674.1 R	
METAL ROOF	BERRIDGE	CEE-LEAK PANEL				

FUGLEBERG KOCH 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com AA26002103

PERMIT REVIEW STAMP

ISSUE HISTORY

REVISION HISTORY

Description

04/13/15 ISSUE FOR PERMIT

No. Date

Date

DELETE IF NON-HUD PROJECT / OR CLIENT LOGO

EDWARD H. HUNTON TENNESSEE LICENSE #00104872

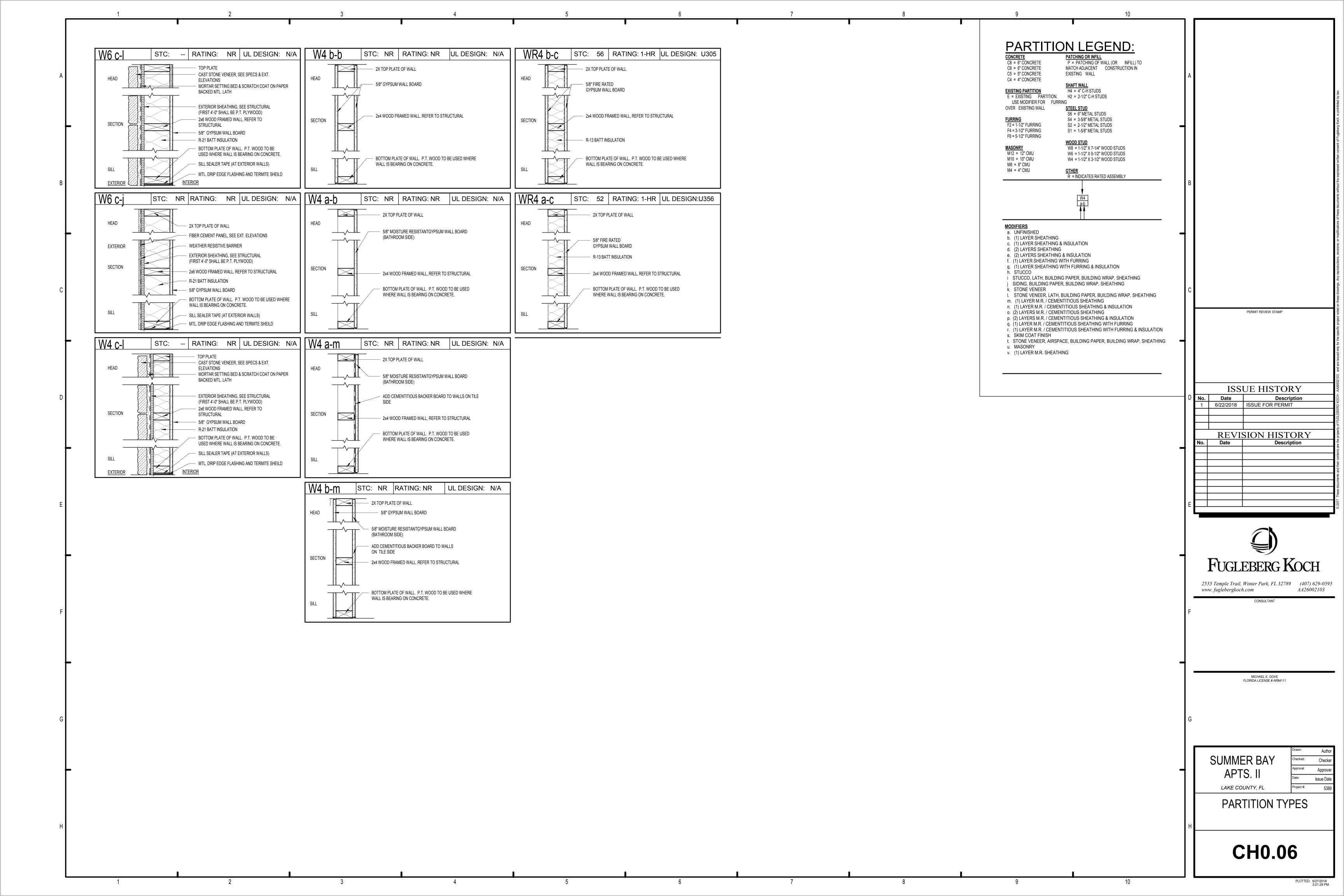
SUMMER BAY

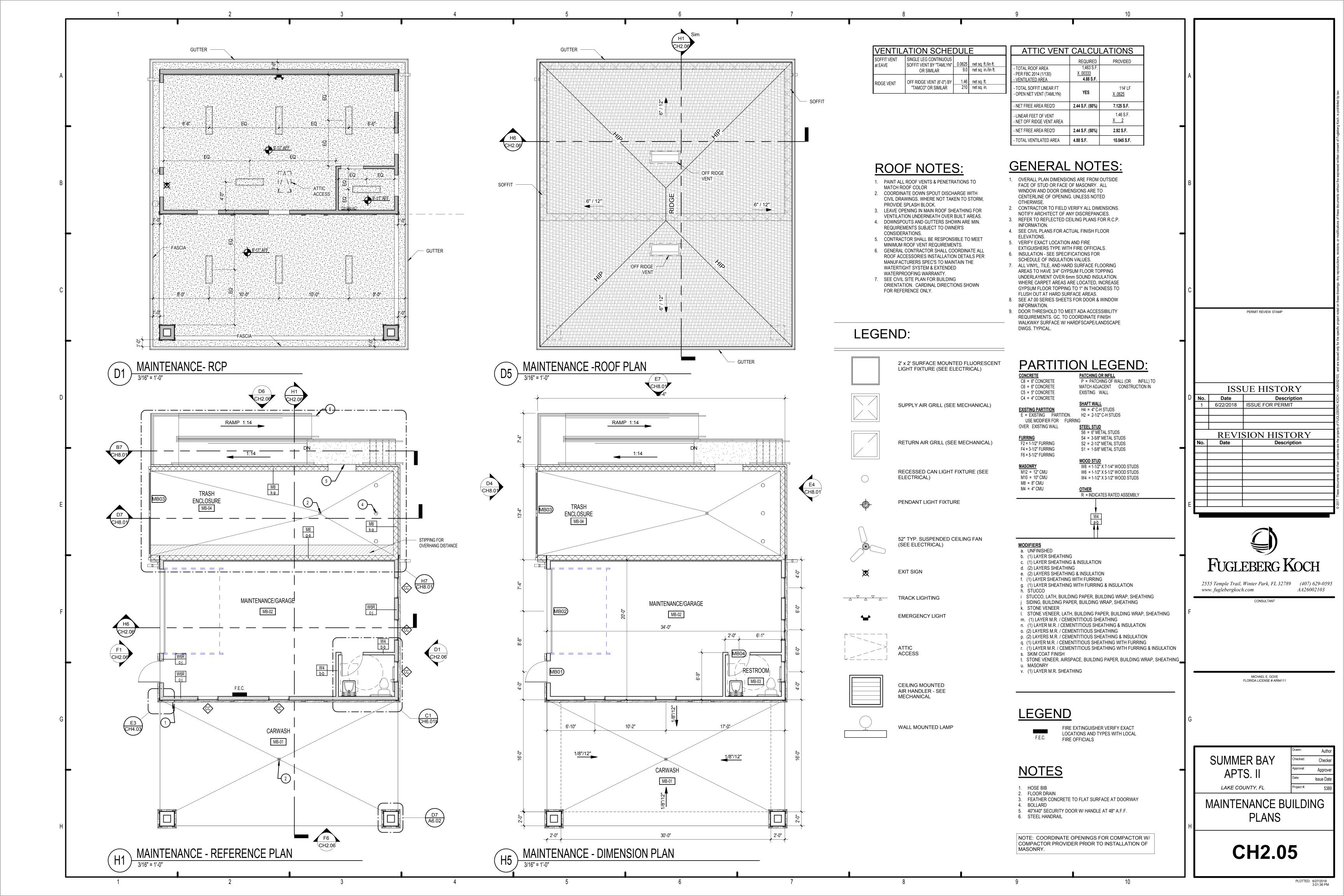
LAKE COUNTY, FL

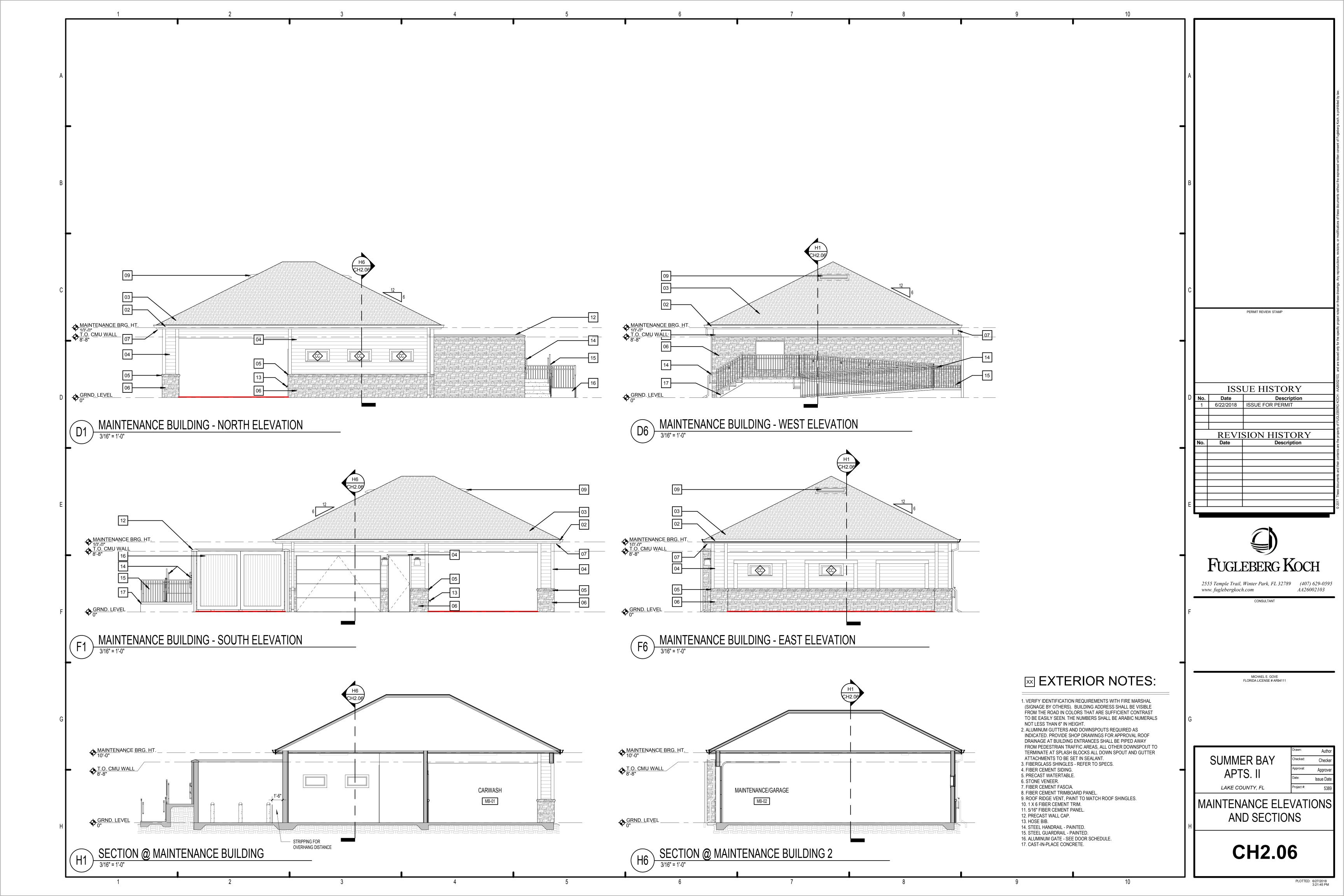
ANALYSIS-MAINTENANCE

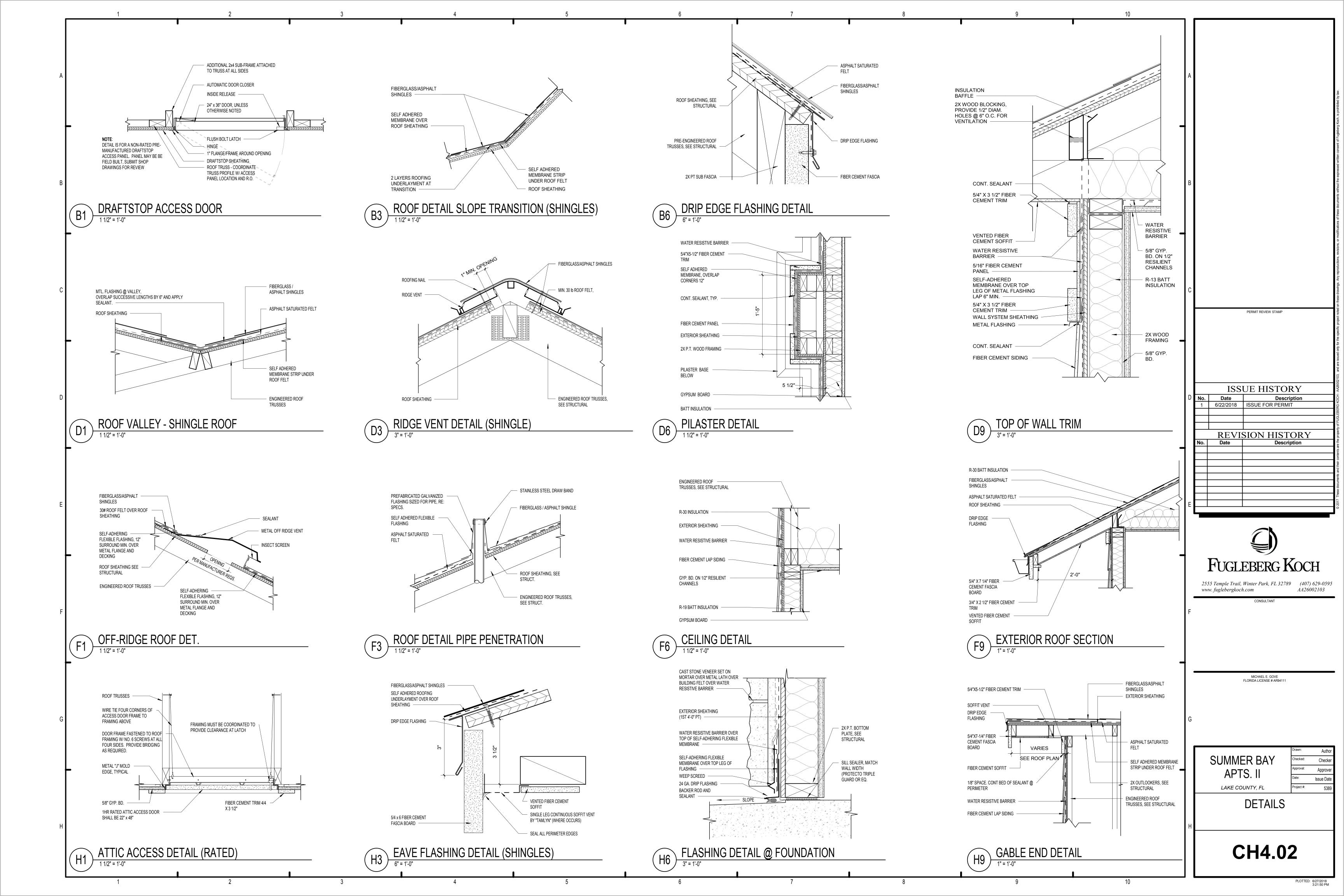
Issue Date

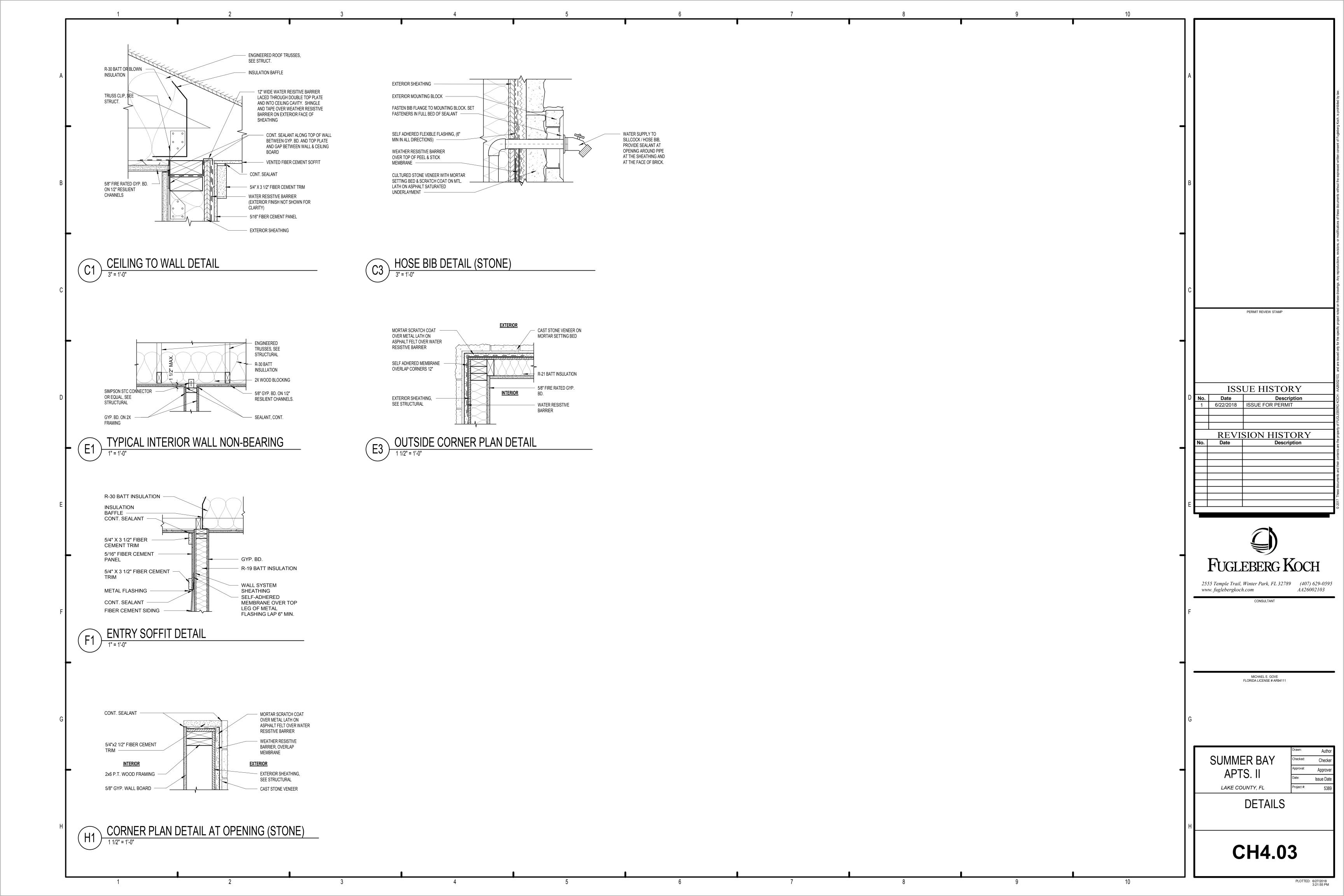
CH0.02B

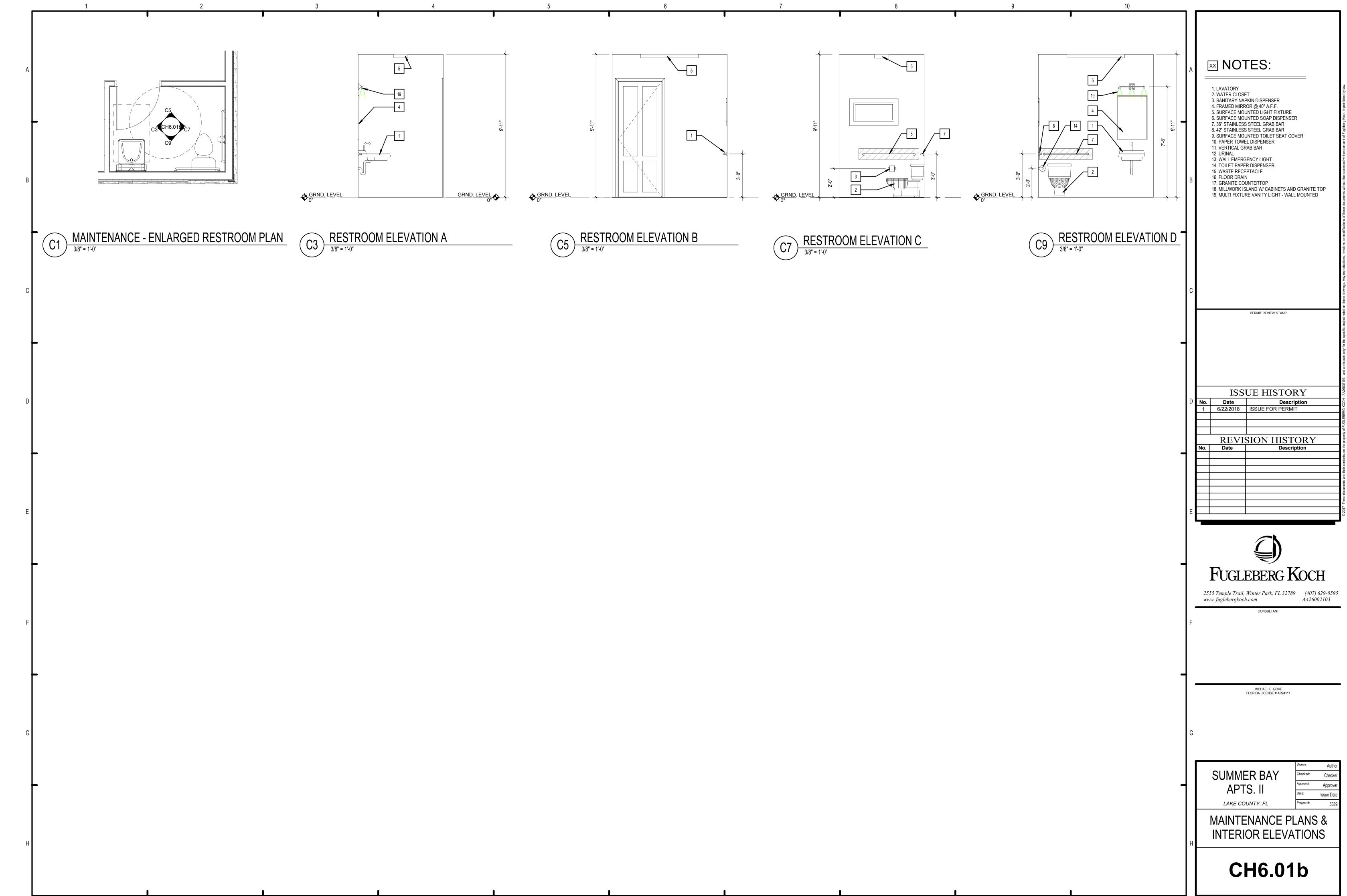




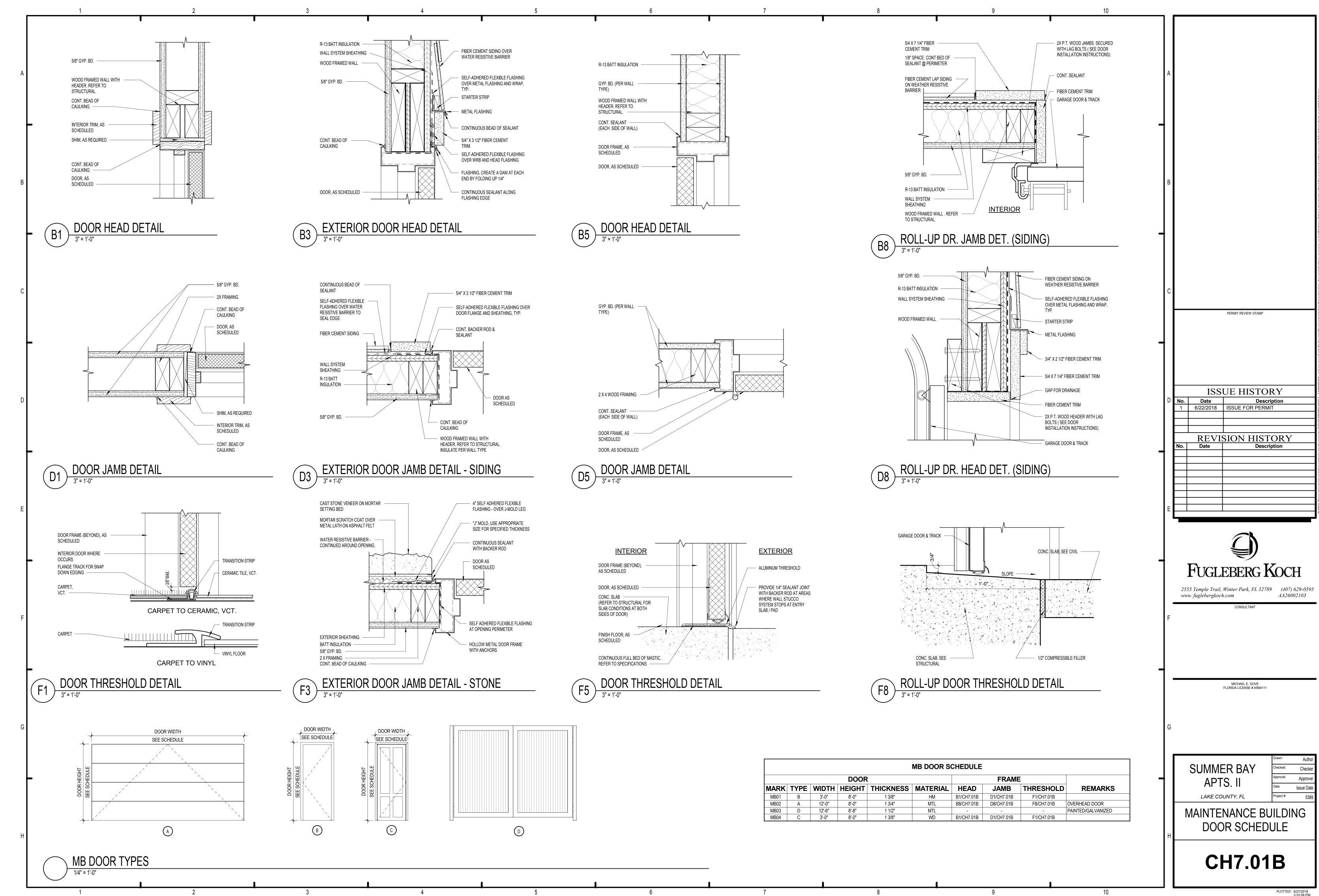






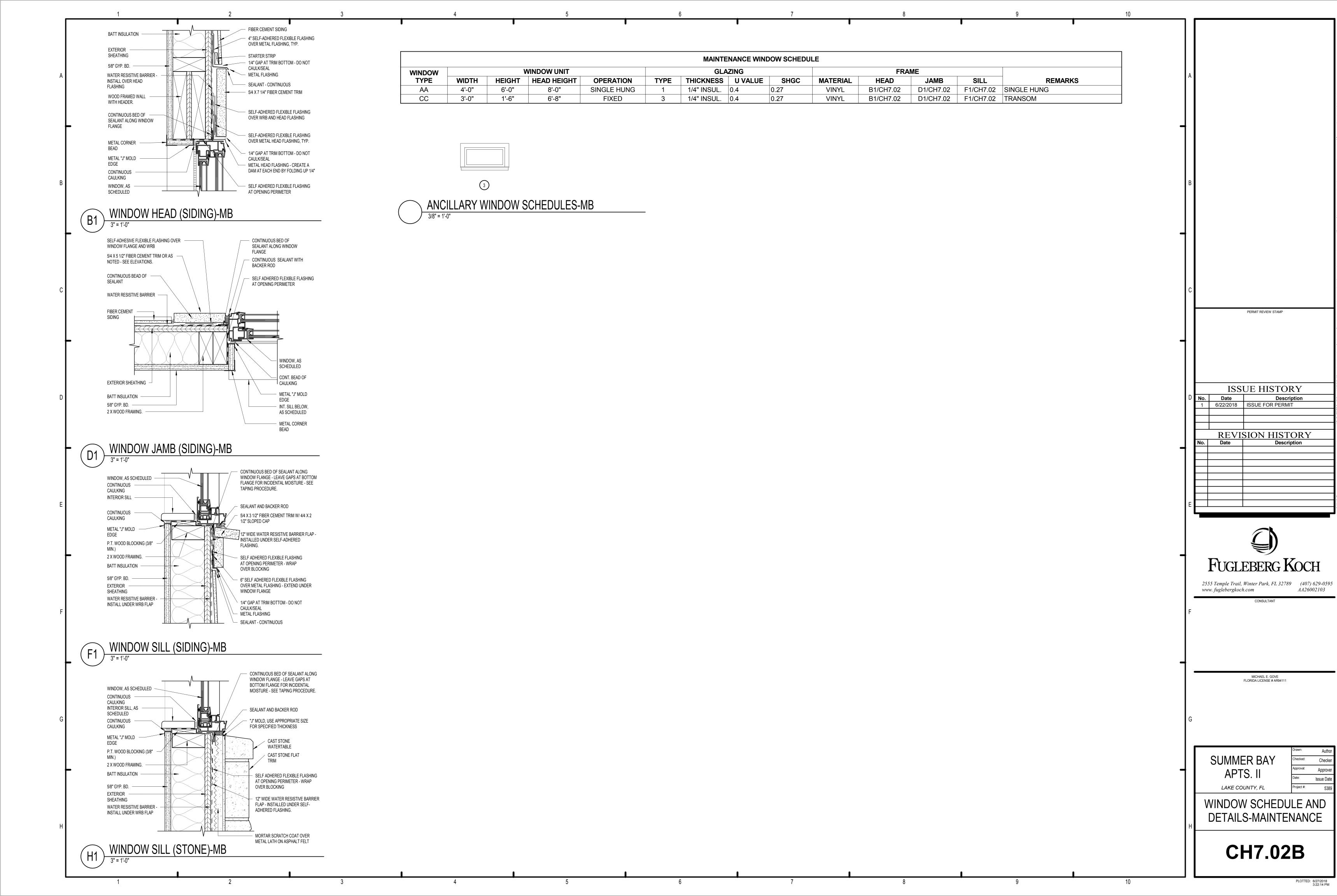


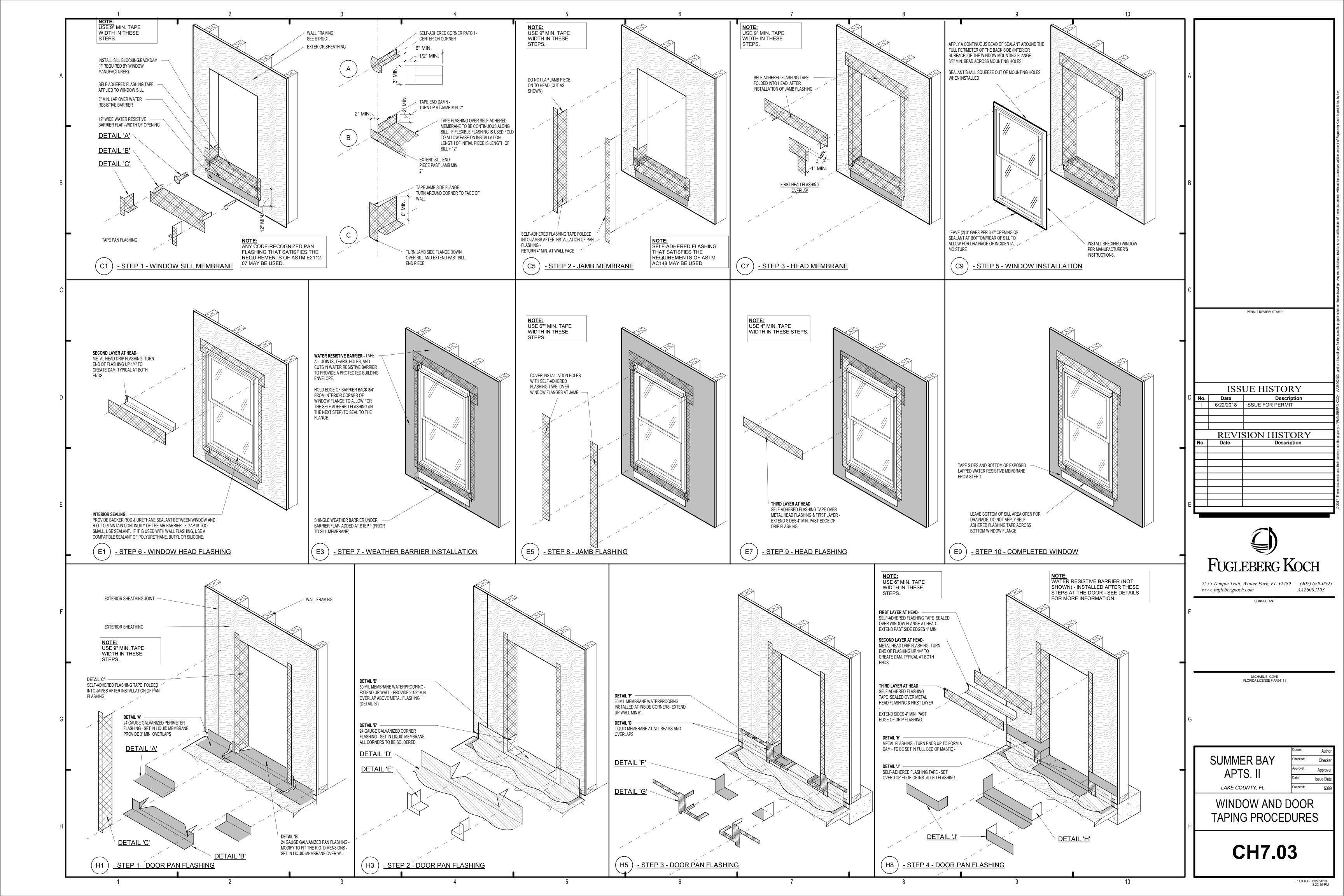
PLOTTED: 6/27/2018 3:22:00 PM



Approve

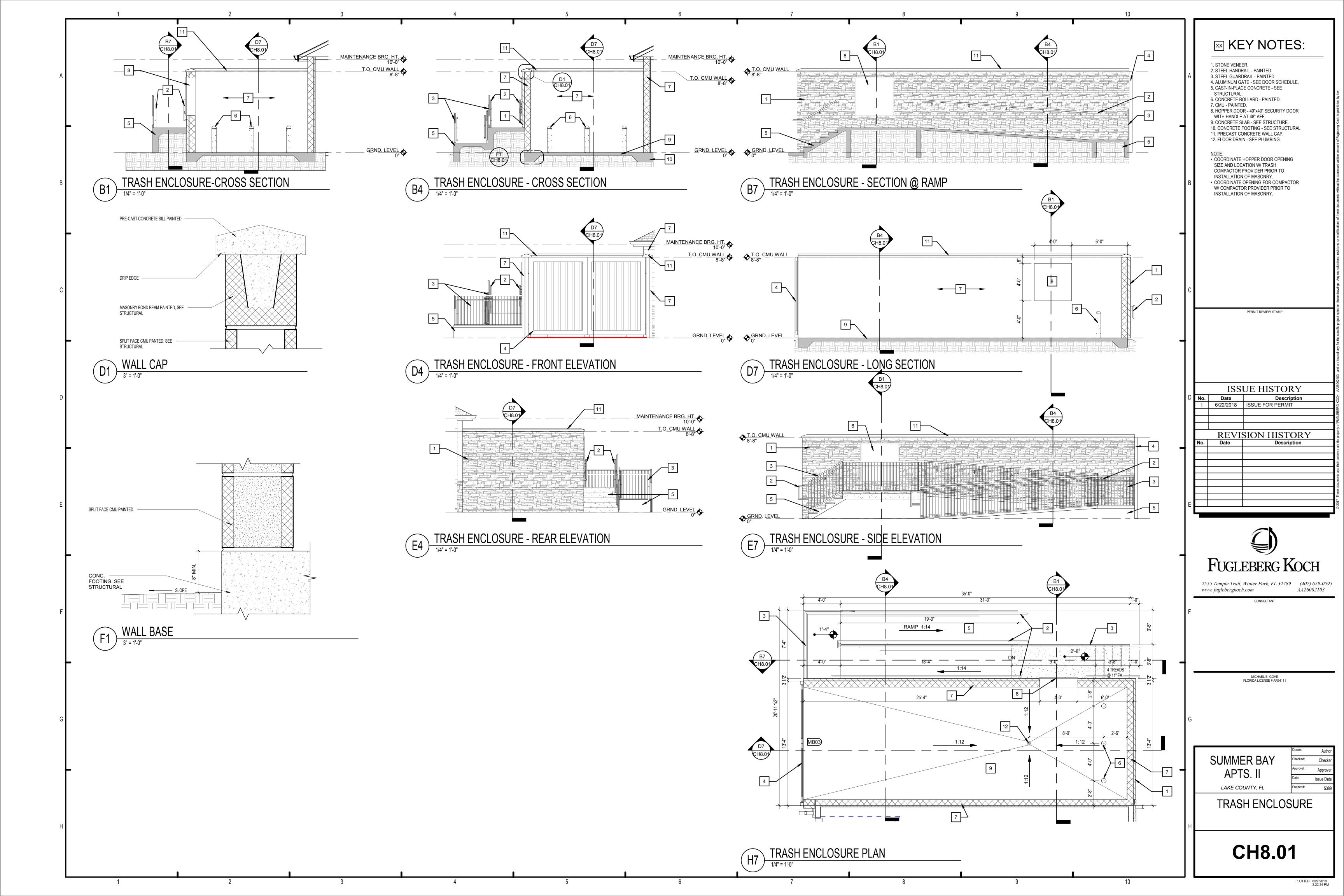
Issue Date





1		2		3	·	4	•		5	è		6	•		7	8		9		1	10	
•					•		•			•			•			•		•				
								MAIN	TENANCE BU	JILDING FIN	NISH SCHED	OULE							7			А
			FLOOR	BASE	CROWN	NORTH			WALLS	UTH		VEST	C	EILING								ed by law.
	MARK MB-01	SPACE DESIGNAT	FLOOR MATERIAL CONC	L MATERIAL CONC	MOLDING N	MATERIAL FII							H MATERIA GWB	AL FINISH		REMA	RKS		_			och, is prohibit
	MB-02	MAINTENANCE/GA GE	RA CONC	WD	G	SWB PT	GWD	PT	GWB	PT	GWB	PT	GWB	PT							-	of Fugleberg K
	MB-03 MB-03	GARAGE RESTROOM	CONC	CONC		GWB PT	GWD	PT	GWB	PT	GWB	PT	GWB	PT								ritten consent
	MB-04 MB-05	TRASH ENCLOSUF	VCT	WD VCT		GWB PT	GWD GWD	PT PT	GWB GWB	PT PT	GWB GWB	PT PT	GWB GWB	PT PT								The expressed v
																						B ments without
																						is of these doct
																					_	or modification
																						tions, revisions
																						. Any reproduc
																						C litese drawings
																						PERMIT REVIEW STAMP
																					_	r the specific p
																						e issued only fc
																						002.103, and ar
																						SSUE HISTORY No. Date Description 1 6/22/2018 ISSUE FOR PERMIT
																						1 6/22/2018 ISSUE FOR PERMIT
																						REVISION HISTORY No. Date Description
																						eir contents are
																						uments and th
																						C L L L L L L L L L L L L L L L L L L L
																					-	FUGLEBERG KOCH
																						2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com AA26002103
																						F
																					_	
																						MICHAEL E. GOVE FLORIDA LICENSE # AR94111
																						G
																						SUMMER BAY Drawn: Author Checked: Checker Approval: Acceptable Approval: Acceptabl
																					_	APTS. II LAKE COUNTY, FL Approval: Approver Date: Issue Date Project #: 5389
																						FINISH SCHEDULE
																						CH7.04b
1		1	1		1		1			1			1			•		1	1			(1

PLOTTED: 6/27/2018



STRUCTURAL NOTES

CONTRACTOR NOTE: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. GUTHERMAN STRUCTURAL, INC. IS NOT RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION OR FOR RELATED SAFETY

CODES AND STANDARDS WIND LOADS AS PER:

PRECAUTIONS AND PROGRAMS

FLORIDA BUILDING CODE 5TH EDITION (2014) WITH AN ULTIMATE DESIGN WIND SPEED OF 140 MPH, EXPOSURE B, NOMINAL DESIGN WIND SPEED OF 108 MPH, $\pm/-0.18$ INTERNAL PRESSURE COEFFICIENT, AND

BUILDING RISK CATEGORY II. B. THIS BUILDING IS DESIGNED AS AN ENCLOSED BUILDING.

THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:

 FLORIDA BUILDING CODE 5TH EDITION (2014). B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE

(ACI 318/ 2011 EDITION). MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED

CONCRETE STRUCTURES (ACI 315/ LATEST EDITION). D. MANUAL OF STANDARD PRACTICE FOR WELDING REINFORCING STEEL INSERTS & CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION.

E. SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS. (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AISC 13TH EDITION (ASD).

SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301/LATEST EDITION.

NATIONAL DESIGN SPECIFICATION, WOOD CONSTRUCTION NDS/2012

H. BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530, 530.1/ASCE 5, 6/TMS 402, 602/2011 EDITIONS). ASCE 7- 10.

ARCHITECTURAL AND MECHANICAL DRAWINGS:

AWS. D1.4/ LATEST EDITION.

THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL MECHANICAL AND ELECTRICAL DRAWINGS AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT.

B. REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, FINISHES, INSERTS, BOLTS SETTINGS, DRAINS, REGLETS, ETC.

BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK. THE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT

D. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE

ALL STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS LISTED ONLY AS COMPLETED STRUCTURES. THE GENERAL CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT WORK IN PROGRESS UNTIL THE STRUCTURES ARE COMPLETED. THE GENERAL CONTRACTOR SHALL ALSO INSURE THAT ITS OPERATIONS AND PROCEDURES PROVIDE NO LOADING GREATER THAN THE DESIGN LOADS LISTED ON ANY MEMBER.

SECTIONS AND DETAILS: DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE NTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS

ELSEWHERE UNLESS OTHERWISE SHOWN. MATERIALS AND ASSEMBLY TEST AS FOLLOWS:

A. EXTERIOR WINDOWS, SLIDING AND PATIO GLASS DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING LABORATORY, AND SHALL BE LABELED WITH AN APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT CERTIFICATION AGENCY, TESTING LABORATORY, EVALUATION ENTITY OR FLORIDA STATE WIDE PRODUCT APPROVAL NUMBER TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

ANSI/AAMA/NWWDA 101/I.S. 2-97 OR TAS 202 (HVHZ SHALL COMPLY WITH

EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED FOR STRUCTURAL INTEGRITY IN ACCORDANCE WITH ASTM E330 AT A LOAD OF 1.5 TIMES THE REQUIRED DESIGN PRESSURE LOAD. THE LOAD SHALL BE SUSTAINED FOR 10 SECONDS WITH NO PERMANENT DEFORMATION OF ANY MAIN FRAME OR PANEL MEMBER IN EXCESS OF 0.4 PERCENT OF ITS SPAN AFTER THE LOAD IS REMOVED HVHZ SHALL COMPLY WITH TAS 202. AFTER EACH SPECIFIED LOADING, THERE SHALL BE NO GLASS BREAKAGE, PERMANENT DAMAGE TO FASTENERS HARDWARE PARTS, OR ANY OTHER DAMAGE, WHICH CAUSES THE DOOR TO BE

D. CUSTOM (ONE OF A KIND) EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED BY AN APPROVED TESTING LABORATORY OR BE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES.

SPECIALTY ENGINEERED PRODUCTS THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED SHOP DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE SPECIALTY ENGINEERED SHOP DRAWINGS ARE SUBMITTED IN A TIMELY MANNER SO AS TO ALLOW REVIEWS AND RESUBMISSIONS AS REQUIRED. ALL SPECIALTY ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND WIND LOADS INCLUDING UPLIFT DESIGNED FOR THE APPROPRIAL GRAVIT LOADS AND LATERAL LOADS. INTERIOR SPECIALTY PRODUCTS SHALL BE DESIGNED FOR LATERAL LOADS TO ASSURE STABILITY. SPECIALTY ENGINEERED PRODUCTS SHALL

A. LIGHT GAUGE METAL, INCLUDING BUT NOT LIMITED TO, SOFFITS, CLADDING, CEILINGS, ETC.

B. MISCELLANEOUS METALS INCLUDING STEEL STAIRS, MECHANICAL EQUIPMENT SUPPORTS, FRAMES THAT SUPPORT MACHINES, PIPES OR OTHER STRUCTURAL METAL USED FOR SUPPORT OF MECHANICAL SYSTEMS.

RIGGING, HANGING WALLS, RAILINGS, GLAZING FRAMES, CLADDING SUCH AS STONE, PRECAST, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ET OR ANY OTHER MISCELLANEOUS PRODUCT REQUIRED BY ANY OF THE CONSTRUCTION

D. IN ADDITION TO THE LOADS SHOWN IN THE DESIGN LOAD SCHEDULE, THE SPECIALTY ENGINEER SHALL DESIGN FOR THE WEIGHT OF ALL MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND FIXTURES, AS WELL AS CHANDELIER FIXTURES, BAR CABINETS, AND ART WORK / MOBILES.

 ALL SITE PREPARATION AND EXCAVATION WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH THE: REPORT ON SOILS AND FOUNDATION INVESTIGATION PREPARED BY ECS FLORIDA, LLC, ECS PROJECT NO. 24:6036, DATED APRIL 26, 2017. THE BUILDING SITE SHOULD BE EXCAVATED TO THE DEPTH AND EXTENT INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED

IN WRITING BY THE SOILS ENGINEER PRIOR TO BACKFILLING 3. BOTTOM OF FOOTINGS TO BEAR ON CONTROLLED COMPACTED FILL CAPABLE OF SAFELY SUPPORTING 2500 POUNDS PER SQUARE FOOT (PSF).

4. SOILS SUPPORTING ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE COMMENCING WORK. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN

TOP OF ALL FOOTINGS SHALL BE $1^\prime-4^{\prime\prime}$ BELOW TOP OF SLAB TYP U.N.O. MAKE ADJUSTMENTS AS NEEDED SO TOP OF ALL EXTERIOR FOOTINGS SHALL BE MINIMUM 12-INCHES BELOW EXTERIOR FINISH GRADE. 6. EXCAVATION & BACKFILL:

ALL EXCAVATION SHALL BE KEPT DRY. EXCAVATE TO DEPTHS AND DIMENSIONS INDICATED. TAKE EVERY PRECAUTION TO GUARD AGAINST ANY MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES, UTILITIES,

B. PROVIDE ANY BRACING OR SHORING NECESSARY TO AVOID SETTLEMENT OR DISPLACEMENT OF EXISTING FOUNDATION OR STRUCTURES. CENTERLINE OF FOOTINGS: SHALL COINCIDE WITH CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED ON DRAWNGS.

DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTION DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE PROCEEDING WITH ANY WORK.

1. CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:

B. SLAB-ON-GRADE

ALL OTHER CONCRETE TO BE 4000 PSI UNLESS NOTED OTHERWISE. 2. ALL CONCRETE SHALL BE READY MIX AND MEET THE FOLLOWING REQUIREMENTS: A. A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.

B. SLUMPS SHALL BE 4-INCHES MINIMUM AND 6-INCHES MAXIMUM. C. CONCRETE SHALL HAVE 3 PERCENT AIR ENTRAINMENT.

D. ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.55. JOBSITE WATER SHALL NOT BE ADDED.

ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI

BUILDING CODE (ACI 318/ 2011 EDITION), THE ACI DETAILING MANUAL (ACI 315/ 1994 EDITION), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301/ LATEST EDITION). 4. SUBMIT ALL REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION. 5. CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY

6. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A 185, UNLESS OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLSTERS SPACED AT 3'-0" O.C. 7. LAP ALL BARS WITH CLASS B TENSION LAP SPLICE UNLESS OTHERWISE NOTED ON DRAWINGS. LAP ALL WWF A MINIMUM OF 12 INCHES (UNLESS OTHERWISE

8. REINFORCING BARS: A. ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH

STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A 615 B. AT CORNERS OF CONCRETE WALLS, BEAMS AND CONTINUOUS WALL FOOTINGS, PROVIDE (1-#5 OR MATCHING) HORIZONTAL BARS X 5'-0 BENT BAR FOR EACH HORIZONTAL BAR SCHEDULED AT EACH FACE.

WHERE COLUMNS ARE AN INTEGRAL PART OF CONCRETE WALLS, WALL REINFORCEMENT SHALL BE CONTINUOUS THRU THE COLUMNS

D. ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE ACI RECOMMENDED

HOOKS UNLESS OTHERWISE NOTED.

FOR BALCONIES, SLABS AND WALKWAYS EXPOSED TO WEATHER ALL REINFORCING STEEL (TOP AND BOTTOM) AS WELL AS SPACERS AND OTHER DEVICES FOR SPACING, SUPPORTING AND FASTENING REINFORCING SHALL BE GALVANIZED CONFORMING TO ASTM A767. BOLSTERS AND CHAIRS TO BE PLASTIC. CONCRETE PLACED IN THESE AREAS TO HAVE .40 W/C CUBIC YARD. REBAR COVER TO BE 1.5" MINIMUM.

F. CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 2000 LBS. OF ADDITIONAL REINFORCING STEEL, INCLUDING DETAILING, FABRICATION,
BENDING, FURNISHING, AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECT'S AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THE PRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S

CONSTRUCTION JOINTS IN STRUCTURAL SLABS AND BEAMS SHALL BE AT MID-SPAN AND KEY JOINTED WITH REINFORCING CONTINUOUS ACROSS JOINT AND ADDITIONAL SHEAR FRICTION REINFORCING. CONSTRUCTION
JOINT LOCATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR CONSTRUCTION. CONSTRUCTION JOINTS IN POST-TENSION SLABS SHALL BE LOCATED AND DESIGNED BY SPECIALTY ENGINEER.

WOOD
ARE TO BE DESIGNED FOR THE WOOD FABRICATOR BY A PROFESSIONA ROOF TRUSSES SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA SEALED CALCULATIONS AND LAYOUT DRAWINGS ARE TO BE SUBMITTED FOR APPROVAL. TRUSS FABRICATOR TO PROVIDE ALL TRUSS—TO—TRUSS HANGERS AS REQUIRED TO RESIST GRAVITY AND UPLIFT REACTION.

(UPLIFT LOADING SHALL USE COMPONENTS & CLADDING WIND FORCES.) WOOD TRUSSES SHALL BE BRACED AND ERECTED IN ACCORDANCE WITH THE 2006 EDITION OF THE BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING &

BRACING OF METAL PLATE CONNECTED WOOD TRUSSES, JOINTLY PRODUCED BY WTCA AND TRUSS PLATE INSTITUTE. BRACING IN THE PLANE OF THE A THE TRUSS FARRICATOR SHALL PROVIDE AND LOCATE CONTINUOUS WEB NIEWBERAS: BRACING FOR EACH TRUSS WEB MEMBER AS REQUIRED.

B. LATERAL BRACING SHALL BE RESTRAINED BY DIAGONAL BRACING (MIN. 2" THICK NOMINAL LUMBER). THIS BRACING IS TO BE CONTINUOUS. C. A MINIMUM OF TWO ROWS OF DIAGONAL BRACING IS REQUIRED, OF

AT EACH VERTICAL WEB MEMBER CLOSEST TO BEARING LOCATIONS. THE BOTTOM CHORDS SHALL BE BRACED BY CONTINUOUS LATERAL BRACING SPACED AT 8'-0" ON CENTER WITH A CEILING ATTACHED TO BOTTOM OF TRUSSES. IF NO CEILING IS ATTACHED TO BOTTOM OF RUSSES, BRACING SHALL BE MINIMUM 2X4 @ 36" ON CENTER NAILED THE TOP OF THE BOTTOM CHORD. DIAGONALS PLACED AT 45 DEGREES TO THE LATERAL BRACES SHALL BE LOCATED AT EACH END. IF BUILDING EXCEEDS 60 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED

BRACING SHOULD BE REPEATED AT 20-FOOT INTERVALS.

AT 20 FOOT INTERVALS. TOP CHORD BRACING:

WOOD TRUSSES

A. IF PLYWOOD DECKING IS APPLIED DIRECTLY TO TOP CHORD, PROPERLY LAPPED AND NAILED TO DEVELOP DIAPHRAGM ACTION, BRACING IS NOT B. IF PURLINS ARE USED, DIAGONAL TOP CHORD BRACING IS REQUIRED AT EACH END. IF BUILDING EXCEEDS 60 FEET IN LENGTH, DIAGONAL

DO NOT CUT, DRILL OR NOTCH ROOF OR FLOOR TRUSSES WITHOUT WRITTEN APPROVAL FROM TRUSS ENGINEER. COORDINATE MECHANICAL, ELECTRICAL, PLUMBING, ETC. SIZES AND LOCATIONS WITH TRUSS LAYOUT PRIOR TO TRUSSES SHALL BE MANUFACTURED & DESIGNED IN ACCORDANCE WITH NATIONAL DESIGN SPECIFICATION(S) FOR WOOD CONSTRUCTION, AF & PA, AND NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1-1995, AND THE LOCAL CODE JURISDICTIONS.

DO NOT OVERLOAD FLOOR OR ROOF TRUSSES WITH BUILDING MATERIALS. CONNECTOR PLATES SHALL BE MANUFACTURED BY A WTCA MEMBER PLATE SUPPLIER AND SHALL MEET OR EXCEED ASTM A653/A653M REQUIREMENTS FOR STRUCTURAL STEEL.

WOOD TRUSS MANUFACTURER TO DESIGN BOTTOM CHORDS OF WOOD ROOF TRUSSES FOR A MINIMUM 10 PSF LIVE LOAD. BOTTOM CHORDS OF WOOD ATTIC TRUSSES TO BE DESIGNED FOR 30 PSF MINIMUM LIVE LOAD. 10. IN ADDITION TO THE LOADS SHOWN IN THE DESIGN LOAD SCHEDULE. THE WOOD TRUSS MANUFACTURER SHALL DESIGN FOR THE WEIGHT OF ALL MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT/FIXTURES AS WELL AS CHANDELIER FIXTURES, BAR CABINETS AND ART WORK/MOBILES

SHOP DRAWINGS THE SHOP DRAWINGS SHALL BE SUBMITTED IN COMPLETE PACKAGES FOR THE

A. CONCRETE MIX DESIGNS B. CONCRETE REINFORCING STEEL AND WELDED WIRE FABRIC

C. PRE-ENGINEERED WOOD TRUSSES PRE-ENGINEERED ITEMS SHALL BE SUBMITTED SIGNED AND SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA.

ROOF WIND PRESSURE (PSF) Vasd									
EFFECTIVE WIND	ROOF AREA								
AREA (SQ. FT.)	1	2	3						
10	+12.2/-19.4	+12.2/-33.7	+12.2/-49.8						
20	+11.1/-18.8	+11.1/-31.0	+11.1/-46.6						
50	+9.7/-18.1	+9.7/-27.4	+9.7/-42.3						
100	+9.6/-17.6	+9.6/-24.7	+9.6/-39.1						
			A						

1. WIND DESIGN PER FBC-2014 5TH EDITION 2. +: INDICATES WIND PRESSUR -: INDICATES WIND SUCTION 3. WALL DISTANCE A = 3.0 FT(COMPONENTS AND CLADDING) 4. FOR EFFECTIVE WIND AREAS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE WIND AREA

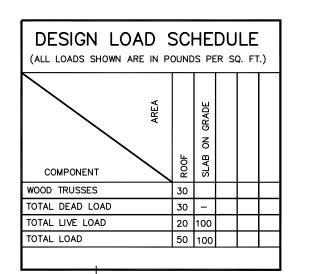
EFFECTIVE WIND AREA		PLAN					
DOOR & WINDOW	WIND PRESSUR	E (PSF) Vasc					
SIZE OF WALL	WALL AREA						
OPENING (SQ. FT.)	4	5					
10	+21.2/-23.0	+21.2/-28.3					
20	+20.2/-22.0	+20.2/-26.4					
50	+18.9/-20.7	+18.9/-23.9					
100	+18.0/-19.8	+18.0/-22.0					

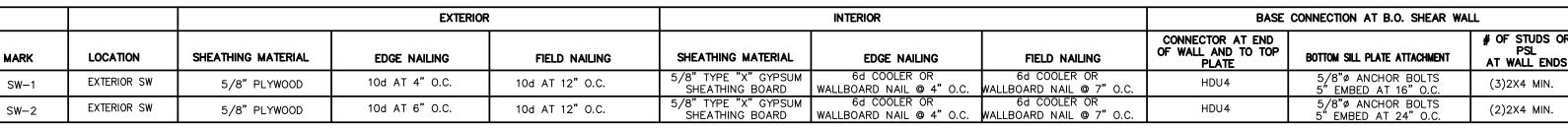
NOTES:

1. WIND DESIGN PER FBC-2014 5TH EDITION 2. +: INDICATES WIND PRESSURE

(COMPONENTS AND CLADDING) FOR WALL OPENINGS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER WALL OPENING AREA.

WALL ELEVATION



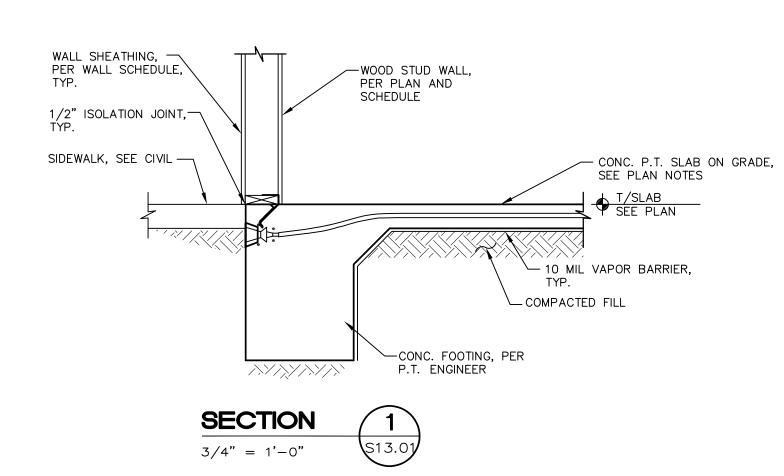


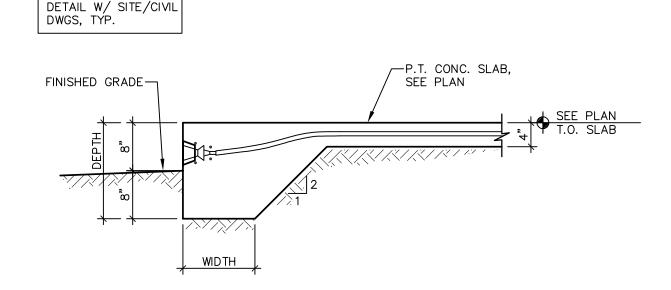
PLYWO	OD SHEATHING NAILING	SCH	EDULE
NAIL SIZE	NAIL SPACING		ZONE
8d RING SHANK	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	ROOF	2 3
8d RING SHANK	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	ROOF	1
8d	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	WALL	(5)
8d	6" @ EDGES, 12" @ INTERMEDIATE SUPPORTS	WALL	4

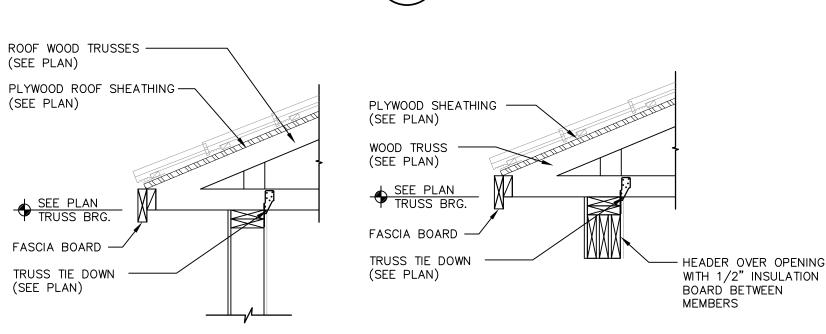
CORNER DISTANCE, A = 3.0 FEET

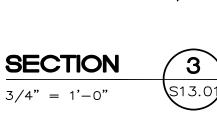
NOTE: COORDINATE

EDGE OF SIDEWALK









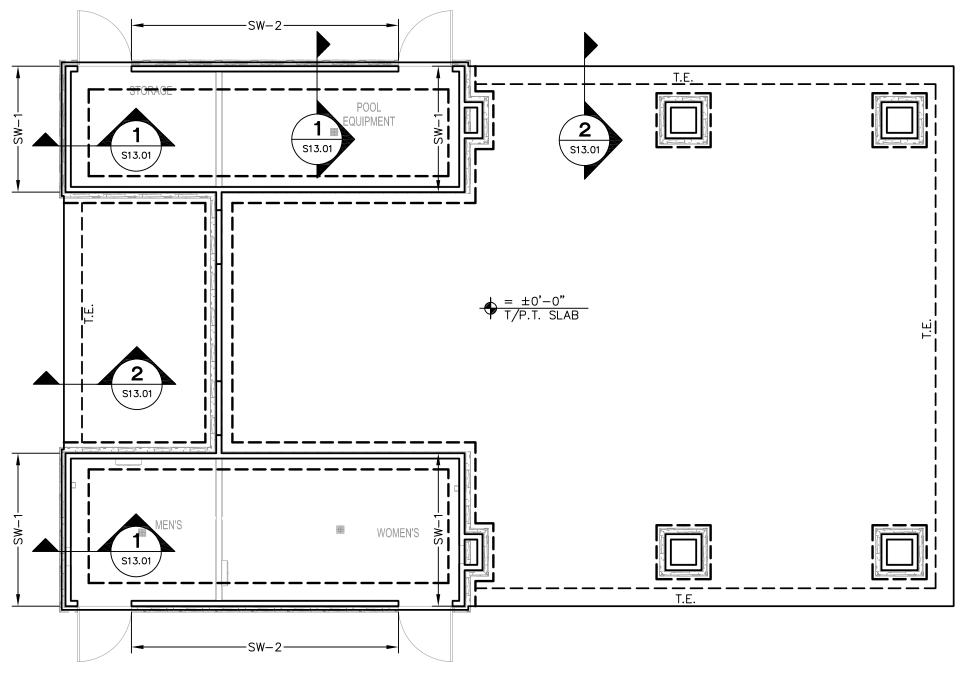




	HEADER S	SCHEDULE
1ARK	SIZE (IN.)	BEARING STUDS
H-1	(2) 2 X 6	(1) B & (1) FULL HEIGHT
H-2	3.5 X 9.25 PSL	(2) B & (2) FULL HEIGHT
H-3	3.5 X 14 PSL	(3) B & (2) FULL HEIGHT

SECTION

1. B INDICATES BEARING STUDS, TOTAL WIDTH OF SUPPORT. 2. PROVIDE 1/2" PLYWOOD BETWEEN DOUBLE HEADERS FOR FLITCH BEAM TO MAKE FULL 3.5" WIDTH.



POOL PAVILION - FOUNDATION PLAN 3/16" = 1'-0"

FOUNDATION PLAN NOTES:

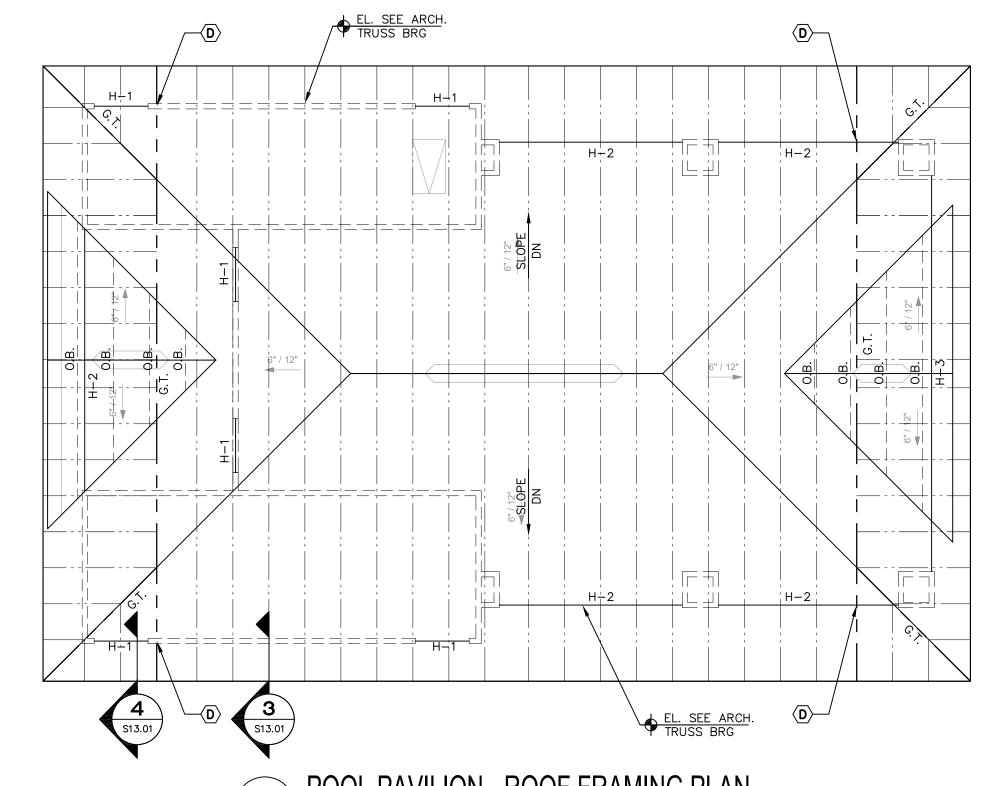
1. ELEV. ±0'-0" IS REFERENCE ONLY. SEE CIVIL FOR

TRUE NAVD ELEVATION. 2. VERIFY SLOPES AND STEPS WITH ARCH'L PRIOR TO CONSTRUCTION.

3. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN, TYP.

4. SEE MECH'L, ELECTRICAL AND PLUMBING (MEP) DRAWINGS FOR

LOCATION OF PVC SLEEVES. COORDINATE WITH HVAC CONTRACTOR 5. ALL WOOD WALL FRAMING TO BE 2x4 WOOD STUDS @ 16" O.C., TYP. LOCATION OF PVC SLEEVES. COORDINATE WITH HVAC CONTRACTOR.





ROOF FRAMING NOTES:

1. TRUSS BEARING ELEVATION = SEE ARCH.

2. PRE-ENGINERED ROOF WOOD TRUSSES SHALL BE SPACED AT 2'-0" O.C. MAX.

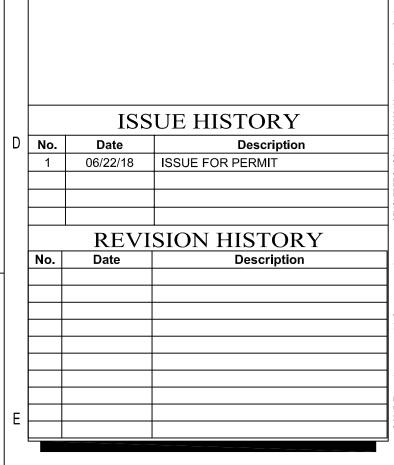
3. VERIFY SLOPES AND STEPS WITH ARCH'L PRIOR TO CONSTRUCTION.

4. ALL ROOF SHEATHING IS 5/8" EXT. GRADE PLYWOOD ATTACHED WITH 8d NAILS AT 6" O.C. AT EDGES, AND 12" O.C. IN FIELD OF PANEL.

5. ALL UPLIFT CONNECTORS SHALL BE SIMPSON H10A U.N.O. ON PLAN.

"D" INDICATES M.G.T. 6. RUNS FOR MECH'L, ELECTRICAL AND PLUMBING (MEP) THROUGH PRE-FABRICATED TRUSSES MUST BE COORDINATED WITH THE TRUSS DESIGNER AND MEP DWGS.

(PIPING, DUCT RUNS, ETC.) FIRE SRPINKLER RUNS MUST ALSO BE COORDINATED. 7. FRAMING CONTRACTOR AND HVAC CONTRACTOR TO COORDINATE DUCT LOCATIONS PRIOR TO TRUSS FABRICATION.



PERMIT REVIEW STAME

DELETE IF NON-HUD PROJECT / OR CLIENT LOGO HERE





John Gutherman Jr., P.E. FL. REG. #60880

SUMMER BAY

LAKE COUNTY, FL

POOL PAVILION STRUCTURAL PLAN SET

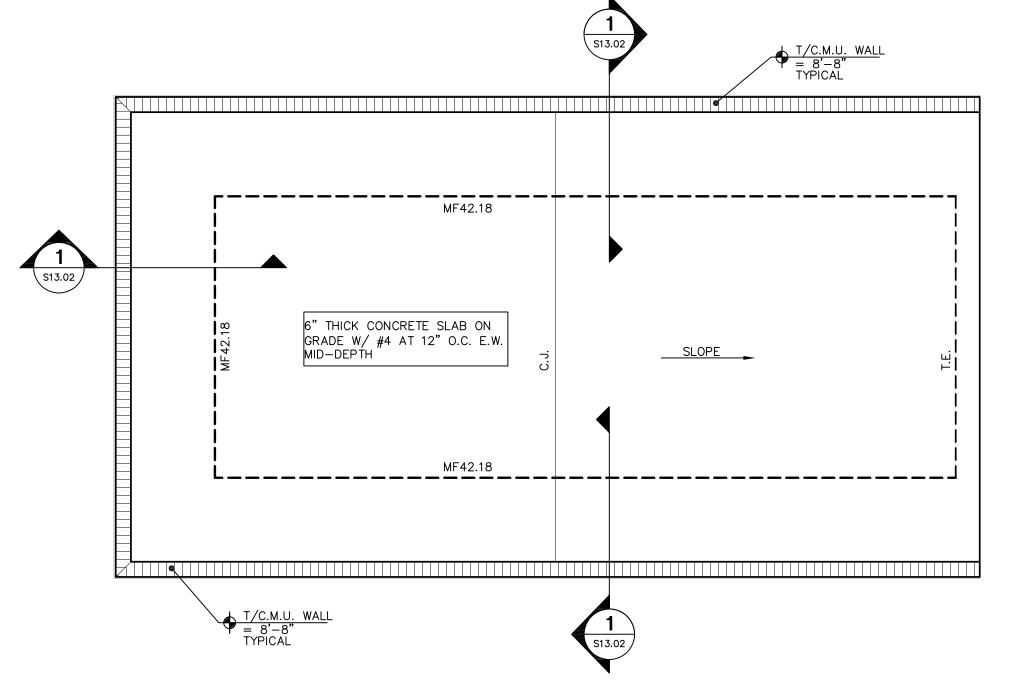
S13.01

PLOTTED: 6/23/2017 12:38:28 PM

JGUTHERMAN

06/22/2018

oroval: JGUTHERMAN



TRASH ENCLOSURE - FOUNDATION PLAN

FOUNDATION PLAN NOTES:

- 1. ELEV. ±0'-0" IS REFERENCE ONLY. SEE CIVIL FOR
- TRUE NAVD ELEVATION. 2. VERIFY SLOPES AND STEPS WITH ARCH'L PRIOR TO CONSTRUCTION.
- 3. C.J. INDICATES CONTROL JOINT SEE DETAIL ON THIS SHEET.
- 4. MF-# INDICATES MONOLITHIC CONCRETE FOOTING, SEE SCHEDULE ON THIS SHEET.
- 5. T.E. INDICATES THICKENED EDGE, SEE DETAIL ON THIS SHEET. 6. MW-# INDICATES CONCRETE MASONRY WALL, SEE SCHEDULE ON THIS SHEET.
- 7. ALL MASONRY WALLS ARE MW-1 UNLESS NOTED OTHERWISE ON PLAN.
- 8. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN, TYP. 9. SEE MECH'L, ELECTRICAL AND PLUMBING (MEP) DRAWINGS FOR LOCATION OF PVC SLEEVES. COORDINATE WITH HVAC CONTRACTOR.

N	MASONRY WALL SCHEDULE											
MARK	MARK THICKNESS REINFORCING											
MW-1	8" CMU	#6 AT 32" O.C.										

MASONRY WALL NOTES:

3000 PSI GROUT MIX.

- 1. WALL SEGMENTS SHALL BE REINFORCED WITH 9 GA. GALVANIZED LATERAL REINFORCING @ 16" O.C. HORIZ. EXTEND REINFORCING
- 6" INTO POURED ELEMENTS AND AROUND ENCASED STEEL. 2. ADJACENT TO ANY EXTERIOR WALL OPENING, PLACE 1 #6
- VERTICAL IN CELL GROUTED SOLID, FULL HEIGHT. 3. ALL MASONRY REINFORCED CELLS SHALL BE FILLED WITH

	FOOTING S	SCHEDULE
MARK	SIZE	REINFORCING
MF42.18	3'-6" X 18" X CONT.	(5) #5 CONT. BOTTOM

STRUCTURAL NOTES CONTRACTOR NOTE:

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. GUTHERMAN STRUCTURAL, INC. IS NOT RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION OR FOR RELATED SAFETY PRECAUTIONS AND PROGRAMS.

CODES AND STANDARDS WIND LOADS AS PER:

- FLORIDA BUILDING CODE 6TH EDITION (2017) WITH AN ULTIMATE DESIGN WIND SPEED OF 140 MPH, EXPOSURE B, NOMINAL DESIGN WIND SPEED OF 108 MPH, +/-0.18 INTERNAL PRESSURE COEFFICIENT, AND BUILDING RISK CATEGORY II.
- B. THIS BUILDING IS DESIGNED AS AN ENCLOSED BUILDING.
- 2. THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:
- A. FLORIDA BUILDING CODE 6TH EDITION (2017). B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
- (ACI 318/ 2011 EDITION). C. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED
- CONCRETE STRUCTURES (ACI 315/ LATEST EDITION). MANUAL OF STANDARD PRACTICE FOR WELDING REINFORCING STEE INSERTS & CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION.
- AWS. D1.4/ LATEST EDITION. SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF
- STRUCTURAL STEEL FOR BUILDINGS. (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AISC 13TH EDITION (ASD). F. SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS,
- NATIONAL DESIGN SPECIFICATION, WOOD CONSTRUCTION NDS/2012
- H. BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530, 530.1/ASCE 5, 6/TMS 402, 602/2011 EDITIONS).
- I. ASCE 7- 10. 3. ARCHITECTURAL AND MECHANICAL DRAWINGS:
- THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL
- B. REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, FINISHES, INSERTS, BOLTS SETTINGS, DRAINS, REGLETS, ETC.
- BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS TO PROPERLY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S
- FAILURE TO COMPLY WITH THIS REQUIREMENT. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK.
- ALL STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS LISTED ONLY AS COMPLETED STRUCTURES. THE GENERAL CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT WORK IN PROGRESS UNTIL THE STRUCTURES ARE COMPLETED. THE AND PROCEDURES PROVIDE NO LOADING GREATER THAN THE DESIGN
- 4. SECTIONS AND DETAILS:
- ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE NTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

MATERIALS AND ASSEMBLY TEST AS FOLLOWS:

Y AN APPROVED INDEPENDENT TESTING LABORATORY, AND SHALL BE LABELED WITH AN APPROVED LABEL IDENTIFYING THE MANUFACTURER PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT CERTIFICATION AGENCY, TESTING LABORATORY, EVALUATION ENTITY OR FLORIDA STATE WIDE PRODUCT APPROVAL NUMBER TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

A. EXTERIOR WINDOWS, SLIDING AND PATIO GLASS DOORS SHALL BE TESTED

- ANSI/AAMA/NWWDA 101/I.S. 2-97 OR TAS 202 (HVHZ SHALL COMPLY WITH
- B. EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED FOR STRUCTURAL INTEGRITY IN ACCORDANCE WITH ASTM E330 AT A LOAD OF 1.5 TIMES THE REQUIRED DESIGN PRESSURE LOAD. THE LOAD SHALL BE SUSTAINED FOR 10 SECONDS WITH NO PERMANENT DEFORMATION OF ANY MAIN FRAME OR PANEL MEMBER IN EXCESS OF 0.4 PERCENT OF ITS SPAN AFTER THE LOAD IS REMOVED. HVHZ SHALL COMPLY WITH TAS 202. AFTER EACH SPECIFIED LOADING, THERE SHALL BE NO GLASS BREAKAGE, PERMANENT DAMAGE TO FASTENERS, HARDWARE PARTS, OR ANY OTHER DAMAGE, WHICH CAUSES THE DOOR TO BE
- CUSTOM (ONE OF A KIND) EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED BY AN APPROVED TESTING LABORATORY OR BE ENGINEERED IN ACCORDANCE
- SPECIALTY ENGINEERED PRODUCTS THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED SHOP DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE SPECIALTY ENGINEERED SHOP DRAWINGS ARE SUBMITTED IN A TIMELY MANNER SO AS TO ALLOW REVIEWS AND RESUBMISSIONS AS REQUIRED. ALL SPECIALTY ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND WIND LOADS INCLUDING UPLIFT AND LATERAL LOADS. INTERIOR SPECIALTY PRODUCTS SHALL BE DESIGNED FOR LATERAL LOADS TO ASSURE STABILITY. SPECIALTY ENGINEERED PRODUCTS SHALL BE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
 - A. LIGHT GAUGE METAL, INCLUDING BUT NOT LIMITED TO, SOFFITS, CLADDING, CEILINGS, ETC.
 - MISCELLANEOUS METALS INCLUDING STEEL STAIRS, MECHANICAL EQUIPMEN SUPPORTS, FRAMES THAT SUPPORT MACHINES, PIPES OR OTHER STRUCTURAL METAL USED FOR SUPPORT OF MECHANICAL SYSTEMS.
 - MISCELLANEOUS HANGERS, CHANDELIERS, CABINETS, METAL FRAMES, LADDERS, RIGGING, HANGING WALLS, RAILINGS, GLAZING FRAMES, CLADDING SUCH AS STONE, PRECAST, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ETC. OR ANY OTHER MISCELLANEOUS PRODUCT REQUIRED BY ANY OF THE CONSTRUCTION
 - IN ADDITION TO THE LOADS SHOWN IN THE DESIGN LOAD SCHEDULE, THE SPECIALTY ENGINEER SHALL DESIGN FOR THE WEIGHT OF ALL MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND FIXTURES, AS WELL AS CHANDELIER FIXTURES, BAR CABINETS, AND ART WORK / MOBILES.

- 1. ALL SITE PREPARATION AND EXCAVATION WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH THE:
- A. REPORT ON SOILS AND FOUNDATION INVESTIGATION PREPARED BY A ECS FLORIDA, LLC, ECS PROJECT NO. 24:6036, DATED APRIL 26, 2017. 2. THE BUILDING SITE SHOULD BE EXCAVATED TO THE DEPTH AND EXTENT
- INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED IN WRITING BY THE SOILS ENGINEER PRIOR TO BACKFILLING. 3. BOTTOM OF FOOTINGS TO BEAR ON CONTROLLED COMPACTED FILL CAPABLE
- OF SAFELY SUPPORTING 2500 POUNDS PER SQUARE FOOT (PSF). SOILS SUPPORTING ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY
- A REGISTERED SOILS ENGINEER BEFORE COMMENCING WORK. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN SPECIFIED SOIL BEARING PRESSURE.
- 6. EXCAVATION & BACKFILL:
- A. ALL EXCAVATION SHALL BE KEPT DRY. EXCAVATE TO DEPTHS AND DIMENSIONS INDICATED. TAKE EVERY PRECAUTION TO GUARD AGAINST ANY MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES, UTILITIES,
- B. PROVIDE ANY BRACING OR SHORING NECESSARY TO AVOID SETTLEMENT
- CENTERLINE OF FOOTINGS: SHALL COINCIDE WITH CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED ON DRAWINGS.
- DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTIO DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE PROCEEDING WITH ANY WORK.

- 1. CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:
 - A. FOUNDATIONS B. SLAB-ON-GRADE . MASONRY GROUT
- ALL OTHER CONCRETE TO BE 4000 PSI UNLESS NOTED OTHERWISE.
- ALL CONCRETE SHALL BE READY MIX AND MEET THE FOLLOWING REQUIREMENTS: A. A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
- B. SLUMPS SHALL BE 4-INCHES MINIMUM AND 6-INCHES MAXIMUM.
- C. CONCRETE SHALL HAVE 3 PERCENT AIR ENTRAINMENT.
- D. ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.55. E. JOBSITE WATER SHALL NOT BE ADDED.
- 3. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI BUILDING CODE (ACI 318/ 2011 EDITION), THE ACI DETAILING MANUAL
- (ACI 315/ 1994 EDITION), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301/ LATEST EDITION).
- SUBMIT ALL REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL PRIOR TO ANY FABRICATION.
- CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY ACI SPECIFICATIONS.
- WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A 185, UNLESS OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLSTERS SPACED AT 3'-0" O.C. 7. LAP ALL BARS WITH CLASS B TENSION LAP SPLICE UNLESS OTHERWISE NOTED
- NOTED). 8. REINFORCING BARS:
 - A. ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A 615
 - B. AT CORNERS OF CONCRETE WALLS, BEAMS AND CONTINUOUS WALL FOOTINGS, PROVIDE (1-#5 OR MATCHING) HORIZONTAL BARS X 5'-0" BENT BAR FOR EACH HÖRIZONTAL BAR SCHEDULED AT EACH FACE.

ON DRAWINGS. LAP ALL WWF A MINIMUM OF 12 INCHES (UNLESS OTHERWISE

- WHERE COLUMNS ARE AN INTEGRAL PART OF CONCRETE WALLS, WALL REINFORCEMENT SHALL BE CONTINUOUS THRU THE COLUMNS.
- D. ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE ACI RECOMMENDED HOOKS UNLESS OTHERWISE NOTED.
- E. FOR BALCONIES, SLABS AND WALKWAYS EXPOSED TO WEATHER ALL REINFORCING STEEL (TOP AND BOTTOM) AS WELL AS SPACERS AND OTHER DEVICES FOR SPACING, SUPPORTING AND FASTENING REINFORCING SHALL BE GALVANIZED CONFORMING TO ASTM A767. BOLSTERS AND CHAIRS TO BE PLASTIC. CONCRETE PLACED IN THESE AREAS TO HAVE .40 W/C RATIO MAXIMUM AND CONTAIN 2.5 GALLONS OF CALCIUM NITRATE PER CUBIC YARD. REBAR COVER TO BE 1.5" MINIMUM.
- CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 2000 LBS. OF ADDITIONAL REINFORCING STEEL, INCLUDING DETAILING, FABRICATION, BENDING, FURNISHING, AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECT'S AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THE PRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S
- CONSTRUCTION JOINTS IN STRUCTURAL SLABS AND BEAMS SHALL BE AT JOINT AND ADDITIONAL SHEAR FRICTION REINFORCING. CONSTRUCTION IOINT LOCATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR CONSTRUCTION. CONSTRUCTION JOINTS IN POST-TENSION SLABS SHALL BE LOCATED AND DESIGNED BY SPECIALTY ENGINEER. MASONRY

1. MASONRY UNITS SHALL BE

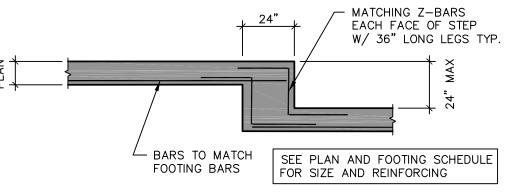
- LOAD BEARING ASTM C90 TYPE II NON-MOISTURE CONTROLLED NORMAL WEIGHT ALL CMU SHALL BE LAID IN A FULL BED OF MORTAR IN RUNNING BOND
- THE COMPRESSIVE STRENGTH OF MASONRY (F'M) SHALL BE [1,500] PSI AS CALCULATED IN ACCORDANCE WITH ASTM C1314.
- 3. ALL MORTAR SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION C270. A. FROM FIELD OBTAINED TEST CUBES. (MIN. OF TWO)
- 4. GROUT SHALL BE A HIGH SLUMP MIX A. IN ACCORDANCE WITH ASTM SPECIFICATION C476
- B. HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI

- C. FROM FIELD OBTAINED TEST CUBES. (MIN. OF TWO)
- 5. ALL CONCRETE MASONRY BEARING AND SHEAR WALLS SHALL BE A. CONSTRUCTED
- B. INSPECTED BY A CERTIFIED INSPECTION COMPANY AND CONSTRUCTED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENT FOR MASONRY STRUCTURES" (ACI 530/ASCE 5/TSM 402) AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TSM 602)/ 2011 EDITIONS.
- FOR JOINT REINFORCEMENT, WALL TIES, ANCHORS AND INSERTS, APPLY A MINIMUM COAT OF 1.5 OUNCES PER SQUARE FOOT (PSF) (458/G/M2) COMPLY WITH THE REQUIREMENTS OF ASTM A153, CLASS B.
- PROVIDE CONTROL JOINTS IN MASONRY WALLS AT A SPACING OF 25' + O.C. AND ALIGN WITH ARCHITECTURAL CONTROL JOINTS.
- TOP OF ALL FOOTINGS SHALL BE 1'-4" BELOW TOP OF SLAB TYP U.N.O. MAKE ADJUSTMENTS AS NEEDED SO TOP OF ALL EXTERIOR FOOTINGS SHALL BE MINIMUM 12-INCHES BELOW EXTERIOR FINISH GRADE.

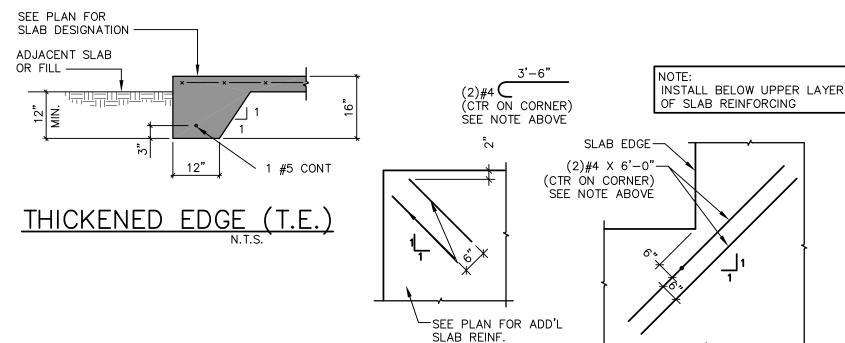
 8. MINIMUM LAP SPLICES FOR REINFORCED CMU PER FBC 5TH EDITION (2014) SECTION 2107.2.1:

 BAR SIZE
 - A. LAP SPLICES SHALL OCCUR DIRECTLY ABOVE FOOTINGS AND SLABS. NO SPLICES ARE ALLOWED AT MID-HEIGHT OF WALL.

- 1. THE SHOP DRAWINGS SHALL BE SUBMITTED IN COMPLETE PACKAGES FOR THE
- A. CONCRETE MIX DESIGNS B. CONCRETE REINFORCING STEEL AND WELDED WIRE FABRIC
- C. CONCRETE MASONRY UNIT SUBMITTALS AND OTHER MASONRY ACCESSORIES
- PRE-ENGINEERED ITEMS SHALL BE SUBMITTED SIGNED AND SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA.

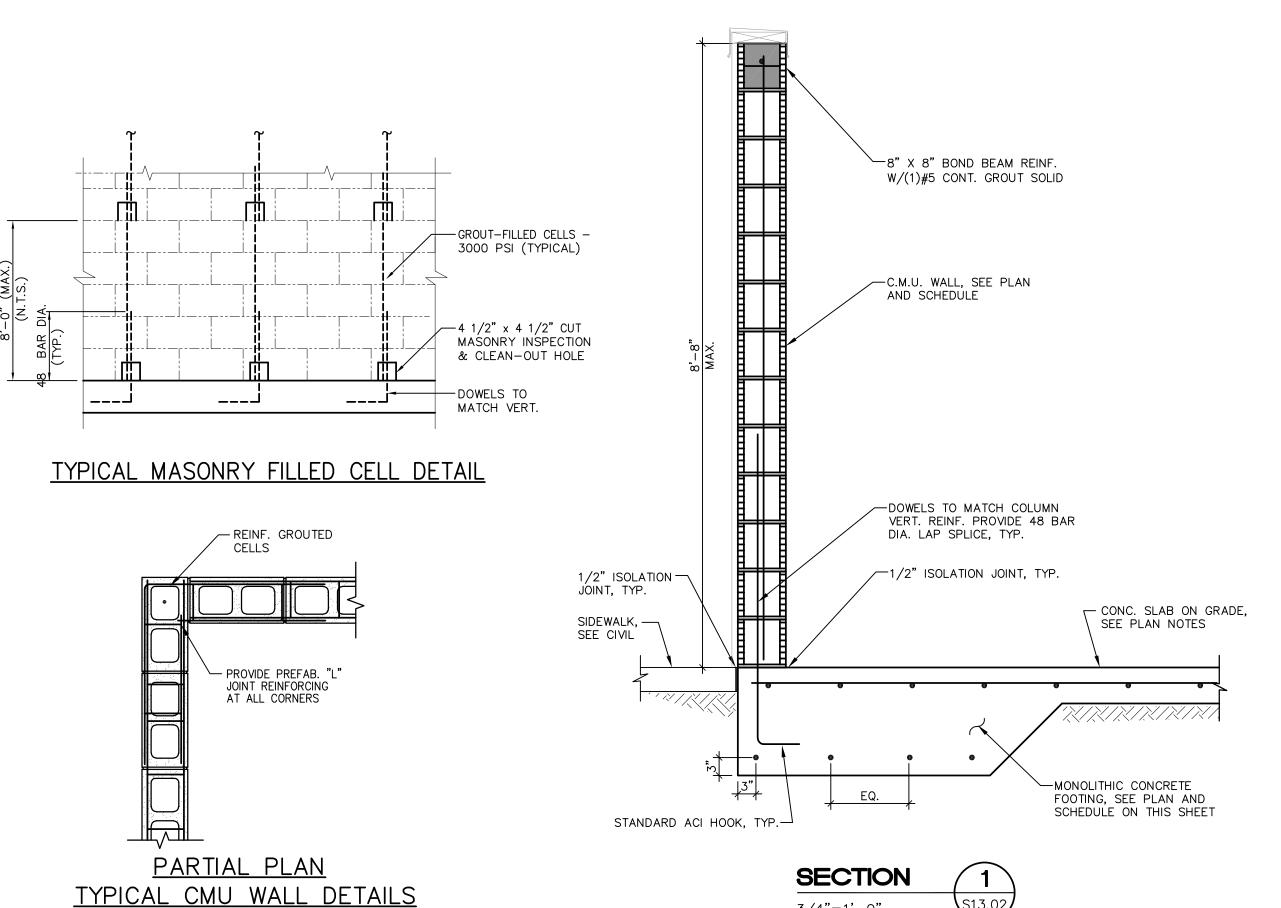






3/4"=1'-0"

TYP. SLAB CORNER REINF.



ISSUE HISTORY D | **No.** | Date 06/22/18 | ISSUE FOR PERMIT **REVISION HISTORY** Date Description

PERMIT REVIEW STAME

DELETE IF NON-HUD PROJECT / OR CLIENT LOGO HERE

FUGLEBERG KOCH 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595

www. fuglebergkoch.com



AA26002103

John Gutherman Jr., P.E. FL. REG. #60880

SUMMER BAY

LAKE COUNTY, FL

TRASH ENCLOSURE STRUCTURAL PLAN SET

S13.02

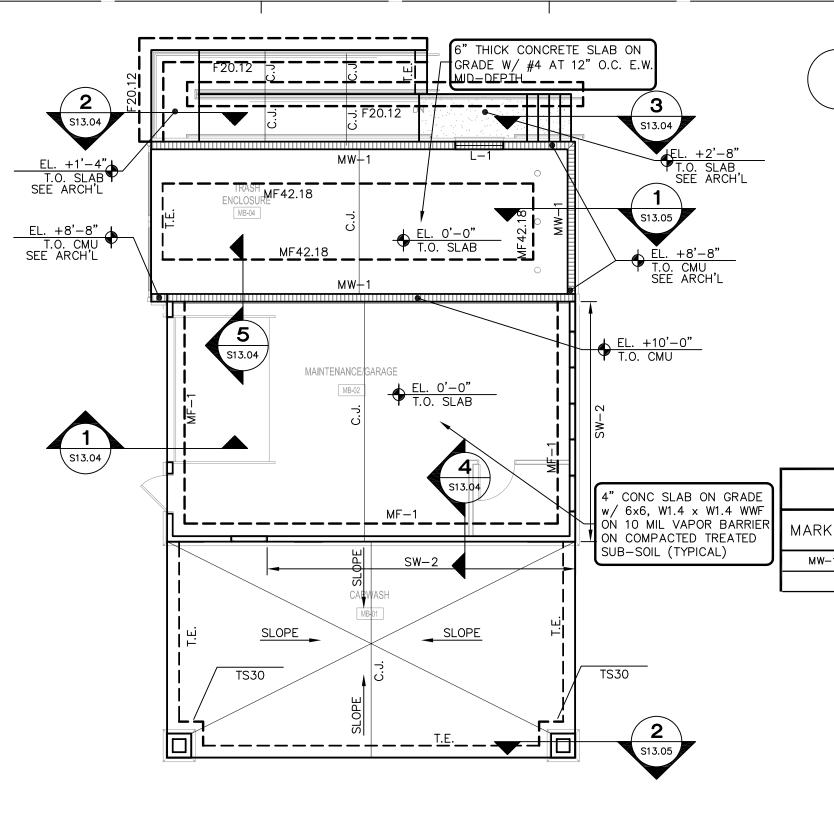
PLOTTED: 6/23/2017 12:38:28 PM

JRIVERA

JGUTHERMAN

06/22/2018

^{proval:} JGUTHERMAN



MAINTENANCE BLDG - FOUNDATION PLAN

FOUNDATION PLAN NOTES:

THICKNESS

8" CMU

TS30

- 1. ELEV. $\pm 0'-0"$ IS REFERENCE ONLY. SEE CIVIL FOR
- TRUE NAVD ELEVATION.
- 2. VERIFY SLOPES AND STEPS WITH ARCH'L PRIOR TO CONSTRUCTION.
- 3. C.J. INDICATES CONTROL JOINT. 4. MF-# INDICATES MONOLITHIC CONCRETE FOOTING, SEE SCHEDULE ON THIS SHEET.
- 5. TS# INDICATES THICKENED SLAB, SEE SCHEDULE ON THIS SHEET.
- 6. MW-# INDICATES CONCRETE MASONRY WALL, SEE SCHEDULE ON THIS SHEET. 7. ALL MASONRY WALLS ARE MW-1 U.N.O. ON PLAN.
- 8. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN, TYP.
- 9. SEE MECH'L, ELECTRICAL AND PLUMBING (MEP) DRAWINGS FOR LOCATION OF PVC SLEEVES.
- COORDINATE WITH HVAC CONTRACTOR.

REINFORCING

#6 AT 32" O.C.

FOOTING SCHEDULE

- 10. L-1 INDICATES 8X8 PRECAST LINTELS W/(1)#5, TYP.
- 11. ALL WOOD WALL FRAMING TO BE 2X6 WOOD STUDS @ 16" O.C. MAX.
- 12. F# INDICATES CONCRETE SPREAD FOOTING. SEE SCHEDULE ON THIS SHEET.
- 13. PROVIDE A BB-2 (8X16 MASONRY BOND BEAM WITH (1)# 5 TOP & BOTTOM) AT TOP OF ALL TRUSS BEARING WALLS, TYP.

MASONRY WALL SCHEDULE

(3) #5 CONT. BOTTOM

- WALL SEGMENTS SHALL BE REINFORCED WITH 9 GA. GALVANIZED LATERAL REINFORCING @ 16" O.C. HORIZ.
- ALL MASONRY REINFORCED CELLS SHALL BE FILLED WITH 3000 PSI GROUT MIX. AT END. CORNERS. AND INTERSECTION OF WALLS PLACE (1)
- MATCHING VERTICAL IN CELL GROUTED SOLID, FULL HEIGHT PROVIDE (2) #6 ON EACH SIDE OF OPENING, U.N.O. ON PLAN, TYP.

DULE	
REINFORCING	
(3) #6 CONT. BOTTOM	MA
(5) #5 CONT. BOTTOM	SI
(4) #5 E.W. BOTTOM	SV



ROOF FRAMING NOTES:

- 1. TRUSS BEARING ELEVATION = SEE ARCH UNLESS NOTED OTHERWISE.
- 2. PRE-ENGINERED ROOF WOOD TRUSSES SHALL BE SPACED AT 2'-0" O.C. MAX.
- 3. FRAMING CONTRACTOR AND HVAC CONTRACTOR TO COORDINATE DUCT LOCATIONS PRIOR TO TRUSS FABRICATION.
- 4. VERIFY SLOPES AND STEPS WITH ARCH'L PRIOR TO CONSTRUCTION.
- 5. ALL ROOF SHEATHING IS 5/8" EXT. GRADE PLYWOOD ATTACHED WITH 8d NAILS AT 6" O.C. AT EDGES, AND 12" O.C. IN FIELD OF PANEL.
- 6. ALL BEAMS SHOWN L- ARE OVER OPENINGS, TYP..

BASE CONNECTION AT B.O. SHEAR WALL CONNECTOR AT END
OF WALL AND TO TOP
PLATE

BOTTOM SIL PLATE ATTACHMENT

OF STUDS OR
PSL
AT WALL ENDS

HDU4

-CONC. SLAB,

SEE PLAN

-10 MIL VAPOR

BARRIER, TYP.

#3 NOSING -

-REINF. PER SCHEDULE

5/8"ø ANCHOR BOLTS 5" EMBED AT 12" O.C. (3)2X6 MIN. 5/8"ø ANCHOR BOLTS 5" EMBED AT 24" O.C. (2)2X6 MIN.

4" SLAB ON GRADE -

____ x ____ x ____ x ___

8" CMU WALL W/

#5 AT 48" O.C. TYP.

STANDARD ACI

HOOK, TYP.

TURN DOWN EDGE

AT CMU

NOTE: FILL ALL BLOCK

CELLS BELOW GRADE

WITH 3000 P.S.I. GROU

BACKFILL PER GEOTECHNICAL

CONC. FOOTING,

AND SCHEDULE

COMPACTED SUB-GRADE PER

GEOTECHNICAL ENGINEER'S

RECOMMENDATIONS

SEE PLAN

BACKFILL PER

GEOTECHNICAL

RECOMMENDATIONS

ENGINEER'S

ENGINEER'S RECOMMENDATIONS

- 7. ALL UPLIFT CONNECTORS FOR WOOD CONNECTIONS SHALL BE SIMPSON H10A U.N.O. ALL UPLIFT CONNECTORS FOR MASONRY CONNECTIONS SHALL BE SIMPSON HETA 16 U.N.O.
- 8. RUNS FOR MECH'L, ELECTRICAL AND PLUMBING (MEP) THROUGH PRE-FABRICATED TRUSSES MUST BE COORDINATED WITH THE TRUSS DESIGNER AND MEP DWGS. (PIPING, DUCT RUNS, ETC.) FIRE SRPINKLER RUNS MUST ALSO BE COORDINATED

HEADER SCHEDULE								
MARK	SIZE (IN.)	BEARING STUDS						
H-1	(3) 2 X 8	(3") B & (2) FULL HEIGHT						
H-2	(3) 2 X 12	(3") B & (2) FULL HEIGHT						
H-3	(3) 1.75 X 18 LVL	(4.5") B & (2) FULL HEIGHT						
H-4	(3) 1.75 X 11.25 LVL	(4.5") B & (2) FULL HEIGHT						

1. B INDICATES BEARING STUDS, TOTAL WIDTH OF SUPPORT. 2. PROVIDE 1/2" PLYWOOD BOARDS BETWEEN EXTERIOR 2x HEADERS FOR FLITCH BEAM TO MAKE FULL 5.5" WIDTH.

		EXTERIOR			INTERIOR	
LOCATION	SHEATHING MATERIAL	EDGE NAILING	FIELD NAILING	SHEATHING MATERIAL	EDGE NAILING	FIELD NAILING
EXTERIOR SW	5/8" PLYWOOD	10d AT 4" O.C.	10d AT 12" O.C.	5/8" TYPE "X" GYPSUM SHEATHING BOARD	6d COOLER OR WALLBOARD NAIL @ 4" O.C.	6d COOLER OR WALLBOARD NAIL @ 7" O.C.
EXTERIOR SW	5/8" PLYWOOD	10d AT 6" O.C.	10d AT 12" O.C.			6d COOLER OR WALLBOARD NAIL @ 7" O.C.
		_		_		_
	EXTERIOR SW	EXTERIOR SW 5/8" PLYWOOD	LOCATION SHEATHING MATERIAL EDGE NAILING EXTERIOR SW 5/8" PLYWOOD 10d AT 4" O.C.	EXTERIOR SW 5/8" PLYWOOD 10d AT 4" O.C. 10d AT 12" O.C.	LOCATION SHEATHING MATERIAL EDGE NAILING FIELD NAILING SHEATHING MATERIAL EXTERIOR SW 5/8" PLYWOOD 10d AT 4" O.C. 10d AT 12" O.C. 5/8" TYPE "X" GYPSUM EXTERIOR SW 5/8" PLYWOOD 10d AT 6" O.C. 10d AT 12" O.C. 5/8" TYPE "X" GYPSUM	LOCATION SHEATHING MATERIAL EDGE NAILING FIELD NAILING SHEATHING MATERIAL EDGE NAILING EXTERIOR SW 5/8" PLYWOOD 10d AT 4" O.C. 10d AT 12" O.C. 5/8" TYPE "X" GYPSUM SHEATHING BOARD WALLBOARD NAIL © 4" O.C. EXTERIOR SW 5/8" DLYWOOD 10d AT 6" O.C. 10d AT 13" O.C. 5/8" TYPE "X" GYPSUM 6d COOLER OR

GYPSUM WALL -

SCHEDULE, TYP.

FINISHED GRADE-

SHEATHING,

PER WALL

-WOOD STUD WALL, PER PLAN AND

SCHEDULE

SECTION

3/4" = 1'-0"

CONCRETE

LAB/PAV'T

STRUCTURAL NOTES

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. GUTHERMAN STRUCTURAL, INC. IS NOT RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION OR FOR RELATED SAFETY

CODES AND STANDARDS WIND LOADS AS PER:

- A. FLORIDA BUILDING CODE 6TH EDITION (2017) WITH AN ULTIMATE DESIGN WIND SPEED OF 140 MPH, EXPOSURE B, NOMINAL DESIGN WIND SPEED OF 108 MPH, +/-0.18 INTERNAL PRESSURE COEFFICIENT, AND
- B. THIS BUILDING IS DESIGNED AS AN ENCLOSED BUILDING.
- 2. THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:
- A. FLORIDA BUILDING CODE 6TH EDITION (2017). B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
- C. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315/ LATEST EDITION).
- D. MANUAL OF STANDARD PRACTICE FOR WELDING REINFORCING STEEL, INSERTS & CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION.
- E. SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS. (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AISC 13TH EDITION (ASD).
- F. SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS,
- ACI 301/LATEST EDITION. G. NATIONAL DESIGN SPECIFICATION, WOOD CONSTRUCTION NDS/2012
- H. BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY
- STRUCTURES (ACI 530, 530.1/ASCE 5, 6/TMS 402, 602/2011 EDITIONS).
- ARCHITECTURAL AND MECHANICAL DRAWINGS:
- A. THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT.
- B. REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, FINISHES, INSERTS, BOLTS SETTINGS, DRAINS, REGLETS, ETC.
- . BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS TO PROPERLY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S
- D. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK.
- E. ALL STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS LISTED ONLY AS COMPLETED STRUCTURES. THE GENERAL CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT WORK IN PROGRESS UNTIL THE STRUCTURES ARE COMPLETED. THE GENERAL CONTRACTOR SHALL ALSO INSURE THAT ITS OPERATIONS AND PROCEDURES PROVIDE NO LOADING GREATER THAN THE DESIGN

ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

5. MATERIALS AND ASSEMBLY TEST AS FOLLOWS:

A. EXTERIOR WINDOWS, SLIDING AND PATIO GLASS DOORS SHALL BE TESTED LABELED WITH AN APPROVED LABEL IDENTIFYING THE MANUFACTURER PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT CERTIFICATION AGENCY, TESTING LABORATORY, EVALUATION ENTITY OR FLORIDA STATE WIDE PRODUCT APPROVAL NUMBER TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

ANSI/AAMA/NWWDA 101/I.S. 2-97 OR TAS 202 (HVHZ SHALL COMPLY WITH

- B. EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED FOR STRUCTURAL INTEGRITY IN ACCORDANCE WITH ASTM E330 AT A LOAD OF 1.5 TIMES THE REQUIRED DESIGN PRESSURE LOAD. THE LOAD SHALL BE SUSTAINED FOR 10 SECONDS WITH NO PERMANENT DEFORMATION OF ANY MAIN FRAME OR PANEL MEMBER IN EXCESS OF 0.4 PERCENT OF ITS SPAN AFTER THE LOAD IS REMOVED. HVHZ SHALL COMPLY WITH TAS 202. AFTER EACH SPECIFIED LOADING HARDWARE PARTS, OR ANY OTHER DAMAGE, WHICH CAUSES THE DOOR TO BE
- D. CUSTOM (ONE OF A KIND) EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED BY AN APPROVED TESTING LABORATORY OR BE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES.
- 1. THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED SHOP DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE SPECIALTY ENGINEERED SHOP RAWINGS ARE SUBMITTED IN A TIMELY MANNER SO AS TO ALLOW REVIEWS ANI RESUBMISSIONS AS REQUIRED. ALL SPECIALTY ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND WIND LOADS INCLUDING UPL AND LATERAL LOADS. INTERIOR SPECIALTY PRODUCTS SHALL BE DESIGNED FOR LATERAL LOADS TO ASSURE STABILITY. SPECIALTY ENGINEERED PRODUCTS SHALL BE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
- A. LIGHT GAUGE METAL, INCLUDING BUT NOT LIMITED TO, SOFFITS, CLADDING,
- B. MISCELLANEOUS METALS INCLUDING STEEL STAIRS, MECHANICAL EQUIPMENT SUPPORTS, FRAMES THAT SUPPORT MACHINES, PIPES OR OTHER STRUCTURAL METAL USED FOR SUPPORT OF MECHANICAL SYSTEMS.

- MISCELLANEOUS HANGERS, CHANDELIERS, CABINETS, METAL FRAMES, LADDERS, RIGGING, HANGING WALLS, RAILINGS, GLAZING FRAMES, CLADDING SUCH AS STONE, PRECAST, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ET OR ANY OTHER MISCELLANEOUS PRODUCT RÉQUIRED BY ANY OF THE CONSTRUCTION
- D. IN ADDITION TO THE LOADS SHOWN IN THE DESIGN LOAD SCHEDULE, THE SPECIALTY ENGINEER SHALL DESIGN FOR THE WEIGHT OF ALL MECHANICAL PLUMBING AND ELECTRICAL EQUIPMENT AND FIXTURES, AS WELL AS CHANDELIER
- FIXTURES, BAR CABINETS, AND ART WORK / MOBILES. ALL SITE PREPARATION AND EXCAVATION WORK IS TO BE PERFORMED IN
- TRICT ACCORDANCE WITH THE REPORT ON SOILS AND FOUNDATION INVESTIGATION PREPARED BY ECS FLORIDA LLC, REPORT #24:6036 DATED APRIL 26, 2017
- 5. SOILS SUPPORTING ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE COMMENCING WORK. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN DEPOSITION.
- A. ALL EXCAVATION SHALL BE KEPT DRY. EXCAVATE TO DEPTHS AND DIMENSIONS INDICATED. TAKE EVERY PRECAUTION TO GUARD AGAINST

- DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR

1. CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:

B. SLAB-ON-GRADE

- ALL CONCRETE SHALL BE READY MIX AND MEET THE FOLLOWING REQUIREMENTS:

- BUILDING CODE (ACI 318/ 2011 EDITION), THE ACI DETAILING MANUAL (ACI 315/ 1994 EDITION), AND THE SPECIFICATIONS FOR STRUCTURAL
- CONCRETE FOR BUILDINGS (ACI 301/ LATEST EDITION).
- 6. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A 185, UNLESS
- A. ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH
- B. AT CORNERS OF CONCRETE WALLS, BEAMS AND CONTINUOUS WALL
- REINFORCEMENT SHALL BE CONTINUOUS THRU THE COLUMNS.
- ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE ACI RECOMMENDED HOOKS UNLESS OTHERWISE NOTED.
- OTHER DEVICES FOR SPACING, SUPPORTING AND FASTENING REINFORCING SHALL BE GALVANIZED CONFORMING TO ASTM A767. BOLSTERS AND CHAIRS TO BE PLASTIC. CONCRETE PLACED IN THESE AREAS TO HAVE .40 W/C RATIO MAXIMUM AND CONTAIN 2.5 GALLONS OF CALCIUM NITRATE PER CUBIC YARD. REBAR COVER TO BE 1.5" MINIMUM.
- CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 2000 LBS. OF ADDITIONAL REINFORCING STEEL, INCLUDING DETAILING, FABRICATION, BENDING, FURNISHING, AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT THE ARCHITECT'S AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THE PRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S

- 2. THE BUILDING SITE SHOULD BE EXCAVATED TO THE DEPTH AND EXTENT INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED IN WRITING BY THE SOILS ENGINEER PRIOR TO BACKFILLING. BOTTOM OF FOOTINGS ASSUMED TO BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 2500 PSF.
- SPECIFIED SOIL BEARING PRESSUR 6. TOP OF ALL FOOTINGS SHALL BE 1'-4" BELOW TOP OF SLAB TYP U.N.O. MAKE ADJUSTMENTS AS NEEDED SO TOP OF ALL EXTERIOR FOOTINGS SHALL BE MINIMUM 12-INCHES BELOW EXTERIOR FINISH GRADE.
- ANY MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES, UTILITIES,
- B. PROVIDE ANY BRACING OR SHORING NECESSARY TO AVOID SETTLEMENT OR DISPLACEMENT OF EXISTING FOUNDATION OR STRUCTURES.
- 8. CENTERLINE OF FOOTINGS: SHALL COINCIDE WITH CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED ON DRAWINGS.
- DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTION

A. FOUNDATIONS

- C. MASONRY GROUT ALL OTHER CONCRETE TO BE 4000 PSI UNLESS NOTED OTHERWISE.
- A. A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI B. SLUMPS SHALL BE 4-INCHES MINIMUM AND 6-INCHES MAXIMUM.
- C. CONCRETE SHALL HAVE 3 PERCENT AIR ENTRAINMENT D. ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.55.
- 3. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI
- 4. SUBMIT ALL REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL PRIOR
- 5. CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY ACI SPECIFICATIONS.
- OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLSTERS SPACED AT 3'-0" O.C. 7. LAP ALL BARS WITH CLASS B TENSION LAP SPLICE UNLESS OTHERWISE NOTED ON DRAWINGS. LAP ALL WWF A MINIMUM OF 12 INCHES (UNLESS OTHERWISE
- STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A 615
- FOOTINGS, PROVIDE (1-#5 OR MATCHING) HORIZONTAL BARS X 5'-0" BENT BAR FOR EACH HORIZONTAL BAR SCHEDULED AT EACH FACE.
- WHERE COLUMNS ARE AN INTEGRAL PART OF CONCRETE WALLS, WALL
- FOR BALCONIES, SLABS AND WALKWAYS EXPOSED TO WEATHER ALL REINFORCING STEEL (TOP AND BOTTOM) AS WELL AS SPACERS AND
- CONSTRUCTION JOINTS IN STRUCTURAL SLABS AND BEAMS SHALL BE AT MID—SPAN AND KEY JOINTED WITH REINFORCING CONTINUOUS ACROSS
 JOINT AND ADDITIONAL SHEAR FRICTION REINFORCING. CONSTRUCTION JOINT LOCATIONS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR O CONSTRUCTION. CONSTRUCTION JOINTS IN POST-TENSION SLABS SHALL BE LOCATED AND DESIGNED BY SPECIALTY ENGINEER.

SIZE

2'-0" X 24"D X CONT

3'-6" X 18" X CONT

3'-0" X 12"D

2'-0" X 12" X CONT

- DROP BOTTOM OF BEAM OR SLAB AT WINDOWS, DOORS AND MASONRY OPENINGS AS REQUIRED TO PROVIDE A CONCRETE CLOSURE BETWEEN THE BOTTOM OF THE BEAM AND WINDOW AND/OR DOOR HEADER OR PROVIDE A PRECAST CONCRETE LINTEL BY CASTCRETE IF NOT NEXT TO A POURED
- MAXIMUM DROP SHALL BE 16" (TWO BLOCK COURSES) AND SPAN EQUAL TO MASONRY OPENING WIDTH. PROVIDE 2 #5 AT BOTTOM OF DROP INCLUDING #3 TIES @ 24" O.C. EXTENDING TO TOP OF BEAM REINFORCING. IF THE LINTEL EXCEEDS THE ABOVE LIMIT OF DROP, A SEPARATED LINTEL SHALL BE PROVIDED AS FOLLOWS:
- L1. OPENING LESS THAN 6'0" WIDE 8" X 8" W/2 #5 BOTTOM BARS. C. LINTELS TO HAVE 8" MINIMUM BEARING AT EACH END.

DEPTH AND WIDTH FOR ITS SUBSEQUENT CONSTRUCTION.

D. IF THE MASONRY OPENING HAS AN END ADJACENT TO A CONCRETE COLUMN PROVIDE (2) #5 OR #6 DOWELS, AS THE CASE MAY BE, IN THE

MASONRY

- MASONRY UNITS SHALL BE TYPE II NON-MOISTURE CONTROLLED
- ALL CMU SHALL BE LAID IN A FULL BED OF MORTAR IN RUNNING BOND
- 2. THE COMPRESSIVE STRENGTH OF MASONRY (F'M) SHALL BE [1,500] PSI AS CALCULATED IN ACCORDANCE WITH ASTM C1314.
- 3. ALL MORTAR SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION C270.
- A. FROM FIELD OBTAINED TEST CUBES. (MIN. OF TWO) 4. GROUT SHALL BE A HIGH SLUMP MIX
- A. IN ACCORDANCE WITH ASTM SPECIFICATION C476 B. HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI C. FROM FIELD OBTAINED TEST CUBES. (MIN. OF TWO)
- 5. ALL CONCRETE MASONRY BEARING AND SHEAR WALLS SHALL BE A. CONSTRUCTED
- B. INSPECTED BY A CERTIFIED INSPECTION COMPANY AND CONSTRUCTED IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENT FOR MASONRY STRUCTURES" (ACI 530/ASCE 5/TSM 402) AND "SPECIFICATIONS FOR
- MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TSM 602)/ 2011 EDITIONS. 6. PROVIDE 8" X 8" MASONRY BEAM WITH 2 #5 CONT. AT EVERY WINDOW SILL. EXTEND BEAM 8" BEYOND EDGE OF OPENING. FOR JOINT REINFORCEMENT, WALL TIES, ANCHORS AND INSERTS, APPLY
- A MINIMUM COAT OF 1.5 OUNCES PER SQUARE FOOT (PSF) (458/G/M2) COMPLY WITH THE REQUIREMENTS OF ASTM A153, CLASS B. 7. PROVIDE CONTROL JOINTS IN MASONRY WALLS AT A SPACING OF 25' + O.C. AND ALIGN WITH ARCHITECTURAL CONTROL JOINTS.
- 8. MINIMUM LAP SPLICES FOR REINFORCED CMU PER FBC 5TH EDITION (2014)
- NO SPLICES ARE ALLOWED AT MID-HEIGHT OF WALL. MASONRY LINTELS:
- A. A PRECAST CONCRETE LINTEL BY CASTCRETE SHALL BE PROVIDED OVER ALL MASONRY WALL OPENINGS. THE LINTEL SHALL BE FULLY GROUTED. B. SHORE PRECAST LINTEL PER MANUFACTURE'S INSTRUCTIONS.
- WOOD TRUSSES ARE TO BE DESIGNED FOR THE WOOD FABRICATOR BY A PROFESSIONAL ROOF TRUSSES SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA. SEALED CALCULATIONS AND LAYOUT DRAWINGS ARE TO BE SUBMITTED FOR HANGERS AS REQUIRED TO RESIST GRAVITY AND UPLIFT REACTION (UPLIFT LOADING SHALL USE COMPONENTS & CLADDING WIND FORCES.) . WOOD TRUSSES SHALL BE BRACED AND ERECTED IN ACCORDANCE WITH THE 2006 EDITION OF THE BUILDING COMPONENT SAFETY INFORMATION GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING &
- BY WTCA AND TRUSS PLATE INSTITUTE. BRACING IN THE PLANE OF THE THE TRUSS FABRICATOR SHALL PROVIDE AND LOCATE CONTINUOUS WEB NLEWTERRS: BRACING FOR EACH TRUSS WEB MEMBER AS REQUIRED.

B. LATERAL BRACING SHALL BE RESTRAINED BY DIAGONAL BRACING

- (MIN. 2" THICK NOMINAL LUMBER). THIS BRACING IS TO BE CONTINUOUS. C. A MINIMUM OF TWO ROWS OF DIAGONAL BRACING IS REQUIRED, ONE AT EACH VERTICAL WEB MEMBER CLOSEST TO BEARING LOCATIONS. THE BOTTOM CHORDS SHALL BE BRACED BY CONTINUOUS LATERAL BRACING SPACED AT 8'-0" ON CENTER WITH A CEILING ATTACHED TO BOTTOM OF TRUSSES. IF NO CEILING IS ATTACHED TO BOTTOM OF TRUSSES. BRACING SHALL BE MINIMUM 2X4 @ 36" ON CENTER NAILED 1 THE TOP OF THE BOTTOM CHORD. DIAGONALS PLACED AT 45 DEGREES TO THE LATERAL BRACES SHALL BE LOCATED AT EACH END. IF BUILDING
- 4. TOP CHORD BRACING: IF PLYWOOD DECKING IS APPLIED DIRECTLY TO TOP CHORD, PROPERLY LAPPED AND NAILED TO DEVELOP DIAPHRAGM ACTION, BRACING IS NOT

EXCEEDS 60 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20 FOOT INTERVALS.

EACH END. IF BUILDING EXCEEDS 60 FEET IN LENGTH, DIAGONAL BRACING SHOULD BE REPEATED AT 20-FOOT INTERVALS. DO NOT CUT, DRILL OR NOTCH ROOF OR FLOOR TRUSSES WITHOUT WRITTEN APPROVAL FROM TRUSS ENGINEER. COORDINATE MECHANICAL, ELECTRICAL PLUMBING, ETC. SIZES AND LOCATIONS WITH TRUSS LAYOUT PRIOR TO

IF PURLINS ARE USED, DIAGONAL TOP CHORD BRACING IS REQUIRED AT

- TRUSSES SHALL BE MANUFACTURED & DESIGNED IN ACCORDANCE WITH NATIONAL DESIGN SPECIFICATION(S) FOR WOOD CONSTRUCTION, AF & PA, AND NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1-2007, AND THE LOCAL CODE JURISDICTIONS.
- DO NOT OVERLOAD FLOOR OR ROOF TRUSSES WITH BUILDING MATERIALS. CONNECTOR PLATES SHALL BE MANUFACTURED BY A WTCA MEMBER PLATE SUPPLIER AND SHALL MEET OR EXCEED ASTM A653/A653M REQUIREMENTS
- WOOD TRUSS MANUFACTURER TO DESIGN BOTTOM CHORDS OF WOOD ROOF TRUSSES FOR A MINIMUM 10 PSF LIVE LOAD. BOTTOM CHORDS OF WOOD ATTIC TRUSSES TO BE DESIGNED FOR 30 PSF MINIMUM LIVE LOAD.
- IN ADDITION TO THE LOADS SHOWN IN THE DESIGN LOAD SCHEDULE, THE WOOD TRUSS MANUFACTURER SHALL DESIGN FOR THE WEIGHT OF ALL MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT/FIXTURES AS WELL AS CHANDELIER FIXTURES, BAR CABINETS AND ART WORK/MOBILES.
- THE SHOP DRAWINGS SHALL BE SUBMITTED IN COMPLETE PACKAGES FOR THE
- A. CONCRETE MIX DESIGNS B. CONCRETE REINFORCING STEEL AND WELDED WIRE FABRIC
- C. CONCRETE MASONRY UNIT SUBMITTALS AND OTHER MASONRY ACCESSORIES D. PRE-ENGINEERED WOOD TRUSSES

100

2. +: INDICATES WIND PRESSURE

20

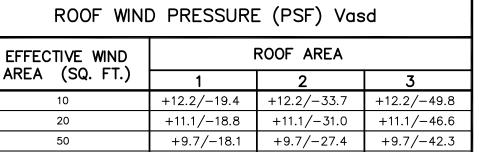
INTERPOLATED, OTHERWISE USE THE

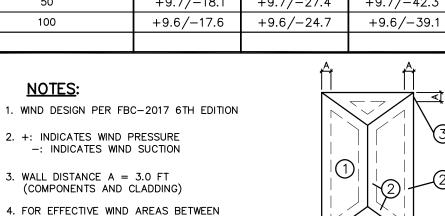
LOAD ASSOCIATED WITH THE LOWER

WALL OPENING AREA.

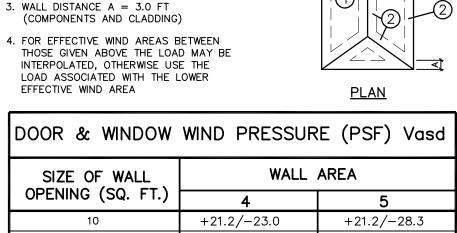
-: INDICATES WIND SUCTION

PRE-ENGINEERED ITEMS SHALL BE SUBMITTED SIGNED AND SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA.



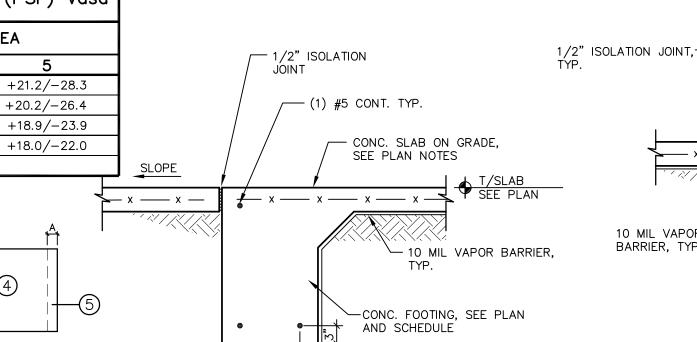


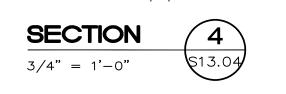
WALL ELEVATION



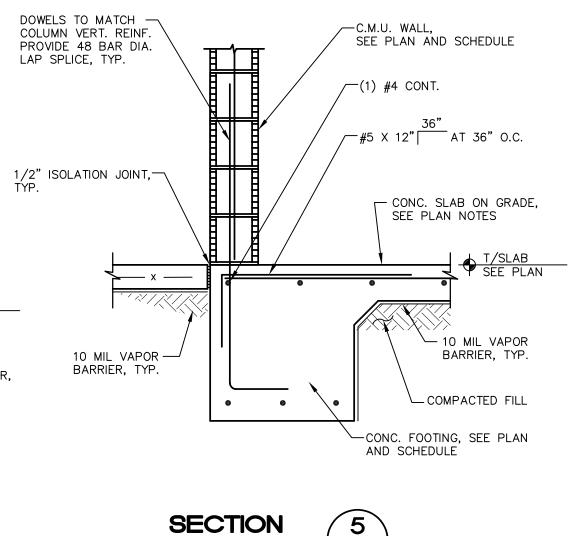
+18.9/-20.7 +18.9/-23.9 100 +18.0/-19.8 +18.0/-22.0 1. WIND DESIGN PER FBC-2017 6TH EDITION 2. +: INDICATES WIND PRESSURE -: INDICATES WIND SUCTION 3. WALL DISTANCE A = 3.0 FT(COMPONENTS AND CLADDING) 4. FOR WALL OPENINGS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE

+20.2/-22.0



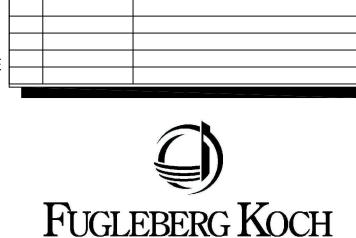


SECTION



PERMIT REVIEW STAMP **ISSUE HISTORY** No. 06/22/18 | ISSUE FOR PERMIT REVISION HISTORY

DELETE IF NON-HUD PROJECT / OR CLIENT LOGO HERE



Description

Date



John Gutherman Jr., P.E. FL. REG. #60880

SUMMER BAY

LAKE COUNTY, FL

MAINTENANCE BUILDING STRUCTURAL PLAN SET

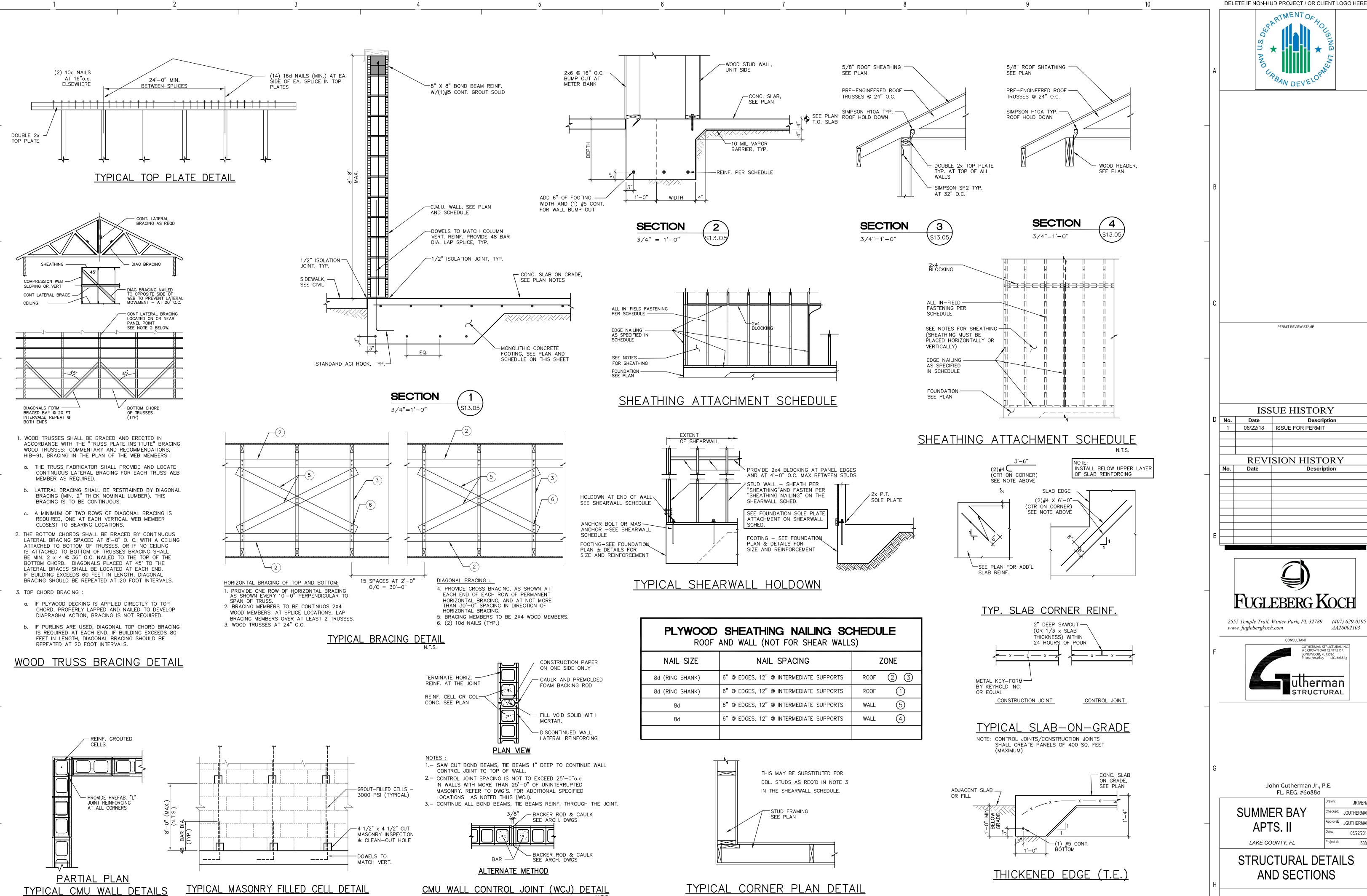
S13.04

PLOTTED: 6/23/2017 12:38:28 PM

JGUTHERMAN

06/22/2018

oroval: JGUTHERMAN



SCALE: N.T.S.

PERMIT REVIEW STAMP **ISSUE HISTORY** Date 06/22/18 | ISSUE FOR PERMIT **REVISION HISTORY** Date Description

FUGLEBERG KOCH

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com AA26002103



John Gutherman Jr., P.E. FL. REG. #60880

SUMMER BAY APTS. II

LAKE COUNTY, FL

STRUCTURAL DETAILS AND SECTIONS

S13.05

^{ked:} JGUTHERMAN

^{proval:} JGUTHERMAN

06/22/2018

TYPE 1 KITCHEN HOOD KH-1 HOOD DIMENSIONS TOTAL SECTION HOOD GREENHECK MODEL CUP OR TEMP. DRAIN RATING SECTION LENGTH STYLE/CONFIGURATION WEIGHT LOCATION WIDTH HEIGHT RATING GHEV-5-S 600 260 60" SINGLE SINGLE WALL EXHAUST ONLY 48" RIGHT DEG F. LBS. INLAND V BANK **ILLUMINATIONS DETAILS** GREASE FILTRATION DETAILS HOOD FIXTURE TYPE BULD/LAMP INFO TYPE/MODEL QTY. LENGTH HEIGHT NO. BULD/LAMP INFO MATERIAL 0 | 16" INCANDECENT (GLOBE) 47.84/30 IN. OC | 100W A19 (BULBS`NOT IŃCL.) ALUMINUM 6 20" EXHAUST PLENUM COLLARS HOOD SECTION # WIDTH (IN.) S.P. VELOCITY (FT/MIN.) LENGTH DIAMETER VOLUME DISTANCE COLLAR # TO END (IN.) (IN.) (IN.) (CFM)

10

NA

750

0.412

750 = 150 CFM/FT.

1600

STORAGE

1\(\frac{EF}{2}\)

MEN'S

OPTIONS AND ACCESSORIES 430 STAINLESS STEEL WHERE EXPOSED. UL 710 LISTED W/OUT EXHAUST FIRE DAMPER - UL #MH11726 36" HIGH CEILING ENCLOSURES — FRONT LEFT RIGHT"— FIELD INSTALLED FACTORY MOUNTED EXHAUST COLLARS LEFT UTILITY CABINET 24" HIGH 48" LONG 12" WIDE INCLUDES PERFORMANCE ENHANCING LIP (PEL) TECHNOLOGY STANDING SEAM CONSTRUCTION FOR SUPERIOR STRENGTH EMBOSSED STAINLESS STEEL FINISH FOR HIGH CORROSION RESISTANCE PROVIDE WITH INTEGRAL FIRE SUPPRESSION SYSTEM SHAPE OF HOODS TO MATCH DESIGN INTENT OF INTERIOR DESIGN DRAWINGS. THE OUTSIDE AIR FROM THE AIR HANDLERS IS SUFFICIENT FOR THE MAKE-UP AIR OF THE GREASE HOODS. THE BUILDING IS TO REMAIN UNDER POSITIVE PRESSURE.

30

ANSUL SYSTEM NOTES:

SPECIFICATIONS

→14x12

WOMEN'S

135

THE RESTAURANT FIRE SUPPRESSION SYSTEM SHALL BE THE PRE-ENGINEERED TYPE WITH A FIXED NOZZLE AGENT DISTRIBUTION NETWORK. IT SHALL BE LISTED WITH UNDERWRITERS LABORATORIES, INC. (UL)

THE SYSTEM SHALL BE CAPABLE OF AUTOMATIC DETECTION AND ACTUATION WITH LOCAL OR REMOTE MANUAL ACTUATION. ACCESSORIES SHALL BE AVAILABLE FOR MECHANICAL OR ELECTRICAL GAS LINE SHUT-OFF APPLICATIONS.

THE EXTINGUISHING AGENT SHALL BE A POTASSIUM CARBONATE, POTASSIUM ACETATE—BASED FORMULATION DESIGNED FOR FLAME KNOCKDOWN AND SECUREMENT OF GREASE RELATED FIRES. IT SHALL BE AVAILABLE IN PLASTIC CONTAINERS WITH INSTRUCTIONS FOR LIQUID AGENT HANDLING AND USAGE.

THE REGULATED RELEASE MECHANISM SHALL BE COMPATIBLE WITH A FUSIBLE LINK DETECTION SYSTEM. THE FUSIBLE LINK SHALL BE SELECTED AND INSTALLED ACCORDING TO THE OPERATING TEMPERATURE IN THE VENTILATING SYSTEM. THE FUSIBLE LINK SHALL BE SUPPORTED BY A DETECTOR BRACKET/LINKAGE ASSEMBLY

GREASE DUCT GENERAL NOTES:

- WELDED ROUND GREASE EXHAUST DUCT UP FROM KITCHEN HOOD. PROVIDE WELDED GREASE DUCT WITH 2 HR. PROTECTION TO COMBUSTIBLES PER N.F.P.A. OR PER GREASE DUCT FIRE WRAPPING DETAIL. SLOPE GREASE DUCT TO HOOD A MINIMUM 1/4" PER FOOT. WELDED DUCT PROTECTION TO COMBUSTIBLES SHALL MEET STATE, LOCAL AND FIRE CODES. TRANSITION AS REQUIRED. PROVIDE ACCESS PANELS AT EVERY CHANGE IN DIRECTION AND EVERY 20' MINIMUM.
- 2. TRANSITION MAIN MAKEUP AIR DUCT DOWN TO KITCHEN EXHAUST HOOD MAKEUP AIR DUCT TAP. PROVIDE MANUAL VOLUME DAMPER ON MAKEUP AIR HOOD TAPS FOR BALANCING PURPOSES. TYPICAL FOR ALL HOOD MAKEUP AIR TAPS. SEE HOOD FOOD SERVICE DRAWING.
- MECHANICAL CONTRACTOR TO INSTALL WRAPPER PANELS ON ALL EXHAUST HOODS. FIELD VERIFY AND COORDINATE WITH ARCHITECTURAL PLAN EXACT HEIGHT OF WRAPPER PANELS. PROVIDE NON-COMBUSTIBLE CEILING GRID MATERIAL WITHIN 18" OF HOODS.

REFERENCE NOTES: ⊗

- 1) CEILING MOUNTED EXHAUST FAN WITH BACKDRAFT DAMPER. ROUTE GALVANIZED STEEL DUCT AND TERMINATE WITH PLASTIC WALL CAP PER
- 2 12"x12" DOOR LOUVER, METALAIRE SERIES DGDF OR APPROVED EQUAL.
- 3 IN-LINE MOUNTED GREASE EXHAUST FAN. ROUTE EXHAUST DUCT UP TO ROOF AND TERMINATE WITH EXHAUST STACK. EXHAUST DISCHARGE SHALL BE 40" ABOVE ROOF SURFACE. WRAP DUCT WITH FIRE RESISTANT MATERIAL (FIRE BARRIER DUCT WRAP).
- 4 PROVIDE ZERO CLEARANCE TO COMBUSTIBLE WELDED GREASE DUCT PER GREASE DUCT NOTES THIS SHEET.
- 5 TERMINATE GREASE EXHAUST THRU ROOF PER FMC 506.3.12.3. PROVIDE DUCT TERMINATION PER DETAIL NO. 3 ON THIS SHEET.

	FAN SCHEDULE											
MARK	ARK AREA SERVED TYPE CFM T.S.P. WATTS/HP R.P.M. VOLTS/PH SONES MANUFACTURER & MODEL NO. NOTES									NOTES		
EF-1	WOMEN'S RR	CABINET	100	0.25	75.2 WATTS	929	120/1ø	1.9	COOK GC-144	1.		
EF-2	MEN'S RESTROOM	CABINET	75	0.25	52.7 WATTS	594	120/1ø	.2	COOK GC-144	1.		
EF-3	POOL EQUIPMENT	CABINET	75	0.25	52.7 WATTS	594	120/1ø	.2	COOK GC-144	2.		
KEF-1	COMMUNAL KITCHEN	IN-LINE	750	0.607	1 HP	1,587	120/1ø	10.0	GREENHECK TCB-2-12-5	3.		

NOTE: EXHAUST OUTLET

SHALL BE A MINIMUM OF

SECURE FAN TO CURB WITH

ROOF CURB -

SS #8x1" FASTENERS ALL

SIDES (TYPICAL) —

3"x2"x1" STEEL ANGLE

SPANNING JOISTS (TYP.)

NTS

40" ABOVE THE ROOF

SURFACE. ——

NOTE: PAINT ALL

TO OWNER'S

SPECIFICATIONS.

COMPONENTS ABOVE ROOF

EXHAUST STACK DETAIL

—BUTTER FLY DAMPER

WIND SHROUD (GALV. STEEL)

EXTENSION (AS INDICATED)

— WOOD NAILER — COUNTER FLASHING

— DUCT WRAP

CHORD.

— FLEXIBLE CONNECTION

ROOF

— GALV. STEEL OR FIBERGLASS DUCT

- STEEL DECK AND INSULATION

- UNISTRUT CHANNEL RUN ON TOP OF TRUSS

1/2" ALL THREADED ROD

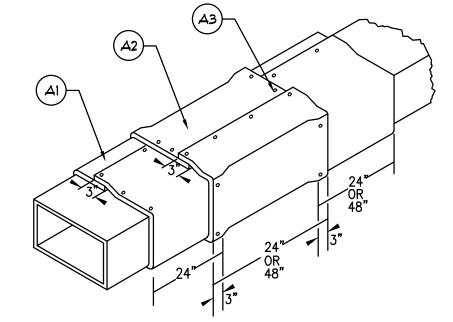
PLACES ON OVEN HOOD.

HANGERS ON HOOD. MIN. 4

BOLTED TO UNISTRUT

COOKING EQUIPMENT.

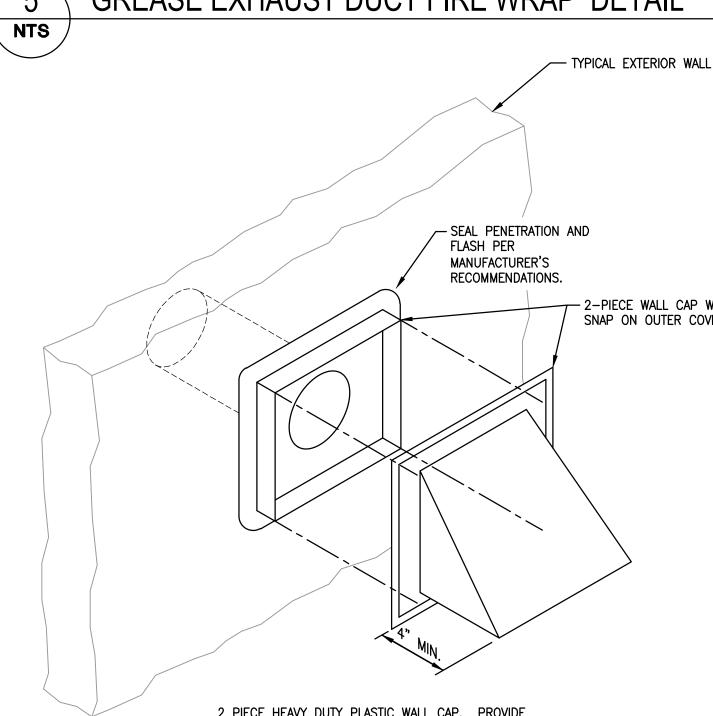
- 1. FAN TO BE CONTROLLED BY INDIVIDUAL LIGHT SWITCH.
- 2. FAN TO BE CONTROLLED BY THERMOSTAT. SETPOINT TO BE SET AT 80 DEGREES FAHRENHEIT.
- 3. HOOD EXHAUST FAN SHALL START AUTOMATICALLY ON THE EVENT COOKING EQUIPMENT BELOW THE HOOD IS ACTIVATED. INTERLOCK HOOD EXHAUST SYSTEM WITH



1/1

TOTAL EXHAUST CFM - SECTION 1

- A1 PYROSCAT FP OR CSM FASTR DUCT WRAP (F1) TYPICAL-BOTTOM PIECE (LAYER 1)
- A2 PYROSCAT FP OR CSM FASTR DUCT WRAP (F1) TYPICAL— TOP PIECE (LAYER 2)
- A3 STEEL INSULATION PINS AT 3" OVERLAPS (TYPICAL) ALUMINUM TAPE (NOT SHOWN) USED OVER EXPOSED EDGES OF BLANKET



FOR FRESH AIR INTAKE AND BATHROOM EXHAUST.

NTS

TYPICAL WALL JACK DETAIL

STEEL ROD W/THREADED VIBRATION ENDS (TYP. 4 PLACES) ISOLATORS -SUPPORT FROM STRUCTURE ABOVE AS REQUIRED. 10"x8" GREASE (CORDINATE W/STRUCT.) DUCT CLEAN-OUT BACKDRAFT ACCESS DOOR.— DAMPER -FOR DUCT SIZES AIR FLOW FLOW ~ 6"x10" GREASE DUCT CLEAN-OUT SEE PLANS ACCESS DOOR. FOR DUCT -TRANSITION AS -CENTRIFUGAL - FLEXIBLE CONNECTOR SIZES REQUIRED EXHAUST FAN TYPICAL OF SUPPLY AND DISCHARGE SIDES.

14"x10" GREASE DUCT CLEAN-OUT ACCESS DOOR.

INLINE CABINET FAN DETAIL



HOOD MOUNTING DETAIL

— S/S CLOSURE BY HOOD MFG.

EXHAUST HOOD VERIFY SIZE &

CONFIGURATION W/ MECHANICAL

ISSUE HISTORY No. Date 1 06/22/2018 ISSUE FOR PERMIT **REVISION HISTORY** Date Description

PERMIT REVIEW STAMP



2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com

Joseph, Lawrence & Co Consulting Engineers 1180 HARWOOD AVE. SUITE 3000 ALTAMONTE SPRINGS, FLORIDA 32714 WWW.JLCENG.COM

JLC 17.0137.00

Adam Joseph Barney P.E. #:69124

SUMMER BAY APTS. I

LAKE COUNTY, FL

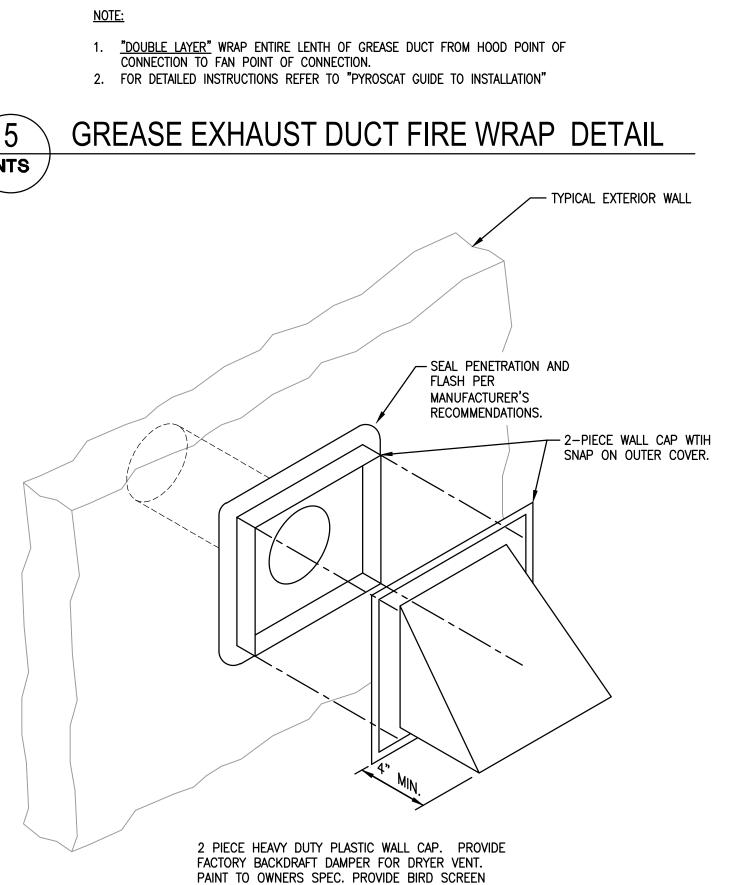
POOL PAVILION FLOOR PLAN - MECHANICAL

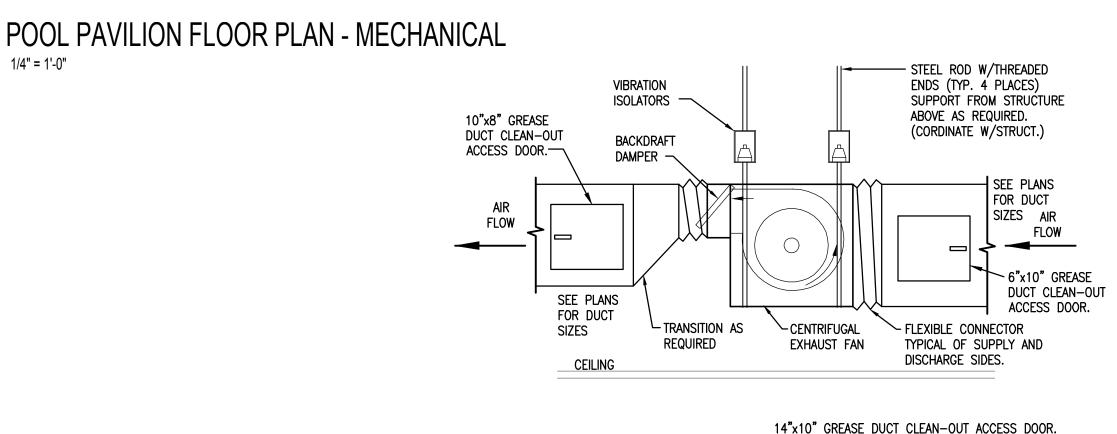
BLS/AJB

BLS/AJB

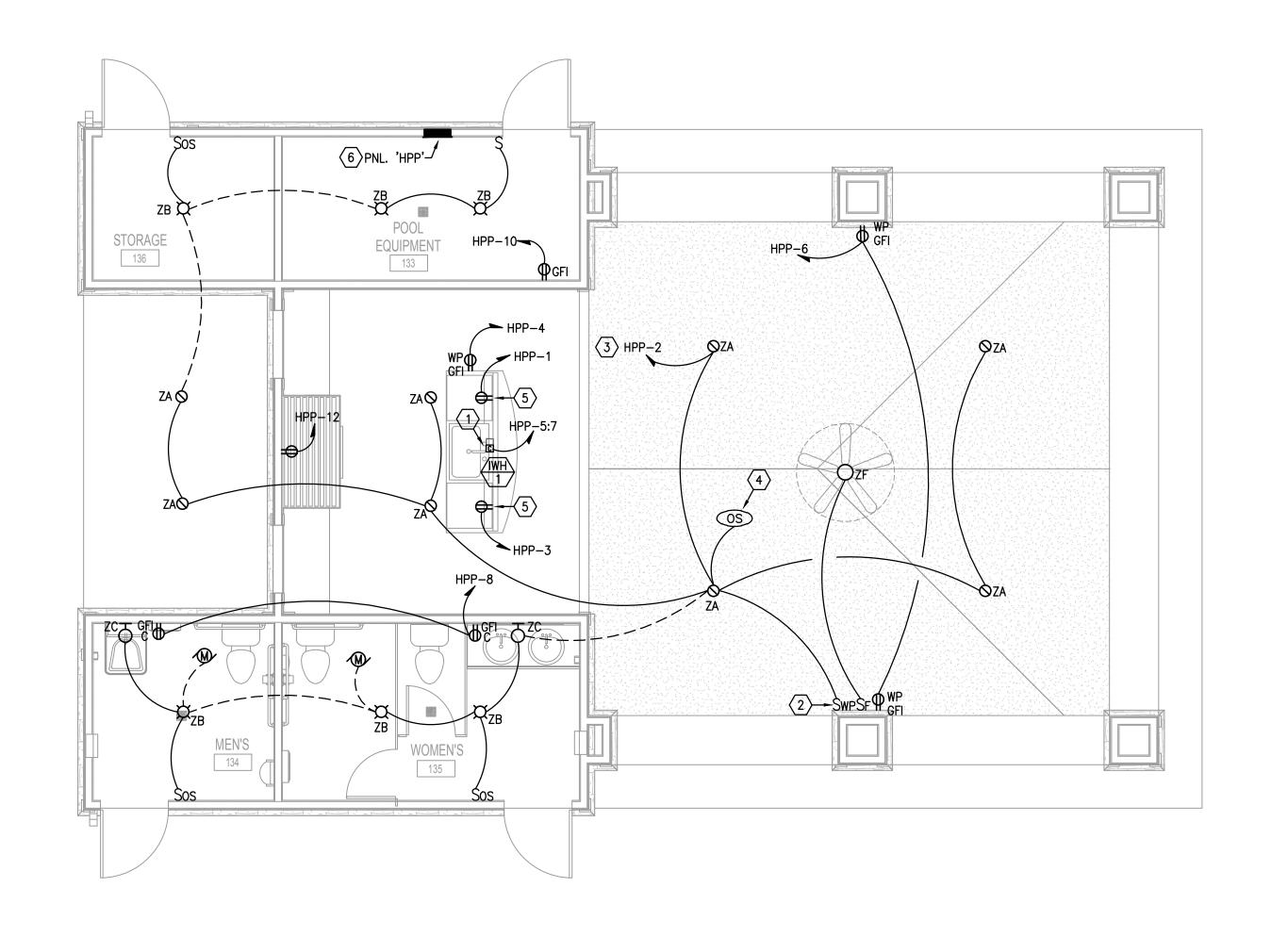
06/22/2018

M13.01





1 2 3 4 5 6 7 8 9 10 MINI COLITAID HANDLING LINIT COLIDIUE	
MINI-SPLIT AIR HANDLING UNIT SCHEDULE REFERENCE NOTES: NARK LOCATION TOTAL AIR OUTSIDE EXTERNAL DRIVE IN TOTAL SENSIBLE COIL COIL TOTAL VOLTSC/ SINGLE POINT UNIT STATE VOLTAGE/ SINGLE SING	
MARK LOCATION SERVED TOTAL AIR FLOW (CFM) CFM) (CFM) UNITED EXHAUST FAN WITH BACKDRAFT DAMPER. ROUTE 4" STATIC PHASE (CFM) (F DB/WB) (F DB/WB) (F DB/WB) (F DB/WB) (F DB/WB) (BTUH) (BTU	
NOTES: 1. POWER FOR INDOOR UNIT PROVIDED FROM EXTERIOR CONDENSER, COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE POWER WIRING BETWEEN EACH UNIT IN FIELD. 2. ROUTE AND SIZE REFRIGERANT LINES PER MANUFACTURES REQUIREMENTS. 3. MOUNT AS HIGH ON WALL AS POSSIBLE. WOUNT AS HIGH ON WALL AS POSSIBLE. MOUNT MAU IN MAINTENANCE ROOM ABOVE DOOR, ROUTE REFRIGERANT LINE FROM WIRING BETWEEN EACH UNIT IN FIELD. DRAIN LINE DOWN WALL AND OUT TO GRASSY AREA. PROVIDE CONDENSATE PUMP EQUAL TO BLUEDIAMOND X87–721. CONDENSATE PUMP MUST BE ACCESSIBLE.	Koch, PLLC is prohibited by law.
MINI-SPLIT CONDENSING UNIT SCHEDULE (HEAT PUMP) COMPRESSOR	ations of these documents without the expressed written consent of Fugleber.
LOUVER SCHEDULE MARK SERVICE AIR FLOW (CFM) FREE AREA (SF) W x H (IN) MAX. VELOCITY IN FPM MAX. PRESSURE DROP (IN H2O) MANUFACTURER & MODEL NO. NOTES L-1 OUTSIDE AIR 1,500 3.0 36"x24" 500 0.36 RUSKIN ELF3675DXD 1. NOTES: 1. PROVIDE BIRD SCREEN AND GRAVITY BACKDRAFT DAMPER.	On these drawings. Any reproductions, revisions, or modifi
FAN SCHEDULE Mark	D ISSUE HISTORY No. Date Description 1 06/22/2018 ISSUE FOR PERMIT REVISION HISTORY No. Date Description
PROPELLER FAN DETAIL MAINTENANCEGARAGE MOUNT FAN TIGHT TO ROOF STRUCTURE. WALL COLLAR WALL C	E Sol5 These documents and their co
TYPICAL EXTERIOR WALL SEAL PENETRATION AND PLASH FER MANUFACTURER'S MANUFACTURER	FUGLEBERG KOCH 2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 Www. fuglebergkoch.com CONSULTANT Joseph, Lawrence & Co
2-PECE WALL CAP WITH SMAP ON OUTER COVER. CAULK ALL AROUND BIRDSCREEN FRAME BRIDSCREEN STORMPROOF LOUVER	Consulting Engineers I180 HARWOOD AVE. SUITE 3000 ALTAMONTE SPRINGS, FLORIDA 32714 TEL: 321.972.4466 WWW.JLCENG.COM CA NO. 28730 JLC 17.0137.00 G Adam Joseph Barney P.E. #:69124
CAULK SECURE FRAME TO WALL WITH EXPANSION BOLTS 12" ON CENTER, ALL 4 SIDES PAINT TO OWNERS SPEC. PROVIDE BIPD SCREEN FOR FRESH AIR INTAKE AND BATHROOM EXHAUST. WALL	SUMMER BAY APTS. II LAKE COUNTY, FL Drawn: MJR/KCM Checked: BLS/AJB Approval: BLS/AJB Date: 06/22/2018 Project #: 5389 MAINTENANCE FLOOR PLAN - MECHANICAL
TYPICAL WALL JACK DETAIL 1 TYPICAL WALL LOUVER DETAIL NTS 1 TYPICAL WALL LOUVER DETAIL 1 TYPICAL WALL LOUVER DETAIL	M13.02



GENERAL NOTES:

- A. DO NOT SCALE ELECTRICAL DRAWINGS FOR ANY DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE 2014 NATIONAL ELECTRIC CODE, NATIONAL, STATE AND LOCAL CODES. PROVIDE GROUNDING AND BONDING PER NEC 250.
- C. SEE SINGLE LINE DIAGRAM FOR FEEDER WIRE AND CONDUIT SIZE. ALL CIRCUITS NOT SIZED ON DRAWING SHALL BE INSTALLED TO MEET MINIMUM SIZE REQUIRED BY NEC. ALL
- D. FIELD VERIFY EXACT LOCATION OF ALL DEVICES AND EQUIPMENT PRIOR TO ROUGH IN.

CONDUCTORS SHALL HAVE AN EQUIPMENT GROUND WIRE SIZED PER NEC.

- E. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT FIXTURE LOCATIONS AND ORIENTATIONS.
- F. REFER TO ARCHITECTURAL ELEVATIONS AND SECTIONS FOR ADDITIONAL LIGHTING FIXTURE MOUNTING DETAILS AND INFORMATION.
- G. ALL EMERGENCY LIGHTING FIXTURES AND EXIT SIGNS SHALL BE CONNECTED "HOT" TO THE INDICATED LOCAL LIGHTING CIRCUIT.
- H. VERIFY ALL MOUNTING HEIGHTS AND PENDANT LENGTHS WITH ARCHITECT AND ENGINEER PRIOR TO ORDERING FIXTURES.

REFERENCE NOTES: (X)

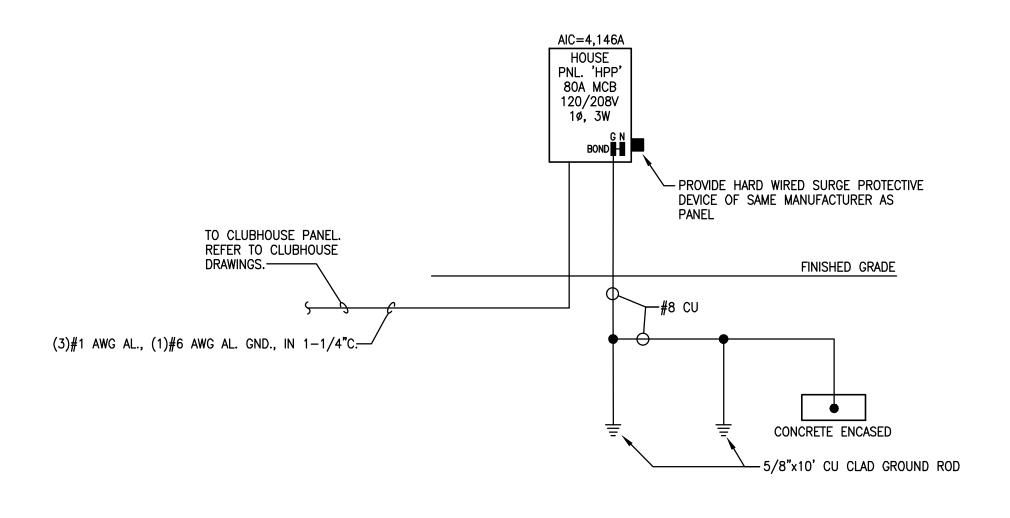
- PROVIDE CONNECTION FOR INSTA-HOT WATER HEATER. COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH PLUMBING CONTRACTOR AND OWNER PRIOR TO ROUGH-IN.
- WEATHERPROOF SWITCHES TO BE MOUNTED IN ARCHITECTURAL COLUMN. COORDINATE LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH—IN.
- 3 CONNECT CIRCUIT TO PANEL VIA PHOTOCELL FOR ON/OFF CONTROL.
- PROVIDE CEILING MOUNTED OCCUPANCY SENSOR TO "TURN OFF" LIGHTS AND FANS IF GAZEBO IS UNOCCUPIED.
- PROVIDE 120V RECEPTACLE BELOW COUNTER FOR KITCHEN EQUIPMENT PROVIDED BY OWNER. COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH OWNER PRIOR TO ROUGH—IN.

POOL PAVILION FLOOR PLAN - ELECTRICAL

PER FEC C405.6.3 (2017 ED) ALL CONDUCTORS FOR FEEDERS AND BRANCH

CIRCUITS ARE DESIGNED FOR A MAXIMUM

OF 5% VOLTAGE DROP TOTAL.



POOL PAVILION BUILDING POWER RISER DIAGRAM

	POOL PAVILION LIGHT FIXTURE SCHEDULE												
MARK	RK DESCRIPTION MANUFACTURER MODEL VOLTS LAMP FIXTURE WATTS WATTS MODEL FIXTURE WATTS												
ZA	6" DIAMETER COMPACT FLUORESCENT DOWNLIGHT, DAMP LOCATION, ELECTRONIC BALLAST	PROGRESS	P60-FB/P8088-21A	120	1	26	CFL	26					
ZB	SURFACE MOUNTED LED FIXTURE. UL DAMP LABEL RATED.	TBD	TBD	120	1	17	LED	17					
ZC	DECORATIVE WALL MOUNTED LED FIXTURE LOCATED AT VANITY. UL DAMP LABEL RATED.	TBD	TBD	120	_	17	LED	17					
ZF	OUTDOOR CEILING FAN, WET LABEL RATED	TBD	TBD	120	_	_	1	_					

NOTES:
DIVISION 16 CONTRACTOR SHALL VERIFY ALL FIXTURE TYPES AND FINISHES WITH OWNER PRIOR TO ORDERING.

							Ρ	AN	LL	HI	7	,							
LOC	CATION: POOL CABANA	VC	LTAG	E:	120/	208V	1ø	3W		М	IN. A	IC RATIN	IG:		10 K	AIC		NOTES:	
TYF	PE: SQUARE 'D' — TYPE NQ	MA	AINS:		80A		MLO 🛛	MCB		М	OUNT	ΓING:		(SURFA	CE		PROVIDE TYPED WRITTEN DIRECTORY PROVIDE GROUND & NEUTRAL BUS	
FED	FROM: UTILITY TRANSFORMER	LU	GS:	[□ SU	B-FE	ED 🗆	FEED-	THRU	El	NCLO	SURE:		ا	NEMA	3R			
K	CIRCUIT DESCRIPTION	NOTES	В	RANC	H CIRC	CUIT	BKR	LOAD	PHAS	E LOA	AD	DIAD	В	RANCH NEUT	CIRC	UIT	TES	CIRCUIT DESCRIPTION	KT
<u></u>	SINGSTY BESSAII NOT	2	ø	NEUT	GND	COND	BKK	KVA	ø	KV	Ά	BKR	ø	NEUT	GND	CON	2	ORGOTT DESCRIPTION	
1	KITCHEN EQUIPMENT		12	12	12	1/2"	20/1	0.50	Α	0.3	35	20/1	12	12	12	1/2	1	LIGHTING	2
3	KITCHEN EQUIPMENT		12	12	12	1/2"	20/1	0.50	В	0.1	18	20/1	12	12	12	1/2	•	RECEPTACLES	4
5	IWH-1		6	_	10	1.25"	50/2	4.15	Α	0.3	36	20/1	12	12	12	1/2	'	RECEPTACLES	6
7	-		6	_	-	_	-	4.15	В	0.3	36	20/1	12	12	12	1/2	,	RECEPTACLES	8
9	SPARE		-	-	-	-	20/1	-	Α	0.1	18	20/1	12	12	12	1/2	'	RECEPTACLES	10
11	SPARE		-	_	-	_	20/1	ı	В	0.5	50	20/1	12	12	12	1/2	'	FAN HOOD	12
13	SPARE		_	_	_	_	20/1	-	Α	_	-	-	-	_	ı	-		SPACE ONLY	14
15	SPACE ONLY		-	_	_	_	ı	ı	В		-	30/2	10	10	10	1/2	,	SURGE PROTECTIVE DEVICE (SPD)	16
17	SPACE ONLY		-	_	_	_	1	-	Α	_	-	-	10	-	1	_		1	18
EG	UIPMENT SERVED		<u> </u>	<u>I</u>	<u> </u>	CO	NN. LOA	D I	F.	D.F.	DEI	MAND LO	OAD						
LIC	GHTING						0.35 KV	A		125%		0.44 K	VA						
EC	QUIPMENT/RECEPTACLES					1	10.38 K\	/A		100%		10.38 k	(VA						
	TES:													T	OTAL	DEM	IAND	LOAD: 10.79 KVA	
1)) CONNECT CIRCUIT VIA PHOTOCELL													T	OTAL	DEM	IAND	AMPS: 51.88 AMPS	

1 06/22/2018 ISSUE FOR PERMIT

REVISION HISTORY

No. Date Description

PERMIT REVIEW STAMP

ISSUE HISTORY

No. Date



2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com BR569



JLC 17.0137.00

Blake Lawrence Suddeth P.E. #: 69060

> BLS/AJB BLS/AJB

06/22/2018

SUMMER BAY APTS. II

LAKE COUNTY, FL

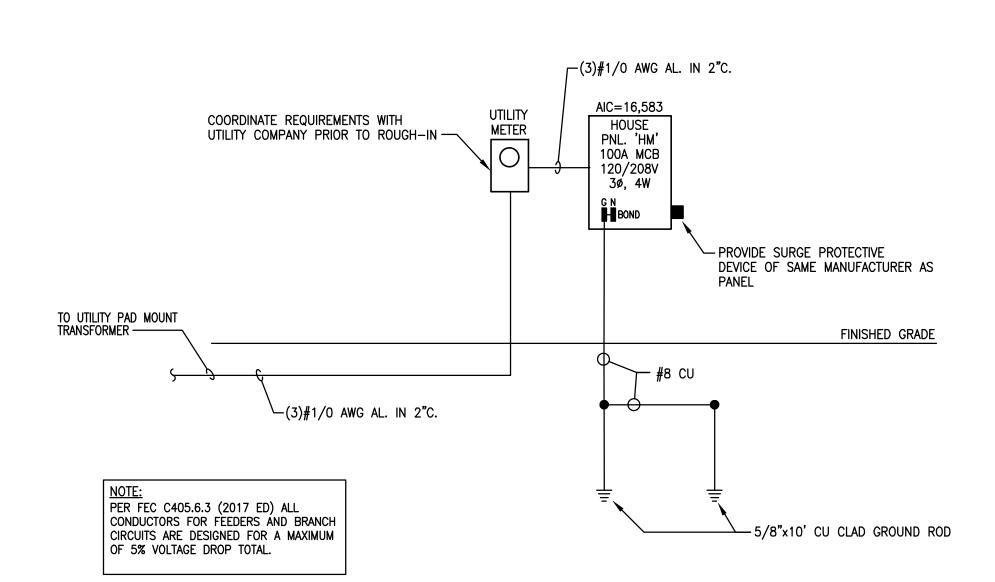
POOL PAVILION FLOOR PLAN - ELECTRICAL

E13.01

	LIGHTING FIXTURE SCHEDULE - MAINT. GARAGE													
MARK	DESCRIPTION	VOLTS	QTY	LAMP WATTS	MODEL	FIXTURE WATTS								
MA	SURFACE MOUNTED LINEAR FLUORESCENT WRAPAROUND FIXTURE WITH PRISMATIC ACRYLIC LENS	COLUMBIA	AWN4-232-EU	120	2	32	T8	64						
МВ	LED WALL MOUNTED VANITY LIGHT LOCATED IN RESTROOM.	TBD	TBD	120	1	25	LED	2						
Н	EXTERIOR STAINLESS STEEL BRACKET LIGHT WITH CLEAR GLASS LENS. UL WET LABEL RATED	TBD	TBD	120	1	17	LED	17						
ЕМ	WALL MOUNTED EMERGENCY LIGHT WITH THERMOPLASTIC HOUSING, TWIN HEADS AND BATTERY BACKUP	DUAL LITE	EV2	120	2	2	LED	4						
X1	SINGLE FACE EXIT SIGN WITH WHITE THERMOPLASTIC HOUSING, RED LETTERS AND BATTERY BACKUP	DUAL LITE	EVE-U-R-W-E	120	-	_	LED	-						

NOTES:
DIVISION 16 CONTRACTOR SHALL VERIFY ALL FIXTURE TYPES AND FINISHES WITH OWNER PRIOR TO ORDERING.

							F	PAN	ΙΕΙ	L ŀ	ΗM	1							,
LOC	ATION: MAINT. GARAGE	VO	LTAGE	<u>:</u>	120/	208V	3ø	4W			MIN.	AIC RATIN	IG:	1	0 K/	AIC		NOTES:	
TYP	E: SQUARE 'D' — TYPE NQ	МА	INS:		100A		VILO 🛛	MCB			MOUN	ITING:		5	SURFA	ACE.		PROVIDE TYPED WRITTEN DIRECTORY PROVIDE GROUND & NEUTRAL BUS	
FED	FROM: UTILITY TRANSFORMER	LU	GS:] SU	B-FE	ED 🗆	FEED-	THRU		ENCL	OSURE:		N	IEMA	1			
K	CIRCUIT DESCRIPTION	NOTES	В	RANCH	CIRC	UIT	DIVD	LOAD	PHAS	SE L	.OAD	DIAD	Bf	RANCH	CIRC	UIT	TES	CIRCUIT DESCRIPTION	CKT
	GINGOTT BESONII TION	0 N	ø	NEUT	GND	COND	BKR	KVA	ø		KVA	BKR	ø	RANCH NEUT	GND	COND	ON	OINGGIT BEGONI HON	5
1	RECEPS — MAINT. EQUIPMENT		12	12	12	1/2"	20/1	0.72	Α	(0.20	20/1	12	12	12	1/2"		LIGHTING — MAINT. GARAGE	2
3	RECEPS - RESTROOM		12	12	12	1/2"	20/1	0.18	В	(0.26	20/1	12	12	12	1/2"	1	LIGHTING - EXTERIOR	4
5	RECEPS - MAINT. EQUIPMENT		12	12	12	1/2"	20/1	0.36	С	(0.07	20/1	12	12	12	1/2"	1	LIGHTING - CAR WASH AREA	6
7	RECEPS - MAINTENANCE		12	12	12	1/2"	20/1	0.36	Α	1	1.00	20/1	12	12	12	1/2"		GARAGE DOOR OPENER	8
9	TRASH COMPACTOR		8	8	10	1"	40/3	3.70	В	(0.15	20/1	12	12	12	1/2"		LIGHTING - TRASH EXTERIOR	10
11	1		8	_	-	_	_	3.70	С	(0.36	20/1	12	12	12	1/2"		RECEPS - TRASH COMPACTOR	12
13	i		8	-	ı	١	ı	3.70	Α		_	20/1	ı	_	-	ı		SPARE	14
15	SPARE		-	_	-	-	20/1	_	В		-	20/1	ı	_	-	ı		SPARE	16
17	SPARE		_		_	_	20/1	_	С		_	20/1	-	_	-	-		SPARE	18
19	SPARE		-		-	_	20/1	_	Α		_	20/1	-	_	_	ı		SPARE	20
21	SPARE		ı	_	-	_	20/1	_	В		_	_	ı	_	-	1		SPACE ONLY	22
23	SPACE ONLY		ı	-	ı	-	ı	_	С		-	1	ı	_	-	ı		SPACE ONLY	24
25	SPACE ONLY		ı	-	ı	1	ı	_	Α		_	30/3	10	10	10	3/4"		SURGE PROTECTIVE DEVICE (SPD)	26
27	SPACE ONLY		ı	_	ı	1	-	_	В		-	-	10	_	-	ı		1	28
29	SPACE ONLY		_	_	_	-	_	_	С		-	-	10	_	-	-		-	30
EQ	UIPMENT SERVED					CO	NN. LOA	(D	L.F.	D.F.	. DE	MAND L	OAD						
LIG	HTING						0.68 KV	Ά		125	%	0.85 K	VA						
RE	CEPTACLES — GENERAL						1.80 KV	Ά		100	%	1.80 K	VA						
	UIPMENT					1	2.10 K\	/A		100	%	12.10 k	(VA						
NOTE	S: ONNECT CIRCUIT VIA PHOTOCELL													T	OTAL	DEM	٩ND	LOAD: 14.75 KVA	
Ľ	ONNEST SINGUIT VIA THOTOGELE													T	OTAL	DEM	٩ND	AMPS: 40.97 AMPS	



Maintenance Building Power Riser Diagram



GENERAL NOTES:

- A. DO NOT SCALE ELECTRICAL DRAWINGS FOR ANY DIMENSIONS.
- B. ALL WORK SHALL COMPLY WITH THE 2014 NATIONAL ELECTRIC CODE, NATIONAL, STATE AND LOCAL CODES. PROVIDE GROUNDING AND BONDING PER NEC 250.
- C. SEE SINGLE LINE DIAGRAM FOR FEEDER WIRE AND CONDUIT SIZE. ALL CIRCUITS NOT SIZED ON DRAWING SHALL BE INSTALLED TO MEET MINIMUM SIZE REQUIRED BY NEC. ALL CONDUCTORS SHALL HAVE AN EQUIPMENT GROUND WIRE SIZED PER NEC.
- D. FIELD VERIFY EXACT LOCATION OF ALL DEVICES AND EQUIPMENT PRIOR TO ROUGH IN.

REFERENCE NOTES: **(S)**

- PROVIDE PUSHBUTTON CONTROL AND LOW VOLTAGE WIRING FOR GARAGE DOOR OPENER AS REQUIRED BY OWNER/MANUFACTURER.
- PROVIDE 120V CEILING MOUNTED OUTLET FOR GARAGE DOOR OPENER. COORDINATE LOCATION WITH DOOR INSTALLER PRIOR TO ROUGH—IN. PROVIDE LOW VOLTAGE WIRING AND PUSH BUTTON LOCATED NEAR DOOR AS REQUIRED.
- (3) CONNECT CIRCUIT VIA PHOTOCELL FOR AUTOMATIC CONTROL OF LIGHT FIXTURES.
- COORDINATE PANEL AND METER LOCATION WITH OWNER, CIVIL CONTRACTOR AND UTILITY COMPANY PRIOR TO ROUGH-IN.
- PROVIDE DISCONNECT SWITCH FOR CONNECTION OF TRASH COMPACTOR. COORDINATE DISCONNECT SIZE, LOCATION, AND FUSING REQUIREMENTS WITH TRASH COMPACTOR MANUFACTURER PRIOR TO ROUGH—IN. PROVIDE CONDUIT AND CONTROL WIRING FOR CONTROL PANEL AS REQUIRED BY MANUFACTURER.

HM-9:11:13 (5)

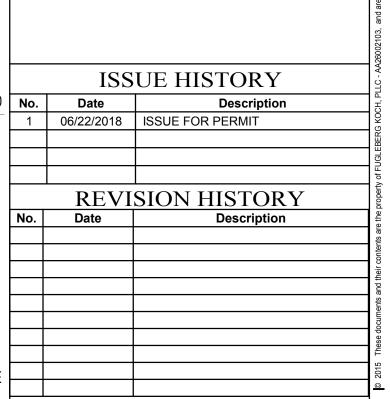
UTILITY METER 4

COMPACTOR MB-04

> CARWASH CH-121

 $\overline{3}$ HM-4

4 PANEL 'HM'



PERMIT REVIEW STAMP



2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com BR569

Joseph, Lawrence & C Consulting Engineers

1180 HARWOOD AVE. SUITE 3000
ALTAMONTE SPRINGS, FLORIDA 32714
TEL: 321.972.4466
WWW.JLCENG.COM
CA NO. 28730

JLC 17.0137.00

Blake Lawrence Suddeth P.E. #: 69060

SUMMER BAY APTS. II

MAINTENANCE FLOOR PLAN

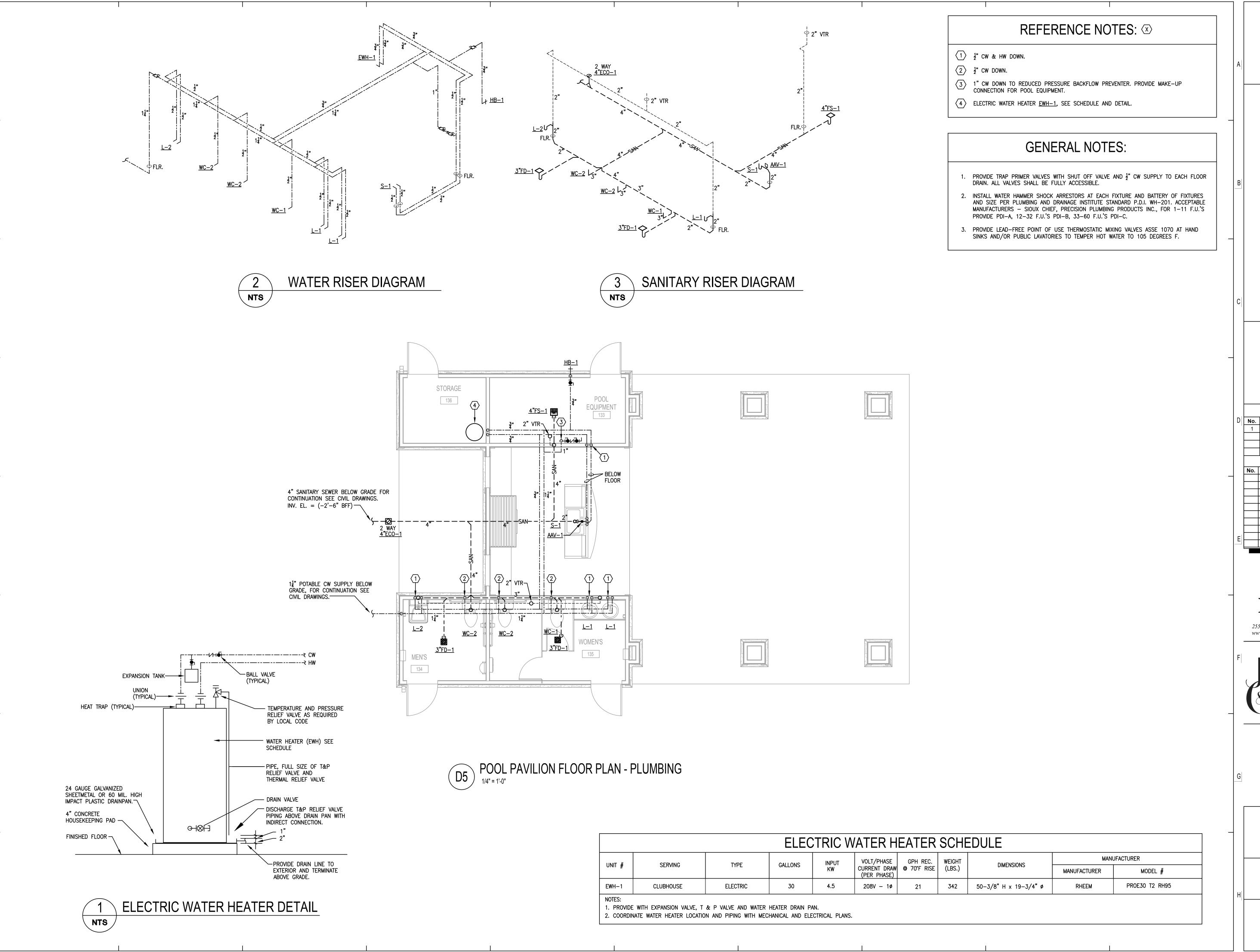
- ELECTRICAL

BLS/AJB

BLS/AJB 06/22/2018

E13.02

No Scale



ISSUE HISTORY

PERMIT REVIEW STAMP

No. Date 1 06/22/2018 ISSUE FOR PERMIT

REVISION HISTORY No. Date Description



FUGLEBERG KOCH

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com BR569

CONSULTANT

Joseph, Lawrence & Co Consulting Engineers 1180 HARWOOD AVE. SUITE 3000 ALTAMONTE SPRINGS, FLORIDA 32714 TEL: 321.972.4466 WWW.JLCENG.COM

JLC 17.0137.00

Adam Joseph Barney P.E. #:69124

SUMMER BAY

LAKE COUNTY, FL

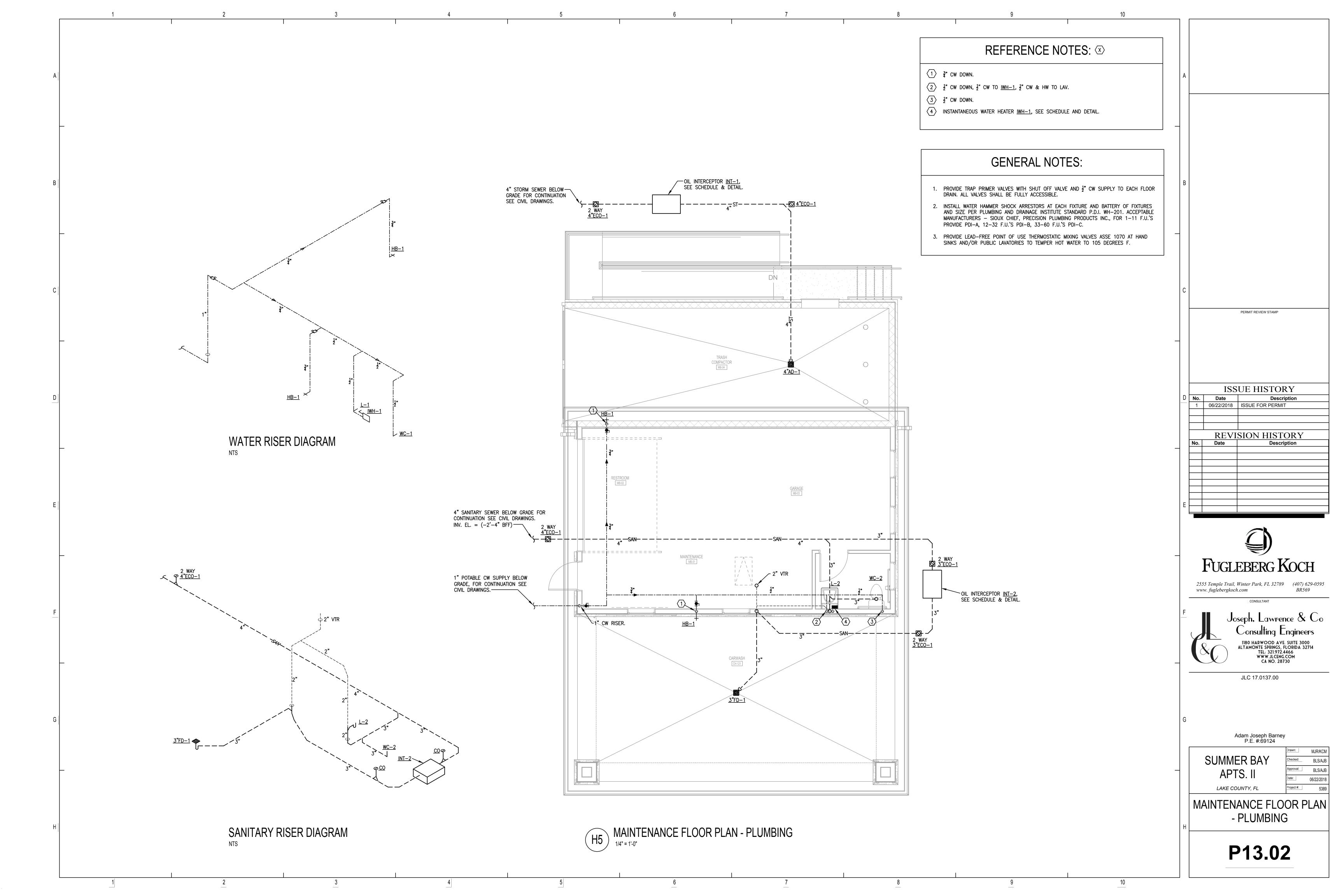
BLS/AJB

BLS/AJB

06/22/2018

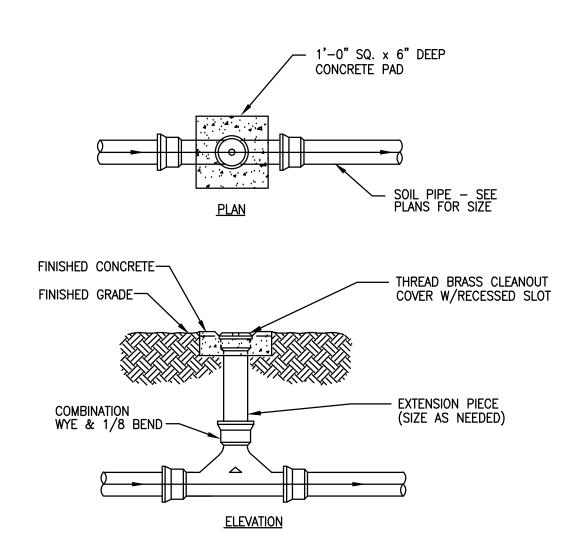
POOL PAVILION FLOOR PLAN - PLUMBING

P13.01

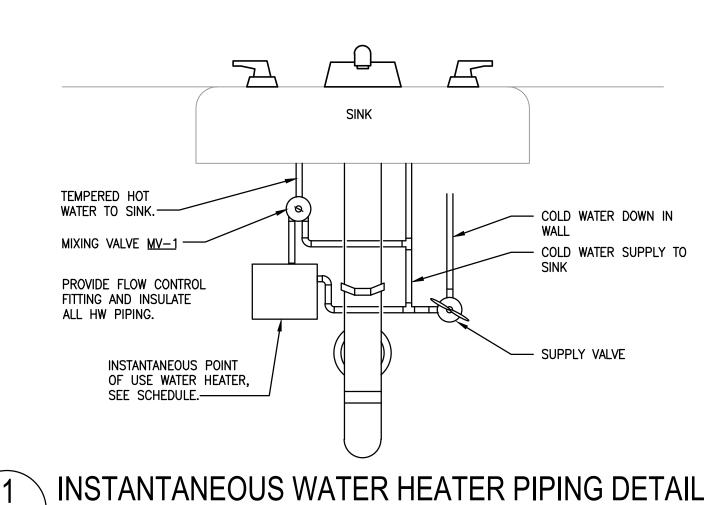


BLS/AJB

06/22/2018







NTS

MARK	FIXTURE	WASTE	TRAP	VENT	COLD	HOT	MANUFACTURER	DESCRIPTION
					WATER	WATER	/MODEL #	
WC-1	WATER CLOSET — ADA TYPE	3"	INTEG	2"	1/2"	_	AMERICAN STANDARD 2998.012 OR EQUAL	RIM 16-1/2"AFF. TANK TYPE, VITREOUS CHINA, 1.6 GPF, SIPHON JET, ELONGATED BOWL, FLOOR MOUNTED, CLOSED COUPLED COMBINATION, BOLT CAPS. 'BRASSCRAFT' ANGLE STOP SUPPLY & ESCUTCHEON. 'BEMIS' SOLID PLASTIC, OPEN FRONT ELONGATED SEAT. WITH SELF SUSTAINING CHECK HINGES. FLUSH HANDLE TO BE ON OPEN SIDE OF TOILET CLEAR SPACE.
L-1	LAVATORY — ADA TYPE	2 "	1-1/4*	1-1/2"	1/2"	1/2"	AMERICAN STANDARD 0355.012 OR EQUAL	LUCERNE 20" x 18" WALL HUNG, VITREOUS CHINA WITH INTEGRAL BACKSPLASH. 'AMERICAN STANDARD' #2275.500, 4" CENTERS, C.P. METAL, TWO—LEVER HANDLE FAUCET. GRID STRAINER WITH TAILPIECE, C.P. BRASS P—TRAP WITH WALL ARM & ESCUTCHEONS. 'BRASSCRAFT' ANGLE VALVE SUPPLY RISERS W/LOOSE KEY STOPS. INSULATE P—TRAP AND SUPPLIES WITH 'TRUEBRO' INSULATION KIT. 'ZURN' 1231 CAST IRON FLOOR MOUNTED CARRIER FITTING WITH CONCEALED ARMS. PROVIDE ANTI—SCALD TEMPERING VALVE FOR HOT WATER SUPPLY.
HB-1	HOSE BIBB	ı	-	_	1/2"	_	WOODFORD #B24 OR EQUAL	CONCEALED NON-FREEZE, WALL HYDRANT, COMPLETE WITH BRONZE BODY, ALL BRONZE INTERIOR PARTS, REPLACEABLE SEAT WASHER, INTEGRAL VACUUM BREAKER, KEY-OPERATED CONTROL VALVE, AND ¾" FEMALE IP INLET CONNECTION STANDARD. NICKEL BRONZE BOX AND HINGED COVER. AVAILABLE WITH ¾" MALE HOSE CONNECTION. INCLUDES OPERATING KEY.
WHA-1	WATER HAMMER ARRESTOR	-	-	_	-	-	SIOUX CHIEF #650 SERIES OR EQUAL	SIZE PER MANUFACTURER'S RECOMMENDATIONS. PDI CERTIFIED. WHA-1: SIZE "A" WHA-2: SIZE "B" REFER TO RISER DIAGRAMS FOR ARRESTOR LOCATIONS. REFER TO SPECIFICATION FOR SELECTION METHOD.
FD-1	FLOOR DRAIN	SIZE/ SEE DWG.	-	_	-	_	ZURN ZN415S-HD-P OR EQUAL	DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS AND TYPE 'S' POLISHED BRONZE 6"x6" HEAVY DUTY SQUARE STRAINER. 1/2" TRAP PRIMER CONNECTION.
AD-1	AREA DRAIN	SIZE/ SEE DWG.	-	_	-	_	ZURN ZN415S-HD OR EQUAL	DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS AND TYPE 'S' POLISHED BRONZE 6"x6" HEAVY DUTY SQUARE STRAINER.
TPV-1	TRAP PRIMER VALVE	_	_	_	1/2"	_	PRECISION PLUMBING PRODUCTS PR-500 OR EQUAL	PROVIDE FULLY ACCESSIBLE SHUT OFF VALVE TO EACH PRIMER VALVE. PROVIDE TRAP PRIMER TO EACH FLOOR DRAIN.
INT-1	OIL INTERCEPTOR	SIZE/ SEE DWG.	-	_	_	_	ZURN 1186-E	ACID RESISTANT COATED INTERIOR AND EXTERIOR FABRICATED STEEL OIL INTERCEPTOR, BRONZE CLEANOUT PLUG, REMOVABLE SEDIMENT BUCKET, HORIZONTAL BAFFLE, SIZE 800, 50 GPM, 30 GALLONS CAPACITY, HEAVY DUTY TRAFFIC COVER AND EXTENSION TO FINISH GRADE.
INT-2	OIL INTERCEPTOR	SIZE/ SEE DWG.	-	_	-	-	ZURN 1186-E	ACID RESISTANT COATED INTERIOR AND EXTERIOR FABRICATED STEEL OIL INTERCEPTOR, BRONZE CLEANOUT PLUG, REMOVABLE SEDIMENT BUCKET, HORIZONTAL BAFFLE, SIZE 600, 25 GPM, 16 GALLONS CAPACITY, HEAVY DUTY TRAFFIC COVER AND EXTENSION TO FINISH GRADE.

1. WHERE COLOR/FINISH OPTIONS ARE AVAILABLE FOR FIXTURES, SELECTIONS SHALL BE SUBMITTED TO THE OWNER PRIOR TO PURCHASE AND INSTALLATION.

VERIFY SINK DIMENSIONS WITH ARCHITECT, RE: MILLWORK.

REFER TO ARCHITECTURAL DRAWING FOR MOUNTING HEIGHTS OF ALL FIXTURES.

FIXTURES FOR USE BY THE DISABLED:
A. INSTALL IN ACCORDANCE WITH A.D.A., STATE AND LOCAL REQUIREMENTS. B. THE FORCE REQUIRED TO ACTIVATE FLUSH VALVES SHALL BE 5 LBS MAXIMUM.

C. FLUSH ACTIVATOR SHALL BE LOCATED ON WIDE SIDE OF THE STALL.

1. COORDINATE WATER HEATER SERVICES, PIPING AND LOCATION WITH MECHANICAL AND ELECTRICAL PLANS.

D. THE FAUCET CONTROLS AND THE OPERATING MECHANISM (OPERABLE WITH ONE HAND) SHALL BE OF THE TYPE NOT REQUIRING AN OPERATING FORCE EXCEEDING 5 LBS, OR TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST.

		ELECTR	IC INSTA	ANTANE	OUS W	ATER H	EATE	R SCHEDULE		
UNIT #	SERVING	TYPE	GALLONS	INPUT	RĘCOVĘRY	VOLT/PHASE CURRENT DRAW	WEIGHT	DIMENSIONS	MANUFA	CTURER
ONII #	SERVING		GALLONS	KW	(GPM)	(PER PHASE)	(LBS.)	DIMENSIONS	MANUFACTURER	MODEL #
IWH-1	SINK	ELECTRIC	INSTANTANEOUS	8.3	57 DEG RISE @ 1 GPM	208V - 1ø	15	10"H x 4"W x 4"D	EEMAX	PA008208T

PERMIT REVIEW STAMP

ISSUE HISTORY 1 06/22/2018 ISSUE FOR PERMIT **REVISION HISTORY**

No. Date Description

FUGLEBERG KOCH

2555 Temple Trail, Winter Park, FL 32789 (407) 629-0595 www. fuglebergkoch.com BR569

Consulting Engineers 1180 HARWOOD AVE. SUITE 3000 ALTAMONTE SPRINGS, FLORIDA 32714 TEL: 321.972.4466 WWW.JLCENG.COM

JLC 17.0137.00

Adam Joseph Barney P.E. #:69124

SUMMER BAY

Approval: BLS/AJB LAKE COUNTY, FL

BLS/AJB

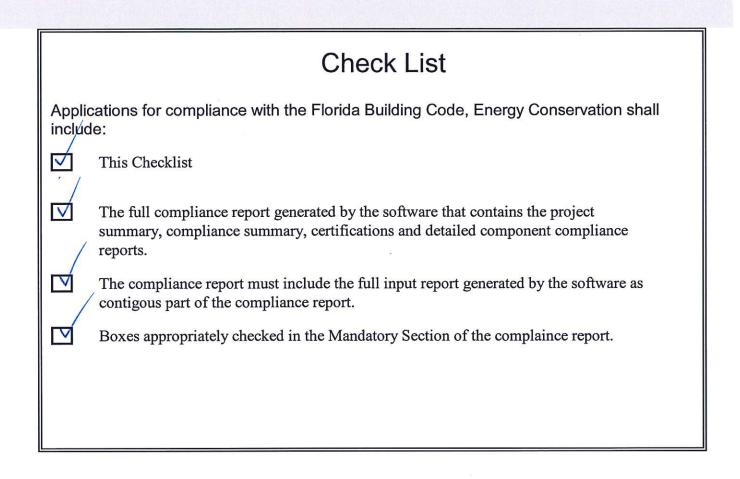
06/22/2018

MAINTENANCE BUILDING SCHEDULES AND DETAILS

P13.03

Florida Building Code, Sixth Edition (2017) - Energy Conservation

EnergyGauge Summit® Fla/Com-2017, Effective Date: Dec 31, 2017 IECC 2015 - Total Building Performance Compliance Option



PROJECT SUMMARY

Short Desc: Summer Bay Maint.

Description: Summer Bay Maintenance

Owner:

Address1:

City: 1

Address2:

State: Florida

Zip: 0

Type: Automotive Facility

Class: New Finished building

Jurisdiction: LAKE COUNTY, LAKE COUNTY, FL (451000)

Conditioned Area: 662 SF

Conditioned & UnConditioned Area: 662 SF

No of Stories: 4

Area entered from Plans 233 SF

No of Stories: 4

Max Tonnage 0.8

Permit No: 0

If different, write in:

Compliance S	Summary		
Component	Design	Criteria	Result
Gross Energy Cost (in \$)	845.0	1,190.0	PASSED
LIGHTING CONTROLS			PASSES
EXTERNAL LIGHTING			PASSES
HVAC SYSTEM			PASSES
PLANT			No Entry
WATER HEATING SYSTEMS			No Entry
PIPING SYSTEMS			PASSES
Met all required compliance from Check List?			Yes/No/NA

IMPORTANT MESSAGE

Info 5009 -- -- An input report of this design building must be submitted along with this Compliance Report

CERTIFICATIONS

I hereby certify that the plans a Florida Energy Code	and specifications covered by this cal	lculation are in co	ompliance with the
Prepared By:	Adam Barney	Building Official:	
Date:	1-18-18	Date:	
I certify that this building is in	compliance with the FLorida Energy I	Efficiency Code	
Owner Agent:		Date:	
If Required by Florida law, I he Efficiency Code	ereby certify (*) that the system desig	n is in complianc	e with the Florida Energy
Architect:	Fugleburg Koch	Reg No:	BR569
Electrical Designer:	Blake Suddeth	Reg No:	69060
Lighting Designer:	Blake Suddeth	Reg No:	69060
Mechanical Designer:	Adam Barney	Reg No:	69124
Plumbing Designer:	Adam Barney	Reg No:	69124
	re Florida Law requires design to be pand registration numbers may be use ans.		

Project: Summer Bay Maint.
Title: Summer Bay Maintenance
Type: Automotive Facility

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Building End Uses

	1) Proposed	2) Baseline
otal	52.50	87.40
	\$845	\$1,400
ELECTRICITY(MBtu/kWh/\$)	52.50	87.40
	15389	25600
	\$845	\$1,400
AREA LIGHTS	3.70	11.00
	1078	3224
	\$59	\$176
MISC EQUIPMT	3.30	3.30
	970	970
•	\$53	\$53
SPACE COOL	38.50	52.20
	11295	15283
	\$620	\$836
SPACE HEAT	3.30	3.10
	970	912
	\$53	\$50
VENT FANS	3.70	17.80
	1076	5211
	\$59	\$285

PASSES

Credits Applied: None

Passing Criteria = 1190

Design (including any credits) = 845

Passing requires Proposed Building cost to be at most 85% of

Baseline cost. This Proposed Building is at 60.3%

Project: Summer Bay Maint.
Title: Summer Bay Maintenance
Type: Automotive Facility
(WEA File: FL ORLANDO INTL ARPT.tm3)

External Lighting Compliance

	External L	ignung (Compilar	ice		
Description	Category	Tradable?		Area or Length or No. of Units (Sqft or ft)		CLP (W)
Ext Light 1	Walkways more that 10 fee wide	t Yes	0.14	26.0	4	64

Tradable Surfaces: 64 (W) Allowance for Tradable: 603.64 (W)

PASSES

All External Lighting: 64 (W)

Complicance check includes a excess/Base allowance of 600.00(W)

Project: Summer Bay Maint.
Title: Summer Bay Maintenance
Type: Automotive Facility

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

Lighting Controls Compliance

Acronym	Ashrae Description ID	Area (sq.ft)	Design CP	Min Compli- CP ance
Maintenance	31,001 Workshop	662	6	1 PASSES

PASSES

Project: Summer Bay Maint.
Title: Summer Bay Maintenance
Type: Automotive Facility

(WEA File: FL_ORLANDO_INTL_ARPT.tm3)

System Report Compliance

PTAC-1 System 1

Through the wall AirConditioner Single

No. of Units

			Pack	age			
Component	Category	Capacity	Design Eff	Eff Criteria	Design IPLV	IPLV Criteria	Comp- liance
Cooling System	Air Conditioners Thru the Wall A/C < 30,000 Btu/h Single Package	9000	12.00	12.00			PASSES
Heating System	Heat Pumps Thru the Wall HP (Heating Mode) < 30,000 Btu/h Single Pkg	10700	7.40	7.40			PASSES
Air Handling System -Supply	Air Handler (Supply) - Constant Volume	280	0.20	0.82			PASSES

PASSES

			Plant	Comp	oliance				
Description	Installed No	Size	Design Eff	Min Eff	Design IPLV	Min IPLV	Category		Comp liance
								None	

		Water I	leater (Complia	nce					
Description	Туре	Ca	ategory		esign Eff	Min Eff		Max Loss		
									Nam	
									Nor	ie
Project: Summer Ba Title: Summer Bay I										
Type: Automotive F (WEA File: FL_OR)			Piping S	ystem C	omp	lian	ce			
			Piping S Is Runout?	Operating	Ins C	ond in/hr	Ce Ins Thick [in]			Complian
(WEA File: FL_OR)	LANDO_INTL	Pipe Dia	Is	Operating Temp	Ins C [Btu-i	ond in/hr	Ins	Thick		Compliano

Mandatory R	oquilorito	(ac applio	ADIE) Mandatory requirements compiled of Energy and Pacific Northwest N Adopted with permission			
Topic	Section	Componen	e Booonpalon	Yes	N/A	Exempt
	1. To b	e checked b	y Designer or Engineer		/	
Insulation	C303.2	Envelope	Below-grade wall insulation installed per manufacturer's instructions.		Ø	
Insulation	C303.2	Envelope	Slab edge insulation installed per manufacturer's instructions.		A	
Insulation	C303.2	Envelope	Above-grade wall insulation installed per manufacturer's instructions.			
Insulation	C402.3	Envelope	High-albedo roofs satisfy one of the following: 3-year-aged solar reflectance >= 0.55 and therma emittance >= 0.75 or 3-year-aged solar reflectance index >= 64.0.	, 🗆	ઇ	
Fenestration	C402.4.4	Envelope	U-factor of opaque doors associated with the building thermal envelope meets requirements.		\checkmark	
SYSTEM_SPECIFIC	C403.2.12.1	Mechanical	HVAC fan systems at design conditions do not exceed allowable fan system motor nameplate hp	V		
SYSTEM_SPECIFIC	C403.2.12.2	Mechanical	or fan system bhp. HVAC fan motors not oversized beyond allowable limits.		Ø	
SYSTEM_SPECIFIC	C403.2.3(8) Table	Mechanical	Heat Rejection Equipment: Minimum Efficiency Requirement meet those listed in Table C403.2.3(8)			
HVAC	C403.2.7	Mechanical	Exhaust air energy recovery on systems meeting Table C403.2.7(1) and C403.2.7(2).		V	
SYSTEM_SPECIFIC	C403.3	Mechanical	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.		□	/
SYSTEM_SPECIFIC	C403.3.2	Mechanical	Economizer operation will not increase heating energy use during normal operation.		Ø	, \square
SYSTEM_SPECIFIC	C403.3.4, C403.3.4.1, C403.3.4.2, C403.3.1	Mechanical	Water economizers provided where required, meet the requirements for design capacity, maximum pressure drop and integrated economizer control.		\square	,
SYSTEM_SPECIFIC	C403.4.2.1	Mechanical	Three-pipe hydronic systems using a common return for hot and chilled water are not used.		四	
SYSTEM_SPECIFIC	C403.4.2.3.1	Mechanical	Hydronic heat pump systems connected to a common water loop meet heat rejection and heat addition requirements.		ď	
SYSTEM_SPECIFIC	C403.4.3.4	Mechanical	Open-circuit cooling towers having water cooled chiller systems and multiple or vairable speed condenser pumps, are designed so that tower cells can run in parallel with larger of flow crtieria		1	
SYSTEM_SPECIFIC	C404.2	Mechanical	Service water heating equipment meets efficiency requirements.		◩	
Wattage	C405.3	Interior Lighting	Exit signs do not exceed 5 watts per face.			
	2. 7	o be check	ed by Plan Reviewer			
Plan Review	C103.2	Envelope	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.			

Plan Review	C103.2	Mechanical	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per		
Plan Review	C103.2	Mechanical	acceptable engineering st Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system		
Plan Review	C103.2	Interior Lighting	sized per manufact Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed.		
Plan Review	C103.2	Exterior Lighting	all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed.		
Insulation	C402.2.5	Envelope	Information provided shoul Slab edge insulation depth/length. Slab insulation extending away from building is covered by pavement or >= 10 inches of soil.		
Insulation	C402.2.6	Project	Radiant heating systems panels insulated to >=R-3.5 on face opposite space being heated.		
HVAC	C402.2.6	Mechanical	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.		
Insulation	C402.2.6	Envelope	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated		
Air Leakage	C402.5.7	Envelope	with a minimum of R-3.5. Vestibules are installed on all building entrances. Doors have self-closing devices.		
SYSTEM_SPECIFIC	C403.2.12.3	Mechanical	Fans have efficiency grade (FEG) >= 67. The total efficiency of the fan at the design point of operation <= 15% of maximum total efficiency of		
HVAC	C403.2.13	Mechanical	the fan. Unenclosed spaces that are heated use only radiant heat.		
HVAC	C403.2.4.2	Mechanical	Each zone equipped with setback controls using automatic time clock or programmable control system.		
SYSTEM_SPECIFIC	C403.2.4.4	Mechanical	Zone isolation devices and controls installed where applicable.		
SYSTEM_SPECIFIC	C403.2.4.7	Mechanical	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.		
SYSTEM_SPECIFIC	C403.2.5	Mechanical	Hot water boilers supplying heat via one- or two-pipe systems include outdoor setback control.		
HVAC	C403.2.6.1	Mechanical	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper		
SYSTEM_SPECIFIC	C403.4.1.1	Mechanical	control, or design airflow >3,000 cfm. Hydronic and multizone HVAC system controls areVAV fans driven by mechanical or electrical		
SYSTEM_SPECIFIC	C403.4.1.3	Mechanical	variable speed drive per Table C403.4.1.1. Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on		
SYSTEM_SPECIFIC	C403.4.2	Mechanical	the zones requiring the most pressure. Temperature reset by representative building loads in pumping systems for chiller and boiler systems >500,000 Btu/h.		

SYSTEM_SPECIFIC	C403.4.2.3.2.1	Mechanical	Closed-circuit cooling tower within heat pump loop have either automatic bypass valve or lower leakage positive closure dampers. Open-circuit tower within heat pump loop have automatic valve to bypass all heat pump water flow around the tower. Open- or cl		
SYSTEM_SPECIFIC	C403.4.2.4	Mechanical	Hydronic systems greater than 500,000 Btu/h designed for variable fluid flow.		
SYSTEM_SPECIFIC	C403.4.2.5	Mechanical	System turndown requirement met through multiple single-input boilers, one or more modulating boilers, or a combination of single-input and modulating boilers. Boiler input between 1.0 MBtu/h and 5 MBtu/h has 3:1 turndown ratio, boiler input between 5.0		
SYSTEM_SPECIFIC	C403.4.2.6	Mechanical	Chilled water plants with multiple chillers have capability to reduce flow automatically through the chiller plant when a chiller is shut down. Boiler plants with multiple boilers have the capability to reduce flow automatically through the boiler plant		
SYSTEM_SPECIFIC	C403.4.3, C403.4.3.2	Mechanical	Fan systems with motors >=7.5 hp associated with heat rejection equipment to have capability to operate at 2/3 of full-speed and auto speed controls to control the leaving fluid temperature or condensing temp/pressure of heat rejection device.		
SYSTEM_SPECIFIC	C403.4.4.5	Mechanical	Multiple zone HVAC systems have supply air temperature reset controls.		
SYSTEM_SPECIFIC	C403.4.4.6	Mechanical	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint reset controls.		
SYSTEM_SPECIFIC	C404.2.1	Mechanical	Gas-fired water-heating equipment installed in new buildings: where a singular piece of water-heating equipment >= 1,000 kBtu/h serves the entire building, thermal efficiency >= 90 Et. Where multiple pieces of water-heating equipment serve the building wi		
SYSTEM_SPECIFIC	C404.4	Mechanical	All piping insulated in accordance with section details and Table C403.2.10.		
SYSTEM_SPECIFIC	C404.5, C404.5.1, C404.5.2	Mechanical	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.		
SYSTEM_SPECIFIC	C404.6.3	Mechanical	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.		
SYSTEM_SPECIFIC	C404.7	Mechanical	Water distribution system that pumps water from a heated-water supply pipe back to the heated-water source through a cold-water supply pipe is a demand recirculation water system. Pumps within this system have controls that start the pump upon receiving		
Wattage	C405.5.1	Exterior Lighting	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.		
Plan Review	C405.6	Project	Group R-2 dwelling units have separate electrical meters.		
Plan Review	C406	Project	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.		
SYSTEM_SPECIFIC	C408.2.2.2	Mechanical	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.		
SYSTEM_SPECIFIC	C408.2.2.2	Mechanical	HVAC hydronic heating and cooling coils have means to balance and have pressure test connections.		

	3	. To be che	cked by Inspector		
Insulation	C303.1	Envelope	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is <=3 in 12.		
Insulation	C303.1	Envelope	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.		
Fenestration	C303.1.3	Envelope	Fenestration products rated in accordance with NFRC.		
Fenestration	C303.1.3	Envelope	Fenestration products are certified as to performance labels or certificates provided.		
Insulation	C303.2, C402.2.4	Envelope	Floor insulation installed per manufacturer's instructions. Cavity or structural slab insulation installed in permanent contact with underside of decking or structural slabs.		
Insulation	C303.2.1	Envelope	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.		
Insulation	C303.2.1	Envelope	Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection.		
Insulation	C402.1.3	Envelope	Non-swinging opaque doors have R-4.75 insulation.		
Insulation	C402.2.2	Envelope	Skylight curbs are insulated to the level of roofs with insulation above deck or R-5.		
Insulation	C402.2.2	Envelope	Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly.		
Air Leakage	C402.5	Envelope	Building envelope contains a continuous air barrier that has been tested and deemed to limit air leakage <= 0.40 cfm/ft2.		
Air Leakage	C402.5.1	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and either constructed or tested in an approved manner. Air barrier penetrations are sealed in an approved manner.		
Air Leakage	C402.5.1.1	Envelope	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.		
Air Leakage	C402.5.1.2.1	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability <= 0.004 cfm/ft2. Air barrier penetrations are sealed in an approved manner.		
Air Leakage	C402.5.1.2.2	Envelope	The building envelope contains a continuous air barrier that is sealed in an approved manner and average assembly air leakage <= 0.04 cfm/ft2. Air barrier penetrations are sealed in an approved manner.		
Air Leakage	C402.5.2, C402.5.4	Envelope	Factory-built fenestration and doors are labeled as meeting air leakage requirements.		
Air Leakage	C402.5.3	Envelope	Where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening are located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope		
Air Leakage	C402.5.5, C403.2.4.3	Envelope	Stair and elevator shaft vents have motorized dampers that automatically close.		
Air Leakage	C402.5.5, C403.2.4.3	Envelope	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed.		
Air Leakage	C402.5.6	Envelope	Weatherseals installed on all loading dock cargo doors.		

Air Leakage	C402.5.8	Envelope	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal		
HVAC	C403.2.1	Mechanical	between interior finish and luminaire housing. HVAC systems and equipment design loads calculated in accordance with ANSI/ASHRAE/ACCA Standard 183 or by an		
SYSTEM_SPECIFIC	C403.2.10	Mechanical	approved equivalent computational procedure HVAC piping insulation thickness. Where piping is installed in or under a slab, verification may		
HVAC	C403.2.3	Mechanical	need to occur during Foundation Inspection. HVAC equipment efficiency verified.		
SYSTEM_SPECIFIC	C403.2.3	Mechanical	PTAC and PTHP with sleeves 16 in. by 42 in. labeled for replacement only as per Footnote b to		
SYSTEM_SPECIFIC	C403.2.4.1	Mechanical	Table C403.2.3(3). Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed		
SYSTEM_SPECIFIC	C403.2.4.1.1	Mechanical	humidification/dehumidification system. Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.		
HVAC	C403.2.4.1.2	Mechanical	Thermostatic controls have a 5 °F deadband.		
HVAC	C403.2.4.1.2	Mechanical	Thermostatic controls have a 5 ŰF deadband.		
HVAC	C403.2.4.1.3	Mechanical	Temperature controls have setpoint overlap restrictions.		
HVAC	C403.2.4.2.1, C403.2.4.2.2	Mechanical	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant		
SYSTEM_SPECIFIC	C403.2.4.2.3	Mechanical	override, 10-hour backup Systems include optimum start controls.		
HVAC	C403.2.4.5, C403.2.4.6	Mechanical	Snow/ice melting system sensors for future connection to controls. Freeze protection systems		
HVAC	C403.2.6.2	Mechanical	have automatic controls installed. Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.		
HVAC	C403.2.9	Mechanical	capacity. HVAC ducts and plenums insulated. Where ducts or plenums are installed in or under a slab, verification may need to occur during Foundation Inspection.		
SYSTEM_SPECIFIC	C403.2.9.1.3	Mechanical	Ductwork operating >3 in. water column requires air leakage testing.		
SYSTEM_SPECIFIC	C403.4.1.2	Mechanical	VAV fans have static pressure sensors located so controller setpoint <=1.2 w.c		
SYSTEM_SPECIFIC	C403.4.2.2	Mechanical	Two-pipe hydronic systems using a common distribution system have controls to allow a deadband >=15°F, allow operation in one mode for at least 4 hrs before changeover, and have rest controls to limit heating and cooling supply temperature to <=30 °F.		
SYSTEM_SPECIFIC	C403.4.2.3.3	Mechanical	Two-position automatic valve interlocked to shut off water flow when hydronic heat pump with pumping system >10 hp is off.		
SYSTEM_SPECIFIC	C403.4.4.5, C403.4.4.5.1-4	Mechanical	Zone controls can limit simultaneous heating and cooling and sequence heating and cooling to each		
SYSTEM_SPECIFIC	C403.4.5	Mechanical	zone. Condenser heat recovery system that can heat water to 85°F or provide 60% of peak heat rejection is installed for preheating of service hot water.		
SYSTEM_SPECIFIC	C403.4.6	Mechanical	Hot gas bypass limited to: <=240 kBtu/h - 50% capacity,		
SYSTEM_SPECIFIC	C404.3	Mechanical	>240 kBtu/h - 25% capacity Heat traps installed on non-circulating storage water tanks.		

			CONTRACTOR OF THE CONTRACTOR O		
SYSTEM_SPECIFIC	C404.3	Mechanical	Heat traps installed on supply and discharge piping of non-circulating systems.		
SYSTEM_SPECIFIC	C404.3	Mechanical	Heat traps installed on supply and discharge piping of non-circulating systems.		
SYSTEM_SPECIFIC	C404.6.1	Mechanical	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply		
SYSTEM_SPECIFIC	C404.6.1, C404.6.2	Mechanical	pipe. Automatic time switches installed to automatically switch off the recirculating hot-water system or		
SYSTEM_SPECIFIC	C404.9.1	Mechanical	heat trace. Pool heaters are equipped with on/off switch and no continuously burning pilot light.		
SYSTEM_SPECIFIC	C404.9.2	Mechanical	Time switches are installed on all pool heaters and pumps.		
SYSTEM_SPECIFIC	C404.9.2	Mechanical	Time switches are installed on all pool heaters and pumps.		
SYSTEM_SPECIFIC	C404.9.3	Mechanical	Vapor retardant pool covers are provided for heated pools and permanently installed spas.		
Controls	C405.2.1	Interior Lighting	Lighting controls installed to uniformly reduce the lighting load by at least 50%.		
Controls	C405.2.1	Interior Lighting	Occupancy sensors installed in required spaces.		
Controls	C405.2.1, C405.2.2.3	Interior Lighting	Independent lighting controls installed per approved lighting plans and all manual controls		
Controls	C405.2.2.1	Interior Lighting	readily accessible and visible to occupants. Automatic controls to shut off all building lighting installed in all buildings.		
Controls	C405.2.3	Interior Lighting	Daylight zones provided with individual controls that control the lights independent of general area		
Controls	C405.2.3, C405.2.3.1,	Interior Lighting	lighting. Primary sidelighted areas are equipped with required lighting controls.		
Controls	C405.2.3.2 C405.2.3, C405.2.3.1,	Interior Lighting	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with		
Controls	C405.2.3.3 C405.2.4	Interior Lighting	required lighting controls. Separate lighting control devices for specific uses installed per approved lighting plans.		
Wattage	C405.2.4	Interior Lighting	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated		
Controls	C405.2.5	Exterior Lighting	from general lighting. Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or		
Wattage	C405.4.1	Interior Lighting	reduce connected lighting > 30%. Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are		
Mandatory Additional	C406.4	Project	less than or equal to allowed watts. Enhanced digital lighting controls efficiency package: Interior lighting has following enhanced lighting controls in accordance with Section C405.2.2:		
Mandatory Additional	C406.6	Project	Luminaires capable of continuous dimming and being addressed individually, <= 8 luminaires controlled in Dedicate outdoor air system efficiency package: Buildings with hydronic and/or multiple-zone HVAC systems are equipped with an independent ventilation system designed to provide >= 100-percent outdoor air to each individual occupied space, as specified by		

Mandatory Additional	C406.7, C406.7.1	Project	Enhanced Service Water Heat System efficiency package. One of the following SWH system enhancements must satisfy 60 percent of hot water requirements, or 100 percent if the building otherwise complies with heat recovery per Section C403.4.5: Waste heat re			
HVAC	C408.2.2.1	Mechanical	Air outlets and zone terminal devices have means for air balancing.			
HVAC	C408.2.2.1	Mechanical	Air outlets and zone terminal devices have means for air balancing.			
Testing	C408.2.3.2	Mechanical	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.			
4. To be che	ecked by Insp		oject Completion and Prior to Iss	suan	ice c	of
		Certificate	e of Occupancy			
Post Construction	C303.3, C408.2.5.2	Interior Lighting	Furnished O&M instructions for systems and equipment to the building owner or designated representative.			
Post Construction	C303.3, C408.2.5.3	Mechanical	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.			
Fenestration	C402.4.2.2	Envelope	Skylights in office, storage, automotive service, manufacturing, non-refrigerated warehouse, retail store, and distribution/sorting area have a measured haze value > 90 percent unless designed to exclude direct sunlight.			
Post Construction	C408.2.1	Mechanical	Commissioning plan developed by registered design professional or approved agency.			
Post Construction	C408.2.3.1	Mechanical	HVAC equipment has been tested to ensure proper operation.			
Post Construction	C408.2.3.3	Mechanical	Economizers have been tested to ensure proper operation.			
Post Construction	C408.2.4	Mechanical	Preliminary commissioning report completed and certified by registered design professional or approved agency.			
Post Construction	C408.2.5.1	Mechanical	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.			
Post Construction	C408.2.5.1	Interior Lighting	Furnished as-built drawings for electric power systems within 90 days of system acceptance.			
Post Construction	C408.2.5.3	Mechanical	An air and/or hydronic system balancing report is provided for HVAC systems.			
Post Construction	C408.2.5.4	Mechanical	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.			
Post Construction	C408.3	Interior Lighting	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.			

Input Data Report

Project Information

Project Name: Summer Bay Maint.

Project Title: Summer Bay Maintenance

Address:

State: Florida

Zip: 0

Owner:

Building Type:

Automotive Facility

Building Classification: New Finished building

GrossArea (SF):

662

No.of Stories:

Bldg. Rotation: None

			Z	ones				
No	Acronym	Description	Туре		Area [sf]	Multi	Total Arc	ea
1	Maintenance	Maintenance	CONDITIO	NED	662.0	1	662.0	
	u u			Spaces				
No	Acronym	Description	Туре	Depth [ft]	Width [ft]	Height Mult		Total Vol[cf]

				Lig	htin	g						
No	Туре	Category	No. Lumii		Watts Lumin	_	Power [W]	Contro	ol Type		No.of Ctrl pt	
In Z oi 1 2	ne: Maintenance In Space: Maintenance Suspended Fluorescen Compact Fluorescen	ent General Lighting		5	6.		320 32	Manual Manual			5 1	
	Walls (\	Walls will be ro	tated	clock	wise	by b	uildin	g rota	ation va	alue)		
No	Description	Туре	Width [ft]	H (Effec) Multi plier	Area [sf]	Orient ation	Conc uctan [Btu/h.s		city [lb.	ns. R-V /cf] [h.sf.]	/alue F/Btu]
In Z	Zone: Maintenan North Wall South Wall	ce 0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp 0.75 in. stucco,	33.00 33.00	12.00 12.00	1	396.0 396.0		0.1118	1.183	14.94 14.94		
3	West Wall East Wall	2x4x16" oc, R11Batt, 0.5 in. gyp 0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp 0.75 in. stucco,	19.00 19.00	12.00 12.00	1	228.0 228.0	West East	0.1118		14.94 14.94		
		2x4x16" oc, R11Batt, 0.5 in. gyp										
	Windows	(Windows will	l be ro	otated	cloc	kwis	e by l	ouildir	ng rota	tion va	alue)	
No	Description	Orientation Shade		U S	SHGC	Vis.T	ra W [ft		H (Effec) [ft]	Multi plier	Total Are	ea
	Zone: In Wall:										,	

	-			D	oors						
No	Description	Туре	Shade?	Width I [ft]	I (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/h.sf.F]	Dens. [lb/cf]		. R . [h.sf.F/ Btu]
In Zo :	In Wall: South Door	Solid core flush (2.25) Solid core flush (2.25)		3.00 16.00	6.66 8.00	2	20.0 128.0				2.85
				R	oofs						
No	Description	Туре	Width [ft]	H (Effe [ft]	c) Multi plier	Area [sf]	Tilt [deg]	Cond. [Btu/h.Sf. F			R-Value [h.sf.F/Btu
In Zo :	ne: Maintenance Roof	Shngl/1/2"WD Deck/WD Truss/9" Batt/Gyp Brd	662.00	1.00	1	662.0	0.00	0.0320	1.50	8.22	31.2
-				Sk	ylight	s					
No	Description 7	Гуре	U Btu/hr sf F	SHGO	Vis.Tr		V H (Effec) Mul			al Area [Sf]
In Z	one: In Roof:										

					Floor	S	9				
No	Descri	ption	Туре	Width [ft]	H (Effec) [ft]	Multi plier	Area [sf]	Cond. [Btu/h.sf.F	Heat Cap. [Btu/sf. F]		
n Zone : 1	: Mair Floor	ntenance	1 ft. soil, concrete floor, carpet and rubber pad	662.00	1.00	Í	662.0	0.2681	34.00	113.33	3.73
						Syst	ems				
PTAC	-1	s	ystem 1			Ai	rCondi	he wall ioner Sing	gle	No.	Of Units
Com	ponent	Category			Сар	Pa acity	ckage Eff	iciency	IPLV		
	1	Cooling Sys	tem			00.00		12.00			
	2	Heating Sys	tem		10′	700.00		7.40			
	3	Air Handlin	g System -Supply		28	30.00		0.20			
				P	lant						
	Equip	ment	Category		Size]	nst.NŒff.		I	PLV
					Wate	r He	aters				
	W-Hea	ter Descripti	on Capaci	ty Cap.U	Jnit I/P F	Rt.		Efficiency		Loss	
	W-Hea	ter Descripti	on Capaci	ty Cap.U	Jnit I/P F	Rt.		Efficiency		Loss	

		Ext	-Lightii	ng				
Description	Catego	ry	No. of Lumin- aires	Watts per Lumin- aire	Area/Len/No [sf/ft/No]	Control Type	Wattage [W]	
Ext Light 1	Walkways n wide	nore that 10 feet	2	32	26.00 Ast	ronomical Ti	me: 64.00	· [
	***		Piping					
о Туре		Operating Temp [F]	Condu	ctivity	Nomonal pipe Diameter [in]	Insulation Thickness [in]		
Domestic and Ser Systems	rvice Hot Water	105.00	C).28	0.25	1.00	No	1 2 2
		Fenestra	tion Use	ed				
Glass Ty	pe	Donoc		SHG	C VLT			
	Ext Light 1 Type Domestic and Services	Ext Light 1 Walkways n wide Type Domestic and Service Hot Water	Ext Light 1 Walkways more that 10 feet wide Type Operating Temp [F] Domestic and Service Hot Water 105.00 Systems Fenestrat Glass Type No. of Penese Contents Penese Contents Reservice Hot Water Contents Fenestrat	Ext Light 1 Walkways more that 10 feet wide Piping Type Operating Temp Condu [Btu-in] Domestic and Service Hot Water 105.00 Systems Fenestration Use Glass Type No. of Glass Conductance	Ext Light 1 Walkways more that 10 feet 2 32 wide Piping Type Operating Temp Conductivity [F] Btu-in/h.sf.F] Domestic and Service Hot Water Systems Fenestration Used Glass Type No. of Glass Conductance SHG-	Description Category No. of Luminaires Ext Light 1 Walkways more that 10 feet wide Piping Temp Conductivity Bulameter [in] Domestic and Service Hot Water Systems Fenestration Used Glass Type No. of Glass Conductance No. of Glass Conductance SHGC VLT	Description Category No. of Luminaires Luminaires Ext Light 1 Walkways more that 10 feet wide Piping Type Operating Temp [F] Domestic and Service Hot Water 105.00 Domestic and Service Hot Water 105.00 Fenestration Used Glass Type No. of Category No. of Luminaires Luminaire Luminaire Area/Len/No Control Type Astronomical Tipe Piping Insulation Conductivity Diameter [in] Insulation Thickness [in] Control Type Astronomical Tipe Conductivity Diameter [in] Insulation Thickness In]	Description Category No. of Lumin- Lumin- aires Rest Light 1 Walkways more that 10 feet wide Piping Type Operating Temp [F] Domestic and Service Hot Water Systems Fenestration Used No. of Category No. of Lumin- Lumin- aires 2 32 26.00 Astronomical Time: 64.00 Astronomical Time: 64.00 Nomonal pipe Diameter Thickness [in] Nomonal pipe Diameter Insulation [in] No Systems Fenestration Used

Materials Used										
Mat No	Acronym	Description	Only R-Value Used	RValue [h.sf.F/Btu]	Thick [ft]	Cond- uctivity [Btu/h.ft.F	Density [lb/cf]	Sp. Heat [Btu/lb.F]		
187	Matl187	GYP OR PLAS BOARD,1/2IN	No	0.4533	0.0417	0.0920	50.00	0.2000		
178	Matl178	CARPET W/RUBBER PAD	Yes	1.2300						
265	Matl265	Soil, 1 ft	No	2.0000	1.0000	0.5000	100.00	0.2000		
48	Matl48	6 in. Heavyweight concrete	No	0.5000	0.5000	1.0000	140.00	0.2000		
267	Matl267	0.75" stucco	No	0.1563	0.0625	0.4000	16.00	0.2000		
266	Matl266	2x4@16" oc + R11 Batt	No	8.3343	0.2917	0.0350	9.70	0.2000		
12	Matl12	3 in. Insulation	No	10.0000	0.2500	0.0250	2.00	0.2000		
23	Matl23	6 in. Insulation	No	20.0000	0.5000	0.0250	5.70	0.2000		
279	Matl279	Solid core flush (2.25")	Yes	2.8537						
81	Matl81	ASPHALT-ROOFING, ROLL	Yes	0.1500				1		
244	Matl244	PLYWOOD, 1/2IN	No	0.6318	0.0417	0.0660	34.00	0.2900		

No	Name			Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Cap [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Bt	
1009	0.75 in. stucco, 2x4x16" oc, R11Batt, 0.5 in. gyp			No	No	0.11	1.18	14.94	8.9	
	Layer	Material No.	Material			Thickr [ft]		Framing Factor		
	1	267	0.75" stuc	со		0.062	5	0.000		
	2	266	2x4@16" oc + R11 Batt		0.2917		0.000			
	3	187	GYP OR PLAS BOARD,1/2IN		0.0417		0.000			
No	Name			Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Cap [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/Bt	
1038	Shngl/1/2"WD I Batt/Gyp Brd	Deck/WD Tri	ıss/9"	No	No	0.03	1.50	8.22	31.2	
	Layer	Material No.	Material			Thickness [ft]		Framing Factor		
	1	81	ASPHAL	Γ-ROOFING,	ROLL			0.000		
	2	244	PLYWOO	D, 1/2IN		0.041	7	0.000		
	3	12	3 in. Insu	lation		0.250	0	0.000		
	4	23	6 in. Insul	ation		0.500	0	0.000		
	5	187	GYP OR I	PLAS BOAR	D,1/2IN	0.041	7	0.000		
No	Name		Simple Massless Construct Construct		Conductance [Btu/h.sf.F]	Heat Cap [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/B		
1057	1 ft. soil, concrete floor, carpet and rubber pad			No	No	0.27	34.00	113.33	3.7	
	Layer	Material No.	Material			Thick: [ft]		Framing Factor		
	1	265	Soil, 1 ft			1.000	0	0.000		
	2	48	6 in. Heavyweight concrete			0.5000		0.000		
	3	178	CARPET W/RUBBER PAD					0.000		
No	Name		_	Simple Construct	Massless Construct	Conductance [Btu/h.sf.F]	Heat Cap [Btu/sf.F]	Density [lb/cf]	RValue [h.sf.F/B	
1058	Solid core flush	(2.25)		No	Yes	0.35			2.9	
	Layer	Material No.	Material	8		Thick [ft]		Framing Factor		
	1	279	Solid core	e flush (2.25"))			0.000		