DRAWING INDEX

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GENERAL NOTES

A. DESIGN CRITERIA

- 1.0 REFERENCED STANDARDS
 - 1.1 THE FLORIDA BUILDING CODE, 7TH EDITION (2020)
 - 1.2 ASCE 7-16
 - 1.3 ASTM SPECIFICATIONS FOR CONCRETE AND MASONRY.
 - 1.4 ACI 318-LATEST EDITION BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
 - 1.5 ACI 520-LATEST EDITION BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.
 - 1.6 ADM 2015
 - 1.7 AA ASM35, AA ADM1
 - 1.8 NATIONAL DESIGN SPECIFICATIONS FOR CONSTRUCTION DESIGN CODES AND GUIDELINES.

2.0 DESIGN LOADS

- 2.1 DESIGN WIND SPEED PER F.B.C, CH. 16 LATEST EDITION:
 - V_{ULT} = 150 M.P.H
 - V_{ASD} = 116 M.P.H
- 2.2 RISK CATEGORY = 1
- 2.3 EXPOSURE CATEGORY = B
- 2.4 ALUMINUM LOADING:
 - 2.4.1 DEAD LOADS = MEMBERS SELF-WEIGHT
 - 2.4.2 LIVE LOADS = 300 LB VERTICAL LOAD ON PRIMARY MEMBERS
 - = 200 LB VERTICAL LOAD ON PURLINS
 - 2.4.3 WIND LOADS PER F.B.C. TABLE 2002.4 (MWFRS)
 - FOR 20X20X0.013" MESH SCREEN:
 - HORIZONTAL PRESSURE ON WINDWARD SURFACE = 31 PSF
 - HORIZONTAL PRESSURE ON LEEWARD SURFACES = 22 PSF
 - VERTICAL PRESSURE ON SCREEN SURFACE = 09 PSF
 - VERTICAL PRESSURE ON SOLID SURFACES = 25 PSF
 - 2.4.3.1 FOR 18X14X0.013" MESH SCREEN, APPLIES FACTOR = 0.88
 - 2.4.3.2 FACTOR APPLIED TO ALLOWABLE STRESS DESIGN PRESSURES = 0.6

= 50 PLF

- 2.4.4 RAILING LOADS PER F.B.C SECTION 1607.8
 - 2.4.4.1 LINEAR LOAD N HANDRAILS AND GUARDRAILS
 - 2.4.4.2 CONC. LOAD ON HANDRAILS AND GUARDRAILS = 200 LB
 - 2.4.4.3 CONC. LOAD ON INTERMEDIATE RAILS = 50 LB
- B. <u>RESPONSIBILITIES</u>
 - 1.0 A LICENSED CONTRACTOR SHALL PERFORM ALL SITE WORK IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE, LOCAL ORDINANCES, ETC.
 - 2.0 CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING FIELD CONDITIONS AND DIMENSIONS PRIOR TO COMMENCEMENT OF DEMOLITION, CONSTRUCTION AND/OR FABRICATION. THE CONTRACTOR SHALL VERIFY THAT THE HOST STRUCTURE/FOUNDATION IS IN GOOD CONDITION WITH THE SUFFICIENT STRENGTH TO SUPPORT PROPOSED STRUCTURE. THE ENGINEER OF RECORD IS TO BE CONTACTED IN WRITING FOR CLARIFICATION IF DISCREPANCIES ARISE.
 - 3.0 CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. WRITTEN DIMENSIONS TO TAKE PRECEDENCE OVER SCALED DIMENSIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHECK THESE PLANS FOR DIMENSIONAL ERROR AND/OR OMISSIONS PRIOR TO CONSTRUCTION. IF ANY ERRORS OR OMISSIONS EXIST IN DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, WITHIN 10 DAYS OF RECEIPT OF PLANS AND PRIOR TO ANY CONSTRUCTION, OR CONTRACTOR ASSUMES THE RESPONSIBILITY FOR THE RESULTS AND ALL COSTS OF RECTIFYING SAME.
 - 4.0 THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS ASSOCIATED WITH THE WORK TO BE COMPLETED. THIS IS TO INCLUDE ALL SHORING AND/OR BRACING REQUIRED FOR COMPLETION OF PROJECT.
 - 5.0 THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF COMPONENTS, FIXTURES, OPENINGS, AND LANDSCAPING ON THE SITE FOR WHICH ARE NOT INCLUDED WITH THE SCOPE OF THEIR PROJECT.
 - 6.0 THESE DRAWINGS AND DETAILS HAVE BEEN PREPARED AND ENGINEERED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR AND/OR MANUFACTURER. CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION IF SPECIAL SITE CONDITIONS ARISE FOR THE FOUNDATION OR HOST STRUCTURE.

LONDON BAY HOMES PROPERTY

16745 CABREO DR

NAPLES, FL 34110

PLANS PREPARED FOR: LIBERTY ALUMINUM

- C. MATERIALS
- 1.0 CONCRETE / FOUNDATION
- 1.1 SOIL
 - 1.1.1 ASSUMED SOIL BEARING PRESSURE = 2,000 PSF
 - 1.1.2 PRIOR TO CONCRETE PLACEMENT, TREAT ENTIRE SUBSURFACE FOR TERMITES IN ACCORDANCE WITH F.B.C. REQUIREMENTS FOR SUNROOMS. NOT REQUIRED FOR EXTERIOR SCREEN ENCLOSURES.

1.1.3 CONCRETE PLACED OVER A POLY VAPOR SHIELD WHERE APPLICABLE.

- 1.2 CONCRETE
- 1.2.1 ALL CONCRETE SHALL BE 3,000 PSI MINIMUM
- 1.2.2 CONCRETE SHALL CONFORM TO ASTM C94 FOR:
 - 1.2.2.1 PORTLAND CEMENT, TYPE 1 ASTM C150
 - 1.2.2.2 3/4" AGGREGATE MAXIMUM ASTM C33
 - 1.2.2.3 AIR ENTRAINMENT, +/- 1% ASTM C260
 - 1.2.2.4 WATER REDUCING AGENT ASTM C494
 - 1.2.2.5 CLEAN POTABLE WATER
 - 1.2.2.6 OTHER ADMIXTURE SHALL NOT BE PERMITTED
 - 1.2.3 ALL SLABS ON GRADE SHALL BE 4" THICK MINIMUM
- 1.3 REINFORCEMENT
 - 1.3.1 FIBERMESH (3/4" PER CUBIC YARD) MAY BE USED IN LIEU OF WELDED WIRE MESH IF APPROPRIATE ACI AND ASTM REQUIREMENTS ARE MET.
 - 1.3.2 METAL WELDED WIRE MESH (WWM) SHALL CONFORM TO ASTM A185.
 - 1.4 PREPARE AND PLACE CONCRETE IN ACCORDANCE WITH ACI MANUAL STANDARD PRACTICE PARTS 1, 2 & 3 ALONG WITH HOT WEATHER STANDARD PRACTICES RECOMMENDATIONS.
 - 1.5 IF UTILIZING AN EXISTING SLAB / FOOTING, CONCRETE SLAB SHALL BE A MINIMUM OF 4" THICK AND VISIBLY FREE OF DETERIORATION, SPALLING OR EXCESSIVE CRACKING. CONTRACTOR TO VERIFY THAT EXISTING FOOTING IS A MINIMUM OF 12" WIDE AND 8" DEEP BELOW EXISTING SLAB OR 12"X12" STRIP FOOTING.

2.0 ALUMINUM

- 2.1 ALL STRUCTURES SHALL BE 6005 T5 ALLOY MINIMUM (U.N.O)
- 2.2 STRUCTURAL ALUMINUM DESIGN SHALL CONFORM TO "PART 1-A SPECIFICATIONS FOR ALUMINUM STRUCTURES - ALLOWABLE STRESS DESIGN" OR "PART 1-B - SPECIFICATIONS FOR ALUMINUM STRUCTURES - BUILDING LOAD AND RESISTANCE FACTOR DESIGN" OF THE LATEST ALUMINUM DESIGN MANUAL.
- 2.3 PROVIDE DIELECTRIC SEPARATION WHERE ALUMINUM COMES IN CONTACT WITH STEEL OR PRESSURE TREATED LUMBER.
- 2.4 ACTUAL WALL THICKNESS OF EXTRUDED ALUMINUM MEMBERS SHALL NOT BE LESS THAN 0.040".
- 2.5 SELF-MATING BEAM SECTIONS TO BE STITCHED WITH #12 SMS SPACED AT 6" ON-CENTER FROM THE END AND 24" ON-CENTER THROUGHOUT THE REMAINDER.
- 2.6 MINIMUM THICKNESS FOR FORMED SHEET ALUMINUM STRUCTURAL WALL PANELS (KICK-PLATES) SHALL BE 0.024".
- 2.7 TYPICAL MESH SCREEN USED SHALL BE 18x14x0.013". THE ENGINEER OF RECORD SHALL BE NOTIFIED IN THE EVENT OF DIFFERENT SCREEN MESH USED.
- 2.8 ROOF BRACING SHALL BE A MINIMUM OD 2"x2"x0.050".
- 2.9 DOOR LOCATIONS MAY BE DETERMINED IN THE FIELD BY CONTRACTOR.
- 2.10 FOR PICTURE WINDOW MODIFICATIONS TO EXISTING SCREEN ENCLOSURES, THE CONTRACTOR SHALL VERIFY THE EXISTING SCREEN ENCLOSURE IS IN STRUCTURALLY SOUND CONDITION AND
- MEETS THE REQUIREMENTS OF THE DETAILS WITHIN THESE PLANS. 2.11 IF ENCLOSURE CONTAINS A SWIMMING POOL OR SPA, THE ENCLOSURE SHALL MEET THE FLORIDA BUILDING CODE, RESIDENTIAL SECTION R4501.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENTS IN ITS ENTIRETY.
- 2.12 SCREEN ROOM ALUMINUM ROOF SECTIONS (COMPOSITE OR PAN) SHALL BE SELECTED/DESIGNED FOR THE WIND PRESSURE STATED WITHIN THE WIND LOADS SECTIONS OF THE GENERAL NOTES. THE SELECTION OF THESE ROOF SECTIONS WAS BASED ON THE SPAN TABLES PUBLISHED AND CERTIFIED BY INDEPENDENT FLORIDA LICENSED ENGINEERS WITH THE UP-TO-DATE N.O.A.

3.0 FASTENERS

- 3.1 ALL FASTENERS SHALL COMPLY WITH ASTM A153.
- 3.2 ALL CONCRETE SCREWS SHALL BE TAPCON, SIMPSON, HILTI, REDHEAD OR APPROVED EQUAL
- 3.3 ALL LAG BOLTS SHALL HAVE A MINIMUM EMBED OF 8 TIMES BOLT DIAMETER INTO STRUCTURE FRAMING.
- 3.4 USE STAINLESS STEEL TYPE 300 18-8 FOR FASTENERS CONNECTING ALUMINUM COMPONENTS TO PRESSURE TREATED LUMBER, UNLESS OTHERWISE NOTED ON PLANS OR MANUFACTURER OF GALVANIZED BOLTS SPECIFIES FOR USE WITH PRESSURE TREATED WOOD.
- 3.5 THE MINIMUM CENTER TO CENTER SPACING FOR SMS SHALL BE 3/4" AND THE MINIMUM CENTER TO EDGE SPACING SHALL BE 1/2" UNLESS OTHERWISE NOTED.
- 3.6 FOR 1x2 MEMBERS TO MASONRY/CONCRETE, USE GALVANIZED 1/4"x2-3/4" TAPCONS OR SIMILAR AT 18" O.C. (TYP.)
- 3.7 FOR 1x2 MEMBERS TO WOOD FRAME, USE #14x2-3/4" WOOD SCREWS AT 18" O.C. (TYP.)
- 3.8 FOR 1x2 MEMBERS TO ALUMINUM, USE #10x1-1/2" SMS OR TEK SCREWS AT 18" O.C. (TYP.)
- 3.9 FOR 1x2 MEMBERS INSTALLED THROUGHOUT AN "OPEN VIEW" OR "PICTURE WINDOW" ASSEMBLY, THE FASTENER SPACING SHALL BE REDUCED TO 12" O.C. MAXIMUM.

ALUMINUM EXTRUSION DIMENSIONS (RAILING							
SNAP SECTIONS							
2 x 2	2" x 2" x 0.045"						
2 x 3		2" x 3" x 0.050"					
2 x 4		2" x 4" x 0.045"					
SNAP P	PLATE:	HR-2 1.795x0.050					
CHANNELS:		1.5"x2.125"x1.5"x0.0					
		2"x3.125"x2"x0.045"					
PICKET	TS:	1" TUBULAR/HOLLO					
TOP CA	NPS:	HR-1 2.5x1.625x0.05					
		HR-14 1.964x1.482x0					
BOTTO	M CHANNEL:	1"x1.5"x0.050"					
POST C	POST CHANNEL: 1.5"x1.5"x0.050"						
2 x 3 2" x 3" x 0.050" 2 x 4 2" x 4" x 0.045" SNAP PLATE: HR-2 1.795x0.050 CHANNELS: 1.5"x2.125"x1.5"x0.045" 2"x3.125"x2"x0.045" 2"x3.125"x2"x0.045" PICKETTS: 1" TUBULAR/HOLLO TOP CAPS: HR-1 2.5x1.625x0.05" HR-14 1.964x1.482x0 BOTTOM CHANNEL: 1"x1.5"x0.050" POST CHANNEL: 1.5"x1.5"x0.050"							

ALUMINUM EXTRUSION DIMENSIONS						
HOLLOW SECTIONS						
2 x 2 2" x 2" x 0.050"						
2 x 3	2" x 3" x 0.050"					
2 x 4	2" x 4" x 0.050"					
2 x 5	2" x 5" x 0.050"					
OPEN-BACK SECTIONS						
1 x 2	1" x 2" x 0.044"					
1 x 3	1" x 3" x 0.045"					
SNAP S	ECTIONS					
2 x 2	2" x 2" x 0.045"					
2 x 3	2" x 3" x 0.050"					
2 x 4	2" x 4" x 0.045"					
SELF-MATING SECTIONS (SMB)						
2 x 4	2" x 4" x 0.044" x 0.100"					
2 x 5	2" x 5" x 0.050" x 0.118"					
2 x 6	2" x 6" x 0.050" x 0.120"					
2 x 7	2" x 7" x 0.057" x 0.120"					
2 x 8	2" x 8" x 0.072" x 0.224"					
2 x 9	2" x 9" x 0.082" x 0.224"					
2 x 10	2" x 10" x 0.092" x 0.374"					
TUBES						
4 x 8	4" x 8" x 0.125" x 0.219"					
4 x 9	4" x 9" x 0.100" x 0.220"					

		ВΥ:				
	REVISIONS	DATE: REVISION:				
5" <u>Nx0.050"</u> 0.050		SOUTH SUN	ENGINEERING, INC.	Engineering, Design & Consulting	223 Taylor St., Suite 121, Punta Gorda, FL 33950 p: [(941) 456-7535 e:] admin@southsunengineering.com f: [(941) 456-7537 w:] www.southsunengineering.com	
	LONDON BAY	HOMES PROPERIY	16745 CABREO DR	NAPLES, FL 34110	PLANS PREPARED FOR: LIBERTY ALUMINUM	
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STATE OF 44	IT IS THE OPINION OF THE ENGINEER THAT THE DESIGN CONTAINED WITHIN THESE THANS AND SPECIFICATIONS WAN DEVELOPED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 7TH EDITION. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE STRUCTURAL PORTION OF THESE PLANS ONLY.					
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY ROBERT S. WELSH, JR, P.E. USING A CA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE CA-1 AUTHENTICATION CODE MUST BE VERIFIED ON	F	ROBE	RT S.	WELS	SH JR., P.E.	
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SCALE = 1/8" = 1' - 0"

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ROBERT S. WELSH JR., P.E.						
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		BY:				
D44 RECEIVING CHANNEL PER PLAN ASTEN CHANNEL TO SIDE OF BEAM W/(4)#12X5/8" SMS INTERNAL)-FASTEN PURLIN TO CHANNEL W/#12X5/8" SMS 2) EACH SIDE.	REVISIONS	ATE: REVISION:				
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N	j.	SOUTH SUN	ENGINEERING, INC.	Engineering, Design & Consulting	223 Taylor St., Suite 121, Punta Gorda, FL 33950 p: [(941) 456-7535 e:] admin@southsunengineering.com f:] (941) 456-7537 w:] www.southsunengineering.com	
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