GOLDEN ENGINEERED 8 POST, 4 MOTOR LIFTS

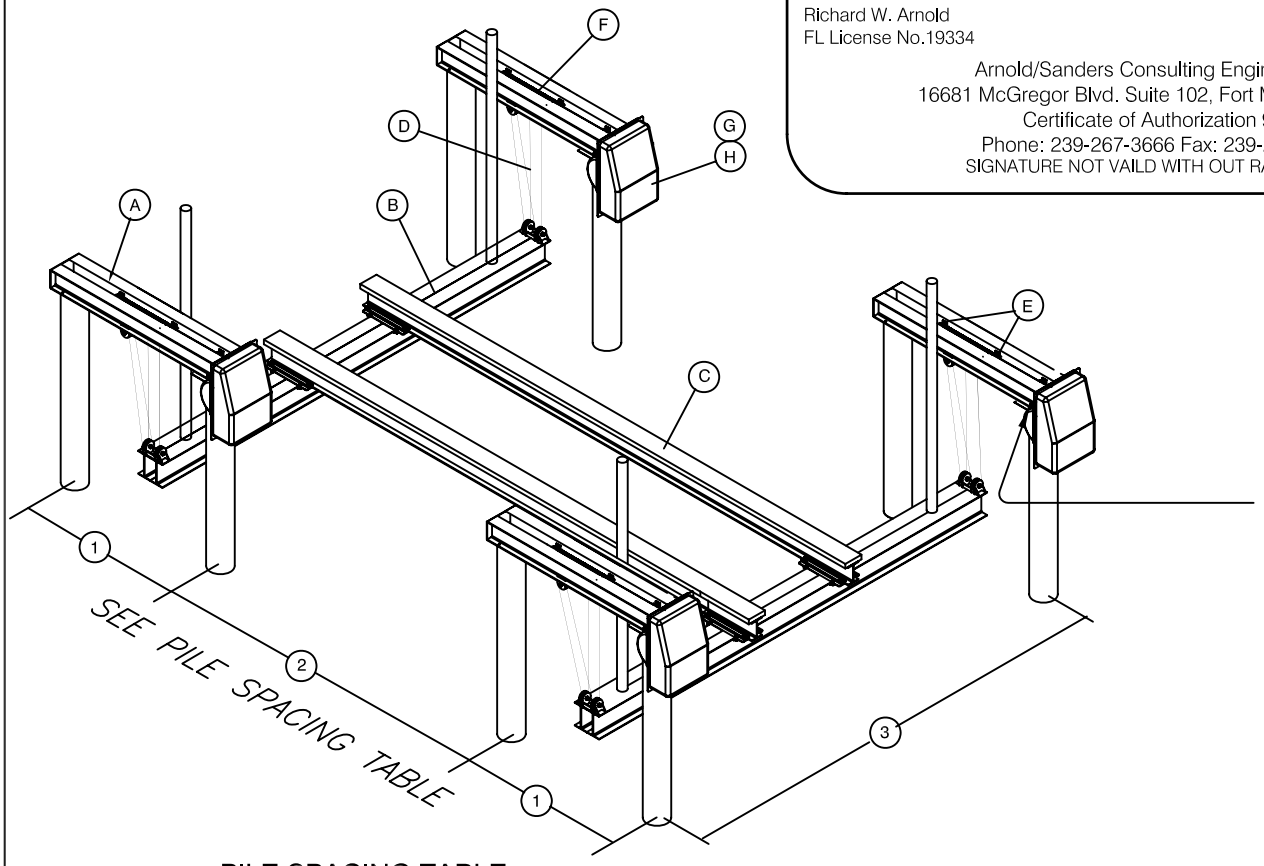
STRUCTURAL ENGINEERING REVIEW

THE GRAVITY AND WIND LOADS FOR THIS CONSTRUCTION HAVE BEEN CALCULATED AS MAIN WIND FORCE RESISTING SYSTEM AND COMPONENTS AND CLADDING IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2004, SECT. 1609 FOR WIND PRESSURES GENERATED BY A BASIC WIND SPEED OF 150 MPH.

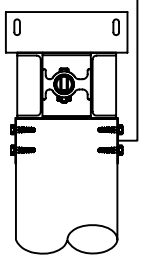
Richard W. Arnold
FL License No.19334

Date

Arnold/Sanders Consulting Engineers, Inc.
16681 McGregor Blvd. Suite 102, Fort Myers, FL 33908
Certificate of Authorization 9451
Phone: 239-267-3666 Fax: 239-267-2771
SIGNATURE NOT VAILD WITH OUT RAISED SEAL



STAINLESS STEEL PILING MOUNT BRACKET 4-3/8" STAINLESS STEEL LAG SCREWS USED TO CONNECT THE BRACKETS TO THE PILING AND 2-3/8" CARRIAGE BOLTS USED TO CONNECT THE BRACKETS TO THE LIFT CHANNELS



PILE SPACING TABLE

LIFT CAPACITY	1	2	3	RECOMMENDED PILE SIZES
32,000# 40,000#	72"	MIN. 72" MAX. 144"	192" 216"	10"
60,000# 80,000#			240" 240"	12"

NOTE: THIS STRUCTURE WILL WITHSTAND LOADS ASSOCIATED WITH WIND SPEEDS OF 150 MPH CALCULATED PER F.B.C. (04 ED) CH 16 & ASCE DOCUMENT 7-02 BOATS SHALL NOT BE STORED ON LIFTS DURING HIGH WIND EVENTS

IN GENERAL PILING PENETRATION TO BE 10' INTO THE SAND BOTTOM OR 5' INTO THE ROCK STRATA.
SUBSURFACE CONDITIONS CAN VARY GREATLY, THE CONTRACTOR SHALL VERIFY ALL PILE CAPACITIES.
ALL PILINGS TO BE 2.5 C.C.A. TREATED.

LIFT CAPACITY		TOP BEAM (A)		CRADLE I-BEAM (B)		BUNK BOARDS (C)		CABLE SIZE (D)		BRGS (E)	WINDER (F)		GEAR RATIO (G)	MOTOR HP (H)	RECOMMENDED PILING SIZES	
Lb	Kg	Inches	Mm	Inches	Mm	Inches	Mm	Inches	Mm		Inches	Mm			Inches	Mm
32,000	14,528	2 Each 8 H x .19 3 W x .35 Chan 6' O.C.	2 Each 203H x 4.8 76.2W x 7.4 Ch 1.8m O.C.	2 Double 10 H x .25 6 W x .41 192" Long	2 Double 254H x 6.4 152.4Wx10.44 x 4.9M	I-Beam 5 x 8 x .25 x 25' Long w/Carpeted Top	I-Beam 127x203 x 6.4 x 7.6M w/Carpeted Top	4-4 Part 5/16 St Steel Cables	4-4 Part 7.9 mm St Steel Cables	8 - Solid 6061-T6 Alum Brgs	4-3"Dia Grooved Alum Winders	4-76mm Dia Grooved Alum Winders	400 to 1	4 - 1 hp	10" Dia Wood or Concrete Pilings	254 mm Dia Wood or Concrete Pilings
40,000	18,160	2 Each 8 H x .25 3¾ W x .41 Ch 6' O.C.	2 Each 203H x 6.4 95.3W x 10.4 Ch 1.8m O.C.	2 Double 10 H x .29 6 W x .50 216" Long	2 Double 254H x 7.4 152.4Wx12.74 x 5.5M			4-4 Part 3/8 St Steel Cables	4-4 Part 9.5 mm St Steel Cables							
60,000	27,240	2 Each 8 H x .25 5 W x .41 i-Bm 6' O.C.	2 Each 203H x 6.4 127W x 10.4 I-Bm 1.8m O.C.	2 Double 12 H x .31 7 W x .62 240" Long	2 Double 304.8H x 9.9 178Wx15.7 x 6M	I-Beam 5 x 8 x .25 x 25' Long w/Carpet Top	I-Beam 127x203 x6.4x7.6M w/Carpet Top	4-4 Part 7/16 St Steel Cables	4-4 Part 11 mm St Steel Cables	8 - Solid Nylon Bushings	8-6"Dia Grooved Alum Winders	8-152.4mm Dia Grooved Alum Winders	500 to 1	4- 1 ½ HP	12" Dia Wood or Concrete Pilings	305 mm Dia Wood or Concrete Pilings
80,000	36,320	2 Each 10 H x .25 6 W x .41 i-Bm 6' O.C.	2 Each 254H x 6.4 152.4Wx10.4 I-Bm 1.8m O.C.	4 Double 12 H x .29 7 W x .47 240" Long	4 Double 304.8H x 7.4 178Wx12 x 6M	Custom		8-4 Part 3/8 St Steel Cables	8-4 Part 9.5 mm St Steel Cables							