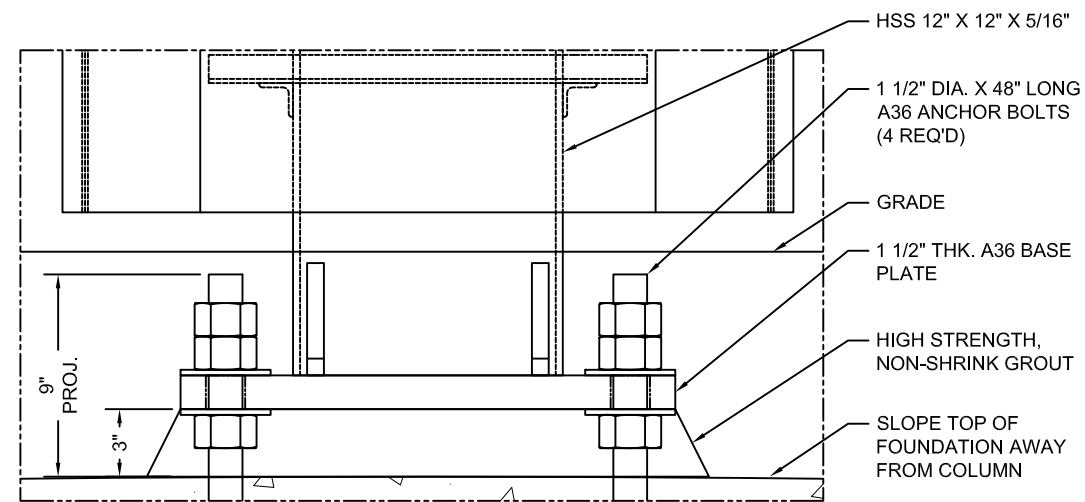
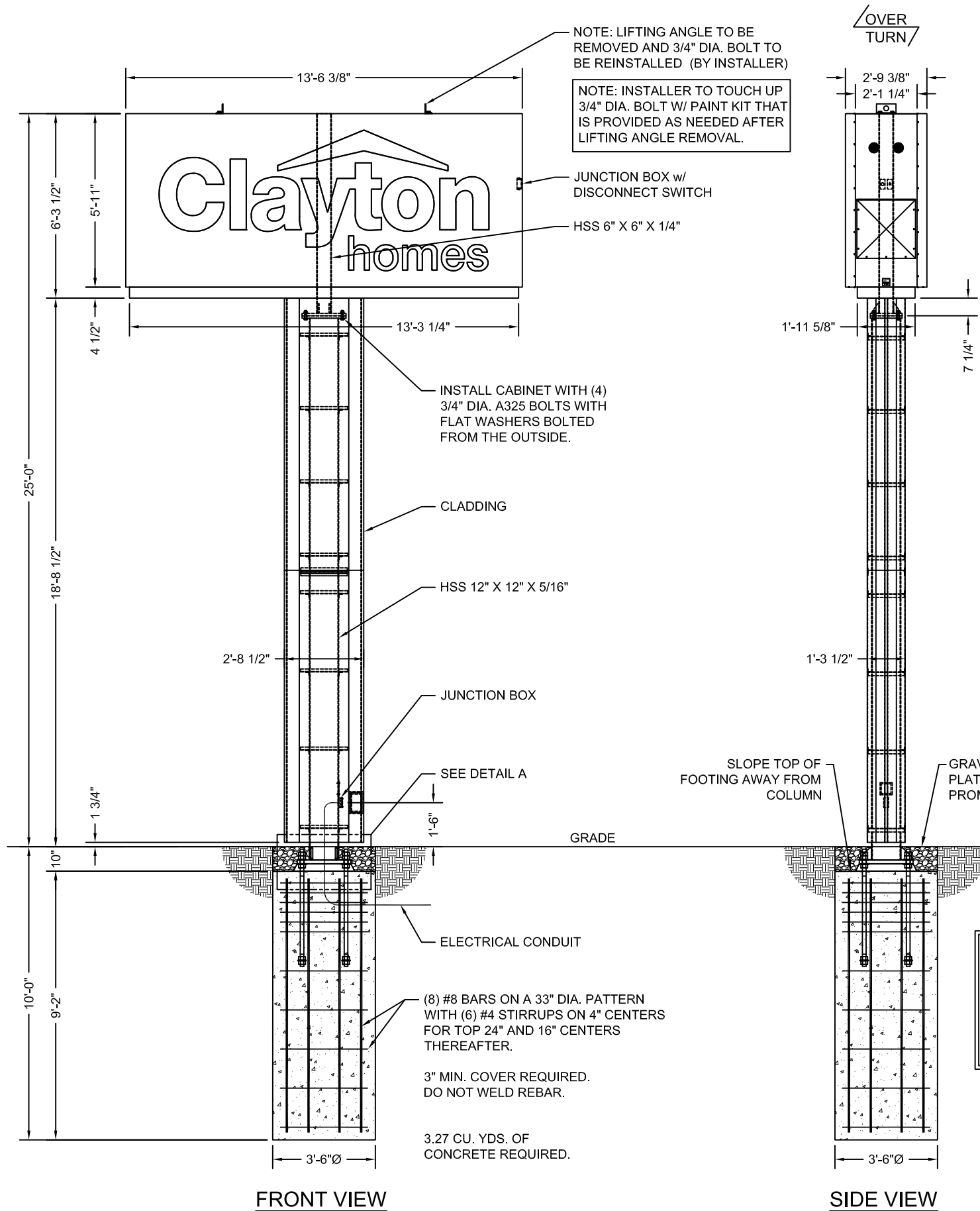
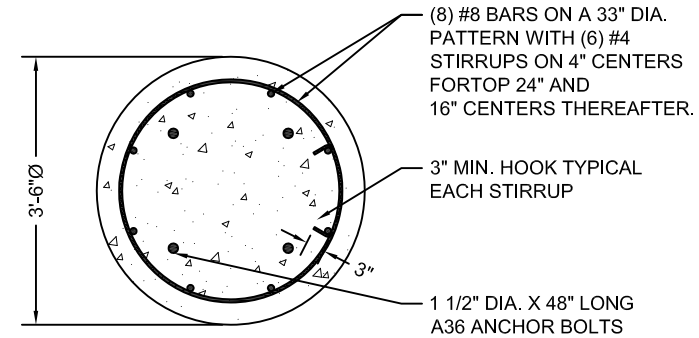
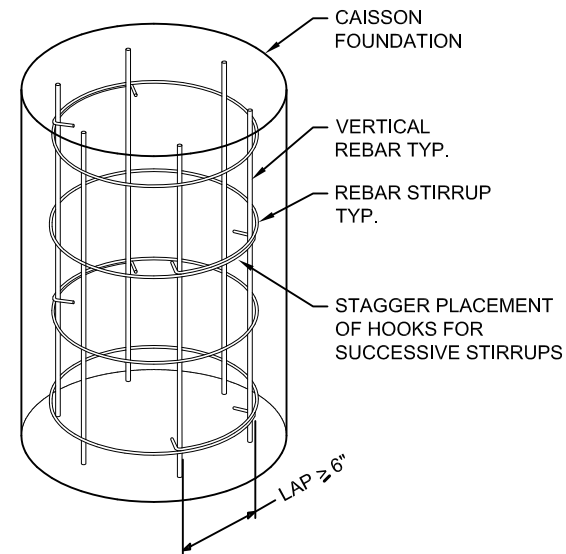




DETAIL A



SECTION @ CAISSON



STIRRUP ILLUSTRATION - N.T.S.

INSTALLATION ADDRESS:

CLAYTON HOMES
4068 WEST US HIGHWAY 90
LAKE CITY, FL 32055

CLIENT:

THE InSite Group

410 Cedar Bluff Rd, Ste 201 Knoxville, Tennessee 37923
Voice: 865.342.8200 • Fax: 865.539.6311

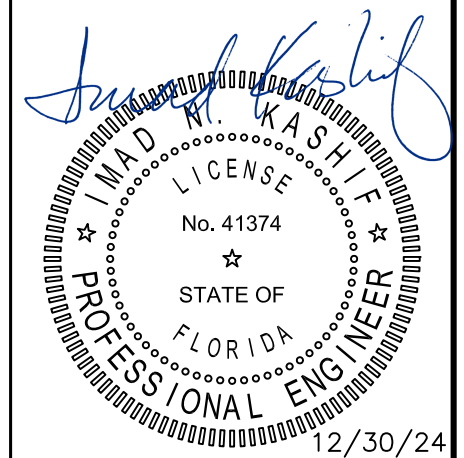
REV	DATE	DESCRIPTION
1	-/-/-	-----
2	-/-/-	-----

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IMAD N. KASHIF, P.E.
FLORIDA STATE LICENSE NO.: 41374

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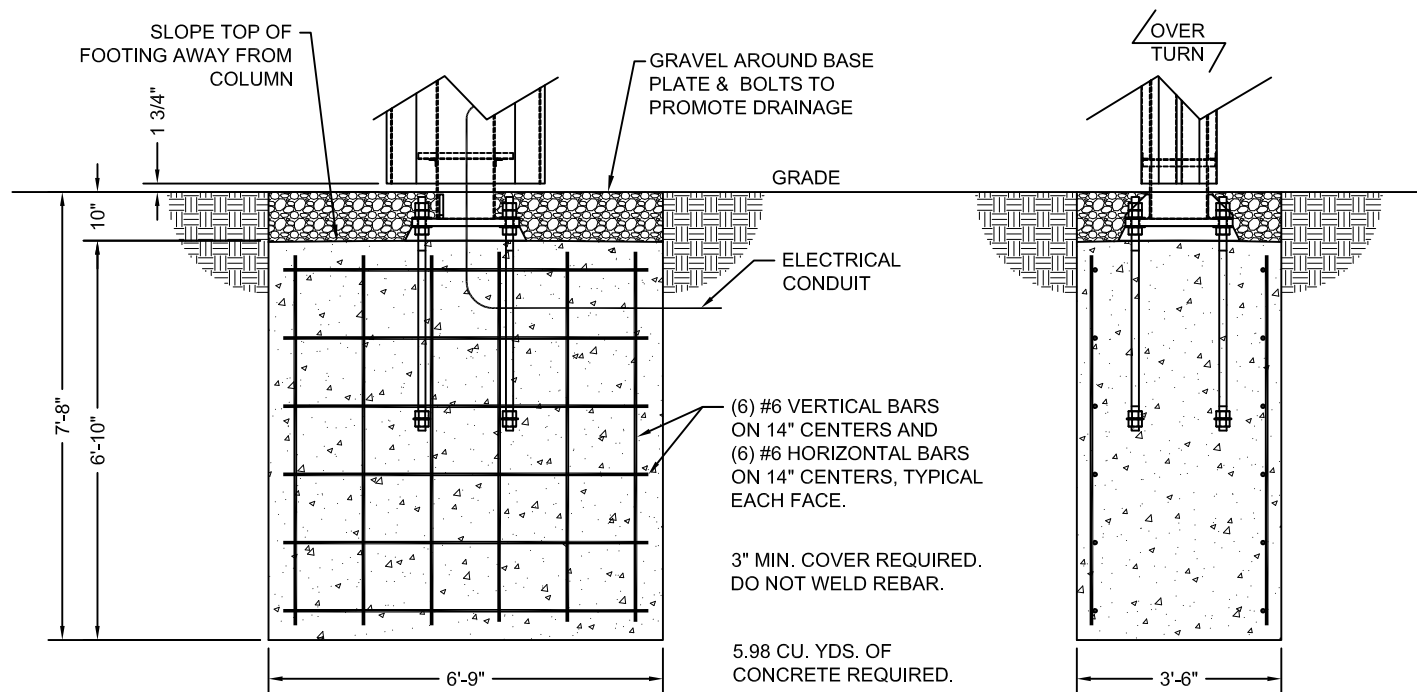


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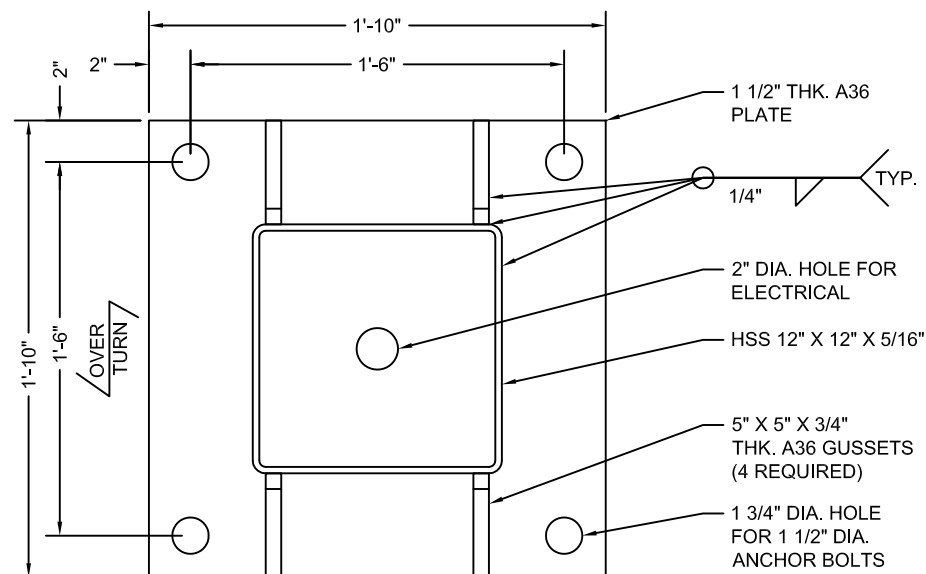
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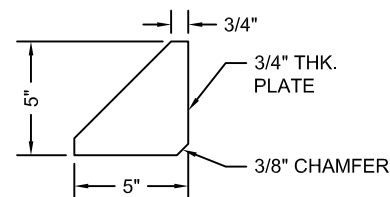
Project Number:		Drawing Number:	
24-0788		B1014073	
SHT.	OF	DATE:	BY:
1	3	12/30/24	SR



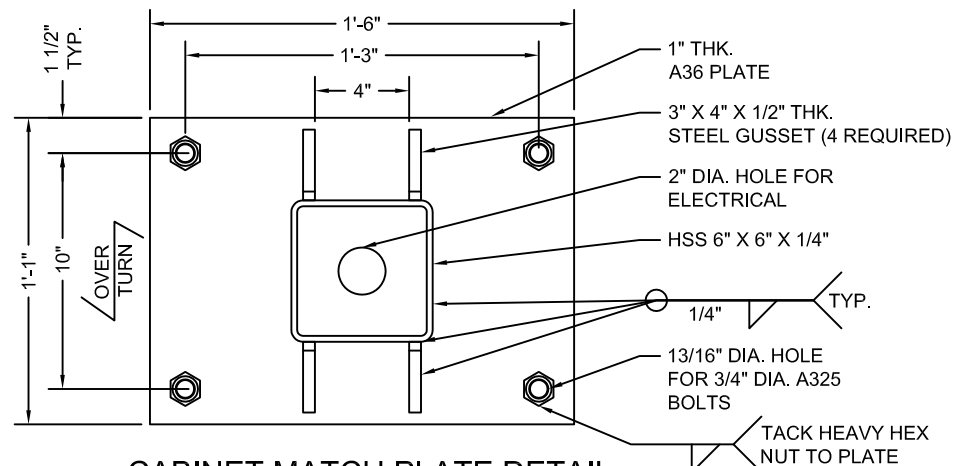
OPTIONAL VERTICAL SLAB FOUNDATION



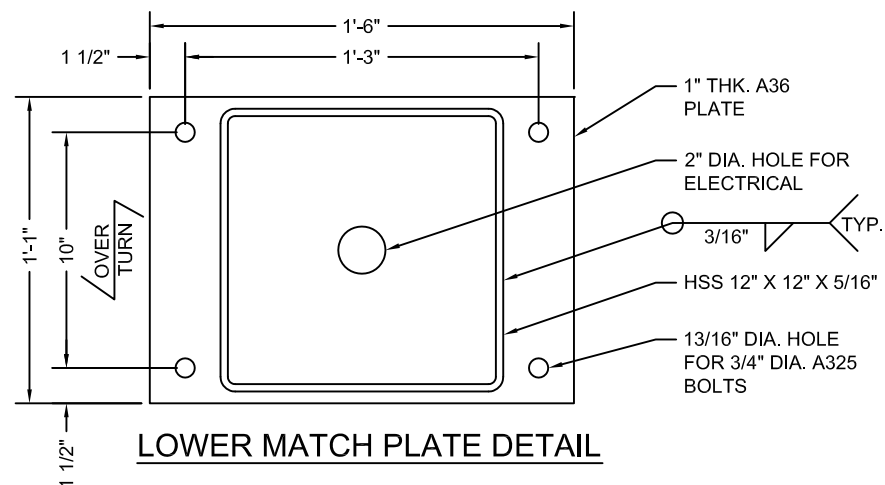
BASE PLATE DETAIL



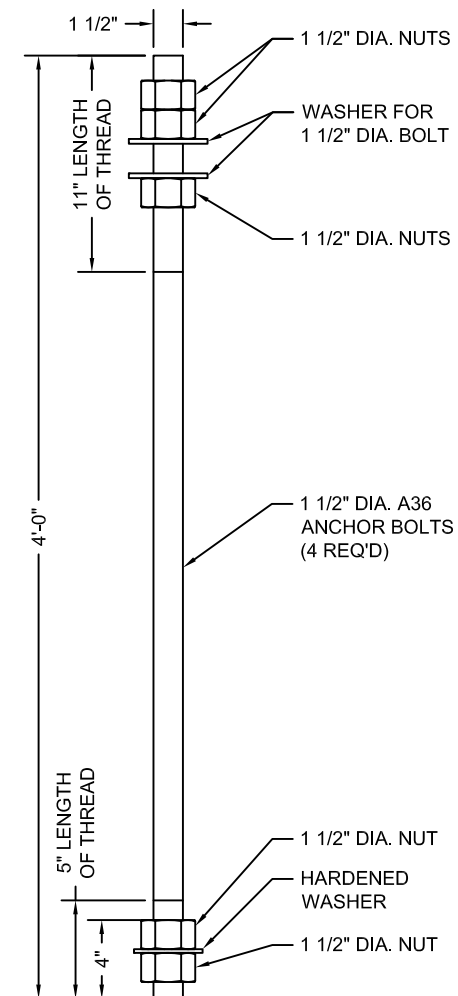
BASE PLATE GUSSET DETAIL



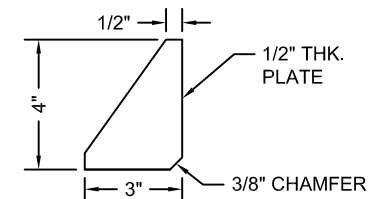
CABINET MATCH PLATE DETAIL



LOWER MATCH PLATE DETAIL



ANCHOR BOLT DETAIL



MATCH PLATE GUSSET DETAIL

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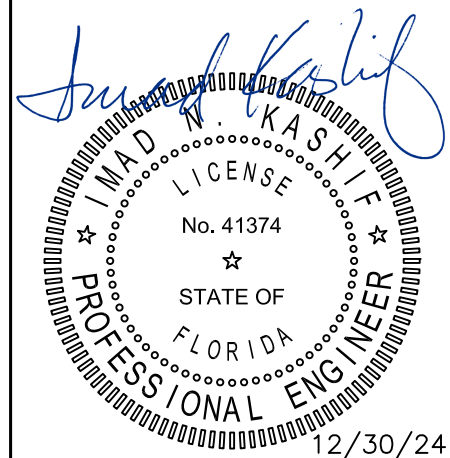
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Project Number: 24-0788		Drawing Number: B1014073	
SHT. 2	OF 3	DATE: 12/30/24	BY: SR

		PROJECT #	24-0788		OWNER:	CLAYTON HOMES			
		December 19, 2024				4068 WEST US HIGHWAY 90			
		DRAWING #	B1014073			LAKE CITY, FL 32055			
		WIND LOAD	28.13	PSF					
		WIND SPEED	120	MPH	CLIENT:	THE INSITE GROUP			
		# COLUMNS	1	FBC 8TH ED (2023)		410 CEDAR BLUFF ROAD, SUITE 201			
		DESIGNER	SR			KNOXVILLE, TN			
				SHAPE	CENTROID		TOTAL		
		ITEM	HEIGHT	WIDTH	FACTOR	HEIGHT	AREA	FORCE	MOMENT
		=====	=====	=====	=====	=====	=====	=====	=====
		CABINET	6.292	13.531	1.000	3.146	85.134	2.395	7.535
		CLADDING	0.604	2.708	1.000	0.302	1.636	2.441	8.996
		CLADDING	18.104	2.708	1.000	9.052	49.032	3.821	65.679
		SUBGRADE	0.833			0.417	0.000	3.821	68.863
		OA#	25.000						
		COLUMN CALCULATIONS		(CODES P=PIPE;O=OTHER;T=TUBE)					
					DESIGN			AVAILABLE	
		COLUMN	COLUMN	COLUMN	lxx	MODULUS	REQUIRED	FLEXURAL	
		WIDTH	DEPTH	WALL	COLUMN	COLUMN	MOMENT	STRENGTH	UNITY
		=====	=====	=====	=====	=====	=====	=====	=====
T		CABINET	6.000	6.000	0.233	28.6	11.22	7.535	0.425
T		CLADDING	6.000	6.000	0.233	28.6	11.22	8.996	0.483
T		CLADDING	12.000	12.000	0.291	292.0	48.66	65.679	0.588
T		SUBGRADE	12.000	12.000	0.291	292.0	48.66	68.863	0.617
		BOLT CALCULATIONS		*****					
			BOLT	BOLTS/	TENSION/	BOLT	ALLOW.	ALLOWABLE	
		ITEM	MOMENT	SPACING	PLATE	BOLT	STRESS	TENSION	
		=====	=====	=====	=====	=====	=====	=====	
		CLADDING	8.996	10.000	4.000	5.397	0.750	45.000	19.880
		BASE PL.	68.863	18.000	4.000	22.954	1.500	19.100	33.752
		PLATE CALCULATIONS		*****					
		ITEM	TENSION/	MOMENT	MOMENT	PLATE	PLATE	PLATE	MINIMUM
			BOLT	ARM	PLATE	WIDTH	DEPTH	THICK.	THICK.
		CLADDING	5.397	5.063	27.325	7.250	13.000	1.000	0.915
		BASE PL.	22.954	3.625	83.209	11.000	22.000	1.500	1.297
		ANCHOR BOLT PROJECTION	ANCHOR EMBEDMENT		ANCHOR BOLT MIN. LENGTH				
		9.000		30.444			40.000		

VERTICAL SLAB									
MOMENT							68.863	FT-KIP	
FORCE							3.821	KIP	
REFERENCE IBC 1807.3.2 & TABLE 1806.2									
ASSUME SOIL CLASS #4 SW, SP, SM, SC, GM & GC									
LATERAL BEARING PRESSURE - PSF/FT OF DEPTH							150.0	PSF/FT	
S1							683.3		
SLAB DEPTH (d)							6.833	FT.	
SLAB WIDTH (b)							6.750	FT.	
SLAB THICKNESS							3.500	FT.	
AVERAGE HEIGHT (h)							18.024	FT.	
A = 2.34*FORCE/(S1*b)							1.721		
CALCULATED DEPTH							6.738	FT.	
MINIMUM THICKNESS WITHOUT REBAR							23.457	IN.	
SQRT(M*12*6*1.7*.75/(.178*12*WIDTH))									
ACTUAL THICKNESS							42.000	IN.	
CONCRETE							5.979	CU. YD.	
CAISSON									
MOMENT							68.863	FT-KIP	
FORCE							3.821	KIP	
REFERENCE IBC 1807.3.2 & TABLE 1806.2									
ASSUME SOIL CLASS #4 SW, SP, SM, SC, GM & GC									
LATERAL BEARING PRESSURE - PSF/FT OF DEPTH							150.0	PSF/FT	
S1							916.7		
DEPTH							9.167	FT.	
DIAMETER							3.500	FT.	
							18.024	FT.	
							2.787	FT.	
CALCULATED DEPTH							8.922	FT.	
MINIMUM THICKNESS WITHOUT REINFORCEMENT							44.376	IN.	
ACTUAL DIAMETER							42.000	IN.	
CONCRETE							3.267	CU. YD.	

General Notes:

- Design is based on a 120 mph, 3 second gust wind design per Florida Building Code, 8th Edition (2023). Category II, Exposure C.
- Caisson and Vertical Slab foundations are based on a presumptive safe lateral soil bearing pressure minimum of 150 psf per foot of depth. Isolated lateral bearing footings subject to short-term lateral loads and not adversely affected by a 1/2" motion at grade are permitted to be designed using twice the tabulated value of the corresponding soil class.
- A soil report was not provided. Foundation analysis assumes Soil Classification 4. Allowable bearing pressure should be verified prior to placement of concrete. In the event that the stated requirements are not met and conditions appear deleterious, cease and secure excavation and immediately contact THE INSITE GROUP.
- Foundation shall not be placed at the top of, or on the side of a slope exceeding 3:1, or adjacent to a fill slope unless re-evaluated by a competent Professional Engineer. Do not place foundation in fill.
- Concrete shall be mixed to attain a minimum 28 day compressive strength of 3000 psi.
- Steel reinforcing bars shall conform to ASTM A615, Grade 60 with deformations in accordance with ASTM A305. Welding of reinforcing bars is prohibited.
- All voids between column base plate and foundation surface shall be completely filled with high-strength, non-shrink grout.
- Anchor bolts shall meet ASTM F1554 Grade 36. Exposed surfaces shall be galvanized or coated to prevent corrosion.
- All support members shall be free from defects. Steel tube shall meet ASTM A500 Grade B with a minimum yield strength of 46000 psi. Steel angle, channel and plate shall meet ASTM A36.
- Steel welds shall be made with E70xx low hydrogen electrodes by persons qualified in accordance with AWS standards within the past two years.
- All structural bolts shall conform to ASTM A325, and be zinc coated unless noted otherwise. When used with structural bolts, heavy hex nuts shall conform to ASTM A563, and washers shall conform to ASTM F436. Pretension all high strength bolts using the Turn-of-Nut method unless noted otherwise.
- The scope of this engineer does not include onsite observations.
- LINK Engineering will not be responsible for the safety on this job site before, during or after installation of this structure. It is the responsibility of the owners, contractors and installers to ensure that the installation and erection of this structure is performed using methods that are in full compliance with OSHA regulations.
- Any deviation from this design or from any part of this drawing, including the General Notes, without prior written consent from LINK Engineering voids this drawing in its entirety.
- The structure designed on this drawing is intended to be installed at the address shown and should not be used at any other location.

INSTALLATION ADDRESS:

CLAYTON HOMES
4068 WEST US HIGHWAY 90
LAKE CITY, FL 32055

CLIENT:

THE InSiteGroup

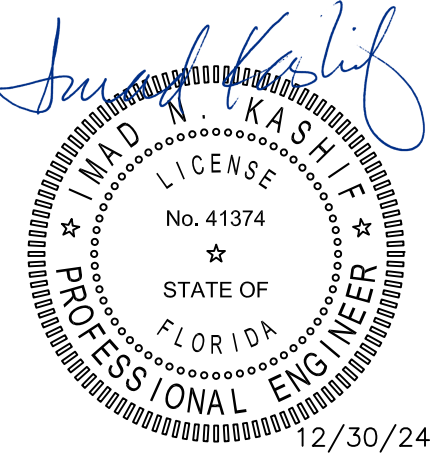
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B	-/-/-	-----

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Project Number: 24-0788		Drawing Number: B1014073	
SHT. 3	OF 3	DATE: 12/30/24	BY: SR