

Columbia County Remodel Permit Application

\$141.50

For Office Use Only Application # 44286 Date Received 1/6/20 By MG Permit # 39155
 Zoning Official 111 Date 1/7/20 Flood Zone X Land Use Ag Zoning A-3
 FEMA Map # _____ Elevation _____ MFE _____ River _____ Plans Examiner T.C. Date 1-15-20
 Comments _____
☐ NOC ☒ Deed or PA ☐ Dev Permit # _____ ☐ In Floodway ☐ Letter of Auth. from Contractor
☐ F W Comp. letter ☐ Owner Builder Disclosure Statement ☐ Land Owner Affidavit ☐ Ellisville Water ☐ App Fee Paid
☒ Site Plan ☐ Env. Health Approval _____ ☐ Sub VF Form _____

Applicant (Who will sign/pickup the permit) Justin Damsky ⁰²⁷⁰ Fax _____ Phone 386-454-1920
 Address 24526 NW 178th Pl. High Springs, FL 32643
 Owners Name Michael Moran Phone 352-504-5472
 911 Address 989 SW High Field Terr. Lake City, FL 32024
 Contractors Name Matthew Miller/Ram Jack Solid Foundations Phone 386-454-1920
 Address 24526 NW 178th Pl. High Springs, FL 32643
 Contractor Email permitting@ramjackfl.com ***Include to get updates on this job.
 Fee Simple Owner Name & Address _____

Bonding Co. Name & Address _____
 Architect/Engineer Name & Address Michael Driscoll P.O. Box 357577 Gainesville, FL 32635
 Mortgage Lenders Name & Address _____

Circle the correct power company ☐ FL Power & Light ☐ Clay Elec. ☐ Suwannee Valley Elec. ☐ Duke Energy

Property ID Number 01-65-16-03761-148 Estimated Construction Cost \$18,000
 Subdivision Name Meadowlands Lot 46-49 Block _____ Unit _____ Phase 3

Driving Directions from a Major Road Take US 441-South ! Right on Tuskenuggee Ave. Go 10 miles
Right on Meadowlands Dr. ! Right on SW High Field Terr.

Construction of Foundation Repair _____ Commercial OR ☒ Residential

Type of Structure (House; Mobile Home; Garage; Exxon) House

Use/Occupancy of the building now Single Family Is this changing No

If Yes, Explain, Proposed Use/Occupancy _____

Is the building Fire Sprinkled? _____ If Yes, blueprints included _____ Or Explain _____

Entrance Changes (Ingress/Egress) _____ If Yes, Explain _____

Zoning Applications applied for (Site & Development Plan, Special Exception, etc.) _____

Columbia County Building Permit Application

CODE: Florida Building Code 2017 6th Edition and the 2014 National Electrical Code.

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

TIME LIMITATIONS OF APPLICATION : An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless pursued in good faith or a permit has been issued.

TIME LIMITATIONS OF PERMITS: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO CONTRACTOR AND AGENT: **YOU ARE HEREBY NOTIFIED** as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. You must verify if your property is encumbered by any restrictions or face possible litigation and or fines.

Mike MORAN
Print Owners Name

[Signature]
Owners Signature

****Property owners must sign here before any permit will be issued.**

****If this is an Owner Builder Permit Application then, ONLY the owner can sign the building permit when it is issued.**

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

[Signature]
Contractor's Signature

Contractor's License Number CBC1255391
Columbia County
Competency Card Number 1307 ✓

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 6th day of January 2020.

Personally known _____ or Produced Identification _____

[Signature]
State of Florida Notary Signature (For the Contractor)

SEAL:



Gary Justin Dansby
NOTARY PUBLIC
STATE OF FLORIDA
Comm# GG193469
Expires 3/17/2022

Columbia County Property Appraiser

Jeff Hampton

2020 Working Values

updated: 11/27/2019

Parcel: << 01-6S-16-03761-148 >>

Owner & Property Info

Result: 3 of 6

Owner	MORAN MICHAEL & LAUREEN 989 SW HIGH FIELD TERR LAKE CITY, FL 32024		
Site	989 HIGHFIELD TER, LAKE CITY		
Description*	LOTS 46 THRU 49 MEADOWLANDS S/D PHASE 3. AG 1053-1811, WD 1111-902, 1111-903, QC 1187- 2623, QC 1230-430,		
Area	20 AC	S/T/R	01-6S-16E
Use Code**	SINGLE FAM (000100)	Tax District	3

*The Description above is not to be used as the Legal Description for this parcel in any legal transaction.

**The Use Code is a FL Dept. of Revenue (DOR) code and is not maintained by the Property Appraiser's office. Please contact your city or county Planning & Zoning office for specific zoning information.

Property & Assessment Values

2019 Certified Values		2020 Working Values	
Mkt Land (3)	\$83,774	Mkt Land (3)	\$83,774
Ag Land (0)	\$0	Ag Land (0)	\$0
Building (1)	\$216,438	Building (1)	\$217,741
XFOB (5)	\$21,556	XFOB (5)	\$21,556
Just	\$321,768	Just	\$323,071
Class	\$0	Class	\$0
Appraised	\$321,768	Appraised	\$323,071
SOH Cap [?]	\$19,424	SOH Cap [?]	\$11,657
Assessed	\$302,344	Assessed	\$311,414
Exempt	HX H3 \$50,000	Exempt	HX H3 \$50,000
Total Taxable	county:\$252,344 city:\$252,344 other:\$252,344 school:\$277,344	Total Taxable	county:\$261,414 city:\$261,414 other:\$261,414 school:\$286,414

Aerial View er Pictometry Google Maps

☒ 2019
 ☐ 2016
 ☐ 2013
 ☐ 2010
 ☐ 2007
 ☐ 2005
 ☒ Sales
**▼ Sales History**

Sale Date	Sale Price	Book/Page	Deed	V/I	Quality (Codes)	RCode
6/2/2011	\$100	1230/0430	QC	I	U	11
11/30/2010	\$30,000	1206/0750	WD	V	U	37
1/30/2010	\$30,000	1206/0749	WD	V	U	37
1/29/2010	\$100	1188/2144	QC	V	U	11
12/29/2009	\$100	1187/2623	QC	V	U	11
6/9/2009	\$100	1174/2310	CT	V	U	18
2/16/2007	\$100	1111/0902	WD	V	U	04
2/9/2007	\$65,000	1111/0903	WD	V	Q	
2/21/2005	\$44,000	1053/1822	AG	V	U	08
2/21/2005	\$45,000	1053/1811	WD	V	U	08

▼ Building Characteristics

Bldg Sketch	Bldg Item	Bldg Desc*	Year Blt	Base SF	Actual SF	Bldg Value
Sketch	1	SINGLE FAM (000100)	2011	2416	3748	\$217,741

AFTER RECORDING - RETURN TO:

PERMIT NUMBER: _____

NOTICE OF COMMENCEMENT

The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. DESCRIPTION OF PROPERTY (Legal description of the property & street address, if available) TAX FOLIO NO.: 01-65-16-03761-148

SUBDIVISION MEADOWLANDS BLOCK _____ TRACT _____ LOT 46-49 BLDG _____ UNIT _____

SEC-01 / TWP-65 / RANGE-16E

2. GENERAL DESCRIPTION OF IMPROVEMENT:

FOUNDATION REPAIR w/ HELICAL PIERS

3. OWNER INFORMATION OR LESSEE INFORMATION IF THE LESSEE CONTRACTED FOR THE IMPROVEMENT:

a. Name and address: MICHAEL MORAN / 989 SW HIGH FIELD TERRACE LAKE CITY, FL 32024

b. Interest in property: OWNER

c. Name and address of fee simple titleholder (if different from Owner listed above): _____

4. a. CONTRACTOR'S NAME: Florida Solid Foundations Inc. dba/ Ram Jack Solid Foundations

Contractor's address: 24526 Nw 178th Place, High Springs, FL 32643 b. Phone number: 386-454-1920

5. SURETY (if applicable, a copy of the payment bond is attached):

a. Name and address: _____

b. Phone number: _____

c. Amount of bond: \$ _____

6. a. LENDER'S NAME: N/A

Lender's address: _____

b. Phone number: _____

7. Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13 (1) (a) 7., Florida Statutes:

a. Name and address: _____

b. Phone numbers of designated persons: _____

8. a. In addition to himself or herself, Owner designates _____ of _____

to receive a copy of the Lienor's Notice as provided in Section 713.13 (1) (b) Florida Statutes.

b. Phone number of person or entity designated by Owner: _____

9. Expiration date of notice of commencement (the expiration date may not be before the completion of construction and final payment to the contractor, but will be 1 year from the date of recording unless a different date is specified): _____, 20____

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

Under penalty of perjury, I declare that I have read the foregoing notice of commencement and that the facts stated therein are true to the best of my knowledge and belief.

(Signature of Owner or Lessee, or Owner's or Lessee's Authorized Officer/Director/Partner/Manager)

(Print Name and Provide Signatory's Title/Office)

State of FLORIDA

County of COLUMBIA

The foregoing instrument was acknowledged before me this 16th day of DECEMBER, 2019

by MICHAEL MORAN, as _____, (name of person) (type of authority, ...e.g. officer, trustee, attorney in fact)

for _____ (name of party on behalf of whom instrument was executed)

Personally Known _____ or Produced Identification X Type of Identification Produced DRIVER'S LICENSE

Rev. 02-28-12



David Thomas Alvarez
NOTARY PUBLIC
STATE OF FLORIDA
Comm# GG365598
Expires 8/14/2023

(Signature of Notary Public)
(Print, Type, or Stamp Commissioned Name of Notary Public)



RAMJACK

PREPARED FOR:

Ram Jack Solid Foundations CBC1255391

24526 NW 178TH Place

High Springs, FL 32643

Office 386-454-1920

FOUNDATION PIERS

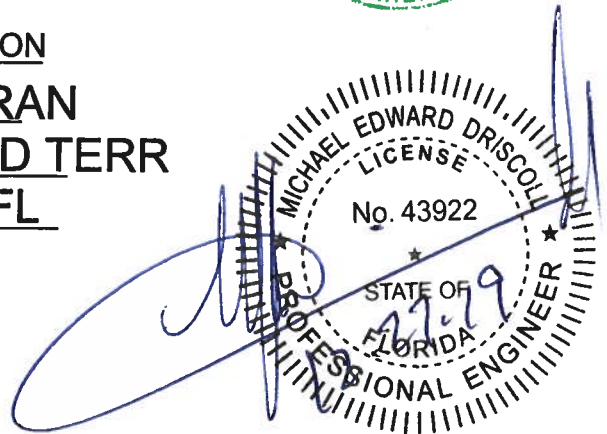
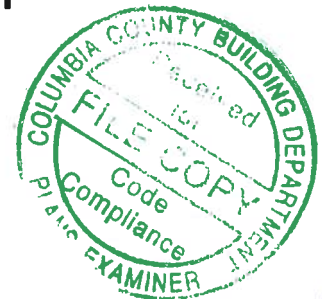
OWNER/ LOCATION

MICHAEL MORAN

989 SW HIGH FIELD TERR

LAKE CITY, FL

DF19-278



INDEX

SHEETS: 1 thru 3. HELICAL PILE DESIGN SUMMARY
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SHEET: 7..... HELICAL DRIVER TORQUE CHART FOR 7K DRIVER
SHEET: 8..... 2-7/8" HELICAL PILES AND ANCHORS
SHEET: 9..... RAMJACK 4037 PILE BARCKET
SHEET: 10..... PROFESSIONAL SERVICES



DRISCOLL ENGINEERING, INC.

CONSULTING ENGINEERS

PO Box 357577

GAINESVILLE, FL. 32635

PH (352) 331-1513

FX. (352) 505-3366

CA 8690

DATE: 12-27-19

**Michael E. Driscoll P.E.
FL Reg #43922**



HELICAL PILE ANALYSIS AND DESIGN

December 27, 2019

TO: Mr. Matt Miller
Ram Jack Solid Foundations
24526 NW 178th Pl
High Springs, Fl 32643-0730

RE: Michael Moran
989 SW High Field Terr
Lake City, Florida

Project. No. DF-19-278

Dear Mr. Miller:

Per our conversation, we understand that the above referenced project is a two story cmu & wood frame wall residence w/ monolithic slab on grade. The assumed footing size is 24"w x 12" d with 3 each #5 bars continuous at bottom. Please note that Engineer has not visited the site and the assumed footing configuration, dimensions & reinforcing must be verified by your on site personnel. If site conditions differ from those outlined in this design please contact us for revisions as required.

Based on the information provided to us this project involves exterior piers which underpin the exterior walls of the building areas selected by Ram Jack. As determined by these parameters & Ram Jack material specifications (attached) the project will require Ram Jack helical piers designed for a working load of 13.9 kips with a safety factor of 2 being applied. The uniform wall load to be resisted by the piles is calculated to be 1.25 klf.

We have requested that any available soils information for this project be provided to us. No soils information has been provided to us for review at this site. Therefore the upper soil stratum at this site is assumed to be firm in accordance with the Florida Building Code 6th edition 2017 (FBC) (N-value > 4). No lateral loading from the existing wall or foundation were provided.

The underpinning piles for this project are defined as laterally unbraced per the FBC. Per section 1810.2.1 of the FBC, "Piers standing unbraced, in air, water or fluid soils shall be designed as columns in accordance with the provisions of this code. Such piles driven into firm soils can be considered fixed and laterally supported at 5 feet below the ground surface and in soft material at 10 feet below the ground surface unless otherwise prescribed by the building official after a

foundation investigation by an approved agency". Based on the information provided, the piles were analyzed for an unbraced length of five (5'-0) feet. The allowable structural capacity of a 2 7/8" diameter pile and a 4037.18 bracket is 15.0 kips. The tables have been attached for your review.

There are two different methods for calculating the capacities for helical piles based on soil strength, Torque Correlation Method and the Individual Bearing Method. The Torque Correlation Method is an empirical method that distinguishes the relationship between helical pile capacity and installation torque and has been widely used since the 1960's. The process of a helical plate shearing through the soil in a circular motion is equivalent to a plate penetrometer test. The International Code Council Evaluation Service (ICC-ES) adopted the Torque Correlation Method in their Acceptance Criteria for Helical Foundation Systems (AC358) as well as the 2015 International Building Code (IBC). The equation for the Torque Correlation Method is shown below (Equation 1.0). The K_t factor is a function of the diameter or geometry of the central anchor shaft and can range from 3 to 20.

$$P_u = K_t \times T \quad \text{Equation 1.0}$$

where P_u = ultimate helical tension capacity
 K_t = imperial torque factor
 T = effective installation torque

The Individual Bearing Method uses Terzaghi's bearing equation with Meyerhof's deep foundation bearing factors. This method uses the sum of the area of the helical plates multiplied by the soil strength. Soil information is required in order to use the individual bearing method. Since there isn't any soils information available for review, the torque correlation method was used.

CONCLUSION

The design of the helical piers for this project including spacing of material and specifications is as follows:

A 2 7/8" diameter helical pile with a 12" helix plate configuration the pile should be attached to the structure with Ram Jack's 4037.18 bracket. The contractor shall install helical piers in accord with the manufacturer's recommendations. If any deviation is required, contact us immediately to discuss possible revisions.

The default K_t factor for a 2 7/8" diameter pile is 9. Therefore, the pile must be installed with a minimum installation torque of 3,085 ft-lbs in order to provide an ultimate capacity of 27.8 kips and a working load capacity of 13.9 kips with a minimum safety factor of 2 being applied.

Based on the calculated wall loads of 1.25 klf, the pile spacing shall not exceed that shown on the pile location plan. The anticipated pile target depth is 14 feet below ground level unless the pile reaches the developed torque required (as referenced above), or a maximum allowable developed torque of 6,171 ft lbs, or refusal.

As previously noted, no lateral loading criteria was provided to be resisted by the pilings. Therefore, it is assumed that the lateral loading is being provided by other structural members. If the pilings are required to resist any lateral loads, please notify this office immediately with the magnitude of the lateral loads to be resisted by the pilings as the pilings will need to be redesigned.

This design is not intended for sinkhole remediation at this project location.

The design and construction of this type of helical pier foundation is not a guarantee of resistance to foundation movement. The unwanted foundation movement or cracking may still occur. Any shallow foundation system which is supported by any type of soil especially clay soils beneath it, even if undercutting and or remediation efforts are performed, has some risk for differential movement.

To the best of my knowledge and belief, this design has been performed in accord with acceptable standards of engineering principles and practice and Ram Jack material and engineering specifications (attached) Should conditions differ during the course of the project, the engineer should be notified immediately to properly assess the differing conditions and their impact on the design.

Michael E Driscoll P.E.
Fl Reg #43922

Elevation & Service Plan

Customer Name: Moran

Site Address 989 SW High Field Terr

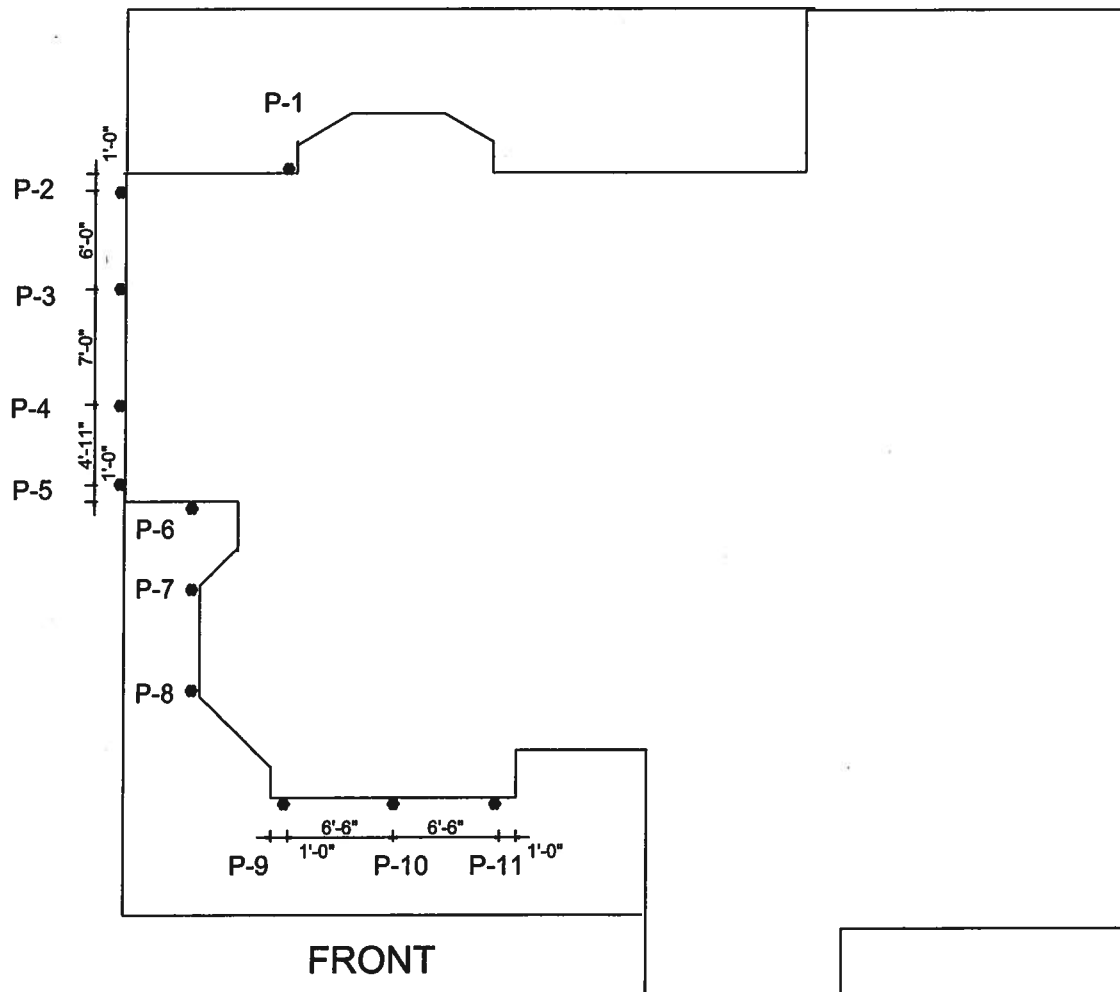
City/State Lake City, FL DF19-278

CONSTRUCTION TYPE: Two story cmu & wood frame walls w/ mono slab on grade 12-27-19



Ram Jack Solid Foundations CBC1255391
24526 NW 178th Pl
High Springs, FL 32643
Office 386-454-1920

PIER LOCATION & QUANTITY BY RAMJACK



Pile Placement w/ 24" spreader bar
L 4"X 4" X 1/4" A-36 STEEL



Pile Placement



Pier Placement in concrete



Drainage Work



Tree



Pressure Grout

Trees indicated may cause interior slab failure if not removed or, if applicable root barrier installed

Drainage problems or notes as indicated on this service plan if not corrected could lead to potential heave or interior floor movement.

Points of elevation as noted on this service plan do not represent actual amounts of recovery.



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Elevation & Service Plan

Customer Name: Moran

Site Address 989 SW High Field Terr

City/State Lake City, FL DF19-278

CONSTRUCTION TYPE: Two story cmu & wood frame walls w/ mono slab on grade 12-27-19



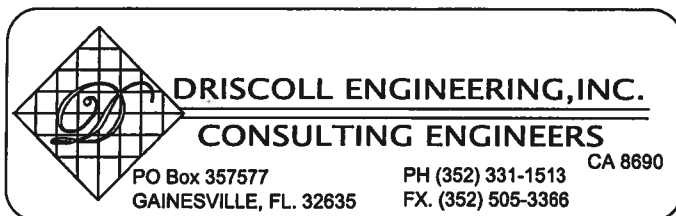
Ram Jack Solid Foundations CBC1255391
24526 NW 178th Pl
High Springs, FL 32643
Office 386-454-1920

PILE NUMBER

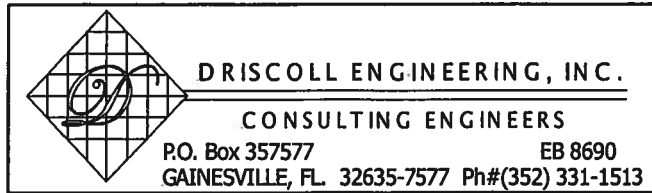
TOTAL LOAD

P-1 THRU P-11

10.5 KIPS



Michael E. Driscoll P.E.
FL Reg #43922



Moran

one story wood frame wall w/ mono
slab

989 SW High Field Terr
Lake City, Fl

Performance criteria based upon: RAMJACK Products™

Helical Pile Bracket # 4037

Lead section #4368

Footing	250 plf
Stem Wall	0 plf
Slab	150 psf
1st Floor	0 plf
Exterior Wall	400 plf
2nd Floor DL	50 plf
2nd Floor Exterior Wall	100 plf
2nd Floor Live Load	200 plf
Roof & Ceiling (DL)	120 plf
2nd Floor Deck (DL)	0 plf
2nd Floor Deck (LL)	0 plf
Roof Live Load (LL)	240 plf
Perm. Soil Load	0 plf
Working Load (Pw)	1,510 - - - (Subtotal)
Temporary Soil Load:	0
Lifting Load (PL):	1,510 - - - (TOTAL)

HELICAL DRIVER TORQUE CHART Upgraded 7K Driver

Dealer :

Ram Jack Solid Foundations
420 SW 11th Ave
High Springs, FL 32643



Hydraulic Motor :

Model : White 300200B7301AAAAB
Displacement (in³) : 12.5

Gear Drive :

Model : Auburn 6SB1316F14
Ratio : 16.88

Torque Equation :

$$T = \left(\frac{\text{Pressure} * \text{displacement}}{24\pi} \right) \text{Gear Ratio} * \eta_{\text{motor}} * \eta_{\text{gear}}$$

where :
Pressure = hydraulic pressure (psi)
displacement = hydraulic motor displacement (in³)
 η_{motor} = motor efficiency
 η_{gear} = gear drive efficiency

Torque Chart

Pressure (psi)	500	750	1,000	1,250	1,500	1,750	2,000	2,250	2,500	2,750	3,000	3,250
Torque (ft-lbs)	1,234	1,851	2,468	3,085	3,702	4,319	4,937	5,554	6,171	6,788	7,405	8,022

***NOTE :**

The torque can also be calculated at any hydraulic pressure by multiplying the pressure by the psi/torque factor for this helical driver which is 2.468.

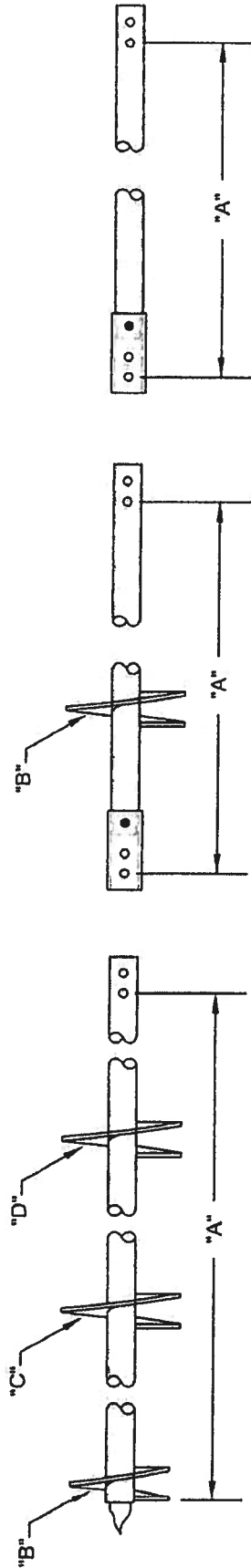
Ultimate Capacity^{1,2,3}

2 3/8" dia. shaft (K _t = 10)	12,341	18,512	24,683	30,853	37,024	40,000⁴						
2 7/8" dia. shaft (K _t = 9)	11,107	16,661	22,214	27,768	33,321	38,875	44,429	49,982	55,536	61,089	66,643	
3 1/2" dia. shaft (K _t = 7)	8,639	12,958	17,278	21,597	25,917	30,236	34,556	38,875	43,194	47,514	51,833	56,153

***NOTE :**

- 1) Ultimate Capacity(Q_u) = Installation Torque (T) x Torque Correlation Factor(K_t).
- 2) Capacities shown in table assumes the pile is fully braced and has no eccentric loading.
- 3) A safety factor of 2 should be applied to the ultimate capacity to obtain the working load capacity.
- 4) Torque rating for 2 3/8" pile is 4,000 ft-lbs (1,621 psi).

2 7/8"Ø HELICAL PILES AND ANC..JRS - EXTERNAL CONNECTION



LEAD SECTION

HELI-X EXTENSION

EXTENSION

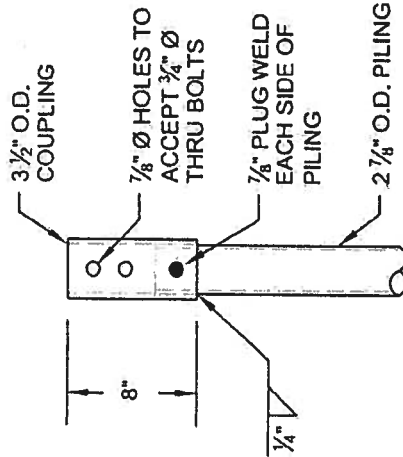
LEAD SECTION TABLE				
CAT. #	"A"	"B"	"C"	"D"
6142	5'-0"	10"	12"	
6143	7'-0"	10"	12"	
6146	7'-0"	14"	16"	
6144	5'-0"	12"	14"	
6145	7'-0"	12"	14"	
6148	7'-0"	10"	12"	14"
6147	7'-0"	8"	10"	12"
6127	2'-0"	10"		

* MULTI-HELIX ARE SPACED 3 DIAMETERS OF THE LOWER HELIX.

HELI-X EXTENSIONS		
CAT #	"A"	"B"
6505.12	5'-0"	12"
6507.12	7'-0"	12"

EXTENSIONS		
CAT #	"A"	"B"
6505	5'-0"	12"
6507	7'-0"	12"
6510	10'-0"	12"

MECHANICAL TORQUE RATING - 5,500 FT-LB
 ULTIMATE CAPACITY (TENS/COMP) - 49.5 KIP*
 ALLOWABLE CAPACITY (TENS/COMP) - 24.75 KIP*
 *BASED ON A TORQUE FACTOR (Kt) = 9



CONNECTION
DETAIL

NOTES:

1. POLYETHYLENE COPOLYMER THERMOPLASTIC COATING PER ICC-ES AC 228.
2. LEAD AND EXTENSION SECTION AND PILOT POINT LENGTHS ARE NOMINAL. PILOT POINTS ARE 3".
3. SHAFT MATERIAL IS 2 7/8"Ø, 0.217" WALL, MINIMUM Fy=65 KSI AND Fu=80 KSI.
4. HELIX BLADE MATERIAL IS HOT ROLLED, MINIMUM Fy=50 KSI AND Fu=80 KSI CARBON STEEL. PLATE THICKNESS IS AVAILABLE IN 3/8" AND 1/2" THICKNESSES.
5. CONNECTORS ARE 3 1/2" Ø, 0.254" WALL, MINIMUM Fy=65 KSI AND Fu=80 KSI.
6. NOMINAL SPACING BETWEEN HELICAL PLATES IS THREE TIMES THE DIAMETER OF THE LOWER HELIX.
7. MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
8. ALL WELDING IS TO BE DONE BY WELDERS CERTIFIED UNDER SECTION 5 OF THE AWS CODE D1.1.
9. ALL COUPLING BOLTS TO BE 3/4" Ø, SAE J429 GRADE 5 BOLTS.

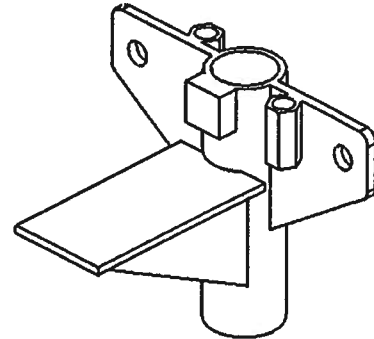


RAMJACK

DWG. NO. 2875.00	CATALOG NO. SEE TABLES	REV. 1
SCALE 3/4"=1'-0"	DRAWN BY DLW	DATE 03/26/08
		SHEET 1 OF 1



HELICAL PILE BRACKET With Narrow Seat



#4037 – SPECIALTY

PRIMARY APPLICATIONS

- Underpinning grade beams and footings of existing structures with Ram Jack's 2 7/8" diameter helical pile system
- Used on lighter structures where the structure has an insufficient reaction load to install Ram Jack's driven pile
- Used on older structures or under reinforced foundations that don't have the structural strength to withstand the cycle loading of the driven pile system

FEATURES/BENEFITS

- Similar to 4038 but with 5" wide seat
- Bracket installed on a 2 7/8" diameter pile has a maximum allowable load of 20 kips
- Helical pile can be driven through bracket
- No welding required for installation
- Easily adjusts foundation elevation
- Thermoplastic co-polymer powder coated

MATERIALS/PARTS

- Steel plates – minimum F_y of 50 ksi
- 3 1/2" diameter bracket sleeve – minimum F_y of 65 ksi
- Two (2) 1" diameter all-thread bolts with nuts (ASTM-A36)
- One (1) support strap

ADDITIONAL PILE ASSEMBLY ITEMS

- Lead section with helixes
- 2 7/8" diameter helical pile extensions (Ref. page YY)

SHIPPING INFORMATION

PART #	ICC-ES PART #	SHIPPING WT. (lbs)	SHIPPING	PARTS PER PALLET
4037		34	Specialty	25

PROFESSIONAL SERVICES BY
DRISCOLL ENGINEERING, INC.
PO BOX 357577,
GAINESVILLE, FL 32609
PH (352)-331-1513
CA 8690

PLANS AND SPECIFICATIONS

The plans and specifications presented herein are applicable only for the anticipated construction at the locations shown. If construction plans change, the Design Professional should be notified so the plans and specifications can be re-evaluated. The Design Professional should be given the opportunity to review final plans and specifications to see if the intent of the plans and specifications has been followed and/or if supplemental details and recommendations are needed. The Design Professional warrants that the plans and specifications contained herein, have been prepared in accordance with generally accepted professional engineering practice. No other warranties are implied or expressed.

CORPORATE PROTECTION

It is understood and agreed that the Design Professional's Basic Services under this Agreement do not include project observation or review of the Contractor's performance or any other construction phase services, and that such services will be provided by the Client. The Client assumes all responsibility for interpretation of the contractor Documents and for construction observation and supervision and waives any claims against the Design Professional that may be in any way connected thereto.

In addition, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any loss, claim or cost, including reasonable attorney's fees and costs of defense, arising or resulting from the performance of such services by other person or entities and from any and all claims arising from modifications, clarifications, interpretations, adjustments or changes made to Contract Documents to reflect changed field or other conditions, except for claims arising from the sole negligence or willful misconduct to the Design Professional.

OWNERSHIP OF INSTRUMENTS OF SERVICE

All reports, plans, specifications, computer files, field data, notes and other documents and instruments prepared by the Design Professional as instruments of service shall remain the property of the Design Professional. The Design Professional shall retain all common law, statutory and other reserved rights, including the copyright thereto.

DEFECTS IN SERVICE

The Client shall promptly report to the Design Professional any defects or suspected defects in the Design Professional's work or services of which the Client becomes aware, so that the Design Professional may take measures to minimize the consequences of such a defect. The Client warrants that he or she will impose a similar notification requirement on all contractors in his or her Client/Contractor contract and shall require all subcontractors at any level to contain a like requirement. Failure by the Client, and the Client's contractors or subcontractors to notify the Design Professional, shall relieve the Design Professional of the costs of remedying the defects above the sum such remedy would have cost had prompt notification been given.

VERIFICATION OF EXISTING CONDITIONS

Inasmuch as the remodeling and/or rehabilitation of an existing building requires that certain assumptions be made regarding existing conditions, and because some of these assumptions may not be verifiable without expending additional sums of money or destroying otherwise adequate or serviceable portions of the building, the Client agrees, to the fullest extent permitted by law, to indemnify and hold the Design Professional harmless from any claim, liability or cost (including reasonable attorney's fees and costs of defense) for injury or economic loss arising or allegedly arising out of the professional services provided under this Agreement, excepting only those damages, liabilities, or costs attributable to the sole negligence or willful misconduct of the Design Professional.