

Cool and Cobb Engineering Company

Date: 7/25/2022

Job: Mike Edenfield

Location: 1013 Northwest Scenic Lake Drive
Lake City, FL 32055

PUSH PIER DESIGN ANALYSIS

The load requirements for the pilings designed to assist in supporting the identified areas of the subject residence were determined. The selected piling locations and the specific piling are identified on the Pier Identification and Location Plan attached. The calculated total loads on the piles in the specific location, including both dead and live loads are documented in the attached table which is designated as Attachment "A". Based on the total load requirements for each of these piles, the push pier driver is to be employed. The push pier driver should be employed with a calculated load of 9,000 lbs., which will provide pile capacity, including the 2 to 1 safety factor of 18,000 lbs. which is greater than the maximum calculated total load of 9,000 lbs. which occurs on the pile identified as no. 300-1. Based on this analysis, the use of the push pier driver for the ECP piles with a specific load of 18,000 lbs. and a minimum depth of 15' is approved and certified as meeting all the requirements of the Florida Building Code 2020 7th Edition, and good engineering practice. This is not to be the primary support structure, but a supplement support to assist in support of the weight of the structure, which will reduce the total pressure on the existing soils. After completion of installation, Cool and Cobb Engineering Company shall be supplied with a drilling log of the location and depths of each pile installed so they can evaluate the installation and prepare the "As Built" drawings.

General Notes:

1. A log of each pile to be kept by Contractor noting depth for each pile.
2. Piles installed less than 48" apart are to be battered 10° away from each other.
3. This design is based on the loads of the structure placed on the shallow soils under the structure.
4. No deep soils geotechnical testing information was provided for this design.
5. This design does not address any possible sink hole activity as defined in Florida Statute § 627.706.

7/25/2022

Carl Cool, P.E.

State of Florida

Professional Engineer No. 16921



Digitally signed
by Carl E Cool

Date:
2022.07.25
14:54:27 -04'00'

This Item has been
electronically sealed by Carl
Cool using a digital signature
and date. Printed copies of this
document are not considered
signed and sealed and the
signature must be verified on
any electronic copies.

203 W. Main St.
Avon Park, FL 33825
Office: (863) 657-2323
Fax: (863) 657-2324

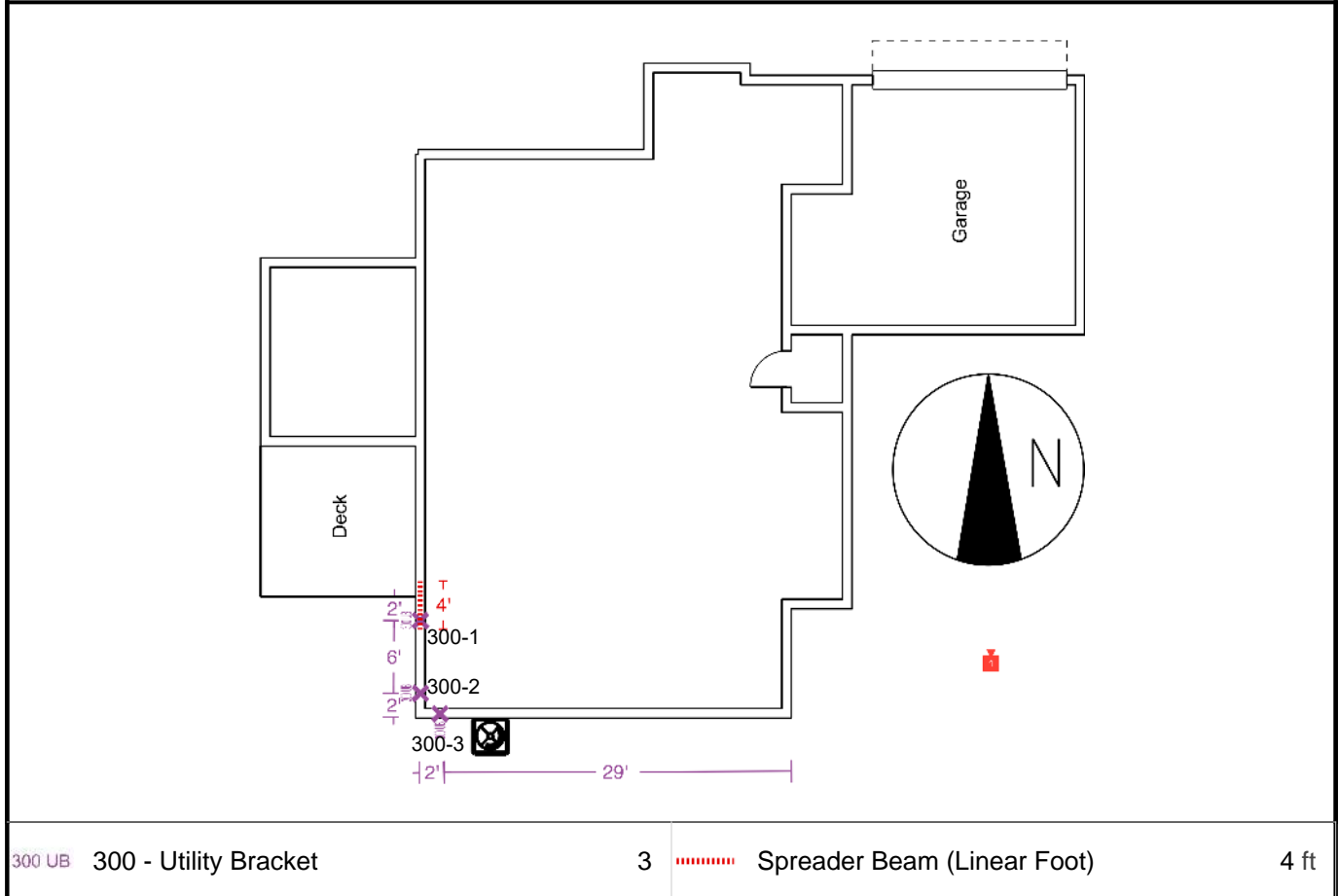


Foundation Professionals of Florida
P.O. Box 1625
Lake City, Florida 32056
www.foundationprosfl.com

Project Address
Mike Edenfield
1013 Northwest Scenic Lake Drive
Lake City, FL 32055

Created By
Conner Rawlins
(386) 406-2191
07/07/2022

Repair Plan



Year structure was built:
1990

Foundation Type:
Concrete Block with Footer

Construction:
Wood Frame

Single - Story

Veneer:
Brick Masonry

This Item has been electronically sealed by Carl Cool using a digital signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

7/25/2022
Carl E. Cool, P.E.
PE#16921

Cool and Cobb Engineering Co.
203 W. Main St.
Avon Park, FL 33825

Cool and Cobb Engineering Company

Date: 7/25/2022

Job: Mike Edenfield

Location: 1013 Northwest Scenic Lake Drive

Lake City, FL 32055

Attachment "A"

Total Load on Pile

(Live Load + Dead Load)

PILE NO.

TOTAL CALCULATE LOAD

300-1

7,500 lbs

300-2

7,500 lbs

300-3

9,000 lbs

This Item has been electronically sealed by Carl Cool using a digital signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Maximum Total Load on Pile: 9,000 lbs

7/25/2022

Carl E. Cool, P.E.

PE# 16921

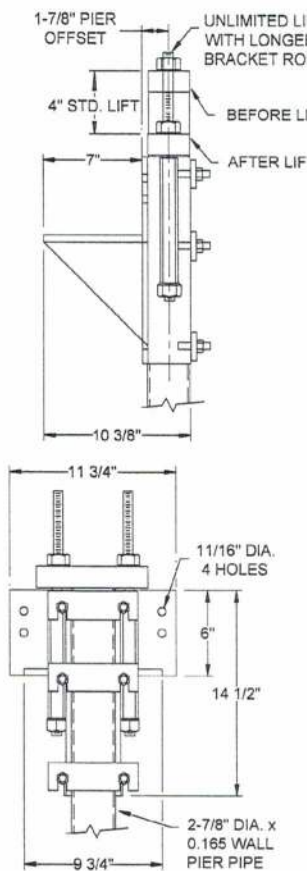
Cool and Cobb Engineering Co.

203 W. Main St.

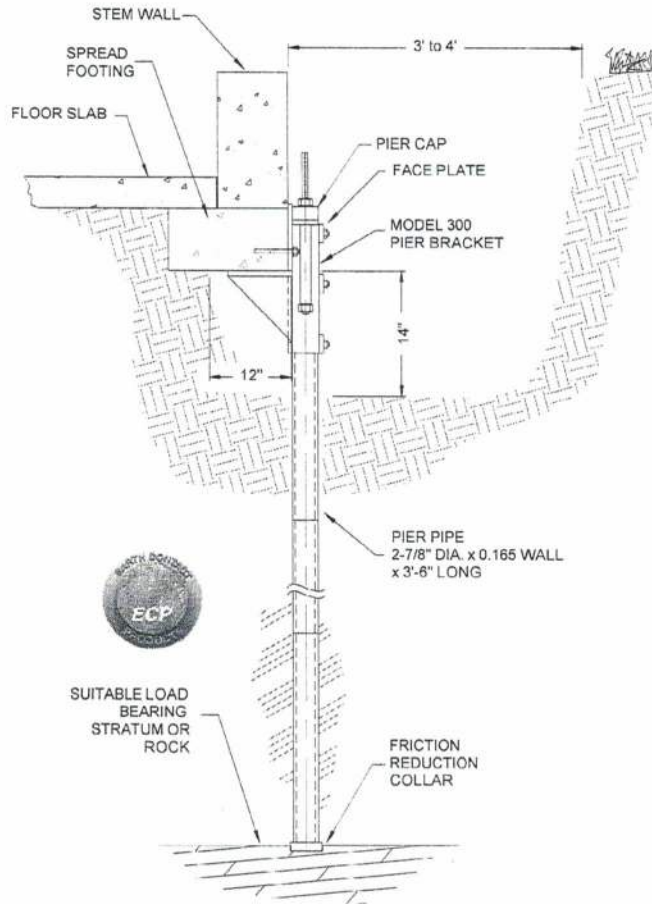
Avon Park, FL 33825

ECP Steel Pier™ PPB-300 Utility Bracket Pier System

- PPB-300 Ultimate Capacity – 68,000 lb
- Maximum Proof Load – 51,000 lb
- 68 Square Inches Bearing Surface
- Standard Lift – 4"
- Fully Adjustable Unlimited Lift Capability
- Installs From Outside or Inside Structure
- Friction Reduction Collar On Lead Pier Section
- 2-7/8" Diameter High Strength, Galvanized Tubular Pier
- Installs With Portable Equipment
- Installed With Little or No Vibration
- Installs To Rock or Verified Load Bearing Stratum
- 100% of Piers Proof Tested When Installed
- U.S. Patent No. 6,193,422
- Manufacturer's Warranty



**PPB-300
Utility Bracket Details**



**PPB-300 Utility Bracket
Application Drawing**

The capacity of the Model 300 foundation support system is a function of the capacity of pier pipe and soil surrounding the pipe, capacity of the load bearing stratum, foundation bracket, foundation strength and strength of the bracket to foundation connection. Actual capacities could be lower than the bracket capacity.

Earth Contact Products, LLC reserves the right to change design features, specifications and products without notice, consistent with our efforts toward continuous product improvement. Please check with Earth Contact Products at 972 480-0007 or 913 393-0007 to verify that you are using the most recent specifications.

ECP Model 350 & Model 400 Utility Bracket
2012-06

Page 6

© 2011 Earth Contact Products, L.L.C.
Permission granted to copy for sole
purpose to prepare bid documents

7/25/2022
Carl E. Cool, P.E.
PE#16921

Cool and Cobb Engineering Co.
203 W. Main St.
Avon Park, FL 33825