



Harnett
C O U N T Y
NORTH CAROLINA

BUILDING RESIDENTIAL

910-893-7525

www.harnett.org

PERMIT NUMBER

BRES1808-0027

JOB ADDRESS: 2699 BUFFALO LAKE RD	PERMIT SUBTYPE: RESIDENTIAL ADD/ALTER	PARCEL NO: 9586-43-7156.000
DESCRIPTION: steel support to basement wall	DATE ISSUED: 8/16/2018	DATE EXPIRED:
PLAN NAME:	ZONING DISTRICT: RA-20R - 0.38 acres (100.0%)	

APPLICANT: Southeast Foundation Repair 709 1/2 Southwest Blvd Clinton, NC 28328	PHONE: (910)299-0198 EMAIL:
CONTRACTOR: Southeast Foundation Repair 709 1/2 Southwest Blvd Clinton, NC 28328	PHONE: (910)299-0198 EMAIL:
OWNER: DONALD MICHAEL LEE 2699 BUFFALO LAKE RD SANFORD, NC 27332 SANFORD, NC 27330-0000	PHONE: EMAIL:

REQUIRED INSPECTIONS

INSPECTION TYPE	APPROVAL	DATE	COMMENTS
FINAL**			
FOOTING			
FOUNDATION			

Development Services
108 E. Front St
Lillington, NC 27546
910-893-7525

CC SALE

MID: xxx9684
TID: xxxx2853
Ref #: 203310482
Batch #: 1024792
Date/Time: 08/16/18 03:31:42 PM
Inv/Tkt #: 180816153106022
Appr Code: 003354
Visa
4xxxxxxxxxxxx5738
Keyed

Amount USD\$ 125.00

Approved

Mode: Card

CUSTOMER COPY



HAYMAN ENGINEERING
ENGINEERING DONE RIGHT... NOW!



CODE NOTES:

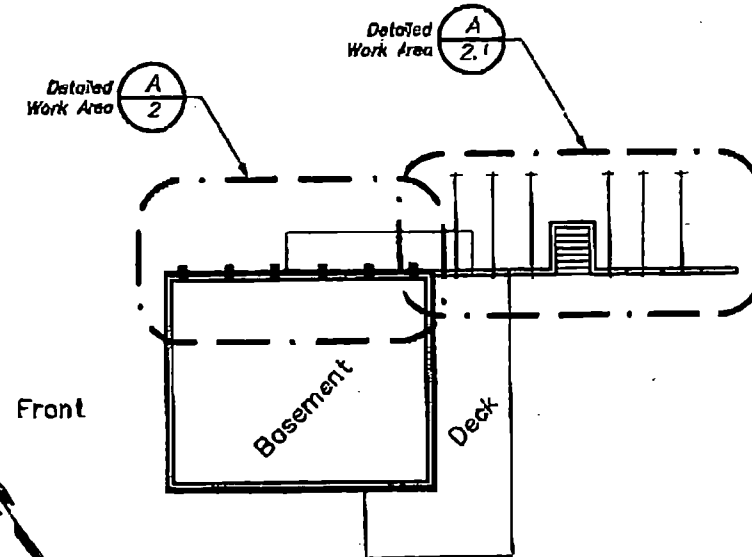
Model Code:
International Residential Code (2015), R301.2(3)
Contractor shall meet all local, state, and federal building code requirements.

GENERAL NOTES

1. This document set contains an engineering design that addresses specific areas of a foundation needing repair. The areas addressed are those of greatest concern to the owner. The scope of work may not address all areas needing attention. Additional work may be added to the contract for construction when deemed appropriate and dependent on the results of initial work. The owner should be alert to possible changes to the condition of the structure and continue to monitor the building's condition.
2. The IRC does not cover the products used in this design. They have been designed in accordance with acceptable engineering practice per R301.1.3. Hayman Engineering warrants that this design is based on sound engineering principles but makes no warranty or guarantee regarding the work performed by the Contractor.
3. This design is based on information supplied by the Contractor. Field verify that no system's placing violates the notes in this drawing set.
4. Install the system shown in accordance with the manufacturer's recommendations.
5. Contractor is responsible for obtaining all permits.

Buffalo Lake Road

A1



HARNETT COUNTY CENTRAL PERMITTING

APPLICATION # BRES1808-0027
JOB NAME Southeast Foundation Repair
DATE PLANS RECEIVED 8-10-18
SITE PLANS APPROVED 8-16-18
APPROVED BY [Signature]

A
1 Site Layout 2699 Buffalo Lake Rd.
SCALE: NTS

HAYMAN ENGINEERING, LTD

205 Park Central East, Ste 412, Springfield, MO 65305
Kevin T. Moore, PE Professional Engineer North Carolina License No. 043594
Board of Engineers-Firm License (COA) C-3535
(417) 831-5550 hfeorders@haymanengineering.com

These drawings are subject to the Hayman Engineering Terms and Conditions

1
COVER

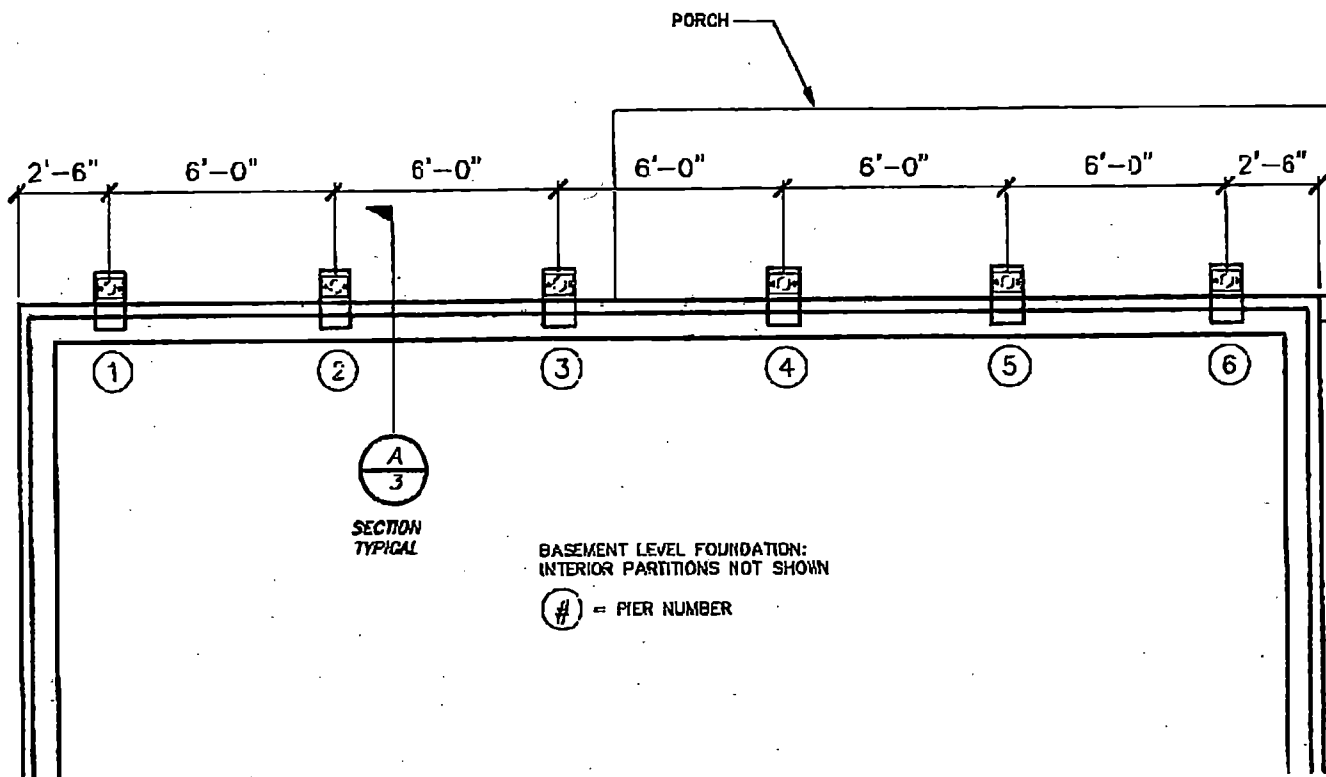
FOUNDATION WORK BY:
SOUTHEAST FOUNDATION REPAIR
709 1/2 SOUTHWEST BLVD.
CLINTON, NC 28328
(910) 299-0198

Owner: Mike Donald
Address: 2699 Buffalo Lake Rd.
Sanford, NC 27332
Job No: HE18070101
Date: 08/13/18
Dwn By: JKT Chkd By: KTM

08/10/18

GENERAL NOTES

1. System spacing is based on the following notes and assumptions. If field conditions differ, notify Engineer before placing piers.
2. Structure:
 - Foundation: 8" thk. CMU wall w/ 20Wx10D spread footing
 - Ext. siding: vinyl/wood, brick
 - Roof: asphalt shingles
 - Exist. structure is generally in good condition.
3. Place piers directly under concentrated load points such as beam pockets, interior load-bearing walls that meet the ext. foundation, interior columns, etc.
4. Place piers on both sides of doors, windows, and other wall openings. Do not place piers under wall openings.
5. Place piers w/in 3' of both sides of significant vertical cracks in the foundation wall. A significant vertical crack is one that eliminates the foundation's ability to transfer load across the crack.



A
2 Detailed Work Area
SCALE: NTS

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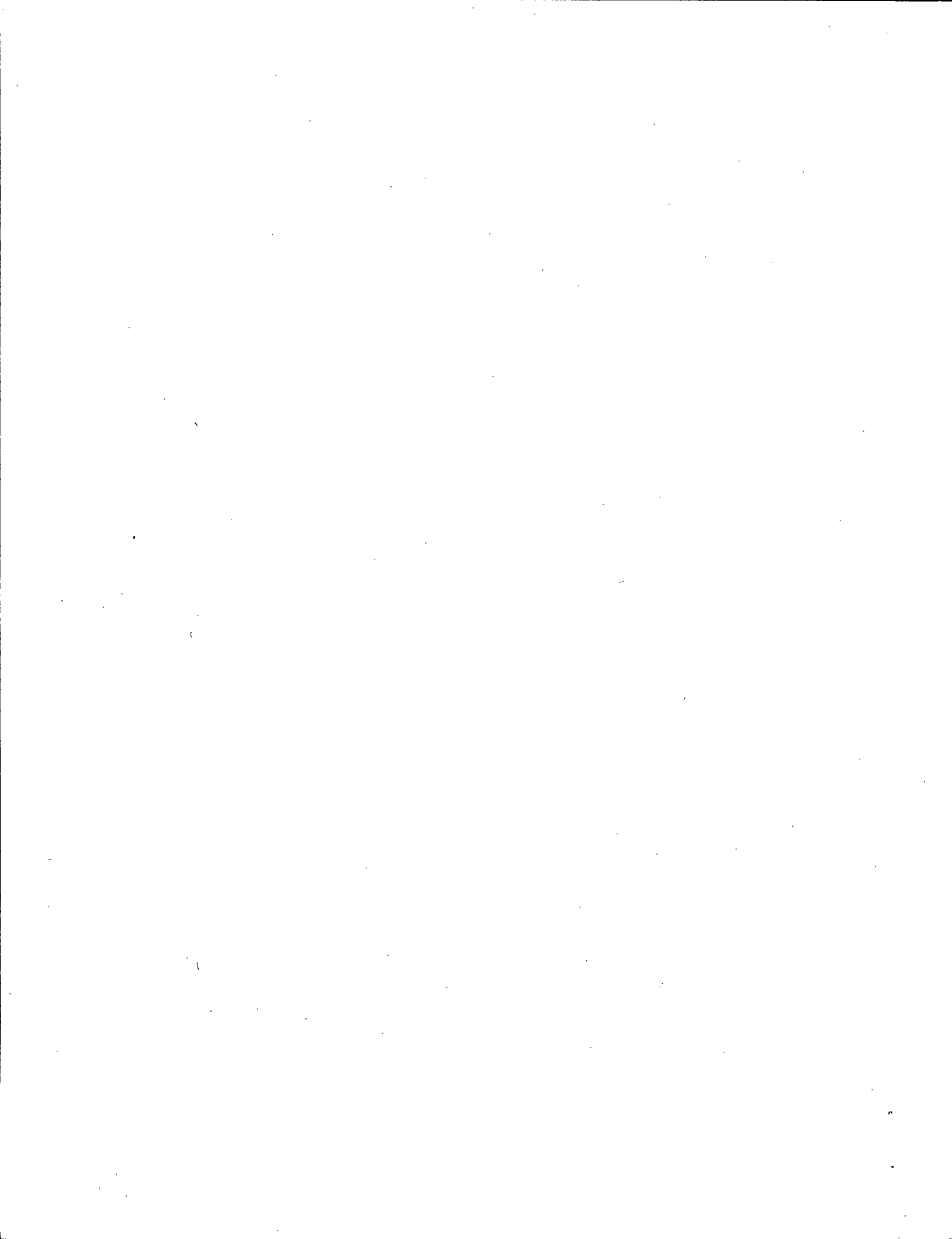
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2
PLAN

FOUNDATION WORK BY:
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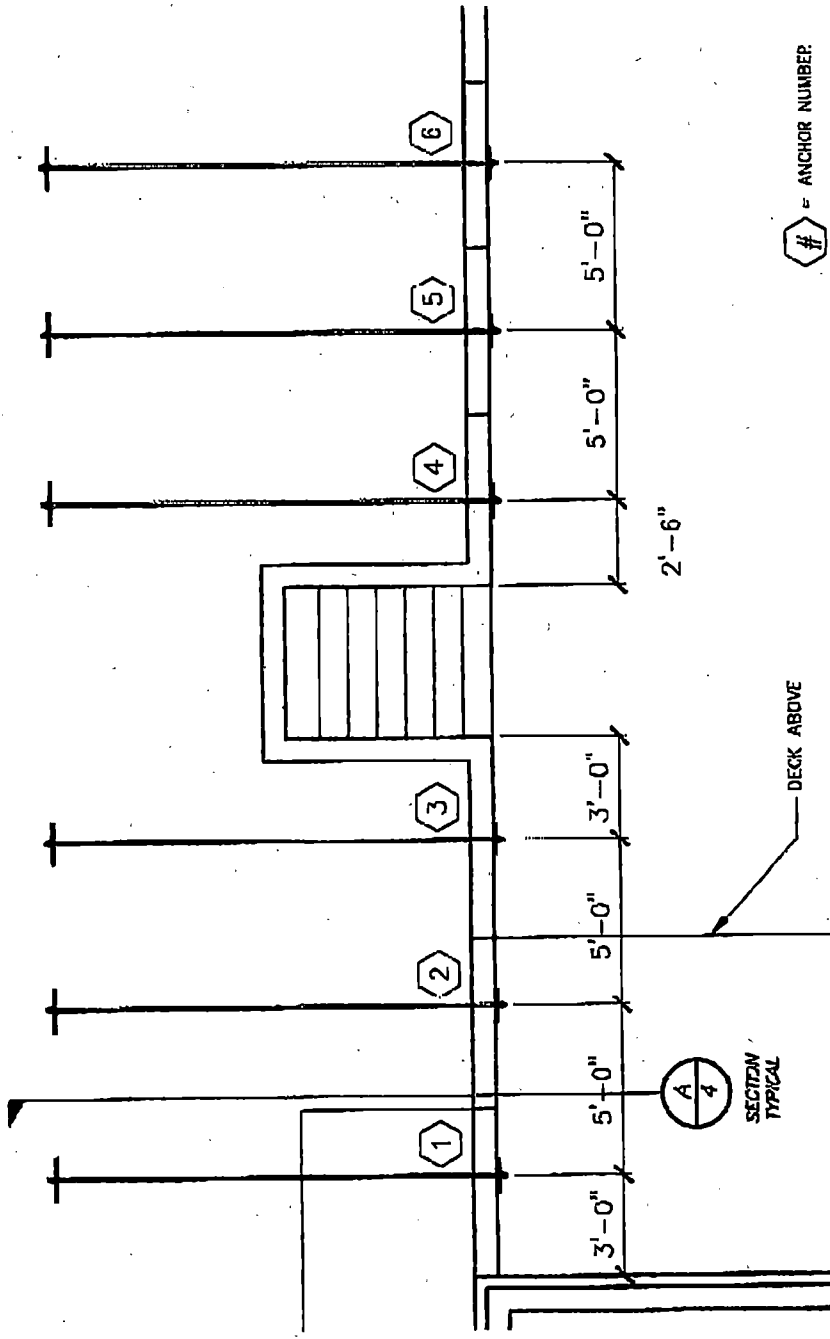


GENERAL NOTES

1. System spacing is based on the following notes and assumptions. If field conditions differ, notify Engineer before placing anchors.
2. Structure:
 - Foundation: 8" thick brick wall w/ typical spread footing
 - Ext. siding: brick
 - Exist. structure is generally in good condition.
3. Apply typical wall anchor plates to walls unless noted otherwise.
4. Maximum allowable deflection in walls is 4" off plumb based on the height of a 9 foot high wall.
5. Minimum effective anchor spacing: 4'-0"
6. Maximum allowable anchor spacing: 5'-0"

TECHNICAL SPECIFICATIONS

- Plate Steel: ASTM A1011 C1008-C1010, 10 gauge plate embossed with two (2) longitudinal ribs, hot-dip galvanized
- Wall Plates: 12"x18" & 12"x28"
 - Earth Anchors: Fabricated from two wall plates welded in a cross pattern.
 - One inch on each end of wall plates bent 90 degrees.
 - Three sizes: 16"x16", 16"x26", and 26"x26", per mfr's recommendation.
 - Thread Rod (Part) HWTR-S230-G-075-80:
 - Medium Carbon Steel
 - Tensile strength = 85 ksi (min.)
 - Allowable tensile capacity = 14 kips 3/4"
 - 10 UNC 2A, 80" long
 - Hot-dip galvanized
 - Min. 2 per anchor assembly
 - Thread Rod Coupler:
 - AISI 1144
 - Yield strength = 100 ksi (min.), Tensile strength = 115 ksi (min.)
 - 3/4 - 10 UNC 2B, oversized top, 3" long
 - > 0.984" diameter, hot-dip galvanized
- Termination Hardware:
- SAE J895 Grade 2 heavy square nuts
 - 3/4 - 10 UNC 2B, oversized top, hot-dip galvanized



A Detailed Work Area - Wall Anchors

SCALE: NTS

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2.1 PLAN

Owner: Mike Donald
 Address: 2699 Buffalo Lake Rd. Sanford, NC 27332
 Job No: HE18070101
 Date: 08/10/18
 Dwn By: JKT Chkd By: KTM

08/10/18



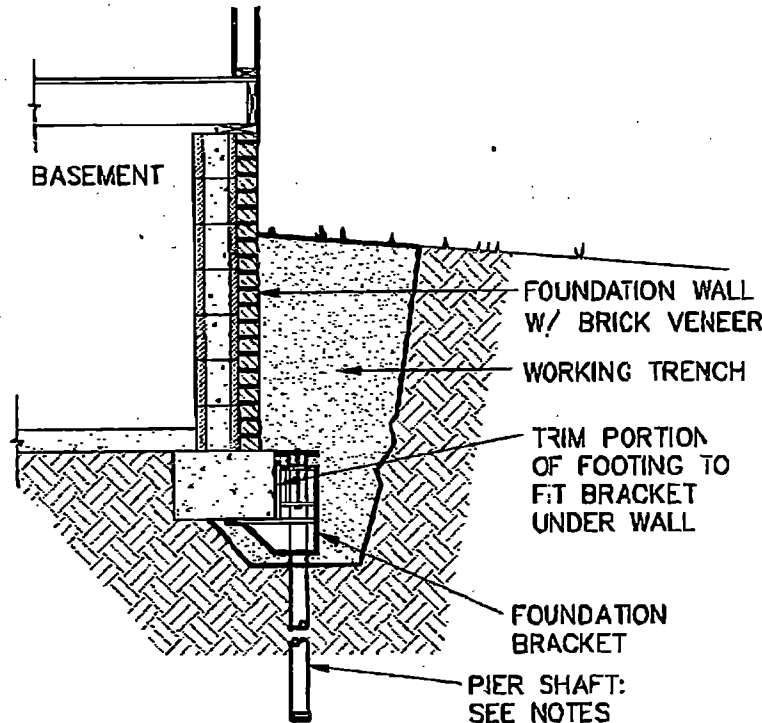
PP288 PUSH PIERS

- Load: Install to an estimated ultimate capacity of 17 KIPS and 1770 PSI.

- Steel: 2-7/8" round galvanized steel.

- Bracket: B w/ 30" sleeve or longer

1. Install in accordance with manufacturer's installation instructions.
2. Push the pier tubes using structure weight as reaction mass until structure lifts slightly to indicate that load has transferred from surrounding soil to push pier.
3. If load transfer occurs before listed pressure is reached, driving may cease, and listed pressure is waived for that pier. Note "load transfer" on the pier drive log along with the pressure achieved at load transfer.
4. If a lift is desired, to prevent structural damage, lift carefully and slowly while monitoring the foundation's and building's conditions. Cease the lift if the building shows evidence of distress.



A Detail - Pier
3 SCALE: NTS

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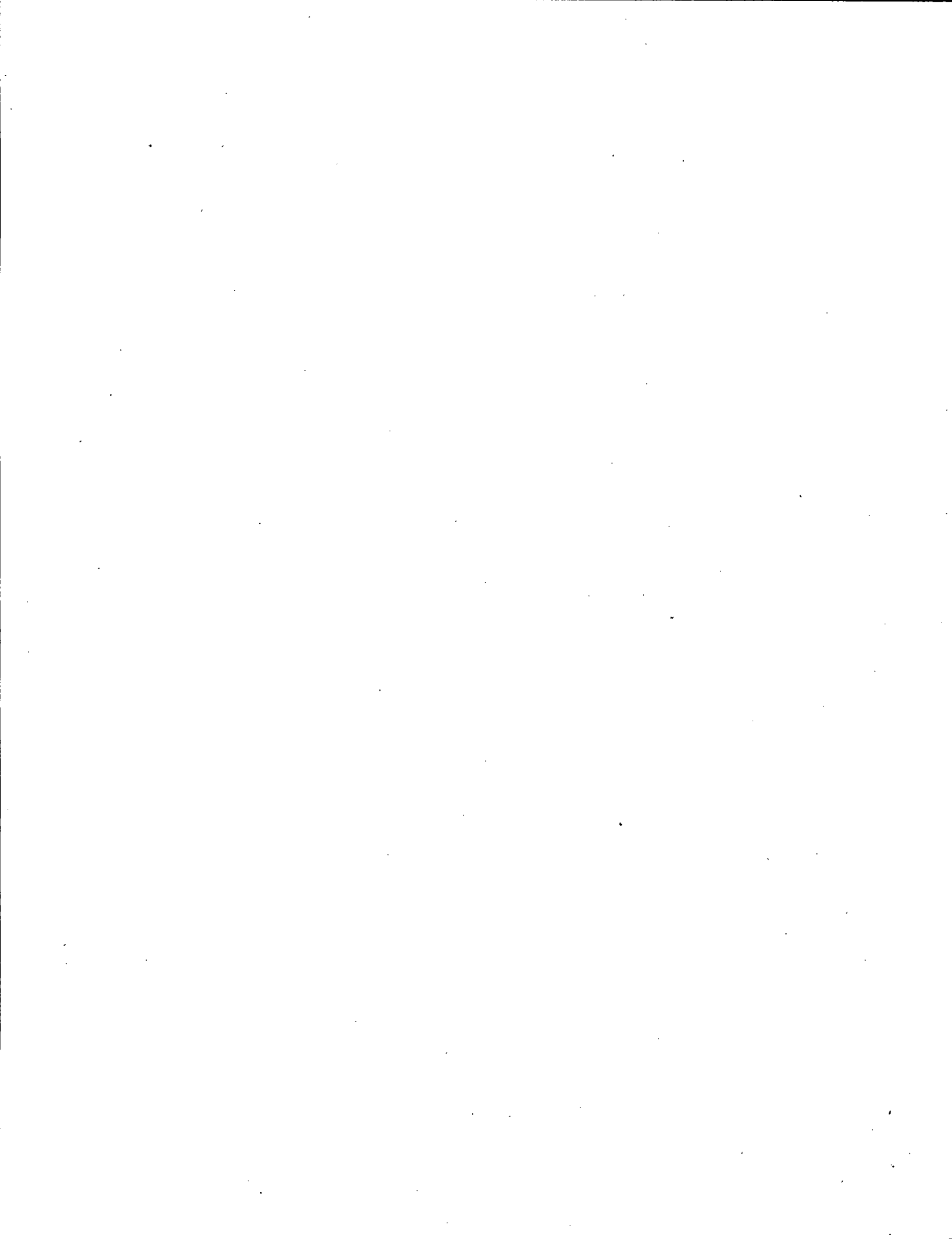
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3
DETAILS

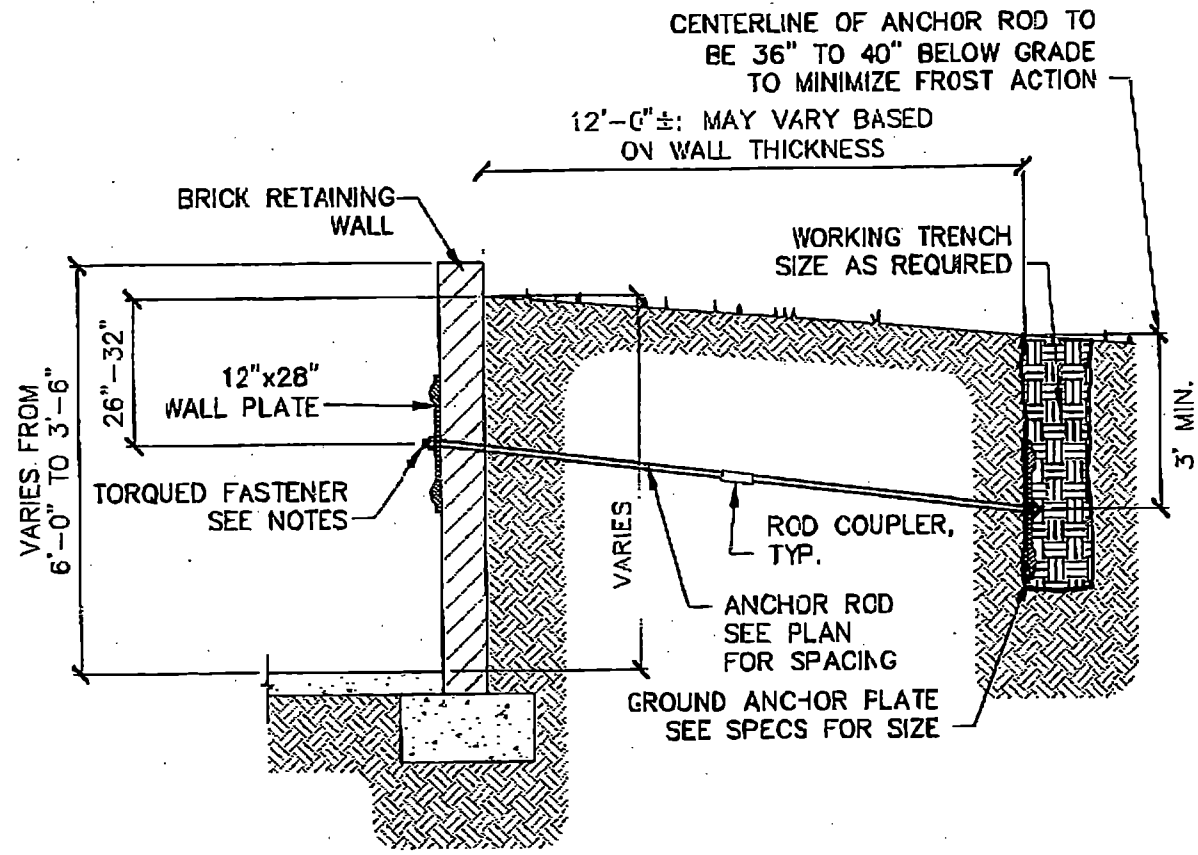
Owner: Mike Donald
Address: 2699 Buffalo Lake Rd.
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Job No: HE18070101
Date: 08/10/18
Dwn By: JKT Chkd By: KTM

08/10/18



WALL ANCHOR NOTES:

1. Space wall anchors as shown on plan.
2. Provide working trench for each yard anchor plate per detail.
3. Finish concrete repairs to match existing finish texture.
4. Depth from grade to wall anchor - 26" to 32". Center in course of block. Adjust height to match field conditions as necessary.
5. Field verify dimensions. Notify engineer of any conflict.
6. Wall Anchors: Foundation Support/Works GeoLock anchors or equivalent.
7. Ensure that anchor rod angles down as it goes out from interior space to prevent lateral wicking into basement.
8. Torque rec: 80 ft-lbs
9. Wall anchor rods may be placed non-perpendicular in plan to the wall being supported. Angled rods needing to miss objects in yard are acceptable.



A Detail - Wall Anchor
4 SCALE: NTS

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4

DETAILS

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