

TITAN ENGINEERING CONSULTANTS, LLC

F-16703

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Austin, TX 78759
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DATE: September 26, 2019

TO: Centex House Leveling
1120 E. 52nd Street
Austin, Texas 78723

RE: Engineer's Completion Certification of Foundation Repairs
@ 9615 FM 621--Staples, Texas
Ref.A) Centex proposal dated 07/24/19

The purpose of this report is to provide an independent limited, visual on-site inspection of 54 spread footing pier and new timber beam locations at the subject property and to verify completion, description and location of footings and timber beams proposed in Centex plan of repairs (Ref A)

On this date, I made following on-site observations of work.

The foundation structure of this frame structure is a pier and beam type with concrete supports and timber beams. Centex reports that the foundation experienced a differential elevation of almost five inches along the front right perimeter corner of the house. Centex proposed to install reinforced concrete spread footings beneath the floor area to raise and stabilize the authorized areas.

The contractor installed 54 spread footings piers beneath new and existing timber beams. Spread footings were each composed of a minimum 24-inch square by ten-inch thick concrete footing installed twenty-four inches below grade.

Reinforced concrete 10-inch diameter sono-tube piers were constructed and reinforced into the concrete footings to support timber beams. Timber beams were anchored to the new piers using steel straps.

The contractor installed 126 linear feet of 4"X6" treated timber beams and 36 feet of treated 2"x6" floor joists to replace deteriorated timber.

September 26, 2019 inspection
9615 FM 621 - Staples, TX

The floor area of the structure was raised to within 1/4-inch level position. The contractor stated they would complete backfilling and clean up the work area.

Expansive clay soils are common in Central Texas. These soils can expand in volume (swell) when wet and can decrease in volume (shrink) when dry. This change in volume of supporting clay soils can cause a corresponding reaction to a house foundation. Spread footings such as those used in this application support and improve stability of the foundation by transferring weight to deeper and expectedly more stable soil strata where moisture contents do not expect to vary as much as more shallow soils. Maintaining a consistent moisture level in the soil should help result in maintaining stability in the foundation.

RECOMMENDATIONS:

- a. Foundation maintenance procedures such as those attached should be followed at all times.

No warranty is expressed or implied as to the performance of this foundation.

The only purpose of this report is to certify and describe the recent foundation repair work (installation of piers or pilings) as performed and developed by Centex House Leveling and described in Ref. A). This report or engineer provided a noninvasive inspection and did not inspect or evaluate any other condition of the house. This report or engineer does not warrant or predict the future performance of the structure. The contractor normally provides warranties or guarantees for foundation repairs.

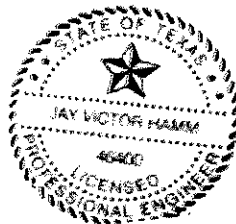
CERTIFICATION

As a licensed Engineer in the State of Texas, I certify by on-site visual inspection, that all work performed by Centex House Leveling appears to have been completed in accordance with general engineering criteria

Respectfully,

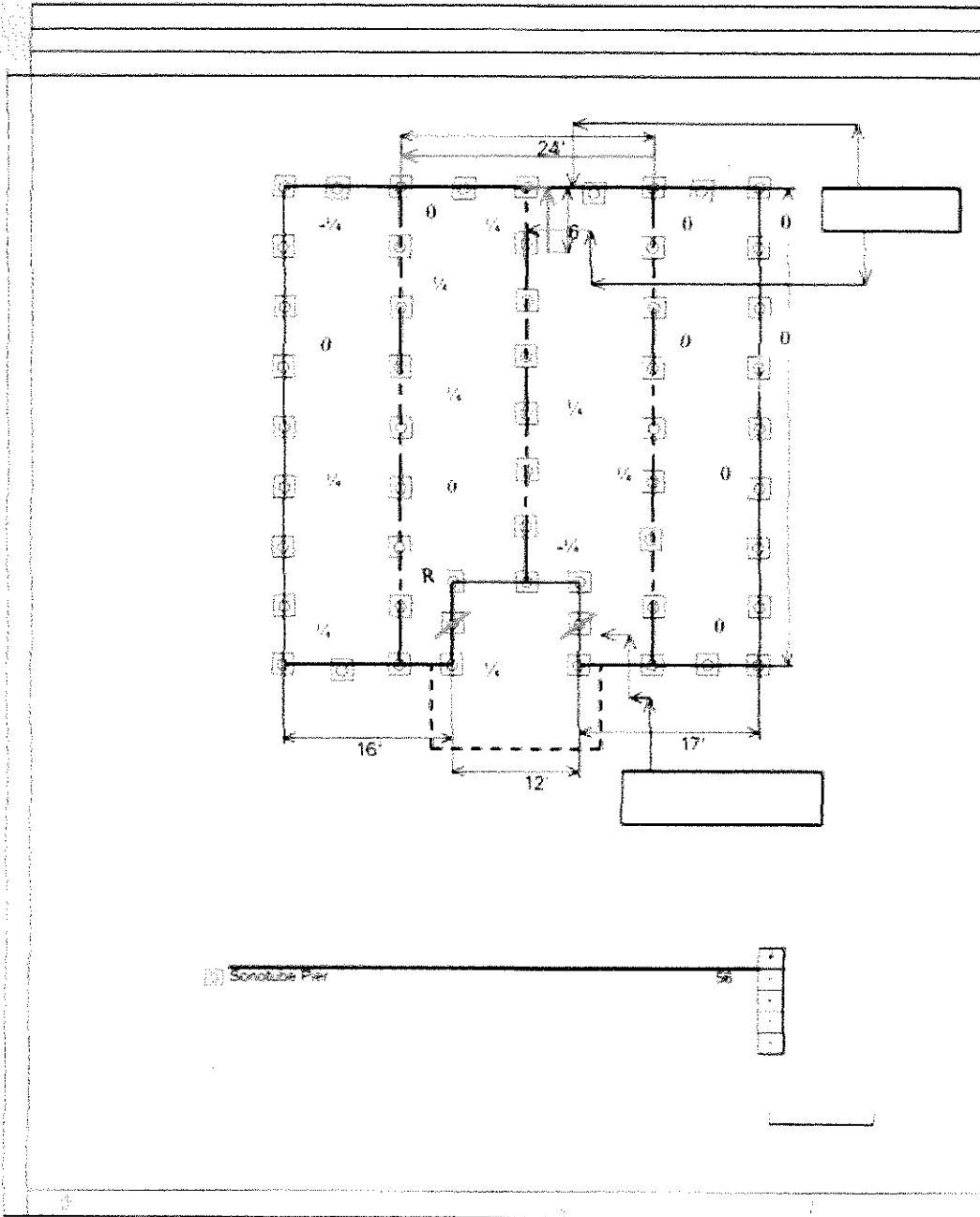


Jay V. Hamm
Registered Professional Engineer
State of Texas
No. 46400



Attachments: Centex plan of repairs
E092619r1x

REF "A"



x/x -FINAL FLOOR ELEVATIONS (09/26/19)