

REPAIR or REMEDY (FAQ's)

Q: If you are retired, why do you do this?

A: When I was teaching, I usually advised on rather large projects. However I occasionally encountered problems of this type. Sometimes the contact was disappointing in that I saw for this particular formation, with its peculiar problems, the solutions came from unanalyzed "experience." I thought, "Do you have 30 years of experience or one year of experience 30 times?" Now with more time, I thought I might be of some help.

Q: Why aren't these problems treated like the usual civil engineering operations?

A: For forensic operations on these rather inexpensive structures, professionals require first a study of site facts, and the existing design. These may be difficult to obtain. If analysis for each type of pressed pier is required, the relation of these preconstructed designs to soil end bearing and smooth side shear must be known or estimated. There is difficulty dealing with the empirical "sensible" conclusions developed long ago for some support types. This is an unwelcome expense for a large organization dealing with a "small" structure.

Q: What are the present solutions to the problem?

A: At this time for structures of less than 5000 square feet or a one story residence, the Texas Board of Registration of Professional Engineers does not consider whether or not a Registered engineer is involved. Some cities require the stamp of a Registered engineer, but these are relatively easy to obtain. Pressed pier types rely on the supposed fact that the pressing goes on until the foundation is "raised." Drilled piers use recognized procedures. Other techniques not covered here are shafts with several flights of a large screws at the bottom, a small scale pile driving operation, and "mud jacking" where a concrete slurry is injected under the structure.

Q: What recommendations do you make?

A: My recommendations come after I and the client review what final procedures the client desires. I merely present to the client two methods with their strengths and weaknesses for his/her decision. I also inform the client of what the structure will most likely look like after the contractor is gone, and what further operations he/she might consider to ensure a particular final appearance.

Q: What is the benefit to the homeowner on the requirement that the seller report this action under penalty of triple damages?

A: A report by a totally independent Registered Professional Engineer.