

GEOTECHNICAL SERVICES

Proposal

Access Management Group Johns Creek Walk 11055 Bell Road



A Lifetime of Support

2260 Northwest Parkway Suite H Marietta, GA 30067 ofc. 678.290.1325 fax 770.956.7403 www.esogrepair.com

August 10, 2017

Dear Edna,

I would like to take this opportunity to thank you for choosing Engineered Solutions to provide you with a quote for your foundation repair needs.

Jay Eastland, Luis Cuevas, and I have a combined 50 years of experience in the foundation and waterproofing business. We have many products at our disposal, which allow us to customize a repair to your specific need. We are accustom to working with engineers in our area and will be glad to furnish some recommendations should the need arise.

Engineered Solutions of Georgia strives to make it as easy as possibly for you to do business with us, we accept most major credit cards, offer six months same as cash and several 100% financing options. Once you have made the decision to work with ESOG on your project we will do everything in our power to insure your satisfaction.

We are committed to being very accessible through the repair process and the bid process as well. We very much look forward to working with you in the near future and would be glad to answer any questions. Please feel free to contact either one of us at the office or try the cell numbers listed below. We also invite you to visit us on the web http://www.esogrepair.com, see our reviews on Kudzu.com (click here), our third party customer service audit conducted by guild quality (click here) and our A rating with the Better Business Bureau (click here)

Yours truly,

Chuck Irby

Jay Eastland 404-754-4689 Luis Cuevas 678-654-4244



The ESOG Advantage



click on each icon to see more information



Guildmaster Award 2014, 2015 Service Excellence Award 2012, 2013 Best of Awards 2011, 2012, 2013, 2014



Contractor Award lest of 2012, 2013, 2014, 2015



Super Service Award 2010, 2011, 2012, 2013, 2014



Proud member of ...





A healthy basement should be a standard, not a luxury.





National Society of <u>Professional Engineers®</u> Signatory, NSPE Licensed Member







Verified Foundation Repair Contractor 2010, 2011, 2012, 2013, 2014, 2015



Five Star Rated Contractor 2010, 2011, 2012, 2013, 2014, 2015



Preferred Contractor 2010, 2011, 2012, 2013, 2014, 2015



2260 Northwest Parkway • Suite H • Marietta, GA 30067 • 678-290-1325

Presented by ESOG

Contract for Services

		Date of Issue: 8/10/17
Customer Information - 22091 Name: Edna Dorantes - Access Management Group Address: 1100 Northmeadow Parkway Suite 114 City: Roswell State: GA Zip: 30076 Phone: Cell: (678) 300-6302 Fax: Fax: Email: edorantes@accessmgt.com	<u>Jobsite Information</u> Contact Name: Edna Dorantes - Access Manage Address: Johns Creek Walk 11055 Bell Rd City: Duluth Phone: Cell: (678) 300-6302 Fax: Email: edorantes@accessmgt.com	ement Group State: GA Zip: 30097
□ Waterproofing	tructural Repairs	1
o provide and install 7 Helical and 12 - 4" diameter weep holes	s as recommended by the engineer.	
 NSTALL FOUNDATION PIERS: 1. Have utilities marked by locating service. Locating service marks from str locating service must be contracted by owner. ESOG may provide recom 2. Excavate area to expose existing concrete footing. 	reet to meter. If any private utilities are suspected in the mendation upon request.	e work area, a private
 Prep footing and attach galvanized foundation brackets for each pier und Drive foundation piers up to 21' through poor soil to load bearing strata advance past 21') 	der center load of footing. (see terms and conditions on page 2 for additional char	ges assessed if piers
5. Transfer load to piers to stabilize foundation against any further settleme	ent.	
6. Secure piers and backfill holes.		
 Drill 4" diameter weep holes as required Clean work area and remove all work related debris 		
6. Clean work area and remove an work related debris.		
THERS TO PROVIDE THE FLLOWING:		
1. Engineer to provide ultimate and working load capacity of the Helical Pie	ars.	
 Provide masonry patching of cracks not sooner than 30 days after Helica 	l Pier installation	
Applicable Warranty – see terms and c	conditions in the attached warranty addendum	
Waterproofing Warranty	ctural Warranty Triple Protection Warranty	/
Payment Schedule		
Deposit		
	Total Operation of American	A44 050 04
Due Upon Completion \$11,350.00	iotal Contract Amount	\$11,350.00

ESOG Signature	Date	Customer Signature	Date		
Chuck Irby		Edna Dorantes - Access Management Group			
Print Name		Print Name			

Accepted by the Customer

Terms & Conditions of This Contract

Customer: Edna Dorantes - Access Managemelopositeu/address: Johns Creek Walk 11055 Bell Rd. Duluth. GA 30097

Date of Issue: 8/10/17

1. SERVICES. Engineered Solutions of Georgia, Inc. ("ESOG") shall perform each of the services listed in Description of Services listed above (the "Services"). You, the customer named above ("Customer"), agree that ESOG shall have no duty to provide any services or deliver any goods other than described above

2. RETAINER. A retainer (the "Retainer") of twenty-five percent (25%) of the Estimate price is due prior to ESOG's commencement of the Services

3. ADDITIONAL CHARGES. Customer acknowledges it is impossible in all cases for ESOG to precisely assess the scope of needed Services prior to commencing work. During the course of providing the Services ESOG may discover additional conditions or damages that must be remedied. In such case, Customer authorizes ESOG to perform such additional services (the "Additional Services") and agrees to reasonably compensate ESOG therefor. Customer further agrees to compensate ESOG for each of the following, regardless of whether such services or charges are expressly included in the Description of Services above:

(a) Normal Construction. This Agreement assumes normal construction, concrete thickness and footing depth (no more than three feet below interior slab) and further assumes compliance with applicable building codes. If unforeseen subsurface conditions are encountered additional charges may be leved (at the contractor's option) to prepare the area for installation. If corrections are non made all warranties are void.

(b) Pre-Drilling Conditions. In some instances debris is located above competent bearing material and cannot be penetrated by piers. In those instances pre drilling is necessary to provide a warranted pier. The pre-drilling mobilization charge is \$3,000.00 and includes one day (up to eight hours) of onsite drilling. If additional drill time is required it will be billed at \$225.00 per hour. If competent bearing is not reached additional movement may occur and such movement is excluded from warranty coverage.

(c) Undisclosed Conditions. If ESOG encounters any unforeseen or undisclosed conditions in performing the Services, additional charges may be incurred (at ESOG option) to provide for and/or correct these conditions. If ESOG recommends that such corrections be made but Customer declines, then all warranties are void.

(d) Footings and Floors. This Agreement is based on a standard width footing (not over sixteen (16) inches wide), unless otherwise specified. If wider footings are encountered, a surcharge of up to \$7.50 per linear foot may be charged at ESOG's sole option. If a monolithic slab is encountered, an alternative inside waterproofing method must be employed and a surcharge of up to \$5.00 per linear foot may be charged. This contract is based on standard floor thickness not to exceed five (5) inches in depth. If thicker floors are encountered, a surcharge of \$2.00 per linear foot per inch of depth may be charged

be charged. This contract is based on standard floor thickness not to exceed the (5) inches in depth. It thicker floors are encountered, a surcharge of \$2.00 per linear foot per linear foot

quote for repairs. ESOG will periodically notify Customer of actual usage. The minimum charge for grouting operations is \$2,900.00 (100 cu.ft. of grout) per day. (h) Change Order. ESOG may request or Customer may order changes in the Services that impact the Estimate Price or the anticipated completion date. All such changes in the Services that affect the

Estimate Price or anticipated completion date shall be formalized in a written change order (each, a "Change Order") substantially in the form attached hereto labeled "Change Order Worksheet". Additional charges associated with a Charge Order shall be provided on the Charge Order Worksheet, and Customer agrees to pay all such additional charges.

4. PAYMENT TERMS. All sums are due immediately upon completion of work (other than the Retainer, which is due in advance), unless otherwise specified in this Agreement. Customer's failure to pay for Services rendered within ten (10) days' completion thereof will constitute a default hereunder. In the event of default, Customer agrees to pay all collection costs incurred by ESOG, including reasonable attorney's fees, and agrees to pay interest at the rate of 1.5% per month (18% APR) on the unpaid balance until paid in full.

5. CUSTOMER DUTIES.

(a) Presence at Jobsite. Customer must be present at the Jobsite for the start and the completion of the project. ESOG's production crews will arrive each day between 8:30am and 9:30am unless (b) Clear Work Area. Customer shall clear all work areas where Services are to be performed (collectively, the "Work Space"). This includes removal by Customer of any and all obstructions and/or

impediments in the Work Space, including, but not limited to: carpet, floor covering, stairs, counters, counter tops, cabinets, shelves, plumbing, appliances, furniture and fixtures. Customer's duty to clear shall further include all space within thirty-six (36) inches from each wall within or adjacent to the Work Space. Customer further agrees to provide a clear path of ingress and egress for personnel and equipment to and from the Work Space.

equipment to and from the Work Space. (c) Water and Electrical Power. Customer shall provide ESOG water service and electrical power necessary for completing the Services. This includes access to water for mixing concrete (if necessary) and a minimum of two (2) electrical circuits (one 20-amp circuit and one 15-amp circuit). If no power is provided, the customer will be responsible for any cost incurred by ESOG in providing power. In the event of circuit overload, access to the fuse or circuit breaker box (electrical service) must be provided. In the case of fuses, the customer must provide an ample supply of replacement fuses in the event of circuit overload. If a sump pump(s) is/are required. Customer shall provide an electrical outlet within 25 feet of the pump. (d) Finished Walls. The customer is responsible for the removal and replacement of baseboards and trim unless otherwise specified. ESOG is not responsible for damage to finished walls (plaster,

sheetrock, baseboards, paint, wall coverings, molding, paneling, etc.) not removed by customer.

6. HOLD HARMLESS. Customer acknowledges the Services provided by ESOG hereunder are inherently dangerous and are sought to help remedy existing water and/or structural damages. Accordingly, Customer agrees to indemnify, defend and hold ESOG harmless from any of the following: (a) Plants, Shrubs and Trees. Outside installations and excavation carry an inherent danger of damage to flowers, plants, shrubs and trees. ESOG assumes no liability for damage to plants, shrubs, trees

(a) rains, of many of the standard and back and the standard and back and the standard and replace and the standard and replace and replace and replace and replacement may result in some color variation in the floor.
 (b) Concrete Floors. With inside installations, a section of concrete floor may be removed and replaced. If necessary, such removal and replacement may result in some color variation in the floor.
 Additionally, if clay must be removed it may cause some staining of the concrete floor. Customer agrees that in some cases such staining is unavoidable, and that ESOG will not be responsible for

(c) Dust. In most cases, the dust control methods utilized are adequate. Occasionally, particularly hard or thick floors require the use of an air harmer, which is less amenable to dust control. In such cases, ESOG will pay up to \$100.00 for an outside cleaning service, as determined by ESOG in its sole discretion.

(d) Plastic Deformation. Components that have deformed over time may cause cracks to appear during a lift. This is a natural occurrence and ESOG assumes no responsibility for such damage and deformation may prevent floors from being level.

(e) Surrounding Amenities, Utilities and Finishes. ESOG shall use commercially reasonable efforts to control grout overflow and splatter. However, as the grout is injected under pressure, some overflow and splatter is unavoidable. ESOG shall not be responsible for damage to plants, underground utilities or adjacent areas into which grout may flow, including, but not limited to, pool shells, brick or store veneer, plumbing, electrical conduits, floor drains and pipe penetrations. Although, ESOG will cover finishes, touch up paint may be required and in some instances walls and ceilings may need to be stone repainted. A quote for painting can be provided upon request and is not included in the cost of this contract. Customer or Customer's agent must be present during the grouting process

7. EXTERIOR DRAINAGE. Exterior drainage is covered under a one-year workmanship and materials warranty. Exterior drainage has a fixed, limited capacity. If that capacity is exceeded due to rain fall or debris in the line, a leak will occur and is not covered under the warranty. A recommendation can be made to have a hydrologist study the drain basin and design a drainage plan to meet specific flood plains (25-year, 50 year, 100-year etc.) at additional cost.

8. STABILIZATION. The primary objective of work performed hereunder is to stabilize the repaired area against further movement. ESOG will attempt, but cannot guarantee, to lift the foundation, level floors, close cracks, render doors and windows operational and move walls back into original position. Customer must be present during the lift. Walls and wall components that have rotated out of position often will not return to their original positions and additional repairs will be required. Such additional repairs are not part of this contract unless otherwise stated. ESOG will lift only as much as the structural integrity will allow

9. SOIL DISCLAIMER. In the absence of a soil report generated by a licensed geotechnical engineer, the allowable soil pressure for the purpose of the Services is 2,000 psf. Prior to construction, soil design parameters stated on the structural foundation details, including, but not limited to, allowable soil bearing pressure, equivalent lateral fluid pressure (active and passive), internal angle of friction, coefficient of friction and soil density, shall be field-verified by a geotechnical testing company engaged by Customer. In the event of a conflict between field-verified soil parameters and those stated on the foundation details, construction shall not proceed until appropriate design modifications by the foundation design engineer-of-record have been submitted.

10. LIMITATION OF LIABILITY. IN NO EVENT SHALL ESOG BE LIABLE FOR ANY LOST PROFITS OR SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER LEGAL OR EQUITABLE THEORY AND REGARDLESS OF WHETHER CUSTOMER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE. THE LIABILITY OF ESOG SHALL BE LIMITED TO THE AMOUNT OF FEES ACTUALLY PAID TO ESOG BY CLIENT UNDER THIS AGREEMENT.

11. DISCLAIMER OF REPRESENTATIONS AND WARRANTIES. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, ESOG MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND THE NON-INFRINGEMENT OF ANY THIRD-PARTY PROPRIETARY RIGHTS. ALL UNIFORM COMMERCIAL CODE WARRANTIES ARE EXPRESSLY DISCLAIMED BY THE PARTIES.

12. MISCELLANEOUS PROVISIONS. This Agreement shall be binding upon and inure to the benefit of the heirs, personal representatives, successors, and assigns of the Parties. Any notice or demand made hereunder shall be sent by electronic mail or facsimile and the original sent as specified herein the same day by United States mail, postage prepaid, addressed to the address provided above. In the event of a default, the defaulting party shall reimburse the non-defaulting party for all costs and expenses reasonably incurred by in connection with the default, including, without limitation, attorney fees. No waiver of any provision of this Agreement shall be deemed or constitute a waiver of any other provision, nor shall any waiver constitute a continuing waiver. No waiver shall be binding unless executed in writing by both parties. This Agreement shall be governed by the laws of the State of Georgia and any dispute related hereto or arising hereunder shall be brought exclusively in the Superior Court of Cobb County, Georgia. This Agreement constitutes the entire agreement between the parties pertaining to its subject matter, and it supersedes all prior contemporaneous agreements, representations, and understandings of the Parties. No modification, or amendment of this Agreement shall be binding unless executed in writing by all Parties. ESOG shall not be in default if prevented from performing any of its obligations hereunder for any reason beyond its reasonable control, including without limitation: acts of God, nature, public enemy strikes, limitations or law, regulations or Customer's failure to perform its duties and obligations required of it in order for ESOG to provide its Services under this Agreement.

Warranties

Structural Warranty:

Engineered Solutions, Inc. warrants its work to be free of defects in workmanship and materials for the life of the structure, provided all terms of the contract have been met. This covers labor and materials under direct control of Engineered Solutions. Products of other suppliers (pier steel, brackets, fasteners, etc) are covered by that manufacturer's separate warranty. This warranty is transferable to successive owners provided that Engineered Solutions is notified in writing, within thirty days of the date of transfer. If any additional movement of the installed components occurs counter to the repair, other than movement caused by earthquake, ground shifts, severe wind, flood, slope or hill movement, extreme change in the water table (sink holes or upheaval), or other Acts of God or similar man made conditions including but not limited to, explosions, mining operations, abandonment of building, improper drainage, adjacent construction, improperly supported additional construction, etc. Engineered Solutions will at no cost to the homeowner, correct any defect in workmanship or materials in order to stabilize the area. The foregoing is our sole warranty. All other warranties are excluded. The owners' sole remedy shall be for correction of any defect in workmanship or materials as set forth above. In no event shall Engineered Solutions be liable for consequential damages regardless of basis of claim.





REQUEST FOR PROPOSAL

Date:	July 17, 2017
Property Name:	Johns Creek Walk Owners Association
Property Address:	11055 Bell Rd, Duluth, GA 30097
Scope of Work:	Entrance monument retaining walls are in need of repair.

Drill 4 inch diameter weep hole 8.0 feet on center be cored through the walls approximately 12 inches above the bottom of the exposed walls to relieve hydrostatic pressures from behind the walls.

Install Two (2) helical piers on the left (as you enter) wall, 3.0 feet each side of the noted crack, to prevent further rotation of the wall.

Install Five (5) helical piers on the right entrance wall. One pier should be located 3.0 feet left of the crack and step-up and one pier each should be located 3.0 feet, 10.0 feet and 16.0 feet right of the crack as well as one at the short column at the right end of the radius.

See attached Construction Testing & Analysis report of more details

Bid Submission:

8/11/17

Contact:

Dave Lyons dlyons@accessmgt.com 678-300-6302

community

CONSTRUCTION ESTING & ANALYSIS

July 7, 2017

Johns Creek Walk Owners Association c/o Access Management 1100 North Meadow Parkway Suite 114 Roswell, Georgia 30076

ATT: Dave Lyons

RE: Johns Creek Walk Entrance Walls 6215 Johns Creek Commons Project# 17-151-1

Dear Mr. Lyons:

Construction Testing & Analysis, Inc. is pleased to submit this report of our findings at the above mentioned site. The purpose of our exploration was to check the soils supporting the large entrance walls on the left and right sides of the main entrance into the property where cracks in the brick were noted. (See attached photos.)

Visual observations noted cracks in the brick in the radius of the tall walls on each side of the entrance. The crack in the brick on the left wall is confined primarily to the upper half of the wall and is only on the face of the wall. A larger crack was noted on the right wall which extended from the top to the footings and, where observed, was on both the face and rear of the wall. In addition to being entrance walls, each wall was backfilled and the walls are also retaining walls supporting landscaped areas and parking. Construction Testing & Analysis Inc. has no knowledge as to the design and construction of these walls. No weep holes were observed in the walls to relieve potential hydrostatic pressures should water accumulate behind the walls.

Borings performed adjacent to the footing of the left wall encountered firm soils exhibiting an allowable soil bearing pressure of 2500PSF. These soil conditions are typically adequate to support a retaining wall designed for a soil bearing pressure of 2500PSF or less. The type and shape of the crack in the left wall is not indicative of settlement. It appears that the top of the left wall has rotated slightly outward resulting in the noted crack. This would account for the crack in the face which is extensive and no crack in the rear which is in compression.

Borings performed adjacent to the footing of the right wall encountered varying soil conditions. The footing at the crack steps up from left to right and continues to step up proceeding right to the first short column at the right end of the radius. The soils supporting the wall at the crack and right of the crack to the short column consisted of soft to firm fill soils exhibiting allowable soil bearing pressures ranging from 1500PSF to 2000PSF. The soils 6.0 feet left of the crack to the tall column were firm and exhibited an allowable soil bearing pressure of 2500PSF. Based on our findings, the footing on the right entrance wall from the crack to the short column at the end of the radius has settled resulting in the noted irregular large stair-step crack in the brick.

Construction Testing & Analysis Inc. recommends that 4 inch diameter weep holes spaced 8.0 feet on center be cored through the walls approximately 12 inches above the bottom of the exposed walls to relieve hydrostatic pressures from behind the walls. Two helical piers should be installed on the left wall, 3.0 feet each side of the noted crack, to prevent further rotation of the wall. Five helical piers should be installed on the right entrance wall. One pier should be located 3.0 feet left of the crack and step-up and one pier each should be located 3.0 feet, 10.0 feet and 16.0 feet right of the crack as well as one at the short column at the right end of the radius.

After the piers have been installed and loaded for a minimum of 30 days, the brick can be repaired. The weep holes should be installed prior to installation of the piers.

While we were on site, it was noted that two areas of the parking lot and curb adjacent to the right entrance wall left of the radius have settled slightly. The areas should be maintained to prevent water from ponding and possibly infiltrating the backfill of the walls.

We have enjoyed working with you on this project. If you have any questions or we can be of further service, please feel free to contact this office.

Sincerely,

CONSTRUCTION TESTING & ANALYSIS, INC.

Charles T. Almand, P.E. President















BRACKET OR LOAD TRANSFER DEVICE (LTD)

WHILE HELICAL PILES AND THE ASSOCIATED METHODS HAVE BEEN USED FOR MANY DECADES, THE IDEAL APPROACH IS ANYTHING BUT ANTIQUATED.

We believe that although it isn't broken, there's always room for improvement. We pioneered the high capacity helical pile industry and today we manufacture helical piles with shaft diameters up to 36". Leave behind any misconceptions you had about helical piles and see what IDEAL has to offer. We're going places. EXTENSION

BOLTED COUPLING

LEAD SECTION

HELIX

GET FAMILIAR

The unit is called a **helical pier** if it resists compressive loads, which are usually downward. It is called a **helical anchor** if it resists tensile loads, which are usually upward or inclined. Many helical units function as both piers and anchors.

A helical unit is installed by simply screwing it into the ground. The central shaft may be round or square and it may be hollow or solid. Hollow (pipe shafts) are often preferred, because they provide a greater section modulus for the same cross-sectional area of steel. Pipe shafts, as compared to solid shafts, generally provide greater resistance to installation torques and buckling under compressive loads.

A typical helical unit is shown to the left. It consists of a central steel shaft, to which can be attached one or more steel helices. The central shaft can be lengthened by adding extension pieces as necessary.

Pipe shafts range anywhere from 2 7/8"" to 36" in diameter, and helices range anywhere from 5" to 48" in diameter and are seldom less than 3/8" thick.

Experience and theory have combined to suggest that the preferred spacing between multiple helices is equal to 3 helix diameters of the preceding helix.

The final component to the helical unit is the Load Transfer Device (LTD). This is used to transfer the tension or compression load from the structure to the helical unit.

Simply put, the helical unit transfers tension or compression load to competent soil strata below incompetent soils.

Dideal

Our team is often called on to fabricate custom brackets and load transfer devices. Below are examples of brackets which are manufactured by IDEAL. Give us a call if you don't see what you're looking for and we can design the perfect bracket to meet project requirements.







APPLICATIONS

A helical pier is a deep foundation. Its purpose is to transfer a structural load to deeper, stronger, and less compressible materials bypassing any weaker and more compressible materials that would be unsuitable for the support of conventional shallow foundations.

As a deep foundation, a helical pier should be considered for most applications that would call for a driven pile, drilled pier, or mini pile.

Helical piles and anchors are usually a great foundation solution to any of the applications below whether it's a new build or existing structure.



COMMERCIAL BUILDING REMEDIATION	SUBSTATIONS	TIE-BACKS/ANCHORS/RETAINING WALLS
SANITARY PIPELINE SUPPORT	LIGHTING <50FT	BULKHEADS
TILT-UP WALL ANCHORS	SOUND WALLS	SHORING PIPELINE
WORK CAMP FOUNDATIONS	BRIDGES/BOARDWALKS/DOCKS	GUY LINES/WIRES
TOWERS - QUAD BASE	ROADWAY SIGNAGE TRAFFIC SIGNALS	TANKS AND SILOS
TOWERS – MONOTUBE	BILLBOARD/SIGNAGE GENERATOR BASES	UNDERWATER SUPPORT
UTILITY ANCHORING	TIE-DOWNS/MOORINGS	MACHINE BASES













For many applications helical units may offer significant advantages over other systems. Some of these include:

WIDE RANGE OF LOADS A wide range of allowable loads. Anywhere from 10-700 tons to be exact.

VERSATILE INSTALLATION ANGLES Adaptability to a variety of installation angles to accomodate compression, tension, lateral, and overturn.

LESS DEPTH = MORE MONEY

Lower cost than driven or drilled piles. While the cost per foot may be higher, piles can be installed to lesser depths and reach the same required capacities.

RAPID INSTALLATION

Not quite lighthing fast, but it's hard to beat the ease and speed of installation.

MINIMAL EQUIPMENT

Minimal support equipment is needed for installation. A drive head, torque indicator, and a few other components and you're up and running. Just by the way, IDEAL offers the most complete drive head packages in the industry.

GREAT FOR LIMITED ACCESS Helical piles are great for low-headroom and other limited-access areas inside, underneath, and in between existing

SIMPLE CUTOFFS With a band saw or torch, on-site cut-offs are a breeze.

NO CONCRETE DELAYS No concrete-related delays, and we all know time is money...

INSTALL IN EXTREME WEATHER Helical piles can be installed in any weather except thunderstorms and whatnot. We play it safe, and you should too.

LIMITED EARTHWORK AND NO SPOILS Little or no earthwork or spoil material is created during helical pile installation. This is a huge advantage when working at

MINIMAL VIBRATION AND NOISE With minimal vibration and noise, helical piles are a perfect fit for historic structures and other urban projects surrounded by fragile people and buildings.

TEMPORARY INSTALLATIONS

Easily removed and reused in temporary applications such as shoring and movable structures.

MOBILIZATION COST

Very low mobilization and demobilization costs. Look at the real costs of installing alternates and you might be as surprised



VARIETY OF INSTALL ANGLES





A helical screw pile is rotated into the ground by using a hydraulic drive head, powered by an excavator, pile driving rig, or any other equipment with hydraulic capability. IDEAL requires installers to monitor installation torque and pile alignment during the installation process. This is required for a few reasons.

First, it is important to have a qualitative assessment of the soils being penetrated at various depths. Using a graph, the recorded installation torgue and depth is interpreted against the existing soil data to obtain a correlation that enables a simple verification strategy to be determined.

screw pile unit.

INSTALLING

The soil data is interpreted against the installation torque and a correlation is obtained to maintain the integrity of the helical screw pile during installation as well as mitigate damage by exceeding the allowed torsional strength to any of the pile's components. Every helical screw pile has a maximum stress level that must not be exceeded in order to avoid compromising the structural integrity of the helical



THE HISTORY

The first helical screw pile was invented in the 1830's by a blind Irish marine construction engineer named Alexander Mitchell. His design proved to be a major improvement over traditional straight pile designs, so Mitchell and his son promptly patented the cast iron screw pile. In 1840 the first screw piles were installed to support the Maplin Sands lighthouse at the mouth of the Thames River. This innovative design caught on and made its way across the pond quickly and before long most of the lighthouses in the Mid-Atlantic region were being built on helical pile foundations. There were more lighthouses built on helical pile foundations in Chesapeake Bay than anywhere else in the world. A total of Forty-two helical screw pile lighthouses were built on Chesapeake Bay between 1850 and 1900.

The helical screw pile technology didn't stay on the east coast. Over the next few years, helical screw pile lighthouses could also be found in the Great Lakes Region and the Gulf of Mexico.

The foundation of a typical screw pile lighthouse consisted of one central pile installed in the center and then flanked by another six or eight piles around the perimeter. This design increased the anchoring properties and the bearing power of the helical screw piles. These early helical screw piles were often installed by using large torque bars and the power of men, horses, or oxen.

Alexander Mitchell's helical screw pile design is just as effective today as it was in the late 18th century and continues to be installed around the world



OUR MISSION

To provide our clients and associates with proprietary technology, products, equipment, and support, ensuring excellence in the design and performance of deep foundation and earth anchoring projects.

IDEAL Manufacturing, Inc. | 80 Bluff Drive, East Rochester, NY 14445 | 800.789.4810 | www.idl-grp.com





Engineered Solutions of Georgia

***** 159 Reviews (678) 905-1499 www.esogrepair.com »

CONTACT THIS BUSINESS

What your neighbors are saying

Very Helpful, 8/11/2015

I was having difficulty trying to find out where my basement was leaking. I contacted Engineered Solutions based on the reviews I read on line. Allan came to my house and not only gave me a detailed...

Very honest company, 3/25/2015

Allan Waite came and consulted on a sidewalk which was pulling away from our house. He presented the options, and told me about how much each option would cost. The lesser cost was one that I could...

Larry F. Posted on 2016-03-21	Todd was very knowledge and Todd was very knowledge and the prices were cheaper. They did a really good and they absolutely fixed everything. They made us happy and I have recommended them and I will again.	OVERALL QUALITY SERVICE VALUE	**** **** ****
Joe S. Posted on 2016-03-10	the experience was extraordinary starting the experience was extraordinary starting with the follow-up from Samantha to the delightful initial call from Luis to the highly-professional skills and professional decorum and sterling work ethics of Shane, Alex, Jonathan, and Cruz.This is not an empty gesture of just wanting to be "nice." As a business man and one conversant with construction, this outfit and team are absolutely first-rate. FIVE STARS for sure!	OVERALL QUALITY SERVICE VALUE	**** **** ****
Nick W. Posted on 2015-10-17	ESoG provided a solid engineered ESoG provided a solid engineered solution to my structural problems around my home. This consisted of a combination of screw anchors and driven piles. Reaching a good load bearing soil required depths over 20 feet. Their solution was well thought out and all alternatives discussed. The work was carried out on time by professionals who were no strangers to what they were doing. And they were neat! Tarps were used to store the dirt that they had to move, and everything thoroughly cleaned up when they left. They took pride in their work and seemed to delight in showing off what they had accomplished. Well pleased!	OVERALL QUALITY SERVICE VALUE	**** **** *****
John M. Posted on 2015-10-14	ESOG arrived when they said ESOG arrived when they said they would and set up ans started work efficiently. My job was a sinkhole under my driveway that was pulling the surrounding soils into it. Allan surveyed the site and presented a proposal based on his best estimate of the job, while emphasizing that a job like mine had many unknowns that could make it a larger job than expected. He was correct, our sinkhole was much bigger than expected, so the crew came back over four days to finish up the job. They cleaned up every day, and at the end, they pressure washed the street to remove all residues. I watched the job over most of the time they were here and was quite satisfied that they were able to fill the sinkhole and solve my problem. I would definitely use them again.	OVERALL QUALITY SERVICE VALUE	**** **** ****
Pat S. Posted on 2015-10-08	This was the best contractor This was the best contractor I have dealt with in a long time. They did exactly what they contracted to do, worked in the hot crawl space by going thru a basement window, and the cellar looked better after they left than before. And I feel it is structurally ready for 50 more years. It was a relief to find them for cellar/pier work. There are some fast operators out there! Chris's report went a bit overboard, included speculation, and included the atticwhich has stood up there for 100 years with one small plaster incident. My entire objective was improving the main floor and the cellar. That attic photo/commentary caused a lot of anxiety when I gave his report to the prospective buyers, as I was required to do legally. When asked he did remove the speculative comments. The rest of his report was specific and told just what to do. I would use him again, but give directions! Overall the company was terrific. I wish they would advertise under "crawl encore".	OVERALL QUALITY SERVICE VALUE	**** **** ****











Engineered Solutions of Georgia

2260 Northwest Parkway Suite H · Marietta, GA 30062 · (678) 290-1325 www.esogrepair.com







the experience was extraordinary... starting with the follow-up from Samantha to the delightful initial call from Luis to the highlyprofessional skills and professional decorum and sterling work ethics of Shane, Alex, Jonathan, and Cruz. This is not an empty gesture of just wanting to be "nice." As a business man and one conversant with construction, this outfit and team are absolutely first-rate. FIVE STARS for sure!

Did you find this helpful? Yes

Review by Dave R. of Fayetteville, GA

Mar 09, 2016

Extremely knowledgable and great company!

Did you find this helpful? Yes

Review by Charles M. of Lilburn, GA

Feb 22, 2016

I am impressed by the work done by Engineered Solutions of Georgia.

Did you find this helpful? Yes

Review by Matt B. of Smyrna, GA

Feb 20, 2016

Excellent service from beginning to end. Hands down the best experience I've ever had with a contractor.

Did you find this helpful? Yes

Review by Richard P. of Douglasville, GA

Feb 20, 2016

★★★★★ Did what they promised on time and on budget

Did you find this helpful? Yes







2260 Northwest Parkway Suite H Marietta, GA 30067 ofc. 678.290.1325 fax 770.956.7403 www.esogrepair.com

CORE VALUES

UNDERSTANDING

- It is important to us that our customers fully understand the issues they are having with their home and why the problems have occurred.
- We will create a customized plan that will fully address the issues and insure that our customers completely understand what we will be doing and how it will be done.

<u>TRUST</u>

We want to earn the trust of our customer in three ways:

- **COMMUNICATION** From the first phone call to the last we will keep our customers informed of their project status and changes as we work together.
- **EXECUTION** From the project design to the completion of the work we will do exactly what we have contracted together to accomplish.
- WORKMANSHIP Every project is custom designed to correct the issues and we will stand behind it with a warranty that is stated in the contract. We will also send out warranty certificates that are transferable with the property.

<u>RESPECT</u>

We consider our customers friends and family and we treat them that way. We will respect their time by confirming all appointments and arriving on time. We will treat their home like our own while performing all work and we will dress and speak professionally at all times. We ensure that all work related debris is removed when the job is completed.

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Engineered Solutions of Georgia, Inc. 2260 Northwest Pkwy Suite H Marietta, GA 30067					A	AUTHORIZED REPRESENTATIVE					

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