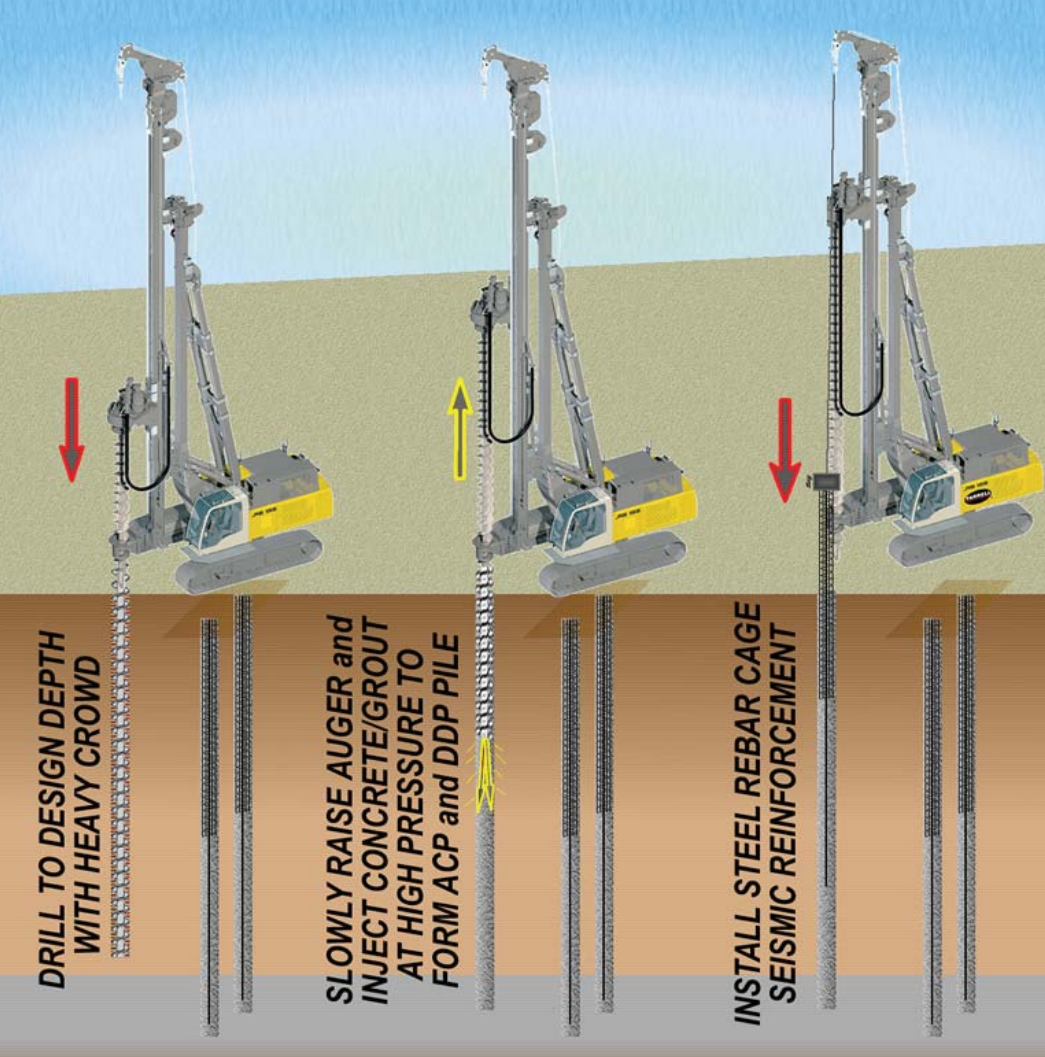


Proven Foundation Solutions + Unmatched Customer Service!

Auger Cast, Drilled Displacement, and Driven Grout Piles

When ground improvement is not the answer, Farrell Design-Build provides its customers with Auger Cast, Drilled Displacement, and Driven Grout Displacement Piles.

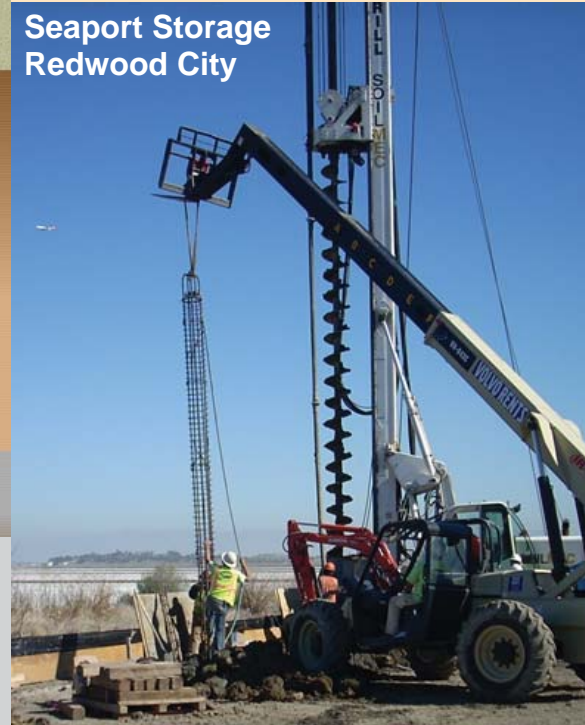


Why Auger Cast and DDP Piles?

ACP and DDP piles are the right solution for heavy building foundation loads on deep compressible soil. With virtually no vibration and quieter construction, your customers can be assured that neighbors will not be disturbed by ACP and DDP pile installation.

Consider Driven Grout Displacement Piles (DGP) for more cost savings... see the back for more information.

Seaport Storage Redwood City



The ACP and DDP ADVANTAGE:

QUALITY Heavy crowd plus high pressure concrete injection is the key to quality.

STRENGTH 3,000 to 5,000 psi concrete plus heavy reinforcement provides high seismic strength.

CAPACITY Injection of grout or concrete under high pressure provides for soil improvement in loose and soft soil zones maximizing pile capacity. Individual pile capacities of 100 to 500 kips ASD.

PROVEN FHWA cites auger cast piles as highway designers first choice foundation system for highway bridges and infrastructure in the USA GEOTECHNICAL ENGINEERING CIRCULAR NO. 8 - Design and Construction of Continuous Flight Auger (CFA) Piles (2007).

ECONOMICAL With DDP the cost of cement/grout mixed soil offhaul is virtually eliminated.

FAST Installed in less time than driven piles with the same and often higher capacity.

Farrell Design-Build provides a full scope of foundation services. Put our foundation and ground improvement experience and specialty engineering services to work on your next project.

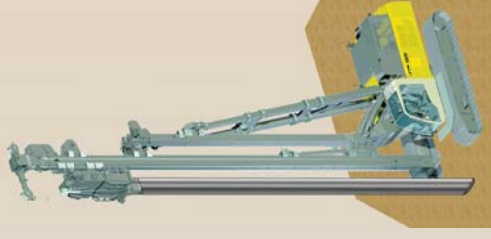


Serving the San Francisco Bay Area, Sacramento Valley, San Joaquin Valley, and Southern California.

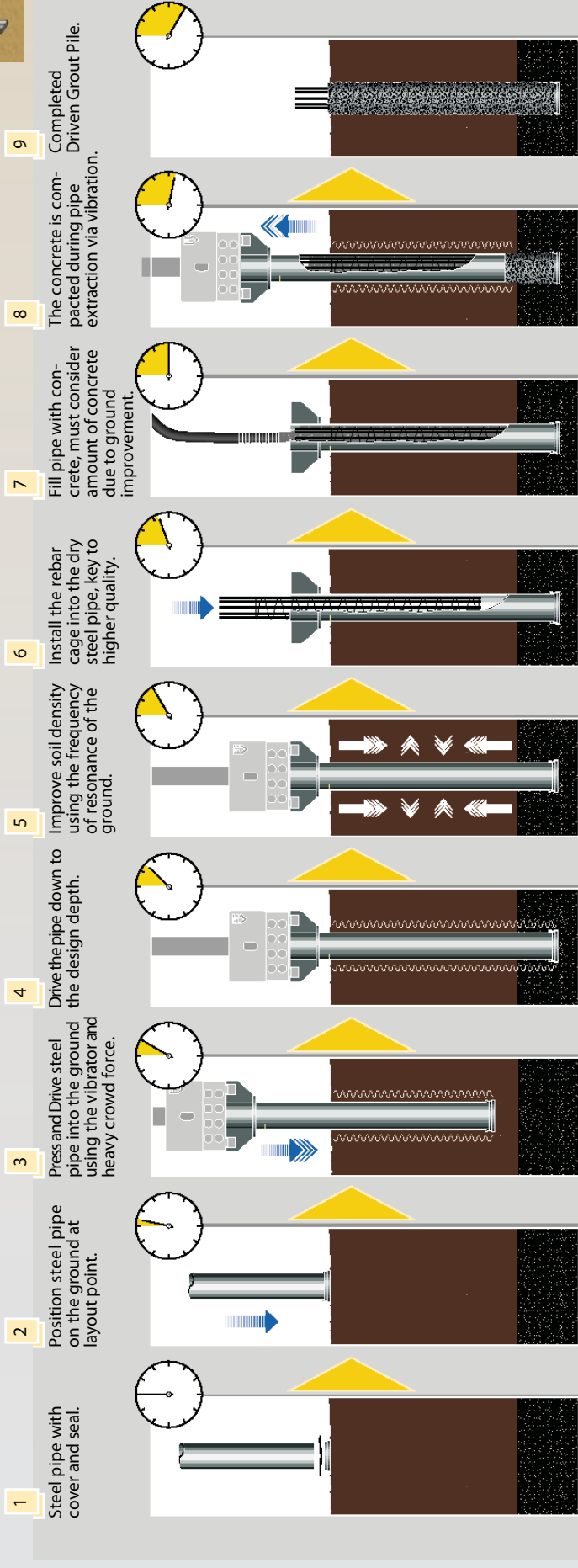
(530) 621-4867 or visit www.farrellinc.com

DRIVEN GROUT DISPLACEMENT PILE (DGP)

Farrell Design-Build FOUNDATION SOLUTION	Depth Of Treatment	BEST Soil Type	TYPICAL Allowable Capacity	KEY Advantages	Limitations	COMPETES With
DGP Driven Grout Displacement Pile	65 feet (20 meters)	Soft to Medium CLAY and Loose SAND	100 kips (444 kN) to 400 kips (1776 kN)	<ul style="list-style-type: none"> • High capacity • Fast installation • Concrete corrosion protection • DRY placement of steel reinf. • Best in soft to medium CLAY • Install in medium dense SAND 	<ul style="list-style-type: none"> • Vibrations at 25 ft. • Refusal to driving in very stiff clay or dense sand 	<ul style="list-style-type: none"> • Driven piles • Steel screw piles • Concrete piers • Auger-cast piles • Stone columns • Soil-cement col.



DRIVEN GROUT DISPLACEMENT PILE CONSTRUCTION PROCESS



More Advantages

Driven grout piles provide considerable cost savings and schedule advantages in soft to medium stiff clay and medium dense sand. Pile quality is enhanced by the vibration removal of the pipe and the concrete or grout is compacted and soil is further improved. Removing the steel pipe on every pile saves considerable money. By changing the force of the vibrator, loose soil can be densified and improved even more to increase pile capacity.

**Serving the San Francisco Bay Area,
Sacramento Valley, San Joaquin Valley,
and Southern California too!**



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