



**Client**

**United States Navy**

URS Group, Inc.  
Fred Walker, PE  
(813) 286-1711

**Location**

Mayport Naval Station  
Jacksonville, Florida

**Services**

- Geotechnical Engineering
- Field Exploration
- Laboratory Testing

**Project Engineers**

- Bruce Khosrozadeh, PE

The fitness center addition included a new gymnasium and outdoor sports field. The gymnasium featured an indoor swimming pool, aerobics and exercise areas, racquetball courts, storage areas, and locker rooms. Geotechnical services included the following elements.

EXPLORATION: CSI Geo staff provided all geotechnical exploration services necessary to evaluate the site for the proposed construction, which included:

- Standard Penetration Test (SPT) borings to a depth of 75' below the ground surface
- Auger borings to a depth of 15' below the ground surface
- Routine laboratory testing on representative soil samples to determine classification and soil behavioral properties

ENGINEERING EVALUATION: CSI Geo staff provided findings and recommendations based on the information gathered during the geotechnical exploration, which included:

- Boring logs with a graphic representation of the soil borings
- Results of laboratory test performed
- A summary of all field and laboratory testing procedures performed
- Water table information
- A brief description of subsurface conditions encountered at each boring
- Evaluation of the subsurface conditions for support of the planned structures
- Shallow foundation analyses including settlement and bearing capacity
- Recommendations for ground improvement
- Driven pile capacity analysis
- Auger-cast pile capacity analysis
- Recommendations for pile spacing based on pile group effects
- Floor slab construction recommendations
- Pool construction recommendations
- Evaluation of paved parking areas
- Seismic analysis and classification

**CSI Geo, Inc.**

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