

## PROJECT DESCRIPTION

**PROJECT:** New Springfield Middle School  
**LOCATION:** South 32<sup>nd</sup> and Jasper Road, Springfield, Oregon  
**DESIGN TEAM:** *Architect:* Soderstrom Architects  
*Structural Engineer:* Walker/DiLoreto/Younie  
*Geotechnical Engineer:* Heery International Newton  
**CONTRACTOR:** John Hyland Construction, Inc.



### DESCRIPTION:

- One-story middle school and gymnasium
- Column loads of 48 to 108 kips
- Wall loads of 2.45 kips per foot

The project geotechnical investigation revealed that a 6' to 9' deep buried stream channel filled with highly sensitive and compressible silts occurred beneath the planned new gymnasium and covered play area. Except in the old stream channel, conventional spread footings on-grade were feasible. However, in the old channel area, consideration was given to two alternate approaches:

1. Overexcavating the objectionable soils and replacing them with compacted fill excavated from other areas on-site
2. Installation of Rammed Aggregate Piers® (RAP) beneath the footings

The Geopier® System proved to be a more cost-effective solution than overexcavation and replacement filling. A total of 57 RAP's with 24" and 33" diameters were installed in 3 working days on-site. Spread footing excavations were made after the RAP's were installed, and earth forming was used; resulting in further savings for the project.

### REFERENCES:

Mr. Brad Tindall, Project Manager John C. Cunningham, G.E.  
John Hyland Construction, Inc. David J. Newton Associates  
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