

Big Picture Thinking. Practical Approach. Sustainable Design.

# **Alsip-Merrionette Park Public Library**

## **Project Highlights and Results**

- Design included a new geothermal water source heat pump heating and cooling system with 24, 450-foot deep wells installed under the Library's new parking lot.
- All design and construction documentation completed with Building Information Modeling (BIM) three-dimensional modeling software.
- Obtained \$90,000 in local grant funding for the project because of geothermal system design.

#### **Project Background**

p-Merrionette Park Public Library
ip, IL
McLauchlan, Don Bezek
PFPIT Engineer
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### **Project Overview**

Building Type:	Municipal Library
Building Attributes:	2 Stories, 39,200 SF
Initial Construction:	1981, 2013
MEPFPIT Systems:	Centralized Geothermal Heat Pump System,
-	Radiant Snow Melt VAV AHUS Chilled Beam DDC

#### Innovation

- MEPFPIT services for the Library's renovation and addition project provided to increase the print and electronic library collections and services offered to the local community.
- Design included a new geothermal water source heat pump heating and cooling system with 24 vertical, 450-foot deep wells installed under the library's new parking lot adjacent to the building.
  - The resulting dual temperature water supplied from the building's main heat pumps was then distributed to chilled beams, VAV boxes, air handlers, and unit heaters located throughout the building.
  - A hot water boiler snow melt system also installed under the walkway at the building entry.



