

Building a Sustainable Value Set - New Onondaga Nation Fire Station

Matthew Broderick, Principal, Ashley McGraw Architects, DPC

Andrew Schuster, Project Architect, Ashley McGraw Architects, DPC

ABSTRACT

The Onondaga Nation's previous fire station was an aging prefab metal building in need of replacement. The Nation's leadership looked to provide a new fire station that expresses their cultural values on sustainability. They also chose to include a shared community hall for the whole Nation community, which was a service currently lacking within the Onondaga Nation, and build it with local labor. The question for the design team was: Can we build a net-zero building, using community labor, with materials that don't harm the environment? How do we prioritize those choices?

Ashley McGraw Architects, which views low-energy use as baseline criteria for a sustainable building, decided to look deeper into the sustainability of their material choices. This presentation looks at the decision making and evaluation criteria that the team used to determine whether or not their choices could be considered sustainable. Instead of producing a matrix of specific characteristics, Ashley McGraw developed a set of equally weighted values that the team could use to compare material and construction options in a proactive way. Focused on renewability, recyclability, and environmental and user health, the final product is a building that goes well beyond sustainable energy to one that expresses the values of the Onondaga Nation in its materials.

BIOGRAPHY

Matthew Broderick, AIA, NCARB, LEED AP BD+C is a Principal at Ashley McGraw Architects. In his 20 years at the firm Matt has worked on a variety of building types with a particular emphasis on sustainable design. Recent projects include the LEED Gold Science Building at Syracuse University, LEED Gold Townhouses at SUNY Oswego, the Southern Tier High Technology Incubator and the addition and renovation to Sadler Dining Hall at SU. He strives for a holistic, forward looking vision of architecture that is in harmony with nature.

Andrew is a project architect at Ashley McGraw Architects. He received his B. Arch from Cornell University in 2007 and has practiced in the US, France, and Ireland. He has a professional background in sustainable materials and is a firm believer in the fact that great design backed up by the right science can make better environments that improve lives. He currently serves as the Director of Outreach for the AIA-CNY. Andrew is a registered Architect and LEED accredited.