

PROJECT PROFILE



LEED® Facts

Heights Recreation Center
Richardson, TX

LEED for New Construction
Certification awarded February, 2016

Silver 53*

Sustainable Sites 21/26

Water Efficiency 3/10

Energy & Atmosphere 6/35

Materials & Resources 7/14

Indoor Environmental
Quality 9/15

Innovation & Design 4/6

Regional Priority 3/4

*Out of a possible 110 points

Heights Recreation Center Richardson, Texas

LEED NC

99.9% FSC Certified Wood

39% Annual indoor water savings

84.3% Construction Waste diverted from
Landfill

41.9% Regional materials

24.7% Recycled materials

HEIGHTS RECREATION CENTER

Suburban Renewal – Recreating Heights Rec

PROJECT BACKGROUND

Originally built in the 1960s, Heights Recreation Center was the city's first. After many years of service, a study in 2005 recommended replacement of the center due to its physical obsolescence. In 2008, the Heights Park Masterplan began the process of re-envisioning the site with a new center, and in 2010, a bond was passed to fund the project. Replacing the neighboring Arapaho Pool was also part of the bond funding and project, though the pool is not part of the LEED certification.

LEED PROCESS

LEED™ certification was an owner-driven goal of the project from the inception. Therefore, H&W, BSA, and all relevant consultant team members have past experience on LEED™ projects and have LEED™ accredited staff assigned to this project. Additionally, a sustainability consultant is on the team to assist the group in evaluating opportunities / challenges along the journey and navigating the process of submittal.

STRATEGIES AND RESULTS

ASPECT #1 – SITING

We believe that an important sustainable aspect of this project is one of its more intangible aspects. Rather than relocate the project to another area in the park (as had been done with a previous city rec center project), this project substantially occupies the original building site. This minimizes the environmental impact of development, and was also achieved with minimal impact to the city's ongoing operations. The city was only without use of the recreation center for a few short months, despite over a year of construction effort. While the project is sustainably designed, this underlying project premise is perhaps its most outstanding sustainable quality.

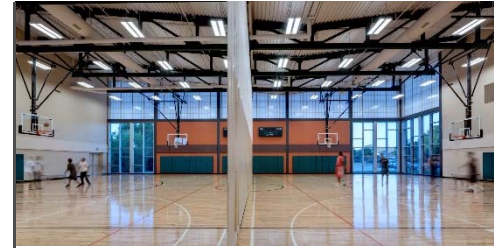
ASPECT #2 – SOLAR ORIENTATION

One of the most significant aspects of the project is that the site afforded itself to an outstanding solar orientation. Located on the south side of an east-west arterial, the project is able to maximize daylighting and views on northern and southern exposures, while minimizing harsh exposures on the east and west facades.

ASPECT #3 – BUILDING INFORMATION MODELING (BIM)

This project was designed using "BIM" technology, and was highly integrated throughout the design process. Architectural, structural, and MEP models were frequently shared and ultimately linked to create the Drawings. Models were then shared with the CMAR to expedite the project delivery and field coordination. Key sustainable benefits of this process include increased project efficiency, more accurate estimating and value decision making. One example of this is with the envelope design. Through detailed coordination between design and construction personnel, steel & stud framing, and masonry wall options were modeled and priced to achieve maximum efficiency with respect to cost and function (durability and thermal performance). This effort assured that sustainable design intent held through the process and avoided the "VE chopping block".

BIM also drastically reduced the use of paper documents, and provided the ability to use the working models for solar orientation accuracy, energy modeling and lighting modeling.



"It's beyond just exercise. It's the sense of community that people feel when they walk into a good piece of architecture."

-Michael Massey,
Director of Parks & Recreation



Owner: City of Richardson
Architect: Brinkley Sargent
Wiginton Architects
Engineer: ME Engineers
Contractor: Hill & Wilkinson
Project Size: 25,620sf

Photography by
Charles Davis Smith

ABOUT LEED

The LEED Green Building Rating System is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's Web site at www.usgbc.org to learn more about how you can make LEED work for you. Support the local chapter of USGBC by visiting www.usgbc-houston.org