# SUSTAINABILITY REPORT

HOEFER WELKER

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## 2024 Green Team Insights

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Our team gained energy modeling expertise and hit our stride on eco charrettes and sustainability planning this year. I am pleasantly surprised in every eco charrette how we can make our buildings better when we take the extra time to better understand the needs of occupants. I learned a ton about the finances of sustainability. Different revenue streams create different opportunities to implement sustainability in different ways.

Matthew Hollingsworth
Architectural Designer



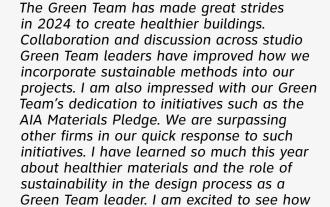
It has been rewarding to help bring sustainable practices to our Florida office and to witness how these efforts resonate with our team in Jacksonville. It's exciting to see that leadership views sustainability as a worthwhile investment, and I'm grateful for the chance to be part of the Green Team from its beginning. This year, the Green Team has worked hard to introduce initiatives that raise awareness and encourage environmentally responsible choices within our daily operations. Seeing so many colleagues actively supporting these changes and contributing to our goals is inspiring.

Caroline Jewell
Interior Designer



I am fascinated by the progress we have made as a team this year. The Green Team leveraged dedicated research on topics we are passionate about to enrich and inform our practice. We have listened to our peers and incorporated their insights, tailoring them through our unique lens. One lesson I believe we have truly begun to understand is how important it is to zone into each person's passions and expertise. From a firm level, each person brings so much to the table that when we throw it all into a mixing bowl, we begin to make the unique and proficient processes that make a true difference in the built environment.

**Alexa Root** Architectural Designer



we will continue to grow in 2025.

**Gracie Knight** Architectural Designer





We are excited to work on our goals and strategic plan for 2025 and get involved in local, sustainable organizations. Our 2024 project highlights include the city of Boerne Fire Station, working to achieve Net Zero energy with a rain harvesting water system, the TCU Burnett School of Medicine is waiting on a LEED Gold certification, and Nebraska Crossings Masterplan in Gretna, Nebraska, prioritizing the use of mass timber for residential towers and sports facilities

- Rodrigo Guerrero Varela, Sarah Morlan, and Lily Ehler



### Elevate Sustainable Leaders and Culture

The word for 2024 was "elevate." With our sustainability director taking leave with the birth of her daughter, an onus was put on elevating leaders within the firm to take on more roles. As a result of this effort, the Green Team expanded its capacity to influence, enhance, and broaden the scope of its work. Diversifying the number of individuals who could move forward with sustainability efforts meant more projects and the successful completion of more initiatives.

**Alexa Root** joined the sustainability studio as a part-time employee this year. **Matthew Hollingsworth** had his first national speaking event at the Accelerating Decarbonization and Construction Conference in Denver. **Jeremiah Vick** 

represented HW at CleanMed, bringing valuable information on sustainable design and operations to our healthcare studio. The Dallas studio welcomed 3 new Green Team leaders: Sarah Morlan, Lily Ehler, and Roger Guerrero, who are working to redefine their office initiative. Lily **Ehler** completed her first eco-charrette for the City of Boerne, Texas. Todd Ray, our Smartsheet specialist, digitized and streamlined project reporting, enabling us to achieve greater output with reduced effort. The Jacksonville office introduced new sustainable operations such as recycling, decreasing food waste from catered events, and providing sustainable tips in their internal newsletter.











# Elevate Partnerships and Community Engagement

This theme of elevating extended beyond the walls of Hoefer Welker. In 2024, we saw an **increase in community engagement** in sustainability. Collaborations with key community partners such as AIA, USGBC, GBI, The Linda Hall Library, KSU, and Girl Scouts allowed us to **empower and encourage** our community and the next generation of sustainability leaders.

For Earth Week this year, we didn't just compete against firms, but our KC office also partnered on a trash pickup with

other plaza companies, including Pulse Design Group and CrossFirst Bank. Hoefer Welker was invited to participate in AIA's large firm round table and attended their annual summit in Minneapolis. We are excited to **start implementing some of the best practices** from the collaborative time at the summit in 2025!











# Elevate Design Performance and Excellence

#### WHAT WAS THE RESULT OF ALL THIS EFFORT?

Our project's performance elevated as well! This year, we saw an impressive increase in energy efficiency in our AIA 2030 reporting across all studios. By doing eco-charrettes with municipal clients, our civic team saw an impressive improvement across energy use and more investment in decarbonized systems such as geothermal, solar, and thermal storage. We invested in training on embodied carbon analysis, completed our first whole building life-cycle analysis, and through our partnership with Cove.tool, we anticipate a rise in those numbers in 2025.

Additionally, we joined an esteemed cohort of forward-thinking architecture firms by participating in the first year of AIA Materials Pledge reporting. We are excited to expand our reporting to AIA and to more than just carbon, as we see materials as having a key impact on supply chain equity, human health, and the environment.



FBI Kansas City Field Office
Two Green Globes Certification



Jacksonville North VA Clinic & Domiciliary
Two Green Globes Certification



IMA Financial Group Corporate Office

LEED Silver Certification



WellSky CityPlace IV (Phase I) **LEED Silver Certification** 



Basehor City Hall

Net Zero | Design Excellence AIA KC

## Sustainability Project Highlights

#### **City of Boerne - Fire Station 2**

11,000 sq. ft. | Net Zero Civic Studio

# Lee's Summit Joint Operations Center & Fire Administration

45,000 sq. ft. | Resiliency Hub Civic Studio

#### **CHI Immanuel Family Health Clinic**

39,502 sq. ft. | Case Study on Module Construction Healthcare Studio

#### **CIS Edmond**

35,560 sq. ft. | Tracking Three Green Globes FLEX Studio

#### The Andersons

30,000 sq. ft. | Tracking LEED Silver Certification Interiors Studio







The City of Boerne, Texas

#### City of Boerne - Fire Station 2

Boerne, Texas | 19,000 sq. ft.

The City of Boerne was highly interested in investing in sustainable design. Not only did this align with the City's commitments, but knowing they would have the Fire Station for years after this meant investing in a resilient design that would last. Our team kicked off the design with an eco-charrette, during which we discussed the city's goals and how they could be implemented into the project. Potential federal incentives, sustainable design strategies, and lifecycle cost analysis were shown to the city for consideration. Since these measures were discussed early, the budget and programming could be easily amended to align with desired outcomes. A net-zero project with solar to offset energy costs and a water reclamation system was selected from this collaboration.

With this new vision, the project envelope was optimized for energy efficiency. The less energy the project utilized, the smaller the investment needed in solar to offset the energy use. The roof was optimized for solar at the correct orientation for utmost energy production. Additionally, the city had concerns about water since they are in a water-stressed area of the country. From these conversations, we were able to integrate the city's reclaimed water utility into the project.

The City of Boerne aims to make this fire station a benchmark for sustainable design, setting the tone for all future city buildings and private developments. With a strong commitment to sustainability, they chose to partner with us to turn this vision into reality, trusting our expertise to help shape their goals.



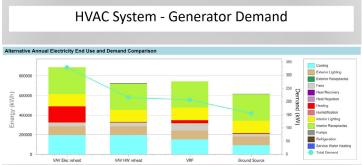


#### **PROJECT TEAM**

**Hoefer Welker** Architecture, Sustainability, MEP Engineering

**L.A. Fuess Partners** Structural Engineering **Dunaway** Civil Engineering, Landscape Architect





#### Building Envelope Energy Analysis

Insulation Type	Existing Envelope	2" EIFS (exterior)	2" rigid (interior)	Replace Windows	2" EIFS & Windows	2" Rigid & Windows
irst Cost		\$16,200	\$16,200	\$14,000	\$30,200	\$30,200
Jtility Cost/Year	(\$13,009)	(\$9,385)	(\$9,396)	(\$8,894)	(\$7,758)	(\$7,805)
Jtility Savings vs Existing Envelope	-	\$3,193	\$3,125	\$4,115	\$5,251	\$5,204
Cost at 10 years Utility + First Cost)	\$149,134	\$128,509	\$129,509	\$115,960	\$119,137	\$119,676
Savings over 10 yrs		\$20,405	\$20,000	\$33,174	\$29,997	\$29,458
Space requirements	None.	None.	Lose 40 SF of interior space	None.	None.	Lose 40 SF of interior space.

The City of Lee's Summit, Missouri

# Lee's Summit Joint Operations Center & Fire Administration

Lee's Summit, Missouri | 45,000 sq. ft.

Our team is helping the City of Lee's Summit provide pragmatic sustainable solutions for both buildings. One is a renovation and reenvisioning of an old Fire Station to an entirely different use type. The other is a brand-new facility. The strategies and cost-saving measures for one don't necessarily apply to the other.

As such, our team uses an eco-charrette to show the life-cycle savings of these different strategies and establish goals for each project independently. Both projects have strict budgets, so most of the conversation concerns how we stretch their dollar-respecting program alongside their long-term performance, wellness, and decreased operational cost needs. Both projects were reviewed for local and federal incentive opportunities. The renovation has already achieved Evergy rebates with the remaining work tracking for both Evergy and federal incentives based on the design

A holistic design approach is being used to help meet these goals. The existing facility was reviewed on-site to determine current conditions and what opportunities were available. From there, analysis was run on the envelope and systems to determine what solutions engendered the greatest ongoing savings for the least first cost. On the new building, whole building energy modeling and glare/solar heat gain analysis were run. We determined that a geothermal system wasn't just the most energy-efficient pick but also worked within budget when smart envelope choices were made. For both projects, we right-sized the best solutions for each unique situation and the maintenance needs of the building users. From these early studies, pragmatic sustainable strategies were found for both projects that won't break the bank yet still increase employee wellness and building performance.





#### **PROJECT TEAM**

#### Hoefer Welker

Architecture, Sustainability, MEP Engineering

**Titan Built, LLC** General Contractor

BHC

Civil Engineering

**Landworks Studio** Landscape Architect

**J&S Structural Engineers** Structural Engineering







#### CHI Health/CommonSpirit

#### **CHI Immanuel Family Health Clinic**

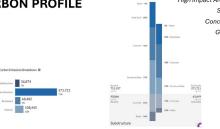
Omaha, Nebraska | 40,000 sq. ft.

How does a sustainable healthcare provider translate sustainability goals and targets into physical building projects? Partnerships! CommonSpirit, McCarthy Construction, and Hoefer Welker worked together on a new family health clinic with pharmacy, imaging, and family health services. By partnering with design and construction firms that shared their commitment to sustainability, the ownership fostered a collaborative team capable of adapting to challenges like inflation, labor shortages, and long lead times while delivering sustainable results.

The project selected prefabrication as a solution to the many obstacles mentioned above. 1,212 exterior wall panels, 393 interior wall panels, 400+ electrical boxes, 7,000 feet of blocking, 120 feet of U/G plumbing, and 700 feet of shared mechanical and plumbing racks were all prefabricated. This decreased waste and embodied carbon. The materials were designed to exact measurements, which reduced raw material and accompanying waste. Waste material produced during the process was recycled within the factory, reducing the construction team's dependence on nearby waste recycling infrastructure. Prefabricated systems were shipped together, streamlining the process and eliminating the need for multiple trucks and separate trips by tradespeople to assemble materials on-site, effectively reducing embodied carbon. Additionally, the materials themselves were lower embodied carbon. CarbonCure concrete, AISC-certified recycled steel, and low embodied carbon windows were used, to name a few.

This ongoing partnership provides options for future scenarios and helps us develop strategies for the next project!

#### **CARBON PROFILE**





#### **PROJECT TEAM**

#### **Hoefer Welker**

Architecture, Sustainability, MEP Engineering

#### McCarthy Build

General Contractor

#### Bob D. Campbell

Structural Engineering

#### FSC

Fire Protection/Life Safety

#### TD2

Civil Engineering, Landscape Architect



TRACKING FOR...

50%

CONSTRUCTION

WASTE

DIVERSION

55%
PRODUCTS
WITH EPDS

40%
MATERIAL
INGREDIENT
REPORTING

37%
DECREASE IN LIGHTING

32%
WATER USE
REDUCTION

#### **U.S. Federal Properties**

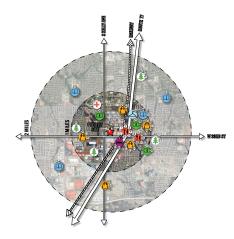
#### **CIS Edmonds**

Edmond, Oklahoma | 35,560 sq. ft.

Similar to CHI Immanuel, sustainable success for this project comes from teamwork! This team has worked together on 17 third-party certified projects (7 LEED, 10 Green Globes) totaling over 2 million square feet. For sustainability to be effective, especially when trying to meet a third-party rating system, it must be implemented holistically. As a result, we used an integrated design approach with all key team members, working together to maximize point totals on the Green Globes rating system despite project constraints. For example, the project decreased embodied carbon by retrofitting an existing building. However, reusing old building systems posed challenges when considering energy efficiency or daylighting. To solve these and other challenges, we used various software analysis tools (daylighting, glare studies, embodied carbon, energy modeling, etc.) to determine the best strategies.

The project also focused on verification. Our team can design the most efficient building in the world, but if it isn't built or operated as designed, those savings will never be realized. This made commissioning at the end of the project even more important. The commissioning agent assists in keeping the actual constructed systems performing similarly to the designed systems so the savings in our modeling software become a reality. Additionally, the Green Globes rating system has a reviewer come on-site at the close of construction to verify that the points sought after have been implemented correctly.

The project is currently tracking for Three Green Globes!





#### PROJECT TEAM

**Hoefer Welker** Architecture, Sustainability

U.S. Federal Properties

Developer

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**Landmark Construction** 

General Contractor

Smith & Boucher MEP Engineering

FSC

Code Consulting







#### The Andersons, Inc.

#### The Andersons in CityPlace Corporate Center IV

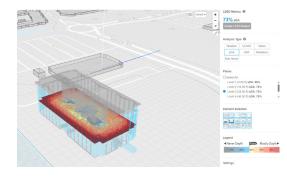
Overland Park, Kansas | 30,000 sq. ft.

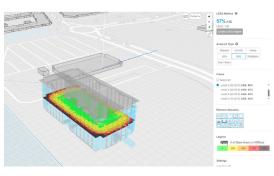
The Andersons already had strong sustainability goals, so when the idea of LEED certification was suggested, they saw an opportunity to align with their current work.

The team focused on energy and water efficiency and selecting sustainable materials. The design decreased lighting power density by 66.05% using LED lighting and strategic lighting placements to optimize light levels over workstations. 78.2% of spaces have occupancy-controlled lighting, 80% daylighting, and 75% have access to views. Over 90% of the lighting is dimmable with a CRI of 90 or above. The project has installed all Energy Star-rated equipment, decreasing process loads. Additionally, the project uses permanently installed, advanced energy meters that account for the total energy used within the tenant space. This provides in-depth data to understand if the building is saving energy as intended.

The project team collaborated with the landlord to provide lower-flow toilets, urinals and sinks in the base building restrooms. Lower-flow kitchen faucets and shower heads were also installed within the project scope. All new equipment and water-using appliances were prioritized to decrease water use. These strategies reduced total water use by 34.4%.

By completing a multi-attribute comparison, Andersons was able to decrease embodied carbon and negative environmental impact and improve material health in product selection. Products with material health and environmental certifications weren't just a priority but were required where applicable. The products consisted of over 29 EPDS and 20 material health certificates. Biophilic design was also key to the space, featuring a moss wall, a wheat-shaped fixture, and reclaimed wood finishes.





#### **PROJECT TEAM**

#### Hoefer Welker

Architecture, Sustainability, MEP Engineering

**Titan Built LLC** 

General Contractor

Block Real Estate Properties Property Management

## Looking Ahead to 2025

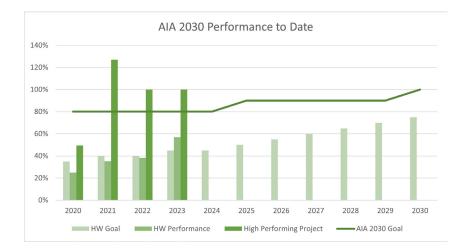
In 2025, the AIA 2030 Target will increase to 95% energy efficiency from its established baseline. Although our internal commitment is net zero in 2040, the push to increase performance remains. We will continue to educate and provide opportunities for our clients to improve ongoing building performance, efficiency, and human health. We are proud to be a leader in sustainability, pushing the industry forward through our AIA Materials Pledge commitment. As one of the flagship firms, we continuously challenge ourselves by reevaluating material selections using a whole building life cycle analysis. Our EPS team has also embraced the MEP 2040 Challenge, working closely with our architects and interior designers to address both operational and embodied carbon in every aspect of design.

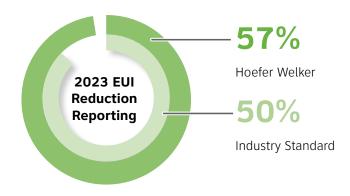
Growth always comes with a learning curve. We are excited to take our lessons learned and trial and error from 2024 to go further. We have established great momentum in 2024 and trained and empowered a task force to take us to greater heights than in previous years. We have elevated our talents, design, and community this year – but we are **not done yet!** 





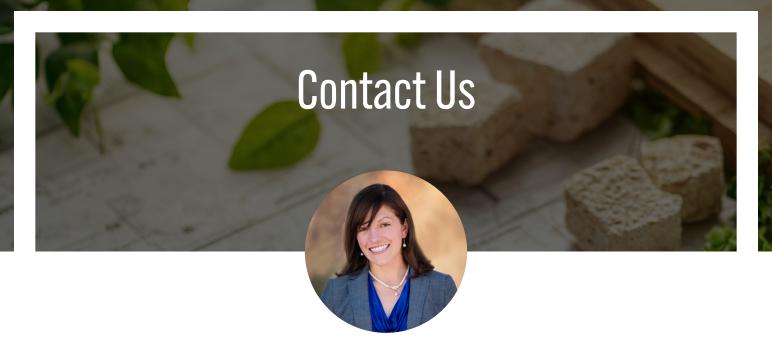






OUR GOALS FOR **2025** 

- Expand eco-charrettes to more than Civic projects
- Report on project fuel sources, not just energy use
- Whole building life cycle analysis on key projects
- Early embodied carbon analysis on 50% of projects
- Further grow Dallas and Jacksonville Green Team and initiatives
- Utilize digitized sustainability project reporting to push performance further



#### **Ashley Langenfeld**

Director of Sustainability | Associate Vice President PE, LEED AP BD+C, WELL AP, GGP, GGF ashley.lagenfeld@hoeferwelker.com

