WHAT MAKES THIS BUILDING GREEN?

LEED Points are achieved by designing and constructing a building to specific green standards in several categories. The following are a few ways that Joe Greene Hall meets or exceeds those standards:

JOE GREENE HALL

SUSTAINABLE SITES

Sustainable Sites within the LEED (Leadership in Energy and Environmental Design) focuses on protecting natural habitats, providing dedicated open space, controlling rainwater and reducing the amount of heat produced and released into the environment. Joe Greene Hall accomplishes the Sustainable Sites initiatives in several of the following ways. The new residence hall is located on a site that previously housed a large asphalt parking lot. Asphalt is a dark material that greatly contributes to the heat island effect, which harvests the sun's rays and retains that heat for long periods of time. This heat island effect consequently impacts the building's energy efficiency and ability to keep the building's occupants comfortable. Joe Greene Hall removed over 60,000 square feet of asphalt and replaced it with 25,000 square feet of vegetation and landscaping outside of the new residence hall, which helped to contribute to the building energy efficiency. The site is also conveniently located within walking distance of many community services including places of worship, a supermarket, banks, eateries, professional services and other services which reduces the resident's need for motorized transportation. The building's location also provides several alternative transportation options including local bus stops for a campus shuttle and the DCTA bus line. Additional site initiatives include bike paths with racks for storage and dedicated parking for low-emitting and fuel-efficient vehicles.

WATER EFFICIENCY

Water Efficiency within the LEED Rating System focuses on reducing the amount of water used both inside and outside of the building. Joe Greene Hall's water usage is reduced by utilizing efficient irrigation controls for landscaping and low-flow plumbing fixtures such as faucets, shower heads and toilets throughout the building. When compared to the typical residence hall construction project, Joe Greene Hall uses 52% less water overall.

ENERGY AND ATMOSPHERE

Energy and Atmosphere within the LEED Rating System focuses on reducing the amount of energy the building through energy efficient building systems, conservation and use of renewable energy sources where available. Joe Greene Hall provides a large variety of the following initiatives that fall under the Energy and Atmosphere category. Joe Greene Hall was fully commissioned and made the necessary adjustments to achieve peak performance from all its energy systems which provided a total energy cost savings of over 32%. The building's HVAC systems have been designed to use refrigerants that won't harm the ozone nor the environment. UNT has also chosen a power provider that utilizes green power options such solar, wind and geothermal. Light Emitting Diode (LED) lights were also used throughout Joe Green Hall which lowered the amount of energy needed to light the building and provided better lighting conditions for occupants. The building's energy efficiency is also reduced by the use of the upgrated chilled water resource from the chiller plant, Kerr Hall mechanical room (which was part of this project).

MATERIALS AND RESOURCES

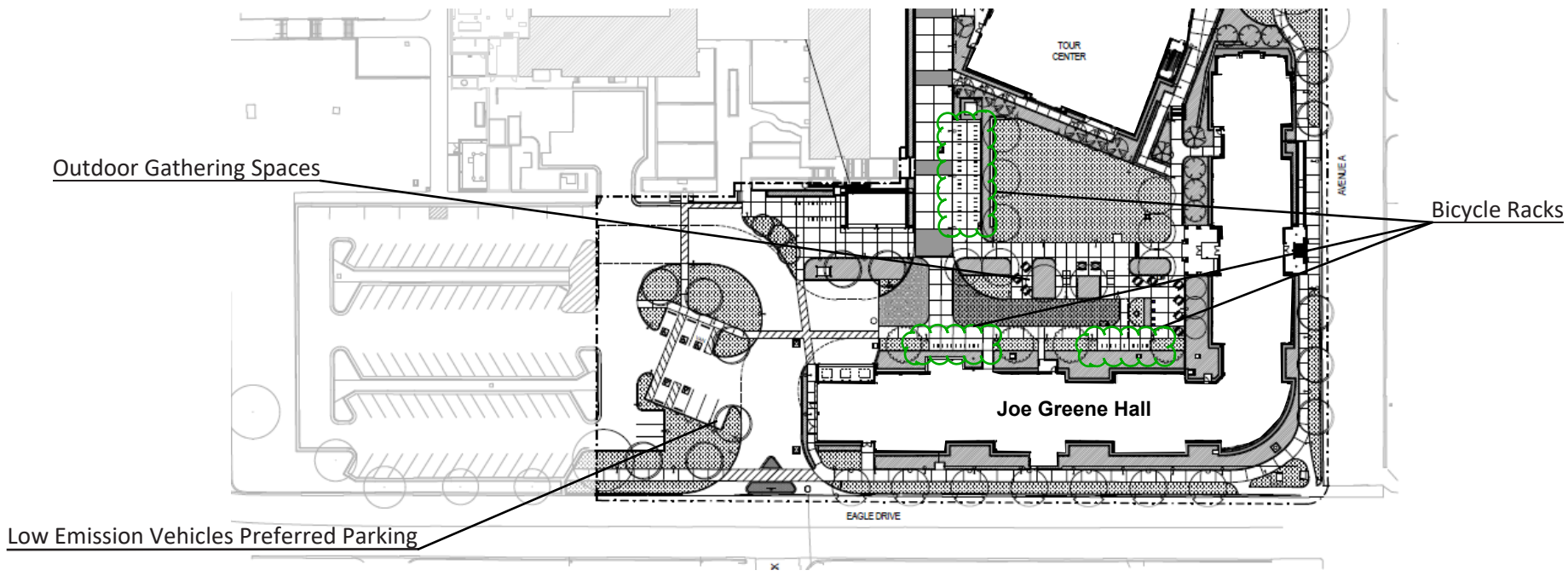
Materials and Resources within the LEED Rating System focuses on reducing the energy and environmental effects of extracting, processing, transporting and disposal of building materials. The building's design also incorporated materials that were carefully sourced from local distributors and manufactures to reduce the overall carbon footprint of the building's construction. Residents are encouraged to recycle with easy to find collection points in the building. Joe Green Hall uses building materials that are derived from recycled content and FSC wood, which is certified as a sustainable resource by the Forest Stewardship Council. In fact, all of the living unit furniture is made from certified wood. See link to the Forest Stewardship Council for more information: https://us.fsc.org/en-us.

INDOOR ENVIRONMENTAL QUALITY

Indoor Environmental Quality within the LEED Rating System focuses on indoor air quality, thermal comfort, lighting controllability and daylighting. Since air quality is of the utmost importance for the occupants of Joe Greene Hall, the project's building interior finishes were selected for their low or no emission of harmful gases. The low VOC (volatile organic compounds) materials includes paint, flooring and composite wood products (primarily found in furniture and cabinets). Residents have the ability to control the temperature in their rooms as well as lighting. Lastly, large windows were included to provide daylighting as well as views from the rooms for physical and mental wellness.

INNOVATION IN DESIGN

For Innovation in Design, the UNT's owner representative worked to create educational flyers to educate residents and staff about the benefits of green cleaning by only using specific products and brands that follow the university's green standards. The University of North Texas is known for its commitment to sustainability with the university staff that are committed to using green products for maintenance as part of that initiative. This flyer was created to guide residents and staff on a self-guided LEED tour of Joe Greene Hall explaining and highlighting the sustainable features of the building which explain LEED initiatives and their benefits.



What *IS* LEED?

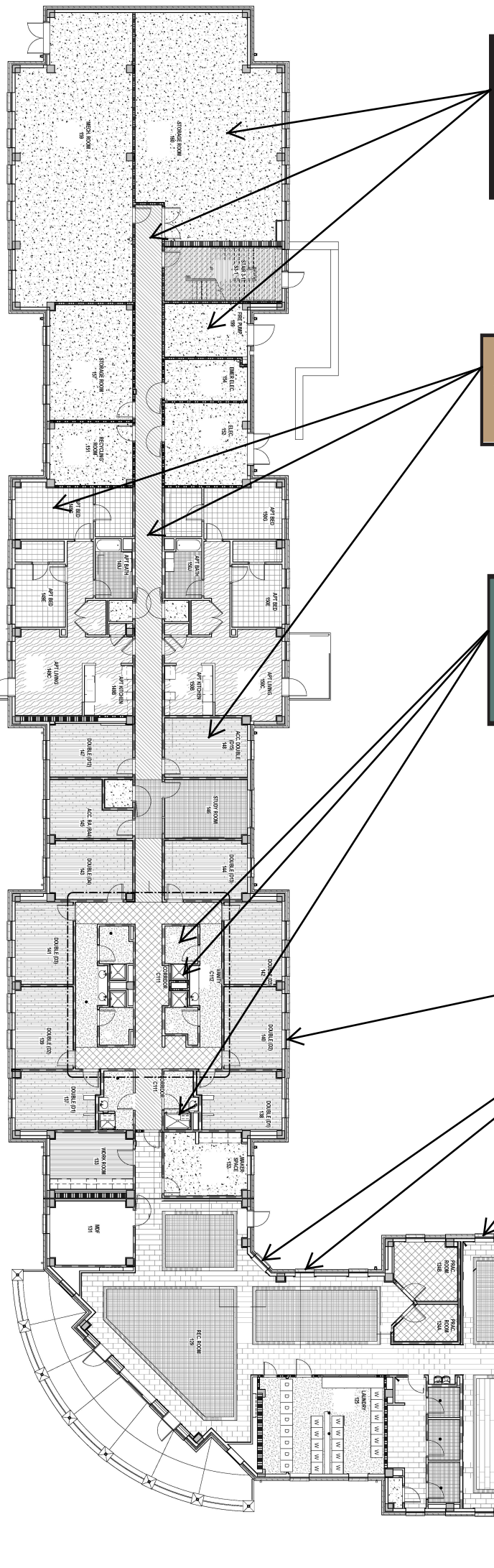
LEED (Leadership in Energy and Environmental Design) is a green building rating system developed by an organization called the United States Green Building Council, or USGBC. The USGBC “is committed to a prosperous and sustainable future through cost-efficient and energy-saving green buildings. USGBC’s mission is ‘to transform the way buildings and communities are designed, built, and operated, enabling an environmentally and socially responsible, healthy, and prosperous environment that improves the quality of life.’”

LEED "...is the most widely used green building rating system in the world. Available for virtually all building, community, and home project types, LEED provides a framework to create healthy, highly efficient and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement.”

Joe Greene Hall
LEED FEATURES
Self-Guided Tour

See if you can spot all of these sustainable features on the 1st floor of Joe Greene Hall!

Scan below to visit the online USGBC and LEED pages for more information.



LED lights can be found throughout the building: corridors, bathrooms and common spaces.

Low VOC adhesive on luxury, vinyl tile and carpet. Low VOC paint products and sealants.

Low-flow water conserving plumbing fixtures in restrooms: faucets, shower heads and toilets.

Ample windows throughout for daylighting and views. Temperature controls for residents and increased fresh air for the ventilation system.