

Verve Ann Arbor: Community Benefits

The proposed 721 S Forest PUD project offers numerous community benefits as outlined below. First and foremost, it strives to help solve a housing shortage through a more economical and efficient use of city land (a limited resource) as called for in the city's Planned Unit Development ordinance – making better use of a limited resource, while respecting adjacent natural features and reusing an underutilized site which lacks modern stormwater controls but has ample supportive utility infrastructure.

A) Sustainability

- Passive House Inspired Building Envelope with 2X Continuous Insulation
- 100% Renewable Energy Certificates Offsets
- 100kW of Building Integrated Solar Power
- All-electric Building
- 2X Code Required Electric Vehicle Charging Infrastructure
- Designing to LEED Silver Standards
- Compost Waste Bin Designations
- Construction Waste Reduction

B) Housing

- \$50,000 Donation to AAHDC to Support Homeless Households in the Central Area
- Meeting Housing Needs Through Increased Density to Reduce Sprawl
- Reduced Miles Traveled in Vehicles and Providing a Variety of Transportation Options
- Increased Diversity of Housing

C) Natural Features

- Preserved Local Tree Canopy
- Reduced stormwater runoff
- Native Plants and Pollinators
- Enhanced Landscaping

D) Economy

- Increased Tax Base by 30x
- First Floor Public Community Retail

E) Additional Baseline Requirements Met

- Affordable Housing Contribution
- Accessible units
- Energy Efficient Design
- Water efficiency
- Drain Disconnection to Reduce Peak Surcharging

Expanded detail on the Community Benefits above and beyond code requirements are as follows:

A) Sustainability

- [Passive House Inspired Building Envelope with 2X Continuous Insulation](#)
Key tenants of passive house principles are continuous insulation and thermal bridge free construction, which the design and sustainability team members have integrated into the building envelope design by utilizing a Sto (or equal) thermal bridge free exterior insulation and finish system. Assuming this system is approved, the design will **double the average continuous insulation** across the façade where used, improving the thermal performance of the building and reducing energy usage for heating and cooling.
- [100% Renewable Energy Certificates Offsets](#)
The project includes the purchase of Renewable Energy Certificates representing green energy for **100% of the building's energy consumption** for 10 Years.
- [100 kW of Building Integrated Solar Power](#)
The design integrates Solar Panels into the building at the roof level, aiming to produce approximately **3% of its energy needs with 100kW of photovoltaic panels**, further reducing the Project's carbon footprint and energy use from off-site sources, reducing the environmental and economic harms associated with fossil fuel energy within in the Community, and supporting A2Zero Strategy #1.
- [All-electric Building](#)
Regardless of the status of City Ordinances, the Project is committed to being "all-electric". There will be an exception for the back-up generator, to provide redundancy and resilience.
- [2X Code Required Electric Vehicle Charging Infrastructure](#)
The Project will include **twenty-six (26) EV-i (installed)** charging stalls at opening, over double the code requirement. Twenty-four (24) EV-i stalls will be located in the parking structure and two (2) EV-i stalls will be located at the ground level surface parking. The remaining spaces for the Project will be EV-C (capable). This effort reduces Community-based pollution by promoting alternatives to conventionally fueled automobiles and supports the adoption of electric vehicles and A2Zero Strategy #2 (Action 6).
- [Designing to LEED Silver Standards](#)
The Project will be designed to meet the requirements of LEED Silver, using a number of LEED strategies beneficial to the Community including whole building energy modeling to optimize **building energy performance to 15% better** than the ASHRAE baseline, providing density and diverse uses, **reducing water usage 40%** from baseline, enhanced indoor air quality strategies, and renewable energy production which reduces greenhouse gas emissions. Many of these strategies are directly in line with the A2Zero Climate Action Plan.

- Compost Waste Bin Designations and Construction Waste Reduction

The Project will include dedicated compost waste bin designations conveniently located. The team has worked with the City Solid Waste reviewer and will develop a plan consistent with the execution of the **2022 Community Climate Action Millage**.

Additionally, the Project will target a **75% reduction** in construction waste per LEED Silver goals.

B) Housing

- \$50,000 Donation to AAHDC for Sustainability Improvements for Facilities in the Central Area

The Project will make a contribution of **\$50,000 to the Ann Arbor Housing Development Corporation 501c(3)** to be used for sustainability upgrades to existing or proposed AAHDC properties located in the Central Area. This contribution will help meet the objectives of the Land Use plan of the Central Area Goal A (Objective 9) for home ownership and rental opportunities for homeless individuals and families within the Central Area, as well as AAHDC and OSI sustainability initiatives.

- Meeting Housing Needs Through Increased Density to Reduce Sprawl

In support of the City's efforts at **curbing suburban sprawl**, the Project will significantly increase the dwelling unit density of the site at a beneficial and convenient location, increasing the efficiency of land use. Providing housing at a walkable, infill location prevents the need for those same units to be built further from the Central Area where they would have a greater land use impact on the environment and require vehicular travel and parking.

A low-density project at the edge of the City with a comparable bed count would result in significantly more vehicle miles traveled, land-use impacts, required parking spots at the project and on campus, among other impacts.

- Reduced Miles Traveled in Vehicles and Providing a Variety of Transportation Options

The traffic impact study estimates that while the Project will add 650 beds to the site, it will add just +3 vehicular trips in the morning and +5 vehicular trips in the afternoon compared to the existing building, with over **97% of new trips generated being pedestrians and cyclists**.

Due to the Project's location, the residents will have a variety of transportation options that will significantly reduce the need for vehicular travel, contributing to A2Zero Strategy #4. The Project will include **206 bicycle parking spaces**, is located just two blocks from the University of Michigan campus and University bus system, and just two blocks from the #4 and #62 AAATA bus lines that connect to the rest of the expanding AAATA system (which students – the target demographic for the project - are able to ride for free).

- Increased Diversity of Housing

Providing more student focused housing proximate to the campus **reduces the pressure for student housing in neighborhoods** further from campus that have historically been single family

occupied homes, also contributing to A2Zero Strategy #4 (Action Items 5 and 6) for housing diversification.

C) Natural Features

- [Preserved Local Tree Canopy](#)

The design and orientation of the Project is specifically focused on minimizing the impact to the stand of mature trees on the neighboring property to the north. The primary building mass has been pushed to the southern property line and the height of the northwest corner has been reduced to 6 stories. The Project team will utilize a certified arborist to help identify potential impacts and mitigation measures during both the design and construction phases, including shade studies for all seasons. This effort support A2Zero Strategy #6 (Action 3).

- [Reduced stormwater runoff](#)

The design calls for converting impervious area to pervious, as well as installing a stormwater detention tank. By **infiltrating 100% of the stormwater runoff** generated on site, with zero discharge to the public storm sewer, the Project will help recharge groundwater and reduce the strain on the city's storm system.

- [Native Plants and Pollinators](#)

Consistent with LEED strategies and project goals, the design will utilize native plantings to maintain biodiversity and support local fauna with habitat and food sources, in particular perennial garden selections that will **attract pollinators** such as the Monarch butterfly.

- [Enhanced Landscaping](#)

A strip of land nearly eighteen feet deep along the northern edge of the site is currently a hard-packed gravel lane extending from the paved parking lot. This portion of the site will be revitalized with attractive greenery that will contribute to the aesthetic appeal of the neighborhood, support natural habitats, and reduce stormwater runoff.

D) Economy

- [Increased Tax Base by 30x](#)

The Project would increase the uncapped tax base by approximately a magnitude of 30 from the existing capped tax base. This significant increase will provide resources to support all other City and County initiatives, such as community climate actions, even beyond the many direct benefits provided by the Project.

- [First Floor Public Community Retail](#)

The Project is planned to include a first floor community retail open to the public that will consist of a coffee shop and gathering space.

In addition to the community benefits, the Project will also meet the following baseline requirements:

- **Affordable Housing Contribution**
The Project will make a contribution estimated at \$4,700,000 to the affordable housing fund.
- **Accessible units**
In keeping with current building codes, two percent of the Project's apartments will be "ANSI Type A" units, designed to meet accessibility. The remaining units will be "ANSI Type B," following Fair Housing Accessibility Guidelines and ANSI.
- **Energy Efficient Design**
The building will comply with stringent efficiency requirements, including reduced lighting power density, efficient HVAC with advanced controls, Energy Star rated appliances, and a high efficiency building envelope. This is key to keeping the Project's carbon footprint low and minimizing its electrical demand.
- **Water efficiency**
The Project's plumbing fixtures will use reduce indoor water use by 40% of the LEED baseline. This will reduce demand on the city's water supply and energy used to treat water and wastewater.
- **Drain Disconnection to Reduce Peak Surcharging**
The footing drains in the existing building are very likely to be connected to the City's sanitary sewer system. Demolition of the building and disconnection of the footing drains will reduce peak surcharging in the sanitary sewers nearby and downstream, to the benefit of the entire community.