

City of Ann Arbor

A2Zero Plan

NorthStadium & Northstar Ann Arbor Properties Response

NorthStadium, LLC and Northstar Ann Arbor Properties recognize and support Ann Arbor's goal to achieve carbon neutrality in 2030 through the development of the A2Zero Plan. As part of our development planning process, we sought to evaluate various alternatives that would enable us to assist in the endeavor, recognizing however, that any additional capital expenditures and operational costs cannot jeopardize the financial viability of the project. The areas that we specifically evaluated are as follows:

1. Onsite Renewable Energy Generation w/ Battery Storage

We spoke with Missy Stults, Ann Arbor's Sustainability and Innovations Manager regarding the use of a Solar energy system for this project. Unfortunately, those conversations as well as independent research with solar contractors, have led us to conclude that solar power is currently not economically feasible for commercial developments of our planned type and size for the reasons outlined below.

- a) At the current time, DTE does not permit net metering of electricity. While a simplification of the situation, we essentially have to pay for all electricity used from the grid at retail rates and any excess electricity we generate from solar energy is sold to the grid at wholesale. Since storage facilities tend to use the most electricity in the winter when solar generation is lowest, and generate the most solar power in the summer when storage facility power needs are the lowest, the current DTE formula does not permit recovery of the costs of solar generating equipment or operating costs within a timeframe that is economically feasible.
- b) Additionally, the technology associated with on-site battery storage, while improving, is currently not operationally efficient nor economically feasible.

Should DTE change its formula in the future or if Ann Arbor is successful in establishing a bulk purchase plan that enables businesses to procure onsite renewables for a discounted price by achieving economies of scale as outlined in the A2Zero Plan, we would be willing to explore this option in the future.

2. Business Electrification

- a) The cost of heating large commercial buildings with natural gas, in most instances, is substantially less than with an all electric heating system due to the current disparity between gas and electric rates. However, we still recognize that energy efficiency and decreased carbon emissions are important goals. Hence, for our Indoor Storage facility we have limited the HVAC system to 4 High Efficiency gas RTU's. For the proposed bank/office building, we will be using the traditional method of heating with gas RTU's with electric reheat coils in the individual spaces. The electric reheat coils

generate the majority of the heating for the individual spaces thereby lessening the use of natural gas.

- b) We are also evaluating the use of a VRF all electric system to determine if the cost and operational efficiency are comparable to the RTU & Electric Reheat system. That evaluation is not complete at the current time.

3. Expansion of Electric Vehicle Charging Infrastructure

We are working with the planning department to ensure our project complies with proposed requirements of the City's ongoing implementation of their EV ordinance.

4. Transition to More Energy Efficient Homes and Businesses

The current State of Michigan Energy Code for commercial buildings requires the implementation of numerous requirements to ensure energy efficiency of buildings. Several of the items we are implementing:

- a) Use of LED lighting throughout the buildings.
- b) Use of high efficiency HVAC equipment
- c) Variable volume roof top units with variable speed compressors.
- d) Premium efficiency motors
- e) Digital HVAC controls allow discharge temperature reset, night setback and control of outdoor air quantities for greater efficiency.
- f) CO2 ventilation control in high occupancy spaces
- g) Lighting controls including time of day, occupancy sensors and daylight sensing.
- h) High efficiency water fixtures.
- i) Energy efficient building envelope including low-e coating glazing.
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5. Energy Disclosure/Benchmarking

NorthStadium, LLC and Northstar Ann Arbor Properties are willing to work with the city on better understanding the requirements and participating.

6. Reduce the Miles traveled by Vehicles

- a) The traditional location of storage facilities has been in the outskirts of town. In order to reduce the mileage required to access those services, we are locating the facility in closer proximity to both businesses and residents. The bank/office building provides a more central location for staff and clients thereby reducing travel distance as well.
- b) By locating the development along an existing AAATA bus route along West Stadium Boulevard, there is further opportunity for the use of public further reducing reliance on individual vehicles.

7. Expansion of Commercial Recycling

We encourage building management and tenants to utilize recycling services in all the properties that we own or manage. As part of our site plan, we are providing for up to a 6 yd recycling container for use by building management, vendors, and tenants.

8. Enhance Refrigerant Recycling and Reuse Program

All existing AC equipment containing refrigerant currently located on the buildings to be demolished has been removed by a licensed contractor for proper recycling or reuse if applicable.

9. Preserve and Enhance the Local Tree Canopy

The business currently located on the site, is a long- abandoned car dealership, hence the site is presently 87% impervious. There are 22 existing trees on the site, 54% of which are invasive or undesirable species. With the proposed development, trees will be installed along the West Stadium Boulevard corridor, along the perimeter of the property, and within the vehicle use area. There are a total of 52 trees proposed with the development, consisting of 71% Michigan native species. Additionally, the proposed development reduces the impervious surface on the site to 81%.