## **City of Ann Arbor**

## A2Zero Plan

## NorthStadium & Northstar Ann Arbor Properties Response

Northstar Ann Arbor Properties recognizes and supports 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. Implement Community Choice Aggregation (CCA)

As the City of Ann Arbor moves towards the implementation of a CCA program, Northstar Bank, as a local community member, is committed to further examining this program as it is developed and implemented and how we may be able to participate.

2. Onsite Renewable Energy Generation w/ Battery Storage & Development of a Community Solar Program

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) The current roof footprint of the Bank/Office building is not of sufficient size because of the necessary HVAC equipment to allow for an economically feasible solar installation.
- b) 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.
- c) 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.

- 3. 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 the proposed

bank/office building, we will be using a Variable Refrigerant Flow (VRF) system to serve the individual spaces. This technology allows for an all-electric system while providing an operationally efficient system. While the VRF system will service the individual interior spaces we will be utilizing a dedicated gas fired Outdoor Air (DOAS) unit with and energy recovery unit to provide the fresh air requirements. From conversations with equipment manufacturers, currently, an all-electric DOAS unit is not economically or operationally efficient and is not the most energy efficient method to meet the outdoor air needs.

- b) Water heaters in the building will be electric.
- 4. Community Electric Vehicle Bulk Buy Program

Should the City of Ann Arbor be able to implement an Electric Vehicle Bulk buy program for businesses in Washtenaw County, Northstar Bank will work to promote this to their employees so that they may utilize this program.

5. Expansion of Electric Vehicle Charging Infrastructure

We have included the necessary EV Infrastructure in accordance with the City's EV Ordinance. Per City code in the EV section, regarding EV-I requirements, "<u>An EVCS shall be</u> <u>wall mounted, or located to accommodate the charging of more than one parking stall</u>." We're required to have 5 EV-I parking stalls, which requires 3 EVCS. Based on this we have elected to to install 6 EV-I parking stalls to further assisting in the City's ongoing implementation of their EV ordinance.

6. Transition to More Energy Efficient 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) Digital HVAC controls allow discharge temperature reset, night setback and control of outdoor air quantities for greater efficiency.
- d) CO2 ventilation control in high occupancy spaces.
- e) Lighting controls including time of day, occupancy sensors and daylight sensing.
- f) High efficiency water fixtures.
- g) Use of energy star appliances.
- h) Energy efficient building envelope including low-e coating glazing.
- 7. Energy Disclosure/Benchmarking

Northstar Bank is willing to work with the city on better understanding the requirements and participating.

8. Green Business Challenge

Northstar Bank is excited to learn more about the Green Business Challenge and how this program can further assist in lower our operation costs while reducing our environmental footprint.

- 9. Reduce the Miles traveled by Vehicles
  - a) By locating the development along an existing AAATA bus route along West Stadium Boulevard, there is further opportunity for the use of public transit, further reducing reliance on individual vehicles.
- 10. Expansion of Composting Program

Northstar Bank is interested in learning further about the City of Ann Arbor's composting program.

11. Expansion of Commercial Recycling

Northstar Bank encourages its employees to utilize recycling services and as part of our site plan, we are providing for up to a 6 yd recycling container for use.

12. Use of Sustainable Building Materials

We anticipate that during the demolition of the existing building, the demolition contractor will separate the various metals in the building such as steel, copper, aluminum etc. along with concrete and block to the extent possible for recycling. During construction we anticipate that approximately 50% of the building materials such as steel, aluminum, copper, concrete, and asphalt will be partially or fully composed of recycled content.

13. Move Toward a Circular Economy

As the City of Ann Arbor moves towards the creating a model of a Circular Economy, Northstar Bank, as a local community member, is committed to working with the City of Ann Arbor on ways that they can offer assistance in holding possible various collection days of toys, books, tools, clothing etc.

- 14. Enhance Refrigerant Recycling and Reuse Program All existing AC equipment containing refrigerant currently located on the building to be demolished has been removed by a licensed contractor for proper recycling or reuse if applicable.
- 15. Preserve and Enhance the Local Tree Canopy

The business currently located on the site is a long-abandoned car dealership, hence the portion of the site dedicated to the proposed project is presently 85% impervious. There are 13 existing trees on the site, 38% 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 23 trees proposed with the development, consisting of 48% Michigan native species. Additionally, the proposed development reduces the impervious surface on the site to 78.6%.

16. Assist in Assembling and Distributing Emergency Preparedness Kits

As the City of Ann Arbor moves towards implementing this initiative, Northstar Bank, as a local community member, is committed to working with the City of Ann Arbor on ways that our employees can volunteer with the assembling of kits as well as ways we can offer assistance in holding possible distribution days.

17. Implement Sensors to Monitor Heat, Air Quality, Waterways and Flooding As the City of Ann Arbor moves towards implementing this initiative, Northstar Bank, as a local community member, is committed to working with the City of Ann Arbor on examining the use of our property and building for installing various sensors.