MIDTOWN ECODISTRICT: Drive Development with Sustainable Infrastructure

MIDTOWN DEVELOPMENT OPPORTUNITY:

The Midtown Campus is a 63 acre City owned property which historically housed institutions of higher education. Located in the geographic center of Santa Fe, it is surrounded by active retail and restaurants, and state, civic, parks and school facilities, and three different City bus routes come near the site. The Midtown Campus contains substantive infrastructure including roads, buildings, water, sewer, electric, gas, and telecommunication. With nearly 60% of the property undeveloped and underutilized, and guided by the Midtown LINK City ordinance, the campus is a prime location for higher-density, mixed-use development.

SANTA FE COMMUNITY PRIORITIES:

The Santa Fe Midtown Campus visioning survey showed strong community support for these industries to be on the campus: Film and Emerging Media, Performance and Visual Arts, Technology and Innovation, and Higher Education Institutions.

INDUSTRY TRENDS + POTENTIAL ECONOMIC VALUE ADDED

So, what are those industries looking for in deciding where to locate?

Increasingly, companies are prioritizing “development prepared sites” that are designed and planned for sustainability. An example is Amazon whose search for a second national campus emphasizes sustainable criteria, including: transit, environment, energy resilience, housing, community, arts and culture. Creative and innovation businesses of all scales, in order to keep quality employees, often use similar criteria when deciding where to locate.

Places that offer opportunities to easily collaborate or partner with other innovators, art and cultural groups, and higher educational institutions are particularly attractive to creative businesses. Santa Fe and the Mid-Town EcoDistrict would provide just that type of “Place”.

ECODISTRICT CONCEPT + GUIDING PRINCIPLES

The EcoDistricts Initiative is a sustainable planning framework that delivers profitable development by prioritizing people and the planet. The EcoDistricts organization is a non-profit similar to LEED and Green Build that collaborates to share and develop information, resources and strategies to help communities across the nation and internationally to form, plan and implement highly sustainable development districts. The EcoDistrict Initiative has identified some fundamental issue for sustainable development to plan for. They are: 1) Mobility Options & Connectivity, 2) Living Infrastructure, 3) Resource Efficiency & Regeneration, 4) Habitat Creation & Preservation, 5) Green Building, 6) Health and Well Being, 7) Public Spaces & Community Identify, and 8) Equitable Development & Prosperity.

The Surroundings design team explored at a conceptual level how three issues--Connections, Water, and Energy--might be a sustainably addressed in the Mid-Town EcoDistrict.

MIDTOWN ECODISTRICT CONCEPT PLAN

Connectivity promotes commerce and quality of life, water is fundamental and needs to be conserved and affordable, and energy independence protects against fluctuations in service and costs. So, how could those ideas be activated at the MidTown EcoDistrict?

Revitalizing infrastructure systems--roads, utilities, etc.--will likely be one of the first steps needed to achieve the more compact, efficient development that the 2016 Mid-Town LINC Ordinance envisions for the St. Michael’s Corridor which includes the Mid Town Campus site. The proposed Mid-Town EcoDistrict plan leverages existing street infrastructure to create a city block grid of flexible infrastructure corridors. This reuse and renew approach can markedly reduce infrastructure costs over an all “new” strategy.

CONNECTIVITY

The EcoDistrict promotes both physical and digital connectivity. The physical connection are to enhance opportunities for ped, bike and transit use, which reduces CO2 pollution and supports less costly mobility choices like walking, biking and transit. New road connections to be negotiated or partnered with adjacent properties include: 1) a Llano Street connector with private landowners, 2) a Camino Carlos Rey connection through NM State and SF Public Schools properties, and 3) a Siringo Road connection through the City’s Siringo Road Complex. Also, proposed are two multi-use path connections. One west to Cerrillos Road through the retail properties, and, one southeast to the City’s La Farge Library. Wide pedestrian sidewalks and bike share lanes would be part of every road. The primary central road, the road from St. Michaels, and the Camino Carlos Rey connection would be designed for bus use. Where those roads meet near the Greer Garson Theater, would be a transit/transfer station for the three city bus routes that serve the area. Bike and car share opportunities would be available to provide flexibility for non-auto owners. An important connection is a district fiber-optic loop to provide the 21st Century digital connectivity pivotal to engaging in the regional, national and global commerce of the future.

WATER

Reducing potable water use, conserves this precious resource for all. The Mid-Town EcoDistrict when fully developed will have a net-zero increase in potable water use over current water usage. Buildings and streets would be designed to harvest storm water to support native landscapes in the public spaces. Wastewater from buildings would be collected in a District system and treated at a small, on-site, district treatment facility. The treated water would be recycled to the buildings for toilet uses, and to cooling chillers for digital equipment. Streets designed with green infrastructure features would treat storm water and avoid the environmental impacts of large piped storm water systems. Water from the storm water ditch along the north side of the property could be directed to District water quality areas as part of a city-wide aquifer recharge effort. Excess treated waters could be provided to the adjacent Franklin Miles Park to reduce potable water use for park irrigation.

ENERGY

The MidTown EcoDistrict target would be to generate 100% of energy needed on-site. Using the over 350 days of sun, it is estimated that at full build-out District roof-mounted solar PV panels could generate over 21M kilowatt/hours of electricity annually. A district ‘Smart Gird” energy optimization system would balance the energy supply and demand between needs across the District. Excess energy could be stored in-District and delivered into the district grid when needed. Excess capacity could be supplied to other City facilities in the Siringo Road Complex.

EXAMPLE ECODISTRICTS

Other cities are modeling how the EcoDistrict framework can propel community and economic development. The Seaholm EcoDistrict in Austin, Texas, the Lloyd EcoDistrict in Portland, Oregon, and the RiNo Art District in Denver, Colorado are transforming underutilized sites into vibrant communities and businesses generators.

STEPS FORWARD

First commit to an EcoDistricts framework. Then, Santa Fe would work with the community to formulate the vision and ‘road map’ to achieve the vision, and identify success criteria for the EcoDistrict. And, form a collaborative organization to execute the vision and roadmap. After the foundation steps, progress would be monitored and measured on a regular schedule using the Mid-Town EcoDistrict success criteria.

EcoDistricts Link: https://ecodistricts.org/case-studies-stories-from-thneighborhood/