PROJECT REQUESTOR: City of Ann Arbor

PROBLEM THAT'S BEING SOLVED: During the development of the Ann Arbor/Ypsilanti SmartZone strategic plan, the SmartZone board heard complaints from tech companies and businesses that affordable and reliable internet connection was not available in the downtown area. In addition, Ann Arbor SPARK has identified through its normal interactions with tech start-ups and existing companies that affordable and reliable internet service is an inhibitor to company creation and growth in the Technology Park area (TIF capture district).

BRIEF DESCRIPTION OF PROPOSED PROJECT: The City of Ann Arbor has an existing fiber optic cable ring around the City that was installed to connect government and educational institutions. The ring has excess fiber capacity and has a line that passes through the downtown area. This project requests funding to install conduit, fiber, and related tech infrastructure (solely within the technology park district) to support affordable and reliable internet service, implement smart city technologies, and enable the creation and expansion of technology companies and employment. (See attachment I for a map from the SmartZone TIF & Development Agreement which illustrates the boundaries of the certified technology park).

This conduit system can connect to and leverage the City's existing conduit and fiber network within this area creating a foot print for third party companies to compete and offer affordable and reliable services within the certified technology park. The City has no intention of being an ISP itself.

ESTIMATED INVESTMENT: The tech park area has a lot of existing (non-tech) infrastructure already in place which makes it difficult to accurately project the costs without design and engineering work. A preliminary estimate is $3.5 to $5 million. This estimate was obtained from one of the firms that the City utilized to install its own fiber ring around the city. Directional estimates for project phases are: design/planning & consulting ($1 million), construction ($3.8 million), testing ($50k), and project oversight ($150k). A more accurate estimate would be available after the design/planning is completed.

ESTIMATED TIMING: Preliminary design, engineering, and project management would likely take a year. This would be followed by roughly 2-3 years of construction. The construction timeframe could vary due to the intensity of the activity in the area and the number of community events that would have to be coordinated around.

STRATEGIC ALIGNMENT: Goals 2 and 3 of the LDFA's strategic plan are to have a "High-Tech Company Friendly Infrastructure" and "High-Tech Company Creation and Growth", respectively (see attachment II). The primary objectives that this project aligns with:

1. *Assist in establishment of reliable/internet access* – This project is limited to the technology park area which is the primary intensive business district of the community and includes 29,530 total jobs (according to the 2018 DDA annual downtown report). Although internet service is offered throughout the district, companies have indicated their service can costs thousands of dollars a month for service and/or service is not reliable. Installing fiber infrastructure which will allow any

ISP to access this business intensive area will improve competition and operate with reliable infrastructure.

2. *Encourage & support Smart City initiatives* – Smart City initiatives do not have a uniform definition but at their core, they utilize technology infrastructure to interface and leverage data and applications to deliver innovative, efficient, and networked services. The City's IT department is in the process of developing a Smart City strategy, but implementing such strategy will require and rely upon the basic infrastructure such as a fiber/electrical conduit network. The abundance of tech companies in the tech park area along with intensive infrastructure can be a playground for innovation and implementation of Smart City services. These new services will require tech companies and employees to innovate and implement new technologies.

3. *Support company creation/growth/viability* – Having this infrastructure in place is the foundation to facilitate connectivity between people, assets, and ideas. By having third party ISPs compete based on services delivered rather than who can afford to install infrastructure, it lowers the cost for company creation and viability and leverages the other tech related industries and assets in the surrounding community.

COMPLEXITY: Installation of conduit, fiber, and related technology infrastructure is not overly complex with today's technology. However, the technology park district, as many downtowns, has a lot of infrastructure already installed and some of it is old. Constructing in this environment is not always simple, so pre-planning and having an appreciation that unforeseen challenges may arise are appropriate expectations to have.

URGENCY: Because internet services are presently provided, the urgency for this effort is not high. However, when considering how fast innovation happens today, the focus in this region on autonomous transportation research, and the need to reduce the hurdles for company creation and sustainability, the installation of the proposed infrastructure is highly desirable sooner rather than later. It would also create a competitive advantage for the community in regards to attracting and assisting technology companies.

SUSTAINABILITY: Approval of this proposal would result in infrastructure that can be utilized for many years into the future beyond the existing life of the LDFA. As a city asset, the city would be responsible for the on-going maintenance and repair of the assets beyond the life of the LDFA.

RETURN ON INVESTMENT/METRICS: A specific impact on companies and employment can't be reasonably estimated, but approval of this proposal is expected to support the achievement of the following metrics tracked by SPARK, the LDFA, and the MEDC.

1. Number of companies graduating from the incubator and locating within Ann Arbor
2. Number of companies expanding employment
3. Number of new companies attracted to the community

RELEVANT EXPERTISE: The City has demonstrated it can manage a project such as this as demonstrated by the fact it oversaw the design and construction of the City's fiber ring over the past two years. The city's project was approx. $3.5 million and was completed within two months of expectations and was approx. $200k under budget.
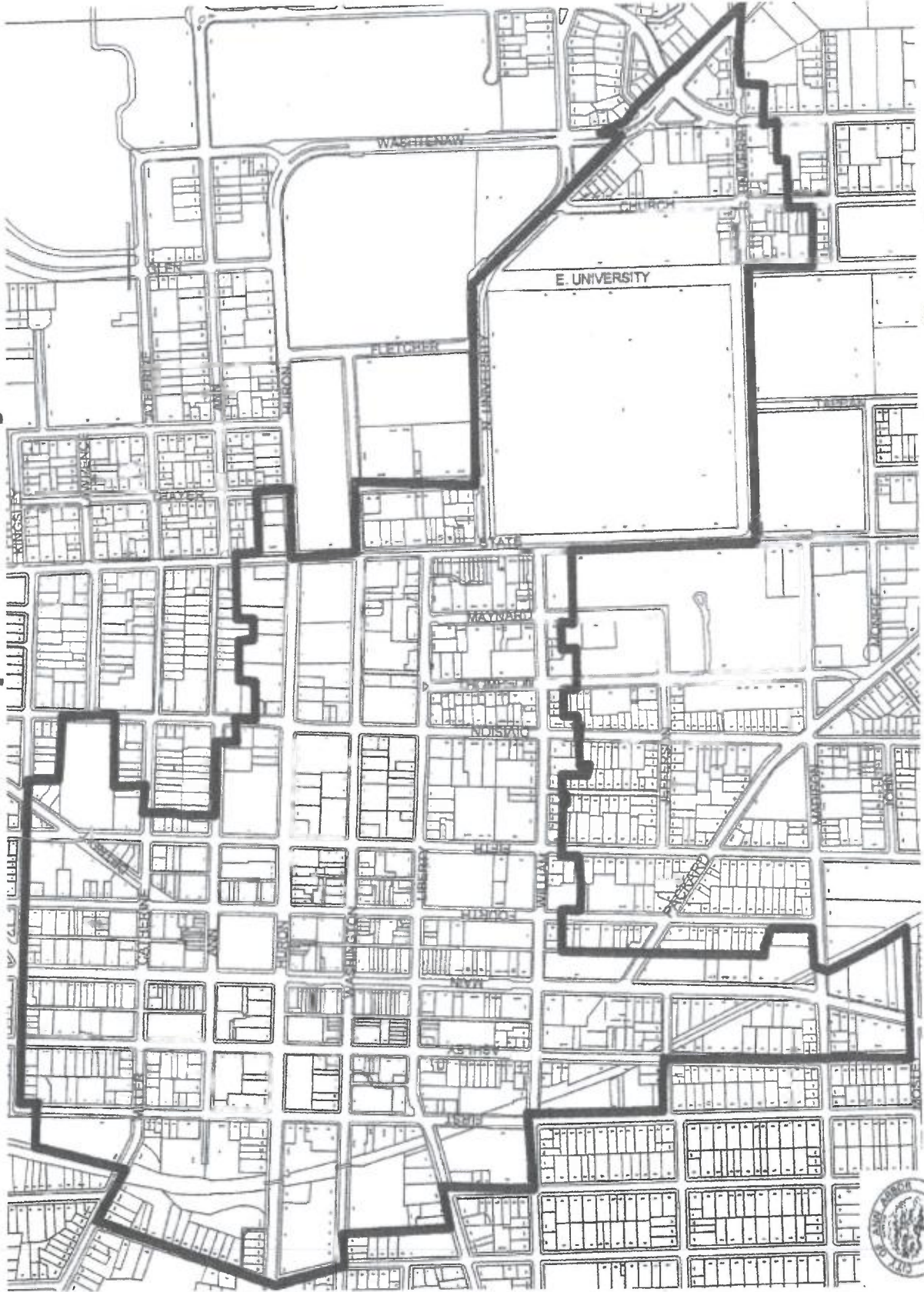
COMPLIANCE WITH LEGISLATION: In response to the Public Act 281 of 1986, Section 15(2)(f) requirement (Planned Construction), the approved Development Plan states, "Investment may be made to

facilitate the expansion of the technology infrastructure, such as high-speed telecommunications throughout the Cities' public facilities as defined by Act 281, or expansion of the incubator facilities within the SmartZone LDFA District.

FUNDING: The LDFA is the right entity to fund this proposal since technology related infrastructure is expressly anticipated within the Tax Increment Financing and Development Plan approved by the MEDC and City, the proposal furthers the strategic goals of the LDFA, and this infrastructure leverages other assets in the community.

Downtown Development Authority District

WASHTENAW

SLER

E. UNIVERSITY

CHURCH

FLETCHER

FLETCHER

NORTH

HAVEN

KINGSLEY

SOUTH STATE

MAYNARD

THAYER

NDISIAIG

DIVISION

HIGH

LIBERTY

WILLIAM

MONROE

MAIN

WASHINGTON

ASHLEY

FOREST

1000 Feet

500

0

500

MICHIGAN SMARTZONE

First 15 Year Primary Focus
Ann Arbor/Ypsilanti LDFA SmartZone

15-Year Strategic Goals

Connected High-Tech Ecosystem	High-Tech Company Friendly Infrastructure	High-Tech Company Creation and Growth	Promote Region	Talent and Workforce Development
• Create connections between high-tech stakeholders	• Assist in establishment of reliable fiber/internet access	• Support company creation/growth/ viability	• Marketing plan to promote our entrepreneurial & innovative culture	• Communicate employment needs of high-tech ecosystem
• Foster tech culture & community	• Encourage & support Smart City Initiatives	• Foster start-up environment	• Collaborate with others to leverage community message	• Develop & support talent initiatives to meet high-tech community needs
• Drive creation of sustainable ecosystem	• Support affordable workspace	• Entrepreneur education	• Attract capital and talent to the region	
• Connect with other SmartZones to enhance regional economy	• Support efforts to establish regional transportation	• Encourage entrepreneurship		

Strategic Objectives