20-64
RESOLUTION
OF THE
REDEVELOPMENT COMMISSION
OF THE
CITY OF BLOOMINGTON, INDIANA

ENDORSING THE FEASIBILITY STUDY FOR THE ECONOMIC DEVELOPMENT AGENCY GRANT APPLICATION TO CONSTRUCT A TECH CENTER IN THE TRADES DISTRICT

WHEREAS, on August 3, 2020, the Redevelopment Commission of the City of Bloomington ("RDC") approved a Project Review & Approval Form authorizing services related to a match required by the terms of a federal EDA CARES Act grant to construct a tech center in the Trades District ("Project"); and

WHEREAS, the City of Bloomington ("City"), along with the Bloomington Economic Development Corporation ("BEDC"), is applying for this grant for the Project, which would serve Bloomington, Monroe County, and the surrounding region; and

WHEREAS, for purposes of the grant application, the BEDC, in collaboration with the City and other community partners, has completed a feasibility study that complies with EDA application requirements for such a study ("Feasibility Study"); and

WHEREAS, as required by the EDA grant application, the Feasibility Study establishes the market demand for the types of entities that are envisioned as future tenants in the Tech Center, and confirms the presence of necessary resources and community support to make the Project a success; and

WHEREAS, the RDC has reviewed the Feasibility Study, which is attached to this Resolution as Exhibit A;

NOW, THEREFORE, BE IT RESOLVED BY THE REDEVELPMENT COMMISSION OF THE CITY OF BLOOMINGTON THAT:

1. The RDC endorses the Feasibility Study, finding that it establishes the market demand and supports the RDC's goals and intent with regard to the Project; and

2. The RDC considers the Project to be a key investment in the future of our City and region that is wholly supported by and consistent with the Feasibility Study.

BLOOMINGTON REDEVELOPMENT COMMISSION

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Donald Griffin, President

ATTEST:

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Cindy Kinnarney, Secretary

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Date

INDIANA UNIVERSITY
PUBLIC POLICY INSTITUTE

TRADES DISTRICT TECHNOLOGY CENTER

Feasibility Study of the Proposed Trades District Technology Center

SEPTEMBER 22, 2020

INDIANA UNIVERSITY

Bloomington Economic Development Corporation

Feasibility Study of the Proposed Trades District Technology Center

Executive Summary

On July 22 of this year SmartAsset™, a web-based personal financial advice firm, published an article that ranked Bloomington, Monroe County, Indiana the most economically vulnerable college town in America (College Towns That Are Most Economically Vulnerable During COVID-19 – 2020 Study, 2020). The vulnerability factors identified in this article included a high concentration of students in the Bloomington population; high dependency on Indiana University employment; and high concentration of service businesses (restaurants and entertainment venues). These vulnerabilities are further supported by some quick facts about Monroe County median household income, which at $48,883 as of July, 2019, was 87% of the state of Indiana median household income, and 78% of the U.S median. (U.S. Census Bureau, 2019)

By contrast, Monroe County possesses a significant reserve of untapped student, faculty and tech talent as well as existing emerging cluster industries that could serve as a regional catalyst for emergence from the current recession by increasing cluster-based, innovation-centric, high tech employment. For example, according to the same U.S. Census data, 47% of Bloomington's adult population (age 25+) holds at least a bachelor's degree. This compares with 26% for the state of Indiana and 32% for the U.S. In addition, major employers, other than Indiana University, include high-tech life sciences companies that are growing, even during this devastating recession. Also, the firms targeted by this commercialization project comprise an emerging industry cluster for Bloomington and the surrounding areas. Industry clusters are widely recognized in economic development literature as the most viable means to grow jobs, promote economic resilience and enable greater regional and global competitiveness.

The Trades District Technology Center (the "Center") will be located adjacent to the Dimension Mill, Inc. ("The Mill"), a nonprofit entrepreneurship co-working space that is supported by the City of Bloomington, Indiana University, several established hi-tech firms, and many other business organizations. Two key features of this facility are technology commercialization services and co-location space for firms specializing in a variety of industries requiring technology capabilities for software development and publishing, artificial intelligence (AI), digital marketing, education services, IoT, Software as a Service (SaaS), consulting and other related industries. Co-location with other high-tech firms is expected to build innovation synergies between companies that may serve different industries but require common technology skills and capabilities to serve their customers. These firms also can play the role of mentor and future business partner for nascent companies utilizing the commercialization and acceleration services of the Center.

The Center will include services for start-up firms that have successfully passed the incubation phase or have demonstrated commercial viability, such as a minimum viable product, and are entering what is commonly referred to as the “Valley of Death.” These services will be offered to de-risk start-ups facing the Valley of Death, plus potential innovations from existing companies to make them more attractive for commercial development, and if needed, venture capital investment. The combination of established tech firms and services for recent start-ups will provide consolidated expertise and create a dynamic environment that enables both types of firms to benefit from spatial proximity for the exchange of ideas, expertise and partnerships that enhance commercialization.

Potential clients of the Center will come from collaborations with several organizations that are starting points for innovation such as The Mill, Westgate at Crane, Indiana University and other existing tech companies. These “input sources” could benefit from working with the Center to increase the speed of decisions about whether an idea has commercial potential, as well as to access expertise that will enable innovators to reach market faster. Ultimately, it is expected that these collaborations will lead to greater tech job growth, increased firm growth, wage growth and new clusters that strengthen the Bloomington and regional economy.

The economic development strategy prepared for the City of Bloomington and Monroe County highlights the Center as a key strategic asset. The strategy’s goals to leverage diverse talent available in the Bloomington and surrounding community, foster inclusive employment opportunities connected to that talent, and utilize existing and emerging industry clusters that provide the greatest opportunity for economic growth in the region are made possible by increasing the level of innovation activity from start-ups and existing businesses. This strategy draws upon and consolidates several existing analyses and plans that demonstrate the economic potential of the community with development of key assets and programming such as that offered by the Center and its tech industry hub space.

In 2014, Battelle Technology Partnership Practice prepared a regional strategic plan for the Southwest Central Indiana Region, which includes Bloomington. This study identified information and communications technology (ICT) as an emerging strength (cluster) based on their analysis of existing location quotients for select industries and employment growth rates. Several existing Bloomington-based companies were cited as major employers that anchored the Battelle cluster analysis. This strength was validated by the PPI data analysis summarized below.

Data analysis prepared by PPI indicates that the targeted businesses to be served by the Center are part of an emerging industry cluster based on employment and cluster data for Monroe County and the region. Our analysis also indicates that there is a

strong relationship between the types of businesses that will be supported by the Center and existing strong cluster industries in areas such biopharma, medical devices and educational services. Moreover, on a regional basis, the strength of defense industries at Crane is another cluster linkage that will support future growth and the development of a strong cluster in business services and custom computer programming services, which are the national industry groupings that include many of the firms targeted for development through the Center.

To gauge stakeholder support for this project PPI interviewed a range of key informants from the public sector, local and regional economic development practitioners, entrepreneurs who have navigated startup and commercialization to create successful tech firms, and those involved in supporting commercialization efforts. We found that nearly all stakeholders were highly enthusiastic about having a center that could support acceleration of the commercialization of high-tech products and services, although one government official questioned whether the center needed to be located in Bloomington to achieve its objectives. Another stakeholder wondered whether a physical co-location and program site were needed. A more experienced and successful tech entrepreneur and venture capitalist with experience in acceleration, opined, however, that the physical space would be important for enhanced commercialization in the area. In both cases, however, both informants with concerns supported the objectives of the Center.

A real estate market analysis for the City of Bloomington and the Trades District where the Center will be located was prepared independently by First Appraisal Group, Inc. This report identifies key factors in determining whether sufficient commercial real estate demand might exist for companies targeted to locate in the Center. While the report recognizes the impact on demand in the current recession brought on by COVID-19, the report also identifies factors that contribute to feasibility of occupancy based on historic demand, the amount of modern, professional office space in Bloomington, and post-recession forecasts for demand, rent prices and occupancy. Although there can be no assurance that occupancy will achieve the forecasted levels of commercial occupancy provided in the report, there is sufficient information in the report to believe those objectives can be achieved.

EDA regulations require that private users of any facility built with federal funds pay fair market rates of rent, although EDA has some discretion with respect to rental rates charges in the initial operation period of a facility. The planned rental rates for this facility are consistent with current market rates as identified in the real estate market analysis. (Please see Appendix B for the full analysis of market conditions plus Appendix C, which includes the initial Business Plan)

The building site and Trades District are located within walking distance to downtown Bloomington, the B-line trail to the south, and residential and commercial development to the north and west. The building also is located directly adjacent to the Dimension

Mill Building, a start-up incubator space, allowing the new Tech Center to create connections both physically, socially, and economically with The Mill and start-up tenants. The location at the intersection of Makers Way and Madison Street allows the building to become a center point or hub for future development within the district and, also allows to building to set a precedent for both scale and architectural language within the district for future development.

With the primary goals of evolving, supporting, connecting, and inspiring technology focused companies in mind, the building program will use a mix of small to medium sized tenant spaces, a central atrium/lobby space, outdoor roof terraces, and amenity support spaces to achieve these goals.

The Center is incorporated as not-for-profit entity and will be overseen by a board that includes City of Bloomington Mayor Hamilton, the Indiana University Assistant Vice President for Innovation and Commercialization, the Regional Director of the Indiana Small Business Development Network at Ivy Tech Community College, the Executive Director of The Mill, the President of the Bloomington Economic Development Corporation and others with knowledge of the tech industry and commercial real estate in the Bloomington area.

The Center will be managed by a relatively lean staff, with a primary focus on organizing and providing commercialization services. Tenet recruiting and occupancy is expected to be provided by a professional real estate firm with strong knowledge of the Bloomington real estate market and the types of businesses targeted for co-location in the Center. An important objective for providing effective commercialization support will be the development of an advisory board or boards who can help potential innovators determine the best commercialization path to follow. The management team also will focus on ensuring that a comprehensive set of technical assistance and capital access services are available to tenants and new start-ups.

The costs of operating the Center will come from a variety of sources including tenant rents, contributions, and other program income. It is recognized, however, that the Center will require its own start-up capital to support the hiring of staff and begin operations. The business plan calls for the Center to be fully self-sufficient within three to four years after occupancy begins.

Based upon the current economic and real estate market data, the proposed business and management plan, and with sufficient start up support from the City, this study concludes that the proposed Trades District Technology Center is feasible. In addition, stakeholder interviews, which include both existing tech-based businesses and start-up companies, indicate a high level of support for this project to achieve greater levels of commercialization and development of Bloomington’s and the region’s economies.

20-65
RESOLUTION
OF THE
REDEVELOPMENT COMMISSION
OF THE
CITY OF BLOOMINGTON, INDIANA

ENDORSING THE COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY FOR THE ECONOMIC DEVELOPMENT AGENCY GRANT APPLICATION TO CONSTRUCT A TECH CENTER IN THE TRADES DISTRICT

WHEREAS, on August 3, 2020, the Redevelopment Commission of the City of Bloomington ("RDC") approved a Project Review & Approval Form in Resolution 20-45 authorizing services related to a match required by the terms of a federal EDA CARES Act grant to construct a tech center in the Trades District ("Project"); and

WHEREAS, the Bloomington Economic Development Corporation ("BEDC") is a co-applicant for the grant, and for purposes of the grant application, the BEDC, in collaboration with the City and other community partners, has developed a regional economic development plan that complies with EDA application requirements for a Comprehensive Economic Development Strategy ("CEDS") or equivalent regional economic development strategy ("CEDS Equivalent"); and

WHEREAS, the CEDS Equivalent outlines an economic plan for the community and the region in which the Project would play a major role; and

WHEREAS, the CEDS Equivalent will be put forward for public review and comment by the broader community in the coming weeks; and

WHEREAS, the RDC has reviewed the CEDS Equivalent, which is attached to this Resolution as Exhibit A;

NOW, THEREFORE, BE IT RESOLVED BY THE REDEVELPMENT COMMISSION OF THE CITY OF BLOOMINGTON THAT:

1. The RDC endorses the CEDS Equivalent, finding that it outlines and supports the RDC's goals and intent with regard to local and regional economic redevelopment and advancement; and

2. The RDC considers the Project to be a key investment in the future of our City and region that is wholly consistent with the CEDS Equivalent.

BLOOMINGTON REDEVELOPMENT COMMISSION

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Donald Griffin, President

ATTEST:

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Cindy Kinnarney, Secretary

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Date

Bloomington/Monroe County
Comprehensive Economic Development Strategy Equivalent

Executive summary

The City of Bloomington, Indiana and surrounding Monroe County are located in Southwestern Central Indiana (The Indiana Uplands Region). Indiana University-Bloomington, the flagship of IU, majorly impacts the community. Beyond IU, Bloomington and Monroe County have other attributes such as outdoor attractions, growing entrepreneurship and industries, capacity for talent, and other quality of life perks. There are also challenges to overcome moving forward including the need for greater diversity and inclusion, for a higher-skilled workforce, and for more housing, particularly affordable options.

Community strengths

A snapshot of the local community reveals potential for success while being mindful of the obstacles in front. Some positives include the well-educated population and successful industries continuing to grow. The Life Sciences industry is particularly strong with about 4,000 jobs in Monroe County alone. Other prominent industries include advanced manufacturing, national security and defense, and tech. Much attention is being given to workforce development. There are more than a handful of organizations dedicated to this purpose including Bloomington WorkOne and Regional Opportunities Initiative. The educational component is primarily carried out by Indiana University, Ivy Tech Community College-Bloomington, and Hoosier Hills Career Center. Bloomington Mayor John Hamilton's Recover Forward Initiative includes investing in such programs. Additionally, entrepreneurship is supported by The Mill, the local incubator, accelerator, and coworking space. The Gayle and Bill Cook Center for Entrepreneurship through Ivy Tech Community College-Bloomington and the growing Trades District are other sources of entrepreneurial assistance.

Community challenges

For all the good Bloomington and Monroe County have to offer, the community is aiming to improve. One major concern is the lack of diversity throughout the area and needing to raise the comfort level of minority individuals. Also, although Bloomington's population is growing, the largest growth projection belongs to the older generation. Students tend to come for their education and not stay beyond its completion. All of this flows into the local issue of workforce. Though organizations are invested in improving it, there is much to do in making sure people of all backgrounds have the skills to be hired into successful careers and employers are no longer scrambling for them. Further disadvantaging the workforce are issues of low wages, limited infrastructure including broadband access, and low availability of housing, especially those in need of affordable housing. Accessible and sustainable transportation are another focus of the community and finally, climate impacts of the future pose additional complications.

Goals

Given the positives and negatives within Bloomington and Monroe County, we propose several goals to improve our community.

First Goal: workforce development

- Increase diversification of economy
- Increase skills within the workforce
- Retain IU alumni and other talent
- Increase diversity of the workforce
- Provide more training to students

Second Goal: business support and attraction

- Protect and promote IU intellectual property
- Cultivate regionalism
- Encourage opportunity zone investment

Third Goal: enhance quality of place

- Increase housing for workforce
- Increase availability of affordable childcare
- Make quality transportation more widely available
- Strengthen quality of life

Fourth Goal: create economic brands locally and regionally by capturing the narrative appeal of the area through partnerships and initiatives.

Overall, Bloomington and Monroe County look forward to strengthening the place many people and businesses call home. A Tech Center in the Trades District allowing commercialization capabilities and providing technical assistance and programming could set the community on a path for growth in the local blossoming tech industry as well as benefit the other strong industries around, and harness the talent needed.

Geographic scope, partners, and methodology

Bloomington, Indiana is the geographic scope for this CEDS-equivalent. The City is based in Monroe County, which is home to over 148,000 individuals and located approximately one hour south of Indianapolis in Southwest Central Indiana, in a region also known as the Indiana Uplands. Monroe County includes the City of Bloomington, county seat and home to over 85,000 residents; the Town of Ellettsville with over 6,700 residents; and smaller towns and other unincorporated areas. Bloomington is the home of Indiana University's flagship campus, with a student population of 43,064.

CEDS-equivalent leadership

The Bloomington Economic Development Corporation (BEDC) spearheaded the development of this strategy. The BEDC is a not-for-profit corporation dedicated to the retention, development, and attraction of quality jobs in Monroe County. The BEDC is funded through memberships and

grants from private industry, the City of Bloomington, the Town of Ellettsville, Monroe County, Indiana University, and Ivy Tech Community College-Bloomington.

Partners

The following organizations and groups informed the development of this document:

Entity	Description
City of Bloomington, Department of Economic & Sustainable Development (ESD)	ESD aims to foster a livable and economically resilient community through partnerships, collaboration, and outreach.
Bloomington Economic Development Corporation (BEDC) Executive Committee	The BEDC executive committee governs the work of the BEDC and includes representatives of the following BEDC members: • BEDC Officers representing private industry • Monroe County Commissioners • Monroe County Council • City of Bloomington Office of the Mayor • City of Bloomington Common Council • Town of Ellettsville
Bloomington Economic Stabilization & Recovery (ES&R) working group	The ES&R working group was formed in late March 2020 by Bloomington Mayor John Hamilton to assess the impact of the COVID-19 pandemic; collect and share information with local employers; launch a loan program for employers; develop reopening resources; and plan for long term recovery. ES&R include representatives from: • City of Bloomington Economic & Sustainability Department • City of Bloomington Common Council • Bloomington Economic Development Corporation • CDFI Friendly Bloomington • Greater Bloomington Chamber of Commerce • Monroe County Council • The Mill
City of Bloomington Economic Development Commission (EDC)	The EDC is a city commission created to enhance economic growth within the City of Bloomington.
City of Bloomington Redevelopment Commission (RDC)	Among other duties, the Bloomington RDC oversees Tax Increment Districts including the one in which the proposed Trades District Technology Center is based.
LEDOs Group	This is a collective of local organizations whose missions connect to economic development initiatives. It meets quarterly and includes representatives from: • City of Bloomington Economic & Sustainability Department • City of Bloomington Common Council • Bloomington Economic Development Corporation

	• CDFI Friendly Bloomington • Downtown Bloomington Inc / Monroe Convention Center • Greater Bloomington Chamber of Commerce • IU Office of Government Relations & Economic Engagement • IU Ventures • Ivy Tech / South Central Indiana Small Business Development Center • Monroe County Council • Regional Opportunity Initiatives • The Mill • Visit Bloomington This group helped develop the SWOT analysis and other recommendations included in this CEDS-equivalent
Economic Recovery Dashboard Group	The Indiana University Crisis Technologies Innovation Lab and Indiana Business Research Center worked with the BEDC and City of Bloomington to launch an economic recovery dashboard. It tracks indicators that are key to understanding Monroe County's economic resilience and recovery from the COVID-19 pandemic. Data from this dashboard has been included in the CEDS-equivalent,

Existing studies and plans that informed this document:

The CEDS-equivalent builds on numerous studies and plans related to economic development from across Monroe County. Many of these documents have ties to the larger South-Central Indiana region.

Document (date)	**Description**	**Geographic scope**
1. Monroe County Comprehensive Plan (2012)	An overview of Monroe County and plans for the future, including goals for development, policies for land use, and descriptions of important community assets	Monroe County, Indiana
2. City of Bloomington Comprehensive Plan (2018)	The City's long range plan for land use and development	Bloomington, Indiana
3. Monroe County Quality of Place & Workforce Attraction Plan (2019)	A summary of Monroe County quality of life attractions and where the County is lacking according to data and residential input	Monroe County, Indiana
4. Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana (2014)	A review and recommendations for SWCI's (Indiana Uplands) economic opportunities and obstacles in pursuing economic well-being and success	Southwest Central Indiana / Indiana Uplands (11 counties)

5. South Central Indiana Housing Opportunities Community Housing Needs Assessment (2016)	A review of regional affordable housing concerns and recommendations to address them	Bloomington, Indiana and some Monroe County content
6. Bloomington Mayor's Wage Growth Task Force Report (2016)	An action plan to accelerate wage growth in the Bloomington/ Monroe County MSA to reverse economic underperformance relative to the State and Nation since the Great Recession of 2008–09	Bloomington, Indiana
7. Southwest Central Indiana Occupational Needs Assessment Advanced Manufacturing Sector Report (2017)	A summary of advanced manufacturing in SWCI (Indiana Uplands) and associated talent needs	Southwest Central Indiana / Indiana Uplands (11 counties)
8. Southwest Central Indiana Occupational Needs Assessment National Security & Defense Sector Report (2017)	A summary of the National Security & Defense industry in SWCI (Indiana Uplands) and associated talent needs	Southwest Central Indiana / Indiana Uplands (11 counties)
9. Southwest Central Indiana Occupational Needs Assessment Life Sciences Sector Report (2017)	A summary report of Life Sciences industry in SWCI (Indiana Uplands) and associated talent needs	Southwest Central Indiana / Indiana Uplands (11 counties)
10. Greater Bloomington Business Environment Survey (2018)	A survey of Bloomington and Monroe County business owners of the business climate and individual needs and recommendations	Monroe County, Indiana
11. City of Bloomington Sustainability Action Plan (2018)	An strategic plan for sustainability and climate adaptation issues environmental	Bloomington, Indiana
12. Monroe County Urbanizing Area Plan (2015)	A planning document for Monroe County development, particularly land and zoning, and how to reach the goals set	Monroe County, Indiana
Supplemental Materials		
13. Town of Ellettsville Comprehensive Plan (2018)	An overview of the Ellettsville Community, its goals, and plans for implementation	Ellettsville, Indiana
14. Economic Impact of Tourism in Monroe County (2017)	A survey of the economic effects tourism enables in the county	Monroe County, Indiana

15. Southwest Central Indiana in Perspective (2013)	A snapshot of the economic and demographic picture of SWCI (Indiana Uplands) and comparisons to other similar places around the country	Southwest Central Indiana / Indiana Uplands (11 counties)
16. Indiana University Bloomington Impact Study (2008)	An overview of Indiana University Bloomington's contributions to the well-being of the state, including the impact of students, alumni, and civic participation	Bloomington, Indiana
17. Bloomington Hospital Site Redevelopment: Existing Conditions (2020)	A report covering community and economic items related to the IU Health Bloomington Hospital site redevelopment	Bloomington, Indiana
18. City of Bloomington Housing Study (2020)	An analysis and strategic roadmap to identify and meet current and future housing priorities	Bloomington, Indiana
19. Transportation Demand Management Program Plan, Bloomington, Indiana (2020)	A plan that provides strategies for improving the accessibility of existing transportation infrastructure and influencing travel behavior to best leverage it	Bloomington, Indiana
20. Sustainability Action Plan Progress Report (2019)	A recap of sustainable initiatives achieved in Bloomington since the 2018 SAP and where continued work is needed	Bloomington, Indiana
21. Climate Risk and Vulnerability Assessment (2020)	An overview of Bloomington's climate sensitivities, projections, and recommendations	Bloomington, Indiana
22. Trades District Technology Center feasibility study and related cluster analysis (forthcoming, 2020)	Early data and interviews from this effort informed this document	Monroe County, Indiana / Indiana Uplands
23. Post-COVID economic conditions from IBRC/CTIL partners + dashboard (2020)	A dashboard that tracks economic conditions for Monroe County, Indiana following the COVID-19 pandemic	Monroe County, Indiana
24. The Bloomington Project A New Approach for Expanding CDFI Coverage in Smaller Markets (2018)	A study by Five/Four Advisors to investigate the viability of bringing CDFI investment to bloomington	Southwest Central Indiana / Indiana Uplands (11 counties)
25. City of Bloomington Public Art Master Plan (2014)	The City's plan for conservation and development of artistic resources	Bloomington, Indiana

26. Visit Bloomington Destination Strategic Plan (2020)	The Convention & Visitors Bureau's strategic plan for regional attraction and branding	Monroe County, Indiana

Summary Background

Introduction

The City of Bloomington is nestled in Monroe County, which is situated within Southwest Central Indiana (SWC Indiana), which is also known as the Indiana Uplands. Bloomington is also home to Indiana University's flagship campus. The city and county have charm, vibrancy, and economic strengths individually and together. The city and county also face challenges, which they must address independently and cooperatively within the region at large.

According to the 2014 Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana, the Indiana Uplands overall regional workforce lacked skills that would directly support industry clusters; there was a dearth of entrepreneurial support, and a general need for greater collaboration among areas along the I-69 corridor. Partners have worked aggressively to address many of the recommendations of the 2014 study. For example, Regional Opportunity Initiatives (ROI) has advanced numerous workforce related investments across the Indiana Uplands and in Bloomington. The Mill provides a substantial contribution of entrepreneurial support along with the Gayle & Bill Cook Center for Entrepreneurship through Ivy Tech Community College Bloomington. Additionally, the Trades District, Bloomington's innovation district, is being developed to accelerate innovation in the city and surrounding region. That said, there remain strategies in need of attention, which we address within this CEDS-Equivalent.

Demographics

According to StatsIndiana, as of 2019 the population of Monroe County was 148,431; the population of the City of Bloomington was 85,755; and the population of the associated metro area was 169,230. The 2014 Strategic Plan Economic and Community Prosperity in Southwest Central Indiana cites future population growth trends similar to the current ones: an abundance of young people largely stemming from the presence of Indiana University and a perennial difficulty in retaining these residents permanently. Older residents also increased their share of the population (currently representing 26.1% of the total population), as is happening almost everywhere in the country. In July 2020, the Bloomington Hospital Site Redevelopment: Existing Conditions Report found students still the largest subset of the population, but those 75 years and older will experience the most growth going forward, followed by 35–54 year olds. This is on par with the national trend referenced in the 2020 Bloomington Housing Study, which projects an 86 percent growth increase for residents 75 and older.

Additionally the Bloomington Hospital Site Redevelopment: Existing Conditions Report highlighted that the presence of Indiana University drives the high rate of education among the

population within Bloomington—approximately 30 percent with a Bachelor's degree and 30 percent with a graduate degree. As of the 2018 Census, Bloomington's population was 81.4% white, 9.9% Asian, and 4.3% Black or African American, with racial diversity projected to increase.

Economy

Indiana's pre-COVID-19 unemployment rate in January and February 2020 was 3.1%, according to the Bureau of Labor Statistics (BLS). Since then, it has risen to 17.5% in April 2020 before dropping in July 2020 to 10.3%. The BLS also tracked the City of Bloomington's seasonally adjusted unemployment rate, which went from 3.6% in January 2020 to 11.2% in April 2020, dropping to 6.3% in July 2020. For comparison, the U.S. seasonally adjusted unemployment rates for January and April 2020 were 3.6% and 14.7%, respectively, and 10.2% in July 2020. According to Hoosiers by the Numbers, the number of continued unemployment claims for Monroe County peaked at 3,239 claims at the end of April and beginning of May. As of August 2020, continued unemployment claims were 1,839. Monroe County sectors most impacted by COVID-19 related unemployment are Accommodation & Food Service, Retail Trade, and Healthcare & Social Assistance.

Unfortunately, even pre-pandemic economic growth in the Indiana Uplands region did not meet national averages, with employment falling 0.3% between 2009 and 2012 (as opposed to the nation's 2.6% increase over the same period) and with a significantly smaller average per capita income ($34,657) than the rest of the country according to the 2014 Strategic Plan Economic and Community Prosperity in Southwest Central Indiana report. The Bloomington 2016 Wage Growth Task Force Report raised concerns about a high poverty rate and the slow pace of post-recession income growth. Between 2007 and 2015, there was a slight rise in unemployment, with job growth concentrated in the service industry. The report also reflected local business concerns at the time that growth was hindered by unclear regulations and a lack of community collaboration among innovative companies.

However, there are bright spots in the Bloomington and Monroe County economies. The Monroe County Quality of Place & Workforce Attraction Plan cites manufacturing as the third largest industry in Monroe County (22) in addition to offering potentially high-paying jobs. The life sciences sector also represents a strength of the local economy. As of the 2017 Regional Opportunity Initiatives (ROI), Inc. Southwest Central Indiana Occupational Needs Assessment Life Sciences Sector, the Indiana Uplands were home to almost 6,000 life sciences jobs; more than 4,000 of which were located in Monroe County. Entry level production jobs are prevalent, representing an opportunity for individuals without post-secondary education, although these positions have an alternate set of stringent requirements. Beyond the life sciences, jobs in defense show promising growth, but employers struggle to recruit appropriate talent to the region. See the ROI Southwest Central Indiana Occupational Needs Assessment National Security & Defense Sector for additional context. Naval Surface Warfare Center (NSWC) Crane has fostered additional growth in the startup arena with specific startup funding and the Battery Innovation Center.

The 2020 Bloomington Housing Study notes that Bloomington's major employment centers range in size from 180 to 7,700 employees, with the majority with between 180 and 525 employees, many of which are located in the downtown. In the 2013 Trades District Master Plan, there was already recognition of the burgeoning tech sector in Monroe County and that the Trades District could serve as a concentration area for the continued growth of the industry. The 2020 Transportation Demand Management Plan stated:

> The city is currently developing a 12-acre area into The Trades District, designed to attract many more employers and thousands of employees to downtown. The Mill, a coworking and business incubator space, is already fully developed, and the historic Kiln building is being redeveloped into mixed-use space to support the growth of businesses developed at The Mill(5).

Workforce Development

Monroe County includes a number of workforce development assets, connected with the larger region. The Indiana Department of Workforce Development maintains a WorkOne Center in Bloomington, providing individualized career development, training, and employment re-entry programs. Regional Opportunity Initiatives has advanced education and workforce initiatives, including major recent investments in two Monroe County school corporations for talent pipeline development. In addition, Ivy Tech Community College, Hoosier Hills Career Center, and other public and private programs provide career pathways into a variety of sectors.

In 2020, the City of Bloomington began investing additional public monies directly into existing workforce development programs as part of the mayor's Recover Forward initiative, including life sciences preparation skills, skills training in the building trades, re-entry training programs for the hard-to-employ, and coding skills in the technology sector. These investments are designed to provide additional financial support for the revitalization of the local economy as the region struggles to recover from the COVID-19 pandemic.

The 2019 Monroe County Quality of Place & Workforce Attraction Plan, however, reported anecdotally that employers struggled pre-pandemic to fill lower paying jobs or second or third shift jobs, and that they have lost skilled workers to other communities. Focus groups and surveys additionally revealed concerns from residents that the community lacks inclusivity and resources for community development as well as robust career opportunities.

Housing

Housing is vital to both the quality of life in Bloomington and Monroe County and the local economy. To keep pace with growth in Bloomington, the Bloomington Housing Study found that Bloomington will need an additional 2,592 units by 2030 or 236 newly constructed units annually.

Because Indiana University students make up such a large percentage of the area's population, the city's housing strategy includes increasing density in student housing in areas closer to

campus in order to re-prioritize single family homes for non-student use. Simultaneously, the city is working to increase the volume of affordable rental units to offset accelerating rents driven by the student rental market.

Limited lot availability and premium land values within the city challenge the financial viability of affordable and workforce housing developments and limit growth of single family homes within city limits. The 2020 Housing Study reported that "over 60% of renter households and nearly 30% of owner-occupied households in Bloomington are cost-burdened." While this rate is high, it is also less than in the past, and therefore the priority should be "households making less than $25,000" (58). The Housing Study suggests investigating alternative funding support, infill strategies, rehabilitation programs, and community education and partnerships.

Transportation

The city's transportation strategies are also under review, as noted in the 2020 Transportation Demand Management Program Plan. Ultimately, the end goals for the community include increasing accessibility throughout the city while also making traffic safer; piloting innovative transportation options, including micro-mobility platforms; and supporting the local economy. The study suggests that in practice these goals will mean less single occupant vehicle travel through promotion of non-car transit and adjustments to parking strategies.

Like many college towns, Bloomington, Indiana is served by two complementary public transit systems. Bloomington Transit provides fixed-route and ADA paratransit service throughout the Bloomington urbanized area. Indiana University operates its own fixed-route transit service, focused on the mobility needs of IU students, faculty, and staff.

According to the 2019 Bloomington Transit Optimization Study, Bloomington Transit carries over three million passengers annually. The BTaccess paratransit service provides approximately 35,000 passenger trips a year. Both of these services experienced dramatic ridership growth since their inception in the early 1980s. Between 1984 and 2014, total BPTC ridership increased from less than 500,000 riders per year to more than 3.5 million. However, after peaking in 2014, BPTC has seen its ridership decline in recent years. Similarly, Indiana University's Campus Bus Service now carries three million annual passengers, down from a peak of 3.7 million in 2011.

The decline in transit ridership in Bloomington is consistent with national trends and coincided with a rapidly changing mobility landscape. Factors contributing to this decline include the prevalence of new and emerging technologies such as app-based ride hailing services, shared-use bicycles and scooters, and even changing retail habits such as online shopping. In addition, development trends in Bloomington have resulted in more people living downtown and within walking or biking distance of the IU Campus. These residents are likely less reliant on transit to get to key regional destinations, both because of proximity and availability of other mobility options.

Environment

Bloomington's natural environment contains a diversity of environmental features and represents a complex interconnected natural system that ranges over 23 square miles. The City of Bloomington boasts 38% canopy coverage and a nationally accredited parks system, which connects to Monroe County parks via a network of city and county trails. This natural environment represents a critical asset to environmental quality and quality of life for citizens and businesses in Bloomington and the surrounding area. The City of Bloomington is committed to maintaining and improving the quality of its natural environment through policies and actions implemented by City staff and the community. The city's 2019 Sustainability Action Plan Progress Report sheds light on past sustainability successes and future plans following the release of the 2018 Sustainability Action Plan. Over the next five years, the City has committed to a series of improvements that will improve the resilience of the community, especially in the face of increasing climate stresses.

To anticipate what climate stresses the City may be vulnerable to, the Economic and Sustainable Development Department released the City's Climate Risk and Vulnerability Assessment (2020). This report analyzed and identified current and projected climate-related risks to people, infrastructure, and natural resources in Bloomington and Monroe County. Understanding susceptibility to climate hazards, such as flooding and heat effects, will then inform development of the Climate Action Plan. Top expected climate impacts identified through the assessment that pose challenges to the business community include potential failure of the road network due to climate instability and adverse effects on stormwater and flood management. Further impacts on energy demand are also expected to arise from extreme temperatures reducing the capacity of energy transmission lines and substations. Increased price volatility also represents another challenge to food insecurity that will impact vulnerable community members to the greatest extent.

To mitigate and adapt to the challenging climate, the City has implemented measures outlined in the the 2018 Bloomington Sustainability Action Plan. These actions range from increasing greenspace to conducting a Greenhouse Gas Inventory and investing in renewable energy—including $13 million in solar panels at 32 municipal locations and support for the residential rooftop solar, and other investments to reduce environmental impact through the Recover Forward initiative.

The City of Bloomington and Monroe County continue to work to incorporate sustainability and climate adaptation efforts into long-term planning of the built environment as reflected in the Trades District Master Plan (2013) and the Unified Development Ordinance that identifies sustainable practices to be incorporated at all levels of the built environment. Together, these efforts work in consort to support economic growth while maintaining environmental quality.

SWOT Analysis

Methodology:
This SWOT analysis draws from 26 aforementioned economic development-related plans and studies for the Monroe County region, with a focus on 11 reports that together form a view of current Monroe County and Bloomington conditions and provide action items for economic improvement. Strengths, weaknesses, opportunities, and threats that were mentioned across these reports are included in the following analysis. Numbers included in the chart below correspond to the numbers in the existing studies table earlier in this document.

Strengths	
Quality of life	• Arts, culture, sporting, recreation amenities draw in tourists, directly supporting local businesses.[1] (1) (2) (3) (13)[2] • Trails and parks systems, other outdoor and natural resources (2) (3)
Talent	• Major research university • Relatively young population • Monroe County has the highest population growth in the Indiana Uplands region. (14) • Well-educated population (2) (3) (14) • High local graduation rates (>90%), strong local schools. (2) (3) • Pipeline of student talent at IU and Ivy Tech • The Dimension Mill coworking space gives remote workers and startups a sense of community, anchoring them to the city. (3)
Workforce development	• Significant investment in growing workforce development initiatives, such as Regional Opportunity Initiatives (ROI) programs to advance the Indiana Uplands region as a 21st Century Talent Region, and programs like the Ready Schools Initiative. • Indiana University, Ivy Tech, Ivy Tech's Center for Life Sciences, Marchant School of Nursing, etc. provide training for in demand skills. (3) • New programs to upskill employees (NextLevel Jobs, Goodwill Excel, Recover Forward)
Entrepreneurship	• The Dimension Mill encourages entrepreneurship and aids

[1] 1.8 million visitors travel to Bloomington every year. In 2015, tourists spent $362 million in total gross sales, directly supporting more than 7.6k jobs. (2)
[2] See Appendix one for source that is represented by this number.

	startups. (2) (3) • Numerous entrepreneurship organizations (BEDC's B-Start program; Greater Bloomington Chamber of Commerce) • Many initiatives to promote small business startups (programs from The Mill; BEDC B-Start program) • The Cook Center for Entrepreneurship at Ivy Tech connects businesses with statewide resources • The Johnson Center for Entrepreneurship and Innovation at Indiana University is a national leader in entrepreneurship education
Business climate	• Major life sciences employers (Cook Medical, Catalent) • Strong local economy (pre-pandemic) (11) • Many networking and outreach opportunities within the business community • Tools for buying and selling businesses
Infrastructure	• Highest Broadband connection in region (14) • A developed public transportation system within city limits. (2) (3) • Well-developed local parks and trails
Location	• Located conveniently between the hubs of Chicago, Indianapolis, St. Louis, and Louisville. I-69 links the region more efficiently to Indianapolis and Indianapolis International Airport. (14)
Resilience	• A stable and diverse economy with a variety of sectors. (1) • A region-wide commitment to sustainability through a number of initiatives (Solarize Bloomington, Monroe County Energy Challenge, etc) (2) (11) • Nonprofit sector that encourages tackling big issues and can fund change. • Indiana University Environmental Resilience Institute
Weaknesses	
Quality of life	• Affordable housing stock does not support demand.[3] (1) (2) (3) (5) (10) • High childcare costs, especially relative to wages. (2) (3) • Limited diversity of population. (3) • Challenges with homelessness and drug use in downtown

[3] Housing costs in Monroe County are the highest in Indiana. 82% of households in Bloomington spend more than 45% of their annual income on housing and transportation costs. (5)

	areas. (11)
Talent	• High brain drain, especially in STEM[4]. (9) (15) • Low retention rate of IU grads, especially STEM majors. (9) (15) • Population growth demographics are not trending up in great numbers. • Businesses struggle to find applicants who possess soft skills. (7) (8) (9) (11)
Workforce development	• Substance / Opioid use disorder lowers workforce participation rate (8) • Limited labor market
Employment	• Indiana University a dominant employer • Stagnant wages • Industry heavily skewed toward tourism and hospitality businesses
Entrepreneurship	• High competition for a limited consumer base • Office spaces and leases that don't support the flexibility required of startups • High cost of rent • Challenges in managing 9-month economy
Business climate	• Vulnerability assessment • Local policies such as zoning regulations, difficult bureaucratic processes, signage regulations constrain business growth (11) • Limited weekday vs. weekend activities causes unstable tourism industry economics
Infrastructure	• High land values and development costs • Lack of certain types of affordable commercial space. (11) • High cost of rental/lease space for small businesses • There are still some areas that lack broadband connection (2) (4) (though the County created infrastructure development zone, and could create more; SCI REMC is also deploying broadband to their service area) • Limited sewer infrastructure outside of Bloomington and Ellettsville, making medium/high density housing development

[4] 39 percent of all IU Bloomington graduates between 1998 and 2002 resided in the state as of 2008. Of that percentage, only a fraction stayed in Monroe County (1,992 in total). (15)

	unfeasible • Limited public transportation outside Bloomington, limited service on Sundays, limited public transportation in a few key areas. (2) (3)
Location	• Only connected via one major traffic artery • Limited number of direct flights out of IND
Resilience	• A dependence on fossil fuels and lack of control over energy sourcing. (2) • Cost of living higher than other peer cities • Overdependence on a limited number of major employers. • Challenges with collaboration between city/county/other units.
Opportunities	
Quality of life	• Indiana University cultural and athletic programming • Recently completed 57-acre Switchyard Park • 24-acre hospital site reuse master planning effort
Talent	• 700,000 living IU alumni are potential "Bloomerangs" • Trailing spouses, especially of Indiana University staff/students
Employment	• Anticipated growth in life sciences[5] and defense sectors will bring additional jobs to the region. (8) (9) • Home of three major talent attractions: Indiana University, Ivy Tech and NSWC Crane. (1) • New initiatives around core industries (life sciences, defense, IT, manufacturing), tied to IU, NSWC Crane, major regional employers, and regional entities like ROI • 40–50 tech companies in Monroe County
Workforce development	• NextLevel Jobs initiative • Recover Forward partnerships with Hoosier Hills / Ivy Tech / The Mill
Entrepreneurship / innovation assets	• The Mill • Certified Tech Park and Trades District will bring new opportunities for development. (2) • Potential for collaboration between IU and Crane, can increase global relevancy and spur regional economic growth. (4) • IU Luddy School of Informatics

[5] Based on current trends, the life sciences sector will have 700 additional jobs each year over the next 5 years. (9)

	• NSWC Crane and Purdue@Westgate
Business climate	• Potential to capitalize on current strong sectors (life sciences and defense) to market community for future development. (4) (6)
Infrastructure	• Growing regionalism • Potential additional local income tax for infrastructure investments
Location	• The development of I-69 could bring more visitors to the local area. (2)
Resilience	• A future-focused community and government, with a commitment to ensuring prosperity for generations to come, exemplified in the 2018 Sustainability Action Plan. (11) • Build business in core strength areas (life sciences, IT, defense, arts, tourism, manufacturing)
Threats	
Quality of life	• Lack of affordable preschool programs. (6) • Higher cost of living than peer cities. • High cost of housing.
Talent	• Defense sector (BRAC) • Aging workforce, many workers are near retirement age. (8)
Employment	• Pandemic-related unemployment, impact on service industries
Workforce development	• County-city transportation barriers limit development • Opioid crisis limit pool of candidates
Entrepreneurship / innovation assets	• Companies able to locate anywhere
Business climate	• Some perceived lack of cooperation between business and public spheres. (11) • Protracted COVID-19 economic recovery
Infrastructure	• Vulnerable land (steep slopes, karst features) limit infrastructure development in some areas. (1) • Cost for small business office space

Location	• While I-69 improve regional accessibility, limited major arteries between regional communities (Bloomington-Columbus, Bloomington-Terre Haute)
Resilience	• Limited resilience references in many planning efforts. • Forecasted future climate change such as warmer summers, more flooding, and wetter winters. (11) • Ever changing technology industry • Potential IU in-person student enrollment decreases

Strategic Direction / Action Plan + Evaluation Framework

Methodology:
The following goals and objectives are drawn from the aforementioned economic development-related studies and plans. They were selected based on multiple references across plans and honed through discussions with relevant stakeholders mentioned below.

Plan of action:
A consortium of Bloomington and regional economic development organizations, with coordination by the Bloomington Economic Development Corporation (BEDC), will implement / track the following goals and activities against this plan. Ongoing development, coordination, tracking, and updates of the strategy will be facilitated through quarterly consortium meetings and ongoing work on initiatives.

Goal 1: To attract and support a qualified, stable, and diverse workforce	
1a: Diversification of employment: Increase quality and diversity of employment opportunities in targeted traded sectors, including technology, defense, and life sciences, to support local workers with opportunities for advancement and wage growth on pace with the state and national trends. **Actions:** • Conduct ongoing business retention, expansion, attraction initiatives focused on key sectors through the BEDC, City of Bloomington, and other partners. • Establish a Trades District Technology Center in 2020-2021 to expand technology employment	
Reference Plans	City of Bloomington Comprehensive Plan (2018) Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana (2014) Wage Growth Task Force Report (2016) Monroe County Quality of Place & Workforce Attraction Plan (2019)

Metrics	Area Median Income BLS Occupation Employment Statistics Sector Employment Net new job growth (targeted sectors) Employment growth by sector (targeted sectors)
Partners	Bloomington Economic Development Corporation, Greater Bloomington Chamber of Commerce, Regional Opportunity Initiatives, City of Bloomington, Dimension Mill Inc., Regional Employers

1b: Facilitate workforce skill development: Further develop a workforce that is adaptive to evolving opportunities, attractive to businesses, and has marketable skills; leverage workforce to attract business.

Actions:

- Establish and expand training for residents in life sciences CGMP (current good manufacturing practices) in 2020, to expand the base of prepared workers for life sciences companies through training delivered by Ivy Tech and the Hoosier Hills Career Center, with area employers.
- Expand City of Bloomington Recover Forward trades programs in 2020-2021 to develop skills training and workforce reentry programs for hard-to-employ populations

Reference Plans	Monroe County Quality of Place & Workforce Attraction Plan (2019) Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana (2014) Wage Growth Task Force Report (2016)
Metrics	Number and diversity of skill development programs Enrollment and graduation rates of programs Employment rate following program graduation Employment wages following program graduation Private sector participation in program development
Partners	IvyTech Community College, Hoosier Hills Career Center, City of Bloomington, Indiana Department of Workforce Development/WorkOne, Bloomington Economic Development Corporation, Greater Bloomington Chamber of Commerce, Regional Employers

1c: Attract highly skilled workforce: Leverage the Indiana University alumni base and the region's cultural assets to address the gap in highly-skilled workforce.

Actions:

- Continue outreach to IU alumni that may be interested in returning to the Bloomington market for job opportunities or to build their businesses, through marketing and in-market alumni events.

Reference Plans	Monroe County Quality of Place & Workforce Attraction Plan (2019)
Metrics	BLS, OES Sector Employment statistics (targeted sectors) US Census Population data Employer data (collected via business retention and expansion work) Indiana University alumni data
Partners	Indiana University, City of Bloomington, Bloomington Economic Development Corporation, Visit Bloomington, Dimension Mill Inc., Regional Employers

1d: Increase inclusion and diversity in high quality employment: Build meaningful inclusivity and support diversity in employment opportunities; lift up those previously marginalized with initiatives for employment.

Actions:

- Support business affinity groups facilitated by the Greater Bloomington Chamber of Commerce to help grow businesses led by underrepresented individuals
- Implement recommendations from the forthcoming Comprehensive Plan to Advance Racial Equity

Reference Plans	Monroe County Quality of Place & Workforce Attraction Plan (2019) City of Bloomington Comprehensive Plan (2018) Bloomington Mayor's Wage Growth Task Force Report (2016) City of Bloomington Comprehensive Plan to Advance Racial Equity (forthcoming 2021)
Metrics	Expansion of employment diversity programs Diversity employment at significant employers
Partners	City of Bloomington, Commission on Hispanic and Latino Affairs, Human Rights Commission, Greater Bloomington Chamber of Commerce, Indiana University, Commission on the Status of Black Males, Dimension Mill Inc., BEDC

1e: Increase career training for students: Promote stronger ties between private sector/industry and regional educational assets, including K-12 and higher education and technical education assets, to develop skills aligned with changing employment needs.

Actions:

- Further develop K12 training pipelines for STEM, through engagement with the Ready Schools initiative from Regional Opportunity Initiatives and support for entrepreneurship with the IncubatorEDU program at the Academy.

Reference Plans	Bloomington Mayor's Wage Growth Task Force Report (2016) Monroe County Quality of Place & Workforce Attraction Plan (2019)
Metrics	Number and diversity of skill development programs Enrollment and graduation rates of programs Employment rate following program graduation Employment wages following program graduation Private sector participation in program development
Partners	Regional Opportunity Initiatives, Bloomington Economic Development Corporation, Greater Bloomington Chamber of Commerce, City of Bloomington, Monroe County Community School Corporation, Richland-Bean Blossom Community School Corporation, Indiana University, IvyTech Community College, Regional Employers
Goal 2: To retain and attract businesses of all sizes across targeted sectors	
2a: Support and retain IU-related intellectual property within the region: Enhance economic vitality of the region through promotion and retention of intellectual property associated with Indiana University Bloomington and Crane//NSWC. **Action:** ● Develop a Trades District Technology Center to enhance diversity in the business sector and to retain technology capital associated with Indiana University.	
Reference Plans	Monroe County Quality of Place & Workforce Attraction Plan (2019) Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana (2014)
Metrics	SBIR awards data Commercialization data Investment data Startups launched
Partners	Indiana University, Ivy Tech Community College, Dimension Mill Inc., Bloomington Economic Development Corporation, City of Bloomington
2b: Regionalism: Foster greater economic regionalism to further advantage local and regional businesses **Actions:** ● Continue to regularly convene local economic development / business related organizations to share updates on work and foster collaboration through quarterly meetings and ongoing collaborative initiatives.	
Reference Plans	City of Bloomington Comprehensive Plan (2018)

	Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana (2014)
Metrics	Participation rates of economic development programs Interconnectivity between economic development initiatives
Partners	Regional Opportunity Initiatives, Bloomington Economic Development Corporation, Visit Bloomington, Local economic development corporations in communities surrounding Monroe County, Center for Rural Engagement
2c: Opportunity Zones: Promote Opportunity Zones created by the The Tax Cuts and Jobs Act of 2017 to promote investment within the City of Bloomington, Monroe County, and surrounding region. **Actions:** ● Continue to promote available properties in the Bloomington Trades District, which is located in an Opportunity Zone. ● Provide information for potential investors in the Opportunity Zone	
Reference Plans	Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana (2014)
Metrics	Jobs created Total Opportunity Zone investments
Partners	Bloomington Economic Development Corporation, City of Bloomington, Greater Bloomington Chamber of Commerce
Goal 3: To further enhance strong quality of place	
3a: Increase supply of workforce housing: Increase supply and diversity of quality workforce housing in Bloomington by 2030 by implementing recommendations of the 2020 City of Bloomington Housing Study.	
Reference Plans	City of Bloomington Housing Study (2020) Monroe County Quality of Place & Workforce Attraction Plan (2019) The Bloomington Project: A New Approach for Expanding CDFI Coverage in Smaller Markets (2018)
Metrics	New workforce housing units Home ownership rates Cost of housing
Partners	City of Bloomington, Housing Study Advisory Committee, CDFI Friendly Bloomington

3b: Increase affordable high quality childcare: Improve access to and affordability of high quality early childhood education in order to improve financial stability and reliability of workforce and create opportunities for workforce career advancement. **Actions:** ● Implement childcare-related recommendations of the Monroe County Quality of Place & Workforce Attraction Plan	
Reference Plans	City of Bloomington Comprehensive Plan (2018) Monroe County Quality of Place & Workforce Attraction Plan (2019) Wage Growth Task Force Report (2016)
Metrics	High quality childcare capacity Low income subsidies
Partners	Community Foundation of Bloomington and Monroe County/Monroe Smart Start City of Bloomington Greater Bloomington Chamber of Commerce
3c: Provide accessible, high-quality transportation: Reduce dependence on the automobile within the City of Bloomington and reduce dependence on single occupancy vehicle commuting. **Actions:** ● Pursue implementation of the 2020 Transportation Demand Management Plan (City of Bloomington) ● Support Bloomington Transit and Rural Transit to bridge Bloomington-County divide ● Support alternative, multi-modal transportation options	
Reference Plans	City of Bloomington Comprehensive Plan (2018) Transportation Demand Management Plan (2020) Monroe County Quality of Place & Workforce Attraction Plan (2019)
Metrics	Public transit ridership rates Use rates of multi-modal alternative transportation options Single occupancy vehicle travel data Public parking data
Partners	City of Bloomington, Bloomington Transit, Rural Transit, IU Campus Bus Service, Regional Employers
3d: Quality of life for residents: Facilitate and showcase a rich cultural climate with diverse, inviting, and accessible outdoor spaces **Actions:**	

<table>
<tr><td colspan="2">

- Support the development of and implement recommendations from the City of Bloomington's forthcoming Parks Five Year Master Plan
- Enact the recommendations of the Bloomington Entertainment & Arts District Strategic Plan
- Support local arts organizations with the Mayor's 2021 Recover Forward initiative

</td></tr>
<tr><td>Reference Plans</td><td>Monroe County Quality of Place & Workforce Attraction Plan (2019)
Bloomington Entertainment & Arts District (BEAD) Strategic Plan (2019)</td></tr>
<tr><td>Metrics</td><td>Program and facility participation rates
Public and private investments in arts organizations
Participant survey data</td></tr>
<tr><td>Partners</td><td>City of Bloomington, Monroe County, Bloomington Arts Commission</td></tr>
<tr><td colspan="2">Goal 4: To develop a local and regional economic brand</td></tr>
<tr><td colspan="2">4a: Advance an economic identity that is unique and compelling. Promote the story of Bloomington, Monroe County, and the broader region as an attractive destination for workers and employers, and a place with a high quality of life for residents to work, live, and play.
Actions:
• Support regional and local branding initiatives through partners like Regional Opportunity Initiatives and Visit Bloomington.</td></tr>
<tr><td>Reference Plans</td><td>Bloomington Mayor's Wage Growth Task Force Report (2016)
Strategic Plan for Economic and Community Prosperity in Southwest Central Indiana (2014)
Visit Bloomington's Destination Strategic Plan for 2020–22</td></tr>
<tr><td>Metrics</td><td>Web traffic statistics to marketing websites containing consistent branding
Social media engagement with sector/talent marketing
Economic development site selection project inquiries
Tourism-related web/social media impressions
Tourism-related visitor data (hotel occupancy, etc.)</td></tr>
<tr><td>Partners</td><td>Regional Opportunity Initiatives, Bloomington Economic Development Corporation, Greater Bloomington Chamber of Commerce, Visit Bloomington, Indiana University, Downtown Bloomington Inc., Monroe Convention Center, City of Bloomington, Regional Employers</td></tr>
</table>

Appendix

Definitions:

- **Economic Development** is defined in this document as the range of activities, policies, and programs that a state, region, or municipality use to create conditions that enable sustainable economic growth. The goal of economic development is to improve the quality of life for all sectors of the population.
- **Business Retention/Expansion (BRE)** is the set of activities/circumstances which keep business within the region and allow them to grow. This matrix looks both at traded and non-traded businesses.
- **Business Creation/Attraction** is the set of activities/circumstances that allow entrepreneurs to thrive and start new businesses within the region and the set of activities/circumstances which attracts new businesses to move/open branches within the region.
- **Workforce Retention/Attraction** is the set of activities/circumstances that bring new populations into the workforce, whether that is local populations who are not currently part of the labor force, or populations not currently residing in the region.
- **Economic Resilience** is the set of local conditions that allows a region to withstand, recover, or avoid shocks to the system. Potential shocks include natural and man-made disasters, economic recessions, or loss of local industries.

20-66
RESOLUTION
OF THE
REDEVELOPMENT COMMISSION
OF THE
CITY OF BLOOMINGTON, INDIANA

APPROVAL OF FUNDING MATCH AND USE OF REAL PROPERTY FOR ECONOMIC DEVELOPMENT ADMINISTRATION (EDA) CARES ACT GRANT TO CONSTRUCT TRADES DISTRICT TECHNOLOGY CENTER

WHEREAS, on August 3, 2020, the Redevelopment Commission of the City of Bloomington ("RDC") approved a Project Review & Approval Form ("Form") in Resolution 20-45 authorizing services related to a match required by the terms of a federal EDA CARES Act grant to construct a tech center in the Trades District ("Project"); and

WHEREAS, the grant application for the Project requires the City to commit to a no less than twenty percent (20%) match of the EDA funding; and

WHEREAS, the Form estimated the Project match at $2,000,000, and that amount has been updated in the revised Form attached to this Resolution as Exhibit A, based on the Project cost developed by Axis, the architecture and engineering firm hired to assist the City in designing the Tech Center building and develop related documents for the application; and

WHEREAS, Axis has completed a near-final draft of the Preliminary Engineering Report ("PER") for the Project which is attached as Exhibit B, the PER being a required submission by EDA with any application for a construction project grant; and

WHEREAS, the RDC has available funds within the Consolidated TIF to provide the match;

NOW, THEREFORE, BE IT RESOLVED BY THE REDEVELOPMENT COMMISSION OF THE CITY OF BLOOMINGTON, INDIANA, THAT:

1. The RDC confirms the following details of the Project:

   Project Title: Economic Development Administration Grant 2020 – Trades District Technology Center (PWEAA2020)

   Match Amount: $1,958,380

   Source of Match: Consolidated TIF

   Amount of Federal Funding Requested: $7,839,520

   Name of AOR: Alex Crowley

2. The RDC hereby commits to a project match in the amount of $1,958,380 or as such amount may be increased or decreased based on the grant awarded by the EDA.

3. The Redevelopment Commission confirms that the match is committed for the period of grant performance, available as and when needed, and not conditioned or encumbered in any way to preclude its use for the Project.

4. This is a commitment to the construction match only. The expenditure of the match will be approved at a later date if and when the Project is awarded an EDA grant, the amount of the required match is determined, and expenditures are required to fund the Project.

5. The Redevelopment Commission additionally will provide the land required for the project, which is defined as approximately the northernmost 1/3 of Lot 2, as memorialized on the Trades District Plat. The Redevelopment Commission will retain ownership of the land for the duration of the Project.

BLOOMINGTON REDEVELOPMENT COMMISSION

_____

Donald Griffin, President

ATTEST:

_____

Cindy Kinnarney, Secretary

_____

Date

City of Bloomington
Redevelopment Commission
Amended Project Review & Approval Form

Please Note:

- Approval of the project by the Redevelopment Commission through this Project Review & Approval Form does not represent an authorization to begin work or expend funds.
- Authorization of work and the commitment of funds shall be done when the Redevelopment Commission reviews and approves: (1) a Purchase Order or Contract prepared after complying with the appropriate procurement process for the type of item, service or construction being sought and (2) the estimated costs associated with the Purchase Order or Contract.
- No payment of funds shall be made without a duly authorized and approved Purchase Order or Contract. All claims for payment against a duly authorized Purchase Order or Contract shall be submitted to the Redevelopment Commission for their review and approval along with any required departmental inspections, reviews and approvals prior to the payment of any funds.

To Be Completed by Requesting Party:
Project Name: Economic Development Administration Grant 2020 – Trades District Technology Accelerator (PWEAA2020)

Project Manager(s): Jeff Underwood, Alex Crowley, Kaisa Goodman

Project Description:

Background: The Trades District Technology Center is a concept being developed for US EDA CARES Act grant funds to aid COVID-19 economic recovery and grow future tech employment in South Central Indiana. The Bloomington Economic Development Corporation (BEDC) and City of Bloomington are collaborating to develop this application, with City as the lead applicant. The grant will fund construction of a Tech Center building, with the RDC permitting the building to be built on real property owned by the RDC in the Trades District.

Project overview: The Trades District Technology Center will support South Central Indiana employment growth in strong and emerging clusters and commercialization of technology. The Center will create a technology hub by providing:

1. **Programming and services**: Commercialization programming will help tech companies grow and develop the region's economic competitiveness through future-focused, diverse employment options in technology.
2. **Space**: Class A office space will house growing and established tech companies, providing possible amenities like labs or meeting spaces.

Target audience: This Center will create a hub for technology companies that are beyond the startup phase, with services and space for growing and mature firms.

Location: Bloomington Trades District.

Model: A nonprofit entity will be established to run the Center.
Connection to COVID-19 recovery: This project will aid recovery through support for a future-focused industry and the creation of good paying jobs.

Competitive advantage: Tech is best positioned to benefit from this center as:

- The tech sector is still growing across our region
- Technology applies across almost all sectors
- It requires less infrastructure and resources compared to other sectors
- Tech and defense are tied to two key public sources of technology development: Indiana University Bloomington and NSA Crane.

Project Timeline: **Start Date:** **July 2020**
End Date: **December 2022**

Financial Information:

Estimated full cost of project:	$2,008,030
Sources of funds:	Consolidated TIF

Project Phases: This breakdown should mirror the contract(s) expected to be issued for this project. Each phase should include a description of the work to be performed, the cost, and the timeline for the contract.

Step	Description	Quoted Cost	Timeline
1.	Application Project Management	$3,000	July/Aug. 2020
2.	NEPA Consultant	$8,650	August 2020
3.	Architecture/Engineering (Pre-App)	$38,000	September 2020
4.	Design/Construction Match	Est. $1,958,380	2021
5.	Approval of Use of Real Property	N/A	2021

TIF District: Consolidated TIF (Expanded Downtown)

Resolution History: 20-45 Project Review and Approval (August 3, 2020)
20-54 Approval of Third Addendum for Project Manager
20-60 Agreement with NEPA Consultant
20-61 Agreement with Axis Architecture for Design Services
20-64 Endorsing the Project Feasibility Study
20-65 Endorsing the Project Comprehensive Economic Development Strategy (CEDS)
20-66 Approval of Funding Match and Use of Real Property

To Be Completed by Redevelopment Commission Staff:

Approved on _____

By Resolution _____ by a vote of _____

TRADES DISTRICT TECHNOLOGY CENTER

PRELIMINARY ENGINEERING REPORT

SEPTEMBER 18, 2020

CITY OF BLOOMINGTON

BLOOMINGTON ECONOMIC DEVELOPMENT CORPORATION
BEDC

PRELIMINARY ENGINEERING REPORT CONTENTS:

DEVELOPED BY:
AXIS ARCHITECTURE + INTERIORS
RUNDELL ERNSTBERGER ASSOCIATES
BRCJ CIVIL ENGINEERS
FRP ENGINEERS
LOFTUS ENGINEERING INC

PROJECT COMPONENT NARRATIVES (C.1)

ARCHITECTURAL DESIGN NARRATIVE

Developed by: Axis Architecture + Interiors

Conceptual Visioning + Project Goals

The primary objective for the project and facility is to create an environment that promotes emerging clusters of technology start-ups and supports growth in tech-focused industries in Bloomington, Monroe County, and South-Central Indiana. The architecture will evolve and support these industries and companies by creating the architectural and programmatical framework that fosters continued business growth within a collaborative environment to support the evolution of their brands, identities, and services/products. The building will also connect and inspire businesses by utilizing architecture and technological infrastructure to create a space that will cultivate relationships between companies, investors, and the public to inspire and recruit future start-ups to the area. Lastly the facility will create diverse employment opportunities and develop connections not only locally, but nationally and globally as well.

Context + Site

The building is located southwest of the intersection of Makers Way and Madison Street within the Bloomington Indiana Trades District, a 12-acre Technology Park envisioned as a place for innovation, attraction, and job-creation for the City of Bloomington. The site and district are located within walking distance to the Bloomington Downtown to the Southeast, B-line trail to the South, and residential and commercial development to the North and West. The building is also located directly adjacent to the Dimension Mill Building, a start-up incubator space, allowing the new Tech Center to create connections both physically, socially, and economically with the Mill and its start-up tenants. Being located at the intersection of Makers Way and Madison Street, allows the building to become a center point or hub for the future development within the district in the future, also allowing to building to set a precedent for both scale and architectural language within the district for future development.

The Trades District is located on the site that was formerly occupied by the historic Showers Brothers Furniture Company that in the mid 1920's had "the largest furniture factory in the world" producing 60% of the hardwood furniture manufactured in the United States. The architectural expression of the building will be one that respects the past heritage of the Showers Brother Furniture Company and existing historic buildings within the district, while at the same time creating a contemporary architecture that inspires technology based companies for today and tomorrow. The architecture will use scale. Materiality, and window fenestrations, to create connections to the past, while using detailing, proportion, transparency, and innovative technologies to create a language for today.

Building Massing + Organization

With the primary goals of evolving, supporting, connecting, and inspiring technology focused companies in mind, the building program uses a mix of small to medium sized tenant spaces, a central atrium/lobby space, outdoor roof terraces, and amenity support spaces to achieve these goals. The 31,375 GSF building is organized into two program "bars" separated by an active atrium/lobby space that serves as the "social core" of building. The atrium space features an open stair, stadium seating area, and natural daylight welcoming people into the building, as well as inviting and encouraging occupants to use the central open stair to promote an active and a healthy work environment. The north program bar and atrium space are set back from Madison

Street and the west pedestrian way to create an East Entry Plaza and a courtyard to the west, both of which become amenity spaces for both the tenants, Dimension Mill, and public.

Service areas and restrooms are located West of the atrium space to create an efficient utility core that stacks between floor plates. Gender inclusive restrooms are utilized on all three levels to provide efficiency and inclusive restroom design throughout the building. Bike lockers and family restrooms equipped with showers (all three levels) are also provided to promote an active and healthy workplace. Lastly, a mother's room is located on Level 01 to provide a comfortable and private space for nursing mothers.

Meeting rooms, a Wellness room, and a work café are located within the North Bar of Level 01 to create connections with these exterior patio and streetscape as well as allowing these rooms to have a connection with the public for potential outreach events and seminars. Tenant spaces ranging from 1,500 SF to 3,600 SF predominantly occupy the rest of the building, providing 18,500 NSF of rental tenant space and 3,200 NSF of amenity space. Exterior workspaces via terraces and site spaces are incorporated on all three levels to create areas of respite, as well as flexible shared workspace for a post Covid-19 office space at convenient locations throughout the building/site.

Architectural Aesthetic and Materiality
The materiality and overall architectural aesthetic were developed with creating a timeless palette and expression that invokes connections both with the industrial past and the technology focused present and future, giving the building a sense of timelessness. Natural materials like charcoal masonry and heavy timber wood structure help anchor the building with the historic buildings that neighbor the site. The building showcases its heavy timber frame both on the interior and exterior providing both warmth, beauty, and a connection to the crafting of wood that was once done by the Showers Brothers Furniture Company on the site. Generous transparency is used along the east façade to provide ample natural light into the office spaces and creating connections to the Entry Plaza and Madison Street to the interior office and atrium spaces. The upper levels are clad with a Corten metal (rusted metal), charcoal metal, and smaller windows openings that creates a dynamic rhythm and contemporary language to the north, west, and south facades. This window rhythm of smaller window openings also allows for future flexibility in the division of tenant spaces and other interior walls. Lastly, a 5,600 SF photovoltaic array canopy is lifted above the building to create a celebrated piece of sustainable infrastructure that provides shade for the outdoor roof terraces, a strong aesthetic piece to the building, and a source of sustainable energy for the building.

Interior spaces will have an aesthetic and materiality that provide continuity to the exterior and site design elements, with the use of natural materials and transparency. The heavy timber structure mentioned previously will create a sense of warmth for the interiors, with polished concrete floors and painted/exposed MEP systems and metal deck creating an architectural language that is cost effective and unique to the building and its tenants. The natural material palette of wood, metal, and concrete will also allow for the tenant spaces have minimal tenant improvement costs due to the strong aesthetic of the shelled space.

Sustainability + Wellness
The buidling design, components, and systems will focus to minimize the negative environmental impacts of the building, while at the same time developing a space that supports human health and wellness. Exterior work spaces both at grade and on roof terraces provide opportunities for respite and fresh air. Window openings throughout the building provide connections to the outdoors and bring natural daylight into the work environment, minimizing the electrical requirements needed for lighting and creating a sense of energy in the spaces. The wood structural system and minimal/exposed interior systems minimizes the need for interior finishes, and helps reduce the carbon footprint of the building. Lastly, a 5,600 SF photovoltaic array canopy on top of the building utilizes pv's already own the be city to create a piece of architecture that celebrates sustainable technology and provides renewable energy to the building

Building Code Review and Zoning Analysis
With the building being a 3-story and 31,375 SF, the building will be equipped with a fire suppression system allowing for the additional height and square footage. With this, the building will be categorized as a type VB (Unprotected Wood Frame) building under IBC 2012, which would allow for the stairs, walls, and floors to be unrated assemblies, and allowing the building to only be served by only two stairs (one open, one closed). All of the interior and exterior areas will be fully accessible via an elevator and a sloped walkway at the patio area East of the café from Makers Way to the main entry doors. The building's B occupancy is an accepted use within the Mixed-use Downtown – Showers Technology Downtown Character Overlay under the City of Bloomington Unified Development Ordinance. The building will be 48'-0" in height, which is below the 50'-0" max building height for the site, and provides a 5'-0" setback at both the West and South lot lines for the site, no setbacks are required off of the North and East faces of the site since this is a corner lot. An existing parking garage located one block South of the building will handle parking requirements necessary for the building, and accessible spots will be identified at the existing street parking along Makers Way and Madison Street.

PROJECT COMPONENT NARRATIVES (C.1)

LANDSCAPE DESIGN NARRATIVE

Developed by: Rundell Ernstberger Associates

The site design for the new Tech Center complements the use occurring within the building and acts as an extension of the space. A formal, paver entry plaza extends from the building's main door towards Madison Street on the east. Adjacent to the entry plaza, exterior bicycle parking and a bench service commuters and visitors to the building and provide convenient access to nearby pedestrian and municipal bicycle facilities, including the B-Line trail, which serves as a primary pedestrian and cyclist thoroughfare connecting the north and south ends of the community. Immediately north of the main entry plaza, the building's social hub and café extend into the space in the form of an outdoor, paver patio that provides movable tables and chairs that allow users to socialize, work, and coordinate in small groups or on an individual basis. Adjacent to the outdoor café, a large community table accommodates gatherings of up to twenty people. Located within an accessible crushed stone pavement, this table and space allows for outdoor meetings, collaboration, and socializing. Overhead catenary lighting extends the use of the space into the evening and provides an ambience that helps better define a dynamic, outdoor room. Surrounding landscape plant material provides color, fragrance, and shade that is pleasurable to users and habitat for local fauna.

Extending along the north and east sides of the main entry plaza, outdoor patio, and community table, a low site wall defines the edge of the property, the right-of-way, and the outdoor space. Constructed of limestone, brick, and materials that complement the building and the character of the Trades District, the wall creates a density along the adjacent streetscape that is ideally suited for pedestrians, provides seating, and marries nicely with the adjacent streetscape. Located on the wall, building identification signage announces arrival to, and welcomes guests and building users to the facility.

The rear, or west side, of the facility addresses an alley which serves as both a service and pedestrian corridor connecting the north and south ends of the Trades District, as well as providing direct pedestrian access to the area's parking garage on the south. An outdoor, paver patio creates a welcoming secondary entrance to the building and provides connections to the facility's wellness room and primary corridor and lobby. The rear patio provides a quieter experience and additional, movable tables and chairs ideally suited for small groups or individuals. North and south of the patio, landscape plantings anchor and soften the building and create a pleasurable pedestrian experience for users within the alley. Adjacent to the south end of the rear patio, a small, brick masonry fence enclosure screens the building's service needs and trash and recycling containers.
A paver, pedestrian path along the south end of the facility provides access to the building's stair well, as well as, direct access to the rear alley on the west and Madison Street on the east. Separating the pedestrian path from the building by five feet, a linear landscape bed provides additional trees, shrubs, and perennials that soften the building and enhance the pedestrian experience.

The north façade of the building addresses the adjacent street, Makers Way, in a direct and urban way that creates a comfortable pedestrian density in harmony with the Trades District's planning and intent. Separated from the back of sidewalk and public right-of-way by five feet, a linear landscape bed is created that is comprised of colorful shrubs and perennials which soften the building, provide attractive scenery for the building tenants, and enhance the pedestrian experience along Makers Way.

PROJECT COMPONENT NARRATIVES (C.1)

CIVIL ENGINEERING NARRATIVE

Developed by: Bledsoe Riggert Cooper James Civil Engineering

Site Context

- Historic Showers Furniture Company
- Railroad Corridor
- COB Redevelopment
- The site is located at the SW corner of Madison St. and Makers Way

Site Constraints

The site is moderately sloped, falling at roughly 3% from northwest to southeast. Streetscapes along Madison Street and Makers Way are fully developed to the lot lines, providing firm match points with the existing site.

Due to historic rail road activity, soil contamination from coal ash and cinders has been documented on the site. Site grading will be designed to elevate the building as much as possible to avoid excavating contaminated soils, while maintaining accessibility. However, it is possible that a significant amount of material will need to be exported from the site and disposed of at an approved waste handling facility.

Site Utilities

Based on provided design drawings of the Trades District development, there appear to be utility stub-outs to the site for water, sewer, and storm.

Water

Water mains runs along the bounding streets both north and east of the site. A fire hydrant is located at the intersection of Maker and Madison, flow test data at this hydrant provided by CBU indicate static pressure of 62 psi and available flow of nearly 850 gpm.

The proposed project will connect fire and domestic water service lines to the main in Maker Way. Fire service will include standard appurtenances, such as post indicator valve and fire department connection.

Sanitary Sewer

A sanitary sewer later has been stubbed out to the site from the main line running in Madison Street. The proposed project will connect a 6" lateral to the provided connection point.

Stormwater

The project anticipates providing for stormwater management on the site. The extent to which this will be required by the City is not yet certain, since there do appear to be some existing underground detention facilities that may have been sized to accommodate runoff from the fully developed Tech Park.

The proposed green roof over the north part of the building will aid in reducing peak runoff from the site, and additional detention and treatment features may be incorporated into the design of the entry plaza.

Electric & Gas

By others.

Site Plan Approvals

The site is zoned for Mixed Use - Downtown, appropriate for tech development. A site plan approval from the City of Bloomington Plan Commission will be required for the new facility. The design team does not anticipate that any variances will be required.

PROJECT COMPONENT NARRATIVES (C.1)

STRUCTURAL DESIGN NARRATIVE

Developed by: FRP Structural Engineers

Project Description

The project will consist of a new office building located in the Trades District in Bloomington, Indiana. The facility will be sited south-west of The Mill building at the corner of Maker Way and Madison Street.

The building will have an approximate size of 31,500 gross square feet. The project will have three floors with no basement and will feature a roof top terrace, green roof, and PV panel array.

Applicable Building Codes and Loading Criteria

The new facility will be designed in accordance with the 2014 Indiana Building Code which is based on the design criteria of the 2012 International Building Code and ASCE/SEI 7-10 Minimum Design Loads for Buildings and Other Structures.

IBC 2012 adopts the following editions of each of the specific material design specifications:

- ACI 318-11 Building Code Requirements for Structural Concrete
- TMS 402-11/ACI 530-11/ASCE 5-11 Building Code Requirements for Masonry Structures
- AISC 360-10 Specification for Structural Steel Buildings
- ANSI/AWC NDS-2012 National Design Specification for Wood Construction

The anticipated loading criteria are as follows:

Floor Dead Load
Self-weight of floor framing systems

Floor Superimposed Dead Load
20 psf for partitions, floor finishes and suspended MEP systems.

Floor Live Load
100 psf for elevated floor slabs. For the Upper Level offices this exceeds the code minimum loading of 80 psf, but provides future flexibility for other uses.

150 psf for mechanical rooms on elevated slabs.

Elevated floor slabs will be designed to mitigate but not eliminate floor vibrations. Design will be in accordance with AISC Steel Design Guide 11 – Floor Vibrations Due to Human Activity and meet the requirements for Chapter 4 Design for Walking Excitation with an acceleration limit of 0.5%, which is typical for office areas.

Slab on grade design will allow for a 10,000 lb scissor or fork lift load with entire load concentrated on one axle. This is intended to cover equipment during construction and maintenance equipment during the operation of the facility. The elevated floor slabs will be designed for light construction equipment such as forks lifts or scissor lifts with a maximum two wheel axle load of 5,000 lbs. This must be confirmed by Owner and CM as being adequate during construction and for maintenance and operations during use of the opened facility.

Roof Dead Load
Self weight of deck and any framing.

Roof Superimposed Dead Load
20 psf for roofing system and all suspended systems from below.

Portions of roof shall be designed for the reactions from roof top fall protection equipment.

Roof areas with mechanical equipment will be designed for the actual weight of the equipment.

Metal roof deck without a slab will not support any suspended concentrated loads from the M/E/P systems. All attachments will need to be made directly to structural members.

Green Roof Superimposed Dead Load
50 psf for roofing system, soil, plantings and all suspended systems below.

Snow/ Roof Live Load
20 psf snow plus 5 psf rain on snow, or snow drifting on flat roofs

PV Structure Dead Load
Self weight of deck and any framing.

PROJECT COMPONENT NARRATIVES (C.1)

STRUCTURAL DESIGN NARRATIVE

Developed by: FRP Structural Engineers

PV Structure Superimposed Dead Load
8 psf for PV panels and supports

PV Structure Ice Loads
Nominal Ice Thickness = ¾"

Ice Concurrent Wind Speed = 40 mph

Wind and Seismic Design Criteria
The ultimate force design wind speed is 115 mph for a three second gust on a Risk Category II structure.

Note: It is assumed that Factory Mutual requirements will not be specified for the structural systems on this project.

Seismic Occupancy Category:	II
Assumed Seismic Site Classification:	B
Seismic Importance Factor:	1.0
Mapped Spectral Response Accelerations:	Ss = 0.223g
	S1 = 0.107g
Seismic Design Category	B

Delegated Design Components
The design of the following components will be delegated to the contractor's supplier: metal stud backup for brick and exterior panels, permanent roof top fall protection systems, cladding systems and their attachments to the structural frame, and fire exit stair framing.

Geotechnical Criteria
Foundation recommendations are based on the geotechnical report titled "Limited Environmental and Preliminary Geotechnical Investigations" prepared by CTL Engineering, Inc. dated June 28, 2013. This report is a preliminary report for the entire development area. It is anticipated that an additional site specific report will be required for this project.

The site is generally characterized by 10' – 15' of soft clays above bedrock. The soft clays are not suitable to support the structure, so foundations extending down to bedrock are anticipated. Previous experience in the area indicates that the bedrock will likely have allowable bearing capacity of 30 ksf.

An additional site specific report will more accurately determine the depth of the bedrock to reduce unknowns and risk of rock removal during the bidding and construction process.

Foundation System
The building foundations will likely be supported on 4'-0" diameter drilled piers extending to bedrock. A perimeter grade beam extending down to frost line will be required for cladding support around the entire building. The grade beam will be designed to span between drilled piers. The top of interior foundations and pile caps will typically be 1'-0" below the proposed slab on grade elevation. The tops of some foundations will need to be 2'-0" below slab on grade where roof leaders come down a column or floor drains are located within their footprint. The bottoms of all perimeter footings outside the basement footprint will be at least 2' 6" below grade to meet frost depth requirements. Pits will be required for each elevator shaft. At this point, it is assumed that all existing utilities within the building lines will be relocated; therefore no special building foundations will be required for bridging over utilities. The specified concrete strength for footings will be 3,000 psi at 28 days.

Slab on Grade
The slab-on-grade construction will be a 5" thick slab with welded wire fabric. There is no need to thicken the slab-on-grade for any interior non-load bearing partitions if the subgrade is properly compacted. The specified concrete strength at 28 days will be 4,000 psi. This will likely need to be constructed on a six inch free draining granular fill. Additional grinding at the control joints should be anticipated for prep work due to curling, especially for any thin set tile or similar finishes. Control joints will be spaced at approximately 10' to 13' on center in each direction with diamond shaped block-outs around the columns where needed. A vapor barrier will be placed below the slab to reduce the potential for moisture infiltration and damage to floor finishes.

PROJECT COMPONENT NARRATIVES (C.1)

STRUCTURAL DESIGN NARRATIVE

Developed by: FRP Structural Engineers

Based on the existing soft clay soils, it is likely that the slab-on-grade can bear on existing soils, provided that the owner recognizes some risk of greater-than-normal slab settlement. If this risk is not acceptable, a structural slab supported by drilled piers would be required.

A troweled finish with a minimum overall FF number of 30 and FL number of 25 is anticipated to be specified for the slab on grade. Higher FF and FL numbers would be specified for polished concrete areas. Depending on architectural requirements, control joints may need to be filled with joint sealant.

The floor slab will be sloped and recessed in several areas. Floor drains and other embedded elements are anticipated. Recessed walk-off mats may be required at the entries to the building.

Superstructure

The structure will consist primarily of glue-laminated (glulam) mass timber supporting concrete slabs on metal deck. Glulam is an engineered wood product consisting of layers of dimensional lumber bonded together with durable, moisture resistant structural adhesives. This material is more cost effective and sustainable, because it is composed of smaller faster growing tree species.

It is anticipated that the species of Glulam used for this project will be a readily available species in the vicinity of the project site, such as Southern Yellow Pine. A stress class of 24F-1.8E will be used with a balanced layup for columns and an unbalanced layup for beams and girders. An Architectural Grade appearance will be specified for exposed to view members. Typical building grids will be approximately 22'-0" x 26'-0"' with joists spaced at 11'-0" oc. Floor-to-floor height will be roughly 14'. Typical members sizes are as follows: Floor Joist – 8-1/2" W x 27-1/2" deep, Floor Girder – 8-1/2" W x 33" deep, Roof Joist – 5" W x 17-7/8" deep, Roof Girder – 5" W x 23-3/8" deep. Timber columns will be a maximum of 15-1/8" x 14-3/4" and a minimum of 8 1/4" x 8-3/4", with the larger sizes occurring on the lower levels of the building. The elevated floors at Level 02, Level 03 and the roof terrace and the green roof will be 3" of normal weight concrete on 3" 18 gage galvanized composite metal deck (6" total thickness). The 18 gage thickness is heavier than required for structural loads, but since the deck will be architecturally exposed a heavier gage is planned to limit deformations often visible in this type of system. The roof decking will be 3" 20 gage galvanized metal roof deck. The lateral system will consist of steel bracing placed in locations to work with other building requirements. The solar support structure will consist of structural steel framing. The steel prepared via SSPC SP6 and painted with a 3 part finish system to ensure an adequate design life for exterior exposure.

Cladding Back-Up and Support

Masonry and metal panel portions of the facades and soffits will be backed-up by light gage metal stud framing, supplemented with miscellaneous steel where required. Lateral back-up and support for the glass curtainwall system will likely consist of steel HSS tubes.

Exposed Structural Finishes

It is anticipated that the following structural elements will remain exposed to public view and an appropriate level of finish will be specified.

- Timber Framing
- Underside of slab on metal deck and roof deck
- Monumental stair at lobby – AESS 3 (Architecturally Exposed Structural Steel, category as defined by AISC 303-16 Code of Standard Practice for Steel Buildings and Bridges)
- PV Panel Support structure – AESS 1

Coordination with Other Trades

The following restrictions will be coordinated between MEP and Structural systems.

<u>Penetrations through Structural Systems</u>

Do not cut openings in any cast-in-place concrete slabs, concrete beams, structural steel beams, and or any columns unless specifically detailed on the structural drawings.

Penetrations up to 12 inches large through cast in place concrete walls and slabs on composite deck may be sleeved or field cut.

All penetrations greater than 12 inches in concrete slabs and walls need to be sleeved or formed. Notify Structural Engineer and CM of any openings greater than 12" that are not shown on the structural drawings. (We intend to eventually coordinate all penetrations greater than 12" and show on our drawings during the CD phase)

Contractor to provide a coordinated submittal of all MEP penetrations (sleeved and field cut) to the structural engineer for review prior to the corresponding pour being made.

PROJECT COMPONENT NARRATIVES (C.1)

STRUCTURAL DESIGN NARRATIVE

Developed by: FRP Structural Engineers

Do not place embedded conduit runs in slabs or walls unless specifically detailed on the Drawings. (We will need to coordinate specific dimensional locations of all embedded conduit in slabs. Electrical contractor cannot have freedom to route conduit as they see fit without prior approval)

Attachments to Structure
Do not suspend or attach any MEP systems to metal roof deck without concrete slabs.

Do not attach any MEP systems greater than 1,000 lbs to any composite slab, cast in place slab, concrete slab, concrete beam or structural steel beam unless specifically detailed on the structural drawings and shown on the load criteria plans.
Attachments shall not be made to the bottom 6" of any cast in pace concrete beam unless the depth of anchor is limited to 1".

Do not attach any MEP systems greater than 150 lbs to any location between panel points of top and bottom chords of bar joists without reinforcement per detail to be provided.

Do not attach any MEP systems greater than 250 lbs to any bar joist panel point.

Field Quality Assurance
General construction observation will be provided by the project Structural Engineer of Record at intervals appropriate to the stage of construction to verify that construction is complying in general with structural plans and specifications.

Separate Testing and Inspection programs for the concrete, mass timber, CMU, and structural steel construction will be provided in each specification section for each respective material. It is highly recommended that these inspections and testing be provided by the owner and not by each individual contractor, which is consistent with Chapter 17 of the International Building Code. Appropriate allowances would need to be included in the project budget outside the construction budget. Following is an overall summary of the Testing and Inspection that will be specified.

The foundation bearing materials will need to be inspected and tested on site by the same firm that prepares the geotechnical report to ensure single source responsibility for the foundation design.

Concrete testing and inspection will consist of at least the following: Slump, cylinder strength, floor flatness requirements and rebar inspections for cast-in-place concrete work.
Steel testing will consist of observations of bolt tightening procedures, and shop and field weld inspections. Additionally, inspections of the roof deck attachments to the structural steel will be specified.

PROJECT COMPONENT NARRATIVES (C.1)

MECH, ELECT, PLUMBING DESIGN NARRATIVE

Developed by: Loftus Engineering Inc

Mechanical System Analysis

Background

The mechanical systems for this project must provide occupant comfort, reliability, humidity control, future flexibility and energy efficiency. The process for system selection will include collaboration with the design team, facility maintenance and administration representatives. Multiple system types will be compared using a building energy model, as well as other categories of performance in a qualitative analysis. More than one system type may be implemented, based on the use of space and schedule of occupancy. The building will be zoned to combine similar heating and cooling load profiles and ventilation requirements.

In addition, multiple energy conservation measures will be evaluated for cost, practicality and return on investment, such as:

- HVAC economizer control sequences

- Energy recovery using a heat exchanger to pre-heat or pre-cool outside air with building relief air.

- Ventilation demand control, providing outside air only when occupancy, or CO2 levels require it.

- Daylight harvesting, to control lighting when ambient light is available.

- Occupancy lighting controls

As the building will utilize almost all of the ground level space, outdoor HVAC equipment will likely be installed on roof areas, away from the outdoor gathering spaces being planned. Systems that may be considered for this project include:

- Variable Air Volume with hot water reheat; Hydronic heating and cooling
  - All heating and cooling air for the space is supplied through this type of unit.
  - Useful in spaces where the occupant load swings between near empty to high density.
  - Effective to control humidity, due to occupants, internal processes or outside air infiltration
  - May be implemented to serve the common circulation spaces and amenities.

-Active Chilled Beam system
  -Primary supply air is provided from a central station air handling unit to drive the chilled beams and provide ventilation air. This involves a smaller ductwork system than the VAV system above.
  -Hydronic heating and cooling to each chilled beam
  -Useful in smaller spaces with varying heating and cooling load profiles.
  -Flexibility of future tenant needs can be met through rearrangement of unitary equipment.

-Variable Refrigerant Flow (VRF)
  -Ventilation air is provided by a dedicated outside air system to each space. This would require the smallest ductwork system to deliver ventilation air only.
  -Flexibility of future tenant needs can be met through rearrangement of unitary equipment.

Mechanical System Narrative

Proposed Airside System

For the purpose of this study, the proposed HVAC system will be assumed to incorporate a central VAV system for the common areas and amenities, with a chilled beam system to serve the tenant spaces.

Air Handling Equipment

Two central air handling units will be located on the third floor roof, to serve the entire building. Unit 1 will be VAV, to serve the common building spaces and amenities (approximately 40% of the building area) with the other generally being used to serve the tenant space chilled beam system (approximately 60% of the building area).

- Unit 1: This unit will serve the common and amenity spaces. This unit is intended to be a variable volume unit, with an enthalpy type energy recovery wheel to pre-condition the

PROJECT COMPONENT NARRATIVES (C.1)

MECH, ELECT, PLUMBING DESIGN NARRATIVE

Developed by: Loftus Engineering Inc

outside air with relief air from the space. The unit's heating coil will be hot water, and the cooling coil will be chilled water coil.

- Unit 2: This unit will serve the tenant spaces on the first, second and third floors. All of the spaces served by this unit will be conditioned with active chilled beams. This unit will drive the active chilled beams. The unit will utilize an enthalpy wheel to pre-condition the outside air with the relief air running back to the unit. The unit will also utilize a pre-heat coil, and a cooling coil. The unit's heating coil will be hot water, and the cooling coil will be chilled water type.

VAV Air Terminal Units: Spaces served by Unit 1 will be provided with VAV air terminal units with hot water re-heat coils. A minimum of one VAV unit for each zone will be provided. Spaces served by chilled beams will have the primary air quantity regulated by CAV air terminal units upstream of the chilled beam units. Each individual suite will have at least one individual zone control by way of a four pipe chilled beam unit(s). The primary air units that drive these boxes will be arranged so that one unit serves multiple rooms. In large open office spaces, the chilled beams will be 2-pipe cooling only chilled beams. The terminal units serving these beams will be selected with reheat coils, and will be arranged so that each cooling zone receives its own air terminal unit with re-heat.

Perimeter office zones and zones with large expanses of glass will also be provided with hot water finned tube radiation.

A toilet exhaust fan will be provided on the roof to exhaust the restrooms.

A three story atrium is planned for the building. An engineered smoke exhaust system will be provided, as required by Code.

Proposed Hydronic System

Heating hot water for the building will be provided by multiple high efficiency, condensing heating water boilers, located in a mechanical room and sized to provide at least 70% of the building load, should one boiler be disabled. The system will use at least two heating water pumps to circulate the heating water to VAV boxes, chilled beams, cabinet unit heaters and finned tube radiation.

Cooling for the building will utilize an air-cooled chiller, with glycol chilled water loop. A building chilled water pump will be provided. Also provided will be two chilled beam loop pumps that will pump a blended chilled beam water loop. The blended chilled water loop supply temperature will be maintained at 2 degrees above the space dew point. Condensate sensors will be provided on representative chilled beam units to shut the chilled water valves in a given area if condensate does form on the piping.

Finned tube radiation will be provided in exterior office spaces and spaces with large expanses of glass.

Hot water cabinet heaters will be provided at entry vestibules, and unit heaters will be provided in mechanical spaces.
Four pipe fan coil units will be provided in the exit stairwells. Two pipe fan coil units will be provided to serve the IT rooms and electrical rooms.

Proposed Building Automation System

A DDC temperature control system will be provided.

CO2 sensors will be provided in high density occupancy areas for demand ventilation and/or monitoring purposes.

PROJECT COMPONENT NARRATIVES (C.1)

MECH, ELECT, PLUMBING DESIGN NARRATIVE

Developed by: Loftus Engineering Inc

Plumbing System Narrative

The plumbing scope is to design a complete plumbing system including domestic hot and cold water, sanitary waste, vent, and storm drain based on the proposed building.

Proposed Domestic Water System

A new domestic water main will enter the building on the first floor. A reduced pressure backflow preventer will be installed in the mechanical room. The water main will provide domestic cold water to the building and the water heater. Domestic cold water will be distributed throughout the building to restroom groups, lavatories, hand-wash sinks, and janitor sinks as required.

Domestic hot water will be heated by a semi-instantaneous steam to hot water heater located in the mechanical room. A standard 120°F hot water loop will be piped to all lavatories, hand-wash, and janitor sinks. Each hot water loop will require a thermostatic mixing valve, and an inline recirculation pump.

A water softener system will not be provided.

Proposed Sanitary and Vent System

Sanitary waste and vent mains will be provided for restroom groups. Restrooms will be ADA compliant.

Sanitary waste from the plumbing fixtures will be piped by gravity to the sanitary sewer. Vent mains will exit the building through the roof.

Proposed Storm Drain System

Roof drainage will be piped from roof drains through vertical risers in the building and out to the storm sewer via gravity.

Proposed Fire Suppression

A fire service will enter the building and be piped through a double check backflow preventer. A fire pump to serve the building is anticipated, based on a recent flow test in the project area. The fire suppression system will consist of sprinkler pipe zone valves and mains. Branch piping will be installed and spaced to provide proper coverage. A standpipe system will be located in the stairwells.

Electrical, Communications and Security Systems Design

Electrical System Narrative

Proposed electrical service for the New Trades District Tech Center will be at 480V, 3-Phase served by Duke Energy. Service will enter a main panelboard, located on Level 1, and be distributed to 480Y/277V branch panelboards for lighting and mechanical equipment loads on each level. The main panelboard will also serve a step-down transformer to feed a 208Y/120V distribution panelboard which will feed 208Y/120V branch panelboards on each level for receptacle and small equipment loads.

Receptacles will be provided in the finished interior rooms and distributed around the tenant spaces for basic use. Receptacles will also be provided in select locations convenient to the exterior seating areas for laptop and cell phone charging.

Emergency power will be provided by battery inverter systems for egress lighting and exit signs, a battery lowering system for the elevator and battery secondary power for the fire alarm. Data and communications systems will have individual UPS systems in each IT rooms and at point-of-use for other critical equipment.

Proposed roof mounted solar photovoltaic panel array (PV) will connect to the main panelboard and provide an on-site energy source that will offset the active electrical load of the building. When the electrical energy produced by the PV array is greater than the usage, the energy will be sold back to the grid through a net metering connection with Duke Energy. A “dashboard” display is anticipated in the lobby to show the energy offset provided by the PV. The City of Bloomington is furnishing the PV panels for the project as part of their commitment, to be installed by the contractor.

PROJECT COMPONENT NARRATIVES (C.1)

MECH, ELECT, PLUMBING DESIGN NARRATIVE

Developed by: Loftus Engineering Inc

Lighting System Narrative

Lighting for the New Trades District Tech Center will all LED type for energy efficiency and reduced maintenance. It is anticipated that a variety of fixture types will be used depending upon the character and desired aesthetic of the interior and exterior spaces. Interior spaces will be mostly ceiling mounted or suspended. Exterior lighting will be a combination of overhead suspended, catenary, lighting, building wall mounted fixtures and free-standing poles or bollards.

Interior spaces will have occupancy sensor controls, and where advantageous, daylight sensor controls. Training and meeting rooms will have dimming controls to facilitate multiple uses including video presentations.

Lighting will be provided for safe egress at all times, and battery powered emergency lighting will be provided for egress lighting during power outages.

Exterior lighting will be controlled by a photocell control to turn on the lighting at dusk and a timeclock to reduce the lighting after hours for energy conservation. It is anticipated that there will be minimum security lighting on from dusk to dawn.

Data And Communications System Narrative

The Trades District Tech Center will have infrastructure designed for communications flexibility and scalability. IT rooms are provided on each level for building infrastructure backbone and distribution. Overhead cable tray pathways will be provided for distribution to including the tenant spaces to allow configuration to tenant's needs. It is anticipated that there will be a combination of wired jacks and dense wireless coverage throughout the interior of the tech center and wireless coverage of the outdoor seating areas.

Level 1 training and meeting rooms will be set-up for video conferencing and multi-media presentations. Tenant spaces will be flexible for audio-visual configuration by the tenants.

Safety Systems Narrative

The Trades District Tech Center will have an access control system to secure the building while allowing tenants and other users access. Security cameras will be provided for monitoring of exterior seating areas, entrances and interior common spaces. An automatic and manual fire alarm system will be provided with notification meeting ADA requirements.

PROJECT COMPONENT NARRATIVES (C.4)

CONSTRUCTION FEASIBILITY

Developed by: Axis Architecture + Interiors

Construction Feasibility Analysis

The project site, program, and building provide both positives and negatives in regards to constructibility of the project. The project site has already been prepped both in utility infrastructure and streetscape/site improvements, which will allow for the building budget/funds to go predominately to the project itself. The site is also relatively flat, which will minimize additional grading and excavation that may be necessary for the project. A 3-level (379 space) parking garage is also currently being constructed one block south of the project site that will be utilized by the building as well, reducing the need to provide parking within the facility or onsite. Lastly, open areas both to the South and West allow for ample space for construction lay down areas, job site circulation, and infrastructure during construction.

With these positives, there are also a few concerns in regards to the project site and constructibility, all of which can be mitigated through various construction and design practices. The soils report notes there is contaminated soils approx 4-8' below grade, the design team will focus on minimizing grade removal at these elevations, as well as hold a budget allowance for removal/disposal for this. The site is also located adjacent to the Showers Brothers Historic buildings to the South and East, in particular the Dimensional Mill building to the East. Due the proximity to these historic buildings, construction vibrations should be minimized and monitored to reduce the impacts on the surrounding historic structures. A pre-construction survey should be conducted to understand what effects the construction of the project may have on the adjacent buildings. Like with every project the uncertainty of the future bidding climate is always a concern. The cost estimate within the PER takes into account escalation along with a 5% design and trade contingency to forecast the potential bid cost of the project. Price estimates/packages will be developed at each milestone throughout the design process to continue to forecast and provide guidance for the owner and design team.

SITE AERIAL


MAKER WAY STREETSCAPE


MADISON STREET STREETSCAPE

VERIFYING STATEMENT OF PROJECT COMPONENTS (C.2)

Narrative to be written and match grant application

TRADES DISTRICT WEST ENTRY (MAKER WAY)


NE INTERSECTION STREETSCAPE

PARKING GARAGE CURRENTLY UNDER CONST

PROJECT DESIGN DRAWINGS (C.3)

CONTEXT + SITE PLAN

PROJECT DESIGN DRAWINGS (C.3)

ZONING SITE PLAN

NOTES

UNIFIED DEVELOPMENT ORDINANCE DISTRICT
- MD-ST: SHOWERS TECHNOLOGY DOWNTOWN CHARACTER OVERLAY

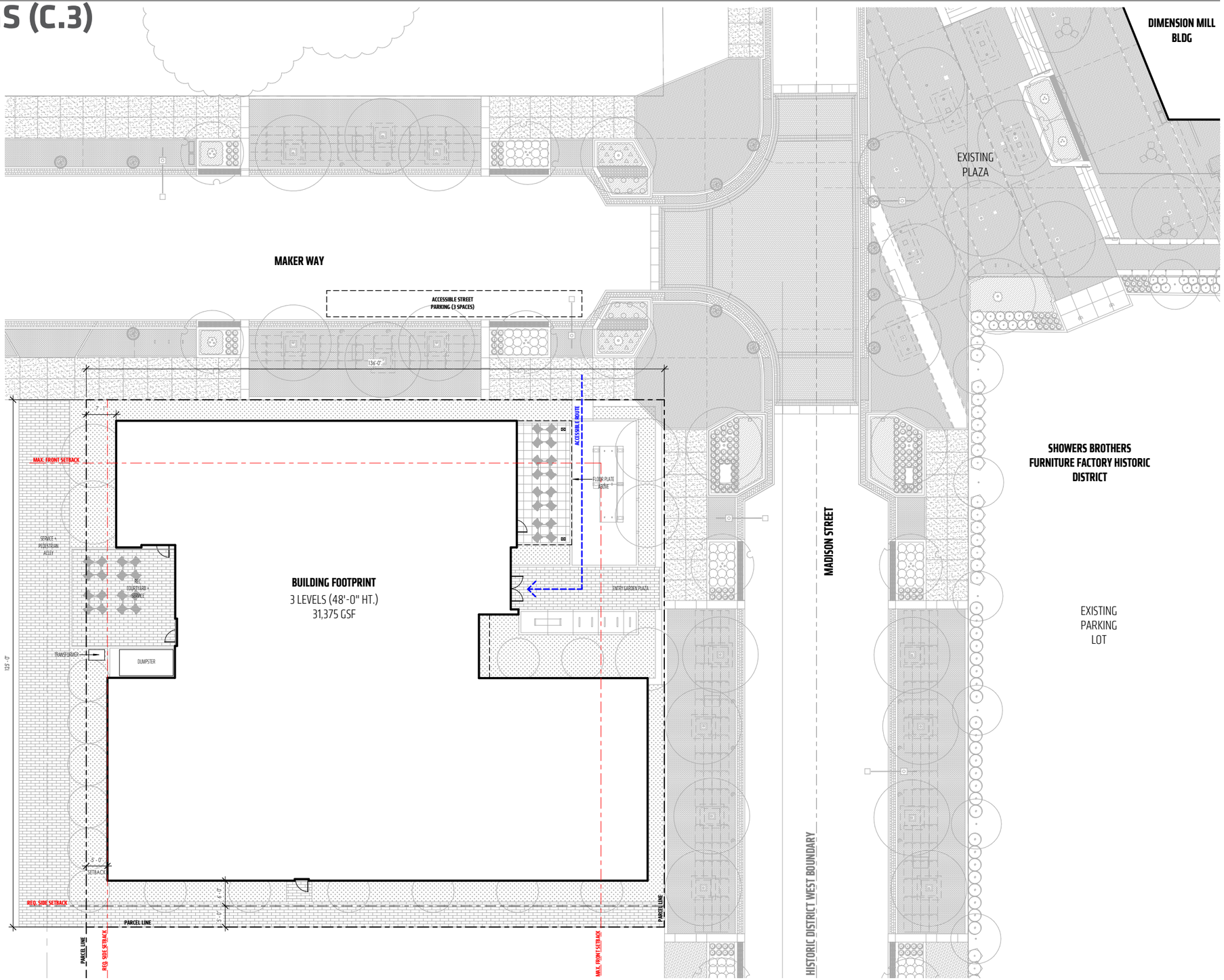
- FRONT SETBACK MAX: 15'-0"
- SIDE SETBACK MAX: 5'-0"
- REAR SETBACK MIN: 5'-0"

- PRIMARY STRUCT. HEIGHT: 50' (4-STORIES)

- IMPERVIOUS SURFACE MAX: 75%
- LANDSCAPE AREA MIN: 25%

- PARKING REQ: NONE
*PROVIDED BY SOUTH GARAGE

SHOWERS BROTHERS FURNITURE FACTORY HISTORIC DISTRICT
- PROJECT SITE IS LOCATED OUTSIDE OF HISTORIC DISTRICT. WEST BOUNDARY OF DISTRICT IS LOCATED ALONG MADISON STREET



SITE PLAN

0 5 15 35

PROJECT DESIGN DRAWINGS (C.3)

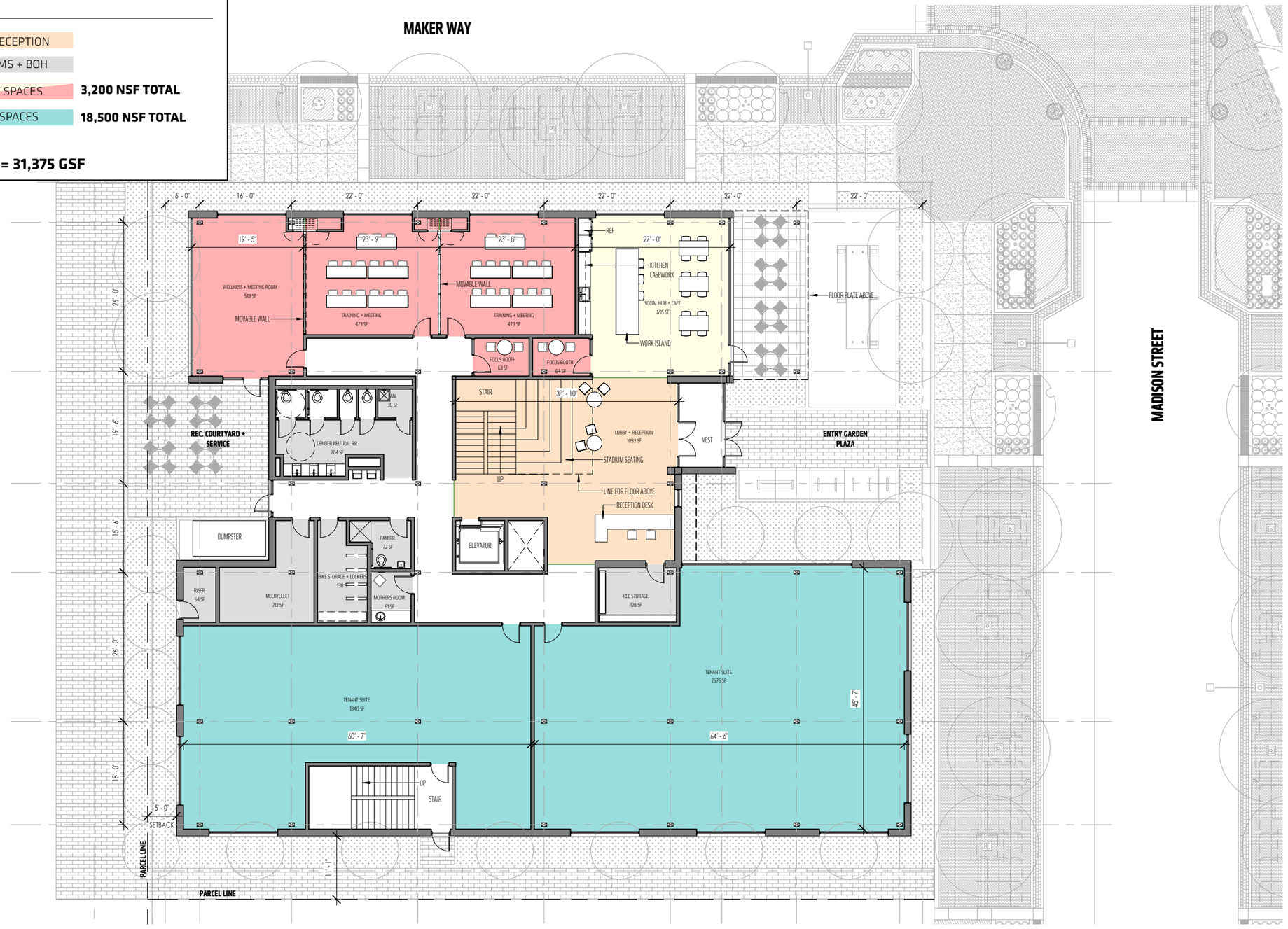
LEVEL 01 FLOOR PLAN

NOTES

1. ATRIUM LOBBY SPACE
2. RESTROOMS + SUPPORT SPACES
3. SOCIAL HUB AND AMENITY SPACES
4. TENANT SPACES
5. OUTDOOR ROOF TERRACE
6. COMMUNITY TABLE + OUTDOOR PLAZA AREA

LOBBY + RECEPTION
RESTROOMS + BOH
AMENITY SPACES **3,200 NSF TOTAL**
TENANT SPACES **18,500 NSF TOTAL**

TOTAL GSF = 31,375 GSF



LEVEL 01 FLOOR PLAN

0 5 15 35

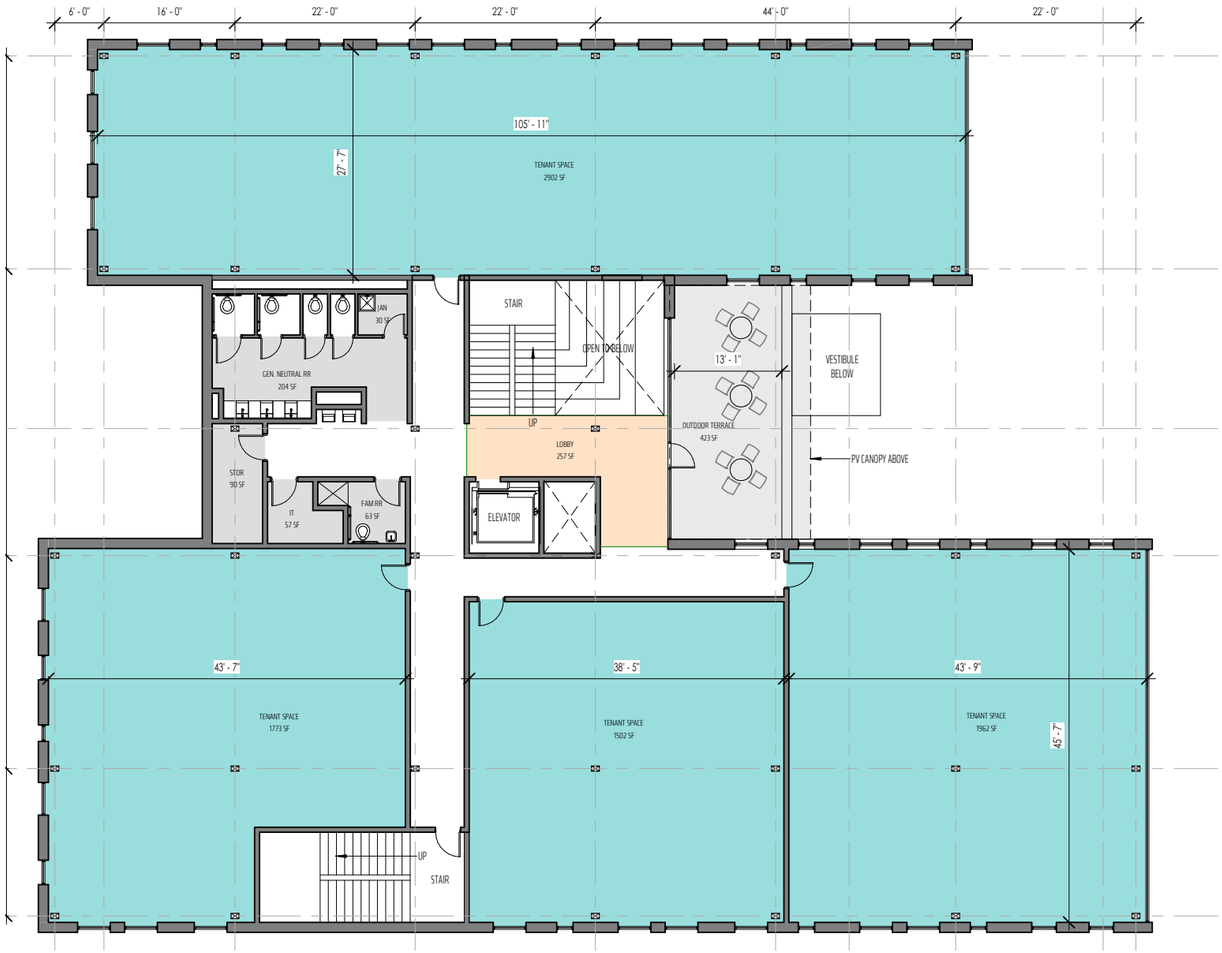
LEVEL 01 GSF = 11,250 GSF

PROJECT DESIGN DRAWINGS (C.3)

LEVEL 02 + 03 FLOOR PLAN

NOTES

1. ATRIUM LOBBY SPACE — LOBBY + RECEPTION
2. RESTROOMS + SUPPORT SPACES — RESTROOMS + BOH
3. SOCIAL HUB AND AMENITY SPACES — AMENITY SPACES — **3,200 NSF TOTAL**
4. TENANT SPACES — TENANT SPACES — **18,500 NSF TOTAL**
5. OUTDOOR ROOF TERRACE
6. COMMUNITY TABLE + OUTDOOR PLAZA AREA — **TOTAL GSF = 31,375 GSF**



LEVEL 02 FLOOR PLAN

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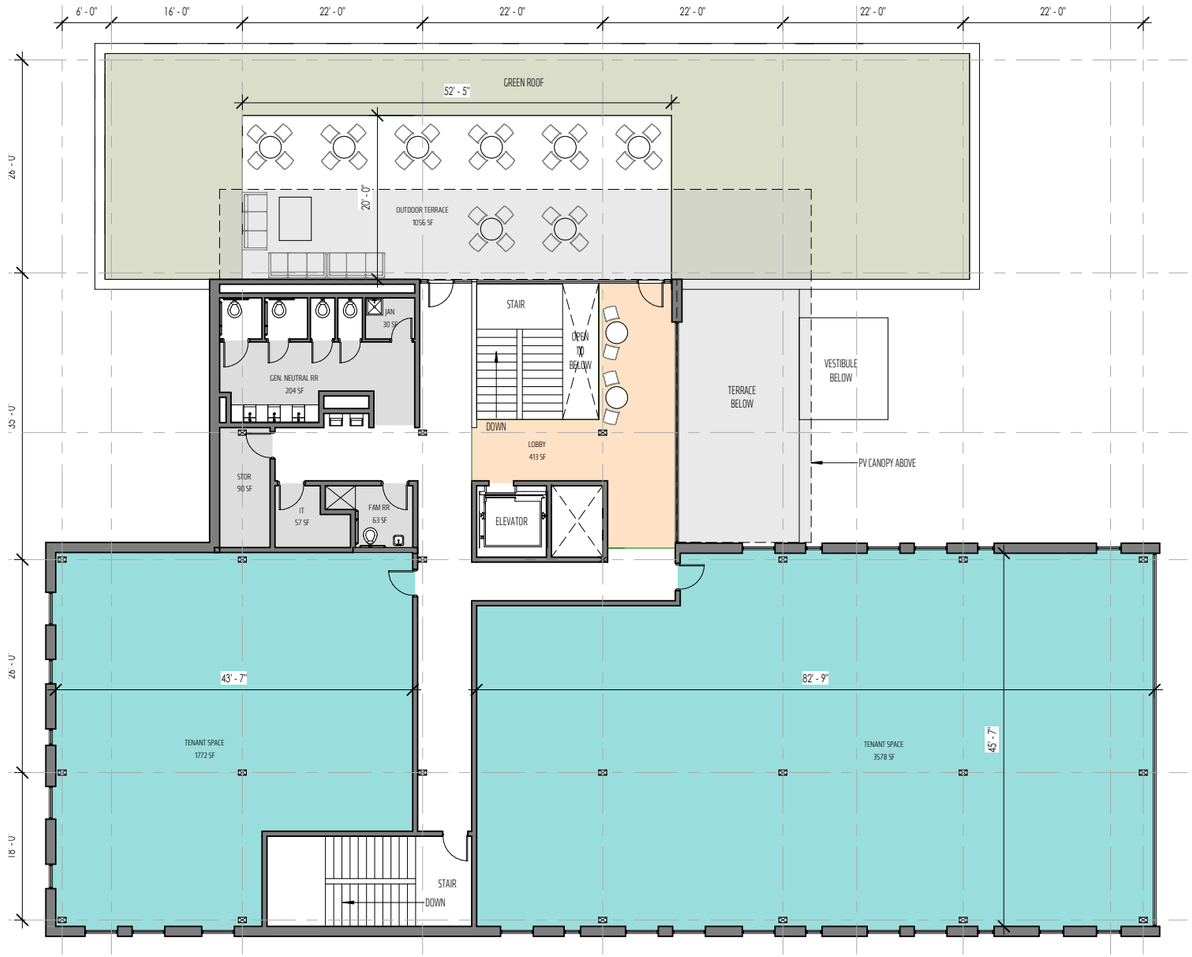
LEVEL 02 GSF = 11,800 GSF



LEVEL 03 FLOOR PLAN

0 5 15 35

LEVEL 03 GSF = 8,325 GSF

PROJECT DESIGN DRAWINGS (C.3)

INTERIOR AESTHETIC VISION

INTERIOR ARCHITECTURE

WELCOMING

INTERIOR DESIGN/ARCHITECTURE IS ALL ABOUT THE HUMAN EXPERIENCE AND EMPOWERMENT. WITH THE USE OF NATURAL MATERIALS, TRANSPARENCY/DAYLIGHT, AND A “SOCIAL CORE” WITHIN BUILDINGS, THE BUILDING WILL CREATE AN INVITING HOME FOR TECH COMPANIES AND COMMUNITY MEMBERS ALIKE.

DESIGN INTEGRITY

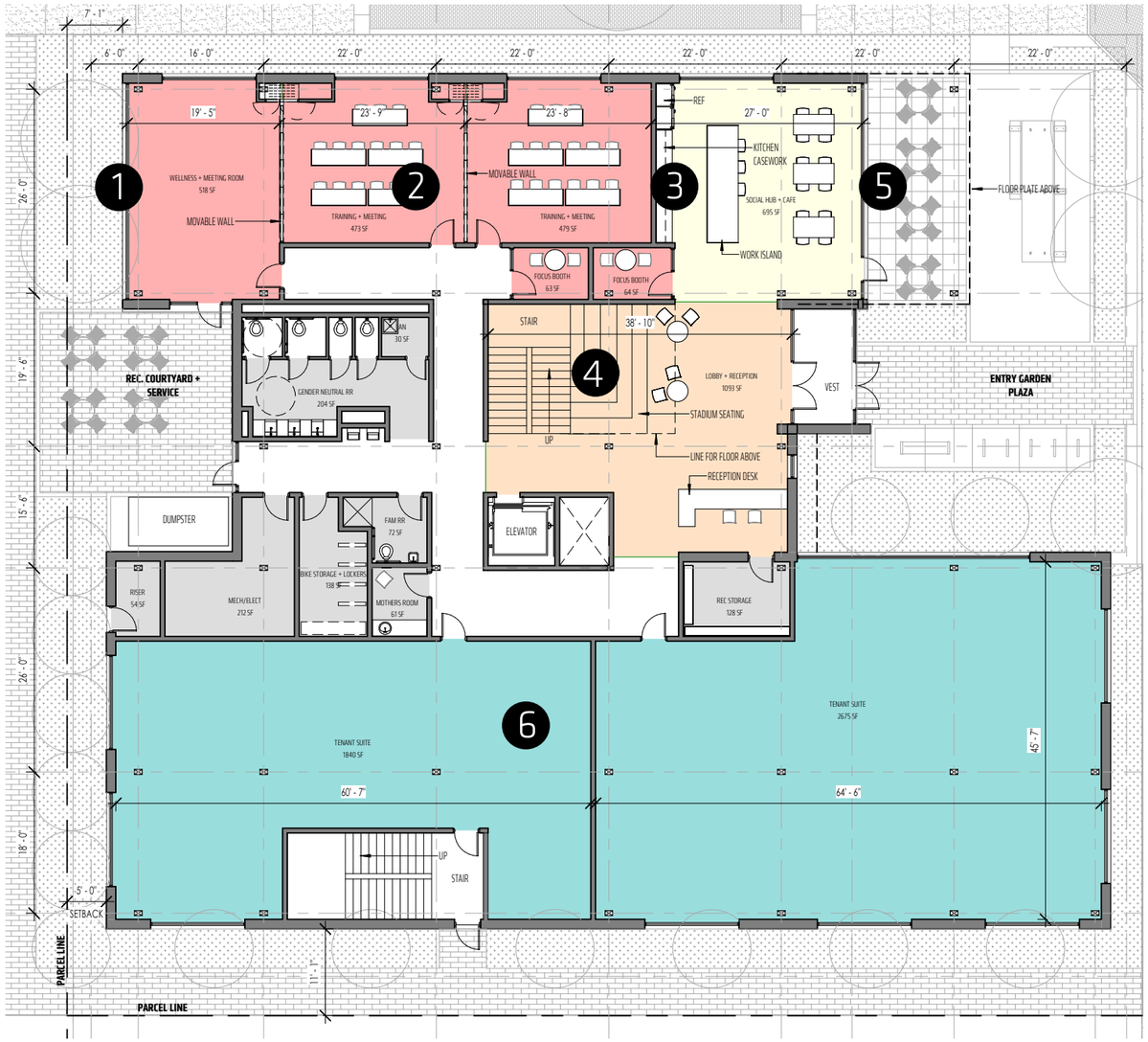
CREATE AN ARCHITECTURE THAT IS TIMELESS - DEVELOPING A MATERIAL PALETTE THAT IS BOTH FORWARD THINKING , YET REFLECTIVE OF THE EXISTING HISTORIC CONTEXT OF THE TRADES DISTRICT.

INSPIRE

CREATING A VARIETY OF DIMENSIONAL AND DYNAMIC SPACES WILL GIVE THE BUILDING A SENSE OF ENERGY, PASSION, AND COMMUNITY. IT WILL BE A SPACE THAT BRINGS OUT THE BEST IN ALL WHO ENTER , FREEING THEM FROM LIMITATIONS.

PROJECT DESIGN DRAWINGS (C.3)

INTERIOR SPACES



DAYLIT WELLNESS + FITNESS ROOM

FLEXIBLE CONFERENCE AND RESOURCE ROOMS

SOCIAL HUB + CAFE

ATRIUM STAIR AND STADIUM LOUNGE

OUTDOOR TERRACE + ENTRY PLAZA

TYPICAL OFFICE SPACE PRE-T/I

PROJECT DESIGN DRAWINGS (C.3)

EXTERIOR AESTHETIC VISION

EXTERIOR ARCHITECTURE

WELCOMING

A SENSE OF ARRIVAL WITH DISTINCT VIEWS TO THE INTERIOR PROVIDING A SENSE OF CONNECTION FROM INTERIOR AND EXTERIOR SPACES. A COHESIVE EXTERIOR AND INTERIOR MATERIAL PALETTE WILL BE UTILIZED TO ALLOW THE BUILDING AND LANDSCAPE TO COMPLIMENT ON ANOTHER.

DESIGN INTEGRITY

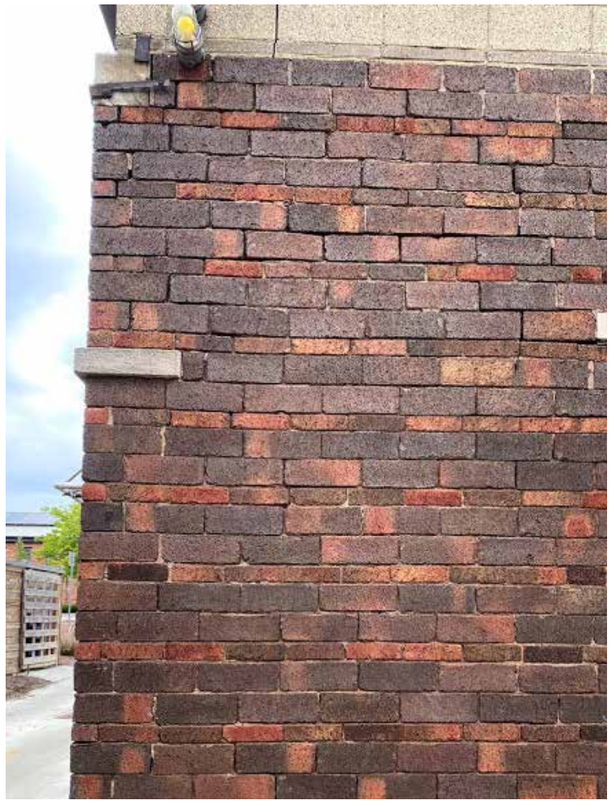
THE ARCHITECTURE SHOULD REFLECT TIMELESSNESS AND INSPIRE. NATURAL TEXTURES AND MATERIALS THAT REFLECT THE REGION, TRANSPARENCY AND SUNSCREENS, EXPOSED STRUCTURE, AND NATURAL LIGHT WILL ALLOW THE STRUCTURE TO BE BOTH TIMELESS AND LAY A FOUNDATION FOR FUTURE DEVELOPMENT IN THE DISTRICT.

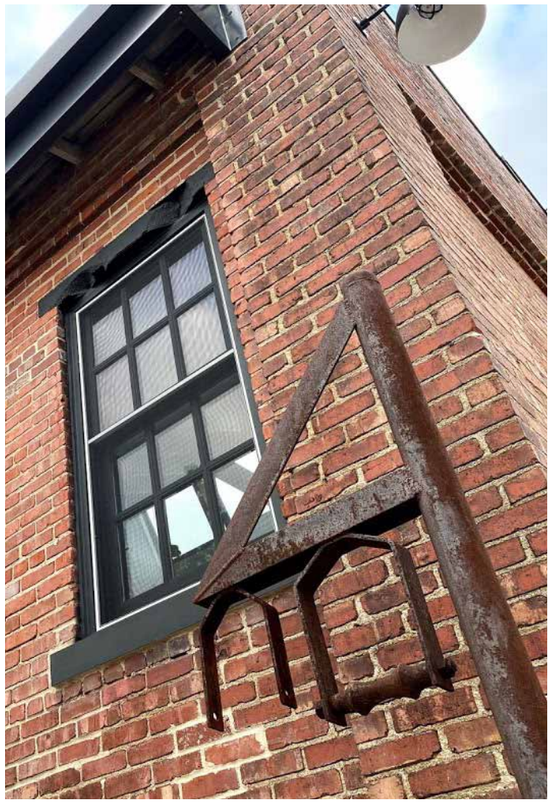
INSPIRE

THE BUILDING WITH BE A SOURCE OF INSPIRATION FOR BOTH THE COMMUNITY AND ITS TENANTS THROUGH ITS DYNAMIC AND REFINED ARCHITECTURAL LANGUAGE, AND BY THE SUSTAINABLE SYSTEMS THAT ALLOW THE BUILDING TO PERFORM EFFICIENTLY AND EFFECTIVELY - BECOMING A MODEL FOR FUTURE SUSTAINABLE DEVELOPMENT WITHIN BLOOMINGTON.

PROJECT DESIGN DRAWINGS (C.3)

TRADES DISTRICT MATERIALITY





PROJECT DESIGN DRAWINGS (C.3)

NE AERIAL VIEW

PROJECT DESIGN DRAWINGS (C.3)

NE STREET PERSPECTIVE

PROJECT DESIGN DRAWINGS (C.3)

MADISON ST PERSPECTIVE

PROJECT DESIGN DRAWINGS (C.3)

WEST PERSPECTIVE

PROJECT DESIGN DRAWINGS (C.3)

MADISON ST PERSPECTIVE

GREY FLY ASH BRICK MASONRY INFILL AT LEVEL 01

CORTEN METAL PANEL FACADE STRIPS

FIXED ALUM STOREFRONT KAWNEER

DARK METAL PANEL FRAME AND INFILL PANELS ABOVE/BELOW WINDOWS

PHOTOVOLTAIC PANEL CANOPY

PROJECT DESIGN DRAWINGS (C.3)

MATERIALITY - MASSING PLAN 2019

Material Guidelines

- Primary Facade Materials
  - Brick
  - Stone
  - Glass (not mirrored)
  - Architectural Metal (not corrugated or ribbed)
  - Wood
- Secondary Facade Materials
  - Split-face cement block
  - Cementitious siding

City of Bloomington | The Trades District Massing Plan 36

*PREPARED BY RUNDELL ERNSTERBER ASSOCIATES IN 2019

PROJECT DESIGN DRAWINGS (C.3)

EXTERIOR ELEVATIONS

EAST ELEVATION
SCALE: 1"=20'-0"

WEST ELEVATION
SCALE: 1"=20'-0"

NOTES

1. GREY FLY ASH BRICK MASONRY
2. CORTEN METAL PANEL
3. ALUMINUM STOREFRONT
4. DARK CHARCOAL METAL PANEL
5. CURTAINWALL SYSTEM
6. PHOTOVOLTAIC CANOPY ARRAY
7. MECHANICAL SCREEN WALL

PROJECT DESIGN DRAWINGS (C.3)

EXTERIOR ELEVATIONS

NORTH ELEVATION
SCALE: 1"=20'-0"

SOUTH ELEVATION
SCALE: 1"=20'-0"

NOTES

1. GREY FLY ASH BRICK MASONRY
2. CORTEN METAL PANEL
3. ALUMINUM STOREFRONT
4. DARK CHARCOAL METAL PANEL
5. CURTAINWALL SYSTEM
6. PHOTOVOLTAIC CANOPY ARRAY
7. MECHANICAL SCREEN WALL

PROJECT DESIGN DRAWINGS (C.3)

TRADES DISTRICT EXISTING STREETSCAPE + LANDSCAPE

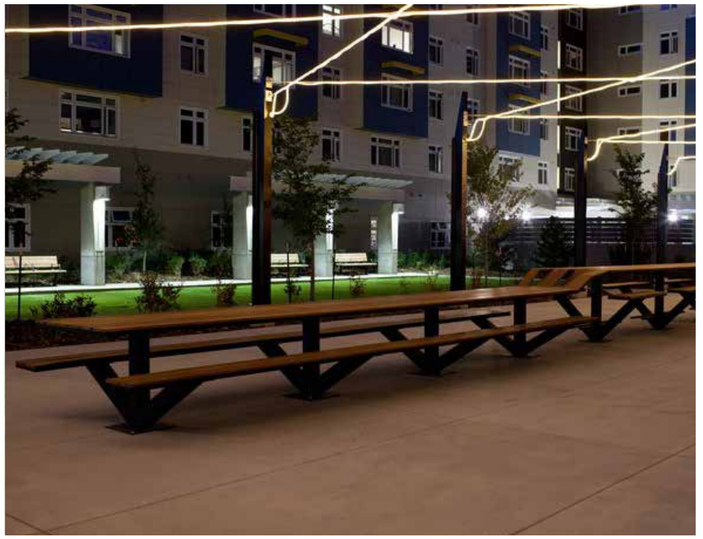
The Trades District Site and Infrastrucutre improvements were developed in 2015 to create a Certified Tech Park adjacent to the Bloomington Downtown. The design seeks to highlight the historic material palette of the industrial setting, while interjecting contemporary design elements. The design team consisted of:

Anderson Bohlander (Site Design)
Blackline Studio (Architecture)
Crawford Murphy Tilly (Civil)
Pivot Marketing (Branding / Marketing)
BRCJ (Survey)

PROJECT DESIGN DRAWINGS (C.3)

EXTERIOR AESTHETIC VISION




OUTDOOR SPACE

WELCOMING

CREATE AN INTEGRATED SITE AND BUILDING DESIGN THAT COMPLIMENT EACH OTHER. CREATING OUTDOOR SPACES OF VALUE THAT SURROUND THE BUILDING AND INTERIOR SPACES.

DESIGN INTEGRITY

THE SITE DESIGN WILL BUILD UPON THE TRADES DISTRICT SITE ELEMENTS, STREETSCAPE, AND PREVIOUS MASTER PLANS TO CREATE EXTERIOR SPACES THAT WILL BE COHESIVE WITH EXISTING AND FUTURE DEVELOPMENTS.

INSPIRE

LANDSCAPE AND SITE ELEMENTS WILL PROVIDE A VARIETY OF SPACES THAT WILL ENERGIZE, INSPIRE, AND CREATE MOMENTS FOR RESPITE. THESE SPACES WILL ALLOW FOR FLEXIBILITY AND PROVIDE OPPORTUNITIES FOR THE OUTDOOR SPACES TO BE USED FOR A VARIETY OF USES.

PROJECT DESIGN DRAWINGS (C.3)

SITE + LANDSCAPE PLAN

NOTES

1. ENTRY PLAZA
2. DINING PATIO
3. BOSQUE & COMMUNITY TABLE
4. BICYCLE PARKING & BENCH
5. SITE WALL
6. SEATING PLAZA
7. TRASH ENCLOSURE
8. PLANT BED

0 10 20

PROJECT DESIGN DRAWINGS (C.3)

ENTRY PLAZA PERSPECTIVE

PROJECT COST ESTIMATE (C.5, C.6, C.7, C.8, C.9)

Proposed Method of Construction
The project will use the traditional design, bid, build delivery method. The owner will have one design contract with the Architect and one contract with the selected contractor after a sealed competitive bidding and selection process. The Architect will hire all necessary engineers and consultants as necessary. Cost analysis and estimates will be provided at the end of each design phase to validate construction costs throughout the design process. Bidding will occur at the end of the design phase, please reference the Project Schedule (pg.42) for estimated durations of design, bidding, and construction phases.

Real Property Acquisition Narrative
Cost Estimate does not include land acquisition of project property. Property is owned by the Bloomington Redevelopment Commission and will be donated at no cost to the City of Bloomington for the purpose of developing the for the building and program identified in the Preliminary Engineering Report. It is believed the property has a value of approximately $370,000.

Permitting Narrative
The project will be required to file for both State of Indiana and Monroe County Building Permits, both of which will be targeted submissions 4 weeks from 100% construction drawings in order to have a bid set that is permitted and ready for construction. The project will also require Site Plan Review from the Planning Department and Development Commission approvals that will take place during the Schematic Design and Design Document phases, with a duration of approximately 2 months. The project is also sited just West of the Showers Brother Historic District, although outside of the boundaries of the district the project team will engage in courtesy reviews and input sessions with the Bloomington Historic Preservation Commission during the Schematic Design Phase.

B**uilding Cost Estimate and Budget**
The attached cost estimate by the Architecture/Engineering Team was developed based on the systems described and illustrated in the attached design package. Overall trade costs can be found on the Total Hard and Soft Cost Summary (pg 39), along with detailed trade costs illustrated on the Trade Cost Summary (pg. 39) and Itemized Trade Cost Estimates (pg 40). The overall estimated trade costs for the entire construction work for the core/shell of the building, site work, and T/I are estimated at $7,345,695. A 5% trade and design contingency, as well as general contractor general conditions ($30k for 16 months), and 8% general contractor overhead and profit are added to the trade costs to arrive at a total construction bid cost estimate of $8,848,418. Additional soft costs including A/E design fees, permits, inspections and connection fees are added to provide a total hard and soft cost of $9,460,618.

PROJECT COST ESTIMATE (C.5, C.6, C.7, C.8, C.9)

TOTAL HARD + SOFT COST SUMMARY

		A/E Cost Estimate	
		Trades District Technology Center	
		BLOOMINGTON, IN	
	Total Building Square Footage	**31,375**	31,375
ITEM	**DESCRIPTION**	**Total Estimate**	TDTC Building
TRADE COSTS			
1.	Sitework/Demolition	**$ 505,700**	$505,700
2.	Structural	**$ 1,492,100**	$1,492,100
3.	Exterior Shell	**$ 1,498,300**	$1,498,300
4.	Interiors	**$ 1,606,100**	$1,606,100
5.	MEP	**$ 2,468,200**	$2,468,200
	TRADE COST ESTIMATE:	**$ 7,570,400**	**$7,570,400**
	Trade Cost & Design Contingency 5%	**$ 378,600**	**$ 378,600**
	TRADE COST SUBTOTAL:	**$ 7,949,000**	**$ 7,949,000**
	COST PER SQ. FT.:	**$ 241.29**	**$ 241.29**
OTHER HARD COSTS			
1.	General Conditions & Field Overhead (16 Mo x $30K)	$ 480,000	
2.	General Contractor OH&P + Bond (8%)	$ 674,400	
	TOTAL CONSTRUCTION BID COSTS:	**$ 9,103,400**	
	COST PER SQ. FT.:	**$ 290.15**	
SOFT COSTS			
1.	Architectural and Engineering Design Fees (7.5% of $9MM)	$ 675,000	
2.	State of Indiana Building Permit	$ 2,000	
3.	City of Bloomington (Monroe County) Building Permit & Inspections	$ 5,500	
4.	Utility Connection Fees	$ 6,000	
	TOTAL SOFT COSTS:	**$ 688,500**	
	TOTAL HARD AND SOFT COST ESTIMATE	**$ 9,791,900**	

TRADE COST SUMMARY

		A/E Cost Estimate
		Trades District Technology Center
		Bloomington, IN
Total Buildings Area	31,375	
	TDTC	Total
Earthwork/Demolition	$158,200	$158,200
Site Utilities	$169,600	$169,600
Paving/Site Concrete	$19,800	$19,800
Landscaping	$64,900	$64,900
Site Electrical	$5,200	$5,200
Misc. Site Items	$88,000	$88,000
Subtotal:	**$505,700**	**$505,700**
Structural		
Foundations/SOG	$233,700	$233,700
Glu-lam Structures and Roof Systems	$1,258,400	$1,258,400
Subtotal:	**$1,492,100**	**$1,492,100**
Exterior Shell		
Exterior Walls	$561,400	$561,400
Glass / Glazing	$697,000	$697,000
Exterior Doors	$24,000	$24,000
Roofing Systems	$215,900	$215,900
Subtotal:	**$1,498,300**	**$1,498,300**
Interiors		
Partitions	$322,000	$322,000
Doors/Windows	$79,000	$79,000
Wall Finishes	$40,100	$40,100
Ceilings	$22,000	$22,000
Floor Finishes	$61,500	$61,500
Millwork/Specialties/Int. Equip.	$761,500	$761,500
Vertical Transportation	$320,000	$320,000
Subtotal:	**$1,606,100**	**$1,606,100**
MEP		
Sprinklers	$139,200	$139,200
Plumbing	$118,400	$118,400
HVAC	$1,322,900	$1,322,900
Electrical	$714,500	$714,500
AV/IT	$173,200	$173,200
Subtotal:	**$2,468,200**	**$2,468,200**
Trade Cost Subtotal	$7,570,400	$7,570,400

PROJECT COST ESTIMATE (C.5, C.6, C.7, C.8, C.9)

ITEMIZED TRADE COSTS ESTIMATE

Trades District Technology Center					Comments
Level 01 Footprint	11,250	GSF			
Level 02 Footprint	11,800	GSF			
Level 03 Footprint	8,325	GSF			31,375 Total GSF
Approximate Site Size	16,320	SF			4,670 SF Open Site Area
SITEWORK					
Earthwork	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Excavation / cut / fill	1,275	CYS	$6.00	$ 7,650	
Offsite Solid Waste Disposal (allowance)	1,750	TON	$70.00	$ 122,500	Assuming all haul off is disposed as solid waste
Erosion Control (allowance)	1	LS	$10,000.00	$ 10,000	
Soil, topsoil (9")	200	CYS	$90.00	$ 18,000	
			subtotal	**$ 158,150**	
			subtotal plus OH/P	**$ 158,200**	
Utilities	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Storm Piping, to 12" HDPE	480	LF	$55.00	$ 26,400	Includes trench, bedding & backfill
Storm Inlets	10	EA	$2,500.00	$ 25,000	
Storm Treatment - hydrodynamic separator	1	EA	$16,000.00	$ 16,000	
Foundation Drain - 4" perforated HDPE	530	LF	$20.00	$ 10,600	
Sanitary Sewer - 6" PVC, includes trench, bedding & backfill	115	LF	$70.00	$ 8,050	Includes trench, bedding & backfill
Water - 2" Domestic Service	65	LF	$90.00	$ 5,850	
2" Domestic Meter & Connection Fees	1	EA	$35,000.00	$ 35,000	
Water - 6" Fire Service	65	LF	$125.00	$ 8,125	Includes trench, bedding & backfill
Water - 4" FDC Service	65	LF	$100.00	$ 6,500	
Fire Dept Connection	1	EA	$2,000.00	$ 2,000	
Post Indicator Valve	1	EA	$2,000.00	$ 2,000	
Onsite Storm Detention	3,000	CF	$8.00	$ 24,000	
			subtotal	**$ 169,525**	
			Total (Nearest 100)	**$ 169,600**	
Paving / Site Concrete	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Concrete pavement (4")	200	SFT	$8.50	$ 1,700	
Concrete pavement (6")	120	SFT	$12.00	$ 1,440	
Pavers (entry plaza)	350	SFT	$30.00	$ 10,500	
Pavers (dining patio)	370	SFT	$35.00	$ 12,950	
Pavers (rear patio)	595	SFT	$30.00	$ 17,850	
Pavers (alley)	1,500	SFT	$30.00	$ 45,000	
Pavers (south alley)	875	SFT	$30.00	$ 26,250	
Decomposed Granite	520	SFT	$22.00	$ 11,440	
Concrete Containment Curb	185	LFT	$45.00	$ 8,325	
			subtotal	**$ 19,765**	
			Total (Nearest 100)	**$ 19,800**	
Landscaping	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Tree, large	5	EA	$750.00	$ 3,750	
Tree, medium	14	EA	$500.00	$ 7,000	
Plant Beds/Areas	3,005	SFT	$18.00	$ 54,090	
			subtotal	**$ 64,840**	
			Total (Nearest 100)	**$ 64,900**	
Site Electrical	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Catenary Lights	4	EA	$500.00	$ 2,000	
Site Light Poles	4	EA	$800.00	$ 3,200	
			subtotal	**$ 5,200**	
			Total (Nearest 100)	**$ 5,200**	
Misc. Site Items	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Entry Wall	75	LF	$550.00	$ 41,250	
Dumpster Enclosure	25	LF	$220.00	$ 5,500	
Community Table	1	LS	$10,000.00	$ 10,000	
Tables	8	EA	$500.00	$ 4,000	
Chairs	24	EA	$300.00	$ 7,200	
Bicycle Racks	5	EA	$500.00	$ 2,500	
Bench	1	EA	$2,500.00	$ 2,500	
Building Identity Signage	1	LS	$15,000.00	$ 15,000	
			subtotal	**$ 87,950**	
			Total (Nearest 100)	**$ 88,000**	

STRUCTURAL					
Foundations / SOG	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Drilled Pier Foundations	400	LF	$200.00	$ 80,000	
Drilled Pier Cap	47	CY	$350.00	$ 16,450	
Concrete Grade Beams	78	CY	$450.00	$ 35,100	
Concrete Foundation Walls	26	CY	$500.00	$ 13,000	
Concrete Piers at Columns	12	CY	$750.00	$ 9,000	
Concrete Elevator Pit	1	LS	$12,500.00	$ 12,500	
Concrete Slab on Grade	11,260	SF	$6.00	$ 67,560	
			subtotal	**$ 233,610**	
			Total (Nearest 100)	**$ 233,700**	
Structural steel / Structural Roof Systems	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Glulam Framing	31,375	SF	$30.00	$ 941,250	
Slab on Metal Deck	22,500	SF	$7.00	$ 157,500	
Roof Deck	10,450	SF	$3.00	$ 31,350	
Steel Bracing	6	TONS	$4,500.00	$ 27,000	
Steel PV Structure	7.5	TONS	$4,500.00	$ 33,750	
Steel Façade Backup	15	TONS	$4,500.00	$ 67,500	
			subtotal	**$ 1,258,350**	
			Total (Nearest 100)	**$ 1,258,400**	
EXTERIOR SHELL					
Exterior Walls	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Brick Veneer	6,500	SF	$24.00	$ 156,000	
Metal Stud Backup + Insulation + Vapor Barrier	15,800	SF	$11.00	$ 173,800	13' Floor to Floor
Charcoal Metal Panels	2,600	SF	$25.00	$ 65,000	13' Floor to Floor
Cor-ten Metal Panels	6,700	SF	$20.00	$ 134,000	13' Floor to Floor
Prefinished Metal Coping	750	LF	$8.00	$ 6,000	
Mechanical Screen Wall	92	LF	$180.00	$ 16,560	
Exterior Painting - Miscellaneous	1	ALW	$5,000.00	$ 5,000	
Exterior Caulking	1	ALW	$5,000.00	$ 5,000	
			subtotal	**$ 561,360**	
			Total (Nearest 100)	**$ 561,400**	
Glass / Glazing	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Storefront	13,300	SF	$42.00	$ 558,600	13' Floor to Floor
Curtain Wall	2,050	SF	$65.00	$ 133,250	13' Floor to Floor
Roof Deck Guardrail	85	LF	$60.00	$ 5,100	
			subtotal	**$ 696,950**	
			Total (Nearest 100)	**$ 697,000**	
Exterior Doors	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Storefront Doorsw/Hdwe	12	EA	$2,000.00	$ 24,000	
			subtotal	**$ 24,000**	
			Total (Nearest 100)	**$ 24,000**	
Roofing Systems	**Qty**	**Units**	**Cost Each**	**Price Total**	**Comments**
Roofing System EPDM Roof Membrane	10,450	SF	$12.00	$ 125,400	
Green Roof System - Extensive	1,960	SF	$25.00	$ 49,000	
Pedestal Roof Deck System	825	SF	$20.00	$ 16,500	
Roof Hatch	1	EA	$25,000.00	$ 25,000	
			subtotal	**$ 215,900**	
			Total (Nearest 100)	**$ 215,900**	

PROJECT COST ESTIMATE (C.5, C.6, C.7, C.8, C.9)

ITEMIZED TRADE COSTS ESTIMATE CONT.

INTERIORS

Partitions	Qty	Units	Cost Each	Price Total	Comments
Interior Studs/Drywall	28,800	SF	$10.00	$ 288,000	
Drywall at Exterior Walls	14,500	SF	$2.00	$ 29,000	
Rough wood carpentry, blocking, etc.	5,000	SF	$1.00	$ 5,000	
			subtotal	**$ 322,000**	
			Total (Nearest 100)	**$ 322,000**	

Doors / Windows	Qty	Units	Cost Each	Price Total	Comments
HM frames/wood doors	40	EA	$1,600.00	$ 64,000	
Movable Walls	2	EA	$7,500.00	$ 15,000	
			subtotal	**$ 79,000**	
			Total (Nearest 100)	**$ 79,000**	

Wall Finishes	Qty	Units	Cost Each	Price Total	Comments
Interior Wall Painting	43,500	SF	$0.75	$ 32,625	
Finish Frames/Doors	40	EA	$60.00	$ 2,400	
Interior caulking	10,000	SF	$0.50	$ 5,000	
			subtotal	**$ 40,025**	
			Total (Nearest 100)	**$ 40,100**	

Ceilings	Qty	Units	Cost Each	Price Total	Comments
Acoustic & Gyp Ceilings	5,500	SF	$4.00	$ 22,000	
			subtotal	**$ 22,000**	
			Total (Nearest 100)	**$ 22,000**	

Floor Finishes	Qty	Units	Cost Each	Price Total	Comments
Concrete Floor Sealer	750	SF	$2.00	$ 1,500	
Concrete Floor Polish	20,000	SF	$2.00	$ 40,000	
Carpeting and Walk-off Mat	2,000	SF	$10.00	$ 20,000	
			subtotal	**$ 61,500**	
			Total (Nearest 100)	**$ 61,500**	

Millwork / Specialties / Int. Equipment / Furnishings	Qty	Units	Cost Each	Price Total	Comments
Toilet Accessories	6	ALW	$750.00	$ 4,500	Hand Dryer, Mirror, Soap Dispenser, etc
Millwork/Casework	40	LF	$1,250.00	$ 50,000	
Bike Lockers	8	EA	$250.00	$ 2,000	
Interior Signage Allowance	1	ALW	$25,000.00	$ 25,000	Core/Shell Allowance
FFE Allowance	1	ALW	$125,000.00	$ 125,000	Core/Shell Allowance
T/I Allowance	18,500	SF	$30.00	$ 555,000	Walls and Doors, Ceiling and Lighting, and Mech/Elect Routing, etc.
			subtotal	**$ 761,500**	
			Total (Nearest 100)	**$ 761,500**	

Vertical Transporation	Qty	Units	Cost Each	Price Total	Comments
MRL Elevator	1	EA	$190,000.00	$ 190,000	
Metal Stair	1	EA	$40,000.00	$ 40,000	
Atrium Stair	1	EA	$90,000.00	$ 90,000	
			subtotal	**$ 320,000**	
			Total (Nearest 100)	**$ 320,000**	

MEP

Plumbing	Qty	Units	Cost Each	Price Total	Comments
Plumbing	32	Fixt	$2,800.00	$ 89,600	Includes Fixtures, DW and waste Piping
Roof Drainage	12,500	SF	$2.30	$ 28,750	
			subtotal	**$ 118,350**	
			Total (Nearest 100)	**$ 118,400**	

HVAC	Qty	Units	Cost Each	Price Total	Comments
AHU, Terminal Units	31,200	SF	$14.55	$ 453,960	
Ductwork	31,200	SF	$5.85	$ 182,520	
Heating Water System	31,200	SF	$7.40	$ 230,880	
Chilled Water System	31,200	SF	$9.10	$ 283,920	
Controls	31,200	SF	$5.50	$ 171,600	
			subtotal	**$ 1,322,880**	
			Total (Nearest 100)	**$ 1,322,900**	

Electrical	Qty	Units	Cost Each	Price Total	Comments
Electrical Power & Distribution	31,200	SF	$9.50	$ 296,400	
Electrical Receptacles & Connections	31,200	SF	$1.50	$ 46,800	
Lighting & Controls	31,200	SF	$8.75	$ 273,000	
Fire Alarm & Security	31,200	SF	$3.15	$ 98,280	
			subtotal	**$ 714,480**	
			Total (Nearest 100)	**$ 714,500**	

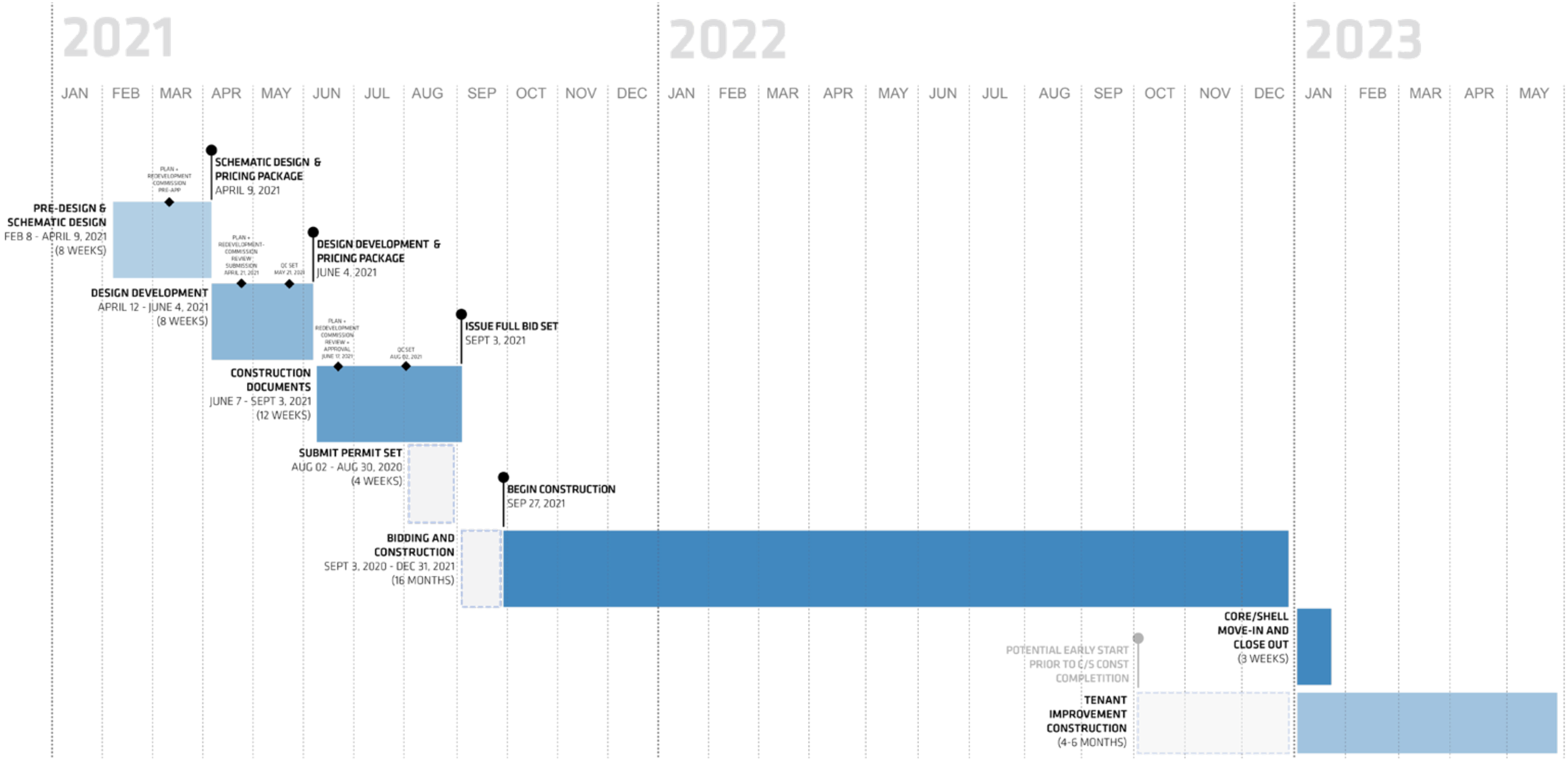
Sprinklers	Qty	Units	Cost Each	Price Total	Comments
Sprinkler Mains with Common Equipment	31,200	SF	$3.50	$ 109,200	
Fire Pump	1	EA	$30,000.00	$ 30,000	
			subtotal	**$ 139,200**	
			Total (Nearest 100)	**$ 139,200**	

AV/IT	Qty	Units	Cost Each	Price Total	Comments
Data & Communications	31,200	SF	$4.80	$ 149,760	
Multimedia Systems	31,200	SF	$0.75	$ 23,400	
			subtotal	**$ 173,160**	
			Total (Nearest 100)	**$ 173,200**	

PROJECT DESIGN + CONSTRUCTION SCHEDULE (C.10)

Schedule Overview

The project schedule below outlines both design and construction activities from February 2021 to Spring of 2023. Design Phases are broken into SD, DD, and CD packages with durations ranging from 8-12 weeks. At the end of each phase the design package will be used to develop a Pricing Package for review by the Owner and Design Team. Site Plan and Redevelopment Plan commission submittal and Permit Submittal have also been incorporated into the schedule to ensure the project stays on track for Issuing a Construction Bid Set in September 2021. Three weeks are held for Bidding and Negotiating with the selected contractor, and a forecasted start of construction of Late September/Early October, with construction lasting approximately 16 months for the core-shell portions of the building. Tenant improvements of tenant spaces are slated to take approximately 4-6 months depending on scale and scope, some of which could potentially begin construction prior to completion of the core-shell project



PROJECT SCHEDULE + TASKS (C.11)

PROPOSED PROJECT TASKS

Administrative and Legal Expenses (COB to Review)
- Record Keeping
-Financial Management
-Monitoring of Equal Opportunity Requirements
-Monitoring Compliance with Federal Labor Standards
-EDA Requirements Monitoring
- Project Closeout Documentation
- Legal Opinions

Land, Structures, Rights-of-way, Appraisals
-N/A (COB to Provide)

Relocation Expenses and Payments
-N/A (COB to Provide)

Architectural and Engineering Fees
- Program Refinement and Schematic Design
- Building Code and Life Safety Review With AHJ Building Code Consultant
- Prepare and Submit Documents For review by Authorities having jurisdiction over the project including the County Redevelopment Commission
- Develop Documents /Packages for Review and Pricing from Schematic Design through Construction Documents Phases of the Project including Specifications and Project Manuals
- Conduct Design Presentations to the Client as Needed Throughout the Design Process
- Conduct all necessary Design Coordination Meetings with the Design Team (Site/Civil, Landscape, Structural, MEP)
- Assist in Bidding and Selection of General Contractor
- Attend Project Construction Meetings on a Bi-Weekly Basis
- Provide Construction Administration Services throughout Construction including Review of Submittals and Payment Applications, respond to Contractor Requests for Information, Process Change Orders and Provide a construction Punch List at End of Project Substantial Completion

Other A/E Fees
- N/A

Project Inspection Fees
- State Permit Submittal
-Monroe County Submittal
- Building Inspection fees within Permit Submittal Cost
- Footing Inspection, Foundation Inspection, Underslab inspection, rough-in Inspection, Electrical Service Inspection, Final Certificate of Occupancy Inspection
- Utility Tap Connections and Fees

Site Work
- Routing of Utilities per A/E Drawings
- Site excavation as necessary by Drawings
- Site grading, landscape, and paving per A/E Drawings
- Storm On-site Detention and Storm Drainage
- Erosion Control during construction as required

Demolition and Removal
- Site excavation and sidewalk demo as necessary for routing of utilities and connections
- Contaminated Soil waste removal and needed as required

Construction
- Core-Shell Construction per Drawings Prepared by A/E Team
-Provide necessary staging, fencing, and sequencing to provide safe construction job site for public and construction team
- Review and Process Submittals and RFI's
- Conduct Owner-Architect- Contractor Meetings Throughout construction
-T/I Construction per Drawings
- Provide project updates and construction schedule to A/E and Design Team
- Schedule Necessary Inspections and Reviews as necessary
- Coordinate Subcontractors and Trades throughout Construction
- Provide Record Drawings and O & M Manuals to Client

Equipment
-Furniture Design and Selection
-Procurement of Vendor
-Furniture and Equipment Drawings and Specifications
- Furniture and Equipment Install

Misc.
-N/A

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