16 TECH

District Core Master Plan (Phase 1)
June 2019

16 Tech District Core Master Plan prepared for 16 Tech Community Corporation by Ayers Saint Gross. Master plan completed June 2016 and updated June 2019. Approved by 16 Tech Community Corporation Board of Directors in June 2019.

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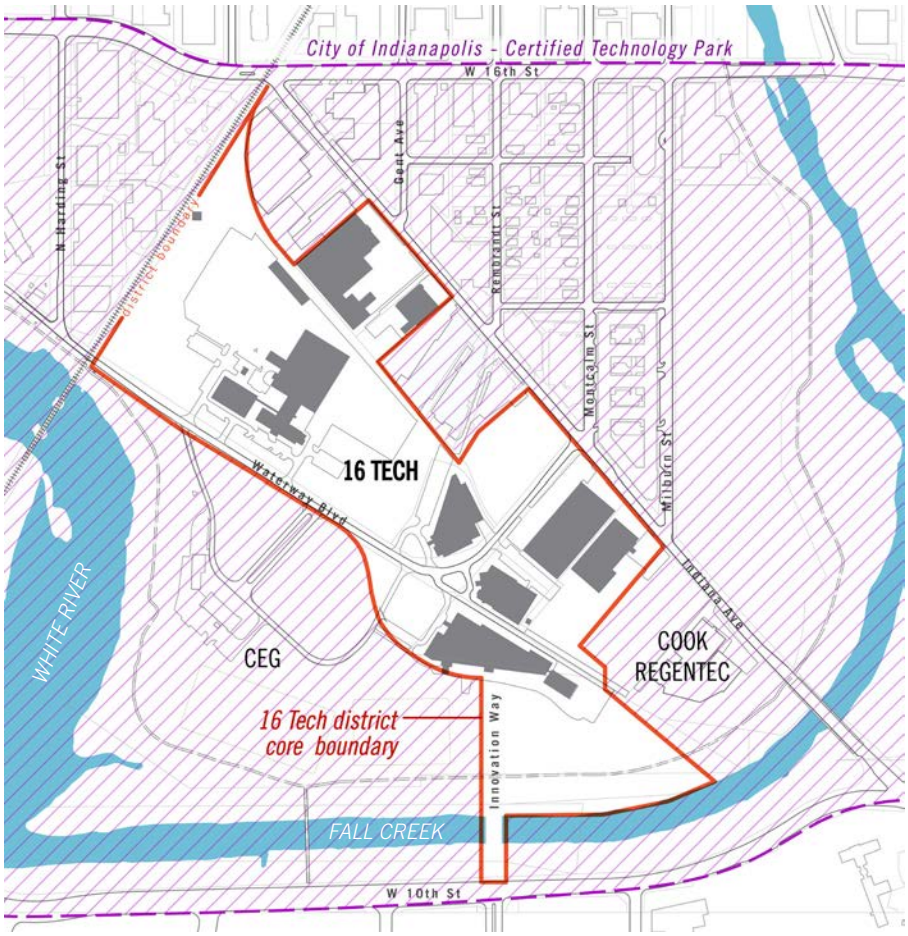
SECTION 1.0: INTRODUCTION

Background

16 Tech is a master planned innovation district encompassing 50 acres on the near northwest side of downtown Indianapolis. Situated within the historic Riverside neighborhood and the Indiana Avenue Cultural District, it is part of a larger 250-acre technology park designated by the City of Indianapolis. The area is in close proximity to the economic, academic, medical, and research hubs of the city and region. Downtown Indianapolis, IUPUI, IU School of Medicine, Riley Hospital, Eskenazi Hospital, Roudebush VA Medical Center, and IU Methodist Hospital are all a short walk, bike ride, bus trip, or drive away.

The primary focus of this Master Plan is the 16 Tech District Core (Phase 1), which is generally bounded by Indiana Avenue, Fall Creek, Waterway Boulevard, and railroad tracks to the west. In late 2015, the property owners within this area, along with the City, corporate partners, and local institutions, established a new organization, 16 Tech Community Corporation (16TCC), to implement the 16 Tech District Core Master Plan and to facilitate the growth of a successful innovation district. 16TCC and its partners own and control development rights for most of the land that comprises the District Core.

The vision for the District Core calls for the area to become a vibrant, dense, mixed-use community where people live, work, learn, and play. The district is designed to be a model for economic development in the knowledge-driven economy and a sustainable new urban community woven into its natural and urban context. While its primary purpose is to drive a wide range of research, innovation, academic, entrepreneurial, technological, and commercial activity, it will also accommodate residential, retail, cultural, recreational, and entertainment uses.

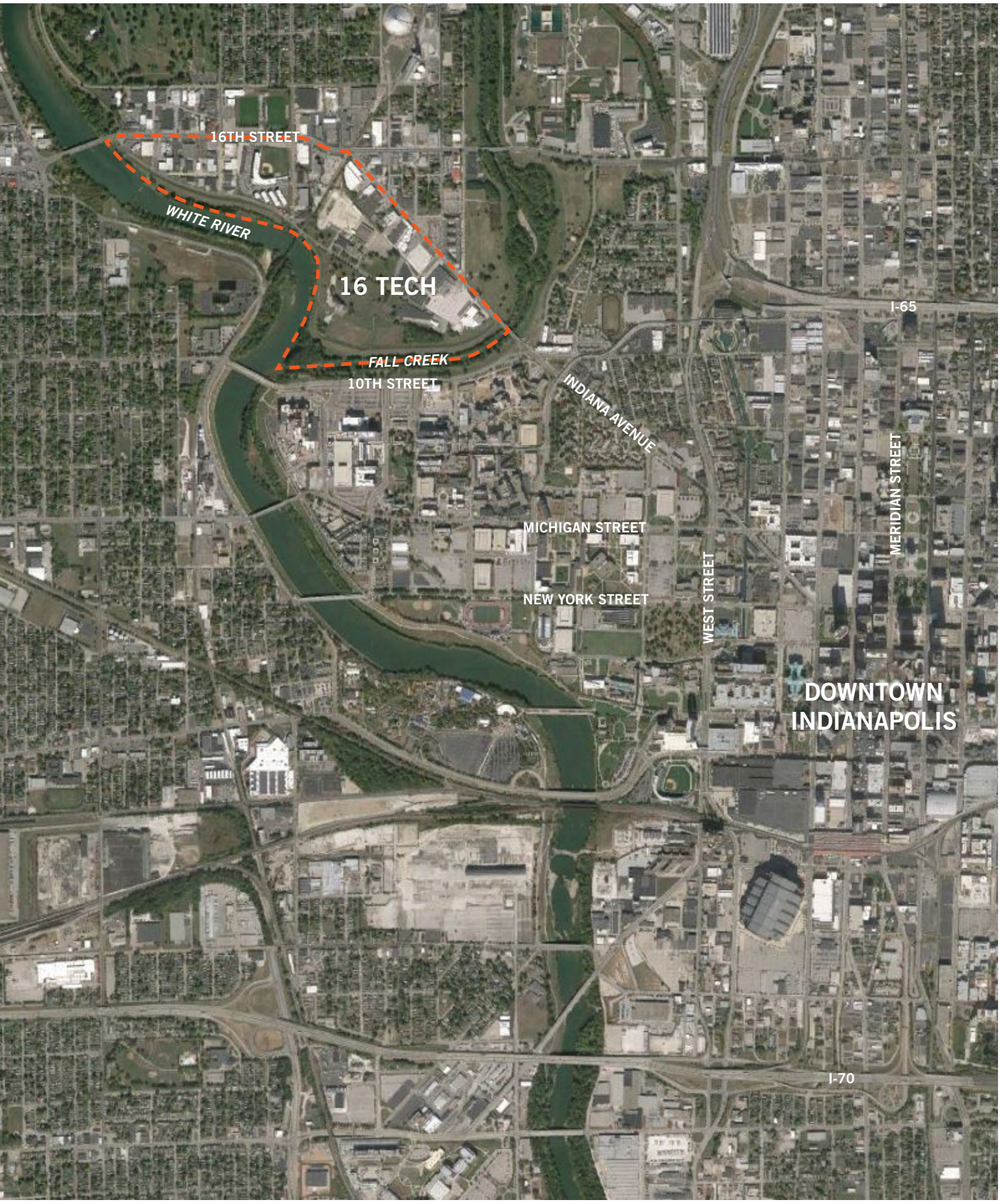


16 Tech District Core: Aerial View

16 Tech District Core: View to Downtown

16 Tech District Core Boundary (Left)

The 16 Tech District Core is part of a larger Certified Technology Park


16TH STREET
WHITE RIVER
16 TECH
FALL CREEK
10TH STREET
INDIANA AVENUE
I-65
MERIDIAN STREET
MICHIGAN STREET
NEW YORK STREET
WEST STREET
DOWNTOWN
INDIANAPOLIS
I-70

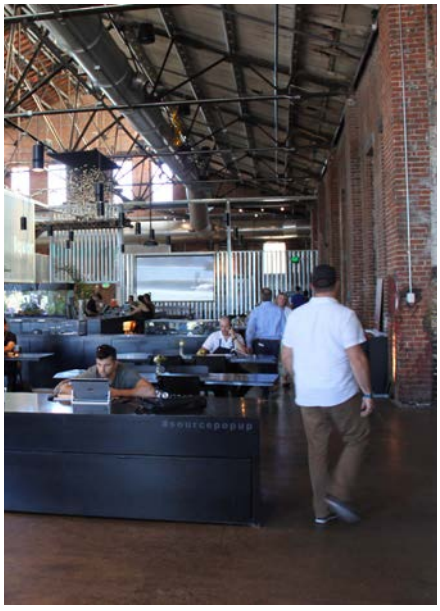
SECTION 1.0: INTRODUCTION

Purpose & Goals

This document is intended to help 16TCC, its partners, and district stakeholders understand and implement the vision of the 16 Tech District Core Master Plan, which is centered on enhancing the Indianapolis and broader Indiana innovation ecosystem.

The vision for the 16 Tech District Core Master Plan was developed during a year-long, participatory planning effort in 2015–2016, with additional updates and refinements made between 2017–2019. The planning process has included numerous stakeholder sessions, design charrettes, consultant meetings, and presentations. Based on robust stakeholder input, the following Design Principles and Objectives have guided the development of the Master Plan:

- Create a unified and diverse platform for start-ups, mature companies, research institutes, academic institutions, makers, food entrepreneurs, artists and scientists to collaborate and thrive.
- Create a destination with a sense of place that has the density and capacity to support a community of innovation and to deepen Indiana's knowledge pool.
- Create a place that is flexible, transparent, gritty, and sustainable.
- Create a magnet for ideas, intellectual property, venture capital, and C-level business executives to support market-driven innovation.
- Create new business opportunities for Indianapolis companies.
- Create a place that fosters industry convergence.



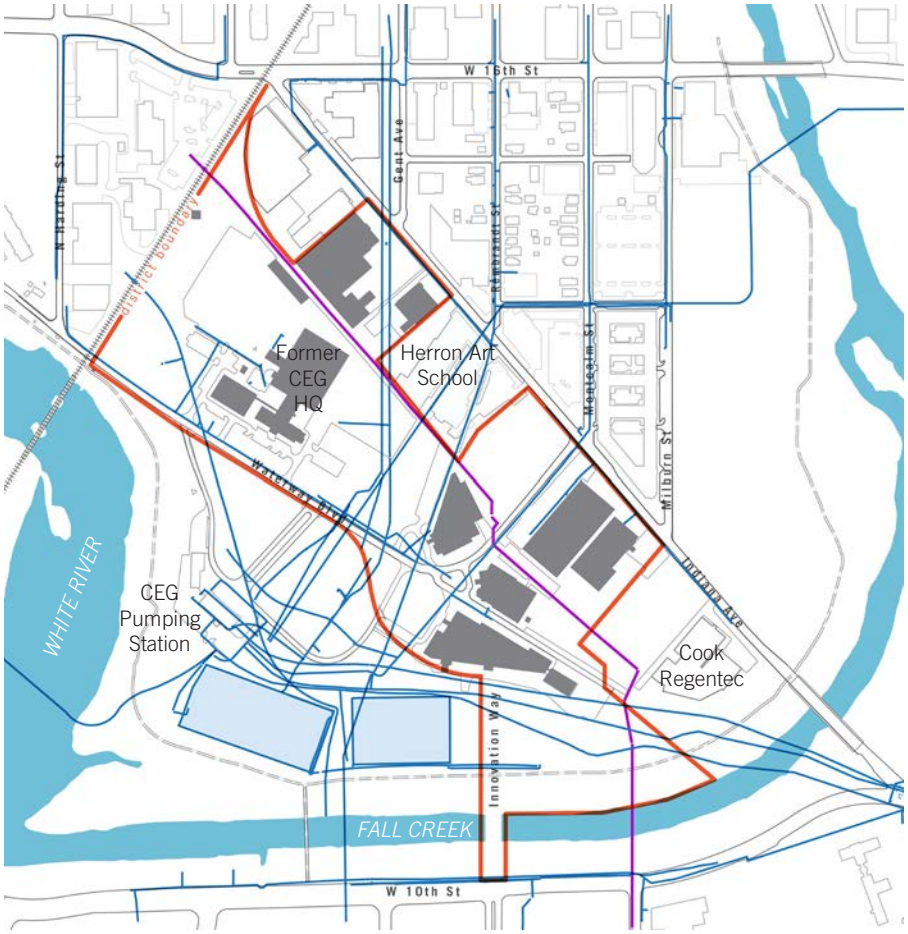
Existing Conditions: Constraints & Opportunities

The 16 Tech District Core has historically been, and must remain, a functioning water pumping and distribution site so the area is encumbered by numerous utility constraints. To allow for new development to occur, certain water lines, wellheads, and other infrastructure will be re-aligned, relocated, or removed. Even after this infrastructure work is complete, the site will continue to have constraints on development in particular locations. New development must adhere to all utility easement and setback requirements based on accurate survey information. The diagram below displays some of the major utility constraints that influenced the design of the Master Plan. This is provided for general informational purposes and is not a complete indicator of all utility constraints and easements for each future development site. Nor does it show future utility locations and alignments.

Along with available land for new construction, the District Core features existing buildings that can be rehabilitated and reused. The former CEG headquarters facility, as well as some low-scale warehouse and industrial buildings along Indiana Avenue, are prime candidates for creative conversions that can provide one-of-a-kind spaces with more affordable rent compared to new construction. These types of raw, industrial, and high-volume spaces will be attractive to entrepreneurs, start-ups, small companies, and other early 16 Tech users and activators.

Former CEG Headquarters Facility

Existing Utility Constraints (2016)



CEG Water Pumping Station

This utility diagram is not a comprehensive indicator of all existing site utilities and does not include associated easements and setback requirements, nor does it represent any subsequent utility infrastructure changes.

2

Master Plan Vision

Overview
Illustrative Master Plan
Character & Experience
Phasing

SECTION 2.0: MASTER PLAN VISION

Overview

The vision for 16 Tech is to become a complete community that nurtures and supports the growth of the Indianapolis innovation ecosystem. The district will become a dense, vibrant, and unique urban neighborhood that is both an integral part of the city and distinct in its character and function. This section outlines the primary features of the 16 Tech Master Plan to help all district stakeholders grasp its design intentions and participate in its successful implementation.

Illustrative Master Plan

The Illustrative Master Plan on the opposite page shows the proposed physical form for 16 Tech. It indicates how new streets, open spaces, and buildings will relate to each other and to other existing physical features of the district. The design of the district hinges on a central park and plaza space, small and walkable blocks, and a mix of building types and uses. The near-term focus area for planning and implementation is the District Core, indicated with a solid line on the opposite page. The primary objectives of the Master Plan are to create:

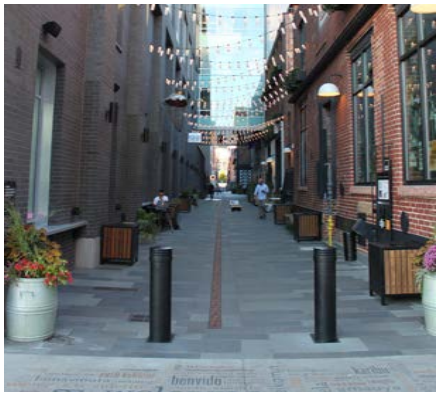
Connections: Successful Innovation Districts require a high degree of physical, social, and professional connectivity. A physical environment that fosters those connections is crucial for 16 Tech's growth. The Master Plan features an extended urban street grid and a new connection to the hospitals and university to the south via a new bridge over Fall Creek. The plan also seeks to fully leverage connections to the broader city and region with improved connections to 16th Street via an extension of Gent Avenue as well as Waterway Boulevard and Milburn Street.

Density: Creating a critical mass of research, entrepreneurial, and innovation activity is also necessary for 16 Tech. Proximity encourages interaction which spurs positive and creative collaboration. Therefore, the Master Plan for 16 Tech calls for a high density, urban form of development that fosters a high rate of personal and professional interactions.

Vibrancy: A healthy, vibrant innovation ecosystem requires diversity. The district should not rely on a single specialization of research or industry. Instead, it should accommodate a wide range of activity and uses.

A Sense of Place: The knowledge economy is driven by talent. In order to compete for that talent, 16 Tech needs to establish itself as a place people want to work, live, learn, play, and create. The Master Plan emphasizes the importance of a high-quality public realm and seeks to create a variety of experiences along its streets, parks, and plazas. It encourages adaptive re-use of existing buildings as well as new construction to create a varied and interesting built environment. It also takes advantage of the unique pattern of proposed streets to create dynamic visual moments with a new architecture.

Image courtesy of Good Design Australia.
UTS Alumni Green-Good Design Award Winner 2016, Architectural Design, Urban Design.



16 Tech District Core: Illustrative Master Plan

Existing Buildings New Buildings Open Spaces

SECTION 2.0: MASTER PLAN VISION


Gem St
16th St
Indiana Ave
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Character & Experience

A key measure of the success of the district will be its ability to attract talent and investment, and a high-quality physical environment and sense of place are critical components of 16 Tech's strategy to compete for both. The district benefits from its location within the city and its proximity to major anchors, but a unique and authentic character and experience of the place will be an added differentiator. Well-educated knowledge workers, especially the tech-savvy and young, continue to gravitate to interesting urban places that offer them exciting job opportunities, social networks, and diversity of experiences. The built environment at 16 Tech will entice people and companies to locate here by becoming a dense, mixed-use, inter-connected, and highly-amenitized urban community with a distinct sense of place. The district will feature a range of office and lab spaces that support all stages of the business life cycle, different housing options, and public open spaces that are integrated into the city's broader park system. Innovation-oriented, cultural, and social programming will be critical to the vibrancy and vitality of the district, so indoor and outdoor spaces that can accommodate a range of events and activities are integrated into the plan. Details governing the quality and character of the public and private landscape and architecture are provided in a separate Design Guidelines document.

Key Placemaking Principles:

- High-quality public realm centered around the main park and plaza
- Horizontal & vertical mix of uses
- Variety of building scales & heights
- Multi-modal, complete streets
- Programming & activation of key streets & spaces on daily, weekly, and seasonal basis
- Strong relationship between interior and exterior spaces
- Creative blend of old & new buildings, historic & contemporary materials

Proposed Public Realm & Architectural Character: View Looking South along Gent Avenue to New IBRI Building

Proposed Public Realm & Architectural Character: Precedent Images













SECTION 2.0: MASTER PLAN VISION

Activating Streets and Ground Floors: New IBRI Building and Innovation Way

Leveraging Existing Buildings: Re-Purposing Former CEG Garage into a Hub of Innovation & Social Activity

Phasing

The 16 Tech District Core will be built over time as funds for infrastructure become available and as market demand dictates. The Master Plan provides flexibility in sequencing new streets and development within the District Core but recommends establishing a critical mass of density and activity within it as soon as possible to generate positive interest and momentum.

Near-term infrastructure investments should:

- Improve access from Indiana Avenue by extending Gent Avenue to Waterway Boulevard
- Establish a high-quality and consistent sense of the public realm by applying the design guidelines for streetscapes and public open spaces
- Initiate a shared parking strategy by constructing a district parking garage
- Relocate or remove select utility infrastructure to open up developable land in subsequent phases
- Enhance access and connectivity to the clinical, research, and academic hubs south of Fall Creek by extending Innovation Way from Gent Avenue to 10th Street

Near-term development should:

- Re-purpose the CEG complex into an innovation center with the garage space converted into the social heart and central meeting space of the innovation district
- Leverage proximity to IBRI and increase office and lab space around their new headquarters building
- Introduce residential, hospitality, restaurant/retail, entertainment, and other supporting and activating uses in the District Core

In time, the core will fill out and additional land area adjacent to the district may become marketable and developable. Underutilized adjacent land has been identified for potential long-term innovation district expansion and is conditional upon 16 Tech's ability to fund the acquisition and other considerations. The 16 Tech Master Plan will need to be updated at that time.

16 Tech District Core:
Phase 1 & Near-Term Development

3

Master Plan Components

Overview
Plan Framework
Connections & Mobility
Building Uses
Parking & Service

SECTION 3.0: MASTER PLAN COMPONENTS

Overview

This section describes the Master Plan using a series of diagrams that distill it into key urban design components and communicate specific planning and design intentions.

Design Framework

The framework diagram illustrates the basic physical organization of the district, highlighting new street alignments and hierarchy, development parcels and size, and the planned open space network.

Street Network

The 16 Tech District Core street network is designed to maximize access into the district, provide convenient circulation within it, and create comfortable and walkable blocks. Street alignments were influenced by existing streets and buildings, future development potential, and existing utility constraints. Because of their function and/or prominence within the plan, certain streets are more important than others and are designed to stand out in their character, right-of-way dimension, relationship to buildings or parks, and streetscape features. Specific street types, detailed street sections, and streetscaping features are defined in a separate 16 Tech Design Guidelines document. All streets in the district are designed to be low-speed streets with one travel lane in each direction and accommodate all modes of transportation while prioritizing pedestrian and non-vehicular movement and safety.

- **Primary Streets:** These streets are the main ways in, out, or around the District Core, provide links to other major city thoroughfares, and establish the primary addresses of the district. New buildings will orient and address primary streets, which may feature wider sidewalks, line the edges of parks, and include a multi-purpose path in specific locations. The Gent Avenue extension, Innovation Way, Waterway Boulevard, and Indiana Avenue are designated as Primary Streets.
- **Secondary Streets:** These streets are intended to carry mostly local traffic and are intended to be less active. To prevent through-traffic using Montcalm Street as a shortcut between 10th Street and 16th Street freeway access, the junction at Innovation Way should be designed as a directionally-limited one-way T-intersection that only permits right turns.
- **Access Drives:** These tertiary roadways will provide access to parking and service areas, as well any necessary emergency access where required.

Open Spaces

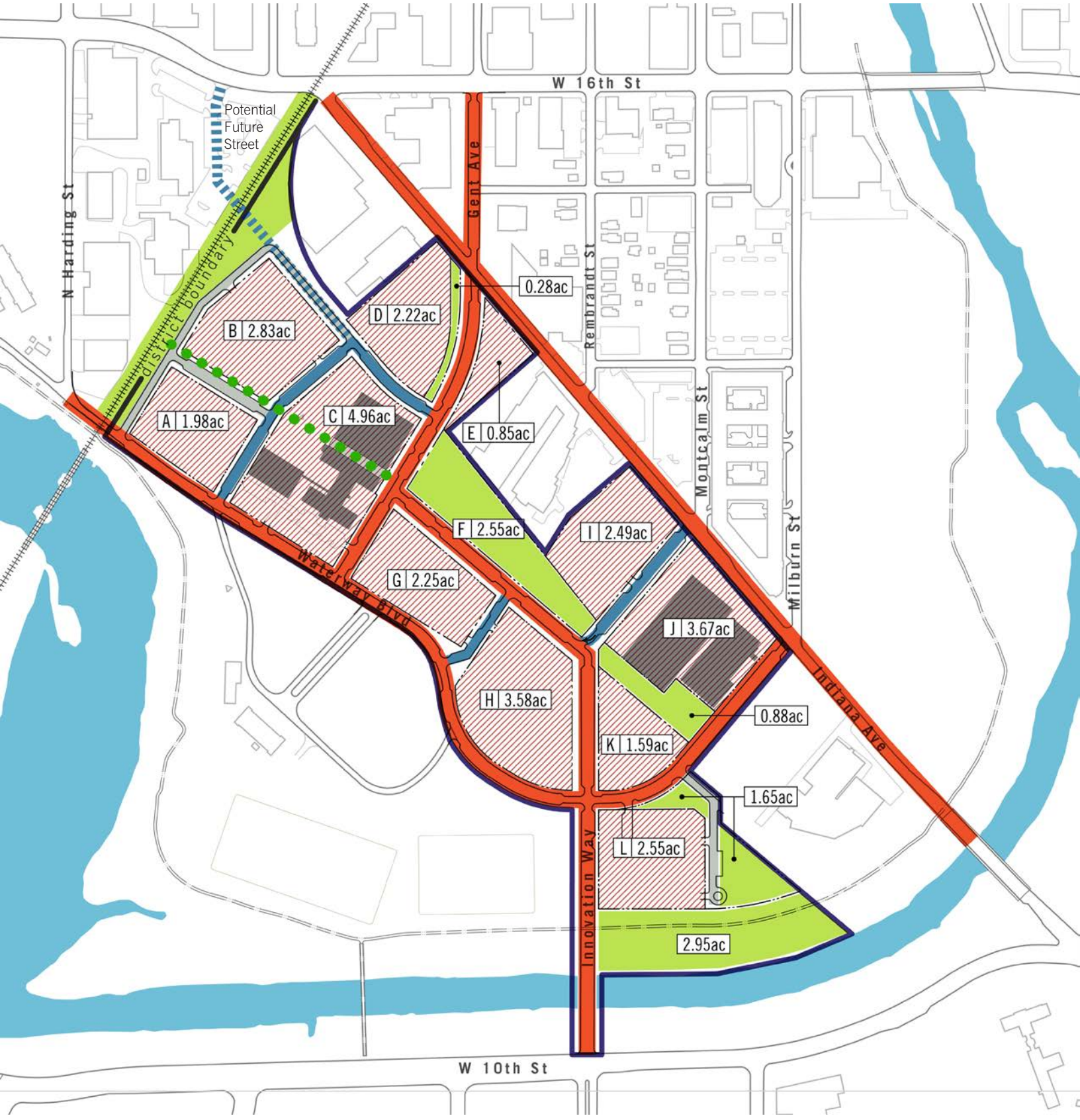
Plazas, parks, greenways, and pedestrian passages are another key element of the district framework. Along with streets, these spaces comprise the public realm necessary to facilitate the desired activity and interaction in the Innovation District. The main feature of the open space network is a large central park and plaza. Along the southern side of it, Innovation Way will be a curbless shared-surface roadway (also called a woonerf) that unifies the park space with the adjoining streetscape so that the street can be closed and utilized for special events. A series of greenways, plazas, and pedestrian ways connect the central park to Cook Regentec's campus and the Fall Creek levee trail to the southeast and to a future rail trail to the northwest.

Development Parcels

The new street and open space network create the development blocks that will populate the district. Development parcels range in dimension and area to allow for a variety in development potential and flexibility in proposed uses and density. 16TCC can release these in whole or in part to development partners to execute individual projects.

Design Framework Diagram

- Primary Streets
- Secondary Streets
- Access Drives
- Open Space
- Existing Buildings
- Developable Area
- Public Pedestrian Way (Interior Passage through CEG Garage)


W 16th St
Potential Future Street
N Harding St
District boundary
Gent Ave
Rembrandt St
Montcalm St
Milburn St
Indiana Ave
Waterway Blvd
Innovation Way
W 10th St
A 1.98ac
B 2.83ac
C 4.96ac
D 2.22ac
E 0.85ac
F 2.55ac
G 2.25ac
H 3.58ac
I 2.49ac
J 3.67ac
K 1.59ac
L 2.55ac
0.28ac
0.88ac
1.65ac
2.95ac

Connections & Mobility

Maximizing connectivity, access, and mobility is a key objective of the 16 Tech District Core Master Plan. An interconnected system of pedestrian walkways, publicly-accessible interior connections, bikeways, paths, and alternative transportation amenities is layered onto the network of streets, sidewalks, and parks in order to enhance mobility to, from, and within the District Core. These safe, comfortable, and secure pathways will provide direct and convenient links within the district and also create a unique experience to those who live in, work in, and visit the district.

Pedestrian Network

All district streets and open spaces will include sidewalks and pathways but the Master Plan calls for a hierarchy within this pedestrian network. The primary pedestrian route through the district follows the main spine of the open space network, from Cook Regentec's property at the southeast, along the central green, and through the proposed interior walkway of the renovated CEG garage building at the northeast. Secondary pedestrian routes branch off of this primary route toward Indiana Avenue and toward adjacent trails and streets. New parks, plazas, and buildings will incorporate these desired pedestrian movements into their site plans. Exterior pathways should be enhanced and marked with lighting, signage, and incorporate protection from the elements with shade trees or canopy coverings.

Trails and Multi-Purpose Paths

From a sustainability and a human health and wellness standpoint, the Master Plan supports and promotes a robust system of jogging and biking trails at 16 Tech. Just as the Cultural Trail has been a major success in downtown Indianapolis, 16 Tech seeks to implement a similar multi-use path through the heart of the district along Innovation Way and Gent Avenue. The Cultural Trail should ultimately be extended along 10th Street to link up with it at the new bridge across Fall Creek. Additional trail opportunities include signed 1-mile and 2-mile district loops and a future rail-to-trail conversion of the railroad right-of-way along the northwest edge of the district, which would further integrate 16 Tech into the regional recreation network.

Alternative Transportation

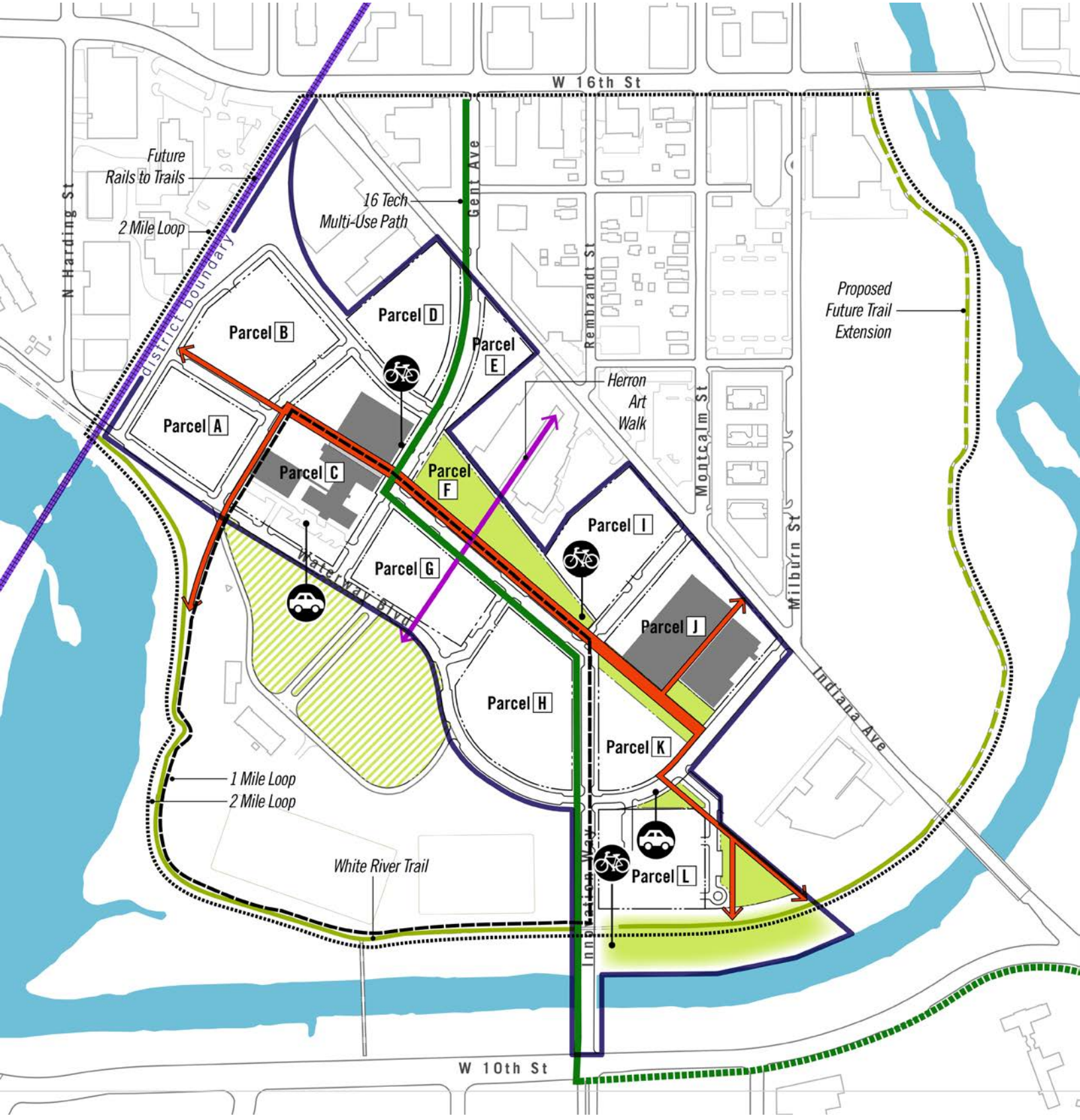
16 Tech should support partnerships for electric car-sharing services. Ideally, there will be a car-sharing station within a five-minute walk of all points of the District Core. To promote cycling and reduce auto-dependency, the city's bike share program should be expanded to include up to three new locations within the 16 Tech District Core. To encourage courteous and responsible dockless scooter use, striped scooter parking 'corrals' can be incorporated into streetscapes. Indiana Avenue is already served by an IndyGo bus line, though as the district grows, the possibility of adding a shuttle service that links 16 Tech to major anchors such as IUPUI, Downtown, and nearby hospitals should be explored.

Art Walk

Proximity to Herron Art School presents an exciting opportunity to incorporate art into the public realm and overall experience of place at 16 Tech. The school's alley and 'yard' is intended to tie into an 'Art Walk' that extends arts activities happening at the school, through the central park, and into the innovation-oriented buildings at Parcel G. Special displays, exhibitions, and events should be planned to encourage and celebrate the blending of art, design, technology, research, and innovation at 16 Tech. The large lawn in front of the CEG pumping station could become a site for larger scale public art or temporary installations.

Connections & Mobility Diagram

- Primary Pedestrian Route
- Secondary Pedestrian Route
- Cultural Trail Extension (Potential)
- 16 Tech Multi-Use Path
- 1 mi Loop
- 2 mi Loop
- Riverfront Bike Trail
- Proposed Rails-to-Trails
- Car Share Station (Potential)
- Bike Share Station (Potential)
- Proposed Art Walk
- CEG Pumphouse Front Yard: Public Art Opportunity


W 16th St
Future
Rails to Trails
2 Mile Loop
district boundary
N Harding St
16 Tech
Multi-Use Path
Gent Ave
Rembrandt St
Proposed
Future Trail
Extension
Parcel B
Parcel D
Parcel E
Parcel A
Parcel C
Parcel F
Herron
Art
Walk
Montcalm St
Milburn St
Parcel I
Parcel G
Waterway Blvd
Parcel J
Indiana Ave
Parcel H
Parcel K
1 Mile Loop
2 Mile Loop
White River Trail
Parcel L
W 10th St

SECTION 3.0: MASTER PLAN COMPONENTS

Building Uses

The Illustrative Master Plan was conceived with the arrangement of new buildings and mix of uses depicted in the building use diagram. Existing buildings within the District Core area are recommended for creative re-purposing as flexible co-working space, labs, maker space, art galleries, design studios, or raw start-up space. Activating uses and amenities such as a brewery, distillery, or food hall are also acceptable and encouraged. More specific design standards for new and existing buildings are provided in the 16 Tech Design Guidelines document.

General Principles

Proposed building uses are not rigidly ascribed to particular geographic locations. The Master Plan is flexible and future building footprints and uses can deviate from the Illustrative Master Plan and the building use diagram as long as the approach to new development follows several principles for achieving the intended urban, mixed-use environment:

- Street-level retail, restaurants, and active ground-floor uses, such as co-working spaces, meeting rooms, and lobbies, should line and activate the primary streets and public open spaces of the district.
- Existing buildings should be re-purposed to create unique spaces for innovation-oriented and activating uses whenever feasible.
- Individual buildings and blocks should be mixed-use, and no part of the district should become dominated by any single use.
- New buildings should typically be built up to or close to the sidewalk
- Buildings should create consistent street walls and enclose adjacent open spaces
- Buildings should orient towards and address the primary streets and open spaces (with main entries, prominent facades, special architectural treatment, etc.)

Innovation Space

16 Tech cannot be a successful innovation district without the office, lab, meeting, and flexible spaces where people work and collaborate. These should come in a variety of space types, sizes, and price points to support the different life cycle stages of companies. The plan supports a robust mix of both renovated and new buildings supporting this use.

Residential

To become a true community with evening and weekend vibrancy, 16 Tech needs to attract people to live in the district core. New residential development should provide rental housing options for different market segments and build up density with a mix of mid-rise apartments, though other residential building types can also be developed. As the market grows and matures, for-sale condos and taller buildings may become feasible.

Retail & Active Uses

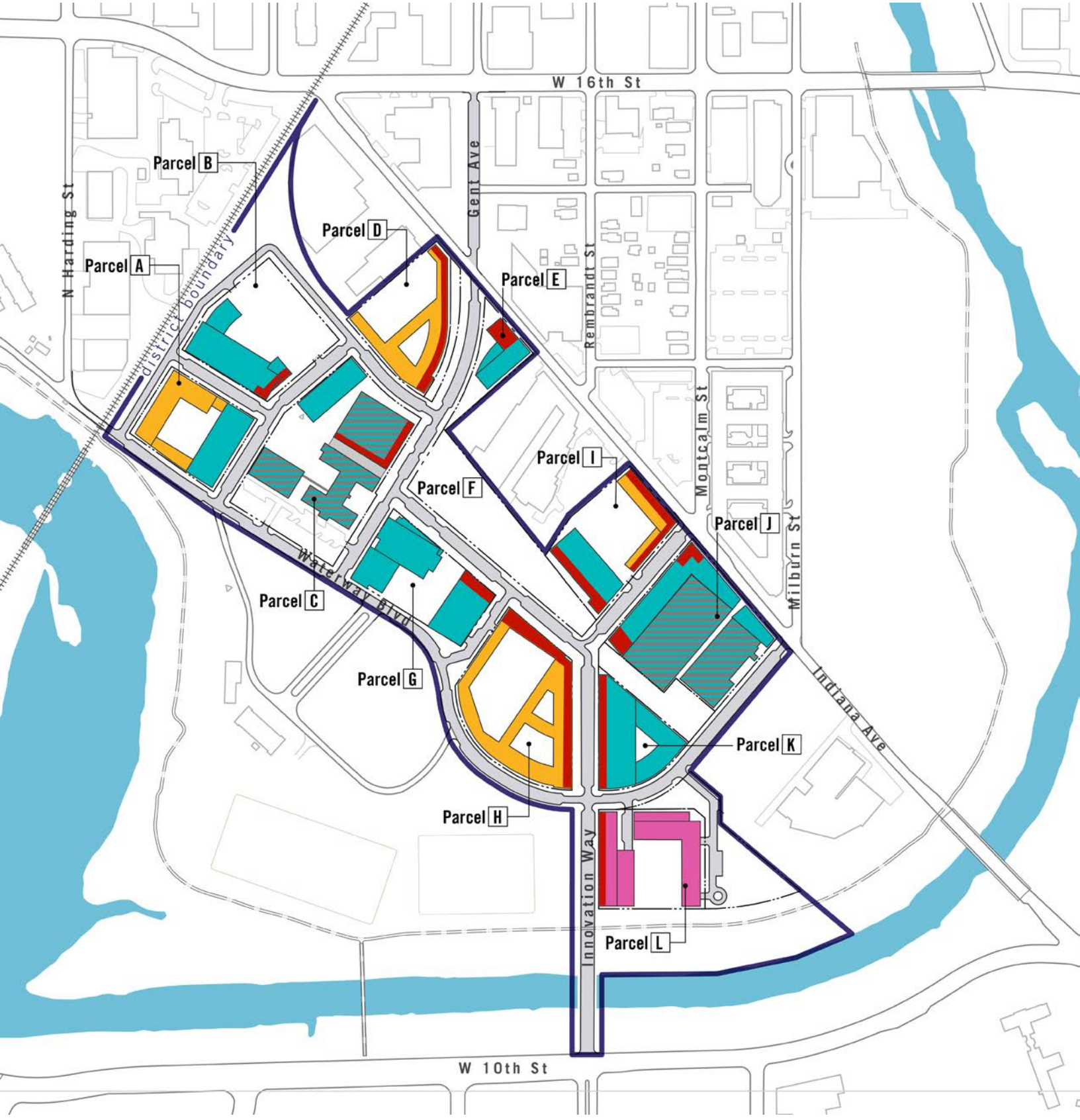
Innovation Way and Gent Avenue are the district's main street address, and this spine will define many visitors' experience of the district. Highly transparent ground floor uses that generate activity, engage sidewalks, and create a continuously interesting urban street experience are encouraged. These may include shops, cafes, restaurants, bars, co-working spaces, studios, galleries, demonstration labs, and interactive innovation exhibition spaces.

Hotel

A hotel with meeting and conference spaces would greatly benefit the innovation ecosystem at 16 Tech. A site along Fall Creek, midway between the District Core and the medical and academic campuses to the south, could be an ideal location.

Building Uses Diagram

- Existing Buildings: Adaptive Re-use & Innovation Space
- New Innovation Buildings: Flexible Research, Office, Lab, & Collaboration
- New Residential Buildings
- New Hotel/Conference Buildings
- Optimal Ground-Floor Retail & Active Uses


W 16th St
Parcel B
Parcel A
Parcel D
Parcel E
Parcel I
Parcel F
Parcel J
Parcel C
Parcel G
Parcel K
Parcel H
Parcel L
N Harding St
district boundary
Gent Ave
Rembrandt St
Montcalm St
Milburn St
Waterway Blvd
Indiana Ave
Innovation Way
W 10th St

Parking & Service

Parking and building service zones are important functions that, if not appropriately considered, can significantly and negatively impact the built environment. They must be functional, convenient, and accessible without compromising the intended district density, walkability, quality, and character. The 16 Tech Design Guidelines provide additional detailed design criteria for parking and service.

Parking Strategy

To achieve the development density and urban character envisioned, the 16 Tech District Core should adopt a district parking strategy that takes advantage of shared and mixed-use parking demand reductions. This strategy would seek to leverage differences in peak parking demands of various district uses (i.e. residential, office, etc.) throughout the day and week to provide adequate parking spaces for the district's period of peak demand. In general, parking for residential buildings should be provided on-site or within the block, while non-residential parking demand may be located on adjacent blocks within a reasonable five-minute walk.

In very early stages of district growth, surface parking lots should meet most or all parking needs, but as additional buildings are added (especially office) structured parking will quickly enter the equation. The first district parking garage should be located within Parcel B to accommodate early phase developments in Parcels C and G. It should be an efficient three-bay structure at four or five levels high with a minimum capacity of 800 cars and potential for expansion. Locations for future parking garages are indicated to the right. 16TCC should track district parking usage and monitor trends in demand as the landscape of mobility continues to evolve.

Parking is most successful in an urban context when it is sited within the interior of blocks and lined or wrapped by buildings. Underground parking and building-integrated parking are also good urban solutions, but these are expensive and are likely impractical at 16 Tech. Parking structures should not be exposed to primary street frontages but may line secondary streets and access drives. Temporary parking lots on future development sites are acceptable.

On-street parking is planned for all new streets within the District Core. Street parking tends to slow down traffic, creates a physical buffer between pedestrians and traffic, and appeals to ground-floor retailers and restaurants. Street parking should be limited to short-term to generate a turnover.

Service & Loading Zones

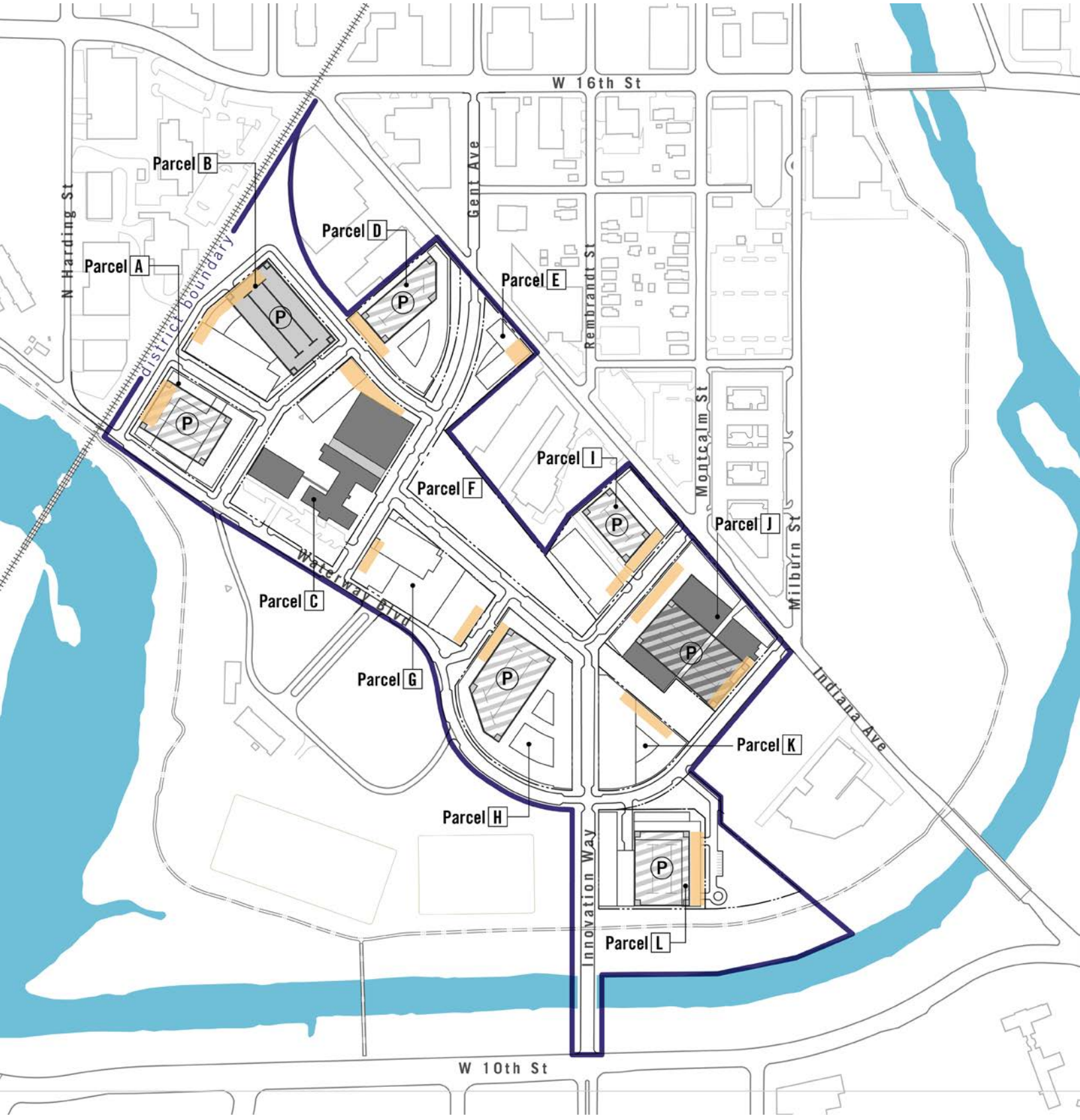
Building service and loading should be designed to minimize the negative impacts on pedestrian activity and the continuity of the streetscape. Service and loading may be located within the interior of development parcels, screened or concealed from public view by buildings or landscape, and accessed by way of an access drive or alley. Where interior service courts or alleys are not possible, building service bays may face out to secondary streets. These bays should be minimized in width and number and should have operable overhead doors to screen service functions from public view. The 16 Tech Design Guidelines provide detailed design criteria for various types of parking.

Curb Cuts

Vehicular movement into and out of parking and service areas should not diminish the pedestrian experience along the street. Hardscape materials should be continuous through any drive aisles to reinforce the primacy of the public realm and enhance the pedestrian crossing zone. Curb cuts should not be located on primary streets and public open spaces. Their locations should be appropriately coordinated with street conditions and amenities, such as on-street parking zones, planting areas, electric car share zones, lighting, and stormwater infrastructure.

Parking & Service Diagram

- Planned District Parking Garage
- Potential Future District Parking Garage (as required)
- Service Access Zone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Parcel B
Parcel C
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Parcel K
Parcel L
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AYERS
SAINT
GROSS