

NEOCITY MASTER PLAN



OSCEOLA COUNTY, FLORIDA
FRAMEWORK CONCEPT & VISION PLAN





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INTRODUCTION

The NeoCity is a 500-acre technology district inspired by an ethos of collaboration designed to transform the way we ideate, create, and innovate. Here burgeoning concepts will gestate into mature technologies, from smart sensors and photonics to software applications and process improvements in science, engineering, and technology, right down to the nanoscale. It is envisioned as an innovation epicenter and a source of high quality jobs and as a mixed-use research and technology destination of regional, state, national and global impact.

The NeoCity Master Plan project brings the master planning, design, economic development, and job creation efforts for Osceola County into sharp focus. It galvanizes planning efforts around 500 acres of County-owned land between Kissimmee and St. Cloud, on the edge of Lake Toho.

Perkins+Will's team has prepared a preliminary Framework Concept Plan for the site as part of a four phase process that will culminate in a master plan spring in 2017. This document provides a summary of the concept and the vision that produced it.

Envisioned as a global site for smart sensors and photonics research and development, NeoCity is anchored by BRIDG, a not-for-profit, industry-friendly consortium focused on manufacturing development of advanced technologies in smart sensors, imagers, advanced devices, and 2.5D/3D chip integration. BRIDG is located in a new state of the art facility, currently under construction within NeoCity.

Creating a mold-breaking 21st Century model for mixed-used, R&D public-private industry partnership developments is a high priority in preparing the comprehensive master plan for the continued development of the site. NeoCity is anticipated to be a leader in sustainable development, integrated into an increasingly interconnected network of growing population centers.

“We expect this to be a magnet for attracting new investment, creating high-wage jobs and spotlighting the groundbreaking work of UCF’s programs in photonics, optics and engineering.”

Viviana Janer, Chairwoman

Osceola County, FL Board of Commissioners





VISION

Through discussion with Osceola County stakeholders the consultant team generated an initial vision for the NeoCity Master Plan to guide the design process.

VISION: A global location for private, technology-based development in a high-quality, collaborative environment to support job creation.

NeoCity has the opportunity to break away from traditional research park development patterns by providing a unique place within Osceola County and Central Florida, with a walkable, urban framework that connects people back to the community and natural landscape around it while reinvigorating the job market within the region.

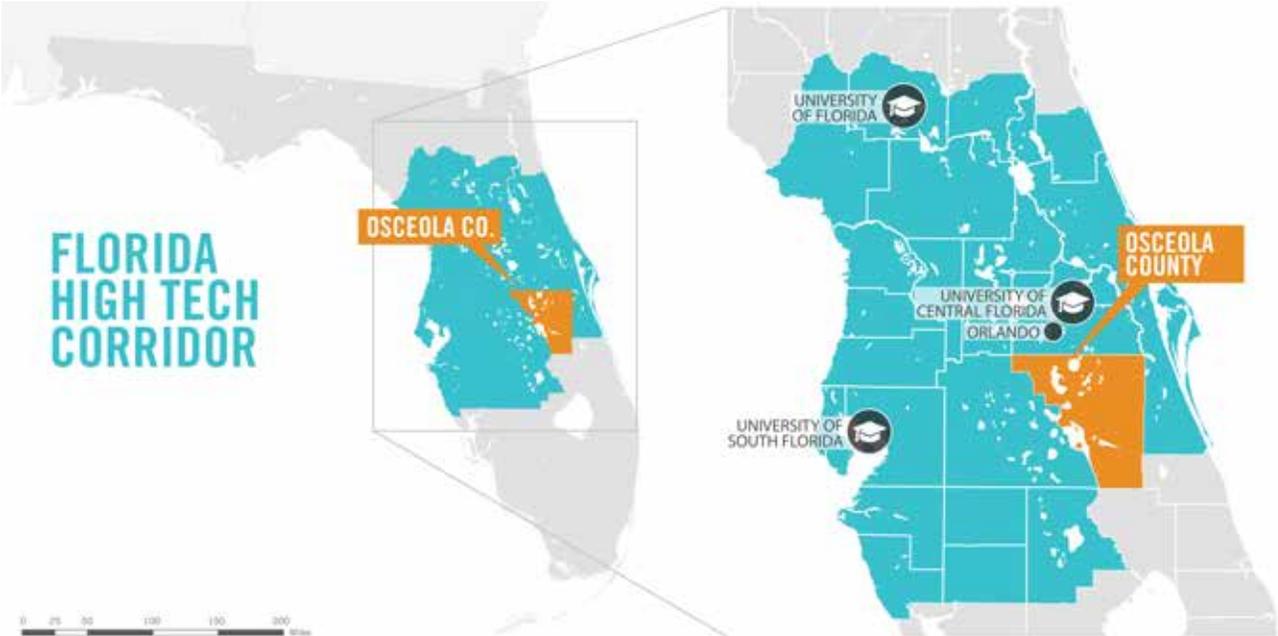
DESIGN MOTIVATION

The design of this Framework Concept Plan is underpinned by the motivation to create a dramatic shift in the quality and design of the built environment in Osceola County, embedding progressive urban design principles, policies, and practices in a development form tailored to cutting edge collaborative research, development, innovation, and commercialization.

ECONOMIC OPPORTUNITY

NeoCity will become the most significant and comprehensive global center for smart sensor, photonics, and nanotechnology research and development, big data/predictive analytics and workforce talent concentration. As the focal point for technology development for the State of Florida, NeoCity will catalyze job creation and talent development in Osceola County.

An integrated master planning process will allow the physical development and research commercialization potential of NeoCity to support each other. To this end, workshop discussion focused on critical-path issues that should be addressed in order to fully realize the economic opportunities that will follow from NeoCity's success in establishing national and international industry partnerships as anchor tenants. Factors in this discussion include workforce education and development, opportunities for related manufacturing businesses, environmental sustainability, quality of life, and place-making.



GLOBAL CONTEXT & LOCATION

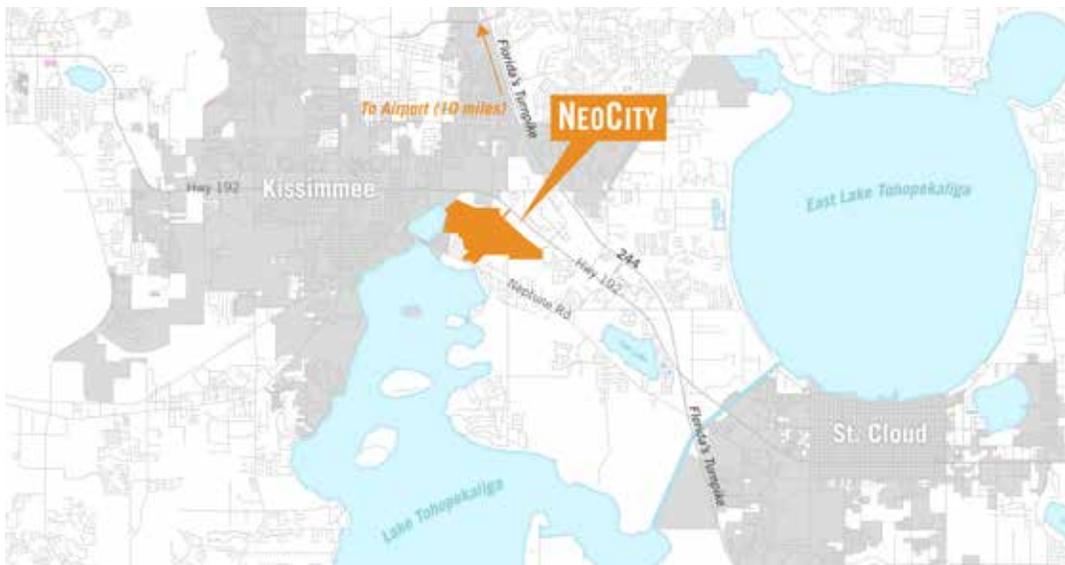
NeoCity competes in the global market of international advanced manufacturing and smart sensor technology and is located within the regional Florida High Tech Corridor. NeoCity is a premier 500-acre master planned campus that will serve as a global center of advanced research, pilot manufacturing, design, and commercialization of sensor related technologies from:

- Corporate Partners for Sensor R&D
- Collaboration of International University Research Centers
- Big Data & Predictive Analytics focused corporate partners
- DOD and DOE and Homeland Security partnerships
- Global Centers of Sensor Related Advanced Research & Development

Located in central Florida just south of Orlando, Osceola County has strategic highway connections to Downtown Orlando and the Orlando International Airport (just 20 minutes from the site), with passenger rail slated to connect to these destinations by 2020. Through its long range master plan, Osceola County has also identified land in strategic locations for flexible industrial manufacturing development.

“This project is about creating opportunity and jobs.”

Donald Fisher, County Manager, Osceola County, Florida



Site Location within Osceola County

INTEGRATED PLANNING

1 IMMERSE /

DIVING INTO A PROJECT, ITS PLACE + CULTURE.

INVESTIGATE THE CONTEXT + IDEAS IN A DATA DIVE

DEFINE THE PROJECT + THE VISION FOR THE FUTURE

COLLABORATIVE WORKSHOP + INTENSIVE PROJECT KICK-OFF

2 INTEGRATE /

REFINING THE GUIDING VISION + SET OF PRIORITIES.

REVIEW OPPORTUNITIES + EVALUATE DESIGN CONCEPTS

ADVANCE THE PREFERRED CONCEPT

REFINED THE PROJECT VISION + ECONOMIC STRATEGY FOR DEVELOPMENT

3 INNOVATE /

CREATING REALISTIC IDEAS + RECOMMENDATIONS.

GROUND BIG IDEAS IN REAL WORLD DETAIL

REFINE PLANNING STRATEGIES

CREATE THE FINAL MASTER PLAN

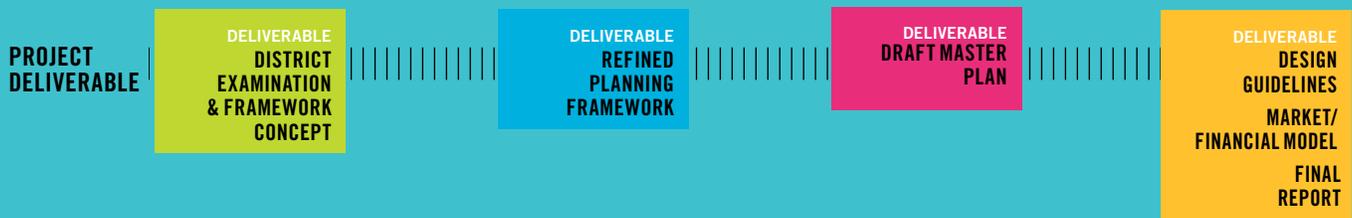
4 INITIATE /

DEVELOPING IMPLEMENTATION TOOLS + SPREADING THE WORD.

AGREE SUPPORTING DESIGN GUIDELINES

BUILD A FINANCIAL IMPLEMENTATION PLAN

CREATE MARKET + FINANCIAL MODEL



INTENSIVE WORKSHOPS

The planning process thus far (Phase 3) has been a highly-orchestrated and intensive set of work sessions, which demonstrate Osceola County's commitment to advance the NeoCity project. The workshops included:

70+ individual meetings

25+ County staff

30+ participants external to Osceola County

PARTICIPATING ENTITIES

Toho Water Authority; Kissimmee Utility Authority; FDOT Consultants; City of Kissimmee; Orlando EDC; Greater Orlando Partnership for Economic Prosperity; School District Osceola County; Valencia College; University Central Florida; Florida Economic Development Organization; Experience Kissimmee; Metro Orlando EDC; High Tech Corridor; Greater Osceola Partnership for Economic Development

COUNTY COMMISSIONERS:

Commissioner Grieb; Commissioner Hawkins; Commissioner Arrington; Former Commissioner Harford.

BUSINESSES

PhotonX; Management Insights; BRIDG (formerly iCAMR); Schoolfield Properties; RJ Widden; IMEC; Champions Gate

COUNTY DEPARTMENTS

Public Lands, Transportation, Planning, Community Development, Public Works, Development Review, Natural Resources, Public Relations, Board of County Commissioners

NEOCITY DRIVING FORCES:

WORKFORCE + ARCHITECTURE + CONNECTIONS + PUBLIC REALM + WAYFINDING +
ACCESSIBILITY + PROGRAMMED EVENTS + ACTIVITIES + SENSE OF PLACE + AMENITIES +
URBAN FORM + BUILDING HEIGHTS + CULTURE + EDUCATION + DENSITY + BRANDING +
ENCLOSURE + CHARACTER + MARKETING + WATER FEATURES + RESOURCE MANAGEMENT +
INDUSTRY MIX + COLLABORATION + PARTNERSHIP + RESILIENCY + LANDSCAPE + TALENT +
STORM WATER + OUTDOOR SPACES + SUSTAINABILITY

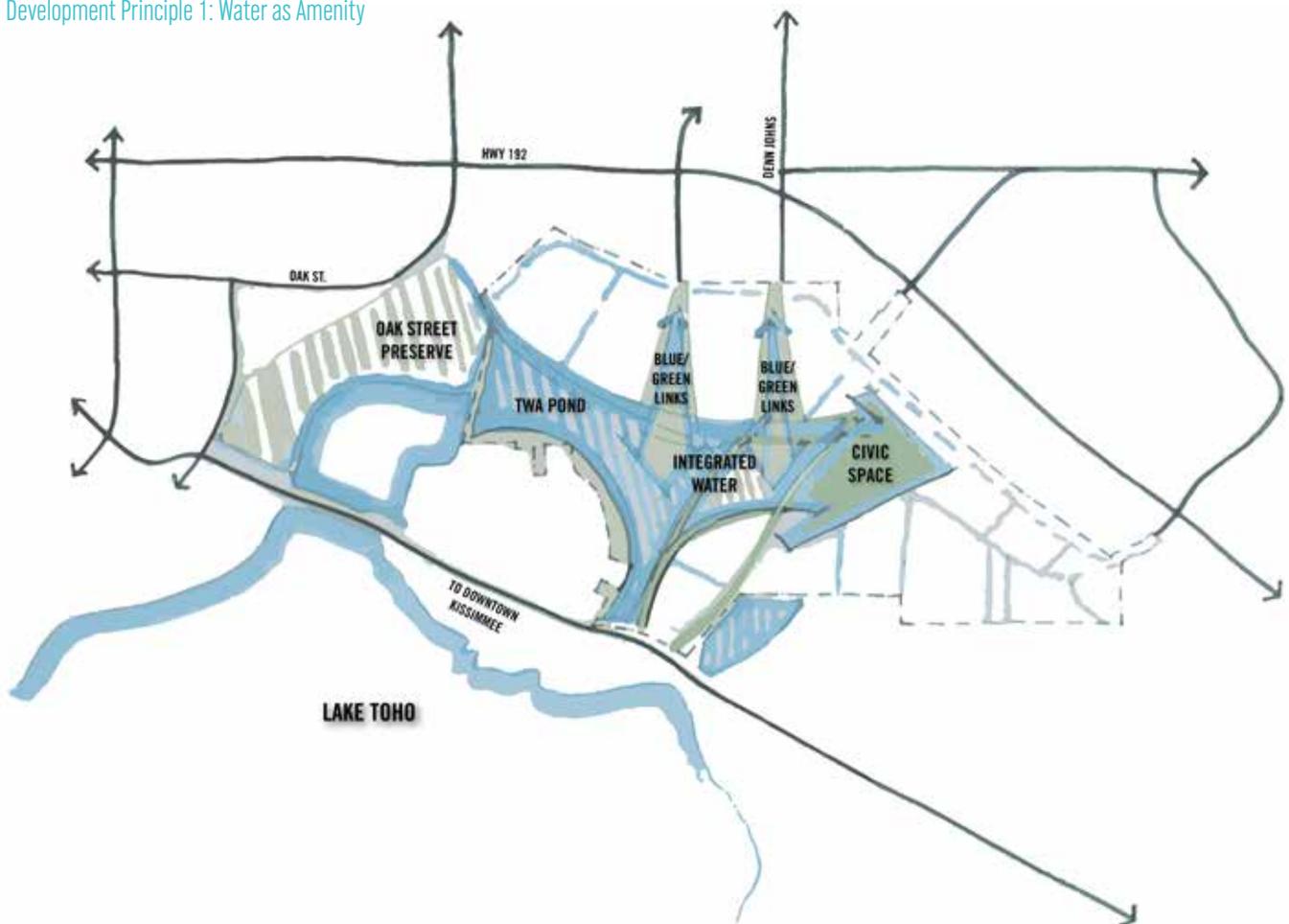


DEVELOPMENT PRINCIPLES

The Immerse Workshop established Framework Principles which are tailored to the site. They create a series of criteria for the further development of the master plan and start to embed NeoCity with a unique design approach and aesthetic.

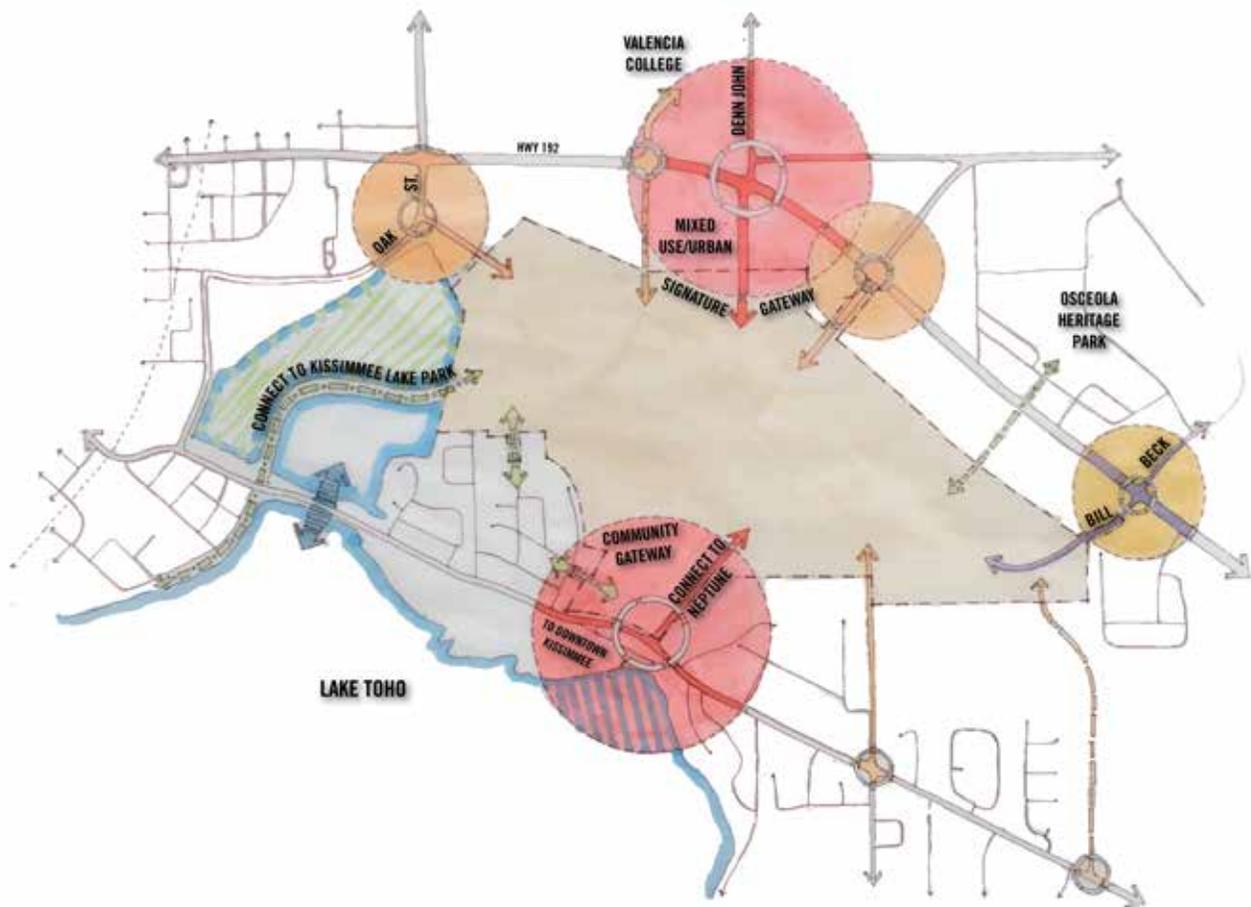
1. Water as Amenity: At the headwaters of the Everglades, NeoCity is in a strategically important location to be able to combine regional water collection with sustainable environmental strategies. This opportunity is realized in the creation of a large body of water on the site which can provide space for recreation, create learning opportunities, and support native wildlife and wetland animals. This design principle seeks to ensure that not only does water perform functional requirements on the site, but that it is drawn into the site through a wide variety of low impact design features, expanding the areas of the site which benefit from direct relationship to water.

Development Principle 1: Water as Amenity



2. Entrances + Gateways: From the outset of this project, opportunities to connect and integrate NeoCity into the surrounding development have been identified at every scale, from new passenger rail and toll roads, to neighborhood pedestrian and bike trail networks. Critical to this connectivity are the points at which the site meets surrounding development: its gateways. This design principle seeks to identify a hierarchy of entrances and gateways to the site, imbuing each with an appropriate and distinctive character. This will create a sense of arrival for future visitors, employees, and residents coming to NeoCity whether driving from the airport, walking from downtown, or riding on a regional bike trail.

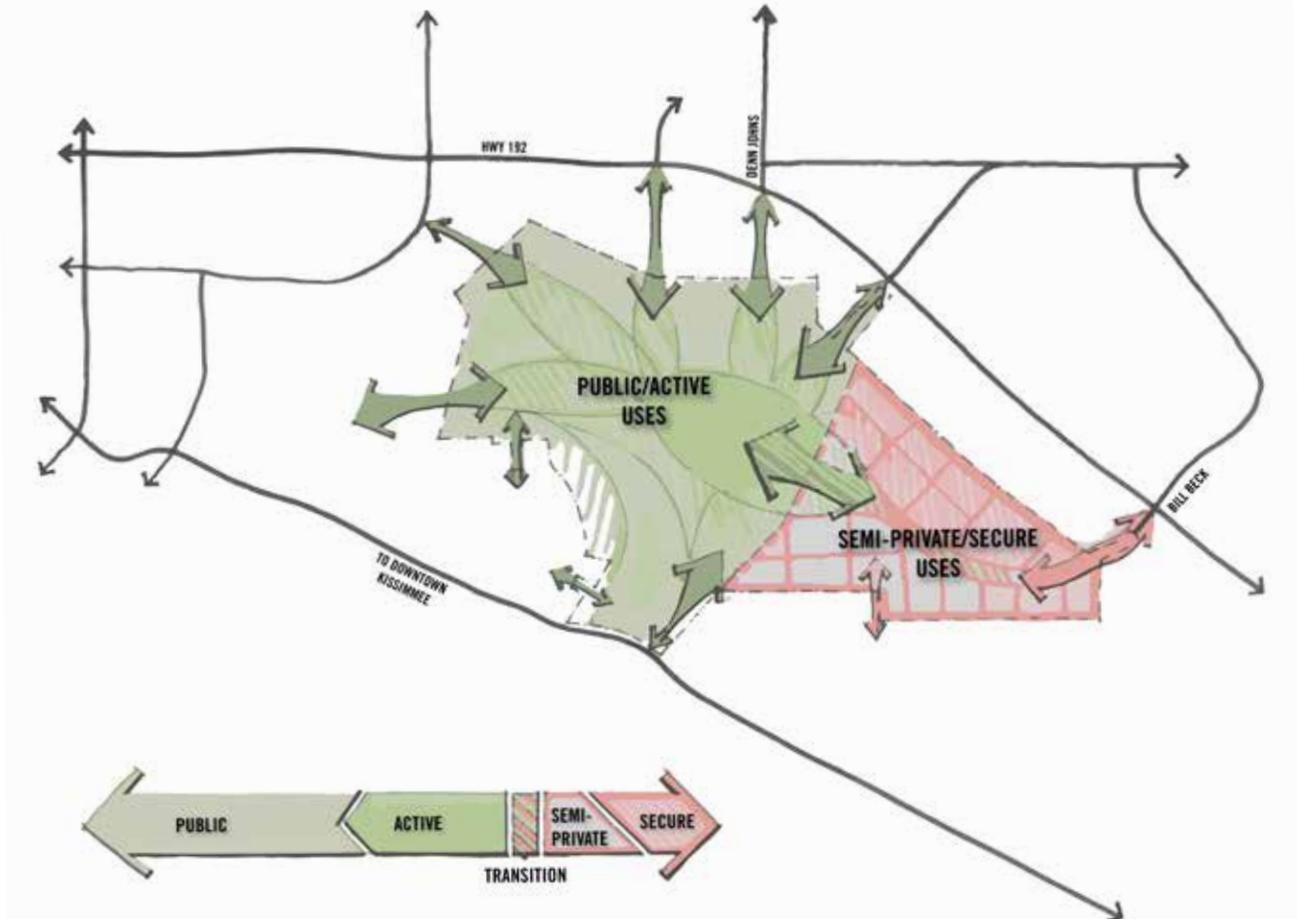
Development Principle 2: Gateway Hierarchy



DEVELOPMENT PRINCIPLES CONTINUED

3. **Matrix of Uses:** Determining the future potential of a former agriculture site in an environment of competing development interests is a process which requires careful management, particularly at the outset of a master plan where investment interest may outstrip available land. This development principle establishes a spectrum or matrix of appropriate uses across the site ranging from publicly active to private and secure. These uses could include high tech research facilities with multi-million dollar tools to busy cafés overlooking the water. A core area of the site is identified for highly public and active spaces with a gradual gradient transitioning to more secure and sensitive uses at the eastern end of the site.

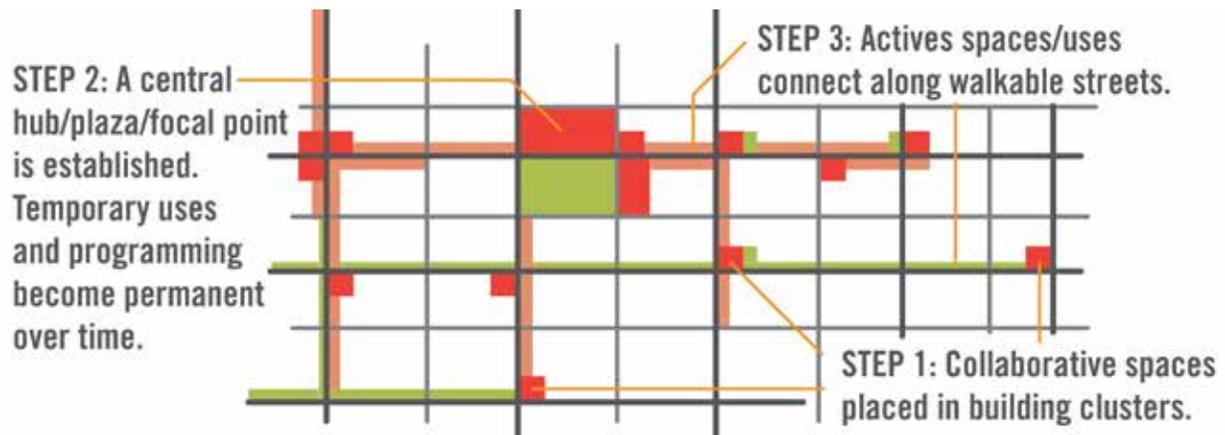
Development Principle 3: Matrix of Uses



4. **Connected nodes of activity:** Collaboration, integration, and the formation of accidental interaction are becoming well-recognized as key components in creating a vibrant culture within innovation and technology focused developments. Creating spaces for people to bump into one another requires advance thought and consideration. The design team recognizes that this 'bump space' doesn't occur accidentally and that careful positioning of active uses, choreography of streets, desire lines, and the size and shape of open space all have their part to play. At a high level, this development principle establishes the notion of nodes of activity which should be formed through the development. In the early

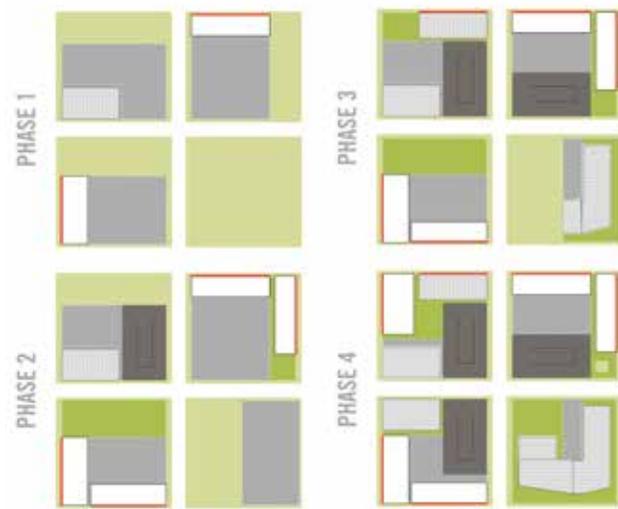
phases, it will be important to identify collaboration space to serve the first building. The center of the site should act as a focus for collaboration and will act as a hub for the high profile activities of NeoCity. Beyond this, as the development expands, other individual nodes of activity will need to be developed within walking catchments of approximately a quarter of a mile. This network may, over time, expand connections between nodes to create more continuous active frontages along streets with high levels of pedestrian and bike activity.

Development Principle 4: Connected Nodes



DEVELOPMENT PRINCIPLES CONTINUED

Development Principle 5: Evolving Block Density



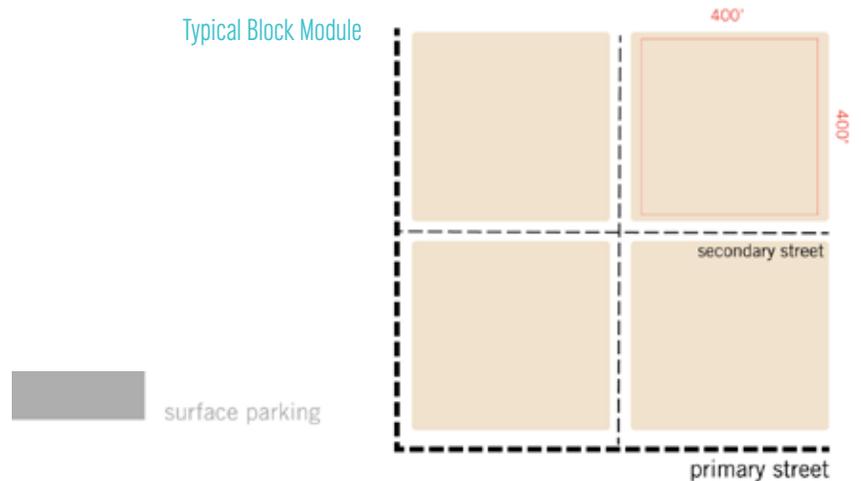
General Block Phasing Logic: Increase in building density over time to a maximum of 85% impermeable surface. Maximum of one secondary street can be closed as part of a combined development parcel.



5. Evolving block density: The implementation of a master plan for a complex high-tech manufacturing and research center does not happen overnight. The goal is to promote responsible density and avoid sprawl. A careful balance needs to be struck between reserving land for future expansion of facilities and the negative outcome of dispersed development where opportunities for collaboration and interaction are reduced.

This development principle establishes a general block size within NeoCity of approximately 400' by 400'. This will create a walkable grid on which to base building positions. Four of these blocks can be clustered to create a quad block surrounded by primary streets while internal cross streets create a secondary grid. Active frontages and collaboration spaces should be focused along the primary streets, with secondary streets more appropriate for lower profile uses, supporting activities, and parking. This principle assumes that if a use exists which is not appropriate for a primary street it should be located toward the center of a quad, allowing sufficient space on the block for future frontage buildings to come forward. Similarly, parking should be located toward the center of the block set back from the frontage, making it clear that there is an expectation for future development to line primary streets.

Typical Block Module



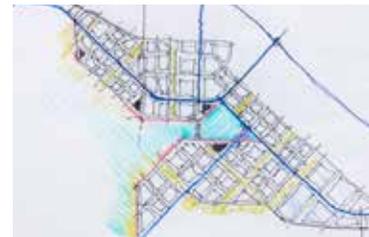
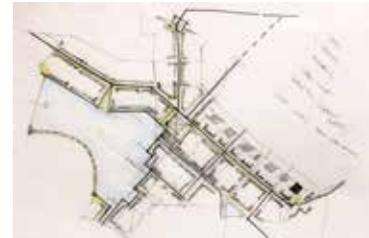
FRAMEWORK CONCEPT

EFFICIENT, EFFECTIVE DESIGN EVOLUTION

From day one, the design team moved quickly and efficiently, collaborating on sketch layouts and facilitating decisions from effective and decisive Osceola County representatives. Input from multiple stakeholder interviews conducted over the course of the Immerse charrette were infused into the designs. These initial sketches allowed for creativity to lead the discussion and for the planning team and County representatives to collaborate on design development.

On day two of the Immerse charrette these initial sketches were validated and refined to test various scenarios for circulation, activity nodes, and gateways. Dozens of sketches and iterations were discussed with the County leadership, and also in an open house session where County staff were encouraged to raise issues and enter into lively debate to contribute local and institutional knowledge into the design team's thinking.

Two distinctive sketch layout options were discussed at length with County leadership. The discussion was anchored by the goal of creating a bold design motif for NeoCity, a concept which the County hopes will appeal to a new generation of researchers and professionals. Both of the sketch layouts possessed the potential to successfully achieve the development principles established at the outset, as each layout had been consistently evaluated against them through the process. The preferred layout has been advanced through the design process to create the draft Framework Concept, and will continue to be refined to the completion of the Master Plan.



Workshop Sketches the Framework Concept Plan

Framework Concept Plan





Illustrative Framework Concept Plan

FRAMEWORK CONCEPT PLAN

The culmination of the process so far is a draft Framework Concept Plan for the site. The design team has carefully reviewed the comments from all of the workshop meetings, incorporated strategic direction provided by leadership, and taken technical advice from County staff under advisement. The outcome is a hybrid of prior concepts and sketches and representation of the product of the collaborative process.

The Framework Concept Plan is intended as an interim step towards a full master plan. It is a gathering of ideas over a period which will be refined, vetted, evaluated and adjusted to the completion of the master plan. The plan establishes high level guidelines for circulation, density, character, street sections, gateways, and public realm. Initial sustainable infrastructure concepts and landscape strategies are provided as high level guidelines for future development.

KEY FEATURES

- A signature bridge forms the focal point and heart of NeoCity. This location may serve as the start point for future recreational events and the gathering spot for tech launches. It is adjacent to a civic plaza and private entertainment spaces, outdoor patios and verandas. This space creates the buzz that people talk about, a place to see and be seen. It is the natural location for arranging to meet a new client, a colleague, or friends. It is the space that everyone can direct you to with ease and familiarity.
- The boardwalk boulevard is at the center of a network of a community-wide trails, which connect the site to residential and commercial uses, as well as local and regional public transit.
- The pond concept creates an extended area of waterfront properties. It uses water as an integrated amenity for the site and select buildings. Water is tied to signature buildings, inspiring architecture, and interactive public art.
- Across NeoCity, the creation of a wide variety of public spaces for incidental meeting and collaboration are created. They embrace native landscape and water. Every building has the potential for a view of a greenway, a tree-lined street, open space, or an expanse of water. The site will also be functional, incorporating water reclamation, shade and cooling, and enhancements while serving as a key component in the regional water management system.
- The concept plan establishes high profile gateway entrances on Highway 192, linking to the community. Development that supports walkable interactions will be created through careful arrangement of blocks that form continuous street frontages. Increased activity at the heart of the site will become more subdued across the site to create balance and compatibility with neighboring residential developments, while incorporating a clear hierarchy of gateways and entrances to the NeoCity.





Illustrative Render from Central Public Space

CONCEPT PLAN : OVERVIEW

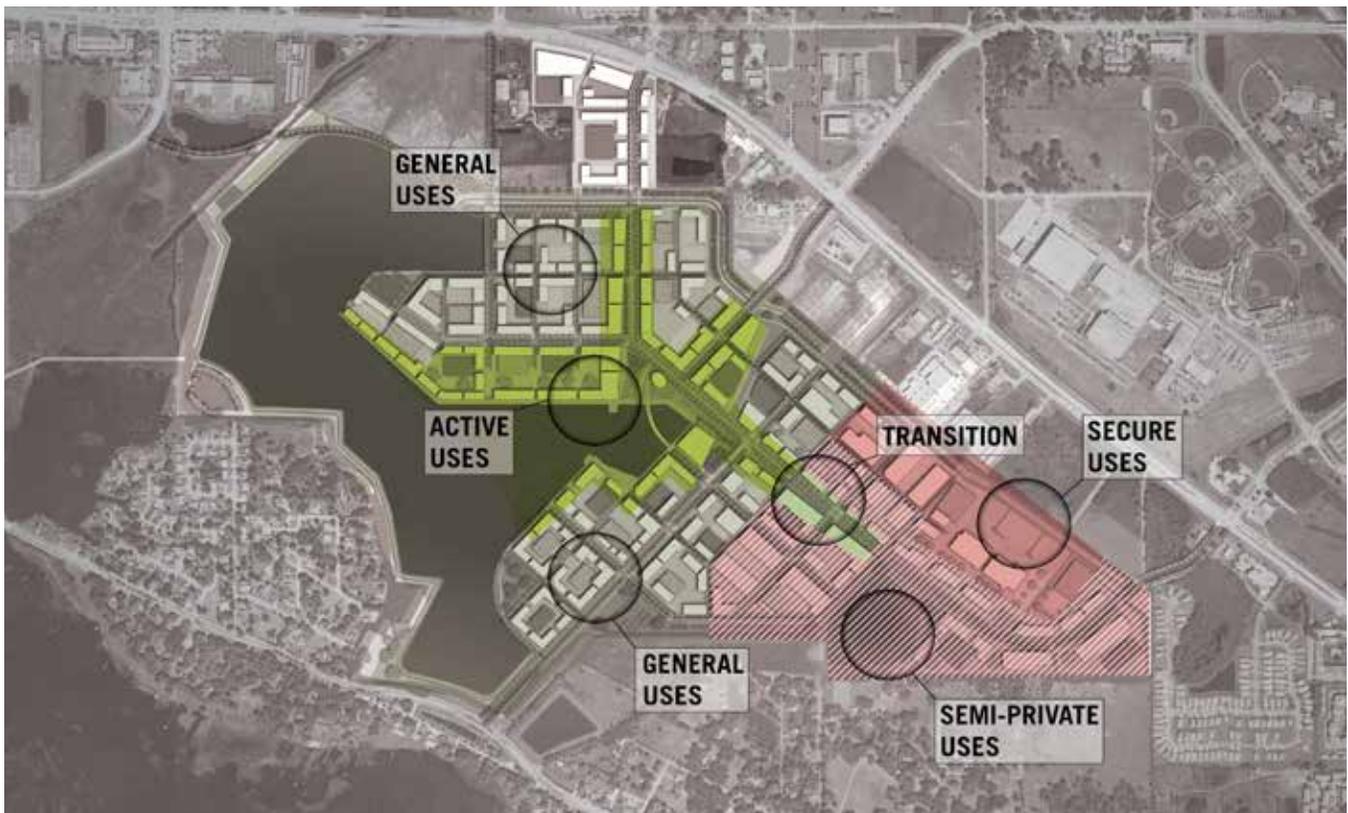
CHARACTER AREAS

Development Principle 4 identifies that a matrix of uses and activity types should be created across the site in order to support the potential needs of a wide variety of uses from research and office to potential mixed-use, multi-family residential. This concept has been embraced by the Framework Concept Plan through the loose creation of neighborhoods. These character neighborhoods will be developed further through the master planning process but their true character will emerge organically as development occurs across the site.

The character of the NeoCity will have international appeal and support global interest in the smart sensor research and technology industry.

DEVELOPMENT SCALE + DENSITY

Development density should seek to create walkable, collaborative, and interactive forms of development. The framework concept seeks to achieve effective and efficient use of land. While it is not possible to establish the exact development density at this stage of master planning, it can be clearly demonstrated that dispersed, low-density development will not support the level of activity necessary to inspire incidental collaboration and networking. These interactions require a more urban scale of built form. Therefore an assumption of building height of between 3-6 floors for primary structures is recommended. Taller buildings should be focused around activity nodes or along primary streets to reinforce the underlying structure of the site.



Framework Use Matrix

CIRCULATION

The circulation structure for the plan begins with the identification of the key gateways in to the site. The roadway framework embodies a 'segmented main street' allowing a clear focus of activity and movements that connect the major portals to the site. This segmented approach discourages the use of the primary roadway network as a cut-through route or high-speed shortcut to downtown Kissimmee. This configuration supports the intention of creating a place that people travel to as a destination, either for work or leisure. The street grid provides a robust network of primary routes and secondary streets which support a typical block size of approximately 400' by 400' allowing significant flexibility in development form.

The NeoCity Framework Concept Plan includes many opportunities for multi-modal transportation, connectivity, internal and external access, mobility, and improved walkability. While the site is accessed through key vehicular gateways, the Framework Concept Plan incorporates a myriad of sidewalks, bike paths and trails that provide bicycle and pedestrian connectivity to open space, development zones, surrounding neighborhoods and downtown Kissimmee.



Framework Trail Network

STREET HIERARCHY

A preliminary street hierarchy for the Framework Concept Plan seeks to create:

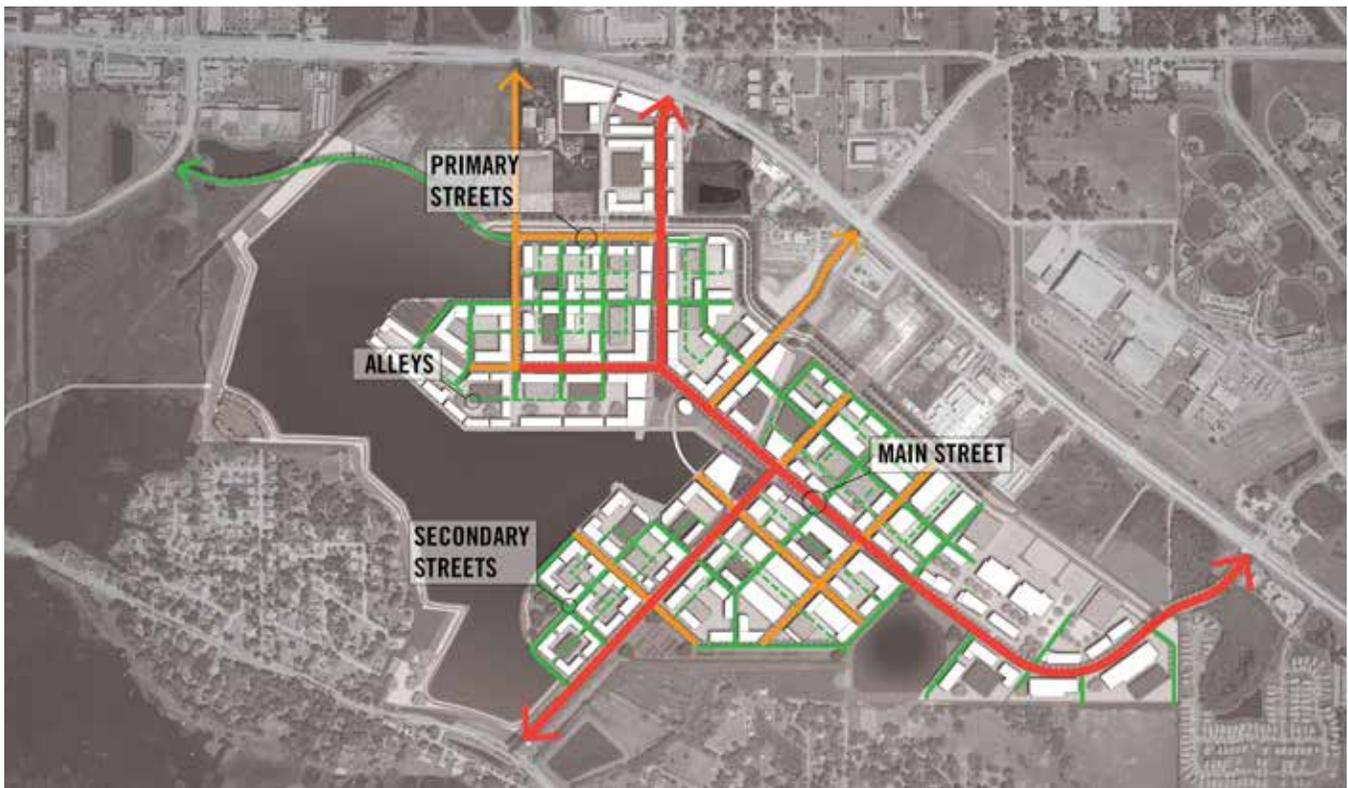
- **Primary Streets:** formal landscape infrastructure with 100'-110' right of way, sufficient to accommodate at a minimum, 6-8' sidewalks, 5' bike lanes, and transit stops.
- Within the primary street network the Framework Concept Plan also identifies a segmented 'main street' which connects east to west through the site. This street is notionally broken into three sections with an eastern green promenade, an active central section, and a western boulevard. Details of these sections will be refined through the master planning process.
- **Collaborative Streets:** Narrower pedestrian and bike priority streets with swales and minimal markings: 50' right of way allowing two-way traffic and shared lanes.
- **Service Alley:** At this Framework Concept scale there is an assumption that servicing will take place for some of the blocks through the use of alleys forming a sub-grid to the street structure.

OPEN SPACES

Development Principle 4 sets the expectation that there will be a network of activity nodes within NeoCity. Associated with these activity nodes there is potential for open spaces to support outdoor collaboration or meeting spaces. The Framework Concept Plan provides a multitude of small scale spaces and eddies from the flow of pedestrians where informal meetings can take place. These spaces will be designed to respond to the future buildings around them but will share common features of shade structures and seating which facilitate their informal use.

A larger more intensely used space will be associated with the Central Plaza zone at the water's edge. This central open space is intended to provide a focus for the site, but also to act as an amenity for the Osceola County community at large.

Street Framework



CONCEPT PLAN : DETAIL

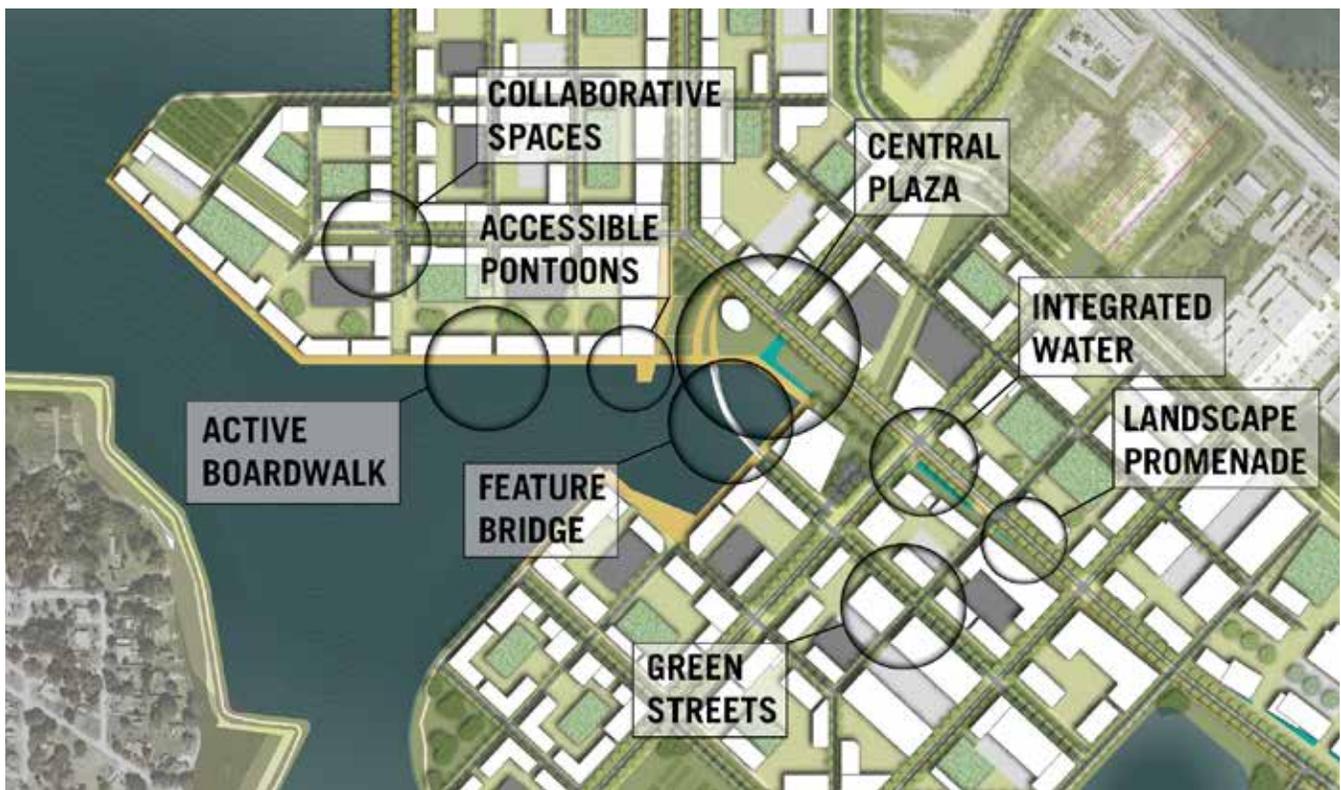
PUBLIC REALM

The quality and feel of the public realm is a significant component of the spirit and character embodied in the NeoCity Framework Concept Plan. Even at the early concept stage, a strong focus has been the creation of a highly walkable and bikeable development.

This means clear consideration for bicycle parking stations, for integrated benches and coordinated trash cans, drinking-water fountains, shade structures, bus stops, and curb cuts. These ideas will be further developed and evaluated through the continuation of the master planning process to challenge and inspire the maximum degree of multi-modal access to and from NeoCity.

As the plan is further developed, thoughtful integration of design concepts should continue to encourage a maximum degree of multi-modal access that promotes and protects the public realm. This should include bus stops, shade structures, bicycle parking, curb cuts, drinking fountains, benches, lighting, signage, trash/recycling receptacles, etc.

Illustrative Framework Concept Plan: Central Public Space



SENSOR BUILDING SITE

Due to open in 2017, the BRIDG facility has lit the fuse of the NeoCity development. When built, this anchor of the development will be one of three waffle slabs of its type in the world, allowing for extraordinary flexibility in the enhanced design and manufacturing of smart sensor technology. However, the building was conceived prior to a complete master plan for site. The County recognized this as an opportunity and enlisted the design team to approach this building in a greater level of detail, acknowledge its high profile, and weave it into the future master plan layout. Given this consideration, the concept plan provides recommendations to consider a phased development approach, which over time, more consistently integrates with the larger NeoCity implementation. Phase one includes the BRIDG sensor building and supporting office space.



Phase 1: BRIDG sensory building facility & Office Buildings 1 & 2



Phase 2: Second Sensor Building and associated office



Phase 3: Structured parking and additional office space



Phase 4: Full build out & structured parking and additional office space

INTEGRATION WITH CONTEXT

Without attempting to dictate the nature of development on private land, a coordinated approach to adjacent land parcels could be highly beneficial to the County and neighboring private land owners. Complementary uses have been broadly discussed along the following lines:

- Highway 192 frontage south: Gateways to the NeoCity site may include Class A office space, business incubator space, boutique hotel or residential suites, executive multi-family housing, etc.
- Highway 192 frontage north: Land within the Osceola Heritage Park may include hospitality, event related development, restaurant, retail, and other amenities that support visitors to NeoCity and to Osceola County.

Guidelines for Development

NeoCity seeks to employ a pattern of development not typically associated with research parks of the recent past. Instead of the low-density, suburban-style, disconnected model that often comes to mind, NeoCity is envisioned as a compact, lively, walkable urban district, with a public realm that encourages interaction and collaboration among users and visitors alike. The development will incorporate distinctive landscape elements and water features that function as vibrant gathering places and provide sustainable infrastructure solutions while creating connections back to the community.

NeoCity in context with Downtown Kissimmee and Osceola Heritage Park



AREAS TO EXPLORE

STRONG FRAMEWORK FOR RAPID LAUNCH OF SITE

- Provide “ready-to go space” for first-in tenants and early prospects to whom the site will be marketed.
- Be prepared to expand existing marketing and tenant / partner recruitment efforts.
- Establish criteria for tenant selection that maximize potential for collaboration and synergy.
- Leverage available space by attracting the most appropriate core partners.
- Develop solutions to near-term hospitality or short-term term housing needs of first tenants.
- “Package” first phase real estate program to maximize opportunities for P3 development solutions.
- Identify approach to pricing land and cost-sharing for infrastructure and site improvements.
- Establish a clear, transparent and flexible RFQ / RFP process to maximize engagement of private sector developers.
- Identify financing sources and options that promote P3 solutions.

TALENT DEVELOPMENT

- Ramp up to meet near-term workforce requirements of early-in tenants.
- Capacity-building with regional university, community college and corporate partners to ensure long-term pipeline of talent at all levels.

RESEARCH COMMERCIALIZATION & SPIN-OUTS

- Integrate existing regional incubator service-delivery capabilities into plans for NeoCity.
- Work with industry and academic partners to identify additional, more specialized resources needed to promote commercialization for NeoCity’s targeted industries.
- Develop “Innovation Center” space where commercialization activities can take place outside of major tenant facilities.
- Public-Private Partnerships (P3) with Real Estate Development Community.
- Leverage initial public sector investment in NeoCity by engaging the private sector in financing further development of site and facilities.

ORGANIZATIONAL DEVELOPMENT PRIORITIES

- Consider governance structure and management capabilities needed to fulfill vision and partnership expectations, and address economic opportunities and implementation plan.
- Consider interim, near-term, and longer-term staffing requirements.
- Establish options for funding on-going operating costs.

DESIGN GUIDELINES

In order to achieve the desired character and form for NeoCity, a set of design guidelines will be used to inform and guide the development. The intent of these guidelines is to encourage a cohesive, vibrant, and efficient development pattern, which strives to create a sense of place beyond the individual building. Presently under development as a part of the master planning process, the design guidelines will cover elements related to overall site coverage and building heights, streetscape and public realm, building facades and setbacks, appropriate uses within the research park, and design & development review process. Ultimately, these guidelines will be translated into a zoning overlay and codified into ordinance by Osceola County.



PERKINS+WILL