



## Henrico County, Virginia

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GreenCity Partners, LLC





BEST Products Plaza

I-95

Parham Rd

BEST Products Plaza - Parham Road / I-95



# Table of Contents

<b>1 INTRODUCTION</b> .....	5	<b>16 USES &amp; PATTERN cont</b>	
<b>2 LOCATION MAP</b> .....	6	Commercial Office .....	65
<b>3 EXISTING CONDITIONS</b> .....	7	General Uses .....	65
<b>4 NATURAL RESOURCES</b> .....	9	BEST Products Building - History .....	67
<b>5 SUSTAINABILITY</b> .....	10	Living Building Challenge .....	71
Goals & Principles .....	11	BEST Products Building - Re-purpose .....	73
Application .....	12	Plans .....	74
Standards .....	13	Rooftop .....	76
Connection to Nature .....	14	Section .....	78
20-Minute Living .....	15	Renderings .....	80
Energy .....	16	Retail .....	83
Water .....	18	GreenCity Center .....	84
Mobility .....	19	Typical Storefront Section .....	85
Carbon .....	20	Hotel & Conference .....	87
Waste .....	21	Residential .....	89
<b>6 MASTER PLAN</b> .....	22	<b>17 PATTERN BOOK</b> .....	91
<b>7 PHASING &amp; SCHEDULE</b> .....	24	Residential .....	91
<b>8 BP PLAZA SITE TAKE-DOWN</b> .....	25	Multi-Family .....	91
<b>9 STREETS</b> .....	26	2 over 2 .....	93
Public / Private Street Plans .....	26	Townhomes .....	97
Street Sections .....	27	Villas .....	101
<b>10 RECREATION &amp; OPEN AREAS</b> .....	45	Single Family Detached .....	105
<b>11 LAND BAY TABLE</b> .....	46	<b>18 CONVERSION CHART</b> .....	109
<b>12 DEVELOPMENT SUMMARIES</b> .....	48	<b>19 SIGNAGE</b> .....	111
<b>13 PARKING</b> .....	52	Design Principles .....	111
<b>14 UTILITIES</b> .....	54	Wayfinding .....	113
Water .....	54	Retail .....	115
Sanitary Sewer .....	55	Placement .....	116
Storm Water .....	46	Sponsorship .....	121
<b>15 MINIMUM LOT WIDTHS &amp; SETBACKS</b> .....	59	<b>20 TRAFFIC IMPACT ANALYSIS</b> .....	122
<b>16 USES &amp; PATTERN</b> .....	63	<b>21 LEGAL DESCRIPTION &amp; SURVEYS</b> .....	124
Arena .....	63	<b>22 CONTACTS</b> .....	135







*This Master Plan was created to establish a development framework for both the public and private spaces to encourage and create an integrated community design. This Master Plan is a guideline to be used as an implementation tool for the character and vision for the development. Conceptual drawings and typical illustrations are used to depict GreenCity's scope, scale and character, and used only to provide comparable types of development patterns anticipated. Minimum standards and requirements that are specifically noted shall be subject to final detailed design and engineering required for the ultimate development of the project.*



GreenCity is planned as an 'eco-district', designed to the highest standards of sustainability and resiliency. It is a non-traditional development model that envisions a next-generation commercial, entertainment and residential community for the Richmond metro region.

The plan borrows from the region's rural roots and existing forest features. The GreenCity plan proposes building within a landscape-centric model which is itself the central theme.

The regulatory guidelines related to protecting the region's Chesapeake Bay streambeds and wetlands are not just preserved here, but embraced as assets. GreenCity will utilize these natural features as organizing elements for the plan and to create a variety of active public open spaces and programs around the natural environment preserved and incorporated.

A new 40-acre, publicly-accessible park system will feature a 1.5 mile long linear 'Forest Walk' will form the backbone of the open space plan.

Nature trails, bikeways and integrated landscape nodes - will connect the living community with the work community and will be designed for residents and workers to easily access and explore.

## Mixed-Use & Market-Driven

The architecture and supporting street grid is designed to shape an inviting public realm – sidewalks, active plazas, and more intimate pocket parks. The building facades that define the public spaces will form GreenCity's Village Center featuring more dense residential uses above retail, and a variety of street types.

While visionary and transformative in its mission, the plan is also pragmatic and market-driven, as well as resilient and adaptive. The street and block plan is flexible enough to accommodate varying land uses and respond to ever-changing economic forces, styles, and uses.

Regularized block dimensions found in the Village Center core allow hotel, residential or office uses to be constructed on any parcel. Parking is designed to be shared as part of a larger managed parking regime.

The market-responsive ground level retail plan follows rules that have proven successful. The retail street is a comfortable 5-minute walk from one end to the other. Streets are narrow for access and visibility of retail on both sides, with short blocks providing multiple means of entrance and egress.

## 20-Minute Living

The diverse mix of uses, residential, retail, office and work environments, retail and hospitality provide the opportunity for a '20-minute' lifestyle. GreenCity will be a place where one can walk or ride to desired destinations in less time and in more engaging ways.

The planned urban/nature environment fosters opportunities for new economic development to greener industries and businesses who have, themselves, pledged to meet high sustainability goals in energy, water, carbon and waste as well as commitments to diverse social equity. GreenCity is where resident and business interests can work together to cultivate common interests in living and working in a community that contributes, in its way, to a better planet.

The GreenCity Plan incorporates the BEST aspects of urban life through well-connected walkable streets. The mix of uses and building programs offers a balance of live, work, shop and play opportunities. It is a development plan that encourages people to 'live local' and walk, bike or shuttle to work, to shop or to attend a concert or sporting event within the context of a well-planned community.



# Location Map 2



GreenCity is located at the key regional crossroads of Interstate highways I-95 and I-295, enhancing commerce and regional tourism that support the proposed arena uses. It is minutes from downtown Richmond and convenient to regional shopping in the Short Pump area.

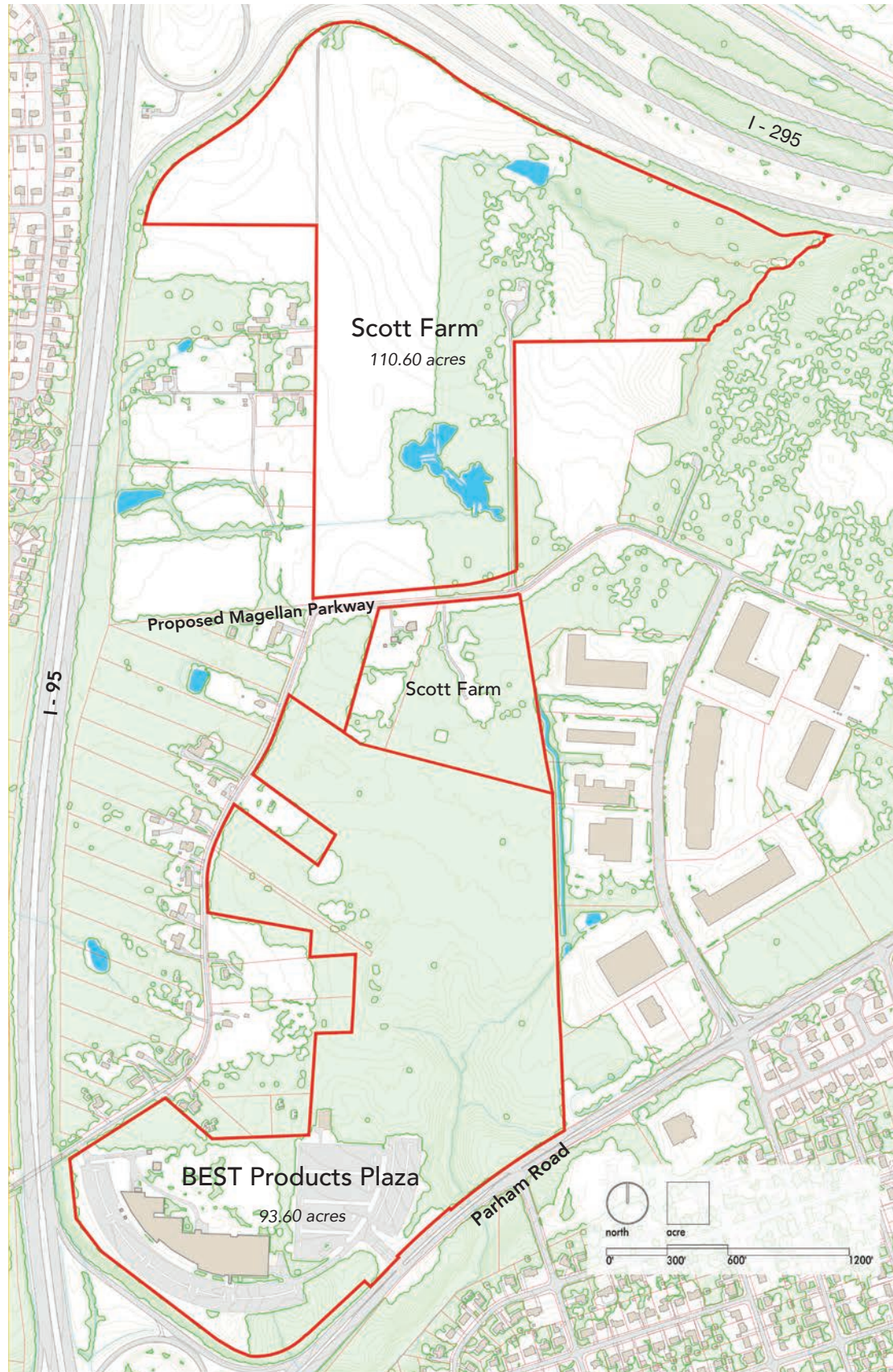
Transit connections are currently under study, but when completed will allow for easy regional access on bus and other systems.

Staples Mills Train Station is a 10-minute drive, and the Richmond International Airport is within a 30 minute drive.





# Existing Conditions **3**



## **BEST Products Plaza** 93.6 acres

The BEST Products Plaza property, situated along Parham Road, was once the national headquarters for BEST Products, a catalogue showroom retail company founded in 1957 until it ceased business operations in 1997.

The site includes 305,000 square feet of office space, surface parking lots, and recreational facilities. The office area and adjacent fields were vacated and eventually acquired by Henrico County in 2011.

Of unique interest to the future development is a pair of eagles sculpted by noted art deco artist Rene Chambellan that remain on the site. The eagles were rescued from atop the historic Airlines Terminal building in New York City, and will be repurposed within the project's public space program.

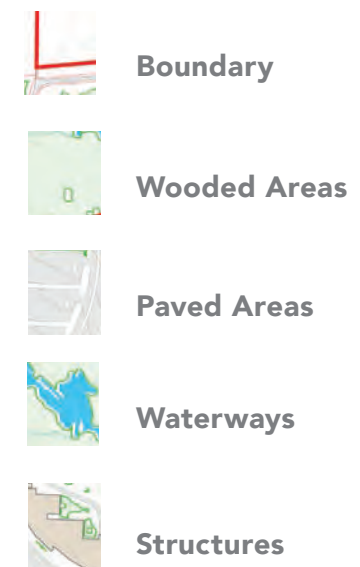
The remainder of the BEST Plaza property is primarily undisturbed, wooded area that generally drains towards the wetlands situated in the southeast corner of the site near the BEST Plaza access intersection with Parham Road.

## **Scott Farm** 110.60 acres

Scott Road, at the interface between the BEST Plaza property and the Scott Farm property, approximates the relative high point of the site, serving as the drainage divide for both the sanitary sewer and storm sewer sheds.

The Scott Farm parcels, primarily encompassing the northern half of the site, consists of a combination of agricultural, residential, and wooded land and generally drains towards the wetlands located in the northeast portion of the site. The major parcel within this site is currently home to a soybean field and contains pockets of wetlands to the south and east.

Neighboring properties that border the Scott Farm site include office parks, residential dwellings, undeveloped woods, and playing fields for Saint Gertrude's school.

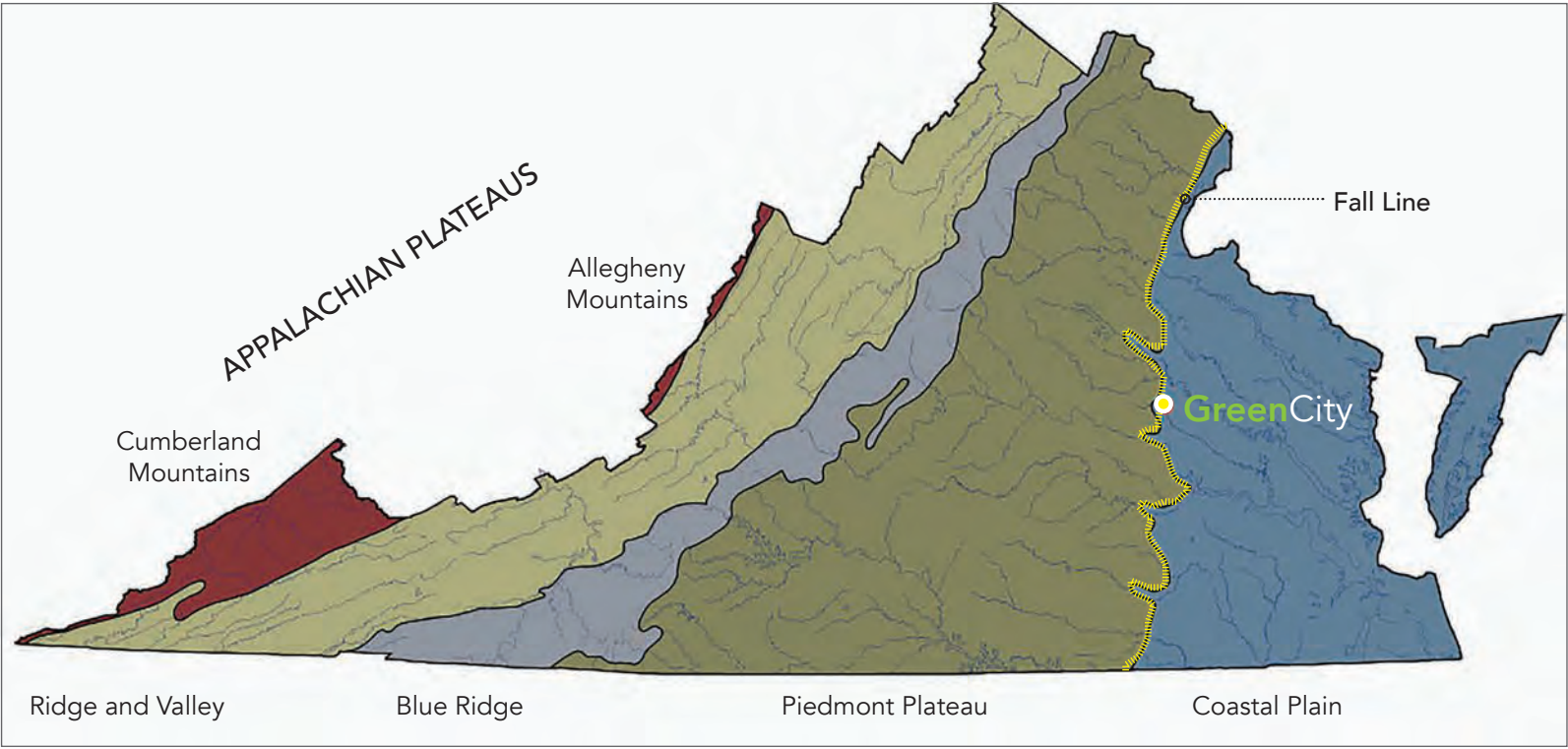






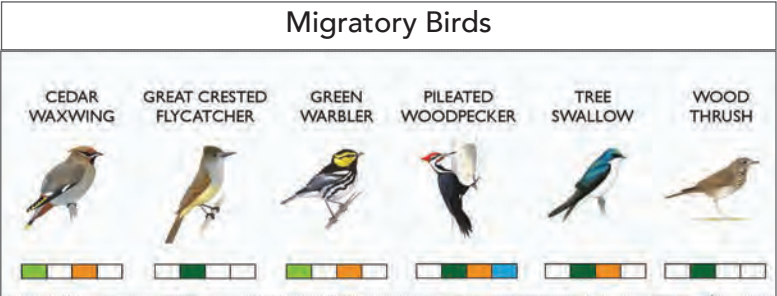
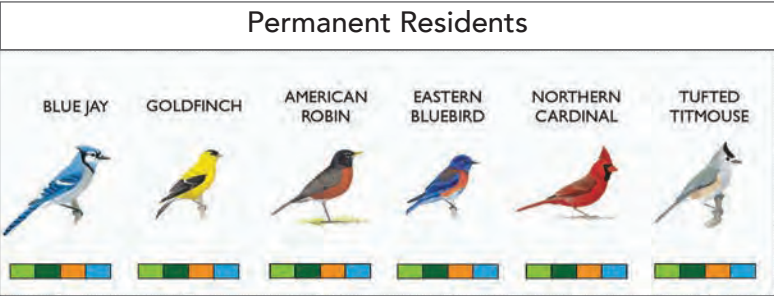


# Natural Resources 4



Located along the fall line dividing Virginia’s Piedmont Plateau and Coastal Plain, the GreenCity site offers a wide range of natural resources and ecologies that may be interpreted and enhanced through a thoughtful balance of protection and intervention.

The Piedmont Plateau is characterized by cities/settlements, farms, fields, hedgerows, rivers/streams and forests that drape the landscape over gently rolling hills. The Coastal Plain, in contrast, is a flat, low-lying land that extends to the ocean. Separating these physiologic zones, which possess rich and diverse plant communities, is the fall line, a range where the rivers cross from hard bedrock of the Piedmont (granite, slate, schist) to the softer rocks of the Coastal Plain (sandstone). The propitious location of GreenCity, along this transitional zone, gives rise to gently sloping landforms, vernal pools, streams and wetlands and diverse plant communities.



Vegetative indicators on site include patches of mixed pine, oak, hickory forest (common to the Piedmont), and sweetgum, blackgum, birch, and holly (common to the Coastal Plain). Early successional species, telling of past impacts and disturbance, are distributed among the mature stands of trees.

Wetland patches and low-lying areas are home to mature red maple and bald cypress bogs with various pollinator species, persimmons, sweet pepperbush and Virginia sweetspire masking the groundplane and providing a wide range of wildlife habitat.



Preserving, connecting, revealing, and interpreting these natural landscape features in a holistic park system is central to the authentic and impactful character of GreenCity.





## GOALS

### Community Building

- Create an inclusive and vibrant community through sustainable uses and infrastructure
- Foster strong civic engagement; diverse and affordable housing; and accessible public spaces and services for daily needs

### Health + Wellbeing

- Support health and happiness through active living, walking and recreation.
- Plan for indoor-outdoor businesses and residential development that encourages access to the nearby natural resources
- Provide for agricultural programs that produce local fresh food grown within the community

### Economic Development

- Attract the nation's most innovative businesses to create economic opportunities that build prosperity and accelerate innovation
- Create new regional attractors that expand leisure and entertainment choices
- Nurture a robust employment base with new jobs, job quality and business start-ups

### Connectivity

- Design for "20-minute living" by planning for inviting and effective connections between people and places
- Plan for a walkable street network that accommodates diverse ages and abilities using multiple travel modes and shared mobility options
- Provide for a high-quality digital network, providing equitable connectivity and leveraged community data

### Living Infrastructure

- Support flourishing ecosystems, and natural resources of wetlands, streambeds
- Introduce natural processes into the built environment

### Resource Restoration

- Design for a net positive community through efficient water use, efficient building design, technology advancement and renewable energy production
- Promoting sustainable systems, services and lifestyles that reduce dependence on the automobile and promote, pedestrian accessibility, and transit



**greencity** will be developed based on proven eco-district principles. Its realization will provide both valuable systems for living today, as well as a proving ground for sustainable communities of the future.

# Sustainability 5

## Goals & Principles

### Eco-District Principles

Eco-districts are urban areas designed and organized in keeping with proven sustainable development principles. They have three main objectives:

- to limit their environmental impact,
- to promote social cohesion, and
- to develop economically.

To achieve these goals, eco-districts are designed to reduce energy needs and save resources. They also focus on creating a socially and functionally diverse environment (housing, services, recreation, entertainment, etc.) within a short walking distance. As a result, residents enjoy richer and more diverse lifestyles in a setting that respects the environment.

With the reintegration of nature planned for the heart of the neighborhood, the use of renewable energy, efforts to minimize energy consumption, and their sustainable water and waste management, and welcoming social diversity, eco-districts allow for demonstrating new ways of living together that is more respectful of both people and the environment. Residents enjoy a higher quality of life, a calmer, healthier environment, better social cohesion, and better connectivity at all levels.

#### **Sustainably-designed buildings with sustainably-designed infrastructure**

Buildings consume more energy than transportation. Buildings in eco-districts, on the other hand, consume less and are built using sustainable materials and systems. They must abide by strict regulations that aim to have the lowest possible energy consumption per square foot.

#### **Better water and waste management**

In another effort to minimize their reliance on various resources, rainwater is collected and used for the maintenance of public spaces (parks, roadsides, etc.) and for restrooms in buildings.

When it comes to waste management, sorting and recycling programs are standard features. Organic waste is collected and composted, then used to maintain green spaces. Some eco-districts in Europe even use a pneumatic underground waste collection system to cut down on vehicle traffic to treatment plants and keep trucks off the neighborhood's roads.

#### **Social and functional diversity**

Eco-districts aim to be accessible to all, with some of its housing reserved for reduced-rent units. They strive to cultivate a population that is socially, culturally, and generationally-diverse, and to have the basic functions and services of any community within their confines in order to promote closeness and a true sense of community. Eco-districts therefore situate homes, businesses, offices, and other daily uses within walking distance of one another.

#### **Efficient, ecological modes of transport**

Eco-districts are designed to favor getting around on foot, by bicycle and public transport, in order to limit the use of individual vehicles. The infrastructure is adapted accordingly, with footpaths, bicycle lanes and secure bicycle parking, a network of public transportation, and the immediate proximity of numerous everyday services, including larger shopping malls, schools, daycare centers, sports facilities, and even train stations and airports.

#### **Urban biodiversity**

Green and natural spaces are cultivated for the residents' comfort and to promote the development of biodiversity (flora and fauna).

#### **Mobility in eco-districts**

Eco-districts have a two-pronged approach to mobility: limiting travel as a result of the convenient location of businesses and services close to residences, and the development of infrastructures favorable to walking, cycling, and the use of public transportation.

It is an ideal setting for the development of shared, clean, silent, electric-powered modes of transit. To meet the short-term, occasional needs of residents, eco-districts often introduce electric car sharing services.



### GreenCity minimum sustainability standards

	Use		Quantity	% Total	ILFI	USGBC	WELL <sup>1</sup>	Energy <sup>2</sup> % green	Water <sup>3</sup> % reuse	organic Waste <sup>4</sup> % processed onsite	solid Waste <sup>5</sup> % reduced
	<b>DISTRICT / Neighborhood</b>		204 ac			LEED-ND		50	50	100	50
renovation	<b>OFFICE - BEST Products</b>	core tenant	350,000 sf	5.62%	LBC petal certified	platinum platinum	certified certified	105 105	100 100	100 100	100 100
	<b>OFFICE</b>	core tenant	1,525,000 sf	24.48%		gold gold	certified certified	50 50	50 50	100 100	50 50
mixed-use	<b>OFFICE</b>	core tenant	65,000 sf	1.04%		gold gold	certified certified	50 50	50 50	100 100	50 50
mixed-use	<b>RETAIL</b>	core tenant	135,000 sf	2.17%		gold gold	certified certified	50 50	50 50	100 100	50 50
mixed-use	<b>RESTAURANT</b>	core tenant	65,000 sf	1.04%		gold gold	certified certified	50 50	50 50	100 100	50 50
	<b>HOTEL</b>		430,000 sf	6.90%		gold	certified	50	50	100	50
	<b>ARENA</b>		435,000 sf	6.98%	LBC petal certified	platinum	certified	105	100	100	50
mixed-use	<b>RESIDENTIAL</b>		1,095,000 sf	17.58%		LEED multi-fam	certified	50	50	100	50
	<b>RESIDENTIAL</b>		2,130,200 sf	34.19%		LEED - res		50	50	100	50
	<b>TOTAL Uses</b>		<b>6,230,200 sf</b>	<b>100.00%</b>							

- 1 Represents goal vs required standard
- 2 Represents minimum green energy utilization goal vs required standard
- 3 Represents minimum water reuse goal vs required standard
- 4 Represents minimum on-site organic waste processing goal vs standard
- 5 Represents minimum on-site solid waste reduction goal vs standard

at grade	<b>PARKING</b>	600 sp	6.67%
below grade	<b>PARKING</b>	1,680 sp	18.67%
structured	<b>PARKING</b>	6,720 sp	74.67%
	<b>TOTAL Parking</b>	<b>9,000 sp</b>	<b>100.00%</b>
land use	<b>PUBLIC OPEN SPACE</b>	73.84 ac	36.12%
land use	<b>STREETS</b>	26.64 ac	13.03%
land use	<b>DEVELOPMENT PARCELS</b>	103.96 ac	50.85%
	<b>TOTAL Development</b>	<b>204.44 ac</b>	<b>100.00%</b>

Sustainable outcomes for GreenCity will be achieved through a variety of well-established certification processes, with mandatory minimum requirements for performance and operational outcomes

Beginning with the development of a district-wide sustainability plan itself, which will set aside protected land areas, natural resources, park systems and defined public open space, the remaining sites will feature greater densities and mixed-use developments to promote walkable neighborhoods connected by higher performing infrastructure.

Building design and resulting sustainability performance will be based on strict but achievable standards that will be certified by one or more well-established institutions focused on promoting a better performing and more resilient built environment. Certifications processes administered by USGBC, BREEAM, International Living Futures Institute (ILFI), and Well Building Institute will be used as core development benchmarks.

Varying uses provide varying opportunity to achieve desired outcomes, with some buildings targeting Living Building Challenge Petal Certification and others LEED Gold or Platinum.

The chart at left summarizes GreenCity's minimum sustainability standards and goals.



# Sustainability 5

## Standards



### LIVING BUILDING CHALLENGE

The **Living Building Challenge** was created in 2006 by the non-profit International Living Future Institute. It is described by the Institute as a philosophy, advocacy tool and certification program that promotes the most advanced measurement of sustainability in the built environment.

#### Performance areas

Living Building Challenge comprises seven performance areas:

- 1. Place** - focuses on creating a connected community that is more pedestrian focused, protecting and restoring existing nature, and encouraging a healthy level of density.
- 2. Water** - a certified building may only use the amount of water that can be harvested onsite and purify that water without the use of chemicals.
- 3. Energy** - reduction and efficiency of energy by requiring the building to produce on-site 105% of the energy it needs
- 4. Health and Happiness** - indoor air quality, thermal comfort, visual comfort, and integration of nature in order to increase the quality of human health and productivity.
- 5. Materials** - focus on eliminating the use of construction materials that have adverse environmental, health, and social impacts.
- 6. Equity** - creating spaces where people of all capabilities, disabilities, ages, and economic status have equal access.
- 7. Beauty** - focuses on encouraging project teams to put in genuine and thoughtful efforts into creating beautiful projects.



### USGBC LEED

Developed by the U.S. Green Building Council, LEED is the most popular framework for identifying, implementing, and measuring green building and neighborhood design, construction, operations, and maintenance. LEED is a voluntary, market driven, consensus-based tool that serves as a guideline and assessment mechanism. LEED rating systems address commercial, institutional, and residential buildings and neighborhood developments.

LEED seeks to optimize the use of natural resources, promote regenerative and restorative strategies, maximize the positive and minimize the negative environmental and human health consequences of the construction industry, and provide high-quality indoor environments for building occupants. LEED emphasizes integrative design, integration of existing technology, and state-of-the-art strategies to advance expertise in green building and transform professional practice.

The technical basis for LEED strikes a balance between requiring today's best practices and encouraging leadership strategies. LEED sets a challenging yet achievable set of benchmarks that define green building for interior spaces, entire structures, and whole neighborhoods.

#### The four levels of LEED certification:



### WELL BUILDING INSTITUTE

The WELL Building Standard is a vehicle for buildings and organizations to deliver more thoughtful and intentional spaces that enhance human health and well-being. WELL v2 includes a set of strategies - backed by the latest scientific research - that aim to advance human health through design interventions and operational protocols and policies and foster a culture of health and well-being. WELL v2 is founded on the following principles:

- Equitable:** Aims to benefit a variety of people, including and especially disadvantaged or vulnerable populations.
- Global:** Proposes interventions that are feasible, achievable and relevant across many applications throughout the world.
- Evidence-based:** Draws upon research across varying disciplines, validated by a collaborative body of experts,
- Technically robust:** Defines industry best practice and validates strategies through performance verification and a rigorous third-party verification process.
- Customer-focused:** Sponsors the success of WELL users through coaching, dynamic resources and a navigating platform
- Resilient:** Keeps pace with advances in research, science, technology and society, and integrating new findings.

#### The are ten concepts of WELL v2:





# Sustainability 5

## Connection to Nature



GreenCity will be grounded in the site, respectful of its natural context and provide a connection to nature for residents and guests.

The GreenCity Park system will support biodiversity at all scales through:

- Protected wetlands and streams that provide enhanced habitat corridors
- Connected park system with curated nature walks and opportunities for fresh air recreation
- Streets built with a priority for human-powered movement, stormwater management, and continuous tree canopies to reduce urban heat-island effect
- A blurring of the natural and built environment through an emphasis on biophilic design with green roofs, plazas and supporting infrastructure
- Opportunities for residents to “get their hands dirty” and grow some of their own food, affordability, with areas designated for urban agriculture

This emphasis on a connection to nature will further enhance residents’ physical and mental well-being.

*The concept that humans have a biological need to connect with nature has been called ‘biophilia’ . . . We are hard-wired to affiliate with the natural world - and just as our health improves when we are in it, so our health suffers when we are divorced from it.*



# Sustainability 5

## 20-Minute Living



GreenCity will provide accessible opportunities for all generations and populations, offering a diverse variety of housing typologies. It is designed as a place to work-live-play and fully experience 20-minute living, where ordinary needs are within a 20-minute walk, a 20-minute bike ride or short auto trip to destinations in the broader community.

### The planned mix of uses in GreenCity will:

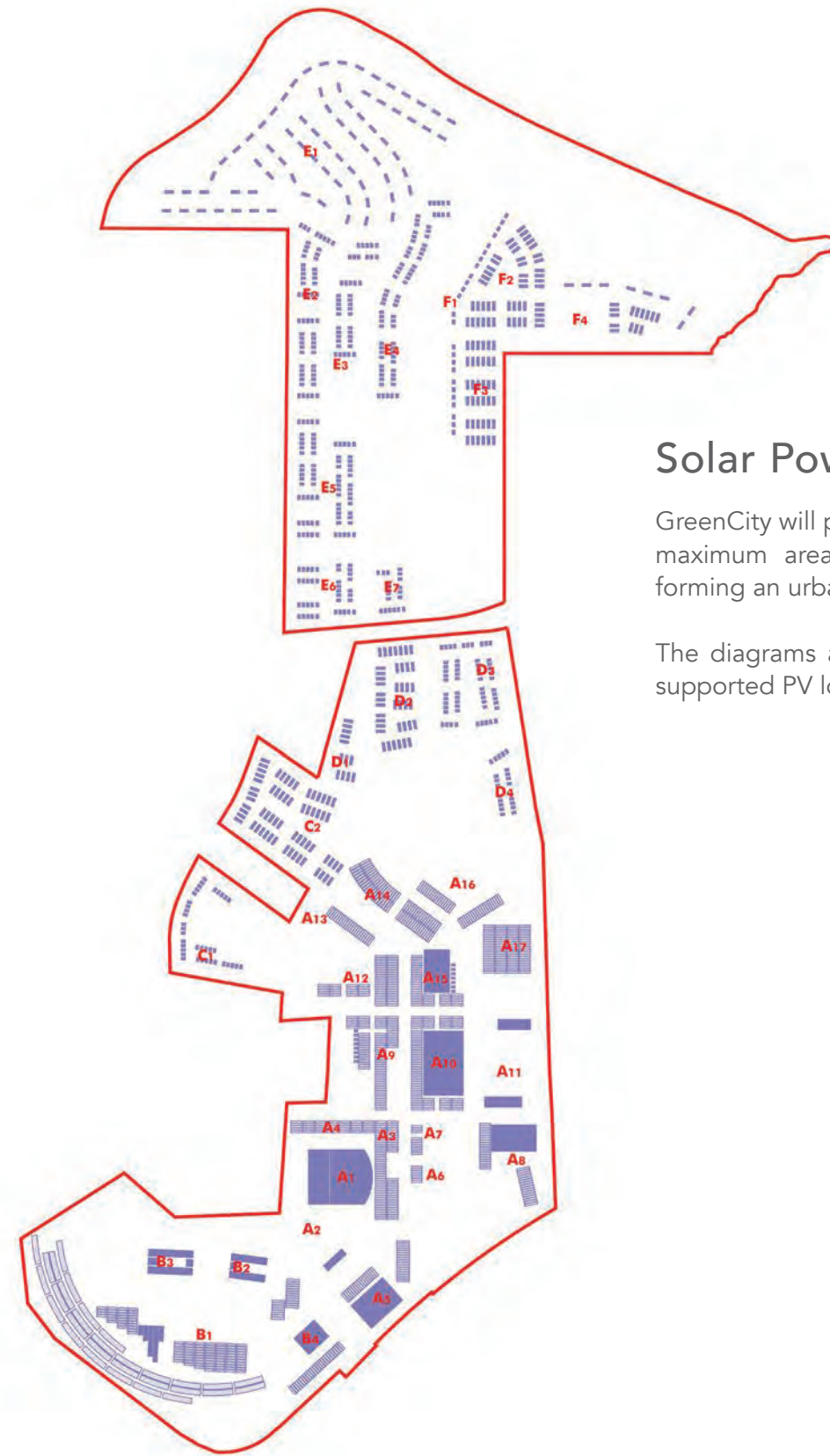
- Support regional and local jobs/housing balance at all income levels
- Include a mix of offices, housing, restaurants, entertainment, shops, and recreation, all connected to nature
- Provide unique green opportunities for locally-based owners and producers
- Create opportunities for mixed-income housing to address housing inequity and deficits in the region
- Promote a place to connect to community where less time commuting offers a variety of meaningful experiences with family, friends, and neighbors

*20 minute living is all about 'local living' - giving people the ability to meet most of their everyday needs within a 20-minute walk, cycle or local public transport trip of from their home.*



# Sustainability 5

## Energy



### Solar Power

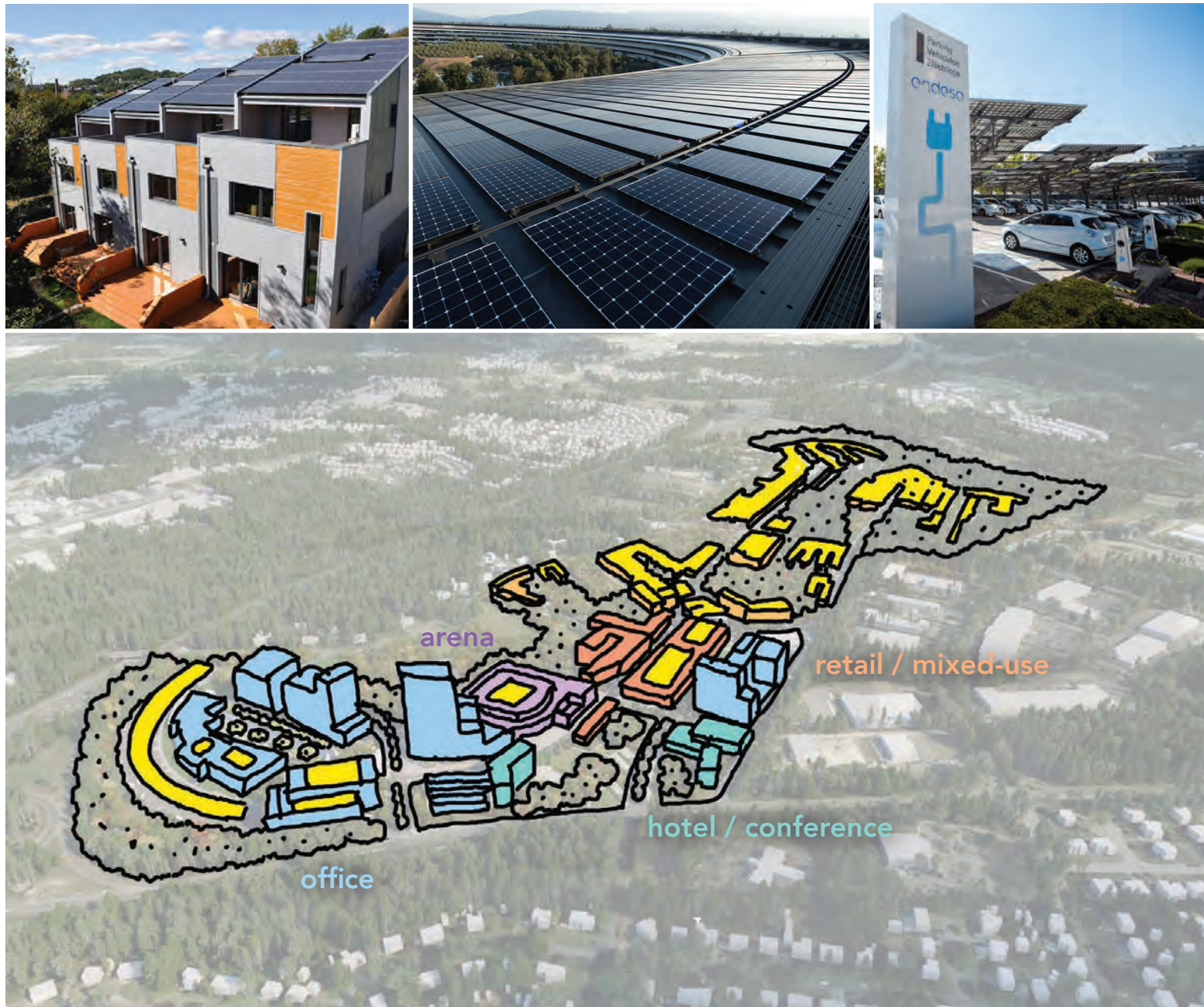
GreenCity will promote rooftops, across all uses, to contribute maximum areas for photo voltaic (PV) arrays, collectively forming an urban solar farm.

The diagrams at left show 20-acres of rooftop and canopy-supported PV locations.



# Sustainability 5

## Energy



GreenCity will strive to be developed as a predominantly Green Energy District, balancing energy production and use while limiting greenhouse gas emissions. Its planning and design are inspired by Virginia's goals of 30% renewable electricity by 2030 and 100% by 2050.

Energy strategies will address all scales of development, sharing resources across micro-grids, within blocks, and between buildings, including:

- Building to Passive House Standards that improve environmental performance through orientation, daylighting air-tightness and additional insulation
- Creation of locally managed District/Micro-Grid and Block Scale Energy systems to provide most cost effective and maintainable heating and cooling
- Emphasis on alternative and efficient energy systems and occupancy
- Ground source and air-source heat pump network + thermal storage – all electric heating and cooling
- Solar Power + battery storage to provide renewable supply, manage demands and improve resilience
- DC networks to reduce demands and meet future loads
- Smart energy systems to improve power quality, reduce losses, reduce operational costs, and offer real-time pricing
- EMS, BMS and occupancy controls, plug load reduction and demand management

*Introducing renewable energy at a variety of scales creates opportunity to for localized microgrids offering district energy management and storage to support community resilience.*



# Sustainability 5

## Water



*Integrating watersheds within a broader potable and stormwater infrastructure will support clean water and conservation goals in concert with gray and blackwater strategies at the building and district scale.*

GreenCity aspires to be a Net Zero Water development, balancing water consumption and waste, while minimizing impacts to the natural ecosystem and watershed. It will become a model for Virginia's conservation goals and programs.

Water Strategies will address supply, demand, and waste including:

### Potable Water Supply:

To minimize demands on the regional water supply network, the development will prioritize the use of local water availability, including:

- Rainwater harvesting from rooftops
- Collection of surface runoff for non-potable uses and aquifer recharging

Additionally, strategies will be developed for re-use of grey water, and the potential treatment of black water

**Potable Water Demand:** Reduce potable water consumption through:

- Low flow fixtures
- EnergyStar Water Sense appliances
- Smart water meters and sensors - leak reduction
- Water efficient landscaping

**Stormwater:** Stormwater infrastructure will be designed as an amenity for the community in the form of flow through planters, rain gardens, and green roofs to ensure that the water that stays or flows off the site is cleaner than when it fell onto the site as raindrops.



# Sustainability 5

## Mobility



*Investing in safe, diverse, and walkable streets is an investment in communities, and helps make neighborhoods worth living in.*

Mobility and connectivity within the district, and to regional amenities is paramount to sustainable community-living. GreenCity will promote connectivity – regional, local and digital – for residents, workers, and guests.

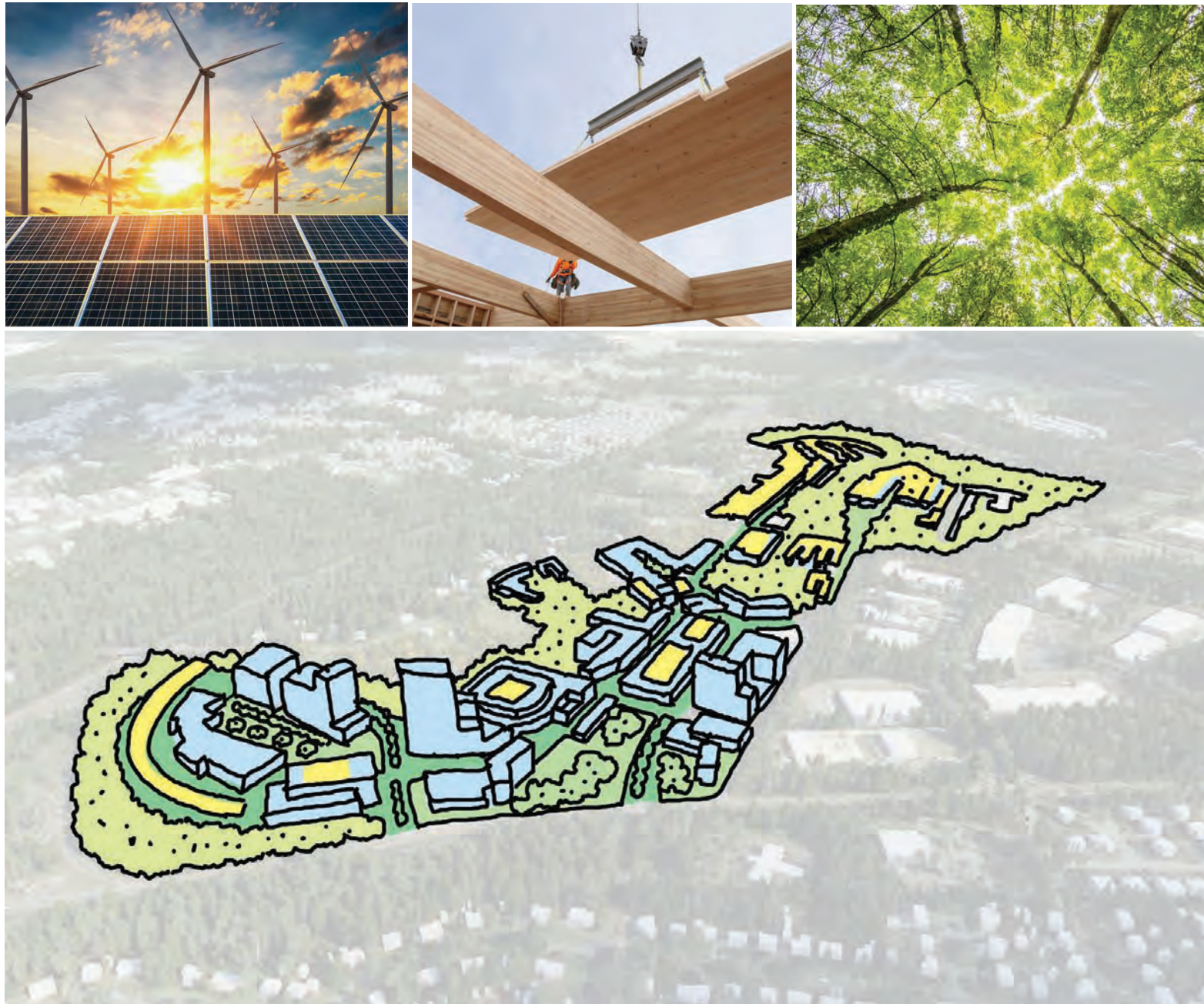
The Connectivity Infrastructure will include:

- Convenient connections to regional transit systems serving Greater Richmond, with considerations for last mile mobility within GreenCity.
- A local street and trail network that:
  - Prioritizes pedestrian-oriented, active mobility on green, shared streets across all scales of the public realm
  - Integrates technology and the sharing economy to support last mile micro-mobility with walking, bikes and future AV vehicles
- Supports the shift to sustainable vehicles and active transportation including:
  - EV charging infrastructure for residents, visitors and pass-through AV shuttle buses and vehicles for local circulation, and amenities designed to support the pedestrian public realm
  - Smart parking systems, both on the street and within the development



# Sustainability 5

## Carbon



GreenCity's goal is to reduce Green House Gas Emissions through management of on-site carbon production, as well as sequestration. With that goal, GreenCity can become a model in Virginia for implementing the Commonwealth's Clean Energy goals.

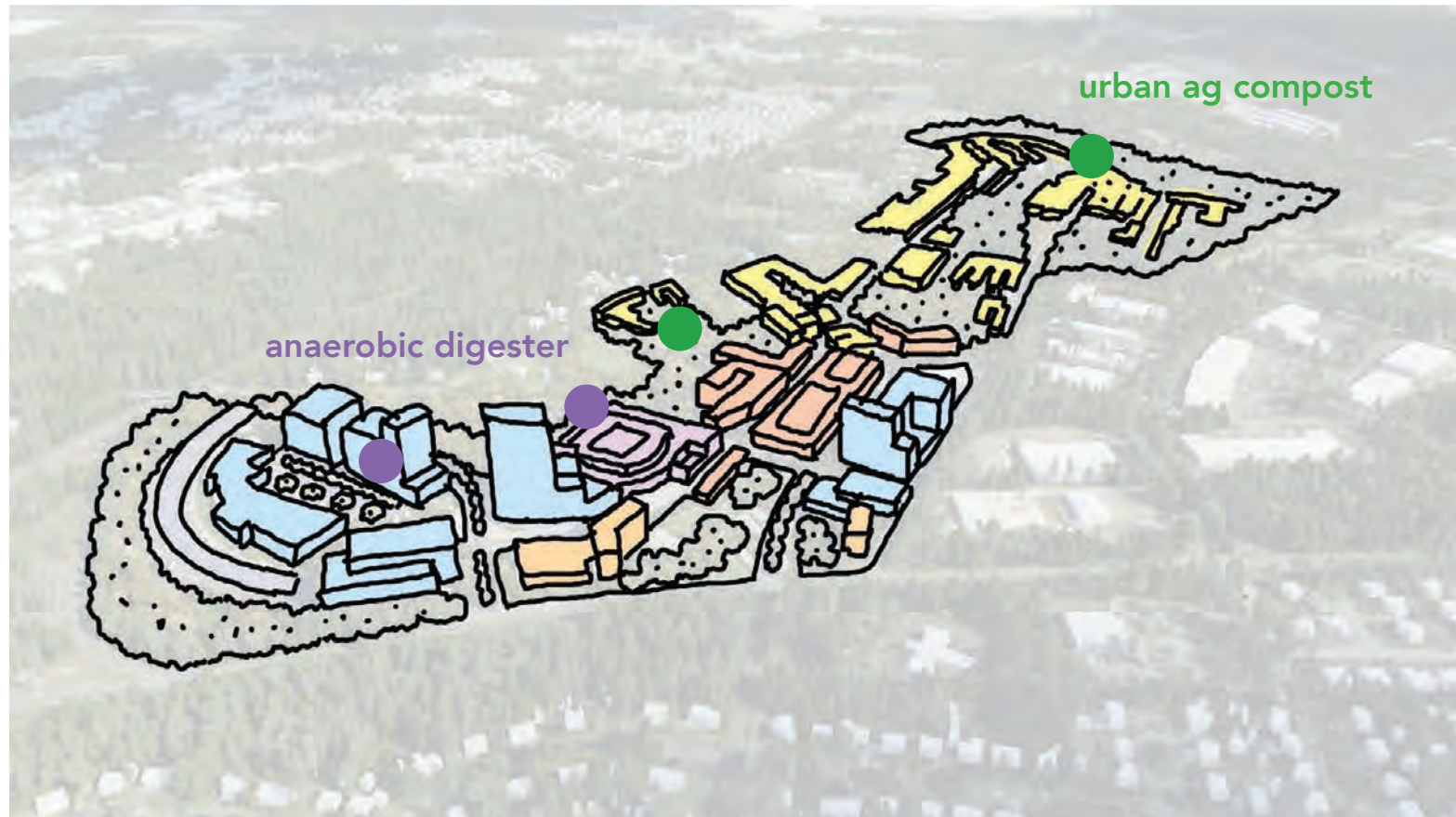
- **Development** - Buildings account for approximately 30% of Virginia's Greenhouse Gas Emissions. GreenCity will minimize impacts through environmentally efficient construction, occupancy, heating and electricity.
- **Transportation** - Transportation accounts for 28% of Virginia's Greenhouse Gas Emissions. One of the many goals of GreenCity is to reduce GHG emissions through utilization of improved regional mass transit connections, and reduction of reliance on single occupancy autos using combustion engines for local trips within the 20-minute neighborhoods. GreenCity's 20-minute living and mixed-use district will promote fewer trips.
- **Carbon Sequestration** - Improve carbon sequestration through responsible management of the existing wetlands and enhance existing and new tree canopy. Additionally, materials like heavy timber and cross laminated timber will receive preferential use within the district.

*Conserving natural resources, using renewable energy, and engaging Best practices in building and transportation in a woodland setting contributes to a carbon positive future.*



# Sustainability 5

## Waste



*Introducing renewable energy at a variety of scales creates opportunity for localized microgrids, offering district energy management and storage to support community resilience.*

### Recover Reduce / Reuse Recycle / Compost

GreenCity's goal is to be zero waste with a minimum diversion of 90%.

While Arlington County, Virginia has a goal of 90% diversion by 2038, GreenCity intends to be at the forefront for reaching this goal sooner.

Waste Strategies will address life-cycle management, from construction through occupancy.

#### Non-Organic Waste:

- Area-wide multi-bin collection for sorting, separation and recycling
- Programs for electronic and bulky waste
- Integrated smart bin technology

#### Organic Waste and Composting:

- Organic waste treated on-site, especially for Arena uses, through digestion for bio-gas production, or composting to enhance landscape and potential food production

#### Waste Management:

- GreenCity will plan for future AV waste collection systems for both non-organic and organic waste

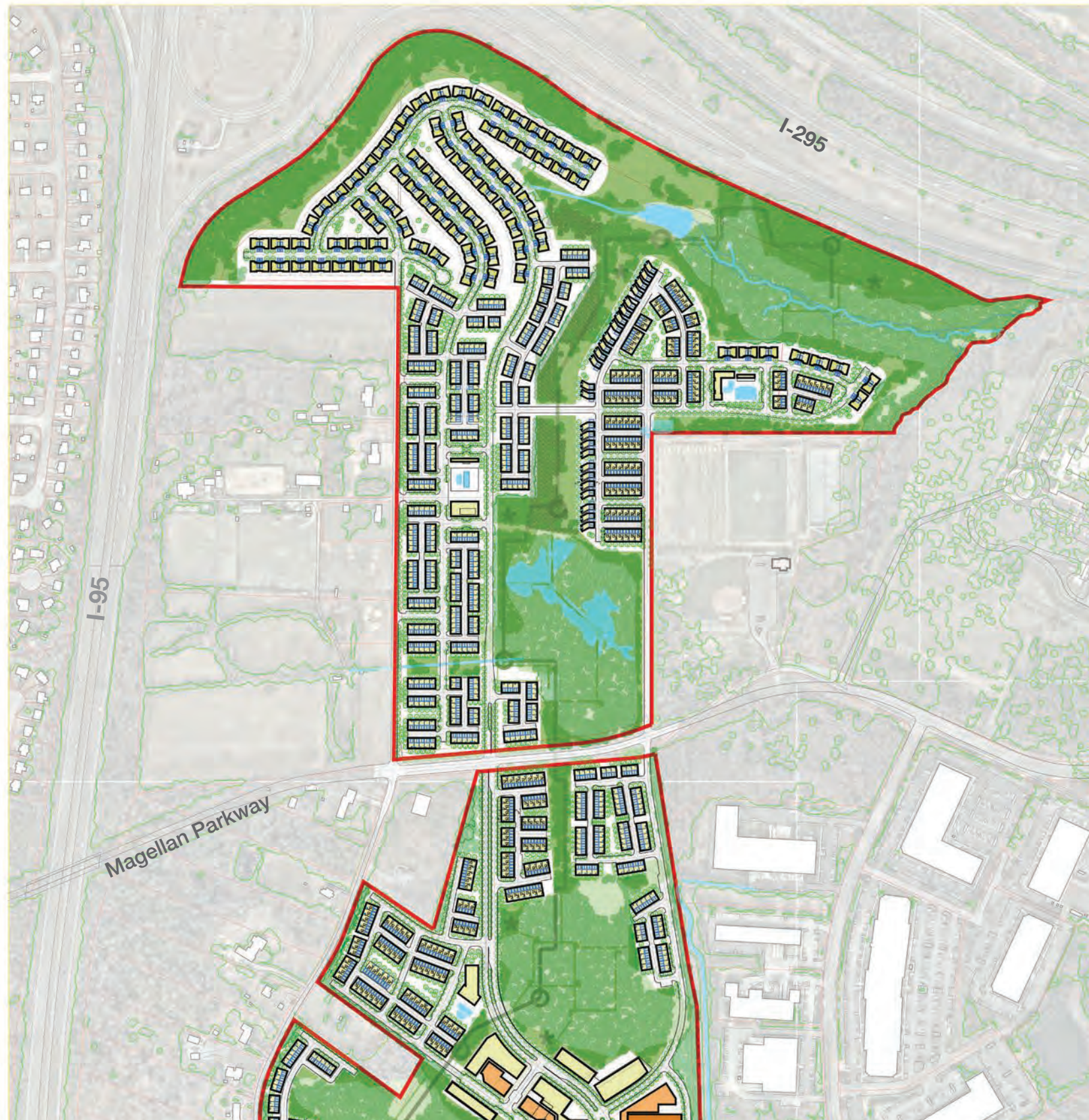


# Master Plan 6

The GreenCity master plan creates a more authentic urban place through the balanced development of multi-family residential, commercial, hospitality, public events and attractions, and retail - all of which will be supported by a well-planned public realm of walkable streets and a connected park system.

## Key planning principles include:

- Introducing a vibrant new mixed-use business and residential community to Henrico County, activating adjacent districts, and engaging in local commerce
- Planning for interdependent blocks and sub-districts that support a well-conceived and connected master plan
- Preserving and connecting natural landscape features into a holistic park system
- Designing, managing and programming walkable streets, plazas, and memorable civic spaces on which they converge.
- Creating a regional destination in support of existing commercial districts and visits to Arena attractions
- Developing a consistent street frontage of an intimate pedestrian scale with different uses, textures, materials and sizes that merge easily into unique and identifiable sub-districts
- Designing for a mix of buildings whose architectural styles, materials, textures and uses stimulate visual interest, yet uphold a consistent quality and remain complementary
- Promoting sustainable systems, services and lifestyles that reduce dependence on the automobile through mixed-use planning, pedestrian accessibility, and transit







### Key to Uses

- Arena:** 17,000-seat multi-purpose arena for touring shows, concerts, NCAA basketball tournaments, AHL hockey
- Retail:** Street level retail below residential and office uses. Free-standing retail uses will include a grocer and pharmacy
- Office:** Class A commercial office uses
- Residential:** Apartments, townhomes, and two over two units and other residential types
- Hotel & Conferencing:** Full service hotels with conferencing facilities
- Park System:** A collection of connected green space, including wetlands, natural resource areas, trails and other outdoor features



# Phasing & Schedule 7

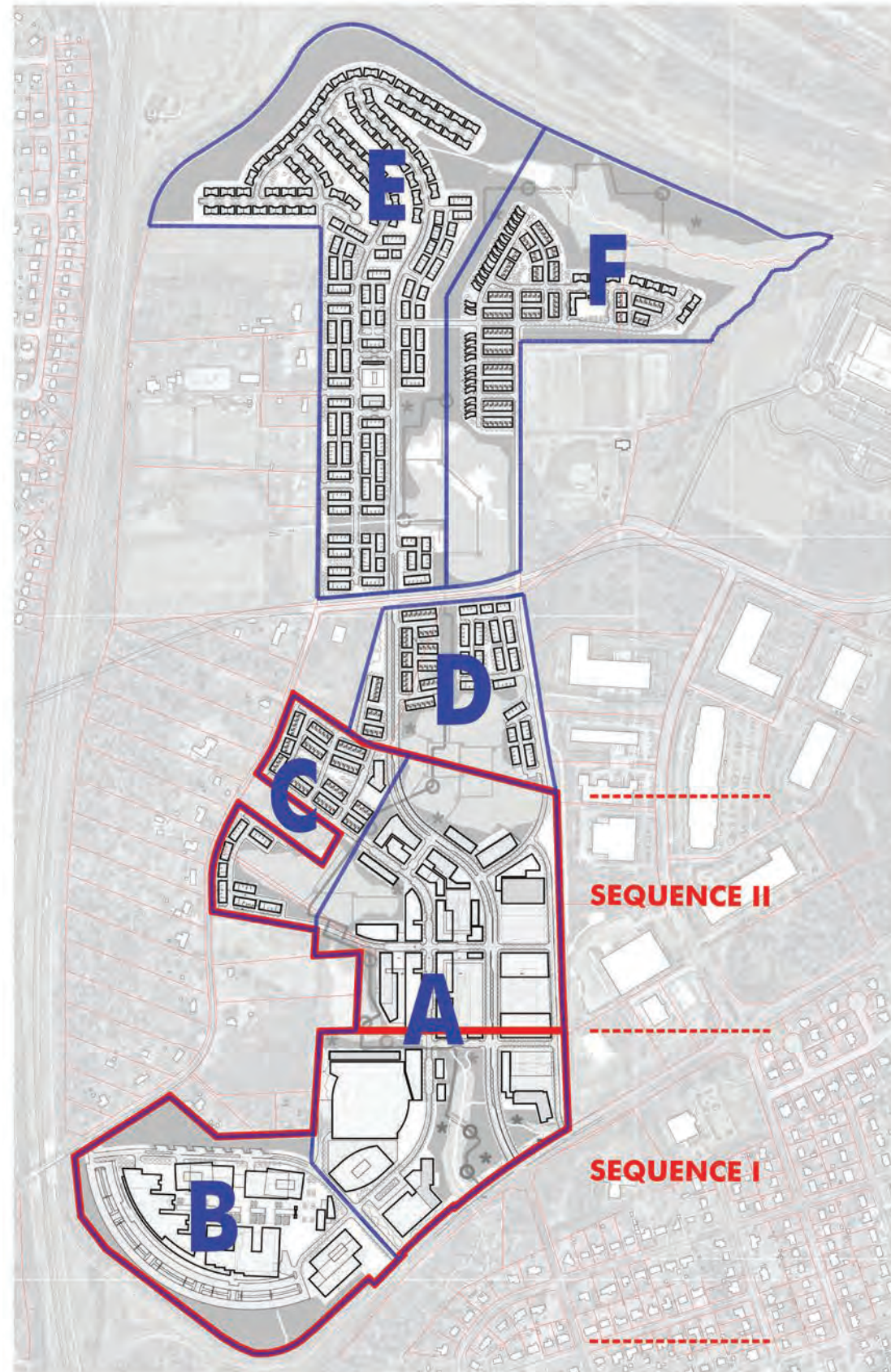
Note: 'Phasing & Scheduling' for illustrative purposes only. Actual phasing may vary



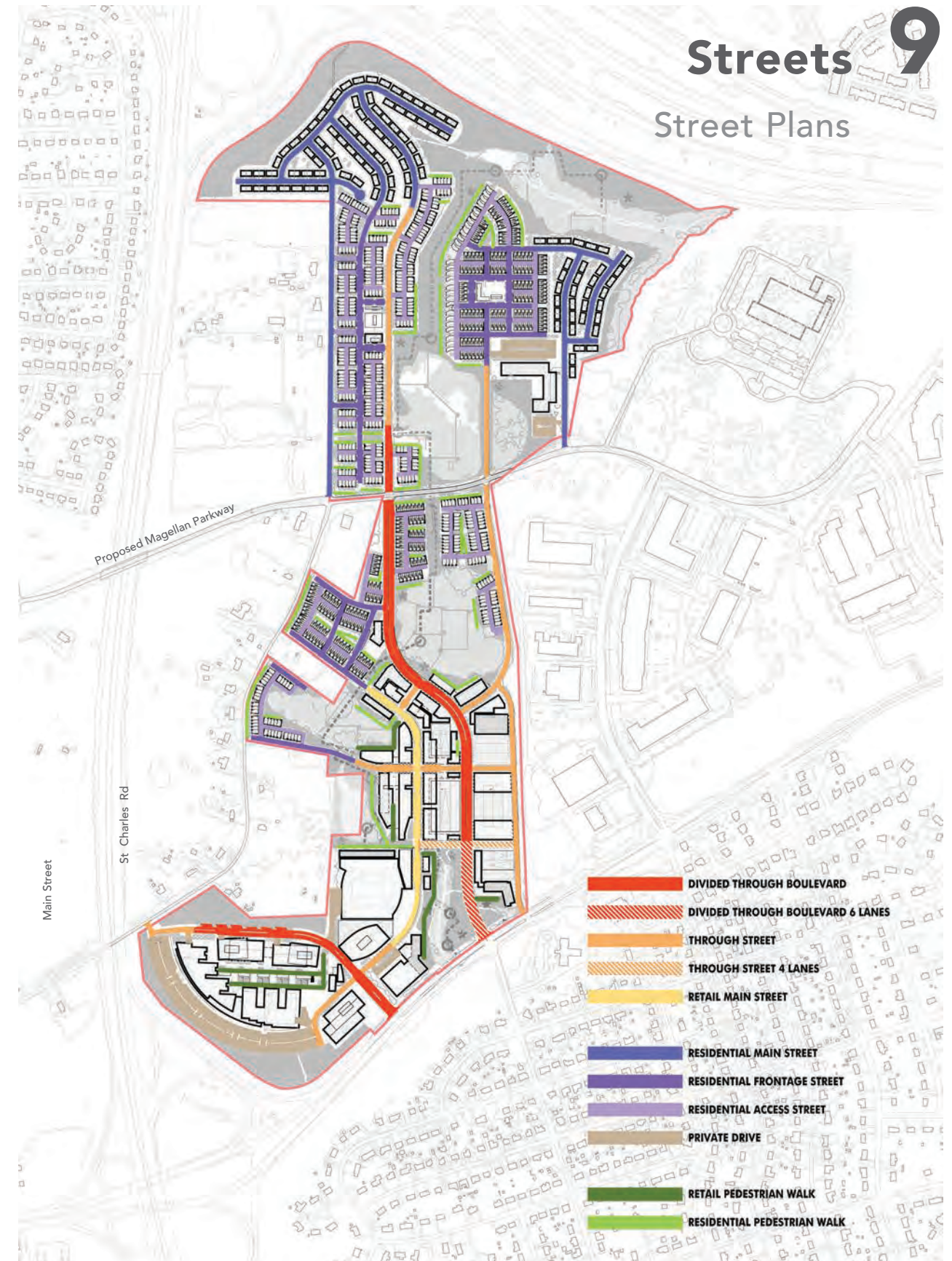
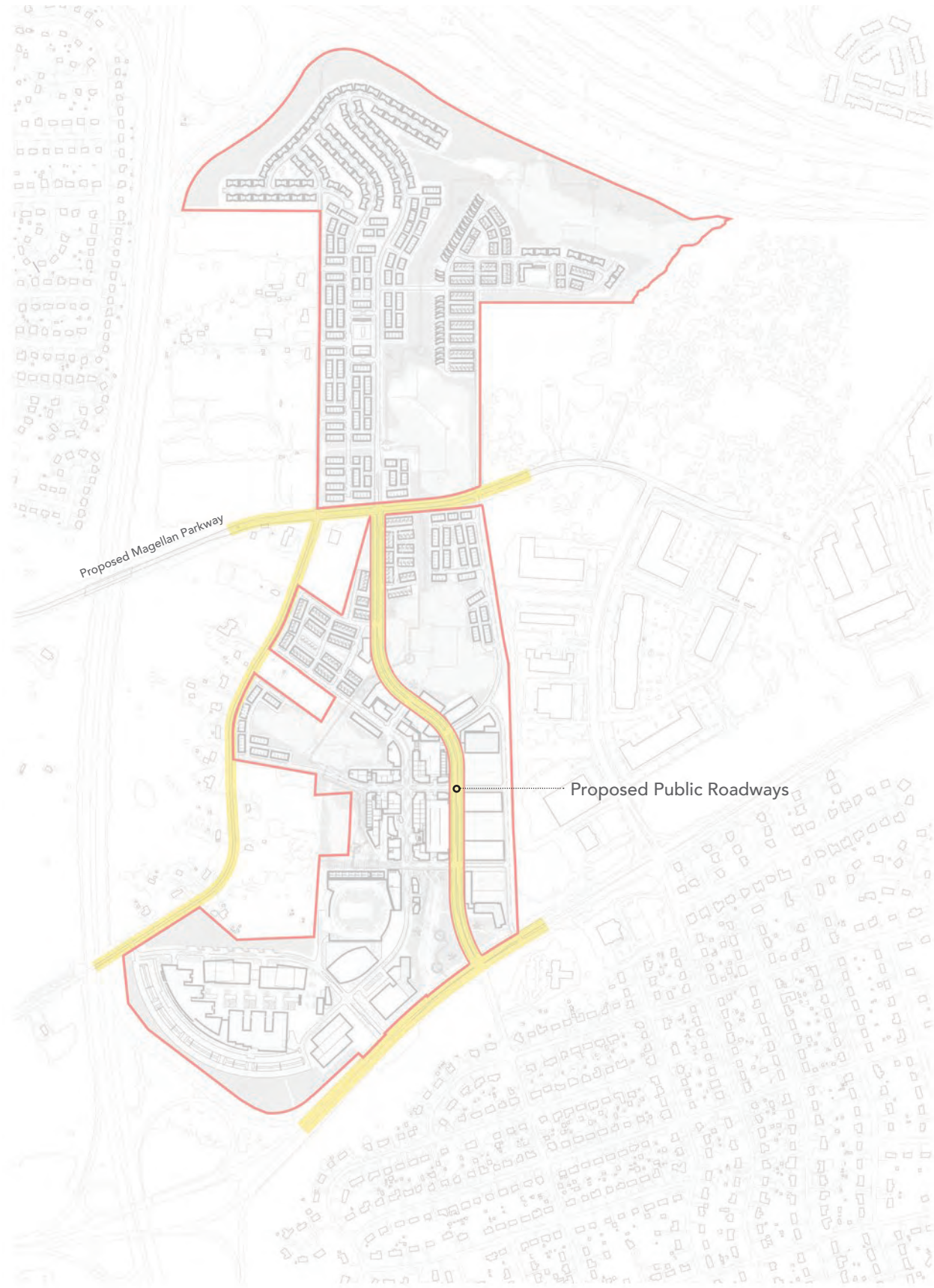
		2021		2022				2023				2024				2025				2026				2027				2028				2029				2030				2031				2032				2033															
		3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4												
<b>SUB PARCEL</b>	<b>PROGRAM</b>																																																														
<b>A</b>	A1 arena			arena																																																											
	A2 office tower A2							office tower A2																																																							
	A3 fitness retail							fitness retail																																																							
	A4 multi-tenant office							multi-tenant office A4																																																							
	A5 hotel							hotel																																																							
	A6 restaurant											restaurant																																																			
	A7 restaurant											restaurant																																																			
	A8 hotel															hotel																																															
	A9 multi-family residential							multi-family residential																																																							
	A10 multi-family residential							multi-family residential																																																							
	A11a office tower A11a											office tower A11a																																																			
	A11b office tower A11b															office tower A11b																																															
	A12 multi-family residential											multi-family residential																																																			
	A13 multi-family residential															multi-family residential																																															
	A14 multi-family residential																			multi-family residential																																											
	A15 multi-family residential											multi-family residential																																																			
	A16 multi-family residential															multi-family residential																																															
A17 large retail															retail																																																
<b>SUB PARCEL</b>	<b>PROGRAM</b>																																																														
<b>B</b>	B1 BEST Products B1			BEST Products B1																																																											
	B2 office tower B2																			office tower B2																																											
	B3 office tower B2																											office tower B3																																			
	B4 office tower B2																															office tower B3																															
	transit center (open area)											transit center																																																			
<b>SUB PARCEL</b>	<b>PROGRAM</b>																																																														
<b>C</b>	C1 townhomes			townhomes																																																											
	C2 2/2 units			2 over 2 residential																																																											
<b>SUB PARCEL</b>	<b>PROGRAM</b>																																																														
<b>D</b>	D1 2/2 units											2 over 2 residential																																																			
	D2 2/2 units											2 over 2 residential																																																			
	D3 townhomes							townhomes																																																							
	D4 townhomes											townhomes																																																			
<b>SUB PARCEL</b>	<b>PROGRAM</b>																																																														
<b>E</b>	E1 villas																											villas																																			
	E2 townhomes																															townhomes																															
	E3 townhomes																															townhomes																															
	E4 townhomes																															townhomes																															
	E5 townhomes																															townhomes																															
	E6 townhomes															townhomes																																															
	E7 townhomes															townhomes																																															
<b>SUB PARCEL</b>	<b>PROGRAM</b>																																																														
<b>F</b>	F1 single family detached																																			single family detached																											
	F2 2/2 units																																							2 over 2 residential																							
	F3 2/2 units																																							2 over 2 residential																							
	F4 2/2 units																																							2 over 2 residential																							
	F5 villas																																							villas																							



# BP Plaza Land Takedown 8









### Connecting GreenCity

GreenCity will feature streets and public spaces that will be designed based on features that are measurable - an intimate scale to support walkable ground level uses, inviting building frontages, and the subtle features and amenities that bring familiarity and comfort.

The Master Plan proposes a mix of development uses that are supported by a regular and well-connected street system that reflects the metrics, design and programming of proven street typologies.

The design metrics of any street within GreenCity respect historic proportions, widths, dimensions and uses, promoting shade and human interaction in all instances.

The most memorable places are those that engage a rich variety of programmed uses and attract a diverse cross section of people who enjoy the authentic energy found in active urban centers. Streets within the district will be carefully curated to provide the most transparent street level experiences possible, whether those are lobbies to residences or hotels, restaurants or shops, or to the arena itself.

Public spaces, sidewalk cafes, and other areas for casual encounters will be programmed to support a variety of events and special uses. Each of the streets within GreenCity will be developed to cater to visitors, tenants, and residents of distinct sub-districts with distinct features, from active retail to quieter side streets.

Public exposure and access are key to attracting visitors and making residents feel secure. If we feel this to be a place where things are happening, and we are welcome, then this is a place we'll want to be.

### Retail Streets

Ground level retail is essential to sustainable urban communities. The availability of fresh food sources, regular and necessary services, and entertainment make up neighborhoods where people want to live and visit.

A concentration of ground-level retail on both sides of streets will activate the planned pedestrian network. The plan imagines urban streetscapes and planting in support of new visitors, tenants, and the resident community. Utilizing buildings and landscapes that are grouped to provide shade for street activity and public amenities will encourage robust street life.

### Residential Streets

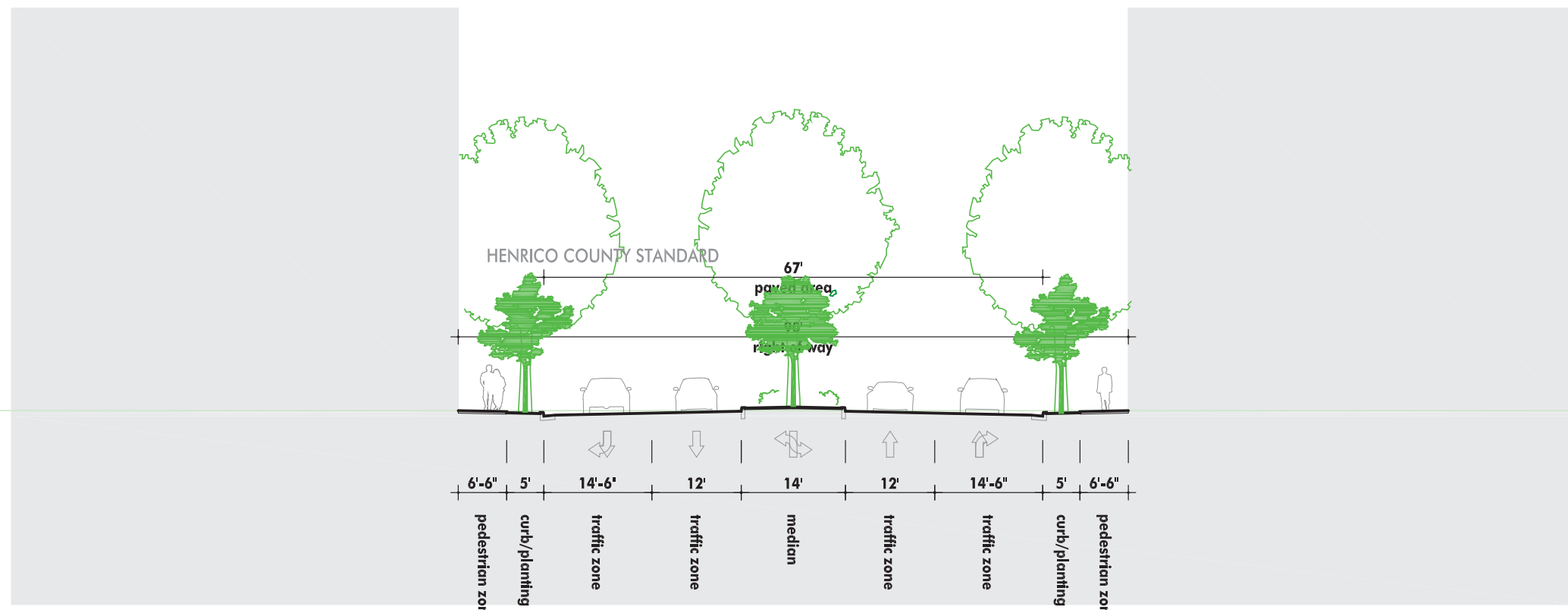
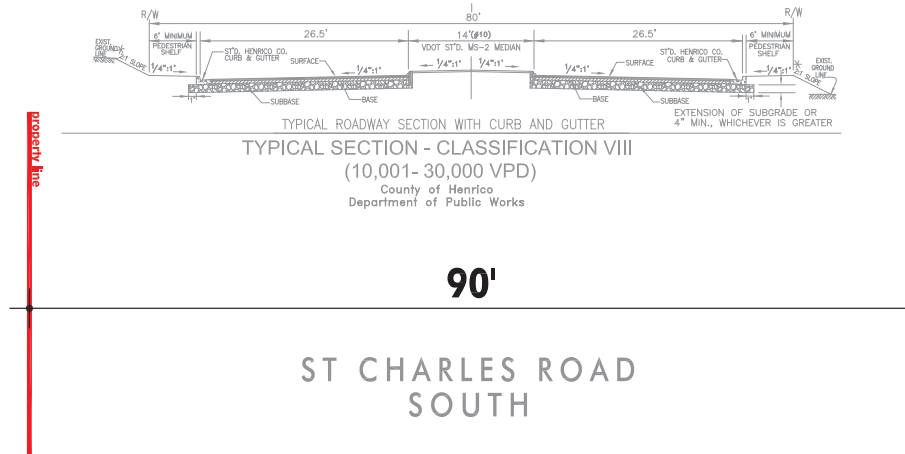
Streets are key determinants of neighborhood livability. They provide access to homes and neighborhood destinations for pedestrians and a variety of vehicle types, from bicycles and passenger cars to moving vans and fire apparatus. They provide a place for human interaction, a place where children play, neighbors meet, and residents go for walks and bicycle rides.

The design of GreenCity's residential streets, will contribute significantly to a sense of community, neighborhood feeling, and perceptions of safety and comfort. The fact that these may be intangible values makes them no less real, something often reflected in property values.

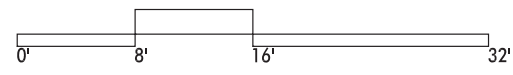


### DIVIDED THROUGH BOULEVARD

<b>ROW Width</b>	<b>90'</b>
<b>Pavement Width</b>	<b>26'-6"</b>
<b>Design Speed</b>	<b>30 mph</b>
<b>Curve Specs</b>	
	<b>14'</b>
<b>Median Width</b>	<b>right turn lanes prohibited</b>
<b>Turn Lanes</b>	<b>left turn lanes at select intersections</b>
	<b>minimum storage length of 150';</b>
	<b>minimum taper length of 100'</b>
<b>Pedestrian Zone</b>	<b>minimum width 11'</b>



DIVIDED THROUGH BOULEVARD  
 28 january 2021



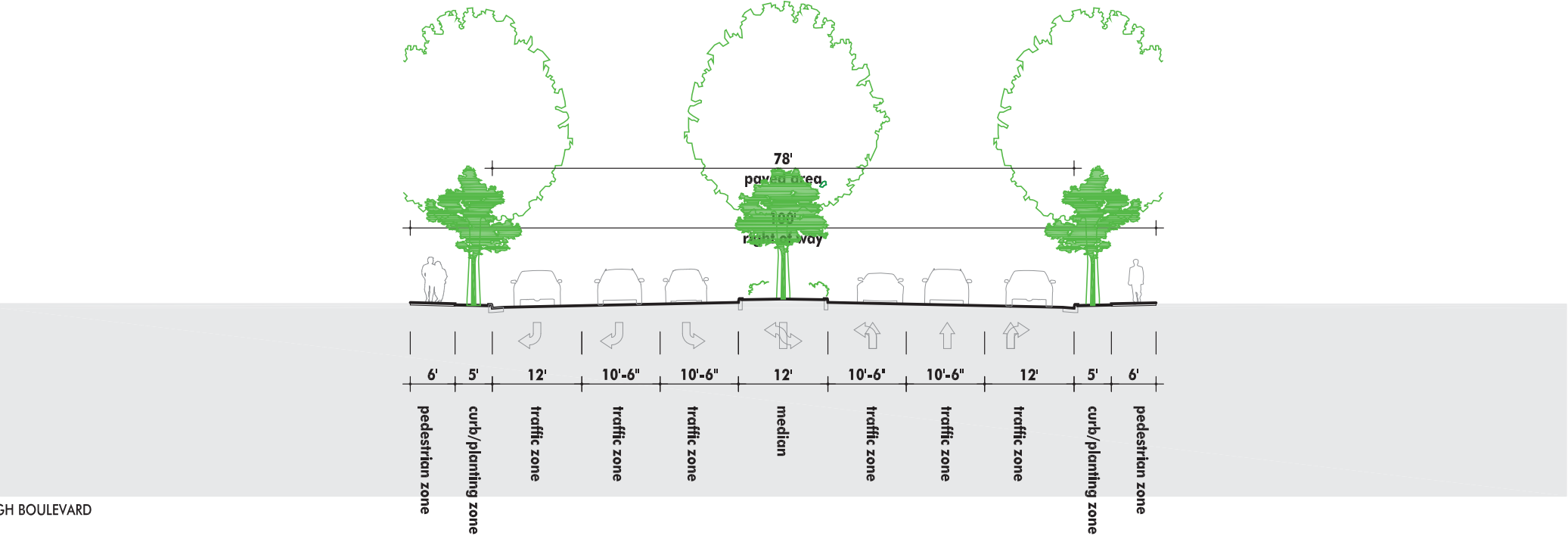
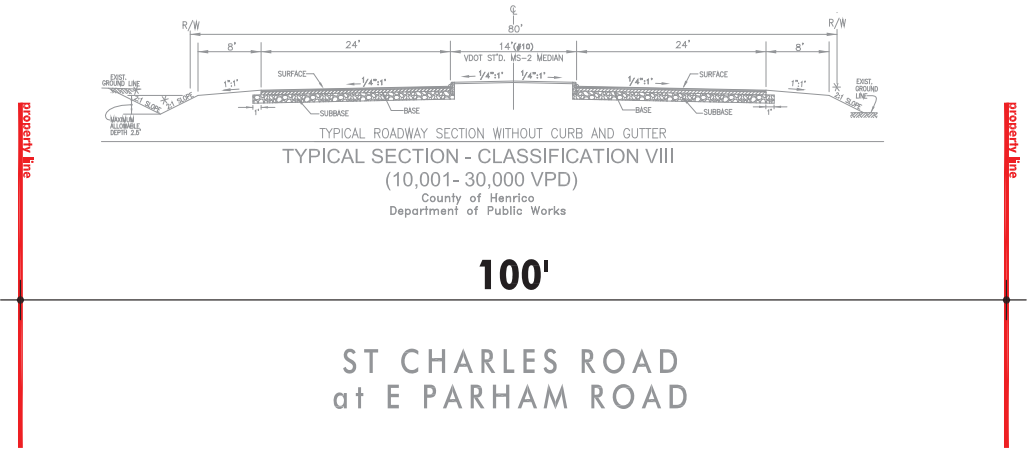


# Streets 9

## Street Sections

### DIVIDED THROUGH BOULEVARD 6 LANES

<b>ROW Width</b>	<b>100'</b>
<b>Pavement Width</b>	<b>33'</b>
<b>Design Speed</b>	<b>30 mph</b>
<b>Curve Specs</b>	
<b>Median Width</b>	<b>14'</b>
<b>Turn Lanes</b>	right turn lanes prohibited left turn lanes at select intersections minimum storage length of 150'; minimum taper length of 100'
<b>Pedestrian Zone</b>	minimum width 11'

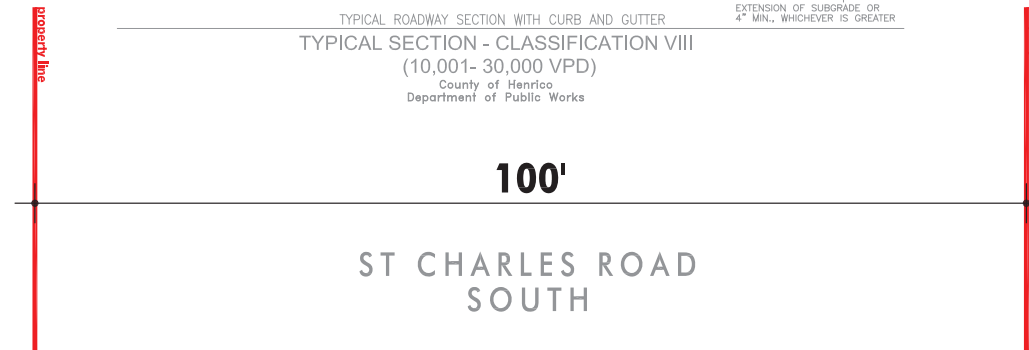
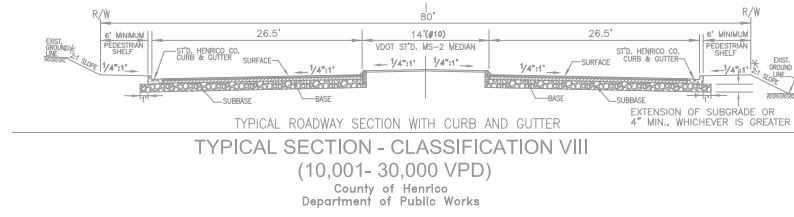


DIVIDED THROUGH BOULEVARD  
18 august 2021

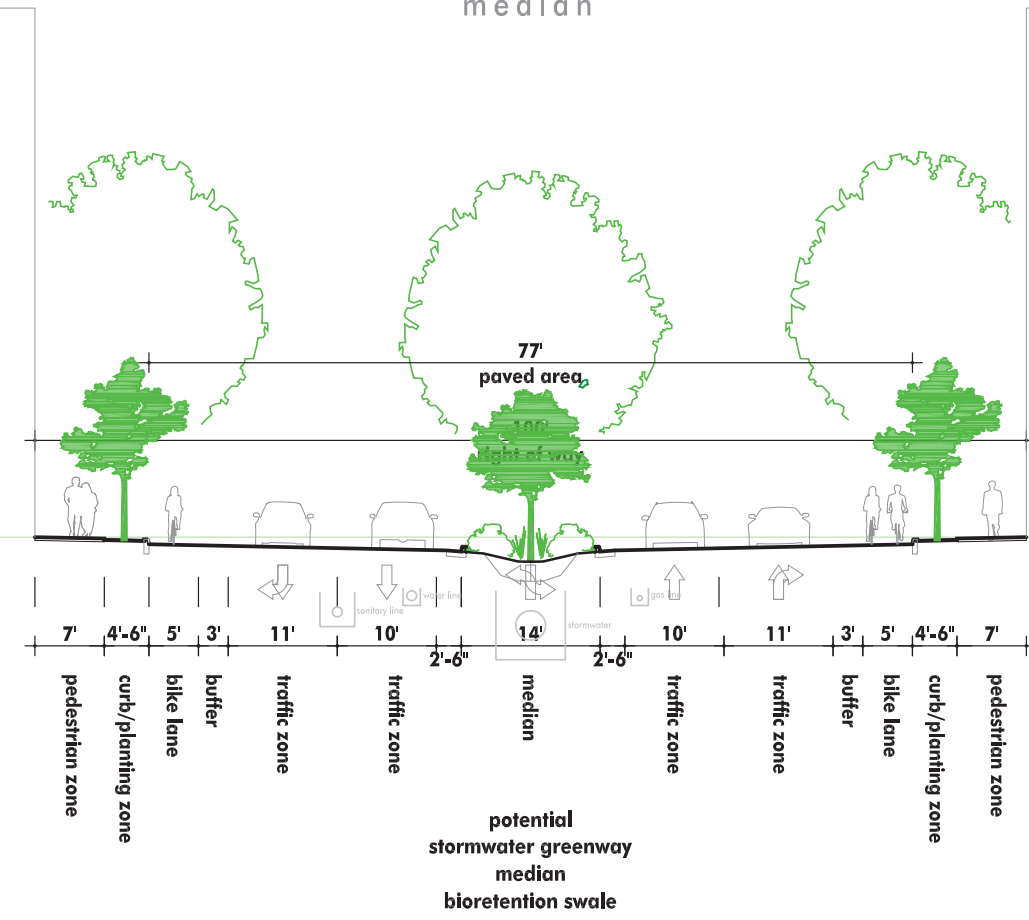


# Streets 9

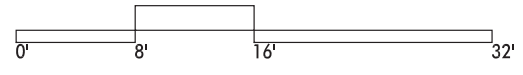
## Street Sections



alternative 2  
 stormwater greenway  
 median



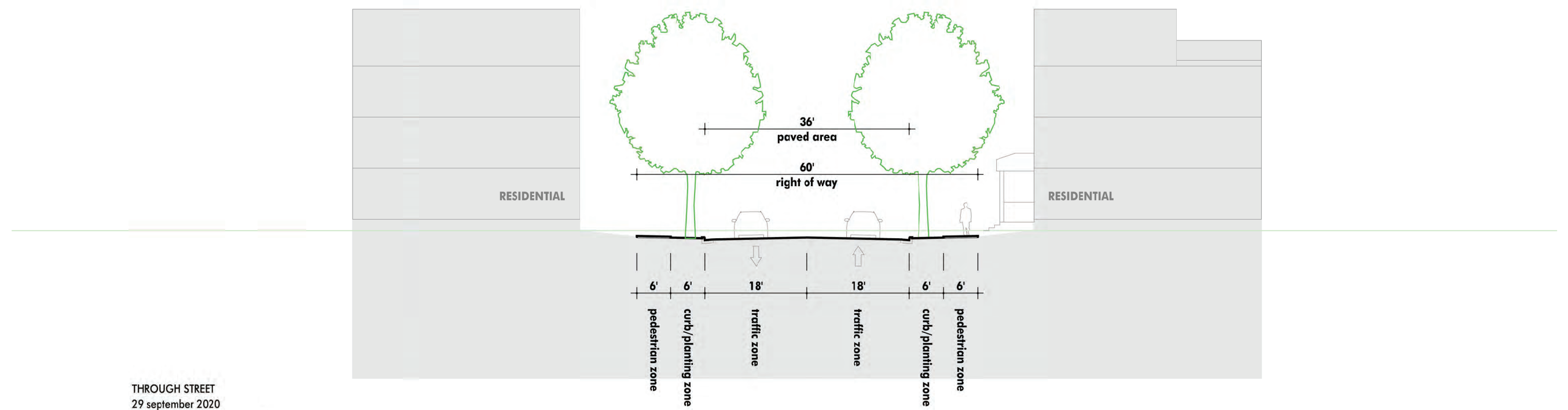
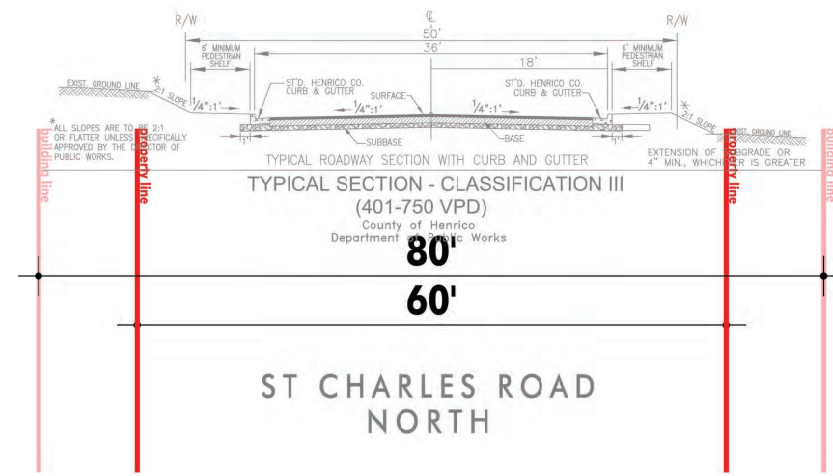
ALTERNATE  
 DIVIDED THROUGH BOULEVARD  
 28 january 2021



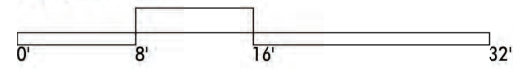


### THROUGH STREET

<b>ROW Width</b>	<b>60'</b>
<b>Pavement Width</b>	<b>36'</b>
<b>Design Speed</b>	<b>25 mph</b>
<b>Median Width</b>	<b>none</b>
<b>Turn Lanes</b>	<b>prohibited</b>
<b>Pedestrian Zone</b>	<b>minimum width 11'</b>



THROUGH STREET  
29 september 2020



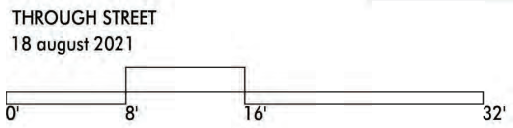
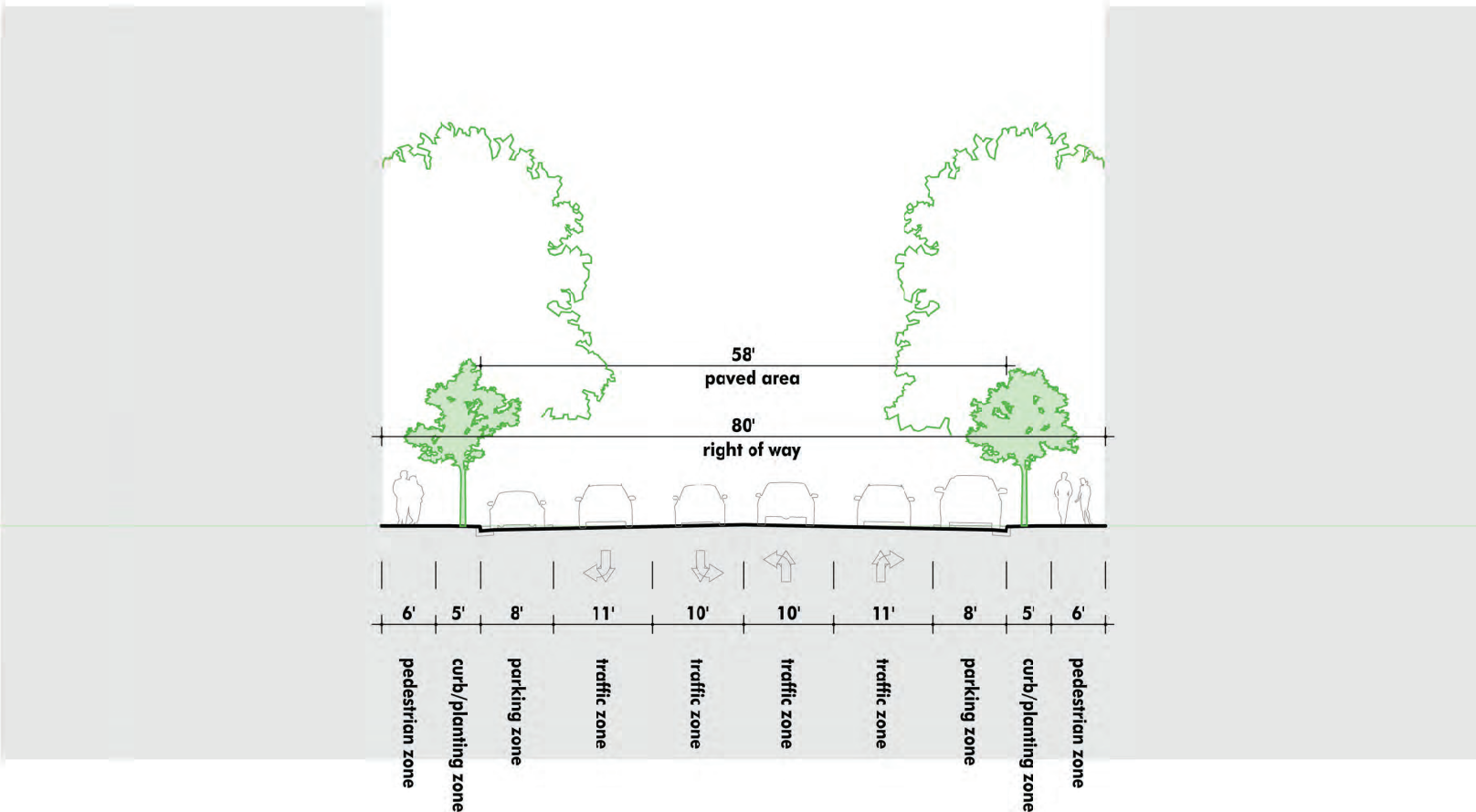
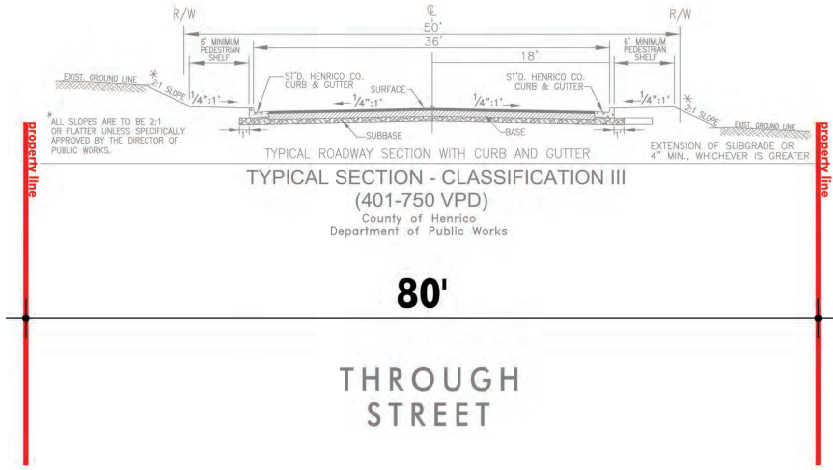


# Streets 9

## Street Sections

### THROUGH STREET 4 LANES

<b>ROW Width</b>	<b>80'</b>
<b>Pavement Width</b>	<b>56'</b>
<b>Design Speed</b>	<b>20 mph</b>
<b>Median Width</b>	<b>none</b>
<b>Turn Lanes</b>	<b>prohibited</b>
<b>Pedestrian Zone</b>	<b>minimum width 15'</b>



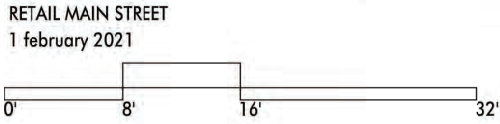
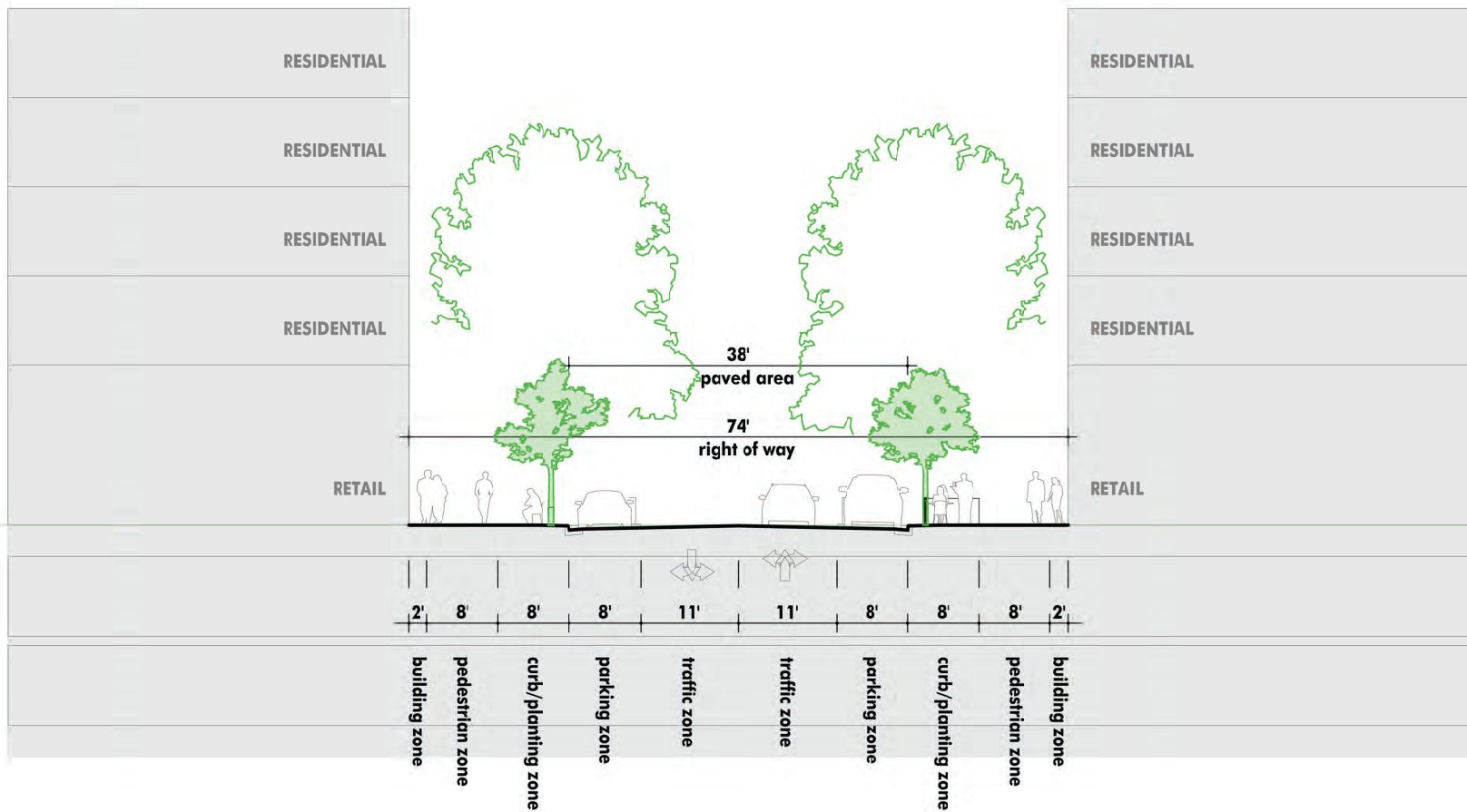
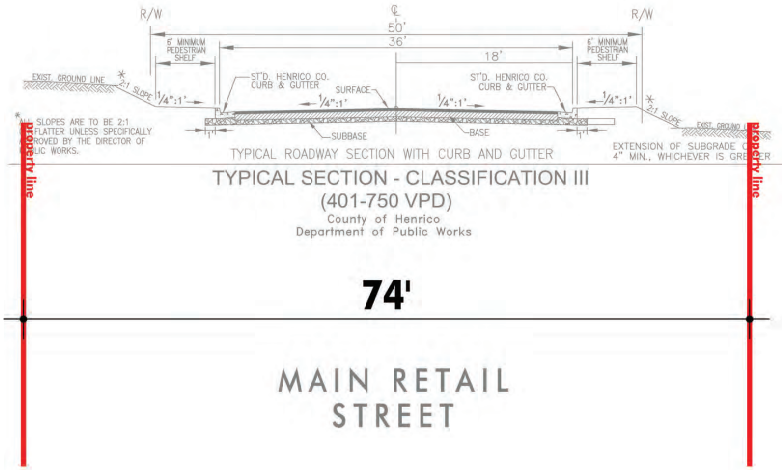


# Streets 9

## Street Sections

### RETAIL MAIN STREET

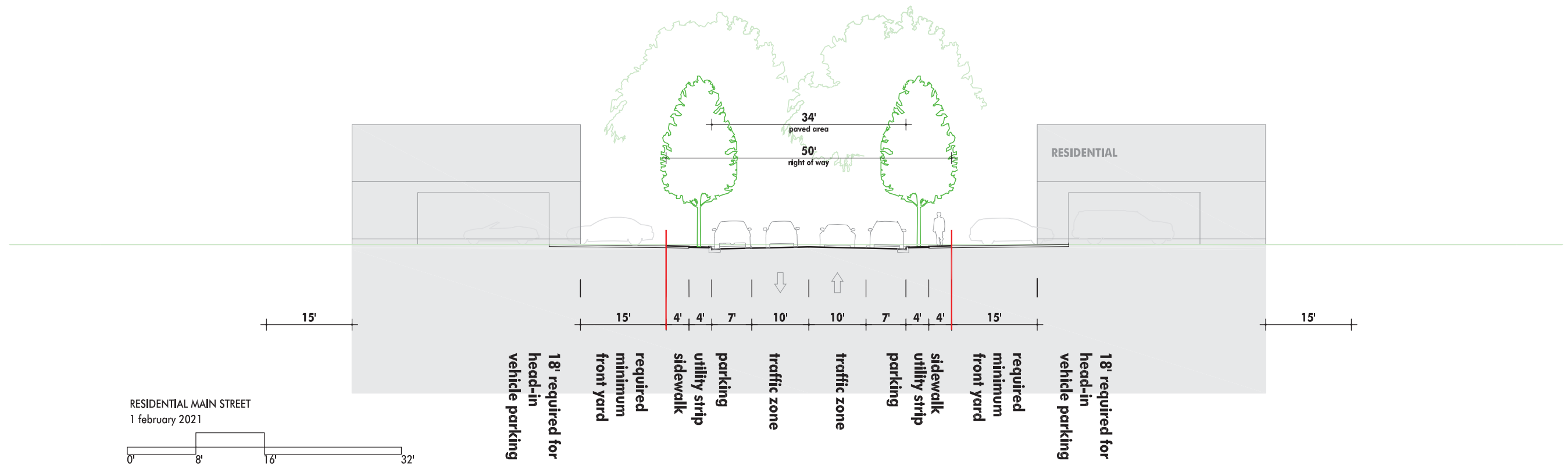
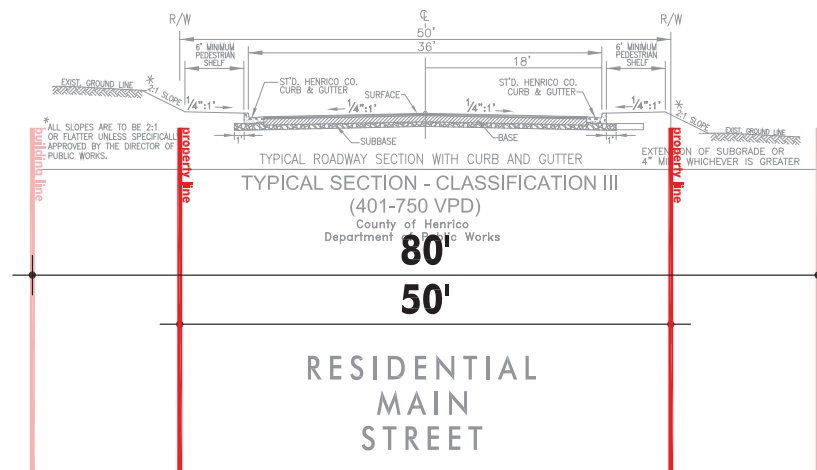
<b>ROW Width</b>	<b>74'</b>
<b>Pavement Width</b>	<b>36'</b>
<b>Design Speed</b>	<b>20 mph</b>
<b>Median Width</b>	<b>none</b>
<b>Turn Lanes</b>	<b>prohibited</b>
<b>Pedestrian Zone</b>	<b>minimum width 15'</b>





### RESIDENTIAL MAIN STREET

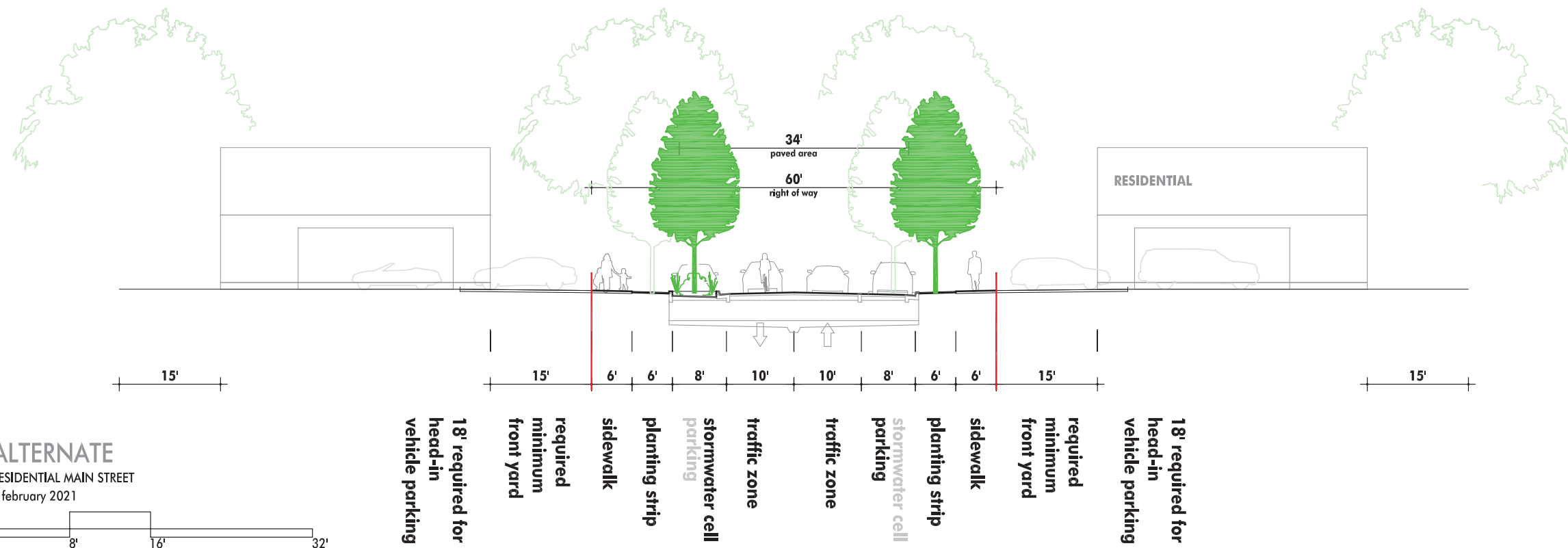
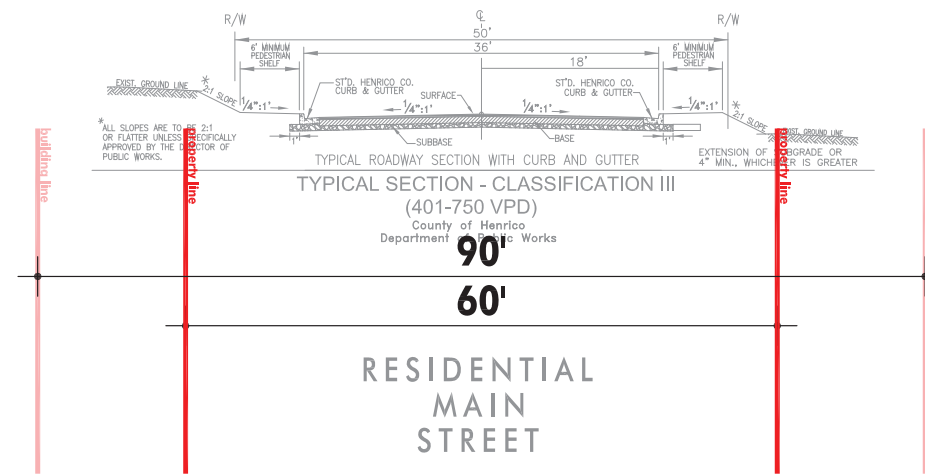
<b>ROW Width</b>	<b>50'</b>
<b>Pavement Width</b>	<b>34'</b>
<b>Design Speed</b>	<b>20 mph</b>
<b>Median Width</b>	<b>none</b>
<b>Turn Lanes</b>	<b>none</b>
<b>Pedestrian Zone</b>	<b>minimum width 4'</b>





### RESIDENTIAL MAIN STREET

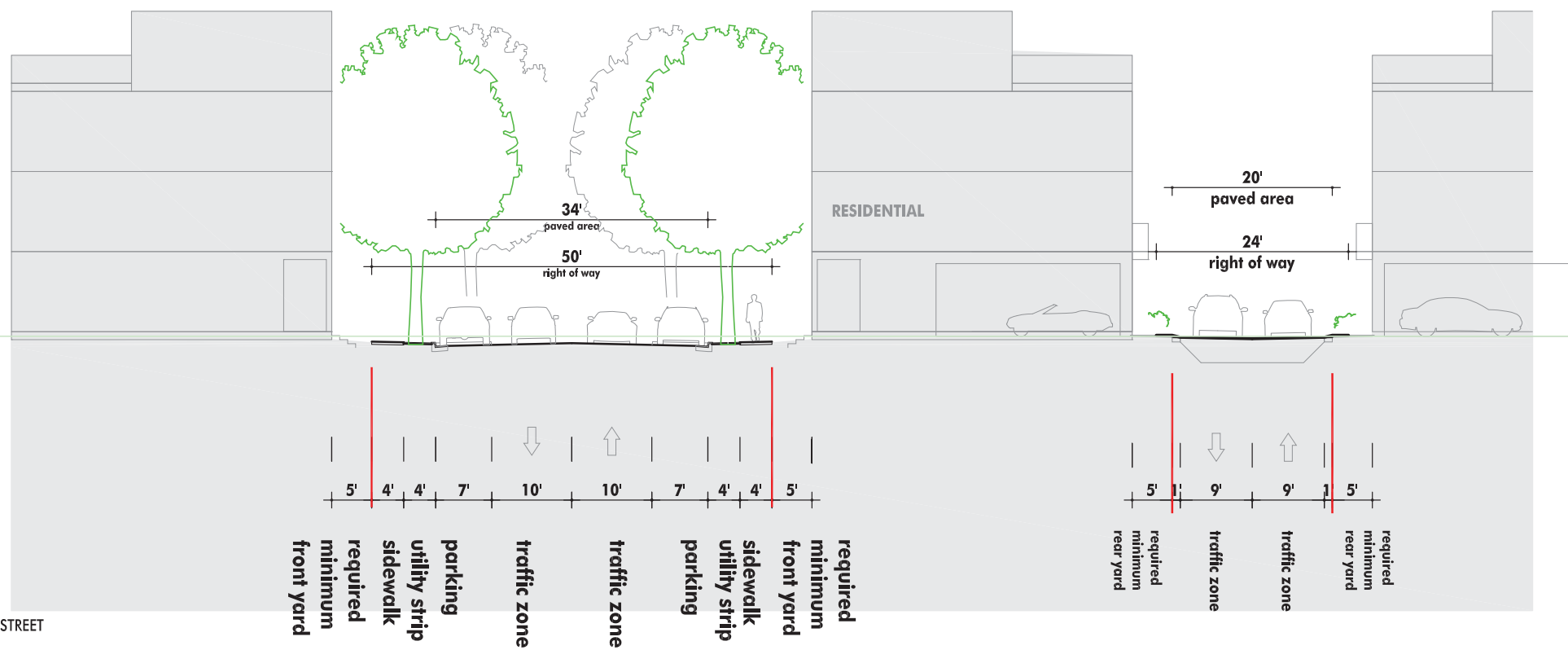
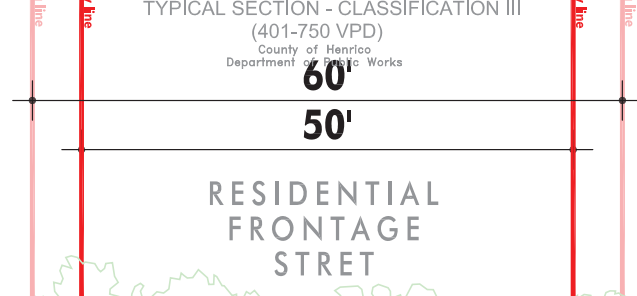
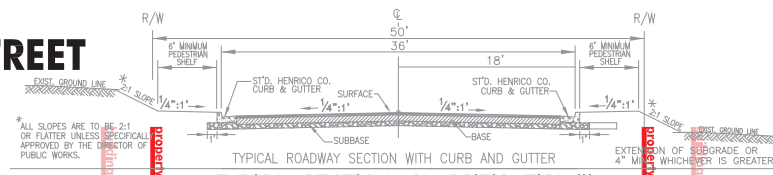
<b>ROW Width</b>	<b>60'</b>
<b>Pavement Width</b>	<b>34'</b>
<b>Design Speed</b>	<b>20 mph</b>
<b>Median Width</b>	<b>none</b>
<b>Turn Lanes</b>	<b>none</b>
<b>Pedestrian Zone</b>	<b>minimum width 4'</b>



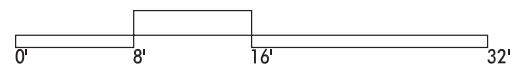


### RESIDENTIAL FRONTAGE STREET

- ROW Width** 60'
- Pavement Width** 34'
- Design Speed** 20 mph
- Median Width** none
- Turn Lanes** none
- Pedestrian Zone** minimum width 4'



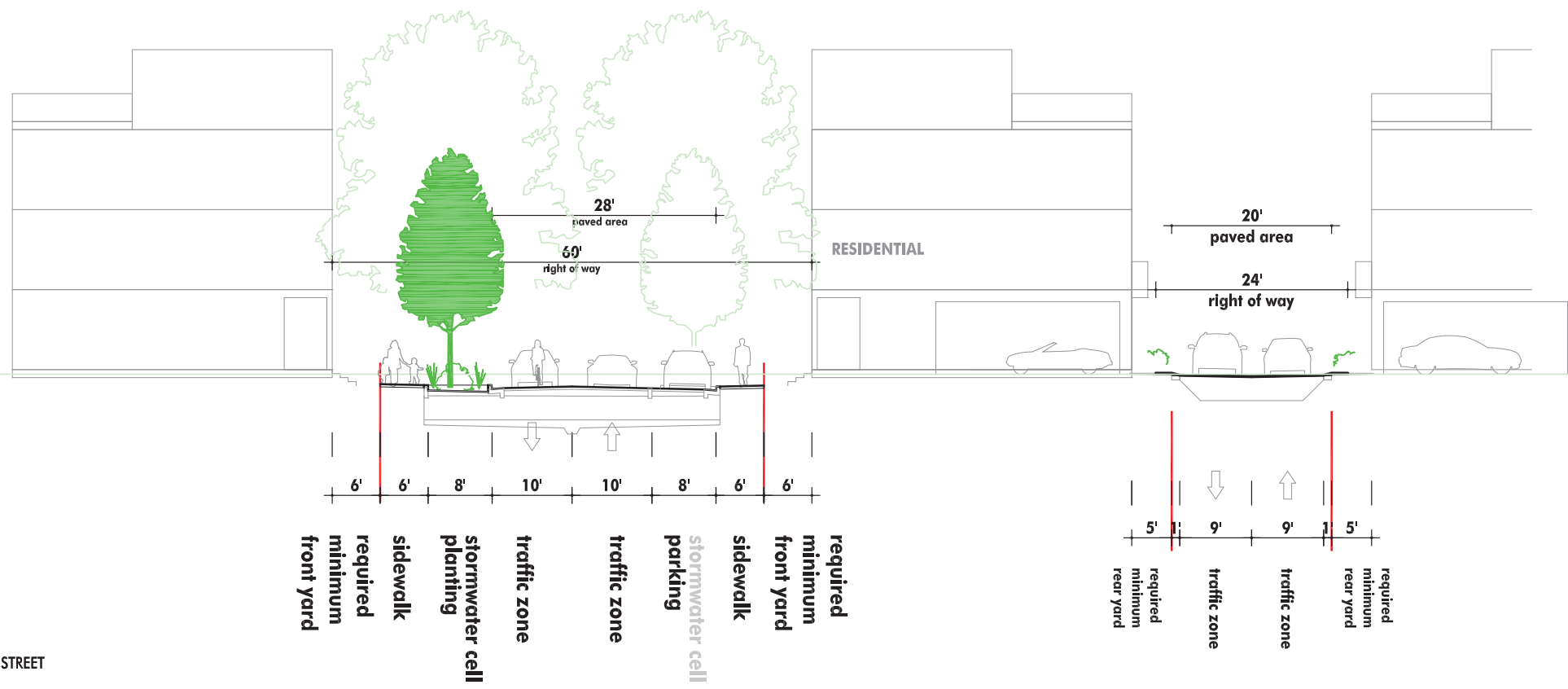
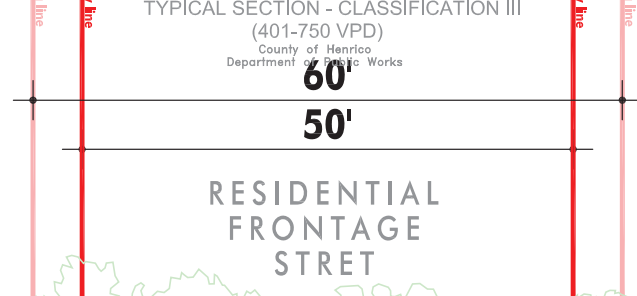
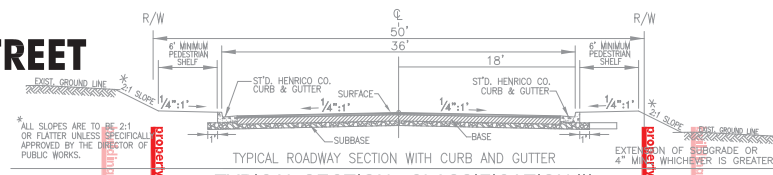
RESIDENTIAL FRONTAGE STREET  
1 february 2021



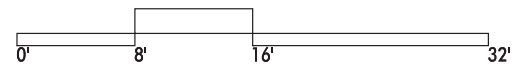


### RESIDENTIAL FRONTAGE STREET

- ROW Width** 60'
- Pavement Width** 28'
- Design Speed** 20 mph
- Median Width** none
- Turn Lanes** none
- Pedestrian Zone** minimum width 4'



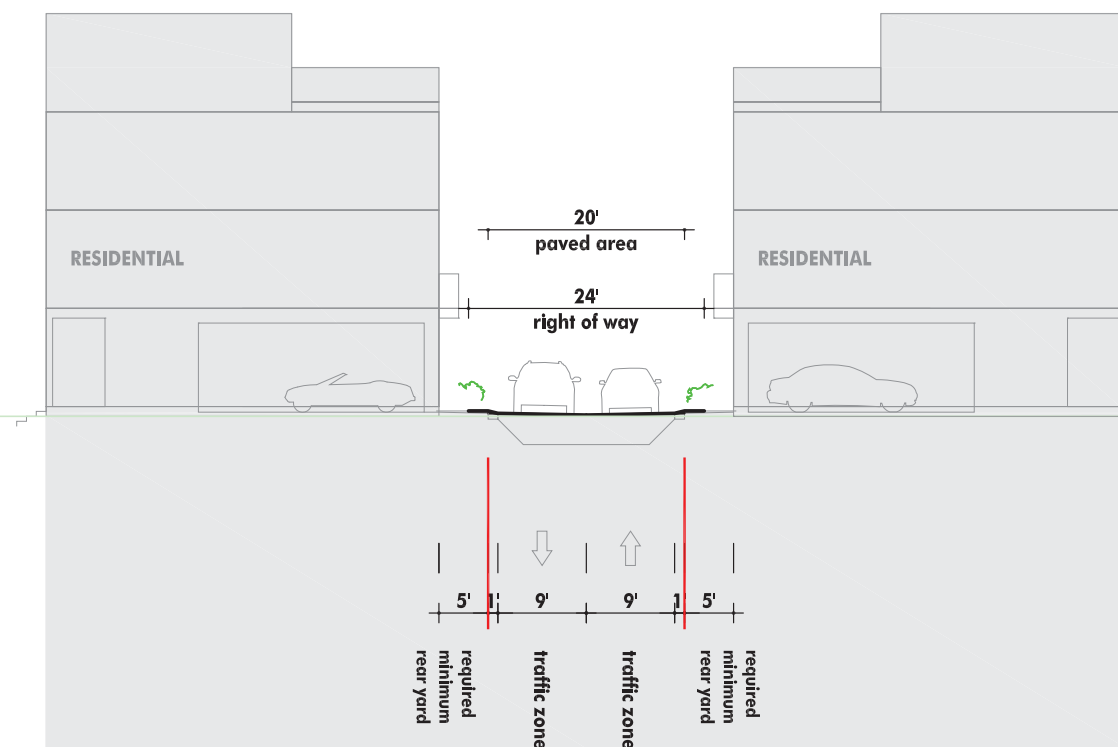
**ALTERNATE**  
RESIDENTIAL FRONTAGE STREET  
1 february 2021



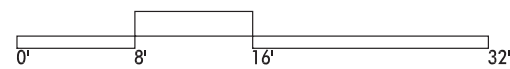


### RESIDENTIAL ACCESS STREET

<b>ROW Width</b>	24'
<b>Pavement Width</b>	20'
<b>Design Speed</b>	10 mph
<b>Median Width</b>	none
<b>Turn Lanes</b>	none
<b>Pedestrian Zone</b>	shared



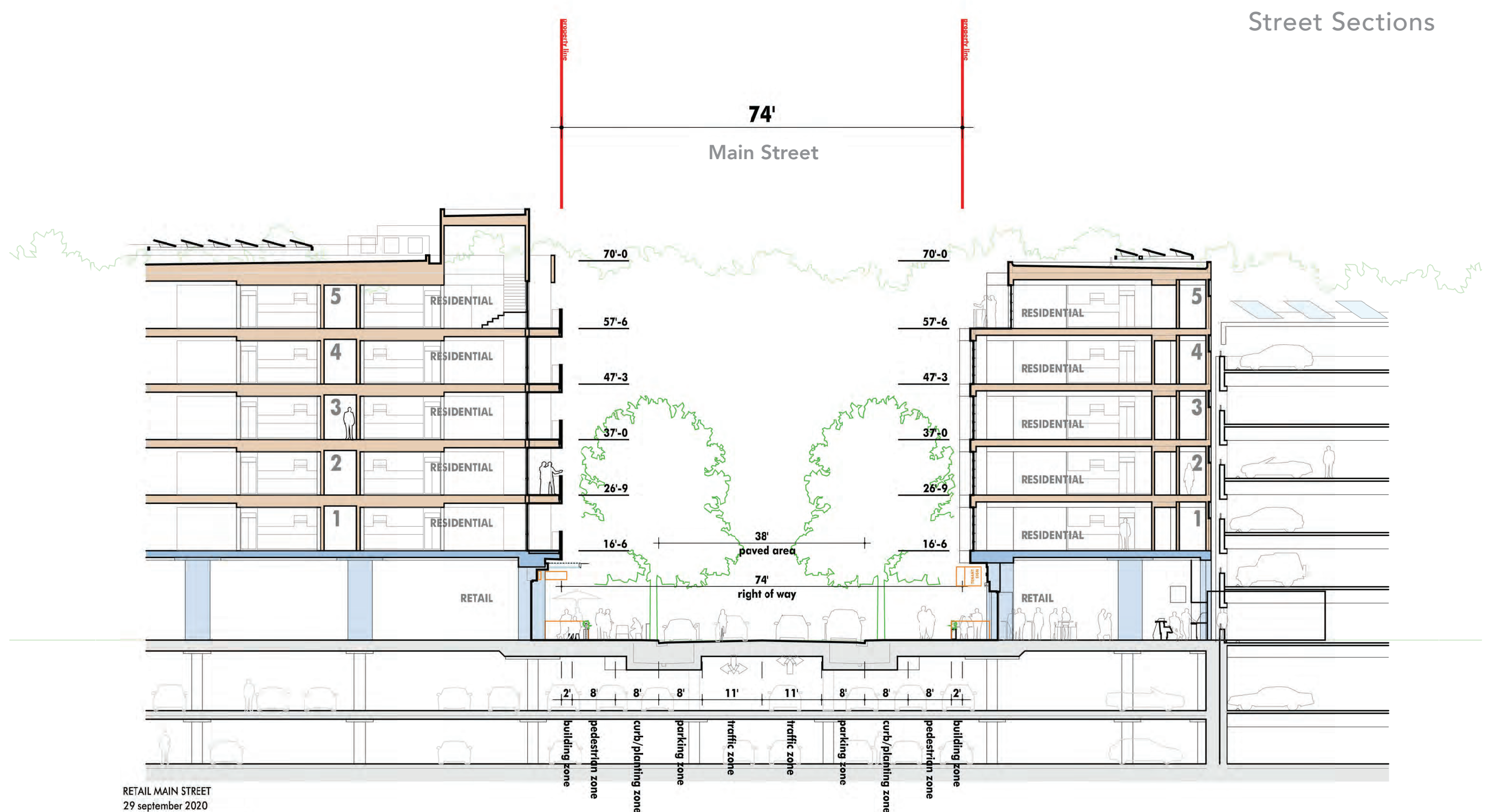
RESIDENTIAL ACCESS STREET  
1 february 2021





# Streets 9

## Street Sections



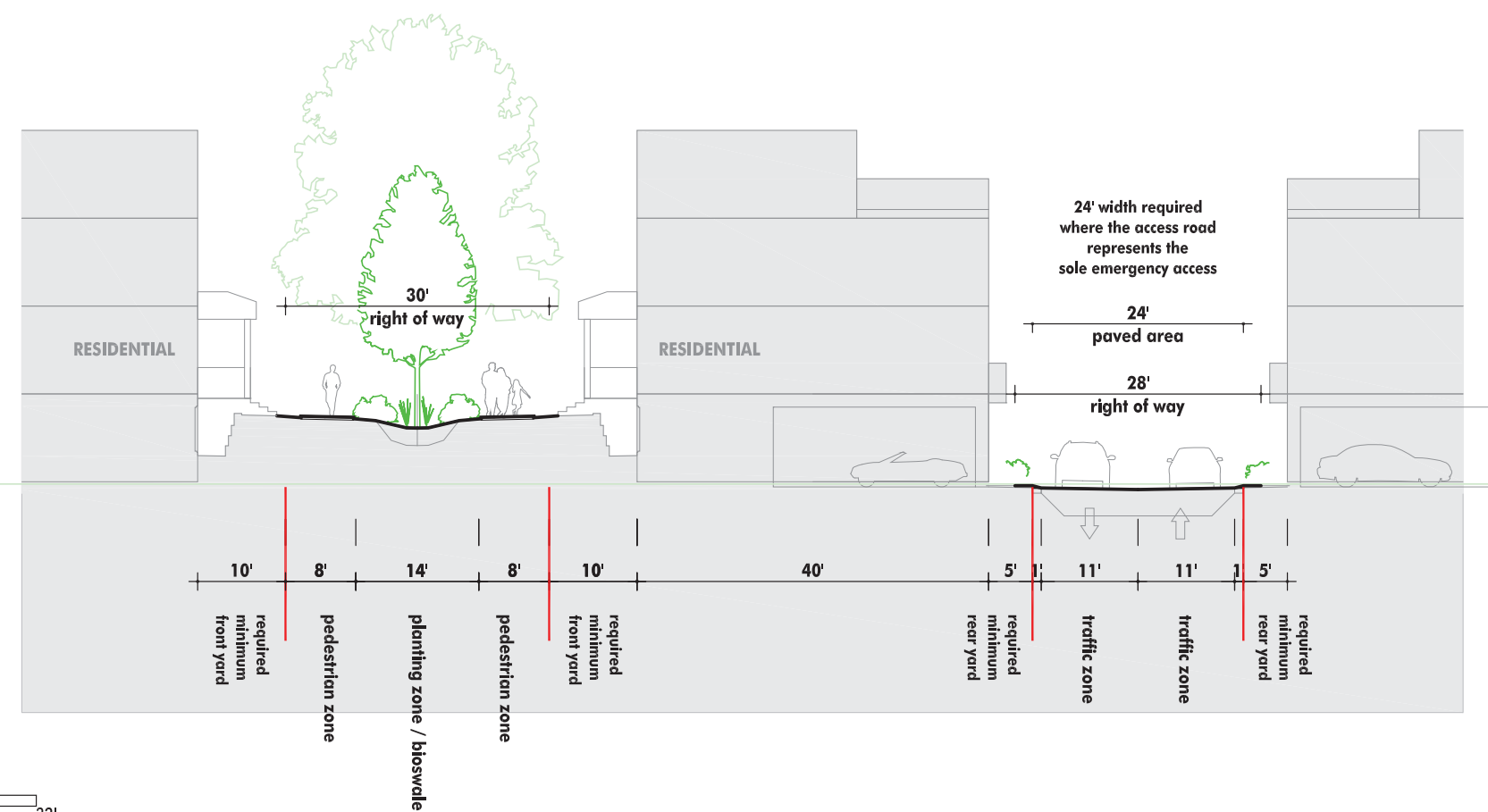
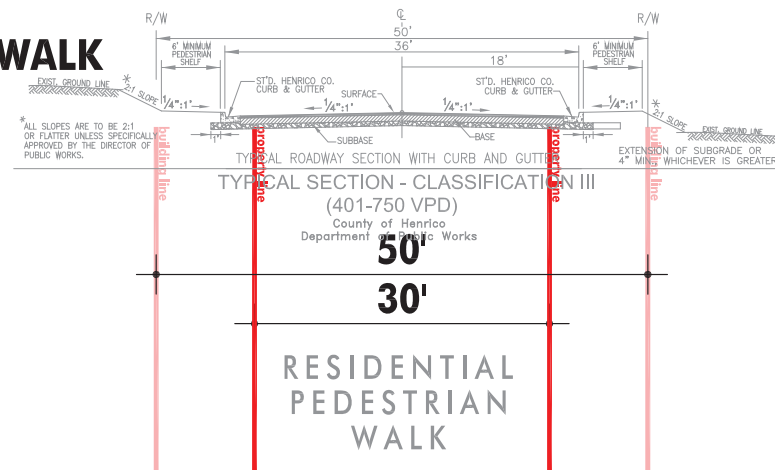
RETAIL MAIN STREET  
29 september 2020

Main Street

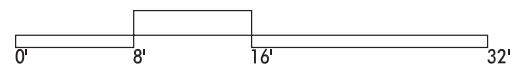


### RESIDENTIAL PEDESTRIAN WALK

ROW Width	50'
Pavement Width	none
Design Speed	pedestrian
Median Width	none
Turn Lanes	none
Pedestrian Zone	minimum width 15'



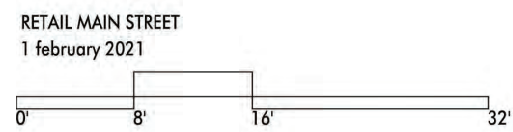
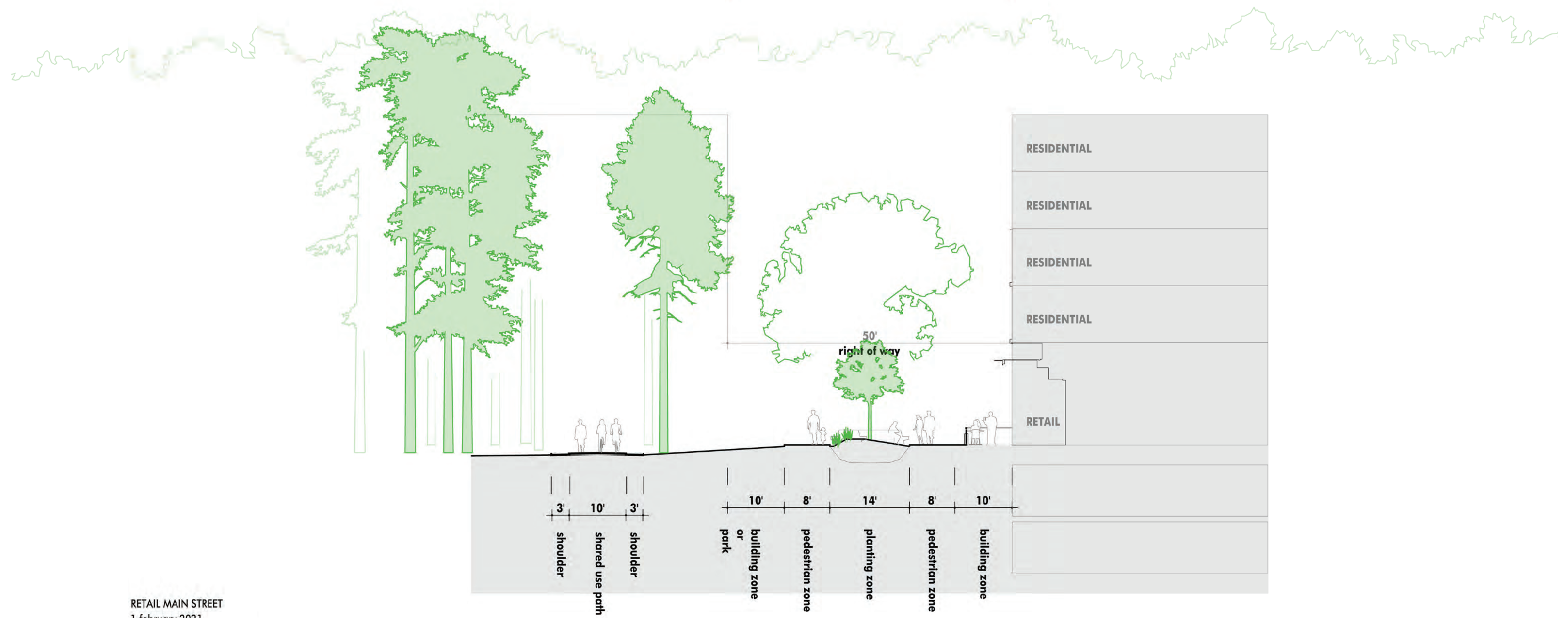
RESIDENTIAL PEDESTRIAN WALK  
1 february 2021



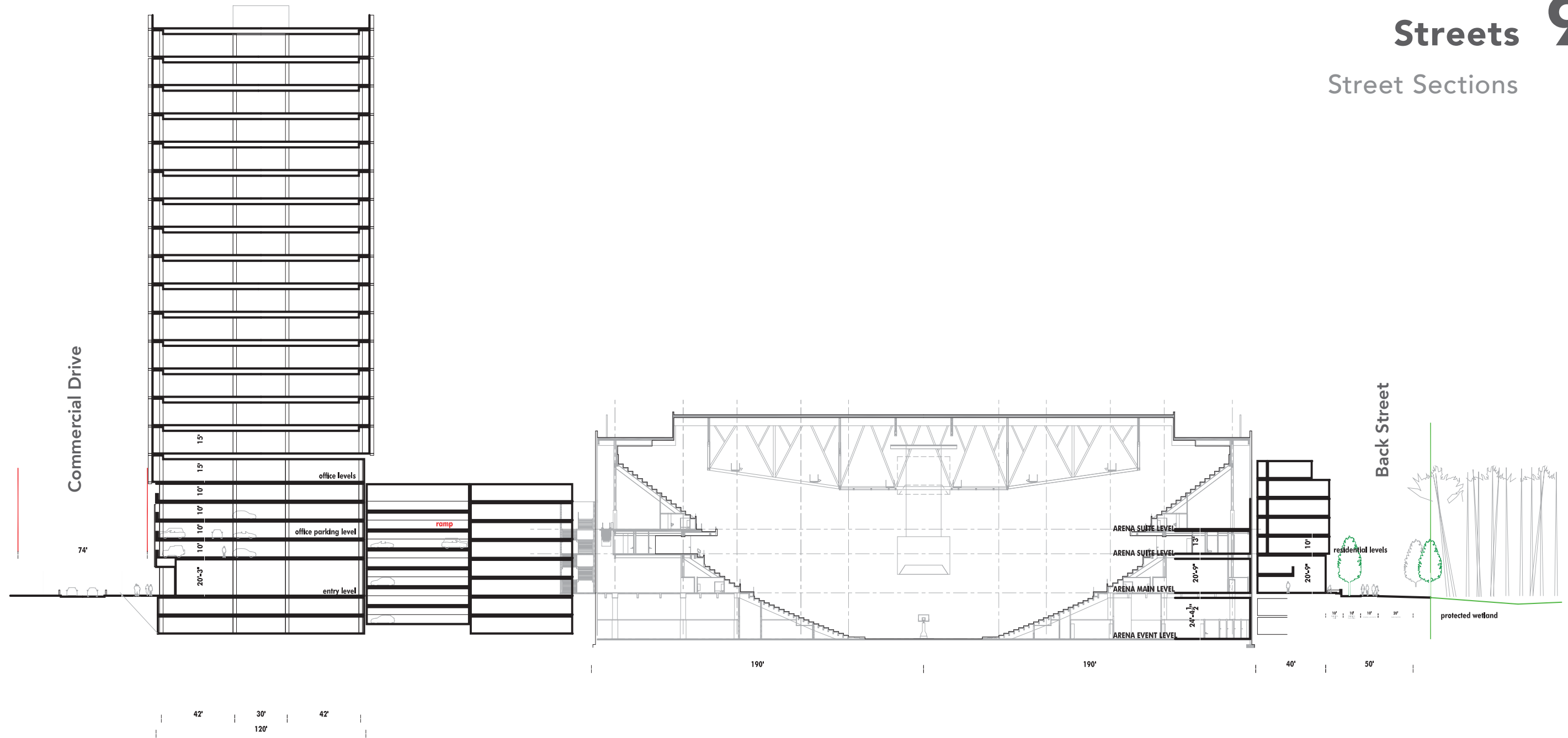


### RETAIL PEDESTRIAN WALK

ROW Width	50'
Pavement Width	none
Design Speed	none
Median Width	none
Turn Lanes	prohibited
Pedestrian Zone	minimum width 15'





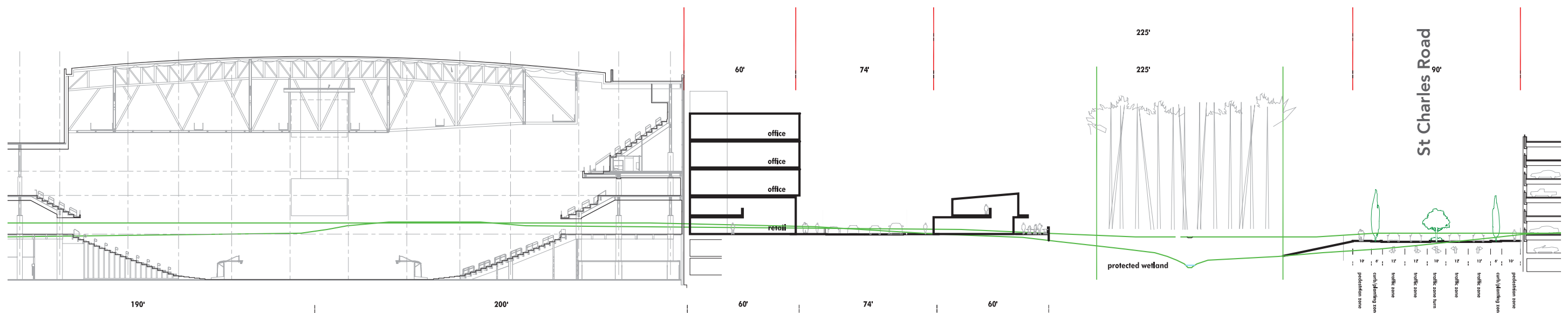


Arena Section • North - South



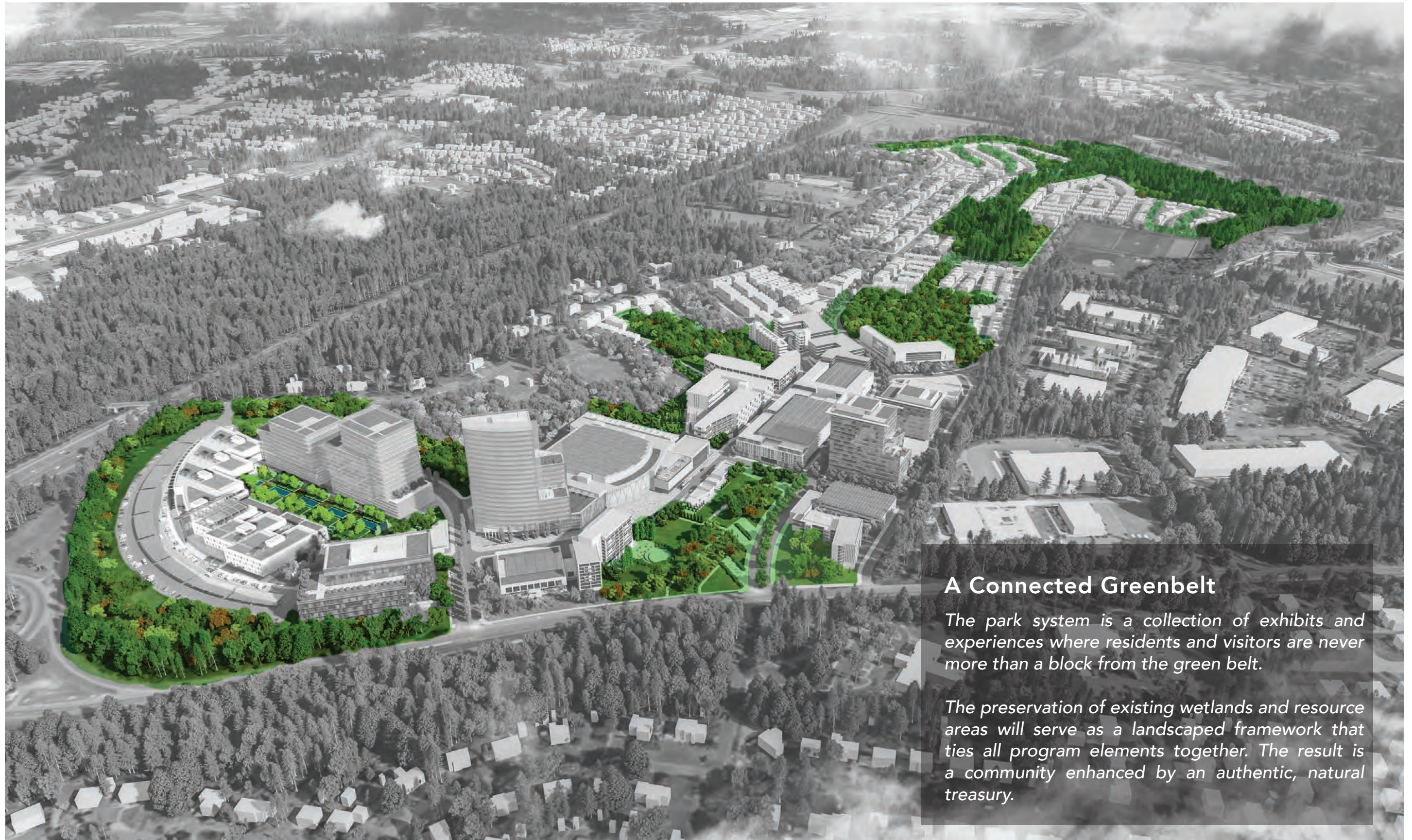
# Streets 9

## Street Sections



Arena Section • East - West





## A Connected Greenbelt

*The park system is a collection of exhibits and experiences where residents and visitors are never more than a block from the green belt.*

*The preservation of existing wetlands and resource areas will serve as a landscaped framework that ties all program elements together. The result is a community enhanced by an authentic, natural treasury.*





GreenCity's proposed park system will include a series of discrete sub-park districts comprising over 40 acres of undeveloped and protected natural ecosystem.

**Forest Walk**, a nature-centered trail connecting the various park sub-districts, will provide for one and one-half miles of protected trails. A broad range of park features have been identified within the larger system to support the diverse uses proposed within the park

The natural resources that already exist on-site will be incorporated within a larger natural infrastructure and showcased. Existing and enhanced wetlands and stream beds will serve as an authentic framework that ties proposed program elements together and creates an outdoor treasury - a collection of exhibits and experiences - where residents, tenants, and visitors are never more than a block from the proposed park system.

It will be a place where living infrastructure and resource conservation are on display.

Ecological patches and bio-dynamic corridors connect GreenCity's district uses and programmatic elements with a spirit and authenticity more characteristic of an arboretum than a commercial development.

A greenway system connects residential, commercial, retail and entertainment land uses throughout the district, offering both recreational and ecological value. The GreenCity landscape takes its cue from the Lower Piedmont and Coastal Plain intersection of woodland forest and wetland plant communities. Native plantings are introduced in a composition that protects, cultivates, and articulates the rich and diverse ecologies of the site and its contextual surrounding. Protected plant communities and wetland systems are largely preserved and further enhanced as the native plant palette extends, in varying forms, throughout the entire development and into the streetscapes, plazas and park spaces.

Carefully considered root volumes and canopy zones allow for shaded and pedestrian-friendly streetscapes throughout the development. Tree bosques and planters invigorate plaza areas by incorporating a diverse mix of canopy and sub-canopy trees, shrub layers and native perennial grasses and flowering specimens. Varied textures and seasonal attributes of GreenCity's diverse landscape bring nature to the doorstep of the district's tenants, residents and patrons.

Pocket parks and open spaces are located throughout the district in close proximity to the greenway system. Useable open lawns are balanced by warm season grass and wildflower meadows, native ornamental collections, managed woodlands and reinforced wetlands to create a dynamic and didactic landscape experience. Accessible trails and overlooks create lasting and memorable connections to local ecologies and GreenCity plant communities.



# GreenCity Project Summary land bay information table

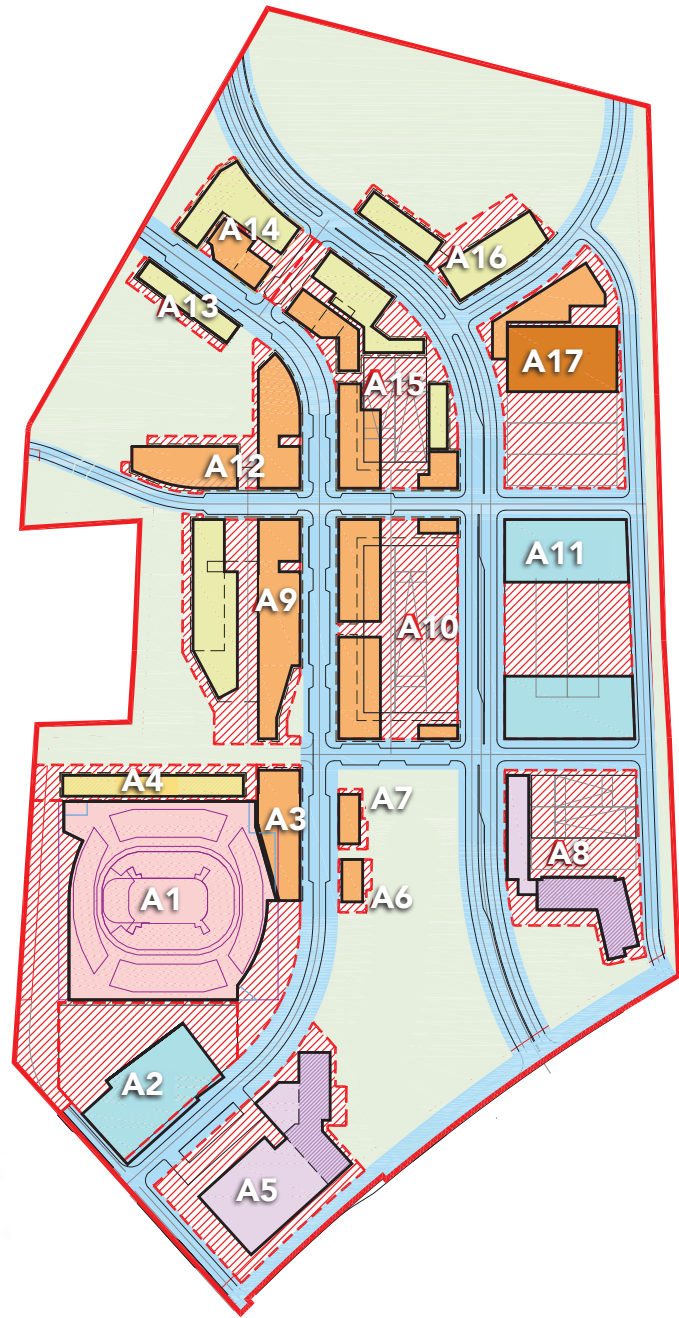
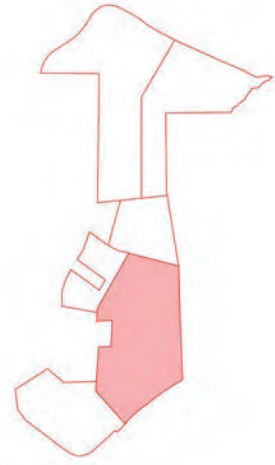
uses	site area	in plan	maximum area	program totals	in plan	building area	in plan	footprint	in plan	coverage	in plan	maximum coverage	average in plan FAR	maximum FAR
<b>site area</b>	204.43	acres	100%											
street area	26.64	acres	13%											
development area	101.99	acres	50%											
open space	75.81	acres	37%											
<b>commercial mixed use</b>	12.95	acres	24.00 acres			1,370,000	sf	401,000	sf	71%		80%	2.43	3.00
multi-family residential				(in residential)										
retail				135,000	sf					2%				
restaurant				65,000	sf					1%				
office				75,000	sf					1%				
parking														
<b>office</b>	18.56	acres	24.00 acres	1,925,000	sf	1,925,000	sf	450,000	sf	56%		80%	2.38	5.00
<b>arena</b>	4.77	acres	6.00 acres	17,000	seats	435,000	sf	140,000	sf	67%		80%	2.10	3.00
<b>hotel</b>	4.02	acres	6.00 acres	500	keys	400,000	sf	75,000	sf	43%		80%	2.29	3.00
conference				30,000	sf	30,000	sf							
<b>residential</b>														
multi-family residential				1,095	units	1,095,000	sf			17%				
stacked townhomes 2/2	15.83	acres	18.00 acres	428	units	770,400	sf	256,800	sf	37%		50%	1.12	1.50
townhomes	24.53	acres	30.00 acres	422	units	1,012,800	sf	337,600	sf	32%		35%	0.95	1.50
attached villas	18.86	acres	24.00 acres	168	units	470,400	sf	252,000	sf	31%		35%	0.57	1.50
single family homes	2.47	acres	6.00 acres	25	units	80,000	sf	30,000	sf	28%		35%	0.74	1.50
<b>total</b>	101.99	acres		2,138	units	6,493,600	sf			100%				
average residential density				10	units/acre									



# Land Bay Areas 11







Subdistrict **A**

# A

**Parcel Areas**

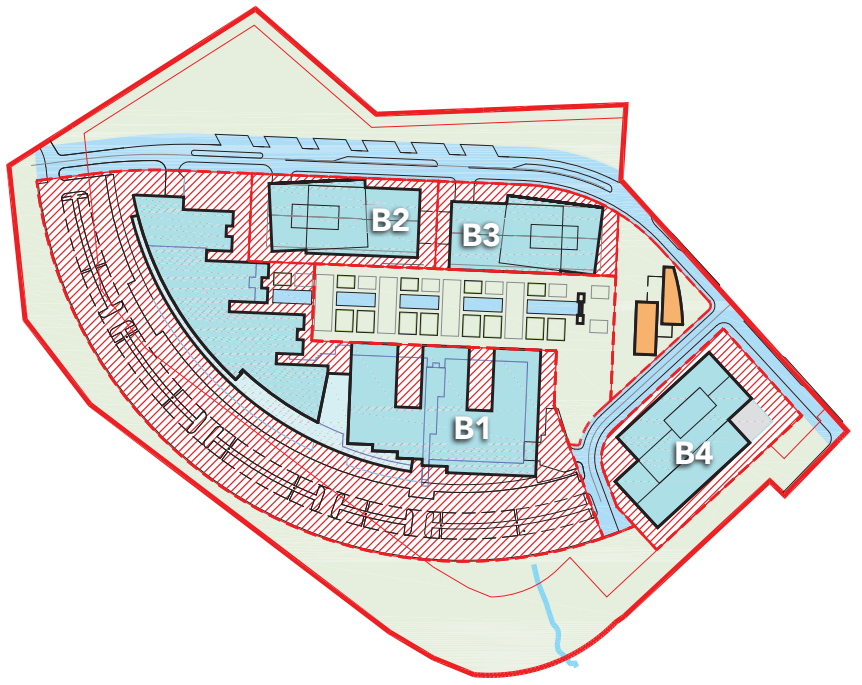
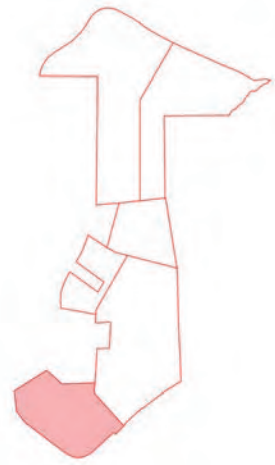
A1	207,589 s.f.
A2	73,705 s.f.
A3	18,747 s.f.
A4	29,123 s.f.
A5	93,617 s.f.
A6	5,946 s.f.
A7	5,749 s.f.
A8	81,410 s.f.
A9	88,142 s.f.
A10	95,760 s.f.
A11	101,322 s.f.
A12	45,134 s.f.
A13	13,438 s.f.
A14	36,516 s.f.
A15	95,391 s.f.
A16	35,153 s.f.
A17	94,957 s.f.

**Park Area**

A\_ 644,700 s.f.

**Streets**

A\_ 567,116 s.f.



Subdistrict **B**

# B

**Parcel Areas**

B1	435,488 s.f.
B2	55,466 s.f.
B3	59,973 s.f.
B4	82,635 s.f.

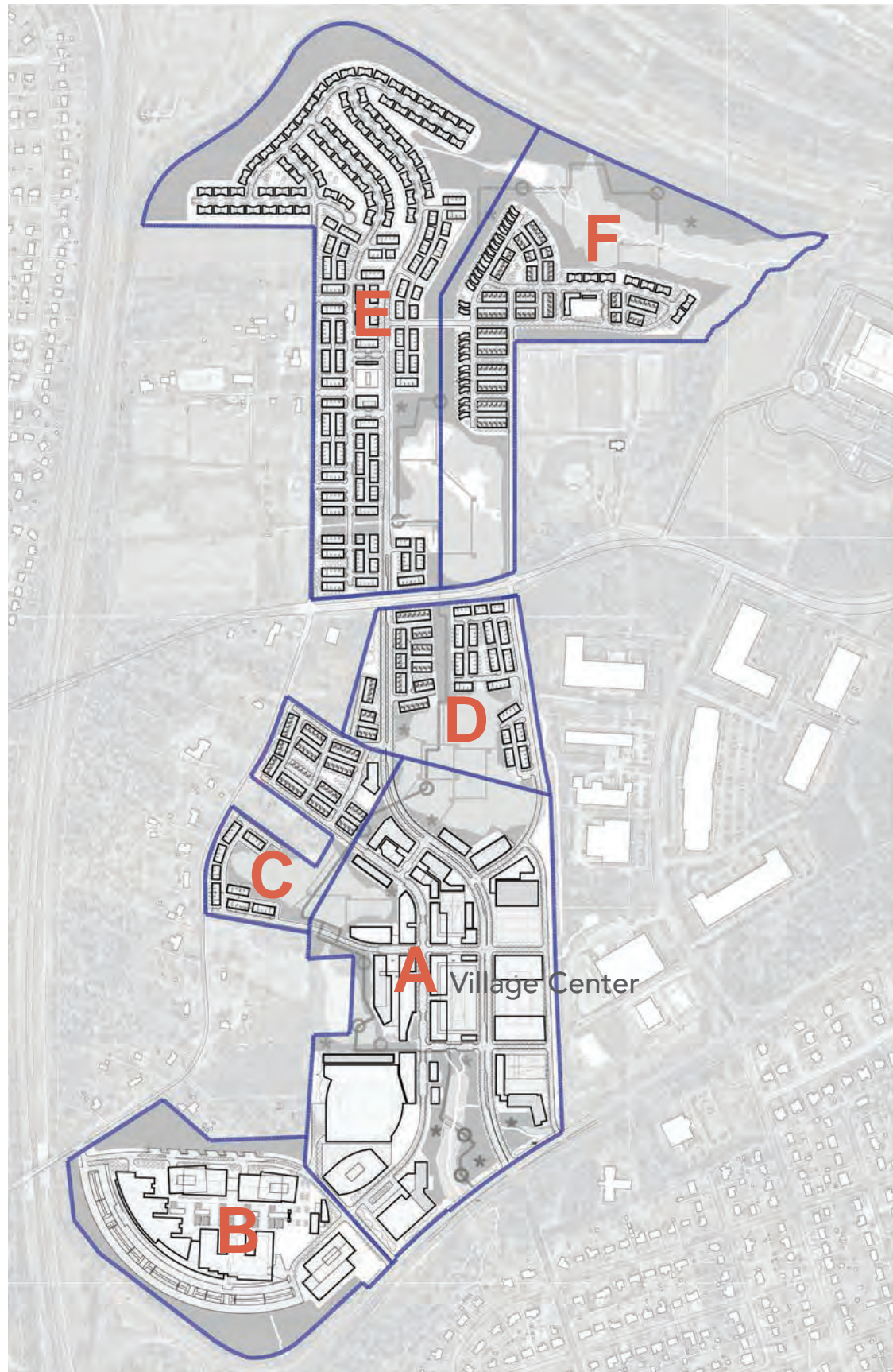
**Park Area**

B\_ 439,379 s.f.

**Streets**

B\_ 131,246 s.f.





## Non-Residential Use Areas

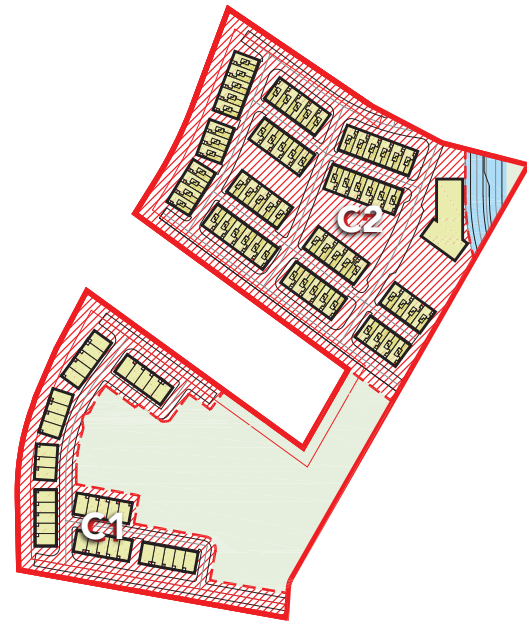
total	use	A	B
200,000 sf	RETAIL	200,000 sf	
1,965,000 sf	OFFICE	955,000 sf	1,010,000 sf
400,000 sf	HOTEL	400,000 sf	
30,000 sf	CONFERENCE	30,000 sf	
435,000 sf	ARENA	435,000 sf	
<b>3,030,000 sf</b>		<b>2,020,000 sf</b>	<b>1,010,000 sf</b>

## Residential Unit Counts

unit count	use	A	B	C	D	E	F
1,095	multi-family	1,095					
428	2 over 2 condos			126	104		85
168	attached villas					152	16
422	townhomes			37	80	305	
25	single-family det'd						25
<b>2,138</b>		<b>1,095</b>		<b>163</b>	<b>184</b>	<b>457</b>	<b>239</b>



# C



## Parcel Areas

C1	126,635 s.f.
C2	265,025 s.f.

## Park Area

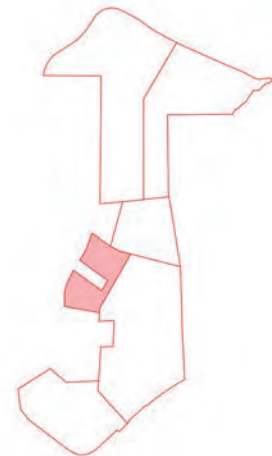
C_	137,437 s.f.
----	--------------

## Streets

C_	11,924 s.f.
----	-------------

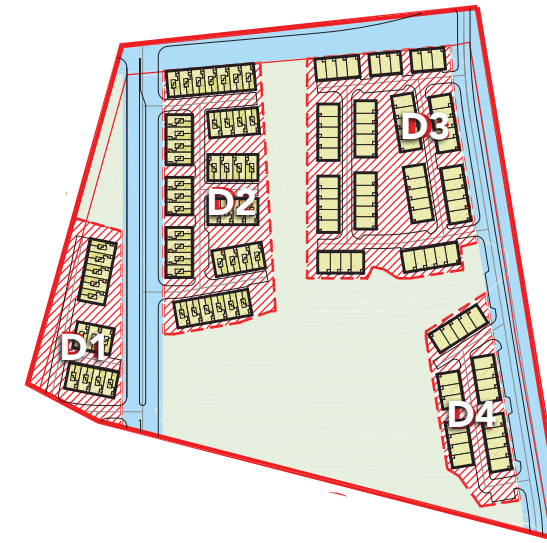
## Residential Units

program	building area	roof area		
C1 townhomes	88,000 s.f.	800 s.f.	37 units	2,400 s.f. each
C2 2 over 2	226,800 s.f.	600 s.f.	126 units	1,800 s.f. each
	<b>315,600 s.f.</b>	<b>105,200 s.f.</b>		



## Subdistrict C

# D



## Parcel Areas

D1	50,352 s.f.
D2	99,218 s.f.
D3	127,214 s.f.
D4	45,042 s.f.

## Park Area

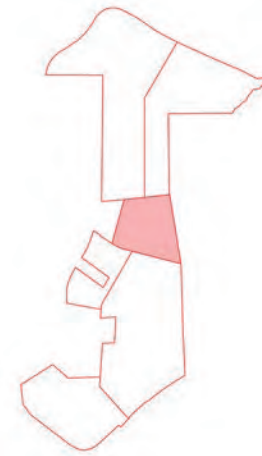
D_	241,640 s.f.
----	--------------

## Streets

D_	167,518 s.f.
----	--------------

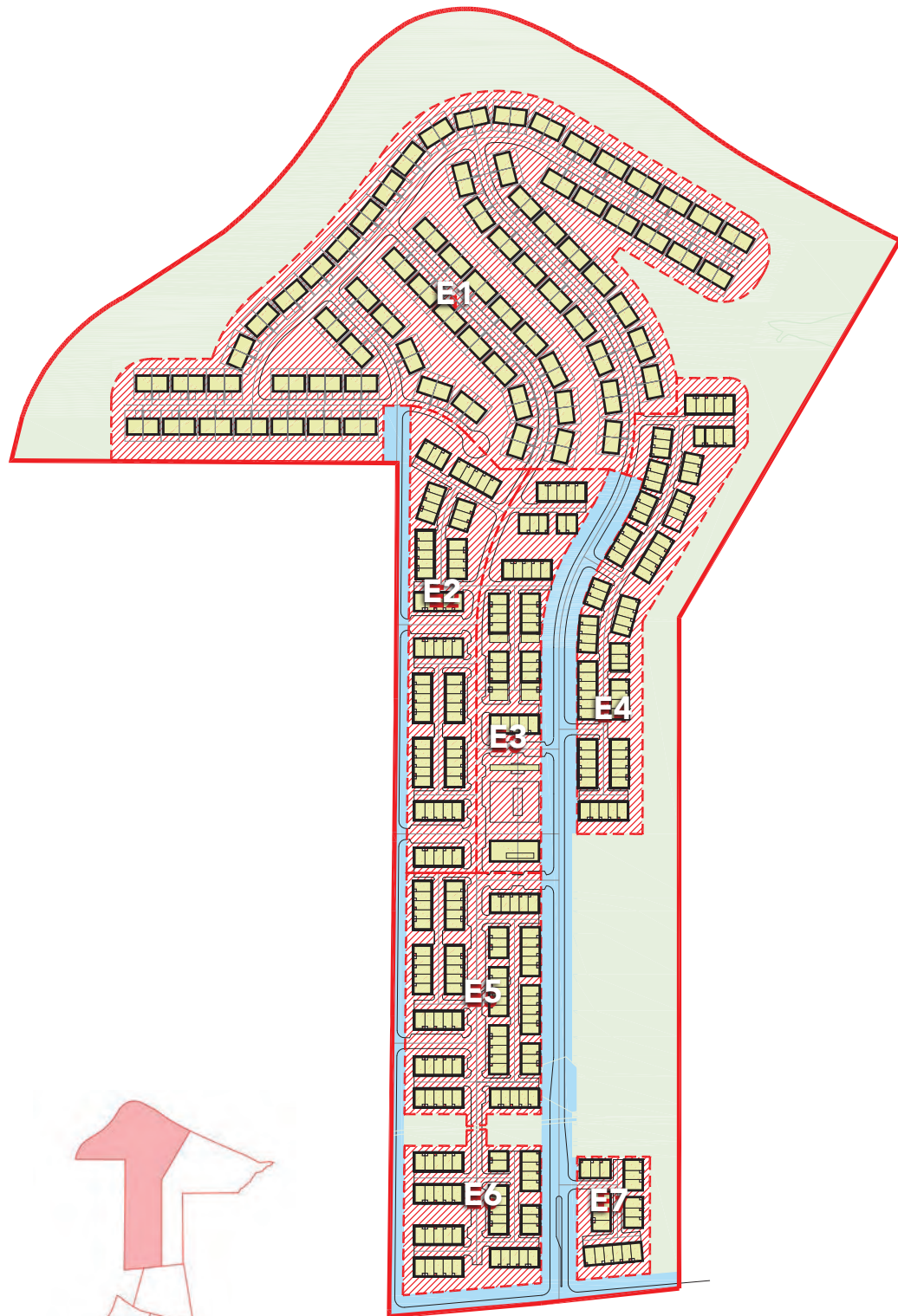
## Residential Units

program	building area	roof area		
D1 2 over 2	43,200 s.f.	600 s.f.	24 units	1,800 s.f. each
D2 2 over 2	144,000 s.f.	600 s.f.	80 units	1,800 s.f. each
D3 townhomes	141,600 s.f.	800 s.f.	59 units	2,400 s.f. each
D4 townhomes	50,400 s.f.	800 s.f.	21 units	2,400 s.f. each
	<b>379,200 s.f.</b>			



## Subdistrict D





Subdistrict **E**

# E

## Parcel Areas

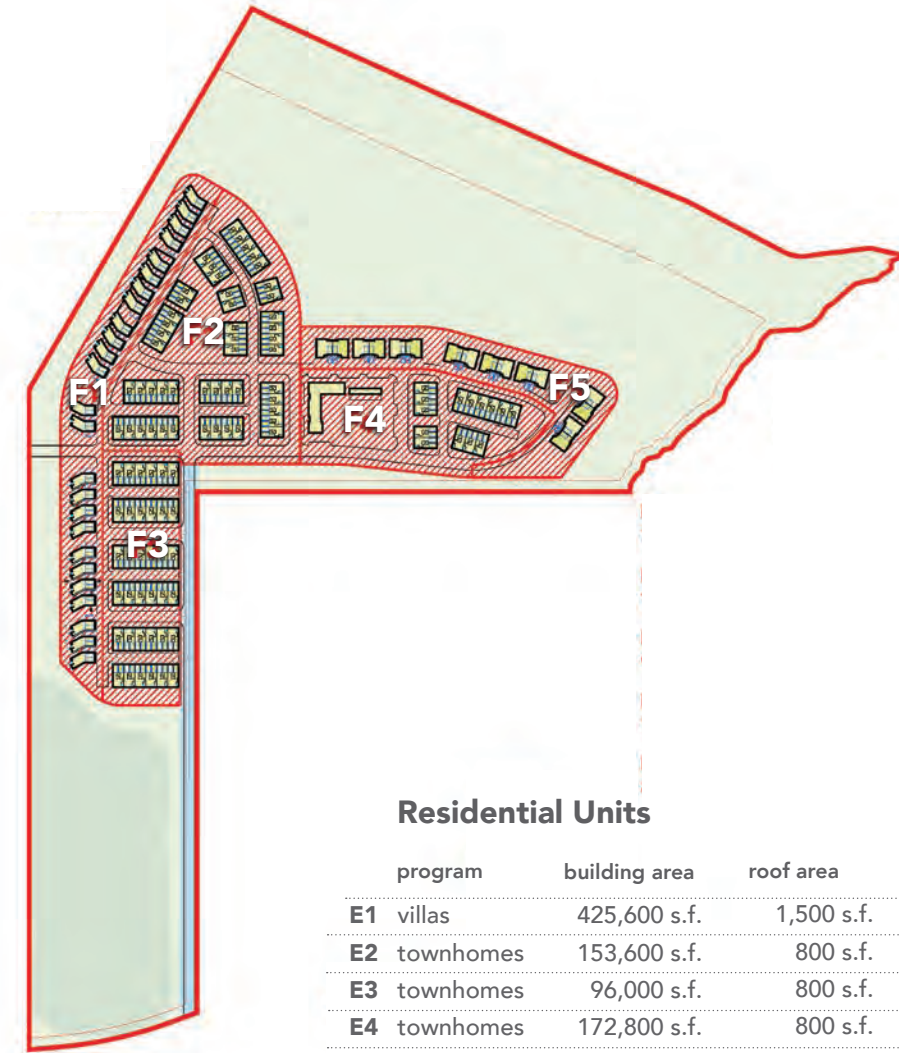
E1	717,374 s.f.
E2	166,249 s.f.
E3	136,068 s.f.
E4	166,467 s.f.
E5	160,618 s.f.
E6	97,642 s.f.
E7	42,690 s.f.

## Park Area

E_	735,197 s.f.
----	--------------

## Streets

E_	234,197 s.f.
----	--------------



# F

## Parcel Areas

F1	107,505 s.f.
F2	181,109 s.f.
F3	93,960 s.f.
F4	104,162 s.f.
F5	85,805 s.f.

## Park Area

F_	1,103,530 s.f.
----	----------------

## Streets

F_	48,276 s.f.
----	-------------

## Residential Units

program	building area	roof area		
E1 villas	425,600 s.f.	1,500 s.f.	152 units	2,800 s.f. each
E2 townhomes	153,600 s.f.	800 s.f.	64 units	2,400 s.f. each
E3 townhomes	96,000 s.f.	800 s.f.	40 units	2,400 s.f. each
E4 townhomes	172,800 s.f.	800 s.f.	72 units	2,400 s.f. each
E5 townhomes	170,400 s.f.	800 s.f.	71 units	2,400 s.f. each
E6 townhomes	93,600 s.f.	800 s.f.	39 units	2,400 s.f. each
E7 townhomes	45,600 s.f.	800 s.f.	19 units	2,400 s.f. each
<b>1,157,600 s.f.</b>				
F1 single family	80,000 s.f.	1,200 s.f.	25 units	3,200 s.f. each
F2 2 over 2	176,400 s.f.	600 s.f.	98 units	1,800 s.f. each
F3 2 over 2	129,600 s.f.	600 s.f.	72 units	1,800 s.f. each
F4 2 over 2	50,400 s.f.	600 s.f.	28 units	1,800 s.f. each
F5 villas	44,800 s.f.	1,500 s.f.	16 units	2,800 s.f. each
<b>481,200 s.f.</b>				

Subdistrict **F**



## GreenCity Parking Summaries parking proposed + required

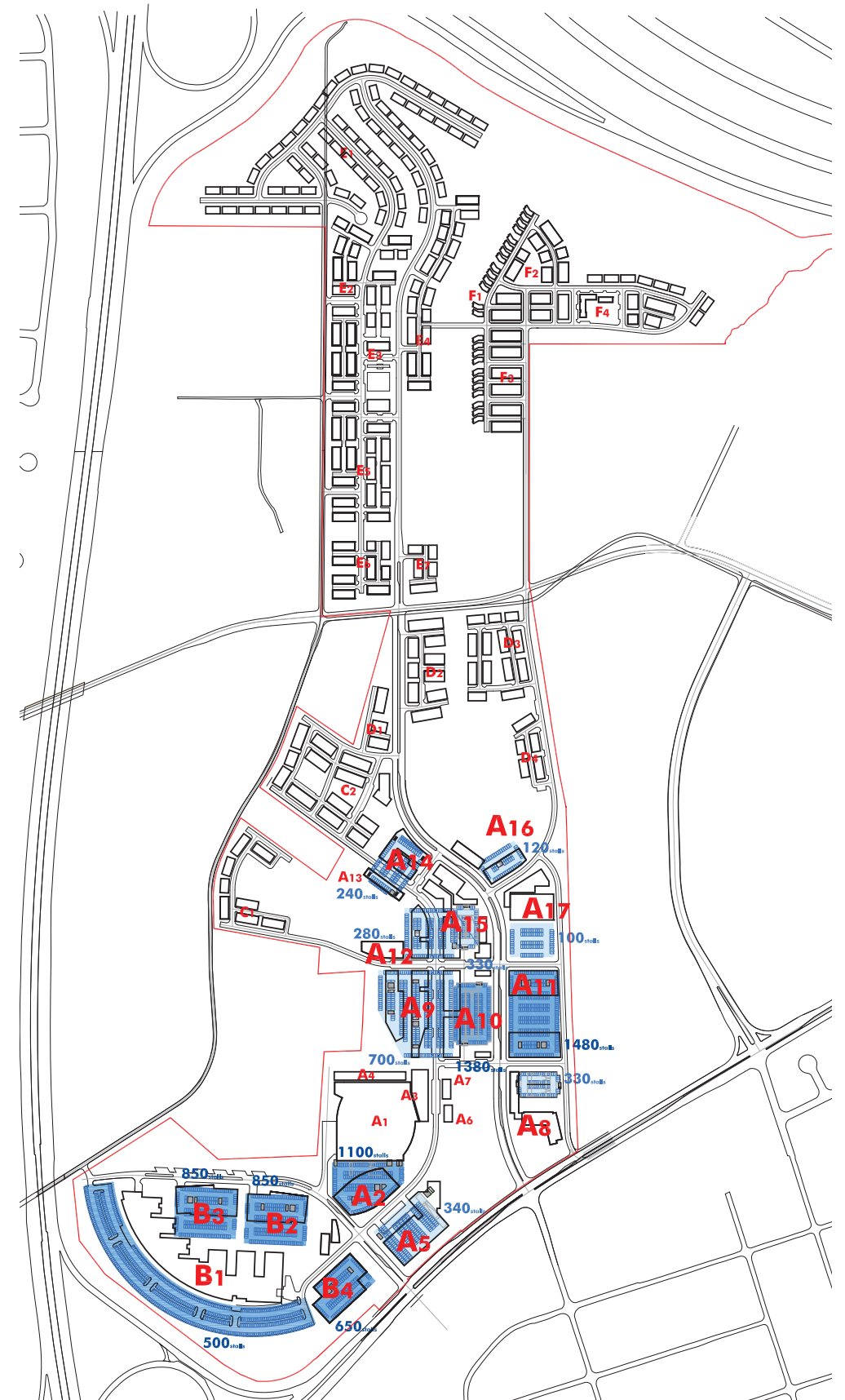
### sub parcel A

sub parcel	program	building area	program	stalls in plan	parking requirement	program parking	shared parking
A1	arena	435,000 sf	17,000 seats		1.00 stall per 4 seats	4,250 cars	50% 2,125 cars
A2	office tower A2	400,000 sf			1.00 stall per 300 sf	1,333 cars	50% 667 cars
	structured parking	400,000 sf		1,000 stalls			
A3	fitness retail	30,000 sf			1.00 stall per 250 sf	120 cars	50% 60 cars
A4	multi-tenant office	75,000 sf			1.00 stall per 300 sf	250 cars	75% 188 cars
A5	hotel	250,000 sf	300 keys		1.00 stall per 1 key	300 cars	100% 300 cars
	conference	20,000 sf			1.00 stall per 250 sf	80 cars	50% 40 cars
	sub-grade parking	50,000 sf		340 stalls			
A6	restaurant	5,000 sf			1.00 stall per 150 sf	33 cars	50% 17 cars
A7	restaurant	5,000 sf			1.00 stall per 150 sf	33 cars	50% 17 cars
A8	hotel	150,000 sf	200 keys		1.00 stall per 1 key	200 cars	100% 200 cars
	conference	10,000 sf			1.00 stall per 250 sf	40 cars	50% 20 cars
	structured parking	50,000 sf		330 stalls			
A9	multi-family residential	250,000 sf	250 units		1.00 stall per 1 unit	250 cars	100% 250 cars
	retail	15,000 sf			1.00 stall per 250 sf	60 cars	50% 30 cars
	restaurant	15,000 sf			1.00 stall per 150 sf	100 cars	50% 50 cars
	sub-grade parking	280,000 sf		700 stalls			
A10	multi-family residential	150,000 sf	150 units		1.00 stall per 1 unit	150 cars	100% 150 cars
	retail	20,000 sf			1.00 stall per 250 sf	80 cars	50% 40 cars
	restaurant	20,000 sf			1.00 stall per 150 sf	133 cars	50% 67 cars
	structured parking	500,000 sf		1,380 stalls			
A11	office tower A11a	220,000 sf			1.00 stall per 300 sf	733 cars	75% 550 cars
	structured parking	600,000 sf		1,480 stalls			
A12	office tower A11b	180,000 sf			1.00 stall per 300 sf	600 cars	75% 450 cars
A12	multi-family residential	200,000 sf	200 units		1.00 stall per 1 unit	200 cars	100% 200 cars
	retail	10,000 sf			1.00 stall per 250 sf	40 cars	50% 20 cars
	restaurant	5,000 sf			1.00 stall per 150 sf	33 cars	50% 17 cars
	sub-grade parking	120,000 sf		280 stalls			
A13	multi-family residential	50,000 sf	50 units		1.00 stall per 1 unit	50 cars	100% 50 cars
A14	multi-family residential	125,000 sf	125 units		1.00 stall per 1 unit	125 cars	100% 125 cars
	retail	10,000 sf			1.00 stall per 250 sf	40 cars	50% 20 cars
	sub-grade parking	100,000 sf		240 stalls			
A15	multi-family residential	220,000 sf	220 units		1.00 stall per 1 unit	220 cars	100% 220 cars
	retail	15,000 sf			1.00 stall per 250 sf	60 cars	50% 30 cars
	restaurant	15,000 sf			1.00 stall per 150 sf	100 cars	50% 50 cars
	structured parking	110,000 sf		330 stalls			
A16	multi-family residential	120,000 sf	120 units		1.00 stall per 1 unit	120 cars	100% 120 cars
	sub-grade parking	50,000 sf		120 stalls			
A17	large retail	35,000 sf			1.00 stall per 250 sf	140 cars	50% 70 cars
	surface parking	40,000 sf		100 stalls			
				<b>6,300 stalls</b>		<b>9,875 cars</b>	

### sub parcel B

sub parcel	program	building area	program	stalls in plan	county requirement formula	program parking	required
B1	office renovation B1	300,000 sf			1.00 stall per 300 sf	1,000 cars	75% 750 cars
	surface parking	200,000 sf		500 stalls			
B2	office tower B2	240,000 sf			1.00 stall per 300 sf	800 cars	75% 600 cars
	structured parking	40,000 sf		800 stalls			
B3	office tower B2	240,000 sf			1.00 stall per 300 sf	800 cars	75% 600 cars
	structured parking	40,000 sf		800 stalls			
B4	office tower B2	180,000 sf			1.00 stall per 300 sf	600 cars	75% 450 cars
	structured parking	30,000 sf		600 stalls			
				<b>2,700 stalls</b>		<b>3,200 cars</b>	

<b>A+B core parking totals</b>	<b>9,000 stalls</b>	<b>13,075 cars</b>	<b>8,541 cars</b>
--------------------------------	---------------------	--------------------	-------------------





## GreenCity Parking Summaries parking proposed + required

sub parcel	program	building area	program	stalls in plan	county requirement formula	parking
<b>sub parcel C</b>						
C1	townhomes	2,400 sf each	37 units	74 stalls	2 stall per 1 door	74 cars townhomes
C2	2/2 units	1,800 sf each	126 units	252 stalls	2 stall per 1 door	252 cars 2/2 units
<b>sub parcel D</b>						
D1	2/2 units	1,800 sf each	24 units	48 stalls	2 stall per 1 door	48 cars 2/2 units
D2	2/2 units	1,800 sf each	80 units	160 stalls	2 stall per 1 door	160 cars 2/2 units
D3	townhomes	2,400 sf each	59 units	118 stalls	2 stall per 1 door	118 cars townhomes
D4	townhomes	2,400 sf each	21 units	42 stalls	2 stall per 1 door	42 cars townhomes
<b>sub parcel E</b>						
E1	villas	2,800 sf each	152 units	304 stalls	2 stall per 1 door	304 stalls villas
E2	townhomes	2,400 sf each	64 units	128 stalls	2 stall per 1 door	128 stalls townhomes
E3	townhomes	2,400 sf each	40 units	80 stalls	2 stall per 1 door	80 stalls townhomes
E4	townhomes	2,400 sf each	61 units	122 stalls	2 stall per 1 door	122 stalls townhomes
E5	townhomes	2,400 sf each	71 units	142 stalls	2 stall per 1 door	142 stalls townhomes
E6	townhomes	2,400 sf each	39 units	78 stalls	2 stall per 1 door	78 stalls townhomes
E7	townhomes	2,400 sf each	19 units	38 stalls	2 stall per 1 door	38 stalls townhomes
<b>sub parcel F</b>						
F1	single family detached	2,200 sf each	25 units	50 stalls	2 stall per 1 door	50 stalls single family detached
F2	2/2 units	1,800 sf each	49 units	98 stalls	2 stall per 1 door	98 stalls 2/2 units
F3	2/2 units	1,800 sf each	36 units	72 stalls	2 stall per 1 door	72 stalls 2/2 units
F4	villas	2,800 sf each	16 units	32 stalls	2 stall per 1 door	32 stalls villas

## Shared Parking Strategies

GreenCity is planned to include a broad spectrum of uses that create an ideal condition for shared parking to be effective in reducing both trips and dedicated spaces. These uses include residential, both for sale and rental, office, hotel, retail, and an arena that creates a large demand primarily during evenings and weekends, when office parking spaces are relatively empty.

Shared parking approaches to calculating parking requirements are normally applied when land uses have different parking demand patterns and are able to use the same parking spaces/areas throughout the day.

This approach is most effective when these land uses have significantly different peak parking characteristics that vary by time of day, day of week, and/or season of the year.

In these situations, shared parking strategies will result in fewer total parking spaces needed when compared to the total number of spaces needed for each land use or business separately.

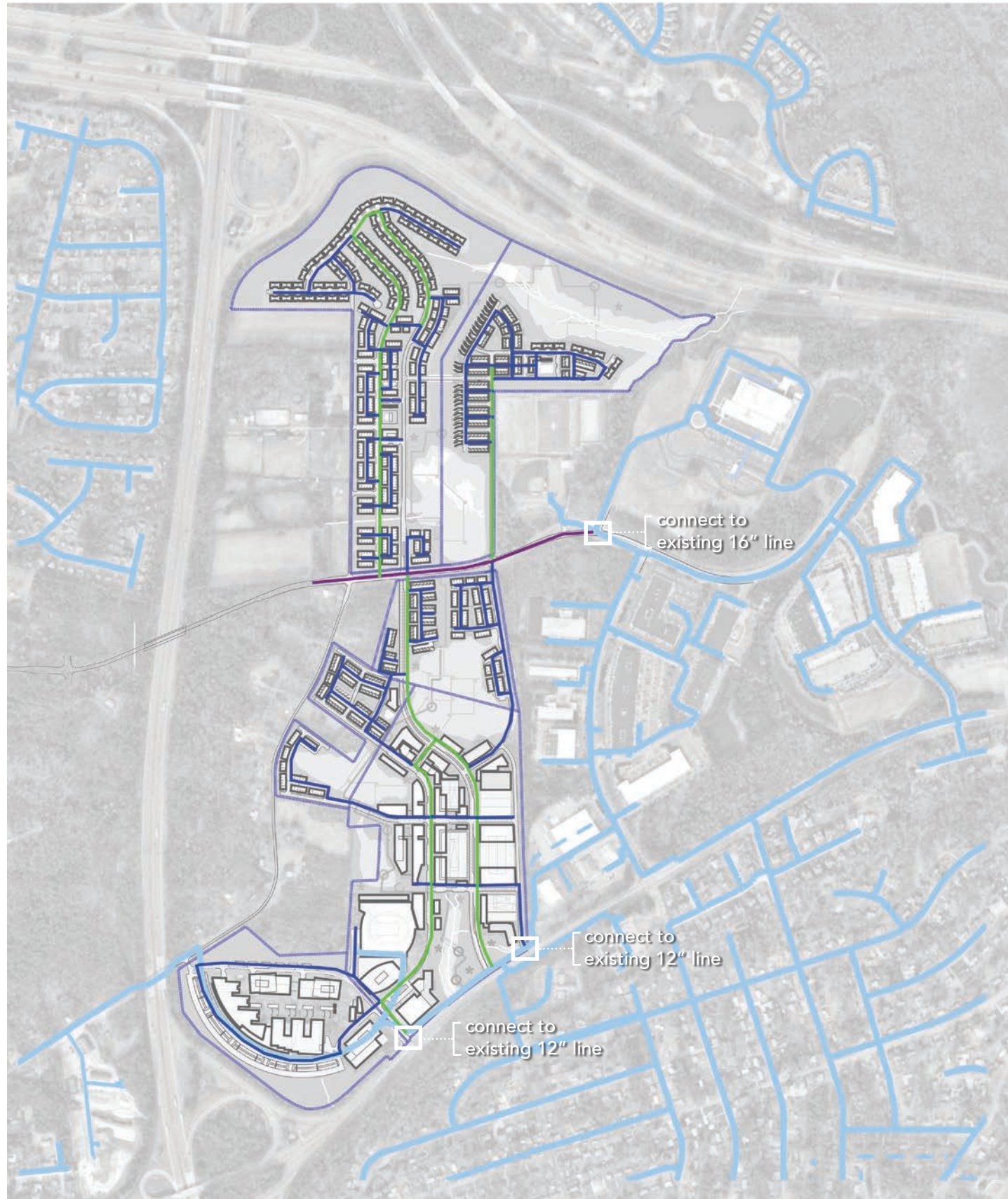
## Current County Parking Requirements by Use

	UMU Requirement	Proposed GreenCity
<ul style="list-style-type: none"> <li>dwelling                             <ul style="list-style-type: none"> <li>one-family 1.00 for each dwelling unit</li> <li>two-family 1.50</li> <li>multi-family 1.50 for each dwelling unit with approved plan of development</li> <li>townhomes, condos 2.00 for each dwelling unit with approved plan of development</li> </ul> </li> <li>hotels 1.00 per bedroom</li> <li>assembly                             <ul style="list-style-type: none"> <li>places of worship 1.00 for each 50sf in primary assembly area</li> <li>fixed seats 1.00 for each 4 seats</li> <li>without fixed seats 1.00 for each 100sf in primary assembly area</li> </ul> </li> <li>hospitals 1.00 for each 2 beds</li> <li>auto service 2.00 for each service bay</li> <li>banks 8.00 for first 1000sf + 1 for each add 150sf</li> <li>bowling alley 5.00 for each lane</li> <li>non-retail service 1.00 for each 400sf</li> <li>retail furniture hardware appliance 1.00 for each 750sf</li> <li>golf course 5.00 for each hole</li> <li>restaurants 1.00 for each 100sf</li> <li>office 1.00 for each 250sf (minimum 5)</li> <li>medical office 1.00 for each 200sf (minimum 5)</li> <li>retail stores 1.00 for each 200sf</li> <li>manufacutring 1.00 for each 2 employees on max shift</li> <li>veterinarian clinic 4.00 for each doctor + 1 per employee</li> <li>bed &amp; breakfast 1.00 for each guestroom + parking required for dwelling</li> </ul>	<ul style="list-style-type: none"> <li>1.00 per bedroom</li> <li>1.00 per 150sf</li> <li>1.00 per 300sf</li> <li>1.00 per 250sf</li> </ul>	<ul style="list-style-type: none"> <li>2 per 1 unit</li> <li>2 per 1 unit</li> <li>1 per 1 unit</li> <li>2 per 1 unit</li> <li>1.00 per 1 key</li> <li>1.00 per 4 seats</li> <li>1.00 per 100 sf</li> <li>1.00 per 150 sf</li> <li>1.00 per 300 sf</li> <li>1.00 per 250 sf</li> </ul>



# Utilities 14

Water



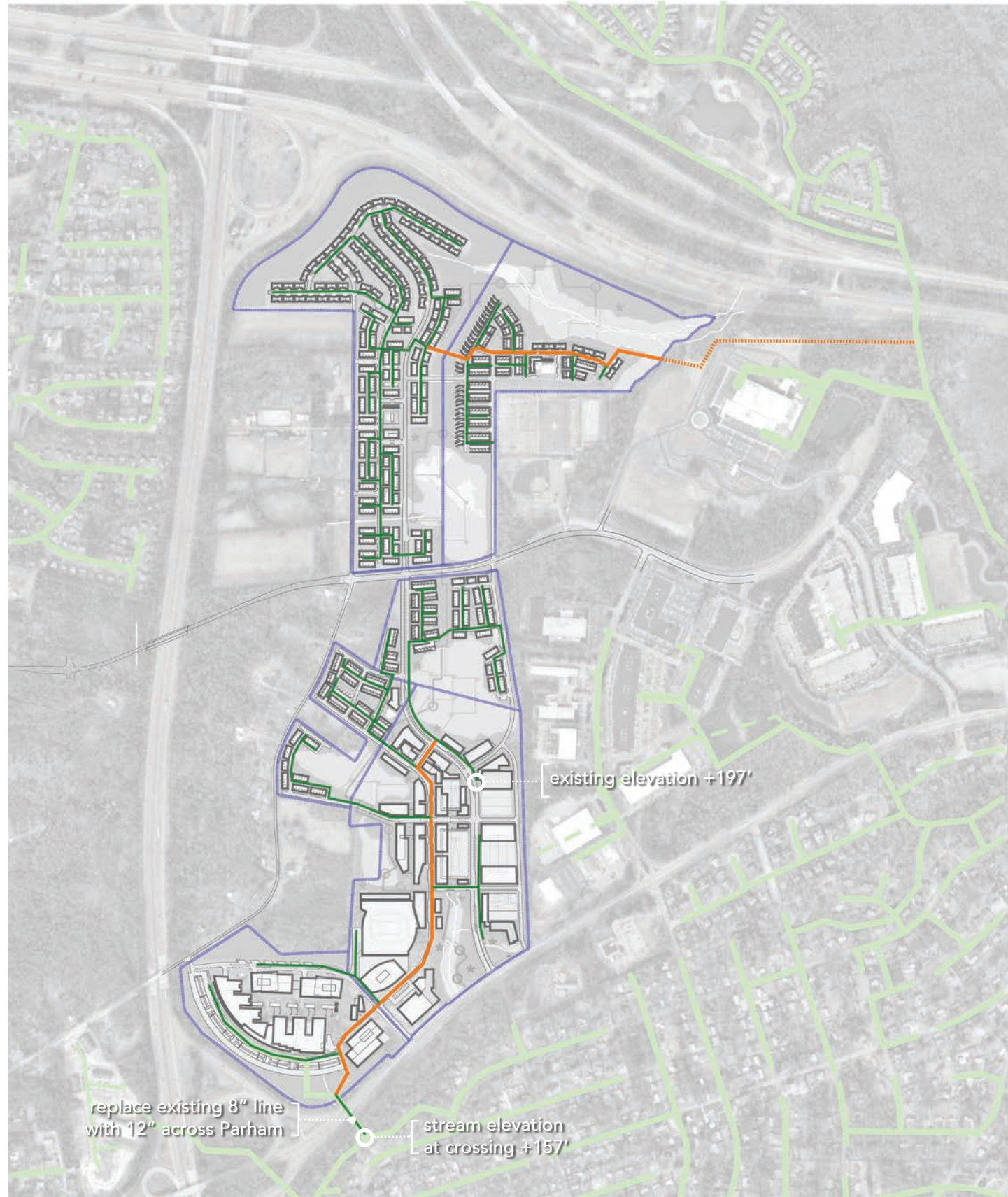
## Water

- 8" Water Line
- 12" Water Line
- 16" Water Line
- Existing Water Lines



# Utilities 14

## Sanitary Sewer



### Sanitary Sewer

- 8" Sanitary Line
- 12" Sanitary Line
- Existing Sanitary Line



# Utilities 14

Storm Water



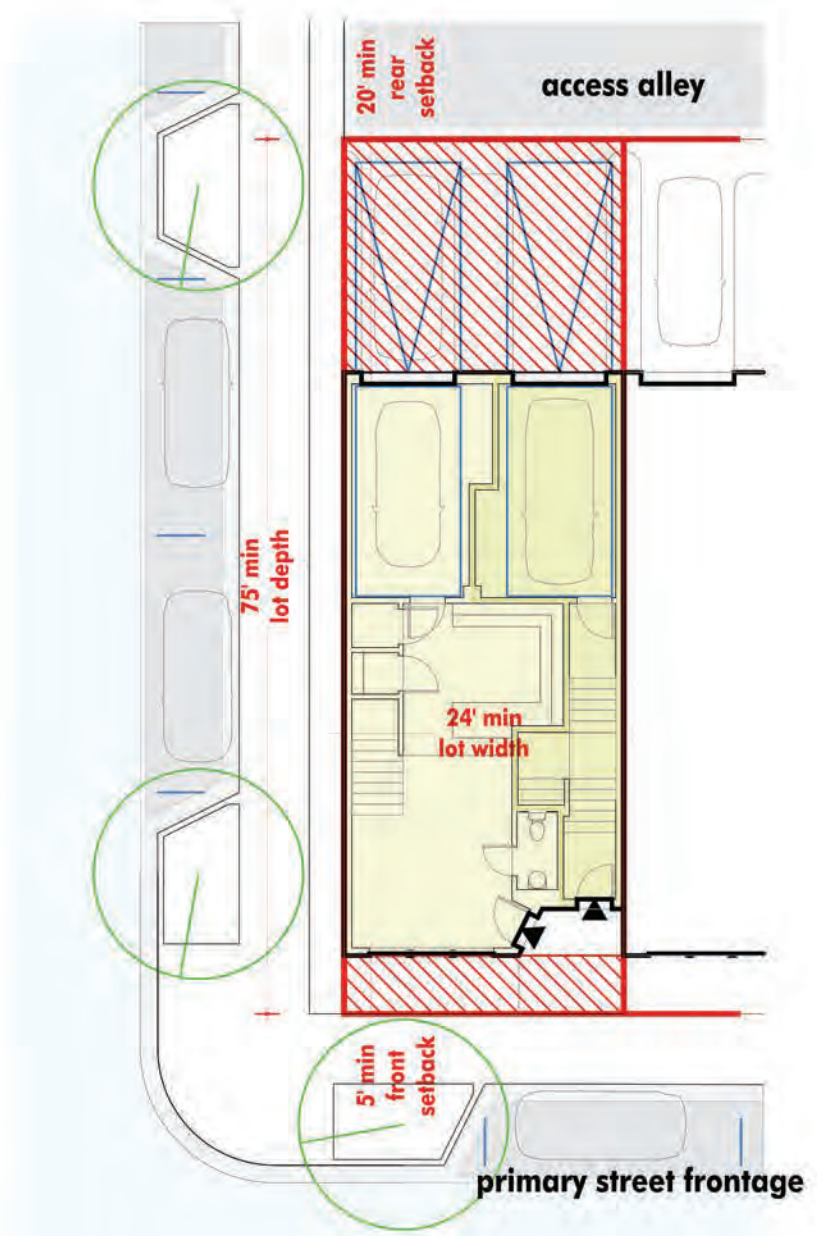
## Storm Water

- Proposed Storm
- SWM Facility

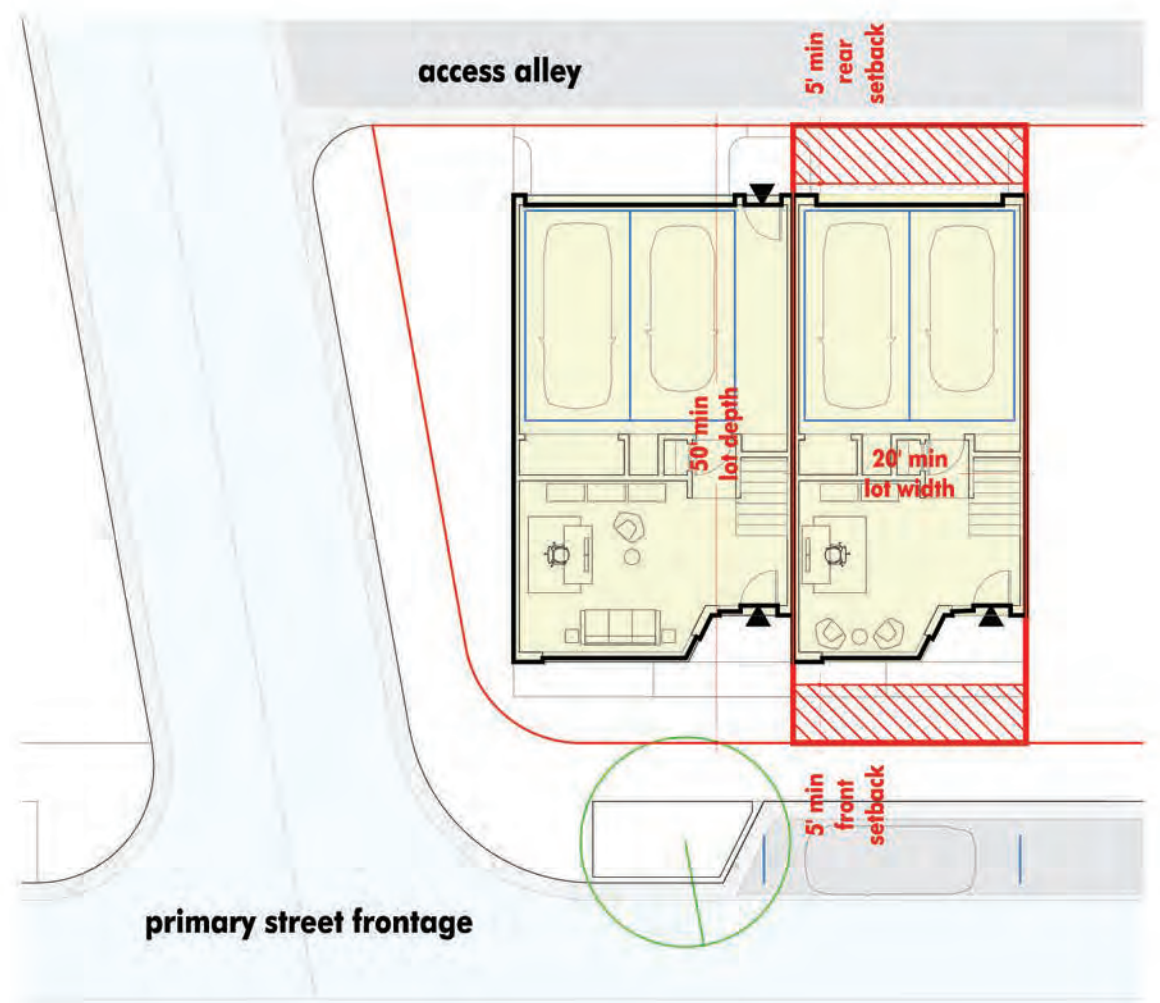
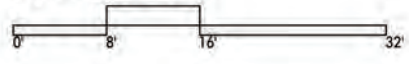


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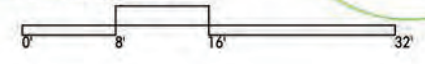




**2 over 2 STACKED TOWNHOMES - LOT MINIMUM DIMENSIONS**  
27 august 2021



**TOWNHOUSE - LOT MINIMUM DIMENSIONS**  
27 august 2021





# Minimum Lot Width & Setbacks 15

## Green City project summary

2/9/2021

### minimum lot width & setbacks

uses	minimum site area in plan	minimum area	minimum lot width	minimum lot depth	minimum front yard	minimum side yard cumulative total *	minimum rear yard	maximum height limit	maximum density residential
<b>commercial mixed use</b> multi-family residential retail restaurant office parking	30,000 sf	5,000 sf	100 ft	40 ft	- ft	- ft	- ft	90 ft	
<b>retail/restaurant</b>	5,700 sf	4,000 sf	80 ft	50 ft	- ft	10 ft *	10 ft	35 ft	
<b>parking structures</b>	24,000 sf	10,000 sf	100 ft	100 ft	- ft	- ft	- ft	75 ft	
<b>office</b>	29,000 sf	20,000 sf	100 ft	80 ft	- ft	- ft	- ft	350 ft	
<b>arena</b>	200,000 sf	180,000 sf	400 ft	400 ft	- ft	- ft	- ft	120 ft	
<b>hotel</b> conference	80,000 sf	50,000 sf	200 ft	150 ft	- ft	- ft	- ft	200 ft	
<b>residential</b>									
multi-family residential (stand alone)	13,000 sf	9,000 sf	60 ft	150 ft	- ft	10 ft *	20 ft	75 ft	
stacked townhomes 2/2	1,800 sf	1,800 sf	24 ft	75 ft	5 ft	- ft	20 ft	55 ft	20 units/acre
townhomes	1,000 sf	1,000 sf	20 ft	50 ft	5 ft	- ft	5 ft	55 ft	18 units/acre
attached villas	2,800 sf	2,800 sf	40 ft	70 ft	15 ft	5 ft *	15 ft	45 ft	12 units/acre
single family homes	2,100 sf	2,100 sf	30 ft	70 ft	15 ft	8 ft *	4 ft	55 ft	10 units/acre

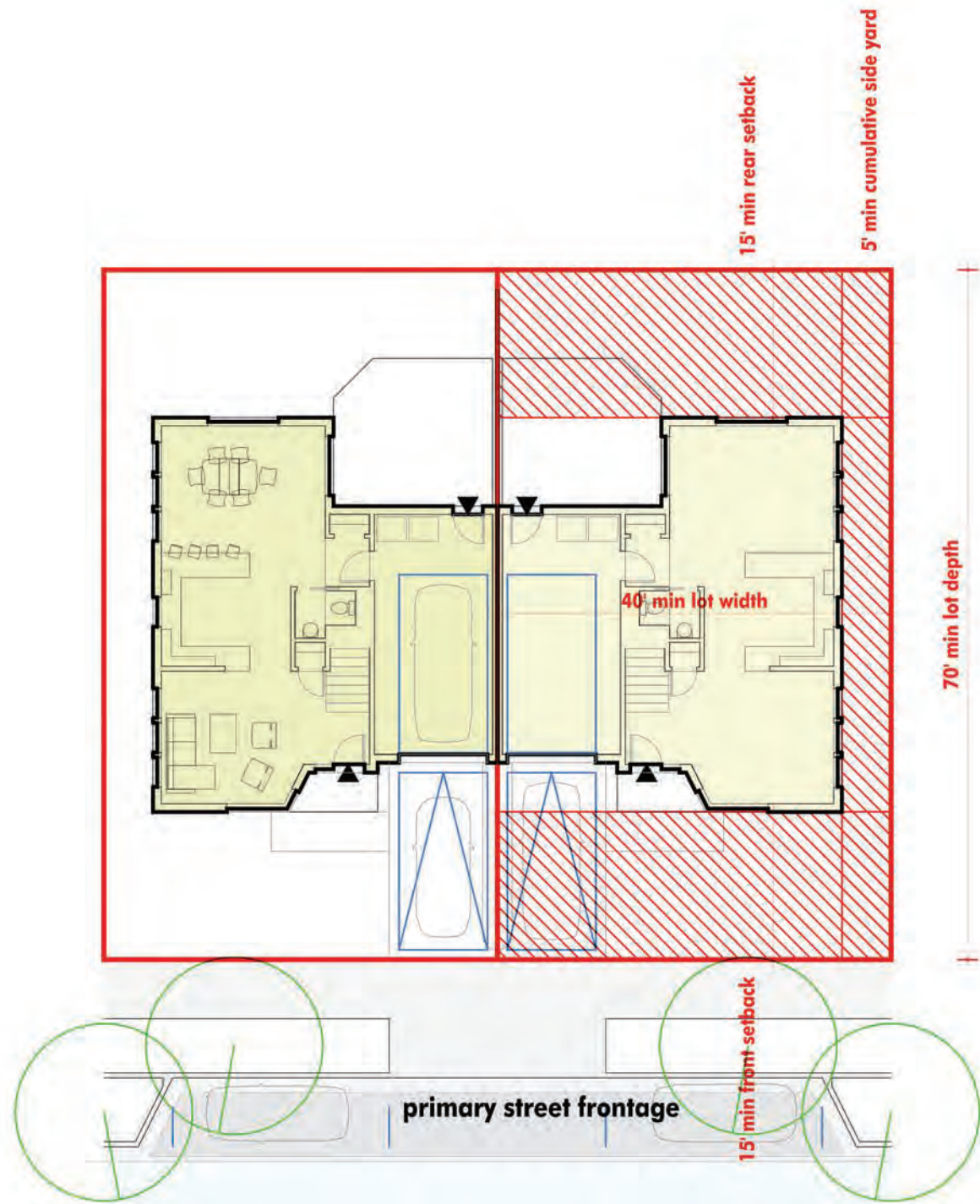
#### allowed encroachments

stairs  
porches  
fireplaces  
awnings

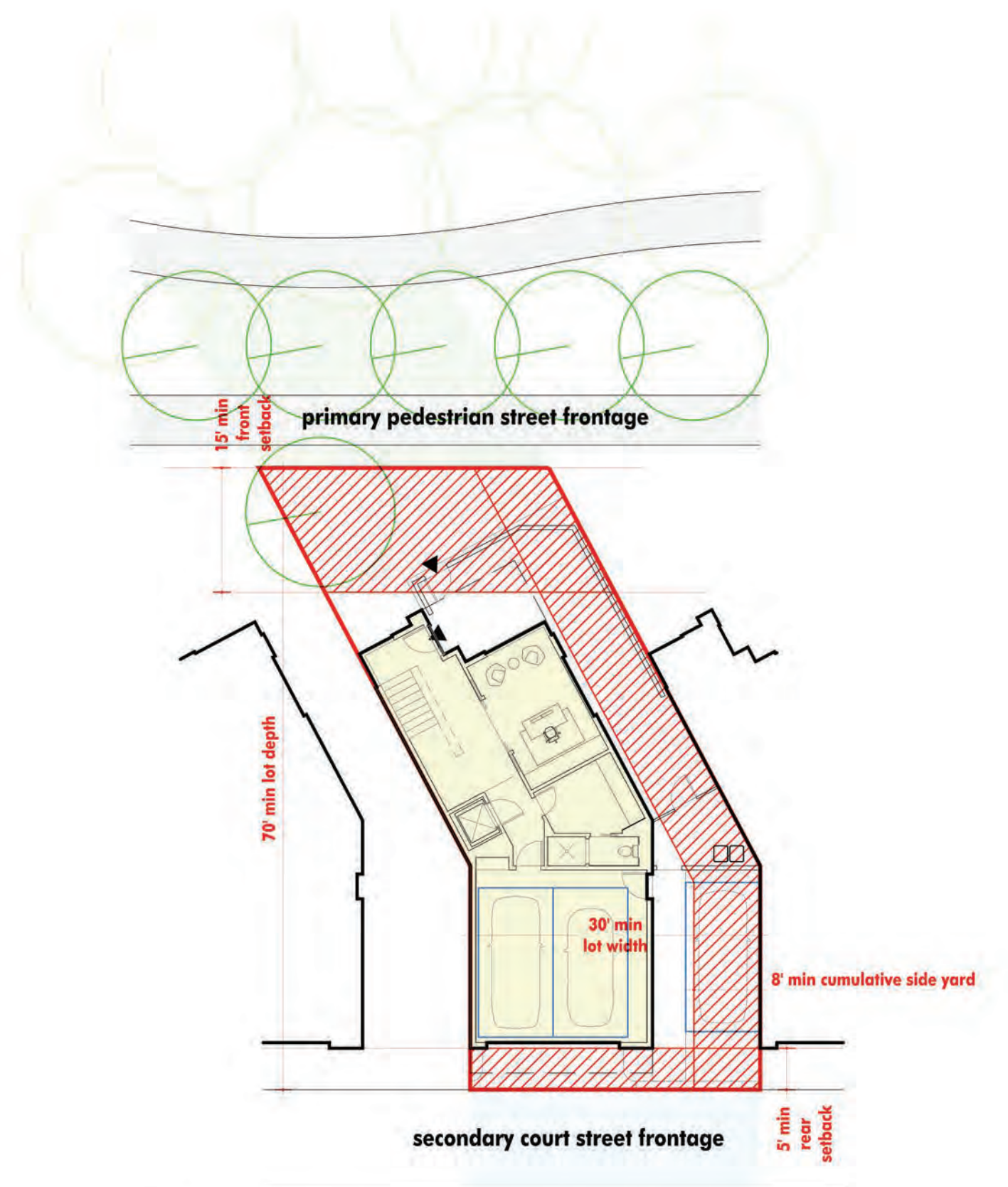
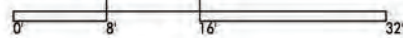
#### not allowed

accessory buildings

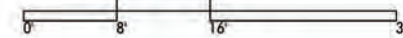




DUAL OCCUPANCY VILLAS - LOT MINIMUM DIMENSIONS  
27 august 2021



SINGLE FAMILY ZERO LOTLINE - LOT MINIMUM DIMENSIONS  
27 august 2021



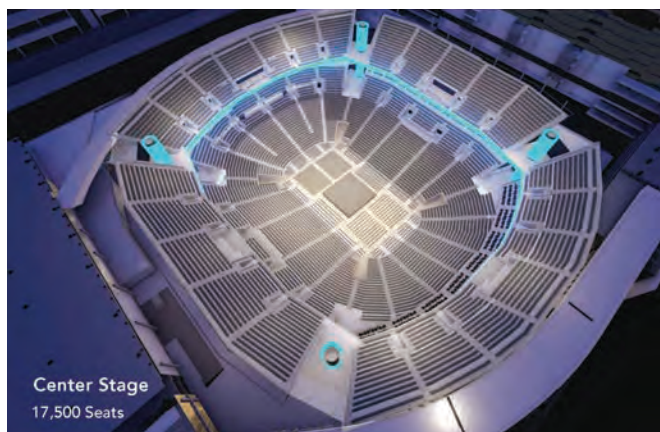


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Basketball  
16,500 Seats



Center Stage  
17,500 Seats







# Land Use & Pattern 16

## Arena

The Arena will be designed to accommodate up to 17,000 spectators, with two public concourses and a private mezzanine that will serve as access to club seating and corporate suites. Arena programming will feature touring concerts, family shows, as well as basketball and hockey events.

Sight-lines will be designed around both concert and basketball configurations primarily, and will allow for quick changeovers to facilitate maximum utilization.

The Arena will feature new smart technologies that support modern venues, including high-resolution, interactive LED center hung boards, and mid-level ribbon LED boards that support both game production and marketing partnerships. Overhead structural systems will be designed to carry the demanding show rigging.

Arena floor level programming will provide for multiple locker rooms to accommodate tournament play and efficient staging and marshaling areas that will allow for quick production turnaround for touring shows.

The new Arena will seek to stake out a unique reputation among concert venues as one the greenest arenas in the world, providing sustainable features not found in any other venue, while still allowing touring shows, tournaments, and conventions the most efficient operation possible.

### Sustainability Standard:

ILFI Petal Certification  
LEED Platinum

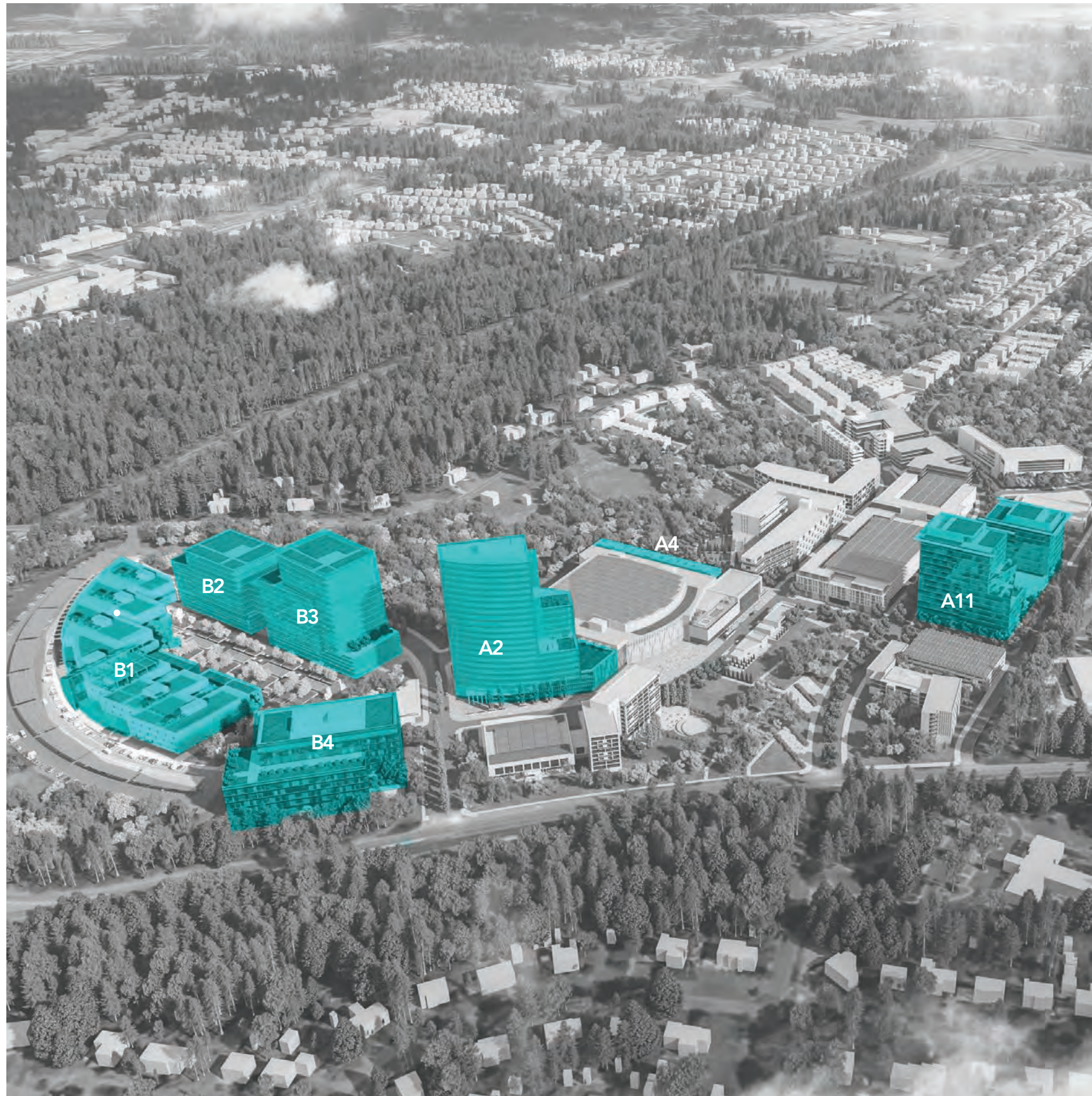






# Land Use & Pattern 16

## Commercial Office



Over the past decade, there has been a trend in commercial office development back to urbanized areas close to city centers, transportation corridors, shops, restaurants and housing. Required office space in these developed areas is generally harder to find for growing companies, but it is where many workers want to be – workers who value culture, diversity, ease of public transportation, biking, or simply working closer to home.

Commercial office space proposed for GreenCity is located along one of the most active corridors on the East Coast. It offers new and relocating businesses a broadly diverse mixed-use urban environment, without the inherent limitations of locating in an existing and constrained downtown environment. These benefits are further enhanced by a GreenCity plan that connects its business communities within a short walk of retail, residential and a natural environment of parks and open space.

As an eco-district, GreenCity will provide the green infrastructure that caters specifically to companies who themselves have set high sustainability goals not otherwise achievable in traditional office environments.

### Sustainability Standards:

- ILFI Petal Certification
- LEED Platinum
- LEED Gold
- Well Building







## BEST Products Building - History

Among the more consequential outcomes of the master plan is the concept to expand and re-purpose the now vacant BEST Products Headquarters Building, turning it into an emblematic 21st-Century work place and embracing the **Living Building Challenge** as a sustainability performance goal.

Abandoned when BEST Products went out of business in 1997, the building is a classic by American architects Hardy Holzman Pfeiffer Associates. In Michael Sorkin's monograph book on the work of HHPA, he described the project, completed in 1997 in this way:

*"...(it is the architect's) most fully developed and sophisticated project to date, a building which summarizes many of the tastes and tendencies developed over more than a decade."*

*"BEST is a long building, intended ultimately to be a great semicircle with a curving facade of glass block rising a moat on one side and with a jagged edge on the other, which maximizes exposures for the individual offices that line it. Inside, the glass block wall stands free, and the second-story floor slab saw-tooths along it, creating a series of two-story open spaces, dramatic in themselves and providing visual interconnection between the floors. The round columns that support the slabs are semicircular air diffusers mounted above the office doors."*

*"Lighting standards in the parking lot are of a type used in Washington, D.C., in the twenties, and the main entrance to the building is flanked by two enormous deco eagles salvaged from the recently demolished Airlines Terminal Building in New York City."*

*The achievement of the BEST building lies in the very sophisticated bivalence in the use of borrowed forms-forms which at once recall their origins and contribute to an overall conception which is completely new."*



BEST Products Headquarters Building - Parham Road / 95



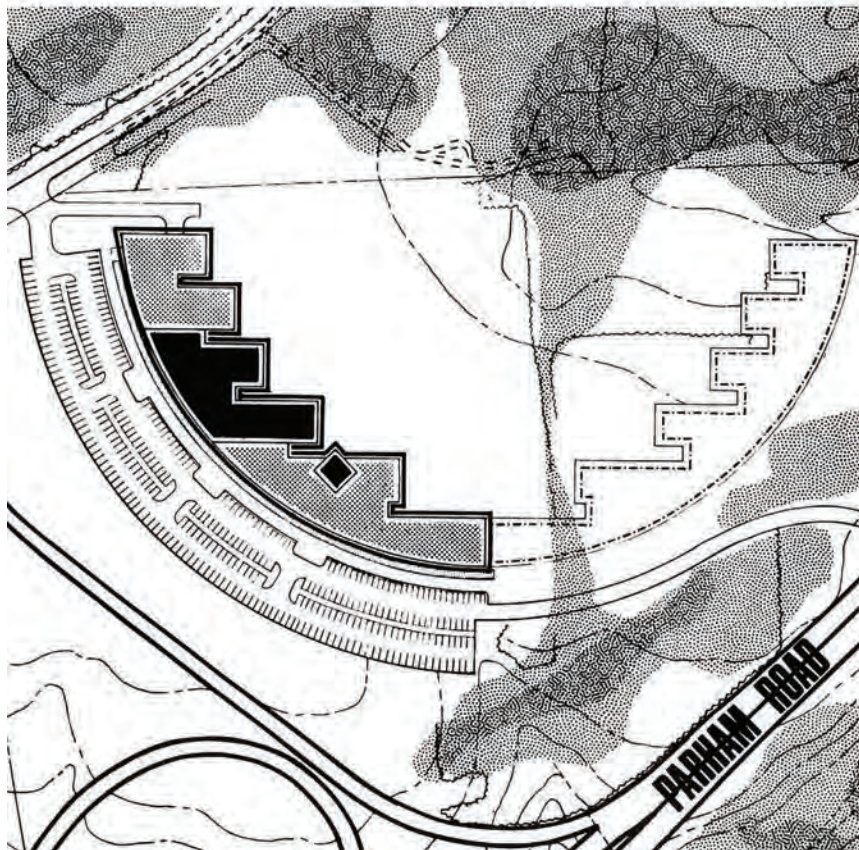


From Michael Sorkin's Preface to **Hardy Holzman Pfeiffer, Monographs on Contemporary Architecture:**

*"Hardy Holzman Pfeiffer's is an architecture of the composite. At its most successful it adduces and celebrates a unity in diversity, a benign pluralism, a cheery coexistence.*

*There is a sensibility that inevitably starts with observation, with picking and choosing. Working at the most catholic limits of eclecticism, HHPA seeks to incorporate the objects of its fancy into built ensembles which both preserve the identities of their parts and forge new wholes.*

*This eminently liberal disposition is thoroughly American in its attempt to reconcile many claims in the service of something larger. For HHPA this larger ambition is not some spurious profundity. Rather it is simply the aim of making places lovely and likeable."*





## Land Use & Pattern

### BEST Products Building - History

#### Historic Eagle Sculptures

BEST Products founder and CEO Sidney Lewis had a strong sense of promotion and artistic sensibilities. It was legend in artistic circles that he would trade store merchandise for art. As a result, the company gathered a significant collection of 20th-century art. Much of the Lewis Collection can be seen at the Virginia Museum of Fine Arts.

One of the larger art acquisitions, the sculpted art deco eagles that flanked the headquarters building entrance, still remain on site. The eagles were rescued from atop the Airlines Terminal Building at 42nd Street in New York City (below) that was demolished in 1978. The Eagles then showed up in Richmond, incorporated into the design of the BEST Products Headquarters Building. (left)

For more than 30 years, the Art-Deco Style Airlines Terminal Building served millions of travelers as a place where airlines tickets could be purchased and where passengers could board shuttle buses to take them to the various area airports.

Construction of the Airlines Terminal began in 1939 to create the chic, futuristic design. Some of the most important exterior design features of the building were Rene Chambellan's decorative carvings, which included these monumental eagle sculptures and light fixtures.

The outstretched wings of the eagles supported the lantern and an 80-foot flagpole made of Oregon pine. The lantern originally flashed alternating green and amber light through filters, illuminating and dimming every 10 seconds.



*Rene Paul Chambellan (September 15, 1893 – November 29, 1955) was an American sculptor who specialized in architectural sculpture. He was also one of the foremost practitioners of what was then called the "French Modern Style" and has subsequently been labeled Zig-Zag Moderne, or Art Deco.*











## LIVING BUILDING CHALLENGE

**The Living Building Challenge** is an international sustainable building certification program created in 2006 by the non-profit International Living Future Institute. It is described by the Institute as a philosophy, advocacy tool and certification program that promotes the most advanced measurement of sustainability in the built environment.

### Performance areas

Living Building Challenge comprises seven performance areas: site, water, energy, health and happiness, materials, equity and beauty. Each performance area has its own intention and are subdivided into a total of twenty Imperatives, each of which focuses on a specific sphere of influence.

#### 1. Place

This petal is created with the purpose to have designers analyze the location of a site and the impacts the construction will have on the nearby environment before being built, and during its operation. It focuses on creating a connected community that is more pedestrian focused, protecting and restoring existing nature, and encouraging a healthy level of density.

#### 2. Water

A certified building is required to be designed to only use the amount of water that can be harvested onsite and purify the water without the use of chemicals. Projects achieving this petal often employ rainwater catchment cisterns, greywater or closed-loop systems, compostable toilets, and other techniques to reduce and recycle water.

#### 3. Energy

This petal focuses on the reduction and efficiency of energy by requiring the building to produce on-site 105% of the energy it needs year-round. It also aims to shift the grid the building is connected to towards more renewable energy.

#### 4. Health and Happiness

This petal focuses on improving indoor air quality, thermal comfort, visual comfort, and integration of nature in order to increase the quality of human health and productivity. Projects often employ biophilic design, daylighting, operable windows, and other techniques to achieve this petal.

#### 5. Materials

This petal's intention is to focus on eliminating the use of construction materials that have adverse environmental, health, and social impacts. These impacts include pollution, resource depletion, habitat loss, deforestation, toxic chemical use, and large embodied energy use. This is done by requiring projects to avoid all materials on the Red List, and to report all materials used and their manufacturer and extraction information. Additionally, projects achieve this petal by creating a materials conservation management plan, using salvaged materials, tracking the location sources of the project's materials, using products with Declare labels, among other tasks.

#### 6. Equity

This petal aims to change society's mindset in which property ownership allows owners to externalize negative environmental impacts onto others. This is done by creating spaces where people of all capabilities, disabilities, ages, and economic status have equal access. It also requires that the project must not disturb another site's access to sunlight, fresh air, and clean water.

#### 7. Beauty

Lastly, the Beauty petal focuses on encouraging project teams to put in genuine and thoughtful efforts into beautifying the project. Although beauty is not subjectively defined in the framework, it is stressed that beauty should be a goal in order to inspire and elevate the lives of the occupants, visitors, and neighbors.

## Land Use & Pattern

# 16

### BEST Products Building - Re-purpose

## A Campus for Today's Workforce

As the first building project envisioned for the new GreenCity master plan, the repositioning of the BEST Products Headquarters, through the Living Building Challenge, will create a new international standard for sustainable design and operations in commercial offices. At over 300,000 s.f., it would be the largest LBC certified office building in the world.

### Design Approach

It begins with the re-use of the existing structure, which will have a material impact in lowering the embodied carbon for the development when compared to a new building, and new efficient systems will ensure a comfortable and sustainable working environment.

New heavy timber interventions into the existing structure will create a central atrium and vertical connector. These insertions will create a new heart to the building and central entry point surrounded by amenities to support a vibrant and multi-generational workforce.

A central spine will connect the development on each floor with radiating fingers of office space perfectly proportioned to maximize internal natural lighting. At a maximum height of 3 stories, circulation has been designed to promote the use of stairs in lieu of elevators, increasing the likelihood of the serendipitous interchange while offering the potential for one-way travel and circulation in times of pandemic precaution.

Each roof level of the building will be activated either by an amenity, as a green roof, or as urban agriculture, further promoting health and a connection to nature. Connected to the Atrium, a new conferencing center is envisioned, with views to the surroundings and direct access to a large roof terrace.

The new BEST Products building will become a model for the future of office and building design.





## Connecting to the Outdoors

Capitalizing on the forested setting, renovations to the existing BEST Products Headquarters will bring the outside in, establishing a seamless connection between the interior working environment and nature. A new atrium will create a direct connection, through the building, to an interior garden and new terraces, while roof amenities will ensure that no employee is less than 50 feet from access to outdoor space.

The re-imagined BEST Products Headquarters will create a horizontal campus capable of supporting approximately 2,500 employees. The development's unique massing breaks down the scale of the campus, reinforcing smaller units of community and identity within the whole, an important aspect in employee satisfaction and retention.

## The Community Atrium

Designed as the heart of the re-imagined BEST Products Headquarters, the 'Atrium' will create a new core for the building, linking the east and west wings and creating a direct connection to rooftop amenities and the cultivated garden spaces outside. Constructed using mass timber, the Atrium will be designed as an extension of the outdoor space with interior greenery and places for respite.

At the ground floor, a cafeteria will border the western edge adding life and activity to the space. At the 3rd level, a new conferencing center will be constructed with direct access through the atrium by both stair and elevator. This space will act as a flexible event space for the overall development, with direct access to an outdoor roof deck with views to the surrounding areas.

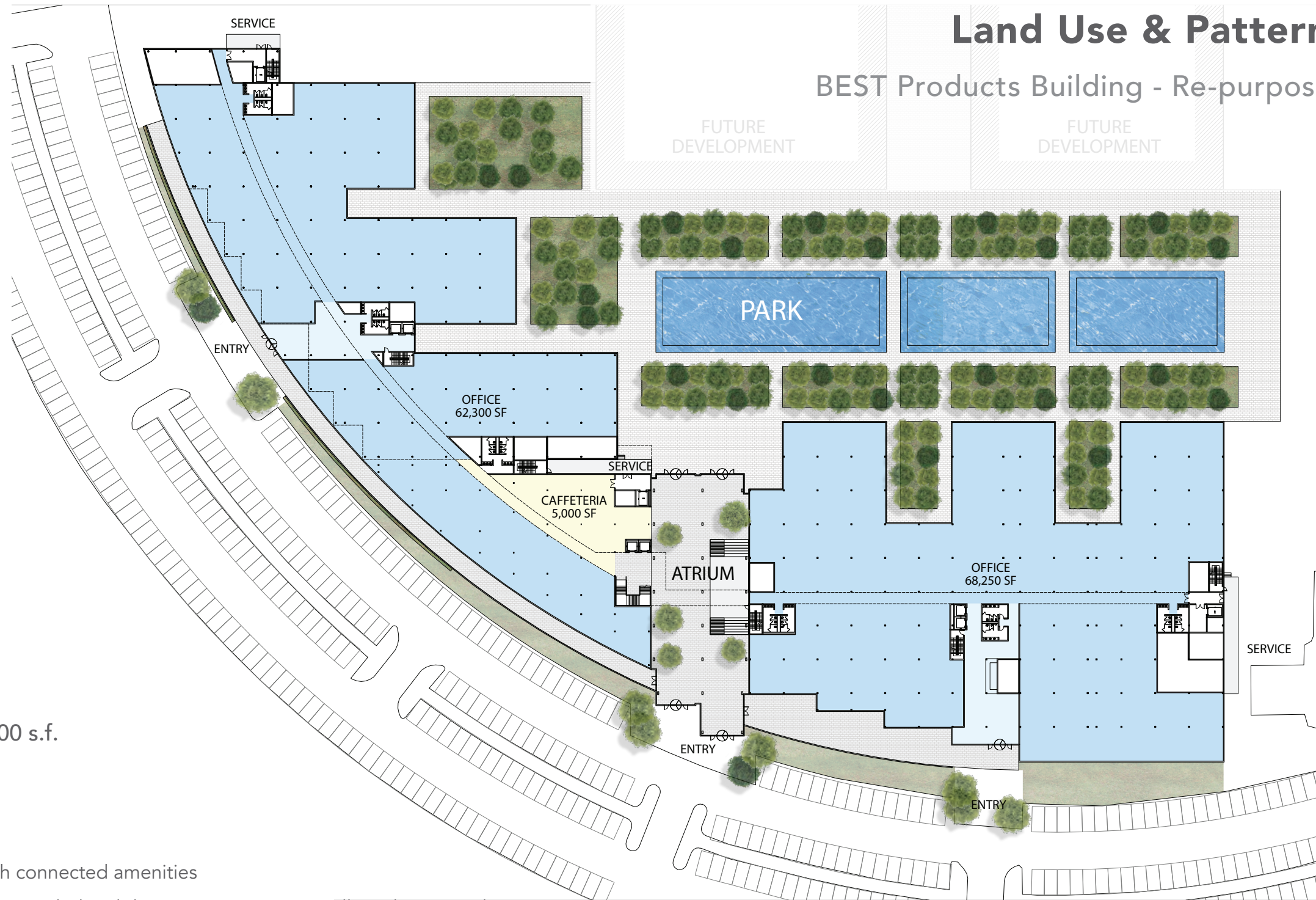
## Usable Rooftop

As part of the goal to create a 'Living Building', the roof is to be fully developed as an extension of the building's tenant program, as well as an embrace of the surrounding eco-district goals. Amenity decks will offer tenants a variety of environments from which to blur the lines between work and play. Urban farming programs will offer tenants the opportunity to directly interact with, and benefit, the community through activities that can transform the development into something more than just a place to work.



# Land Use & Pattern

## BEST Products Building - Re-purpose



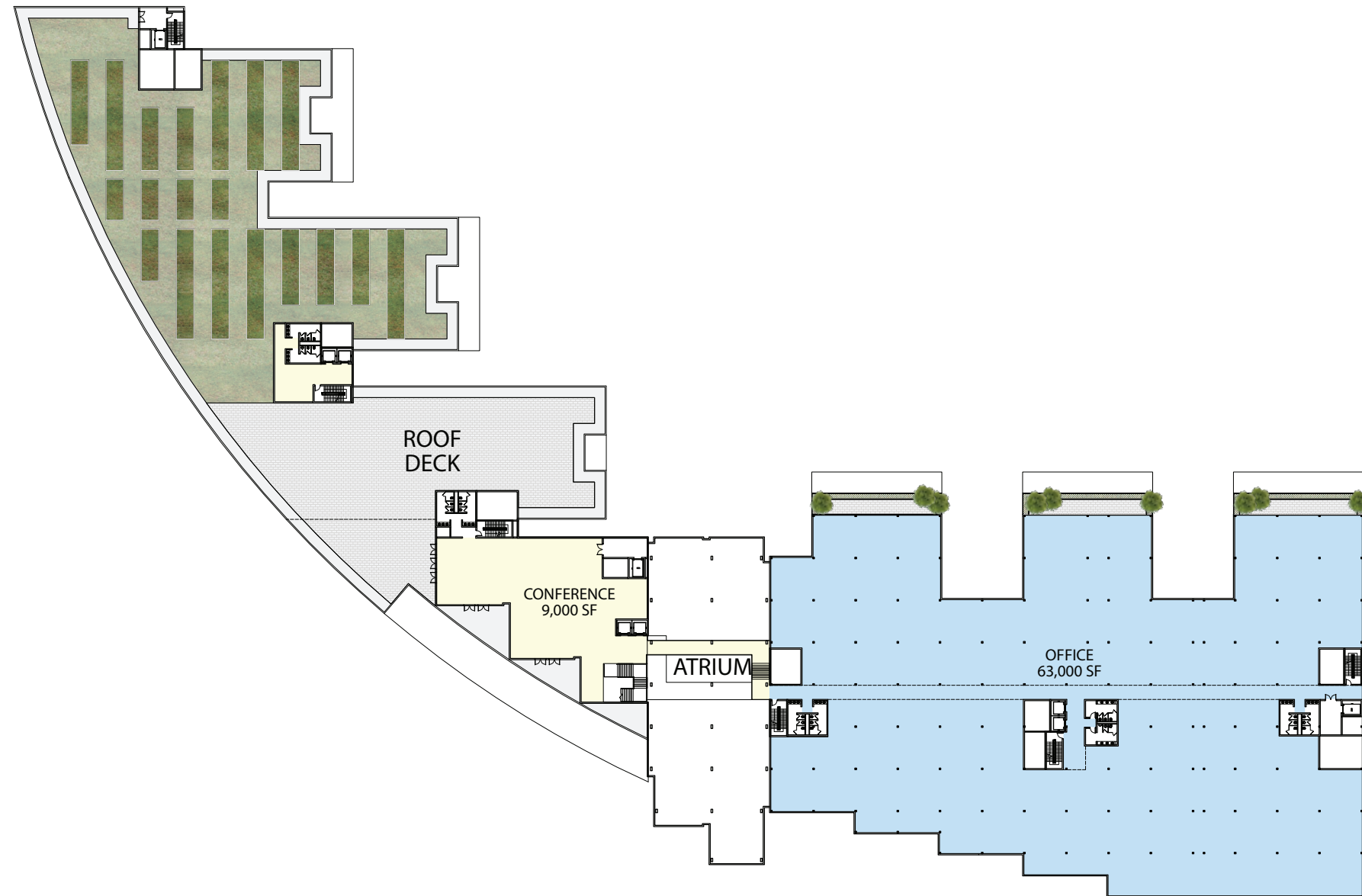
### Level 01

Gross Area 161,400 s.f.

### Key Features

- Central Atrium with connected amenities
- Unified development with the ability to separate into smaller sub-tenant clusters
- Stair promoted as primary means of circulation
- Seamless Indoor-Outdoor Connection



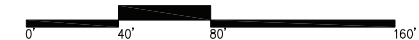


## Level 03

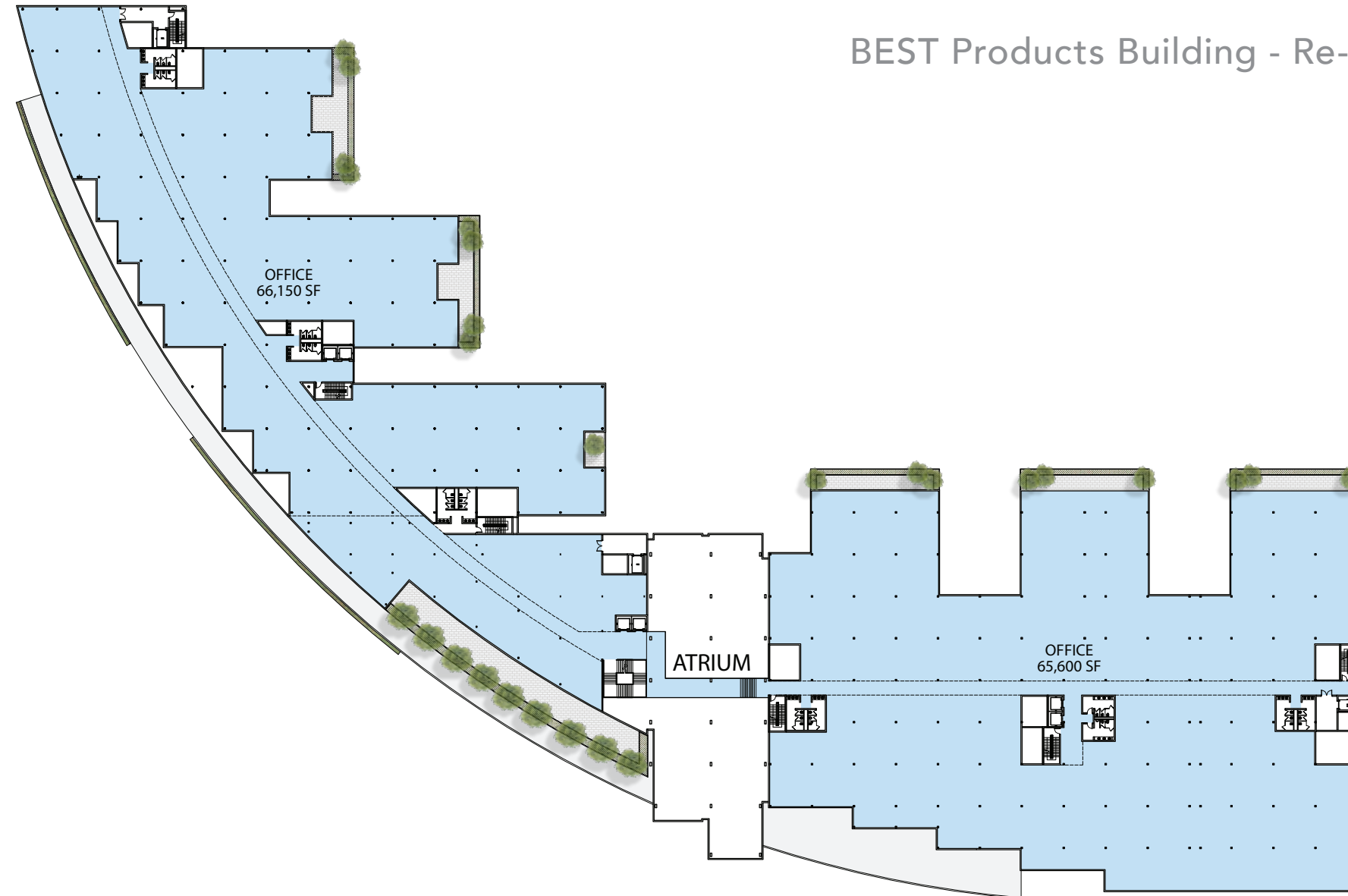
Gross Area 126,000 s.f.

### Key Features

- Conference/Community Room with direct stair and elevator access from Atrium
- Urban Farming and Roof Top Amenities
- Seamless Indoor-Outdoor Connection







### Level 02

Gross Area 135,000 s.f.

### Key Features

- Unified development with the ability to separate into smaller sub-tenant spaces
- Stair promoted as primary means of circulation
- Seamless Indoor-Outdoor Connection





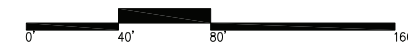


## Level **Rooftop**

Gross Area 66,500 s.f.

### Key Features

- Conference/Community Room with direct stair and elevator access from Atrium
- Urban Farming and Roof Top Amenities
- Seamless Indoor-Outdoor Connection





## BEST Products Building - Re-purpose



### Rooftop Agriculture

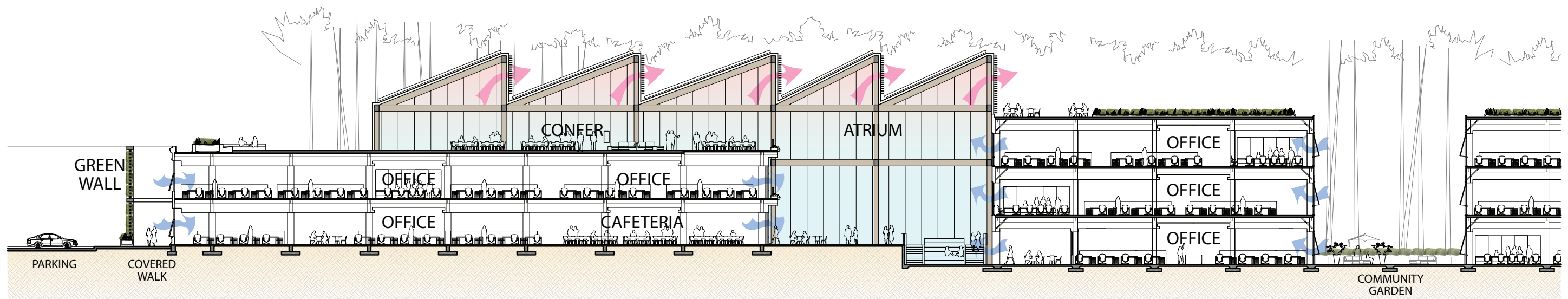
Using rooftops to grow food is a movement that is growing in cities and urban areas nationwide. On top of the demand for locally produced, high-quality food, people living in urban areas find they want to reconnect to nature, and there is nothing more natural than growing food. The GreenCity development plan will create the opportunity for Henrico County to demonstrate how otherwise forgotten space can be put to a true “higher-and-better” use.

There is already recognition that community gardens provide economic benefits, increase social equity, strengthen neighborhoods and promote environmental stewardship. In many communities, portions of publicly-owned property have been provided for residents to grow fruits, vegetables, flowers, herbs, native or ornamental plants for both commercial and non-commercial purposes.

The GreenCity Gardens program will be designed specifically to:

- support the sustainability goals for the eco-district, improve the quality of life for residents, create a healthy environment, and enhance economic development and job creation opportunities;
- demonstrate the technique and benefits of rooftop farming to help spread its occurrence throughout urban development areas;
- increase the public’s understanding of the value of community gardens and the need for community gardens in developed areas;
- encourage and facilitate local urban agriculture which increases access to fresh, nutritional food for residents, particularly those in under-served communities.





## Sustainable Strategies

### Energy

- Net positive energy
- Geothermal
- Natural ventilation
- Life cycle analysis - cradle to grave
- High efficiency systems
- High performance enclosure
- Photovoltaic energy production

### Water

- Net zero water
- Intensive & extensive green roof
- Roof top farming
- Low flow fixtures

### Health & Wellness

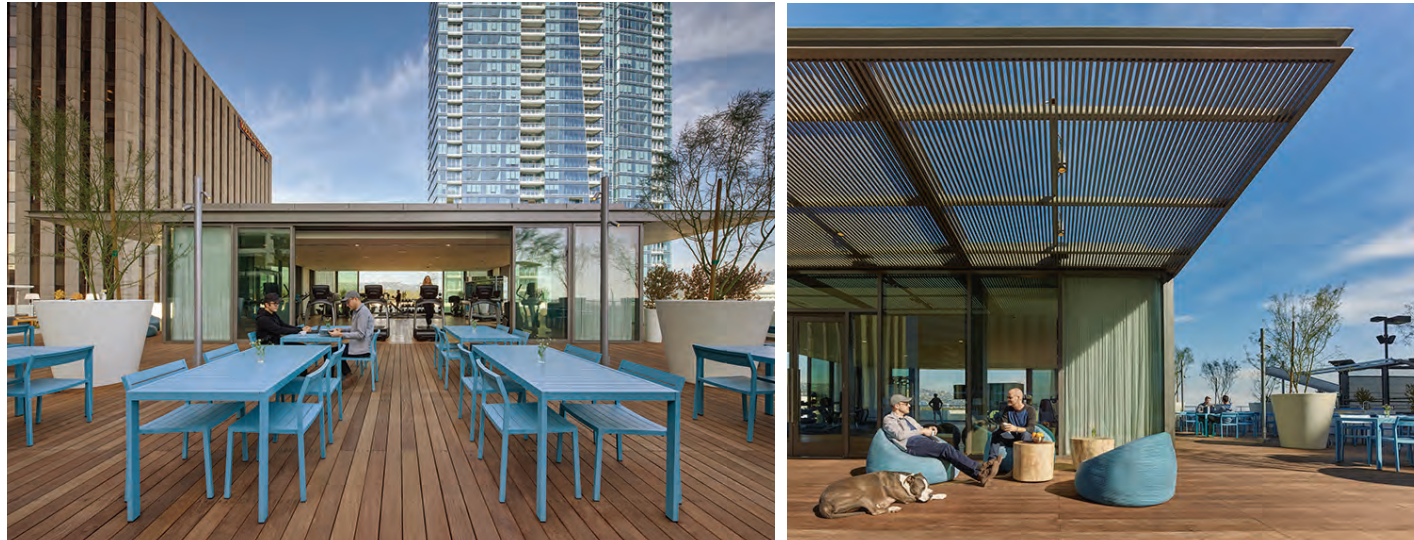
- Community Atrium
- Feature stair access to all floors
- Biophilic design
- Easy access to outdoor space
- Indoor and outdoor amenities
- Daylight analysis





# Land Use & Pattern 16

BEST Products Building - Re-purpose



## Rooftop Amenities







# Land Use & Pattern

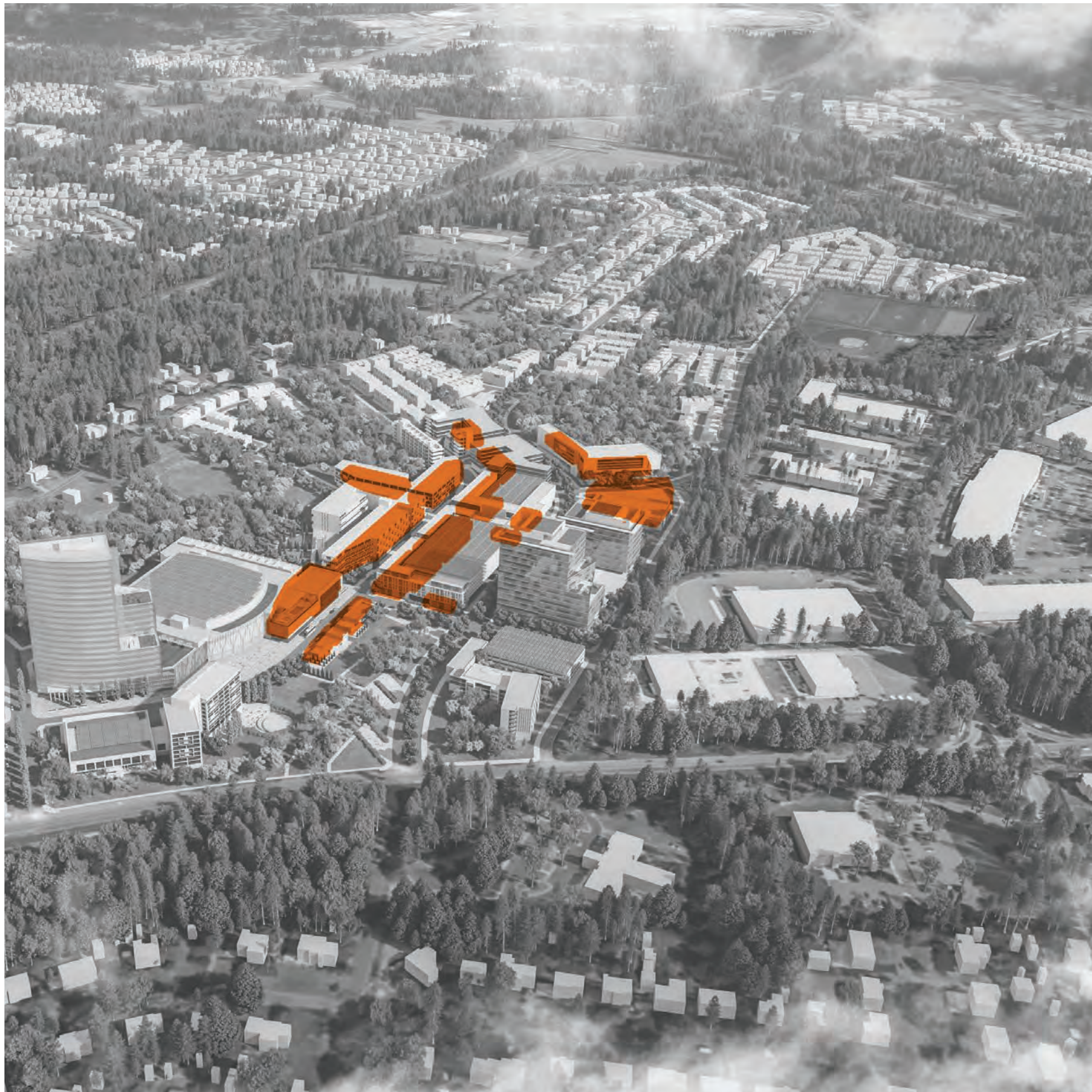
BEST Products Building - Re-purpose











# Land Use & Pattern 16

## Retail

The GreenCity development plan introduces an active and highly programmed Retail Center with connections to the residences, businesses and the park system through the articulation of walkable streets and public open spaces.

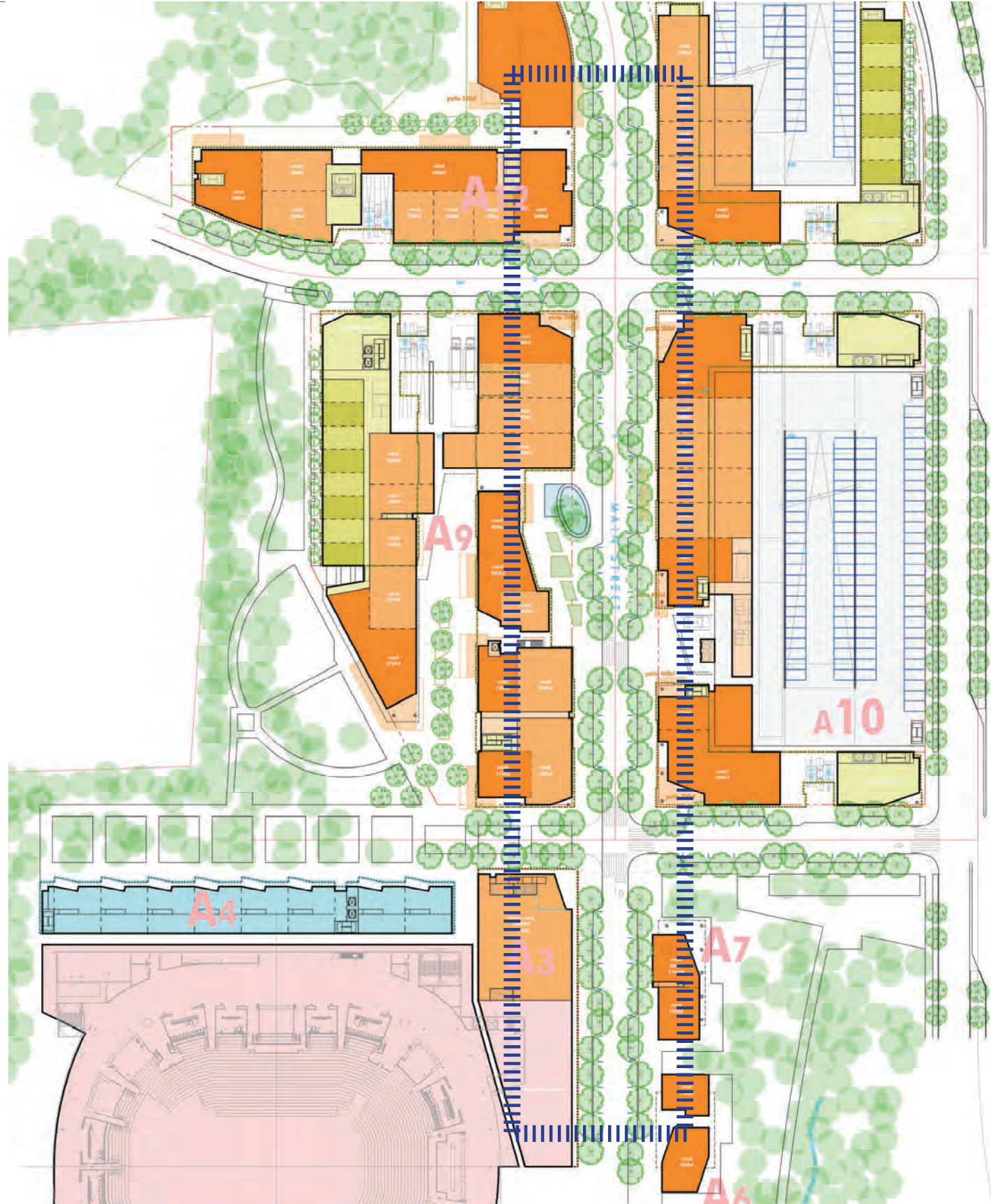
The new streets will be shaped and augmented to facilitate a well-populated and energetic street scene, while still providing adequate space and parking access for visitors. Convenient underground and above ground parking will service the needs of all GreenCity tenants, residents, and visitors.

A concentration of ground-level retail on both sides of the streets will activate the planned pedestrian network. The development plan imagines urban streetscapes and planting in support of new visitors, tenants, and the resident community. Buildings and landscape, grouped to provide shade for street activity and public amenities, will encourage robust street life.

### Sustainability Standards:

- LEED Platinum
- LEED Gold
- Well Building

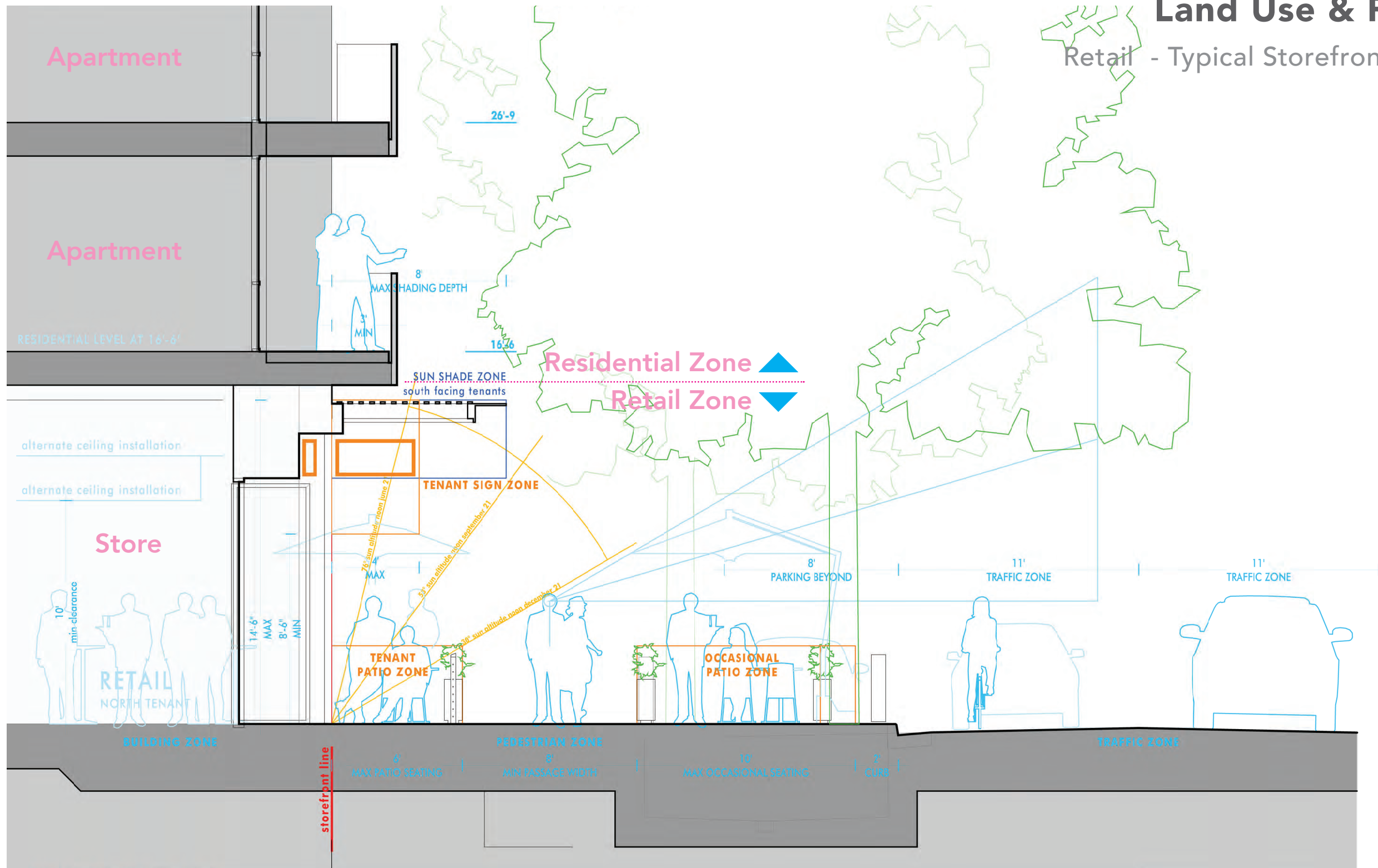




### GreenCity Center Main Street Shopping



Retail - Typical Storefront Section











# Land Use & Pattern 16

## Hotel / Conference

Two hotels are planned for GreenCity, with the first scheduled to be developed in the initial development sequence, and the second to follow as the market dictates.

The initial 300-room GreenCity Hotel and Conference Center will be operated as a leading hotel property in the region for both group and individual business. Given its prominent location and visibility, it will be one of the premier venues for tourism, conferences and meetings.

The hotel and conferencing facilities will combine a highly desirable mix of features and services that will be attractive for group and leisure business, from national meeting planners, local corporate users, social functions, as well as tourism.

The facilities will be among the best guest rooms, conference space and location in the greater Richmond market. The variety of potential uses and programs in the area creates opportunity for growing incremental room nights. Its mixed-use setting and arena programming opportunities allow for the creation of new festivals and events.

### Sustainability Standards:

LEED Gold  
Well Building





## Community and Diversity

GreenCity will be a resilient, culturally rich community through the optimization of natural resources, prioritizing well-being, and nurturing a regenerative relationship to nature.

GreenCity creates an equitable community through inclusion-oriented design. A variety of outdoor spaces make it possible to both live a “20-minute” lifestyle and still reconnect with the ecosystem and the larger community through active and passive activities. The Town Center will promote casual encounters that build resilient neighborhood relationships, while footpaths, discrete parks and plazas enhance the sense of community.

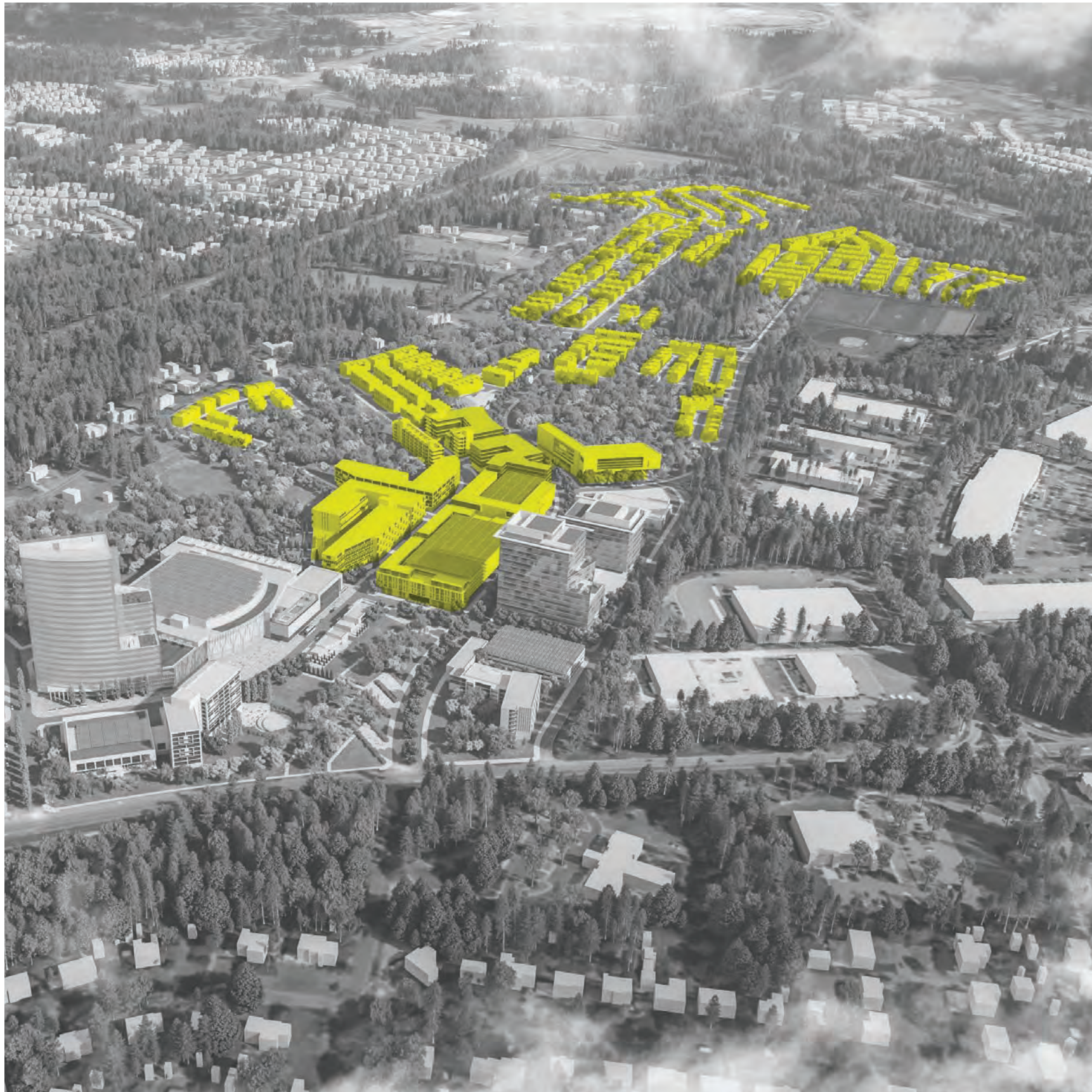
## Lifestyle

GreenCity residences support a healthy lifestyle in a setting that encourages new types of interactions and connections with each other, and with nature.

Each housing type links outdoor spaces to the experience of the home, extending the natural landscape into the residential setting. The design of each residence creates interior spaces that promote wellness by responding to the site, maximizing both daylight and natural ventilation for each residence.

Open and inviting neighborhood hubs welcome all members of the community. Residential neighborhood amenities like fitness parks, green roofscapes and community centers support the collective and individual activities that shape daily life.





# Land Use & Pattern 16

## Residential

The residential community planned for GreenCity is balanced and strengthened by the diversity of housing products integrated into walkable neighborhoods. These are organized around communities, which are designed with less density north of Magellan Parkway, and greater density south of Magellan, which features greater mixed-use integration with other commercial uses.

The ambition of the development is to also provide affordable living alternatives for residents who prefer the benefits of more urban lifestyles, but don't wish to give up access to more rural natural settings.

With significant integration of retail and commercial workspace, there will be opportunities for many to forgo the economic and environmental burden of being a family with multi-automobile ownership and time-consuming commuter lifestyles.

The full range of residential types proposed include:

- Multi-family over retail (within the Village Center)
- Townhomes
- Two-over-two
- Villas
- Single Family
- Senior Multi-Family
- Senior Villas

### Sustainability Standards:

Passive House





Multi-Family Mixed-Use Example Elevation

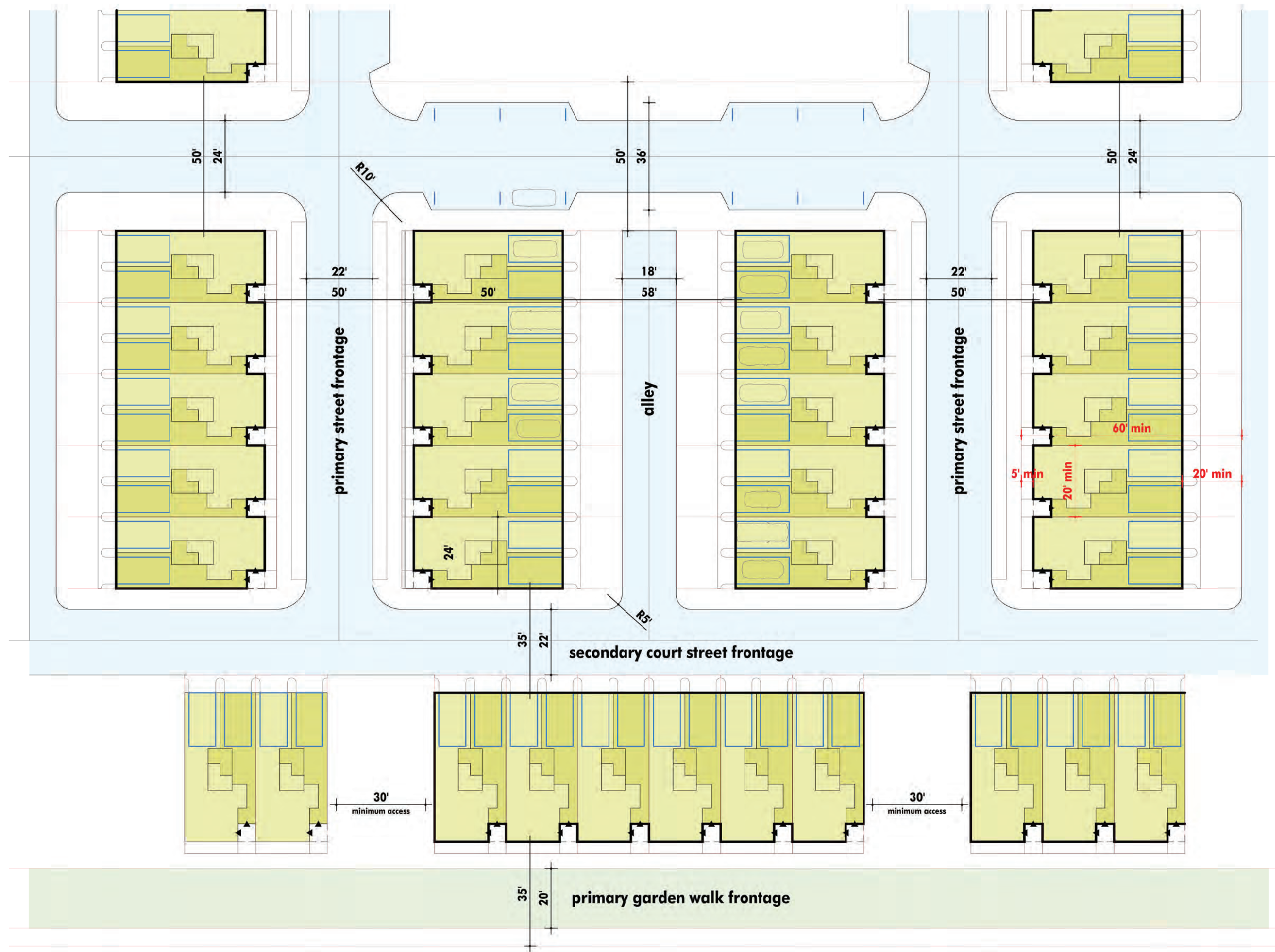


# Pattern Book 17

Multi-Family





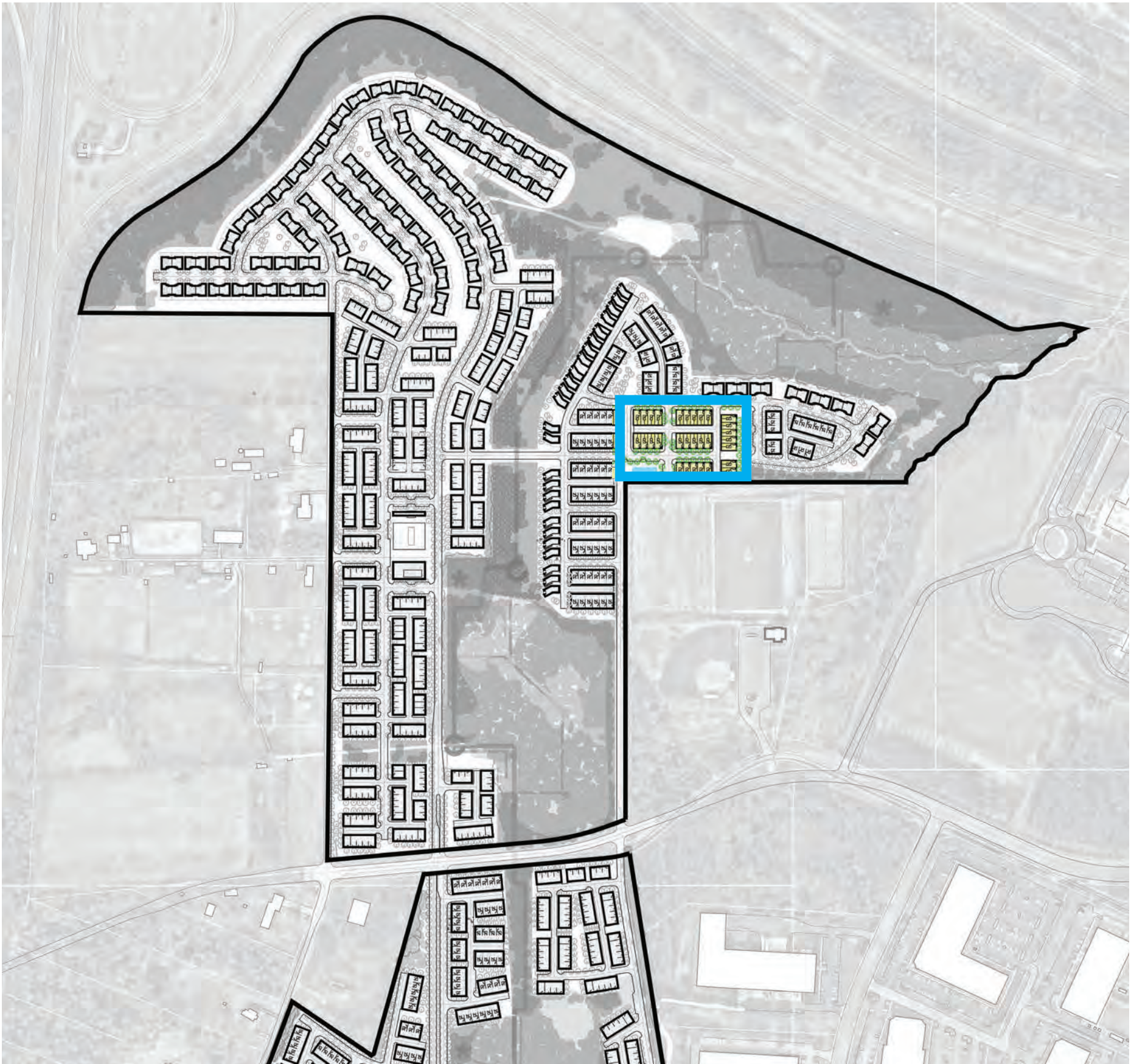


2 over 2 units • Example Neighborhood Plan



# Pattern Book 17

2 over 2







2 OVER 2 STACKED TOWNHOMES- EXAMPLE ELEVATION - PRIMARY STREET FRONTAGE

2 over 2 • Example Elevation • Primary Street Frontage

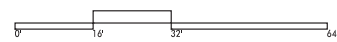
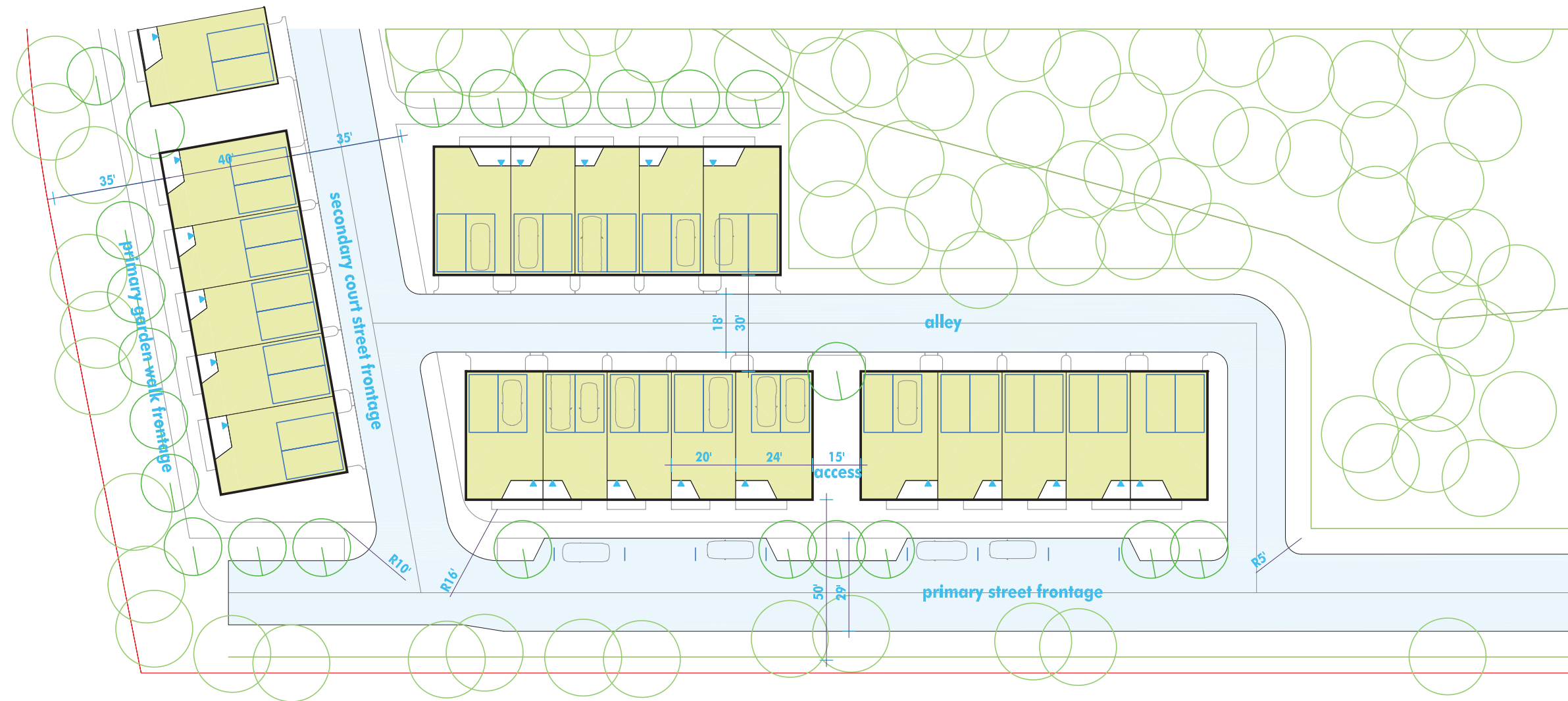


# Pattern Book 17

2 over 2







## Townhomes • Example Neighborhood Plan



# Pattern Book 17

Townhomes







TOWNHOMES- EXAMPLE ELEVATION - PRIMARY STREET FRONTAGE

Townhomes • Example Elevation • Primary Street Frontage



# Pattern Book 17

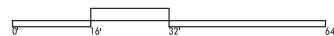
## Townhomes



TOWNHOMES- EXAMPLE ELEVATION - PRIMARY STREET FRONTAGE

### Townhomes • Example Elevation • Primary Street Frontage



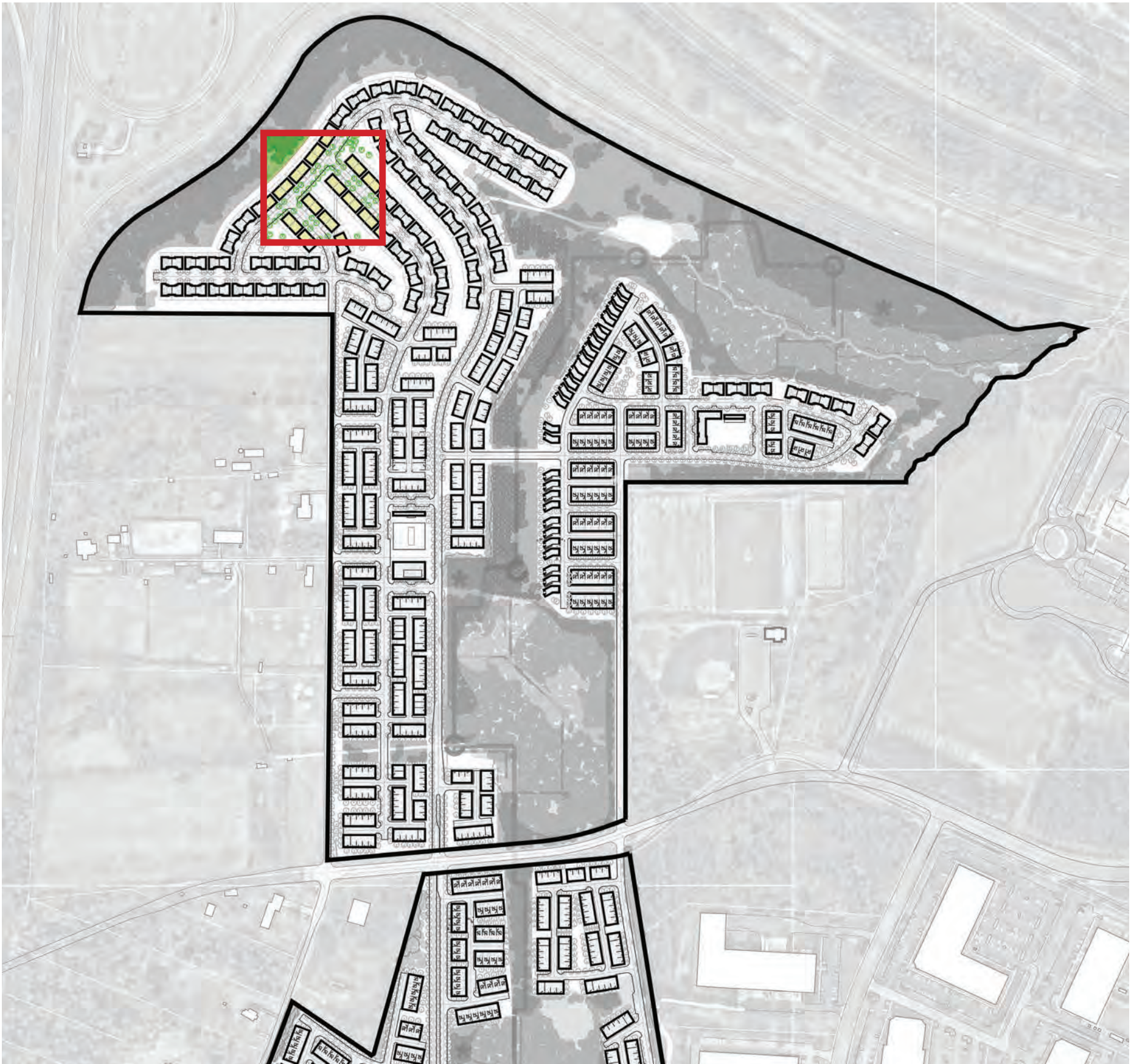


Villas • Example Neighborhood Plan

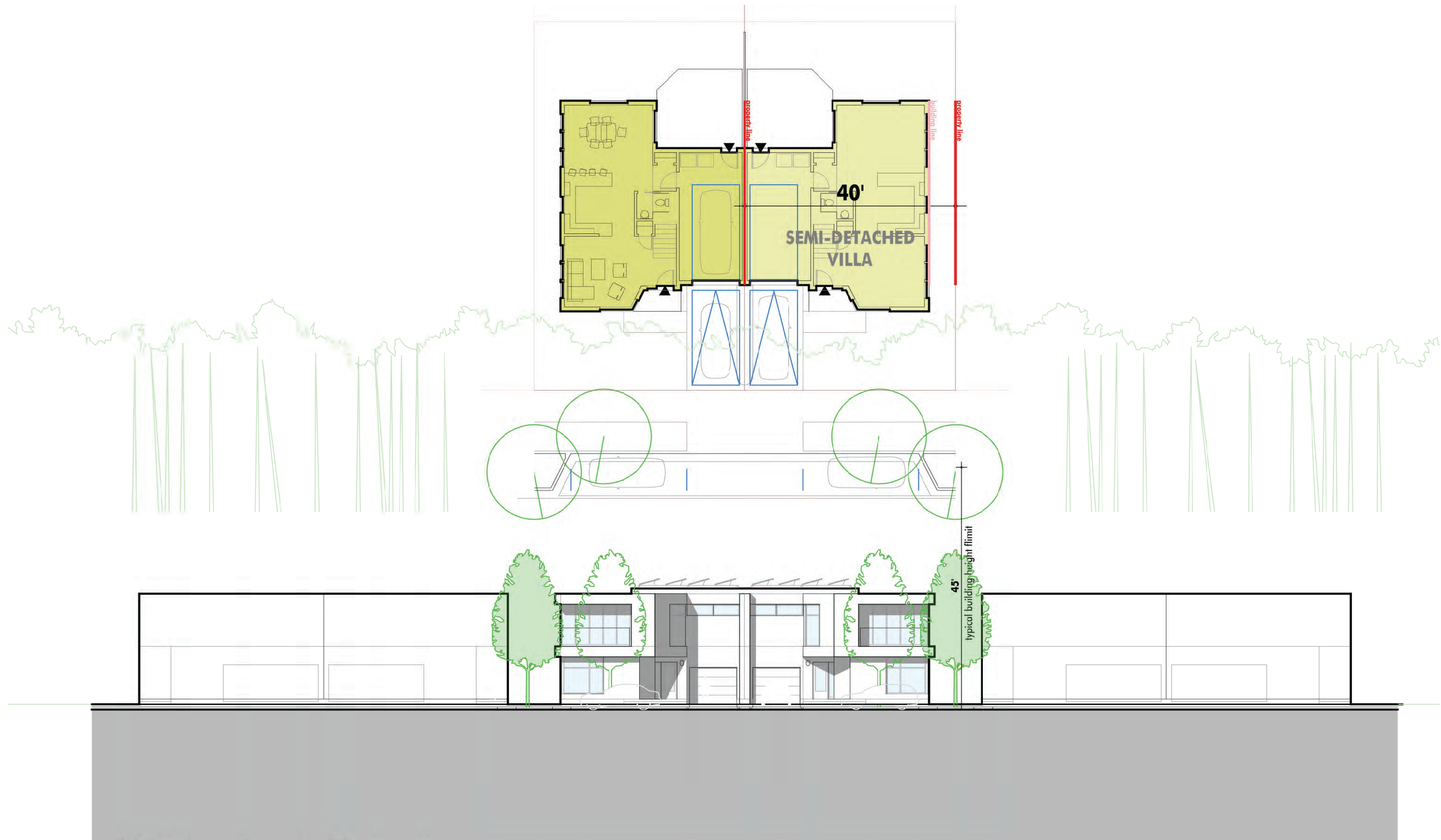


# Pattern Book 17

Villas







SEMI DETACHED VILLA - EXAMPLE ELEVATION - PRIMARY STREET FRONTAGE

## Semi-Detached Villa • Example Elevation • Primary Street Frontage

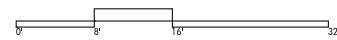
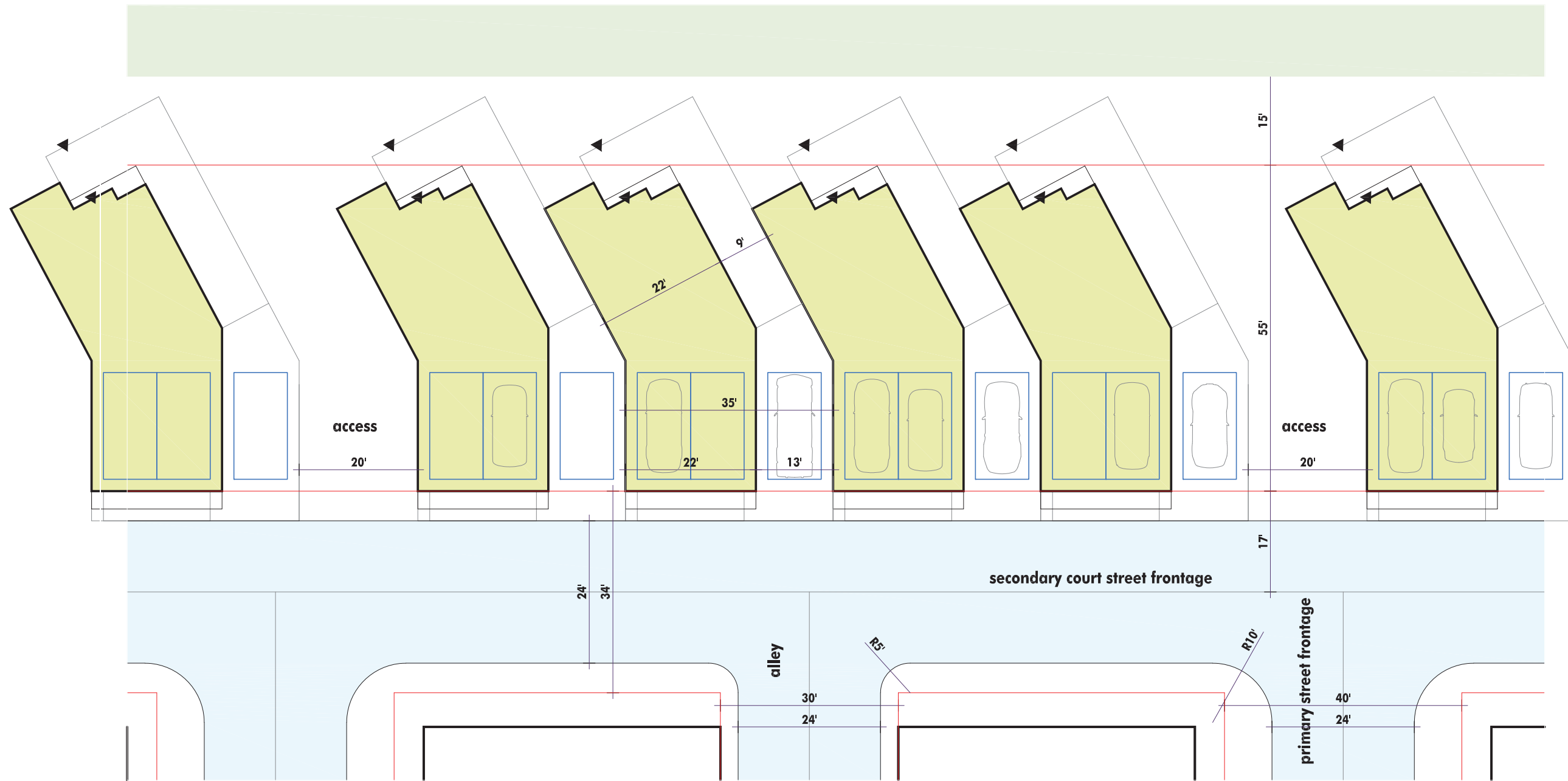


# Pattern Book 17

Villas





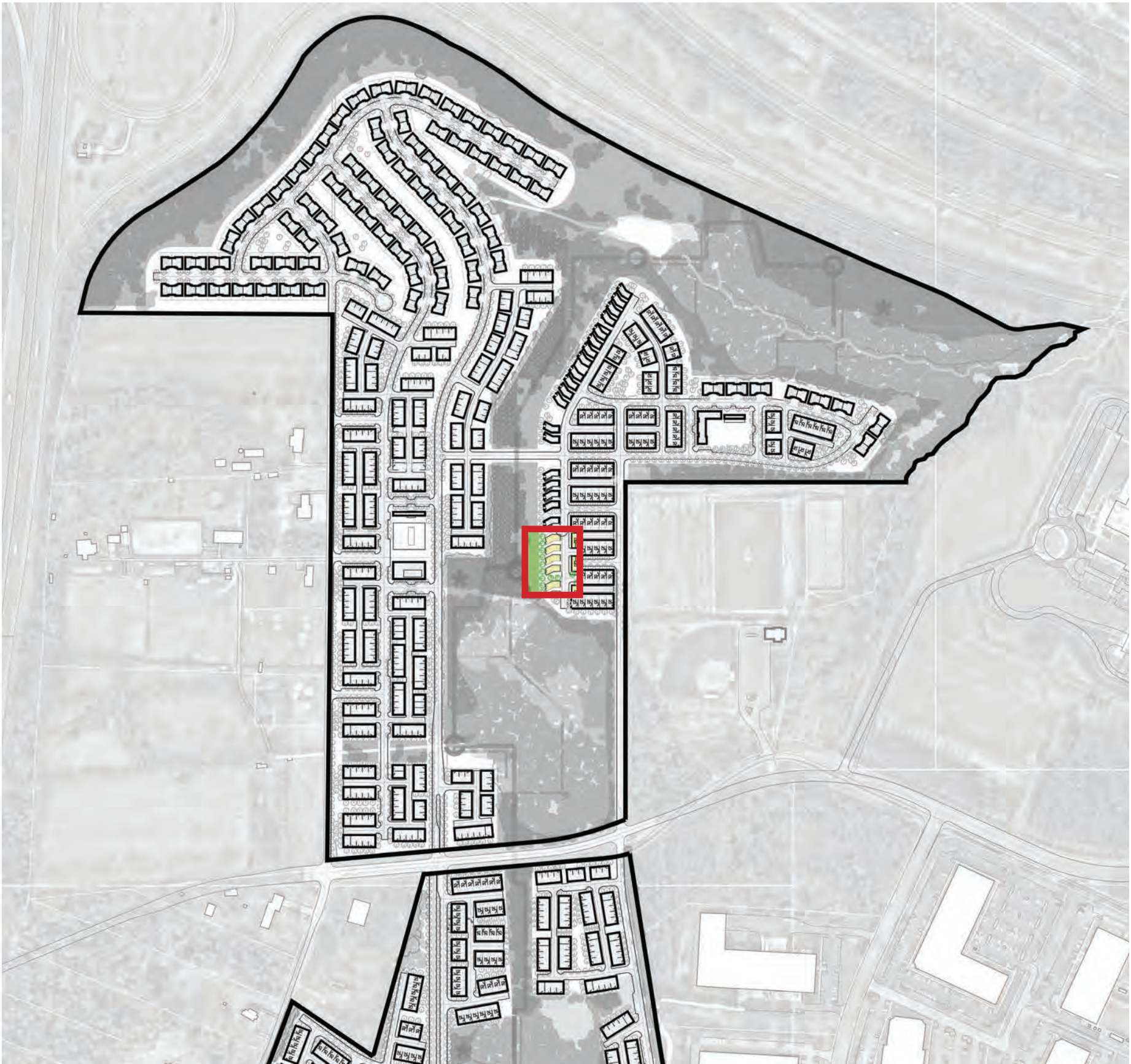


### Single Family Detached • Example Neighborhood Plan



# Pattern Book 17

Single Family



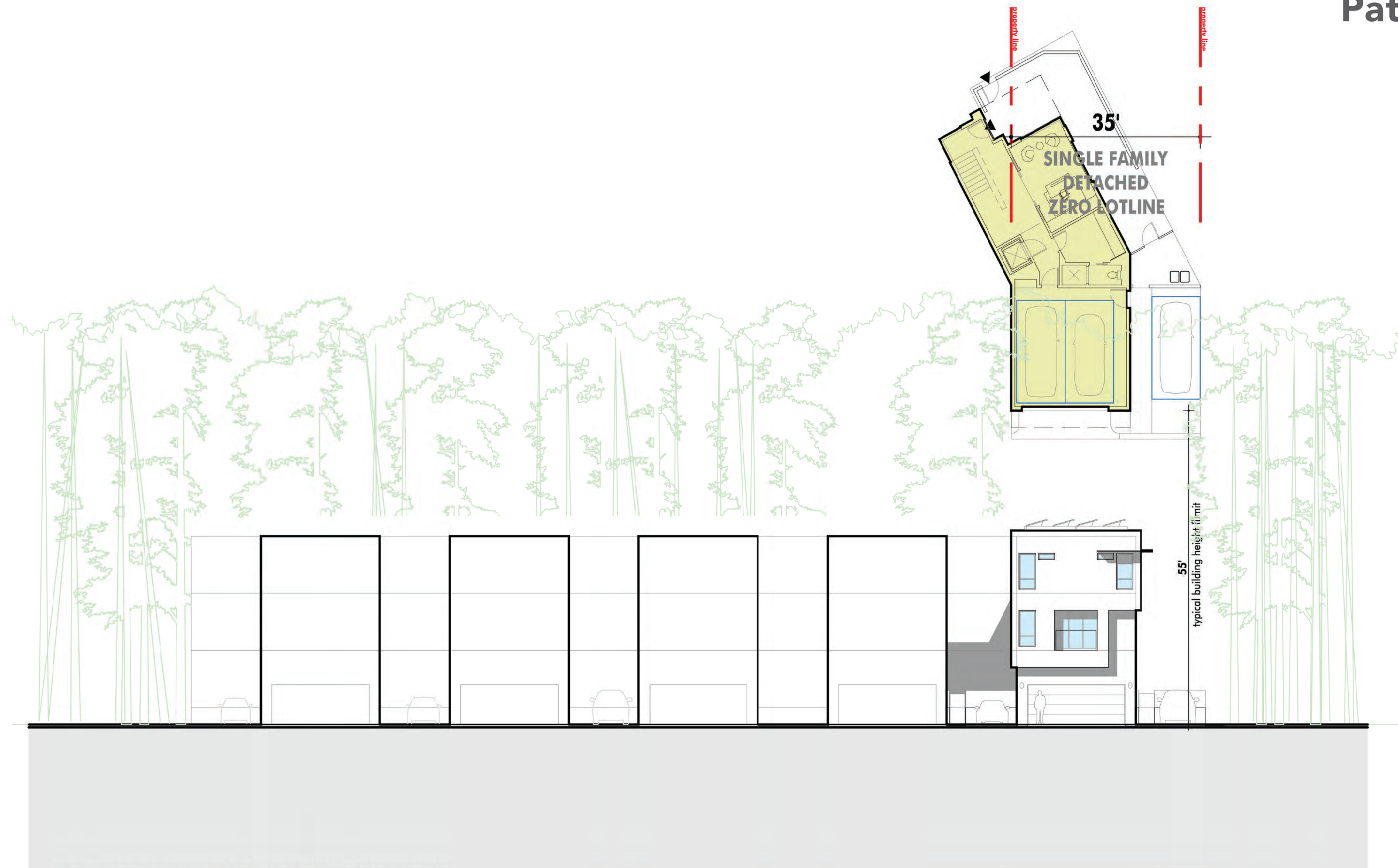




SINGLE FAMILY DETACHED HOME - EXAMPLE ELEVATION - PRIMARY STREET FRONTAGE

Single Family Detached Home • Example Elevation • Primary Street Frontage





SINGLE FAMILY DETACHED HOME - EXAMPLE ELEVATION - SECONDARY STREET FRONTAGE

## Single Family Detached Home • Example Elevation • Secondary Street Frontage



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## GreenCity Project Summary Conversion Chart

	ideal lot area	program unit	efficiency			parking	convertible to	office	mixed use	stacked townhouse 2/2	townhouse	attached villas	single family detached
hotel	100 ksf	300 keys	0.33 keys/ksf lot	1 stall per	1 key	300 stalls	50% max	400 ksf	250 units				
arena	200 ksf	17000 seats		1 stall per	4 seats	4250 stalls	0% max						
commerical office	100 ksf	400 ksf	0.25 ksf/ksf lot	4 stall per	1 ksf	1600 stalls	50% max		250 units				
mixed use	100 ksf						20% max	400 ksf		250 units	250 units		
structured parking		700 stalls	0.14 stalls/ksf lot										
retail		20 ksf	5.00 doors/ksf lot	5 stall per	1 ksf	100 stalls							
restaurant		20 ksf	5.00 doors/ksf lot	10 stall per	1 ksf	200 stalls							
multi-family residential		250 units	0.40 doors/ksf lot	1 stall per	1 unit	250 stalls							
stacked townhomes 2/2	100 ksf	40 doors	2.50 doors/ksf lot	1 stall per	1 door	40 stalls	100% max		250 doors		40 doors	20 doors	25 doors
townhome	100 ksf	40 doors	2.50 doors/ksf lot	2 stall per	1 door	80 stalls	50% max		250 doors	40 doors		20 doors	25 doors
attached villa	100 ksf	20 doors	5.00 doors/ksf lot	2 stall per	1 door	40 stalls	100% max			40 doors	40 doors		25 doors
single family detached	100 ksf	25 doors	4.00 doors/ksf lot	2 stall per	1 door	50 stalls	100% max			40 doors	40 doors	20 doors	





## Sign Definitions

### Static Signage

A static sign is defined by a single sign element that is not self-changing and whose graphics will not vary unless physically altered. Examples of this sign type include room identification signs, painted metal directional signs with painted/vinyl graphics, digitally cut vinyl graphics, and tactile ADA signs. Static signage can also be internally or externally illuminated.

### Dynamic Signage

A dynamic sign is defined as a one-way automatically changing sign element that can be programmed to display various graphics and messages. Examples of this sign type include LED monitors or displays, and video boards. Dynamic signs are typically electronic displays with programmable content, these signs may consist of scheduled events, and campus notices.

### Digital Signage

A digital sign is defined as an interactive and changeable sign. Examples of this sign type include touch screen video display units. Smart phones app-based wayfinding system may be considered. Digital signs require the ability for personal interaction. Digital signs will be considered for the campus, with the quantity based upon level layout at pedestrian walkways, etc.

Interactive software and hardware devices will comply with the U.S. Section 508 standards. An alternative design or technology that results in equivalent or greater accessibility and usability by individuals with disabilities will be provided.



*Signage within GreenCity is one of many unifying elements that will help to distinguish the community and create a strong and memorable identity in its overall scale*

## Signage Design Principles

**Coordinated Project Signage:** Use coordinated signage to promote the GreenCity identity. Signage based on a consistent unified design motif will add to a cohesive consistent look at GreenCity.

**Complementary Tenant Signage:** Integrate tenant signage with the site design, building architecture and design theme of the district. Ensure signage is compatible in scale and character with the building and storefront.

**Wayfinding System:** Wayfinding serves to orient visitors and offers a sense of familiarity to returning customers. Wayfinding will create a superior level of comfort for visitor orientation.

**High-Quality Signage:** High quality signage materials will offer an elevated aesthetic for tenants, but also should reflect the overall high quality of design at GreenCity.

**Legible Signage:** Create signs that present a clear and simple message. Concise signage with few words tends to convey the BEST message.

**Durable Signage:** Construct signs of durable, high quality materials that withstand weathering. Durable signage will create a feeling of permanence throughout GreenCity.

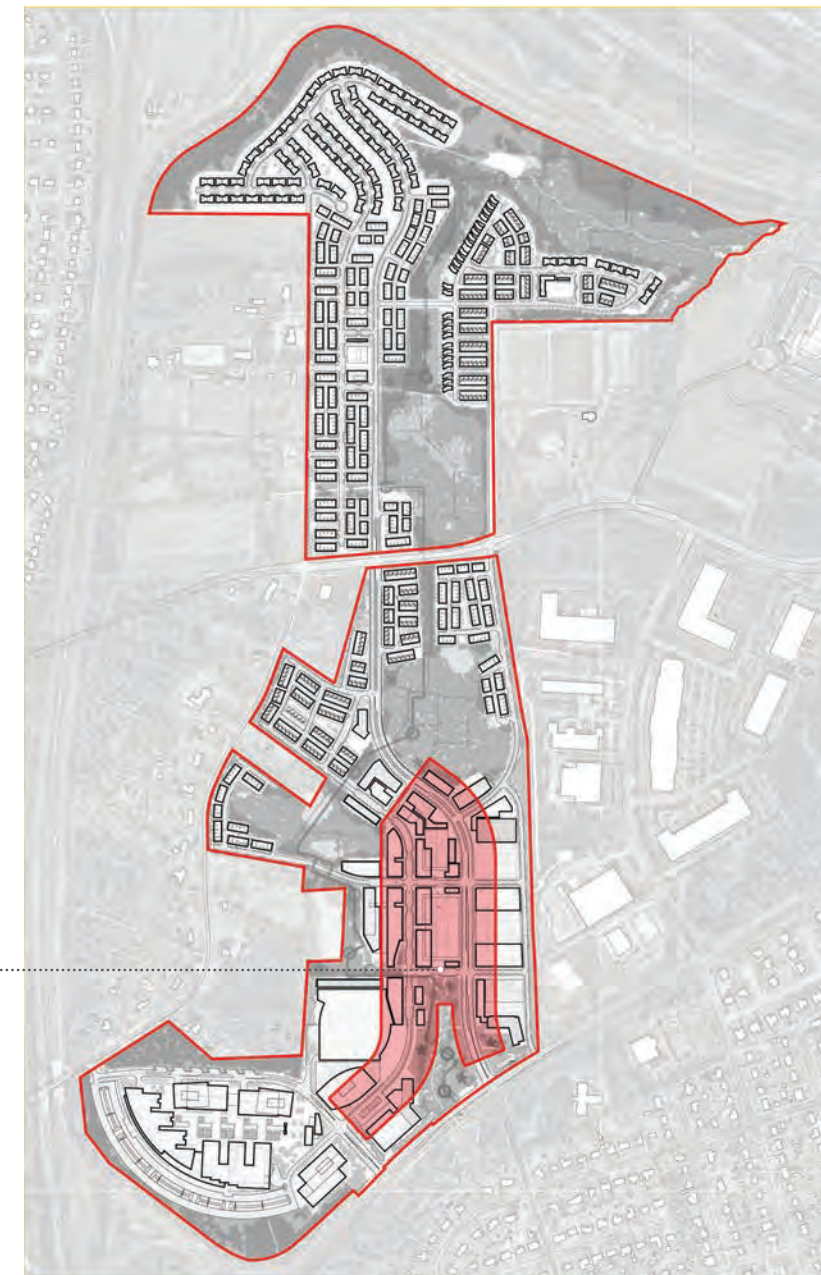
**Civic Art Potential:** Civic art will provide the opportunity to enrich the environment. Civic art may be used to highlight special locations such as gateways and public plazas, or to enrich architectural and landscape details.

**Signage District**  
**Area Restricted Sign Limits**

The following signage types, as defined in this section, is limited to the shaded area at right:

- Digital Signage
- Animated Displays
- Sponsorship signs / advertising

*East/West Sign District boundaries are measured 150' from centerlines of Main Street on the west, and St. Charles on the east*



**Signage District**





## District Signage Design Intent

Project and district identifiers will include highly visible gateway markers. In addition to advertising within the district, these signs should enhance project identity and establish a welcoming point of arrival. Wayfinding signs will be especially useful in orienting first-time visitors, while offering a sense of familiarity to returning customers.

## District Signage Design Guidelines

1. Develop a “family” of signage that creates a graphic continuity throughout the project. In GreenCity, districting concepts may require individualized district signage “families”.
2. Provide vehicular directionals consistent with Henrico County requirements that guide motorists to important destinations on-site.
3. Include directional signs and maps that guide persons on foot and bicycle to important public services and facilities, parks, outdoor gathering areas, and major tenants.
4. Avoid signage in corner/driveway sight clearance areas.

## District Signage Characteristics

### Vehicular Directional

- Gateway signage clearly identifies the project at vehicular points of entry and provides information (or place identification).
- Signs are scaled to their surroundings and in accordance with their function as primarily vehicular-oriented project identifiers.
- Gateway elements may include landscape, hardscape and light displays.
- Gateways enhance the project and establish the overall character of the signage program.
- Signs are constructed of high quality and durable materials that are weather and vandal resistant.
- Gateway signs are primarily for project name or logo. If these signs are digital, additional content (artistic, public interest and sponsor/tenant) would be allowed content. Off-Site content is prohibited.



*District signage will enhance the unique identity of GreenCity and create a cohesive graphic family of signs for getting around. Signage will include identity signage, transportation and traffic control signage, parking access and availability, and wayfinding signage.*

### Directional / Wayfinding Typologies

#### Vehicular Directional

- Directionals are located at or near project entrances and key intersections, and other locations that will serve to guide motorists to their destination. Signs direct motorists toward parking, and major destinations and attractions, including the larger tenants.
- Vehicular directionals are freestanding or mounted on light poles, and scaled to their surroundings for a comfortable read by slow moving vehicles and cyclists.
- Materials for vehicular directionals are similar to those making up other project signage and compatible with the overall signage program.
- Signs are visually engaging with highly legible text and graphics.

#### Pedestrian Directional

- Directionals are located along major pedestrian circulation routes and other locations that will serve to guide the pedestrians toward public services and amenities, or through the park system.
- Pedestrian directionals maintain pedestrian flows and sight lines.
- Signs are scaled to their surroundings for a comfortable read by persons-on-foot and bicycle.
- Signs are created from high quality and durable materials that are weather and vandal resistant.
- Enhance project identity and maintain capability with overall signage program.

#### Wayfinding / Informational Kiosks

- Wayfinding/Info Kiosks are located within or near major pedestrian gathering spaces and key intersections subject to heavy pedestrian flow.
- Wayfinding/Info Kiosks present essential information needed to navigate the project.
- Kiosks are made from high quality durable materials, as these elements are exposed to the weather and will receive an especially high degree of contact with the public.
- Wayfinding/Info Kiosks and maps may also locate points of interests and essential services provided.
- Advertising / PSA / Retail engagement, Parking, Sustainability information
- Information is presented in a clear and highly graphic manner, and locates project tenants, major destinations, and, public and/or guest services.
- Kiosks are situated to maintain pedestrian flows and preserve sight lines.
- Kiosks can also function as "community boards" that advertise upcoming events.

#### Shared Open Space

- Educational - Interpretive Signage
- Exercise stations, mile markers
- Informational signage in pavement

#### Digital Signage

- Digital Art and Landmarks to contain artful content and lighting expressions to enhance the experience of entering GreenCity. Project Identity and On-Site content may also be displayed.
- Digital Wayfinding/Info Kiosks can function as interactive maps, bus schedules, community functions and temporary directional signage for special events.
- Digital displays that will be freestanding or integrated into architecture.
- With merging combinations of digital signage, wayfinding and advertising, a single signage element may host multiple expressions.







*Tenant signage quality will be measured through its compatibility with the building architecture, its level of integration with the storefront design, and the ability to clearly communicate.*

### Tenant Signage Criteria

1. Locate and design tenant identity signs to complement the building architecture and storefront design.
2. Restrict tenant identification signs to the business name, simple logo or other elements typically used to depict their brand.
3. Ensure that window signage and graphics augment and obscure display areas by no more than 15% of the overall window area.
4. Office buildings and associated parking structures facing major streets are allowed to have:
  - a. Identity signage near the top of their buildings that is sufficiently scaled to be readable from adjacent arterial roads and freeway.
  - b. Only the corporate entity name and/or logo, and/or the name of a company that has purchased naming rights.
  - c. Up to four Identity signs.
5. Coordinate sign placement with the arrangement of bays, windows, and other architectural features while remaining consistent with the standards.
6. The overall size, materials and graphic composition of a tenant sign should be coordinated with the architectural character of the project district and storefront design.
7. Encourage pedestrian-scaled projecting signs (mounted, projecting blade signs, etc.) along pedestrian sidewalks and pathways.

### Projecting Signage

- Projecting signage is integrated with the design of the building, coordinating with the architectural details and color scheme of the building.
- Projecting signs are placed perpendicular to the building.

### Building Integrated Signage

- Supergraphics are integrated with the building architecture, coordinating with the overall design.
- Large-scale painted or applied decorative art in bold colors and typically in geometric or typographic designs.
- May be permanent or temporary and used over walls or windows to create an illusion of expanded or altered space.
- Use of supergraphics may be static imagery and may serve a broader set of purposes including holidays, celebrations, advertising and sponsor promotions.

### Free-Standing Signage

- Freestanding signage (affixed to the ground or connected to supports affixed to ground, and not affixed to a building) includes architectural details, quality materials, and colors compatible with the associated buildings.
- Signage incorporates durable sign materials that withstand exposure to the elements.
- Freestanding signage should be easily and comfortably read by both pedestrians and by vehicular traffic.

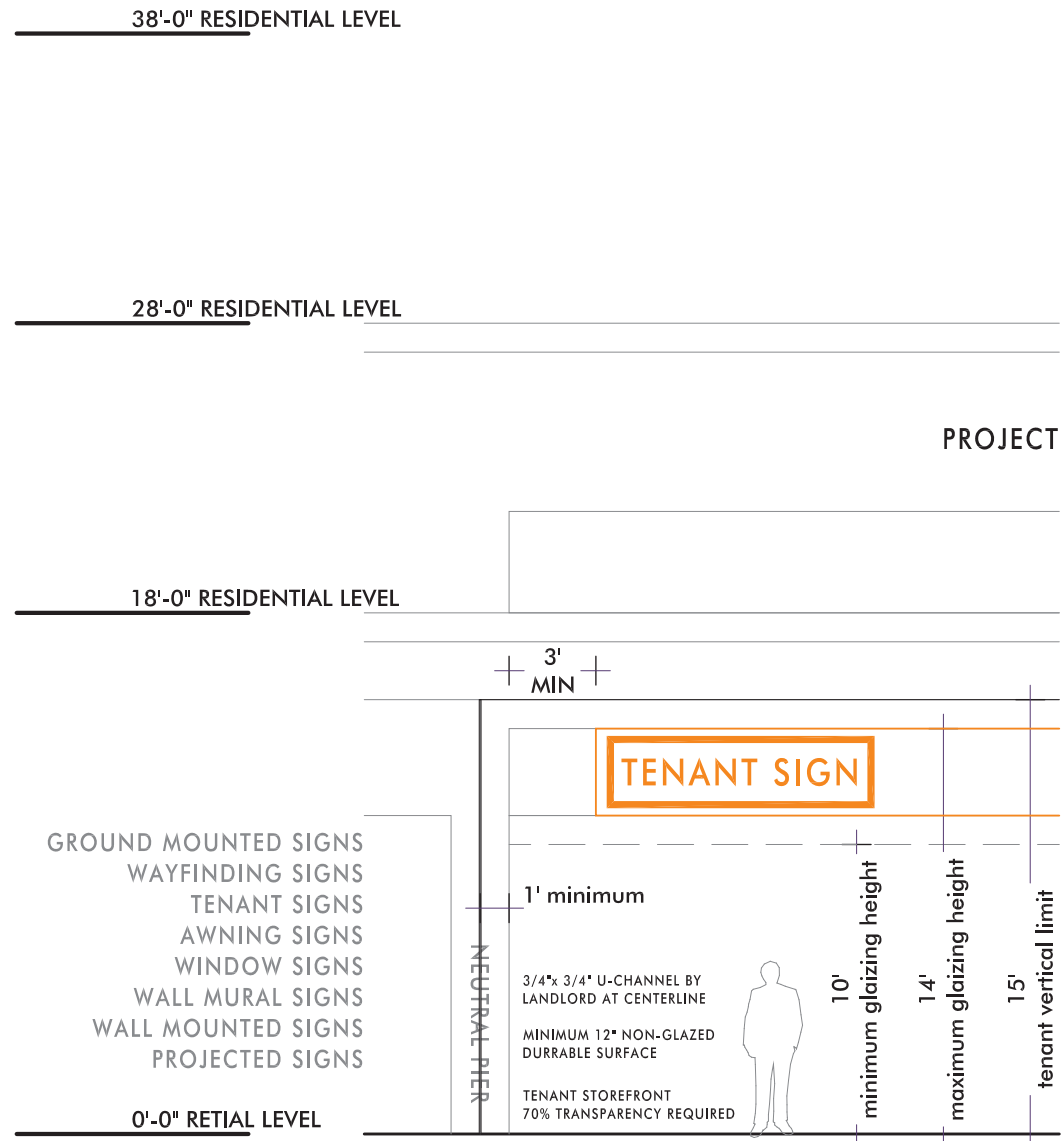
### Building-Mounted Signage

- Building-mounted signs are conceived as an integral part of the building façade, placed in accordance with façade rhythm, scale and proportion.
- Signs do not obscure architectural features such as vertical piers, trimwork, ornamental features, etc.
- Parapet / High Wall Signs are mounted above windows and below parapet top

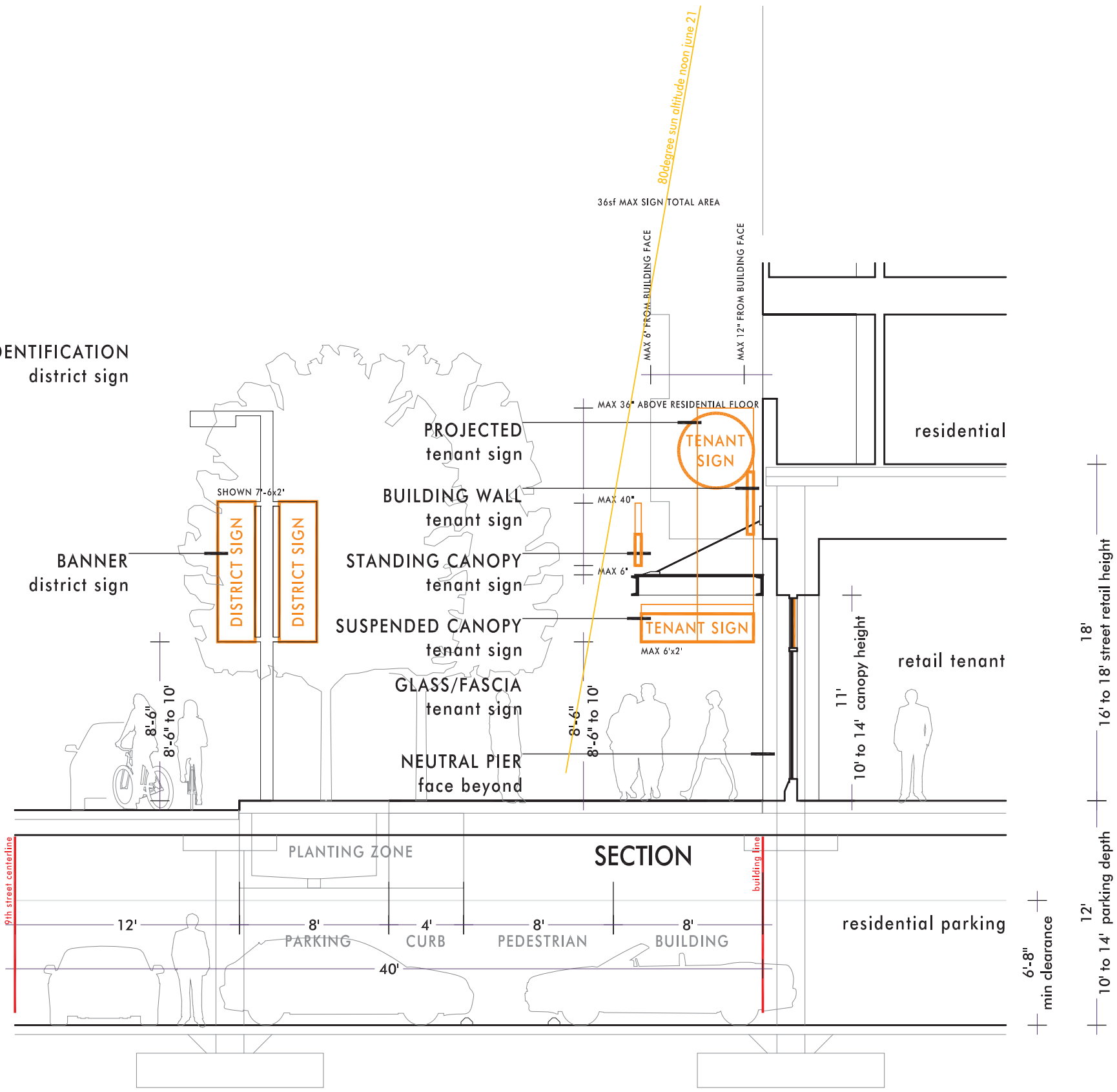
### Storefront Signage

- Storefront signage will be integrated with the design of the building, compatible with the architectural details and color scheme of the building.
- A window sign that is located on or within 6 feet of the window plane, painted or attached.
- Will produce little to no impact to nearby residences.





ELEVATION

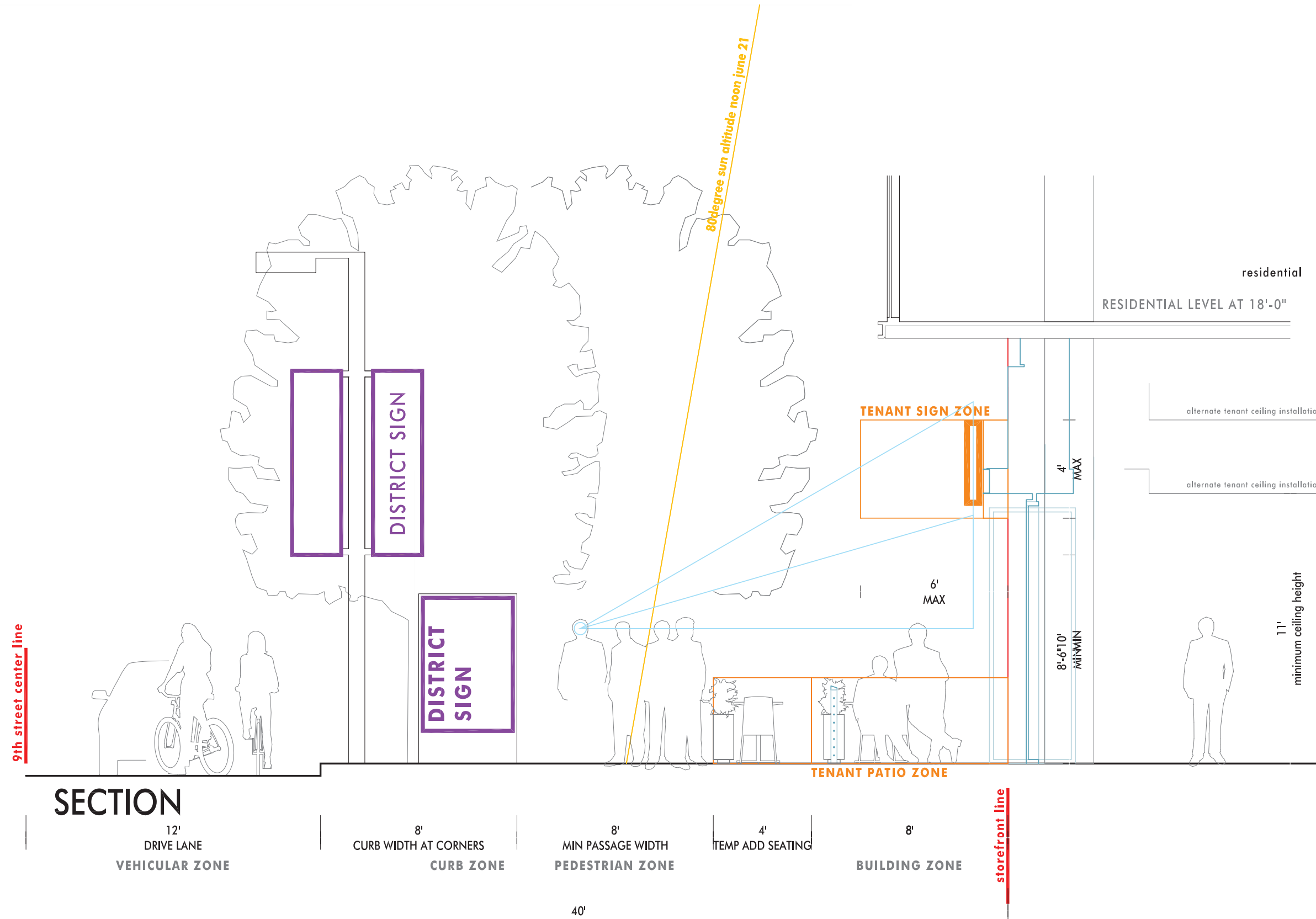


SECTION

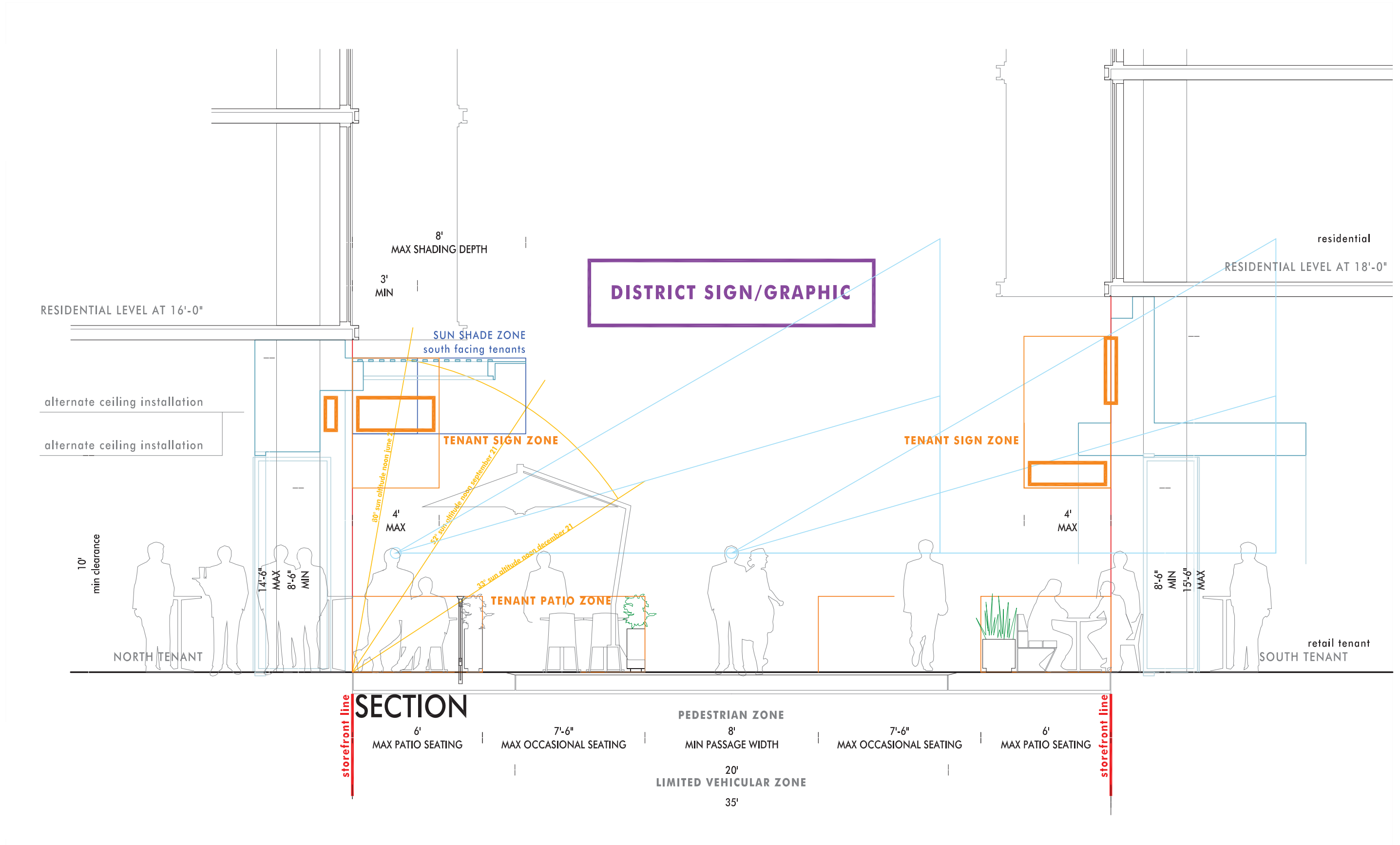


# Signage 19

## Placement



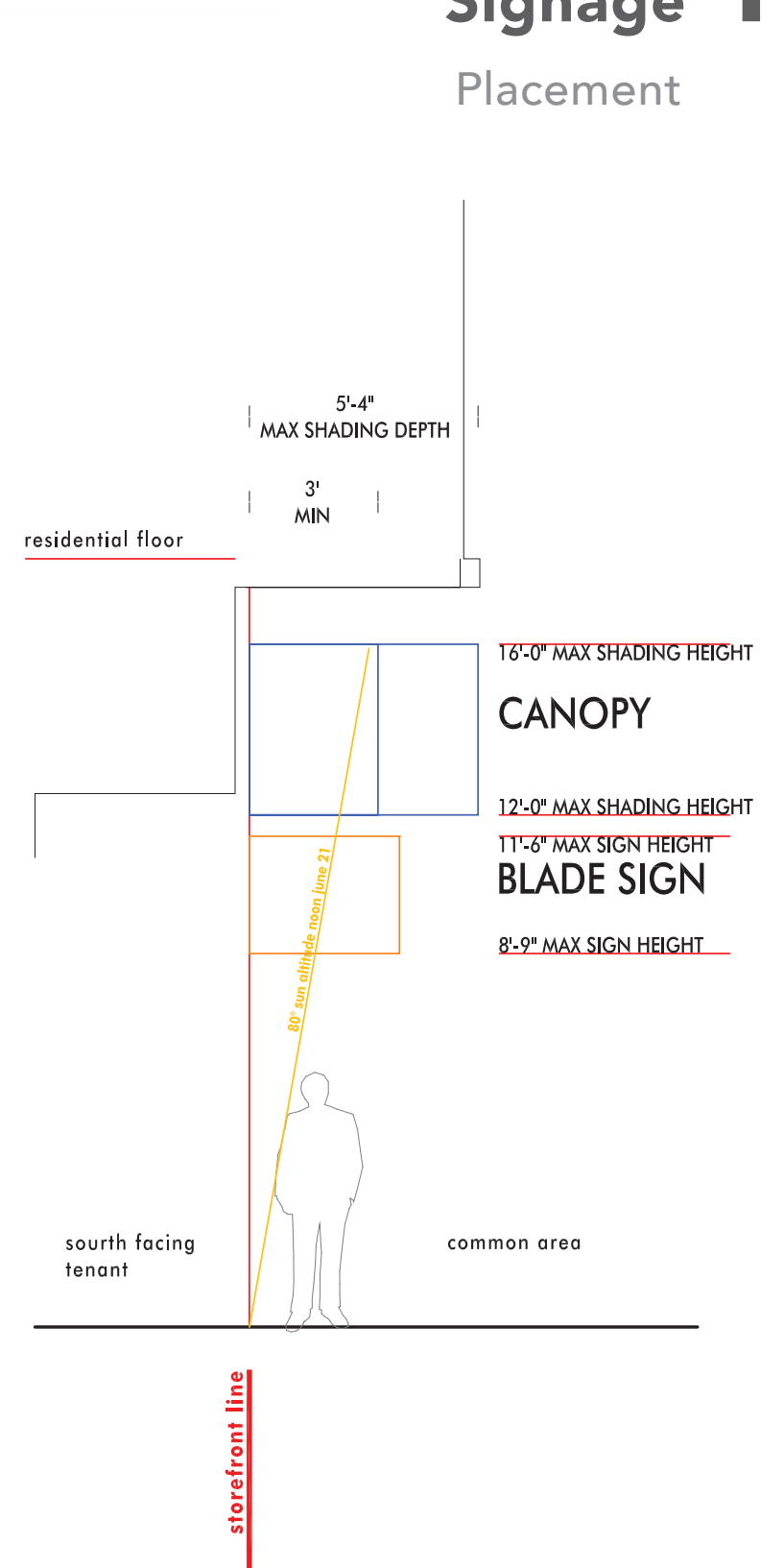
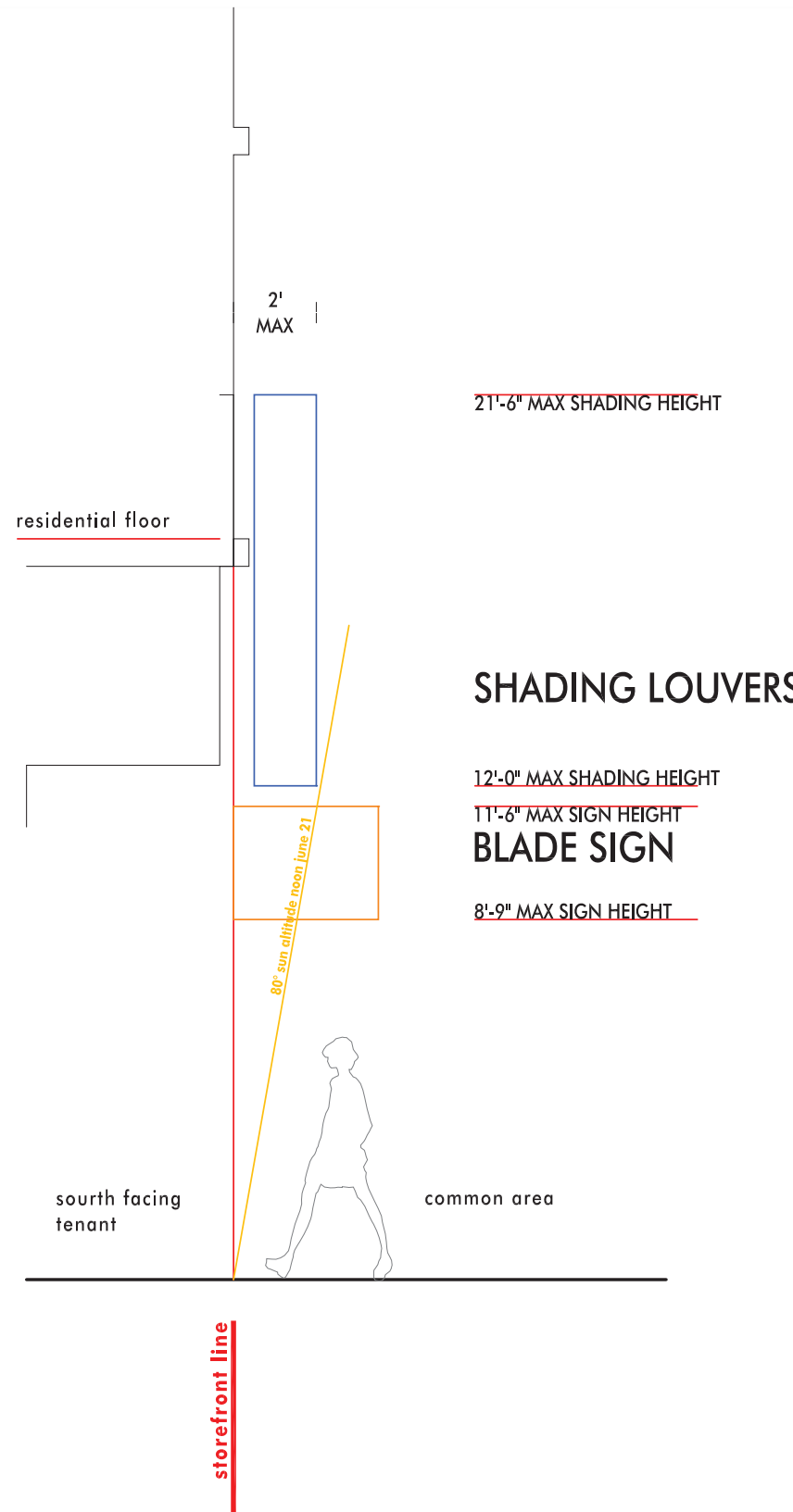
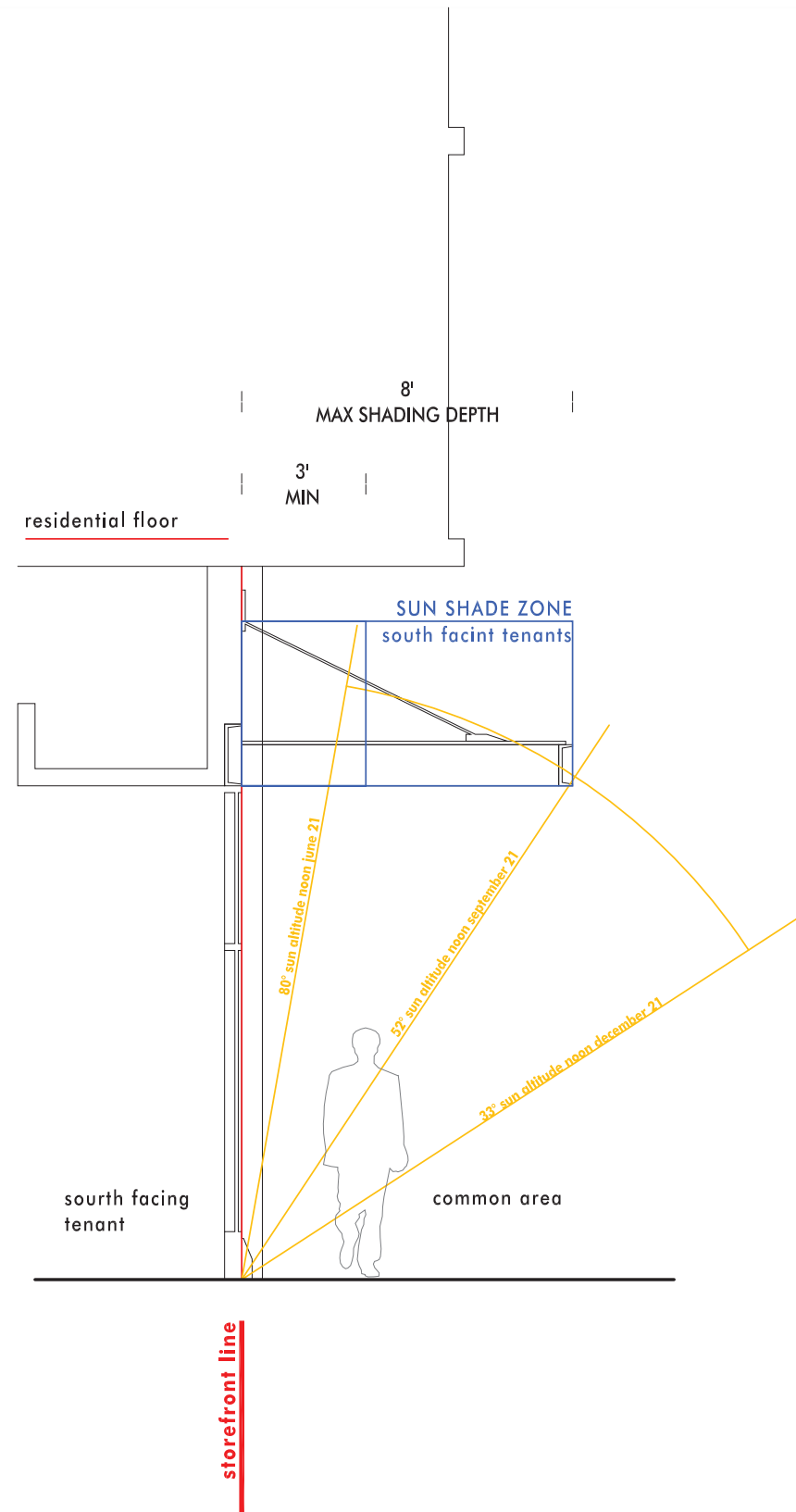




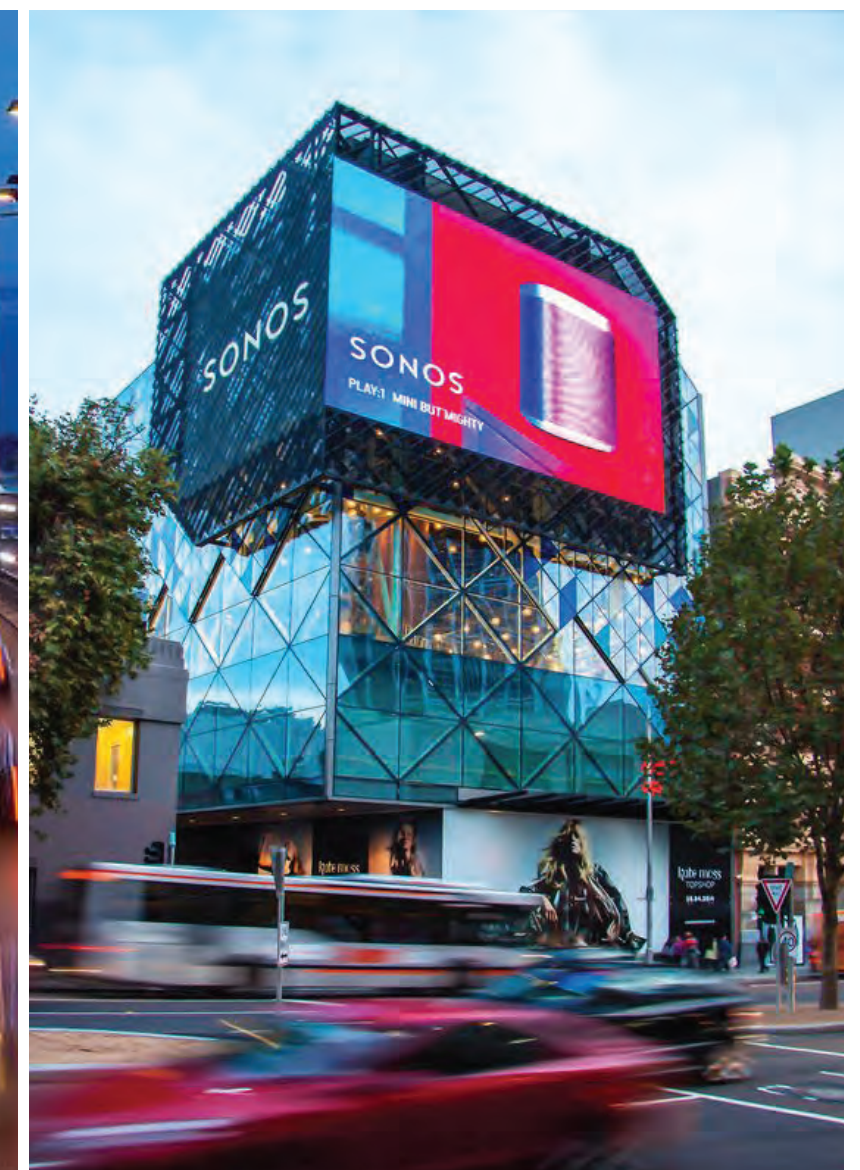


# Signage 19

## Placement









*Arena sponsorship and advertising will further enhance the identity of GreenCity and create an active center, enhance a vibrant mixed-use district, enliven a pedestrian friendly “live, work, and play” environment, and create a destination attraction for the region.*

### Animated / Digital / Interactive Technologies

- Signage contains images, parts or illumination which flash, change, move, stream, scroll, blink or otherwise incorporate motion.
- Signage incorporates durable sign materials that are able to withstand exposure to the elements.
- Animated signage shall only be located internal to the project to avoid distraction and safety hazards to passing cars on streets.
- Digital signage facing Parham may display animated content on event days, when traffic is restricted on Parham.
- Interactive technologies can include areas subject to projected images.
- Signage should be integrated into the design of buildings, hardscape or as sculptural elements occupying significant locations.

### Light & Sound

- Freestanding multi-sided structures may include animated and/or non-animated signs.
- Includes architectural details, quality materials, and relates spatially to its surroundings.
- Light and sound towers are conceived as an integral part of the outdoor space, placed in accordance with façade rhythm, scale and proportion.
- Lighting must not compete with or mimic traffic signal devices that may confuse motorists.

### Rooftop Signage

- Rooftop signs located on the arena are an important sponsorship opportunity for purchasers of naming rights.
- Signage is integrated with the design of the building, coordinating with the architectural details and color scheme of the building.
- Signs are considerate of nearby uses.
- Signs that are applied or placed upon the roof surface, usually not visible from any adjacent public right-of-way.

### Naming Rights

- An area at the top of a building face, dedicated to sponsorship of an organization, typically displaying the organization’s logo and brand.
- Tenant are typically the major lessees of a multi-tenant building.

### Sponsorship Zones

- An area within the site dedicated to sponsorship by an organization, typically displaying the organization’s logo and brand.

### Sponsorship & Advertising - Design Intent

The types of sponsorship and advertising signs used at GreenCity are based on viewable location, “off-site” advertising content, levels of animation, event duration, and hours of operation. Buildings and plazas may be named after companies who have purchased naming rights. The signage may also include digital displays, reader boards and other graphics that will enhance the events held at GreenCity.

### Advertising Signage Standards

1. Locate and design signs to be freestanding, integrated into building architecture or storefront design.
2. Coordinate signage placement with the arrangement of bays, windows, and other architectural features.
3. Locate animated, digital, signs on flat, unadorned surfaces.
4. Design digital signs as clean, simple, attractive, appropriate and brief messages.
5. Ensure that signage and interactive technologies augment and minimally obscure display areas of storefronts.



# Green City Traffic Impact Analysis

## Summary of Findings

In accordance with Code of Virginia §15.2-2222.1 (Chapter 527), a Traffic Impact Analysis (TIA) has been performed in close coordination with Henrico County Department of Public Works and the Virginia Department of Transportation (VDOT). The TIA allows for the County and VDOT to coordinate land-use and transportation planning and provide better information to decision makers and citizens regarding the proposed rezoning application, its impact on both state-controlled and County-controlled roads, and the appropriateness of roadway improvements to mitigate those impacts.

GreenCity is located just east of the I-95 / Parham Road interchange, with primary access on E. Parham Road and secondary access on Magellan Parkway. Five interstate interchanges along I-95 and I-295 are within two miles of the site providing accessibility throughout the region. The development proposes two major access points on E. Parham Road – the extension of St. Charles Road and the existing western access, which served the former Best Products headquarters. The development will extend St. Charles Road through the property to Magellan Parkway, which is proposed by the County to extend across I-95 to Brook Road (US Route 1).

GreenCity is an urban mixed-use development consisting of 2,000 plus residential units, approximately two million square feet of office space, about 200,000 square feet of retail, two hotels with conference facilities, and a 17,000-seat arena.

Working with Henrico County and VDOT, consensus was reached on the scope of the traffic analysis, which included the development intersections on E. Parham Road, the I-95 / Parham Road interchange, three intersections along Magellan Parkway, and the first two intersections north of E. Parham Road internal to the development site.

Existing traffic volumes were collected in June 2021, as one source of data used to project traffic volumes within the study area. The Richmond Regional Demand Model served as a source of traffic distribution patterns and growth projections. Travel time runs and queue observations were conducted for microsimulation calibration and validation purposes

The project team utilized industry standard methodology from the Institute of Transportation Engineer's (ITE) *Trip Generation Manual, 10th Edition* to estimate the number of new vehicle trips that the GreenCity project will generate. The trip generation process incorporated appropriate vehicle trip reductions for internal trips between land uses within the site. A percentage of the trips generated are assumed to be pass-by trips, which are vehicles that are already on the road network that will stop at GreenCity. Trips were generated for the proposed arena assuming a typical midsize event. **Table 1** shows the anticipated net site trips on the surrounding roadway network.

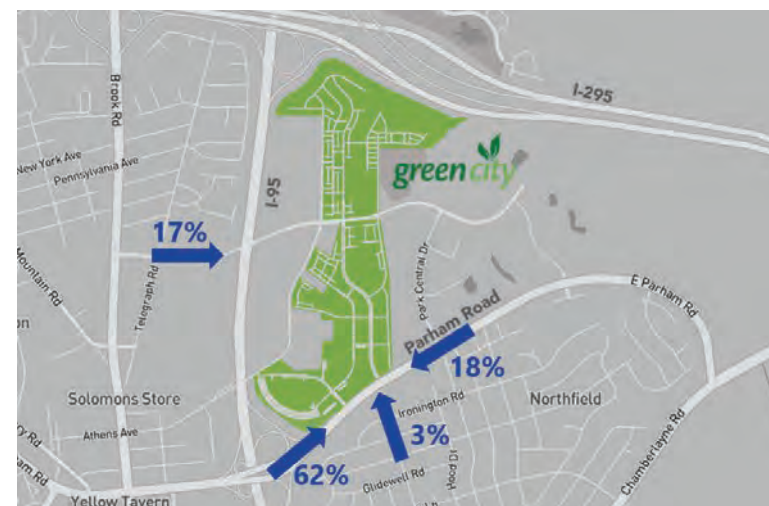
**Table 1 GreenCity Net New Vehicle Trips**

AM Peak Hour			PM Peak Hour			Weekday Total		
Trips	Enter	Exit	Trips	Enter	Exit	Trips	Enter	Exit
2,991	2,049	942	3,760	1,354	2,406	46,814	23,407	23,407

Source: GreenCity UMU Master Plan and ITE *Trip Generation Manual, 10th Edition*

These new vehicle trips were distributed throughout the local street network consistent with the land use patterns assumed in the Regional Travel Demand Model. It is expected that most of the traffic (62%) will come through the I-95 / Parham Road interchange. Henrico County is anticipating that Magellan Parkway will be extended to the west to intersect with Brook Road, including a new bridge across I-95, by the expected 2025 opening year of the arena. **Figure 1** highlights the expected distribution pattern:

**Figure 1 GreenCity Site Trip Distribution**



A microsimulation traffic analysis was completed for Build 2040 conditions to determine what operational impact the additional vehicles generated by GreenCity would have on the study area intersections.

Transportation infrastructure improvements were recommended to accommodate the full build of the development and are shown in **Figure 2**.

These recommendations include the following features:

- New signal control at western access intersection (former Best Products access).
- Eastbound through traffic will not be controlled by the signal. Only the westbound, eastbound left-turn movement, and southbound egress from the site will be controlled.
- At the western access intersection (existing access to the former Best Products building), southbound left turns from the site will be prohibited. Vehicles that are coming from the south on I-95 will be prohibited from entering the site at this western access. Both intersections will be signalized.
- Fourth southbound approach leg added to a signal-controlled Parham Road / St. Charles Road intersection.
- Through traffic northbound and southbound will be prohibited to reduce the potential for cut-through traffic and to optimize the efficiency of the signal control.
- Three eastbound left-turn lanes will be necessary to accommodate the high volume of traffic entering the site at this intersection.
- New right-in / right-out site access east of St. Charles Road intersection.



## Recommended Improvements

The results of the analysis show that with the recommended improvements in place, the two E. Parham Road intersections will operate at acceptable levels of service (B/C) in the morning and evening peak hours in 2040. The microsimulation analysis of the interstate interchange also showed acceptable merge, diverge, and weaving conditions.

A signal warrant analysis was conducted to determine if the projected traffic volumes at certain intersections met the requirements for future signal control. The results of this analysis are:

### Warranted Intersections

- E. Parham Road and West Access Road (former BEST Products Entrance)
- E. Parham Road and St. Charles Road
- West Access Road and Main Retail Street / Best Products Building
- St. Charles Road and Internal East-West Roadway
- Brook Road and Magellan Parkway

### Not Warranted Intersections

- Magellan Parkway and Telegraph Road
- Magellan Parkway and St. Charles Road

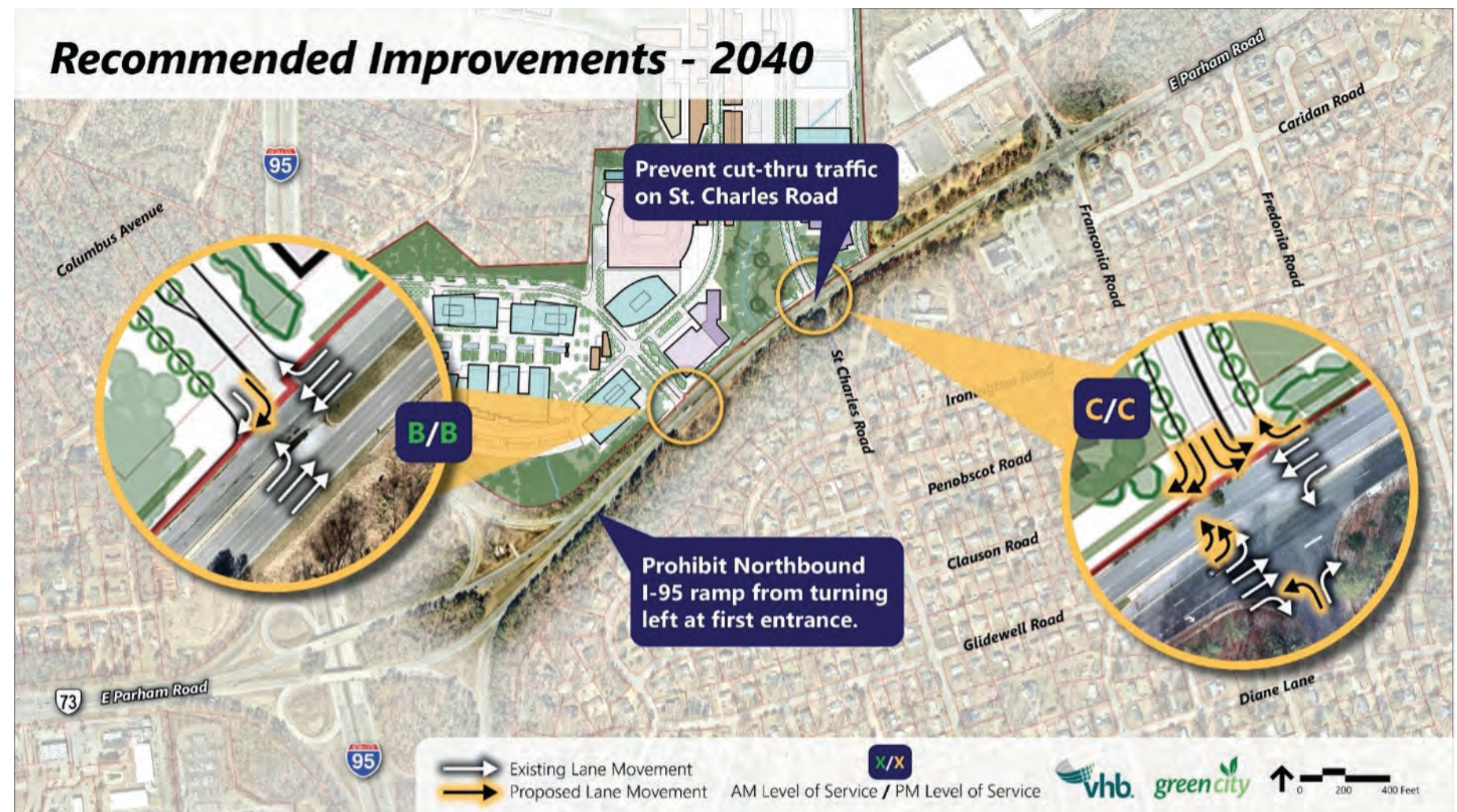
Overall, the traffic impacts of GreenCity can be mitigated with improvements to the road network serving the site. Multimodal improvements in the area including the extension of transit service on Brook Road and the construction of the Fall Line Trail will encourage the use of other modes and further reduce the projected traffic volumes.

A special event traffic management plan will be developed to manage traffic generated by the proposed arena prior to its opening. Although traffic generated by typical events can be accommodated without a special access planning, the large events – approximately five (5) per year generating over 10,000 attendees – will require the special event traffic management plan to determine the most efficient flow of vehicles in and out while trying to minimize the impact on the surrounding roadway network and pedestrian movements.

# Traffic Impact Analysis 20

## Summary of Findings

Figure 2 GreenCity Recommended Transportation improvements with corresponding level of service





Metes and Bounds Description  
County of Henrico Property  
Parcel ID #787-758-3213

Bearings and Distances are based on the following  
ALTA/ACSM Land Title Survey prepared by AES Dated 12/10/2011  
Tower Site Exhibit prepared by Point to Point Land Surveyors Dated 04/28/2021

Beginning at a point at the intersection of the southerly right of way of Scott Road, an eighty foot and variable width public right of way and a thirty foot prescriptive right of way, and the easterly right of way of Interstate 95, a variable width and limited access highway.

Thence, with the southerly right of way of Scott Road, the following courses and distances.  
N57-36-53E 142.46 feet to a point.  
N57-31-56E 417.15 feet to a point being a northwesterly property corner of the now or formerly Shirly M. West property.

Thence S48-58-15E 306.96 feet, departing the southerly right of way of Scott Road and with the westerly property line of the now or formerly Shirly M. West property, to a point.

Thence, continuing with the property lines of the now or formerly Shirly M. West property, the now or formerly Raymond and Shirly M. Liscpomb properties, the now or formerly Mary P. Whitlock, et al property and the now or formerly Walter T. and Jeanette J. Wiley properties, the following courses and distances.  
N87-47-55E 478.50 feet to a point.  
N03-51-17E 503.72 feet to a point.  
N88-19-32E 177.91 feet to a point.  
N02-51-52E 386.01 feet to a point.  
S86-19-37W 226.61 feet to a point.  
N03-38-17E 128.80 feet to a point.  
N79-50-58W 521.04 feet to a point on the southerly right of way of Scott Road.

Thence, with the now easterly right of way of Scott Road, the following courses and distances.  
N01-04-58W 140.80 feet to a point.  
Along the arc of a curve to the right, having a radius of 474.20 feet, an arc of 176.75 feet, the chord of said arc running N09-35-43E 175.73 feet to a point on the southerly right of way of 16.5 foot unnamed private lane.

Thence, with the rights of way of an unnamed private lane, the following courses and distances.  
S55-40-58E 939.89 feet to a point.  
N30-01-42E 23.43 feet to a point.  
N56-01-51W 943.47 feet to a point on the southerly right of way of Scott Road.

Thence, with the southerly right of way of Scott Road, the following courses and distances.  
N23-15-16E 99.23 feet to a point.  
N27-50-20E 126.48 feet to a point being a northwesterly property corner of the now or formerly Margaret W. Hinson and Mattie W. Jackson property.

Thence, departing the southerly right of way of Scott Road and with the property lines of the now or formerly Margaret W. Hinson and Mattie W. Jackson property, the following courses and distances.  
S54-01-38E 512.29 feet to a point.  
N29-47-51E 173.25 feet to a point.  
N53-49-21W 506.04 feet to a point on the southerly right of way of Scott Road.

Thence, with the southerly right of way of Scott Road, the following courses and distances.  
N31-54-07E 72.60 feet to a point.  
Along the arc of a curve to the left, having a radius of 832.29 feet, an arc of 166.99 feet, the chord of said arc running N26-09-15E 166.71 feet to a point.  
N20-24-22E 192.65 feet to a point being a northwesterly property corner of the now or formerly Nicholas and Susan L. Sepe property.

Thence, departing the southerly right of way of Scott Road and with the property lines of the now or formerly Nicholas and Susan L. Sepe property and the now or formerly RP Parham, LLC properties, the following courses and distances.  
S55-52-34E 330.37 feet to a point.  
S53-15-14E 91.33 feet to a point.  
S75-10-08E 129.07 feet to a point.  
S75-35-41E 858.37 feet to a point on the westerly property line of the now or formerly RLBB Park Central, LLC property.

Thence, with the westerly property lines of the now or formerly RLBB Park Central, LLC property, the now or formerly Worth Higgins and Associates, inc. property, the now or formerly 8750 Park Central Drive, LLC property and the now or formerly Jain Society of Central Virginia property, the following courses and distances.  
S01-51-28E 987.44 feet to a point.  
S02-13-43E 678.45 feet to a point on the northerly right of way of Parham Road, a variable width public right of way.

Thence, with the northerly right of way of Parham Road, the following courses and distances.  
S59-03-24W 75.14 feet to a point.  
Along the arc of a curve to the left, having a radius of 3859.72 feet, an arc of 609.58 feet, the chord of said arc running S54-36-12W 608.95 feet to a point.  
N39-50-23W 10.00 feet to a point.  
Along the arc of a curve to the left, having a radius of 3869.72 feet, an arc of 350.90 feet, the chord of said arc running S47-33-45W 350.78 feet to a point.  
S45-02-07E 10.00 feet to a point.  
Along the arc of a curve to the left, having a radius of 3859.72 feet, an arc of 57.82 feet, the chord of said arc running S44-32-36W 57.82 feet to a point.  
S44-06-23W 142.36 feet to a point.  
N45-56-55W 40.00 feet to a point at the beginning of the limited access line for the right of way of Interstate 95.

Thence, with the limited access line for the right of way of Interstate 95, the following courses and distances.  
S47-04-06W 379.99 feet to a point.  
S54-36-35W 21.85 feet to a point.

Along the arc of a curve to the right, having a radius of 340.00 feet, an arc of 297.60 feet, the chord of said arc running S69-45-36W 288.19 feet to a point.  
N67-49-51W 56.66 feet to a point being a southeasterly property corner of the proposed tower site parcel.

Thence, departing the limited access line for the right of way of Interstate 95 and with the property lines of the proposed tower site parcel, the following courses and distances.  
N08-41-29E 199.22 feet to a point.  
Along the arc of a curve to the right, having a radius of 836.29 feet, an arc of 154.97 feet, the chord of said arc running N84-27-49W 154.75 feet to a point.  
S20-14-01E 117.04 feet to a point on the limited access line for the right of way of Interstate 95.

Thence, with the limited access line for the right of way of Interstate 95, the following courses and distances.  
N52-45-01W 651.09 feet to a point.  
N37-31-28W 204.74 feet to a point.  
N06-02-46W 296.58 feet to the point of beginning and containing 4,033,450 square feet or 92.5953 acres of land.







**Schedule B Exceptions  
Commitment No: 831500018**

EXCEPTIONS 1-7, NOT OF A SURVEY NATURE.

EXCEPTION 8, EASEMENT IN DEED BOOK 205A, PAGE 56 MAY POSSIBLY APPLY TO THIS PROPERTY BUT THE DEED DOES NOT CLEARLY DEFINE EASEMENT. THEREFORE IS NOT SHOWN HEREON.

EXCEPTION 9, EASEMENT IN DEED BOOK 249A, PAGE 482 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 10, EASEMENT IN DEED BOOK 249A, PAGE 488 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 11, EASEMENT IN DEED BOOK 253C, PAGE 367 APPEARS TO FALL OFFSITE OF SUBJECT PROPERTY. THEREFORE IS NOT SHOWN HEREON.

EXCEPTION 12, EASEMENT IN DEED BOOK 450, PAGE 431 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 13, EASEMENT IN DEED BOOK 914, PAGE 458 APPEARS TO FALL OFFSITE OF SUBJECT PROPERTY EXCEPT FOR INTERSTATE 295 ON RAMP C WHICH IS SHOWN HEREON.

EXCEPTION 14, EASEMENT IN DEED BOOK 926, PAGE 568 APPLIES. THEREFORE IS SHOWN HEREON.

EXCEPTION 15, EASEMENT IN DEED BOOK 926, PAGE 571 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 16, EASEMENT IN DEED BOOK 980, PAGE 673 APPLIES BUT CONTAINS NO SURVEY INFORMATION TO BE SHOWN HEREON.

EXCEPTION 17, EASEMENT IN DEED BOOK 1224, PAGE 582 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 18, CERTIFICATE OF TAKE IN DEED BOOK 1670, PAGE 816 AND DEED BOOK 967, PAGE 412 APPLIES. THEREFORE IS SHOWN HEREON. INTERSTATE 295 RIGHT-OF-WAY.

EXCEPTION 19, EASEMENT IN DEED BOOK 1699, PAGE 314 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 20-22, NOT OF A SURVEY NATURE.

EXCEPTION 23, EASEMENT IN DEED BOOK 249A, PAGE 488 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 24, EASEMENT IN DEED BOOK 253C, PAGE 367 APPEARS TO FALL OFFSITE OF SUBJECT PROPERTY. THEREFORE IS NOT SHOWN HEREON.

EXCEPTION 25, EASEMENT IN DEED BOOK 444, PAGE 509 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 26, EASEMENT IN DEED BOOK 444, PAGE 511 MAY APPLY TO THIS PROPERTY BUT NO FIELD INFORMATION WAS FOUND TO SHOW HEREON.

EXCEPTION 27-28, NOT OF A SURVEY NATURE.

EXCEPTION 29, EASEMENT IN DEED BOOK 208A, PAGE 133 MAY APPLY TO THIS PROPERTY BUT ENTIRE DEED WAS NOT SUPPLIED BY TITLE COMPANY.

EXCEPTION 30, EASEMENT IN DEED BOOK 253C, PAGE 371 APPLIES. THEREFORE IS SHOWN HEREON.

**Legal Description - 88.782 Acres**

COMMENCING AT A POINT BEING THE INTERSECTION OF LEVEL GREEN LANE AND SCOTT ROAD THENCE; LEAVING THE NORTH LINE OF SCOTT ROAD NORTH 00°37'42" EAST A DISTANCE OF 1,365.59 FEET TO A SET NAIL THENCE; NORTH 00°22'01" EAST A DISTANCE OF 521.39 FEET TO A FOUND NAIL AND CAP THENCE; NORTH 89°37'21" WEST A DISTANCE OF 853.07 FEET TO A FOUND VDOT MONUMENT ON THE SOUTH RIGHT-OF-WAY LINE OF INTERSTATE 295 THENCE; CONTINUING ALONG THE SOUTH RIGHT-OF-WAY OF INTERSTATE 295 ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 467.96 FEET, A LENGTH OF 427.22 FEET, A CHORD BEARING OF NORTH 31°27'26" EAST AND A CHORD DISTANCE OF 412.54 FEET TO A FOUND VDOT MONUMENT THENCE; NORTH 57°32'48" EAST A DISTANCE OF 214.62 FEET TO A FOUND VDOT MONUMENT THENCE; ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 923.51 FEET, A LENGTH OF 440.30 FEET, A CHORD BEARING OF NORTH 43°56'40" EAST AND A CHORD DISTANCE OF 436.14 FEET TO A FOUND VDOT MONUMENT THENCE; NORTH 30°12'33" EAST A DISTANCE OF 69.49 FEET TO A FOUND VDOT MONUMENT THENCE; ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 316.25 FEET, A LENGTH OF 489.43 FEET, A CHORD BEARING OF NORTH 74°32'06" EAST AND A CHORD DISTANCE OF 442.03 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 56°13'51" EAST A DISTANCE OF 282.14 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 53°49'57" EAST A DISTANCE OF 216.83 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 62°11'49" EAST A DISTANCE OF 569.33 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 66°11'45" EAST A DISTANCE OF 596.31 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 67°24'32" EAST A DISTANCE OF 309.70 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 63°36'37" EAST A DISTANCE OF 283.62 FEET TO A FOUND VDOT MONUMENT THENCE; NORTH 83°28'54" EAST A DISTANCE OF 143.82 FEET TO A FOUND VDOT MONUMENT THENCE; ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 3933.72 FEET, A LENGTH OF 76.89 FEET, A CHORD BEARING OF SOUTH 77°20'42" EAST AND A CHORD DISTANCE OF 76.89 FEET TO A SET ROD THENCE; LEAVING THE SOUTH LINE LINE OF INTERSTATE 295 SOUTH 68°27'42" WEST A DISTANCE OF 57.28 FEET TO A SET ROD THENCE; SOUTH 56°15'57" WEST A DISTANCE OF 70.82 FEET TO A SET ROD THENCE; SOUTH 68°41'48" WEST A DISTANCE OF 29.16 FEET TO A SET ROD THENCE; SOUTH 61°54'05" WEST A DISTANCE OF 132.06 FEET TO A SET ROD THENCE; SOUTH 64°38'33" WEST A DISTANCE OF 69.51 FEET TO A SET ROD THENCE; NORTH 81°11'09" WEST A DISTANCE OF 182.58 FEET TO A SET ROD THENCE; NORTH 61°10'56" WEST A DISTANCE OF 53.50 FEET TO A SET ROD THENCE; SOUTH 88°31'52" WEST A DISTANCE OF 52.25 FEET TO A SET ROD THENCE; NORTH 58°11'14" WEST A DISTANCE OF 52.90 FEET TO A SET ROD THENCE; SOUTH 70°41'33" WEST A DISTANCE OF 24.04 FEET TO A SET ROD THENCE; SOUTH 80°04'04" WEST A DISTANCE OF 23.74 FEET TO A SET ROD THENCE; NORTH 74°09'35" WEST A DISTANCE OF 44.71 FEET TO A SET ROD THENCE; NORTH 63°52'01" WEST A DISTANCE OF 45.19 FEET TO A SET ROD THENCE; NORTH 38°59'45" WEST A DISTANCE OF 25.71 FEET TO A SET ROD THENCE; NORTH 76°09'16" WEST A DISTANCE OF 31.90 FEET TO A SET ROD THENCE; SOUTH 25°07'09" WEST A DISTANCE OF 20.19 FEET TO A SET ROD THENCE; NORTH 53°24'33" WEST A DISTANCE OF 38.04 FEET TO A SET ROD THENCE; NORTH 64°55'43" WEST A DISTANCE OF 21.57 FEET TO A SET ROD THENCE; NORTH 77°28'57" WEST A DISTANCE OF 22.15 FEET TO A SET ROD THENCE; SOUTH 38°02'54" WEST A DISTANCE OF 24.06 FEET TO A SET ROD THENCE; NORTH 82°58'49" WEST A DISTANCE OF 20.47 FEET TO A SET ROD THENCE; NORTH 32°20'54" WEST A DISTANCE OF 33.11 FEET TO A SET ROD THENCE; NORTH 59°20'22" WEST A DISTANCE OF 16.17 FEET TO A SET ROD THENCE; NORTH 40°27'32" WEST A DISTANCE OF 29.65 FEET TO A SET ROD THENCE; SOUTH 04°36'08" WEST A DISTANCE OF 543.62 FEET TO A FOUND ROD THENCE; SOUTH 89°24'29" WEST A DISTANCE OF 496.86 FEET TO A FOUND ROD THENCE; SOUTH 00°35'49" EAST A DISTANCE OF 1212.18 FEET TO A FOUND ROD BEING ON THE NORTH LINE OF SCOTT ROAD THENCE; CONTINUING ON THE NORTH LINE OF SCOTT ROAD ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 255.81 FEET, A LENGTH OF 71.21 FEET, A CHORD BEARING OF SOUTH 77°00'29" WEST AND A CHORD DISTANCE OF 70.98 FEET TO A FOUND ROD THENCE; SOUTH 84°59'22" WEST A DISTANCE OF 947.86 FEET TO A FOUND P.K. NAIL BEING THE POINT OF BEGINNING AND CONTAINING 3,867,333 SQUARE FEET OR 88.782 ACRES OF LAND.

**Legal Description - 4.012 Acres**

COMMENCING AT A POINT ON THE SOUTH LINE OF SCOTT ROAD BEING 318' FEET FROM THE INTERSECTION OF LEVEL GREEN LANE AND SCOTT ROAD THENCE; CONTINUING ON THE SOUTH LINE OF SCOTT ROAD NORTH 85°13'56" EAST A DISTANCE OF 295.36' FEET TO A FOUND PIPE THENCE; LEAVING THE SOUTH LINE OF SCOTT ROAD SOUTH 20°02'09" WEST A DISTANCE OF 775.27 FEET TO A 48" DEAD OAK TREE THENCE; NORTH 75°25'07" WEST A DISTANCE OF 129.10 FEET TO A FOUND PIPE THENCE; NORTH 53°22'14" WEST A DISTANCE OF 91.64 FEET TO A FOUND PIPE THENCE; NORTH 15°23'30" EAST A DISTANCE OF 639.57 FEET TO A FOUND PIPE ALONG THE SOUTH LINE OF SCOTT ROAD BEING THE POINT OF BEGINNING AND CONTAINING 174,744 SQUARE FEET OR 4.012 ACRES OF LAND.

**Legal Description - 6.121 Acres**

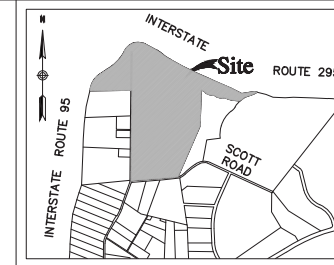
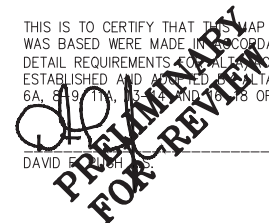
COMMENCING AT A POINT BEING THE INTERSECTION OF LEVEL GREEN LANE AND SCOTT ROAD THENCE; LEAVING THE NORTH LINE OF SCOTT ROAD NORTH 00°37'42" EAST A DISTANCE OF 1,365.59 FEET TO A SET NAIL THENCE; NORTH 00°22'01" EAST A DISTANCE OF 521.39 FEET TO A FOUND NAIL AND CAP THENCE; NORTH 89°37'21" WEST A DISTANCE OF 853.07 FEET TO A FOUND VDOT MONUMENT ON THE SOUTH RIGHT-OF-WAY LINE OF INTERSTATE 295 THENCE; CONTINUING ALONG THE SOUTH RIGHT-OF-WAY OF INTERSTATE 295 ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 467.96 FEET, A LENGTH OF 427.22 FEET, A CHORD BEARING OF NORTH 31°27'26" EAST AND A CHORD DISTANCE OF 412.54 FEET TO A FOUND VDOT MONUMENT THENCE; NORTH 57°32'48" EAST A DISTANCE OF 214.62 FEET TO A FOUND VDOT MONUMENT THENCE; ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 923.51 FEET, A LENGTH OF 440.30 FEET, A CHORD BEARING OF NORTH 43°56'40" EAST AND A CHORD DISTANCE OF 436.14 FEET TO A FOUND VDOT MONUMENT THENCE; NORTH 30°12'33" EAST A DISTANCE OF 69.49 FEET TO A FOUND VDOT MONUMENT THENCE; ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 316.25 FEET, A LENGTH OF 489.43 FEET, A CHORD BEARING OF NORTH 74°32'06" EAST AND A CHORD DISTANCE OF 442.03 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 56°13'51" EAST A DISTANCE OF 282.14 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 53°49'57" EAST A DISTANCE OF 216.83 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 62°11'49" EAST A DISTANCE OF 569.33 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 66°11'45" EAST A DISTANCE OF 596.31 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 67°24'32" EAST A DISTANCE OF 309.70 FEET TO A FOUND VDOT MONUMENT THENCE; SOUTH 63°36'37" EAST A DISTANCE OF 283.62 FEET TO A FOUND VDOT MONUMENT THENCE; NORTH 83°28'54" EAST A DISTANCE OF 143.82 FEET TO A FOUND VDOT MONUMENT THENCE; ALONG A CURVE TO THE LEFT HAVING A RADIUS OF 3933.72 FEET, A LENGTH OF 76.89 FEET, A CHORD BEARING OF SOUTH 77°20'42" EAST AND A CHORD DISTANCE OF 76.89 FEET TO A SET ROD THENCE; LEAVING THE SOUTH LINE LINE OF INTERSTATE 295 SOUTH 68°27'42" WEST A DISTANCE OF 57.28 FEET TO A SET ROD THENCE; SOUTH 56°15'57" WEST A DISTANCE OF 70.82 FEET TO A SET ROD THENCE; SOUTH 68°41'48" WEST A DISTANCE OF 29.16 FEET TO A SET ROD THENCE; SOUTH 61°54'05" WEST A DISTANCE OF 132.06 FEET TO A SET ROD THENCE; SOUTH 64°38'33" WEST A DISTANCE OF 69.51 FEET TO A SET ROD BEING THE POINT OF BEGINNING THENCE; SOUTH 28°15'22" WEST A DISTANCE OF 47.85 FEET TO A SET ROD THENCE; SOUTH 23°15'31" WEST A DISTANCE OF 51.43 FEET TO A SET ROD THENCE; SOUTH 35°17'56" WEST A DISTANCE OF 50.03 FEET TO A SET ROD THENCE; SOUTH 32°41'09" WEST A DISTANCE OF 27.90 FEET TO A SET ROD THENCE; SOUTH 47°36'45" WEST A DISTANCE OF 86.08 FEET TO A SET ROD THENCE; SOUTH 53°31'01" WEST A DISTANCE OF 26.10 FEET TO A SET ROD THENCE; SOUTH 25°49'42" WEST A DISTANCE OF 13.05 FEET TO A SET ROD THENCE; SOUTH 56°24'44" WEST A DISTANCE OF 60.83 FEET TO A SET ROD THENCE; SOUTH 63°18'16" WEST A DISTANCE OF 44.06 FEET TO A SET ROD THENCE; SOUTH 34°32'31" EAST A DISTANCE OF 25.88 FEET TO A SET ROD THENCE; SOUTH 63°42'53" WEST A DISTANCE OF 24.10 FEET TO A SET ROD THENCE; SOUTH 09°29'18" WEST A DISTANCE OF 15.03 FEET TO A SET ROD THENCE; SOUTH 89°24'29" WEST A DISTANCE OF 488.86 FEET TO A FOUND ROD THENCE; NORTH 04°36'08" EAST A DISTANCE OF 543.62 FEET TO A SET ROD THENCE; SOUTH 40°27'32" EAST A DISTANCE OF 29.65 FEET TO A SET ROD THENCE; SOUTH 59°20'22" EAST A DISTANCE OF 16.17 FEET TO A SET ROD THENCE; SOUTH 32°20'54" EAST A DISTANCE OF 33.11 FEET TO A SET ROD THENCE; SOUTH 82°58'49" EAST A DISTANCE OF 20.47 FEET TO A SET ROD THENCE; NORTH 38°02'54" EAST A DISTANCE OF 24.06 FEET TO A SET ROD THENCE; SOUTH 77°28'57" EAST A DISTANCE OF 22.15 FEET TO A POINT THENCE; SOUTH 64°55'43" EAST A DISTANCE OF 21.57 FEET TO A SET ROD THENCE; SOUTH 53°24'33" EAST A DISTANCE OF 38.04 FEET TO A SET ROD THENCE; NORTH 25°07'09" EAST A DISTANCE OF 20.19 FEET TO A SET ROD THENCE; SOUTH 76°09'16" EAST A DISTANCE OF 31.90 FEET TO A SET ROD THENCE; SOUTH 38°59'45" EAST A DISTANCE OF 25.71 FEET TO A SET ROD THENCE; SOUTH 63°52'01" EAST A DISTANCE OF 45.19 FEET TO A SET ROD THENCE; SOUTH 74°09'35" EAST A DISTANCE OF 44.71 FEET TO A SET ROD THENCE; NORTH 80°04'04" EAST A DISTANCE OF 23.74 FEET TO A SET ROD THENCE; NORTH 70°41'33" EAST A DISTANCE OF 24.04 FEET TO A SET ROD THENCE; SOUTH 58°11'14" EAST A DISTANCE OF 52.90 FEET TO A SET ROD THENCE NORTH 88°31'52" EAST A DISTANCE OF 52.25 FEET TO A SET ROD THENCE; SOUTH 61°10'56" EAST A DISTANCE OF 53.50 FEET TO A SET ROD THENCE; SOUTH 81°11'09" EAST A DISTANCE OF 182.58 FEET TO A SET ROD BEING THE POINT OF BEGINNING AND CONTAINING 266,614 SQUARE FEET OR 6.121 ACRES OF LAND.

**Surveyor Certification**

TO: RIVERSTONE PROPERTIES, LLC AND FIDELITY NATIONAL TITLE INSURANCE COMPANY;

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WAS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND APPROVED BY ALTA AND NSPS AND INCLUDES ITEMS 1-4, 6A, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18 OF TABLE A THEREOF.

DAVID E. HUBBARD JANUARY 21, 2015



VICINITY MAP  
(NOT TO SCALE)

**General Notes**

- HORIZONTAL DATUM IS BASED ON VIRGINIA SOUTH DISTRICT, NAD 1983.
- THE PARCELS ARE IN ZONE "C" AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE COUNTY OF HENRICO, VIRGINIA, COMMUNITY PANEL NUMBER 510077 0050 B, EFFECTIVE DATE FEBRUARY 04, 1981.
- THIS SURVEY WAS PREPARED WITH A TITLE REPORT PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NUMBER 831500018, DATED JANUARY 22, 2015.
- PARCEL GPINS 788-762-3171 AND 789-762-3970 LIE ENTIRELY WITHIN THE AGRICULTURAL DISTRICT (A-1) AS SHOWN ON THE ZONING DISTRICT MAP OF THE COUNTY OF HENRICO, VIRGINIA.
- PARCEL GPIN 787-760-9582 LIES ENTIRELY WITHIN THE AGRICULTURAL DISTRICT (A-1) AS SHOWN ON THE ZONING DISTRICT MAP OF THE COUNTY OF HENRICO, VIRGINIA.
- NO EVIDENCE SITE WAS USED AS A SOLID WASTE DUMP.

**ALTA/ACSM SURVEY  
OF THREE PARCELS OF LAND LYING  
NORTH AND SOUTH OF SCOTT ROAD**

FAIRFIELD MAGISTERIAL DISTRICT

**HENRICO COUNTY  
COMMONWEALTH OF VIRGINIA**

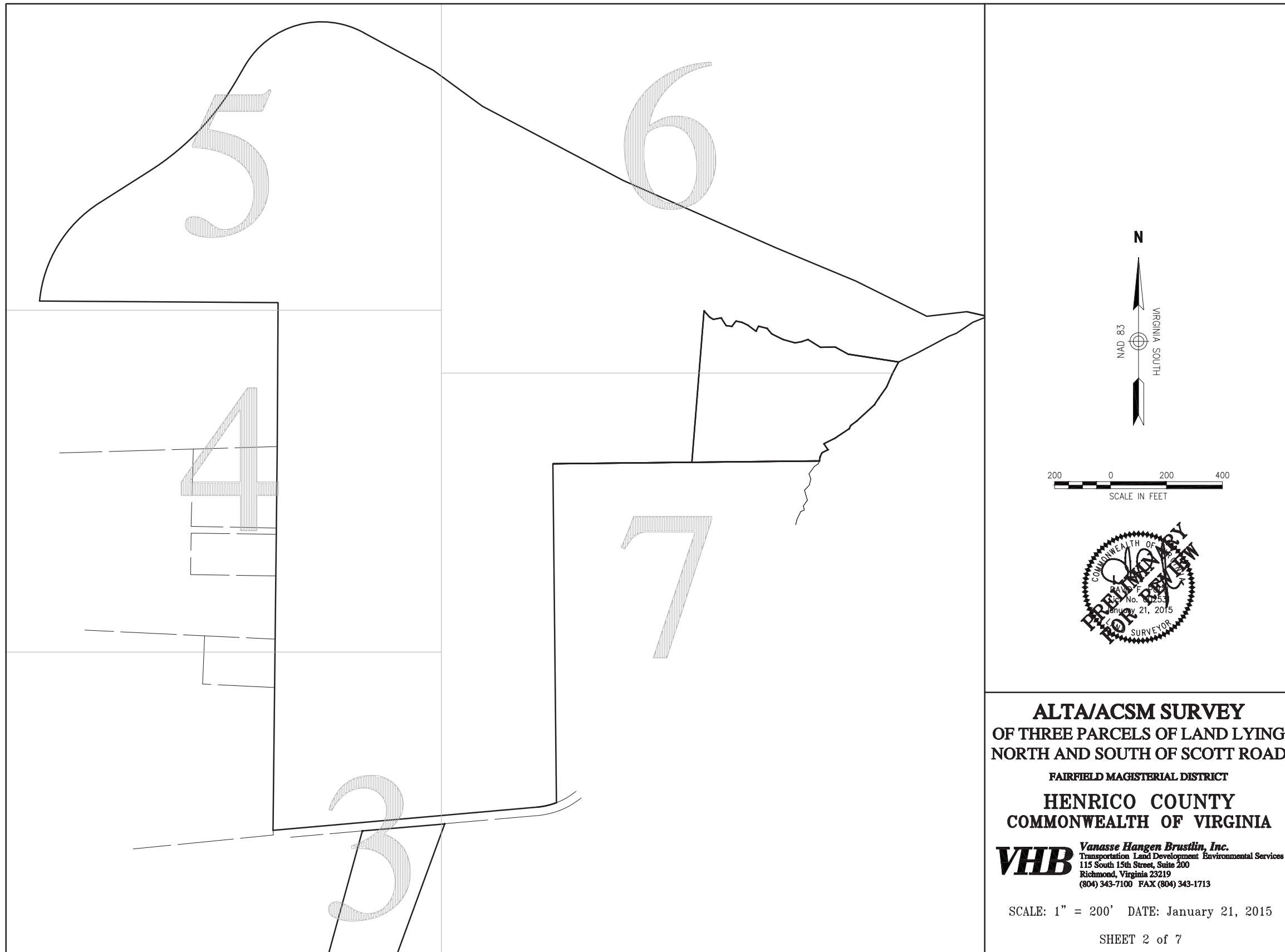
**VHB** Vanasse Hangen Brustlin, Inc.  
Transportation Land Development Environmental Services  
115 South 15th Street, Suite 200  
Richmond, Virginia 23219  
(804) 343-7100 FAX (804) 343-1713

SCALE: NONE DATE: January 21, 2015

SHEET 1 of 7

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**ALTA/ACSM SURVEY  
OF THREE PARCELS OF LAND LYING  
NORTH AND SOUTH OF SCOTT ROAD  
FAIRFIELD MAGISTERIAL DISTRICT  
HENRICO COUNTY  
COMMONWEALTH OF VIRGINIA**

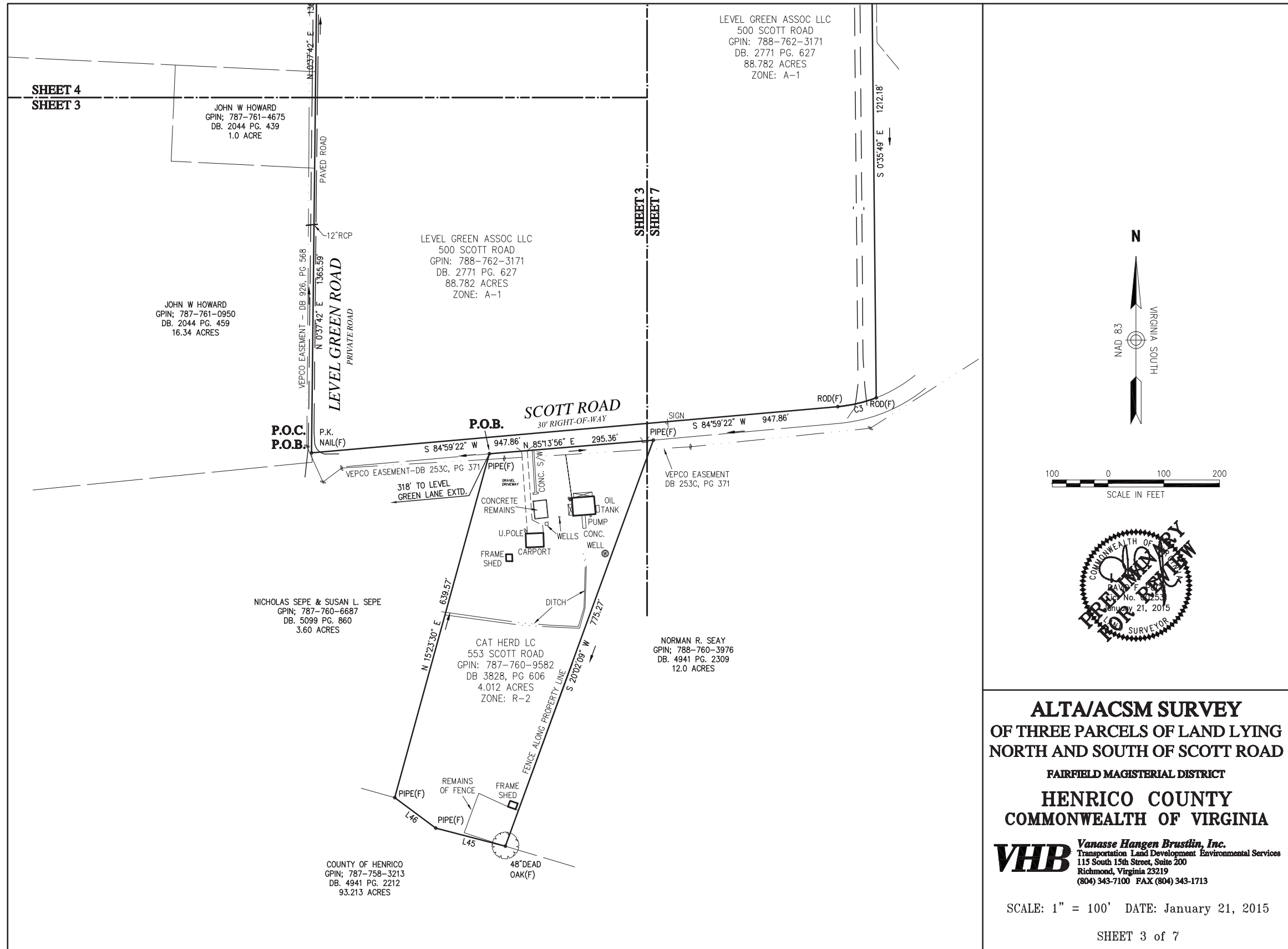
**VHB** *Vanasse Hangen Brustlin, Inc.*  
Transportation Land Development Environmental Services  
115 South 15th Street, Suite 200  
Richmond, Virginia 23219  
(804) 343-7100 FAX (804) 343-1713

SCALE: 1" = 200' DATE: January 21, 2015

SHEET 2 of 7

\\RICHVA\Projects\33949.00\cad\sr\planset\33949Alta.dwg





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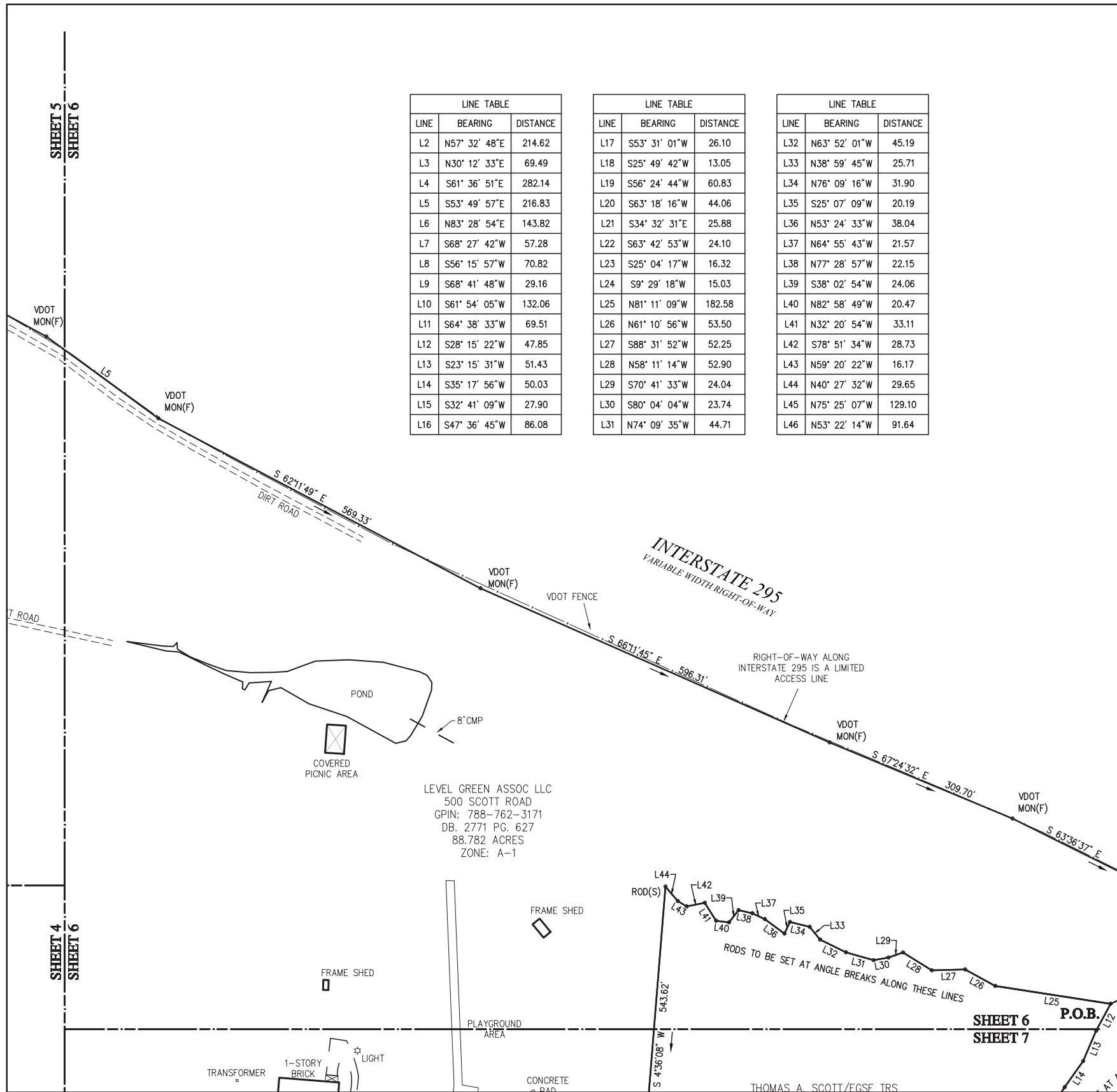








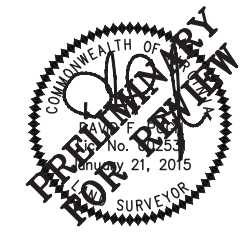
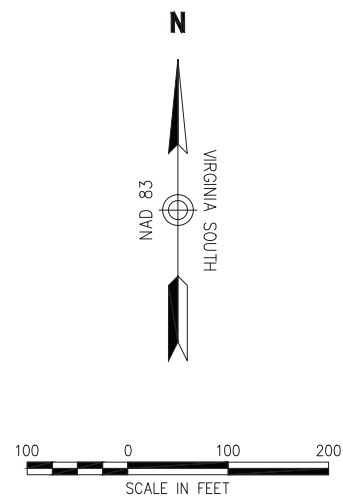




LINE	BEARING	DISTANCE
L2	N57° 32' 48"E	214.62
L3	N30° 12' 33"E	69.49
L4	S61° 36' 51"E	282.14
L5	S53° 49' 57"E	216.83
L6	N83° 28' 54"E	143.82
L7	S68° 27' 42"W	57.28
L8	S56° 15' 57"W	70.82
L9	S68° 41' 48"W	29.16
L10	S61° 54' 05"W	132.06
L11	S64° 38' 33"W	69.51
L12	S28° 15' 22"W	47.85
L13	S23° 15' 31"W	51.43
L14	S35° 17' 56"W	50.03
L15	S32° 41' 09"W	27.90
L16	S47° 36' 45"W	86.08

LINE	BEARING	DISTANCE
L17	S53° 31' 01"W	26.10
L18	S25° 49' 42"W	13.05
L19	S56° 24' 44"W	60.83
L20	S63° 18' 16"W	44.06
L21	S34° 32' 31"E	25.88
L22	S63° 42' 53"W	24.10
L23	S25° 04' 17"W	16.32
L24	S9° 29' 18"W	15.03
L25	N81° 11' 09"W	182.58
L26	N61° 10' 56"W	53.50
L27	S88° 31' 52"W	52.25
L28	N58° 11' 14"W	52.90
L29	S70° 41' 33"W	24.04
L30	S80° 04' 04"W	23.74
L31	N74° 09' 35"W	44.71

LINE	BEARING	DISTANCE
L32	N63° 52' 01"W	45.19
L33	N38° 59' 45"W	25.71
L34	N76° 09' 16"W	31.90
L35	S25° 07' 09"W	20.19
L36	N53° 24' 33"W	38.04
L37	N64° 55' 43"W	21.57
L38	N77° 28' 57"W	22.15
L39	S38° 02' 54"W	24.06
L40	N82° 58' 49"W	20.47
L41	N32° 20' 54"W	33.11
L42	S78° 51' 34"W	28.73
L43	N59° 20' 22"W	16.17
L44	N40° 27' 32"W	29.65
L45	N75° 25' 07"W	129.10
L46	N53° 22' 14"W	91.64



**ALTA/ACSM SURVEY**  
**OF THREE PARCELS OF LAND LYING**  
**NORTH AND SOUTH OF SCOTT ROAD**  
 FAIRFIELD MAGISTERIAL DISTRICT  
**HENRICO COUNTY**  
**COMMONWEALTH OF VIRGINIA**

**VHB** *Vanasse Hangen Brustlin, Inc.*  
 Transportation Land Development Environmental Services  
 115 South 15th Street, Suite 200  
 Richmond, Virginia 23219  
 (804) 343-7100 FAX (804) 343-1713

SCALE: 1" = 100' DATE: January 21, 2015

SHEET 6 of 7

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**EASEMENTS/AGREEMENTS THAT AFFECT SUBJECT PROPERTY:**

VIRGINIA ELECTRIC AND POWER COMPANY  
D.B. 253C, PG. 369 (EXCEPTION 2) (PLOTTED)

**EASEMENTS THAT DO NOT AFFECT SUBJECT PROPERTY:**

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS  
D.B. 2252, PG. 255 (EXCEPTION 3)

COUNTY OF HENRICO/ WATER AGREEMENT  
D.B. 2246, PG. 1329 (EXCEPTION 4)

COUNTY OF HENRICO/ SEWER AGREEMENT  
D.B. 2246, PG. 1337 (EXCEPTION 5)

COUNTY OF HENRICO/ SEWER AGREEMENT  
D.B. 2519, PG. 2113 (EXCEPTION 4 AND 5)

EASEMENT AGREEMENT  
D.B. 2269, PG. 1061 (EXCEPTION 5)

EASEMENT AGREEMENT  
D.B. 2519, PG. 1484 (EXCEPTION 5)

EASEMENT AGREEMENT  
D.B. 2488, PG. 276 (EXCEPTION 6)

EASEMENT AGREEMENT  
D.B. 2488, PG. 287 (EXCEPTION 7)

20' DRAINAGE EASEMENT  
D.B. 2495, PG. 1145 (EXCEPTION 8)

D.B. 2815, PG. 1080 (EXCEPTION 8)

15' VIRGINIA POWER EASEMENT  
D.B. 2517, PG. 100 (EXCEPTION 10)

10' BELL ATLANTIC-VIRGINIA EASEMENT  
D.B. 2517, PG. 978 (EXCEPTION 11)

20' DRAINAGE EASEMENT  
D.B. 2526, PG. 1993 (EXCEPTION 12)

20' DRAINAGE EASEMENT  
D.B. 2519, P.B. 1472 (EXCEPTION 12)

SETBACK, HEIGHT, AND BULK STANDARDS TAKEN FROM ARTICLE XXI, SEC 24-94, HENRICO COUNTY ZONING ORDINANCE

ZONING: M-1C
FRONT YARD - 25'
REAR YARD - 50'
SIDE YARD - 25'
HEIGHT - 45'

\*\* ALL SETBACKS, HEIGHT RESTRICTIONS, PARKING REQUIREMENTS, AND BULK STANDARDS SHOWN OR NOTED ON THIS PLAT ARE OPEN TO INTERPRETATION BY THE HENRICO COUNTY OFFICIALS.

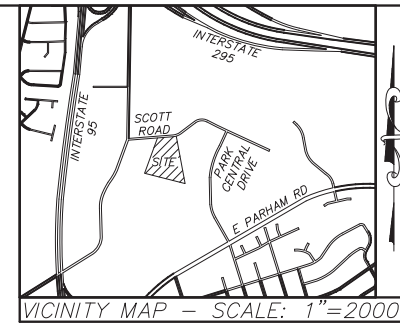
**METES AND BOUNDS**

BEGINNING AT A POINT SITUATED THE SOUTHERN LINE OF SCOTT ROAD, A 30' RIGHT OF WAY, SAID POINT BEING ±1,153 FROM THE WESTERN LINE OF PARK CENTRAL DRIVE; LEAVE SAID SCOTT ROAD S10°33'03"E, 996.86' TO A POINT; THENCE N75°44'00"W, 859.29' TO A POINT; THENCE N20°12'22"E, 776.37' TO A POINT SITUATED ON THE SOUTHERN LINE OF SCOTT ROAD; THENCE ALONG SAID SOUTHERN LINE N84°57'13"E, 334.00' TO A POINT; THENCE ALONG A CURVE TO THE LEFT WITH A CHORD N79°40'35"E, 52.58' AND A L=52.65', R=285.81', AND Δ=10°33'20" TO THE POINT OF BEGINNING. SAID PARCEL CONTAINING 522,945 SQUARE FEET OR 12.00 ACRES

CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	CHORD	CHORD BEARING	TANGENT
C1	52.65'	285.81'	10°33'20"	52.58'	N79°40'35"E	26.40'

**NOTES**

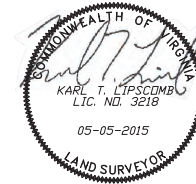
- 1.) THIS SURVEY WAS MADE WITH THE BENEFIT OF A TITLE COMMITMENT FROM FIDELITY NATIONAL TITLE INSURANCE COMPANY; COMMITMENT No. 831500078, EFFECTIVE MARCH 31, 2015, REVISED APRIL 30, 2015
- 2.) THE PROPERTY DESCRIBED ON THIS SURVEY DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. THE PROPERTY LIES WITHIN ZONE "X", COMMUNITY PANEL No. 51087C0065C, DATED: 12/18/2007
- 3.) ONLY SURFACE INDICATIONS OF UNDER GROUND UTILITIES WERE LOCATED ON THIS SURVEY.
- 4.) ZONING: M-1C
- 5.) THIS PARCEL HAS DIRECT ACCESS SCOTT ROAD AND PARK CENTRAL DRIVE, WHICH IS A PUBLIC DEDICATED RIGHT-OF-WAY.
- 6.) PARKING PROVIDED: .....00 REG. SPACES  
.....0 HCP SPACES  
00 TOTAL SPACES



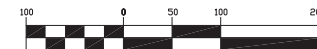
**CERTIFICATION**

To: Riverstone Properties, LLC, Fidelity National Title Insurance Company;

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS. The field work was completed on April 1, 2014



**GRAPHIC SCALE**



( IN FEET )

1 inch = 100 ft.

**ALTA/ACSM LAND TITLE SURVEY OF  
12.00 ACRES OF LAND SITUATED ON  
SCOTT ROAD  
FAIRFIELD DISTRICT  
HENRICO COUNTY, VIRGINIA**

REVISED MAY 4, 2015  
REVISED APRIL 28, 2015  
APRIL 22, 2015

SCALE 1" = 100'

**Townes**  
SITE ENGINEERING  
9850 LORI ROAD, SUITE 201  
CHESTERFIELD, VIRGINIA 23832  
PHONE: (804) 748-9011 FAX: (804) 748-2590

CHECKED BY: \_\_\_\_\_ SHEET 1 OF 1

DRAWN BY: SDF

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#### Water Street Studios

Eugene Ryang  
Keith Whipple

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**green city**

Henrico County, Virginia

GreenCity Partners, LLC