# **Chapter 1. Vision and Guiding Principles**

## Vision Statement

The Plan envisions North Potomac Yard as an environmentally and economically sustainable and diverse 21st Century urban, transit-oriented, mixed-use community that is compatible with adjacent neighborhoods. The Plan seeks to create a regional destination with diverse built and natural spaces where people want to spend time in a wide variety of pursuits.

The North Potomac Yard Small Area Plan (Plan) is intended to guide public and private investment and development decisions in the northern portion of Potomac Yard (Landbay F) (North Potomac Yard). The Plan focuses on the creation of dynamic urban forms, a complementary mix of land uses, community amenities, and a range of housing opportunities.

The Plan is a framework to create one of the most sustainable series of neighborhoods within the region, known for its outstanding Four Mile Run waterfront, parks, public transportation, innovative architecture, environmentally sustainable design and practices, and incorporation of Alexandria's ("Alexandria" or "City") rich history and culture.

# Figure 2a. Plan Principles

- Create North Potomac Yard as a model of environmental sustainability for its site planning, infrastructure, and buildings.
- Create an economically sustainable development.
- Promote excellence in design with a new standard in architecture, urban design, and materials that create a compelling and lasting identity.
- Create a vibrant and diverse mixed-use community that provides options for living, working, shopping, recreation, culture, and civic uses for a wide range of incomes and ages.
- Pursue a comprehensive multi-modal approach to transportation based on a highly walkable urban environment, minimal automobile impact, and maximum use of existing and new Metro stations.
- Create landscaped streets and a network of useable open spaces and parks with a strong connection to Four Mile Run and the Potomac.
- Provide connections, and transitions appropriate to and protective of the character of surrounding neighborhoods.

#### Creating a Complete, Sustainable Community

The Plan will guide future growth and redevelopment by taking advantage of North Potomac Yard's strengths: planned economic diversity, history, a central location in the region, dedicated high-capacity transitway (Metroway), a future Metrorail station and proximity to the Ronald Reagan Washington National Airport.

The Vision Statement and Plan Principles emphasize the importance of creating a sustainable community. "Sustainability" refers to the long-term environmental, economic, and social health of a community, one in which the needs of this generation are met without compromising the ability of future generations to meet their needs. The City has embraced sustainability as a core value through the adoption of numerous policies and regulations. Together, these policies and regulations will provide a roadmap to move Alexandria toward becoming a more sustainable City. The fundamental goal of the Plan is for North Potomac Yard to achieve progressive and innovative strategies for sustainability in all aspects of development.

The three primary elements of sustainability integrated throughout the Plan consist of the following:

1. Environmental Sustainability and Performance

Redevelopment is based on establishing long-term environmental goals, such as carbon neutrality, as well as achieving short- and mid-term goals, such as the incorporation of environmentally responsible building and site development practices; aggressive strategies for the reduction of energy and water use, stormwater reduction, and water reuse; and the restoration and continued health of the ecosystem and watershed. These issues are discussed in more detail in Chapter 2: Environmental Sustainability and Performance, Chapter 6: Transportation and Chapter 7: Infrastructure.

# 2. Economic Sustainability

The Plan enables North Potomac Yard to be poised for future growth as a long-term economic development area for the City. This growth, which is good for the City and the region, requires the provision of a future Metrorail station. The Plan requires additional office development in order to increase the real estate tax base and the maximization of density (particularly office density) around the Metrorail station. A goal of the Plan is attracting businesses, jobs, visitors, families, shoppers, and tourists. These issues are discussed in more detail in Chapter 4: Land Use.

# 3. Social Sustainability

Consistent with the City goal of diversity, the Plan envisions a mix of uses, amenities, housing opportunities, and community facilities to serve a variety of age groups, interests, and income levels. These issues are discussed in more detail in Chapter 4: Land Use and Chapter 5: Community Facilities.

# Chapter 2 Environmental Sustainability & Performance

Sustainable design is not so much a collection of technologies, but rather the integration of the built environment into the natural ecosystem. The Plan supports redevelopment of a site impacted by historic rail yard operations by using innovative techniques and environmental requirements to achieve innovative outcomes in sustainability. North Potomac Yard will demonstrate environmental leadership through Tthe following are the primary-strategies to ensure that the redevelopment of the Plan area enhances the natural environment and quality of life, and improves environmental performance with new development. The goal of the Plan is to prioritize strategies of the City's Environmental Action Plan and to provide a strategy to implement sustainable approaches and technologies for the entire site.

A. Mixed-use development: The Plan Pprovides a balance of office, residential, and retail to maximize walkability and transit use. Creating a walkable mixed-use community with easy access to the Potomac Yard Metro Station, Metroway, local bus service and pedestrian and bicycle networks will reduce the amount of single-occupancy vehicle trips and greenhouse gas (GHG) emissions.

Editorial note: The order of topics A-I has been changed as shown below and text within each topic updated as shown in track changes.

- B. District-wide sustainability measures: The intent of the Plan is to encourage district-wide sustainability measures that will be integrated in a coordinated and comprehensive manner supporting the City's environmental goal of new construction to be carbon neutral by 20302040. These measures will be identified as part of an Environmental Sustainability Master Plan (ESMP), and will include, but are not limited to, green buildings, open spaces, stormwater management, energy and water efficiency, conservation measures, and use of renewable resources and emerging technologies. The Plan recommends strategies to evaluate district or neighborhood sustainability through certification approaches such as LEED-ND Silver or comparable.
- C. Energy Utilization, Conservation, and Building Design: In addition to district-wide strategies, the Plan also recommends sustainability enhancements to individual buildings, particularly in energy use and stormwater. By transforming the built environment to be more energy-efficient and climate-friendly, the buildings in North Potomac Yard can reduce their carbon footprint. Buildings should incorporate effective use of energy utilization and conservation methods including but not limited to: lighting efficiency, electric vehicle charging stations, reduction in water resources, as well as other green infrastructure/technologies.
- D. Green roofs: New development will be required to provide green roofs. Green roofs have the potential to provide amenity space for building users; reduce heat (by adding thermal mass and thermal resistance value); reduce cooling (evaporative cooling) loads on buildings; reduce the urban heat island effect; increase the life span of the roof; reduce stormwater runoff; filter airborne pollutants and CO<sub>2</sub> out of the air; filter pollutants, nutrients and heavy metals out of rainwater; and increase wildlife habitats in an urban area.
- E. Stormwater Management, Green Infrastructure, and Nnatural Vvegetation: Stormwater management is required to be integrated as part of the street and open space design to improve the site's hydrology to reduce runoff, improve water quality, and provide residents and visitors opportunities to participate in the natural processes of their environment.

- <u>F. Water conservation</u>: Rainwater collection systems, natural irrigation, and greywater recycling are encouraged, and green roofs are required to help conserve energy and limit potable water usage.
- A.G. Open space network: An interconnected park and greenway system will provide residents, employees, and visitors with access to local and regional active and passive recreation amenities. Sustainable design of parks and open spaces can include pervious materials and native landscaping in addition to providing crown coverage and tree canopy to this area of the City.
- **H.** Native plants: The use of native plant species and water-efficient landscaping limits the need of fertilization and conserves water.
- B.I. Designing for Longevity: Quality built forms that create timeless buildings which are also designed for longevity will encourage reuse rather than replacement and account for life cycle analysis.

The Plan recommends the submission of an Environmental Sustainability Master Plan (ESMP) as part of the submission of the first development special use permit (DSUP), which will identify strategies to implement the phased recommendations on a plan-area wide basis. The This Sustainability PlanESMP should integrate long-term progressive goals in successive phases, with the ultimate goal of carbon neutrality for the entire Plan area. The phasing should anticipate a 20 to 30 year build-out of North Potomac Yard, Yard and the evolution of sustainability requirements and technology during that period. The Plan encourages the creative use of technology and design to incorporate green infrastructure and sustainable design into buildings, structures, open spaces, and environment. The ESMP will be updated with the submission of subsequent DSUPs to meet the plan objectives and ensure the area continues to utilize progressive and new technologies for environmental performance and sustainability.

### **Environmental Sustainability & Performance Recommendations:**

### Environmental Leadership

- 2.1) North Potomac Yard should strive to achieve carbon neutrality by <del>2030</del>2040.
- 2.2) Provide a mix of land uses, and a transit-oriented development as part of the redevelopment of the Plan area.
- 2.3) Explore the possibility of community gardens so that residents and visitors could have access to edible and non-edible plantings. Community gardens also offer a unique educational opportunity.

## Reduce Energy Use

- 2.4) Explore a minimum of LEED Silver or comparable, or the City's green building standards and requirements, whichever is greater. <u>In addition, new buildings will comply with the Environmental Action Plan (EAP)</u>, as implemented through City policies. <u>Energy consumption/utilization and storm water should be prioritized in the certification for the buildings</u>.
- 2.5) Encourage the use of alternative energy sources including but not limited to solar and wind power throughout the Plan area.
- 2.6) Integrate the use of natural daylighting in all proposed buildings.

# <u>District – Wide Sustainability Measures</u>

2.7) Require the submission of an Environmental Sustainability Master Plan as part of the submission of the first development special use permit (DSUP) that demonstrates the compliance with the goals and recommendations of the Plan and identifies short-term, mid-term and long-term strategies to achieve and

amended for subsequent block(s) and/or building(s) that demonstrates the compliance with anticipated goals and recommendations of the Plan and the goal of district-wide sustainability measures. amended for The Plan should be updated with each subsequent block(s) and/or building(s) that demonstrates the compliance with anticipated to show how the project achieves the Plan's goals. and recommendations of the Plan and

- 2.8) Require plan area-wide sustainability through LEED-ND Silver or comparable.
- 2.9) Require the provision of green roofs for new development.
- 2.10) Provide an integrated network of open space, which incorporates environmental components as part of its design.
- 2.11) Design new development to prioritize travel by pedestrians, bikes and transit and minimize the need for car use.
- 2.12) Design parking garages to accommodate electric vehicle charging stations.
- 2.13) Provide affordable housing within ½ mile of Metro Station.

# <u>Reduce Stormwater Runoff – Water Conservation</u>

- 2.14) Require minimum quantities of green roof and/or solar power generation on building roofs.
- 2.15) Encourage reuse of captured rainwater.
- 2.16) Require stormwater management, and if feasible, recaptured water, to be integrated as part of the street, and open space, and proposed buildings design.
- 2.17) Encourage water conservation <u>using sustainable methods such as by using ultra</u>—low and/or low flow plumbing fixtures—and reuse of captured rainwater.
- 2.18) Use native plant species and water-efficient landscaping.

## Design for Longevity

- 2.19) Design buildings for long-term aesthetic appeal and flexibility for future changes in use.
- 2.20) Utilize quality building materials that consider the long term life cycle of the building.
- 2.21) Maintain a walkable small block network of streets and sidewalks for pedestrians; avoid super blocks.

# **Chapter 3 Urban Design Plan Framework**

Creating North Potomac Yard as a great place will involve the collective experience of architecture, public spaces, public art, urban design, and landscape design. An exclusive focus on density and land use will not result in a high quality cohesive urban community or an enduring sustainable place that will bring lasting value to the City. The combination of innovative and high-quality architecture, environmentally sustainable elements and great public and private spaces will create attractive places to live - places that will express the culture and tradition of Alexandria, while also enabling this area to be an effective long-term economic engine for the City. It is crucial that as projects proceed, buildings, open space and the public realm be held to the highest standards of quality, ensuring that all of the redevelopment provides amenities and economic value for the City. Quality begets quality.

# A. Urban Design Framework

The urban design framework plan (Figure 3.1) provides the basic structure for an interconnected series of streets, blocks, and parks. The required street grid is based on Alexandria's historical pattern of pedestrian-scale blocks, with expected variations in the street grid pattern at the Metrorail station and Crescent Gateway Park to create a <u>distinctive</u> and memorable street pattern at these visually prominent locations. The Metrorail station serves as a focal design element for Metro Square neighborhood. The framework streets will connect to existing streets within the rest of Potomac Yard, Potomac Yard Arlington, and align neighborhoods to the west. The Plan recommends the <u>adoption of North Potomac Yard Urban</u> Design <u>Guidelines-Standards and Guidelines</u> to augment the urban design elements of the Plan.

# **B.** Street Hierarchy

A street hierarchy based on the function identifies prominent streets and streets for parking and service access (Figure 3.1). "A" streets are the most prominent streets; "B" streets connect "A" and "C" streets and provide general pedestrian and vehicular circulation for the neighborhoods. "C" streets provide a means of access and service entries to parking. The Design Guidelines may provide for service entries on "B" streets when buildings have no alley or "C" street frontage. The streets vary in width depending on their function, hierarchy and scale of adjacent buildings. The required width of the streets and sidewalks capture the characteristics of great urban streets. All streets will be designed to favor the -pedestrian and keep the vehicle at low speeds.- All streets will also be designed to be consistent with the City's Complete Street Design Guidelines.

The Plan also recommends that portions of the roads adjacent to Potomac Yard Park and the Metro station be designed as shared streets, intended to prioritize the pedestrian and provide a more seamless transition from the open space and the adjoining streets. Shared streets are also intended to have design elements such as pavers to differentiate from other streets within North Potomac Yard, and encourage slower traffic to maximize safety adjacent to Potomac Yard Park and Metro Plaza.

The required street cross-sections for each street<u>are depicted. North Potomac Yard Urban Design Standards.</u>

# C. Creation of Three Distinct Urban Neighborhoods

A defining element of the City is its distinct neighborhoods, such as Old Town, Del Ray, Northeast, Lynhaven, Rosemont, and Parker-Gray. The City also includes numerous emerging or transitioning neighborhoods such as Carlyle, Eisenhower East, and Landmark/Van Dorn. The differences in identity, character, and scale of the various communities complement each other and contribute to the richness of the urban experience of the City. Consistent with the City's urban tradition of a series of interconnected, distinctive neighborhoods, the Plan requires three unique and identifiable neighborhoods (Figure 43.2).

- Metro Square Neighborhood
- Market Neighborhood
- Crescent Gateway Neighborhood

# The Metro Square Neighborhood

This neighborhood is the transit hub of North Potomac Yard, where the Metrorail station, dedicated high-capacity transitway Metroway, local and regional and local circulator bus services, and bike lanes will converge. Two important public spaces define the character of the neighborhood, including Metro Plaza and Metro Square Park. These open spaces are discussed in greater detail in *Chapter 4: Land Uses*.

The neighborhood is characterized by a mix of uses, but will be predominantly office with ground floor retail. In addition, uses such as entertainment and/or live performance arts are encouraged. An entertainment district could provide a unique identity for this neighborhood and would differentiate this new town center from others in the region. The entertainment and theater uses can utilize the office parking during the evening hours, and add evening activity within the neighborhood.

## The Market Neighborhood

This neighborhood is the heart of North Potomac Yard, where a significant amount of retail and restaurants will create an exciting regional destination. This neighborhood is where large format retailers may be located (see *Analysis of Market Conditions in Appendix 2*). This neighborhood will provide the greatest mix of uses, offering a range of housing and office uses above the ground floor retail\_-uses\_near the Potomac Yard Metrorail Station. Because of the retail and adjoining Metrorail Station.

One of the blocks may include an internal pedestrian walkway/connection.

# Crescent Gateway Neighborhood

Located in the northern portion of the site at the gateway to the City, this neighborhood <u>primarily</u> consists <u>of</u> residential uses, with other uses such as a hotel and a possible school. The neighborhood will be defined by its Crescent Park and will take advantage of the adjacent Four Mile Run and parks. The Crescent Park creates a residential address for the adjoining larger scale residential buildings. Buildings in this neighborhood are situated to enjoy views of the Potomac River and the Washington, D.C. skyline. A signature element of the neighborhood will be the required curved building facades adjacent to Crescent Park. Taller buildings are located within the central portion of the neighborhood and step down in height to the existing smaller-scale neighborhoods to the west and the George Washington Memorial Parkway to the east.

## D. Gateways and Vistas

Similar to Old Town and the remainder South of Potomac Yard, most the east-west streets visually terminate into the Potomac River or linear park (except within the Metro Square Neighborhood where the street terminates at the Metro station pavilion and plaza.

There are opportunities Throughout the development, for buildings will to reinforce visually reinforce visually prominent locations vistas along Route 1, Potomac Avenue and the George Washington Memorial Parkway. The scale, character, elements and orientation of new buildings are required to highlight the designated gateways and vistas. Signature facades and gateway elements draw attention to specific points of interest and mark the location of entries and places for each of the neighborhoods serving (Figure 3.3). The Plan recommends variety in building massing, design, and height, and distinctive building tops for taller buildings.

# E. Urban and Building Form

The urban form is based on the best of Alexandria's design elements such as pedestrian scale at the street level while creating distinctive urban buildings and forms. The buildings are intended to\_be contemporary, exhibit design excellence, and reinforce the public realm and character of each neighborhood. The higher density, mixed-use buildings in some of the neighborhoods will provide the urban density to helpnecessary to\_activate retail and restaurants as well as reinforce\_a sense of place, urban life, and vitality for Potomac Yard.

The basic bulk and form of buildings will be governed by the block-specific Development Summary Table (Table 3), Maximum Building Heights (Figure 17), and Minimum Building Heights (Figure 18) found in Chapter 4: Land Use. Collectively, these standards will ensure that appropriate densities are maintained and that buildings will create an urban street wall from which the streets and open spaces will be defined and framed. Densities and building heights are discussed in more detail in Chapter 4: Land Use. The North Potomac Yard Design-Standards and Guidelines address -urban and building form elements such as building stepbacks, variation in heights, and form.

# F. Flexible Metrorail Zone

The final design and location of the Metrorail station requires additional coordination with the Washington Metropolitan Area Transit Authority (WMATA), the National Park Service (NPS), and other applicable Federal and State agencies. In addition, although the conceptual route for the dedicated highcapacity transitway has been finalized, the type of vehicle that will be utilized (bus rapid transit and/or streetcar) and the location of the stations are not yet finalized. Within the Flexible Metrorail Zone (Figure 9), the final configuration of the streets, blocks, buildings, and open space will be determined as part of the development review process, subject to the intent and recommendations provided in the Plan. Figures 10 and 11 represent two possible configurations of the Flexible Metrorail Zone. The location of the Metrorail station and access points have been established, and the Metrorail Station access pavilion is one of the primary and central components that has driven the function and design for the area around the Metrorail station. The Plan recommends that the streets that contain the Metroway will need to be designed with as narrow a cross-section as possible, while still accommodating transit, to ensure that these streets do not create a visual or physical barrier for the neighborhoods within Potomac Yard or adjoining neighborhoods that will need to access the retail and Metrorail Station. See Chapter 6 Transportation, for a more detailed description of Potomac Avenue and the conceptual alignment of the Metroway.

The Flexible Metrorail Zone is envisioned as an urban place centered around the Metrorail station, Metro Plaza, Metro Square Park, and adjacent buildings. Key goals of the Flexible Metrorail Zone include:

- Creation of -an urban Metrorail station which primarily serves pedestrians and not automobiles;
- Maximization of the accessibility of the Metrorail station and high-capacity transitway route and stations:
- Emphasis on connectivity to the Metrorail station and high-capacity transitway stations;
- Maximization of building height and office density, and memorable building forms in the vicinity of the Metrorail station;
- Provision of a centrally-located, well-defined urban park;
- Potomac Avenue\_(relocated) will connect to the planned street network to the north and south;
- Inclusion of a visual terminus for Water Street-Evans Lane at Metro Square Plaza; and
- Provision of a meaningful connection to Landbay K Potomac Yard Park.

Refer to recommendation 3.2 for the specific requirements within the Flexible Metrorail Zone.

# G. Public Art and History

Public art and historical interpretation help define a community, create a sense of place, celebrate the site's unique history, reinforce a design theme, engage and inspire the public, and add beauty to space that will be enjoyed for generations to come. Consideration should be given to the integration of public art and historical references, interpretation, and educational opportunities. The public art element of the Plan will need to be consistent with any city-wide public art funding policy and/or as required through the development review process. The Plan recommends a Public Art and History Interpretive Plan to integrate public art and history in a comprehensive way throughout the plan area.

# **Urban Design Recommendations**

# Framework Streets and Blocks

- 3.1) Require the streets and blocks depicted in the Framework Plan to be constructed as part of any redevelopment and dedicated to the City (Figure 3).
- 3.2) The final design and configuration of the streets, blocks, buildings, and open space with the Flexible Metrorail Zone (Figure 9) will be determined through the development review process. Flexible Metro Zone

The final configuration of the streets, blocks, buildings, and open space shall be subject to the following:

- a. An approximately .70- acre shaped Metro Plaza shall be provided adjacent to the Metrorail Station and in the general shape and configuration as generally depicted in Figure (3.5).
- b. An approximately 0.70-acre square-shaped park shall be centrally located within the Flexible Metrorail Zone on either Block 16 or 21as generally depicted in Figure 3.5a. Final location of Metro Square Park will be determined during Phase II.
- a. The-Parks shall be surrounded on all sides by streets, and framed by streets, buildings, and active-uses on each side that activate the parks/open spaces.

c.

- <u>b.d.</u> Potomac Avenue (<u>relocated</u>) shall align and connect to the Potomac Avenue right-of-way south of Landbay—<u>F</u> and to the final alignment of the Potomac Avenue (<u>relocated</u>) right-of-way to the north of the Flexible Metrorail Zone.
- e.e. The overall curvilinear nature of Potomac Avenue (relocated) shall be maintained.
- <u>f.</u> The shape of the buildings in plan and form within the Flexible Metrorail Zone shall create distinct and memorable three-dimensional forms.
- d.g. Buildings surrounding the <u>eentrally located Metro Square Ppark</u> shall be required to provide a primary entrance facing the approximately 0.70-acre park.
- e.<u>h.</u> Buildings on Potomac Avenue shall be required to provide a primary entrances facing designed to frame and activate Potomac Avenue.
- <u>i.</u> Buildings will be required to have more than one entrance and/or through lobbies for buildings with multiple street frontages.
- £j.\_Pedestrian bridge(s) within the Flexible Metrorail Zone that access the Metrorail station shall be fully integrated into the design for the Metrorail station adjoining\_buildings,\_and adjacent open spaces.
- g.k. The alignment of Potomac Avenue (relocated) shall be such that Landbay K.Potomac Yard Park is continuous.
- <u>h.l.</u> Development blocks east of Potomac Avenue shall be of sufficient size for market-acceptable building floor plates.
- +m. The blocks and buildings shall be subject to the minimum height and density provisions and other applicable zoning provisions, design guidelines, and the North Potomac Yard Small Area Plan.
- j.—The streets and buildings shall be configured to accommodate transit and transit stations...and..
- k. Buildings should be designed to integrate transit stations and/or stops.

<del>l.</del>n.\_

- m.o. The streets shall be configured to provide a fine-grained interconnected street grid network and spacing consistent with and connecting to streets outside the Flexible Metrorail Zone.
- n.p. Evans Lane is strongly encouraged to will connect\_from Main Line BoulevardRoute 1 to Potomac Avenue. (relocated).
- 3.3) Require the street hierarchy to define space and differentiate the character of streets and neighborhoods (Figure 3.1).
- 3.4) Require streets to prioritize emphasize the pedestrian and bicycles connections and safety.
- 3.5) Allow for internal pedestrian connections and alleys within the blocks.
- 3.6) Improve and enhance the Route 1 frontage with streetscape improvements, buildings, and landscaping
- 3.7) Street design will be consistent with the City's Complete Street Design Guidelines.

# Creation of Three Distinct Urban Neighborhoods

- 3.8) The parks and open spaces depicted in the Framework Plan shall be required within each neighborhood as a defining element of each neighborhood (Figure 3).
- 3.9) Create three distinctive and unique neighborhoods. Encourage the use of history as inspiration for the design of the open space, public realm, and buildings. Encourage the use of public art to establish distinct neighborhood identities and create unifying themes for the neighborhoods.
- 3.10) Encourage a mix of innovative building typologies within each neighborhood.
- 3.11) The Metrorail station shall serve as a focal design element for the Metro Square Neighborhood.
- 3.12) Explore the possibility of providing cultural and civic uses to reinforce the character of each neighborhood.
- 3.13) Incorporate distinctive wayfinding signage throughout North Potomac Yard that orients pedestrians, cyclists, and auto users to prominent sites and locations within and around the Plan area.

# Gateways and Vistas

- 3.13a) Require variety in building massing, design, and height.
- 3.13b) Use heights and variety in heights, building materials, orientation, and dimensions to create distinctive building tops for taller buildings.
- 3.14) Provide distinctive building forms and architecture at the designated gateway locations (Figure 7).

# **Urban and Building Form**

- 3.15) Balance the aesthetic and functional criteria of sustainable design.
- 3.16) Create an urban building scale and relationship between buildings, streets and open spaces that ensure urban relationships of the buildings and sidewalk, and maximizes walkability and the use of transit
- 3.17) Require any building with government tenants or tenants who require security measures to meet the vision, applicable provisions of the Master Plan and future design guidelines North Potomac Yard Design Standards and Guidelines.
- 3.18) Adopt futuredhere to the North Potomac Yard Urban Ddesign Standards and Guidelines to implement the v-Vision of the Plan.-

# Public Art and History

- 3.19) Require the submission of a Public Art & History Interpretive Plan for North Potomac Yard and explore relationships between public art and the history of the site.
- 3.20) Integrate small and large-scale public art which considers the history of the site, as well as thematic, artistic, and cultural ideas into new development and the public realm, including the following areas: trails, transit infrastructure, open spaces, buildings, site furnishings, lighting, gateways, and wayfinding.

# **Chapter 4 Land Use**

## A. Balancing Land Uses

The allocation and mix of land uses are based on the proximity and relationship to the Metrorail station, high-capacity transit, existing and planned surrounding uses, open space, the required street network, circulation, and market conditions. A balanced mix of uses provides benefits including:

- Improving safety and walkability by sustaining street life through daytime and evening hours;
- Maximizing use of transportation infrastructure capacity by distributing peak hour traffic over longer periods, maximizing internal trips, and maximizing transit use;
- Decreasing parking demand, and creating opportunities for shared parking; and
- Supporting retail by establishing a diverse customer base.

The Plan creates a balance among office, residential and retail uses. Office uses have economic benefits for the City, and provide patrons for restaurants and shops primarily during the day. Residential and hotel uses provide activity primarily in the mornings, evening and weekends. Office, residential, and retail uses require connectivity and critical mass to ensure their success. The challenge is to create a fine-grained mix of uses and still meet the market and relationship demands generally required for each of the uses.

A 50/50 mix of residential and office use does not mean an equal distribution of square footage for each use. The City's current occupancy for office is 3.5 employees/1,000 square feet, while <a href="mailto:new office">new office</a> construction occupancy will likely be 4 employees/1,000 square feet. <a href="mailto:mM">mM</a> ulti-family residential use is 1.8 residents/ unit. Therefore, to provide a balance of residents and employees, approximately two to three times more residential than office square footage is necessary.

The Plan requires specific uses for certain blocks. For example, <u>most of</u> the blocks <u>adjacent around to</u> the Metrorail station are required to be office. However, the Plan allows flexibility for the upper floors of the majority of the blocks to be residential and/or office use (Figure <u>12-4.1</u> and-Table <u>4.3</u>). The intent of the <u>Plan is that, as the Plan area is redeveloped, office and residential are balanced based on occupancy.</u> The final maximum permitted square feet and range of permitted uses for each block will be determined as part of the <u>zoning and subsequent</u> development review process for each building to ensure a balanced mix <u>of uses</u>.

#### *Note:*

Office use(s) may be permitted for any of the blocks within ½ mile of the Metrorail station as depicted within Figure 4.1, so long as the office use complies with the maximum permitted height(s) for each block, and the amount of office complies with the total amount of office permitted within CDD 19, and the use is subject to all applicable conditions and requirements as part of the development review process.

## B. Neighborhood Land Use Strategy

The land use strategy capitalizes on the planned \$220 to \$235 million (2015 dollars) significant monetary investment in a newthe Metrorail station and the additional investment in the planned dedicated high-capacity transit corridor (Metroway), local bus, and potential shuttle service which will be provided for North Potomac Yard. All of the proposed blocks are located within a ½ mile radius of the Metrorail station, and more than half of the blocks are located within a ¼ mile. The close proximity of these blocks to the Metrorail station provides a unique opportunity to integrate land use with transit to create a transit-oriented development for Potomac Yard. (For a neighborhood map, see Figure 3.2).

Table 1 Metrorail Station 1/4/ and 1/2/ Mile Approximate Densities

Northern Options (B2/B3) (North and South Entrances)

	All Landbays						
	Inside 1/4	Outside 1/4	Total within 1/2				
Residential/ Office	<del>5,000,000</del> <u>7,452,350</u>	4,000,0002,350,000	9,000,000 9,802,350				
Retail	790,000990,300	340,000 <u>75,000</u>	<del>1,130,000</del> <u>1,065,300</u>				
Hotel	450,000257,100	<del>170,000</del> <u>82,900</u>	620,000340,000				
Total	6,240,0008,899,750	4,510,0002,507,900	<del>10,750,000</del> <u>11,207,650</u>				

Note: The density amount of development shown includes total existing and planned development in North and South Potomac Yard., including density proposed for North Potomac Yard. Planned development outside Potomac Yard, such as Oakville Triangle, is not included. The density is measured from Metrorail Station Option B. See Table 3 for overall development summary proposed as part of the Plan.

While the overall goal of the Plan is to maximize de<u>velopment</u>nsity – particularly office density development near the Metrorail station and transit, the land uses are also based on creating community and reinforcing the character of each of the neighborhoods. For a neighborhoods map, see Figure 3.2.

Many of the buildings leading to the Metrorail station, Landbay G and adjacent to transit stops are required to provide ground floor retail (Figure\_124.3). Office uses are required for the upper levels of the some blocks closer to the Metrorail station, both to maximize transit use and to benefit from the existing office planned in the adjoining Landbays G and H. With approximately y-1.5-7 to 2.25-44 million square feet of office use within the Metro Square Neighborhood, the culmination of the planned 1.52 million square feet in Landbays G and H result in a total of 3approximately -4 to 4.5 million square feet of office within this neighborhood and the adjacent landbays.

The Metro Square Neighborhood (Blocks 16-23) will include predominantly office and hotel uses with ground floor retail. Entertainment uses may also be allowed within this neighborhood. This neighborhood will be defined by two open spaces, Metro Plaza and Metro Square as discussed in more detail below.

The Market Neighborhood (Block 7-14) will have the largest amount of retail of all the neighborhoods and a similar density amount of development as the Metro Square Neighborhood. The Plan recommends flexibility for the upper floors for office and/or residential uses.

The Crescent Gateway Neighborhood (Block 1-6) requires predominantly residential uses, hotel, and possible community-civic uses.

C. Land Use — Future Zoning (Coordinated Development District- CDD#19)

The Land Use Plan (Figure 124.1) depicts the principal land uses for each block. In 2010, The this Plan recommends recommended modification of the boundaries of the existing. Coordinated Development District (CDD #10) (Figure 4.2a)zoning and the creation created of a new Coordinated Development District (CDD #19) (Figure 4.2a). CDD#19 was approved in June 2010 to implement The rezoning will be contingent on compliance with the vision, intent and recommendations of the Plan. It also and future established Design Standards and Guidelines (including a definitive plan agreed to by the property owners

and the City in regard to financing the proposed Metrorail station) and <u>included</u> approval of a <u>subsequent rezoning</u>, CDD Concept Plan and applicable approvals by the City. Figure <u>4.2a</u>14a depicts the location of the existing CDD zoning in the planning area, and Figure <u>4.2b</u>14b depicts the creation of the new CDD zone for North Potomac Yard. The recommendations of the Plan will function as the CDD Guidelines and basis for approval of a subsequent rezoning the CDD zoning.

#### D. Retail Uses

The required retail uses are an integral part of the development and land uses for North Potomac Yard (Figure 154.3). The retail study commissioned to assess the potential for retail within Potomac Yard found that given the scale, amount of development and a future Metrorail station, the market can support the proposed amount of retail (see Analysis of Market Conditions in Appendix 2). It is the intent of the Plan that the retail uses provide for the basic needs of residents and employees while also attracting visitors from throughout the region. The anticipated retail uses could include large and small tenants which serve the regional market, neighborhood-serving retail, and-restaurants and "lifestyle" entertainment retail (see Analysis of Market Conditions in Appendix 2: Context for Plan). Large format retail tenants who serve the regional market, if provided, should be concentrated in the Market Neighborhood, convenience retail to serve transit users should be concentrated in the Metro Square Neighborhood, and restaurants and entertainment uses could be located in both neighborhoods.

Note: Additional ground floor retail locations may be approved, if it complies with the intent of the Small Area Plan and is part of the development review process.

The Plan concentrates a significant amount of retail and provides connections to the planned retail for Landbay G (Figure 154.3). The Plan creates a new East - West retail street (Reed Avenue), and a new north-south retail street on the eastern portion of the site (New Street DA) which will connect East Reed Avenue, to the Metrorail station, and the retail planned for Landbay G.

The locations depicted as Required Retail (Figure 154.3) will provide ground floor retail as part of the development of each of the blocks. The retail is also required to connect configured to relate to Landbay G. See Table 4.3 for the amount of maximum retail for each block. The locations depicted as Preferred Optional Retail are anticipated to be retail, but the final ground floor use will be determined as part of the development review process. However, even where retail uses are preferred optional, the height and depth of the ground floor space, and potential loading and service areas are required to be designed to not preclude future retail uses. Additional retail may be provided as ground floor uses pending future development approvals. As part of the redevelopment, the retail must be focused and continual.

The Plan requires the submission of a comprehensive retail strategy that addresses coordinated coordination, management, and maintenance issues. The Plan recommends the establishment of a Business Improvement District (BID), or comparable entity, to ensure that the retail is comprehensively managed, the neighborhood open spaces are programmed, and marketing is coordinated. The establishment of the BID or comparable entity retail strategy will be required implemented prior to the submission of a development special use permit for the first building and/or block occupancy of the first phase of redevelopment to ensure that the retail properties are managed in a comprehensive manner for the entirety of North Potomac Yard. Future The North Potomac Yard Design Standards and Geuidelines will have standards for the design of the retail uses, storefronts and signage.

# E. Adjacent Redevelopment Sites and Plans

Although not specifically a part of North Potomac Yard, there are several possible redevelopment sites in close proximity to North Potomac Yard (Figure 4.4). Development and future planning of these sites should be mutually beneficial for the adjacent Route 1 corridor and Potomac Yard.

The Plan recognizes that the value of these properties will be positively impacted by the significant infrastructure and other public amenities constructed at Potomac Yard and recommends that, when these properties redevelop as a result of a rezoning, that they be required to participate in the financing of these and other improvements as may be determined by a future planning process or as part of the development review process.

As North Potomac Yard redevelops, and the new Metrorail station and dedicated high-capacity transitway are constructed and implemented, it is possible that several of the larger sites on the west side of Route 1 could redevelop

-The Oakville Triangle/Route 1 Corridor Plan, establishes a 20-year vision and framework for the properties west of Route 1. The redevelopment on the west side of Route 1 (Figure 4.4) will include office, hotel, residential, and a combination of retail, neighborhood serving and "maker space" uses. The Plan addresses future infrastructure, land uses, building heights, design standards, open space, and affordable housing for these sites and is intended to guide public and private investment for infrastructure improvements. CDD#24 was established to guide the redevelopment of the properties within the Oakville Plan area.

This Plan does not recommend land use or zoning changes for these properties. However, fFuture redevelopment of sites in close proximity to Potomac Yard will need to enhance connections with Potomac Yard both physically and through programming of land uses and public amenities so that these individual parcels are integrated into Potomac Yard.

# F. Building Height

The height for each neighborhood is based on the following:

- Define open space, streets and the public realm;
- Maximize development in proximity to the Metrorail station;
- Smaller scale buildings on Route 1 adjacent to the lower scale established neighborhoods of <a href="Hume Springs">Hume Springs</a>, Lynhaven and Del Ray to the west;
- Taller buildings in the central portion of the site to provide transitions to the existing neighborhoods to the west and the George Washington Memorial Parkway to the east;
- Taller signature buildings at the central portion of the site to denote the symbolic center of North Potomac Yard and at the visual terminus of Main Line Boulevard on the northern portion of the site;
- Using taller and shorter heights to demarcate the required gateways; and
- A variety of heights within each block and for individual buildings.

#### Notes:

- Where signature facades are required, it will be permitted to exceed the maximum building height by a maximum of two levels not to exceed 5,000 sq. ft., if approved as part of the development review process. The locations shall be limited to locations depicted in Figure 3.3- Signature Facades.
- The North Potomac Yard Design Standards and Guidelines establish minimum heights.

<sup>1</sup>-For Block 7 maximum building height shall be 85 feet however, additional height may be permitted as part of a development review process in consultation with the National Park Service (NPS). In no event shall the maximum building height exceed 120 feet for the northern portion of the block and 180 feet for the southern portion of the block.

 $^2$  For Block 14 and 19, the height range is 60 - 90 feet. However, to ensure height variety, only one block is permitted to go up to 90 feet. The remaining block will have a maximum height of 60 feet.

Adjacent to the Metrorail station, the Federal Aviation Administration (FAA) flight path limits the building heights to approximately 100 feet (Figure 4.4c16). Despite the limitation, the majority of the density development in North Potomac Yard is located within a-1/4 mile of the planned Metrorail station. A recommendation of the Plan is that the City work with the FAA to explore the possibility of eliminating or revising the flight path height restrictions to permit additional height and density near the proposed Metrorail station Figure 4.5a depicts the estimated FAA height restrictions within North Potomac Yard.

Building heights within the flight path are pursuant to FAA requirements, as may be amended, and measured to the top of structure.

The Plan recommends maximum heights which range from 50 feet to 250 feet for several taller signature buildings (Figure 174.5b). For buildings fronting the George Washington Memorial Parkway, particularly on Blocks 7 and 10, consideration should be given to appropriate massing and building design compatible with the adjoining character of the Parkway. In addition to maximum heights, the Plan is also recommending recommends minimum heights to ensure an appropriate urban scale and density near the planned transit and Metrorail station. Minimum heights are established by the North Potomac Yard Design Standards and Guidelines.

(Figure 18).

# G. Parking Strategy

# Location of Parking

A goal of the Plan is that to the extent possible, parking should be located below-grade. Below-grade parking enables uses and people (rather than cars) to be located at and above the street level. Below-grade parking generally reduces the scale of buildings and generally results in a more urban building form and better relationship with the street. In addition, when there are height limits, above-grade parking generally reduces both density and open space, which is inconsistent with the vision and intent of the Plan.

Each building and block within North Potomac Yard is required to provide a minimum of one level of underground parking. All of the parking for Block 2, Block 3, Block 5 and Block 21 and Blocks within Phase I (Blocks 10, 14, 15, 18, 19, and 20) is required to be located below grade regardless of the use. to This enables the internal ground level open space, ground floor use, and possible pedestrian connections, planned for these blocks and building entrances relating to the adjoining streets and open space (Figure 194.6a). On-street parallel parking is generally required for all of the streets, excluding the park frontages, where it may be provided to serve Metro.

Above-grade structured parking may be located within the central portion of the block at grade, provided that a minimum of one level of parking is provided below grade and each level of the entire street and/or park/open space frontage is devoted to active uses (residential, office and/or retail) (Figure 20 a4.6a). If above-grade structured parking is provided above the ground floor uses, the parking is required to be screened with active uses (residential, office and/or retail) (Figure 20 b4.6b, 4.6c) for the entire street and/or park/open space frontage. If collector parking garages are provided for retail uses, the garages will be predominantly screened with actives uses and also screened with architectural treatments. Additional parking and screening requirements will be are included in future the Design Standards and Guidelines and subsequent zoning conditions.

## Parking Ratios and Shared Parking

The amount of parking is intended to meet the economic and programmatic demands of the planned uses while also creating a transit-oriented development. To discourage single occupancy vehicle (SOV) travel, a maximum parking ratio is recommended for each land use. No minimum parking requirements are

recommended in the Plan. The minimum amount of parking will be determined as part of the development review process for each block and/or building. The parking maximums have several advantages that include:

- Encouraging commuters to make transportation choices other than private autos, decreasing vehicle miles traveled, and reducing auto congestion and air pollution; and
- Maximizing the use of developable land and ensuring that the urban form remains compact.

Table <u>4.</u>2 compares the parking required by the City's Zoning Ordinance and the parking maximums recommended by the Plan.

Table 4.2: Existing Parking Minimums and Proposed Parking Maximums

USE	EXISTING ZONING ORDINANCE MINIMUMS	PARKING MAXIMUMS*
Civic/Community Facilities/ <del>Theater</del>	5.0 spaces/1,000 sq. ft. (community buildings, museums, libraries, or similar) 1.0 space/5 seats (church) 1.0 space/ 25 seats (elementary school) 2.0 spaces/classroom (day nursery-childcare)	2.5 spaces/1,000 sq. ft.
<u>Theater</u>	1.0 space/ 4 seats (theater)	1.0 spaces/10 seats
Hotel (per room)	1.0 space/ <del>2-rooms</del> + 1.0 space/ 15 employeesrooms	0.75 space /room
Office	1.7 spaces /1,000 sq. ft.	1.21 spaces/1,000 sq. ft.
Residential	1.30.64 – 0.8 spaces/unit (1 BR) 1.75 – 1.28 – 1.6 spaces/unit (2 BR) 2.2 – 1.28 – 2.4 spaces/unit (3+ BR) **	1.0 space /unit
Restaurant	1.0 space per 4 seats	3.5 spaces /1,000 sq. ft.
Retail/Grocery	4.35 spaces /1,000 sq. ft.	3.5 spaces /1,000 sq. ft.

<sup>\*</sup>Visitor parking may be required by the City as part of the development review process. \*\*All uses will be required to participate as part of a comprehensive shared parking strategy.

Shared parking will be required as part of the development of each building and block. Therefore, the amount of parking for each of the blocks and buildings will likely be lower than the parking maximums. The amount, location, distribution and management of shared parking will be determined as part of the development review process.

A number of factors contribute to the success of shared parking, including:

• A mixture of uses that would lend itself to multiple stops within the same vehicular trip;

<sup>\*\*</sup> Requirement for market rate units. Ratios for affordable units vary based on income level. Refer to Section 8-200(A) of the Zoning Ordinance.

- Variations in the timing of peak parking demand for different uses;
- Alternate modes of transportation available; and
- Good pedestrian connections, amenities and appropriate scale to encourage walking.

For additional information on parking, see Chapter 6: Transportation.

# H. Open Space

The Plan recommends a comprehensive network of parks and public<u>ly accessible</u> open spaces that serve to define the neighborhoods in which they are located, <u>with and provide</u> connections to local and regional open space systems and trails (Figure <u>214.7</u>). The parks will be a combination of active, <u>social, civic,</u> and passive open spaces and will integrate historical interpretive elements, public art, and improve the City's urban tree canopy. <u>Park design will include consideration for shade.</u>

Active open spaces: These spaces can include sports, exercise, or active play; can be recreational facilities such as playgrounds, playing fields, flexible fields spaces, courts, multi-purpose areas and dog parks; or can include areas for large events, and intense activity/programming.

**Social open spaces:** These spaces are designed and used for impromptu and organized gatherings and can include game elements, seating areas, community gardens, farmer's markets, and small event spaces.

Passive open spaces: These spaces can be used for relaxation, such as sitting or strolling and can include trails, picnic areas, and open areas.

**Civic spaces:** These spaces include plaza and event areas.

A minimum of 15% of North Potomac Yard is required to be provided as ground level open space, with an additional 25% open space required to be provided at either ground level and/or on roof-tops. Blocks 2, 3, 5 and 21 will be required to provide ground level open space due to the required underground parking.

Open spaces and plazas are vital to the area's quality of life, helping to foster social interactions and establishing a sense of community for this area. As the population and densities within the Plan area increase, open space will become an increasingly important neighborhood amenity. Not only is there a need to increase the amount of open space, but also the type of space. Different users—from office workers, to attendees of special events, to residents walking with dogs or playing with their children—require unique open space facilities.

# Four Mile Run

North Potomac Yard is bordered on the north by Landbay E (Four Mile Run Park) and Four Mile Run, a heavily urbanized flood control channel that is planned for restoration. The Four Mile Run Restoration Master Plan (FMRMP) was adopted to be a model of urban ecological restoration. Through the sensitive and sustainable integration of natural areas with active urban nodes, the Four Mile Run Restoration Master Plan proposes that the corridor be a place along which the communities of Arlington and Alexandria can gather, recreate and celebrate a shared waterfront. The Four Mile Run Restoration Master PlanFMRMP identifies Potomac Yard as "a vibrant urban node that is home to thousands of new residents and workers while offering terrific shopping. On nice days, it's great to relax on the terraced banks that lead down to the water, on benches along the stream or in the elevated park."

The Plan builds on the Four Mile Run Restoration Master PlanFMRMP: it requires Crescent Park and improvements next to Four Mile Run, which are intended to provide a wide range of opportunities, both active and passive, and include opportunities for a gathering and event space. Planned removal of the Potomac Yard terminal station and associated poles will provide opportunities to enhance this adjacent open space consistent with the FMRMP.

Figure 22.4.7 depicts a conceptual rendering of Four Mile Run along North Potomac Yard. Together, through the Four Mile Run Restoration Master PlanFMRMP and the Plan, amenities will be provided on both sides of Four Mile Run and on the existing approximately 1-acre pedestrian bridge, which will connect to Crescent Park and Landbay KPotomac Yard Park beyond, providing a series of spaces for a variety of interests which celebrate the connection to the water and natural environment.

# Potomac Yard Park (Landbay K)

The Plan requires the extension of the currently approved constructed Landbay KPotomac Yard Park to provide a continuous open space connection and off-street trail from Four Mile Run to Braddock Road. Together, the proposed (approximately 3.5 to 44.5 acres) extension and approved (24 acres) parks will result in an approximately 2829-acre City park for the City. The park within North Potomac Yard will should be designed as a regional amenity for users of all ages and abilities, and will provide active, social, and passive recreational amenity areas ies for existing and future residents and visitors. The park will be designed to incorporate interpretive elements of the multi-century transportation history of this corridor. It will also provide a crucial non-motorized connection between Braddock Road Metro and Four Mile Run.

The continuation of Landbay KPotomac Yard Park into North Potomac Yard enables integration of the park with the remainder of the Potomac Yard development. The current Landbay KPotomac Yard Park plan-includes an approximately 15-foot section of land between North Potomac Yard and the active rail corridor. The extension of Landbay KPotomac Yard Park along the eastern edge of North Potomac Yard will provide the opportunity to create a meaningful connection between the existing Landbay KPotomac Yard Park, Crescent Park, Four Mile Run, and the George Washington Memorial Parkway. The Plan recommends that the Landbay KPotomac Yard Park extend to Four Mile Run along the eastern edge of Landbay Fthe Plan area, and that the extension be wide enough to provide substantial separated bicycle and pedestrian trail amenities, plantings, interpretive areas, and the ability for active, passive, and social uses amenities, while providing and a vegetative buffer along the rail corridor consistent with Potomac Yard Park, the already planned portion of Landbay K. The area at the northern end of Potomac Yard Park is a wider portion of the park and provides an opportunity to include flexible field space and play spaces for park users and possibly students.

The street adjacent to the park (Figure 4.7) will be designed as a shared street that will reinforce the public nature of the Park. The street serves to delineate the private development from the public park but will also be designed as a transition between park users and the adjacent development. The Plan envisions the road to be designed as a shared street that reinforces the hierarchy of users; pedestrians, cyclists, then cars. The design of the street is envisioned to be curbless with special treatment which integrates the road design with adjacent uses. The street can serve as an extension of Potomac Yard Park, with the opportunity for occasional closure for festivals, events, and/or park programming. The North Potomac Yard Pump Station will be coordinated with the design of this area to not preclude these uses.

#### Metro Plaza

This open space will be one of the most civic open space within North Potomac Yard as it will function as the visual and physical arrival point for the Potomac Yard Metrorail station. As part of the Metrorail station, this Plaza has been configured to serve as a distinct and memorable form and space for departure and arrival from the Metrorail station. The buildings have been configured to create a unique and memorable shape from the ground (Figure -4.9) but also from the Metrorail Pavilion and pedestrian bridge which will be elevated approximately 20 feet above grade.

The Metro Plaza will be a minimum of 0.3 acres. It is anticipated that the Plaza will be an urban space with pavers and street trees to provide a variety of functions and uses. In addition, the streets adjacent to the Plaza may be curbless and use pavers or other special materials comparable to the Plaza to make the Plaza function as a larger space. The Plaza and streets together will be a minimum of approximately 0.7 acres. The Plaza will also be framed by ground floor retail and active uses such as outdoor dining/seating. The Metro Station pavilion will terminate the vista for the Plaza and reinforce the prominence of the Plaza as an active civic space. The Plaza will be an "iconic zone" that can include public art features, furniture, or creative paving/landscaping. The Plaza will also provide connections to Potomac Yard Park and the Potomac Yard Trail. (Figure 4.9)

# Metro Square

This park is proposed as an urban square of approximately 0.70 acres at adjacent to a nearby dedicated high-capacity transit station (Metroway) transit hub which includes the Potomac Yard Metrorail station across the street, nearby dedicated transit, and local bus service (Figure 4.10). The park Square is required to be surrounded by public streets designed to have a distinct and clear public character. While the Metro Plaza will be a smaller and more functional space, this larger space will be a gathering area for the surrounding office and ground floor uses. Metro Square will and be framed by the surrounding buildings with retail and active uses at the ground floor. Metro Square will need to be configured and designed in a manner that relates and provides connectivity to Metro Plaza to the east of Potomac Avenue. The design and configuration of the Market Green will be determined as part of the development review process for the future phases.

Located at the intersection of Evans Lane, Water Street and Potomac Avenue, Metro Square will be the focal element of Centrally located within this neighborhood. Metro Square will visually connect to Metro Plaza and the Metro Station. The Square provides a civic and social space where office workers, potential theatre-goers, shoppers, commuters and residents can gather. The park is envisioned to include a mix of landscaping and hardscape (pervious where appropriate), providing a range of experiences to accommodate active social gathering. Amenities in the park may include benches, movable furniture, high-quality temporary retail carts, public art, historic interpretation, and water features. The park should be designed to accommodate programming and events that serve its diverse users. In support of the principle of collocation, future development should consider utilizing the space below the park (underground) for uses supportive of the character of the neighborhood, such as a theatre.

The Plan proposes three buildings adjacent to the Metrorail station. The area to the south of the proposed buildings is not part of North Potomac Yard, but is part of the approved Landbay K (Potomac Yard Park). While there is a potential for an additional building at this location, the Plan does not recommend a building because of the impact on planned and approved open space. Further analysis of a building to the south of North Potomac Yard would need to occur as part of a subsequent planning process. As previously discussed, the blocks adjacent to the Metrorail station are subject to the Flexible Metrorail Zone and the applicable standards.

#### Market Green Park

The Market Green is <u>envisioned as a linear</u> open space forming the core of the Market Neighborhood (<u>Figure 4.11</u>). The green is proposed to occupy approximately <u>one-1.0</u>-acre <u>at the center of on East</u> Reed Avenue, <u>within two elements separated by Main Line Boulevard</u>. The Market Green will be framed at the ground level by active retail uses, and buildings that along portions of the park will rise up to 250 feet, the tallest and most prominent buildings in all of Potomac Yard. The design of the Market Green should reinforce this prominent location, and is envisioned to accommodate <u>social and</u> passive uses including pedestrian pathways, large open green spaces, plantings, and trees. <u>Mizner Park has a similar character</u>

(Figure 26). Uses and activities in the Market Green may include special events, such as fairs, live music, markets, and other similar events, which may on occasion also utilize the adjacent streets. For this purpose, the street surfacing material surrounding the Market Green should be of a distinct character and material from the other streets to enhance the pedestrian experience. The linear configuration of the Market Green is consistent with the finger parks established in the southern landbays of Potomac Yard. The Illustrative Plan depicts one way to configure Market Green in future phases. The design and configuration of the Market Green will be determined as part of the development review process for the future phases.

## Market Lawn (Phase I)

Market Lawn will be an approximately 0.2-acre open space (Figure 4.12) on the eastern portion of Reed Avenue. This open space is located at the terminus of East Reed Avenue and will be an active social space framed by retail uses. The lawn, and adjacent street section along Reed Avenue, should be designed to be flexible to accommodate a variety of events and social gatherings such as outdoor movies, Farmer's Markets, and event programming. Streets adjacent to Market Lawn may be curbless with special material to be a flexible extension of Market Lawn for occasional programming/events. The lawn will be designed with a combination of hard and landscaped materials that facilitate large gatherings and events, outdoor dining and seating, and creates an urban outdoor living room to the adjacent retail uses.

#### Internal Pedestrian Street / Connection

The Plan requires that, at a minimum, one continual internal pedestrian connection be provided for one of the blocks within the Metro Square or Market Neighborhood Block 21 (Figure 4.10)

which could consist of a central hardscaped open space area that could be lined with restaurants, outdoor dining, music venues, and theatre uses. This space is envisioned to be primarily hardscape with amenities that celebrate culture, art and creative expression. Stone Street in New York City could serve as a potential design precedent (Figure 25). This space provides a "break" in the standard street grid.

An internal pedestrian connection is also proposed within Block 10 (Figure 4.12) to provide access from the pedestrian retail street to Potomac Yard Park. This pedestrian connection will be framed with active uses and can include overhead elements and lighting to create visual interest for the park users.

#### Crescent Park

Located at the intersection of the existing Landbay K\_Potomac Yard trail and Four Mile Run Park (Landbay E) is Crescent Park (Figure 4.13). This curved open space (and adjoining strip to the west along Four Mile Run) creates an important connection between these two regional parks linking the associated trail networks with the Four Mile Run pedestrian bridge urban deck and Arlington. This intentional break in the street grid also provides a meaningful terminus for New Street D. The park is required to be approximately 3-2.3 acres, and its orientation and crescent shape are configured to maximize access and vistas, including views of the Nation's-Capitol building. The park also serves as a buffer between the proposed buildings and the George Washington Memorial Parkway. The park is partially bordered on its curved edge by a street, and defined by signature buildings that follow the curved, crescent shape of the park. The amenities for the park will likely include a large gathering and event space, pedestrian pathways, large open green spaces, significant landscaping, pedestrian and bicycle pathways, a stormwater water amenity feature, and a possible civic use.

To realize the vision of these open spaces, and to reinforce them as a coordinated system of spaces, the Plan requires a comprehensive open space plan, that includes rooftop open space, with the specific requirements to be provided as part of the <u>rezoning Coordinated Development District (CDD)</u> approvals.

Roof-Top Open Space

Suggested roof-top amenities could include active courts and turf areas, dog parks and/or dog runs, and playgrounds, as well as passive recreational spaces to meet the needs of the anticipated population. Public access of certain blocks should be considered to enhance the recreational opportunities and views within North Potomac Yard, increase community interaction, and, on office buildings, to activate space in the evenings. These roof-top open spaces are anticipated to incorporate substantial sustainable components, while maintaining access and uses for residents and building users.

# **Playing Fields**

The City recognizes the has a need for additional athletic playing fields generally for residents. While the Plan does not require the provision of playing fields within North Potomac Yard, the Plan recommends that the developer assist in the provision of off-site playing fields.

# Pump Station

A pump station is necessary to accommodate the planned development within North Potomac Yard. The Plan recommends that the facility be generally located on the northeastern portion of the Plan area within or adjacent to Potomac Yard Park. The design of facility will require coordination with AlexRenew and as part of the Phase I DSUP and design of Potomac Yard Park. Because of the prominent location within the park, the facility will need to include high quality design, materials, and be integrated with the design of Potomac Yard Park. Additional information and recommendations are discussed further in Chapter 7: Infrastructure.

## I. Housing

The Plan envisions a place designed to accommodate a wide range of incomes, ages, and household types and sizes. By planning for a variety of housing types and products, which offer a variety of affordability options, it is likely that those who work, shop, and recreate in North Potomac Yard will also be able to live there.

Consistent with the Housing Master Plan (HMP), the Plan envisions a variety of housing options designed to accommodate households with different incomes and abilities, at different life stages, and of different sizes. In 2013, the HMP established a "housing for all" policy to meet the diverse and changing housing preferences of existing and future Alexandrians, workers, and retirees and recommended focusing affordable housing efforts in areas with the greatest potential for increased density, in particular in mixed-use developments with good access to transit, jobs, and services.

The Plan recommends that 30% in additional density be allowed for the provision of affordable housing where appropriate, pursuant to Section 7-700 of the Zoning Ordinance.

Several tools will be instrumental in achieving this vision, including allowing additional bonus density for affordable housing; exploring opportunities to co-locate affordable housing with public uses (such as a school or recreation facility); using public land for affordable housing, when feasible; including public housing and/or replacement Resolution 830 units; and leveraging the City's Housing Trust Fund with private, state, and

Resolution 830: Equivalent units required to replace public housing units when they are demolished or redeveloped.

units; and leveraging the City's Housing Trust Fund with private, state, and federal funding to the greatest extent possible.

To achieve this, the Plan recommends that developers be encouraged to:

- Provide affordable and workforce housing units, both rental and for sale, throughout North
   Potomac Yard;
- Explore the provision of public housing units;

- Offer a range of housing types to accommodate different household sizes and compositions, including studio, one, two and three bedroom units;
- Incorporate green and sustainable designs and materials to enhance the interior living environment and to yield energy savings for residents;
- Integrate universal design and/or accessibility features to accommodate multiple life stages and abilities: and
- Explore opportunities for public, private and non profit collaborations to maximize the use of land and to leverage all available resources for the development of workforce and affordable, including public housing.

Affordable housing contributions in the Plan will be governed by the city-wide guidelines in effect at the time development approvals are sought. Such guidelines are expected to provide for both mandatory and voluntary contributions. It is anticipated that voluntary contributions they will be satisfied through the

provision of on-site housing units and/or cash contributions to the City's Housing Trust Fund.

The growing unmet demand for affordable housing poses potential challenges to the city's livability, economic competitiveness, social service network, and transportation system. In 2016, nine percent of the Potomac Yard Small Area's rental housing stock was affordable to residents earning up to 60% of the Area Median Income (AMI) which ranges from \$45,660 for a one-person to \$65,160 for a four-person household. Affordable units are currently available at The Station at Potomac Yard (64 units), Station 650 (8 units), and Notch 8 (12 units); 78 affordable rental units are also available just outside the small area plan at Jackson Crossing along with six affordable ownership units at The Preston. Providing and encouraging opportunities that increase the provision of affordable housing will help to meet growing demand.

In the City of Alexandria public housing typically serves households with incomes up to 30% of the Washington, D.C. area median income ("AMI"); affordable rental housing serves households with incomes up to 60% AMI; and workforce rental housing serves households with incomes up to 80% AMI. For qualified first-time homebuyers with incomes up to 100% of AMI, the City offers a range of homeownership assistance for the purchase of affordable forsale units.

1. As determined by the U.S. Department of Housing and Urban Development (HUD).

# Housing Case Study: The Station at Potomac Yard Alexandria, Virginia

The Station is an award winning, creative approach to meeting multiple community needs in a dense, high cost exurb of Washington, D.C., and provides an easily replicated model of sustainable design and construction. The project's innovative mixed use design combines a fire station, 64 units of affordable and workforce rental housing and retail space, maximizing the use of land in a built environment. The project was made possible through a successful public private collaboration among the City of Alexandria, Potomac Yard Development, LLC (PYD), a joint venture of national homebuilders, Pulte and Centex Corporations, and the Alexandria Housing Development Corporation (AHDC), a local non-profit housing developer. Conceived when it was realized that PYD's proposed urban design (which had already been vetted and approved through a public process) might hinder optimal emergency services response times within the Yard, PYD offered to provide land and money for a new fire station, and the City utilized air rights above the fire station to produce critically needed affordable housing (between 2000 and 2007, more than 10,000 of the City's existing privately owned "market affordable" rental housing stock in the City was lost to rent increases or redevelopment). Through AHDC, significant federal, state and local funds were leveraged to finance four stories of affordable housing. During the public outreach process, the community expressed a strong desire to include workforce housing: PYD's voluntary contribution of \$7.5 million to the City's housing fund helped underwrite the costs to develop 20 workforce units.

Consistent with Alexandria's Eco-City charter, The Station is "green"—the residential component is built to Earthcraft program standards (yielding energy savings for residents) and the first floor fire station LEED Silver certified.

## **Housing Case Study: Jackson Crossing**

Jackson Crossing has created an infusion of much needed affordable housing along the booming and increasingly expensive Route 1 Corridor between Potomac Yard and Crystal City. The apartment project, constructed by AHC at the intersection of East Reed Avenue and Jefferson Davis Highway, opened in January 2016 to a waitlist of over 500 households. Built to Earthcraft program standards, the 78-unit property offers a range of units affordable to households with incomes up to 60% of the area median income (AMI) and features underground parking, a rooftop patio, and onsite management. Ground-floor community space provides a pre-K program, available to children of residents at a reduced cost. The project's completion along this transit-, amenity-, -employment-rich corridor hinged on the implementation of best practices and tools from the Housing Master Plan. AHC successfully leveraged the City's \$2.5 million investment (including a predevelopment loan) to secure \$24 million in low-income housing tax credit equity and private financing. The City also donated a publicly-owned parcel to assist AHC assemble land for the project while robust public engagement and education built community consensus and support.

# Housing Case Study: Gateway at King and Beauregard

Slated for completion in late 2018, Gateway Apartments reflects an innovative public-nonprofit and forprofit partnership: the affordable housing project is being constructed within a large mixed-use development—the Gateway at King and Beauregard. The Alexandria Housing Development Corporation (AHDC) purchased air rights to construct 74 affordable rental units on top of ground-floor retail and contracted with the master developer to construct the below-ground parking required to serve the project. The City's support (a loan of up to \$5.5 million, including \$350,000 in predevelopment funding) has leveraged tax credit equity and other financing and enabled AHDC to broaden the project's level of affordability; units will serve households earning 40% to 60% AMI for a period of 60 years. In addition, the majority of units will be family-sized with two to three bedrooms, and 10% will be accessible. The project was the first in Alexandria to utilize the City's optional parking reductions for affordable housing effectively lowering project costs while its strategic location along a future bus-rapid-transit corridor and next to a bike-share station promises to expand residents' access to jobs and services.

Table 3-4.3 Development Summary

Block #	Principal Land Use	Office SF		Office or Residential SF (DU)	Retail (SF)	Hotel (SF)	Total <sup>3</sup>
1	Open Space	(Crescent I	Park)				
2	Residential	0	500,000 (500)	0	0	0	500,000
3	Hotel	0	0	0	0	170,000 <u>8</u> 2,900	<del>170,000</del> <u>82,900</u>
4 ¹	Community Facility/ Public	0	0	0	0	0	0

	Building						
5	Residential	0	600,000 (600)	0	0	0	600,000
	Office / Residential	110,000	0	250,000 (250 DU)	35,000	0	395,000
Crescent Gateway Neighborhood		110,000	1,100,000 (1,100)	250,000 (250 DU)	35,000	170,000 <u>8</u> 2,900	1,665,000 <u>1,577,9</u>
	Office / Residential	0	0	240,400 <mark>320,000</mark> ( <del>320</del> -240 DU)	31,600 <sub>90</sub> ,	0	410,000272,000
	Office / Residential	0	0	690,000 <u>643,000</u> (690- <u>643</u> DU)	154,800 0,000	0	<del>800,000</del> <u>798,100</u>
	Office / Residential	55,000	0	260,000 (260 DU)	40,000	0	355,000
	Office / Residential	0	0	328,600 <mark>330,000</mark> (330-328 DU)	36,000 ,000	0	490,000 <u>364,600</u>
	Office / Residential	0	0	643,400 <mark>700,000</mark> (700-605 DU)	171,900 0,000	0	<del>820,000</del> <u>815,000</u>
	Office and/or Residential	55,000	0	295,000 (295 DU)	50,000	0	400,000
13	Open Space	(Market €	Commons Gree	<u>en</u> )			
<u>14</u>	<u>Retail</u>	0	<u> </u>	<u>0</u>	<u>62,900</u>	<u>0</u>	<u>62,900</u>
Market District Neighborhood TOTAL		110,000	)	2,595,0002,410,7 00 (2595-2411_DU)	<del>570,000</del> <u>54</u> <u>7,200</u>	0	<del>3,275,000</del> <u>3,067,9</u>
Flexible Metrorail Zone (Blocks 14, 15, 16, 18, 19, 20 & 21) 22A	Office	1,100,00	)	300,000484,300 (300-484,300 DU)	190,000 <u>21</u> 2,8000	<b>9</b> 87,100	<del>1,590,000</del> 1,884,2
	Office / Residential	60,000	)	250,000 (250 DU)	50,000	0	360,000
<del>19</del>	Open Space	(Market Square Park)					

22	Office	370,000	0	0	65,000	0	435,000
23	Office	180,000	0	0	20,000	0	200,000
Metro Square Neighborhood TOTAL		1,710,00 0	0	550,000734,300 (550-734_DU)	325,000 <u>34</u> 7,800	<del>0</del> 87,100	<del>2,585,000</del> <u>2,879,200</u>
24	Open Space	(Landbay K extension—Potomac Yard Park extension)					
							Total (SF)
							7,525,000

#### NOTES:

- 1. Community facilities, public buildings and accessory uses may be provided on any block and are not deducted from the maximum permitted development; however the uses will be subject to the height requirements, design guidelines and other applicable elements as part of the development review process. Block 4 is reserved as a possible school site. Co-location of uses within Block 4 (including residential) is encouraged where feasible and shall not count toward the maximum development square footage.

  2. The blocks located within the Flexible Metrorail Zone are defined herein and the final block configuration and number of blocks will be determined as part of the rezoning and development review process.

  2. Approximately 0.7-acres within block 16 or 21 will be provided as open space for Market Square Park within the Flexible Metrorail Zone.
- 3. The maximum amount of development shall be 7,525,000 sf; however, the amount of permitted development within each block is conceptual. The final amount of development may be permitted to be transferred from block to block and will be determined as part of the rezoning for the subject property and development special use permit.
- 4. In addition to the maximum amount of development, a minimum amount of density is required for each block pursuant to the minimum heights and other applicable requirements.
- 5. Section 7 700 of the zoning ordinance is not applicable to North Potomac Yard (Landbay F). Additional ground floor retail locations may be approved, if they are consistent with the intent of the Small Area Plan and is approved as part of the development review process. The retail amount will be deducted from the maximum amount of development permitted within each block.

### Land Use Recommendations

#### Land Use - Zoning

- 4.1 Establish a new-Adhere to CDD#19 zone to implement the Vision and recommendations of the Plan.
- 4.2 Permit the flexibility of office and/or residential uses for Blocks 6-12, 17, and 22, 23, and a portion of Block 16.

## Metro Square Neighborhood

- 4.3 Require predominantly office uses and ground floor retail uses for the Metro Square neighborhood.
- 4.4 Explore the provision of live performance space/theatre.
- 4.5 Explore the possibility of uses such as a theatre below Metro Square Park (underground).

## Market Neighborhood

4.6 Allow flexibility for office and/or residential uses on upper floors within the blocks of this neighborhood.

## Crescent Gateway Neighborhood

4.7 Require predominantly residential uses in this neighborhood.

#### Retail Uses

- 4.8 Locations with required retail shall be provided as depicted in Figure <u>154.3</u>.
- 4.9 For <u>preferred optional</u> retail locations, the ground floor height and depth shall be designed to not preclude retail uses.
- 4.10 <u>Develop Adhere to design standards and guidelines for all retail uses, including large-format retailers.</u>
- 4.11 Develop Adhere to standards for retail storefronts and signage.
- 4.12 Encourage opportunities for live-work and comparable ground floor uses.
- 4.13 Encourage neighborhood-serving retail uses, including the potential provision of a grocery store within the Metro Square or Market neighborhoods.
- 4.14 Explore the possibility of allowing street carts vendors.
- 4.15 Require the submission of a comprehensive retail marketing strategy prior to the submission of a development special use permit for the first building and updated with each subsequent development approval.
- 4.16 Require district-wide management of retail (i.e. business improvement district, or other similar entity).

# **Building Height**

- 4.17 Ensure that the ceiling heights and depths for various uses are flexible to encourage a broad range of uses within the residential and commercial buildings, particularly the ground floor.
- 4.18 Transition building height and scale to Route 1 and the existing residential neighborhoods to the west and the George Washington Memorial Parkway to the east.
- 4.19 Differentiate the height of the gateway elements of the neighborhood by establishing taller or shorter heights for these elements.
- 4.20 Explore the possibility of eliminating or revising Adhere to the Federal Aviation Administration (FAA) flight path restrictions.
- 4.21 <u>Implement Adhere to maximum and minimum heights for each block consistent with Figures 47</u> 4.5b.
- 4.22 Require that any amenity space on the top floor of the building of Block 2 be made periodically available for public functions and/or meetings.
- 4.23 Provide taller signature buildings at the central portion of the site to denote the symbolic center of North Potomac Yard, and at the visual terminus of Main Line Boulevard on the northern portion of the site.
- 4.24 Require a variety of heights within each block and for individual buildings.
- 4.25 For Blocks 7 and 10, height, massing, and building design shall be compatible with the adjoining character of the George Washington Memorial Parkway. For Block 7, maximum building height shall be 85 feet except additional height may be permitted as part of a development review process in consultation with the National Park Service (NPS). In no event, shall the maximum building height exceed 120 feet for the northern portion of the block and 180 feet for the southern portion of the block.
- 4.26 For Block 14 and 19, the height range shall be 60 90 feet. However, to ensure height variety, only one block is permitted to go up to 90 feet. The remaining block shall have a maximum height of 60 feet. 4.27 The building height for the locations depicted as signatures facades (Figure 3.3), will vary from the primary maximum height of the building by being lower or slightly taller as permitted herein, or through the architectural treatment. Where signature facades are required, it will be permitted to exceed the maximum building height by a maximum of two levels not to exceed 5,000 sq. ft., if approved as part of the development review process. The locations shall be limited to locations depicted in Figure 3.3-Signature Facades.

#### **Parking**

- 4.28 Implement parking maximums.
- 4.29 Require unbundled residential parking.
- 4.30 Implement parking ratios that reflect the transit-oriented nature of the development consistent with Table 4.2.
- 4.31 Require shared parking throughout North Potomac Yard.
- 4.32 A minimum of one level of underground parking is required for each block and/or building.
- 4.33 All of the parking for Blocks 2, 3, 5, 10,14,15,18,19,20, and 21 is are required to be entirely belowgrade.
- 4.34 Any above-grade parking is required to be lined with active uses for each level for all street and park and/or open space frontages (Figures 4.6a, 4.6b, 4.6c) (Figures 19, 20a, 20b). If collector parking garages are provided for retail uses, the garages will be predominantly screened with actives uses and also screened with architectural treatments.
- 4.35 Generally require on-street parking for streets, excluding park frontages.
- 4.36 Require provision of long and short-term bicycle parking.

## Open Space

- 4.37 Require the submission of a comprehensive Open Space Plan to identify the programming within each park/public open space. <u>The Comprehensive Open Space Plan will include a mixture of active, passive, civic, and social spaces, as generally depicted in Figure 4.8.</u>
- 4.38 The parks/open space required within the Framework Plan, which consist of the following, need to be implemented with the development of each neighborhood:
  - Expanded open space Minimum 2.3-acre public park at Four Mile Run to provide a meaningful connection to the City's open space network, consistent with the Four Mile Run Restoration Master Plan (Crescent Park):
  - A finger 1.0 acre park/open space in the retail district (Market Green);
  - An approximately 0.2-acre open space east of Potomac Avenue in the Market Neighborhood (Market Lawn)
  - A square shaped 0.7-acre park plaza/urban square at the Metrorail station (Metro Square);
  - An approximately 0.3-acre plaza at the Metrorail Station (Metro Plaza)
  - An <u>approximately 4.5-acre</u> extension of <u>Landbay KPotomac Yard Park</u> to provide usable open space along the rail corridor; and <u>make a nonmotorized transportation connection to Four Mile</u> Run; and
  - -Internal pedestrian connections with adjacent active uses shall be provided in the Metro Square and/or Market Neighborhoods.
- 4.39 Require that Landbay K Potomac Yard Park and Crescent Park be dedicated to the City as public parks, with an agreement for private maintenance in perpetuity. The remainder of the parks (Crescent Park, Four Mile Run Promenade, Metro Square, Market Green, Market Lawn, and Metro Plaza) and the central open spaces are required to be privately owned and privately maintained but accessible to the public through the provision of a-perpetual public access easements. Any open space over parking garages will provide perpetual public access easements.
- 4.40 A minimum of 15% of North Potomac Yard is required to be provided as ground level open space, with an additional 25% to be provided at either ground level or on rooftops. Blocks 2, 3, 5 and 21 within North Potomac Yard shall be required to provide additional open space due to the central ground level spaces within the blocks.
- 4.41 Explore the possibility of collocating uses in open space, for example, entertainment, civic and cultural uses, historical interpretation, public art, and stormwater management.

- 4.42 Provide off-street shared useseparated paths for pedestrians and bicyclists in the open space at Four Mile Run and through Landbay K (Potomac Yard Park).
- 4.43 Provide public and private dog parks and/or runs. Explore the possibility of locating these facilities on roof tops.
- 4.44 The developer shall assist in the provision of off-site playing fields.
- 4.45 Employ sound urban forestry principles and practices to improve the City's tree canopy.
- 4.46 Explore the possibility of including interim active recreational fields.
- 4.47 A pump station may be located on the northern portion within the Plan area within or adjacent to Potomac Yard Park. The facility will need to include high quality design, and materials, and be integrated with the design of Potomac Yard Park and be subject to the criteria and recommendations described in Chapter 7: Infrastructure.
- 4.48 The Plan envisions at least one internal pedestrian connection for one of the blocks within the Metro Square or Market Neighborhood which could consist of a central hardscaped open space area that could be lined with restaurants, outdoor dining, music venues, and theatre uses.
- 4.49 The design and configuration of the Market Green will be determined as part of the development review process for the future phases.

# Housing

- 4.50 Contribute to the City's affordable. Housing Trust Fund, consistent with guidelines in effect at the time development approvals are sought; and /or provide affordable rental and for-sale workforce housing units with a minimum 40-year term of affordability, both rental and for sale, throughout North Potomac Yard.
- 4.51 To maximize housing diversity throughout the Plan area, allow bonus density of 30% for the provision of affordable housing pursuant to Section 7-700 of the Zoning Ordinance, as appropriate.
- 4.52 Provision of public housing in North Potomac Yard shall be strongly encouraged particularly as other public housing sites in the City redevelop. Consideration of the existing project based Allow for potential ARHA replacement units in the Plan area. density bonus Bonus density or height for affordable housing should be considered to facilitate possible public housing relocation to North Potomac Yard.
- 4.53 Offer a range of housing types to accommodate different household sizes and compositions, including studio, one, two and three bedroom units.
- 4.54 Incorporate green and sustainable designs and materials to enhance the interior living environment and to yield energy savings for residents.
- 4.55 Integrate universal design and/or accessibility features to accommodate multiple life stages and abilities. <u>Incorporate "visitability" features</u>, when feasible, to ensure new developments are accessible to people regardless of their physical abilities.
  - 4.56 Explore opportunities for public, private and non profit nonprofit collaborations to maximize the use of private and public land and to leverage all available resources for the development of affordable and workforce housing, including public housing and/or replacement Resolution 830 units.
- 4.57 Permit micro-units, where appropriate, to enhance housing affordability options.
- 4.58 Encourage co-location of affordable housing, including senior or assisted living, with future civic, municipal, and other uses where possible.

# **Chapter 5 Community Facilities**

The Plan recognizes that a successful urban community is one that strives to provide amenities and services for all its residents. New community facilities should be designed and constructed to meet the needs of the population today and tomorrow. Uses such as a school, child care center, recreation/community center, flexible exhibition and theatre/performance space, or library are potential community facilities.

## A. Projected Demographics

The dDemographics give a snapshot of the size and character of the anticipated North Potomac Yard population. The projected number of residents will generate a demand for community and/or civic facilities, including public schools. It is this population and age that will ultimately determine the future needed facilities and programs. It is expected young workers, and singles and non-traditional families are projected to will comprise a substantial portion of North Potomac Yard's future population. Finally, gGiven the proposed affordable housing recommendations, persons with a range of incomes will be part of the community. Between 350-110 and 500-160 school-aged children are projected to reside in North Potomac Yard, weighted more heavily in favor of younger children of elementary school age.

# B. Collocation, Flexibility, and Incentives

Community facilities should be collocated to ensure cost and operational efficiency, and for the added convenience for users. The term collocation refers to the vertical integration of multiple uses within the same building. The future community facilities should expand on the principle of the Potomac Yard Fire Station which combines a fire station and affordable housing. In order to ensure that the needs of Potomac Yard residents, workers, and visitors can be accommodated throughout the day, and into the future, the Plan recommends that community facilities be designed as flexible multi-purpose spaces and possibly as part of residential and/or office buildings. Multi-purpose spaces are differentiated from collocated uses in that multiple uses can use the same space. In order to encourage provision of these facilities, whether public or private, the Plan recommends that the floor area for community facilities not count against the maximum amount of permitted development. While the community facilities will not be deducted from the maximum permitted development, the Plan recommends that each use require the approval of a development special use permit (DSUP), excluding childcare facilities within existing buildings.

# C. Community Facilities

**Emergency Services** 

The new police facility on Wheeler Avenue will adequately serve the proposed development. No new fire facility is needed as the area is located only a few blocks from The Potomac Yard Fire Station and the mutual aid fire service provided throughout the City.

#### Schools

The proposed development will potentially generate the need for additional school capacity. Based on 2008-20092017 student generation rates, between 211-60 and 258-90 elementary, 70-20 and 117-30 middle, and 70-25 and 117-40 high school students will be generated by the projected residential uses for North Potomac Yard. The remainder of Potomac Yard (including Landbays G, H, I, J, and L and Potomac Green) is expected to has generated a total of 84 students enrolled in ACPS during the 2016-2017 academic year. between Of those students, 3 were enrolled in pre-k, 123 and 14037 elementary, 67 and 9322 middle, and 53 and 7022 in high school students.

If elementary school student generation rates continue to increase, the City will not have need additional capacity to support elementary school students generated by the new development in North Potomac Yard. Furthermore, if middle and high school generation rates continue to increase, in the long-run, the City will face additional capacity challenges in the middle and high schools. The most critical need is the provision of additional system capacity at the elementary school level.

The Plan addresses three possible options to accommodate the needs of a possible school:

- 1) Block 4 has been reserved for a possible school site. In light of the fact that Because North Potomac Yard will be urban in nature, a school, if constructed in this location, must be in an urban form, such as the Tenderloin Community School in San Francisco, California, which is a multi-level elementary school but includes elements such as a family resource center, health center, counseling rooms, an adult education center, and a preschool child development center. The building will also require underground garage parking and possible rooftop recreation and community gardens;
- 2) Construct a new school at an off-site location; or
- 3) Expand or reconstruct an existing school, for example, Cora Kelly STEM School, to accommodate additional students.

If the school reservation (Block 4) is not used for a school site, the City would reserve the right to use the block for other purposes <u>such as open space and/or a comparable community facility/public building with potential colocation uses above</u>. The remainder of the community facilities will be determined as part of the development review process.

#### Childcare Facilities

Because of the proposed amount of residential and office uses, there will be a considerable need for childcare facilities that can serve residents and employees. Childcare may be located within an office and/or residential building and could be included as part of the school or adjacent to the proposed school. Considering the school will not likely be built in the early phases of the development, childcare facilities will need to be provided in the early phases and integrated within larger office or residential buildings. To encourage these uses, the Plan is recommending that childcare uses be permitted with administrative approval within existing buildings.

### Other Potential Community Facilities

In addition to a potential school and childcare facilities, there are numerous other facilities that may be needed or desired as part of the development of North Potomac Yard. Some of the potential uses are listed below.

- Community Arts, Exhibition and/or Performance Space. This space could contain an art gallery
  and could be utilized for community gatherings as well as destination events such as festivals,
  concerts, and other arts performances, and would be particularly appropriate in the Metro
  Square Neighborhood.
- Education Center. A privately funded education center or learning facility could be provided,
  possibly with a focus on sustainability or green infrastructure. Sustainability is not only a key
  component of the overall Plan, but it could also serve, as other models such as the Living
  Classroom have shown, as another feature supporting Potomac Yard's multi-faceted program of
  community building.

- *Neighborhood Reading Room/Library*. A neighborhood reading room or library could be provided, and should be centrally located.
- *Community Center*. A space that can serve as a community function space. The facility could be linked to the school, which has often historically been the case for such facilities in urban communities.
- Recycling Center/Program. An important and significant component of the Sustainability Plan will be requirements and incentives for, and facilities to accommodate, a complete recycling program.
- Transit Center. A transit center to support the multi-modality of the development could be collocated with an office building in close proximity to the Metrorail station or transit.
- Youth Center. Appropriate locations could be collocated with or near the school, parks or other educational settings and with easy access for all residents. Uses in this space could include after school, educational and social activities for young residents.

It is certain that not all of these community facilities should be placed within North Potomac Yard, or even Potomac Yard. However, potential sites and buildings for locating these community facilities will need to be identified and where the facilities could be developed as part of the proposed residential and/or office buildings. If any, or a combination of all of these uses were developed in the Plan area, they could assist in being a catalyst for redevelopment. The development of childcare and possibly a school in this area would also serve commercial office development, especially for employees with children. To integrate the facilities as part of the planning and development process, the Plan recommends the submission of a comprehensive Community Facilities proposal, that is updated with each development.

# **Community Facilities Recommendations**

# School

5.1 Adequate provision shall be made to accommodate an urban school, collocated with a childcare facility and/or comparable uses. Block 4 shall be reserved for a possible urban school. If Block 4 is not needed for a school, the City may use the block for open space and/or a comparable community facility/public building with potential co-located units above as approved by City Council.

#### Daycare/Childcare

5.2 Require the provision of daycare/childcare facilities as part of the community facilities, mixed-use, and/or office buildings. Daycare/childcare facilities shall be permitted through an administrative approval within existing buildings.

# Collocation, Flexibility and Development Incentive

5.3 To the greatest extent feasible, community facilities shall be collocated, and be designed to provide for flexible use of interior spaces.

#### Zoning

5.4 Community facilities and/or public buildings may be included on or in any block and/or building and shall not be deducted from the maximum permitted development. These uses shall be defined as part of the rezoning for the Plan area.

## *Implementation*

5.5 Provide a comprehensive Community Facilities proposal depicting the general size and locations of community facilities and/or public buildings proposed within North Potomac Yard, including but not

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limited to the school and daycare/childcare facilities recommended herein. This Proposal shall be submitted as part of the first development special use permit and amended as necessary to accommodate future uses and programming.

# **Chapter 6 Transportation**

The transportation strategy has been designed to facilitate a significant mode shift from private autos to alternative, more sustainable means of transportation, consistent with the Transportation Master Plan and Environmental Action Plan. The transportation network is required to include a Metrorail station, dedicated high-capacity transit corridor, buses, shuttles, car sharing, and bicycle facilities. In addition, an aggressive Transportation Management Plan (TMP) program will be required and parking will be managed, shared, priced, and designed to reduce car trips. The Plan is designed to allow employees and residents access to essential services within a five-minute walk, and streetscapes are designed to accommodate easy access to transit and the Metrorail station. The Plan also recommends a shared street adjacent to Potomac Yard Park and the Metrorail station to prioritize pedestrians.

A significant portion of the adjoining roadway system is already established with limited opportunity to build additional east-west streets. The geography that gives Potomac Yard its special character – its location between the Potomac River and the adjoining established neighborhoods – also constrains access.

Recommendations include strategies to manage transportation demand, expand the street grid and connectivity, provide additional transit capacity, incorporate an expansive bicycle and pedestrian network and create a culture of people first in a complete green streets context.

# A. Transportation Network

In the preparation of the transportation analysis, a set of parameters were developed relating to development density, the future transportation network, travel mode choice (mode split), a 2030-2040 buildout year and general future traffic growth (background traffic). Each of these is briefly described below:

- Future Metrorail Station: A new Metrorail station is required by the Plan to support the proposed density and accommodate new person trips.
- Crystal City/Potomac Yard (CCPY) <u>Transit (TransitwayMetroway)</u>: High-capacity transit service
  will be provided in dedicated lanes on Route 1 and through the Plan area and Potomac Avenue. It
  will intersect with the Metro service to create a high-performance transit hub for Potomac Yard.
- Local and Circulator Transit Service: Additional local-serving routes will be provided to connect the new development in North Potomac Yard to existing neighborhoods and other destinations with enhanced service local transit.
- US Route 1 (Jefferson Davis Highway) ("Route 1"): Route 1 will be widened to accommodate a dedicated high-capacity transitway Metroway for the length of Route 1 to Arlington County. between E. Glebe Road and Evans Lane, where Metroway is anticipated to turn east on to Potomac Avenue. The illustrative plan depicts one option for the Metroway alignment. The final alignment will be determined as part of a future planning process and approval by City Council. Route 1 will not be widened to accommodate additional SOV (single occupancy vehicles) vehicle lanes.
- Potomac Avenue: This new major north-south route will connect Route 1 to the south with Crystal Drive on the north and will provide additional north/south capacity for local and non-local trips.
- Internal Street Network: The Plan requires a fine-grained, interconnected network of <u>urban</u> streets with multimodal connectivity to the surrounding neighborhoods.
- New <u>Landbay K Potomac Yard Park</u> bicycle/pedestrian connection: This off-street trail
  connection will tie Potomac Yard directly to Four Mile Run through a linear park connecting
  Braddock Road and Four Mile Run, enhancing its access to the major regional trail network that
  currently serves recreational users as well as commuters.

## B. Transportation Analysis

An updated transportation study was conducted to determine the impact of the proposed development at for North Potomac Yard, analyzing Phase I (year 2021) and full-build out impacts (year 2040), comparing the updated Plan to the 2010 Plan. The study found that current vehicular traffic conditions along Route I and at most intersections adjacent to Potomac Yard are acceptable; however, some delays occur during the commuter peak period. With the increment of background traffic growth, traffic from approved (currently unbuilt) developments, and the completion of Potomac Yard, traffic will increase on roadways and at intersections.

The study found that current vehicular traffic conditions along Route 1 and at most intersections adjacent to Potomac Yard are acceptable; however, some delays occur during the peak period. With the increment of background traffic growth, traffic from approved (currently unbuilt) developments, and the completion of Potomac Yard, traffic will increase on roadways and at intersections.

The evaluation assumes a 2030 buildout year, and that through traffic on Route 1 will grow by approximately 10 percent. This growth is intended to reflect likely increases in traffic attributable to general city growth including development already planned in neighboring jurisdictions and development approved in Landbays G, H, I and J. Regardless of whether or at what density Potomac Yard is redeveloped; Route 1 will operate at capacity in areas. The study assumes that through traffic on Route 1 will grow by approximately 10 percent by 2040. This growth is intended to reflect likely increases in traffic attributable to general city growth and regional through trips (Figure 6.1). Traffic for specific approved and unbuilt developments such as Oakville Triangle, were considered separately from and in addition to the 10 percent growth. Regardless of whether or at what density North Potomac Yard is redeveloped, Route 1 will operate at capacity in areas. With the recommended multimodal transportation network, most intersections will operate acceptably with the exception of the intersections of \_-Route 1/ Slaters Lane Route 1/E. Reed Avenue, Route 1/E. Glebe Road, Route 1 at the entrance to the existing Toyota dealership, and Route 1/Potomac Avenue. There is a negligible difference in traffic operations for 2040 under the updated Plan, as compared to the Plan approved in 2010.

The analysis assumed all roadway improvements already planned as part of the 2010 Plan, and improvements associated with the Route 1/Oakville Triangle Corridor Plan. These are further described below, and include improvements at Route 1/E. Glebe Road, improvements at Route 1/E. Custis Avenue, improvements at Route 1/Swann Avenue, a signal at Route 1/Montrose Avenue, and improvements at Route 1/E. Reed Avenue to allow for east-west through traffic across the intersection, which is not allowed today.

Because of the limited east-west connectivity from Route 1 to the west, E. Glebe Road is unable to accommodate the anticipated traffic traveling east-west without additional improvements. The intersection of Route 1/E. Glebe Road has a number of challenges including awkward geometry and adjoining single family homes. These factors limit the opportunity for improvements to increase capacity. One improvement recommended by the Plan is to include turn lanes on the northwest side of the intersection, but this improvement is limited in the relief it provides at the intersection.

The transportation analysis performed for the Plan is a planning-level analysis without the benefit of specifics regarding locations and types of development on a given block. The development is anticipated to be built out over a 20-30 year period, and traffic patterns in the region will likely change over time. All future development applications will require detailed traffic studies to analyze the specific impacts of the blocks based on future transportation data available at that time. These studies will refine the planning level analysis performed for the Plan. They will also identify traffic impacts associated with specific

development and make more detailed recommendations based on the analysis of the traffic impacts on the roadway network at the time of redevelopment and may refine the type and timing of transportation improvements required to support the development.

Table 5. Travel Speed and Time on Route 1 Corridor

# 2030 Future Conditions with Development Average Weekday PM Peak Hour Travel Speeds and Times for US 1

Scenario	Southbound		Northbound			
	Speed (mph) Travel Time (min)		Speed (mph)	Travel Time (min)		
Existing	20.9	5.0	22.3	4.5		
Future Conditions without Development	13.1	8.0	14.7	7.0		
Future Conditions with Development	16.6	7.0	12.1	8.5		

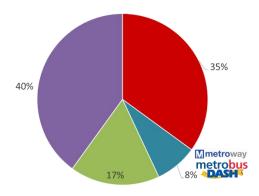
<sup>\*</sup> Future conditions assume the construction of the transitway on US 1, New Street C, and within the Plan area

Source: Kimley-Horn and Associates, Inc.

The significant investments in the multimodal transportation network already planned and recommended in the <u>updated</u> Plan such as the new Metrorail station and dedicated transit lanes will create the substantial capacity to move people and accommodate increases in travel demand associated with continued development in Alexandria as well as in Potomac Yard-specifically.

# C. Mode Share

<sup>\*\*</sup>Under Future Conditions with Development, US-1 signals are timed with lead-lag left turns and coordinated with 140 second cycle length. Potomac Avenue is timed with coordinated, 90 second cycle length signals.



To represent the anticipated trip-making patterns associated with the redevelopment of North Potomac Yard, assumptions were developed to assign trips to transit, pedestrian, bicycle, and auto modes. The assumptions were based on local, regional, and national experience and evidence for similar scale urban redevelopment projects. Specifically, the recent Metrorail ridership study was consulted in addition to data from the Crystal City, Braddock Road, and King Street Metrorail stations and US Census, Journey to Work data. It is widely recognized that urban, mixed-use developments with accessible transit will result in lower automobile trip generation. When the specific mode choice assumptions per land use detailed in Table 6 are applied to the proposed mix of uses in North Potomac Yard, the resulting mode share is 4740% of the trips being made by automobiles, 3743% of the trips being made are by transit, and 1617% of the trips being made are by bike or on foot (Table 6Chart 6.1). The mode share assumes buildout of the proposed mix of uses, accessibility to multiple modes of transportation, including Metrorail and dedicated high-capacity transitway Metroway, enhanced street connectivity, and bike and pedestrian facilities.

**Table 6. Mode Choice Assumptions** 

<b>Mode Choice Assumptions with a Potomac Yard Metrorail Station</b>								
Land Use	Transit (Metrorail)	Transit (Metrobus, DASH, and CCPY)	Pedestrian/ Bicycle (non-auto)	Auto	Total			
Office: adjacent to a transit station	<del>35%</del>	<del>11%</del>	<del>6%</del>	48%	100%			
Office: within ¼ mile of a transit station	<del>21%</del>	9%	<del>6%</del>	64%	100%			
Residential: adjacent to a transit station	54%	1%	<del>16%</del>	<del>29%</del>	100%			
Residential: within ¼ mile of a transit station	48%	1%	15%	<del>36%</del>	100%			

Residential: ½ to ½ mile of a transit station	31%	<del>5%</del>	10%	<del>54%</del>	100%
Hotel	<del>27%</del>	4%	31%	38%	100%
Entertainment (theater)	<del>26%</del>	<del>6%</del>	<del>11%</del>	<del>57%</del>	100%
Retail: all, excluding large format	<del>29%</del>	8%	<del>27%</del>	<del>36%</del>	100%
Retail: large format	9%	<del>5%</del>	14%	<del>73%</del>	100%

# D. Streets and Connectivity

The updated Plan includes parameters not to further widen Route 1, not to add any median breaks for vehicles along Route 1, and to minimize the number of additional left turn or right turn pockets along Route 1 or Potomac Avenue. To better address the limited east-west connectivity and support the anticipated level of east-west traffic, and consistent with the recommendations of the Transportation Study, the 2010 Plan, and the Route 1/Oakville Triangle Corridor Plan, the updated Plan recommends:

- Physical improvements at the intersection of E. Glebe Road and Route 1;
- New east-west connectivity or comparable street, circulation, and/or transit improvements, as part of any proposed development and any future planning efforts for properties to the west of Route 1;
- Maximize the street grid by configuring Reed Avenue at Route 1 to allow all movements;
- Study the intersection of Commonwealth and Reed Avenues to determine the need for signalization and pedestrian upgrades
- Major intersections to the west of Route 1 may need to be further analyzed in the future to determine if any additional improvements, such as signalization or pedestrian improvements are needed; and
- Explore and evaluate the option of opening Evans Lane, and Wesmond Drive and Lynhaven Drive in the future to provide access to Route 1 as new development occurs along the west side of Route 1; and-
- Traffic calming for neighborhoods west of Route 1 will be phased and implemented with development of North Potomac Yard.

The recommendations of the Plan are consistent with the City's Transportation Master Plan, which recommends a fine-grained street grid to accommodate circulation for all modes through the site and connect to the neighborhoods across Route 1.

The <u>updated</u> Plan and the transportation analysis, <u>consistent with the 2010 Plan and the Route 1/Oakville Triangle Corridor Plan</u>, show Reed Avenue connecting across Route 1 and serving as an additional eastwest connection. This connection is recommended to accommodate the additional traffic from the development. Additional street connections will help disperse traffic and alleviate overburdened intersections. The provision and timing for additional east-west connectivity or comparable street, circulation, and/or transit improvements will likely be desirable in the future. New east-west connections

should continue to be explored as part of development and planning for properties to the west of Route 1.

In addition to exploring additional east-west street connectivity, additional right-of-way to provide turn lanes and enhanced pedestrian accommodations will be necessary at E. Glebe Road at Route 1.—The intersection of Commonwealth and Reed Avenues will need to be signalized and studied to improve pedestrian movements. For a discussion of neighborhood impacts and other recommendations to address these issues, see *Chapter 8: Existing Neighborhoods*.

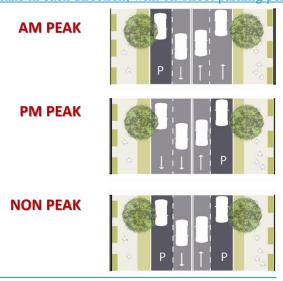
The updated Plan includes additional transportation improvements not included in the 2010 Plan including:

- Signal timing updates on Route 1;
- Lane reconfiguration at Route 1 / Potomac Avenue (in the westbound direction to provide a left turn lane, left turn lane, and left/right turn lane); and
- Extend left turn lanes at select locations along US Route 1 based on the results of future traffic studies where appropriate.

All streets in North Potomac Yard are required to be public and dedicated to the City, or include public access easements. In addition, the streets should be compatible with the City's Complete Street Design Guidelines. The streetscape and public right-of-way must play an important role in managing stormwater while visually reinforcing the environmental sustainability principles of the Plan. Low-impact design techniques that reduce runoff and provide water quality treatment are required to be incorporated as part of the street design. These techniques could include but are not limited to pervious surfaces for parking spaces and sidewalks, curbside bioretention areas, and large, interconnected tree wells irrigated with harvested rainwater.

#### Future Potomac Avenue

Keeping Potomac Avenue within its current alignment, connecting to Potomac Yard South, and to Arlington to the north is a key aspect of the Plan. To enhance the pedestrian character of Phase I Potomac Avenue, it will operate as depicted in Figure 6.3. During peak hours, this includes two travel lanes in the peak direction and one travel lane in the non-peak direction; in non-peak hours, there will be one travel lane in each direction, with on-street parking permitted in the outside travel lanes.



Under the full Plan buildout, Potomac Avenue is anticipated to be designed to include the dedicated lanes for Metroway connecting to the dedicated lanes within Arlington County. The road will be designed in a manner that enhances the pedestrian environment and connectivity, while also maintaining efficient and reliable service of the Metroway. It will be designed to prioritize pedestrians, bicyclists, transit and cars in that order. The future design of the street will:

- Include a generous 20-25 foot streetscape on each side with accommodation for an enhanced bicycle facility on or adjacent to Potomac Avenue;
- Provide traffic signals at regular intervals to facilitate safe and timely pedestrian crossings;
- Design buildings to frame and activate the street and provide on-street parking where feasible;
- Facilitate connections between neighborhoods east and west of the street, striving to knit the two areas together;
- Minimize the distance pedestrians need to cross with streetscape enhancement for walkability and safety; and
- Maximizes accessibility, reliability and ridership of Metroway service.

At the time of the redevelopment of the uses west of Potomac Avenue, an additional traffic analysis will be conducted to determine the number of lanes/street cross-section needed to serve the development and location of the Metroway with the goal to have the minimum number required. As the future analysis is conducted, it will be important to consider new or emerging technologies, such as autonomous vehicles, that may have an impact on traffic operations.

#### E. Transit

One of the most important features of North Potomac Yard is its commitment to transit-oriented development. As such, the City is committed to providing levels of transit service which can help the North Potomac Yard achieve a minimum 5060% transit non-single occupancy vehicles (SOV) mode split throughout its phases of development. This involves a range of transit options which will provide transit services consistent with the amount and type of the planned development.

New transit infrastructure including a new Metrorail station, dedicated high-capacity transitway Metroway and expanded local bus service are required by the Plan to support the proposed density. These transit facilities and the Metrorail station, in particular, allow for a higher transit ridership and a higher level of development density. Without the new transit infrastructure, the proposed levels of development could not be adequately supported by the proposed street network traffic congestion will overwhelm the street network capacity, and the transportation network will fail.

In addition, as discussed in *Chapter 5: Community Facilities*, streets, public spaces, and transit facilities should be designed to support and facilitate transfers between the various transportation modes, especially near the Metrorail station, a Transit Center should be located in North Potomac Yard to support the new transit options.

## Metrorail Station

The Potomac Yard Metrorail Station is a key element of the transportation plan for Potomac Yard and consistent with the City's Transportation Master Plan. The station will provide direct access to the regional Metrorail system from Potomac Yard, and will enable the density and mix of uses envisioned in the plan by encouraging a high transit mode split and adding capacity to the transportation network. The station will be located along the existing Metrorail Blue and Yellow

<u>Lines between the Ronald Reagan Washington National Airport Station and the Braddock Road</u> Station.

The Metrorail Station has been designed to allow for pedestrian access on both the east and west sides of the rail tracks. There are two access pavilions on the west side of the tracks, and an -access ramp on the east side of the tracks. The ramp on the east side of the tracks will provide access from Potomac Greens. Pedestrian bridges over the CSX rail tracks will connect communities on the east and west side of the rail corridor. In addition, "shortcut" stairs have been incorporated into the design of both east and west ramps, to allow for convenient interchange between the ramps and the adjoining parks.

The southern pavilion, on the west side of the tracks, is located at the terminus of E. Glebe Road and Potomac Avenue, adjacent to Landbay G Town Center in South Potomac Yard. The northern pavilion will provide access to the station from North Potomac Yard. This pavilion will be framed by Metro Plaza at the terminus of Evans Lane. The Plan has been designed to provide access to the station for pedestrians, bicyclists, buses, and anticipates short-term drop-off adjacent to the station entrance. The final configuration of parks and streets will be determined during the development special use permit (DSUP) process.

During the North Potomac Yard planning process, the Metrorail Station Feasibility Work Group ("Work Group") was established to examine the technical and financial feasibility of a new Metrorail station at Potomac Yard. The Work Group analyzed eight potential locations and did a preliminary screening using factors including station constructability, phasing, and cost. After the initial screening, three of the eight original station location alternatives remained under consideration and could proceed to the environmental analysis phase of the feasibility process: No build, A and the B Alternatives, (see Figure 28). The B alternatives, as depicted and discussed in the Potomac Yard Metrorail Station Concept Development Study, best achieve the intent and vision of the Plan. With regard to financial feasibility, it was determined that a new station (in the location of the B Alternatives would cost between \$220 and \$235 million (2015 dollars) depending on the alternative.

**Table 7: Metrorail Station Alternatives Cost Estimates** 

	Cost (in millions)				
	Low	Mid-point	High		
Alternative A	<del>\$190</del>	<del>\$220</del>	<del>\$250</del>		
<b>B</b> -Alternatives	<del>\$200</del>	<del>\$235</del>	<del>\$270</del>		

Note: Station costs include two mezzanines and a pedestrian access ramp to Potomac Greens.

The implementation of the Metrorail station will require coordination with WMATA, the National Park Service (NPS), Federal highway and transit agencies, CSX and adjoining developers. Issues to be resolved include impacts on the NPS scenic easement, the George Washington Memorial Parkway, and delineation and mitigation of potential impacts to wetlands and floodplains. The developer will be required to contribute substantially to the financing of the construction of the Metrorail station (see

Chapter 9: Implementation), and special tax districts in all of the Potomac Yard CDD's will be necessary. It is required that federal environmental review processes be followed and that a final station location will not be established until these review processes are completed.

Figure 30 Proposed-Dedicated Transitway Metroway Route

Metroway This route allows an additional stop along Route 1 to serve the Lynhaven community
(there is currently inadequate right of way width to accommodate an exclusive transit lane at the bridge crossing Four Mile Run). Arlington has made significant investments in a routing along Potomac Avenue, including a station at south Glebe and exclusive right of way that is already set aside. Right of way will be reserved to maintain a consistent setback the length of the Route 1 frontage.

Dedicated transit lanes are planned within the Route 1 corridor. The plans include the widening of Route 1 to accommodate dedicated high capacity transit within a landscaped central median; and provision of left turning movements while promoting a pedestrian friendly environment designed as an urban boulevard with the transit vehicle within the central median.

The Metroway is a high-capacity bus rapid transit service that utilizes dedicated transit lanes within the Route 1 corridor providing cross jurisdictional connections through Potomac Yard between the Braddock Road Metrorail Station and Crystal City. Arlington County has made significant investments in constructing dedicated lanes along Crystal Drive, Potomac Avenue and South Glebe Road, including, a new station on South Glebe Road. Arlington has also reserved right-of-way along Potomac Avenue north of Four Mile Run.

In Alexandria, the Metroway promotes a pedestrian-friendly urban environment by providing centrally located transit vehicles within a central median on Route 1 between Potomac Avenue to the south, and E. Glebe Road to the north.

The Plan illustrates one option for the Metroway alignment between E. Glebe Road and Evans Lane, where it is anticipated to turn east on to Potomac Avenue. Under this option, the Metroway would turn east onto Evans Lane and then north onto Potomac Avenue continuing into Arlington County. The Metroway service would operate within dedicated lanes for the length of its route. The final alignment will be determined as part of a future planning process and will require approval by City Council.

The Plan anticipates two additional Metroway stops to be located within the North Potomac Yard Plan area, one proximate to the Potomac Yard Metrorail Station and another at the northern end of the Plan area to serve future residential developments. The design of these stations may be consistent with the Route 1 stations or with a design determined to be consistent with the North Potomac Yard neighborhood.

The Plan recommends exploring options to incorporate innovative green technologies into the design of the dedicated transit right-of-way. The stations should behave been designed to include innovative real-time transit information and display technologies to include route maps, schedules and local and regional information. Stations will provide shelter from the elements, seating, and lighting. These facilities will beare ADA accessible and may also include have the ability to purchase fare media, near-level boarding, heating, and optional WiFi/wireless Internet, emergency intercoms, public art, and solar power.

Local and Circulator Transit Service

While Metrorail and dedicated transitway Metroway services are critical elements, other modes of transit cannot be overlooked. These are local buses operated by DASH and Metrobus that provide valuable connections between neighborhoods in the City. Currently, North Potomac Yard is served by local bus service, which provides seven days a week service to the existing shopping center. DASH bus service also connects North Potomac Yard to the Del Ray neighborhood. DASH will need to increase the service on this route and to add service from other parts of the City as the project develops. The Metrorail station will also serve as a transit hub for DASH and other transit providers. Longer term plans call for direct bus connections from portions of the City, such as the West End, directly to North Potomac Yard. The Plan recommends that additional local-serving routes should be explored to connect locations within Potomac Yard to nearby communities and destinations.

# F. Truck Loading

The growth in office, retail and other development will increase truck loading and deliveries. To maintain efficient traffic circulation, the City will require a comprehensive policy regarding truck loading and deliveries during the development review process. Truck loading and deliveries—are should be prohibited on A and <a href="mainted-on-B">limited on B</a> streets. C Streets provide a means of access and service entries to the neighborhoods and allows A and B street frontages to function as primary streets. Additional requirements regarding access and loading will beare specified in future—the Design Standards and Guidelines.

### G. Parking Management

Management of on-street and on-site parking is a critical feature of any transportation system and should be carefully coordinated with other transportation considerations. On-street parking spaces will be required to be efficiently managed to maximize turnover of spaces and encourage garage parking for longer stays. On-street parking spaces will be required to be metered and be part of a performance parking program to manage parking resources efficiently.

Parking garages should employ smart parking technologies including variable pricing and available parking space technologies. Wayfinding signage should be employed to efficiently direct drivers to parking garages and clearly, indicate price and availability of parking. Parking garage entrance widths shall be minimized.

As shared parking is a key element of the on-site parking program, details about how shared parking will operate will be reviewed during the development review process.

# H. Bicycles

The bicycle network requires both on- and off-street bikeways to serve all users and trip types with a particular focus on bicycle parking and better connections to transit. The network will enable more people to bicycle for some of their daily trips and increase the proportion of the workforce who cycle to work. The bicycle network is a key element in the multimodal approach to transportation, has health and environmental benefits, and is consistent with the sustainability goals of the Plan.

An off-street shared-use path is required along the length of Potomac Yard ParkLandbay K between Braddock Road to the south and Four Mile Run to the north. The Potomac Yard ParkLandbay K path will provide a high-quality experience for pedestrians and bicyclists, and serve as a spine for a wider network of paths and associated connections. Designed to minimize conflicts and provide a direct connection between Braddock Metro Neighborhood and Potomac Yard, the trail is an important complement to the street grid. The majority of this trail, now known as the Potomac Yard Trail, has been constructed between Braddock Road and East Glebe Road. The extended portion of the trail will provide separated

pedestrian and bicycle access to the Potomac Yard Metro Station and continue north to the extended Four Mile Run Trail.

The slow design speed and urban context of the streets will encourage cyclists to 'take the lane' on all streets where appropriate. However, on-street bicycle facilities on primary streets may include bicycle lanes and shared-lane markings ("sharrows") intended to improve bicycle safety and provide a sense of security. Roadway crossings are critical to the connectivity of the bicycle network and intersections will be designed to stress the convenience and comfort of cycling.

Bicycle facilities will be implemented in locations as depicted in Figure (XX). In addition, the Four Mile Run trail will be extended east of Route 1 to North Potomac Yard, and continue east traversing beneath Potomac Avenue, the rail lines and George Washington Memorial Parkway to connect to the Mt. Vernon Trail, consistent with the City's Transportation Master Plan. The Plan provides a bicycle/pedestrian access bridge over the CSX tracks from the Potomac Yard Metrorail station to the Potomac Greens neighborhood.

Providing adequate end-of-trip facilities is a critical component of any bicycle network and perhaps more so in transit-oriented developments such as North Potomac Yard. The Plan considers bicycle parking in a number of contexts:

- Bike parking at residential and employment sites
- Bike parking at retail areas
- Long-term and short-term bike parking at the Potomac Yard Metrorail Station
- Long-term and short-term bike parking near Metroway stations
- Bike stations in connection with public transportation along the transitway Metroway and Metrorail.
- At homes and at workplaces.
- At shops and retail centers.
- On streets in general.

A connection from Landbay K to the Four Mile Run Trail is recommended as part of the Plan. In addition, a future connection from Landbay K across the George Washington Memorial Parkway to the Mount Vernon Trail should be explored. The Plan should provide a 24-hour bicycle/pedestrian access bridge over the CSX tracks from North Potomac Yard to the east.

Bikeshare is often used by members during the first mile and last mile of their trips, as it compliments existing public transit options. Bikeshare stations are located nearby in Crystal City, Del Ray, Potomac Greens, Arlandria and Braddock Road Metro area. The Plan will require the provision of Bikeshare stations to serve future users; final locations will be dispersed throughout the Plan area and determined as part of development review and CDD permits.

#### I. Water <del>Taxi</del>Transportation

The Plan encourages the use of alternative modes of transportation. The possibility of water transportation on the Potomac River and potentially on Four Mile Run would require technical and operational evaluation. Any future proposal for a water taxi will need to be consistent with the intent of the Four Mile Run Restoration Master Plan and Design Guidelines. A water taxiWater transportation, particularly on the Potomac River, may reduce demand on other transit systems that may be carrying increased numbers of summer tourists and visitors to special events. Water taxis-transportation could link Potomac Yard to a growing system of waterfront destinations along the Potomac River, including Old Town, National Harbor, Anacostia, and Georgetown.

# J. Transportation Management Plans (TMP)

Transportation Management Plans (TMPs) are a set of specific strategies that influence travel behavior by mode, frequency, time, route or trip length in order to help achieve an efficient and sustainable use of transportation facilities, along with other City goals such as promoting access for all transportation system users, improving mobility, and minimizing the negative impacts of vehicular traffic.

Given the centrality of multimodal transportation in North Potomac Yard, and in order to ensure that the systems and programs are in place as needed to support the density, the Plan requires that future development participate in a TMP district which employs aggressive TMP measures to achieve the 5060% mode share targets assumed in the study, and also meet future TMP requirements.

These strategies will include parking maximums, market-rate parking fees for all uses, performance parking, shared parking, parking management, transit passes, "unbundling" parking cost (parking facilities <u>for residential uses</u> available at additional cost rather than included in <u>residential unit cost</u>), transit incentives, required TMP plans and monitoring, and similar measures. North Potomac Yard will also be required to participate as part of a TMP district.

Providing market rate parking is an important tool in the TMP strategies employed to create a successful multimodal community. Availability and cost of parking will heavily influence people's decision whether or not to drive. Parking should be available for those that choose to drive and are willing to pay its cost. At the same time, incentives (financial and otherwise) should be provided to those who choose not to drive. Parking maximums, as discussed in *Chapter 4: Land Use*, are required to achieve the modal split anticipated for new development.

## **Transportation Recommendations**

#### Streets

- 6.1) Provide a compact grid of streets consistent and in alignment with, and connecting to the established street grid in Potomac Yard (Potomac Avenue and Main Line Boulevard), on the west side of Route 1, and in Potomac Yard Arlington.
- 6.2) Maximize the street grid within the site and connectivity to adjacent neighborhoods including:
  - Intersection improvements on west leg of Route 1 / E. Glebe Road.
  - Restriping of Potomac Avenue at Route 1.
  - Reed Avenue at Route 1 shall be configured to allow all movements.
  - Explore and evaluate the option of opening Evans <u>and</u>, Wesmond, <u>and Lynhaven</u> in the future to provide access to Route 1 as redevelopment occurs on the west side of Route 1.
  - Major intersections to the west of Route 1 may need to be further analyzed in the future to determine if any additional improvements, such as signalization or pedestrian improvements are needed
  - Study the intersection of Commonwealth and Reed Avenue to determine the need for signalization and pedestrian upgrades.
- 6.3) All streets and rights-of-way shall be dedicated or provided as public access easements to the City.
- 6.4) Consider all users in the future design of streets and streetscapes, consistent with the City's Complete Street Design Guidelines.
- 6.5) Design and configure Potomac Avenue to include the following for each Phase:
  - a. Phase 1 (East of Potomac Avenue):
    - Provide frequent and safe pedestrian and bicyclist crossing access;
    - Provide on-street parking, as feasible;

- During peak hours, design the street to include two travel lanes in the peak direction and one travel lane in the non-peak direction; in non-peak hours, there will be one travel lane in each direction, with on-street parking permitted in the outside travel lanes;
- Design the street to facilitate connections between neighborhoods east and west of the street, knitting the two areas together;
- Design buildings to frame and activate the street;
- Provide streetscape enhancements for walkability and safety;
- Provide traffic signals at regular intervals;
- Maintain existing bike trail along western side of Potomac Avenue;
- Maximize accessibility to the Metroway service.
- b. Phase II (West of Potomac Avenue): Potomac Avenue will be designed to be a north-south multimodal urban street within Potomac Yard. The Avenue will be designed to prioritize pedestrians, bikes, transit and cars in that order and meet the following criteria:
  - Metroway alignment will be integrated to maintain urban scale streets and walkability and cycling;
  - Specific design of the enhanced bike facility will be determined as part of Phase II;
  - Design for the minimum width necessary to accommodate planned multi-modal functions of the street including pedestrian crossings;
  - Provide 20-25 ft. streetscape on both sides;
  - Provide traffic signals at regular urban intervals to facilitate safe pedestrian crossings;
  - Design buildings to frame and activate the street;
  - Provide on-street parking where feasible;
  - Ensure street design that facilitates connections between neighborhoods east and west of the street, knitting the two areas together;
  - Provide accessibility to Metroway to maximize ridership.
- 6.6) Shared streets as identified in the Plan shall comply with the following recommendations:
  - Shared streets should be curbless and provide the flexibility to potentially/periodically close for programming and events.
  - The design of the street should include two-way circulation and provide on-street parking. On-street parking will allow for short-term parking.
  - Ensure that the street is designed and functions as a smaller/neighborhood street.
  - Incorporate special treatment. Explore materials/pavers or vertical elements to slow traffic.
- 6.7) Study, develop and implement a comprehensive phased approach to address traffic impacts in neighborhoods adjacent to the development and other impacted neighborhoods. (See also recommendations in *Chapter 8: Existing Neighborhoods*).
- 6.8) New east-west connectivity or comparable street, circulation, and/or transit improvements, should be explored as part of any proposed development and/or any future planning efforts for properties to the west of Route 1.
- 6.9) With any rezoning of the property, The provision and timing of improvements to the intersection of E. Glebe Road at Route 1 are required will be addressed within the CDD zoning.
- 6.10) Each development will be required to submit a comprehensive approach and policy regarding truck loading and deliveries as part of the development review process.

## Transit

6.11) Require the construction of an operational Metrorail station. Rezoning of the property is contingent upon the City and the landowner agreeing to a financial plan funding the Metrorail station.

- 6.12) In conjunction with other public agencies, <u>streets</u>, <u>public spaces</u>, <u>and transit facilities should be</u> <u>designed and constructed in a manner that supports and facilitates transfers between the various transportation modes a new intermodal transit and transit center shall be constructed proximate to the new Metrorail station.</u>
- 6.13) Require the construction of <u>a-the Metroway transitway</u>. The final alignment of the <u>transitway</u> <u>Metroway</u> and station locations shall be determined with <u>any rezoning for the site subsequent phases</u>.
- 6.14) Require dedication of right-of-way to accommodate the high-capacity transitway Metroway.
- 6.15) Explore options to iIncorporate green technologies into the design of the dedicated transit right-of-way and stations.
- 6.16) Transit stations should be designed to include real-time transit information and innovative display technologies to include route maps, schedules, and local and regional information.
- 6.17) Require participation in a Transportation Management (TMP) District in coordination with existing Potomac Yard TMP District.
- 6.18) Employ aggressive Transportation Management Plan (TMP) performance measures, meeting or exceeding a 5060% non-SOV modal split.
- 6.19) Explore additional local-serving routes to connect locations within Potomac Yard to nearby communities and destinations.

### **Parking**

- 6.20) On-street parking is required to be metered and managed through a performance parking program.
- 6.21) Provide advanced parking management systems including real-time parking availability, pre-trip parking information and parking reservation/navigation systems.
- 6.20) Require long and short term bicycle parking. 6.22) Adhere to additional parking recommendations found in Chapter 4: Land Use Recommendations *Parking*.

### Pedestrian – Bicycle

- 6.23) Provide a continuous, connected and accessible network that enables pedestrians particularly those with mobility impairments to move safely and comfortably between places and destinations.
- 6.24) Develop a comprehensive on- and off-street bicycle network.
- 6.25) Develop a connected system of primary and secondary bikeways with ample bicycle parking to serve all bicyclists' needs.
- 6.26) Provide a 24-hour bicycle and pedestrian connection across the railroad tracks to Potomac Greens in conjunction with Metrorail station development.
- 6.27) Provide centralized bicycle storage facilities, located near the Metrorail and transit locations for all users of Potomac Yard including areas for private and for shared-use bicycles in conjunction with Metrorail station development. Commuter and recreational bicycle information could also be available to residents and visitors.
- 6.28) Explore Provide a future connection from Potomac Yard Park Landbay K across the George Washington Memorial Parkway to the Mount Vernon Trail.
- 6.29) Provide a future connection from Potomac Yard Park Landbay K to the Four Mile Run Trail.
- 6.30) Require an off-street shared-use path along the length of <u>Landbay K Potomac Yard Park</u> between Braddock Road to the south and Four Mile Run to the north.
- 6.31) Incorporate Bikeshare stations at key activity centers within the Plan area.

# **Chapter 7 Infrastructure**

### A. Water Management Master Plan

With the intent of fully complying with Alexandria's Eco-City Charter of sustainably managing water resources to meet regulatory and capacity needs, a Water Management Master Plan (WMMP) is required to be provided by the developer, which will coordinate water supply, stormwater management, and wastewater systems. The Plan will include systems to reduce potable water use by capturing and reusing rainwater, reducing wastewater generation through water conservation, implementing low impact development (LID) and green infrastructure techniques for managing stormwater, and exploring reuse of greywater. These, in turn, will serve to reduce development impact on the storm and sewer infrastructure, and improve the instream habitat and water quality of Four Mile Run, the Potomac River, and the Chesapeake Bay.

Green infrastructure is an integral component of sustainable communities primarily because it can help protect the environment and human health while providing other social and economic benefits.

### B. Stormwater Management

Redevelopment presents an opportunity to coordinate stormwater management on individual blocks, in new public roads and rights-of-way, and throughout North Potomac Yard that integrates within the development frameworksimultaneously. To accomplish the innovative stormwater goals envisioned as part of the Plan, the WMMP will incorporate specific stormwater management requirements. Both smaller on-site systems and larger facilities serving multiple blocks will be required to be integrated as part of the WMMP. The innovative techniques specified will provide enhanced stormwater performance measures that exceed water quality requirements current at the time of development. Individual blocks, for example, should incorporate elements such as vegetated green roofs, rainwater harvesting, pervious pavement systems, urbanand bio-retention, and tree wells that integrate into the infrastructure. The technologies helpareas to reduce the amount of stormwater runoff generated, treat stormwater runoff, create ecological habitat, provide cleaner air and other public health benefits, and reuse the remaining stormwater to the greatest extent possible. The harvested rainwater will provide irrigation to adjacent vegetated areas such as on-site landscaping and tree wells located in the public right of way.

The WMMP may allow for the possibility of locating limited stormwater management infrastructure in the public realm including new public roadways consistent with City requirements. Green infrastructure LID techniques that require infiltration such as urban bio-retention, infiltration planters, vegetated swales, native tree planting, cisterns, vegetated green roofs, and pervious surfaces (including but not limited to native plant materials, permeable paving, porous concrete, sidewalk planters, and other techniques) provide the opportunity to remove pollutants in stormwater runoff, reduce the volume of runoff, help clean the air, reduce energy costs, promote public health, and provide other community amenities.

The installation of green infrastructure that requires infiltration will require special consideration due to low-level soil and groundwater contamination remaining from Potomac Yard's previous use as a railyard. Larger stormwater facilities, such as the stormwater management pond planned for Crescent Park, will be required to be designed to provide a high level of nutrient removal as well as function as a high-quality recreational amenity for residents and visitors and be integrated into the overall design of this urban park.

Since North Potomac Yard is uniquely located at the confluence of Four Mile Run and the Potomac River, the redevelopment is required to support the guidelines outlined in the Four Mile Run Restoration Master Plan while further enhancing protection of the adjacent Resource Protection Areas (RPA). This proposal will reclaim portions of the RPA to improve riparian character and ecological functionality.

# C. Wastewater Management

North Potomac Yard will have a significant impact on the City of Alexandria's sanitary sewer collection system and Alexandria Renew Enterprises' Alexandria Sanitation Authority's (ASA)(AlexRenew) wastewater-sewer collection and wastewater treatment systems. As a condition of approval of the Potomac Yard/Potomac Greens CDD zoning for CDD#10, a sanitary sewer line interceptor was built from the Potomac Yard development directly to the ASA AlexRenew Advanced Wastewater Treatment (AWT) facility. This Potomac Yard Off site Sanitary Trunk Sewer (PYTS) was required because the City's sanitary sewer collection system existing sewer system (both City and AlexRenew) did not have sufficient capacity to carry the sanitary flows from development proposed within the CDD#10. The PYTS was designed to include additional capacity (beyond the anticipated requirement of the CDD#10 at that time) to meet future needs of the City including the diversion of wet weather flows from the AlexRenew Four Mile Run Pump Station, separation of a portion of the City's combined sewer system (CSS) flows in the Old Town area, and limited development along the Route 1 corridor.

In the Potomac Yard/Potomac Greens CDD, it was anticipated that the redevelopment of North Potomac Yard would contain up to 600,000 square feet of development. The Plan recommends increasing the permitted amount of development from 600,000 square feet to 7.5 million square feet. The sanitary flows generated from this level of development slightly exceed the remaining unallocated capacity in the PYTS, including what had originally been designed to accommodate future City needs, i.e., separated sanitary flows from CSS area and other future developments.

Based on preliminary analysis, the City's conservative flow estimates indicate that an assignment of the available capacity will likely lead to a surcharges surcharged (i.e. an over capacity) condition within the PYTS, with the potential to cause back-ups and sanitary sewer overflows into the environment. The City has evaluated several options for accommodating the additional flows anticipated from North Potomac Yard, which includes the use of low flow plumbing fixtures and practicing water conservation measures to reduce the generation of the municipal wastewater, construction of a separate, parallel sanitary trunk sewer, and possible reuse of greywater. The use of low-flow fixtures and water conservation practices are in accordance to the recommended by the City's Eco-City Charter adopted by the City of Alexandria. With these water conservation measures, additional conveyance capacity will still be needed to convey the flows from the area to the treatment plant. The applicant will contribute funding toward the required improvements to the infrastructure to provide the necessary conveyance for the 7.5 million square feet in proposed development. In addition to the limited conveyance capacity, the City is evaluating capacity needs at the ASA AlexRenew wastewater treatment facility. Based on the most current development projections, sufficient treatment capacity should be available for this development.

# D. Solid Waste Management

In compliance with the City's Eco-City Charter, the developer will prepare a solid waste management plan for handling and dispose-disposal of solid wastes in an environmentally sustainable manner, which will include a hierarchy of uses: Reduce, Reuse, Recycle Resource Recovery, and Proper Disposal. The Plan shall develop a program to recycle the construction and demolition debris and materials that can be converted into valuable resources that would otherwise become waste.

### E. Pump Station

A pump station will need to be constructed to accommodate the planned development within North Potomac Yard to pump sanitary sewage from the Plan area to the PYTS. The Plan recommends the pump station be generally located at the northern portion of Plan area as generally depicted in Figure 7.1, either adjacent to or integrated into Potomac Yard Park. The Plan recommends the pump station be designed in a manner that is integrated and compatible with the design and programmed uses of the adjoining Potomac Yard Park, and the facility be designed with high-quality materials compatible with the design of the adjoining Potomac Yard Park. The facility shall be located as close to the existing rail corridor, if feasible, to minimize impacts to Potomac Yard Park.

The design of the facility will require coordination with the City and AlexRenew. The pump station will need to be designed and constructed in accordance with AlexRenew's guidelines and requirements and ensure sufficient pumping capacity to serve the entire Plan area. Design of the pump station will be conducted as part of the Phase I development special use permit and design of Potomac Yard Park.

F. Dominion Virginia Power (DVP) Proposed 230-KV Transmission Line
Dominion Virginia Power's project will add and upgrade equipment at the existing switching station on
E. Abingdon Drive in Alexandria, and connect to the Glebe Substation on S. Glebe Road in Arlington.
DVP's 230-KV Transmission Line could be located underground within the northern portion of the Plan
area and potentially under a segment of Potomac Yard Park, Four Mile Run Park, and the future Crescent
Park. As part of DVP's project, the existing terminal station along the southern bank of Four Mile Run
will be removed, consistent with the Four Mile Run Master Plan. The Plan recommends that the final
alignment of the transmission line minimize impacts to the planned open space and programming and
improvements within North Potomac Yard and Four Mile Run.

#### **Infrastructure Recommendations**

#### Stormwater Management

- 7.1) \_\_\_A Water Management Master Plan (WMMP) is required as part of the rezoningCDD requirements. The WMMP will be updated/amended with each building and/or block to demonstrate compliance with each applicable phase.
- -7.2) Require use of pervious surfaces on sidewalks, driveways, parking areas, and streets to reduce generation of stormwater runoff, and provide green infrastructure practices to reduce stormwater pollution.
- 7.3) Maximize use of rooftop space for other sustainability practices (for example, for open space, community gardens, green roofs, energy generation, etc).
- 7.4) Maximize on-site stormwater reduction and reuse techniques to reduce the impact on public stormwater infrastructure.
- 7.5) Remove impervious surfaces within RPAs and revegetate to restore function and quality.
- 7.6) Maximize exposure of stormwater management facilities as functional amenities to promote citizen awareness and understanding of stormwater quality issues, while providing community co-benefits through the use of green infrastructure.
- 7.7) Construct additional sanitary sewer conveyance infrastructure to address sanitary sewer needs for the Plan are and address Potomac River and Chesapeake Bay nutrient treatment needs.
- 7.8) Use harvested rainwater to meet irrigation demand.
- 7.9) Research and evaluate other pioneering technologies to address the capacity needs.

### Wastewater Management

7.10) Use water conservation measures to reduce the generation of municipal wastewater and explore reuse of greywater.

## Solid Waste Management

- 7.11) Develop and launch an education program that will include a hierarchy of uses: Reduce, Reuse, Recycle, and Proper Disposal of hazardous wastes.
- 7.12) Develop a recycling program for commercial and multi-family buildings.
- 7.13) Develop a community recycling program.

#### Pump Station

Editorial note: The order of recommendations has been

reorganized by topic area.

7.14) The facility shall be located on the northeastern portion of the Plan area as generally depicted in Figure (XX).

7.15) The pump station will be designed with high quality materials and in a manner that ensures integration and compatibility with the design and programmed uses of the adjoining Potomac Yard Park. The facility should be located as close to the existing rail corridor as feasible to minimize impacts to the Potomac Yard Park. The design of the facility will require coordination between the City, developer, AlexRenew and conducted as part of the Phase I development special use permit and design of Potomac Yard Park.

Dominion Virginia Power Proposed 230-KV Transmission Line

7.16) Any future power transmission lines should be undergrounded by DVP and located in a manner to minimize the planned improvements within North Potomac Yard and Four Mile Run. As part of the construction of any additional transmission lines, the existing terminal station within Four Mile Run (Figure XX), should be removed by DVP.

## Chapter 8 Existing & Planned Neighborhoods

## A. Neighborhood Character

The planning principles state that connections and transitions should be provided that are appropriate and protective of the character of surrounding neighborhoods. Each of the neighborhoods surrounding North Potomac Yard has a unique character that should be retained. New development should be compatible with the surrounding neighborhoods.

### B. Established Neighborhoods

The neighborhoods located on the west side of Route 1, are low-density residential neighborhoods of historical and architectural significance. In particular, the Town of Potomac (which includes portions of the present-day Mount Jefferson and Del Ray communities), was designated a National Register Historic District in 1992. The area began to develop in 1894 as the planned residential communities of Del Ray and St. Elmo, and was incorporated as the Town of Potomac in 1908 before being annexed by the City of Alexandria in 1930. These neighborhoods were some of the first streetcar suburbs in America.

The Lynhaven community is a predominately residential community of single-family, townhouse, and multi-family homes, most of which were constructed in the 1940s to house the largely African-American Potomac Yard railroad workers. North of Lynhaven, constructed as early as 1942, the Hume Springs community now includes a mix single-family, brick row houses, townhouses, and multi-family homes. The Del Ray and Mount Jefferson communities are located just south of Lynhaven on the west side of Route 1 across from Landbays G, H, I, and J. The communities include a mix of single-family, duplex, and multifamily homes, and commercial and industrial uses. Activity in this area is centered around the Mount Vernon Avenue commercial district. Many of the railroad workers at Potomac Yard resided in the Del Ray and Mount Jefferson communities.

### C. New Neighborhoods

New neighborhoods are also located within the vicinity of North Potomac Yard, and include Potomac Yard Arlington, Landbay G (Town Center), South Potomac Yard, and Potomac Greens, and Route 1 Corridor - Oakville Triangle.

#### Potomac Yard Arlington

Across Four Mile Run, Potomac Yard Arlington is a development which, when complete, will include approximately 2 million square feet of office uses, 225,000 square feet of retail uses, 1,500 multi-family units, and 625 hotel rooms. Building heights will range from approximately 120 to 160 feet.

### South Potomac Yard

South Potomac Yard is a neighborhood with a mix of office, residential, and retail uses. The neighborhood contains approximately 2 million sq. ft. of commercial uses, approximately 1,840 residential units and approximately -145,000 sq.ft. of retail. The building types include mid-rise multifamily buildings, townhouses, office and hotel buildings. The heights within South Potomac Yard currently range from 40 to 44 for most townhouses, up to 82 feet for multi-family residential buildings, and up to 132 for office buildings. In early 2009, the City Council An approved a-mixed-use, urban "Town Center" development is located in Landbay G\_within South Potomac Yard. The Town Center was approved for approximately 700,000 square feet of sapproved for a mix of office, retail, hotel, and multifamily residential uses, 183,000 square feet of retail uses, 414 multi-family units, and 623 hotel rooms.

The South Potomac Yard neighborhood establishes the urban framework which the North Potomac Yard Plan builds upon, creating a walkable, urban-scale system of blocks with active uses to encourage and reinforce the pedestrian experience.

#### Potomac Greens/Old Town Greens

Potomac Greens/Old Town Greens, located to the east of the CSX railroad and Metrorail tracks, is a new residential community consisting of 2- and 3-story townhouses. The Potomac Greens development is located in Landbay A of Potomac Yard/Potomac Greens. There are 436 townhouse units within the Potomac Greens/Old Town Greens neighborhood. Building heights range from 35 ft. to 45 ft. In addition Also, there is an approximately 15,000 sq. ft. of neighborhood serving retail on Slater's Lane which is located in Landbay C (Potomac Plaza).

# Oakville Triangle - Route 1 Corridor Plan

The Oakville Triangle – Route 1 Corridor Plan builds on the strengths of the contextual area, the industrial heritage of Potomac Yard, the character of the adjoining neighborhoods, the Metroway and Metrorail station, and the planned and existing uses within Potomac Yard. The Plan area contains 24 acres with 2.7 million sq. ft. of anticipated mixed uses to include office, hotel, residential, and a combination of retail, neighborhood serving and "maker space" uses. The new neighborhood will provide improved and enhanced open spaces that connect the existing neighborhoods on the west of Route 1 to the larger system of open spaces in the area. The Plan establishes community amenities, including affordable housing, open space, streetscape, and transportation infrastructure improvements for pedestrians, bikes, and cars.

# D. Connectivity and Accessibility

The existing neighborhoods are served by an interconnected system of streets, pedestrian and bicycle routes and trails, and open space. Route 1 is currently perceived as a barrier between the existing neighborhoods and Potomac Yard, in particular for pedestrians and bicyclists. The 1999 Concept Plan for Potomac Yard strives to integrate new development with existing neighborhoods. The continuation and expansion of this philosophy in North Potomac Yard will not only enable residents, workers, and visitors of existing neighborhoods to access amenities at Potomac Yard, but also it will increase the accessibility of amenities in existing neighborhoods to future residents, workers, and visitors of Potomac Yard.

The Metroway and new Metrorail Station provide existing and future residents with direct access to the larger regional and sub-regional transit system and encourage multi-modal transportation use. The Metroway provides jurisdictional connections between Braddock Road and Crystal City while the Metrorail station provides regional connections to Fairfax County, Arlington, Washington DC, and Maryland. To facilitate connections between existing neighborhoods to the west of the Plan area, the planned improvements as part of the Oakville Triangle – Route 1 Corridor Plan and proposed Phase I Potomac Avenue operation will enhance and improve pedestrian connection and accessibility across Route 1 and Potomac Avenue. Specific information concerning the transportation network can be found in Chapter 6: Transportation.

# E. Mitigating Neighborhood Traffic Impacts

The Potomac Yard Multi-modal Transportation Study found that traffic will increase with new development, including on collector streets such as E. Glebe and Reed, and incremental increases on local streets. Currently, the majority some of the streets on the west side of Route 1 do not have access to Route

1 nor do they provide direct access to collector roadways on the west. Threshold analyses were performed to confirm that the anticipated volumes on the east-west roadways would not exceed the design capacity of the local roadway system. The analysis also showed that the greater the connectivity of the street grid the greater the dispersal of trips on the street network and, thus the impact on any one street is minimized. The Plan provides for a number of amenities and benefits to surrounding neighborhoods, including enhanced transit service, better connectivity and bicycle and pedestrian accommodations. *Chapter 6: Transportation* identifies a number of recommendations that address issues of connectivity and mitigating impacts on adjacent neighborhoods.

While the anticipated impact does not exceed the technical capacity of the existing local street, there will be some impacts perceived by the residents living in adjacent neighborhoods. The narrow streets and frequent blocks in the adjacent neighborhoods are already a model of good neighborhood design that distributes traffic and encourages lower speeds.

In anticipation of increased traffic volumes, a variety of additional traffic calming and parking management strategies could be considered. The Plan recommends that the developer be required to provide a monetary contribution for a comprehensive traffic calming strategy, to be implemented in the immediately adjacent neighborhoods and beyond, and appropriately phased with development as it comes in for review. The City will conduct engagement with the neighborhoods to identify potential impacts and traffic calming improvements prior to the completion of developments. Baseline traffic data should will be collected for evaluation of future impacts of development. While a number of some tools would be considered as part of the comprehensive strategy, one strategy may be to provide traffic calming treatments specifically within the first blocks off of Route 1 to alert drivers of the residential character of the neighborhoods. Other tools include managing intersections with streetscape improvements, raised crosswalks, curb extensions, speed cushions, traffic circles, developing a parking management plan and other traffic calming treatments.

# **Existing Neighborhoods Recommendations**

- 8.1) Require the developer to provide a monetary contribution for the preparation and implementation of a comprehensive traffic calming and parking management strategy for the neighborhoods to the west of Potomac Yard. The study and implementation shall be proactive and phased with development.
- 8.2) Evaluate alternatives for traffic calming treatments at gateway locations along the west side of Route 1 and throughout neighborhoods.
- 8.3) Promote smooth transitions between existing neighborhoods and new development at North Potomac Yard through a careful consideration of uses, heights, and massing.
- 8.4) Development at North Potomac Yard should preserve and build upon the unique history and character of existing neighborhoods.
- 8.5) Develop connections which are consistent and compatible with existing development within Potomac Yard and across Route 1.