

NATIONAL CAPITAL COMMISSION

FEDERAL LAND USE, DESIGN, AND TRANSACTION APPROVAL SUBMISSION

MARCH 2020



NATIONAL CAPITAL COMMISSION

FEDERAL LAND USE, DESIGN, AND TRANSACTION APPROVAL SUBMISSION

MARCH 2020

March 2020

The information contained in this document produced by Re: public Urbanism is solely for the use of the Client identified above for the purpose for which it has been prepared and Re: public Urbanism undertakes no duty to or accepts any responsibility to any third party who may rely upon this document.

Re: PUBLIC PROJET | PAYSAGE Avenue31 figure | JENNIFER MURRAY | LAND DEVELOPMENT & PROJECT MANAGEMENT



TABLE OF CONTENTS

1.0	PROJECT SUMMARY	6	4.0 POLICY CONFORMANCE REVIEW	4
1.1 PROJECT SUMMARY		6	4.1 PLAN FOR CANADA'S CAPITAL (2017–2067)	2
			4.2 CAPITAL URBAN LANDS PLAN (2017–2067)	2
	1.1 PROJECT DESCRIPTION	6	4.3 GREENBELT MASTER PLAN	2
	1.2 SITE ANALYSIS	9	4.4 FEDERAL & NCC SUSTAINABLE DEVELOPMENT STRATEGIES	2
	1.3 URBAN CONTEXT	10	4.5 PROVINCIAL POLICY STATEMENT	
	1.4 PROJECT OBJECTIVES	11		_
	1.5 PROJECT SCHEDULE	12	4.6 CITY OF OTTAWA OFFICIAL PLAN	5
			4.7 CITY OF OTTAWA ZONING BY-LAW 2008-250	5
2.0	PROPOSED PRINCIPLES & GUIDELINES FOR THE NCBP	14	5.0 IMPLEMENTATION PLAN	5
	2.1 GUIDING PRINCIPLES	14		
	2.2 DESIGN PRINCIPLES	15	5.1 MASTER PLAN APPROVALS PROCESS	5
	2.3 URBAN DESIGN GUIDELINES	16	5.2 DEVELOPMENT APPROVALS PROCESS	5
	2.4 UNIVERSAL ACCESSIBILITY BRIEF	32	5.3 PUBLIC CONSULTATION SUMMARY	5
3.0	PROPOSED DEMONSTRATION PLAN FOR THE NCBP	34	6.0 LONG-TERM IMPLEMENTATION	5
	2.4. PROPOSED DEMONSTRATION DI ANI	2.4	6.1 ADDRESSING THE ENVIRONMENT	5
	3.1 PROPOSED DEMONSTRATION PLAN	34	6.2 RISE OF AUTOMATION & AI	5
	3.2 EXPLANATORY NOTE ON DEMONSTRATION PLAN	34	6.3 RISE OF AUTONOMOUS VEHICLES	Ę
	3.3 LANDSCAPE PLAN	36		
	3.4 CIRCULATION PLAN	37	7.0 CONCLUSION	6
	3.5 LANDSCAPE ZONES	38	0 00.110200.011	0
	3.6 RENDERED ARCHITECTURAL VIEWS	39		

EXECUTIVE SUMMARY

This document constitutes Avenue 31's Federal Land Use, Design, and Transaction Approvals (FLUDTA) submission for the National Capital Business Park located at 4120 and 4055 Russell Road in the City of Ottawa and has been developed based on the submission requirements identified at the FLUDTA pre-consultation held between the Avenue 31 and the National Capital Commission on November 13, 2019. The document is organized in seven sections outlining the:

- The project summary including the project description, site and context analysis, project objectives and schedule
- The proposed guiding principles and guidelines – including the overall project principles, subsequent design principles, detailed design and sustainability guidelines, and a brief on the universal accessibility requirements for the project
- The proposed demonstration plan including the master demonstration plan and architectural renderings of the proposed development
- Policy Conformance Review reviewing and analysing all relevant federal, NCC, provincial, and City policies and regulations and demonstrating conformity of the proposed development with those policies and regulations

- Implementation plan including the master plan approvals process, detailed site development approvals process, and the public consultation undertaken in support of the proposed development
- Long term implementation outlining the flexibility and long range implementation of the development

The submission concludes with a professional planning opinion regarding the proposed development, recommending approval of the proposed development by the NCC.



1.0 PROJECT SUMMARY

1.1 PROJECT DESCRIPTION

The National Capital Business Park (NCBP) will be a premier business and industrial park to service the warehousing, data communications centres, distribution and employment needs of the National Capital Region by providing over 100,000 m2 (1,000,000 ft²) of new build-to-suit office, warehouse, and industrial space on approximately 40 ha (100 acres) of urban land. The NCBP will be composed of 3 distinct sites and developments planned and designed as a cohesive industrial park through urban design, landscape architecture, and architecture. The sites are described as follows:

Site 1 – 4120 Russell Road

Lot Area: 46 652 m2 Proposed Building Area: 8 325 m2

Site 2 - 4120 Russell Road

Lot Area: 74 718 m2

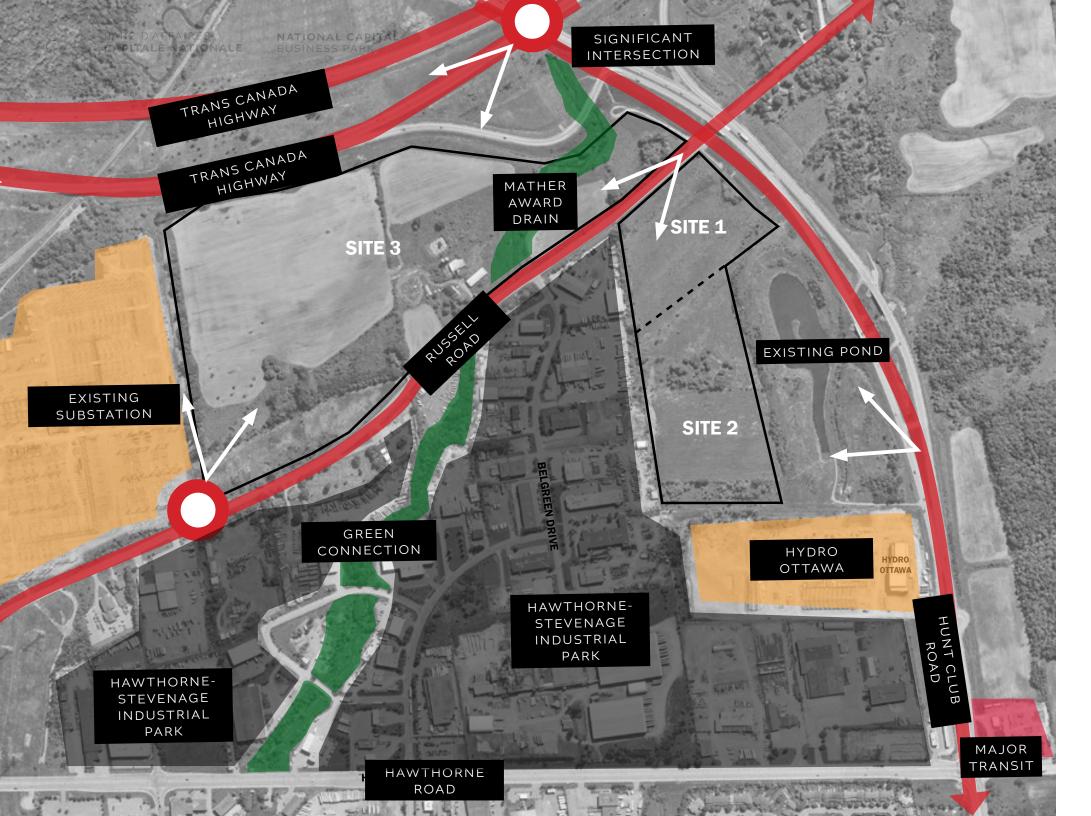
Proposed Building Area: 17 400 m2

Site 3 – 4055 Russell Road

Lot Area: 283 698 m2

Proposed Building Area: 75 020 m2

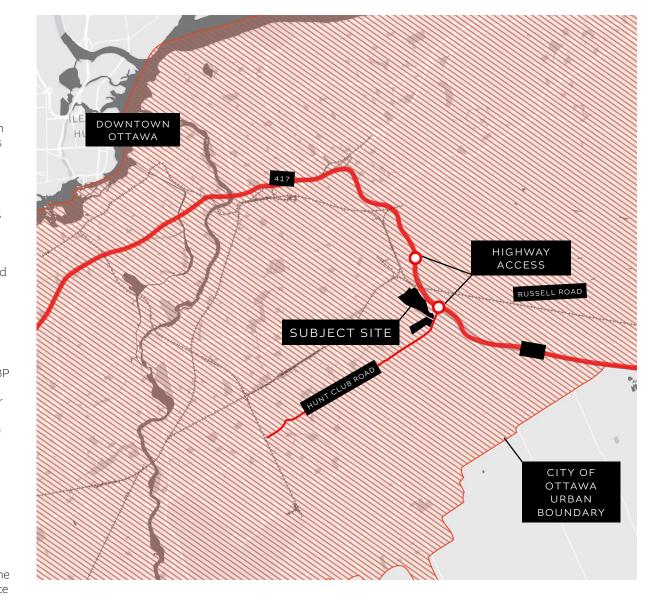




1.2 SITE ANALYSIS

The subject lands are located in the Hawthorne-Stevenage Industrial Park immediately west of the Highway 417 / Hunt Club Road interchange in south east Ottawa at one of the primary gateways to the National Capital Region's urban area. The lands are notably situated at the interface between the Greenbelt to the south and east, and the City's urban fabric to the north and west, with the two major roads physically dividing the areas. The overall site is made up of two distinct tracts of land on either side of Russell Road, acquired by the NCC between 1960 and 1974. Today, the sites are a mix of fallow and previously cultivated lands, with the largest parcel on the east side of Russell Road containing a residential bungalow, a former farm and associated vacant buildings now in varied states of repair. The Mather Award Drain also runs through the south end of the largest site, draining into McEwan's Creek to the south of the property. Providing municipal drainage to much of the developed Hawthorne-Stevenage Industrial Park.

Highway 417 and Hunt Club Road border the NCBP on the east and south, respectively; Russel Road bisects the larger Site 3 from Sites 1 and 2. Further east and south of the NCBP is the Greenbelt, containing a range of open space, natural heritage features (forest, wetland), agriculture, and low density rural residential uses; as mentioned, the roadways act as defined physical border for the Greenbelt. The existing Hawthorne-Stevenage Industrial Park that has developed around the subject lands, contains a range of light to heavy industrial and service uses. There are two major public utilities uses located in the vicinity: Hydro Ottawa maintains offices and a yard immediately west of Sites 1 and 2, and; Hydro One maintains the Hawthorne Transformer Station to the north of Site



1.3 URBAN CONTEXT















1.4 PROJECT **OBJECTIVES**

Creating Economic Opportunity

At its core the National Capital Business Park is about creating new economic opportunities for the National Capital Region and supporting the long-term diversification and resiliency of the Region's economy. The National Capital Business Park will be an opportunity to create new employment lands, jobs and new assessment value for the Region, and capitalizing on underutilized lands.

Incorporating Design Excellence

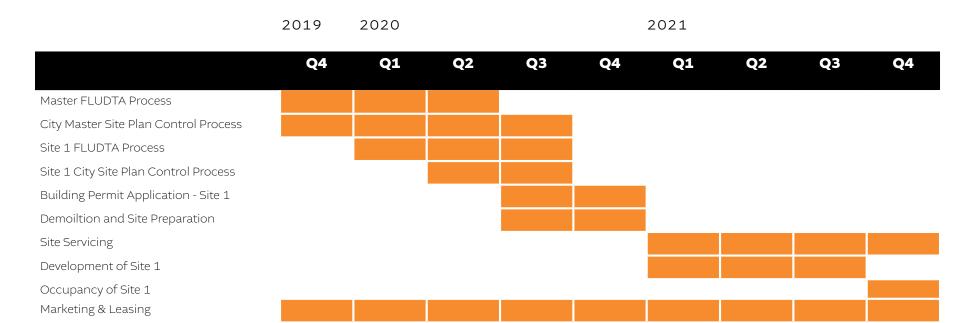
A part of Avenue 31's core values is creating forward-looking and visionary projects that respond to future needs. Through the incorporation of best practices in architecture, landscape architecture, and urban design, the National Capital Business Park will serve as a symbol for the National Capital Region and a performance-driven Park that integrating the best in sustainability, resiliency, and technology

Creating a Positive Legacy

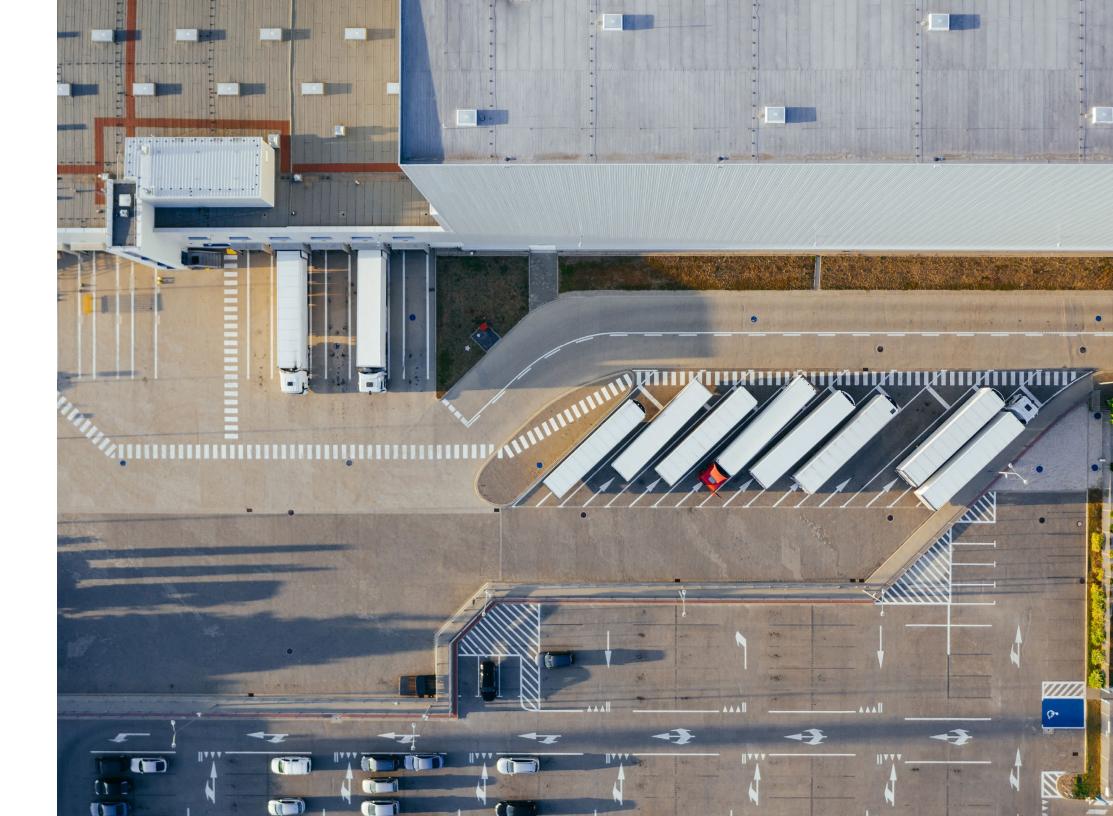
The NCC is the crown corporation responsible for planning, developing, and managing lands and buildings in the National Capital Region, to create a Region that is of national significance. In partnering in the development of the National Capital Business Park, the NCC along with Avenue 31, will ensure that the development of the site will create a positive legacy for the NCC and reflect the NCC's goals, objectives that it implements through its plans.



1.5 PROJECT SCHEDULE



Note: sites 2 and 3 will proceed as per market demand



2.0 PROPOSED PRINCIPLES & GUIDELINES FOR THE NCBP

2.1 GUIDING PRINCIPLES



GATEWAY TO THE NATIONAL CAPITAL REGION

The National Capital Business Park recognises its location as a major entrance to the National Capital Region and its design will ensure that it becomes a symbol of economic prosperity and growth for the Region. Acknowledging the legacy of the NCC and the history of the National Capital Region, the National Capital Business Park will be a welcoming gateway to Ottawa.

CREATING ECONOMIC OPPORTUNITY & DESIGNING FOR DISRUPTION

The National Capital Business Park will be developed to attract and grow businesses on the leading edge of our economy including logistics, data processing, and research and development. By attracting tomorrow's leaders, the Park will take advantage of new technologies and industry



RESPECTING THE NATURAL ENVIRONMENT

Located at the interface between the City's urban area and the NCC's Greenbelt the National Capital Business Park will take advantage of its location, context, and the natural beauty of the Greenbelt by incorporating the natural environment into the site. Viewing all decisions through a sustainability lens, the Park will seek to explore ways to reduce its carbon footprint and incorporate environmental performance into its design.

2.2 DESIGN PRINCIPLES







RESPONDING TO CONTEXT

The National Capital Business Park recognises that good design flows from the physical, social, and economic context of its site. Local influences, both natural and built, will be identified and incorporated in the design. It will recognise and respond to its context at the regional, neighbourhood, and site scale, including: using existing topography, drainage, landscape features, and vegetation; making efficient use of existing infrastructure and improving circulation, drainage, and other infrastructure systems; and responding to the local land use context to ensure that the Park improves not only the site but area the around it.

REFLECTING THE NCC'S LEGACY

The National Capital Business Park will conserve, enhance the site to create a strong sense of place that is reflective of the site's history and the NCC's legacy. The Park will use design, architecture, and landscape that builds upon the history of the National Capital Region and reflects the priorities of the NCC including the protection and enhancement of the Greenbelt, entryways and viewsheds, and the protection of the natural environment.

PROMOTING DESIGN EXCELLENCE

The National Capital Business Park will make a contribution to the area's structure and identity recognising that successful cities include vibrant places with a strong sense of identity. The creation of a quality urban design will be one of the most important components of the development of the National Capital Business Park. Its built form, streetscape, and open spaces will be attractive, safe, and comfortable, and maintain the overall visual cohesiveness of the area.

2.3 URBAN DESIGN GUIDELINES

RESPONDING TO CONTEXT

The National Capital Business Park recognises that good design flows from the physical, social, and economic context of its site. Local influences, both natural and built, will be identified and incorporated in the design. It will recognise and respond to its context at the regional, neighbourhood, and site scale, including: using existing topography, drainage, landscape features, and vegetation; making efficient use of existing infrastructure and improving circulation, drainage, and other infrastructure systems; and responding to the local land use context to ensure that the Park improves not only the site but area the around it.







2.3.1 SITE LAYOUT

- a.) The topography of the site will be analyzed to:
 - i.) take advantage of natural drainage patterns and grade;
- ii.) minimize the amount of earth moving required;
- iii.) direct stormwater and sanitary by gravity to the existing municipal infrastructure; and
- iv.) make efficient use of the property and optimizing existing infrastructure.
- b.) The location of proposed buildings, alignment of access roads and parking areas will consider existing features of the site, to create a unique identity for the project.
- c.) The arrival area will focus the formalized design to a central plaza area.
- d.) d) Site elements such as buildings, parking, driveways, walking paths and amenity areas will be arranged to emphasize the stronger design

- components of the site (e.g., landscaping, view corridors, naturalized areas) and deemphasize and functional elements (e.g., service facilities, parking areas, and refuse enclosures) through proper placement and design of buildings and landscaping;
- e.) Multiple service / loading facilities will be located adjacent to each other to reduce visual and noise impacts;
- f.) The location and orientation of buildings will frame and address the site's natural features. and where possible, provide new opportunities for access and visual connections to the landscape; and,
- g.) Loading areas will be located and designed to minimize direct exposure to public view. These areas will be buffered with landscaping or other design features to reduce the visual impact whenever possible. At the same time, recognizing the logistical needs and context as an industrial area.

2.3.2 PARKING & VEHICULAR CIRCULATION

- a.) Parking lots will be strategically located to reduce their visual impact and, to ensure direct connections between the street and the building entrance and to avoid obstructing views of the building's front façade from the street where
- b.) Primary access points for automobiles will be enhanced with elements such as ornamental landscaping, low-level decorative walls, monument-type signs, and decorative paving to emphasize site access locations;
- c.) Site access and internal circulation will promote safety, efficiency, convenience, and minimize conflict between vehicles and large trucks; and,
- d.) Unobstructed sight lines at corners and midblock will improve visibility for vehicles exiting and entering the site.



2.3.3 SERVICE AREAS & UTILITIES

- a.) Where practical and feasible, installed equipment, electrical rooms, and service rooms will be placed within the footprint of the buildings, or screened from view; and,
- b.) When possible, refuse storage and loading areas should be screened from public view from Highway 417 and Hunt Club Road.

REFLECTING THE NCC'S LEGACY

The National Capital Business Park will enhance the existing features of the site to create a strong sense of place. The Park will use design, architecture, and landscape that builds upon the history of the National Capital Region and reflects the priorities of the NCC including the protection and enhancement of the Greenbelt, entryways and viewsheds, and the protection of the natural environment.





2.3.4 HERITAGE & CULTURE OF THE NATIONAL CAPITAL REGION

- a.) The character of the Park and buildings within will communicate its special nature to users and visitors and create a high-quality environment that sets it apart from other industrial parks
- b.) The site's location as a gateway to National Capital Region will be an underlying placemaking feature of the site told through a coordinated master plan and branding.



2.3.5 THE GREENBELT INTERFACE & VIEWSHEDS

- a.) When adjacent to the Greenbelt and / or identified priority viewsheds additional landscaping in conjunction with required setbacks will be provided to mitigate potential visual adverse impacts; and,
- b.) Parking areas located within or abutting the Greenbelt and / or identified viewsheds will be developed with landscaping along property lines to reduce the visibility of vehicles.



2.3.6 NATURAL HERITAGE & HABITAT PROTECTION

- a.) Roads, driveways, loading and unloading areas near the existing natural features will be planned to minimize impact;
- b.) Biodiversity will be encouraged through the selection of native, non-invasive and drought-tolerant species in naturalized / low maintenance landscaped areas; and,
- c.) Consideration will be given to a planting range of flowering species which blossom successively throughout the spring, summer and fall seasons to support nectar and pollen supplies.
- d.) An Environmental Impact Statement (EIS) will be developed for the master plan and any specific recommendations will be implement through the design and landscaping of the site.

PROMOTING DESIGN EXCELLENCE

The National Capital Business Park will make a contribution to the area's structure and identity recognising that successful cities include vibrant places with a strong sense of identity. The creation of quality urban design will be one of the most important components of the development of the National Capital Business Park. Its built form, streetscape, and open spaces will be attractive, safe, and comfortable, and maintain the overall visual cohesiveness of the area.





2.3.7 SIGNAGE

- a.) Signs attached to the buildings shall be designed to be an integrated part of the building, (e.g. recessed into the façade or fascia);
- b.) Freestanding identification signs may include the building address and should be located near the street frontage and ground mounted in a landscape setting;
- c.) Materials and colours used on the sign will be consistent and compatible with the Park's comprehensive colour and materials scheme;
- d.) Signs shall not dominate the streetscape by their size or height and may be internally or externally lit; and
- e.) A central "beacon sign" will be visible from Russell Rd and from the Hwy 417 eastbound off-ramps. The signage will be subject to review by the NCC, the Ministry of Transportation and the Municipality under signage by-laws.



2.3.8 ARCHITECTURAL DESIGN

- a.) Building heights, massing and setbacks will be varied, to define different functions such as offices and
- b.) Vertical and horizontal offsets will be integrated within building façades to minimize building bulk; and
- c.) Primary building entries will be readily identifiable and well defined through the use of projections, recesses, columns, roof structures, or other design elements.

ARCHITECTURAL INSPIRATION SOURCES



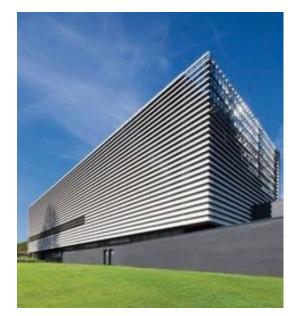
AERIAL TULIP FIELDS

Tulip fields in Anna Paulowna, photographed by Normann Szkop

















DESIGN INSPIRATION / PROJECT IDENTITY





DESIGN INSPIRATION / PROJECT IDENTITY

2.3.9 LANDSCAPING

















- a.) Landscaped areas will be planned and designed as an integral part of the Park. The type, quantity and placement of plant material will be selected for its structure, texture, colour, and compatibility with the building design and materials;
- b.) Where appropriate (typically adjacent to natural areas) strategic tree plantings will provide shade in the summer and shelter from blowing wind and snow in the winter to reduce energy demand and snow removal costs;
- c.) Buildings will provide a high level of landscaping at the street frontage and along the interface with Highway 417; and,
- d.) Landscaping will be used strategically in the parking lot areas to provide tree cover to reduce heat island impacts, and also to provide bio-swales and permeable materials where possible to increase natural stormwater infiltration.





2.3.10 LOCATION AND TRANSPORTATION

The Park will target 2-5 LEED Credits by seeking achieve the following objectives:

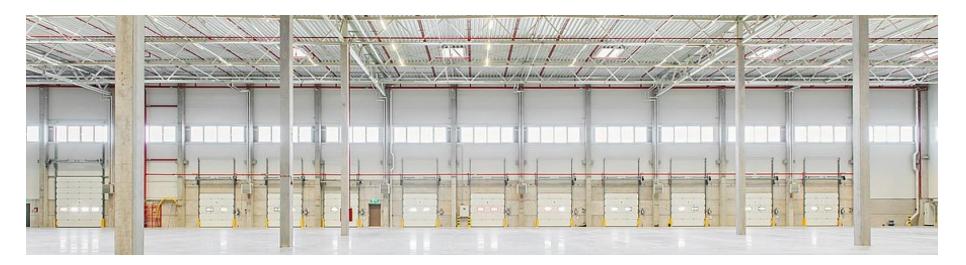
- a.) Sensitive Land Protection To avoid the development of environmentally sensitive lands and reduce the environmental impact from the location of a building on a site.
- b.) High Priority Site To encourage project location in areas with development constraints and promote the health of the surrounding area
- c.) Surrounding Density and Diverse Uses To conserve land and protect farmland and wildlife habitat by encouraging development in areas with existing infrastructure. To promote walkability, and transportation efficiency and reduce vehicle distance traveled. To improve public health by encouraging daily physical activity.

- d.) Access to Quality Transit To encourage development in locations shown to have multimodal transportation choices or otherwise reduced motor vehicle use, thereby reducing greenhouse gas emissions, air pollution, and other environmental and public health harms associated with motor vehicle use.
- e.) Bicycle Facilities To promote bicycling and transportation efficiency and reduce vehicle distance traveled. To improve public health by encouraging utilitarian and recreational physical activity.
- f.) Green Vehicles To reduce pollution by promoting alternatives to conventionally fueled automobiles

2.3.11 SUSTAINABLE SITES

The Park will target 3-5 LEED Credits by seeking achieve the following objectives:

- a.) Construction Activity Pollution Prevention To reduce pollution from construction activities by controlling soil erosion, waterway sedimentation, and airborne dust.
- b.) Required Site Assessment To assess site conditions before design to evaluate sustainable options and inform related decisions about site design.
- c.) Site Development Protect or Restore Habitat -To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.
- d.) Open Space To create exterior open space that encourages interaction with the environment, social interaction, passive recreation, and physical activities.



- e.) Rainwater Management To reduce runoff volume and improve water quality by replicating the natural hydrology and water balance of the site, based on historical conditions and undeveloped ecosystems in the region.
- f.) Heat Island Reduction To minimize effects on microclimates and human and wildlife habitats by reducing heat islands.
- g.) Light Pollution Reduction To increase night sky access, improve nighttime visibility, and reduce the consequences of development for wildlife and people.

2.3.12 ENERGY EFFICIENCY

- a.) LEED v4 Building, Design & Construction: (Warehouses & Distribution Centres) will be used as a design checklist and guiding principle to encourage Energy Efficiency at the detailed design stage.
- b.) Buildings will be designed to meet the Ontario Ministry of Municipal Affairs and Housing Supplemental Standard (SB-10, January 1, 2017) of the Ontario Building Code (OBC). OBC Part 12 Resource Conservation and Environmental Integrity and Supplementary Standard SB-10 Energy Efficiency Supplement. Typically, the buildings energy performance is required to beat the national average for building of this type by 30%. Ontario has one of the most stringent energy performance requirements for buildings in Canada.
- c.) The incorporation of alternative or renewable energy sources such as solar panels or wind turbines within building design will be explored, where feasible. Specifically, for Site 3 options will be explored which utilize the expansive roof surface for opportunities for alternative energy
- d.) Net zero or net zero ready buildings will be reviewed for feasibility as building technology continues to evolve:





- a.) The construction of stormwater, wastewater and waster supply sewers and pipes will be done under an Environmental Compliance Approval issued by the Ontario Ministry of Environment Conservation and Parks. The ECA is issued under Provincial jurisdiction, under a Transfer or Review (with review of sewer design completed by municipalities) or as a Direct Submission (typically submitted directly to the Ontario Ministry for stormwater ponds).
- b.) The Municipal and Provincial requirements for stormwater Quality Control, as confirmed with the Rideau Valley Conservation Authority will be the removal of 80% of Total Suspended Solids from stormwater.



c.) For quantity control it will be either postdevelopment flow will meet pre-development flow, or as otherwise agreed where it will benefit the downstream hydrology to increase postdevelopment flow. As determined through the local sub-watershed study and in consultation with the Rideau Valley Conservation Authority.

2.3.14 LIGHT POLLUTION

- a.) LEED v4 Building Design & Construction (Sustainable Sites: Light Pollution Reduction credit criteria are recommended to guide design decisions).
- b.) Additionally, Royal Astronomical Society of Canada (RASC) "Dark Sky 2018 guidelines" will be reviewed and implemented where feasible through detailed design.



2.3.15 BIRD-FRIENDLY DESIGN

- a.) During detailed design "bird-friendly building design guidelines" of the Canadian Standards Association (CSA A460:19) will be referenced and implemented where feasible.
- b.) The "City of Ottawa Bird Safe Design Guidelines" (currently under development by the City) will be reviewed and implemented as applicable.

2.4 UNIVERSAL ACCESSIBILITY BRIEF

Accessibility requirements for the project are directed by both the Province of Ontario's legislation regarding accessibility as well as the City of Ottawa's policy directions. Matters related to universal accessibility are summarized below.

2.4.1 PROVINCE OF ONTARIO

Ontario is the first province, and one of the first jurisdictions in the world, to enact specific legislation establishing a goal and timeframe for achieving universal accessibility. It is also the first jurisdiction to legislate accessibility reporting and standards so people with disabilities can participate more actively in their communities.

2.4.2 CITY OF OTTAWA

Additionally, the City of Ottawa developed the City of Ottawa Accessibility Design Standards in 2015. These standards are intended to make the City "a leader in developing accessible environments for all, embracing the principles of "universal design". The Standards were developed with recognition of the need to encourages the inclusion and integration of diverse communities and preventing and removing obstructions that create exclusion.

2.4.3 IMPLEMENTATION

During the detailed design and site plan approval stage of the development process, the project architect will review and demonstrate conformance with: the Accessibility for Ontarians with Disabilities Act, 2005 and the City of Ottawa Accessibility Design Standards (2015)

3.0 PROPOSED DEMONSTRATION PLAN FOR THE NCBP

3.1 PROPOSED DEMONSTRATION PLAN

The proposed demonstration plan for the NCBP accommodates one large warehouse building of 64,200 m2 and an additional five buildings ranging in size from 8,200 m2 to 10,350 m2 providing a range of building sizes and configurations to suit the growing needs of the region's logistics and industrial users. Highway connections from Hunt Club Road truly makes this Park a logistics hub as logistics users recognize great value in time savings to get to and from the highway interchange as a result of direct access to a proposed signalized intersection on Hunt Club Road.

Design considerations that influenced the development of the demonstration plan include:

- · Orientating buildings towards Highway 417 and Hunt Club Road to ensure a strong presence along these gateway corridors;
- · Locating loading away from the well-travelled arterials so as to not detract from the gateway
- Enhancing landscaping and significant open spaces orientated towards the adjacent Greenbelt to mediates between the urban and Greenbelt interface; and

- · Developing consistent landscape, architectural, signage, and branding to unite the 3 sites into one Park providing cohesiveness and a strong image for the development.
- · Technical and market considerations that influenced the development of the demonstration plan include:
- · Locating one large building on Site 3a as this is one of the only sites of its size in all of the National Capital Region capable of responding to a large logistics and warehouse user;
- · Laying out Site 3 to address the presence of a trunk sewer that bisects the site:
- · Siting a small building on Site 3b ideally for users seeking their own dedicated, controlled and secure site accesses to both the building and trucks and parking areas; and
- · Establishing a multi-building campus which can accommodate smaller buildings with different building heights and configurations to respond to large range of tenants and market demand.

3.2 EXPLANATORY NOTE ON DEMONSTRATION PLAN

This proposed demonstration plan has been prepared to illustrate how the property can be developed in compliance with the principles and guidelines of this document, as well as the policies, guidelines, and regulations of Federal, Provincial, and Municipality authorities. It is not a finalized site plan. The actual development and finalized site plan(s) may vary from the demonstration plan based on the needs of the tenants, market conditions, and / or the detailed requirements of Federal, Provincial, or Municipal authorities. While the finalized site plan(s) may vary from the demonstration plan, they will maintain compliance with the principles and guidelines of this document. For example the proposed number and sizes of buildings within the site may vary. The layout and configuration of parking areas and access roads may be designed in a different configuration.



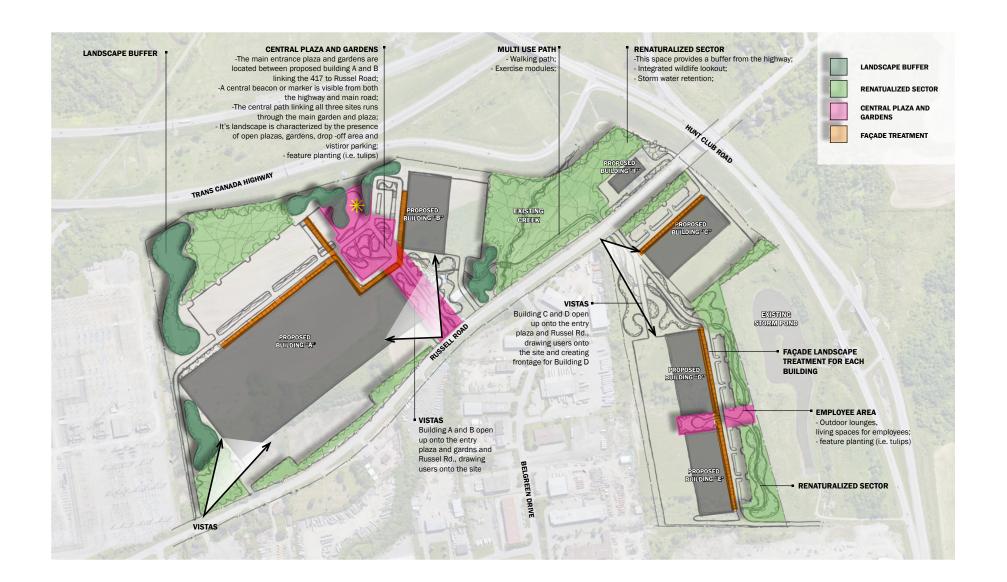
3.3 LANDSCAPE PLAN



3.4 CIRCULATION PLAN



3.5 LANDSCAPE ZONES



3.6 RENDERED ARCHITECTURAL VIEWS



View of National Capital Business Park looking south from Highway 417 from viewpoint identified in the Greenbelt Master Plan, Mer Bleue Sector Schedule



View of National Capital Business Park looking north from Highway 417 from viewpoint identified in the Greenbelt Master Plan, Mer Bleue Sector Schedule



View of National Capital Business Park looking south from Hunt Club Road



View of National Capital Business Park looking north from Hunt Club Road





View of National Capital Business Park from internal circulation system

4.0 POLICY CONFORMANCE REVIEW

Five Federal and NCC documents have been identified as having some potential relevance to the development of the National Capital Business Park. These are: the Plan for Canada's Capital; the Capital Urban Lands Plan; the Greenbelt Master Plan; the Federal Sustainable Development Strategy; and the NCC Sustainable Development Strategy. The following section identifies all relevant policies and guidance related to the NCBP in each plan and provides an explanation (in italics) of how the NCBP conforms or relates to these plans.

4.1 PLAN FOR CANADA'S CAPITAL (2017 - 2067)

The NCC's Plan for Canada's Capital establishes the overall vision and strategic framework for the management and development of federal lands within the National Capital Region. Structured around a vision of Canada's Capital as "a symbol of our country's history and diversity, a true reflection of our democratic values and our commitment to a flourishing and sustainable future", the Plan identifies three primary goals of a Capital that is: inclusive and meaningful; picturesque and natural; and thriving and connected. The subject lands are federally owned and therefore subject to conformity with the policies of this plan. Therefore, the project proposal was reviewed for consistency with the applicable policy directions established under the

4.1.1 Chapter 2: An Inclusive and Meaningful Capital

National Commemorations:

The NCC will continue to recognize significant contributions to the development of the country through toponymy. The NCC will refer to its Policy on Toponymy to guide future decisions.

The proposed development will be branded and marketed as the 'National Capital Business Park' to reflect its prominence as a gateway to the National Capital Region.

Representing Canadian Diversity and Regional Identity

The NCC will encourage cultural expressions in architecture and landscaping that reflect the diversity and cosmopolitanism of Canada's 21st century population.

See Design Principle 2 and urban design guideline 2.3.4. The proposed architectural treatment and landscape plan will incorporate the design theme of 'tulips' in reference to the annual gift from the Netherlands to Canada for the Liberation of the Netherlands during the Second World War, that has become symbolic of Ottawa as the Nation's Capital. *In particular, the colour scheme and architectural* detailing of the proposed buildings is a representation of the tulip agricultural fields found in the Netherlands. This thematic treatment is both representative of the cultural heritage of the Dutch immigrants to Canada, the National Capital Region and Canada, as well as the local agricultural and rural farm context of the immediate area surrounding the project.

4.1.2 Chapter 3: A Picturesque and **Natural Capital**

Waterways and Shorelines

The NCC will cooperate with the municipalities to improve best practices for the management of stormwater, particularly by progressively improving techniques to manage water quality and initiate remedial work. Runoff rates will be managed to avoid the degradation of creek and river corridors. The NCC will implement the policy to frame the use of its lands for new water quality control infrastructure. This applies when the municipality has no alternative but to use federal lands.

See sustainability guidelines 2.4.2.

The Greenbelt

The NCC will work with the City of Ottawa, conservation agencies, and other private- or publicsector partners to develop ecological linkages from the Greenbelt to broader ecological networks.

See design guideline 2.3.6 and sustainability guideline 2.4.2. The proposed development is adjacent to two identified 'Natural Links' in the Greenbelt Master Plan following an existing Mather Award Drain. The existing creek will be retained and naturalized landscaping is proposed on either side to preserve and enhance the connectivity between the two Natural Links.

Capital Urban Green Spaces

The management of forested and treed areas on federal urban property will require the development of an urban forest management policy and rejuvenation actions. Federal agencies will work in close collaboration with the municipalities affected, some of which have developed policies in this respect.

An Environmental Impact Statement (EIS), Environmental Assessment, and Tree Conservation Report have been completed to address these

The NCC will work with municipalities, conservation agencies and other partners to develop ecological



Boardwalk on the Mer Bleue Bog Trail in Canada's Capital Greenbelt. Source: NCC Plan for Canada's Capital

linkages from the urban parks and open space network to broader ecological networks.

See design guideline 2.3.6 and sustainability guideline 2.4.2. The proposed development is adiacent to two identified 'Natural Links' in the Greenbelt Master Plan following an existing drain (the Mather Award Drain), which drains to the McEwan Creek (south of the subject property). The existing drain will be retained and naturalized landscaping is proposed on either side to preserve and enhance the connectivity between the two Natural Links.

4.1.3 Chapter 5: A Thriving and **Connected Capital**

The Capital and the Regional Economy

The divestiture of some surplus federal lands will help to achieve regional objectives of consolidation and intensification within the existing urban boundaries.

The proposed development is found within the designated 'Urban Boundary' of the City of Ottawa,

are designated 'Urban Employment Area' in the Official Plan and are zoned for Heavy Industrial Use (IH). As such, the proposed development supports both provincial and municipal goals of urban intensification, the efficient use of infrastructure, and providing employment and economic development opportunities and economic diversification.

A Living Culture and Heritage

The NCC will promote the quality of design to ensure the creation of responsive, accessible, enduring and responsible places, buildings, structures and landscapes over time.

See Design Principle 3 and design guidelines 2.3.4, 2.37, 2.3.8, and 2.3.9. Also see the Universal Accessibility Brief.

4.1.4 Chapter 6: Making It Happen **Promoting Design Excellence**

The NCC will assume a leadership role in the region to promote inspiring quality projects: this means projects that are context-sensitive, responsive to

users, coherent and flexible, aesthetically engaging, durable and appropriate for the intended uses. universally accessible, and energy-efficient.

See Design Principles 2 and 3 and design guidelines 2.3.4. 2.37. 2.3.8. and 2.3.9. Also see the Universal Accessibility Brief.

The NCC will encourage integrated design approaches to foster the best outcomes for each individual project, ensuring the participation of design and land use planning specialists in order to achieve the highest quality results.

The proposed development has been designed in accordance with design principles and guidelines established in this document to promote high quality design. These guidelines have been prepared by architecture, urban design / planning, and landscape architecture professionals and reviewed by both NCC and City of Ottawa Staff.

The NCC will seek designs, for all projects, that address both the built form and the public realm surrounding them with an integrated character. Designs should address views, built form relationships and street character.

See Design Principle 1 and design guidelines 2.3.1, 2.3.5, 2.3.7, and 2.3.8.

The NCC will support innovation and inclusiveness in architecture, design and planning, while also enhancing heritage.

See Design Principles 2 and 3 and design guidelines 2.3.4, 2.3.5, 2.3.7, 2.3.8, and 2.3.9.

The NCC will encourage project proponents to consider projects that will endure, and plan appropriately with sustainable design and the use of durable materials and renewable energy.

See 2.4 sustainability guidelines.

4.2 CAPITAL URBAN LANDS PLAN (2017-2067)

The Capital Urban Lands Plan (CULP) is a land-use plan providing detailed policy guidance to support the planning and stewardship of the Capital's Urban Lands. The Plan informs the day-to-day management of federal property to support a shared vision to be implemented over the long-term. The Plan provides long-range policy statements necessary to ensure that project proposals, landuse and activities are consistent with the vision for the future of Canada's Capital. The subject lands are federally owned and therefore subject to the policies of this plan. The project proposal was reviewed for consistency with the applicable policy directions established under the Plan.

4.2.1 'Non-designated NCC Property' Designation

The subject lands fall within the 'Non-Capital Realm' land use type and are designated 'Nondesignated NCC Property' on Schedule 4.1 'Urban Lands: Designations' of the Plan. The 'Non-Capital Realm' land use type is a category of land use applied to federal sites "that do not to play a Capital role" in the Plan and "may be utilized to support non-Capital functions and land-uses should they become surplus to the needs of the Capital". Within this land use type, the subject lands are designated 'Non-designated NCC Property', a designation applied to lands "that do not serve a Capital role and that are not identified to be of strategic regional importance due to their relative size and location are identified as non-designated NCC properties. These NCC sites are not required to support federal program requirements or related government support functions." There are no applicable objectives or policies related to the 'Non-designated NCC Property' designation.

As 'Non-designated NCC Property' these lands have essentially been designated as surplus to the needs

of the NCC, the proposed development of the lands will ensure that the subject lands are able to provide a 'non-capital role' in the National Capital Region as an economic and employment generator.

4.2.2 'Capital Arrival' Designation

The subject lands are adjacent to a designated 'Capital Arrival' link as illustrated on Schedule 4.2 'Urban Lands: Links' of the Plan. The 'Capital Arrival designation seek to create gateways "of high scenic value, communicating clearly that one is entering a Capital, an inspiring and memorable place." The policy direction for the 'Capital Arrival' designation seek to see development on these links:

- · Contribute to the beautification of the Capital and define a distinctive Capital signature.
- · Enhance protection of views and vistas towards the National Symbols, cultural landscapes and other features of the Capital.
- · Support landscape and aesthetic improvements along Capital Arrival and Scenic Entry routes.

See Design Principles 1-3 and design guidelines

4.2.3 Urban Lands Policies

The Urban Lands Policies contained in Section 4.4 of the Plan, outline policies "intended to help foster memorable and animated spaces that distinguish our Capital from other places". These policies are intended to apply "broadly" to federal lands within the National Capital Region.

4.2.4 Context-Sensitive Planning

The NCC supports context-sensitive planning that ensures use compatibility and fit in order to achieve the objectives of this Plan.

- · Plan and locate works in a manner that protects natural features and urban greenspaces.
- · Consolidate and develop lands sited in accessible locations, making efficient use of existing

infrastructure.

- · Apply context-sensitive planning and design criteria to ensure all land-uses and related projects are compatible with the character of the Capital.
- · Strive for an improved interaction with the surrounding urban environment in the development of Capital functions.
- · Archaeological studies or surveys may be required prior to the initiation of any project that may have an impact on a recognized or potential archaeological site. The implementation of appropriate measures to inventory, document, and protect the resources may be required, under the guidance of a qualified archaeologist.

See Design Principles 1-3 and design guidelines 2.31, 2.3.5. and 2.3.6.

4.2.5 Design Excellence

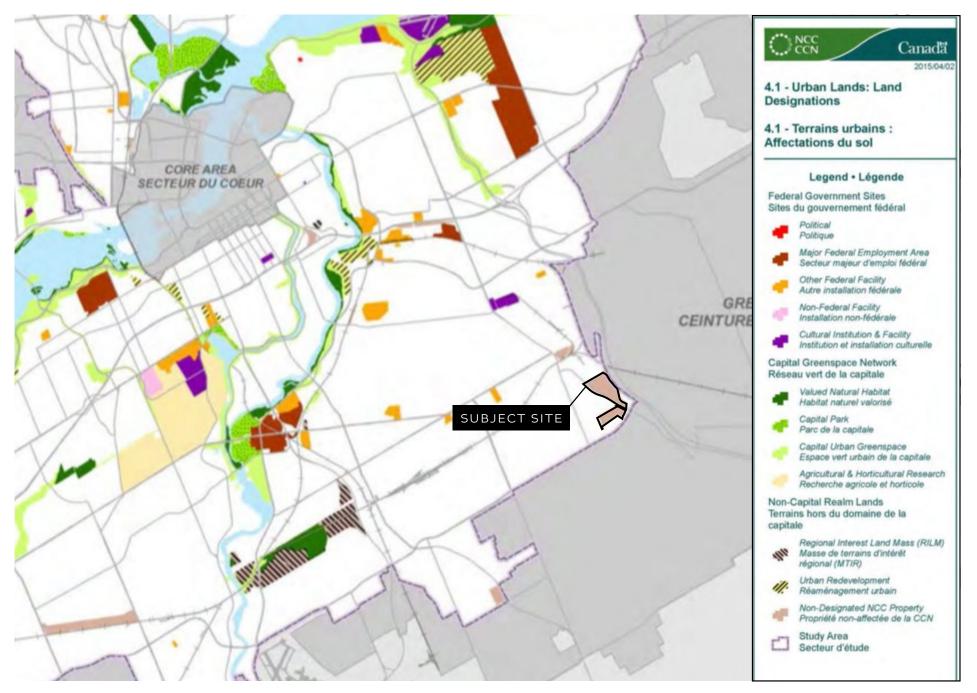
The NCC will advocate for developments that contribute to the beautification of the Capital.

- · Foster design excellence and creativity that enhances the built fabric and landscapes of the Capital.
- · Ensure proposed design solutions are durable over the long-term and can be maintained in a cost-effective manner.
- · Establish project guidelines that provide detailed performance expectations for design quality. context sensitivity and the protection of natural features.
- Develop qualitative project evaluation criteria that encourage innovative architecture, planning and landscape design.

See design principles 1-3 and design guidelines 2.3.4, 2.3.7, 2.3.8, and 2.3.9.

4.2.6 Lighting

The quality of lighting is an important contributor to



Capital Urban Lands Plan

the character of Canada's Capital. The NCC will work to develop and implement a more detailed lighting policy. over time.

- · Employ illumination technologies that eliminate high intensity lighting and glare. Full cut off fixtures should be used to preserve a dark night sky.
- · Keep illumination levels to the minimum required for user comfort and safety.
- · Encourage the increased use and adoption of emerging energy-efficient systems. (e.g., LED light sources, etc.)
- · Select light fixtures that area appropriately shielded and that produce long wavelength light.

See sustainability guideline 2.4.4.

4.2.7 Urban Tree Protection Policy

Urban trees are vital to the image of the Capital and also contribute significantly to the liveability of the Capital

- · Strongly favour the planting of native and noninvasive tree species on NCC lands.
- · Non-native trees or other plantings may be planted on a limited basis under the following circumstances, for example:
 - · For ornamental and/or formal landscape applications where native species are not feasible or appropriate to the context;
 - · Where non-native alternatives offer a significant better likelihood of survival given conditions specific
 - · to the planting location (e.g., impacted street trees): and
 - · Other similar exceptional circumstances
- · When work is proposed on NCC lands, as authorized under a Federal Approval, Land Access Permit, Event Permit or Maintenance Contract, the proponent and/or contractor will be required to:
 - · Clearly identify the location of all trees that may be affected by works on or adjacent to

federal property on construction plans.

- · Fully reinstate and/or improve landscapes that are affected or altered by NCC authorized works:
- · Adequately monitor tree health and construction site conditions during and after construction to ensure adequate protective measures are implemented, where required:
- · Protect trees that may be affected by construction activities on or adjacent to federal property during construction by reducing risk of injury to the trunk, limbs or roots of tree causing damage or death of the tree:
- · Maintain, water and protect all plantings implemented as a result of compensatory and/or mitigation measures to ensure a successful establishment period, where required: and
- · Manage any federally or provincially protected tree species in accordance with the applicable federal and/or provincial regulations.

An Environmental Impact Statement, Environmental Assessment, and Tree Conservation Report will be prepared as part of the detailed FLUDA process, and as part of the Municipal Site Plan Control review process. It will document all significant tree's on site and proposed mitigation of any proposed removal.

4.2.8 Signage on Urban Lands

Signage on federal property within the urban lands must be designed and located in a manner that contributes to the beauty of Canada's Capital. Signage design shall reflect and reinforce the distinctive qualities of the Capital and of its environs, while not detracting from Capital function(s) present or a site's contribution to the overall quality of the Capital's setting. Direction, identification and information signage should be addressed as an integral component of any project proposed on federal property.

Signage guidelines will be essential to clarify the role of signage and its appropriateness on federal lands within the Capital Realm. This Plan provides a broad approach to evaluate proposals relevant to the Urban Lands, where the introduction of new signage may affect federal lands of importance to the Capital.

- · Permit signage serving to support visitor information and wayfinding purposes across all land designations.
- · Permit limited commercial signage in relation to activities authorized on NCC lands and in support of NCC commercial tenants
- · Where authorized, signage must respect the following policy direction:
 - · Provide a functional justification for the proposed signage;
 - · Comply with context sensitivity and excellence of design policies;
 - · Ensure compatibility with adjacent Capital sites, the Capital function(s) present, views protection, heritage conservation, landscapes of symbolic and/or picturesque character:
 - · Respect the planning principles established for the Capital Urban Lands: Minimize the visual impact of signs in relation to their functional requirements:
 - · Ensure consistency of information and size with the site's level of importance to the Capital's image and the quality of materials, durability and legibility;
 - · Ensure that sign content is provided in both official languages in equal prominence (Reference: Federal Identity Program Policy and Guidelines):
 - · Encourage subtlety of any proposed lighting effects.

See design quideline 2.3.9. in-future the installation of electric vehicle charging stations for employees and possibly for commercial truckina.

4.3 GREENBELT MASTER PLAN

The Greenbelt Master Plan establishes the NCC's vision and mission for the National Capital Region's Greenbelt to 2067 and envisions a Greenbelt that "will forever protect natural systems, agriculture and opportunities for outdoor recreation and education that will inspire Canadians and contribute to the sustainability and quality of life in Canada's Capital Region." It is organized around a master Demonstration Plan as well as sector and area plans that deal with specific districts and specific areas or features in the Greenbelt. It then provides a series of policy directives to implement the Plan's vision. While the subject lands are not inside the Greenbelt they area adjacent to it, and owned by the NCC. The Greenbelt Master Plan was reviewed to ensure conformity with the Plan. The subject lands border two sectors 'Pine Grove Sector' and 'Mer Bleue Sector'

4.3.1 Agriculture

Provide opportunities for sustainable agriculture, providing economic returns now and for future generations without interfering with natural processes and by realizing benefits for Canada's Capital Region.

· Support farm tenants in resolution of conflicts that arise between normal farm operations and neighbouring urban land uses.

The proposed development will be a light industrial and is well buffered from area agricultural operations to reduce any potential for conflict. No 'sensitive lands uses' (e.g. residences, schools, places of worship, etc) are proposed for the development.

4.3.2 Natural Link

Lands designated 'Natural Link' are lands that provide or have the potential to provide many

resources for species but are not of sufficient size or quality to provide for all habitat requirements or ecological functions. Natural Link lands support ecological connectivity, a key component of greenbelt natural resource management, to allow the daily movement of species, seasonal migrations, dispersal, habitat connectivity and species persistence.

- · Maintain or restore riparian areas of naturalized vegetation along watercourses. targeting the most prescriptive version of Ontario or federal standards.
- · Establish widths of Greenbelt Natural Links that are at minimum 60 metres initially. working towards a minimum 250 m width over the longer term for target Natural Links.
- Prevent fragmentation of designated natural links, providing connectivity elsewhere when facility security or structures (such as linear infrastructure) impact upon natural link function.
- · Restore fragmented ecosystems by providing for species movement and prohibiting land use changes that interfere with the function and health of Natural Links.

See design guideline 2.3.6 and 2.3.8, and sustainability quideline 2.4.2.

4.3.3 Capital Arrival / Scenic Entry

- · Improve the vistas of selected transportation routes, as identified in the sector plans. through use of context-sensitive landscaping.
- · Protect and enhance panoramas identified as medium and high quality (2008 Greenbelt Visual Assessment), as identified on the sector plans. This includes views within and extending beyond Greenbelt boundaries. Consult both 1992 and 2008 Visual Assessments to determine precise land areas and the range of approaches available to improve landscape quality.

- Maintain and enhance the visual character. of landscape views from roadways, working in partnerships and using a variety of approaches. Employ measures such as strategic roadside tree planting, increased hedgerows, establishment of shelterbelts, woodlot and ravine restoration, compensation of tree canopy losses, vegetative screening, minimization of urban lighting, and infrastructure design. Assess each situation on its own merits to determine the most appropriate approach.
- · Maintain and enhance the edges of the Greenbelt to demonstrate best management practices and to delineate the Greenbelt. Encourage neighbouring owners to emulate such practices. Reinforce a distinct Greenbelt edge through such means as roadside plantings and shielded lighting.

See Design Principle 2 and design guideline 2.3.5.

Specific enhanced landscape buffering is proposed along the eastern edge of the project, adjacent to the Hwy 417 eastbound ramps.

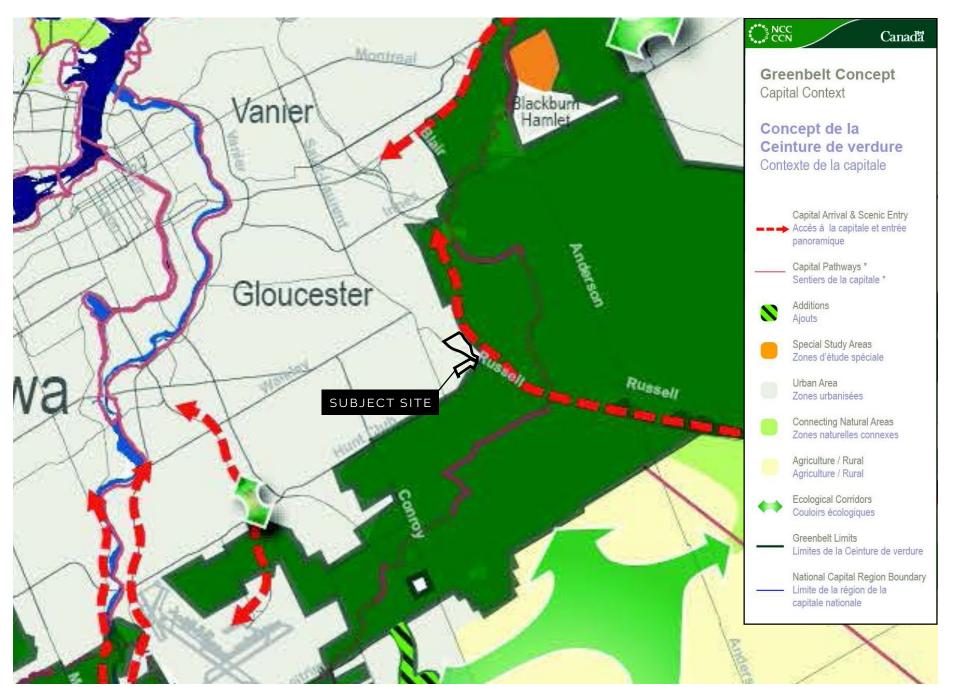
Where possible with grading and site layout, opportunities to preserve existing hedgerows of trees will be explored.

4.3.4 Mer Bleue Sector

M - Visual Quality – Capital Arrival and Scenic

- · Work with City to improve visual aesthetic of industrial and utility uses west of Greenbelt edge along the Highway 417 Capital Arrival.
- · Explore potential to enhance scenic route quality along Russell, Anderson, Ridge, Ramsayville and Innes Roads and along the Innes Bypass.

See urban design guideline 2.3.5.



4.4 FEDERAL & NATIONAL CAPITAL COMMISSION SUSTAINABLE DEVELOPMENT STRATEGIES

The Federal Sustainable Development Strategy (FSDS) is Canada's action plan for moving forward on addressing climate change and sustainable development. This document establishes a number of sustainability goals and targets that the federal government has committed to achieving over the next three years involving leadership through education, regulation, and the way in which federal lands are used and managed, for example. While not required to report on the FSDS, the National Capital Commission (NCC) has also developed a sustainable development strategy, adopting a framework and set of goals in direct alignment with the FSDS. The NCC Sustainable Development Strategy (NCCSDS) is a means for implementing the goals and priorities of the FSDS, but within the scope of the National Capital Region (NCR). Given their complementary and derivative nature, both Plans have been reviewed and analysed together.

4.4.1 Effective Action on Climate Change: A low-carbon economy contributes to limiting global average temperature rise to well below 2 degrees Celsius and supports efforts to limit the increase to 1.5 degrees Celsius.

The FSDS sets a target of reducing Canada's total greenhouse gas emissions by 30% (relative to 2005

levels) by 2030. In working to achieve this goal, the Government of Canada (GoC) will support businesses and Canadians in taking actions to reduce greenhouse gas emissions. Some of the initiatives identified in the NCCSDS to achieve this goal in the NCR include: promoting sustainable transportation and mobility in the NCR; promoting the development of surplus NCC brownfield sites and sites adjacent to transit nodes, consistent with NCC plans; and, encouraging the installation of electric vehicle charging stations at NCC parking

See the sustainability guidelines. The NCBP is situated in proximity to an established transit network of bus lines on Hunt Club Road, Hawthorne Road, and Walkley Road. The site is also able to accommodate in-future the installation of electric vehicle charging stations for employees and possibly for commercial trucking.

4.4.2 A Green and Low Carbon Government: The GoC will transition to low-carbon, climate-resilient, and green operations.

The FSDS advises that the GoC will lead by example through operations that are low-carbon, resilient, and green, making the committing that all new buildings and major building retrofits will prioritize low-carbon investments based on integrated design principles. Under some of the initiatives in the NCCSDS, the NCC is committed to tracking energy and water consumption and greenhouse gas emissions of NCC buildings and lands, adopting minimum standards for renovations and construction on NCC land, as well as investing in measures to support low-carbon forms of transportation to reduce emissions from commuting.

See the sustainability guidelines. Given the proposed development would see the design and construction of completely new buildings and on-site

infrastructure, there are ample opportunities to ensure that best practices are incorporated into the site's construction, building design, and operators on site. Specific elements of the LEED v4 Building, Design & Construction checklist will be reviewed and integrated, where feasible, at the detailed design stage.

4.4.3 Modern and Resilient Infrastructure: Modern, sustainable, and resilient infrastructure supports clean economic growth and social inclusion

The FSDS commits the GoC to supporting lowcarbon, resilient infrastructure (e.g. installation of vehicle charging stations). Two of the initiatives in support of this goal identified in the NCCSDS include plans to adopt stormwater management guidelines to reduce impacts on water quality and quantity and encourage the implementation of resilient infrastructure on NCC lands.

See urban design and sustainability guidelines. The extensive landscaping plan developed for the NCBP incorporates the use of functional green spaces and low impact design (increased stormwater infiltration) intended to help manage stormwater quality and quantity. A detailed stormwater design will be reviewed as part of the Environmental Compliance Approval, issued by the Ontario Ministry of Environment, Conservation & Parks.

There will also be opportunities to incorporate green infrastructure such as passenger and commercial vehicle (EV) charging stations as part of future development on the site.

4.4.4 Clean Energy: All Canadians have access to affordable, reliable, and sustainable energy

One of the GoC initiatives outlined in the FSDS is to support voluntary action to reduce greenhouse gas and air pollutant emissions through clean energy generation and consumption. Under the NCCSDS, one of the ways in which the NCC intends to address this goal is by undertaking assessments of the renewable energy potential of NCC land and buildings to increase the proportion of renewable energy systems.

See the sustainability guidelines.

The expansive roof area of the Site 3 building may provide the opportunity for alternative energy generation such as solar panel.

4.4.5 Pristine Lakes and Rivers: Clean and healthy lakes and rivers support economic prosperity and the well-being of Canadians

In support of this goal, the FSDS commits the GoC to working with partners on water quality and ecosystem health. One of the initiatives identified in the NCCSDS to achieve this goal in the NCR is for commitment of the NCC to prioritize and restore degraded shorelines along watercourses and lakes on NCC lands to improve ecosystem integrity.

See the sustainability guidelines. As part of the voluntary Site Plan Control review the development will be subject to Provincial, Municipal and Rideau Valley Conservation Authority policies. Stormwater quality and quantity will be reviewed. The Municipal Drain on the property is part of the McEwen's Creek Sub-Watershed. Development review will take in to account recommendations made through the McEwen's Creek Sub-Watershed study.

4.4.6 Sustainably Managed Lands and Forests: Lands and forests support biodiversity and provide a variety of ecosystem services for generations to come

The FSDS commits the GoC to conserving and enhancement government-owned natural spaces. as well as encouraging conservation efforts on private lands. The NCCSDS identifies some of the following initiatives to achieve this goal in the NCR; adopting and implementing a forest strategy that considers natural and cultural heritage values and focuses on urban tree protection; promoting connectivity of ecosystems and natural habitats in the NCR; as well as renewing the Corporate Natural Resources Action Plan supporting projects that expand knowledge of biodiversity health on NCC

See the urban design and sustainability guidelines. A Tree Conservation Report will be completed as part of the voluntary site plan approvals process.

4.4.7 Healthy Wildlife Populations: All species have healthy and viable populations

The FSDS identifies priorities around increasing the percentage of migratory bird species, implementing the regulatory and policy framework and tools to protect species at risk, and deliver enhanced conservation action. Two of the initiatives identified in the NCCSDS to achieve this goal within the NCR includes adopting bird-friendly standards for building design, including landscaping and lighting for federal buildings and lands, and the creation of a pollinator habitat landscaping program for certain developments in the NCR.

See the urban design and sustainability guidelines. The tree planting and landscaping on the site is



EFFECTIVE ACTION ON CLIMATE CHANGE A low-carbon economy contributes to limiting global average temperature rise to well below degrees Celsius and supports efforts to limit the increase to 1.5 degrees Celsius



GREENING GOVERNMENT The Government of Canada will transition to lowcarbon, climate-resilient, and green operations



CLEAN GROWTH A growing clean technology industry in Canada contributes to clean growth and the transition to a low-carbon economy



MODERN AND RESILIENT INFRASTRUCTURE Modern, sustainable, and resilient infrastructure supports clean economic growth and social



CLEAN ENERGY All Canadians have access to affordable. reliable and sustainable energy



HEALTHY COASTS AND OCEANS Coasts and oceans support healthy, resilient and productive ecosystems



PRISTINE LAKES AND RIVERS Clean and healthy lakes and rivers support economic prosperity and the well-being of Canadians



SUSTAINABLY MANAGED LANDS AND Lands and forests support biodiversity and provide a variety of ecosystem services for

generations to come



HEALTHY WILDLIFE POPULATIONS All species have healthy and viable populations



CLEAN DRINKING WATER All Canadians have access to safe drinking water and, in particular, the significant challenges Indigenous communities face are addressed



SUSTAINABLE FOOD Innovation and ingenuity contribute to a worldleading agricultural sector and food economy for the benefit of all Canadians



CONNECTING CANADIANS WITH NATURE Canadians are informed about the value of nature, experience nature first hand, and actively engage in its stewardship



SAFE AND HEALTHY COMMUNITIES All Canadians live in clean, sustainable communities that contribute to their health and well-being

intended to accommodate the natural space needs of both people and wildlife, connecting the green corridor running through the Hawthorne-Stevenage Industrial Park to the Greenbelt.

4.4.8 Sustainable Food: Innovation and ingenuity contribute to a world-leading agricultural sector and food economy for the benefit of all Canadians

One of the initiatives identified in the NCCSDS geared to achieving this goal in the NCR is through the enhancement of the conservation and quality of soil and water courses

See the sustainability guidelines. The site landscaping design is intended to ensure to negative impacts on the natural water course bisecting Site 3 are mitigated.

4.4.9 Connecting Canadians with Nature: Canadians are informed about the value of nature, experience nature first-hand, and actively engage in its stewardship

The FSDS commits the GoC to maintaining or increasing the number of Canadians that get out into nature and increasing participation in biodiversity conservation activities. The NCCSDS also outlines a handful of initiatives intended to help achieve this goal in the NCR, with the overall intent being to encourage an increase access and the number of visitors to Capital parks and green spaces.

The courtyard system and walking paths proposed in the overall design of the NCBP are intended to offer opportunities for on-site employee and off-site employees, to utilize and connect with these outdoor spaces.

4.4.10 Safe and Healthy Communities

All Canadians live in clean, sustainable communities that contribute to their health and well-being. The FSDS commits the GoC to strive for continual decreases in emissions from 1990 levels of fine particulate matter, nitrogen oxides, sulphur oxides, and volatile organic compounds from all sources.

The subject site is strategically located within an existing industrial/employment area, and adjacent to a provincial highway (Highway 417). The location of the subject site reduces and/or eliminates the need for truck traffic to navigate predominantly residential and/or other areas frequented by pedestrians and the general public.

4.5 PROVINCIAL POLICY STATEMENT

The Provincial Policy Statement (PPS) is a document the Province of Ontario's statement of policy as it relates to land use. The PPS is issued under Section 3 of the Planning Act, which requires that all decisions affecting planning matters "be consistent" with the PPS.

4.5.1 General Framework

Section 1 of the PPS generally establishes the policies and framework with which communities can strive to balance focus between the economic. social, and environmental realms through informed decision-making on land use and growth. One of the ways in which this can be done is through the promotion of cost-effective development patterns to minimize land consumption and servicing costs. and by focusing development in settlement areas.

The NCBP is located within an established part of the urban settlement area designated for employment uses, and the proposed business park seeks to provide new opportunities for larger distribution and logistics focused operations to establish at a key gateway to the City, with full access to services.

4.5.2 Integrated Approach

Section 1.2.1 of the PPS states that a coordinated, integrated, and comprehensive approach should be used when dealing with planning matters such as economic development.

The use of federal lands and the associated Federal Land Use, Design, and Transaction Approvals (FLUDTA) process is coordinated by the National Capital Commission (NCC). Therefore, a strong working relationship between the National Capital Commission (NCC) and Avenue 31 has, and will be, integral to the preparation of this proposal and

realization of the project. Continued coordination with other important stakeholders such as the City of Ottawa will be essential to the success of the NCBP

4.5.3 Promoting Economic Development

Section 1.3.1 of the PPS states that one of the ways in which planning authorities shall promote economic development and competitiveness is by providing opportunities for a diversified economic base, including maintaining a range and choice of suitable sites for employment uses. While the regional economy is continuing to grow around its established government, high-tech, and knowledgebased sectors, it will be crucial for the region to support the growth of other sectors.

The National Capital Business Park has been designed to meet the needs of uses associated with distribution and logistics (proximity and access to major transportation corridors, large site sizes); opportunities which are becoming rare within the bounds of the Ottawa Greenbelt and closer to potential clients.

4.5.4 Protecting Major Goods Movement

Section 1.6.8.2 of the PPS states that major goods movement facilities and corridors shall be protected for the long term, and that freight-supportive approaches should be used in the development of lands within or adjacent to these facilities or corridors.

The subject site is situated directly adjacent to Highway 417 and located approximately 12 kilometres from the Ottawa International Airport. The proposed design and intended uses for the subject property seek to leverage the proximity to these important features. Site 3 in particular has been designed to accommodate those particular operations requiring a significant amount of site space, which provides a unique and rare opportunity considering the City's limited catalogue of affordable sites suitably sized to accommodate these uses.

4.5.5 Sustainability

Section 1.8.1 of the PPS states that planning authorities shall support steps towards energy conservation, environmental sustainability, and climate change adaptation. This can be done through the promotion of land use patterns that maximize opportunities for energy efficiency and conservation, consider the mitigating effects of vegetation, and maximize vegetation within settlement areas.

The National Capital Business Park has been designed to incorporate an extensive green space network geared to maximizing the amount of vegetation and permeable surfaces on the site. This can help mitigate impacts such as the "heat-island" effect caused from the introduction of significant amounts of asphalt and building materials and can also assist with the management of stormwater. The landscaping plan also includes a considerable re-naturalization plan for the undeveloped portions of the site that seeks to reintroduce tree cover originally removed to accommodate cultivation.

4.5.6 Natural Heritage Features & Areas

Section 2.2.1 of the PPS states that planning authorities shall protect, improve or restore the quality and quantity of water by ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.

Avenue 31 has retained a qualified team of landscape architects to develop a comprehensive landscaping and greenspace plan for the National Capital Business Park that seeks to provide quality spaces for enjoyment by employees while also playing a role in managing flow rates and sediment levels in site runoff. The extensive landscaping plan and design of the site ultimately seeks to ensure that new development does not impose undue burden on the existing stormwater management system and/or negative impacts on receiving waterbodies, such as the existing creek that runs through Site 3.

4.6 CITY OF OTTAWA OFFICIAL PLAN

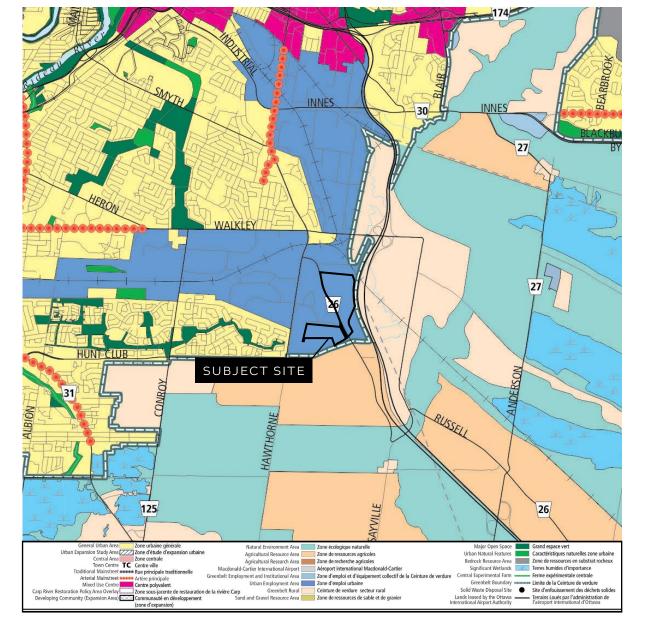
4.6.1 Encouraging Intensification

The policies of the City of Ottawa Official Plan (OP) encourage and prioritise intensification within the Urban Area where appropriate, in lieu of expanding beyond the Greenbelt and contributing to sprawl. Section 2.2.2 of the OP states that employment intensification may occur under a range of circumstances, including through the infilling of vacant or underutilised land within Urban Employment Lands.

The subject lands offer an excellent opportunity for employment intensification and diversification within the urban area as they are largely vacant and arguably underutilized considering their designation for employment uses and can be developed adjacent to existing employment areas and distant from incompatible uses.

4.6.2 Supply of Employment Lands

Section 2.2.3 of the City of Ottawa Official Plan (OP) outlines the City's employment area policies as they relate to growth management. This section generally states that the maintenance of an adequate supply of suitable employment land, especially those lands able to accommodate uses requiring larger sites and separation distances from other uses, is essential to diversifying and strengthening Ottawa's economy. This section further recognises that many of the larger Urban Employment Areas and sites are located inside the Greenbelt and the City encourages intensification and renewal of employment uses within these areas; however, these areas have been largely built out and have a limited supply of vacant lands to accommodate growth in certain sectors. Furthermore, opportunities for these urban



Ottawa Official Plan Schedule B Source: City of Ottawa

With the above in mind, the National Capital Business Park presents a unique opportunity to offer employment lands suitable for those users requiring larger sites, access to multi-modal transportation networks (Highway 417, Ottawa International Airport), and proximity to the local client base, all within the Greenbelt. This development would not only contribute to the diversification of the East Industrial area in which the NCBP is situated, but also promotes a more compact form of development and efficient use of existing lands, in lieu of expanding to areas outside the greenbelt which may require more expensive servicing options, less public transit access for employees, and further distance from clients.

4.6.3 The Natural Heritage System

Section 2.4.2 identifies surface water features such as part of the natural heritage system in Ottawa, and states that the natural heritage system must be protected by ensuring that land is developed in an environmentally sensitive manner, and designed to address matters such as erosion, conservation, and surface water protection. According to available information on the OP schedules, there does not appear to be any significant natural heritage features identified on the subject lands. Notwithstanding this, there is a small creek and associated riparian corridor that runs through the area, passing through Site 3 of the subject lands.

Accordingly, the proposed building locations and landscaping for the site has been designed with the intention of framing, enhancing, and protecting this

4.6.4 Permitted Uses in Employment Areas

Section 3.6.5.2 of the OP states that within Urban Employment Areas, the Zoning By-law will permit a range of employment uses, including but not

Zoning Mechanism		Provisions
Minimum lot area	4,000 m2	
Minimum lot width		No minimum
Minimum front yard and corner	7.5 m	
Minimum interior side yard and rear yard	uses listed under Section 201(1) abutting a residential or institutional zone	15 m
	all other cases	7.5 m
Max floor space index		2
Max building height		22 m
Minimum width of landscaping	abutting a residential or institutional zone	7.5 m
	all other cases	3 m

Accessory display and sales area must be within the same building as the use to which it is accessory and must not exceed 25% of the gross floor area of that use.

For other applicable provisions, see Part 2 – General Provisions, Part 3 – Special Use provisions, and Part 4 – Parking, Queuing and Loading Provisions.

The proposed Demonstration Plan has been evaluated against the performance standards of the zoning by-law and complies with all applicable zoning requirements.

limited to traditional industrial uses such as warehousing, distribution, and storage.

The NCBP seeks to contribute to diversifying Ottawa's employment base by introducing new opportunities for these uses to be established within the Urban Area.

4.7 CITY OF OTTAWA ZONING BY-LAW 2008-250

By-law 2008-250 is the comprehensive zoning bylaw for the City of Ottawa. All development in the City is required to comply with the provisions of this by-law.

4.7.1 Heavy Industrial Zone

The subject lands are zoned "Heavy Industrial (IH)" under the City of Ottawa Zoning By-law No. 2008-250. The purpose of this zone is to: permit a wide range of industrial uses in accordance with the policy direction established for the Employment Area and General Urban Area designations of the Official Plan; allow certain complementary uses (e.g. health and fitness, recreation, service commercial) to be established for the purpose of serving the employees and general public in the immediate area; prohibit standalone retail uses within the Employment Area, but allowing for limited sample and showroom space ancillary to the primary employment use; and, implement development standards intended to ensure industrial uses do not negatively impact adjacent non-industrial uses and areas. Sections 201 through 202 outline the permitted uses, zoning standards, and general regulations applicable to the IH zone, which have been briefly summarized in the following tables.

Permitted Uses under Section 201(1)

heavy equipment and vehicle research and development animal care establishment sales, rental and servicing centre animal hospital heavy industrial uses service and repair shop automobile body shop kennel storage yard leaf and yard waste composting automobile service station technology industry facility broadcasting studio light industrial uses training centre Cannabis Production Facility medical marihuana production (contained within a building truck transport terminal facility that is not a greenhouse) catering establishment office warehouse waste processing and transfer crematorium parking garage facility drive-through facility parking lot personal brewing facility emergency service garden nursery printing plant

Permitted Uses under Section 201(2), subject to the cumulative total gross floor area not exceeding 2,999 m2 and any one use not exceeding 300 m2 of gross floor area (except amusement centre & recreational and athletic facility)

production studio

amusement centre gas bar

animal care establishment bank instructional facility

personal service business place bank machine

of assembly

bar post office

recreational and athletic facility car wash

restaurant

convenience store

A Bar is also a permitted use but must be established ancillary to a permitted brewery, winery, or distillery, and must not have a gross floor area exceeding the greater of 300 m2 or 25% of the floor area of the brewery, winery, or distillery to which it is ancillary.

5.0 IMPLEMENTATION PLAN

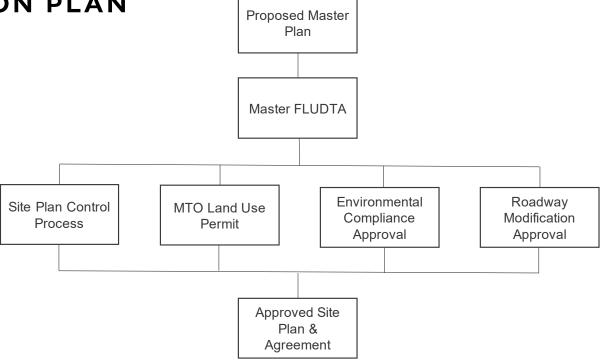
The implementation of the project will occur in two primary stages: the first being the master plan approvals process, leading to the approval of the overall site; and second, being the development approvals process, being the process leading to the actual development of the project and the development of the finalized site plan(s) for the Park. These processes are outlined below.

5.1 MASTER PLAN APPROVALS PROCESS

The Master Plan Approvals Process is the current stage in the implementation of the project and involves the FLUDTA submission following by the City's site plan control process. It is at this stage that Avenue 31 will begin the process of identifying individual users / tenants for the project.

5.1.1 Site Plan Control Process

Through the authority of the Planning Act, the City of Ottawa has established the entire City to be an area of site plan control. This approvals process is used by the City to ensure that land development is designed appropriately, safe, functional and minimizes potential impacts on neighbouring properties. It also ensures that the City's standards for developing land are respected. The process involves the following detailed technical documents that will undergo a technical review and circulation by the City of Ottawa, the Rideau Valley Conservation Authority, and the Ontario Ministry of the Environment Conservation and Parks The



City, Conservation Authority, and Province have required the approval of the following plans and studies prior to any construction on the lands:

- Overall master plan
- Site plan
- Site servicing plan
- Site servicing study
- Grade control and drainage plan
- Geotechnical study
- Transportation impact assessment
- Roadway modification plan
- Erosion and sediment control plan
- 10. Stormwater management report
- 11. Noise feasibility study
- Planning rationale 12.
- Landscape plan

- 14. Survey plan
- Architectural building elevation drawings 15.
- 16. Tree conservation report
- Environmental impact statement 17.

After approval of these plans and studies, their implementation is enforced through a site plan agreement and servicing agreement entered into between the City and Avenue 31 including the posting of financial security to ensure due performance.

5.1.2 Municipal Roadway Modification Approval

Construction of off-site road improvements (turn lanes, etc.) will be subject to the City's Municipal Roadway Modifications Approval.

5.1.3 Ontario Ministry of Transportation **Land Use Permit**

Given their proximity to Highway 417, the project lands are located within the Ontario Ministry of Transportation's (MTO) Highway Corridor Management permitting process. This provincial land use permit process ensures that all development and signage respects the requirements of the Province's corridor management standards as well as the requirements of the Public Transportation and Highway Improvement Act, specifically as they relate to building and parking siting and location, signage, stormwater management, and lighting.

5.1.4 Ontario Ministry of Environment, Conservation and Parks' Environmental Compliance Approval (ECA)

Activities regulated under the Environmental Protection Act, and the Ontario Water Resources Act, must be carried out in accordance with those Acts, the applicable regulations and the guidelines administered by the Ministry. The project's stormwater management plan will be subject to the ECA process.

5.2 DEVELOPMENT APPROVALS PROCESS

The Development Approvals Process is the second and final stage of the project's implementation and involves the identification of individual users / tenants for the project, whose individual developments will proceed through the NCC's sitespecific FLUDTA process. Bound by the obligations of the master FLUDTA approval and the site plan agreement with the City, individual tenants will then enter the municipal permitting process as well as any applicable Conservation Authority's permitting process. This stage of the development will result in the actual development of the site.

5.2.1 FLUDTA Process

Individual developments within the overall project will be subject to the NCC's site-specific Federal Land Use, Design and Transactions Approvals (FLUDTA) process prior to construction.

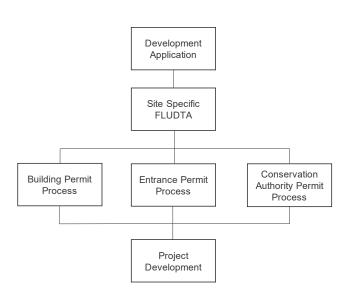
5.2.2 Municipal Permitting Processes

In addition to the site plan approval process, the City also requires that the project will be subject to:

· application for, and receipt of, buildings permits issued by the City under the Ontario Building Code

5.2.3 Conservation Authority Regulatory Approvals

The Rideau Valley Conservation Authority (RVCA) RVCA administers a regulation made under Section 28 of the Conservation Authorities Act known as the Development. Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation (Ontario Regulation 174/06). This regulation allows RVCA to ensure that proposed



developments have regard for natural features and hazards (i.e. unstable slopes and flooding) in order

- · prevent loss of life;
- · minimize property damage and social disruptions:
- reduce public and private expenditures related to emergency operations, evacuations and restoration: and.
- minimize the hazards associated with development in floodplains and areas which are susceptible to erosion, which in future years may require expensive protective measures.

5.3 PUBLIC CONSULTATION SUMMARY

Public consultation of the project is directed by both the NCC and the City of Ottawa based on the respective requirements of the FLUDTA and site plan control processes. The public consultation is summarized below

5.3.1 NCC Public Consultation Requirements

The NCC's public consultation requirements will be addressed through the City's site plan approval process as noted below.

5.3.2 City of Ottawa Public Consultation Requirements

The project is voluntarily subject to the City of Ottawa's site plan approval process. As part of the City's site plan approval process the City will undertake a 3-part consultation process:

- · All technical reports, studies and drawings submitted as part of the application process are made available to the public on the City of Ottawa's website, Development Applications Portal for a commenting period;
- · A large sign summarizing the proposal is placed on the property to notify the public that an application has been received; and
- · After the public notification / commenting period is completed, the City will summarize any public comments received on the application prior to any approval from the City.

6.0 LONG-TERM IMPLEMENTATION

While the initial stages of project implementation are focused on permitting proposed land-use, the project implementation does not end after the initial implementation. The project will continue to be implemented over the longer term of the 99-year lease with the NCC. Over the life of the project, significant societal and technological change is expected to occur, and the project has been developed to address these changes. Three major trends are expected to influence the implementation of the project in the coming years. The following section outlines how longer-term implementation of the project is anticipated.

6.1 ADDRESSING THE FNVIRONMENT

Climate change and resiliency is anticipated both by Avenue 31 and the NCC to be one of the single greatest challenges in the coming years. Addressing this challenge involves focusing on the environmental and energy performance of the project. To meet the NCC and Avenue 31's environmental and sustainability objectives, a Sustainability Strategy has been developed to encourage and support the implementation of renewable energy solutions and GHG emission reductions from the project.

It is also anticipated that the project's natural areas will increase in value as more urbanization occurs in the immediate area. The landscape plan developed for the site has been developed as a key component of the site's sustainability. As the restoration and enhancement of the project's

naturalized areas matures, it is anticipated that these areas will also be a net contributor to the overall environmental performance of the site.

As land values increase and urban pressures expand, the economic opportunities may arise to provide more intensive development of the property, while stormwater storage could be underground and quality control can be through mechanical technology, such as oil-grit separators.

6.2 RISE OF **AUTOMATION & AI**

Logistics and manufacturing operations are increasingly looking to automation, artificial intelligence (AI) and other technological solutions to create more efficient operations to increase productivity, reduce operating costs, and address increased labour pool challenges. This reality requires new industrial developments to be equipped to accommodate current and future technological advances. Ottawa in particular has a long and established reputation as a Canadian centre of research and development, a position that is likely to continue through the presence of the Federal Government.

At its core the National Capital Business Park is intended to position itself as a hub of advanced logistics through tenant selection as well as by engaging trades able to deliver a development capable of housing next-generation industries. This includes measures such as developing sensorand robotics-grade floor plates.

6.3 RISE OF AUTONOMOUS VEHICLES

The electrification and development of autonomous vehicles is another trend expected to have a significant impact on the National Capital Business Park when combined with increased automation. Similarly, commercial trucking is anticipated to undergo industry disruptions. Commercial electric vehicle charging infrastructure is already being built in North America and will potentially become more main-stream along with autonomous commercial vehicles, and longcombination vehicles (LCV's) becoming more

These trends are anticipated to create significant redundancies in parking and parking requirements. The existing concept provides considerable opportunity for infill re-development to occur within the existing surface parking areas or to see these areas converted to green space.

Based on the analyses, guidelines, and conformance review contained in the previous sections of this report, it is respectfully submitted that the proposed National Capital Business Park represents good planning, exhibits design excellence, represents and appropriate built form and composition of uses, and is a desirable and appropriate development that will allow for significant investment in the subject lands, the Hawthorne-Stevenage Industrial Park, and the Capital Region as a whole.

The proposed development, guidelines and strategies, and implementation plan conform to all relevant NCC and Federal Government policies and plans, as well as provincial and municipal policies, plans and regulations.

Paul Hicks, MCIP, RPP Urban Planner | Principal Re: public Urbanism

