

KING'S Ψ WHARF

Table of Contents

5	Background
10	A Renewed Vision
17	Districts
36	Key Design Elements
46	Influences and Constraints
59	Questions Arising
69	Administration
73	Conclusion
	Appendices (Attached Separate Document)



Background

The Dartmouth Marine Slips began operation in 1859; they closed in 2003. A century and a half of industrial operations will leave a notable mark on a place. For those who recall the Dartmouth Marine Slips and Shipyard as they stood in 2006, one must conclude that it took both bold vision to imagine King's Wharf rising from that grimy site – and significant courage to pursue the dream.

Downtown Dartmouth at the time did not inspire confidence that there would be a market for such a development and there was substantial risk in taking on such an industrial site. There were many that expected failure. But Fares was undaunted and proceeded to develop a bold vision for the site and complete the arduous process of obtaining a development agreement.

4 striking buildings now stand along the northeastern shore of the site featuring some 354 residential units, a Market Store, highly rated Italian restaurant, Just Us Coffee, legal offices, a goldsmith and, shortly, a new cocktail lounge. As well, the Shubenacadie Canal lands have been granted to the city, along with a small park running between King's Wharf Place and Dartmouth Cove. This completes phase 1 of the development.

Substantive Amendment Application

In late 2013, an application was submitted to the city seeking to amend the Stage 1 Development Agreement. Among other changes, the amendment proposed up to 400 more residential units, a salt lagoon, infilling of the ‘triangle lot’ to the east of the site for a new tower, substantial changes to buildings EF and GH resulting in long podium-tower configurations, more height generally and a reconfiguration of the proposed grade separated access – from helix to an imposing earthen-ramp.

Acknowledging the cost of maintaining the waterfront boardwalk, a new building was proposed on the breakwater.

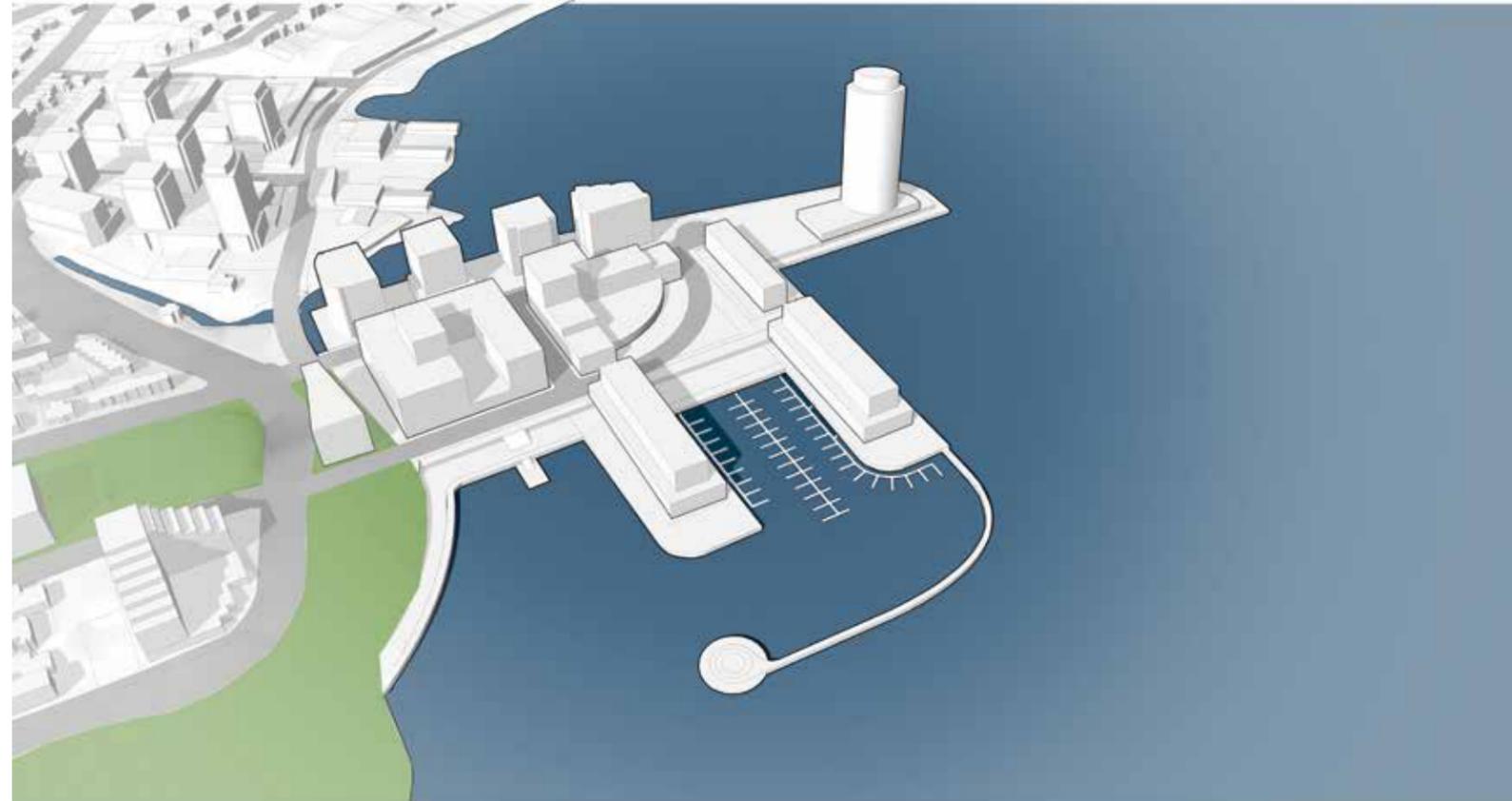
Other, less visible, changes related to improving agility and flexibility in addressing an ever-shifting market, and ones aimed at improving circulation in

underground parking facilities. While the city did not disagree with the proposed density increases, or even added height in principle, they had other concerns with the proposal, some of which were significant. Work on the application stalled.

By 2015 it was clear that the current design for the remainder of the site, while of elegant presentation, would not result in the kind of complete community desired by Fares. Nor was it ideally suited to the stated objectives of creating a pedestrian-oriented, waterfront development that would complement the historic fabric of downtown Dartmouth. Rather than staying the course with the approved site plan (the easy thing to do), Fares engaged a consulting team to help reimagine the site and unearth its full potential.

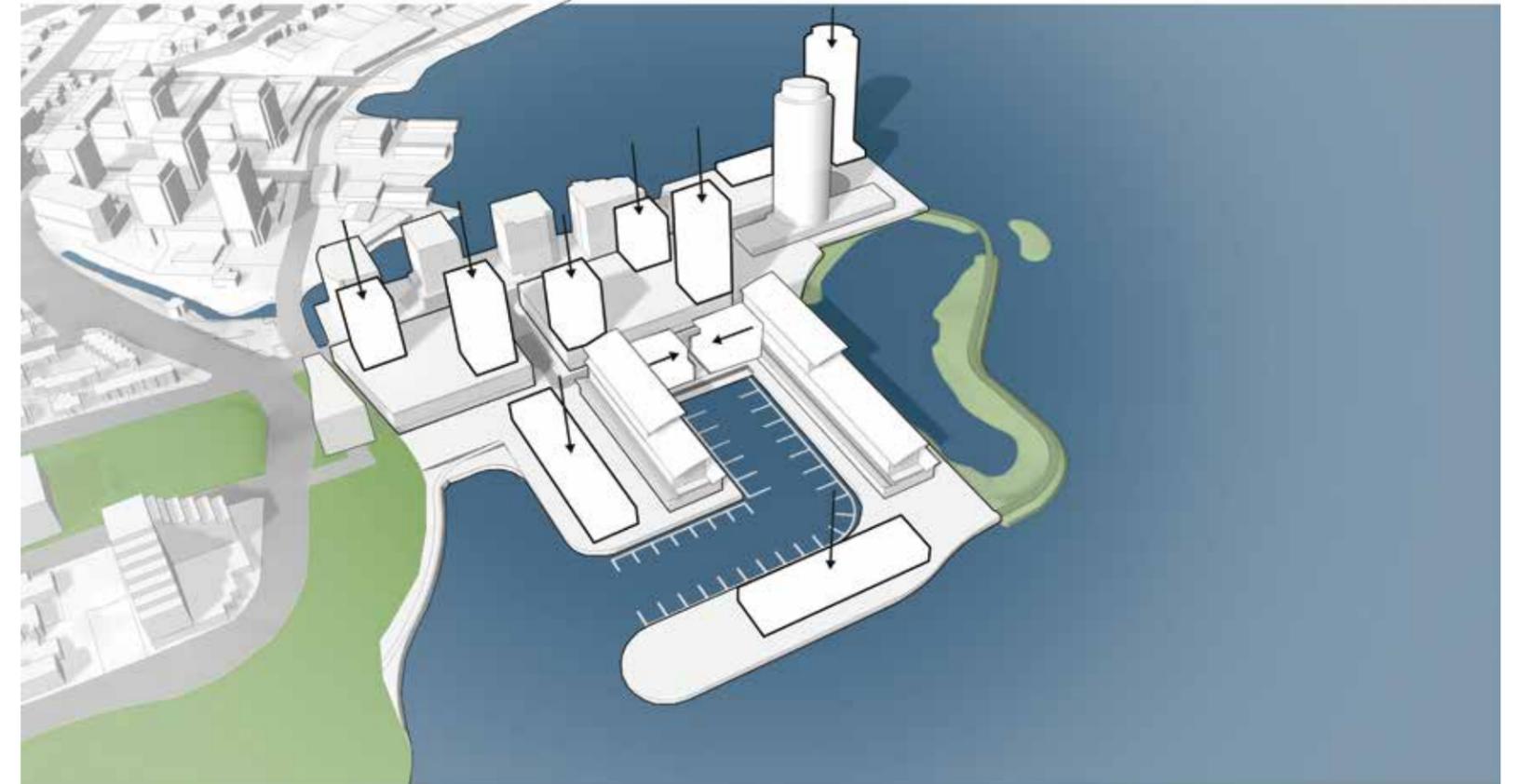


Rendering of Site Proposed by 2013 Amendment



Original DA

1500 units contained in very large buildings and surrounded by vast, unprogrammed park spaces.



2013 Substantive Amendment Proposal

The ask was to add in additional towers and increase density beyond the total 1500unit to 1900units.

A Renewed Vision

Downtowns have been under assault for many decades now. Segregation of land and widespread adoption of the personal automobile lead to increasingly far-flung suburban lifestyles pulling more people from inner-core neighbourhoods. Over this time, downtowns were re-created to better accommodate the car. Roads were widened or doubled and parking lots replaced buildings. The implications of this are now better understood and efforts are being made to reduce the trend.

Jan Gehl, a leading proponent in the movement seeking to create people-oriented spaces, once said, “Only architecture that considers human scale and interaction is successful architecture”. He also suggested that if we can get people out walking, the built environment will adapt in a positive manner. That organic adaptation takes time however and so we wish to create an environment which makes walking pleasurable from the outset; a community which encourages face-to-face interaction by featuring spaces that lure – that beg to be occupied and that adapt to change.

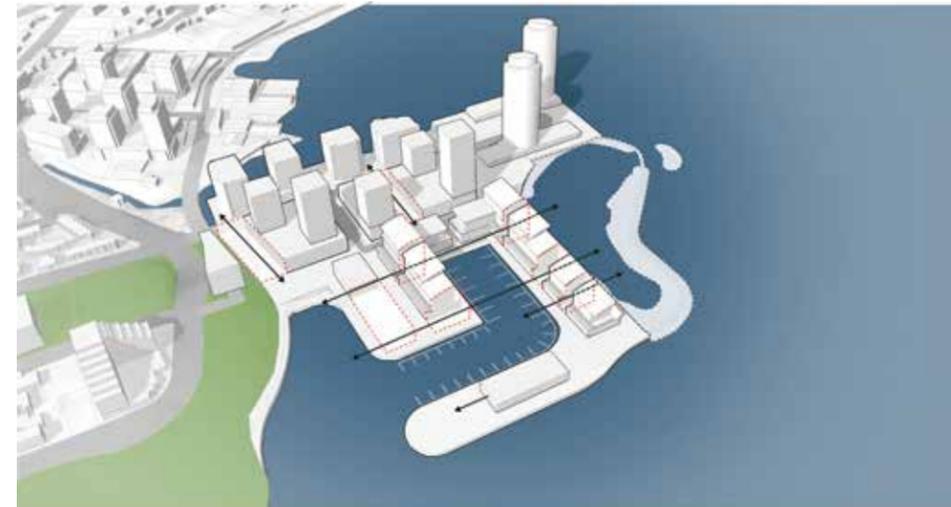


This is what Fares wanted. He wanted a development that took the great parts of the cities he’s experienced around the world and reproduced them with a Nova Scotia flair. That was a pleasure to walk around. That further helped to revitalise Dartmouth and reminded Haligonians of our ability to produce beautiful neighborhoods now, not just protect those from the past. Ones that acknowledge what we

have (re)learned about what makes a great neighborhood and a great community. This piece of land was a rare find, being right on the waterfront in the downtown of a city, and it deserved a development worthy of it’s location.

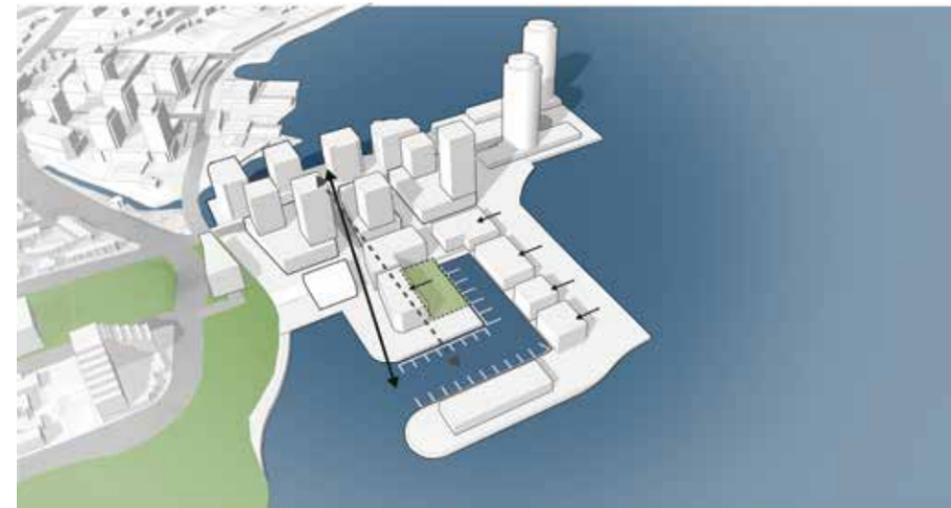
The following diagrams give a synopsis of the proposed changes to the site in order to meet this vision.

Revising the Site to Meet the Renewed Vision



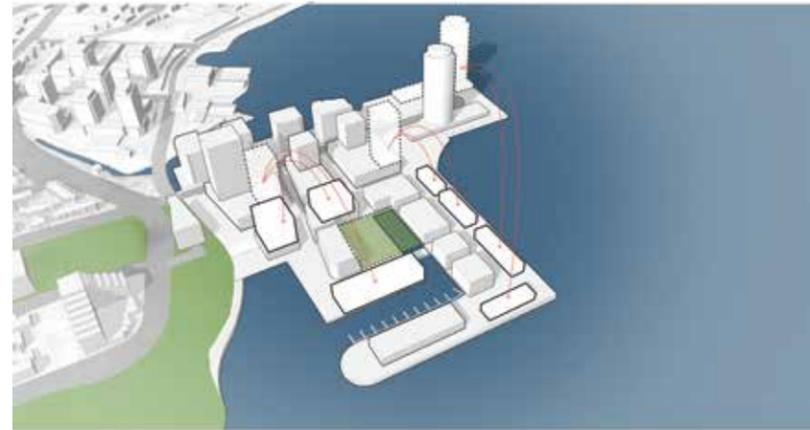
Reduced Building Footprints & Increased Site Permeability

To create a more pedestrian-focused environment, proposed building footprints were reduced in size, creating more articulated and varied street facades. Reduced building footprints open more passageways between buildings for increased site permeability.



Offset The Grid

By pushing out the bottom on Anchorage Street a new public space is created in the centre of the site as well as a larger public venue facing downtown Dartmouth.



Redistribute Units

Move the residential towers from the centre of the site to midrise buildings and townhouses around the site perimeter. The tower suggested in the 2013 application is deleted. This creates a variety of building types and massing to meet demands for a diversity of residential units and commercial spaces. Bringing the total unit count back to the original 1500units.



Create a Variety of Programmed Parkland

Addressing the variety of needs for creating and supporting positive public community life, a series of connected public spaces define different areas of the site. While keeping the perimeter of the site open and public with a variety of experience and parks there is also a central commons with public gardens and outdoor kitchens. New waterfront uses provide animation along boardwalks.



Connection to the Harbour

View Corridors are maintained, or realigned for better effect.



Art

Within each district will be a variety of public art pieces. Illustrated are suggested locations for installations only.



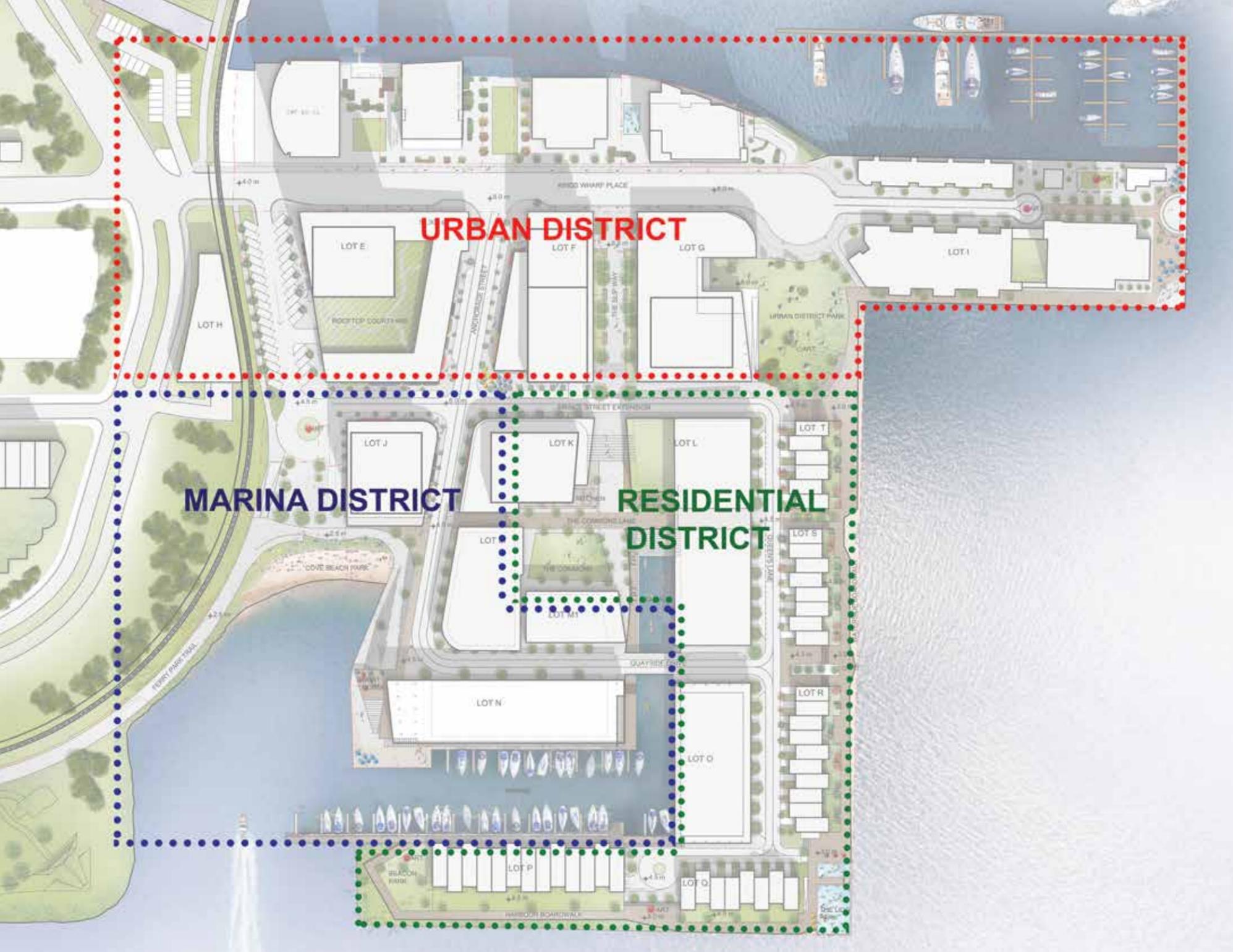
Concept Site Plan

Apart from the tower, which cannot help but be striking, the intention is that the buildings are subservient to the spaces and atmosphere they create. While the architecture will generally have a modern sensibility, it will not be stark; it will lend itself to being lived in and adapted. In the great places of the world, a certain messiness lends intrigue; such a place feels real. There will be a sense that the place has grown organically resulting in many different building typologies which, nevertheless, complement one another. There will be a clear sense of place.

The new site plan offers considerable variety both in commercial opportunities and residential offerings. As such, we will be able to address a broad residential demographic as well as offering a range of prospects for entrepreneurial initiatives – from start-ups to the well established. We hope, as well, that a great many people who live on the site, or nearby, will also work on the site. Again, this lends to the making of a complete community.

And of course, there is strong connection with the water. The site provides many different ways to interact with the ocean around it. Each building, in some way, will have a connection with it. As well though, the connection between the ocean and the public is preserved and enhanced with the public boardwalk and parks.

Apart from the potential impacts of climate change, which we must address - we also wish to raise the bar regarding community health – both through environmental stewardship and also by facilitating outdoor-oriented lifestyles.



Districts

As the site redesign progressed, 3 distinct districts began to emerge; these were named the Urban, Marina and Residential districts - reflecting a general idea or use behind each area.

While they are depicted as having clear boundaries, it is expected that they will meld as they meet and boundaries can be expected to move as market forces evolve.

Each district has it's own qualities and pedestrian experiences which are defined by their parks, existing natural landscape as well as architecture, commercial and retail offerings.



The Urban District Park

The Urban District

The Urban District runs along King's Wharf Place (KWP), terminating at a long point which extends into Dartmouth Cove, just past the Maristella tower.

The nature of this street is largely pre-determined due to the wide street right-of-way and by the building form and setbacks in existence along the SE flank. The vehicular-nature of this street served, in part, as the impetus behind the redesign as we strive to attain a more pedestrian-friendly community. With the stage set, it stands to reason that the largest buildings on this site will find homes along this street – lending an urban form and hence, characterization.

Building E, falling to the right of KWP, will be the largest on the site. It will house a large grocer within a commercial podium which itself, will be topped with townhouses ringing much of the perimeter. As it occupies an entire block, the podium will be fashioned in a manner which suggests multiple buildings, better relating it to the fabric of downtown Dartmouth. It will also feature a residential tower rising to 24 storeys. This will serve to block winter winds from much of the site and proves the least intrusive in terms of sun shading.

Crossing Anchorage, we come to Building F, also of podium/tower configuration, but much smaller and only rising to 14 storeys. Like several other of the proposed buildings it will front on, and respond to, 4 distinctively different streets. Along Prince Ext. (The Slipway), we can expect a slightly more utilitarian functionality. Most interestingly, its SE flank runs along a pedestrian road (King's Lane). Here, Buildings F and G will feature a mix of residential and commercial uses with semi-private yards pushing into the street. Live-works may present opportunities for small offices or artisanal shops. This small street, with a porthole view of the harbour at the end, also serve to lure pedestrians down to the exquisite canal and the Commons.

Building G, further along KWP and across the pedestrian street, features an off-set tower which provides sea-views for existing residents in buildings A, B, C and D. Building G also fronts on the most natural of parks to be featured on King's Wharf – The Urban District Park.

Lying beyond the cul-de-sac at the end of King's Wharf Place, The Point is at once both apart from, and integral to, King's Wharf. The current cul-de-sac will remain in place with a private drive leading

onto the Point. Narrower and possibly featuring pavers, this portion of road will signal a different relationship between person and place; more upscale and intimate. On the right, leading to the towers, the streetwall will feature considerable permeability at street-level with mixed-use storefronts. It is hoped that the left side of the road will be balanced by featuring townhouse condominiums, backing on Dartmouth Cove, however this will only be possible if the view corridor width permits slight intrusion.

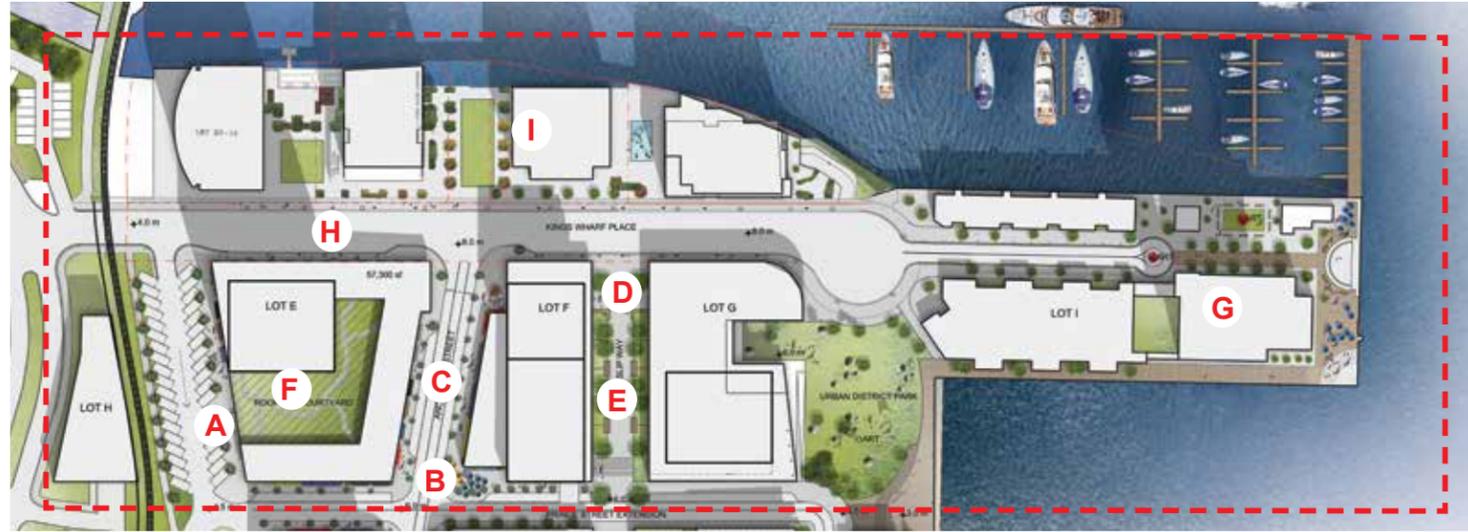
Previously referred to as the Iconic Tower, the Maristella (Sea Star) is expected to rise to 36 storeys – with the lower levels containing a hotel of notable elegance.

The well landscaped grounds extending to the south and east from the hotel will generally be open to the public however portions of the site may be shut off for private ceremonies such as weddings from time to time.

As with the original 4 buildings along KWP, those proposed for the remaining build-out of KWP and the Point will feature 2 levels of underground parking.



The Urban District



D. Kings Lane - Pedestrian Street



E. Live Work Units on Pedestrian Street



F. Roof Top Patio



A. Large Scale Retail Offering



B. Streets are Designed for Ample Patio Space



C. Boutique Retailers



G. Iconic Tower



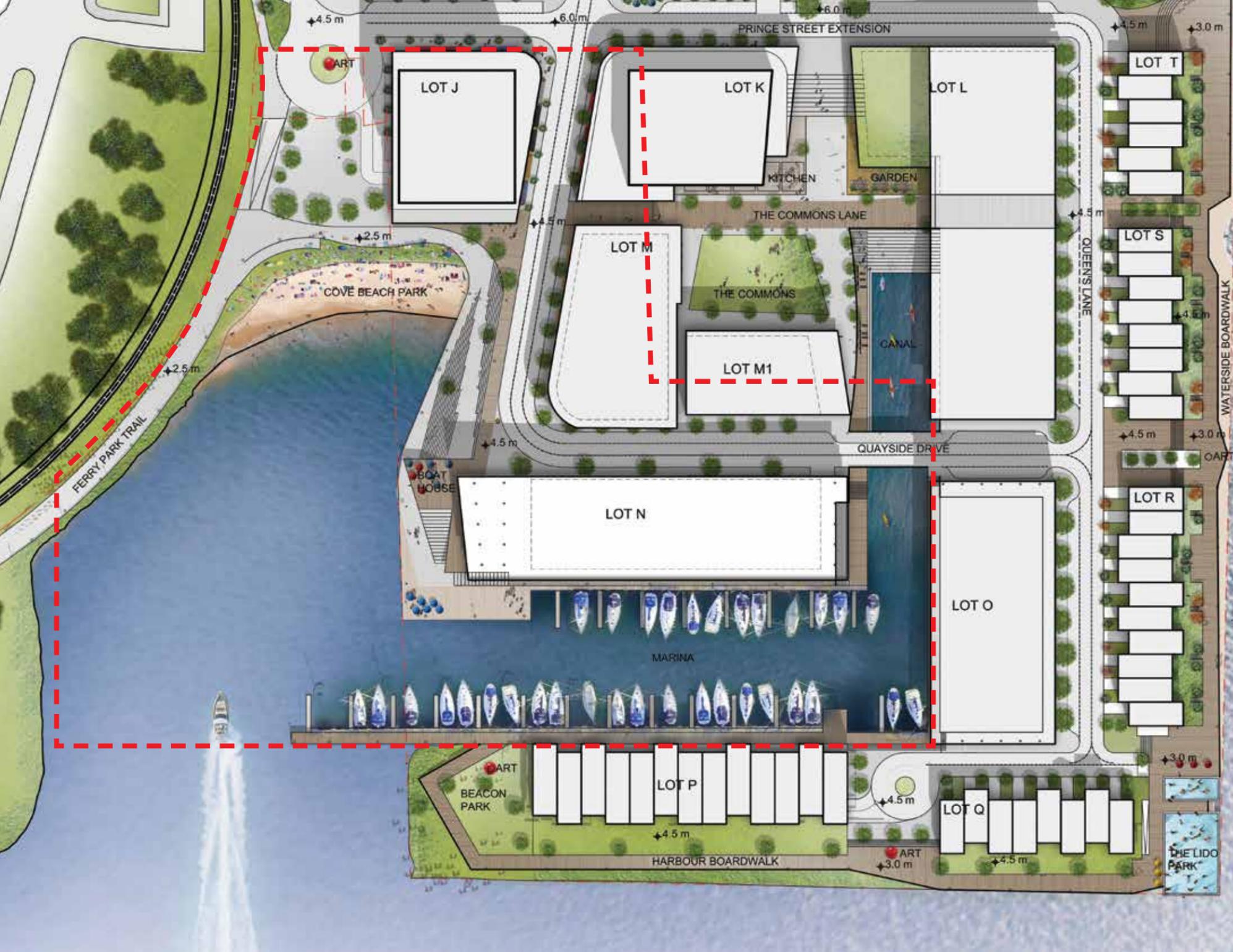
H. Retail Focused Streets



I. Connect and Complement new Buildings with Existing Architecture



The Marina District



The Marina District

Nestled below King’s Wharf Place, we come to the Marina District which could be described as the village core. Like the Urban District, all buildings will be designed to contain both commercial and residential uses.

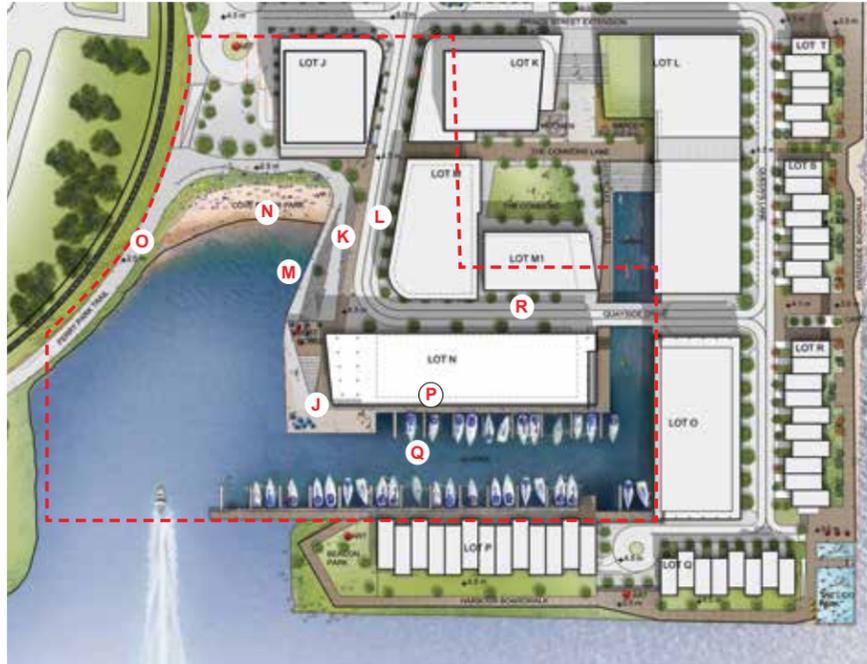
By placing more density along KWP and on the Point, moderate densities become possible within the more intimate Marina and Residential districts. Roads here are narrower and more pedestrian oriented.

Passing along the commercial frontages on either side of Anchorage, one comes to Prince Street Extension. Here, a turn to the right leads to the Cove Beach and Ferry Park Trail. To the left one finds further commercial opportunities, the Commons and canal, the entrance to the Residential District, the Urban District Park and Waterside Boardwalk.

Crossing Prince Street Extension, the view widens dramatically as one enters the Marina district and what must be the fullest expression of King’s Wharf. Here we find a collection of buildings and public spaces which provide not only ample residential accommodation, but commercial and amenity uses which respond and relate to the waterfront. With the long evening sun bathing the western corner of the site, it will be alive with restaurants, cafes and bars spilling out on to waterside terraces. Boat rentals, the water taxi and visiting mariners will further activate the space – all in full view of downtown Dartmouth.

While higher densities along King’s Wharf Place require two levels of underground parking, moving to more moderate densities on the lower portion of the site requires only one level of underground parking. This lowers buildings and roads substantially allowing a more intimate connection to the water (while still being high enough at 4m above mean sea level to avoid flood concerns).

The Marina District



K. Retail Streets Along Waters Edge



J. Mixed Use Building Along Wood Boardwalk



L. Retail Streets Along Waters Edge



M. Active Waters Along Boat House



P. Housing and Park Along the Water



N. Urban Beach



Q. Pedestrian and Scale Development



O. New Ferry Park Trail



R. Retail Streets

The Residential District





The Residential District

The Residential district is divided into two distinct quarters – the quieter area, along Queen’s Lane, and the more exuberant side, falling on the breakwater and facing both inward, on the marina and outward, toward the Halifax skyline. In both areas, along the waterside, we expect 3–4 storey townhouses featuring small private yards and rooftop terraces.

Along the inner face of Queen’s Lane, the buildings will be more European in style and look either over the street, the canal or the marina.

These buildings are expected to be almost entirely residential in composition and will tend to attract families in the more peaceful sections of the district; this is particularly true given the many recreation areas which fall within a block in any direction.

The core of the Residential district clusters around a semi-public park known as the Commons. As the name suggests, this space is intended to serve

as an informal, community gathering place for those living around it. Protected from stronger winds and provided with ample sun penetration by grace of lower buildings to the SW, this space will be designed to facilitate a wide variety of leisure activities. It is also proposed to feature community gardens and lies adjacent to the canal. This gathering space is accessible by no fewer than 6 pedestrian pathways and will be further animated by interaction with the canal.

While the buildings, themselves, may not feature commercial uses (at least along Queen’s Lane), during summer months it can be expected that kiosks will be featured at The Lido Park.

Particularly as the site nears full build-out, there will be adequate residential density in the area to support a wide variety of retail and service amenities adding significantly to a robust downtown commercial core.

The Residential District



S. Community Garden



U. King's Commons



V. Individually Articulated Residential Housing



W. Town Houses with Garden Space



T. Outdoor Kitchen



X. Canal Surrounded by Buildings



Y. Public Lido



Z. Publicly Accessible Boardwalk

Key Design Elements





Routes: The Journey and the Destination

Whether one approaches by water, by road, or by trail - there will be an anticipation that comes from the certainty that a great experience awaits. Once on site, many routes will offer journeys through the site with surprises around every corner. This will be especially true for those on foot.

Throughout the lower site, the web of roads and paths offers not considerable permeability through the site, but also interaction – both with the site and with people. In keeping with policy W-9a, roads are intimately narrow and, while slightly off-axis in areas, approximate the scale of the downtown Dartmouth grid.

To the extent possible, while maintaining view corridors through the site, we have provided several ‘surprise endings’ along certain streets and paths. These points of interest – sometimes only partially exposed, both tantalize one to explore – but also serve as markers to aid in developing a mental map and sense of place. Journey and destination are intended to be equally pleasurable.

These same narrow roads, complete with traffic calming measures and active sidewalks, will ensure motorists move through the site at safe speeds; pedestrians and cyclists will predominate – not cars.

Built Form: Streetscape, Places and Views

The roads, pathways and outdoor spaces of the site are framed and enriched by the surrounding buildings. On the site plan, buildings appear only as massing blocks. Much like the slab of stone which initially confronts the sculptor – these blocks will be carved into, revealing buildings in the process. The blocks suggest maximum volumes and building placement only. The nature of the buildings will, in each case, respond to location, orientation, wind regime and purpose. Detailed consideration of design metrics/guidelines (drawn from those proposed by the city for downtown Dartmouth), will further inform design.

A focus of all efforts will be to ensure that the experience of pedestrians will be enjoyable and memorable. Some of the factors which contribute this include: rich architectural detailing, permeability and rhythm of facades, creation of pockets of calm and sun, adaptable spaces (which may involve moveable furniture), traffic calming, vibrant signage and retail display and places for outdoor dining.

In any development, there will be portions of buildings which must fulfill utilitarian purposes: garage entries, loading bays and solid waste management facilities being the most common. So that they do not become orphaned and uncared-for spaces, it is intended that these be crafted with an understanding that they are part of the public realm.

At a larger scale, the site steps up from the south – helping manage summer winds and allowing sun penetration into the site. By pushing higher in the north corner of the site and by utilizing more of the lot, we offer a more congenial, intimate atmosphere in the Marina and Residential districts. Here, buildings will have smaller footprints and heights ranging from 3 to 8 storeys.

We have retained the required view corridors along King and Prince and have reintroduced views for those traveling in a southerly direction along Alderney Drive. While the site plan

currently shows two more view corridors parallel to King and Prince – these may have to be interrupted as they will funnel strong winter winds directly into and through the site as currently occurs along KWP.

In keeping with the current DA, which allows certain view corridor interruptions, we are seeking to intrude slightly on the King's Street view corridor, just past the KWP cul-de-sac. As noted previously, this allows the introduction of 2 storey townhouses on the NE side of the point, resulting in a 2-sided drive leading to the Maristella.

Of course, the buildings are only part of the whole – the addition of parks and amenities add desirable beauty, connection to nature and life-balance.



Parks, Open Space & Community Health

We sometimes neglect to consider community health in our urban design efforts. Fortunately, many, if not most, features of sustainable communities also tend to foster community health – both socially and physically.

Compact, mixed use developments located in, or near, downtowns, confer a great many benefits: they promote Active Living, support transit, create demand for smaller, local uses and services and generally result in vibrant, pedestrian oriented, socially connected communities.

If we can entice those living in outlying areas back to the core, there will eventually be a reduction in demand for parking facilities (often at surface) – thereby leaving room for more amenities (and better streetscapes), which in turn encourages more pedestrian activity and creates a more favourable, urban real-estate market.

For many, leaving their yard will be a difficult decision. The challenge, then, is to offer alternative options for outdoor living. Private balconies and terraces along with larger, shared spaces (formal and informal both), will work for many.

In terms of formal public spaces, the number, variety and scope of parks on the site has been greatly increased as compared with the current site plan, which features large, unprogrammable public spaces. The proposed parks are dispersed liberally about the site in varying configurations and orientations. In doing so, it is hoped that regardless of season or weather (with careful design), there will be offered opportunities for outdoor leisure activity.

There will be places for quiet introspection as well as full-on play; opportunities for community gathering, splashing in water or setting off in a boat are in generous supply.



King's Wharf will always be about the sea and once completed, it will be possible to walk, almost without interruption, along 1.2 kilometres of boardwalks, docks, roads and park pathways.

A complete circumnavigation could commence as one leaves the Ferry Park Trail and crosses the Cove Beach Park. This small beach-park lies primarily on city lands and will operate as a fully public amenity. For ease of access, a small surface parking area (which can be repurposed as a public piazza for events) is proposed adjacent to the beach. While the park lies out of view of Alderney Drive, those traveling along Ferry Park Trail will find it as a pleasant surprise.

From Cove Beach Park, one can wander up around the Boathouse Square as passengers disembark from the water taxis, or set out in rented kayaks, and on to the docks fronting the marina, past the boats tied at their slips.

One then crosses the Canal bridge and enters The Commons. This park, which overlooks the Canal, is proposed to be largely unprogrammed, but is intended to be versatile in the types of opportunities it provides. Certainly, the presence of community BBQ facilities and food gardens should result in some lively neighbourhood gatherings.

The Canal is an exciting addition to the site which takes the form of a shallow tidal pool. As such, it is expected that a wide range of marine life will be visible making it a sort of living classroom. Further, the Canal will receive storm waters, filtered in bio-swales, and subsequently flushed with tides. Information discussing the many natural systems at work will foster an intimate connection with, and respect for, ocean ecosystems.

Still along the water, one passes the community food gardens, then down the far side of the Canal, over the bridge and eventually to the docks along the outer marina. After a walk along the dock – no doubt interacting with those relaxing on their boats along the way, one



comes to Beacon Park at the outer tip of the breakwater. This park marks the entrance to the marina and could feature a striking piece of art which, when lit, would serve as a beacon to those returning to the marina by dark. It also provides an intermediate view terminus along the Anchorage view corridor. This park will likely be the site of many a sunset picnic and romantic moment.

From there, wandering along the Harbour Boardwalk while enjoying views of the Halifax Skyline and the bustling activity of the harbour, one eventually finds the Lido Park with its salt-water swimming pools and summer kiosks; a beautiful place for a swim or to find a bench from which to contemplate the sea.

The two breakwater parks and wide, Harbour Boardwalk connecting them, together with the Waterside Boardwalk are proposed as public parkland.

Carrying on from the Lido Park, we walk along the Waterside Boardwalk – the longest continuous stretch of boardwalk on the site. Running along a naturally forming stone beach and bordered by the gardens of low-rise Townhouse units to the west, the boardwalk leads to the Urban District Park. It is intended that this park will be less structured, in contrast to the polished streetscape of King's Wharf Place at its upper reaches. It will resemble a natural shoreline environment with walkways only developed once desire paths become evident.

Kings Wharf: Development Agreement

Leaving this park, and its natural pebble beach, you can access King's Wharf Place or continue onto The Point Promenade which follows the shoreline at an elevation set just below the residences leading up to the Maristella Tower. Once past the tower, the promenade concludes at the semi-public gardens which grace the tip of The Point.

From here, there are a great many ways to complete the loop – but one particularly nice route would start by turning down the flagstone lined The Slipway, a cobbled pedestrian street featuring semi-private gardens leading in to live-work units on either side. This continues across Prince Street Extension, back into the Commons and then to the Cove Beach along the Commons Lane, a pedestrian alley.

Of course, those exploring any part of the site will find ample opportunity to access the extensive boardwalk system. Along Queen's Lane, for instance, there are 4 parkettes through which one can access the Waterside Boardwalk.

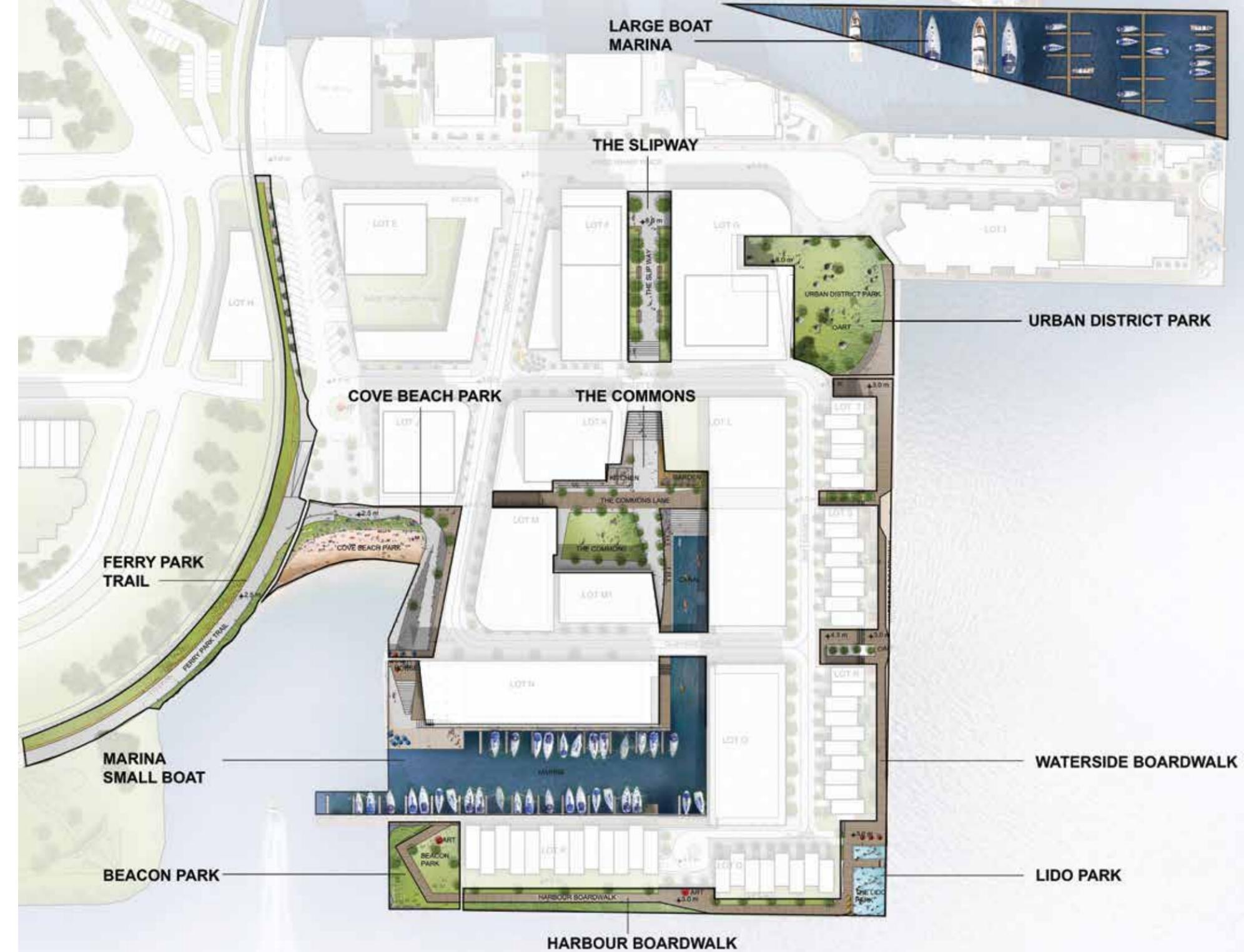


Already in existence on the site is Park B – as it is known internally. This simple grass park aligned with Anchorage Rd. overlooks Dartmouth Cove. It was completed in Phase 1 and sits between The Keelson and Killick buildings.

King's Wharf will be a popular destination, drawing people from a wide region. It is important that residents and visitors alike feel comfortable (safe), while enjoying the many public areas of the site.

Part of this sense of safety will come from the many eyes on the streets and care given to avoiding any dark, uninhabited alleyways. Suitable lighting will help as well.

Taken together, the extensive walks, the indoor and outdoor amenities, the ample opportunity to engage in marine related sports and facilitation of a car-free life and you have all the ingredients of a healthy, fun lifestyle.



Design Influences & Constraints



Design Influences & Constraints

King's Wharf is a large, complex site; while several design influences/objectives have been discussed earlier, many more have required detailed consideration as we set to the challenge of redesigning the site.

In striving to craft a site imbued with the desired qualities, there are myriad factors to contend with – some of which compete, one with another, and certain of which present opportunities for innovation; examples emanating from city objectives, for instance, include:

- The desire for a welcoming site gateway in the face of railway requirements;

- Maintaining connection to the harbour and views of the city skyline - but avoiding creation of wind tunnels;
- Ensuring connection to the water while staying safely above storm surges;
- Providing abundant waterfront access vs. cost of construction and maintenance;
- The economic feasibility of moderate density while constructing at the water's edge.
- Constructing efficient parking structures underground while ensuring pedestrian friendly streetscapes at the surface.

Thankfully, in the extensive suite of policies and regulations which apply to development at King's Wharf Place, we achieve goal-congruence with the majority. Notable examples include:

- Pedestrian Oriented
- Waterfront vibrancy / engagement
- Increased Marina Amenities in Dartmouth Cove
- Residential density in downtown
- Mixed Use
- Efficient use of infrastructure
- Supports Public Transit

Others, however, present significant challenges as can be seen.

Commercial Viability

King's Wharf is a mixed-use community. This does not mean, however, that every building will feature a mix of uses. In certain cases, desired objectives (such as accommodating a range of family types), is better served with single-use buildings and even provision of areas which are primarily residential in nature. Further, if commercial is spread too thinly, an inadequate critical mass is achieved. Clustering of commercial uses in certain areas of the site will help alleviate this concern.



In keeping with a move toward Form-Based planning, no locations are predetermined for Institutional or Office space. By providing larger phases and the possibility of overlapping DAs (an approach which is explored in further detail later on), these uses can be accommodated should the market suggest a need.



As a great many new jobs are created in small, start-up companies, we intend to support that by offering a range of commercial spaces –in terms of size, location and affordability. Adding further flexibility, many of the smaller buildings will be designed to permit live-work options.

While we are seeking to reduce dependency on the automobile, parking remains a critical component in successful commercial development. Policy W-9a(6) indicates that, to enhance the pedestrian nature of the development, parking shall primarily be

underground. It does provide for limited surface parking however, which is fortunate as, particularly with respect to the large grocer destined for Building 1, some amount of surface parking is considered necessary. While not normally considered ideal for the entrance to a development, this will fall below the view of those overlooking the site from Alderney Drive and will be heavily landscaped. We also propose a small surface parking area adjacent the Cove Beach Park. This area will be designed to permit other event uses as well.



Technological Change and Demographic Shift

A century ago, we transitioned from horse, to horseless buggy and soon thereafter to flight. By all accounts, we will see equally dramatic change over the next 15 years – which happens to coincide with the expected build-out of this site. Between autonomous cars, flying cars, drone delivery, dramatically increased use of robots, AI technology and myriad other advancing factors, we have many existential challenges ahead. The viability of renewable energy is increasing logarithmically. E-bikes make commuting by bicycle a sweat-free endeavour. Online Retail is

taking over from Box Stores as the new disruptor for downtown retail districts and digital nomads can work from the place of their choosing.

All of this speaks to a need to embed flexibility into the build-out program for King’s Wharf; agile adaptation will be key. This understanding, in part, drives our request for larger phases with overlapping DAs.

Demographically – we have a shift at both ends of the spectrum – Boomers are retiring young, healthy and well financed. They are looking for lives which open the door to experiences near and far. In contrast to previous generations,

Millennials seek better work/life balance and may chose not to own cars or houses as they impede accessing life experiences. World travelled, they value artisanal offerings and appreciate local culture and unique services. At both poles then, we see groups favouring experiences over acquisitions; downsizing and simplifying – seeking quality over quantity. These factors, taken together with the knowledge that we are competing on the world stage, have inspired us to look beyond typical development patterns.

Environmental Stewardship

In Canada, our current penchant for individual cars and stand-alone houses on sprawling lots, plays a leading role in our having one of the largest environmental footprints in the developed world.

Those who we seek to attract to King’s Wharf will value not only their own wellbeing, but also that of the planet; King’s Wharf has much to offer in this regard. Its location provides for easy access to bus routes, the Halifax Ferry and all the shops and services featured in the Downtown, thereby enabling a car-free lifestyle.

Further, buildings such as those existing, and proposed, offer substantial energy savings when it comes to heating (sharing walls, floors and ceilings with other units as they do).

Apart from the inherent sustainability of King’s Wharf described above, we are currently planning to introduce several further improvements with respect to storm water management, urban heat island effect and energy resilience. Considerations include, but are not limited to the following:

- Bio-Swales and Permeable Pavements
- Green Roofs
- Renewable Energy Generation
- Consideration of seawater-based district heating and cooling
- EV Charging Stations
- LEED features in larger buildings.
- Introduction of LEED ND features as appropriate.

These will be developed further in Phase 2 agreements during detailed design.





Stormwater Bioswale



Rooftop Vegetable Garden



Green Roof



Wind Turbine

Climate (Change) Response

Surrounded by water on 3 sides and with open Atlantic to the South, the implications of our location are an ever-present factor at King's Wharf. Tides rise and fall between 5' and 7' twice a day, winds build and buffet and rain and snow are as likely to come from the side as above. And then, of course, there are the extreme events – and more extreme events to come if we stay the current path with respect to global action on climate change.

Wind

As with any maritime location, wind is a significant factor on this site. An initial analysis of the site (attached) reveals several interesting factors commencing with predominant seasonal winds. In the summer, these largely come from the south west. Stepping up from the water, as our current model does, helps reduce significant downdrafts. Buildings which partially surround the marina aid in navigation at slow speed and reduce irksome wind-related noise from sailboat halyards. Sheltered areas, such as The Commons, should prove relatively calm even on blustery days.

Winter winds present more of a problem as the predominant direction is from the NW; this coincides exactly with our required view corridors which, by policy, are meant to drill, unimpeded, through the site to the water. Avoiding significant wind effects along and to the sides of The Slipway (Prince Ext.) and KWP will be almost impossible as a result. This is already experienced in our current configuration. Permitting 'roughness' (building intrusion and surface modulation) along these corridors can help somewhat.

Where towers are to be employed (which they must to achieve necessary density), podiums are important as they deflect downdrafts from impacting the street level. Putting height at the north corner of the site, adjacent the railway and Alderney Drive, limits sun shading and shields some of the site from the worst of the winter winds. Still, with respect to towers, design features such as re-entrant or chamfered corners help reduce wind acceleration. Introduction of canopies and porous wind screens can be employed to manage wind in challenging areas. These micro adaptations will be introduced during detailed design for stage 2 agreements.



Sun

It is not possible to achieve density without blocking sun to some extent. That said, the site has been crafted with a view to minimize loss of sun in public areas. As buildings tumble down toward the south, sun is admitted into several prime public spaces – most notably, the marina and The Commons. Apart from early in the day, the breakwater parks and boardwalk as well as the Cove Beach receive sun for the better part of the day and well into the evening.



Sea Level Rise, Storm Surge and Wave Action

Per Section 26 of the Downtown Dartmouth LUB, no residential suites may be located lower than 3.8m above CGVD28, which represents the mean sea level for North America. Apart from parking garages and possibly a boat storage facility, no main-use floor elevations on the site will be lower than this elevation.

The Canadian Extreme Water Level Adaptation Tool (CAN EWLAT) indicates a range of sea level increases based on moderate or extreme predictions. For Halifax harbour, it is estimated that sea level rise by 2050 will range from 0.26m to .29m and as much as 0.61m to .85m by 2100 as compared with current conditions¹.

	MRSLS RCP4.5	MRSLS RCP8.5
2020	0.05	0.05
2030	0.12	0.13
2040	0.19	0.2
2050	0.26	0.29
2060	0.32	0.39
2070	0.39	0.48
2080	0.47	0.59
2090	0.55	0.71
2100	0.61	0.85

At these elevations, even in the year 2100, mean sea level would not reach the floor of the lowest levels of underground parking.

The CAN EWLAT does not indicate wave predictions for Halifax Harbour. Nor does it indicate storm surge information. In regard to these factors, we are looking at a variety of means of safeguarding those portions of the site which can be expected to sustain significant wave action, both on a routine basis and in extreme weather events. One approach currently under review is mimicking natural coastal shorelines which have adapted over time to these conditions. An approach coupling bio-mimicry along with constructed barrier forms intended to lesson destructive wave action may prove the best option.

Where the Salt Lagoon proposed in 2013 was to occur on a Port Authority Water lot, and where no agreement in this regard is currently in place, we are not presenting it as part of this application. That said, where development of a natural dune and salt lagoon system could confer benefits as a natural barrier to storm surge, and where it could serve as an exciting educational amenity for the Downtown, negotiation on this opportunity may yet occur.

¹ <http://www.bio.gc.ca/science/data-donnees/can-ewlat/selected-location-en.php?type=TG&prov=NS&loc=Halifax&station=20>

CN Rail

In the case of King's Wharf, the elephant in the room is always CN – or rather, an access shared with a railway. This impacts the design of buildings along the line, intrudes on peace and quiet, results in pesky delays and, ultimately, can hamper attention to emergency situations (although it has not done so to date).

In certain of these there lies a balance; for example, while one may occasionally be delayed by a train for a few minutes, many hours a

week may be saved by living in this downtown location. Also, the recent installation of anti-trespass fencing, while regrettable aesthetically, has lead to whistle cessation - leaving only a tolerable amount of noise and vibration to contend with.

Building design implications and emergency response, on the other hand, must be managed and are discussed later in this document.

Development Costs

Development at water's edge is always more expensive. Factoring in wave action, tidal variation and surge, higher winds and, of course, higher land costs and coming to market with a viable project can be a challenge. Add to this the expense of responding to the rail crossing safety, City desires for extensive waterfront access and policies which prohibit development on a significant portion of the site, and the challenge rises further still.



Questions Arising

In this section, we discuss areas which, due to policy or public sentiment, staff have expressed concerns about.

The Character of Dartmouth Cove

A key aspect of the new plan is an increase in the amount of submerged land which is to be raised above high water. This is not to increase the density or number of units on the site – quite the contrary; it is necessary if we are to allow for a finer grained, more pedestrian scale and community focused development.

In policy W-9a it is noted that consideration must be given to maintaining the character of Dartmouth Cove by limiting infill. What direction is to be taken from this is unclear as when this policy was drafted, these lands were highly industrialized and not something of picturesque quality. There is also the question as to what the borders of Dartmouth Cove are. As the northeast flank of this site was largely developed to the limits of the property, and where this meeting of land and water forms a boundary of the cove, development falling on the Halifax side of the property would not affect Dartmouth Cove; nor does infill contained within the breakwater running along SW property line.

As has been discussed in previous meetings and public hearings, the thick silt laying underwater on this site is heavily polluted and so unlikely to be regarded as healthy habitat. While not the case at King's Wharf, much development in HRM results in excavation of pyritic slate – an otherwise troublesome by-product that is neutralized by immersion in salt water. Using this slate as the primary means of elevating these submerged lands, capping polluted silts in the process – should be viewed as a win-win. Further, any infill carried out on this site results in habitat offsets.



A New Relationship with Halifax Harbour

As noted previously when discussing HRM policy objectives both in general and as apply to King's Wharf, the desire for connection to the harbour is significant; this has been ever-present in the design team's mind as the new site plan evolved.

On cessation of heavy industrial operations on the former shipyards, the city quickly realised the potential of this location. As a substantial land / water-lot of almost 30 acres it is unquestioned that redevelopment of the site would forge a new relationship with the harbour – one much more accessible and attractive to the public. So too would it change the near-view, and range of amenities, for those around it. While some may not embrace this change, the community around them will most certainly benefit from this development.

Connection Between Downtown Dartmouth and the Harbour - Through King's Wharf

Since the beginning, it has been a requirement that the Ferry Terminal Park be connected by a shoreline trail to King's Wharf. This connection results from policy desires to extend the Dartmouth Waterfront into Dartmouth Cove. Apart from this, it also provides Active Transportation (AT) connection between King's Wharf (along with future adjacent development), to the ferry terminal, park, and Alderney Landing. Lastly, as will later be seen, it serves as an important safety link serving both King's Wharf and the Alderney Landing public facility.

At the entrance to King's Wharf from the trail, The Cove Beach Park is to be created from what is now a hidden, unkempt and littered cove cut off to the public by the rail line.

Still in regard to the trail, while there has been talk of moving the Trans Canada Trail onto the King's Wharf site - away from the busy Alderney Drive, details around this remain to be worked out and so it is not shown on our current site plan.

By road, future development plans for King Street will better connect Portland Street to the entrance of King's Wharf. This results in a dramatic increase in contiguous, mixed-use development in the Downtown – allowing a free flow between the downtown and King's Wharf and its kilometer plus of publically accessible waterfront.

While certain long-views of the harbour are curtailed by this development, exciting near-views are created – and none more enticing than that which will be available to those travelling south along Alderney Drive. As one passes the old City Hall, glimpses of something special will appear through the trees. On rounding the corner, adjacent the park, the view of the site and, particularly, the Marina District, will be unparalleled. The draw for Downtown Dartmouth, as a regional destination, promises to be significant.

Distant Harbour Views

Policy W9a (4) indicates that, “Visual access to the harbour shall be provided through the incorporation of street corridor views leading to the water and through the use of urban design features.”

For reasons that extend from the logic noted previously, we must provide development on the breakwater. We are aware of the desire to retain views of the harbour across the tip of the breakwater and so have pulled back buildings initially proposed there. As well, we have reduced loading to one side (against the marina), leaving the entire outer edge as a public walkway along the water with panoramic views of the greater harbour and the Halifax skyline

In policy, considerable focus has been placed on the retention of view corridors. The current stage 1 DA requires that we maintain 4 view corridors: King, Prince, Alderney Drive (in theory), and through Park B along Anchorage. Each of these, in their own way, is problematic.

The King St. corridor is far less successful than one might imagine given the abundant width of King’s Wharf place. The trouble starts with the height of King’s Wharf Place which, at 8m above sea level, obscures views from King St. until one rises almost to Portland St. By this time, the viewer is over half a kilometer from the water. Due to the angle of the view, as things stand, only a sliver of water may be seen. Once the point is carried out 400’ at the 8m elevation to accommodate underground parking, it is probable that there will be no water view whatsoever. One’s eye does, however, rest on the Harbour Solutions treatment plant.

The Prince St. corridor fares better in the new plan as the lower portion of the site is not so highly elevated and the view is slightly less industrial. Once again however – by the time the eye reaches open water on the far side of the site, it has traveled over half a kilometer and the view is quickly curtailed by the hills below Pleasant St. Moreover, this view is frustrated by trees along

Alderney Drive. By comparison, the near view from Prince over the cove and into the marina will be excellent.

The Alderney Drive corridor, which is intended to provide views of that harbour for those traveling in a westerly direction into downtown – did not function in any fashion under the old plan – being completely pinched off by buildings and the proposed helix. Under the new plan, there may be glimpses of water through the foliage. Leading to the intersection of King St., there is no sidewalk along Alderney and so pedestrians will not have opportunity to enjoy views from the anticipated vantage points.

The Park B / Anchorage corridor suffers the disadvantage of commencing at 9m above sea level. As such, views of the Halifax skyline through the site from the only public venue (the Trans Canada Trail on Dartmouth Cove), are very limited. Only those in private homes residing well above the trail could benefit from this long view and it is our understanding that the city, by policy, does not protect private views.





Taken collectively, these many corridors consume a significant amount of land and render sensible site planning decisions into awkward compromises in the process. In return, (if we are to be honest), they offer little. It should also be noted that while other view corridor policies may suggest as much, Policy W-9a (4) does not dictate that these corridors be provided for those off-site.

Acknowledging that view corridor policy was not a perfect fit in all circumstances, staff, in 2008, proposed amendment allowing more flexibility in application, inclusive of potential trade-offs aligned with policy intent. For reasons unclear, this amendment is not shown in current policy documents however the approach appears to have been utilized in arriving at the current DA – how

else to explain the acknowledged incursions into the Alderney Drive corridor?

With respect to design implications, it was (and continues to be), our hope that the site would offer those visiting a variety of enticing paths through the site via a procession of serial views – unveiling and tantalizing as they unfold, eventually leading to one of the many fantastic public amenity spaces. This ambition has been somewhat compromised as we attempt to maintain the required view corridors.

The Anchorage corridor (now realigned to better suit the site), achieves this in part as, from the upper reaches of the site, the eye travels down Anchorage, senses a widening (and attendant promise of shoreline activity) before leaping across the Marina to an art installation at Beacon Point, then leaps again to rest on the Halifax Skyline.

Regrettably, the two primary corridors (King and Prince), align precisely with the dominant winter winds – leading to a wind-tunnel effect through the length of the site which will prove impossible to mitigate.

Regardless of whether retained view corridors are successful, our proposed site offers a suite of new, attractive views of life at the sea to those on and off the site, as well panoramic views of Halifax Harbour.



Up-close and Personal with Halifax Harbour

DD-SPS Policy W9b suggests that the entirety of the waterfront should be retained for public access either through acquisition, or perpetual easement; while not an imperative, it is a strong suggestion.

While it is not surprising that this ambition was forged into policy – it could not anticipate our unusually long waterfront perimeter (nearing 1.5 kms) as compared against the developable land mass.

In the past, the city conveyed a disinclination to safeguard the entirety of the waterfront by acquisition due to concern over long-term maintenance costs. Per policy, this leaves the latter option which, quite improbably, relies on having a handful of landowners shoulder the costs and complexities of maintaining a busy public waterfront in perpetuity. Thankfully, there now seems to be an openness to taking a portion of the breakwater and the boardwalks for public parks.

The new plan devotes ample opportunity for public interaction with the waterfront – both in terms of myriad opportunities to access water based recreation and amenities as well as views through and into the site. The only areas which are not proposed as publicly accessible are to the rear of the site where it backs on Dartmouth Cove.

Access and Risk Mitigation

While site access and risk related to the railway crossing have been lumped together as one, they may also be considered separately.

In 2008, during deliberations on the Stage 1 agreement, it seemed a given that Red Book standards be applied; this resulted in a requirement for a second access. These standards (we have come to learn), were not written with urban development in mind; rather, they were crafted to address risk in far-flung, suburban development in the wooded, ex-urban fringe.

Looking at matters in more detail, traffic volume analysis, even at full build-out and with a second marina considered, does not indicate a need for more than the one intersection to serve King's Wharf. As we move to a world where we are less dependent on car ownership (and adapt to more sustainable forms of mobility), further reductions in congestion can be expected.

Having come to this conclusion, we are left only with mitigation of risk associated with the crossing. In light of this (and where there had been no previous analysis of risk or mitigation alternatives), Fares engaged Emergency Solutions International (ESI), to carry out such a study. ESI are recognized as Industry experts in the field of Community-based risk analysis.

As part of their assessment, ESI invited HRM Planning, Parks, Infrastructure, Fire, Police, 911 and EMCI to participate in risk-scenario workshops. As well, communities across the country, who manage rail-associated risk, were consulted. CN was engaged, the nature of rail traffic considered and the site thoroughly studied.

The resulting report indicates that, while a grade separated access (GSA) is one means of dealing with most (but not all) risk, other alternatives will work in this situation. Since erection of a GSA (of approximately 3 storeys in height), will undermine a great many city objectives for downtown and waterfront, and where both initial and ongoing costs will be significant, consideration of alternative risk mitigation measures is in order.

The report, which is attached, provides an analysis of risk as well as mitigation options which generally fall into 3 categories: protocols, infrastructure and technological solutions. Generally, risk on this site is either of moderate probability but low consequences, or very slight probability, but high consequences. One thing is also a given – risk cannot be reduced to 0. The goal, then, is to establish mitigation measures which lower expected risk to an acceptable level, by means which are feasible in terms of cost, complexity and reliability.

While more study is required, a suite of response tools is starting to become apparent. We now are aware of, and successfully using, the CN 1-800 Hotline # which allows first responders to call to have a train clear a crossing. To date, there have been no instances where this was required at King's Wharf however it is comforting to know that the option exists.

Going forward, technological advances will allow for “situational awareness” (in this case, location and direction of any trains in the vicinity), leading to a further increase in public safety. Remote sensing is something which is being adopted by communities elsewhere in Canada in this regard. This, in conjunction with direct communication to the Montreal Dispatch centre, would address the vast majority of concerns.

In terms of alternative access to the site, the development of the Ferry Park Trail in a manner which allows vehicles to pass during an emergency is under consideration. By way of a triple win – such a trail would provide considerable protection to the rail line in this area where it is exposed to wave action and, more importantly, provide an alternative access to the Alderney Landing complex and event venue which is also at risk of being blocked by trains.

Development of response protocols and remote sensing will have value anywhere there is a crossing – not simply at King's Wharf. There are 15 crossings along approximately 11 kilometers of Dartmouth waterfront alone. Building a GSA is not an option for each and every one of these.

Against this backdrop, a concern was raised recently that the container port may relocate to the Dartmouth shore in Eastern Passage. If no changes to routing were introduced, this would result in a dramatic increase in train traffic and transport of dangerous goods along 11 kilometers of Dartmouth waterfront and its downtown. However much the container business may benefit Nova Scotia – it would not justify transferring the existing problem in Halifax to Dartmouth. Dramatically increasing risk along the entirety of the Dartmouth waterfront would not be supported, in our opinion, and so a new route out of Eastern Passage must come along with such a move; this would render the current tracks and marshalling yard obsolete. It could, in fact, be the best thing ever to happen to Dartmouth.

In a previous report, staff expressed a concern over the lowness of the King's Wharf Place access making site evacuations difficult. At it's lowest point, King's Wharf Place is 4 metres above mean

sea-level. The average tidal variation is 1m above and below this mark. To top 4.0m, an additional surge of 3.0m above high tide would be required. Should a high-water event of this magnitude come to pass, it will not happen without warning nor, in the view of ESI, would it be statistically likely to coincide with an emergency of such a magnitude that evacuation was necessary.

As revisions to this plan continued to unfold, we held consultation meetings with HRM Police and Fire. In one such meeting, the idea of a Police community satellite office was raised. Included in this was accommodation of the police bicycles (now located out in Burnside), and possibly even a police boat. Seeing mutual benefit in such an arrangement, we committed to provide such a space should it prove of ongoing interest to HRM Police. Also under discussion is provision of a mooring for the Auxiliary Coast Guard boat.

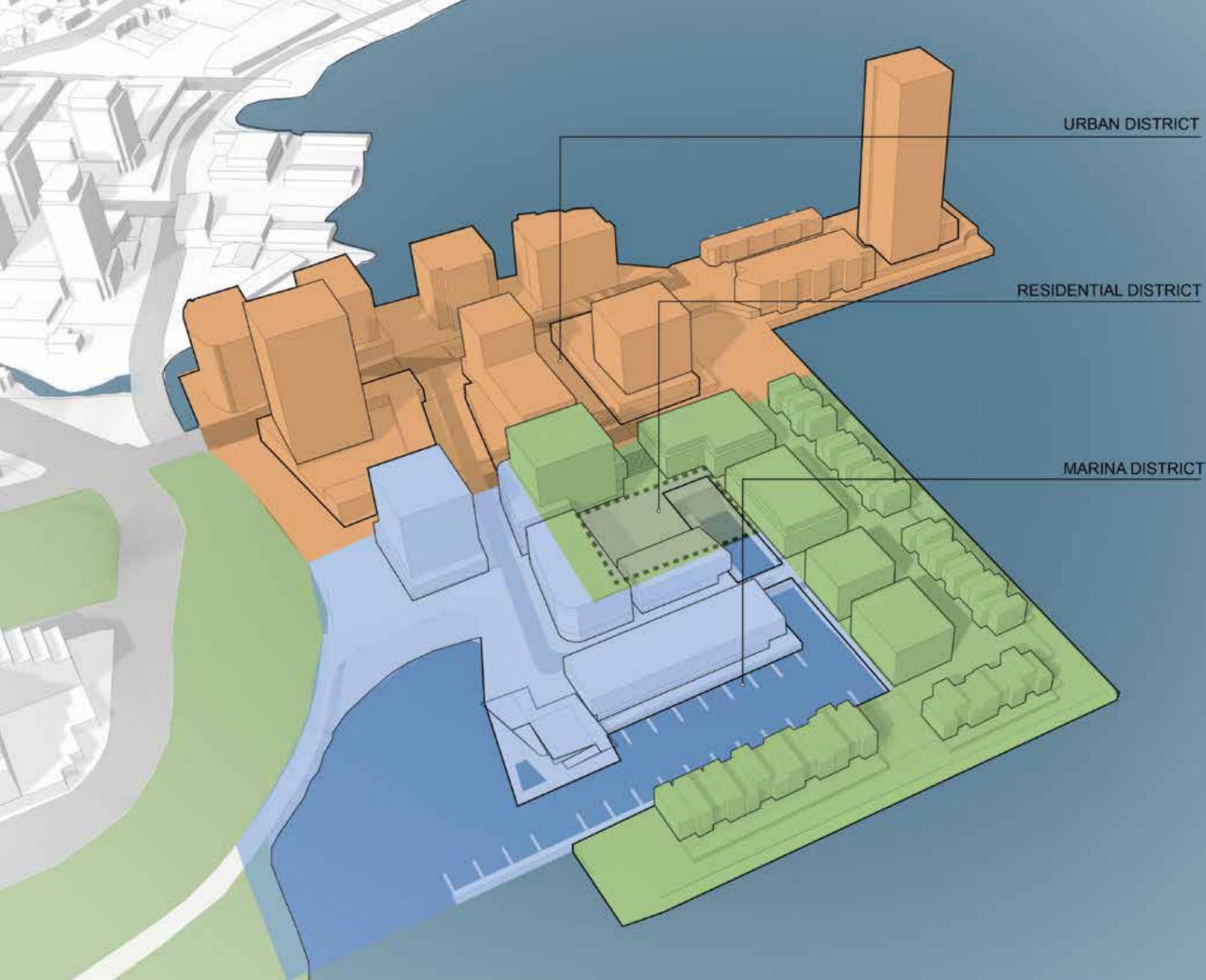
The report contains mention of other emergency preparedness measures such as locating Automated External Defibrillators in lobbies of larger buildings on the site. Fares agrees that this would be a valuable mitigation tool.

Subsequent to the report being released, a joint meeting of stakeholders was held in

June. Attendance was excellent, including 3 representatives from CN (one by conference call).

Highlights of this meeting included confirmation by 911 dispatch that the 1-800# was working (elsewhere – there have been no calls requiring it at King's Wharf), that situational awareness was of significant interest, and that an emergency link by Ferry Park Trail should be pursued – both for King's Wharf and for Alderney Landing.

More recently, CN representatives attended the site to review a pinch—point adjacent Alderney Landing which would make movement of Fire Trucks to the proposed trail difficult. Police and Ambulance vehicles are already able to pass through the parking garage.



Administration

In this section, we will touch on several proposed changes with respect to administration of agreements.

Non-substantive Amendments

In the Amendment Chart attached to this report we have proposed to include several new areas which may be varied as non-substantive amendments (Part 4). These were premised on the understanding that any such variance must demonstrate congruence with policy and DA intent. Further, where we expect that a Development Officer may not be comfortable exercising discretion in interpretation, we

propose that these considerations be moved to Part 4 as well. In this way, goal consistency and transparency are maintained.

Design Guidelines

Rather than pre-design a group of buildings under a phase which will build out over many years, we are proposing to introduce the use of Design Guidelines. This is in keeping with future city policy and, when coupled with a development framework consisting of street ROWs, building volumes and maximum heights, will lead to an organic, but complementary, build-out on the site

over time. Buildings will be designed individually, by different architects, and in response to market conditions and technologies available at the time of design.

The guidelines, as proposed, are drawn almost entirely from the Halifax Design Guidelines (provided to us as suggested guidelines for Downtown Dartmouth in early 2016), but with small changes proposed which are in keeping with the specific nature of this site. The flexibility that this provides will complement the proposed changes to how phasing is addressed.

Chart of Proposed Amendments

The information provided in this report is intended to augment the Detailed Chart of Amendments (the Chart). Proposed section changes are suggestions only; it is the intent and effect that we are most interested in.

It is hoped that between this report and the Chart that we have captured all necessary amendments (and none which are unnecessary), however it is expected that city staff will arrive at alternative changes in some instances.

Some proposed changes are intended to bring clarity to intention; others seek to better align the project with policy, improve placemaking, respond to market uptake or streamline logistics.

More specifically, changes noted in the chart include:

- Subdivision out of phase
- Better alignment with form based planning by removing stipulations on where land uses will occur
- Clear language around permission for interim uses (this is a 30 acre site with a 15 year build-out)
- Revisions to percentage of office vs. commercial space,
- Language around outside, but related contracts dealing with Ferry Park trail and the Cove Beach Park
- Revised language concerning site access and risk management
- Certainty around which parks will be assumed by HRM

- Amendments to criteria concerning boardwalks
- Provision of more scope with respect to view corridors
- More flexibility with respect to construction and siting of the marinas

Not yet indicated, but to be included, are any changes proposed in the recent Non-Substantive Amendment application which are deemed, by city staff, to be substantive. We request that these be shifted to this Substantive Amendment Application.

Conclusion

In concluding, we would like to begin by offering a quote from page 42 of the Downtown Dartmouth Secondary Planning Strategy which reads, “With striking views of the harbour, convenient access to public transit, employment centres throughout the capital district, services, and recreational facilities, the former marine slip property is an ideal location for a high quality mixed-use development on the waterfront. Re-development of this nature could further the objectives of this plan for the business district and alleviate resident concerns expressed towards nuisances associated with marine related industry on the lands.”

And while the DDSSPS Policies W9a and W9b provide for, and directly influence, the direction of development at King’s Wharf, it is important also to consider how this development facilitates a great many city goals and objectives at the broader scale. Looking at the Regional Plan, we see close alignment between our proposal and objectives laid out with respect to Environment, Energy and Climate Change; Settlement and Housing; Transportation & Mobility; Economy and Finance; and Municipal Water Services, Utilities & Solid Waste. Similar goal congruence, with few exceptions, can be found in lower-level plans as well.

It would not be possible to fully satisfy every objective that, to one degree or another, relates to this extensive and complex project; any attempt to do so will result in significant and possibly crushing delays. Certain objectives must rise to the top if success is to be guaranteed and we, collectively, must agree on what those will be.

Working with the city and other stakeholders, we have made it clear that our utmost goal is to provide a framework which will result in the development of a complete community – one fashioned from great streets, buildings and places and one which does not feel contrived – but of the place. To achieve this, we believe – requires not more, but less density and less height (on the lower portion of the site); to keep the project viable, the same # of units are spread over a larger area of

the 30-acre site and some buildings in the Urban District are taller.

The site abounds with memorable vistas and spaces; the view from Alderney Drive into the Marina District and the Commons and Canal area being prime examples.

Opportunities such as this are rare and require vision, perseverance and both government and community support. If Permitted to flourish, this project will contribute to a downtown and waterfront renaissance in the fullest possible measure over the decade to come.

Some say the best thing about downtown Dartmouth is the view of Halifax; we, together, can change that.



Appendices

Appendix A: Requested Amendments

Appendix B: Revised Schedules

Schedule A: Legal Description of Lands

Schedule B: Site Plan

Schedule C: Servicing

Schedule D: Phasing

Schedule E: Parkland

Schedule F: View Corridors

Schedule G: Parking

Schedule H: Cross Sections

Appendix C: ESI Risk Assessment Report

Appendix D: Building Heights

Appendix E: Design Guidelines