PIER 8 BLOCK 16 DESIGN CHECKLIST  DESIGN PRINCIPLES & DIRECTIONS	Complies	Partially Complies	Does Not Comply	Not Applicable	Essential or Discretionary	DESCRIBE HOW THE GUIDELINE OR DESIGN DIRECTION IS MET  (provide drawing reference as required)
PIER 7 + 8 URBAN DESIGN VISION						
1.3 VISION AND GUIDING PRINCIPLES						
The Urban Design Study Vision Statement states:						
"Pier 8 will become a vibrant urban waterfront neighbourhood to be enjoyed by all residents of the City. The vitality of Hamilton's urban waterfront will be supported by a mix of residential, commercial, community and cultural uses."						
The Urban Design Study also established key development concepts that influence the potential character of future development on Block 16. These include:						
<ul> <li>"A new Green Street (The Greenway) that connects from east to west. This open space is framed by new residences and has activity anchors at the east and west boundaries of the open space</li> </ul>						
<ul> <li>A mix of building heights and massing to provide a varied and interesting architectural character."</li> </ul>						
Additional Considerations inform how development on Block 16 should be addressed. These considerations building upon the vision established in the Urban Design Study and are supplemented by the following site-specific objectives and guiding principles:						
<ul> <li>"Because of its strategic location, flanked on all four sides by public and publicly accessible open spaces, and within the James Street view corridor, Block 16 has always been considered a site of strategic importance within the overall Pier 8 development.</li> </ul>						
<ul> <li>Recognizing this high visibility, prominence and strategic role, the Urban Design Study designated Block 16 as a potential institutional site appropriate for a public facility.</li> </ul>						
<ul> <li>In considering the potential for a residential or mixed-use development as an alternative use for Block 16, the public role of the site should continue to be</li> </ul>						

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recognized and therefore requires a high-quality development of exceptional design in order to achieve the landmark status that this site calls for.  • For both a mid-rise and tall-building scenario, future development of Block 16 has the potential to create a landmark and a visual anchor at Pier 8 that is emblematic of the Harbour's renewal.  • A mid-rise building in this location should strive to create a district level landmark given its strategic location and visibility as a feature centred on the James Street view corridor and as the block that serves as the western gateway to both the Greenway and the Waterfront Promenade.  • A tall-building in this location, when designed to standards of exceptional quality and design excellence, has the opportunity to create a metropolitan/regional landmark emblematic of the renewal of Hamilton Harbour. At the ground plane it can act as the gateway to the Greenway and Waterfront Promenade. The higher portions of the tower will be highly visible from the downtown, centred on the James Street Corridor. A tower will also be clearly visible as a landmark visible from the McQueston High Level Bridge and the James N. Allan Skyway.  • New development should strive to capture the public imagination by achieving a unique high-quality building design that is exceptional.  • Given Block 16's location on the north side of the Greenway, the identity of new development should express environmentally sustainable features, green design references, and exceptional high-quality landscaping.  • New development should animate the surrounding pedestrian areas with unique active uses at-grade and create a high-quality, accessible public realm.  • New multi-storey residential development should offer a high quality of life for residents of all ages including family-friendly units design and generous outdoor living spaces contiguous with units.						

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<ul> <li>New development should provide appropriate transition and sufficient separation distances between development on the surrounding blocks and public space. "</li> </ul>						
PIER 8 BLOCK 16 URBAN DESIGN GUIDELINES						
2.0 CONTEXTUAL CONSIDERATIONS						
2.1 Fit and Transition in Scale						
2.1.1 Apply minimum horizontal separation distances and other building envelope controls (including stepbacks and setbacks) to transition from new development to lower-scale buildings.						
2.2 Sunlight and Sky View						
2.2.1 Shadows from new development should allow for a minimum of 3.0 hours of sun coverage between 9:00a.m. and 6:00p.m. as measured from March 21st to September 21st for any spot on public sidewalks opposite the Block 16 development.						
2.2.2 Shadows from new development should allow for a minimum of 50% sun coverage at all times of the day as measured from March $21^{\rm st}$ to September $21^{\rm st}$ on the waterfront promenade.						
2.3 Prominent Sites and Views						
<ul> <li>2.3.1</li> <li>The following viewpoints towards Pier 8 Block 16 should be considered:</li> <li>a. Mid-span on the Burlington Bay James N.Allan Skyway;</li> <li>b. Mid-span on the McQuesten High Level Bridge; and</li> <li>c. James Street North at King Street.</li> </ul>						
3.0 SITE ORGANIZATION						
3.1 Building Entrances						

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3.1.1 Primary building entrances should be accessible and front onto public streets and pedestrian paths.						
3.1.2 Primary entrance(s) should be prominent and distinguished through articulation and façade variations.						
3.1.3 Entrances should be highly glazed to provide enhanced visibility, surveillance, interest, and activity.						
3.1.4 Primary building entrances should be weather protected by incorporating measures such as canopies, awnings, or overhangs.						
3.1.5  The location of the main building entrance to the lobby and at-grade entrance to individual units should consider wind impacts and provide mitigating measures to ensure pedestrian comfort and safety.						
3.2 Site Access, Servicing and Parking						
3.2.1 Consider shared site servicing and parking infrastructure for Block 16 and Block 1, with parking access located at the east side of Block 1 if a shared or consolidated access is provided.						
3.2.2 Minimize the extent of site area dedicated to site servicing and parking access through the use of shared infrastructure, efficient layouts, and reduced curb cuts.						
3.2.3 Recess, screen, and minimize the dimension of garage doors and service openings visible from public streets and open spaces. Apply high-quality finishes and design.						

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3.2.4 Parking should be located below grade. Surface parking should be limited to short-term drop-off and delivery spaces.						
3.3 Private Open Spaces	-					
3.3.1  A minimum of 20% of the site area should be landscaped at-grade. Landscaped areas at-grade will include elements such as hard and soft exterior paved areas, water features, public art installations, etc.						
3.3.2 Where appropriate, private open spaces should be visually integrated with the Greenway south of Block 16.						
3.3.3 All at-grade units should have a front door facing the exterior with a landscaped front yard between a minimum of 2.5 metres to 4.0 metres in depth. Landscaping, minor changes in elevation, short fences, and front steps may be included within the front yard setback.						
3.3.4 At-grade units should, where possible, be elevated approximately 0.6 metres above the flanking public sidewalk, if an accessible path can also be provided, to allow for appropriate public-private transition.						
3.3.5 At-grade enclosed balconies should not be permitted.						
3.4 Above Grade Balconies						
3.4.1 All units shall have access to private outdoor space contiguous with, and accessible from, the residential unit in the form of a balcony or a terrace.						

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3.4.2 Private residential balconies on all sides and especially the south side should reference the Greenway through design themes and balcony infrastructure that supports outdoor planting.						
3.4.3 Balconies should be designed to be large enough to accommodate a range of activities and hold basic furnishings while maximizing sunlight access. They should also be safe and generally free from uncomfortable wind conditions.						
3.4.4  The size of balconies may vary depending on location, orientation, and architectural design but should strive to create depths in some locations that support a wide range of outdoor functions such as outdoor dining.						
3.4.5  The area of the balcony shall be free of any mechanical equipment, permitting full outdoor use as an extension of the indoor unit.						
3.4.6 Balconies should be integrated into the building design composition and may include a combination of projecting and recessed balconies.						
3.4.7  20% of the area of a terrace or balcony and 20% of its exterior width can be occupied by micro-sunrooms. These are small glass enclosures integrated within the terrace or balcony to serve as a sunroom or a small greenhouse providing opportunities for year round use of terraces and the integration of urban agriculture and visible plantings. These glass enclosures provide a means to articulate the façade of the building and extend the Greenway theme into its architectural expression. The area of the micro sunrooms will be exempt from the permitted GFA of the building but will be considered as contributing to the 2.0 square metre exterior amenity area required to every unit.						
3.5 Public to Private Realm Interface						

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3.5.1 Ensure an appropriate level of visual and physical access and overlook at-grade.						
3.5.2 Promote sufficient glazing and landscape design to promote natural surveillance and views towards public and private areas.						
3.5.3  Provide direct, universal access from the public sidewalk for all public entrances to commercial uses and shared lobbies.						
3.5.4 Provide high-quality landscaped setbacks, between 2.5 metres and 4.0 metres, for private entrances to ground floor residential units. Landscaping, minor changes in elevation, short fences, and front steps may also be included within setbacks.						
3.5.5 At-grade units should, where possible, be elevated approximately 0.6 metres above the flanking public sidewalk, if an accessible path can also be provided, to allow for appropriate public-private transition.						
3.5.6 Provide Live/Work or townhouse development along the east property line, with atgrade entrances, to promote grade related activity.						
3.5.7 Place common areas with active uses within the first 4-storeys of buildings.						
3.5.8 Encourage green elements, such as trees, green walls, water features, and other visually engaging elements within and surrounding new development.						
3.6 Expressing the Building Base						
3.6.1 Feature views into common areas such as the lobby, gym and common rooms and integrate 'green' elements, such as trees, green walls, public art, and water features, inside and surrounding the building.						

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3.6.2 Integrate the creative use of featured lighting to enliven the site and base building.						
4.0 PUBLIC REALM INTERFACE						
4.1 Streetscape and Landscape Design						
4.1.1 Organize streetscape and landscape elements to support a comfortable, vibrant, and safe public realm through the use of consistent design elements, materials, and landscaping.						
4.1.2 Provide a minimum landscaped buffer of 1.5 metres on the north, west and south side of the site.						
4.1.3 Provide decorative pedestrian oriented lighting.						
4.2 At-Grade Units	-				_	
4.2.1 Place Live/Work or townhouse units and other grade related units with an appropriate landscape setbacks and amenities to animate adjacent streets and open spaces.						
4.2.2 All grade related units should be setback to allow for a landscaped front yard and an appropriate public-private transition.						
4.2.3 Live/Work or townhouse units should have a minimum front yard depth of 2.5-4.0 metres.						

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4.3 Mid-Block Pedestrian Connection (Pedestrian Mews) 4.3.1						
Provide a new Pedestrian Mews along the east edge of Block 16 and west edge of Block 1.						
4.3.2 Public access will be provided through the Mews.						
4.3.3  The width of the Mews measured from building face to building face between buildings on Block 16 and 1, should be 12.0 metres for a mid-rise building and 15.0 metres for a tall-building.						
4.3.4 Three-storey at-grade Live/Work or townhouse units with front doors facing the Mews should flank the west (Block 16) and east (Block 1) sides of the Mews. To create adequate transition between private at-grade units and the public walkway within the Mews, a landscaped front yard zone should be provided within the Mews area in front of all at-grade units. This front yard area may include steps, landscaping, and other elements to provide suitable transition.						
4.3.5 Live/Work or Townhouse units located adjacent to the Pedestrian Mews should have a minimum frontage width of 5.0 metres per unit.						
4.3.6 The end units should be designed with a corner condition with architectural treatments and windows that address both frontages.						
4.3.7  For a mid-rise building on Block 16 the entirety of the 12.0 metres Mews may be located on the east side of Block 16. A tree-lined public, pedestrian walkway of at least 3.0 metres in width should be centred within the Mews. With a seating, landscaping and tree planting zone of approximately 2.0 metres on either side and 2.5 metres depth landscaped front yards flanking grade-related Live/Work or Townhouse units on either side.						

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4.3.8  For a tall building, the 15.0 metres aggregate width of the Mews is proposed to be evenly split, with 7.5 metres located on the east side of Block 16 and 7.5 metres provided on the west side of Block 1. A tree-lined public, pedestrian walkway of at least 3.0 metres in width should be centred within the Mews, with a seating, landscaping and tree planting zone of approximately 2.0 metres on either side and 4.0 metres depth landscaped front yards flanking grade-related Live/Work or Townhouse units on either side.						
4.3.9 Provide high-quality, well designed streetscape elements including granite unit pavers, benches, bike racks, pedestrian scale light standards or light bollards, to promote a comfortable pedestrian experience and safety.						
4.4 Public Art 4.4.1						
Ensure adequate building setbacks and space surrounding public art to allow for visual accessibility.						
4.4.2 Public art may be integrated into architectural designs or placed within the public realm.						
5.0 RESIDENTIAL BUILDING DESIGN						
5.1 Lobby						
5.1.1 Residential lobbies should be visually and physically connected to adjacent open spaces, outdoor amenity areas, and public sidewalks.						
5.1.2 Residential lobbies should be located on a ground floor with a minimum floor to floor height of 6.0 metres and should be generously glazed to provide interior and exterior views and natural observation.						

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5.1.3 Residential lobbies should be designed to encourage socialization and interaction.						
5.1.4 Residential lobbies should be flexible in their design to accommodate a range of activities.						
5.1.5 Residential lobbies should provide designated areas to accommodate locker storage areas for parcel and food deliveries, waiting areas, communal lounge areas and recreational/activity spaces.						
5.2 Amenity Spaces						
5.2.1  New development should provide a minimum of 2.0 square metres of indoor and 2.0 square metres of outdoor amenity space per unit.						
5.2.2 Common indoor and outdoor amenity spaces should be located adjacent to each other where feasible either at-grade or where indoor amenity spaces are adjacent to a large outdoor roof terrace.						
5.2.3 Indoor and outdoor amenity areas should have provisions for child and youth areas and activities, as well for a range of ages.						
5.2.4 Common outdoor amenity spaces should be located where they will have optimal sunlight access and mitigation from wind.						
5.2.5 The design of common areas should imaginatively address the needs of people of all ages and abilities.						
5.2.6 A common area for pet-friendly amenities should be provided.						

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5.3 Family Sized Units 5.3.1						
A minimum of 10% of units should be three-bedroom units.						
5.3.2  Three-bedroom units should be located on the first 6-storeys as much as possible to maintain a closer relationship with ground level activities or within proximity to indoor and outdoor amenity areas.						
5.3.3  For both the mid-rise and tall building scenarios, larger floor plate sizes have been recommended in these guidelines for the lower levels of the buildings to provide sufficient dimensions for larger family-sized units.						
5.3.4 Three-bedroom units should be placed in proximity to indoor and outdoor amenity areas where feasible.						
5.3.5 Provide a varied mix of three-bedroom units in the form of grade-related units and townhouse/loft units.						
6.0 SUSTAINABILITY						
6.1.1 Green Building - Energy						
6.1.1 Energy Star certification shall be achieved for any new buildings on Block 16 including provision of Energy Star Certified appliances.						
6.1.2 Complete Energy Modeling, Mechanical Commissioning and Air Tightness testing to the Energy Star certification standard is required.						

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6.1.3 Include high performance façade design that may include elements such as solar shading, lower glazing to wall ratio, triple glazing and renewable materials.						
<ul> <li>6.1.4 Consideration should be given to preparing for future District Energy connections by:         <ul> <li>Providing space for future equipment and thermal piping;</li> <li>Securing an easement between the mechanical rooms and the property line for future thermal piping; and,</li> </ul> </li> <li>Including two-way pipes within the building to carry thermal energy from the district energy network to the section in the building where the future energy transfer station will be located.</li> </ul>						
6.1.5 Complete a Lifecycle Carbon Assessment (LCA) that is third party verified and identify opportunities to reduce carbon emissions through building material selection.						
6.1.6 Cool Roof design and material should be considered to reflect UV rays and self-cool by efficiently emitting radiation away from the building.						
6.1.7 Building roofs should include a minimum of 50% coverage for green roofs. Alternative configurations may include a minimum of 50% roof coverage for solar capture equipment, cool roofing materials or a combination thereof.						
6.2 Air Quality and Thermal Performance						
6.2.1 Design the building's Heating, Ventilation and Air Conditioning (HVAC) system to support enhanced air quality and thermal performance.						
6.2.2 Design Building HVAC system to be mold resistant.						

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6.2.3 Include enhanced filtration systems to filter out particulate matter that may enter through operable windows.						
6.2.4 Select building materials that reduce VOC emissions to contribute to healthy air within the building. Applicable materials include flooring, common amenity space furniture, sealants, paints and insulation.						
6.3 Resiliency and Health	_					
6.3.1 Implement design strategies to reduce viral transmission by reducing common touch points within shared spaces, including entryways, the lobby, elevators and amenity areas.						
6.3.2 In an effort to reduce contact with respiratory droplets natural ventilation should be provided throughout all building areas to enhance fresh air flow.						
6.3.3  The building should be design with access to back up generators that can supply energy to the entire building for a period of up to 48 hours.						
6.3.4  The building should be designed to provide residents with a back-up drinking water supply for a period of up to 48 hours.						
6.3.5 The building should be designed to ensure ease of communication of updates during states of emergency.						
6.3.6  The building should be designed to ensure equal access to high speed internet, including the provision of wi-fi in amenity areas.						

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6.4 Light 6.4.1 Amenity spacey, lobby areas and a minimum of 50% of a dwelling unit shall have access to natural light.	П	Т		Т		
6.4.2 LED lighting should be provided to reduce energy requirements.						
6.5 Microclimate (Pedestrian Weather Protection and Wind Effects)						
6.5.1 Building design and landscape design should mitigate adverse wind impacts on atgrade and elevated areas used by the public or building occupants.						
6.5.2 Ensure building design and mitigation measures allow for the appropriate wind comfort criteria desired for an area.						
6.5.3 Provide sufficient mitigation measures where wind comfort criteria is exceeded.						
6.5.4 Provide permanent pedestrian weather protection, including overhangs and canopies, at building entrances and along at-grade frontages and pedestrian sidewalks.						
6.6 Water						
6.6.1 The building design should be compliant with City and Provincial standards and guidelines for Low Impact Development Measures.						
6.6.2 Water filtration systems should be designed to enhanced standards.						
6.6.3  The building should be designed with appropriate ventilation systems to remove humidity from bathrooms.						

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6.6.4  Provision of water efficient fixtures that meet Energy Star standards shall occur to reduce indoor water use.						
6.6.5  Domestic water heating fixtures that meet Energy Star standards should be provided.						
6.6.6 Greywater recycling should be used as a source for irrigation of the site landscaping.						
6.7 Waste 6.7.1 Buildings shall be designed with appropriate waste sorting facilities to ensure recycling and organic waste collection programs are supported.						
6.8 Landscaping						
6.8.1 Plant 100% native plants. Preference should be given to drought resistant planting strategies. Invasive species shall be avoided.						
6.8.2 Utilize bioswale, rain gardens and permeable paving materials within landscaping.						
6.8.3 Greywater irrigation systems should be used.						
6.8.4 Soil volumes for tree plantings should be increased at least 5% above minimum standards.						
6.8.5 Green roofs should be used on roof surfaces that are not used as active terraces and also as landscape features within active terraces.						

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6.9 Green Infrastructure						
6.9.1 Provision of Electric Vehicle (EV) infrastructure for 10% of residential parking spaces.						
6.9.2  The remaining vehicle parking spaces must be designed EV capable (i.e. a complete electrical circuit terminating in an electrical outlet for the purpose of future installation of EV charging).						
6.9.3 Provision of well-designed bicycle parking facilities to meet the needs of cyclists and support bicycle use. Short-term parking (visitors or less than two hours parking), long-term parking (residents parking) and overnight visitor bicycle parking facilities should be provided within the below-grade parking structure.						
<ul> <li>6.9.4</li> <li>Short-term outdoor bike parking: <ul> <li>a. Located close to building entrances (no more than 20 metres) to make it easily accessible;</li> <li>b. Within the view of residents, building security, or in an area close to street or public amenities and;</li> <li>c. The design of bike parking racks or other systems should be attractive and integrated into the site design, public art opportunities, street furniture, and other amenities on site.</li> </ul> </li> </ul>						
<ul> <li>6.9.5</li> <li>Short-term and long-term indoor bike parking:</li> <li>a. Located in the ground level or in the first level of underground parking garage to make an easy access from the ground level and minimize the interactions between bicycles and automobiles in the garage;</li> <li>b. The underground bike parking room should be easily accessible by elevator or ramp. A dedicated two-way bicycle ramp (3.0m wide at 6-7% slope) is preferred;</li> </ul>						

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<ul> <li>c. The ground level bike room should be located away from the main entrance but side of the building facing the mid-block connection;</li> <li>d. Ensure regular security surveillance to improve safety and precent</li> </ul>						
vandalism and misuse; and,  e. Provision of electrical outlets for electric bikes and scooters.						
6.10 Bird Friendly Design						
6.10.1 Design new development with bird friendly best practices including sunshades or louvers, visual markers within glazed surfaces, and non-reflective glazing to reduce window collisions with birds.						
6.10.2 Exterior lighting fixtures should be programmable to allow for dimming during migratory seasons.						
6.10.3 Ensure the design of buildings complies with Bird Friendly Design Guidelines in accordance with the Canadian Standard Associations CSA A460 Bird Friendly building design.						
6.11 Setting Sail Secondary Plan (Sustainability Extract)						
6.11.1  The design and construction of new development and redevelopment shall incorporate best practices and appropriate building technology to minimize energy consumption, conserve water, reduce waste and improve air quality.						
6.11.2  New development and redevelopment shall be encouraged to incorporate rooftop terraces, greenwalls, rooftop gardens and/or other green technologies to improve micro-climatic conditions, energy efficiency, air quality and for stormwater management.						

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6.12 Pier 7 and 8 Urban Design Study (Sustainability Extract)						
6.12.1  A core focus on environmental sustainability should be reflected in both the building and landscape designs.						
6.12.2  Pedestrian and cycling paths can double as a naturalized storm water management area. The landscape features should be engineered to minimize the overall environmental impacts of development. If required, the overall water quality can be maintained by having water flow through an oil grit separator and then into the water gardens.						
6.12.3  An objective for redevelopment at Pier 7 + 8 is to reduce the ecological footprint of the community and to minimize life cycle costs. This is to be achieved through a holistic design approach to development that considers the natural conditions of the site and the sustainability opportunities that arise when planning a new community from the very beginning. Designers will be asked to further the area's sustainability goals through consideration of the following:						
<ul> <li>Alternate energy sources such as wind or solar should be encouraged in the schematic design phases of each development project.</li> <li>The landscape and architectural design of the community will highlight its sustainable features.</li> <li>Landscape architectural design will prioritize the use of indigenous, non-invasive plant material and will promote biodiversity, stormwater management and creation of shade.</li> </ul>						
6.12.4 Cycling should be accommodated in all development plans by providing for secure bicycle parking for visitors, residents and employees.						
6.12.5 Bicycle parking should be placed closer to front doors and key designations.						

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6.12.6 Parking structures should include parking for bicycles, motorcycles, mopeds, e-bikes, small cars, electric car parking with charging stations and accessible parking.						
6.12.7 Parking structures should be designed with the ability to be retrofitted into usable space should the area's demand for parking be reduced in the future.						
6.12.8 Priority parking spaces should be provided for car share stations.						
6.12.9  Priority parking spaces should be provided for electric cars as well as the provision for electrical supply stations and their expansion should be provided for in utility designs.						
7.0 Mid-Rise Building Design						
7.1 Massing Envelope 7.1.1 Proposed building designs should fit within the massing envelope described in Sections 7.2 to 7.7 to ensure a compatible mid-rise building.						
7.2 Height						
The maximum building height for a mid-rise building on Block 16 should be no greater than 40.0 metres including the mechanical penthouse.						
7.3 Building Area						
The maximum Gross Construction Area of the mid-rise building, including above ground mechanical spaces but excluding below grade areas is 14,000 square metres.						
7.4 Podium						
A three storey podium is required on the east side of the building flanking the Mews. Storeys above the third storey should be setback a minimum of 3.0 metres. The north, west and south sides for the building may or may not incorporate a podium if adequate wind mitigation measures can be demonstrated.						

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7.5 Ground Floor Height						
7.5.1 All common spaces on the ground floor shall provide a minimum height of 6.0 metres, measured floor-to-floor from average grade.						
7.5.2 At-grade units should, where possible, be elevated approximately 0.6 metres above the flanking public sidewalk, if an accessible path can also be provided, to allow for appropriate public-private transition.						
7.6 Separation Distance and Setback						
7.6.1 The massing envelope for the first 3-storeys should be setback:						
a) A minimum of 1.5 metres from the north, south and west property line; and,						
b) A minimum of 12.0 metres from the east property line.						
7.6.2 The following minimum stepbacks define the massing envelope above the third storey:						
<ul> <li>a) 3.5 metres on the north (this provides a minimum separation distance of 25.0 metres from the Waterfront Promenade);</li> </ul>						
b) 3.0 metres on the west (this provides a minimum separation distance of 30.0 metres from the existing Hamilton Waterfront Trust Centre);						
c) 3.0 metres on the south;						
d) 3.0 metres on the east (which provides minimum distance above the third storey of 15.0 metres from Block 1).						
7.6.3 The following minimum stepbacks define the massing envelope above the $10^{\rm th}$ floor: a) 2.0 metres from the north and west; and						

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b) 2.0 metres from the east.						
7.7 Building Width and Articulation	-					
Large building widths should be mitigated with building articulation and façade changes to provide a fine grain appearance.						
7.8 Green Building Feature						
Integration of outdoor planting and trees on balconies, terraces and roofs should be provided to the greatest extent possible.						
7.9 Mechanical Penthouse	-					
7.9.1 Roof-top mechanical elements should fit harmoniously and complement the overall architectural design.						
7.9.2 Where possible, mechanical penthouses and all rooftop units should be hidden from sight with screening or wrapped by residential units.						
7.9.3  Mechanical penthouses may also be recessed from the building face to minimize the perceived height of the building, unless incorporated into the building design.						
7.10 Materiality	-					
7.10.1 Bird friendly designs should be incorporated to reduce bird strikes.						
7.10.2 High-quality, durable and sustainable materials should be used.						
7.10.3 Materials should be distinct while respecting the rhythm of existing materials used through Pier 8.						
7.10.4 Exterior Insultation and Finish System (EFIS) is not permitted.						

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8.0 Tall Building Design Guidelines						
8.1 Massing Envelope						
8.1.1. Proposed building designs should fit within the massing envelope described in Sections 8.2 to 8.8 to ensure a compatible tall building.						
8.2 Building Height						
The recommended maximum height (147.0 metres) was derived from an analysis that reviewed the tallest building presently in Hamilton (Landmark Place), which has a geodetic elevation at 226.0 metres. For Block 16 the recommended maximum geodetic height is slightly lower at 224.0 metres which equates to 147.0 metres above grade. The intent of this recommended height is to avoid a building form that is above the presently established maximum. The 147.0 metre height can accommodate a 45 storey building based on a 6.0 metre ground floor, average floor to floor heights for upper levels at 3.0 metres as well as the height of a mechanical penthouse. The topmost elevation of the structure including the mechanical penthouse cannot be above 147.0 metres. (See Appendix A for maximum height diagrams).						
8.3 Building Area						
The maximum Gross Constructed Area of a tall building, including above ground mechanical spaces but excluding below grade areas, is 38,200 square metres.						
8.4 Podium						
A three storey podium is required on the east side of the building flanking the Mews. Storeys above the third storey should be setback a minimum of 5.0 metres. The north, west and south sides of the building may or may not incorporate a podium if adequate wind mitigation measures can be demonstrated.						
8.5 Lower Development Zone						
8.5.1  The following lower development zone setbacks define the massing envelope to ensure an appropriate transition between public and private spaces:						
<ul> <li>a) 1.5 metres from the north, south and west property lines and a minimum of 4.0 metres from all property lines when adjacent to grade related units.</li> </ul>						

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b) 7.5 metres from the east property line.						
<ul> <li>8.6 Tower Placement and Separation Distances</li> <li>8.6.1 The following minimum building stepbacks should be applied to the massing envelope above the third storey to ensure appropriate transition and separation distances between development sites, to provide adequate sky views and sunlight access and to reduce pedestrian level wind impacts:  a) 11.0 metres on the north to provide a minimum separation distance of 30.0 metres from the Waterfront Promenade;</li> <li>b) 13.5 metres on the west which provides a minimum separation distance of 45.0 metres from the existing Hamilton Waterfront Trust Centre;</li> <li>c) 3.0 metres on the south which connects the vertical and horizontal Greenway; and,</li> <li>d) 5.0 metres on the east which provides a minimum separation distance of 25.0 metres for any buildings above three storeys on Block 1. Any portion of Block 1 above three storeys should incorporate an equivalent 12.5 metre stepback in order to achieve an aggregate 25.0 metre separation distance between buildings above three storeys.</li> </ul>						
8.6.2 A multidisciplinary team of wind consultants, designers and engineers should be engaged by the applicant early in the design process to ensure building designs are compliance with appropriate Pedestrian Level Wind conditions.						
8.7 Floor Plate Size and Shape						
8.7.1 To ensure a slender and tapered building design:  a) Tower floor plates should not exceed 850.0 square metres between the 4 <sup>th</sup> – 30 <sup>th</sup> storeys; and						

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b) Tower floor plates should not exceed 650 square metres above the $31^{\rm st}$ storey.						
8.8 Building Proportion						
8.8.1 A tall building on Block 16 should be proportioned to be slender when viewed from the James Street North corridor.						
8. 9 Green Facade						
8.9.1  The south side façade should include unique design patterns and additional balcony and terrace areas to accommodate outdoor planting and landscaping.						
8.10 Building Top (Tower Top)						
8.10.1 Roof-top mechanical elements should be screened and complement the overall tower shape and design.						
8.10.2						
If exterior illumination is integrated into the design of a tall building it should enhance and promote the landmark location of Pier 8 and contribute to the character of the Harbour, without adversely impacting the surrounding neighbourhood context.						
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If exterior illumination is integrated into the design of a tall building it should enhance and promote the landmark location of Pier 8 and contribute to the character of the Harbour, without adversely impacting the surrounding neighbourhood context.  8.10.3  Programmable fixtures which can be dimmed or turned off are encouraged to reduce bird strikes during migration season.						
If exterior illumination is integrated into the design of a tall building it should enhance and promote the landmark location of Pier 8 and contribute to the character of the Harbour, without adversely impacting the surrounding neighbourhood context.  8.10.3  Programmable fixtures which can be dimmed or turned off are encouraged to reduce						

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8.11.3 High-quality, durable, and sustainable materials should be used.						
8.11.4 Exterior Insulation and Finish System (EFIS) is not permitted.						
8.11.5 Landscaping materials should be of high quality including granite pavers for pedestrian paths.						
8.12 Sustainability for a Tall Building 8.12.1  The design and operations of the building shall limit operational greenhouse gas emissions and encourage use of low-carbon energy sources using whole-building energy modeling and an annual greenhouse gas intensity (GHGI) target to be established and agreed to by the City of Hamilton as contained in the Sustainability Report to be submitted in support of the Official Plan Amendment and Rezoning.  8.12.2  A Building Automation System (BAS) shall be designed to monitor building-level data representing total building energy consumption (electricity, natural gas, chilled water propane, biomass, domestic hot water, etc.) and renewable energy production.						
8.12.3  The building shall be enrolled in Energy Star Portfolio Manager to track energy and water consumption and waste generation of the new development during operations. Enrollment of the project in the program must occur before the project presents Detailed Design to the City of Hamilton Design Review Panel.						
8.12.4 In Energy Star Portfolio Manager, provide the City of Hamilton with read-only access to the project on an annual basis.						

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8.12.5 An Operations & Maintenance (O&M) Manual will be prepared for the project and include direction and guidance for building operators into the building on how to upload data into Energy Star Portfolio Manager on a monthly basis.						
8.12.6						
Energy Star certification shall be achieved including provision of Energy Star Certified appliances.						
8.12.7 Complete Energy Modelling, Mechanical Commissioning and Air Tightness testing to the Energy Star certification standard.						
8.12.8 Include high performance façade design that may include elements such as solar shading, lower glazing to wall ratio, triple glazing and renewable materials.						
8.12.9  Complete a Lifecycle Carbon Assessment (LCA) that is third party verified and identify opportunities to reduce carbon emissions through building material selection.						