PETER J. LESDOW

URBAN & ARCHITECTURAL DESIGN BRIEF

KALAR APARTMENTS 7302 KALAR ROAD, NIAGARA FALLS, ONTARIO

PREPARED FOR 2131595 ONTARIO INC.

JANUARY 23, 2024 PETER J. LESDOW ARCHITECT PROJECT NUMBER 23-05

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PETER J. LESDOW ARCHITECT

URBAN & ARCHITECTURAL DESIGN BRIEF

FOR

KALAR APARTMENTS. 7302 KALAR ROAD, NIAGARA FALLS. ONTARIO

Peter J. Lesdow Architect was retained by the owners of the subject property, 2131595 Ontario Inc. (Daniel Perri), to design a 412 unit apartment building at 7302 Kalar Road in Niagara Falls.

At the Pre-Consultation meeting on May 4, 2023, based on the proposed design an Urban & Architectural Design Brief was requested. This Brief forms part of the application for an Official Plan and Zoning By-law Amendment on this property.

In support of the proposed design of the development, the Design Brief addresses How it meets Urban and Architectural design objectives as provided in the Niagara Regions Model Urban Design Guidelines of April 2005.

The Model Urban Design Guidelines is a comprehensive document for the implementation of Ten Smart Growth Principles. Its guidelines address many design considerations which effect the quality of a community's built environment. These considerations include design guidelines for such items as neighbourhood planning structure, road design, parks and open spaces, natural heritage, multi-use trails, main street commercial, large format commercial and industrial sites which are outside the realm of this proposal.

This Design Brief focus is on those guidelines which are applicable and appropriate for this apartments urban and architectural design. These include:

- 1. This apartment proposal and its meeting applicable objectives as identified in the Introduction of the Guidelines.
- 2. How the proposed developments site design meets the objectives of the Public Realm and its associated large-scale planning and design guidelines, Section 3c Sidewalks and Streetscaping, and Section 3c.7 Street Trees.









Architec

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905-357-1112 plesdow@cogeco.net 3. The Private Realm within the sites property boundaries which is the focus of this design brief. It will look at those elements of this development's design which are visible from the public realm. It will address the design rationale of urban and architectural design approaches with respect to the buildings massing, height, facades, parking, driveways, and entrance in relation to neighbouring properties.

It will also respond to applicable specific sections of the guidelines for the private realm which are in Sections 4A. Residential, Item 4a.1 Design Principals, Item 4a.2 Building Variation & Density, and all Sections within 4d. Highrise Development.

Its should be noted that objectives as quoted from the Model Urban Design Guidelines are *italicized*.

DESIGN BRIEF RELATIVE TO MODEL URBAN DESIGN GUIDELINES INTRODUCTION

DESIGN BRIEF RELATIVE TO MODEL URBAN DESIGN GUIDELINES INTRODUCTION

THE PROPOSED APARTMENT DEVELOPMENT

This proposed development requires an Official Plan and Re-Zoning of its site to be amended.

It is to take an under-utilized light industrial site and replace it with a 412-unit apartment building in an area which is predominantly residential.

The apartment proposal is in keeping with applicable urban design objectives as identified in the Model Urban Design - Introduction which includes:

1. Create a Mix of Land Uses

Urban Design Implications

- Low-rise, single use neighbourhoods are balanced by a mix of single and multiple family housing forms.
- A mixture of building forms and types contributes to a more vital, attractive neighbourhood character.

The neighbourhood or area is a large subdivision predominantly made up of single family, two storey homes with some townhouses. There is an apartment building along Kalar Road which is currently under construction.

The introduction of this apartment building will provide more multiple family housing which is much needed in the area and in the City of Niagara Falls.

Its built form at the edge of the adjacent subdivision will contribute to the areas character, providing variation to the building architecture, mass, and height relative to the repetitive two-storey built forms found in the subdivision.

2. PROMOTE COMPACT BUILT FORM

Compact Built Form results in less land being used for development, protecting farmland and open space.

URBAN DESIGN IMPLICATIONS

- Compact Built Form with a range of development types including low rise, mid and higher built forms.
- It make use of less desirable sites such as greyfield and brownfield sites.
- Higher density buildings can be placed close to parks and institutional buildings, e.g. schools, recreation centres.
- Higher density building forms may require large amounts of parking that should be well designed and environmentally sustainable.

This apartment building has 412 units and is on a property of 1.29 hectares. Its compact design and two levels of underground parking provides approximately 320 units per hectare. The average number of houses per hectare in the nearby subdivision is approximately 15 to 18. It would take approximately 19 hectares of land for single family homes to provide an equivalent number of units

per hectare as this apartment development. This comparison clearly shows the efficiency in the use of land as an apartment building versus single family homes found in the area.

It should also be noted that this development is to occur on a site which is currently zoned as light industrial, where a Phase 2 Environmental Assessment notes minor amounts of contaminants have been found. As part of this Re-Zoning those contaminants are to be removed and properly disposed of as per Ministry of the Environment requirements. This development makes use of a less desirable site found within an established residential area, removes contaminants, and provides much needed housing for the city.

3. OFFER A RANGE OF HOUSING OPPORTUNITIES AND CHOICES

A variety of housing types in the same community allows people of different generations to live together, which allows young families and seniors to stay in the neighbourhood they are familiar with and live close to their families if they wish to do so.

URBAN DESIGN IMPLICATIONS

- Different housing forms are designed with appropriate massing and height transitions to reduce shadow, microclimate, and privacy impacts.
- Townhouses and apartments are designed as attractive, high-quality buildings.

As discussed in Item 1, this apartment development will provide alternative housing accommodations to the community. It will provide affordable apartments in the area with one, two and three-bedroom units. These units will cater to the needs of different generations who wish to live in the area.

This apartment building with its large mass and height is located on the very edge of the subdivision. Situated as it is, the shadow studies and provided in Appendix C show there are no shadowing impacts on nearby residential properties. Pedestrian wind impacts in the area from the buildings design are also at a minimum as supported by the Wind Study provided in the Official Plan, Re-Zoning amendment submission.

The architectural drawings and perspective renderings clearly show the apartment's attractive and modern exteriors using high quality materials such as stone at its three storey base podium.

4. PRODUCE WALKABLE NEIGHBORHOODS AND COMMUNITIES

There are numerous benefits to walking: -

• Walking can help reduce the need to own and use cars.

URBAN DESIGN IMPLICATIONS

- All streetscape design including new and retrofit conditions accommodate sidewalks on at least one side of the street and regularly spaced trees.
- Buildings have minimum, regularly spaced setbacks to aid in the comfort and safety of the streetscape realm.
- Streetscape design includes access to dedicated off- or on-road cycling lanes where appropriate.

The developments site is in an ideal location, within walking distance of major commercial shopping centres, banks, restaurants, community centre, elementary and high schools.

In the streetscape design for this development, a new sidewalk is to be constructed with trees regularly spaced as per the perspective renderings provided in Appendix A and Landscape design drawings in Appendix B and also provided with the Official Plan Amendment and Re-Zoning application.

The three-storey podium along the street for each apartment have regular or equally spaced setback which exceed the minimum By-law setback of 13m + 7.5m from the original centreline of Kalar Road.

This development will provide a 2.94m wide road widening dedication along its entire length to the Niagara Region. This strip of land will later be used by the Niagara Region to provide an on-road cycling lane.

6. PRESERVE FARMLAND AND NATURAL RESOURCES

URBAN DESIGN IMPLICATIONS

• New development is designed to maximize land use efficiency in order to reduce the need to develop farmland.

As discussed in Item 2 Promote Compact Built Form above, the site currently has a light industrial use. It also has minor amounts of contaminants which are to be removed to Ministry of the Environment requirements. The site is also in a growing residential area and is municipally serviced.

This development does not take away from existing farmland. The apartment buildings design provides for 320 units per hectare on a current light industrial property versus 15-18 single family homes per hectare as a subdivision, where subdivisions typically are built on lands more recently used agriculturally.

7. Direct Development int Existing Communities

Rationale

The standard pattern of urbanization – or 'growth' – now ends to involve the constant development of new areas instead of reinvesting in local areas. The development of farmland and open space results in higher long-term infrastructure costs. – Instead, it is desirable to reinvest in existing built areas to take advantage of – existing – roads, utilities, schools, and other public amenities that taxpayers have already paid to establish.

URBAN DESIGN IMPLICATIONS

• Guidelines assist in ensuring that new building fit in the existing fabric and contribute to the creation of walkable, visually attractive, and vibrant neighborhoods.

The development occurs within an existing residential area, making use of an under-utilized industrial site, and provides for a high density residential property. Its location also makes use of existing roads, sidewalks, and utilities. This results in a significant savings of current and long-term infrastructure costs.

Further and as noted above, this development is within walking distance of major commercial shopping centres, banks, restaurants, community centre, elementary and high schools. This development with its residents will also contribute to a vibrant neighbourhood.

DESIGN BRIEF RELATIVE TO MODEL URBAN DESIGN GUIDELINES PART 3 PUBLIC REALM SECTION 3C. SIDEWALKS & STREETSCAPES ITEM 3C.4 RESIDENTIAL AREA SIDEWALKS ITEM 3C.6 SIDEWALK - PARKING INTERFACE ITEM 3C.7 STREET TREES

SECTION 3C. SIDEWALKS & STREETSCAPING

ITEM 3C.4 RESIDENTIAL AREA SIDEWALKS

Even though residential area sidewalks carry fewer pedestrians, they are important public spaces for social activity such as meeting neighbours, children's games, and exercising.

a) Sidewalks should be a minimum of 1.5m wide.

An existing 1.5m wide sidewalk is found along the street frontage of the property which will be reinstated where removed in the construction of the entrance driveway.

- b) Sidewalks should generally be located on both sides of all arterial roads, at least one side of collector streets and local roads.
- c) The design of sidewalks should coordinate with intersecting driveways and pedestrian walkways.

The proposed municipal sidewalk is continuous and intersects perpendicularly with the sites entrance driveway. This arrangement provides pedestrians clear visual access of vehicular traffic at this intersection.

The municipal sidewalk is also coordinated and connected with private 1.5m wide sidewalks on each side of the entrance driveway and lead to the front entrance of each apartment building. The private sidewalks are also in line with plantings similar to the municipal sidewalk.

d) Generally, the sidewalk surface should be constructed of poured concrete, however unit paving may be used to provide opportunities for variation and visual interest.

The municipal and private walks are to be poured concrete. Where the municipal sidewalk intersects with the sites entrance driveway the concrete will also provide pedestrians an identified crosswalk over the driveway.

ITEM 3C.6 SIDEWALK PARKING INTERFACE

Surface parking areas adjacent to the sidewalk are detrimental to sidewalk quality, pedestrian comfort, and safety. The surface parking interface should be well designed with adequate buffers.

In the design of the site, surface parking does not exist adjacent to the municipal sidewalk. This sidewalk is instead adjacent to the continuous landscaping along the front of the property.

A negligible number of private visitor parking spaces are visible from the Public Realm along Kalar Road.

ITEM 3C.7 STREET TREES

Trees provide shade and comfort to pedestrians and enhance the visual and environmental qualities of the street. Trees should be incorporated into street designs wherever possible. Native species for street trees should be used wherever possible to promote long-term survival and to prevent disease.

b) Trees should be spaced consistently at 6.0 to 9.0m intervals. Appropriate clearances from utility boxes, street lights, and sight triangles should be considered.

Along the municipal sidewalk, trees are to be incorporated into Kalar Roads streetscape. Native species are spaced consistently at 9.0m intervals along the municipal sidewalk, providing shade to pedestrians and enhancing the visual quality of the street and development.

DESIGN BRIEF RELATIVE TO MODEL URBAN DESIGN GUIDELINES PART 4 PRIVATE REALM INTRODUCTION SECTION 4A. RESIDENTIAL ITEM 4A.1 DESIGN PRINCIPLES ITEM 4A.2 BUILDING VARIATION & DENSITY

SECTION 4D.HIGH-RISE BUILDINGITEM 4D.2DESIGN PRINCIPLESITEM 4D.3GENERAL LOCATION &
ORIENTATIONITEM 4D.4HEIGHT, MASS AND TRANSITIONITEM 4D.5OPEN SPACE AND
LANDSCAPINGITEM 4D.6PARKING AREASITEM 4D.7ARCHITECTURAL QUALITY

DESIGN BRIEF RELATIVE TO MODEL URBAN DESIGN GUIDELINES PART 4 PRIVATE REALM INTRODUCTION

This section is the focus of this Urban and Architectural Design Brief. It more specifically addresses the site and apartment designs intent relative to its surrounding area and the Model Urban Design Guidelines.

There are two items within Part 4 Private Realm of the Design Guidelines that this design brief will respond to which are appropriate for the high-rise apartment development. The first is Section 4a. Residential, focusing on Items 4a.1 Design Principals and 4a.2 Building Variation and Density. These objectives and guidelines are more general with respect to the sites use and this developments integration with the area. The second Section is 4d. High-rise Buildings, which discusses more specific details of the developments Urban and Architectural Design meeting the Model Urban Design Guidelines.

It should be noted that this design brief is comprehensive and complete even though it does not respond to Model Urban Design Guidelines Sections:

- 4a.6 Building Height
- 4a.7 Architectural Features
- 4a.9 Apartments and Mixed Use Buildings
- 4a.10 Apartment Building Parking Areas

This is because all the guidelines in these sections are included in Section 4d High-rise Building. Responding to these above sections would have resulted in unnecessary repetition of the same guideline adherence explanations.

SECTION 4A. RESIDENTIAL

ITEM 4A.1 DESIGN PRINCIPLES

1. Positive Image: A positive residential image is a key design consideration for enhancing the quality and character of the overall streetscape and neighbourhood. Housing should incorporate architectural design elements to create a positive street image. Elements such as front-attached garages or blank walls must be avoided.

For this project to achieve a positive residential image in its surrounding area, the following was incorporated in the buildings architectural and landscape design:

- A three-storey podium at the base of each building which face Kalar Road.
- The use of quality materials.
- Building facades have physical depth through the undulation of walls and projection of balconies.
- Landscaping along the entirety of Kalar Road except for the sites entrance drive.
- Rooftop gardens

The architecture of this development is discussed further in this Design Brief in Section 4d.7 Architectural Quality.

2. Context Sensitive: The mass, scale, and architectural elements of residential buildings should be sensitive to adjoining areas. Design elements such as the height, building mass, and architectural features should complement the overall neighbourhood character. Context sensitive design will support the creation of a unique sense of place that respects local cultural and natural environmental features.

This high rise apartment development is surrounded by the following land uses:

- North (intersection of Kalar & McLeod Roads) a commercial property with strip mall.
- West a proposed school site.
- East a watershed area protected by the Niagara Peninsula Conservation Authority.
- South Light Industrial

With this developments location being adjacently surrounded by the above-described uses, nearby low-rise residential properties are buffered from this apartments mass and height.

Also, based on the building height its setbacks are in general conformance with City of Niagara Falls By-law standards, providing adequate landscape buffers between itself and residential properties.

It is because of these factors that this development is sensitive to its context.

3. Housing Variety & Choice: A full range of housing types (i.e., detached, semi-detached, townhouse, apartments) and tenures (for sale, rent, affordable, and aged-care) should be provided so as to provide options for a wide range of residents/family types (i.e. single parents, couples, families with children, seniors, people with special needs, and others). A range of housing types will address changes in market conditions and provide flexibility for people at a variety of income levels.

The development will add much-needed affordable rental units to the area. Its varied unit types of one, two, and three-bedroom units will provide for a wide range of residential/ family types.

ITEM 4A.2 BUILDING VARIATION & DENSITY

- a) Housing variety should be achieved on each street and block as a means of strengthening neighbourhood character and identity. Repetition of house type, size and design (style, elevation, materials, etc.) should therefore be avoided.
- b) A full range of housing types (i.e., detached, semidetached, townhouse, apartments) should be provided to promote variety and diversity, and to address changes in market conditions.

The proposed high-rise apartment will add to the housing variety along its section of Kalar Road and can address changes market conditions.

d) Residential density should be increased at appropriate locations to promote transit use. Density is the ratio of residential units on a given area of land, and is typically measured in dwelling units per acre. The following table outlines the target net densities (area exclusive of roads) for common housing types.

Туре	Density
Single Detached	up to 10 units/acre
Semi-Detached	up to 20 units/acre
Townhouse	up to 40 units/acre
Apartment	over 25 units/acre

- e) The highest density development should occur at appropriate locations. Appropriate locations include areas that benefit from increased population and have a variety of movement and travel options, including:
 - the centre of a neighbourhood;
 - larger public open spaces (e.g. neighbourhood parks);
 - transit facilities or major transit corridors; and
 - larger institutional uses (eg. universities).

The apartment developments density is 129 units/acre, and its lot is found one property south of the Kalar and McLeod Road intersection. The site is on City of Niagara Falls Transit routes 105/105b, and a short walk to route 113.

The sites' location is central to the area and is within walking distance to neighbourhood parks, a high school, several elementary schools, the MacBain Community Centre, The Boys and Girls Club, as well as several large commercial developments.

SECTION 4D. HIGH RISE BUILDING

ITEM 4D.1 INTRODUCTION

High rise buildings are an acceptable element in urban form when appropriately located and designed. This section provides guidelines to assist in the planning and design of high rise buildings.

ITEM 4D.2 DESIGN PRINCIPLES

1. *Human Scale:* The human scale should be reinforced through appropriate building height, mass and architectural design.

These high-rise apartments have a three-storey base, or podium, with at heights which reflects the residential buildings in the area.

The podiums masses are softened by the used of architectural elements such as balconies, the composition of varied materials such as glass, stone and stucco, and the undulation of the buildings face along Kalar Road. Its rooftop garden top is framed with balcony rails and planting beds.

The high-rise portion of these apartments are stepped back not less than 28.5m from Kalar Roads current edge. This provides a building mass and height along the street which is of a human scale consistent with other buildings along Kalar Road.

2. *Minimum Impact:* The impact of high rise buildings on open spaces and adjacent properties should be minimized through adequate height and mass transition, separation, and landscaping.

As described in 4a.1 Design Principles, this development is surrounded by a commercial property, a proposed school, a light industrial property, and a watershed protected area, all which buffer it from low-rise residential developments in the area.

Also, based on the building's height its setbacks are in general conformance with City of Niagara Falls By-law standards providing an adequate landscape buffer or separation between itself and residential properties.

3. **Relate to Street:** High rise buildings should have a strong relationship to the street, both by use and form.

Westerly apartments within the three-storey podium as well as westerly units within the towers have exposure to the street to maintain the buildings relationship with Kalar Road.

5. **Environmentally Sustainable:** High rise buildings should be designed to achieve a high degree of environmental sustainability and address opportunities for solar orientation and water runoff minimization.

These high-rise buildings longest lengths are oriented east-to-west, which provides sun-oriented exposure for nearly half of the units in each tower.

A storm water management plan will be developed at the Site Plan Agreement stage of the development. The final Engineered design will ensure that water run-off will be kept to a minimum as per the City of Niagara Falls and Niagara Region standards.

ITEM 4D.3 GENERAL LOCATION & ORIENTATION

a) Generally, high rise buildings should be located at major road intersections or neighbourhood 'nodes' and preferably adjacent to public open space. High rise buildings should reinforce the prominence of these locations through appropriate massing, setbacks, building design, and open space treatments.

As provided in *4a.2 Building Variation & Density (e)* above, these high-rise apartments are located one property south of the major Kalar and McLeod Road intersection. It is also adjacent to the easterly tributary to Warren Creek's open space flood plain natural preserve.

The architectural design provides:

- Appropriate massing with their three-storey podiums, towers of varying heights, and articulation of the top floors.
- Setbacks which are in general conformity with City of Niagara Falls By-law standards.
- A beautiful, modern style.
- Open landscape areas along Kalar Road.

- b) High rise buildings should face adjoining streets and frame the adjoining public open spaces (ie. courtyards, gardens, etc).
- c) Active facades and ground level uses such as retail commercial or habitable living areas should be provided.

Addressing both *b*) and *c*), the habitable living areas of this high-rise developments three-storey podiums with face Kalar Road.

d) Entrances should be oriented directly to the street and be accessible from public sidewalks.

The main entrance into each apartment is found within a shared central courtyard which provides for pedestrian and vehicular access. The courtyard is directly connected with Kalar Road by 1.5m wide sidewalks and landscaped buffers on either side of a vehicular access drive.

f) Parking areas should be located underground wherever possible. Surface parking should be limited and located to the rear of buildings.

Parking for this development is predominantly underground, with limited surface parking towards the centre (behind the podiums) and rear of the site. Of the 518 parking spaces found on this site, no more than seven visitor's parking spaces are visible from Kalar Road, but they are found over 40m from the street edge.

ITEM 4D.4 HEIGHT, MASS AND TRANSITIONS

a) The design of high rise buildings should respect potential negative impacts on adjacent properties, including overshadowing, overlooking and windtunnel effects. Therefore, building height and mass should be appropriate to the type and nature of adjoining development.

A Shadow Study is provided as a scaled series on Architectural A-3 of the full drawing set, and a reduced copy is found in Appendix C of this document. It provides shadowing for the dates June 21 and September 21, at the hours of 10:00am, 12:00pm, 2:00pm and 4:00pm.

A Wind Study was prepared by RWDI (#2306234) as part of the Official Plan and Re-Zoning which is included with this submission.

Both the Shadow and Wind Study show there is no negative impact on adjacent properties, particularly residential properties in the area.

With respect to the apartment buildings' units overlooking adjacent residential properties, this is not an issue as the orientation or view from the majority of higher balconies is north or south, with minimal views to the westerly residential area.

b) Nodes and major intersections are the appropriate locations for the tallest / highest buildings.

As discussed above, this development is found just one property south of the major Kalar and McLeod Road intersection.

c) Wherever possible, high rise buildings greater than 5 storeys should extend vertically with small footprints and include a base height of 3 to 5 storeys.

As discussed above, both buildings' podiums are three storeys in height.

d) The base height should generally be no greater than 2 storeys above adjacent property height.

The three-storey podium heights are similar to the predominantly two-storey residential housing in the area. When one considers the sloped roof peak heights of the two-storey buildings, this developments rooftop gardens will be at about the same elevation.

e) New developments should be designed to provide a height transition to lower scale developments and public spaces to minimize impacts of taller buildings, including shadowing and wind acceleration.

The three-storey podiums along Kalar Road provide height transitions between their respective towers and the lower residential buildings in the area.

g) A step back of the building wall should occur above the building base. The step back distance should be a minimum of 2.0m.

In this design, the apartment towers are set back a distance of over 17.5m from the face of their podiums along Kalar Road.

h) Visual Angular Plane Analysis should be used to determine appropriate building envelopes. A visual angle is typically measured from pedestrian areas located opposite the proposed development or from the boundary of an adjacent property (refer to Figure).



The Visual Angular Plane Analysis on the previous page is based on the provided Figure found in the Model Urban Design Guidelines on page 64. The section drawing above shows the building is designed in accordance with the Guidelines' criteria with respect to its height and stepped back design relative to the Visual Angular Plane from Kalar Road.

ITEM 4D.5 OPEN SPACE & LANDSCAPING

a) Private communal open space should be designed to provide a range of recreational opportunities, which may include plazas, children's play equipment, landscaped gardens, tennis courts, etc.

ITEM 4A.9 APARTMENT & MIXED USE BUILDINGS

j) Outdoor amenity areas may be provided as an external garden area, rooftop terrace. Roof terraces require planting, screening, and wind shelter to promote comfort and safety.

In response to Items 4d.5 a) and 4a.9 j), these buildings podium rooftops will each provide outdoor amenity areas which will be landscaped, offer open seating, a trellised area with grill for family gatherings, children's play areas, and a small mini-putt green.

The Wind Study provided by RWDI included with this OPA/ ZBA application shows these terraces will provide comfortable and safe activity spaces for the residents.

ITEM 4D.6 PARKING AREAS

a) Parking areas as part of high rise buildings should be located underground, integrated within the building, or structured parking.

The majority of parking for this high-rise development is located underground in a garage integrated with the apartment's foundations and structure.

b) Access to underground or structured parking should be provided at the interior of the lot - not at the corner.

Access to the underground parking garage is located towards the rear and centre of the lot, far from Kalar Road.

d) Surface parking must not be located between the public ROW and the front of the adjacent primary building.

This development offers no parking between the public realm of Kalar Road and the front faces of the buildings.

e) Where surface parking areas are required, design guidelines outlined in Section 4e should apply.

Surface parking for this development adheres to Section 4e of the design guideline.

f) Vehicular ramps for underground or structured parking should not exceed 40% of the street frontage.

Vehicular ramps to underground parking do not occur along street frontage but are found towards the rear and centre of the site.

ITEM 4D.7 ARCHITECTURAL QUALITY

The design and architectural quality of a new development should be measured according to some of the following principles:

• Identity

New developments should seek to achieve a unique expressive identity respectful of context. The ground floor of buildings should be designed to express the individuality of the commercial or residential unit through architectural expression and the inclusion of entrance doors and windows addressing the street.

These high-rise apartment buildings have a unique, expressive architectural design which provides an identity respectful of its context as shown in the renderings provided in Appendix A.

The buildings three-storey podiums are designed to express the individual apartment units which address the street through the design of their windows, balconies, and the variation of materials.

• Expressive Forms

New developments should be composed of a base at street level, the main body of the building, and a roof form. This may be achieved through various means including setbacks, extrusions, textures and materials. Lower portions of the facades should be strongly articulated to add variety, interest and a human scale dimension.

These apartments have three-storey podiums at street level, with their main towers set significantly back from the street, with the tower accented with continuous balcony features.

Various architectural means were employed to create expressive forms in this design, including:

- Stepped setbacks along the street.
- Extensive balconies with continuous canopies
- A heavier appearing base with the use of stone, and lighter feeling aluminum panels and stucco above.
- Contrasting colours, materials, and textures across all facades.

• Building Entrances

The sense of arrival to a building should be expressed through the design and detailing of its entrance. Canopies or colonnades extending towards the street providing weather protection should be provided at all principal entries to residential and commercial buildings where possible.

A sense of arrival to the buildings is achieved by introducing trees along the street face, leading to landscaped elements along either side of the vehicular drive. This drive leads to and circles a heavily landscaped courtyard with a large, brightly lit porte-cochere announcing the main entrances of each

building. For convenience, a number of visitors parking spaces are provided within the courtyard as well.

Mechanical Penthouses

Vents, mechanical equipment rooms and elevator penthouses should be integrated with the architectural treatment of roofs and screened from view. To create greater interest in the skyline, higher buildings should introduce articulation in the upper floors. This can be achieved through the use of terracing and/or architectural appurtenances like projecting roof lines, trellises or vertical elements.

Mechanical equipment and elevator penthouses have the same constructivist architectural aesthetic and materials as the main buildings and are set back from the building faces to reduce their mass from below.

The top floor of each building is also articulated with a continuous balcony and cornice overhang. Further, windows at the top floor are varied from the floors below to further articulate this floor and create greater interest in the skyline.

• Window Design

The detailing of window elements is important to avoid a "tacked-on" appearance. The use of window mullions or recessed windows, set into the facade, will create a more solid expression and increased shadow lines.

The window design was an important element in the development of the building façades. Several architectural devices were used in their detailing, such as:

- Avoiding more typical punched windows as they create a tacked-on or spotted appearance. Instead, a floor-to-ceiling window systems is to be used, broken by the floor slabs. These windows mimic and integrate with the vertical opaque wall panels to their sides.
- Continuous vertical corner windows which integrate well with the overall design.
- Irregular mullion patterns create interest and compliment the buildings overall aesthetic.
- Varied window patterns made up of vertical and horizontal bands, along with opaque wall panels and continuous balconies are organized into balanced compositions on each façade.

Balconies

Balconies should be designed as integral parts of the building design. Balconies should be provided for residential apartments wherever possible.

Every apartment in these two towers is provided with a private balcony, apart from ground floor units with their private patios. The organization and design of the balconies is the primary architectural device in the development of the façade composition, creating patterns with their depth and shadows.

The balconies are varied in their widths and positioning, with some placed only outside of their units, while others are continuous across several unit façades with appropriately placed dividers. They identify floor lines at the base and top floor of each building. The balconies three-dimensional forms greatly break down the mass of the buildings to a more human scale.

Rooftop Gardens

Roofs and terraces should be usable for private and communal outdoor patios, decks, and gardens. Green roofs are encouraged as a means of retaining stormwater, improving air quality and adding visual interest.

As noted above, each buildings podium roof is designed as a landscaped terrace for private or communal gatherings. The Artists' Renderings in Appendix A along with the Architectural and Landscape drawings provided with this submission show these terraces each to have open seating areas, trellised areas with a grill for cooking, and a small mini-putt green.

• Privacy

For residential units with direct access from the street, privacy should be enhanced through the creation of a buffer zone. This can be achieved through private outdoor amenity spaces, landscaping, and shifting grades.

Apartment units in the three-storey podium which face Kalar Road do not have direct access to the street. Their setback is in accordance with the City of Niagara Fall By-law standard, which allows for a significant amount of landscaping in front of these units, as well as a front lawn consistent with the developing residential area. Within the front lawn is a row of trees along the public sidewalk.

This landscaped setback buffer and the trees it holds provides ample privacy from the street for residents whose units face Kalar Road.

Safety & Security

Residential developments and unit designs should be safe and secure from on-street access. Public and semi-private outdoor spaces should have some degree of overlook from the residential units and good visibility from the street. Landscaping should be illuminated to enhance security. CPTED (Crime Prevention through Environmental Design) principles should be incorporated into building and site design.

All yards about the buildings have balconies and windows providing clear views to their adjacent yards. Ground floor apartments have landscaped gardens and guard rails about their private patios. As can be seen in the Artists' renderings in Appendix A, trees are to be illuminated, which in turn will illuminate the front yard offering more security for the residents. The trees themselves are spaced in a manner that the yard is clearly visible between them, eliminating concealed spaces which may create security issues.

With the lower floors being clad in stone, the threat of damage through vandalism is minimized.

All these considerations contribute to creating a property and development which provides Crime Prevention through Environmental Design.

• Exterior Materials

Cladding materials may include brick, stone, metal, wood, glass, insitu concrete, and pre-cast concrete. Stucco should not be used as a principal wall material at the lower levels of a building. Vinyl siding, plastic, plywood, concrete block, tinted and mirrored glass and metal siding utilizing exposed fasteners are discouraged.

As noted above, the entirety of the lower floors for these buildings are to be clad with quality stone to firmly 'ground' the building.

Feature balcony and canopy projection accents with wood-printed & soft-white aluminum are introduced at the second floor.

Above the third floor podium, cladding become entirely wood-printed or soft-white aluminum and introduces Exterior Insulated Finishing System (stucco).

All materials noted as 'discouraged' above will not be used.

CONCLUSION

This Urban and Architectural Design Brief supports how the Kalar Apartments location and design will integrate well within its existing neighbourhood, which is evidenced by it meeting all applicable Items found in the Niagara Region's Model Urban Design Guideline.

As outlined in this Design Brief part titled 'Design Brief Relative to Model Urban Design Guidelines Introduction', it meets the first seven of the Regions Smart Growth Principles. Principles 8, 9 and 10 are not applicable and outside the scope of this development; these Principles are:

- 8. Provided a variety of transportation choices.
- 9. Make developments predictable and cost effective.

10. Encourage stakeholder collaboration.

These principles are within the control, scope, and responsibility of the City of Niagara Falls and the Niagara Region.

This Design Brief's Part 3 Public Realm describes how this apartment design responds to and meets the Urban Design Guidelines Items:

3c.4 Residential Area Sidewalks and Streetscaping

3c.6 Sidewalk Parking Interface

3c.7 Street Trees

Which it does through its sidewalks and landscaping both along Kalar Road and within the site.

This Design Brief's main focus was the how the apartments high-rise design responds to the Guidelines *Part 4 Public Realm*. It addresses Sections most appropriate for this development, which includes:

Section 4a. I	<u>Residential</u>
Item 4a.1	Design Principles
Item 4a.2	Building Variation & Density
Section 4d.	High-rise Building
Item 4d.2	Design Principles
Item 4d.3	General Location & Orientation
Item 4d.4	Height, Mass and Transition
Item 4d.5	Open Space and Landscaping
Item 4d.6	Parking Areas
Item 4d.7	Architectural Quality

It is noted in this Design Brief that it is comprehensive and complete, even though it did not respond to the Model Urban Design Guidelines Items:

- 4a.6 Building Height
- 4a.7 Architectural Features
- 4a.9 Apartments and Mixed Use Buildings
- 4a.10 Apartment Building Parking Areas

This is because all Guidelines found in these Items are encompassed in Section 4d. Highrise Buildings.

Based on this Design Brief and the apartments design adherence to the Model Urban Design Guidelines, as noted above, this building will integrate well within the existing neighbourhood.

Its location is within walking distance of amenities, such as parks, schools, community centres, and large commercial developments.

This attractive apartment development also makes use of existing municipal services, roads, sidewalks, and public transit, which will result in significant savings in current and future infrastructure.

Its built form will contribute to the areas character, providing variation to the building architecture,

massing, and height relative to the repetitive two-storey built forms found in the adjacent subdivision.

This development will also provide much-needed affordable residential units, and its residents will certainly contribute to a growing, vibrant neighbourhood.

Respectfully,

Peter J. Lesdow B.A., B.Arch., O.A.A., M.R.A.I.C., N.C.A.R.B.

APPENDIX A PERSPECTIVE RENDERINGS



ALONG KALAR ROAD, VIEWING SOUTHEAST



FACING EAST, VIEWING OVER KALAR ROAD



VIEWING NORTHEAST ACROSS KALAR ROAD



VIEWING SOUTHWEST ACROSS PROTECTED TRIBUTARY TO WARREN CREEK

APPENDIX B LANDSCAPE ARCHITECT DRAWINGS





APPENDIX C Shadow Studies

