



# City of Richmond


## Report to Committee Planning and Development Division

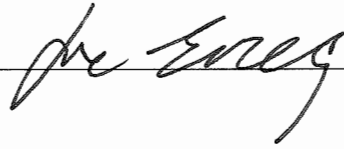
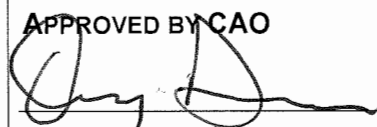
**To:** Planning Committee  
**From:** Wayne Craig  
Director of Development  
**Re:** Arterial Road Policy Updates

**Date:** January 27, 2016  
**File:** 10-6350-00

### Staff Recommendation

That the proposed amendments to the Arterial Road Policy as provided in the January 27, 2016 staff report titled "Arterial Road Policy Updates," be approved to proceed to public and stakeholder consultation.

  
Wayne Craig  
Director of Development  
WC:el  
Att. 8

REPORT CONCURRENCE		
<b>ROUTED TO:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>
Affordable Housing Engineering Policy Planning Transportation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
<b>REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE</b>	<b>INITIALS:</b> DW	<b>APPROVED BY CAO</b> 

## Staff Report

### Origin

The City has encouraged residential densification along arterial roads through the existing Arterial Road Policy since the 1999 Official Community Plan (OCP) was adopted. This includes specific policies to support compact lots (e.g., 9 m or 30 ft. wide single detached and coach house) development with a rear lane access, as well as townhouse developments. The Arterial Road Policy directs these forms of development to areas with access to transit service; and generally in locations away from the single-family neighbourhoods. The City has reviewed and refined this Policy over the years, with the most recent revision completed as part of the OCP Update (Bylaw 9000) in 2012.

The following referral motion was passed by Planning Committee on January 6, 2015:

*“That staff review zoning provisions and policies regarding duplexes and triplexes in the City with the objective of increasing the provision of these housing forms on large lots and report back.”*

The purpose of this report is to respond to this referral, and to specifically:

- Provide more specificity and clarity to the Arterial Road Policy.
- Introduce additional housing types that may be considered on arterial roads.
- Identify specific areas suitable for front-back duplex development with driveway access to and from a rear lane.
- Identify specific areas suitable for front-back duplex and/or triplex developments with driveway access to and from the fronting arterial road.
- Identify specific areas suitable for row house developments with driveway access to and from a rear lane.

The following referral motion was passed by Planning Committee on July 15, 2015:

*“That staff investigate the potential for small lot subdivision in the city and report back.”*

Staff note that this report does not include options for small lot subdivision or duplex and triplex development within existing established single-family neighbourhoods in internal subdivisions, as this is beyond the scope of this Arterial Road Policy update. This will require considerable additional research to review this potential, and a separate report will be presented to the Planning Committee at a later date.

## **Housing Types**

The current Arterial Road Policy encourages two (2) types of housing on arterial roads: Arterial Road Townhouse and Arterial Road Compact Lots. In response to Planning Committee's referral motions regarding duplexes and triplexes in the City, staff are recommending two (2) new housing types on arterial roads – Arterial Road Compact Lot Duplex and Arterial Road Duplex/Triplex. While row house developments are permitted under the OCP, this housing type is not currently included in the Arterial Road Policy. Staff are recommending a set of development criteria to guide Arterial Row House developments. In addition to providing more specificity and clarity to the Arterial Road Policy, staff are recommending a number of minor amendments to the policy related to Arterial Road Townhouse and Arterial Road Compact Lot developments.

### Arterial Road Townhouses

Since the Arterial Road Policy was adopted in 2001, approximately 750 townhouse units on properties along arterial roads were approved. The height of these townhouses ranges from two (2) to three (3) storeys; and the density of these townhouse sites ranges from 0.55 to 0.7 FAR. Attachment 1 presents a sample of typical site plans and elevations of approved arterial road townhouse developments in the City.

### *Arterial Road Development Map*

The current Arterial Road Policy (Section 3.6.1) of OCP Bylaw 9000 includes an Arterial Road Development Map identifying specific sites for townhouse developments. The policy also permits additional townhouse developments on arterial roads to be considered through a rezoning application where the proposed development sites meet the following set of location criteria:

- 800 m (2,625 ft. or 10 minute walk) of a Neighbourhood Centre (e.g., Broadmoor, Blundell, Garden City, Seafair, Terra Nova or Ironwood Shopping Centres); or
- 800 m (2,625 ft. or 10 minute walk) of a City Community Centre (e.g., South Arm, Thompson, West Richmond or Steveston Community Centres); or
- 400 m (1,312 ft. or 5 minute walk) of a Commercial Service use (e.g., store, shopping plaza or gas/service station with a retail sales area); or
- 400 m (1,312 ft. or 5 minute walk) of a Public School (e.g., elementary or secondary school); or
- 400 m (1,312 ft. or 5 minute walk) of a Park on City or School Board lands (e.g., playing field or open space).

### ***Proposed Amendment***

In order to provide greater clarity on which properties have potential for townhouse developments, staff recommend removal of the location criteria provision from the policy and specifically identified areas to be considered for townhouse developments on the Arterial Road Development Map (Attachment 4). Townhouse areas identified on the map are based on a review of the location criteria, area context, and existing Lot Size Policies which prohibit townhouse development, etc. with an intention to maintain the established streetscape, form and character, as well as the massing and scale of each block of arterial road.

*Site Assembly Size Requirement*

The current Arterial Road Policy includes a set of Townhouse Development Requirements to determine whether a site may be redeveloped, and how the site should be redeveloped. Minimum land assembly size and minimum residual site size requirements are established in the Townhouse Development Requirements. The policy also recognizes that developing townhouses on lots with a new house and with narrow frontages will be more difficult, especially for land assembly purposes. Where townhouse development is permitted as per the Arterial Road Development Map (Attachment 4), but the site does not meet the minimum land assembly or residual sites requirements, a townhouse proposal should still be considered on its own merit.

*Proposed Amendment*

Staff propose to amend the “New Homes or Narrow Lots” section under the Townhouse Development Requirements to provide clarity that new townhouse developments which do not meet the minimum land assembly requirement may be considered, provided that:

- An existing lot/site is isolated (orphaned) and is not able to consolidate with adjacent properties (i.e., surrounding lots recently redeveloped).
- It can be demonstrated development can be achieved in full compliance with the objectives of the Arterial Road Policy, Development Permit Guidelines, all other Townhouse Development Requirements, and the provisions of the Zoning Bylaw.
- The form and character of the development, including massing and building height, are respectful of the adjacent existing developments (i.e., reduced permitted density and/or reduced building heights may be required to achieve an appropriate interface).
- The proposed development provides a recognizable benefit to the area, such as tree retention and high quality pedestrian environment along the fronting streets.

*Design Guidelines for Arterial Road Townhouses*

The current Arterial Road Guidelines for Townhouses in Section 14.4.13 of OCP Bylaw 9000 apply to all new townhouse developments along arterial roads. The intent of the design guidelines is to provide adequate and appropriate articulation and character to the building form, and ensure that on-site landscaping is provided.

*Proposed Amendment*

Based on the feedback from the public on recent townhouse development projects, staff recommend the following amendments to the Arterial Road Guidelines for Townhouses:

a. Rear Yard – Building Heights and Form

Staff recommends an amendment to the Arterial Road Guidelines for Townhouses to limit the height of buildings to a maximum of two (2) storeys along the rear yard interface with adjacent single-family lots. The current design guidelines allow two-storey to 2½ storey townhouse units along the rear yard interface with single-family housing. Due to the minimum flood construction level requirements of the Flood Plain Designation and Protection Bylaw 8204, the slab of the new townhouse developments may be constructed at a higher elevation than the adjacent properties. Due to the potential impacts of a 2½ storey townhouse adjacent to the rear yard of an existing single-family lot, staff are recommending all units adjacent to the rear yard of existing single-family dwelling be two- storeys.

### b. Rear Yard – Setbacks

The current design guidelines require a 6.0 m rear yard setback along the rear yard interface with single-family housing where deemed necessary; and single storey projections into the rear yard setback for a distance of up to 1.5 m are permitted subject to appropriate opportunities for tree planting and the provision of appropriate private outdoor space. Concerns raised by residents of single-family homes adjacent to townhouse sites indicate that residents would prefer a townhouse rear yard setback requirement and projection allowances equivalent to those for single-family homes. Staff recommend the following amendments to this sub-section of the Arterial Road Guidelines for Townhouses:

- Remove the term “where deemed necessary” and clarify that a 6.0 m rear yard setback is required along the rear yard interface with single-family housing.
- Clarify that a 4.5 m rear yard setback to the ground floor only may be considered subject to appropriate opportunities for tree planting and the provision of appropriate landscaping and private outdoor space within the rear yards.

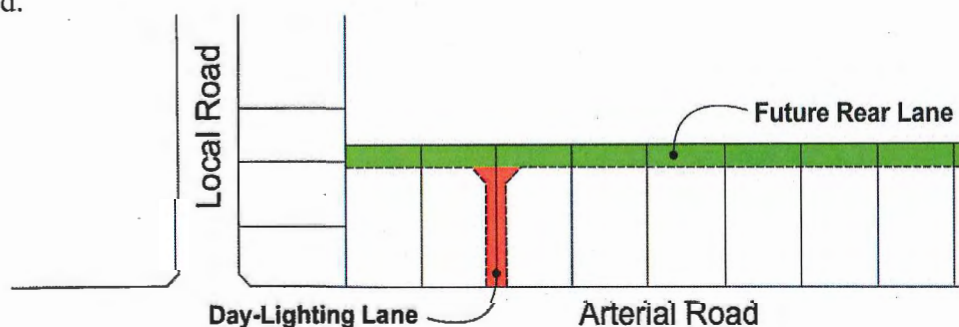
### Arterial Road Compact Lots

Since the Arterial Road Policy was adopted in 2001, approximately 420 compact lots (e.g., minimum 9 m wide lots) along arterial roads have been created, of which 310 properties are zoned for Arterial Road Compact Lot Single Detached (i.e., RC1 & RC2 zones) and 110 properties are zoned for Arterial Road Compact Lot Coach House (i.e., RCH & RCH1 zones). The proposed policy update will continue to recommend compact lot developments on certain arterial roads where there is an existing operational municipal lane or where a fully operational lane can be constructed:

- Minimum lot width at 9.0 m.
- Single Detached developments will be permitted on all compact lots.
- Coach House developments will be encouraged on lots having a lot depth greater than 35 m and a lot area greater than 315 m<sup>2</sup> (3,390 ft<sup>2</sup>); these requirements are based on the current Coach House (RCH1) zone, which ensures the developments will have appropriate outdoor spaces on the lots.

### *Lane Establishment/Extension for Compact Lot Developments*

To facilitate compact lot developments, the proposed policy update will identify areas where lane establishment and/or extension are possible. Attachment 5 shows the proposed location for lane extensions and establishment. Where rear lane establishment started on a compact lot development block but there is limited opportunity for the existing lane to be extended to a local road, a day-lighting lane to provide access from the arterial road to the rear lane system may be considered.



Staff have identified four (4) blocks where rear lane establishment started on a compact lot development block but there is limited opportunity for the existing lane to be extended to a local road:

- 8300 to 8400 block of Railway Avenue (east side only)
- 7300 to 7500 block of No. 2 Road (east side only)
- 8500 to 8700 block of No. 2 Road (west side only)
- 6600 to 6700 block of Steveston Highway (north side only)

For these four (4) blocks (also mapped on Attachment 5), a day-lighting lane to provide access from the arterial road to the rear lane system may be considered.

***Proposed Amendment***

Where a new day-lighting lane is required to provide access from the arterial road to the future rear lane system, the City may establish a lane implementation strategy for the block. The intent of this implementation strategy is to ensure properties where the new day-lighting lanes are to be located would not bear an inordinate burden for the lane establishment costs, which may prevent them from redeveloping in a timely manner. The proposed Arterial Road Policy update will include an implementation strategy, as follows:

- The location of the day-lighting lane will be determined at the time of a development application based on the overall access need for the entire block, location of the access, and type of traffic movements permitted, etc.; if the first development proposal for the block does not provide a suitable access arrangement for the entire catchment area, the application may not be considered until an appropriate 'day-light' connection for the entire block has been established;
- Only one (1) additional lane entrance/exit off an arterial road per block will be considered;
- At the time of the development, as a condition to Rezoning, the first developer will dedicate and build the day-lighting lane; the first developer would be reimbursed for the costs of land and construction, by later benefiting developers when they redevelop in the future;
- Developments on the benefiting properties will be required to contribute financially to the day-lighting lane on a proportional basis (i.e., based on their development site area);
- Frontage improvements and/or dedications & construction of the rear lane remain the responsibility of each individual development, and are not subject to the formula described above;
- Development Applications, Engineering Planning, and Transportation staff will review each application and determine the location and configuration of the day-lighting lane as well as the lane implementation strategy, including the extents of the benefiting area on each block;
- Engineering Planning staff will administer the program once an implementation strategy has been established.

*Arterial Road Compact Lot Duplex*

In response to Planning Committee's referral motions regarding duplexes and triplexes in the City, staff explored the opportunity for these uses on arterial roads based on the following guiding principles:

- Densification along major arterial roads should minimize traffic disruption by eliminating driveways along arterial roads.
- Densification along minor arterial roads should result in no net increase in the number of driveways to maintain existing traffic flow.
- Duplex and triple developments should not be considered on arterial road properties where townhouse developments are identified in the Arterial Road Policy.

Staff have reviewed various potential forms of duplex and triplex developments, as well as the existing sizes and configuration of lots along arterial roads. Based on this analysis, two (2) new types of housing are proposed - Arterial Road Compact Lot Duplex, and Arterial Road Duplex/Triplex.

On arterial roads, where there is an existing operational municipal lane, or where a fully operational lane can be constructed, staff recommends a front and back duplex typology with driveway access to and from a rear lane only. The minimum width of the lots for this use will be 9.0 m; permitted density will be at a maximum of 0.6 FAR; and vehicle access will be limited to the rear lane. The character, massing and scale of the front and back duplex developments will be similar to those of the existing compact lot single detached and coach house developments (see Attachment 2).

***Proposed Amendment***

The proposed Arterial Road Policy update will include location criteria and development requirements for Arterial Road Compact Lot Duplex developments, as follows:

- Maximum permitted density at 0.6 FAR applies to the entire lot area.
- Minimum lot width of 9.0 m; minimum lot depth of 40.0 m; minimum lot area of 360 m<sup>2</sup> (3,875 ft<sup>2</sup>); these requirements will ensure that the duplex units would have a minimum average unit size of 108 m<sup>2</sup> (1,160 ft<sup>2</sup>) at 0.6 FAR, as well as adequate private outdoor spaces and sufficient parking areas on the lot.
- Duplex development may also be considered on corner lots where significant road dedication and frontage improvements are required (i.e., lane dedication and construction, plus frontage improvements on two (2) frontages).
- No secondary suites will be allowed in duplex developments.
- A Development Permit will be required for all duplex developments, and an OCP Amendment will be required to designate all new duplex sites along arterial road Development Permit Area.
- A set of draft design guidelines is provided in Attachment 7.



The potential locations for Arterial Road Compact Lot Single Detached, Arterial Road Compact Lot Coach House, and Arterial Road Compact Lot Duplex are identified on the Proposed Arterial Road Development Map (Attachment 4). A set of sample site plan and building elevations is also presented on Attachment 2.

### Arterial Road Duplex/Triplex

Using the same guiding principles mentioned in the last section, staff have identified potential for a front and back duplex and triplex typology, with driveway access to and from a minor arterial road where there is no opportunity for lane establishment. The character, massing and scale of the street fronting units will be controlled to resemble that of a single-family home. Access to each property will be from a minor arterial road to minimize traffic impacts, and a shared driveway will be required at subdivision.

### ***Proposed Amendment***

The proposed Arterial Road Policy update will include location criteria and development requirements for Arterial Road Duplex/Triplex, as follows:

- Maximum permitted density at 0.6 FAR applies to the entire lot area.
- Minimum lot width of 13.5 m.
- The minimum lot width may be reduced to 10.35 m for a subdivision with a shared vehicle access; this would facilitate a two (2) lot subdivision on larger lots and a development of a duplex or a triplex on each of the new lots.
- Lots with a lot size equal to or greater than 464.5 m<sup>2</sup> (5,000 ft<sup>2</sup>) may be redeveloped with a front and back duplex; this will ensure that the development to create dwelling units with a minimum average unit size of 139.3 m<sup>2</sup> (1,500 ft<sup>2</sup>), as well as adequate private outdoor spaces and sufficient parking areas on the lot.
- Lots with a lot size equal to or greater than 743 m<sup>2</sup> (8,000 ft<sup>2</sup>) may be redeveloped with a triplex; this will ensure that the development to create dwelling units with a minimum average unit size of 148.5 m<sup>2</sup> (1,600 ft<sup>2</sup>), as well as adequate private outdoor spaces and sufficient parking areas on the lot.
- Internal drive aisles may be designed as vehicle courtyards to accommodate a turnaround area for residents; vehicles will not be allowed to reverse out of the site onto a public road.
- On-site visitor parking will be required on development proposals consist of three (3) or more units.
- Rezoning and Development Permit applications for duplexes, triplexes, coach houses, or granny flats may also be considered on isolated sites that do not have potential for Arterial Townhouse or Arterial Road Compact Lot developments.
- No secondary suites will be allowed in duplex and triplex developments.
- A Development Permit will be required for all duplex and triplex developments, and an OCP Amendment will be required to designate all new duplex and triplex sites along arterial road Development Permit Area.
- A set of draft design guidelines is provided in Attachment 7.



All arterial road properties meeting the location criteria for duplex and triplex developments are identified on the Proposed Arterial Road Development Map (Attachment 4). Conceptual site plans and building elevations for various forms of duplex and triplex developments are provided on Attachment 3.

It is noted that lot access currently serving one (1) single-family dwelling will have increased utility and traffic as a result of potentially up to six (6) dwelling units to be developed on-site under the proposed policy changes. To address the increased traffic impacts at the development application stage, the access arrangement will be reviewed with the objective of decreasing the overall number of access points. In addition, off-site improvements, such as highlighting the access points with contrasting decorative surface and pavement treatment, may be required as part of the frontage upgrades for the development.

### Arterial Road Row House

The Official Community Plan (Bylaw 9000) adopted on November 19, 2012 establishes a policy under Section 3.3 Diverse Range of Housing Types, Tenure and Affordability that encourages fee simple row houses where there is lane access on a development site with at least 30 m lot depth, and located within walking distance (i.e., 800 m) of a Neighbourhood Service Centre.

Based on the location criteria defined in the OCP, Attachment 6 shows possible locations for row house developments. While the form of row housing is similar to townhouses, row house developments will only be permitted where there is an existing operational municipal lane or where a fully operational lane can be constructed, but not on sites identified for Arterial Road Townhouse developments. Row house developments can be considered on sites identified for Arterial Road Compact Lot Single Detached, Arterial Road Compact Lot Coach House, and Arterial Road Compact Lot Duplex.

### ***Proposed Amendment***

The proposed policy update will include a set of development criteria for Row Houses, as follows:

- Maximum density of 0.6 FAR; maximum lot coverage for buildings of 50%; minimum front yard setback at 6.0 m; and maximum building height of 2½ storeys; these development requirements are consistent with those for compact lot developments.
- Row house lots shall comply with the following subdivision requirements:

	Minimum Lot Area	Minimum Lot Width	Minimum Lot Depth	Approximate Unit Size
Internal Lot	180 m <sup>2</sup>	6.0 m	30.0 m	108.0 m <sup>2</sup> (1,163 ft <sup>2</sup> )
End Lot	216 m <sup>2</sup>	7.2 m	30.0 m	129.6 m <sup>2</sup> (1,395 ft <sup>2</sup> )
Corner Lot	270 m <sup>2</sup>	9.0 m	30.0 m	162.0 m <sup>2</sup> (1,744 ft <sup>2</sup> )

- Each row house development should consist of at least three (3) side-by-side dwelling units; which share a party wall with an adjoining dwelling unit, and each unit is located on its own fee simple lot which abuts a street and a dedicated rear lane.

- No secondary suite will be permitted in row house unit smaller than 123.0 m<sup>2</sup> (1,324 ft<sup>2</sup>) in order to ensure the principal dwelling unit is at least 90.0 m<sup>2</sup> (969 ft<sup>2</sup>) and the secondary suite is at least 33.0 m<sup>2</sup> (355 ft<sup>2</sup>).
- Design guidelines will be developed and a Development Permit will be required for all row house developments; an OCP Amendment will be required to designate all new row house sites along arterial roads as a Development Permit Area.

## **Staff Comments**

### Affordable Housing

At this time, there is no policy or contribution rate for duplexes, triplex, or row houses identified in the Affordable Housing Strategy. However, staff recommend that a cash-in-lieu contribution option at the townhouse rate (i.e., at \$4.00 per buildable square foot) be considered for duplex, triplex, and row house developments as these housing types and townhouses are in similar built forms (i.e., building forms share a party wall). Should the duplex/triplex/row house framework proposed in this report be endorsed, it is recommended that the Affordable Housing Strategy be updated to include a contribution rate for these housing forms.

### Sustainability Initiatives

To support City of Richmond's sustainability objectives, the following will be required for all duplex, triplex and row house developments.

- Dwelling design must meet the Energy Star for New Homes Standard.
- Development should incorporate sustainable design elements acceptable to the City into site and building design and construction, and exhibit design excellence through such means as:
  - Natural filtration of rainwater.
  - Solar power technology as an energy source; where it is not possible to incorporate renewable energy, ensure that the building is designed to allow on-site energy production in the future, for example, by including "solar ready" piping.
  - Energy star appliances and low water plumbing fixtures.
  - Provide for adequate energy supply and infrastructure to enable future installation of electric vehicle charging system.
  - Green technology building products.

### Accessible Housing

To ensure that the design of a development enables all people, including people with disabilities, to have full and unrestricted access to every part of a project, the following will be required for all duplex, triplex and row house developments.

- Aging in place features must be provided in all units (e.g., inclusion of blocking to bathrooms for installation of grab-bars, provision of blocking to stair walls to accommodate lift installation at a future date, and provision of lever door handles).
- Convertible units are highly recommended. One (1) convertible unit should be provided in each development proposal consisting of four (4) or more units.

### Population Projection

Based on the proposed Arterial Road Development Map (Attachment 4), approximately 1,620 arterial road properties have redevelopment potential. Taking the subdivision and development requirements of the various housing types permitted on arterial roads into account, staff estimate that approximately 6,115 new dwelling units could be created (see Attachment 8 for details). This is an addition of approximately 4,495 ground oriented housing units outside City Centre, which is approximately 47% of the estimated number of new ground oriented housing units outside City Centre between 2011 and 2041 envisioned in the OCP.

The new ground oriented housing units could house approximately 17,600 residents (see Attachment 8 for details). This is an approximately 12,200 increase in population, which is approximately 40% of the expected population growth outside City Centre between 2011 and 2041 envisioned in the OCP.

### **Future Studies**

While the intent of this Arterial Road Policy Update is to recommend duplex and triplex developments on arterial road in response to Planning Committee's referral motions, and to provide more clarity on where each type of arterial road residential developments can be considered, staff also recommend future studies on two (2) areas to provide additional development potential along arterial roads. Staff have already added these items to the policy planning work program and separate reports will be presented to the Planning Committee at a later date. These studies may also be undertaken on a specific timeline as directed by Council.

### Double Fronting Lots Along Arterial Roads

Double fronting lots along arterial road are currently excluded from the Arterial Road Policy. To provide additional development opportunities and create a high quality pedestrian environment along all arterial roads, double fronting lots on arterial road may be considered for redevelopment. Most of the double fronting lots in the City have vehicle access from a local road and are typically fronting onto the local road, and have a back yard abutting the arterial road with a tall line of fence and/or a row of hedge. To increase development opportunity of ground-oriented housing along arterial road, the following types of development may be explored:

- Front and back duplex with vehicle access from local street.
- Low density townhouse development with vehicle access from arterial road, and detached or duplex units fronting local road.

Staff believe this warrants future study as developments of the arterial road double fronting lots may improve arterial road streetscape and increase population to support higher quality transit services outside of the city centre.

### Densification Along the East Side of Railway Avenue

With the completion of the Railway Greenway, properties along Railway Avenue may be considered for densification. The current Arterial Road Policy permits townhouse and compact lot developments on various blocks of Railway Avenue. Existing density on compact lots and townhouse sites along Railway Avenue is in the range of 0.55 to 0.6 FAR. Townhouse developments at a density up to 0.7 FAR may be considered depending on the size and configuration of a proposed townhouse site.

Properties along Railway Avenue, between Granville Avenue and Steveston Highway, may accommodate townhouse developments at a density up to 0.7 FAR, as these blocks of Railway Avenue (i.e., properties on the east side of the road) are located within 400 m walking distance of the Railway Greenway (located on the west side of the road). However, to support townhouse developments on a block where compact lot developments with an operational back lane exist, the following should be considered:

- Design of the townhouse development must be respectful of the existing adjacent single-family developments;
- Townhouse developments will not deter alternate access (i.e., lane) implementation; and
- Provision of affordable housing in keeping with other city's initiatives (i.e., a minimum of 5% of the total residential floor space is provided as built Affordable Housing units, with a minimum of an additional 7.5% of residential space being provided in the form of purpose built modest market rental housing units, and a minimum of 2.5% residential floor space as built market rental housing and secured as rental in perpetuity).

For those properties along Railway Avenue, between Granville Avenue and Steveston Highway, high density townhouse developments (i.e., 3-4 storey high stack townhouses) or low rise apartments may also be explored. Staff acknowledge that this would be a departure from the established character of the area, but will explore options if so directed by Council.

### **Consultation**

It is recommended that staff be authorized to consult with the development community and residents prior to Council considering the proposed amendments.

### Industry Consultation

Staff will discuss the proposed changes to the Arterial Road Policy with the Urban Development Institute (UDI) at the next available regular meeting, as well as the Greater Vancouver Home Builders Association (GVHBA) and the Richmond Small Home Builders Group at a special meeting organized by staff. Feedback from these groups will be considered during refinement of the proposed amendments.

### Public Consultation

Staff propose to host five (5) Open Houses on the proposed changes to the Arterial Road Policy at four (4) community centres located within the Arterial Road Policy Area (i.e., South Arm, Steveston, Thompson and West Richmond) and at the City Hall. Invitations to the Open Houses will be placed in local newspaper and posted on the City's website two (2) weeks prior to the Open Houses. Feedback from the public will be considered during refinement of the proposed amendments. The public will have a further opportunity to comment on the proposed amendments at the Public Hearing should Council support the proposed amendments.

### School District

The proposed changes to the Arterial Road Policy will be referred to School District No. 38 (Richmond) under OCP Bylaw Preparation Consultation Policy 5043. According to this Policy, OCP amendments involving residential developments which would have the potential to generate 50 or more school aged children are to be referred to the Board of Education (e.g., typically around 295 multiple-family housing units). Staff will update school board staff throughout the consultation process.

### **Implementation Strategy**

Subject to the outcome of public consultation, staff will prepare the updated Arterial Road Policy along with an implementation strategy. The strategy will include:

- Amendments to area plans and introduction of new standard zones to facilitate various types of arterial road developments in accordance to the Proposed Arterial Road Development Map (Attachment 4), including the recommended duplex, triplex and row house developments;
- Designation of development permit areas and preparation of design guidelines for all new arterial road duplex, triplex and row house developments;
- Establishment of lane implementation strategies, where required, to facilitate lane extensions and compact lot developments; which will include who, how, and when the day-lighting lane should be provided; when the land and construction costs should be reimbursed; whether the reimbursed amount will be indexed; and whether a termination clause will be included;
- Establishment of a community amenity contributions policy for land uses that are not subject to Development Cost Charges (DCCs) to facilitate infrastructure and/or community amenity developments required to accommodate the additional residential density on arterial roads.

### **Financial Impact or Economic Impact**

None.

**Conclusion**

Staff have undertaken a review on the Arterial Road Policy in the OCP and recommend new housing types on arterial roads in response to Planning Committee's referral on duplexes and triplexes in the City, with the objective of increasing the provision of these housing forms on large lots. Staff are recommending:

- two (2) new housing types, including Arterial Road Compact Lot Duplex and Arterial Road Duplex/Triplex;
- development criteria to guide row house developments on arterial road; and
- a series of minor amendments to the Arterial Road Policy and an updated Arterial Road Development Map in order to provide more specificity and clarity to the policy.

It is recommended that staff be authorized to consult with the Urban Development Institute (UDI), Greater Vancouver Home Builders Association (GVHBA), Richmond Small Home Builders Group, and the general public, prior to Council considering the proposed changes to the Arterial Road Policy.



Edwin Lee  
Planner 1

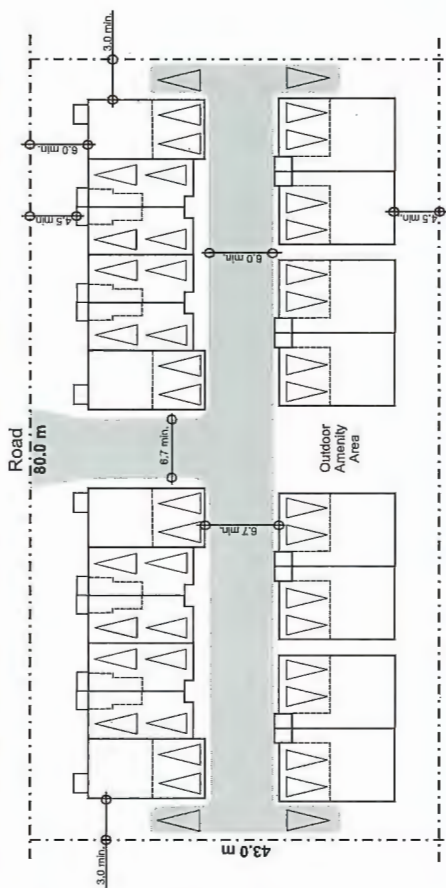
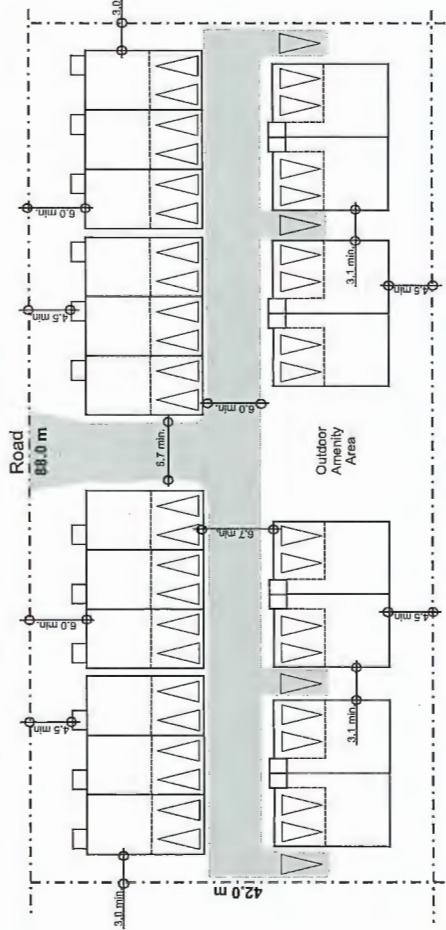
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**Attachments:**

- Att. 1: Arterial Road Townhouse Development
- Att. 2: Arterial Road Compact Lot Development
- Att. 3: Arterial Road Duplex/Triplex Development
- Att. 4: Proposed Arterial Road Development Map
- Att. 5: Proposed Arterial Road Lane Network
- Att. 6: Proposed Compact Lot & Row House Development Map
- Att. 7: Proposed Arterial Road Guidelines for Duplexes/Triplexes
- Att. 8: Population Projection



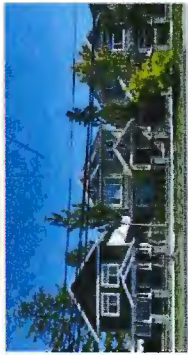
## Townhouse Development with 3-Storey Units Along Arterial Road



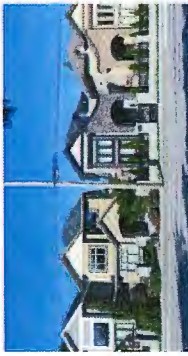


# Arterial Road Compact Lot Development

Arterial Road Compact Lot  
Single Detached



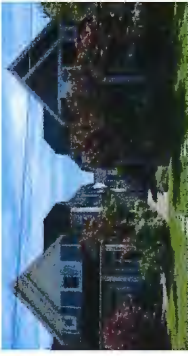
Arterial Road Compact Lot  
Single Detached



Arterial Road Compact Lot  
Coach House



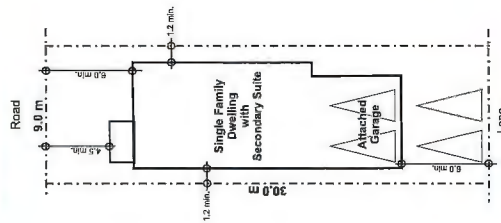
Arterial Road Compact Lot  
Duplex



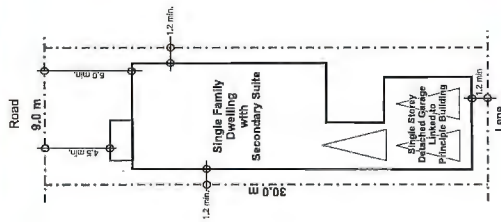
Arterial Road Row House



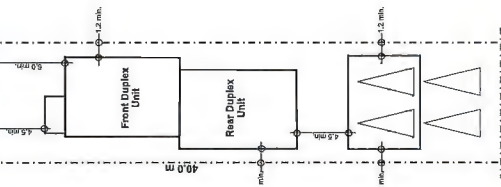
Type I — Single Detached Dwelling with  
Attached Garage



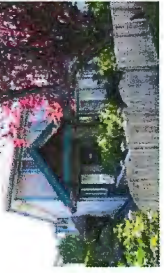
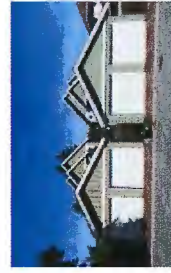
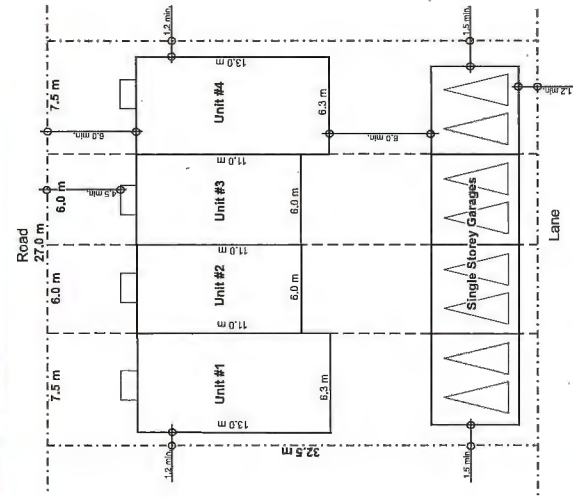
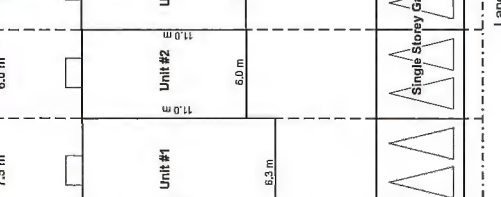
Type II — Single Detached Dwelling with  
Garage Linked to the Principal Building



Front Duplex Unit



Rear Duplex Unit



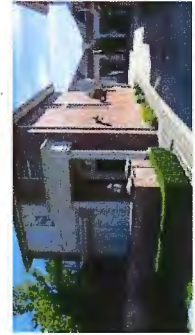
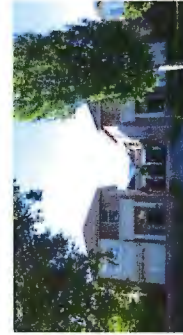
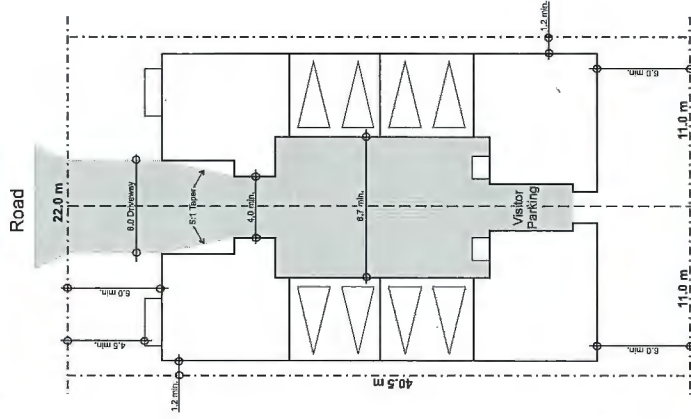
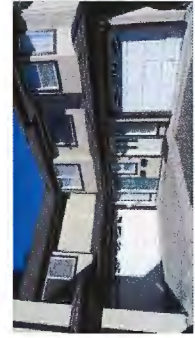
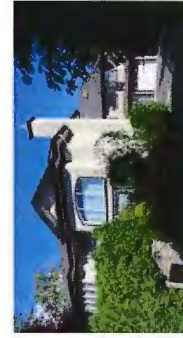
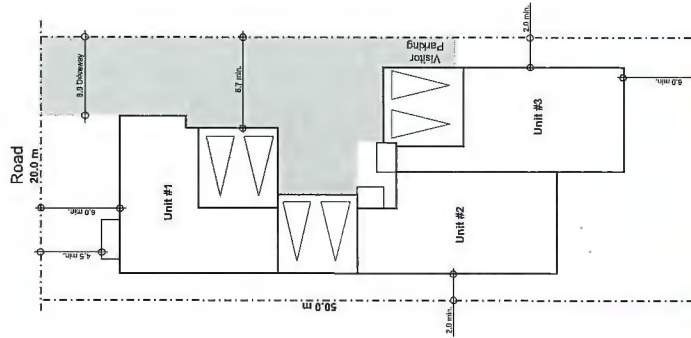
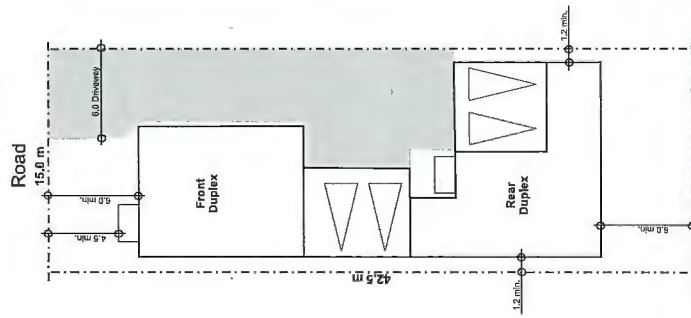
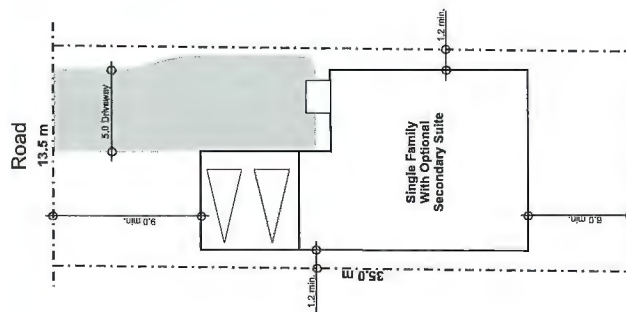
# Arterial Road Duplex/Triplex Development

Arterial Road Single Detached

Arterial Road Duplex

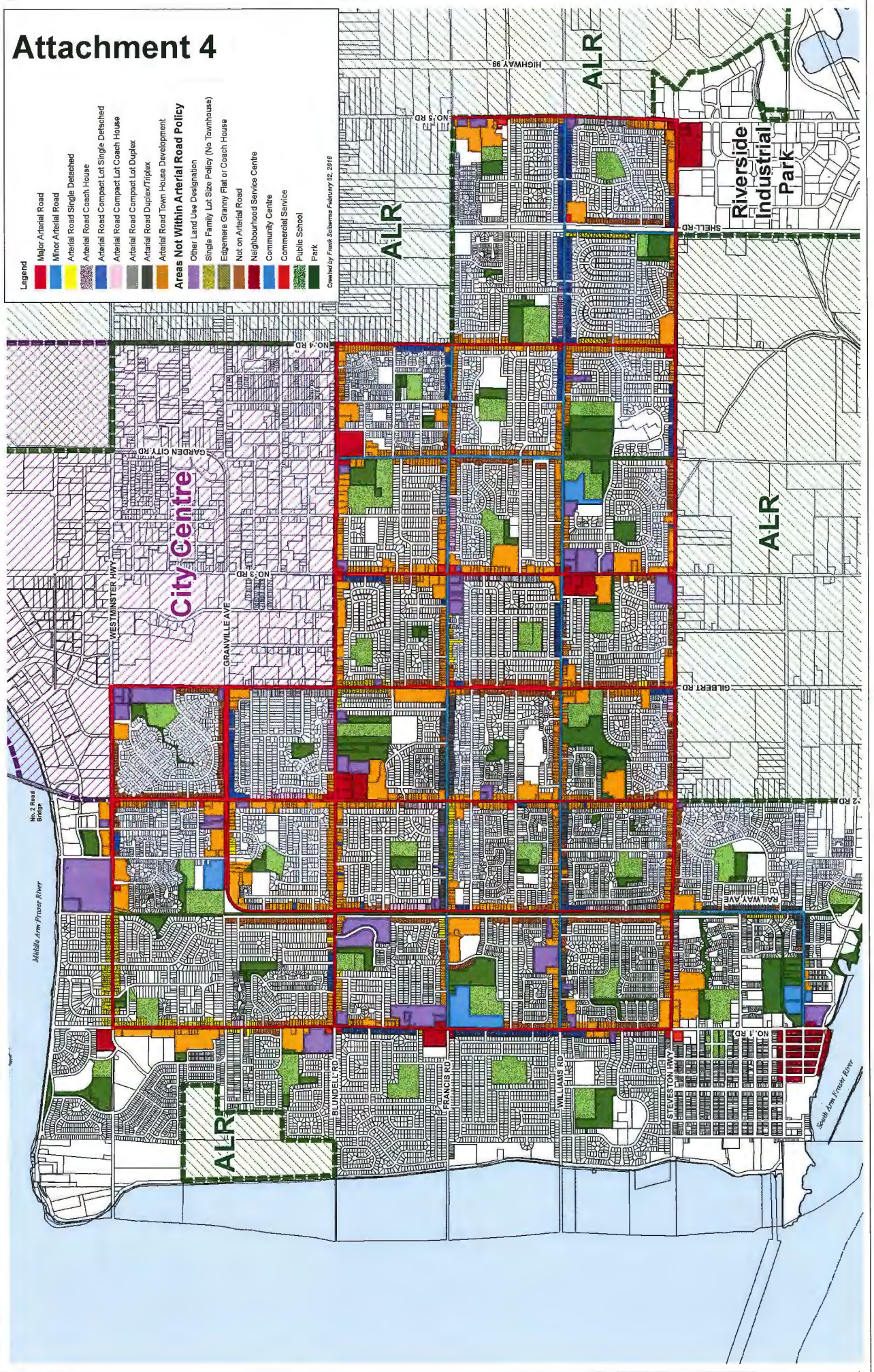
Arterial Road Triplex

Arterial Road Duplex Lots with Shared Driveway



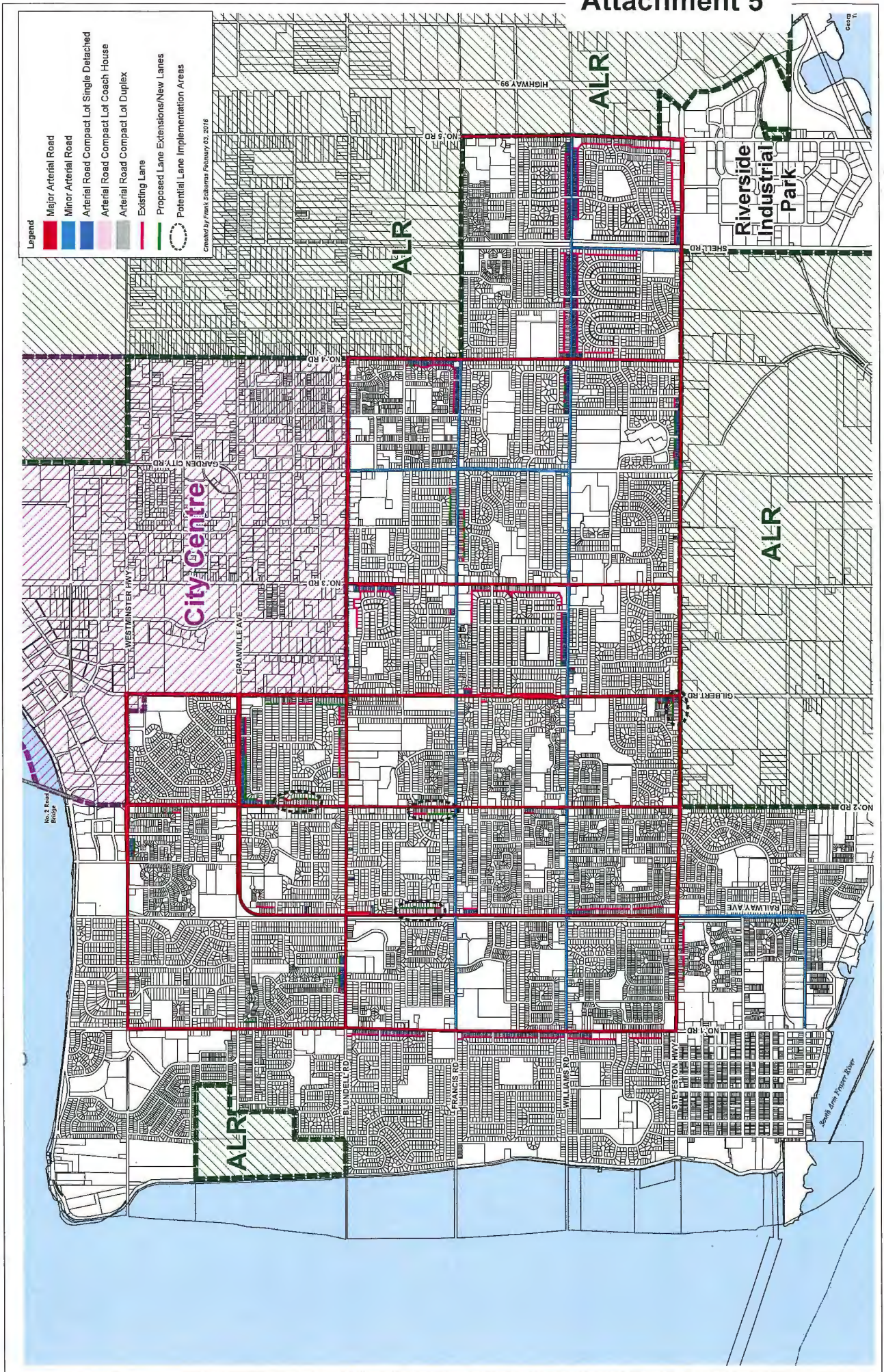


## Attachment 4





# Arterial Road Policy Update - Lane Network





[illegible]



## Arterial Road Guidelines for Duplexes/Triplexes

### Neighbourhood Character

The intent is to achieve variety and have this new form of housing fit into the neighbourhood.

- a) The form character, scale and siting of new buildings should be compatible with the predominant character and scale of the surrounding single-family neighbourhood.
- b) The exterior materials and colours of duplexes/triplexes should
  - i. Complement the overall character of the existing neighbourhood;
  - ii. Complement, but not replicate, the character of the neighbouring developments;
  - iii. Have a high quality of architectural design and detailing.

### Variety in Design

- c) Variations in design should be encouraged so as not to repeat the same architectural appearance, building form and elevations in a row on neighbouring developments.
- d) Small variations in setbacks, height, and roof lines should be encouraged between duplex clusters to provide visual diversity on the same block; however, overall expression should be a cohesive urban form and unity of architectural expression.

### Building Form

The intent is to ensure that duplexes/triplexes are attractive and do not adversely impact adjacent homes.

### Privacy of Neighbours

- a) Duplexes/triplexes should be
  - i. Oriented and sited to protect the privacy and minimize the overlook and shadowing of adjacent properties; and
  - ii. Screened from neighbouring yards by suitable landscaping.
- b) Consideration should be given to greater setbacks above the ground floor, special landscaping measures and/or orienting living areas away from neighbours.

### Scale and Massing

- c) The design of duplexes/triplexes should contribute to the positive characteristic of the street frontage, and should include sloped roofs, landscaped front yards, predominant front doors and ample internal space between buildings within each duplex cluster.
- d) Roof forms should be sloped and carefully detailed, or partially flat roofs or decks should be landscaped.

### Building Façade

- e) The primary façade of duplex unit facing the street must be articulated to create depth and architectural interest.
- f) Entrances to each unit should be clearly defined, numbered and visible from the street.
- g) On corner lots, buildings should be designed such that the main entries to the two dwellings each face a street.
- h) The primary façade of duplex unit facing the internal drive aisle should be visually broken into smaller components or sections to discourage wide, flat and unbroken facades.

- i) In order to minimize the apparent bulk of a building, recessed and partly recessed balconies are preferred to projecting balconies.
- j) Windows should be oriented and designed to maximize light penetration into the unit while mitigating overlook onto the adjacent unit and adjacent properties.
- k) Protect visual privacy for neighbouring buildings by offsetting windows on adjacent facades. Reflected window plans should be included submissions to ensure that this is achieved.
- l) Windows and their treatment should contribute to the architectural character of the building and the streetscape. Windows should have residential character and detailing.
- m) Side yard windows should be modest in size and be recessed in that section of the building façade.
- n) Building faces and dormers should not be windowless, and sidelight windows should be incorporated into bay projections.

#### Exterior Materials Textures and Colour

- o) Materials to convey an image of quality, durability and a high level of craftsmanship.
- p) Buildings and roofing materials should reflect the heritage and climate of Richmond.
- q) Stucco is acceptable when used in combination with other exterior finishing materials.
- r) Cedar shingles or a similar type of roofing (in terms of colour and texture), or high profile asphalt shingles are preferred to accentuate a single family character.

#### Site Planning

The intent is to provide direction on the location of the duplex clusters, services and parking.

- a) Each development should have adequate, well-defined circulation, parking and access.
- b) Access driveways to/from an arterial road should be limited to 6.0 m in width, and should be combined wherever possible.
- c) Front yards and flanking side yards must not be used for parking.
- d) Resident parking should be covered and screened from the street.
- e) For duplex/triplex developments along arterial roads, internal drive aisles that provide access to garages should be designed as vehicle courtyards to accommodate a turnaround area allowing for a three-point turn of passenger vehicles. Vehicles will not be allowed to reverse onto a public road.
- f) Fire access, garbage and recycling facilities, mail and deliveries should be provided for, to the satisfaction of the relevant authorities.
- g) Each dwelling unit should have a private patio or balcony and well-defined, safe semi-private space. Where the only private open space of a unit is provided on the yard facing an arterial road, a balcony or deck space facing the interior side yard or back yard should be provided.

#### Landscaping

The intent is that landscaping be lush and that fences or gate be attractive, particularly along any street frontages or common area.

#### Trees Retention and Replacement

- a) Existing natural landscaping, including significant trees, should be retained and incorporated into site development plans when feasible.
- b) Landscaping for duplex developments shall:



- i. meet the City's 2:1 replacement policy where existing trees are being removed;
- ii. comply with the minimum planting sizes specified in the City's Tree Protection Bylaw where replacement trees are being planted, unless approved otherwise by the Director of Development or designate;
- iii. include an appropriate mixture of deciduous and coniferous trees, with the coniferous being sized and spaced appropriately and to address Crime Prevention Through Environmental Design (CPTED) principles.

#### Landscaping

- c) Landscaping should be residential in character and should pay special attention to front yard quality, including presentation of mature trees. Low-maintenance, native plant materials are preferred.
- d) The grade between the City's sidewalk and the landscaping along the front property line should be the same.
- e) Wherever possible, a grassed strip with at least one deciduous tree (minimum 6 cm calliper) per lot should be installed along the front property line.
- f) In addition to the aforesaid landscaping along the front property line, one deciduous tree (minimum 6 cm calliper) or one coniferous tree (minimum height 3.5 m) is to be planted on each lot in the front yard.
- g) All front yard areas and front property lines must be planted with a combination of lawn, flower beds, flowering shrubs and ground cover to provide seasonal interest and water permeability.
- h) If individual shrubs are planted in the front yard, they must be of a low height that will not exceed 1.2 m (4 ft.) and must be located behind any fencing on the front property line.
- i) Continuous hedges are not permitted in the front yard.
- j) Walkways/pathways from the arterial road to the entrance of the duplex units are not to consist of asphalt materials (e.g., should be aggregate concrete, stamped concrete, paving stones, pervious paving or other acceptable material to the City).
- k) Permeable material is strongly encouraged for use in unenclosed surface parking areas and carports as well as paths.
- l) Provide adequate lighting to enhance security and visibility. Exterior lighting should be designed to avoid "light-spill" onto adjoining properties.

#### Fences and Gates

- m) If fences are unavoidable, provide metal transparent fences and brick or stone pilasters (in combination with landscaping). In some cases, wooden picket, lattice, three board fences or similar is acceptable. Solid panel should be avoided.
- n) Fences within the front yard should be no higher than 1.2 m (3.94 ft.) and should be placed a minimum of 0.50 m (1.64 ft.) from the internal edge of the sidewalk. Trellises and arbours should be placed a minimum of 2.0 m (1.64 ft.) from the front property line.
- o) Fencing should incorporate flower beds, flowering shrubs and other low lying landscaping to provide improved articulation.
- p) Vehicle gates at duplex site entrances are discouraged. To define the boundary between private and public space, provide:
  - i. pavement in contrasting colour and texture across driveway entrances;
  - ii. minor architectural elements;
  - iii. appropriate landscaping.

### Population Projection

Housing Type	Number of Properties Available for Redevelopment	Number of New Lots may be Created	Number of Units may be Created	Average Number of Persons Per Household*	Projected Population
Compact Lot Single Detached	161 properties have subdivision potential	322	322 Single Detached Units and permitted Secondary Suites	3.3 (including secondary suites)	1063
Compact Lot Coach House	72 properties have subdivision potential	144	144 Principal Units and 144 Coach House Units	3.3 (including coach house units)	475
Compact Lot Duplex	58 properties have subdivision potential +	116	232 Duplex Units	3.0	696
	67 properties have no subdivision potential	0	134 Duplex Units	3.0	402
Arterial Road Duplex	49 properties have subdivision potential +	98	196 Duplex Units	3.0	588
	131 properties have no subdivision potential	0	262 Duplex Units	3.0	786
Arterial Road Triplex	3 properties have subdivision potential +	6	18 Triplex Units	3.0	54
	53 properties have no subdivision potential	0	159 Triplex Units	3.0	477
Arterial Road Townhouse	1,032 properties		4343 Townhouse Units @ 21 unit/acre	3.0	13,029
<b>Total</b>	<b>1,626 properties</b>		<b>6,115 units</b>		<b>17,570 residents</b>

\* Based on 2011 Census Release