

# Engineering Reference Guide

for Single and Two-Family Dwellings



This guide covers essential aspects of the development process for single-family dwellings (SFD), two-family dwellings (TFD), and laneway homes, including inspections by the City of Burnaby's Engineering Department before, during, and after construction. Use this guide to ensure your construction project stays in compliance with the City of Burnaby's regulations and standards.

## SFD/TFD Development Overview: Engineering Inspection Process

### Pre-application inspection

Engineering inspectors will conduct a preliminary on-site review during the pre-application process\*



### Inspection **prior** to construction

Engineering inspectors will visit the property prior to start of construction activities to review preliminary requirements and note any pre-existing damage to City property



### Post-construction inspection

Once the certificate of occupancy is issued, Engineering inspectors will conduct a final inspection of the site prior to issuing a refund of your damage deposit

\*For more information regarding the pre-application process, please refer to our Single-Family Application Guide.

# Installation & Repair Responsibility

## Your responsibility for installation and/or repair

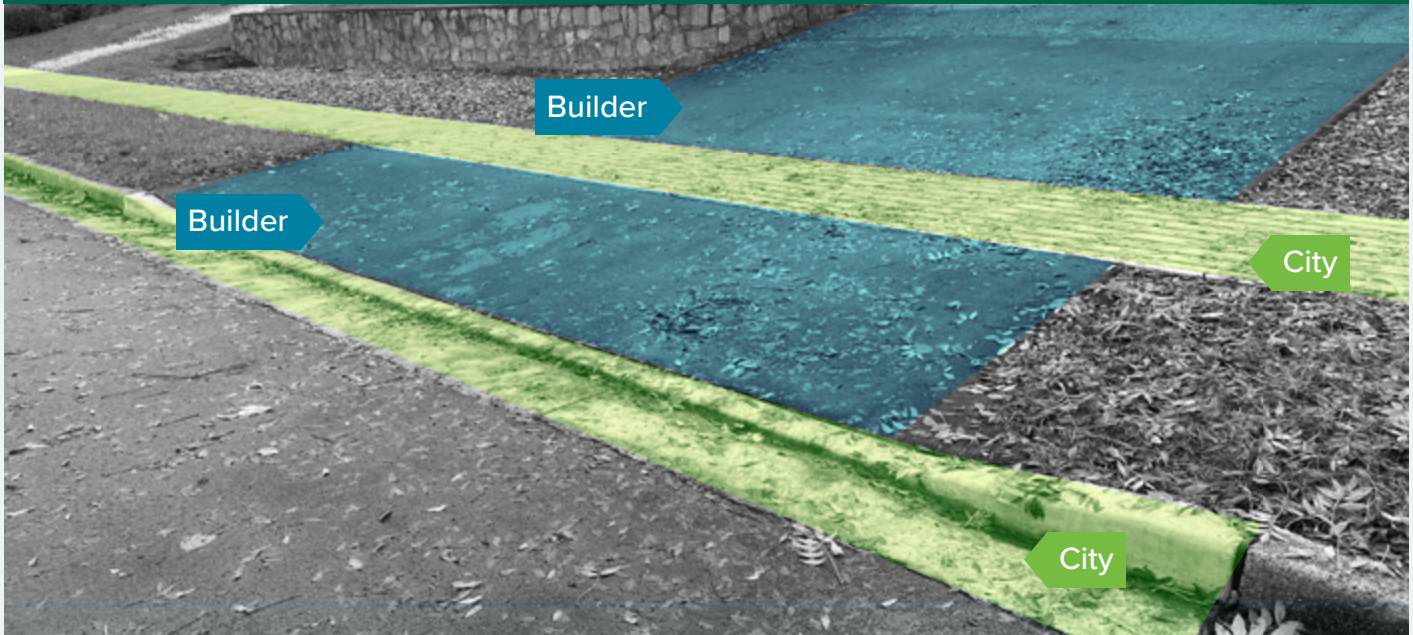
- » Landscaping and ensuring compliance with the City's Boulevard Treatment and Maintenance Policy
- » Driveway vehicle connector – private portion. See photo below
- » Pedestrian connector walk/stairs (if required)
- » Vision clearance at street and lane corners (e.g. no structure greater than a specific height in these areas) and clearance at lane corners (lane corner truncation) in compliance with s. 6.13 of the Burnaby Zoning Bylaw
- » Water, sanitary, storm service standpipes, MR boxes and meter boxes to final finish-grade
- » Tree fencing installation
- » Any third-party servicing and restoration work to be completed in compliance with City Pavement Restoration Policy

## City to install and repair or replace at your cost\*

- » Concrete sidewalks and curbs
- » Asphalt roadways/lanes
- » Driveway concrete letdowns
- » Damage to or replacement of City trees in accordance with the City's forestry guidelines
- » Culverts for driveway crossing
- » Any damage which existed prior to construction which is worsened during construction (e.g. existing single crack in the sidewalk panel worsened will require full replacement at your cost)
- » Any other damage caused to City property, infrastructure or utilities
- » Any other damages caused to City infrastructure or utilities

\*It is your responsibility to contact [engineering@burnaby.ca](mailto:engineering@burnaby.ca) to initiate the repair process with the City.

## Photo reference of installation responsibilities



# Timeframe for Service Connection Installations

The estimated timeframe for service connection installations is noted below.

5. **Sanitary and storm sewer:** Installation/renewal/lowering of sanitary and storm sewer connections generally takes between 10-12 weeks.
6. **New water connection:** Installation of a new water connection generally takes between 4-6 weeks.
7. **Water cuts or turn-offs at the property line:** Please provide at least 4 business days notice to the City. The area at the shut-off must be clear of construction materials and debris.
8. **Driveway/culvert removal/installation:** The estimated timeframe for driveway/culvert installation is 6-8 weeks. It is your responsibility to ensure all work requirements in the Engineering Approval Terms and Conditions (Section 9) are met, and to email [engineering@burnaby.ca](mailto:engineering@burnaby.ca) to schedule this work.

The actual timeframe for completion of the above City services may vary depending on weather conditions and request volumes.

## Construction Guidelines

### Tree Fencing

Any trees on the City boulevard must be protected. You will be required to install fencing in accordance with the City's tree protection layout.

Please contact [treeline@burnaby.ca](mailto:treeline@burnaby.ca):

- before tree fencing installation for a copy of the City's most current tree protection layout and tree fencing requirements, and for any questions
- following completion of construction for an inspection



### Demolition & Excavation

Since demolition and excavation operations cause the majority of damage to City property, ensure the following:

1. Do not allow heavy equipment to travel on City streets or lanes. Transport equipment directly onto the site on a rubber-tired carrier unless the cleats are covered. Planking on City property is usually necessary to avoid damaging pavement, curbs, sidewalks, etc.
2. Ensure the adjacent streets and lanes are kept clear of excavation and building materials. Mud tracked onto City streets is dangerous, and will be addressed immediately by City crews at your expense.
3. Make sure the sidewalk next to your property is kept safe at all times for pedestrians, including any cuts made for third-party utility service providers (eg., BC Hydro, FortisBC, etc.)

## Construction Runoff Water

Turbid water and/or concrete wash-water must be contained to the site until it is appropriate to discharge. You are required to follow the Best Management Practices (BMPs) outlined in the City's [Sediment Control Measures brochure](#). Only clear water with a pH between 6.5 - 8.5 should enter the storm system. If your site does not have a storm sewer connection, please speak with Engineering staff.

## Garbage Pick-Up & Recycling Procedures

The City will continue to pick up normal household garbage and recyclables during construction; however, absolutely no building or demolition materials can be placed into the City's collection bins. Your service may be halted and/or bylaw fines may be issued should we observe any violations. Owners are responsible for maintaining the garbage and green bins assigned to the property during construction. Do not switch bins to another address, as the bin serial numbers are issued to a specific address. If your bins are lost or damaged during the demolition/construction phase, you will be responsible for the cost to replace them.

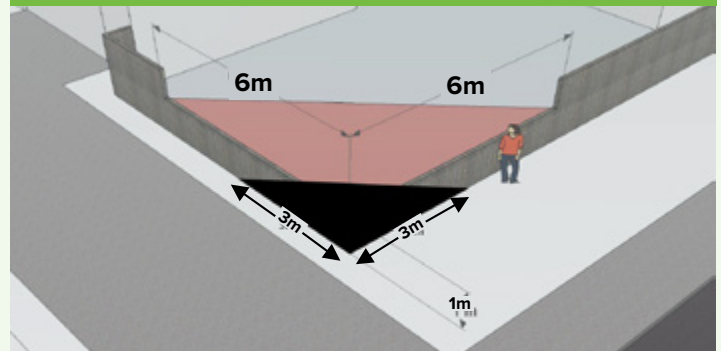
## Vision Clearance

No structure or other growth greater than 1.07 m (3.51 ft.) in height is permitted:

- at a street corner, in the area bounded by the intersecting lot lines and a line joining points along the lot lines 9 m (29.53 ft.) from their point of intersection
- at a lane corner (the intersection of a lane with another lane or with a street), in the area bounded by the intersecting lot lines and a line joining points along the lot lines 6 m (19.69 ft.) from their intersection (shown as pink triangle in Figure 1).

At a lane corner, no building, structure, including fences and retaining walls, landscape feature, hedge, tree or other vegetation is permitted in the area bounded by the intersecting lot lines at the lane corner and a line joining points along the lot lines 3 m (9.84 ft.) from their point of intersection (shown as black triangle in Figure 1).

Figure 1



Meets standards



Does not meet standards:  
Fence blocking vision clearance



Does not meet standards:  
Truncation is not 3x3 metres



### Ditch Enclosures

Ensure ditch enclosures adhere to approved plans, maintaining a minimum 1 metre clearance from fixed utilities (guywires, utility poles, etc.). Pipe materials should be approved by the City and installed by City crews. The City only places gravel after the installation of the culvert of the ditch enclosure. If the property owner prefers to install asphalt, it will be their responsibility.

### Meets standards



### Retaining Walls & Stairs

Ensure that retaining walls and any stairs you build are not on City property or Statutory Rights-of-Way.

### Does not meet standards



Stairs built on City property

Minimum 1 m landing required at back of sidewalk

### Meets standards



Retaining wall and stairs on private property

### Does not meet standards



Retaining walls on City property

## Parking Pad Guidelines on Unfinished Streets

Ensure parallel parking pad installation on unfinished streets is a maximum of 10 feet wide measured from the edge of the road. Parking pad materials must be asphalt or compacted road base gravel.

### Meets standards



### Does not meet standards



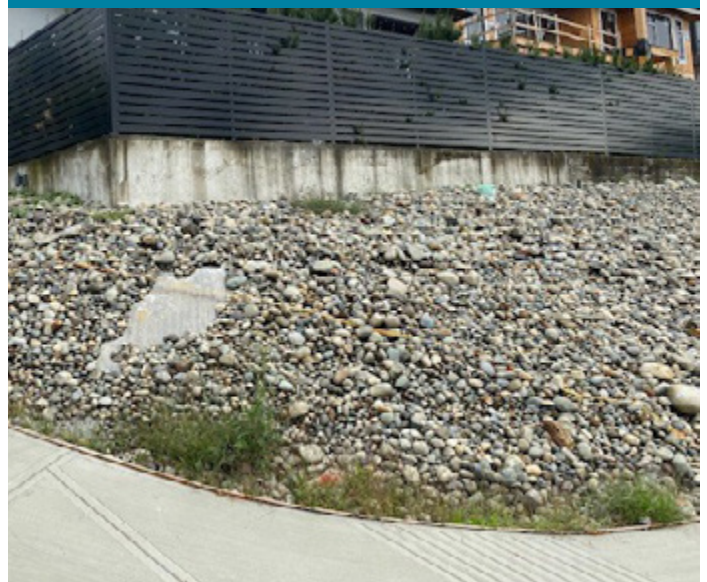
## Stone Pebbles

Ensure that any stone pebbles you plan to install are less than 1 inch in diameter.

### Meets standards



### Does not meet standards



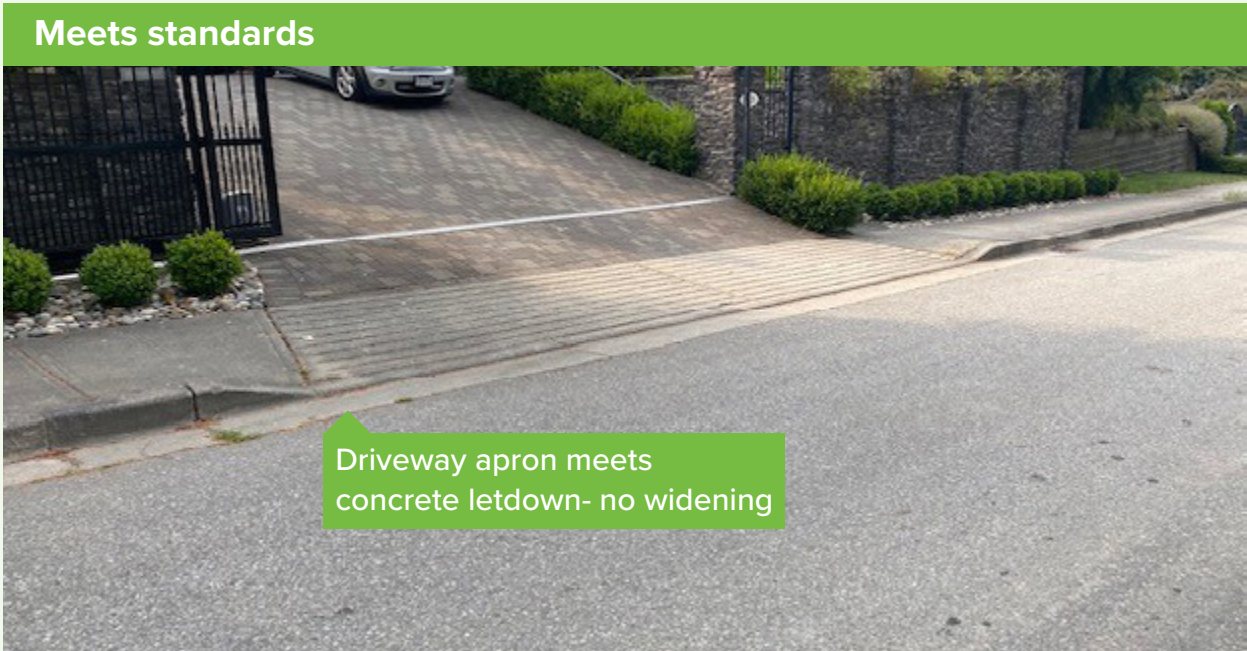
### Driveway Elevation Requirements

Ensure that the driveway meets the existing lane or road edge elevation. No ramping into lane is allowed. The driveway must be installed to the approved grade. The maximum slope is 5 percent off the street and 10 percent off the lane.



### Driveway Letdown

Ensure the driveway vehicle connector aligns with the concrete letdown.



# Damage Deposit Refunds

## Conditions for Damage Deposit Refunds

Before a refund of the damage deposit, you must ensure the following conditions are met:

- » Certificate of Occupancy has been issued by the City's Building Department
- » completion of all landscaping both at the front and back of the property in accordance with the City's Boulevard Treatment and Maintenance Policy
- » removal of all debris and building material from City property
- » completion of all City works, including service connection installation, driveway crossing/culvert installation, and repairs to City property, if required
- » completion of all third-party restoration works, if required, by utility service providers (eg., BC Hydro, FortisBC, etc.)
- » repair or correction of all noted deficiencies, including any encroachments on City property or statutory right-of-way areas.

## Damage Deposit Deductions

A final damage deposit inspection will be conducted following issuance of the Certificate of Occupancy to assess any new or additional damage to City property. If any damage to City property is noted, the City will repair the damage at the owner's cost and deduct from the damage deposit the amounts set out under Schedule E2 of the *Burnaby Consolidated Fees and Charges Bylaw* (the "**Fees and Charges Bylaw**"), as follows:

### **(a) Deduction for Damage to City Property (City to repair/replace)**

Please refer to Schedule E2 of the Fees and Charges Bylaw, under the heading "Deduction for Damage to City Property (City to repair/replace) Section 14(14)" for the types of damage that the City will repair or replace, and the associated fee that the City will deduct from the damage deposit for any such repairs or replacements.

### **(b) Deduction for Damage to City Property (City to repair/replace—3 months' notice to owner)**

Please refer to Schedule E2 of the Fees and Charges Bylaw, under the heading "Deduction for Damage to City Property (City to repair/replace if not completed by owner within 3 months of notice of damage from City) Section 14(14)" for the types of damage that the City will repair or replace if the owner fails to repair or replace the damage within 3 months from the date of the notice of damage from the City, and the associated fee that the City will deduct from the damage deposit for the repairs or replacements performed by the City.

### **(c) Deduction for Damage to Other City Property (not listed in sections 13(a) and 13(b) above)**

For any damage to City property which is not listed under those headings of Schedule E2 of the Fees and Charges Bylaw noted under paragraphs (a) and (b) above, the City will deduct the actual cost of the repair or replacement from the damage deposit.

If the damage deposit is not sufficient to cover the cost to repair or replace all damaged City property, then the owner will pay to the City the additional amount for the repair upon receipt of an invoice from the City.