



DNVFRS - DEVELOPMENT APPLICATION REQUIREMENTS

In addition to the drawings which are required by other departments, all rezoning and development permit applications which propose new buildings (other than detached residential) will require a separate and complete full size Fire Truck Access Plan which will be circulated to the District of North Vancouver Fire and Engineering Departments for their review. Incomplete submissions may delay the review and subsequently the finalization of application processing.

Once finalized, two additional copies of this plan are required. Upon being stamped as approved by the Fire and Engineering Departments (including transportation), one copy will be filed with the development application and the other sent to the applicant for their files. A digital copy of the Fire Truck Access Plan is to be provided to the Fire Department for their records by the applicant.

All subsequent submissions for approvals must also include the approved Fire Truck Access Plan Drawing which will be reviewed by the Fire Department to ensure there have not been any changes.

Fire Truck Access Plan Requirements

This Fire Truck Access Plan will be in the form of a site plan at a scale of 1:500 (1":40'0") or 1:250 (1":20'0") and should be fully dimensioned showing building outlines, setbacks, driveways, parking, and fire truck access all clearly noted. This drawing will also include location and identification of the following:

- New and existing hydrant(s) location and coverage (i.e. 75m radius).
- Dimensioned distance between hydrant(s) and Fire Department connections.
- Dimensioned distance from all buildings between the furthest primary access point to the nearest fire truck access.
- All entrances and exits from underground parking areas.
- Dimensions of dead ends.
- Any areas of suspended slab construction.
- The location(s) of fire alarm annunciator panel(s) and sprinkler control valve(s).
- Fire truck access route with design weights.
- Adjacent municipal streets, lanes or access right-of-way.
- Which buildings are sprinklered and non-sprinklered.
- Rollover curb required for all fire truck access routes.

Additional Requirements

1. Every non-sprinklered building must have direct access for firefighting from outdoors up to the sixth storey or 25 metres (82 feet) above grade.
2. Fire truck access routes must be designed and constructed to support the DNVFRS largest aerial fire apparatus, which has a gross vehicle weight of 36,968 kg (81,500 lb) and an overall length of 15 m (49 ft 3 in), including the bucket overhang. Construction materials must ensure all-weather accessibility under all climatic conditions.
3. Any designated fire truck access must be a minimum of 6 metres (19 feet, 9 inches) wide with no obstructions. Clearance heights must be a minimum of 5 metres (16 feet, 5 inches) vertically.
4. A turnaround facility to conform to the current BC Building Code Edition must be provided for any dead-end portion of a fire truck access route exceeding 90 metres (295 feet).
5. On cul-de-sac type turnarounds, where light standards protrude or dead-end portions exceed 90 metres, a minimum 15.3 radius is required or use turning template (autoturn).
6. Any road, street, or area that is a designated fire truck access must be located no further than 15 metres (49 feet, 3 inches) or closer than 3 metres (9 feet, 10 inches) from the face of a building.
7. Curves or off sets on access roads must conform to the current B.C. Building Code Edition, and a centerline turning radius of 12 metres (39 feet, 5 inches) to accommodate aerial and ladder platforms.
8. Provide an autoturn analysis to confirm the driveway access is compatible for a 'Tower' fire truck. Crossing the centreline and/or straddling two lanes may be permitted in low traffic areas.
9. If a fire truck is not used for the autoturn analysis, show the profile and dimensions of the design vehicle on the drawing.
10. On 'S' type curves, the fire truck access radius must be designed to accommodate aerial and ladder platforms.
11. A change of gradient on access roads must not to exceed 1 in 12.5 over a minimum distance of 15 metres (49 feet, 3 inches) and must provide a minimum overhead clearance of 5 metres (16 feet, 5 inches) measured vertically for the entire length of the slope.

12. Fire Lanes:

- Gates or other structures used to secure primary or secondary access roads or lanes, including *bollards or locking devices*, must be approved by the Fire Department and Engineering prior to acceptance of the design, and installation
- Fire lanes shall be designed to a maximum of grade not to exceed 3% at any location tower truck usage could be expected.
- Open fire lanes must be clearly marked with approved permanent signage or with approved highway painting of lines and words, which must read:

FIRE LANE – NO PARKING

The size and colour of these markings/signs are to be approved by *AHJ/DNVFRS* prior to installation.

- Primary or secondary access routes, when secured by gates, bollards, chains, or other approved, removable assemblies, must have a permanent mounted sign (in accordance with MUTCD) on each side of the obstruction of a size no less than 60 cm wide by 75 cm high (24 inches by 30 inches), which must read:

EMERGENCY ACCESS ONLY – ABSOLUTELY NO PARKING

By Order of the District of North Vancouver Fire & Rescue Services

13. Fire Department connection must be:

- In a location approved by Fire Department.
- Fully visible and recognizable from the street or nearest point of Fire Department vehicle accessibility.

14. The Fire Department connection for a standpipe or automatic sprinkler system must be located so the distance from the fire department connection to a hydrant is not more than 45 metres (150 feet) and is unobstructed.

15. For a building not provided with a Fire Department connection, a Fire Department pumper vehicle must be able to be accommodated so that the length of the access route from a hydrant to the vehicle, plus the unobstructed path of travel for the firefighter from the vehicle to the building is not more than 90 metres (300 feet) and the unobstructed path of travel for the firefighter from the vehicle to the building is not more than 45 metres (150 feet).

16. The distance between hydrants or standpipes must not be greater than 75 metres (246 feet) to serve all uses other than single family dwellings.

17. To avoid confusion during an emergency response, a list of potential building names must be provided and approved at the detailed application stage.

Note: *If requirements cannot be met, applicants may propose alternative solutions through a code professional.*

**Questions about Fire Access in Development Applications?
Please contact the project Development Planner.**