

APPENDIX E

ON-SITE MITIGATION MEASURES FROM CANMORE

EDCG



Examples of on-site mitigation measures from the Canmore's Engineering Design and Construction Guidelines are included in Table E-1.

Table E-1 On-site mitigation measures from the Canmore EDCG.

Measure	Description	Reference Material
Minimum floor elevations	Established to ensure that the habitable space of a development is higher than the modelled flood levels.	Section 9, Pages 9-4 to 9-6, Figure. 9-1
Minimum building opening elevation	The concept is similar to the minimum floor elevation. Building openings refer to window wells, garage doors, door entrances, and the top of foundation walls.	Section 9, Page 9-4 to 9-6, Figure. 9-1
Driveways	Driveways sloping towards the building are discouraged	Section 9, Page 9-6
Raising the Lot	The development is not exposed to the hazard when raised above the modelled flood level.	Section 9, Pages 9-7 to 9-9, Table 9-2, Figure 9-3
Fuel Storage	Fuel storage containers, private pumping stations and any other external service installations with mechanical or electrical parts should be raised and secured at or above the minimum floor elevation.	Section 9, Page 9-9
Temporary flood protection	Preventing floodwater ingress into a building to minimize the impact of and to give occupants more time to relocate ground-floor contents.	Section 9, Pages 9-9 to 9-10
Grading & Drainage	Landscaping of a development site or property boundary to direct or divert floodwater away from buildings.	Section 9, Page 9-10
Basement & Below Grade Spaces	Due to the potential harm to building occupants, flood-proofing of spaces below the top of the foundation wall should be avoided. Walk-up basements, which feature a sunken entrance or dug-in stairs that extend from ground level down to the basement, should be avoided as an entry/exit point.	Section 9, Page 9-10
Foundation Design	The foundation design should consider the anticipated flood loads, potential debris impact loads, and scouring of foundation walls.	Section 9, Page 9-10, Table 9-3, Table 9-4

Measure	Description	Reference Material
Window Wells	The window well drainage system should minimize the likelihood of water accumulation in the well. The contact between the window well and the foundation should be sealed. The top of the window well should extend at least to the Minimum Building Opening Elevation. Grades around the window well must slope away at a minimum of 2%.	Section 9, Page 9-13
Waterproofing Measures	Waterproofing of foundation walls significantly increases the flood resistance of a building and can be adopted for buildings in steep creek hazard zones.	Section 9, Page 9-13 to 9-14
Flood-resilient building design	Flood-resilient buildings, also known as wet-proofing, are designed and constructed to minimize the impact of floodwater entering the building, thereby causing minimal permanent damage, maintaining structural integrity, and facilitating easier drying and cleaning.	Section 9, Page 9-14, Table 9-5