

The MVCA safe access policies were developed with guidance and direction from the Ministry of Natural Resources and Forestry (MNRF) *Technical Guide – River & Stream Systems: Flooding Hazard Limit*. The MVCA may require safe access to the existing and/or proposed development within the regulatory floodplain be provided prior to approval in order to protect people and property from flood hazards or damage. Vehicular and pedestrian access routes must have safe access, both ingress (enter) and egress (exit) to the area outside of the floodplain during the regulatory flood event. The availability of safe access is directly related to flood depth and velocity. An access road is deemed unsafe for the passage of vehicles if it is subject to more than 0.3 meters of flooding during the regulatory flood event and the maximum flood velocity exceeds 1.0 metres/second.

Safe access routes must be designed to allow normal flow passage without obstructing or impeding flow. Any development within the regulatory floodplain, including site grading, fill placement or removal, must demonstrate no negative impacts on flood elevations, floodplain conveyance and storage capacity. A balance cut and fill may be required to offset floodplain volumes.

Supporting Technical Requirements	
Safe Access	<p>Access concerns include but are not limited to:</p> <ul style="list-style-type: none"> - Vehicular access routes (municipal roadways and private rights-of-way) - Pedestrian access routes (private laneways, driveways and walkways between residences and vehicular access routes) <p>Vehicular access and parking lots must be designed to allow for safe vehicular movement to municipal right-of-way (ROW):</p> <ul style="list-style-type: none"> - Flood depth less than or equal to 0.3 metres - Flow velocity less than or equal to 1.0 metres/second <p>Driveways or roads may be filled to a minimum depth of 0.3 metres below the regulatory flood level and to a maximum depth of 0.3 metres above the regulatory flood elevation with side slopes of driveway/access roads to existing grades at 3H:1V slope.</p> <p>All additions to the existing and/or new public roads and driveways must be floodproofed to no lower than 0.3 metres below the regulatory flood elevation.</p>
Hydraulic Analysis	<p>Hydraulic analysis may be required to demonstrate that providing a safe access will not result in adverse impact on the floodplain conveyance and storage capacity. The analysis should include:</p> <ul style="list-style-type: none"> - Existing overland flows paths and drainage - Flood elevations, flow velocities, and cross-section data - Backwater analysis (if applicable) - Total fill volume and cut and fill balances, if required, (in 0.3 m increments) demonstrating no impacts on the floodplain conveyance and storage capacity
Engineering Drawings	Pre and post grading plan including drainage, the regulatory floodplain elevation, existing and proposed road profiles and side slopes tying into existing grades
Qualified Persons	Signed and stamped by a qualified professional engineer licensed in the Province of Ontario