Turnip representation of QLD rule section 151A encoding.

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| **Section 151A** **Lane filtering between slow or stationary vehicles on a motorbike**  (1) The rider of a motorbike is ***lane filtering***along a length of road if the rider rides the motorbike between—  (a) two adjacent lines of traffic travelling in the same direction as the motorbike; or  (b) two vehicles (regardless of whether the rider remains within a single marked lane), each vehicle travelling in—  (i) the same direction as the motorbike; and  (ii) separate, but adjacent, marked lanes.  (2) The rider of a motorbike must not unlawfully lane filter along a length of road.  (3) For subsection (2), if 1 or more of the following circumstances apply while a rider is lane filtering along a length of road, the rider is taken to have unlawfully lane filtered along the length of road—  (a) the rider does not hold an O type licence for the class of the motorbike;  (b) the rider rides at a speed of more than 30km/h;  (c) the rider rides in a school zone;  (d) a no filtering sign applies to the length of road;  (e) it is not safe to lane filter.  (4) A no filtering sign on a road applies to a length of road starting at the sign and ending at the nearer of the following—  (a) if the length of road ends at a T-intersection or dead end—the end of the length of road;  (b) the next end no filtering sign that is on the road.  (5) In this section—  ***end no filtering sign*** means a traffic sign—  (a) with a symbol displaying a motorbike positioned between two vehicles with a black diagonal line across the symbol; and  (b) with a symbol positioned below the symbol mentioned in paragraph (a) displaying the word ‘END’ in black letters.  ***no filtering sign*** means—  (a) a traffic sign with a symbol displaying a motorbike positioned between two vehicles with a red diagonal line across the symbol; or  (b) a traffic sign displaying the words ‘no filtering’.  ***school zone***means a school zone under [section 23](https://www.legislation.qld.gov.au/view/html/inforce/current/sl-2009-0194#sec.23)(2) but only during the times when a lower speed limit applies to a driver in the school zone than the speed limit that applies to a driver for a length of road immediately outside the school zone. |
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| Encoding (Appendix A) |
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| Text  Description automatically generated with low confidence |
| **Atom Initialisations:**  **Atom** rider\_Rides\_motorbike  **Atom** motorbike\_InBetween(LineOfTraffic1, LineOfTraffic2)  **Atom** LineOfTraffic1\_IsTravellingInTheSameDirectionOf\_motorbike  **Atom** LineOfTraffic2\_IsTravellingInTheSameDirectionOf\_motorbike  **Atom** LineOfTraffic1\_IsAdjacentTo\_LineOfTraffic2  **Atom** rider\_LaneFilteringAlong\_lengthOfRoad  **Atom** motorbike\_InBetween\_(vehicle1, vehicle2)  **Atom** vehicle1\_IsTravellingInTheSameDirectionOf\_motorbike  **Atom** vehicle2\_IsTravellingInTheSameDirectionOf\_motorbike  **Atom** vehicle1\_IsTravellingIn\_lane1  **Atom** vehicle2\_IsTravellingIn\_lane2  **Atom** lane1\_IsSeparatedFrom\_lane2  **Atom** lane1\_IsAdjacentTo\_lane2  **Atom** lane1\_IsMarked  **Atom** lane2\_IsMarked  **Atom** rider\_LawfullyLaneFilteringAlong\_lengthOfRoad  **Atom** LawfullyLaneFilter  **Atom** UnlawfullyLaneFilteringAlong  **Atom** LawfullyLaneFilteringAlong  **Atom** LaneFilteringAlong  **Atom** UnlawfullyLaneFilter.Defeater  **Atom** class\_Of\_motorbike  **Atom** rider\_HoldsOTypeLicenceFor\_class  **Atom** rider\_UnlawfullyLaneFilteringAlong\_lengthOfRoad  **Atom** rider\_isRidingAtSpeedGreaterThan\_30kilometresPerHour  **Atom** rider\_IsRidingIn\_schoolZone  **Atom** noFilteringSign\_AppliesTo\_lengthOfRoad  **Atom** IsSafeToLaneFilter  **Atom** lengthOfRoad\_IsLengthOfRoadOf\_road  **Atom** noFilteringSign\_IsOn\_road  **Atom** road\_EndsIn\_Tintersection  **Atom** lengthOfRoad\_StartsAt\_noFilteringSign  **Atom** lengthOfRoad\_EndsAt\_Tintersection  **Atom** road\_EndsIn\_deadEnd  **Atom** lengthOfRoad\_EndsAt\_deadEnd  **Atom** endNoFilteringSign\_IsOn\_road  **Atom** lengthOfRoad\_EndsAt\_EndNoFilteringSign  **Atom** (noFilteringSign\_DistanceTo\_endNoFilteringSign)\_LessThan\_(noFilteringSign\_DistanceTo\_deadEnd)  **Atom** (noFilteringSign\_DistanceTo\_endNoFilteringSign)\_LessThan\_(noFilteringSign\_DistanceTo\_TIntersection)  **Atom** trafficSign\_Display\_symbol  **Atom** symbol\_MadeOf\_symbolOfMotorbike  **Atom** symbol\_MadeOf\_symbolOfTwoVehicles  **Atom** symbolOfMotorbike\_InBetween\_symbolOfTwoVehicles  **Atom** trafficSign\_Display\_blackDiagonalLine  **Atom** blackDiagonalLine\_Across\_symbol  **Atom** trafficSign\_DisplayString\_`END'\_inBlackLetters  **Atom** symbolEND\_PositionedBelow\_symbol  **Atom** trafficSign\_Is\_endNoFilteringSign  **Atom** trafficSign\_Display\_redDiagonalLine  **Atom** redDiagonalLine\_Across\_symbol  **Atom** trafficSign\_DiplayString\_`no filtering'  **Rules:**  s151A\_1\_a: rider\_Rides\_motorbike & motorbike\_InBetween\_(LineOfTraffic1, LineOfTraffic2) & LineOfTraffic1\_IsTravellingInTheSameDirectionOf\_motorbike & LineOfTraffic2\_IsTravellingInTheSameDirectionOf\_motorbike & LineOfTraffic1\_IsAdjacentTo\_LineOfTraffic2 **=>** rider\_LaneFilteringAlong\_lengthOfRoad  s151A\_1\_b: rider\_Rides\_motorbike & motorbike\_InBetween\_(vehicle1, vehicle2) & vehicle1\_IsTravellingInTheSameDirectionOf\_motorbike & vehicle2\_IsTravellingInTheSameDirectionOf\_motorbike & vehicle1\_IsTravellingIn\_lane1 & vehicle2\_IsTravellingIn\_lane2 & lane1\_IsSeparatedFrom\_lane2 & lane1\_IsAdjacentTo\_lane2 & lane1\_IsMarked & lane2\_IsMarked **=>** rider\_LaneFilteringAlong\_lengthOfRoad  s151A\_2: rider\_Rides\_motorbike **=>** **[O]** rider\_LawfullyLaneFilteringAlong\_lengthOfRoad  sLawfullyLaneFilter: UnlawfullyLaneFilteringAlong **=>** LaneFilteringAlong  sUnlawfullyLaneFilter: LawfullyLaneFilteringAlong **=>** LaneFilteringAlong  sUnlawfullyLaneFilter\_Defeater: UnlawfullyLaneFilteringAlong **=> ~** LawfullyLaneFilteringAlong  s151A\_3\_a: rider\_Rides\_motorbike & rider\_LaneFilteringAlong\_lengthOfRoad & class\_Of\_motorbike & **~** rider\_HoldsOTypeLicenceFor\_class **=>** rider\_UnlawfullyLaneFilteringAlong\_lengthOfRoad  s151A\_3\_b: rider\_Rides\_motorbike & rider\_LaneFilteringAlong\_lengthOfRoad & rider\_isRidingAtSpeedGreaterThan\_30kilometresPerHour **=>** rider\_UnlawfullyLaneFilteringAlong\_lengthOfRoad  s151A\_3\_c: rider\_Rides\_motorbike & rider\_LaneFilteringAlong\_lengthOfRoad & rider\_IsRidingIn\_schoolZone **=>** rider\_UnlawfullyLaneFilteringAlong\_lengthOfRoad  s151A\_3\_d: rider\_Rides\_motorbike & rider\_LaneFilteringAlong\_lengthOfRoad & noFilteringSign\_AppliesTo\_lengthOfRoad **=>** rider\_UnlawfullyLaneFilteringAlong\_lengthOfRoad  s151A\_3\_e: rider\_Rides\_motorbike & rider\_LaneFilteringAlong\_lengthOfRoad & **~** IsSafeToLaneFilter **=>** rider\_UnlawfullyLaneFilteringAlong\_lengthOfRoad  s151A\_4\_a\_i: lengthOfRoad\_IsLengthOfRoadOf\_road & noFilteringSign\_IsOn\_road & road\_EndsIn\_Tintersection & lengthOfRoad\_StartsAt\_noFilteringSign & lengthOfRoad\_EndsAt\_Tintersection **=>** noFilteringSign\_AppliesTo\_lengthOfRoad  s151A\_4\_a\_ii: lengthOfRoad\_IsLengthOfRoadOf\_road & noFilteringSign\_IsOn\_road & road\_EndsIn\_deadEnd & lengthOfRoad\_StartsAt\_noFilteringSign & lengthOfRoad\_EndsAt\_deadEnd **=>** noFilteringSign\_AppliesTo\_lengthOfRoad  s151A\_4\_b: lengthOfRoad\_IsLengthOfRoadOf\_road & noFilteringSign\_IsOn\_road & endNoFilteringSign\_IsOn\_road & lengthOfRoad\_StartsAt\_noFilteringSign & lengthOfRoad\_EndsAt\_EndNoFilteringSign **=>** noFilteringSign\_AppliesTo\_lengthOfRoad  s151A\_4\_b\_exceptionTo\_a\_i: lengthOfRoad\_IsLengthOfRoadOf\_road & road\_E ndsIn\_deadEnd & noFilteringSign\_IsOn\_road & endNoFilteringSign\_IsOn\_road & lengthOfRoad\_StartsAt\_noFilteringSign & (noFilteringSign\_DistanceTo\_endNoFilteringSign)\_LessThan\_(noFilteringSign\_DistanceTo\_deadEnd) & lengthOfRoad\_EndsAt\_EndNoFilteringSign **=>** noFilteringSign\_AppliesTo\_lengthOfRoad  s151A\_4\_b\_exceptionTo\_a\_ii: lengthOfRoad\_IsLengthOfRoadOf\_road & road\_EndsIn\_Tintersection & noFilteringSign\_IsOn\_road & endNoFilteringSign\_IsOn\_road & lengthOfRoad\_StartsAt\_noFilteringSign & (noFilteringSign\_DistanceTo\_endNoFilteringSign)\_LessThan\_(noFilteringSign\_DistanceTo\_TIntersection) & lengthOfRoad\_EndsAt\_EndNoFilteringSign **=>** **[O]** noFilteringSign\_AppliesTo\_lengthOfRoad  s151A\_5\_EndNoFilteringSign: trafficSign\_Display\_symbol & symbol\_MadeOf\_symbolOfMotorbike & symbol\_MadeOf\_symbolOfTwoVehicles & symbolOfMotorbike\_InBetween\_symbolOfTwoVehicles & trafficSign\_Display\_blackDiagonalLine & blackDiagonalLine\_Across\_symbol & trafficSign\_DisplayString\_`END'\_inBlackLetters & symbolEND\_PositionedBelow\_symbol **=>** trafficSign\_Is\_endNoFilteringSign  s151A\_5\_NoFilteringSign: trafficSign\_Display\_symbol & symbol\_MadeOf\_symbolOfMotorbike & symbol\_MadeOf\_symbolOfTwoVehicles & symbolOfMotorbike\_InBetween\_symbolOfTwoVehicles & trafficSign\_Display\_redDiagonalLine & redDiagonalLine\_Across\_symbol & trafficSign\_DiplayString\_`no filtering' **=>** trafficSign\_Is\_noFilteringSign  sUnlawfullyLaneFilter\_Defeater **≫** sLawfullyLaneFilter  s151A\_4\_b\_exceptionTo\_a\_i **≫** s151A\_4\_a\_i  s151A\_4\_b\_exceptionTo\_a\_ii **≫** s151A\_4\_a\_ii 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