APPENDIX L:

Warrant Assessment Reports

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	9094 Regional Road 25	**Project Number**	2022-7556-2
		Date	2025-11-10
Horizon	2035 Future Total	**Analyst**	MY

Study Intersection Summary

Major Street	Regional Road 25	**Direction**	North/South
Minor Street	Full Moves Access	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**Number of Lanes**	2+
T-Intersection?	Yes	**Intersection Type**	New

Notes: Free Flow (Rural) is used when the operating speed is greater than or equal to 70km/h. Restricted Flow (Urban) is used otherwise.
The Number of Lanes greater than 1 only needs to be for one direction along the major road.
An intersection is considered New if at least 1-leg is added to an existing intersection.

Input Volumes and Average Hourly Volume Determination

Peak Hour	Major: Regional Road 25						Minor: Full Moves Access						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	168	440	0	0	1229	39	83	0	81	0	0	0	0
PM	354	1221	0	0	686	83	282	0	168	0	0	0	0
AHV	131	415	0	0	479	31	91	0	62	0	0	0	0

The AHV is determined by the availability of the peak hour estimates. If both Peak 1 and Peak 2 Peak Hour Volume estimates are available then AHV = (Peak1phv + Peak2phv)/4. In only the case that one estimate is available then AHV = Peak1phv/2 **or** Peak2phv/2.

Justification 7 - OTM Book 12

JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENT 1 LANE HIGHWAYS		MINIMUM REQUIREMENT 2 OR MORE LANE HIGHWAYS		COMPLIANCE		
						Sectional		Entire Percentage
		Free Flow	Restricted Flow	Free Flow	Restricted Flow	Numerical	Percentage	
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches (Avg. Hour)	480	720	600	900	1209	201.5%	85.0%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	153	85.0%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	1056	176.0%	176.0%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	91	182.0%	
Applicable Threshold				X				

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 176.0%
Percentage Required to be Justified: 150%

Signal Justification 7 Met: [X] **Yes** [ ] **No**

TRAFFIC SIGNAL WARRANTS - JUSTIFICATION 7 (PROJECTED VOLUMES)
PER OTM BOOK 12

Project and Scenario Summary

Project	9094 Regional Road 25	**Project Number**	2022-7556-2
		Date	2025-11-10
Horizon	2035 Future Total	**Analyst**	MY

Study Intersection Summary

Major Street	Regional Road 25	**Direction**	North/South
Minor Street	Full Moves Access	**Direction**	East/West

Intersection Details for Warrant Parameters

Flow Conditions	Free Flow (Rural)	**Number of Lanes**	1
T-Intersection?	Yes	**Intersection Type**	New

Notes: Free Flow (Rural) is used when the operating speed is greater than or equal to 70km/h. Restricted Flow (Urban) is used otherwise.
The Number of Lanes greater than 1 only needs to be for one direction along the major road.
An intersection is considered New if at least 1-leg is added to an existing intersection.

Input Volumes and Average Hourly Volume Determination

Peak Hour	Major: Regional Road 25						Minor: Full Moves Access						Pedestrians Crossing Major Street
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	
AM	0	0	0	68	0	38	64	177	0	0	224	112	0
PM	0	0	0	149	0	101	107	270	0	0	254	186	0
AHV	0	0	0	54	0	35	43	112	0	0	120	75	0

The AHV is determined by the availability of the peak hour estimates. If both Peak 1 and Peak 2 Peak Hour Volume estimates are available then AHV = (Peak1phv + Peak2phv)/4. In only the case that one estimate is available then AHV = Peak1phv/2 **or** Peak2phv/2.

Justification 7 - OTM Book 12

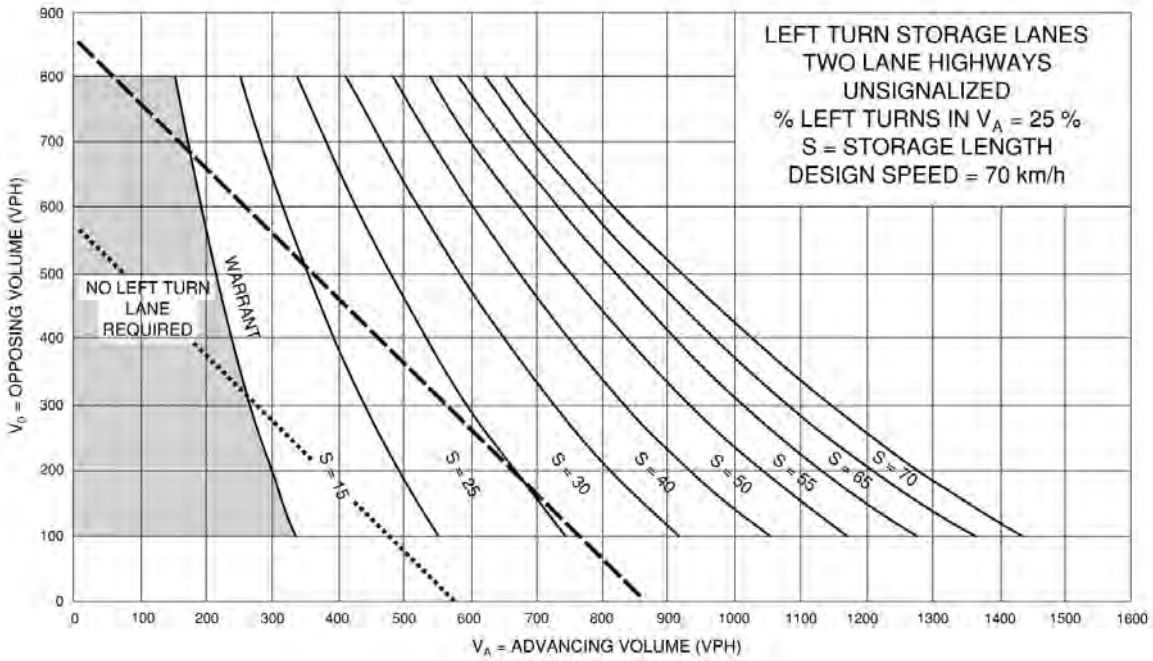
JUSTIFICATION	DESCRIPTION	MINIMUM REQUIREMENT 1 LANE HIGHWAYS		MINIMUM REQUIREMENT 2 OR MORE LANE HIGHWAYS		COMPLIANCE		
						Sectional		Entire Percentage
		Free Flow	Restricted Flow	Free Flow	Restricted Flow	Numerical	Percentage	
1. Minimum Vehicular Volume	A. Vehicle Volume, All Approaches (Avg. Hour)	480	720	600	900	439	91.5%	91.5%
	B. Vehicle Volume, Along Minor Streets (Avg. Hour)	180	255	180	255	350	194.4%	
2. Delay to Cross Traffic	A. Vehicle Volume, Major Street (Avg. Hour)	480	720	600	900	89	18.5%	18.5%
	B. Combined Vehicle and Pedestrian Volume Crossing Artery From Minor Streets (Avg. Hour)	50	75	50	75	163	326.0%	
Applicable Threshold		**X**						

Note: For T-intersections the thresholds for 1B have been increased by 50% per OTM Book 12.
Existing Intersections Require 120% Justification
New/Proposed Intersections Require 150% Justification

Percent Compliance: 91.5%
Percentage Required to be Justified: 150%

Signal Justification 7 Met: [ ] **Yes** [X] **No**

Exhibit-9A-13



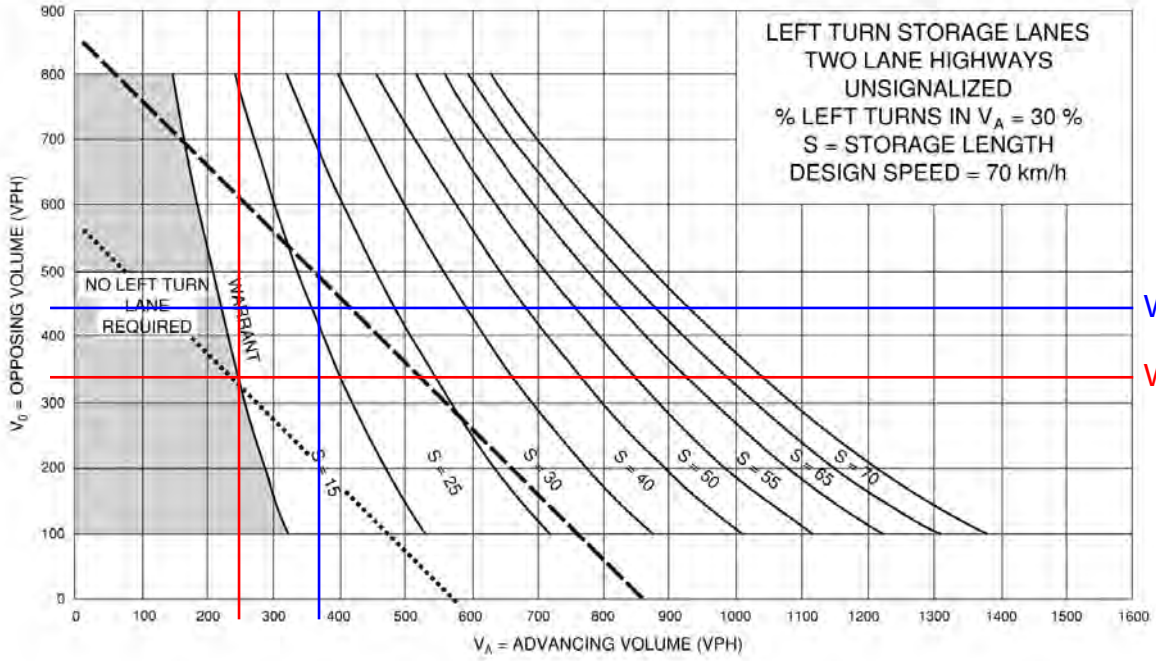
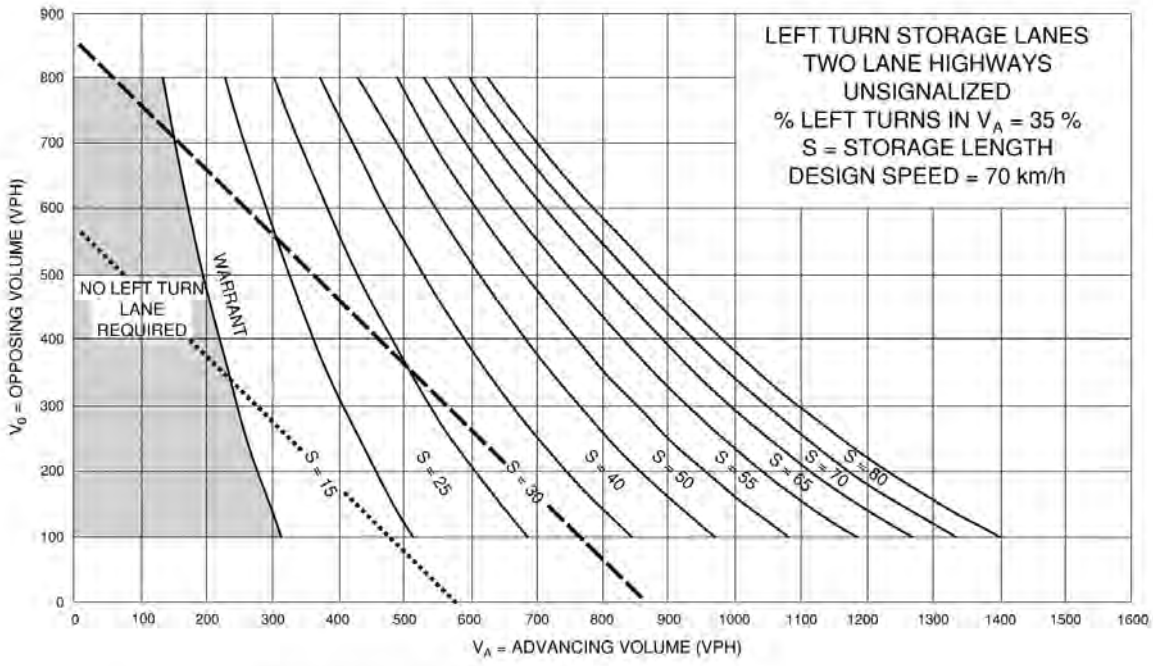
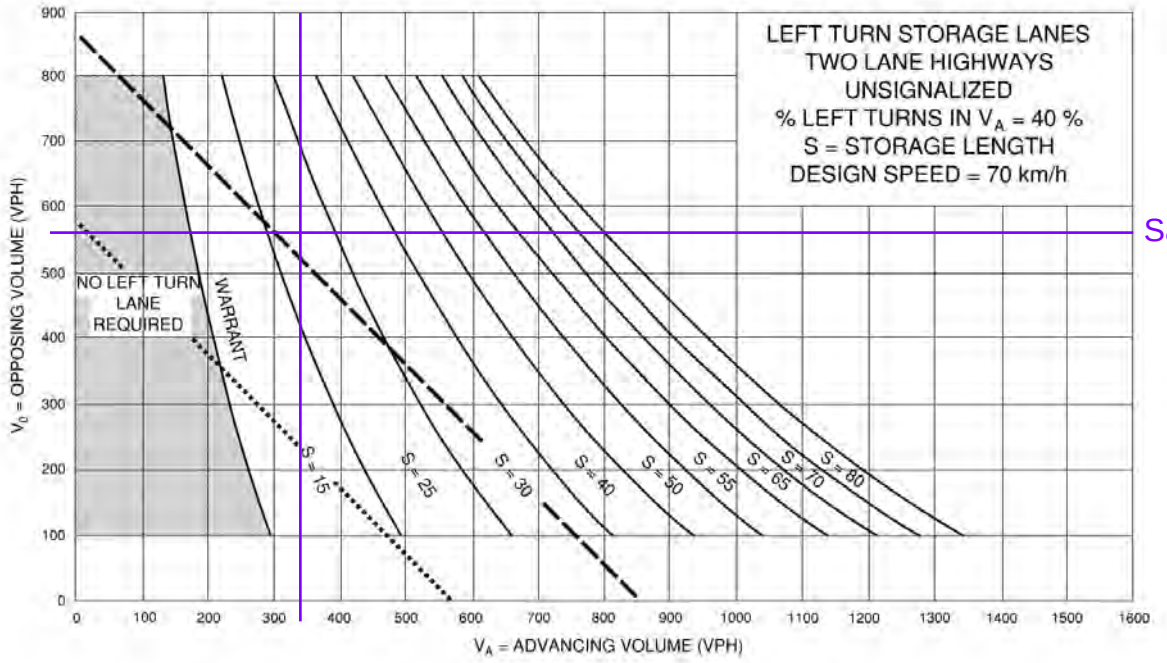


Exhibit-9A-14





Intersection	Horizon	Right-Turn Volume	Through Volume	Total Approach Volume	% Right-Turn
Regional Road 25 & Full Moves Access	2035 FT AM	39	1229	1268	3%
	2035 FT PM	83	686	769	11%
	2035 FT SAT	114	654	768	15%
5 Side Road& Full Moves Access	2035 FT AM	112	224	336	33%
	2035 FT PM	186	254	440	42%
	2035 FT SAT	264	303	567	47%