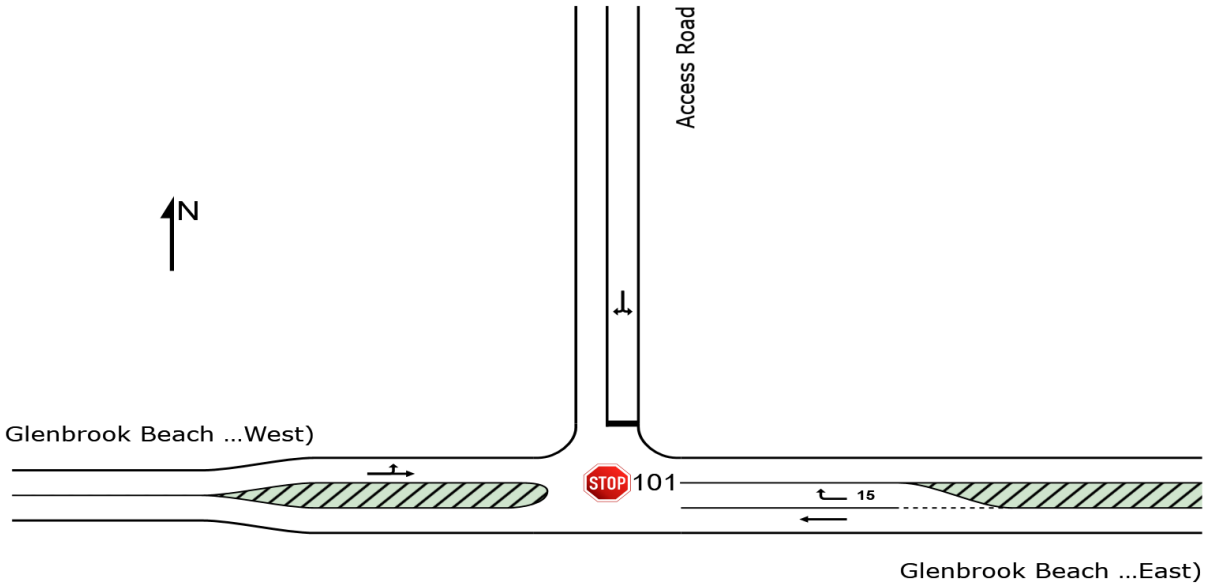
SITE LAYOUT

Site: 101 [GBR Access - AM Peak (Site Folder: With Right Turn Bay)]

New Site
Site Category: (None)
Stop (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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Project: \\Nz4105-ppfss01\shared_projects\310103911\technical\Transport\SIDRA_Modelling\372_GBR_Access.sip9

MOVEMENT SUMMARY

Site: 101 [GBR Access - AM Peak (Site Folder: With Right Turn Bay)]

Output produced by SIDRA INTERSECTION Version: 9.0.3.9771

Reprocess the Site in this Version to see the selected Movement Class results. All results may be affected by reprocessing compared with Version 9.0 results.

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Glenbrook Beach Road (East)															
5	T1	All MCs	289	8.0	289	8.0	0.158	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.9
6	R2	All MCs	55	4.0	55	4.0	0.067	10.0	LOS B	0.3	1.9	0.59	0.79	0.59	51.6
Approach			344	7.4	344	7.4	0.158	1.6	NA	0.3	1.9	0.09	0.13	0.09	73.5
North: Access Road															
7	L2	All MCs	7	29.0	7	29.0	0.020	14.2	LOS B	0.1	0.6	0.66	0.95	0.66	43.3
9	R2	All MCs	1	0.0	1	0.0	0.020	22.3	LOS C	0.1	0.6	0.66	0.95	0.66	48.0
Approach			8	25.4	8	25.4	0.020	15.2	LOS C	0.1	0.6	0.66	0.95	0.66	43.9
West: Glenbrook Beach Road (West)															
10	L2	All MCs	1	0.0	1	0.0	0.353	7.0	LOS A	0.0	0.0	0.00	0.00	0.00	74.4
11	T1	All MCs	653	8.0	653	8.0	0.353	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.7
Approach			654	8.0	654	8.0	0.353	0.1	NA	0.0	0.0	0.00	0.00	0.00	79.7
All Vehicles			1006	7.9	1006	7.9	0.353	0.7	NA	0.3	1.9	0.04	0.05	0.04	76.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 101 [GBR Access - PM Peak (Site Folder: With Right Turn Bay)]

Output produced by SIDRA INTERSECTION Version: 9.0.3.9771

Reprocess the Site in this Version to see the selected Movement Class results. All results may be affected by reprocessing compared with Version 9.0 results.

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
East: Glenbrook Beach Road (East)															
5	T1	All MCs	678	8.0	678	8.0	0.367	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	79.7
6	R2	All MCs	7	29.0	7	29.0	0.008	9.3	LOS A	0.0	0.3	0.49	0.64	0.49	52.0
Approach			685	8.2	685	8.2	0.367	0.2	NA	0.0	0.3	0.01	0.01	0.01	79.3
North: Access Road															
7	L2	All MCs	55	4.0	55	4.0	0.070	10.5	LOS B	0.3	1.9	0.49	0.91	0.49	50.4
9	R2	All MCs	1	0.0	1	0.0	0.070	29.5	LOS D	0.3	1.9	0.49	0.91	0.49	50.1
Approach			56	3.9	56	3.9	0.070	10.8	LOS B	0.3	1.9	0.49	0.91	0.49	50.4
West: Glenbrook Beach Road (West)															
10	L2	All MCs	1	0.0	1	0.0	0.232	7.0	LOS A	0.0	0.0	0.00	0.00	0.00	74.5
11	T1	All MCs	429	8.0	429	8.0	0.232	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	79.8
Approach			431	8.0	431	8.0	0.232	0.1	NA	0.0	0.0	0.00	0.00	0.00	79.8
All Vehicles			1172	7.9	1172	7.9	0.367	0.6	NA	0.3	1.9	0.03	0.05	0.03	77.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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LANE SUMMARY

Site: 101 [GBR Access - AM Peak (Site Folder: With Right Turn Bay)]

Output produced by SIDRA INTERSECTION Version: 9.0.3.9771

New Site
Site Category: (None)
Stop (Two-Way)

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
East: Glenbrook Beach Road (East)															
Lane 1	289	8.0	289	8.0	1836	0.158	100	0.0	LOS A	0.0	0.0	Full	500	0.0	0.0
Lane 2	55	4.0	55	4.0	815	0.067	100	10.0	LOS B	0.3	1.9	Short	15	0.0	NA
Approach	344	7.4	344	7.4		0.158		1.6	NA	0.3	1.9				
North: Access Road															
Lane 1	8	25.4	8	25.4	415	0.020	100	15.2	LOS C	0.1	0.6	Full	500	0.0	0.0
Approach	8	25.4	8	25.4		0.020		15.2	LOS C	0.1	0.6				
West: Glenbrook Beach Road (West)															
Lane 1	654	8.0	654	8.0	1854	0.353	100	0.1	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	654	8.0	654	8.0		0.353		0.1	NA	0.0	0.0				
All Vehicles	1006	7.9	1006	7.9		0.353		0.7	NA	0.3	1.9				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Lane LOS values are based on average delay per lane.
Minor Road Approach LOS values are based on average delay for all lanes.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Approach Lane Flows (veh/h)

East: Glenbrook Beach Road (East)

Mov. From E To Exit:	T1 W	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	289	-	289	8.0	1836	0.158	100	NA	NA
Lane 2	-	55	55	4.0	815	0.067	100	0.0	1
Approach	289	55	344	7.4		0.158			

North: Access Road

Mov. From N To Exit:	L2 E	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	7	1	8	25.4	415	0.020	100	NA	NA
Approach	7	1	8	25.4		0.020			

West: Glenbrook Beach Road (West)

Mov. From W	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.

To Exit:	N	E							
Lane 1	1	653	654	8.0	1854	0.353	100	NA	NA
Approach	1	653	654	8.0		0.353			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	1006	7.9	0.353

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
East: Glenbrook Beach Road (East)				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Access Road				
Lane 1	0.0	0.0	0.0	0.0
West: Glenbrook Beach Road (West)				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 101 [GBR Access - PM Peak (Site Folder: With Right Turn Bay)]

Output produced by SIDRA INTERSECTION Version: 9.0.3.9771

New Site
Site Category: (None)
Stop (Two-Way)

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] m	Lane Config	Lane Length m	Cap. Adj. %	Prob. Block. %
East: Glenbrook Beach Road (East)															
Lane 1	678	8.0	678	8.0	1846	0.367	100	0.1	LOS A	0.0	0.0	Full	500	0.0	0.0
Lane 2	7	29.0	7	29.0	940	0.008	100	9.3	LOS A	0.0	0.3	Short	15	0.0	NA
Approach	685	8.2	685	8.2		0.367		0.2	NA	0.0	0.3				
North: Access Road															
Lane 1	56	3.9	56	3.9	796	0.070	100	10.8	LOS B	0.3	1.9	Full	500	0.0	0.0
Approach	56	3.9	56	3.9		0.070		10.8	LOS B	0.3	1.9				
West: Glenbrook Beach Road (West)															
Lane 1	431	8.0	431	8.0	1854	0.232	100	0.1	LOS A	0.0	0.0	Full	500	0.0	0.0
Approach	431	8.0	431	8.0		0.232		0.1	NA	0.0	0.0				
All Vehicles	1172	7.9	1172	7.9		0.367		0.6	NA	0.3	1.9				

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Lane LOS values are based on average delay per lane.
Minor Road Approach LOS values are based on average delay for all lanes.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Approach Lane Flows (veh/h)

East: Glenbrook Beach Road (East)

Mov. From E To Exit:	T1 W	R2 N	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	678	-	678	8.0	1846	0.367	100	NA	NA
Lane 2	-	7	7	29.0	940	0.008	100	0.0	1
Approach	678	7	685	8.2		0.367			

North: Access Road

Mov. From N To Exit:	L2 E	R2 W	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	55	1	56	3.9	796	0.070	100	NA	NA
Approach	55	1	56	3.9		0.070			

West: Glenbrook Beach Road (West)

Mov. From W	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.

To Exit:	N	E							
Lane 1	1	429	431	8.0	1854	0.232	100	NA	NA
Approach	1	429	431	8.0		0.232			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	1172	7.9	0.367

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length m	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
East: Glenbrook Beach Road (East)				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Access Road				
Lane 1	0.0	0.0	0.0	0.0
West: Glenbrook Beach Road (West)				
Lane 1	0.0	0.0	0.0	0.0