# SITE TRAFFIC ASSESSMENT

# FOR PROPOSED EXPANSION OF NULAID EGGLAND FACILITY ON FARM 745, THORNHILL



October 2021

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### **DOCUMENT CONTROL SHEET**

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## **1 INTRODUCTION**

## 1.1 BACKGROUND

Engineering Advice & Services (Pty) Ltd was appointed by Quantum Foods (Pty) Ltd during September 2021 to prepare a Site Traffic Assessment (STA) for the proposed expansion of Nulaid Eggland Facility situated on farm 745, Thornhill in the Kouga Local Municipality.

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This TIS forms part of an application for regularization of an unlawful activity in terms of Section 24G of the National Environmental Management Act, 1997 (Act No. 107 of 1998).

## **1.2 OBJECTIVES OF THE STUDY**

In broad terms, the purpose of the STA is to determine the extent and nature of traffic generated by the proposed expansion of the development, assess the impact of this traffic on the operation of the adjacent road network, and devise solutions for any problems identified.

The following key elements, *inter alia*, are addressed:

- Determination of traffic generated by the existing and proposed development components;
- The suitability and safety of existing accesses to accommodate additional traffic generated by the proposed expansion of the development;
- The capacity of the existing road network within the influence radius; and
- Impact of the development and extensions on the DR01928 as well as the R331 (MR00400).

In general, this report serves to satisfy the Kouga

Municipality and the Eastern Cape Province Department of Transport that the traffic impact of the envisaged development is within acceptable limits and that suggested improvements conform to the standards and parameters set by these authorities.

## **1.3** Methodology

The approach followed in conducting the traffic impact statement was in accordance with the guidelines set by the **TMH 16 Volume 1- South African Traffic Impact and Site Assessment Manual**<sup>(1)</sup>. The methodology used was as follows:

- Present traffic flow patterns were obtained for typical weekday AM and PM peak periods and the
  affected junctions analysed, where after recommendations were made on the present need for road
  upgrading, without taking the proposed expansion into account;
- The existing trips generated by the existing lay houses were used to determine the number of additional trips that will be generated by the proposed additional lay houses;
- The generated traffic was assigned to the surrounding road network;
- Once again, the functioning of the affected junctions was analysed, and recommendations made on the need for road upgrading taking cognisance of the proposed development for the development (2021) and development plus 5-year (2026) planning horizons given the phasing of the development components;
- The access arrangements were assessed in terms of traffic operations and safety to ensure that the accesses operate at acceptable levels of service and conform to traffic safety requirements; and
- By taking into account the findings of the study, conclusions were made regarding financial responsibilities of the affected parties for the required road upgrading measures.



### **1.4** STUDY AREA

Based on the extent of the development (existing and proposed expansion) the study area was restricted to the junctions of R331 (MR00400) and the existing access roads with DR01928 given that trips generated by the proposed development will approach along these roads and impact on these junctions.

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It is considered that outside the above-mentioned study area trips will be further dispersed such that impact on individual road sections and junctions becomes minimal.

### **1.5** Assumptions and Limitations

The scope of this TIA is limited to the project as described in this report. The scope only deals with vehicular traffic related impacts at the junctions within the prescribed study area and excludes consideration of the following:

• Any vehicular activity outside of the study area as defined in **Chapter 1.4** above;

The report is based on a number of assumptions and is subject to certain limitations. These are as follows:

- That operational trip frequency is based on development information supplied by the site owner / developer;
- That vehicle trips generated by the existing lay houses can be applied to the new lay houses on a proportional basis; and
- That trips generated by the proposed development are distributed to and from the site based on the location of the development site relative to the major road network.

Notwithstanding these assumptions it is our view that this Site Traffic Assessment provides the necessary framework to allow the operator to conduct activities within the necessary legal, planning and operational requirements set by the relevant road authorities.

## 2 THE DEVELOPMENT AND ENVIRONS

## 2.1 CURRENT LAND USE RIGHTS

Farm 745 (Portion 1 of the Farm Diep Kloof 429 & Portion 4 of the Farm Bergsig North 431 was consolidated on 22 July 2020 to form Farm 745) measures approximately 287.8 ha in extent, is currently zoned for agricultural Zone 1 purposes and is utilised as an agricultural lay house, producing eggs. The approved SG diagram for Farm 745 is attached as **Annexure A**.

## 2.2 **DEVELOPMENT ENVIRONS**

The development is located approximately 3 km west of Thornhill. The site is bounded by DR01928 to the east and the R331 (MR00400) to the south as indicated on **Figure 1**.

The land use surrounding the site can be categorised as agricultural to the north, east, south and west.

## 2.3 DEVELOPMENT OVERVIEW

The existing development consists of eight egg lay houses, four initial lay houses with a 30 000-hen capacity per lay house, four lay houses with a 40 000-hen capacity per lay house and an existing on-site packing facility. The first six lay houses and the on-site packing facility were constructed prior to the Environment Compliance Approval (ECA) Regulations of September 1997. The two lay houses constructed in 2004 were constructed without environmental authorization.

The development intends on expanding the facility to add two additional lay houses, bringing the total lay houses to ten. This increases the capacity from approximately 280 000 hens to 360 000 hens.



# **3** DATA COLLECTION

## 3.1 PEAK HOUR TRAFFIC VOLUMES

Peak hour traffic turning movement counts were conducted during weekday AM and PM peak periods on 29<sup>th</sup> September 2021 at the following junctions:

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- R331 (MR00400) / DR01928
- DR01928 / Access 1
- DR01928 / Access 2

The detailed survey data is attached as Annexure B and summarised on Figure 2 below.



## **3.2 DAILY TRAFFIC VOLUMES**

Unfortunately, no daily (24-hr) traffic counts have been conducted in the area since 2012. As such, the background traffic has been escalated by 3% in order to be conservative.

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The escalated 2026 peak hour traffic volumes are indicated on **Figure 3** overleaf.



## 3.3.1 Existing

**R331** (**MR00400**) is a provincial class 3 rural minor arterial road which links Thornhill, Loerieheuwel and Hankey to the N2 and comprises of a single surfaced traffic lane in each direction. The road is in a fair to poor condition to the west of DR01928. The posted speed limit is 100km/h in the vicinity of the development.

**DR01928** is a provincial class 5 rural local road road providing access to farms in the area. The road is 7m wide and is unsurfaced. The road is in a very poor condition.

The existing road network configuration is indicated on **Figure 4** overleaf.





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	1:400 Aburn OH OSSOBIAL DRAMMO	UNIFILA DATE OCT 382	73 Hough Road, Vitainar P.G. Bax 1947 Hamourood Port Climboth 013 1 William (047) W1 3421	UNHLA/ DATE	UNHLA/DATE	FIGURE 4: EXISTING ROAD AND INTERSECTION CONFIGURATION	1838-P-804

## 4 CAPACITY ANALYSIS – BEFORE DEVELOPMENT

**Level of Service (LOS)** is defined as the operating condition that may occur at a junction when it accommodates various traffic volumes. LOS is a qualitative measure of the effect of speed, travel time, traffic interruptions, freedom to manoeuvre, safety, driving comfort and convenience, and operating costs. The LOS applicable to junctions under various control conditions, as defined in the **Highway Capacity Manual** <sup>(2)</sup> are indicated in **Table 1** below:

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## Table 1: Level of Service definitions for Vehicles (Highway Capacity Manual <sup>(2)</sup> method)

Level of	Control delay per vehicle in seconds (d) (including geometric delay)								
Service	Signals and Roundabouts	Stop Signs and Yield Signs							
А	d ≤ 10	d ≤ 10							
В	10 < d ≤ 20	10 < d ≤ 15							
С	20 < d ≤ 35	15 < d ≤ 25							
D	35 < d ≤ 55	25 < d ≤ 35							
E	55 < d ≤ 80	35 < d ≤ 50							
F	80 < d	50 < d							

The capacity analysis was undertaken using the SIDRA Intersection Network 9<sup>(3)</sup> capacity analysis method.

The results are shown in Table 2, below and the detailed SIDRA output sheets attached as Annexure C.

Intersection	Dela	ıy (s)	V,	/c	LOS*		
Intersection	АМ	РМ	AM	РМ	AM	РМ	
MR00400 (R331) / DR01928	2.6	2.5	0.018	0.028	A*	A*	
DR01928 / Access 1	1.6	3.3	0.009	0.015	A*	A*	
DR01928 / Access 2	1.5	2.1	0.008	0.006	A*	A*	

\* - SIDRA Intersection Network <sup>(3)</sup> does not calculate intersection LOS for stop-controlled junctions. The LOS indicated is sourced from the Highway Capacity Manual <sup>(2)</sup> (Table 1 above).

As can be seen from the results contained in **Table 2**, no capacity problems are experienced at the affected junctions under current conditions.

## 5 TRIP GENERATION AND DISTRIBUTION

#### 5.1 EXISTING DEVELOPMENT TRIPS

The existing development comprises of eight lay houses with a 280 000-hen capacity and an on-site packing facility. The current traffic to and from the site is generated by the existing development comprising the six authorized and two unauthorized lay houses. The trips generated by these eight lay houses and an on-site packing facility are indicated on **Figure 2** above as well as **Table 3** below.

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#### 5.2 **PROPOSED EXPANSION OF DEVELOPMENT TRIPS**

The proposed expansion will include two additional lay houses which increases the capacity from approximately 280 000 hens to 360 000 hens. The current peak hour traffic volumes generated by the existing eight lay houses will be increased by 20% to allow for traffic generated by the expansion of the development with two additional lay houses.

The existing peak-hour trips generated by the existing eight lay houses and the additional trips for the additional two lay houses are indicated in **Table 3** below:

				AM Pe	ak Hou	ır			PM Peak Hour								
		Acc	ess 1			Access 2				Access 1				Access 2			
	Liį	ght	He	avy	Light Heavy			avy	Li	ght	Heavy		Light		Heavy		
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	
Existing Trips	3	1	1	2	4	1	1	0	7	14	0	0	4	5	0	0	
Generated Trips (20%)	1	0	0	1	1	0	0	0	2	3	0	0	1	1	0	0	
Total Additional Trips Generated		3							7								
Total Trips				1	6							3	37				

#### **Table 3: Peak Hour Trip Generation Summary**

#### 5.3 **TRIP DISTRIBUTION**

Given the location of the proposed development and given the current traffic movements at the R331 / DR01928 junction, the following trip distribution is assumed:

- 80% to and from the east via R331 (MR00400); and
- 20% to and from the west via R331 (MR00400).

The generated peak hour trips are indicated on Figure 5 overleaf.

The generated trips added to the AM and PM peak hour volumes for the 2021 and 2026 development horizons are indicated on **Figure 6** and **Figure 7** overleaf.







## 6 ACCESS ARRANGEMENTS

Access to the development will be gained from DR01928 via two existing access points to the Eggland facility situated approximately 100m (Access 1) and 675m (Access 2) north of the R331, as indicated on **Figure 8**.

Shoulder sight distance was assessed in terms of Figure 2.5.5(a) of **TRH 17: Geometric Design of Rural Roads** <sup>(4)</sup>. TRH17 indicates that a single unit vehicle entering a 7m road with a design speed of 60 kph (DR01928) requires shoulder sight distance of 200m. The distance between Access Road 1 and the R331 is 100m.

Given the low volumes at this junction as well as it being an existing access the junction is acceptable. The requirement for a passenger car is 100m.

The assessment indicates that shoulder sight distance from both access points are in excess of the required distances.











					- and				IATIONAL ROUTE 2	
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		1:4		UNINLA DATE	007 3821	6012 10/7ext (047) 101 2421	UNHLA/DATE	UNHLA/DATE	FIGURE & PROPOSED LAY HOUSES AND ACCESS ARRANGEMENTS	1935-P-400

## 7 CAPACITY ANALYSIS – AFTER DEVELOPMENT

#### 7.1 2021 AFTER DEVELOPMENT

The capacity analysis was undertaken using the SIDRA Intersection Network 9<sup>(3)</sup> capacity analysis method.

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After adding generated traffic volumes to the background peak hour volumes, the traffic situation was analysed in order to determine the LOS at which the junction and access points would operate after adding the traffic generated by the development. The results are shown in **Table 4** below and the detailed SIDRA output sheets attached as **Annexure D**.

Intersection	Dela	ıy (s)	V,	/c	LO	S*
Intersection	AM	РМ	AM	РМ	AM	РМ
MR00400 (R331) / DR01928	2.7	2.7	0.019	0.030	A*	A*
DR01928 / Access 1	1.7	3.5	0.010	0.019	A*	A*
DR01928 / Access 2	1.6	2.4	0.008	0.007	A*	A*

#### Table 4: Results of Junction Capacity Analysis – 2021 After Development

\* - SIDRA Intersection Network <sup>(3)</sup> does not calculate junction LOS for stop-controlled junctions. The LOS indicated is sourced from the Highway Capacity Manual <sup>(2)</sup> (Table 1 above).

As can be seen from the results contained in **Table 4**, the additional traffic generated by the additional lay houses has little to no impact on operations at the affected junctions.

#### 7.2 2026 AFTER DEVELOPMENT

After adding generated traffic volumes to the escalated background peak hour volumes, the traffic situation was analysed in order to determine the LOS at which the junctions would operate after adding the traffic generated by the development. The results are shown in **Table 5** below and the detailed SIDRA output sheets attached as **Annexure E**.

Intersection	Dela	y (s)	V,	/c	LO	S*
Intersection	AM	РМ	АМ	РМ	AM	РМ
MR00400 (R331) / DR01928	2.7	2.6	0.022	0.035	A*	A*
DR01928 / Access 1	1.6	3.6	0.011	0.023	A*	A*
DR01928 / Access 2	1.5	2.5	0.010	0.008	A*	A*

#### Table 5: Results of Junction Capacity Analysis – 2026 After Development

\* - SIDRA Intersection Network <sup>(3)</sup> does not calculate junction LOS for stop-controlled junctions. The LOS indicated is sourced from the **Highway Capacity Manual** <sup>(2)</sup> (**Table 2** above).

As with the 2021 after development assessment, the results contained in **Table 5** indicate that the additional traffic generated by the additional lay houses has little to no impact on operation of the affected junctions in terms of capacity.

## **8** LOADING REQUIREMENTS

Existing loading areas are currently provided at the on-site packhouse via the access roads from Access Road 1.

## 9 CONCLUSIONS

## 9.1 EXISTING DEVELOPMENT

- A total of 13 and 30 vehicle trips are generated during the AM and PM peak hours respectively;
- DR01928 is in a poor condition;
- Under existing traffic conditions, with the eight lay houses (six authorized and two unauthorized) the results of the capacity analysis indicate that the affected junctions operate at LOS A or better in terms of capacity during AM and PM peak hours.

## 9.2 AFTER DEVELOPMENT

- Access to the proposed expansion of the development (additional two lay houses) can be accommodated at the existing access points as indicated on **Figure 8**;
- A total of 3 and 7 additional vehicle trips are generated during the AM and PM peak hours respectively;
- When considering traffic generated by the additional lay houses the results of the capacity analysis indicate that the additional traffic generated by the proposed development has minimal impact on the affected junction and access point;
- The additional traffic will have a minimal impact on the condition of the existing roads; and
- DR01928 and the R331 requires no upgrading to accommodate the additional traffic volumes from a capacity perspective.

## **10 Recommendations**

In view of the findings of this study, it is recommended that:

- This site traffic assessment be approved by the Eastern Cape Department of Transport;
- Access/egress to the development be provided from the existing access points as indicated on **Figure 8**.

## **11 REFERENCES**

- 1. *Joubert, Sampson, et al*, **TMH 16 Volume 1- South African Traffic Impact and Site Assessment Manual**, COTO, August 2012.
- 2. Transportation Research Board, Highway Capacity Manual, 2000.
- 3. *Akcelik & Associates (Pty) Ltd*, **SIDRA Intersection Network 9 User Guide**, SIDRA Solutions, April 2020.
- 4. NITRR, **TRH 17 Geometric Design of Rural Roads,** CSRA, September 1984

ANNEXURE A Land Use Rights



ANNEXURE B Peak Hour Traffic Counts

Project :	TIA : PI	ROPOSEDE	XPANSION (	OF NULAID DE	VELOPME	NT IN THORNHILL													
		DR01928				Day & date : 29/													
	NO. 1					Time period: 06:		)											, <b>10</b> , <b>1</b>
STARTING			DR0192	8			DR	01928				R3	31			R331		AM PEAK HOUR	AM PEAK HOUR
DIRECTION			Northbou	nd			Sout	thbound				Westb	ound			Eastbound	INTER-		
TIME		Light Vehicle		Heavy		Light Vehi		Heavy		Lig	ht Vehicles			Heavy		Light Vehicles Heavy	SECTION	2021	2026
	Left	Thru Right	Total Lef	t Thru Ri	ght Total	Left Thru Rig	ht Total	Left Thru Ri	ght Total I	_eft Thr	ru Right	Total	Left	Thru Right Total	Left	Thru Right Total Left Thru Right To			
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Total	2		3 6	0 0	0 0	29 0	4 33	3 0 0	0 0	0 1	139 48	187	0		) 5		0 321	DR01928	DR01928
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PHF			0.63		#####		0.63	3	#####			0.78		#####	ŧ	0.73 ##	### 0.91		
Project : Intersection :			XPANSION (	DE NULAID DE	VELOPME	NT IN THORNHILL													
intersection.	NO. 1	DR01920				Day & date : 29/ Time period: 15:	:09/2021	)										N	
STARTING			DR0192	8				01928				R3	31			R331		PM PEAK HOUR	PM PEAK HOUR
			Northbou					thbound				Westb				Eastbound	INTER-		
TIME		Light Vehicle		Heavy		Light Vehi		Heavy		Lig	ht Vehicles	6		Heavy		Light Vehicles Heavy	SECTION	2021	2026
	Left	Thru Right	Total Lef	t Thru Ri	ght Total	Left Thru Rig	pht Total	Left Thru Ri	ght Total I	.eft Thr	ru Right	Total	Left	Thru Right Total	Left	Thru Right Total Left Thru Right To	al Total Hour		
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17:00	0	) 0 (	0 0	0 0	0 0	5 0	1	6 0 0	0 0	0	16 2	18	0	0 0 0	)	1 15 0 16 0 0 0	0 40 157	▎	
17:15	0	0 (	0 0	0 0	0 0	3 0	0	3 0 0	0 0	0	13 4	. 17	0	0 0 0	)		0 34 160		
17:30	0			0 0		3 0	1	4 0 0	0 0	0	12 <u>2</u>	14	0				0 33 150		
17:45 Total	0						5 46				12 <u>3</u> 150 <u>33</u>	10	0				0 29 136 0 389	1 2 3	1 2 3
Peak hour						40 1 30 0	3 3				150 <u>33</u> 56 13		0			5         151         0         156         0         0         0           3         53         0         56         0         0         0         0	0 389	DR01928	DR01928
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PHF			#####		#####		0.63	-	#####			0.85		#####	ŧ	0.88 ##	### 0.93		
L				I I			0.00	-				0.00							

Project :	TIA : PF	ROPOSED EX	XPANSION C	F NULAID E	DEVELOP	MENT IN T	HORNHILL														· 💳 💌	
-	R331 / I	DR01928				Day &	date : 29/09	9/2021														
	NO. 1					Time p	period: 06:00	0 - 09:00													- <del>11</del>	
STARTING			DR01928	3				DR0 <sup>2</sup>	1928					R331			R	331			AM PEAK HOUR	AM PEAK HOUR
DIRECTION			Northbour	nd				South	oound				We	estbound			East	bound		INTER-		
TIME		Light Vehicles	S	Hea	vy		Light Vehicle	es		Heavy		Light \	/ehicles		Heavy	Li	ght Vehicles	Hea	avy	SECTION	2021	2026
	Left	Thru Right	Total Left	Thru I	Right Tota	al Left	Thru Right	t Total	Left Th	ru Right T	Total Left	Thru	Right Total	Left	Thru Right Total	Left T	nru Right Total	Left Thru	Right Total	Total Hour		
06:00	0	0 0	) 0	0 0	0	0 3	3 0	1 4	0	0 0	0	0 6	2	8 (	0 0	0 0	7 0	0 0	0 0	19	9 8 7	9 8 7
06:15	1	1 0	) 2	0 0	0	0 4	4 0	0 4	0	0 0	0	0 11	3	14 (		0	7 0	0 0	0 0	27		
06:30 06:45				0 0	0	0 2	2 0	0 2	0	0 0	0	0 /	/	14 (					0 0	29 24 99		
07:00	0	0 1			0			0 3	0		0	0 4	7	10 (		$\frac{1}{2}$	4 0			26 106		
07:15	0	0 0	) 0	0 0	0	0 2	2 0	0 2	0	0 0	0	0 12	4	16 (		) 0	10 0 10		0 0	28 107		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
07:30	0	0 0	) 0	0 0	0	0 5	5 0	1 6	0	0 0	0	0 19	0	19 (	0 0	0	5 0	0 0	0 0	30 108		
07:45	0	0 0	) 0	0 0	0	0 4	4 0	1 5	0	0 0	0	0 23	8	31 (	0 0	0 0	7 0	0 0	0 0	43 127	─────────── │	
08:00	0	0 0	0 0	0 0	0	0 1	1 0	0 1	0	0 0	0	0 10	2	12 (	0 0	0	2 0 2	0 0	0 0	15 116		
08:15	0	0 0		0 0	0	0 1		0 1	0	0 0	0	0 12	0	12 (		) 1		0 0	0 0	24 112		
08:30 08:45	0	0 0	1	0 0	0	0 2	2 0	0 2	0		0	0 12	0	18 ( 15 (						26 108 30 95	1 2 3	1 2 3
Total	2	1 3			0	0 29		0 <u>2</u> 4 33	0		0	0 139	48 18	13 ( 37 (		5	90 0 95			321	DR01928	DR01928
Peak hour	2	1 2	2 5	0 0	0	0 23		1 10	0	0 0	0	0 33	1 1	56 0		4	31 0 35		0 0	106	5101320	Diterisze
Peak 15 min			2		-	0		4			0			18		)	12	2	0	29		
PHF			0.63		###	###		0.63		Ŧ	#####		0.7	78	####	L .	0.73		#####	0.91		
																					<b></b>	
·																						
Project :		ROPOSED EX	XPANSION C	F NULAID E	DEVELOPI			0/0004														
Intersection :	NO. 1	DR01928				Day & Time p	date : 29/09 period: 15:00	9/2021 0 - 18:00													Ν	
STARTING			DR01928	}				DR0 <sup>2</sup>	1928					R331			R	331			PM PEAK HOUR	PM PEAK HOUR
			Northbour					South	bound					estbound				bound		INTER-		
TIME		Light Vehicles		Hea	-		Light Vehicle			Heavy			/ehicles		Heavy		ght Vehicles	Hea		SECTION	2021	2026
	Left	Thru Right	Total Left	Thru	Right Tota	al Left	Thru Right	t Total	Left Th	ru Right	Total Left	Thru	Right Total	Left	Thru Right Total	Left TI	nru Right Total	Left Thru	Right Total			
15:00	0	0 0	0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 8	5	13 (		0	8 0 8	0 0	0 0	21		
15:15 15:30	0				0	0 0	J U 1 1	0 0	0	0 0	0	0 16		1/ (					0 0	28	$\begin{array}{c} 9 & 8 & 7 \\ \hline 3 & 0 & 30 \\ \end{array}$	9 8 7 3 0 35
15:30 15:45	0			0 0	0		$\frac{1}{2}$	0 2	0	0 0	0	1 11	0	12 (			12 0 1			32 24 105		3 0 35
16:00	0	0 0	0	0 0	0	0 0	0 0	0 0	0	0 0	0	0 13	2	15 (		0	16 0 10		0 0	31 115		
16:15	0	0 0	) 0	0 0	0	0 3	3 0	0 3	0	0 0	0	0 11	7	18 (	0 0	0	10 0 10	0 0	0 0	31 118		
16:30	0	0 0	) 0	0 0	0	0 10	0 0	1 11	0	0 0	0	1 15	5	21 (	0 0	0 0	11 0 1 <sup>-</sup>	0 0	0 0	43 129	11 <b>53 →                                  </b>	5 11 <b>61 → ← 65</b> 5
16:45	0	0 0	0	0 0	0	0 12	2 0	1 13	0	0 0	0	1 12	2	15 (	0 0	0	15 0 1	0 0	0 0	43 148		
17:00	0	0 0	0	0 0	0	0 5		1 6	0	0 0	0	0 16		18 (		) 1	15 0 10	0 0	0 0	40 157	│ ▲ │ ▲ │ <b>▶</b> ↓	
17:15 17:30	0			0 0	0	0 3		0 3	0	0 0	0	0 13	4	1/ (					0 0	34 160 33 150		
17:45	0			0 0	0	0 3	3 0	1 4 1 4	0	0 0	0	1 12	2	16 (		) 2	9 0 0			33 150 29 136	1 2 3	
Total	0			0 0	0	0 40	) 1	5 46	0		0	4 150	33 18	B7 0		5	151 0 156			389	1 2 5	
Peak hour	0	0 0	0	0 0	0	0 30		3 33	0	0 0	0	2 56		71 (		3	53 0 56		0 0	160	DR01928	DR01928
Peak 15 min	1 1		0	1		0	1	13			0			21			16		0	43		
PHF																			#####			



Project : Intersection :				I OF NULAID DI			NHILL 29/09/2021														
	NO. 2					•	06:00 - 09:00	)												- <b>1</b> ,₽	- <b>1−</b> ,₽,
STARTING			DR01	928		•		R01928					-				ACCE	SS ROAD 1		AM PEAK HOUR	AM PEAK HOUR
DIRECTION			Northbo					thbound				Wes	tbound					astbound	INTER-		
TIME	Li	ight Vehi		Heav	,	Light	Vehicles		Heavy		Liç	ght Vehicles		Heav	у	Light	Vehicles	Heavy	SECTION	2021	2026
	Left Th	hru Rig	ght Total L	eft Thru R	ght Total L	eft Thru	Right Total	Left	Thru Rig	ht Total	_eft Th	ru Right Total	Left	Thru R	ight Total	Left Thru	Right Tota	Left Thru Right		<u>]</u>	
06:00	0	2	0 2	0 0	0 0	0	2 1	3 0	0	0 0	0	0 0 0	0 0	0	0 0	0	0 0	0 0 0 3	3 8	987	9 8 7
06:15	0	4	0 4	0 0	0 0	0	2 0	2 0	1	0 1	0	0 0 0	0 0	0	0 0	0	0 1	1 0 0 0	0 8	0 8 0	0 9 0
06:30	0	3	0 3	0 4	0 4	0	2 0	2 0	0	0 0	0		0 0	0	0 0	0	0 0		0 9		
06:45 07:00	0	5	0 5	0 1	0 4	0	3 0	3 0	0	0 0	0			0	0 0	0					
07:15	3	4	0 7			0		0 0	0	0 0	0			0		0					$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
07:30	0	0	0 0	0 0	0 0	0	2 0	2 0	0	0 0	0			0	0 0	0	0 5	5 0 0 0	0 7 35	12 $3$ $ 0$ $4$	$\begin{array}{c c} 1 \\ 12 \\ 3 \\ \hline \end{array} \qquad \qquad$
07:45	2	3	0 5	0 1	0 1	0	4 0	4 0	0	0 0	0	0 0 0	0 0	0	0 0	0	0 1	1 0 0 0	0 11 33	╣ <sup>╵</sup> <sup>─</sup> └──────── <sup>★</sup> ┥╷ <b>┝</b> <sup>♥</sup> ┌────┘╵	╽╶└──────┥ ┍→♥┌───┘╵╽
08:00	1	1	0 2	0 1	0 1	0	0 0	0 0	2	0 2	0	0 0 0	0 0	0	0 0	0	0 0	0 0 0 0	0 5 29		
08:15	1	1	0 2	0 0	0 0	0	0 0	0 0	0	0 0	0	0 0 (	0 0	0	0 0	0	0 0	0 0 0 0	0 2 25	4 24 0	5 28 0
08:30	3	1	0 4	0 2	0 2	0	1 0	1 0	1	0 1	0	0 0 0	0 0	0	0 0	0	0 1	1 0 0 0	0 9 27	1 2 3	1 2 3
08:45	0	3	0 3	0 0	0 0	0	0 0	0 0	1	0 1	0			0	0 0	0			0 5 21		<b>DD</b> 04000
Total Peak hour	13	30	0 43	1 12	0 13	0 1		7 0	5	0 5	0			0	0 0	0	0 9	9 0 0 5	5 92	DR01928	DR01928
Peak 15 min	3	10	0 19	1 0	0 9	0	7 0	7 U 3	1	0 1	0			0	0 0	0			2 39		
PHF			0.68		0.56		0.5	8		0.25		#####			#####		0.	25	0.50 0.75	1	
I																					
				I OF NULAID DI																	
Intersection :	DR01928 NO. 2	3 / ACCE	SS ROAD 1		D T	ay & date : ime period:	29/09/2021 15:00 - 18:00	)													
STARTING			DR01					R01928					-				ACCE	SS ROAD 1		PM PEAK HOUR	PM PEAK HOUR
			Northbo					thbound					tbound					stbound	INTER-		
TIME		ight Vehi		Heav			Vehicles		Heavy			ght Vehicles		Heav			Vehicles	Heavy	SECTION	2021	2026
	Left Th	hru Ric	ght Total L	eft Thru R	ght Total L	eft Thru	Right Total	Left	Thru Rig	ht Total	_eft Th	ru Right Total	Left	Thru R	ight Total	Left Thru	Right Tota	Left Thru Right	Total Total Hour		
15:00	2	1	0 3	0 2	0 2	0	2 1	3 0	0	0 0	0	0 0 0	) ()	0	0 0		() ()				
15:15		0				<b>NI</b>			<u> </u>		$\cap$			$\sim$	0 0	0			0 10		
	1	0		0 0	0 0	0	0 0	0 0	2	0 2	0			0	0 0	0			0 10	987	9 8 7
	0	0	0 1 0 0		0 0	0	0 0 0	0 0 0 0	2 0 2	0 2 0 0 0 2	0			0	0 0	0		2         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0		9 8 7 0 18 0	9 8 7 <b>0 21 0</b>
15:30 15:45	0 1 0	0 0 0 3	0 1 0 0 0 1 0 3	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0	0 0 0 0 0 0 1 0	0 0 0 0 1 0	2 0 2 2	0 2 0 0 0 2 0 2	0 0 0	0 0 0 0 0 0 0 0 0		0 0 0	0 0 0 0 0 0 0 0		0 1 0 0 0 0 0 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 10 0 3 0 0 0 3 16 0 7 13		$\begin{array}{c} 9 & 8 & 7 \\ \hline 0 & 21 & 0 \\ \hline 0 & 1 & 0 \\ \hline 0 \\ \hline 0 & 0 \\ \hline 0 \\ \hline 0$
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15:30 15:45 16:00 16:15 16:30 16:45 17:00 17:15	0 1 0 4 4 1 1 1	0 0 3 2 3 0 2 4	0 1 0 0 1 0 3 0 6 0 7 0 0 1 0 3 0 3 0 5	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0         0           0         0           1         0           0         0           3         0           6         0           4         0           2         0	0 0 0 0 1 0 0 0 3 0 6 0 4 0 2 0	2 0 2 2 3 0 0 0 0	0 2 0 0 0 2 0 2 0 2 0 3 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0         0         0           0         0         0         0           0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0         0           0	0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 1 0 0 0 0	0     0       0     0       0     0       0     1       0     1       0     4       0     7       0     2       0     1	2       0       0       0         0       0       0       0         0       0       0       0         1       0       0       0         4       0       0       0         8       0       0       0         2       0       0       0         1       0       0       0		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$10  1  4  0  6 \\ 11  0  4  0  5 \\ 12  16  4  0  4  0  4  0  0  0  0  0$
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-			DEXPANSION O	F NULAID DE																	
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STARTING			DR01928				DR01928						-				ACCESS	ROAD 1		AM PEAK HOUR	AM PEAK HOUR
DIRECTION			Northboun				Southboun					West	tbound				East		INTER-		
TIME		Light Veh		Heavy		Light Vehicles		Heavy		Lig	ht Vehicles			Heavy		Light Vehi		Heavy	SECTION	2021	2026
	Left	Thru Ri	ght Total Left	Thru Riç	ht Total Lef	t Thru Right	Total Left	Thru Rig	ht Total	Left Th	ru Right	Total	Left Th	u Right To	tal Left	Thru Rio	ght Total	Left Thru Right T		]	
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Total	13	30	0 43	1 12	0 13	0 16 1	17	0 5	0 5	0	0 0	0	0 0	0 0	0 0	0	9 9	0 0 5	5 92	DR01928	DR01928
Peak hour	3	16	0 19	1 8	0 9	0 7 0	7	0 1	0 1	0	0 0	0	0 0	0 0	0 0	0	1 1	0 0 2	2 39		
Peak 15 min			7		4		3		1			0	)		0		1		1 13		
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STARTING	1				Tin	y & date : 29/09/2 ne period: 15:00 -	2021 · 18:00													N	Ν
			DR01928		Tin	ne period: 15:00 -	18:00 DR01928						-				ACCESS			PM PEAK HOUR	PM PEAK HOUR
			Northboun	b	Tin	ne period: 15:00 -	<u>18:00</u> DR01928 Southboun	d				West	tbound				East	ound	INTER-	PM PEAK HOUR	PM PEAK HOUR
TIME		Light Veh	Northboun icles	d Heavy	Tin	ne period: 15:00 - Light Vehicles	- <u>18:00</u> DR01928 Southboun	d Heavy		u	ht Vehicles	West	tbound	Heavy		Light Veh	Eastl icles	ound Heavy	SECTION		
		0	Northboun	d Heavy	Tin	ne period: 15:00 -	- <u>18:00</u> DR01928 Southboun	d Heavy	ht Total	u		West	tbound	Heavy u Right To		<u> </u>	East	ound Heavy	SECTION otal Total Hour	PM PEAK HOUR	PM PEAK HOUR
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15:00         15:15         15:30         15:45         16:00         16:15         16:30         16:45         17:00         17:15		0	Northboun icles	d Heavy	Tin	ne period: 15:00 - Light Vehicles	- <u>18:00</u> DR01928 Southboun	d Heavy	ITotal           0         0           0         2           0         0           0         2           0         0           0         2           0         2           0         2           0         2           0         2           0         2           0         2           0         0           0         0           0         0           0         0           0         0           0         0	u		West	tbound			<u> </u>	Eastl icles	ound Heavy	SECTION           Dtal         Total         Hour           0         10         0           0         3         0           0         0         3         10           0         0         3         10           0         0         7         13           0         9         15           0         17         36	PM PEAK HOUR 2021 9 8 7 0 18 0 10 1 - 0 6 11 0 - 0 6 11 12 14 - 0 6 14 - 0 6 14 - 0 6 14 - 0 6 14 - 0 6	PM PEAK HOUR 2026 $9  8  7$ $0  21  0$ $10  1  9$ $10  1  0  0  6  5  4$ $12  16  0  0  4$
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Project :				OF NULAID DE													-				
Intersection :						Day & date		2021													
	NO. 3					Time period															
STARTING			DR0192	28				DR0192	8				-				ACCESS	ROAD 2		AM PEAK HOUR	AM PEAK HOUR
DIRECTION			Northbou	Ind				Southbou	nd			We	stbound				Eastbo	und	INTER-		
TIME		t Vehicles		Heavy	,	Ligh	nt Vehicles		Heavy		Light	Vehicles		Heavy		Light Veh		Heavy	SECTION	2021	2026
	Left Thru	ı Right	Total Le	ft Thru Ri	ght Total	Left Thr	u Right	Total Lef	t Thru Right	t Total Le	ft Thru	Right Total	Left	Thru Right	Total Left	Thru Ri	ght Total L	eft Thru Right Tot			
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Peak hour		12 0	16	1 7	0 8	0	7 0	7	0 1	0 1	0	0 0	0 0	0 0	0	0 0	1 1	0 0 0	0 33		
Peak 15 min			6		4			2		1			0		0		1		0 12		
PHF			0.67		0.50			0.88		0.25		####	<b>#</b>		#####		0.25	###	### 0.69		
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	DR01928 / A				VELOPINE	Day & date	(INFILL · 20/00/2	2021													RI
intersection .	NO. 3	00200	NOND 2			Time period	l: 15:00 -	· 18:00													
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			Northbou					Southbou					stbound				Eastbo		INTER-	000/	
TIME	U U	t Vehicles		Heavy		Ŭ	nt Vehicles		Heavy			Vehicles		Heavy		Light Veh		Heavy	SECTION	2021	2026
45.00	Left Inru	I Right		ft Thru R	ght Iotal	Left Inr	u Right	Total Lef	t Thru Right		ft Ihru	Right Total	Left	Ihru Right	Total Left		ght Total L	eft Thru Right Tot	al Iotal Hour		
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Project :	TIA : PRO	OPOSE	D EXPANS	ION OF	NULAID	DEVELOPME	ENT IN T	HORNHIL	L												- <u> </u>			· · · · · · · · · · · · · · · · · · ·	
			ESS ROAD					date : 29																	
	NO. 3						-	period: 06																	
STARTING			DR	01928					D	R01928						-				ACC	CESS ROA	D 2		AM PEAK HOUR	AM PEAK HOUR
DIRECTION			Nort	hbound					So	uthbound	1				Wes	tbound					Eastbound		INTER-		
TIME	L	_ight Vel	hicles		Hea			Light Veh			Hea	vy		Light Vehic			Heavy		<u> </u>	Vehicles		Heavy	SECTION	2021	2026
	Left T	Thru R	Right Total	Left	Thru	Right Total	Left	Thru Ri	ight Tota	l Left	Thru	Right Tota	l Left	Thru Righ	nt Total	Left	hru Right	Total L	eft Thru	Right To	tal Left	Thru Right Tota	I Total Hour		
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Project ·	TIA · PR(	OPOSE	DEXPANS	ION OF			ENT IN T	HORNHII	1									<i><b><i>п</i>ппп</b></i>		<u> </u>					
					NULAID	DEVELOPME							<u>, 11</u>	<u> </u>		<u></u>		<u>  ######</u>							
Intersection :			ED EXPANSI ESS ROAD		NULAID	DEVELOPME	Day &	HORNHIL date : 29 period: 15	9/09/2021	)0					•	<u></u>		<u>  #####</u>							
Intersection :	DR01928		ESS ROAD	2		DEVELOPME	Day &	date: 29	9/09/2021 5:00 - 18:0 D	00 R01928						-				ACC	CESS ROA	D 2		PM PEAK HOUR	PM PEAK HOUR
Intersection : STARTING	DR01928 NO. 3	8 / ACC	ESS ROAD	2			Day &	date : 29 period: 15	9/09/2021 5:00 - 18:0 D So	00					Wes	<u>, , , , , , , , , , , , , , , , , , , </u>				ACC		D 2	INTER-	PM PEAK HOUR	
Intersection :	DR01928 NO. 3	8 / ACC	ESS ROAD DR Norti hicles	2 01928 hbound	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy		Light Vehic	Wes	- itbound	Heavy		Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER- SECTION		PM PEAK HOUR 2026
Intersection : STARTING TIME	DR01928 NO. 3	8 / ACC	ESS ROAD	2 01928 hbound	Неа		Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy		Light Vehic	Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2	INTER- SECTION	PM PEAK HOUR	
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Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15	DR01928 NO. 3	8 / ACC	ESS ROAD DR Norti hicles	2 01928 hbound	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           1         Total           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         1	PM PEAK HOUR 2021	$\begin{array}{c c} 2026 \\ & 9 & 8 & 7 \\ \hline 0 & 21 & 0 \\ \hline \\ 6 & 10 & 0 & 0 \end{array}$
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30	DR01928 NO. 3	8 / ACC	ESS ROAD DR Norti hicles	2 01928 hbound	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           Total         Hour           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         2           0         4           1         4           0         8	PM PEAK HOUR 2021	$\begin{array}{c c} & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ \end{array}$
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30	DR01928 NO. 3	8 / ACC	ESS ROAD DR Norti hicles	2 01928 hbound	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           1         Total           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         1	PM PEAK HOUR 2021	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30 16:45 17:00	DR01928 NO. 3	8 / ACC	ESS ROAD DR Norti hicles	2 01928 hbound	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           Total         Hour           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         2           0         4           1         4           0         8	PM PEAK HOUR 2021	$\begin{array}{c c} & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ \end{array}$
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30	DR01928 NO. 3	8 / ACC	ESS ROAD DR Norti hicles	2 01928 hbound	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           Total         Hour           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         2           0         4           1         4           0         8	PM PEAK HOUR 2021	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30 16:45 17:00 17:15 17:30 17:45	DR01928 NO. 3	8 / ACC	ESS ROAD DR Norti hicles	2 01928 hbound	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           Total         Hour           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         1           4         10           0         8           1         4           0         8           0         16           3         31           0         7           34	PM PEAK HOUR 2021 $9 \ 8 \ 7$ $0 \ 18 \ 0$ $10 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30 16:45 17:00 17:15 17:30 17:45 Total	DR01928 NO. 3	8 / ACC	ESS ROAD DR North hicles Right Total 0 0 0 0 0 0 0 0 0 0 0 0 0	2 01928 hbound Left 1 1 1 0 (0 0 (0 1 (0 1 (0 1 (0 5 (0 0 (0 5 (0 1 (0 1 (0 5 (0 1 (0)) 1 (0 1 (0 1 (0 1 (0)) 1 (0 1 (0 1 (0)) 1 (0 1 (0 1 (0)) 1 (0)) 1 (0)) 1 (0)) 1 (0)) 1 (	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh Thru Ri 0 0 0 0 0 0 0	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           Total         Hour           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         1           0         3           0         16           0         3           0         7           34           0         1           0         5           16           1         55	PM PEAK HOUR 2021 9 8 7 0 18 0 10 0 11 12 10 0 12 0 4 7 0 1 2 3	$ \begin{array}{c} 2026 \\  & 9 & 8 & 7 \\  & 0 & 21 & 0 \\  & 0 & 0 & 0 \\  & 11 & 0 & 0 & 0 \\  & 12 & 0 & 0 & 0 \\  & 5 & 8 & 0 & 0 \\  & 5 & 8 & 0 & 0 \\  & 1 & 2 & 3 & 0 \\ \end{array} $
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30 16:45 17:00 17:15 17:30 17:45 Total Peak hour	DR01928 NO. 3	8 / ACCight Vel Thru R 1 0 0 0 1 1 0 0 2 0 5 1 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ESS ROAD  DR  North  hicles  Right Total  0  0  0  0  0  0  0  0  0  0  0  0  0	2 01928 hbound Left 1 1 1 0 (0 0 (0 1 (0 1 (0 1 (0 5 (0 0 (0 5 (0 1 (0 1 (0 5 (0 1 (0)) 1 (0 1 (0 1 (0 1 (0)) 1 (0 1 (0 1 (0)) 1 (0 1 (0 1 (0)) 1 (0)) 1 (0)) 1 (0)) 1 (0)) 1 (	Неа	avy	Day & Time p Left Left 0	date : 29 period: 15 Light Veh Thru Ri 0 0 0 0 0 0 0	9/09/2021 5:00 - 18:0 D So nicles	00 R01928 uthbound	Hea Thru 0 2 0 0 0 0 0 0 0 2 0 2 0 2 0 2	vy			Wes	- itbound			Ŭ	ACC	CESS ROA Eastbound	D 2 Heavy	INTER- SECTION           Total         Hour           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         1           0         3           0         1           0         3           0         7           0         3           0         7           0         3           0         1           0         5           1         55           0         34	PM PEAK HOUR 2021 $9 \ 8 \ 7$ $0 \ 18 \ 0$ $10 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0 \$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
Intersection : STARTING TIME 15:00 15:15 15:30 15:45 16:00 16:15 16:30 16:45 17:00 17:15 17:30 17:45 Total	DR01928 NO. 3	8 / ACCight Vel Thru R 1 0 0 0 1 1 0 0 2 0 5 1 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ESS ROAD DR North hicles Right Total 0 0 0 0 0 0 0 0 0 0 0 0 0	2 01928 hbound Left 1 1 0 (0 0 (0 0 (0 1 (0 1 (0 5 (0 0 (0 5 (0 1 (0) 1 (0 1 (0) 1 (0 1 (0) 1	Неа	avy	Day & Time p	date : 29 period: 15 Light Veh Thru Ri 0 0 0 0 0 0 0	9/09/2021 5:00 - 18:0 D So nicles ight Tota 0 0 0 0 0 0 0 0 0 0 0 0 0	00 R01928 uthbound	Hea Thru 0 2 0 0 0 0 0 0 0 2 0 2 0 2 0 2	vy	Left 2 00 0 0 2 00 2 00 2 00 2 00 3 00 0 0 0 0 0 0 0 0 0 0 0 0		Wes	- stbound Left 7 0 0 0 0 0 0 0			Ŭ	ACC Vehicles Right To 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CESS ROA Eastbound	D 2 Heavy	INTER-           SECTION           Total         Hour           0         5           0         0           0         0           0         0           0         0           0         0           0         0           0         0           0         2           0         4           1         4           0         3           0         16           0         3           0         7           34         10           1         55           0         34           0         16	PM PEAK HOUR 2021 9 8 7 0 18 0 10 0 11 12 10 0 12 0 4 7 0 1 2 3	$ \begin{array}{c} 2026 \\  & 9 & 8 & 7 \\  & 0 & 21 & 0 \\  & 0 & 0 & 0 \\  & 11 & 0 & 0 & 0 \\  & 12 & 0 & 0 & 0 \\  & 5 & 8 & 0 & 0 \\  & 5 & 8 & 0 & 0 \\  & 1 & 2 & 3 & 0 \\ \end{array} $



ANNEXURE C SIDRA OUTPUT SHEETS: 2021 Before Development

#### Site: 01 [[01] 01 AM ND (Site Folder: [01] 2021 Before Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 Before Development Site Category: (None) Stop (Two-Way)

Veh	icle Mo	vement	Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM/ FLO <sup>V</sup> [ Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	h: Farm	Access												
1	L2	2	5.0	2	5.0	0.003	6.5	LOS A	0.0	0.1	0.12	0.92	0.12	48.2
2	T1	1	5.0	1	5.0	0.003	7.2	LOS A	0.0	0.1	0.13	0.91	0.13	21.8
3	R2	2	5.0	2	5.0	0.003	7.3	LOS A	0.0	0.1	0.26	0.85	0.26	45.9
Аррі	roach	5	5.0	5	5.0	0.003	6.9	LOS A	0.0	0.1	0.18	0.89	0.18	43.8
East	: MR004	400 (R33	1)											
4	L2	1	5.0	1	5.0	0.018	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	54.9
5	T1	33	5.0	35	5.0	0.018	0.0	LOS A	0.1	0.5	0.00	0.04	0.00	59.6
6	R2	23	5.0	24	5.0	0.018	5.7	LOS A	0.1	0.5	0.11	0.51	0.11	46.7
Аррі	roach	57	5.0	60	5.0	0.018	2.4	NA	0.1	0.5	0.05	0.23	0.05	55.4
Nort	h: DR01	928												
7	L2	9	5.0	9	5.0	0.008	7.8	LOS A	0.0	0.2	0.07	0.96	0.07	45.4
8	T1	1	5.0	1	5.0	0.003	8.6	LOS A	0.0	0.1	0.25	0.85	0.25	27.4
9	R2	1	5.0	1	5.0	0.003	8.6	LOS A	0.0	0.1	0.25	0.85	0.25	47.0
Аррі	roach	11	5.0	12	5.0	0.008	8.0	LOS A	0.0	0.2	0.10	0.94	0.10	44.7
Wes	t: MR00	400 (R33	31)											
10	L2	4	5.0	4	5.0	0.010	5.6	LOS A	0.0	0.0	0.00	0.13	0.00	33.7
11	T1	31	5.0	33	5.0	0.010	0.0	LOS A	0.0	0.1	0.01	0.08	0.01	59.2
12	R2	1	5.0	1	5.0	0.010	5.7	LOS A	0.0	0.1	0.01	0.03	0.01	55.4
Аррі	roach	36	5.0	38	5.0	0.010	0.8	NA	0.0	0.1	0.01	0.08	0.01	55.9
All V	ehicles	109	5.0	115	5.0	0.018	2.6	NA	0.1	0.5	0.05	0.28	0.05	54.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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# Site: 01 [[01] 01 PM ND (Site Folder: [01] 2021 Before Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 Before Development Site Category: (None) Stop (Two-Way)

Veh	icle Mo	ovement	Perfor	mance										
Mov ID	Turn	INP VOLL [ Total veh/h		DEM/ FLO <sup>V</sup> [ Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	h: Farm	Access												
1	L2	1	5.0	1	5.0	0.002	6.5	LOS A	0.0	0.1	0.14	0.91	0.14	48.0
2	T1	1	5.0	1	5.0	0.002	7.5	LOS A	0.0	0.1	0.19	0.89	0.19	21.5
3	R2	1	5.0	1	5.0	0.002	7.8	LOS A	0.0	0.1	0.32	0.82	0.32	45.4
Аррі	oach	3	5.0	3	5.0	0.002	7.3	LOS A	0.0	0.1	0.22	0.87	0.22	40.9
East	: MR004	400 (R33	1)											
4	L2	2	5.0	2	5.0	0.021	5.6	LOS A	0.0	0.0	0.00	0.03	0.00	54.7
5	T1	56	5.0	59	5.0	0.021	0.0	LOS A	0.1	0.6	0.04	0.10	0.04	58.8
6	R2	13	5.0	14	5.0	0.021	5.8	LOS A	0.1	0.6	0.11	0.22	0.11	50.7
Аррі	oach	71	5.0	75	5.0	0.021	1.3	NA	0.1	0.6	0.05	0.12	0.05	57.7
Nort	h: DR01	928												
7	L2	30	5.0	32	5.0	0.028	7.9	LOS A	0.1	0.7	0.09	0.94	0.09	45.4
8	T1	1	5.0	1	5.0	0.006	8.9	LOS A	0.0	0.2	0.30	0.84	0.30	27.1
9	R2	3	5.0	3	5.0	0.006	8.9	LOS A	0.0	0.2	0.30	0.84	0.30	46.7
Аррі	oach	34	5.0	36	5.0	0.028	8.0	LOS A	0.1	0.7	0.12	0.93	0.12	45.2
Wes	t: MR00	400 (R33	31)											
10	L2	3	5.0	3	5.0	0.016	5.6	LOS A	0.0	0.0	0.00	0.06	0.00	34.0
11	T1	53	5.0	56	5.0	0.016	0.0	LOS A	0.0	0.1	0.01	0.04	0.01	59.6
12	R2	1	5.0	1	5.0	0.016	5.8	LOS A	0.0	0.1	0.01	0.02	0.01	55.6
Аррі	oach	57	5.0	60	5.0	0.016	0.4	NA	0.0	0.1	0.01	0.04	0.01	58.0
All V	ehicles	165	5.0	174	5.0	0.028	2.5	NA	0.1	0.7	0.05	0.27	0.05	55.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[01] 02 AM ND (Site Folder: [01] 2021 Before Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 Before Development Site Category: (None) Stop (Two-Way)

Vehi	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total	IMES HV]	DEM FLO [ Total	WS HV]	Deg. Satn	Delay	Level of Service	QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
Couth		veh/h	veh/h	veh/h	%	v/c	sec		veh	m	-		-	km/h
South	n: DR0	1928												
7	L2	4	1	4	25.0	0.009	5.1	LOS A	0.0	0.0	0.00	0.17	0.00	15.1
8	T1	24	8	25	33.3	0.009	0.0	LOS A	0.0	0.0	0.00	0.07	0.00	58.9
Appro	bach	28	9	29	32.1	0.009	0.7	NA	0.0	0.0	0.00	0.08	0.00	51.2
North	: DR0′	1928												
2	T1	8	1	8	12.5	0.003	0.0	LOS A	0.0	0.0	0.02	0.06	0.02	58.9
3	R2	1	0	1	0.0	0.003	5.6	LOS A	0.0	0.0	0.05	0.13	0.05	48.2
Appro	bach	9	1	9	11.1	0.003	0.6	NA	0.0	0.0	0.02	0.06	0.02	57.4
West:	Nulai	d Access	1											
4	L2	1	0	1	0.0	0.001	8.1	LOS A	0.0	0.0	0.06	0.95	0.06	47.5
6	R2	3	2	3	66.7	0.005	10.6	LOS B	0.0	0.2	0.16	0.97	0.16	28.9
Appro	bach	4	2	4	50.0	0.005	10.0	LOS A	0.0	0.2	0.14	0.97	0.14	36.2
All Ve	hicles	41	12	43	29.3	0.009	1.6	NA	0.0	0.2	0.02	0.16	0.02	51.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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# Site: 02 [[01] 02 PM ND (Site Folder: [01] 2021 Before Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 Before Development Site Category: (None) Stop (Two-Way)

Vehi	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total	IMES HV]	DEM FLO [ Total	WS HV]	Deg. Satn ,	Delay	Level of Service	QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
South	n: DR0	veh/h	veh/h	veh/h	%	v/c	sec	_	veh	m	_	_	_	km/h
7	L2	7	0	7	0.0	0.004	5.1	LOS A	0.0	0.0	0.00	0.52	0.00	14.4
8	T1	9	0	9	0.0	0.004	0.0	LOS A	0.0	0.0	0.00	0.05	0.00	59.3
Appro	bach	16	0	17	0.0	0.004	2.3	NA	0.0	0.0	0.00	0.25	0.00	36.3
North	: DR0′	1928												
2	T1	18	3	19	16.7	0.006	0.0	LOS A	0.0	0.1	0.01	0.03	0.01	59.4
3	R2	1	0	1	0.0	0.006	5.6	LOS A	0.0	0.1	0.02	0.06	0.02	49.1
Appro	bach	19	3	20	15.8	0.006	0.3	NA	0.0	0.1	0.01	0.03	0.01	58.7
West:	Nulai	d Access	1											
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.01	0.99	0.01	47.5
6	R2	14	0	15	0.0	0.015	8.2	LOS A	0.1	0.4	0.13	0.91	0.13	31.5
Appro	bach	15	0	16	0.0	0.015	8.2	LOS A	0.1	0.4	0.12	0.92	0.12	33.5
All Ve	hicles	50	3	53	6.0	0.015	3.3	NA	0.1	0.4	0.04	0.37	0.04	44.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[01] 03 AM ND (Site Folder: [01] 2021 Before Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 Before Development Site Category: (None) Stop (Two-Way)

Vehio	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	: DR0		Voli/II	Voli/II	,,,	110	000		Von					
7	L2	5	1	5	20.0	0.008	5.8	LOS A	0.0	0.0	0.00	0.24	0.00	30.4
8	T1	19	7	20	36.8	0.008	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	59.1
Appro	bach	24	8	25	33.3	0.008	1.2	NA	0.0	0.0	0.00	0.12	0.00	52.3
North	: DR0′	1928												
2	T1	8	1	8	12.5	0.003	0.0	LOS A	0.0	0.0	0.02	0.06	0.02	59.3
3	R2	1	0	1	0.0	0.003	5.6	LOS A	0.0	0.0	0.05	0.13	0.05	31.2
Appro	bach	9	1	9	11.1	0.003	0.6	NA	0.0	0.0	0.02	0.06	0.02	55.8
West:	Nulai	d Access 2	2											
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.05	0.96	0.05	47.5
6	R2	1	0	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.13	0.90	0.13	47.5
Appro	bach	2	0	2	0.0	0.001	8.1	LOS A	0.0	0.0	0.09	0.93	0.09	47.5
All Ve	hicles	35	9	37	25.7	0.008	1.5	NA	0.0	0.0	0.01	0.15	0.01	53.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[01] 03 PM ND (Site Folder: [01] 2021 Before Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 Before Development Site Category: (None) Stop (Two-Way)

Vehio	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM/ FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	: DR0	1928												
7 8	L2 T1	4 7	0 0	4 7	0.0 0.0	0.003 0.003	5.5 0.0	LOS A LOS A	0.0 0.0	0.0 0.0	0.00 0.00	0.43 0.09	0.00 0.00	30.1 59.2
Appro	ach	11	0	12	0.0	0.003	2.0	NA	0.0	0.0	0.00	0.21	0.00	47.4
North	: DR0′	1928												
2 3	T1 R2	18 1	3 0	19 1	16.7 0.0	0.006	0.0 5.6	LOS A LOS A	0.0	0.1	0.01	0.03	0.01	59.7 31.5
Appro West:		19 d Access :	3 2	20	15.8	0.006	0.3	NA	0.0	0.1	0.01	0.03	0.01	58.0
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.02	0.99	0.02	47.5
6	R2	5	0	5	0.0	0.005	8.2	LOS A	0.0	0.1	0.12	0.91	0.12	47.5
Appro	ach	6	0	6	0.0	0.005	8.2	LOS A	0.0	0.1	0.10	0.92	0.10	47.5
All Ve	hicles	36	3	38	8.3	0.006	2.1	NA	0.0	0.1	0.02	0.24	0.02	53.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 01 [[02] 01 AM AD (Site Folder: [02] 2021 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 After Development Site Category: (None) Stop (Two-Way)

Veh	icle Mo	ovement	Perfor	mance										
Mov ID	Turn	INP VOLL [ Total veh/h		DEM/ FLO [ Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUE [ Veh. veh		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	h: Farm	Access												
1	L2	2	5.0	2	5.0	0.003	6.5	LOS A	0.0	0.1	0.12	0.92	0.12	48.2
2	T1	1	5.0	1	5.0	0.003	7.2	LOS A	0.0	0.1	0.14	0.91	0.14	21.8
3	R2	2	5.0	2	5.0	0.003	7.3	LOS A	0.0	0.1	0.26	0.85	0.26	45.9
Appr	oach	5	5.0	5	5.0	0.003	7.0	LOS A	0.0	0.1	0.18	0.89	0.18	43.7
East	: MR004	400 (R33	1)											
4	L2	1	5.0	1	5.0	0.019	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	54.9
5	T1	33	5.0	35	5.0	0.019	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
6	R2	25	5.0	26	5.0	0.019	5.7	LOS A	0.1	0.6	0.11	0.54	0.11	46.3
Appr	oach	59	5.0	62	5.0	0.019	2.5	NA	0.1	0.6	0.05	0.24	0.05	55.1
Nort	h: DR01	928												
7	L2	10	5.0	11	5.0	0.009	7.8	LOS A	0.0	0.2	0.07	0.96	0.07	45.4
8	T1	1	5.0	1	5.0	0.003	8.6	LOS A	0.0	0.1	0.25	0.85	0.25	27.4
9	R2	1	5.0	1	5.0	0.003	8.6	LOS A	0.0	0.1	0.25	0.85	0.25	46.9
Appr	oach	12	5.0	13	5.0	0.009	7.9	LOS A	0.0	0.2	0.10	0.94	0.10	44.8
Wes	t: MR00	400 (R33	31)											
10	L2	4	5.0	4	5.0	0.010	5.6	LOS A	0.0	0.0	0.00	0.13	0.00	33.7
11	T1	31	5.0	33	5.0	0.010	0.0	LOS A	0.0	0.1	0.01	0.08	0.01	59.2
12	R2	1	5.0	1	5.0	0.010	5.7	LOS A	0.0	0.1	0.01	0.03	0.01	55.4
Appr	oach	36	5.0	38	5.0	0.010	0.8	NA	0.0	0.1	0.01	0.08	0.01	55.9
All V	ehicles	112	5.0	118	5.0	0.019	2.7	NA	0.1	0.6	0.05	0.29	0.05	54.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 01 [[02] 01 PM AD (Site Folder: [02] 2021 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 After Development Site Category: (None) Stop (Two-Way)

Veh	icle Mc	vement	Perfor	mance										
Mov ID	Turn	INP VOLL [ Total veh/h		DEM/ FLO [ Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	h: Farm	Access												
1	L2	1	5.0	1	5.0	0.002	6.5	LOS A	0.0	0.1	0.14	0.91	0.14	48.0
2	T1	1	5.0	1	5.0	0.002	7.5	LOS A	0.0	0.1	0.19	0.89	0.19	21.5
3	R2	1	5.0	1	5.0	0.002	7.9	LOS A	0.0	0.1	0.33	0.82	0.33	45.4
Appr	oach	3	5.0	3	5.0	0.002	7.3	LOS A	0.0	0.1	0.22	0.87	0.22	40.8
East	: MR004	400 (R33	1)											
4	L2	2	5.0	2	5.0	0.022	5.6	LOS A	0.0	0.0	0.00	0.03	0.00	54.7
5	T1	56	5.0	59	5.0	0.022	0.1	LOS A	0.1	0.6	0.04	0.10	0.04	58.7
6	R2	15	5.0	16	5.0	0.022	5.8	LOS A	0.1	0.6	0.12	0.25	0.12	50.2
Appr	oach	73	5.0	77	5.0	0.022	1.4	NA	0.1	0.6	0.06	0.13	0.06	57.5
Nort	h: DR01	928												
7	L2	33	5.0	35	5.0	0.030	7.9	LOS A	0.1	0.8	0.09	0.94	0.09	45.4
8	T1	1	5.0	1	5.0	0.007	8.9	LOS A	0.0	0.2	0.30	0.85	0.30	27.0
9	R2	4	5.0	4	5.0	0.007	9.0	LOS A	0.0	0.2	0.30	0.85	0.30	46.7
Appr	oach	38	5.0	40	5.0	0.030	8.0	LOS A	0.1	0.8	0.12	0.93	0.12	45.3
Wes	t: MR00	400 (R33	31)											
10	L2	4	5.0	4	5.0	0.016	5.6	LOS A	0.0	0.0	0.00	0.08	0.00	33.9
11	T1	53	5.0	56	5.0	0.016	0.0	LOS A	0.0	0.1	0.01	0.05	0.01	59.5
12	R2	1	5.0	1	5.0	0.016	5.8	LOS A	0.0	0.1	0.01	0.02	0.01	55.6
Appr	oach	58	5.0	61	5.0	0.016	0.5	NA	0.0	0.1	0.01	0.05	0.01	57.4
All V	ehicles	172	5.0	181	5.0	0.030	2.7	NA	0.1	0.8	0.06	0.29	0.06	55.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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# Site: 02 [[02] 02 AM AD (Site Folder: [02] 2021 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 After Development Site Category: (None) Stop (Two-Way)

Vehio	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	: DR0	1928												
7 8	L2 T1	5 25	1 8	5 26	20.0 32.0	0.010 0.010	5.1 0.0	LOS A LOS A	0.0 0.0	0.0 0.0	0.00 0.00	0.19 0.08	0.00 0.00	15.0 58.7
Appro	bach	30	9	32	30.0	0.010	0.9	NA	0.0	0.0	0.00	0.10	0.00	49.8
North	: DR0′	1928												
2 3	T1 R2	8 1	1 0	8 1	12.5 0.0	0.003 0.003	0.0 5.7	LOS A LOS A	0.0 0.0	0.0 0.0	0.02 0.05	0.06 0.13	0.02 0.05	58.9 48.2
Appro	bach	9	1	9	11.1	0.003	0.6	NA	0.0	0.0	0.03	0.06	0.03	57.4
West:	Nulai	d Access	1											
4	L2	1	0	1	0.0	0.001	8.1	LOS A	0.0	0.0	0.06	0.95	0.06	47.5
6	R2	3	3	3	100.0	0.005	11.8	LOS B	0.0	0.2	0.18	1.00	0.18	24.9
Appro	bach	4	3	4	75.0	0.005	10.9	LOS B	0.0	0.2	0.15	0.99	0.15	33.0
All Ve	hicles	43	13	45	30.2	0.010	1.7	NA	0.0	0.2	0.02	0.17	0.02	50.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[02] 02 PM AD (Site Folder: [02] 2021 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 After Development Site Category: (None) Stop (Two-Way)

Vehi	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total	IMES HV]	DEM FLO [ Total	WS HV]	Deg. Satn	Delay	Level of Service	QUI [ Veh.	ACK OF EUE Dist ]	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
Ocuth		veh/h	veh/h	veh/h	%	v/c	sec		veh	m				km/h
South	n: DR0	1928												
7	L2	9	0	9	0.0	0.005	5.1	LOS A	0.0	0.0	0.00	0.56	0.00	14.3
8	T1	10	0	11	0.0	0.005	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
Appro	bach	19	0	20	0.0	0.005	2.4	NA	0.0	0.0	0.00	0.27	0.00	34.6
North	: DR0′	1928												
2	T1	19	3	20	15.8	0.006	0.0	LOS A	0.0	0.1	0.01	0.03	0.01	59.4
3	R2	1	0	1	0.0	0.006	5.6	LOS A	0.0	0.1	0.02	0.06	0.02	49.2
Appro	bach	20	3	21	15.0	0.006	0.3	NA	0.0	0.1	0.01	0.03	0.01	58.8
West:	Nulai	d Access	1											
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.01	0.99	0.01	47.5
6	R2	17	0	18	0.0	0.019	8.2	LOS A	0.1	0.5	0.13	0.91	0.13	31.5
Appro	bach	18	0	19	0.0	0.019	8.2	LOS A	0.1	0.5	0.13	0.91	0.13	33.2
All Ve	hicles	57	3	60	5.3	0.019	3.5	NA	0.1	0.5	0.04	0.39	0.04	43.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[02] 03 AM AD (Site Folder: [02] 2021 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 After Development Site Category: (None) Stop (Two-Way)

Vehi	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: DR0	1928												
7	L2	6	1	6	16.7	0.008	5.7	LOS A	0.0	0.0	0.00	0.28	0.00	30.3
8	T1	19	7	20	36.8	0.008	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	59.0
Appro	bach	25	8	26	32.0	0.008	1.4	NA	0.0	0.0	0.00	0.14	0.00	51.2
North	: DR01	1928												
2	T1	8	1	8	12.5	0.003	0.0	LOS A	0.0	0.0	0.02	0.06	0.02	59.3
3	R2	1	0	1	0.0	0.003	5.6	LOS A	0.0	0.0	0.05	0.13	0.05	31.1
Appro	bach	9	1	9	11.1	0.003	0.6	NA	0.0	0.0	0.02	0.06	0.02	55.8
West:	Nulai	d Access	2											
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.04	0.96	0.04	47.5
6	R2	1	0	1	0.0	0.001	8.2	LOS A	0.0	0.0	0.13	0.90	0.13	47.5
Appro	bach	2	0	2	0.0	0.001	8.1	LOS A	0.0	0.0	0.09	0.93	0.09	47.5
All Ve	hicles	36	9	38	25.0	0.008	1.6	NA	0.0	0.0	0.01	0.17	0.01	52.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[02] 03 PM AD (Site Folder: [02] 2021 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2021 After Development Site Category: (None) Stop (Two-Way)

Vehio	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM/ FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: DR0	1928												
7 8	L2 T1	5 7	0 0	5 7	0.0 0.0	0.003 0.003	5.5 0.0	LOS A LOS A	0.0 0.0	0.0 0.0	0.00 0.00	0.50 0.06	0.00 0.00	29.8 59.4
Appro	bach	12	0	13	0.0	0.003	2.3	NA	0.0	0.0	0.00	0.24	0.00	45.7
North	: DR0′	1928												
2 3	T1 R2	18 1	3 0	19 1	16.7 0.0	0.006	0.0 5.6	LOS A LOS A	0.0	0.1	0.01	0.03	0.01	59.7 31.5
Appro West:		19 d Access 2	3	20	15.8	0.006	0.3	NA	0.0	0.1	0.01	0.03	0.01	58.0
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.01	0.99	0.01	47.5
6	R2	6	0	6	0.0	0.007	8.2	LOSA	0.0	0.2	0.12	0.91	0.12	47.5
Appro	bach	7	0	7	0.0	0.007	8.2	LOS A	0.0	0.2	0.10	0.92	0.10	47.5
All Ve	hicles	38	3	40	7.9	0.007	2.4	NA	0.0	0.2	0.02	0.26	0.02	52.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 01 [[03] 01 AM AD (Site Folder: [03] 2026 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2026 After Development Site Category: (None) Stop (Two-Way)

Veh	icle Mc	vement	Perfor	mance										
Mov ID	Turn	INP VOLU		DEM/ FLO		Deg. Satn		Level of Service	95% BA QUE		Prop. Que	Effective Stop	Aver. No.	Aver.
		[ Total	HV ]	[ Total	HV ]	Saur	Delay	Service	[ Veh.	Dist ]	Que	Rate	Cycles	Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m			- 5	km/h
Sout	h: Farm	Access												
1	L2	2	5.0	2	5.0	0.003	6.5	LOS A	0.0	0.1	0.14	0.91	0.14	48.1
2	T1	1	5.0	1	5.0	0.003	6.7	LOS A	0.0	0.1	0.15	0.91	0.15	29.2
3	R2	2	5.0	2	5.0	0.003	7.4	LOS A	0.0	0.1	0.28	0.84	0.28	45.7
Appr	oach	5	5.0	5	5.0	0.003	7.0	LOS A	0.0	0.1	0.20	0.88	0.20	45.2
East	: MR004	400 (R33	1)											
4	L2	1	5.0	1	5.0	0.022	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	54.9
5	T1	38	5.0	40	5.0	0.022	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	59.8
6	R2	29	5.0	31	5.0	0.022	5.8	LOS A	0.1	0.7	0.12	0.54	0.12	46.3
Appr	oach	68	5.0	72	5.0	0.022	2.5	NA	0.1	0.7	0.05	0.24	0.05	55.1
Nort	h: DR01	928												
7	L2	11	5.0	12	5.0	0.010	7.8	LOS A	0.0	0.3	0.07	0.95	0.07	45.4
8	T1	1	5.0	1	5.0	0.003	8.7	LOS A	0.0	0.1	0.27	0.84	0.27	27.3
9	R2	1	5.0	1	5.0	0.003	8.8	LOS A	0.0	0.1	0.27	0.84	0.27	46.9
Appr	oach	13	5.0	14	5.0	0.010	8.0	LOS A	0.0	0.3	0.10	0.93	0.10	44.8
Wes	t: MR00	400 (R33	31)											
10	L2	5	5.0	5	5.0	0.012	5.6	LOS A	0.0	0.0	0.00	0.14	0.00	33.6
11	T1	36	5.0	38	5.0	0.012	0.0	LOS A	0.0	0.1	0.01	0.08	0.01	59.2
12	R2	1	5.0	1	5.0	0.012	5.7	LOS A	0.0	0.1	0.01	0.03	0.01	55.5
Appr	oach	42	5.0	44	5.0	0.012	0.8	NA	0.0	0.1	0.01	0.08	0.01	55.7
All V	ehicles	128	5.0	135	5.0	0.022	2.7	NA	0.1	0.7	0.05	0.28	0.05	54.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 01 [[03] 01 PM AD (Site Folder: [03] 2026 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2026 After Development Site Category: (None) Stop (Two-Way)

Vehi	cle Mo	ovement	Perfor	mance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM/ FLO [ Total veh/h		Deg. Satn v/c		Level of Service	95% BA QUI [ Veh. veh	ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
Sout	n: Farm	Access												
1	L2	1	5.0	1	5.0	0.002	6.6	LOS A	0.0	0.1	0.16	0.90	0.16	47.9
2	T1	1	5.0	1	5.0	0.002	7.7	LOS A	0.0	0.1	0.21	0.88	0.21	21.5
3	R2	1	5.0	1	5.0	0.002	8.2	LOS A	0.0	0.1	0.35	0.82	0.35	45.1
Appr	oach	3	5.0	3	5.0	0.002	7.5	LOS A	0.0	0.1	0.24	0.87	0.24	40.7
East:	MR004	400 (R33	1)											
4	L2	2	5.0	2	5.0	0.026	5.6	LOS A	0.0	0.0	0.00	0.03	0.00	54.7
5	T1	65	5.0	68	5.0	0.026	0.1	LOS A	0.1	0.7	0.04	0.10	0.04	58.8
6	R2	17	5.0	18	5.0	0.026	5.9	LOS A	0.1	0.7	0.13	0.25	0.13	50.2
Appr	oach	84	5.0	88	5.0	0.026	1.4	NA	0.1	0.7	0.06	0.13	0.06	57.5
North	n: DR01	928												
7	L2	38	5.0	40	5.0	0.035	7.9	LOS A	0.1	0.9	0.10	0.93	0.10	45.4
8	T1	1	5.0	1	5.0	0.007	9.1	LOS A	0.0	0.2	0.32	0.84	0.32	26.8
9	R2	4	5.0	4	5.0	0.007	9.2	LOS A	0.0	0.2	0.32	0.84	0.32	46.5
Appr	oach	43	5.0	45	5.0	0.035	8.0	LOS A	0.1	0.9	0.13	0.92	0.13	45.3
West	: MR00	400 (R33	31)											
10	L2	4	5.0	4	5.0	0.019	5.6	LOS A	0.0	0.0	0.00	0.07	0.00	34.0
11	T1	61	5.0	64	5.0	0.019	0.0	LOS A	0.0	0.1	0.01	0.04	0.01	59.5
12	R2	1	5.0	1	5.0	0.019	5.9	LOS A	0.0	0.1	0.01	0.02	0.01	55.6
Appr	oach	66	5.0	69	5.0	0.019	0.4	NA	0.0	0.1	0.01	0.05	0.01	57.7
All Ve	ehicles	196	5.0	206	5.0	0.035	2.6	NA	0.1	0.9	0.06	0.29	0.06	55.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[03] 02 AM AD (Site Folder: [03] 2026 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2026 After Development Site Category: (None) Stop (Two-Way)

Vehi	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM FLC [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: DR0	1928												
7	L2	6	1	6	16.7	0.011	5.1	LOS A	0.0	0.0	0.00	0.20	0.00	15.0
8	T1	29	9	31	31.0	0.011	0.0	LOS A	0.0	0.0	0.00	0.08	0.00	58.7
Appro	bach	35	10	37	28.6	0.011	0.9	NA	0.0	0.0	0.00	0.10	0.00	49.5
North	: DR01	1928												
2	T1	9	1	9	11.1	0.003	0.0	LOS A	0.0	0.0	0.02	0.05	0.02	59.0
3	R2	1	0	1	0.0	0.003	5.7	LOS A	0.0	0.0	0.05	0.12	0.05	48.3
Appro	bach	10	1	11	10.0	0.003	0.6	NA	0.0	0.0	0.03	0.06	0.03	57.6
West:	Nulai	d Access	1											
4	L2	1	0	1	0.0	0.001	8.1	LOS A	0.0	0.0	0.06	0.95	0.06	47.5
6	R2	3	3	3	100.0	0.005	11.9	LOS B	0.0	0.3	0.19	0.99	0.19	24.9
Appro	bach	4	3	4	75.0	0.005	11.0	LOS B	0.0	0.3	0.16	0.98	0.16	32.9
All Ve	hicles	49	14	52	28.6	0.011	1.6	NA	0.0	0.3	0.02	0.16	0.02	50.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[03] 02 PM AD (Site Folder: [03] 2026 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2026 After Development Site Category: (None) Stop (Two-Way)

Vehi	cle Mo	ovement	Perform	nance										
Mov ID	Turn	INP VOLU [ Total veh/h		DEM FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South	n: DR0	1928												
7	L2	10	2	11	20.0	0.006	5.1	LOS A	0.0	0.0	0.00	0.56	0.00	34.9
8	T1	11	1	12	9.1	0.006	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	60.0
Appro	bach	21	3	22	14.3	0.006	2.4	NA	0.0	0.0	0.00	0.27	0.00	51.5
North	: DR01	1928												
2	T1	22	4	23	18.2	0.007	0.0	LOS A	0.0	0.1	0.01	0.02	0.01	59.5
3	R2	1	0	1	0.0	0.007	5.6	LOS A	0.0	0.1	0.02	0.05	0.02	49.2
Appro	bach	23	4	24	17.4	0.007	0.2	NA	0.0	0.1	0.01	0.03	0.01	58.9
West:	Nulai	d Access	1											
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.00	1.00	0.00	47.5
6	R2	19	3	20	15.8	0.023	8.8	LOS A	0.1	0.7	0.15	0.92	0.15	30.8
Appro	bach	20	3	21	15.0	0.023	8.8	LOS A	0.1	0.7	0.14	0.93	0.14	32.4
All Ve	hicles	64	10	67	15.6	0.023	3.6	NA	0.1	0.7	0.05	0.39	0.05	50.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[03] 03 AM AD (Site Folder: [03] 2026 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2026 After Development Site Category: (None) Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INP VOLU [ Total veh/h		DEM FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: DR01928														
7	L2	7	1	7	14.3	0.010	5.7	LOS A	0.0	0.0	0.00	0.28	0.00	30.3
8	T1	22	8	23	36.4	0.010	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	59.0
Appro	bach	29	9	31	31.0	0.010	1.4	NA	0.0	0.0	0.00	0.14	0.00	51.2
North: DR01928														
2	T1	9	1	9	11.1	0.003	0.0	LOS A	0.0	0.0	0.02	0.05	0.02	59.4
3	R2	1	0	1	0.0	0.003	5.7	LOS A	0.0	0.0	0.05	0.12	0.05	31.2
Appro	bach	10	1	11	10.0	0.003	0.6	NA	0.0	0.0	0.02	0.06	0.02	56.2
West: Nulaid Access 2														
4	L2	1	0	1	0.0	0.001	8.1	LOS A	0.0	0.0	0.05	0.96	0.05	47.5
6	R2	1	0	1	0.0	0.001	8.3	LOS A	0.0	0.0	0.14	0.89	0.14	47.5
Appro	bach	2	0	2	0.0	0.001	8.2	LOS A	0.0	0.0	0.09	0.93	0.09	47.5
All Ve	hicles	41	10	43	24.4	0.010	1.5	NA	0.0	0.0	0.01	0.16	0.01	52.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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#### Site: 02 [[03] 03 PM AD (Site Folder: [03] 2026 After Development)]

Traffic Impact Statement for the Proposed Expansion of Nulaid Eggland Facility on Farm 745, Thornhill 2026 After Development Site Category: (None) Stop (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INP VOLU [ Total veh/h		DEM FLO [ Total veh/h		Deg. Satn v/c	Aver. Delay sec	Level of Service		ACK OF EUE Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: DR01928														
7	L2	6	1	6	16.7	0.004	5.7	LOS A	0.0	0.0	0.00	0.53	0.00	29.5
8	T1	8	0	8	0.0	0.004	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	59.7
Appro	bach	14	1	15	7.1	0.004	2.5	NA	0.0	0.0	0.00	0.25	0.00	45.2
North: DR01928														
2	T1	21	3	22	14.3	0.007	0.0	LOS A	0.0	0.1	0.01	0.03	0.01	59.7
3	R2	1	0	1	0.0	0.007	5.6	LOS A	0.0	0.1	0.01	0.05	0.01	31.6
Appro	bach	22	3	23	13.6	0.007	0.3	NA	0.0	0.1	0.01	0.03	0.01	58.2
West: Nulaid Access 2														
4	L2	1	0	1	0.0	0.001	8.0	LOS A	0.0	0.0	0.01	0.99	0.01	47.5
6	R2	7	1	7	14.3	0.008	8.7	LOS A	0.0	0.2	0.13	0.92	0.13	46.7
Appro	bach	8	1	8	12.5	0.008	8.6	LOS A	0.0	0.2	0.12	0.93	0.12	46.8
All Ve	hicles	44	5	46	11.4	0.008	2.5	NA	0.0	0.2	0.02	0.26	0.02	52.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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