



**ALAN TAYLOR & ASSOCIATES**

**TRAFFIC ASSESSMENT FOR**  
**HASTINGS ASSOCIATION FOR CHRISTIAN EDUCATION (HACE) LTD**  
**&**  
**GANTONS PTY LTD**

**PROPOSED REZONING OF LOT 2 DP 601094**  
**& LOT 4 DP 825704 MUMFORD STREET, PORT MACQUARIE**

**IMPACT OF ADDITIONAL TRAFFIC**  
**CREATED BY THE PROPOSED DEVELOPMENT**

*Prepared by: Alan Taylor & Associates  
453 Ocean Drive  
Laurieton*

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## **1.0 INTRODUCTION**

### **1.2 Preamble**

This Traffic Impact Assessment has been prepared for an application to be made to Port Macquarie Hastings Council for the rezoning of Lot 2 DP 601094 and Lot 4 DP825704.

Lot 2 is presently owned by Gantons Pty Ltd.

Lot 4 is owned by the Hastings Association for Christian Education (HACE) Ltd, occupied by Heritage Christian School which is to continue and which wishes to add additional buildings at some point in the future.

The rezoning is to more accurately reflect the location of the Environment E2 zone, and amend the R1 zone to IN2 for Lot 2 to allow the intended use. These details are provided in more depth by Michelle Love – Planning Consultant.

This traffic study is not an in depth analysis of traffic impacts expected by the future full development of each site. It is a preliminary assessment of current traffic entering and leaving Mumford Street and an appraisal of the effect of additional facilities for the school and proposed workshops.

It is expected that a detailed Traffic Impact Assessment may be required to support a Development application in due course.

### **1.2 The Study Process**

The objective of this report is to assess the traffic impacts of the proposed change of use and development of Lot 2 DP 601094 and the future addition to the Heritage Christian School on:

- a) Lot 4, on the intersection of Kemp Street with Hastings River Drive
- b) Mumford Street with Kemp Street
- c) Mumford Street.

Vehicle traffic counts have been conducted at these intersections between 0700 and 0930 on 12 December 2017, to determine the existing traffic volumes flowing in each direction.

The traffic generation criteria has been determined by reference to the Roads & Maritime Guide to Traffic Generating Developments which includes information on traffic generation for specific development, Austroads Guide to Traffic Management Part 12 and Port Macquarie Hastings Council Development Control Plan.

## **2.0 EXISTING TRAFFIC CONDITIONS**

### **2.1 Description of the Development Proposed**

The proposed development of Lots 2 & 4 in Mumford Street is dependent on the two lots being rezoned from part R1 & E2 to part R1, E2 & IN2.

#### **Lot 2: Workshops**

The existing use of Lot 2 is a youth work-group and the proposed new use would be for motor workshops, and car panel repairs and painting. A major part is for the storage of motor vehicles prior to processing for sale. The balance is for staff parking.

The existing building is an “assembly building” with an area of 860m<sup>2</sup> approximately. There are no other buildings on the site.

There is an existing carpark of 60 spaces and this is to remain in use.

The current workshop at Miedecke Motors (over the road) will be re-located to and housed in the existing building. This will operate under the Miedecke management. It will contain 15 work bays and employ 10 people.

It is also proposed that two additional buildings could be needed within about 5 years as follows:

- Workshop building 900m<sup>2</sup> area
- Paint shop & detailing 340m<sup>2</sup>.

An existing car park has a capacity of 60 vehicles and an additional number of 300 is required for parking of pre-sale vehicles.

To provide for the near term 10 employees 13 car parks will be needed and in the longer term an additional 25 spaces in the workshop and 10 management staff.

### **2.6 The Heritage Christian School**

#### **Lot 4**

The impact of traffic on the future development of the Heritage Christian School, Lot 4 DP 825704 was assessed by the school principal on 8 March 2017, as part of a Development Application on behalf of the school. This DA including the “traffic survey” was approved by Council on 5 May 2017.

The conclusion in this study is:

*“The capacity of the school with the existing car parking and infrastructure layout is 444 students. It is independent of the schools approved number of students which is set at 500 under the current approvals, which would still be permissible if sufficient parking is provided. The School is requesting the current approval of 500 students be maintained. The School does agree, however, that any expansion of car parking facilities would need to be assessed were it to exceed the current classroom capacity of 444 students.*

*It is the School's view that additional car parking spaces are not required until it exceeds 444 students."*

This study includes a count of the present car parking facilities used in the peak period for staff, students and dropping off of students.

At no time were the car parks utilised to capacity.

The provision of the car parking facility at the school is therefore seen to be adequate for its existing and short term needs.

## **2.3 Existing Road Network**

The two sites are on the south side of Mumford Street which is a cul de sac with a turning area at its end.

Mumford Street is readily accessible by left turning vehicles from Hastings River Drive. Right turning vehicles entering Mumford Street have excessive waiting time due to the volume of traffic on Hastings River Drive and should proceed to a roundabout at Clifford Drive some 400m to the east and return to make a left hand turn.

Mumford Street is also readily able to be accessed via The Mainsail and The Boulevard to Kemp Street, then Mumford Street.

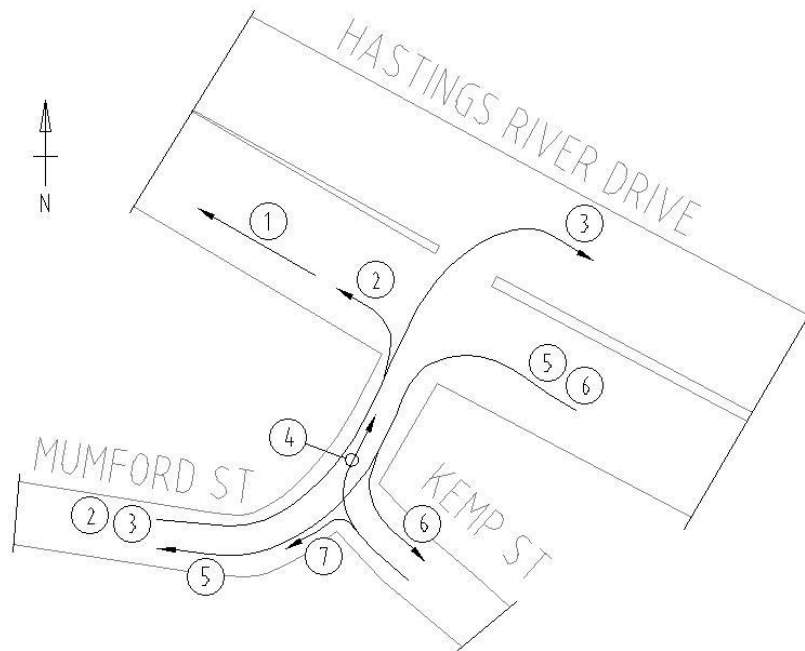
In summary there is a network of streets south of Hastings River Drive that can be utilised to access the sites and vehicles from north of Hastings River Drive should make use of the roundabouts to the east and west of Mumford street for expedience and safety.

## **2.4 Existing Traffic Volumes**

The vehicle counts and movements taken on 12 December 2017 are shown on the sketch and table below.

The count was carried out through a morning peak between 0700 to 0930 hours, which indicates an hourly peak between 0745 & 0845.

# **EXISTING TRAFFIC VOLUME MUMFORD ST, KEMP ST & HASTINGS RIVER DRIVE INTERSECTION**



ROUTE No.	DESCRIPTION	AM PEAK V/HR NUMBER OF VEHICLES
①	HASTINGS RIVER DRIVE THROUGH TRAFFIC	620
②	MUMFORD ST THEN <u>WEST</u> ON HASTINGS RIVER DRIVE	68
③	MUMFORD ST THEN <u>EAST</u> ON HASTINGS RIVER DRIVE	33
④	KEMP STREET TO HASTINGS RIVER DRIVE(DIRECTION NOT RECORDED)	63
⑤	HASTINGS RIVER DRIVE TO MUMFORD ST	86
⑥	HASTINGS RIVER DRIVE TO KEMP ST	20
⑦	KEMP ST TO MUMFORD ST	23

### **3. IMPACTS OF THE PROPOSED DEVELOPMENT**

#### **3.1 The Heritage Christian School**

As noted in Section 2.2 the drop off zones and temporary and permanent car parks are not utilised to their maximum capacity at present.

The report prepared by the School Principal, attached, indicates that any additional school buildings or facilities is unlikely to have any significant impact on the school or Mumford Street and the surrounds.

#### **3.2 Gantons Pty Ltd (Miedecke) Operations**

The proposed buildings are to be utilised for workshop and car storage operations.

The conversion of the existing building to a workshop would result in 860m<sup>2</sup> of working area intended to provide 15 work bays. It is estimated that 20 employees would be needed and 5 management staff.

The proposed future building as shown on the site plan drawing are 900m<sup>2</sup> and 340m<sup>2</sup>.

The total number of work bays could then be say 40. The number of staff required is estimated to be 20.

The total parking required on the basis of the above to comply with council's DCP would be 60 (1 per work bay plus 1 per employee).

It must be stated that the above is approximate only as no detailed planning has been undertaken at this stage.

#### **3.3 Pedestrians & Cyclists**

No detail study of pedestrians or cyclists was done for the rezoning as it is considered the situation will not change to any significant degree.

Mumford Street roadway pavement is 8m wide and a dead end. Small vehicles predominate the landscape. The road is clear, level and straight.

The southern verge/footpath is 6m wide, with few obstructions, clear and level.

The developments will not increase numbers of pedestrians and cyclists, however the road reserve could readily accommodate additional numbers.

#### **4. CONCLUSION**

The existing traffic count for a morning peak hour has been carried out and included in this report to give an indication of traffic numbers and movements.

The peak hour has been determined as from 0745 to 0845. Employees at a mechanical workshop would normally be expected to commence work before 0745 and not affect the morning peak.

The present situation regarding traffic movement seems to work satisfactorily and an additional say 40 vehicles accessing Mumford Street before 0745 (say 0700 – 0745) would not impact the current peak.

The present school has adequate and presumably approved parking facilities which operate satisfactorily. The church site has (presumably) approved parking for 60 vehicles. It is not anticipated that these numbers are likely to increase in the medium term. It is thought the parking now existing and approved would have taken traffic impact into account.

The proposed development on the rezoned land will have minimal impact on the loss of amenity or safety for pedestrians and cyclists. This issue can be addressed in detail at DA stage as the land resource is in place to accommodate any modification or improvement works.

It is further considered this overview should be adequate for processing of the application for rezoning. Further detailed analysis and planning of the future development of the Ganton's site may well reach a conclusion that the three road intersection should be reconstructed to better manage the traffic flow.



## **APPENDIX A**

### **HERITAGE CHRISTIAN SCHOOL TRAFFIC SURVEY**

These are the plans referred to in  
Development Application No.:

DA2016 - 695

and determined as APPROVED on: 5 May 2017  
PORT MACQUARIE-HASTINGS COUNCIL



8 March 2017

**Heritage Christian School**  
**33 Mumford Street, Port Macquarie NSW 2444**  
**Traffic Survey: Thursday 23<sup>rd</sup> February to Friday 3<sup>rd</sup> March 2017**

The survey was conducted during the morning and afternoon 'peak' traffic times, and across the three school parking areas (Front Car Park; Back Car Park; and the 'Kiss and Drop' Zone at the eastern end of the Front Car Park area).

Attached are the records of each of the five days covered. Several key factors were identified:

1. There is a difference between peak traffic flows morning and afternoon. It is clear that the split start times for Primary and High School (High School commence at 8:40am; Primary at 9:00am) in the morning results in lower traffic flow.
2. There was a difference between the 'wet weather' peak traffic flows (particularly for Primary pick up) during the wet weather period from what is experienced normally. This was particularly evident with the 'Kiss and Drop' Zone on a number of occasions not being used, with parents wanting to drop their children in the Front Car Park as it is closer to the covered walkways.
3. The School currently has 270 of its 340 students utilising the 'bus pass' system (96 Primary; 174 High School). Unlike a State school where students are drawn from the immediate area surrounding the school, many within such a distance that they would not qualify for a bus pass, Heritage draws from a wide catchment with students travelling by bus into Port Macquarie. Anecdotally, a greater portion of our students utilise the bus system as a result of the far greater travel distances involved.

**General Comments:**

The H-Block building project is not designed to lift the capacity of the School beyond its current 500 approved limit. The Block Grant Authority recommends class room sizes ranging from 65sq metres to 75sq metres depending on the grade. Many of our classrooms are 55sq metres, and whilst the room count appears sufficient for 450 students, the floor area is considerably less as assessed by the Block Grant Authority.

The project adds three standard classrooms, but re-allocates two classrooms elsewhere to specialist rooms. In addition, the Visual Arts room that was located in the Woolshed has been relocated in to the new H-Block facility with its original location being converted to a store room for the assembly hall, meaning there is actually no 'net gain' in teaching facilities in the High School.

1. There are currently 30 Students in Year 12. With no plans (or additional specialist facilities) to 'dual stream' Stage 6 (Years 11 and 12) this number will not see any significant variation on the current projected numbers.
2. The School's current attendance rate is approximately 90%. This equates to an average daily attendance of 306 students.

A vibrant, engaged  
community... *Educating, Nurturing, Empowering.*

33 Mumford Street  
PO Box 5598  
Port Macquarie NSW 2444  
Phone 02 6583 8277  
Fax 02 6583 6640

admin@heritage.nsw.edu.au  
www.heritage.nsw.edu.au  
Operated by the Hastings Association  
for Christian Education Ltd.  
ABN 47 002 521 404

These are the plans referred to in  
Development Application No.:

DA2016 - 695

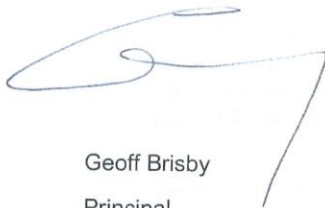
and determined as APPROVED on: 5 May 2017  
PORT MACQUARIE-HASTINGS COUNCIL

(page 2 of 2)

3. Whilst many parents choose to use the 'Kiss and Drop' Zone, a number of families are choosing to enter the Front Car Park and park for 2-3 minutes to drop their children off. This means we are seeing a consistent 'turnover' in very short term parking taking place both in the morning drop off and afternoon pick up. This was particularly evident during the wet weather experienced during the 'traffic survey'.
4. The School has staggered start times which spreads the load on traffic flow (8:40am High School, 9:00am Primary).
5. Since Miedecke Ford have purchased the Church site next door to the School and provided off-street parking for all of their staff and other vehicles the traffic issues in Mumford Street have eased considerably.
6. The Woolshed project relocated the existing Visual Arts Rooms from the Woolshed across to H-Block. Again, this is a 'curriculum delivery' decision, and does not increase the student capacity of the School.
7. Existing facilities and forward planning, including car parking, have capacity for 200 Primary and 244 High School students. This 'capacity number' does not involve any significant increase in staffing as it is simply maximising numbers in existing classes.

The capacity of the school with the existing car parking and infrastructure layout is 444 students. It is independent of the schools approved number of students which is set at 500 under the current approvals, which would still be permissible if sufficient parking is provided. The School is requesting the current approval of 500 students be maintained. The School does agree, however, that any expansion of car parking facilities would need to be assessed were it to exceed the current classroom capacity of 444 students. It is the School's view that additional car parking spaces are not required until it exceeds 444 students.

Sincerely



Geoff Brisby  
Principal



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DA2016 - 695

and determined as APPROVED on: 5 May 2017  
PORT MACQUARIE-HASTINGS COUNCIL



Heritage Christian School

*Educating...Nurturing...Empowering*

### Car Park Survey

Monday, 27 February to Friday, 3 March 2017

DAY/DATE	TIME	(number of free car spaces)			COMMENTS
		FRONT CAR PARK	BACK CAR PARK	KISS & DROP ZONE *	
Mon, 27 Feb	8:40am	18	3	7	1x D/A Park (Front C/P) free
	8:50am	14	2	4	
	9:00am	16	2	5	
	2:50pm	3	2	0 - 7	Showers
	3:00pm	0	2	0 - 9	Showers
	3:10pm	16	3	3	Showers
Tue, 28 Feb	8:40am	22	2	5	1 x D/A Park (Front C/P) & Heavy Showers
	8:50am	21	2	7	Heavy Showers
	9:00am	23	0	6	Heavy Showers & 9:10am = 26 Front C/P
	2:50pm	4	1	2	
	3:00pm	0	1	0	
	3:10pm	17	1	4	Heavy Showers
Wed, 1 Mar	8:40am	20	1	7	Light to Medium Rain
	8:50am	25	1	6	Light to Medium Rain
	9:00am	22	1	7	Light to Medium Rain
	2:50pm	1	2	1	Showers of Rain
	3:00pm	1	1	0	Showers of Rain
	3:10pm	22	2	6	Showers of Rain
Thu, 2 Mar	8:40am	22	1	7	
	8:50am	23	1	7	
	9:00am	17	1	7	
	2:50pm	6	0	0	
	3:00pm	1	1	0	
	3:10pm	17	1	3	1x D/A Park (Front C/P) free
Fri, 3 Mar	8:40am	27	6	7	1x D/A Park (Front C/P) free
	8:50am	26	6	7	
	9:00am	24	6	7	
	2:50pm	12	6	0	
	3:00pm	10	5	0	
	3:10pm	27	7	4	

\* Has highlighted families not using the "Kiss & Drop" Zone effectively

\* Rain - more families dropping child/ren in main car park and not using the "Kiss & Drop" Zone



# Heritage Christian School

Edvised Hing...N...the plans referred to in  
Development Application No.:

## Car Park Survey

Thursday, 23 February to Friday, 24 February 2017

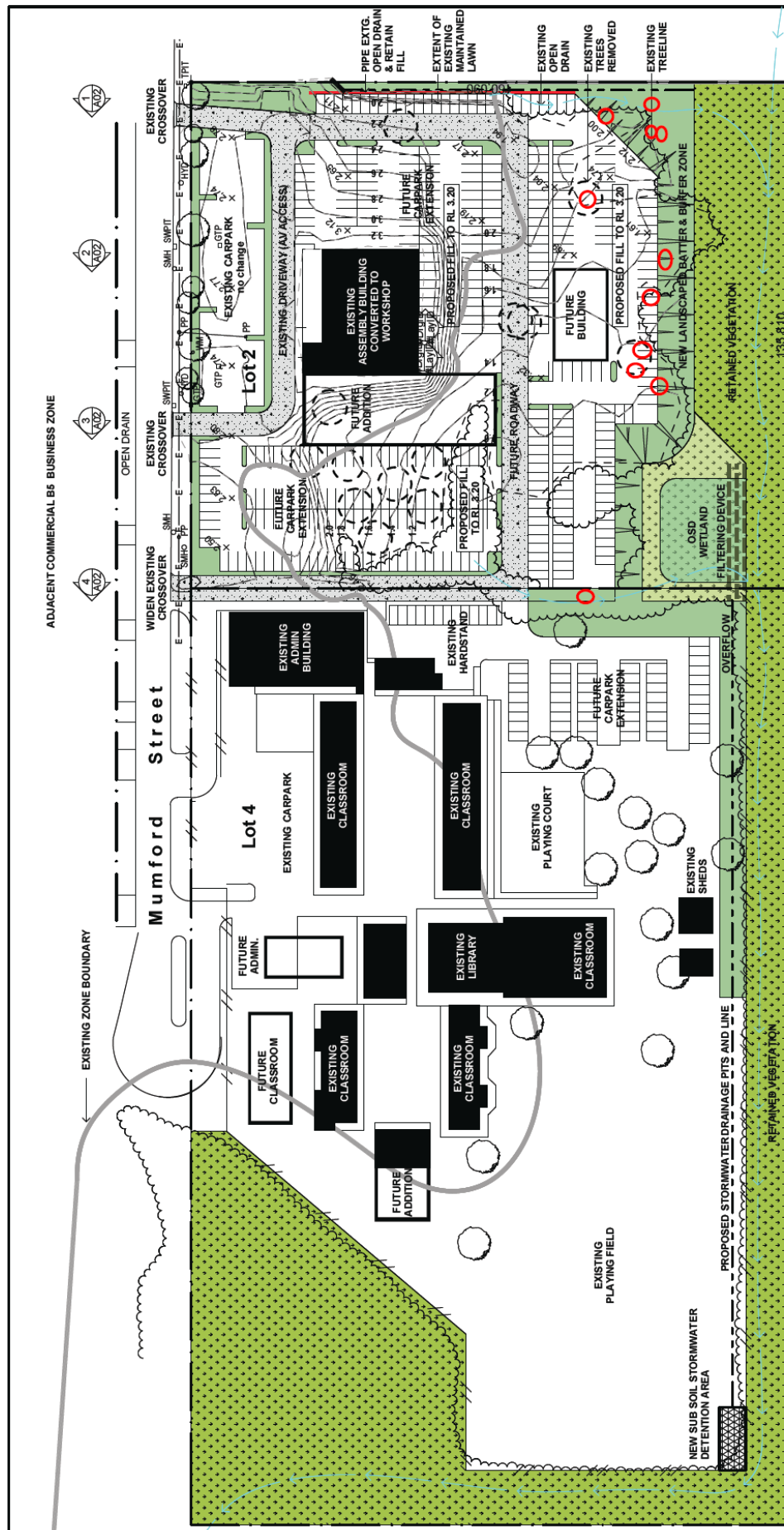
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and determined as APPROVED on: 5 May 2017  
PORT MACQUARIE-HASTINGS COUNCIL

DAY/DATE	TIME	(number of free car spaces)			COMMENTS
		FRONT CAR PARK	BACK CAR PARK	KISS & DROP ZONE	
Thu, 23 Feb	8:40am	16	4	5	
	8:50am	15	2	5	
	9:00am	11	3	6	
	2:50pm	5	2	3	
	3:00pm	2	2	2	
	3:10pm	7	2	6	
Fri, 24 Feb	8:40am	19	4	7	
	8:50am	20	4	4	
	9:00am	19	2	6	
	2:50pm	4	2	5	
	3:00pm	3	2	4	
	3:10pm	16	3	6	

## **APPENDIX B**

### **PROPOSED REZONING PLAN**



**Proposed Rezoning  
Lot 2 DP601094 & Lot 4 DP825704  
Mumford Street PORT MACQUARIE**

## Site Plan

Scale 1:1000  
Date 19/12/2017  
Drawing No  
A01 A 'A'

