PP_2021_2911 Proposed Cyprus Club Redevelopment

58-76 Stanmore Road, 2-20 Tupper Street & 3-9 Alma Street, Stanmore

TRAFFIC AND PARKING ASSESSMENT REPORT

28 March 2022

Ref 21513



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1. INTRODUCTION

This report has been prepared to accompany an amended Planning Proposal for the proposed redevelopment of the Cyprus Club, located at 58-76 Stanmore Road, 2-20 Tupper Street & 3-9 Alma Street, Stanmore (Figures 1 and 2).

On 25 September 2018, PP_2021_2911 was originally lodged with the Department of Planning, Industry & Environment (DPIE) seeking to amend the *Marrickville LEP 2011* by:

- rezoning the site to B4 Mixed Use and R1 General Residential
- identify the land on the key site map to introduce an additional permitted use for a residential flat building associated with a mixed-use development on the *B4* zoned land
- increase the building height to range from 11m to 23m
- increase the FSR to range from 1:1 to 1.8:1
- widen the road on the Alma Avenue frontage, as per the Land Reservation Acquisition
 Map

As a result of the above proposed changes to the *Marrickville LEP 2011*, the original Planning Proposal envisaged the construction of up to 160 dwellings in addition of commercial/retail and club floor space across three sites. In particular, Site A (Buildings A &

B) comprised the club and commercial/retail space, Site B (Buildings C & D) comprised residential apartments and Site C (Building E) comprised residential townhouses.

Two new through-site links were also proposed, running east-west through the site, known as Lane A (12m wide reserve, separating Sites B & C and lining up with Harrington Street) and Lane B (8m wide reserve, separating Sites A & B).

Off-street parking was proposed for each site in separate basement parking areas. Vehicular access to Site A was proposed to be provided via Lane B, vehicular access to Site B was proposed to be provided via Lane A and vehicular access to Site C was proposed to be provided directly off Tupper Street.

In order to mitigate the projected increase in vehicular movements, the original Planning Proposal proposed measures to assist through:

- the widening of Alma Avenue
- the provision of two through-site laneways between Alma Avenue & Tupper Street,
 offering continuation of Harrington Street

The original Planning Proposal was lodged with Council in 2016 a *draft* Traffic & Parking Impact Assessment (by *Traffix*, dated December 2016) was prepared in support of the Planning Proposal. The *Traffix* report acknowledged the site's suitable location near public transport for future residents and visitors, also describing the existing and proposed road intersection performance, impact on surrounding road network and the proposed car parking requirements.

In terms of associated traffic movements, the 2016 *Traffix* report estimated that the Planning Proposal would generate in the order of 46 and 77 vehicles/hour (vph) during the weekday AM and PM road network peak periods, respectively, which represented a *net increase* of approximately 40 and 52 vph, respectively, when factoring in the existing traffic generation of the site.

| Traffix Forecasted Traffic Generation Assessment | | | | | |
|--|-------------------|--------------------|---------------------|--|--|
| Use | Floor area/yield | AM peak trips | PM peak trips | | |
| Club | 966m ² | 0 | 10 (8 in & 2 out) | | |
| Commercial/retail | 467m ² | 0 | 26 (13 in & 13 out) | | |
| Residential | 160 dwellings | 46 (9 in & 37 out) | 41 (33 in & 8 out) | | |
| Sub total | | 46 (9 in & 37 out) | 77 (54 in & 23 out) | | |
| Less existing | | -6 (1 in & 5 out) | -25 (20 in & 5 out) | | |
| Nett total | | 40 (8 in & 32 out) | 52 (34 in & 18 out) | | |

As part of the *Traffix* report, a SIDRA capacity analysis of the surrounding road network was undertaken at the following intersections:

- Stanmore Road, Enmore Road & Edgeware Road
- Stanmore Road & Liberty Street
- Stanmore Road & Tupper Street

The *Traffix* report ultimately concluded that the Planning Proposal scheme resulted in a "negligible increase in traffic delays across the network".

Off-street parking requirements were also assessed in the *Traffix* report, based on the rates specified in the *Marrickville DCP 2011* and the RMS *Guidelines*.

Based on the original Planning Proposal scheme, *Traffix* concluded that the development would require a total of 166 off-street car parking spaces for the residential and commercial/retail uses *plus* parking for the club.

DPIE have since undertaken a detailed review of the planning proposal, including the *Traffix* report, and noted that the report "does not adequately assess the suitability of the existing road network to accommodate the proposal, the impact of the proposal and measures to address this". "There are some matters which are unclear or have not been adequately addressed and remain unresolved until addressed by Gateway Conditions (as follows)":

- The anticipated number of parking spaces does not reflect the updated Urban
 Design Report (apartment mix and dwelling numbers), the current DCP parking
 provisions which are listed by Areas 1, 2 and 3, and the number of spaces
 expected for the proposed club premises (based on the expected patronage and
 staffing number).
- The traffic surveys (2009 and 2016) used to determine existing in-bound and out-bound traffic flows are out of date, and limited to a survey of the Alma Avenue-Stanmore Road intersection, and not the Tupper Street-Stanmore Road intersection.
- Details of the vehicle entry and exit movements onto Tupper Street and Alma Avenue.
- Lack of clarity as to whether the existing road network can support the proposed development, or recommendations of the updates required to accommodate the proposed development and manage traffic movements and delays including:
 - upgrades to Tupper Street-Stanmore Road intersection to address the anticipated vehicle delays and level of service capacity. It is noted that this intersection will require either traffic signal upgrades or an accident report to be prepared if the existing give-way intersection is retained.
 - how the proposed widening of Alma Avenue will operate with regards to the operation of the intersection with Stanmore Road and whether oneway or bi-directional traffic movements will be accommodated.
 - the implications for kerbside parking on Tupper Street which currently limits bi-directional traffic flows.
 - options for reduced on-site parking provision to minimise trip generation and private vehicle usage, and maximise public transport patronage.

A new traffic impact assessment will need to address the above uncertainties and investigate the potential widening of the street to support the proposed development, the impact that the proposed development will have on the existing street network and make recommendations on how to address this. A **Gateway Condition** is recommended accordingly

As noted above, DPIE have requested that a new traffic and parking impact assessment report is prepared in order to assess the abovementioned unresolved matters. Furthermore, in a report to Council in September 2018, referenced in Gateway, the following was also noted:

Council should note that the report to the Local Planning Panel recommended there should be additional studies carried out post-Gateway Determination for the following

- a study dealing with the existing narrow Alma Avenue and narrow Tupper Street capacity, the need to service the development and so identify the necessary accommodating street widths
- a local traffic study dealing with traffic impacts on the existing nearby narrow local street network and making recommendations on how to address this.

Accordingly, *Varga Traffic Planning (VTP)* have been engaged to undertake the new study.

Notwithstanding, the original 2018 Planning Proposal scheme submitted to DPIE, the March 2022 Planning Proposal scheme has been amended for a reduced MFSR of 1.75:1. This will accommodate 116 dwellings (106 apartments & 10 terrace houses) and approximately 2,500m² GFA of commercial/retail and club floor space across three sites.

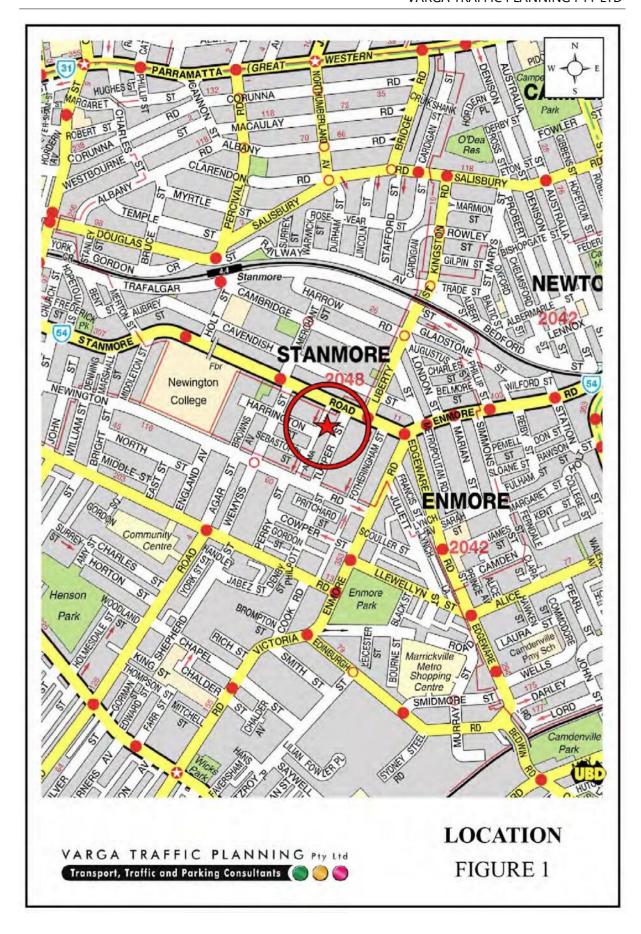
Off-street parking is again proposed for each site in separate basement parking areas, however the two vehicular through-site links, Lane A & Lane B, have been deleted, as the ownership of the entire site will remain with The Cyprus Club as opposed to being divested. There will, however, remain pedestrian pathways between Tupper Street and Alma Avenue where the laneways previously were present.

Vehicular access to Site A (the club and commercial/retail space) is now proposed to be provided via the southern end of Site A's Tupper Street site frontage, whilst vehicular access to Site B (the residential apartments) is now proposed to be provided midway along the (widened) Alma Avenue site frontage. Vehicular access to Site C (the residential townhouse) is now proposed to be provided via Site B's Alma Avenue driveway, with an internal throughsite link.

It is noted that based on the proposed land use and parking yields within the revised Planning Proposal, and the proposed driveways being located within 90m of a classified road (Stanmore Road), referral is required to Transport for NSW (TfNSW) under Clause 104 and Schedule 3 of the *State Environmental Planning Policy (Infrastructure)* 2007.

The purpose of this report is to assess the traffic and parking implications of the amended Planning Proposal, and to that end this report:

- describes the site and provides details of the amended Planning Proposal
- reviews the road network in the vicinity of the site, and the traffic conditions on that road network
- reviews the existing public transport and essential services available in the vicinity of the site
- estimates the traffic generation potential of the amended Planning Proposal, and assigns that traffic generation to the road network serving the site
- assesses the traffic implications of the amended Planning Proposal in terms of road network capacity and any mitigation measures required
- reviews the geometric design features of the proposed amended concept car parking and loading facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking and loading provided on the site.
- Undertake a preliminary assessment of car parking requirements which will be included in a future site specific DCP
- Recommendations of next steps for measures to reduce private vehicle trip generation and demand, and maximise public transport patronage.





2. PROPOSED DEVELOPMENT

Existing Site

The subject site is located on the southern side of Stanmore Road, extending between Alma Avenue and Tupper Street. The site has street frontages of approximately 67m in length to Stanmore Road and approximately 140m in length to both Alma Avenue and Tupper Street. The site occupies an area of approximately 9,129m².

The subject site is currently occupied by the Cyprus Club which is a part three/part four-storey building located in the north-eastern corner of the site. The club building comprises bars, a restaurant and function rooms, and has a Gross Floor Area (GFA) of approximately 1,765m² and an internal *Public Floor Area (PFA)* of approximately 900m².



The term *Public Floor Area* (*PFA*) is used to define those areas of the club which are readily accessible to patrons and therefore provides the most accurate basis for determining club patronage levels, and the traffic and parking demands expected to be generated by those patronage levels. Generally speaking, it includes indoor bars, lounges, gaming rooms, bistro and dining areas, however excludes uncovered outdoor areas, loading docks, storage areas, office/administration areas, staff amenities, kitchens and other "back-of-house" facilities which are inaccessible to club patrons.

The existing club currently employees a total of 19 staff, including up to 10 staff at any given time on busy days during food service times. Those staff numbers do not include contractors such as cleaners. Notwithstanding, contractors such as cleaners are typically on site *outside* of the club's busy periods.

Off-street parking for the Cyprus Club is currently provided for approximately 173 cars in an outdoor, at-grade parking area located on the western and southern portions of the site, as indicated in the aerial image below. The western parking area comprises formal, linemarked parking spaces whilst the southern portion provides informal overflow parking. Vehicular access to the club's car parking area is provided via 4 separate driveways located off the Alma Street site frontage. No existing vehicular access to the club's car park is provided off the Stanmore Road or Tupper Street site frontages.



Existing Cyprus Club parking provision

Loading/servicing for the existing club is currently undertaken by a variety of commercial vehicles from vans, wagons and utilities up to and including medium rigid trucks. A service area is provided at the rear of the existing club, accessed via a single driveway located off the Tupper Street site frontage.

In addition to the club, the site also contains 6 free-standing residential dwelling houses to the south of the club building, fronting Tupper Street. No.10 & No.14 Tupper Street residences have an off-street parking space, however the remaining 4 residences to not.

A series of *Streetview* images of the site frontages are reproduced below and on the following page.



Stanmore Road & Tupper Street intersection



Tupper Street (facing north towards Stanmore Road)



Stanmore Road & Alma Avenue intersection



Alma Avenue (facing north towards Stanmore Road)

Original Planning Proposal

As noted in the foregoing, the original Planning Proposal PP_2021_2911 was lodged which sought to rezone the abovementioned site and amend the *Marrickville LEP 2011's* development standards to enable residential flat buildings and mixed-use development, commercial and club floor space across three sites, as per the figure on the following page.

A summary of the original proposal for each site is reproduced on the following page which has been taken from Inner West Council's meeting on 11 September 2018.



Figure 3. Indicative scheme, including division of larger site into Sites A, B and C and associated buildings A, B, C, D and E.

Original Planning Proposal Site Plan

| PROPOSED | Site A | Site B | Site C |
|---|---|--|---------------------------|
| Land Use zone (proposed) | B4 Mixed Use | R1 General Residential | R1 General Residential |
| Üses | Building A – club and residential Building B – commercial and residential | Residential (residential flat buildings) | Residential (terraces) |
| Height of Building (maximum) | 21 metres | 28 metres | 14 metres |
| Height in storeys (maximum) | Building A – 5 storeys Building B – 5 storeys | Building C –8 storeys Building D –5 storeys | 4 storeys |
| Site Area | 2,425m² | 4,675m² | 1,450m ² |
| Gross Floor Area | 4,250m² | 9,350m² | 2,100m ² |
| Floor Space Ratio (excluding car parking) | 1.75:1 | 2.0:1 | 1.84;1 |

Summary of Original Planning Proposal

Off-street parking was proposed for each site in separate basement parking areas, comprising 50-100 spaces for Site A, 150-200 spaces for Site B and 10-15 spaces for Site C. Vehicular access to Site A was proposed to be provided via Lane B, vehicular access to Site B was proposed to be provided via Lane A and vehicular access to Site C was proposed to be provided directly off Tupper Street.

In order to mitigate the projected increase in vehicular movements, the original Planning Proposal proposed measures to assist through:

- the widening of Alma Avenue
- the provision of two through-site laneways between Alma Avenue & Tupper Street, offering continuation of Harrington Street

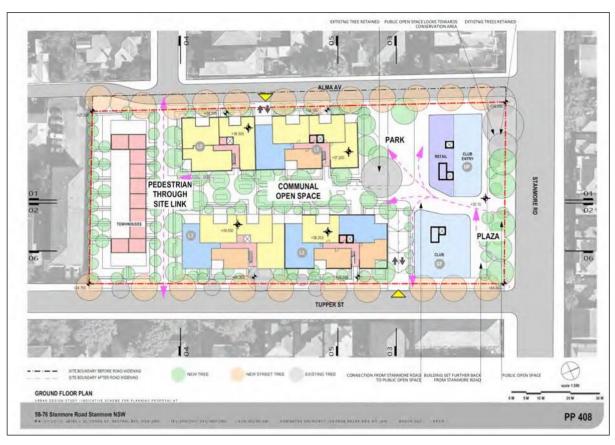
Revised Planning Proposal – March 2022

The original Planning Proposal scheme has been amended to propose MFSR 1.75:1, accommodating up to 116 dwellings (106 apartments & 10 terrace houses) and approximately 2,500m² GFA of commercial/retail and club floor space across three sites. A comparison table of the original and revised PP schemes is reproduced below whilst the ground floor and lower ground floor plan extracts of the revised Planning Proposal are reproduced on the following page.

| Use | Original PP – 2016 <i>Traffix</i> Report | Revised PP – 2022 |
|------------------------------|--|---|
| Club floor area | 966m ² GFA (~500m ² PFA) | ~1,800m ² GFA (~900m ² PFA) |
| Retail/commercial floor area | 467m ² | 676m ² |
| Residential | 160 dwellings | 116 dwellings |
| Parking | 166 spaces + club | 260-270 spaces inc. club |

Off-street parking is again proposed for each site in separate basement parking areas, however the two vehicular through-site links, Lane A & Lane B, have been deleted, as the ownership of the entire site will remain with The Cyprus Club as opposed to being divested. There will, however, remain pedestrian pathways between Tupper Street and Alma Avenue where the laneways previously were present.

Vehicular access to Site A (the club and retail/commercial space) is now proposed to be provided via the southern end of Site A's Tupper Street site frontage, whilst vehicular access to Site B (the residential apartments) is now proposed to be provided midway along the (widened) Alma Avenue site frontage. Vehicular access to Site C (the residential townhouse) is now proposed to be provided via Site B's Alma Avenue driveway, with an internal throughsite link.



Revised Planning Proposal 2022 - Ground Floor



Revised Planning Proposal 2022 – Lower Ground Floor

The revised traffic modelling indicates that under normal operating conditions, queue lengths into and out of the club/retail parking area off Tupper Street will be minimal and will not impact traffic flow along Stanmore Road. At this stage, it is not yet known what type of "control point" will be implemented at the club/retail car park entry – e.g., boom gate, number plate recognition, etc. This level of design will be further explored at DA stage.

Loading/servicing for the proposed development is expected to continue to be undertaken by a variety of commercial vehicles from vans, wagons and utilities up to and including 8.8m long medium rigid trucks. In this regard, a dedicated loading bay is proposed to be provided within the lower ground floor level, underneath the club building. Due to the topography of the site and the longer ramp lengths required for trucks due to shallower permissible ramp grades, vehicular access for service vehicles is to be provided via the abovementioned entry/exit driveway located towards the northern end of the Tupper Street site frontage.

Architectural concept plans of the revised Planning Proposal have been prepared by *PA Studio* and are reproduced in Appendix A.

Proposed Road Network Changes

As noted in the foregoing, in order to mitigate the projected increase in vehicular movements, the original Planning Proposal proposed measures to assist through:

- the widening of Alma Avenue
- the provision of two through-site laneways between Alma Avenue & Tupper Street,
 offering continuation of Harrington Street

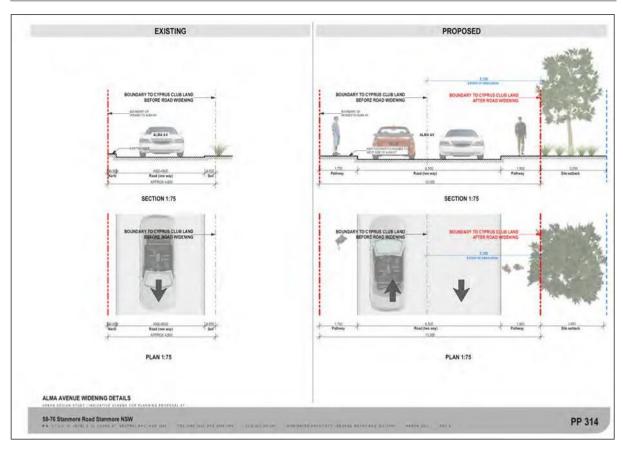
Whilst the two through-site vehicular laneways have been deleted from the revised Planning Proposal, the widening of Alma Avenue is still proposed. In this regard, plan extracts of the proposed Alma Avenue road widening are provided on the following page, indicating that the existing 4.85m wide road reserve will be increased to 10.0m - i.e., a land dedication of 5.15m. This will allow the provision of a 1.7m wide footpath along the western side of Alma Road, a 6.5m wide road carriageway and a 1.8m wide footpath along the eastern side of Alma Avenue, along the site frontage.

It is also worth noting that the design of the building fronting Stanmore Road will be set back from the northern boundary such that the available footpath width for the public will extend within the site boundary. The official boundary will not change however the usable footpath width for pedestrians walking along the southern side of Stanmore Road will be wider than the official/legal Council verge width. This may comprise a right-of-footway easement strip within the site, or similar, which is commonplace. These works will not affect the retained trees shown on landscape drawings.

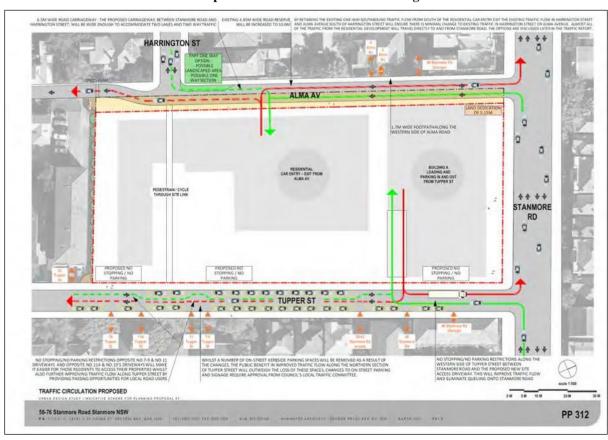
The proposed 6.5m wide Alma Avenue carriageway width, between Stanmore Road and Harrington Street, will be wide enough to accommodate two lanes. This could comprise either retaining the existing one-way southbound traffic flow with on-street parking introduced *or* converting Alma Avenue to two-way traffic flow, north of Harrington Street. Both options are discussed later in this report.



Proposed Alma Avenue Road Widening



Proposed Alma Avenue Road Widening



Proposed Traffic Circulation

The existing width of Tupper Street is approximately 7.3m wide, with kerbside parking permitted along both sides of the road. Whilst two-way traffic flow is permitted, the road width and kerbside parking essentially reduces traffic to a single lane flow, with drivers having to wait where they can until an opposing driver(s) passes.

Residents of the existing flat buildings opposite the site in Tupper Street also currently experience difficulty turning into/out of their respective property's driveway, particularly when cars are parked close to the edge of their driveway and/or when cars are parked opposite their driveway.

As such, it is also now proposed to install No Stopping/No Parking restrictions along the western side of Tupper Street, in between Stanmore Road and the proposed new site access driveway, in order to improve traffic flow. In addition, it is also proposed to install No Stopping/No Parking restrictions along the western side of Tupper Street, opposite No.7-9 & No.11's driveways as well as opposite No.11A & No.19's driveways. Restricting parking along these two sections of Tupper Street will make it easier for those residents to access their properties whilst also further improving traffic flow along Tupper Street by providing passing opportunities for local road users.

Whilst a number of on-street kerbside parking spaces will be removed as a result of the changes, it is considered that the public benefit in improved traffic flow and safety along the northern section of Tupper Street will outweigh the loss of these spaces. It is also noted that any changes to on-street parking and signage requires approval from Council's Local Traffic Committee.

A series of architectural concept plans of the existing and proposed traffic arrangements have been prepared by *PA Studio* and are also reproduced in Appendix A.

3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by Transport for NSW (TfNSW) is illustrated on Figure 3.

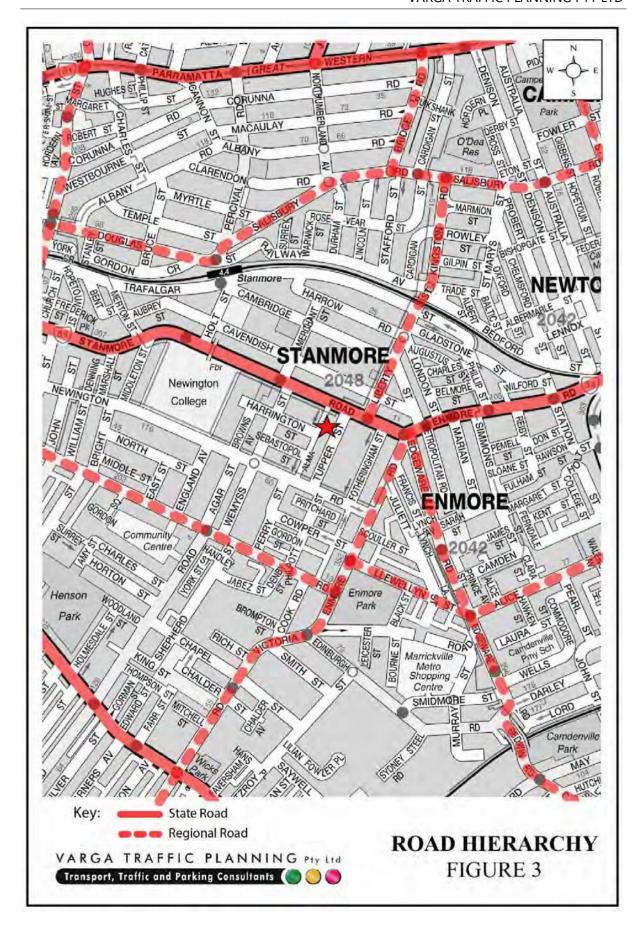
Stanmore Road and Enmore Road (north of Stanmore Road) are classified by TfNSW as *State Roads* which provide the key east-west road link in the area, linking Enmore Road to King Street. They typically carry two traffic lanes in each direction in the vicinity of the site, with kerbside parking permitted at selected locations, outside of road network peak periods.

Enmore Road (south of Stanmore Road) and Victoria Road are classified by TfNSW as *Regional Roads* which provide a key north-south road link in the local area, linking Sydenham Road and Stanmore Road. They also typically carry two traffic lanes in each direction in the vicinity of the site, with kerbside parking permitted at selected locations, outside of road network peak periods.

Edgeware Road and Liberty Street are also classified by TfNSW as *Regional Roads* which perform the function of a north-south *collector route* through the local area. They typically carry one traffic lane in each direction in the vicinity of the site, with additional lanes/turning bays provided at key locations. Kerbside parking is generally permitted.

Tupper Street is a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. Two-way traffic flow is permitted, whilst kerbside parking is generally permitted on both sides of the road.

Alma Avenue is also a local, unclassified road which is primarily used to provide vehicular and pedestrian access to frontage properties. It is restricted to one-way southbound traffic flow only. Due to the existing road reservation width, footpaths are not provided along either side of the road, nor is kerbside parking permitted.



Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

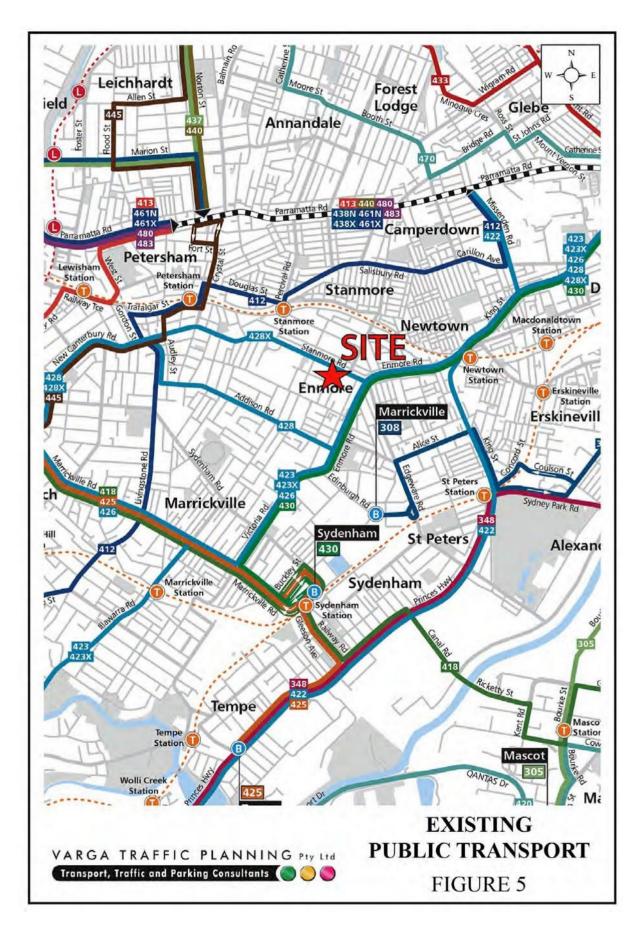
- a 60 km/h SPEED LIMIT which applies to Stanmore Road
- a 50 km/h SPEED LIMIT which applies to all other local roads in the area
- a 40 km/h SCHOOL ZONE SPEED LIMIT which applies to all roads in the vicinity of Newington College
- TRAFFIC SIGNALS in Stanmore Road where it intersects with Merchant Street,
 Liberty Street and also Enmore Road/Edgeware Road
- a NO RIGHT TURN restriction in Stanmore Road for westbound traffic turning onto Merchant Street
- a ONE WAY southbound restriction in Alma Avenue and also Fotheringham Street
- a ONE WAY eastbound restriction in Newington Road, between Fotheringham Street and Enmore Road
- SPEED HUMPS located along Tupper Street Newington Road and also Wernyss Street
- a 3T LOAD LIMIT in Tupper Street

Existing Public Transport Services

The existing bus services available in the area are illustrated on Figure 5. There are currently 7 bus routes travelling within approximately 400m radius of the site along Enmore Road and Stanmore Road, comprising the 355, 423/423X, 426, 428/428X & 430 services.

The abovementioned bus services also connect with train services at numerous suburban railway stations including Bondi Junction, Erskineville, Newtown, Martin Place, St James, Central, Canterbury and Sydenham.

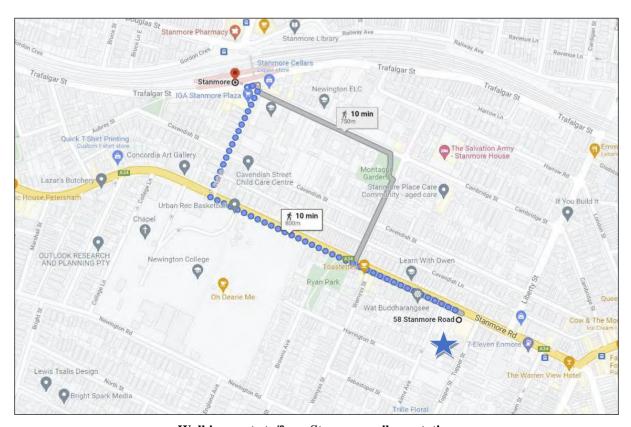




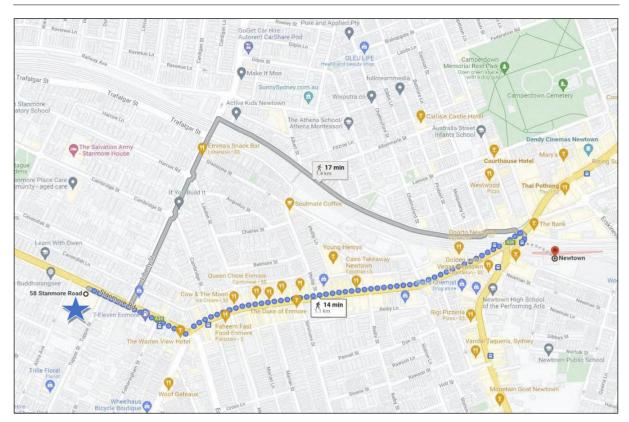


400m radius map

In addition, Stanmore and Newtown railway stations are also located approximately 800m and 1.1km walking distance, respectively, to/from the site.



Walking route to/from Stanmore railway station



Walking route to/from Newtown railway station

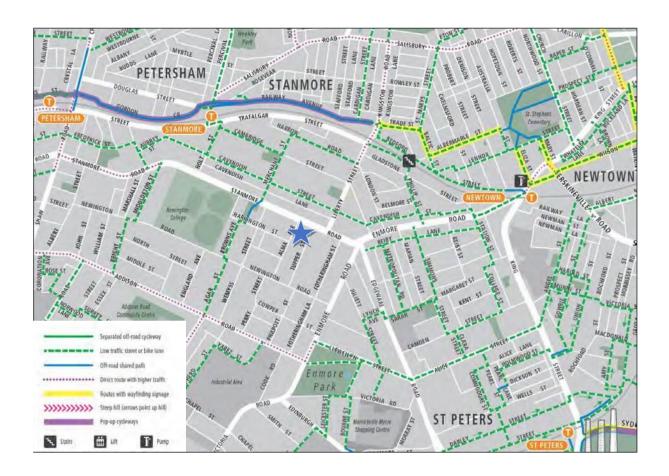
In addition, the site is located within close proximity to a wide variety of shops and services including licenced clubs, banks, supermarkets, gymnasiums, restaurants and specialty stores along Stanmore Road and Enmore Road. The site is therefore considered to be highly accessible to essential services and public transport options.

Local Bicycle Routes

The existing bicycle routes located in the vicinity of the site are illustrated on the following page. The bicycle routes are readily accessible from the subject site and provide a number of on-road bicycle routes linking the local area, including the following routes to employment centres:

- Redfern via Wilson Street & Church Street
- Broadway via Shephard Street, Wilson Street & Church Street
- Camperdown via Church Street
- Newtown via Mary Street
- Redfern via Wilson Street & Church Street

- University of Sydney via Prospect Street & Church Street
- Stanmore & Petersham via Salisbury Road & Church Street



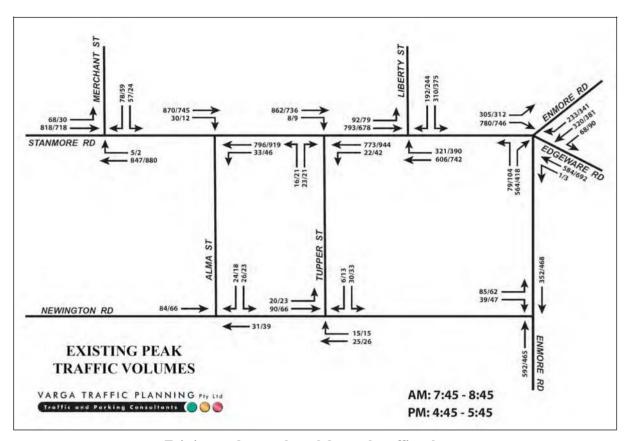
Existing Traffic Conditions

An indication of the existing traffic conditions on the road network in the vicinity of the site is provided by *updated* peak period traffic surveys which were undertaken on Friday 26th November 2021 as part of this traffic study. In this regard, the *updated* traffic surveys were undertaken at the following intersections:

- Stanmore Road & Merchant Street
- Stanmore Road & Alma Avenue
- Stanmore Road & Tupper Street
- Stanmore Road & Liberty Street
- Stanmore Road, Enmore Road & Edgeware Road
- Newington Road & Alma Avenue
- Newington Road & Tupper Street

- Newington Road & Enmore Road
- Alma Avenue and the club car park's access driveways

The results of the traffic surveys are reproduced in full in Appendix B and summarised on the figure below. It is also pertinent to note that the existing Cyprus Club car park is also used as a Covid-19 drive-through testing facility, such that those traffic movements were captured in the survey results.



Existing road network weekday peak traffic volumes

Projected Traffic Generation

The traffic implications of development proposals primarily concern the effects of the *additional* traffic flows generated as a result of a development and its impact on the operational performance of the adjacent road network, particularly during the morning and afternoon weekday road network peak periods.

An indication of the traffic generation potential of the Planning Proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the RMS's *Technical Direction* (TDT 2013/04a) document.

The RMS *Guidelines* and TDT 2013/04a are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the Planning Proposal:

Commercial Premises

2.0 peak hour vehicle trips per 100m² GFA

Medium Density Residential Flat Buildings (2-20 dwellings)

1 & 2 bedroom apartments:
0.4-0.5 peak hour vehicle trips per dwelling
3 or more bedroom apartments:
0.5-0.65 peak hour vehicle trips per dwelling

High Density Residential Flat Buildings in Sub-Regional Centres (20+ dwellings)

0.29 peak hour vehicle trips per dwelling

With respect to the club component, the RMS *Guidelines* notes the following.

3.7.3 Clubs.

Overview

Surveys of licensed clubs conducted by the RTA in 1978 indicate that it is difficult to generalise on their traffic generation because of the diversified nature of clubs. Traffic generation is affected by such factors as the provision of live entertainment, gambling facilities, number of members and club location. Behavioural changes since 1978, such as the introduction of random breath testing, also make such generalisations more difficult.

The 1978 surveys of clubs found an evening peak period traffic generation of 10 veh/hr/100 m² licensed floor area, and a total vehicle generation over the 4.00 pm to 1.00 am period of 90 veh/100 m² licensed floor area.

A traffic generation assessment of new clubs should be based on recent surveys of similar clubs. For extensions to an existing club, the assessment should be based on the relevant club.

If a club is located in or is adjacent to a residential area, late-night traffic generation must also be assessed in order to determine noise effects.

In this regard, *VTP* have been involved in a number of club projects over the years, and in our experience, the key driver of club traffic is the number of patrons, therefore adopting a *Public Floor Area* approach, rather than a GFA approach, often provides a more accurate representation. As a general rule, a club's *PFA* is typically in the order of 50% of the GFA.

As noted in the foregoing, the term *Public Floor Area* (*PFA*) is used to define those areas of a club which are readily accessible to patrons and therefore provides the most accurate basis for determining club patronage levels, and the traffic and parking demands expected to be generated by those patronage levels.

Generally speaking, PFA includes indoor bars, lounges, gaming rooms, bistro and dining areas, but excludes uncovered outdoor areas, loading docks, storage areas, office/administration areas, staff amenities, kitchens and other "back-of-house" facilities which are inaccessible to club patrons.

The floor area of the club in the revised Planning Proposal is approximately 1,829m² GFA, such that the *Public Floor Area* is in the order of 900m² PFA.

In terms of a suitable traffic generation of which to apply to the club, reference is made to the Waverley Bowling Club redevelopment, that *VTP* were involved in. The original bowling club had a floor area of approximately 600m^2 PFA, and therefore is considered a good comparison for the revised Planning proposal. Traffic surveys undertaken at the Waverley Bowling Club in 2018 (i.e. pre-Covid-19), indicated that the club generated in the order of *1.0 peak vehicle trips per 100m*² *PFA* during the weekday AM peak period and *8.5 peak vehicle trips per 100m*² *PFA* during the weekday PM peak period.

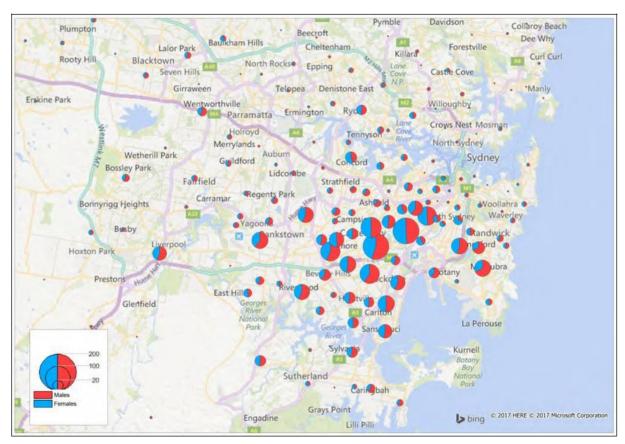
Application of the above traffic generation rates to the various components outlined in the revised Planning Proposal yields a traffic generation potential in the order of 52 and 142 vph during the weekday AM and PM road network peak periods, respectively. A table of the traffic volumes and the various uses, including in/out splits (based on industry standard and experience) is reproduced below.

| Revised Planning Proposal Forecasted Traffic Generation Assessment | | | | | | |
|--|--|------------------------|------------------------|--|--|--|
| Use | Floor area/yield | AM peak trips (veh/hr) | PM peak trips (veh/hr) | | | |
| Club | 1,800m ² GFA (~900m ² PFA) | 9 (7 in & 2 out) | 77 (54 in & 23 out) | | | |
| Retail/commercial | 676m ² | 13 (10 in & 3 out) | 38 (19 in & 19 out) | | | |
| Residential | 116 dwellings | 30 (6 in & 24 out) | 27 (22 in & 5 out) | | | |
| Total | | 52 (23 in & 29 out) | 142 (95 in & 47 out) | | | |

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, in order to determine the *net increase* (*or decrease*) in traffic generation potential expected to occur as a consequence of the Planning Proposal.

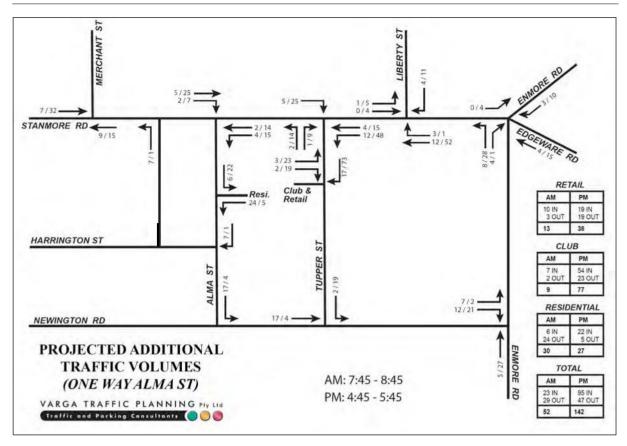
Notwithstanding the above, for the purposes of providing a rigorous assessment, it has been assumed that *all* of the projected future traffic flows of 52 AM vph and 142 PM vph will be new or *additional* to the existing traffic flows currently using the adjacent road network – i.e. no offset, or *discount*, of traffic associated with the existing club has been applied.

With respect to where existing Cyprus Club members reside, discussions with the club indicates that the vast majority live to the south and south-west of the site, as indicated in the map below.

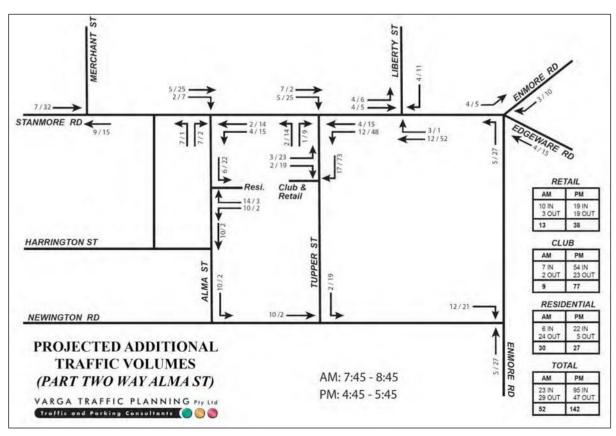


Map of where existing Cyprus Club members reside

Accordingly, the distribution of the projected future additional traffic volumes is illustrated on the diagrams on the following page, with both Alma Avenue options presented.



Projected additional traffic volumes peak trip distribution (retaining one-way Alma Avenue)



Projected additional traffic volumes peak trip distribution (two-way Alma Avenue north of Harrington St)

Those projected traffic flows as a consequence of the Planning Proposal will not have any unacceptable traffic implications in terms of road network capacity, nor will any road upgrades/improvements/widening be required beyond the proposed widening of Alma Avenue, as is demonstrated by the following section of this report.

Traffic Implications - Road Network Capacity

The traffic implications of development proposals primarily concern the effects that any *additional* traffic flows may have on the operational performance of the nearby road network. Those effects can be assessed using the SIDRA NETWORK program which is widely used by TfNSW and many LGA's for this purpose. Criteria for evaluating the results of SIDRA analysis are reproduced in the following pages. The individual movement summaries are reproduced in Appendix C (whereby one-way traffic flow is retained in Alma Avenue) and Appendix D (whereby two-way traffic flow is introduced to Alma Avenue, north of Harrington Street).

The results of the revised SIDRA NETWORK capacity analysis of the surrounding intersections are summarised in the table on the following page, revealing that:

- all surrounding intersections currently operate at an overall average *Level of Service "A"*, "*B"* or "*C"*
- under the projected *nett increase* in projected future traffic demands expected to be generated by the Planning Proposal, all surrounding intersections will continue to operate at existing overall *Levels of Service*, with minimal increases in average vehicle delays (irrespective of whether Alma Avenue remains one-way or is converted to two-way).

In essence, the rigorous capacity analysis confirms that the traffic generation potential of the revised Planning Proposal on the subject site, even *without discounting* any traffic associated with the existing club, will not have any appreciable effect on the performance of nearby intersections (with minimal increases in delays on all approaches, if any), and that no further upgrades will be required beyond the proposed widening of Alma Avenue.

| SUMMARY RESULTS OF SIDRA NETWORK ANALYSIS OF SURROUNDING ROAD NETWORK | | | | | | |
|--|----------------------------|------------|---|------------|---|------------|
| Key Indicators | Existing Traffic Demand | | Projected Development Traffic Demand (One Way Alma Ave) | | Projected Development Traffic Demand (Two Way Alma Ave) | |
| | AM | PM | AM | PM | AM | PM |
| Stanmore Rd & Merchant St | | | | | | |
| LOS | A | A | A | A | A | A |
| DOS | 0.508 | 0.463 | 0.521 | 0.500 | 0.521 | 0.500 |
| AVD (Sec/Veh) | 10.5 | 7.5 | 10.2 | 7.3 | 10.2 | 7.3 |
| Stanmore Rd & Alma Ave (one-way) | | | | | | |
| LOS | A(A) | A(B) | A(A) | A(B) | A(C) | A(C) |
| DOS | 0.366 | 0.514 | 0.368 | 0.557 | 0.368 | 0.559 |
| AVD (Sec/Veh) | 0.7 (12.0) | 0.4 (14.9) | 0.8 (12.3) | 0.7 (15.8) | 0.9 (39.7) | 0.7 (29.1) |
| Stanmore Rd & Tupper St | | | | | | |
| LOS | A(C) | A(C) | A(D) | A(D) | A(D) | A(D) |
| DOS | 0.343 | 0.302 | 0.361 | 0.470 | 0.365 | 0.471 |
| AVD (Sec/Veh) | 1.0 (41.8) | 0.8 (38.5) | 1.1 (44.0) | 1.8 (49.3) | 1.1 (44.6) | 1.8 (49.5) |
| Stanmore Rd & Liberty St | | | | | | |
| LOS | В | В | В | В | В | В |
| DOS | 0.715 | 0.719 | 0.716 | 0.772 | 0.708 | 0.724 |
| AVD (Sec/Veh) | 23.7 | 25.5 | 23.6 | 26.4 | 23.5 | 26.6 |
| Stanmore Rd, Enmore Rd & Edgeware Rd | | | | | | |
| LOS | C | С | С | C | С | C |
| DOS | 0.847 | 0.844 | 0.863 | 0.875 | 0.854 | 0.872 |
| AVD (Sec/Veh) | 40.2 | 38.3 | 40.7 | 40.2 | 40.4 | 40.1 |
| Newington Rd & Alma Ave | | | | | | |
| LOS | A(A) | A(A) | A(A) | A(A) | A(A) | A(A) |
| DOS | 0.043 | 0.034 | 0.049 | 0.034 | 0.044 | 0.034 |
| AVD (Sec/Veh) | 1.2 (4.3) | 1.1 (4.2) | 1.4 (4.3) | 1.2 (4.2) | 1.3 (4.3) | 1.1 (4.2) |
| Newington Rd & Tupper St | | | | | | |
| LOS | A(A) | A(A) | A(A) | A(A) | A(A) | A(A) |
| DOS | 0.057 | 0.046 | 0.066 | 0.048 | 0.062 | 0.047 |
| AVD (Sec/Veh) | 1.8 (5.0) | 2.3 (4.9) | 1.7 (5.1) | 2.5 (5.0) | 1.8 (5.1) | 2.5 (5.0) |
| Newington Rd & Enmore Rd | | | | | | |
| LOS | A(B) | A(B) | A(B) | A(B) | A(B) | A(B) |
| DOS | 0.163 | 0.208 | 0.172 | 0.235 | 0.205 | 0.242 |
| AVD (Sec/Veh) | 1.1 (15.7) | 1.1 (15.6) | 1.3 (16.1) | 1.5 (17.4) | 1.4 (16.6) | 1.5 (17.6) |
| Alma Ave & Residential Driveway | | | | | | |
| LOS | - | - | A(A) | A(A) | A(A) | A(A) |
| DOS | - | - | 0.036 | 0.042 | 0.036 | 0.042 |
| AVD (Sec/Veh) | - | - | 1.1 (3.6) | 1.1 (3.6) | 1.2 (3.7) | 1.2 (5.7) |
| Tupper St & Club/Retail Driveway | | | | | | |
| LOS | - | - | A(A) | A(A) | A(A) | A(A) |
| DOS | - | - | 0.025 | 0.069 | 0.025 | 0.069 |
| AVD (Sec/Veh) | - | - | 0.9 (3.8) | 2.1 (4.1) | 0.9 (3.8) | 2.1 (4.1) |

LOS – Level of Service; DOS – Degree of Saturation; AVD – Average Vehicle Delays
Worst turning movements and respective delays indicated in brackets (sign-controlled intersections)

Criteria for Interpreting Results of Sidra Analysis

1. Level of Service (LOS)

| LOS | Traffic Signals and Roundabouts | Give Way and Stop Signs |
|-----|--|---|
| 'A' | Good operation. | Good operation. |
| 'B' | Good with acceptable delays and spare capacity. | Acceptable delays and spare capacity. |
| 'C' | Satisfactory. | Satisfactory but accident study required. |
| 'D' | Operating near capacity. | Near capacity and accident study required. |
| 'E' | At capacity; at signals incidents will cause excessive | At capacity and requires other control mode. |
| | delays. Roundabouts require other control mode. | |
| 'F' | Unsatisfactory and requires additional capacity. | Unsatisfactory and requires other control mode. |

2. Average Vehicle Delay (AVD)

The AVD provides a measure of the operational performance of an intersection as indicated on the table below which relates AVD to LOS. The AVD's listed in the table should be taken as a guide only as longer delays could be tolerated in some locations (i.e., inner city conditions) and on some roads (i.e., minor side street intersecting with a major arterial route).

| Level of Service | Average Delay per Vehicle (secs/veh) | Traffic Signals, Roundabout | Give Way and Stop Signs |
|---------------------|--|---|--|
| A | less than 14 | Good operation. | Good operation. |
| В | 15 to 28 | Good with acceptable delays and spare capacity. | Acceptable delays and spare capacity. |
| С | 29 to 42 | Satisfactory. | Satisfactory but accident study required. |
| D | 43 to 56 | Operating near capacity. | Near capacity and accident study required. |
| Е | 57 to 70 | At capacity; at signals incidents will cause excessive delays. Roundabouts require other control mode. | At capacity and requires other control mode. |

3. Degree of Saturation (DS)

The DS is another measure of the operational performance of individual intersections.

For intersections controlled by traffic signals¹ both queue length and delay increase rapidly as DS approaches 1, and it is usual to attempt to keep DS to less than 0.9. Values of DS in the order of 0.7 generally represent satisfactory intersection operation. When DS exceeds 0.9 queues can be anticipated.

For intersections controlled by a roundabout or GIVE WAY or STOP signs, satisfactory intersection operation is indicated by a DS of 0.8 or less.

The values of DS for intersections under traffic signal control are only valid for cycle length of 120 secs.

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4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 6 and comprise:

- CLEARWAY restrictions along the northern side of Stanmore Road during the weekday morning peak period
- CLEARWAY restrictions along the southern side of Stanmore Road during the weekday afternoon peak period, including along the site frontage
- NO STOPPING/NO PARKING restrictions along both sides of Stanmore Road at all other times, between Enmore Road and Tupper Street
- generally UNRESTRICTED kerbside parking along both sides of Stanmore Road in the vicinity of the site outside of weekday Clearway times, including along the western portion of the site frontage
- NO STOPPING/NO PARKING restrictions along Alma Avenue, including along the site frontage
- generally UNRESTRICTED kerbside parking along both sides of Tupper Street, including along the site frontage, and elsewhere throughout the local area.



Club Car-Parking - Site Specific DCP

Based on the proposed club's floor area, the club has the potential to accommodate up to say, 40 staff and 915 patrons.

By way of comparison, the existing club has a floor area of approximately $1,765\text{m}^2$ GFA, with approximately 173 car parking spaces, equating to an effective parking rate of 1 space per 10m^2 GFA.

Applying the existing effective parking rate of 1 space per 10m² GFA to the proposed club's floor area of 1,829m² GFA, yields an off-street parking requirement of 183 spaces.

It is pertinent to note however, that the original club approval was granted at a time when car driver rates at clubs and licensed venues tended to be much higher. Behavioral changes since that time, such as the introduction of random breath testing and the proliferation of Uber and the like, has meant that the car driver rates have reduced.

Based on detailed club member consultations and feedback, approximately 100 car spaces (including staff) are required. Furthermore, by way of comparison, the Waverley Bowling Club redevelopment was ultimately approved with a club floor area of approximately 660m^2 PFA and 77 dedicated off-street parking spaces, thereby equating to a parking rate of 1 space per $8.5m^2$ PFA. Application of that parking rate to the Cyprus Club's proposed redeveloped floor area of approximately 900m^2 PFA, yields a parking requirement of 105 spaces.

On this basis, the indicative concept scheme submitted with the revised Planning Proposal includes the provision of approximately 100 club parking spaces, which is a significant reduction to the *existing* parking provision and consistent with an equivalent venue (Waverley Bowling Club), and will therefore ensures the viability of the club moving forward. However, the exact parking rates will be established through the site-specific DCP to be prepared

With respect to the parking for the residential and retail/commercial components, it is expected that parking will be provided broadly in accordance with the *MDCP 2011* rates, which equates to a total of approximately 260-270 parking spaces across the entire site. Again, these exact rates will be established through the site-specific DCP.

The geometric design layout of the proposed car parking facilities will ultimately be designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1* in respect of parking bay dimensions, ramp gradients and aisle widths for the various user classes.

The below table demonstrates how car parking provision was calculated for the purposes of the indicative scheme, noting that actual car parking rates will be determined through the only informs the site specific DCP.

| | Car Park Summa | ary - Indic | cative Sch | neme ¹ | | | | Sche | me Provide |
|---------------------|---|----------------|-----------------------------|-------------------------|---|-----------------------------|-------------------------|-----------|------------|
| Site | Building | Units / SQM | Council Parking Rates | RMS Parking Rates | Club (Outlined Traffic Report) | Council Parking Rates | RMS Parking Rates | PP40 | 03 - PP406 |
| Site A | Building A - Residential - 1 Bed | 16 | 0.5 | 0.6 | . , | 8 | 9.6 | | |
| | Building A - Residential - 2 Bed | 8 | 1.0 | 0.9 | | 8 | 7.2 | | |
| | Building A - Residential - 3 Bed | 4 | 1.2 | 1.4 | | 4.8 | 5.6 | | |
| | Total Apartments / Visitor | 28 | 0.1 | 0.2 | | 2.8 | 5.6 | | |
| | Club @ 1,800 | 1,800 | 22.5 | | 100 | 100 | 100 | | |
| | Retail / Commercial @ 700sqm | 700 | 7+1per 45sqm > 500sqm | | | 11 | 11 | | |
| Total - S | Dir. A | | | | | 405 | 400 | | 450 |
| i otai - s | Site A | | | | | 135 | 139 | { | 150 |
| Site B | Building C - Residential - 1 Bed | 15 | 0.5 | 0.6 | | 8 | 9 | | |
| | Building C - Residential - 2 Bed | 22 | 1.0 | 0.9 | | 22 | 20 | | |
| | Building C - Residential - 3 Bed | 11 | 1.2 | 1.4 | | 13 | 15 | | |
| | Building D - Residential - 1 Bed | 0 | 0.5 | 0.6 | | - | 4 | | |
| | | 6 | 0.5 | | | 3 | 4 18 | l — | |
| | Building D - Residential - 2 Bed Building D - Residential - 3 Bed | 20 4 | 1.0 | 0.9 | | 20 5 | 18 6 | | |
| | Building D - Residential - 3 Bed | 4 | 1.2 | 1.4 | | 5 | 0 | | |
| | Total Apartments / Visitor | 78 | 0.1 | 0.2 | | 8 | 16 | | |
| Total - | Site B | | | | | 78 | 87 | | 90 |
| Site C | Townhouses / Terrace Housing - 2 Bed | 2 | 1 | | | 2 | 2 | | |
| 2.10 0 | Townhouses / Terrace Housing - 3 Bed | 8 | 1 | | | 8 | 8 | | |
| | Total Dwellings | 116 | | | | , | | | |
| Total - S | | | | | | 10 | 10 | | 19 |
| Total Cars Required | | | | | | 223 | 236 | | 259 |
| | | | | | | | | | |
| 1. The s | scheme provided in the urban design repor | t is indica | tive only v | vith the fu | ture DCP | controlling | the even | tual sche | me |

As noted in the foregoing, at this stage it is not yet known what type of "control point" will be implemented at the club/retail car park entry – e.g., boom gate, number plate recognition, etc. Appendix D of *AS2890.1:2004* provides detail on the capacity of entry and exits at large car parks, with boom gates capable of allowing in the order of 300 vehicles/hour/lane, whilst number plate recognition (or "free flow") capable of allowing in the order of 600 vehicles/hour/lane.

Based on a more restrictive/conservative boom gate control point design within the club/retail car park, and the estimated peak vehicle trips detailed in Chapter 3 of this report, a high-level queuing analysis indicates that the 98th percentile queue lengths at the entry and exit control points will be in the order of 3 cars.

Along with the proposed removal of kerbside parking along the northern end of the western side of Tupper Street, drivers exiting the club/retail parking area will be able to turn left back onto Stanmore Road in an orderly fashion.

Whilst minimising any impact to neighbouring residential streets is always a priority, such as Tupper Street and Harrington Street to the south of the site, it is difficult to "discourage" drivers to avoid those roads without physical or legal restrictions.

Furthermore, restricting the development's residential traffic to right-out only (and avoiding Harrington Street) and club/retail traffic to left-out only (and avoiding Tupper Street to the south), would add additional traffic load to the Stanmore Road/Alma Street and Stanmore Road/Tupper Street intersections.

Introducing measures to "discourage" development traffic to avoid Harrington Street and Tupper Street to the south can be further explored at DA stage, however the traffic analysis determined that this was not required and that development traffic using these roads will be minimal.

Loading/Servicing Provisions

Loading/servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles from vans, wagons and utilities up to and including 8.8m long medium rigid trucks. In this regard, a dedicated loading bay is proposed to be provided within the lower ground floor level, underneath the club building.

The manoeuvring area will ultimately be designed to accommodate the swept turning path requirements of these MRV trucks, allowing them to enter and exit the site in a forward direction at all times via the Tupper Street access ramp.

The geometric design layout of the proposed loading facilities will also ultimately be designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2* in respect of loading dock dimensions, overhead clearances, ramp gradients and service area requirements for 8.8m MRV trucks.

Recommendations of next steps for measures to reduce private vehicle trip generation and demand, and maximise public transport patronage:

It is recommended than any development application, is conditioned to include a Green Travel Plan (GTP) to bring about better transport arrangements to manage travel demands, particularly promoting more sustainable modes of travel, modes which have a low environmental impact such as walking, cycling, public transport and better management of car use.

As part of a GTP, a number of policies and procedures would be put in place at the site to encourage transport choice to and within the site, namely public transport, walking and cycling. These measures would effectively assist in managing the use of private vehicle trips and parking within the area to reduce congestion and cumulative impacts of vehicle emissions upon air quality.

A GTP is a package of coordinated strategies and measures to promote and encourage sustainable travel, such as walking, cycling and public transport etc. Such plans aim to influence the way people move to/from a business, residential complex or any other organisation to deliver better environmental outcomes and a range of travel choices, whilst also reducing the reliance on private car usage, particularly single occupancy car trips.

The planning of the new development would need to accommodate innovative ideas to better manage the transport demand of the project. It would be necessary to introduce new measures to ensure that trips generated by the proposed development are not solely private car based, particularly single occupancy trips. An example of a successful GTP is the one implemented at Harold Park. The green travel plan incorporates concepts to reduce reliance on cars, by facilitating a modal shift towards public transport usage as opposed to car usage, particularly for single-occupancy car trips.

As such, it is proposed to provide a green travel plan as part of the CCC proposed development, with green travel plan initiatives intended to be provided prior to the occupation of the site.

This travel plan would aim to achieve a lower car driver mode upon occupation compared with comparable sites. These green travel plan initiatives would promote the use of more sustainable modes of travel (i.e., walking, cycling, car share and public transport) and subsequently, reduce vehicle trips to/from the area. Such measures would include (but not limited to):

- Appointment of a Travel Plan Co-ordinator to ensure the ongoing monitoring and evaluation of the plan.
- The Cyprus Club providing a bus service to transport multiple patrons to and from the club
- Providing information and ensuring the development ties in with the sustainable active travel initiatives outside of the site.
- Provision of a Transport Access Guide (TAG) given to every new occupant of the dwelling
- Creation of high-quality pedestrian/shared environments and cycling facilities to encourage cycling and walking
- Provide car sharing facilities and promote the availability of such car sharing pods to reduce private car ownership
- Provide free opal cards to all residents upon occupation with pre-loaded credit so that travel
 patterns can be influenced from Day 1 and or club patron with their new or renewed
 membership
- Provision of public transport noticeboards to notify all residents/occupants of the alternate transport options available and a transport access guide for all new occupants
- Provision of high-quality telecommunication points to reduce the need for travel off-site
- A half yearly newsletter for every resident after occupation to outline the latest news on sustainable travel initiatives in the area.
- Provision of free yearly GoOccasional, car share membership for the initial occupation of dwellings to allow two drivers registered per membership
- Provision of bicycle parking spaces for both residents and visitors in accordance with council requirements.

Thus, it is envisaged that the implementation of a green travel plan could reduce trips generated by the development, particularly to target residents and staff within the proposed development site.

Conclusion

The foregoing has found that all surrounding intersections are expected to continue to operate at existing *Levels of Service* under the revised Planning Proposal scenario (with minimal increases in delays on all approaches), and that no infrastructure upgrades will be required, beyond the proposed widening of Alma Avenue. Whether Alma Avenue remains as one-way or is converted to two-way makes little difference to the network, however it does remove a portion of the development's residential traffic off the local road network.

Furthermore, the proposed development will also ultimately satisfy Council's off-street parking requirements for the residential and retail/commercial components whilst also providing sufficient parking for the club to ensure its viability into the future.

It is therefore reasonable to conclude that the proposed development will not have any unacceptable implications in terms of road network capacity or off-street parking/loading requirements.

APPENDIX A

ARCHITECTURAL CONCEPT PLANS

SITE DATA

Current Proposal

Site:

56-78 Stanmore Road, Stanmore 2-20 Tupper Street, Stanmore 1-9 Alma Avenue, Stanmore

Site Area:

9129 m2 (original site area) 8438 m2 (after road widening to Alma Avenue)

Site Dimensions:

66.5 m to Stanmore Road 139.5 m to Alma Avenue 140 m to Tupper Street

Proposal Summary

Zoning

Part Mixed Use (B4) and part General Residential (R1)

Massing:

Perimeter block massing consisting of buildings facing Stanmore Road, Tupper Street and Alma Avenue highly articulated building forms in both plan and elevation buildings step to reflect site falls.

Use

Approx. 1600 - 2000 m2 of club building over 2 levels

Approx. 500-700 m2 of commercial /retail space at ground level facing Stanmore

Approx. 106 residential units + 10 Terrace Houses

Road Widening

approx. 700 m2 of land dedicated for road widening along Alma Avenue (5.m wide)

Public Open Space:

- approx. 400 m2 public plaza located at the northern end of the site facing Stanmore Road
- approx. 600 m2 of a public park off Alma street as shown

Communal Open Space:

 approx. 2215 m2 of communal open space at ground levels, as per ADG guidelines. Roof level areas removed

Through Site Link:

- Lane A: Publicly accessible shared pedestrian zone & thru site link extending Harrington Street. Potential for dedication to Council (subject to Council consideration)
- Lane B: Publicly accessible shared vehicular / pedestrian zone & thru site link connecting Alma Avenue and Tupper Street

Parking

- Site A: approx. 150 spaces over three levels
- Site B: approx. 90 spaces over two levels
- Site C: approx. 20 spaces

Height:

- 5 Storey Stanmore Road (upper two levels set back)
- 4 Storey Alma Avenue (upper level set back)
- 5/6 Storey Tupper Street (upper level set back)
- Townhouses (Site C)

Setbacks

2 - 6 m (in addition to upper level setbacks on building on site A and B)

Recommendations

- 1. Approx 5m wide / 700 m2 of land dedicated for road widening along Alma Avenue, in addition to new footpath of 1.8 m adjoining the site and 1.7 m on the opposite side of Alma avenue as per diagram PP403
- 2. i) publicly accessible thru site link extending Harrington Street with potential for dedication to Council LANE A (PP404)
 - ii) publicly accessible through site link connecting Alma Avenue and Tupper Street LANE B (PP404)
- Site is not subdivided Land remains owned into perpetuity by the Cyprus Club
- Setbacks to Stanmore Road of min 4.5 m Setbacks to Tupper Street of between 2 m and 5 m Setbacks to Alma Avenue between 2 m and 3 m, excluding road dedication
- 5. Approx. 600 m² Common Open Space (Urban Pocket Park) adjacent to Alma St. Landscaping, children's playground, public seating area provided.
 - The centrepiece of the Urban Pocket Park will be a large existing tree (not previously proposed to be retained) and confirmed by our Arborist consultant as worthy of retention
- Approx. 400 m² of public plaza at the northern end of the site facing Stanmore Road
- 7. Nom. 1000 m2 internal residential courtyard extending the length of the Site B
- 8. Mixed Use (B4) Zoning to upper portion of site (Site A) and General Residential (R1) Zoning to the middle and lower portions of the site (Site B + Site C)
- 9. Maximum building heights of:
 - SITE A 21 m
 - SITE B 17-21 m
 - SITE C 11 m
- 6. i) building heights of 4-5 storeys fronting Stanmore Road with the upper most storey setback 3 m on all sides from the external wall of the floor below
 - ii) building heights of 4 storeys fronting Alma Avenue with the upper most storey setback 3 m from the Alma Avenue external wall of the floor below
 - iii) building heights of 4 6 storeys fronting Tupper Street with the upper storey (small area) setback 9 m from the Tupper Street external wall of the floor below and 6 m from the lane A external wall of the floor below. Half storey removed
- 10. Maximum AHD building heights as setout in PP412 11. Permissible

Floor Space Ratio of

- SITE A & SITE B COMBINED 1.75 : 1
- SITE C 1.0 : 1

INTRODUCTION / INFORMATION 9

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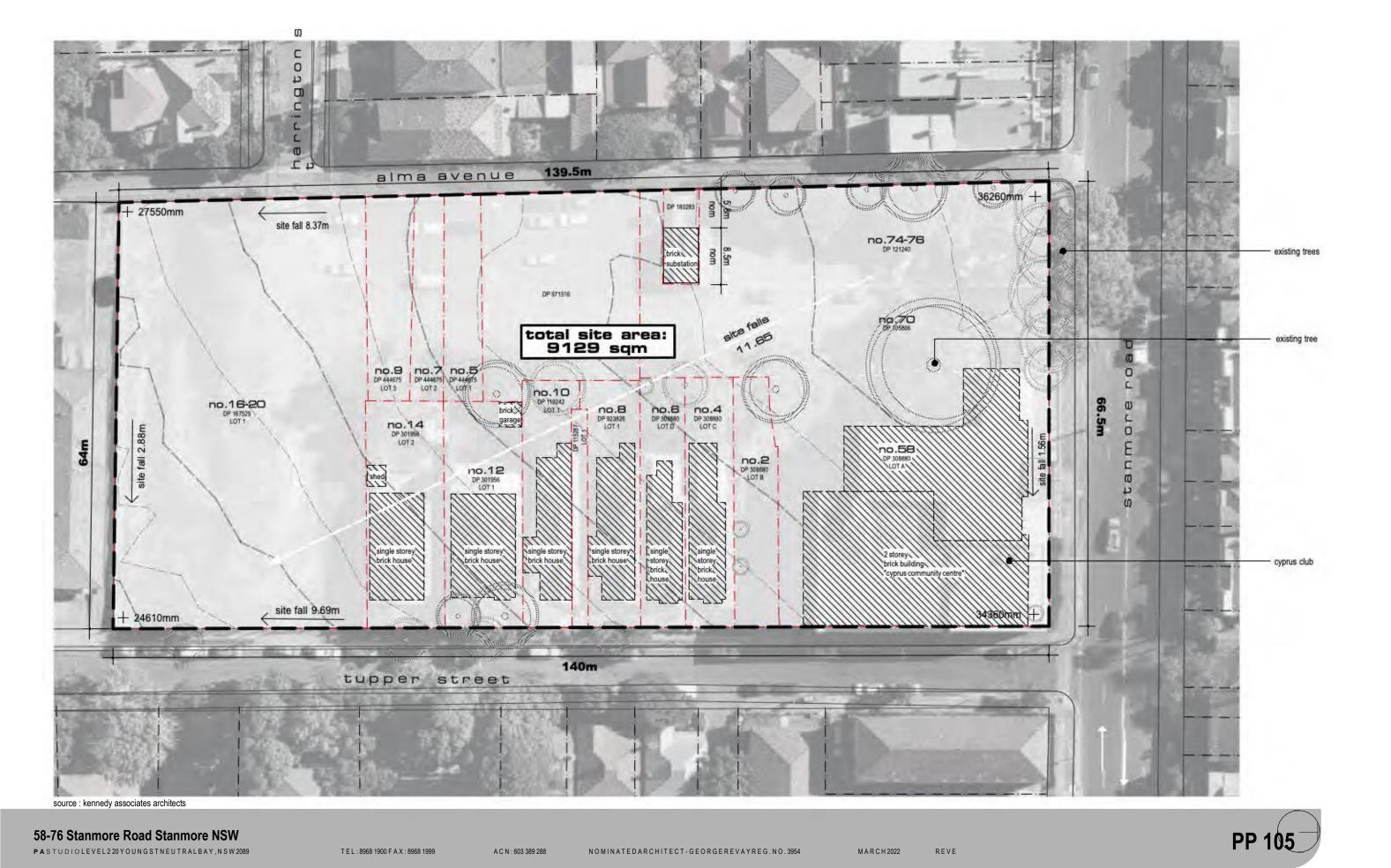
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ACN: 603 389 288

NOMINATED ARCHITECT - GEORGEREVAYREG. NO. 3954

MARCH 2022

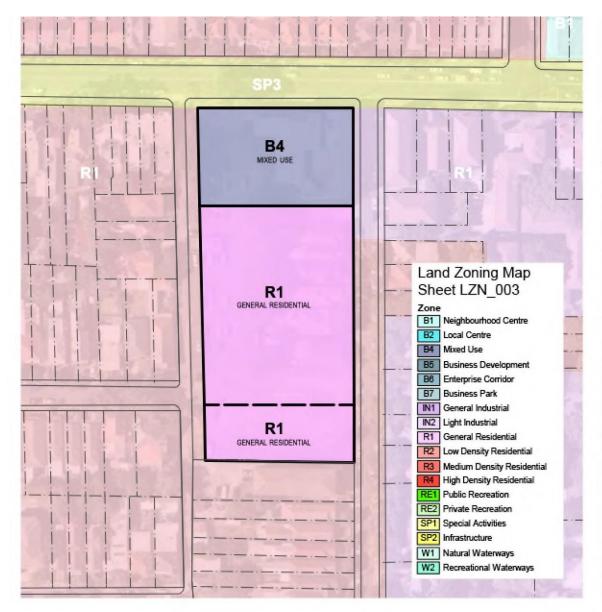
REVE

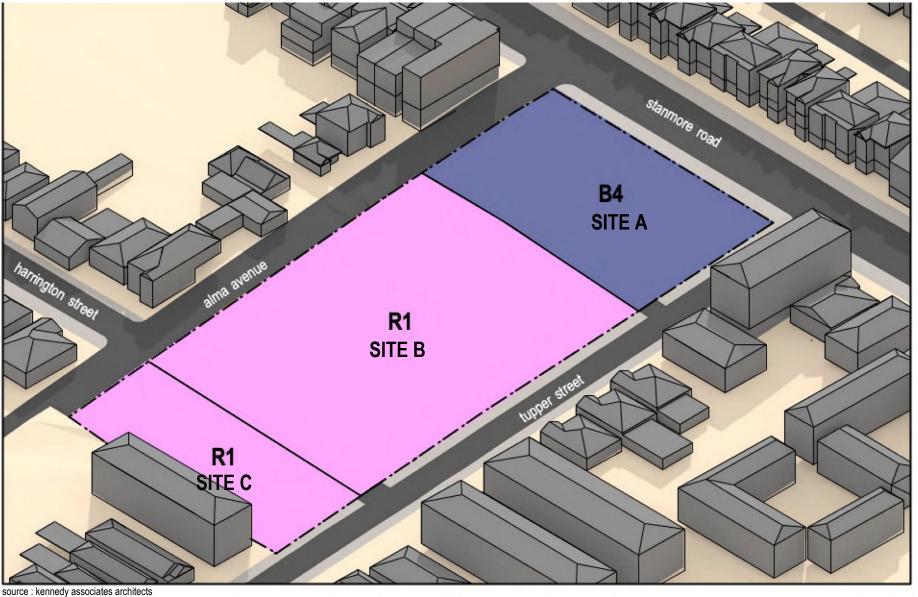


EXISTING SITE

URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:

scale 1:500





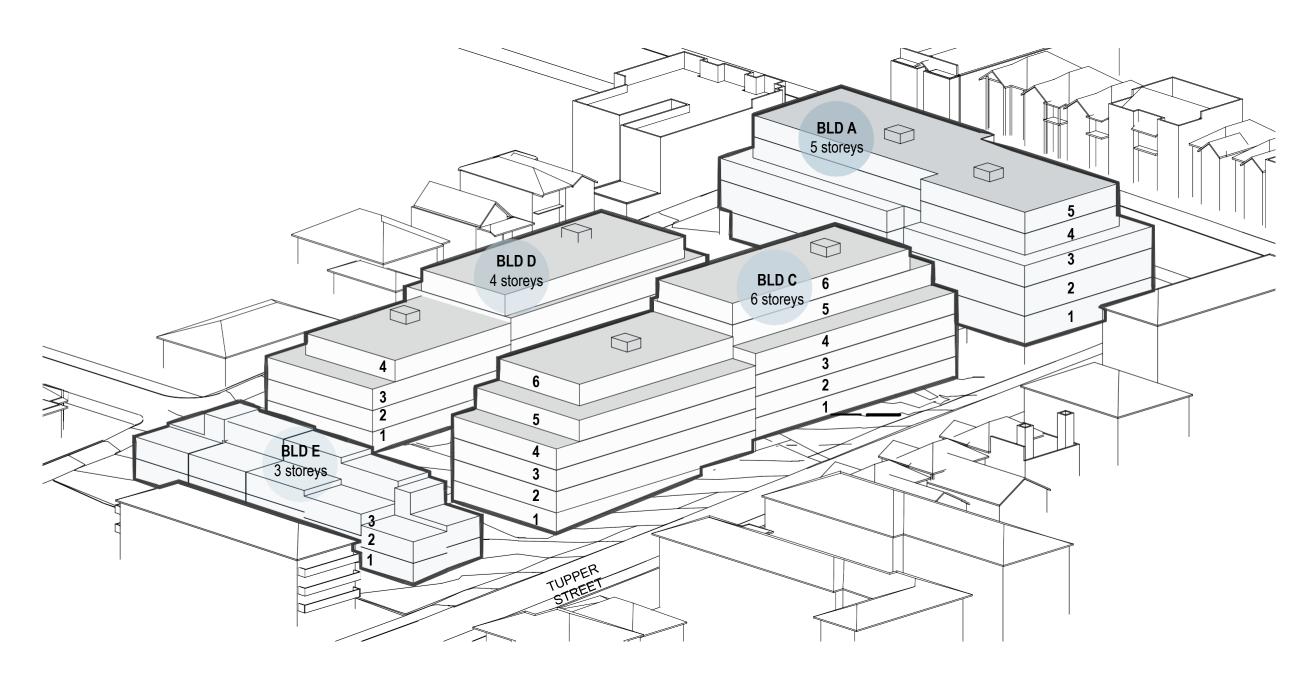
ZONING

| location | zoning | proposed use |
|----------|---|--|
| SITE A | B4 - mixed use | BLD A registered club (ground + first floors) |
| | note: Site A to be inlculded on MLEP schedule 1 with additional permitted use of a 'residential flat building' as part of a mixed use development | residential apartments above (upper floors) retail / commercial (basement + ground floors) |
| SITE B | R1 - General Residential | BLD A + B residential flat buildings |
| SITE C | R1 - General Residentiall | BLD E towhnhouses / terrace housings |



URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:

REVE



BUILDING HEIGHT IN STOREYS

| location | | no. storeys | |
|----------|------------|-------------|--|
| SITE A | building A | 5 storeys | |
| SITE B | building C | 6 storeys | |
| | building D | 4 storeys | |
| SITE C | building E | 3 storeys | |

NOTE:

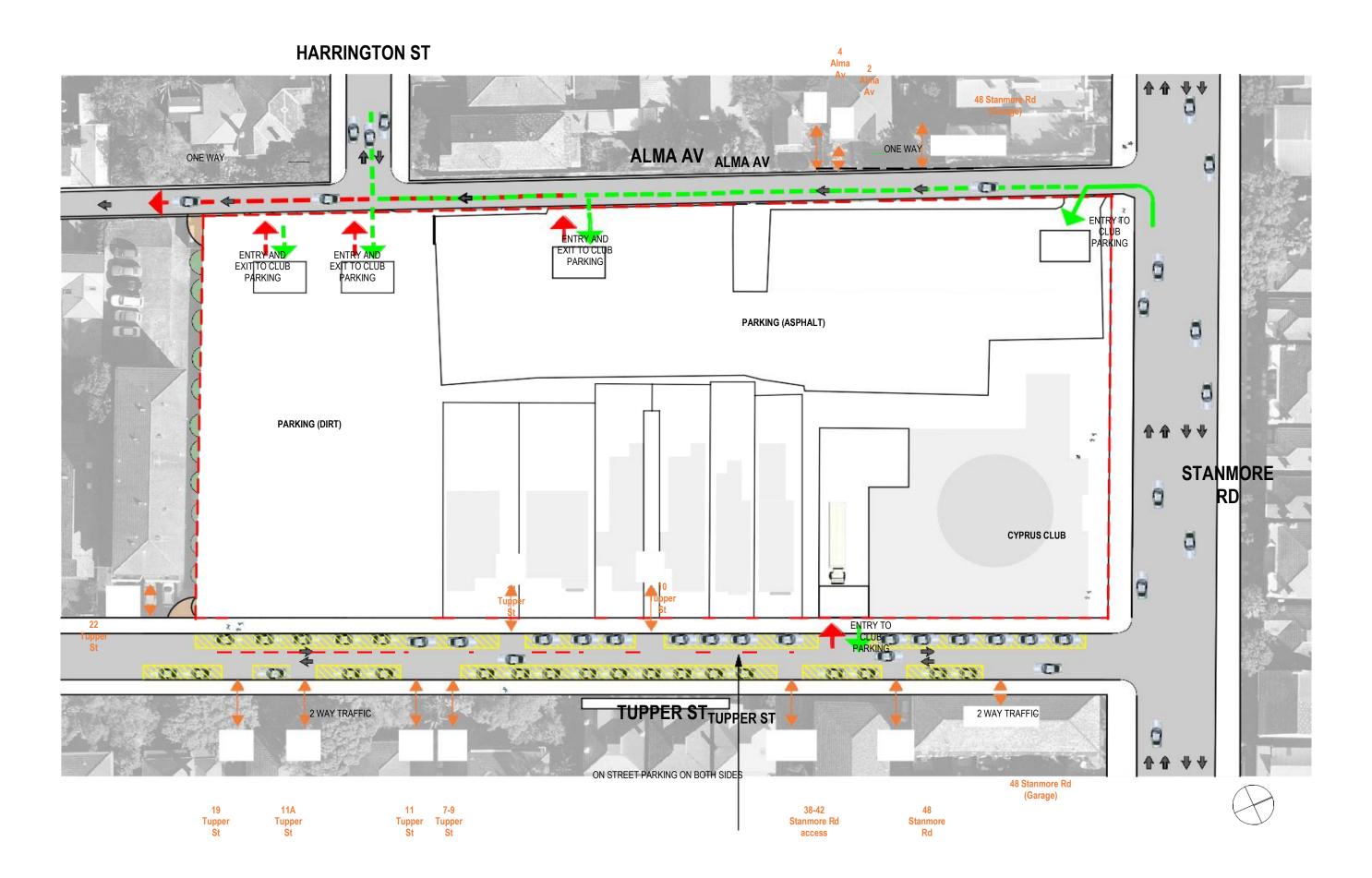
number of storeys excluded basement carparkig including where parts of basement is raised more than 1m above ground level due to site falls.

storeys are counted above ground level for street frontages and above podium level for the interior portion of buildings C+D.

BUILDING HEIGHT - STOREYS

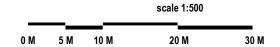
URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:

REVE

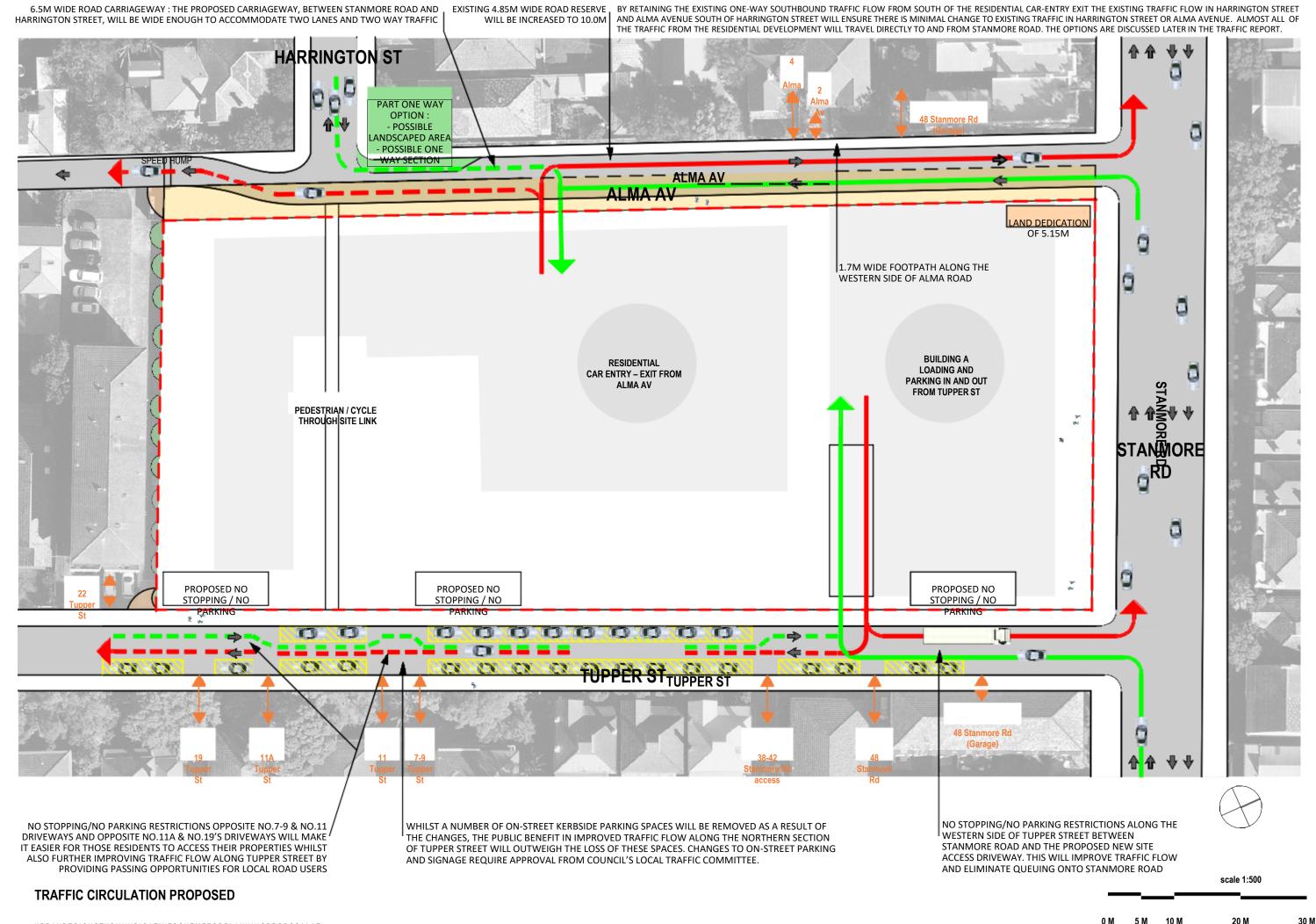


PRESENTLY, TUPPER STREET IS DESIGNATED AS A TWO-WAY ROAD, HOWEVER TWO VEHICLES CANNOT PASS ONE ANOTHER AND VEHICULAR ACCESS IS DIFFICULT TO ENTRIES TO EXISTING APARTMENT BUILDINGS BECAUSE OF PARKED CARS

TRAFFIC CIRCULATION EXISTING



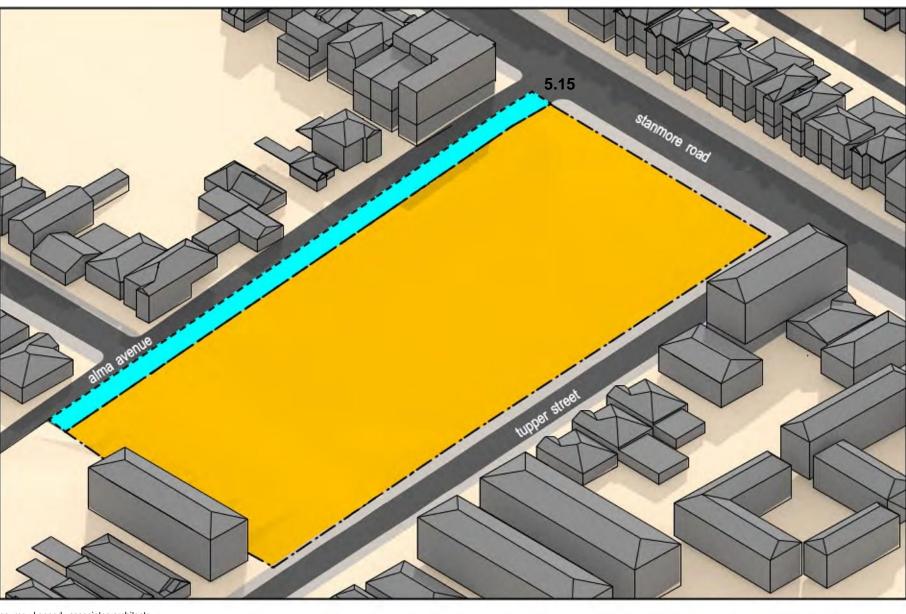
PASTUDIOLEVEL 2 20 YOUNG STNEUTRALBAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



PASTUDIOLEVEL 2 20 YOUNGSTNEUTRAL BAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



ALMA AVENUE VIEW FACING NORTH



source : kennedy associates architects

ROAD WIDENING

| location | width | area (m²) |
|-------------|-------|-----------|
| ALMA AVENUE | 5.15m | 697 |

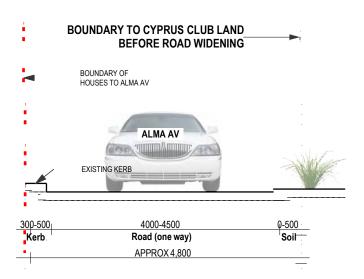
^{*}see diagram PP314 for road widening details

Alma avenue is currently a one-way traffic. By expending it, we will allow a two-way street along our site.

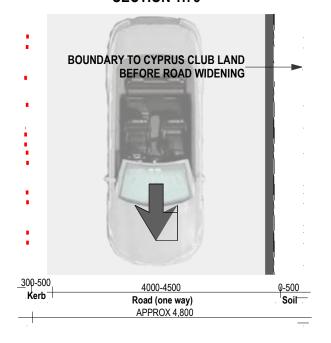
ALMA AVENUE WIDENING

URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:

EXISTING PROPOSED



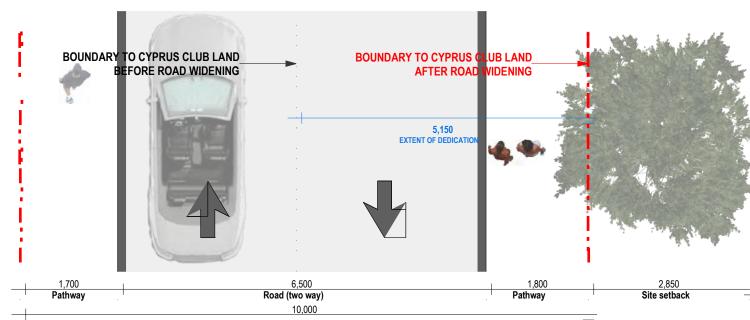
SECTION 1:75



PLAN 1:75

BOUNDARY TO CYPRUS CLUB LAND BEFORE ROAD WIDENING BOUNDARY OF HOUSES TO ALMA AV NEW FOOTPATH TO HOUSES TO WEST SIDE OF ALMA ST 1,700 6,500 Pathway Road (two way) Pathway Site setback

SECTION 1:75



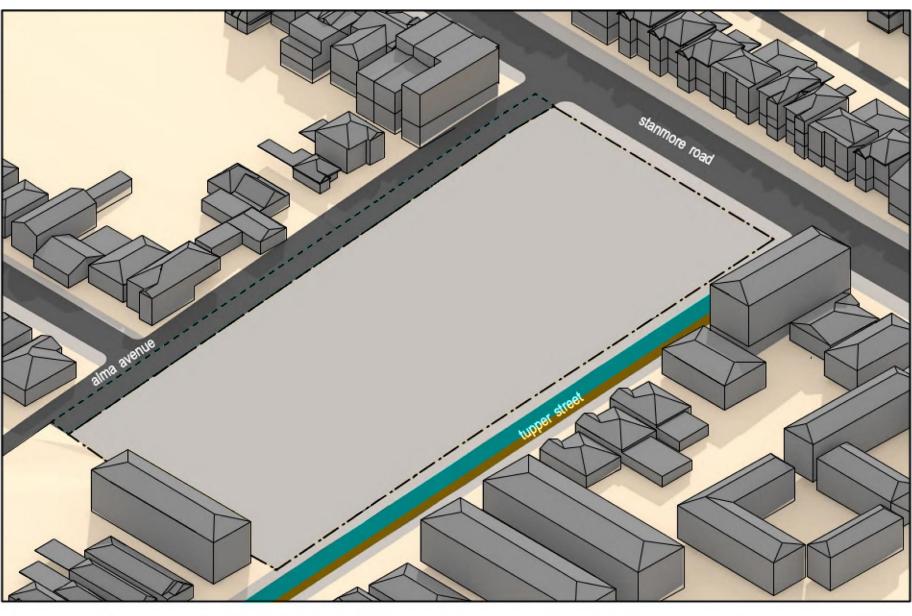
ALMA AVENUE WIDENING DETAILS

URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:

REVE



TUPPER STREET VIEW FACING SOUTH



PARKING CHANGE *see diagram PP316 for details

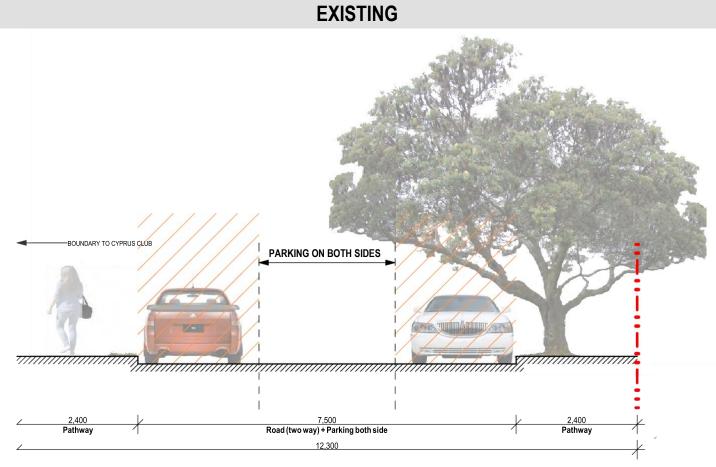
Tupper street is very narrow. It is only 7.5 metres wide and two cars cannot pass each other without pulling into driveways or reverse manoeuvring.

Tupper Street will be 2 way allowing vehicles to easily enter and exit the car-park, reduce any likelihood of queuing onto Stanmore Road.

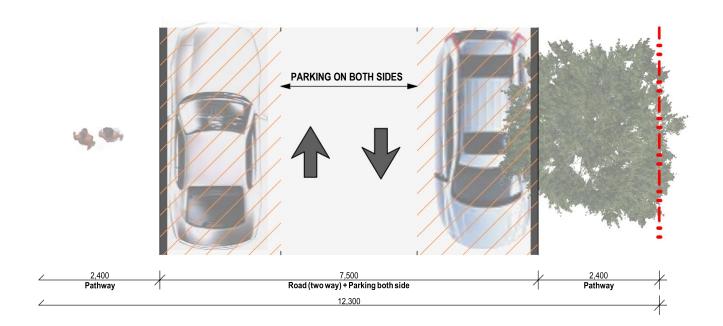
Parking on the west side of Tupper Street traffic will be partially removed.

Entry to the basement car-park will be close to Stanmore Road.

URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:



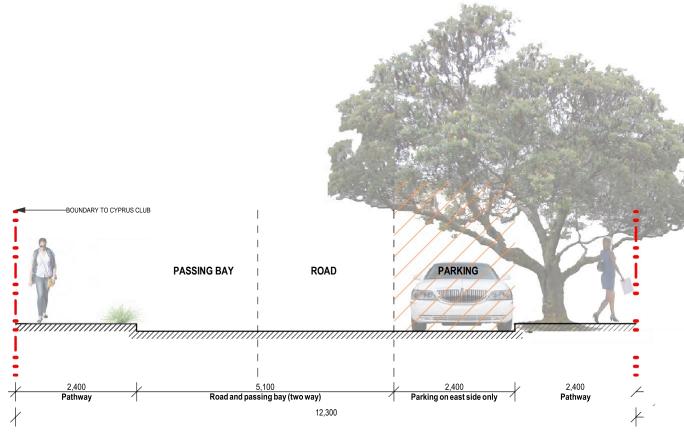
SECTION 1:75



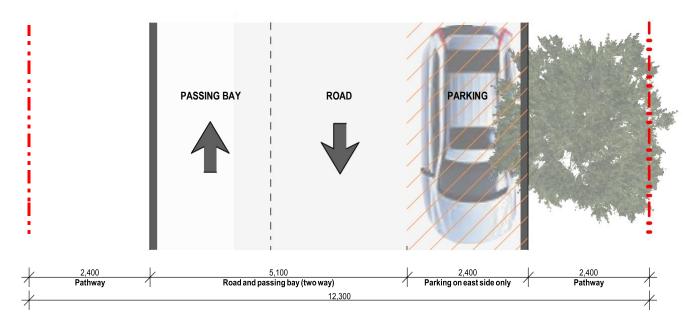
PLAN 1:75

TUPPER STREET PARKING CHANGE DETAILS
URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:

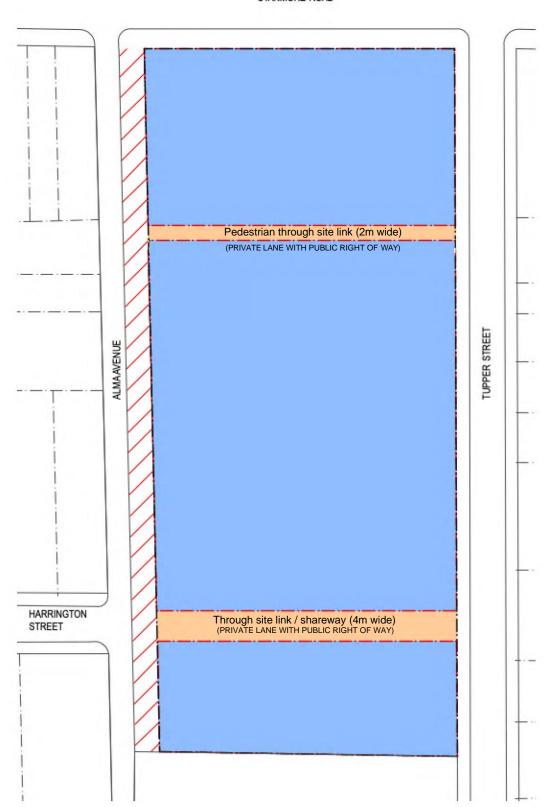
PROPOSED

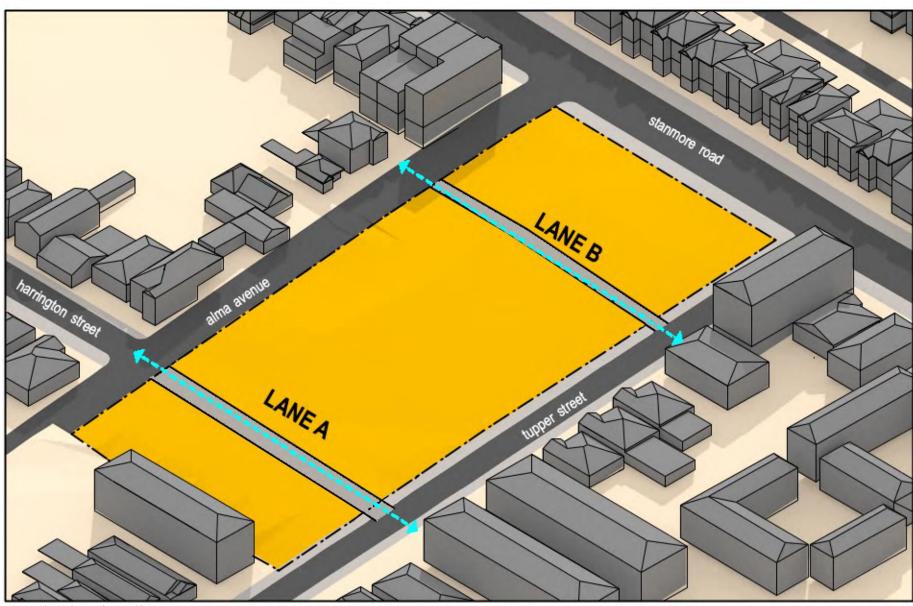


SECTION 1:75



PLAN 1:75





source : kennedy associates architects

LANES

| name | width | domain |
|--------|-------|---|
| LANE A | 4m | private lane with public right of way (potential of council ownership) |
| LANE B | 2m | private lane with public right of way (potential of council ownership) |

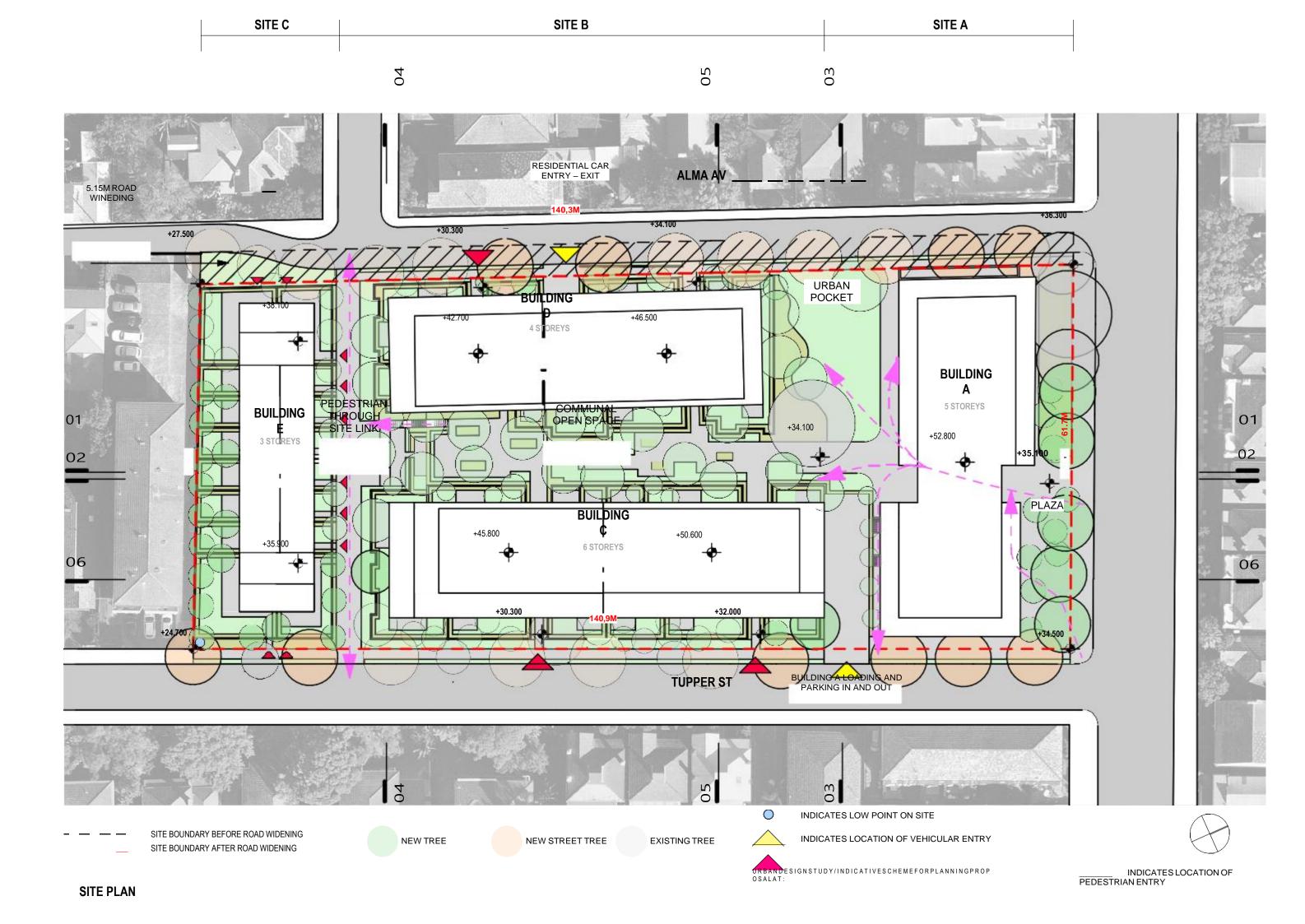


URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:









scale 1:500 0 M 5 M 10 M 20 M 30 M

58-76 Stanmore Road Stanmore NSW

PASTUDIOLEVEL220YOUNGSTNEUTRALBAY,NSW2089

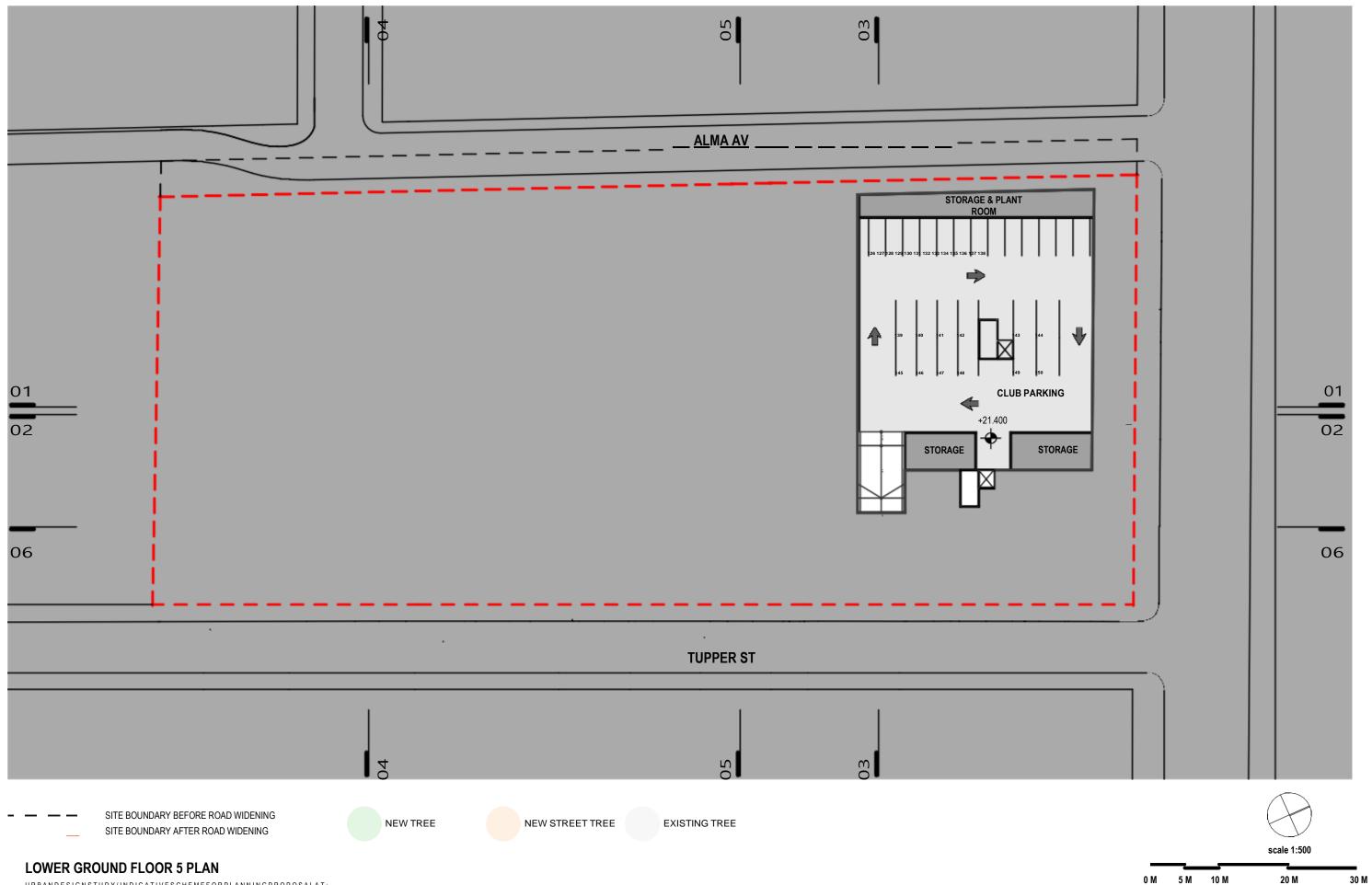
T E L: 8968 1900 F A X: 8968 1999

A C N: 603 389 288

NOMINATEDARCHITECT-GEORGEREVAYREG.NO.3954

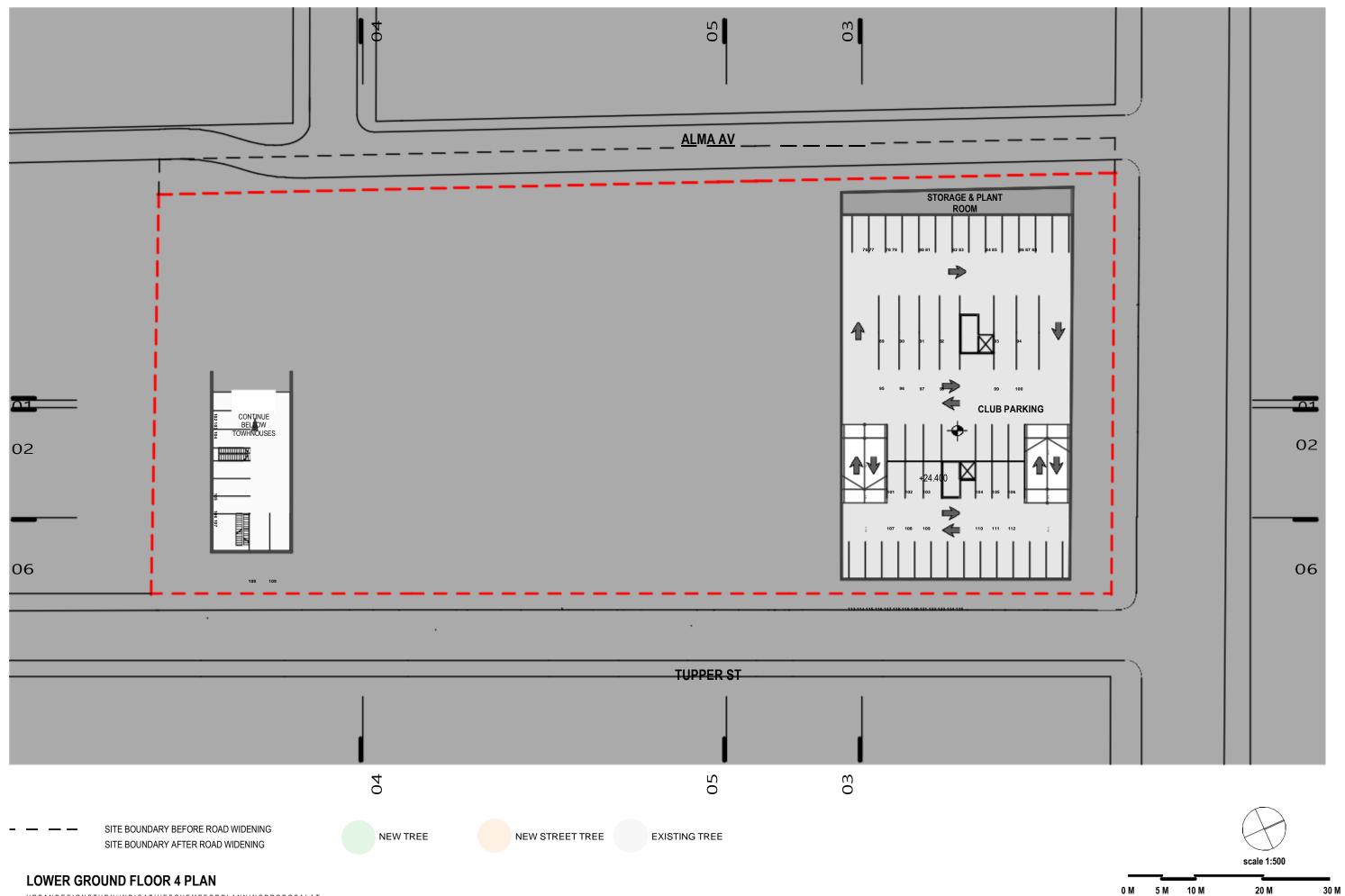
M A R C H 2022

REVE

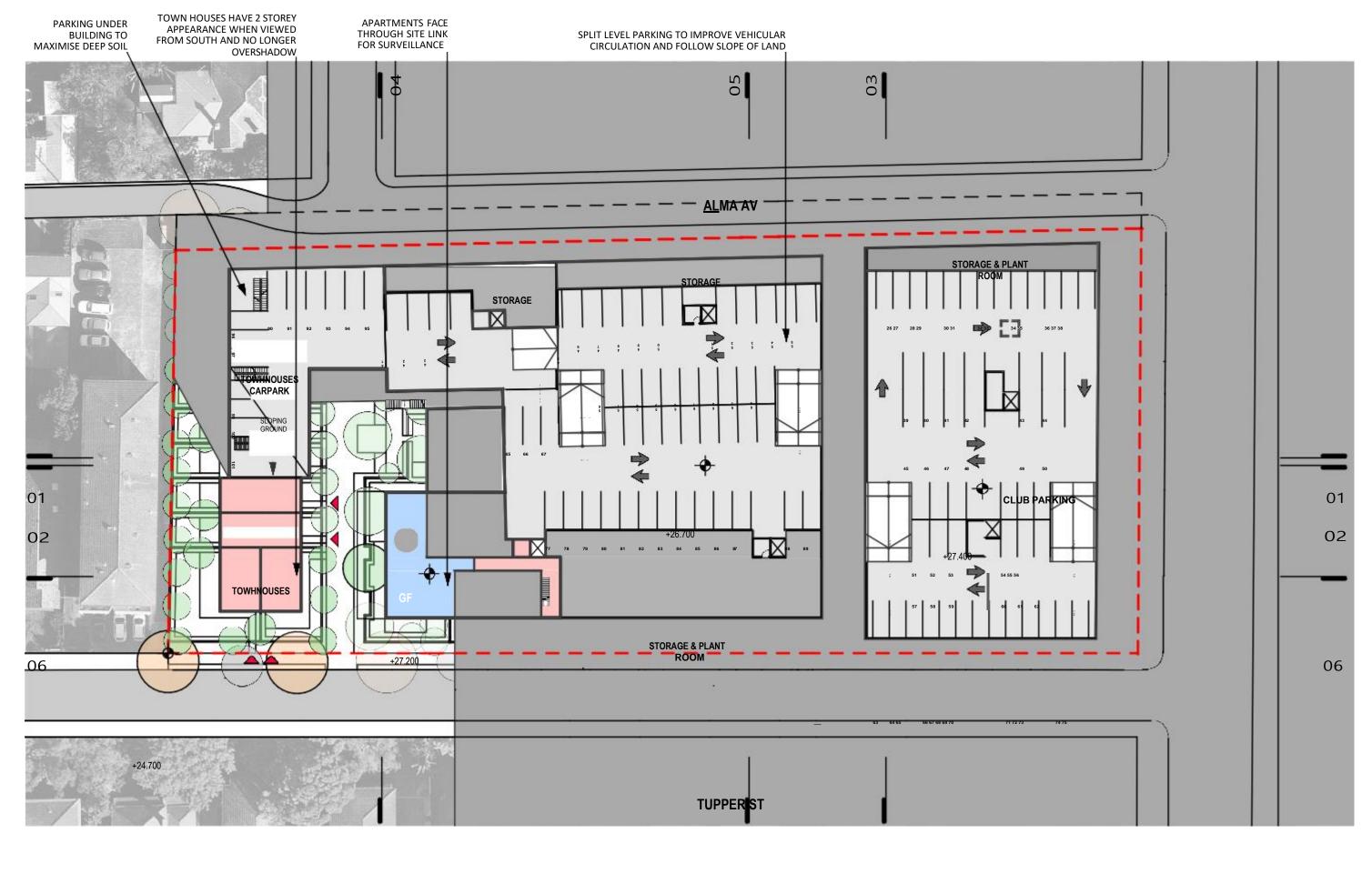


URBANDESIGNSTUDY/INDICATIVESCHEMEFORPLANNINGPROPOSALAT:

PASTUDIOLEVEL 2 20 YOUNGSTNEUTRALBAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



PASTUDIOLEVEL 2 20 YOUNGSTNEUTRALBAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



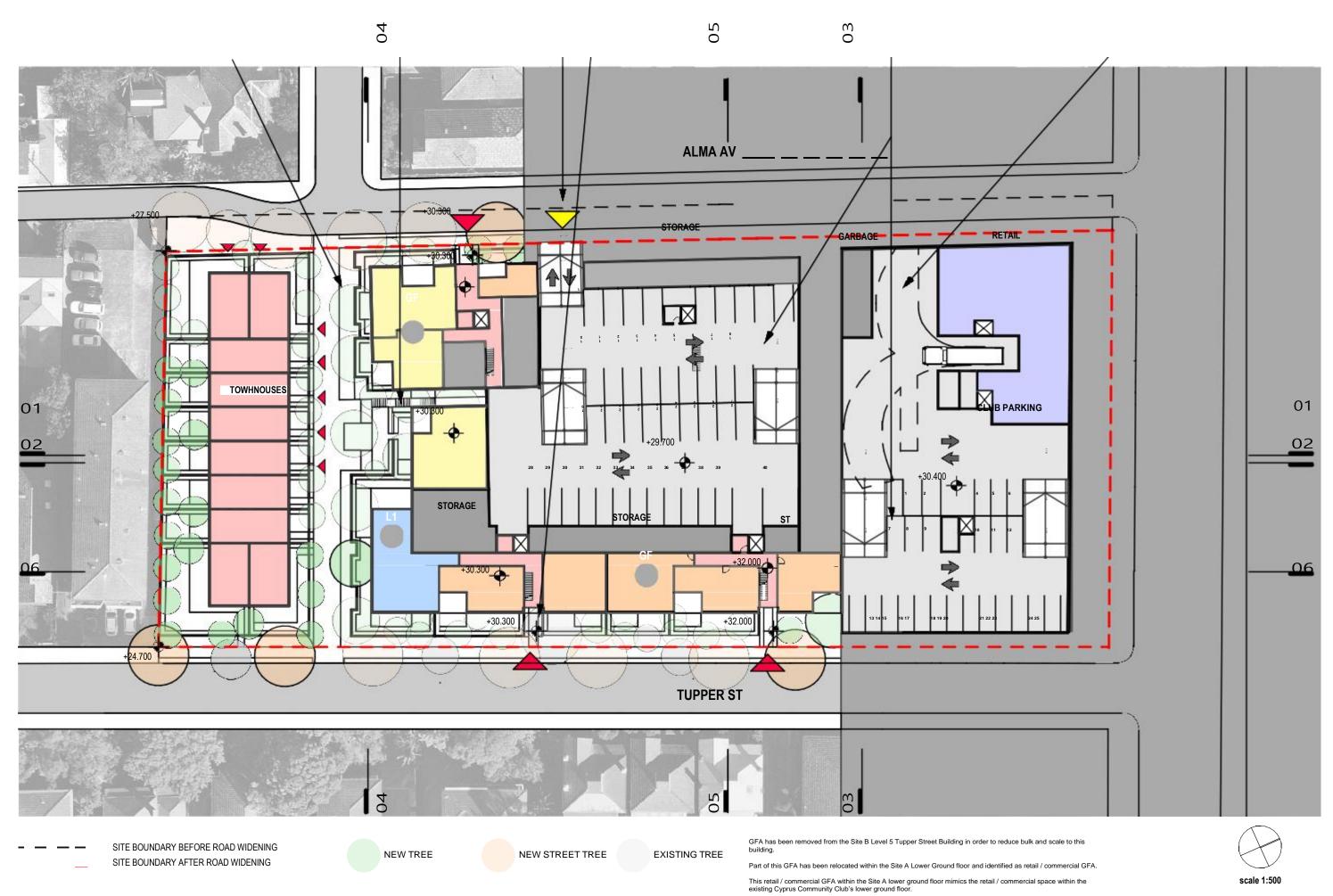




0 M 5 M 10 M 20 M 30 M

58-76 Stanmore Road Stanmore NSW

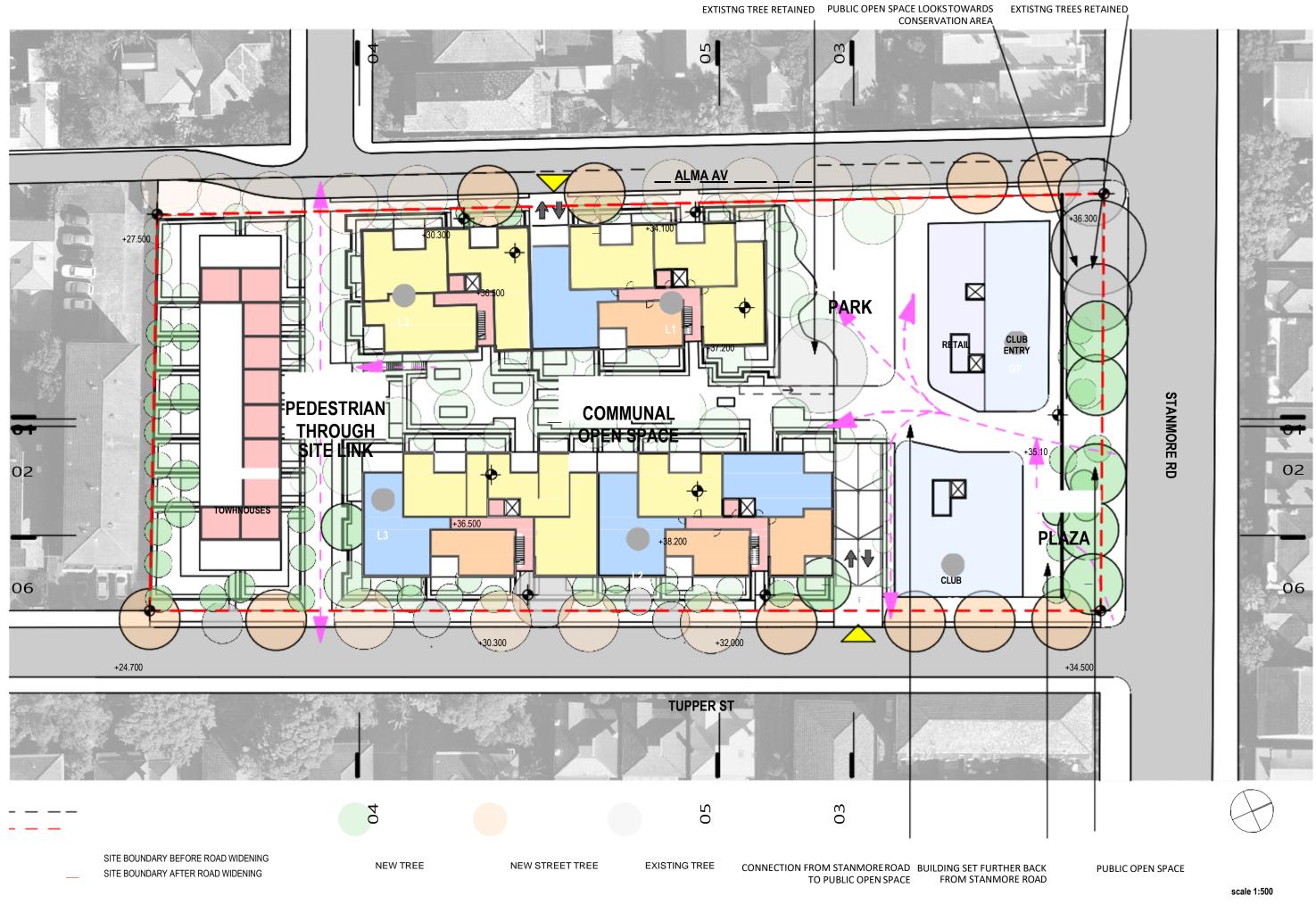
PASTUDIOLEVEL 2 20 YOUNG STNEUTRAL BAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



PASTUDIOLEVEL 2 20 YOUNG STNEUTRAL BAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



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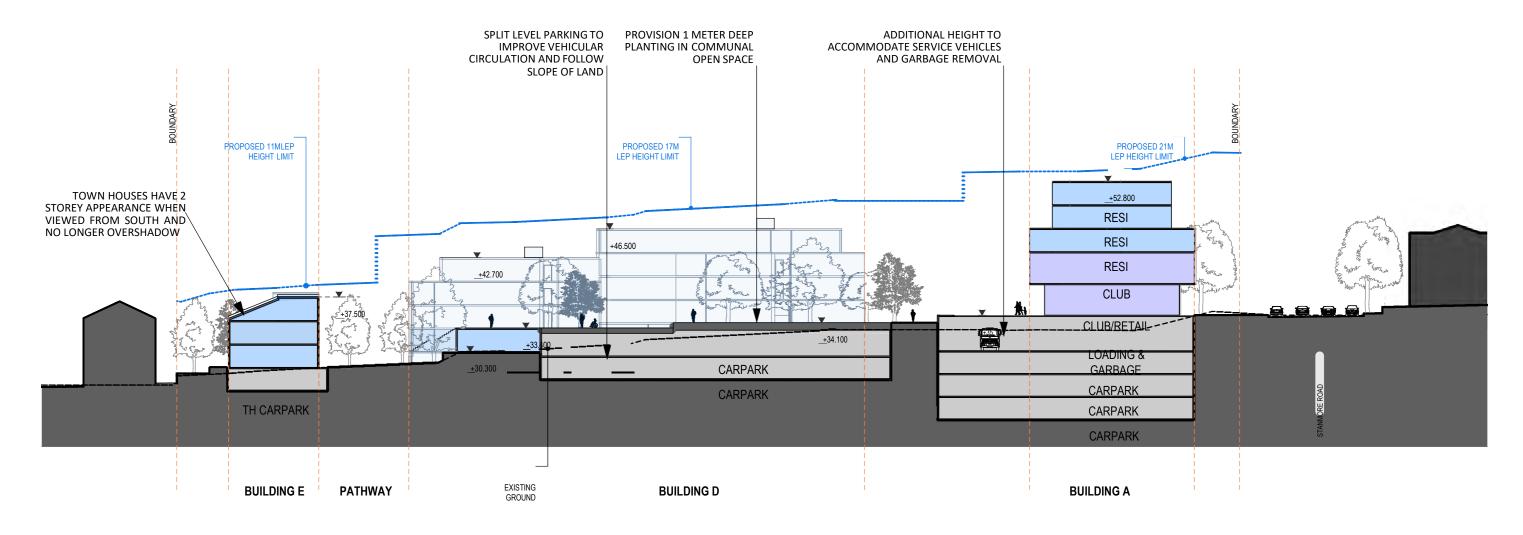


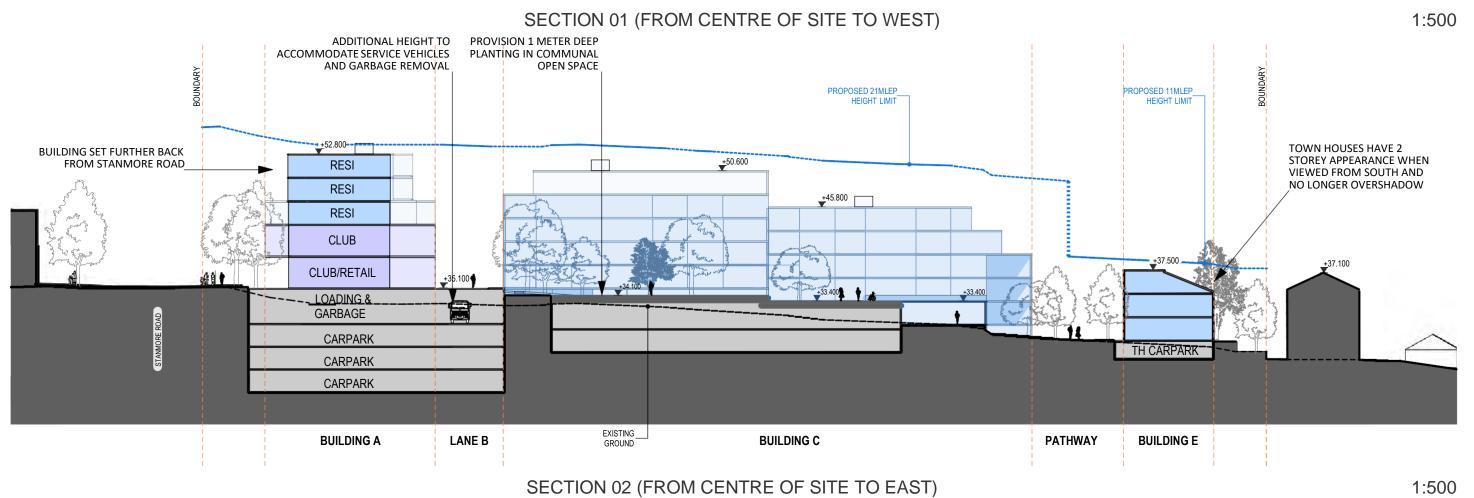
0 M 5 M 10 M

20 M

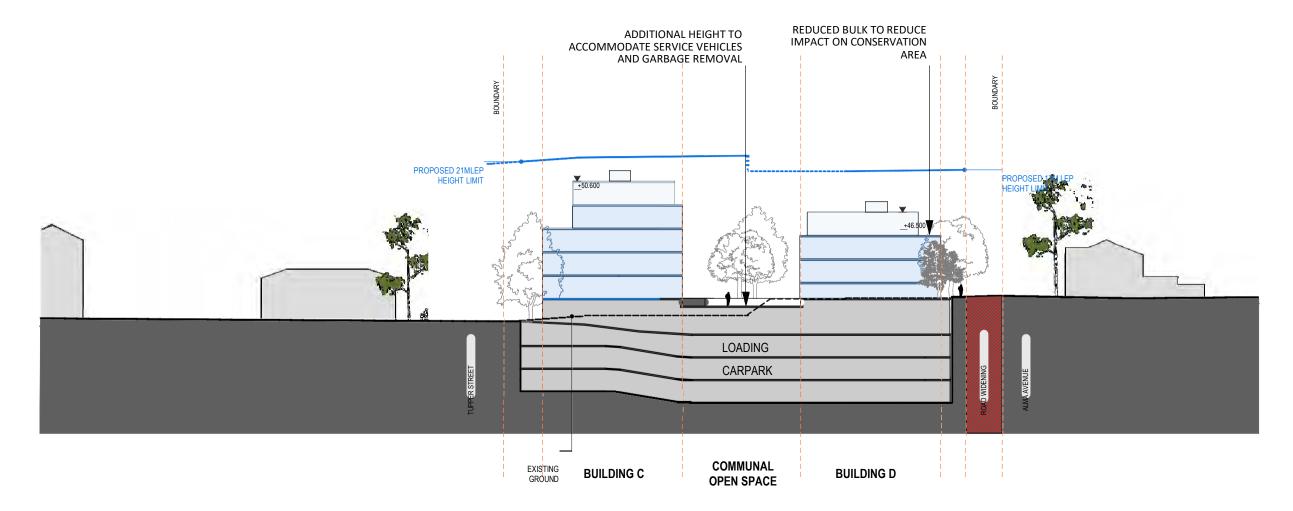
30 M

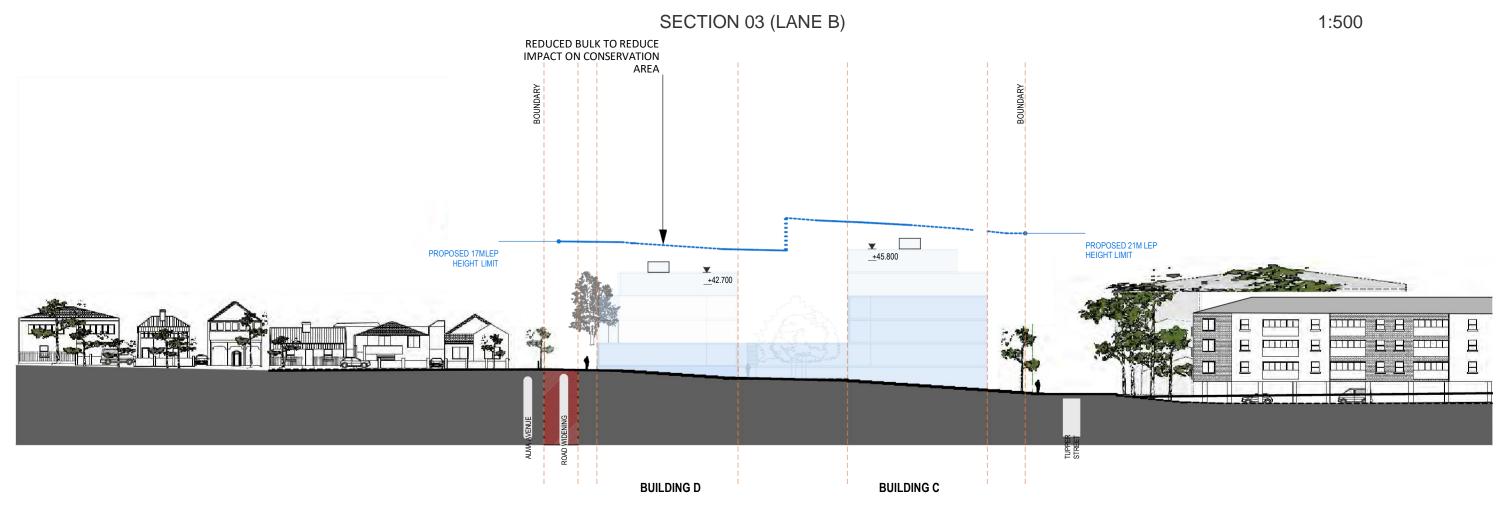
PASTUDIOLEVEL 2 20 YOUNGSTNEUTRALBAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



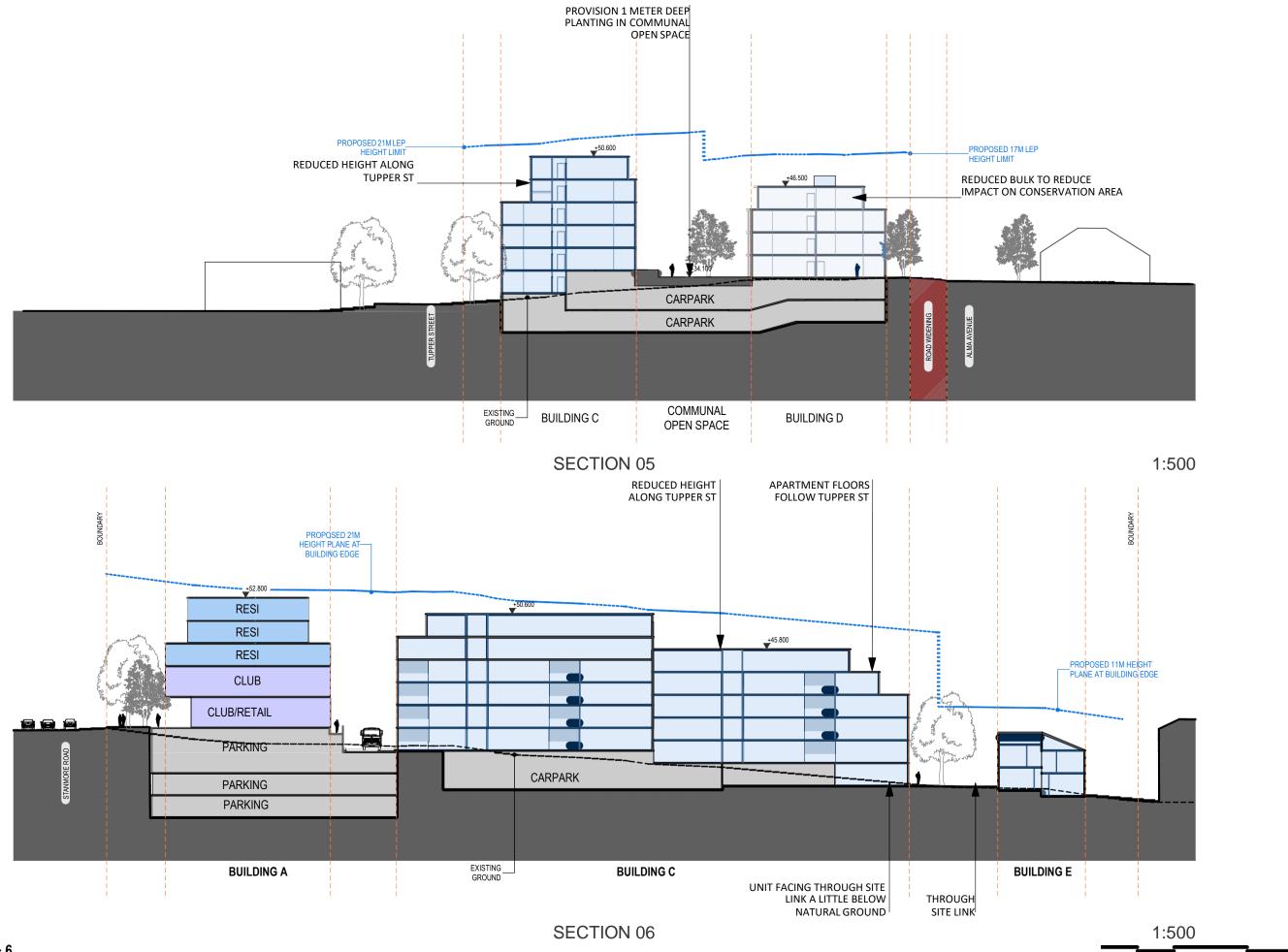


PASTUDIOLEVEL 2 20 YOUNGSTNEUTRALBAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE





PASTUDIOLEVEL 2 20 YOUNG STNEUTRALBAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT-GEORGEREVAYREG. NO. 3954 MARCH 2022 REVE



0 M 5 M 10 M

20 M

30 M

58-76 Stanmore Road Stanmore NSW
PASTUDIOLEVEL2 20 YOUNG STINEUTRALBAY, NSW 2089 TEL: 8968 1900 FAX: 8968 1999 ACN: 603 389 288 NOMINATED ARCHITECT - GEORGERE VAYREG. NO. 3954 MARCH 2022 REVE

APPENDIX B

TRAFFIC SURVEY DATA

TRANS TRAFFIC SURVEY TURNING MOVEMENT SURVEY Intersection of Stammore Rd and Merchant St, Stammore

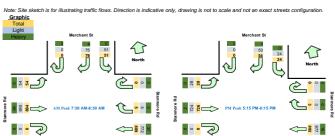
| GPS | -33.897711,151.166391 |
|-----------|-----------------------|
| | Fri 26/11/21 |
| Weather: | |
| Suburban: | |
| Cuetomor | V/TD |

| North: | Merchant St |
|--------|-------------|
| East: | Stanmore Rd |
| South: | N/A |
| West: | Stanmore Rd |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 7:30 AM-8:30 AM |
| Peak | PM: | 5:15 PM-6:15 PM |

| All Vehicles | | | | | | | | | | | | |
|--------------|------------|---|----|----|----------|---|----------|----------|-----|----|-----------|--------------|
| | me | | | | East App | | nmore Ko | West App | | | Hourly To | otai Peak |
| | Period End | | R | L | _ | R | | _ | EB | L | | |
| 7:30 | 7:45 | 0 | 8 | 6 | 0 | 0 | 178 | 0 | 271 | 13 | 1892 | Peak |
| 7:45 | 8:00 | 0 | 19 | 13 | 0 | 1 | 208 | 0 | 228 | 17 | 1873 | |
| 8:00 | 8:15 | 0 | 27 | 15 | 0 | 3 | 207 | 0 | 187 | 13 | 1831 | |
| 8:15 | 8:30 | 0 | 25 | 17 | 0 | 1 | 216 | 0 | 208 | 11 | 1751 | |
| 8:30 | 8:45 | 0 | 7 | 12 | 0 | 0 | 216 | 0 | 195 | 27 | 1662 | |
| 8:45 | 9:00 | 0 | 24 | 19 | 0 | 0 | 206 | 0 | 160 | 35 | | |
| 9:00 | 9:15 | 0 | 14 | 5 | 0 | 0 | 184 | 0 | 154 | 15 | | |
| 9:15 | 9:30 | 0 | 7 | 7 | 0 | 0 | 176 | 0 | 188 | 11 | | |
| 16:30 | 16:45 | 0 | 12 | 5 | 0 | 0 | 209 | 0 | 163 | 9 | 1683 | |
| 16:45 | 17:00 | 0 | 17 | 4 | 0 | 0 | 218 | 0 | 192 | 12 | 1713 | |
| 17:00 | 17:15 | 0 | 16 | 8 | 0 | 0 | 199 | 0 | 172 | 11 | 1693 | |
| 17:15 | 17:30 | 0 | 10 | 5 | 0 | 2 | 235 | 0 | 181 | 3 | 1727 | Peak |
| 17:30 | 17:45 | 0 | 16 | 7 | 0 | 0 | 228 | 0 | 173 | 4 | 1696 | |
| 17:45 | 18:00 | 0 | 18 | 6 | 0 | 0 | 201 | 0 | 184 | 14 | | |
| 18:00 | 18:15 | 0 | 10 | 6 | 0 | 1 | 228 | 0 | 188 | 7 | | |
| 18:15 | 18:30 | 0 | 7 | 7 | 0 | 0 | 215 | 0 | 165 | 11 | | |

| Peak | Time | North Ap | proach Me | erchant S | East App | roach Sta | nmore Ro | West App | roach Sta | nmore R | Peak |
|--------------|------------|----------|-----------|-----------|----------|-----------|----------|----------|-----------|---------|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 7:30 | 8:30 | 0 | 79 | 51 | 0 | 5 | 809 | 0 | 894 | 54 | 1892 |
| 17:15 | 18:15 | 0 | 54 | 24 | | - 3 | 802 | 0 | 726 | 28 | 1727 |



| Light | Vehicles |
|-------|----------|
| | Time |

| | | North Approach Merchant S East Approach Stanmore RoWest Approach Stanmore R | | | | | | | | | | |
|--------------|------------|---|----|----|---|---|-----|---|-----|----|--|--|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | | |
| 7:30 | 7:45 | 0 | 7 | 6 | 0 | 0 | 171 | 0 | 255 | 13 | | |
| 7:45 | 8:00 | 0 | 16 | 13 | 0 | 1 | 198 | 0 | 214 | 17 | | |
| 8:00 | 8:15 | 0 | 27 | 15 | 0 | 3 | 197 | 0 | 177 | 13 | | |
| 8:15 | 8:30 | 0 | 25 | 17 | 0 | 1 | 206 | 0 | 194 | 11 | | |
| 8:30 | 8:45 | 0 | 7 | 12 | 0 | 0 | 210 | 0 | 183 | 27 | | |
| 8:45 | 9:00 | 0 | 23 | 19 | 0 | 0 | 191 | 0 | 153 | 35 | | |
| 9:00 | 9:15 | 0 | 14 | 5 | 0 | 0 | 173 | 0 | 146 | 15 | | |
| 9:15 | 9:30 | 0 | 7 | 6 | 0 | 0 | 162 | 0 | 171 | 11 | | |
| 16:30 | 16:45 | 0 | 12 | 5 | 0 | 0 | 204 | 0 | 160 | 9 | | |
| 16:45 | 17:00 | 0 | 17 | 4 | 0 | 0 | 213 | 0 | 188 | 12 | | |
| 17:00 | 17:15 | 0 | 16 | 8 | 0 | 0 | 192 | 0 | 169 | 11 | | |
| 17:15 | 17:30 | 0 | 10 | 5 | 0 | 2 | 231 | 0 | 180 | 3 | | |
| 17:30 | 17:45 | 0 | 16 | 7 | 0 | 0 | 224 | 0 | 173 | 4 | | |
| 17:45 | 18:00 | 0 | 18 | 6 | 0 | 0 | 197 | 0 | 184 | 14 | | |
| 18:00 | 18:15 | 0 | 9 | 6 | 0 | 1 | 225 | 0 | 187 | 7 | | |
| 18:15 | 18:30 | 0 | 7 | 6 | 0 | 0 | 213 | 0 | 164 | 11 | | |

| Peak | Time | North Ap | proach Me | erchant S | East App | roach Sta | nmore Rd | West App | roach Sta | nmore R | d Peak |
|--------------|------------|----------|-----------|-----------|----------|-----------|----------|----------|-----------|---------|--------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 7:30 | 8:30 | 0 | 75 | 51 | 0 | 5 | 772 | 0 | 840 | 54 | 1797 |
| 17:15 | 18:15 | 0 | 53 | 24 | 0 | 3 | 877 | 0 | 724 | 28 | 1709 |

| | | | | | East App | | | | | |
|--------------|------------|---|---|---|----------|---|----|---|----|---|
| Period Start | Period End | U | R | _ | U | R | WB | U | EB | _ |
| 7:30 | 7:45 | 0 | 1 | 0 | 0 | 0 | 7 | 0 | 16 | 0 |
| 7:45 | 8:00 | 0 | 3 | 0 | 0 | 0 | 10 | 0 | 14 | 0 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 14 | 0 |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 12 | 0 |
| 8:45 | 9:00 | 0 | 1 | 0 | 0 | 0 | 15 | 0 | 7 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 8 | 0 |
| 9:15 | 9:30 | 0 | 0 | 1 | 0 | 0 | 14 | 0 | 17 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 4 | 0 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 3 | 0 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 1 | 0 |
| 18:15 | 18:30 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 1 | 0 |

| Peak | Time | North App | oroach Me | erchant S | East App | roach Sta | nmore Rd | West App | roach Sta | nmore R | d Peak |
|--------------|------------|-----------|-----------|-----------|----------|-----------|----------|----------|-----------|---------|--------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 7:30 | 8:30 | 0 | 4 | 0 | 0 | 0 | 37 | 0 | 54 | 0 | 95 |
| 17:15 | 18:15 | 0 | 1 | 0 | 0 | 0 | 15 | 0 | 2 | 0 | 18 |

| Ti | me | North Approa | ch Merchant St | East Approac | h Stanmore Rd | | h Stanmore Rd | Hourly Tota |
|--------------|------------|--------------|----------------|--------------|---------------|------------|---------------|-------------|
| Period Start | Period End | Eastbound | Westbound | Northbound | Southbound | Northbound | Southbound | Hourly Tota |
| 7:30 | 7:45 | 0 | 0 | 1 | 2 | 2 | 4 | 40 |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 3 | 1 | 61 |
| 8:00 | 8:15 | 1 | 0 | 2 | 1 | 1 | 1 | 83 |
| 8:15 | 8:30 | 0 | 2 | 6 | 0 | 11 | 2 | 83 |
| 8:30 | 8:45 | 0 | 1 | 3 | 2 | 19 | 5 | 66 |
| 8:45 | 9:00 | 1 | 0 | 2 | 5 | 15 | 3 | |
| 9:00 | 9:15 | 0 | 1 | 1 | 0 | 2 | 2 | |
| 9:15 | 9:30 | 0 | 1 | 2 | 0 | 1 | 0 | |
| 16:30 | 16:45 | 0 | 0 | 0 | 1 | 3 | 1 | 33 |
| 16:45 | 17:00 | 0 | 1 | 1 | 1 | 4 | 4 | 34 |
| 17:00 | 17:15 | 0 | 0 | 1 | 3 | 5 | 1 | 31 |
| 17:15 | 17:30 | 1 | 0 | 0 | 2 | 4 | 0 | 30 |
| 17:30 | 17:45 | 0 | 0 | 2 | 3 | 0 | 1 | 40 |
| 17:45 | 18:00 | 0 | 0 | 0 | 3 | 2 | 3 | |
| 18:00 | 18:15 | 2 | 0 | 4 | 0 | 2 | 1 | |
| 18:15 | 18:30 | 1 | 0 | 0 | 0 | 6 | 10 | |

| | | Merchant St | | |
|-------------|-------------------|---|--|-------------|
| | | 20 🕽 | North | |
| Stanmore Rd | 17 8 5 8 | Pedestrians AM Peak 7:30 AM-8:30 AM PM Peak 5:15 PM-6:15 PM | \$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Stanmore Rd |

TRANS TRAFFIC SURVEY TURNING MOVEMENT SURVEY *** trafficurvey.com.au *** trafficurvey.com.au

Intersection of Stanmore Rd and Alma Ave, Stanmore

| GPS | -33.898367,151.168133 |
|-----------|-----------------------|
| Date: | Fri 26/11/21 |
| Weather: | Fine |
| Suburban: | |
| Customer: | VTP |

| North: | N/A |
|--------|-------------|
| East: | Stanmore Rd |
| South: | Alma Ave |
| West: | Stanmore Rd |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 7:45 AM-8:45 AM |
| Peak | PM: | 4:45 PM-5:45 PM |

| Ti | me | East App | roach Sta | nmore Rd | South A | pproach i | Alma Ave | West App | roach St | anmore R | Hourly To | lourly Total | |
|--------------|------------|----------|-----------|----------|---------|-----------|----------|----------|----------|----------|-----------|--------------|--|
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | Hour | Peak | |
| 7:30 | 7:45 | 0 | 166 | 7 | 0 | 0 | 0 | 0 | 8 | 238 | 1727 | | |
| 7:45 | 8:00 | 0 | 189 | 6 | 0 | 0 | 0 | 0 | 5 | 245 | 1729 | Peak | |
| 8:00 | 8:15 | 0 | 200 | 10 | 0 | 0 | 0 | 0 | 5 | 213 | 1652 | | |
| 8:15 | 8:30 | 0 | 204 | 3 | 0 | 0 | 0 | 0 | 5 | 223 | 1618 | | |
| 8:30 | 8:45 | 0 | 203 | 14 | 0 | 0 | 0 | 0 | 15 | 189 | 1599 | | |
| 8:45 | 9:00 | 0 | 187 | 13 | 0 | 0 | 0 | 0 | 12 | 156 | | | |
| 9:00 | 9:15 | 0 | 191 | 7 | 0 | 0 | 0 | 0 | 10 | 186 | | | |
| 9:15 | 9:30 | 0 | 195 | 3 | 0 | 0 | 0 | 0 | 7 | 211 | | | |
| 16:30 | 16:45 | 0 | 236 | 11 | 0 | 0 | 0 | 0 | 7 | 159 | 1699 | | |
| 16:45 | 17:00 | 0 | 209 | 8 | 0 | 0 | 1 | 0 | 4 | 200 | 1723 | Peak | |
| 17:00 | 17:15 | 0 | 222 | 17 | 0 | 0 | 0 | 0 | 3 | 179 | 1685 | | |
| 17:15 | 17:30 | 0 | 245 | 11 | 0 | 0 | 0 | 0 | 2 | 185 | 1687 | | |
| 17:30 | 17:45 | 0 | 243 | 10 | 0 | 0 | 0 | 0 | 3 | 181 | 1659 | | |
| 17:45 | 18:00 | 0 | 201 | 4 | 0 | 0 | 1 | 0 | 6 | 172 | | | |
| 18:00 | 18:15 | 0 | 222 | 5 | 0 | 0 | 0 | 0 | 4 | 192 | | | |
| 18:15 | 18:30 | 0 | 210 | 4 | 0 | 0 | 0 | 0 | 5 | 196 | | | |

| Peak | Time | East App | roach Sta | nmore Rd | South A | pproach A | Alma Ave | West App | roach Sta | anmore R | d Peak |
|--------------|------------|----------|-----------|----------|---------|-----------|----------|----------|-----------|----------|--------|
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | total |
| 7:45 | 8:45 | 0 | 796 | 33 | 0 | 0 | 0 | 0 | 30 | 870 | 1729 |
| 16:45 | 17:45 | 0 | 919 | 46 | 0 | - 0 | 1 | 0 | 12 | 745 | 1723 |

Note: Site sketch is for illustrating traffic flows. Direction is indicative only, drawing is not to scale and not an exact streets configuration.

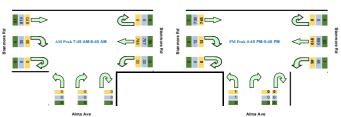
Graphic
Total
Light









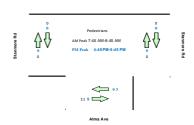


| Pedestrians | Cr | ossing |
|-------------|----|--------|
| | | |

| | me | | h Stanmore Rd | | ach Alma Ave | | h Stanmore Rd | Hourly Total |
|--------------|------------|------------|---------------|-----------|--------------|------------|---------------|---------------|
| Period Start | Period End | Southbound | Northbound | Westbound | Eastbound | Southbound | Northbound | riourly rotal |
| 7:30 | 7:45 | 0 | 0 | 4 | 2 | 0 | 0 | 20 |
| 7:45 | 8:00 | 0 | 0 | 0 | 2 | 0 | 0 | 18 |
| 8:00 | 8:15 | 0 | 0 | 4 | 3 | 0 | 0 | 22 |
| 8:15 | 8:30 | 0 | 0 | 0 | 5 | 0 | 0 | 24 |
| 8:30 | 8:45 | 0 | 0 | 3 | 1 | 0 | 0 | 22 |
| 8:45 | 9:00 | 0 | 0 | 0 | 6 | 0 | 0 | |
| 9:00 | 9:15 | 0 | 0 | 2 | 7 | 0 | 0 | |
| 9:15 | 9:30 | 0 | 0 | 1 | 2 | 0 | 0 | |
| 16:30 | 16:45 | 0 | 0 | 0 | 1 | 0 | 0 | 16 |
| 16:45 | 17:00 | 0 | 0 | 4 | 2 | 0 | 0 | 17 |
| 17:00 | 17:15 | 0 | 0 | 2 | 2 | 0 | 0 | 15 |
| 17:15 | 17:30 | 0 | 0 | 3 | 2 | 0 | 0 | 19 |
| 17:30 | 17:45 | 0 | 0 | 0 | 2 | 0 | 0 | 16 |
| 17:45 | 18:00 | 0 | 0 | 4 | 0 | 0 | 0 | |
| 18:00 | 18:15 | 0 | 0 | 3 | 5 | 0 | 0 | |
| 18:15 | 18:30 | 0 | 0 | 1 | 1 | 0 | 0 | |

| Peak | Time | East Approac | h Stanmore Rd | South Appro | ach Alma Ave | West Approac | Peak total | |
|--------------|------------|--------------|---------------|-------------|--------------|--------------|------------|------------|
| Period Start | Period End | Southbound | Northbound | Westbound | Eastbound | Southbound | Northbound | reak total |
| 7:45 | 8:45 | 0 | 0 | 7 | 11 | 0 | 0 | 18 |
| 16:45 | 17:45 | 0 | 0 | 9 | 8 | 0 | 0 | 17 |





| Light Vehicles Time East Approach Stanmore Rd South Approach Alma Ave West Approach Stanmore R | | | | | | | | | | | | | |
|--|------------|---|-----|----------|---|---|----------|---|----|-----|--|--|--|
| | | | | nmore Rd | | | Alma Ave | | | | | | |
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | | | |
| 7:30 | 7:45 | 0 | 159 | 7 | 0 | 0 | 0 | 0 | 8 | 225 | | | |
| 7:45 | 8:00 | 0 | 179 | 6 | 0 | 0 | 0 | 0 | 5 | 229 | | | |
| 8:00 | 8:15 | 0 | 190 | 10 | 0 | 0 | 0 | 0 | 5 | 203 | | | |
| 8:15 | 8:30 | 0 | 193 | 3 | 0 | 0 | 0 | 0 | 5 | 210 | | | |
| 8:30 | 8:45 | 0 | 195 | 14 | 0 | 0 | 0 | 0 | 15 | 177 | | | |
| 8:45 | 9:00 | 0 | 170 | 13 | 0 | 0 | 0 | 0 | 12 | 147 | | | |
| 9:00 | 9:15 | 0 | 181 | 7 | 0 | 0 | 0 | 0 | 10 | 178 | | | |
| 9:15 | 9:30 | 0 | 178 | 3 | 0 | 0 | 0 | 0 | 7 | 191 | | | |
| 16:30 | 16:45 | 0 | 231 | 11 | 0 | 0 | 0 | 0 | 7 | 156 | | | |
| 16:45 | 17:00 | 0 | 204 | 8 | 0 | 0 | 1 | 0 | 4 | 196 | | | |
| 17:00 | 17:15 | 0 | 216 | 16 | 0 | 0 | 0 | 0 | 3 | 177 | | | |
| 17:15 | 17:30 | 0 | 240 | 11 | 0 | 0 | 0 | 0 | 2 | 184 | | | |
| 17:30 | 17:45 | 0 | 239 | 10 | 0 | 0 | 0 | 0 | 3 | 181 | | | |
| 17:45 | 18:00 | 0 | 197 | 4 | 0 | 0 | 1 | 0 | 6 | 172 | | | |
| 18:00 | 18:15 | 0 | 219 | 5 | 0 | 0 | 0 | 0 | 4 | 191 | | | |
| 18:15 | 18:30 | 0 | 208 | 4 | 0 | 0 | 0 | 0 | 5 | 195 | | | |

| ſ | Peak | Time | East Approach Stanmore Rd South Approach Alma Ave West Approach Stanmore F | | | | | | anmore R | d Peak | | |
|---|--------------|------------|--|-----|----|---|---|---|----------|--------|-----|-------|
| ſ | Period Start | Period End | U | WB | L | U | R | L | U | R | EB | total |
| Γ | 7:45 | 8:45 | 0 | 757 | 33 | 0 | 0 | 0 | 0 | 30 | 819 | 1639 |
| Г | 16:45 | 17:45 | 0 | 899 | 45 | 0 | 0 | 1 | 0 | 12 | 738 | 1695 |

| Tir | me | East App | roach Sta | nmore Rd | South A | pproach A | Alma Ave | West App | roach Sta | anmore |
|-------------|------------|----------|-----------|----------|---------|-----------|----------|----------|-----------|--------|
| eriod Start | Period End | U | WB | L | U | R | L | U | R | EB |
| 7:30 | 7:45 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 7:45 | 8:00 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 8:00 | 8:15 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 8:15 | 8:30 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 8:30 | 8:45 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 8:45 | 9:00 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| 9:00 | 9:15 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9:15 | 9:30 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 16:30 | 16:45 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 16:45 | 17:00 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 17:00 | 17:15 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| 17:15 | 17:30 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:30 | 17:45 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 18:15 | 18:30 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

| Peak | Time | East App | roach Sta | nmore Rd | South A | pproach / | Alma Ave | West App | roach Sta | anmore R | d Peak |
|--------------|------------|----------|-----------|----------|---------|-----------|----------|----------|-----------|----------|--------|
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | total |
| 7:45 | 8:45 | 0 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 90 |
| 16:45 | 17:45 | 0 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 28 |

TRANS TRAFFIC SURVEY

TURNING MOVEMENT SURVEY

Intersection of Stanmore Rd and Tupper St. Stanmore

| GPS | -33.898679,151.168889 |
|-----------|-----------------------|
| | Fri 26/11/21 |
| Weather: | Fine |
| Suburban: | Stanmore |
| Customer: | VTP |

| | •• |
|--------|-------------|
| North: | N/A |
| East: | Stanmore Rd |
| South: | Tupper St |
| | |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 7:30 AM-8:30 AM |
| Peak | PM: | 4:45 PM-5:45 PM |

| | | | | nmore Rd | | | Supper St | | | | Hourly To | |
|--------------|------------|---|-----|----------|---|----|-----------|---|---|-----|-----------|------|
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | Hour | Peak |
| 7:30 | 7:45 | 0 | 166 | 1 | 0 | 10 | 7 | 0 | 0 | 238 | 1747 | Peak |
| 7:45 | 8:00 | 0 | 190 | 2 | 0 | 2 | 5 | 0 | 1 | 244 | 1704 | |
| 8:00 | 8:15 | 0 | 204 | 7 | 0 | 8 | 6 | 0 | 4 | 209 | 1624 | |
| 8:15 | 8:30 | 0 | 204 | 5 | 0 | 8 | 3 | 0 | 0 | 223 | 1588 | |
| 8:30 | 8:45 | 0 | 175 | 8 | 0 | 5 | 2 | 0 | 3 | 186 | 1570 | |
| 8:45 | 9:00 | 0 | 196 | 4 | 0 | 5 | 3 | 1 | 2 | 153 | | |
| 9:00 | 9:15 | 0 | 195 | 13 | 0 | 5 | 3 | 0 | 3 | 183 | | |
| 9:15 | 9:30 | 0 | 196 | 8 | 0 | 8 | 2 | 0 | 2 | 209 | | |
| 16:30 | 16:45 | 0 | 242 | 12 | 0 | 6 | 5 | 0 | 4 | 155 | 1747 | |
| 16:45 | 17:00 | 0 | 215 | 11 | 0 | 5 | 2 | 0 | 2 | 198 | 1773 | Peak |
| 17:00 | 17:15 | 0 | 232 | 10 | 0 | 3 | 7 | 0 | 4 | 175 | 1736 | |
| 17:15 | 17:30 | 0 | 246 | 12 | 0 | 6 | 10 | 0 | 2 | 183 | 1750 | |
| 17:30 | 17:45 | 0 | 251 | 9 | 0 | 7 | 2 | 0 | 1 | 180 | 1721 | |
| 17:45 | 18:00 | 0 | 199 | 10 | 0 | 9 | 6 | 0 | 3 | 169 | | |
| 18:00 | 18:15 | 0 | 223 | 12 | 0 | 14 | 4 | 0 | 2 | 190 | | |
| 18:15 | 18:30 | 0 | 207 | 13 | 0 | 7 | 7 | 0 | 5 | 191 | | |

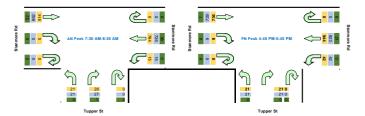
| Peak | Time | East App | roach Sta | nmore Rd | South A | pproach 1 | Supper St | West App | roach Sta | anmore R | d Peak |
|--------------|------------|----------|-----------|----------|---------|-----------|-----------|----------|-----------|----------|--------|
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | total |
| 7:30 | 8:30 | 0 | 764 | 15 | 0 | 28 | 21 | 0 | 5 | 914 | 1747 |
| 16:45 | 17:45 | 0 | 944 | 42 | - 0 | 21 | 21 | 0 | 9 | 736 | 1773 |

Note: Site sketch is for illustrating traffic flows. Direction is indicative only, drawing is not to scale and not an exact streets configuration.









| Period End | Southbound | Northbound |
|------------|------------|------------|
| 8:30 | 0 | 0 |
| 17:45 | 0 | 0 |
| | | |
| | | |
| | | |

21

16

12 16

8:15

8:30 8:45

9:00 9:15

9:30

16:45 17:00

17:15

17:30

18:00 18:15

8:00 8:15

8:45

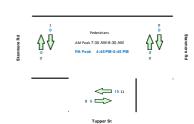
9:15

16:30

16:45 17:00

17:15

17:45 18:00



| Light Vehicl | | | | | | | | | | |
|--------------|------------|---|-----|----|---|----|----|---|---|----------|
| | | | | | | | | | | anmore R |
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB |
| 7:30 | 7:45 | 0 | 159 | 1 | 0 | 10 | 7 | 0 | 0 | 225 |
| 7:45 | 8:00 | 0 | 180 | 2 | 0 | 2 | 5 | 0 | 1 | 228 |
| 8:00 | 8:15 | 0 | 194 | 7 | 0 | 7 | 6 | 0 | 4 | 199 |
| 8:15 | 8:30 | 0 | 193 | 5 | 0 | 8 | 3 | 0 | 0 | 210 |
| 8:30 | 8:45 | 0 | 167 | 8 | 0 | 5 | 2 | 0 | 3 | 174 |
| 8:45 | 9:00 | 0 | 179 | 4 | 0 | 5 | 3 | 1 | 1 | 145 |
| 9:00 | 9:15 | 0 | 185 | 13 | 0 | 5 | 3 | 0 | 3 | 175 |
| 9:15 | 9:30 | 0 | 179 | 8 | 0 | 8 | 2 | 0 | 2 | 189 |
| 16:30 | 16:45 | 0 | 237 | 11 | 0 | 6 | 5 | 0 | 4 | 152 |
| 16:45 | 17:00 | 0 | 210 | 11 | 0 | 5 | 2 | 0 | 2 | 194 |
| 17:00 | 17:15 | 0 | 225 | 10 | 0 | 3 | 7 | 0 | 4 | 173 |
| 17:15 | 17:30 | 0 | 241 | 12 | 0 | 6 | 10 | 0 | 2 | 182 |
| 17:30 | 17:45 | 0 | 247 | 9 | 0 | 7 | 2 | 0 | 1 | 180 |
| 17:45 | 18:00 | 0 | 195 | 10 | 0 | 9 | 6 | 0 | 3 | 169 |
| 18:00 | 18:15 | 0 | 220 | 12 | 0 | 14 | 4 | 0 | 2 | 189 |
| 18:15 | 18:30 | 0 | 205 | 13 | 0 | 7 | 7 | 0 | 5 | 190 |

| Peak | Time | East App | roach Sta | nmore Ro | South A | pproach 1 | upper St | West App | roach Sta | nmore R | d Peak |
|--------------|------------|----------|-----------|----------|---------|-----------|----------|----------|-----------|---------|--------|
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | total |
| 7:30 | 8:30 | 0 | 726 | 15 | 0 | 27 | 21 | 0 | 5 | 862 | 1656 |
| 16:45 | 17:45 | 0 | 923 | 42 | 0 | 21 | 21 | 0 | 9 | 729 | 1745 |

| | me | | | nmore Rd | | | upper St | | | |
|-------------|------------|---|----|----------|---|---|----------|---|---|----|
| eriod Start | Period End | U | WB | L | U | R | L | U | R | EB |
| 7:30 | 7:45 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 7:45 | 8:00 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 8:00 | 8:15 | 0 | 10 | 0 | 0 | 1 | 0 | 0 | 0 | 10 |
| 8:15 | 8:30 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 13 |
| 8:30 | 8:45 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 8:45 | 9:00 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 1 | 8 |
| 9:00 | 9:15 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 9:15 | 9:30 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 16:30 | 16:45 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| 16:45 | 17:00 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 17:00 | 17:15 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 17:15 | 17:30 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 17:30 | 17:45 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 18:15 | 18:30 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

| Peak | Time | East App | roach Sta | nmore Rd | South A | pproach 1 | upper St | West App | roach Sta | anmore R | d Peak |
|--------------|------------|----------|-----------|----------|---------|-----------|----------|----------|-----------|----------|--------|
| Period Start | Period End | U | WB | L | U | R | L | U | R | EB | total |
| 7:30 | 8:30 | 0 | 38 | 0 | 0 | 1 | 0 | 0 | 0 | 52 | 91 |
| 16:45 | 17:45 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 28 |

TRANS TRAFFIC SURVEY TURNING MOVEMENT SLIPVEY TRANSURVEY ORNER OF STANDARD OF

| GPS | -33.898899,151.169476 |
|-----------|-----------------------|
| | Fri 26/11/21 |
| Weather: | |
| Suburban: | Stanmore |
| Cuetomor | \/TD |

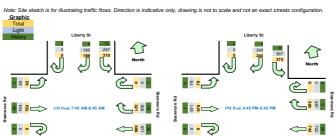
All Vehicles

| North: | Liberty St |
|--------|-------------|
| | Stanmore Rd |
| South: | N/A |
| West: | Stanmore Rd |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PW: | 4:30 PM-6:30 PM |
| Traffic | AM: | 7:45 AM-8:45 AM |
| Peak | PM: | 4:45 PM-5:45 PM |

| Tit | me | North Approach Liberty St East Approach Stanmore RoWest Approach Stanmore RI Hourly To | | | | | | | | Hourly To | tal | |
|--------------|------------|--|----|-----|---|-----|-----|---|-----|-----------|------|------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | Hour | Peak |
| 7:30 | 7:45 | 0 | 35 | 71 | 0 | 71 | 132 | 0 | 222 | 26 | 2292 | |
| 7:45 | 8:00 | 0 | 45 | 58 | 0 | 69 | 147 | 0 | 228 | 18 | 2311 | Peak |
| 8:00 | 8:15 | 0 | 54 | 77 | 0 | 62 | 157 | 0 | 195 | 22 | 2284 | |
| 8:15 | 8:30 | 0 | 60 | 82 | 0 | 81 | 149 | 0 | 209 | 22 | 2283 | |
| 8:30 | 8:45 | 0 | 30 | 93 | 0 | 109 | 153 | 0 | 161 | 30 | 2243 | |
| 8:45 | 9:00 | 0 | 56 | 86 | 0 | 93 | 145 | 0 | 145 | 13 | | |
| 9:00 | 9:15 | 0 | 37 | 89 | 0 | 81 | 171 | 0 | 175 | 13 | | |
| 9:15 | 9:30 | 0 | 43 | 72 | 0 | 70 | 161 | 0 | 203 | 14 | | |
| 16:30 | 16:45 | 0 | 72 | 109 | 0 | 102 | 182 | 0 | 140 | 21 | 2496 | |
| 16:45 | 17:00 | 0 | 57 | 88 | 0 | 111 | 169 | 0 | 188 | 15 | 2508 | Peak |
| 17:00 | 17:15 | 0 | 65 | 98 | 0 | 97 | 177 | 0 | 158 | 20 | 2470 | |
| 17:15 | 17:30 | 0 | 64 | 90 | 0 | 90 | 194 | 0 | 170 | 19 | 2473 | |
| 17:30 | 17:45 | 0 | 58 | 99 | 0 | 92 | 202 | 0 | 162 | 25 | 2457 | |
| 17:45 | 18:00 | 0 | 52 | 109 | 0 | 94 | 157 | 0 | 156 | 22 | | |
| 18:00 | 18:15 | 0 | 57 | 93 | 0 | 86 | 178 | 0 | 175 | 29 | | |
| 18:15 | 18:30 | 0 | 46 | 100 | 0 | 93 | 174 | 0 | 184 | 14 | | |

| Peak | Time | North A | pproach l | iberty St | East App | roach Sta | nmore Ro | West App | roach Sta | anmore R | d Peak |
|--------------|------------|---------|-----------|-----------|----------|-----------|----------|----------|-----------|----------|--------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 7:45 | 8:45 | 0 | 189 | 310 | 0 | 321 | 606 | 0 | 793 | 92 | 2311 |
| 16:45 | 17:45 | 0 | 244 | 375 | 0 | 390 | 742 | 0 | 678 | 79 | 2508 |



| Period Start | Period End | |
|--------------|------------|---|
| 7:30 | 7:45 | |
| 7:45 | 8:00 | Г |

| | me | | pproach l | iberty St | East App | | | West App | | nmore R |
|--------------|------------|---|-----------|-----------|----------|-----|-----|----------|-----|---------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L |
| 7:30 | 7:45 | 0 | 34 | 69 | 0 | 64 | 126 | 0 | 209 | 26 |
| 7:45 | 8:00 | 0 | 44 | 55 | 0 | 63 | 138 | 0 | 213 | 17 |
| 8:00 | 8:15 | 0 | 52 | 74 | 0 | 57 | 149 | 0 | 185 | 21 |
| 8:15 | 8:30 | 0 | 60 | 80 | 0 | 78 | 138 | 0 | 196 | 22 |
| 8:30 | 8:45 | 0 | 29 | 88 | 0 | 107 | 146 | 0 | 150 | 29 |
| 8:45 | 9:00 | 0 | 55 | 82 | 0 | 90 | 129 | 0 | 137 | 13 |
| 9:00 | 9:15 | 0 | 37 | 87 | 0 | 80 | 161 | 0 | 168 | 12 |
| 9:15 | 9:30 | 0 | 42 | 68 | 0 | 68 | 145 | 0 | 183 | 14 |
| 16:30 | 16:45 | 0 | 71 | 108 | 0 | 101 | 177 | 0 | 137 | 21 |
| 16:45 | 17:00 | 0 | 57 | 84 | 0 | 110 | 164 | 0 | 184 | 15 |
| 17:00 | 17:15 | 0 | 65 | 96 | 0 | 97 | 170 | 0 | 156 | 20 |
| 17:15 | 17:30 | 0 | 63 | 89 | 0 | 89 | 190 | 0 | 169 | 19 |
| 17:30 | 17:45 | 0 | 58 | 98 | 0 | 91 | 198 | 0 | 162 | 25 |
| 17:45 | 18:00 | 0 | 51 | 108 | 0 | 94 | 154 | 0 | 156 | 22 |
| 18:00 | 18:15 | 0 | 57 | 93 | 0 | 86 | 175 | 0 | 174 | 29 |
| 18:15 | 18:30 | 0 | 46 | 98 | 0 | 93 | 172 | 0 | 183 | 14 |

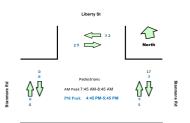
| Peak T | ime | North A | pproacn L | liberty St | East App | roach Sta | nmore Rd | west App | d Peak | | |
|----------------|------------|---------|-----------|------------|----------|-----------|----------|----------|--------|----|-------|
| Period Start F | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 7:45 | 8:45 | 0 | 185 | 297 | 0 | 305 | 571 | 0 | 744 | 89 | 2191 |
| 16:45 | 17:45 | 0 | 243 | 367 | 0 | 387 | 722 | 0 | 671 | 79 | 2469 |

| Heavy Vehic | | | | | | | | | | |
|--------------|------------|---|---|---|---|---|----|---|----|----------|
| | me | | | | | | | | | anmore R |
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L |
| 7:30 | 7:45 | 0 | 1 | 2 | 0 | 7 | 6 | 0 | 13 | 0 |
| 7:45 | 8:00 | 0 | 1 | 3 | 0 | 6 | 9 | 0 | 15 | 1 |
| 8:00 | 8:15 | 0 | 2 | 3 | 0 | 5 | 8 | 0 | 10 | 1 |
| 8:15 | 8:30 | 0 | 0 | 2 | 0 | 3 | 11 | 0 | 13 | 0 |
| 8:30 | 8:45 | 0 | 1 | 5 | 0 | 2 | 7 | 0 | 11 | 1 |
| 8:45 | 9:00 | 0 | 1 | 4 | 0 | 3 | 16 | 0 | 8 | 0 |
| 9:00 | 9:15 | 0 | 0 | 2 | 0 | 1 | 10 | 0 | 7 | 1 |
| 9:15 | 9:30 | 0 | 1 | 4 | 0 | 2 | 16 | 0 | 20 | 0 |
| 16:30 | 16:45 | 0 | 1 | 1 | 0 | 1 | 5 | 0 | 3 | 0 |
| 16:45 | 17:00 | 0 | 0 | 4 | 0 | 1 | 5 | 0 | 4 | 0 |
| 17:00 | 17:15 | 0 | 0 | 2 | 0 | 0 | 7 | 0 | 2 | 0 |
| 17:15 | 17:30 | 0 | 1 | 1 | 0 | 1 | 4 | 0 | 1 | 0 |
| 17:30 | 17:45 | 0 | 0 | 1 | 0 | 1 | 4 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 |
| 18:15 | 18:30 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 1 | 0 |

| Peak | Time | North A | pproach L | iberty St | East App | roach Sta | nmore Rd | West App | d Peak | | |
|--------------|------------|---------|-----------|-----------|----------|-----------|----------|----------|--------|---|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 7:45 | 8:45 | 0 | 4 | 13 | 0 | 16 | 35 | 0 | 49 | 3 | 120 |
| 16:45 | 17:45 | 0 | 1 | 8 | 0 | 3 | 20 | 0 | 7 | 0 | 39 |

| | me | | ach Liberty St | | h Stanmore Rd | | h Stanmore Rd | Hourly Tota |
|--------------|------------|-----------|----------------|------------|---------------|------------|---------------|--------------|
| Period Start | Period End | Westbound | Eastbound | Northbound | Southbound | Northbound | Southbound | riourly rota |
| 7:30 | 7:45 | 0 | 0 | 1 | 2 | 0 | 0 | 17 |
| 7:45 | 8:00 | 0 | 1 | 3 | 1 | 0 | 0 | 26 |
| 8:00 | 8:15 | 1 | 1 | 4 | 2 | 0 | 0 | 34 |
| 8:15 | 8:30 | 0 | 0 | 1 | 0 | 0 | 0 | 33 |
| 8:30 | 8:45 | 1 | 0 | 9 | 2 | 0 | 0 | 35 |
| 8:45 | 9:00 | 0 | 2 | 2 | 9 | 0 | 0 | |
| 9:00 | 9:15 | 1 | 1 | 2 | 3 | 0 | 0 | |
| 9:15 | 9:30 | 0 | 0 | 1 | 2 | 0 | 0 | |
| 16:30 | 16:45 | 0 | 3 | 3 | 1 | 0 | 0 | 22 |
| 16:45 | 17:00 | 1 | 2 | 2 | 3 | 0 | 0 | 24 |
| 17:00 | 17:15 | 0 | 1 | 0 | 1 | 0 | 0 | 23 |
| 17:15 | 17:30 | 0 | 2 | 1 | 2 | 0 | 0 | 37 |
| 17:30 | 17:45 | 2 | 4 | 0 | 3 | 0 | 0 | 40 |
| 17:45 | 18:00 | 1 | 0 | 5 | 1 | 0 | 0 | |

| Peak | Time | North Appro | ach Liberty St | East Approac | h Stanmore Rd | West Approac | Peak total | |
|--------------|------------|---------------------|----------------|--------------|---------------|--------------|------------|------------|
| Period Start | Period End | Westbound Eastbound | | Northbound | Southbound | Northbound | Southbound | reak total |
| 7:45 | 8:45 | 2 | 2 | 17 | 5 | 0 | 0 | 26 |
| 16:45 | 17:45 | 3 | 9 | 3 | 9 | 0 | 0 | 24 |

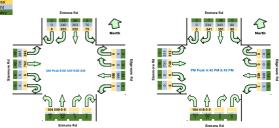




| | -33.899467,151.1709 | | | noro rea, ocumnoro | | | |
|-----------|---------------------|---|--------|--------------------|-----------------|-----|------------------------------------|
| Date: | Fri 26/11/21 | l | North: | Enmore Rd | Survey | | 7:30 AM-9:30 AM |
| Weather: | Fine | | East: | Edgeware Rd | Period | | 4:30 PM-6:30 PM 6:00 AM-9:00 AM |
| Suburban: | Stanmore | | South: | Enmore Rd | Traffic Peak | | 4:45 PM-5:45 PM |
| Customer: | VIP | | West: | Stanmore Rd | reak | FW. | 4.40 FWP0.40 FWI |

| All Vehicles | | | | | | | | | | | | | | | | | | | |
|--------------|------------|---|-----|---------|----|---|---------|-----|---|---|---|----------|----|---|---------|-----|----|------|---------|
| | me | | | ch Enmo | | | Approac | | | | | ch Enmor | | | Approac | | | | y Total |
| Period Star | Period End | ٥ | R | SB | _ | U | R | WB | L | ٥ | ĸ | NB | L | ٥ | R | EB | L | Hour | Peak |
| 7:30 | 7:45 | 0 | 52 | 77 | 18 | 0 | 0 | 126 | 0 | 0 | 0 | 97 | 2 | 0 | 0 | 165 | 92 | 2791 | |
| 7:45 | 8:00 | 0 | 43 | 79 | 18 | 0 | 0 | 145 | 0 | 0 | 0 | 137 | 5 | 0 | 0 | 190 | 68 | 2934 | |
| 8:00 | 8:15 | 0 | 52 | 69 | 15 | 0 | 0 | 150 | 0 | 0 | 0 | 126 | 9 | 0 | 0 | 218 | 89 | 2951 | Peak |
| 8:15 | 8:30 | 0 | 56 | 92 | 17 | 0 | 0 | 141 | 1 | 0 | 0 | 152 | 24 | 0 | 0 | 181 | 85 | 2932 | |
| 8:30 | 8:45 | 0 | 82 | 80 | 18 | 0 | 0 | 148 | 0 | 0 | 0 | 149 | 41 | 0 | 0 | 191 | 63 | 2924 | |
| 8:45 | 9:00 | 0 | 63 | 91 | 25 | 0 | 0 | 141 | 2 | ٥ | 0 | 132 | 30 | 0 | ٥ | 172 | 46 | | |
| 9:00 | 9:15 | 0 | 55 | 99 | 13 | 0 | 0 | 169 | 2 | ٥ | 0 | 110 | 16 | 0 | ٥ | 172 | 73 | | |
| 9:15 | 9:30 | 0 | 62 | 107 | 13 | 0 | 1 | 171 | 1 | 0 | 0 | 107 | 15 | 0 | 0 | 185 | 79 | | |
| 16:30 | 16:45 | 0 | 82 | 99 | 19 | 0 | 0 | 178 | 8 | 0 | 0 | 79 | 35 | 0 | 0 | 186 | 69 | 3082 | |
| 16:45 | 17:00 | 0 | 73 | 109 | 31 | 0 | 0 | 170 | 1 | 0 | 0 | 107 | 33 | 0 | 0 | 184 | 87 | 3087 | Peak |
| 17:00 | 17:15 | 0 | 103 | 98 | 15 | 0 | 0 | 160 | 2 | 0 | 0 | 108 | 17 | 0 | 0 | 182 | 61 | 3025 | |
| 17:15 | 17:30 | 0 | 76 | 94 | 23 | 0 | 0 | 174 | 0 | 0 | 0 | 115 | 33 | 0 | 0 | 188 | 83 | 3002 | |
| 17:30 | 17:45 | 0 | 89 | 80 | 21 | 0 | 0 | 188 | 0 | 0 | 0 | 88 | 21 | 0 | 0 | 192 | 81 | 2964 | |
| 17:45 | 18:00 | 0 | 84 | 90 | 21 | 0 | 0 | 153 | 3 | 0 | 0 | 105 | 17 | 0 | 0 | 194 | 66 | | |
| 18:00 | 18:15 | 0 | 96 | 98 | 22 | 0 | 0 | 160 | 1 | 0 | 0 | 78 | 19 | 0 | 0 | 165 | 84 | | |
| 18:15 | 18:30 | 0 | 66 | 109 | 22 | 0 | 0 | 175 | 2 | 0 | 0 | 82 | 22 | 0 | 0 | 188 | 82 | | |

| Peak | Time | Nort | h Approa | ch Enmo | re Rd | East | Approac | h Edgewa | re Rd | Sou | th Approa | ch Enmor | Rd | West | Approac | h Stanmo | ore Rd | Peak |
|-------------|------------|------|----------|---------|-------|------|---------|----------|-------|-----|-----------|----------|-----|------|---------|----------|--------|-------|
| Period Star | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | U | R | EB | L | total |
| 8:00 | 9:00 | 0 | 253 | 332 | 75 | 0 | 0 | 580 | 3 | 0 | 0 | 559 | 104 | 0 | 0 | 762 | 283 | 2951 |
| 16:45 | 17:45 | 0 | 341 | 381 | 90 | 0 | U | 692 | 3 | U | 0 | 418 | 104 | U | U | 740 | 312 | 3087 |



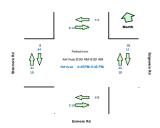
| Liaht | Vehicles |
|-------|----------|

| | me | | h Approa | | re Rd | | | h Edgewa | re Rd | | th Approx | | e Rd | | | h Stanmo | re Rd | |
|------------|------------|------|------------|------------|----------|------|---------|------------|-------|-----|-----------|------------|-----------|------|---------|----------|------------|---|
| eriod Star | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | ٥ | R | FB | L | |
| 7:30 | 7:45 | 0 | 50 | 64 | 18 | 0 | 0 | 115 | 0 | 0 | 0 | 87 | 2 | 0 | 0 | 159 | 85 | |
| 7:45 | 8:00 | 0 | 38 | 75 | 18 | 0 | 0 | 136 | 0 | 0 | 0 | 120 | 5 | 0 | 0 | 178 | 64 | |
| 8:00 | 8:15 | 0 | 50 | 63 | 13 | 0 | 0 | 142 | 0 | 0 | 0 | 112 | 8 | 0 | 0 | 206 | 84 | |
| 8:15 | 8:30 | 0 | 53 | 83 | 16 | 0 | 0 | 131 | 1 | 0 | 0 | 136 | 24 | 0 | 0 | 173 | 79 | |
| 8:30 | 8:45 | 0 | 79 | 73 | 17 | 0 | 0 | 144 | 0 | 0 | 0 | 132 | 39 | 0 | 0 | 176 | 62 | |
| 8:45 | 9:00 | 0 | 58 | 84 | 24 | 0 | 0 | 129 | 2 | 0 | 0 | 125 | 28 | 0 | 0 | 165 | 42 | |
| 9:00 | 9:15 | 0 | 51 | 90 | 13 | 0 | 0 | 164 | 2 | 0 | 0 | 100 | 14 | 0 | 0 | 163 | 72 | |
| 9:15 | 9:30 | 0 | 57 | 94 | 11 | 0 | 1 | 159 | 1 | 0 | 0 | 99 | 14 | 0 | 0 | 166 | 78 | |
| 16:30 | 16:45 | 0 | 82 | 93 | 19 | 0 | 0 | 174 | 8 | 0 | 0 | 72 | 35 | 0 | 0 | 184 | 68 | |
| 16:45 | 17:00 | 0 | 72 | 98 | 31 | 0 | 0 | 165 | 1 | 0 | 0 | 100 | 33 | 0 | 0 | 175 | 87 | |
| 17:00 | 17:15 | 0 | 100 | 93 | 15 | 0 | 0 | 155 | 2 | 0 | 0 | 101 | 17 | 0 | 0 | 180 | 61 | |
| 17:15 | 17:30 | 0 | 75 | 82 | 23 | 0 | 0 | 171 | 0 | 0 | 0 | 108 | 32 | 0 | 0 | 185 | 82 | |
| 17:30 | 17:45 | 0 | 87 | 70 | 21 | 0 | 0 | 187 | 0 | 0 | 0 | 84 | 21 | 0 | 0 | 191 | 81 | |
| 17:45 | 18:00 | 0 | 82 | 83 | 21 | 0 | 0 | 152 | 3 | 0 | 0 | 100 | 17 | 0 | 0 | 193 | 66 | |
| 18:00 | 18:15 | 0 | 93 | 90 | 22 | 0 | 0 | 160 | 1 | 0 | 0 | 73 | 19 | 0 | 0 | 164 | 84 | |
| 18:15 | 18:30 | 0 | 64 | 95 | 22 | 0 | 0 | 175 | 2 | 0 | 0 | 75 | 22 | 0 | 0 | 186 | 82 | |
| Peak | Time | Nort | h Approa | ch Enmo | re Rd | East | Approac | h Edgewa | re Rd | Sou | th Approx | ch Enmor | e Rd | West | Approac | h Stanmo | re Rd | F |
| | Period End | U | R | SB | L | U | К | WB | L | U | ĸ | NB | L | U | К | FB | L | t |
| 8:00 | 9:00 | 0 | 240 334 | 303 343 | 70 90 | 0 | 0 0 | 546 678 | 3 | 0 | 0 | 505 393 | 99 103 | 0 | 0 | 720 | 267 311 | Ε |

| Ti | ime | Nort | h Approa | ch Enmo | re Rd | East | Approac | h Edgewa | are Rd | Sou | th Approa | ch Enmore | e Rd | West | Approac | h Stanmo | re Rd |
|------------|------------|------|----------|---------|-------|------|---------|----------|--------|-----|-----------|-----------|------|------|---------|----------|-------|
| eriod Star | Period End | U | R | SB | _ | U | R | WB | L | U | R | NB | _ | ٥ | К | EB | L |
| 7:30 | 7:45 | 0 | 2 | 13 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 6 | 7 |
| 7:45 | 8:00 | 0 | 5 | 4 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 17 | 0 | 0 | 0 | 12 | 4 |
| 8:00 | 8:15 | 0 | 2 | 6 | 2 | 0 | 0 | 8 | 0 | 0 | 0 | 14 | 1 | 0 | 0 | 12 | 5 |
| 8:15 | 8:30 | 0 | 3 | 9 | 1 | 0 | 0 | 10 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 8 | 6 |
| 8:30 | 8:45 | 0 | 3 | 7 | 1 | 0 | 0 | 4 | 0 | 0 | 0 | 17 | 2 | 0 | 0 | 15 | 1 |
| 8:45 | 9:00 | 0 | 5 | 7 | 1 | 0 | 0 | 12 | 0 | 0 | 0 | 7 | 2 | 0 | 0 | 7 | 4 |
| 9:00 | 9:15 | 0 | 4 | 9 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 10 | 2 | 0 | 0 | 9 | 1 |
| 9:15 | 9:30 | 0 | 5 | 13 | 2 | 0 | 0 | 12 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 19 | 1 |
| 16:30 | 16:45 | 0 | 0 | 6 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | - 1 |
| 16:45 | 17:00 | 0 | 1 | 11 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 9 | 0 |
| 17:00 | 17:15 | 0 | 3 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | 0 |
| 17:15 | 17:30 | 0 | 1 | 12 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 7 | 1 | 0 | 0 | 3 | 1 |
| 17:30 | 17:45 | 0 | 2 | 10 | 0 | 0 | 0 | - 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 1 | 0 |
| 17:45 | 18:00 | 0 | 2 | 7 | 0 | 0 | 0 | - 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 1 | 0 |
| 18:00 | 18:15 | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 1 | 0 |
| 18:15 | 18:30 | 0 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | 0 |

| Peak | Time | Nort | Approa | ch Enmo | re Rd | East | Approac | h Edgewa | re Rd | Sou | th Approa | ch Enmor | e Rd | West | Peak | | | |
|-------------|------------|------|--------|---------|-------|------|---------|----------|-------|-----|-----------|----------|------|------|------|----|----|-------|
| Period Star | Period End | U | R | SB | L | U | R | WB | L | U | K | NR | L | U | К | FB | L | total |
| 8:00 | 9:00 | 0 | 13 | 29 | | 0 | 0 | 34 | 0 | 0 | 0 | 54 | | 0 | 0 | 42 | 16 | 198 |
| 16:45 | 17:45 | 0 | 7 | 38 | 0 | 0 | 0 | 14 | 0 | 0 | 0 | 25 | 1 | 0 | 0 | 15 | 1 | 101 |

| | me Period En | North Approa Eastbound | Ch Enmore Rd Westbound | Northbound | Southbound | South Approx Eastbound | Ch Enmore Rd Westbound | West Approac Northbound | | Hourly Tot |
|-------|-----------------|---------------------------|---------------------------|---------------|---------------|---------------------------|---------------------------|----------------------------|---------------|------------|
| 7:30 | 7:45 | 0 | 2 | 2 | 7 | 1 | 1 | 1 | 1 | 71 |
| | | | | | | | | | | |
| 7:45 | 8:00 | 1 | 5 | 1 | 1 | 1 | 1 | 3 | 1 | 69 |
| 8:00 | 8:15 | 1 | 2 | 6 | 0 | 2 | 1 | 1 | 1 | 78 |
| 8:15 | 8:30 | 0 | 2 | 12 | 3 | 3 | 2 | 3 | 3 | 87 |
| 8:30 | 8:45 | 0 | 1 | 5 | 3 | 1 | 0 | 1 | 2 | 71 |
| 8:45 | 9:00 | 4 | 1 | 5 | 4 | 2 | 0 | 3 | 4 | |
| 9:00 | 9:15 | 2 | 1 | 4 | 1 | 0 | 1 | 12 | 2 | |
| 9:15 | 9:30 | 0 | 1 | 1 | 1 | 0 | 0 | 5 | 4 | |
| 16:30 | 16:45 | 2 | 3 | 4 | 9 | 4 | 7 | 4 | 13 | 153 |
| 16:45 | 17:00 | 3 | 2 | 2 | 11 | 4 | 6 | 6 | 14 | 144 |
| 17:00 | 17:15 | 0 | 4 | 2 | 2 | 0 | 2 | 16 | 9 | 156 |
| 17:15 | 17:30 | 0 | 1 | 0 | 6 | 1 | 1 | 6 | 9 | 163 |
| 17:30 | 17:45 | 2 | 5 | 8 | 3 | 3 | 1 | 6 | 9 | 199 |
| 17:45 | 18:00 | 0 | 3 | 12 | 11 | 7 | 5 | 12 | 10 | |
| 18:00 | 18:15 | 3 | 3 | 6 | 8 | 2 | 7 | 7 | 6 | |
| 18:15 | 18:30 | 4 | 5 | 13 | 6 | 2 | 2 | 16 | 12 | |
| Peak | Time | North Approa | ch Enmore Rd | East Approacl | n Edgeware Rd | South Approx | ch Enmore Rd | West Approac | h Stanmore Rd | Peak ho |
| | Period En | Eastbound | Westbound | Northbound | Southbound | Eastbound | Westbound | Northbound | Southbound | total |
| 8:00 | 9:00 | 5 | 6 12 | 28 | 10 | 8 8 | 3 | 34 | 10 | 78 144 |



TRANS TRAFFIC SURVEY

ection of Newington Rd and Alma Ave, Stanmore

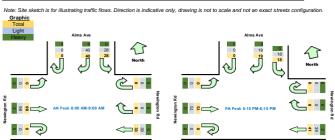
| | tion of Homing |
|-----------|-----------------------|
| GPS | -33.900909,151.166840 |
| | Fri 26/11/21 |
| | Fine |
| Suburban: | Stanmore |
| Customer: | VTP |

| ı | North: | Alma Ave |
|---|--------|--------------|
| | | Newington Rd |
| ı | South: | |
| ı | West: | Newington Rd |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 8:00 AM-9:00 AM |
| Peak | PM: | 5:15 PM-6:15 PM |

| | me | | | Alma Ave | | | | | | vington R | | y Total |
|--------------|------------|---|----|----------|---|---|----|---|----|-----------|------|---------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | Hour | Peak |
| 7:30 | 7:45 | 0 | 2 | 5 | 0 | 0 | 6 | 0 | 12 | 0 | 136 | |
| 7:45 | 8:00 | 0 | 1 | 4 | 0 | 0 | 7 | 0 | 14 | 0 | 165 | |
| 8:00 | 8:15 | 0 | 7 | 6 | 0 | 0 | 3 | 0 | 21 | 0 | 189 | Peak |
| 8:15 | 8:30 | 0 | 6 | 5 | 0 | 0 | 8 | 0 | 29 | 0 | 189 | Peak |
| 8:30 | 8:45 | 0 | 10 | 11 | 0 | 0 | 13 | 0 | 20 | 0 | 183 | |
| 8:45 | 9:00 | 0 | 17 | 6 | 0 | 0 | 9 | 0 | 18 | 0 | | |
| 9:00 | 9:15 | 0 | 4 | 12 | 0 | 0 | 1 | 0 | 20 | 0 | | |
| 9:15 | 9:30 | 0 | 3 | 12 | 0 | 0 | 7 | 0 | 20 | 0 | | |
| 16:30 | 16:45 | 0 | 5 | 4 | 0 | 0 | 17 | 0 | 19 | 0 | 147 | |
| 16:45 | 17:00 | 0 | 4 | 5 | 0 | 0 | 12 | 0 | 18 | 0 | 146 | |
| 17:00 | 17:15 | 0 | 3 | 6 | 0 | 0 | 6 | 0 | 13 | 0 | 140 | |
| 17:15 | 17:30 | 0 | 4 | 6 | 0 | 0 | 7 | 0 | 18 | 0 | 151 | Peak |
| 17:30 | 17:45 | 0 | 7 | 6 | 0 | 0 | 14 | 0 | 17 | 0 | 147 | |
| 17:45 | 18:00 | 0 | 2 | 2 | 0 | 0 | 10 | 0 | 19 | 0 | | |
| 18:00 | 18:15 | 0 | 6 | 4 | 0 | 0 | 10 | 0 | 19 | 0 | | |
| 18:15 | 18:30 | 0 | 4 | 4 | 0 | 0 | 15 | 0 | 8 | 0 | | |

| Peak | Time | North A | pproach | Alma Ave | East Appr | oach New | ington R | Vest App | roach Nev | vington R | Peak |
|--------------|------------|---------|---------|----------|-----------|----------|----------|----------|-----------|-----------|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 8:00 | 9:00 | 0 | 40 | 28 | 0 | 0 | 33 | 0 | 88 | 0 | 189 |
| 17:15 | 18:15 | - 0 | 19 | 18 | 0 | 0 | 41 | - 0 | 73 | - 0 | 151 |



| Light Vehicle | | | | | | | | | | |
|---------------|------------|---|----|----|---|---|----------|---|----|---|
| | me | | | | | | ington R | | | |
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L |
| 7:30 | 7:45 | 0 | 2 | 5 | 0 | 0 | 6 | 0 | 12 | 0 |
| 7:45 | 8:00 | 0 | 1 | 4 | 0 | 0 | 7 | 0 | 13 | 0 |
| 8:00 | 8:15 | 0 | 7 | 6 | 0 | 0 | 3 | 0 | 20 | 0 |
| 8:15 | 8:30 | 0 | 6 | 5 | 0 | 0 | 8 | 0 | 29 | 0 |
| 8:30 | 8:45 | 0 | 10 | 11 | 0 | 0 | 13 | 0 | 20 | 0 |
| 8:45 | 9:00 | 0 | 17 | 6 | 0 | 0 | 9 | 0 | 17 | 0 |
| 9:00 | 9:15 | 0 | 4 | 12 | 0 | 0 | 1 | 0 | 20 | 0 |
| 9:15 | 9:30 | 0 | 3 | 12 | 0 | 0 | 7 | 0 | 19 | 0 |
| 16:30 | 16:45 | 0 | 5 | 4 | 0 | 0 | 17 | 0 | 19 | 0 |
| 16:45 | 17:00 | 0 | 4 | 5 | 0 | 0 | 12 | 0 | 18 | 0 |
| 17:00 | 17:15 | 0 | 3 | 6 | 0 | 0 | 6 | 0 | 13 | 0 |
| 17:15 | 17:30 | 0 | 4 | 6 | 0 | 0 | 7 | 0 | 18 | 0 |
| 17:30 | 17:45 | 0 | 7 | 6 | 0 | 0 | 12 | 0 | 17 | 0 |
| 17:45 | 18:00 | 0 | 2 | 2 | 0 | 0 | 10 | 0 | 19 | 0 |
| 18:00 | 18:15 | 0 | 6 | 4 | 0 | 0 | 10 | 0 | 19 | 0 |
| 18:15 | 18:30 | 0 | 4 | 4 | 0 | 0 | 15 | 0 | 8 | 0 |

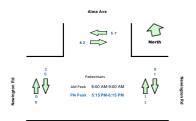
| Peak | Time | North A | pproach i | Alma Ave | East Appr | oach Nev | ington R | Vest App | roach Nev | vington R | Peak |
|--------------|------------|---------|-----------|----------|-----------|----------|----------|----------|-----------|-----------|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 8:00 | 9:00 | 0 | 40 | 28 | 0 | 0 | 33 | 0 | 86 | 0 | 187 |
| 17:15 | 18:15 | 0 | 19 | 18 | 0 | 0 | 39 | 0 | 73 | 0 | 149 |

| | leavy Vehicles Time North Approach Alma AveEast Approach Newington R Vest Approach Newington R | | | | | | | | | | | | |
|--------------|--|---|---|---|---|---|----|---|----|---|--|--|--|
| | | | | | | | | | | | | | |
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | | | |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | | | |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |

| Peak | Time | North A | pproach i | Alma Ave | East Appr | oach Nev | ington R | Vest App | roach Nev | vington R | Peak |
|--------------|------------|---------|-----------|----------|-----------|----------|----------|----------|-----------|-----------|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 8:00 | 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 17:15 | 18:15 | - 0 | | | | | 2 | | | - 0 | 2 |

| Period Start | Period End | Eastbound | Westbound | Southbound | Northbound | Southbound | Northbound | Hourly Total |
|--------------|------------|-----------|-----------|------------|------------|------------|------------|--------------|
| 7:30 | 7:45 | 1 | 1 | 0 | 0 | 0 | 0 | 14 |
| 7:45 | 8:00 | 1 | 1 | 0 | 0 | 0 | 0 | 15 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 2 | 0 | 18 |
| 8:15 | 8:30 | 3 | 5 | 0 | 0 | 0 | 0 | 16 |
| 8:30 | 8:45 | 0 | 3 | 0 | 0 | 0 | 0 | 9 |
| 8:45 | 9:00 | 4 | 0 | 0 | 1 | 0 | 0 | |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 | 9:30 | 0 | 0 | 0 | 1 | 0 | 0 | |
| 16:30 | 16:45 | 4 | 0 | 0 | 0 | 1 | 0 | 15 |
| 16:45 | 17:00 | 0 | 1 | 0 | 0 | 0 | 0 | 11 |
| 17:00 | 17:15 | 2 | 0 | 0 | 0 | 0 | 0 | 11 |
| | | | | | | | | |

| Peak | Time | North Appro | ach Alma Ave | East Approach | n Newington Rd | West Approac | Peak total | |
|--------------|------------|-------------|--------------|---------------|----------------|--------------|------------|------------|
| Period Start | Period End | Eastbound | Westbound | Southbound | Northbound | Southbound | Northbound | reak total |
| 8:00 | 9:00 | 7 | 8 | 0 | 1 | 2 | 0 | 18 |
| 17:15 | 18:15 | 6 | 2 | 1 | 1 | 0 | 0 | 10 |



17:45

18:00 18:15 18:00 18:15

TRANS TRAFFIC SURVEY

Intersection of Newington Rd and Tupper St, Stanmore

| GPS | -33.901151,151.167506 |
|-----------|-----------------------|
| Date: | Fri 26/11/21 |
| Weather: | Fine |
| Suburban: | Stanmore |
| Customor | V/TD |

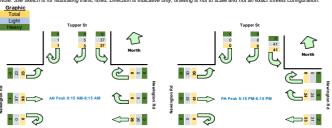
| North: | Tupper St |
|--------|--------------|
| | Newington Rd |
| South: | |
| West: | Newington Rd |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 8:15 AM-9:15 AM |
| Peak | PM: | 5:15 PM-6:15 PM |

| Tit | me | North A | pproach ' | Tupper St | East Appr | oach Nev | | Vest App | roach Nev | vington R | Hourly | / Total |
|--------------|------------|---------|-----------|-----------|-----------|----------|----|----------|-----------|-----------|--------|---------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | Hour | Peak |
| 7:30 | 7:45 | 0 | 0 | 6 | 0 | 4 | 6 | 0 | 9 | 8 | 159 | |
| 7:45 | 8:00 | 0 | 1 | 5 | 0 | 3 | 6 | 0 | 16 | 2 | 187 | |
| 8:00 | 8:15 | 0 | 1 | 7 | 0 | 4 | 2 | 0 | 20 | 7 | 192 | |
| 8:15 | 8:30 | 0 | 3 | 6 | 0 | 4 | 5 | 0 | 29 | 5 | 199 | Peak |
| 8:30 | 8:45 | 1 | 1 | 12 | 0 | 4 | 12 | 0 | 25 | 6 | 194 | |
| 8:45 | 9:00 | 0 | 1 | 5 | 0 | 0 | 8 | 0 | 14 | 10 | | |
| 9:00 | 9:15 | 0 | 0 | 14 | 0 | 1 | 1 | 0 | 30 | 2 | | |
| 9:15 | 9:30 | 0 | 4 | 6 | 1 | 1 | 3 | 0 | 23 | 9 | | |
| 16:30 | 16:45 | 0 | 3 | 8 | 0 | 6 | 14 | 0 | 19 | 4 | 181 | |
| 16:45 | 17:00 | 1 | 6 | 3 | 0 | 4 | 6 | 0 | 18 | 5 | 177 | |
| 17:00 | 17:15 | 0 | 3 | 8 | 0 | 3 | 3 | 0 | 14 | 5 | 182 | |
| 17:15 | 17:30 | 0 | 1 | 14 | 0 | 3 | 6 | 0 | 18 | 6 | 197 | Peak |
| 17:30 | 17:45 | 0 | 3 | 8 | 0 | 5 | 11 | 0 | 16 | 7 | 194 | |
| 17:45 | 18:00 | 0 | 3 | 9 | 0 | 8 | 7 | 0 | 13 | 8 | | |
| 18:00 | 18:15 | 0 | 1 | 10 | 0 | 8 | 9 | 0 | 14 | 9 | | |
| 18:15 | 18:30 | 0 | 6 | 12 | 0 | 6 | 9 | 0 | 8 | 4 | | |

| Peak | Time | North A | pproach 1 | Tupper St | East Appr | oach New | vington R | Vest App | roach Nev | vington R | Peak |
|--------------|------------|---------|-----------|-----------|-----------|----------|-----------|----------|-----------|-----------|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 8:15 | 9:15 | 1 | 5 | 37 | 0 | 9 | 26 | 0 | 98 | 23 | 199 |
| 17:15 | 18:15 | 0 | - 8 | 41 | - 0 | 24 | 33 | 0 | 61 | 30 | 197 |

Note: Site sketch is for illustrating traffic flows. Direction is indicative only, drawing is not to scale and not an exact streets configuration.



| Tit | me | North A | pproach ' | Tupper St | East Appr | oach Nev | ington R | Vest App | roach Nev | vington |
|--------------|------------|---------|-----------|-----------|-----------|----------|----------|----------|-----------|---------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L |
| 7:30 | 7:45 | 0 | 0 | 6 | 0 | 4 | 6 | 0 | 9 | 8 |
| 7:45 | 8:00 | 0 | 1 | 5 | 0 | 3 | 6 | 0 | 15 | 2 |
| 8:00 | 8:15 | 0 | 1 | 7 | 0 | 4 | 2 | 0 | 20 | 6 |
| 8:15 | 8:30 | 0 | 3 | 6 | 0 | 4 | 5 | 0 | 29 | 5 |
| 8:30 | 8:45 | 1 | 1 | 12 | 0 | 4 | 12 | 0 | 25 | 6 |
| 8:45 | 9:00 | 0 | 1 | 5 | 0 | 0 | 8 | 0 | 13 | 10 |
| 9:00 | 9:15 | 0 | 0 | 14 | 0 | 1 | 1 | 0 | 30 | 2 |
| 9:15 | 9:30 | 0 | 4 | 6 | 1 | 1 | 3 | 0 | 22 | 9 |
| 16:30 | 16:45 | 0 | 3 | 7 | 0 | 6 | 14 | 0 | 19 | 4 |
| 16:45 | 17:00 | 1 | 6 | 3 | 0 | 4 | 6 | 0 | 18 | 5 |
| 17:00 | 17:15 | 0 | 3 | 8 | 0 | 3 | 3 | 0 | 14 | 5 |
| 17:15 | 17:30 | 0 | 1 | 14 | 0 | 3 | 6 | 0 | 18 | 6 |
| 17:30 | 17:45 | 0 | 3 | 8 | 0 | 5 | 9 | 0 | 16 | 7 |
| 17:45 | 18:00 | 0 | 3 | 9 | 0 | 8 | 7 | 0 | 13 | 8 |
| 18:00 | 18:15 | 0 | 1 | 10 | 0 | 8 | 9 | 0 | 14 | 9 |
| 18:15 | 18:30 | 0 | 6 | 12 | 0 | 6 | 9 | 0 | 8 | 4 |

| Peak | Time | North A | pproach 1 | Tupper St | East Appr | oach New | ington R | Vest App | roach Nev | vington R | Peak |
|--------------|------------|---------|-----------|-----------|-----------|----------|----------|----------|-----------|-----------|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 8:15 | 9:15 | 1 | 5 | 37 | 0 | 9 | 26 | 0 | 97 | 23 | 198 |
| 17:15 | 18:15 | 0 | 8 | 41 | 0 | 24 | 31 | 0 | 61 | 30 | 195 |

| Heavy Vehicles Time North Approach Tupper StEast Approach Newington R Vest Approach Newington R | | | | | | | | | | | | | |
|---|------------------|---------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|--|--|--|
| | ne Period End | North A | pproach 1 | Tupper St | East Appr | roach Nev | vington R | Vest App | roach Nev | vington R | | | |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| | | - | | - | | - | | | | | | | |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | | | |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | | | |
| 16:30 | 16:45 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | | | |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |

| Peak | Time | North A | oproach T | Tupper St | East Appr | oach New | ington R | Vest App | Peak | | |
|--------------|------------|---------|-----------|-----------|-----------|----------|----------|----------|------|---|-------|
| Period Start | Period End | U | R | L | U | R | WB | U | EB | L | total |
| 8:15 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 17:15 | 18:15 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 |

7:30 7:45 1 1 1 1 0 0 13

7:45 8:00 1 1 1 0 1 0 0 17

8:00 8:15 1 0 1 0 0 0 21

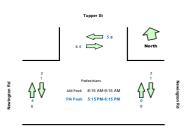
8:15 8:30 3 1 0 0 0 0 25

8:30 8:45 3 0 0 0 0 3 2 23

8:45 9:00 1 2 2 0 0 2

9:00 9:15 9:15 9:30 16:30 16:45 16 17:00 14 16:45 17:00 17:15 16 17:15 17:30 15 17:30 17:45 13 17:45 18:00 18:15 18:00

| Peak Time | | North Approx | ach Tupper St | East Approach | Newington Rd | West Approac | Peak total | |
|--------------|------------|--------------|---------------|---------------|--------------|--------------|------------|------------|
| Period Start | Period End | Westbound | Eastbound | Northbound | Southbound | Northbound | Southbound | reak total |
| 8:15 | 9:15 | 8 | 6 | 2 | 0 | 3 | 6 | 25 |
| 17:15 | 18:15 | 5 | 4 | 1 | 0 | 1 | 4 | 15 |



18:15

TRANS TRAFFIC SURVEY TURNING MOVEMENT SURVEY ** trafficsurvey.com.au ** trafficsurvey.com.au

Intersection of Newington Rd and Enmore Rd. Stanmore

| GPS | -33.901954,151.169566 | |
|-----------|-----------------------|--|
| | Fri 26/11/21 | |
| Weather: | | |
| Suburban: | Stanmore | |
| Customer: | VTP | |

| North: | Enmore Rd |
|--------|--------------|
| | N/A |
| | Enmore Rd |
| West: | Newington Rd |

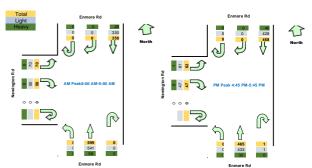
| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 8:00 AM-9:00 AM |
| Peak | PM: | 4:45 PM-5:45 PM |

| | | | | | | | nmore R | | | vington R | | y Total |
|-------------|------------|---|---|-----|---|-----|---------|---|----|-----------|------|---------|
| Period Star | Period End | U | R | SB | U | NB | _ | U | R | L | Hour | Peak |
| 7:30 | 7:45 | 0 | 0 | 58 | 0 | 116 | 0 | 0 | 9 | 15 | 989 | |
| 7:45 | 8:00 | 0 | 0 | 78 | 0 | 128 | 0 | 0 | 6 | 21 | 1068 | |
| 8:00 | 8:15 | 0 | 0 | 86 | 0 | 156 | 0 | 0 | 10 | 13 | 1077 | Peak |
| 8:15 | 8:30 | 0 | 0 | 99 | 0 | 159 | 0 | 0 | 6 | 29 | 1032 | |
| 8:30 | 8:45 | 0 | 0 | 89 | 0 | 149 | 0 | 0 | 17 | 22 | 961 | |
| 8:45 | 9:00 | 0 | 0 | 84 | 0 | 135 | 0 | 0 | 17 | 6 | | |
| 9:00 | 9:15 | 0 | 0 | 90 | 0 | 108 | 0 | 0 | 11 | 11 | | |
| 9:15 | 9:30 | 0 | 0 | 75 | 0 | 120 | 0 | 0 | 8 | 19 | | |
| 16:30 | 16:45 | 0 | 0 | 106 | 0 | 97 | 0 | 0 | 15 | 19 | 1030 | |
| 16:45 | 17:00 | 0 | 0 | 129 | 1 | 114 | 0 | 0 | 12 | 13 | 1043 | Peak |
| 17:00 | 17:15 | 0 | 0 | 115 | 0 | 109 | 0 | 0 | 16 | 18 | 1015 | |
| 17:15 | 17:30 | 0 | 0 | 122 | 0 | 119 | 0 | 0 | 8 | 17 | 990 | |
| 17:30 | 17:45 | 0 | 0 | 102 | 0 | 123 | 0 | 0 | 11 | 14 | 939 | |
| 17:45 | 18:00 | 0 | 0 | 123 | 0 | 96 | 0 | 0 | 11 | 11 | | |

| Peak | Time | North Ap | proach E | nmore Ro | South Ap | proach E | nmore RV | est Appr | oach Nev | ington R | |
|-------------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------|
| Period Star | Period End | U | R | SB | U | NB | L | U | R | L | total |
| 8:00 | 9:00 | 0 | 0 | 358 | 0 | 599 | 0 | 0 | 50 | 70 | 1077 |
| 16:45 | 17:45 | 0 | 0 | 468 | 1 | 465 | 0 | 0 | 47 | 62 | 1043 |

Note: Site sketch is for illustrating traffic flows. Direction is indicative only, drawing is not to scale and not an exact streets configuration.

Graphic



Light Vehicles

| | ne | | | | | | nmore RV | l est Approach Newington I | | | |
|-----------|------------|---|---|-----|---|-----|----------|----------------------------|----|----|--|
| riod Star | Period End | U | R | SB | U | NB | L | U | R | L | |
| 7:30 | 7:45 | 0 | 0 | 53 | 0 | 107 | 0 | 0 | 9 | 15 | |
| 7:45 | 8:00 | 0 | 0 | 71 | 0 | 110 | 0 | 0 | 5 | 19 | |
| 8:00 | 8:15 | 0 | 0 | 79 | 0 | 142 | 0 | 0 | 10 | 13 | |
| 8:15 | 8:30 | 0 | 0 | 93 | 0 | 138 | 0 | 0 | 6 | 29 | |
| 8:30 | 8:45 | 0 | 0 | 82 | 0 | 136 | 0 | 0 | 17 | 22 | |
| 8:45 | 9:00 | 0 | 0 | 76 | 0 | 125 | 0 | 0 | 17 | 6 | |
| 9:00 | 9:15 | 0 | 0 | 79 | 0 | 96 | 0 | 0 | 11 | 11 | |
| 9:15 | 9:30 | 0 | 0 | 65 | 0 | 109 | 0 | 0 | 7 | 19 | |
| 16:30 | 16:45 | 0 | 0 | 96 | 0 | 92 | 0 | 0 | 15 | 19 | |
| 16:45 | 17:00 | 0 | 0 | 118 | 1 | 105 | 0 | 0 | 12 | 13 | |
| 17:00 | 17:15 | 0 | 0 | 103 | 0 | 100 | 0 | 0 | 16 | 18 | |
| 17:15 | 17:30 | 0 | 0 | 113 | 0 | 114 | 0 | 0 | 8 | 16 | |
| 17:30 | 17:45 | 0 | 0 | 94 | 0 | 114 | 0 | 0 | 11 | 14 | |
| 17:45 | 18:00 | 0 | 0 | 115 | 0 | 91 | 0 | 0 | 11 | 11 | |
| 18:00 | 18:15 | 0 | 0 | 95 | 0 | 83 | 0 | 0 | 17 | 17 | |
| 18:15 | 18:30 | 0 | 0 | 93 | 0 | 88 | 0 | 0 | 11 | 11 | |

| Peak | Time | North Approach Enmore Rosouth Approach Enmore RVI est Approach Newington R | | | | | | | | | |
|-------------|------------|--|---|-----|---|-----|---|---|----|----|-------|
| Period Star | Period End | U | R | SB | U | NB | L | U | R | L | total |
| 8:00 | 9:00 | 0 | 0 | 330 | 0 | 541 | 0 | 0 | 50 | 70 | 991 |
| 16:45 | 17:45 | 0 | 0 | 428 | 1 | 433 | 0 | 0 | 47 | 61 | 970 |

Heavy Vehicle

| | | | | | | | | | Oacii Nev | rington K |
|-------------|------------|---|---|----|---|----|---|---|-----------|-----------|
| Period Star | Period End | U | R | SB | U | NB | L | U | R | L |
| 7:30 | 7:45 | 0 | 0 | 5 | 0 | 9 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 0 | 7 | 0 | 18 | 0 | 0 | 1 | 2 |
| 8:00 | 8:15 | 0 | 0 | 7 | 0 | 14 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 6 | 0 | 21 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 0 | 7 | 0 | 13 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 0 | 8 | 0 | 10 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 0 | 11 | 0 | 12 | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 10 | 0 | 11 | 0 | 0 | 1 | 0 |
| 16:30 | 16:45 | 0 | 0 | 10 | 0 | 5 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 11 | 0 | 9 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 12 | 0 | 9 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 9 | 0 | 5 | 0 | 0 | 0 | 1 |
| 17:30 | 17:45 | 0 | 0 | 8 | 0 | 9 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 8 | 0 | 5 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 11 | 0 | 10 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 8 | 0 | 4 | 0 | 0 | 0 | 0 |

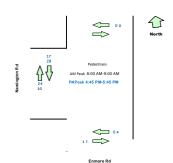
| Peak Time North Approach Enmore Rd | | | | | | proach E | nmore RV | est Appr | Peak | | |
|------------------------------------|------------|---|---|----|---|----------|----------|----------|------|---|-------|
| Period Star | Period End | U | R | SB | U | NB | L | U | R | L | total |
| 8:00 | 9:00 | 0 | 0 | 28 | 0 | 58 | 0 | 0 | 0 | 0 | 86 |
| 16:45 | 17:45 | 0 | 0 | 40 | 0 | 32 | 0 | 0 | 0 | 1 | 73 |

Pedestrians Crossing

| | me | | ch Enmore Rd | | ich Enmore Rd | | h Newington Rd | Hourly Tota |
|--------------|------------|-----------|--------------|-----------|---------------|------------|----------------|-------------|
| Period Start | Period End | Westbound | Eastbound | Westbound | Eastbound | Southbound | Northbound | Hourly 10ta |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 4 | 1 | 33 |
| 7:45 | 8:00 | 0 | 0 | 1 | 1 | 3 | 1 | 35 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 5 | 4 | 32 |
| 8:15 | 8:30 | 0 | 0 | 1 | 1 | 9 | 2 | 28 |
| 8:30 | 8:45 | 0 | 0 | 2 | 0 | 2 | 3 | 19 |
| 8:45 | 9:00 | 0 | 0 | 1 | 0 | 1 | 1 | |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 1 | 4 | |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 1 | 3 | |
| 16:30 | 16:45 | 0 | 1 | 0 | 0 | 6 | 6 | 47 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 8 | 1 | 53 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 9 | 4 | 61 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 6 | 6 | 66 |
| 17:30 | 17:45 | 0 | 0 | 0 | 1 | 5 | 13 | 68 |
| 17:45 | 18:00 | 0 | 0 | 0 | 1 | 6 | 10 | |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 13 | 5 | |
| 18:15 | 18:30 | 0 | 0 | 0 | 1 | 9 | 4 | |

| Peak | Time | North Approa | ch Enmore Rd | South Approa | ch Enmore Rd | West Approach | Peak total | |
|--------------|------------|--------------|--------------|--------------|--------------|---------------|------------|------------|
| Period Start | Period End | Westbound | Eastbound | Westbound | Eastbound | Southbound | Northbound | reak total |
| 8:00 | 9:00 | 0 | 0 | 4 | 1 | 17 | 10 | 32 |
| 16:45 | 17:45 | 0 | 0 | 0 | 1 | 28 | 24 | 53 |

Enmore F





| GPS | -33.898503, | 151.168098 |
|----------|--------------|------------|
| | Fri 26/11/21 | |
| Weather: | Fine | |

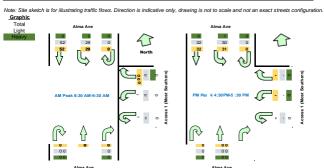
| North: | Alma Ave |
|--------|--------------------------|
| East: | Access 1 (Most Southern) |
| South: | Alma Ave |
| West: | N/A |

| Surve | θУ | AM: | 7:30 AM-9:30 AM |
|-------|----|-------|-----------------|
| Perio | od | PIVI: | 4:30 PM-6:30 PM |
| Traff | ic | AM: | 8:30 AM-9:30 AM |
| Peal | k | PM: | 4:30 PM-5:30 PM |

| 111 | me | North A | | uma Ave | pproach i | Access 1 | Most So | South A | pproacn A | Alma Ave | Hourly | I otal |
|--------------|------------|---------|----|---------|-----------|----------|---------|---------|-----------|----------|--------|--------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | Hour | Peak |
| 7:30 | 7:45 | 0 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | |
| 7:45 | 8:00 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | |
| 8:00 | 8:15 | 0 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 77 | |
| 8:15 | 8:30 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | |
| 8:30 | 8:45 | 0 | 19 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | Peak |
| 8:45 | 9:00 | 0 | 16 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 9:00 | 9:15 | 0 | 11 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 9:15 | 9:30 | 0 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 16:30 | 16:45 | 0 | 12 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | Peak |
| 16:45 | 17:00 | 0 | 5 | 7 | 0 | 1 | 1 | 0 | 0 | 0 | 60 | |
| 17:00 | 17:15 | 0 | 9 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | |
| 17:15 | 17:30 | 0 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | |
| 17:30 | 17:45 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | |
| 17:45 | 18:00 | 0 | 5 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | _ | |
| 18:00 | 18:15 | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | _ | |
| 18:15 | 18:30 | 0 | 6 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | | |

| Peak | Time | North A | pproach A | lma Ave | pproach / | Access 1 | (Most So | South A | pproach A | Ilma Ave | |
|--------------|------------|---------|-----------|---------|-----------|----------|----------|---------|-----------|----------|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:30 | 9:30 | 0 | 52 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 16:30 | 17:30 | 0 | 32 | 31 | 0 | 1 | 1 | 0 | 0 | 0 | 65 |





| <i>Light Vehicl</i> Tir | me | North A | pproach A | lma Ave | pproach / | Access 1 | (Most So | South Approach Alma Ave | | | |
|----------------------------|------------|---------|-----------|---------|-----------|----------|----------|-------------------------|---|----|--|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | |
| 7:30 | 7:45 | 0 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 | 8:00 | 0 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 | 8:15 | 0 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 | 8:30 | 0 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 | 8:45 | 0 | 19 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 | 9:00 | 0 | 16 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 | 9:15 | 0 | 11 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 | 9:30 | 0 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:30 | 16:45 | 0 | 12 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:45 | 17:00 | 0 | 5 | 7 | 0 | 1 | 1 | 0 | 0 | 0 | |
| 17:00 | 17:15 | 0 | 9 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17:15 | 17:30 | 0 | 6 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17:30 | 17:45 | 0 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17:45 | 18:00 | 0 | 5 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | |
| 18:00 | 18:15 | 0 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 18:15 | 18:30 | 0 | 6 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | |

| Peak | Time | North A | pproach A | lma Ave | pproach / | Access 1 | (Most So | South Ap | pproach A | Ilma Ave | Peak |
|--------------|------------|---------|-----------|---------|-----------|----------|----------|----------|-----------|----------|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:30 | 9:30 | 0 | 52 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 81 |
| 16:30 | 17:30 | 0 | 32 | 30 | 0 | 1 | 1 | 0 | 0 | 0 | 64 |

| Heavy Venic Tir | ne | | pproach A | lma Ave | | | (Most So | | | |
|--------------------|------------|---|-----------|---------|---|---|----------|---|---|----|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Peak | Time | North A | pproach A | Ima Ave | pproach / | Access 1 | (Most So | South A | pproach A | Alma Ave | Peak |
|--------------|------------|---------|-----------|---------|-----------|----------|----------|---------|-----------|----------|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:30 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 17:30 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |



| GPS | -33.899167, 151.16776 |
|-----------|-----------------------|
| Date: | Fri 26/11/21 |
| Weather: | Fine |
| Suburban: | Stanmore |
| Customer: | VTP |

| North: | Alma Ave |
|--------|----------------------------|
| East: | Access 2 (S of Harrington) |
| South: | Alma Ave |
| West: | N/A |

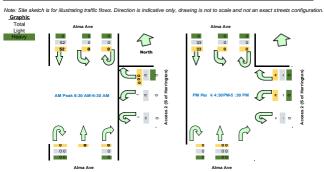
| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-------|-----------------|
| Period | PIVI: | 4:30 PM-6:30 PM |
| Traffic | AM: | 8:30 AM-9:30 AM |
| Peak | PM: | 4:30 PM-5:30 PM |

| Vehicles |
|----------|
| |
| |

| | me | | | lma Ave | pproach A | | | | | | Hourly Total | |
|--------------|------------|---|----|---------|-----------|---|---|---|---|----|--------------|------|
| Period Start | Period End | U | SB | ٦ | U | R | ٦ | J | R | NB | Hour | Peak |
| 7:30 | 7:45 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | |
| 7:45 | 8:00 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | |
| 8:00 | 8:15 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | |
| 8:15 | 8:30 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | |
| 8:30 | 8:45 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | Peak |
| 8:45 | 9:00 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 9:00 | 9:15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 9:15 | 9:30 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 16:30 | 16:45 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | Peak |
| 16:45 | 17:00 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | |
| 17:00 | 17:15 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | |
| 17:15 | 17:30 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | |
| 17:30 | 17:45 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | |
| 17:45 | 18:00 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 18:00 | 18:15 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 18:15 | 18:30 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

| Peak | Time North Approach Alma Ave pproach Access 2 (S of Harr | | | North Approach Alma Ave | | | South A | Peak | | | |
|--------------|--|---|----|-------------------------|---|---|---------|------|---|----|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:30 | 9:30 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| 16:30 | 17:30 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |





| <i>Light Vehicl</i> Tir | me | North A | pproach A | lma Ave | oproach A | ccess 2 (| S of Harr | South Approach Alma Ave | | | |
|----------------------------|------------|---------|-----------|---------|-----------|-----------|-----------|-------------------------|---|----|--|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | |
| 7:30 | 7:45 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 7:45 | 8:00 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:00 | 8:15 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:15 | 8:30 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:30 | 8:45 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 8:45 | 9:00 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:00 | 9:15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 9:15 | 9:30 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:30 | 16:45 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 16:45 | 17:00 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17:00 | 17:15 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17:15 | 17:30 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17:30 | 17:45 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 17:45 | 18:00 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 18:00 | 18:15 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 18:15 | 18:30 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

| Peak | Time North Approach Alma Ave pproach Access 2 (S of Hart | | | S of Harr | South Ap | Peak | | | | | |
|--------------|--|---|----|-----------|----------|------|---|---|---|----|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:30 | 9:30 | 0 | 52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| 16:30 | 17:30 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |

| avy | Vehic | cles |
|-----|-------|------|
| | | |

| | me | | | lma Ave | | Access 2 (| S of Harr | | South Approach Alma Ave | | | |
|--------------|------------|---|----|---------|---|------------|-----------|---|-------------------------|----|--|--|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | | |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

| Peak | k Time North Approach Alma Ave pproach Access 2 (S of Harr | | | South A | Peak | | | | | | |
|--------------|--|---|----|---------|------|---|---|---|---|----|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:30 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

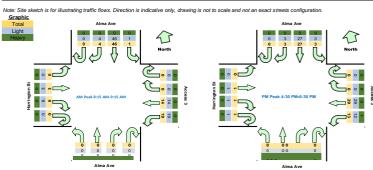


| North: | Alma Ave |
|--------|---------------|
| East: | Access 3 |
| South: | Alma Ave |
| West: | Harrington St |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 8:15 AM-9:15 AM |
| Peak | PM: | 4:30 PM-5:30 PM |

| | me | Nor | th Appro | ach Alma | Ave | Ea | st Approa | ch Acces | s 3 | Sc | outh Appro | ach Alma A | ve | West | Approach | n Harringt | on St | Hourly | y Total |
|--------------|------------|-----|----------|----------|-----|----|-----------|----------|-----|----|------------|------------|----|------|----------|------------|-------|--------|---------|
| Period Start | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | U | R | EB | L | Hour | Peak |
| 7:30 | 7:45 | 0 | 0 | 7 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | |
| 7:45 | 8:00 | 0 | 1 | 2 | 1 | 0 | 0 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 71 | |
| 8:00 | 8:15 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | |
| 8:15 | 8:30 | 0 | 0 | 5 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 93 | Peak |
| 8:30 | 8:45 | 0 | 3 | 16 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 91 | |
| 8:45 | 9:00 | 0 | 0 | 15 | 1 | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | | |
| 9:00 | 9:15 | 0 | 1 | 10 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | | |
| 9:15 | 9:30 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | |
| 16:30 | 16:45 | 0 | 0 | 11 | 1 | 0 | 0 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 78 | Peak |
| 16:45 | 17:00 | 0 | 1 | 4 | 1 | 0 | 0 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | |
| 17:00 | 17:15 | 0 | 2 | 7 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 62 | |
| 17:15 | 17:30 | 0 | 0 | 5 | 1 | 0 | 0 | 10 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 61 | |
| 17:30 | 17:45 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | |
| 17:45 | 18:00 | 0 | 0 | 5 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | | |
| 18:00 | 18:15 | 0 | 2 | 4 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | | |
| 18:15 | 18:30 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |

| I | Peak | Time | No | th Appro | ach Alma | Ave | Ea | st Approa | ich Acces | s 3 | Sc | outh Approa | ach Alma A | ve | West | Approach | Harringte | on St | Peak |
|---|--------------|------------|----|----------|----------|-----|----|-----------|-----------|-----|----|-------------|------------|----|------|----------|-----------|-------|-------|
| | Period Start | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | U | R | EB | L | total |
| | 8:15 | 9:15 | 0 | 4 | 46 | 1 | 0 | 0 | 14 | 19 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 93 |
| | 16:30 | 17:30 | 0 | 3 | 27 | 3 | 0 | 0 | 29 | 13 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 78 |



| | | Time North Approach Almeriod Start Period End U R SB | | | | | | ch Acces | s 3 | Sc | outh Approa | ach Alma A | ve | West | Approach | h Harringt | on St |
|--------------|------------|--|---|----|---|---|---|----------|-----|----|-------------|------------|----|------|----------|------------|-------|
| Period Start | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | U | R | EB | L |
| 7:30 | 7:45 | 0 | 0 | 7 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 1 | 2 | 1 | 0 | 0 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 8:00 | 8:15 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 5 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| 8:30 | 8:45 | 0 | 3 | 16 | 0 | 0 | 0 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 8:45 | 9:00 | 0 | 0 | 15 | 1 | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |
| 9:00 | 9:15 | 0 | 1 | 10 | 0 | 0 | 0 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |
| 9:15 | 9:30 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 11 | 1 | 0 | 0 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 1 | 4 | 1 | 0 | 0 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 2 | 7 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| 17:15 | 17:30 | 0 | 0 | 5 | 1 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 7 | 0 | 0 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 5 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| 18:00 | 18:15 | 0 | 2 | 4 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 |
| 18:15 | 18:30 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Peak | Peak Time North Approach Alma Ave | | | | | East Approach Access 3 | | | | So | uth Approa | ich Alma A | ve | West | on St | Peak | | |
|--------------|-----------------------------------|---|---|----|---|------------------------|---|----|----|----|------------|------------|----|------|-------|------|---|-------|
| Period Start | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | U | R | EB | L | total |
| 8:15 | 9:15 | 0 | 4 | 46 | 1 | 0 | 0 | 14 | 19 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 0 | 93 |
| 16:30 | 17:30 | 0 | 3 | 27 | 3 | 0 | 0 | 29 | 12 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 77 |

| vy | Vehicle |
|----|---------|
| | Time |

| | me | No | th Appro | ach Alma | Ave | Ea | st Approa | ich Acces | s 3 | Sc | outh Appro | ach Alma A | ve | West | Approach | n Harringt | on St |
|--------------|------------|----|----------|----------|-----|----|-----------|-----------|-----|----|------------|------------|----|------|----------|------------|-------|
| Period Start | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | U | R | EB | L |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Peak | Time | Nor | th Approa | ich Alma | Ave | Ea | st Approa | ch Acces | s 3 | Sc | uth Approa | ich Alma A | ve | West | Approach | Harringto | on St | Peak |
|--------------|------------|-----|-----------|----------|-----|----|-----------|----------|-----|----|------------|------------|----|------|----------|-----------|-------|-------|
| Period Start | Period End | U | R | SB | L | U | R | WB | L | U | R | NB | L | U | R | EB | L | total |
| 8:15 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 17:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |



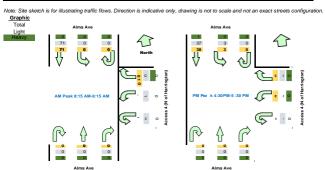
| GPS | -33.899579, 151.167564 |
|-----------|------------------------|
| | Fri 26/11/21 |
| | Fine |
| Suburban: | |
| Customer: | VTP |

| North: | Alma Ave |
|--------|----------------------------|
| East: | Access 4 (N of Harrington) |
| South: | Alma Ave |
| West: | N/A |

| Survey | AM: | 7:30 AM-9:30 AM |
|---------|-----|-----------------|
| Period | PM: | 4:30 PM-6:30 PM |
| Traffic | AM: | 8:15 AM-9:15 AM |
| Peak | PM: | 4:30 PM-5:30 PM |

| Tit | me | North A | pproach A | Ima Ave | pproach / | Access 4 (| N of Harr | South A | pproach A | Ilma Ave | Hourly | Total |
|--------------|------------|---------|-----------|---------|-----------|------------|-----------|---------|-----------|----------|--------|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | Hour | Peak |
| 7:30 | 7:45 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | |
| 7:45 | 8:00 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | |
| 8:00 | 8:15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | |
| 8:15 | 8:30 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | Peak |
| 8:30 | 8:45 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | Peak |
| 8:45 | 9:00 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 9:00 | 9:15 | 0 | 17 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | |
| 9:15 | 9:30 | 0 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | |
| 16:30 | 16:45 | 0 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | Peak |
| 16:45 | 17:00 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | |
| 17:00 | 17:15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | |
| 17:15 | 17:30 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | |
| 17:30 | 17:45 | 0 | 10 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 36 | |
| 17:45 | 18:00 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | | |
| 18:00 | 18:15 | 0 | 7 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | | |
| 18:15 | 18:30 | 0 | 7 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | | |

| Peak | Time | North A | proach A | lma Ave | pproach A | Access 4 (| N of Harr | South Ap | pproach A | Ima Ave | Peak |
|--------------|------------|---------|----------|---------|-----------|------------|-----------|----------|-----------|---------|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:15 | 9:15 | 0 | 71 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 72 |
| 16:30 | 17:30 | 0 | 38 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 41 |



| Tit | me | North A | pproach A | Ilma Ave | oproach A | Access 4 (| N of Harr | South A | pproach A | Ilma Ave |
|--------------|------------|---------|-----------|----------|-----------|------------|-----------|---------|-----------|----------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB |
| 7:30 | 7:45 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 17 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 9 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 10 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 7 | 1 | 0 | 0 | 1 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 7 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |

| Pe | ak Time | North A | pproach A | Ilma Ave | oproach A | Access 4 (| N of Harr | South A | pproach A | Ima Ave | Peak |
|-----------|----------------|---------|-----------|----------|-----------|------------|-----------|---------|-----------|---------|-------|
| Period St | art Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:15 | 9:15 | 0 | 71 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 72 |
| 16:30 | 17:30 | 0 | 37 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 40 |

Heavy Vehicles

| | me | | | Ima Ave | pproach A | | N of Harr | | | |
|--------------|------------|---|----|---------|-----------|---|-----------|---|---|----|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB |
| 7:30 | 7:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7:45 | 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:00 | 8:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:15 | 8:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:30 | 8:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8:45 | 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:00 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9:15 | 9:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:30 | 16:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16:45 | 17:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:00 | 17:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:15 | 17:30 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:30 | 17:45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17:45 | 18:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:00 | 18:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18:15 | 18:30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Peak | Time | North A | pproach A | lma Ave | pproach A | Access 4 (| N of Harr | South A | oproach A | lma Ave | Peak |
|--------------|------------|---------|-----------|---------|-----------|------------|-----------|---------|-----------|---------|-------|
| Period Start | Period End | U | SB | L | U | R | L | U | R | NB | total |
| 8:15 | 9:15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | |

APPENDIX C

SIDRA MOVEMENT SUMMARIES ONE WAY ALMA AVENUE

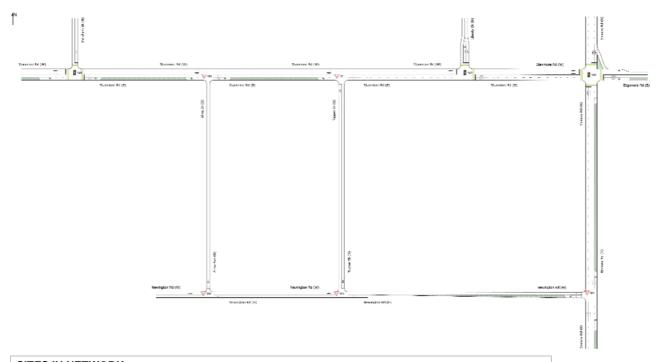
NETWORK LAYOUT

■□ Network: N101 [Existing Network AM 2021 (Network Folder:

General)]

Existing Network AM 2021 Network Category: (None)

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



| SITES IN I | NETWORK | |
|------------------|---------|----------------------|
| Site ID | CCG ID | Site Name |
| 1 01 | NA | STA_MERX AM 2021 |
| ∇ ₁₀₁ | NA | STA_ALMX AM 2021 |
| ∇ 101 | NA | STA_TUPX AM 2021 |
| 1 01 | NA | STA_LIBX AM 2021 |
| 1 01 | NA | STA_ENM_EDGX AM 2021 |
| ∇ ₁₀₁ | NA | NEW_ALMX AM 2021 |
| ∇ ₁₀₁ | NA | NEW_TUPX AM 2021 |
| ∇ ₁₀₁ | NA | ENM_NEWX AM 2021 |

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Project: Z:\DATA\Data\Jobs\21work\21513_58-76Stanmore\SIDRA\211206\Existing Network 2021.sip9

Site: 101 [STA_MERX AM 2021 (Site Folder: General)]

■□ Network: N101 [Existing Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Merchant St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|---------|----------------------------------|-------|---------------------------------|--------------|---------------------|-----------------------|---------------------|------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO' [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanm | ore Rd (E | ≣) | | | | | | | | | | | |
| 5 | T1 | 847 | 4.3 | 847 | 4.3 | * 0.508 | 8.5 | LOS A | 15.7 | 113.6 | 0.40 | 0.58 | 0.40 | 38.3 |
| Appro | oach | 847 | 4.3 | 847 | 4.3 | 0.508 | 8.5 | LOS A | 15.7 | 113.6 | 0.40 | 0.58 | 0.40 | 38.3 |
| North | : Merch | nant St (N | 1) | | | | | | | | | | | |
| 7 | L2 | 57 | 0.0 | 57 | 0.0 | 0.492 | 56.1 | LOS D | 7.4 | 53.0 | 0.97 | 0.80 | 0.97 | 19.9 |
| 9 | R2 | 78 | 3.8 | 78 | 3.8 | * 0.492 | 56.2 | LOS D | 7.4 | 53.0 | 0.97 | 0.80 | 0.97 | 26.4 |
| Appro | oach | 135 | 2.2 | 135 | 2.2 | 0.492 | 56.2 | LOS D | 7.4 | 53.0 | 0.97 | 0.80 | 0.97 | 24.3 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 68 | 0.0 | 68 | 0.0 | 0.315 | 8.6 | LOS A | 8.3 | 60.5 | 0.35 | 0.36 | 0.35 | 41.2 |
| 11 | T1 | 818 | 6.1 | 818 | 6.1 | 0.315 | 5.2 | LOS A | 8.3 | 61.1 | 0.35 | 0.34 | 0.35 | 35.8 |
| Appro | oach | 886 | 5.6 | 886 | 5.6 | 0.315 | 5.4 | LOS A | 8.3 | 61.1 | 0.35 | 0.34 | 0.35 | 36.5 |
| All Ve | ehicles | 1868 | 4.8 | 1868 | 4.8 | 0.508 | 10.5 | LOS A | 15.7 | 113.6 | 0.42 | 0.48 | 0.42 | 35.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | ovement | Perforr | nance | | | | | | | |
|--------------------|--------------|----------------|---------------------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Et Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | ped | m | | | sec | m | m/sec |
| East: Stanmore | Rd (E) | | | | | | | | | |
| P2 Full | 15 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Merchant | t St (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 214.6 | 208.6 | 0.97 |
| West: Stanmore | Rd (W) | | | | | | | | | |
| P4 Full | 45 | 54.3 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| All Pedestrians | 64 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.4 | 214.8 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



■□ Network: N101 [Existing Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Alma St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanm | ore Rd (E | =) | | | | | | | | | | | |
| 4 | L2 | 33 | 0.0 | 33 | 0.0 | 0.073 | 4.9 | LOS A | 0.0 | 0.0 | 0.00 | 0.14 | 0.00 | 48.5 |
| 5 | T1 | 796 | 4.9 | 796 | 4.9 | 0.366 | 0.2 | LOS A | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 58.0 |
| Appro | oach | 829 | 4.7 | 829 | 4.7 | 0.366 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 57.5 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 870 | 5.9 | 870 | 5.9 | 0.334 | 0.6 | LOS A | 0.7 | 5.4 | 0.08 | 0.02 | 0.09 | 55.3 |
| 12 | R2 | 30 | 0.0 | 30 | 0.0 | 0.334 | 12.0 | LOS A | 0.7 | 5.4 | 0.19 | 0.06 | 0.23 | 49.5 |
| Appro | oach | 900 | 5.7 | 900 | 5.7 | 0.334 | 1.0 | NA | 0.7 | 5.4 | 0.08 | 0.02 | 0.10 | 55.1 |
| All Ve | ehicles | 1729 | 5.2 | 1729 | 5.2 | 0.366 | 0.7 | NA | 0.7 | 5.4 | 0.04 | 0.02 | 0.05 | 55.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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■□ Network: N101 [Existing **Network AM 2021 (Network**

Folder: General)]

Stanmore Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|----------|----------------------------------|------------|----------------------------------|--------------|---------------------|-----------------------|---------------------|------------|------------------------------|----------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO' [Total veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. I Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | : Tuppe | er St (S) | | | | | | | | | | | | |
| 1 3 | L2 R2 | 16 23 | 0.0 | 16 23 | 0.0 | 0.339 0.339 | 10.9 41.8 | LOS A LOS C | 0.8 0.8 | 5.4 5.4 | 0.56 0.56 | 0.70 0.70 | 0.66 0.66 | 19.9 19.9 |
| Appro | | 39 ore Rd (E | 0.0 | 39 | 0.0 | 0.339 | 29.1 | LOS C | 0.8 | 5.4 | 0.56 | 0.70 | 0.66 | 19.9 |
| | | • | , | | | | | | | | | | | |
| 4 5 | L2 T1 | 22 773 | 0.0 5.0 | 22 773 | 0.0 5.0 | 0.078 0.343 | 4.1 0.3 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 0.00 | 0.09 0.01 | 0.00 | 51.5 58.3 |
| Appro | ach | 795 | 4.9 | 795 | 4.9 | 0.343 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 58.1 |
| West | Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 862 | 5.9 | 862 | 5.9 | 0.236 | 0.1 | LOS A | 11.9 | 87.8 | 0.02 | 0.01 | 0.02 | 57.4 |
| 12 | R2 | 8 | 0.0 | 8 | 0.0 | 0.236 | 10.8 | LOS A | 7.3 | 53.3 | 0.04 | 0.01 | 0.05 | 55.0 |
| Appro | ach | 870 | 5.9 | 870 | 5.9 | 0.236 | 0.2 | NA | 11.9 | 87.8 | 0.02 | 0.01 | 0.02 | 57.4 |
| All Ve | hicles | 1704 | 5.3 | 1704 | 5.3 | 0.343 | 1.0 | NA | 11.9 | 87.8 | 0.02 | 0.03 | 0.03 | 49.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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: 101 [STA_LIBX AM 2021 (Site Folder: General)]

■□ Network: N101 [Existing Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Liberty St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|----------|----------------------------------|------------|--------------------------------|--------------|---------------------|-----------------------|---------------------|--------------|-----------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanm | ore Rd (E | Ξ) | | | | | | | | | | | |
| 5 6 | T1 R2 | 606 321 | 5.8 5.0 | 606 321 | 5.8 5.0 | 0.430 * 0.536 | 4.8 17.7 | LOS A LOS B | 9.6 7.2 | 70.3 52.6 | 0.30 0.44 | 0.27 0.82 | 0.30 0.44 | 37.6 36.5 |
| Appro | oach | 927 | 5.5 | 927 | 5.5 | 0.536 | 9.3 | LOS A | 9.6 | 70.3 | 0.35 | 0.46 | 0.35 | 36.8 |
| North | : Libert | y St (N) | | | | | | | | | | | | |
| 7 9 | L2 R2 | 310 189 | 4.2 2.1 | 310 189 | 4.2 2.1 | 0.375 * 0.689 | 27.2 58.9 | LOS B LOS E | 11.7 10.9 | 85.1 77.8 | 0.70 1.00 | 0.76 0.84 | 0.70 1.05 | 28.9 19.3 |
| Appro | oach | 499 | 3.4 | 499 | 3.4 | 0.689 | 39.2 | LOS C | 11.7 | 85.1 | 0.81 | 0.79 | 0.83 | 24.3 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 11 | L2 T1 | 92 793 | 3.3 6.2 | 92 793 | 3.3 6.2 | 0.715 * 0.715 | 32.7 29.6 | LOS C LOS C | 12.2 12.2 | 89.8 89.8 | 0.86 0.87 | 0.79 0.79 | 0.86 0.88 | 29.2 7.2 |
| Appro | oach | 885 | 5.9 | 885 | 5.9 | 0.715 | 30.0 | LOS C | 12.2 | 89.8 | 0.87 | 0.79 | 0.88 | 11.4 |
| All Ve | ehicles | 2311 | 5.2 | 2311 | 5.2 | 0.715 | 23.7 | LOS B | 12.2 | 89.8 | 0.65 | 0.66 | 0.65 | 23.5 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement. Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------------------|---------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|-------|
| Mov ID Crossing | Flow Delay Service | | AVERAGE QUE [Ped | | Prop. Et Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed | |
| | ped/h | sec | | ped | m | | | sec | m | m/sec |
| East: Stanmore | Rd (E) | | | | | | | | | |
| P2 Full | 23 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Liberty St | (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 217.2 | 211.9 | 0.98 |
| All Pedestrians | 27 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.3 | 214.7 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [STA_ENM_EDGX AM 2021 (Site Folder: General)]

■□ Network: N101 [Existing Network AM 2021 (Network

Folder: General)]

Stanmore Rd, Enmore Rd & Edgeware Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|---------|-------------------------|------|-----------------------|------|----------------|----------------|---------------------|------|------------------------|--------------|----------------------------|--------------------|----------------|
| Mov ID | Turn | DEMA FLOV [Total | | ARRI FLO [Tota | WS | Deg. Satn | Aver. Delay | Level of Service | | ACK OF EUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed |
| | | veh/h | % | veh/h | % | v/c | sec | | veh | m | | | | km/h |
| South: Enmore Rd (S) | | | | | | | | | | | | | | |
| 1 | L2 | 79 | 0.0 | 79 | 0.0 | 0.847 | 62.6 | LOS E | 20.2 | 151.7 | 1.00 | 0.98 | 1.19 | 14.2 |
| 2 | T1 | 564 | 11.3 | 564 | 11.3 | * 0.847 | 58.2 | LOS E | 20.2 | 151.7 | 1.00 | 0.99 | 1.19 | 16.8 |
| Appr | oach | 643 | 10.0 | 643 | 10.0 | 0.847 | 58.8 | LOS E | 20.2 | 154.3 | 1.00 | 0.99 | 1.19 | 16.5 |
| East: | Edgew | are Rd (E | ≣) | | | | | | | | | | | |
| 4 | L2 | 1 | 0.0 | 1 | 0.0 | 0.321 | 24.7 | LOS B | 10.3 | 75.5 | 0.65 | 0.56 | 0.65 | 32.4 |
| 5 | T1 | 584 | 5.3 | 584 | 5.3 | 0.321 | 20.1 | LOS B | 10.3 | 75.5 | 0.65 | 0.56 | 0.65 | 32.5 |
| Appr | oach | 585 | 5.3 | 585 | 5.3 | 0.321 | 20.1 | LOS B | 10.3 | 75.5 | 0.65 | 0.56 | 0.65 | 32.5 |
| North | n: Enmo | ore Rd (N) |) | | | | | | | | | | | |
| 7 | L2 | 68 | 5.9 | 68 | 5.9 | 0.502 | 42.6 | LOS D | 17.2 | 128.6 | 0.79 | 0.76 | 0.79 | 27.0 |
| 8 | T1 | 320 | 8.1 | 320 | 8.1 | 0.502 | 36.1 | LOS C | 17.2 | 128.6 | 0.79 | 0.76 | 0.79 | 8.0 |
| 9 | R2 | 233 | 5.6 | 233 | 5.6 | * 0.654 | 55.2 | LOS D | 12.1 | 89.0 | 0.97 | 1.01 | 0.97 | 5.5 |
| Appr | oach | 621 | 6.9 | 621 | 6.9 | 0.654 | 44.0 | LOS D | 17.2 | 128.6 | 0.86 | 0.86 | 0.86 | 10.0 |
| West | : Stanm | nore Rd (\ | N) | | | | | | | | | | | |
| 10 | L2 | 305 | 5.2 | 305 | 5.2 | 0.275 | 17.9 | LOS B | 10.3 | 75.2 | 0.60 | 0.75 | 0.60 | 23.9 |
| 11 | T1 | 780 | 6.0 | 780 | 6.0 | * 0.844 | 45.7 | LOS D | 26.6 | 195.8 | 0.99 | 0.93 | 1.02 | 25.5 |
| Appr | oach | 1085 | 5.8 | 1085 | 5.8 | 0.844 | 37.9 | LOS C | 26.6 | 195.8 | 0.88 | 0.88 | 0.90 | 25.3 |
| All V | ehicles | 2934 | 6.9 | 2934 | 6.9 | 0.847 | 40.2 | LOS C | 26.6 | 195.8 | 0.86 | 0.83 | 0.91 | 21.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

* Critical Movement (Signal Timing)

| Pedestrian Movement Performance | | | | | | | | | | | | | |
|---------------------------------|---------------|--------|----------------|---------------------|-------------------------|-----|-----------------|-------------------------|----------------|-----------------|----------------|--|--|
| Mov ID | | | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Ef Que | fective Stop Rate | Travel Time | Travel Dist. | Aver. Speed | | |
| | | ped/h | sec | | ped | m | | | sec | m | m/sec | | |
| Sou | ıth: Enmore F | Rd (S) | | | | | | | | | | | |
| P1 | Full | 12 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | |
| Eas | t: Edgeware | Rd (E) | | | | | | | | | | | |
| P2 | Full | 33 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 | | |
| Nor | th: Enmore F | Rd (N) | | | | | | | | | | | |
| РЗ | Full | 13 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | |
| We | st: Stanmore | Rd (W) | | | | | | | | | | | |
| P4 | Full | 16 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | |
| All I | Pedestrians | 73 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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Project: Z:\DATA\Data\Jobs\01\Jobs\21work\21513_58-76StanmoreRdStanmore\SIDRA\211206\Existing Network 2021.sip9



V Site: 101 [NEW_ALMX AM 2021 (Site Folder: General)]

■□ Network: N101 [Existing **Network AM 2021 (Network**

Folder: General)]

Newington Rd & Alma Ave Site Category: (None) Give-Way (Two-Way)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|---------|----------------------------------|-----|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: Newington Rd (E) | | | | | | | | | | | | | | |
| 5 | T1 | 31 | 0.0 | 31 | 0.0 | 0.016 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | oach | 31 | 0.0 | 31 | 0.0 | 0.016 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 26 | 0.0 | 26 | 0.0 | 0.038 | 3.6 | LOS A | 0.1 | 0.9 | 0.17 | 0.48 | 0.17 | 34.7 |
| 9 | R2 | 24 | 0.0 | 24 | 0.0 | 0.038 | 4.3 | LOS A | 0.1 | 0.9 | 0.17 | 0.48 | 0.17 | 41.7 |
| Appro | oach | 50 | 0.0 | 50 | 0.0 | 0.038 | 3.9 | LOS A | 0.1 | 0.9 | 0.17 | 0.48 | 0.17 | 39.4 |
| West | : Newir | ngton Rd | (W) | | | | | | | | | | | |
| 11 | T1 | 84 | 0.0 | 84 | 0.0 | 0.043 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | oach | 84 | 0.0 | 84 | 0.0 | 0.043 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| All Ve | hicles | 165 | 0.0 | 165 | 0.0 | 0.043 | 1.2 | NA | 0.1 | 0.9 | 0.05 | 0.15 | 0.05 | 46.1 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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Project: Z:\DATA\Data\Jobs\21work\21513_58-76StanmoreRdStanmore\SIDRA\211206\Existing Network 2021.sip9



V Site: 101 [NEW_TUPX AM 2021 (Site Folder: General)]

■□ Network: N101 [Existing **Network AM 2021 (Network**

Folder: General)]

Newington Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|---------|----------------------------------|-----|--------------------------------|--------------|---------------------|-----------------------|---------------------|------|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| | V G 11/11 | 70 | V/0 | 300 | | VOII | | | | | 1311/11 |
| 5 | T1 | 25 | 0.0 | 25 | 0.0 | 0.022 | 0.2 | LOS A | 0.1 | 0.6 | 0.15 | 0.20 | 0.15 | 43.4 |
| 6 | R2 | 15 | 0.0 | 15 | 0.0 | 0.022 | 4.9 | LOS A | 0.1 | 0.6 | 0.15 | 0.20 | 0.15 | 43.4 |
| Appro | oach | 40 | 0.0 | 40 | 0.0 | 0.022 | 1.9 | NA | 0.1 | 0.6 | 0.15 | 0.20 | 0.15 | 43.4 |
| North | : Tupp | er St (N) | | | | | | | | | | | | |
| 7 | L2 | 30 | 0.0 | 30 | 0.0 | 0.025 | 4.8 | LOS A | 0.1 | 0.7 | 0.18 | 0.51 | 0.18 | 40.6 |
| 9 | R2 | 6 | 0.0 | 6 | 0.0 | 0.025 | 5.0 | LOS A | 0.1 | 0.7 | 0.18 | 0.51 | 0.18 | 40.6 |
| Appro | oach | 36 | 0.0 | 36 | 0.0 | 0.025 | 4.8 | LOS A | 0.1 | 0.7 | 0.18 | 0.51 | 0.18 | 40.6 |
| West | : Newir | ngton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 20 | 0.0 | 20 | 0.0 | 0.057 | 4.5 | LOS A | 0.0 | 0.0 | 0.00 | 0.10 | 0.00 | 43.5 |
| 11 | T1 | 90 | 0.0 | 90 | 0.0 | 0.057 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.10 | 0.00 | 43.5 |
| Appro | oach | 110 | 0.0 | 110 | 0.0 | 0.057 | 0.8 | NA | 0.0 | 0.0 | 0.00 | 0.10 | 0.00 | 43.5 |
| All Ve | ehicles | 186 | 0.0 | 186 | 0.0 | 0.057 | 1.8 | NA | 0.1 | 0.7 | 0.07 | 0.20 | 0.07 | 42.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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Project: Z:\DATA\Data\Jobs\21work\21513_58-76StanmoreRdStanmore\SIDRA\211206\Existing Network 2021.sip9



V Site: 101 [ENM_NEWX AM 2021 (Site Folder: General)]

■□ Network: N101 [Existing **Network AM 2021 (Network**

Folder: General)]

Enmore Rd & Newington Rd Site Category: (None) Give-Way (Two-Way)

| Vehi | Vehicle Movement Performance | | | | | | | | | | | | | |
|-----------|------------------------------|----------------------------------|------|----------------------------------|-----------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEM/ FLO\ [Total veh/h | | ARRI FLO\ [Total veh/h | WS HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Enmo | ore Rd (S | 5) | | | | | | | | | | | |
| 2 | T1 | 592 | 11.1 | 592 1 | 11.1 | 0.163 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | oach | 592 | 11.1 | 592 1 | 11.1 | 0.163 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| North | : Enmo | re Rd (N |) | | | | | | | | | | | |
| 8 | T1 | 352 | 7.7 | 352 | 7.7 | 0.158 | 0.1 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | oach | 352 | 7.7 | 352 | 7.7 | 0.158 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| West | : Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 85 | 0.0 | 85 | 0.0 | 0.087 | 6.0 | LOS A | 0.3 | 2.2 | 0.38 | 0.60 | 0.38 | 35.9 |
| 12 | R2 | 39 | 0.0 | 39 | 0.0 | 0.130 | 15.7 | LOS B | 0.5 | 3.2 | 0.75 | 0.89 | 0.75 | 30.4 |
| Appro | oach | 124 | 0.0 | 124 | 0.0 | 0.130 | 9.0 | LOS A | 0.5 | 3.2 | 0.50 | 0.69 | 0.50 | 33.3 |
| All Ve | ehicles | 1068 | 8.7 | 1068 | 8.7 | 0.163 | 1.1 | NA | 0.5 | 3.2 | 0.06 | 0.08 | 0.06 | 54.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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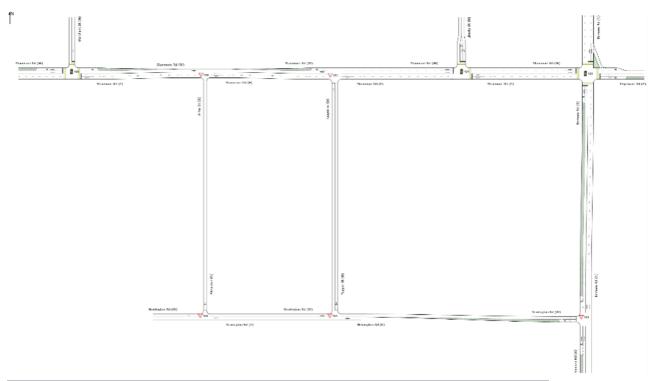
NETWORK LAYOUT

■□ Network: N101 [Existing Network PM 2021 (Network Folder:

General)]

Existing Network PM 2021 Network Category: (None)

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



| SITES IN | SITES IN NETWORK | | | | | | | | | | | | |
|------------------|------------------|----------------------|--|--|--|--|--|--|--|--|--|--|--|
| Site ID | CCG ID | Site Name | | | | | | | | | | | |
| 1 01 | NA | STA_MERX PM 2021 | | | | | | | | | | | |
| ∇ ₁₀₁ | NA | STA_ALMX PM 2021 | | | | | | | | | | | |
| ∇ ₁₀₁ | NA | STA_TUPX PM 2021 | | | | | | | | | | | |
| 1 01 | NA | STA_LIBX PM 2021 | | | | | | | | | | | |
| 1 01 | NA | STA_ENM_EDGX PM 2021 | | | | | | | | | | | |
| ∇ ₁₀₁ | NA | NEW_ALMX PM 2021 | | | | | | | | | | | |
| ∇ ₁₀₁ | NA | NEW_TUPX PM 2021 | | | | | | | | | | | |
| ∇101 | NA | ENM_NEWX PM 2021 | | | | | | | | | | | |

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Site: 101 [STA_MERX PM 2021 (Site Folder: General)]

■□ Network: N101 [Existing Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Merchant St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|-----------------------|----------------------------------|-----|--------------------------------|--------------|---------------------|-----------------------|---------------------|------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEM/ FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | East: Stanmore Rd (E) | | | | | | | | | | | | | |
| 5 | T1 | 880 | 2.3 | 880 | 2.3 | 0.286 | 5.5 | LOS A | 6.5 | 46.4 | 0.28 | 0.51 | 0.28 | 39.9 |
| Appro | oach | 880 | 2.3 | 880 | 2.3 | 0.286 | 5.5 | LOS A | 6.5 | 46.4 | 0.28 | 0.51 | 0.28 | 39.9 |
| North | : Merch | nant St (N | 1) | | | | | | | | | | | |
| 7 | L2 | 24 | 0.0 | 24 | 0.0 | 0.458 | 63.0 | LOS E | 4.8 | 34.4 | 0.99 | 0.77 | 0.99 | 18.8 |
| 9 | R2 | 59 | 5.1 | 59 | 5.1 | * 0.458 | 61.6 | LOS E | 4.8 | 34.4 | 0.99 | 0.77 | 0.99 | 25.4 |
| Appro | oach | 83 | 3.6 | 83 | 3.6 | 0.458 | 62.0 | LOS E | 4.8 | 34.4 | 0.99 | 0.77 | 0.99 | 24.0 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 30 | 0.0 | 30 | 0.0 | 0.093 | 6.1 | LOS A | 1.7 | 12.3 | 0.23 | 0.27 | 0.23 | 42.3 |
| 11 | T1 | 718 | 1.1 | 718 | 1.1 | * 0.463 | 3.7 | LOS A | 10.1 | 71.1 | 0.30 | 0.28 | 0.30 | 37.1 |
| Appro | oach | 748 | 1.1 | 748 | 1.1 | 0.463 | 3.8 | LOS A | 10.1 | 71.1 | 0.30 | 0.28 | 0.30 | 37.4 |
| All Ve | ehicles | 1711 | 1.8 | 1711 | 1.8 | 0.463 | 7.5 | LOS A | 10.1 | 71.1 | 0.32 | 0.42 | 0.32 | 37.3 |

Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Movement Performance | | | | | | | | | | | | | | |
|---------------------------------|--------------|----------------|---------------------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|--|--|--|--|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Et Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed | | | | |
| | ped/h | sec | | ped | m | | | sec | m | m/sec | | | | |
| East: Stanmore | Rd (E) | | | | | | | | | | | | | |
| P2 Full | 15 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | | | |
| North: Merchant | St (N) | | | | | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 214.6 | 208.6 | 0.97 | | | | |
| West: Stanmore | Rd (W) | | | | | | | | | | | | | |
| P4 Full | 45 | 54.3 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 | | | | |
| All Pedestrians | 64 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.4 | 214.8 | 0.98 | | | | |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



■□ Network: N101 [Existing Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Alma St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanm | ore Rd (E | ≣) | | | | | | | | | | | |
| 4 | L2 | 46 | 0.0 | 46 | 0.0 | 0.251 | 5.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.06 | 0.00 | 54.7 |
| 5 | T1 | 919 | 2.2 | 919 | 2.2 | 0.251 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.03 | 0.00 | 57.3 |
| Appro | oach | 965 | 2.1 | 965 | 2.1 | 0.251 | 0.2 | NA | 0.0 | 0.0 | 0.00 | 0.03 | 0.00 | 57.2 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 745 | 0.9 | 745 | 0.9 | 0.514 | 0.5 | LOS A | 0.5 | 3.6 | 0.06 | 0.01 | 0.08 | 56.4 |
| 12 | R2 | 12 | 0.0 | 12 | 0.0 | 0.514 | 14.9 | LOS B | 0.5 | 3.6 | 0.06 | 0.01 | 0.08 | 56.4 |
| Appro | oach | 757 | 0.9 | 757 | 0.9 | 0.514 | 0.7 | NA | 0.5 | 3.6 | 0.06 | 0.01 | 0.08 | 56.4 |
| All Ve | ehicles | 1722 | 1.6 | 1722 | 1.6 | 0.514 | 0.4 | NA | 0.5 | 3.6 | 0.03 | 0.02 | 0.04 | 56.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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V Site: 101 [STA_TUPX PM 2021 (Site Folder: General)]

■□ Network: N101 [Existing **Network PM 2021 (Network**

Folder: General)]

Stanmore Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | се | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-----------------------|---------------------|------|-------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF IEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Tupp | er St (S) | | | | | | | | | | | | |
| 1 | L2 | 21 | 0.0 | 21 | 0.0 | 0.302 | 8.7 | LOS A | 0.7 | 5.0 | 0.74 | 0.86 | 0.86 | 21.8 |
| 3 | R2 | 21 | 0.0 | 21 | 0.0 | 0.302 | 38.5 | LOS C | 0.7 | 5.0 | 0.74 | 0.86 | 0.86 | 21.8 |
| Appro | oach | 42 | 0.0 | 42 | 0.0 | 0.302 | 23.6 | LOS B | 0.7 | 5.0 | 0.74 | 0.86 | 0.86 | 21.8 |
| East: | Stanm | ore Rd (E | Ξ) | | | | | | | | | | | |
| 4 | L2 | 42 | 0.0 | 42 | 0.0 | 0.257 | 4.1 | LOS A | 0.0 | 0.0 | 0.00 | 0.05 | 0.00 | 54.9 |
| 5 | T1 | 944 | 2.3 | 944 | 2.3 | 0.257 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 57.4 |
| Appro | oach | 986 | 2.2 | 986 | 2.2 | 0.257 | 0.2 | NA | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 57.2 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 736 | 1.0 | 736 | 1.0 | 0.198 | 0.2 | LOS A | 11.4 | 80.7 | 0.03 | 0.01 | 0.03 | 56.2 |
| 12 | R2 | 9 | 0.0 | 9 | 0.0 | 0.198 | 11.6 | LOS A | 2.8 | 19.7 | 0.07 | 0.02 | 0.07 | 52.7 |
| Appro | oach | 745 | 0.9 | 745 | 0.9 | 0.198 | 0.3 | NA | 11.4 | 80.7 | 0.03 | 0.01 | 0.03 | 56.2 |
| All Ve | ehicles | 1773 | 1.6 | 1773 | 1.6 | 0.302 | 0.8 | NA | 11.4 | 80.7 | 0.03 | 0.04 | 0.03 | 49.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

Site: 101 [STA_LIBX PM 2021 (Site Folder: General)]

■□ Network: N101 [Existing Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Liberty St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|-----------|----------------------------------|------------|---------------------------------|--------------|---------------------|-----------------------|---------------------|--------------|-------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO' [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanmo | ore Rd (E | Ξ) | | | | | | | | | | | |
| 5 6 | T1 R2 | 742 390 | 2.7 0.8 | 742 390 | 2.7 0.8 | 0.540 * 0.565 | 7.5 23.4 | LOS A LOS B | 16.3 11.5 | 116.8 81.0 | 0.42 0.60 | 0.38 0.88 | 0.42 0.60 | 31.0 33.5 |
| Appro | oach | 1132 | 2.0 | 1132 | 2.0 | 0.565 | 13.0 | LOS A | 16.3 | 116.8 | 0.48 | 0.55 | 0.48 | 32.8 |
| North | : Liberty | y St (N) | | | | | | | | | | | | |
| 7 9 | L2 R2 | 375 244 | 2.1 0.4 | 375 244 | 2.1 0.4 | 0.384 * 0.719 | 22.0 56.3 | LOS B LOS D | 12.7 14.0 | 90.5 98.0 | 0.63 1.00 | 0.75 0.86 | 0.63 1.05 | 31.4 19.8 |
| Appro | oach | 619 | 1.5 | 619 | 1.5 | 0.719 | 35.5 | LOS C | 14.0 | 98.0 | 0.77 | 0.79 | 0.79 | 25.5 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 11 | L2 T1 | 79 678 | 0.0 1.0 | 79 678 | 0.0 1.0 | 0.714 * 0.714 | 38.9 35.9 | LOS C LOS C | 12.7 12.7 | 89.8 89.8 | 0.92 0.92 | 0.82 0.82 | 0.92 0.93 | 26.8 6.1 |
| Appro | oach | 757 | 0.9 | 757 | 0.9 | 0.714 | 36.2 | LOS C | 12.7 | 89.8 | 0.92 | 0.82 | 0.93 | 9.8 |
| All Ve | ehicles | 2508 | 1.6 | 2508 | 1.6 | 0.719 | 25.5 | LOS B | 16.3 | 116.8 | 0.68 | 0.69 | 0.69 | 23.4 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | | | |
|--------------------|-----------------------|----------------|---------------------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|--|--|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Et Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed | | |
| | ped/h | sec | | ped | m | | | sec | m | m/sec | | |
| East: Stanmore | East: Stanmore Rd (E) | | | | | | | | | | | |
| P2 Full | 23 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | |
| North: Liberty St | (N) | | | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 217.2 | 211.9 | 0.98 | | |
| All Pedestrians | 27 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.3 | 214.7 | 0.98 | | |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [STA_ENM_EDGX PM 2021 (Site Folder: General)]

■□ Network: N101 [Existing Network PM 2021 (Network

Folder: General)]

Stanmore Rd, Enmore Rd & Edgeware Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | e | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-------|---------------------|--------------|-------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Delay | Level of Service | QU [Veh. | ACK OF EUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | h: Enma | ore Rd (S | | ven/n | 70 | V/C | sec | | veh | m | | | | KIII/II |
| | | • | , | | | | | | | | | | | |
| 1 | L2 | 104 | 0.0 | 104 | 0.0 | 0.815 | 62.9 | LOS E | 15.6 | 112.7 | 1.00 | 0.95 | 1.17 | 14.0 |
| 2 | T1 | 418 | 6.0 | 418 | 6.0 | * 0.815 | 58.3 | LOS E | 16.4 | 120.6 | 1.00 | 0.94 | 1.16 | 16.7 |
| Appr | oach | 522 | 4.8 | 522 | 4.8 | 0.815 | 59.2 | LOS E | 16.4 | 120.6 | 1.00 | 0.94 | 1.16 | 16.2 |
| East: | Edgew | are Rd (E | ≣) | | | | | | | | | | | |
| 4 | L2 | 3 | 0.0 | 3 | 0.0 | 0.424 | 28.5 | LOS B | 12.9 | 92.1 | 0.73 | 0.63 | 0.73 | 30.4 |
| 5 | T1 | 692 | 2.0 | 692 | 2.0 | 0.424 | 23.9 | LOS B | 14.4 | 102.7 | 0.73 | 0.63 | 0.73 | 30.4 |
| Appr | oach | 695 | 2.0 | 695 | 2.0 | 0.424 | 23.9 | LOS B | 14.4 | 102.7 | 0.73 | 0.63 | 0.73 | 30.4 |
| North | n: Enmo | ore Rd (N) |) | | | | | | | | | | | |
| 7 | L2 | 90 | 0.0 | 90 | 0.0 | 0.564 | 39.2 | LOS C | 19.7 | 146.9 | 0.79 | 0.78 | 0.79 | 28.1 |
| 8 | T1 | 381 | 9.7 | 381 | 9.7 | 0.564 | 32.8 | LOS C | 19.7 | 146.9 | 0.79 | 0.78 | 0.79 | 8.6 |
| 9 | R2 | 341 | 2.1 | 341 | 2.1 | * 0.700 | 50.2 | LOS D | 16.3 | 116.3 | 0.96 | 1.04 | 0.96 | 6.0 |
| Appr | oach | 812 | 5.4 | 812 | 5.4 | 0.700 | 40.8 | LOS C | 19.7 | 146.9 | 0.86 | 0.89 | 0.86 | 10.6 |
| West | : Stanm | ore Rd (\ | N) | | | | | | | | | | | |
| 10 | L2 | 312 | 0.0 | 312 | 0.0 | 0.275 | 17.8 | LOS B | 10.5 | 73.4 | 0.60 | 0.75 | 0.60 | 24.1 |
| 11 | T1 | 746 | 2.0 | 746 | 2.0 | * 0.844 | 43.0 | LOS D | 27.5 | 195.8 | 0.99 | 0.94 | 1.03 | 26.3 |
| Appr | oach | 1058 | 1.4 | 1058 | 1.4 | 0.844 | 35.6 | LOS C | 27.5 | 195.8 | 0.88 | 0.88 | 0.91 | 26.0 |
| All V | ehicles | 3087 | 3.2 | 3087 | 3.2 | 0.844 | 38.3 | LOS C | 27.5 | 195.8 | 0.86 | 0.84 | 0.90 | 21.7 |

Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

* Critical Movement (Signal Timing)

| Pedestri | an Movemen | t Perforr | nance | | | | | | | |
|----------------|-------------------|----------------|---------------------|----------------|-------------|-----------------|------|----------------|-----------------|----------------|
| Mov ID Cros | Dem. sing Flow | Aver. Delay | Level of Service | AVERAGE QUE | UE | Prop. Et Que | Stop | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | [Ped ped | Dist] m | | Rate | sec | m | m/sec |
| South: En | more Rd (S) | | | | | | | | | |
| P1 Full | 12 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| East: Edg | eware Rd (E) | | | | | | | | | |
| P2 Full | 33 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| North: En | more Rd (N) | | | | | | | | | |
| P3 Full | 13 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| West: Sta | inmore Rd (W) | | | | | | | | | |
| P4 Full | 16 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| All Pedes | trians 73 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



V Site: 101 [NEW_ALMX PM 2021 (Site Folder: General)]

■□ Network: N101 [Existing **Network PM 2021 (Network**

Folder: General)]

Newington Rd & Alma Ave Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rmano | ce | | | | | | | | | |
|-----------|--------|----------------------------------|-------|--------------------------------|--------------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| E) | | | | | | | | | | | |
| 5 | T1 | 39 | 0.0 | 39 | 0.0 | 0.020 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 39 | 0.0 | 39 | 0.0 | 0.020 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 23 | 0.0 | 23 | 0.0 | 0.030 | 3.6 | LOS A | 0.1 | 8.0 | 0.15 | 0.47 | 0.15 | 34.8 |
| 9 | R2 | 18 | 0.0 | 18 | 0.0 | 0.030 | 4.2 | LOS A | 0.1 | 0.8 | 0.15 | 0.47 | 0.15 | 41.8 |
| Appro | ach | 41 | 0.0 | 41 | 0.0 | 0.030 | 3.9 | LOS A | 0.1 | 0.8 | 0.15 | 0.47 | 0.15 | 39.2 |
| West: | Newir | ngton Rd | (W) | | | | | | | | | | | |
| 11 | T1 | 66 | 0.0 | 66 | 0.0 | 0.034 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 66 | 0.0 | 66 | 0.0 | 0.034 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| All Ve | hicles | 146 | 0.0 | 146 | 0.0 | 0.034 | 1.1 | NA | 0.1 | 0.8 | 0.04 | 0.13 | 0.04 | 46.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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



V Site: 101 [NEW_TUPX PM 2021 (Site Folder: General)]

■□ Network: N101 [Existing **Network PM 2021 (Network**

Folder: General)]

Newington Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|----------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|------------|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| E) | | | | | | | | | | | |
| 5 6 | T1 R2 | 26 15 | 0.0 | 26 15 | 0.0 | 0.023 0.023 | 0.1 4.8 | LOS A LOS A | 0.1 0.1 | 0.6 0.6 | 0.13 0.13 | 0.20 0.20 | 0.13 0.13 | 43.7 43.7 |
| Appro | ach | 41 | 0.0 | 41 | 0.0 | 0.023 | 1.8 | NA | 0.1 | 0.6 | 0.13 | 0.20 | 0.13 | 43.7 |
| North | : Tupp | er St (N) | | | | | | | | | | | | |
| 7 9 | L2 R2 | 33 13 | 0.0 | 33 13 | 0.0 | 0.032 0.032 | 4.7 4.9 | LOS A LOS A | 0.1 0.1 | 0.8 0.8 | 0.15 0.15 | 0.51 0.51 | 0.15 0.15 | 40.7 40.7 |
| Appro | ach | 46 | 0.0 | 46 | 0.0 | 0.032 | 4.8 | LOS A | 0.1 | 0.8 | 0.15 | 0.51 | 0.15 | 40.7 |
| West | Newir | ngton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 23 | 0.0 | 23 | 0.0 | 0.046 | 4.5 | LOS A | 0.0 | 0.0 | 0.00 | 0.14 | 0.00 | 41.3 |
| 11 | T1 | 66 | 0.0 | 66 | 0.0 | 0.046 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.14 | 0.00 | 41.3 |
| Appro | ach | 89 | 0.0 | 89 | 0.0 | 0.046 | 1.2 | NA | 0.0 | 0.0 | 0.00 | 0.14 | 0.00 | 41.3 |
| All Ve | hicles | 176 | 0.0 | 176 | 0.0 | 0.046 | 2.3 | NA | 0.1 | 0.8 | 0.07 | 0.25 | 0.07 | 41.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

V Site: 101 [ENM_NEWX PM 2021 (Site Folder: General)]

■□ Network: N101 [Existing **Network PM 2021 (Network**

Folder: General)]

Enmore Rd & Newington Rd Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|---------|----------------------------------|-------|---------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO' [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Enmo | re Rd (S | 5) | | | | | | | | | | | |
| 2 | T1 | 465 | 6.9 | 465 | 6.9 | 0.208 | 0.1 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | oach | 465 | 6.9 | 465 | 6.9 | 0.208 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| North | : Enmo | re Rd (N |) | | | | | | | | | | | |
| 8 | T1 | 468 | 8.5 | 468 | 8.5 | 0.127 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | oach | 468 | 8.5 | 468 | 8.5 | 0.127 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| West | Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 62 | 0.0 | 62 | 0.0 | 0.050 | 5.7 | LOS A | 0.2 | 1.3 | 0.17 | 0.51 | 0.17 | 37.4 |
| 12 | R2 | 47 | 0.0 | 47 | 0.0 | 0.154 | 15.6 | LOS B | 0.5 | 3.8 | 0.75 | 0.89 | 0.75 | 30.5 |
| Appro | oach | 109 | 0.0 | 109 | 0.0 | 0.154 | 10.0 | LOS A | 0.5 | 3.8 | 0.42 | 0.67 | 0.42 | 33.2 |
| All Ve | ehicles | 1042 | 6.9 | 1042 | 6.9 | 0.208 | 1.1 | NA | 0.5 | 3.8 | 0.04 | 0.07 | 0.04 | 55.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

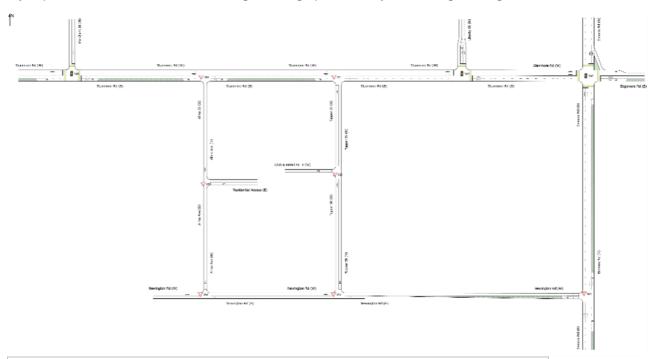
NETWORK LAYOUT

■□ Network: N101 [Proposed Network AM 2021 (Network Folder:

General)]

Existing Network AM 2021 Network Category: (None)

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



| SITES IN | NETWORK | |
|------------------|---------|----------------------|
| Site ID | CCG ID | Site Name |
| 1 01 | NA | STA_MERP AM 2021 |
| ∇ ₁₀₁ | NA | STA_ALMP AM 2021 |
| ∇ ₁₀₁ | NA | STA_TUPP AM 2021 |
| 1 01 | NA | STA_LIBP AM 2021 |
| 1 01 | NA | STA_ENM_EDGP AM 2021 |
| ∇ ₁₀₁ | NA | NEW_ALMP AM 2021 |
| ∇ ₁₀₁ | NA | NEW_TUPP AM 2021 |
| ∇ ₁₀₁ | NA | ENM_NEWP AM 2021 |
| ∇ 101 | NA | ALM_SITEP AM 2021 |
| ∇ ₁₀₁ | NA | TUP_SITEP AM 2021 |

Site: 101 [STA_MERP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Merchant St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | e | | | | | | | | | |
|-----------|---------|----------------------------------|-------|---------------------------------|--------------|---------------------|-----------------------|---------------------|------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEM/ FLO\ [Total veh/h | | ARRI FLO' [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanm | ore Rd (E | ≣) | | | | | | | | | | | |
| 5 | T1 | 856 | 4.2 | 856 | 4.2 | * 0.506 | 8.2 | LOS A | 15.4 | 111.7 | 0.39 | 0.57 | 0.39 | 38.5 |
| Appro | oach | 856 | 4.2 | 856 | 4.2 | 0.506 | 8.2 | LOS A | 15.4 | 111.7 | 0.39 | 0.57 | 0.39 | 38.5 |
| North | : Merch | nant St (N | 1) | | | | | | | | | | | |
| 7 | L2 | 57 | 0.0 | 57 | 0.0 | 0.521 | 57.3 | LOS E | 7.5 | 53.6 | 0.97 | 0.80 | 0.97 | 19.6 |
| 9 | R2 | 78 | 3.8 | 78 | 3.8 | * 0.521 | 57.3 | LOS E | 7.5 | 53.6 | 0.97 | 0.80 | 0.97 | 26.2 |
| Appro | oach | 135 | 2.2 | 135 | 2.2 | 0.521 | 57.3 | LOS E | 7.5 | 53.6 | 0.97 | 0.80 | 0.97 | 24.0 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 68 | 0.0 | 68 | 0.0 | 0.314 | 8.2 | LOS A | 8.1 | 59.1 | 0.34 | 0.35 | 0.34 | 41.3 |
| 11 | T1 | 825 | 6.1 | 825 | 6.1 | 0.314 | 4.8 | LOS A | 8.1 | 59.6 | 0.34 | 0.33 | 0.34 | 36.0 |
| Appro | oach | 893 | 5.6 | 893 | 5.6 | 0.314 | 5.1 | LOS A | 8.1 | 59.6 | 0.34 | 0.33 | 0.34 | 36.7 |
| All Ve | ehicles | 1884 | 4.7 | 1884 | 4.7 | 0.521 | 10.2 | LOS A | 15.4 | 111.7 | 0.41 | 0.47 | 0.41 | 35.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------------|----------------|---------------------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Ef Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | ped | m | | | sec | m | m/sec |
| East: Stanmore | Rd (E) | | | | | | | | | |
| P2 Full | 15 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Merchant | St (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 214.6 | 208.6 | 0.97 |
| West: Stanmore | Rd (W) | | | | | | | | | |
| P4 Full | 45 | 54.3 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| All Pedestrians | 64 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.4 | 214.8 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Alma St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|---------|----------------------------------|-------|---------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEM/ FLO\ [Total veh/h | NS | ARRI FLO' [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanmo | ore Rd (E | Ξ) | | | | | | | | | | | |
| 4 | L2 | 37 | 0.0 | 37 | 0.0 | 0.074 | 4.9 | LOS A | 0.0 | 0.0 | 0.00 | 0.16 | 0.00 | 47.5 |
| 5 | T1 | 798 | 4.9 | 798 | 4.9 | 0.368 | 0.2 | LOS A | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 57.8 |
| Appr | oach | 835 | 4.7 | 835 | 4.7 | 0.368 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.03 | 0.00 | 57.3 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 875 | 5.8 | 875 | 5.8 | 0.350 | 0.6 | LOS A | 0.8 | 6.1 | 0.08 | 0.02 | 0.10 | 54.8 |
| 12 | R2 | 32 | 0.0 | 32 | 0.0 | 0.350 | 12.3 | LOS A | 0.8 | 6.1 | 0.19 | 0.06 | 0.24 | 49.5 |
| Appro | oach | 907 | 5.6 | 907 | 5.6 | 0.350 | 1.1 | NA | 0.8 | 6.1 | 0.09 | 0.03 | 0.11 | 54.6 |
| All Ve | ehicles | 1742 | 5.2 | 1742 | 5.2 | 0.368 | 0.8 | NA | 0.8 | 6.1 | 0.05 | 0.03 | 0.06 | 55.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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Organisation: VARGA TRAFFIC PLANNING | Licence: NETWORK / 1PC | Processed: Wednesday, 8 December 2021 11:40:24 AM Project: Z:\DATA\Data\Jobs01\Jobs\21work\21513_58-76StanmoreRdStanmore\SIDRA\211208\Proposed Network 2021.sip9

V Site: 101 [STA_TUPP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|----------|----------------------------------|------------|--------------------------------|---------------------|---------------------|-----------------------|---------------------|-------------|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | AND | ARRI FLO [Tota veh/h | VAL WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Tuppe | er St (S) | | | | | | | | | | | | |
| 1 3 | L2 R2 | 18 24 | 0.0 | 18 24 | 0.0 | 0.361 0.361 | 11.9 44.0 | LOS A LOS D | 0.9 0.9 | 6.0 6.0 | 0.53 0.53 | 0.69 0.69 | 0.65 0.65 | 6.5 6.5 |
| Appr | oach | 42 | 0.0 | 42 | 0.0 | 0.361 | 30.3 | LOS C | 0.9 | 6.0 | 0.53 | 0.69 | 0.65 | 6.5 |
| East: | Stanmo | ore Rd (E | ≣) | | | | | | | | | | | |
| 4 5 | L2 T1 | 34 777 | 0.0 5.0 | 34 777 | 0.0 5.0 | 0.079 0.350 | 4.1 0.3 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 0.00 | 0.13 0.02 | 0.00 0.00 | 48.2 57.7 |
| Appr | oach | 811 | 4.8 | 811 | 4.8 | 0.350 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 57.2 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 12 | T1 R2 | 862 13 | 5.9 0.0 | 862 13 | 5.9 0.0 | 0.240 0.240 | 0.2 11.0 | LOS A LOS A | 13.3 4.8 | 97.7 35.2 | 0.04 0.07 | 0.01 0.02 | 0.04 0.08 | 55.8 52.0 |
| Appro | oach | 875 | 5.8 | 875 | 5.8 | 0.240 | 0.4 | NA | 13.3 | 97.7 | 0.04 | 0.01 | 0.04 | 55.8 |
| All Ve | ehicles | 1728 | 5.2 | 1728 | 5.2 | 0.361 | 1.1 | NA | 13.3 | 97.7 | 0.03 | 0.03 | 0.03 | 48.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

Site: 101 [STA_LIBP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Liberty St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | e | | | | | | | | | |
|-----------|----------|----------------------------------|-------|-------------------------|--------------|----------------|-------|---------------------|--------------|-------------------------|--------------|----------------------------|--------------------|----------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO' [Total | WS I HV] | Deg. Satn | Delay | Level of Service | QU [Veh. | ACK OF EUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed |
| Fast: | Stanm | ore Rd (E | | veh/h | 70 | v/c | sec | | veh | m | | | | km/h |
| | | • | , | | | | | | | | | | | |
| 5 | T1 | 618 | 5.7 | 618 | 5.7 | 0.438 | 4.8 | LOS A | 9.7 | 71.5 | 0.30 | 0.27 | 0.30 | 37.6 |
| 6 | R2 | 324 | 4.9 | 324 | 4.9 | * 0.541 | 17.7 | LOS B | 7.3 | 53.0 | 0.44 | 0.82 | 0.44 | 36.5 |
| Appro | oach | 942 | 5.4 | 942 | 5.4 | 0.541 | 9.2 | LOS A | 9.7 | 71.5 | 0.35 | 0.46 | 0.35 | 36.8 |
| North | : Libert | y St (N) | | | | | | | | | | | | |
| 7 | L2 | 310 | 4.2 | 310 | 4.2 | 0.375 | 27.2 | LOS B | 11.7 | 85.1 | 0.70 | 0.76 | 0.70 | 28.9 |
| 9 | R2 | 193 | 2.1 | 193 | 2.1 | * 0.703 | 59.2 | LOS E | 11.2 | 79.9 | 1.00 | 0.85 | 1.06 | 19.2 |
| Appro | oach | 503 | 3.4 | 503 | 3.4 | 0.703 | 39.5 | LOS C | 11.7 | 85.1 | 0.81 | 0.80 | 0.84 | 24.2 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 93 | 3.2 | 93 | 3.2 | 0.716 | 32.7 | LOS C | 12.2 | 89.8 | 0.86 | 0.79 | 0.86 | 29.2 |
| 11 | T1 | 793 | 6.2 | 793 | 6.2 | * 0.716 | 29.7 | LOS C | 12.2 | 89.8 | 0.87 | 0.79 | 0.88 | 7.2 |
| Appro | oach | 886 | 5.9 | 886 | 5.9 | 0.716 | 30.0 | LOS C | 12.2 | 89.8 | 0.87 | 0.79 | 0.88 | 11.5 |
| All Ve | ehicles | 2331 | 5.1 | 2331 | 5.1 | 0.716 | 23.6 | LOS B | 12.2 | 89.8 | 0.65 | 0.66 | 0.65 | 23.5 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------------|----------------|---------------------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Et Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | ped | m | | | sec | m | m/sec |
| East: Stanmore | Rd (E) | | | | | | | | | |
| P2 Full | 23 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Liberty St | (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 217.2 | 211.9 | 0.98 |
| All Pedestrians | 27 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.3 | 214.7 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [STA_ENM_EDGP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd, Enmore Rd & Edgeware Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | icle Mo | vement | Perfo | rmano | e | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-------|---------------------|--------------|-------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Delay | Level of Service | QU [Veh. | ACK OF EUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| Sout | h: Enm | ore Rd (S | | ven/n | % | V/C | sec | _ | veh | m | _ | _ | _ | Km/n |
| | | , | , | | | | | | | | | | | |
| 1 | L2 | 87 | 0.0 | 87 | 0.0 | 0.863 | 64.2 | LOS E | 21.0 | 157.1 | 1.00 | 1.00 | 1.22 | 13.9 |
| 2 | T1 | 568 | 11.3 | 568 | 11.3 | * 0.863 | 59.9 | LOS E | 21.0 | 157.1 | 1.00 | 1.01 | 1.22 | 16.5 |
| Appr | oach | 655 | 9.8 | 655 | 9.8 | 0.863 | 60.4 | LOS E | 21.0 | 160.1 | 1.00 | 1.01 | 1.22 | 16.1 |
| East: | Edgew | are Rd (E | ≣) | | | | | | | | | | | |
| 4 | L2 | 1 | 0.0 | 1 | 0.0 | 0.323 | 24.7 | LOS B | 10.4 | 76.1 | 0.65 | 0.56 | 0.65 | 32.4 |
| 5 | T1 | 588 | 5.3 | 588 | 5.3 | 0.323 | 20.1 | LOS B | 10.4 | 76.1 | 0.65 | 0.56 | 0.65 | 32.4 |
| Appr | oach | 589 | 5.3 | 589 | 5.3 | 0.323 | 20.1 | LOS B | 10.4 | 76.1 | 0.65 | 0.56 | 0.65 | 32.4 |
| North | n: Enmo | ore Rd (N |) | | | | | | | | | | | |
| 7 | L2 | 68 | 5.9 | 68 | 5.9 | 0.502 | 42.3 | LOS C | 16.9 | 126.2 | 0.79 | 0.76 | 0.79 | 27.1 |
| 8 | T1 | 320 | 8.1 | 320 | 8.1 | 0.502 | 35.7 | LOS C | 16.9 | 126.2 | 0.79 | 0.76 | 0.79 | 8.1 |
| 9 | R2 | 236 | 5.5 | 236 | 5.5 | * 0.667 | 55.8 | LOS D | 12.4 | 90.7 | 0.98 | 1.01 | 0.98 | 5.5 |
| Appr | oach | 624 | 6.9 | 624 | 6.9 | 0.667 | 44.1 | LOS D | 16.9 | 126.2 | 0.86 | 0.86 | 0.86 | 10.0 |
| West | : Stanm | ore Rd (| N) | | | | | | | | | | | |
| 10 | L2 | 305 | 5.2 | 305 | 5.2 | 0.276 | 16.9 | LOS B | 9.7 | 70.6 | 0.57 | 0.74 | 0.57 | 24.7 |
| 11 | T1 | 780 | 6.0 | 780 | 6.0 | * 0.846 | 46.3 | LOS D | 26.6 | 195.8 | 0.99 | 0.94 | 1.03 | 25.3 |
| Appr | oach | 1085 | 5.8 | 1085 | 5.8 | 0.846 | 38.0 | LOS C | 26.6 | 195.8 | 0.87 | 0.88 | 0.90 | 25.2 |
| All V | ehicles | 2953 | 6.8 | 2953 | 6.8 | 0.863 | 40.7 | LOS C | 26.6 | 195.8 | 0.85 | 0.84 | 0.91 | 21.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

* Critical Movement (Signal Timing)

| _ | | | | | | | | | | | |
|-----------|---------------|--------------|----------------|---------------------|----------------|-------------|-----------------|------|----------------|-----------------|----------------|
| Ped | destrian Mo | vement | Perforr | nance | | | | | | | |
| Mov ID | Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE | UE | Prop. Ef Que | Stop | Travel Time | Travel Dist. | Aver. Speed |
| | | ped/h | sec | | [Ped ped | Dist] m | | Rate | sec | m | m/sec |
| Sou | ıth: Enmore I | Rd (S) | | | | | | | | | |
| P1 | Full | 12 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| Eas | t: Edgeware | Rd (E) | | | | | | | | | |
| P2 | Full | 33 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| Nor | th: Enmore F | Rd (N) | | | | | | | | | |
| РЗ | Full | 13 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| We | st: Stanmore | Rd (W) | | | | | | | | | |
| P4 | Full | 16 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| All I | Pedestrians | 73 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



V Site: 101 [NEW_ALMP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Newington Rd & Alma Ave Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | ovement | Perfo | rman | се | | | | | | | | | |
|-----------|---------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| E) | | | | | | | | | | | |
| 5 | T1 | 31 | 0.0 | 31 | 0.0 | 0.016 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | oach | 31 | 0.0 | 31 | 0.0 | 0.016 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 43 | 0.0 | 43 | 0.0 | 0.049 | 3.6 | LOS A | 0.2 | 1.3 | 0.17 | 0.47 | 0.17 | 34.8 |
| 9 | R2 | 24 | 0.0 | 24 | 0.0 | 0.049 | 4.3 | LOS A | 0.2 | 1.3 | 0.17 | 0.47 | 0.17 | 41.8 |
| Appro | oach | 67 | 0.0 | 67 | 0.0 | 0.049 | 3.9 | LOS A | 0.2 | 1.3 | 0.17 | 0.47 | 0.17 | 38.6 |
| West | : Newir | ngton Rd | (W) | | | | | | | | | | | |
| 11 | T1 | 84 | 0.0 | 84 | 0.0 | 0.043 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | oach | 84 | 0.0 | 84 | 0.0 | 0.043 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| All Ve | ehicles | 182 | 0.0 | 182 | 0.0 | 0.049 | 1.4 | NA | 0.2 | 1.3 | 0.06 | 0.17 | 0.06 | 45.3 |

Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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V Site: 101 [NEW_TUPP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network AM 2021 (Network**

Folder: General)]

Newington Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | ce | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newing | gton Rd (| E) | | | | | | | | | | | |
| 5 | T1 | 25 | 0.0 | 25 | 0.0 | 0.022 | 0.2 | LOS A | 0.1 | 0.6 | 0.17 | 0.20 | 0.17 | 43.2 |
| 6 | R2 | 15 | 0.0 | 15 | 0.0 | 0.022 | 4.9 | LOS A | 0.1 | 0.6 | 0.17 | 0.20 | 0.17 | 43.2 |
| Appro | oach | 40 | 0.0 | 40 | 0.0 | 0.022 | 2.0 | NA | 0.1 | 0.6 | 0.17 | 0.20 | 0.17 | 43.2 |
| North | : Tuppe | er St (N) | | | | | | | | | | | | |
| 7 | L2 | 32 | 0.0 | 32 | 0.0 | 0.027 | 4.9 | LOS A | 0.1 | 0.7 | 0.20 | 0.51 | 0.20 | 39.0 |
| 9 | R2 | 6 | 0.0 | 6 | 0.0 | 0.027 | 5.1 | LOS A | 0.1 | 0.7 | 0.20 | 0.51 | 0.20 | 39.0 |
| Appro | oach | 38 | 0.0 | 38 | 0.0 | 0.027 | 4.9 | LOS A | 0.1 | 0.7 | 0.20 | 0.51 | 0.20 | 39.0 |
| West | : Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 20 | 0.0 | 20 | 0.0 | 0.066 | 4.5 | LOS A | 0.0 | 0.0 | 0.00 | 0.09 | 0.00 | 44.2 |
| 11 | T1 | 107 | 0.0 | 107 | 0.0 | 0.066 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.09 | 0.00 | 44.2 |
| Appro | oach | 127 | 0.0 | 127 | 0.0 | 0.066 | 0.7 | NA | 0.0 | 0.0 | 0.00 | 0.09 | 0.00 | 44.2 |
| All Ve | ehicles | 205 | 0.0 | 205 | 0.0 | 0.066 | 1.7 | NA | 0.1 | 0.7 | 0.07 | 0.19 | 0.07 | 41.9 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

V Site: 404 IENM NEWD AM 2024

V Site: 101 [ENM_NEWP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Enmore Rd & Newington Rd Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rmanc | e: | | | | | | | | | |
|-----------|--------|----------------------------------|-------|----------------------------------|-----------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO\ [Total veh/h | WS HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | : Enmo | ore Rd (S | 5) | | | | | | | | | | | |
| 2 | T1 | 597 | 11.1 | 597 1 | 11.1 | 0.164 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | ach | 597 | 11.1 | 597 1 | 11.1 | 0.164 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| North | : Enmo | re Rd (N |) | | | | | | | | | | | |
| 8 | T1 | 352 | 7.7 | 352 | 7.7 | 0.158 | 0.1 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | ach | 352 | 7.7 | 352 | 7.7 | 0.158 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| West | Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 92 | 0.0 | 92 | 0.0 | 0.095 | 6.0 | LOS A | 0.3 | 2.4 | 0.38 | 0.61 | 0.38 | 35.9 |
| 12 | R2 | 51 | 0.0 | 51 | 0.0 | 0.172 | 16.1 | LOS B | 0.6 | 4.2 | 0.76 | 0.89 | 0.76 | 30.2 |
| Appro | ach | 143 | 0.0 | 143 | 0.0 | 0.172 | 9.6 | LOS A | 0.6 | 4.2 | 0.52 | 0.71 | 0.52 | 32.9 |
| All Ve | hicles | 1092 | 8.5 | 1092 | 8.5 | 0.172 | 1.3 | NA | 0.6 | 4.2 | 0.07 | 0.09 | 0.07 | 54.0 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

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).

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: 101 [ALM_SITEP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Alma Ave & Residential Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mc | vement | Perfo | rman | се | | | | | | | | | |
|-----------|---------|----------------------------------|--------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Reside | ential Acc | ess (E |) | | | | | | | | | | |
| 4 | L2 | 24 | 0.0 | 24 | 0.0 | 0.015 | 3.6 | LOS A | 0.1 | 0.4 | 0.14 | 0.43 | 0.14 | 36.8 |
| Appro | oach | 24 | 0.0 | 24 | 0.0 | 0.015 | 3.6 | LOS A | 0.1 | 0.4 | 0.14 | 0.43 | 0.14 | 36.8 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 6 | 0.0 | 6 | 0.0 | 0.036 | 3.4 | LOS A | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 40.0 |
| 8 | T1 | 63 | 0.0 | 63 | 0.0 | 0.036 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 38.5 |
| Appro | oach | 69 | 0.0 | 69 | 0.0 | 0.036 | 0.3 | NA | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 39.1 |
| All Ve | ehicles | 93 | 0.0 | 93 | 0.0 | 0.036 | 1.1 | NA | 0.1 | 0.4 | 0.04 | 0.14 | 0.04 | 37.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Tupper St & Club/Retail Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|----------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|-----------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Tupp | er St (S) | | | | | | | | | | | | |
| 1 | L2 | 1 | 0.0 | 1 | 0.0 | 0.021 | 3.4 | LOS A | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 40.1 |
| 2 | T1 | 39 | 0.0 | 39 | 0.0 | 0.021 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 39.9 |
| Appro | oach | 40 | 0.0 | 40 | 0.0 | 0.021 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 39.9 |
| North | : Tuppe | er St (N) | | | | | | | | | | | | |
| 8 | T1 | 30 | 0.0 | 30 | 0.0 | 0.025 | 0.1 | LOS A | 0.1 | 0.6 | 0.08 | 0.17 | 0.08 | 30.9 |
| 9 | R2 | 17 | 0.0 | 17 | 0.0 | 0.025 | 3.6 | LOS A | 0.1 | 0.6 | 0.08 | 0.17 | 0.08 | 38.4 |
| Appro | oach | 47 | 0.0 | 47 | 0.0 | 0.025 | 1.4 | NA | 0.1 | 0.6 | 0.08 | 0.17 | 0.08 | 37.0 |
| West | : Club 8 | & Retail A | ccess | (W) | | | | | | | | | | |
| 10 | L2 | 3 | 0.0 | 3 | 0.0 | 0.004 | 3.5 | LOS A | 0.0 | 0.1 | 0.11 | 0.45 | 0.11 | 36.9 |
| 12 | R2 | 2 | 0.0 | 2 | 0.0 | 0.004 | 3.8 | LOS A | 0.0 | 0.1 | 0.11 | 0.45 | 0.11 | 36.9 |
| Appro | oach | 5 | 0.0 | 5 | 0.0 | 0.004 | 3.6 | LOS A | 0.0 | 0.1 | 0.11 | 0.45 | 0.11 | 36.9 |
| All Ve | ehicles | 92 | 0.0 | 92 | 0.0 | 0.025 | 0.9 | NA | 0.1 | 0.6 | 0.05 | 0.12 | 0.05 | 38.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

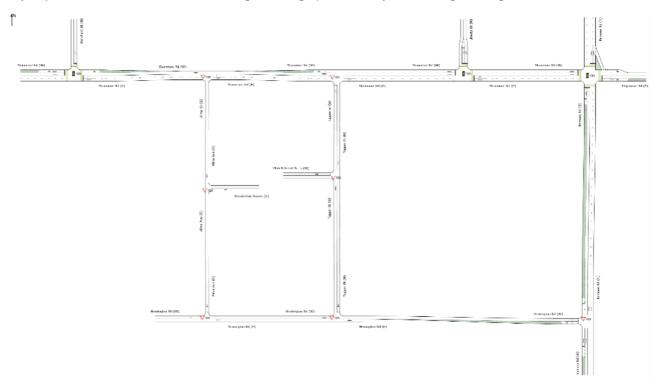
NETWORK LAYOUT

■□ Network: N101 [Proposed Network PM 2021 (Network Folder:

General)]

Existing Network PM 2021 Network Category: (None)

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



| SITES IN | NETWORK | |
|------------------|---------|----------------------|
| Site ID | CCG ID | Site Name |
| 1 01 | NA | STA_MERP PM 2021 |
| ∇ ₁₀₁ | NA | STA_ALMP PM 2021 |
| ∇ ₁₀₁ | NA | STA_TUPP PM 2021 |
| 1 01 | NA | STA_LIBP PM 2021 |
| 1 01 | NA | STA_ENM_EDGP PM 2021 |
| ∇ ₁₀₁ | NA | NEW_ALMP PM 2021 |
| ∇ ₁₀₁ | NA | NEW_TUPP PM 2021 |
| ∇ ₁₀₁ | NA | ENM_NEWP PM 2021 |
| ∇ ₁₀₁ | NA | ALM_SITEP PM 2021 |
| ∇ ₁₀₁ | NA | TUP_SITEP PM 2021 |

Site: 101 [STA_MERP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Merchant St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|---------|----------------------------------|-------|---------------------------------|--------------|---------------------|-----------------------|---------------------|------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO' [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanmo | ore Rd (E | ≣) | | | | | | | | | | | |
| 5 | T1 | 895 | 2.2 | 895 | 2.2 | 0.288 | 5.3 | LOS A | 6.4 | 45.5 | 0.27 | 0.50 | 0.27 | 40.1 |
| Appro | oach | 895 | 2.2 | 895 | 2.2 | 0.288 | 5.3 | LOS A | 6.4 | 45.5 | 0.27 | 0.50 | 0.27 | 40.1 |
| North | : Merch | nant St (N | 1) | | | | | | | | | | | |
| 7 | L2 | 24 | 0.0 | 24 | 0.0 | 0.500 | 64.4 | LOS E | 4.8 | 34.9 | 0.99 | 0.77 | 0.99 | 18.5 |
| 9 | R2 | 59 | 5.1 | 59 | 5.1 | * 0.500 | 63.0 | LOS E | 4.8 | 34.9 | 0.99 | 0.77 | 0.99 | 25.2 |
| Appro | ach | 83 | 3.6 | 83 | 3.6 | 0.500 | 63.4 | LOS E | 4.8 | 34.9 | 0.99 | 0.77 | 0.99 | 23.7 |
| West | Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 30 | 0.0 | 30 | 0.0 | 0.096 | 5.9 | LOS A | 1.8 | 12.3 | 0.22 | 0.26 | 0.22 | 42.4 |
| 11 | T1 | 750 | 1.1 | 750 | 1.1 | * 0.478 | 3.5 | LOS A | 10.3 | 72.4 | 0.29 | 0.28 | 0.29 | 37.2 |
| Appro | ach | 780 | 1.0 | 780 | 1.0 | 0.478 | 3.6 | LOS A | 10.3 | 72.4 | 0.29 | 0.28 | 0.29 | 37.6 |
| All Ve | hicles | 1758 | 1.8 | 1758 | 1.8 | 0.500 | 7.3 | LOS A | 10.3 | 72.4 | 0.31 | 0.41 | 0.31 | 37.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------------|----------------|---------------------|-------------------------|-----|-----------------|-------------------------|----------------|-----------------|----------------|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Ef Que | fective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | ped | m | | | sec | m | m/sec |
| East: Stanmore | Rd (E) | | | | | | | | | |
| P2 Full | 15 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Merchant | St (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 214.6 | 208.6 | 0.97 |
| West: Stanmore | Rd (W) | | | | | | | | | |
| P4 Full | 45 | 54.3 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| All Pedestrians | 64 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.4 | 214.8 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

V Site: 101 [STA_ALMP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Alma St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmand | e | | | | | | | | | |
|-----------|---------|-------------------------|-----------|-------------|--------------|--------------|-------|---------------------|---------------|-------------------------|--------------|----------------------------|--------------------|----------------|
| Mov ID | Turn | DEM/ FLO\ [Total | WS HV] | ARRI FLO | WS I HV] | Deg. Satn | Delay | Level of Service | QUI [Veh. | ACK OF EUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed |
| | | veh/h | % | veh/h | % | v/c | sec | | veh | m | | | | km/h |
| East: | Stanmo | ore Rd (E | ≣) | | | | | | | | | | | |
| 4 | L2 | 61 | 0.0 | 61 | 0.0 | 0.259 | 5.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.07 | 0.00 | 53.4 |
| 5 | T1 | 933 | 2.1 | 933 | 2.1 | 0.259 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.03 | 0.00 | 56.7 |
| Appr | oach | 994 | 2.0 | 994 | 2.0 | 0.259 | 0.3 | NA | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 56.5 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 770 | 0.9 | 770 | 0.9 | 0.557 | 0.8 | LOS A | 0.9 | 6.2 | 0.09 | 0.02 | 0.14 | 54.2 |
| 12 | R2 | 19 | 0.0 | 19 | 0.0 | 0.557 | 15.8 | LOS B | 0.9 | 6.2 | 0.09 | 0.02 | 0.14 | 54.2 |
| Appr | oach | 789 | 0.9 | 789 | 0.9 | 0.557 | 1.2 | NA | 0.9 | 6.2 | 0.09 | 0.02 | 0.14 | 54.2 |
| All Ve | ehicles | 1783 | 1.5 | 1783 | 1.5 | 0.557 | 0.7 | NA | 0.9 | 6.2 | 0.04 | 0.03 | 0.06 | 55.0 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Stanmore Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|----------|----------------------------------|------------|----------------------------------|--------------|---------------------|-----------------------|---------------------|------------|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO' [Total veh/h | WS HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | ı: Tupp | er St (S) | | | | | | | | | | | | |
| 1 3 | L2 R2 | 35 30 | 0.0 | 35 30 | 0.0 | 0.470 0.470 | 14.9 49.3 | LOS B LOS D | 1.3 1.3 | 9.3 9.3 | 0.75 0.75 | 0.95 0.95 | 1.05 1.05 | 6.4 6.4 |
| Appro | oach | 65 | 0.0 | 65 | 0.0 | 0.470 | 30.8 | LOS C | 1.3 | 9.3 | 0.75 | 0.95 | 1.05 | 6.4 |
| East: | Stanm | ore Rd (E | ≣) | | | | | | | | | | | |
| 4 5 | L2 T1 | 90 959 | 0.0 2.3 | 90 959 | 0.0 2.3 | 0.274 0.274 | 4.1 0.0 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 0.00 | 0.10 0.05 | 0.00 0.00 | 50.6 55.3 |
| Appro | oach | 1049 | 2.1 | 1049 | 2.1 | 0.274 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.05 | 0.00 | 54.8 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 736 | 1.0 | 736 | 1.0 | 0.221 | 0.8 | LOS A | 11.8 | 83.4 | 0.11 | 0.03 | 0.11 | 48.1 |
| 12 | R2 | 34 | 0.0 | 34 | 0.0 | 0.221 | 12.3 | LOS A | 2.3 | 16.6 | 0.26 | 0.07 | 0.27 | 37.8 |
| Appro | oach | 770 | 0.9 | 770 | 0.9 | 0.221 | 1.3 | NA | 11.8 | 83.4 | 0.12 | 0.03 | 0.12 | 47.5 |
| All Ve | ehicles | 1884 | 1.5 | 1884 | 1.5 | 0.470 | 1.8 | NA | 11.8 | 83.4 | 0.07 | 0.07 | 0.09 | 42.1 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

Site: 101 [STA_LIBP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Liberty St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|----------|----------------------------------|------------|--------------------------------|--------------|---------------------|-----------------------|---------------------|--------------|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanmo | ore Rd (E | | V 011/11 | 70 | •//0 | | | 7011 | | | | | 1(11)/11 |
| 5 6 | T1 R2 | 794 391 | 2.5 0.8 | 794 391 | 2.5 0.8 | 0.584 * 0.584 | 8.7 27.9 | LOS A LOS B | 21.8 12.2 | 155.6 86.3 | 0.52 0.64 | 0.48 0.90 | 0.52 0.64 | 28.8 31.5 |
| Appro | oach | 1185 | 1.9 | 1185 | 1.9 | 0.584 | 15.0 | LOS B | 21.8 | 155.6 | 0.56 | 0.62 | 0.56 | 30.6 |
| North | : Libert | y St (N) | | | | | | | | | | | | |
| 7 9 | L2 R2 | 375 255 | 2.1 0.4 | 375 255 | 2.1 0.4 | 0.384 * 0.718 | 22.0 55.5 | LOS B LOS D | 12.7 14.5 | 90.5 101.8 | 0.63 0.99 | 0.75 0.86 | 0.63 1.04 | 31.4 20.0 |
| Appro | oach | 630 | 1.4 | 630 | 1.4 | 0.718 | 35.5 | LOS C | 14.5 | 101.8 | 0.78 | 0.79 | 0.80 | 25.5 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 11 | L2 T1 | 84 682 | 0.0 1.0 | 84 682 | 0.0 1.0 | 0.722 * 0.722 | 39.0 36.2 | LOS C | 12.7 12.7 | 89.8 89.8 | 0.92 0.92 | 0.82 0.83 | 0.92 0.94 | 26.8 6.1 |
| Appro | oach | 766 | 0.9 | 766 | 0.9 | 0.722 | 36.5 | LOS C | 12.7 | 89.8 | 0.92 | 0.83 | 0.94 | 9.9 |
| All Ve | ehicles | 2581 | 1.5 | 2581 | 1.5 | 0.722 | 26.4 | LOS B | 21.8 | 155.6 | 0.72 | 0.72 | 0.73 | 22.9 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------------|----------------|---------------------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Ei Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | ped | m m | | rate | sec | m | m/sec |
| East: Stanmore I | Rd (E) | | | | | | | | | |
| P2 Full | 23 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Liberty St | (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 217.2 | 211.9 | 0.98 |
| All Pedestrians | 27 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.3 | 214.7 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [STA_ENM_EDGP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Stanmore Rd, Enmore Rd & Edgeware Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | icle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|----------|----------------------------------|-------|---------------------------------|--------------|---------------------|-----------------------|---------------------|------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO [Total veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| Sout | h: Enmo | ore Rd (S | | VCII/II | 70 | V/C | 300 | _ | VCII | - " | _ | | _ | KIII/II |
| 1 | L2 | 132 | 0.0 | 132 | 0.0 | 0.875 | 69.3 | LOS E | 16.6 | 118.7 | 1.00 | 1.02 | 1.30 | 12.9 |
| 2 | T1 | 419 | 6.0 | 419 | 6.0 | * 0.875 | 63.6 | LOS E | 19.6 | 144.1 | 1.00 | 1.02 | 1.27 | 15.7 |
| Appr | | 551 | 4.5 | 551 | 4.5 | 0.875 | 64.9 | LOS E | 19.6 | 144.1 | 1.00 | 1.02 | 1.28 | 15.1 |
| East | : Edgew | are Rd (E | Ξ) | | | | | | | | | | | |
| 4 | L2 | 3 | 0.0 | 3 | 0.0 | 0.503 | 29.8 | LOS C | 13.2 | 93.8 | 0.76 | 0.67 | 0.76 | 29.8 |
| 5 | T1 | 707 | 2.0 | 707 | 2.0 | 0.503 | 24.7 | LOS B | 15.7 | 111.8 | 0.75 | 0.66 | 0.75 | 30.0 |
| Appr | oach | 710 | 2.0 | 710 | 2.0 | 0.503 | 24.7 | LOS B | 15.7 | 111.8 | 0.75 | 0.66 | 0.75 | 30.0 |
| North | n: Enmo | re Rd (N) |) | | | | | | | | | | | |
| 7 | L2 | 90 | 0.0 | 90 | 0.0 | 0.564 | 39.2 | LOS C | 19.7 | 146.9 | 0.79 | 0.78 | 0.79 | 28.1 |
| 8 | T1 | 381 | 9.7 | 381 | 9.7 | 0.564 | 32.8 | LOS C | 19.7 | 146.9 | 0.79 | 0.78 | 0.79 | 8.6 |
| 9 | R2 | 351 | 2.0 | 351 | 2.0 | * 0.756 | 54.4 | LOS D | 17.7 | 125.8 | 0.98 | 1.07 | 1.03 | 5.6 |
| Appr | oach | 822 | 5.4 | 822 | 5.4 | 0.756 | 42.7 | LOS D | 19.7 | 146.9 | 0.87 | 0.90 | 0.89 | 10.2 |
| West | t: Stanm | ore Rd (\ | N) | | | | | | | | | | | |
| 10 | L2 | 316 | 0.0 | 316 | 0.0 | 0.276 | 17.8 | LOS B | 10.6 | 74.1 | 0.60 | 0.75 | 0.60 | 24.1 |
| 11 | T1 | 746 | 2.0 | 746 | 2.0 | * 0.846 | 43.3 | LOS D | 27.5 | 195.8 | 0.99 | 0.94 | 1.04 | 26.2 |
| Appr | oach | 1062 | 1.4 | 1062 | 1.4 | 0.846 | 35.7 | LOS C | 27.5 | 195.8 | 0.88 | 0.88 | 0.91 | 25.9 |
| All V | ehicles | 3145 | 3.1 | 3145 | 3.1 | 0.875 | 40.2 | LOS C | 27.5 | 195.8 | 0.87 | 0.86 | 0.93 | 21.0 |

Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

* Critical Movement (Signal Timing)

| Ped | destrian Mo | vement | Perforr | nance | | | | | | | |
|-----------|---------------|--------------|----------------|---------------------|-------------------------|-----|-----------------|-------------------------|----------------|-----------------|----------------|
| Mov ID | Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Ef Que | fective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | | ped/h | sec | | ped | m m | | rtato | sec | m | m/sec |
| Sou | ıth: Enmore F | Rd (S) | | | | | | | | | |
| P1 | Full | 12 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| Eas | t: Edgeware | Rd (E) | | | | | | | | | |
| P2 | Full | 33 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| Nor | th: Enmore R | Rd (N) | | | | | | | | | |
| РЗ | Full | 13 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| Wes | st: Stanmore | Rd (W) | | | | | | | | | |
| P4 | Full | 16 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| All I | Pedestrians | 73 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



V Site: 101 [NEW_ALMP PM 2021 (Site Folder: General)]

■☐ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Newington Rd & Alma Ave Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rman | ce | | | | | | | | | |
|-----------|--------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| E) | | | | | | | | | | | |
| 5 | T1 | 39 | 0.0 | 39 | 0.0 | 0.020 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 39 | 0.0 | 39 | 0.0 | 0.020 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 27 | 0.0 | 27 | 0.0 | 0.033 | 3.6 | LOS A | 0.1 | 8.0 | 0.15 | 0.47 | 0.15 | 34.8 |
| 9 | R2 | 18 | 0.0 | 18 | 0.0 | 0.033 | 4.2 | LOS A | 0.1 | 0.8 | 0.15 | 0.47 | 0.15 | 41.8 |
| Appro | ach | 45 | 0.0 | 45 | 0.0 | 0.033 | 3.8 | LOS A | 0.1 | 0.8 | 0.15 | 0.47 | 0.15 | 38.9 |
| West: | Newir | ngton Rd | (W) | | | | | | | | | | | |
| 11 | T1 | 66 | 0.0 | 66 | 0.0 | 0.034 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 66 | 0.0 | 66 | 0.0 | 0.034 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| All Ve | hicles | 150 | 0.0 | 150 | 0.0 | 0.034 | 1.2 | NA | 0.1 | 0.8 | 0.05 | 0.14 | 0.05 | 46.2 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

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).

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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Organisation: VARGA TRAFFIC PLANNING | Licence: NETWORK / 1PC | Processed: Wednesday, 8 December 2021 11:40:40 AM Project: Z:\DATA\Data\Jobs\01\Jobs\21work\21513_58-76StanmoreRdStanmore\SIDRA\211208\Proposed Network 2021.sip9



V Site: 101 [NEW_TUPP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Newington Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mc | vement | Perfo | rman | се | | | | | | | | | |
|-----------|---------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|---------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| | ven/n | /0 | V/C | 360 | | ven | m | | | | KIII/II |
| 5 | T1 | 26 | 0.0 | 26 | 0.0 | 0.023 | 0.1 | LOS A | 0.1 | 0.6 | 0.14 | 0.20 | 0.14 | 43.6 |
| 6 | R2 | 15 | 0.0 | 15 | 0.0 | 0.023 | 4.8 | LOS A | 0.1 | 0.6 | 0.14 | 0.20 | 0.14 | 43.6 |
| Appro | oach | 41 | 0.0 | 41 | 0.0 | 0.023 | 1.9 | NA | 0.1 | 0.6 | 0.14 | 0.20 | 0.14 | 43.6 |
| North | : Tupp | er St (N) | | | | | | | | | | | | |
| 7 | L2 | 52 | 0.0 | 52 | 0.0 | 0.045 | 4.8 | LOS A | 0.2 | 1.2 | 0.16 | 0.51 | 0.16 | 39.3 |
| 9 | R2 | 13 | 0.0 | 13 | 0.0 | 0.045 | 5.0 | LOS A | 0.2 | 1.2 | 0.16 | 0.51 | 0.16 | 39.3 |
| Appro | oach | 65 | 0.0 | 65 | 0.0 | 0.045 | 4.8 | LOS A | 0.2 | 1.2 | 0.16 | 0.51 | 0.16 | 39.3 |
| West | : Newir | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 23 | 0.0 | 23 | 0.0 | 0.048 | 4.5 | LOS A | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 41.6 |
| 11 | T1 | 70 | 0.0 | 70 | 0.0 | 0.048 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 41.6 |
| Appro | oach | 93 | 0.0 | 93 | 0.0 | 0.048 | 1.1 | NA | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 41.6 |
| All Ve | ehicles | 199 | 0.0 | 199 | 0.0 | 0.048 | 2.5 | NA | 0.2 | 1.2 | 0.08 | 0.27 | 0.08 | 40.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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



V Site: 101 [ENM_NEWP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Enmore Rd & Newington Rd Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|--------|----------------------------------|-------|----------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO' [Total veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | : Enmo | ore Rd (S |) | | | | | | | | | | | |
| 2 | T1 | 492 | 6.5 | 492 | 6.5 | 0.219 | 0.2 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | ach | 492 | 6.5 | 492 | 6.5 | 0.219 | 0.2 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| North | : Enmo | re Rd (N |) | | | | | | | | | | | |
| 8 | T1 | 468 | 8.5 | 468 | 8.5 | 0.127 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | ach | 468 | 8.5 | 468 | 8.5 | 0.127 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| West | Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 64 | 0.0 | 64 | 0.0 | 0.052 | 5.7 | LOS A | 0.2 | 1.3 | 0.17 | 0.51 | 0.17 | 37.3 |
| 12 | R2 | 68 | 0.0 | 68 | 0.0 | 0.235 | 17.4 | LOS B | 0.9 | 6.1 | 0.78 | 0.93 | 0.86 | 29.2 |
| Appro | ach | 132 | 0.0 | 132 | 0.0 | 0.235 | 11.8 | LOS A | 0.9 | 6.1 | 0.49 | 0.72 | 0.52 | 31.7 |
| All Ve | hicles | 1092 | 6.6 | 1092 | 6.6 | 0.235 | 1.5 | NA | 0.9 | 6.1 | 0.06 | 0.09 | 0.06 | 54.2 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

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).

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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V Site: 101 [ALM_SITEP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Alma Ave & Residential Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|---------|----------------------------------|--------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Reside | ential Acc | ess (E |) | | | | | | | | | | |
| 4 | L2 | 5 | 0.0 | 5 | 0.0 | 0.003 | 3.6 | LOS A | 0.0 | 0.1 | 0.13 | 0.43 | 0.13 | 36.9 |
| Appro | oach | 5 | 0.0 | 5 | 0.0 | 0.003 | 3.6 | LOS A | 0.0 | 0.1 | 0.13 | 0.43 | 0.13 | 36.9 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 22 | 0.0 | 22 | 0.0 | 0.042 | 3.4 | LOS A | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 39.5 |
| 8 | T1 | 58 | 0.0 | 58 | 0.0 | 0.042 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 35.7 |
| Appro | oach | 80 | 0.0 | 80 | 0.0 | 0.042 | 0.9 | NA | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 38.4 |
| All Ve | ehicles | 85 | 0.0 | 85 | 0.0 | 0.042 | 1.1 | NA | 0.0 | 0.1 | 0.01 | 0.15 | 0.01 | 38.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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Organisation: VARGA TRAFFIC PLANNING | Licence: NETWORK / 1PC | Processed: Wednesday, 8 December 2021 11:40:40 AM Project: Z:\DATA\Data\Jobs\21work\21513_58-76StanmoreRdStanmore\SIDRA\211208\Proposed Network 2021.sip9



V Site: 101 [TUP_SITEP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Tupper St & Club/Retail Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|----------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|------------|-------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Tupp | er St (S) | | | | | | | | | | | | |
| 1 2 | L2 T1 | 1 42 | 0.0 | 1 42 | 0.0 | 0.022 0.022 | 3.4 0.0 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 0.00 | 0.01 0.01 | 0.00 0.00 | 40.1 39.9 |
| Appro | oach | 43 | 0.0 | 43 | 0.0 | 0.022 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 39.9 |
| North | : Tuppe | er St (N) | | | | | | | | | | | | |
| 8 | T1 R2 | 51 73 | 0.0 | 51 73 | 0.0 | 0.069 0.069 | 0.1 3.7 | LOS A LOS A | 0.3 0.3 | 2.2 2.2 | 0.12 0.12 | 0.28 0.28 | 0.12 0.12 | 27.3 37.8 |
| Appro | oach | 124 | 0.0 | 124 | 0.0 | 0.069 | 2.2 | NA | 0.3 | 2.2 | 0.12 | 0.28 | 0.12 | 36.8 |
| West | : Club 8 | & Retail A | ccess | (W) | | | | | | | | | | |
| 10 | L2 | 23 | 0.0 | 23 | 0.0 | 0.032 | 3.5 | LOS A | 0.1 | 8.0 | 0.12 | 0.46 | 0.12 | 36.9 |
| 12 | R2 | 19 | 0.0 | 19 | 0.0 | 0.032 | 4.1 | LOS A | 0.1 | 0.8 | 0.12 | 0.46 | 0.12 | 36.9 |
| Appro | oach | 42 | 0.0 | 42 | 0.0 | 0.032 | 3.8 | LOS A | 0.1 | 0.8 | 0.12 | 0.46 | 0.12 | 36.9 |
| All Ve | ehicles | 209 | 0.0 | 209 | 0.0 | 0.069 | 2.1 | NA | 0.3 | 2.2 | 0.09 | 0.26 | 0.09 | 37.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

APPENDIX D

SIDRA MOVEMENT SUMMARIES TWO WAY ALMA AVENUE

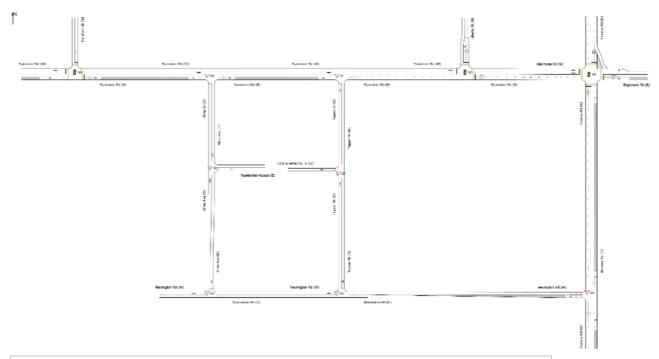
NETWORK LAYOUT

■□ Network: N101 [Proposed Network AM 2021 (Network Folder:

General)]

Existing Network AM 2021 Network Category: (None)

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



| SITES IN | NETWORK | |
|------------------|---------|----------------------|
| Site ID | CCG ID | Site Name |
| 1 01 | NA | STA_MERP AM 2021 |
| ∇ ₁₀₁ | NA | STA_ALMP AM 2021 |
| ∇ ₁₀₁ | NA | STA_TUPP AM 2021 |
| 1 01 | NA | STA_LIBP AM 2021 |
| 1 01 | NA | STA_ENM_EDGP AM 2021 |
| ∇ ₁₀₁ | NA | NEW_ALMP AM 2021 |
| ∇ ₁₀₁ | NA | NEW_TUPP AM 2021 |
| ∇ ₁₀₁ | NA | ENM_NEWP AM 2021 |
| ∇ ₁₀₁ | NA | ALM_SITEP AM 2021 |
| ∇ ₁₀₁ | NA | TUP_SITEP AM 2021 |

Site: 101 [STA_MERP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Merchant St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|-----------------------|----------------------------------|-----|---------------------------------|--------------|---------------------|-----------------------|---------------------|------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO' [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | East: Stanmore Rd (E) | | | | | | | | | | | | | |
| 5 | T1 | 856 | 4.2 | 856 | 4.2 | * 0.506 | 8.2 | LOS A | 15.4 | 111.7 | 0.39 | 0.57 | 0.39 | 38.5 |
| Appro | oach | 856 | 4.2 | 856 | 4.2 | 0.506 | 8.2 | LOS A | 15.4 | 111.7 | 0.39 | 0.57 | 0.39 | 38.5 |
| North | : Merch | ant St (N | 1) | | | | | | | | | | | |
| 7 | L2 | 57 | 0.0 | 57 | 0.0 | 0.521 | 57.3 | LOS E | 7.5 | 53.6 | 0.97 | 0.80 | 0.97 | 19.6 |
| 9 | R2 | 78 | 3.8 | 78 | 3.8 | * 0.521 | 57.3 | LOS E | 7.5 | 53.6 | 0.97 | 0.80 | 0.97 | 26.2 |
| Appro | oach | 135 | 2.2 | 135 | 2.2 | 0.521 | 57.3 | LOS E | 7.5 | 53.6 | 0.97 | 0.80 | 0.97 | 24.0 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 68 | 0.0 | 68 | 0.0 | 0.314 | 8.2 | LOS A | 8.1 | 59.1 | 0.34 | 0.35 | 0.34 | 41.3 |
| 11 | T1 | 825 | 6.1 | 825 | 6.1 | 0.314 | 4.8 | LOS A | 8.1 | 59.6 | 0.34 | 0.33 | 0.34 | 36.0 |
| Appro | oach | 893 | 5.6 | 893 | 5.6 | 0.314 | 5.1 | LOS A | 8.1 | 59.6 | 0.34 | 0.33 | 0.34 | 36.7 |
| All Ve | ehicles | 1884 | 4.7 | 1884 | 4.7 | 0.521 | 10.2 | LOS A | 15.4 | 111.7 | 0.41 | 0.47 | 0.41 | 35.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Movement Performance | | | | | | | | | | | | |
|---------------------------------|--------------|----------------|---------------------|-------------------------|-----|---------|--------------------------|----------------|-----------------|----------------|--|--|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. E | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed | | |
| | ped/h | sec | | ped | m | | | sec | m | m/sec | | |
| East: Stanmore | Rd (E) | | | | | | | | | | | |
| P2 Full | 15 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | |
| North: Merchant | t St (N) | | | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 214.6 | 208.6 | 0.97 | | |
| West: Stanmore Rd (W) | | | | | | | | | | | | |
| P4 Full | 45 | 54.3 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 | | |
| All Pedestrians | 64 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.4 | 214.8 | 0.98 | | |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



■□ Network: N101 [Proposed **Network AM 2021 (Network**

Folder: General)]

Stanmore Rd & (Two-Way) Alma St Site Category: (None) Give-Way (Two-Way)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|----------|----------------------------------|------------|--------------------------------|--------------|---------------------|-----------------------|---------------------|------------|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Alma | St (S) | | | | | | | | | | | | |
| 1 3 | L2 R2 | 7 7 | 0.0 | 7 7 | 0.0 | 0.091 0.091 | 5.5 39.7 | LOS A LOS C | 0.2 0.2 | 1.6 1.6 | 0.47 0.47 | 0.58 0.58 | 0.47 0.47 | 27.2 27.2 |
| Appro | oach | 14 | 0.0 | 14 | 0.0 | 0.091 | 22.6 | LOS B | 0.2 | 1.6 | 0.47 | 0.58 | 0.47 | 27.2 |
| East: | Stanm | ore Rd (E | ≣) | | | | | | | | | | | |
| 4 5 | L2 T1 | 37 798 | 0.0 4.9 | 37 798 | 0.0 4.9 | 0.074 0.368 | 4.9 0.2 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 0.00 | 0.16 0.02 | 0.00 0.00 | 47.5 57.8 |
| Appro | oach | 835 | 4.7 | 835 | 4.7 | 0.368 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.03 | 0.00 | 57.3 |
| West | Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 875 | 5.8 | 875 | 5.8 | 0.335 | 0.6 | LOS A | 0.8 | 5.9 | 0.08 | 0.02 | 0.10 | 54.9 |
| 12 | R2 | 32 | 0.0 | 32 | 0.0 | 0.335 | 12.2 | LOS A | 8.0 | 5.9 | 0.20 | 0.06 | 0.24 | 49.2 |
| Appro | oach | 907 | 5.6 | 907 | 5.6 | 0.335 | 1.0 | NA | 0.8 | 5.9 | 0.09 | 0.03 | 0.10 | 54.7 |
| All Ve | ehicles | 1756 | 5.1 | 1756 | 5.1 | 0.368 | 0.9 | NA | 0.8 | 5.9 | 0.05 | 0.03 | 0.06 | 53.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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



■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehicle Movement Performance | | | | | | | | | | | | | | |
|------------------------------|----------|----------------------------------|------------|--------------------------------|--------------|---------------------|-----------------------|---------------------|------------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South: Tupper St (S) | | | | | | | | | | | | | | |
| 1 3 | L2 R2 | 18 24 | 0.0 | 18 24 | 0.0 | 0.365 0.365 | 12.2 44.6 | LOS A LOS D | 0.9 0.9 | 6.0 6.0 | 0.53 0.53 | 0.69 0.69 | 0.66 0.66 | 6.5 6.5 |
| Appro | | 42 ore Rd (E | 0.0 | 42 | 0.0 | 0.365 | 30.7 | LOS C | 0.9 | 6.0 | 0.53 | 0.69 | 0.66 | 6.5 |
| | | | | | | | | | | | | | | |
| 4 5 | L2 T1 | 34 777 | 0.0 5.0 | 34 777 | 0.0 5.0 | 0.079 0.350 | 4.1 0.3 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 | 0.13 0.02 | 0.00 | 48.2 57.7 |
| Appro | ach | 811 | 4.8 | 811 | 4.8 | 0.350 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.02 | 0.00 | 57.2 |
| West | Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 869 | 5.9 | 869 | 5.9 | 0.242 | 0.2 | LOS A | 12.2 | 89.9 | 0.04 | 0.01 | 0.04 | 55.8 |
| 12 | R2 | 13 | 0.0 | 13 | 0.0 | 0.242 | 11.0 | LOS A | 5.1 | 37.2 | 0.07 | 0.02 | 0.08 | 52.0 |
| Appro | ach | 882 | 5.8 | 882 | 5.8 | 0.242 | 0.4 | NA | 12.2 | 89.9 | 0.04 | 0.01 | 0.04 | 55.8 |
| All Ve | hicles | 1735 | 5.2 | 1735 | 5.2 | 0.365 | 1.1 | NA | 12.2 | 89.9 | 0.03 | 0.03 | 0.03 | 48.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

Site: 101 [STA_LIBP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd & Liberty St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | icle Mo | vement | Perfo | rmano | се | | | | | | | | | |
|-----------|-----------|-------------------------|-----------|-----------------------|--------------|---------|-------|---------------------|--------------|---------------------------|--------------|----------------------------|--------------------|----------------|
| Mov ID | Turn | DEMA FLOV [Total | WS HV] | ARRI FLO [Tota | WS I HV] | | Delay | Level of Service | Ql [Veh. | BACK OF JEUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed |
| Cast. | Chaman | veh/h | <u>%</u> | veh/h | % | v/c | sec | | veh | m | | | | km/h |
| East | Stanmo | ore Rd (E | =) | | | | | | | | | | | |
| 5 | T1 | 618 | 5.7 | 618 | 5.7 | 0.438 | 4.8 | LOS A | 9.8 | 71.9 | 0.30 | 0.27 | 0.30 | 37.5 |
| 6 | R2 | 324 | 4.9 | 324 | 4.9 | * 0.552 | 17.9 | LOS B | 7.4 | 54.3 | 0.45 | 0.82 | 0.45 | 36.4 |
| Appr | oach | 942 | 5.4 | 942 | 5.4 | 0.552 | 9.3 | LOS A | 9.8 | 71.9 | 0.35 | 0.46 | 0.35 | 36.7 |
| North | n: Libert | y St (N) | | | | | | | | | | | | |
| 7 | L2 | 310 | 4.2 | 310 | 4.2 | 0.382 | 27.9 | LOS B | 11.9 | 86.5 | 0.71 | 0.77 | 0.71 | 28.6 |
| 9 | R2 | 193 | 2.1 | 193 | 2.1 | * 0.703 | 59.2 | LOS E | 11.2 | 79.9 | 1.00 | 0.85 | 1.06 | 19.2 |
| Appr | oach | 503 | 3.4 | 503 | 3.4 | 0.703 | 39.9 | LOS C | 11.9 | 86.5 | 0.82 | 0.80 | 0.84 | 24.1 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 96 | 3.1 | 96 | 3.1 | 0.708 | 31.9 | LOS C | 12.2 | 89.8 | 0.85 | 0.78 | 0.85 | 29.5 |
| 11 | T1 | 797 | 6.1 | 797 | 6.1 | * 0.708 | 28.7 | LOS C | 12.2 | 89.8 | 0.86 | 0.78 | 0.87 | 7.4 |
| Appr | oach | 893 | 5.8 | 893 | 5.8 | 0.708 | 29.1 | LOS C | 12.2 | 89.8 | 0.86 | 0.78 | 0.86 | 11.8 |
| All V | ehicles | 2338 | 5.1 | 2338 | 5.1 | 0.708 | 23.5 | LOS B | 12.2 | 89.8 | 0.65 | 0.66 | 0.65 | 23.6 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------|---------|----------|--------------|--------|------|--------------|--------|--------|-------|
| Mov ID Crossing | Dem. | Aver. | Level of | | | | ffective | Travel | Travel | Aver. |
| ID Clossing | Flow | Delay | Service | QUE [Ped | Dist] | Que | Stop Rate | Time | Dist. | Speed |
| | ped/h | sec | | ped | m | | | sec | m | m/sec |
| East: Stanmore I | Rd (E) | | | | | | | | | |
| P2 Full | 23 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Liberty St | (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 217.2 | 211.9 | 0.98 |
| All Pedestrians | 27 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.3 | 214.7 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [STA_ENM_EDGP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Stanmore Rd, Enmore Rd & Edgeware Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|---------|-------------------------|-----------|-----------------------|--------------|----------------|-------|---------------------|--------------|-------------------------|--------------|----------------------------|--------------------|----------------|
| Mov ID | Turn | DEMA FLOV [Total | VS HV] | ARRI FLO [Tota | WS I HV] | Deg. Satn | Delay | Level of Service | QU [Veh. | ACK OF EUE Dist] | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed |
| | | veh/h | % | veh/h | % | v/c | sec | | veh | m | | | | km/h |
| South | h: Enmo | ore Rd (S |) | | | | | | | | | | | |
| 1 | L2 | 84 | 0.0 | 84 | 0.0 | 0.854 | 63.2 | LOS E | 20.5 | 153.9 | 1.00 | 0.99 | 1.20 | 14.1 |
| 2 | T1 | 564 | 11.3 | 564 | 11.3 | * 0.854 | 58.9 | LOS E | 20.5 | 153.9 | 1.00 | 0.99 | 1.20 | 16.7 |
| Appr | oach | 648 | 9.9 | 648 | 9.9 | 0.854 | 59.4 | LOS E | 20.5 | 156.7 | 1.00 | 0.99 | 1.20 | 16.3 |
| East: | Edgew | are Rd (E | Ξ) | | | | | | | | | | | |
| 4 | L2 | 1 | 0.0 | 1 | 0.0 | 0.323 | 24.7 | LOS B | 10.4 | 76.1 | 0.65 | 0.56 | 0.65 | 32.4 |
| 5 | T1 | 588 | 5.3 | 588 | 5.3 | 0.323 | 20.1 | LOS B | 10.4 | 76.1 | 0.65 | 0.56 | 0.65 | 32.4 |
| Appr | oach | 589 | 5.3 | 589 | 5.3 | 0.323 | 20.1 | LOS B | 10.4 | 76.1 | 0.65 | 0.56 | 0.65 | 32.4 |
| North | n: Enmo | ore Rd (N) |) | | | | | | | | | | | |
| 7 | L2 | 68 | 5.9 | 68 | 5.9 | 0.502 | 42.6 | LOS D | 17.2 | 128.6 | 0.79 | 0.76 | 0.79 | 27.0 |
| 8 | T1 | 320 | 8.1 | 320 | 8.1 | 0.502 | 36.1 | LOS C | 17.2 | 128.6 | 0.79 | 0.76 | 0.79 | 8.0 |
| 9 | R2 | 236 | 5.5 | 236 | 5.5 | * 0.664 | 55.6 | LOS D | 12.3 | 90.4 | 0.97 | 1.01 | 0.98 | 5.5 |
| Appr | oach | 624 | 6.9 | 624 | 6.9 | 0.664 | 44.2 | LOS D | 17.2 | 128.6 | 0.86 | 0.86 | 0.86 | 9.9 |
| West | : Stanm | nore Rd (\ | N) | | | | | | | | | | | |
| 10 | L2 | 309 | 5.2 | 309 | 5.2 | 0.276 | 17.2 | LOS B | 10.0 | 73.2 | 0.58 | 0.74 | 0.58 | 24.4 |
| 11 | T1 | 780 | 6.0 | 780 | 6.0 | * 0.847 | 46.2 | LOS D | 26.6 | 195.8 | 0.99 | 0.93 | 1.02 | 25.3 |
| Appr | oach | 1089 | 5.8 | 1089 | 5.8 | 0.847 | 38.0 | LOS C | 26.6 | 195.8 | 0.88 | 0.88 | 0.90 | 25.2 |
| All V | ehicles | 2950 | 6.8 | 2950 | 6.8 | 0.854 | 40.4 | LOS C | 26.6 | 195.8 | 0.86 | 0.84 | 0.91 | 21.5 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

* Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------------|----------------|---------------------|----------------|-------------|-----------------|------|----------------|-----------------|----------------|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE | UE | Prop. Et Que | Stop | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | [Ped ped | Dist] m | | Rate | sec | m | m/sec |
| South: Enmore I | Rd (S) | | | | | | | | | |
| P1 Full | 12 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| East: Edgeware | Rd (E) | | | | | | | | | |
| P2 Full | 33 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| North: Enmore F | Rd (N) | | | | | | | | | |
| P3 Full | 13 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| West: Stanmore | Rd (W) | | | | | | | | | |
| P4 Full | 16 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| All Pedestrians | 73 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



V Site: 101 [NEW_ALMP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Newington Rd & Alma Ave Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|--------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| E) | | | | | | | | | | | |
| 5 | T1 | 31 | 0.0 | 31 | 0.0 | 0.016 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 31 | 0.0 | 31 | 0.0 | 0.016 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 36 | 0.0 | 36 | 0.0 | 0.044 | 3.6 | LOS A | 0.2 | 1.1 | 0.17 | 0.48 | 0.17 | 34.8 |
| 9 | R2 | 24 | 0.0 | 24 | 0.0 | 0.044 | 4.3 | LOS A | 0.2 | 1.1 | 0.17 | 0.48 | 0.17 | 41.7 |
| Appro | ach | 60 | 0.0 | 60 | 0.0 | 0.044 | 3.9 | LOS A | 0.2 | 1.1 | 0.17 | 0.48 | 0.17 | 38.9 |
| West: | Newir | gton Rd | (W) | | | | | | | | | | | |
| 11 | T1 | 84 | 0.0 | 84 | 0.0 | 0.043 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 84 | 0.0 | 84 | 0.0 | 0.043 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| All Ve | hicles | 175 | 0.0 | 175 | 0.0 | 0.044 | 1.3 | NA | 0.2 | 1.1 | 0.06 | 0.16 | 0.06 | 45.6 |

 $Site \ Level \ of \ Service \ (LOS) \ Method: \ Delay \ (RTANSW). \ Site \ LOS \ Method \ is \ specified \ in \ the \ Network \ Data \ dialog \ (Network \ tab).$

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).

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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V Site: 101 [NEW_TUPP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Newington Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | ce | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-----------------------|---------------------|-----|-------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| E) | | | | | | | | | | | |
| 5 | T1 | 25 | 0.0 | 25 | 0.0 | 0.022 | 0.2 | LOS A | 0.1 | 0.6 | 0.16 | 0.20 | 0.16 | 43.3 |
| 6 | R2 | 15 | 0.0 | 15 | 0.0 | 0.022 | 4.9 | LOS A | 0.1 | 0.6 | 0.16 | 0.20 | 0.16 | 43.3 |
| Appro | oach | 40 | 0.0 | 40 | 0.0 | 0.022 | 2.0 | NA | 0.1 | 0.6 | 0.16 | 0.20 | 0.16 | 43.3 |
| North | : Tupp | er St (N) | | | | | | | | | | | | |
| 7 | L2 | 32 | 0.0 | 32 | 0.0 | 0.027 | 4.8 | LOS A | 0.1 | 0.7 | 0.19 | 0.51 | 0.19 | 39.1 |
| 9 | R2 | 6 | 0.0 | 6 | 0.0 | 0.027 | 5.1 | LOS A | 0.1 | 0.7 | 0.19 | 0.51 | 0.19 | 39.1 |
| Appro | oach | 38 | 0.0 | 38 | 0.0 | 0.027 | 4.9 | LOS A | 0.1 | 0.7 | 0.19 | 0.51 | 0.19 | 39.1 |
| West | : Newir | ngton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 20 | 0.0 | 20 | 0.0 | 0.062 | 4.5 | LOS A | 0.0 | 0.0 | 0.00 | 0.09 | 0.00 | 43.9 |
| 11 | T1 | 100 | 0.0 | 100 | 0.0 | 0.062 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.09 | 0.00 | 43.9 |
| Appro | oach | 120 | 0.0 | 120 | 0.0 | 0.062 | 0.8 | NA | 0.0 | 0.0 | 0.00 | 0.09 | 0.00 | 43.9 |
| All Ve | ehicles | 198 | 0.0 | 198 | 0.0 | 0.062 | 1.8 | NA | 0.1 | 0.7 | 0.07 | 0.19 | 0.07 | 41.9 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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



V Site: 101 [ENM_NEWP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network AM 2021 (Network

Folder: General)]

Enmore Rd & Newington Rd Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rmanc | e: | | | | | | | | | |
|-----------|--------|----------------------------------|-------|-----------------------------------|-----------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI' FLO\ [Total veh/h | WS HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | : Enmo | ore Rd (S | 5) | | | | | | | | | | | |
| 2 | T1 | 597 | 11.1 | 597 1 | 11.1 | 0.164 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | ach | 597 | 11.1 | 597 1 | 11.1 | 0.164 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| North | : Enmo | re Rd (N |) | | | | | | | | | | | |
| 8 | T1 | 352 | 7.7 | 352 | 7.7 | 0.158 | 0.1 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | ach | 352 | 7.7 | 352 | 7.7 | 0.158 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| West | Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 85 | 0.0 | 85 | 0.0 | 0.087 | 6.0 | LOS A | 0.3 | 2.2 | 0.38 | 0.60 | 0.38 | 35.9 |
| 12 | R2 | 61 | 0.0 | 61 | 0.0 | 0.205 | 16.6 | LOS B | 0.7 | 5.2 | 0.77 | 0.91 | 0.81 | 29.8 |
| Appro | ach | 146 | 0.0 | 146 | 0.0 | 0.205 | 10.4 | LOS A | 0.7 | 5.2 | 0.54 | 0.73 | 0.56 | 32.3 |
| All Ve | hicles | 1095 | 8.5 | 1095 | 8.5 | 0.205 | 1.4 | NA | 0.7 | 5.2 | 0.07 | 0.10 | 0.07 | 53.5 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

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).

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: 101 [ALM_SITEP AM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network AM 2021 (Network**

Folder: General)]

(Two-Way) Alma Ave & Residential Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|------------------------------|----------------------------------|-------|------|---------|---------------------|-----------------------|---------------------|-----|-------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | FLC | al HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Alma | Ave (S) | | | | | | | | | | | | |
| 2 | T1 | 1 | 0.0 | 1 | 0.0 | 0.001 | 0.1 | LOS A | 0.0 | 0.0 | 0.14 | 0.23 | 0.14 | 36.1 |
| 3 | R2 | 1 | 0.0 | 1 | 0.0 | 0.001 | 3.7 | LOS A | 0.0 | 0.0 | 0.14 | 0.23 | 0.14 | 38.4 |
| Appro | oach | 2 | 0.0 | 2 | 0.0 | 0.001 | 1.9 | NA | 0.0 | 0.0 | 0.14 | 0.23 | 0.14 | 37.8 |
| East: | East: Residential Access (E) | | | | | | | | | | | | | |
| 4 | L2 | 10 | 0.0 | 10 | 0.0 | 0.018 | 3.6 | LOS A | 0.1 | 0.4 | 0.14 | 0.46 | 0.14 | 36.8 |
| 6 | R2 | 14 | 0.0 | 14 | 0.0 | 0.018 | 3.7 | LOS A | 0.1 | 0.4 | 0.14 | 0.46 | 0.14 | 36.8 |
| Appro | oach | 24 | 0.0 | 24 | 0.0 | 0.018 | 3.7 | LOS A | 0.1 | 0.4 | 0.14 | 0.46 | 0.14 | 36.8 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 6 | 0.0 | 6 | 0.0 | 0.036 | 3.4 | LOS A | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 40.0 |
| 8 | T1 | 63 | 0.0 | 63 | 0.0 | 0.036 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 38.5 |
| Appro | oach | 69 | 0.0 | 69 | 0.0 | 0.036 | 0.3 | NA | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 39.1 |
| All Ve | ehicles | 95 | 0.0 | 95 | 0.0 | 0.036 | 1.2 | NA | 0.1 | 0.4 | 0.04 | 0.15 | 0.04 | 37.7 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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



■□ Network: N101 [Proposed **Network AM 2021 (Network**

Folder: General)]

Tupper St & Club/Retail Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|----------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|------------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Tuppe | er St (S) | | | | | | | | | | | | |
| 1 2 | L2 T1 | 1 39 | 0.0 | 1 39 | 0.0 | 0.021 0.021 | 3.4 0.0 | LOS A LOS A | 0.0 0.0 | 0.0 | 0.00 | 0.01 0.01 | 0.00 | 40.1 39.9 |
| Appro | | 40 | 0.0 | 40 | 0.0 | 0.021 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 39.9 |
| North | : Tuppe | er St (N) | | | | | | | | | | | | |
| 8 9 | T1 R2 | 30 17 | 0.0 | 30 17 | 0.0 | 0.025 0.025 | 0.1 3.6 | LOS A LOS A | 0.1 0.1 | 0.6 0.6 | 0.08 0.08 | 0.17 0.17 | 0.08 0.08 | 30.9 38.4 |
| Appro | oach | 47 | 0.0 | 47 | 0.0 | 0.025 | 1.4 | NA | 0.1 | 0.6 | 0.08 | 0.17 | 0.08 | 37.0 |
| West | : Club 8 | Retail A | ccess | (W) | | | | | | | | | | |
| 10 | L2 | 3 | 0.0 | 3 | 0.0 | 0.004 | 3.5 | LOS A | 0.0 | 0.1 | 0.11 | 0.45 | 0.11 | 36.9 |
| 12 | R2 | 2 | 0.0 | 2 | 0.0 | 0.004 | 3.8 | LOS A | 0.0 | 0.1 | 0.11 | 0.45 | 0.11 | 36.9 |
| Appro | oach | 5 | 0.0 | 5 | 0.0 | 0.004 | 3.6 | LOS A | 0.0 | 0.1 | 0.11 | 0.45 | 0.11 | 36.9 |
| All Ve | ehicles | 92 | 0.0 | 92 | 0.0 | 0.025 | 0.9 | NA | 0.1 | 0.6 | 0.05 | 0.12 | 0.05 | 38.2 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

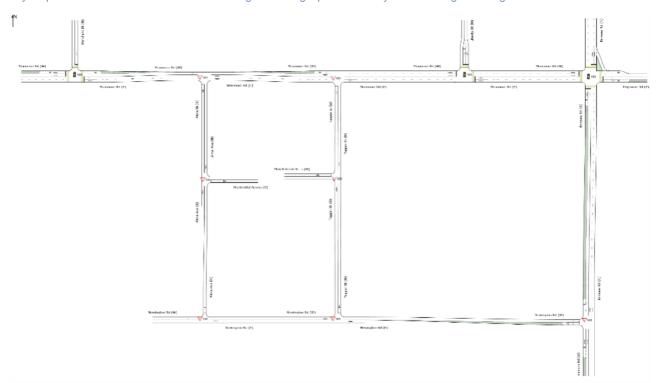
NETWORK LAYOUT

■□ Network: N101 [Proposed Network PM 2021 (Network Folder:

General)]

Existing Network PM 2021 Network Category: (None)

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



| SITES IN | NETWORK | |
|------------------|---------|----------------------|
| Site ID | CCG ID | Site Name |
| 1 01 | NA | STA_MERP PM 2021 |
| ∇ ₁₀₁ | NA | STA_ALMP PM 2021 |
| ∇ ₁₀₁ | NA | STA_TUPP PM 2021 |
| 1 01 | NA | STA_LIBP PM 2021 |
| 1 101 | NA | STA_ENM_EDGP PM 2021 |
| ∇ ₁₀₁ | NA | NEW_ALMP PM 2021 |
| ∇ ₁₀₁ | NA | NEW_TUPP PM 2021 |
| ∇ ₁₀₁ | NA | ENM_NEWP PM 2021 |
| ∇ ₁₀₁ | NA | ALM_SITEP PM 2021 |
| ∇ ₁₀₁ | NA | TUP_SITEP PM 2021 |

Site: 101 [STA_MERP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Merchant St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | е | | | | | | | | | |
|-----------|---------|----------------------------------|-------|----------------------------------|--------------|---------------------|-----------------------|---------------------|--------------------------------|------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO' [Total veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | 95% BA QUE [Veh. veh | | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Stanmo | ore Rd (E | ≣) | | | | | | | | | | | |
| 5 | T1 | 895 | 2.2 | 895 | 2.2 | 0.288 | 5.3 | LOS A | 6.4 | 45.5 | 0.27 | 0.50 | 0.27 | 40.1 |
| Appro | oach | 895 | 2.2 | 895 | 2.2 | 0.288 | 5.3 | LOS A | 6.4 | 45.5 | 0.27 | 0.50 | 0.27 | 40.1 |
| North | : Merch | ant St (N | 1) | | | | | | | | | | | |
| 7 | L2 | 24 | 0.0 | 24 | 0.0 | 0.500 | 64.4 | LOS E | 4.8 | 34.9 | 0.99 | 0.77 | 0.99 | 18.5 |
| 9 | R2 | 59 | 5.1 | 59 | 5.1 | * 0.500 | 63.0 | LOS E | 4.8 | 34.9 | 0.99 | 0.77 | 0.99 | 25.2 |
| Appro | oach | 83 | 3.6 | 83 | 3.6 | 0.500 | 63.4 | LOS E | 4.8 | 34.9 | 0.99 | 0.77 | 0.99 | 23.7 |
| West | Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 | L2 | 30 | 0.0 | 30 | 0.0 | 0.096 | 5.9 | LOS A | 1.8 | 12.3 | 0.22 | 0.26 | 0.22 | 42.4 |
| 11 | T1 | 750 | 1.1 | 750 | 1.1 | * 0.478 | 3.5 | LOS A | 10.3 | 72.4 | 0.29 | 0.28 | 0.29 | 37.2 |
| Appro | oach | 780 | 1.0 | 780 | 1.0 | 0.478 | 3.6 | LOS A | 10.3 | 72.4 | 0.29 | 0.28 | 0.29 | 37.6 |
| All Ve | ehicles | 1758 | 1.8 | 1758 | 1.8 | 0.500 | 7.3 | LOS A | 10.3 | 72.4 | 0.31 | 0.41 | 0.31 | 37.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | |
|--------------------|--------------|----------------|---------------------|-------------------------|----------------|---------|--------------------------|----------------|-----------------|----------------|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. E | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | ped | m ¹ | | | sec | m | m/sec |
| East: Stanmore | Rd (E) | | | | | | | | | |
| P2 Full | 15 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| North: Merchant | St (N) | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 214.6 | 208.6 | 0.97 |
| West: Stanmore | Rd (W) | | | | | | | | | |
| P4 Full | 45 | 54.3 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| All Pedestrians | 64 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.4 | 214.8 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Stanmore Rd & (Two-Way) Alma St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | се | | | | | | | | | |
|-----------|----------|----------------------------------|------------|--------------------------------|--------------|---------------------|-----------------------|---------------------|------------|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Alma | St (S) | | | | | | | | | | | | |
| 1 3 | L2 R2 | 1 2 | 0.0 | 1 2 | 0.0 | 0.019 0.019 | 4.9 29.1 | LOS A LOS C | 0.0 0.0 | 0.3 0.3 | 0.78 0.78 | 0.78 0.78 | 0.78 0.78 | 27.5 27.5 |
| Appro | oach | 3 | 0.0 | 3 | 0.0 | 0.019 | 21.1 | LOS B | 0.0 | 0.3 | 0.78 | 0.78 | 0.78 | 27.5 |
| East: | Stanm | ore Rd (E | ≣) | | | | | | | | | | | |
| 4 5 | L2 T1 | 61 933 | 0.0 2.1 | 61 933 | 0.0 2.1 | 0.259 0.259 | 5.0 0.0 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 0.00 | 0.07 0.03 | 0.00 0.00 | 53.4 56.7 |
| Appro | oach | 994 | 2.0 | 994 | 2.0 | 0.259 | 0.3 | NA | 0.0 | 0.0 | 0.00 | 0.04 | 0.00 | 56.5 |
| West | Stanm | ore Rd (| W) | | | | | | | | | | | |
| 11 | T1 | 770 | 0.9 | 770 | 0.9 | 0.559 | 0.8 | LOS A | 0.9 | 6.2 | 0.09 | 0.02 | 0.14 | 54.2 |
| 12 | R2 | 19 | 0.0 | 19 | 0.0 | 0.559 | 15.8 | LOS B | 0.9 | 6.2 | 0.09 | 0.02 | 0.14 | 54.2 |
| Appro | oach | 789 | 0.9 | 789 | 0.9 | 0.559 | 1.2 | NA | 0.9 | 6.2 | 0.09 | 0.02 | 0.14 | 54.2 |
| All Ve | ehicles | 1786 | 1.5 | 1786 | 1.5 | 0.559 | 0.7 | NA | 0.9 | 6.2 | 0.04 | 0.03 | 0.06 | 54.6 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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



■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Stanmore Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmand | :e | | | | | | | | | |
|-----------|----------|----------------------------------|------------|----------------------------------|--------------|---------------------|-----------------------|---------------------|------------|-----------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO' [Total veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Tuppe | er St (S) | | | | | | | | | | | | |
| 1 | L2 R2 | 35 30 | 0.0 | 35 30 | 0.0 | 0.471 0.471 | 14.9 49.5 | LOS B LOS D | 1.3 1.3 | 9.3 9.3 | 0.75 0.75 | 0.95 0.95 | 1.05 1.05 | 6.3 6.3 |
| Appro | oach | 65 | 0.0 | 65 | 0.0 | 0.471 | 30.9 | LOS C | 1.3 | 9.3 | 0.75 | 0.95 | 1.05 | 6.3 |
| East: | Stanmo | ore Rd (E | :) | | | | | | | | | | | |
| 4 5 | L2 T1 | 90 959 | 0.0 2.3 | 90 959 | 0.0 2.3 | 0.274 0.274 | 4.1 0.0 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 0.00 | 0.10 0.05 | 0.00 0.00 | 50.6 55.3 |
| Appro | oach | 1049 | 2.1 | 1049 | 2.1 | 0.274 | 0.4 | NA | 0.0 | 0.0 | 0.00 | 0.05 | 0.00 | 54.8 |
| West | : Stanm | ore Rd (| N) | | | | | | | | | | | |
| 11 | T1 | 738 | 0.9 | 738 | 0.9 | 0.221 | 0.8 | LOS A | 11.9 | 84.0 | 0.11 | 0.03 | 0.11 | 48.1 |
| 12 | R2 | 34 | 0.0 | 34 | 0.0 | 0.221 | 12.3 | LOS A | 2.3 | 16.1 | 0.26 | 0.07 | 0.27 | 37.8 |
| Appr | oach | 772 | 0.9 | 772 | 0.9 | 0.221 | 1.3 | NA | 11.9 | 84.0 | 0.12 | 0.03 | 0.12 | 47.5 |
| All Ve | ehicles | 1886 | 1.5 | 1886 | 1.5 | 0.471 | 1.8 | NA | 11.9 | 84.0 | 0.07 | 0.07 | 0.09 | 42.0 |

Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

Site: 101 [STA_LIBP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Stanmore Rd & Liberty St Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | cle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|-----------|----------------------------------|------------|----------------------------------|--------------|---------------------|-----------------------|---------------------|--------------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARRI FLO' [Total veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East | Stanm | ore Rd (E | ≣) | | | | | | | | | | | |
| 5 6 | T1 R2 | 794 391 | 2.5 0.8 | 794 391 | 2.5 0.8 | 0.584 * 0.584 | 8.7 28.9 | LOS A LOS C | 21.8 12.5 | 155.8 87.8 | 0.52 0.65 | 0.48 0.90 | 0.52 0.65 | 28.8 31.0 |
| Appr | | 1185 | 1.9 | 1185 | | 0.584 | 15.3 | LOS B | 21.8 | 155.8 | 0.56 | 0.62 | 0.56 | 30.3 |
| North | n: Libert | y St (N) | | | | | | | | | | | | |
| 7 9 | L2 R2 | 375 255 | 2.1 0.4 | 375 255 | 2.1 0.4 | 0.384 * 0.718 | 22.0 55.5 | LOS B LOS D | 12.7 14.5 | 90.5 101.8 | 0.63 0.99 | 0.75 0.86 | 0.63 1.04 | 31.4 20.0 |
| Appr | oach | 630 | 1.4 | 630 | 1.4 | 0.718 | 35.5 | LOS C | 14.5 | 101.8 | 0.78 | 0.79 | 0.80 | 25.5 |
| West | : Stanm | ore Rd (| W) | | | | | | | | | | | |
| 10 11 | L2 T1 | 85 683 | 0.0 1.0 | 85 683 | 0.0 1.0 | 0.724 * 0.724 | 39.1 36.3 | LOS C LOS C | 12.7 12.7 | 89.8 89.8 | 0.92 0.92 | 0.82 0.83 | 0.92 0.94 | 26.8 6.0 |
| Appr | oach | 768 | 0.9 | 768 | 0.9 | 0.724 | 36.6 | LOS C | 12.7 | 89.8 | 0.92 | 0.83 | 0.94 | 10.0 |
| All V | ehicles | 2583 | 1.5 | 2583 | 1.5 | 0.724 | 26.6 | LOS B | 21.8 | 155.8 | 0.72 | 0.72 | 0.73 | 22.8 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

Critical Movement (Signal Timing)

| Pedestrian Mo | vement | Perforr | nance | | | | | | | | | |
|--------------------|-----------------------|----------------|---------------------|-------------------------|-----|-----------------|--------------------------|----------------|-----------------|----------------|--|--|
| Mov ID Crossing | Dem. Flow | Aver. Delay | Level of Service | AVERAGE QUE [Ped | | Prop. Et Que | ffective Stop Rate | Travel Time | Travel Dist. | Aver. Speed | | |
| | ped/h | sec | | ped | m | | | sec | m | m/sec | | |
| East: Stanmore | East: Stanmore Rd (E) | | | | | | | | | | | |
| P2 Full | 23 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 | | |
| North: Liberty St | (N) | | | | | | | | | | | |
| P3 Full | 4 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 217.2 | 211.9 | 0.98 | | |
| All Pedestrians | 27 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.3 | 214.7 | 0.98 | | |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: 101 [STA_ENM_EDGP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Stanmore Rd, Enmore Rd & Edgeware Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

| Vehi | icle Mo | vement | Perfo | rmano | :e | | | | | | | | | |
|-----------|----------|----------------------------------|-------|---------------------------------|--------------|---------------------|-----------------------|---------------------|------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO [Total veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| Sout | h· Enmo | ore Rd (S | | veii/ii | /0 | V/C | 366 | | ven | - ''' | | | | KIII/II |
| 1 | L2 | 131 | 0.0 | 131 | 0.0 | 0.872 | 68.8 | LOS E | 16.4 | 117.8 | 1.00 | 1.02 | 1.29 | 12.9 |
| 2 | T1 | 418 | 6.0 | 418 | 6.0 | * 0.872 | 63.2 | LOS E | 19.4 | 143.0 | 1.00 | 1.02 | 1.29 | 15.8 |
| | | | | | | | | | | | | | | |
| Appr | oacn | 549 | 4.6 | 549 | 4.6 | 0.872 | 64.5 | LOS E | 19.4 | 143.0 | 1.00 | 1.02 | 1.27 | 15.1 |
| East: | Edgew | are Rd (E | ≣) | | | | | | | | | | | |
| 4 | L2 | 3 | 0.0 | 3 | 0.0 | 0.503 | 29.8 | LOS C | 13.2 | 93.8 | 0.76 | 0.67 | 0.76 | 29.8 |
| 5 | T1 | 707 | 2.0 | 707 | 2.0 | 0.503 | 24.7 | LOS B | 15.7 | 111.9 | 0.75 | 0.66 | 0.75 | 30.0 |
| Appr | oach | 710 | 2.0 | 710 | 2.0 | 0.503 | 24.7 | LOS B | 15.7 | 111.9 | 0.75 | 0.66 | 0.75 | 30.0 |
| North | n: Enmo | re Rd (N) |) | | | | | | | | | | | |
| 7 | L2 | 90 | 0.0 | 90 | 0.0 | 0.564 | 39.2 | LOS C | 19.7 | 146.9 | 0.79 | 0.78 | 0.79 | 28.1 |
| 8 | T1 | 381 | 9.7 | 381 | 9.7 | 0.564 | 32.8 | LOS C | 19.7 | 146.9 | 0.79 | 0.78 | 0.79 | 8.6 |
| 9 | R2 | 351 | 2.0 | 351 | 2.0 | * 0.756 | 54.3 | LOS D | 17.6 | 125.6 | 0.98 | 1.07 | 1.03 | 5.6 |
| Appr | oach | 822 | 5.4 | 822 | 5.4 | 0.756 | 42.7 | LOS D | 19.7 | 146.9 | 0.87 | 0.90 | 0.89 | 10.2 |
| West | t: Stanm | ore Rd (\ | N) | | | | | | | | | | | |
| 10 | L2 | 317 | 0.0 | 317 | 0.0 | 0.276 | 17.6 | LOS B | 10.4 | 73.0 | 0.59 | 0.75 | 0.59 | 24.3 |
| 11 | T1 | 746 | 2.0 | 746 | 2.0 | * 0.846 | 43.4 | LOS D | 27.5 | 195.8 | 0.99 | 0.94 | 1.04 | 26.2 |
| Appr | oach | 1063 | 1.4 | 1063 | 1.4 | 0.846 | 35.7 | LOS C | 27.5 | 195.8 | 0.87 | 0.88 | 0.90 | 25.9 |
| All V | ehicles | 3144 | 3.1 | 3144 | 3.1 | 0.872 | 40.1 | LOS C | 27.5 | 195.8 | 0.87 | 0.86 | 0.93 | 21.1 |

Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Network Data dialog (Network tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

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

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

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

* Critical Movement (Signal Timing)

| Pedestr | ian Movemen | t Perforr | nance | | | | | | | |
|----------------|--------------------|----------------|---------------------|----------------|-------------|-----------------|------|----------------|-----------------|----------------|
| Mov ID Cros | Dem. ssing Flow | Aver. Delay | Level of Service | AVERAGE QUE | UE | Prop. Et Que | Stop | Travel Time | Travel Dist. | Aver. Speed |
| | ped/h | sec | | [Ped ped | Dist] m | | Rate | sec | m | m/sec |
| South: E | nmore Rd (S) | | | | | | | | | |
| P1 Full | 12 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| East: Ed | geware Rd (E) | | | | | | | | | |
| P2 Full | 33 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.8 | 215.2 | 0.98 |
| North: Er | nmore Rd (N) | | | | | | | | | |
| P3 Full | 13 | 54.2 | LOS E | 0.0 | 0.0 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| West: St | anmore Rd (W) | | | | | | | | | |
| P4 Full | 16 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |
| All Pedes | strians 73 | 54.2 | LOS E | 0.1 | 0.1 | 0.95 | 0.95 | 219.7 | 215.2 | 0.98 |

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay) Pedestrian movement LOS values are based on average delay per pedestrian movement. Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.



V Site: 101 [NEW_ALMP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Newington Rd & Alma Ave Site Category: (None) Give-Way (Two-Way)

| Vehic | cle Mo | vement | Perfo | rman | ce | | | | | | | | | |
|-----------|--------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newin | gton Rd (| E) | | | | | | | | | | | |
| 5 | T1 | 39 | 0.0 | 39 | 0.0 | 0.020 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 39 | 0.0 | 39 | 0.0 | 0.020 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 25 | 0.0 | 25 | 0.0 | 0.031 | 3.6 | LOS A | 0.1 | 0.8 | 0.15 | 0.47 | 0.15 | 34.8 |
| 9 | R2 | 18 | 0.0 | 18 | 0.0 | 0.031 | 4.2 | LOS A | 0.1 | 0.8 | 0.15 | 0.47 | 0.15 | 41.8 |
| Appro | ach | 43 | 0.0 | 43 | 0.0 | 0.031 | 3.9 | LOS A | 0.1 | 0.8 | 0.15 | 0.47 | 0.15 | 39.1 |
| West: | Newir | gton Rd | (W) | | | | | | | | | | | |
| 11 | T1 | 66 | 0.0 | 66 | 0.0 | 0.034 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| Appro | ach | 66 | 0.0 | 66 | 0.0 | 0.034 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 50.0 |
| All Ve | hicles | 148 | 0.0 | 148 | 0.0 | 0.034 | 1.1 | NA | 0.1 | 0.8 | 0.04 | 0.14 | 0.04 | 46.3 |

 $Site\ Level\ of\ Service\ (LOS)\ Method:\ Delay\ (RTA\ NSW).\ Site\ LOS\ Method\ is\ specified\ in\ the\ Network\ Data\ dialog\ (Network\ tab).$

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).

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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V Site: 101 [NEW_TUPP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Newington Rd & Tupper St Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | ce | | | | | | | | | |
|-----------|----------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|------------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| East: | Newing | gton Rd (| E) | | | | | | | | | | | |
| 5 6 | T1 R2 | 26 15 | 0.0 | 26 15 | 0.0 | 0.023 0.023 | 0.1 4.8 | LOS A LOS A | 0.1 0.1 | 0.6 0.6 | 0.13 0.13 | 0.20 0.20 | 0.13 0.13 | 43.6 43.6 |
| Appro | oach | 41 | 0.0 | 41 | 0.0 | 0.023 | 1.8 | NA | 0.1 | 0.6 | 0.13 | 0.20 | 0.13 | 43.6 |
| North | : Tuppe | er St (N) | | | | | | | | | | | | |
| 7 9 | L2 R2 | 52 13 | 0.0 | 52 13 | 0.0 | 0.045 0.045 | 4.8 5.0 | LOS A LOS A | 0.2 0.2 | 1.2 1.2 | 0.15 0.15 | 0.51 0.51 | 0.15 0.15 | 39.3 39.3 |
| Appro | oach | 65 | 0.0 | 65 | 0.0 | 0.045 | 4.8 | LOS A | 0.2 | 1.2 | 0.15 | 0.51 | 0.15 | 39.3 |
| West | : Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 11 | L2 T1 | 23 68 | 0.0 | 23 68 | 0.0 | 0.047 0.047 | 4.5 0.0 | LOS A LOS A | 0.0 0.0 | 0.0 0.0 | 0.00 | 0.14 0.14 | 0.00 | 41.4 41.4 |
| Appro | | 91 | 0.0 | 91 | 0.0 | 0.047 | 1.1 | NA | 0.0 | 0.0 | 0.00 | 0.14 | 0.00 | 41.4 |
| All Ve | ehicles | 197 | 0.0 | 197 | 0.0 | 0.047 | 2.5 | NA | 0.2 | 1.2 | 0.08 | 0.27 | 0.08 | 40.8 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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



V Site: 101 [ENM_NEWP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed Network PM 2021 (Network

Folder: General)]

Enmore Rd & Newington Rd Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rmano | e | | | | | | | | | |
|-----------|---------|----------------------------------|-------|--------------------------------|--------------|---------------------|-----------------------|---------------------|-----|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARRI FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Enmo | ore Rd (S |) | | | | | | | | | | | |
| 2 | T1 | 492 | 6.5 | 492 | 6.5 | 0.219 | 0.2 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | oach | 492 | 6.5 | 492 | 6.5 | 0.219 | 0.2 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| North | : Enmo | re Rd (N |) | | | | | | | | | | | |
| 8 | T1 | 468 | 8.5 | 468 | 8.5 | 0.127 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| Appro | oach | 468 | 8.5 | 468 | 8.5 | 0.127 | 0.0 | NA | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 59.9 |
| West | : Newin | gton Rd | (W) | | | | | | | | | | | |
| 10 | L2 | 62 | 0.0 | 62 | 0.0 | 0.050 | 5.7 | LOS A | 0.2 | 1.3 | 0.17 | 0.51 | 0.17 | 37.3 |
| 12 | R2 | 70 | 0.0 | 70 | 0.0 | 0.242 | 17.6 | LOS B | 0.9 | 6.4 | 0.78 | 0.93 | 0.86 | 29.1 |
| Appro | oach | 132 | 0.0 | 132 | 0.0 | 0.242 | 12.0 | LOS A | 0.9 | 6.4 | 0.50 | 0.73 | 0.54 | 31.6 |
| All Ve | ehicles | 1092 | 6.6 | 1092 | 6.6 | 0.242 | 1.5 | NA | 0.9 | 6.4 | 0.06 | 0.09 | 0.07 | 54.1 |

Site Level of Service (LOS) Method: Delay (RTANSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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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V Site: 101 [ALM_SITEP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

(Two-Way) Alma Ave & Residential Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|---------|----------------------------------|--------|------|---------|---------------------|-----------------------|---------------------|-----|--------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLO\ [Total veh/h | | FLC | al HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | BACK OF JEUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | n: Alma | Ave (S) | | | | | | | | | | | | |
| 2 | T1 | 1 | 0.0 | 1 | 0.0 | 0.001 | 0.1 | LOS A | 0.0 | 0.0 | 0.15 | 0.28 | 0.15 | 48.6 |
| 3 | R2 | 1 | 0.0 | 1 | 0.0 | 0.001 | 5.6 | LOS A | 0.0 | 0.0 | 0.15 | 0.28 | 0.15 | 53.1 |
| Appro | oach | 2 | 0.0 | 2 | 0.0 | 0.001 | 2.9 | NA | 0.0 | 0.0 | 0.15 | 0.28 | 0.15 | 52.0 |
| East: | Reside | ential Acc | ess (E |) | | | | | | | | | | |
| 4 | L2 | 2 | 0.0 | 2 | 0.0 | 0.004 | 3.6 | LOS A | 0.0 | 0.1 | 0.13 | 0.51 | 0.13 | 43.8 |
| 6 | R2 | 3 | 0.0 | 3 | 0.0 | 0.004 | 5.7 | LOS A | 0.0 | 0.1 | 0.13 | 0.51 | 0.13 | 43.8 |
| Appro | oach | 5 | 0.0 | 5 | 0.0 | 0.004 | 4.8 | LOS A | 0.0 | 0.1 | 0.13 | 0.51 | 0.13 | 43.8 |
| North | : Alma | Ave (N) | | | | | | | | | | | | |
| 7 | L2 | 22 | 0.0 | 22 | 0.0 | 0.042 | 3.4 | LOS A | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 39.5 |
| 8 | T1 | 58 | 0.0 | 58 | 0.0 | 0.042 | 0.0 | LOS A | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 35.7 |
| Appro | oach | 80 | 0.0 | 80 | 0.0 | 0.042 | 0.9 | NA | 0.0 | 0.0 | 0.00 | 0.13 | 0.00 | 38.4 |
| All Ve | ehicles | 87 | 0.0 | 87 | 0.0 | 0.042 | 1.2 | NA | 0.0 | 0.1 | 0.01 | 0.15 | 0.01 | 39.4 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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

V Site: 101 [TUP_SITEP PM 2021 (Site Folder: General)]

■□ Network: N101 [Proposed **Network PM 2021 (Network**

Folder: General)]

Tupper St & Club/Retail Access Site Category: (None) Give-Way (Two-Way)

| Vehi | cle Mo | vement | Perfo | rman | се | | | | | | | | | |
|-----------|----------|----------------------------------|-------|-------------------------------|--------------|---------------------|-----------------------|---------------------|------------|------------------------------|--------------|----------------------------|--------------------|------------------------|
| Mov ID | Turn | DEMA FLOV [Total veh/h | | ARR FLO [Tota veh/h | WS I HV] | Deg. Satn v/c | Aver. Delay sec | Level of Service | | ACK OF EUE Dist] m | Prop. Que | EffectiveA Stop Rate | ver. No. Cycles | Aver. Speed km/h |
| South | : Tuppe | er St (S) | | | | | | | | | | | | |
| 1 2 | L2 T1 | 1 42 | 0.0 | 1 42 | 0.0 | 0.022 0.022 | 3.4 0.0 | LOS A LOS A | 0.0 0.0 | 0.0 | 0.00 | 0.01 0.01 | 0.00 | 40.1 39.9 |
| Appro | ach | 43 | 0.0 | 43 | 0.0 | 0.022 | 0.1 | NA | 0.0 | 0.0 | 0.00 | 0.01 | 0.00 | 39.9 |
| North | : Tuppe | er St (N) | | | | | | | | | | | | |
| 8 9 | T1 R2 | 51 73 | 0.0 | 51 73 | 0.0 | 0.069 0.069 | 0.1 3.7 | LOS A LOS A | 0.3 0.3 | 2.2 2.2 | 0.12 0.12 | 0.28 0.28 | 0.12 0.12 | 27.3 37.8 |
| Appro | ach | 124 | 0.0 | 124 | 0.0 | 0.069 | 2.2 | NA | 0.3 | 2.2 | 0.12 | 0.28 | 0.12 | 36.8 |
| West | Club 8 | Retail A | ccess | (W) | | | | | | | | | | |
| 10 | L2 | 23 | 0.0 | 23 | 0.0 | 0.032 | 3.5 | LOS A | 0.1 | 0.8 | 0.12 | 0.46 | 0.12 | 36.9 |
| 12 | R2 | 19 | 0.0 | 19 | 0.0 | 0.032 | 4.1 | LOS A | 0.1 | 0.8 | 0.12 | 0.46 | 0.12 | 36.9 |
| Appro | ach | 42 | 0.0 | 42 | 0.0 | 0.032 | 3.8 | LOS A | 0.1 | 0.8 | 0.12 | 0.46 | 0.12 | 36.9 |
| All Ve | hicles | 209 | 0.0 | 209 | 0.0 | 0.069 | 2.1 | NA | 0.3 | 2.2 | 0.09 | 0.26 | 0.09 | 37.3 |

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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).

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

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