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Brooklyn Data Centre Traffic Impact Assessment

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Stockland Development Pty Ltd

Brooklyn Data Centre
20 May 2026

Brooklyn Data Centre Traffic Impact Assessment

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Executive summary

This Traffic Impact Assessment (the Assessment) has been prepared on behalf of *Stockland Development Pty Ltd* in support of the planning permit application for the land at 413 Francis Street, Brooklyn (**the Site**).

This application seeks approval for the Stage 1 portion of the land use and development for a data centre (**the Project**) (shown in Figure ES 1 below) pursuant to the Industrial 1 & 3 Zones.

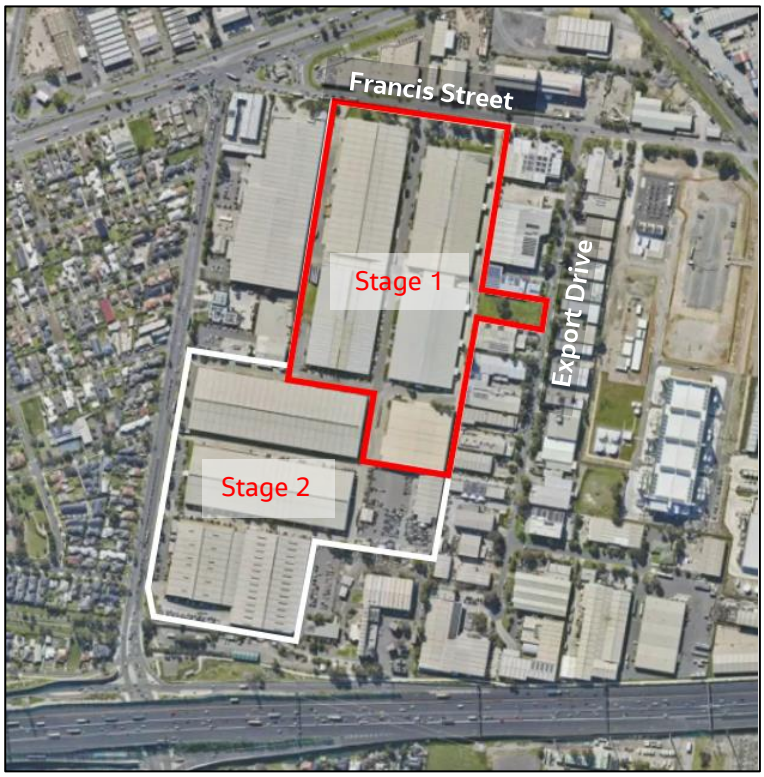

Figure ES 1. Location of the Project

Early works approval will be sought to undertake bulk earthworks across the Stage 1 area, including Site preparation and levelling to enable AusNet to deliver the substation (utility installation). Demolition of existing warehouse buildings and associated hardstand/car-parking areas will occur as part of Stage 1 under separate building approvals. The substation works will be subject to a separate approval process managed by AusNet.

This Assessment provides a review of anticipated traffic conditions and outlines recommended next steps to support ongoing Project design for Stage 1. It should be noted that the Stage 2 area of the Site will continue its existing function and operations adjacent to the Project.

Vehicle access for the Project will remain broadly consistent with existing conditions. Francis Street will function as the access point for the Project, providing direct connection to the broader arterial network, including Princes Highway, Millers Road and the West Gate Freeway. For the Stage 2 area (retaining its current function and operations), four existing Millers Road crossovers will be retained to support continued operations of the reduced Brooklyn Distribution Centre. Traffic volumes on Millers Road are not expected to increase as a result of the Project.

Traffic surveys indicate that the existing Brooklyn Distribution Centre entry from Francis Street generates approximately 57 AM peak trips, 53 PM peak trips, and 424 daily vehicle movements, with 40–70% attributable to heavy vehicles. The Project is expected to generate approximately 20 additional peak-hour

trips but 60 fewer daily trips, with heavy vehicles accounting for only 5% of movements. Accordingly, while peak-hour activity increases slightly, the Project will reduce heavy vehicle traffic and overall daily volumes.

The projected modest traffic increase can be accommodated by the existing road network, and no upgrades to roads or intersections are anticipated. Overall, the traffic impact is considered low, and the Project is expected to comply with the relevant transport-related statutory requirements of the Hobsons Bay Planning Scheme. A detailed access assessment will be completed at the next submission stage to confirm these findings.

This Assessment specifically addresses Stage 1 of the Project, as summarised in Table ES-1.

Table ES-1. Summary of traffic impact assessment and statutory controls

Project Details	
Location	413 Francis Street, Brooklyn
Use	Data Centre
Size	75,000 m^2
Parking	110 car spaces, 10 bicycle spaces
Access	One (1) access point on Francis Street
Statutory Controls	
Clause 52.06 Car Parking	Provision of 110 car spaces meets the peak parking requirement for the approximate 50 employees, potential visitors, and the increased demand associated with work shift changeover periods. The proposed car parking layout and proportion of allocated accessible car parking spaces satisfy the requirements of AS2890.6-2009 and the Building Code of Australia.
Clause 52.29 Land Adjacent to the Principal Road Network	The Project will achieve appropriate access and subdivision outcomes for land adjoining the Principal Road Network through the required permit as the Project will create or alter access to Francis Street which is designated as part of Transport Zone 2. No adverse safety impacts are anticipated, with access arrangements improved through the consolidation and eastward relocation of crossovers along Francis Street.
Clause 52.34 Bicycle Facilities	Provision of 10 bicycle spaces meets the requirement to encourage cycling by requiring secure, accessible and convenient bicycle parking and end-of-trip facilities.
Traffic Considerations	
Traffic Impact	The Project is expected to generate an additional 19 vehicles in the AM peak and 23 vehicles in the PM peak; however, the overall daily traffic volume will decrease by approximately 60 vehicles, resulting in a net reduction in total daily traffic from the Project.

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Acronyms and abbreviations

Acronym	Definition
DFP	Development Facilitation Program
DTP	Department of Transport and Planning
GAV	General Access Vehicle
GFA	Gross Floor Area
HV	Heavy Vehicle
LV	Light Vehicle
MVA	Megavolt-amperes
OSOM	Over Size and Over Mass
RAV	Restricted Access Vehicle
vph	Vehicles per hour

1. Introduction

1.1 Project overview

The Project seeks the staged use and development of a two-storey data centre (250MVA ultimate power capacity) shown in **Figure 1-1** and pursuant to the Industrial 1 & 3 Zones. To facilitate these works, the existing warehouse buildings and associated hard stand/car parking area are to be removed. Early works approval will be sought to undertake bulk earthworks across the Site, including the preparation of leveling of the Site to allow AusNet to deliver the substation (utility installation). It is noted that the substation area will be subject to separate planning approvals and the use and development associated with the substation will be subject to a separate approval prepared by AusNet.

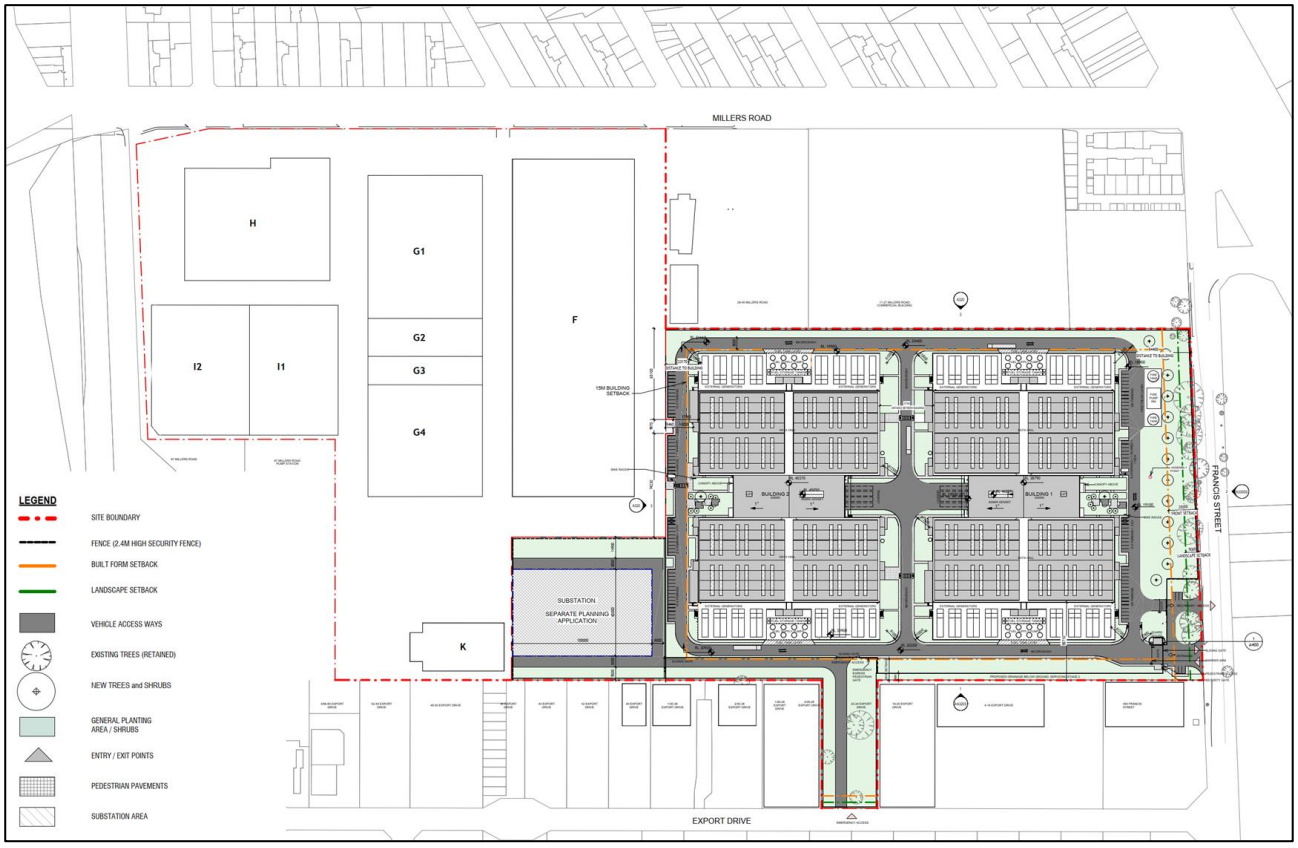

Figure 1-1. Draft site plan for the Project Stage 1[1]

1.2 Planning permit application

This application meets the relevant eligibility criteria to be considered under the Development Facilitation Program where the Minister for Planning will be the Responsible Authority pursuant to Clause 53.22 of the Planning Scheme.

In particular, the Project seeks permission for the staged delivery of two, two-storey data centre buildings, generally comprising the following buildings and works:

- Bulk earthworks for site preparation and leveling (early works approval sought);

[1] Extract from A104 Site Plan – Masterplan, Revision B (20/05/2026)

- Construction of two-storey data centre buildings with a building height of 18.3 metres, with an additional 7.2 metres of building services for plant and chiller equipment (combined maximum height of circa 25.5 metres);
- The buildings comprise a total gross floor area of circa 75,000 square metres across the two-storey data halls and ancillary offices, with additional associated major plant open structures (housing generators and chillers);
- Vehicle ingress and egress is proposed centrally along the Site's frontage to Francis Street, with 110 car parking spaces provided at the frontage of the two data centre buildings;
- Removal of some vegetation to accommodate the functional parameters of the proposed data centre and substation development;
- Additional landscaping provided in the front setback of the building, scattered throughout the Site, and to the office entry of each building, providing an improved landscape response; and
- Provision of required utilities, including a diesel generator backup power system, associated fuel storage systems, fire pump and associated water tanks.

1.3 Purpose of this Assessment

This Assessment presents the findings of the preliminary traffic impact assessment for the Project. It provides an evaluation of anticipated traffic generation, access arrangements, and transport-related impacts, along with recommendations to guide the Project's ongoing design.

The Assessment has been prepared to support the application lodged with DFP under Clause 53.22 – Significant Economic Development. In accordance with Clause 14 of the DFP requirements, this document addresses the necessary transport and accessibility considerations, including:

- A description of expected traffic types and volumes generated by the Project, including key access routes.
- An assessment of predicted impacts on road safety and road network capacity. Cumulative impacts and intersection performance were not assessed given the minimal impacts of the Project on the traffic network.
- Details of the proposed internal road network, servicing arrangements, and on-site parking provisions, prepared in line with relevant planning scheme requirements and applicable Australian Standards.
- Identification of any proposed road upgrades, infrastructure works, or new access arrangements required to support the Project.

2. Existing conditions

2.1 Zoning and land use

The Project seeks the approval for the staged use and development of two, two-storey data centre (250 MVA ultimate capacity) pursuant to the Industrial 1 Zone, Industrial 3 Zone, and Special Building Overlay, where data centre use is permissible. The Site is located at 413 Francis Street, Brooklyn, approximately 12 kilometres (km) west of the Melbourne central business district. It sits at the western end of an established industrial precinct adjacent to the West Gate Freeway as shown in Figure 1-2.

The Site spans 22 hectares, with frontages of 251 m to Francis Street and 381 m to Millers Road. The Site is developed with multiple industrial and warehouse buildings with associated office space and currently operates as the Brooklyn Distribution Centre. Surrounding land uses as shown in Figure 2-1 include:

- North: Industrial developments across Francis Street, with a larger industrial precinct in Tottenham beyond Geelong Road/Princes Highway.
- East: Distribution centres and warehouse facilities within the Brooklyn Industrial Estate, predominantly comprising two- to three-storey buildings.
- South: Land zoned for public use (service and utility), bordered by the West Gate Freeway.
- West: Residential area across Millers Road, predominantly one- to two-storey dwellings.

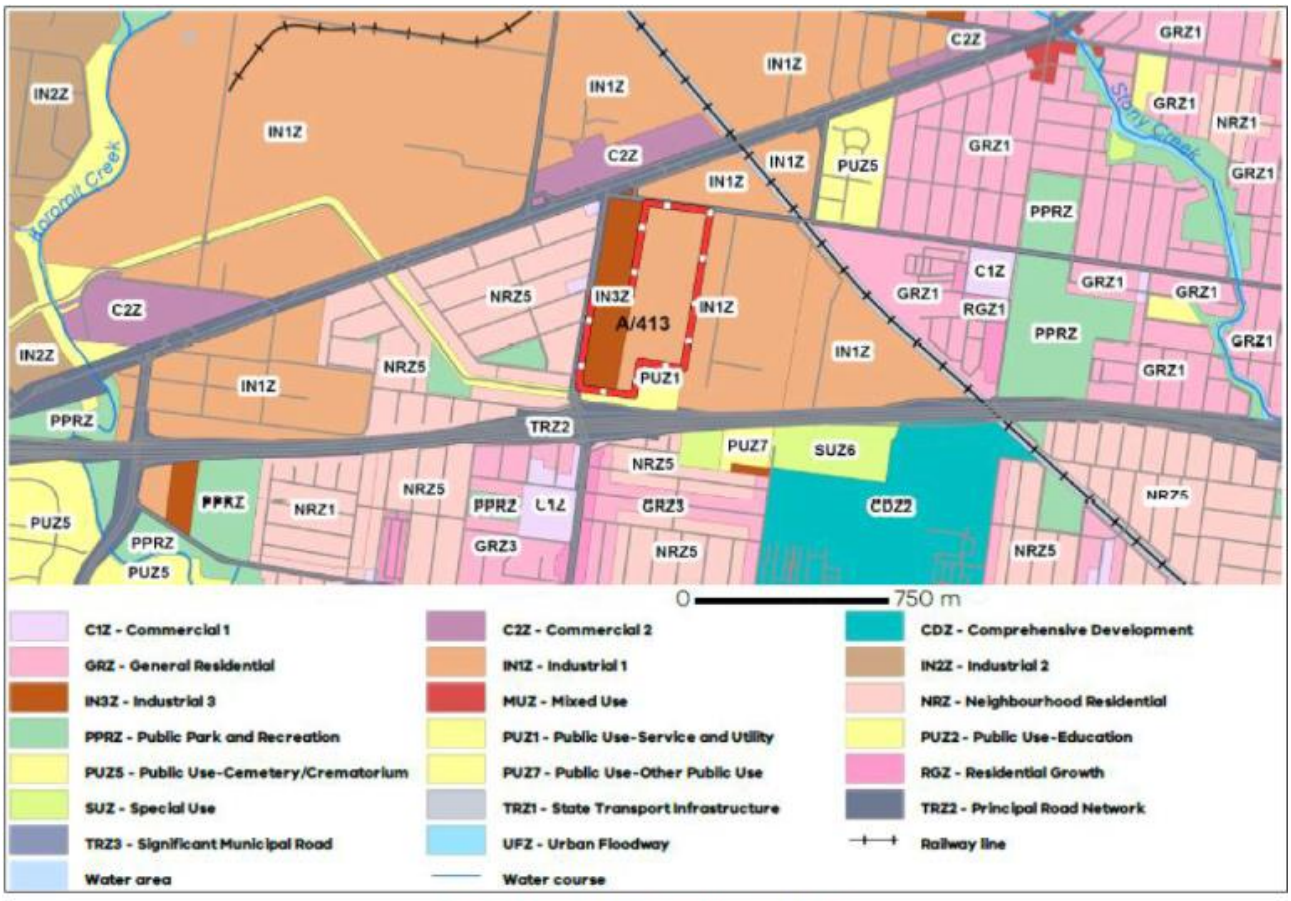

Figure 5 | Industrial 1 Zone and Industrial 3 Zone

Figure 2-1: Land use planning zones[2]

[2] Source: Planning Property Report, A/413 Frances Street, Brooklyn 3012 (VicPlan, 2026)

2.2 Road network

2.2.1 Francis Street

Francis Street is the local name for the Docklands Highway, which functions as an arterial road aligned in the east-west direction between Whitehall Street to the east and Millers Road to the west. A speed limit of 50 km/hr applies. Figure 2-2 shows a typical cross-section of Francis Street adjacent to the Site.

Figure 2-2. Francis Street, facing west adjacent to the Site[3]

2.2.2 Millers Road

Millers Road functions as an arterial road aligned in a north-south direction between Prince Highway West (Geelong Road) to the north and Esplanade to the south. A speed limit of 60 km/hr applies. Figure 2-3 shows a typical cross-section of Millers Road adjacent to the Site.

Figure 2-3. Millers Road, facing north adjacent to the Site[4]

[3] Source: Google Maps Street View, Francis Street

[4] Source: Google Maps Street View, Millers Road

2.3 Site traffic generation

2.3.1 Traffic survey data

2022 traffic surveys

The 2022 traffic surveys undertaken as part of the *Traffix Group* Traffic Assessment recorded peak-hour vehicle volumes at the Site access on Francis Street. These results, presented in Table 2-1, indicate that the existing Brooklyn Distribution Centre generates approximately 53 AM peak and 81 PM peak vehicles per hour (vph). HV proportions were not classified, and daily traffic volumes were not provided as part of the survey.

Table 2-1. Recorded 2022 traffic volumes (Traffix Group, 2022)

	Total Volume (vph)	Inbound Volume (vph)	Outbound Volume (vph)
Site AM peak	53	30	23
Site PM Peak	81	33	48

2026 traffic surveys

Additional traffic surveys were conducted on behalf of *Stockland Development Pty Ltd* from Tuesday 20 January to Thursday 22 January 2026 at the three main Site access points on Francis Street. The survey results indicate that the existing Brooklyn Distribution Centre generates an average of 57 AM peak and 53 PM peak vehicle trips, with an average weekday daily volume of 424 vehicles per day. HV proportions were observed to be higher during the AM peak outbound and PM peak inbound movements.

When compared with the 2022 traffic survey data, the 2026 surveys show similar AM peak volumes and lower PM peak volumes, indicating relatively stable morning activity with a reduction in evening peak traffic.

A summary of the average inbound and outbound volumes across the three survey days is shown in Table 2-2.

Table 2-2. Recorded 2026 traffic volumes

	Total Volume	Inbound			Outbound		
		Total	HV %	HV	Total	HV %	HV
Site AM Peak	57	22	32%	7	35	69%	24
Site PM Peak	53	22	64%	14	31	32%	10
Daily *	424	195	42%	81	229	39%	90

* *Daily traffic volumes represent an average weekday between 6:00 AM and 6:00 PM*

First principles traffic estimates

As an additional source, first principles traffic estimates were applied to calculate traffic generation at the existing Brooklyn Distribution Centre. Traffic generation rates were derived from Chapter 5 of the *Guide to Transport Impact Assessment* (Transport for NSW, 2024) for 'large format warehousing', and these assumptions are shown in Table 2-3.

Table 2-3. Summary of trip generation rates for the existing Brooklyn Distribution Centre

	Vehicle Trips per 100 m^2 GFA*	Site GFA (m^2)	Total Trips Generated
Site AM Peak	0.26	58,340	152
Site PM Peak	0.23	58,340	134
Daily	2.83	58,340	1,650

** Based on Estate Gross Floor Area 10,000 m^2 -100,000 m^2*

Vehicle class distributions for large format warehousing, reproduced from Table 5.22 of the *Guide to Transport Impact Assessment*, are presented in Table 2-4.

The proportions of inbound and outbound trips by light vehicles (LV) and HVs have been directly adopted from the referenced guideline. Therefore, the combined distribution of vehicle classes totals 100%.

Table 2-4. Vehicle classification by direction summary for large format warehousing

	All Vehicles			LV			HV		
	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound
Site AM Peak	100%	62%	38%	69%	49%	20%	31%	13%	18%
Site PM Peak	100%	34.5%	65.5%	72.5%	17.5%	55%	27.5%	17%	10.5%
Daily	100%	50%	50%	68%	34%	34%	32%	16%	16%

Based on the above trip generation, and directional splits, and the proportion of inbound and outbound vehicles, the estimated peak period and daily traffic volumes for the Brooklyn Distribution Centre are summarised in Table 2-5.

Table 2-5. Summary of trips generated by the existing Brooklyn Distribution Centre

	Total Volume	Inbound				Outbound			
		Total	HV %	LV	HV	Total	HV %	LV	HV
Site AM Peak	152	94	13%	82	12	58	18%	48	10
Site PM Peak	134	47	27.5%	33	13	88	10.5%	79	9
Daily	1,650	825	32%	561	264	825	32%	561	264

2.3.2 Selected traffic generation volumes

The traffic generation volumes derived from first principles estimates are higher than those identified in the traffic surveys. As the first principles outputs are guideline-based estimates only, the 2026 recorded traffic survey data has been adopted as the more reliable basis for estimating existing traffic generation at the Brooklyn Distribution Centre. Based on these surveys, the Centre generates approximately 57 AM peak trips, 53 PM peak trips, and a total of 424 daily vehicle movements.

2.4 Site accessibility

2.4.1 Vehicle access

Vehicle access to the Site will broadly remain consistent with the existing conditions. Francis Street will function as the main frontage and access point for the Project, offering direct entry from both the east and west. Broader connectivity to the State road network is maintained through the Princes Highway and Millers Road, supporting efficient regional access.

For the Stage 2 area (which will retain its current function and operations), the three existing crossovers on Millers Road will be retained to support the ongoing operation of the reduced Brooklyn Distribution Centre.

The existing access configuration to the Site will be maintained, and no road or intersection upgrades are proposed as part of the Project. A detailed access assessment will be prepared at the next stage of the submission process to confirm these assumptions and ensure that access arrangements continue to operate safely and efficiently under the proposed traffic conditions, as illustrated in Figure 2-4.

Figure 2-4. Site and area considered for Stage 1

2.4.2 Public transport

Four Transport Victoria bus routes operate along Millers Road and the Princes Highway in proximity to the Site frontage, including Routes 411, 412, and 414 between Laverton Station and Footscray, and Route 903 connecting Altona to Mordialloc. These services provide regular public transport access within walking distance of the Site as shown in Figure 2-4.

The nearest train stations are Tottenham Station and Sunshine Station, located approximately two and three kilometres north of the Site, respectively. Both stations are accessible via connecting bus services, such as Routes 411, 412 and 903, providing onward rail connections to the broader metropolitan network.

2.5 Surrounding road network conditions

Traffic volume data has been sourced from the Department of Transport and Planning (DTP) Historical Annual Average Daily Traffic (AADT) datasets (2001–2019), which provide annual average daily traffic volumes for all vehicles and heavy vehicles (HV) in each direction on declared road segments within the Victorian road network. These datasets form the baseline understanding of regional traffic flows and HV proportions on key arterial routes adjoining the Site, as summarised in Table 2-6.

Table 2-6. Road network characteristics

Road Name	Road Hierarchy/ Jurisdiction	Speed Limit (km/h)	Existing Road Cross-section	AADT	AADT HV	HV %
Docklands Highway (Francis Street)	Arterial Road/ DTP	50 km/h (posted)	▪ One lane per direction ▪ Undivided carriageway	3,402	728	21%
Princes Highway	Arterial Road/ DTP	80 km/h (posted)	▪ Three lanes per direction ▪ Service road per direction ▪ Divided carriageway	24,025	1,821	8%
Millers Road	Arterial Road/ DTP	60 km/h (posted)	▪ Two lanes with a shared parking/bicycle lane per direction ▪ Divided carriageway	12,564	1,939	15%

2.6 Approved HV network

Figure 2-5 illustrates the National Heavy Vehicle Regulator (NHVR) gazetted 25 m B-Double network in Victoria, showing the HV network surrounding the Site.

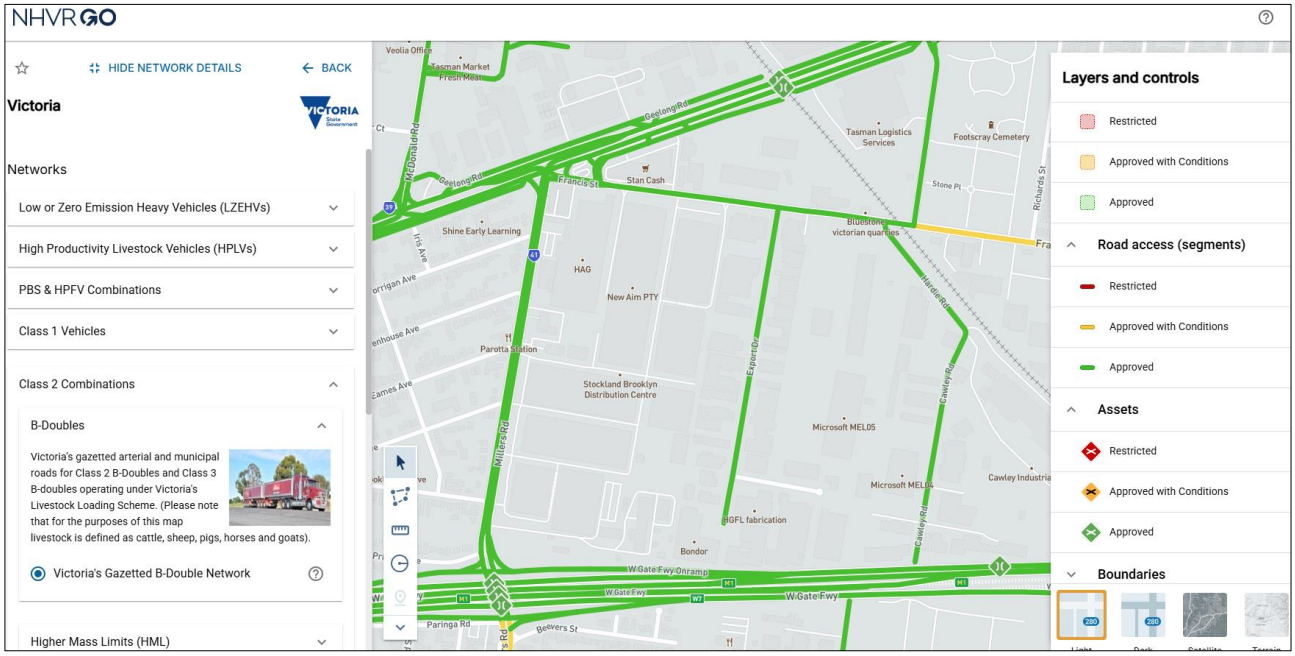

Figure 2-5. NHVR – Class 2 B-Doubles[5]

[5] Source: NHVR National Network Map

3. Project traffic details

3.1 Traffic routes

All vehicles travelling to and from the Project will use Francis Street, which provides direct connectivity to the wider road network such as Princes Highway, Millers Road and West Gate Freeway. The Project workforce will adopt similar travel routes to those currently used by the existing Brooklyn Distribution Centre workforce, with commuting and service vehicle movements following established local and regional patterns. Accordingly, changes in travel routes or traffic distribution are not expected.

3.2 Vehicle tracking

Swept path diagrams (Appendix A) capture the vehicle tracking for the Project. The design of the access and internal road circulation is expected to accommodate the swept path of vehicles.

3.3 Estimated traffic generation

The estimated operational workforce trips are shown in Table 3-1. Further details of the assumptions applied to estimate the operational traffic generation numbers are provided in Appendix B.

Table 3-1. Estimated traffic generation for the Project

	Inbound Trips		Outbound Trips		Total
	LV	HV	LV	HV	All
Site AM Peak	42	2	30	2	76
Site PM Peak	30	2	42	2	76
Daily	172	10	172	10	364

The Project is expected to generate:

- Approximately 76 vehicle trips per peak hour and 364 vehicle trips per day in both directions.
- Approximately 5% of these trips comprise HV.
- The daily inbound and outbound LV trips comprise the total AM and PM peak trips plus an additional 100 visitor trips throughout the day.
- The daily inbound and outbound HV trips have been derived on the basis that peak hour HV activity represents approximately 20% of the total daily volume. This reflects the expectation that, aside from initial data centre server installations, routine truck movements will remain limited on a day-to-day basis.

In addition, the level of HV activity is considered minimal in the context of the overall traffic generation profile.

3.4 Assessment of traffic generation impact

A comparison of estimated traffic generation between the existing Brooklyn Distribution Centre and the Project is provided in Table 3-2.

Table 3-2. Traffic generation comparison

	Estimated Existing Brooklyn Distribution Centre Total	Estimated Project Total (Data Centre)	Difference
Site AM Peak	57	76	+19
Site PM Peak	53	76	+23
Daily	424	364	-60

In summary, the Project is expected to generate slightly higher traffic volumes during the AM and PM peak periods (with an increase of approximately 20 vehicles per hour) when compared with the existing Brooklyn Distribution Centre. However, the overall daily traffic volume generated by the Project is 60 vehicles fewer.

This comparison between the peak-hour and daily traffic volumes primarily provides an indication of the magnitude of vehicles utilising the access points. It is also important to note that the vehicle composition of the existing Brooklyn Distribution Centre and the Project would differ due to the difference in land uses. The existing Brooklyn Distribution Centre is likely to have a larger proportion of HV throughout the day compared to a data centre, which would primarily comprise employees with minimal HV movements. The projected increase in peak-hour traffic associated with the Project is modest and can be accommodated within the existing capacity of the surrounding road network.

On this basis, it is unlikely that any road or access upgrades will be required, and the overall traffic impact of the Project is considered minimal.

3.5 Construction phase

During the construction phase, traffic activity will primarily consist of construction workers, deliveries, and the transport of large equipment. Delivery and installation of major infrastructure components may require oversized vehicles ranging from 40 m to 48 m in length and up to 4.5 m in width. These movements will be limited to specific activities, such as the installation of substation equipment and other large-scale infrastructure.

All traffic management measures, including the preparation and submission of Over Size and Over Mass (OSOM) permit applications, will be undertaken by the appointed contractor in accordance with statutory requirements and local authority guidelines. A Construction Traffic Management Plan (CTMP) will be required to address traffic impacts associated with heavy vehicle and OSOM activities during construction.

3.6 Operational phase

The operational phase of the data centre is expected to commence in the early 2030s and will operate 24 hours a day, seven days a week. All operational and maintenance related traffic will use the existing surrounding road network, as described in Section 2.

Maintenance tasks will be integrated into routine daily operations and will not require a separate workforce. Accordingly, this Assessment considers only operational traffic generated by staff commuting, occasional visitor trips, and periodic deliveries. Visitor numbers are expected to be low, and HV deliveries will be infrequent and typically scheduled outside peak periods; therefore, neither has been separately included in the peak-hour traffic analysis.

The Project comprises two data centre buildings and associated infrastructure, incorporating the following traffic related features:

- 110 on-site car parking spaces.
- End of trip facilities provided within each building's administration area to support staff commuting via active transport modes.

Operational traffic estimates have been developed using assumptions informed by comparable data centres, as outlined in Table 3-1.

During the operational phase, HV activity will be limited to General Access Vehicles (GAVs), which comply with standard mass and dimension requirements and do not require permits to operate on the public road network. GAVs may operate freely unless restricted by signage. The Assessment assumes that only GAVs will contribute to operational HV movements.

From an access perspective, the surrounding road network is considered suitable for the anticipated operational vehicle types.

4. Statutory controls

As per the Hobsons Bay Planning Scheme[6], the relevant transport-related statutory controls include:

- Clause 52.06 Car Parking
- Clause 52.29 Land Adjacent to the Principal Road Network
- Clause 52.34 Bicycle Facilities.

4.1 Clause 52.06 Car Parking

The purpose of Clause 52.06 Car Parking is:

- *To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.*
- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not adversely affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

110 car parking spaces are proposed across the Site. The car parking layout is preliminary and has been reviewed against Clause 52.06 to confirm that the proposed provision and design approach are suitable to support the Project's planning permit application.

A Data Centre use is nested within the Utility Installation land use group; however, no specific parking rate applies under Clause 52.065 Table 1. Under Clause 52.066, where no rate is specified, car parking must be provided to the satisfaction of the responsible authority. A car parking demand assessment has therefore been undertaken to justify the proposed supply of 110 spaces.

Based on an anticipated core dayshift workforce of up to 50 employees, the proposed parking provision of 110 spaces would allow for employee parking, visitor parking, and shift-change overlap. Modal share assumptions also result in reduced demand due to car passenger trips and alternative transport modes. The proposed parking supply is therefore considered sufficient to meet the expected operational demand.

Compliance with Clause 52.06-9 Design Standards for Car Parking will be demonstrated at the detailed design stage. Minimum parking and accessway dimensions are summarised in Table 4-1.

Two accessible parking spaces are included in the car parking layout. The proportion of accessible parking spaces complies with AS2890.6-2009 and the Building Code of Australia.

[6] https://planning-schemes.app.planning.vic.gov.au/Hobsons%20Bay/ordinance

Table 4-1. Minimum dimensions of car parking spaces and accessways[7]

Angle of Car Parking Spaces to Access Way	Accessway Width (m)	Car Space Width (m)	Car Space Length (m)
Parallel	3.6	2.3	6.7
45°	3.5	2.6	4.9
60°	4.9	2.6	4.9
90°	6.4	2.6	4.9
	5.8	2.8	4.9
	5.2	3.0	4.9
	4.8	3.2	4.9

4.2 Clause 52.29 Land Adjacent to the Principal Road Network

The purpose of Clause 52.29 Land Adjacent to the Principal Road Network is:

- *To ensure appropriate access to the Principal Road Network or land planned to form part of the Principal Road Network.*
- *To ensure appropriate subdivision of land adjacent to Principal Road Network or land planned to form part of the Principal Road Network.*

Clause 52.29 further identifies that a permit is required to:

- *Create or alter access to:*
  - *A road in a Transport Zone 2.*
  - *Land in a Public Acquisition Overlay if a transport manager (other than a municipal council) is the acquiring authority and the acquisition is for the purpose of a road.*
- *Subdivide land adjacent to:*
  - *A road in a Transport Zone 2.*
  - *Land in a Public Acquisition Overlay if a transport manager (other than a municipal council) is the acquiring authority and the acquisition is for the purpose of a road.*

A permit is not required to:

- *Create or alter access, or subdivide land, if carried out by or on behalf of the Head, Transport for Victoria.*
- *Realign a boundary.*
- *Subdivide an existing building, provided the building is already connected to services and no new access is required.*
- *Subdivide land into two lots, provided no new access is required.*

Access to the Site is via Francis Street, which is in Transport Zone 2 and part of the Principal Road Network. Based on the current design, the Project will create or alter access via Francis Street and therefore will require a permit under Clause 52.29.

[7] Adapted from Clause 52.06, Table 2

4.2.1 Effect of the Project on the operation of the road

The Project is expected to generate approximately 20 additional vehicles per hour during peak periods compared to the existing Brooklyn Distribution Centre, while the total daily traffic generated by the Site is anticipated to be lower, resulting in a net reduction in overall daily vehicle movements. It is assumed that all traffic accessing the Site will do so directly via Francis Street, and the operational traffic network distribution is consistent with the background traffic directional split.

There will be minimal traffic impacts on the surrounding road network. Millers Road access points will function only as secondary connections for use in exceptional circumstances such as power-related emergency access. Traffic volumes on Millers Road are not expected to increase as a result of the Project. These access points will be gated and remain closed during normal operations. On this basis, adverse safety impacts on the public road network are not expected.

4.2.2 Effect of the Project on public safety

The Project will maintain the same number of ingress and egress connections as the existing conditions. All internal access arrangements have been designed to comply with the relevant requirements of Clause 52.06 Car Parking, specifically:

- Where the accessway serves four or more car spaces and connects to Francis Street, vehicles are able to exit the Site in a forward direction (refer to swept path assessments in Appendix A).
- A corner splay will be provided on the egress. Landscaping and structures within these areas will remain below 900 mm in height to provide a clear view of pedestrians on the footpath.
- The proposed access to car spaces meets the minimum 6 m separation requirement.

Based on compliance with the above design standards, the proposed internal access arrangements for the Project are not expected to adversely affect public safety. This outcome is supported by the consolidation of crossovers on the Francis Street frontage.

4.3 Clause 52.34 Bicycle Facilities

The purpose of Clause 52.34 Bicycle Facilities is:

- *To encourage cycling as a mode of transport.*
- *To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.*

Clause 52.34 seeks to encourage cycling by requiring the provision of secure, accessible and convenient bicycle parking and associated shower and change facilities. The proposed bicycle facilities have been reviewed for compliance with Clause 52.34 to support the Project's planning permit application.

A Data Centre use is nested within the Utility Installation land-use group; however, neither use is assigned a bicycle parking rate under Clause 52.34-3 Table 1. In such cases, bicycle facilities must be provided to the satisfaction of the responsible authority. To inform this requirement, the recommended bicycle provision has been benchmarked against the rate for 'office – other than specified', based on an assumed net floor area of approximately 1,500 m^2. The resulting recommended provision, summarised in Table 4-2, includes 7 bicycle spaces, 2 showers, and 2 change rooms.

Although no specific bicycle parking rate applies to data centre uses, the inclusion of bicycle and end-of-trip facilities is encouraged to support active transport. The Project proposes to provide 10 bicycle spaces, meeting which exceeds the recommended provision under Clause 52.34.

Table 4-2. Recommended provision of bicycle facilities for 'office – other than specified' use

Bicycle Facility	Requirement	Quantity
Bicycle spaces	1 space per 300 m^2 of net floor area for employees, plus 1 space per 1,000 m^2 of net floor area for visitors.	7
Showers	1 shower for the first 5 bicycle spaces, plus 1 for each additional 10 spaces.	2
Change rooms	1 change room or direct access to a communal change room per shower.	2

5. Summary

The existing Brooklyn Distribution Centre generates 57 and 53 vehicle trips during the AM and PM peak periods respectively, with up to 70% of these existing trips expected to be HV. Daily traffic volumes for the existing Brooklyn Distribution Centre are shown to be 424 vehicles, with 40% HV.

Estimated Project traffic generation:

- 76 vehicle trips per peak-hour and 364 vehicle trips per day in both directions.
- Approximately 5% of these trips comprise HV.

The Project is expected to generate slightly higher traffic volumes during the AM and PM peak periods, with an increase of approximately 20 vehicles per hour compared to the existing Brooklyn Distribution Centre. The overall daily traffic volume generated by the Project is 60 vehicles fewer than the existing Brooklyn Distribution Centre.

This comparison between the peak-hour and daily traffic volumes primarily provides an indication of the magnitude of vehicles utilising the access points. It is also important to note that the vehicle composition of the existing Brooklyn Distribution Centre and the Project would differ due to difference in land uses. While the existing Brooklyn Distribution Centre generates a high proportion of HV trips, the proposed data centre will primarily attract LV associated with employees and visitors, with minimal ongoing HV activity. As a result, the change in traffic volumes represents a reduction in the HV presence across the day.

The projected increase in peak-hour traffic is considered modest and is expected to be accommodated within the existing road network, with no upgrades to roads or access points anticipated. Overall, the Project's traffic impact is assessed as low.

The Project complies with the relevant transport-related statutory controls outlined in the Hobsons Bay Planning Scheme.

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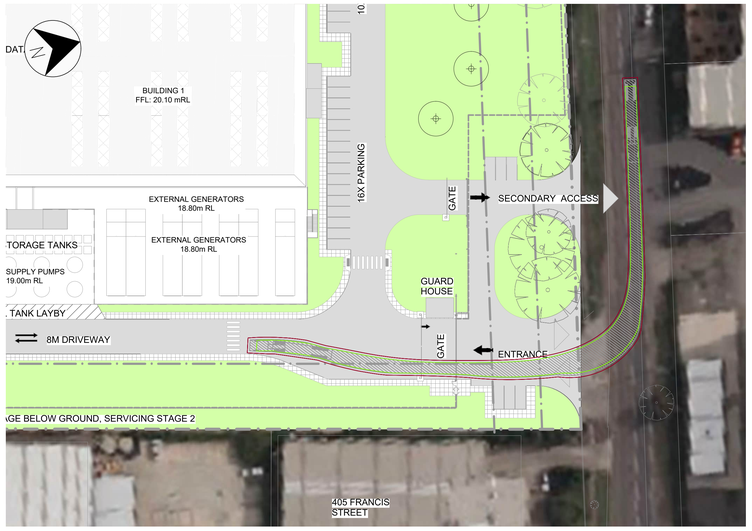
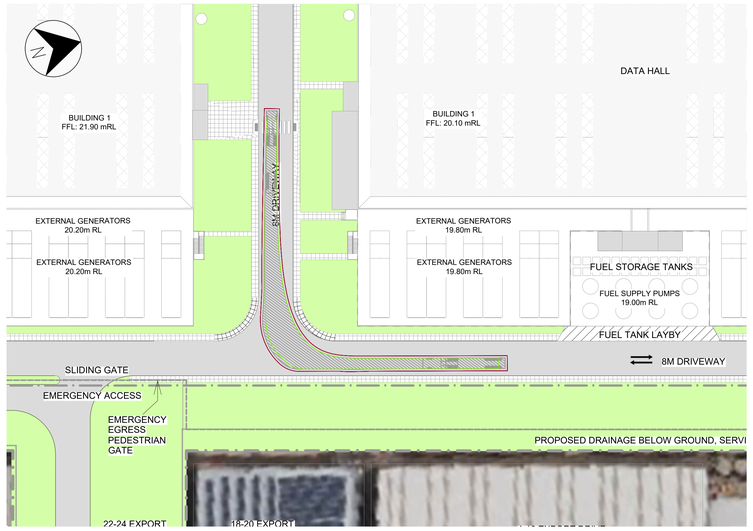
Appendix A. Vehicle tracking swept path diagrams



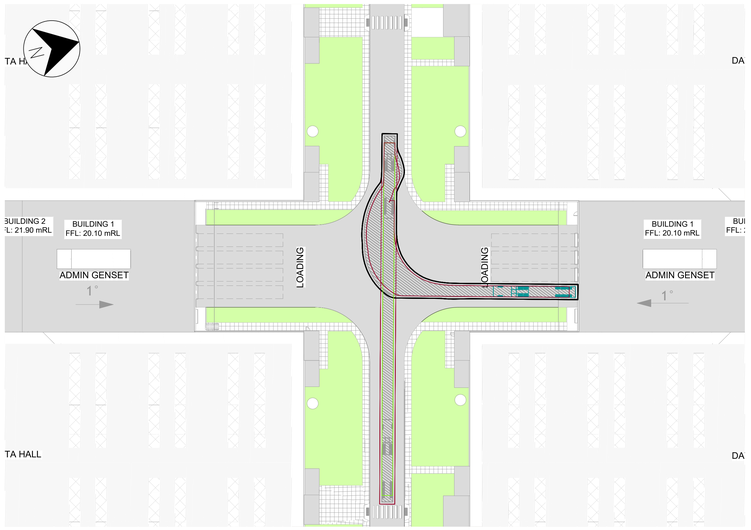
SWEPT PATH TRACKING 1: 19m PMS SEMI TRAILER - ENTRY VIA FRANCIS STREET

SCALE: 1:500



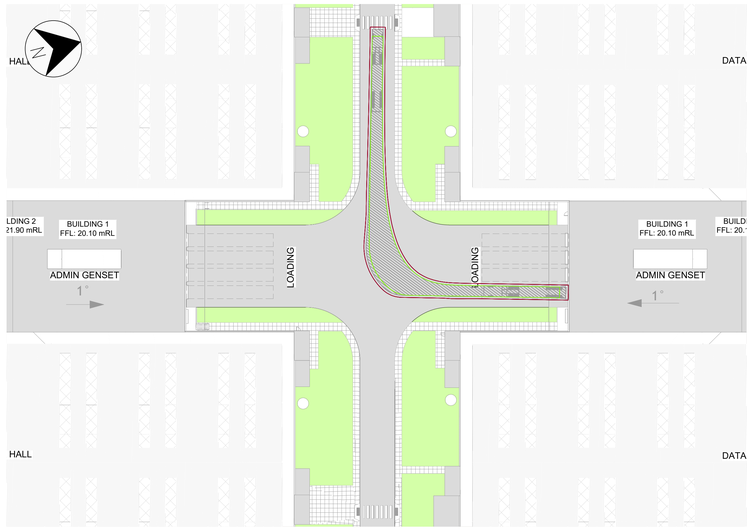
SWEPT PATH TRACKING 2: 19m PMS SEMI TRAILER - RIGHT TURN WEST TO LOADING BAY AREA

SCALE: 1:500



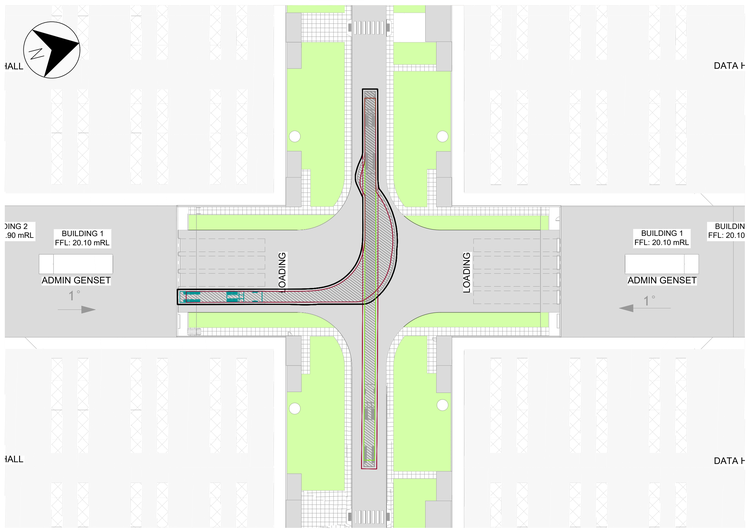
SWEPT PATH TRACKING 3: 19m PMS SEMI TRAILER - REVERSE 3 POINT TURN TO LOADING BAY 1-1

SCALE: 1:500



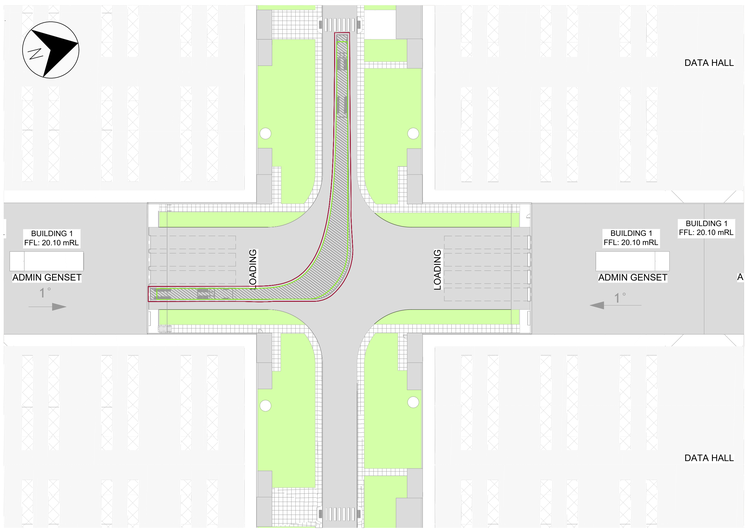
SWEPT PATH TRACKING 4: 19m PMS SEMI TRAILER - RIGHT TURN TO EXIT LOADING BAY 1-1

SCALE: 1:500



SWEPT PATH TRACKING 5: 19m PMS SEMI TRAILER - REVERSE 3 POINT TURN TO LOADING BAY 2-1

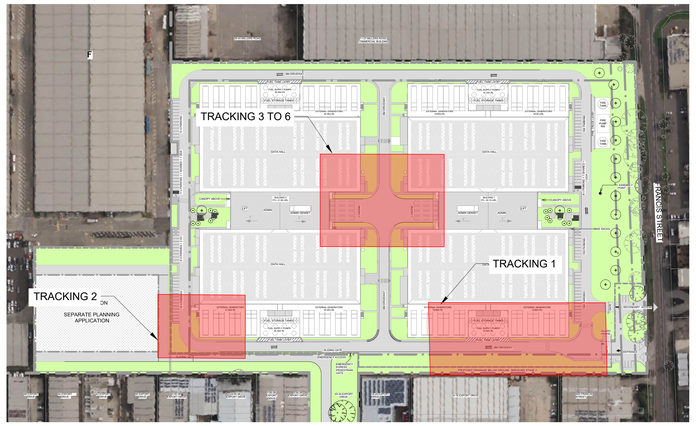
SCALE: 1:500



SWEPT PATH TRACKING 6: 19m PMS SEMI TRAILER - LEFT TURN TO EXIT LOADING BAY 2-1

SCALE: 1:500

LOCATION PLAN:



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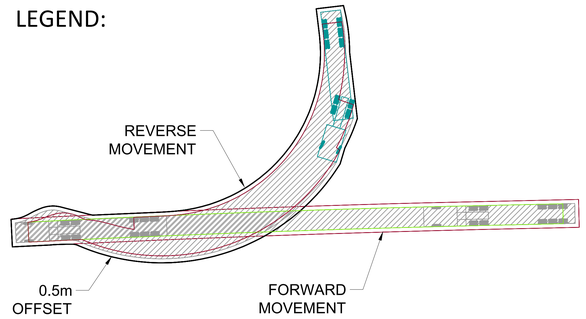
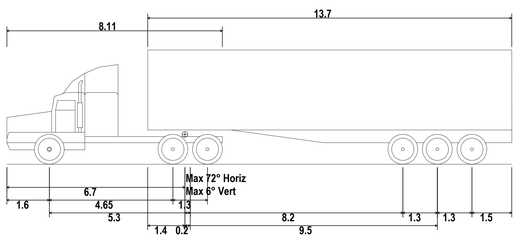


VEHICLE PROFILE:



Prime mover and semi-trailer (19 m)	
Overall Length	19.000m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.540m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

DRAWING TO BE PRINTED IN COLOUR

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PROJECT
BROOKLYN DATA CENTRE

BUILDING NAME
413 FRANCIS STREET
BROOKLYN

TITLE
BDC VEHICLE TRACKING
SHEET 1

DRAWING STATUS

DRAWN	DRAWING CHECK	REVIEWED	APPROVED
PC	PC		
DESIGNED	DESIGN REVIEW	DATE	DATE
PC	LT		

SCALE	SHEET SIZE	INTERNAL PROJECT No.
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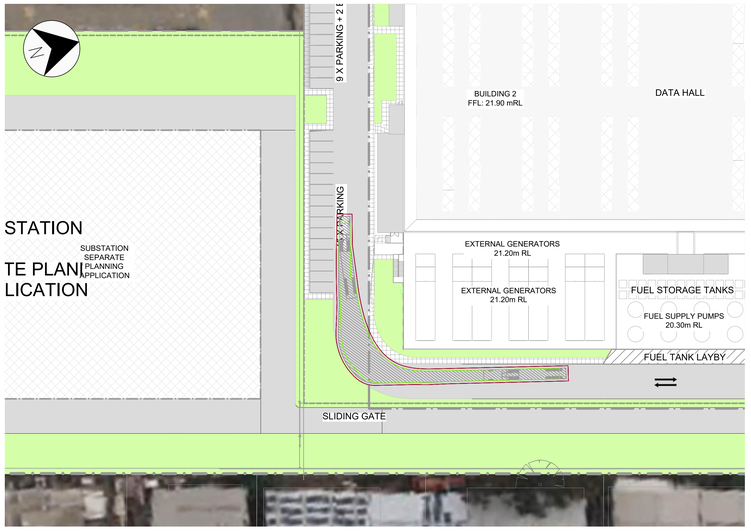
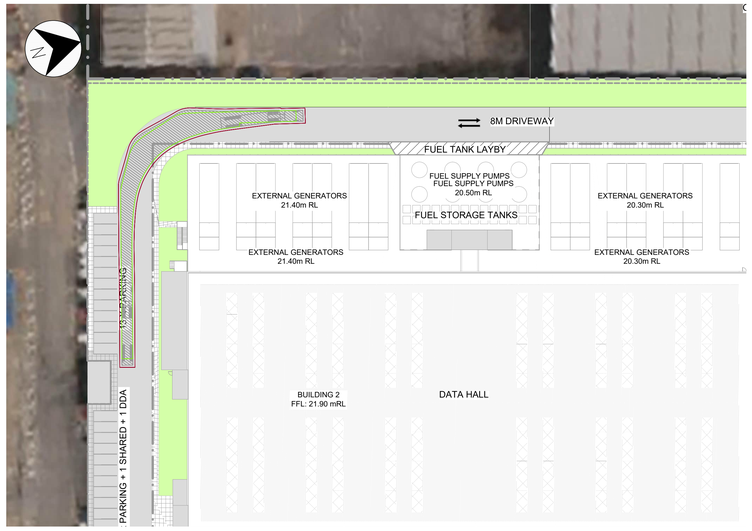


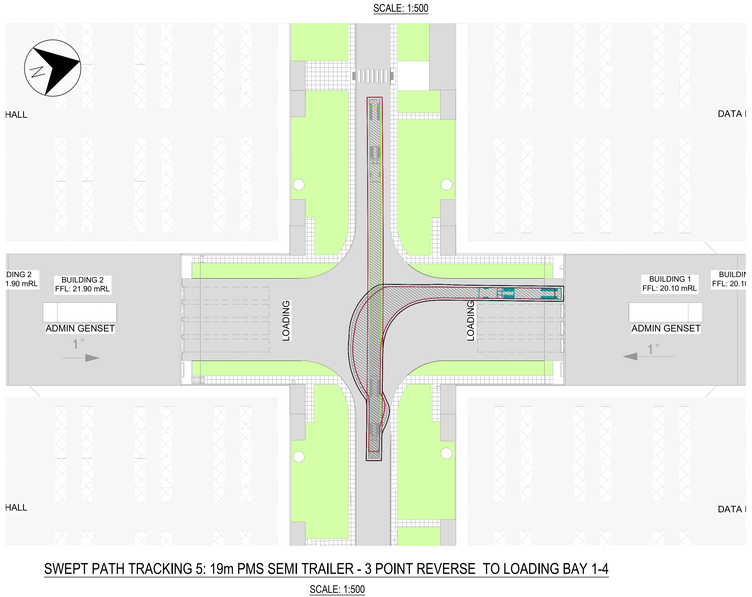
SWEPT PATH TRACKING 1: 19m PMS SEMI TRAILER - RIGHT TURN WEST TO LOOP TO LOADING BAY

SCALE: 1:500



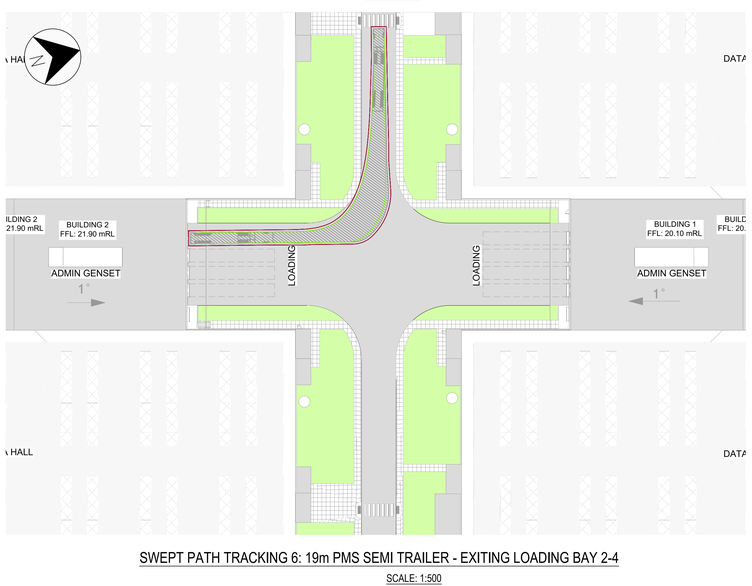
SWEPT PATH TRACKING 2: 19m PMS SEMI TRAILER - RIGHT TURN HEADING TO LOADING BAY AREA

SCALE: 1:500



SWEPT PATH TRACKING 3: 19m PMS SEMI TRAILER - TURNING INTO LOADING BAY AREA FROM THE WEST

SCALE: 1:500



SWEPT PATH TRACKING 4: 19m PMS SEMI TRAILER - 3 POINT REVERSE TO LOADING BAY 2-4

SCALE: 1:500

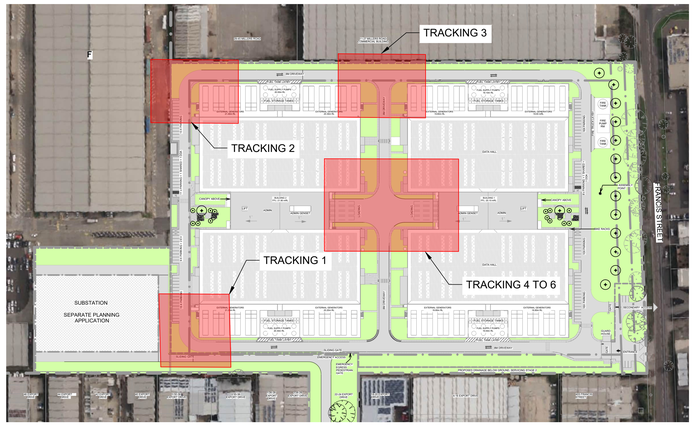
SWEPT PATH TRACKING 5: 19m PMS SEMI TRAILER - 3 POINT REVERSE TO LOADING BAY 1-4

SCALE: 1:500

SWEPT PATH TRACKING 6: 19m PMS SEMI TRAILER - EXITING LOADING BAY 2-4

SCALE: 1:500

LOCATION PLAN:



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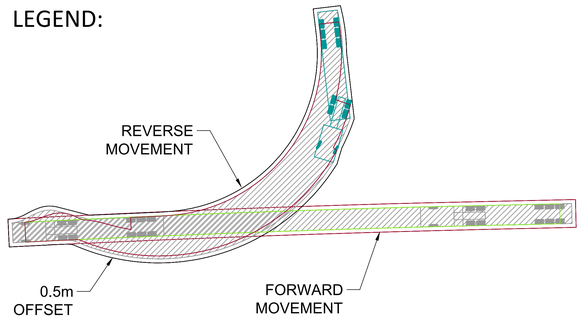
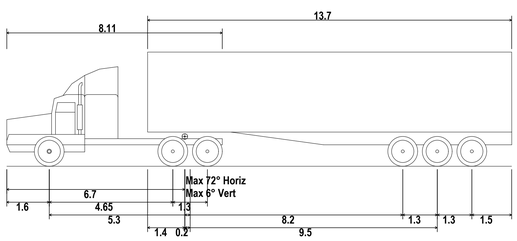


VEHICLE PROFILE:



Prime mover and semi-trailer (19 m)

Overall Length	**19.000m**
Overall Width	**2.500m**
Overall Body Height	**4.300m**
Min Body Ground Clearance	**0.540m**
Track Width	**2.500m**
Lock-to-lock time	**6.00s**
Curb to Curb Turning Radius	**12.500m**

DRAWING TO BE PRINTED IN COLOUR

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PROJECT
BROOKLYN DATA CENTRE

BUILDING NAME
413 FRANCIS STREET
BROOKLYN

TITLE
BDC VEHICLE TRACKING
SHEET 2

DRAWING STATUS

DRAWN	DRAWING CHECK	REVIEWED	APPROVED
PC	PC		
DESIGNED	DESIGN REVIEW	DATE	DATE
PC	LT		

SCALE	SHEET SIZE	INTERNAL PROJECT No.
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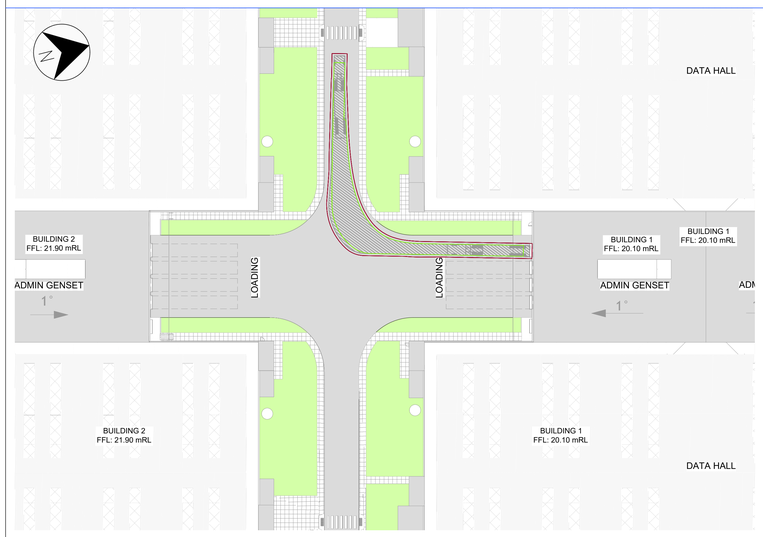
DRAWING No. C104-2 REV



SWEPT PATH TRACKING 1: 19m PMS SEMI TRAILER - EXITING LOADING BAY 1-4

SCALE: 1:500

SWEPT PATH TRACKING 2: 19m PMS SEMI TRAILER - RIGHT TURN NORTH TO FRANCIS ST EXIT

SCALE: 1:500

SWEPT PATH TRACKING 3 19m PMS SEMI TRAILER - EXITING ONTO FRANCIS ST VIA SECONDARY EXIT

SCALE: 1:500

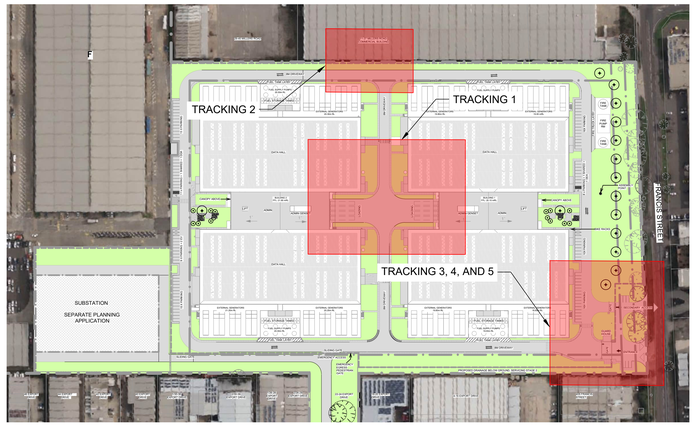
SWEPT PATH TRACKING 4: 19m PMS SEMI TRAILER - EXITING ONTO FRANCIS ST VIA SECURITY PRIMARY EXIT

SCALE: 1:500

SWEPT PATH TRACKING 4: 19m PMS SEMI TRAILER - U TURN AROUND FRANCIS ST FRONTAGE

SCALE: 1:500

LOCATION PLAN:



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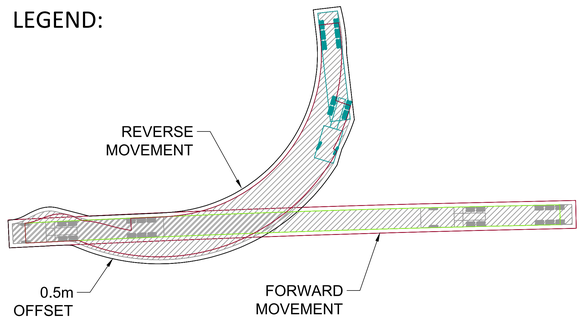
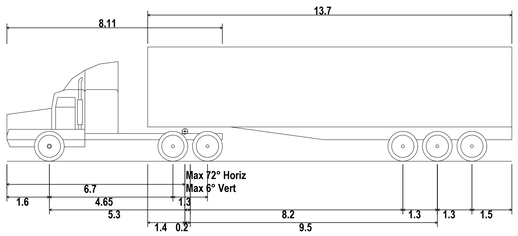


VEHICLE PROFILE:



Prime mover and semi-trailer (19 m)	
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PROJECT
BROOKLYN DATA CENTRE

BUILDING NAME
413 FRANCIS STREET
BROOKLYN

TITLE
BDC VEHICLE TRACKING
SHEET 3

DRAWING STATUS

DRAWN	DRAWING CHECK	REVIEWED	APPROVED
PC	PC		
DESIGNED	DESIGN REVIEW	DATE	DATE
PC	LT		
SCALE	SHEET SIZE	INTERNAL PROJECT No.	
1:500	A0	IA355900	
DRAWING No.			REV
C104-3			

26/11/2025 11:43:37 AM

Appendix B. Traffic generation assumptions

The following assumptions have been applied in estimating operational traffic generation:

- **Operational loading** is anticipated to be serviced by 19 m trucks, consistent with standard freight vehicle dimensions.
- **Delivery and installation** of substation equipment may require the use of larger vehicles (40–48 m long and up to 4.5 m wide). These movements are limited to the construction phase only and have not been considered for the operation of the data centre.
- **HV** activities will be minimal during operation, assumed to be 2 trips per hour and 20 trips per day.
- **Workforce assumptions:**
  - Operational traffic will primarily consist of permanent on-site personnel, commuting from across Melbourne in LV.
  - The Project will operate on a basis of 24 hours, 7 days a week, with three (3) shifts per day (two daytime shifts and one night-time shift).
  - The core daytime shift will comprise up to 50 employees, with arrival and departure patterns aligning with typical road network peak periods (7:00–9:00 AM and 3:00–5:00 PM).
  - The other shifts will have smaller workforce numbers, 25–50% of the core day shift (i.e. 13-25 employees).
  - Daily visitors will range 20-100 persons (10 visitors assumed during peak hour), with an average vehicle occupancy rate of 1.2 persons per car.
- **Mode share assumptions:**
  - 20% of the core daytime shift workforce is expected to use public transport or active transport.
  - 80% of the core daytime shift workforce is assumed to travel by private vehicles, with an average vehicle occupancy rate of 1.2 persons per car.
- **Directional split:**
  - During the AM peak hour, traffic movements reflect the overlap between day shift arrivals and night shift departures.
  - During the PM peak hour, this pattern is reversed.
  - Operational traffic network directional split is consistent with the background traffic directional split.
- **Daily trips** are the total of workforce commuting trips, visitor trips (100 daily trips for assessment) and HV trips (assumed 20 trips).