

TECHNICAL NOTE

Job Name: No 1. Reading, 29-35 Station Road
Job No: 43102
Note No: TN001
Date: 18th March 2019
Prepared By: J House / P Brady
Subject: Response to RBC Highways

1. Introduction

- 1.1. This technical note has been prepared by Peter Brett Associates (PBA) now part of Stantec to respond to Reading Borough Council (RBC) local highway Authority response received on 13th March 2019. This is in response to the Full Planning Application for the demolition of the existing vacant 6-storey retail and office building at 29 Station Road and the erection of a replacement basement and 23-storey building to provide flexible retail (Class A1, A2, A3, A4 or A5) use at part ground floor level, a 135-bedroom hotel (Class C1) at 1st to 16th floors and offices (Class B1a) at 17th to 21st floors.

2. Servicing and Delivery Management

RBC Comment

- 2.1. *"There are no agreed timescales to remove the taxi horseshoe rank outside the 'old' front entrance of the station, facing the town centre. Therefore, current queueing/waiting of taxi's will continue on Garrard Street until the temporary arrangements cease. I am concerned that the proposed development does not allow for the efficient delivery of goods and will intensify the number of large deliveries to the site which may cause considerable congestion and inconvenience to other road users if larger vehicles are unable to access the service bay."*

PBA Response

- 2.2. The site has existing delivery rights to the rear from Garrard Street which have been continually utilised with the taxi rank in place. Nonetheless the temporary taxi rank along Garrard Street has always been subject to the completion of the Station and Station Hill improvements works which offer multiply new interchange and pick up areas.
- 2.3. The primary delivery vehicles that will require access to the rear service yard will be for Linen/Food/Beverage deliveries associated to the proposed hotel and would typically be via LGV's and medium sized vehicles such as 7.5t Box Van. Further to this the office proposal will generate your typical courier deliveries throughout the daily period, which again are more LGV based than OGV. These vehicles swept paths are illustrated on **PBA Dwg 43102/5501/001C** which show a 7.5t Box Van and 7.5t Panel Van accessing the rear service yard.
- 2.4. The only conflict created by these vehicles reversing into the loading area is with the single taxi bay at the very eastern end of Garrard Street at the crossover to Station Road. However, this space directly feeds the main taxi rank outside the 'old' station front therefore the space is continually active and once the taxi has moved onto the pickup point the remaining queuing taxis would allow the vehicles to make its manoeuvre into to rear service yard as is the case now.

TECHNICAL NOTE

- 2.5. A refuse vehicle is expected to be the largest vehicle accessing the rear of the site for servicing operations. With respect to refuse access, the proposals put forward to reverse off Garrard Street would be infrequent and reflects the existing operations currently being carried by adjacent occupiers including Novotel and Garrard House. In addition these types of operation as per now are likely to be carried out at times when the taxi rank is not heavily used.
- 2.6. For a robust review, we provided the swept path of a large 12.5m articulated lorry accessing the rear service yard to illustrate that in the event that a larger OGV access was needed it could access within the confines of the road extents. These types of vehicles are not generally utilised for town centre servicing of such land uses. In addition, given the very low likelihood of such a vehicle requiring access and that the taxis are actively moving along Garrard Street, and not waiting for long periods of time, if required the OGV and taxis would easily be able to manage the road space and allow the vehicle to make the manoeuvre.
- 2.7. The existing sites permitted use would have created a degree of servicing and deliveries however in part some of these would have been operated directly from Station Road. Therefore, whilst across the local network there wouldn't appear to be a significant impact on the level of servicing and deliveries movements, as the proposed development is suggesting all servicing and deliveries are to be via the rear service bay at site level the vehicle trips could in part be considered as new to Garrard Street.
- 2.8. To provide an understanding of the level of servicing and delivery vehicles that may be generated by the development proposal an assessment has been carried out using TRICs to derive daily trip rates for LGVs and OGVs for the proposed hotel. The resulting trip generation for a 140-bed town centre hotel per day is summarised in the table below.

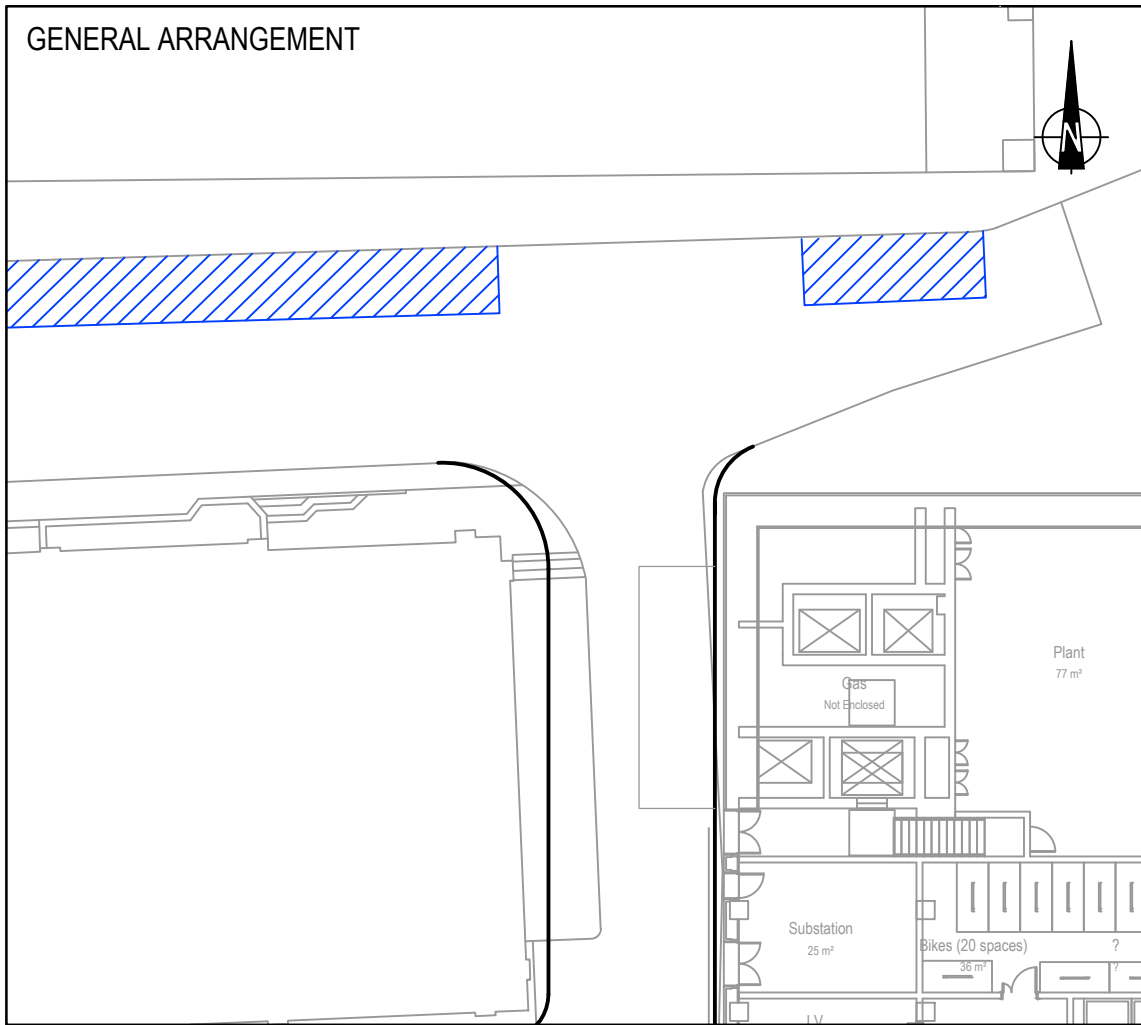
Land Use Class	Per 100 m ²	Daily		
		Arrivals	Departures	Two -Way
Hotel (140 Beds)	LGV	2	1	3
	OGV	2	2	4
	Total	4	3	7

- 2.9. The TRICs assessment for the hotel estimates that there would be 2 OGVs arrivals across an operational day that would typically be a medium goods deliveries or refuse vehicles, rather than a large OGV.
- 2.10. As the TRICs database has limited LGV and OGVs surveys for town centre retail and office developments we have sought to utilise the Transport for London Kerbside Loading guidance (July 2009). The guidance provides the typical number of servicing and delivery visit to businesses. This suggest:
- A3 Café/Restaurants (assumed use of the proposed ground floor) - an upper limit of 17 visits would be carried out across a weekly period, or alternatively **3 arrivals** per day based on a 7 days a week opening and a.
 - B1 Office - an upper limit of 50-80 visits would be carried out across a weekly period, or alternatively **10 to 16 arrivals** per day based on a 5 day working week. These visits would typically be associated to courier's and office supplies deliveries and may vary dependent on the occupier.
- 2.11. As a combined development, the three land uses proposed could generate upto 23 daily delivery and servicing arrival trips with the majority of trips undertaken by LGV rather than larger HGVs. In addition, it should be noted that although the office development would be traditionally operated between 7am and 7pm, the other two land uses hotel and retail can be serviced out of these hours.

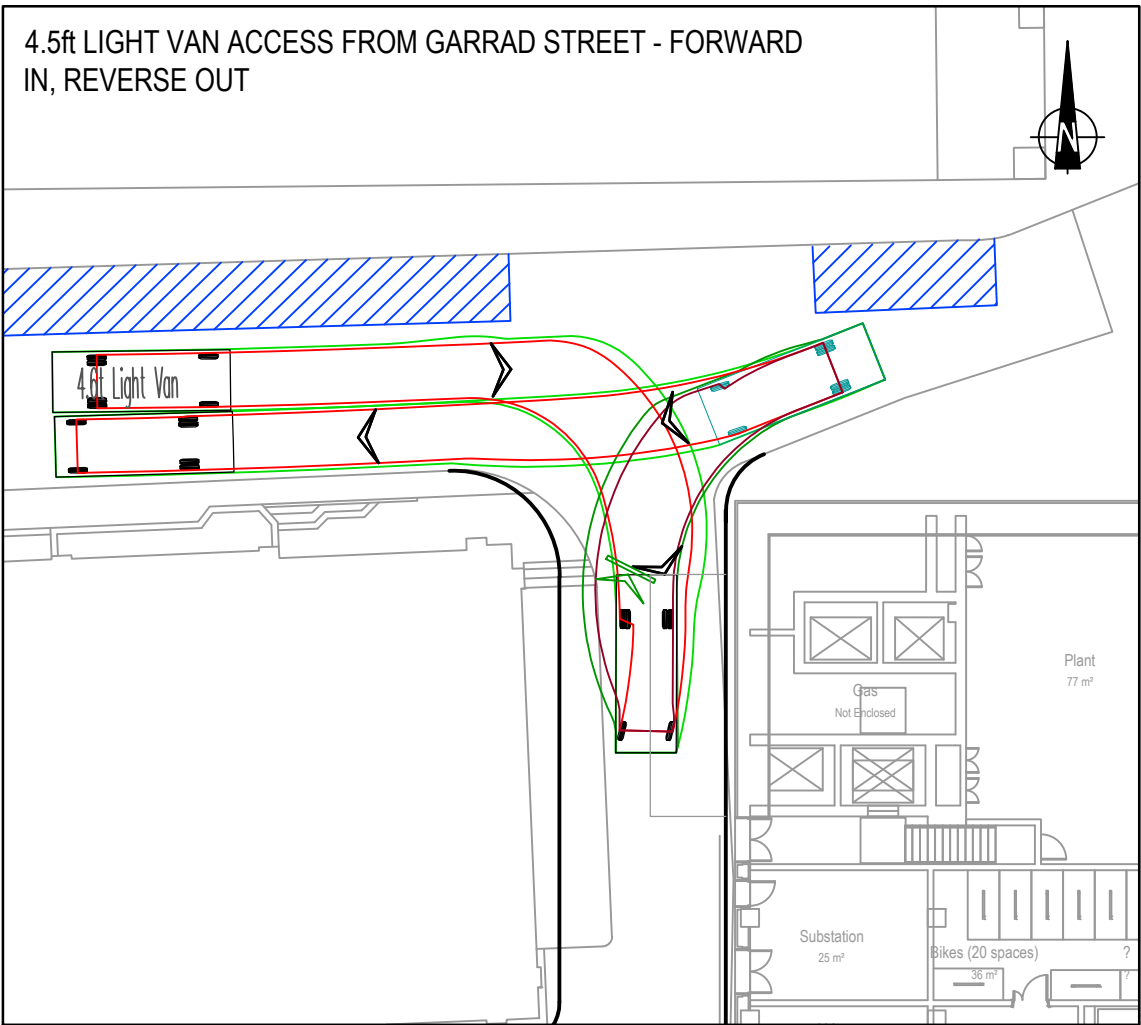
TECHNICAL NOTE

- 2.12. The current site, Novotel, and Garrard House are all serviced to the rear via Garrard Street with the taxi rank in situ. The new development will continue to utilise the rear servicing area and the type of vehicles that will serve the land uses in the main are LGV and small/medium OGV's which even with the combined usage will be infrequent throughout a normal working day. The current taxi rank has no material bearing on the sites current and future servicing capabilities, given the level of usage, the type of vehicles and the nature of the ranks operation which can support periodic use of sections if required by servicing vehicles possess no safety or operational disbenefits to the taxis or the sites servicing.

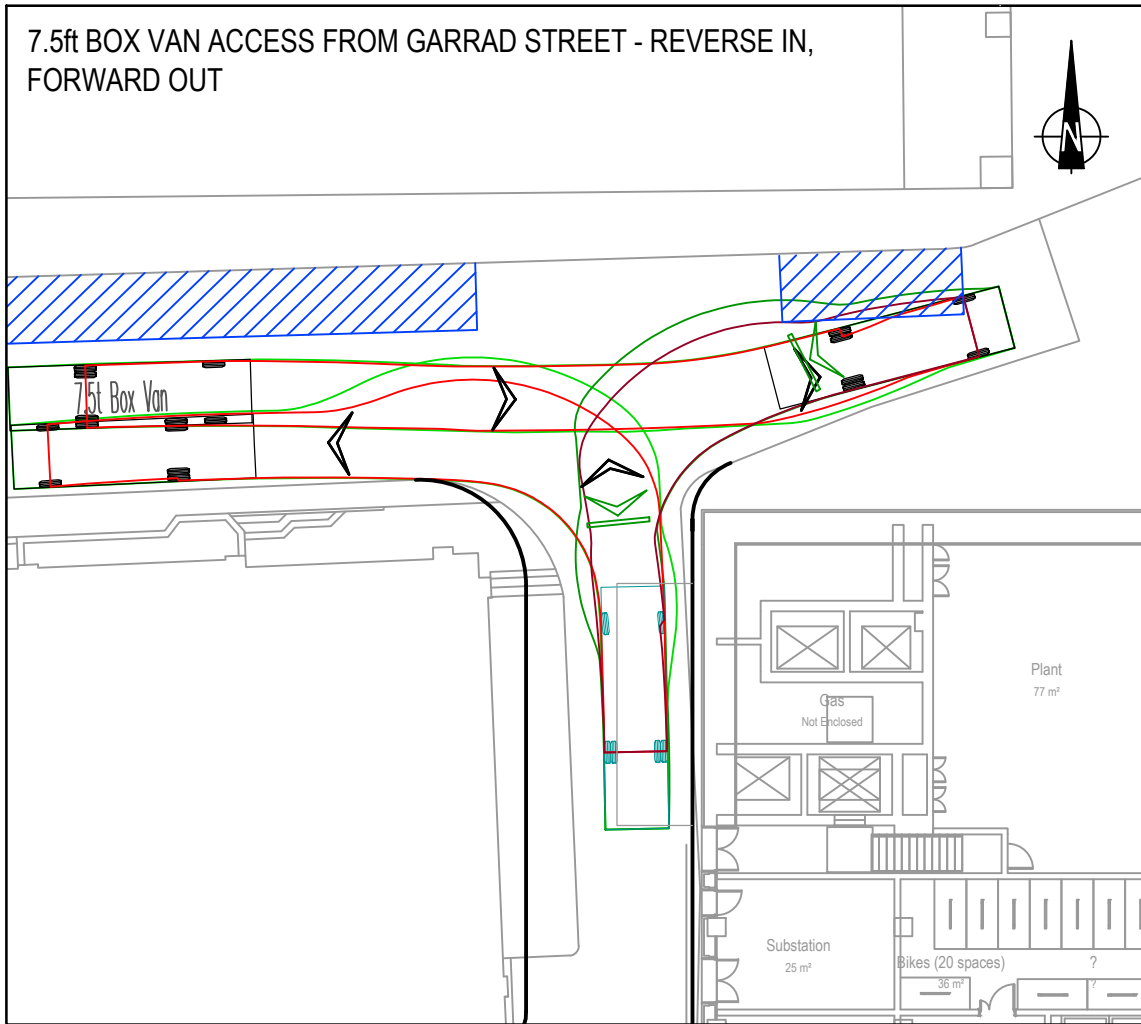
GENERAL ARRANGEMENT



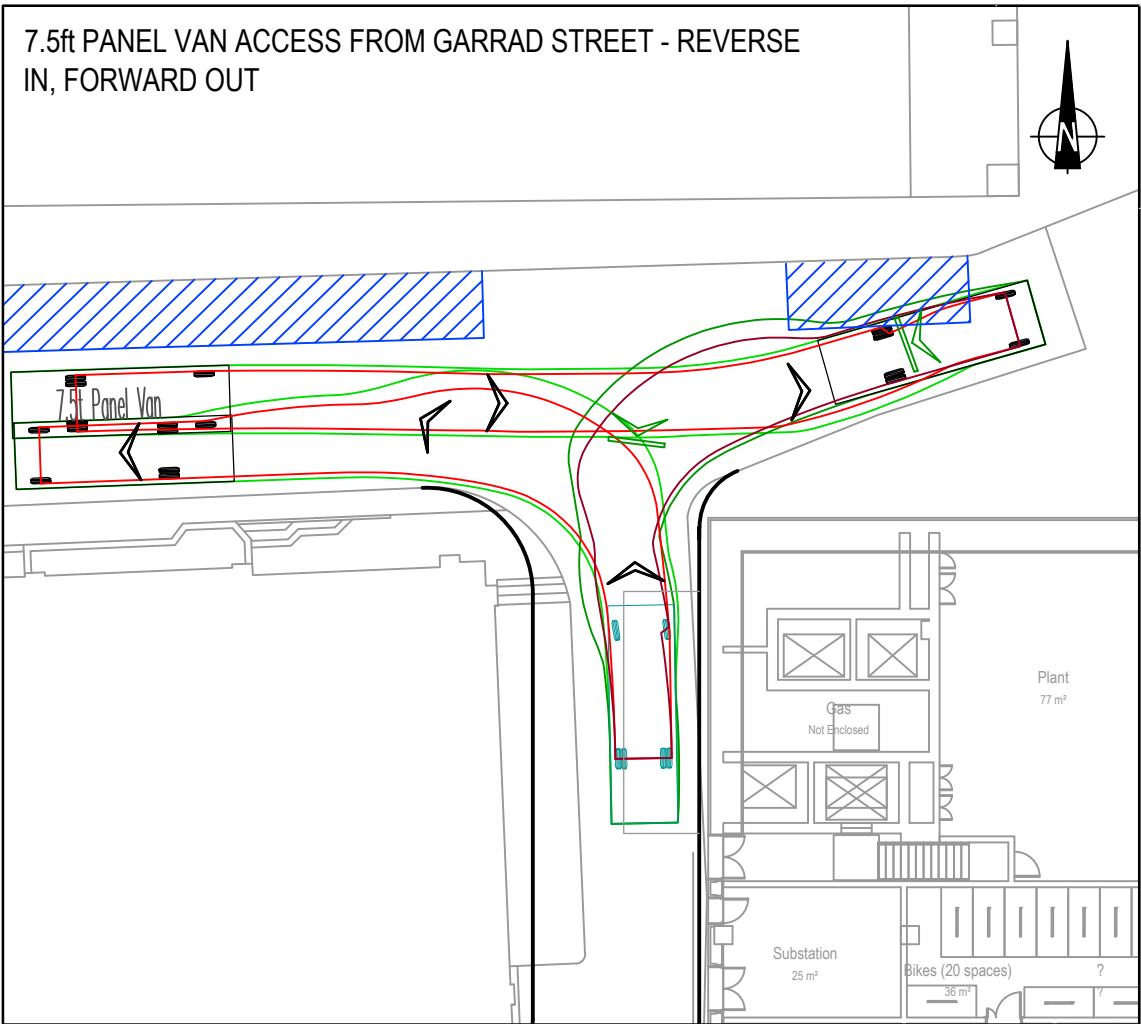
4.5ft LIGHT VAN ACCESS FROM GARRAD STREET - FORWARD IN, REVERSE OUT



7.5ft BOX VAN ACCESS FROM GARRAD STREET - REVERSE IN, FORWARD OUT

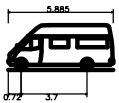


7.5ft PANEL VAN ACCESS FROM GARRAD STREET - REVERSE IN, FORWARD OUT

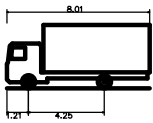


- KEY**
- EXISTING ON-STREET PARKING
 - PROPOSED KERB-LINE

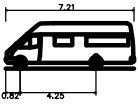
VEHICLE PROFILE



4.6t Light Van
Overall Length 5.88m
Overall Width 2.00m
Overall Body Height 2.52m
Min Body Ground Clearance 0.76m
Track Width 1.76m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 6.00m



7.5t Box Van
Overall Length 8.01m
Overall Width 2.10m
Overall Body Height 2.55m
Min Body Ground Clearance 0.35m
Track Width 2.06m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.40m



7.5t Panel Van
Overall Length 7.21m
Overall Width 2.19m
Overall Body Height 2.54m
Min Body Ground Clearance 0.31m
Track Width 1.86m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.40m

C	REVISED SWEEP PATH ANALYSIS	02.10.18	SB	JH	PB
B	REVISED MASTERPLAN	25.09.18	SB	JH	PB
A	REVISED MASTERPLAN	14.03.18	AL	JH	PB
Mark	Revision	Date	Drawn	Chkd	Appd

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Drawing Issue Status	FOR INFORMATION
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STATION ROAD, READING
SERVICE AREA SWEEP PATH ANALYSIS
LIGHT GOODS VEHICLES

Client

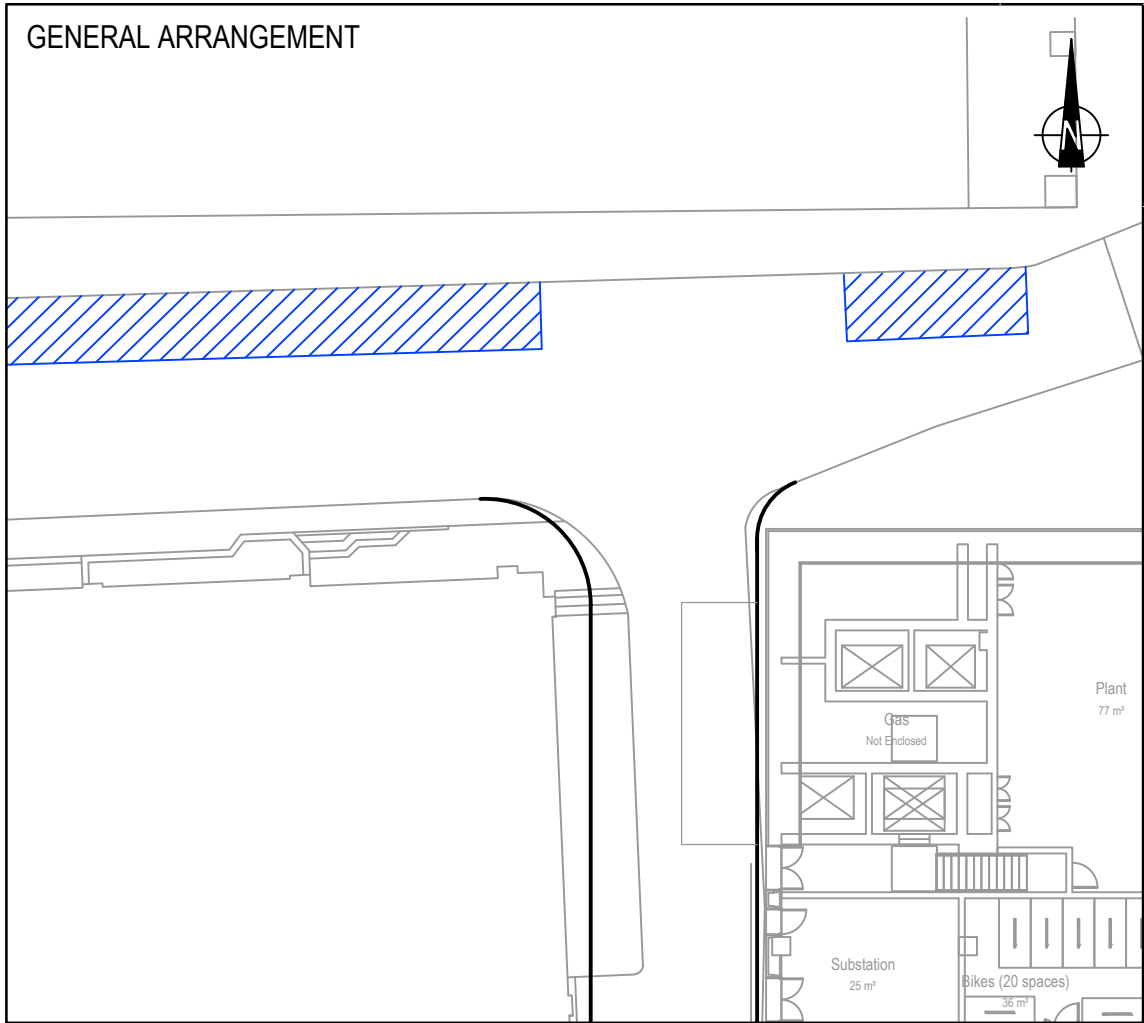
Date of 1st Issue 08.03.2018
Designed -
Drawn AL

A3 Scale 1:250
Checked JH
Approved -

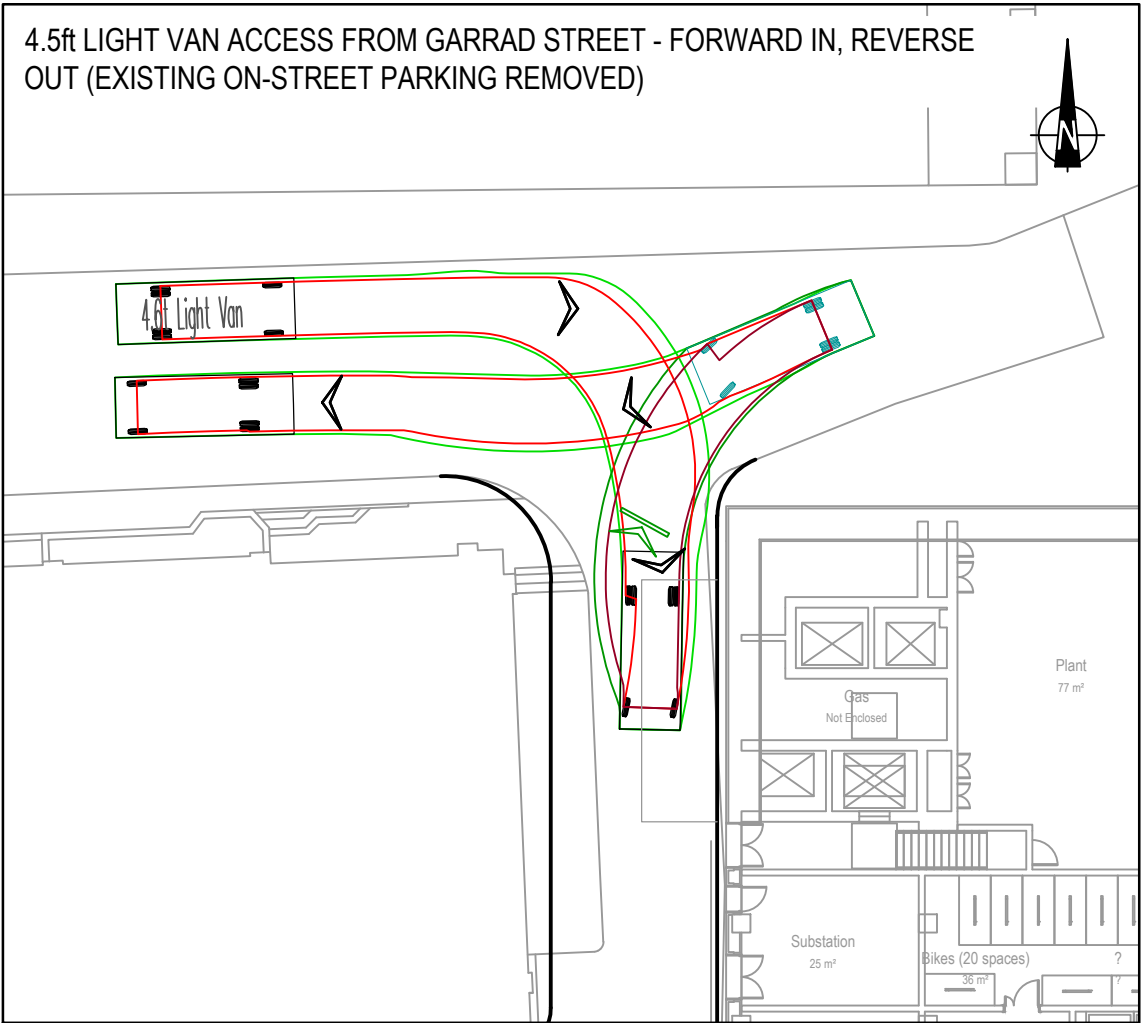
Drawing Number 43102_5501_001
Revision C

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GENERAL ARRANGEMENT



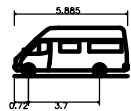
4.5ft LIGHT VAN ACCESS FROM GARRAD STREET - FORWARD IN, REVERSE OUT (EXISTING ON-STREET PARKING REMOVED)



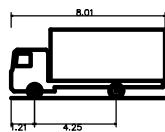
KEY

- EXISTING ON-STREET PARKING
- PROPOSED KERB-LINE

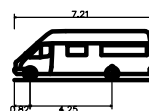
VEHICLE PROFILE



4.6t Light Van
Overall Length 5.885m
Overall Width 2.000m
Overall Body Height 2.526m
Min Body Ground Clearance 0.249m
Track Width 1.765m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 6.000m

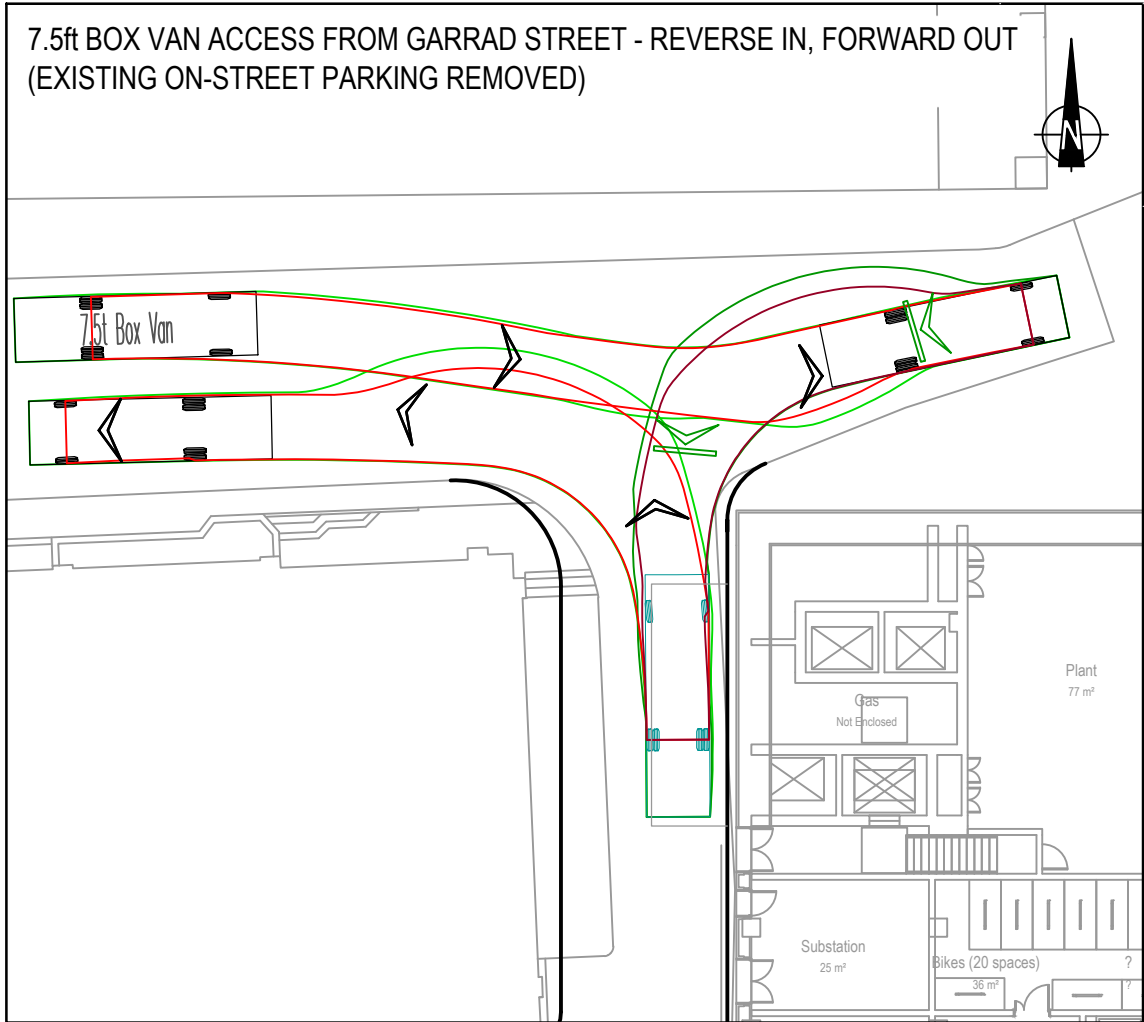


7.5t Box Van
Overall Length 8.010m
Overall Width 2.100m
Overall Body Height 3.556m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.400m

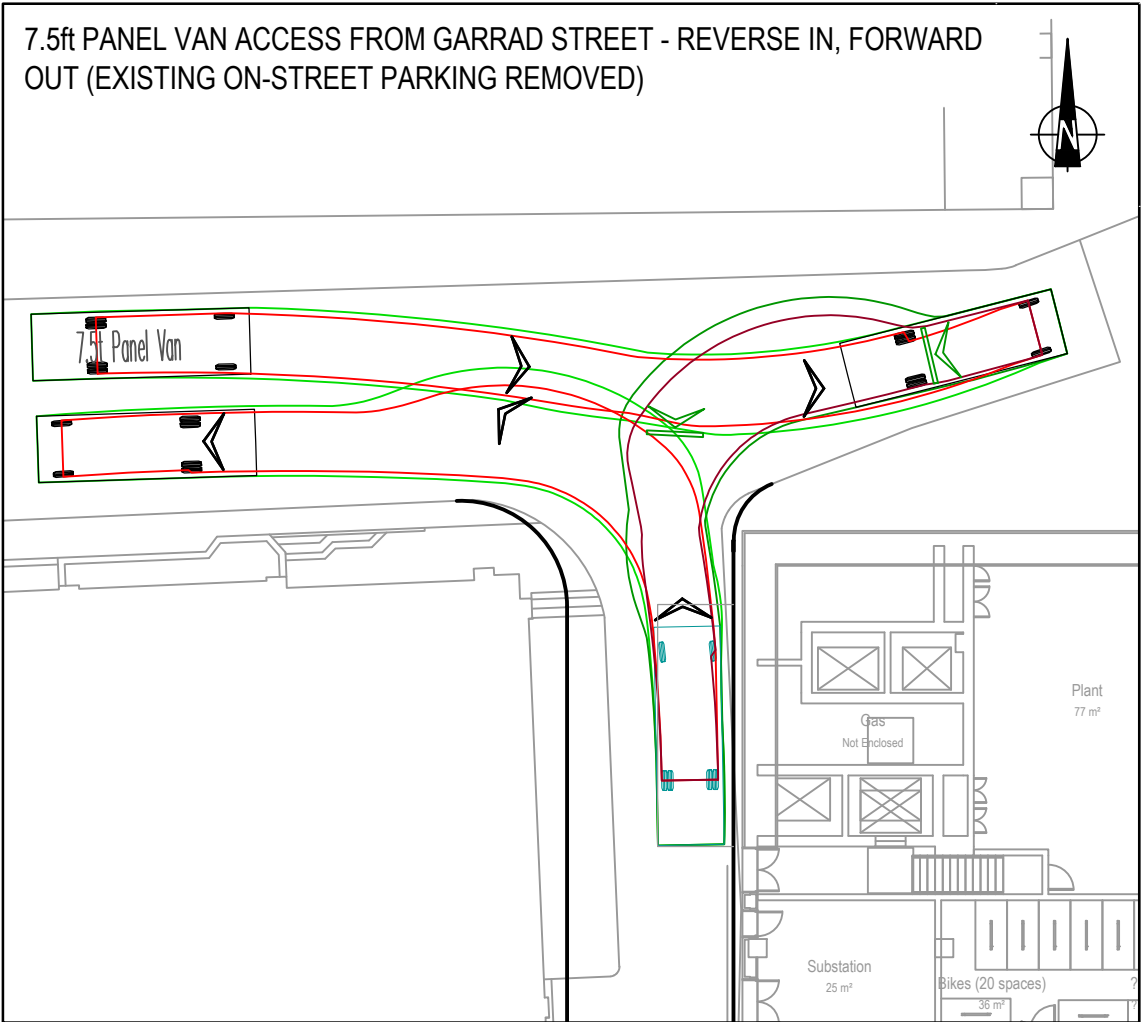


7.5t Panel Van
Overall Length 7.210m
Overall Width 2.192m
Overall Body Height 2.544m
Min Body Ground Clearance 0.316m
Track Width 1.865m
Lock to lock time 4.00s
Kerb to Kerb Turning Radius 7.400m

7.5ft BOX VAN ACCESS FROM GARRAD STREET - REVERSE IN, FORWARD OUT (EXISTING ON-STREET PARKING REMOVED)



7.5ft PANEL VAN ACCESS FROM GARRAD STREET - REVERSE IN, FORWARD OUT (EXISTING ON-STREET PARKING REMOVED)



E	REVISED SWEEP PATH ANALYSIS	02.10.18	SB	JH	PB
D	REVISED MASTERPLAN	25.09.18	SB	JH	PB
C	REVISED MASTERPLAN	09.05.18	SB	JH	PB
B	REVISED MASTERPLAN	18.04.18	SB	JH	PB
A	REVISED MASTERPLAN	14.03.18	AL	JH	PB
Mark	Revision	Date	Drawn	Chkd	Appd

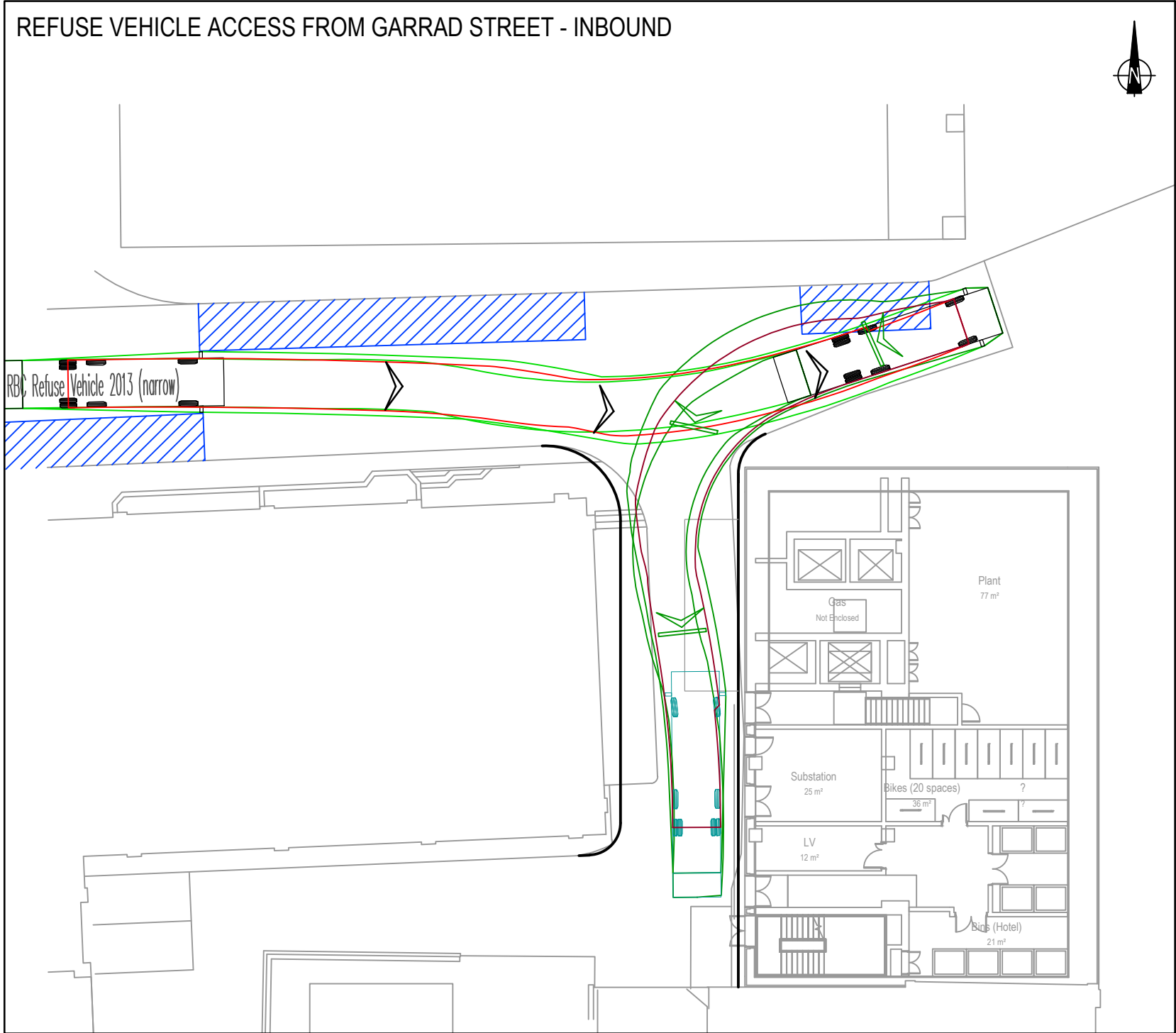
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Drawing Issue Status	FOR INFORMATION
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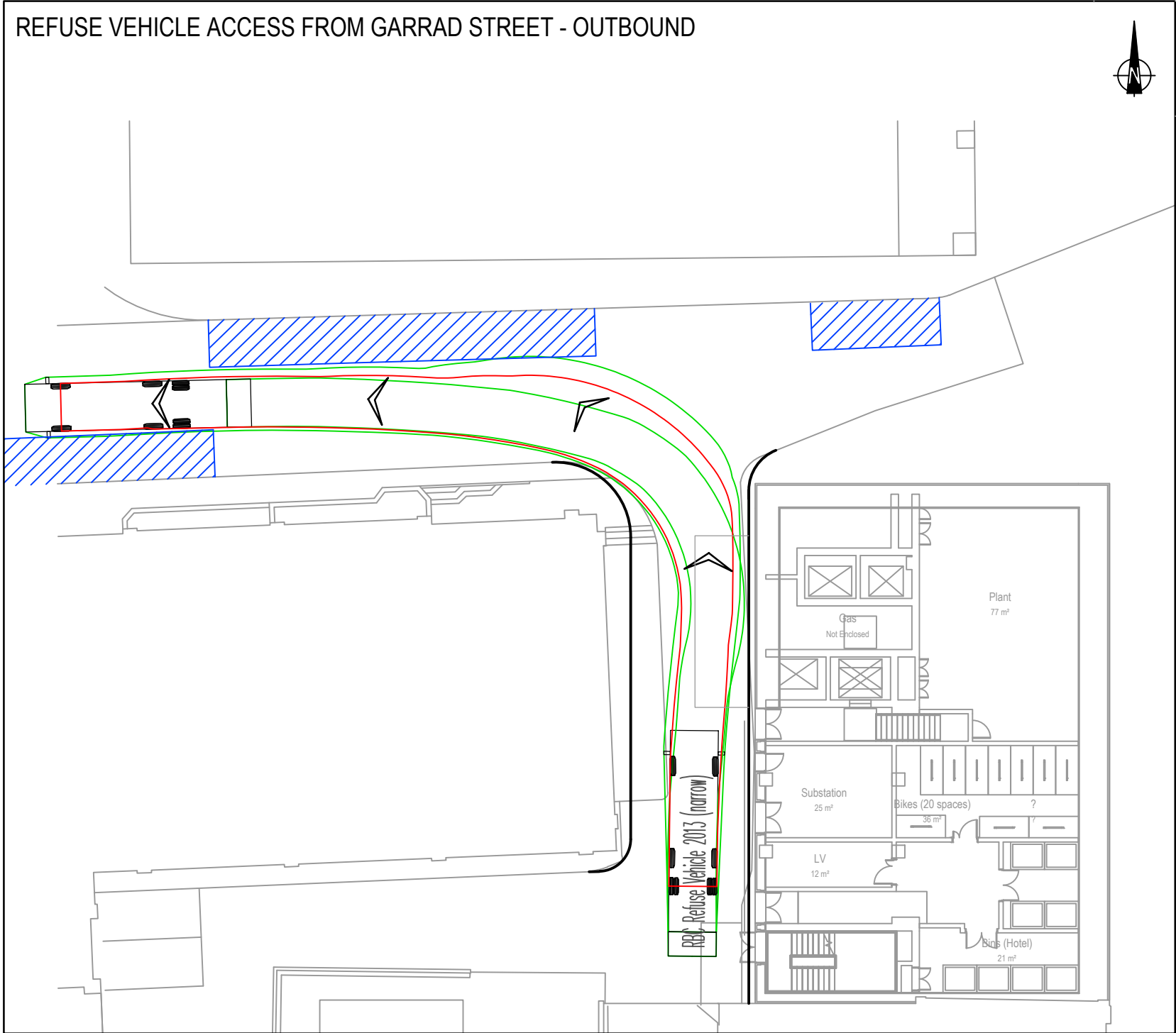
STATION ROAD, READING
SERVICE AREA SWEEP PATH ANALYSIS
LIGHT GOODS VEHICLES
(TAXI RANK RELOCATED)

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Date of 1st Issue	Designed	Drawn			
08.03.2018	-	AL			
A3 Scale	Checked	Approved			
1:250	JH	PB			
Drawing Number	Revision				
43102_5501_002	E				

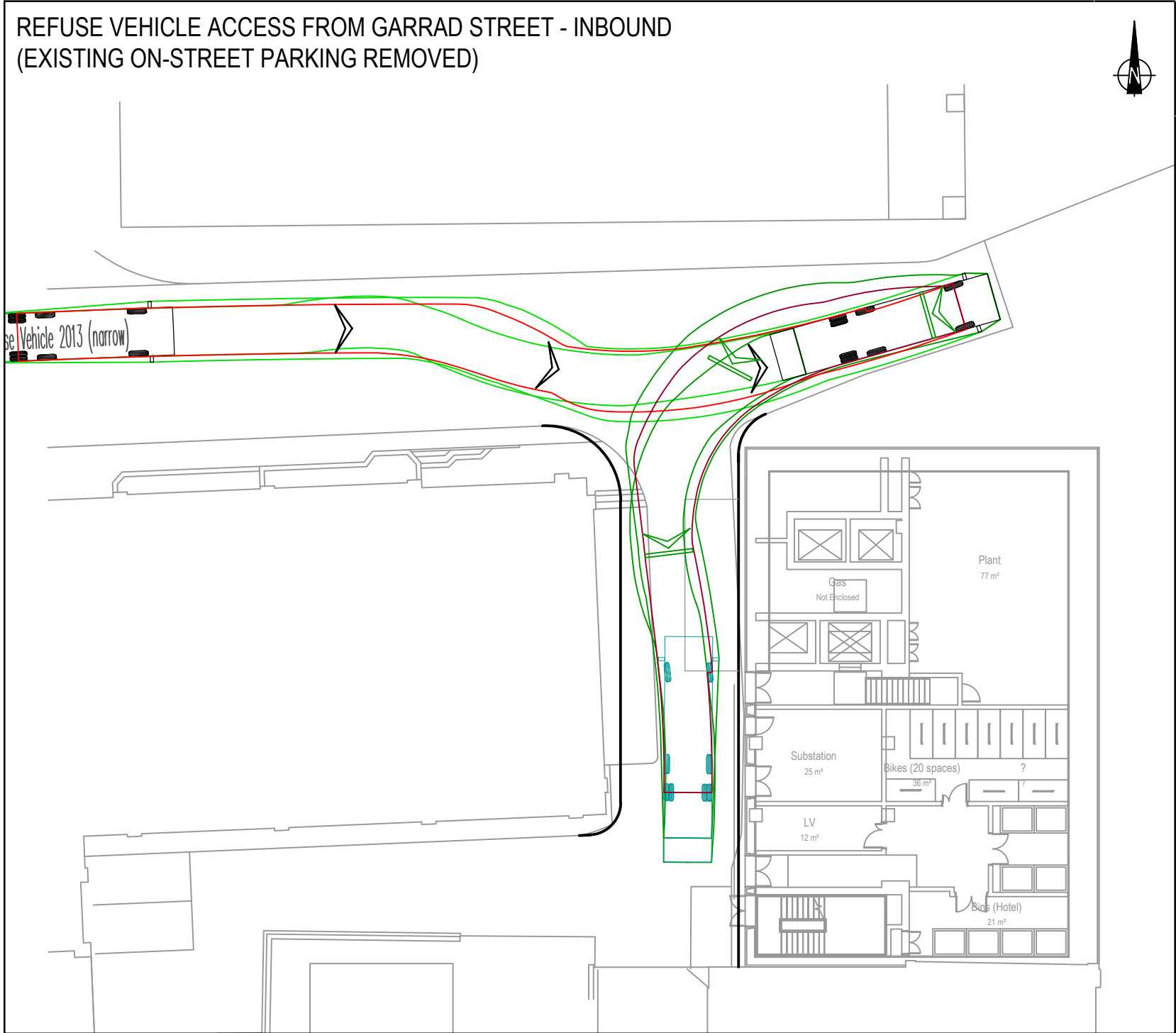
REFUSE VEHICLE ACCESS FROM GARRAD STREET - INBOUND



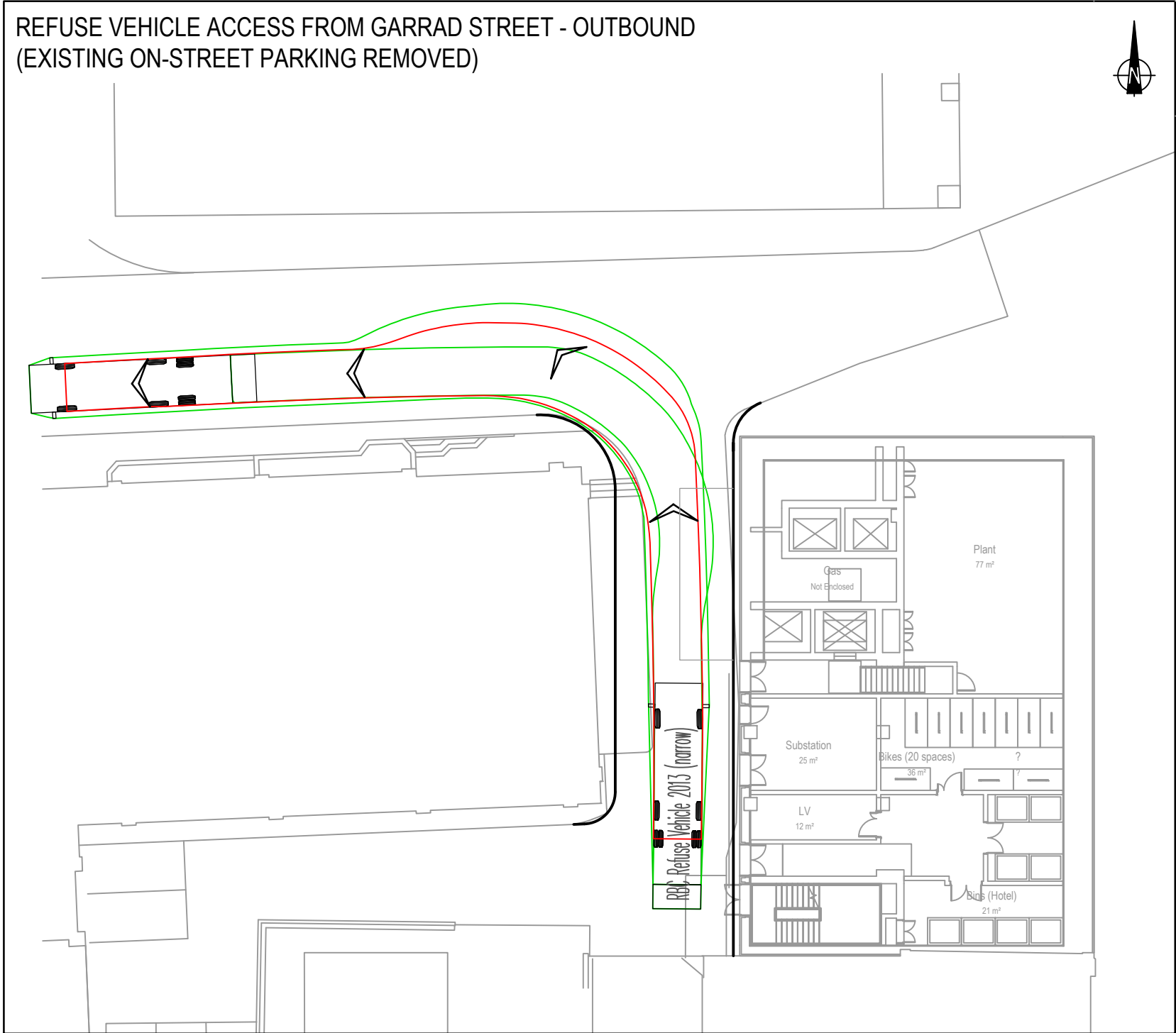
REFUSE VEHICLE ACCESS FROM GARRAD STREET - OUTBOUND



REFUSE VEHICLE ACCESS FROM GARRAD STREET - INBOUND
(EXISTING ON-STREET PARKING REMOVED)

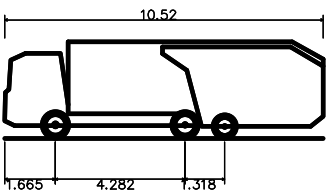


REFUSE VEHICLE ACCESS FROM GARRAD STREET - OUTBOUND
(EXISTING ON-STREET PARKING REMOVED)



KEY
EXISTING ON-STREET PARKING
PROPOSED KERB-LINE

VEHICLE PROFILE



RBC Refuse Vehicle 2013 (narrow)
Overall Length 10.520m
Overall Width 2.230m
Overall Body Height 3.193m
Min Body Ground Clearance 0.398m
Track Width 2.230m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 10.250m

E	REVISED SWEEP PATH ANALYSIS	02.10.18	SB	JH	PB
D	REVISED SWEEP PATH ANALYSIS	19.09.18	SB	JH	PB
C	HATCHING REMOVED	09.05.18	SB	JH	PB
B	REVISED MASTERPLAN	18.04.18	SB	JH	PB
A	REVISED MASTERPLAN	14.03.18	AL	JH	PB
Mark	Revision	Date	Drawn	Chkd	Appd

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Drawing Issue Status
FOR INFORMATION

STATION ROAD, READING
SERVICE AREA SWEEP PATH ANALYSIS
REFUSE ACCESS

Client

Date of 1st Issue 08.03.2018
A2 Scale 1:250
Drawing Number 43102_5501_003

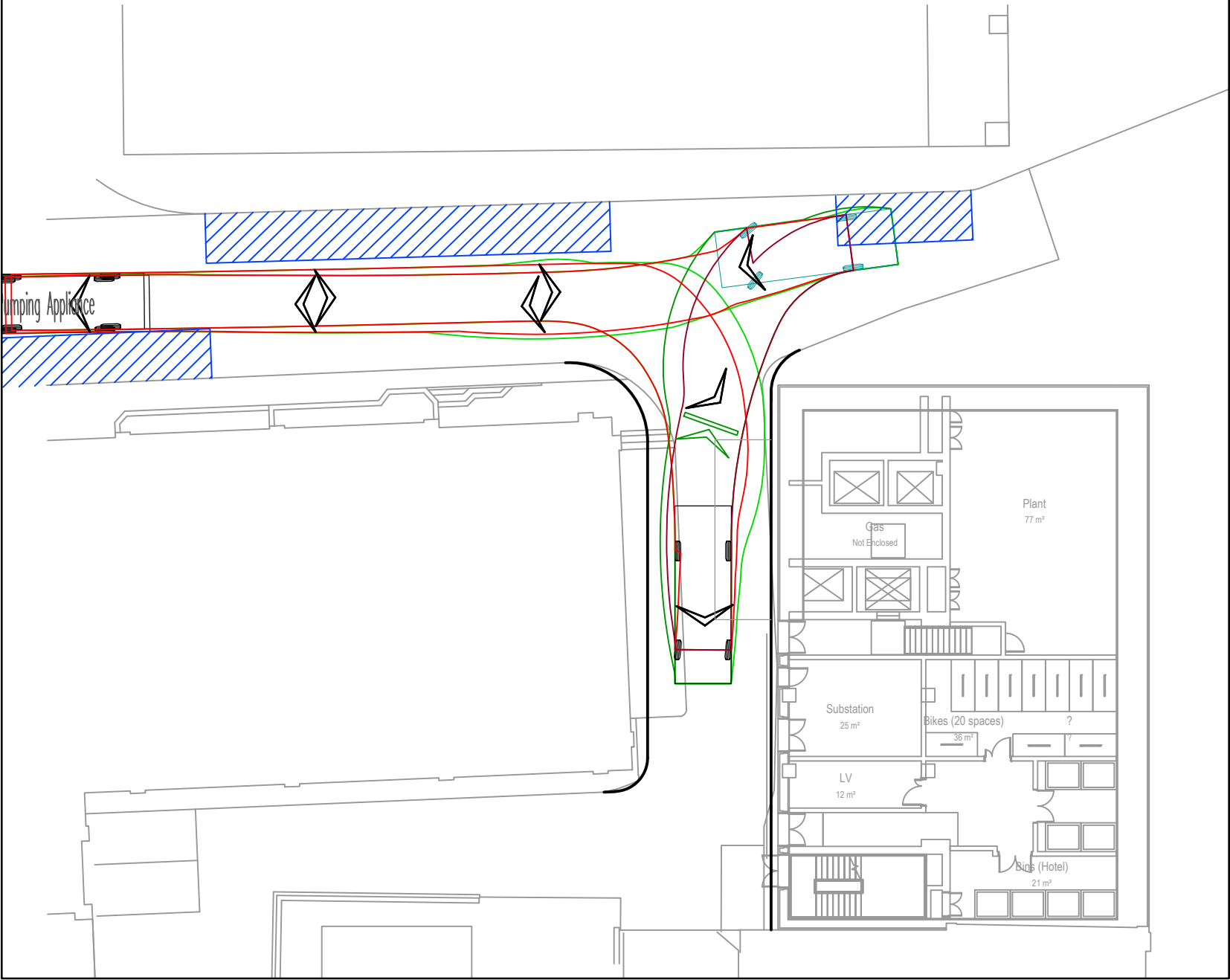
Designed -
Checked JH
Revision E

Drawn AL
Approved PB

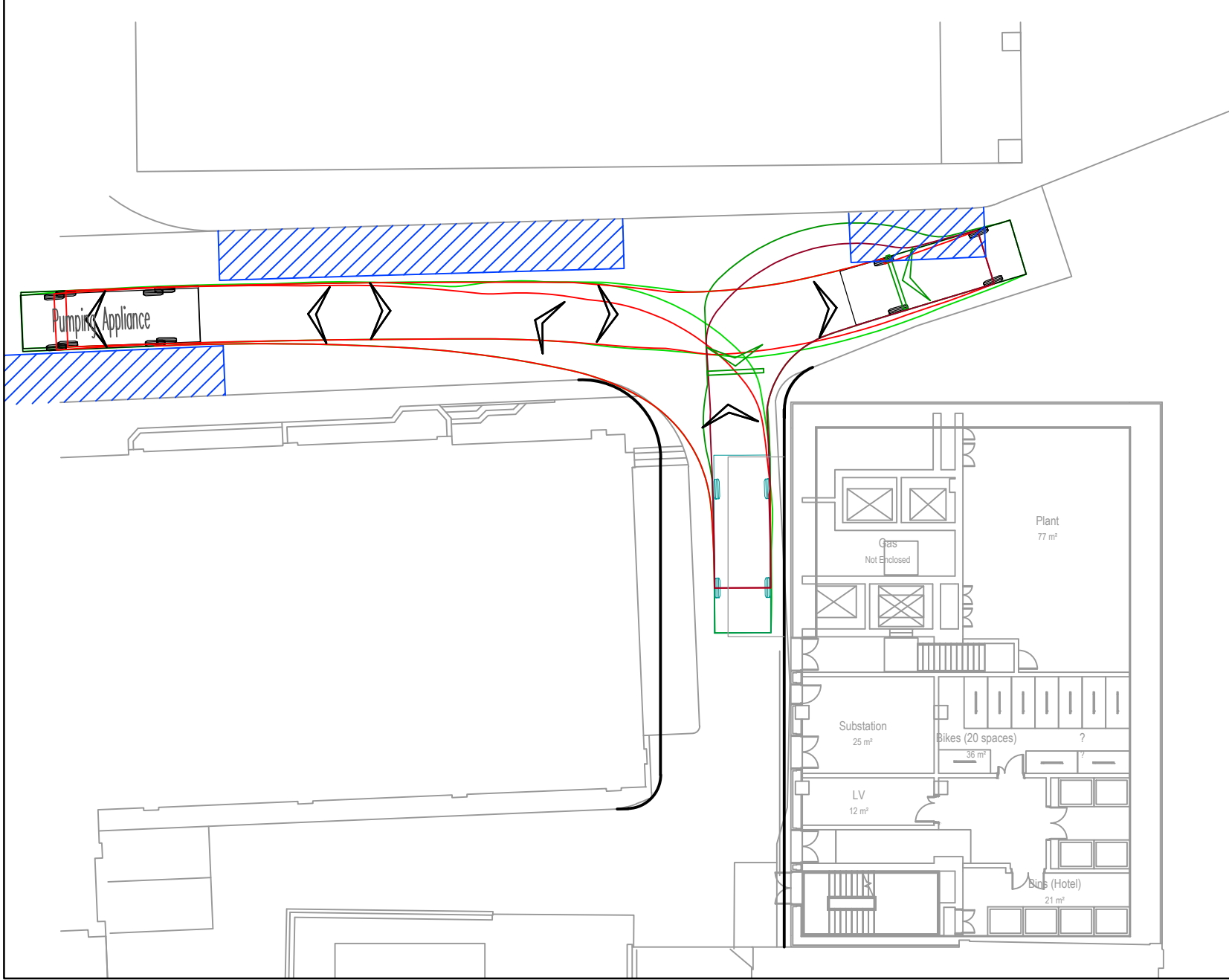
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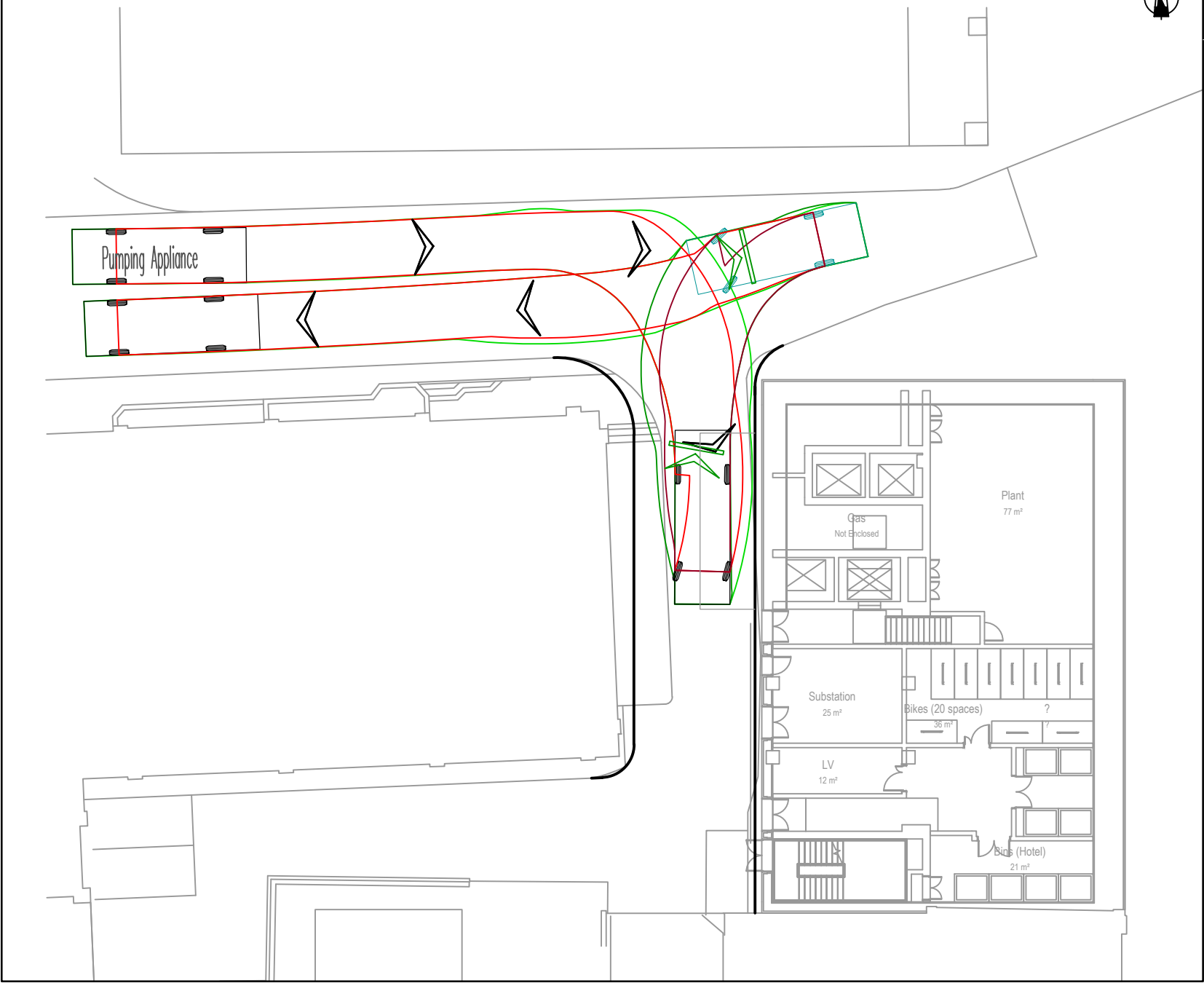
PUMPING APPLIANCE ACCESS FROM GARRAD STREET - FORWARD IN, REVERSE OUT



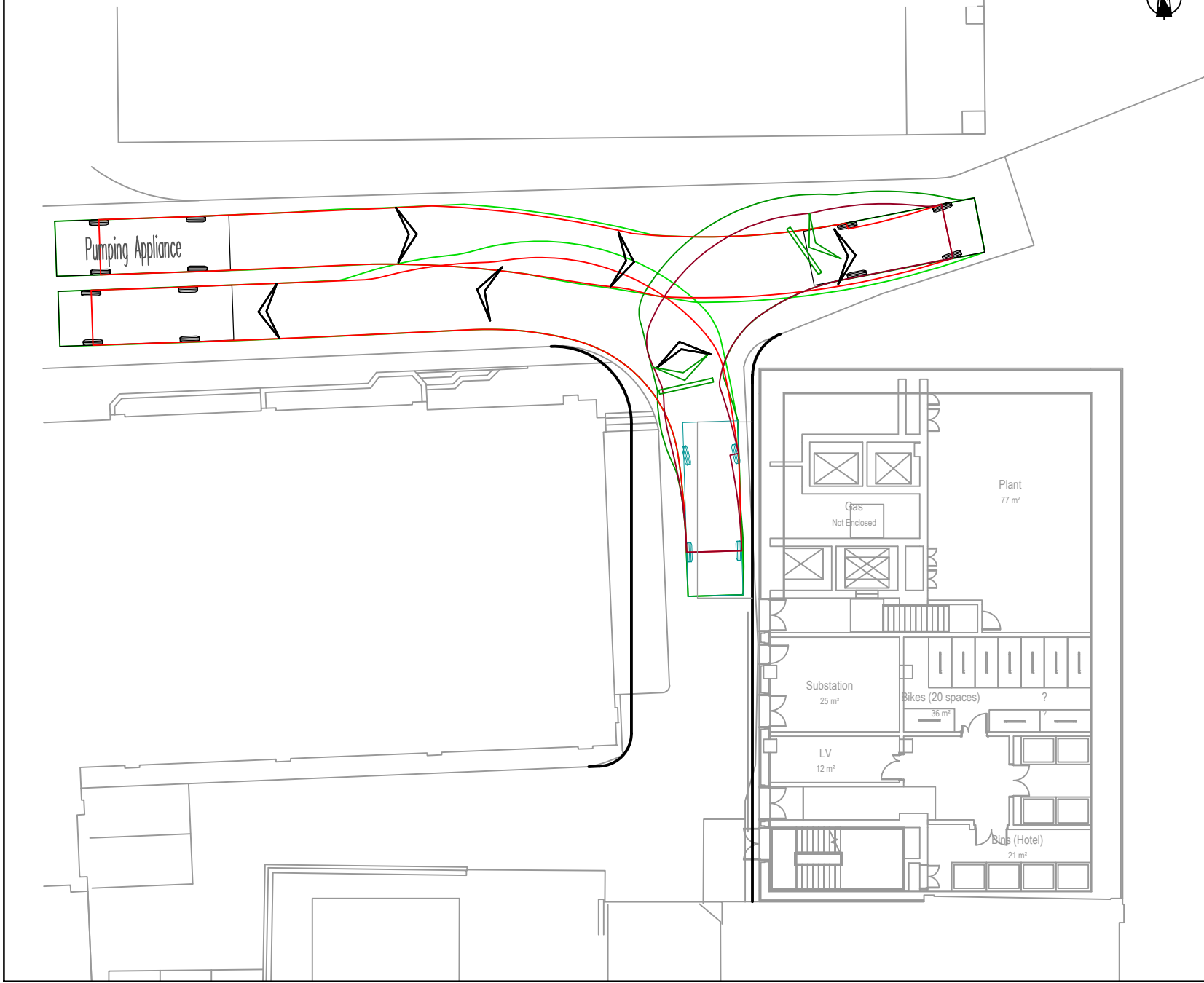
PUMPING APPLIANCE ACCESS FROM GARRAD STREET - REVERSE IN, FORWARD OUT



PUMPING APPLIANCE ACCESS FROM GARRAD STREET - FORWARD IN, REVERSE OUT
(EXISTING ON-STREET PARKING REMOVED)

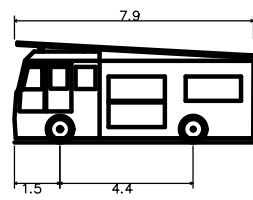


PUMPING APPLIANCE ACCESS FROM GARRAD STREET - REVERSE IN, FORWARD OUT
(EXISTING ON-STREET PARKING REMOVED)



- KEY
- EXISTING ON-STREET PARKING
 - PROPOSED KERB-LINE

VEHICLE PROFILE



Pumping Appliance	7.900m
Overall Length	2.500m
Overall Width	3.300m
Overall Body Height	0.140m
Min Body Ground Clearance	2.500m
Track Width	4.00s
Lock-to-lock time	7.750m
Curb to Curb Turning Radius	

D	REVISED SWEEP PATH ANALYSIS	02.10.18	SB	JH	PB
C	REVISED SWEEP PATH ANALYSIS	19.09.18	SB	JH	PB
B	HATCHING REMOVED	09.05.18	SB	JH	PB
A	REVISED MASTERPLAN	18.04.18	SB	JH	PB
Mark	Revision	Date	Drawn	Chkd	Appd

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Drawing Issue Status

FOR INFORMATION

STATION ROAD, READING
SERVICE AREA SWEEP PATH ANALYSIS
PUMPING APPLIANCE

Client

Date of 1st Issue
13/04/18

A2 Scale
1:250

Drawing Number
43102/5501/004

Designed
-

Checked
JH

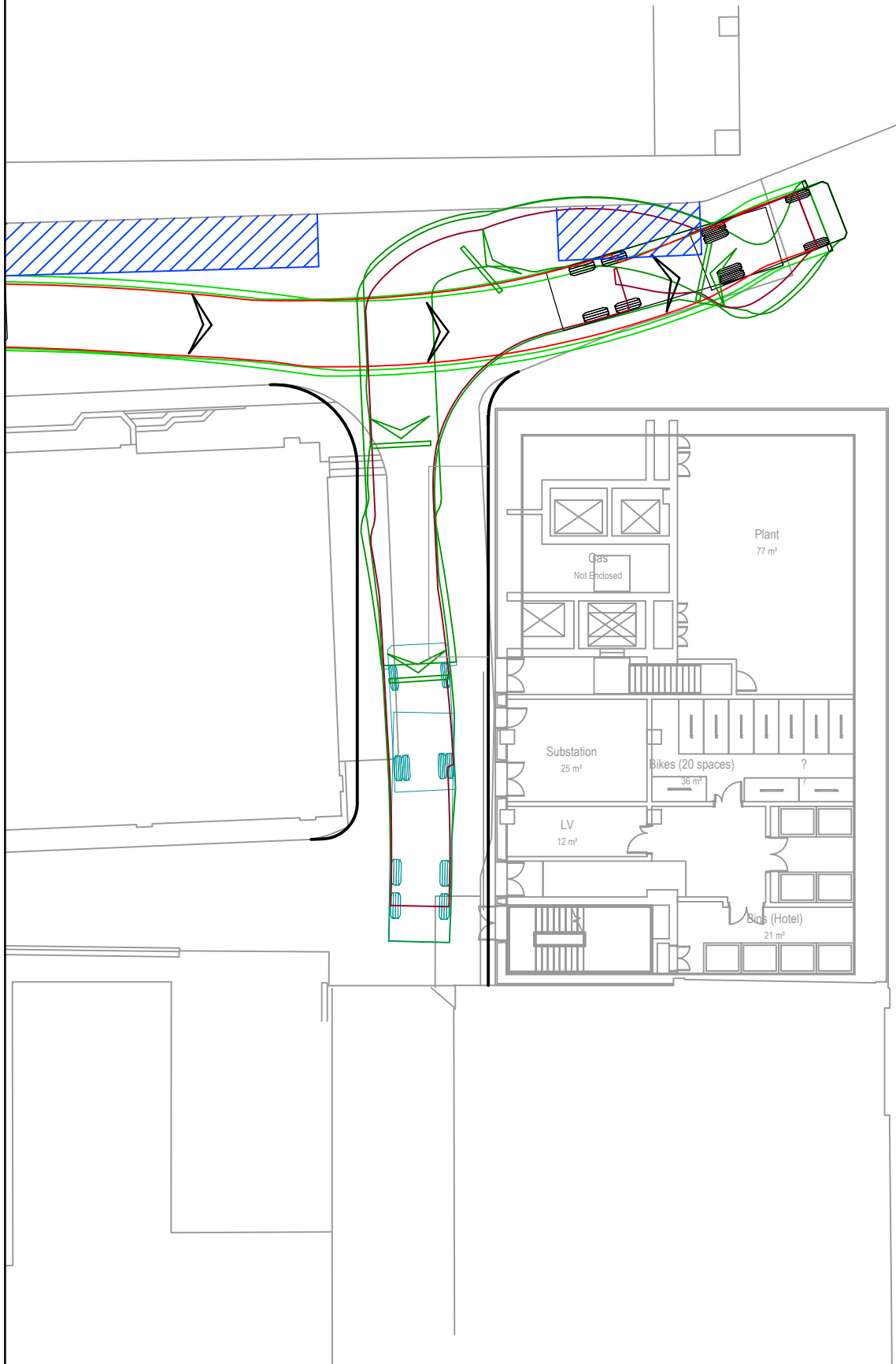
Revision
D

Drawn
LA

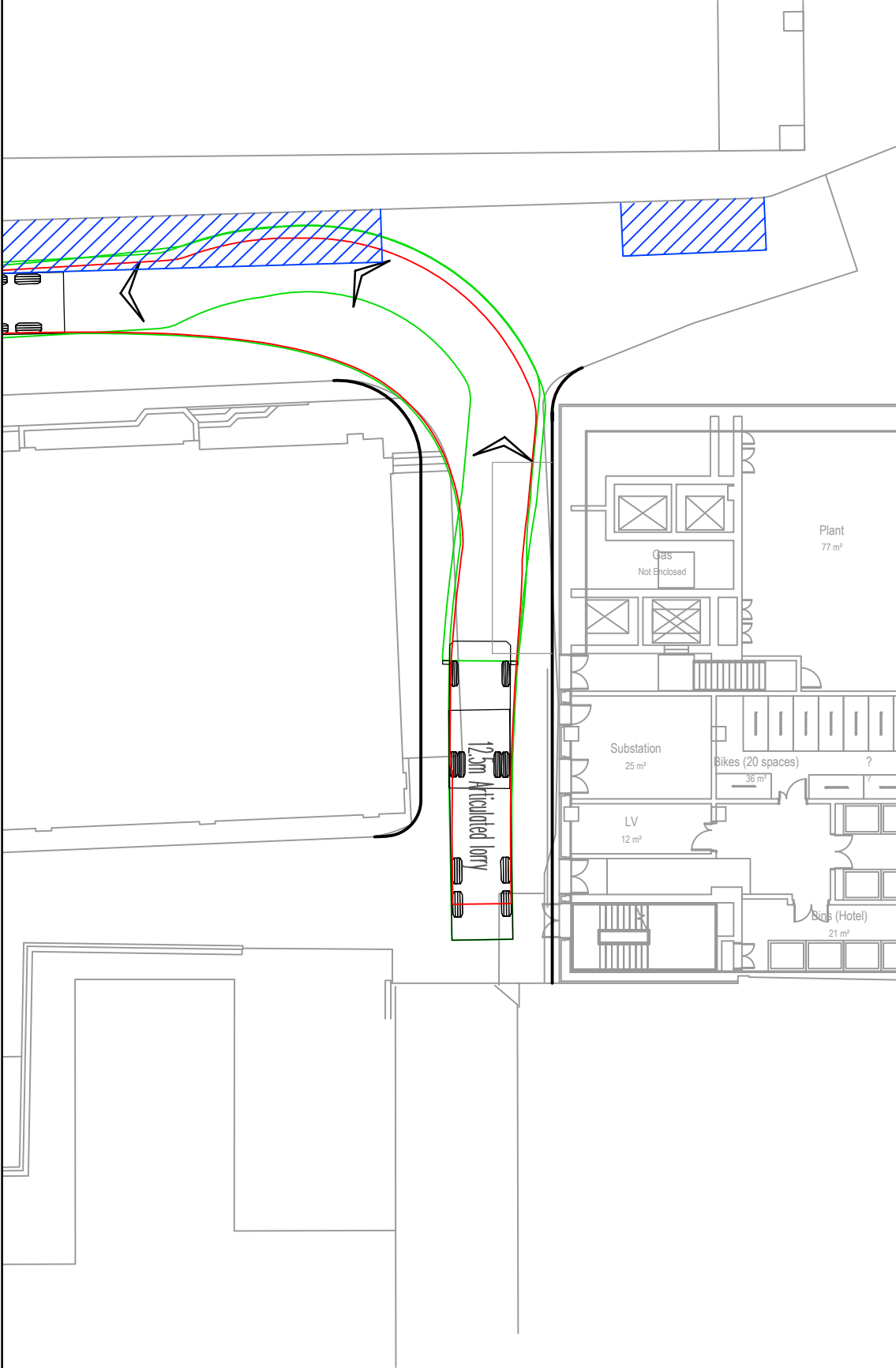
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ARTICULATED VEHICLE ACCESS FROM GARRAD STREET -
INBOUND



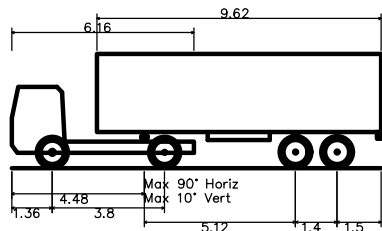
ARTICULATED VEHICLE ACCESS FROM GARRAD STREET -
OUTBOUND



KEY

- EXISTING ON-STREET PARKING
- PROPOSED KERB-LINE

VEHICLE PROFILE



12.5m Articulated lorry
Overall Length 12.500m
Overall Width 2.550m
Overall Body Height 3.870m
Min Body Ground Clearance 0.515m
Max Track Width 2.470m
Lock-to-lock time 3.00s
Curb to Curb Turning Radius 6.550m

D	REVISED SWEEP PATH ANALYSIS	02.10.18	SB	JH	PB
C	REVISED MASTERPLAN	19.09.18	SB	JH	PB
B	HATCHING REMOVED	09.05.18	SB	JH	PB
A	REVISED MASTERPLAN	18.04.18	SB	JH	PB
Mark	Revision	Date	Drawn	Chkd	Appd

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Drawing Issue Status
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STATION ROAD, READING
SERVICE AREA SWEEP PATH ANALYSIS
12.5m ARTIC

Client

Date of 1st Issue 13/04/18	Designed -	Drawn LA
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