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TRAFFICWISE
traffic & transportation solutions



Senior Planning Officer
South Dublin County Council
County Hall, Tallaght
Dublin 24, D24 YNNS

Our Ref: 03052/LO/1408/JK

19-Aug-2022

Dear Sir

PLANNING PERMISSION IS SOUGHT BY RELMONT LIMITED FOR WORKS TO PREVIOUSLY GRANTED PLANNING APPLICATION REG REF: SD17A/0407. IN BUILDING 'C', THE WORKS INCLUDE; THE MATERIAL CHANGE OF USE FROM PREVIOUSLY GRANTED GROUND FLOOR CAR PARK TO 2 NO. 1-BED APARTMENTS AND 1 NO. 2-BED APARTMENT, THE RE-ORGANISED BIN AND BIKE STORE ARRANGEMENT, THE REMOVAL OF PREVIOUSLY GRANTED PITCHED ROOF TO ALLOW FOR THE CONSTRUCTION OF TWO ADDITIONAL LEVELS ABOVE THE PREVIOUSLY GRANTED SECOND FLOOR LEVEL. ON THE PROPOSED THIRD FLOOR, THERE WILL BE 3 NO. 2-BED APARTMENTS AND 1 NO. 1-BED APARTMENT WITH BALCONIES AND THE PROPOSED FOURTH FLOOR WILL ACT AS A PENTHOUSE LEVEL, CONSISTING OF 3 NO. 1-BED APARTMENTS AND 1 NO. 2-BED APARTMENT WITH ROOF TERRACE BALCONIES. ASSOCIATED ELEVATIONAL CHANGES THROUGHOUT TO INCLUDE THE PROVISION OF 2 NO WINDOWS TO THE NORTH ELEVATION, NEXT TO BUILDING 'B', AND 2 NO. WINDOWS TO THE SOUTH ELEVATION, AND NEW DOOR TO PROPOSED BIKE STORAGE AT GROUND FLOOR LEVEL. FURTHER WORKS INCLUDE; THE RELOCATION OF THE EXISTING WATER TANK FROM THE ROOF OF BUILDING 'C' TO THE NORTH SIDE OF BUILDING 'A' NEXT TO THE VEHICULAR ENTRANCE TO THE SITE, AND PROPOSED NEW SIGNAGE TO BE ERECTED ON THE RELOCATED WATER TANK, ASSOCIATED LOCALISED ADDITIONAL LANDSCAPING WORK THROUGHOUT, INCLUDING THE ADDITION OF A TOTAL OF 24 NEW EXTERNAL SURFACE PARKING SPACES TO THE 19 EXTERNAL SURFACE PARKING SPACES PREVIOUSLY GRANTED, INCLUDING 4 NO. CAR CHARGING SPACES, 5 NO. VISITOR BICYCLE SPACES AND ALL ASSOCIATED SITE WORKS ALL AT EDMONDSTOWN MILL, EDMONDSTOWN ROAD, RATHFARNHAM, DUBLIN 16, WHICH IS A PROTECTED STRUCTURE.

PLANNING SUBMISSION – ROADS & TRAFFIC

1 INTRODUCTION

1.1 Trafficwise Ltd. is a firm of consulting engineers specialising in Traffic and Transportation Planning and Geometric Roads Design. We act for **Relmont Limited** ("Relmont") in this matter. This document is an integral part of a parent planning submission prepared by OC Architects & Design. This part of the submission relates to roads and traffic matters.

1.2 The existing site enjoys planning permission for the development of Edmondstown Mill which in the brief terms relevant to roads and traffic consists of 25 no. residential units, car parking, cycle parking, new boundary treatment, reconfigured vehicular site entrance, new pedestrian entrance

footway and pedestrian pathway along the Owendoher River. The current permission was considered under Planning Register Reference SD17A/0407 when the submitted application was subject to rigorous and objective assessment with respect to, car parking and cycle parking and the proposed access arrangement and interaction with the receiving roads environment.

1.3 Roads and traffic matters considered key to the assessment of this current application are set out herein. In the following we aim set out those elements of the permitted development previously determined and unchanged by the current proposals. Importantly this document highlights those elements of the current permitted development that are proposed to be changed and evaluates the effect of such change with reference to the appropriate standards and development plan standards.

1.4 In preparing this submission we have reviewed the Council's decision and the schedule of planning conditions attached under Planning File Reg. Ref. SD17A/0407. We have considered the assessment of the current permitted development in the Planning Officer's Reports together with the assessments of the Transportation Department on Planning File Reg. Ref. SD17A/0407 which ultimately gave rise to the decision to issue the current grant of planning permission.

2 CURRENT PERMITTED DEVELOPMENT

2.1 Development Access

2.1.1 Details of the permitted development access are provided in Trafficwise Drawing No. TWL/03052/RFI-01 dated March 2018 (copy attached as Appendix A) received by the Planning Authority in response to their Request for Further Information (RFI) on Planning File Reg. Ref. SD17A/0407 dated 18th January 2018. The submitted drawing shows the proposed access arrangement with pedestrian crossing incorporating dropped kerbs and tactile paving. The drawing shows unobstructed visibility sightline criteria for drivers exiting the site together with unobstructed forward visibility and Stopping Sight Distance criteria for drivers travelling along Edmondstown Road and approaching the site access. As per the detailed requirements set out in the RFI the sightlines 'y'-distance is 49m and is measured from a set-back or 'x'-distance of 2.4m. Visibility Sightlines are measured in accordance with TII DN-GEO-03060, Section 5.6.3. Similarly Stopping Sight Distances on

both approaches are 49m and are measured in accordance with the standard method of measurement set out in TII DN-GEO-03031, Section 2.1.

- 2.1.2 Item No. 5 of the Schedule appended the Final Grant of permission under Planning File Reg. Ref. SD17A/0407 requires agreement on the detailed design of the entrance in relation to the widening of the existing footway along the site frontage. In addition, Item 5 (4) requires that the boundary wall shall be a maximum of 0.9m in height with pillars of 1.2m maximum height at the vehicle access point. Item No. 5 acknowledges that these details are as presented in the plans and particulars submitted at the additional information stage.

Development Access

The current application proposes no alteration, amendment or revision to the permitted development vehicular access details. The Applicant respectfully invites a similar set of Conditions relating to the agreement of the final detailed design with South Dublin County Council Roads Department prior to the commencement of the development.

3 PROPOSED DEVELOPMENT

3.1 Parking

3.1.1 Car Parking

- 3.1.1.1 South Dublin Development Plan 2016-2022, Table 11.24 sets out Maximum Car Parking Rates for residential development stating that the number of spaces provided for any particular development should not exceed the maximum provision, further stating that the maximum provision should not be viewed as a target and that a lower rate of parking may be acceptable given certain criteria including proximity to public transport.

- 3.1.1.2 Table 11.24 is replicated below.

Table 11.24 Maximum Parking Rates (Residential Development)¹

DWELLING TYPE	NO. BEDROOMS	ZONE 1	ZONE 2
Apartment	1 Bed	1 space	0.75 space
	2 Bed	1.25 spaces	1 space
Duplex	3+ Bed	1.5 spaces	1.25 spaces
House	1 Bed	1 space	1 space
	2 Bed	1.5 spaces	1.25 spaces
	3+ Bed	2 spaces	1.5 spaces

3.1.1.3 The development is located in Zone 1 and includes the permitted 25 no. residential units comprising 4 no. 1-bed units and 21 no. 2-bed units, together with a proposed further 11 no. residential units comprising 6 no. 1-bed units and 5 no. 2-bed units. In total the revised development includes 10 no. 1-bed units and 26 no. 2-bed units. **Table 2.1** summarises the development plan requirement and the corresponding provision for car parking in the proposed development.

UNIT TYPE	DEVELOPMENT PLAN	PROPOSED
10 x 1-Bed	10	10
26 x 2-Bed	33	33
Total	43	43

Table 2.1 Car Parking Standard and Proposed Provision

3.1.1.4 It is proposed to provide a total of 43 no. car parking spaces at grade in a surface car park. The surface car park includes the original linear scheme along the river which has been extended westward through the site. Proposed building modifications and site layout reconfiguration facilitate the provision of additional car parking in the north-west of the site separated by a standard aisle of 6m. The proposed car parking layout is shown on OC Architects & Design, 'Proposed Site Layout Plan' Drawing No. PL002. For clarity an excerpt of that drawing is provided in **Figure 2.1**

¹ South Dublin County Council Development Plan 2016-2022, Table 11.24

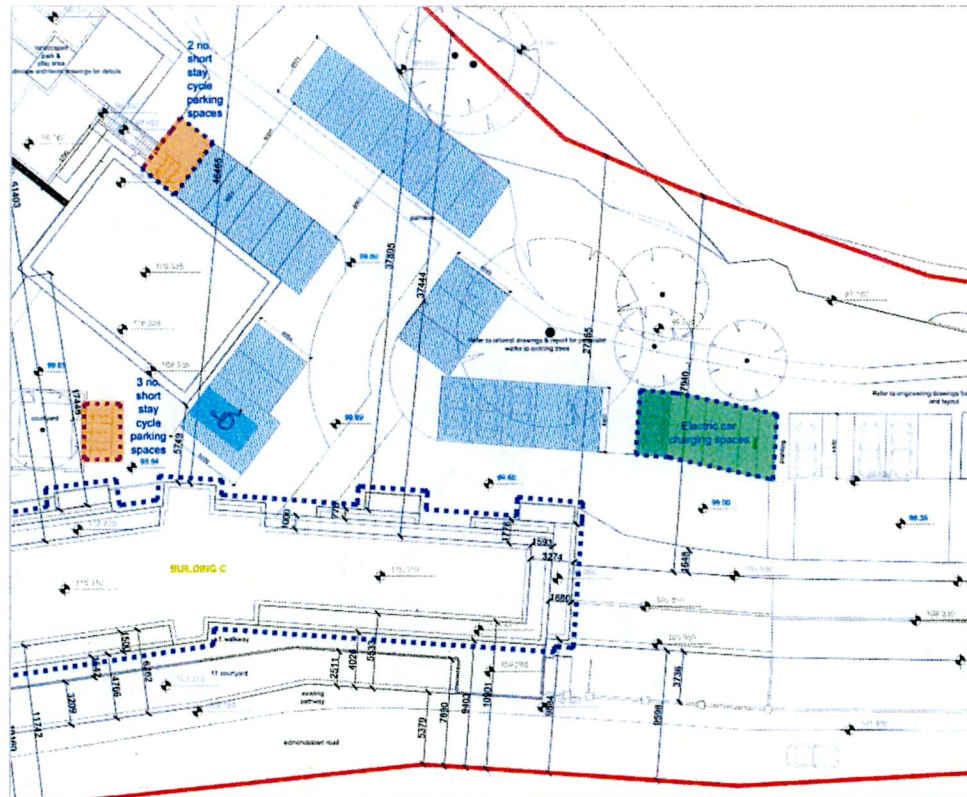


Figure 2.1 Excerpt 'Proposed Site Layout Plan' (annotation by Trafficwise)

3.1.1.5 All development is required to provide facilities for the charging of battery-operated plug-in electric cars at a rate of up to 10% of the total car parking spaces. The remainder of the parking spaces should be constructed to be capable of accommodating future charging points, as required. The closest suitable power supply is Building 'C'. There are merits to locating the electric vehicle charging points closer to the building and closer to the power supply. It is proposed to provide the required spaces which are shown marked on Drawing PL002 and highlighted 'green' in **Figure 2.1**. Dual ESB mini pillars will be placed between every other car charging space. Ducting and other ancillary infrastructure will be such that all the spaces in the development, including those already permitted, can readily have electric vehicle charging hardware added in response to demand as envisaged in the development plan. It is respectfully submitted that the precise ESB pillar models and other matters of technical detail can reasonably be agreed with the Planning Authority post consent and a condition of planning is invited to give this effect.

3.1.1.6 Parking facilities for mobility impaired drivers and their vehicles are required to be provided at locations proximate to the entry point of the proposed building and generally close to associated facilities for wheelchair access to buildings. 1 no. accessible space is provided and is located as shown on Drawing PL002 and highlighted 'blue' in **Figure 2.1**.

Car Parking

The proposed number of parking spaces complies with the current development plan standard. The proposed layout ensures 6m aisles and manoeuvring area behind spaces. The required number of accessible spaces and electric charging spaces are proposed whilst all spaces include the infrastructure required to facilitate the future inclusion of vehicle charging hardware.

3.1.2 Bicycle Parking

3.1.2.1 South Dublin Development Plan 2016-2022, Table 11.22 sets out Bicycle Parking Standards and requires the provision of 1 no. long-term space for every 5 no. residential units and 1 no. short-term space for every 10 no. units. Long-term bicycle parking or storage is designed for the use of residents and should be located in a secure area that is not freely accessible to the general public. Short-stay parking is for use by the general public and should be accessible.

3.1.2.2 A summary of county development plan bicycle parking standards and guidelines is provided in **Table 2.2** together with the corresponding proposed provision at the development.

UNIT TYPE	DEVELOPMENT PLAN		PROPOSED	
	Long-term	Short-term	Long-term	Short-term
10 x 1-Bed	2	1	Secure Bicycle Storage at Basement Level	At-grade In Car Parking Area
26 x 2-Bed	6	3		
Total	8	4	25	5

Table 2.2 Bicycle Storage/Parking

3.1.2.3 Short-term bicycle parking is provided at-grade in the scheme car park at the locations highlighted 'orange' in **Figure 2.1**. The proposed short-term spaces are accessible by the general public and can be used by visitors and residents. The spaces are convenient and accessible and being close to the building entrances they benefit from passive surveillance being overlooked from the residential units and by passers-by entering and leaving the buildings.

3.1.2.4 It is proposed to provide 25 no. secure bicycle storage spaces for residents. These spaces are shown on OC Architects & Design 'Proposed Floor Plans' Drawing No. PL003. An excerpt of the relevant part of the drawing is provided in **Figure 2.2**. The proposed bicycle spaces are to be provided at basement level. These spaces are provided for use by residents and are not freely accessible by the general public.

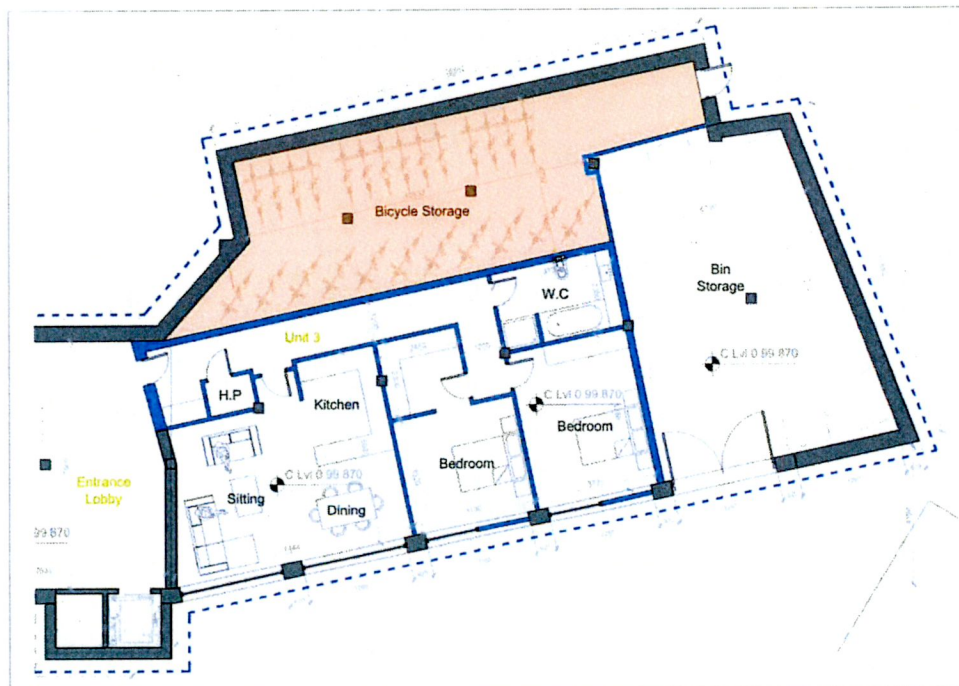


Figure 2.2 Excerpt 'Proposed Floor Plans' (annotation by Trafficwise)

Bicycle Parking

The proposed number long-term bicycle parking/storage spaces is more than threefold the development plan standard. Short-term bicycle parking satisfies the development plan standard and is optimally located where it will be overlooked by several units and is also convenient for visitors using the river walk.

3.2 Internal Circulation

- 3.2.1 In determining the current permitted development Planning File Reg. Ref. SD17A/0407 South Dublin County Council sought turning and circulating assessments as part of the Request for Further Information date 18th January 2018. The requested data included a swept path analysis drawing demonstrating that fire tenders and large refuse vehicles can access/egress the site and can use the proposed turning area within the site.
- 3.2.2 Given the previous request and also given the internal modifications now proposed to the site layout, vehicle swept path analyses for both fire tender and refuse vehicles were undertaken using the proprietary software Autodesk 'Vehicle Tracking' (formerly AutoTrack).
- 3.2.3 The swept path analyses were undertaken using the same design refuse vehicle and design fire tender as were used in the previous assessment considered by the Planning Authority under Planning File Reg. Ref. SD17A/0407. The dimensions turning spaces are determined in part by the size and geometric characteristics of vehicles. The design vehicles represent the larger size range of the vehicles type and accordingly residential roads designed to accommodate them should be adequate for the majority of other vehicles.
- 3.2.4 Vehicle details are provided at the end of **Appendix B**. Vehicle manoeuvres for the site access and internal turning area have previously been provided to Planning File Ref. SD17A/0407 in Trafficwise Drawing No. 03052/RFI-02 which is also attached in **Appendix B** for information.
- 3.2.5 There are no proposed changes to the development access to Edmondstown Road which has already been determined suitable and so no further analyses of the access is considered necessary.
- 3.2.6 The internal turning area is affected by the current proposal and so further analysis of this area has been undertaken using the same assessment vehicles as before and using the proprietary software Vehicle Tracking².

² Vehicle Tracking: Distributed by Autodesk, add-on to AutoCAD 2023

3.2.7 The following vehicles manoeuvres are provided in Drawing No. 03052/RA-01 attached in **Appendix A**.

- Design Refuse Vehicle Turning within Site
- Design Fire Tender Turning within Site

Internal Circulation

There is no change proposed to the permitted development access to Edmondstown Road which provides satisfactory sightlines and stopping distance and accommodates turning manoeuvres by fire tenders and refuse vehicles. Current AutoTrack assessments confirm that fire tenders and large refuse vehicles can use the proposed turning area within the site.

3.3 Traffic Generation

3.3.1 The traffic generation of the permitted development and the incremental increase in traffic arising from the proposed alteration to the development has been estimated by reference to the TRICS database. The TRICS criteria selected to model the likely trip rates of the permitted and proposed residential development is 'Residential – Mixed Private/Non-Private Housing'. Results for the TRICS database were returned from a selection of 15 no. sites.

3.3.2 The TRICS database provides specific trip rates under a category for Apartments Privately Owned. The trip rates for apartments are considered likely to be low in the context of the proposed development location, therefore in the interest of a more robust assessment this report uses the higher rates returned under the category for houses. Houses traffic generation rates are typically twice that of apartments.

3.3.3 Under the above site selection criteria the 85th Percentile sites returned from the TRICS database are as follows:

- AM Arrival Rate.....Site Reference: HE-03-M-01
- AM Departure Rate.....Site Reference: WO-03-M-01
- PM Arrival Rate.....Site Reference: WO-03-M-01
- PM Departure Rate.....Site Reference: CB-03-M-03

3.3.4 The average and upper value peak hour trip rates for the proposed residential development are shown in Table 2.3 below.

Forecast Trip Rate Residential	AM Arrive (Rate)	AM Depart (Rate)	PM Arrive (Rate)	PM Depart (Rate)
Average	0.13	0.28	0.32	0.20
Upper Value / 85 th Percentile	0.25	0.39	0.42	0.29

Table 3.3 Potential Traffic Generation Trip Rates – Proposed Residential

3.3.5 The permitted development includes for 25 no. apartment units whilst the current proposal is for an additional 11 no. units. The estimated average traffic peak hour generation used to model the residential development are set out in Table 2.4 below.

Scenario	AM Arrive (No.)	AM Depart (No.)	PM Arrive (No.)	PM Depart (No.)
Permitted Total 25 no. Units	3	7	8	5
Proposed Total 36 no. Units	5	10	12	3
Difference	+1	+3	+4	+2

Table 3.4 Potential Traffic Generation

3.3.6 Bearing in mind that the above figures are derived for houses and generation rates from apartments are likely to be about half it can be appreciated that the traffic generation of the proposed 36 no. unit residential development is unlikely to be significant in the context of the carrying capacity of the receiving road network. The incremental increase in peak hour traffic is not significant.

Traffic Generation

The forecast increase in peak hour traffic generation arising from the proposed development is not significant. Traffic generation values are considerably sub-threshold.

3.4 Public Transport

3.4.1 There are 2 no. Dublin Bus stops located along R116 Edmondstown Road along the frontage of the development. Edmondstown Golf Stop 2938 is the northbound stop and Edmondstown Golf Stop 2929 is for southbound public transport passengers. Both stops are serviced by Bus No. 61 and No. 161.

3.4.2 The site is reasonably well served by busses. The Dublin Bus timetable shows that direct routes serving Whitechurch are the 61 and 161 services. Service 61 operated by Dublin Bus runs as follows from Eden Quay >> 20mins >> Ranelagh >> 10mins >> Milltown >> 10mins >> Nutgrove Avenue >> 13mins >> Whitechurch. The schedule for the journey from Whitechurch is simply reversed. The following is the published timetable.

Eden Quay to Whitechurch

Monday - Friday				Saturday				Sunday			
07:00	08:00	09:00r	09:30	08:30	09:30	10:30	11:30	10:30	11:30	12:30	13:30
10:45	12:00	13:15	14:30	12:30	13:30	14:30	15:30	14:30	15:30	16:45	17:45
15:45	17:00	17:30r	18:15	16:45	17:45	19:00	20:00	19:00	20:00	21:00	22:00
19:15	20:15	21:15	22:15	21:00	22:00	23:00		23:00			
23:15											

White Church to Eden Quay

Monday - Friday				Saturday				Sunday			
06:00	06:30r	07:00r	08:00	07:15	08:15	09:30	10:30	09:30	10:30	11:30	12:30
09:30	10:45	12:00	13:15	11:30	12:30	13:30	14:30	13:30	14:30	15:30	16:30
14:30	15:45	16:00r	17:00	15:30	16:30	18:00	19:00	18:00	19:00	20:00	21:00
18:15	19:15	20:15	21:15	20:00	21:00	22:00	23:00	22:00	23:00		
22:15	23:15										

3.4.3 Route R161 is operated by GoAhead and connects Rockbrook through Whitechurch Estate to the Dundrum Luas Station. Only a handful of services are scheduled to stop at Rockbrook instead buses predominantly serve the Whitechurch Estate. The following is the published timetable.

Rockbrook - Dundrum

Rockbrook (2934)	07:30	08:55	10:35	12:05	13:35	15:05	16:45	18:15
Moyville (2940)	07:34	08:59	10:39	12:09	13:39	15:09	16:49	18:19
Whitechurch Way (7067)	07:39	09:04	10:44	12:14	13:44	15:14	16:54	18:24
Heather Lawn (4988)	07:46	09:11	10:50	12:20	13:50	15:20	17:00	18:30
Dundrum Luas (2825)	08:00	09:25	11:02	12:32	14:02	15:32	17:12	18:42

Dundrum-Rockbrook


Dundrum Luas (2825)	08:10	09:55	11:25	12:55	14:25	15:55	17:25	18:55
Heather Lawn (4987)	08:19	10:04	11:34	13:04	14:34	16:07	17:37	19:04
Whitechurch Way (7067)	08:27	10:10	11:41	13:11	14:41	16:15	17:45	19:10
Ballyboden Crescent (7449)	08:31	10:14	11:45	13:15	14:45	16:20	17:50	19:14
Rockbrook (2933)	08:39	10:20	11:51	13:21	14:51	16:26	17:56	19:20

- 3.4.4 A comprehensive service is provided to Whitechurch and to Ballyoden Road which is served by a Route 15b which runs approximately every 10-15 minutes on weekdays and Saturdays depending upon the time of day. On Sundays the service is approximately half hourly. The junction of Ballyboden Road and Taylor's Lane is located approximately 1 km north of the existing Edmondstown Mill access. Bus stops located on R115 Stocking Lane are accessible on foot via the Prospect Estate and are approximately 500m from the development site entrance. The Route 15b service is operated by Dublin Bus and runs from Merrion Square >> 16mins >> Aungier St. >> 10mins >> Rathmines >> 12mins >> Terenure >> 20mins >> Stocking Avenue.

4 CONCLUSION

- 4.1 In terms of access, roads and traffic the development has not altered fundamentally. There is no change affecting the site access, where there are effects on circulation within the site the turning of service and emergency vehicles has been shown to be consistent with the standard determined satisfactory for the permitted development. Other changes to provide cycle parking for residents and visitors are well formulated. The proposed car park includes both accessible parking and electric vehicle charging spaces with all spaces provided with the infrastructure for conversion. We respectfully invite the Planning Authority to agree that the proposed alterations to the development are well formulated and provides a balanced approach to the provision of access, servicing and pedestrian welfare consistent with the permitted development and consistent with the proper planning and sustainable development of the area.

Yours sincerely



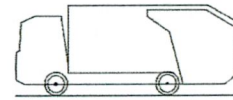
Julian Keenan
for **Trafficwise** Ltd.

Appendix A: Vehicle Turning Assessment

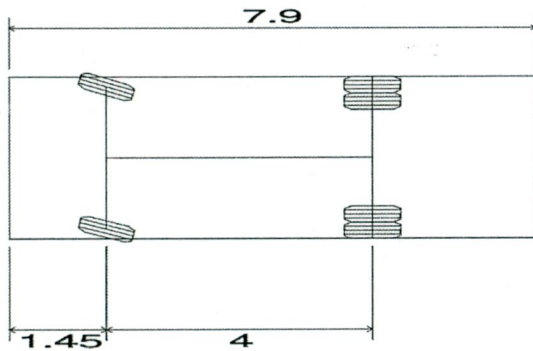
- Trafficwise Drawing No. TWL/03052/RA-01

Vehicle Tracking Vehicle Details

Ref:



Vehicle Name:	DB32 Refuse Vehicle
Type:	Rigid vehicle
Category:	Autodesk
Classification:	Autodesk
Source:	DB32: Residential Roads and Footpaths
Description:	Design vehicle
Notes:	All data taken from DB32: Appendix 1. Turning circle radius used is the worst of left and right lock.
Unit 1 Name:	DB32 Refuse Vehicle Tractor



DB32 Refuse Vehicle

Overall Length	7.900m
Overall Width	2.400m
Overall Body Height	3.183m
Min Body Ground Clearance	0.388m
Max Track Width	2.400m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	9.625m

Vehicle Tracking Vehicle Details

Ref:

Unit Name: DB32 Refuse Vehicle Tractor
Type: Tractor (with driver controlled steering)
Body style: Refuse / Garbage Truck (Small)
Classification: Autodesk

Source: No data

Description: No data

Notes: No data

Datum: Front Primary Axle

Front Axle(s): 1 Ackerman (axles fixed, wheels turn)
 Primary Front Axle Offset: 0.000m
 Effective Front Axle Offset: 0.000m (Auto Calculated)
 Maximum Wheel Angle: Unlimited
 Status: Active Non Self-Steered
 Track Width: 2.350m
 Total Wheels: 2 (positioned at the ends of the axle)
 Tire Width: 0.235m (Auto Calculated - proportion of Track Width)
 Tire Diameter: 0.823m (Auto Calculated - proportion of Track Width)

Rear Axle(s): 1 Fixed
 Primary Rear Axle Offset: 4.000m (Innermost Axle behind Front Primary Axle)
 Effective Rear Axle Offset: 4.000m (Auto Calculated)
 Maximum Wheel Angle: Unlimited
 Status: Active Non Self-Steered
 Track Width: 2.400m
 Total Wheels: 4 (positioned at the ends of the axle)
 Tire Width: 0.240m (Auto Calculated - proportion of Track Width)
 Tire Diameter: 0.840m (Auto Calculated - proportion of Track Width)

Steering: Front Axle(s):
 Min. Curb / Curb Turning Radius: 9.625m (based upon active axles only)
 Calculated Maximum Wheel Angle: 31.600deg
 Lock-to-Lock Time (Fwd/Rev): 6.0sec / 6.0sec
 Driver / Pilot
 Driver Offset Longitudinally: 0.050m (in front of Front Primary Axle)
 Driver / Pilot Offset Laterally: -0.600m (Right of Centerline)
 Driver Height: 2.300m (Above ground level)

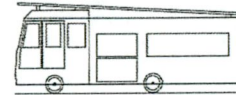
Front Coupling: None

Rear Coupling: None

Body outline (plan):
 Outline Type: Rectangle
 Offset (X,Y): -1.450m, 0.000m
 Length / Width: 7.900m / 2.400m

Vehicle Tracking Vehicle Details

Ref:



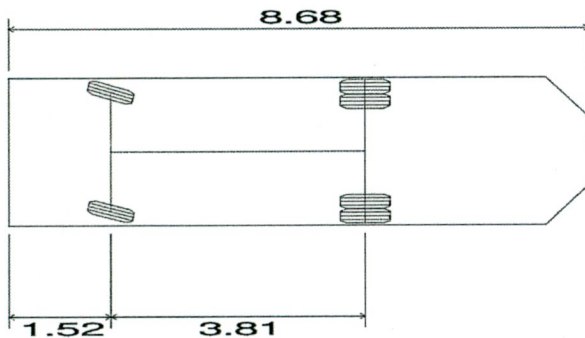
Vehicle Name: DB32 Fire Appliance
Type: Rigid vehicle
Category: Autodesk
Classification: Autodesk

Source: DB32: Residential Roads and Footpaths

Description: Design vehicle

Notes: All data taken from DB32: Appendix 1. Turning circle radius used is the worst of left and right lock.

Unit 1 Name: DB32 Fire Appliance Tractor



DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	7.910m

Vehicle Tracking Vehicle Details

Ref:

Unit Name:	DB32 Fire Appliance Tractor
Type:	Tractor (with driver controlled steering)
Body style:	Fire Tender
Classification	Autodesk
Source:	No data
Description:	No data
Notes:	No data
Datum:	Front Primary Axle
Front Axle(s):	1 Ackerman (axles fixed, wheels turn)
Primary Front Axle Offset:	0.000m
Effective Front Axle Offset:	0.000m (Auto Calculated)
Maximum Wheel Angle:	Unlimited
Status:	Active Non Self-Steered
Track Width:	1.958m
Total Wheels:	2 (positioned at the ends of the axle)
Tire Width:	0.196m (Auto Calculated - proportion of Track Width)
Tire Diameter:	0.685m (Auto Calculated - proportion of Track Width)
Rear Axle(s):	1 Fixed
Primary Rear Axle Offset:	3.810m (Innermost Axle behind Front Primary Axle)
Effective Rear Axle Offset:	3.810m (Auto Calculated)
Maximum Wheel Angle:	Unlimited
Status:	Active Non Self-Steered
Track Width:	2.121m
Total Wheels:	4 (positioned at the ends of the axle)
Tire Width:	0.212m (Auto Calculated - proportion of Track Width)
Tire Diameter:	0.742m (Auto Calculated - proportion of Track Width)
Steering:	Front Axle(s):
Min. Curb / Curb Turning Radius:	7.910m (based upon active axles only)
Calculated Maximum Wheel Angle:	37.000deg
Lock-to-Lock Time (Fwd/Rev):	6.0sec / 6.0sec
Driver / Pilot	
Driver Offset Longitudinally:	-0.020m (in front of Front Primary Axle)
Driver / Pilot Offset Laterally:	-0.600m (Right of Centerline)
Driver Height:	2.500m (Above ground level)
Front Coupling:	None
Rear Coupling:	None
Body outline (plan):	
Outline Type:	Line
Offset (X,Y):	0.000m, 0.000m
Vertices...	
1	-1.520, -1.090
2	6.510, -1.090
Outline Type:	Line
Offset (X,Y):	0.000m, 0.000m
Vertices...	
1	7.160, -0.500
2	7.160, 0.500
Outline Type:	Line
Offset (X,Y):	0.000m, 0.000m
Vertices...	
1	6.510, 1.090

Appendix B: Information Submitted Under Reg. Ref. SD17A/0407

- Trafficwise Drawing No. TWL/03052/RFI-01
- Trafficwise Drawing No. TWL/03052/RFI-02
- AutoTrack Vehicle Specifications