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CIVIL, ENVIRONMENT & STRUCTURAL ENGINEERS



Delivery and Servicing Plan

Land at St. Columba's Close, Gravesend, DA12 4AJ

Oakwood Building Contractors Ltd

12th May 2025

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1. Introduction

1.1 Overview

Oakwood Building Contractors Ltd ('the client') is taking forward the permitted residential development at St. Columba's Close, Gravesend, DA12 4AJ (hereafter referred to as the 'permitted development'), which is within the Gravesham Borough Council (GBC) area.

The permitted development involves the following:

"Demolition of Nos. 1-12 St Patricks Gardens. Nos. 36-41 St Patricks Gardens and Nos. 28-42 even nos. only St Columba's Close, and the caretakers facility. Erection of 2no. 2 storey buildings, 1no. 3 storey building and 1no. part 3 and part 4 storey building; to provide 46 residential dwellings (Class C3) residential use, with associated vehicle and pedestrian access, amenity space with hard and soft landscaping, car and cycle parking, refuse and recycling storage provision, and other associated works."

AVAL Consulting Group Limited (ACGL) was instructed by the client to produce a Delivery & Servicing Management Plan (DSP) to accompany the planning conditions to GBC. Planning Condition 24 on delivery and servicing arrangements states that:

"Prior to any part of the permitted development being occupied or used, and notwithstanding the details shown on the approved plans, submitted documents and application form, details and arrangements for deliveries and servicing the proposed development, shall be submitted to and approved, in writing, by the Local Planning Authority and shall thereafter be implemented as approved. The servicing strategy shall include the following:

(a) Details for the servicing of the residential apartments and communal spaces to be provided as part of the development, to have regard to the phased delivery of the development and interim arrangements required until such time as the whole development is built out and operating;

(b) Details as to how existing properties will be serviced during the construction of the development and once it has been built out (if this differs)."

This Delivery and Servicing Plan (DSP) describes the anticipated service and delivery vehicle movements, servicing location and how such activities will be managed. This DSP builds upon the servicing strategy outlined within the Transport Assessment prepared by SWECO (October 2022).

The preparation of a DSP is intended to provide GBC with a commitment from the applicant to manage the commercial service vehicle trips to and from the development in accordance with the strategy and measures outlined within this document.

This report has been carried out in accordance with good practice guidelines and has been prepared in accordance with National Planning Policy Framework (NPPF) (2025) and current Planning Guidance documents, such as Policy CS19 of the Gravesham Local Plan Core Strategy (September 2014).

The remainder of this report is structured as follows:

- Chapter 2 outlines the purpose of this document with reference to the local authority, in accordance with which this document has been prepared;
- Chapter 3 provides a brief overview of the permitted development and the associated delivery and servicing requirements;
- Chapter 4 identifies the objectives of the Delivery and Servicing Plan including the vehicle routing to the site; and
- Chapter 5 provides a summary of the conclusions.

1.2 Site Location and Details

The permitted residential development is located at St. Columba's Close, Gravesend, DA12 4AJ, as shown in Figure 1.1 below. The approximate National Grid Reference for the site is X566001, Y172106.

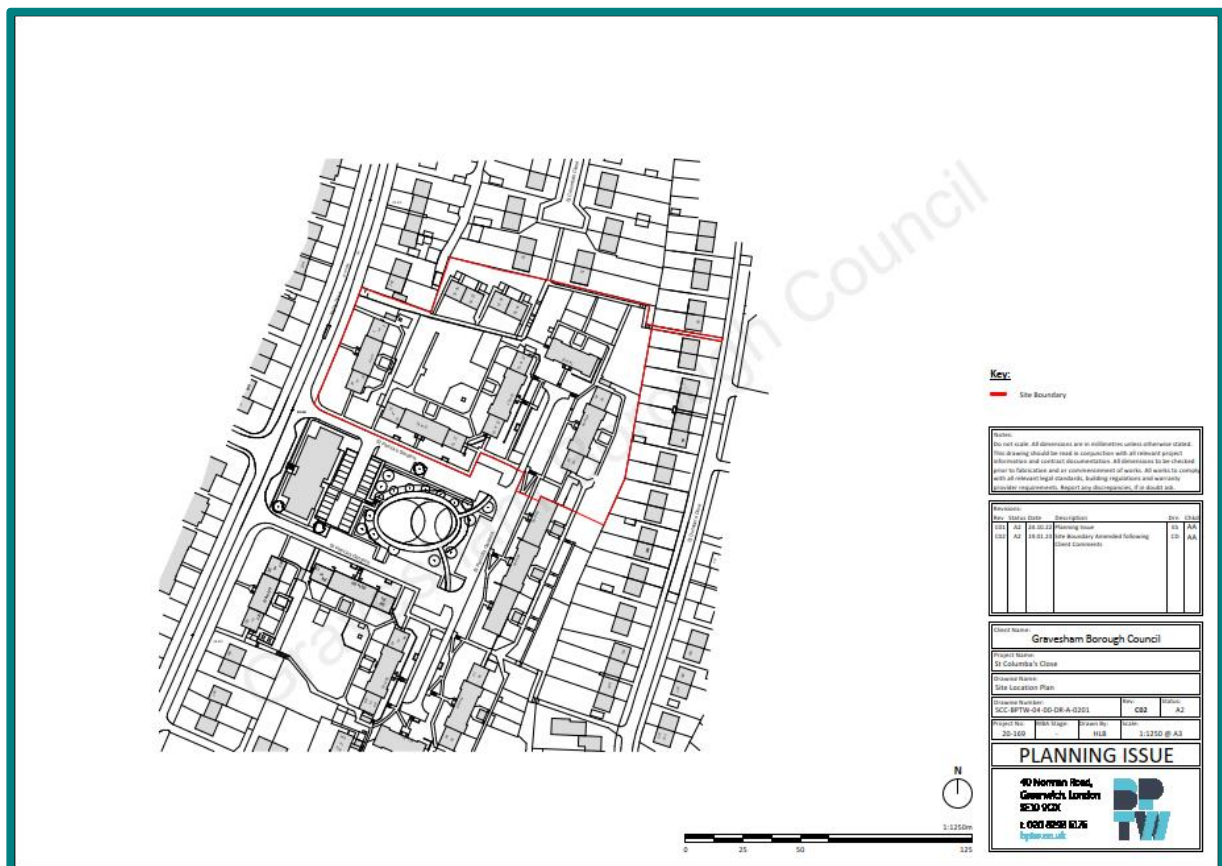


Figure 1.1 – Site Location (Source: Client)

The site is located at the southern end of St Columba's Close in Gravesend, surrounded by established residential developments. The site cannot be accessed from St Columba's Close, but it can be accessed from Valley Drive along the western boundary.

To the north and east of the site are houses on St Columba's Close and St Dunstan's Drive, while the south adjoins St Patrick's Gardens and the west borders Valley Drive. The site is accessible from Valley Drive.

Immediately to the south lies the Bishop's Court development, a recently completed scheme comprising 23 flats with associated landscaping and parking. The site benefits from integration within an established residential neighbourhood.

The site is well-connected by foot and cycle paths, with direct links to Valley Drive and the surrounding street network. Public footpath NGX-30 runs through the site, enhancing pedestrian connectivity. A variety of local amenities including schools, supermarkets, recreational areas, and places of worship lie within an 800m catchment, accessible via safe and well-lit footways. Cycling routes follow local roads with 30mph and 20mph speed limits, supporting safe travel. Public transport is easily accessible from adjacent bus stops on Valley Drive, which are served by routes 480, 490, and G1, offering frequent connections to Gravesend town centre and railway station.

Valley Drive, running alongside the western boundary, connects to the B261 Old Road East to the north and the A2 to the south, providing direct access to Dartford, London, Strood, and Maidstone.

2 Guidance

2.1 Local Policy

Relevant Guidance Documents include:

- Gravesham Local Plan Core Strategy (Adopted September 2014)
- Design for Gravesham Design Code SPD (March 2023)
- National Planning Policy Framework (NPPF, 2025)

While the Gravesham Local Plan Core Strategy (Adopted September 2014) does not contain a standalone policy exclusively dedicated to deliveries and servicing, it emphasises the need for these functions to be fully integrated into development proposals. This is particularly important in residential developments where the movement of goods and access by service and emergency vehicles must be planned carefully to ensure safe, convenient, and unobtrusive operation.

Relevant policies include:

- Policy CS11: Transport – Promotes sustainable transport solutions and requires developments to consider delivery and servicing needs as part of an integrated approach to transport and access.
- Policy CS19: Development and Design Principles – Requires new development to provide safe and convenient access for all users, including service vehicles, while minimising impacts on the surrounding environment and public realm.

Developers are encouraged to incorporate practical features such as designated delivery and loading bays, turning areas for larger vehicles, and unobstructed access routes to facilitate efficient servicing operations.

Specific Policies for New Residential Developments:

The Gravesham Local Plan Core Strategy sets out clear guidance for the design, layout, and composition of new housing developments:

- Policy CS14: Housing Type and Size – Ensures that new developments meet the diverse needs of the community by providing a balanced mix of unit types and sizes.
- Policy CS15: Housing Density – Encourages higher density development in accessible urban locations while ensuring compatibility with local character and infrastructure capacity.
- Policy CS16: Affordable Housing – Requires a proportion of new residential development to be delivered as affordable housing, tailored to meet identified local needs.
- Policy CS18: Climate Change – Promotes sustainable design and construction practices that mitigate environmental impacts and improve energy efficiency in residential developments.

National Planning Policy Framework (NPPF) Context:

The National Planning Policy Framework (NPPF, 2025) reinforces the importance of designing developments that are accessible, safe, and sustainable. Paragraph 110 of the NPPF states that developments should ensure “safe and suitable access to the site can be achieved for all users,” while Paragraph 112 supports the need to provide for service and delivery vehicles without detracting from residential quality of life. Furthermore, Paragraphs 104–106 stress the importance of integrating transport and land-use planning to reduce congestion and promote active travel. In the context of residential developments, the NPPF encourages early consideration of servicing needs and transport impacts to ensure long-term functionality and sustainability.

3 Permitted Development

3.1 Scheme Outline

The permitted development involves the following:

“Demolition of Nos. 1-12 St Patricks Gardens. Nos. 36-41 St Patricks Gardens and Nos. 28-42 even nos. only St Columbas Close, and the caretakers facility. Erection of 2no. 2 storey buildings, 1no. 3 storeys building and 1no. part 3 and part 4 storey building; to provide 46 residential dwellings (Class C3) residential use, with associated vehicle and pedestrian access, amenity space with hard and soft landscaping, car and cycle parking, refuse and recycling storage provision, and other associated works”.

The proposed site layout plan is provided in Appendix A.

3.2 The Development

3.2.1 Vehicular Access

Vehicular access to the permitted development would be provided via a newly constructed access road forming a priority-controlled junction with Valley Drive. This access would be delivered as part of the development and is positioned to the north of the site, as illustrated on the site layout plan. The access road would comprise a 4.8m wide carriageway, suitable for two-way vehicle movement, and a 2.5m wide footway on the northern side to accommodate pedestrian activity. Visibility splays of 2.4m x 43m would be provided in both directions at the junction with Valley Drive in line with guidance from Manual for Streets, promoting safe ingress and egress. A preliminary design of the site access road and visibility splays is presented in Appendix C.

As part of the development's servicing strategy, the access road would be designed to accommodate a Large Refuse Vehicle (LRV), which would be able to enter the site, manoeuvre using the on-site turning provision, and exit in a forward gear via Valley Drive. Vehicle swept path analysis demonstrating this movement is provided in Appendix B.

Similarly, the layout has been designed to accommodate emergency vehicles, which are smaller than a refuse vehicle.

To prevent through traffic while maintaining emergency access, a collapsible bollard would be installed between the two access roads within the development. This measure would restrict general vehicular movement between the access roads while allowing emergency vehicles to pass through. The approximate location of the collapsible bollard is illustrated in Appendix A.

Furthermore, the existing public footpath traversing the site would be retained and improved. Proposed improvements include resurfacing and lighting enhancements, ensuring safe and accessible pedestrian connectivity through the site.

3.2.2 Parking

The permitted development would provide a total of 26 car parking spaces to support the net increase of 20 new dwellings, equating to a parking ratio of 1.3 spaces per dwelling. This provision is considered appropriate in the local context and is supported by 2011 Census data for the surrounding area, which indicates an average car ownership level of 1.1 cars per household. Additionally, the proposed ratio is consistent with recent local developments, including the nearby Bishop's Court scheme, where a ratio of 1.1 spaces per dwelling was agreed for 23 dwellings and 25 parking spaces.

Importantly, the existing parking spaces located within the site's red line boundary will not be removed or altered as part of the proposed development. For the proposed houses, each dwelling would benefit from one electric vehicle (EV) charging space. In the case of the proposed flats, 20% of car parking spaces would be fitted with active EV charging infrastructure from the outset, while the remaining 80% would include passive provision, allowing for easy future upgrades to active charging capability.

Cycle parking provision has also been carefully considered and would exceed the minimum requirements outlined in the Kent Vehicle Parking Standards SPG 4 (July 2006). A total of 60 cycle parking spaces are proposed—20 for houses and 40 for flats and maisonettes—ensuring ample provision for residents and visitors. To support sustainable travel further, charging infrastructure for electric cycles would be provided at 5% of the total cycle parking spaces.

3.2.3 Delivery and Servicing

The delivery and servicing strategy for the permitted development has been designed in accordance with Kent County Council's Freight Action Plan and Gravesham Borough Council's emphasis on sustainable, efficient, and safe transport operations. The plan ensures that all delivery and servicing activities are conducted in a manner that minimises disruption to the local highway network, supports sustainable travel, and maintains high safety standards.

3.2.4 Construction Phase Deliveries

All delivery and servicing operations will be managed internally within the site boundary, avoiding any obstructions to public roads such as Valley Drive or adjacent residential streets. A designated service area within the development will be used for all goods deliveries and waste collections, ensuring a safe and contained environment for operational vehicles.

To prevent queuing and minimise traffic congestion, a "just-in-time" delivery system will be implemented. Suppliers will be required to confirm their estimated time of arrival at least 20 minutes in advance. Deliveries will be restricted to off-peak hours, with delivery windows set from 10:00 AM to 2:00 PM, Monday to Friday, in order to avoid peak school and commuter traffic. A banksman will be present during all

servicing hours to coordinate vehicle movements, safeguard pedestrian and cyclist activity, and enforce adherence to site safety protocols.

Construction-phase logistics will be managed under a comprehensive Construction Management Plan (CMP), which will include detailed routing, scheduling, and environmental protocols. Vehicle access for deliveries during construction will be via the proposed new site access road off Valley Drive, with wheel washing facilities in place to prevent mud and debris from being tracked onto the public highway. Construction workers will not be permitted to park on site, aligning with Kent's sustainable transport goals. Instead, workers will be encouraged to travel via public transport or active travel modes, supported by secure cycle parking.

The delivery and servicing strategy further supports sustainability by encouraging the use of modern, low-emission vehicles and requiring all contractors and delivery companies to adhere to FORS Silver accreditation and CLOCS standards. This includes mandatory safety training, vehicle equipment for vulnerable road user protection, and robust incident reporting protocols.

To ensure ongoing compliance and flexibility, the strategy will be regularly reviewed and updated throughout the development phases. All contractors and delivery personnel will receive a Delivery and Servicing Handbook, outlining access procedures, delivery windows, safety measures, and environmental responsibilities.

Through careful planning and adherence to best practices and policy guidance, this strategy ensures that delivery and servicing operations are carried out efficiently, safely, and with minimal impact on the surrounding community.

3.2.5 Waste Strategy and Refuse Collection

A Waste Management Plan, prepared by AVAL Consulting Group Limited for Oakwood Building Contractors Ltd and issued in May 2025, supports the permitted development at St. Columba's Close, Gravesend. The plan sets out a detailed strategy for managing both construction and residential waste, aligned with national and local policy, including the Kent Minerals and Waste Local Plan (2024–2039) and Gravesham Borough Council's Waste Management Policy (2025).

Key measures include secure, purpose-built bin stores for all dwellings, with separate provisions for general waste, recycling, and food waste. Individual houses will have kerbside collection with two wheelie bins and a food caddy, while the two communal blocks will feature a dedicated store housing 1100L bins for refuse and recycling, and 140L bins for food waste. Collections will follow GBC's weekly and fortnightly schedules. The plan also promotes sustainability through waste segregation, on-site composting packs for residents, and regular coordination with the local authority to avoid service disruption. Together, these measures ensure efficient, hygienic, and policy-compliant waste management across the development.

3.2.6 Visibility and Swept Path Analysis

The analysis, which includes visibility splays (Appendix C) and a refuse vehicle swept path assessment (Appendix B), demonstrates compliance with national and local highway standards to ensure safe and functional vehicle movements.

Appendix C illustrates the visibility splays for the proposed site access on Valley Drive, produced by SWECO in 2022. The analysis includes visibility in both the northern and southern directions and demonstrates compliance with the required standards for a 30mph design speed. The visibility splays extend 2.4m back from the carriageway edge, as per the standard guidance for minor road junctions, and provide sufficient sightlines to ensure safe vehicular ingress and egress from the site. The red line denotes the site boundary, while the blue dashed lines mark the extent of the visibility splays, confirming that the required sight distances can be achieved within land either under the control of the applicant or within the public highway boundary. This ensures that visibility will not be obstructed by third-party land or development.

Appendix B presents the swept path analysis for a council-sized refuse vehicle accessing and exiting the proposed development at St Columba's Close. The analysis, also produced by SWECO in 2022, demonstrates the vehicle's inbound and outbound manoeuvres and confirms that the layout accommodates the turning requirements of a large refuse vehicle. The tracking illustrates both the wheel and body paths, with a 0.5m buffer to ensure clearance and safety. The vehicle is shown to successfully navigate the internal road network without overrunning footways or landscaped areas. This confirms that waste collection services can operate effectively without obstruction or the need for excessive reversing, in accordance with local authority servicing standards.

The visibility splay and swept path analyses demonstrate that the proposed access arrangements are both safe and operationally sound. The visibility splays meet the design requirements for a 30mph road and are fully achievable within land controlled by the applicant or within the public highway. The swept path analysis confirms that a council refuse vehicle can safely enter and exit the site without obstruction, supporting the provision of essential services. Together, these assessments confirm that the proposed development is suitable from a highways and access perspective.

4 DSP Measures and Vehicle Routing

3.1 Overview

This chapter provides details of the DSP including vehicle routing to the site.

3.2 Objectives

Delivery and Servicing Management Plans developed through the planning process seek to support sustainable development. They are drafted within the context of the guidance provided within the best practice guidance.

The DSP objectives are:

- Goods and services will be delivered, and waste removed, in a safe, efficient and environmentally friendly way, on-site and not on the public highway;
- Identify deliveries that could be reduced, re-timed or even consolidated through consultation with suppliers;
- Improve the reliability of deliveries to the site;
- Reduce the operating costs of building occupants; and
- Reduce the impact of freight activity on residents and the environment.

3.3 Measures

In accordance with Kent County Council's and Gravesham Borough Council's transport and planning guidance, the proposed management measures and servicing strategies have been structured under the following key areas: Site Design; Procurement and Servicing Strategy; Operational Efficiency; Waste Management; and Vehicle Trip Reduction. Each of these aspects is considered in the sections below to ensure the development supports sustainable and efficient access and servicing arrangements.

3.3.1 Design

The proposed development has been designed to ensure that servicing activities are undertaken on-site. Bin stores are on site.

- Risk Assessment of Servicing Areas

A risk assessment would normally be undertaken by suitably trained site management staff prior to use. This assessment will examine the following issues:

- Implementation of safe working practices; and
- Interaction with servicing vehicles.

3.3.2 Waste Management

- Waste Reduction, Storage and Removal Measures

Guidance contained within the Kent County Council's and Gravesham Borough Council's Plan identifies that developments should provide sufficient facilities for storage and collection of segregated waste.

- Refuse Collection Procedures

Refuse collection will be undertaken outside of the peak hours where possible.

- Enforcement

The contents of this DSP have been prepared in order to inform the planning authority of the servicing strategy for the site.

3.4 Delivery and Service Vehicle Access

3.4.1 Servicing the Residential Units

Servicing for the permitted residential development at St Columba's Close has been carefully considered to ensure safe, efficient, and sustainable access for service and delivery vehicles. The development layout accommodates turning requirements for a council-sized refuse vehicle, as demonstrated in the swept path analysis provided in Appendix B. All servicing, including refuse collection and deliveries, will take place within the site boundary, avoiding any need for vehicles to reverse onto the public highway. This approach aligns with Kent County Council's highway safety standards and promotes minimal disruption to the surrounding road network.

Whilst the development is being constructed, the existing residential units can be serviced from St Patrick's Gardens to the south. This takes place currently and so there would be no change.

A Waste Management Plan has been prepared to support the application, outlining the proposed storage and collection arrangements for household waste and recycling. Refuse storage areas are located within close proximity to the highway for ease of access by collection crews, while remaining discreetly integrated into the development design. In parallel, a Transport Plan has been developed to promote sustainable travel behaviour among residents and reduce reliance on private car use. The plan incorporates measures such as improved pedestrian access, cycle parking provision, and a focus on reducing the number of vehicle trips generated by servicing and deliveries. Together, these strategies form a cohesive servicing approach that is practical, policy-compliant, and environmentally responsible.

3.5 Delivery and Service Vehicle Trip Generation

Given the scale and residential nature of the proposed development—comprising 46 new dwellings with a net increase of 20 units compared to the existing site—it is expected that delivery and servicing trip generation will remain modest and in line with developments of similar size and context. The servicing requirements of the site will predominantly include routine household deliveries (e.g., parcels, groceries), maintenance visits, and scheduled waste collection.

A Waste Management Plan has been developed to support the efficient and safe collection of refuse and recyclables. The plan ensures that refuse vehicles can access the internal road network, turn within the site, and exit in forward gear, as demonstrated in the swept path analysis (Appendix B). This avoids any requirement for reversing onto the public highway and minimises disruption to surrounding road users.

The supporting Transport Plan also includes measures aimed at reducing the number of delivery and servicing trips to the site. These include encouraging residents to consolidate deliveries through the use of parcel lockers or timed deliveries and promoting walking and cycling for local trips to reduce reliance on vehicle-based services. With these measures in place, it is anticipated that delivery and servicing trips will be efficiently managed within the site without creating adverse impacts on Valley Drive or the wider highway network.

Overall, given the limited increase in residential units and the nature of modern residential servicing, it is not anticipated that delivery and servicing activities will result in any material impact on local traffic conditions. These trips are expected to be spread throughout the day and will represent a small proportion of the overall trip generation associated with the site.

3.6 Vehicle Routing to Site

Access to the proposed development at St Columba's Close will be achieved via a new priority junction from Valley Drive, a well-connected residential distributor road. The most appropriate route for service and delivery vehicles approaching the site is via the A2 Watling Street, turning onto Valley Drive via either St Benedict's Avenue or Old Road East, both of which provide direct and suitable connections to the site.

This routing strategy ensures that larger vehicles, including refuse collection and delivery vans, utilise established main roads for the majority of their journey, minimising their presence on narrower residential streets. Signage, delivery instructions, or site management protocols can be used to encourage this preferred route for servicing and delivery operators.

By directing vehicle movements along main distributor routes and minimising travel through adjacent residential areas, the proposed routing helps to reduce noise,

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improve safety, and maintain the residential amenity of the surrounding neighbourhood.

4 Conclusion

The permitted development on land at St. Columba's Close, Gravesend, represents a carefully planned residential development that integrates sustainable transport, servicing, and waste management strategies in accordance with national and local planning policies. The Delivery and Servicing Plan (DSP) has been meticulously developed to ensure that all delivery and servicing activities are conducted safely, efficiently, and with minimal disruption to the local community.

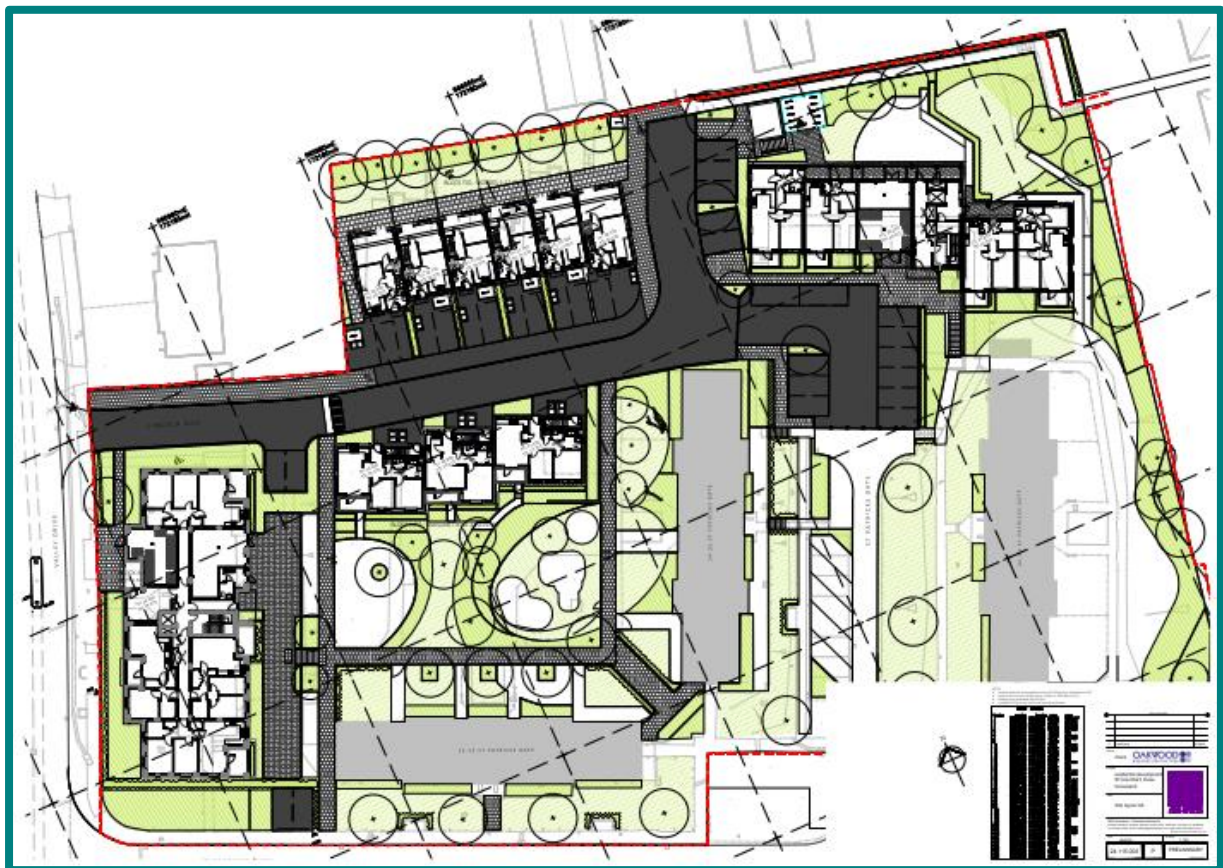
Key features of the plan include on-site servicing, including refuse collection and goods deliveries, to avoid obstruction on public roads and to minimise traffic congestion. The plan further supports sustainability by promoting low-emission vehicles, reducing vehicle trip generation, and encouraging the use of alternative transportation methods, such as cycling and public transport. The proposed vehicle routing ensures that servicing vehicles utilise main roads, avoiding narrow residential streets and maintaining safety and comfort for residents.

The site design also accommodates necessary vehicle movements, including those of large refuse and emergency vehicles, without compromising on pedestrian safety. Additionally, the waste management strategy provides for effective segregation, storage, and collection of waste, aligning with local environmental objectives.

By adhering to best practices in design, logistics, and sustainability, the proposed development and its associated DSP ensure that the project will not only meet the needs of its residents but also contribute positively to the surrounding community, reducing the environmental impact and enhancing the quality of life in the area.

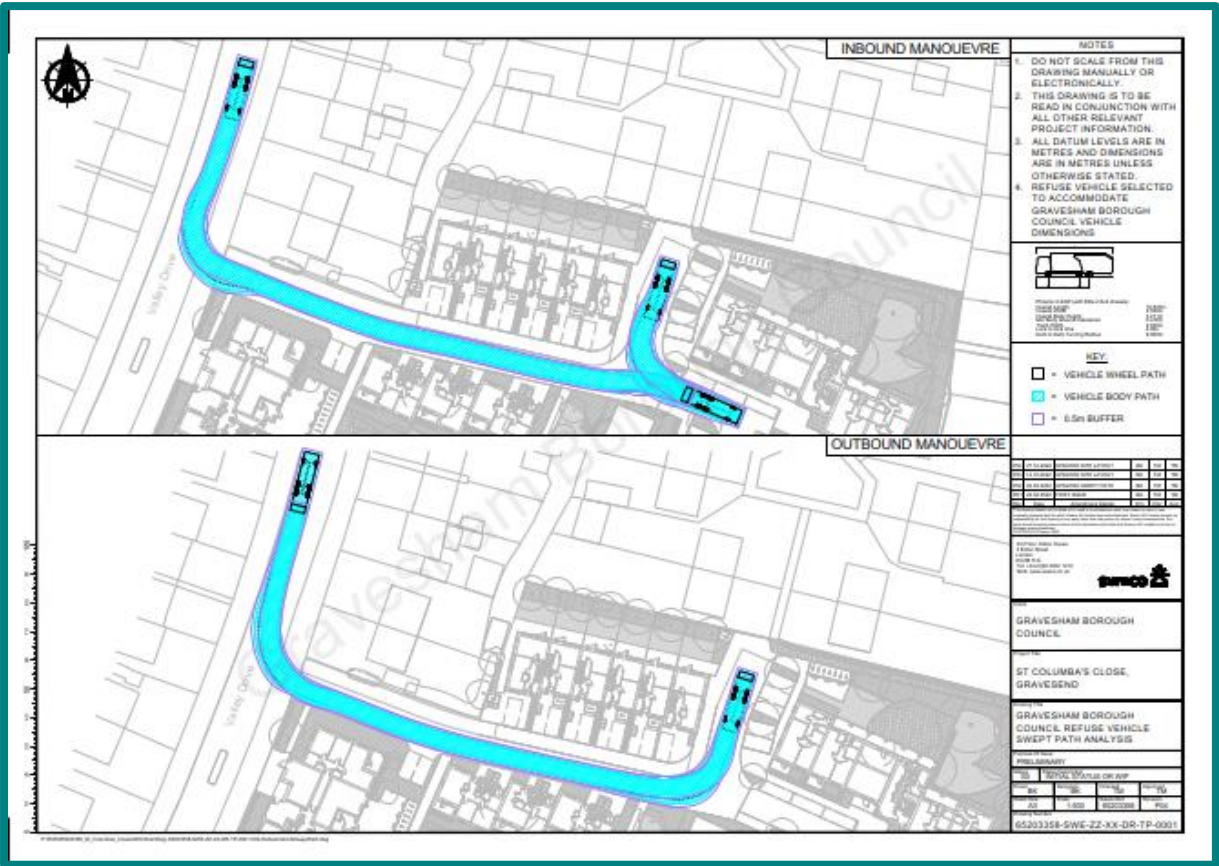
Appendices

Appendix A: Site Layout Plan



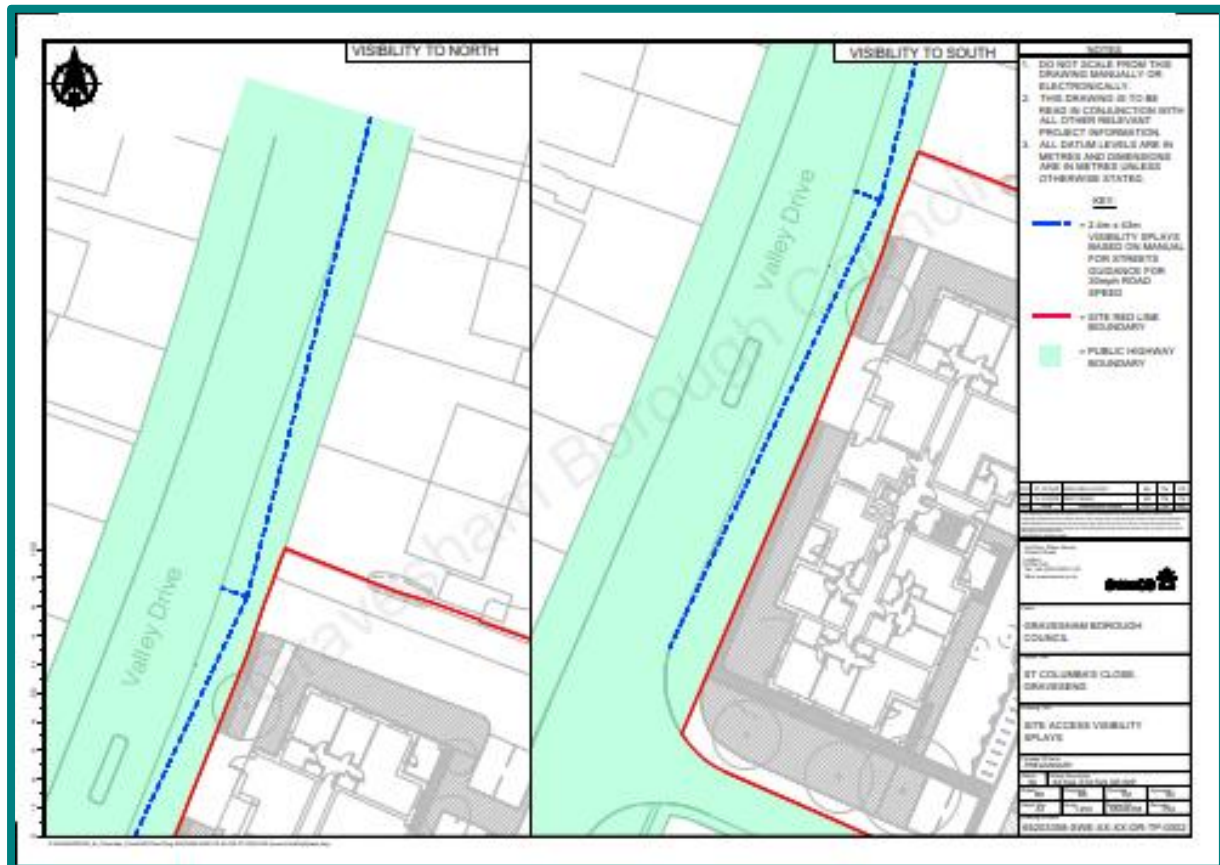
Source: Client

Appendix B: Swept Path Analysis



Source: SWECO

Appendix C: Visibility Splays



Source: SWECO