Southwark Streetscape Design Manual

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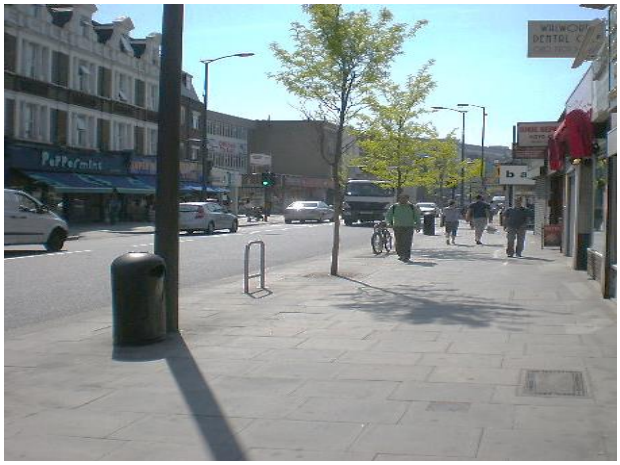
Southwark Council
southwark.gov.uk

Contents

1 Introduction

1.1 Purpose

The purpose of this Manual is to promote the improvement of Southwark's streets and open spaces. It aims to achieve attractive, safe and accessible streets by setting out guidelines and specifications for materials, street furniture and highway layout design. This Design Manual forms an essential reference for anyone who is responsible for making design, management and operational decisions that affect the streets in the London Borough of Southwark. It complements Southwark's forty-five design standards, visit www.southwark.gov.uk/SSDM.



By providing a borough-wide, coherent approach to the streetscape design, the design manual will help define and strengthen the character of Southwark, as well as ensure good design principles are more widely adopted so a higher quality of implementation and maintenance can be achieved.

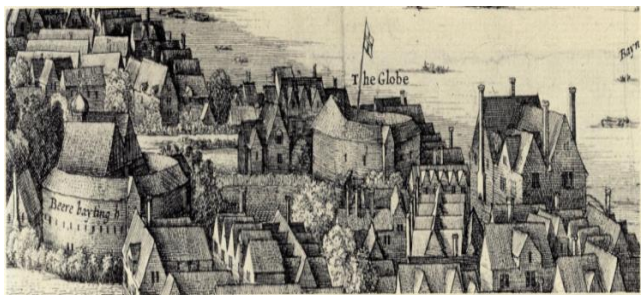
1.2 History of Southwark

Southwark is London's most historic borough. It was an ancient borough in the county of Surrey, made up of a number of parishes, which increasingly came under the influence and jurisdiction of the City of London.

Two roman roads: Stane Street and Watling Street meet in Southwark at what is now Borough High Street. Southwark is recorded in the Domesday Book as *Sudweca*. The name means "southern defensive work" and is formed from the Old English *sūth* and *weorc*. The southern location is in reference to the City of London to the north; Southwark being at the southern end of London Bridge.

During the early Middle Ages, Southwark developed an important market that occupied the High Street from some time in the 13th century, but was removed in order to improve traffic to the Bridge. Under a separate Act of Parliament in 1756 the Borough Market was confirmed in its present site. The area was renowned for its inns, especially The Tabard from which Chaucer's pilgrims set off on their journey in *The Canterbury Tales*.

In 1587, Southwark was given its first playhouse theatre, *The Rose*. Both Christopher Marlowe and William Shakespeare, two of the finest writers of the Elizabethan age, worked at The Rose. In 1599 the Globe Theatre, in which Shakespeare was a shareholder, was erected on the Bankside. It burned down in 1613, and was rebuilt in 1614, only to be closed by the Puritans in 1642 and subsequently pulled down not long thereafter. A modern replica called Shakespeare's Globe, has been built near the original site.



The Mayflower set sail for America from Southwark in July 1620, but had to stop and regroup in Plymouth after its companion ship, the Speedwell developed serious leaks. The Mayflower left Plymouth in September 1620. Southwark had a busy waterfront with many docks and warehouses well into the 20th century before London began to decline as a Port. The area is now a vibrant business centre.

Southwark is 28.85 km^2 area, with 331km of carriageway, 469km of footway and a population of 303,000 (3.5% of the total population of London). There are 262,000 jobs in the Borough which is 4.9% of the total jobs in London.

1.3 Principles of Streetscape Design

Consistency and Clarity

Our coordinated approach to design gives our streets a consistent appearance. We promote a palette of products and materials that compliments the character of Southwark's streets.

Safe and Fit for Purpose

The way we design our streets enables people to use space efficiently and safely by:

- Ensuring vehicle speeds are appropriate for the surroundings. We consider vehicle speed when designing new street schemes.
- Creating a visual language for streetscapes. We aim to improve 'legibility', so that bollards, guard rails, signs and road markings are minimal and streets are uncluttered.
- Adequate lighting provision. We consider street safety and reduce the fear of crime, as well as the ambience of the surrounding area.

Local Distinctiveness

Our streetscapes acknowledge local character and distinctiveness. Schemes respond to agreed needs but do not compromise local character.

We respect landscape, ecology, built environment and local heritage. We consider alternatives to standard approaches in some areas to cater for local circumstances.

Access for All

Streets cater for vehicles, pedestrians, cyclists and other road users. We work to ensure safe journeys for all and prioritise non-car movement where appropriate. We do this by providing uncluttered routes that are adequately lit and accessible, and shared highway space.

Our duty is to consider and protect everyone who uses the roads and pavements, including those with disabilities. We want to create streets where:

- People of all abilities can access different methods of transport and change between them.
- People can move along footways unhindered by street clutter, poor-quality materials and badly placed obstacles.
- Conflict between vehicles and pedestrians is reduced.
- There is space on the pavements where people can meet socially and where vibrant, well-managed street activity can flourish.

Sustainable Quality

We manage the streets in a sustainable way by:

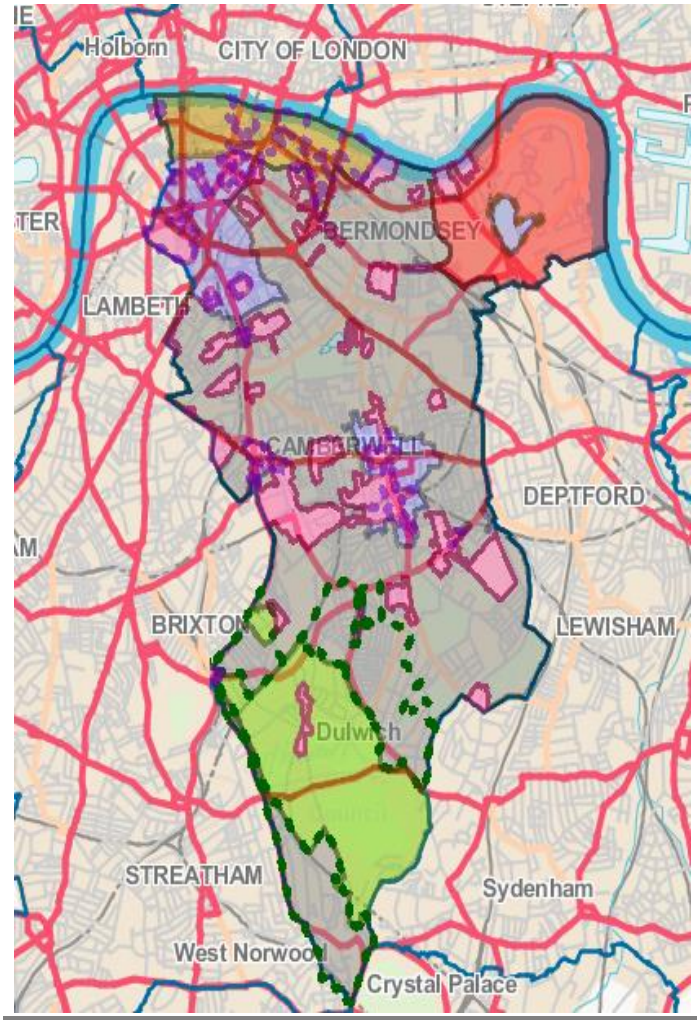
- Using strong, durable materials and building methods that guarantee a long life but are flexible to change.
- Where possible, ensuring the materials we use are sustainably produced and sourced.
- Exploring new technologies that offer renewable sources or reduce dependence on fossil fuels.
- Ensuring existing streetscapes are maintained through regular inspection and timely repairs.
- Ensuring new streetscapes meet stringent standards. Where developers build roads with a view to their adoption by the council acting as the highway authority, they need to meet our design and construction standards. The Department for Transport's Manual for Streets (2007) provides an overview of the issues that developers will need to consider when liaising with local authorities.

2 How to use this Manual

2.1 Regulating Plan

The manual includes a Regulating Plan that defines the basic default palettes of materials and street furniture for Southwark. They have been grouped according to their suitability for the different character areas within Southwark.

It is important to note that the requirement to comply with palettes linked to Regulating Plan designations does not currently apply to streets in Southwark that are not part of the Highway for which Southwark Council is the Highway Authority. As such parks, many estate roads and roads controlled by Transport for London are exempt. However, in the event that such roads are required for any reason to be constructed to the adoptable standards of the Council acting as Highway Authority (e.g. by requirement of a Planning Condition or Obligation) then the palette requirements for the relevant Regulating Plan designations shall apply.



There are six character areas:

- **General** Any area not in one of the other Specification Area designations.
- **Docks** Rotherhithe ward and Surrey Docks ward (as defined by their constitutional boundaries at the time of publishing).
- **Village** "conservation area" designations established under the Planning (Listed Buildings and Conservation Areas) Act 1990 by the council acting as Local Planning Authority that are within Dulwich Community Council area (as defined by its constitutional boundaries at the time of publishing), with the exception of the following:
- **Heritage** "conservation area" designation established under the Planning (Listed Buildings and Conservation Areas) Act 1990 by the council acting as Local Planning Authority, excluding areas within Dulwich which fall within the "Village" Specification Area designation.
- **Town Centre** "major town centre", "district town centre" and "local centre" policy designation boundaries defined within the adopted Local Development Framework Proposals Map.
- **World Centre** the "strategic cultural area" policy designation boundaries defined within the adopted Local Development Framework Proposals Map.

A live, on-line version of the Regulating Plan can be found in the SSDM pages at www.southwark.gov.uk. This can be used to zoom in to identify individual streets and properties when proposing a scheme.

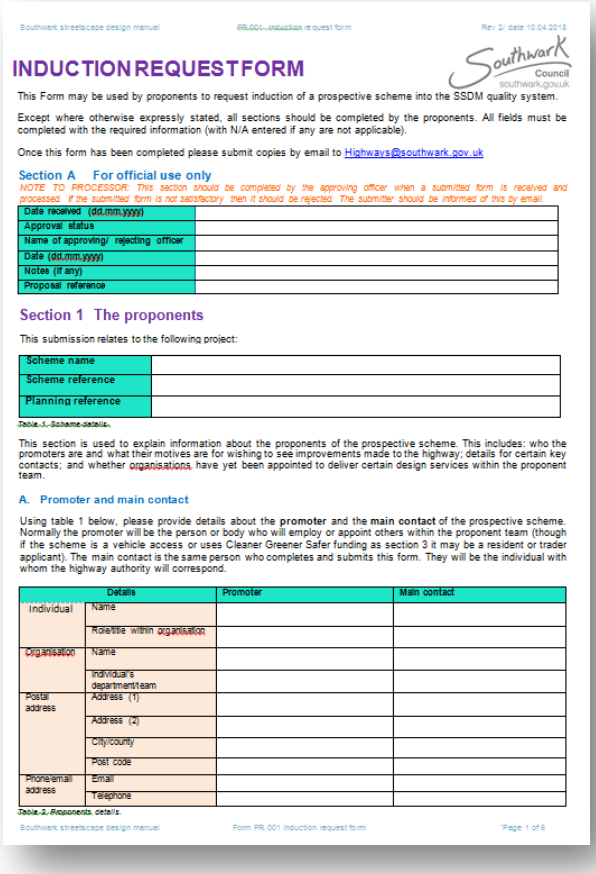
Compliance with this design manual is mandatory. By exception, deviation from the manual will be agreed by the council's approving officers.

All schemes being promoted in Southwark must follow the council's design quality process to ensure a structured approach to streetscape design.

2.2 Induction of Schemes into SSDM Quality System

Requesting Induction

Any proposed scheme to create or improve a Highway needs to be captured on the SSDM Quality System. The information required only needs to be very basic about the nature of the envisaged works. No significant design proposal drawings are required at this time. The intention is to capture any proposal as early as possible.



Southwark streetscape design manual — FR.001 - Induction request form — Rev 2/ date 10.04.2018

INDUCTION REQUEST FORM

This Form may be used by proponents to request induction of a prospective scheme into the SSDM quality system.

Except where otherwise expressly stated, all sections should be completed by the proponents. All fields must be completed with the required information (with N/A entered if any are not applicable).

Once this form has been completed please submit copies by email to Highways@southwark.gov.uk

Section A For official use only

NOTE TO PROCESSOR: This section should be completed by the approving officer when a submitted form is received and processed. If the submitted form is not satisfactory then it should be rejected. The submitter should be informed of this by email.

Date received (dd.mm.yyyy)	
Approval status	
Name of approving/ rejecting officer	
Date (dd.mm.yyyy)	
Notes (if any)	
Proposal reference	

Section 1 The proponents

This submission relates to the following project:

Scheme name	
Scheme reference	
Planning reference	

Table 1. Scheme details.

This section is used to explain information about the proponents of the prospective scheme. This includes: who the promoters are and what their motives are for wishing to see improvements made to the highway; details for certain key contacts; and whether organisations have yet been appointed to deliver certain design services within the proponent team.

A. Promoter and main contact

Using table 1 below, please provide details about the **promoter** and the **main contact** of the prospective scheme. Normally the promoter will be the person or body who will employ or appoint others within the proponent team (though if the scheme is a vehicle access or uses Cleaner Greener Safer funding as section 3 it may be a resident or trader applicant). The main contact is the same person who completes and submits this form. They will be the individual with whom the highway authority will correspond.

Details		Promoter	Main contact
Individual	Name		
	Role/title within organisation		
Organisation	Name		
	Individual's department/team		
Postal address	Address (1)		
	Address (2)		
	City/county		
	Post code		
Phone/email address	Email		
	Telephone		

Table 2. Proponents details.

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Each scheme description should consist of works within a single contiguous site (though this may be a statutory zone such as a 20mph zone or controlled parking zone if this is logically related to the scheme objectives/ends). However, including multiple sites within a single constitutional Ward or Community Council area may be permitted for very minor schemes (For instance, introducing pedal cycle parking stands in multiple locations around a Ward).

The information provided will be used to enter the new scheme into the Highway Authority's Scheme Database as a Proposal. This is to assist the Highway Authority deliver its statutory duty to coordinate works in the highway.

Once the scheme has been accepted onto the database, the Approving Officer will be assigned to the scheme and the scheme reference number issued. The Approving Officer will contact the Main Contact for the promoters to arrange a meeting to discuss next steps and clarify any aspects of the Quality System that the promoters may be uncertain about.

2.3 Southwark Highway Scheme Pathways Definitions

Depending on the size and complexity of the proposed scheme, there are three pathways through the SSDM Quality process. These pathways simplify the process for less complex schemes. See Table 1 below.

Pathway	Scope of likely appropriate schemes
A	• Schemes that include the creation of any new street or new highway. • Schemes that include the creation or large comprehensive improvement / enlargement of public spaces in either existing or new streets. • Medium schemes that involve substantial changes to existing street geometry.
B	• Internal program-based asset renewal works which involve minor improvements / changes rather than just like for like renewal. • Internal program-based asset renewal works to pavements, lighting, trees etc. • Point based improvements that are more technically / statutorily complex e.g. zebra crossings, "floating" bus stops. • Simple, clearly defined developer improvements (Majority of S278/S38 works).
C	• Minor isolated changes to waiting and loading restriction or access prohibitions (and associated TMOs) that require no physical changes other than to signs and road markings. • Very simple point works or program-based internal asset renewal works. Typically in response to minor local issues raised by the public or elected members (including via CGS). • Scoping designs to investigate plausibility of schemes.

Table 1. Scope of works appropriate to each Pathway.

Each Pathway definition has design information that must be provided as part of the design process. However as the complexity of the schemes decrease from Pathway A down to Pathway C, the required design information decreases too. The implications for each Pathway are described in Table 2 below.

Implications		Pathway A	Pathway B	Pathway C
Entry onto Schemes Spreadsheet required		✓	✓	✓
Schemes to be part of a group		(✓)	(✓)	(✓)
Scheme Certificate required		✓	✓	
Performance assessment reports (PARS): required to confirm success at achieving objectives/thresholds		✓		
Quality Plan Components	Objectives: the fundamental objectives of the scheme. Some may be identified as priority or compulsory.	✓	✓	
	Success thresholds: Describe what constitutes success in achieving the objectives at different levels. Basis for later performance assessment (if required).	✓		
	Monitoring indicators, surveys and assessments: used to define the success thresholds in greater detail, where required.	✓		
	Proposed Physical Measures (PPMs). These are broadly defined design approaches that teams must attempt to incorporate into their proposals to deliver particular objectives. They are discharged if it is shown they are not feasible/ desirable.	✓		
	Compulsory Works: *New* These are very well defined design improvements that must be incorporated into proposals.	(✓)	✓	✓
	Works limit plan: Defines the maximum area in which standards must be complied with.	✓	✓	✓
	New highway extents plan (only if new streets are proposed): confirms minimum street widths, alignments and access points for new streets.	(✓)	(✓)	
	Funding: Details to be included in the relevant columns of the scheme spreadsheet.	✓	✓	✓
	Program List: Spreadsheet that allows multiple schemes to be inducted at once for program based renewal works and the like. It then also serves as their quality plan and scheme certificate (the later not being produced for those schemes).			✓

Ticks in brackets mean this item is to be complied where applicable.

Table 2. Required information for each Pathway.

Reactive repairs identified through the inspection and repair service (potholing/flagging etc.) and works by statutory undertakers are not included in this process.

2.4 Structured Quality Design Process

The main purpose of the Design Process is to ensure a structured approach to the development, review, approval, construction and monitoring of schemes to create or improve Highways. This helps provide certainty for all interested parties and assists in good project management. The sequence of intervals is based on a logical arrangement of tasks and activities that need to be completed before latter ones can be reasonably commenced. In order to ensure that the process is followed and the activities in each interval are completed, the work phases as shown in Table 3 below need to be followed.

Approval Process

On the completion of each of the stages as shown in Table 3 below, the consultant/ developer will produce a set of minutes of the meeting in which all the relevant details are captured and agreed. If so required, any departure certificates will be approved and signed off by the Approving Officer. A letter of approval of the construction drawings for all highway works will be issued by the Approving Officer after completion of the design review process.

The SSDM Quality System stages are described in Table 3 below.

Phase	Workstage	Mandatory for Pathway
Proposal	Conduct a meeting to review the proposal and for the Approval Officer to assign the appropriate SSDM Scheme Pathway.	A (and B where applicable)
Outline Design	On completion of the outline design a review will be undertaken to: 1. Review the design to confirm suitability of the scheme 2. Agree any Departures from Design Standards 3. Carry out Public Consultation activities and RSA/ACA site visits if applicable. 4. Stopping Up: Where relevant, agree Stopping Up proposals for consultation.	A (and B where applicable)
Detailed Design	On completion of the outline design review the detail design can be undertaken. Typical items of work to be undertaken during the detail design. The following is an indicative list only. 1. Carry out Public Consultation activities and RSA/ACA site visits if applicable. 2. Issuing responses to RSA/ACA Audit Reports if applicable. 3. Approve final version of the Quality Plan 4. Submit information for statutory/ constitutional consultation on Traffic Management Orders (TMOs) and/or Stopping Up proposals. 5. Review consultation responses. Agree minor modifications to the Detailed Design Proposal Package Approved. 6. Confirm the Order(s). 7. Undertake on submission of final detail design a comprehensive design review. 8. Approve the final Detailed Design Proposal Package for progress to construction.	A, B and C
Construction	On approval to go to construction the following are typical items of work to be undertaken. The following is an indicative list only. 1. Obtain 'before' data for monitoring purposes in advance of the start of works. 2. Approve various work management plans. (Traffic management plans etc.) 3. Construct the works and carry out associated inspection / supervision activities. 4. Snagging Self-Assessment by the Contractor and 5. Agree snagging issues and any modifications identified in the RSA to be addressed immediately and the 'watch' items that can be monitored.	A, B and C
Handover and Close Out	On completion of the Maintenance period the following are typical items of work to be undertaken. The following is an indicative list only. 1. Carry out any monitoring data collection activities and RSA/ACA site visits. 2. Under take final snagging inspection. 3. Agree adjustments to the constructed works / snagging issues. 4. Agree adjustments to the Maintenance Plan 5. Implement and sign-off any snagging actions/ adjustments to the constructed works that need to be addressed.	A, B and C
In Use	If applicable on completion of the 36 Month Post-Completion the following are typical items of work to be undertaken. The following is an indicative list only. 1. Carry out any monitoring data collection activities and RSA/ACA site visits. 2. Agree any remaining adjustments to the constructed works /snagging issues. 3. Implement and sign-off any remaining snagging actions/adjustments. 4. Hand over the Health and Safety File.	A (and B where applicable)

Table 3. Southwark Quality Design Process

Southwark Highway Scheme Pathway A Flowchart

Appendix A describes both the Outline Design process and the Detailed Design process for Pathway A schemes. Complex schemes that follow Pathway 'A' will have to go through both Outline Design stage as well as Developed/ Technical Design (or Detailed Design) stages.

Pathway B Flowchart

Less complex schemes that follow Pathway 'B' do not have to go through the Outline Design stage. Generally they can progress to the Developed/Technical Design (or Detailed Design) stages after the Preparation and Brief has been accepted. Appendix B describes the Design process for Pathway B schemes.

Pathway C Flowchart

Pathway C schemes are by definition minor works with clear objectives, using established construction methods. Provided the schemes are inducted onto the Schemes spreadsheet for coordination purposes and a works limits plan is produced, only part one of the quality plan is required. Appendix C describes the Design process for Pathway C schemes.

2.5 Design Workshops and Meetings

Minimum Number Workshops/Meetings Required

The number of meetings that take place for a complex **Pathway A** scheme will be dependent on the scheme. For example:

i. Design workshop to discuss draft design drawings and departures.
ii. Draft Quality Audit workshop to discuss safety audit, consultation results and compliance check.
iii. Design workshop to discuss detailed design submission.
iv. Quality Audit Workshop.

(See Appendix A for when these meetings should occur in the scheme design process.)

For **Pathway B** schemes it is recommended to hold two design quality workshop meetings. The first to discuss draft drawings produced in the preparation/brief proposal stage. It will discuss any proposed departures; identify consultations, safety audit requirements and potential Traffic Management Orders. Depending on the complexity of the Pathway B scheme, this meeting may be very short, or even dismissed with the agreement of the approving officer. The second meeting is to discuss detailed design, consultation results, and any necessary amendments. (See Appendix B for when these meetings should occur.)

Pathway C schemes do not require a mandatory meeting, but can benefit from workshops if there are issues that need resolution.

Design Workshop/Meeting Attendees and Materials

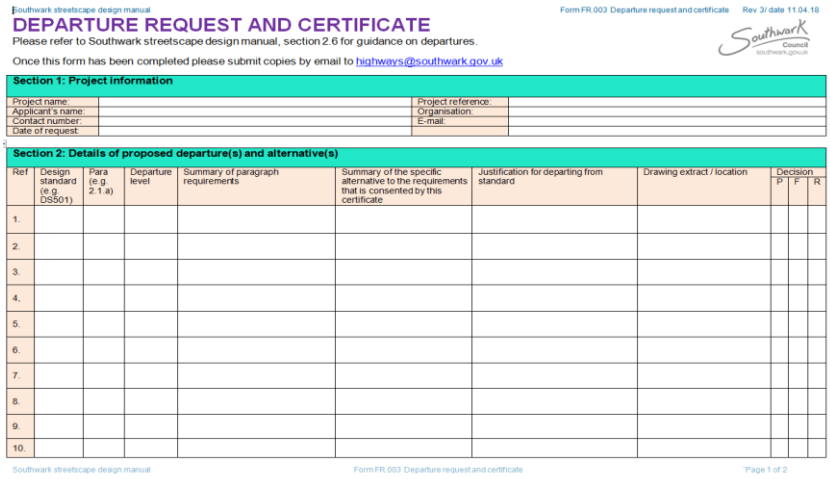
The Approving Officer and the Main Contact for the scheme as minimum attendance, but it is usual for the design engineer and the project manager for the scheme to also attend. The Approving Officer or Project Manager may invite other council officers to attend if they have relevant input (e.g. tree officers or the Traffic Manager). Similarly, the Main Contact may invite key staff (e.g. contractor/ site foreman, design engineers).

The promoter/project team is requested to bring copies of their design to the meeting together with plans and such other information as may be necessary to reasonably inform discussions. It is recommended that copies of this information are provided to the Approving Officer and Project Manager three days before meetings so that meetings are more productive.

2.6 Departures from Design Standards

Types and Levels of Departure

Departures from design standards will only be accepted where it has been demonstrated to the satisfaction of the council's approving officer that there are no other options and the departure is required. All Departures will be formally submitted for review.



Southwark streetscape design manual Form FR.003 Departure request and certificate Rev 3/ date 11.04.18

DEPARTURE REQUEST AND CERTIFICATE

Please refer to Southwark streetscape design manual, section 2.6 for guidance on departures.

Once this form has been completed please submit copies by email to highways@southwark.gov.uk

Section 1: Project information

Project name:		Project reference:	
Applicant's name:		Organisation:	
Contact number:		E-mail:	
Date of request:			

Section 2: Details of proposed departure(s) and alternative(s)

Ref.	Design standard (e.g. DS501)	Para (e.g. 2.1.a)	Departure level	Summary of paragraph requirements	Summary of the specific alternative to the requirements that is consented by this certificate	Justification for departing from standard	Drawing extract / location	Decision P	F	R
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										

Southwark streetscape design manual Form FR.003 Departure request and certificate *Page 1 of 2

As with Level 1 departures, the Project Team will have to convince the Group Manager that there are no other options and the departure is required.

There are two general Types/Levels of Departure that may apply:

i. Basic Level 1 Departure:
This is the most common departure, typically required where there is a viable alternative, but the Authority wishes to avoid or restrain that alternative (e.g. use of many road signs and markings). The council's officer appointed to the scheme can review and approve these basic departures. The majority of SSDM requirements are of this level and the process is very simple. All that is required is for the Project Team to demonstrate to the Approving Officer that:
- The proposed Departure is sensible.
- Any noted conditions that may be explained in Design Standards are satisfied.

The council's officer appointed to the scheme is responsible for retaining information within the Scheme File for future internal audit.

ii. Basic Level 2 Departure:
These departures are reserved for things considered undesirable by the authority and only likely to be appropriate in exceptional circumstances (other approaches being strongly favoured). They are more complex in nature and involve a number of stakeholders or interested persons. The council's group manager will be responsible for all Level 2 departures. This level of departure is often indicated by the phrase "should" or "should not" in the design standards (e.g. in the event it was stated that "this method of construction should not be used", or "minimum width of 1.8m should be provided", then a Level 2 Departure is required.

Departure Requests

Departure requests must be submitted and agreed in advance of the submission of design proposal information. The earliest point in the Development Process at which Departure requests may be made and determined is during the Outline Design workshop. Departure requests are specific to individual schemes. Departures may not be requested, and will not be approved, for multiple schemes at once.

Southwark Council will keep a log of approved departures and will undertake an annual review as part of our continuous improvement process. If the same departures are often approved, then this will be used to inform amendments to our design standards.

Special Placemaking Opportunity Departures and Design Pilot Departures are rare and may only be made if an SPO or Design Pilot Dispensation was approved or instructed during the Design Briefing. Consequently they are not shown on the departure form. However, the Approving Officer may be contacted for advice on how to amend the form to submit a Design Pilot or SPO Departure.

When a formal Level 1 Departure is requested, applicants should try to anticipate the likely concerns of Approving Officers. Design Standards will often note conditions that must be demonstrated if departures are requested or circumstances in which requests are likely to be met favourably.

Level 2 Departures require a detailed description of why the Departure is required, description of the variance from the Southwark Streetscape Design Manual (SSDM) requirement and a drawing showing the SSDM requirement and the proposed departure requirement.

Requests and Approvals for both Levels of Departure may relate to more than one SSDM design requirement at a time provided they relate to a single coherent issue and must be logically indivisible from one another.

The justification for Basic Level 1 and Level 2 Departures are limited to:

i. Construction feasibility (excluding cost).
ii. Cost to the Council.
iii. Network Management impact.
iv. Road safety.
v. Maintainability.
vi. Accessibility (e.g. vulnerable pedestrians).

If a SPO Dispensation applies such that a SPO Departure can be made then requests may also be justified using the following further grounds:

i. Visual amenity.
ii. Benefit to social interaction.

A submitted Departure request is reviewed by the council's group manager/approving officer. The Applicant will be contacted to confirm whether the submission is Accepted or Rejected via email or other correspondence. Where information is found to be unacceptable, the submission will be returned to the Applicant as rejected.

If circumstances change to the extent that the justification for the Departure ceases to exist, the Departure Approval may be revoked by the Group Manager. An appeal may be made by the applicant to the Head of Highways.

Where relevant, the Approving Officer may require commuted sums or internal charges to be paid to cover the additional costs to the Highway Authority that are likely to be borne as a result of the approved departure.

2.7 Special Placemaking Opportunities (SPOs)

Criteria for Dispensations

Special Placemaking Opportunities (SPO) Dispensations may be approved to support the delivery of more bespoke design proposals within small, well defined areas of streets and spaces. The emphasis of any SPO will be that the proposal will create a better scheme than that possible with the SSDM requirements.

SPO Dispensations may be proposed by either Promoters or internal Planning and Regeneration Officers. From time to time, Approving Officers may also suggest to the above parties that they consider proposing Dispensations.

SPO Dispensations may only be approved during the Outline design meeting with Highways/Transport officers. This is to ensure that all parties consider the programme and cost.

The detail of each Dispensation must be recorded in the Project's Quality Plan. Details must include:

i. Spatial extents of the Dispensation. This is defined on the Works Limit Plan.
ii. Special Objectives that will delivered and the Potential Physical Measures through which it is initially proposed to achieve these.
iii. Associated Monitoring Indicators that will be used to evaluate the success in achieving the Objectives.

If an SPO Dispensation is approved then the following additional requirements apply:

i. Mandatory inclusion of Outline Design Workstages.
ii. Preparation of a minimum of three Outline Design options.

iii. Mandatory inclusion of additional Design Workshops. These Workshops will inform the agreement of the design proposals as well as snagging and monitoring following implementation.
iv. All Departures to be subject to Final Confirmation at the end of Detailed Design when it can be confirmed that the SPO related Objectives committed to have been fundamentally delivered.
v. Additional Approving Officer fees to cover additional Approving Officer involvement.

The Head of Highways may revoke approved SPO Dispensations if it becomes clear that the project team are not acting to deliver the related SPO objectives or it is accepted that delivering the agreed objectives is no longer viable due to a fundamental change in constraints or other key scheme influences.

2.8 Quality Plans

Purpose of Quality Plans

The purpose of a Quality Plan is to confirm for each Project:
i. Spatial boundaries
ii. Objectives.
iii. Indicators that will be used to measure how successful the above objectives are.
iv. Matters that are out of scope and therefore do not need to be addressed by design proposals.
v. Potential Physical Measures (or PPMs).
vi. Access points, alignments and minimum widths for new streets and spaces.

A full Quality Plan (both Part 1: Design Brief and Part 2: Monitoring Plan) is required for Pathway A schemes. Pathway B Schemes will be reviewed by the Approving Officer to decide if the objectives of the scheme require a Monitoring Plan (Part 2 of the Quality Plan). Only the Design Brief (Part 1 of the Quality Plan) is required for Pathway C schemes.

Design Brief Details (Part 1 of Quality Plan)

This requirement is used to confirm the following information:

i. Potential Physical Measures (PPMs)
PPMs are physical interventions that the Project Team must consider to deliver particular agreed Objectives. They must be mutually agreed between the parties. If a Special Placemaking Opportunity Dispensation is approved for a part/s of the Project Area then any PPMs relating to these must be separately stated. PPMs are normally only specified for areas within the existing adopted Highway.

ii. Design Matters that are Out Of Scope
This section is used to state any Design Matters that it is *exceptionally* agreed to exclude from the scope of the improvements that must be carried out within the Project Area. These Matters are referred to as Out Of Scope. The practical consequence of a Design Matter being Out Of Scope is that requirements in SSDM Design Standards associated with it do not then need to be met.

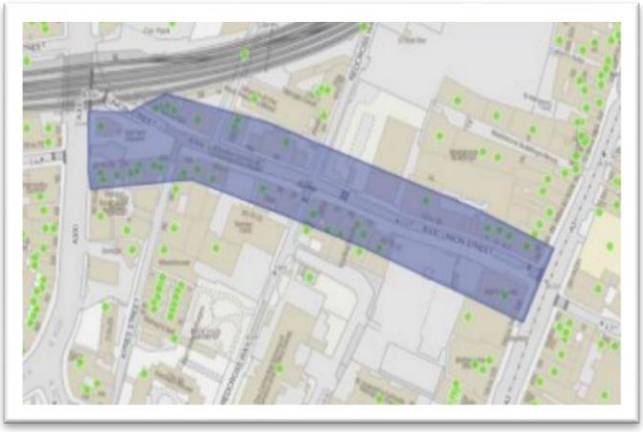
2.9 Scheme Submission Requirements

Design Brief Detail Requirement

This requirement is used to confirm the Objectives and Potential Physical Measures (PPMs) for Pathway A, schemes and if required, for Pathway B schemes.

Works Limits Plan

This Plan should confirm the following information over an OS base map scaled at 1:500 or closer:



Project Area

This is the minimum area(s) within which it is agreed the Project will carry out improvement works. On a case specific basis the Project Team may also be required to carry out minor works outside of the Project Area to facilitate works within it. Examples include updating zonal traffic signs or speed limit signs due to changes affecting Traffic Management Orders and Speed Limit Orders within the Project Area.

Special Placemaking Opportunity (SPO) Dispensation

If a SPO Dispensation is Approved for a part/parts of the Project Area then the spatial limits of this must be identified. The reference code and name for that Dispensation must also be stated.

Design Pilot Dispensation

If a Design Pilot Dispensation is Approved for a part/parts of the Project Area then the spatial limits of this must be identified. The reference code and Subject of that Pilot must also be stated.

Areas associated with Design Matters that are Out Of Scope

If it has exceptionally been agreed that certain Design Matters are Out Of Scope within parts of the Project Area then those locations may be identified for clarity, but this is not mandatory.

New Highway Extents Plan

This Plan is only required if the Project will include any proposed new Highways, or proposed new accesses from the existing Highway (including vehicle crossings).

This Plan must confirm the following information over an OS base map scaled at 1:500 or closer:

i. The location of new points of access to new streets and spaces from the existing Highway and any proposed Vehicle Crossings from the same.
ii. The centreline alignments of new streets and spaces.
iii. The minimum widths of new streets and spaces.

Any dimensions required on this drawing should be correct to the nearest centimetre and will be taken as such when interpreting the information in future.

Document Submittal for all S278 and S38 Schemes

Appendix D details the complete submission requirement. Please Note: On reviewing the submission, if any of the listed documents are missing then the submission will be rejected; unless it has been agreed with the Approving Officer that some documents may be omitted for smaller schemes.

2.10 Performance Assessment Reports (Pathway A Only)

The purpose of each Performance Assessment Report (PAR) is to evaluate the success of design proposals or constructed works in achieving the agreed Objectives in the Quality Plan for a Project. In doing so, PARs encourage continued focus by all parties on adherence to Quality Plans. PARs are concerned only with delivery of agreed Quality Plan Objectives.

The evaluation of how successful the design proposals and constructed works are in meeting the individual Quality Plan Objectives are:

i. Scoring each proposal/works in achieving the Objective as follows:

- A – Objective substantially exceeded.
- B – Objective met.
- C – Objective partly met.
- N –Objective not achieved.

ii. Justification:
The assessor must provide justification for the score they have assigned.

iii. Reasons for failure/shortfall
If an Objective has been scored as either C (Objective partly met) or N (Objective not achieved) then the reasons for the shortcoming must be explained and justified.

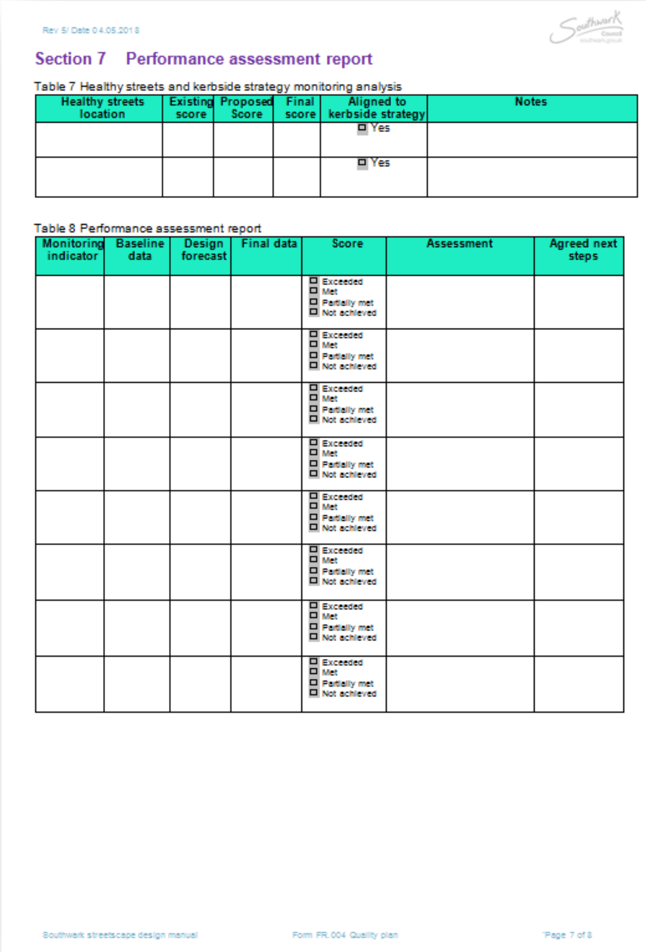
2.11 Continuous Improvement

The head of highways will undertake an annual review of the following items to check conformity with this procedure:

i. A sample of Quality Plans and associated documents.
ii. A sample of Departure Requests and determinations.
iii. A sample of PARs.

If it becomes apparent that a specific Departure is often approved, then this information may be used to inform the need to amend our Design Standards accordingly.

The Standing Order Procedure will be reviewed annually by the Head of Highways and updated where appropriate.


Rev 5/ Date 04.05.2018

Section 7 Performance assessment report

Table 7 Healthy streets and kerbside strategy monitoring analysis

Healthy streets location	Existing score	Proposed Score	Final score	Aligned to kerbside strategy	Notes
				☐ Yes	
				☐ Yes	

Table 8 Performance assessment report

Monitoring indicator	Baseline data	Design forecast	Final data	Score	Assessment	Agreed next steps
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		
				☐ Exceeded ☐ Met ☐ Partially met ☐ Not achieved		

Southwark streetscape design manual Form FR.004 Quality plan Page 7 of 8

3 Street Design

3.1 Key Design Principles

The relationship of street to buildings should be judged by thinking in three dimensions, so designers avoid positioning street furniture near doorways, and they relate the height of lighting columns to the eaves line of buildings. Trees can enhance the streetscape by framing views of buildings.

Understanding how, why and in what numbers people and vehicles use a street informs decisions about space allocation and access. Consideration should be given to the needs of people with mobility problems, who are particularly sensitive to changes in level, the positioning of street furniture and signs, and the nature and condition of surfaces.

Streets should not be considered in isolation. They are part of a network and good design will link streets both for ease of movement and aesthetically. It is conventional practice to classify roads and streets on the narrow criterion of traffic function. Typically road design aims to avoid conflicts between different road users, by promoting safe and efficient traffic flow. This approach can inadvertently ignore the wider function of the street as a route for pedestrians and cyclists and a place where people live, work and socialise

The effectiveness of traditional approaches to minimising risk to pedestrians by segregating them from traffic and using engineering devices to strictly designate space are being challenged. Increasing evidence suggests that such measures actually encourage motorists to drive less considerately and deter people from walking because it is frustrating. More dangerous streets can be the result.

Standards of maintenance have a great effect on people's perception of street quality. Good design reduces the future maintenance burden by selecting materials on the basis of whole life costing. It is particularly important that designs assist rather than frustrate the cleansing of streets.

Capital works can impose a strain on maintenance budgets, leading to difficulties in maintaining new schemes. When works are planned the revenue implications should be assessed and reported to members. Schemes should not proceed where a significant increase in maintenance costs will not be covered by a commensurate increase in the maintenance budget.

3.2 Southwark's Kerbside Strategy

The kerbside is the space which people often think is just for car parking; but examples of kerbside use can include street seating, bus stops, cycle and car parking, waste collection, servicing and deliveries and tree planting. The market stalls at East Street in Walworth and the white posts and grass verges of Dulwich are examples of how the kerbside can be used to shape a place's identity.

We predict a huge growth in the population of Southwark to something like 369,000 people by 2031. Southwark is already densely populated, with 10,632 persons/sq.km compared to the London average of 5,510.

We estimate that there are 361,200 deliveries made in Southwark each week. The increase in employment, population and consumer behaviour is likely to make deliveries and serving increase by another 30%.

Car ownership in London has generally declined by around 5.1% and in Southwark this is even faster with a 6.6% drop to just over 43% of residents owning a car. But evidence also shows that residents are not doing as much physical activity, with Southwark having some of the highest rates of overweight and obesity in the country (56% of adults and 44% of children aged 10-11).

More people are killed or seriously injured walking and cycling than any other mode of transport. More footway space is required.

3.2.1 Kerbside Strategy Policies

Due to the continued growth of our local economy and more households there will be a need for more deliveries, servicing and public transport. Air pollution and congestion and bus speed will become worse unless we promote a more balanced use of our kerbside, to encourage walking and cycling.

With all this in mind, Southwark Council have introduced eight new policies as part of our kerbside strategy:

KSS Policy 1
Allocate space in accordance with Southwark's streetwise approach.
KSS Policy 2
Prioritise kerbside space for walking and cycling.
KSS Policy 3
Implement parking controls based on an evidence led approach.
KSS Policy 4
Review parking in town centres.
KSS Policy 5
Require safer, robust delivery, servicing and waste management.
KSS Policy 6
Implement more green infrastructure.
KSS Policy 7
Expand the shared mobility network.
KSS Policy 8
Adapt our kerbside to meet future needs.

3.2.2 Renew/Upgrade Footways adjacent to all Developments

To encourage walking, we will adopt the Southwark Street Wise approach in all of our programmed maintenance works, prioritising the allocation of space and balancing the competing demands on the kerbside.

We will require all developers to renew and upgrade the kerb and footway adjacent to their development to the appropriate materials as specified in our regulating plan and materials palette. We shall always push for a minimum footway width of 2.4m, in order to best accommodate the predicted increase in walking and cycling.

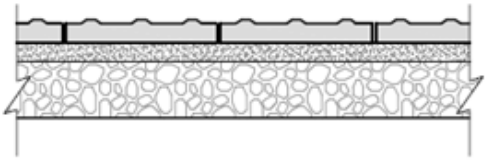
Where the development site is too narrow to step back and achieve 2.4m footway width, we will consider how the walking space may be improved elsewhere through the street, either on the other side of the road, or by reducing the carriageway width.

3.3 Tactile Paving

Blister surface is used at crossing points to aid partially sighted pedestrians. In Southwark, colours of tactile paving at different crossing points have not been specified, only that they shall be visually distinct to the surrounding paving. However, the exception is in "Heritage" and "World Centre" areas of Southwark, where the colour of tactile paving at both controlled and uncontrolled pedestrian crossings shall complement the surrounding historic pavement.

At controlled crossings when people have priority over cars (pelican, zebra and traffic signal controlled crossings) the tactile paving is laid with a tail towards the back of the footway. Where utility apparatus covers are present they are upgraded to incorporate the tactile paving.

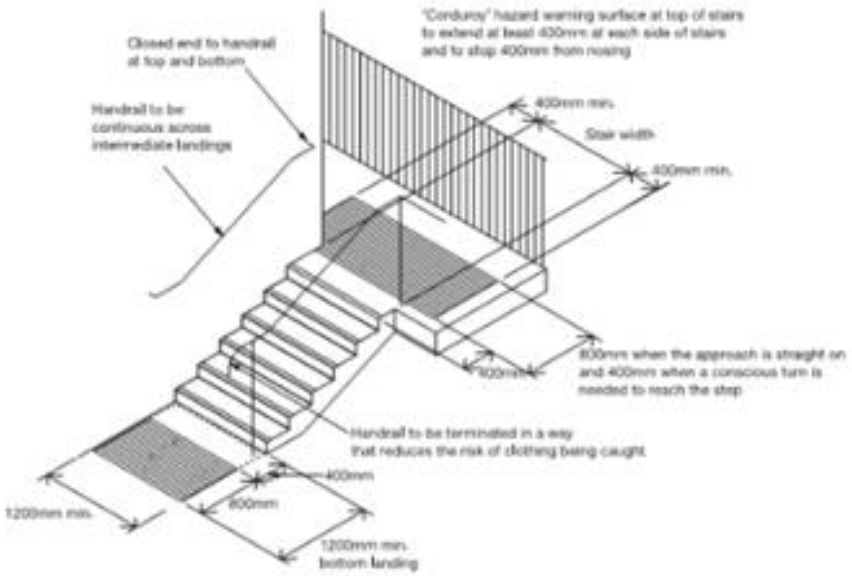
At uncontrolled crossings where pedestrians don't have priority and must decide if it is safe to cross (side roads, busy vehicle crossovers, kerb to kerb flat top raised tables and signal controlled crossings without pedestrian phases) the tactile paving must be a minimum of ≥1.2m but ≤4.4m along the edge of the carriageway.

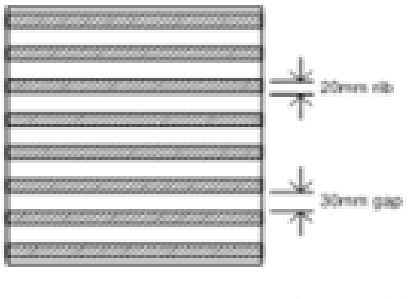


50mm YORKSTONE TACTILE PAVING, 400x400mm.
30mm COMPACTED SAND LAYING COURSE COMPLYING WITH BS 6677 PART 3 OR BS 6717 PART 3 EXCEPT A MAX. 1% SHOULD PASS THE 75 MICRON SIEVE. SAND SHALL NOT BE FROM CRUSHED ROCK.
150mm SUB BASE TYPE 1 GRANULAR MATERIAL TO SHW CLAUSE 803.
GEOTEXTILE

TACTILE PAVING CONSTRUCTION

Corduroy paving is used at the top of stairs or where a footway/footpath joins a shared route to convey the message "proceed with caution". The profile of the corduroy surface comprises of rounded bars 6mm high running transversely across the direction of pedestrian travel.





'Corduroy' hazard warning surface (with 6mm ribs)

Note: Full details of tactile paving are in "Guidance on the use of Tactile Paving Surfaces."

Rib profile

3.4 Traffic Calming

Traffic calming schemes are designed to reduce vehicle speeds, thus improving road safety. They can be introduced for various reasons, e.g. at the request of local residents, after an area-wide consultation and to address the accident statistics obtained from the Police. The management of speed offers significant social, environment and economic benefits and is central to road safety.

Traffic-calming features, if designed insensitively, can harm the nature of our traditional streets. Many streets in our cities and towns have historically had a strong, linear, open character. Unfortunately, in many instances, highway engineering schemes have eroded their traditional character to the detriment of pedestrian use. The manner in which a road is treated at the entry to a traffic calmed area should enhance the locality as well as calm the traffic.

Any development proposing new streets must consider providing vertical traffic calming features such as speed tables and side entry treatments.

3.4.1 Speed Tables

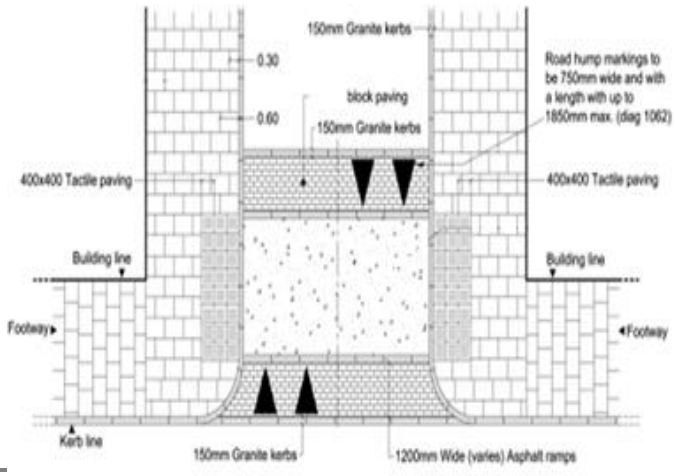
Speed tables have two ramps either side of a flat section raised flush with the height of the footway. They extend fully across the carriageway so they merge flush with a kerb to provide a level crossing point for pedestrians (whereas a traffic carpet will have a reduced 60mm kerb upstand at its edges).

The material on the table should clearly define vehicular priority. Raised tables should be constructed with a single type of precast concrete blocks or clay paviours. One or more types of blocks can be used within high profile areas. The modular units must be close jointed. The ramp should not exceed a 1 in 15 slope.

Zebra crossings can be marked on top of speed tables, but the table top is then constructed with bituminous surfacing to ensure the road markings adhere and are conspicuous. Raising the crossing makes it more visible and encourages drivers to slow down.

3.4.2 Side Entry Treatments

These are constructed on the side road of a priority junction. They are built to slow traffic and provide a level crossing surface. They comprise a raised table and may often include build outs.



3.4.3 Build Outs

A build-out is the narrowing of an existing road profile by increasing the width of footways to form a constriction, designed to slow vehicles and reduce the time pedestrians are vulnerable in the carriageway, helping them to cross the road safely.

Build-outs often suffer from poor drainage as they interfere with the original kerb lines. Road sweeping is difficult and litter or leaves may collect, resulting in maintenance problems. Build-outs are strongly encouraged to widen footways, discourage inappropriate parking and make space for trees or creating pedestrian crossing opportunities.

Side entry treatments should not always generate build-outs. Where streets are at approximately 90˚ to the main road, a raised table across the existing carriageway can address both pedestrian access and traffic-calming requirements. Where side streets are wide, especially when they are at an angle to the main road, build-outs are appropriate.

Build-outs are also used to segregate parking and tree planting. Chicanes are the most complex and intrusive form of kerb build-out; here the specification of kerb alignment and radii is critical. They are often visually inappropriate and reduce the area of parking available on roads.

When designing build-outs, the paving should be continuous from the original footway into the build-out wherever possible. The paving bond and coursing should be continued if the gradient of the new footway allows it. Where the levels do not allow this to occur, the drainage channel should be utilised as the junction to knit together the existing footway with the build-out footway.

If the levels of the new extended footway require a drainage channel to be retained, then the new channel should be constructed in a material which matches or complements the paving material. In situations where the existing surface has a historic value, the kerb can often be retained in its existing location, to retain the street's form. Tactile paving should be integrated and laid without a break in the bond pattern.

Kerb radii should always be specified accurately in new schemes. The radius should normally be one for which kerbstone is stocked by the contractors in 0.5m lengths. The radius should both maximise footway for pedestrians, and be sufficient to minimise the possibility of vehicle overrun. If the build-out's kerb radius is sufficient for avoiding overrun, there will be less need to install bollards for pedestrian protection.

Bollards should be avoided on buildouts. A traffic sign or lighting column in the corner can function in place of a bollard. Reinforced paving to withstand vehicle over run should be considered. A departure would be required before bollards are introduced on new buildouts. Large build-outs producing new areas of footway should be landscaped with carefully sited trees and if possible, new seating and lighting.

3.4.4 Width Restrictions

Width restrictions are narrowed sections of road, acting like gateways, to prevent heavy goods vehicles from using side streets, or residential roads as a rat run between principal routes. They help preserve the character of our streets whilst still allowing access for emergency services or delivery vehicles.

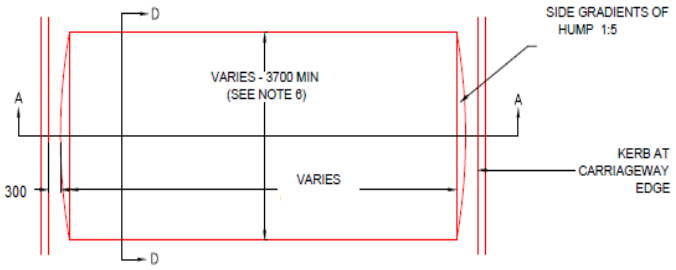
3.4.5 Priority Give Way Build-Outs

Priority chicane build-outs are effective in reducing traffic speeds on busy roads, as vehicles travelling in opposite directions must stop to give way. A physical feature such as a speed cushion can be placed within the restricted area to slow vehicles that may be travelling out of hours, when traffic is light and they may not have to slow to give way to oncoming vehicles. However, this does result in a loss of on-street parking and street furniture should be kept to a minimum.

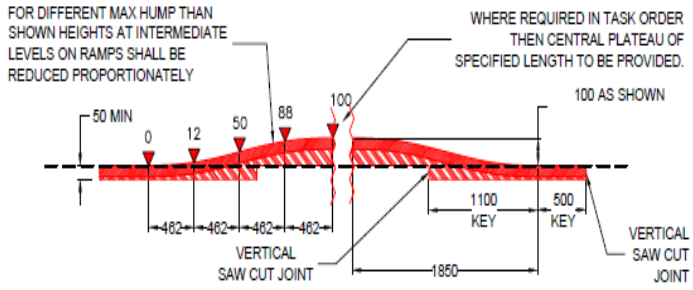
Care should be taken with the positioning of any horizontal traffic calming feature to avoid manholes and gullies. It is poor design to have to introduce a road closure to lift apparatus because the build out or width restriction leaves insufficient room for vehicles to pass around the gully while it's being cleaned.

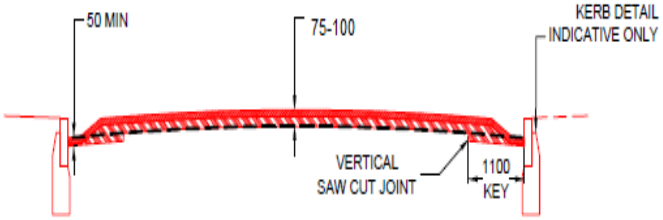
3.4.6 Speed Humps

Sinusoidal Speed humps are used to reduce vehicle speeds in Southwark rather than speed cushions. This is because wider vans and SUVs can straddle speed cushions and their effectiveness is reduced. In addition, many drivers take a route over the cushion to try and minimise their effect, this can result in vehicles approaching each other in the centre of the carriageway, or cyclists on the edge of the road being "squeezed".



SINUSOIDAL RAMP FACE HUMP - PLAN





Speed humps shall be constructed in a material to match the carriageway, usually hot rolled asphalt.

Wherever possible, we will seek to replace regular speed humps with speed tables or other speed reducing features when developing new schemes. Where we are resurfacing streets, existing speed cushions will be replaced with sinusoidal humps wherever possible.

3.5 Vehicle Prohibitions

Vehicle prohibitions are often considered where there is a conflict between pedestrians and vehicles and no practical, effective way to segregate them. This could be busy shopping streets, where the amenity is improved by making it a pedestrian zone or narrow lanes where the size of modern vehicles would endanger cyclists or pedestrians. Junctions with a poor accident record may be considered for crash remedial measures. It may be that a suitable solution is to reduce the complexity of the junction by removing a mode of traffic. This can be accomplished by introducing a vehicle prohibition, effectively closing the road to cars, whilst still maintaining access for pedestrians. Alternatively, traffic management schemes designed to keep our strategic routes flowing may require the closure of come side roads, so traffic signalised junctions can be simplified, prioritising flow along the strategic road.

These closures are managed by high kerbs, 150mm minimum and landscaping, planting or useful street furniture. Bollards may be used where the alternatives are inappropriate. A Traffic Management Order must be consulted on and processed to remove the vehicular rights.

Emergency access may need to be preserved through the vehicle prohibition. This can be accomplished with either lockable bollards or collapsible plastic bollards that the emergency vehicles can drive over. Previous solutions such as deterrent paving and emergency access gates will no longer be used as they are easily damaged and visually intrusive. Deterrent paving is constantly abused by vehicles driving over them.

Gated vehicle prohibition to prevent “rat running” through a residential area: very maintenance intensive.

Except in very limited circumstances, provision for pedal cycles will be maintained through vehicle prohibitions by means of a “dedicated carriageway” that is vertically segregated from pedestrians and where the layout permits, they shall be a minimum of 1.5m wide. They should be designed to reduce the possibility that they are blocked by parked vehicles.

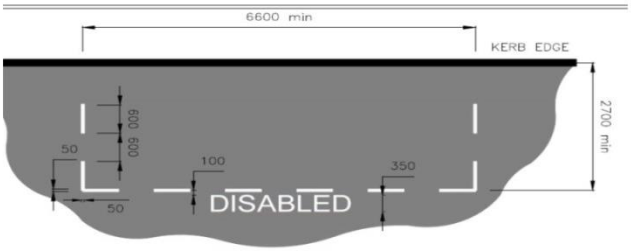
Before the vehicle prohibition.

After the vehicle prohibition.

3.6 Parking

Access for All

Car parking and alighting from vehicles are important activities at the start and end of journeys. Guidance for the provision of disabled car parking is available and Traffic Advisory Leaflet TAL 05/95 'Parking for Disabled People', should be referred to.



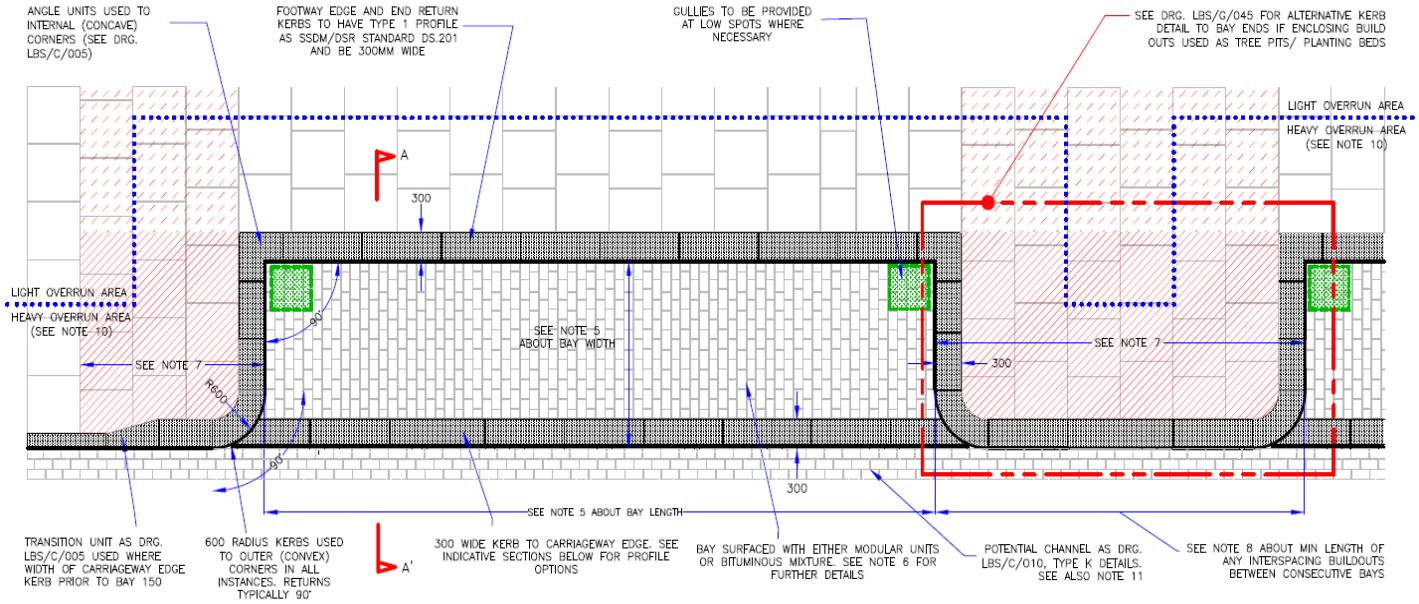
Dedicated parking bays for a disabled driver or helper will be considered. They are for the exclusive use of blue badge holders. Where such parking bays are provided, the adjacent kerbside should be kept clear of obstructions such as post boxes, phone booths, litter bins, etc.

Inset Parking Bays

Inset parking bays may be preferred to other forms of kerbside parking for various reasons, including improved protection of parked vehicles and the perceptual expansion of pedestrian areas. Both reasons may positively influence the behaviour of road users and so promote more courteous riding and driving. Pedal cyclists will not need to deflect out into the carriageway around parked vehicles, which can be stressful as they may be squeezed together with following vehicles.

Controlled Parking Zones (CPZs)

A controlled parking zone is an area where all parking is restricted to people who hold permits or buy pay-and-display vouchers for a limited period for the days/ times of operation. CPZs benefit residents and local businesses by deterring commuter and overspill parking, whilst permitting resident parking, business parking and waiting and loading. CPZs require a Traffic Management Order to be brought into effect. They are widely consulted on with residents and the public and they are an aid to promoting sustainable transport. Wherever possible, we will ensure that the space within a zone is either a marked bay or a double yellow line, thus removing the need for zone entry and exit plates.



3.7 Pedestrian Crossings

To prioritise pedestrian movement in the highway, wherever possible, crossings should be straight and wide, rather than staggered or with refuges. Prams and wheelchairs benefit more from the footway being built out at a crossing, rather than a narrow refuge being provided in the centre of the road. This reduces the time pedestrians are isolated in the carriageway and may also aid traffic movement, as the red phase at signalised crossings can be reduced in line with the narrower pedestrian crossing.

We will seek to introduce new controlled and uncontrolled crossings in new schemes wherever possible to improve pedestrian accessibility.

3.8 Dropped Kerbs

Local Authorities are required to consider the needs of disabled people when designing new schemes or improvements to the highway. Basic considerations are to provide adequate gradients and flush kerbs for wheelchair users, contrasting coloured tactile paving for visually impaired, adequate gradients and comfortable texture for people with walking difficulties or painful conditions such as arthritis.

Ramps should be surrounded by level pavements, have clean straight edged construction, have the correct gradient, be clear of the kerb radius and have kerbs flush with the level of the road surface. (Flush kerbs are used only with pedestrian crossing points. Dropped kerbs at vehicles accesses will have a 25mm upstand to guide surface water along the channel.)

The ramp gradient at a dropped kerb shall not exceed 1 in 12 (8%). Ideally 1 in 20 should be provided, but it is recognised that this requires a 2,500mm long ramp which cannot always be accommodated. The shallower the gradient, the less the risk of trips or falls. Generally, ramps are a minimum of 1,200mm long (which relates logically to three 400x400mm square precast tactile paving slabs). Where the footway is too narrow to accommodate a 1,200mm ramp, consider dropping the whole footway width.

At a corner where there are multiple dropped kerbs, the ramps for separate crossing points should be designed to remain clearly visible to help guide the visually impaired (who may not be able to see across the road) to aim for the other dropped kerb. Dropped kerbs all the way around a curve should be avoided as it may guide people off at an angle into traffic, or encourage vehicles to overrun the corner.

Dropped kerbs must be provided in pairs and ramps shall be aligned to guide pedestrians towards the companion dropped kerb. Drainage gullies with open gratings that can catch wheels or walking sticks should not be installed near dropped kerb crossings.

Inspection covers are frequently found at street corners and they interfere with dropped kerb crossings. Utility companies are to be encouraged to avoid locating new service boxes in the kerbside zone at corners to avoid conflict with crossings and key street lighting locations. Existing inspection covers at crossing points are to be reset wholly within the gradient or on the level. Inset or recessed covers should be used to allow continuous paving layout, tactile edges and straight edges.

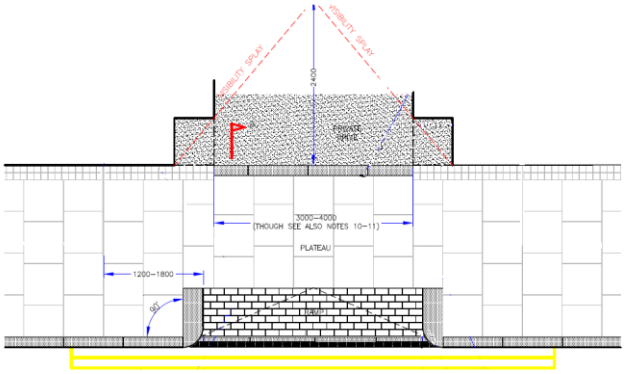
3.9 Vehicle Crossovers

Crossovers should be designed with the minimal number of materials used and retaining the maximum width of flush walking surface for pedestrians. Mixing concrete flags and black-top should be avoided. The materials used should be consistent along the length of the street.

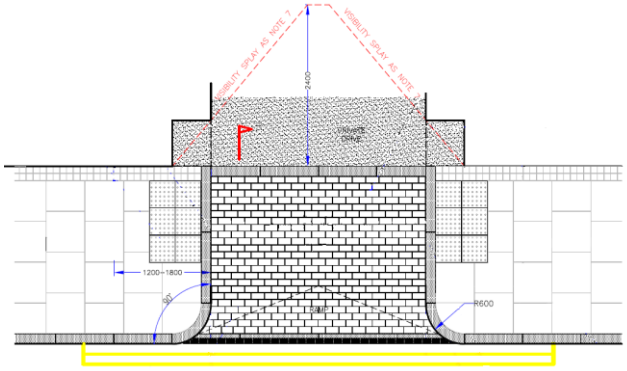
Normally, crossovers that would involve the loss of a tree will not be allowed. For new applications, the council will first consider the safe access and egress from the premises and pedestrian safety before considering the likely future maintenance and the appearance and conservation aspects of the street. Planning permission may be required on classified streets and for crossovers that will convert the grass front garden into an impermeable surface.

Sub-base strengthening may be required to protect concrete flagstones from commercial vehicles using the crossing. The exact specification will therefore depend on the intended use of the crossover.

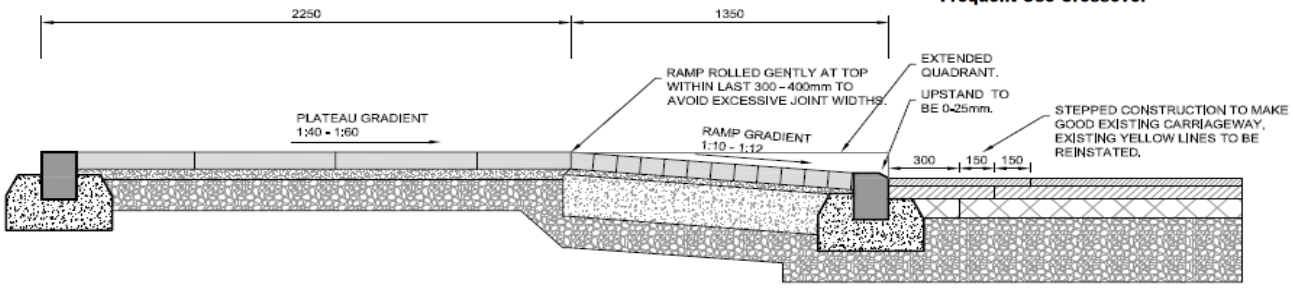
Accesses that serve more than twelve premises are frequent use and granite setts should be laid across the footway to alert pedestrians that there is an increased risk of sharing the footway with vehicles. Tactile crossings should also be considered for partially sighted pedestrians.



Light Use Crossover



Frequent Use Crossover



DROP CROSSING CONSTRUCITON (PLATEAU)

75mm THICK PAVING FLAG TO BS EN 1339:2003, TO MATCH JOINTED WITH (5-7mm) STABILIZED JOINTING SAND COMPLYING WITH BS 7533.

50mm COMPACTED SAND LAYING COURSE COMPLYING WITH BS 7533. SAND SHALL NOT BE FROM CRUSHED ROCK.

150mm SUB BASE TYPE 1 GRANULAR MATERIAL.

VEHICLE CROSSING CONSTRUCITON (RAMP)

80mm THICK MIX OF SILVER, MID, AND DARK GREY RECTANGULAR IMITATION GRANITE SETT CONCRETE BLOCKS (208mm x 173mm) TO BS EN 1338:2003 LAID IN STRETCHER BOND.
COLOUR MIX TO BE:-
SILVER GREY = 60%.
MID GREY = 20%
DARK GREY = 20%.

30mm L-MH2 OR L-MHX FINE BEDDING CONCRETE.

200mm CEMENT BOUND GRANULAR MATERIAL (CBGM).

150mm SUB BASE TYPE 1 GRANULAR MATERIAL.

3.10 Disability Ramps

The Disability Discrimination Act 1995 imposes a duty on owner of premises to ensure access for disabled people, including the removal of steps at the entrance of buildings. Occasionally, the only practical way a disability ramp can be provided is to locate it in the highway. Planning Permission may be required for the ramp to alter the front of the building, and even then, it may be refused by the Highway Authority if the ramp will unreasonable obstruct passage through the highway. It must be demonstrated that there are no practical alternatives within the site boundaries, such as relocating the main entrance to where the footway is higher, an alternative access, internal ramps or a sort rise platform lift.

Ramp surfaces should be slip resistant. The surface should be 1.5m wide and the unobstructed width at least 1m wide. A level rest area of at least 1.2m should be allowed at the top and bottom of each ramp. Ramp gradients may be 1 in 12 for 5m or 1 in 15 for 10m before another 1.2m long level rest area is provided. Ramps with gradients shallower than 1 in 20 do not require rest areas.

A kerb or solid balustrade is provided on the open side of the ramp. Handrails should be provided on both sides of the ramp, be continuous across landings and, where possible, extend to doorways. The top of a handrail should be 1000mm above the ramp surface, and 900-1100mm above the surface of a landing.

Use of colour contrast, kerbs and handrails and perhaps the pattern of the ramp paving, should be used to alert pedestrians to the change in pavement level. A vision zone 18m from junctions or crossing points must be maintained.

In exceptional circumstances where the footway is narrow, and a ramp cannot be accommodated, the authority may agree to raise the whole width of the footway. Utility companies will need to be consulted and care must be taken concerning the damp course of adjacent frontages. If the height of the kerb is less than 380mm, a guard rail is not essential. If the gradient is steeper than 1 in 20, a handrail should be provided on the wall of the building.

3.11 Road Markings

Lining and lettering on the carriageway can be

visually intrusive. The Traffic Signs Manual allows different widths of yellow line to be used in environmentally sensitive areas and on slower speed roads. We will use 50mm primrose yellow lines throughout the Borough. It is important with the thinner line width that the paint is regularly renewed to ensure enforcement is possible.

3.12 Drainage

Sustainable Urban Drainage Systems (SUDs)

SUDS design must be integrated into new schemes with careful consideration of the maintenance and management responsibilities. Options for SUDS in the street scene include pervious surfaces, soft verges, vegetated areas and soakaways, which can all be designed to promote the infiltration of surface water from the street scene into the ground.

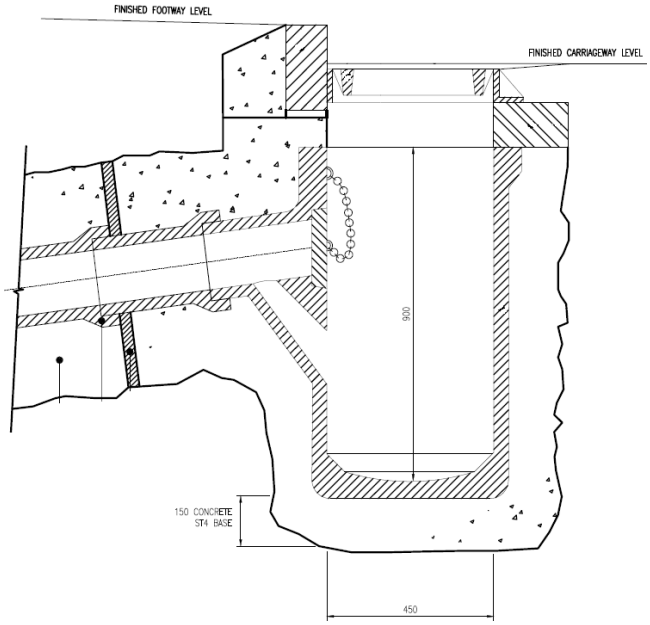
The Council does not require discharge consents for highway runoff either to surface waters or to ground water. However the authority does have a responsibility to ensure that discharges do not cause pollution. It is for the Borough to determine how pollution control is carried out. Special precautions should be taken in areas which are particularly sensitive, either for their groundwater, surface water or ecological resource. There may be particular requirements with regard to drainage and the control of pollution which should be discussed and agreed with the Environment Agency and English Nature.

Drainage Gullies

Special attention should be given to providing adequate drainage where there are traffic calming features such as side road entry treatments and where the footway is being extended into the carriageway.

The use of footway drainage systems should be avoided where possible with run off drained by means of a simple cross-fall across the footway. Where drainage is required, linear channel drainage should be flush with the pavement surface and laid in straight lengths.

All gullies in the carriageway and footway must be connected to the sewer. Where this is not possible, the use of soakaways may be possible if the ground is suitably permeable. A commuted sum will be required for renewing the soak away after it silts up and becomes ineffective. Gully grills should not be located on pedestrian crossing points and they shall be cycle friendly.



4 Preferred Footway Material Pallet

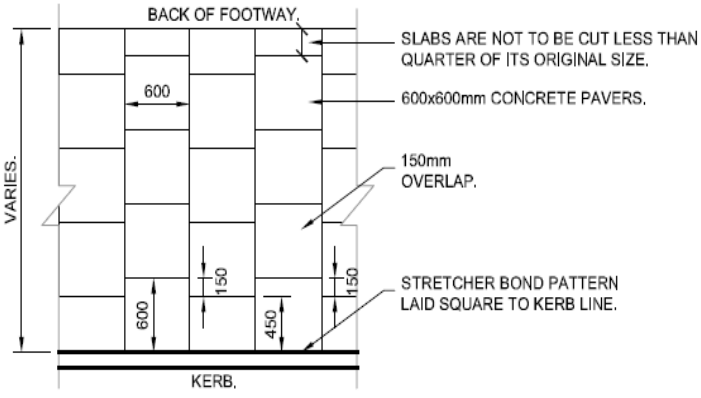
4.1 General Specification Area

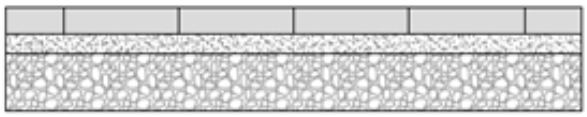
In the General Specification areas of Southwark, the carriageways are bituminous, the footway is a single type of flag paving (including the plateaus of vehicle accesses) and a single type of block paviour used to raised tables, cycle tracks, inset parking bays and the plateaus of heavily used vehicle accesses.

4.1.1 Precast Concrete Paving Flags, Pimple Finish, Grey to BS EN 1339:2003

The standard flag is grey, dimensions: 600 x 600 x 70mm. Steel reinforced slabs are required in heavy overrun areas. Where the overrun is expected to be light, then the reinforcement can be dropped and the slab thickness reduced from 72mm to 63mm. The 50mm thick option is not used in Southwark.

Flags are laid to BS 7533-4:1998 Installation.





30 mm COMPACTED SAND LAYING COURSE COMPLYING WITH BS 7533. SAND SHALL NOT BE FROM CRUSHED ROCK. JOINTED WITH (5-7mm) STABILISED JOINTING SAND COMPLYING WITH BS 7533.
150mm SUB BASE TYPE 1 GRANULAR MATERIAL.

PAVING SLAB CONSTRUCTION

It may be permissible to utilise fibre reinforced concrete paving flags for heavy vehicle overrun areas as an alternative to the steel reinforced flags.

4.1.2 Precast Concrete Block Paviours, Mid Grey to BS EN 1338:2003

The standard block paviour is 200x100x80mm mid grey colour. Where used in speed table ramps, they are laid bound in a stretcher bond perpendicular to the dominate carriageway edge.

Alternative surfacing options are described in the Southwark Materials Palette. However, a level 1 departure will be required to use them instead of the preferred materials unless they are replacing like for like.

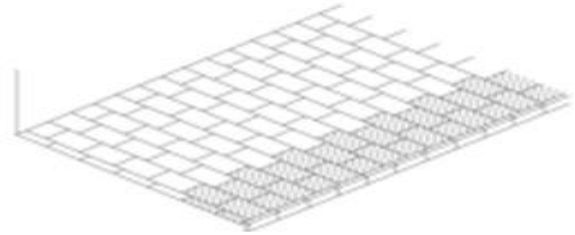
4.2 Heritage / World Centre Areas

In the World Centre Specification areas of Southwark, the carriageways are bituminous or natural stone setts. The footway is a single type of flag paving (including the plateaus of vehicle accesses) and one or more types of block paviour used to raised tables, inset parking bays and the plateaus of heavily used vehicle accesses. There are two options for the paving flags, Yorkstone Flag paving, which is also the preferred paving material for Heritage Areas, or natural granite flag paving.

4.2.1 Yorkstone Flag Paving

Yorkstone paving is natural stone which has been quarried, cut and dressed into paving slabs. It is a fine-grained, hard sandstone and millstone. It is produced in a range of surface finishes and slab sizes containing buff and grey colour bands. Laid to BS 7533-4:2006, 63mm thick slabs, with a length to width ratio of 1.5 to 1, in random lengths of 300/450/600/750mm.

Due to its exceptional weathering qualities (with the material looking better as it ages) and its long life Yorkstone is an appropriate material in historic and sensitive high-profile sites. Yorkstone is traditionally laid in random courses, which allows a range of stone sizes to be used, However, in streets with narrow footways or with vehicle overrun problems, 400 x 200 x 75 slabs to be used.



Where there may be heavy over-run the front two courses shall be reinforced by using thicker flags (up to 100mm) and increasing the cementitious bound base course to 200mm and the laying course to a 30MPA compressive strength 25mm thick bedding mortar.

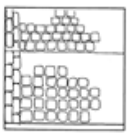
4.2.2 Granite Setts to BS EN 1342:2012

Granite is a most hard, stain resistant and durable natural paving material. It has a long tradition of use in London for carriageways and kerbs. As with other paving bedded on concrete, utility company reinstatements and maintenance work does not affect the bond of the adjacent paving. Broken-out setts or kerb are difficult to damage and can normally be reused. Laid to BS 7533-7:1998.

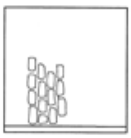
Granite setts have excellent slip characteristics and, due to surface and joint variations, slow up vehicles. Level or dressed granite setts are available second hand: these are as comfortable to walk on as brick or concrete block, but more slip-resistant, due to the quartz crystal composition of the material.

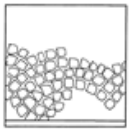
Dimensions:
200x100x100mm
240x160x160mm

The width of joints to be kept to a minimum.



Bond patterns - 3 types





Care is needed in certain locations with oil drips in the pointing and heavy vehicles “rocking” the granite ribbons containing the panel of setts. Setts can also be used in crossovers and barrel drops and as deterrent paving to discourage pedestrian use. Fine specification is needed in footways and pedestrianised areas to give a surface smooth enough for some users. If historic setts are re-used then an alternative smooth route should be available for people with mobility problems.

Granite setts are used for table tops, inset parking bays and for the plateaus of frequent use vehicle accesses. The colour of the sets is laid in an evenly distributed mix of 20% Silver Grey, 60% Mid Grey and 20% Dark Grey.

4.2.3 Granite Flag Paving

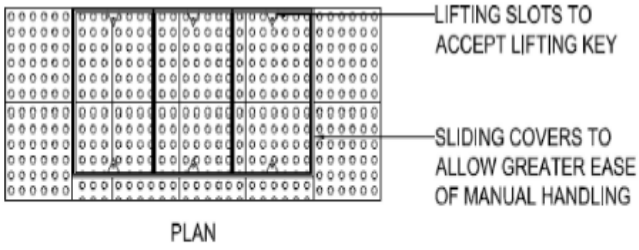
Granite natural stone slab paving is a second option that may be used in World Centre specification areas that are not also heritage areas.

Pale grey to off white, 600 x 750 x 90mm slabs laid to BS EN 1341:2012.

Where there may be heavy over-run the front two courses shall be reinforced by using thicker flags (up to 100mm) and increasing the cementitious bound base course to 200mm and the laying course to a 30MPA compressive strength 25mm thick bedding mortar.

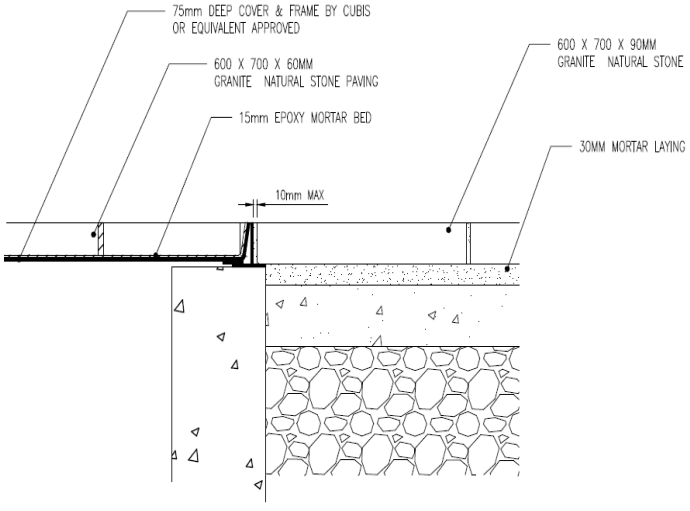
4.2.4 Recessed Covers

In higher profile footways there is always a preference for recessed covers and frames to be used.



UTILITY COVER ARRANGEMENTS IN BLISTER PAVING

It should be noted that there may be an additional maintenance cost when requiring recessed covers for statutory undertakers' apparatus. Some utility companies will only undertake to maintain the standard covers, and not the recessed frames. A commuted sum may be required to cover the additional maintenance burden.



RECESSED UTILITY COVER DETAIL

4.3 Village Specification Areas

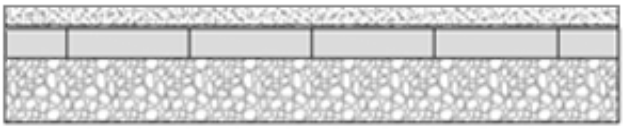
In the Village Specification areas of Southwark, the carriageways are bituminous; the footways are either bituminous or a single type of flag paving (including the plateaus of vehicle accesses) and one type of block paviour used to raised tables, inset parking bays and the plateaus of heavily used vehicle accesses.

4.3.1 Asphalt Paving

Asphalt is a generic name applied to all road and pavement materials produced by mixing bitumen with various aggregates. It is generally a black material that provides a level, non-slip surface for pedestrians and vehicles. The product offers good value for money, durability and waterproofing characteristics.

It is used in the Village because it is an existing distinctive part of the look and feel of the area.

Southwark has adopted the London wide asphalt specification 2016 promoted by LOTAG and TfL.



30mm thick B-SFA AC6 Dense 100/150 Bituminous surface
80mm thick B-BiFC 14 proprietary cold mix to Clause 948
150mm Type 1 Sub base (depending on CBR of formation)

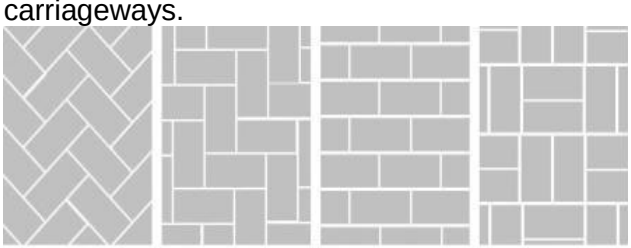
CBR	≤2%	3%	4%	5%	≥6%
Min Type 1 Subbase /mm	200	150	125	100	100

4.4 Docks Specification Areas

In the Docks Specification areas of Southwark, the carriageways are historically block paviours, but may also be bituminous pavements. The footways are either concrete or clay paviours (including the plateaus of vehicle accesses). and one type of block paviour used to raised tables, inset parking bays and the plateaus of heavily used vehicle accesses.

Red coloured precast concrete block paviours, 200 x 100 x 80mm are the preferred surfacing material to reinforce the character of the redevelopment in this Dockland area.

The block paviours are laid in Basket weave bond to BS 7533-6:2006 on the footways and in a Herringbone bond to BS 7533-3:2006 on carriageways.



To ensure that concrete blocks last longer in future (e.g. surfaces do not abrade so quickly and colour doesn't bleach out); their method of manufacture should be to BS EN 1338:2003, incorporating a two layer press, with a separate facing layer. The units should be vapour cured for a minimum of 12 hours to reduce the risk of efflorescence before packing. The facing layer should be ≥6mm and have a bulk density ≥375kg/m^3.

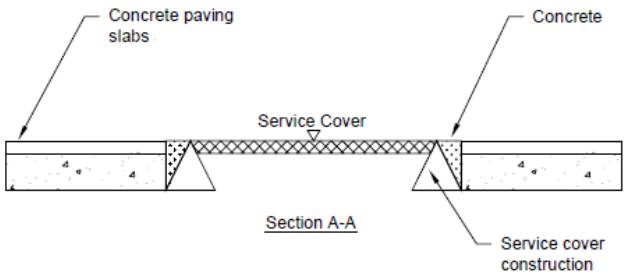
4.5 Town Centre Areas

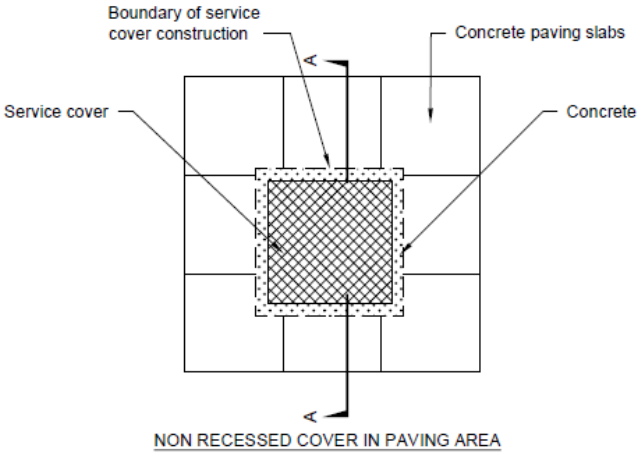
In the Town Centre Specification areas of Southwark, the carriageways are bituminous pavements and/or small modular paving unit surfaced carriageway. The footways are natural stone flags (including the plateaus of vehicle accesses), and one or more types of block paviour used to raised tables, inset parking bays and the plateaus of heavily used vehicle accesses.

In the Town Centre, granite stone flags 600 x 750 x 80mm are used in light vehicle overrun areas. Laid to BS 7533-8:2003.

As with World Centre and Heritage sites, in areas of heavy vehicle overrun the paving shall be reinforced by increasing the flag thickness to 90mm and its breaking load from 15 KN to 21KN.

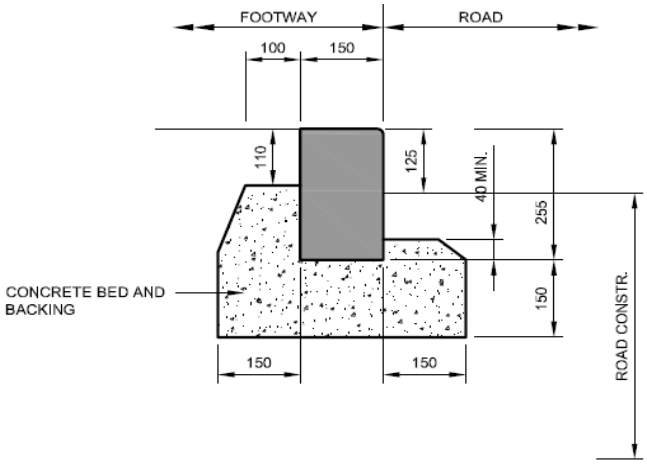
In town centre footways (and other general areas), **utility covers** may be flush with a 50mm thick concrete surround.





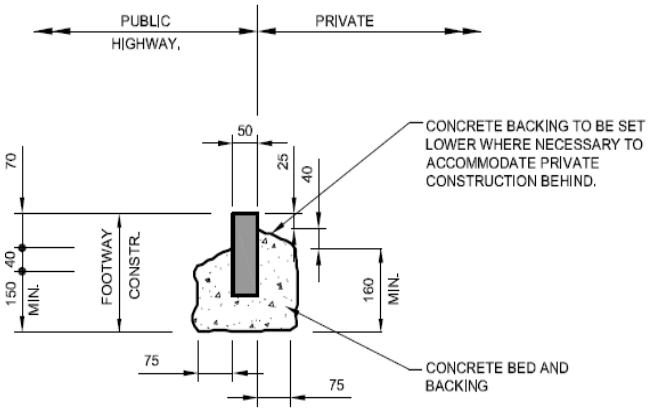
4.5.1 Kerbstones

In General or Heritage areas any precast concrete kerb is to be replaced with granite kerbstone laid with a narrow top face (150mm wide). It is important to retain and match the wide kerbs where they exist. Kerbs can be worked to specific radii, but standard radii stock should be used normally to avoid mistakes.



In all other areas 300mm wide granite kerbs are preferred over 150mm wide granite kerbs between the footway and the carriageway.

Granite edging kerbs are required at the rear of the footway/footpath to delineate between public highway and private land. In Heritage or World Centre areas the granite edging is to be replaced with Yorkstone slabs, cut to 50x150mm and laid on end to BS 7533-4:1998.



5 Street Furniture

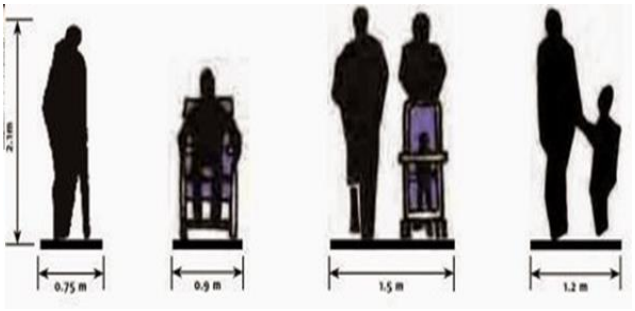
5.1 Overall Design Principles

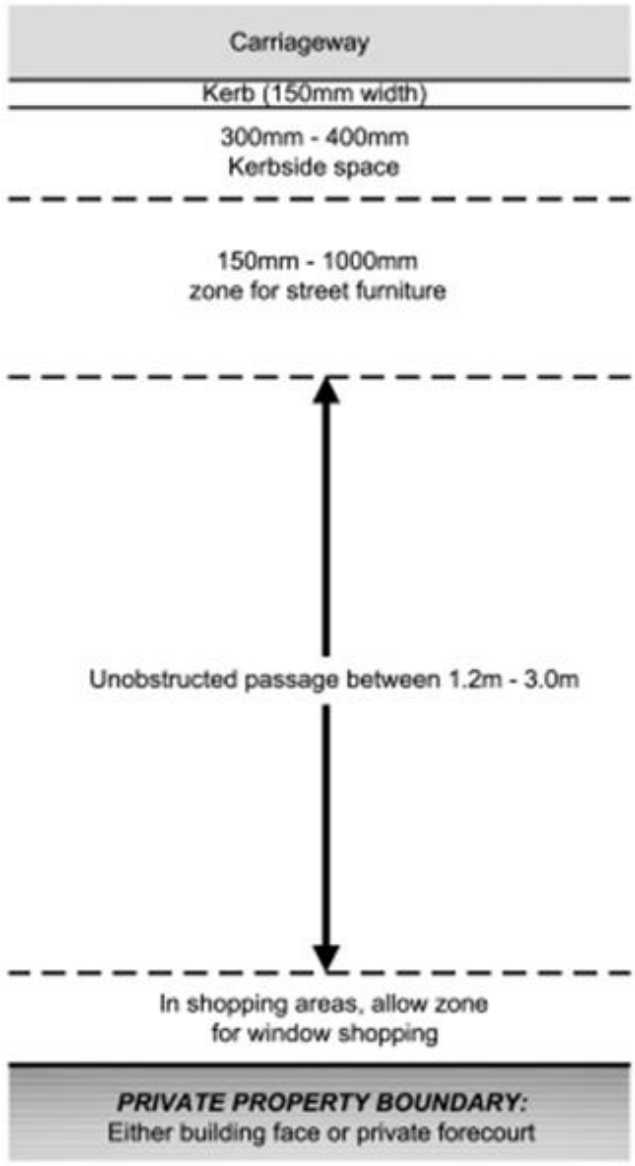
In the design of any new highway or environmental improvement scheme, decisions on the amount of street furniture, the design of the elements and their general arrangement, should be carefully considered. Nothing should be placed in the street unless absolutely necessary. Less is more.

At the outset of a project, any superfluous, redundant street furniture should be identified and removed. The proposed new street furniture should be reduced to a minimum by good design. Unnecessary street clutter and redundant signage often present barriers to free movement of pedestrians and visually blight our environment. As well as being an eyesore, the plethora of street furniture can also adversely impact on people's feeling of personal safety, either by obstructing sight lines or by contributing to the overall run-down state of the area if they are left in a poor state of repair or attract graffiti/flyposting.

Pedestrians share the footway with a wide range of street furniture and traffic equipment. The footway can get very congested and obstructed if street furniture is not located with care; the narrower the pavement, the less bulky

the equipment that can be placed there. The effective width of a footway is reduced after allowing for street furniture. To help maximise space, street furniture should ideally be arranged in line near the kerb edge to keep an unobstructed route for the convenient and comfortable passage of pedestrians. This is particularly important for wheelchair users, people with other mobility aids, and people with children and pushchairs.





The minimum clear width is 1.8m. Widths should increase to 3m at bus stops and in shopping centres. In existing constricted circumstances the minimum width is 1.2m. Kerbside street furniture should not be located adjacent to blue badge parking bays.

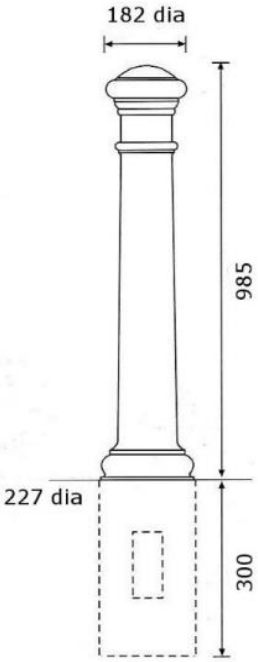
With the exception of seats, street furniture should normally be organised along the front of the footway.

Historic street furniture which gives a locality its distinctiveness should be retained wherever possible and, if disused, brought back into use. When historic street furniture is being restored or replicated, accuracy and authenticity must be strictly observed.

Doubling up of functions should further reduce the impact of street clutter. Every opportunity should be made to reduce the need for additional posts. Lamp columns in particular should be used to accommodate signs, bus lane enforcement cameras, telecommunication equipment and CCTV cameras. Other posts should be designed to incorporate more than one sign.

5.2 Non-Illuminated Bollards

Bollards pose a risk to blind and partially sighted people. The preference is always to design them out of new schemes. Where they cannot be avoided, the preferred bollard in Southwark is the Manchester bollard.



Strengthened paving and parking enforcement provide the scope to significantly reduce the use of bollards. Generally they should be limited to the following circumstances:

- Where they accommodate necessary low-level upright traffic signs in footways, footpaths or cycle tracks that need to face street users (for instance, blue cycle track roundel signs).
- To the edges of footways along interfaces with Raised Tables where a substantial risk of vehicle overrun exists or there is an evidenced safety or accessibility need for additional delineation of the footway edge.
- Where necessary to protect a basement or other buried structure that is vulnerable to damage from vehicle overrun.

Bell bollards may be acceptable on street corners that are vulnerable to heavy vehicles, but caution is required to ensure they do not become a hazard to partially sighted people.

In the Village, white imitation timber posts are preferred to protect verges. These posts have a steel core and are coated in white recycled plastic to eliminate maintenance.

5.3 Illuminated Bollards

The white and yellow plastic illuminated bollards (with the keep left, white on blue background sign) are prone to vandalism, are unsightly and frequently out of keeping within the overall street scape. Retro-reflective bollards are to be used in Southwark.

Illuminated bollard no longer used

The need for retro-reflective bollards on kerb build-outs is less justifiable. Often they are obscured by parked cars, and often they duplicate existing street furniture such as belisha beacons or traffic signs increasing the street clutter. The street lighting should normally be sufficient to provide a clear view of the kerb.

Retro-reflective bollard preferred in Southwark

As the Borough of Southwark is a 20mph zone, retro-reflective bollards may be used without the yellow backing to complement the street scape.

Splitter island with keep left direction

Splitter island in one way street where traffic can flow either side

Where they were used at the kerbside or on kerb build-outs they will be replaced with conventional bollards.

5.4 Street Lighting

Street lighting has to be designed to standards making them easy to adopt. The council's street lighting section should always be consulted early in the design process so that the lighting issues and opportunities can be integrated seamlessly within the overall design approach of the project and technical information, maintenance and cost implications are established at the start.


Old Sodium Street Lanterns


New Energy Saving LED Lanterns Installed

The design of street lighting should:

- Create safer places/ contribute to crime prevention by providing sufficient illumination for the public within the public realm.
- Create safer carriageways by providing sufficient illumination for motorists, cyclists and pedestrians.
- Assist the legibility and general visual coherence of spaces.
- Take into account the architectural scale, character and setting of the space when considering the scale, design and ambient levels of the street lighting.
- Should conform to British Standard 5489 Code of Practice or CEN Code (Comite Europeen de Normalisation).

Where there are opportunities for mounting lights onto buildings they should be pursued, to reduce clutter and obstructions in the streets. Where a design approach is taken to mount lighting on the buildings, careful consideration should be given to prevent any damage to the fabric of the building and permission must be obtained from the owners of the premises.

Consideration should always be given to utilising lamp columns for mounting other street furniture. Where the need for additional loading capacity has been identified on lighting columns, e.g. to accommodate banners, hanging baskets, larger signs, CCTV cameras or mobile telephone aerials, strengthened columns (with a thicker shaft) must be specified. Heritage and non-heritage columns should be able to accommodate signs of 0.7m^2 (back to back).

Please refer to the 2017 Draft London Borough of Southwark Street Lighting Policy for illustrations of preferred columns and lanterns.

5.5 CCTV

Consideration should always be given to utilising lamp columns for mounting portable cameras. Where new lighting is proposed and portable cameras are likely to be installed in the future, strengthened columns (with a thicker shaft) must be specified. Any new CCTV installations should ensure optimum line of sight is achieved so that only a minimum number of cameras are required. Locations of columns should not create additional clutter within the street or obstruct the movement of pedestrians. New column installations in areas of distinctiveness are likely to be sensitive and locations must be referred back to planning / conservation officers for consultation.

5.6 Traffic Signs

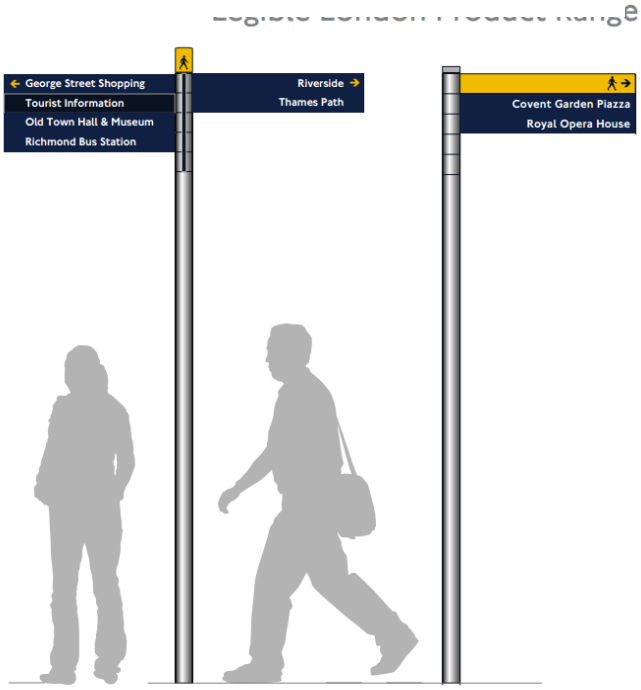
The number of signposts should be kept to a minimum and avoided wherever possible. Signs (including dog litter signs) should be doubled-up on lamp columns (especially illuminated signs which need a power supply), or other existing posts. Where appropriate, signs are located on a building wall or fence as a first preference (we will contact the owners). Or mounted back to back and where possible, arranged in well organised clusters where there is a group of signs.

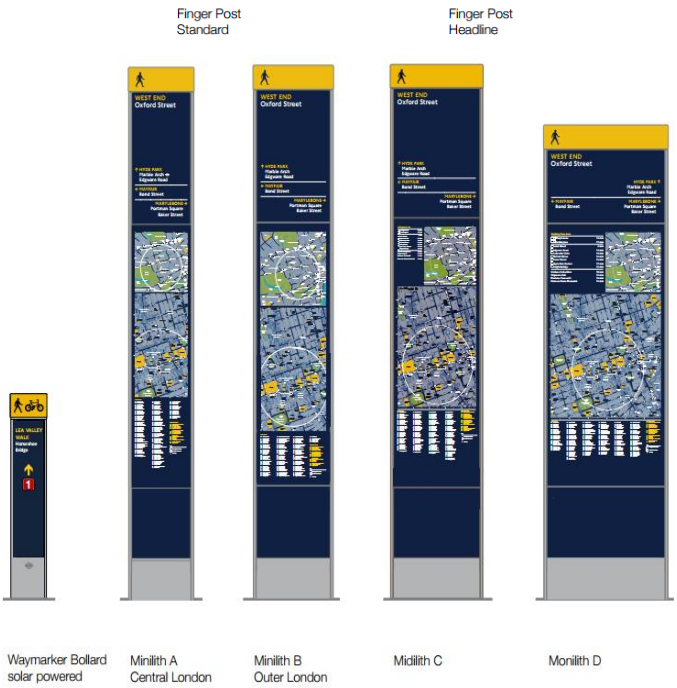
Traffic direction signs are provided as an aid to movement, and consequently they shall give direction to general destinations or to other strategic routes (such as motorways and ring roads). Traffic signs shall not give directions to individual businesses (they may state “industrial estate” or “superstore”, but not a specific store that could be construed as advertising).

The impact on visual quality should be considered. Warning signs and ‘give way’ signs are unnecessary in areas where vehicle speeds are low. ‘No waiting at any time’ signs are no longer required by regulations. Conspicuous yellow backing boards to signs will not be allowed unless specifically required by a road safety audit. Each sign must have a clear message to communicate to the road user or it shall not be permitted.

5.7 Pedestrian Signs and Information Boards

Transport for London has also developed a comprehensive wayfinding system for pedestrians in town centres called 'Legible London'. The system uses well researched and clear methodology to present directional information with a number of different 'products' available. These include free standing plinths, traditional finger posts and branded posters for display in public transport interchanges. The ‘Legible London’ signage will be used in Southwark.

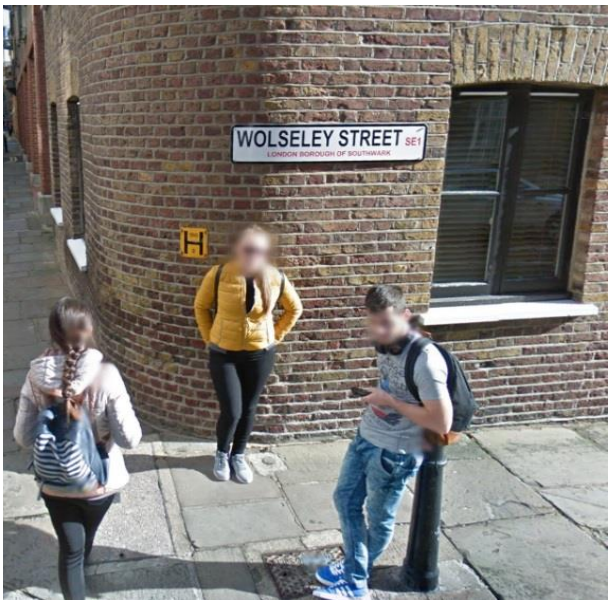




5.8 Street Name Plates

Wherever possible, street name plates and signs should be positioned at the rear of footways in a location that can easily be seen by vehicle users with minimal obstruction. There should be at least one street name plate on each road.

Historic street name plates should be renovated rather than replaced to ensure that the history of the Borough's street scene is protected and that a stronger sense of place evolves over time. Historic or significant wall-mounted street signs should not be removed.



5.9 Advertising

Advertising is discouraged in the highway, which should be kept clear for the passage of pedestrians, but it is recognised that it is a valid and potentially financially rewarding part of businesses retail areas. Consequently, Southwark Council manages advertising, granting licences where there is sufficient space to accommodate the advertising and taking enforcement action where adverts are inappropriate or excessive. Permanent adverts will require planning permission.

5.10 Pavement Cafes, Tables & Chairs and Street Trading

Street activity can add to the vibrancy, life and colour of streets and shopping parades. Tables, chairs, plant pots and umbrellas create bright, lively areas throughout the day and into the evening. Such activity can persuade other businesses to move in and the visual interest can reduce traffic speeds.

We licence pavement cafes according to a set criteria for eating, drinking and selling goods. We also grant licences for street activities, including street trading, to control the type and style of activity, helping to ensure that the streets stay neat and clean.

5.11 Seating

Seating should not be located too close to road traffic or in the middle of the footway. Seating should be placed in adequate space, in sheltered areas from the wind, preferably receiving some sun, and where the back of the seating is unexposed (against a wall). Seating should not be placed longitudinally down slopes. In areas of antisocial behaviour, consider an armrest in the middle of the seat that may prevent sleeping on the seat.

5.12 Litter Bins

We put litter bins where they are most needed, in shopping areas, along school and station routes, next to bus stops and at on street recycling points. Southwark Council have approximately 3,200 litter bins distributed throughout the Borough. Street bins are standard products chosen for sturdiness, simple design, ease of emptying and value for money.

5.13 Bus Shelters

Southwark Council will encourage Transport for London and their suppliers to install and maintain bus shelters that are appropriate to individual sites. The aim should be to provide a shelter at every site where significant numbers of people wait to catch a bus (more than 50 people per day). As most busy bus stops already have shelters, the selection of shelters for new sites should consider the style of adjacent shelters and the character of the area, aiming to create a consistent “run” of shelters along a given bus route. The length of shelters may be expected to vary with the number of people at each stop but the style should be consistent.

Shelters should generally face the carriageway and provide a clear view of approaching buses for passengers waiting in the shelters. Shelters must be positioned to avoid obstruction to passengers boarding and alighting from buses, and in particular wheelchair passengers using

the centre door of the bus. Shelters within the boarding and alighting zone must therefore be set back at least 2.7m from back of shelter to the kerb line. If there is insufficient footway space to allow this, the shelter should be located outside the boarding zone (immediately downstream from the stop).

Care must also be taken to ensure that shelters do not obstruct footways. There should 1.5m behind the shelter if placed “centre of footway” or 2.5m if mounted at the rear of the footway. These clear dimensions should be increased on busy streets and in town centres. The effect on historic boundaries and listed buildings should be considered. If there is insufficient width for shelters to face the carriageway, they may be mounted facing away from the carriageway, in which case the rear of the shelter must be at least 0.5m from the kerb line and the shelter must be located immediately “downstream” of the boarding and alighting area.

Seating should be provided within shelters, except where it is established that the provision of seats has undesirable consequences in terms of encouraging non-bus passengers to congregate or loiter. Seating should be durable and “minimal” in style, in order to discourage loitering. “Perch” type seating is permissible where bus frequencies are high.

Shelters may have end panels, which provide protection from wind and rain, but if such panels obstruct the footway then the end panels should be omitted. Advertising will continue to be permitted on bus shelters, in end panels and preferably rear panels, except in Heritage and World Centre areas or areas of advertising control. Any advertising needs to comply with statutory requirements. Advertising panels may be internally illuminated, but moving, rotating, flashing, pulsating or video-style advertising displays will not be permitted. No sound output from advertising panels will be permitted.

Accessible bus stops should be accessible to all users in accordance with TfL guidance.

5.14 Pedestrian Guard Railing

The purpose of guard-railing was to protect pedestrians at vulnerable locations on footways, central reservations and on pedestrian crossings and refuges. On heavily used footways guard-railing was provided to deter casual pedestrian use of the carriageway and to direct pedestrians to the safest crossing points on the footway.

Guardrailing contributing to street clutter

However, segregating pedestrians behind barriers creates a hostile environment for them. It can also encourage drivers to speed as they perceive the pedestrians to be protected from them by the barriers and unlikely to be able to enter the carriageway. After the guard-rails were removed from Jamaica Road, the 85th percentile speed reduced from 33mph to 30mph.

Guard-rails attract other clutter (adverts, banners, chained bicycles) thus creating obstacles and impediments for pedestrians; add to the overall street clutter and to the Council's maintenance liability.

On pedestrian central refuges, guard-railing occasionally causes a hazard to pedestrians who have crossed in a desired direction and are then prevented by the guard-rails from getting onto the refuge, leaving them stranded in the carriageway. Cyclists may get trapped by guard-rails and be unable to escape from potential crushing injuries from HGVs and other vehicles in the road.

When the guard-rails were removed from outside Borough Station 80% of people said they preferred the new arrangement, 12 % said they preferred guard-rails and 8% held no opinion.

When pedestrian guard-rails were removed from Kensington High Street as part of an improvement scheme, there was an overall reduction in accidents and their severity, indicating that guard-rails do not necessarily improve road safety overall.

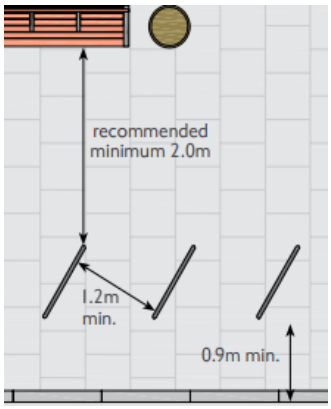
Southwark Council will always remove pedestrian guard rails where possible; retaining it only by exception where a road safety audit specifically requires it.

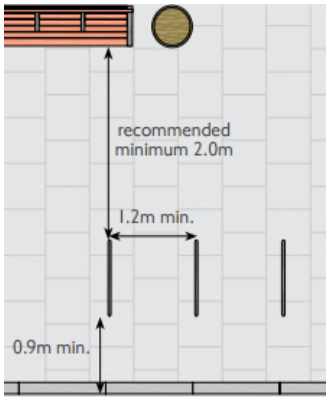
No street clutter created by guardrails at both the pedestrian and cycle crossing in close proximity

5.15 Cycle Stands

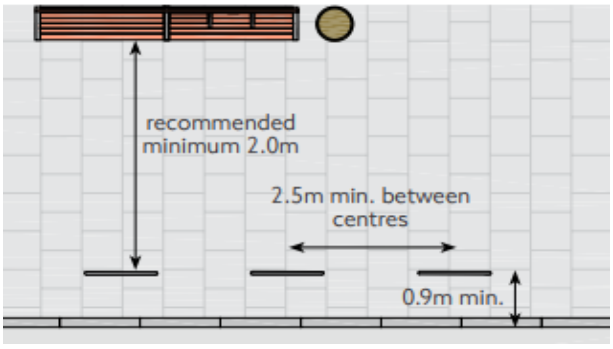
Cycle stands should be designed in accordance with the London Cycling Design Standards.

The Sheffield cycle stand with a tapping rail in black is generally preferred by Southwark. They should be located in areas where they will be used and seen. If possible they should be sheltered and grouped together with some larger gaps to provide approximately 5% space for larger pedal cycles (hand cycles and tricycles).





Step free access should lead to the cycle stands and if located adjacent to the kerb a dropped kerb should be provided to enable disabled access.



6 Street Trees

6.1 Benefits of Trees

Street trees and other planting are a valuable part of the experience of our cities and towns and contribute to humanising our environment, often providing a welcome relief in urban areas. The necessity for trees in our towns and cities is overwhelmingly evident. At times, it is difficult to reconcile tree planting with other needs associated with the infrastructure required in modern cities, e.g. roads, footpaths, street lighting, utility services etc.

The natural form, colour, shelter, shade and enclosure offered by street planting can, when appropriate, offer a welcome counterpoint to the hard edge of the built form. They also assist to limit and buffer us from some of the harmful aspects of our environment, including air and noise pollution, and often provide valuable habitat for fauna. Trees and other types of planting are more successful when they are selected and planted carefully to complement the wider townscape.

There are approximately 107,000 trees in the London Borough of Southwark, of which 15,000 are street trees. The benefits of trees are numerous and should be recognised.

Trees:

- Filter airborne dust and pollution.
- Absorb traffic noise in built-up areas.
- Reduce temperature extremes and generate breezes.
- Act as a screen, increasing privacy in residential roads and gardens.
- Provide shade.
- Convert CO_2 into oxygen, increasing the quality of the air on a local basis.
- Provide food and nesting sites for birds, other animals and insects, thus increasing the nature conservation value of an area.
- Provide displays of colour throughout the year.
- Are a relatively low maintenance addition to the streetscape in terms of their high visual impact (given the right species selection).
- Act as a buffer between the stresses of modern urban living and improve the quality of life for people living and working in towns.
- Provide many psychological and health benefits, they have been shown to reduce stress.
- Also increase property values (a survey of estate agent's windows will always show more expensive properties in “tree-lined streets”).
- Soften the built form.
- Provide a buffer between the footway and the carriageway.

Disadvantages of Trees

Trees can have some disadvantages if the wrong species is selected, or proper tree management is not carried out:

- Large leaves may block drains and guttering, provide dense shade in summer and a slip hazard in autumn.
- Large, pulpy fruits may cause a mess and a slip hazard on footways is not cleared.
- Aggressive root action from nearby trees can cause uneven and hazardous surfaces.
- Thirsty trees requiring lots of water may contribute to structural damage in nearby properties.
- Honeydew, produced by aphids feeding on the leaves, drips on parked cars and house windows.
- Excessive suckering occurs at the base of some tree species, which can result in partially blocked pavements, obstructing pedestrian movement.
- Excessive shading can be caused where inappropriate trees are planted or allowed to grow in inappropriate positions. This may lead to damp problems.
- May obscure street lighting.

6.2 Tree Selection Factors

Trees have to be carefully selected to be in proportion with the scale of the streets and spaces in which they are to be planted. Tree planting can provide rhythm and punctuation points in a street, but the planting should not obscure key visual links and should complement buildings. For example, a historical terrace frontage would be complemented well by a formal line of trees, creating an avenue effect, whereas a more varied built form, with a less established building line, would benefit from a less formal approach, possible combining a mix of species.

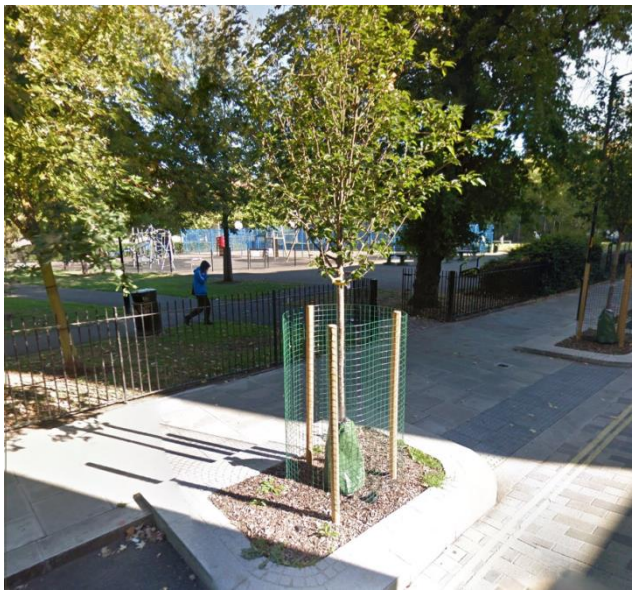
In some streets there may be no scope for tree planting due to insufficient space along the footway, or the relationship of the building façade to the street scene could be disturbed as a result of tree planting.

There should be no assumption that trees can automatically be replaced within the street until a full assessment of the location of underground services and plant has been undertaken. This assessment should include the digging of trial pits.

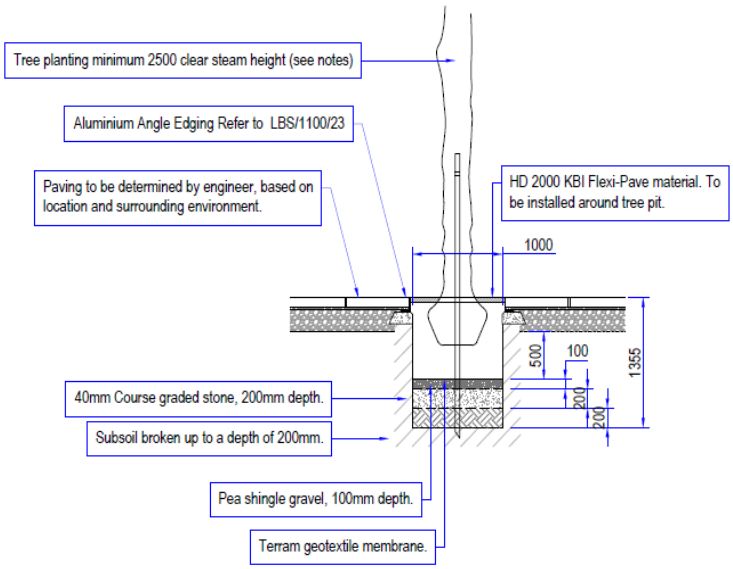
6.3 Planting Guidance

Existing trees ought to be retained. Where there is a protected kerb edge or in side roads, new trees are best located away from the building frontages. The trees need to be close enough to the kerb edge to accommodate an unobstructed footway width of at least 1.8m on a residential street, and as near as 3m on commercial streets and adjacent to bus stops as possible. There nevertheless should be sufficient distance from the kerb edge to protect the trees from possible damage by high-sided vehicles especially along bus routes. The final decision for actual planting locations rests with Southwark Council.

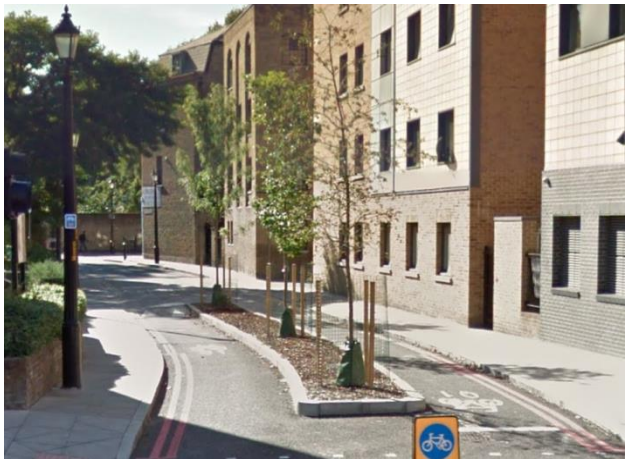
Kerb build-outs formed as part of traffic management can provide appropriate planting sites away from services (in areas that were previously carriageway) and building frontages, as well as narrowing the carriageway to slow vehicles. Consideration will need to be given in the detailing in order to prevent the possibility of impact damage from vehicles.



Tree pits should be constructed as large as possible given the constraints of the site. They must provide adequate rooting space and soil, i.e. 1,400mm^2 excavation if possible and a minimum of 500mm deep. Specifications need to take into account simple aeration and irrigation tubes, with a simple drainage layer in the base. A simple irrigation system is to use a 60mm diameter flexible perforated hose about 600–700mm long, one end leading directly to the root ball and the other protruding slightly above soil level; this can then be filled quickly with water and has few pieces liable to break or be vandalised. The hose should be specified in a dark colour. Within primary roads and secondary roads the detail for the surfaces of pits of established trees should be a permeable layer of bound gravel to match the colour of the adjoining footway. Where pedestrian flow is lower, for example in residential streets, the tree pit should be covered with soil and mulch or with self-binding gravel.



Southwark Council now prefers to avoid using tree grilles, as they accumulate litter, are costly and can create trip hazards. However, in vulnerable locations, the use of tree guards helps to protect trees in their early years and may be acceptable.



Standard trees with 12–14cm girth and 2m clear stem to canopy (to maintain sightlines under the canopy) are an appropriate size for general planting. However, in areas prone vandalism or areas requiring instant and greater tree impact, larger size (18–20cm or 20–22cm girth) extra heavy standard trees are appropriate. It should be noted that larger planted trees will require greater maintenance i.e. more watering in times of reduced rainfall. Trees should be supported with double staking or underground guying. Trees should be planted no less than 8m apart.

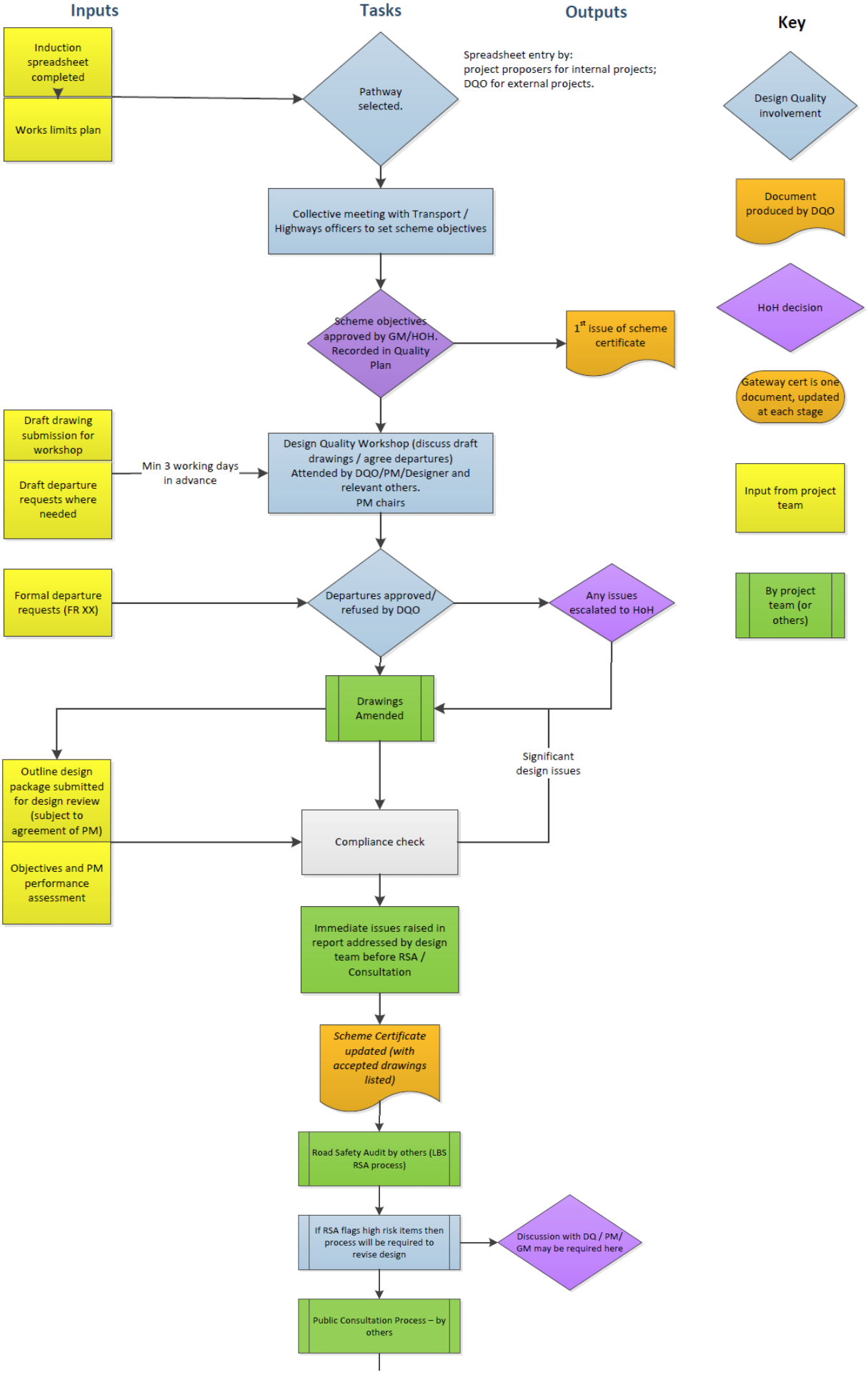
6.4 Planters

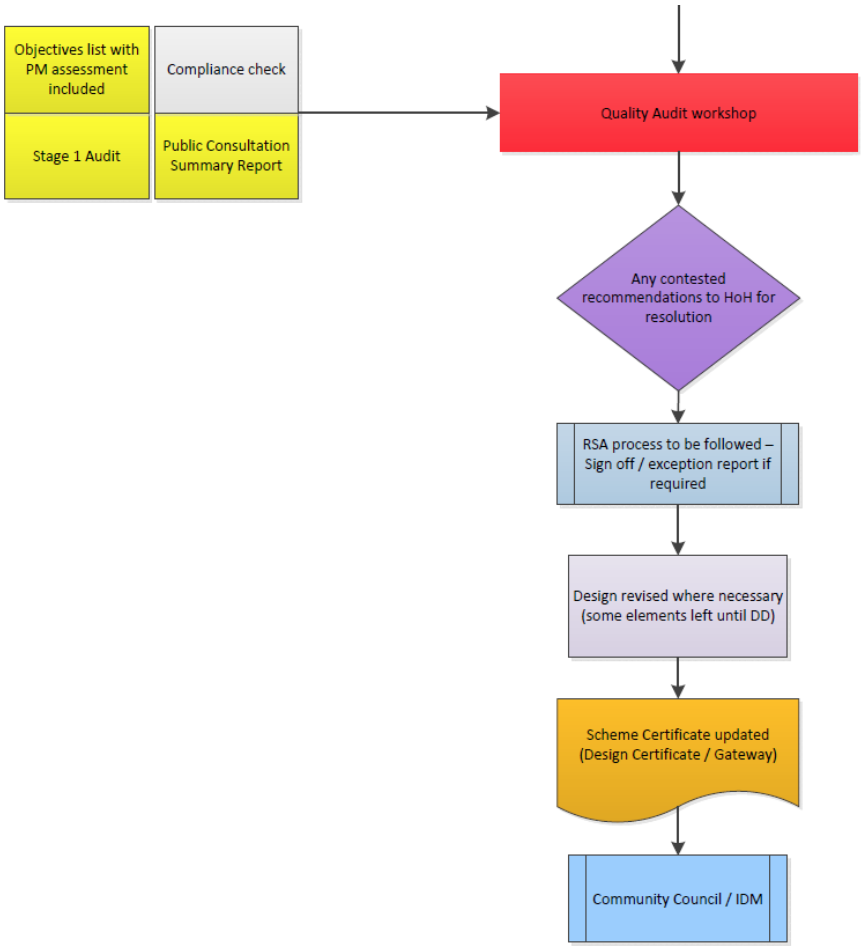
Raised beds can provide protection and a means of getting trees and shrubs into areas where there is insufficient depth available otherwise. Structures can provide high quality architectural detailing and sculptural elements if appropriate to their setting. However, poorly located planters can clutter pavements, restrict passing widths and interrupt pedestrian movement. New planters must be limited to locations where there will be a retained clear pavement width of at least 2m. Planters may be used on the carriageway in some rare circumstances, particularly as part of traffic calming schemes to reduce speeds. Raised planters should have adequate drainage with consideration for the sub-base and its drainage capability.

Irrigation/maintenance costs should always be considered before installing planters and Southwark prefers to establish planting in the ground where less maintenance (watering) would be required. In some locations community ownership and management of planters could be considered.

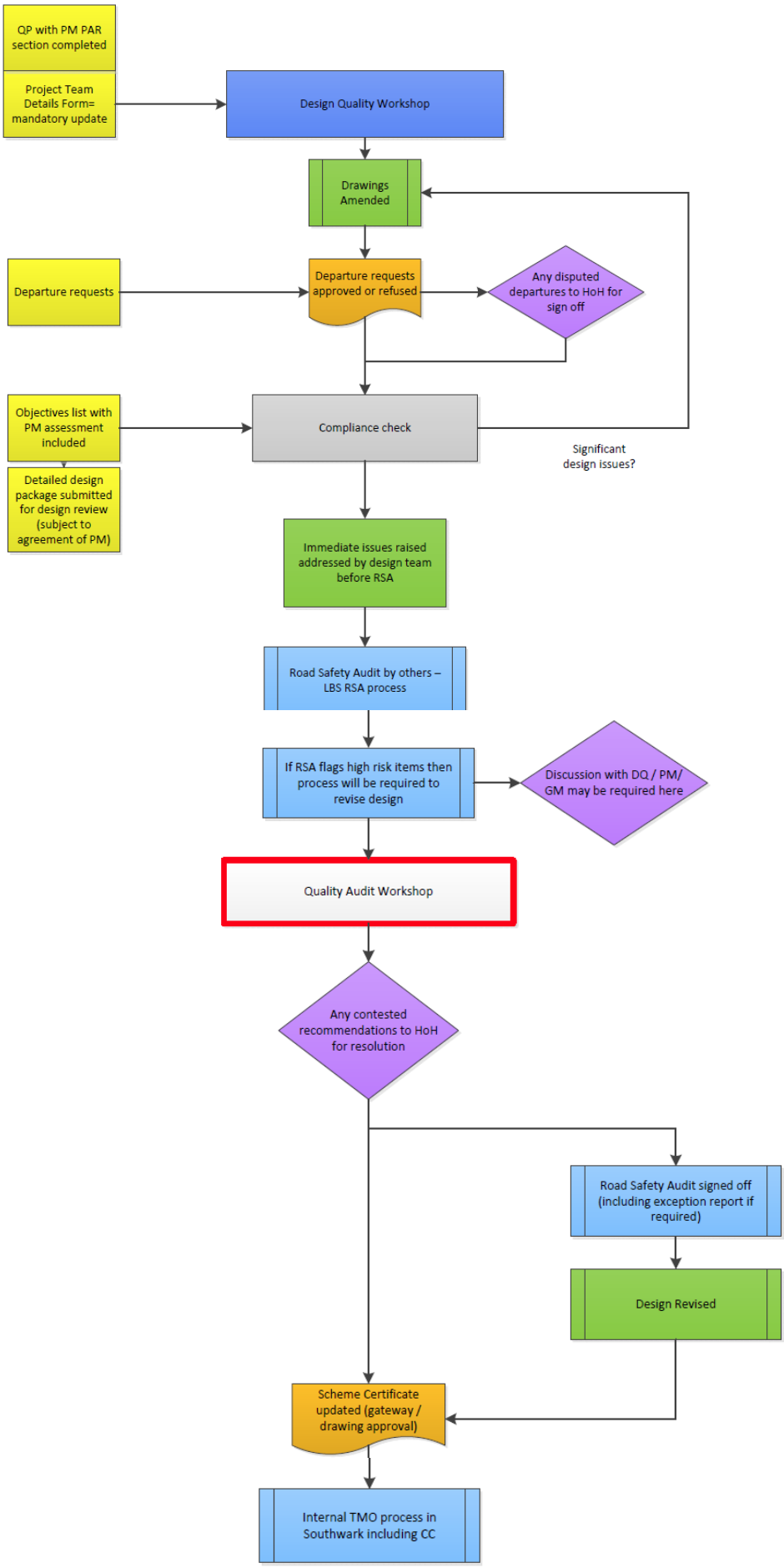
Any new scheme should consider providing planting. In this way, green spaces and parks in Southwark will start to become connected and wildlife can migrate from different Sites of Importance for Nature Conservation throughout the borough. Creating “corridors” between green areas will help promote biodiversity and also resilience should one of the green areas become unwelcoming for wildlife.

Appendix A Southwark Highway Scheme Pathway A Outline Design Flowchart

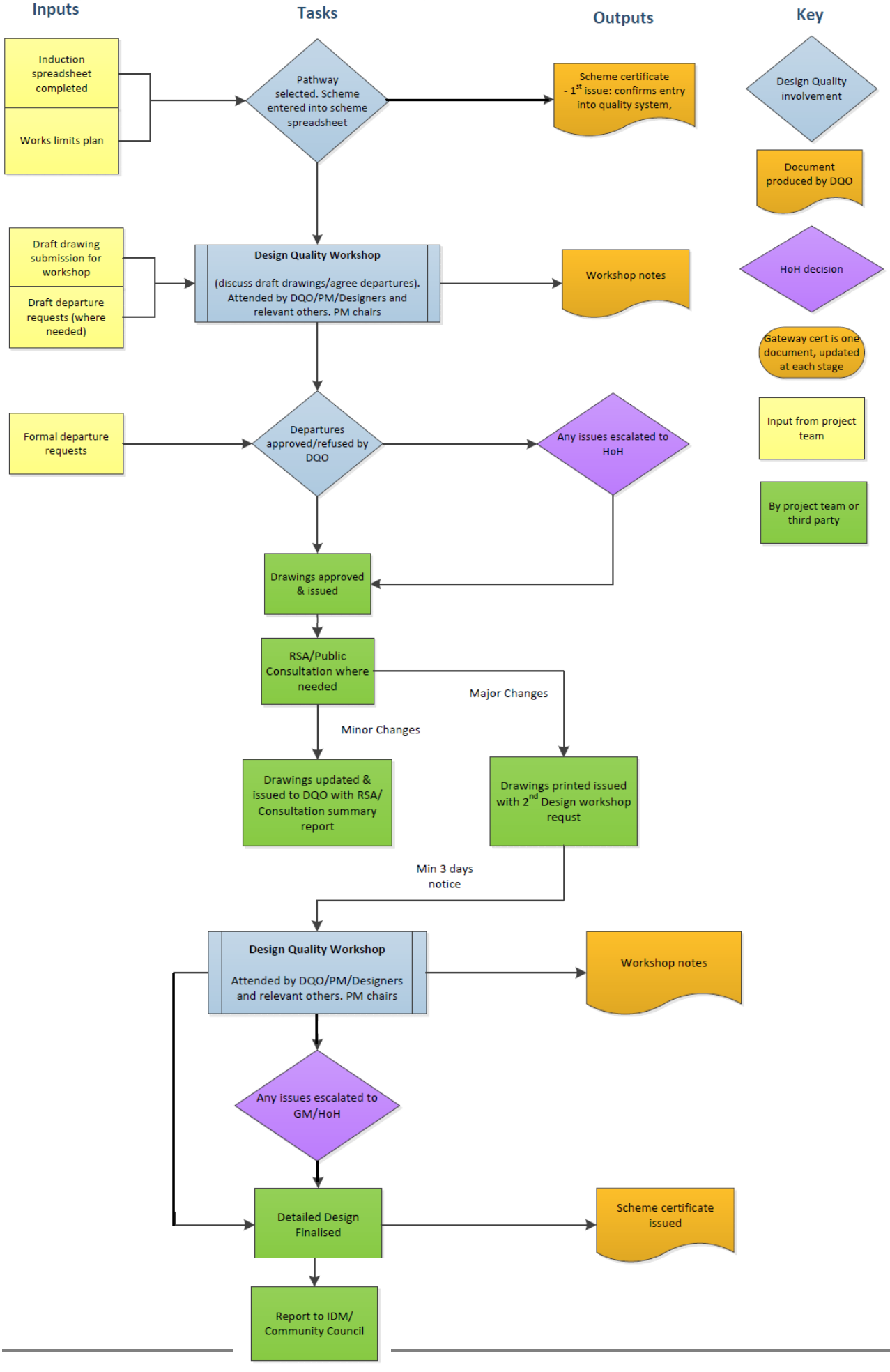



Objectives list with PM assessment included
Compliance check
Stage 1 Audit
Public Consultation Summary Report
Quality Audit workshop
Any contested recommendations to HoH for resolution
RSA process to be followed – Sign off / exception report if required
Design revised where necessary (some elements left until DD)
Scheme Certificate updated (Design Certificate / Gateway)
Community Council / IDM

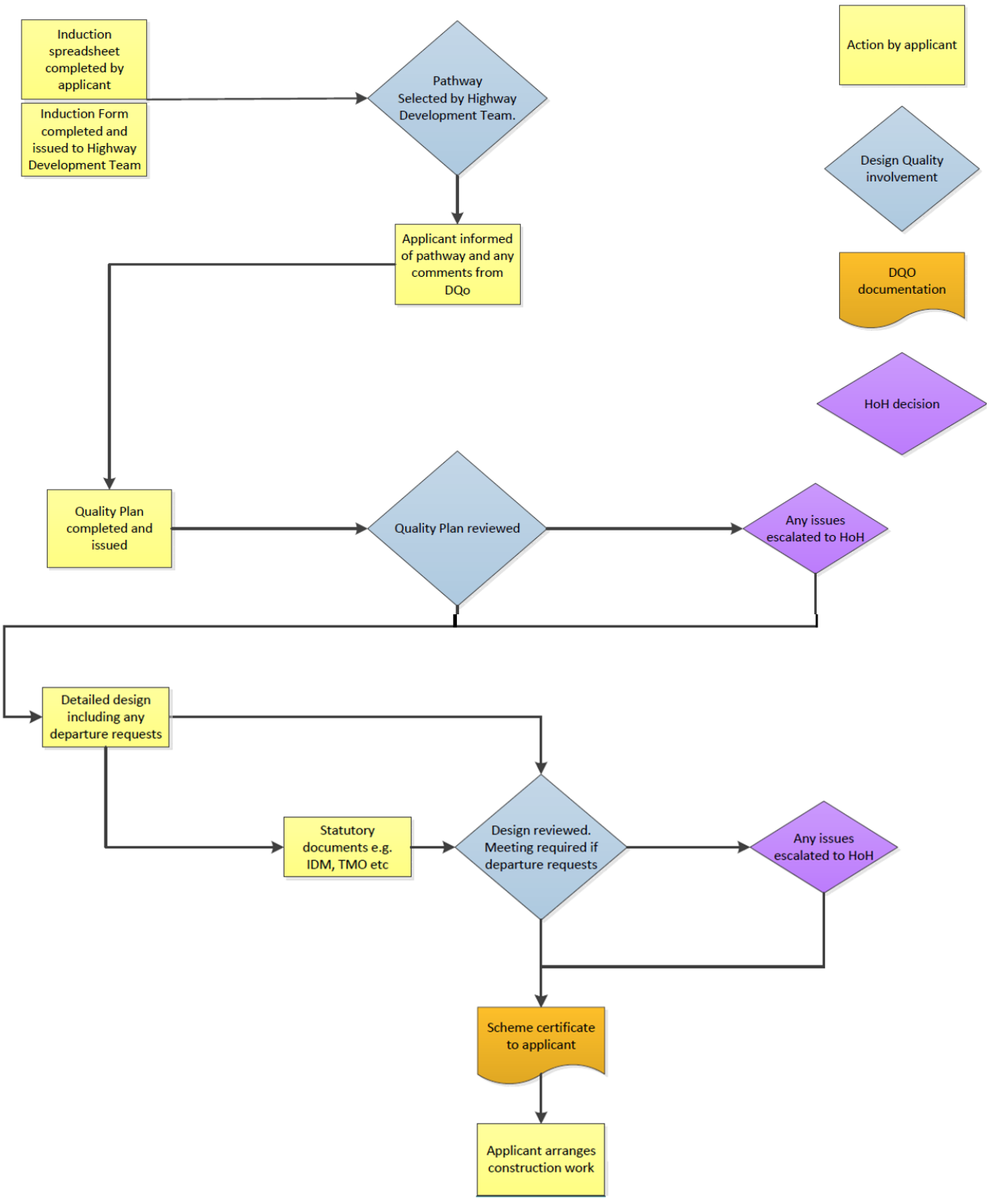
Southwark Highway Scheme Pathway A Detailed Design Flowchart



Appendix B Southwark Highway Scheme Pathway B Design Flowchart



Appendix C Southwark Highway Scheme Pathway C Design Flowchart



Appendix D Document Submission Requirements for all S278 and S38 Schemes

- A completed 'Section 278/38 Highways Act 1980 Application Form to enter into Agreement'.
- A drawing called 'Section 278/38 Agreement' showing the areas of highway and associated open space and shown coloured in the following manner:-

Ownership boundary	- Solid red
S278 works boundary	- Solid blue
Land to be adopted	- Solid green with hatching
Easements	- Solid plum with hatching
Carriageway	- Grey
Footways and Footpaths	- Yellow
Shared surfaces	- Hatched Grey/Yellow
Cycle ways	- Crimson
Paved Areas (not used by pedestrians E.g. central reserves or traffic islands)	- Burnt Sienna
Open or grassed areas	- Green dotted hatching
Combined or Foul Sewer	- Solid red ink line (fine)
Surface Water Sewer	- Solid blue ink line (fine)
Gully connections	- Broken blue ink line (fine)
Lamp column position	- Brown circle
Street nameplate position	- Brown cross
Tactile Paving	- Buff (Controlled crossings: Red colour)

Drawings

To form part of each agreement, the developer will be required to provide a full set of drawings consisting of:-

a. Site Location plan with red line (e.g. 1:1250 or 1:2500).
b. Site clearance.
c. General Arrangement plan (e.g. 1:500) including verges, visibility splays, plot boundaries, traffic calming features, building positions, garages and vehicle crossings, parking, trees, planting and landscaping, cross- section locations.
d. Road construction details - typical sections.
e. Longitudinal and cross sections at 5.0m interval - where necessary.
f. Topographical survey with levels related to Ordnance datum – **contours at 25mm interval.**
g. Highway drainage layout and calculations and any detail drawings.
h. Details of any traffic calming measures.
i. Details of street lighting, signs, road markings, traffic signals and other street furniture.
j. Details of statutory undertakers alterations.
k. Vehicle turning circle / swept-path drawings.
l. Landscaping treatment.
m. Setting out drawing
n. Road markings and signs drawing.
o. Pavement construction layout.

Documents

- Pre-construction site condition survey
- Requirements for any temporary or permanent traffic orders, permits or licences.

Preliminary drawings and associated s278/38 documentation must be provided in full size hard copies, one set only (electronic copies can also be provided additionally). Once technical approval has been given, the developer will have to provide up to **five hard copies** of all drawings.

Southwark Council
southwark.gov.uk