Inclusive Design and Placemaking

Supplementary Appendix to Kent Design Guide

Access Audit Toolkit

22nd October 2010

Produced in partnership by Kent County Council, Maidstone Borough Council and Tunbridge Wells Borough Council

Contents

Access Audit & Guidelines

Technical Guidance and User Guide
October 2010

1 Introduction

Setting the Scene

A high quality and accessible environment is central to increasing walking levels and providing an experience that meets the needs of all users irrespective of age, ability, experience or understanding. National guidance issued by the DfT and Communities' highlights the central role of combining 'hard' and 'soft' measures to create accessible environments that encourage a shift to sustainable travel and help respond to issues of congestion, poor health, climate change, regeneration, as well as housing and economic growth.

It is apparent that understanding and addressing issues of accessibility will be a dominant factor in decisions to grant planning permission.

Creating an Accessible Environment – Key Principles

Almost everyone is a pedestrian at some point, as such; environments must cater for a wide variety of users. Whilst individual user needs may vary, people walking can be considered to have the same basic requirements and making an environment walkable for all can be summarised using the '5 C's':

- **Connected** – consideration should be given to the locations of local attractor destinations and routes should be designed or improved to provide links and help people get from A to B in a direct, safe and easy manner

- **Convenient** – developing pedestrian networks should be a high priority in street design. They should connect to one another and crossings should be on pedestrian desire lines to minimise deviation.

- **Comfortable** – routes should make walking an enjoyable experience by ensuring they are high quality, safe, free from obstructions and of an acceptable gradient and width.

- **Conspicuous** – streets should be made safe by increasing natural surveillance, reducing speeds and mitigating the impact of anti-social behaviour for people walking.

- **Convivial** – the quality of the walking environment should be improved to enhance the way people feel about and interact with the local area and other people. This involves tackling issues such as litter and graffiti and by creating engaging and interesting public space through the use of materials, lighting and art.

This highlights the importance of providing a pleasant and comfortable experience for users. However, it is important to note that a pedestrian should not be thought of

as just a transport user getting from ‘A to B’, the term applies to anyone using the public realm, for instance people sitting, talking or reading. This needs to be borne in mind when creating and reviewing pedestrian environments.

The importance of objective appraisal

This accessibility audit tool has been developed to allow users to undertake an independent appraisal of existing and/ or proposed streetscapes to evaluate the quality of an environment ahead of development of a scheme or planning application. The tool will help ensure consideration of priorities from an Equality Act perspective have been met. This tool is designed to assess both the quality of an environment for its users whilst providing a check on basic design standards. The majority of users within an environment do not consider whether their surroundings meet design standards, they assess an environment based on how it caters for their needs. In many circumstances it will be appropriate to exceed standards (which are commonly based on minimum desirability) to achieve a higher quality of public realm.

Nevertheless, to ensure an environment caters for all its users and to help identify quick-wins this tool helps to identify issues and problems associated with design. Environments should be considered from the view point of more vulnerable users including adults with children or buggies, wheelchair users, visually impaired people, older pedestrians and children.

Relationship with Part M Building Regulations and other Standards

Our rationale is to apply a single common approach to the pedestrian environment for both public and private spaces where there is more intensive movement. Both *Part M* (Building Regulations) and DfT’s *Inclusive Mobility* document provide specifications to support access to buildings and access within public spaces. Part M specifically relates to means of access form the boundary of a site to the entrance of a building; whereas Inclusive Mobility generally uses higher standards for pedestrian routes.

For planning applications the schemes must comply to Part M but the spirit of the guidance is to encourage the designer **to look beyond minimum standards to create a solution that best suits the location.** The audit process is designed to help highlight specific weaknesses in the public realm so that the designer can make informed recommendations and decisions about the dimensions and standards he will use. In the same way as Manual for Streets encourages a thought process that moves away from ‘meeting minimum standards’ so the access audit process is in place to help the designer develop an optimum, user-friendly development or scheme.

In order to address the requirements of the Equality Act to ***advance opportunity*** for disabled people wherever possible designers should be looking to apply the higher standards rather than adopt a minimum compliance approach.

Aims of the Access Audit

The aims of the audit are to:

- Evaluate the quality of an environment from a users perspective;
- Identify all the barriers to movement in the public realm that may restrict the opportunities for pedestrians to move freely in the streets and gain entry to any public building along the route;
- Produce an accurate on-site record of the barriers so that the information can be entered into a database and used for asset management, scheme design or Section 106/278 obligations; Note that this includes recording of existing street furniture locations and clearance widths.
- Testing of connections between new development site and the surrounding area.
- Make a record of suggestions about the actions necessary to remove the barriers.

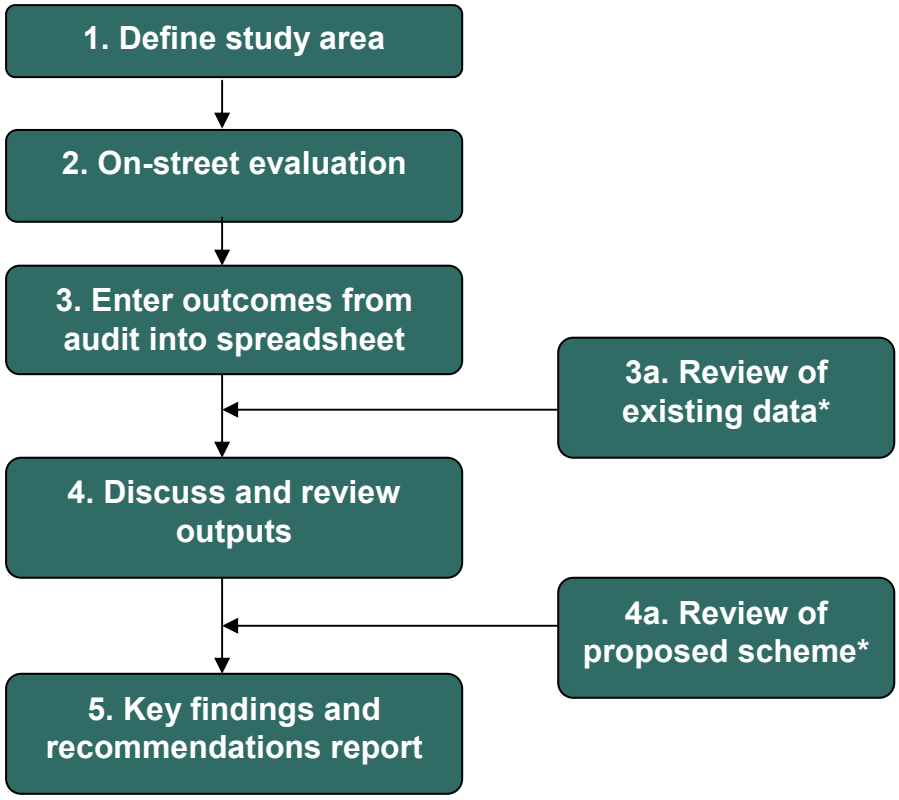
The audit can be applied to the following environments:

- Streets / Roads including residential streets, shopping streets and all other streets where there is a demand for pedestrian movement. This includes links to and facilities at public transport nodes and crossings;
- All public rights of way;
- Public amenity space;
- Parks and open spaces.
- Pseudo=public areas e.g. shopping courtyard maintained by private companies
- Access to rail and bus stations, bus stops and other transport interchanges

Whilst the main audit is normally carried out during the working day in order to capture photographs and other intelligence, it is recommended, if resources allow, to carry out an audit at the busiest time (e.g. shopping street on a Saturday morning) and also in the evening/night-time to pick issues of surveillance, personal safety and visibility.

2 Audit Process

The key stages of the review process are illustrated below:



** Where appropriate*

Stage 1: Define study area
The study area should be defined using computer based or paper mapping to identify the audit boundaries, allow each environment to be identified and help allocate the routes to be assessed. Reviewers should take copies of the maps on-site for orientation and assessment purposes.

Stage 2: On-street evaluation
The identified routes should be assessed as set out below, prior to an assessment being undertaken, reviewers should have read this document and familiarised themselves with the potential barriers and appropriate standards as set out in Appendix A. The review should not be undertaken mechanically, and reviewers should assess how people are likely to want to use the environment and how well the environment serves their needs. The reviewer should not only consider an environment from their own point of view but also as if they were mobility or visually impaired for example. Reviewers should also be mindful of the impact of weather conditions and time of day.

To provide assistance a set of prompts have been developed and are attached at the end of this guidance document.

On-street review method:

1. Walk the route to get a feel of the general ambience of the area.

2. Complete the survey sheet in full, including names of the surveyors, date, time, weather and location;

3. Start at the beginning of your allocated section and look out for any obstructions or barriers that may impede movement. Give each barrier a number (starting at 1), and note the number on the plan as accurately as possible. If a particular problem relates to the whole street use arrows or shading to denote the extent of the problem. If there is a nearby property with a number/ name or other landmark it would be sensible to record this as well as marking the number on the map.

4. Enter the barrier number in the Route Point column of the survey sheet and describe the nature of the barrier in the Observation column and a proposed solution in the Recommendation column.

5. Where the barrier is not in-line with specific design standards, for instance where a dropped kerb is not flush or the gap between items of street furniture is too narrow or the footway is below standard widths the appropriate measurement (e.g. dropped kerb has a 10mm upstand) should be noted in the Measurement(s) column.

6. Take a photo of the barrier and log the photo reference in the Photo(s) column of the survey sheet.

7. If the property adjacent to the environment being reviewed is a public building i.e. not a private house, check to see whether access is restricted. Categorize the properties on the route as follows:-

8.
    a. **Colour in red** - properties that could not be entered by mobility impaired persons.
    b. **Colour in yellow** - properties that could be entered by a mobility impaired person with assistance.
    c. **Colour in green** - properties that could be easily entered by all users. (N.B. It will not be necessary to enter the property to complete this assessment)

9. Continue walking the street noting barriers in the same way until you reach the end of your route. If auditing both sides of a street, number one side of the street consecutively and then return along the opposite side.

10. At the end of your audit make notes on the survey sheet concerning the general quality of the pedestrian environment using the qualitative indicators (Appendix A) as a guide to the type of matters that should be taken into

account. An overall score for each indicator should also be identified as explain in Appendix A. Reviewers should also include any other general observations they feel will enhance the overall quality of the findings.

An example survey sheet is attached to this document.

Note: The conduct of the audit inevitably involves making a judgment about what constitutes a barrier. Try to be as objective as possible by referring to the Prompts, Barrier Checklist in Appendix A and discussing any questionable points with members of the team in an attempt to arrive at a consensus. If in doubt - record the problem - it can always be eliminated if it is thought to be of minor significance. The Indicator Checklist is intended to provide a guide to the things to look out for on the route but reviewers should add any other matters that are not on the list and make a note in records as this may help to refine the audit checklist for future use.

Stage 3: Enter outcomes from review into electronic spreadsheet
The on-site evaluation survey sheets should be used to complete the electronic spreadsheet entering both Observations and Recommendations along with the relevant short-hand codes. These codes are attached in Appendix B.

In addition, the anticipated cost of each recommendation should be provided along with the OS coordinates, a link to the photos and an assessment of the barriers' relative priority from 0 where no action is considered necessary/ worthwhile to 5 where immediate action is required.

Stage 3a: Review of existing data
Where available and appropriate a review of existing data will support and inform the above analysis, this should include the following if available:

- Road accident data
- Stakeholder views
- Traffic flows and speeds
- Pedestrian flows / count data
- Crime and disorder data
- Complaints
- Public transport information.

Stage 4: Discuss and review outputs
The outcomes of the above stages should be reviewed and discussed with colleagues to arrive at a consensus over the identified costs and priorities.

Stage 4a: Review of proposed scheme
Where a new scheme is proposed, the plans/ drawings should be reviewed in a similar manner to that described in Stage 2. Each potential barrier should be numbered on the plan and logged within the spreadsheet along with the appropriate Observation and Recommendation Codes. The barriers identified previously through the on-street audit should be borne in mind to check that issues are being addressed.

In parallel, it is advisable to consult with Kent Police at an early stage. This should include the local Police Architectural Liaison Officer and/or the Crime Prevention Design Advisor.

Stage 5: Key findings and recommendations report

A summary report should be provided which reviews the identified issues and recommendations by type, by priority and by costs. It should also highlight the problems along the various routes and any issues associated with buildings. This can this be used to generate a set of recommendations to help inform future maintenance programmes or develop existing/ planned wider development schemes.

2.1 Example Survey Form (to be replaced with neater graphic in final version)

Surveyor(s)	xxx and yyyy
Date	01/01/2010
Time	11:30
Weather	Dry
Location	Anytown, Kent

Route Number	Route Point	Observation	Recommendation	Photo(s)	Measurement(s)
A	1	Poor signage	Improve signage	001	
A	2	Street light in middle of footway	Relocate light column	002	
A	3	Bollards create pinch point	Relocate bollards	003	Spacing only 0.5m
A	4	Upstand on dropped kerb creates trip hazard	Relay kerb so it is flush	004	Upstand is 10mm

Qualitative assessment / Notes	
Architecture	
Comments	text...
Ambience	
Comments	text...
Character	
Comments	text...
Landmarks	
Comments	text...
Permeability	
Comments	text...
Perception of safety	
Comments	text...
Personal comfort	
Comments	text...
General comments	

2.2 Audit Prompt Sheets

FOOTWAYS AND OFF ROAD PATHS

Effective Width

- How wide is the 'effective' pedestrian space?
- Is it sufficient for flows?
- Is it suitable for wheelchair use?
- Does the link meet standards?
- Is it wide enough to allow pedestrians to pass one another and obstructions?
- Is there congestion?

Kerbs/ Dropped kerbs

- Are kerb upstands located where appropriate?
- Are kerbs dropped and consistent?
- Are they situated on desire lines?
- Can dropped kerbs be used to cross the road easily?
- Are they wide enough?
- Is the gradient suitable?
- Are they flush? Should be a maximum of 6mm
- Should be bull-nosed, not square
- Do the dropped kerbs have the appropriate tactile paving

Tactile Information

- Is tactile information present?
- Is the tactile information consistent?
- Is the tactile information correct?
- Does the tactile provision meet with the standards?
- To what extent is it maintained?
- Is the tactile paving faded?
- Is the tactile paving the right colour?
- Are there any interruptions, service hatches for example?

Steps/ Gradient/ Ramps/ Handrails

- Are alternatives to steps provided?
- Is there sufficient contrast between the steps?
- Is a textured surface provided?
- How severe is the gradient?
- Are there rest points? (NB individual ramp sections must be less than 6m)
- Are handrails provided? Do they meet standards?
- Do the steps have the recommended contrast highlighted step nosings?

- Do the steps have warning corduroy paving at the top and bottom?
- Is there enough space for a wheelchair user to turn?

Surface quality

- Is the surface even and smooth?
- Are there any trip hazards?
- Is there adequate surface friction?
- Has the surface been reinstated to a high standard?
- Is it consistent?
- Are covers and gratings flush with the footway?

Drainage/ Crossfalls

- Is there evidence of ponding?
- Is the crossfall severe?

Shared-use

- Is shared use the only option in this location?
- Is there a shared-use path? Is it well signed?
- Is there any type of segregation?
- Is the segregation in line with DfT Guidance in the use of tactile paving surfaces?
- Are widths sufficient to cater for flows and movement?

Signage

- Are street signs provided and maintained?
- Is signage present, clear, concise correct and consistent?
- Have the signs been placed in an appropriate position to enhance visibility?
- Does the signage have good contrasting features?
- Information boards / maps provided?
- Does signage include time or distance?
- Are they well lit?
- Is it accessible to all users?

Guard Rail

- Is guardrail in place?
- Is it necessary and can it be removed without prejudice to road safety?
- Evidence of dangerous behaviour? Is visibility affected?
- Could alternatives be used?

- Where in place, does it meet DfT standards?

Street furniture

- Is street furniture aligned to minimise deviation and obstruction?
- Is there confusion? Is the item necessary?
- Is there colour contrast with the surrounding area?
- Are the materials non-reflective to reduce glare?
- Is the street furniture consistent in materials and design code throughout the street?
- Could furniture be combined? E.g. Lighting and signage/ bins?
- Are telephone boxes and cash points accessible to users of all abilities?
- Is seating provided, is it correctly located and designed
- Are lighting columns provided? Do they meet standards?
- Does the lighting system give uniform light coverage?

Surfacing

- Is the surfacing suitable for all users?

Gates/ Barriers

- Are gates or barriers provided?
- Are the gates and barriers easily visible and do they contrast with their surroundings?
- Could a disabled person negotiate the barrier? Think about the needs of e.g. a wheelchair or mobility scooter user, assistance dog owner etc)
- Are they necessary? Would an alternative be possible?
- Is visibility affected?

Surveillance/ Security

- Is the path overlooked?
- Is it well lit?
- Is it busy?
- If it is a footpath, can people walk directly from ‘A to B’?
- Does the route contain acute deviation that people could hide behind?

AT GRADE CROSSINGS

Location/ Type

- Is there a safe crossing place where needed?
- Is the facility correct based on location, traffic speed/ volume and users?
- Is it located on pedestrian desire lines?
- Has the appropriate tactile paving been used in line with DfT Guidance (layout and colour contrast)?
- Have localised adaptations taken place on the use of tactiles (brass studs, grey blocks etc)

Dropped kerbs

- Are the dropped kerbs in suitable locations at the crossing point?
- Is the capacity of the dropped kerb adequate?
- To what degree are the kerbs dropped?
- Is the gradient suitable?
- Is the provision of dropped kerbs on the crossing consistent?
- To what extent are they flush with the footway and carriageway?

Tactile paving

- Is tactile information provided at the approach, in the refuge and at the end of the crossing?
- Has tactile paving faded or been damaged?
- How appropriate is the tactile information? Does it meet requirements?
- Is there colour contrast in defining the crossing point?

Audible/ Tactile push button

- Is the positioning of the button adequate for all users?
- Is the button located near to the tactile surface?
- Is there audible information for sensory impaired users?
- Do controlled crossings have rotating cones

Waiting zone/ refuge

- Is capacity sufficient to cater for demand?
- Does it meet standards?

Crossing timings

- Is there a pedestrian phase?
- How long, approximately, is the waiting time?
- How long does it take to traverse the entire crossing?

GRADE SEPARATED CROSSINGS

Location/ Access

- Is a subway or footbridge provided?
- Would an at-grade crossing be more appropriate?
- Has the recommended central delineator line been installed?
- Has tactile paving been installed in line with DfT Guidance?
- Is there clear definition between pedestrians and cyclists using tactile paving?
- Are ramps provided as well as steps?
- Are the surfaces suitable?

Security

- Are security measures in place?
- Is there sufficient lighting?
- Do they appear safe to use?
- Is CCTV provided?

Shared use

- Is the facility shared with cyclists?
- Is there signage?
- Is there suitable space for users to pass one another in comfort?

PUBLIC TRANSPORT NODES/FACILITIES

Bus stops/ shelters

- Is there a shelter?
- Is seating provided?
- Are maps and information accessible for all users?
- Is there audio or help point information?
- Is there sufficient space on the footway to cater for waiting passengers and passing pedestrians?
- Are dropped kerbs provided in the vicinity?

Bus boarder

- Is a bus boarder provided?
- Are access and egress points obstructed in any way?
- Are the gradients accessible?
- Is tactile paving provided?
- Can the vehicle position itself parallel to the waiting area?

PUBLIC BUILDINGS

Access

- Can all users easily access the building?
- Do steps/ ramps etc cause a barrier?
- Is there an automatic door? Does it open inwards?
- Is there a revolving door? If so, is there an alternative entrance?

Usability/ Appearance

- Can the handles etc be used with limited handling dexterity?
- Is there warning of the door's existence?
- Is the door easily identifiable with good contrasting features?
- If there are glass doors do the panels have markers to ensure visibility?

PUBLIC LAVATORIES

Access

- Are they accessible?
- Can they be used by both males and females?
- Is there space for baby changing?
- Are braille signs available?

Maintenance

- Are they well maintained and clean?
- Is there an on-site assistant?

PEDESTRIANISED ZONES

Area

- Is it clear where the pedestrianised area ends?
- Is there any chance of danger for users?
- Is there confusion?

Street furniture

- Is there excessive street furniture?
- Is it well aligned or randomly scattered?
- Is there a clear route through the space?
- Is seating provided?
- Are items of interest provided?
- Does the street furniture contrast well against their surroundings?

CAR PARKS

On-street/ Off-street

- Are spaces provided?
- Are they accessible by all users?
- Do they align with standards?
- Does it feel safe?

Markings/ Surfacing

- Are bays for different users clearly marked?
- Is the surface suitable for use by all users?

Location/ Security

- Is parking located close to public facilities?
- Are dropped kerbs with tactiles provided to assist movement?
- Are the parking spaces overlooked?
- Is the area well lit?
- Is the evidence of CCTV or manned surveillance?

OBSTRUCTIONS

Overhead

- Do trees, shrubs, shop awnings or signs result in overhead obstructions?
- Is landscaping well-maintained?
- Are they an acceptable height?
- Do they also affect width or visibility?
- Do they align with standards?

Temporary

- Are there any temporary obstructions such as parked cars, shop A boards, shop goods, café seating and street works?
- Do they restrict pedestrian movement?
- Do they cause conflict?
- Are there specific risks for blind and partially sighted people?

OTHER

Maintenance

- Is the area clean?
- What is the level of drainage?
- How littered is the area?
- Is there any evidence of neglect?
- What is the quality of reinstatements?
- What is the impact of seasonal foliage / leaf litter?
- Has there been a failure to remove graffiti?
- Is soft landscaping well tended or neglected?

Inconsistency

- Has access provision been consistent across the area?
- Are there significant gaps?
- Are there areas where disabled people could be left ‘stranded’?

Emergency Access

- Is there sufficient access for emergency vehicles to the street or space?
- In the case of redevelopment, has emergency access from the site been considered?
- If so, are there any barriers to safe independent egress/means of escape for disabled people?

QUALITATIVE FACTORS

Architecture

- What is the quality of the architecture?
- Obvious ‘eyesores’?
- Quality of frontages?
- Number of closed/ shut-up frontages?
- Any distinctive features?

Ambience

- General ambience? Pleasant or unpleasant?
- Visual/ sensory interest?
- Activities/ interaction?
- Quality of landscapes?

Character

- Is there a distinctive character?
- Is there consistency in building materials and methods?
- Is there a regular building form and/ or pattern?
- Are the developments in scale to one another?

Landmarks

- Are there landmarks?
- Do they help legibility?

Permeability

- Is the street permeable and connected?
- Can you go where you want on a direct route?
- Are dead ends signposted?

Safety/ Comfort

- Does the area feel safe? Does it feel threatening?
- Are there any dark spaces?
- Do you feel at risk?

- Are there any other dangers?
- Is there excessive noise, unpleasant smells etc?
- Is the route well used?
- Does it benefit from informal surveillance (children walking home from school at a certain time of day or physically adjacent to an '8 till late' shop)
- Does it form formal surveillance (e.g. CCTV, policed route by PCSO)

2.3 Access Audit Guidelines

The audit aims to: -

1. Evaluate the quality of the street environment from the perspective of a pedestrian user.

2. Identify all the barriers to movement in the public realm that may restrict the opportunities of pedestrians to move safely, independently and freely in the streets and gain entry to any public building along the route.

3. Produce an accurate on site record of the location of the barrier in sufficient detail so that the information can be entered later onto a spreadsheet and used for asset management, scheme design or Section 106/278 obligations.

4. Make a record of suggestions about the action necessary to remove the barriers.

Method

- Walk your route to get the feel of the general ambience of the area.

- Complete the names of the group members, allocated group number and weather conditions on the survey sheet.

- Start at the beginning of your allocated section and look out for any obstructions or barriers that may impede movement. Give each barrier a number. Note the number on the plan as accurately as possible. (See example). If a particular problem relates to the whole street use arrows or shading to denote the extent of the problem.

- Enter number 1 in column 1 of the survey sheet and describe the nature of the barrier in column 2 (see example below). In column 3 give a brief indication of what needs to be done to remove the barrier. If there is a nearby property with a number or name or other landmark it would be sensible to record this as well as marking the number on the map.

- If the property adjacent to the street is a public building i.e. not a private house, check to see whether access is restricted. Categorize the properties on the route as follows:-

- Colour in red - properties that could not be entered by a disabled person. Colour in yellow - properties that could be entered by a disabled person with assistance.
  Colour in green - properties that could be easily entered by all users. (NB It is not necessary to enter the property for this audit to ascertain whether it is possible to move freely around the interior. Your task is to check whether entry is possible.

- Continue walking the street noting barriers in the same way until you reach the end of your route. If you are auditing both sides of a street it is usually easier to number one side of the street consecutively and then return along the opposite side.

- At the end of your audit make notes of the general quality of the pedestrian environment using the qualitative indicators as a guide to the type of matters that you should be taking into account. Include any other general observations that you feel will enhance the overall quality of the findings.

- If you have a camera you may wish to photograph some examples of the problems that you encounter.

Route no.	Site reference	Observations / comments	Recommendations
7	3	Pavement surface damaged	Repair using materials to match existing i.e. concrete paving stones
7	4	Temporary obstruction- parked cars overhanging pavement	Consider campaign to inform owners of obstruction
Example of a completed survey sheet. Write clearly so that it will be possible to enter the comments on spreadsheet at a later date.			

The conduct of the audit inevitably involves making a judgment about what constitutes a barrier. Try to be as objective as possible by referring to the checklist and discussing any questionable points with the members of the team in an attempt to arrive at a consensus. If in doubt - record the problem - it can always be eliminated if it is thought to be of minor significance. The checklist is intended to provide a guide to the things to look out for on the route. Add any other matters that are not on the list and make a special note in your records as this may help to refine the audit checklist for future use.

The checklist is divided into quantitative indicators and qualitative indicators. The quantitative indicators relate mainly to matters of fact that can be recorded or quantified. The qualitative relate more to matters of judgment about the quality of the environment - this is where you have to make a sensible judgment.

2.4 Quantitative Indicators

KERBS

1. Is a kerb causing a barrier? E.g. no dropped kerb at crossing points.
2. Is the kerb poorly aligned?

3. Has the dropped kerb got tactile paving where appropriate?

If there is a dropped kerb please check: -

- **Width** - it should be 2 metres in width (3 metres for areas with very high pedestrian flows)

- **Slope of ramp** - it should be 5% (1 in 20) although 1 in 15 is adequate, **1** in 12 is absolute maximum e.g. can **a** wheelchair user self propel his or her wheelchair with reasonable ease?

- **Junction of kerb and road surface** - it should be flush - to enable smooth passage from pavement to street surface

- **Alignment** - it should be aligned with a matching kerb on the opposite side Visibility -it should be possible for pedestrians to see clearly across the road

- **Desire Lines** - it should be placed in a position where pedestrians naturally want to walk - subject to safety considerations.

- **Tactile paving** -has this been provided where appropriate and to standard?

STEPS BARRIER

Note situations where steps exist and note if there is no alternative route via a ramp. Where steps exist (with or without ramps) please check: -

Handrail

- Handrail should be on both sides of steps
- Note material of handrail - is it cold, slippery, difficult to grasp?
- What is diameter of handrail? Standard diameter is 45- 50mm.
- Height above step nose - should be 850mm
- Overall height from ground -should be 1000mm

Definition of Tread

- Is there sufficient contrast between the rising and going of step? If not sufficient, is there a painted white line or contrasting line (depending on the colour of the step) to assist people with visual impairments?
- Is there a textured surface set parallel to the step nosing at the top and bottom of each flight to act as a warning for people with visual impairments?
- Are stairs reasonably well lit by natural daylight or supplementary lighting so that user does not negotiate stairs in his or her own shadow?

Comfort and Safety

- Is there a reasonable relationship between the height and depth of each step?

- Has the warning corduroy paving been installed at the top and bottom of the flight of steps?

SLOPES OR RAMPS

- Are handrails provided?
  - Is there adequate colour contrast between the handrail and the background to enable people with visual impairments to see the rail?
  - What is the material of handrail?
  - Is it cold to the touch?

- Is a ramp provided?
  - Does ramp have an anti-slip surface?
  - Is ramp too steep? Should be 1 in 20 ideally (this regarded as level) 1 in 15 is adequate. 1 in 12 absolute maximum. As a guide a wheelchair user should be able to self propel wheelchair up ramp.
  - Is there a resting place at the top and bottom of the ramp i.e. a flat area clear of any outward door swing? This is an important safety feature.

SURFACE CONDITIONS

- Is surface regular? Check for cracks, irregularities caused by poor jointing or reinstatement, broken or damages surfaces. Are there any depressions that might collect rainwater, ice etc?

- Is there evidence of slippery surfaces on pavement e.g. growth of green algae?

- Are grids, gratings, drain covers flush with paving?

PAVEMENT (FOOTWAY)

Note situations where no pavement exists in spite of pedestrian demand.

If pavement exists check:

- Width - it should be 2000mm of obstacle free space. Minimum -1800mm. Note that a double pushchair is 1000mm, wheelchair (670mm, but with elbows 900mm) Electric pavement scooter or wheelchair-I000mm. At bus stops pavement should be wider (3000 mm including shelter). Minimum overall width at obstacles e.g. signs posts - 1000mm.

- Note cambers of pavement - does camber deflect a wheeled vehicle such as child's tricycle or wheelchair into road? If so record this as a DANGER point.

- Check situations where heavy pedestrian flow likely particularly at peak times e.g. outside a cinema or theatre. Is pavement wide enough to accommodate this peak use?

- Is there evidence of slippery surfaces on pavement e.g. growth of green algae?

- Check to see if paving is even - particularly at junctions between paving types. Are grids, gratings, drain covers flush with paving?

- If there is a completely flush shared surface, are there effective delineators in place to assist visually impaired pedestrians? What form do they take?

CROSSING PLACES

Note situations where no crossing but one needed.

Is there a safe crossing place where needed and justified by traffic volume e.g. signal controlled pelican crossing or a zebra crossing in points where pedestrian desire lines exist? (Places where people naturally want to cross the street)

If a crossing exists check:

- Is there a dropped kerb each side?

- Is there tactile warning for people with visual impairments? E.g. a surface with raised bubble finish (usually red in colour) that is perceptible to feeling underfoot.

- If tactile warning in place - has it been correctly laid? It should be L shaped for all new puffin, pelican and zebra crossings. Does the arm of the L extend back to the pavement where possible?

- Is the bubble pattern in line with the direction of the crossing?

- Is tactile paving laid in a way that causes obstructions for other users?

- Is there an audible signal - beeping sound or tactile signal - see rotating cone under box to help visually impaired pedestrians to cross?

- Time the length of time the green man is displayed and the length of time flashing green man in place. Note both these times on the audit sheet.

- Is the push button accessible?

- Is it facing the right way?

BUS STOPS AND SHELTERS

- Is there a shelter provided at the bus stop? Is there seating provided for waiting passengers?

- Is the seating user friendly? (upright seats, individual arm rests?)

- Are information boards/ route maps at an accessible height?

- Is text on information boards printed at a reasonable size to maximize use?

- Is frame orientated to help pedestrians? E.g. cantilever design, glazing on roadside behind kerb, no clear glazed panels in pedestrian desire lines.

BUS BOARDERS

- Are the gradients the boarders to the correct gradient?

- Are tactiles in place at the point of boarding?

- Can the bus access the platform so that the bus is parallel and flush? Note what is preventing this from happening

- Is there space to allow wheelchair users/people with pushchairs to turn 90 and board the bus?

- If people are waiting at the bus stop is there a clear 2m gap to allow pedestrians to pass?

ACCESS TO PUBLIC BUILDINGS ALONG THE ROUTE

- Is it possible for wheelchair users, baby buggies etc. to gain access to the properties along the route?

- Are there barriers caused by steps, narrow doorways etc?

- Does the threshold project above surface to create an obstruction? 13mm maximum up stand.

- Is it possible to open door to premises if using a wheelchair? 800 mm is minimum width for wheelchair access.

- If automatic doors exist do they open towards the user? This can be dangerous and alarming. Is there a flat area in front of the doors? Is timing set for a slow user? Where closers provided are they slow enough to accommodate a person whose mobility and agility may be affected by a disability? Note that sliding doors are preferred by visually impaired users.

- If revolving doors provided is there an alternative entrance adjacent for people who find this type of door alarming?

- Is the location of the entrance made obvious by detailing, colour or other design features?

- Can door furniture (handles, push bars etc. be used by people with limited manual dexterity?

- If door is fully glazed is there a warning of the existence of the door e.g. by graphics etc.

STREET FURNITURE AND SIGNAGE

- Is the item of street furniture or signage really necessary? Check for duplication.

- Is there signage contusion?

- Are signs provided for pedestrians as well as motorists?

- Do poles or bollards have the recommended contrast strip in line with best practice in DfT's *Inclusive Mobility*?

If pedestrian signage provided is it:

- Easy to follow? Do the signs lead the pedestrian or are there gaps in the signing instructions? Are the signs clear, legible and obvious? Is the written instruction in a mixture of upper case and lower case (NB many people recognize words by shape, not individual letters)

- Is there adequate colour contrast between lettering, pictograms and background? Are embossed letters, pictograms, numbers etc provided for people with visual impairments? Is sign fixed at a height to facilitate use by everyone? Are signs well placed at points of confusion or do they state the obvious?

- Do the signs facilitate visitor access to the attractions of the town? Are maps provided? If so are they provided with a textured tactile version are they well

produced in terms of graphics i.e. easy to understand for a wide range of users?

- Is there scope to dual use street furniture/utility provision to support disabled people, children etc – e.g. providing clear street maps on water/electivity service boxes at lower heights?

- Is the item of street furniture causing an obstruction or unreasonably disrupting pedestrian movement on the pavement?

- Is the item in a good state of repair? If not explain problem. How are signs fixed?

- Are poles really necessary - could signs be fixed to a building for example?

- Check sitting of pole- it should be minimum of 450mm, maximum of 600mm from edge of carriageway. It should have a white band marking of 140-160mm in width 1.5-1.7 metres in height to lower part of band.

- Distance between poles should be a minimum of 1000mm Minimum mounting height 2100mm - Maximum 2500mm

Telephone Boxes

- Are telephones accessible by wheelchair users? Is there a facility for a seated user or person of small stature? Can wheelchair user read visual displays or are they too high?

- Is there an inductive coupler for people with hearing aids?

Automatic Teller Machines (hole in the wall or cash points)

- Can wheelchair users reach automatic teller machines at banks and building society offices?

- Check if well signed so that screen displays are legible from a sitting as well as standing position.

- Check height of card dispenser (should be 1250, less if recessed.) Is there a clear space in front of the ATM to enable a wheelchair user to stop on a level surface (1500 x 1500)?

Pedestrianised Zones

- Check particularly for excessive use of street furniture. Is design of street furniture high quality?

- Is there an identifiable zone in which street furniture is positioned or is it randomly scattered?

- Ideally there should be tactile warnings of the existence of an item of street furniture e.g. use of a distinctive ground surface.

- Is there a clear unobstructed route through street furniture?

- Are tactile messages present to guide people with visual impairments through the route?

- Is it clear when the pedestrianised area ends? If confusion exists so that parents or people with visual impairments may not realise that the safe area is at an end please record this as a DANGER point.

- Is there confusion about the start and end of safe areas?

- Is seating provided? If so is it designed to be user-friendly? Does it have arms, straight back, and comfortable surface?

- Is there provision of tactile warning borders around trees and cycle racks?

CAR PARKS

If there is a car park along your route check whether:

- Bays are provided for disabled people/parents and clearly marked and signposted.

- Bays are wide enough to accommodate transfer from wheelchair. (3600mm or 2 linked spaces with a shared space of 1200mm) kerbs flush to facilitate transfer.

- Surface of car park – e.g. if gravel spaces or loose stones it would be unusable by wheelchair user.

- Sitting of spaces in relation to facilities being served is reasonable distance.

- Does car park feel safe - i.e. well-lit etc.

OVERHANGING TREES/SHRUBS ETC. OR OTHER OBSTRUCTIONS

- Do trees, shrubs; shop awnings, overhead heaters etc result in overhead obstructions for people with visual impairments? There should be a minimum of 2 100mm clear headroom.

- Do overgrown hedgerows result in reduction of effective width of pavement or obstruct visibility?

TEMPORARY OBSTRUCTIONS

Kent County Council has a policy on "The Management of Obstructions and Temporary Items on the Public Highway". This policy outlines the need to maintain a 2m width for footway at all times although a 1.5m width will be permitted in some circumstances. Please refer to the document for further guidance:

http://democracy.kent.gov.uk/Published/C00000529/M00003329/AI00012564/$ItemB4Appendix.docA.ps.pdf

In addition, to carry out work or place anything on the public highway that will cause an obstruction, hazard or danger, authorisation will almost certainly be required from Kent County Council. Information about the license application process can be found via the following link.

http://www.kent.gov.uk/roads_and_transport/highway_maintenance/applications_and_licences.aspx

- Note the position of temporary obstructions. E.g. cars parked at right angles to street on private forecourts or gardens that overhang pavement or street, cars parked with inside wheels on pavement etc.
- Note position of A-frame boards used by shopkeepers for advertising if these are obstructing the width or are goods on display in shop forecourts restricting access by pedestrians?
- Is there more than one A Board for an individual premise?
- Can the A Board be accommodated elsewhere safely or will it need to be removed?

STANDARD OF STREET MAINTENANCE

- Is there evidence of excessive litter? Is lifter present that has obviously been in situ for a considerable period?
- Is there excessive fouling of the street or open spaces by dogs?
- Does the street show evidence of standing pools of water caused by inadequate drainage or blocked drains?
- Is there evidence of failure to clear the streets of leaves, ice, snow etc?

INCONSISTENCY ISSUES

- Across the study area, has access provision been applied consistently or are there 'gaps'?

- Are there any locations where the disabled people may be left ‘stranded’ because the design code has not been followed through e.g. missing or mis-configured tactile paving, flush surfaces leading into areas with kerbs, missing dropped kerbs?

- What is the overall risk to vulnerable road users (you may wish to split your comments between primary and secondary (feeder) pedestrian routes)

2.5 Qualitative Indicators

Please write your comments on each aspect.

GENERAL PERCEPTION OF THE STREET ENVIRONMENT

Architecture
What is the quality of the architecture along the route? Is the area predominantly one of modern or historic buildings? Comment on the quality. Are there any obvious eyesores along the route? E.g. buildings that are completely out of character with the area, gap sites, ugly fencing, hoardings, security shutters, empty or under-utilized buildings? Note the location of any buildings or other features of this type on the map.

Ambience
What is the general ambience of the area? Pleasant or unpleasant? Stimulating or boring? Is there visual or sensory interest in the area? Is there a lack of colour or interest? Are there interesting activities taking place in the area? Are there any gaps in the building frontages that break the continuity of the area? What is the quality of the landscape provision, floral displays and public art e.g. sculpture, fountains, statuary etc? Are they appropriate for the character of the town?

Character
Do you think that the area has a distinctive character? How would you describe this? What makes it distinctive?

Landmarks
Is the area legible? E.g. are there landmarks that help you to find your way? Do visual or audible clues assist this process e.g. fountains, tree groups, prominent buildings etc.

Permeability:

- Is the street pattern permeable?
- Can you get to where you want to go on a direct route?
- Are there lots of dead ends?
- If dead ends exist are they signposted?

Perception of Safety

- Is the area safe or threatening? It the latter - why does it feel unsafe?
- Are there any areas along the route that have a potentially threatening atmosphere? Are there any ‘no go’ areas? Would you feel safe here at night?
- Are there blank alienating walls, gap sites, overgrown or uncared for areas?

- Are there any areas where there is the potential for ambush - especially at night?

- Are there parts of the route where you would feel at risk because of traffic danger? Dangerous corners, traffic too close for comfort. Imagine the situation for a person shepherding a small child. Would they feel safe?

- Are there any other dangers or perceptions of danger not mentioned?

Personal Comfort

- What is the level of personal comfort? Is it cold, windy, exposed? Is it warm, cosy, comfortable?

- Is there excessive noise, unpleasant smells, exhaust fumes or other?

- Inconveniences or health hazards?

Public Lavatories

Are there sufficient public lavatories in the area?

If lavatories exist are they:

- Accessible? Do lavatories include a specially designed unisex WC compartment for the use of disabled people? Is there space for baby changing facilities in WC's for men and women?

- Are the WCs maintained in a reasonably clean and hygienic way? Or are they unsavory and almost unusable?

Seating
Is there adequate provision of seating? The existence of resting places particularly helps to extend the walking range of elderly or disabled people.

Lighting
Although difficult to judge during the day look out for street lighting columns. If they are not present in the street consider whether this likely to be a problem after dark.

2.6 Dimensions – Quick Reference List

NB: Note that the dimensions are only minimum standards and that higher levels of accessibility should be aimed for wherever possible.

BASIC DIMENSIONS OF PEOPLE AND EQUIPMENT

Minimum passage width - stick user 750 mm
Minimum passage width - double crutch user 900 mm
Minimum passage width - adult and child 1100 mm
Minimum passage width - adult plus helper 1200 mm
Minimum passage width - wheelchair - standard 900 mm
Minimum passage width - wheelchair - scooter/electric wheelchair 1000 mm
Minimum passage width - adult plus guide dog 1100 mm
Length of pram plus pusher 900 mm
Length of 95th percentile wheelchair 1140 mm
Length of wheelchair plus pusher 1750 mm
Length of space for wheelchair 1250 mm
Length of adult plus guide dog 1500mm
Length of powered scooter 1270 mm
Length of electric pavement vehicle (average) 1400 mm
Width of double pushchair 1000mm
Width of wheelchair (with elbows) 900 mm
Width of 95th percentile wheelchair (excluding elbows) 670 mm
Width of electric pavement vehicle or scooter 1000 mm
Eye level of wheelchair user 1175-1265 mm
Seated height of wheelchair user 1300 - 1385 mm
Turning circle - manual wheelchair (also small electric) 1575mm
Turning circle - outdoor electric wheelchair 2420 mm
Turning circle - electric pavement vehicle 4350 mm

FOOTWAYS AND FOOTPATHS

Preferred obstacle free footway width (overall) 2000 mm
Minimum footway width (overall) 1800 mm
Widths at bus stops (overall) - including shelter width 3000 mm
Minimum width at local restrictions (clearance) (e.g. bus shelters) 1350 mm
Absolute minimum at obstacles (clearance) (e.g. sign posts) 1000 mm

WIDTH OF DROPPED KERB

Standard width 2 metres
With high pedestrian flows 3 metres
Adjacent to parking spaces of disabled people 1 metre

HANDRAILS

Standard 45-50 mm diameter
Round section 45 mm
Height above ramp section 900 mm
Height above step nose 850 mm
Height overall from ground 1000 mm

POSITIONING OF POLES

Distance from property line to outer edge of pole 275 mm
Distance from edge of carriageway - minimum 450 mm (In extreme circumstances this may be waivered)
Distance from edge of carriageway - maximum 600 mm
Clear distance between 2 sign poles 1000mm
Minimum mounting height 2100mm
Maximum mounting height 2500 mm
Width of white band marking 140-160mm

Height of lower edge of band 1.5-1.7 metres

WASTE BINS, BOLLARDS, SEATS AND FLOWER BOXES

Height to top of bin 1300 mm
Height of bollard (minimum) 1000mm
Average height of seats 580mm
Height of flower boxes and free standing objects 1000 mm
Position of whit band marking (or paint on the top of the bollard) 800 mm

OVERHANGING TREES AND SIGNS

Minimum trimming height 3000 mm
Height of signs - Estate Agents, etc. 2500 mm

TACTILE PAVING

400mm x 400 mm slabs now standard
Inset controlled crossing 800 mm deep tail to back of footway (red)
In-line controlled crossing 1200 mm deep with tail (red)
Angled kerb situation at controlled crossing 800 mm deep at narrowest point (red)
Indented uncontrolled crossing 400 mm deep (buff)
Uncontrolled crossing away from junction (e.g. using with 800 mm deep pedestrian islands, flat top hump) (buff)

Refuge islands:

- less than 2 metres wide All paved in tactile (buff)
- greater than 2 metres wide 2 strips of 800mm depth (buff)

Pedestrian island (signal crossings):

- Strips of 800 mm width (red)
- Side road treatment at footway level 1200mm deep (buff)
- Shared use cycle/pedestrian routes. Directional slabs on pedestrian and cycle side 2400mm long

LIST OF CODES FOR USE ON ACCESS AUDIT OBSERVATION SHEETS/DATABASE

AS	Audible Signal
BB	Bus Boarder
BS	Bus Stop
CP	Crossing Point
DK	Dropped Kerb
DKR	Dropped Kerb Ramp
FM	Flashing Man
G	Gap between Dropped Kerb and Road
GC	General Comment
GM	Green Man
GU	General Unpleasantness
IC	Inspection Cover
MF	Make Flush
MS	Missing Section/Link
N.A.	Not Applicable
OHV	Overhanging Vegetation
PC	Pedestrian Crossing
PDL	Pedestrian Desire Line
PDS	Potential Danger Site
PMI	Poorly Maintained Inspection Cover
PPS	Uneven/Eroded/Messy Pavement Surface
PSQ	Poor Surface Quality
PTS	Potential Trip Site
PW	Pavement Width
RG	Reduce Gradient
SAB	Shop Advertising Board
SF	Street Furniture
SL	Street Lighting
SM	Shop Merchandise (inc. awnings)
SPS	Sunken/Raised Paving Slabs
ST	Step into shop or frontage premises
TK	Taper Kerb
TP	Tactile Paving
TS	Tactile Signal
ZC	Zebra Crossing

Recommendation Codes

CL	Clean Up
CU	Cut Down Vegetation
DES	Redesign Area
IP	Improve Signage
IS	Improve Surface
MF	Make Flush
MW	Make Wider/More Accessible
NA	Not Applicable
RE	Remove Object

RP	Repair Object/Area
RPL	Replace
RL	Relocate/Move

Observation Codes

AS	Audible Signal
BA	Bus Boarder
BS	Bus Stop
CP	Crossing Point
DK	Dropped Kerb
DKR	Dropped Kerb Ramp
FM	Flashing Man
G	Gap between Dropped Kerb and Road
GC	General Comment
GM	Green Man
GO	General Obstacles
GU	General Unpleasantness
IC	Inspection Cover
MS	Missing Section/Link
NA	Not Applicable
NS	Poor Signage
OHV	Overhanging Vegetation
PC	Pedestrian Crossing
PDL	Pedestrian Desire Line
PDS	Potential Danger Site
PMI	Poorly Maintained Inspection Cover
PPS	Uneven/Eroded/Messy Pavement Surface
PSQ	Poor Surface Quality
PTS	Potential Trip Site
PW	Pavement Width
RG	Reduce Gradient
SAB	Shop Advertising Board
SF	Street Furniture
SL	Street Lighting
SM	Shop Merchandise (inc. Awnings)
SPS	Sunken/Raised Paving Slabs
ST	Step into Shop or Frontage Premises
TK	Taper Kerb
TP	Tactile Paving
TS	Tactile Signal
UN	Unnecessary Object
ZC	Zebra Crossing