AVOIDING SEVERANCE THROUGH INFRASTRUCTURE, LEVELS OR LAND USES:

Large infrastructure such as roads or utility corridors can effectively sever different parts of the same community. This severance can be highly detrimental to those with mobility needs as traditional mitigation methods such as bridges or underpasses are cumbersome and difficult to achieve full accessibility without substantial increase in the distance of travel.

Masterplanners shall:

1. Ensure that major infrastructure corridors do not create severance within and between communities by ensuring fully accessible routes are no more than 50% greater than the straight line distance.

RESOLVING LEVELS TO BENEFIT ACCESSIBILITY:

Levels can present one of the largest challenges to achieving an accessible development. Variations in levels often result in steps or gradients that require remedial features to be included in the design. Through integrated design the need for these features can be significantly reduced or eliminated altogether. To achieve this those responsible for setting building and road levels need to work together or be the same person to ensure that levels do not impinge on delivering an accessible environment.

Masterplanners shall:

1. Ensure that levels are part of the masterplanning process and identify a grading strategy that minimises the number of slopes greater than 1:50.

DELIVERING HIGH CONNECTIVITY:

A highly connected environment will help increase accessibility. Limiting the size of development blocks ensures high levels of connectivity which means an increase in the choice of routes a person can take. Reducing block size also help reduce walkable journey times. In accessible masterplanning terms, a distinction can be made between vehicular blocks and walkable blocks which can differ through the provision of pedestrian only routes. When considering the size of blocks provision of drop-off spaces for vulnerable users needs to be considered.

Masterplanners shall:

1. Produce a Connectivity Strategy that ensures that at least 75% of pedestrian desire lines are maintained by locating a fully accessible crossing point within 50m of the desire line. Desire lines shall be identified as part of the Connectivity Strategy and approved by DCCA.
2. Ensure that no more than 25% of development blocks exceed 200m in width or depth.

ACHIEVING A COMFORTABLE ENVIRONMENT:

Accessible design needs to incorporate the comfort of the user in the design provision. The provision of shade can increase the usability of routes and spaces throughout the year. A choice of shaded routes should be provided throughout a development and form part of the masterplan process. At the masterplanning level, shading should look to rely on buildings, streets and landscaping to provide the majority of shaded routes. Shade structures can further enhance the shade provision at key spaces and where natural shade is not possible. To achieve natural shade from trees sufficient space needs to be provided for in ground trees to be provided. This needs to be considered when establishing utility corridors throughout a development. Influencing architectural design: At the masterplanning level guidelines can be put in place to influence architectural design to enhance accessibility and comfort in the built environment. A masterplanning perspective to shading and wind tunnelling.

Masterplanners shall:

1. Ensure that at least 50% of all pedestrian routes in the development be shade by either shade trees or shading structures. Shading is calculated by using the sun's position at 1pm on the Autumn Equinox. A minimum of 1.8m of the footpath should be in shade to qualify and be at least 60% shaded by trees canopy or structure. Further detail is provided in Section 3.5.
2. Preserve the priority of the shaded routes and avoid compromising it through the placement barriers such as car parking entrances or changes in levels.

ROLE OF STREET FURNITURE:

Street furniture can play an important part in enhancing accessibility across neighbourhoods. Whether it is providing places to rest or providing places to park cycles, well positioned and well designed street furniture has a role to play.

Masterplanners shall:

1. Ensure that primary pedestrian routes have a shaded rest space with accessible compliant street furniture at least one every 350m.
2. Provide bicycle parking within 20m of a buildings main entrance or accessible lift lobby if provided in the basement. Bicycle parking should be equal or greater than 5% of the total car parking spaces for a building.

HORIZONTAL SEGREGATION OF DIFFERENT MODES:

Horizontal segregation is particularly important for those with visual impairments and for older and younger people. This issue becomes more important the higher the traffic speed and for highly pedestrianised areas. In general for local streets the segregation of non-vehicular modes is not necessary and can impinge on accessibility as different barriers are put in place of free movement. This freedom of movement needs to be balanced with the need to provide an edge to the footpath for those with visual impairments. In new developments the use of sikkat should be encouraged used as they provide car free routes that can be shaded. Sikkat or lanes with active frontage are encouraged in denser urban areas.

Masterplanners shall:

1. Ensure a detectable edge is provided along the edge of the footpath either in the form of a kerb or a tactile paving.
2. Promote the use of traffic free routes through neighbourhoods in the form of sikka's. These sikka's shall be a minimum of 3m wide and paved to a footpath standard. They shall meet the requirements set out in section 2.2.
3. Utilise horizontal segregation between different modes on routes where the speed limit is above 50Kph. Cycle routes shall be segregated from vehicle and pedestrian traffic and have a dedicated cycle lane which is clearly marked. There should be no change of level between the pedestrian and cycle routes with the cycle route being wheelchair accessible.