

July 21st. 2010



MITCHELL'S Boherbee Community

## Design Guide Strategy

**Aim:** High quality external areas and community facilities.

The quality, maintenance and 'ownership' of external spaces had been a fundamental issue in the area previously and all external spaces in the new masterplan now have clearly defined and obvious functions.

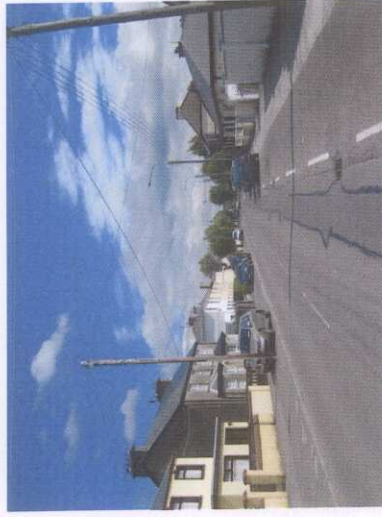
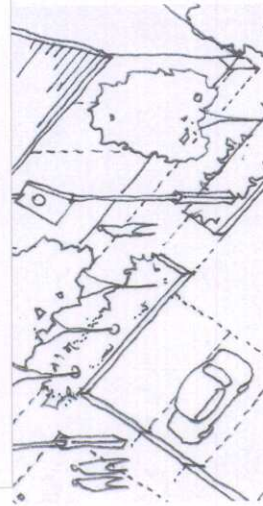
The central aim is to reverse the trend of residents leaving and build on the historically strong community, with a right to return for existing residents.

### The Plan:

Existing streets are refurbished and junctions between key streets and important edges to the area are marked as focal points: such as a landscaped public seating place.

Adjacent to the New Public Services Building and in front of the new School there are opportunities for playgrounds and public open spaces. Between the more formal main streets, the residential areas are broken up with small stretches of landscaped streets, which contain right angle bends to help slow traffic.

The combination of these elements gives the area its distinctive identity,



**"Mitchels Crescent** is a unique, almost rural location within the city enjoying special views.

The Design Guide develops existing features within a hierarchy from the main spinal road with strong 2-storey frontages to terraced housing with gardens, served by streets or cul de sacs.

The new school is embedded within this framework encouraging walking to school and avoiding dropping off by car."

The proposed new streets are **shared spaces** designed to make the area welcoming with traffic speeds minimised through design.

Public realm, open space and soft landscaping are all integrated within the street design to promote maximum use and create opportunities for community engagement. This is an important principle, as one of the problems previously associated with Mitchels Crescent was the lack of ownership of the areas around buildings and, as a consequence, a lack of respect shown to adjacent properties.



## Detailed Design

The Design Document focuses on people-friendly external areas, not traffic – although 100% car parking is provided, bearing in mind that most homes :

"the streets are designed to promote very low speeds without the clutter of signage or need for speed humps.

For the homezones, we traveled to the Netherlands with community representatives to see well-established 'woonerf' shared area projects in use, and they had a definite influence on our designs.

"A language of surfacing materials was developed to delineate different areas such as parking bays without the need for road paint.

The wide range of concrete block paving products available today proved invaluable to provide different textures and scales.

We used a range of varying unit sizes, shapes and patterns. Group parking areas – generally surfaced with concrete block permeable paving – are punctuated with areas of planting, protected from vehicles with low steel railings."

All the paving and kerbing was carefully detailed, then constructed on site under a clerk of works' supervision. Particular care was taken to integrate below-ground services with 2.5m wide service strips in roads, as well as inspection covers including recessed, block-laid covers for continuity.

## Detailed Design



NATIONAL  
BUILDING  
AGENCY



## Home Zones

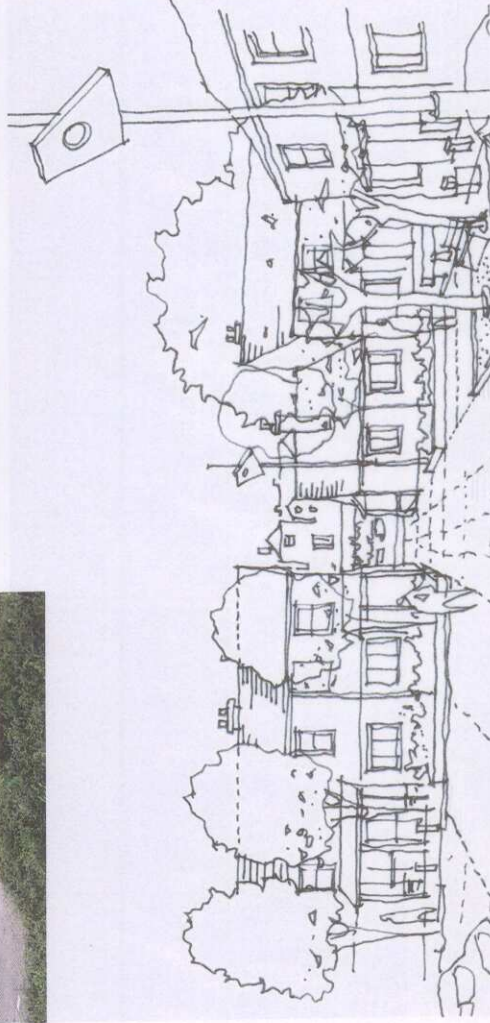
Home Zones are an attempt to strike a balance between vehicular traffic and everyone else who uses the street - the pedestrians, cyclists, business people and residents.

Some see Home Zones as a way of "reclaiming" local streets from a traditional domination by cars - drivers have to give way to pedestrians and cyclists and are normally responsible for any injury caused to them.

Others see it more modestly as a way of trying to restore the safety and peace in neighbourhoods that are becoming overwhelmed with speeding traffic.



## Detailed Design





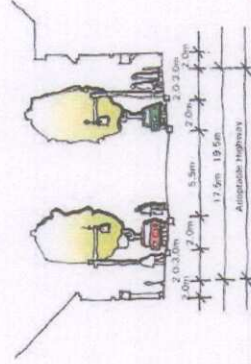
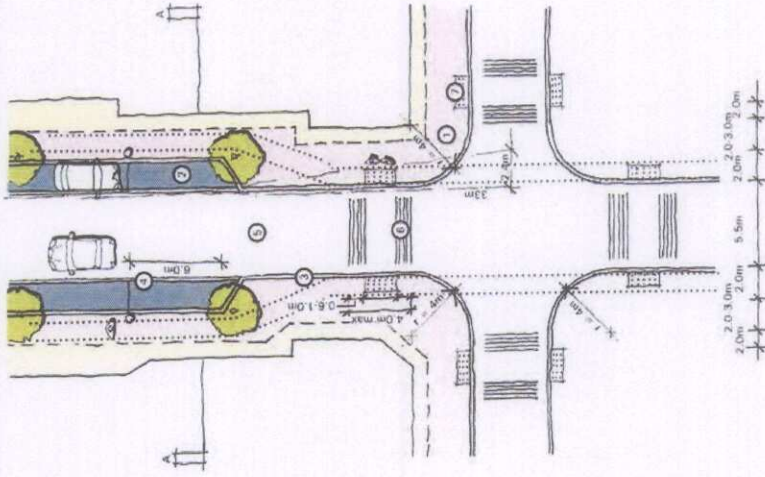
## 'Streets not Roads'

'Streets not Roads' has been the mantra for all those that care about the quality of life in our cities, towns and villages over recent years.

- We must move beyond signs and speed humps to create environments that are intuitively 'slow'.
- All those that are responsible for streets - in their creation, maintenance and management - must be part of a wide-ranging dialogue to enable real places of community interaction to be delivered.
- Streets must be efficiently managed for the good of society as a whole.
- Streets as a safe place to greet your neighbour, to shop, to meet and to play".



## 'Streets not Roads'



### Benefits of 20mph traffic speeds include:

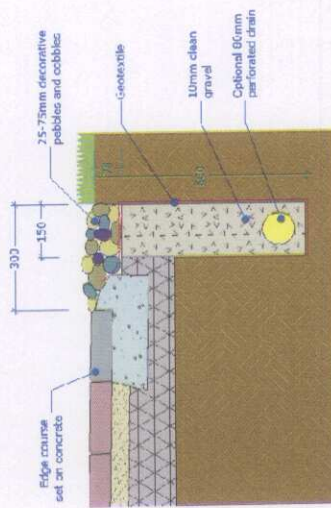
- **Safety** – there is unequivocal evidence that slower speeds save lives and injuries.
- **Noise** – a car driven at 20mph produces up to 8dB less drive-by noise than a car driven at 30mph.
- **Emissions** – vehicles driven smoothly within a 20mph limit can produce less than 10 percent of the carbon dioxide emissions of a vehicle driven within a 30 mph limit



## Sustainable Drainage

Permeable paving is used extensively in areas of car parking bays and carriageways to attenuate and store surface water runoff at source prior to discharge into the surface water sewer – although a comprehensive SUDS scheme is proposed for later phases. Concrete block permeable paving is an ideal SUDS technique for high density housing, retaining a good quality finish with minimal maintenance. There are concerns about maintaining other techniques such as swales and ponds to a high standard in this sort of environment. is the first permeable paving to be adopted by a local authority in Ireland. "The wide range of concrete block paving products available today proved invaluable."

"Concrete block permeable paving is an ideal SUDS technique for high density housing, retaining



## Sustainable Drainage



NATIONAL BUILDING AGENCY



## Materials

Surface materials were carefully selected to generate a sense of place and space for the shared surfaces, as well as other areas, keeping durability and fitness for purpose in mind.

Varying the textures, block dimensions and laying patterns defines specific spaces and heightens the driver's sense of awareness without altering surface colours.

Linking all the spaces and streets are strong lines of high quality precast concrete kerbs laid as wide channels.

In order to develop consistency throughout the development, even with different designers involved in future phases, the masterplan specified paving materials carefully and provided details of their use in conjunction with planting.

The principles laid down are even carried over into private areas,



## Materials



## Street Furniture

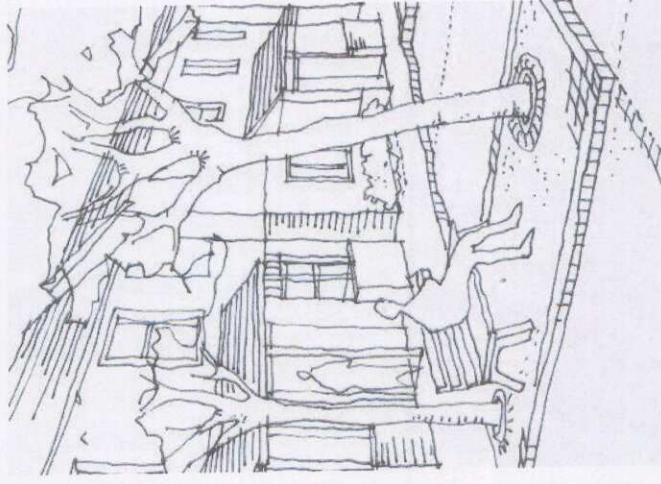
With precast concrete paving and kerbs, distinct, modular units and designed variations in colour, texture and shape can break up areas giving visual interest and a humanscale not possible with monotonous, formless materials such as asphalt.

In recent years, Interpave manufacturers have transformed this concept, moving away from simple, regular patterns and colours to expand an extensive palette of styles, shapes, colours and textures to meet current demands in urban design, matching – and often exceeding – the visual qualities of materials such as stone. This is a valid and sustainable interpretation of the requirement for 'local materials' in adopted guidelines.

It is generally unrealistic on cost, availability and accessibility grounds to specify locally extracted stone which may have been used in the past, while imported stone fails to meet sustainability criteria.



## Street Furniture



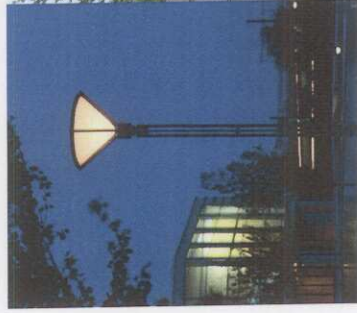


## Street Furniture

Proposals for the installation of any items of street furniture shall have regard to the following:

- (a) Additional street furniture items shall have regard to the need to reduce visual clutter and ensure that items are discreet and well designed so as not to detract from visual amenities.
- (b) All new street furniture items shall have a clear function relative to their location and shall have regard to the need to reduce and avoid street clutter and ensure that footpaths and cycle ways are kept free of unnecessary impediments.
- (c) The co-location of street furniture items/ signage, where feasible, will be required in order to reduce their clutter.
- (d) The use of high quality materials, which may include polished steel and/or suitable coating of structures etc, will be required in order to ensure good visual appearance of furniture items.
- (e) All street elements shall be so located as to provide clear, accurate and timely guidance for road users, pedestrian and cyclists.

## Street Furniture





## Street Furniture

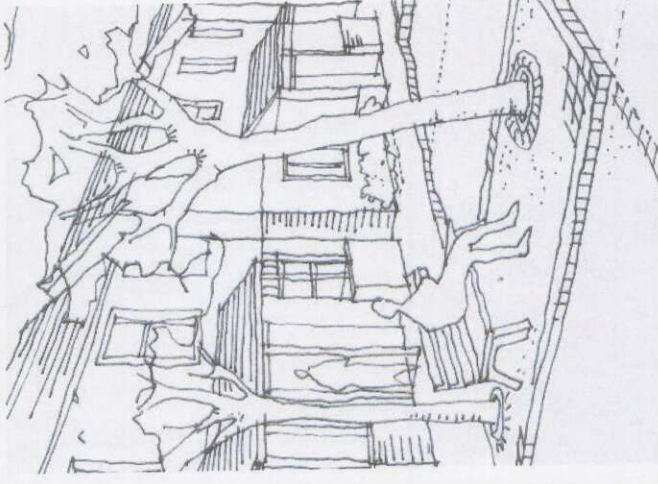
With precast concrete paving and kerbs, distinct, modular units and designed variations in colour, texture and shape can break up areas giving visual interest and a humanscale not possible with monotonous, formless materials such as asphalt.

In recent years, Interpave manufacturers have transformed this concept, moving away from simple, regular patterns and colours to expand an extensive palette of styles, shapes, colours and textures to meet current demands in urban design, matching – and often exceeding – the visual qualities of materials such as stone. This is a valid and sustainable interpretation of the requirement for 'local materials' in adopted guidelines.

It is generally unrealistic on cost, availability and accessibility grounds to specify locally extracted stone which may have been used in the past, while imported stone fails to meet sustainability criteria.

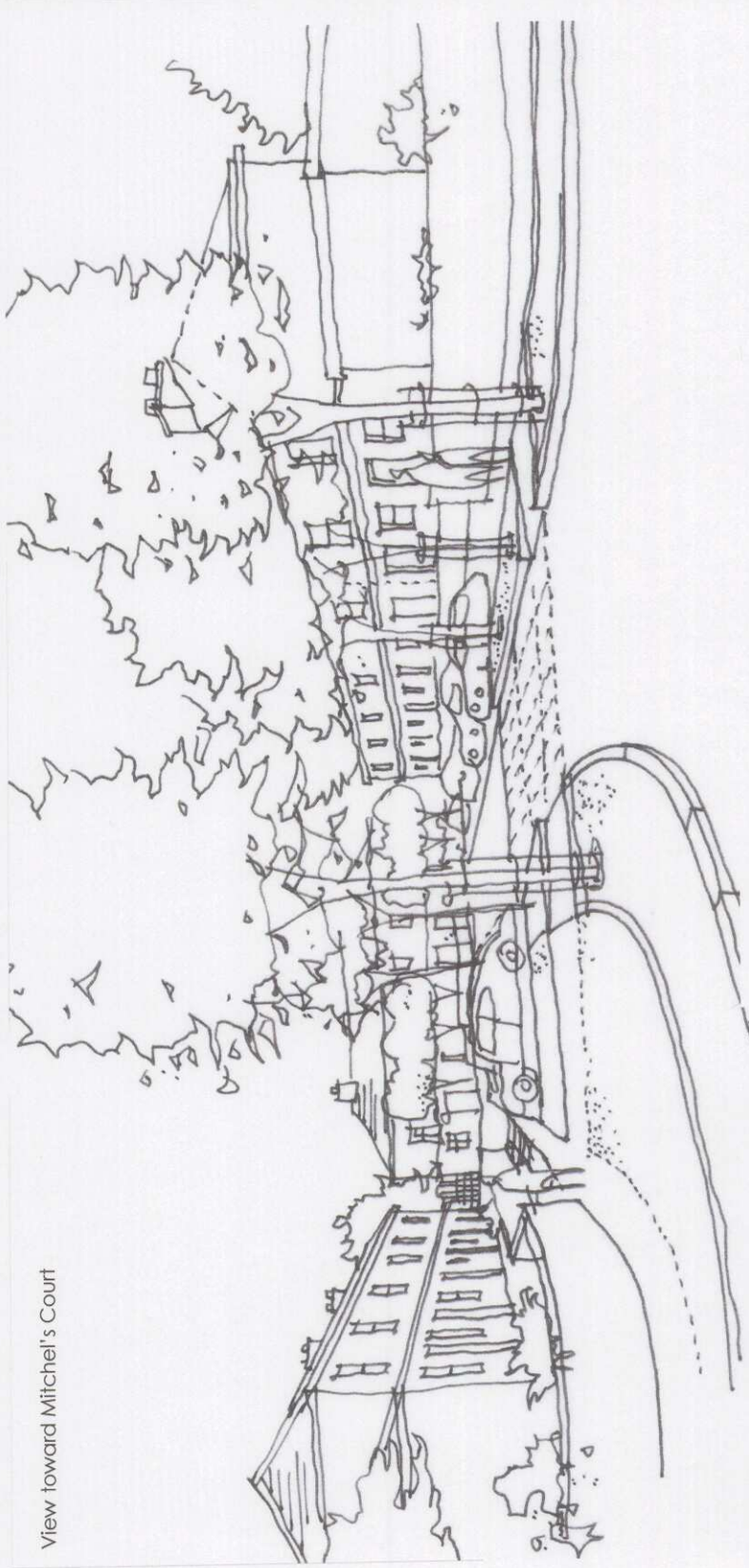


## Street Furniture

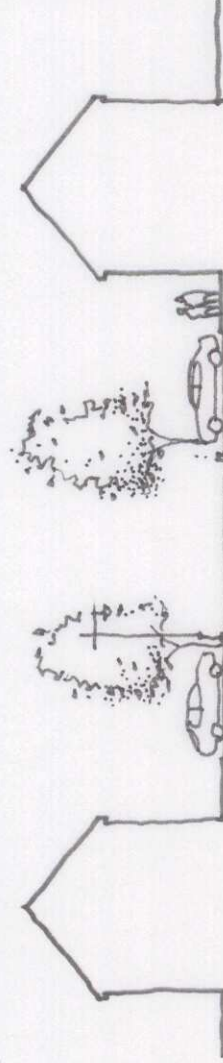




View toward Mitchell's Court



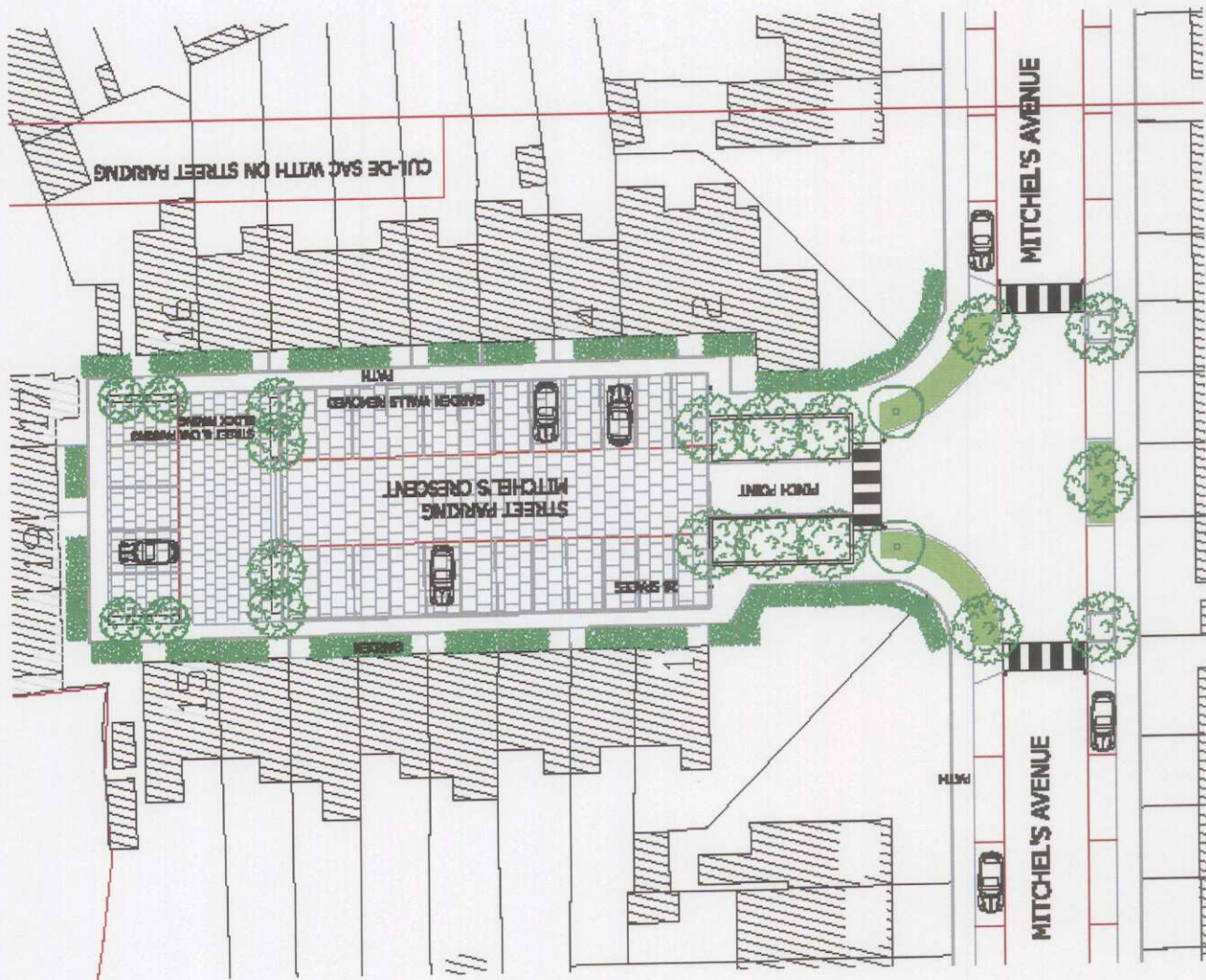
**Cul De Sac  
Mitchell's Court**



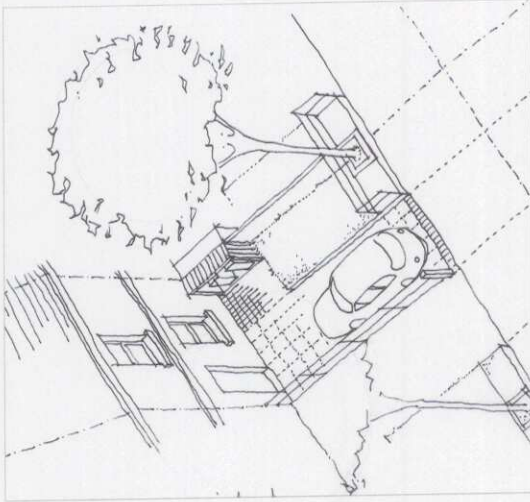
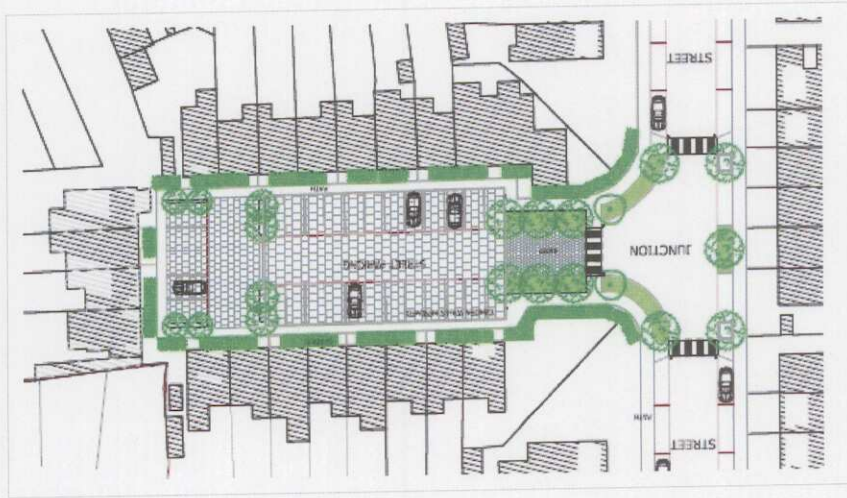
Section thru' Off-Site Perpendicular Parking



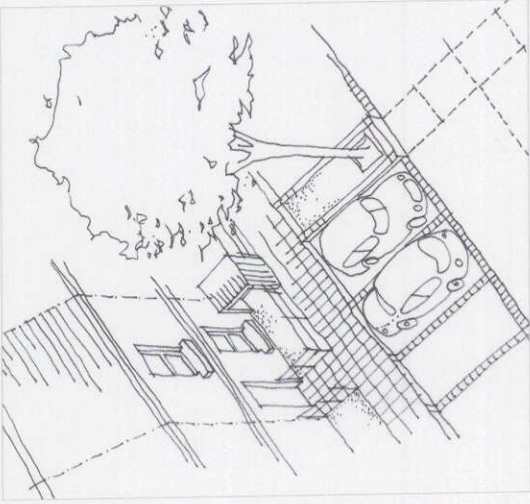
# Cul De Sac Mitchel's Court







On-Site Parking



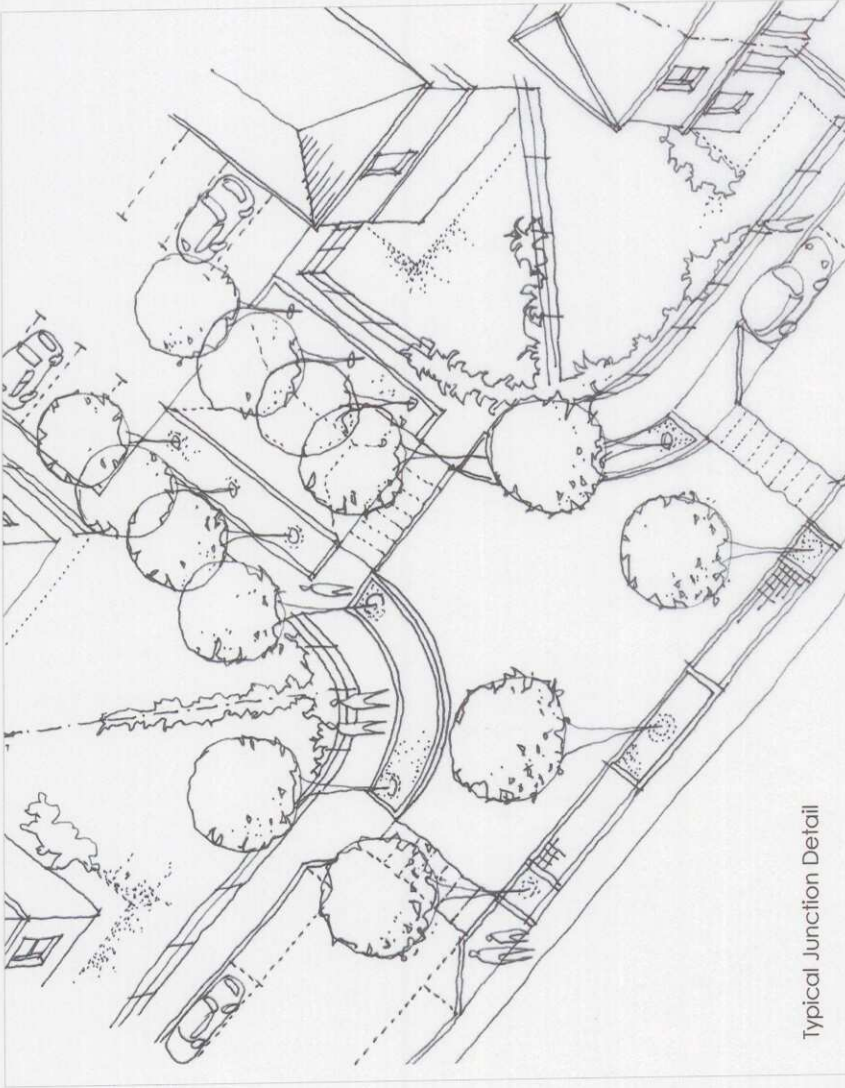
Off-Site Parking



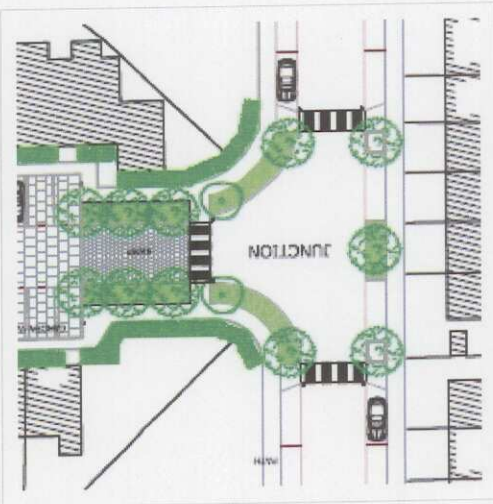
Section thru' Perpendicular & Parallel Parking

## Cul De Sac Mitchel's Court





Typical Junction Detail

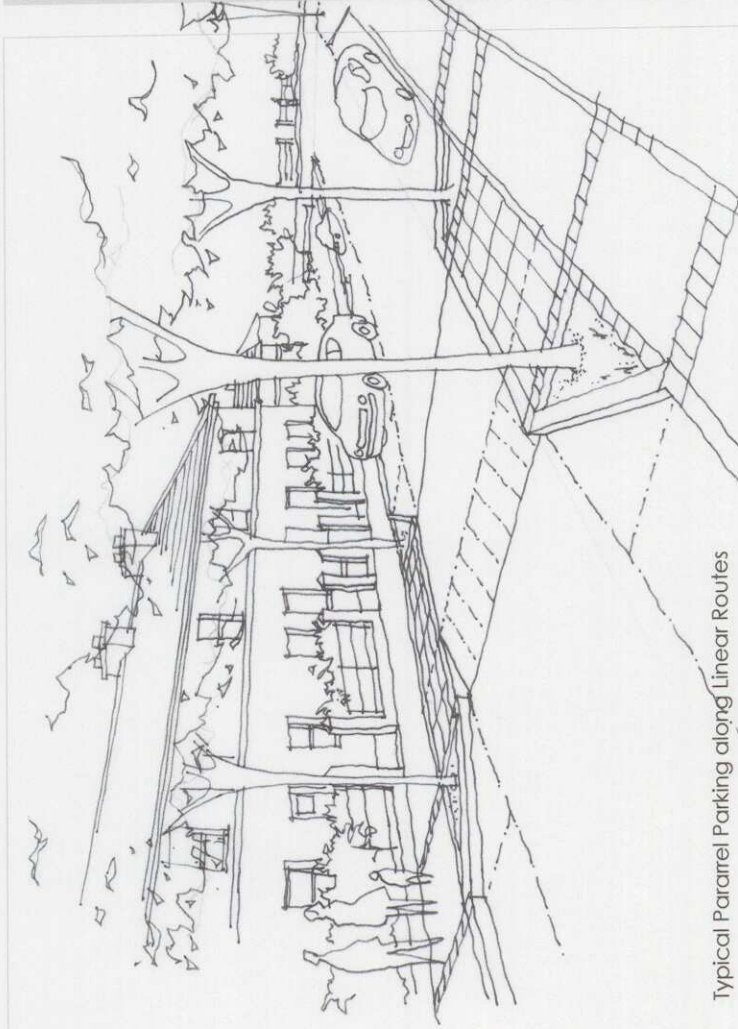


Junction:  
Mitchel's Avenue &  
Mitchel's Court

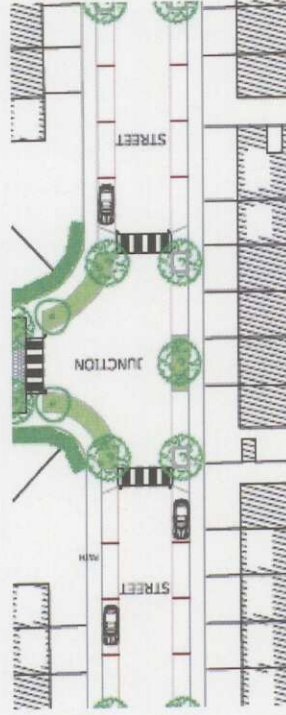




**Linear Street  
Mitchel's Avenue**



**Typical Parallel Parking along Linear Routes**





**Pedestrian Areas & Footpaths:**  
**Kilsaran Standard Flag Paving in Curragh**  
**Gold and Natural 600 x 600 x 63mm**



**Street and Car parking:**  
**Kilsaran Mellifont Block Paving in**  
**Curragh Gold and Natural**  
**240 x 160 x 63mm**

## Paving



**Bollards by Hartecast**  
 HC 2065 Stainless steel and  
 powdered coated finish in  
 Ral no.7012



**Litter Bins by Hartecast**  
 HC 2055 Stainless steel and  
 powdered coated finish in  
 Ral no.7012



## Contemporary Street Furniture





### Tree Guards by Hartecast

HC 100 tree guard and support frame

## Contemporary Street Furniture



### Tree Guards by Hartecast

HC 100 tree guard and support frame

NATIONAL  
BUILDING  
AGENCY



ENVIRONMENTAL LUMINAIRE, ESPECIALLY DESIGNED FOR ANY KIND OF AREA. STREETS, PAVEMENTS, SQUARES, PARKS, AVENUES, RESIDENTIAL AREAS AND PEDESTRIAN STREETS.

BECAUSE OF ITS ATTRACTIVE, LINEAR AND MINIMALIST DESIGN, IT ADAPTS PERFECTLY TO ANY KIND OF ENVIRONMENT.

THE LIGHT SOURCE ALLOWS DIFFERENT CONFIGURATIONS: SINGLE, DOUBLE AT DIFFERENT HEIGHTS AND MULTIPLE, WHICH MEANS IT CAN BE USED FOR VARIOUS APPLICATIONS.

IT HAS A CURVED OPTICAL ASSEMBLY WHICH OPTIMISES PERFORMANCE AND REDUCES THE EFFECTS OF LIGHT POLLUTION.

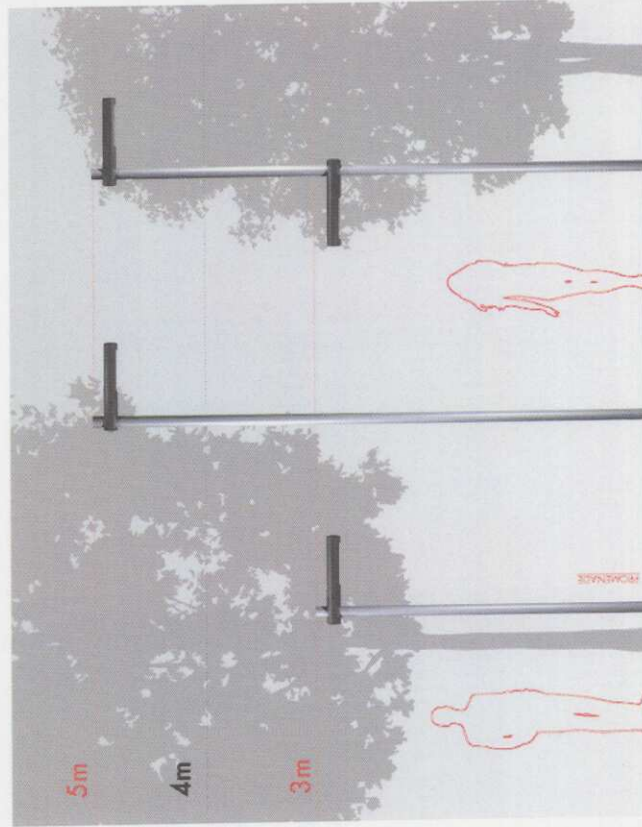
#### DESCRIPTION

**Body:** Diecast aluminium.

**Optical assembly:** Anodised aluminium reflector and curved transparent glass cover.

**Base plate:** Galvanised steel plate.

**Finishes:** Black forge, broken-on paint.



SCALE 1:200

## Lighting Standard Promenade by Harte Design Ltd



URBAN DECORATIVE / RESIDENTIAL ENVIRONMENTAL



#### TECHNICAL CHARACTERISTICS

**Dimensions:** 650 x 200 mm

**Lamps:** Fluorescent 2X36 W

**Reactances:** Built in the luminaire

**Lampholder:** G11

**Protection degrees of the luminaire:** IP55

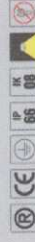
**Class I**

**Protection degrees of the optical assembly:** IP55, IK08

**Luminaire clamping:** Ø 100 mm

**Assembled height:** 3 - 5 m

**Clamping:** Vertical coupling Ø 100 mm.



NATIONAL  
BUILDING  
AGENCY



