Penarth Heights

Highway Statement

ON BEHALF OF CREST NICHOLSON (SW)



FEBRUARY 2007



gary gabriel associates

consulting structural & civil engineers

Becket House Vestry Road Sevenoaks Kent TN14 5EL Tel: 01732 460142 Fax: 01732 459249 email: engineers@ggauk.com



gary gabriel associates

consulting structural & civil engineers

Becket House Vestry Road Sevenoaks Kent TN14 5EL also at Sherborne Dorset 01935 812846 tel: 01732 460142 fax: 01732 459249 email: engineers@ggauk.com web: www.ggauk.com

JOB NO: 18280

PENARTH HEIGHTS, SOUTH WALES HIGHWAY STATEMENT FOR PLANNING

INTRODUCTION

This Statement has been prepared to accompany the Planning Application for the above proposed housing development. It sets out the principles of the highway layout for a sustainable development providing a safe environment within a quality urban design.

The Welsh Design Commission and VoGC Planners have encouraged the proposals to incorporate 'shared space' principles. The scheme achieves this in the ways demonstrated below, whilst taking on board many of the comments made by the Highway Authority.

The needs of the pedestrian are paramount and priority has been given to providing spaces for people and the community, but also allowing for vehicle movement.

DESIGN PARAMETERS

Following consultation between Vale of Glamorgan Highways Department and Gary Gabriel Associates, the following design parameters have been agreed.

- The existing highway network leading to the site includes traffic calming measures such as speed bumps.
- The whole of the proposed development is to be a 20 mph zone.
- Traffic calming to reduce speeds will be achieved by regular junctions, bends and change of surface material rather than use of speed bumps. Table junctions are acceptable.
- Principle carriageways to be 5.5m wide, but can be narrowed where serving fewer dwellings subject to swept path analysis.
- Footways to be 1.8/2.0m wide but in certain areas 1.5m will be acceptable with an absolute minimum 1.2m. Minimum hard paved verge 0.5m wide.
- Junction radii 6m except onto existing road which should be 7.5m.
- Visibility splays to be 3m x 23m generally, 3m x 45m on the The Ridgeway, and 2.4m x 23m where less than 5 units. Forward visibility 23m.
- Isolated areas of highway can drain onto private areas and vice versa.

Partners

T S Cossey BSc(Hons) C Eng. MIStructE MICE FConsE B Pilcher BSc C Eng. MIStructE FConsE C R Hook BSc(Hons) C Eng. FIStructE FConsE GGA Services Ltd.



DETAILED DESIGN

Based on the above the proposed highways layout incorporates the following main criteria:

- Traffic calming has been achieved by geometrical layout and different surface finishes.
- Junctions and bends have been introduced at 50-60m spacing. Most junctions are raised tables in contrasting surface finish from the adjacent carriageways.
- Carriageway widths have been reduced where possible but of sufficient width to allow passing of slow moving cars. The carriageways have been tracked for larger vehicles such as refuse vehicles and fire appliances with sufficient places for cars to pass.
- Pedestrian movement has been given top priority with footway links maintained from outside the site and within the development either via designated footways or through traffic calmed shared areas. Principal pedestrian footways have incorporated tactile paving at crossing points on the major junctions.
- Traffic calming at junctions is achieved by raised tables, narrow carriageway entries but adequate width for two cars, contrasting materials, low kerb heights and adjacent parking. With slow moving vehicles, defining priority is not necessary so the development is not cluttered with signs and road markings. Adequate visibility is provided at all junctions.

The proposals seek to create a traffic calmed environment where vehicle speeds will be restricted (by way of design to well below 20mph). By doing so it is intended to create a public realm that encourages greater use of the streets for social activity, thereby contributing to a sense of community. It is our contention that any further watering down of these proposals will seriously jeopardise the overall success of the project.