SITE ANALYSIS

SITE SELECTION

Criteria for selection of the site are:

Location:  
   a) The site should be within the Athlone Core and not on its periphery, so as to insure design for involvement and vitality.

   b) The site should be public orientated, allowing for maximum activity and interaction of people. It follows that it should be close to a bus route and pedestrian way, as well as having easy service to it.

Feasible Development: A site having more than one private owner is difficult to develop consistently as the owners may not see eye to eye on the nature of its development.

Site Edges: The edges of the site should be easily accessible and unhampered by adjacent buildings or legislation. The edges should be easily seen from the surroundings to enhance focus and visual identity.

One site presents itself clearly as having all the required criteria set out above, as well as additional advantages particular to it. This site is at the west end of Old Klipfontein Road, bounded by a proposed medical centre to the north, Old Klipfontein Road to the south, a proposed civic square to the west and Lawrence Road to the east. The location of the site is indicated within the existing context, the proposed development forming an overlay. A description of photos pertaining to the site follows:

The site as located on the model of the proposals for the Athlone Core.
The location of the site within the existing context to indicate the nature of present activity around it.
Views from the site.

The water cooling towers to the north.
A seven storey office tower seemingly out of context with its low surroundings to the south east.
The fine view of Table Mountain to the south west.

CLIMATE AND SUN

As the seasons and climates change so the strength of the sun's rays varies. "The redeeming section" as sketched by Le Corbusier for the Unite de Habitation applies to the site. The strong summer sun is higher and the rays are easily shaded by horizontal brise soleil. In winter the rays penetrate past the brise soleil as the sun is lower and in this way the cold living unit is warmed. The average sunshine per year is 71% of the possible sunshine per year - figures taken from D.F. Malan Weather Office. Table Mountain screens the west sun from Athlone before it sets, thereby casting a pre-sunset shadow and forming a natural brise soleil to the horizontal rays of the setting sun. The rays of the west sun and the noon-day sun are very strong and must be shaded. The east sun's rays are not as strong but they penetrate space because they are nearly parallel to the earth's surface.

DENSITY

To utilize the site to its maximum potential by developing it to the most feasible density. This means making use of a 20% residential bulk bonus allowed for in the planning proposals, thereby increasing permissible bulk to 4.44 which is made up as follows:
Shopping: bulk factor = 1
Offices: bulk factor = 1
Residential: bulk factor = 2.44 (with bulk bonus)
ECONOMY

A realistic approach should be adopted without allowing building cost to become restrictive. Prime floor space because of central location and prestige will give exceptional rentals. Living units may possibly be sold under the Sectional Titles Act in future. A building of bulk 4.44 could have an estimated return of 20% in rentals on the initial expenditure, allowing for bond payment and maintenance cost. This percentage is high because the bulk factor is considered to be optimum - any increase in office or residential bulk would lower the 20% figure considerably because of building costs.

CONCLUSIONS

The site is dynamically placed having different activity and movement on each of its four sides to which it should sympathetically respond. It forms a visual focus to the west end of Old Klipfontein Road, as well as a visual closure to the east end of the proposed square. A pedestrian way is mandatory at the north boundary of the site.