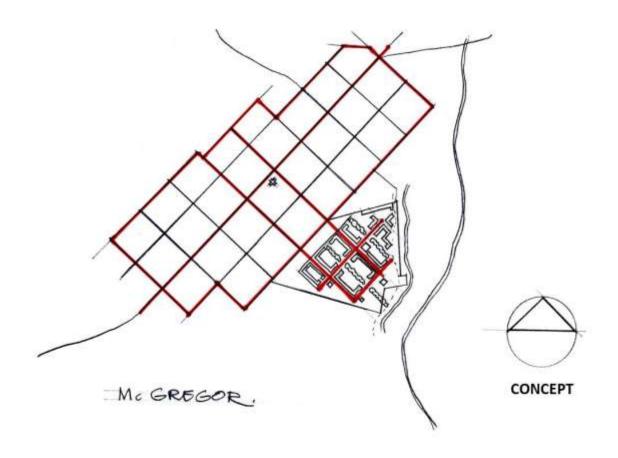
URBAN DESIGN INFORMANTS

ERF 360 McGREGOR FEBRUARY 2014



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CK: 94/37657/23 ARCHITECTS ~ PLANNERS HERITAGE CONSULTANTS

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ANNEXURE 1: Planner's Memo

1. INTRODUCTION

Henry Aikman submitted a Heritage Impact Assessment for the proposed McGregor housing project on Erf 360 McGregor.

The Phase 1 HIA Application which included Heritage Indicators was endorsed by MHS (McGregor Heritage Society) and submitted as an annexure to the Phase 2 HIA. When the Phase 2 HIA and proposed layout was submitted, the committee was of the view that the form of the development proposed 'would have negative implication for heritage significance'. The committee resolved that in order to arrive at an appropriate and acceptable design, expertise in the field of urban design should be brought onto the professional team for the project and that such expertise should have adequate experience in projects involving sensitive heritage environments.

Andrew Berman, an urban designer (member of UDISA) and heritage practitioner (member of APHP) of Urban Design Services cc was approached in this regard to assist in the revision of the proposals.

2. STATEMENT OF INDEPENDENCE AND EXPERTISE

Andrew Berman of Urban Design Services cc is an accredited heritage practitioner and a member of the Association of Professional Heritage Practitioners (APHP). Urban Design Services cc and its members are independent consultants and have no financial interest in any developments involving the parties undertaking this or any other projects, other than fair remuneration for professional services rendered.

Andrew Berman has had over ten years of experience in heritage management. Projects involving sensitive heritage environments include a number of projects in the central city conservation area, Alphen, and other farms in the Winelands, the Fernwood Parliamentary Sports Complex in Newlands and urban design inputs adjacent to the Grade 1 site in Arniston.

3. METHODOLOGY

The work involved reading the various HIA reports, visiting the site, meetings with the project team, and desk-top analysis and reporting. Of primary importance were Aikman's design indicators set out below.

This report was reviewed and edited by Andre Pentz of Urban Design Services cc. Andre Pentz has equivalent qualifications and expertise to Andrew Berman.

4. HERITAGE RELATED INDICATORS FROM THE HERITAGE IMPACT ASSESSMENT

(Extract from Henry Aikman's HIA Report)

The following heritage related design indicators for the redevelopment of Erf 360 are generated to protect the integrity of what is considered to be a heritage resource of great/Provincial significance: the historic townscape of McGregor.

Agricultural edge to Buitekant Street

Buitekant Street is as its name implies is the outer edge of the village and even today is characterised by low-density development. Besides a few large houses fairly recently erected there are a number of undeveloped parcels of land. Some of this land is even currently being used for subsistence vegetable cultivation taking advantage of water from the fully operational irrigation furrow.

It is proposed to retain this outer edge condition that an agricultural edge be created on the south west side of Buitekant Street. A band accommodating smallholdings and the existing dam should be developed. The dam that currently obtains water by pump from the river could be fed by the "leiwater" irrigation system. The existing farm track at the base of the dam provides a natural boundary to this zone. The two existing cottages should be retained as part of the agricultural edge. A windbreak of trees should be planted on the township edge of this zone.

Kerkstraat

Kerkstraat is a major cross street in the village and should be extended onto Erf 360. A public/community facility at the intersection of Kerk and Buitekant can create a "special place" in the village. This should be a gateway into the new residential area. With the agricultural edge and public/community facility at the intersection there is no need for the development of the remainder of the site to be aligned with the village's historical grid.

House types

The village is characterised by a great variety of house types. The oldest form being the simple 3-bay cottage with a pitched thatch roof and external hearth and chimney. A later version has a simple parapet with a low-pitched roof of corrugated iron. Both these archetypes were often connected in pairs or as semi-detached dwellings. It will be important to create as much variety as possible as Erf 360 slopes down towards the river and the roofscape will be an important visual element. Even as has been recommended that only three house types are used variety can be achieved by the use of double pitch roofs, lean-to roofs with a simple parapet and by linking units as illustrated below. The McGregor Heritage Society requested that consideration be given to building external hearths. These could be a feature of corner sites and those in visually prominent positions.



Figure 1: Pair of houses in the village



Figure 2: Three linked dwelling

Tree planting

While the village is not characterised by avenues of trees as in Stellenbosch and other historic towns and villages, trees can play an important role in reducing the impact of high density residential development. It has been recommended that a gateway be created at the intersection of Kerkstraat and Buitekant Street with the siting there of a public/community facility. This public place should be heavily treed to create summer shade. It was also recommended that a windbreak of trees should be planted along the lower edge of the agricultural zone. Besides this tree planting groups of trees should be planted strategically to break up the homogeneity of the township layout.



Figure 3: Composite of indicators

These Indicators were endorsed by the MHS and must inform the design.

5. BRIEF ANALYSIS STATEMENT

For the purposes of this report a brief analysis statement of the urban structure and form is included below.

The urban structure of McGregor is characterised by the grid of large blocks, with small groups of houses aligned on the streets. There is a delicate balance of urban and rural in the town, and also a defining contrast between the urban qualities to be found in the town and the surrounding agricultural fields and landscape.



View of part of McGregor showing its rural and urban quality



Typical street view of houses and walls aligned on street

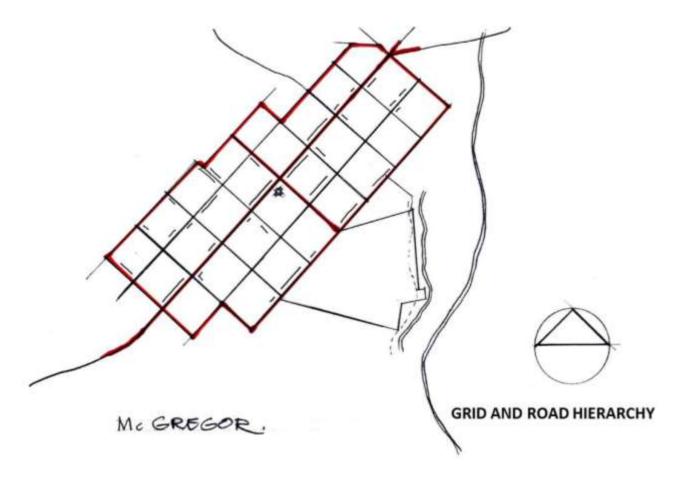
6. APPROACH

It is important to have a clear attitude or approach to how one adds on to a historic village. On one hand, the integrity of the old town should be maintained, while at the same time the new has to be integrated as seamlessly as possible.

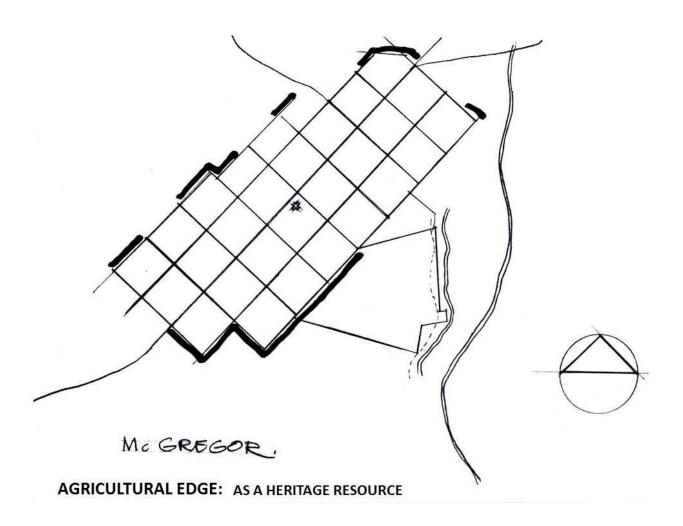
Grid and Route Hierarchy: The underlying structuring concept

The roughly square grid is imposed on the landscape and defines what is urban. While it may appear that a grid is neutral, with roads and intersections of equal importance, this is not so.

The entrance and road, Voortrekker Road is of primary importance in the road hierarchy. At the church (which dominates the town). There is a cross route of Church Street which is also an important route. The large grid of superblocks allow for an urban quality with the rows of houses lining the street while gardens and small scale agricultural fields are located behind and inside the block. Views down the roads are of the surrounding agricultural landscape and mountains. There was a distinct urban edge on the perimeter of the village which has been eroded over time, blurring the distinction of the urban rural divide. The grid of superblocks is the defining urban structuring element of McGregor.



By employing the large 'superblock' idea, and by extending the existing grid, the new development can be integrated into the village, providing easy accessibility with the straight extension of 'Kerk and Bree Streets. Accessibility and integration can also occur at the Meyer Crescent.



Structuring concept responding to the town edge

The diagram above shows the extent of the agricultural edge around McGregor. It extends in an unbroken line on the south side of the village, broken at the Meyer Crescent section of the 'onderdorp' and is the longest intact section of the urban / rural continual edge that remains. This was identified in the HIA as a heritage resource, and was included in the indicators, i.e. to maintain an agricultural strip on the south east side of Buitekant Street.



Water channel which is part of the road system on major routes

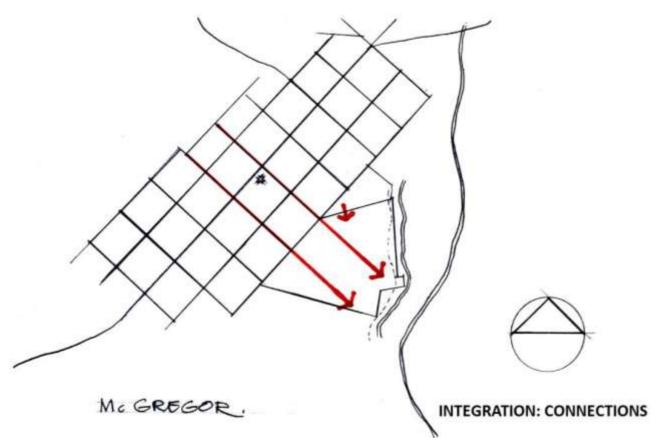


Photograph showing section of an intact part of the urban rural edge View along Buitekant Street

Integration with the town

It is logical to extend the grid of the town south east into Erf 360. This is shown on the diagram below.

Church Street is extended through to the floodline and Bree Street to the olive grove edge. A connection through the Hartzenberg Cul de sac, near the Meyer Crescent should be made to integrate the new development with the relatively recent extension further up Buitenkant Street.



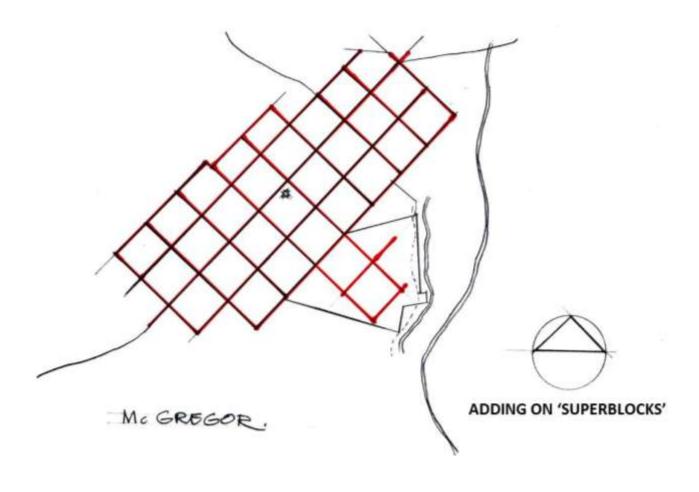
The new superblocks are treated as per the concept of McGregor, with houses and facilities aligned along the roads of the extended grid. The interiors of the 'superblocks' are developed for the new low cost houses with streets aligned giving visual linkages to the surrounding agricultural area. Local play spaces and social space can occur with the 'superblocks'.

Note that there will be a clear change in the street hierarchy and scale from the 'superblock' roads to the narrower local scale areas within. The particular requirements of subsidised housing (the small erven, the optimisation of services etc.) are accommodated inside the superblocks and this will allow the changes in density and scale to be absorbed within the overall street and block structure of McGregor. The superblock idea also allows for the mass of 500 units to be 'broken up' into smaller sections and will allow for some variety and the use of tree planting as a layer in defining spaces and neighbourhood.

Integration with the town: extending the grid

The challenge is to maintain the relationship between urban development and its agricultural context, while retaining the identity and integrity of both. The new development must be carefully integrated with the old town, while maintaining its own identity, with its layout allowing for accessibility, choice, human scale, and defined social space, while relating in a sensitive positive way to the natural edges and farm boundaries on the perimeter.

The superblock grid is 'disrupted' by the irregular edge of the floodline and olive grove edge on the east and south.



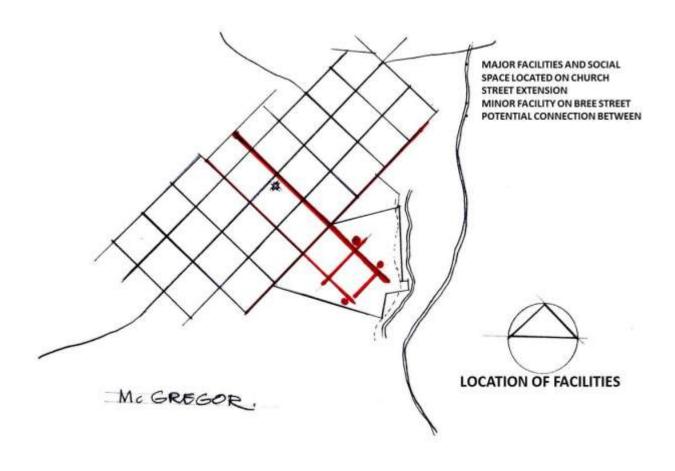
Provision and location of Facilities

The proposed extension of the town will require a site for a church and some limited commercial opportunities. The limited requirements for social facilities or uses other than residential is a concern; to avoid the inevitable 'sea of housing' effort should be made to intensify the main routes with double storey houses, and provide variety with special corner site units, flat roofed houses as well as pitched roofed units, so as to provide visual relief from the blanket residential fabric. Careful tree planting inside the 'superblock will be essential. (See Planner's memo attached – Annexure 1).

It is proposed to site social facilities primary along the Church Street extension, and less so on Bree Street, which is less important.

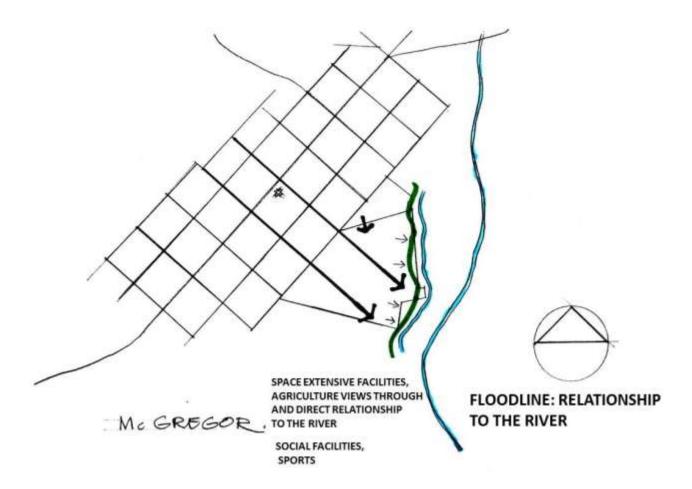
Employing the superblock idea, accessibility to facilities on both streets can be achieved (see diagram below).

Facilities especially space extensive, should be located also at the green river edge (for example – sports fields can be located in the flood zone) Diagram.



Provision and location of Facilities continued

Space extensive facilities can be located on the edges of the site towards the river.



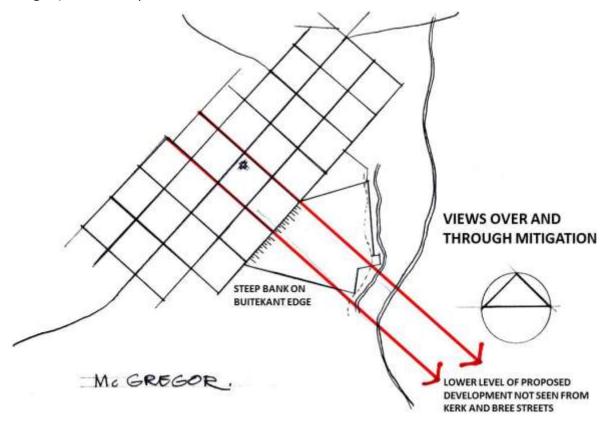
<u>Potential visual impacts</u>

The development of Erf 360 will be mitigated to a certain extent by the significant bank along Buitekant Street as well as the slope down towards the river. This will reduce the visual impact from Buitekant Street. More importantly, views down Kerk and Bree Street from within McGregor will not be adversely affected.

The structuring concept of the McGregor grid is to be extended, which contributes tovisual-spatial continuity. Kerk and Bree Streets are extended southeast, and will be lined with relatively high-density units and community facilities, in line with the overarching concept of McGregor.

The Diagram below shows the important views down Church Street and Bree Street.

Because the site is at a lower level, existing view corridors (shown in the photographs below) should be maintained.





View down Church Street (Telephoto)



View down Church Street (wide angle) towards proposed development

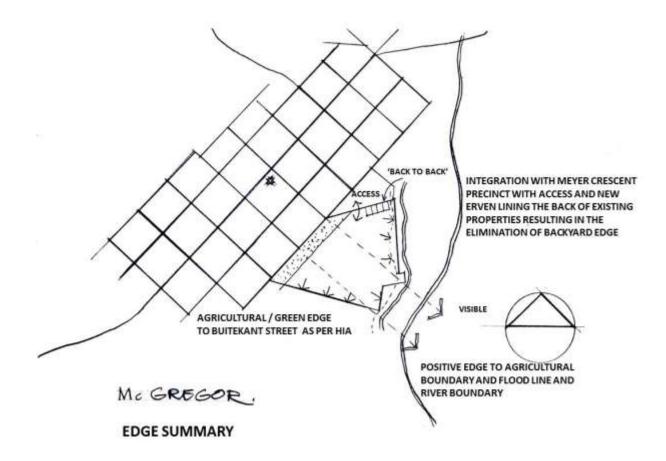


View down Church Street (Telephoto)



View down Church Street (Wide Angle) towards site of proposed development

<u>Development of the concept: edge summary</u>

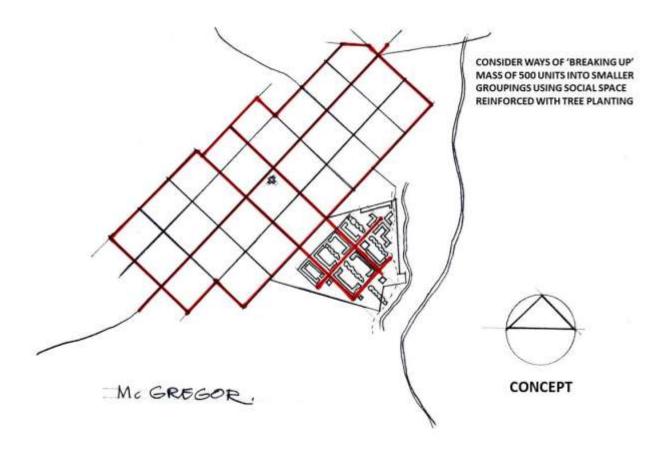


The diagrams indicate the principles to be employed with the extension of the 'superblock' grid concept of McGregor into Erf 360.

The extended superblock integrates seamlessly with the existing town, and the historic pattern is respected. Church and Bree Street extend to the south east edge, with the superblock grid pattern interrupted and modified by the natural edge, as defined by the floodline.

The superblock grid 'breaks up' the 500 unit development, and allows for variety of layout and social space within the blocks. Tree planting can also be employed within the blocks to define social space and routes, and to provide a green link to the river.

Development of the concept: composite diagram/ concept



The 'superblock' idea allows for the integration of the new development with the town. The main superblock roads provide for social space at the village scale, while development within the blocks allows for more local, intimate social space.

The agricultural edge is an important heritage resource. The distinct urban / rural relationship should be maintained and reinforced. There should be a positive edge relationship, with buildings and facilities defining the urban-rural boundary.

7. LAYOUT DESIGN ITERATIONS/PROPOSALS (SOURCE: URBAN DYNAMICS / UDA ARCHITECTS & URBAN DESIGNERS/ MATTHEW GRAY ARCHITECTS AND URBAN DESIGNERS)

ITERATION 1



The design originally submitted to HWC did not acknowledge the first indicator adequately i.e. the proposed agricultural edge to Buitekant Street. From an urban design perspective, the plan was also problematic for the following reasons:

- Having only one main vehicular access to the development it did not integrate the proposals sufficiently into the old town.
- Other issues at the smaller scale included a lack of variety of house types, block layouts allowing sight lines of back yards through blocks, and backyard edges to the river.
- A commercial node on Buitekant Street at the Kerk Street intersection would have compromised the heritage value of the village edge.
- Bree Street should also have been extended, directly into the new development to integrate it with McGregor and to increase access and choice.
- The organising geometry, was aligned with the 'Onderdorp' Meyer Crescent, not with the dominant rectilinear geometry of McGregor.

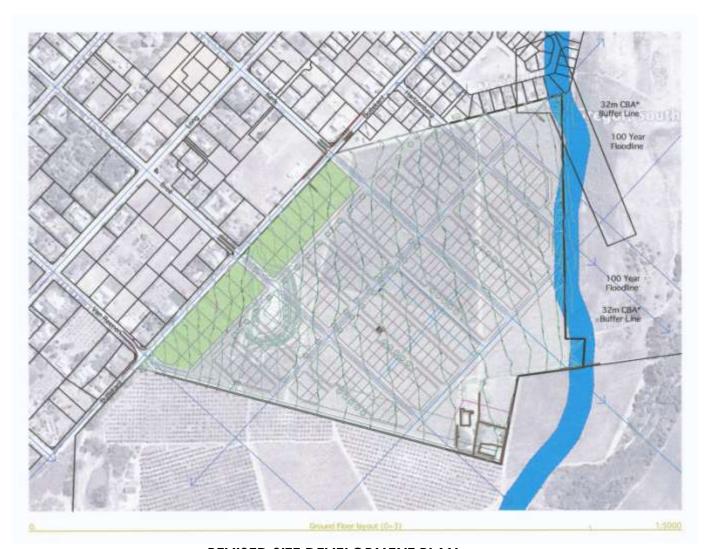
ITERATION 2



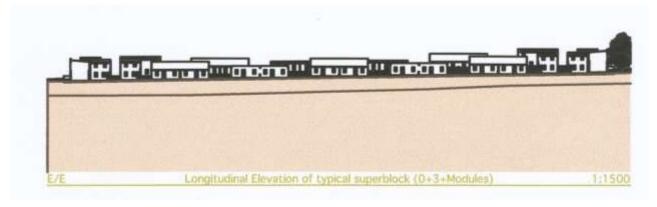
A revised design was drawn up with the road geometry changed from the diagonal to a geometry parallel to the Mc Gregor grid, with rows of blocks stepped down to the river, and tree'd extensions of Kerk and Bree Streets. While this proposal was an improvement, the nature of the Buitekant Street edge was not made clear and the layout appears mechanistic and monotonous.

ITERATION 3: REVISED SITE DEVELOPMENT PLAN (CURRENT PROPOSAL)

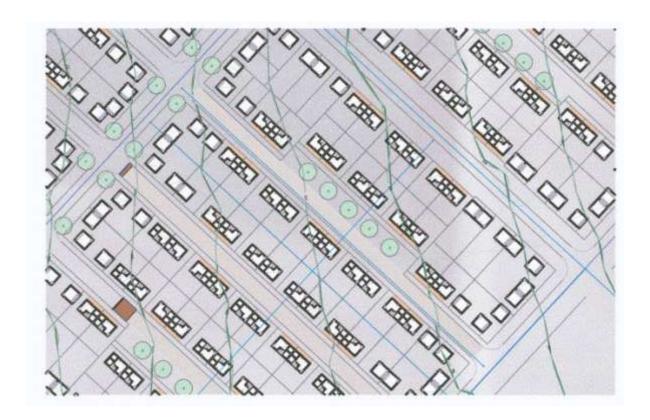
This basically incorporates the ideas contained in this report i.e. the notion of extending the routes and grid of the McGregor superblocks, and the principles relating to the treatment of the edges.



REVISED SITE DEVELOPMENT PLAN



Transect indicating intent to provide a sense of urban quality and continuity to the streetscape including diversity of house types with double storey units at the block ends and closure of backyard spaces.



PROPOSED BLOCK DEVELOPMENT AND SITING OF UNITS

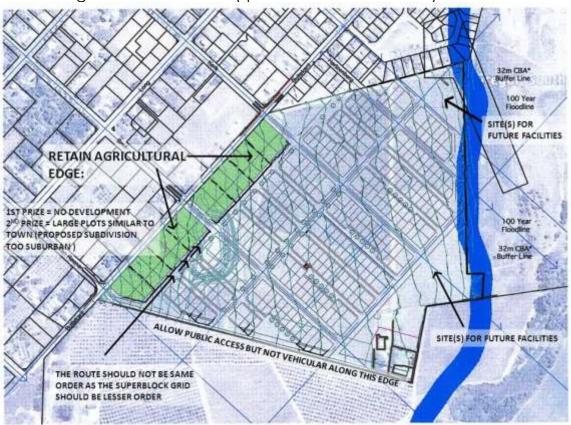


ILLUSTRATIVE VIEW OF STREETSCAPE

8.CONCLUSION

The Revised SDP is supported in principle, apart from the following (see also written comments added to SDP drawing below):

- 1/ The south east edge to Buitekant Street should be reserved for agriculture and remain undeveloped. (Second prize would be to have agricultural plots similar in size to those of the original town). The proposed subdivision into smaller plots as indicated in the SDP is too suburban in scale, and therefore inappropriate.
- 2/ The route on the other side of the agricultural edge parallel to Buitekant Street should be of a lesser order than that of the main superblock grid (i.e. a narrower street/road reserve).
- 3/ Likewise, the southern edge along the olive grove should not form part of the overall route /grid layout. The geometry should be configured to allow for public (pedestrian) access along the edge, but not serve as a vehicular through-route.
- 4/ It is assumed that where public facilities are required they will be appropriately located, either within the development on the major routes of the Church and Bree Street extensions (local non space-extensive facilities), or on the edges toward the river (space extensive facilities).



REVISED SITE DEVELOPMENT PLAN WITH COMMENTS

ANNEXURE 1: PLANNER'S MEMO