

# SUBMISSION RE PROPOSED DEVELOPMENT AT THE REMAINDER OF THE FARM ALICEVILLE – PENNINGTON A.K.A. UMDONI POINT

MAY 3, 2015 PENNINGTON RATEPAYERS' AND RESIDENTS' ASSOCIATION - PRRA pENNINGTON

Email: penningtonratepayers@gmail.com

### 1. Introduction

## Re: Amendment Application to the Environmental Impact Assessment Report, dated March 2015 provided by Environmental Solutions, hereinafter referred to as The Report.

The applicant, Zamori 129 (PTY) Ltd, wishes to change the original approval to now construct 281 single storey houses and various administration buildings; increase the hardened surface area; increase the development land area; and change the development mix to small typical retirement village cottages, frail care centre and administration buildings. This is now the fourth amendment to the original application. The comments that follow are in part based on copies of the following documents:

- a) the Amendment Application to the Environmental Impact Assessment Report, dated March 2015 provided by Environmental Solutions, hereinafter referred to as The Report
- b) an email dated 20 March 2015 to A&IP's stating that comments must be provided by end April 2015 but the Report gives May 4<sup>th</sup> 2015 as the deadline
- c) The Application for Amendment of Environmental Authorization published by The Department of Agriculture and Environmental Affairs (KZN) signed on 18 November 2013.
- d) The Amended Record of Decision (ROD) dated 06 June 2008 published by KZN Agriculture and Environmental Affairs.

The application is for the construction of 281 residential cottages designed and managed as a retirement village, with a Frail Care Centre, Administration Block, Chapel and other facilities and infrastructure required for this type of development, and a Conservation Area. In parallel with the amendment of the environmental authorisation, the property will require rezoning from Local Residential 3 to Retirement Village under the KwaZulu-Natal Planning and Development Act (PDA) and the Spatial Planning and Land Use Management Act (SPLUMA).

**2. Preamble:** The Pennington Ratepayers' and Residents' Association, hereafter referred to as the PRRA, has no objection in principle to the development as now proposed provided the concerns and recommendations that follow are adequately addressed. There is no wish to unnecessarily delay the project in question but the PRRA feels strongly that the present Application is deficient on a number of aspects which are commented on below.

### 3. Environmental aspects

The Pennington Ratepayers' and Residents' Association – PRRA is not commenting on purely environmental aspects pertaining to the property in question i.e. Umdoni Point, aka as the remainder Farm Aliceville No 1247, as other Interested and Affected Parties are better qualified to do so and have made such submissions which we support. Hence we are concentrating on Service and Engineering issues; Storm Water Management and Traffic Controls as these relate to the development proposed by Zamori 129 (PTY) Ltd.

#### 4. Sewage Disposal and Storm Water Controls

These two aspects are addressed together, given that storm water controls play a considerable part in the management of Pennington's sewage system.

It is recognised that the applicants may consider the issues raised in this submission, particularly those in relation to sewage, are not of their concern but the Pennington Community has valid concerns that need to be addressed and cannot simply be disregarded. With the exception of the two developments situated East of the R102 (Selborne Golf Estate and Eden Rock Residential Estate, the entire Pennington sewage reticulation system is linked to the Municipal Sewage Works through the Dolphin Drive pump station (Nr 3).Over time immense suffering has been inflicted on surrounding residents and severe ecological damage has been caused to the adjoining wetland and the Nkomba Stream/lagoon. It is time to ensure that this will not happen again or is minimised to the extent possible, hence the recommendations that follow.

#### 4.1 Conclusions relating to Sewage Disposal and Storm Water Controls

The main issue at hand is that spare capacity to handle sewage from the proposed development is entirely reliant on the fact that parts of Pennington Village proper (some 750 sites) have not been connected yet as foreseen in the 2011 Master Plan attached to this submission – Annex 1. Connecting these 750-odd sites will require upgrading of the rising main connecting the Dolphin Drive pump station to the Municipal Sewage Works and installing additional pumping capacity, meaning in reality there is no spare capacity in the Pennington system until this is done: a sewage system has to be capable of serving its entire catchment area which is not the case whereas the proposed development would expand that catchment area still further. Additionally, limited holding capacity at the new Dolphin Drive pump station means that any extended operational failure will automatically result in raw sewage being diverted into the Nkomba Wetland, the Nkomba Stream and, eventually, into the Indian Ocean at the Nkomba Lagoon. The risk of overflows is considerably heightened by uncontrolled ingress of storm water into the sewage system. These aspect are reviewed in detail in the paragraphs that follow but below we offer some suggestions that would alleviate some of the immediate issues and could allow this development to proceed provided cast-iron guarantees are obtained from the UGU District Municipality and others that the proposed actions will be undertaken in an acceptable timeframe.

### 4.2 Recommendations

**4.2.1 Sewage:** The re-alignment of Dolphin Drive as part of the construction of the new pump station makes additional space available that can be used for the construction of a suitable facility to contain and temporarily store waste water overflows as recommended also in the July 2012 EMP. Overflows would be directed into this facility and would be returned to the sump proper when normal operations resume.

This would be an extension of UGU's current construction project<sup>1</sup> and would to a certain extent alleviate the holding capacity constraints identified in para 4.3.3 below.

**4.2.2 Ingress of storm water:** UGU to urgently undertake a physical inspection of all properties connected to the Pennington sewage system and; to determine also whether and in how far the reticulation system itself contributes to storm water ingress due to failing pipe joints etc., particularly in waterlogged areas of Pennington. Both actions of course followed by the necessary corrective measures.

**4.2.3 Immediate review of the overall Pennington sewage situation**: Update the existing Master Plan, which in our view is no longer valid and in any case is a 'living document', to provide answers to the questions raised in this submission, including those related to the construction of additional holding capacity and eliminating the ingress of storm water<sup>2</sup>. The report should outline the best way forward and should take the concerns of the Pennington Community in consideration.

### 4.3 Detailed discussion

# 4.3.1 The 2011 Pennington Sewage Master Plan (Annex 1) assumed 140 sites to be connected at Umdoni Point, aka as the remainder Farm Aliceville No 1247, and a further 78 at the Umdoni Retirement Village (URV).

In reality 281 sites plus other buildings are now proposed at Umdoni Point whereas the Umdoni Retirement Village itself added 120 sites on part of the remainder Farm Aliceville No 1247 purchased from the applicants, as well as other buildings (Frail Care Centre, Hall etc) = about 200 additional sites over and above what assumed by the Master Plan.<sup>3</sup>

## **4.3.2** The remaining sewage catchment area in Pennington, to be connected in future, consists of approx. 750 sites.<sup>4</sup>

The sewage works have been upgraded to biologically handle flows up to 2MI/d and as such could cater for most (but not all) of the full catchment inflows. However neither the pumps to be installed nor the existing rising main to the sewage works could cope and in time both will require upgrading.

# 4.3.3 The emergency storage capacity for the new Pump station 3 (now under construction at Dolphin Drive) as planned is 10 hours based on Pump station 1 inflows and existing inflows from area 2.

However, when the complete catchment area is connected this reduces to 2.5 hours. Physical space at the Dolphin Drive site is constrained by the R102 on the one side and Dolphin Drive

<sup>&</sup>lt;sup>1</sup> From our perspective this would be a separate construction project, to be linked to the new pump station on completion – as such it would not delay construction of the new pump station.

<sup>&</sup>lt;sup>2</sup> This Association suggests this is best undertaken by the Civil Engineers who prepared the 2011 Master Plan (Bosch Stemele), as soon as possible.

<sup>&</sup>lt;sup>3</sup> It is difficult to estimate how many other sites have been developed since May 2011 elsewhere in the connected areas of Pennington: 50 seems a reasonable assumption but it has to be assumed these match the projections of the Master Plan.

<sup>&</sup>lt;sup>4</sup> This excludes the Abrams Crest development (145 sites) in Kelso that apparently has been switched to septic tanks as it is understood that Transnet have refused permission for pump station A to be built on their property. As such this is not included in the 750 referred to above although we understand connection to waterborne sewage is foreseen under the Umdoni Town Planning Scheme.

itself on the other side making anything larger (in terms of holding capacity) impractical at this site. The additional 200-plus sites referred to in para 4.1, once connected, will reduce the present holding capacity to less than 9 hours and to just 1.4 hours when the entire catchment area (as calculated in 2011) has been connected. The design includes a generator set and standby pumps but these only provide a partial solution, always assuming maintenance is up to standard and power outages are both rare and limited.

## 4.3.4 The holding capacity as it stands is severely insufficient.

In this respect it is important to note that the Amended Environmental Management Plan (July 2012) states *that, should all else fail, it is intended that a pipe from the pump station will allow for the discharge of raw sewage in the Nkomba stream.*<sup>5</sup> The report suggests this is unacceptable and that a suitable facility to contain and temporarily store any waste water overflows must be sought. But this does not form part of the current construction project.

## 4.3.5 It is not possible to forecast an accurate completion date for pump station.

As of 30 April 2015, work is nearly 4 years behind schedule and is again at a standstill since 15.12.2014. Not even the excavation has been completed and we understand unexpected technical complications have arisen that limit the rate at which the actual construction can advance as and when work may resume. It is our belief that end 2016 could be a realistic completion date but this cannot be guaranteed.

# 4.3.6 Considerable changes and complications have arisen since UGU signed a Service Agreement with Zamori 129 (PTY) Ltd.

The original agreement, dated February 6<sup>th</sup> 2008, covers 245 erven and 1 Frail Care Centre but already 120 units have been developed by the Umdoni Retirement Village on land excised from the remainder Farm Aliceville No 1247, aka as Umdoni Point. The present application is for a further 281 units plus 1 Frail Care Centre and other buildings, i.e. a total of 417. This visà-vis the estimate of 140 erven allowed for in the Master Plan.

Furthermore, the 2008 UGU agreement concerns 245 individual erven plus 1 frail care centre but the proposed lay-out, according to the Environmental Solutions report, is not for individual erven but for one property with different zones where people will buy life rights, meaning the original lay-out is no longer applicable in any way apart from the open spaces.

### 4.4 Community concerns

**4.4.1** To date, large areas of Pennington proper have not been connected to sewage but substantial new developments to the South of Pennington proper, as well as Penvalley and others to the West, have been connected with all the resultant sewage ending up at the Dolphin Drive site from where it is pumped to the sewage farm. <sup>6</sup>

<sup>&</sup>lt;sup>5</sup> Finally ending up in the beach lagoon – both stream and lagoon have been severely polluted in recent years by regular spillages from the existing pump station at Dolphin Drive with invader-type water hyacinth now covering parts of the lagoon.

<sup>&</sup>lt;sup>6</sup> To note that the **Socio-Economic Impact Assessment Report** gives Pennington Households as numbering 1130 and claims that over 80% are connected to a sewage system but this needs clarification because some 750 Pennington sites remain to be connected to a sewage system. The data used in the report date from 2011.

Dolphin Drive itself, Barracouta Bend and the entire area to the North-East of pump station 3 remain without waterborne sewage. If additional developments now take up still more of the already unacceptably low holding capacity then over time it will become impossible to connect those areas that are now without access.

**4.4.2** The foregoing makes it clear that not only is the Pennington sewage system of great concern to residents of Pennington proper, but also that much has changed since 2008 and when the original Master Plan was drawn up. It is disappointing in the extreme that the developers have made no attempt whatsoever to deal with any of these issues previously raised by this Association, other than stating repeatedly that a service agreement is in place, basically suggesting that anything beyond this is not of their concern. For example also Ezemvelo KZN Wildlife has previously stated that studies should be undertaken on a.o. sewage but The Report simply says that sewage from the site will be treated at the UGU Waste Water Plant.

# 4.5 The PRRA is not against the development as such and appreciates that efforts have been made to accommodate some of the environmental concerns, and that the number of units on the frontal eastern dune has been reduced.

Nevertheless, it is this Association's contention that the service agreement in question needs to be reviewed, based on a renewed study of Pennington sewage arrangements that, hopefully, will provide clarity on the best way forward. The status quo is unacceptable from both an environmental and a social/community perspective – simply adding yet further pressure on the system because 7 years ago something was agreed is not acceptable. Today's situation is different and change over that period has to be taken into account – this includes acknowledging the serious service cum engineering concerns and objections of the Pennington Community, not simply discarding these. In fact, in our view, refusing to take these into account could place the impartiality of The Report in question.

# 4.6 Storm Water Management forms an integral part of this and should not be addressed in isolation.

**4.6.1** Pennington regularly receives heavy rainfalls of 50 mm and higher. Other than a number of small streams there is no formal water drainage system in Pennington. Yet the Amended record of Decision (ROD) of 06 June 2008 states that storm water is to be piped to the closest drainage lines... There is general consensus that earlier large-scale developments to the South of Pennington have radically changed the nature, flows and behaviour of some of these streams, in some instances to the detriment of adjoining residents. The impact of storm water flowing into wetlands, onto adjacent properties, into streams and on to the sea shore therefore is environmentally critical.

But the end-response to these concerns is to say that a storm water management plan shall be provided for approval by the Local Authority prior to commencement of construction work on site. This simply removes storm water management from the present discussion and ignores the stated concern that the Umdoni Municipality lacks the resources to adequately assess and monitor this. Therefore, before commencement of construction, the storm water runoff needs to be researched and provision made for a storm water system that will prevent further damage to Pennington's already inadequate storm water system.

**4.6.2** Furthermore, ingress of storm water into the sewage system has been causing regular overflows at existing pump stations but despite this Association's best efforts no concrete action, for example inspection, has been taken by UGU in this regard. This in spite of UGU Management previously advising this Association in an open meeting in 2013 that a technical solution to discover illegal ingress of storm water was available and would be acquired.

**4.6.3** Again, this Association is not against the development in question but these issues need reviewing and the best way forward needs to be sought. It is accepted that time is of the essence here which makes it even more surprising that not more effort has been made in the report to adequately address these different concerns. The Report makes repeated references to having a Storm Water Management Plan which will resolve all concerns regarding storm water. However, in our view this will not provide a solution unless a holistic approach to the storm water problem in the development area and Pennington is taken.

**4.6.4** It is impressive to state that the Storm Water Management Plan will be in line with recommendations regarding Sustainable Urban Drainage Systems (SUDS) as proposed by City of Cape Town Catchment, Storm Water & River Management (CSRM) and the Report on Engineering Services by May Houseman & Associates. December 2014, for it gives the impression that the storm water problem will be resolved. However, these plans are all at a macro level and do not consider Pennington's unique situation at a micro level that requires special consideration. The emergence of a new wetland opposite Pienaar Road has been attributed to the construction of new units in the western section of Umdoni Point, now part of the Umdoni Retirement Village. The runoff is into the Makamati Stream whose banks are being eroded due to additional run off when it rains, putting properties at risk as banks have already collapsed up to their boundaries. There was a dam that provided a degree of attenuation but this and a bridge at Umdoni Road South were washed away in 2008. A very thorough BAR was undertaken giving rates of flow and all the necessary facts to design a new bridge. But nowhere in the present report is a figure given, not even an estimate, for the increase of water flow from the proposed development which will impact on the Makamati stream.

### 5. Road Traffic and related issues.

**5.1 Restricted Development Access.** We stated in our original comments that, in order to protect the existing physical and social environment of the established adjacent residential areas which currently offer alternative access routes to the development site, the pending Amendment to the ROD should be broader to include the restrictive access of, construction vehicles, mechanically driven construction plant/machinery and construction personnel, to all alternative routes other than the direct route to the Main Entrance of the development site as a whole.

The response to this is as follows – Page 38 of The Report:

Damage to roads during construction: Needs to be discussed with local authorities. The Retirement Village will be required to maintain its own roads, storm water systems, water supply and sewage. As this is not an additional cost to the Municipality a portion of the rates paid will be available to upgrade services in other areas. If possible the site could be accessed directly from the R102 through September Bells/Gwala Gwala.

This simply evades the issue in that a) as it stands the Umdoni Municipality cannot afford to adequately maintain its road network; b) it is impossible to ring-fence any portion of Municipal Rates income for a specific purpose and c) any fenced-off development on privately owned land is responsible for all maintenance on that land in any case.

The load carrying capacity of Pennington's roads is very limited with a weight restriction of 5 tonnes. The average tipper truck already weighs 7 tonnes or more. Underground water is very prevalent in Pennington and when roads are wet as a result they act as a sponge. Meaning heavy vehicles cause water to be expressed and potholes to appear as a result. Similarly, whilst there are verges many are wet and will not support the weight of heavy trucks.<sup>7</sup>

**5.2** We also repeat again that as a preventative assurance the Frontal Eastern Dune Node bordering the North /South dirt track extension to Botha Place must be suitably high fenced in order to prevent any access or departure (what-so-ever) to and from the development site along that track.

5.3 In view of the foregoing we maintain our demand that the Applicant and the Umdoni Municipality sign an agreement prior to commencement of any Works to be performed, with regard to the cost and timing of road upgrades, maintenance thereof during construction and final repair to all existing access roads, including Pennington Drive, used by the Applicant/Developer and their Contractors, and that enforceable guarantees, payable on demand, will be lodged in this respect. The Traffic Impact Statement annexed to The Report comments on the relatively poor state of Pennington roads but simply ignores the impact construction vehicles would have.

**5.4 Road traffic.** Our concern as stated is that we believe this development will likely add at least 300 vehicle trips to Pennington's daily traffic flows as no direct access to the R102 is provided whereas the original ROD did not condone a road link through the existing retirement village. Pennington's roads are narrow and in parts already congested but the application makes no reference to this whereas the increased traffic along the proposed secondary access roads will seriously impact the quality of life of the adjoining residents.

The Traffic Impact Statement or TIS as provided however basically dismisses all concerns raised by this Association and individual residents by stating there will not be any significant impact on the overall Pennington road system, with the exception of Minerva Avenue.

<sup>&</sup>lt;sup>7</sup> The most recent extension to the Umdoni Retirement Village was accessed from the R102.....

This Association questions whether the TIS has adequately researched the situation considering that it commences by wrongly stating the number of retirement cottages to be 300. Statements as 'elderly residents are unlikely to move about much at night' are simply assumptions: there has been a tendency to lower the minimum entry age of retirement villages (with some at just 60+) whereas the likely cost of units is such that only fairly well-off persons will apply, resulting in an average of more than one vehicle per unit. Hence we question the number of day trips in and out the TIS authors assume. In our view the impact of additional traffic on the Pennington road network has been addressed in a very shallow manner and, frankly, we question the credibility of the Traffic Impact Statement.

**5.5 Traffic Management plan.** We have previously stated that, as the original ROD omitted to address a traffic management plan for the build-up and movement of construction personnel to and from Pennington, there was a need to arrange a temporary on-site taxi rank and parking for construction personnel with the Applicant/Developer fully accountable for the management thereof.

The response statement that the contractor will be responsible for transporting workers to and from the construction site and that workers will wear clothing identifying them as working for the contractor is welcomed but, should be formalised in any approvals that may be granted, including those for any rezoning of the property in question.



