

BEFORE THE ENVIRONMENT AND LAND USE APPEAL TRIBUNAL

ELAT 2056/21

In the matter of :-

Mrs. Begum Noorenah Allusaib Mohit

Appellant

v/s

Ministry of Housing and Land Use Planning

Respondent

DETERMINATION

1. The present appeal is against a decision taken by the Morcellement Board of the Ministry of Housing and Land Use Planning [“The Ministry”] for having rejected the application of the Appellant for a Morcellement Permit [“BLUP”] for the subdivision of a plot of land of an extent of 6120 sq.m into 2 lots situated at Palisandre Street, St. Croix, Port Louis, for residential purposes. The Appellant was informed of the decision of the Respondent via the National E-Licensing System [‘NELS’] on 1st October 2021. The reasons for refusal are:

“Site is sandwiched between flood prone areas. As per data available, if this morcellement is implemented, it will accentuate the existing flooding issues in that region. As per the vulnerability analysis, the region of St Croix is categorized with the highest vulnerability index which is 5.”

2. Both parties were legally represented. The Appellant deponed and Mr. Oodally, Civil and Structural Engineer, was called as a witness on behalf of the Appellant. The Respondent's representative, Mrs. Prayag, Office Management Assistant from the Morcellement Board of the Ministry deponed and Mr. Ramdohur, Land Drainage Officer from the Land Drainage Authority as well as Mr. Seetohul, Project Manager at the National Development Unit ['NDU'] were called as witnesses on behalf of the Respondent. We have duly considered all the evidence placed before us as well as the submissions of both Counsel.

3. The grounds of appeal as per Annex A of the Notice of Appeal are:

"1. Because the Respondent has wrongly and unfairly rejected the application of the Appellant (then Applicant) as in truth and in fact it has failed to consider and to give due weight to relevant factors such as the existence of settlement, residential houses, schools, shops and large drains built by the NDU near to or in the near vicinity of the site.

2. Because the Respondent unreasonable rejected the application of the Appellant (then Applicant) based on mere speculation and apprehensions and on reliance of past data."

I. Under Ground 1

4. It is the contention of the Appellant under this ground that the decision of the Respondent was wrong and unfair because it did not give due consideration to the existence of settlements and the large drains built by the NDU in the vicinity of the site. According to the testimony of the Appellant, there are existing houses in the vicinity and the construction of drains built by the NDU is partly completed. According to her although her plot has never been flooded as such, after the implementation of the drains in the area there will be no issues of flooding. She finds the Respondent's decision unfair since she also did not witness any water accumulation on the subject site and this was also confirmed in her engineer's report.

5. The Respondent's case is that it relied on information and data provided by the Land Drainage Authority ['LDA'] that the whole area is prone to floods, to come to the decision of rejecting the application. Bearing in mind the existing development in the area, no clearance was granted by the LDA in order not to aggravate the existing flood issues. Mrs. Prayag, representative of the Ministry, explained that many applications have been rejected by the Morcellement Board of the Ministry in the region of St Croix based on the views of the LDA although she could not confirm whether it was also for the period of June 2021 to June 2022 for that particular area. She explained that the delay in issuing the refusal letter from the day the Morcellement Board took the decision to reject the application was due to the Ministerial approval of the decision being awaited.

6. This case rests on technical issues and we have at hand the versions of the engineer, Mr. Oodally, called on behalf of the Appellant and the Land Drainage Officer, Mr. Ramdohur, from the LDA, the authority responsible for land drainage called by the Respondent. Mr. Oodally who had previously worked as Engineer at the City Council of Port Louis stated that from his 12+ years of experience at the Council he has never come across any issue of water accumulation or flooding from Palisandre area of St Croix. He admitted not to have been on the site since 2004 until he visited it on 31st of January 2022 when he took cognizance of the ongoing constructions of drains and then after cyclone Batsirai in February 2022; both times, according to him, there was no accumulation of water. He produced a report containing a plan and 4 photographs, marked Doc A, dated 4th of February 2022 in which he set out these findings and according to him, the site is not located in a flood prone area.

7. Land drainage has become a vital issue more especially since the country has started experiencing flash floods, the most serious one being in March 2013 causing the death of 11 people. The *Technical Sheet on Drainage* in **Planning Policy Guidance 1** ['PPG1'] sets out the need and reasoning behind the provision for drainage with regards to new developments. It provides as follows:

“Most new development will change the surface water runoff regime. Changing land use from rural to urban (soft landscape to hard) means an increase in impermeable areas (roofs, drives, roads). Consequently rainwater that falls on the area will run off quicker than it did previously.

A small development of a house or two, taken in isolation may be perceived to have a negligible effect on runoff. However, when several such developments are added together in one area, a significant change in runoff regime may occur.”

8. The same policy also provides guidance on potential flood plains, areas where development should be avoided such as where the “occasional groundwater levels” are a lot higher than their “normal groundwater level” for areas located downstream. These may be liable to flooding and accumulation of water due to water logging during extreme rainfall events.

9. In terms of context analysis, the subject site is a bare plot found within an area of St. Croix, Port-Louis, where generally the surrounding land has been parceled out with proper road networks, names allocated to the roads, and utilities existing as can be noted from various documents including the photograph and map annexed to the Statement of Case [‘SOC’] marked as Annexes D and E and photographs marked Docs C1 and C2. The area of St Croix is a residential area with is built up as can be noted from the map of the LDA marked Doc B but development in the area immediately surrounding the subject site is still sparse as can be noted from Annex D of the SOC and Doc B. The existence of houses, shops, schools and drains is taken into account but their presence cannot be taken in any way to mean that more development should be added on to the area which has now been assessed as being a flood prone area by the Land Drainage Authority, which incidentally is the only authority that can declare an area as flood prone. It can be gauged from the fact that the site is located at the foot of a mountain as explained by Mr. Ramdohur, St. Croix is likely to face problems such as water accumulation and flooding due to water run-off from the mountain. As explained in the **PPG1** *supra*, developments generally create impermeable surfaces which delays the absorption of water into the soil. This explains why inhabited areas

found at the foot of a mountain not only are likely to face water accumulation problems but also floods due to the impediment caused by the development to the natural drainage passes based on the topography of the land.

10. Mr. Ramdohur explained the state of affairs in the area in great detail using Doc B, especially clarifying how the topography of the land in the area leads to some natural drainage passes converging towards the inhabited area of St. Croix by getting naturally channeled towards the river, Rivulet Terre Rouge. He explained that the area shaded in red has been classified as flood prone and that the LDA analyses areas holistically, as opposed to individual plots.
11. We are of the view that the Respondent was right to have considered the views of the LDA being given that the area of St. Croix being located at the foot of the mountain is prone to floods. Although we have considered Mr. Oodally's views that the soil at the site is absorbent, we are not convinced that a mere visual appreciation on 2 occasions can lead to a definite conclusion. We would rather in such matters rely on the type of technology that the LDA uses based on the high-resolution Digital Elevation Model with precision of up to a few centimetres when it comes to the behaviour of water and possible water courses when it comes from higher land which can be assessed only using technology such as drones. This method is internationally accepted and is a very reliable model, as per the testimony of the officer from LDA.
12. Whether the subject site has been flooded in the past may or may not be within the knowledge of the Appellant since she only acquired it less than two years prior to lodging her appeal. We have it in evidence from Mrs. Prayag that the region of St Croix has been subjected to recurrent floods for more than 10 years (for which appropriate measures were being implemented). The fact that it is located in an area which has experienced floods before, necessitating emergency procurement for the building of drains is indicative that the site has the potential of experiencing floods, especially in the eventuality that the water run-off regime changes in the case of extreme rainfall event. These are no longer unlikely events with the climate change that the world is currently undergoing and the number and types of development mushrooming.

13. It will be, in our view, a fallacy to pinpoint an exact location amidst the wider context as being sites which do not usually experience floods to say they are not flood prone because so far this has not proven to be an exact science. On this score we agree on the holistic approach taken by the LDA since the stakes are too high. We understand Mr. Seetohul to be saying that drain works undertaken by the NDU were underway in the region of St Croix and that as at August 2021 it had almost reached completion near Palisandre Street. The existence of large drains in itself cannot be taken to mean that there is an existing effective system in place. The system has been put in place agreeably, whether it works effectively is a question of assessment for which only the LDA has the expertise and authority. This ground therefore fails.

II. Under Ground 2

14. The Appellant contests the decision of the Respondent under this ground on the basis that it was unreasonable to reject the application based on mere speculation and apprehensions and on reliance of past data. In order to understand how water behaves in the area following heavy rainfall, it stands to reason that reliance must be placed on information collected and that includes information from similar past events. This is what the LDA did and what the Appellant and the engineer of the Appellant also did. They all sought information from sources that witnessed past related incidents in the area. Mr. Ramdohur explained how the LDA started collecting data obtained from previous interventions from several quarters, such as fire services, police and meteorological department. Since we are indirectly dealing with the effect of climatic conditions in the present scenario, one cannot plan for the future without looking at the past and the source of the problem from the past that needs addressing. We find this to be a reasonable and fair approach. Mr. Ramdohur explained that the region of St Croix has been categorized as having a vulnerability index of 5, which is the highest end of the scale. This evidence has not been successfully challenged by any other expert. The Tribunal has to accept this assessment coming from a specialized authority. Mr. Ramdohur also explained that the vulnerability index is given by both the LDA and the consultant working on the Land Drainage master plan.

15. We believe that the reasoning that the continued existence of residential settlements around the site as being evidence that the vulnerability index is not accurate, is a flawed one. People cannot be driven out of their homes nor can the government be expected to displace people from a whole area. The vulnerability index gives an indication of the vulnerability of areas prone to floods. If we are to accept the position of the Appellant, it may well be that St Croix was at a vulnerability index of 5 and things have evolved since then but we cannot surmise on this issue in the absence of compelling evidence. According to Mr. Oodally, the soil at the subject site is absorbent and the water table seemed to be below two (2) metres. This evidence not only is flimsy because there is no indication of what method he used to make such an assessment but also lacks sufficiency in the face of the workings of a body which has expertise in land drainage. Evidence was adduced as regards the state of the locus following the passage of cyclone Batsirai. It would be risky to rely on such evidence as it does not indicate what happened actually on the site and in the surrounding area during the cyclone; whether there was water accumulation in the area and if it was waterlogged or flooded.
16. Bearing in mind the subject site is located in a residential area, apart from the drains having been put into place, there is no indication on record whether these work or will work effectively in the face of an extreme rainfall event unless the LDA provides us with such evidence, which it has not. We agree that as regards the **PPO Directive 41**, this is not a document that makes any declaration that St Croix is in a state of emergency but rather is a directive issued for emergency procurement for the construction of drains “in regions affected by flood and other natural disasters which are determined and certified by the Land Drainage Authority.” This, in turn, is indicative of the state of emergency that St Croix was at the time. One may argue that with the implementation of the drains since then, the vulnerability index of St Croix may have decreased. We cannot surmise on the issue, and can only rely on the evidence of the LDA which derives its authority from the **Land Drainage Authority Act 2017**. We cannot risk relying on press articles which may be susceptible to misinformation and lack technical rigour.

17. The LDA also works on the basis of analysis of data collected after events such heavy rains, floods, flash floods to do a mapping of where and how the water flows and would flow. The LDA has not given any clearance for development in the region of St Croix and the officer from LDA explained in great detail why this is so and the works which are being carried out to mitigate flooding in the area. We are of the view that the Respondent acted as a reasonable permit authority in aligning its decision to the views of the LDA in this case since the area has been classified as being prone to flooding, which it believes is a planning issue of utmost importance in view of the area's antecedents. It is important to understand that flooding is a hazard whose parameters, including depth and velocity, vary significantly within the flood hazard area. Mitigating risk to life in case of flooding requires a comprehensive set of measures since the water run-off regime may vary and the extent of flooding is unpredictable. The aim of the authorities is to reduce risk of flooding and water accumulation to a manageable level hence minimizing any life-threatening risks. This set of measures generally involves a combination of effective land use planning, flood mitigation measures, emergency response strategies for flooding, and building standards, which takes time and several assessments.

18. For all the reasons set out above, we find that the Respondent's decision was correct. The appeal is set aside. While we have understood Mr. Ramdohur to be saying that the situation in that area will need to be assessed over a couple of years over a few rainy seasons, we would urge the authorities to try to expedite the rehabilitation works so that people can exercise their right to enjoy their property. No order as to costs.

Determination delivered on 19th October 2023 by

Mrs. J. RAMFUL JHOWRY
Vice Chairperson

Mr. S. MOOTHOSAMY
Member

Mr. R. SEETHUL
Member

