

EXECUTIVE SUMMARY

BACKGROUND AND PROJECT OVERVIEW

Fairview Suburban Estate Company (Pty) Ltd (the applicant) received a positive Environmental Authorisation (EA) for the Residential and Mixed-Use Development of the Remainder of Erf 1082, Fairview, Nelson Mandela Bay Municipality, from the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), on 9 May 2012 (DEDEAT Reference Number: ECm1/387/M/07-169). This EA followed the submission of a Final Environmental Impact Assessment Report (Final EIA), dated March 2011, by Public Process Consultants, the independent Environmental Assessment Practitioner (EAP) appointed by the applicant. Subsequent to the receipt of the EA, dated 9 May 2012, the following amendments have been issued by DEDEAT:

- Amendment Notice #1, 24 August 2012 (non-substantive amendment).
- Amendment Notice #2, 6 November 2012 (substantive amendment, which supersedes the original EA, dated 9 May 2012).
- Amendment Notice #3, 27 May 2013 (non-substantive amendment)
- Amendment Notice #4, 17 January 2017 (non-substantive amendment)
- Amendment Notice #5, 8 April 2019 (substantive amendment)
- Amendment Notice #6, 10 June 2022 (non-substantive amendment)

The applicant proposes to consolidate, subdivide and rezone Phases 7, 8, 9 and 11 of Erf 1082 from Residential 2, Private Open Space, Special Purpose (access) and Transportation (Roads) to Special Purposes (High-Tech/ Industrial Business Park) and Transportation (roads). The EA for Erf 1082 contains the following condition, amongst others:

“3.2.7. Any changes to, or deviations from the project description set out in this Environmental Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of this Environmental Authorisation to apply for further authorisation in terms of the regulations.”

The proposed rezoning of Phases 7, 8, 9, and 11 is considered a substantive amendment as the impacts of special purposes was not assessed in the initial application for environmental authorisation and were not taken into consideration in the initial environmental authorisation. Part 2, Regulations 31 and 32 of the NEMA EIA Regulations, 2014 (as amended) must be followed to apply for activities that require substantive amendments. The applicant has appointed Sandra Wren of Public Process Consultants as the independent EAP to manage the Amendment Application (AA) and associated Public Participation Process.

PROPOSED REZONING AMENDMENT OVERVIEW

The applicant proposes to consolidate, subdivide and rezone Phases 7, 8, 9 and 11 of Erf 1082 from Residential 2 (Townhouses), Private Open Space, Special Purpose (Access) and Transportation (Roads) to Special Purposes (High Tech/ Industrial Business Park) and Transportation (Roads). **The total development area of 10.65ha is not proposed to change.**

The table below provides a comparative overview of the proposed rezoning.

ZONING	CURRENT ZONING IN HA	PROPOSED ZONING IN HA	DIFFERENCE
Residential 2 (Townhouses) - 170 units <u>to</u> Special Purposes (High Tech/ Industrial Business Park) - 34 erven	8.08	8.89	+0.81
Private Open Space	0.61	0	-0.61
Special Purpose (Access and Internal Roads) <u>to</u> Transportation 1 (Roads)	1.96	1.75	-0.21
TOTAL	10.65	10.65	

Based on the proposed rezoning of Phases 7, 8, 9 and 11 from Residential 2 to Special Purposes the following specialist studies have been undertaken as part of the Amendment Application Process:

- Ecological Assessment, to include:
 - Aquatic Assessment – to, amongst others, assess the impacts of increased stormwater runoff on the Lorraine Tributary which forms part of the Baakens River and make appropriate recommendations for stormwater management.
 - Vegetation Assessment Review – to review the assessment of impacts associated with the proposed change in zoning, on the vegetation on Phases 7, 8, 9 and 11.
- Bulk Services – review of the bulk services for Phases 7, 8, 9 and 11, based on the proposed change in zoning, changes in stormwater runoff and management thereof, domestic water consumption, effluent generation and electricity demand.
- Traffic Assessment – revision of the traffic assessment for Phases 7, 8, 9 and 11 based on the change from Residential 2 to Special Purposes.
- Review of the EMPr

The proposed rezoning would result in the following changes to Phases 7, 8, 9 and 11:

- 34 Special Purpose (High Tech/ Industrial Business Park) erven of 8.89ha, **previously** 130-170 Residential 2 (Townhouses) erven of 8.08ha.

- Private Open Space of 0.61ha **to be incorporated** into Special Purpose (High Tech/ Industrial Business Park) and Transportation 1 (Roads) zoning.
- Transportation 1 (Roads) zoning of 1.75ha, previously Special Purpose (Access) of 1.54ha and Transportation 1 (Roads) of 0.42ha.
 - Overall reduction in road surface area and length, which will result in a reduction in maintenance and life cycle costs.
- Relaxation of 30% of the area to be set aside for landscaping.
- Relaxation of side and rear building lines from 5m to 2.5m but maintain street frontage at 5m.
- The site is accessible from Circular Drive, Fern Road and Mimosa Street. Mimosa is a main road in Fairview and provides access to and from both Circular Drive (via Willow Road at this stage) and William Moffatt. Mimosa road will provide the main access into the subject site.
- Stormwater generated from the proposed rezoned area will still be able discharge overland and via a piped stormwater network to eventuate into the Baakens River via the defined water course adjacent to the area to be rezoned. No piped stormwater discharge is proposed directly into the tributary of the Baakens River.
 - The overall increase in hard surfaces due to the proposed zoning changes will result in shorter times of concentration in major storm events, thus increasing the stormwater runoff from the area under consideration. An additional 0.52m³/s and 0.46m³/s will be generated for both the 1:50 and 1:100-year storm events. However, the rezoning will have no effect on the 1:100-year floodline previously determined, as the additional runoff is considered negligible.
- The provision of water to the proposed rezoned development will be off the existing 250 mm diameter water main in Mimosa Road. The **additional** Annual Average Daily Demand is estimated at 121Kl/day, translating to an AADD of 251Kl/day. The additional demand will not significantly affect pressure available in the existing reticulation surrounding and supplying this development. The overall length of water main pipelines required to service the proposed Special Purpose (High Tech/ Industrial Business Park) erven will be significantly shorter, which will result in a reduction in maintenance and life cycle costs.
- Effluent to flow into internal 160mm diameter foul sewer pipes, still required to be constructed, into the existing bulk 250mm diameter foul sewer and ultimately discharges into the existing 600mm diameter Baakens River Bulk Sewer pipeline. Dry weather flow and peak wet weather flow for effluent will not be affected by the proposed rezoning to Special Purposes.

See Chapter Two of the Report for further detailed information regarding the project description and town planning motivation for the proposed rezoning.

SUPPLEMENTARY BULK SERVICES REPORT

The supplementary bulk services report prepared by Hatch Africa (Pty) Ltd concludes the following with regards to the roads and wet services required for the proposed rezoning:

- **Sufficient capacity exists in existing roads, wet services, and electricity supply to support the proposed rezoning of Phases 7, 8, 9 and 11 of the development to Special Purposes use.**
- The revised plan layout for the rezoning to special purposes will reduce both road length and surfaced area which will have a positive impact on maintenance and life cycle costs.
- The increase in the hard surfaces which will result in shorter times of concentration in major storm events, thus increasing the stormwater runoff from the area under consideration. An additional 0.52 m³/s and 0.46 m³/s will be generated for both the 1:50 and 1:100-year storm events. The rezoning will have no effect on the 1:100 year flood line previously determined as the additional runoff is considered negligible.
- The road lengths and surfaced road area will be reduced from what was proposed under the residential zoning, the maintenance and life cycle cost of the stormwater infrastructure will also be reduced.
- The additional Annual Average Daily Demand for water required in terms of the Guideline for the proposed rezoning to Special Purpose is minimal and equivalent to the AADD of an additional 121 residential erven (additional 121Kl/day).
- The length of water main pipelines required to service the Special Purposes Erven will be significantly shorter and will therefore require less maintenance during its life cycle.
- Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWFW) for effluent will not be affected by the proposed rezoning to Special Purposes.

See Chapter Four of the Report for further detailed information regarding the bulk services assessment.

ECOLOGICAL SPECIALIST ASSESSMENT

In terms of the current approved zoning, all of the existing vegetation on the site (Phase 7, 8, 9 and 11) would be cleared to allow for the construction of the houses, roads and Private Open Space areas. This would still be the case, should the zoning of the site be changed as proposed. **No significant advantages or disadvantages of the proposed zoning changes have been identified, from a biophysical perspective. The impacts that were previously identified, which relate to the vegetation and associated habitat, are deemed to still be applicable and are not anticipated to change.** All mitigation measures previously proposed, as well as the associated conditions in the current Amended Environmental Authorisation are still applicable.

In this assessment various watercourses were confirmed in the regional and study area landscape, but no natural systems were observed directly within the site. The site is, however, directly adjacent to a tributary of the Baakens River but located outside of the 1:100-year floodline. As the development area is not anticipated to change the development is anticipated to remain outside of the 1:100-year flood line.

These systems, their current state and functionality were evaluated against the previous impact assessment and the proposed layout amendment All previous terrestrial impacts must be upheld with the addition of one impact. The only impact which required re-evaluation after mitigation was an Indirect Construction phase impact, namely, Loss of Indigenous vegetation with regards to birds (nectar feeders), which

would result in a lower or reduced impact significance from Low to Very Low (-) to NEUTRAL to LOW (-) based on the highly invaded nature of the amendment area.

The terrestrial and aquatic systems, their current state and functionality were evaluated against the original Ecological impact assessment conducted in 2010. A number of minor changes were determined in the impacts and associated mitigation measures. The overall impacts decreased due to the present transformed nature of the site due to an increase in alien invasive tree species within the amendment area. Therefore, the proposed rezoning of the amendment area will not increase the significance of any impacts and the impact post-mitigation would remain **LOW or VERY LOW**.

It is recommended that indigenous plant species are used in landscaping and adequate erosion protection measures should form part of the Stormwater Management plan. As such the following **additional condition** is recommended to be included in the amended Environmental Authorisation, should one be granted:

- **Adequate erosion protection measures should be included as part of the stormwater management infrastructure and the adequacy thereof must be monitored on an annual basis along with the alien vegetation monitoring.**

See Chapter Five of the Report for further detailed information regarding the ecological impact assessment.

TRAFFIC IMPACT ASSESSMENT ADDENDUM

The Addendum to the Traffic Impact Assessment prepared by Engineering Advice and Services concludes the following with regards to the traffic impacts anticipated for the proposed rezoning:

- The proposed Light-industrial land-use, consisting of 34 individual erven, will be 8 108m² (0.81ha) larger in size than the Residential 2 land-use originally proposed, which consisted of 170 individual erven. The development footprint for Phases 7, 8, 9 and 11 will remain within the same area assessed in the original EIA from 2011.
- No problems are experienced at the affected junctions under current conditions in terms of capacity.
- Access for Phases 7, 8, 9 and 11 are proposed at the same location as proposed for the initial residential development on Mimosa Road.
- The Residential 2 land-use for Phases 7, 8, 9 and 11 would generate 187 trips in both the weekday AM and PM peak hour. The Special Purpose land-use would generate a total number of 217 vehicle trips during the weekday peak traffic hours. Thus, an additional 30 peak hour trips would be generated in both the weekday AM and PM peak hours by the change in zoning from Residential 2 to Special Purposes (High-tech/ Industrial Business Park) for Phases 7, 8, 9 and 11.
- The results of the intersection capacity analysis after development for the 2025 development horizon indicate that the impacts as a result of the additional traffic generated by Proposed Special Purposes zoning of Phases 7, 8, 9 and 11 has **minimal impact** on the operation of the affected intersections when compared to the impacts of traffic generated by the initial Residential 2 zoning.
- The results of the intersection capacity analysis after development of **all phases** of Erf 1082, Fairview for the 2025 development horizon indicates that traffic generated by all the phases **have little or no impact on the operation of the affected intersections in terms of capacity**
- The results of the intersection capacity analysis after development of all phases of Erf 1082, Fairview for the 2030 development horizon indicates that traffic generated by the entire development only impacts significantly on the operational capacity of the intersection of Willow Road with Circular Drive which operates at LOS F during the AM peak hour.
- In the longer term should all the proposed developments occur as anticipated, in order to accommodate traffic by these developments and alleviate congestion along Circular Drive and Willow Road the NMBM will need to consider the implementation of the proposed Lorraine – Fairview Arterial and possibly the proposed Glendore Road Arterial to divert background trips and trips generated by the proposed developments from Willow Road to these routes.

See Chapter Six of the Report for further detailed information regarding the traffic impact assessment.

PUBLIC PARTICIPATION

The following section of the report provides details of the Public Participation Process undertaken for the Amendment Application. The assessment process being implemented can be divided into three phases namely:

- **Phase 1: Pre-Application and Project Announcement**
 - Pre-application consultation with DEDEAT
 - Approval for Public Participation Plan by DEDEAT
 - Notice to DEDEAT of intention to submit an Amendment Application
 - Project Announcement and Registration of I&APs (30 days)
 - Specialist Studies
- **Phase 2: Application Form and Amendment Report**
 - Submission of Amendment Application Form to DEDEAT
 - Draft Amendment Report Review (30 days) (**We Are Here Now**)
 - Submission of Final Amendment Report to DEDEAT
- **Phase 3: Decision Making and Appeal Period**

The Amendment Application Process is currently at the stage where an Amendment Application Form has been submitted to the competent authority, DEDEAT. The Draft Amendment Report (Draft AR), inclusive of specialist studies, is being released for a 31-day comment period, extending from **27 July 2023 to 28 August 2023**.

The following provides a summary of the issues raised during the Project Announcement Phase, the number in brackets indicates the number of times a specific issue has been raised by I&APs during this phase of the assessment process:

- Traffic Impacts (4)
- Potential Socio-Economic Impacts (2)
- Potential Noise Impacts (4)
- Town Planning (4)
- Public Participation Process and Amendment Application (14)
- General (5)

The issues raised have been included in the Comments and Responses Trail in Chapter Three of the Report and copies of these comments are included in Appendix F. No comments have been received from I&APs which have required additional specialist studies to be undertaken as part of the Amendment Application Process.

For more information regarding the proposed amendments see Chapter Seven of the Report.

CONCLUDING REMARKS

- The potential impacts of the proposed amendments regarding rezoning of Phases 7, 8, 9 and 11 of Erf 1082 Fairview do not differ significantly from those originally assessed in the Final EIA Report (2011) for the project.
- The most significant changes that have been identified, include the incorporation of the 0.61ha of Private Open Space into Special Purposes (High Tech/ Industrial Business Park) and Transportation 1 (Roads) zoning.
- An increase in the anticipated Annual Average Daily Water Demand by 121Kl/day.
- An additional 30 peak hour trips would be generated in both the weekday AM and PM peak hours by the change in zoning from Residential 2 to Special Purposes (High-tech/ Industrial Business Park) for Phases 7, 8, 9 and 11. The proposed change in land-use will therefore lead to an increased vehicle trip generation to/from this part of the development.
- Access for Phases 7, 8, 9 and 11 are proposed at the same location as proposed for the initial residential development on Mimosa Road, between the proposed 22nd Avenue and Leadwood Crescent intersections.
- Stormwater generated from the proposed rezoned area will be able discharge overland and via a piped stormwater network to eventuate into the Baakens River via the defined water course adjacent to the area to be rezoned. No piped stormwater discharge is proposed directly into the tributary of the Baakens River.
- An overall reduction in road surface area and length will result in a reduction in maintenance and life cycle costs.
- The overall increase in the hard surfaces due to the proposed zoning changes will result in shorter times of concentration in major storm events, thus increasing the stormwater runoff from the area under consideration. An additional 0.52 m³/s and 0.46 m³/s will be generated for both the 1:50 and 1:100-year storm events. However, the rezoning will have no effect on the 1:00 year floodline previously determined, as the additional runoff is considered negligible.

The following additional conditions are recommended by the relevant specialists to be included in an Amended Environmental Authorisation, should one be granted:

- A finalised layout plan for Phases 7, 8, 9 and 11, based on the layout titled "Proposed Subdivision of Remainder of Portion Erf 1082 Fairview", with Drawing Number 22014_Fai – 07 (Rev 2), dated 27/02/2023, drawn by Metroplan Town and Regional Planners, as included in the Amendment Report, to be submitted to DEDEAT and Nelson Mandela Bay Municipality for approval prior to the commencement of construction. Such layout plan to include the layout of Phases 7, 8, 9 and 11 (as described in Section 2 of this Amended Environmental Authorisation) and such layout to conform to the layout as included in Appendix G of the Amendment Report.
- Adequate erosion protection measures should be included as part of the stormwater management infrastructure and the adequacy thereof must be monitored on an annual basis along with the alien vegetation monitoring.
- A finalised layout plan for the roads and wet services for Phases 7, 8, 9 and 11 based on the layout plan titled "Subdivision of Erf 1082, Fairview Stage 4: Proposed Roads, Sewer and Water Layout", with drawing number H115868-00000-223-271-0001 Revision B, by Hatch Africa (Pty) Ltd, as included in the Amendment Report, to be submitted to DEDEAT for approval prior to the commencement of construction. Such layout plan to include the bulk services layout of Phases 7, 8, 9 and 11 and such layout to conform to the layout, as included in Appendix G in the Amendment Report.
- The approved EMP must be updated to include the abovementioned additional conditions.