

1 Need and Desirability Report

The 'need and desirability' of the project should be evaluated against the strategic context of the development proposal along with the broader societal needs and public interest. According to the DEA Guideline on Need and Desirability (DEA, 2017¹), the concept of 'need and desirability' relates to the *"nature, scale and location of development being proposed, as well as the wise use of land."* The concept of 'need and desirability' can be explained in terms of the broader meaning of its two components, need primarily referring to time, and desirability to place. It is acknowledged that 'need and desirability' are interrelated and the two components collectively should be considered in an integrated and holistic manner.

According to the DEA Guideline (DEA, 2017), the strategic context for the need and desirability of an activity can be reviewed in light of what is envisioned for a specific area, specifically what has been proposed in a municipal Integrated Development Plan (IDP) and Spatial Development Framework (SDF). These planning tools provide direction as to the desired spatial form of a municipality. Similarly, municipal Environmental Management Frameworks (EMFs) also provide the desired spatial form in terms of the environmental context of an area. Furthermore, the DEA Guideline (DEA, 2017) states that the need and desirability of an activity should be evaluated against the principles of *"promoting justifiable economic and social development"* as well as the principles of *"securing ecological sustainable development and use of natural resources"* as set out in the bill of rights in the Constitution.

Table 1 and **Table 2** below aims to provide more detailed responses regarding the project specific responses to the questions raised in the Need and Desirability guidelines of DEA (2017) and the Western Cape Government: Department of Environmental Affairs and Development Planning (2013). The responses were compiled taking into consideration the Provincial Spatial planning framework, Municipal IDPs, SDFs strategy, Biodiversity plans and the outcome of the project screening phase during which No-Go areas were identified based on environmental and socio-economic considerations.

Table 1: Need (Timing) of the proposed project (based on the 2017 DEA and 2013 DEA&DP guidelines): Promoting justifiable economic and social development

Question	Response
1. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority i.e. is the proposed development in line with the projects and programmes identified as priorities within the Integrated Development Plan (IDP)?	The proposed Amendment to the authorised project is in line with the identified priorities as stipulated within the Integrated Development Plan. Please note that the EA was authorised on 16/09/2013. Master planning conducted for the CCT's Bulk Water Supply System has projected that a new bulk water reservoir will be required by 2014 to augment stressed sections of the System, and that a new water treatment plant and bulk conveyance will be required by 2016 to increase the overall treatment and conveyance capacity of the System. Timing of implementation is however dependent on demand growth and the impact of implementation of the City's Water Demand Management Strategy. Due to increasing water demands within the Cape Metropolitan Area (CMA), and with new raw water supplies that became available upon completion of the Berg Water Project, the CCT proposes to implement new infrastructure to increase the CCT's water treatment and bulk storage capacity and to increase the flexibility of the bulk water distribution network.

¹ DEA. 2017. Guideline on Need and Desirability, Integrated Environmental Management Guideline Series 9, Department of Environmental Affairs (DEA), Pretoria, South Africa.

Question	Response
	Furthermore, please note that for the proposed Amendment the development both the Cape-Winlands Integrated Development Plan (IDP) of the 5th Generation (2022/23 – 2026/27) as well as the Cape Winlands Spatial Development Framework (2019-2024) identified Water Infrastructures as one of the focus areas to meet to current demand of basic services to the growing population.
2. Should development, or if applicable, expansion of the town/ area concerned in terms of this land use (associated with the activity being applied for) occur at this point in time?	The proposed amendment to the authorised project is located beyond the urban edge. Rural development and the provision of low-income housing are priorities for the Stellenbosch and Drakenstein Municipality. In this regard Klapmuts has been identified as one of the three growth nodes for the Stellenbosch Municipality. The land towards the west of Klapmuts (where the site is located) has been identified as suitable for urban development. This land has lower agricultural potential. The Klapmuts Spatial Development Framework (SDF) was approved by Council in 2009. The key section in the Klapmuts SDF (2009) with reference to the Social Impact Assessment (SIA), specifically the proposed site, is the section on the urban edge. In terms of the Klapmuts SDF edge, portion 1, which forms the western most portion of the edge cuts across the area identified for the development. The area occupied by the proposed site has therefore been identified as suitable for future urban growth, including residential development. The Stellenbosch Head Planner has indicated that an internal process is currently underway to contest the approval of certain elements of the approved SDF. In addition, Klapmuts is identified as a future growth node in the Draft Stellenbosch Municipal SDF (2009). Please note that for the proposed Amendment the development both the Cape-Winlands Integrated Development Plan (IDP) of the 5th Generation (2022/23 – 2026/27) as well as the Cape Winlands Spatial Development Framework (2019-2024) identified Water Infrastructures as one of the focus areas to meet to current demand of basic services to the growing population.
3. Does the community/ area need the activity and the associated land use concerned (is it a societal priority)?	Yes, it is a need and social priority. Please note that the proposed Amendment being applied is for a valid existing authorised EA, dated 16/09/2013. Cape Town is a growing city and due to population and economic growth, it continues to experience a resultant growth of water demand. This growth necessitates increasing the raw water resources available to the City, as well as increasing the treatment, storage, and conveyance capacity of the City's water supply system to be able to continue supplying the growing water demand, particularly during peak demand periods during the hot dry summer months. The construction of the Berg River Dam and Supplement Scheme was completed in 2008, increasing the raw water resources available to the CCT by 81 million m³ per annum.

Question	Response
	Additional bulk water supply infrastructure is now required to increase the water treatment, bulk storage, and conveyance capacity of the CCT's Bulk Water Supply System to ensure that this system can continue to supply water during peak demand periods. If this infrastructure (inclusive of the proposed amendments) is not implemented timeously, the risk of having to implement water restrictions in some areas or across the entire city of Cape Town during the peak water demand periods in the hot dry summer months will progressively increase. Master planning conducted for the CCT's Bulk Water Supply System has projected that a new bulk water reservoir will be required by 2014 to augment stressed sections of the System, and that a new water treatment plant and bulk conveyance will be required by 2016 to increase the overall treatment and conveyance capacity of the System. Timing of implementation is however dependent on demand growth and the impact of implementation of the City's Water Demand Management Strategy.
4. Are there necessary services with appropriate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?	All necessary services are available with appropriate capacity as per the valid existing authorised EA, dated 16/09/2013.
5. Is this development provided for in the infrastructure planning of the municipality, and if not, what will the implication be on the infrastructure planning of the municipality (priority and placement of services)?	Yes, it has been provided for by the City of Cape Town (CCT). Master planning conducted for the CCT's Bulk Water Supply System has projected that a new bulk water reservoir will be required by 2014 to augment stressed sections of the System, and that a new water treatment plant and bulk conveyance will be required by 2016 to increase the overall treatment and conveyance capacity of the System. Timing of implementation is however dependent on demand growth and the impact of implementation of the City's Water Demand Management Strategy.
6. Is this project part of a national programme to address an issue of national concern or importance?	No. The proposed Amendment to the approved project will be of local importance to provide clean water and services to the growing population of the area. The application for water supply is required by CCT to augment its bulk water supply system to meet future demands. The proposed infrastructure will also improve flexibility of the bulk water distribution system as well as the security of supply.
7. Do location factors favour this land use (associated with the activity applied for) at this place?	Yes, the proposed amendment entails minor changes to the (i) access road corridor and the (ii) relocation of the Wynland pipeline. (i) Approval for the access road was granted for a 20m road reserve and a 9.5m surfaced roadway. Approval was granted on a preliminary route for the access road which has since, due to existing infrastructure and the natural topography, been refined. Based on the refined route, an amendment is requested for the access road. This amendment application is therefore applying to amend the alignment of the

Question	Response
	preliminary access route approved through the 2012 EIA Report. (ii) There is an existing pipeline from Wynland Water that is routed through the proposed reservoir and water treatment plant site. This pipeline must be relocated before the construction of the reservoir can commence.
8. Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area? Will the development complement the local socio-economic initiatives (such as local economic development (LED) initiatives), or skills development programmes?	The proposed amendment to the authorised project will result in positive outcomes and provide clean water to the community . The efficient and beneficial use of water in public interest is motivated by the need of the proposed reservoir in one of South Africa's most intensive winter rainfall farming districts where wine, fruit, wheat and livestock are produced. The region also supports mountain conservation/water catchment areas and has significant urban development with major road and rail transport routes traversing the area. More than 95% of the area that would be traversed by the infrastructure is designated as agricultural. The application for water supply is required by CCT to augment its bulk water supply system to meet future demands. The proposed infrastructure will also improve flexibility of the bulk water distribution system as well as the security of supply.
9. What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?	Specific mitigation measures pertaining environmental health and safety are identified for inclusion into the Environmental Management Plan (EMPr). Although the project does not include construction of the site in question, regulations as per the Occupational Health and Safety Act (Act No. 85 of 1993) should apply during the construction phase of the project.
10. What measures were taken to ensure the participation of all interested and affected parties? What measures were taken to ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were given to all forms of knowledge, including traditional and ordinary knowledge?	The Public Participation Process is undertaken in terms of the 2014 NEMA EIA Regulations, as amended and includes activities such as I&AP identification, newspaper adverts, written notification, and placement of site notices as per the letter received from DEA&DP dated 13 December 2022.
11. Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more important priorities for which the resources should be used (i.e. what are the opportunity costs of using these resources for the proposed development alternative?)	Environmental opportunities and constraints were identified at the start of the assessment process which will facilitate and inform the detailed design. Mitigation measures to manage impacts on sensitive environmental aspects have been included in the report to ensure that impacts on the environment are kept to acceptable levels. An EMPr has been compiled for the approved EA which incorporates the mitigation measures put forward by the specialists for this Amendment Report. The implementation of the EMPr will ensure that environmental management continues throughout the life cycle of the project. The appropriateness of the development in the broader context has received attention. All the above aspects contribute to the sustainability of the development.

Question	Response
12. What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons (who are the beneficiaries and is the development located appropriately)?	The beneficiaries will be all the people who will use the water service. The project would present the opportunity for the creation of employment opportunities during both construction and operation. The efficient and beneficial use of water in public interest is motivated by the need of the proposed reservoir in one of South Africa's most intensive winter rainfall farming districts where wine, fruit, wheat and livestock are produced. The region also supports mountain conservation/water catchment areas and has significant urban development with major road and rail transport routes traversing the area. More than 95% of the area that would be traversed by the infrastructure is designated as agricultural.
13. Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left?	The EMPr describes all reasonable and feasible mitigation measures and addresses long-term environmental management actions that are guided by the findings and recommendations of the specialists during the Basic Assessment Phase. The EMPr addresses the potential environmental impacts and mitigation measures of the proposed activity on the environment throughout the project life-cycle.
14. How was a risk-averse and cautions approach applied in terms of socio-economic impacts?	Potential socio-economic related risks will be mitigated through a proactive public participation process. Public Participation Process is undertaken in terms of the 2014 NEMA EIA Regulations and will culminate in a Public Participation Report

Table 2: Desirability (placing) of the proposed project (based on the 2017 DEA Guideline and 2013 DEA&DP Guideline): Securing ecological sustainable development and use of natural resources

Question	Response
1. Is the development the best practicable environmental option for this land/ site?	Yes, it is need and social priority. Please note that the proposed Amendment being applied is a valid existing authorised EA, dated 16/09/2013. Cape Town is a growing city and due to population and economic growth, it continues to experience a resultant growth of water demand. This growth necessitates increasing the raw water resources available to the City, as well as increasing the treatment, storage, and conveyance capacity of the City's water supply system to be able to continue supplying the growing water demand, particularly during peak demand periods during the hot dry summer months.
2. How will this development use and/or impact on non-renewable and renewable natural resources and the ecosystem of which they are part?	The anticipated use of both natural renewable and non-renewable resources is not significant given the nature of the development.
3. Would the approval of this application compromise the integrity of the existing approved Municipal IDP and SDF as agreed to by the relevant authorities?	The approval of this application will not compromise the integrity of the existing approved Municipal IDP and SDF as it aligned to the strategies proposed in the documents.
4. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area (e.g. as defined in Environmental	Biodiversity mapping sets out the land use objectives spatially in the form of Critical Biodiversity Areas (CBAs). both the Cape-Winlands Integrated Development Plan (IDP) of the 5th Generation (2022/23

Question	Response
Management Frameworks (EMFs)), and if so, can it be justified in terms of sustainability considerations?	– 2026/27) as well as the Cape Winelands Spatial Development Framework (2019-2024) has highlighted balancing environmental protection with service delivery as a challenge for environmental management.
5. How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas (built and rural/ natural environment)?	A Biodiversity assessment was commissioned for the Amendment to the authorised project. All mitigation measures will be included in the EMPR.
6. How will the development impact on people's health and wellbeing (e.g. in terms of noise, odours, visual character and sense of place, etc.)?	There are no foreseen impacts on people's health and well-being given the nature of the development
7. What are the limits of current knowledge (note: the gaps, uncertainties and assumptions must be clearly stated)	Assumptions, Limitations and Gaps in Knowledge for the proposed project have been elaborated on in section J of the Amendment Report.
8. How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage?	There are currently no significant cultural heritage resources located on the site. No archaeology or palaeontology material has been found on the site.