PROPOSED REMEDIATION AND RESIDENTIAL DEVELOPMENT OF THE PROTEA VILLAGE PHASE 2 DEVELOPMENT, ERF 503, BISHOPSCOURT, CAPE TOWN

DEA&DP NOI REFERENCE NUMBER: 16/3/3/6/7/1/A6/7/2026/25

CHAND REFERENCE: PV02

EXECUTIVE SUMMARY

INTRODUCTION

The Applicant is the Protea Village Development Company (Pty) Ltd, which implements the project on behalf of the Protea Village Communal Property Association (CPA). The Protea Village Development Company (Pty) Ltd is solely owned by the Protea Village CPA. A claim for restitution of land rights has been awarded by the Land Claims Commission in terms of the Restitution of Lands Act, 1994 (Act No. 22 of 1994). The claim was lodged on behalf of 132 former residents, who resided in the original Protea Village Area and were forcibly removed during the 1960s, in terms of the Group Areas Act, 1950 (Act No. 41 of 1950). 86 of the 132 claimants opted for land restitution.

An area of approximately 28.4 hectares of land was claimed in terms of the Claim relating to the property that was lost by the Protea Village Community when forced removals took place. Not all of the dispossessed land could be restored to the Protea Village CPA (as third-party properties have now been developed on part of the land post the forced removals), however the area which has been restored is approximately 12.29 hectares in total (which is 29.4% of the area of land that was dispossessed). It is the intention of the Protea Village Community to resettle on Erf 242, Bishopscourt, whilst using the proceeds from the sale of properties on Erf 503 and Erf 511 to pay for the installation of services and the construction of houses on Erf 242.

In May 2021, the Department of Environmental Affairs and Development Planning (DEA&DP) granted environmental authorisation for the development of Erf 212 (comprising subdivided Erf 511 and Remainder Erf 212) and Erf 242 ("Phase 1") (EA Reference: 16/3/3/1/A6/7/2046/20; 16/3/3/5/A6/7/2020/24). During the pre-application phase of the Phase 1 application, the development of Erf 503, Bishopscourt was included, and all specialist reports considered the proposed development of Erf 503 within their assessments and determinations. At the time of the initial engagement with Interested and Affected Parties, the Applicant intended to submit a single environmental application encompassing the full development. However, due to delays in obtaining clarity from the Department on the Part 8 Land Contamination process, a decision was made to proceed with the environmental application for Phase 1 only, thereby excluding Erf 503 from the submitted development proposal. It was understood at the time of decision that the incorporation of Erf 503 would constitute an amendment application, however the Department has since required that a new application for Environmental Authorisation must be obtained prior to activities commencing on site.

Erf 503, Bishopscourt is bordered by two streams, namely Window Stream and Nursery Stream, which converge into the Liesbeek River. There are also a number of large, predominantly non-indigenous, mature trees on the site.

Whilst the site is currently vacant land and has historically (and is currently) used for recreational activities, this property is, in fact, private land and is not designated Public Open Space. On 26 February 2021, the closure of Public Place on Erf 503, Bishopscourt was gazetted. Erf 503 was

transferred to the Protea Village Communal Property Association on 15 June 2021. While Erf 503 is currently open and accessible to the public for recreational activities, the property does not form part of the City of Cape Town's Public Open Space on Remainder Erf 212.

**Note: Although this area is known as the "Boschenheuvel Arboretum", it is not an arboretum in the technical sense, where "trees are cultivated for their scientific or educational interest." The "Arboretum" was established by the City of Cape Town in the mid-1990s, in spite of a request by the Protea Village Community that such naming be reconsidered, given that their land claim was underway pertaining to the property.*

This text provides an executive summary for the Basic Assessment Report (BAR) for the Proposed Remediation and Residential Development of The Protea Village Phase 2 Development, Erf 503, Bishopscourt, Cape Town.

This document is currently being subjected to a 30-day pre-application public review period. All comments raised in relation to the Pre-application Draft BAR will be considered, and where appropriate, changes will be incorporated into the Draft BAR. Following this, an application will be made to the Department of Environmental Affairs & Development Planning (DEA&DP), and the Draft BAR will be subjected to an 30-day public review period. Comments received in this PPP will be considered, and where appropriate, changes will be incorporated into the Final BAR for submission to the competent authority (the DEA&DP) for their final decision-making. Note that while I&AP contact information is not disclosed as part of this report, all contact details of I&APs will be included in the final BAR to the DEA&DP and will become part of the public record.

The most pertinent details regarding the environmental process are captured in this executive summary. Full details are provided in the rest of the Draft BAR and the Appendices, which, inter alia, contains the full specialist reports.

PROJECT DESCRIPTION

The Protea Village Development Company (Pty) Ltd intends to develop approximately 1.17Ha in Bishopscourt, Cape Town where land has been awarded to the 86 families of the Protea Village Community Property Association (CPA) as part of a formal land restitution claim.

The proposed scope includes the following:

<u>Remediation Activities</u>
To address the historical waste disposal on site, remediation activities will be undertaken on Erf 503, Bishopscourt in alignment with the authorised Remediation Order issued by the Department of Environmental Affairs and Development Planning: Pollution and Chemicals Management (DEA&DP: PCM). To address site contamination, three alternative Method Statements have been proposed and accepted by the DEA&DP: PCM.

<u>Residential Development</u>
The development will entail 10 residential units and associated infrastructure.

This will include:

- The construction of an internal access road that will link to the existing Winchester Road,
- The development of a gatehouse;
- The development of perimeter boundary walls;
- Soft landscaping using indigenous plant species and retaining, where possible, existing trees.

- Service infrastructure:
    - A range of underground services (electrical, water, sewage, stormwater, telecommunication) will be installed within the site boundary.
    - A sewage pump station would be located on plot 670 and would pump sewage to the existing main on Winchester Road

The architectural design of the homes will align harmoniously with the character of the surrounding neighbourhood, guided by established architectural guidelines to ensure integrity and prevent the construction of illegal structures. Additionally, careful consideration will be given to preserving mature trees on this portion of the site wherever feasible.

Stormwater Management

The Stormwater Management Plan (SWMP) that was approved in Phase 1 included the swales on either side of Erf 503. However, during this assessment of Erf 503 the proximity of the stormwater system necessitated adjustments to allow for nodes of enhanced swales (where in excess of 15m between the cadastral boundary and surveyed edge of the "active channel"), these nodes would then be connected by swales, comprising shallow, unlined channels, approximately 300mm in depth and gently graded. This will be further refined in the detailed design phase.

Figure 1. Locality Map at 1km scale (created using Google Earth Pro, 2025)

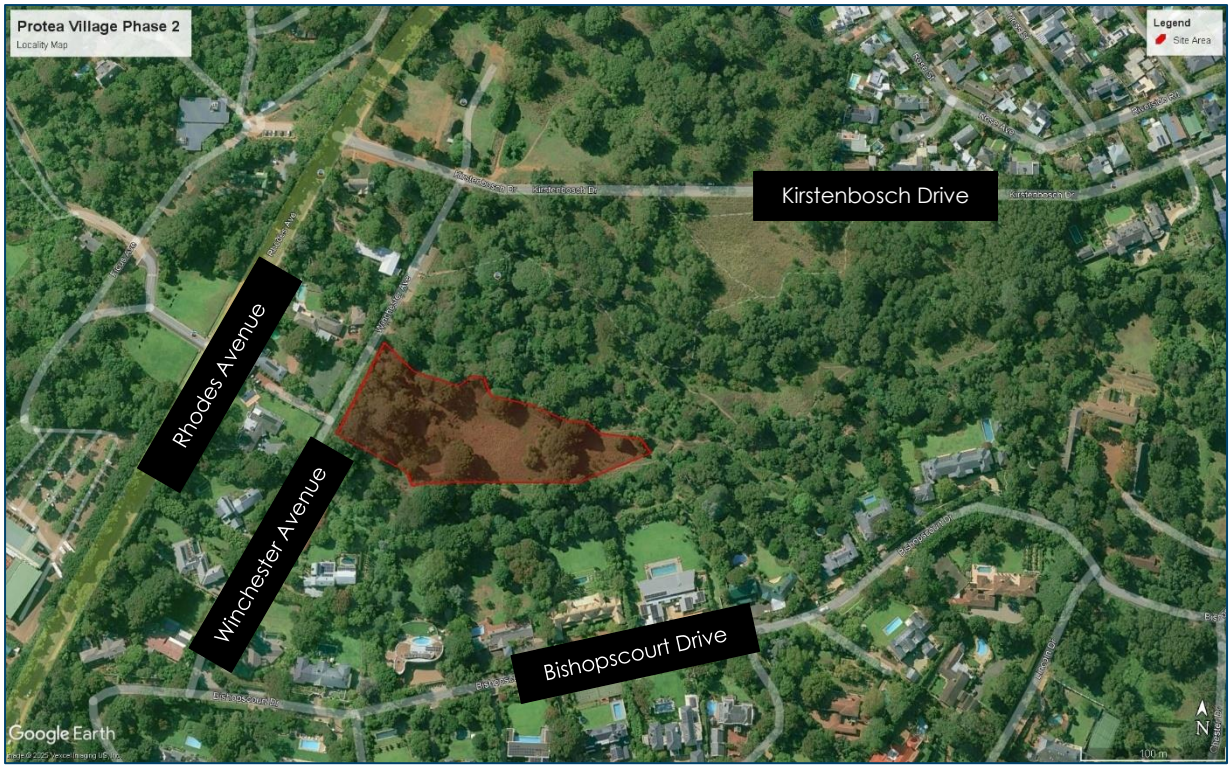

Figure 2. Locality Map at 100m scale, the site (Erf 503) shown in red polygon (created using Google Earth Pro, 2025)

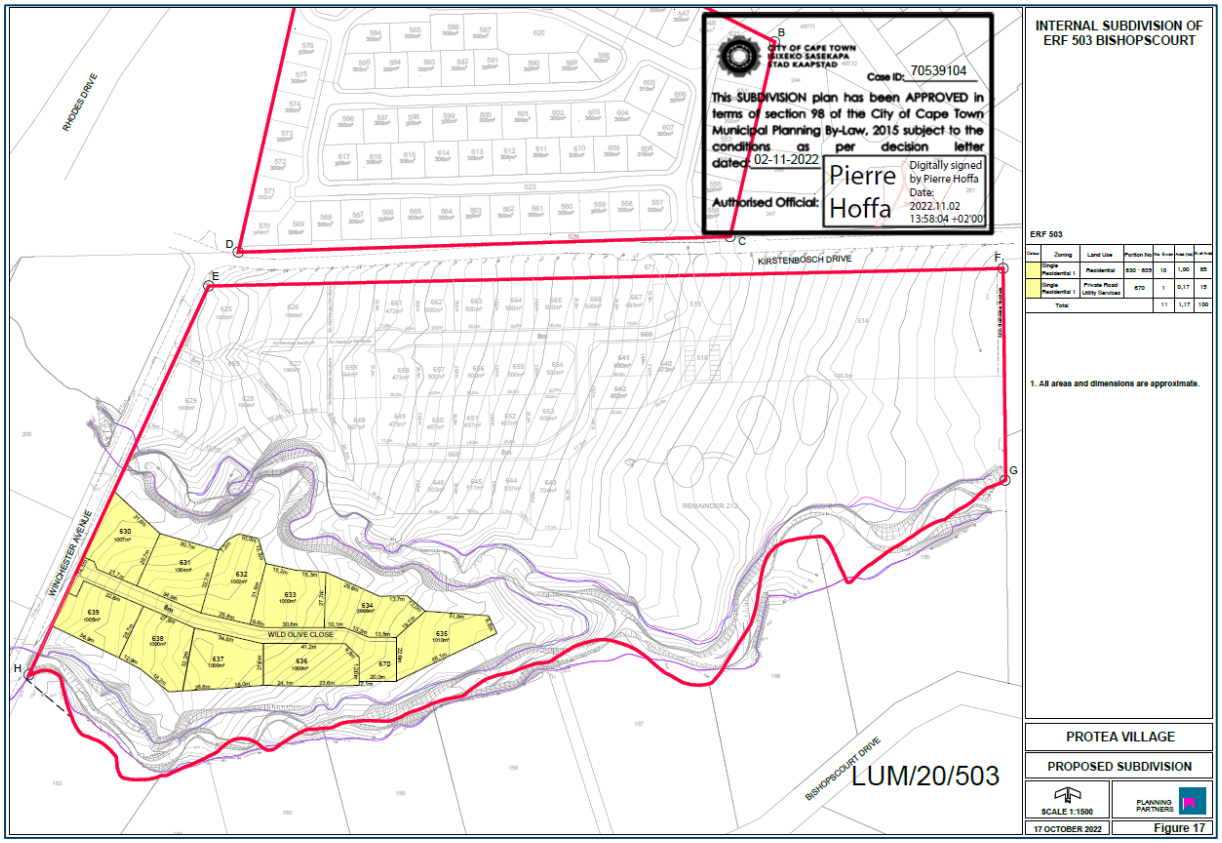

Figure 3. Site Development Plan of preferred alternative for the Protea Village Phase 2 Development (Source: Planning Partners, 2025)

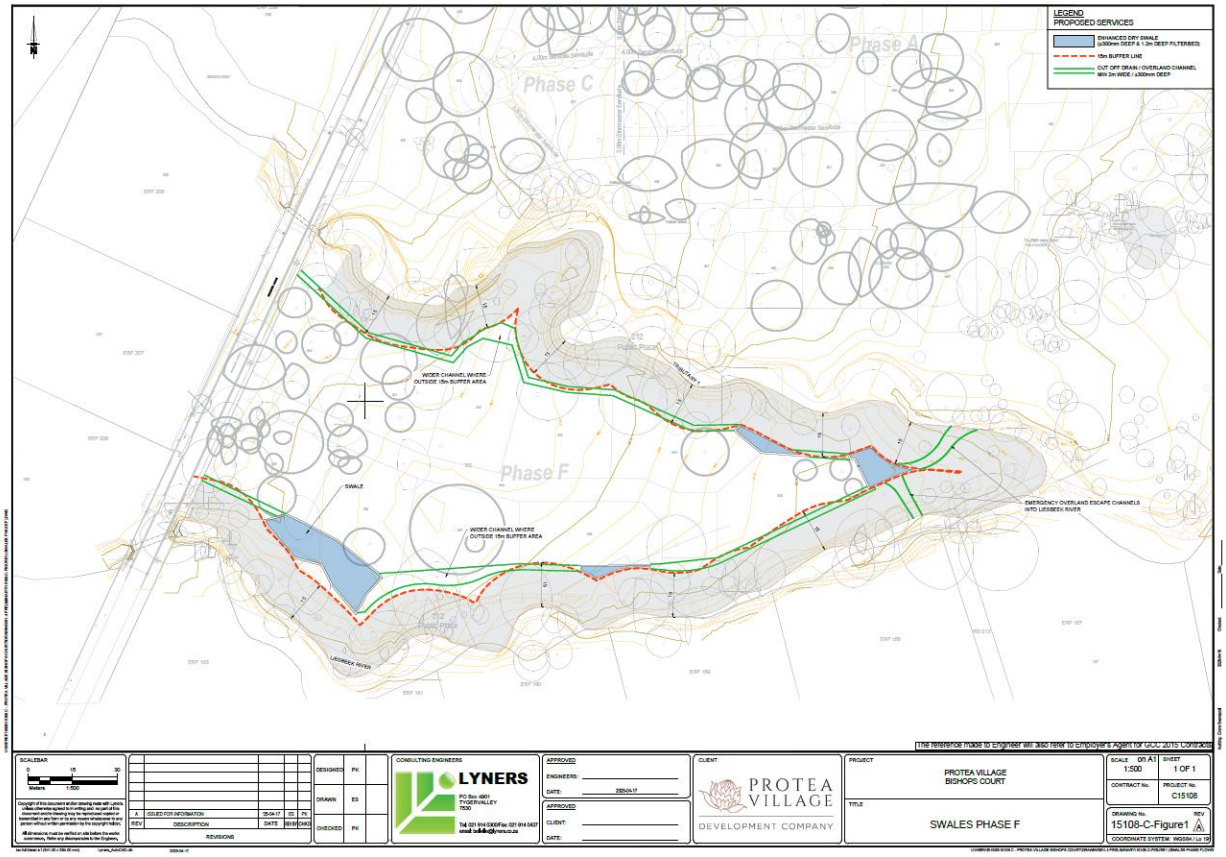

Figure 4: Proposed Swale Design (Source: Lyners, 2025)

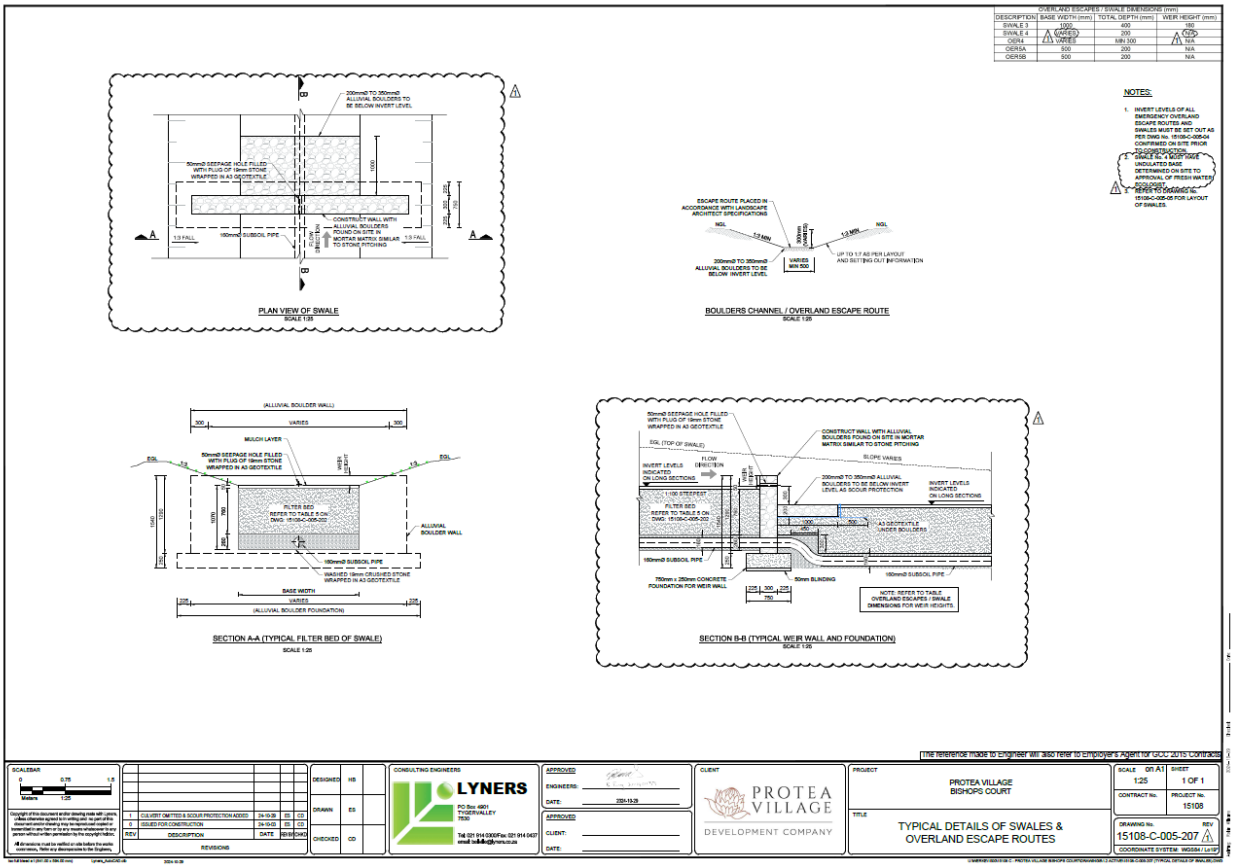

Figure 5: Typical Design of Swales & Overland Escape Routes (Source: Lyners, 2025)

LEGISLATION

With respect to the National Environmental Management Act (No. 107 of 1998), as amended (NEMA) and association Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) and associated Listed Activities, the following aspects of the proposed development are important:

Listing Notice 1 – Activity 12

In accordance with the Part 8 Remediation Order issued by the Department to the City of Cape Town for the proposed site, remediation and cleanup activities, as outlined in the approved Part 8 Remediation Order Method Statement, must be carried out on Erf 503, Bishopscourt. These activities will take place within 32 meters of the adjacent Liesbeeck tributary. In addition to the remediation activities, development of the proposed residential development will also lie within 32m of the adjacent Liesbeeck tributary.

A **Water Use License** for the Protea Village Development, covering both Phase 1 and Phase 2, was issued by the Department of Water and Sanitation on the 29th of August 2022 (Reference: WU8044). No conditions stipulated in the WULA conflict with the preferred alternative. The conditions of the WULA will continue to be implemented by the Applicant and its professional project team during the construction and operational phases of the Phase 2 development, as they remain applicable.

ALTERNATIVES

The site was awarded as part of the Protea Village land claim, which title was transferred to the Protea Village Communal Property Association on 15 June 2021 in fulfilment of the State's

compliance with the Land Claim award, in accordance with the Restitution of Land Rights Act, and therefore, no alternative site options are considered as no other site will achieve the required restitution. Erf 503, Bishopscourt was transferred to the Protea Village Communal Property Association on 15 June 2021. The preferred site alternative is the development footprint on Erf 503, Bishopscourt.

While the full property's intended use is outlined in this report, it is important to note that the development footprint does not extend into the adjacent riverine corridor. The designated "site" (or development footprint) includes the following key components:

- Serviced stands, residential units, internal road network and internal civil & electrical services on Erf 503.
- Stormwater swales on Erf 503.

These elements define the scope of the development, ensuring that the riverine corridor remains unaffected.

Although no property or site alternatives are assessed in this Basic Assessment process, extensive deliberation and multi-disciplinary input have been considered in determining the "site" proposed for development (the term "site" here specifically refers to the development footprint proposed on Erf 503).

NO-GO ALTERNATIVE

It is important to note that the no-go alternative does not imply the continuation of the current status quo on Erf 503, as the land has already been awarded and transferred to the Protea Village community through the land restitution process. Presently, the site remains undeveloped and is open and informally accessible to the general public, with many regarding it as an "arboretum"—despite it not being officially designated or managed as such—and as a public open space, although it is neither zoned nor maintained as Public Open Space. Consequently, the no-go alternative does not reflect a static outcome, but rather a deviation from the community's planned reintegration and development of the site in line with their restitution rights.

The no-go alternative is, in fact, more accurately described as the "existing rights" alternative, given that Erf 503 is currently associated with formal ownership and land use rights, having been awarded to the Protea Village community. Under the existing Agricultural zoning, the following uses are permitted: agriculture, intensive horticulture, dwelling house, riding stables, guest house, hotel, tourist accommodation, intensive animal farming, farm shop.

Within the scope of the existing zoning, the Protea Village Community would be entitled to fence the property to prevent unauthorised access (the Protea Village Community are within their rights to do so immediately, should they elect to do so), construct a dwelling house and associated outbuildings, and engage in economic activities such as intensive agriculture or horse-riding operations. These activities would not trigger the requirement for Environmental Authorisation in terms of the National Environmental Management Act (NEMA), provided specific environmental constraints are adhered to, including.

- Residential and agricultural buildings as allowed in terms of zoning;
- No development would occur within the river and riparian zones or within 32m thereof;
- If any livestock are to be introduced to the site, it would be below the following thresholds:
    - 20 square meters per large stock (i.e. horses) and less than 500 in total;
    - 8 square meters per small stock unit (i.e. pigs, chickens etc.) and less than 1000 in total, unless pigs are kept which would be less than 250;

- 3 square meters per rabbit and less than 500;
- 250 square meters per ostrich/ emu and less than 50

BASELINE ENVIRONMENT

Groundwater Aspects:

A Geotechnical Assessment was undertaken by Kantey and Templar (2019) and a verification letter was provided in 2025. Within their assessment, Kantey and Templar have noted that in October 2016 groundwater was intersected as moderate to strong seepage flows at 1,0m – 3,0m below ground level in three of the trial holes. The water represents a seasonally fluctuating water table which is perched on the virtually impervious residual soils and bedrock which underly the site at depth (Kantey and Templar, 2025). As their 2016 field investigation was undertaken towards the end of a relatively dry rainy season, the soil moisture conditions encountered should not be considered as representative of conditions throughout the year.

During periods of sustained winter rains, the water table is likely to rise significantly and stabilise at levels close to and, in the lower lying parts of the site, at existing ground level (Kantey and Templar, 2025). At these levels, the water can be expected to saturate the soils within which foundation excavations, services trenches and road box-cuts will be formed during construction with strong subterranean seepages anticipated in places (Kantey and Templar, 2025).

Suitable drainage measures will have to be provided for the control and removal of such water in all instances where deep excavations, box-cuts etc., are planned and construction programmed for the rainy season (Kantey and Templar, 2025). It should also be noted that the near surface seepages may result in unstable/matrassing subgrade conditions over access/construction road areas (Kantey and Templar, 2025). It is thus evident that special attention will need to be given to drainage, not only of the building areas but also the surrounds, during final design of the bulk earthworks and fixing of final platform/terrace/road levels (Kantey and Templar, 2025).

The timing of construction will remain an important factor in the programming of the works. Where construction is programmed for the dry summer months, groundwater is not likely to present untoward problems, other than in the lower lying eastern part of the site (Kantey and Templar, 2025).

Surface Water:

A freshwater impact assessment was undertaken by Liz Day of Liz Day Consulting (2019 and 2025). The site falls within the Liesbeek River Catchment, within the DWS quarternary catchment G22C. No wetlands or springs are found within Erf 503 itself. Two significant rivers flow along its boundaries: Window Stream (north) and Nursery Stream (south). These rivers converge just downstream into the Liesbeek River. The site is criss-crossed by informal paths, and the riverine corridors abutting the site are clearly currently used as walkways by numerous people and their dogs, triggering erosion and trampling in places. The site is within a Fish Sanctuary as per the National Freshwater Ecosystem Priority Area (NFEPA) dataset. Potential species of concern include: Cape kurper (*Sandelia capensis*) and Cape galaxiads (*Galaxias zebratus*). The occurrence of these species near the site is not confirmed, however, assumed that they would occur there given that the water quality is only marginally compromised and the riverine habitat is in relatively good condition. Invasive tree species on site include: Poplars (Populus canescens), Black Alder (Alnus glutinosa), Black locust, Beefwood. Other key invasive plant species include: Kikuyu grass, Wandering Jew, Purple Vetch, Wild Ginger, Lantana, Swordfern. These species reduce habitat quality and contribute to riverbank instability.

Once-off water quality samples were collected from each stream in February 2025 for analysis of major nutrient concentrations, while dissolved oxygen (DO), electrical conductivity (EC),

turbidity and pH were measured *in situ*. The results suggest that the streams at the time of sampling were:

- Low in dissolved salts (as measured by EC) and as would be expected in foothill streams draining well-leached Table Mountain Sandstone dominated catchments in mountain fynbos areas.
- Possibly with elevated nutrient concentrations, within the range of mildly eutrophic for orthophosphate, based on algal growth in the stream – note that laboratory Limits of Quantification were within the range for "Poor" for this variable, and actual concentrations may have been lower.
- Unlikely to be impacted by ammonia toxicity.
- Window Stream is more impacted than Nursery Stream.
- The rivers are likely to be relatively sensitive to changes in water quality, particularly nutrient enrichment and sedimentation.

Day (2019) did report on once-off SASS5 assessments in the Liesbeek River just downstream of the eastern boundary of Erf 503, and found 17 aquatic macroinvertebrate families at that time, from which an Ecological Category C was derived, using the SASS5 biomonitoring methodology, reported on in that study. Two endemic fish species Galaxias zebratus and Sandelia capensis are likely to be present in the river reaches.

Watercourse condition:
Overall, the rivers both fall within a PES Category 7C (Moderately Modified) with scores of 61 and 67 for Window and Nursery Stream respectively. Both streams scored lowest (Category D) for Riparian condition (53 and 57 % respectively) and better (69 and 76%) for instream habitat integrity, reflecting only moderate levels of water quality impact, and functional instream habitat quality, despite erosion, channel diversion and channelisation. Rehabilitation of riparian habitat to a Category C however considered realistically achievable, with effort.

Role in the catchment:
From a catchment perspective, the river reaches through the present study area are considered important because they:

- Represent one of only three reaches of the Liesbeek River downstream of Kirstenbosch Gardens that have not yet been canalized;
- Contribute relatively clean water to the river in its reaches downstream of the site, thus potentially counteracting more significant pollution from urban drainage downstream;
- Are still extensive enough and with sufficient riparian and instream vegetation to be likely to provide habitat / cover to small to medium sized river-associated fauna such as Cape Clawless Otters.

Classification and Threat status:
Both streams are classified as Upper Foothill rivers (or cobble-bed foothill rivers). The National Biodiversity Assessment indicates that the threat status of both perennial and seasonal Upper Foothill rivers in the Southern Folded Mountains Ecoregion is Endangered and Poorly Protected.

Biodiversity:
The following specialist studies were undertaken: Tree Survey verification exercise by Ms. Antoinette James and Ms. Suzanne Papenfus of Planning Partners; Arboriculture Peer Review of Tree Survey by Mr. Paul Britton of Beyond Horizons Consulting; Terrestrial Biodiversity Compliance statement conducted by Sean Altern and Trevor O'Donoghue of NCC Group (Pty) Ltd; Botanical Compliance statement conducted by Sean Altern and Trevor O'Donoghue of NCC Group (Pty) Ltd; Faunal Compliance statement conducted by Amber Jackson of Biodiversity Africa.

Other than the presence of the adjacent riverine corridor, the site does not exhibit any sensitivities regarding either the CCT terrestrial biodiversity network or the Cape Farm Mapper

conservation layers. The botanical assessment conducted by NCC (NCC, 2025a and NCC, 2025b) is consistent with these findings. NCC (2025a) notes that the site is not included in any of the WCBSP levels (Critical Biodiversity Area "CBA", Ecological Support Area "ESA", Other Natural Area "ONA") thus suggesting that conservation authorities deem the site to have low terrestrial biodiversity and conservation value which is in stark contrast to a 'Very High' Terrestrial biodiversity ascribed by the screening tool.

The site is a completely transformed forest glade environment, dominated by exotic species, and does not represent a natural fynbos or indigenous ecological community (NCC, 2025a). The necessary positive ecological drivers to sustain such a community are absent, while negative impacts, such as invasive alien species, persist (NCC, 2025a). As a result, the proposed development will not have a significant impact on terrestrial biodiversity. There is no expected loss of terrestrial biodiversity or species of conservation concern with the full development of the site, and this conclusion is reached with high confidence (NCC, 2025a).

It is significant that the site has not been deemed conservation-worthy by the relevant conservation authorities, as evidenced by its absence on the WCBSP (NCC, 2025a). This absence, which reflects the lack of significant ecological value or the presence of indigenous vegetation and species of conservation concern, is confirmed to be accurate (NCC, 2025a). All three features for which the site was initially ascribed a "Very High" Terrestrial Biodiversity sensitivity have been thoroughly examined and refuted. No additional factors have been identified that would support this classification. As a result, the Terrestrial Biodiversity Compliance Statement affirms that the site is of "**Low**" Terrestrial Biodiversity sensitivity, and the proposed development is deemed acceptable from a terrestrial biodiversity perspective (NCC, 2025a). Furthermore, the study area (PAOI or site) is confirmed to be of a '**Low Sensitivity**' for terrestrial plant species in keeping with the Screening Tool result (NCC,2025b).

A tree survey of Erf 503 was developed to determine which trees must be retained, which must be removed and which may be retained or removed.

The entire project footprint was previously transformed and currently offer fauna degraded grassland habitat, alien invasive plant species, riparian habitat and aquatic features of the Liesbeek River (Biodiversity Africa, 2025). Various bird, mammal, reptile and amphibian species use the project area for shelter, foraging and breeding. However, the project area is not expected to host a great number of species or significant populations of any one species (Biodiversity Africa, 2025). Faunal species in urban area tend to use rivers as corridors for passage, especially at night when they can go undetected and often do so intermittently (Biodiversity Africa, 2025).

The DFFE STR highlighted two animal species as sensitive. The assessment found that the species are considered to have a low to very low likelihood of occurrence in the project area due to a lack of suitable habitat. The specialists disagree with the DFFE STR rating of high and is of the opinion that the sensitivity should be downgraded to medium sensitivity for the riparian areas and low sensitivity for the degraded grassland areas (Biodiversity Africa, 2025). Two additional SCC have been confirmed or have a high likelihood of occurrence within the project area, namely the Cape Dwarf Chameleon (NT) and Cape Rain Frog (NT).

Geographical:

A Geotechnical assessment was undertaken by Kantey and Templar. The naturally deposited soils of the erf 8 to 11 investigation area consist of two distinctive horizons of mountain foot slope materials in the form of:

- an upper, 1,4 – 2,7m thick layer of fine grained sandy hillwash and, at depth,
- coarse grained colluvium (talus) comprising sandy soils containing scattered boulder gravels, matrix supported sub-rounded to rounded gravel, cobbles and boulders of medium hard to hard rock quartzitic sandstone.

The trial holes all confirmed the presence of the hillwash and colluvial boulder gravels down to the depths investigated in the trial holes. These materials were all described as of 'transported' origin in the profiles. Neither residual granite nor granite bedrock was intersected in the trial holes.

The fill represents domestic waste mixed with variable quantities of sandy soils which locally alternate with more clayey micaceous silt. The waste includes glass bottles, abundant plastic bags, rusted steel objects, gravel and boulders (measuring up to 700mm in diameter). The profile is voided locally, the overall consistency ranging from loose (unacceptably loose) to medium dense. The hillwash occurs as a variably clayey to silty fine to medium grained sand containing scattered subrounded to rounded gravel cobble and isolated boulders. Organic matter occurs throughout with tree roots well developed over localised areas. The colluvial material is of Ordovician age, deposited as talus 'cones' forming part of the east facing mountain footslopes of the Kirstenbosch / Bishopscourt area. As such, the colluvium is of variable composition forming an interbedded deposit ranging from boulder gravels matrix supported in slightly silty to sandy material, to silty and gritty sands containing isolated to scattered gravel, cobbles and boulders of sandstone.

Subgrade Conditions:
Due to the presence of substantial deposits of low-density soils (fill and transported material), the bulk earthworks at the site will likely involve cutting, reworking, selection, replacement, and vibratory compaction of the subsoils. As a result, the fill and the upper approximately 0.8 meters of the underlying transported materials will need to undergo vibratory compaction to improve the in-situ density. It is recommended that subgrade conditions and in particular the in-situ CBR strength of the in-situ soils be verified by way of site specific visual assessment and DCP testing (and if required field density testing) prior to importation and placement of selected pavement layerworks (base, subbase, etc.).

Heritage Resources:
Mr. Timothy Hart of ACO Associates cc, referenced as "Hart, 2019" within this report conducted a HIA for the Protea Village Phase 1 and Phase 2 development. This report has been verified as accurate by David Halkett of ACO Associates.

A known 20th-century household waste dumping area occupies the eastern portion of Erf 503 and will require remediation prior to any future development. Given the relatively recent origin of the deposited material, it is not expected to hold archaeological significance (Halkett, 2025). Halkett (2025) has noted that no Graded structures or areas will be affected by the proposed activities and HWC has not raised any issues in this regard in their final comments. No significant physical surface archaeological resources were identified by Hart (2019), though some may indeed lie buried and may be identified as a result of monitoring of development (Halkett, 2025).

Halkett (2025) noted that there is no change to the identified minimal physical heritage resources identified by Hart (2019) in the original HIA. Palaeontological resources were not assessed previously as HWC did not identify it as a necessary study (Halkett, 2025). Palaeontology was however discussed with respect to identified sensitivities on the SAHRIS database and National Screening Tool.

Historical and Cultural Aspects:

Historical Background of the Protea Village Community
The story of the Protea Village community is defined by three pivotal moments that irrevocably shaped their collective identity and destiny. The first occurred in 1834 with the abolition of slavery in the Cape Colony. At that time, 29 formerly enslaved individuals chose to remain in the area, establishing themselves on land where they were no longer in bondage. Here, they built a self-sufficient community and nurtured livelihoods rooted in freedom and resilience. The

second defining moment came with the rise of Kirstenbosch Botanical Gardens. This development not only deepened their relationship with the land but also provided opportunities for members of the community to acquire skills in construction and land management—skills that extended their expertise beyond the realm of small-scale agriculture and into the very fabric of the growing city. The third, and perhaps most traumatic, moment was their forced eviction by the apartheid government between the late 1950s and 1964. This displacement severed their physical ties to the land they had called home for generations, but it did not erase their deep-rooted connection to it—a connection that continues to inform their struggle for restitution and restoration today. Hart provides details into the lives that the Protea Village Community would have lived.

Erf 503 was once part of the Protea Village, a community of more than 130 families (86 families opted to return to land) who trace their origins back to the emancipation of slavery in 1834 (Hart, 2019). The community was evicted from their homes from 1961 onwards because of the Group Areas Act implemented by the apartheid government of the time (Hart, 2019). Their homes, village school and sports grounds were demolished because Bishopscourt was declared a "whites only" suburb (Hart, 2019). Since the clearing of the land, Erf 503 has remained undeveloped and is used as an openly accessible area by the general public, however, is zoned Agricultural.

**Note: Whilst the site is currently vacant land and has historically (and is currently) used for recreational activities, this property is, in fact, private land and is not designated Public Open Space. On 26 February 2021, the closure of Public Place on Erf 503, Bishopscourt was gazetted. Erf 503 was transferred to the Protea Village Communal Property Association on 15 June 2021. While Erf 503 is currently open and accessible to the public for recreational activities, the property does not form part of the City of Cape Town's Public Open Space on Remainder Erf 212.*

Visual Aspects:

A Visual Impact Assessment (VIA) for the entire Protea Village Development (Phase 1 and Phase 2) was compiled by David Gibbs in 2020. Following this, Gibbs has provided a verification report confirming the impacts and findings of his 2020 report remain valid.

The site is an anthropic environment in transition; part of a broader cultural landscape at the interface between the peri-urban (neighbourhood), rural (arboretum) and wilderness (mountain side) domains. The world-famous Kirstenbosch Botanical Gardens are located within the immediate vicinity (Gibbs, 2025). The site nestles beneath the dramatic 'back table' edifice of Table Mountain. High rainfall is experience in this area and the site has a lush, wooded character. There is a relaxed and informal 'rural' quality to this site, with its meadow and woodland landscape, especially along Kirstenbosch Drive, which has the sense of a rural country road (Gibbs, 2025). The site lies along the upper reaches of the Liesbeek Valley, within a transitional zone between 'rural' landscape and 'urban' townscape. Whereas the site contours are subtle, and the site itself flat, the views of the mountains towards the west and north-west are striking (Gibbs, 2025).

Residential neighbourhoods of varying densities surround the site, including areas with more compact grid-layouts as well as more sub-urban organic layout typologies (Gibbs, 2025). Whereas the original Protea Village community had settled the area in former times, the tragic consequence of the Group Areas Act has removed much of the material evidence of the earlier settlement (Gibbs, 2025). The Landscape Character of the regional setting is considered highly sensitive to visual impact as it is associated with areas of high visual / scenic amenity. The Landscape Character of the local context is also considered highly sensitive, due to the site's location within a residential neighbourhood and within proximity of scenic routes (Rhodes Avenue) (Gibbs, 2025).

The site is considered a cultural landscape of high scenic, cultural, and historical significance, defined as a space layered with history and evidence of ongoing human activity that together form a meaningful visual and aesthetic heritage resource (Gibbs, 2025). It holds strong value for communities due to its cultural associations and the visual character it presents.

Gibbs identified the following visual resources: type of environment; landscape integrity and quality; views and view corridors; visual resources across scale. He further provides certain broad and detail design considerations which have been incorporated into the Architectural Design Guidelines.

Impacts specific to Phase 2 are likely to include the visual intrusion of residential structures in various sightlines: in the foreground from the riparian corridor, in the mid-ground from Winchester Avenue, and in the background from Kirstenbosch Drive. These intrusions could disrupt the existing sylvan character of the landscape (Gibbs, 2025). Lighting and signage associated with the new residential development may further compound the visual intrusion. Collectively, these changes have the potential to visually isolate the Phase 2 portion of the property from its broader cultural landscape context and alter the current 'sense of place'. As such, these visual impacts will require mitigation measures to ensure they remain within acceptable thresholds and preserve the overall integrity of the landscape (Gibbs, 2025).

Agricultural Aspects:
A Site Sensitivity Verification and Agricultural Compliance Statement was conducted by Johann Lanz.

The assessment was undertaken through an on-site investigation conducted on the 21st of January 2025, supplemented by existing data on climate, soil characteristics, and agricultural potential (Lanz, 2025). The primary objective was to evaluate the site's suitability for crop production. Lanz (2025) noted that as assessments of soil properties and long-term agricultural potential are not season-dependent, the timing of the fieldwork did not influence the validity of the findings (Lanz, 2025).

While the site's climate, topography, and soil characteristics theoretically support viable crop production, its practical agricultural potential is significantly constrained by external factors (Lanz, 2025). Specifically, the site's location within an urban area renders it physically and functionally isolated from other agricultural areas, thereby making agricultural activities unfeasible (Lanz, 2025). Despite its current agricultural zoning, municipal land use planning has designated the site for non-agricultural purposes. Consequently, the site lacks any realistic potential for future agricultural use and is therefore assessed as having no practical agricultural production potential (Lanz, 2025).

The true sensitivity, as assessed on the ground, is **low** (Lanz, 2025). Lanz (2025) therefore disputes the sensitivity classification of the site by the screening tool and verifies the entire site as being of **low agricultural sensitivity** because of its assessed cropping potential.

Noise Aspect:
No noise aspects are anticipated during the operational phase, as such a Noise Management Plan was compiled by Soundscape to manage and minimise construction related noise.

Construction activities will be highly variable in intensity, location, duration, and time of day, even over a 24-hour cycle. Expected noise levels 10 m from construction activities will likely range between 52 and 91 dBA depending on the specific activity, equipment involved, and duration. The nearest residential properties are located between 20 and 80 meters from the development footprint. Assuming spherical noise propagation (without accounting for factors such as ground absorption or atmospheric attenuation) construction activities could generate noise levels at nearby receptors ranging from as low as 35 dBA to as high as 85 dBA. However,

it is important to note that construction noise is not constant in volume, duration, or location, and peak noise levels are typically short-lived, occurring for only a few hours per day.

Traffic Aspects:
A Transport Impact Assessment (TIA) was undertaken by Innovative Transport Solutions in Phase 1 for the entire development (including erf 503). The Transport Engineer conducted a verification exercise and found that the TIA remains valid for Phase 2.

The TIA describes that the proposed access to site conforms to the access spacing guidelines provided in the Road Access Guideline Manual (RAG) for a Suburban Environment. A traffic analysis was undertaken at all the proposed intersections including the proposed access point to Erf 503. The analyses indicate that the proposed intersection with the entrance to the proposed development, expected to still operate at acceptable levels of service with the existing geometry during the weekday a.m. and p.m. peak hours. The TIA found that all existing intersections are expected to continue to operate at acceptable levels of service and that no capacity improvements are required to mitigate the impact of the development.

Socio-economic Aspects:
The primary objective of the proposed development is to facilitate the sustainable restoration of the Protea Village community to the land and homes from which they were forcibly removed, where their homes and livelihoods were destroyed. The business model is designed to generate the necessary financial resources for the construction of their new homes.

The socio-economic benefits of this restoration would be substantial, as it would allow the return of the 86 original members (or their descendants) and their families to the land from which they were forcibly displaced. This would not only reconnect the Protea Village community to the site of their history but would also promote socio-economic upliftment.

An analysis of data from various communities suggests that the Protea Village community has faced an opportunity cost due to the loss of their land and homes in the Bishopscourt/Newlands suburbs. This assertion is reinforced by the community's history, which highlights their active participation in the local workforce, education, and the establishment of professional relationships within the area. The impact of returning home would be profound, significantly strengthening and advancing the community's legacy. This restoration would not only serve as a realization of social and environmental justice but also re-establish intergenerational equity, ensuring that the community's legacy is preserved and enriched for future generations.

Additionally, the majority of the labour required for the construction sector will be sourced locally, with a significant proportion consisting of previously disadvantaged individuals.

SUMMARY OF IMPACTS

The Basic Assessment was aimed at identifying and assessing all significant impacts associated with the proposal. The impacts are summarised in the tables below, which are duplications of the impact summary tables included in the Basic Assessment Report.

Geotechnical:
The findings from the geotechnical specialist indicate that while the site is generally suitable for development, the low-density fill and upper hillwash will require either deeper foundations on the medium-dense hillwash or subsoil improvement through dynamic compaction, influencing the proposed remediation and residential development design.

Additionally, the potential for a perched water table during high rainfall will necessitate effective drainage management, and challenges related to deep trenching and removal of

deleterious material in the bouldery colluvium will need to be addressed during construction to ensure the stability and safety of the development.

Terrestrial:
Confirmation that there are no terrestrial biodiversity constraints to the proposed development. Recommendations for general management measures have been included in the EMPr.

Botanical:
Confirmation that there are no botanical constraints to the proposed development. Recommendations for general management measures have been included in the EMPr.

Faunal:
Confirmation that there are no faunal constraints to the proposed development. Recommendations for general management measures to prevent impact on animal species have been included in the EMPr.

Heritage:
If mitigation is carried out ahead of and after development, Halkett (2025) does not believe that significant cumulative impact will occur to cultural and archaeological resources. The Archaeological monitoring plan will be implemented for this development. All additional mitigation measures have been included within the EMPr. The Architectural Guidelines responds to the requirements laid out by the specialist.

Visual:
The visual impacts of the development of this portion are unlikely to compromise the visual and spatial experience of the critical components of the cultural landscape in any significant manner. An Architectural Design Guidelines have been created for Phase 1 to ensure that the residential structures blend with the existing buildings in the area as well as specific landscaping requirements. These Guidelines will be implemented for this development.

Aquatic:
Assuming that the recommended mitigation measures outlined in the specialist assessment can be accommodated, the proposed development of Erf 503 would be supported from an aquatic ecosystems perspective. The findings of the initial freshwater study informed the developable area on site, and the updated assessment lead to comprehensive discussions on the design of the stormwater management swales. The design of these swales was then altered so as to minimise impact on the surrounding riverine corridors. Furthermore, the remaining mitigation measures have been included within the EMPr.

Agricultural:
Confirmation that there are no agricultural constraints to development as proposed.

Noise Management Plan:
Confirmation that there are no noise constraints to development as proposed. The NMP will be implemented during the construction phase.

Transport:
Confirmation that there are no traffic constraints to the development as proposed.

MITIGATION AND RESPONSE

The proposed development and its associated activities have been investigated and assessed in relation to with the sensitivities identified in the baseline environment. The assessment also considers the direct, indirect and cumulative impact on local communities as well as the greater Metropolitan area.

Mitigation measures have been proposed to minimize any adverse impacts, while measures to enhance the potential positive effects of the development have also been identified. Ultimately, the proposed development is driven by returning the 86 families to their home. Furthermore, the report informs authorities of uncertainties and assumptions to ensure that a cautious approach is adopted in decision-making.

Geotechnical:
Several design considerations have been noted within the geotechnical assessment and the following measures have been proposed:

- Fill and the upper approximately 0.8 meters of the underlying transported materials will need to undergo vibratory compaction on site;
- Subgrade conditions and in particular the in-situ CBR strength of the in-situ soils be verified by way of site specific visual assessment and DCP testing (and if required field density testing) prior to importation and placement of selected pavement layerworks (base, subbase, etc.);
- A founding solution which could form a cost-effective alternative would be the use of a stiffened concrete raft foundation which is constructed on the site soils after in-situ densification employing dynamic compaction techniques. An alternative, potentially cost-effective founding solution involves the use of a stiffened concrete raft foundation. This foundation would be constructed on the site soils following in-situ densification using dynamic compaction techniques.
- The entire site must be treated prior to the commencement of construction activities to prevent potential vibration damage to neighbouring structures or buried services;
- The final design must account for the efficient removal of runoff water from the site and prevent the direct discharge or accumulation of water in the immediate vicinity of any new buildings;
- Sub-surface drainage may need to be installed along selected sections of roadway in the low-lying areas of the site to collect and remove near-surface groundwater seepages. The extent, location, and depth of installation will be determined through an on-site assessment of subgrade conditions during the road construction phase.
- The following is suggested for the design of subsurface drainage:
    - The sandy fill and hillwash should be considered marginal to poor drainage material, with a coefficient of permeability (k) no greater than 10-5 m/s.
    - The hillwash (sandy material) should be considered good drainage material, with a coefficient of permeability ranging from 10-3 to 10-4 m/s.
- For the drainage design of permeable paving, etc., it is recommended that site-specific permeability tests be conducted

Terrestrial Biodiversity:
No specific mitigation measures have been proposed for managing terrestrial biodiversity species loss; however, general impact management actions have been identified. The site must be kept free of invasive alien plant species listed under the National Environmental Management: Biodiversity Act (Act 10 of 2004) and its associated Alien and Invasive Species Regulations (2014). Additionally, standard SHERQ (Safety, Health, Environment, Risk, and Quality) housekeeping practices must be maintained, including prohibiting the disposal of waste runoff into gutters, ensuring that all litter is removed from the site, and regularly servicing chemical ablutions with a disposal and maintenance register kept on-site.

Botanical Biodiversity:
No specific mitigation measures have been proposed for managing Botanical biodiversity species loss; however, general impact management actions have been identified. The site must be kept free of invasive alien plant species listed under the National Environmental

Management: Biodiversity Act (Act 10 of 2004) and its associated Alien and Invasive Species Regulations (2014). Additionally, standard SHERQ (Safety, Health, Environment, Risk, and Quality) housekeeping practices must be maintained, including prohibiting the disposal of waste runoff into gutters, ensuring that all litter is removed from the site, and regularly servicing chemical ablutions with a disposal and maintenance register kept on-site.

Faunal:
The faunal specialist has indicated that should the recommended mitigation measures be implemented, the proposed development is expected to have a minimal impact on animal species inhabiting the area and adjacent habitats. These include:

- A search, rescue and relocation plan for the Cape Rain Frog (NT) and Cape Dwarf Chameleon (NT) must be drafted and implemented prior to construction.
- The ECO must check established alien trees for nesting raptors (including Owls) prior to removal. If confirmed that no active nests are present the tree can be removed. If a nest is present with eggs, chicks or fledglings the tree must remain in place until fledgelings leave the nest and nest is no longer used for breeding (±3 months).
- Preferably large established trees would remain and incorporated into landscaping.
- The Storm Water Management Plan compiled in association with Dr Liz Day must be implemented, to ensure that runoff from the project area that enters the Liesbeek River does not cause pollution or siltation so as not to disrupt animal species that may use the river for drinking, habitat and/or breeding.
- All construction and construction related activities (including parking of vehicles and machinery) must remain within the approved project footprint and must not encroach into natural areas outside the project footprint. To facilitate this, the boundaries of the development footprint areas must be clearly demarcated.
- All refuse stored outside should be contained to one area and bins must be wildlife proof.
- Construction night lighting and operation lighting must avoid shining directly towards the riparian area i.e., lighting in open space areas within development must be minimised and external lights must be down lights placed as low to the ground as feasible and must be low UV emitting lights, such as most LEDs.
- Where possible impacted areas that do not form part of the operational footprint (i.e., construction footprint) must be rehabilitated using indigenous vegetation. Rehabilitation efforts must provide habitat for faunal species by placing removed rocks and/or logs in stacks at strategic sites within the construction footprint to provide shelter for small faunal species during operation.

Heritage Impact:
All mitigation measures provided in Hart (2019) that are applicable to Erf 503 are incorporated into the EMPr as specifications. These measures include the following:

- Retention of significant trees;
- Continued implementation of Gribble (2024) monitoring plan.

Architectural Guidelines: Design guidelines will be implemented. Guidelines should be fairly limited as the architectural qualities of Bishopscourt are very eclectic ranging from conservative single-story bungalows to grand mansions and modernist buildings of up to 3 stories in height. The common characteristics of the houses are that most are on large erven arranged on loose a grid system. Most properties have a lush garden and a canopy of mature trees which is a major contributor to the urban quality. It is important that there is variation in the design of homes to create some harmony with the diverse architecture of the suburb.

Note: The existing Architectural Guidelines responds to the requirements laid out by the specialist.

Trees, loss of forest and meadows: Mitigation of this will, in part, be through planting of new trees and the retention of as many mature trees as reasonably possible, in accordance with the existing tree retention plan.

Visual:
In the construction phase, the open spaces, stormwater and wetland zones as 'no-go areas'. Planning and management must respond positively to visual/heritage considerations and design indicators, towards an appropriate fit and seamless integration into the cultural landscape context of the receiving environment. Architectural measures should ensure visually recessive structures and to combat the cumulative effect of the aggregation of buildings and services. Landscape measures should to anchor and settle the new buildings into the site and to 'dissolve' and 'diffuse' hard edges. The implementation management of a landscape plan which restores the 'sylvan' character and informal 'rural' quality of the site should suffice as mitigation of the operational phase visual impacts. An Operational Phase Environmental Management Plan (OEMP) should be provided.

Aquatic Biodiversity:
Several mitigation measures were proposed in relation to the stormwater manages infrastructure (such as the swales and swale outlets). Stormwater management infrastructure, with the obvious exception of the outlets to the rivers themselves, must be located immediately against the cadastral boundaries of the plots. A minimum of 15 m setback must be provided from the surveyed edge of the active channel to the lower edge of any enhanced swales. Discharge areas into Window and Nursery Streams should include adequate measures for the dissipation of flows, without impacting on river bank integrity. The swales and enhanced swale areas should all be planted with appropriate, locally indigenous vegetation that would contribute positively to indigenous biodiversity in the area. These areas should be planted and managed as indigenous zones.

Additional construction phase mitigation measures have been proposed by the specialist. A CEMP must be compiled and overseen by an ECO. The development boundary must be fenced off using temporary mesh or other fencing that will act as an effective deterrent to the accidental or other passage of vehicles or personnel into sensitive areas. Installation of a silt screen along the fence line must also take place. This fencing must be installed prior to construction activities starting. Access is only allowed in these areas for the construction of the stormwater swales and outlets. Measures must be set in place prior to the start of construction for the collection of sediment-rich stormwater generated in the disturbed construction areas upslope of the riparian corridors. The final gravel and sand infill into the enhanced swales along the two river channels should be completed only at a late stage in the development, as their long-term function could be compromised by the receipt of construction-phase sediment loads. The efficacy of on-site sediment management must be monitored by carrying out comparative weekly turbidity measurements up- and downstream of the site. Any construction waste must be removed from the riparian corridor (area outside of the site) as well as from the 3m buffer areas within the development erven, where the stormwater swales would be established.

General Construction mitigation measures proposed by the specialist are:

- No refueling, vehicle repair, storage or fuel storage is to be allowed within 30 m of the boundary of Erf 503;
- All refueling areas and fuel storage areas must be adequately covered and bunded to control potential pollution sources;
- No vehicles or machinery / tools are to be washed on site such that contaminated runoff can flow into the buffers and /or seep or rivers;

- Adequate toilet facilities must be established and managed on site for use by construction workers;
- Daily removal of litter from all construction areas on the site is required, as well as weekly removal of litter from the adjacent riverine areas;
- A Construction Phase Environmental Management Programme (CEMPr) must be compiled and implemented as specified in Section 4.3.1.

Operational phase mitigation measures proposed by the specialist include that the river reaches abutting the site should remain publicly accessible and locally valued as public community amenities. In addition, active use of the riverine areas helps prevent local "land invasion" / encroachment by private landowners into public spaces including the important Window and Nursery Stream corridors abutting the present site.

The following measures aim to support amenity use of the river corridors abutting Erf 503

- The property boundaries abutting the river corridors should be bounded with palisade-type fencing only, to prevent the riverine corridor being a cut-of area with no on-site surveillance;
- Plots on Erf 503 must be landscaped with locally indigenous vegetation – other than in the case of existing, non-invasive trees that have been itemised for retention (Britton 2018).
- Landscaping of Plot 670 should allow for earth bunding around the proposed pump station, sufficient to contain at least 4 hours of pump station overflow in the event of pump breakdown or power outage;
- The pump station should be equipped with telemetry and alternative power supply (e.g. generator or UPS) in the event of power outages;
- An Operational Phase Environmental Management Programme (OEMPr) must be drawn up for the development.

Noise:
The proposed development is only anticipated to generate noise during construction phase and not in the operation phase. The Noise Management Plan includes a number of mitigation measures to reduce noise impacts of construction activities. These include general measures; specific equipment selection and substitution; modification of equipment; noise enclosures; Equipment use and placement; maintenance; specific working hours; controlling the spread of noise; training; monitoring and ensuring compliance; community engagement and communication.

Traffic:
The specialist recommends that, In accordance with the CoCT Zoning Scheme, 2 bays per dwelling units be provided for the high-income residential units in line with rates for Standard Parking Zones. The access road for the proposed development must be at least 120m from the access road to Erf 212 (Sagewood Close) as per the Road Access Guideline Manual (RAG) for a Suburban Environment.

Remediation Order:
To address to contamination of Erf 503, a remediation order was issued and three alternative Method Statements have been proposed. Furthermore, the remediation order outlines the need for monitoring and compliance with the order and the remediation plan. Several specific conditions of compliance have been identified.

NEED AND DISIRABLILITY

The proposed development is a necessary and desirable project for the City of Cape Town. It addresses the housing needs of 86 families from the Protea Village CPA by funding their housing through the sale of residential stands. The development optimizes underutilized land, supports sustainable urban growth, and contributes to social equity by providing stable

housing for the local community. Moreover, it aligns with the City's Municipal Spatial Development Framework and Integrated Development Plan, ensuring that the project supports the city's broader urban planning and growth objectives.

The development also adheres to the principles of environmental sustainability, ensuring that environmental impacts are minimized and managed through a well-structured EMPr (**Appendix H**). Overall, the proposed development is a positive contribution to Cape Town's urban landscape and a model for community-driven development.

The proposal is therefore aligned with the principles of Environmental Management as well as the general objectives of Integrated Environmental Management in terms of NEMA. The above discussion including the alignment of the project with spatial planning instruments demonstrate that the proposal is needed at this point in time and that it is desirable on the proposed site.

PUBLIC PARTICIPATION

The public participation process (PPP) proposed and currently underway align with the minimum legislative requirements prescribed in regulation 41 of the EIA Regulations, 2014 (as amended).

The pre-application Public Participation Process (PPP) undertaken for the current public review period of this pre-application Draft BAR includes the following activities:

- A 14-day public comment period on a Background Information Document, which was distributed via email and a knock and drop exercise to surrounding residents on the 23rd of May 2025. The commenting period on the BID closed on the 6th of June 2025.
- A 30-day public comment period for the Pre-application Draft BAR.
- Notification of the availability of the Pre-application Draft BAR was emailed to the preliminary Interested and Affected Party (I&AP) database.
- A knock-and-drop exercise, along with the notification letter, was conducted for residences and formal institutions adjacent to the proposed development.
- The Pre-application Draft BAR has been made available for download on Chand's website throughout the comment period.
- An executive summary for separate download (for I&APs with limited access to data) is also available on Chand's website during the comment period.
- A site notice has been placed on site. This notice, in English, contains the information prescribed by the EIA Regulations, 2014, as amended, and PPP guidelines.
- Advertisements have been placed in a local newspaper distributed to the local community containing the information as prescribed by the EIA Regulations, 2014, as amended, and PPP guidelines.
- A hardcopy of the Executive Summary has been made available at the local Subcouncil offices, along with a comment box and comment forms, for the duration of the public commenting period.
- Hard copies of the BAR will be made available to I&APs or commenting parties, upon reasonable request.

Note: The Pre-Application Draft BAR is currently undergoing a 30-day public review and commenting period.

Post-application Draft BAR Public Participation

The following activities will be conducted on availability of the post-application Draft BAR for public comment.

- A 30-day public comment period for the post-application Draft BAR.
- Notification of the availability of the post-application Draft BAR will be emailed to the preliminary Interested and Affected Party (I&AP) database.
- The Post-application Draft BAR will be made available for download on Chand's website throughout the comment period.
- An executive summary for separate download (for I&APs with limited access to data) will also be available on Chand's website during the comment period.
- A hardcopy of the Executive Summary will be made available at the local Subcouncil office, along with a comment box and comment forms, for the duration of the public commenting period.
- Hard copies of the BAR will be made available to I&APs or commenting parties, upon reasonable request.

To provide access to commenting for individuals without access to data, email, or fax, Chand has encouraged I&APs to make telephonic contact and submit their comments, which will be recorded (in writing) as part of the Basic Assessment process.

All registrations and comments received during both 30-day public comment periods will be added to the I&AP database and included in the Final BAR for submission to the DEA&DP.

Evidence for the activities listed above will be included in the Public Participation Report of the Final BAR, which will be submitted to the DEA&DP for decision-making. All comments will be reflected in a comments and responses report.

Once the DEA&DP has reviewed the Final BAR and issued its decision, the decision, along with the date, reasons for decision, means of accessing the decision, an explanation of the appeals process, and any further requirements, will be distributed to the registered I&APs via email for those with email addresses and by post for those without. The decision will also be uploaded to Chand's website for download. The applicable appeal period will be explained in accordance with the decision.

CONCLUSION

The study was informed by specialists to ensure a high level of confidence in findings. It was found that the site is entirely transformed, with little to no biodiversity remaining. The most significant biophysical sensitivities are the two streams adjacent to the site. The freshwater ecologist provided sufficient recommendations to prevent / minimise impacts on these resources and the downstream Liesbeek River.

From a social perspective, the point of departure for the study was to benefit and fund the best homes for the Protea Village Community that will be reestablished on the adjacent land (the Phase 1 development). Consideration was given to mitigation to prevent/ limit significant impacts on the surrounding residential areas. The no-go alternative is not without negative impacts and is not reasonable or feasible when compared to the limited, justifiable negative impacts and benefits associated with the development proposal.

The study did not reveal any fatal flaws. All impacts can be limited to acceptable levels and all specialists involved supported the development, as proposed. All specialist recommendations are incorporated into the design or the EMPr.

Table A: Summary of Impacts

Planning, Design and Development Phase Impacts	Preferred Alternative (Overpass)		No-Go Alternative	
	Before Mitigation	After Mitigation	Before Mitigation	After Mitigation
Nuisance Impacts: Noise and Dust	Medium (-)	Very Low (-)	Low to Medium (-)	Not Applicable
Use of Natural Resources	Medium (-)	Low (-)	Low (-)	Not Applicable
Socio-Economic Aspects	High (+)	Not Applicable	Low (+)	Not Applicable
Archaeological and Cultural	Medium (-)	Low (+)	Medium (-)	Medium high (+)
Visual Impacts	Medium (-)	Low (-)	Negligible	Negligible
Aquatic: Degradation of riverine corridors	Medium	Low	Low to Medium	N/A
Aquatic: Physical disturbance of Window and Nursery Streams leading to habitat degradation and loss of resilience	Medium	Low	While the specialist did not report on any particular impact for the no-go alternative in the construction phase, the EAP notes that the erection of a fence, construction of a dwelling, etc. could well be associated with negative impacts on the aquatic features, albeit at a reduced significance compared to the development alternative.	
Aquatic: Changes in river water quality	Low to Medium	Low	While the specialist did not report on any particular impact for the no-go alternative in the construction phase, the EAP notes that the erection of a fence, construction of a dwelling, etc. could well be associated with negative impacts on the aquatic features, albeit at a reduced significance compared to the development alternative.	
Operational Phase Impacts	**Preferred Alternative (Overpass)**		**No-Go Alternative**	
	Before Mitigation	**After Mitigation**	**Before Mitigation**	**After Mitigation**

Nuisance Impacts: Noise	Low (-)	Negligible	Low (-)	Low (-) (in absence of an EMPr)
Use of Natural Resources	Low (-)	Very Low (-)	Very Low (-)	Not Applicable
Socio-Economic Aspects	Medium (+)	Not Applicable	Very Low (+)	Not Applicable
Socio-Economic Aspects : Direct Impact on Protea Village Community	High (+)	High (+)	High (-)	High (-)
Traffic	N/A	N/A	N/A	N/A
Archaeological and Cultural	Medium High (-)	Medium	Medium High (-)	Medium
Visual Impacts	Medium (+)	High (+)	Negligible	Negligible
Aquatic	Low to medium	Low	Low to Medium	N/A