

THE PROPOSED DEVELOPMENT OF THE 15 ON HECTOR AFFORDABLE HOUSING DEVELOPMENT ON ERF 6482, LOTUS RIVER, CITY OF CAPE TOWN

EA APPLICATION REFERENCE NO.: 16/3/3/1/A2/18/3006/26

DEA&DP NOI REFERENCE NO.: 16/3/3/6/7/1/A2/18/3101/25

DWS WUA REFERENCE NO.: WU41961

HWC CASE NO.: HWC25021004SVB0210

EXECUTIVE SUMMARY

This Executive Summary was updated after the comment periods for the (pre-application) Draft Basic Assessment Report (BAR) and (post-application) BAR in response to comments received from Interested and Affected Parties (I&APs).

All changes to the Executive Summary (following the pre-application comment period) are indicated in pink text. All changes to the BAR (following the post-application comment period) are indicated in underlined and italicised pink text.

A Comments and Responses Report containing comments received from I&APs during the comment periods for the Draft BAR and BAR, and responses by the Environmental Assessment Practitioner (EAP), is appended to the BAR.

Introduction

The Western Cape Department of Infrastructure (Dol – 'the Applicant') intends to develop a ~5 ha housing development ('the project') on Erf 6482, Lotus River, Cape Town ('the site'). The project is intended to provide government subsidised housing to qualifying beneficiaries and forms part of the greater Retreat housing initiative.

The site previously accommodated the Lotus River High School between 1975 and 1998 and was later utilised by various non-governmental organisations and community initiatives serving the Lotus River and Grassy Park areas. The site is currently occupied by several families residing unlawfully within and around the partially demolished school buildings, while churches and crèches continue to operate from portions of the site. In addition, informal dwellings and unlawful dumping activities have become established on the property, with historical imagery indicating that informal occupation commenced around 2020.

Developments which trigger activities listed in terms of the Environmental Impact Assessment (EIA) Regulations, 2014, as amended, promulgated in terms of the National Environmental Management Act 107 of 1998 (NEMA) require an Environmental Authorisation (EA) prior to commencing with these activities. A Basic Assessment (BA) is required as part of this application for an EA, as the proposed development triggers activities listed in Listing Notice (LN) 1 of the NEMA EIA Regulations, 2014, as amended.

The (pre-application) Basic Assessment Report (BAR) was subject to a 30-day pre-application public review period. Where appropriate, changes to the pre-application BAR have been made (highlighted in pink) based on comments received during the pre-application public review period.

The (post-application) BAR was then subjected to a 60-day public review period. All comments on BAR were considered and, where appropriate, changes were incorporated into the Final BAR (i.e., this report), which was submitted to the Competent Authority (the Western Cape Department of Environmental Affairs and Development Planning [DEA&DP] in this case) for final decision-making.

Chand Consultants ('Chand') was appointed by the Dol as the independent Environmental Assessment Practitioner (EAP) to undertake the BA process for the project.

Project Description

The project, 15 on Hector Housing Development, will consist of affordable housing, including Breaking New Ground (BNG)¹ and (possibly) First Home Finance (FHF)² housing units³. Approximately 318 housing units are proposed, ~80% of which will be two-storey walk-up units, and ~20% of which will be single-storey units (designed to support diverse household structures, including those requiring improved accessibility). Each unit will be located on erven ranging from ~75 m² to ~95 m². Two-storey units will be ~45 m² and single-storey units will be ~40 m² in size.

In addition, the following infrastructure is proposed as part of the development:

- A network of internal roads, designed to municipal standards and incorporating:
 - Safe pedestrian movement.
 - Non-motorised transport (NMT) integration, and
 - Controlled vehicular access, with no direct access to Strandfontein Road.
- Public open space, ~10 075 m² in size, designed to support recreation, informal play, and social interaction.
- Community facilities, possibly for:
 - A ~498 m² flexible community facility/place of worship/Early Childhood Development (ECD) facilities or similar community-supportive uses, and
 - Land use rights for small-scale local services to meet daily needs.
- Stormwater infrastructure (detention ponds and swales);
- Soft landscaping (using indigenous plant species); and
- Service infrastructure.

¹ An affordable housing intervention recognised under South Africa's BNG policy (Department of Human Settlements, 2004).

² A government housing support programme designed to help lower to middle income households buy/build their first homes.

³ The type of affordable housing will be confirmed during the project implementation stage with guidance by market interest.

The project will be developed in three phases:

- Phase 1: approximately 47% of residential units, community facilities, the pocket park, utility services (including water and electrical infrastructure), stormwater infrastructure and key internal and access routes;
- Phase 2: approximately 42% of residential units, one electrical substation and key internal and access roads; and
- Phase 3: approximately 11% of residential units and key internal and access roads.

Project Location

The site is bordered by Edward Avenue to the north, a public open space to the west and a road reserve to the south. Marius road borders the eastern boundary of the site and the M17 (Strandfontein Road) is located a further ~350 m to the east of the site, beyond which is the Philippi Horticultural Area.

Alternatives

No property or site alternatives have been considered for the project. However, with input from an Aquatic Biodiversity specialist, the site layout underwent various iterations to minimise impacts on wetlands which surround the site. In addition to the preferred layout, an alternative configuration was also considered ('Alternative 1'). Alternative 1 comprises 319 units, ~ 70% of which will be two-storey walk-up units, 26% of which will be single-storey units and 2% of which will be veteran units. Alternative 1 comprises slightly less two-storey and veteran units and more single-storey units than the preferred alternative. The additional units in Alternative 1 are located along the southern and western boundaries of the site. However, these have been relocated/removed in the preferred alternative to mitigate the risk of dumping in the open spaces around the wetlands surrounding the site, as recommended by the Aquatic Biodiversity specialist. The layout of internal roads has subsequently been reconfigured to accommodate a road as a more acceptable interface with the open space to the south and the west of the housing component of the development.

The No-Go Alternative implies the project does not go ahead, i.e., that no affordable housing will be developed on the site, and the current unlawful activities will continue, and/or other activities not requiring authorisation may be pursued. Current activities taking place at the site include occupancy of informal dwellings, structures and the school buildings and dumping of waste (general domestic waste, bricks and building materials and glass).

The No-Go Alternative is not preferred as the project will make a meaningful contribution to addressing the housing backlog in Cape Town, reduce the number of unlawful occupations and provide opportunities for homeownership to the surrounding community, improve infrastructure development in the area (through non-motorised transport routes, road upgrades etc.) alleviate dumping on Erf 6482, and make valuable socio-economic contributions to the area. Additionally, the project will improve the safety of the area as it will counteract the status quo of the surrounding area. The outcomes of the proposed development aligns with the City of Cape Town's (CoCT) strategic objectives.



Site locality

Legislation

Chand has determined that the project will trigger Activity 19 of LN 1 (*The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse*). The DoI is therefore required to apply for an EA from DEA&DP, informed by a BA process.

The project will also require a Water Use Authorisation (WUA) as it triggers water uses listed under Section 21 of the National Water Act 36 of 1998. An application for WUA **is being applied for**.

Baseline Environment

Groundwater

The site is underlain by the Cape Flats Aquifer, which presents a high yielding potential and good water quality. Localised contamination of the aquifer is likely due to the highly permeable nature of the aquifer's geology and the shallow water table. Although the aquifer is considered to have a very high vulnerability to point source contamination, the project is assessed to have a low impact on groundwater if the mitigation measures specified by the groundwater specialist are adhered to. Depth to groundwater at the site is 4.91 meters below ground level (mbgl).

Surface Water

Extensive seasonal wetlands in good conditions are located just outside the southern boundary of the site. These wetlands are seasonally saturated to inundated depressions and support various threatened indigenous wetland plant and animal species. Patches of seasonally saturated wetlands are located just outside the western boundary of the site. The Big Lotus River⁴ flows further west of these wetlands.

Large areas of seasonally inundated and saturated wetlands are present within the site (although much of the site has been infilled). Some of the seasonally inundated wetlands have been excavated, forming artificial depressions and presenting poor water quality.

The project will be developed over all the wetlands at the site, but includes adequate provision of infrastructure to manage stormwater runoff. The layout will include a minimum 20 m setback buffer from the wetland outside of the southern boundary of the site, ensuring that no hard infrastructure will be located within 20 m of this wetland. Portions of the buffered area will be used for development of swales. Two swales and a detention pond will be constructed in the open area in the western portion of the site.



Seasonal wetlands south of the site (beyond the site boundaries)

Biodiversity

The site is located within the Table Mountain Strategic Water Source Area (SWSA)⁵. The Table Mountain SWSA is regarded as a very broad scale spatial data feature that is not deemed significant in this case given that the site is located in an urbanised area. Therefore, the SWSA has no influence on the project.

The site falls within a region which historically (but no longer) comprised critically endangered Cape Flats Sand Fynbos vegetation. The site is currently regarded as a transformed environment comprising almost exclusively of exotic species. No species of conservation concern are present at the site, as confirmed by a ground truthing exercise conducted by a terrestrial biodiversity specialist.

Eleven trees (including *Schinus terebinthifolius* Brazilian pepper trees, *Platanus x acerfolia* London plane trees, Cypress conifer tree and *Syzygium cordatum* water berry tree) were identified at the site, all of which are located around the old school buildings in the southeastern portion of the site.

No sensitive areas delineated in terms of the Western Cape Biodiversity Spatial Plan and the City of Cape Town Biodiversity Spatial Plan (e.g., Critical Biodiversity Areas, Ecological Support Areas or any other designated conservation areas) are located at the site.

Socio-economic

The site is located in Ward 66, Sub-council 18 within the suburb of Lotus River. On its own, Lotus River constitutes a sub-place⁶. Key socio-economic statistics are summarised below:

- Lotus River has a population of 38 143, making up 8 895 households with an average size of 4.29 people per household.
- The largest segment of the population is coloured (~93%).
- There are marginally more females (51.8% of the population) than males (48.2% of the population) living in Lotus River.
- Almost half of the population (49%) is made up of 25 to 64 year olds.
- Most of the working age population⁷ is employed (~80%), and the overall unemployment rate is 19.53%, and the labour absorption rate⁸ is 49.92%.
- Approximately 40% of households have a monthly income of R 3 200 or less.
- Approximately 20% of households have a monthly income ranging from R 3 201 to R 6 400, and ~18% of households have an income ranging from R 6 401 to R 12 800. Approximately 8.5% of households have no income.
- Almost all (~96%) of households reside in formal dwellings.
- Most households (~40%) reside in rented dwellings. Only 30% of households reside in dwellings that they own and is fully paid off. Approximately 25% of households reside in dwellings that they own but have not yet paid off.
- Almost all (~99%) of households have access to piped water.

- Approximately 97% of households have access to a flush toilet connected to the public sewer system and more than 99% of households have their refuse removed at least once per week.
- Almost all (99%) of households use electricity for lighting in their dwelling.
- Approximately 90% of households use electricity for cooking (9.1% use gas). Approximately 74% of households use electricity for heating (~22% do not use energy for heating).

Traffic and Transport

The site abuts Edward Avenue to the north, as well as Marius Road and Hector Avenue to the east. All these roads are classified as Class 5 Local Streets and are two-way, two lane roads. Edward Avenue runs in an east-westerly direction, terminating at Bruce Avenue to the west and Marius Road/Hector Avenue to the east. Hector Avenue runs in a north-south direction, terminating at George Road, which leads to Strandfontein road in the east. Marius Road (a short access road) starts at Hector Avenue and terminates in a cul-de-sac to the southeast. The future R300 Freeway extension (a Class 1 Principal Arterial) road reserve is south of the site⁹.

Public transport modes near the site include minibus taxi routes, operating routes along Marius Road, Hector Avenue and Strandfontein Road and connecting areas including Retreat, Hanover Park, Mitchell's Plain, Ottery, Wynberg, Grassy Park and Strandfontein. Golden Arrow Bus Services (GABS) operate routes along Marius Road, Hector Avenue and Edward Avenue and connect areas including Athlone Industria, Steenberg, Epping, Lotus River, Lavender Hill, Bayview and Claremont. The Phase 2A MyCiTi services, which includes two direct routes along Ottery Road and Strandfontein Road, is expected to be rolled out imminently. These service routes will connect Mitchell's Plain to Wynberg via Spine Road and the Phillipi Horticultural Area.

Summary of Impacts

This BA process identified and assessed all significant impacts associated with the proposed development/project. Three specialist studies were undertaken, namely, a groundwater impact assessment, an aquatic biodiversity impact assessment (including wetland delineation and water sampling tests) and terrestrial biodiversity compliance statement.

Groundwater

The following impacts on groundwater were identified:

- The available area for groundwater recharge will be reduced. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Groundwater may be contaminated by construction activities. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation; and
- Groundwater resources may be contaminated by contaminated stormwater infiltration and/or sewage leaks. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation.

Aquatic Biodiversity

The following impacts on aquatic biodiversity were identified:

- Definite loss of the wetlands on the site. The significance of this impact is rated as **Medium-High (negative)** and no mitigation is possible if the project is approved;
- Wetlands surrounding the site may be degraded due to construction activity. The significance of this impact is rated as **High (negative)** and is reduced to **Low (negative)** after mitigation;
- Wetlands surrounding the site will be susceptible to the dumping of solid waste by backyard settlements for whom service delivery has not been planned for. The significance of this impact is rated as **Medium-High (negative)** and is reduced to **Low (negative)** after mitigation; and
- The Big Lotus River will be susceptible to the dumping of solid waste by potential backyard settlements for whom service delivery has not been planned for. The significance of this impact is rated as **Medium-High (negative)** and is reduced to **Low (negative)** after mitigation.

The development will result in the permanent loss of wetlands located within the site boundary. This loss is unavoidable should the development proceed and remains of **Medium-High (negative)** significance. The impact management approach applied in this BA process is therefore focused on:

1. Avoiding and minimising impacts on wetlands and aquatic features outside of the site boundary through buffers, construction controls and long-term operational management; and
2. Implementing on-site rehabilitation and ecological functionality measures associated with the stormwater system and public open space to partially compensate for loss of aquatic ecosystem functioning.

The determination of whether a formal wetland offset is required, including any offset ratio, location and governance requirements, will be finalised through the Water Use Licence Application process in terms of the National Water Act 36 of 1998 and the Competent Authority for that process (i.e., the national Department of Water and Sanitation [DWS]). The on-site measures described in this BAR are mitigation and compensation measures and must not be interpreted as a formal offset unless confirmed by the DWS.

Terrestrial Biodiversity

As no species of conservation concern (SCC) or remnants of indigenous vegetation (Cape Flats Sand Fynbos) were identified at the site, the site is verified to have a **Low** terrestrial biodiversity sensitivity. Furthermore, the current state of the site is considered to be highly transformed. Therefore, the project will not have an impact on terrestrial biodiversity.

⁴ The Big Lotus River is concrete and canalised in these reaches, enabling the river to contain big floods (Liz Day Consulting, 2025).

⁵ SWSAs refer to the 10% of South Africa's land area that provides a disproportionate 50% of the country's water runoff (Lötter, 2021).

⁶ A smaller geographic area that forms part of a larger region (i.e., Lotus River is a sub-place of the bigger allotment of Grassy Park).

⁷ According to Statistics South Africa, the working age population ranges from 15 to 64 years old.

⁸ Proportion of the working age population that is employed.

⁹ It is uncertain whether this road will ever be constructed.

Visual Impacts

The following visual impacts were identified:

- Temporary visual disturbance during construction. The significance of this impact is rated as **Low (negative)** and is reduced to **no impact** after mitigation;
- Visual incongruity with the surrounding residential character. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Increased visual bulk and density. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation; and
- Alteration of streetscape and urban form. The significance of this impact is rated as **Low (negative)** before and after mitigation.

Socio-Economic Impacts

The following socio-economic impacts were identified:

- Employment creation and local economic stimulation. The significance of this impact is rated as **Low (positive)** and is increased to **Medium (positive)** after enhancement;
- Temporary disruption to surrounding community activities. The significance of this impact is rated as **Low (negative)** before and after mitigation;
- Provision of affordable housing and improved living conditions. The significance of this impact is rated as **High (positive)** before and after enhancement;
- Changes in local demographics and pressure on services. The significance of this impact is rated and **Low (negative)** before and after mitigation; and
- Improved safety, urban management and formalisation. The significance of this impact is rated as **Medium (positive)** and is increased to **High (positive)** after enhancement.
- Displacement of unlawful occupants. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation.

Traffic Impacts

The following traffic impacts were identified:

- Increased construction traffic and temporary disruption to local road network. The significance of this impact is rated as **Low (negative)** before and after mitigation;
- Changes to access arrangements and introduction of new intersections. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Reduced access spacing. The significance of this impact is rated as **Low (negative)** before and after mitigation;
- Reduced shoulder site distance at proposed access points. The significance of this impact is rated as **Low (negative)** before and after mitigation;
- Potentially reduced adequacy of off-street parking provision and parking spillover. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Potentially reduced adequacy of internal road geometry, circulation and intersection control. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Potential difficulty for refuse collection vehicle access and manoeuvrability within the site. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Potential changes in traffic volumes and operation of the local road network. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation; and
- Potential increased trip generation and additional traffic on the surrounding road network. The significance of this impact is rated as **Low (negative)** before and after mitigation.

Impacts on Heritage Resources

The following impacts on heritage resources were identified:

- Disturbance of previously unknown heritage resources during construction. The significance of this impact is rated as **Low (negative)** before and after mitigation; and
- Long-term impact on heritage resources during operation. The project will not impact this aspect.

Heritage Western Cape has confirmed that no further heritage impact assessment is required in their response (dated 8 April 2025) to a Notification of Intent to Develop that was submitted for the project.

Geotechnical Impacts

The following geotechnical impacts were identified:

- Excavation and earthworks in loose fill and shallow groundwater conditions resulting in unstable excavations, groundwater ingress and construction delays. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Occurrence of subgrade failure or uneven settlement. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation;
- Reduced integrity of long-term stability of building foundations. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation; and
- Waterlogging and degradation of pavements and structures because of long-term stormwater and groundwater management. The significance of this impact is rated as **Medium (negative)** and is reduced to **Low (negative)** after mitigation.

Public Participation

A first phase of PPP ('pre-application PPP') was undertaken from November to December 2025. PPP activities undertaken as part of the pre-application PPP include:

- Advertising the project in the *People's Post* newspaper;
- Erecting A2-sized site notification posters at conspicuous locations around the site boundary;
- Releasing the Draft BAR (this report) for comment from 11 November 2025 to 11 December 2025 (30 days);
- Making hard copies of the Draft BAR (this report) available for public review at:
 - Sub-council 18 office (Corner of Buck Road and 6th Avenue, Lotus River, 7941); and
 - Chand Consultants' offices in Plumstead, Cape Town;
- Providing written notification to potential interested and affected parties (IAP) (via email and post [to potential IAPs who do not have email addresses]) about the availability of the Draft BAR (this report) for public comment; and
- Dropping letters at adjacent properties and properties within a two-block radius (where contact information is not available).

The post-application BAR was subjected to a 60-day comment period (from 3 March 2026 to 6 May 2026). The following activities were undertaken for the post-application PPP:

- Advertising the project in the *People's Post* newspaper;
- Erecting A2-sized site notification posters at conspicuous locations around the site boundary.
- Releasing the BAR for comment from 3 March 2026 to 6 May 2026 (60 days);
- Making hard copies of the Draft BAR available for public review at:
 - Subcouncil 18 office (Corner of Buck Road and 6th Avenue, Lotus River, 7941); and
 - Chand Consultants' offices in Plumstead, Cape Town;
- Providing written notification to registered and potential IAPs (via email and post [to potential IAPs who do not have email addresses]) about the availability of the BAR (this report) for public comment;
- Dropping letters at adjacent properties and properties within a two-block radius (where contact information is not available); and
- Notifying the unlawful occupants of the informal structures and unlawful occupants within the remaining buildings on the site by means of email and letter drops (where contact information is not available).

In addition to the general notification measures undertaken, specific steps were taken to ensure that persons occupying structures on the site were provided with a reasonable opportunity to participate in the environmental process. The following steps were taken to ensure that persons occupying structures on the site were notified:

- Notification emails were sent to committee members of the occupants of the school building;
- Notification letters were given to occupants of the site; and
- Site notices were placed around the site.

As the project will require a Water Use Licence (WUL), the post-application (formal) PPP comprised a 60-day (rather than a 30-day) comment period to make provision for the PPP requirements specified in GN R267 of 2017, as amended (Water Use Licence Application and Appeals Regulations). All documentation related to the formal PPP (e.g., newspaper adverts, letters etc) include d the details of both the EA application and WUL application.

Conclusion

This Final BAR identified and assessed the potential impacts associated with the project. The project will result in unavoidable adverse impacts, specifically on wetlands within the site boundary. Wetlands surrounding the site will also be adversely impacted, although these impacts are of limited intensity assuming that the recommended mitigation measures are implemented.

The project will make a meaningful contribution to addressing the current backlog in the provision of housing in Cape Town, specifically for beneficiaries of the greater Retreat initiative.

Assuming that the Applicant is committed to the implementation of the recommended mitigation measures, Chand believes that this Final BAR demonstrates that the adverse impacts can be reduced to acceptable levels.

The study did not reveal any fatal flaws and all specialist recommendations¹⁰ are incorporated into the design and the Environmental Management Programme.

Way Forward

The Final BAR is now being submitted to DEA&DP for decision-making. Registered I&APs will be informed when the Final BAR is submitted to DEA&DP. The Final BAR will be uploaded to the Chand website (www.chand.co.za) for information. Once a decision is taken by the authorities, this decision and the associated appeal procedure will be communicated to all registered I&APs.

¹⁰ The recommendation by the aquatic biodiversity specialist to construct and maintain a solid waste interceptor fence in the Big Lotus River has been omitted from the Environmental Management Programme as this would fall outside the boundaries of Erf 6482. This measure is based on a broader catchment-level intervention and is not within the sole control of the Applicant. The Applicant is, however, willing to engage with relevant stakeholders to explore the feasibility of implementing such an initiative.