



EIA REFERENCE NUMBER: 16/3/3/1/A5/11/2033/22
NEAS REFERENCE NUMBER: WCP/EIA/0001113/2022
ENQUIRIES: Mr. R. Chambeau
DATE OF ISSUE: 17 January 2023

The Director
Duro Brick Company (Pty) Ltd.
The Picton
134 King Edward Road
PAROW
7500

For Attention: Mr. P. Smith

Cell: (083) 700 4294
Email: pieter@hanocron.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE PROPOSED CLOSURE OF THE EVERITE ASBESTOS SITE FOR THE ESTABLISHMENT OF A LIGHT INDUSTRIAL PARK AND ASSOCIATED INFRASTRUCTURE ON ERF 18354, BRACKENFELL.

1. With reference to the above application, this Department hereby notifies you of its decision to **grant** Environmental Authorisation, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the decision on the application, that all registered interested and affected parties ("I&APs") are provided with access to the decision and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the National Appeal Regulations, 2014 (as amended), which prescribes the appeal procedure to be followed. This procedure is summarised in the attached Environmental Authorisation below.

Yours faithfully

MS. MARE-LIEZ OOSTHUIZEN
ACTING DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

Copies to: (1) Ms. C. Muller / Ms. M. Penwarden (Chand Environmental Consultants cc) Email: Claudette@chand.co.za / info@chand.co.za
(2) Ms. S. Warnich-Stemmet (City of Cape Town: ERM) Email: sonja.warnichstemmet@capetown.gov.za

EIA REFERENCE NUMBER: 16/3/3/1/A5/11/2033/22

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): THE PROPOSED CLOSURE OF THE EVERITE ASBESTOS SITE FOR THE ESTABLISHMENT OF A LIGHT INDUSTRIAL PARK AND ASSOCIATED INFRASTRUCTURE ON ERF 18354, BRACKENFELL.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activity specified in section B below with respect to the Preferred Alternative, described in the Basic Assessment Report ("BAR") dated 09 September 2022.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Director
c/o Mr P. Smith
Duro Brick Company (Pty) Ltd.
The Picton
134 King Edward Road
PAROW
7500

Cell: (083) 700 4294
Email: pieter@hanocron.co.za

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**".

B. ACTIVITY AUTHORISED

Listed Activity	Activity/Project Description
<p>Listing Notice 1 of the EIA Regulations, 2014, (as amended):</p> <p>Activity Number 31 Activity Description:</p> <p><i>"The closure of existing facilities, structures or infrastructure for-</i></p> <p>(i) <i>any development and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014;</i></p> <p>(ii) <i>any expansion and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014;</i></p> <p>(iii) <i>...</i></p> <p>(iv) <i>any phased activity or activities for development and related operation activity or expansion or related operation activities listed in this Notice or Listing Notice 3 of 2014; or</i></p> <p>(v) <i>any activity regardless the time the activity was commenced with, where such activity:</i></p> <p>(a) <i>is similarly listed to an activity in (i), (ii) above; and</i></p> <p>(b) <i>is still in operation or development is still in progress;</i></p> <p><i>excluding where-</i></p> <p>(aa) <i>...</i></p> <p>(bb) <i>the closure is covered by part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or"(cc)such closure forms part of a mining application, in which case the requirements of the Financial Provisioning Regulations apply."</i></p>	<p>The closure and permanent capping of a facility previously used to dispose of asbestos and which still contains hazardous waste. Thereafter, the site will be redeveloped with a light industrial park.</p>

The abovementioned list is hereinafter referred to as "the listed activity".

The holder is herein authorised to undertake the following alternative that includes the listed activity relating to the authorised development:

The authorised development entails the capping of an existing asbestos waste site and development of a light industrial park and associated infrastructure on Erf 18354, Brackenfell.

The development footprint of the area to be capped will be approximately 95 000m² in extent.

Different capping strategies for different areas of the site will be implemented. In sections where no infrastructure (i.e. green areas) will be required, the capping layer would be more robust, while areas with infrastructure (i.e. roads and buildings) would have a thinner capping layer since the layerworks for the infrastructure required would provide an additional capping layer. Furthermore, the proposed capping and development would result in minimal excavation, with compaction and importing of fill material to realise the levels required.

Green Areas:

Existing indigenous vegetation will be cleared and the proposed capping layerworks will be constructed directly onto the compacted in-situ material. The capping layer will comprise of the following:

- A cement stabilized layer to a thickness of approximately 300mm;
- A graded crushed stone layer to a thickness of approximately 150mm;
- A layer of woven geotextile; and
- A loosely placed layer of topsoil to a thickness of approximately 200mm.

Roads:

The proposed road layerworks for the main access roads (i.e. asphalt finish) will include the following layers:

- Approximately 40 mm Premix;
- Approximately 150 mm G4;
- Approximately 150 mm G5;
- Approximately 150 mm Upper Selected; and
- Approximately 150 mm Lower Selected.

An area of approximately 135m² will be excavated for levelling purposes in order to limit excavation into the asbestos as much as possible.

The proposed road layerworks for areas with a brick paving finish (internal parking areas) will include the following layers:

- Approximately 70mm Paver on 20mm sand bedding;
- Approximately 150mm G5;
- Approximately 150mm Upper Selected; and
- Approximately 150mm Lower Selected.

Where the brick paving levels are close to the existing ground and excavation is required, the crushed stone layer of the abovementioned layerworks would be placed underneath the bricking paving layerworks.

Building Platforms:

The proposed building platform areas can be categorised into the following three capping scenarios:

- A. Final at, or just below the existing level (maximum excavation into the asbestos would be required here);
- B. Final level between 0mm and 700mm above existing level (intermediate excavation into the asbestos would be required here); and
- C. Final level more than 700mm above existing level (no excavation into the asbestos would be required here).

Each scenario would entail varying degrees of excavation into the existing ground, from 700mm excavation to no excavation into the existing ground. Excavation of 700mm into the existing ground would require capping with no additional fill (scenario A above), while the scenario with no

excavation would not require capping layerworks and only bulk earthworks (scenario C above). The area where maximum excavation is required for building platforms would be limited to 25m².

Services:

The proposed services would largely be located within the proposed earthworks and/or capping layers as described above.

The services would be located within roads or parking areas, or traverse across areas where no bulk earthworks would need to occur. It is in areas such as those where no bulk earthworks would be necessary (i.e. the green/landscaped areas) that the proposed services would be deeper than the proposed capping layers, so that excavation into the existing ground and asbestos would be required.

Trenches for services would, as far as possible, not be excavated into the asbestos, but rather into the new, imported fill and road layerworks, to limit disturbance of asbestos on site. However, there would be certain instances where excavation into the ground would be necessary.

The existing stormwater pond will be extended. The extension will result in excavation into the existing pond embankment. Armorflex grass blocks would line the bottom and side slopes of the pond. A vegetated buffer (i.e. a green area) would be provided around the pond and would be capped as per the "Green Areas" described above. The extended stormwater pond and associated buffer area will be approximately 14 250m² in extent.

Due to mole activity on the site, a rodent barrier will be installed along the entire perimeter of the site. This would entail the excavation of a 1m deep trench that would be lined with a geomembrane and backfilled with a cement stabilised material. The geomembrane would continue across the top of the trench and be placed against the property boundary.

Access

Access to the site will be gained from Virgo Close, off Gemini Road in Brackenfell Industria.

Proposed Road Upgrades

An additional right-turn lane at the Okavango Road/Old Paarl Road intersection will be developed. The northern approach will be widened to provide a new northbound acceleration lane along Okavango Road for the eastbound left-turn slip. A 2 m wide sidewalk will be provided along Old Paarl Road. The road upgrades are not listed in terms of the NEMA EIA Regulations, 2014 (as amended) and are required from a traffic impact perspective.

C. SITE DESCRIPTION AND LOCATION

The authorised listed activity will be undertaken on Erf 18354, Brackenfell.

The 21-digit Surveyor General code for the proposed site is:

Erf 18354, Brackenfell	C06700040001835400000
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Site co-ordinates for the proposed site is:

Middle point	33° 52' 29.30" South	18° 42' 4.57" East
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Refer to Annexure 1: Locality Plan and Annexure 2: Site Plan.

The said section of land is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Chand Environmental Consultants cc
c/o Ms. Claudette Muller and Ms. Marielle Penwarden
P.O. Box 238

PLUMSTEAD
7801

Cell.: (021) 762 3050

Email: Claudette@chand.co.za / info@chand.co.za

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activity specified in Section B above in accordance with and restricted to the Preferred Alternative described in the BAR dated 09 September 2022 on the site described in Section C above.
2. The holder must commence with the listed activity on the site within a period of **five (5) years** from the date of issue of this Environmental Authorisation.
3. The development must be concluded within **ten (10) years** from the date of commencement of the listed activity.
4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
5. Any changes to, or deviations from the scope of the alternatives described in section B above must be approved in writing by the Competent Authority, before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

6. A minimum of 7 (seven) calendar days' notice, in writing must be given to the Competent Authority before commencement of land clearing activities.
 - 6.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 6.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 7 and 11.

Notification and administration of appeal

7. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision—
 - 7.1. Notify all registered Interested and Affected Parties ("I&APs") of –
 - 7.1.1. the outcome of the application;
 - 7.1.2. the reasons for the decision as included in Annexure 3;
 - 7.1.3. the date of the decision; and

- 7.1.4. the date when the decision was issued.
- 7.2. Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;
- 7.3. Draw the attention of all registered I&APs to the manner in which they may access the decision;
- 7.4. Provide the registered I&APs with:
 - 7.4.1. name of the holder (entity) of this Environmental Authorisation,
 - 7.4.2. name of the responsible person for this Environmental Authorisation,
 - 7.4.3. postal address of the holder,
 - 7.4.4. telephonic and fax details of the holder,
 - 7.4.5. e-mail address, if any, of the holder,
 - 7.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).
8. The listed activity, including site preparation, must not be commenced with within 20 (twenty) calendar days from the date the holder notifies the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided, i.e., the listed activity, including site preparation, must not be commenced with until the appeal is decided.

Management of activity

9. The Environmental Management Programme ("EMPr") (dated September 2022) and submitted as part of the application for Environmental Authorisation is hereby approved.
10. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

11. The holder must appoint a suitably experienced Environmental Control Officer ("ECO") before commencing with construction activities to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.
12. A copy of the Environmental Authorisation, EMPr, Environmental Audit Reports and compliance monitoring reports must be kept at the office of the EA holder of the authorised listed activity and must be made available to any authorised person on request.
13. Access to the site referred to in Section C above must be granted and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see these for the purpose of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

14. In terms of Regulation 34 of the EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the EIA Regulations, 2014 (as amended).

- 14.1. The holder must undertake an environmental audit within three (3) months of the commencement of the listed activity and submit an Environmental Audit Report to the Competent Authority within one (1) month of completion of the environmental audit.
- 14.2. A second Environmental Audit Report must be submitted to the Competent Authority within one (1) month of the completion of the construction activities.
- 14.3. Thereafter, an Environmental Audit Report must be submitted to the Competent Authority every five (5) years after the commencement of the operational phase.
- 14.4. The holder must, within 7 (seven) days of the submission of the Environmental Audit Report to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request.

Specific conditions

15. Any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

16. All identified *Lampranthus explanatus* flora on site must be relocated to the Bracken Nature Reserve as per the recommendations of the updated Botanical Survey (compiled by Ross C. Turner and dated 30 May 2022).
17. A rodent barrier must be installed along the entire perimeter of the site during the construction phase. This must entail the excavation of a 1m (minimum) deep trench to be located 1m away from the property boundary that must be lined with a HDPE geomembrane and backfilled with a cement stabilised material. The geomembrane must continue across the top of the trench and be placed 100mm up against the property boundary.
18. A copy of the final Landscape Plan must be submitted to the Competent Authority for record keeping purposes prior to the commencement of the operational phase.
19. Employment opportunities must be afforded to the local community (as far as possible) during all phases of the proposed development.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activity.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with the listed activity within the period specified in Condition 2, this Environmental Authorisation shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.

4. An application for amendment of the Environmental Authorisation must be submitted to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 (as amended) must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:

Amendments to the EMPr, must be made in accordance with Regulations 35 to 37 of the EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

1. An appellant must –
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs–
 - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 2.2. Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal form/s must be submitted by means of one of the following methods:

By post: Attention: Mr. M. Venter
Western Cape Ministry of Local Government, Environmental Affairs and
Development Planning
Private Bag X9186
CAPE TOWN
8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr. M. Venter (Tel: 021 483 3721)
Room 809
8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

5. The prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

H. DISCLAIMER

The Western Cape Government, the holder, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is greatly appreciated.

Yours faithfully

MS. MARE-LIEZ OOSTHUIZEN
ACTING DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 17 JANUARY 2023

Copies to: (1) Ms. C. Muller / Ms. M. Penwarden (Chand Environmental Consultants cc) Email: Claudette@chand.co.za / info@chand.co.za
(2) Ms. S. Warnich-Stemmet (City of Cape Town: ERM) Email: sonja.warnichstemmet@capetown.gov.za

ANNEXURE 1: LOCALITY MAP

The subject property is demarcated in red below.



ANNEXURE 2: SITE PLAN

Site plan for the proposed development.



ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, inter alia, the following:

- a) The information contained in the application form dated and received by the competent authority on 17 June 2022, the BAR dated and received by the competent authority on 09 September 2022, the EMPr (dated September 2022) submitted together with the BAR and the additional information received by the Competent Authority on 11 January 2023;
- b) Relevant information contained in the Departmental information base, including, the Guidelines on Public Participation, Alternatives and Exemptions (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the NEMA;
- d) The comments received from I&APs and responses to these, included in the BAR dated 09 September 2022;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) No site visits were conducted. The competent authority had sufficient information before it to make an informed decision.

All information presented to the competent authority was taken into account in the consideration of the application for environmental authorisation. A summary of the issues which, according to the competent authority, were the most significant reasons for the decision, is set out below.

1. Public Participation

A public participation process ("PPP") was undertaken for the application process and entailed the following:

- Identification of and engagement with I&APs;
- Fixing a notice board at the site where the listed activity is to be undertaken on 27 January 2022 and 22 June 2022;
- Giving written notice to the occupiers of land adjacent to the site where the listed activity is to be undertaken, the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activity on 26 January 2022 (1st Public Participation Period) and 22 June 2022 (2nd Public Participation Period);
- The placing of a newspaper advertisement in the "Tygerburger" on 26 January 2022 and 22 June 2022 and "Die Burger" on 26 January 2022;
- The draft BAR and updated draft BAR documents were available on the EAP's company website www.chand.co.za for review.
- Making the draft BAR and updated draft BAR available to I&APs for comment from 26 January 2022 to 25 February 2022 and 23 June 2022 to 22 July 2022;

All of the concerns raised by I&APs were responded to and adequately addressed during the public participation process. This Department is satisfied that the PPP that was followed met the minimum legal requirements and all the comments raised and responses thereto were included in the comments and responses report. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

2. Alternatives

No site alternatives were identified and assessed. No technology alternatives were identified and assessed. Two operational alternatives and the "No-Go" alternative were identified and assessed as follows:

Operational Alternative 1

This alternative would only allow for the capping of the site, with the exception of the retention pond area and associated buffer area. This is estimated at 95,000 m². No development will occur on the site.

Operational Alternative 1 was not deemed the preferred alternative from a financial perspective as the proposed site would remain as an open space within an industrial area.

Operational Alternative 2 (the Preferred Alternative - herewith authorised):

The Preferred Alternative entails the capping of an existing asbestos waste site and development of a light industrial park and associated infrastructure on Erf 18354, Brackenfell.

The development footprint of the area to be capped will be approximately 95 000m² in extent.

Different capping strategies for different areas of the site will be implemented. In sections where no infrastructure (i.e. green areas) will be required, the capping layer would be more robust, while areas with infrastructure (i.e. roads and buildings) would have a thinner capping layer since the layerworks for the infrastructure required would provide an additional capping layer. Furthermore, the proposed capping and development would result in minimal excavation, with compaction and importing of fill material to realise the levels required.

Green Areas:

Existing indigenous vegetation will be cleared and the proposed capping layerworks will be constructed directly onto the compacted in-situ material. The capping layer will comprise of the following:

- A cement stabilized layer to a thickness of approximately 300mm;
- A graded crushed stone layer to a thickness of approximately 150mm;
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- A loosely placed layer of topsoil to a thickness of approximately 200mm.

Roads:

The proposed road layerworks for the main access roads (i.e. asphalt finish) will include the following layers:

- Approximately 40 mm Premix;
- Approximately 150 mm G4;
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- Approximately 150 mm Lower Selected.

An area of approximately 135m² will be excavated for levelling purposes in order to limit excavation into the asbestos as much as possible.

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- Approximately 70mm Paver on 20mm sand bedding;
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Where the brick paving levels are close to the existing ground and excavation is required, the crushed stone layer of the abovementioned layerworks would be placed underneath the bricking paving layerworks.

Building Platforms:

The proposed building platform areas can be categorised into the following three capping scenarios:

- A. Final at, or just below the existing level (maximum excavation into the asbestos would be required here);
- B. Final level between 0mm and 700mm above existing level (intermediate excavation into the asbestos would be required here); and
- C. Final level more than 700mm above existing level (no excavation into the asbestos would be required here).

Each scenario would entail varying degrees of excavation into the existing ground, from 700mm excavation to no excavation into the existing ground. Excavation of 700mm into the existing ground would require capping with no additional fill (scenario A above), while the scenario with no excavation would not require capping layerworks and only bulk earthworks (scenario C above). The area where maximum excavation is required for building platforms would be limited to 25m².

Services:

The proposed services would largely be located within the proposed earthworks and/or capping layers as described above.

The services would be located within roads or parking areas, or traverse across areas where no bulk earthworks would need to occur. It is in areas such as those where no bulk earthworks would be necessary (i.e. the green/landscaped areas) that the proposed services would be deeper than the proposed capping layers, so that excavation into the existing ground and asbestos would be required.

Trenches for services would, as far as possible, not be excavated into the asbestos, but rather into the new, imported fill and road layerworks, to limit disturbance of asbestos on site. However, there would be certain instances where excavation into the ground would be necessary.

The existing stormwater pond will be extended. The extension will result in excavation into the existing pond embankment. Armorflex grass blocks would line the bottom and side slopes of the pond. A vegetated buffer (i.e. a green area) would be provided around the pond and would be capped as per the "Green Areas" described above. The extended stormwater pond and associated buffer area will be approximately 14 250m² in extent.

Due to mole activity on the site, a rodent barrier will be installed along the entire perimeter of the site. This would entail the excavation of a 1m deep trench that would be lined with a geomembrane and backfilled with a cement stabilised material. The geomembrane would continue across the top of the trench and be placed against the property boundary.

Access

Access to the site will be gained from Virgo Close, off Gemini Road in Brackenfell Industria.

Proposed Road Upgrades

An additional right-turn lane at the Okavango Road/Old Paarl Road intersection will be developed. The northern approach will be widened to provide a new northbound acceleration lane along Okavango Road for the eastbound left-turn slip. A 2 m wide sidewalk will be provided along Old Paarl Road. The road upgrades are not listed in terms of the NEMA EIA Regulations, 2014 (as amended) and are required from a traffic impact perspective.

The preferred alternative (Operational Alternative 2) is preferred over Operational Alternative 1 as merely capping the site without further development would not be economically viable and, given that hard capping is required to prevent extrusion of asbestos, the site would have to have a hard

covering, which would not be aesthetically pleasing, or aligned with the socio-economic spatial planning intentions for the area.

"No-Go" Alternative

The "No-Go" alternative would result in maintaining the "status quo" of the existing property in its current state, which could result in further disturbance and subsequent erosion through mole activity. In addition, it is not legally acceptable in terms of the Asbestos Regulations, 2001, which require that asbestos and risk of exposure to asbestos be effectively managed and controlled. Therefore, the "No-Go" alternative is not a feasible alternative for implementation, based on the potential future risk to human health, as well as non-compliance with the Asbestos Regulations, 2001. Therefore, since the Preferred Alternative will not result in unacceptable environmental impacts, the "No-Go" alternative was not warranted.

3. Impact Assessment and Mitigation measures

3.1. Activity Need and Desirability

The proposed site falls within an existing industrial area and is surrounded by industrial development on all sides. The proposed development is in line with the objectives of the Cape Town Spatial Development Framework, 2017, in that it would create employment-generating activities along the accessibility grid, contributing to the strategy of improved access to economic opportunities. Further to an increase in job opportunities and economic development, the proposed redevelopment would result in the removal of alien species and the preservation of endangered natural vegetation (provided appropriate mitigation is followed). In addition, the decommissioning of the site prior to redevelopment would ensure that risks of exposure to asbestos are considerably reduced in comparison to the current situation.

Subdivision and Site Development Plan applications will be submitted to the City of Cape Town in line with the proposed development of the Industrial Park. The zoning is currently Industrial, which is the proposed end-use.

There are a number of major mobility routes in close proximity to the site (Kruisfontein Road, Old Paarl Road, Okavango Road and the N1) in addition to a railway system with links to Bellville, the Cape Town CBD and Paarl/Wellington. As such, the proposed development would promote economic growth at an accessible location. In addition, a diverse range of neighborhoods occur in the nearby vicinity (Northpine, Scottsdale, Protea Village, Ruwari and Protea Hoogte), which would promote the objective of integrated urban areas whereby employment can be pursued within close proximity to homes.

Given that the proposed closure and redevelopment would be located in an industrial area and would serve to eliminate the risk of asbestos spread, it is not believed that it would have an impact on the 'sense of place' and it would not be setting a precedent given that there are a number of similar developments already in the area. The proposed decommissioning would result in a healthier environment for occupiers of the site and surrounds, by reducing the potential for exposure to asbestos wastes. This promotes the right of access to an environment that is not harmful to health and well-being as captured in Section 24(1)(a) of The Constitution.

3.2. Groundwater impacts

A Hydrogeological Assessment conducted by Parsons and Associates and dated May 2015, was undertaken in response to the Department of Water and Sanitation (DWS) requesting additional hydrogeological information, in support of a Basic Assessment submitted by Chand Environmental Consultants to the Department of Environmental Affairs (DEA).

Detailed hydrogeological investigations into groundwater contamination resulting from historic activities at the Everite site were conducted between 1998 and 2005. Groundwater contamination was detected and the extent thereof delineated, but it was not possible to

distinguish the contamination emanating from the Everite asbestos waste site. No groundwater users had been impacted by the contamination from the Everite site in general, and the Everite asbestos waste site in particular.

Monitored natural attenuation remained the preferred method of remediating the detected impacts. It was recommended that 3 monitoring boreholes be re-established at the asbestos waste site and quarterly sampling be undertaken for 2 years to define seasonal variation. Thereafter, the need for further monitoring could be re-assessed in light of observations to that point.

An updated Hydrogeological statement compiled by Parsons and Associates, dated 05 September 2022, was undertaken to confirm whether the findings presented in the previous assessment dated May 2015, remains applicable.

The specialist indicated that there have been no development activities on the site since the initial assessment that was done in 2015, apart from periodic alien vegetation clearing and instances of illegal dumping. The proposal to develop the site remains the same as that considered during the 2015 assessment.

The specialist has noted that the 2015 assessment was based on groundwater data collected between 1998 and 2005. Information on groundwater use in the area is now more than 20 years old and the absence of any groundwater monitoring in that time prevents any new understanding of the subsurface migration and / or attenuation of any contaminants, as well as the effectiveness of a monitored natural attenuation strategy.

While the specialist's recommendation that 3 monitoring boreholes be re-established at the asbestos waste site and quarterly sampling be undertaken for 2 years to define seasonal variation remains valid, the absence of recent hydrocensus data is not regarded as a limitation. There has been little new development north and west of the waste site, and groundwater movement has been determined to be in a westward direction. The plume had not extended northwards to the residential area where boreholes may have been established, particularly during the drought of 2016 – 2018. Such boreholes would be used for non-potable purposes and the contaminants of concern (asbestos, salinity, potassium and sulphate) are of low risk.

It is the specialist's opinion that monitored natural attenuation remains the preferred method of remediating the detected impacts. The recommended monitoring is needed to support this. It is also the specialist's opinion that the 2015 report remains valid and applicable and can be used in support of the Basic Assessment.

3.3. Botanical Impacts

A Botanical Screening Report compiled by Ross C. Turner, and dated June 2012, was undertaken to perform a botanical screening survey of the old Everite asbestos waste consolidation site.

According to the specialist, the majority of the site currently consists of sterile landfill infested primarily with *Acacia saligna*. The only original, intact, quartzitic surface sand on the site occurs in the north-eastern corner and in a small adjacent strip along the north-eastern boundary. The extreme north-eastern corner of the site contains the only indigenous vegetation remnant, albeit composed of only five species. One of these five plant species is classified as Endangered (EN) on the Red List of South African Plants (Raimondo et al., 2009), namely *Lampranthus explanatus* (Mesembryanthemaceae). A further three indigenous plant species occur in the vicinity outside of the north-eastern corner of the site.

With respect to fauna found on the site, indigenous and alien birds, as well as the Cape dune molerat was identified on site in 2012, especially in the north-western portion of the site in the vicinity of the stormwater pond. The specialist noted that such corridors or "islands" of vegetation can provide important ecosystem services for especially birds, given the pace of habitat destruction in the SW Cape lowlands, as well as climate change which impacts bird migrations.

An updated botanical statement compiled by Ross C. Turner, dated 30 May 2022, verified and confirmed the relevance of the botanical study undertaken in 2012.

The specialist indicated that after on-site discussion with consultants responsible for monitoring asbestos discharge from the site, it was apparent that the northern portion of the site containing *Lampranthus explanatus* was also underlain by asbestos waste. The specialist recommended that all specimens of *Lampranthus explanatus* on site should be relocated to Cape Flats Sand Fynbos ("CFSF") vegetation portions of the Bracken Nature Reserve, Brackenfell, and/or to a horticultural facility such as Kirstenbosch National Botanical Gardens. Seed capsules can also be collected for cultivation from seed; and cuttings can also be made. Plant relocation should be performed by qualified personnel, taking necessary health precautions into consideration while on site. These mitigation measures have been included in the EMPr which must be implemented in accordance with the conditions of this Environmental Authorisation.

Ecological connectivity with the few remaining indigenous vegetation remnants, such as the nearby Bracken Nature Reserve, has been entirely lost due to ongoing suburban and light-industrial development in Brackenfell. Currently, despite at least two rounds of extensive alien-clearing between 2005 and 2022, the site is heavily infested with alien vegetation.

Furthermore, given the toxic / hazardous nature of the site, it should be remembered that asbestos is also harmful to other organisms such as birds, moles, snakes, etc., and that the site, in its current condition, is suitable for conservation of neither flora, fauna, nor avifauna.

Regarding a general comparison of the site in 2022 with the site as it was in 2012, it appears as though illegal dumping has increased in amount since 2012. It also appears as though human utilization of the site for both illegal and innocent purposes, has increased. The terracing and drainage structures (composed of cement, brick and tyres) are notably degraded.

The specialist concluded that mitigation of botanical impacts on this site does not include the option of conservation, due to the toxicity and transformed nature of the site. A contiguous CFSF plant community ceased to exist at the site many decades ago, although a handful of post-disturbance / successional species have managed to thus far persist, albeit under increasingly degraded conditions.

3.4. Freshwater Impacts

A Freshwater Assessment compiled by Blue Science, dated June 2012, determined that there is a large artificial pond in the north-western corner of the site which was previously constructed to manage stormwater runoff from the site. Numerous drains have been constructed on the elevated portion of the site to channel stormwater into this pond and there is a small drainage channel along the outer edge of the northern and eastern portion of the property. The stormwater pond is overgrown with bulrush (*Typha capensis*) and while it has little significance in terms of biodiversity, it does play an important role in stormwater management on the site.

The wetland/storm water pond has no real significance in terms of biodiversity as it is an overgrown mono stand of bulrush. It does however provide some habitat for birdlife, but more importantly, it performs an important function in mitigating storm water on the site. It should preferably remain intact (with a small buffer area of 15 m from the delineated edge surrounding it) and be cleared of alien vegetation.

As the pond is located at the lowest point on the site, it could continue to serve as mitigation measure for storm water from the proposed development, as per the City of Cape Town's storm water policy. Should the pond need to be relocated, one of similar size should be created elsewhere on the site.

The impact of the preferred alternative for the proposed development on freshwater/ surface water would be limited, with the implementation of mitigation measures. Cumulative impacts would relate to change in quality and quantity (flow patterns) of stormwater, but implementation of mitigation measures would limit significant change in stormwater characteristics leaving the site.

The specialist indicated in her correspondence dated 09 September 2022, that the aquatic ecological assessment undertaken of the site in the original assessment (June 2012) remains unchanged. The site has remained vacant and the only aquatic feature present on the site is the stormwater-related pond in the north-western corner of the site. This wetland is reflected in the City of Cape Town Wetland map as a stormwater pond and is not included in the National Wetland Map 5 or the Freshwater Ecosystem Priority Areas Wetland mapping. This was confirmed by the Department of Water and Sanitation in their correspondence dated 08 May 2013 and 18 July 2022.

The indicated significance of the potential aquatic ecosystem impact for the proposed development of the site remains Low negative and the proposed mitigation measures, which have been included in the EMP accepted in terms of Condition 9 of this Environmental Authorisation, remain unchanged.

3.5. Heritage Impacts

A Notice of Intent to Develop was submitted to Heritage Western Cape in May 2012. Heritage Western Cape indicated in their correspondence dated 06 June 2012, that there is no reason to believe that the proposed development will impact on heritage resources, and that no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is therefore required.

An electronic mail correspondence from Heritage Western Cape dated 06 September 2022, reaffirms the previous comments issued on 06 June 2012, and indicates that no further studies are required.

3.6. Health Impacts

An Asbestos Risk Assessment (compiled by Occupational Hygiene Monitoring Services (Pty) Ltd ("OHMS"), dated 19 October 2020) was undertaken to quantify the potential risks of asbestos exposure related to the current site condition and mole activity at the site since capping, and to recommend rehabilitation measures to mitigate potential risks that may be identified.

The Asbestos Risk Assessment was carried out at the Everite site located in Brackenfell, Cape Town on 01, 03, 08 and 10 September 2020. The assessment consisted of a visual examination of the site and taking of bulk samples of asbestos in soil over the entire area of the site, and air samples at 10 points on the high point location of the site. The assessment was carried out following the "*Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated sites, in Western Australia 2009*".

From specialist observations, the sandy areas revealed large quantities of asbestos debris, due to mole activity. The areas where most asbestos debris were observed, are located in the high lying area to the South of the site, with some asbestos debris also observed in the central area of the property. These areas are not compacted soil, but generally loose soil. Other areas of the property are compacted with a type of hardcore backfill, with clay deposits being visible. The property is generally covered with grass and Port Jackson bushes that serves to encapsulate any asbestos that may become airborne at this moment in time. The asbestos observed is in the form of a conglomerate of loosely bound asbestos debris. There are also numerous amounts of asbestos chip (debris from asbestos items e.g., roof sheets, gutters and rainwater pipes etc.).

Friable asbestos was visible on the site during the specialist assessment. A total of 80 bulk samples and 10 asbestos "in air" samples were taken. Numerous bulk samples tested positive for asbestos, however, all the air samples were found to be negative for asbestos.

The specialist's mitigation measures have been included in the EMP to be implemented.

3.7. Traffic Impact

A Traffic Impact Assessment, dated July 2021, was compiled by Innovative Transport Solutions to assess the impacts that the proposed development will have on traffic in the area.

The assessment summarises the existing transport conditions within the site vicinity and provides an assessment of the transport impact of the proposed development on the surrounding road network. It resulted in the following conclusions and recommendations:

Existing Traffic: All the study intersections currently operate at an acceptable LOS, except the Old Paarl Road/Orion Street intersection. The congestion at this intersection is due to rat-run traffic avoiding congestion elsewhere on the network and no upgrades are recommended at this intersection. Motorists do have the opportunity to access Old Paarl Road via the signalised Kruisfontein Road intersection.

Background Traffic: All the study intersections will continue to operate at an acceptable LOS, except the Old Paarl Road/Okavango Road intersection. It is recommended that an additional right-turn lane be provided westbound along Old Paarl Road and the northern approach should be widened to provide a new northbound acceleration lane along Okavango Road for the eastbound left-turn slip lane.

Development Trips: It is expected that the development will generate approximately 346 trips during the a.m. peak hour and p.m. peak hours.

Total Traffic: Based on the capacity analyses, all the study intersections will operate at an acceptable LOS during the weekday peak hours with the proposed development completed. The Old Paarl Road/Orion Street intersection will operate at a LOS=F, but as discussed for the existing and background conditions, no upgrades are recommended at this intersection. Motorists have the opportunity to access Old Paarl Road via the signalised Kruisfontein Road intersection.

Access: Access is proposed via the existing Leo Close off Gemini Street.

Non-Motorised Transport and Public Transport: The existing facilities in the site vicinity is sufficient. No additional facilities are recommended.

Parking: Parking should be provided in accordance with the latest City of Cape Town zoning scheme requirements. The specific parking requirements for each erf will be confirmed during SDP applications stage.

Based on the above investigation, it is evident that the proposed development can be accommodated with the mitigation measures implemented as proposed.

3.8. Geotechnical Impacts

A Geotechnical Investigation (compiled by Morris Environmental & Groundwater Alliances ("MEGA"), dated 01 September 2010 and 04 December 2011) was undertaken. In 2010, as part of the preliminary investigations, eight (8) options for possible use of the site were identified with the option of hard surfacing and light industrial type units receiving favour. It was recommended at the time to Group 5 (the then client) that a detailed geotechnical assessment of the founding conditions was required, as well as an investigation of safety and health issues around the nature

and extent of the buried asbestos wastes. This work was done and reported in the 2011 document noted above.

Morris *et al* (2011) confirmed that the previous capping on the site had been compromised by mole activity and that the site hosts much alien vegetation. They also noted that there were no unacceptable airborne exposure risks at the time, which has been corroborated by OHMS (2021). Development of light industrial facilities on the site would be possible, but the site would require re-engineering for development and there would be some long-term annual maintenance and management required for the site (Morris *et al*, 2011). The re-engineering and re-development would require an EIA process and input from civil engineers, asbestos specialists, and town planners in order to execute it in terms of applicable law.

Most of the Lower Platform 1 area, including the adjacent (north side) slopes comprise asbestos wastes (Morris *et al*, 2011). The Lower Platform 2 area is mostly clean, other than some spill-over and minor surface contamination along the toe of the slopes up to the Platform 1 area (Morris *et al*, 2011). The site is generally underlain by fill and waste deposits overlying in situ subsoil deposits of Quaternary Age. The above is underlain by residual soils that grade with depth into weathered granite bedrock of the Cape Granite Suite.

Alternative 1 is not preferable from a geotechnical perspective as mole activity would continue and asbestos would be brought to the surface again eventually, and the vegetation on site could be a fire hazard from time to time which may also lead to further asbestos exposure risks (Morris *et al*, 2011).

The specialist was requested by the EAP whether the reports from 2010 and 2011 were still relevant. In response, the specialist indicated in their correspondence dated 30 August 2022, that based on their visual inspection conducted on 29 August 2022, they were comfortable that the findings of the previous investigations undertaken and reported by MEGA and partners are relevant and still applicable to the site. No material changes to the site layout and topography were noted.

In summary, it was concluded that the founding conditions over parts of the waste dump areas – both upper and lower platform areas, are highly compromised to depths >4 m. The possibility of differential settlement across the entire site is high. The potential for liquefaction of parts of the wet sludge wastes exists. Only light weight structures were considered suitable for parts of the site.

In considering what is being proposed for re-development of the site, the specialist is concerned that the highly compromised nature of the founding conditions across this site are not suitable for the types of structures being proposed. The specialist indicates that from what has been seen in the Everite Project Description it is not consistent with what was envisaged and proposed in 2011.

In response to the specialist's concerns around poor founding conditions in certain areas, the EAP has indicated that a structural engineer was approached to comment on the feasibility of developing the structures proposed. A letter from Mr. Kleynhans (Ekcon Engineers) dated 08 September 2022, confirms that should the site be capped as proposed and with good engineering, that the required foundations could be designed to support the buildings across all areas of the site.

3.9. Noise and Dust Impacts

Potential noise and dust impacts are anticipated during the decommissioning of the asbestos waste site and construction phase of the proposed development. The potential noise and dust impacts are anticipated to be low negative with mitigation. Mitigation measures to reduce the potential noise and dust impacts have been included in the EMP.

3.10. Services

The City of Cape Town (Department of Technical Services) in the correspondence dated 02 December 2020, have confirmed the following:

Sewer Reticulation

There is an existing 160 mm Ø sewer main in Taurus Road. The development on the erf will drain in a north western direction towards the sewer main in Taurus Road. The sewer network downstream has sufficient relative spare capacity to convey the proposed flow to the Wastewater Treatment Plant.

Waste Water Treatment

The sewer network falls within the catchment of the Bellville Wastewater Treatment Works, the ADWF sewerage contribution of 79 kl/day can be accommodated. There is sufficient capacity at the WWTW to accept the effluent from this development.

Bulk Water

The City of Cape town's bulk supply system has sufficient water resource, treatment, bulk storage and conveyance capacity to supply the estimated annual average daily demand of 113 kl/day proposed development.

Water Reticulation

There is an existing water network around the erf. There is a 150 mm Ø water main located in Leo Close to which the developer could connect. The water main has sufficient velocity and pressure currently to service the development. The water network has sufficient capacity to supply the proposed development with 1.6/s estimated water demand.

The City of Cape Town (Solid Waste Management: Collections Department) in their correspondence dated 26 August 2020, indicated that they have no objection to the proposed development. The City of Cape Town (Energy Directorate) in their correspondence dated 17 December 2019, indicated that the City's electricity supply network in the area has sufficient capacity to cater for the requirements of the proposed development.

The development will result in both negative and positive impacts.

Negative Impacts include:

- Risks associated with the potential excavation of asbestos during the capping and redevelopment process;
- Potential traffic impacts during decommissioning and construction phases of the development; and
- Potential construction related impacts in terms of dust and noise impacts.

Positive impacts include:

- The proposed development will provide light industrial development within close proximity to public transport and promote economic growth within the area;
- The proposed decommissioning of the existing asbestos waste site will eliminate the risk of asbestos spread and potential harm to human and animal health; and
- The creation of employment opportunities.

4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), inter alia, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activity will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activity can be mitigated to acceptable levels.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: *“Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.”*

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