

ENVIRONMENTAL AUTHORISATION FOR THE ROPOSED READY MIX BATCH PLANT ON ERF 4886, MACASSAR, WESTERN CAPE

DRAFT BASIC ASSESMENT REPORT

EIA REFERENCE NUMBER: 16/3/3/1/A3/39/2019/21

OCTOBER 2021

COMPILED BY:
Victor Manavhela
Biogeotech Environmental Services (Pty,Ltd)
01 Goldengroove
Cnr Oosthuizen and Leiphodt
Germiston
1401
Cell: 072 130 2932
E-mail: info@biogeotech.co.za / VManavhela@biogeotech.co.za



BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

OCTOBER 2021

(For official use only)	
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	16/3/3/1/A3/39/2019/21
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

GENERAL PROJECT DESCRIPTION

(This must Include an overview of the project including the Farm name/Portion/Erf number)

Afrimat Readymix proposes to erect a mobile batching plant on erf 4886, Macassar for commercial use to service the Khayelitsha, Strand and Somerset West area. A total of 9ha is being is needed for the yard, and thus only a portion of the entire erf measuring 90 632.13m² will be utilised for this development. The site is located next to the Zandvliet Waste Water Treatment Works, East of the R310 (Baden Powell Drive) and opposite Sandvlei Smallholdings, situated in the City of Cape Town Municipal area.

The yard will consist of 2x 100ton silos on foundation, one karoo batching plant, two 6X2 mobile containers, a water scale, admix scale, loader ramp and one loader on site. An existing gravel road of approximately 6m wide runs adjacent to the site and will be utilised as an access road, the road currently provides access to the existing sand mine to the south of the proposed development.

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
3. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
4. All applicable sections of this BAR must be completed.
5. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
6. This BAR is current as of **November 2019**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at <http://www.westerncape.gov.za/eadp> to check for the latest version of this BAR.
7. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
8. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
9. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.
10. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
11. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
12. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
13. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link <https://screening.environment.gov.za/screeningtool> to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

14. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for- Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS

<p align="center">CAPE TOWN OFFICE: REGION 1 and REGION 2</p> <p>(Region 1: City of Cape Town, West Coast District) (Region 2: Cape Winelands District & Overberg District)</p>	<p align="center">GEORGE OFFICE: REGION 3</p> <p align="center">(Central Karoo District & Garden Route District)</p>
<p>BAR must be sent to the following details:</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1 or 2) Private Bag X 9086 Cape Town, 8000</p> <p>Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town</p> <p>Queries should be directed to the Directorate: Development Management (Region 1 and 2) at: Tel: (021) 483-5829 Fax (021) 483-4372</p>	<p>BAR must be sent to the following details:</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530</p> <p>Registry Office 4th Floor, York Park Building 93 York Street George</p> <p>Queries should be directed to the Directorate: Development Management (Region 3) at: Tel: (044) 805-8600 Fax (044) 805 8650</p>

MAPS

<p>Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.</p>	
<p>Locality Map:</p>	<p>The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map.</p> <p>The map must indicate the following:</p> <ul style="list-style-type: none"> • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; and • a linear scale. <p>For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.</p> <p>Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.</p>

Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	<p>Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:</p> <ul style="list-style-type: none"> • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. • The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development must be clearly indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ul style="list-style-type: none"> o Watercourses / Rivers / Wetlands o Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable); o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"); o Ridges; o Cultural and historical features/landscapes; o Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow <p>A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.</p>
Site photographs	<p>Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as Appendix C. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.</p>
Biodiversity Overlay Map:	<p>A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as Appendix D.</p>
Linear activities or development and multiple properties	<p>GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system.</p> <p>Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix.</p> <p>For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as Appendix A3.</p>

ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference

WCBSB:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a ✓ (tick) or a x (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			✓ (Tick) or x (cross)
Appendix A:	Maps		
	Appendix A1:	Locality Map	✓
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	N/A
	Appendix A3:	Map with the GPS co-ordinates for linear activities	N/A
Appendix B:	Appendix B1:	Site development plan(s)	✓
	Appendix B2	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;	✓
Appendix C:	Photographs		✓
Appendix D:	Biodiversity overlay map		✓
Appendix E:	Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.		
	Appendix E1:	Final comment/ROD from HWC	Pending
	Appendix E2:	Copy of comment from Cape Nature	Pending
	Appendix E3:	Final Comment from the DWS	Pending
	Appendix E4:	Comment from the DEA: Oceans and Coast	Pending
	Appendix E5:	Comment from the DAFF	Pending
	Appendix E6:	Comment from WCG: Transport and Public Works	Pending
	Appendix E7:	Comment from WCG: DoA	Pending
	Appendix E8:	Comment from WCG: DHS	Pending

	Appendix E9:	Comment from WCG: DoH	Pending
	Appendix E10:	Comment from DEA&DP: Pollution Management	Pending
	Appendix E11:	Comment from DEA&DP: Waste Management	Pending
	Appendix E12:	Comment from DEA&DP: Biodiversity	Pending
	Appendix E13:	Comment from DEA&DP: Air Quality	Pending
	Appendix E14:	Comment from DEA&DP: Coastal Management	Pending
	Appendix E15:	Comment from the local authority	Pending
	Appendix E16:	Confirmation of all services (water, electricity, sewage, solid waste management)	Pending
	Appendix E17:	Comment from the District Municipality	Pending
	Appendix E18:	Copy of an exemption notice	N/A
	Appendix E19	Pre-approval for the reclamation of land	N/A
	Appendix E20:	Proof of agreement/TOR of the specialist studies conducted.	✓
	Appendix E21:	Proof of land use rights	✓
	Appendix E22:	Proof of public participation agreement for linear activities	N/A
Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.		Pending
Appendix G:	Specialist Report(s) G1: Biodiversity report G2: Heritage specialist report		✓
Appendix H:	EMPr		✓
Appendix I:	Screening tool report		✓
Appendix J:	The impact and risk assessment for each alternative		✓
Appendix K:	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline		✓
Appendix M	Site Sensitivity Verification Report		✓

Appendix.....	Any other attachments must be included as subsequent appendices	
---------------	---	--

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE:		GEORGE OFFICE:
	REGION 1 (City of Cape Town, West Coast District)	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Garden Route District)
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent: Name of contact person for Applicant/Proponent (if other): Company/ Trading name/State Department/Organ of State: Company Registration Number: Postal address: Telephone: E-mail:	Afrimat Readymix (Cape) Pty Ltd		
	Mr Pieter Grove		
	Afrimat Readymix (Cape) Pty Ltd		
	1983/000088/07		
	Tyger Valley Office Park No.2, Cnr Willie van Schoor & Old Oak Road, Bellville		
			Postal code: 7530
	(021) 917 8840		Cell: 066 489 5950
	pieter.grove@afriam.co.za		Fax: (021) 914 1174
	Company of EAP: Biogeotech Environmental Services EAP name: Mr Victor Manavhela Postal address: 04 Jasmyn street, Klopper park Germiston Telephone: Cell: 072 130 2832 E-mail: info@biogeotech.co.za Fax: () Qualifications: Masters Degree in Environmental Management EAPASA registration no:		
	Company of EAP: EAP name: Postal address: Telephone: E-mail: Qualifications: EAPASA registration no:		
Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall: Contact person: Postal address: Telephone: E-mail:	City of Cape Town		
	Michele Wansbury		
	P.O. Box 655		
	Cape Town		Postal code: 8000
	(021) 444 4630		Cell:
	Michele.wansbury@capetown.co.za		Fax: ()

SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INCLUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	New	<input checked="" type="checkbox"/>	Expansion	
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				
No					
3.	For Linear activities or developments				
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:				
N/A					
3.2.	Development footprint of the proposed development for all alternatives.				m ²
N/A					
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.				
N/A					
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.				
N/A					
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives				
3.6.	Starting point co-ordinates for all alternatives				
	Latitude (S)	°	'	“	
	Longitude (E)	°	'	“	
	Middle point co-ordinates for all alternatives				
	Latitude (S)	°	'	“	
	Longitude (E)	°	'	“	
	End point co-ordinates for all alternatives				
	Latitude (S)	°	'	“	
	Longitude (E)	°	'	“	
Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.					
4.	Other developments				
4.1.	Property size(s) of all proposed site(s):			90632.13	m ²
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):			9ha	m ²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives: 90000				m ²
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).				
<p>Erf 4886 Macassar is an underdeveloped and previously mined property located directly on the Macassar Road (M9), 830m east of Baden Powell Drive (R310), and directly east of the Zandvliet Waste Water Treatment Works and opposite Sandvlei Smallholdings. The property is currently owned by Propateez 66 Pty Ltd, a subsidiary of Afrimat Limited.</p> <p>The proposed Readymix Batching Plant development will consist of a wash bay, water recycling pit and ponds, pre-fabricated access control, control rooms / office and staff belt, cement and fly-ash silo and aggregate scale. Jojo tanks for water storage, and readymix bilo amenities, a ready</p>					

mix loading area, load hood, a mobile batching plant consisting of a hopper, conveyor, aggregate storage silos and a dry out area silo. It is noted that the majority of the infrastructure is mobile / temporary.

The following measures will be practiced on site to eliminate / reduce any negative environmental impacts resulting from the construction and operation of the Readymix Batching Plant:

- Wash water from trucks and machinery will be diverted to a material wash-out and dry-out bunker with appropriate drainage and water recycling.
- Recycled water will be reused on site (dust suppression if necessary), and dried out material (gravels and fines) will be transported to Afrimat quarries to be mixed with gravel and stone.
- A closed water management system will thus be implemented on site, preventing any processed concrete or contaminated water from leaving the site.
- All wet or spillage areas are to be concrete surfaced and sloped to manage run-off at a point for settlement and recycling.
- Dalmatic Dust Collectors (i.e. dedicated filtration / extraction units) are fitted to each silo. Sprinklers will be mounted on the bin walls and hopper. Recycled water will be utilised for dust suppression during windy periods.
- Waste will be collected and stored on site until it is removed by a licensed waste removal service. Hazardous waste will be stored separately on site and removed by a licensed waste removal service and disposed of at licensed hazardous landfill site. All waste on site should first be reduced, recovered/reused or recycled before going to landfill.

The establishment and operation of the temporary batching plant may have the following negative environmental impacts:

- Ground and Surface water contamination
- Spillages – cement and hydrocarbon
- Contaminated run-off water
- Dust
- Noise
- Waste

4.5. Indicate how access to the proposed site(s) will be obtained for all alternatives.

Access to the site will be gained using an existing road, the applicant has no plans to construct a new road.

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C	0	6	7	0	0	1	5	0	0	0	0	4	8	8	6	0	0	0	0	0
------	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.7.	Coordinates of the proposed site(s) for all alternatives:																				
	Latitude (S)							34°				03'				18.08"					
	Longitude (E)							18°				43'				25.63"					

SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO X
---	-----	-------------

2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	YES	NO X
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	YES	NO X
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO X
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	NO X
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO X
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO X
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO X
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	NO X

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.	
EIA Regulations: GNR 326 and 327 of 7 April 2017	
Occupational Health and Safety Act (No 85 of 1993)	
Section 42(1) of the MPBL-2015 (as amended 2019)	
City of Cape Town Municipal Planning By-Law (2015) (as amended 2019)	City of Cape Town and Western Cape Government Spatial and Land use planning by-laws and regulations are used as guidelines for the Consent Use application in terms of Section 42(i) of the Municipal Planning By-Law 2015 (as amended 2019), to allow for the establishment of the Readymix Batching Plant within the Agricultural (AG) zone of the Development Management Scheme.
Western Cape Land Use Planning Act, 2014 (LUPA)	
Western Cape Land Use Planning Regulations, 2015	
Spatial Planning and Land Use Management Act, 2013 (SPLUMA)	

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
N/A

5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.
BGIS (www.bgis.sanbi.org.za) - Used during desktop research to identify the sensitive environments within the proposed development area

Western Cape Biodiversity Spatial Plan Handbook 2017 – used to inform of the CBAs and ESAs in the area.

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

N/A

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
N/A		
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3	Describe the portion of the proposed development to which the applicable listed activity relates.
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.	Clearance of vegetation for the erection of a Readymix Batching plant
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	Clearance of indigenous vegetation for an area more than one hectare but less than 20 hectares as a total footprint
<p>Note:</p> <ul style="list-style-type: none"> The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted. Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority. 		

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Category A	Describe the portion of the proposed development to which the applicable listed activity relates.
N/A		

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant Listed Activity(ies)	Describe the portion of the proposed development to which the applicable listed activity relates.
N/A		

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1. Provide a description of the preferred alternative.

The current location was chosen due to the property being owned by Propateez 66 Pty Ltd a subsidiary of Afrimat Limited. The site has been previously mined to the east and therefore the decision to locate the Readymix Batching plant of 9ha on the remainder of the site. The area is relatively flat facilitating drainage in support of run-off recovering and recycling, therefore in favour of the Batching operation. A mobile batching plant will be utilised and fitted with dedicated filtration / extraction unit fitted to each silos to reduce any dust pollution.

The development will be located in an area already utilised for similar operations and is believed not to cause a significant increase in negative environmental impacts.

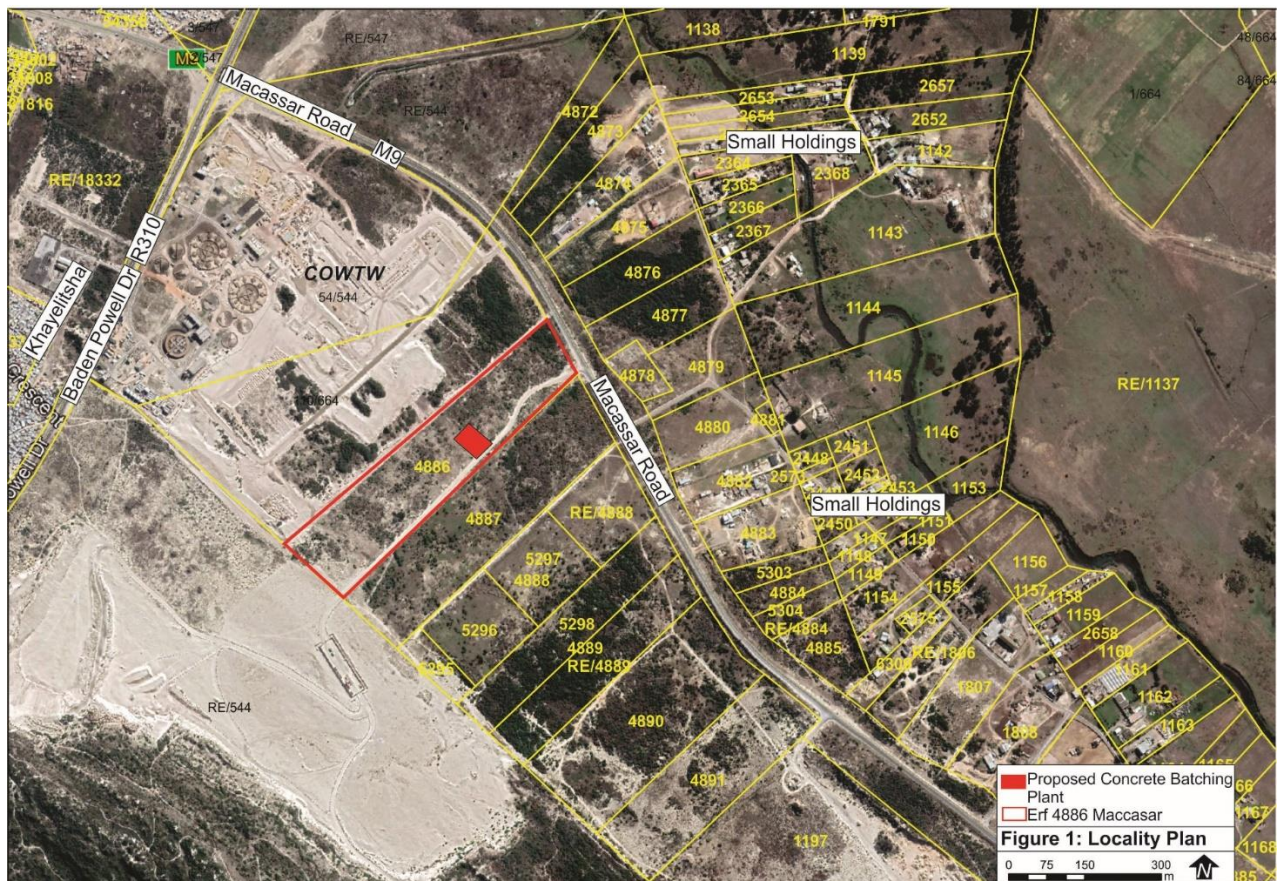
2. Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.

Erf 4886 Macassar is zoned Agricultural Zoning (AG), with "mining" as a consent use. Accordingly, the development of a concrete batching plant and its location within the major metropolitan sand mining area, deem such land use as an associated mining land use.

Surrounding zoning includes:

- Erven/ Farm 54/ 544 and 110/664: Utility
- Farm RE/ 544: Agricultural Zoning (AG)
- Erf 4887: Agricultural Zoning (AG)
- Erven 4875-4879: Rural Zoning (RU)

Erf 4886 Macassar is located outside the "urban footprint"



3. Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.

No conflict has developed.

4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.
	The location of the Readymix Batching Plant would assist with housing delivery in a development focused area such as Paardevlei and Macassar. Residents from the Khayelitsha area that are semi-skilled and unskilled will be employed at the operation.
4.2	The Integrated Development Plan of the local municipality.
	The necessity of, and demand for construction concrete (ready-mix concrete) by the construction industry for housing and its support infrastructure and land uses currently underway (e.g. Croyden, Faure, Macassar) and envisaged for the greater Khayelitsha, Faure, Paardevlei node is a given reality. The development of the concrete batching plant will bring along value-adding opportunities to the surrounding communities through job creation opportunities not only in readymix but with associated services. The development would thus aid in boosting employability and develop a skill based workforce for a growing area and economy. In turn, the social and economic status of the surrounding disadvantaged areas will enhance. This speaks to economic inclusion and provides for the introduction of urban growth and development in marginalised areas.
4.3.	The Spatial Development Framework of the local municipality.
	The Municipal Spatial Development Framework (MSDF) 2018 identifies and positions Erf 4886 in a Priority Conservation Action Area (broad) within the <i>“Spatial Transformation Area”</i> strategy of the MSDF (2018). The proposed development is located within a designated “Consolidation Area”, including either new development subject to capacity or being within the existing built footprint of the City or an approved land use right, and subject to a 20-year future land use scenario, TOD modelling and Medium Term Infrastructure Framework. While the proposed development falls within a Property Conservation Action Area (broad), the MSDF's Development Directive: Environment identifies exceptions in respect of the Biodiversity Network, stating: <i>“Macassar Dunes mining area: Given this site’s location between areas of need and the anticipated growth in government-subsidised housing opportunities in the broader area, the development of employment generating land uses would be supported”</i> .
4.4.	The Environmental Management Framework applicable to the area.
	SPLUMA, NEMA and the City of Cape Town's Environmental Strategy collectively provides for the basis to protect and enhance the city's biophysical and social and aesthetic assets to sustain the economy, create a liveable urban environment and build resilience. The Helderberg District Plan (2012): Sub-District 1 – Vergenoegd / Macassar Areas positions erf 4886 in a Priority Conservation Action Area in terms of the biodiversity network, and the Municipal SDF pits forward the broader environs of Erf 4886 as a Consolidated Area subject to new development subject to capacity (engineering services) and within the existing built footprint of the City and approved land use rights. The development directive for environment with regards to the biodiversity network in the City of Cape Town is that as a general guideline, where the protected areas have been accurately delineated to protect natural resources, development should not be considered. An exception is made for the Macassar Dunes Mining Area given the site's location between areas of need and the anticipated growth in government-subsidised housing opportunities in the broader area, the

	development of employment-generating land uses (such as the Readymix Batching Plant) would be supported.
5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
	Interested and affected parties and all stakeholders have been given the opportunity to comment and provide their views. The Public Participation Process is not yet complete, comments are anticipated once the Draft BAR (this report) has been circulated. The Draft BAR will be updated once the 30 day public review and comment period lapsed. Comments from the stakeholders will be incorporated into the Final BAR to be submitted.
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.
	<p>According to the WC Biodiversity Spatial Plan and map, the proposed development falls within the Ecological Support Area 2 (ESA2) which are defined in the plan as areas that are not essential for meeting biodiversity targets, but play an important role in supporting the functioning of PAs and CBAs. The desired management objective is to restore and/or manage to minimise impact on ecological infrastructure functioning; especially soil and water – related services.</p> <p>According to the Biodiversity Report prepared by Mark Berry Environmental Consultants, “No known Species of Conservation Concern occur on or in close proximity to the site. The site also forms part of a CBA corridor between the coastal strip and the Kuils River CBA to the north. The corridor is also severely degraded/eroded by sand mining activities, the presence of the Zandvliet WWTW and alien infestation.”</p> <p>The mitigation measures as suggested by Mark Berry Environmental Consultants, along with the desired management objective of the ESA 2 and the re-establishment of strandveld vegetation will be implemented on site.</p>
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
	The proposed development does not encroach on any of the relevant zones defined in the ICMA
8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.
	The screening report has not changed.
9.	Explain how the proposed development will optimise vacant land available within an urban area.
	<p>The Municipal Spatial Development Framework (MSDF) 2018 identifies and positions Erf 4886 in a Priority Conservation Action Area (broad) within the “<i>Spatial Transformation Area</i>” strategy of the MSDF (2018). The proposed development is located within a designated “Consolidation Area”, including either new development subject to capacity or being within the existing built footprint of the City or an approved land use right, and subject to a 20-year future land use scenario, TOD modelling and Medium Term Infrastructure Framework.</p> <p>While the proposed development falls within a Property Conservation Action Area (broad), the MSDF's Development Directive: Environment identifies exceptions in respect of the Biodiversity Network, stating: “<i>Macassar Dunes mining area: Given this site's location between areas of need and the anticipated growth in government-subsidised housing opportunities in the broader area, the development of employment generating land uses would be supported</i>”.</p>

10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
<p>Erf 4886 Macassar being undeveloped has no installed engineering services (including storm water management), except for the gravel access road (+-8,0m), with access off Macassar Road (M9). Such at-grade intersection enjoys both favourable horizontal and vertical alignments, its abutting terrain being flat and providing adequate east and west sight distances, and its location being 1km from the M9/ R310 intersection and 150m from the nearest Sandvlei Smallholding access road intersection.</p> <p>The Macassar water pipe-line is located north of the M9, with an underground power-supply cable +-10,0m north of the M9 centre-line.</p>	
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).
<p>Erf 4886 Macassar being undeveloped has no installed engineering services (including storm water management), except for the gravel access road (+-8,0m), with access off Macassar Road (M9). Such at-grade intersection enjoys both favourable horizontal and vertical alignments, its abutting terrain being flat and providing adequate east and west sight distances, and its location being 1km from the M9/ R310 intersection and 150m from the nearest Sandvlei Smallholding access road intersection</p> <p>The Macassar water pipe-line is located north of the M9, with an underground power-supply cable +-10,0m north of the M9 centre-line.</p>	
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.
<p>The necessity of, and demand for construction concrete (ready-mix concrete) by the construction industry for housing and its support infrastructure and land uses currently underway (e.g. Croyden, Faure, Macassar) and envisaged for the greater Khayelitsha, Faure, Paardevlei node is a given reality. This current temporary land use departure application falls within the footprint of such node, having the following advantages:</p> <ul style="list-style-type: none"> - Transport cost-saving for both the delivery of sand to the plant from nearby Macassar Dune sand mines and the delivery of mixed concrete to the envisaged development, also reducing road user risk given reduction of heavy traffic passing through existing built-up areas - Value-adding opportunities through local mineral (i.e. sand) beneficiation (mixed-concrete), job opportunities (especially in the construction value chain) and local transport sector stimulation - Creating sustainable economic multipliers in the local economy given avoidance of higher import product (readymix concrete) cost impacts <p>While the establishment and production cost of the batching plant will contribute directly to urban infrastructure, the latent benefit of the resource investment (i.e. construction sand, mixed concrete) will be realized well beyond the life-cycle of the sand mines and the concrete batch plant through the benefits to be derived from the urban environment created.</p> <p>The social impact on the nearby Sandvlei Smallholdings will be negligible given the distance from such holdings as well as the limited workforce to be employed at the batching plant, none of whom will reside on the site. Furthermore, noise and dust generation mitigation measures will be in place. Positive social benefit will be realized through the role of the batching plant in unlocking the latent benefit and synergy vested in the mineral resource</p>	

(sand, aggregate) to create a socio-economic benefit through integrated urban development.

Land use south of Macassar Road in the vicinity of the plant includes either existing sand mines, previously mined areas and utility services (Zandvleit Waste Water Treatment Works), all compatible with the proposed use. However, the impact on the Sandvlei Smallholdings to the north, especially those abutting Macassar Road and being some 300m distant will require mitigation measures for dust prevention/ suppression and noise abatement, as well as the covering of truck sand-loads to prevent windblown sand en-route to the plant. Subsequent to the departure period (5-years) the disturbed footprint will be reinstated to pre-batch plant condition.

Despite the relative distance to the Sandvlei Smallholdings north of Macassar Road, the following mitigation measures will be put in place:

- Management of all waste (cement water run-off, domestic and industrial waste disposal, hydrocarbon leakage/ spillage (fuel, oil)) and stormwater management to prevent any contamination of both surface and groundwater.
- Dust mitigation, including sprinklers at workstations and surface wetting in movement areas
- Traffic management through bell-mouth construction at the Macassar Road intersection, including safety signage, as well as truck driver education re safety and speed management.
- Hours of operation being restricted to 07h00 – 18h00 week-days

SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that if the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

N/A

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

Pending

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

Western Cape Department of Environmental Affairs and Development Planning

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

The State Departments and Organs of State will get the opportunity to comments on this Draft Basic Assessment Report.

5. if any of the State Departments and Organs of State did not respond, indicate which.

Pending

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

Interested and affected parties and all stakeholders have been given the opportunity to comment and provide their views. The Public Participation Process is not yet complete, comments are anticipated once the Draft BAR (this report) has been circulated. The Draft BAR will be updated once the 30 day public review and comment period lapsed. Comments from the stakeholders will be incorporated into the Final BAR to be submitted.

Note:

A register of all the I&AP's notified, including the Organs of State, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that "Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
 - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
 - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
 - if a facsimile was sent, a copy of the facsimile Report;
 - if an electronic mail was sent, a copy of the electronic mail sent; and
 - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	NO X
1.2.	Provide the name and or company who conducted the specialist study.		
N/A			
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
The site overlies the Cape Flats Aquifer which is classified as a "Major Aquifer System" and is regarded as highly permeable. The aquifer is highly productive and able to support large scale abstraction for public supply, urban commercial agriculture and other purposes which makes this site to have a high potential of agricultural activities.			
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		
The groundwater level is unknown and the activities of the proposed development will have direct impacts on the groundwater. Impact such oil spillages and any groundwater contamination have been indicated on the EMPr to protect ground water resources			

2. Surface water

2.1.	Was a specialist study conducted?	YES	NO X
2.2.	Provide the name and/or company who conducted the specialist study.		
N/A			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		
<p>There is no surface water present on the site. The only stormwater body on erf 4886, is the previously mined quarry which is classified as a Dune Strandveld Isolated Depression, measuring 0.38 ha in total.</p> <p>A natural river/stream runs approximately 500m to the North of the access road and Sandvlei Smallholdings. The Zandvliet Water Treatment Works ponds are located 500m to the West of the property. The Macassar Dune Nature Reserve is located 500m to the North of the access road and is classified as a natural and semi-natural channelled valley-bottom wetland.</p> <p>According to Mark Berry Environmental Consultants, the site borders onto a linear depression wetland that runs along a section of Macassar Road. However, No NFEPA (National Freshwater Ecosystem Priority Areas) natural wetlands are present in the vicinity of the site.</p>			

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO X
3.2.	Provide the name and/or company who conducted the specialist study.		
N/A			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
<p>The proposed development is not within the coastal public property, the coastal protection zone, coastal access land or a coastal protected area.</p>			
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
N/A			
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.		
<p>The proposed development does not influence the coastal protection zone, littoral active zone and estuarine functional zones.</p>			

4. Biodiversity

4.1.	Were specialist studies conducted?	YES X	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Mark Berry Environmental Consultants			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		

A biodiversity survey of the site was undertaken on May 2021 by Mark Berry, an independent biodiversity specialist. A qualitative assessment of the type and condition of affected vegetation on site, disturbances and presence of alien species, Species of Conservation Concern and protected species was carried out. Plant species not identified in the field, were collected or photographed and identified at the Compton Herbarium at Kirstenbosch.

The South African vegetation map and latest floristic taxonomic literature and reference books were used for the purpose of this study. Any plants classified as rare or endangered in the Red List of South African Plants online database are highlighted. Brownlie's (2005), CapeNature and other relevant guidelines for biodiversity assessments were taken into account in the assessment.

4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.
------	---

The general guideline to restore and/or manage to minimise impact on ecological infrastructure functioning, especially soil and water-related services is taken into account when it comes to the design of the proposed batching plant. The development is designed in a manner that prohibits any waste water from leaving the site and all potential pollution will remain within the confines of the concrete floor. All wastewater and potential pollution will be contained and disposed or remedied according to company procedures.

- Wash water from trucks and machinery will be diverted to a material wash-out and dry-out bunker with appropriate drainage and water recycling.
- Recycled water will be reused on site (dust suppression if necessary), and dried out material (gravels and fines) will be transported to Afrimat quarries to be mixed with gravel and stone.
- A closed water management system will thus be implemented on site, preventing any processed concrete or contaminated water from leaving the site.
- All wet or spillage area are to be concrete surfaced and sloped to manage run-off at a point for settlement and recycling.

The proposed development will adhere to the mitigation measures put forth by the botanical survey to be mitigate any negative environmental impacts that might transverse the general guidelines and management objectives put forth by the Biodiversity Spatial Plan. Afrimat readymix Management along with the designated ECO on site will ensure that no negative impacts occur on the surrounding natural areas as a result of the Readymix operation. The encouragement of the re-establishment of strandveld vegetation on the remainder of the property along with the removal of alien vegetation as a long – term management requirement will aid in the rehabilitation of the site in future.

4.5.	Explain what impact the proposed development will have on the site specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.
------	--

The proposed development falls under land use sub-category "5 (c) New Settlements" under the Map category Ecological Support Area 2, as identified in the Biodiversity Survey.

Subsequently, this means that development is not permissible that will compromise the biodiversity objective. However, according to the Biodiversity survey conducted, the proposed Erf 4886 in Macassar is located in a degraded strandveld vegetation, partly infested with invasive acacias and devoid of significant strandveld elements. No known species of conservation concern occur on or in close proximity to the site. Even though the site forms part of 2 biodiversity corridors, the corridor is severely degraded and under constant pressure from the mining activities, housing and infrastructure development in the surrounding areas. The overall impact of the proposed development on the biodiversity network is expected to be low to medium significance, where the only practical mitigation measure would be to rehabilitate the remainder of the property and to encourage the re-establishment of strandveld vegetation, and to control the invasive alien species as a long-term measure.

4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.
------	---

N/A

4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.
------	---

The presence of fauna has not influenced the development.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.

The proposed development will be 9ha in total and only take place on a portion of the Erf 4886. The site is underdeveloped and relatively flat, Even though the erf is located in the Macassar Dunes Area, it falls outside of the Coastal Urban Edge. Majority of the entire Macassar Dunes Area is characterised as Parabolic Dune Field.

These dunes have already been impacted by urbanisation, agriculture, dwellings, informal housing, dumping, and sand mining. The proposed development will be established on a portion of the dunes that have already been disturbed.

Geology

In geological terms, the area is essentially a vast sheet of aeolian sand, ultimately of marine origin, which has blown up from the adjacent beaches over a period on the order of a hundred thousand years. Below the sand, the bedrock is in general the Malmesbury Shale, except on part of the western margin between Zeekoevlei to the south and Claremont and Wetton to the north, where an intrusive mass of Cape Granite is to be found.

Soil

According to the Draft Cape Flats District Baseline And Analysis Report – State of the Environment (2019), the Cape Flats District, the Sandveld Group is mainly represented by the Springfontyn Formation, which was developed through the deposition of windblown sand (an aeolian deposit) and consists of reddish to grey, unconsolidated quartzose aeolian sand. The Springfontyn Formation covers the north and north-western portion of the Cape Flats District, including Athlone, Manenberg, Ottery and the north-western portion of Philippi. The southern and south-eastern portion of the district, extending from Muizenberg across the Cape Flats and inland to Phillipi and Manenberg, is characterised by the semi consolidated aeolian sands of the Witzand Formation, with minor outcrops of the Langebaan Formation calcrete occurring in the south-eastern corner of the district.

The soil in this area is also predominantly fine and medium grained silty sand, mostly cohesionless and uncemented, and potentially prone to liquefaction if ground shaking occurs. The soils are alkaline sands derived from Tertiary to recent calcareous sand of marine origin.

Agriculture

The Cape Flats District contains the Philippi Horticultural Area (PHA), most of which has been classified as an 'agricultural area of significant value given its existing use' in the City's Agricultural Land Review. The south-eastern portion of the PHA has been rated an area of significant value given its potential and emerging agricultural use, while smallholdings are located on a narrow strip along the central part of the western border of the PHA (CoCT, 2008b).

According to research conducted by Dr Battersby-Lennard and Haysom (2012) the area produces well over 50 different horticultural crops and many farmers are also active in livestock production. The farmers have realigned their production to new markets and market systems and are now actively selling direct to the major retailers, retailer agents and other sources such as restaurants and speciality stores. Farmers are also actively involved in on-farm value addition

The site overlies the Cape Flats Aquifer which is classified as a "Major Aquifer System" and is regarded as highly permeable. The aquifer is highly productive and able to support large scale abstraction for public supply, urban commercial agriculture and other purposes which makes this site to have a high potential of agricultural activities.

The MSDF designates the Philippi Horticulture Area (PHA) as a Unique Area which is under threat from development pressure and illegal activities taking place in the area. Although a detailed Agricultural study has not been conducted, the proposed development however will not impact on the soil potential to continue with food production. Upon decommissioning the project, all infrastructure on site will be cleared and the soil will be scarified to ensure that the area is prepared for vegetation growth. It is important to note that some of the challenges faced by farmers in this area are related to continuous theft of farming infrastructure and increasingly large scale theft of produce which shows that the proposed development will not be a threat to the urban commercial agricultural potential of the site after decommissioning the project (Battersby-Lennard and Haysom, 2012).

During all the phases of the project, active soil erosion prevention and rehabilitation should occur. Active monitoring by the Mine Manager must occur to ensure prevention or early detection of soil erosion. Early detection will increase the successful chances of rehabilitation of that area.

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES X	NO
6.2.	Provide the name and/or company who conducted the specialist study. Mr. Mlilo from Integrated Specialists Services (Pty) Ltd Constantia Park, Building 16-2, 546, 16th Road, Midrand, 1685 Tel: 010 492 4330, Fax: 086 652 9774, Cell: 071 685 9247 Email: trust@issolutions.co.za		
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development. The area has been subjected to disturbances over the years and there were no sensitive heritage resources identified during the study. In terms of Section 36 of the NHRA, the study did not identify any grave or burial ground within the proposed development site. The proposed development site does not trigger Section 34 of the NHRA because there are no buildings or structures which are older than 60 years at the site. However, sub-surface archaeological material and unmarked graves may still exist and when encountered during clearance and construction at the batching site, work must be stopped forth-with, and the finds must be reported to the South African Heritage Resource Agency (SAHRA) or the heritage practitioner.		

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.

The site has no sites, features or objects of cultural heritage significance. The proposed development lies on disturbed ground that is within a highly industrialized zone.

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
	<p>According to the City of Cape Town 2011 Consensus for Khayelitsha, the total population is 391 749, the number of households are 118 809 and the average household size is 3.30.</p> <p>Key results from the consensus reflected that:</p> <ul style="list-style-type: none"> • The population is predominantly Black African (99%) • 36% of those aged 20 years and older have completed Grade 12 or higher • 62% of the labour force (aged 15 to 64) is employed • 74% of households have a monthly income of R3 200 or less <p>Khayelitsha labour force indicators:</p> <ul style="list-style-type: none"> • Total labour force: 179 235 <ul style="list-style-type: none"> ○ Employed: 111 093 ○ Unemployed: 68 142 • Not economically active: 95 751 • Unemployment rate: 38.02 % • Labour absorption rate: 40.40 % • Labour force participation rate: 65.18 % <p>Khayelitsha is a growing lower to middle class township with a growing number of entrepreneurs which are supported by local and international organisations and aid agencies. It is considered to be Cape Town's largest township. The most common forms of employments are domestic work, service work, skilled manual labour, unskilled manual labour and security services.</p> <p>Khayelitsha has a good transport structure, the Golden Arrow Bus Services, MyCitibus IRT system, Metro rail trains and many local taxi's have routes to and from the township. Khayelitsha District Hospital was opened in February 2012, and is a public health facility with a status of District Hospital. There are similarly various other clinics in Khayelitsha.</p> <p>The Khayelitsha demographic entails Black African's (98.6%) of which 48.1% are male, and 50.5% are female. The total coloured population is 0.6% of which 0.3% are male and female respectively. 0.1% of the population are Asian and white. 0.6% of the population are considered as "other".</p>
8.2.	Explain the socio-economic value/contribution of the proposed development.

Surrounding areas such as the Vergenoegd Farm, Macassar, and the Macassar Dunes Mining Area, Khayelitsha and Firgrove are targeted areas for government subsidised housing opportunities. The location of the Readymix Batching Plant in close proximity to these proposed development areas will have the following advantages:

- Transport cost-saving for both the delivery of sand to the plant from nearby Macassar Dune sand mines and the delivery of mixed concrete to the envisaged development, also reducing road user risk given reduction of heavy traffic passing through existing built-up areas
- Value-adding opportunities through local mineral (i.e. sand) beneficiation (mixed-concrete), job opportunities (especially in the construction value chain) and local transport sector stimulation
- Creating sustainable economic multipliers in the local economy given avoidance of higher import product (readymix concrete) cost impacts

Positive social benefit will be realized through the role of the batching plant in unlocking the latent benefit and synergy vested in the mineral resource (sand, aggregate) to create a socio-economic benefit through integrated urban development.

8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.
------	--

The proposed development will create job opportunities for those who are unskilled, semi-skilled and skilled workers and who reside within the surrounding Khayalitsha and Macassar areas.

8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.
------	--

Afrimat Readymix Cape operates 4 readymix plants in the Cape Town area already and a total of 11 readymix plants in the Western Cape. No serious complaints were received from the surrounding public. The development is within an agricultural area that has existing sand mining operations and a waste water treatment plant directly to the east. Additional noise cause by the load and haul of ready mix trucks would not constitute a significant increase in the surrounding ambient levels. Dalmatic Dust Collectors will be fitted to the silo's (main source of dust), sprinklers will be mounted on the bin walls and hopper, and wetting of the surface will occur as a means of dust management on site.

Despite the relative distance to the Sandvlei Smallholdings north of Macassar Road, the following mitigation measures will be put in place:

- Management of all waste (cement water run-off, domestic and industrial waste disposal, hydrocarbon leakage/ spillage (fuel, oil)) and stormwater management to prevent any contamination of both surface and groundwater.
- Dust mitigation, including sprinklers at workstations and surface wetting in movement areas
- Traffic management through bell-mouth construction at the Macassar Road intersection, including safety signage, as well as truck driver education re safety and speed management.
- Hours of operation being restricted to 07h00 – 18h00 week-days

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1. Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred property and site alternative.

Erf 4886 Macassar is a total of 9,062 ha (see Figure 2 below) of underdeveloped land which has been previously mined (sand mining). Erf 4886 Macassar is an underdeveloped and previously mined property located directly on the Macassar Road (M9), 830m east of Baden Powell Drive (R310), and directly east of the Zandvliet Waste Water Treatment Works and opposite Sandvlei Smallholdings, City of Cape Town in Western Cape. The property is currently owned by Propateez 66 Pty Ltd, a subsidiary of Afrimat Limited. The property is currently zoned as Agricultural land, although no agricultural activities are taking place.

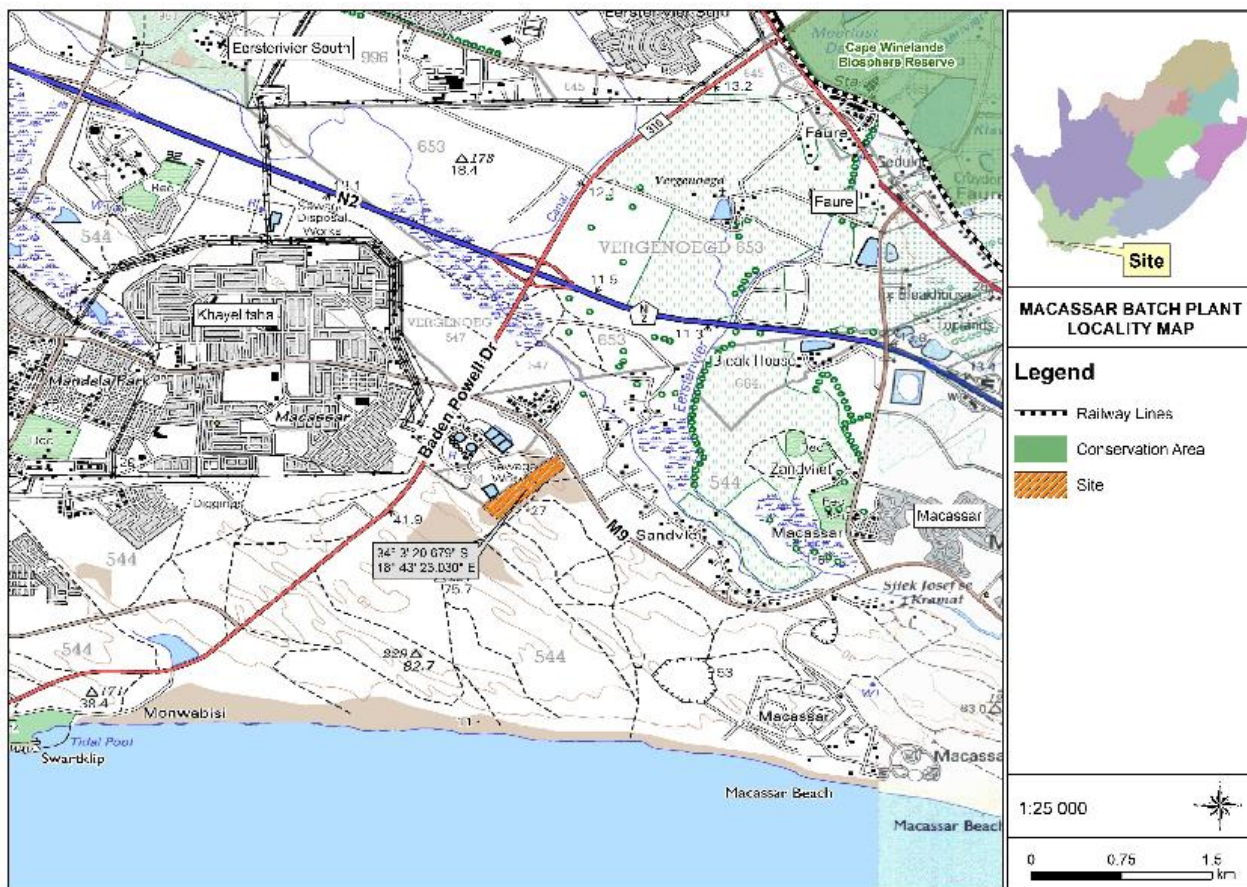


Figure 2: Locality Map of the proposed site

In total about 90000m² will be affected as result of the developmental footprint with clearing over 5 ha likely to occurs.. An existing gravel access road which runs adjacent to the site and services as an access road to the existing sand mine to the South will be utilised as an access road to the proposed development.

Provide a description of any other property and site alternatives investigated.

No reasonable or feasible alternative was considered due to the fact the Erf 4886, Macassar is owned by Propateez 66 Pty Ltd, a subsidiary of Afrimat Limited (a public company) and also owner / operator of the Olympic Sand Mine some 2 km to the south-east of the proposed development site.

Provide a motivation for the preferred property and site alternative including the outcome of the site selection matrix.

Erf 4886 is undeveloped (vacant), having in the past been mined for sand. A current gravel access road providing access to a sand mine (AfriSam) on RE/544 to the south, with such access road intersection off Macassar Road (M9) located on the northern boundary of the Erf 4886. The activity is an opportunity in relation to the surrounding core developments planned for the future of the area. The Helderberg District Plan (2012): Sub-District 1 – Vergenoegd/Macassar encourages "mixed-use" intensification opportunities at local nodes found in Macassar and Firgrove.

The following additional factors favoured the preferred property:

- (i) Being located on a flatish portion of Erf 4886
- (ii) Having direct access to the existing gravel access road on Erf 4886
- (iii) Being located outside (i.e. south of) the CBA; Terrestrial area
- (iv) Being adequate distance from the Macassar Road (M9) to facilitate truck queuing and adequate stopping distance
- (v) Being an adequate distance from the nearest residential dwelling north of Macassar Road in order to successfully mitigate any potential noise and dust nuisance.

Other alternatives were therefore not considered.

Provide a full description of the process followed to reach the preferred alternative within the site.

The site was identified in terms of available land and the property is owned by Propateez 66 Pty Ltd, a subsidiary of Afrimat Limited, a site selection matrix was not utilised and is therefore not applicable.

Provide a detailed motivation if no property and site alternatives were considered.

The area earmarked for the readymix batch plant activities was previously used for mining purposes and no natural area of significant value needs to be disturbed. The proposed area is directly connected to major roads in area being the Macassar Road (M9), 830m east of Baden Powell Drive (R310). No new roads need to be established to reach the proposed processing area.

The demand for the proposed Readymix Batch Plant arises from the Khayelitsha-Stellenbosch-Helderberg Basin corridors focussing on Faure, Macassar and Paardevlei insofar current and future urban development, with the Macassar sand mines and Erf 4886 being located within such development focus. A batching plant being situated in a development corridor would assist in minimising the delivery turnaround time in order to reduce the transport costs and vehicle use per trip. It would furthermore reduce the traffic impact of concrete mixer-trucks over long distances. The Macassar rural area is well suited for the development given its close proximity to future core development areas, as well as the nature of Readymix Batch plants given their limited and temporary footprints and the minimal pollution given the recycling of all liquid and solid waste generated on site

List the positive and negative impacts that the property and site alternatives will have on the environment.

Positive:

- Job opportunities for the surrounding community (Khayelitsha)
- Rehabilitation of the land after completion of the project
- Reuse of water on site
- Proposed development and its location is within the major metropolitan sand mining area

- While batching plants are usually located in industrial areas, a lack of such industrial area in close proximity to the Macassar sand mines and the future core development area, the Macassar rural area (erf 4886) is well suited for the location of such plants given their limited and temporary footprints.

Negative:

- Clearance of +/- 50 000m² of natural land
- Use of water supply from local municipality
- Generation of waste on site
- Increased traffic on the Macassar Road

1.2. Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred activity alternative.

The proposed Readymix Batching Plant development will consist of a wash bay, water recycling pit and ponds, pre-fabricated access control, control rooms / office and staff amenities, a ready mix loading area, load hood, a mobile batching plant consisting of a hopper, conveyor belt, cement and fly-ash silo and aggregate scale. Jojo tanks for water storage, and readydmix bilo, aggregate storage bilo's and a dry out area bilo. It is noted that the majority of the infrastructure is mobile / temporary.

No manufacturing activities will be taking place, the applicant will be using aggregate and cement to produce concrete. The concrete process will involve mixing process of cement, fly – ash and aggregate in the hopper.

Provide a description of any other activity alternatives investigated.

No alternative was considered

Provide a motivation for the preferred activity alternative.

The preferred activity will result in a temporary footprint due to the erection of a mobile batching plant, as well as minimal pollution given the recycling of all liquid and solid waste generated, as well as dust attenuation.

Provide a detailed motivation if no activity alternatives exist.

No activity alternative was considered. Afrimat Aggregates have Olympic Sand Mine some 2km to the south-east of the proposed site. The activity is an opportunity in relation to the surrounding core developments planned for the future of the surrounding areas. The Helderberg District Plan (2012): Sub-District 1 – Vergenoegd/Macassar encourages “mixed-use” intensification opportunities at local nodes found in Macassar and Firgrove.

List the positive and negative impacts that the activity alternatives will have on the environment.

Positive:

- Mobile batching plant will be erected
- Afrimat Readymix Western Cape successfully operates 4 readymix plants in the Cape Town area already and a total of 11 readymix plants in the Western Cape
- The presence of a Readymix plant in an area identified for future core developments could possibly aid the development of the core areas

Negative:

- Clearance of +/- 50 000m² of natural land

- Use of water supply from local municipality
- Generation of waste on site
- Increased traffic on the Macassar Road

1.3. Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts

Provide a description of the preferred design or layout alternative.

Development of the site will include the following:

- A fenced and gated 3965m² site accessed via a 10,0m wide access road (existing subject to widening) on Erf 4886 to Macassar Road (M9).
- A +-27m² prefabricated double storey complex (i.e. container offices) including access control, batch control room, offices, storage room and staff amenities and toilets, originally contract managed chemical toilets during construction, followed by flush sanitation to a conservancy tank
- A mobile batching plant unit, which includes, but is not limited to, hoppers, compressor, conveyors, and 2 cement/ fly-ash silos of approximately 14m in height, 2,5m in diameter and having an overall storage capacity of 200 tons
- Aggregate storage Fine material and solids dry-out bunkers
- Additional support infrastructure including a water recycling pit and pond, mixer truck wash-bay, water storage tank, additive (Admix) storage tank, and mixer-truck, front-end loader and staff vehicle parking/storage areas.

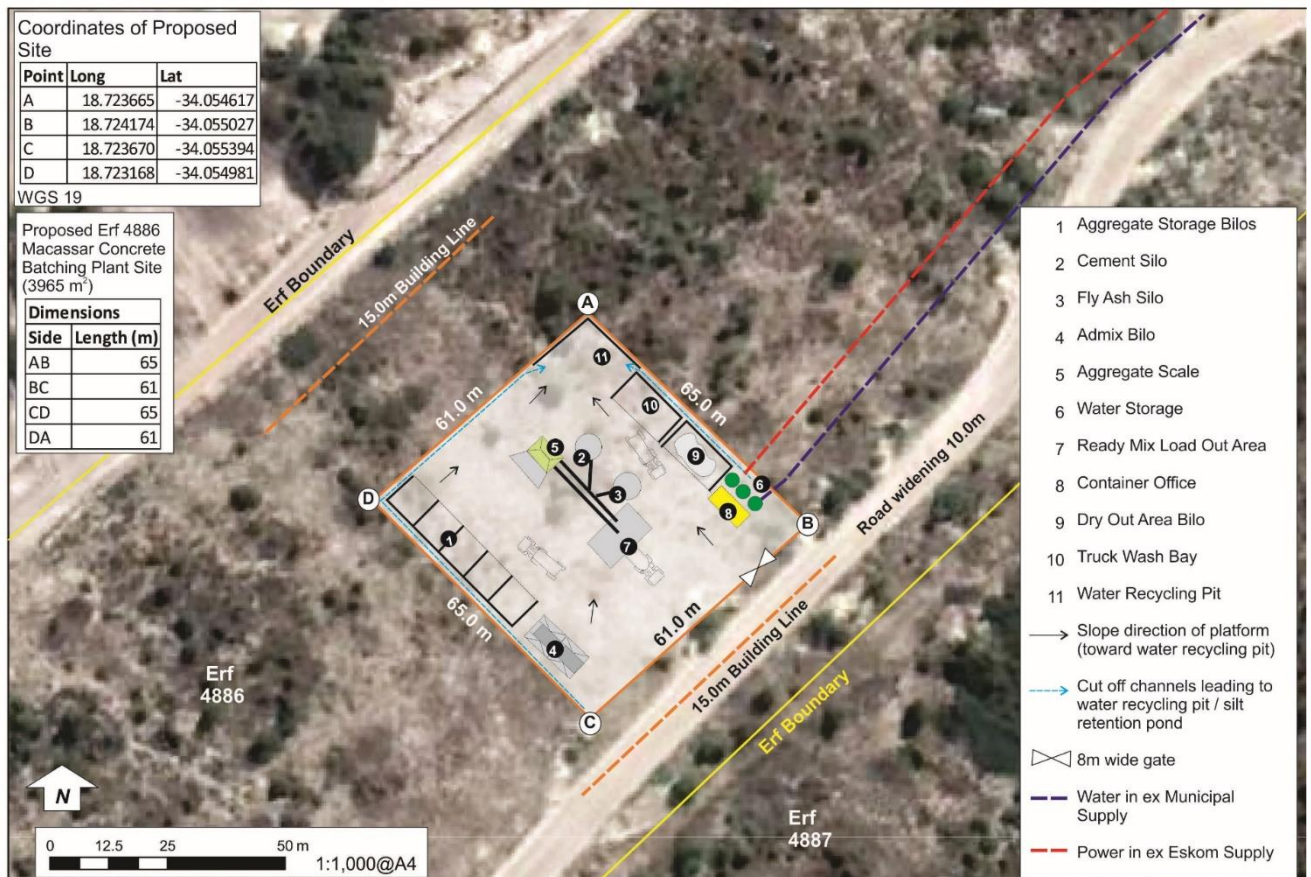


Figure 3: Preferred layout

Provide a description of any other design or layout alternatives investigated.

No other design or layout alternatives were considered.

Provide a motivation for the preferred design or layout alternative.	
<p>The majority of the infrastructure on site is mobile/ temporary. The built structures include foundations /footings and walling for the aggregate bins. Other structures include the floor and walls for the wash-out and dry-out bunkers and water recycling ponds, the surface sealing of all wet and spillage areas to facilitate drainage of spillage and run-off to the dry out bunker and water recycling ponds to avoid and/or minimise any potential negative impact on the environment.</p>	
Provide a detailed motivation if no design or layout alternatives exist.	
<p>No alternative was considered as all Afrimat Readymix Operations follow a similar design with the same built structures.</p>	
List the positive and negative impacts that the design alternatives will have on the environment.	
<p>Positive:</p> <p>Majority of the infrastructure is mobile, facilitating any future removal of the batch plant and rehabilitation of the site, with built structures being restricted to:</p> <ul style="list-style-type: none"> • Foundations or footings. • Walls (±3,0m high) to form the aggregate bins. • Floor and 1,0m high walls enclosing the wash-out and dry-out bunkers, and water recycling ponds. • Surface sealing (concrete) of all wet areas to facility drainage of spillage and run-off to the dry-out bunker and water recycling pond. • The site is designed to minimise/avoid any potential negative impact on the environment. <p>Negative:</p> <ul style="list-style-type: none"> • Clearance of +- 50 000m² of natural land • Generation of waste on site 	
1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred technology alternative:	
<p>No preferred technology alternative as an existing batch plant will be utilised for this development.</p>	
Provide a description of any other technology alternatives investigated.	
<p>No alternative was considered as the batching plant is a mobile plant from a previous readymix site.</p>	
Provide a motivation for the preferred technology alternative.	
<p>The preferred technology alternative will be utilised on site due to the fact that a mobile plant from a previous readymix site will be erected for the proposed development.</p>	
Provide a detailed motivation if no alternatives exist.	
<p>No alternative was considered as the batching plant is a mobile plant from a previous readymix site.</p>	
List the positive and negative impacts that the technology alternatives will have on the environment.	
N/A	
1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	

The following outlines the operational process:

- (i) Delivery to Site:
 - Sand and aggregates are delivered to the site and stored in aggregate bins according to aggregate size.
 - Cement is delivered to the site and stored in the silos.
 - Additive mixture ("admixture") is delivered to the site and stored in a tank.
- (ii) Weighing and discharging materials into a truck mixer:
 - Sand and aggregates are loaded via a front-end loader into an aggregates weigh-hopper and then conveyed and discharged into a truck-mixer.
 - Cement from the silo is discharged via a totally enclosed cement screw conveyor into the truck-mixer.
 - Water and admixture is measured and pumped into the truck-mixer.
- (iii) Mixing and delivery:
 - The truck mixer capacity is limited to 5-6m³, with such quantity constituting a "batch" or load.
 - All "mixing" takes place within the mixer unit mounted on the truck chassis. Mixing commences prior to leaving the plant in order that the mixture ("slumps") are checked and corrected (e.g. addition of water) at the checkpoint.
 - On leaving the plant, mixing continues en-route to the final destination where the concrete is poured.
- (iv) Mixer-truck return, washing and reloading:
 - Subsequent to delivery, mixer-trucks return, with mixer drums being washed (wash-out bay) prior to being reloaded for the next delivery.

Washed-out Aggregate Management (i.e. emanating from returning trucks and cement works)

The site development includes a material wash-out and dry-out bunker, with appropriate drainage and water recycling. This allows for mixer drums on trucks to be washed out, with washed out material being deposited in a dry-out bunker. The dry-out bunker allows for material (fines) and water to be separated (i.e. cement water).

This waste is treated as follows:

- Material or fines are removed (semi dry) and placed in the dry-out bin (waste bin), where-after it is trucked back to the quarry (i.e. away from the premises), where it is re-crushed with the gravel and stone.
- The cement water passes through a two-stage settling pond system where-after clean water is recycled for use in the concrete batching process and for dust wetting. Any residue (fines) resulting from the water recycling are dried in the dry-out bin.
- Similarly run-off from truck washing (all trucks are spray-washed prior to leaving the site) is recycled as per above.

Therefore, given that a closed waste management system is employed, no processed concrete (solids) or processed water (cement-water) is disposed of or released into the storm water system or sewer. Furthermore, all wet or spillage areas are concrete surfaced and sloped to manage all run-off at a point for settlement and recycling as per the washed-out aggregate.

Dust Management

Dust management occurs at the following levels, namely:

- The sand component delivered to the site by trucks and tipped into bins, and when transferred to the batching plant:

- Dust originates when tipping on-site into the bins
- Dust originates when sand is transferred by front-end loader to the batching plant. Dust is suppressed by sprinklers mounted on the bin walls and on the hopper. Sprinklers mounted on bin walls are also used to suppress dust generation during high wind periods.
- Exhaust of air on top of the cement silo when filling. To control dust, each silo is fitted with Dalmatic dust collectors (i.e. dedicated filtration / extraction units).
- Truck and front-end loader movement on site and along roadways. Sprinklers (using recycled water) are placed around the site perimeter to suppress truck generated dust. Additionally, all movement surfaces are wetted.

Waste and Effluent

- Chemical toilets will be installed and maintained by a contractor of their choice.
- Domestic waste will be collected on site and stored in small drums, prior to being disposed of in refuse bags through the municipal solid waste system (landfill site).
- Industrial waste (e.g. scrap/oil) will be stored in drums for removal by a waste contractor to a designated landfill (e.g. Visserhok).

Provide a description of any other operational alternatives investigated.

No operational alternatives were considered for the activity.

Provide a motivation for the preferred operational alternative.

The preferred operational alternative is the standard operating process at all the existing Afrimat readymix sites.

Provide a detailed motivation if no alternatives exist.

No operational alternatives were considered for the activity. Afrimat Readymix operations operate under the same operational processes.

List the positive and negative impacts that the operational alternatives will have on the environment.

Positive

- Dust management to minimise any dust nuisance on surrounding areas and activities
- Waste management measures will be implemented
- Water recycling on site will be implemented
- A closed waste management system is employed, no processed concrete (solids) or processed water (cement-water) is disposed of or released into the storm water system or sewer.

Negative

- Clearance of +- 4 000m² of natural land
- Generation of waste on site
- Usage of municipal water
- Laydown of a concrete slab
- Minimal dust emissions

1.6. The option of not implementing the activity (the 'No-Go' Option).

Provide an explanation as to why the 'No-Go' Option is not preferred.

The no-go alternative entails no change to the status quo and is therefore a real alternative that needs to be considered. Opportunity loss for Afrimat Readymix considering the future core development areas surrounding the proposed Readymix Batching Plant. The applicant who is the landowner will not be able to diversify the income of the property considering that it's already disturbed by previous mining activities. The applicant will also not be able to supply in the demand of building contractors in the area.

1.7.	Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.
------	--

No other alternatives were considered due to the fact that the design, technology and operational preferred alternatives are all alternatives that have been implemented by other Afrimat Readymix operations with success.

1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.
------	---

The current location was chosen due to the property being owned by Propateez 66 Pty Ltd a subsidiary of Afrimat Limited. The site has been previously mined to the east and therefore the decision to locate the Readymix Batching plant of 9ha on the remainder of the site, which has already been disturbed by previous activities. The area is relatively flat facilitating drainage in support of run-off recovering and recycling, therefore in favour of the Batching operation. A mobile batching plant will be utilised and fitted with dedicated filtration / extraction unit fitted to each silos to reduce any dust pollution.

The development will be located in an area already utilised for similar operations and is believed not to cause a significant increase in negative environmental impacts.

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).
--

No "No-Go" areas have been identified

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

An aspect and impact matrix was completed to determine the significance (high, Medium or Low) and potential environmental impacts and risks associated with the proposed development.

Potential environmental activity aspects and impacts which may occur during the commencement and implementation of the project are identified. This is supported by the identification of receptors (people or man-made structures) and resources (components of the biophysical environment), which allows for an understanding of the impact pathway and an assessment of the sensitivity to change. Environmental impacts are then identified based on the potential interaction between the aspects and receptors or resources.

The significant of the impact is then assessed as either High, Medium or Low depending on the severity of the environmental impact.

A detailed desktop study was undertaken to determine the environmental setting in which the project is located. Various desktop investigations were used to determine the significance and sensitivity of the

potential environmental impacts. The Biodiversity report was utilised with regards to the impact on the natural vegetation. The identification of management and mitigation measures will be done based on the significance of the impacts. Measures must be sufficient, appropriate and practical to protect the environment.

The assessment of the impacts has been conducted according to a synthesis of criteria required by the guideline documents to the EIA regulations (2006) and integrated environmental management series published by the Department of Environmental Affairs and Tourism (DEAT) currently Department of Environmental Affairs (DEA). In addition to this, it is a requirement of the National Environmental Management Act (NEMA) 2014 Regulations, Appendices 1 and 2 that an Impact and Risk Assessment process be undertaken for Basic Assessments and Environmental Impact Reporting.

Below is the assessment methodology utilized in determining the significance of the construction, operational and decommission impacts of the proposed activities, and where applicable the possible alternatives, on the biophysical and socio-economic environment.

$$\text{SIGNIFICANCE} = \text{CONSEQUENCE} \times \text{PROBABILITY}$$

$$\text{WHERE Consequence} = \text{Extent} + \text{Intensity} + \text{Duration}$$

The criteria used to determine impact consequence are presented on the tables below. Each rating has been allocated a score weighting

Table 1: Criteria used to determine the Consequence of the Impact

Rating	Definition of Rating	Score
A. Extent - the area over which the impact will be experienced		
Local	Limited to the immediate area(s) around the project site -	1
Regional	Extends over a larger area that would include a major portion of an area or province	2
National/International	Nationally or beyond	3
B. Intensity - the magnitude of the impact in relation to the sensitivity of the receiving environment, taking into account the degree to which the impact may cause irreplaceable loss of resources		
Low	Site-specific and wider natural and/or social functions and processes are negligibly altered	1
Medium	Site-specific and wider natural and/or social functions and processes continue albeit in a modified way	2
High	Site-specific and wider natural and/or social functions or processes are severely altered	3
C. Duration- the lifetime of the impact, that is measured in relation to the lifetime of the proposed development and its reversibility		
Short-term	(0 to 3 years)	1
Medium-term	(3 to 10 years) confined to the construction period	2
Long-term	(more than 10 years)	3

Permanent	beyond the anticipated lifetime of the project	4
-----------	--	---

The combined score of these three criteria corresponds to a Consequence Rating, as follows:

Table 2: Method used to determine the Consequence Score

Combined Score (A+B+C)	3 – 4	5	6	7	8 - 9
Consequence Rating	Very low	Low	Medium	High	Very high

Once the consequence was derived, the probability of the impact occurring was considered, using the probability classifications presented in the table below.

Table 3: Probability Classification

Probability– the likelihood of the impact occurring	
Improbable	1
Possible	2
Probable	3
Definite	4

The overall significance of impacts was determined by considering consequence and probability using the rating system prescribed below

Table 4: Impact significance ratings

		Probability			
		Improbable	Possible	Probable	Definite
Consequence	Very Low	INSIGNIFICANT	INSIGNIFICANT	VERY LOW	VERY LOW
	Low	VERY LOW	VERY LOW	LOW	LOW
	Medium	LOW	LOW	MEDIUM	MEDIUM
	High	MEDIUM	MEDIUM	HIGH	HIGH
	Very High	HIGH	HIGH	VERY HIGH	VERY HIGH

Practicable mitigation and optimisation measures are recommended and impacts are rated in the prescribed way both without and with the assumed effective implementation of mitigation and optimisation measures.

The impact significance rating should be considered by authorities in their decision-making process based on the implications of ratings ascribed below:

- Insignificant: the potential impact is negligible and will not have an influence on the

decision regarding the proposed activity/development.

- Very Low: the potential impact is very small and should not have any meaningful influence on the decision regarding the proposed activity/development.
- Low: the potential impact may not have any meaningful influence on the decision regarding the proposed activity/development.
- Medium: the potential impact should influence the decision regarding the proposed activity/development.
- High: the potential impact will affect the decision regarding the proposed activity/development.
- Very High: the proposed activity should only be approved under special circumstances.

Cumulative impact: Consideration must be given to the extent of any cumulative impact that may occur due to the proposed development. In relation to an activity, means the impact of an activity that in itself may not be significant but which may become significant when considered together with the potential impacts eventuating from similar or diverse activities or undertakings in the area. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium or high impact. Potential cumulative impacts identified for the proposed development include dust generation from crushing in the plant, materials handling, and vehicle travelling on unpaved roads; noise from the screening and crushing plant, vehicles collecting the material and the bricks.

Degree of confidence in predictions: The specialist should state what degree of confidence (low, medium or high) is there in the predictions based on the available information and level of knowledge and expertise.

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

Alternative:	
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

OPERATIONAL PHASE	
Potential impact and risk:	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.
<p>According to the Biodiversity Report prepared by Mark Berry Environmental Consultants, the following findings and impact measures were identified:</p> <p>The site is located in degraded strandveld vegetation. A large part is heavily infested with invasive acacias and devoid of significant strandveld elements. No known Species of Conservation Concern occur on or in close proximity to the site, with all the recorded species considered to be widespread and common. Without mitigation, the impact on Cape Flats Dune Strandveld will be of low to medium significance at a local level. The surrounding vegetation (irrespective of its condition) should, however, be actively protected during the construction and</p>	

operational phase of the batching plant. The impact can further be minimised by optimal positioning of the plant in the most infested part of the site. Table 1 below summarises the impact on vegetation type, habitat and species.

Table 1 Impact on vegetation type, habitat and species.

Mitigation	Extent	Duration	Intensity	Probability of occurrence	Significance – Current option	Confidence
Without mitigation	Limited to site	Long term	High	High	Low-med (-)	Med-high
With mitigation	Limited to site	Long term	High	High	Low (-)	Med-high
Mitigation measures: During the construction and operation of the batching plant, avoid the unnecessary disturbance of the surrounding vegetation by means of fencing; position the batching plant in most degraded (alien infested) part of the site.						

The site forms part of a CBA corridor between the coastal strip (incl. the Macassar dune system) and the Kuils River CBA to the north. The corridor is however severely degraded/eroded by sand mining activities, the presence of the Zandvliet WWTW and alien infestation. The WWTW is currently being expanded. Rehabilitation of these areas may restore or strengthen the corridor to a certain extent depending on the environmental goals of the larger area. One can therefore expect a low to medium impact on the functionality of the CBA corridor. The only practical mitigation measures would be to rehabilitate the remainder of the property, encourage the reestablish of strandveld vegetation and to control of invasive aliens as a long-term measure.

Table 2 below summarises the impact on CBA's.

Table 2 Impact on the biodiversity network, CBA's, etc.

Mitigation	Extent	Duration	Intensity	Probability of occurrence	Significance – Current option	Confidence
Without mitigation	Limited to site	Long term	High	High	Low-med (-)	Med-high
With mitigation	Limited to site	Long term	High	High	Low (-)	Med-high
Mitigation measures: Encourage the re-establishment of strandveld vegetation on the remainder of property; control aliens as a long-term management requirement.						

Accordingly, the following mitigation measures were put forth in the biodiversity report and will form part of the mitigation measures to be implemented by the proposed development:

- During the construction and operation of the batching plant, avoid the unnecessary disturbance of the surrounding vegetation by means of fencing;
- The batching plant surface should be properly sealed and bunded to prevent soil contamination;

	<ul style="list-style-type: none"> • Position the batching plant in most degraded (alien infested) part of the site; and • Encourage the re-establishment of strandveld vegetation on the remainder of property and control aliens as a long-term management requirement. Please note that it is a legal requirement for landowners to clear alien vegetation on their land.
2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr
<p>The following measures were identified by Mark Berry Environmental Consultants in the Biodiversity Report prepared for the proposed development:</p> <ul style="list-style-type: none"> • During the construction and operation of the batching plant, avoid the unnecessary disturbance of the surrounding vegetation by means of fencing; • The batching plant surface should be properly sealed and bunded to prevent soil contamination; • Position the batching plant in most degraded (alien infested) part of the site; and • Encourage the re-establishment of strandveld vegetation on the remainder of property and control aliens as a long-term management requirement. Please note that it is a legal requirement for landowners to clear alien vegetation on their land. <p>All the impact management measures will be included in the EMPr.</p>	
3.	List the specialist investigations and the impact management measures that will not be implemented and provide an explanation as to why these measures will not be implemented.
<p>All impact measures identified will be implemented on site</p>	
4.	Explain how the proposed development will impact the surrounding communities.
<p>The social impact on the nearby Sandvlei Smallholdings will be negligible given the distance from such holdings as well as the limited workforce to be employed at the batching plant, none of whom will reside on the site. Furthermore, noise and dust generation mitigation measures will be in place. Positive social benefit will be realized through the role of the batching plant in unlocking the latent benefit and synergy vested in the mineral resource (sand, aggregate) to create a socio-economic benefit through integrated urban development.</p> <p>Despite the relative distance to the Sandvlei Smallholdings north of Macassar Road, the following mitigation measures will be put in place:</p> <ul style="list-style-type: none"> – Management of all waste (cement water run-off, domestic and industrial waste disposal, hydrocarbon leakage/ spillage (fuel, oil)) and stormwater management to prevent any contamination of both surface and groundwater. – Dust mitigation, including sprinklers at workstations and surface wetting in movement areas – Traffic management through bell-mouth construction at the Macassar Road intersection, including safety signage, as well as truck driver education re safety and speed management. – Hours of operation being restricted to 07h00 – 18h00 week-days. <p>The proposed development will provide for additional job opportunities to the nearby Khayelitsha and Macassar areas. The type of jobs available require semi-skilled employees as well as employees with minimal/ no skills but are willing to be trained. Once the identified future core development areas in the Vergenoegd/Macassar areas start developing, the location of the Readymix batching plant would result in minimal delivery turn-around time in order to reduce transport costs and vehicle use per trip, especially during mass housing projects. It would also reduce the impact of concrete mixer-trucks over long distance, especially through built-up areas. Given the limited footprint of a readymix plant and the</p>	

design of the proposed development, it is anticipated that minimal pollution would occur given the recycling of all liquid and solid waste generated.

The proposed development has medium to low significance impacts, which will be short term activities in nature. The planned activities negative impacts can be controlled and avoided or minimised. Mitigation measures will be used to manage and control any potential impact.

5. Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.

Anticipated risks of climate change that could impact the proposed development include:

- Declining water supplies
- Changes in precipitation
- Increased wind speeds
- Unexpected intense and extreme weather events

Afrimat needs to ensure that water recycling pits are able to accommodate the increased rainfall, and that storm water management efforts on site is maintained and monitored, especially during the winter months. Dalmatic Dust Collectors must be kept in good working condition to ensure that minimal dust nuisance is caused. The proposed development should not operate during any dangerous weather events that may cause harm to the employees or surrounding neighbours

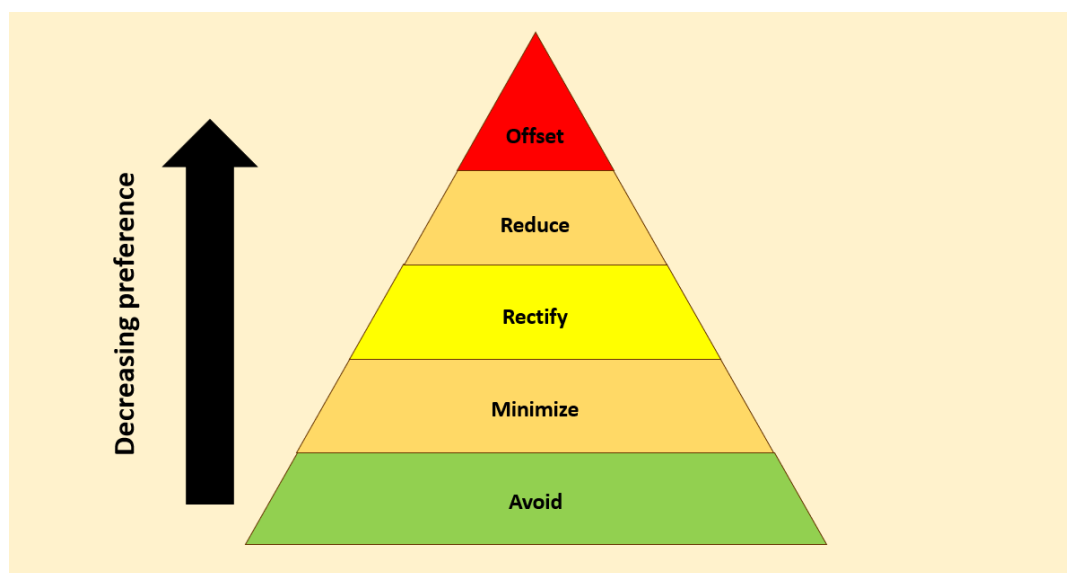
6. Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.

N/A

7. Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.

All the mitigation measures proposed by the specialist studies will be integrated into the EMP for the proposed development.

8. Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.



All potential environmental impacts identified for the proposed development are mitigated in terms of the most realistic stage for that impact in the mitigation hierarchy. All mitigation measures proposed by specialist studies, have been assessed against the hierarchy to achieve the level that can be effectively implemented on the proposed site.

With regards to site selection and design, the portion of erf 4886 selected for the proposed development was selected in part due to the site being previously disturbed, therefore avoiding the negative environmental impact on an alternative site. The closure phase of the proposed development will include rehabilitation of the disturbed areas resulting in a positive impact on the environment in future. In accordance with the temporary nature of the application (i.e. a temporary departure) it is noted that the majority of the infrastructure is mobile, facilitating any future removal of the batch plant and rehabilitation of the site to restore it to its natural state.

The remaining impacts of the proposed development will be monitored and measured to minimise any negative impact through physical controls, operational controls and abatement controls being implemented throughout the lifecycle of the proposed development.

SECTION J: GENERAL

1. Environmental Impact Statement

1.1. Provide a summary of the key findings of the EIA.

During the construction of the proposed development, environmental impacts may occur on soils, natural vegetation, ground water, air quality, noise, visual aspects and sites of archaeological and cultural importance should the EMPr not be adhered to.

Construction phase impacts identified by the Basic Assessment Process include:

- Potential for Soil Erosion;
- Loss of or damage to Vegetation;
- Impact of litter/waste pollution from the activities and construction workers on site on the surrounding environment;
- Job creation;
- Wind-blown dust;
- Impact of construction activities on visual aesthetics of the surrounding environment;
- Noise Impacts;
- Impact on cultural heritage aspects; and
- Socio-economic aspects.

Operational phase impacts identified by the Basic Assessment Process include:

- Impact of potential soil erosion;
- Impact of the proposed development on visual aesthetics of the surrounding environment;
- Impact of increased revenue to the local economy;
- Impact on noise;
- Impact on groundwater; and

- Socio-economical.

The proposed development will result in no unacceptable biophysical and socio-economic impacts, after mitigation. No (post mitigation) impacts of high negative significance will occur as a result of the implementation of the proposed activity during either the construction or operational phase. All the identified impacts will be localised, short-term and will have a medium to low significance. The significance of the impacts can be reduced to low and very low with the implementation of mitigation measures and monitoring. Contaminated water run-off from the site may have a negative impact on the surrounding areas, especially if seepage into the groundwater occurs. In order to prevent the occurrence, management of washed-out aggregate will be through diverting wash-water from trucks and machinery to a material wash-out and dry-out bunker fitted with appropriate drainage and water recycling. The recycled water will be reused and dried-out material or fines will be trucked to one of the Afrimat quarries (off-site) where it will be re-crushed with gravel and stone. This closed water management system eliminates any processed concrete or processed water (cement water) being disposed of or released into the soil, storm water system or sewers. All wet or spillage areas are concrete surfaced and sloped to manage all run-off at a point of settlement (water recycling pit) and recycling.

The proposed development has positive socio-economic impacts of low significance in the construction phases, in terms of job creation, and positive impacts of very high significance in terms of job creation and increased revenue into the local economy during the operational phase.

The implementation of the "No-Go" alternative would have a negative impact of high significance in terms of the opportunity cost of lost increased revenue to local economy, as well as a low negative impact of job losses.

1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)
	See Appendix B2
1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

The proposed development will provide for additional job opportunities to the nearby Khayelitsha and Macassar areas. The type of jobs available require semi-skilled employees as well as employees with minimal/ no skills but are willing to be trained. Once the identified future core development areas in the Vergenoegd/Macassar areas start developing, the location of the Readymix batching plant would result in minimal delivery turn-around time in order to reduce transport costs and vehicle use per trip, especially during mass housing projects. It would also reduce the impact of concrete mixer-trucks over long distance, especially through built-up areas. Given the limited footprint of a readymix plant and the design of the proposed development, it is anticipated that minimal pollution would occur given the recycling of all liquid and solid waste generated.

The proposed development has medium to low significance impacts, which will be short term activities in nature. The planned activities negative impacts can be controlled and avoided or minimised. Mitigation measures will be used to manage and control any potential impact.

2. Recommendation of the Environmental Assessment Practitioner (“EAP”)

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMP
------	---

The following impact management outcomes were identified:

Aggregate

Washed out aggregate will be diverted from a wash-out bunker to a dry-out bunker with appropriate drainage to a two stage settling pond. The recycled water will be reused in the batching process. Dried out fines will be trucked to off-site Afrimat quarries where it will be added to gravel and stone. This closed waste management system eliminated any processed concretes or water being disposed of or released into the soil, storm water system or sewer. All runoff will lead to a point of settlement and recycled as per the washed aggregate.

Air Quality

Dust will result from the batching process. Dust will be managed through Dalmatic dust collectors (i.e. dedicated filtration / extraction units fitted to each silo), sprinklers mounted on bin walls and on the hopper, and wetting of all movement surfaces during high wind periods and during truck movements will be practiced on site in a means to mitigate any negative dust impacts.

Possible mitigation measures can include:

- Keeping aggregate and sand damp
- Cover or enclose conveyor belts and hoppers 'keep pavements and surfaces clean
- Wetting of haul road into the proposed development and all other movement surfaces, especially during high wind periods
- Development and implement an inspection regime for all dust control components
- Dalmatic dust collectors fitted to each silo
- Sprinklers mounted onto bin walls and the hopper
-

The entire compound traversed by vehicles, should be paved with a hard, impervious material. Unsealed surface should be protected with barriers to exclude vehicles. The pavement should be kept clean and dust free. Spills and leaks must be contained and cleaned up immediately before dust is generated.

Sand and aggregate should be delivered in a dampened state, using covered trucks. Material to be re-wetted before being dumped into the aggregate storage silos on site.

Conveyor belts which are exposed to the wind and used for raw material transfer should be effectively enclosed or alternatively have a sprinkler system in place.

Cement should be stored in sealed, air tight storage silos. All hatches, inspection points and duct work should be air tight. Any cement spills should be cleaned up as soon as they are detected. The silo delivery pipe should be kept locked at all times except when a delivery is in progress. Cement dust emissions from the silo during filling operations must be minimised. Alternative dust control technology can be used as long as equivalent or better performance is achieved. Equipment needs to be maintained in accordance with the manufacturer's instructions to ensure appropriate performance.

Runoff and waste water

Potential pollutants in batching plant wastewater include:

- Cement
- Sand
- Aggregate
- Petroleum products

These substances can adversely affect the water quality in the receiving environment by increasing the pH in soil and water, contaminating water and sediments with hydrocarbons. The main sources of wastewater generation at batching plants are:

- Stormwater runoff
- Dust control sprinklers
- Slumps
- Cleaning and washing of equipment

Waste water will be directed to the water recycling pit. Washed-out aggregate management through diverting wash-water from trucks and machinery to a material wash-out and dry-out bunker, with appropriate drainage and water recycling. The recycled water will be reused on site and dried out fines (cement) will be collected and transported to Afrimat quarries to be mixed with gravel and stone.

The waste water recycling system must be able to store the contaminated runoff generated over a 24 hour period and be sufficient to contain spills from any storage facilities on site.

Effectively the water demand would decrease due to the reuse of water from the water recycling pit.

Nuisance (Noise, Odour etc.)

Major noise sources at batching plants include:

- Truck and front end loader engine noise and reverse warning devices
- Hydraulic pumps
- Aggregate delivery to aggregate bunkers and hoppers
- Conveyor belts
- Air valves
- Filters
- Alarms

Afrimat must ensure noise impacts from the concrete batching plant are avoided or reduced to an acceptable level. Where possible, equipment should be enclosed to reduce noise at the source, and only operate within the appropriate working hours. Noisy equipment should be located away from Noise Sensitive Receptors, or behind sound barriers (stockpiles) where possible. Access and Exit points must be positioned away from noise sensitive areas.

Additional noise would be the temporary noise and dust produced by the mixing of aggregate, cement and additive as per the readymix batching procedure. The proposed development will be located in an area already utilised by delivery trucks due to the existing sand mines in the area. The

additional noise from readymix and delivery trucks would therefore be insignificant. The proposed development is 1.3km from Khayelitsha, the closest township.

Biodiversity

If the project is allowed to proceed, the following mitigation measures should be considered:

- During the construction and operation of the batching plant, avoid the unnecessary disturbance of the surrounding vegetation by means of fencing;
- The batching plant surface should be properly sealed and bunded to prevent soil contamination;
- Position the batching plant in most degraded (alien infested) part of the site; and
- Encourage the re-establishment of strandveld vegetation on the remainder of property and control aliens as a long-term management requirement. Please note that it is a legal requirement for landowners to clear alien vegetation on their land.

2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.
------	--

No Conditional aspects to be included.

2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.
------	--

It is considered the opinion of the EAP that the activity may be authorised. The proposed erf is located in an ideal location with regards to the Khayelitsha – Stellenbosch – Helderberg Basin corridors focussing on Faure, Macassar and Paardevlei insofar current and future urban development, with the Macassar sand mines (construction / concrete sand) and Erf 4886 Macassar being located within such development focus.

While batching plants are usually located in industrial areas, either permanently or on a temporary basis, a lack of such industrial area in close proximity to the Macassar sand mines and the future core development area, the Macassar rural area (Erf 4886) is well suited for the location of such Readymix Batching Plants given their limited and temporary footprints.

Batching plants require close proximity to users given the need to minimise delivery turn-around time in order to reduce transport costs and vehicle use per trip, especially in mass-housing delivery projects. It would also reduce the impact of concrete mixer-trucks over long distances, especially through built-up areas.

The proposed site is relatively flat which would facilitate the drainage in support of run-off for recovering and recycling. It has an existing access gravel access road which is utilised by delivery trucks to and from the existing sand mine to the south. The site is located in degraded strandveld, with a large part heavily infested with invasive acacias and devoid of significant strandveld elements. No Species of Conservation Concern occur on or in close proximity to the site. The property is owned by Propateez 66 Pty Ltd, a subsidiary of Afrimat Limited (a public company) and also owner / operator of the Olympic Sand Mine some 2km to the south-east. The site is therefore regarded as the preferred site and alternatives are not considered.

The project will also have positive impacts due to the employment to be created to the surrounding Khayelitsha and Macassar areas.

The impacts anticipated for the proposed development are considered to be of medium and low significance. The significance of the impacts can be reduced to low and very low when the mitigation measures are implemented.

The following mitigation measures should be considered for inclusion in an environmental authorisation:

- All employees on site must undergo induction prior to the start of employment, with specific emphasis on environmental mitigation measures to be implemented on site. All training must be kept on a register and on file.
- An EMP must annually be audited to monitor the implementation and compliance of the EMP
- Spill kits must be kept on site. All spillages on site to be cleaned immediately.
- Evaporation ponds on site need to be cleared when full.
- Aggregate stockpiles to be wet with sprinklers during high wind conditions to prevent potential air pollution (dust).
- A fire break should be created around the proposed development to mitigate the possible negative impact to the surrounding natural vegetation should a fire occur on site.
- Fencing must be put up during construction to avoid the unnecessary disturbance of the surrounding vegetation.
- The batching plant surface should be properly sealed and bunded to prevent soil contamination.
- The batching plant should be placed in the most degraded (alien infested) part of the site.
- The re-establishment of strandveld vegetation on the remainder of the property must be encouraged.

2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.
------	---

The following assumptions, uncertainties and gaps in knowledge are applicable to this development:

Interested and Affected Parties consultation is not yet completed. The Draft BAR will be updated once the 30-day public review and comment period has lapsed. Comments from the stakeholders will be incorporated into the Final BAR to be submitted.

It is uncertain whether a dust monitoring system (dust buckets) will have to be put in place. Public complaints and neighbouring activities will determine whether a dust monitoring system is needed.

The waste disposal contractor and waste disposal facility is still undetermined. It is unknown the total amount of waste and emissions to be anticipated during the construction and operational phases of the proposed development.

No Heritage Impact Assessment was undertaken

No wetland delineation was undertaken as there are no signs of surface water on site.

No authorised licensed waste disposal facility was approached.

	The impact of the development on the proposed objective for the site as an open space, and where appropriate, to restore degraded land to natural and near-natural land for improved ecological functioning. It is uncertain whether this objective will be achieved given the surrounding activities and proposed urban developments by the City of Cape Town.
2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.
The period within which commencement must occur is November 2020, the period for which the environmental authorisation is granted and the date on which the development proposal will have been concluded, where the environmental authorisation does not include operational aspects is 30 years.	

3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.
Groundwater pollution will be restricted by the batching plant's sealed working and movement area capturing all run-off (natural, spillage, machinery/ vehicle washing, etc) to a water recycling plant, with an residue being dried on-site and removed to the quarry for re-crushing with aggregate.
When constructed, the concrete batching plant will comprise a sealed working and movement floor to prevent groundwater pollution. All surface water (rain) accumulating on such floor, together with any production spillage and roof run-off (office/ control room), will be captured, and recycled for use in the concrete manufacturing, thereby limiting any surface water run-off. Surface water run-off from up-slope of the batching plant and from the gravel access road will be diverted via cut-off drains to a formal storm water channel leading down towards the Macassar Road where it will be managed via the roadside storm water drain.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.
Washed out aggregate will be diverted from a wash-out bunker to a dry-out bunker with appropriate drainage to a two stage settling pond. The recycled water will be reused in the batching process. Dried out fines will be trucked to off-site Afrimat quarries where it will be added to gravel and stone. This closed waste management system eliminated any processed concretes or water being disposed of or released into the soil, storm water system or sewer. All runoff will lead to a point of settlement and recycled as per the washed aggregate.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.
N/A	

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one Applicant.

I, PIETER GROVE ID number 7709215016089 in my personal capacity or duly authorised thereto hereby declare/affirm that all the information submitted or to be submitted as part of this application form is true and correct, and that:

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
 - o meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
 - o meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
 - o costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
 - o costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
 - o Legitimate costs in respect of specialist(s) reviews; and
 - o the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the Applicant:

Date:

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (“EAP”)

I Victor Manavhela....., EAPASA Registration numberN/A..... as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;



Signature of the EAP:

Date: 15 October 2021

Biogeotech Environmental Services

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

I, EAPASA Registration number as the appointed Review EAP hereby declare/affirm that:

- I have reviewed all the work produced by the EAP;
- I have reviewed the correctness of the information provided as part of this Report;
- I meet all of the general requirements of EAPs as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP:

Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I Trust Mlilo, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



10 June 2021

Signature of the EAP:

Date:

Integrated Specialists Services (Pty) Ltd

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I Mark Berry, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



10 May 2021

Signature of the EAP:

Date:

Mark Berry Environmental Consultants

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

I N/A....., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), the Department and I&APs, all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP:

Date:

Name of company (if applicable):