

Planting Design Palette

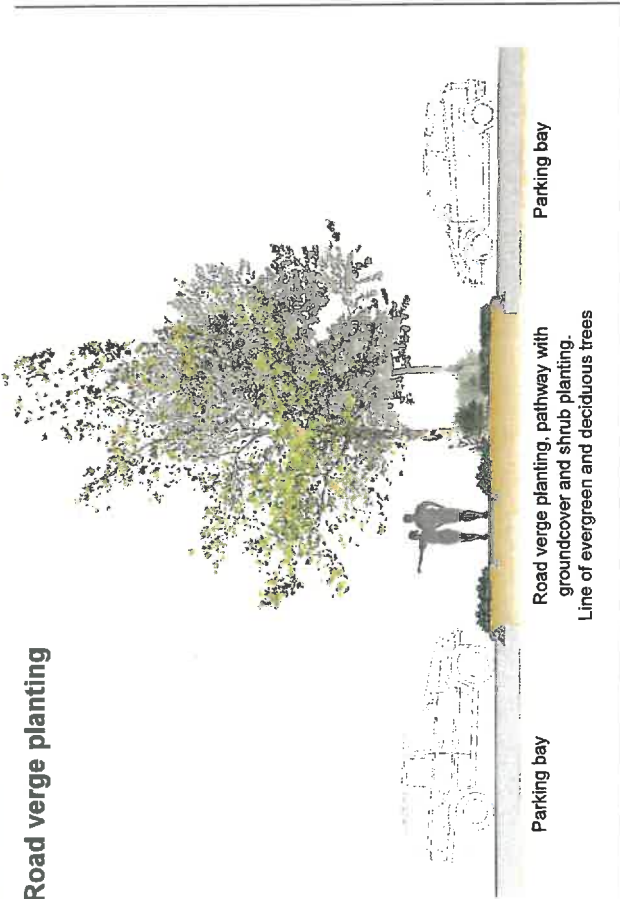
Boland Gateway

PHASE 1

September 2022



Road verge planting



Shrubs and groundcovers



Athanasia dentata



Salvia chamaeleagnea



Coleonema album



Carissa macrocarpa



Drosanthemum spp.



Diets grandiflora



Ruschia caroli

Trees

Deciduous



Platanus acerfolia



Celtis africana

Evergreen



Podocarpus falcatus



Syzygium cordatum



Aloe arborescence



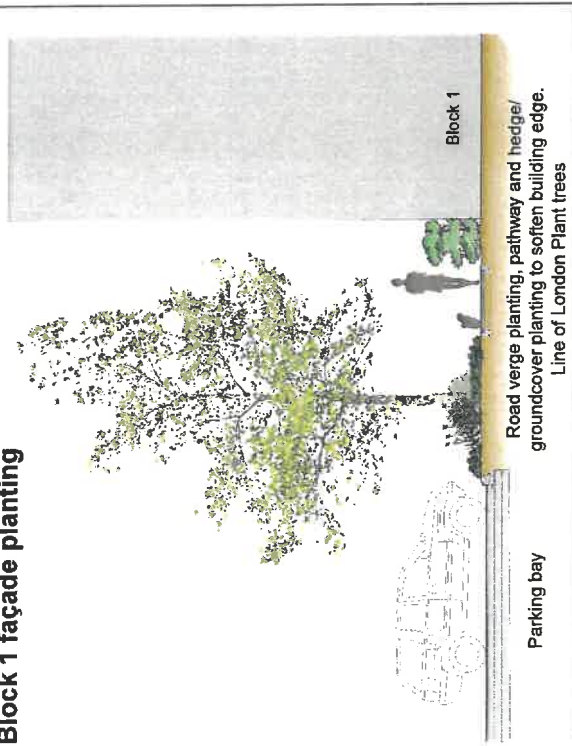
Felicia spp.



Coteleydon orbiculata



Block 1 façade planting



Shrubs and groundcovers



Crassula multicaeva



Platanus acerifolia

Trees: Deciduous



Celtis africana



Asparagus densiflorus



Pelargonium cucullatum

Plectranthus neochilus



Plumbago auriculata



Searsia crenata



Carissa macrocarpa

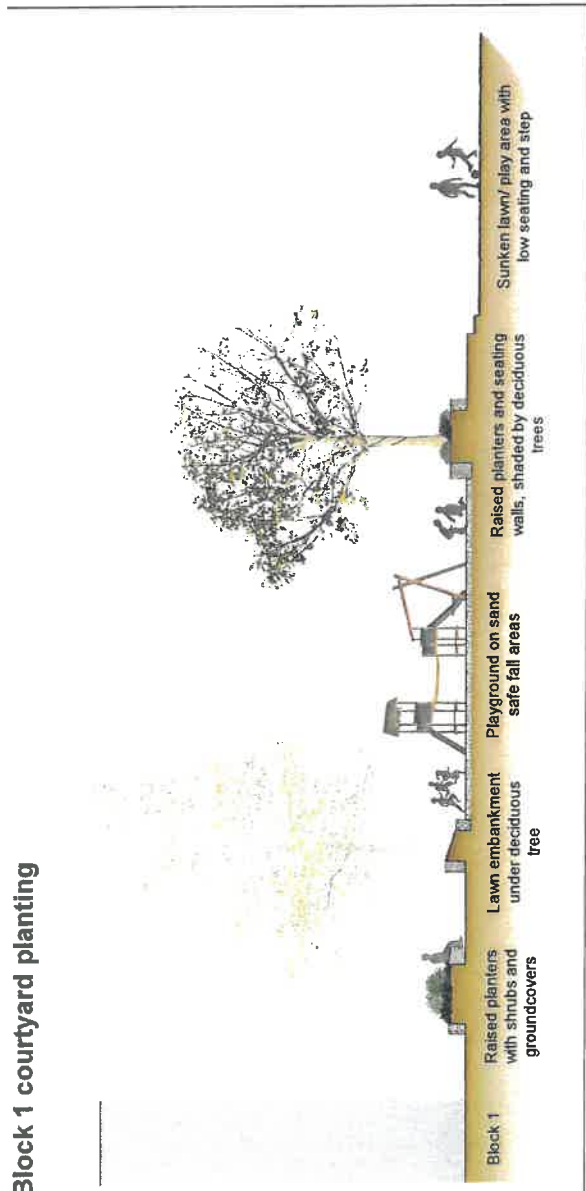


Portulacaria afra

Watsonia spp.



Block 1 courtyard planting



Shrubs and groundcovers



Dianthus grandiflora



Coleonema album



Othonna capensis



Arctotis spp.



Platanus acerifolia



Celtis africana



Portulacana afra



Aloe arborescence



Tulbaghia violacea



Bulbine frutescens

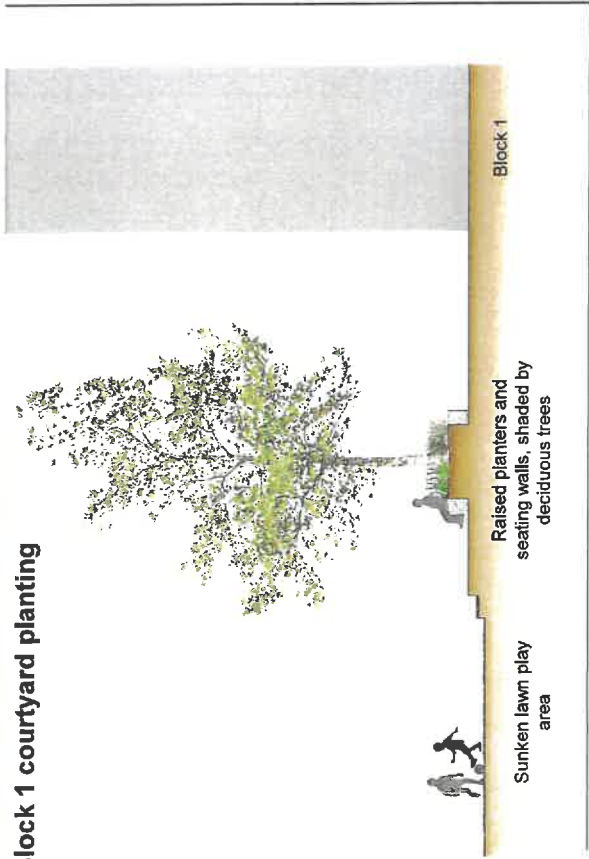


Cotyledon orbiculata

Trees: Deciduous



Block 1 courtyard planting



Trees: Deciduous



Platanus acerifolia



Celtis africana



Searisia crenata



Tulbaghia violacea

Shrubs and groundcovers



Dietes grandiflora



Othonna capensis



Coteleydon orbiculata



Coleonema album



Carissa macrocarpa



Portulacaria afra



Ruschia caroli



Bulbine frutescens



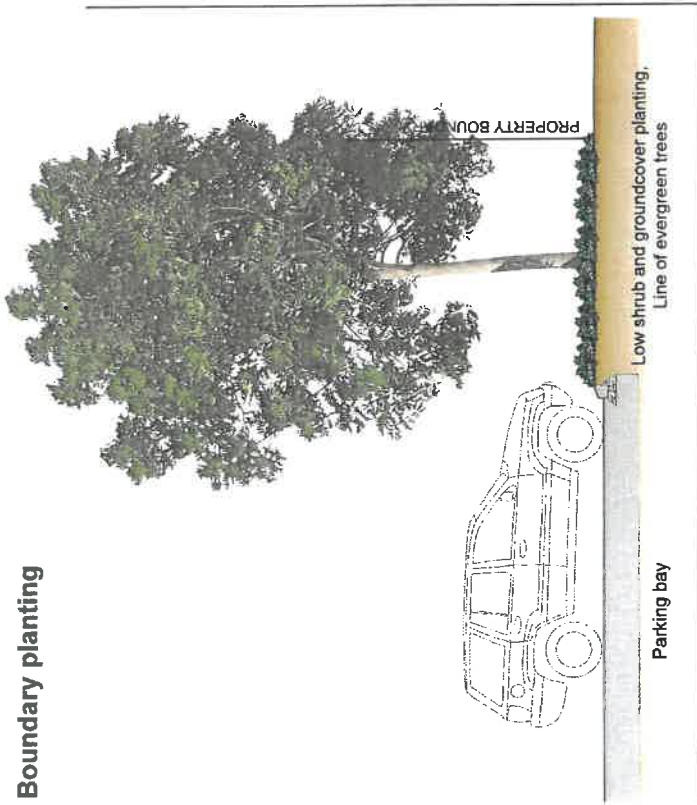
Arctotis spp.



Tecoma capensis



Boundary planting



Trees: Evergreen



Harpephyllum caffrum



Podocarpus falcatus

Shrubs and groundcovers



Carpobrotus edulis



Arctotis spp.



Delosperma lydenbergense



Plectranthus neochilus

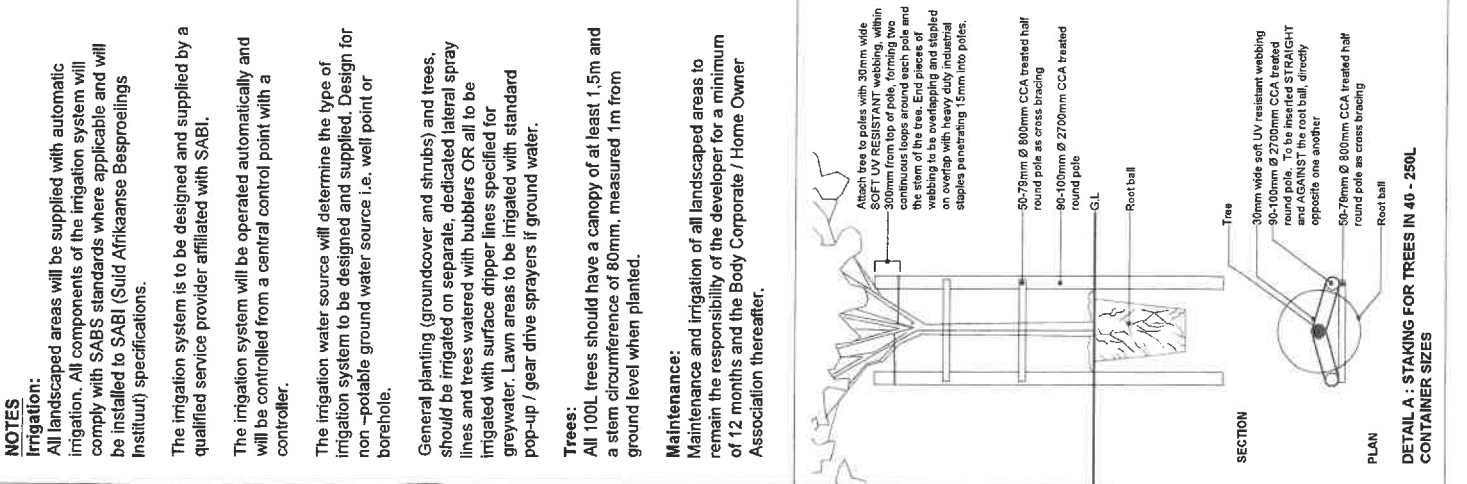
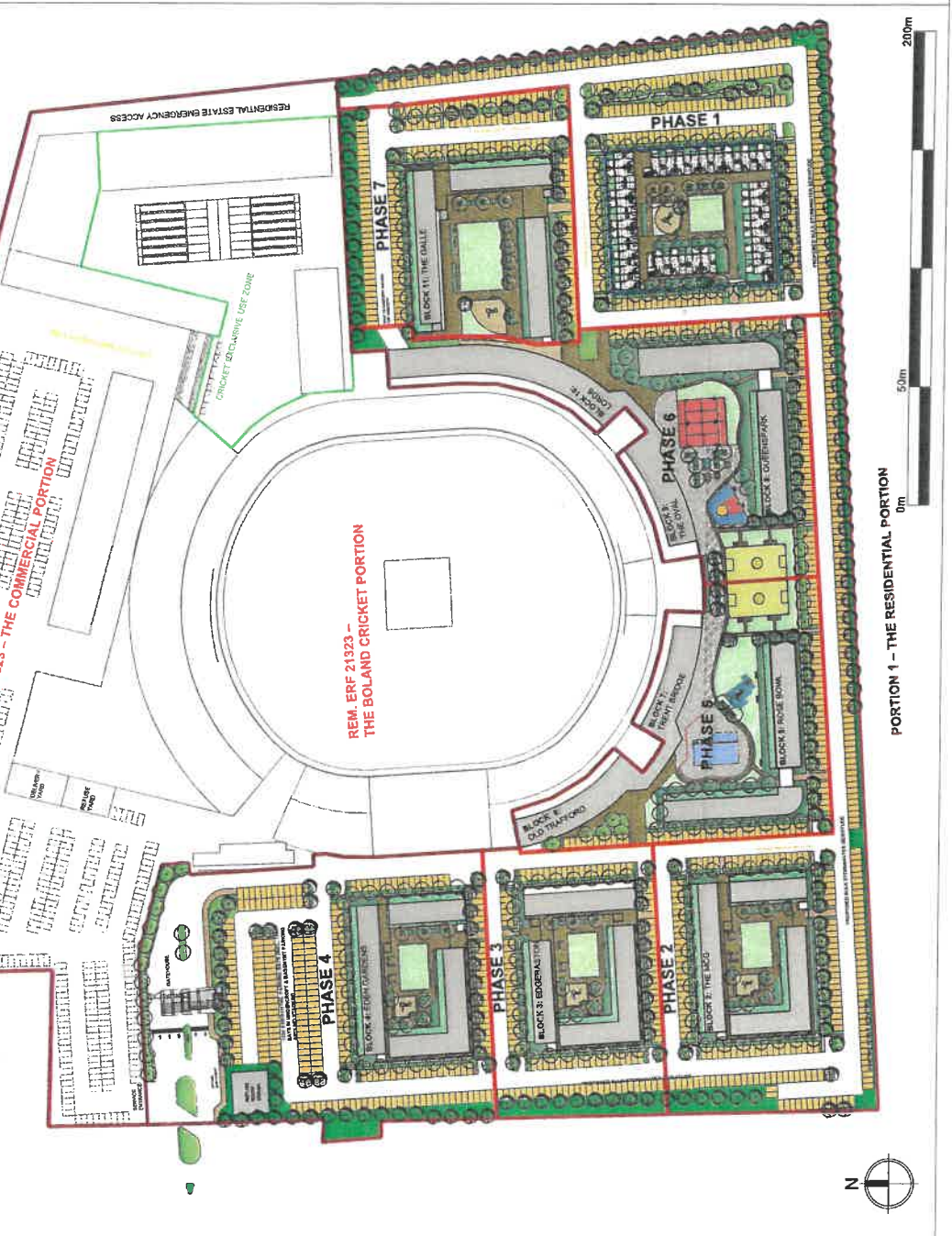


Tecoma capensis



NOTES
Irrigation:
 All landscaped areas will be supplied with automatic irrigation. All components of the irrigation system will comply with SABS standards where applicable and will be installed to SABI (Suid Afrikaanse Besproeiings Instituut) specifications.
 The irrigation system is to be designed and supplied by a qualified service provider affiliated with SABI.
 The irrigation system will be operated automatically and will be controlled from a central control point with a controller.
 The irrigation water source will determine the type of irrigation system to be designed and supplied. Design for non-potable ground water source i.e. well point or borehole.
General planting (groundcover and shrubs) and trees, should be irrigated on separate, dedicated lateral spray lines and trees watered with bubblers OR all to be irrigated with surface dripper lines specified for greywater. Lawn areas to be irrigated with standard pop-up / gear drive sprayers if ground water.
Trees:
 All 100L trees should have a canopy of at least 1,5m and a stem circumference of 80mm, measured 1m from ground level when planted.
Maintenance:
 Maintenance and irrigation of all landscaped areas to remain the responsibility of the developer for a minimum of 12 months and the Body Corporate / Home Owner Association thereafter.

- Trees:**
 Evergreen (min. 100L):
 Apodytes dimidiata
 Hamephyllum caffrum
 Nuxia foribunda
 Olea europaea subsp. africana
 Podocarpus falcatus
 Syzygium cordatum
 Syzygium guineense
 Trichilia emetica
 Deciduous (min. 100L):
 Celtis africana
 Combretum erythrophyllum
 Erythrina caffra
 Platanus acerifolia
 Quercus nigra
- Tail Shrubs, Windbreaks & Informal hedges (2m²):**
 Aloe arborescens
 Athanasia dentata
 Brachylaena discolor
 Buddlejia saligna
 Carissa macrocarpa
 Crassula marginata
 Dodonea viscosa
 Eriocaulon africanus
 Euryops virgineus
 Halleria lucida
 Pelargonium cucullatum
 Plumbago auriculata
 Portulacaria afra
 Polygala myrsinifolia
 Salvia africana-lutea
 Savia chamealeagnea
 Searsia crenata
 Searsia lucida
 Tarchonanthus camphoratus
- Shade shrubs and bulbs (3-4m²):**
 Aloe arborescens, cooperii & striata
 Berberis repens
 Carissa macrocarpa 'Green carpet'
 Chasmanthe foribunda
 Clivia spp & hybrids
 Coleonema alba / pulchellum
 Corydalis orbiculata
 Dietes bicolor
 Euryops pectinatus
 Felicia spp & hybrids
 Halleria elliptica
 Kniphofia praecox
 Othonna capensis
 Pelargonium capitatum
- Ground covers (5m²):**
 Lampranthus aureus
 Lampranthus roseus
- Ground covers (3-4m²):**
 Dietes grandiflora
 Carissa macrocarpa Green Carpet
 Crassula multicaeva
 Pelicodanthe frutescens
 Trachelospermum jasminoides
- Smaller shrubs and bulbs (3-4m²):**
 Watsonia spp
 Zantedeschia aethiops
 Heliclystium crispum
- Sanatio ficoides**
 Selago spp
 Scaevola plumosa
 Watsonia spp
 Zantedeschia aethiops
 Heliclystium crispum
- Plectranthus neochilis**
 Asparagus densiflorus 'sprenger'
 Aptenia cordifolia
 Arctostaphylos
 Arctostaphylos
 Bulbine frutescens
 Carobrotus edulis
 Crotalaria orbiculata
 Crassula multicaeva
 Crassula marginata
 Crocosmia aurea
 Delosperma iyoenburgense
 Dimorphotheca fruticosa
 Drosanthemum floribundum
 Drosanthemum speciosum
 Drosanthemum hispidum
 Heliclystium angyrophyllum
 Heliclystium cymosum
 Jordaanella dubiae
- Tecoma capensis**
 Senecio ficoides
 Selago spp
 Scaevola plumosa
 Watsonia spp
 Zantedeschia aethiops
 Heliclystium crispum
- Ruschia caroli**
 Ruschia lineolata
 Pelargonium petalatum
 Tubifragia violacea
 Watsonia hybrids
 Malephora crocea
 Othonna dentata
 Othonna capensis
 Felicia glenwood
- Climbers (5m²):**
 Rhoicissum tomentosa
 Thunbergia alata
- Lawn:**
 Cynodon dactylon
 Stenotaphrum secundatum



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LEGEND:

TREES

Street Trees (1000 container size):



Deciduous Trees:

Evergreen Trees

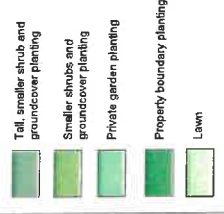
Compact and Open Space Trees (2000 container size):



Deciduous Trees

Evergreen Trees

SOFT LANDSCAPING



HARD LANDSCAPING



210

DATE	12	14
REVISION		
FILE CONNECTION		

WINDSHIELD
 WINDSHIELD CONSULTING
 P.O. Box 2448
 Fax: (855) 934-1332
 Email: info@windshield.co.za
 www.windshield.co.za

CLIENT: Boland Gateway (Pty) Ltd

PROJECT TITLE: Boland Gateway

DRAWING INFORMATION:
 Drawing Name: Landscape Plan - Phase 1
 DRAWING NUMBER: 210
 DATE OF ISSUE: 2022-08-23
 SCALE: 1:200 (B1)
 DATE: 2022-08-23
 DRAWN BY: RGS
 CHECKED BY: RGS
 APPROVED BY: RGS

DATE: 12/14

FOR APPROVAL

Pelargonium capitatum
Senecio ficoides
 Selago spp
Sisbe plumosa
Watsonia spp
Zantedeschia aethiopica
Helichrysum crispum

Shade shrubs and groundcovers (3-4m²):
Dietes graminiflora
Carissa macrocarpa Green Carpet
Crassula multicaeva
Plectranthus verticillatus
Plectranthus mona lavender
Trachelospermum jasminoides

Ground covers (5m²):
Gezania rigens
Lampranthus aureus
Lampranthus roseus
Plectranthus neochilis
Asparagus densiflorus 'sprengeri'
Aptenia cordifolia
Arctotis acutulis
Arctotis stoechadifolia
Bulbine frutescens
Carbobrotus edulis
Cotyledon orbiculata
Crassula multicaeva
Crassula marginata
Crocossmia aurea
Delosperma lydenburgense
Dimorphotheca fruticosa
Drosanthemum floribundum
Drosanthemum speciosum
Drosanthemum hispidum
Helichrysum argyrophyllum
Helichrysum cymosum
Jordaaniella dubiae
Ruschia caroli
Ruschia lineolata
Pelargonium peltatum
Tuibaghia violacea
Watsonia hybrids
Malephora crocea
Othonna dentata
Othonna capensis
Felicia glenwood

Climbers (5m²):
Rhoicissus tomentosa
Thunbergia alata

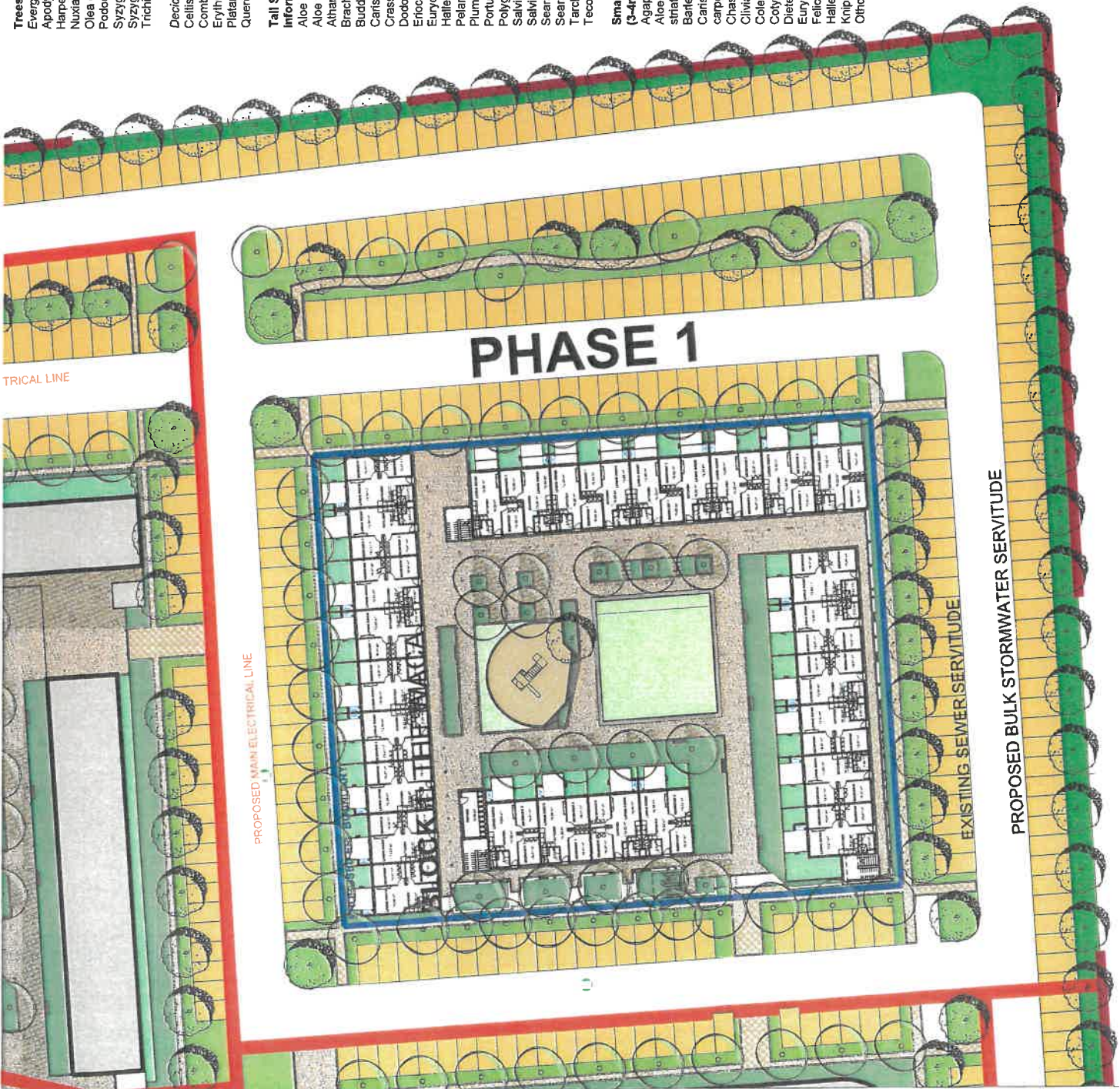
Lawn:
Cynodon dactylon
Stenotaphrum secundatum

Trees:
Evergreen (min. 100L):
Apodytes dimidiata
Harpephyllum caffrum
Nuxia floribunda
Olea europaea subsp. africana
Podocarpus falcatus
Syzygium cordatum
Syzygium guineense
Trichilia emetica

Deciduous (min. 100L):
Callis africana
Combretum erythrophyllum
Erythrina caffra
Platanus acerifolia
Quercus nigra

Tall Shrubs, Windbreaks & Informal hedges (2m²):
Aloe arborescens
Aloe ferax
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Athanasia dentata
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Canessa macrocarpa
Crassula marginata
Dodonea viscosa
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Euryops virgineus
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Salvia chamaeleopnea
Searsia crenata
Searsia lucida
Tarconanthus camphoratus
Tecomia capensis

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Agapanthus varieities
Aloe arborescens, cooperii & striata
Baeria repens
Canessa macrocarpa 'Green carpet'
Chasmanthe floribunda
Clivia spp & hybrids
Coleonema alba / pulchellum
Cotyledon orbiculata
Dietes bicolor
Euryops pectinatus
Felicia spp & hybrids
Halleria elliptica
Kniphofia praecox
Othonna capensis



DAVID HELBIG & ABRAHAMSE, LAND SURVEYORS

Erf 41641 (Public Street) Paarl

S.G. No.

1404/2022

Approved

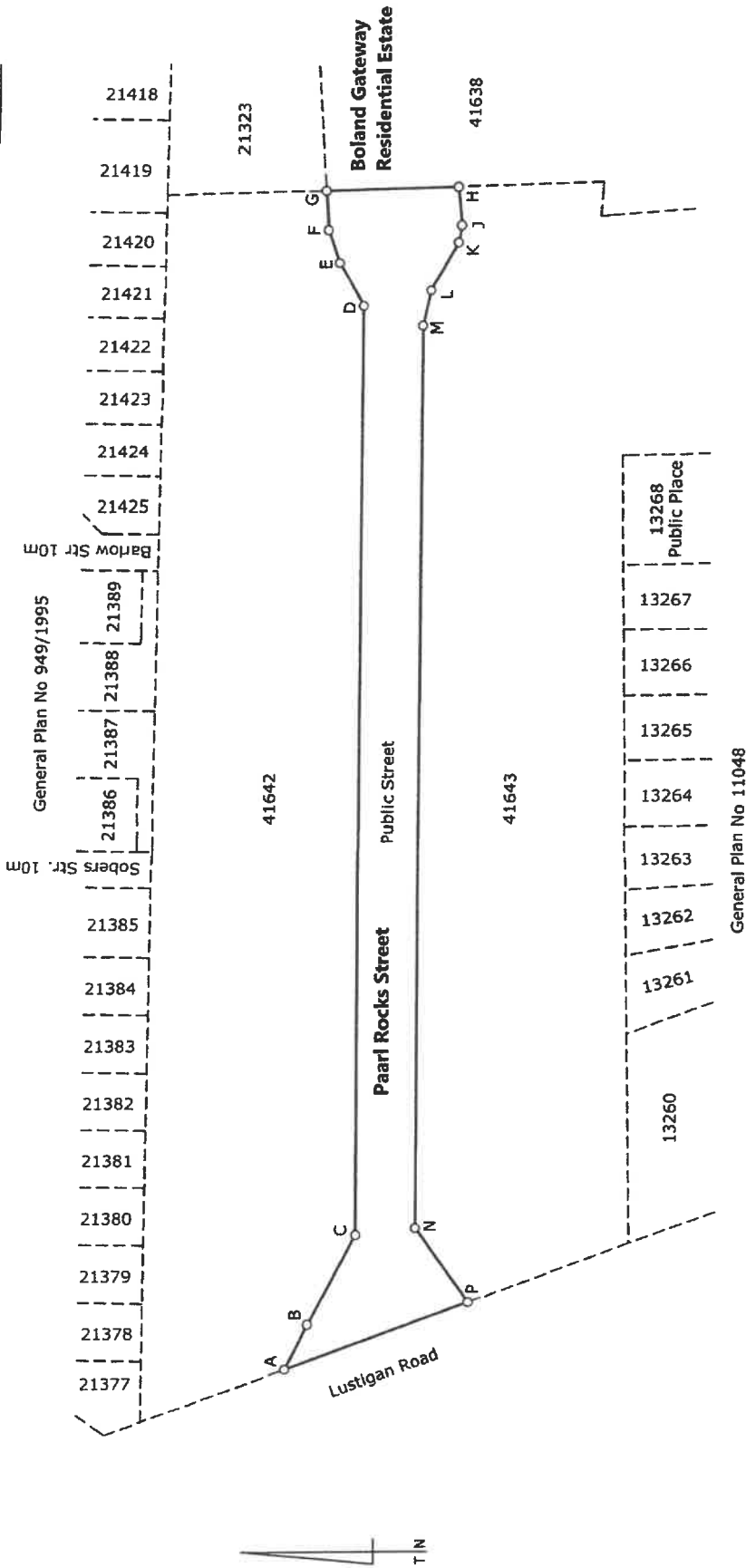
[Signature]

for Surveyor-General

29-07-2022

Sheet No 2 of

2 Sheets



Surveyed between June 2021 and June 2022 by me

[Signature]

S.G. DREYER
Professional Land Surveyor
(PLS1028)

Scale 1: 1250

Erf 41641 Paarl

01 AUG 2022

[Signature]



DRAKENSTEIN
MUNISIPALITEIT • MUNICIPALITY • UMASIPALA
Paarl | Wellington | Gouda | Saron | Sirnordium

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www.drakenstein.gov.za
customercare@drakenstein.gov.za
Civic Centre, Berg River Boulevard, Paarl 7646

Memo

To: EXECUTIVE DIRECTOR: CORPORATE & PLANNING SERVICE DEPARTMENT
(ATTENTION: J. MEYER)

From: MANAGER: INFRASTRUCTURE DEVELOPMENT

Enquiries: L. PIENAAR

Collaborator number: 2037025

Reference number: 15/4/1 (41638) P (0812)

Date: 09 June 2023

Subject: APPLICATION FOR SUBDIVISION, PERMANENT DEPARTURE, CREATION OF SERVICES SERVITUDE, AMENDMENT OF CONDITIONS OF APPROVAL, CONSENT USE, APPROVAL OF STREET NAMES: ERF 41638 PAARL (BOLAND GATEWAY) REVISION 1

Time Limit on Conditions: These conditions will be limited to a period of 2 (two) years from the date as on the covering memo from this department. If after this period no construction has commenced (this excludes any preparatory work or site clearance) all the studies carried out for the proposed development need to be updated and revised accordingly, this shall include compliance with the latest legislation, amended legislation, latest or amended standards and revised master planning.

NOTE: This comment covers a number of disciplines and each section needs to be dealt with by a competent specialist in that field co-ordinated by the consultant managing the application. No correspondence will be entered into with individual consultants

THE FOLLOWING CONDITIONS WILL APPLY

1 STREETS & TRAFFIC

- 1.1 The proposed development is supported and traffic assessment acceptable in general, conditional on the statements below, and should be revisited with details of upgrading taking all comments into consideration at Site Development Plan (SDP) submission stage;
- 1.2 *The conditions as stated by the Provincial Roads Engineer (PRE) in their letter referenced TPW/CFS/RP/LUD/REZ/SUB-10/462 (Job 29054) dated 12 January 2022 must be adhered to;*
- 1.3 *Any alterations to the existing road network or construction of new roads and accesses will be the responsibility of the developer which includes design, approval and construction of any additional traffic control and or traffic calming measures as detailed in the updated Traffic Impact Assessment (TIA) of UDS referenced UDS411/Reports/TIA/Rev01 dated 13 December 2021. All costs to be carried by the developer; and*

- 1.4 The Langenhoven Street being the main access route to the Paarl CBD and economic centres to the north from this development, should be regarded as the main mobility route from the development to these areas. Focus of upgrades should in all instances consider this scenario.

2 STORM WATER

- 2.1 ***The proposed development is supported from a stormwater management perspective. The Stormwater Management Plan (SWMP) of UDS referenced UDS411/reports/swmp_rev-b dated 27 March 2023 should be revised with a minimum time of concentration of 15 minutes for the storm events prior to the approval of any civil and/ or building plans;***
- 2.2 ***The Disaster Management Plan (DMP) is supported from a stormwater management perspective. The DMP of UDS referenced UDS411/S3/dmp Rev00 dated 27 March 2023 must be revisited prior to the approval of any civil and/ or building plans. The name, location and contact details of the developer/ chairman of the Property Owners Association incase of major flooding at the proposed inlet structure at erf 21128 Paarl must be clearly indicate. The responsible person must sign the DMP on behalf of the Property Owners Association.***
- 2.3 Any new storm water networks or upgrading of existing networks will be the responsibility of the developer, which includes design, approval and construction thereof as detailed in the SWMP. All costs to be carried by the developer;
- 2.4 No development is allowed within the 1:50 year flood line and any construction within the 1:100 year flood line must be 1m above the 1:100 year flood line;
- 2.5 Pollution control measures to mitigate chemical and solid pollution must be provided at inlet and outlet structures as may be relevant;
- 2.6 Only pre-development run-off of a 1:2 year storm event will be accepted into the existing system. Provision must be made to accommodate the detention of run-off for a 1:50 year storm event; and
- 2.7 Provision must be made for an effective rainwater harvesting system to be planned and designed for all roof water. The volume of the storage facilities should be based on 0.02m³/m² roof area.

3 WATER

- 3.1 ***The developer shall be responsible to implement the findings of the GLS report dated 19 July 2021;***
- 3.2 ***The developer may be responsible to relocate the water main crossing erf 20725 Paarl along its southern boundary. This cost is not deductible from the Development Charges;***
- 3.3 The development will be provided with a bulk metered connection at actual cost;
- 3.4 All individual portions must be provided with a separate water connection and a separate water meter to municipal specifications;
- 3.5 All the metered connections must be installed one meter inside the erf boundary of each portion;

3.6 Water saving devices shall be installed in toilets, bathrooms and basins;

3.7 Any existing system that is to remain shall be upgraded to minimum municipal standards.

4 WASTEWATER SERVICES

4.1 *The developer shall be responsible to implement the findings of the GLS report dated 19 July 2021;*

4.2 *The developer may be responsible to relocate the wastewater main crossing erf 20725 Paarl along its southern boundary. This cost is not deductible from the Development Charges;*

4.3 The applicant shall ensure adherence to the various conditions in the Drakenstein Municipality, Water and Sanitation By-law 2022 relating to wastewater effluent discharge;

4.4 All individual portions must be provided with a separate wastewater connection;

4.5 All the connections must be installed one meter inside the erf boundary of each portion; and

4.6 Any existing system that is to remain shall be upgraded to minimum municipal standards.

5 SOLID WASTE

5.1 The Municipality undertakes, after the proclamation of the township/development, to remove household refuse in accordance with its by-laws and shall make its own arrangements with the occupants of erven/home owner's organisation/body corporate in the township/development, for the removal of such household refuse;

5.2 A waste recovery/recycling initiative has been implemented in Drakenstein and the development will have to be prepared to comply with any requirements as the project is rolled out;

5.3 Such collection shall be from a single centralised waste collection site (or sites) for the development as per agreement with Solid Waste Department;

5.4 Provision should be made for a waste disposal facility and entrance to the township, with lockable gate for wheelie bins (240l bins) and recyclable bags equal to the number of dwellings per development;

5.5 A key should be provided to Drakenstein Municipality to be able to unlock the door/gate to garbage area on collection days, from the kerbside;

5.6 The garbage area should be enclosed with a 1.8m high fence and need to be provided with the following;

- Tap with running water;
- A gully which is connected to an approved sewer connection;
- Concrete floor;

5.7 Municipal refuse trucks will not enter the township (complex) to collect wheelie bins on collection days;

5.8 The Developer shall indemnify the Municipality from any damages caused as a result in rendering the refuse removal service; and

- 5.9 The submitted Integrated Solid Waste Management Plan must be approved by the Solid Waste Management department before the approval of the civil design drawings.

6 DEVELOPMENT CHARGES

- 6.1 Based on the information provided in the application, Development Charges are payable by the developer. Development Charges will be calculated when a more detailed SDP is submitted; and
- 6.2 The payment of the Development Charge (water, wastewater, stormwater, solid waste and roads) can be discounted against the bulk service cost needed for the development.

7 GENERAL

- 7.1 *Depending on the scale of expansion in future, additional Civil Engineering Specialist Reports may be requested by this department when the developer wishes to increase the GLA;*
- 7.2 *When at any stage in future the municipality is required to take over ownership and maintenance of civil infrastructure, it will be the responsibility of the property owners to ensure all water and waste water connections adhere to municipal standards and by-laws;*
- 7.3 A services agreement shall be entered into, prior to the start of construction, where in shall be detailed the apportionment of funding of any new works common to the area, including but not limited to road network upgrading, sewerage treatment works upgrading, bulk water supply upgrading, sewage network upgrading;
- 7.4 When any service is to be taken over by Drakenstein Municipality, any damage caused due to the construction of houses or any other construction activity shall be repaired by the Developer. Failure to do so will result in clearances and occupation certificates being withheld and remedial works shall be done by Drakenstein Municipality for the cost of the developer;
- 7.5 The developer is responsible for the payment of a Developers Charge (water, sewer, stormwater, solid waste and roads) which can be discounted against the bulk service cost needed for the development;
- 7.6 The developer is responsible for the funding of all connections to the bulk services and all internal works;
- 7.7 The findings of the bulk service capacity analysis carried out by councils consultant GLS Engineers, needs to be implemented simultaneously with the development;
- 7.8 All of the works, including but not limited to; roads, stormwater, water, sewers, landscaping, irrigation, etc. shall be designed by a suitably registered (ECSA registration for the civil works and SACLAP registration for the landscaping) person and any such works shall be constructed under supervision of such registered person. All such design plans shall be submitted to the Civil Engineering Services Department of Drakenstein Municipality for approval prior to the commencement of construction;
- 7.9 The whole of the works shall fall under the control of a single project manager;

- 7.10 The municipality shall be represented at all site meetings for the duration of the construction of the works and to this end timeous notification of such meetings shall be supplied to the Civil Engineering Services Department;
- 7.11 All works where applicable shall be constructed to at least the minimum standards as set out in, Engineering Services: Municipal Standards;
- 7.12 Where applicable all water network, (downstream of the valve immediately upstream of the bulk water meter, upstream of the connection to the existing system or intersection point with the existing road), sewer network, stormwater network and road network components shall be a private combined system and shall be indicated as such on all documents and plans;
- 7.13 All private combined systems (including but not limited to water, sewer, stormwater, roads, irrigation, etc.) shall be the joint and several responsibility (including but not limited to the administration of the joint account and operation and maintenance of the system) of the members of the homeowners association/body corporate and must be noted as such in any constitution of any such body and any such constitution must be submitted for approval by council. This constitution shall be notarially linked to each separate title deed;
- 7.14 A comprehensive operational infrastructure management plan shall be drawn up and submitted for approval by the Civil Services Department;
- 7.15 A set of accurate as-built drawings as per Drakenstein Municipality: Civil Engineering Department's Standards must be submitted at the practical completion inspection; and
- 7.16 The above conditions are to be complied with in stages.
- 7.16.1 Requirements associated with the preparation of plans, drawings, permits, agreements and approvals, shall be complied with prior to construction;
- 7.16.2 Requirements associated with the completion of construction, development charges, as-built drawings, maintenance management plans, agreements, etc. These will be complied with prior to the transfer of any property or occupation of any property/building in the phase; and
- 7.16.3 Proof of compliance for the requirements associated with long term operations must be available on request.

 LP RIENAAR (Pr. Eng)

ACTING EXECUTIVE DIRECTOR: ENGINEERING SERVICES

I:\DEVELOPMENT APPLICATIONS\15 town planning\15-4-1\2023\comments\Erf 41638 Paarl - Subdivision, Permanent Departure, Creation of Services Servitude Revision 1.docx

LP/gm

Provide Comments: Electro Technical Engineering Services



LU Circulation 2002035

Task Ref 4596512

From Jaime Meyer

Due Date 09-11-2022

Date Completed 09-11-2022

Date Assigned 09-11-2022 12:15

LUA On/Offices Ref 1995755

LUA ExtensionRef 11889407

Provide Comments: Electro Technical Engineering Services Yes

User: Electro Technical Engineering LEONL

Services: In Order

Outcome: Electro Technical Engineering

Completion Date: Electro Technical Engineering Services 2022-11-09

Comments: Electro Technical Engineering Services (Note: This field forms part of an official email to the Applicant)

The development shall be services by means of one communal bulk supply that shall be provided from the street boundary.

NRS019 network recovery cost will apply for this development.

An application must be submitted to the respective department for approval of the development electrical installation and load requirement.

A certificate of compliance and occupational certificate must be issued by a private registered installation electrician on the day the service is rendered.

Feedback History

Feedback User Leon Lamy (LEONL)

Feedback Date 09-11-2022 16:05

Completion 100%

Feedback No feedback was required.

Resubmitted Tests

Prev. Allocation To

Date Reallocated

Resubmission Note

Task Note

Note

Back