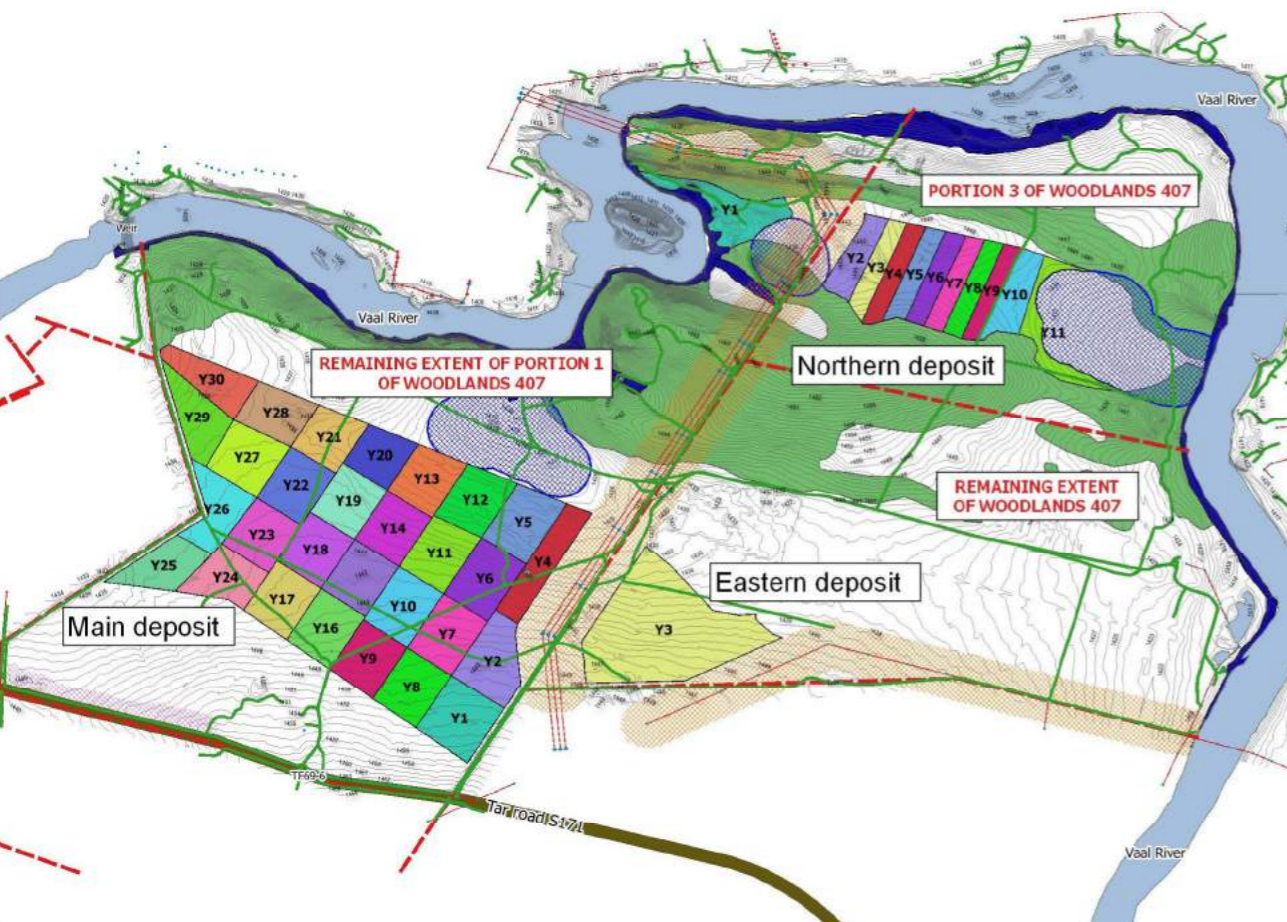
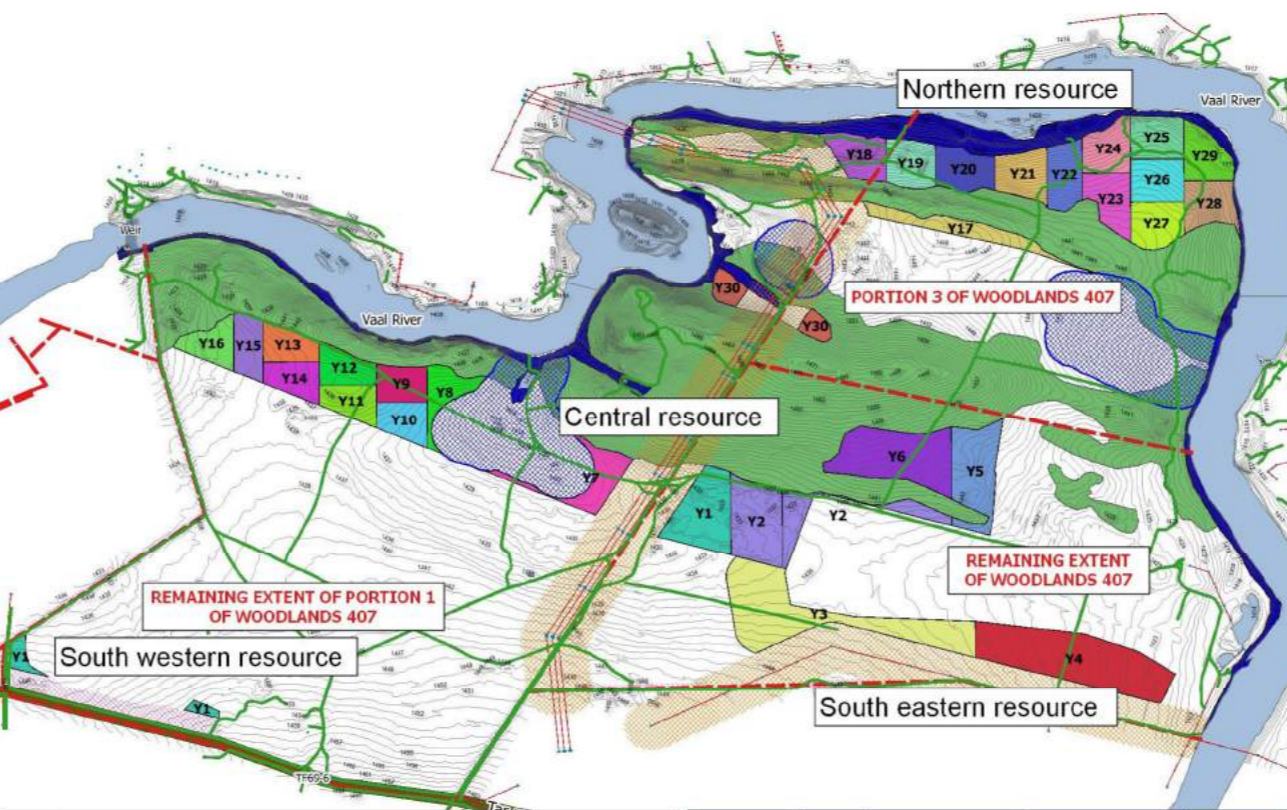


30 year mining plan for sand reserve



30 year mining plan for aggregate resource



NOTES:
 Buffer areas were calculated according to the following criteria:
 - 102m around wetlands (preliminary)
 - 100m from main tar road
 - 100m from electrical infrastructure (relaxation can be applied for)
 - 20m from property boundaries

The following buffer zones are outstanding and requires incorporation to determine final resource distribution:
 - Buffer zones around archeological sites, riparian systems, ecological sensitive and high biodiversity areas. (Ridges and riparian zones were excluded from the resource distribution based on the scoping phase assessments and delineation. Buffer zones are still to be determined during EIA phase.

BLOCK REF	CROP	AREA CULTIVATED	CENTROID	PERIMETER
GOOSEBAY FARM				
Block A	Maize	279 844m ²	-26,75345 27,62983	2 110m
Block B	Maize	513 940m ²	-26,75173 27,62331	2 951m
Block C	Maize	223 939m ²	-26,75078 27,61692	2 479m
Block D	Maize	124 657m ²	-26,75287 27,61553	1 610m
Block E	Maize	244 681m ²	-26,75328 27,59195	1 946m
Block F	Maize	116 368m ²	-26,74858 27,62694	1 881m
Block G	Wheat	193 860m ²	-26,74655 27,62820	2 053m
Block H	Maize	155 128m ²	-26,75661 27,60109	1 783m
Lucerne field	Lucerne	19 327m ²	-26,74933 27,63128	584m
TOTAL		1 871 744m²		

Legend

Mine layout

- Processing plant footprint
- Pump station

Goosebay Canyon Farm

- Tar road
- Vaal River_Polygon
- GOOSEBAY TRACKS
- Goosebay cadastral info
- Goosebay dams
- Goosebay electricity

Buffer zones

- 102m Wetland buffer (pre-mitigation)
- 100m power line buffer
- 20m property boundary buffer
- 100m road intersection
- Riparian zone
- Ridges (preliminary)

Resource distribution

- Aggregate resource
- Sand deposit

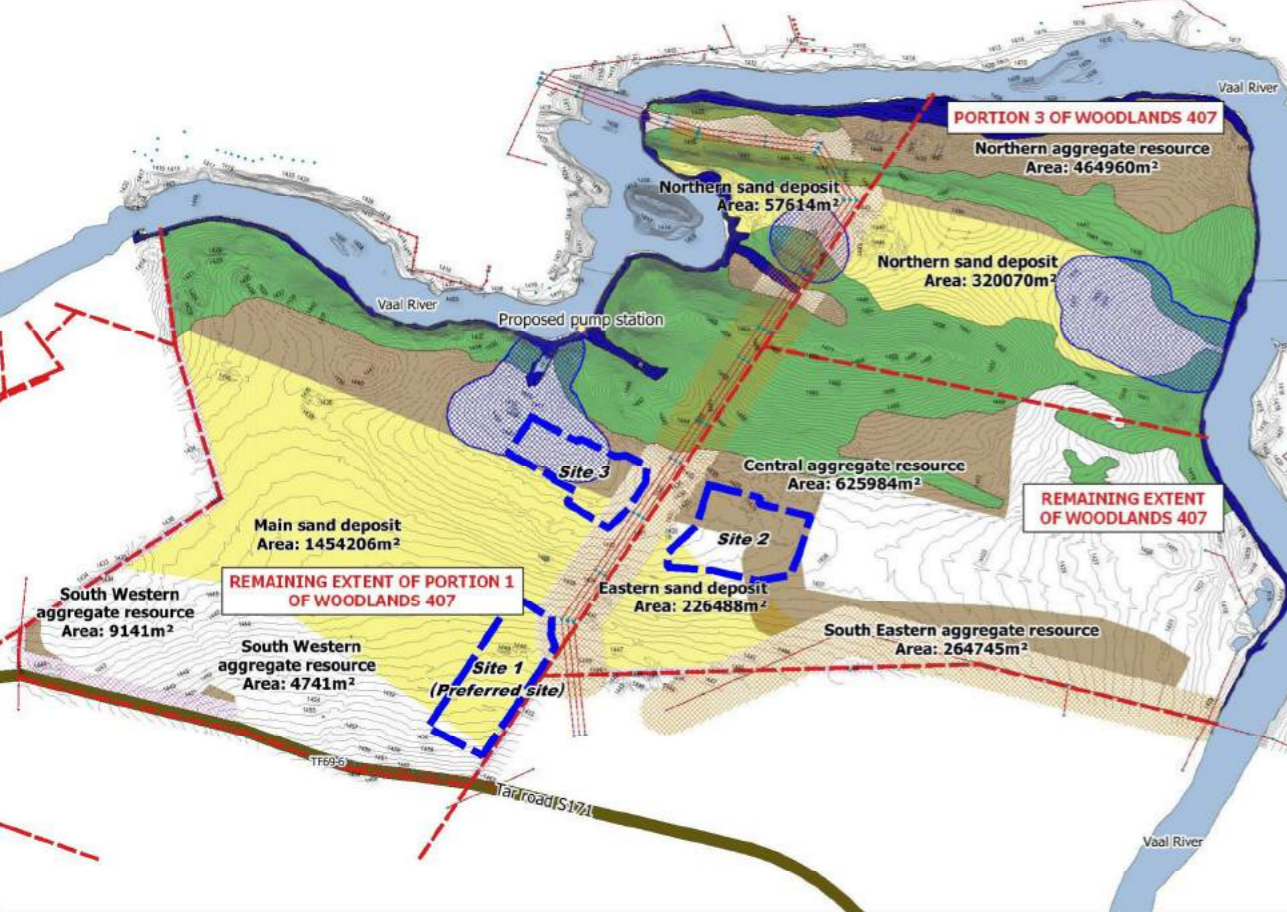
Goosebay Canyon Farm - Agriculture

- Agricultural block
- Fence line

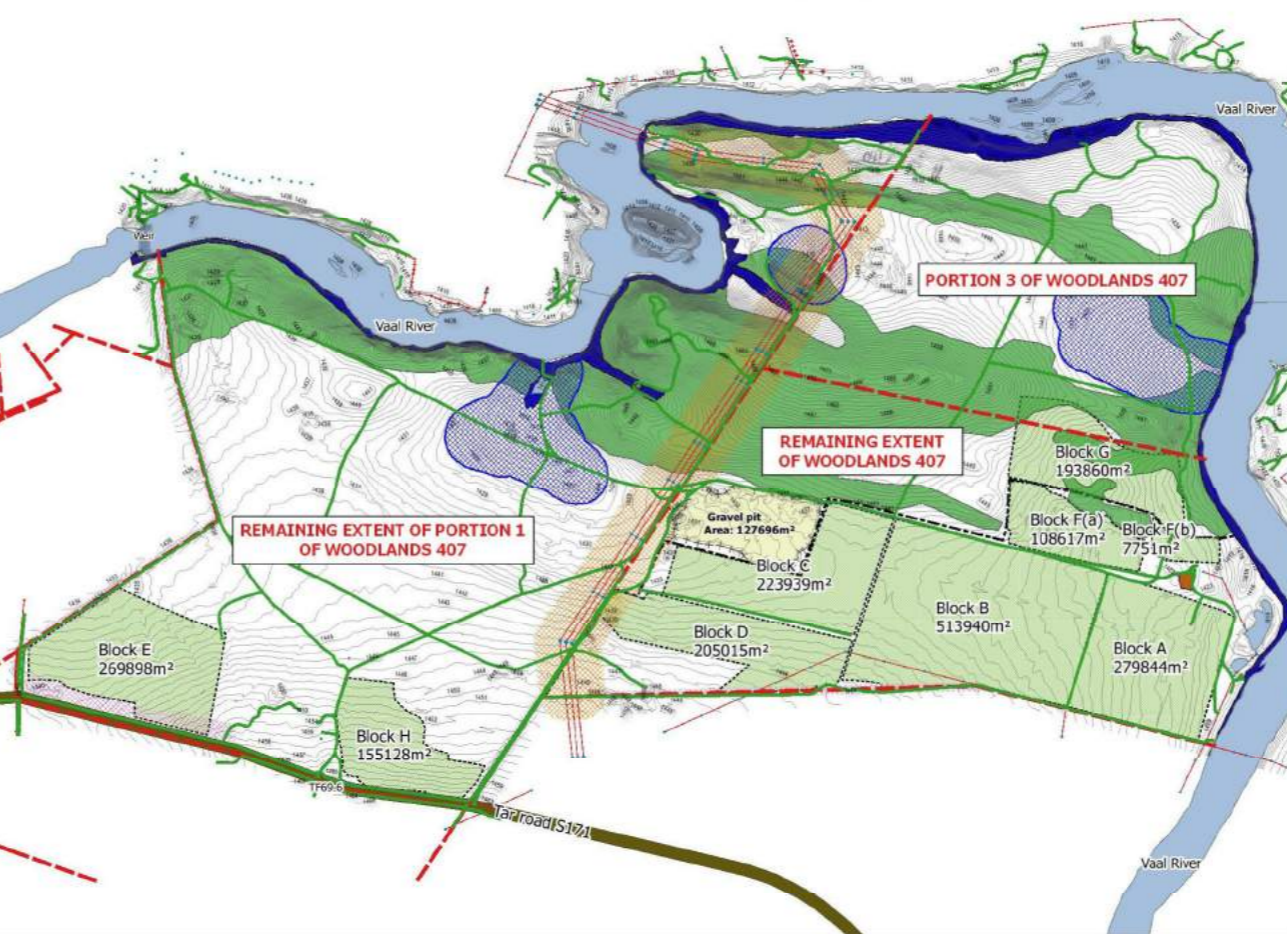
30 year mining plan

Y1	Y11	Y21
Y2	Y12	Y22
Y3	Y13	Y23
Y4	Y14	Y24
Y5	Y15	Y25
Y6	Y16	Y26
Y7	Y17	Y27
Y8	Y18	Y28
Y9	Y19	Y29
Y10	Y20	Y30

Resource distribution and alternative processing plant locations



Agricultural fields



CLIENT:
PURE SOURCE MINE

DRAWING TITLE:
 GOOSEBAY FARM, CURRENT AND FUTURE LAND USES

DESCRIPTION:
 REPRESENTATION OF MINING AND AGRICULTURAL ACTIVITIES ON GOOSEBAY FARM

DATE:
 2018-10-04

SCALE (A1):
 1:11 000

DRAWING NO:
 1 OF 1

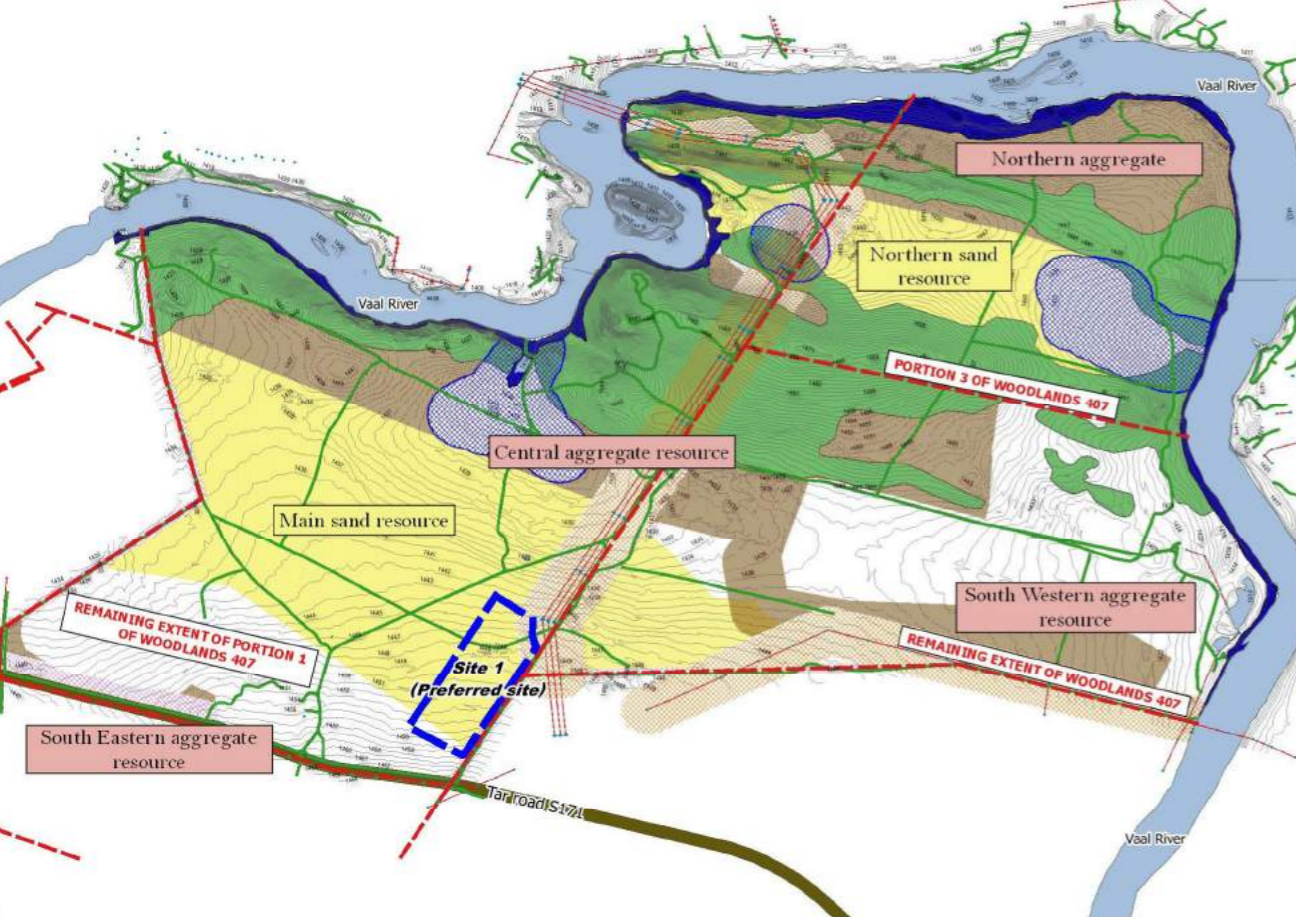
DRAWING VERSION:
 12

DRAWING PREPARED BY:
 MR. MADER VAN DEN BERG
 ML(PROF) IN LANDSCAPE ARCHITECTURE

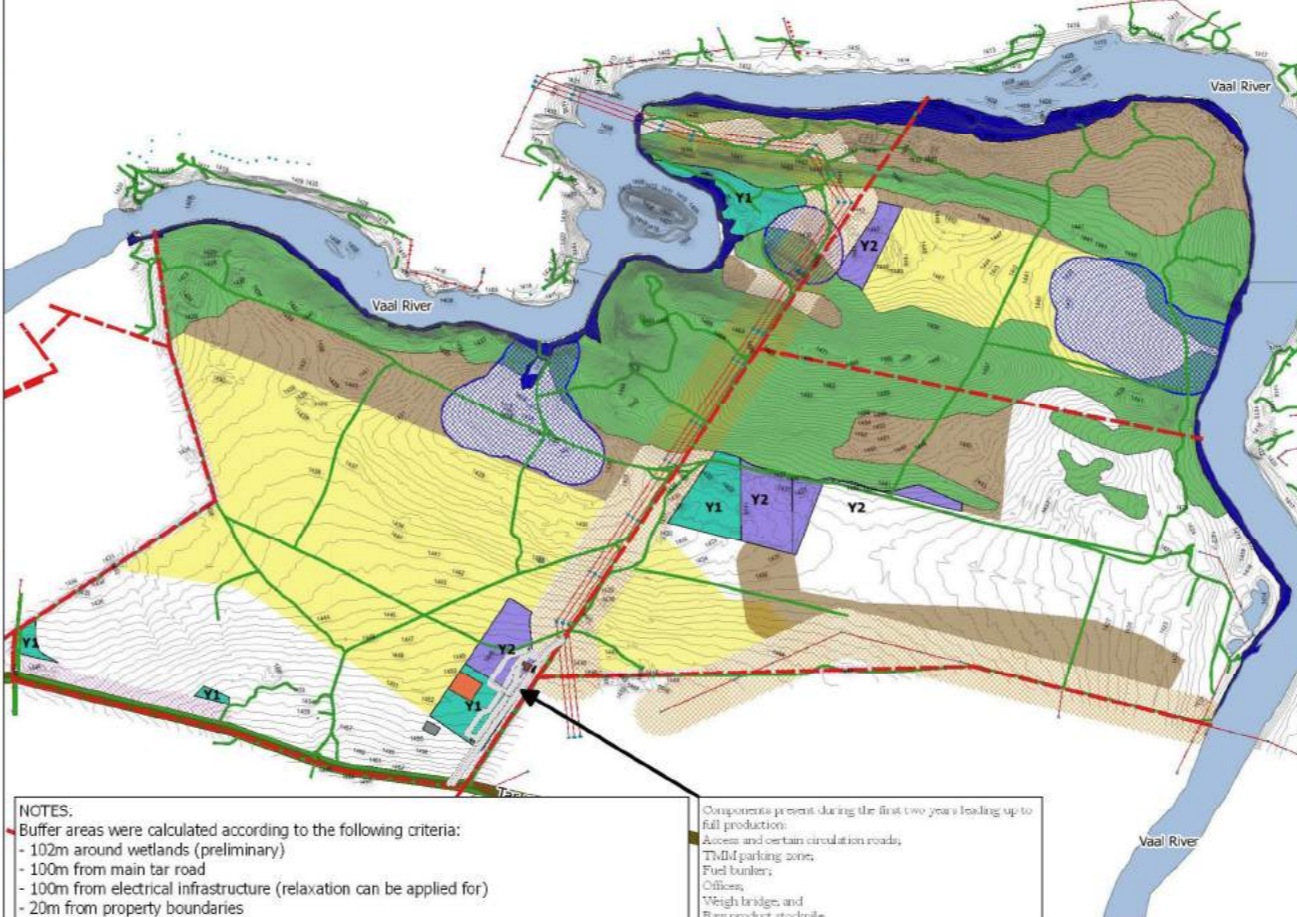
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ENTIRE RESOURCE AREA OF SILICA SAND AND AGGREGATES



**CONSTRUCTION PHASE - LOW PRODUCTION
Year 1 and 2 Sand and Aggregate mining areas**

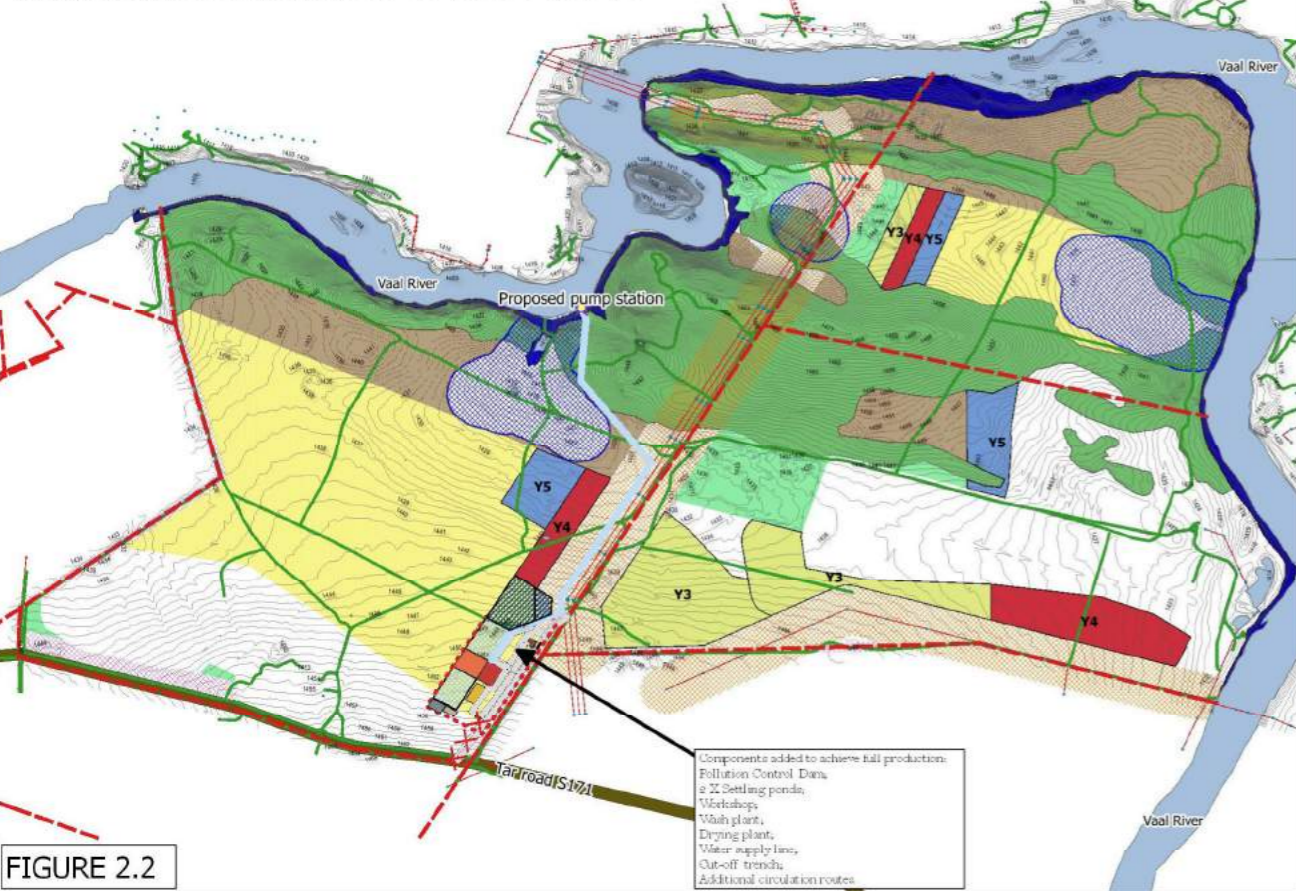


NOTES:
 - Buffer areas were calculated according to the following criteria:
 - 102m around wetlands (preliminary)
 - 100m from main tar road
 - 100m from electrical infrastructure (relaxation can be applied for)
 - 20m from property boundaries

The following buffer zones are outstanding and requires incorporation to determine final resource distribution:
 - Buffer zones around archeological sites, riparian systems, ecological sensitive and high biodiversity areas. (Ridges and riparian zones were excluded from the resource distribution based on the scoping phase assessments and delineation. Buffer zones may still be adjusted during the EIA phase.)

Components present during the first two years leading up to full production:
 Access and certain circulation roads,
 TMM parking zones,
 Fuel bunker,
 Offices,
 Weigh bridge, and
 Raw product stockpile

**OPERATIONAL PHASE - FULL PRODUCTION
Year 3 to 5 Sand and Aggregate mining areas.
Progressive rehabilitation of Year 1 and 2.**



**OPERATIONAL PHASE - FULL PRODUCTION
Year 6 to 10 Sand and Aggregate mining areas.
Progressive rehabilitation of Year 3 to 5.**



Legend

Goosebay Canyon Farm

- Estimated sand deposit
- Estimated aggregate
- Tar road
- Vaal River
- Goosebay cadastral info
- Goosebay dams
- Goosebay electricity

Buffer zones

- 102m Wetland buffer (pre-mitigation)
- 100m power line buffer
- 20m property boundary buffer
- 100m road intersection
- Riparian zone
- Ridges (preliminary)

Mine layout

- Pump station
- TMM parking
- 2.5MVA Power supply
- PCD
- Fuel bunker
- Offices
- Water supply line
- Cut off trench
- Security check point
- Drying plant
- Wash plant
- Raw product stockpile
- Settling ponds
- Progressive rehabilitation

30 year mining plan

Y1	Y11	Y21
Y2	Y12	Y22
Y3	Y13	Y23
Y4	Y14	Y24
Y5	Y15	Y25
Y6	Y16	Y26
Y7	Y17	Y27
Y8	Y18	Y28
Y9	Y19	Y29
Y10	Y20	Y30

CLIENT:
PURE SOURCE MINE

DRAWING TITLE:
PROGRESSIVE MINING AND REHABILITATION OF SAND AND AGGREGATE RESOURCE

DESCRIPTION:
YEARLY SAND AND AGGREGATE MINING AREAS FROM YEAR 1 TO 10 AND PROGRESSIVE REHABILITATION

DATE: 2018-10-23	SCALE (A1): 1:11 000
DRAWING NO: 1 OF 3	DRAWING VERSION: 3

DRAWING PREPARED BY:
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FIGURE 2.2

OPERATIONAL PHASE - FULL PRODUCTION
Year 11 to 15 Sand and Aggregate mining areas.
Progressive rehabilitation of Year 6 to 10.

OPERATIONAL PHASE - FULL PRODUCTION
Year 16 to 20 Sand and Aggregate mining areas.
Progressive rehabilitation of Year 11 to 15.

- Legend**
- Goosebay Canyon Farm**
- Estimated sand deposit
 - Estimated aggregate resource
 - Tar road
 - Vaal River
 - Goosebay cadastral info
 - Goosebay dams
 - Goosebay electricity
- Buffer zones**
- 102m Wetland buffer (pre-mitigation)
 - 100m power line buffer
 - 20m property boundary buffer
 - 100m road intersection
 - Riparian zone
 - Ridges (preliminary)
- Mine layout**
- Pump station
 - TMM parking
 - 2.5MVA Power supply
 - PCD
 - Fuel bunker
 - Offices
 - Water supply line
 - Cut off trench
 - Security check point
 - Drying plant
 - Wash plant
 - Raw product stockpile
 - Settling ponds
 - Progressive rehabilitation

- 30 year mining plan**
- | | | |
|-----|-----|-----|
| Y1 | Y11 | Y21 |
| Y2 | Y12 | Y22 |
| Y3 | Y13 | Y23 |
| Y4 | Y14 | Y24 |
| Y5 | Y15 | Y25 |
| Y6 | Y16 | Y26 |
| Y7 | Y17 | Y27 |
| Y8 | Y18 | Y28 |
| Y9 | Y19 | Y29 |
| Y10 | Y20 | Y30 |

OPERATIONAL PHASE - FULL PRODUCTION
Year 21 to 25 Sand and Aggregate mining areas.
Progressive rehabilitation of Year 16 to 20.

OPERATIONAL PHASE - FULL PRODUCTION
Year 26 to 30 Sand and Aggregate mining areas.
Progressive rehabilitation of Year 21 to 25.

CLIENT:
PURE SOURCE MINE

DRAWING TITLE:
 PROGRESSIVE MINING AND REHABILITATION OF SAND AND AGGREGATE MINING AREAS

DESCRIPTION:
 YEARLY SAND AND AGGREGATE MINING AREAS FROM YEAR 11 TO 30 AND PROGRESSIVE REHABILITATION

DATE: 2018-10-23	SCALE (A1): 1:11 000
DRAWING NO: 2 OF 3	DRAWING VERSION: 3

DRAWING PREPARED BY:
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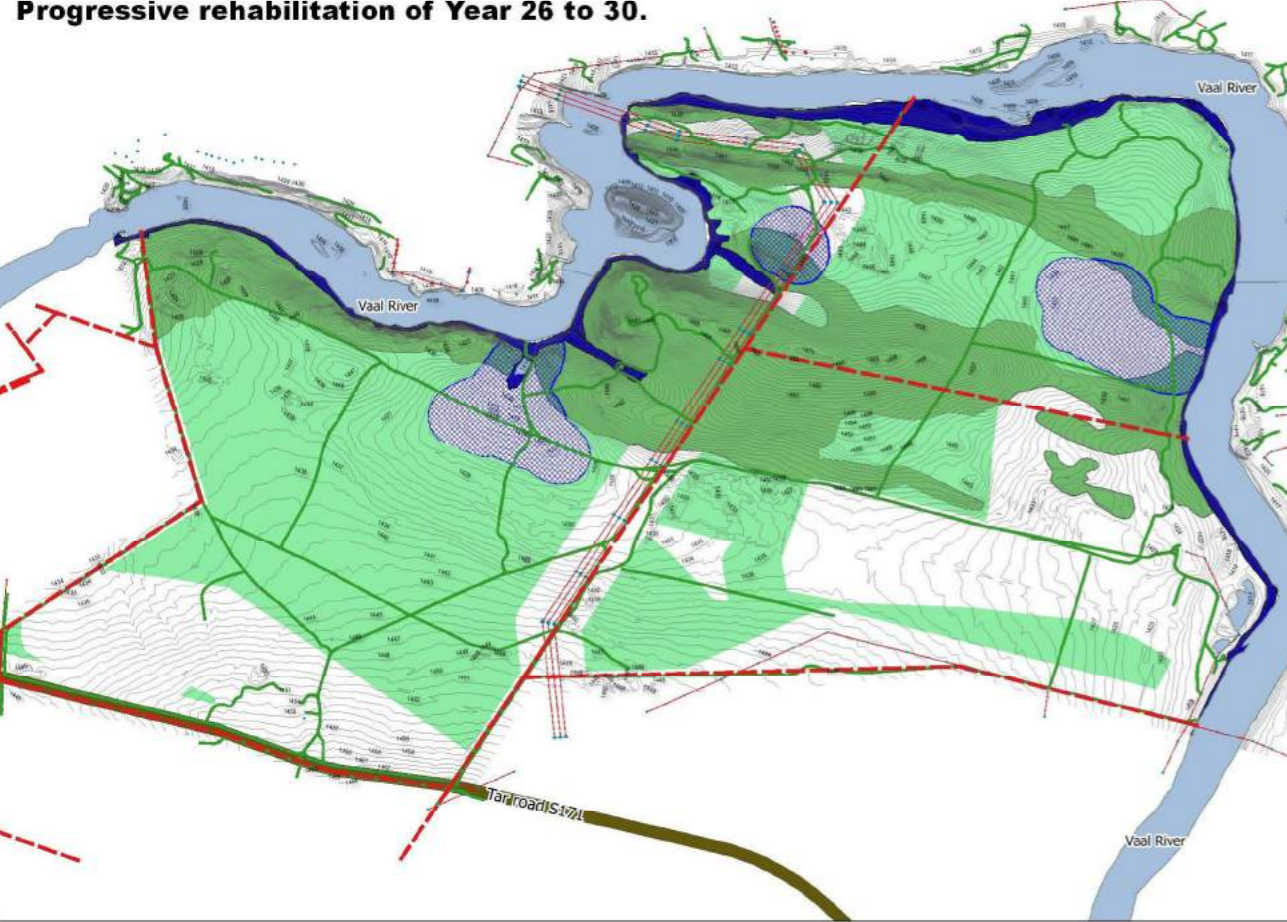


FIGURE 2.3

CLOSURE PHASE - LOWERED PRODUCTION FROM YEAR 27 - 30
Sand and Aggregate mining completed.
Progressive rehabilitation of Year 26 to 30.

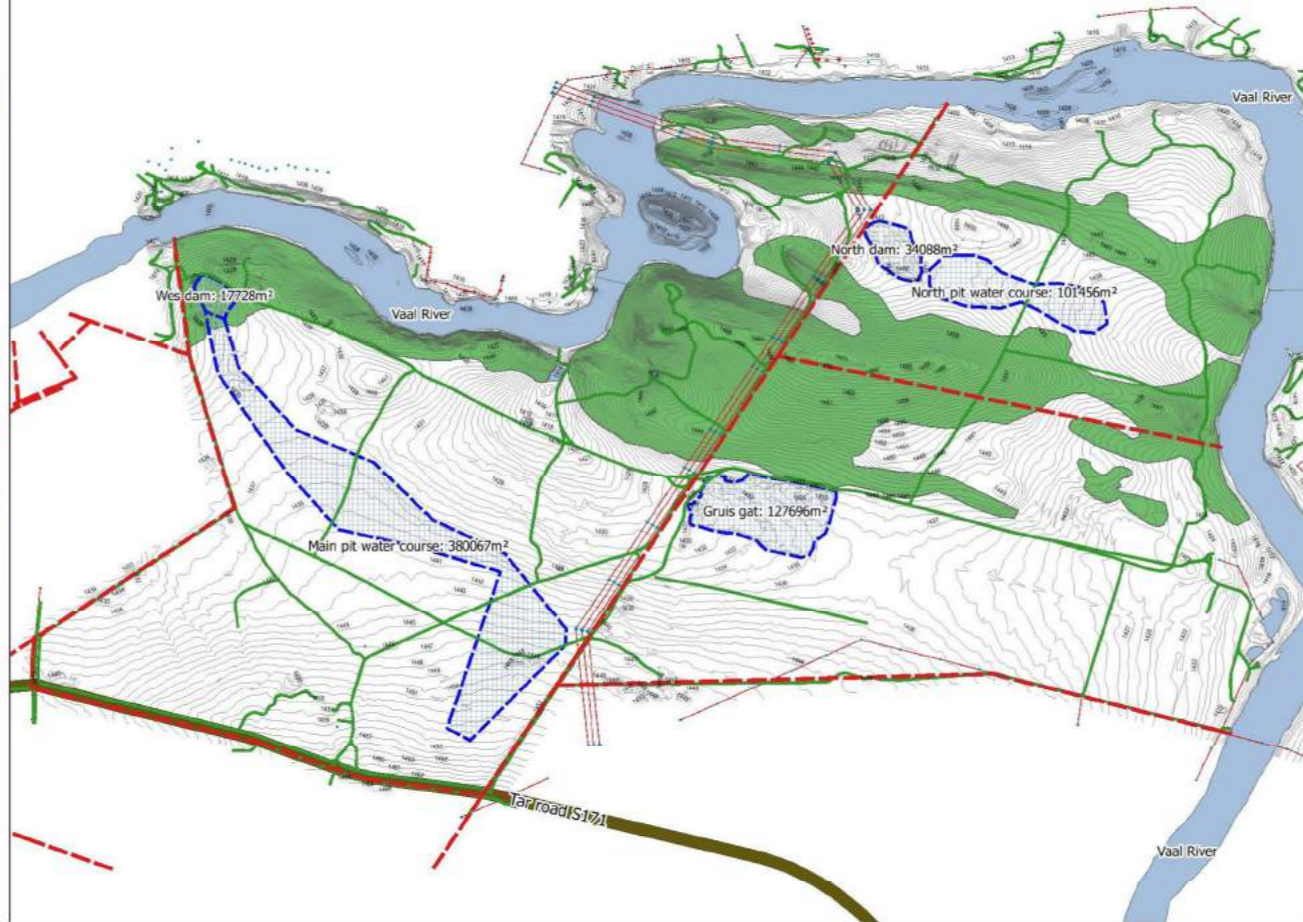
EXISTING DAMS

- Legend**
- Goosebay Canyon Farm**
- Tar road
 - Vaal River
 - Goosebay cadastral info
 - Goosebay existing dams
 - Proposed dams
 - Goosebay electricity
 - Progressive rehabilitation
- Buffer zones**
- 102m Wetland buffer (pre-mitigation)
 - 100m power line buffer
 - 20m property boundary buffer
 - 100m road intersection
 - Riparian zone
 - Ridges (preliminary)



DAMS FOR PROCESSING PLANT

PROPOSED DAMS



CLIENT:
PURE SOURCE MINE

DRAWING TITLE:
 FINAL REHABILITATION

DESCRIPTION:
 REHABILITATED AREA AND EXISTING AND PROPOSED DAMS

DATE:
 2018-10-23

SCALE (A1):
 1:11 000

DRAWING NO:
 3 OF 3

DRAWING VERSION:
 3

DRAWING PREPARED BY:
 MR. MADER VAN DEN BERG
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FIGURE 2.4