



water & sanitation

Department
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

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LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO 36 OF 1998) (THE ACT)

I, **Trevor Balzer**, in my capacity as Deputy Director-General: Special Projects in the Department of Water and Sanitation acting under authority of the powers sub-delegated to me by the Acting Director-General of Water and Sanitation, hereby authorise the following water uses in respect of this licence.

SIGNED:

DATE:

LICENCE NO: 08/C42K/CI/8861
FILE NO: 27/2/2/C1042/1/1

1. Licensee
Postal address

TETRA4 (PTY) LTD
P O BOX 442
BRUMA
2026

2. Water uses

2.1 Section 21(c) of the Act:

Impeding or diverting the flow of water in a watercourse subject to the conditions as set out in Appendices I and II.

2.2 Section 21(i) of the Act:

Altering the bed, banks, course or characteristics of a watercourse, subject to the conditions as set out in Appendices I and II.

3. Property on which the water uses will be exercised

Table 1: Properties where water use will be exercised

| Number | Property Name & Number | Portion | Owner | Registration Division |
|--------|------------------------|---------|-----------------------------|-----------------------|
| 1. | Brakspuit 121 | 0 | Meintjes Izak Jacobus | Theunissen |
| 2. | Enkeldoorn 360 | 0 | Meintjes Izak Jacobus | Theunissen |
| 3. | Boschluis Spruit 278 | 0 | Jansen Van Rensburg WJ | Theunissen |
| 4. | Boschluis Spruit 278 | 1 | Pretorius Hermanus Johannes | Theunissen |
| 5. | Boschluis Spruit 278 | 2 | Dawie P Junior Trust | Theunissen |

| | | | | |
|-----|----------------------|---|--|-------------|
| 6. | Retreat 118 | 0 | Jacobs FPD | Theunissen |
| 7. | Nortier 361 | 1 | Jacobs Frans Petrus Dawid | Theunissen |
| 8. | Jordaan 1 | 1 | Jacobs Frans Petrus Dawid | Theunissen |
| 9. | Driekoppies 322 | 0 | Smith Jacobus Andriaan | Theunissen |
| 10. | Frisgewaag 550 | 0 | Smith Jacobus Andriaan | Theunissen |
| 11. | Frisgewaag 550 | 1 | Smith Jacobus Andriaan | Theunissen |
| 12. | Frisgewaag 550 | 2 | Smith Jacobus Andriaan | Theunissen |
| 13. | Kleinpan 320 | 0 | Smith Jacobus Adriaan | Theunissen |
| 14. | Hendriena 563 | 0 | Smith Jacobus Andriaan | Theunissen |
| 15. | Glen Ross 562 | 0 | Republiek van Suid-Afrika | Theunissen |
| 16. | Adamsonsvlei No. 655 | 0 | Republiek van Suid-Afrika | Ventersburg |
| 17. | Palmietkuil 328 | 0 | Sibanye Gold Ltd | Theunissen |
| 18. | Palmietkuil 328 | 1 | Sibanye Gold Ltd | Theunissen |
| 19. | Palmietkuil 328 | 4 | Mandalay Trust | Theunissen |
| 20. | Palmietkuil 328 | 5 | William Peter Du Plessis FamilieTrust | Theunissen |
| 21. | Palmietkuil 328 | 6 | Sibanye Gold Ltd | Theunissen |
| 22. | Kalkoenkrans 225 | 1 | Sibanye Gold Ltd | Theunissen |
| 23. | Kalkoenkrans 225 | 2 | William P Du Plessis familie Trust | Theunissen |
| 24. | Kalkoenkrans 225 | 4 | Sibanye Gold Ltd | Theunissen |
| 25. | Damplaats 341 | 0 | Palmietkuil Besigheids Trust | Theunissen |
| 26. | Zonderzorg 342 | 0 | Sibanye Gold Ltd | Theunissen |
| 27. | Zonderzorg 342 | 1 | Palmietkuil Besigheids Trust | Theunissen |
| 28. | Zoetendal 243 | 1 | Smith Magdalena Adriana | Theunissen |
| 29. | Doornrivier 330 | 1 | Oosthuizen JH | Theunissen |
| 30. | Doornrivier 330 | 2 | Mandalay Trust | Theunissen |
| 31. | Excelsior 147 | 0 | Luxor Trust | Theunissen |
| 32. | Excelsior 147 | 1 | Kotze JBJN | Theunissen |
| 33. | Terra Blanda 155 | 0 | Dawie Pretorius Junior Trust | Theunissen |
| 34. | Blaauwdrift 188 | 3 | Taljaard Pietra Elizabeth | Theunissen |
| 35. | Die Wilger 544 | 0 | Van Den Berg CJ | Theunissen |
| 36. | Helpmekaar 47 | 0 | South Park Farming Pty Ltd | Theunissen |
| 37. | Helpmekaar 47 | 1 | Stilte Trust | Theunissen |

| | | | | |
|-----|--------------------------|---|-------------------------|-------------|
| 38. | Helpmekaar 47 | 3 | Sibanye Gold Ltd | Theunissen |
| 39. | Mond van Doornrivier 38 | 0 | Sancrocube Pty Ltd | Theunissen |
| 40. | Mond van Doornrivier 38 | 2 | Q R BAETA & CO Pty Ltd | Theunissen |
| 41. | Middelplaas 583 | 0 | Marthinus Boshoff Trust | Theunissen |
| 42. | Grottkau 410 | 0 | Grottkau Trust | Theunissen |
| 43. | Goedemoed 143 | 0 | Sibanye Gold Ltd | Theunissen |
| 44. | Goedemoed 143 | 2 | Kotze DJJ | Theunissen |
| 45. | Deeldam 106 | 0 | Ancor Familie Trust | Theunissen |
| 46. | Deeldam 106 | 4 | Ancor Familie Trust | Theunissen |
| 47. | Leeuwbult 52 | 0 | Sibanye Gold Ltd | Theunissen |
| 48. | Harmonie 579 | 0 | Sibanye Gold Ltd | Theunissen |
| 49. | Erfdeel 188 | 2 | Eskom Holdings Ltd | Ventersburg |
| 50. | Tarka 656/ Adamsons Vlei | 0 | Stille Trust | Ventersburg |

4. Registered owner of the Property

See Table 1 above.

5. Licence and Review Period

- 5.1 This licence is valid for a period of thirty (30) years from the date of issuance and it may be reviewed at intervals of not more than five (5) years.

6. Definitions

"Any terms, words and expressions as defined in the National Water Act, 1998 (Act 36 of 1998) shall bear the same meaning when used in this Licence."

"The Act" means the National Water Act, 1998 (Act 36 of 1998)

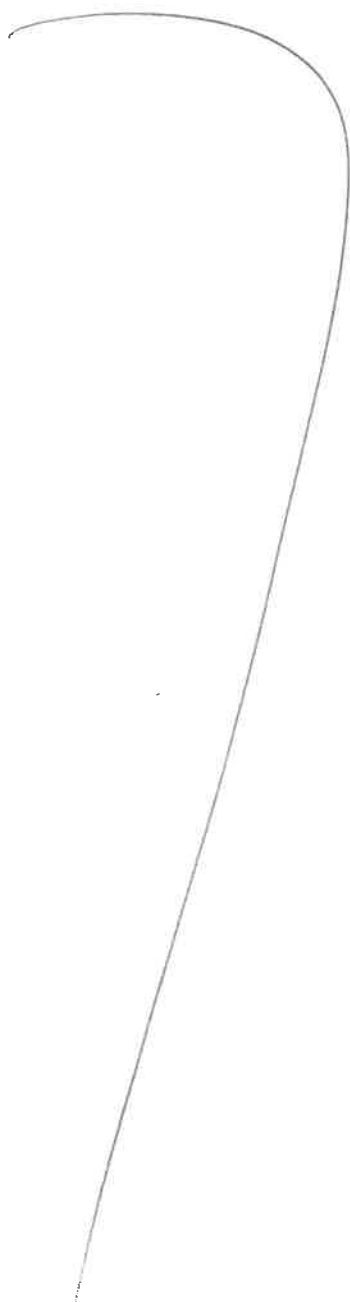
"The Provincial Head" means the Head of Provincial Operations: Free State, Department of Water and Sanitation, Private Bag 528, Bloemfontein, 9300.

"Department" means Department of Water and Sanitation

"Report" refers to all the reports submitted by Environmental Impact Management Services (EIMS) to Department of Water and Sanitation with a water use licence application for the construction of a gas pipeline across the watercourses and the Rivers in C42L and C42K, Theunissen RD, within Lejweleputswa Local Municipality.

7. Description of the activity

This licence authorises Tetra4 (Pty) Ltd for a construction a pipeline for **natural gas production operations within an existing production right** in terms of Section 21(c) and (i) water uses of the National Water Act of 1998, (Act 36 of 1998). Water uses associated with the Construction of a gas pipeline across the watercourses, Bosluitspruit and Sand River near Welkom, C42L and C42K quaternary catchment, within Lejweleputswa Local Municipality located in the Middle Vaal Water Management Area.



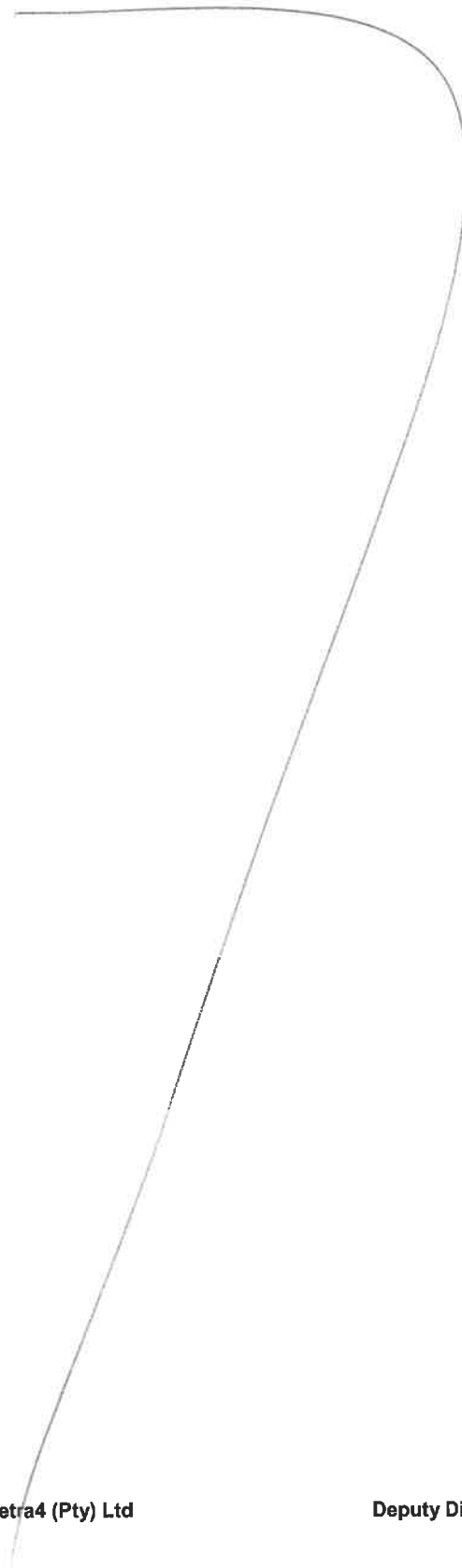
APPENDIX I

General conditions of the licence

1. This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
2. The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.
3. The Licensee must immediately inform the Provincial Head of any change of name, address, premises and/or legal status.
4. If the property in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Provincial Head of the Department within sixty (60) days of the said change taking place.
5. If a water user association is established in the area to manage the resource, membership of the Licensee to this association is compulsory. Rules, regulations and water management stipulation of such association must be adhered to.
6. The Licensee shall be responsible for any water use charges or levies imposed by a responsible authority.
7. While effect must be given to the Reserve as determined in terms of the Act, where a desktop determination of the Reserve has been used in issuance of a licence, when a comprehensive determination of the Reserve has finally been made; it must be given effect to.
8. Any incident that causes or may cause water pollution must be reported to the Provincial Head or his/her designated representative within twenty four (24) hours.
9. The licence must not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.
10. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time.
11. The Licensee must conduct an annual internal audit on compliance with the conditions of Licence. A report on the audit must be submitted to the Provincial Head within one (1) month of the finalisation of the audit.
12. The Licensee must appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within three (3) months of the date this licence is issued and a report on the audit must be submitted to the Provincial Head within one (1) month of finalisation of the report.
13. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of / amongst other things.
 - 13.1 Shortage of water;
 - 13.2 Inundation of flood;



- 13.3 Any force majeure event;
- 13.4 Siltation of the river or dam basin; and
- 13.5 Required Reserve releases.



APPENDIX II

Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse and
Section 21(i) of the Act: Altering the bed, banks, course or characteristic of a watercourse

1. GENERAL

1.1 This licence authorises Tetra4 (Pty) Ltd to extend natural gas production operations within an existing production right for Section 21(c) and (i) water use activities for the construction facilities as set out in Table 2. Within quaternary catchment C42K and in the water use licence application reports submitted to the Department:

Table 2: Summary of water uses applied for:

| Infrastructure Type | Within Wetland/ Within Buffer | Height (in mm) | Width (in mm) | Length (in mm) | Structure material | Lat-Start | Long-Start | Lat-End | Long-End | Type | Appro. PES | Name |
|------------------------------|-------------------------------|----------------|---------------|----------------|--|-----------|------------|----------------|----------------|------------------------|------------|------------------------|
| WITHIN WETLAND | | | | | | | | | | | | |
| Trunkline South (to Sibanye) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.25808 | 26.74904 | -28.25823 | 26.74901 | Depression/Pan Wetland | C/D | Middelplaas No. 583/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.25822 | 26.74879 | -28.25808 | 26.74904 | Depression/Pan Wetland | C/D | Middelplaas No. 583/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.26558 | 26.74366 | -28.26376 | 26.74339 | Flat Wetland | E/F | Excelsior No. 147/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27196 | 26.74462 | -28.26954 | 26.74426 | Seep Wetland | E | Excelsior No. 147/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27206 | 26.74464 | -28.27224 | 26.74351 | Seep Wetland | E | Excelsior No. 147/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27206 | 26.74464 | -28.27206 | 26.74464 | Seep Wetland | E | Excelsior No. 147/0 |
| Existing Wells EX1 | Within Wetland | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.27225 | 26.74351 | Not Applicable | Not Applicable | Seep Wetland | E | Excelsior No. 147/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27623 | 26.74529 | -28.27609 | 26.74529 | Seep Wetland | E | Goedemoed No. 143/2 |
| Trunkline South (to Sibanye) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.24072 | 26.75309 | -28.24234 | 26.75271 | Depression/Pan Wetland | C/D | Middelplaas No. 583/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.24234 | 26.75271 | -28.24072 | 26.75309 | Depression/Pan Wetland | C/D | Middelplaas No. 583/0 |
| Trunkline South (to Sibanye) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.22221 | 26.75418 | -28.22357 | 26.75420 | Depression/Pan Wetland | C/D | Doorn Rivier No. 330/2 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.22244 | 26.75424 | -28.22322 | 26.75431 | Depression/Pan Wetland | C/D | Doorn Rivier No. 330/2 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18854 | 26.74184 | -28.18727 | 26.74491 | Seep Wetland | C | Kalkoenkrans No. 225/2 |

| | | | | | | | | | | | | |
|------------------------------|----------------|--|-----|-------|-----------------------------|-----------|----------|-----------|----------|--|-----|--------------------------------|
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18339 | 26.73457 | -28.18292 | 26.73500 | Seep Wetland | C | Kalkoenkrans No. 225/2 |
| Trunkline South (to Sibanye) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18594 | 6 | -28.18872 | 26.73578 | Seep Wetland | C | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18866 | 26.72920 | -28.18845 | 26.72940 | Evaporation/Tailings/Other Mining Dams | C | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18857 | 26.74180 | -28.18854 | 26.74184 | Seep Wetland | C | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18594 | 26.73509 | -28.18857 | 26.74180 | Seep Wetland | C | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18594 | 26.73509 | -28.18872 | 26.73578 | Seep Wetland | C | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.19069 | 26.72729 | -28.19054 | 26.72743 | Unchanneled Valley Bottom Wetland | D/E | Palmietkuil No. 328/6 |
| Trunkline North (to HDR1) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18207 | 26.72975 | -28.18209 | 26.72979 | Seep Wetland | D | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18209 | 26.72979 | -28.18207 | 26.72975 | Seep Wetland | D | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.17330 | 26.74416 | -28.17216 | 26.74473 | Seep Wetland | C/D | Kalkoenkrans No. 225/2 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.17162 | 26.74332 | -28.17138 | 26.74269 | Seep Wetland | C/D | Kalkoenkrans No. 225/2 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16433 | 26.72841 | -28.16475 | 26.72909 | Depression/Pan Wetland | C/D | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13444 | 26.71866 | -28.13478 | 26.71843 | Seep Wetland | C | Mond Van Doorn Rivier No. 38/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.12258 | 26.72140 | -28.12320 | 26.72145 | Ephemeral Channel | N/A | Mond Van Doorn Rivier No. 38/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.10297 | 26.72602 | -28.10301 | 26.72603 | Unchanneled Valley Bottom Wetland | C | Blaauwdrift No. 188/3 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.09318 | 26.73568 | -28.09314 | 26.73480 | Channeled Valley Bottom Wetland | C | Adamsonsvlei No. 655/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.24954 | 26.70281 | -28.24908 | 26.70292 | Seep Wetland | E/F | Boschuis Spruit No. 278/2 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27023 | 26.67838 | -28.26827 | 26.67855 | Seep Wetland | C | Driekoppies No. 422/1 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27355 | 26.66717 | -28.27338 | 26.66711 | Ephemeral Channel | N/A | Hendriena No. 563/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27433 | 26.66319 | -28.27442 | 26.66382 | Flat Wetland | E/F | Retreat No. 118/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27279 | 26.65286 | -28.27282 | 26.65307 | Seep Wetland | C/D | Retreat No. 118/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27206 | 26.64797 | -28.27214 | 26.64851 | Seep Wetland | C/D | Retreat No. 118/0 |

| | | | | | | | | | | | | |
|------------------------------|----------------------------|--|-------|-------|--|-----------|----------|----------------|----------------|-----------------------------------|----------------|----------------------------|
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.28639 | 26.74531 | -28.28465 | 26.74527 | Channeled Valley Bottom Wetland | B/C | Goedemoed No. 143/2 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.28605 | 26.74200 | -28.28618 | 26.74283 | Channeled Valley Bottom Wetland | B/C | Grottkau No. 410/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.28638 | 26.74403 | -28.28639 | 26.74531 | Channeled Valley Bottom Wetland | B/C | Grottkau No. 410/0 |
| Existing Wells SPG3 | Within Wetland | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.28605 | 26.74200 | Not Applicable | Not Applicable | Channeled Valley Bottom Wetland | B/C | Grottkau No. 410/0 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.21603 | 26.74812 | -28.21434 | 26.74651 | Unchanneled Valley Bottom Wetland | C | Doom Rivier No. 330/1 |
| Trunkline South (to Sibanye) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.21434 | 26.74651 | -28.21603 | 26.74812 | Unchanneled Valley Bottom Wetland | C | Doom Rivier No. 330/4 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.20407 | 26.74047 | -28.20944 | 26.74363 | Unchanneled Valley Bottom Wetland | C | Palmietkuil No. 328/4 |
| Trunkline South (to Sibanye) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.20012 | 26.73845 | -28.21434 | 26.74651 | Unchanneled Valley Bottom Wetland | C | Palmietkuil No. 328/6 |
| Trunkline North (to HDR1) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18265 | 26.73082 | -28.18415 | 26.73360 | Channeled Valley Bottom Wetland | D | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18410 | 26.73350 | -28.18410 | 26.73350 | Channeled Valley Bottom Wetland | D | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18410 | 26.73350 | -28.18410 | 26.73350 | Channeled Valley Bottom Wetland | D | Palmietkuil No. 328/6 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18155 | 26.75465 | -28.18283 | 26.75724 | Depression/Pan Wetland | C/D | Kalkoenkrans No. 225/2 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16121 | 26.73305 | -28.16461 | 26.73261 | Seep Wetland | E | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16121 | 26.73305 | -28.17116 | 26.73124 | Seep Wetland | E | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16121 | 26.73305 | -28.16126 | 26.73691 | Seep Wetland | E | Kalkoenkrans No. 225/1 |
| Trunkline North (to HDR1) | Within Wetland | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.15760 | 26.73352 | -28.17602 | 26.72986 | Seep Wetland | E | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within Wetland | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11638 | 26.71524 | -28.11747 | 26.71839 | Riparian Habitat | D | Blaauwdrift No. 188/3 |
| WITHIN 500M WETLAND BUFFER | | | | | | | | | | | | |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | 90.00000 | 26.73390 | -28.14863 | 26.73643 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14315 | 26.73229 | -28.13547 | 26.72720 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14315 | 26.73229 | -28.13547 | 26.72720 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.15463 | 26.73391 | -28.14863 | 26.73644 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |

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|---------------------------|----------------------------|--|-----|-------|-----------------------------|-----------|----------|-----------|----------|------------------------------|----------------|----------------------------|
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14313 | 26.73232 | -28.13547 | 26.72724 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14313 | 26.73232 | -28.13547 | 26.72724 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13637 | 26.71802 | -28.13659 | 26.71803 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13648 | 26.71694 | -28.13676 | 26.71681 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14832 | 26.71812 | -28.14819 | 26.71851 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/7 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14338 | 26.71645 | -28.14832 | 26.71812 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14832 | 26.71811 | -28.15037 | 26.71878 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72720 | -28.13547 | 26.72720 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72724 | -28.13547 | 26.72724 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13637 | 26.71802 | -28.13637 | 26.71802 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13647 | 26.71694 | -28.13648 | 26.71694 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14863 | 26.73643 | -28.15463 | 26.73390 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/RE |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72720 | -28.14315 | 26.73229 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72720 | -28.14315 | 26.73229 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72720 | -28.13547 | 26.72720 | Within 500m of a watercourse | Not Applicable | Annex Glen Ross No. 562/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.10236 | 26.72586 | -28.10901 | 26.72752 | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/3 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11637 | 26.71524 | -28.11747 | 26.71839 | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/3 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11106 | 26.71560 | -28.11831 | 26.71932 | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/3 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.10213 | 26.72622 | -28.10432 | 26.72171 | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.10901 | 26.72752 | -28.11091 | 26.72719 | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/3 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11005 | 26.72755 | -28.11072 | 26.72767 | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/2 |

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|------------------------------|----------------------------|--|-------|-------|--|-----------|----------|----------------|----------------|------------------------------|----------------|----------------------------|
| Existing Well 1629 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.11091 | 26.72719 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/3 |
| Existing Well 1307 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.11630 | 26.71524 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Blaauwdrift No. 188/3 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.24898 | 26.70299 | -28.24568 | 26.70712 | Within 500m of a watercourse | Not Applicable | Boschuis Spruit No. 278/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.25398 | 26.70173 | -28.24898 | 26.70299 | Within 500m of a watercourse | Not Applicable | Boschuis Spruit No. 278/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27580 | 26.64453 | -28.27173 | 26.64579 | Within 500m of a watercourse | Not Applicable | Die Wilger No. 544/0 |
| Existing Well Retreat | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.27582 | 26.64454 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Die Wilger No. 544/0 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.21635 | 26.74846 | -28.21635 | 26.74846 | Within 500m of a watercourse | Not Applicable | Doom Rivier No. 330/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.23631 | 26.75412 | -28.23631 | 26.75412 | Within 500m of a watercourse | Not Applicable | Doom Rivier No. 330/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.21635 | 26.74846 | -28.23625 | 26.75411 | Within 500m of a watercourse | Not Applicable | Doom Rivier No. 330/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.22442 | 26.75384 | -28.22129 | 26.75372 | Within 500m of a watercourse | Not Applicable | Doom Rivier No. 330/2 |
| Trunkline South (to Sibanye) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.21434 | 26.74651 | -28.23631 | 26.75412 | Within 500m of a watercourse | Not Applicable | Doom Rivier No. 330/1 |
| Trunkline South (to Sibanye) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.22129 | 26.75372 | -28.22442 | 26.75384 | Within 500m of a watercourse | Not Applicable | Doom Rivier No. 330/2 |
| Existing Well 1400 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.22205 | 26.74335 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Doom Rivier No. 330/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27160 | 26.67397 | -28.27088 | 26.67538 | Within 500m of a watercourse | Not Applicable | Driekoppies No. 422/0 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27088 | 26.67538 | -28.26818 | 26.67855 | Within 500m of a watercourse | Not Applicable | Driekoppies No. 422/0 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.26818 | 26.67855 | -28.26349 | 26.67895 | Within 500m of a watercourse | Not Applicable | Driekoppies No. 422/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27196 | 26.74462 | -28.25918 | 26.74271 | Within 500m of a watercourse | Not Applicable | Excelsior No. 147/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27206 | 26.74464 | -28.27224 | 26.74351 | Within 500m of a watercourse | Not Applicable | Excelsior No. 147/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27206 | 26.74464 | -28.27206 | 26.74464 | Within 500m of a watercourse | Not Applicable | Excelsior No. 147/RE |

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|---------------------------|----------------------------|--|-------|-------|--|-----------|----------|----------------|----------------|------------------------------|----------------|------------------------|
| Existing Well EX1 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.27225 | 26.74351 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Excelsior No. 147/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.28639 | 26.74531 | -28.27609 | 26.74529 | Within 500m of a watercourse | Not Applicable | Goedemoed No. 143/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.28605 | 26.74200 | -28.28639 | 26.74531 | Within 500m of a watercourse | Not Applicable | Grottkau No. 410/RE |
| Existing Well SPG3 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.28605 | 26.74200 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Grottkau No. 410/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13756 | 26.71635 | -28.14003 | 26.71676 | Within 500m of a watercourse | Not Applicable | Helpmekaar No. 47/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.14003 | 26.71676 | -28.14338 | 26.71645 | Within 500m of a watercourse | Not Applicable | Helpmekaar No. 47/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.15499 | 26.71788 | -28.15510 | 26.71744 | Within 500m of a watercourse | Not Applicable | Helpmekaar No. 47/3 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13756 | 26.71635 | -28.13756 | 26.71635 | Within 500m of a watercourse | Not Applicable | Helpmekaar No. 47/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27497 | 26.66764 | -28.27337 | 26.66711 | Within 500m of a watercourse | Not Applicable | Hendriena No. 563/0 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27336 | 26.66710 | -28.27214 | 26.67188 | Within 500m of a watercourse | Not Applicable | Hendriena No. 563/0 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27497 | 26.66764 | -28.27497 | 26.66764 | Within 500m of a watercourse | Not Applicable | Hendriena No. 563/0 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16121 | 26.73305 | -28.16558 | 26.73248 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16121 | 26.73305 | -28.16558 | 26.73248 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16121 | 26.73305 | -28.16558 | 26.73248 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18387 | 26.75080 | -28.18395 | 26.74810 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18474 | 26.73479 | -28.18474 | 26.73479 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.16121 | 26.73305 | -28.16126 | 26.73691 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.17986 | 26.73780 | -28.17986 | 26.73780 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.17986 | 26.73780 | -28.17138 | 26.74269 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/2 |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.15463 | 26.73390 | -28.18126 | 26.72837 | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/1 |

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|------------------------------|----------------------------|--|-------|-------|--|-----------|----------|----------------|----------------|------------------------------|----------------|---------------------------------|
| Existing Well DBE 1 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.18340 | 26.75818 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/2 |
| Existing Well BEI 02 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.16294 | 26.72420 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Kalkoenkrans No. 225/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.24701 | 26.75162 | -28.25356 | 26.75009 | Within 500m of a watercourse | Not Applicable | Middelplaas No. 583/0 |
| Trunkline South (to Sibanye) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.23631 | 26.75412 | -28.25823 | 26.74901 | Within 500m of a watercourse | Not Applicable | Middelplaas No. 583/0 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11946 | 26.72051 | -28.12698 | 26.72277 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11946 | 26.72051 | -28.12698 | 26.72277 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11831 | 26.71932 | -28.11946 | 26.72051 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/2 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.12409 | 26.71809 | -28.12584 | 26.71899 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.12581 | 26.71957 | -28.13378 | 26.72631 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.12578 | 26.71950 | -28.13378 | 26.72635 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.12689 | 26.72232 | -28.13637 | 26.71802 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13676 | 26.71681 | -28.13756 | 26.71635 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13535 | 26.71802 | -28.13647 | 26.71694 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72720 | -28.13547 | 26.72720 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72724 | -28.13547 | 26.72724 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13637 | 26.71802 | -28.13637 | 26.71802 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13756 | 26.71635 | -28.13756 | 26.71635 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13647 | 26.71694 | -28.13648 | 26.71694 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.12586 | 26.71897 | -28.13547 | 26.72720 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.13547 | 26.72720 | -28.13547 | 26.72720 | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |

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|------------------------------|----------------------------|--|-------|-------|--|-----------|----------|----------------|----------------|------------------------------|----------------|---------------------------------|
| Existing Well HDR 1 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.12586 | 26.71897 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| HDR 1 Compressor | Within 500m Wetland Buffer | | 60000 | 60000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.12582 | 26.71838 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Mond Van Doorn Rivier No. 38/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18410 | 26.73350 | -28.18479 | 26.73481 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/6 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.19490 | 26.72375 | -28.19129 | 26.72672 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.21891 | 26.71549 | -28.20978 | 26.71867 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/1 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18410 | 26.73350 | -28.18526 | 26.73496 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/6 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18857 | 26.74180 | -28.18854 | 26.74184 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/6 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.21434 | 26.74651 | -28.20005 | 26.73843 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/4 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18541 | 26.73496 | -28.18857 | 26.74180 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/6 |
| | | | | | | | | | | | | |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.19672 | 26.73765 | -28.19991 | 26.73840 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/4 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18474 | 26.73479 | -28.19672 | 26.73765 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/6 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.20005 | 26.73843 | -28.19991 | 26.73840 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/4 |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.20005 | 26.73843 | -28.19991 | 26.73840 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/4 |
| Trunkline North (to HDR1) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18126 | 26.72837 | -28.18509 | 26.73509 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/6 |
| Trunkline South (to Sibanye) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.19672 | 26.73765 | -28.21434 | 26.74651 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/4 |
| Trunkline South (to Sibanye) | Within 500m Wetland Buffer | | 600 | 8000 | HDPE SDR 17 PE 100 Gas Pipe | -28.18541 | 26.73496 | -28.19672 | 26.73765 | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/4 |
| Existing Well ST23 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.19989 | 26.73855 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/4 |
| ST23 Compressor | Within 500m Wetland Buffer | | 60000 | 60000 | Carbon steel, mild steel, concrete, HDPE, structural steel | -28.18511 | 26.73508 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Palmietkuil No. 328/6 |

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|--|----------------------------|--|-------|-------|--|-----------|----------|----------------|----------------|------------------------------|----------------|-------------------------|
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27173 | 26.64579 | -28.27497 | 26.66764 | Within 500m of a watercourse | Not Applicable | Retreat No. 118/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.27497 | 26.66764 | -28.27497 | 26.66764 | Within 500m of a watercourse | Not Applicable | Retreat No. 118/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.09054 | 26.73717 | -28.10213 | 26.72622 | Within 500m of a watercourse | Not Applicable | Adamsonsvlei No. 655/RE |
| Infield Pipeline | Within 500m Wetland Buffer | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.08270 | 26.73062 | -28.08295 | 26.73060 | Within 500m of a watercourse | Not Applicable | Adamsonsvlei No. 655/RE |
| Existing Well 2057 (subject to change with the completion of detailed designs) | Within 500m Wetland Buffer | | 20000 | 28000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.09055 | 26.73716 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Adamsonsvlei No. 655/RE |
| Existing Well 2033 | Within 500m Wetland Buffer | | 10000 | 14000 | Carbon Steel, Mild Steel, Concrete, HDPE, Structural Steel | -28.07838 | 26.73234 | Not Applicable | Not Applicable | Within 500m of a watercourse | Not Applicable | Adamsonsvlei No. 655/RE |

ROAD CROSSINGS ON SAND RIVER AND BOSLUITSPRUIT

| | | | | | | | | | | | | |
|------------------|------------------------|--|-----|-------|-----------------------------|-----------|----------|-----------|----------|------------------|---|--|
| Infield Pipeline | Sand River Crossing | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11583 | 26.71717 | -28.11831 | 26.71932 | Riparian Habitat | D | Blaauwdrift No. 188/3 (Property 1) |
| Infield Pipeline | Sand River Crossing | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11946 | 26.72051 | -28.11981 | 26.72076 | Riparian Habitat | D | Mond Van Doorn Rivier No. 38/RE (Property 2) |
| Infield Pipeline | Sand River Crossing | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.11831 | 26.71932 | -28.11946 | 26.72051 | Riparian Habitat | D | Mond Van Doorn Rivier No. 38/2 (Property 3) |
| Infield Pipeline | Bosluitspruit Crossing | | 600 | 50000 | HDPE SDR 17 PE 100 Gas Pipe | -28.28618 | 26.74283 | -28.28652 | 26.74532 | Riparian Habitat | B | Grottkau No. 410/RE |

- 1.2 The Licensee must carry out and complete all the activities listed under condition 1.1 according to the following:
 - 1.2.1 Plans to extend natural gas production operations within an existing production right: Integrated Water Use Licence Application by Environmental Impact Management Services (EIMS) dated 28 March 2018.
 - 1.2.2 Approved Environmental Impact Assessment (EIA) Report for cluster 1 by Environmental Impact Management Services (EIMS), 02 May 2017.
 - 1.2.3 Environmental Management Programme for the cluster 1 project by Environmental Impact Management Services (EIMS), dated 28 April 2017.
- 1.3 The conditions of the authorisation must be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of these activities and the Licensee must take such measures that are necessary to bind such persons to the conditions of this licence.

- 1.4 A suitably qualified person(s), appointed by the Licensee, and approved in writing by the Provincial Head: Free State must be responsible for ensuring that activities are undertaken in compliance with the specifications as set out in reports submitted to the Department or the Responsible Authority and the conditions of this licence.
- 1.5 No activity must take place within the 1:100 year flood line or the delineated riparian habitat, whichever is the greatest, or within 500 m radius from the boundary of any wetland unless authorised by this licence.
- 1.6 A copy of the water use licence and reports set out under condition 1.2 of this Appendix must be on site at all times.
- 1.7 Buffers of 30m must be implemented between the wetland and the irrigation area and the pasture area.
- 1.8 Ecological class of rivers and wetlands (PES of B) must not to be lowered. Recommended Ecological Class (REC) for wetland must be set as class B.
- 1.9 A layout plan confirming that the 1:100 year floodline of the watercourse upstream of the dam wall do not affect any public property must be submitted to the Department within 30 days of issuance of water use licence.

2. FURTHER STUDIES AND INFORMATION REQUIREMENTS

- 2.1 For water use activities in Table 2:
 - 2.1.1. No fundamental alterations of the work method statements, site plan(s) and drawings are allowed, unless a modification is requested and granted by the Provincial Head in writing; and
- 2.2 If the Licensee is not the end user/beneficiary of the water use related infrastructure and will not be responsible for long term maintenance and management of the infrastructure, the Licensee must provide a programme for hand over to the successor-in-title including a brief management/maintenance plan and the agreement for infrastructure along with allocation of responsibilities, within three (3) months of the date of issuing of this licence.
- 2.3 For the activity listed under condition 1.1, Table 2, "as-built" plan(s) and engineering drawing(s) prepared by a registered professional engineer, must be submitted to the Provincial Head within six (6) months of completion of activity. These plan(s) and drawing(s) must indicate the watercourse(s) including wetland boundaries and layout and structure location(s) of all infrastructure impeding and/or diverting flow of watercourses as well as alterations to watercourse(s) on the properties.
- 2.4 Pipeline Maintenance Plan must be submitted within three months of issuance of this licence.
- 2.5 For all the activities listed under condition 1.1, Table 2, "as-built" plan(s) and engineering drawing(s) prepared by a registered professional engineer, must be submitted to the Provincial Head within three (3) months of the date of issuance of this licence. These plan(s) and drawing(s) must indicate the watercourse including wetland boundaries and layout and structure location(s) of all infrastructure impeding and/or diverting flow of the watercourse as well as



alterations to the watercourse on the property.

- 2.6 An Environmental Management Plan (EMP) and rehabilitation plan for the decommissioning of any of the water use activities listed in Table 2 must be submitted five (5) years before commencing with closure to the Provincial Head for a written approval.

3. PROTECTIVE MEASURES

General Conditions on Stormwater Management

- 3.1 Stormwater shall be diverted from the construction works and roads and shall be managed in such a manner as to disperse runoff and to prevent the concentration of stormwater flow.
- 3.2 Where necessary works must be constructed to attenuate the velocity of the stormwater discharge and to protect the banks of the watercourse.
- 3.3 Stormwater control works must be constructed, operated and maintained in a sustainable manner throughout the project.
- 3.4 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the watercourse.

4. WATER USE ACTIVITIES IN RELATION TO THE CHARACTERISTICS OF A WATERCOURSE

4.1 Water Quality

- 4.1.1 The Licensee must ensure that the quality of the water to downstream water users does not decrease because of the water use activities listed under condition 1.1.
- 4.1.2 In-stream water quality must be analysed on a two-weekly basis during construction otherwise monthly at monitoring points both upstream and downstream of the activities for the following variables, but not limited to:
- 4.1.2.1 Suspended solids (mg/l) : <20 mg/l;
 - 4.1.2.2 Total dissolved Solids (mg/l) : <450MG/l;
 - 4.1.2.3 Dissolved Oxygen (mg/l) : <6mg/l and
 - 4.1.2.4 Turbidity (NTU): <3NTU
- 4.1.3 Monitoring must be undertaken as set out in condition 4.
- 4.1.4 Monitoring must continue for 3 years after cessation of the activities listed in condition 1.1.



- 4.1.5 Turbidity, sedimentation and chemical changes to the composition of the water must be limited and monitored both upstream and downstream of activities.
- 4.1.6 Activities that lead to elevated levels of turbidity of any watercourse must be minimised. Activities must be scheduled to take place during the dry seasons when flows are lowest where reasonably possible. If this is not possible and if management measures have not been provided for activities in a wet season in the reports submitted to the Department or the Responsible Authority, the Licensee must submit such to the Head of Provincial Operations: Free State for written approval before these activities commence. Natural in-stream hydrology is to be used to determine which months constitute the low flow months.
- 4.1.7 Pollution of and disposal/spillage of any material into the watercourse must be prevented, reduced, or otherwise remediated through proper operation, maintenance and effective protective measures.
- 4.1.8 Vehicles and other machinery must be serviced well above the 1:100 year flood-line or outer edge of the riparian habitat whichever is the greatest. Oils and other potential pollutants must be disposed off at an appropriate licensed site, with the necessary agreement from the owner of such a site.
- 4.1.9 Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance.
- 4.1.10 No material with pollution generating potential will be used in any of the operation and maintenance activities.
- 4.1.11 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps return the spilled material back into the system. The system must be maintained in a state of good repair and standby pumps must be provided.

4.2 Flow

- 4.2.1 The water use must not result in a change in the quality, velocity, pattern, timing water level and assurance of flow in the watercourse.
- 4.2.2 The Licensee must ensure that the overall magnitude and frequency of flow in the water course/s does not decrease, other than for natural evaporative losses and authorised attenuation volumes.
- 4.2.3 Increased run-off during construction must be managed using berms and other suitable structures as required to ensure flow velocities are reduced, special care must be given to ensure velocity is slowed before reaching the watercourse.



4.3 Riparian Habitat (Vegetation and Morphology)

- 4.3.1 Activities must start up-stream and proceed into a down-stream direction, so that the recovery processes can start immediately, without further disturbance from upstream works.
- 4.3.2 The proposed construction should not increase bank instability and the erosive potential of a stream. Steps should be taken to ensure that the channel is able to withstand the most probable maximum flood events without undue bank instability or erosion.
- 4.3.3 Operation and storage of equipment within the riparian habitat must only take place within the approved limits of disturbance indicated in an approved site plan and work method statements.
- 4.3.4 Activities must not occur in sensitive riffle habitats or where there are rock outcrops.
- 4.3.5 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans, referred to in condition 2, may not be removed from the area.
- 4.3.6 Removal of riparian forest must be authorised in terms of the National Forest Act (Act No. 84 of 1998).
- 4.3.7 The vegetation of the surrounding catchment on the property must also be managed to prevent erosion and siltation of the watercourse.
- 4.3.8 Alien and invader vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be eradicated or controlled, using standard methods approved by the Department.
- 4.3.9 Existing vegetation composition in riparian zones by maintaining the natural variability in flow fluctuations must be maintained.
- 4.3.10 Recruitment and maintaining of a range of size classes of dominant riparian species in perennial channels must be stimulated.
- 4.3.11 Encroachment of additional exotic species and terrestrial species in riparian zones must be discouraged.
- 4.3.12 Accumulation of woody debris on terraces by periodic flooding must be discouraged.
- 4.3.13 Existing flood terraces and deposition of sediments on these terraces to ensure optimum growth, spread and recruitment of these species must be maintained.
- 4.3.14 All reasonable steps must be taken to minimise noise and mechanical vibrations in the vicinity of the watercourses.



- 4.3.15 The necessary erosion prevention mechanisms must be employed to ensure the sustainability of all structures and activities and to prevent in stream sedimentation.
- 4.3.16 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.
- 4.3.17 Slope/bank stabilisation measures must be implemented.
- 4.3.18 Stockpiling of removed soil and material must be stored outside of the 1:100 year flood line or riparian habitat, whichever is the greater, to prevent being washed into the watercourse and must be covered to prevent wind and rain erosion.
- 4.3.19 The indiscriminate use of machinery within the in stream and riparian habitat may lead to compaction of soils and vegetation and must therefore be strictly controlled.

4.4 Biota

- 4.4.1 The Licensee must take all reasonable steps to allow movement of aquatic species, including migratory species.
- 4.4.2 All reasonable steps must be taken not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.
- 4.4.3 The current level of diversity of biotopes and communities of animals, plants and microorganisms must be maintained.

5. GENERAL SPECIFICATIONS

- 5.1 A suitably qualified person, appointed by the Licensee, and approved, in writing, by the Provincial Head, must be responsible for ensuring that the structure is constructed, operated and maintained in line with the design specifications.
- 5.2 The Licensee must ensure that the pipeline shall not be damaged excessively by floods exceeding the magnitude of floods occurring on average once in every 100 years.
- 5.3 The necessary erosion prevention mechanisms shall be employed to ensure the sustainability of all the abstraction works and the pipeline.
- 5.4 Structural maintenance plan must be submitted to the Department for approval within three months from the date of issuance of this licence
- 5.5 Gas pipeline must cater for aquatic biota movement and ecological connectivity.
- 5.6 Pipeline structure must cater for the 1:100 year flood events. Plants species plan for the rehabilitation purpose must be developed and submitted to Department for approval within three months of issuance of this licence.



- 5.7 The banks must be shaped to 1:3 slopes to blend into the environmental, protected by rocks, top soil, rock mattress or geotextiles and vegetated with natural vegetation.
- 5.8 Environmental Management Plan must be implemented and
- 5.9 This authorisation does not authorise the production of gas or conducting any other water uses activities except the construction of pipe lines.
- 5.10 The Licensee is responsible for obtaining the necessary servitudes associated with this activity.

6. PROTECTIVE MEASURES

- 6.1 All activities within the riparian zone should be restricted as far as possible.
- 6.2 Alien vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be eradicated or controlled, using standard methods approved by the Department.
- 6.3 Soils that have become compacted through the activities of the development must be loosened to an appropriate depth to allow seed germination.
- 6.4 Increased runoff due to vegetation clearance and/or soil compaction must be managed and steps must be taken to ensure that stormwater does not lead to the watercourse instability and excessive levels of silt entering the watercourse.
- 6.5 The extent of disturbance should be limited by limiting all construction activities to the development area as indicated on the general layout plan as far as practically possible.
- 6.7 As far as possible, the existing road and farm tracks should be used as the access road to provide access during construction as this will reduce the extent of the disturbed area.

7. REHABILITATION

- 7.1 All disturbed areas must be re-vegetated with an indigenous seed mix in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are used in restoring the biodiversity.
- 7.2 The vegetation of the surrounding catchment should also be managed to prevent erosion and siltation of the watercourse including wetland/pan.
- 7.3 The Licensee shall embark on a systematic long-term rehabilitation programme to restore natural watercourses (wetland/pan) to environmentally acceptable and sustainable conditions after construction, which shall include, but not be limited to:
 - 7.3.1 The rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem; and
 - 7.3.2 Annually assess the habitat to monitor the sustainability of the solar panels and compliance with these conditions. Action must be taken to rectify any negative impacts.



- 7.4 The Licensee shall ensure that the volume of runoff to the wetlands/pans is not reduced or excessively increased except for natural evaporative losses and the authorised attenuation volumes.

8. GENERAL SURFACE WATER DESIGN REQUIREMENTS AND CRITERIA

- 8.1 The Licensee shall clearly indicate all wetlands boundaries within the project area on layout plans.
- 8.2 Design and planning of all proposed construction activities adjacent to or in the vicinity of rivers, streams and wetlands shall consider the following measures:
- 8.2.1 Impact of alignment on springs and wetlands shall be investigated and monitored and ensure their continued functioning.
- 8.2.2 Where appropriate, large individual indigenous riparian trees shall be avoided during construction and shall be clearly marked on site.
- 8.2.3 All construction roads in or adjacent to the riparian zone shall be minimised and if required, shall be aligned and managed so as to minimise disturbance of the riparian zone and in-stream habitats.

9. BUDGETARY PROVISIONS

- 9.1 The water user must ensure that there is a budget sufficient to complete and maintain the water use and for successful implementation of the rehabilitation programme as set out in this licence.
- 9.2 The Department may at any stage of the process request proof of budgetary provisions.

[END OF LICENCE]

