

2. IDENTIFICATION, ASSESSMENT AND RANKING OF IMPACTS TO REACH THE PROPOSED ALTERNATIVES INCLUDING THE PREFERRED ALTERNATIVE WITHIN THE SITE

Note: In this section the focus is on the identified issues, impacts and risks that influenced the identification of the alternatives. This includes how aspects of the receiving environment have influenced the selection.

(a) List the identified impacts and risks for each alternative.

Alternative 1:	Tree Mast - Preferred Alternative: Noise (Very-low negative); Visual (Low-medium negative); Cultural Historical (low-negative); Socio-economic (low-positive); Ecological aspect (Negligible)
Alternative 2:	Lattice Mast: Not Preferred Alternative: Noise (Very-low negative); Visual (high – medium negative); Cultural Historical (low-negative) Socio-economic (low-positive); Ecological aspect (Negligible)
Alternative 3:	Monopole Mast: Not Preferred Alternative: Noise (Very-low negative); Visual (high – medium negative); Cultural Historical (low-negative) Socio-economic (low positive); Ecological aspect (Negligible)
No-go Alternative:	Socio-economic (Low-negative)

(b) Describe the impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts can be reversed; may cause irreplaceable loss of resources; and can be avoided, managed or mitigated.

The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. (The EAP has to select the relevant impacts identified in blue in the table below for each alternative and repeat the table for each impact and risk).

Alternative 1:	Proposed 30m high Tree Mast – (Preferred)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Noise (Very-Low negative)
Nature of impact:	Noise impact from machinery on the property and neighbouring residential properties during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised noise disturbance on the site
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Slight increase in localised ambient noise levels (negligible)
Cumulative impact prior to mitigation:	Very – Low negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Very-Low negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low negative
OPERATIONAL PHASE	
Potential impact and risk:	The activity is not expected to have any noise impacts during the operational phase.
Nature of impact:	

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

DECOMMISSIONING AND CLOSURE PHASE

Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	Proposed 30m high Tree Mast – (Preferred)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Visual impact: Low-Medium negative. The proposed cellular mast appears to have an overall moderate to low visual impact, due to the topography and landscape elements as well as the fact that the tree design is in context with the landscape elements. The development is thus within acceptable levels of change and will not detract from the visual value of the area.
Nature of impact:	Unightly views due to construction site
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised visual disturbance on site
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Low
Indirect impacts:	Very-Low negative
Cumulative impact prior to mitigation:	Low-negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	Visual impact mitigation measures will be dealt with in the Environmental Management Programme ("EMPr"). The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others:

	<ul style="list-style-type: none"> The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. Construction only to take place during normal working hours. Implementation of the EMPr.
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> The Contractor shall endeavour to keep noise generating activities to a minimum. Construction only to take place during normal working hours. No construction on Sundays. Compliance with the appropriate legislation with respect to noise shall be mandatory. Construct a 30m high tree mast which will be located adjacent to some tall bluegum trees. Implementation of the EMPr.
Residual impacts:	Very Low-negative
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Medium negative
OPERATIONAL PHASE	
Potential impact and risk:	Visual impact: Low-Medium negative
Nature of impact:	Visual impact: High-Medium negative. The development of the mast will have a visual impact because of the height of the mast (30m in height) and is located within an agricultural area of Hemel en Aarde Valley. Hemel en Aarde Scenic Road is located to the north of the site.
Extent and duration of impact:	Local, Permanent
Consequence of impact or risk:	Low-Medium negative
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low - negative
Degree to which the impact can be reversed:	Very Likely
Indirect impacts:	Negligible (Possibly during the harvesting season and holiday season).
Cumulative impact prior to mitigation:	Low-Medium - negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium - negative
Degree to which the impact can be avoided:	Highly Unlikely (Low)
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	<ul style="list-style-type: none"> Restrict the height of the mast to only 30m; Construct a tree mast; Construct the mast adjacent to existing mature trees; and Implementation of the EMPr.
Residual impacts:	Very Low - negative
Cumulative impact post mitigation:	Very Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Medium negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	

Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	Proposed 30m high Tree Mast – (Preferred)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Socio-Economic (Low - Positive)
Nature of impact:	Temporary jobs will be created in the construction industry during the construction phase.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Positive (temporary job creation)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A. This is a positive impact
Degree to which the impact can be reversed:	N/A. This is a positive impact
Indirect impacts:	Very - Low - Positive (contribute to temporary construction jobs).
Cumulative impact prior to mitigation:	Low - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase.
Degree to which the impact can be managed:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Degree to which the impact can be mitigated:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Proposed mitigation:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Residual impacts:	Low – Positive (Temporary jobs to be created during the construction phase).
Cumulative impact post mitigation:	Low – Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
OPERATIONAL PHASE	
Potential impact and risk:	Socio-economic aspect (Medium – Positive)
Nature of impact:	The proposed activity will increase the coverage of telecommunications services, including providing a more reliable and wider coverage. The proposed mast will have a positive impact on the socio-economics of the surrounding area as it will provide communication users with the option of faster internet coverage, cheaper cellular rates and available, stable network coverage which could be critical in the case of an emergency.
Extent and duration of impact:	Regional, Long-term
Consequence of impact or risk:	Please see above. The activity will increase the cellular network coverage within the area. Medium – Positive
Probability of occurrence:	Highly Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A. Unlikely to cause any loss of resources. This is a positive impact.
Degree to which the impact can be reversed:	N/A. This is a positive impact.
Indirect impacts:	Low – Positive indirect impacts associated with the activity. Improved mobile network coverage within the surrounding area.
Cumulative impact prior to mitigation:	Medium - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact that will improve the cellular network coverage within the surrounding area.
Degree to which the impact can be managed:	N/A. This is a positive impact.
Degree to which the impact can be mitigated:	N/A. This is positive impact.

Proposed mitigation:	N/A. This is a positive impact. No mitigation measures required.
Residual impacts:	Low - Positive
Cumulative impact post mitigation:	Low - Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Positive
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 1:	Proposed 30m high Tree Mast – (Preferred)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is expected to have very low impact on heritage and cultural-historic aspects.
Nature of impact:	The loss of heritage, cultural or historic aspects during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - negative
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Very - Low Negative
Cumulative impact prior to mitigation:	Low - Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Negative
Degree to which the impact can be avoided:	Medium (Likely)
Degree to which the impact can be managed:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)
Proposed mitigation:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and

	<p>must not be disturbed further until the necessary approval has been obtained from HWC.</p> <ul style="list-style-type: none"> Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low - Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low- Negative
OPERATIONAL PHASE	
Potential impact and risk:	Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is expected to have a low impact on heritage and cultural-historic aspects.
Nature of impact:	The loss of heritage, cultural or historic aspects during the operational phase
Extent and duration of impact:	Local, Duration the operational phase
Consequence of impact or risk:	Low - Negative
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Very-Low negative
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Very – Low Negative
Cumulative impact prior to mitigation:	Low - Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Negative
Degree to which the impact can be avoided:	Medium (Likely)
Degree to which the impact can be managed:	<ul style="list-style-type: none"> If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)
Proposed mitigation:	<ul style="list-style-type: none"> If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low – Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require ‘decommissioning’ or ‘closure’, as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	

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

Alternative 1:	Proposed 30m high Tree Mast – (Preferred)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Ecological aspect (negligible)
Nature of impact:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects. The proposed site is not located within a Critical Biodiversity Area (“CBA”) or Ecological Support Area (“ESA”) and is totally transformed from its natural state due to past development activities on the property. The site contains no indigenous vegetation and is covered with kikuyu grass.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	The EMPr must be enforced and monitored by the Environmental Control Officer (“ECO”). The following measures should be implemented amongst others: <ul style="list-style-type: none"> • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. • The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	The EMPr must be enforced and monitored by the Environmental Control Officer (“ECO”). The following measures should be implemented amongst others:

	<ul style="list-style-type: none"> • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. • The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take during normal working hours. • Implementation of the EMP.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	

Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	Lattice Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Noise (Low-negative)
Nature of impact:	Noise impact from machinery on the property and neighbouring residential properties during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised noise disturbance on site
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Slight increase in localised ambient noise levels (negligible)
Cumulative impact prior to mitigation:	Low-negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-low negative
OPERATIONAL PHASE	
Potential impact and risk:	The activity is not expected to have any noise impacts during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	

Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	Lattice Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Visual impact: High-Medium negative. The development of the mast will have a visual impact because of the height of the mast (30m in height) and is located within an agricultural area of Hemel en Aarde Valley. Hemel en Aarde Scenic Road is located to the north of the site.
Nature of impact:	Unightly views due to construction site
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised visual disturbance on site
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Low
Indirect impacts:	Low
Cumulative impact prior to mitigation:	Low-Medium negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High - Medium - negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	<p>Visual impact mitigation measures will be dealt with in the Environmental Management Programme ("EMPr"). The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. • The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The Contractor shall endeavour to keep noise generating activities to a minimum.

	<ul style="list-style-type: none"> Construction only to take place during normal working hours. No construction on Sundays. Compliance with the appropriate legislation with respect to noise shall be mandatory. Construct a 30m high lattice mast. Implementation of the EMPr.
Residual impacts:	Very Low-negative
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High-Medium negative
OPERATIONAL PHASE	
Potential impact and risk:	Visual impact: Medium-negative
Nature of impact:	Visual impact: Medium negative. The development of the mast will have a visual impact because of the height of the mast (30m in height) and is located within an agricultural area of Hemel en Aarde Valley. Hemel en Aarde Scenic Road is located to the north of the site.
Extent and duration of impact:	Local, Permanent
Consequence of impact or risk:	Low-Medium negative
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low - negative
Degree to which the impact can be reversed:	Very Likely
Indirect impacts:	Negligible (Possibly during the harvesting season and holiday season).
Cumulative impact prior to mitigation:	Medium - negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - negative
Degree to which the impact can be avoided:	Highly Unlikely (Low)
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	<ul style="list-style-type: none"> Restrict the height of the mast to only 30m; Construct a lattice mast; and Implementation of the EMPr.
Residual impacts:	Very Low - negative
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	Lattice Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Socio-Economic (Low - Positive)
Nature of impact:	Temporary jobs will be created in the construction industry during the construction phase.

Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Positive (temporary job creation)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A. This is a positive impact
Degree to which the impact can be reversed:	N/A. This is a positive impact
Indirect impacts:	Very - Low - Positive (contribute to temporary construction jobs).
Cumulative impact prior to mitigation:	Low - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase.
Degree to which the impact can be managed:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Degree to which the impact can be mitigated:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Proposed mitigation:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Residual impacts:	Low – Positive (Temporary jobs to be created during the construction phase).
Cumulative impact post mitigation:	Low – Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
OPERATIONAL PHASE	
Potential impact and risk:	Socio-economic aspect (Medium – Positive)
Nature of impact:	The proposed activity will increase the coverage of telecommunications services, including providing a more reliable and wider coverage. The proposed mast will have a positive impact on the socio-economics of the surrounding area as it will provide communication users with the option of faster internet coverage, cheaper cellular rates and available, stable network coverage which could be critical in the case of an emergency.
Extent and duration of impact:	Regional, Long-term
Consequence of impact or risk:	Please see above. The activity will increase the cellular network coverage within the area. Medium – Positive
Probability of occurrence:	Highly Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A. Unlikely to cause any loss of resources. This is a positive impact.
Degree to which the impact can be reversed:	N/A. This is a positive impact.
Indirect impacts:	Low – Positive indirect impacts associated with the activity. Improved mobile network coverage within the surrounding area.
Cumulative impact prior to mitigation:	Medium - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact that will improve the cellular network coverage within the surrounding area.
Degree to which the impact can be managed:	N/A. This is a positive impact.
Degree to which the impact can be mitigated:	N/A. This is positive impact.
Proposed mitigation:	N/A. This is a positive impact. No mitigation measures required.
Residual impacts:	Low - Positive
Cumulative impact post mitigation:	Low - Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Positive
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	

Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 2:	Lattice Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is expected to have a low impact on heritage and cultural-historic aspects.
Nature of impact:	The loss of heritage, cultural or historic aspects during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Negative
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Very – Low Negative
Cumulative impact prior to mitigation:	Low - Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Negative
Degree to which the impact can be avoided:	Medium (Likely)
Degree to which the impact can be managed:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)
Proposed mitigation:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low - Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Negative
OPERATIONAL PHASE	
Potential impact and risk:	Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is expected to have a low impact on heritage and cultural-historic aspects.
Nature of impact:	The loss of heritage, cultural or historic aspects during the operational phase
Extent and duration of impact:	Local, Duration the operational phase
Consequence of impact or risk:	Low - Negative
Probability of occurrence:	Probable

Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Very – Low Negative
Cumulative impact prior to mitigation:	Low - Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Negative
Degree to which the impact can be avoided:	Medium (Likely)
Degree to which the impact can be managed:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)
Proposed mitigation:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low – Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Alternative 2:	Lattice Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	

Potential impact and risk:	Ecological aspect (negligible)
Nature of impact:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects. The proposed site is not located within a Critical Biodiversity Area ("CBA") or Ecological Support Area ("ESA") and is totally transformed from its natural state due to past development activities on the property. The site has no indigenous vegetation and is covered with kikuyu grass.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	<p>The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. • The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	<p>The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. • Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. • The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take during normal working hours. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	Monopole Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Noise Low-negative
Nature of impact:	Noise impact from machinery on the property and neighbouring residential properties during construction.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised noise disturbance on the site
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Slight increase in localised ambient noise levels (negligible)
Cumulative impact prior to mitigation:	Low - negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - negative
Degree to which the impact can be avoided:	Medium

Degree to which the impact can be managed:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> The Contractor shall endeavour to keep noise generating activities to a minimum. Construction only to take place during normal working hours. No construction on Sundays. Compliance with the appropriate legislation with respect to noise shall be mandatory. Implementation of the EMPr.
Degree to which the impact can be mitigated:	Low-negative
Proposed mitigation:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> The Contractor shall endeavour to keep noise generating activities to a minimum. Construction only to take place during normal working hours. No construction on Sundays. Compliance with the appropriate legislation with respect to noise shall be mandatory. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - negative
OPERATIONAL PHASE	
Potential impact and risk:	The activity is not expected to have any noise impacts during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	Monopole Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Visual impact: High-Medium negative. The development of the mast will have a visual impact because of the height of the mast (30m in height) and is located within an agricultural area of Hemel en Aarde Valley. Hemel en Aarde Scenic Road is located to the north of the site.
Nature of impact:	Unightly views due to construction site
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Localised visual disturbance on site
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Negligible
Degree to which the impact can be reversed:	Low
Indirect impacts:	Low
Cumulative impact prior to mitigation:	Low-Medium negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High-Medium negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	<p>Visual impact mitigation measures will be dealt with in the Environmental Management Programme (“EMPr”). The EMPr must be enforced and monitored by the Environmental Control Officer (“ECO”). The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. • Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. • The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. • Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. • Construction only to take place during normal working hours. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Probable
Proposed mitigation:	<p>The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> • The Contractor shall endeavour to keep noise generating activities to a minimum. • Construction only to take place during normal working hours. No construction on Sundays. • Compliance with the appropriate legislation with respect to noise shall be mandatory. • Implementation of the EMPr.
Residual impacts:	Very Low-negative
Cumulative impact post mitigation:	Medium - Low negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - negative
OPERATIONAL PHASE	
Potential impact and risk:	Visual impact: High-Medium negative
Nature of impact:	Visual impact: High-Medium negative. The development of the mast will have a visual impact because of the height of the mast (30m in height) and is located within an agricultural area of Hemel en Aarde Valley. Hemel en Aarde Scenic Road is located to the north of the site.
Extent and duration of impact:	Local, Permanent
Consequence of impact or risk:	Low-Medium negative
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low - negative
Degree to which the impact can be reversed:	Very Likely
Indirect impacts:	Negligible (Possibly during the harvesting season and holiday season).
Cumulative impact prior to mitigation:	Medium - negative

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - negative
Degree to which the impact can be avoided:	Highly Unlikely (Low)
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	<ul style="list-style-type: none"> • Restrict the height of the mast to only 30m; • Construct a monopole mast; and • Implementation of the EMPr.
Residual impacts:	Very Low - negative
Cumulative impact post mitigation:	Very Low - negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium-Low negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	Monopole Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Socio-Economic (Low - Positive)
Nature of impact:	Temporary jobs will be created in the construction industry during the construction phase.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Positive (temporary job creation)
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A. This is a positive impact
Degree to which the impact can be reversed:	N/A. This is a positive impact
Indirect impacts:	Very - Low - Positive (contribute to temporary construction jobs).
Cumulative impact prior to mitigation:	Low - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase.
Degree to which the impact can be managed:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Degree to which the impact can be mitigated:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Proposed mitigation:	N/A. This is a positive impact. Temporary jobs will be created during the construction phase. No mitigation measures required.
Residual impacts:	Low – Positive (Temporary jobs to be created during the construction phase).
Cumulative impact post mitigation:	Low – Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
OPERATIONAL PHASE	
Potential impact and risk:	Socio-economic aspect (Medium – Positive)

Nature of impact:	The proposed activity will increase the coverage of telecommunications services, including providing a more reliable and wider coverage. The proposed mast will have a positive impact on the socio-economics of the surrounding area as it will provide communication users with the option of faster internet coverage, cheaper cellular rates and available, stable network coverage which could be critical in the case of an emergency.
Extent and duration of impact:	Regional, Long-term
Consequence of impact or risk:	Please see above. The activity will increase the cellular network coverage within the area. Medium – Positive
Probability of occurrence:	Highly Probable
Degree to which the impact may cause irreplaceable loss of resources:	N/A. Unlikely to cause any loss of resources. This is a positive impact.
Degree to which the impact can be reversed:	N/A. This is a positive impact.
Indirect impacts:	Low – Positive indirect impacts associated with the activity. Improved mobile network coverage within the surrounding area.
Cumulative impact prior to mitigation:	Medium - Positive
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Positive
Degree to which the impact can be avoided:	N/A. This is a positive impact that will improve the cellular network coverage within the surrounding area.
Degree to which the impact can be managed:	N/A. This is a positive impact.
Degree to which the impact can be mitigated:	N/A. This is positive impact.
Proposed mitigation:	N/A. This is a positive impact. No mitigation measures required.
Residual impacts:	Low - Positive
Cumulative impact post mitigation:	Low - Positive
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Positive
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Alternative 3:	Monopole Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is expected to have a low impact on heritage and cultural-historic aspects.
Nature of impact:	The loss of heritage, cultural or historic aspects during the operational phase
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Low - Negative
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Very – Low Negative
Cumulative impact prior to mitigation:	Low - Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low - Negative

Degree to which the impact can be avoided:	Medium (Likely)
Degree to which the impact can be managed:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)
Proposed mitigation:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low – Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Negative
OPERATIONAL PHASE	
Potential impact and risk:	Heritage and Cultural-Historic Aspects – Due to the site location and nature of the activity, the activity is expected to have an impact on heritage and cultural-historic aspects.
Nature of impact:	The loss of heritage, cultural or historic aspects during the operational phase
Extent and duration of impact:	Local, Duration the operational phase
Consequence of impact or risk:	Low - Negative
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Very – Low Negative
Cumulative impact prior to mitigation:	Low - Negative
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium - Negative
Degree to which the impact can be avoided:	Medium (Likely)
Degree to which the impact can be managed:	<ul style="list-style-type: none"> • If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. • Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. • Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium (Likely)

Proposed mitigation:	<ul style="list-style-type: none"> If any archaeological remains (including but not limited to fossil bones and fossil shells, coins, indigenous and/or colonial ceramics, any articles of value or antiquity, stone artefacts and bone remains, structures and other built features, rock art and rock engravings) are discovered during construction they must immediately be reported to Heritage Western Cape (HWC) and must not be disturbed further until the necessary approval has been obtained from HWC. Should any human remains/burial or archaeological material be disturbed, exposed or uncovered during construction, these should immediately be reported to the South African Heritage Resources Agency and HWC. The ECO and Engineer are also to be informed. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Low – Negative
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low – Negative
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require ‘decommissioning’ or ‘closure’, as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Alternative 3:	Monopole Mast (30m in height) – Not Preferred
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	Ecological aspect (negligible)
Nature of impact:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects. The proposed site is not located within a Critical Biodiversity Area (“CBA”) or Ecological Support Area (“ESA”) and is totally transformed from its natural state due to past development activities on the property. The site contains no indigenous vegetation and is covered with kikuyu grass.
Extent and duration of impact:	Local, Duration of construction phase
Consequence of impact or risk:	Negligible
Probability of occurrence:	Highly Unlikely
Degree to which the impact may cause irreplaceable loss of resources:	Highly Unlikely
Degree to which the impact can be reversed:	Definite
Indirect impacts:	Insignificant
Cumulative impact prior to mitigation:	Negligible
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
Degree to which the impact can be avoided:	Low (Highly Likely)
Degree to which the impact can be managed:	<p>The EMPr must be enforced and monitored by the Environmental Control Officer (“ECO”). The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated.

	<ul style="list-style-type: none"> No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. Construction only to take place during normal working hours. Implementation of the EMPr.
Degree to which the impact can be mitigated:	Medium
Proposed mitigation:	<p>The EMPr must be enforced and monitored by the Environmental Control Officer ("ECO"). The following measures should be implemented amongst others:</p> <ul style="list-style-type: none"> The contractor shall restrict all his activities, materials, equipment and personnel to within the area specified/demarcated. No further encroachment onto the degraded ESA on site, construction activities to be clearly restricted to demarcated construction area. Construction material must be stored in areas designated by the site agent and in a neat and orderly manner and must not damage natural vegetation. The contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. Immediately after the demolishing of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape. Construction only to take during normal working hours. Implementation of the EMPr.
Residual impacts:	Negligible
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negligible
OPERATIONAL PHASE	
Potential impact and risk:	Due to the site location and nature of the activity, the activity is not expected to have any impacts on ecological or biodiversity aspects during the operational phase.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	The project as proposed does not require 'decommissioning' or 'closure', as such the potential impacts thereof is considered irrelevant.
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

Note: The EAP may decide to include this section as Appendix J to the BAR. **(This section was added as Appendix J to the BAR).**