ERF 4440, CNR CUNNINGHAM AVE & SEODIN ROAD
KURUMAN
COMMERCIAL DEVELOPMENT

VISUAL ASSESSMENT

For consideration in the land use application

For

EnviroAfrica

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Final Report

26 November 2020

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Relevant Qualifications & Experience of the Author

Ms Sarien Lategan holds an Honours Degree in Geography as well as a Masters Degree in Town and Regional Planning from the University of Stellenbosch. She has 7 years experience as Town planner at a local government, 3 years with South African National Parks as planner and project manager of various GEF and World Bank managed, tourist facilities in the Table Mountain National Park and since 2004 as private practitioner involved in inter alia Site Analysis and Visual Impact assessments for various types of developments ranging from housing, tourism to infrastructure developments.

Ms Lategan is registered as a professional Town and Regional Planner as well as Environmental Assessment Practitioner under previous voluntary registration, currently in process of new registration.

Declaration of Independence

I, Sarah C. Lategan, declare that I am an independent consultant to EnviroAfrica and, has no business, financial, personal or other interest in the proposed project or application in respect of which I was appointed, other than fair remuneration for work performed in connection with the application. There are furthermore no circumstances which compromise my objectivity in executing the task appointed for.

SC Lategan
26-11-2020

EXECUTIVE SUMMARY

The proposed development of a portion of Erf 4440, situated on the corner of Seodin Road and Cunningham Avenue/De Jager Street, consist of a building for the purpose of a business & innovation hub with a parking area. The proposed building would be a container configuration with multi levels but maximum height of 6m.

The property is currently zoned for open space purposes and covered in primarily indigenous vegetation. It is however not actively utilise as recreational space but rather simply viewed as open or unutilised land. The property is situated just above the original river bank and west sloping.

The surrounding land uses consist of a mix containing residential, business, light industrial/workshop and community services (Municipal depot, Ambulance centre). Seodin Road appears to be in a state of transition from residential to small businesses and road side trading. Cunningham/De Jager street is still fairly undeveloped with the ambulance station as the beginning of potential further development as properties have been subdivided along this road. No spesific architectural style is observed and building designs seems to be of no specific character. No strong or pleasing streetscape exist in fact currently the area appears somewhat chaotic in both design, use and activities. The shopping mall to the west in the CBD is prominent in the environment but the rear faces to the property and creates a backyard feel to it.

Thus is was concluded that the receiving environment hold very little visual elements of significance.

The digital viewshed for the site was determined and refined to a limit of 2km due to topography and landscape elements. Potential receptors were identified within the viewshed as well as on the outside perimeter of the viewshed as to ground truth the digital model.

The following potential receptors were identified and tested with profiles and photos -

1. Tsenin Street (R31) approach
2. Buitekant Street approach
3. Seodin Street approach
4. N14 approach
5. Cunningham/De Jager Street approach
6. CBD approach
7. Seodin Residential Area
8. Kuruman West Residential

9. CBD
10. Cunningham Residential
11. Frylink Residential Area

The summary table indicates that of these receptors none were rated as of high visual impact. The overall visual impact is low to moderate. It also confirms that the perimeter of the digital viewshed.

Table 1: Impact rating summarised

Potential Receptors	Low	Moderate	High
1 Tsenin Street (R31) approach			
2 Buitekant Street approach			
3 Seodin Street approach	Distance	Close	
4 N14 approach	Negligible		
5 Cunningham/De Jager Street approach			
6 CBD approach			
7 Seodin Residential Area			
8 Kuruman West Residential	Negligible		
9 CBD	Negligible		
10 Cunningham Residential	Negligible		
11 Frylink Residential Area			

The development will change that landscape but within acceptable levels of change and will not detract from the value of the area. The design does has the potential to be more intrusive should bright and reflective colours area used and insensitive bulk signage attached to the building and property perimeter. In order thus to ensure that the visual impact remains within these acceptable levels the following conditions of approval should be considered -

1. Use of non reflective colours to blend with the surrounding environment. (examples are grey and green shade in line with the natural vegetation).
2. Films should be used to reduce excessive reflection of glazing
3. Landscaping should compliment the natural vegetation and reduce the impact of hard surfaces such as the parking area.

1 BACKGROUND & TERMS OF REFERENCE

Sarien Lategan was appointed to undertake the visual impact assessment of a commercial development on a portion of Erf 4440 in extent 5000m², located on the corner of Cunningham Avenue and Seodin Road, Kuruman within the Ga-Segonyana Municipal area.

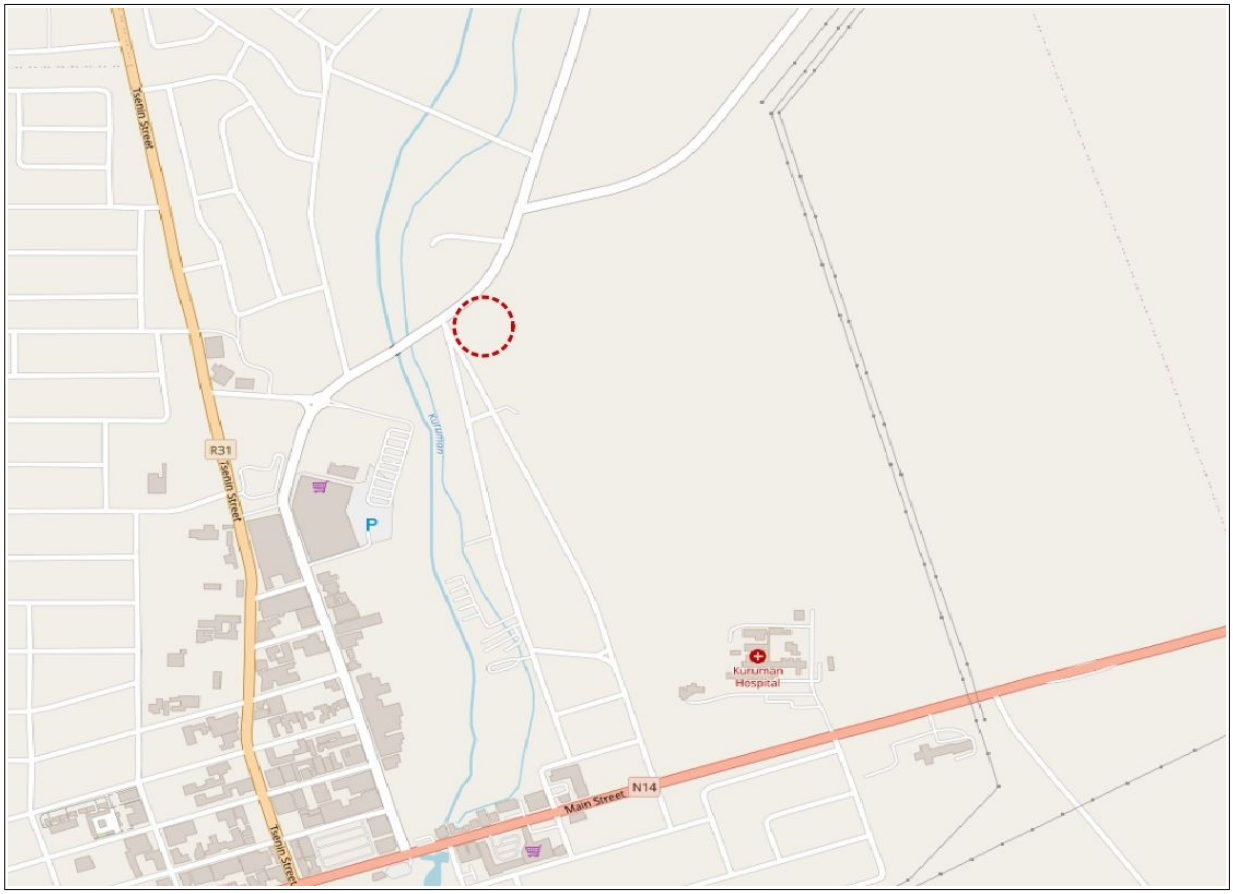

Figure 1: Locality

Figure 2: Portion of erf 4440 to be developed

The applicant intends to develop an Innovation and Business Hub on the said portion of land. The buildings to consist of multi-levels with maximum double storey complex configured with containers.

The objective of the visual impact assessment is to determine the significance of any visual impact, which may result from the construction of the proposed business hub. This assessment will indicate whether, from a visual perspective the development constitute an acceptable level of change and if required, what potential mitigation measures can reduce any such impact.

To determine the potential extent of the VIA required, the following broad criteria are considered.

Table 2: Requirements for visual assessment

Areas with protection status, e.g. nature reserves	The site is zoned as public open space and erf 4440 primarily covered in natural vegetation.
Areas with proclaimed heritage sites or scenic routes	Informal graveyard close to development site on erf 4440. No known proclaimed sites
Areas with intact wilderness qualities, or pristine ecosystems	Site has natural vegetation
Areas with intact or outstanding rural or townscape qualities	No
Areas with a recognized special character or sense of place	No
Areas with sites of cultural or religious significance	No. Refer to above graveyard. No sign of maintenance or honoring of graves
Areas of important tourism or recreation value	Potentially
Areas with important vistas or scenic corridors	No
Areas with visually prominent ridgelines or skylines.	No

Table 3: Nature of intended development

High-intensity type projects including large-scale infrastructure	Medium scale
A change in land use from the prevailing use	In part
A use that is in conflict with an adopted plan or vision for the area	None identified
A significant change to the fabric and character of the area	Potentially
A significant change to the townscape or streetscape	Potentially
Possible visual intrusion in the landscape	Potentially
Obstruction of views of others in the area	Potentially

From the above, it is clear that the receiving environment holds certain visual elements, which may be impacted upon by the commercial development on the site. In order to assist authorities to make an informed decision, the input of a specialist is required to assist in assessing the visual impact of the development proposal.

The term visual and aesthetic is defined to cover the broad range of visual, scenic, cultural, and spiritual aspects of the landscape. The terms of reference for the specialist are to:

- Provide the visual context of the site with regard to the broader landscape context and site-specific characteristics.
- Provide input in compiling layout/design alternatives.
- To describe the affected environment and set the visual baseline for assessment
- Identify the legal, policy and planning context related to visual impact
- Identifying visual receptors
- Predicting and assessing impacts
- Recommending mitigation measures

2 Methodology and principles

2.1 Methodology

Table 4: Summary of methodology

Task undertook	Purpose	Resources used
A screening of the site and environment	To obtain an understanding of the site and area characteristics and potential visual elements	Photographs Site visits
Identify visual receptors	To assess the visual impact from specific viewpoints	Digital modelled viewshed Photographs
Contextualize the site within the visual resources	To present an easy to understand context of the site within the visual resource baseline	Graphic presentation Superimposed photo's
Propose possible mitigation measures	To present practical guidelines to reduce any potential negative impacts.	Specialist: S. Lategan

Throughout the evaluation the following fundamental criteria applied:

- Awareness that "visual' implies the full range of visual, aesthetic, cultural and spiritual aspects of the environment that contribute to the area's sense of place.
- Consideration of both the natural and cultural (urban) landscape, and their inter-connectivity.
- The identification of all scenic resources, protected areas and sites of special interest, as well as their relative importance in the region.
- Understanding of the landscape processes, including geological, vegetation and settlements patterns which give the landscape its particular character or scenic attributes.
- The inclusion of both quantitative criteria, such as visibility and qualitative criteria, such as aesthetic value or sense of place.

- The incorporation of visual input as an integral part of the project planning and design process, so that the findings and recommended mitigation measures can inform the final design and quality of the project.
- To test the value of visual/aesthetic resources through public involvement.

2.1.1 Principles

The following principles to apply throughout the project:

- The need to maintain the integrity of the landscape within a changing land use process
- To preserve the special character or 'sense of place' of the area
- To minimize visual intrusion or obstruction of views
- To recognize the regional or local idiom of the landscape.

2.1.2 Fatal flaw statement

A potential fatal flaw is defined as an impact that could have a "no-go" implication for the project. A "no-go" situation could arise if the proposed project were to lead to (Oberholzer, 2005):

1. Non-compliance with Acts, Ordinance, By-laws and adopted policies relating to visual pollution, scenic routes, special areas or proclaimed heritage sites.
2. Non-compliance with conditions of existing Records of Decision.
3. Impacts that may be evaluated to be of high significance and that are considered by the majority of stakeholders and decision-makers to be unacceptable.

The screening of the site and initial project intentions did not reveal any of the above issues which may result in a fatal flaw.

2.1.3 Gaps, limitations and assumptions

The assessment is based on the information provided by the developer. Only preliminary architectural drawings were provided. The assumption is that the final development proposal will be in similar architectural style and of similar scale and grain although not exact.

Photos were taken to closely resemble what the human eye would see from that point and at that distance. Slight variances may occur from different angles but the intention is to provide a general presentation of potential views.

2.1.4 Assessment explained

Visual Impact relates not only to the physical visibility of a structure or development, but the context of that structure within the environment. The assessment therefore firstly describes the

receiving environment from a socio-cultural-, heritage- and physical landscape perspective to set a baseline from which to evaluate the appropriateness of a new element in that specific environment. Although every effort is made to rate and explain visual impact, it is not an exact science and holds a significant level of intangible community values.

A broad potential viewshed area is determined using digital elevation modeling techniques. This provides the area within which specific viewpoints, called visual receptors are identified. Specific views from these receptors are then assessed with the use of photo's and the element superimposed on such photo's to provide an "animation" of the potential view. Based on these, the significance of the impact is then determined through the rating of the exposure level, receptor sensitivity and the intrusion level.

The following framework is used to assess view receptors:

Table 4: Rating Criteria

Criteria	High	Moderate	Low
Exposure	Dominant, clearly visible	Recognizable to the viewer	Not particularly noticeable to the viewer
Sensitivity	Residential, nature reserves, scenic routes	Sporting, recreational, places of work	Industrial, mining, degraded areas
Intrusion/Obstructive	A noticeable change, discordant with surroundings	Partially fits but clearly visible	Minimal change or blends with surroundings

Exposure is a tangible criteria, which refers to the visibility of the element.
Intrusion or Obstructive is a less tangible criteria which refers to what level an element is "acceptable" within a setting.
Sensitivity deals with the receiving environment and the landscape elements which are appropriate within such environment.

A sensitive receptor with low exposure and/or low intrusion rate can be regarded as a low significance rating. A receptor of low sensitivity but with high exposure can be of high significance if the intrusion rate is also high but is reduced if the intrusion rate is medium or low.
The overall significance, therefore, depends not only on the sensitivity of the receptor but also on the exposure and intrusion rate and thus a combination of the criteria.

The purpose of mitigation measures are to lower the exposure or intrusion level in order to lower the overall significance of the rating.

2.2 Legal Context

2.2.1 National Environmental Management Act, 107, 1998 and relevant Guidelines

The application is not subject to the NEMA regulations.

2.2.2 Northern Cape PSDF

No specific references on this scale of development

2.2.3 John Taolo Gaetsewe District Spatial Development Framework

No specific relevance to the visual character of the site.

2.2.4 Heritage Resources Act

No proclaimed heritage sites exist on or adjacent the site.

An old graveyard close to the site is protected since it is older than 60years. This does not impact on the visual assessment

3 Development Proposal

A 5000m² portion of Erf 4440, situated on the corner of Cunningham Avenue and Seodin Road will be utilized for the development of an Innovation and Business Hub. The development will consist of a building and parking area as per Site Development (Figure 3)

Figure 3: Site Development Plan

Figure 4: Building Elevations

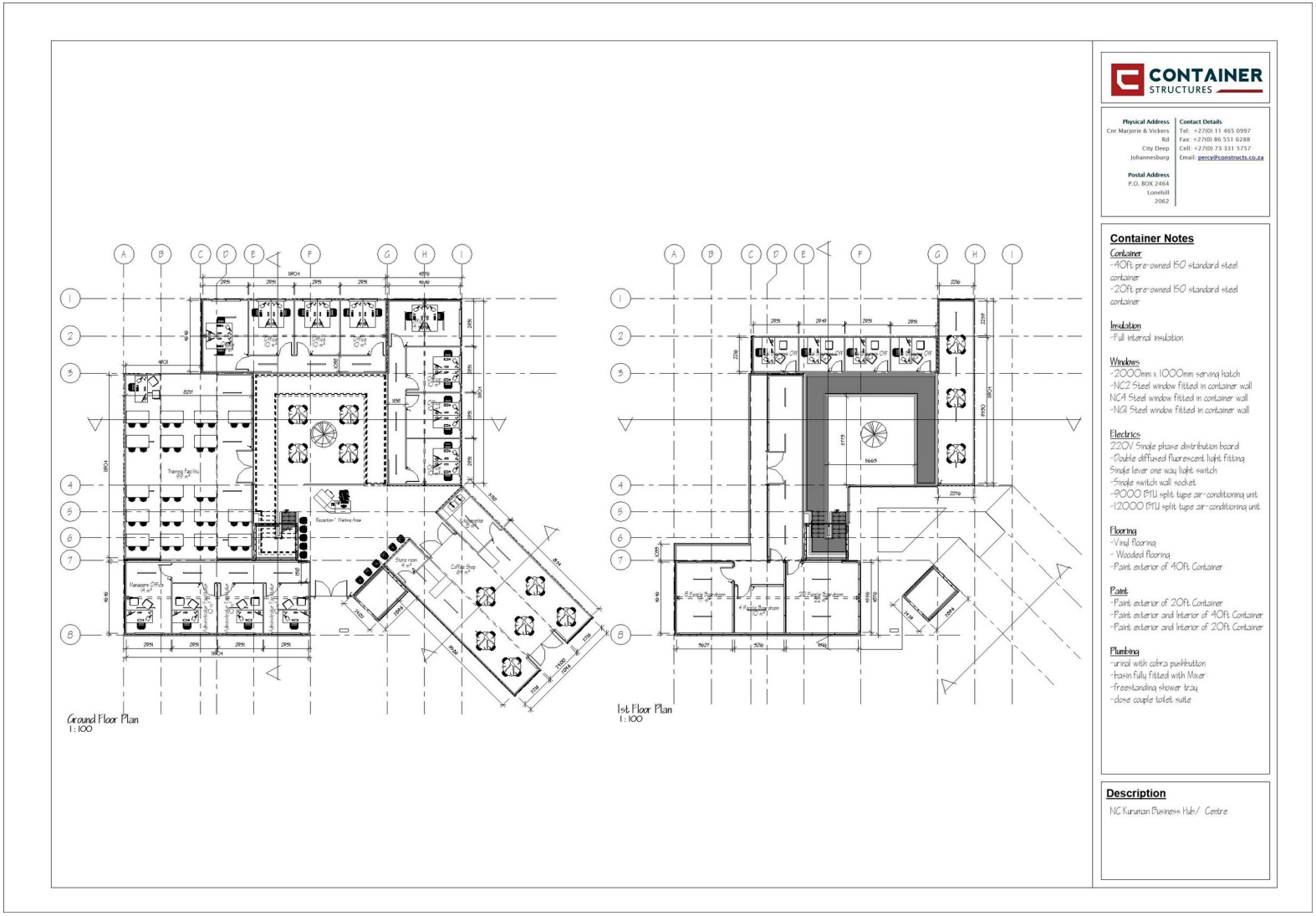

Figure 5: Building layout

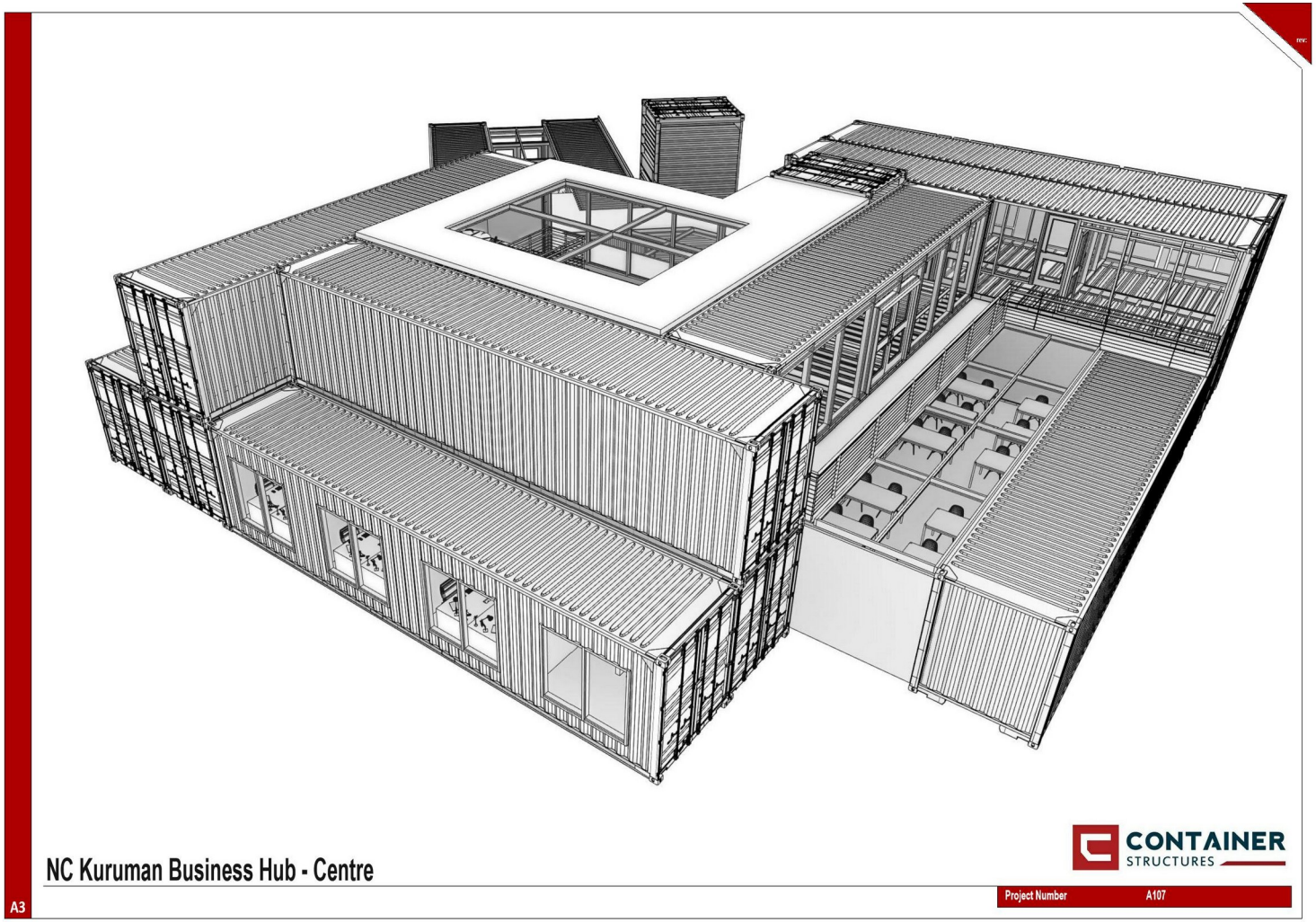

Figure 6: Building 3D presentation

4 RECEIVING VISUAL ENVIRONMENT

4.1 Description

The site is currently a portion of public open space although it is not actively used as such. It is situated next to the very busy Seodin Road which connects Mothibistad with Kuruman. Seodin Road does not display a specific character or architectural style. Architecture and land use along this route does not display any coherence is in fact chaotic. At the Cunningham intersection area, a number of different land uses are present ranging from business to light industrial type activities.

Cunningham road leads to the hospital, emergency services and residential areas. This road is an important connector between Seodin Rd and Main Road/N14. Although the properties along this route is mainly vacant, community services are present. No specific streetscapes with visually sensitive elements exists which needs to be considered.

The locality of the site opposite the municipal depot and “behind” the mall with the parking decks overlooking the area, the site does display almost being part of the business area “backyard”.
The erf itself of which the remainder will remain as open space covered predominantly indigenous vegetation, creates a natural backdrop to the development.

The immediate environment hold very little scenic values and none of significance. No elements were identified which deserves special attention regarding visual quality. The overall visual sensitivity of the immediate area is thus low.

4.2 Viewshed

The viewshed refers to the area from where the development would potentially be visible. A viewshed was generated on the assumption of a maximum building height of 6m.

On a flat surface the maximum distance that the human eye can theoretically view an object is 30km due to the curvature of the earth. This is influenced by the size, colour and height of an object. .

The theoretical viewshed is furthermore significantly reduced by landscape elements such as buildings and vegetation. Although an object may be visible from a larger area, not all views are directed towards that element, thus further reducing the viewshed.

In the case of the Erf 4440 development, the practical viewshed is reduced to a 2km radius due to topography and landscape elements (ref fig. 7). The position of the site within the urban context, also reduces the individual visibility from further away.

The urban landscape itself provides a high level of visual absorption. This absorption rate is increase by the topography (valleys and hills).

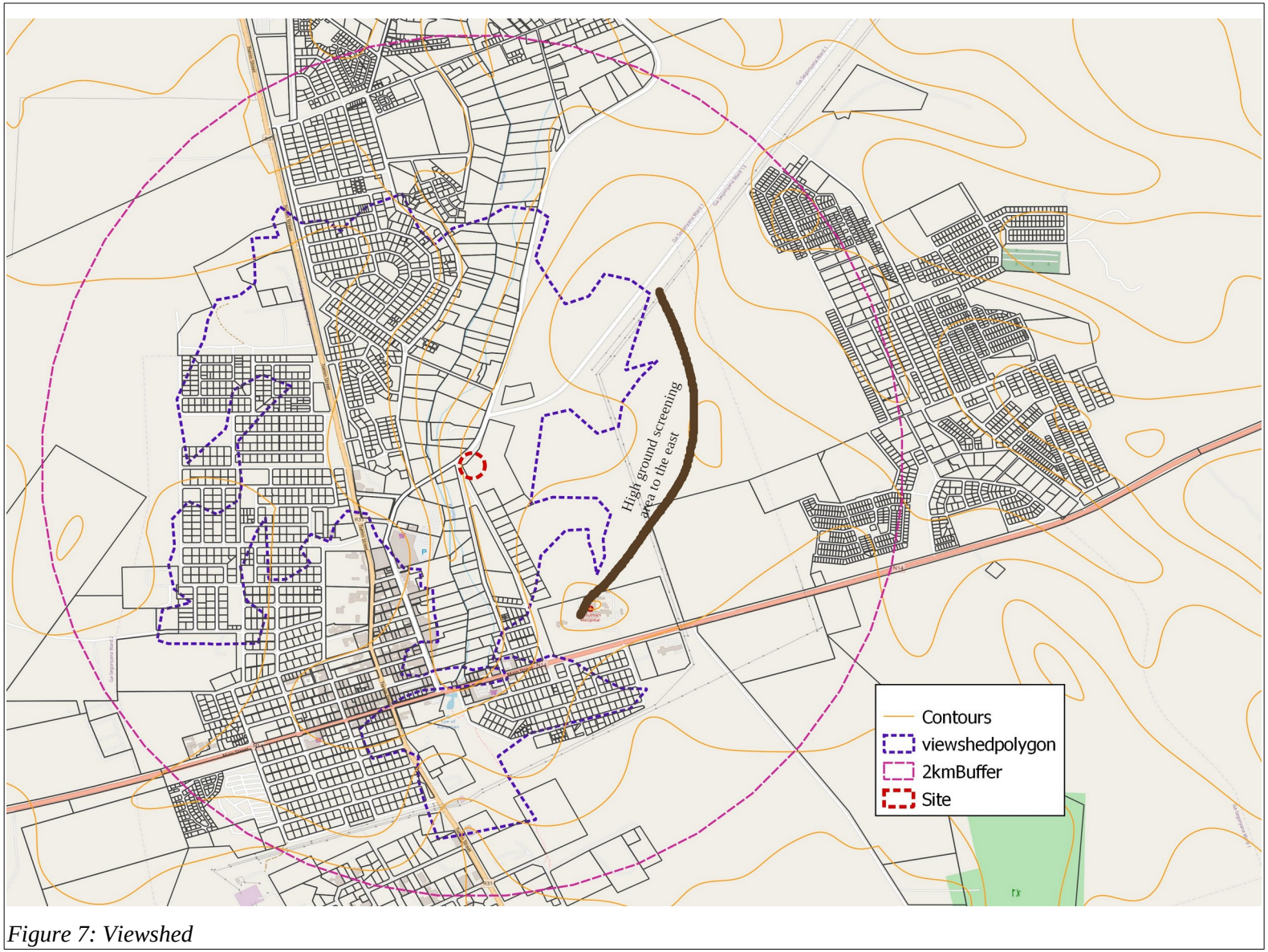

Figure 7: Viewshed

4.3 Sense of Place:

The site is in a an area characterised by a mix of land uses. Land use and architecture creates a discordant urban environment with a somewhat chaotic feel. Unorganised roadside activities results in a feeling of chaos and is not inviting. Various traffic hazards exists making the street and pavement areas hazardous for pedestrians. No urban coherence exist.

Photo 1: Seodin Road streetscape

Cunningham/De Jager street currently serves mainly as connector with the N14 and with mainly vacant properties has no specific visual character.

The overpowering back of the mall creates a backyard feel to the street.

Photo 2: Untended roadside treatment

Photo 3: Mix land use with mall in background

Photo 4: Rear of Mall facing the site

Photo 5: Cunningham/De Jagerstreet view

5 VISUAL RECEPTORS

Visual receptors are those positions from where the development site is potentially visible. Based on the character of the locality of the receptor, its sensitivity can be rated. Generally, residential areas and tourism-related destinations and routes are sensitive to visual intrusions as they relate to the well-being of residents and the tourism quality of the area.

For this assessment, areas with similar views have been identified and animations created for such views. Slight difference may thus be possible from individual properties, but the overall impact within such area would be the same.

5.1 Potential Receptors

The following potential visual receptor areas have been identified (Refers Fig 8):

1. Tsenin Street (R31) approach
2. Buitekant Street approach
3. Seodin Street approach
4. N14 approach
5. Cunningham/De Jager Street approach
6. CBD approach
7. Seodin Residential Area
8. Kuruman West Residential
9. CBD
10. Cunningham Residential
11. Frylink Residential Area

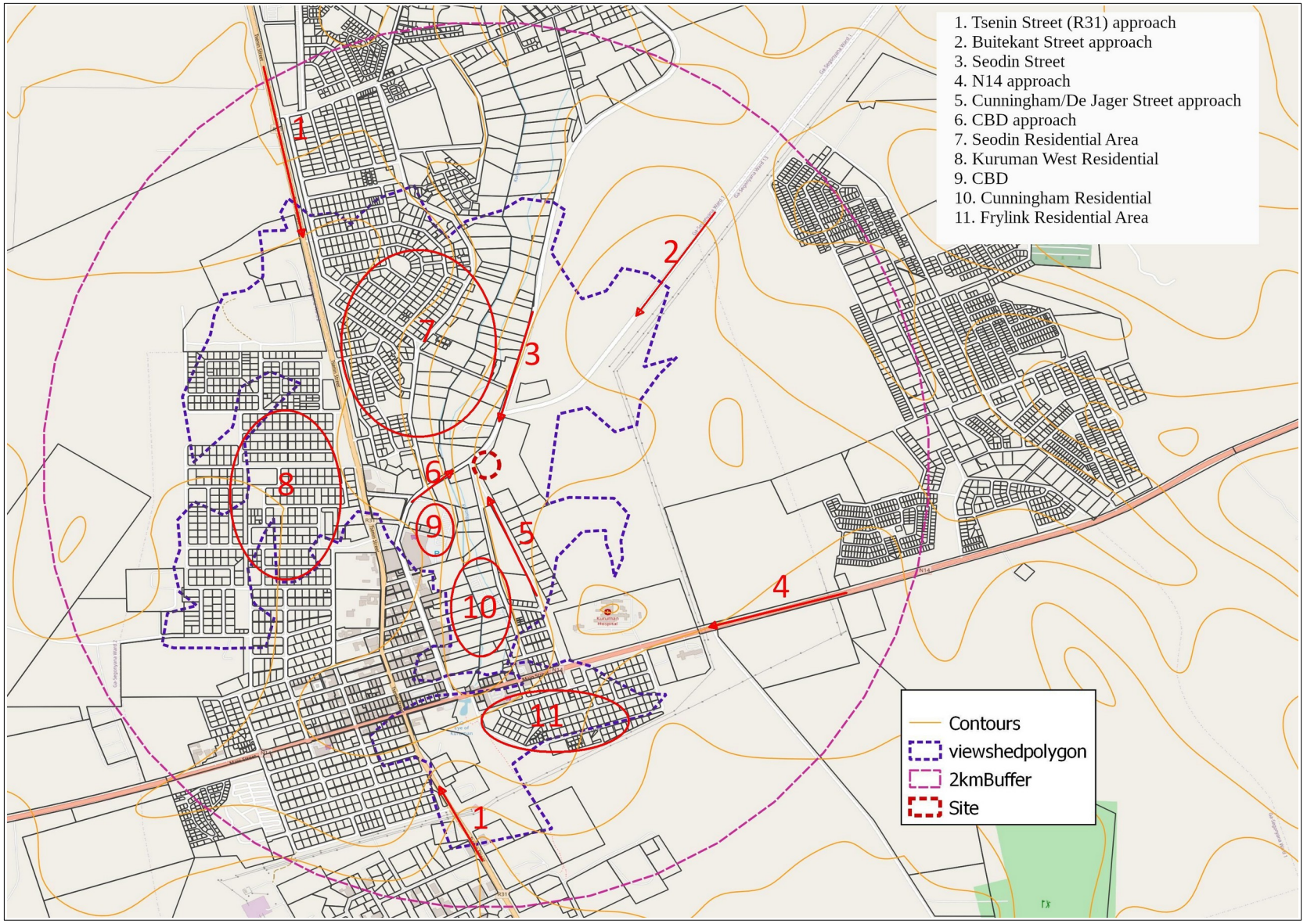

Figure 8: Map of Receptors

5.2 Assessment of Receptors

5.2.1 Tsenin Street / R31 approach

Approaching along the R31 from the north, the view is screened by the residential area i.e. buildings and trees. The site is not visible on this approach.

Figure 9: Northern approach on R31

Approaching from the south, the view is toward the town and although the site may be visible at specific positions along this route, it would be part of the urban environment and not specifically visible due to the fact that the building is in only 6m in height. The intrusion level is thus extremely low.

Figure 10: R31 southern approach

Table 5: R31 approach impact rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes	sporting, recreational, places of work, national Road	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

The overall impact along the R31 approach in either directions are low.

5.2.2 Buitekant Street approach

When approaching from the northeast along Buitekant Street, the site is screened by the trees north/ northeast of the development site. These trees provide sufficient screening to at least block the view of any structure on the development site of approximately 6m in height. The proposed building is approximately 5,9m in height. The top of the builiding may be vaguely visible. The building is also placed in front of the buildings in the CDB (Checkers) which thus provide a backdrop and does not protrude above these buildings.

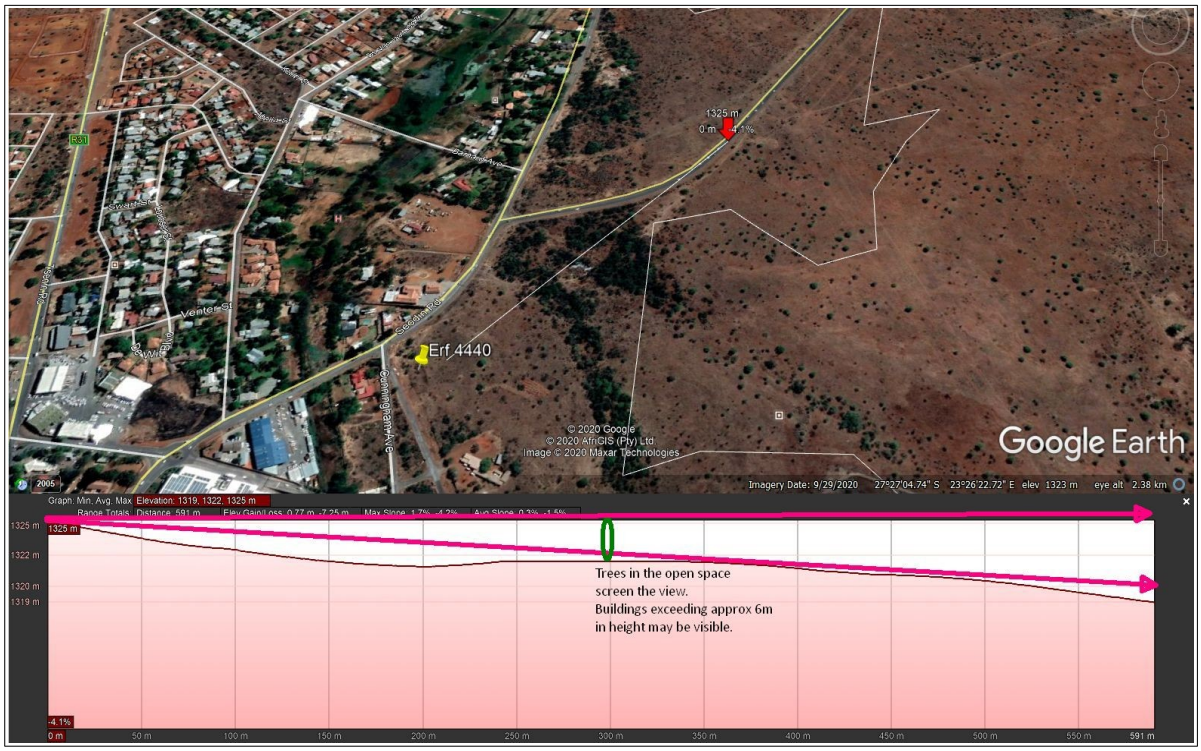

Figure 11: Profile of approach along Buitekant Street

Illustration 1: Buitekant Street approach

As the viewer moves closer to the intersection the road descent and the trees will provide full screening of the building.

Table 6: Buitekant Street approach rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes *	sporting, recreational, places of work, national Road Residential areas faces away from site.	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

The overall impact from the Buitekant Street approach is low.

5.2.3 Seodin Road approach

Approaching from the north along Seodin Road the site is screened by vegetation and infrastructure elements. It is only when the traveller arrives at the Buitekant Street intersection, that the site comes into view.

Figure 12: Seodin Road approach

The visual impact from this distance is low.

Table 7: Seodin Road apporach rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes	sporting, recreational, places of work, national Road	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

Illustration 2: Seodin Road approach in close proximity

As the traveller pass the Buitekant street intersection, the site becomes more visible on the left as you enter a business area. Due to the topography the building will be slightly below the Seodin Road level, reducing the visibility of the building.

Table 8: Seodin Road view rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes	sporting, recreational, places of work, national Road	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

The overall impact from this position is moderate. The Intrusion level can be reduced by using non-reflective colours on the building not to create a contrast against the natural vegetation.

5.2.4 N14 approach

Approaching Kuruman along the N14, the site is situated to the right in the side view of the traveller. Due to the topography and the low elevation of the building, the site is not clearly visible and the building not noticeable to the traveller. The roof may be vaguely visible but probably screened by landscape elements. The profile below confirms that the N14 approach is outside the viewshed.

The higher ground to the east of the site creates a view barrier.

Figure 13: Profile of N14 approach

The visual impact is thus negligible.

5.2.5 Cunningham-De Jager street approaching

From the Main Road intersection turning into De Jager street (Cunningham), the site is not visible until you reach the crest.

At the Ambulance station is passed, the site is in clear view to the right.

Photo 6: De Jager street approach at Main Road intersection

Photo 7: Approach apposite ambulance station

At this point the building becomes prominent. Due to the presence of other utility/service related uses in the vicinity, it is in accordance with the surrounding land use.

Illustration 3: Cunningham-De Jager close proximity view

Table 9: De Jager street approach in close proximity rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes	sporting, recreational, places of work, national Road	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

The overall impact is thus moderate. Should it be required to blend better with the open area to the rear, it should be considered to use non-reflective colours, use sensitive signage and use appropriate landscaping.

5.2.6 CBD approaching

From the traffic circle towards the site, the view is still a distance and the observer occupied by the CBD activities as well as the Mall building. As you move closer to the site, the road descend through the river and then ascend towards the site. At this point the site is in direct view. The area is still very busy with a mix of land uses including business and roadside trading. Although the building is clearly visible it is in accordance with the surrounding land uses and thus not intrusive.

Illustration 4: CBD approach in close proximity

Table 10: CBD close up approach rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes	sporting, recreational, places of work, national Road	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

The overall visual impact is moderate. Through the use of non-reflective colours the building can blend more with the area. The use is however in line with the surrounding activities and fits well.

5.2.7 Seodin Residential area

Although the residential area is within the viewshed, properties are fenced and large trees throughout the neighbourhood restrict views and direct views inward. Properties thus does not have a view outward and the building is not visible from within the neighbourhood.

Table 11: Seodin Residential area rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes	sporting, recreational, places of work, national Road	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

Although a residential area is in general, sensitive to visual intrusions, the site is not within the neighbourhood and not visible, thus the overall impact is very low.

5.2.8 Kuruman West Residential

Although the residential area to the west of the CBD is within the viewshed, the building will not be visible as it would be screened by buildings in the CDB. Properties are also fenced and trees block outward views.

The visual impact is thus negligible.

5.2.9 Central Business Area

The Central Business Area (CBD) is within the viewshed but due to buildings the view from street level is restricted to the street. Buildings are also facing towards the street and view lines are not directed towards the site. The shopping mall dominates the streetscape in Livingston street. The site will be visible from the parking deck at the rear of the mall. This viewpoint is however not sensitive and users will rarely pay attention to the view beyond this area.

Visual impact from the CBD is thus negligible.

5.2.10 Cunningham Residential area

Cunningham Avenue is lower than De Jager Street and the properties are below the original river bank and upper plateau. Only a builiding of approximately 10m in height would be visible from the Cunningham street residential properties and complexes.

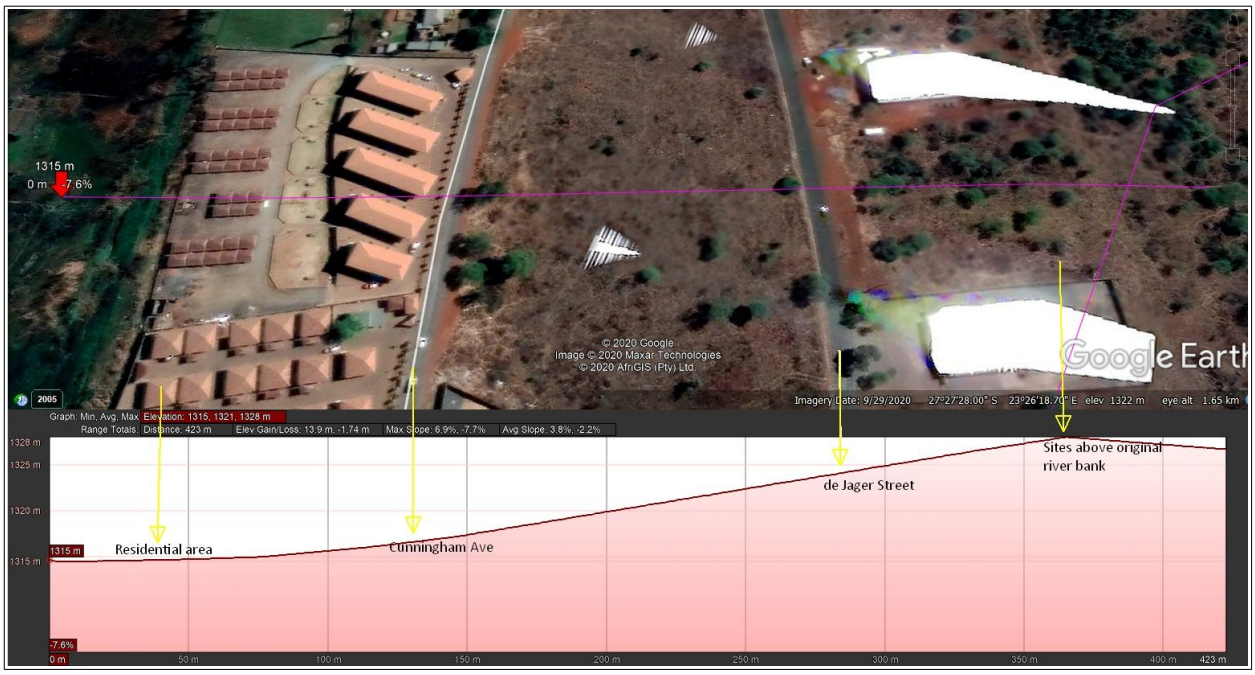

Figure 14: Valley Profile explained

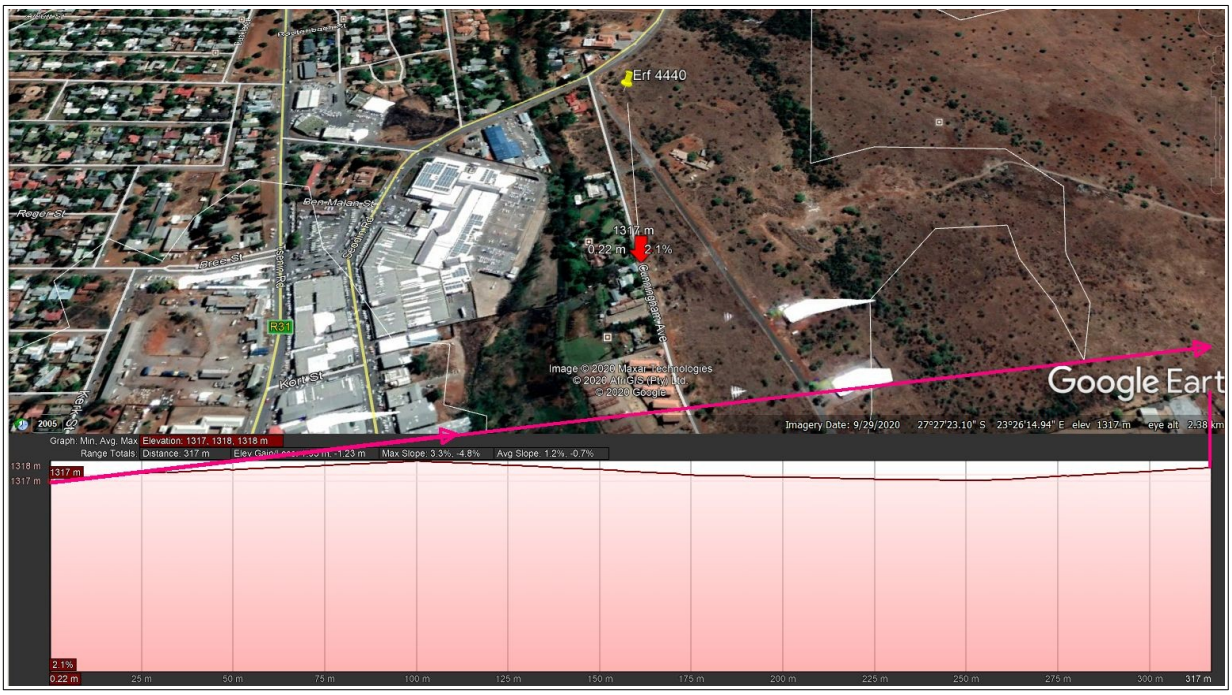

Figure 15: Viewline from Cunningham Ave residential area

The overall impact is thus negligible.

5.2.11 Frylink Street residential area

This neighbourhood is situated on a hill, sloping in the direction of the site. The viewlines are thus directed towards the site.

From the lower areas as indicated in photo 8 , the site is not visible. The higher areas have varied visibility of the site as the profiles indicates. Most areas will have very limited view of the buildings. The site is also just over 1km from the neighbourhood and thus the visibility is reduced.

Photo 8: View from lower Frylink area

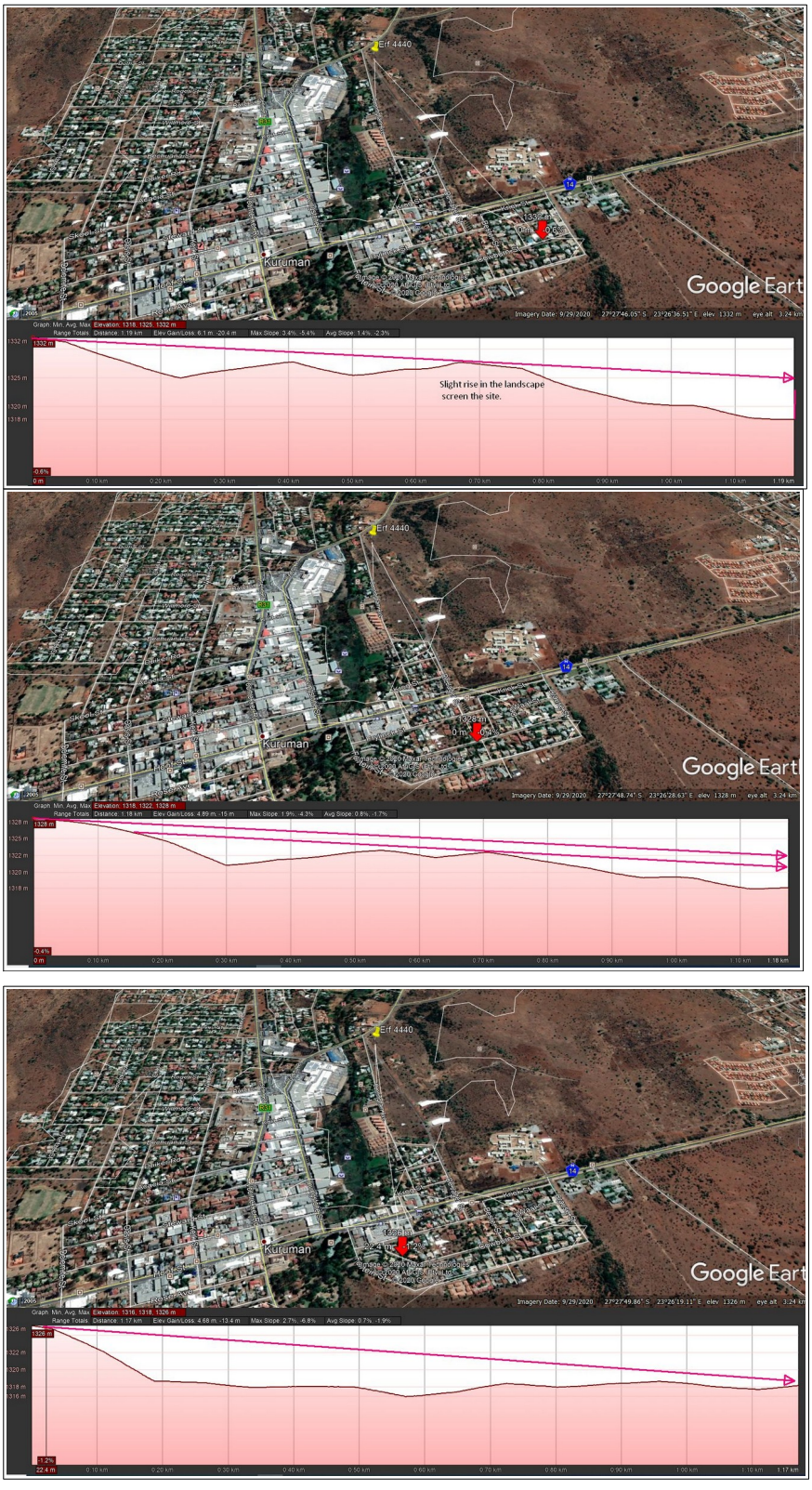

Figure 16: View lines from different observation points in the Frylink area

Table 12: Frylink Residential area rated

Criteria	High	Moderate	Low
Exposure	dominant, clearly visible	recognizable to the viewer	not particularly noticeable to the viewer
Sensitivity	residential, nature reserves, scenic routes	sporting, recreational, places of work, national Road	industrial, mining, degraded areas
Intrusion/Obstructive	noticeable change, discordant with surroundings	Partially fits but clearly visible	minimal change or blends with surroundings

The overall visual impact is due to the distance and topography is low.

6 CUMULATIVE IMPACT

The Department of Environment and Tourism issued a guideline document in terms of which cumulative impacts should be assessed.[1] This guideline document identifies types and characteristics of different cumulative effects as summarized in the table below.

Table 13: Types and characteristics of cumulative effects

TYPE	CHARACTERISTIC	IDENTIFY POTENTIAL IMPACT
Time Crowding	Frequent and repetitive effects.	Activity remains at same pace, frequency and intensity over time. No time crowding impacts.
Time Lags	Delayed effects.	No time lag impacts.
Space Crowding	High spatial density of effects.	The development will increase the urban component slightly. If all properties are developed along De Jager/Cunningham street, the open space presence will be reduced.
Cross-boundary	Effects occur away from the source.	No impact
Fragmentation	Change in landscape pattern.	Reduction in natural landscape will create small change, however it is adjacent similar uses and does not create fragmentation, rather infill.
Compounding Effects	Effects arising from multiple sources or pathways.	No compounding impacts.
Indirect Effects	Secondary effects.	No impact
Triggers and Thresholds	Fundamental changes in system functioning and structure.	No impact

The cumulative impact of this development is very low.

[1] DEAT (2004) Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7, Department of Environmental Affairs and Tourism (DEAT), Pretoria

7 CONSTRUCTION

During construction, various types of vehicles and equipment will be used on site and materials transported to the site. This will impact on the general experience of viewers. This impact is however temporary and not uncommon during construction of infrastructure. Communities have fairly high tolerance levels for such activities if it contributes to the infrastructure of the area.

Site clearance can also create the potential of dust and create an unpleasant visual impact, especially along the feeder roads. The construction management plan should thus provide for sufficient dust control during construction.

Overall visual impact during construction is rated as moderate but can be mitigated to control dust which will lower the impact to within acceptable levels.

8 FINDINGS

It was determined that the receiving environment holds little visual value and thus the visual sensitivity of the immediate vicinity is low. The surrounding landscape does not hold important cultural or architectural elements which will be visually impacted by the proposed development. Assessing the potential receptors, the extent of the viewshed was confirmed which implies that any potential significant views will be restricted to within 2km from the site.

The development is within the scale of the urban landscape and does not detract from the street scape. The urban landscape provides sufficient absorption of this type and scale of development which result in the general low visual impact.

Assessment of the receptors determine that views from a distance is low or negligible and it is only once an observer is close to the site that the building will be prominent. The use of the building will be in accordance with the surrounding land uses and thus not result in a change in the character of the area. No indication has been provided of details such as colours and signage. If bright colours and insensitive signage is going to be used, the impact may be more. This can be mitigated by using non-reflective colours which will compliment the environment and sensitive signage.

The overall visual impact of the proposed development can be regarded as low.

9 MITIGATION MEASURES

The current proposals does not provide for detail regarding colour of buildings or landscaping. In order to reduce any potential visual impacts, mainly from direct street views, it is recommended that -

1. Use of non reflective colours to blend with the surrounding environment. (examples are grey and green shade in line with the natural vegetation).
2. Films should be used to reduce excessive reflection of glazing
3. Landscaping should compliment the natural vegetation and reduce the impact of hard surfaces such as the parking area.

10 CONCLUSION

From the assessment it is derived that the proposed development will be within acceptable levels of change as with regard to the visual impact and can be positively considered. Such consideration should take cognizance of the proposed mitigation measures.