

COHWHSA Association NPC

Registration Number: 2012/001920/08

Submission to JG Afrika – 30 April 2019

PWV8: Route Determination for the Proposed Realignment of a Section of the Planned PWV8 Route

Document Number: COHWHSA-PWV8-1

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1. DEFINITIONS

- 1.1. COHWHSA – Cradle of Humankind World Heritage Site (as promulgated and defined in South African Law);
- 1.2. Class A Road – a defined road reserve capable of accommodating an eight lane highway;
- 1.3. Class B Road – a defined road reserve capable of accommodating a six lane road;

2. BACKGROUND TO SUBMISSION

During October 2018 the COHWHS Association became aware that the process to proceed with the realignment of a section of the PWV8 route is in process.

The PWV8 will be a Class A highway supported by Class B roads.

Over the last four months there has been interactions with JG Afrika (the consultant's appointed by The Gauteng Provincial Department of Roads and Transport, to manage the Environmental Feasibility Assessment and Public Participation process). These meetings have culminated in the COHWHS Association making this submission, and as supported by a number of interested and affected other parties.

3. BACKGROUND TO THE PWV8 REALIGNMENT

The PWV8 has been in planning since the 1970's, when servitudes were registered over properties extending from Beyers Naude (formerly D F Malan) towards Potchefstroom.

During the late 1980's the TPA Roads Department met with the Kromdraai community and confirmed the plans to realise the PWV8 – albeit in some 25 years' time.

In 1999 the Cradle of Humankind World Heritage Site was registered with UNESCO. The registration of the area as a world heritage site has significant implications on what can and cannot be done within the world heritage site. Portions of the original PWV8 routing traversed the newly declared World Heritage Site.

Accordingly, upon a request by the Cradle Management Authority, a decision was taken to scrap the route traversing the world heritage site and to re-align the PWV8 along alternate routes. JG Afrika submitted three alternate routes – see Maps at end of document.

It is also noted that alternative routes may be submitted and these will be considered on their merits.

The process of selecting a final route is being managed in three broad phases – each of which includes a public participation process:

- a. **Route Determination Phase:** Public Participation process, Environmental Feasibility Assessment and High Level Specialist Investigations.
- b. **Preliminary Design Phase:** Public Participation process, Environmental Feasibility Assessment and Specialist Investigations.
- c. **Detailed Design Phase:** Public Participation process, Environmental and Water Use Authorisation and detailed Specialist Investigations.

4. PURPOSE OF SUBMISSION

The COHWHS Association wishes to place on record the following:

- 4.1. That there have been constructive interactions between JG Afrika and the members of the COHWHS Association;
- 4.2. That the members of the COHWHS Association have also held discussions with other interested and affected parties – again constructive;
- 4.3. That the issues pertaining to the re-alignment are both numerous and complex and that due to the proximity of the world heritage site that some issues may be more important than others;

- 4.4. That various principles and alternatives have been tabled and debated;
- 4.5. That this document serves as the formal submission of the COHWHS Association at this time and that further inputs will be submitted as the process unfolds.

5. GUIDING PRINCIPLES

Regardless of which route is finally determined to be the most appropriate, the following key principles are seen as non-negotiable:

- 5.1. The route must not traverse the Cradle of Humankind World Heritage site – the South African Government has a legal obligation to protect the “Universal Historical and Environmental Integrity” of the site. We also have a moral obligation as citizens to protect the World Heritage site for posterity.

This includes both the Class A main route and any ancillary Class B routes that may be considered as part of the planning process.

The World Heritage Site must be protected from all potentially high volume traffic routes traversing the site.
- 5.2. The route must act as both a physical and psychological barrier that prevents urban sprawl from encroaching on the COHWHS and its environs.
- 5.3. The route must have the most positive or least negative impact on land owners and residents in terms of investment, emotional well-being and economic sustainability.
- 5.4. All land owners over whose property the road traverses must be adequately compensated.
- 5.5. The route must not traverse the dolomitic geology and geologically unstable areas associated with the COHWHS (caves which house the fossils of ancient man).
- 5.6. The route must be as far south as possible and have the “least” impact on the World Heritage Site – in terms of visual, noise, air and light pollution.
- 5.7. The route must have the least impact on the environment in terms of petrochemical, water, noise, and light and air pollution and must support the reduction of fossil fuel usage and limit the impact on global warming.
- 5.8. The proposed routes must be in the first instance be evaluated as to the technical feasibility and subject to the route being technically and environmentally feasible, a full Economic Cost/Benefit Analysis must be undertaken.
- 5.9. That the COHWHS Association be privy to all ongoing deliberations, reports, investigations and decision making processes.
- 5.10. That the road must give maximum long term protection to the COHWHS, which when combined with access control and effective town planning will preserve the integrity of the site and prevent urban sprawl and development that is not in keeping with an ecologically and culturally sensitive area.

6. ANCILLARY ISSUES

There are a number of issues that must be considered when assessing the appropriateness of the re-aligned route, each of these will require specialist investigations by the appropriate authorities and or specialists appointed to undertake same:

6.1. Technical Issues

- 6.1.1. Geological underlay and the suitability for the construction of a highway;

- 6.1.2. The extent of *cuts and fills* required to construct the proposed route;
- 6.1.3. The *gradients* that will be necessary along the proposed route;
- 6.1.4. The sharpness of the *curves* required along the proposed route;
- 6.1.5. Consideration must be given for what will be the Shortest route;
- 6.1.6. Access to and from the proposed PWV8 to other roads and the areas bordered by the proposed route;

6.2. Historical/Cultural/Social/Heritage Issues

- 6.2.1. Graves and burial grounds – these must be plotted;
- 6.2.2. Black Reef (gold bearing ore) and historical sites – these must be plotted;
- 6.2.3. A Cultural Heritage assessment of the affected area is required;
- 6.2.4. Recent history including tribal migration and Anglo-Boer war activity;
- 6.2.5. Continued public participation and engagement with all interested and affected parties throughout the process.

6.3. Environmental, Archaeological and Anthropological Issues

- 6.3.1. Caves and fossil sites – these are fundamental to the World Heritage site and must be given a wide berth;
- 6.3.2. Dolomite areas – these areas are particularly porous and have given rise to the numerous caves and underground water systems in the area;
- 6.3.3. Visual impact on the area;
- 6.3.4. Air, light, ground, water, petrochemical and noise pollution;
- 6.3.5. Catchment areas, surface water and water run-off;
- 6.3.6. Red data species – identification and protection of these is required;
- 6.3.7. Bat populations and their impact on the eco system – a full investigation is required.

6.4. Economic Issues

- 6.4.1. An economic cost benefit analysis is required of the technically and environmentally feasible routes - in order to determine which routes are economically viable;
- 6.4.2. The economic impact on the existing residents and land owners is a key consideration.

6.5. Legislative Framework

Due consideration must be given to the various statutes governing the various factors to be considered, some of which are, but not limited to:

- 6.5.1. The Cradle of Humankind World Heritage Site;
- 6.5.2. The protection of heritage resources, including The National Heritage Resources Act;
- 6.5.3. The removal of graves and human tissues;
- 6.5.4. Environmental legislation.

7. OBJECTIONS TO THE JG AFIKA PROPOSED ROUTES 1, 2, 3

- 7.1. The JG AFRIKA proposed routes traverse the COHWHS. The decision has already

been taken to re-align the PWV8 route beyond the sensitive areas of the COHWHS.

- 7.2. Neotectonic features of the Linksfield-Protea Ridge System: The JG AFRIKA proposed routes traverse this laterally (east to west), where there is some evidence of faulting and landslides. There is the possibility that high rainfall and seismic events could occur at the same time – these should be considered when undertaking long term development plans. [See independent report by Oliver Barker of BANZI GEOTECHNICS].
- 7.3. Geotechnical experts conclude that the geology of the area traversed by the JG Afrika proposed routes is unsuitable for a major metropolitan corridor.
- 7.4. Spatially the COHWHS covers only 3% of the surface area of Gauteng – a small area that can easily be preserved as close to its heritage state as possible.
- 7.5. No map has been produced plotting the proximity of the routes to caves, historical and cultural sites, geologically sensitive areas/dolomites, graves, red data species etc. [See independent report – CULTURAL HERITAGE IMPACT ASSESSMENT for Portion 115 of the Farm Honingklip 178 IQ].
- 7.6. No assessment of the impact of the proposed routes on the bat populations has been undertaken. [See relevant independent report produced by Dr JF Durand].

8. COHWHS Association - PROPOSED ROUTES

- 8.1. The routes proposed on the attached maps (see Routes A and B) take into consideration a number of the non-negotiable points raised in Paragraph 4, accepting that a full feasibility and viability study is still required.

Route A route traverses the R28 at the top of the first rise on the “Krugersdorp hill” towards Sterkontein Hospital towards Tarlton.

Route B route traverses the Farm Honingklip towards Sterkontein Hospital towards Tarlton.

- 8.2. The proposed routes are also the shortest and Route B is supported in principle by the Mogale Local Municipality [See letter from G Turner – Manager Development Planning and Economic Services].
- 8.3. The proposed routes are the more scenic of the routes currently under discussion.
- 8.4. The proposed routes are the most direct routes and will therefore have the least impact on existing structures and environmental factors.
- 8.5. Consideration should also be given to the merits of traversing the Protea Ridge section by means of a Tunnel.
- 8.6. The proposed routes will impact the least number of landowners.
- 8.7. Subject to the outcome of the technical and environmental feasibility and economic cost/benefit analysis, these routes are potentially the most economically viable.
- 8.8. The proposed routes will both protect and enhance the COHWHS – to a greater extent than any of the other proposed routes - notwithstanding that there may be a limited traverse of less sensitive node.
- 8.9. That the provincial and national “ring road network” will not be affected in its objectives.

9. APPROVAL AUTHORITY

10. CHRONOLOGY OF ENGAGEMENTS

#	Date	Key Touchpoints
1	October 2018	COHWHS Association became aware of PP process
2	12 November 2018	Commencement of Public Participation Process by JG Afrika
3	November 2018	COHWHS Association requested from JG Afrika the criteria used to determine the proposed alternative routes 1, 2 and 3 (Not as yet provided)
4	March 2019	Public Open Day
5	4 April 2019	COHWHS Association met with the JG Afrika Technical Team
6	25 April 2019	COHWHS Association met with interested and affected parties
7	30 April 2019	Due date for inputs to JG Afrika – First Phase

11. SUPPORT

The COWHS Association submission (this submission) has the support of a number of the residents and landowners, who have given their formal support. [Copies of Support documents available on request].

12. MAPS

See the following maps which set out the alternative routes (1, 2 & 3) as submitted by JG Afrika plus the two routes proposed by the COHWHS Association (Routes A and B).

COHWHS Association PWV8 Alternative Proposal

Existing Routes



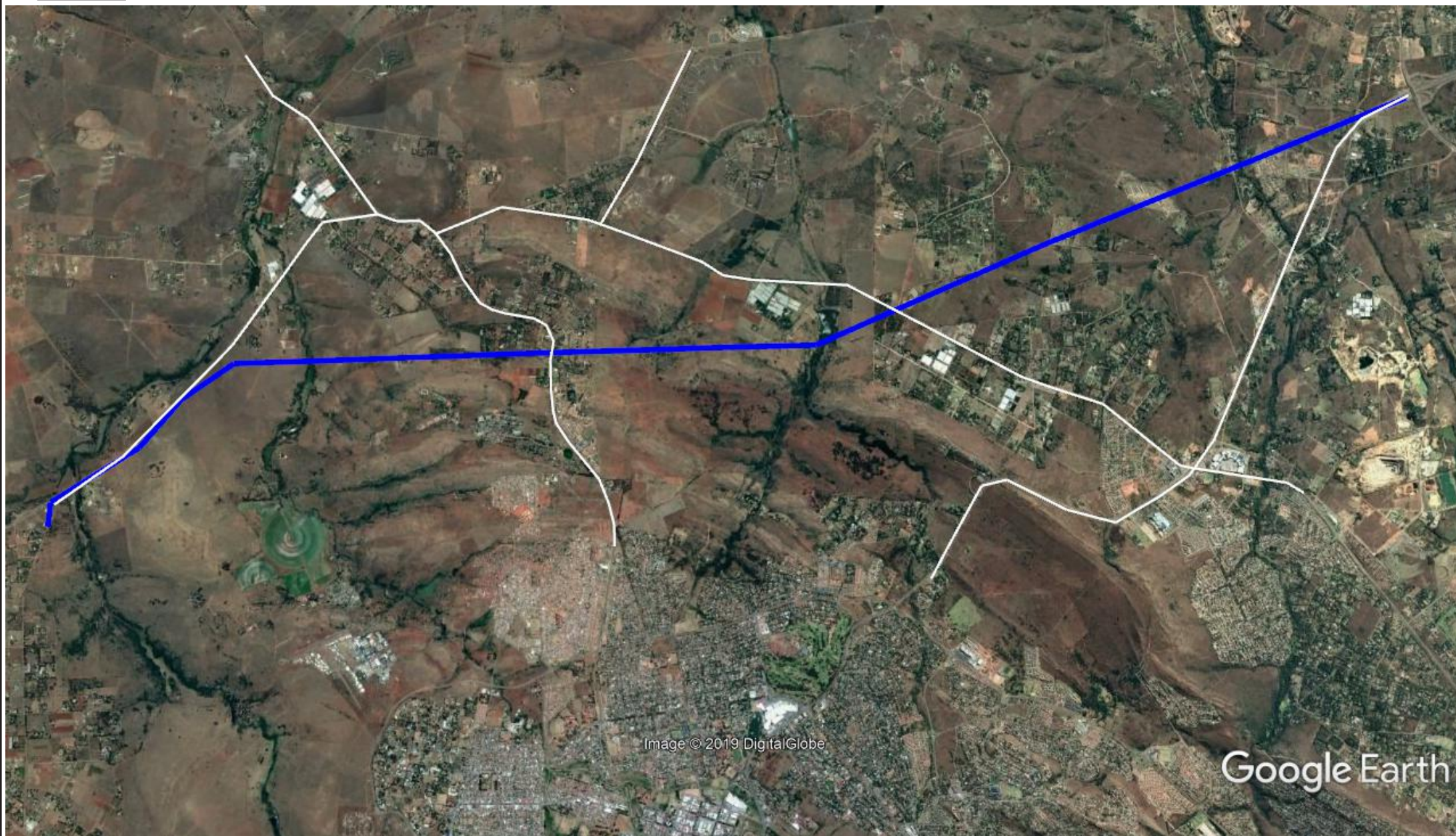
COHWHS Association PWV8 Alternative Proposal

JG Africa Alternative 2



COHWHS Association PWV8 Alternative Proposal

JG Africa Alternative 3



COHWHS Association PWV8 Alternative Proposal

JG Africa Alternative Landowner Suggestion



COHWHS Association PWV8 Alternative Proposal

COHWHS Association Alternative A



COHWHS Association PWV8 Alternative Proposal

COHWHS Association Alternative B





COHWHS Association PWV8 Alternative Proposal

All alternatives



COHWHS Association Alternative A
COHWHS Association Alternative B
JG Africa Alternative 2
JG Africa Alternative 3
JG Africa Alternative Landowner Suggestion

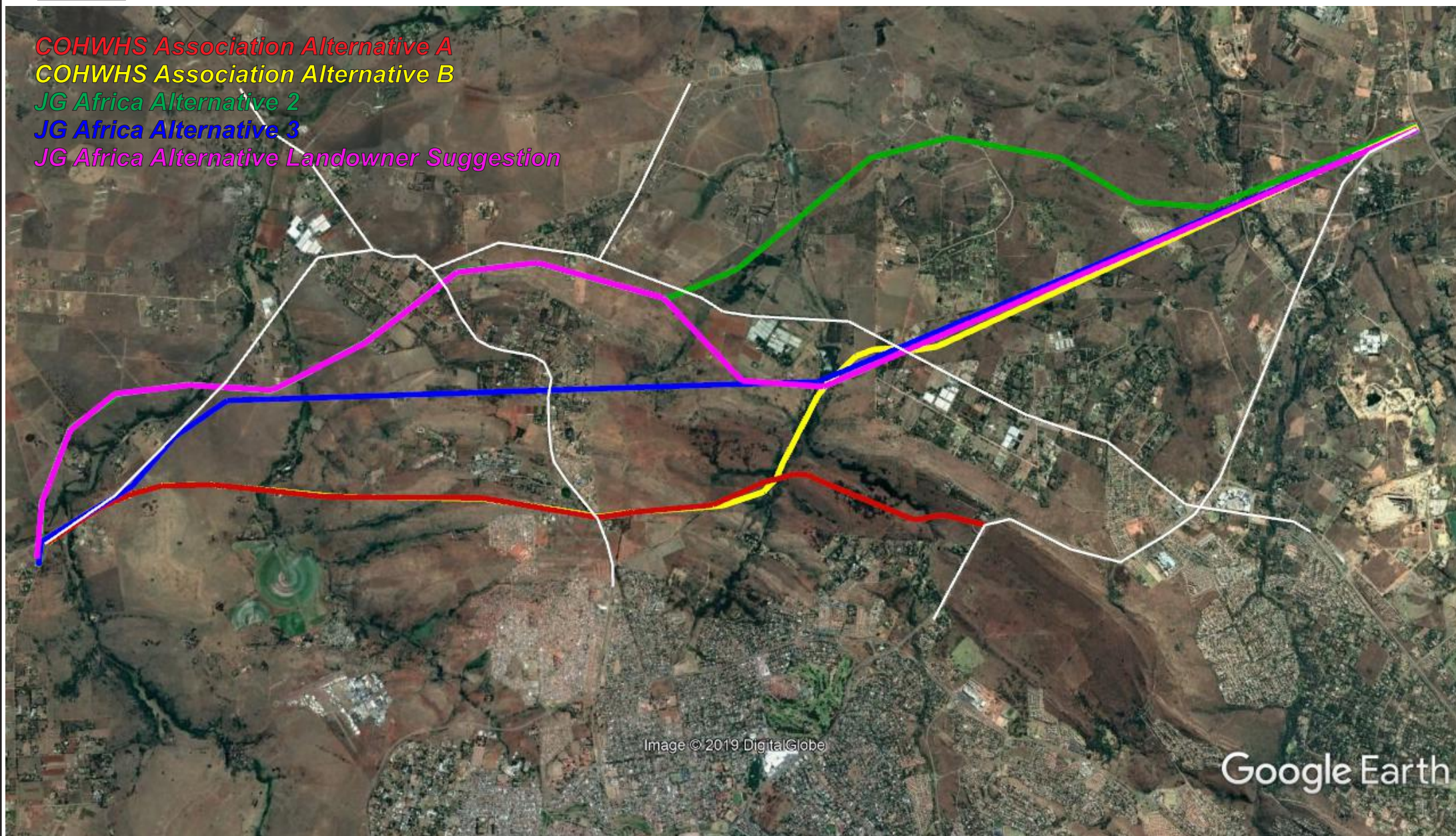


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Google Earth