R2 Terms of Reference

Background

A self-governing overseas territory of the United Kingdom, St Helena is an island of 47 square miles in the South Atlantic. With Cape Town in South Africa some 1,700 miles distant, the Islanders enjoy a unique lifestyle in truly beautifully unspoilt. It has around 60 miles of metalled roads and 50 bridges and culverts.

The development of the Wharf in Ruperts means that all goods brought to St Helena by ship will be entering a new wharf and working port located in Ruperts valley. Warehousing will relocate from Jamestown to Ruperts, a substantial volume of this cargo will be moved from Ruperts to Jamestown (or beyond) by road.

Currently Field Road is of substandard width and alignment to carry the required cargo. Also, the junction at Field Road/Side Path is not suitable for the increased traffic numbers. The road has a substandard width on Side Path for the increased traffic numbers. The R2 project is intended to address all issues by improving the road link between Ruperts and Jamestown. The R2 project is the widening, re-grading and re-alignment of a 3000m stretch of road from the brow, Jamestown to Ruperts. (Detailed in the diagram enclosed)

Without this project it will be difficult to transport cargo safely from Ruperts via Field Road and into Jamestown. This has significant impacts on traders who will have to carry out the operation to maintain stock in Jamestown. If a commuter or tourist route also develops via Ruperts then there will be significant congestion which will impact on tourism, business and the day to day lives of Saints.

Objectives.

To carry out the necessary surveys and prepare engineering designs for the R2 project. The R2 project is the widening, re-grading and re-alignment of a 3000m stretch of road from the brow, Jamestown to Ruperts in accordance with the attached design criteria. The consultant shall prepare a detailed conceptual design for Saint Helena Government to be used as a basis of the procurement of a contractor to undertake the works.

Scope of work.

The consultant shall perform all the work necessary to achieve the objectives of the assignment and shall at all times utilize the most economical, effective and widely accepted engineering concepts in this work.

In carrying out the work the consultant shall co-operate with Saint Helena Government and in particular with the R2 Project Board which will administer the construction contract and the Roads department of the Environment and Natural Resources Directorate.

Using *Method of Measurement for Highway Works Volume IV*. The detailed engineering design shall be presented to a degree of accuracy that will enable quantities of principal items of construction materials to be estimated.
Such principal items shall include: earth work, earth work cut and fill, sub-base materials, surfacing materials, drainage structures, retaining structures and vehicle restraining systems.
The consultant will be aware that the contractor will be expected to deliver the project within 9 calendar months from award of contract.

Design criteria.
The consultant shall use the following brief.

- Saint Helena Government will procure the R2 design services using the NEC3 Professional Services Short Contract.
- The surfaced width shall be circa 5.5m
- The consultant shall allow for the rehabilitation and re use the existing surface course to form sub base.
- The surface course of the road will be a double surface dressing finish with a polymer modified bitumen emulsion.
- Gradients shall normally comply with those listed Overseas Road Note 6, however where this is impractical they shall not exceed the existing gradient on that section and efforts must be made to reduce gradients over 14%
- The Road structure and any retaining structures shall be designed for minimum vehicle weights of 20T on 2 axles or 30T on 3 axles
- Future rock fall risk is expected to be reduced in the construction phase of this project. However, rock fall risk must be considered in the design of the project.
- A geotechnical survey of the section of Side Path that passes over an open excavation will be assessed and if necessary, a solution shall be incorporated into the R2 design.
- The road design shall be taken from the TRL overseas road note 3, road note 6, and road note 31. (link below)
  http://www.transport-links.org/transport_links/publications/publications_list.asp?fcriteria=Overseas+Road+Notes&stype=Category&Categoryid=2
- The consultant must detail any areas of specific concern in delivering the project to existing specification.
- The Field Road section of the project cannot start until the Haul Rd has been completed and adopted. Side Path works must be planned and co-ordinated to enable one continuous operation to progress from Side path to Field Rd.
- Where a 30mph or 50kph design speed is uneconomical to achieve the road will follow existing contours and the road speed will be controlled by signs reducing the maximum speed.
- Realign the Field Rd junction to be perpendicular to Side Path or as close to perpendicular as is possible.

- Realign the junction at the Brow known as Seale's Corner to allow safer two way access to Side Path
- The road from the Brow to Rupert's will have designed Vehicle Restraint System https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223667/traffic-signs-manual-chapter-05.pdf (VRS) constructed from galvanised metal. The design shall conform to European Standard BS EN 1317-1 to -3 and DD ENV 1317-4:2002, and in prEN 1317-5 and prEN 1317-6. Further details can be found on the below link. http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol2/section2/td1906.pdf
- All road markings shall be designed in accordance with Department for Transport chapter 5 road markings & will be laid using thermoplastic paint. The roads will have appropriate markings at junctions and centre lines. Demarcation for pedestrians shall be added if practical and safe. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223667/traffic-signs-manual-chapter-05.pdf
- A geotechnical survey of the section of Side Path that passes over an open excavation will be assessed and if necessary, a solution shall be incorporated into the R2 design.
- The consultant must plan where the spoil from the job will be placed and incorporate it into the activity schedule.
- The consultant shall obtain planning permission when the design has been finalised and agreed with the client.
- The consultant shall include a price for the project management of the construction phase of the R2.

Obligations of the consultant.

The consultant shall include in their proposal the numbers and types of personnel and their periods of employment, together with curricula vitae, that is needed to carry out the services required.

During the field work the consultant shall provide at least one senior engineer in St Helena.

The consultant will adhere to *Method of Measurement for Highway Works Volume IV.*

The consultant shall make his own arrangements for all office and living accommodation, transportation, supplies, surveys, investigations, testing, administrative services etc. in connection with the work.

Obligations of Saint Helena Government.

The Government will make available to the consultant all relevant reports and data in its possession but the consultant shall be fully responsible for the interpretation and use of the material in question.

The Government will liaise with other government offices as required in order to facilitate the consultant's work.

Saint Helena Government will procure the R2 design services using the NEC3 Professional Services Short Contract.

Photograph of R2 start and finish (marked in red)