



12 October 2016

## Screening Opinion for Proposed East-West Arterial Extension – National Roads Authority

### Prepared by the Department of Environment for the National Conservation Council

The ***National Conservation Council's (NCC) Directive for Environmental Impact Assessments*** issued under section 3(12)(j) and which has effect under section 43(2)(c) of the National Conservation Law (NCL), notes that all activities listed in Schedule 1 will be considered against the screening criteria outlined in sections 1 to 3 of Schedule 1 of the Directive to determine whether an EIA may be required. These screening criteria are: the type and characteristics of development, the location of the development and the characteristics of the potential impacts.

The **proposed project** is for a 10 mile extension of the EW Arterial which extends eastward from the Hirst Road intersection to just beyond the Frank Sound Road intersection at the Ironwood Village and Golf Club intersection (see attached Plan).

Having considered the proposal and accompanying justification as detailed in the Memorandum from the Chief Officer, Ministry of PLAHI dated 20<sup>th</sup> September 2016 against the screening criteria outlined above, the Department of Environment (DoE) is of the opinion that the proposed road extension requires an Environmental Impact Assessment (EIA) based on the following factors:

1. The proposal clearly falls within Section 5 (ii) of Schedule 1 of the EIA Directives i.e. *Transportation infrastructure, including planning or construction of new roads, and of road extensions.*
2. The proposed 10-mile roadway will traverse a substantial area of wetland habitat along the entire length of the southern perimeter of the Central Mangrove Wetland (CMW). As the ecological heart of Grand Cayman, the CMW is critical to many important natural processes which are vital to the long-term wellbeing of the residents of the Cayman Islands. It is part of a large scale water flow system, filtering and conditioning the surface water and shallow ground water which supports the mangrove communities and flows into North Sound. Other important functions include storm protection and flood mitigation; shoreline stabilization and erosion control; groundwater (freshwater lens) recharge; retention of sediments and pollutants; export of organic matter to the North Sound; stabilization of local climate conditions, particularly rainfall and temperature; carbon storage; provision of nursery grounds and habitat for a variety of marine and terrestrial biodiversity including species on Schedule 1 Part 1 of the NCL. The CMW has been designated as an Important Bird Area under the criteria established by Birdlife International as it supports at least 1,500 individuals or 83% of the Cayman Islands' population of the globally significant West Indian Whistling-duck, and the endemic Cayman Parrot, *Amazona leucocephala caymanensis*,

breeds in outer monospecific black, black/white and black/red mangrove zones (1,145 ha) of the southern CMW. (<http://www.birdlife.org/datazone/sitefactsheet.php?id=19723#FurtherInfo>).

The scope and characteristics of the potential significant effects of the proposed road scheme on this nationally important resource will require assessment of the direct and indirect impacts affecting the natural and built environment of the area including but not limited to:

- a. An assessment of the ecological function and value of the specific natural resources that will be affected by the construction and operation of the road (e.g. direct impacts from the footprint of the road and indirect impacts arising from lighting, noise etc.);
  - b. An assessment of the impacts associated with changes to the hydrology and drainage patterns of the area which could affect the CMW basin as a result of the road construction, and a flood risk assessment for the populated areas south of the road corridor, with identification of any potential measures to avoid, minimise or mitigate impacts;
  - c. An assessment of impacts to off-site natural resources due to the excavation and/or mining of the significant quantities of aggregate required for construction of the 10 miles of road;
  - d. An assessment of any onsite and off-site impacts associated with the de-mucking and disposal of significant quantities of peat overburden within the road corridor; and
3. Detailed Geotechnical investigations will have to be carried out along the entire path of the proposed road in order to identify any potential constraints on the proposed alignment and/or construction methodology;

Additionally, the EIA procedure prescribed in the NCC's gazetted Directives provides opportunities for public consultation at appropriate points in the process, including determining the scope of the EIA, prior to agreeing the Terms of Reference.

The DoE takes note of the points raised in the consultation Memorandum submitted by the Chief Officer PLAHI and offers the following comments in response to the specific points extracted and italicised below:

- *The corridor was included in the 1997 Development Plan that remains in effect today, and as such, the proposed route has been in the public domain for almost 20 years.*

The DoE can find no record of the EW Arterial Corridor in the 1997 Development Plan. As best we can determine the corridor was proposed as part of the 2003 Amendments to the 1997 Development Plan which were never adopted. Furthermore the accompanying text for the 2003 amendments advocates for the use of the Best Practicable Environmental Option approach when siting road corridors and provides the examples of avoiding wetland areas, which can make construction costly, affect regional drainage, fragment habitats and wildlife corridors, disrupt wildlife behavioural patterns etc. The text also notes that alternative road design and construction methodologies that minimise impact to wetlands should be researched and implemented where feasible.

- *The route of the corridor was also gazetted under Section 26 Roads Law in 2005, this being the legal mechanism for the NRA to declare its long term roads planning intent to the public.*

The gazetted route was not informed by any ecological or environmental assessment, contrary to best practice and legal obligations in North America, Europe and most countries in our region. Further, in the intervening 11 years circumstances may have changed e.g. laws, regulations, the environmental sensitivity or rarity of natural resources (e.g. availability of aggregate, abundance of ecological resources or specific habitat types which could have been depleted due to other developments) which require a revised approach. As noted in the consultation request, the alignment was changed to reflect changes in National Trust land ownership – this is one such example of a circumstantial change which required a review of the road corridor. Good practice in Forward Planning dictates that plans for development are reviewed on a regular basis in order to ensure that they remain current, necessary and appropriate.

- *Proposed public roads do not require planning consent under the Planning & Development Law & Regulations. The NRA has never previously undertaken an EIA for a public road; however, a public consultation exercise on the proposed route of the road is intended.*

What took place in the past should not be considered as justification for continuing the practice if it is demonstrably flawed. The construction of a 10 mile stretch of a major arterial road through an environmentally important wetland area would trigger the requirement globally for an EIA, and now does so in Cayman. Most jurisdictions require the planning of road schemes to begin with a Strategic Environmental Assessment to be followed by an EIA once the need for the road has been established, alternative routes have been evaluated and the preferred route identified.

- *The corridor hugs the northern boundary of development as close as possible and minimizes disturbance to the undeveloped interior of Grand Cayman. There is no alternative new route to the eastern districts without going through the interior wetlands. As such, only localized areas are understood to be of possible concern (eg near the Botanic Park & Mastic Trail).*

It is common practice for a road alignment to go through a series of iterations prior to an EIA being carried out on the preferred alignment option. Features such as the Mastic Trail and other National Trust land holdings are obvious features to avoid; however the EIA will likely result in further iterations of the layout as baseline data is acquired regarding issues such as drainage patterns, habitat type, presence of protected species, geotechnical investigations etc. Not only is this information important in order to minimize environmental impacts, but also to ensure that robust costings for the project can be established prior to committing to a project of this scale and magnitude.

- *However, the National Trust for the Cayman Islands, which owns a large section of land in the local area, has no objections and has agreed to the proposed route.*

We recognise the effort to avoid the National Trust's protected areas but note that agreement was only in respect of their property which comprises a small part of the overall route/alignment.

- *The NRA has already undertaken a geotechnical/site investigation for most of the proposed route. To the best of our knowledge, no significant environmental features and/or concerns were identified.*

The DoE welcomes confirmation that geotechnical / site investigations have been undertaken. As part of the EIA scoping exercise this, and any other relevant reports and data, will form part of the baseline information required for the assessment of impacts.

- *The proposed draft construction & funding Agreement between CIG, NRA and IOG that is under negotiation provides a mitigation commitment to alleviate any environmental matters.*

The DoE notes that an EIA is the proper method for comprehensively and transparently assessing impacts and identifying, quantifying and costing mitigation measures to avoid, minimise or mitigate significant environmental effects. The DoE would strongly recommend that no legal commitments are made without the benefit of robust assessment of the likely significant effects of the project.

- *The economic benefits and national good of the project are considered very significant:*

*It is vital for the sustainability of the Ironwood Village development*

*It facilitates access to multiple other land Parcels for potential development.*

The opening up of substantial parcels of land along a 10 mile stretch of road on the perimeter of an ecologically important area raises a number of environmental and socio-economic issues, which should be the subject of appropriate analysis and consideration. This would normally come forward through a long-range planning process articulated in the form of a national development plan, which would take account of the projected need for social infrastructure (eg schools, health care), support services, physical infrastructure (eg utilities) etc.

*Job creation as a result of both road construction and new economic activity that will arise along the road corridor as part of the longstanding Go East initiative*

*The inherent benefit of the Road itself will alleviate severe commuter traffic congestion*

### **International Considerations:**

As well as all the considerations outlined above, the NCL gives effect to relevant provisions of a number of multilateral environmental agreements to which Cayman is a contracting party through the UK. The Convention on Wetlands of International Importance (RAMSAR) is one such agreement and commits Contracting Parties to formulate and implement their planning so as to promote the conservation and wise use of all wetlands in their territory, through means such as conducting environmental impact assessments before transformations of wetlands (Article 3). Also, the Environment Charter signed by the Cayman Islands Government in 2001 commits the Cayman Islands to “undertake environmental impact assessments before approving major projects and while developing our growth management strategy” (Commitment 4). It is worth noting that the Bermuda Court of Appeal recently found that the Charter is a legally binding document on the government.

After considering the Screening Opinion detailed above, the NCC is required to issue its decision to the originating entity on the requirement for an EIA, pursuant to Section 43 (1).