Guernsey Airport Pavements Rehabilitation
Environmental Impact Assessment
Volume I: Non Technical Summary

Prepared for

Guernsey Airport

Contents

Preface

This Non Technical Summary provides a summary of the findings of the Environmental Statement (ES), and is submitted in support of a Planning Application made by Guernsey Airport to the States of Guernsey Environment Department; for proposed pavement rehabilitation and associated infrastructure improvements at Guernsey Airport.

The Non Technical Summary and Environmental Statement report the findings of an Environmental Impact Assessment conducted in accordance with the Land Planning and Development (Environmental Impact Assessment) Ordinance 2007; which came into affect on the 6th April 2009. The Environmental Impact Assessment is presented in three volumes:

- Volume 1: Non-Technical Summary;
- Volume 2: Environmental Statement;
- Volume 3: Technical Appendices.

The Applicant

The applicant for the proposed project is Guernsey Airport (GA); a division of the Public Services Department of the States of Guernsey. The relevant contact details for GA are as follows:

Guernsey Airport
La Villiaze
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Guernsey
GY8 0DS

Opportunity for Comment

For opportunities to comment on the Environmental Statement and associated planning application submission to the Environment Department, the complete Environmental Impact Assessment with supporting technical appendices can be viewed and downloaded from the Guernsey Airport Pavements Project website at www.gov.gg/airport2040 . CD copies are available free of charge from Guernsey Airport at the address above. Hard copies are also available subject to a printing charge.

Location

Guernsey Airport is located within the Forest Parish of Guernsey, three miles west south west of St. Peter Port, the Island's capital. The airport site measures approximately 92 hectares in area and is roughly bounded by La Mare Road to the west, Route des Bas Courtils to the north, La Villiaze Road to the east and Rue de Farras / Rue de Landes to the south.

Need for Improvements

Although the airport in general has experienced significant historical growth, the runway arrangement has remained relatively unchanged since it was tarmaced in 1960. The runway was last surfaced in 1974 and now requires resurfacing. In addition, the taxiways and apron are in need of overlay and replacement respectively. The airfield ground lighting is now obsolete and also needs renewal. None of this work would normally require a planning application, as it would be regarded as maintenance work essential to the day-to-day operation of the airport. However, whilst addressing these shortcomings, it is also necessary to address and improve a number of deficiencies in relation to the safety of the airport.

In particular, the proposed improvements to the runway surfacing will trigger the need to comply with current regulatory recommendations from the civil aviation authorities; which include minimum safety standards in relation to the Runway End Safety Areas (RESA's). These are located at either end of the runway and provide emergency landing capability in the event of an aircraft 'overshoot' or an aborted take-off. The current safety areas approximate to the bare permitted minimum of 90 metres in length and fall well below the standard recommendation of 240 metres. The current provisions at Guernsey Airport are no longer considered acceptable and there is a risk that take-off and landing restrictions could be imposed that would severely limit operations.

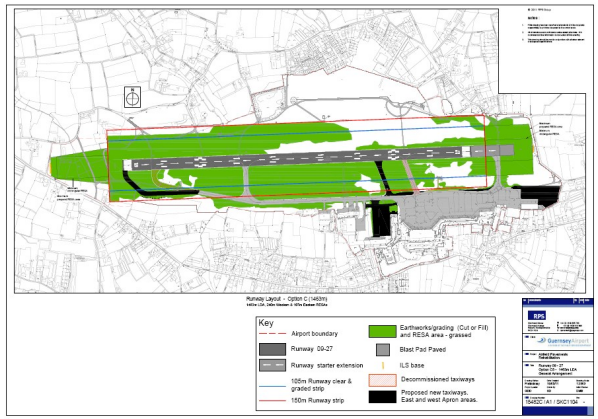
The Proposed Scheme

The proposed design of the runway improvements is the culmination of a process that has evolved over several years, beginning in November 2003 when the States debated the possibility of a runway extension as part of the wider ranging rehabilitation works. Subsequent inspections and reports have detailed the extent of the rehabilitation work required and the associated safety enhancements that would be necessitated as a result.

Starting with a baseline design, a total of nine different schemes have been considered by the States; consisting of six main options and two sub-options, in addition to the original baseline scheme. In all options considered, the existing runway length of 1463 metres is maintained. In some cases, however, the runway is displaced to the west by varying distances to accommodate the improved Runway End Safety Areas (RESA's). A States debate in October 2009 concluded that Option C was the most viable scheme and this has been developed and forms the basis for the design configuration for which the application is made. A further States debate in February 2011 considered new options resulting from an independent review conducted by Mott Macdonald and again concluded that Option C was the most viable.

It is accordingly proposed that the current runway be displaced to the west by approximately 120 metres, with the provision of a 60 metre grass runway strip to the new western end of the runway; and a 240 metre grass Runway End Safety Area (RESA) beyond the runway strip. A 120 metre Starter Extension will result from the repositioned eastern end of the runway (over the displaced section) and a 60 metre paved runway strip will be added to this, followed by a 197 metre grass RESA. At the western end of the airport, the La Mare Road will be closed and due to the existing ground levels, a varying amount of building up of ground will be required to accommodate the new RESA.

The reconfiguration at the eastern end of the runway will result in part of the extended RESA being paved (as it forms part of the current runway). This improves the safety of the RESA for landing aircraft but will also 'double-up' to provide an earlier take off run for aircraft departing to the west. Retention of this paved area will enable aircraft departing to the west to begin their take off run from the same point as currently used, thereby maintaining their climb out over St Peters at the same height. This paved area at the east will provide a marginal performance improvement but with a positive result for maintaining existing departure and noise profiles to the west. In terms of the permanent works, it is considered that only the work to the western end of the runway impacts on the environment and accordingly, this is the focus of the EIA submission.



Environmental Impact Assessment

An Environmental Impact Assessment comprises a series of studies, surveys, and consultations in order to gain an understanding of the existing baseline environmental conditions at a proposed development site. From this data, an objective assessment of the predicted environmental impacts from the proposed development is undertaken and an assessment of their significance is conducted. The information generated is compiled in an Environmental Statement which provides an objective description of the significant environmental effects of a development and the measures that may be taken to reduce or avoid them.

Consultation and Scoping

In accordance with the procedures of the EIA Ordinance 2007 and the Rural Area Plan for Guernsey, the submitted Environmental Statement is also considered as a request to the Environment Department for a 'Scoping Opinion', whereby details of the proposal are considered to determine whether the EIA suitably addresses all pertinent issues. Any necessary revisions can then be made accordingly. Guernsey Airport also recognises the importance of stakeholder engagement and has carried out extensive pre-application consultation with statutory and non statutory consultees, including local residents. Such consultation feedback has also been incorporated into the design of the scheme, the Environmental Statement and proposed mitigation strategies where appropriate.

Predicted Environmental Impacts

Archaeology and Historic Environment

A desk-top study and site investigation of relevant areas of likely archaeological interest to be affected by the proposed works has been undertaken, including the excavation of selected test-pits, with appropriate assessment and recording. This focussed primarily on the western end, which is easily accessible and the primary area most likely to be affected by the project. Evidence of Bronze Age settlement was discovered, with the main areas of find being concentrated within two key areas. There are no areas of built historic environment affected by the proposals.

The study concludes that the impact of the project on archaeology will largely be restricted to the early stages of the project; such as for the removal of topsoil and subsoil prior to the construction of the RESA and compound areas. Ongoing excavation work continues in the western area and it is recommended that this continues whilst construction phasing allows. Recommended mitigation includes appropriate recording of finds and suitable watching briefs as work progresses. Whilst some archaeology in the working areas will undoubtedly be lost, the proposed works actually afford an opportunity for investigation and recording that may not have occurred otherwise. Similarly, the presence of the airport offers some measure of protection to remaining buried archaeology other than in the working areas; because it severely restricts the likelihood of any other development taking place in this area.

Hydrology

Impacts of alterations to flow patterns and drainage mechanisms; loss of groundwater recharge areas; and risk of groundwater pollution were all considered as part of a hydrology assessment. In particular, consideration has been given to the limitations of water supply on the Island and potential threats of pollution from the existing airport operations; as well as the potential benefits of the proposed drainage reconfiguration.

No significant adverse impacts on hydrology were identified; with appropriate mitigation measures being proposed for treatment of contaminants and relatively minimal use of existing water supply. However, alterations to the site drainage infrastructure as a result of the development are considered to provide long-term benefits for both the availability of the Island water supply and the quality of local water resources.

Flood Risk

A Flood Risk Assessment has been undertaken for the proposed development and concludes that, with sufficient mitigation measures in place, the development will not have an adverse risk of flooding; either to neighbouring properties or the surrounding water course network.

The location and topography of the airport site in relation to that of any local watercourse results in the risk from fluvial flooding being considered as low. The development is to incorporate adequate flood alleviation measures and mitigates against adverse effects of storm water in a sustainable manner; including the additional benefit of a more efficient system of retaining water, which can be used as a potable supply for the Island.

Ecology, Natural Resources and Landscape Character

The assessment has concentrated on the area affected by the proposed western RESA but also includes the areas to be used as site compounds during the works. A Desktop Study of all the available data on the sites and a Field Survey of the current habitats and species present were undertaken.

Overall, the impact of the proposals upon the ecological environment and landscape character varies, dependent upon the permanent or temporary nature of the works for each of the sites. The permanent works to the western RESA area will have the greatest effect, with loss of significant ecological habitat, which is likely to have a major impact. The works will also affect an area of landscape character value, which is likely to have a moderate impact.

The western RESA area will affect an important area of wetland habitat and have significant visual intrusion into a typical area of Guernsey farmland landscape. With suitable mitigation, protection of the remaining habitat areas such as earth banks and hedges can ensure their retention during and after the works. Appropriate mitigation will also safeguard against any pollution. The compound areas will only be in temporary use but will have a considerable visual impact during the life of the project. Suitable protection and mitigation will enable them to be returned to open green fields of equal agricultural value at the end of construction operations.

Traffic and Transport

The assessment has principally focussed on the construction phase of the development and the logistical operation of transporting the required equipment and materials to the application site. As there is to be no change to air traffic, the long term impact from a transport perspective will be negligible, with the only notable impact being the closing of the La Mare Road. However, during the construction phase of development, there will be an impact placed upon the local transport infrastructure with use of the temporary Longue Hougue port to bring the relevant materials onto the Island and also the HGV trips that will be created to transport the materials and equipment to the working areas. Consideration has also been given to the accommodation of the contract workers for the Project and the means by which they will travel to and from the site.

It is considered that the transportation proposals for the Project are likely to have a major effect on the Island's road network, as a result of the large volumes of materials and equipment that require transporting over a relatively condensed period. However, appropriate mitigation has been identified to ensure that this impact is kept to an absolute minimum and in particular, specific measures will be introduced to ensure public and highway safety is maintained at all times. It should also be noted that this impact will be on a short term basis only and there will be no long term impact to the Island once the construction phase is complete.

Noise and Vibration

The noise and vibration effects associated with the construction and operation of the proposed facility have been assessed using standard methods and criteria. For assessment purposes, the project was divided into distinct elements, including construction related traffic movements; construction operations and the operation of the airport with new runway positioning (air noise and ground noise impacts).

Construction noise impacts have been predicted at the nearest noise sensitive receptors to the works. Noise ratings of minor to substantial are predicted during the course of the works. As a consequence there is a need to implement standard construction mitigation measures to reduce the potential adverse effects that may occur.

It was concluded that the impact of changes in air noise due to the reduced repositioned glide slope to the west of the Airport would result in a negligible change in the air noise environment.

Air Quality

The assessment found that air quality in Guernsey is generally good with the main local source of atmospheric pollution being identified as emissions from vehicles operated inefficiently at low speeds on the Island's roads, particularly during peak hours.

It was concluded that air quality does not constitute a material constraint for the proposed works; with effects on air quality being limited to the construction phase due to fugitive dust and emissions associated with on-site construction-related vehicles and plant. These can be adequately mitigated against through the employment of standard dust control measures. Pollutant concentrations due to construction-related vehicle emissions have been predicted at a range of distances from the proposed haul route. The air quality effects associated with the construction-related vehicles are deemed to be of negligible to minor significance.

The proposals are not designed to change the capacity of the airport and the number of aircraft movements would be broadly similar to the number of movements had the airport been operating at its full capacity. As such, changes in aircraft movements due to the runway and taxiway reconfiguration, both on the ground and in the air, have not been explicitly considered. The changes in traffic flow characteristics on the immediate road network associated with the road closure and the proposed reconfiguration are deemed to have a negligible effect in terms of air quality.

Lighting

The assessment investigated the additional needs to facilitate work operations during the construction period; and also included consideration of potential impact from the reconfiguration of airport operational lighting. The assessment found the location of the proposed runway approach lights gives a reduction in incident light on the residences in closest proximity when compared to the existing arrangements; with the exception of one location which has a slight increase in average light but within recommended limits.

Due to the intrinsically dark character of the Island, any lighting scheme such as that proposed for the temporary compound areas will have a large visual impact; as they will become a very prominent feature of the night sky in a similar way to the airport itself. However, the impact will be short term and any effects upon local residences will be minimised through the careful positioning of the lights and the use of appropriate light fittings designed to reduce overspill and glare. Mitigation will also include measures to turn off the lighting when not in use.

Socio-Economic

In the main, it is considered that the key issues which make up the socio-economic profile of the Island will be unaffected by the proposed development; both during the construction stage and upon completion of the works when the improved runway is fully operational. The only area of note from an impact perspective is likely to be in relation to transport because of the high volume of HGV generation within a condensed period; although this will be restricted to the short term only during construction. In terms of the other areas of the Island's profile, no mitigation is deemed necessary; although appropriate management will be required with regard to construction employees and their accommodation during the construction phase process.

Cumulative Effects

As part of the Environmental Impact Assessment, the potential for different impacts to 'interact with one another' has been assessed and it is concluded that there are no significant impacts posed from the interaction of effects. In addition there are no significant cumulative impacts posed through the impact of other developments on the Island.

Mitigation Measures

Appropriate mitigation measures will be incorporated in to the proposed development. These will take effect both during the construction phases of the project, i.e. noise and dust control over working compounds; and post completion of the improvements, i.e. reinstatement of working areas and habitat replacement. The full range of mitigation measures proposed are detailed within the Environmental Statement and their suitable and timely provision will be ensured by means of a Construction Environmental Management Plan that will be prepared for the project.