

5.0 LAND USE

5.1 INTRODUCTION

This chapter describes the existing land uses of the study area and identifies the effects that the airport and its supporting infrastructure could have on land use within and adjacent to the airport development area. Temporary (construction) and permanent and operational impacts have been predicted including effects on private property, agricultural land and recreation facilities.

The assessment draws on, and provides information to, other chapters including Planning Context (Chapter 4), Landscape and Visual Amenity (Chapter 10), Roads, Traffic and Footpaths (Chapter 12) and Marine Environment (Chapter 14). This chapter should be read with reference to Figure 5.1 in Volume 3 of this ES, which identifies key land uses within and adjacent to the development boundary. Photographs 5.1 to 5.16 shown on Figure 5.2 illustrate the main land use types within the study area.

5.2 METHODS

5.2.1 Desk Study

The following specific tasks have been undertaken in order to inform the baseline data collection and appraisal of potential impacts:

- A review of the previous survey of land use which was undertaken in 1990;
- A review of satellite imagery and aerial photographs;
- Review of existing and proposed land use data and policies from the St Helena LDCP;
- Consultation with SHG and other interested bodies on St Helena including the Legal, Lands and Planning Department and the Agriculture and Natural Resources Department (ANRD)
- Review of current planning applications and other known development proposals.

5.2.2 Field Survey

A previous survey of land use on St Helena was undertaken in 1990. The results of this survey have been updated with observations made during site visits in November 2005 and May 2007. Figure 5.1, contained within Volume 3, presents the findings of the desk and field surveys. The survey includes an area approximately 100m around the boundary of the ADA. For the purpose of the assessment it has been assumed that the baseline situation at the time of the survey will be similar to that at the commencement of construction. Developments scheduled to take place during the construction of the airport have been noted.

Table 5.1 below describes the land use categories used for the baseline survey and includes photographs. Further photographs of key land uses within the area are illustrated in Figure 5.2 - Photographs 5.1-5.16 in Volume 3 of this ES.

Table 5.1 Key Land Use Descriptions (Refer to Figure 5.1 in Volume 3 of this ES)

Land Use	Description of Land Use Category	Photographs shown on Figure 5.2 of Volume 3 of this ES
Residential	All types of residential property including adjacent garden land.	5.1, 5.2
Commercial	Business uses including commercial storage, shops, bars and light industry including garages	5.3
Infrastructure	Infrastructure uses relate to power generation and waste disposal.	5.4, 5.5
Tourism, Recreation & Amenity	Facilities used for tourism and recreational purposes including for outdoor relaxation and enjoyment.	5.6, 5.7
Community Use	Buildings and land areas that are used for community purposes, i.e. buildings that are usually open to the general public including schools, SHG buildings, community halls and churches.	5.8
Pasture	All land which supports grazing livestock.	5.9, 5.10
Arable	All land which is used for crop production.	5.11
Woodland Scrub	Woodland planting including endemic and indigenous regeneration planting as well as low or thin woodland cover of exotic/introduced species.	5.12
Rough Ground	Land which is not utilised including ground which has been colonised by plant material as well as arid and eroded ground. The great majority of which is termed Coastal Zone.	5.13, 5.14
Watercourses	The majority of watercourses are usually dry and only carry water on occasions through the year.	5.15, 5.16

5.2.3 Impact Criteria

The following criteria have been use when determining the significance of the temporary and permanent effects of the development:

- **Major Adverse Impact**
 - Land take to the extent that it precludes existing or intended use.
 - Activity to the extent that it permanently precludes use.
 - Loss of amenity to an extent that deters use.
- **Moderate Adverse Impact**
 - Land take to the extent that it compromises but does not preclude use.
 - Activity to the extent that it precludes use for an extended period of time.
 - Loss of amenity to an extent that it compromises but does not deter use.
- **Minor Adverse Impact**
 - Land take peripheral to use.
 - Activity to the extent that it temporarily precludes use.
 - Loss of amenity that does not compromise use.
- **Neutral Impact**
 - No land take. Existing or intended land use can continue.
 - No discernible loss of amenity.
- **Beneficial** New facilities benefiting existing land uses.

Consistent with the methods used in this EIA (see Chapter 3), only Major and moderate effects are considered to be significant.

5.3 EXISTING CONDITIONS

A range of land uses were identified in the vicinity of the proposed airport and supporting infrastructure. These are summarised below and in Figures 5.1 and 5.2 in Volume 3 of this ES.

5.3.1 Residential

Residential properties located near the ADA are concentrated around Rupert's Valley, Deadwood, Longwood and Bottom Woods. In these settlements, housing tends to be low density with the majority of properties single storey. Most residential properties have garden areas and some have small holdings where they graze small domestic animals including goats or grow vegetables. There are also small number scattered residential properties and isolated individual properties including along the access track at Woody Ridge and at Bradleys Government Garage.

5.3.2 Commercial

Rupert's Bay is the focal point for commercial land use within the study area. Various commercial premises are located around the Bay including Argos and the St Helena cannery (fish processing facility) and a number of commercial storage units used by shop owners in Jamestown.

Within the settlement of Longwood there are a number of shops and a bar.

5.3.3 Infrastructure

Fuel is transferred onto the island from ship to a bulk fuel farm located in Rupert's Bay. A bowser is used to pump fuel from the ship and into storage tanks at the fuel farm. From this location fuel is pumped via an approximately 0.85 km long gas oil pipeline to the island's fuel store and power station located within Rupert's Valley. A pipeline for petrol runs along the opposite side of the valley to storage tanks.

The power station generates all of the island's electricity. It comprises fuel storage tanks and a number of buildings housing generators, controls and other equipment.

Other infrastructure located within Rupert's Valley includes a quarantine station and incinerator, used to dispose of medical and other such sensitive waste material. Domestic household and commercial trade waste is disposed of at a refuse dump located at Horse Point.

A Meteorological Station is located adjacent to Bottom Woods. The station provides weather forecasts for St Helena. Northwest of Prosperous Bay Plain (PBP) is Bradleys Government Garage, currently used for storage by SHG.

Existing roads lie within the ADA at Rupert's, Deadwood and Bradleys. There is an existing track at Woody Ridge which provides access to residential properties.

5.3.4 Tourism, Recreation and Amenity

Tourism, recreational and amenity land uses are scattered throughout the study area and include a beach, footpaths, areas used for fishing and features of historic and scenic interest. The beach at Rupert's Bay is a well used recreational resource. It is the only beach on the island that is accessible by road and where swimming in the sea is considered safe. The area adjacent to the beach is regularly used for barbecues and other social gatherings.

A number of locations and areas have been identified as being of historic and tourist interest including a number of coastal batteries, the signal station at Prosperous Bay and Longwood House. Sites of historic interest are considered in greater detail in Chapter 11 of this ES. Adjacent to Longwood House is a public green with seating and play facilities. There is a nine-hole golf course and a tennis court at Piccolo Hill.

The Millennium Forest, a conservation project, is located north west of Bradleys Government Garage and is an area of significant amenity value. It is used for both recreation and tourism. This area historically formed part of "The Great Wood", a native forest of Gumwoods and Ebonies which was cleared, in part to use the wood for fuel. In 1999 it became the site of the Millennium Forest, a joint conservation / community project, in which Gumwoods have been re-introduced. The Forest was initially funded by the Overseas Territories Environment Fund and later by the community and visitor contributions.

There are a number of recreational footpaths around the island many of which provide access to other recreational areas where a variety of land uses may be practiced. Formal footpaths on the island, called Post Box Walks, are located throughout the study area including Rupert's Bay, PBP and Sharks Valley. Footpaths are considered in more detail in Chapter 12.

Fishing is regularly undertaken along lengths of the St Helena's coastline. Fishing locations within the study area include lengths of coastline between Rupert's Bay and Crown Point on the north of island; and on the east of the island adjacent to PBP, around King and Queen Rocks, Porches Gate and Gill Point.

5.3.5 Community Use

Land uses identified as being of community use include churches, schools and community halls. Two schools, both located in Longwood, have been identified in the study area. The first, Harford Middle School is located on the west of Longwood; and the second, Longwood First School in the centre of the community, adjacent to Longwood House. Two churches have been identified within the study area; one located adjacent to residential properties in Rupert's Bay and the other in Longwood. Other community uses within the study area include a Salvation Army drop-in centre in Deadwood and in Longwood; Harford Community Centre and a Day Centre for disabled people.

5.3.6 Pasture

The majority of grazing land is located at Deadwood Plain with a smaller pockets of pastoral land north of Longwood Farm and at Woody Ridge. In total pastoral land within

the study area occupies roughly 2.6 km². The land is used predominantly for grazing cattle. The pastures at Deadwood Plain are divided into around 15 paddocks, amongst which grazing is carried out on a rotational basis overseen by a syndicate of cattle owners. The presence of the Deadwood settlement around the pastoral area's southern and south-western margins results in a considerable amount of daily human activity on the lower part of the Plain. Much of it associated with the movement of cattle and provision of fodder.

5.3.7 Arable

Arable farming land is centred around Longwood Farm and is owned by SHG. The crops grown vary seasonally and typically include onions, potatoes, pumpkins and other root vegetables. The total area of land used for crop growing around Longwood Farm is approximately 400m². Arable farming occurs at a number of locations on St Helena, however, the arable land around Longwood is the greatest concentration of arable land on the island.

5.3.8 Woodland Scrub

Woodland scrub comprises a mix of native and non-native species and is the second largest land use in the study area. Much of this land use covers higher inland areas and none of it is currently commercially cropped.

5.3.9 Rough Ground

The majority of the land within the study area is rough ground with no land use function. Rough ground occupies extensive tracts of land along the coastal margins often stretching inland to higher slopes. Much of the area identified as rough ground is owned by SHG and is termed Coastal Zone. In a number of areas the effects of soils erosion are readily apparent resulting in extensive areas of degraded and unproductive land. Re-vegetation has occurred in a small number of areas, however, the extent of this is limited and confined to more inland areas.

5.3.10 Watercourses

There are numerous watercourses flowing within the study area. These rise in the higher ground located towards the centre of the island and drain into the bays which surround the islands perimeter. Most of the watercourses are usually dry with intermittent flows dependent on rainfall. Sharks Valley, which is the exception, flows all year round.

5.4 ASSESSMENT OF EFFECTS

This assessment firstly summarises potential effects, then sets out the measures which will be taken to avoid, reduce or offset these effects and finally summarises the residual impacts i.e. those effects that remain after the implementation of mitigation (Tables 5.2 and 5.3).

The area of potential land take is the area falling within the ADA. As explained in Section 3.5 the ADA is set no wider than the area absolutely needed to construct the works, thus reducing the impacts of the scheme. However, in places the ADA encompasses a wider corridor, or area, where there is uncertainty as to how an element of the scheme will be constructed or to allow the Contractor to choose the most efficient working method. The main elements of the scheme for which the ADA has been widened are the access road up the steep slopes from Rupert's Valley, the quarries, construction camps, the water pipeline and possible overhead power lines. In total the ADA encompasses an area of approximately 5km² made up mainly of rough ground (over 3.5km²) and woodland/scrub (about 1km²) with the remainder mostly existing infrastructure (including the existing fuel installation) and agricultural land.

5.4.1 Potential Construction Effects

The phasing of construction (see Chapter 2) is very much dependent on the successful Contractor's methodology and as such a construction programme is yet to be confirmed. It is likely that the temporary works in Rupert's Bay will be constructed first, together with the opening of a quarry in Rupert's Valley to enable construction of the wharf. Major works at the airport site are likely to follow.

Inherent with construction operations is the requirement for construction compounds, work sites and camps at a number of locations including the sites of the proposed wharf, the airport and haul road. These sites are necessary for the storage of plant, materials, site offices and accommodation for workers. The locations of these sites can be seen on Figure 2.1 in Volume 3 of this ES.

The majority of potential impacts on land use relate to temporary land take associated with the construction works for the airport and supporting infrastructure. Additionally, construction activities may result in temporary severance or reduced accessibility to particular areas and disturbance to particular land use functions.

Through the design process every practicable step has been taken to avoid temporary land take of privately owned land. However, construction activities along the route of the new access road will require temporary access to privately owned land at properties in Deadwood. No land take is required; only temporary access to provide the necessary underground drainage for the access road.

5.4.2 Potential Permanent and Operational Effects

Permanent and operational effects on land use relate principally to the overall permanent land take of the airport and supporting infrastructure. There may be additional permanent impacts resulting from the loss of function of land use; including the loss of agricultural land, recreational land and effects associated with severance.

The majority of permanent land take resulting from the airport and supporting infrastructure occurs on land owned by SHG, however, a corridor of privately owned land will also be required to provide for an upgraded access track (approximately 3.5m wide) to the water supply infrastructure at Sharks Valley.

5.4.3 Mitigation

The approach to mitigating the effects on land use focuses on minimising the land take, both temporary and permanent, in order to minimise disturbance on existing land use and privately owned land. This approach has informed the design and development of the airport and supporting infrastructure as well as the siting of the construction compounds, lay down areas and other facilities. Mitigation measures identified below are included within the EMP which forms Volume 5 of this ES. During construction the following mitigation measures will be implemented:

- As required by the EMP all land used for temporary construction works and outside the area to be developed will be fully reinstated on completion of works, or earlier.
- Temporarily affected areas of woodland scrub will be reinstated with planting of a suitable species mix.
- Footpaths will be kept open wherever reasonably practicable. Where it is not possible to keep footpaths open an alternative route would be agreed with the Engineer and relevant Departments of SHG. Construction will not cause obstruction of footpaths and measures would be implemented to prevent litter, debris and other waste from being deposited on footpaths.
- Access to agricultural land including pastoral and arable fields will be maintained throughout the construction period in order to minimise disturbance and ensure the fields remain both functional and viable. Where access cannot be maintained alternative arrangements will be made. Work affecting agricultural land or farms will be carried out in accordance with the UK DEFRA guidance (namely the Code of Good Agricultural Practice for Protection of Water and Air MAFF 1998) for preventing the spread of plant and animal diseases and in consultation with ANRD. Procedures will be implemented to prevent damage to adjacent agricultural land, field drainage and irrigation systems during the construction works.
- Any damage to existing agricultural land as a result of access, accommodation works or other works will be reinstated as soon as practicably possible. Reinstatement of new or existing agricultural pasture or arable land will include remediation of compaction, reinstatement of drainage and irrigation where applicable and restoration of the land to such a condition that would ensure and enable continued future farming practices. This will entail a full program of reinstatement to address potential construction effects on drainage and top/subsoil compaction. Damage and disruption to field drainage and irrigation outside the works will be avoided. Any drains which are disrupted in the course of the accommodation works and / or mitigation works which affect agricultural land and which are to remain will be intercepted and piped away to a suitable outfall or reinstated.
- During construction, topsoils will be stripped and stored to prevent soil structure damage. Soil stripping, storage and placing would comply with the guidelines set out in British Standard BS6031:1981 Code of Practice for Earthworks and BS3882:1994 Specification for Topsoil) as far as reasonably practicable. No other material would be placed on top of the storage heaps and construction plant will not pass over the storage heaps. Compaction and contamination of the topsoil shall be prevented by fencing and covering as appropriate. If the soil has to be stored for more than 6 months, this stock pile will be seeded with a deep rooting grass / legume seed mixture, in order to maintain structure and aeration, to minimise weed colonisation and to stabilise the stockpile.
- Temporary closures of Rupert's Beach will be kept to an absolute minimum. The community will be informed at least two weeks in advance of any temporary closure period. The duration and purpose of any closure would be communicated through the radio and newspapers. The Contractor shall inform the Engineer who will arrange for the notice to be published through the St Helena Access Project Team.

In order to minimise the permanent and operational effects on land use the following mitigation measures will be implemented:

- The airport and associated infrastructure have been designed to avoid, as much as possible, permanent impacts on privately owned land and sensitive land uses.
- At Rupert's Bay where the permanent wharf is located the beach will be moved due to the siting of the permanent wharf. The surface of the beach may need to be replenished using sand gained during the dredging of the bay (see Chapter 14).
- Access around the coast towards Banks Bay will be maintained for fishermen and walkers.
- Where woodland scrub is permanently lost to the haul road an equal or greater amount of native species will be planted.
- Where arable / pastoral fields are bisected by the haul road, gated access will be provided.
- A track / path will be provided to maintain access between Prosperous Bay Plain and the length of coastline between King and Queen Rocks and Porches.
- Access to Shark's Valley will be maintained, however, it would be restricted to areas outwith those required for the permanent airport water supply infrastructure.

5.5 RESIDUAL EFFECTS

Tables 5.2 and 5.3 summarise the results of the assessment and identify the significance of both construction and permanent residual effects. The only significant negative impacts are the effects on Rupert's Beach during construction and operation. All other adverse impacts are minor adverse or negligible. The provision of a new wharf is considered to be a beneficial effect with respect to commercial activities at Rupert's.

Land take from private property is limited to:

- During construction, temporary access would be required to a small number of properties at Deadwood in order to install underground drainage for the access road.
- Permanent land take from privately owned land along an upgraded track at Woody Ridge to provide access to the water supply works at Sharks Valley. The upgraded track will be 3.5m wide. This land is currently used for agriculture and woodland.

The remainder of the scheme is located on land owned by SHG and predominately consists of rough ground or woodland/scrub.

Table 5.2 Temporary Residual Effects

Location	Potential Effect	Mitigation Measure	Residual Effect (inc. mitigation)
Rupert's Bay	There will be temporary land take at Rupert's Bay during the construction of both the temporary and permanent wharfs.	Land used for temporary construction works and outside the area to be developed will be fully reinstated on completion of works, or earlier if appropriate.	Negligible effect
	The beach including the amenity area at Rupert's Bay will not be available at times for recreational use during the construction of both the temporary and permanent wharfs	There is no mitigation to avoid, reduce or offset this impact.	Temporary moderate adverse effect
	There could be disturbance and / or reduced accessibility to The Shears at Rupert's Bay.	Footpaths and access to the fish off-loading areas will be kept open wherever reasonably practicable. Where it is not possible to keep footpaths and the Shears open an alternative arrangement will be agreed with the Engineer and relevant Departments of SHG. Proposals for the temporary or permanent closure or diversion of any footpaths, will be developed during the design and incorporated in the EMP.	Temporary minor adverse effect
	There could be reduced accessibility to the footpath running from Rupert's Bay to Banks Bay.		Temporary minor adverse effect
Rupert's Valley	There will be temporary land take in Rupert's Valley where storage, lay down and compound areas are to be located. Land take may also include the commercial storage units and the siting of a compound adjacent to the church in the upper part of the valley.	Land used for temporary construction works and outside the area to be developed will be fully reinstated on completion of works, or earlier if appropriate.	Negligible effect
	In Rupert's Valley at the site of the construction compounds and lay down areas there is the potential for dust. This effect is considered in more detail in Chapter 7.	Dust suppression measures, including sealing the road along Rupert's Valley will be put in place in order to minimise potential effects (see Chapter 7).	Temporary minor adverse effect
	There will be temporary land take in the upper sections of Rupert's Valley associated with the opening of a temporary	The temporary quarry will be restored using, where appropriate, inert construction waste from the quarry and other	Negligible effect

Location	Potential Effect	Mitigation Measure	Residual Effect (inc. mitigation)
	quarry.	construction sites.	
Rupert's Bay to Prosperous Bay Plain	Access may be required to properties at Deadwood to provide drainage for the new access road.	Prior to access land owners will be informed of access requirements and the length of works. All land affected will be reinstated.	Minor adverse
	Temporary loss of woodland north of Blackfield Gut during the construction of the haul road.	Woodland used for temporary construction works and outwith the final route of the haul road will be fully reinstated with an appropriate mix of species on completion of works, or earlier if appropriate.	Temporary minor adverse effect
	There will be temporary land take associated with working areas adjacent to the route of the haul road where existing roads are being improved and new roads constructed including areas of arable and pastoral land at Deadwood Plain and Mulberry Gut / Bilberry Field Gut respectively, and woodland scrub.	Pastoral and arable land used for temporary construction works and outwith the final route of the haul road will be fully reinstated on completion of works, or earlier if appropriate. Throughout the construction period access will be maintained in order to ensure fields remain functional and viable.	Negligible effect
Prosperous Bay Plain	There will be temporary land take on Prosperous Bay Plain associated with the construction of the airfield.	Land used for temporary construction works and outside the area to be developed will be reinstated on completion of works, or earlier if practicable.	Negligible effect
	During construction of the airport and airfield there will be reduced access to a significant length of coastline around King and Queens Rocks, Porches Gate and Gill Point. This length of coastline is used for recreational fishing.	Footpaths will be kept open wherever reasonably practicable. Where it is not possible to keep footpaths open an alternative route will be agreed with the Engineer and relevant Departments of SHG. Proposals for the temporary or permanent closure or diversion of any footpaths, will be developed during the design and incorporated in the EMP. It is recognised that there may be periods of closure, however, these will be limited as much as possible.	Temporary minor adverse effect

Location	Potential Effect	Mitigation Measure	Residual Effect (inc. mitigation)
Government Garage (Bradleys) and Prosperous Bay Plain	There will be temporary land take at PBP where construction compounds and work sites and camps will be located.	Land used for temporary construction works and outside the area to be developed will be reinstated on completion of works, or earlier if appropriate.	Negligible effect
Sharks Valley and Prosperous Bay Plain.	There may be reduced accessibility to Sharks Valley during construction of the airport's water supply infrastructure.	Footpaths will be kept open wherever reasonably practicable. Where it is not possible to keep footpaths open an alternative route will be agreed with the Engineer and relevant Departments of SHG. Proposals for the temporary or permanent closure or diversion of any footpaths, will be developed during the design and incorporated in the EMP. It is recognised that there may be periods of closure, however, these will be limited as much as possible.	Temporary minor adverse effect
	There may be reduced accessibility to Gill Point associated with construction / operation of the temporary sea water abstraction infrastructure.		Temporary minor adverse effect
	Land take during upgrading of access tracks to water supply infrastructure at Woody Ridge and to Sharks Valley.	Precise route will be determined during detailed design and will aim to reduce land take and avoid effects on residential property.	Minor adverse
Areas where Ancillary Components will be located	There will be temporary land take during the construction of ROL's and navigational aids.	Land used for temporary construction works and outside the area to be developed will be reinstated on completion of works, or earlier if appropriate.	Negligible effect

Table 5.3 Permanent and Operational Residual Effects

Location	Potential Effect	Mitigation Measure	Residual Effect
Rupert's Bay	The beach at Rupert's Bay will remain as a recreational and amenity resource, however, it is likely that changes in marine process could affect the beach. (See Chapter 14 for affects on marine processes). Activities at the beach may also be affected when the wharf is being used i.e. temporary closures.	See Chapter 14 for mitigation of affects on marine processes. See Chapter 10 for mitigation of landscape and visual impacts.	Moderate adverse
	Permanent land take resulting from the wharf and associated infrastructure.	Permanent land take has been minimised as much as possible through the design process.	Negligible effect
	The provision of a new wharf will be beneficial to commercial activities in Rupert's Bay.	None required.	Beneficial effect
Rupert's Valley	Permanent land take associated with the relocation of the bulk fuel installation to the upper section of Rupert's Valley beyond the power station.	The airport and supporting infrastructure have been designed to avoid, as much as possible, permanent impacts on privately owned land and sensitive land uses. Major areas of land take have been confined to areas identified as rough ground i.e. those that serve no specific land use function.	Negligible effect Relocation of the Bulk Fuel Installation further up the Valley may be seen as a positive effect by local residents.
	Permanent land take associated with widening of the existing road.		
Rupert's Bay to Prosperous Bay Plain	Permanent loss of pastoral land on Deadwood Plain where the haul road will be located.	Permanent land take has been minimised as much as possible through the design process. Where agricultural land is bisected by the haul road, gated access will be provided.	Minor adverse
	Permanent loss of arable land north of Longwood where the haul road will be located.	Permanent land take has been minimised as much as possible through the design process.	Minor adverse
	Permanent loss of woodland north of Blackfield Gut where the haul road bisects it.	Where woodland scrub is permanently lost to the haul road an equal or greater amount of native species will be planted elsewhere along the haul road.	Negligible effect
	Permanent severance of the arable land at Mulberry Gut / Bilberry	Where agricultural land is bisected by the haul road, gated access will be	Negligible effect

Location	Potential Effect	Mitigation Measure	Residual Effect
	Field Gut where the haulage route crosses to the north of the field.	provided.	
	Permanent land take on rough ground where the haul road is routed.	Permanent land take has been minimised as much as possible through the design process.	Minor adverse
Prosperous Bay Plain	Permanent land take associated with the airport including both air side and land side facilities.	Permanent land take has been minimised as much as possible through the design process.	Minor adverse
	Permanent severance or reduced accessibility to areas of amenity interest and value including Signal Station, Gill Point, King and Queen Rocks, Porches Gate and the coastline generally, which is used for recreational fishing.	Direct access between Prosperous Bay Plain and the coast line on the east of the island used for recreational purposes will be permanently severed by the airport. A new, albeit longer path will be constructed resulting in a minor adverse residual impact. The post box walk to Gill Point will be rerouted. The route will be slightly longer but, in part, the quality of the path will be improved.	Minor adverse
Government Garage (Bradleys) and Prosperous Bay Plain	Permanent loss of rough ground associated with the haul road.	Permanent land take has been minimised as much as possible through the design process.	Negligible effect
Woody Ridge, Sharks Valley and Prosperous Bay Plain.	Permanent land take along an access track at Woody Ridge. Existing track to be upgraded to a width of 3.5m to provide access to water supply infrastructure at Sharks Valley.	Precise route will be determined during detailed design and will aim to reduce land take and avoid effects on residential property. Improved track may be of benefit to local residents.	Minor adverse
Areas where Ancillary Components will be located	Permanent loss of rough ground associated with ROL's and navigational aids.	No mitigation is proposed as the land take affects rough ground and areas are small in scale.	Negligible effect