

## Work Started on the Open Channel



View from Prosperous Bay Plain, showing the Basil Read drill rigs in place on the ridge above Dry Gut.

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Work has started on drilling explosive holes (see the article on page 4 on blasting) in preparation for cutting the open channel in Dry Gut. The Open Channel will provide a storm water drainage solution by cutting into the adjoining valley. For more information, see the Open Channel Planning Statement at [www.sainthelenaaccess.com](http://www.sainthelenaaccess.com)

## Councillors' Visit to the Airport Project



Basil Read, the Project Management Unit and the Access Office were pleased to host a site visit for Councillors to provide a briefing on project progress. Further discussions are planned as the Airport Project prepares for certification. More on this in future Airport Updates.

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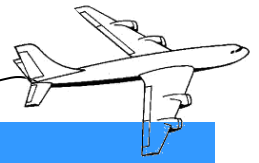
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### Conservation Focus

The airport development area incorporates some environmentally very sensitive areas on the island. Throughout the design phase, and during construction, efforts are made to avoid or reduce impacts on these areas. For example the land-take within the Central Basin, which is home to a significant assemblage of endemic flora and fauna, has been reduced by 40 percent during the development of the reference design. Elsewhere, in the Millennium Forest and on Tungi Flats, which is an important Wirebird habitat, we have re-aligned the airport road. By moving the road outside (Millennium Forest) or to the edge (Tungi Flats) of the area, we reduce its impact on the sensitive receptors in these locations.

Our aim is to clearly identify the environmentally sensitive areas within the airport development area. In the past few weeks we have installed a number of signs on site identifying 'Conservation Areas'. The areas will also be clearly demarcated to prevent accidental intrusion by construction traffic. Most of these measures will be in areas not accessible to the public. However, you may see the new signs and demarcation markers near the Millennium Forest and in other public areas.



In the coming months we will also increasingly be working on the rehabilitation of sites no longer required for construction works. One of the first areas we will be looking at is immediately adjacent to one of only a few known habitat areas of the endemic Mole spider. We aim to rehabilitate this site in a manner that will be sympathetic to the habitat requirements of this species and will be working with specialists to develop a suitable approach.

### Dedication Ceremony at BFI

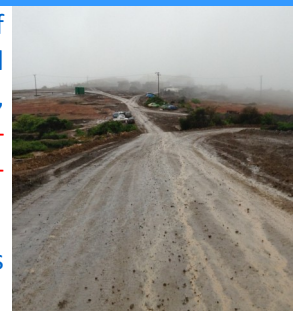


Celebrating the conclusion of the welding works at the new BFI Storage Facility in Ruperts, the Trotech Team led a small Dedication Ceremony on site. This is a tradition the Thai workers carry out on the successful completion of their projects and on this occasion they were joined by Saint, British and South African colleagues from Basil Read. This is an example of the mix of nationalities and cultures under the Airport Project and is one of many examples of the team spirit.

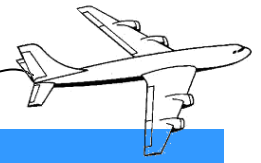
### Access Road Construction—Please Drive with Care

Due to recent weather conditions, some of the road conditions within the construction areas of the Airport Project have worsened. Basil Read would like to advise the public that, whilst still open for public use, the roads within areas such as Bottom Woods, Bradleys, Mulberry Gut, and Deadwood are within the construction site. **The public are therefore advised to please proceed with extreme caution whilst driving in these areas and to adhere to the road signs provided as well as the specified speed limits.**

Basil Read are currently undertaking remedial works to ensure that roads are passable. Works are ongoing and your patience and co-operation is much appreciated at this time.



## Visitors to the Airport Project



### A Busy Period for the Airport Project...

The next few weeks will be an even busier period than normal for the Airport Project. On 2<sup>nd</sup> September 2013 we will welcome back to the island the following visitors from Basil Read and the Department for International Development (DFID).

#### Jimmy Johnston

##### Basil Read Airport Project Director



Basil Read Project Director, Jimmy Johnston, will be undertaking a progress visit to the Airport Project.

The visit will provide Jimmy with an opportunity to ascertain construction progress, interact with BR on-island Management and staff with a focus on the day to day and future challenges facing the team.

Jimmy will also liaise with SHG Directorates and DFID with a view to sharing ideas and ensuring readiness for the airport once completed.

A key focus of the visit will be engaging with relevant stakeholders on the certification process for the airport as well as Disaster Management preparation.

#### Bryony Walmsley

##### Basil Read Contractor's Environmental Management Plan Co-ordinator



Bryony Walmsley is the Contractor's Environmental Management Plan Co-ordinator for the St Helena Airport Project.

Bryony will be conducting a bi-annual environmental audit to assess the compliance and implementation of the Contractors Environmental Management Plan. This entails detailed audits of the airport site, identifying environmental constraints and challenges go-

ing forward as well as advising Site Management on practical environmental matters.

She will also liaise with stakeholders on-island, particularly SHG and DFID environmental representatives, in relation to the environmental progress of the project to date.

#### Richard (Dick) Beales

##### DFID Airport Project Environmental Support



As a former Senior Natural Resources and Environment Adviser with DFID's Overseas Territories Department until he 'retired' in 2008, Dick has been closely involved with the Airport Project since 2003. When the project was re-activated in 2010 he was contracted by DFID to provide environmental support to the airport team in London on a call-down basis. This will be his 10th visit to the island (since 1988), but the first since airport construction started.

The first week of Dick's visit will be used to update his knowledge of environmental issues that have arisen in the course of construction so far and how these are being managed. This will enable him to provide a better-informed service to the team in London in the lead-up to the opening of the airport. He will then spend a further period on the island providing support to the Access Office in mobilising the Landscape and Ecology Mitigation Programme.

#### Nigel Kirby

##### DFID Project Manager



Nigel Kirby is DFID's Project Manager for the St Helena Airport Project. Nigel first joined DFID's Overseas Territories Department as an Infrastructure Adviser in 2002 and took up his current post in August 2010. Nigel has visited St Helena many times in connection with both the airport and wider infrastructure.

During Nigel's visit in September, we will be looking at construction progress to date. In

addition, discussions are planned on proposals for Rupert's Bay wharf, requirements for airport certification, securing air services, and ensuring close collaboration between the airport and wider tourism and economic development.





## Why do we need to blast?

The Airport Project requires large excavations in order to build the runway and terminal buildings. In terms of earthmoving targets, the filling of Dry Gut alone requires 8,000,000m<sup>3</sup> of earth; the quota for earthworks on the project is therefore at 20,000m<sup>3</sup> per

day. Blasting is a key requirement to meet these targets.

## Blasting

The Basil Read (BR) blasting team performs all site blasts. The team consists of qualified drillers, blasters and a charging foreman who are all supported by blasting experts.

We can assure residents that any blasting for the Airport Project is subject to stringent procedures: measures are in place to ensure that these are adhered to.

## Blast Planning

Basil Read blasting personnel must first design and submit a blast design for approval by the Project Management Unit for the Airport Project. Only once this is accepted, can the blast go ahead.

## Blast Monitoring

The seismograph is an instrument for measuring vibration and noise associated with blasting.

Prior to each blast, there are seismographs placed at 500meters and 900meters away from the blast area. Seismographs are also placed in any nearby sensitive areas (e.g. residential areas or areas of historic importance). This is part of a protocol to measure the ground vibration, blast noise or airwaves.

For blasts on Prosperous Bay Plain, seismographs are commonly placed near the Basil Read fuel tanks and the residential areas near Bradleys and Bottom Woods. In light of requests from the public, Basil Read have also placed seismo-

graphs near the hospital in Jamestown and near the residential areas in Cow path. To date there have been no significant seismic readings: this indicates that all blasts have been within the set parameters.



## Noise and Vibration

The noise level in blasting will depend on the size of the blast and the proximity to the blast site. Residents may feel the vibration from the blasts but this should not cause damage to persons or property.

Environmental conditions play a big part in blasting, for example, the island's mountainous terrain, deep valleys and certain other geological conditions can affect noise and vibration levels.

In light of these conditions, particularly if there are also strong winds, the blast can cause a sound like a thunder-clap which can be heard for miles. This might startle people who are unaware that Basil Read are blasting, but it should not cause damage to property.

Another effect of blasting is ground vibration which can also be controlled. This is done within the blast planning by reducing the size of the explosive charges and their confinement in the rock. The timing sequence is also planned to delay firing of each hole by us-

ing timing relays. These measures play a very important part in controlling the ground vibration.

Actual noise levels in comparison with the largest Basil Read blast	Decibels
Two people speaking to each other in conversation	35
Refrigerator	40
Vacuum Cleaner	70
Garbage Truck	100
A 20mph gust of wind	130
An average thunder clap	140
A Jet Plane flyover	140
Basil Read's Largest Blast- 500 metres upwind of the blast	140

## Public Information on Blasts

Notification of any planned blasts within the Prosperous Bay area is now posted on the Blast information board situated at Bradleys. Notification for any blasts to be carried out in Rupert's area and beyond will be made via the local radio one day prior to blasting, and on the same day of the blast. Before a blast takes place, a siren is sounded and will only stop after the blast is fired and the all clear is given.

## Mitigation

After each blast, we examine seismograph readings to ensure blast-induced vibration and noise is within the specified limits. To date our seismographs have recorded blast vibration and noise levels well below damage-inducing levels. Again, this indicates that all blasts are within the set parameters. Maintaining these parameters ensures that the blasts do not cause any structural damage to property.

1. Holes drilled for blasting grid



2. Charges inserted into holes



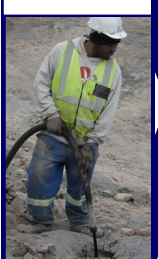
3. A network of charging leads form a grid



4. Hole depths measured.



5. Holes filled with explosive



6. Detonator charged and placed within explosive holes.



7. Blast area cleared



8. Detonator charged and fired from at least 500 meters away.



9. Blast takes place, moving thousands of tons of rock

