



Planning Application For Development

Dame Lois BrowneEvans Building, 5th Floor, 58 Court Street,
Hamilton HM 12, Bermuda.
Tel: 441-297-7756, Fax: 441-295-4100

Please read the accompanying guidance notes
first, then complete the form.
To be submitted in DUPLICATE for an In-principle application
and in TRIPLICATE for a Final Approval application.
Please complete in BLOCK LETTERS and TICK BOXES.

I. Details of Applicant & Agent

APPLICANT

Name LFWPCO

Address
c/o CODAN SERVICES LIMITED, CLARENDON HOUSE
2 CHURCH STREET

Parish <u>Hamilton</u>	Postcode <u>HM 11</u>
Tel (w): <u>(441) 295-5950</u>	Tel (c):
Email:	Fax: <u>(441) 292 4720</u>

AGENT

Agent's Ref No. 16011

Name OBMI/ Scott Associates Architects Inc.

Address
Woodbourne Hall, 1 Gorham Rd

Parish <u>Hamilton</u>	Postcode <u>HM 08</u>
Tel (w): <u>1 441 278 3557</u>	Tel (c):
Email: <u>Colin Campbell (ccampbell@OBMI.com)</u>	Fax: <u>1 441 292 1687</u>

2. Location *Full postal address of application site*

Property Name
Bermuda L.F. Wade International Airport

No. & Road Name
3 Cahow Way

Lot Number(s) (if vacant)

Parish <u>St. George's</u>	Postcode <u>GE CX</u>
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3. Type of Application

Please tick appropriate box

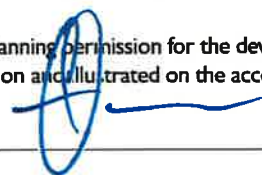
In-Principle Approval

Final Approval

4. Signature*

* If the application form is signed by anyone other than the owner of the land, the application must be accompanied by a letter signed by the owner stating that he/she is aware that the application is being made, or accompanied by a certificate in accordance with section 16(2) of the Development and Planning Act 1974.

I/We hereby apply for planning permission for the development described in this application and illustrated on the accompanying plans.

Signature 

Print Name LFWPCO (Per Colin Sam)

Date July 12, 2016

5. Proposed Development

Full description of the proposed development.
Use BLOCK LETTERS and itemize all development.

The proposed project consists of a new Passenger Terminal Building (2 storeys), associated aircraft aprons, modifications to taxiway interconnects and interface, installation of a new hydrant fueling system, new access road and parking (151 new car spaces and 103 new cycle spaces), electrical and mechanical services, new sewage treatment plant and associated landscaping.

(See attached letter)

See over page for additional questions on **Reserved Matters** and complete as necessary.

FOR OFFICE USE ONLY - DO NOT FILL IN

APPLICATION NO.

DATE RECEIVED JUL 12 2016

DECISION AND DATE OF DECISION

RECEIVED
DEPARTMENT OF PLANNING

6. Zoning

Zoning of application site under the Bermuda Plan 2008

Please tick the appropriate boxes

Development Base Zones

- Residential 1
 Residential 2
 Rural
 Tourism
 Commercial
 Mixed Use
 Industrial
 Institutional
 Airport
 Special Study Area

Conservation Base Zones

- Open Space Reserve
 Coastal Reserve
 Nature Reserve
 Park
 Recreation

Conservation Areas

- Agricultural Reserve
 Woodland Reserve

Protection Areas

- Historic Protection Area
 Cave Protection Area
 Water Resources Protection Area
 Airport Control Protection Area
 City of Hamilton Plan 2001
 Listed Building

Ref # _____

Grade _____

7. Lot Size

Square Feet Square Metres

354,425

Please tick appropriate box

8. Vacant Site

Please tick appropriate box

Is this a vacant site? NO YES

Give Subdivision Ref. No.

S/ _____

or Proof of Separate Title NO YES

9. Existing/Proposed Floor Area By Use

Please tick appropriate box Square Feet Square Metres

Gross Floor Areas	Description of Use	Existing Floor Area	Proposed Additional/Reduction	TOTAL
	New Passenger Terminal Building	0	26,427	26,427
	BELCO Substation + Security Gate + Generator	0	200+130+302	632
	Transformer + Water Treatment Facility	0	132+238	370
	Mail/GSE + Catering Bldg.	1,857+2,688	0	4,545
			TOTAL	31,974

10. Reserved Matters

In-Principle Approval

If this is an application for In-Principle approval please tick the appropriate boxes for the matters you are seeking approval for at the In-Principle stage:

Final Approval

Only complete if In-Principle Application remains valid for this site.

If relevant, indicate by ticking the appropriate boxes the matters which were reserved by the DAB to be determined at the Final Approval stage.

Give the Department's reference number and date of the related In-Principle approval

Planning Application Number

Date of In-Principle approval

- Use(s)
 Siting & Layout
 Site Coverage
 Building Height
 Density of Units
 Building Lines
 Design
 External Appearance
 Access
 Parking Provision
 Landscaping
 Others (specify below)

I. Application Details

Please tick appropriate box

(a) Site Coverage

Square Feet Square Metres

(b) Site Coverage%

Percentage of lot size

(c) Gross Floor Area

(all floors) Sq. Ft. Sq. M

(d) Area of

Hard-surfacing

(e) Dwelling Units

(all floors)

(f) Car Park

(g) Bike Parking

	Existing	Proposed Additional	TOTAL
(a) Site Coverage	4,345	18,107	22,452
(b) Site Coverage%	1.23 %	5.11 %	6.33 %
(c) Gross Floor Area	4,545	27,429	31,974
(d) Area of Hard-surfacing	121,320	4,810	126,310
(e) Dwelling Units	0	0	0
(f) Car Park	86	151	237
(g) Bike Parking	unknown	102	102

	NO	YES
(i) Apartment House Development	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(j) Access Will a new access to a public road be created	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(k) Setback Does this proposal satisfy all setbacks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If "No", which setbacks are infringed?

Public Road	Estate Road	Lot Line	Railway Trail	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(h) Size of Units

Number of Units by Unit type

	Studio	1 Bed	2 Bed	3 Bed	4 Bed	TOTAL
Existing						
Proposed						
TOTAL	N/A	N/A	N/A	N/A	N/A	N/A

(l) Is there a dog(s) on the property?

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>

(m) Name and Telephone Number of contact person to arrange a site visit by technical officers.

Aaron Adderly, General Manager, Bermuda L. F. Wade International Airport

441- 299 - 4850

II. Water Supply and Waste Disposal

Please tick appropriate box

(a) Area of Roof (water catch)

Square Feet Square Metres

(b) Capacity of Water Tanks

Imperial Galons Cubic Litres

	Existing	Proposed Additional	TOTAL
(a) Area of Roof	4,345	21,873	26,218
(b) Capacity of Water Tanks	16,600	560,922	577,522

(c) Other means of Water Supply:

Please tick appropriate box

Is the site served by a well?

Is the site served by a reverse osmosis unit?

Is the site linked to a piped potable water supply?

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

If Yes give Department of Environmental Protection Permit Number

If Yes give Department of Environmental Protection Permit Number

PERMIT NUMBERS

(d) Cess pits

Number of cess pits?

EXISTING	PROPOSED	TOTAL
N/A	N/A	N/A

(e) Other means of Waste Treatment & Disposal

Please tick appropriate box

Is the site linked to an existing sewer line?

Is the site served by some other form of treatment facility?

NO	YES
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Give details of new or improved methods of treatment and disposal proposed

e.g. septic tank, activated sludge, deep sealed bore hole, etc.

The following are located outside of this Site, but within airport lands:

Sewage disposal boreholes WR-4176/ WR-1126 ;

Air conditioning disposal boreholes WR-4354

Well WR-4353

Reverse osmosis unit WP-4352

Documents attached:

Letter from Agent

Parking Breakdown

Project Logistics Plan

Section 12 (e) Sewerage (Including Aircraft Liquid Waste)



Government of Bermuda
Ministry of Public Works
OFFICE OF THE PERMANENT SECRETARY

8th July, 2016

Mrs. Aideen Ratteray-Pryse
Director
Department of Planning
Ministry of Home Affairs
5th Floor Dame Lois Browne-Evans Building
58 Courts Street
Hamilton HM 12

Ref: Planning Application- LFWPCO Bermuda Limited

Dear Mrs. Ratteray-Pryse,

The purpose of this letter is to confirm that the Ministry of Public Works (the Landowner) is aware that a planning application is being submitted by LFWPCO Bermuda Limited and as the landowner, the Ministry of Public Works supports the application.

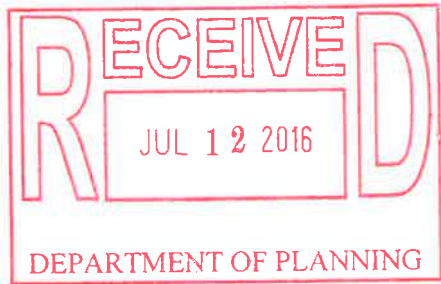
If you require any additional information please contact the undersigned at 297-7783.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Francis C. Richardson'.

Francis C. Richardson
Permanent Secretary
Ministry of Public Works

Cc: Mr. Randy Rochester, Permanent Secretary, Tourism Transport & Municipalities
Mr. Christopher Farrow, Chief Surveyor Ministry of Public Works



July 11, 2016

Department of Planning
Dame Lois Browne-Evans Building
5th Floor
58 Court Street
Hamilton, HM 12

Attn: Ms. Victoria Pereira, Senior Planning Officer, Development Management

Bermuda L.F. Wade International Airport - 3 Cahow Way St. Georges GE CX, Bermuda

In accordance with the provisions of the Development & Planning Act 1974, we enclose the following application for your consideration and Final Approval:

- 1. Complete DAP 1 Form Application
- 2. Cover letter summarizing the project and submission documents
- 3. Planning Application Final Approval Drawings (5 sets)
- 4. Planning Application Final Approval Drawings in PDF format
- 5. EIS Report (3 sets)
- 6. EIS Report in PDF format

We enclose a copy of the letter from the Bermuda Ministry of Public Works, dated July 11, 2016 confirming that they have no objections to this Planning Application for Development by OBMI/Scott & Associates.

We would note that in accordance with the requirements of the Building Act of 1988, a separate application for a building permit will be forwarded to the Building Officials.

The proposed project consists of a new Passenger Terminal Building (2 storeys), associated aircraft aprons, modifications to taxiway interconnects and interface, installation of a new hydrant fueling system, new access road and parking (151 new car spaces and 102 new cycle spaces), electrical and mechanical services, new sewage treatment plant and associated landscaping.

The site is owned by the Ministry of Public Works and the area under development is approximately 354,425 m². The boundary lines are shown on the plans, with the area marked out on the site where the new development is to take place.

The existing passenger terminal building will remain operational until year 2020, at which time there will be a separate application for repurposing works.



The construction will take place in 6 phases as outlined in the Logistic Planning – Phasing and Timing of the Works.

We trust that this proposed development will be acceptable to the Development Applications Board, and on behalf of our clients, we wish to thank you for your immediate consideration of this matter. Should you have any further queries, please do not hesitate to contact us.

Yours Sincerely,

Colin Campbell

OBMI

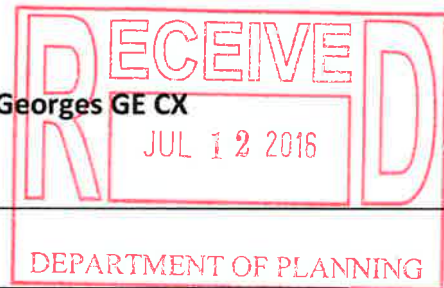
Darija K. Scott

Scott Associates Architects Inc.

- cc. Department of Airport Operations - Aaron Adderley, General Manager
- LFPCO Bermuda Limited – Steve Nackan, Director
- KPMG Advisory Limited – Lori Rockhead, Senior Manager, Advisory

Attached: 5 sets of full size drawings.

Project: L.F. Wade International Airport - 3 Cahow Way St. Georges GE CX
Bermuda Airport Redevelopment Project
VEHICULAR PARKING BREAKDOWN



Year 2020					
#	Parking Type	New PTB		Existing PTB	
		Car	Cycle	Car	Cycle
1	Public Parking	132 (127 + 5 HC)	48	232	33
2	Staff Parking	19 (17 + 2 HC)	54	100	100
3	Sub-total	151	102	332	133
4	Taxi/Limo	At existing PTB		50	
	Total	253		515	
Beyond Year 2020					
#	Parking Type	New PTB		Existing PTB	
		Car	Cycle	Car	Cycle
1	Public Parking	Additional 154 (148 + 6 HC)	Additional 30	Parking at the Existing PTB will be reconfigured	

Notes:

1. Above numbers exclude parking associated with Cargo operations.
2. Above numbers exclude bus, shuttle van, and curb parking of taxis at the new PTB.
3. HC denotes handicapped parking.
4. Parking numbers at the Existing PTB may vary slightly by use and allocation.
5. Exact number of handicapped spaces at Existing PTB not recorded.

Bermuda Airport Redevelopment Project Logistics Planning

(Reference Civil Drawings C-G-001 Regional Site and Access Plan; C-G-002 Project Site Plan, and; C-A-040 Security Fencing Layout Plan during Construction)

Overview

The Bermuda Airport Redevelopment Project will see a new Air Terminal Building constructed away from the existing terminal building along with associated aircraft aprons, car parking, electrical and mechanical services, airfield upgrades and a new sewage treatment plant.

The Site Offices and Staging Areas will be along the NW boundary of the site and are accessible from Kindley Field Road. In addition to the site offices, a temporary concrete plant, an asphalt plant and an area for aggregate stockpiles are planned within the construction site boundaries.

Phasing and Timing of the Works

The works to construct the new airport facility will be carried out in 6 Phases starting in November 2016

Phase 1 – Establish Site Offices, Site Fencing, Haul Road and Laydown Areas. Decommission Old Airside Road, Taxiways and reroute Fuel Lines. Construct new Taxiway S.

November 2016 to April 2017

Phase 2 – Piling and Foundation Works, Beginning of Structural Works

April 2017 to August 2017

Phase 3 – ATB Cladding & Roofing, Early Interior Works, BELCO Vault, Outer Apron Earthworks

August 2017 to June 2018

Phase 4 - ATB Cladding & Roofing, Interior Works, BELCO Vault commissioned, Inner Apron Works

June 2018 to October 2018

Phase 5 – Interior Fit-out, Car Parking and Entry Roads, Apron Completions

October 2018 to January 2020

Phase 6 – Completion

March 2020

The Supply Chain

Very few construction materials are produced or are available in quantity in Bermuda making the need to source and transport from overseas almost all of the building elements.

The only major building material that is available locally is Concrete Masonry Units (CMU) which is produced in a factory using locally sourced aggregates and imported cement.

The Overseas Supply Chain - Primary construction materials (structural steel, reinforcement steel, cladding, roofing, mechanical & electrical services etc.) are usually sourced in the Eastern United States or in Ontario and Maritime Canada as supply routes are the best with direct sea route service from New Jersey and Florida. Similarly, construction finishing materials are generally sourced in the USA and Canada for the same reason.

There are other construction materials that are shipped directly from source by dedicated ship. The most regular of these shipments are cement, aggregates for concrete and fuel. Other examples of dedicated shipments that are usually project specific are aggregate for filling or land reclamation, boulders for marine revetment works and petroleum based asphalt binders (bitumen).

The Local Supply Chain - As noted previously, as far as this Project is concerned, the only significant local building material available in Bermuda is concrete masonry units (CMU). Although ready mixed concrete is also available it is planned that the majority of concrete required on the site will be batched on the site. Since it is likely particularly in the early and later stages of the project when concrete demands are low that some concrete will be purchased from the nearby ready mix plant so this will be considered in the analysis of the local supply chain.

Project Specific Shipping - The scale of the Airport construction coupled with the distance from the normal entry point of the Port of Hamilton means that careful consideration of the import of materials needs to be fully considered to ensure that the usual importation of goods is not severely affected and that the road traffic and condition due to heavy loads are not adversely affected.

Overall Project Shipping

An overall study of the port of entry points and local sources for construction materials was undertaken with respect to the construction schedule.

Materials Planned to be Imported via Pennos or Marginal Wharfs - In addition to the goods that will either pass through the Port of Hamilton, or come in at single commodity wharfs such as fuels and cement, there are building materials expected to be imported via the east end facilities Pennos Wharf in St George's and Marginal Wharf in St David's.

Import of Equipment and Materials Directly to the Marginal Wharf - The wharf, subject to a new depth verification survey, is suitable for certain types of vessels for the purposes of delivery of equipment and materials for the Airport Project.

Specific examples of imports at this dock are:-

- Project Temporary Office Trailers
- Concrete and Asphalt Batching Equipment
- Concrete and Asphalt Placing Equipment
- Piles and Piling Equipment
- Structural Steel
- Drywall and Drywall Studs
- Other construction materials to ensure full and economical loads

Import of Equipment and Materials Directly to Pennos Wharf -While it is an option to import materials (aggregates) directly to Pennos Wharf, as has been done successfully in the past, there are currently issues with Swing Bridge which crosses Ferry Reach from St Georges to St David's Island. The bridge is currently under a reduced loading condition imposed by the Ministry of Public Works. This reduced loading has been carried out by reducing the bridge to a single lane controlled by traffic lights. It is estimated that this contraflow system will almost double the round trip time between Pennos Wharf

and the Project site rendering this method of moving aggregate to the site inefficient and therefore too costly. Additionally, since the route is largely on the public road system the type of vehicle permitted will be the smaller 5 CY type vehicle common on the roads. This option is not viable.

Preferred Option - Ship to Pennos Wharf and Transship by Barge to Marginal Wharf

This option takes advantage of the safe deep water draft available at Pennos Wharf. A bulk carrier ship either with grabs similar to the BC Wani Falcon or with a self-unloading conveyor system (such as the MV Balder which was used recently to import aggregate for the land reclamation project in Dockyard) would be moored at Pennos Wharf and discharge onto the dock and then be transferred to barges. The barges would then cross the Harbour to Marginal Wharf where they would be unloaded onto the dock and loaded into truck for transport along the Airport Haul road to the Project site.

Waste Disposal

All construction Projects create waste. This can vary from demolition materials to waste from meals, and; surplus construction materials to the packaging the materials come in. On a very large project such as the Airport Redevelopment, this can represent a significant number of trips from the site to the location for disposal.

In Bermuda waste needs to be partially separated as disposal takes place at different facilities around the Island.

The Waste Management Department of the Ministry of Public Works and provides specific information on the location for disposal of most commonly found materials.