

# **DARWIN INTERNATIONAL AIRPORT**

## **DEPARTMENT OF DEFENCE**

### **METHOD OF WORKING PLAN**

**YPDN 23/02**

<b>AERODROME:</b>	<b>RAAF Base Darwin / Darwin International Airport</b>
<b>PROJECT DESCRIPTION:</b>	<b>P0009 - National Airfields Works at RAAF Base Darwin - Package 1 - RWY 11-29 Reconstruction</b>
<b>DATES:</b>	
<b>Approval of MOWP</b>	<b>31 July 2023</b>
<b>Revision Date</b>	<b>26 April 2024</b>
<b>Commencement of works</b>	<b>15 August 2023</b>
<b>Completion of works</b>	<b>31 March 2025</b>
<b>Expiry of MOWP</b>	<b>31 March 2025</b>

CHANGE REGISTER

This Change Register has been developed in accordance with Part 139 (Aerodromes) Manual of Standards 2019, to provide guidance to the reader regarding changes between the below two MOWP document revisions:

- Previous revision - MOWP YPDN 23/02 V2.1
- Current revision - MOWP YPDN 23/02 V2.2

Ref.	Change	MOWP Section	Description	MOWP V2.1	MOWP V2.2
1	Issue Number	Throughout	Change of Issue Number.	V2.1	V2.2
2	RWY 18/36 Temporarily Displaced	ANNEX B - DRAWINGS Stage 11A Stage 11B Stage 12 Stage 19B	Stage Drawing Changes to denote RWY 18/36 as Temporarily Displaced (Reduced Length).	MOWP YPDN 23/02 V2.1 denoted that RWY 18/36 was CLOSED during the below Stages. Stage 11A Stage 11B Stage 12 Stage 19B	MOWP YPDN 23/02 V2.2 denotes that RWY 18/36 is SHORTENED during the below Stages and associated Declared Distances and Equipment Height Limits apply. Stage 11A Stage 11B Stage 12 Stage 19B
3	RWY 18/36 Temporarily Displaced	2.6.6 2.6.7 2.6.8 2.6.15	Works Sequence Table Changes to denote RWY 18/36 as Temporarily Displaced (Reduced Length).	MOWP YPDN 23/02 V2.1 denoted that RWY 18/36 was CLOSED during the below Stages. 2.6.6 Works Sequence – Stage 11A 2.6.7 Works Sequence – Stage 12 2.6.8 Works Sequence – Stage 11B 2.6.15 Works Sequence – Stage 19B	MOWP YPDN 23/02 V2.2 denotes that RWY 18/36 is SHORTENED during the below Stages. 2.6.6 Works Sequence – Stage 11A 2.6.7 Works Sequence – Stage 12 2.6.8 Works Sequence – Stage 11B 2.6.15 Works Sequence – Stage 19B

Ref.	Change	MOWP Section	Description	MOWP V2.1	MOWP V2.2
4	PAPI location amendments	ANNEX B – DRAWINGS Stage 9B Stage 10 Stage 11A Stage 11B Stage 12	The graphical location of the PAPI's have been amended to match their installed position onsite.	-	The graphical location of the PAPI's have been amended to match their installed position onsite for the referenced Stages.
5	RWY 18/36 Temporarily Displaced	3.6 and 3.6.1 3.7 and 3.7.1 3.8 and 3.8.1 3.15 and 3.15.1	Restriction to Aircraft Operations (RTAO) Table Changes to denote RWY 18/36 as Temporarily Displaced (Reduced Length).	MOWP YPDN 23/02 V2.1 denoted that RWY 18/36 was CLOSED during the below Stages.  3.6 RTAO – Stage 11A 3.6.1 RTAO – Stage 11A NOTAM  3.7 RTAO – Stage 12 3.7.1 RTAO – Stage 12 NOTAM  3.8 RTAO – Stage 11B 3.8.1 RTAO – Stage 11B NOTAM  3.15 – Stage 19B 3.15.1 RTAO – Stage 19B NOTAM	MOWP YPDN 23/02 V2.2 denotes that RWY 18/36 is SHORTENED during the below Stages. Amended NOTAM information is provided to detail this change.  3.6 RTAO – Stage 11A 3.6.1 RTAO – Stage 11A NOTAM  3.7 RTAO – Stage 12 3.7.1 RTAO – Stage 12 NOTAM  3.8 RTAO – Stage 11B 3.8.1 RTAO – Stage 11B NOTAM  3.15 – Stage 19B 3.15.1 RTAO – Stage 19B NOTAM
6	Construction Vehicle access via TWY C1 and TWY C2.	ANNEX B – DRAWINGS Stage 11A Stage 11B Stage 12 Stage 19B	An introduced (Construction) Vehicle access route is denoted along TWY C1 and TWY C2 for the below Stages. Stage 11A Stage 11B Stage 12 Stage 19B	-	An introduced (Construction) Vehicle access route is denoted along TWY C1 and TWY C2 for the below Stages. Stage 11A Stage 11B Stage 12 Stage 19B

Ref.	Change	MOWP Section	Description	MOWP V2.1	MOWP V2.2
7	Construction Vehicle access via TWY S	ANNEX B – DRAWINGS Stage 9B, 10 and 19B.	An introduced (Construction) Vehicle access route is denoted along TWY S.	-	An introduced (Construction) Vehicle access route is denoted along TWY S.
8	NOTAMs	3 Restrictions to Aircraft Operations	Amended NOTAM wording due to Reference Items above.	-	-
9	Stage 16 Drawing	ANNEX B – DRAWINGS Stage 16	Drawing update to remove U/S cones on TWY E2.	Stage 16 Drawing showed U/S cones on TWY E2.	Stage 16 Drawing has removed the U/S cones on TWY E2.
10	Email address	11 ANNEX A DISTRIBUTION LISTS	Correction of email address for 452SQN DAR FLT CDR.	-	-
11	Stage 10 Dates	2.6, 2.6.4, 3.4	End date change of Stage 10.	Stage 10 ended on 28-April-2024.	Stage 10 now ends on 29-April-2024.
12	Stage 9B Dates	2.6, 2.6.5, 3.5	End date change of Stage 9B.	Stage 9B ended on 28-April-2024.	Stage 9B now ends on 24-April-2024.
13	Signatories	10.4 Approval	Removal of Base Manager – RAAF Base Darwin.	Listed the RAAF Base Darwin – Base Manager.	Removal of Base Manager – RAAF Base Darwin.
14	Stage 11B Dates	2.6, 2.6.8, 3.8	Stage 11B end date now 3-June-2024	Stage 11B end date was 2-June-2024.	Stage 11B end date now 3-June-2024
15	Stage 12 Dates	2.6, 2.6.7, 3.7	Stage 12 end date now 3-June-2024	Stage 12 end date was 2-June-2024.	Stage 12 end date now 3-June-2024
16	Stage 15 Dates	2.6, 2.6.9, 3.9	Stage 15 start date now 4-June-2024	Stage 15 start date was 2-June-2024.	Stage 15 start date now 4-June-2024
17	Stage 16 Dates	2.6, 2.6.10, 3.10	Stage 16 start date now 3-June-2024	Stage 16 start date was 2-June-2024.	Stage 16 start date now 3-June-2024



## CONTENTS

<b>1</b>	<b>METHOD OF WORKING PLAN (MOWP)</b>	<b>8</b>
1.1	Purpose of the MOWP	8
<b>2</b>	<b>WORKS INFORMATION</b>	<b>8</b>
2.1	Purpose of the Works	8
2.2	Description of the Works	8
2.3	Definitions	8
2.4	Times and Dates	9
2.5	Work Activities	9
2.6	Works sequence	10
2.6.1	Works sequence - Stage 7	12
2.6.2	Works sequence - Stage 8	12
2.6.3	Works sequence - Stage 9A	13
2.6.4	Works sequence - Stage 10	14
2.6.5	Works sequence - Stage 9B	15
2.6.6	Works sequence – Stage 11A	16
2.6.7	Works sequence – Stage 12	17
2.6.8	Works sequence – Stage 11B	18
2.6.9	Works sequence - Stage 15	19
2.6.10	Works sequence – Stage 16	19
2.6.11	Works sequence – Stage 17A	20
2.6.12	Works sequence – Stage 17B	20
2.6.13	Works sequence – Stage 18	21
2.6.14	Works sequence – Stage 19A	21
2.6.15	Works sequence – Stage 19B	22
2.6.16	Works sequence – Stage 20	23
2.6.17	Works sequence – Stage 21A	23
2.6.18	Works sequence – Stage 21	24
2.6.19	Works sequence – Stage 22	25
2.6.20	Works sequence – Stage 23	26
<b>3</b>	<b>RESTRICTIONS TO AIRCRAFT OPERATIONS (RTAO)</b>	<b>27</b>
3.1	RTAO - Stage 7	27
3.1.1	RTAO - Stage 7 NOTAM	28
3.2	RTAO - Stage 8	29
3.2.1	RTAO - Stage 8 NOTAM	30
3.3	RTAO - Stage 9A	31
3.3.1	RTAO - Stage 9A NOTAM	32
3.4	RTAO - Stage 10	33
3.4.1	RTAO - Stage 10 NOTAM	34
3.5	RTAO - Stage 9B	35
3.5.1	RTAO - Stage 9B NOTAM	36

3.6	RTAO - Stage 11A .....	37
3.6.1	RTAO - Stage 11A NOTAM.....	38
3.7	RTAO - Stage 12 .....	39
3.7.1	RTAO - Stage 12 NOTAM.....	40
3.8	RTAO - Stage 11B .....	41
3.8.1	RTAO - Stage 11B NOTAM.....	42
3.9	RTAO - Stage 15 .....	43
3.9.1	RTAO - Stage 15 NOTAM.....	44
3.10	RTAO - Stage 16 .....	45
3.10.1	RTAO - Stage 16 .....	46
3.11	RTAO - Stage 17A .....	47
3.11.1	RTAO - Stage 17A NOTAM.....	48
3.12	RTAO - Stage 17B .....	49
3.12.1	RTAO - Stage 17B NOTAM.....	50
3.13	RTAO - Stage 18 .....	51
3.13.1	RTAO - Stage 18 NOTAM.....	52
3.14	RTAO - Stage 19A .....	53
3.14.1	RTAO - Stage 19A NOTAM.....	54
3.15	RTAO - Stage 19B .....	55
3.15.1	RTAO - Stage 19B NOTAM.....	56
3.16	RTAO - Stage 20 .....	57
3.16.1	RTAO - Stage 20 NOTAM.....	58
3.17	RTAO - Stage 21A .....	59
3.17.1	RTAO - Stage 21A NOTAM.....	60
3.18	RTAO - Stage 21 .....	61
3.18.1	RTAO - Stage 21 NOTAM.....	62
3.19	RTAO - Stage 22 .....	63
3.19.1	RTAO - Stage 22 NOTAM.....	64
3.20	RTAO - Stage 23 .....	65
3.20.1	RTAO - Stage 23 NOTAM.....	66
<b>4</b>	<b>DECLARED EMERGENCIES AND ADVERSE WEATHER .....</b>	<b>67</b>
<b>5</b>	<b>NOTAM .....</b>	<b>68</b>
<b>6</b>	<b>Return To Service Timings .....</b>	<b>68</b>
<b>7</b>	<b>PERSONNEL AND EQUIPMENT .....</b>	<b>69</b>
7.1	General .....	69
7.2	Control of Works Personnel, Security and Safety of Aircraft Operations.....	69
7.3	Vehicles and Plant .....	70
7.4	Critical and Sensitive Areas - CNS Equipment .....	70
7.5	Access to the Works and Security .....	70
7.6	Visual Ground Aids .....	71
7.7	Works Permits.....	71
7.8	Protection of Electrical Services.....	71

7.9	Crane Permit.....	71
7.10	Other Restrictions.....	72
7.11	Environmental.....	72
7.12	Foreign Object Debris (FOD) Control .....	72
<b>8</b>	<b>AERODROME MARKERS, MARKINGS and LIGHTS .....</b>	<b>73</b>
8.1	Unserviceability Markers.....	73
8.2	Works Limit Markers .....	73
8.3	Lighting .....	73
8.4	RWY 11-29 Temporary Displaced Thresholds .....	74
8.5	RWY 11-29 Temporary PAPIs .....	74
8.6	Works within the Runway Strip .....	74
<b>9</b>	<b>ADMINISTRATION .....</b>	<b>75</b>
9.1	Design Consultant (DC).....	75
9.2	Works Organisation / Contractor .....	75
9.3	Project Manager Contract Administrator (PMCA) .....	75
9.4	Works Safety Officer .....	76
9.5	Base Aviation Safety Officer.....	76
9.6	Contact Details.....	77
9.7	Distribution .....	79
<b>10</b>	<b>AUTHORITY.....</b>	<b>80</b>
10.1	Issue.....	80
10.2	Variation.....	80
10.3	Expiry.....	80
10.4	Approval.....	80
<b>11</b>	<b>ANNEX A – DISTRIBUTION LISTS.....</b>	<b>81</b>
<b>12</b>	<b>ANNEX B – DRAWINGS.....</b>	<b>88</b>

**1 METHOD OF WORKING PLAN (MOWP)**

**1.1 Purpose of the MOWP**

CASA Part 139 MOS – Aerodromes requires operators of a certified aerodrome to make all necessary arrangements to ensure that aerodrome works do not create a hazard to aircraft or cause confusion to pilots. Furthermore, an aerodrome operator must not carry out aerodrome works without a MOWP unless the works are of a time-limited or emergency nature, or the works do not require restrictions to aircraft operations.

To achieve the requirements of CASA Part 139 MOS – Aerodromes, this MOWP has been prepared in accordance with the requirements of CASA Part 139 MOS – Aerodromes, Chapter 16 – Method of Working Plans (CASA, 2019) and ensures that all works conducted are in accordance with Civil Aviation Safety Regulations and CASA Part 139 MOS – Aerodromes and CASA Instrument 07/24 – Darwin Aerodrome (Relevant Activities in Obstacle Restriction Area – Runway 11/29).

**2 WORKS INFORMATION**

**2.1 Purpose of the Works**

The Department of Defence (DoD) National Airfield Works Program is a 10 year rolling Airfield Capital Works maintenance program which encompasses the annual pavement maintenance program as well as the capital maintenance projects across all airfields within the Defence Estate. The DoD has a Joint User Deed (JUD) with Darwin International Airport across the Joint User Area (JUA), requiring all works within the JUA to be in accordance with the requirements of the JUD.

The P0009 National Airfield Works at Darwin has the aim of maintaining the network of aircraft pavements, stormwater drainage and Aeronautical Ground Lighting (AGL) at Darwin including the areas within the Joint User Area.

**2.2 Description of the Works**

The scope of works covered in this MOWP includes the Runway 11-29 reconstruction at RAAF Base Darwin / Darwin International Airport as part of the P0009 - National Airfields Works (Package 1 Expedited Runway Works) at RAAF Base Darwin and Mount Bunday Airfield project (P0009).

A series of reviews will be conducted through workshops during the project to review productivity, operations and refine procedures and timelines for the remaining stages. The MOWP will be updated and distributed accordingly following the reviews.

**2.3 Definitions**

A table of MOWP YPDN 23/02 specific definitions is provided below.

<b>Package</b>	Package: The P0009 RAAF Darwin Works are broken up into two (2) Packages. Package 1 is the focus of this MOWP YPDN 23/02, including pavement reconstruction and overlay works to Runway 11-29. Package 1 will enable the runway width to be reduced from 60m to 45m for reclassification to a Code 4E runway.
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<b>Stage</b>	<p>Stage: All works conducted within a specific duration. Stage drawings at Annex B illustrate the conditions and associated information of the airfield during the Stage depicted, whilst indicating the location of the work zones contained within that Stage.</p> <p>The MOWP is restricted to working under only one (1) Stage per work shift. The Stage Sequencing is presented in <b><u>1.5 Works sequence.</u></b></p>
<b>Phase</b>	<p>Phase: A series of Stages, describing the works progress. There are four (4) phases under MOWP YPDN 23/02:</p> <ul style="list-style-type: none"> <li>▪ Main Construction,</li> <li>▪ Cut Over of AGL for the new 45m runway width requirements,</li> <li>▪ Grooving and</li> <li>▪ Remaining AGL Works.</li> </ul>
<b>Zone</b>	<p>Zone: Areas of work within a Stage, dependent on the Stage in effect. Numerical Zones describe on pavement work areas within the graded runway strip. Alphabetical Zones describe off pavement work areas outside of the graded runway strip, identified by the gable markers</p>
<b>RTS</b>	<p>RTS: Return to Service.</p> <p>Describes a work activity / shift in which the works contractor is required to vacate and reinstate the work areas (zones) back to a nominated extent and to allow for aircraft traffic as detailed within the Stage description and associated NOTAM.</p>

## 2.4 Times and Dates

Note that all Shift Times and Dates presented in MOWP YPDN 23/02 are in Local Darwin time (Australian Central Standard Time).

## 2.5 Work Activities

The asphalt pavement section of Runway 11-29 at RAAF Base Darwin (the primary and longest runway for long-haul and wide body aircraft movements) needs jointly required capital works as aspects of the runway surface, and the underlying pavement, are at the end of their serviceable life.

Works under this Project include reconstructed asphalt pavements, asphalt overlays, construction of a new drainage network and associated Runway Airfield Ground Lighting (AGL) works to Runway 11-29.

The planned works may include but are not limited to pavement, electrical works, drainage works, survey or geological investigation and will be undertaken within a prescribed MOWP stage.

Phases	Stages	Key Activities
Main Construction	7 to 21 (excluding 21A)	<ul style="list-style-type: none"> <li>▪ Pavement reconstruction.</li> <li>▪ Asphalt overlays.</li> <li>▪ Drainage installation inclusive of subsoil drain, swale and stormwater pipes and culverts.</li> <li>▪ Airfield Ground Lighting (AGL) removal / protection.</li> <li>▪ AGL installation inc. cabling.</li> <li>▪ Grooving activities.</li> </ul>
Cut Over	21A	<ul style="list-style-type: none"> <li>▪ Pre-commissioning of AGL whilst existing 60m wide RWY lighting remains.</li> <li>▪ Cut Over from 60m wide RWY lighting to new 45m wide RWY lighting.</li> </ul>
Grooving	22 and 23	<ul style="list-style-type: none"> <li>▪ Grooving of all new pavement works as soon as practicable (8 - 10 weeks after laying of asphalt) following the completion of the main construction pavement stages.</li> <li>▪ Decommissioning of redundant 60m wide RWY lighting.</li> <li>▪ Installation of inset AGL within Runway 11-29 grooving extent.</li> </ul>

The actual date and time of commencement will be advised by a NOTAM, to be issued not less than 48 hours before work commences.

*Note: Environmental management requirements are covered under Section 3.6 and 3.10 and all works are to be covered by the P0009 CEMP and approved Environmental Clearance Certificate.*

## 2.6 Works sequence

A detailed Works sequence is provided in the proceeding sub-sections and presented per Stage. The below Table summarises the overall Works sequence.

Phases	Stage Sequence	Start	End
Main Construction	Stage 7	28-Mar-24	2-Apr-24
	Stage 8	2-Apr-24	5-Apr-24
	Stage 9A	5-Apr-24	21-Apr-24
	Stage 10	5-Apr-24	21-Apr-24
	Stage 9B	21-Apr-24	24-Apr-24
	Stage 10	21-Apr-24	29-Apr-24
	Stage 11A	29-Apr-24	6-May-24
	Stage 12	29-Apr-24	6-May-24
	Stage 11B	7-May-24	3-Jun-24
	Stage 12	7-May-24	3-Jun-24
	Stage 15	4-Jun-24	14-Jul-24
	Stage 16	3-Jun-24	14-Jul-24
	Stage 17A	15-Jul-24	4-Aug-24
	Stage 17B	15-Jul-24	4-Aug-24
	Stage 18	4-Aug-24	28-Aug-24
	Stage 19A	4-Aug-24	11-Aug-24
	Stage 19B	12-Aug-24	28-Aug-24
	Stage 20	29-Aug-24	18-Oct-24
Cut Over	Stage 21A	25-Oct-24	27-Oct-24
Main Construction	Stage 21	29-Aug-24	12-Nov-24
Grooving	Stage 22	13-Nov-24	20-Dec-24
	Stage 22	6-Jan-25	29-Jan-25
	Stage 23	30-Jan-25	31-Mar-25

**\*Note that works in Stages 9A, 9B, 11A, 11B, 15, 19A, 19B and 20 within the central section of Runway 11-29 will occur under RTS (return to service) and will revert back to Stages described below.**

For Stage 9A; the RTS (return to service) arrangement will be Stage 10.

For Stage 9B; the RTS (return to service) arrangement will be Stage 10.

For Stage 11A; the RTS (return to service) arrangement will be Stage 12.

For Stage 11B; the RTS (return to service) arrangement will be Stage 12.

For Stage 15; the RTS (return to service) arrangement will be Stage 16.

For Stage 19A and 19B; the RTS (return to service) arrangement will be Stage 18.

For Stage 20; the RTS (return to service) arrangement will be Stage 21A or Stage 21.

### 2.6.1 Works sequence - Stage 7

<b>Planned dates</b>	28-Mar-24 to 2-Apr-24	<b>Drawing</b>	ANNEX B – STAGE 7
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	Full length available.
<b>Zones</b>	On-pavement: n/a Off-pavement (drainage): C, D, F Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works.
<b>Activities</b>	Closure of Taxiway Delta to undertake demolition, drainage, pavement reinstatement and AGL works.		
<b>Displaced Threshold</b>	Full length available.		

### 2.6.2 Works sequence - Stage 8

<b>Planned dates</b>	2-Apr-24 to 5-Apr-24	<b>Drawing</b>	ANNEX B – STAGE 8
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2100m 11 RWY 2160m
<b>Zones</b>	On-pavement: 5, 6, 7, 8 Off-pavement (drainage): C, D, F Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works.
<b>Activities</b>	<ul style="list-style-type: none"> <li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 1254m / 1194m W END RWY 11/29 CLOSED DTHR11 at CH1254.		



### 2.6.3 Works sequence - Stage 9A

<b>Planned dates</b>	5-Apr-24 to 21-Apr-24	<b>Drawing</b>	ANNEX B – STAGE 9A
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 9A RTS: 29 RWY 1643m 11 RWY 1690m
<b>Zones</b>	On-pavement: 4-4, 4-5, 4-6, 5, 6, 7, 8 Off-pavement (drainage): D, F, H Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 9A RTS (0200 to 1130 Local). All other times, revert to Stage 10 29 RWY 2100m 11 RWY 2160m
<b>Activities</b>	<b>Stage 9A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 10.</b> <ul style="list-style-type: none"> <li>• Works in Stage 9A include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		

#### 2.6.4 Works sequence - Stage 10

<b>Planned dates</b>	5-Apr-24 to 29-Apr-24	<b>Drawing</b>	ANNEX B – STAGE 10
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2100m 11 RWY 2160m
<b>Zones</b>	On-pavement: 5, 6, 7, 8 Off-pavement (drainage): C, D F, H Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 10 is concurrent with Stage 9A or Stage 9B)
<b>Activities</b>	<ul style="list-style-type: none"> <li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> </ul>		
<b>RWY 11-29 Displaced Threshold</b>	DTHR11 by 1254m / 1194m W END RWY 11/29 CLOSED. DTHR11 at CH1254. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 10.		
<b>RWY 18-36</b>	RWY 18/36 CLOSED		

### 2.6.5 Works sequence - Stage 9B

<b>Planned dates</b>	21-Apr-24 to 24-Apr-24	<b>Drawing</b>	ANNEX B – STAGE 9B
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 9B RTS: 29 RWY 1643m 11 RWY 1690m
		<b>RWY 18-36 TORA</b>	18 RWY 990m
<b>Zones</b>	On-pavement: 4-4, 4-6, 5, 6, 7, 8 Off-pavement (drainage): D, F, H Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 9B RTS (0200 to 1130 Local). All other times, revert to Stage 10 29 RWY 2100m 11 RWY 2160m
<b>Activities</b>	<b>Stage 9B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 10.</b> <ul style="list-style-type: none"> <li>• Works in Stage 9B include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> </ul>		
<b>RWY 11-29 Displaced Threshold</b>	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
<b>RWY 18-36</b>	RWY 18/36 CLOSED		

### 2.6.6 Works sequence – Stage 11A

<b>Planned dates</b>	29-Apr-24 to 6-May-24	<b>Drawing</b>	ANNEX B – STAGE 11A
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 11A RTS: 29 RWY 1420m 11 RWY 1480m
		<b>RWY 18-36 TORA</b>	18 RWY 990m
<b>Zones</b>	On-pavement: 4-2, 4-3, 4-4, 4-6, 5, 6, 7, 8 Off-pavement (drainage): C, F, G, H Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 11A RTS (0200 to 1130 Local). All other times, revert to Stage 12 29 RWY 2100m 11 RWY 2160m
<b>Activities</b>	<b>Stage 11A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 12.</b> <ul style="list-style-type: none"> <li>• Works in Stage 11A include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> </ul>		
<b>RWY 11-29 Displaced Threshold</b>	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
<b>RWY 18-36</b>	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		

### 2.6.7 Works sequence – Stage 12

<b>Planned dates</b>	29-Apr-24 to 3-Jun-24	<b>Drawing</b>	ANNEX B – STAGE 12
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2100m 11 RWY 2160m
		<b>RWY 18-36 TORA</b>	18 RWY 990m
<b>Zones</b>	On-pavement: 5, 6, 7, 8 Off-pavement (drainage): C, F, G, H Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 12 is concurrent with Stage 11A or 11B)
<b>Activities</b>	<ul style="list-style-type: none"> <li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> </ul>		
<b>RWY 11-29 Displaced Threshold</b>	DTHR11 by 1254m / 1194m W END RWY 11/29 CLOSED. DTHR11 at CH1254. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 12.		
<b>RWY 18-36</b>	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		

### 2.6.8 Works sequence – Stage 11B

<b>Planned dates</b>	7-May-24 to 3-Jun-24	<b>Drawing</b>	ANNEX B – STAGE 11B
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 11B RTS: 29 RWY 1643m 11 RWY 1690m
		<b>RWY 18-36 TORA</b>	18 RWY 990m
<b>Zones</b>	On-pavement: 4-4, 4-5, 4-6, 5, 6, 7, 8 Off-pavement (drainage): C, F, G, H Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 11B RTS (0200 to 1130 Local). All other times, revert to Stage 12 29 RWY 2100m 11 RWY 2160m
<b>Activities</b>	<b>Stage 11B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 12.</b> <ul style="list-style-type: none"> <li>• Works in Stage 11B include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> </ul>		
<b>RWY 11-29 Displaced Threshold</b>	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
<b>RWY 18-36</b>	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		

### 2.6.9 Works sequence - Stage 15

<b>Planned dates</b>	4-Jun-24 to 14-Jul-24	<b>Drawing</b>	ANNEX B – STAGE 15
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 15 RTS: 29 RWY 1420m 11 RWY 1480m
<b>Zones</b>	On-pavement: 4-2, 4-3, 4-4, 4-5, 4-6, 5, 7, 8 Off-pavement (drainage): F, G, H Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 15 RTS (0200 to 1130 Local). All other times, revert to Stage 16 29 RWY 2631m 11 RWY 2691m
<b>Activities</b>	<b>Stage 15 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 16.</b> <ul style="list-style-type: none"> <li>• Works in Stage 15 include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> <li>• HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		

### 2.6.10 Works sequence – Stage 16

<b>Planned dates</b>	3-Jun-24 to 14-Jul-24	<b>Drawing</b>	ANNEX B – STAGE 16
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2631m 11 RWY 2691m
<b>Zones</b>	On-pavement: 7, 8 Off-pavement (drainage): F, G, H Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 16 is concurrent with Stage 15)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> <li>• HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 723m / 663m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 16.		

### 2.6.11 Works sequence – Stage 17A

<b>Planned dates</b>	15-Jul-24 to 4-Aug-24	<b>Drawing</b>	ANNEX B – STAGE 17A
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2721m 11 RWY 2781m
<b>Zones</b>	On-pavement: 8 Off-pavement (drainage): F, H Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works. (0600 – 1900 Local 2030 - 0930 UTC when Stage 17 is concurrent with Stage 17B)
<b>Activities</b>	<ul style="list-style-type: none"> <li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> <li>HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 723m / 573m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 17A.		

### 2.6.12 Works sequence – Stage 17B

<b>Planned dates</b>	15-Jul-24 to 4-Aug-24	<b>Drawing</b>	ANNEX B – STAGE 17B
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2721m 11 RWY 2781m
<b>Zones</b>	On-pavement: Zone 8 and select RWY 18-36 locations as per Drawing for Stage 17B Off-pavement (drainage): F, H Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 17B RTS (1900 to 0600 Local). All other times, revert to Stage 17A 29 RWY 2721m 11 RWY 2781m
<b>Activities</b>	<ul style="list-style-type: none"> <li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> <li>Maintenance pavement works to RWY 18/36 as per the locations marked in the Stage 17B Drawing.</li> <li>HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 723m / 573m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 17B.		



### 2.6.13 Works sequence – Stage 18

<b>Planned dates</b>	4-Aug-24 to 28-Aug-24	<b>Drawing</b>	ANNEX B – STAGE 18
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2631m 11 RWY 2691m
<b>Zones</b>	On-pavement: 7, 8 Off-pavement (drainage): F, H, I Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works. (1130-0200 Local). 0200-1630 UTC when Stage 18 is concurrent with Stage 19A and Stage 19B)
<b>Activities</b>	<ul style="list-style-type: none"> <li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> <li>HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 723m / 663m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 18.		

### 2.6.14 Works sequence – Stage 19A

<b>Planned dates</b>	4-Aug-24 to 11-Aug-24	<b>Drawing</b>	ANNEX B – STAGE 19A
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 19A RTS: 29 RWY 1420m 11 RWY 1480m
<b>Zones</b>	On-pavement: 4-2, 4-3, 4-4, 4-5, 4-6, 5, 7, 8 Off-pavement (drainage): F, H, I Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 19A RTS (0200 to 1130 Local). All other times, revert to Stage 18 29 RWY 2631m 11 RWY 2691m
<b>Activities</b>	<p><b>Stage 19A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</b></p> <ul style="list-style-type: none"> <li>Works in Stage 19A include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> <li>HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		

### 2.6.15 Works sequence – Stage 19B

<b>Planned dates</b>	12-Aug-24 to 28-Aug-24	<b>Drawing</b>	ANNEX B – STAGE 19B
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 19B RTS: 29 RWY 1643m 11 RWY 1690m
		<b>RWY 18-36 TORA</b>	18 RWY 990m
<b>Zones</b>	On-pavement: 4-4, 4-5, 4-6, 5, 6, 7, 8 Off-pavement (drainage): F, H, I Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 19B RTS (0200 to 1130 Local. All other times, revert to Stage 18 29 RWY 2631m 11 RWY 2691m
<b>Activities</b>	<b>Stage 19B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</b> <ul style="list-style-type: none"> <li>• Works in Stage 19B include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> <li>• HIAL demolition and installation of new.</li> </ul>		
<b>RWY 11-29 Displaced Threshold</b>	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
<b>RWY 18-36</b>	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		

### 2.6.16 Works sequence – Stage 20

<b>Planned dates</b>	29-Aug-24 to 18-Oct-24	<b>Drawing</b>	ANNEX B – STAGE 20
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	During Stage 20 RTS: 29 RWY 1481m 11 RWY 1421m
<b>Zones</b>	On-pavement: 4-2, 4-1, 3, 2, 1 Off-pavement (drainage): C, B, A, I Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 20 RTS (0200 to 1130 Local). All other times, revert to Stage 21 29 RWY 2480m 11 RWY 2420m
<b>Activities</b>	<b>Stage 20 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 21.</b> <ul style="list-style-type: none"> <li>• Works in Stage 20 include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>• Installation of associated drainage.</li> <li>• Flank regrading and AGL secondary trenching.</li> <li>• HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR29 by 1933m / 1873m E END RWY 11/29 CLOSED DTHR29 at CH1421. Temp Displaced Threshold at the RWY 29 end for RTS times only.		

### 2.6.17 Works sequence – Stage 21A

<b>Planned dates</b>	25-Oct-24 to 27-Oct-24	<b>Drawing</b>	ANNEX B – STAGE 21A
<b>Phase</b>	Cut Over	<b>RWY 11-29 TORA</b>	29 RWY 2480m 11 RWY 2420m
<b>Zones</b>	On-pavement: 1, 2 Off-pavement (drainage): A, B, I Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works.
<b>Activities</b>	Ground Checks and Flight Checks of the newly installed (unpowered) Runway 11-29 Airfield Ground Lighting system and the Cut Over to the 45m width AGL system.  Initially, the medium intensity runway lighting system will operate until the high intensity runway lights can be cut over to the new 45m AGL. Indicatively this will take a period of up to two (2) calendar days.		
<b>Displaced Threshold</b>	DTHR29 by 1046m / 874m E END RWY 11/29 CLOSED. DTHR29 at CH2308. Temp Displaced Threshold at the RWY 29 end during the entirety of Stage 21A.		

### 2.6.18 Works sequence – Stage 21

<b>Planned dates</b>	29-Aug-24 to 12-Nov-24	<b>Drawing</b>	ANNEX B – STAGE 21
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2480m 11 RWY 2420m
<b>Zones</b>	On-pavement: 1, 2 Off-pavement (drainage): A, B, I Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works.
<b>Activities</b>	<ul style="list-style-type: none"> <li>Removal and reconstruction of Runway 11-29 pavement (29 Threshold) at the Eastern end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li> <li>Installation of associated drainage.</li> <li>Flank regrading and AGL secondary trenching.</li> <li>HIAL demolition and installation of new.</li> </ul>		
<b>Displaced Threshold</b>	DTHR29 by 1046m / 874m E END RWY 11/29 CLOSED. DTHR29 at CH2308. Temp Displaced Threshold at the RWY 29 end during the entirety of Stage 21.		

### 2.6.19 Works sequence – Stage 22

<b>Planned dates</b>	13-Nov-24 to 20-Dec-24 6-Jan-25 to 29-Jan-25	<b>Drawing</b>	ANNEX B – STAGE 22
<b>Phase</b>	Grooving	<b>RWY 11-29 TORA</b>	During Stage 15 RTS 29 RWY 1420m 11 RWY 1480m  At all other times the full Runway 11-29 TORA will be available.
<b>Zones</b>	On-pavement: 5, 4-6, 4-5, 4-4, 4-3, 4-2 Off-pavement (drainage): n/a Off-pavement (AGL): E	<b>Shift timing</b>	13-Nov-24 to 9-Dec-24 RTS (0145 - 0545 Local)  9-Dec-24 to 20-Dec-24 RTS (0145 – 0445 Local) or RTS (0145 - 0545 Local) depending on the day of the week as per NOTAM  6-Jan-25 to 29-Jan-25 RTS (0145 – 0445 Local)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Works in Stage 22 include grooving inclusive of line marking reinstatement.</li> <li>• Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights.</li> </ul>		
<b>Displaced Threshold</b>	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED. DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		

### 2.6.20 Works sequence – Stage 23

<b>Planned dates</b>	30-Jan-25 to 31-Mar-25	<b>Drawing</b>	ANNEX B – STAGE 23
<b>Phase</b>	Grooving	<b>RWY 11-29 TORA</b>	<p>During Stage 23 RTS  29 RWY 1481m  11 RWY 1421m</p> <p>At all other times the full Runway 11-29 TORA will be available.</p>
<b>Zones</b>	On-pavement: 4-2, 4-1, 3, 2, 1 Off-pavement (drainage): n/a Off-pavement (AGL): E	<b>Shift timing</b>	RTS (0145 – 0445 Local)
<b>Activities</b>	<ul style="list-style-type: none"> <li>• Works in Stage 23 include grooving inclusive of line marking reinstatement.</li> <li>• Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights.</li> </ul>		
<b>Displaced Threshold</b>	DTHR29 by 1933m / 1873m E END RWY 11/29 CLOSED DTHR29 at CH1421. Temp Displaced Threshold at the RWY 29 end for RTS times only.		

### 3 RESTRICTIONS TO AIRCRAFT OPERATIONS (RTAO)

#### 3.1 RTAO - Stage 7

Planned dates	28-Mar-24 to 2-Apr-24	Drawing	ANNEX B – STAGE 7
Phase	Main Construction	RWY 11-29 TORA	Full length available.
Zones	On-pavement: n/a Off-pavement (drainage): C, D, F Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works.
Activities	Closure of Taxiway Delta to undertake demolition, drainage, pavement reinstatement and AGL works.		
Restrictions: Manoeuvring Area			
Runways	Full length available.		
Taxiways	Taxiway D closed.		

3.1.1 RTAO - Stage 7 NOTAM

Stage 7 NOTAM	
TWY D CLOSED DUE WIP REFER METHOD OF WORKIN PLAN YPDN 23/02 STAGE 7	
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	



### 3.2 RTAO - Stage 8

Planned dates	2-Apr-24 to 5-Apr-24	Drawing	ANNEX B – STAGE 8
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2100m 11 RWY 2160m
Zones	On-pavement: 5, 6, 7, 8 Off-pavement (drainage): C, D, F Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works.
Activities	<ul style="list-style-type: none"><li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>Installation of associated drainage.</li><li>Flank regrading and AGL secondary trenching.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 1254m / 1194m W END RWY 11/29 CLOSED DTHR11 at CH1254. Temp Displaced Threshold at the RWY 11 end for RTS times only.  Runway 18/36 closed.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway T closed. Taxiway D closed.		

### 3.2.1 RTAO - Stage 8 NOTAM

Stage 8 NOTAM																			
<p>THR RWY 11 DISPLACED 1254M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1194M WESTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 15FT AGL ON RWY 2501M FM START OF TORA RWY 29 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2160 (7087)</td><td>2250 (7382) (2.15)</td><td>2160 (7087)</td><td>2100 (6890)</td></tr><tr><td>29</td><td>2100 (6890)</td><td>2160 (7087) (2.0)</td><td>2100 (6890)</td><td>2100 (6890)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 1879 (6165) (1.6) 2095 (6874) (1.9) RWY 29 2074 (6804) (1.6) 2156 (7074) (1.9) RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 29 DIST TO RUN MARKERS U/S WHEN 11 THR DISPLACED RWY 29 TWY D, E1 AND E2 TKOF RUN AVBL SIGNS U/S WHEN 11 THR DISPLACED TWY A1, C3, C4 D, V2, AND T CLOSED ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 8</p>					RWY	TORA	TODA	ASDA	LDA	11	2160 (7087)	2250 (7382) (2.15)	2160 (7087)	2100 (6890)	29	2100 (6890)	2160 (7087) (2.0)	2100 (6890)	2100 (6890)
RWY	TORA	TODA	ASDA	LDA															
11	2160 (7087)	2250 (7382) (2.15)	2160 (7087)	2100 (6890)															
29	2100 (6890)	2160 (7087) (2.0)	2100 (6890)	2100 (6890)															
<p>Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)</p>		<p>RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision). RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 ENG RUN UP AND COMPASS SWING AVBL</p>																	
STAGE 8 NOTAM																			
<p>RWY 18/36 CLOSED DUE WIP TWY C1 CLOSED REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 8</p>																			

### 3.3 RTAO - Stage 9A

Planned dates	5-Apr-24 to 21-Apr-24	Drawing	ANNEX B – STAGE 9A
Phase	Main Construction	RWY 11-29 TORA	During Stage 9A RTS: 29 RWY 1643m 11 RWY 1690m
Zones	On-pavement: 4-4, 4-5, 4-6, 5, 6, 7, 8 Off-pavement (drainage): D, F, H Off-pavement (AGL): E	Shift timing	During Stage 9A RTS (0200 to 1130 Local). All other times, revert to Stage 10 29 RWY 2100m 11 RWY 2160m
Activities	<b>Stage 9A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 10.</b> <ul style="list-style-type: none"><li>• Works in Stage 9A include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.  Runway 18/36 closed.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway B1 closed. Taxiway B2 closed. Taxiway D closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

3.3.1 RTAO - Stage 9A NOTAM

Stage 9A NOTAM																			
<p>THR RWY 11 DISPLACED 1934M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1651M DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY IDENT LGT HJ, PILOT MNT OBST 18FT AGL 1823M FM START OF TORA RWY 29</p> <p>REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>1690 (5545)</td><td>1780 (5840) (2.15)</td><td>1690 (5545)</td><td>1420 (4659)</td></tr><tr><td>29</td><td>1643 (5391)</td><td>1703 (5587) (4.0)</td><td>1643 (5391)</td><td>1643 (5391)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 1409 (4623) (1.6) 1625 (5331) (1.9) RWY 29 1479 (4852) (1.6) 1559 (5115) (1.9) 1604 (5262) (2.2) 1633 (5358) (2.5) 1679 (5509) (3.3)</p> <p>RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT</p> <p>RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M TWY A1, C3, C4, B1, B2, D, V2, AND T CLOSED</p> <p>INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 9A</p>					RWY	TORA	TODA	ASDA	LDA	11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)	29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)
RWY	TORA	TODA	ASDA	LDA															
11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)															
29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	RWY 11/29 reclassified as a Code 2 Runway (Non-Instrument)																		
	RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 ENG RUN UP AND COMPASS SWING AVBL																		
STAGE 9A NOTAM																			
<p>RWY 18/36 CLOSED DUE WIP TWY C1 CLOSED REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 9A</p>																			

### 3.4 RTAO - Stage 10

Planned dates	5-Apr-24 to 29-Apr-24	Drawing	ANNEX B – STAGE 10
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2100m 11 RWY 2160m
Zones	On-pavement: 5, 6, 7, 8 Off-pavement (drainage): C, D, F, H Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 10 is concurrent with Stage 9A or Stage 9B)
Activities	<ul style="list-style-type: none"><li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>Installation of associated drainage.</li><li>Flank regrading and AGL secondary trenching.</li></ul>		
Restrictions: Manoeuvring Area			
Runway 11-29	DTHR11 by 1254m / 1194m W END RWY 11/29 CLOSED. DTHR11 at CH1254. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 10.		
Runway 18-36	RWY 18/36 CLOSED		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway T closed. Taxiway D closed.		
Aircraft type restrictions	RWY29 intersection departure from TWY D available to Light Single Engine Aircraft only.  RWY29 intersection departure from TWY E2 not available.		

**3.4.1 RTAO - Stage 10 NOTAM**

Stage 10 NOTAM																			
<p>THR RWY 11 DISPLACED 1254M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1194M WESTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 15FT AGL ON RWY 2501M FM START OF TORA RWY 29 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2160 (7087)</td><td>2250 (7382) (2.15)</td><td>2160 (7087)</td><td>2100 (6890)</td></tr><tr><td>29</td><td>2100 (6890)</td><td>2160 (7087) (2.0)</td><td>2100 (6890)</td><td>2100 (6890)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 1879 (6165) (1.6) 2095 (6874) (1.9) RWY 29 2074 (6804) (1.6) 2156 (7074) (1.9) RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 29 DIST TO RUN MARKERS U/S WHEN 11 THR DISPLACED RWY 29 TWY D, E1 AND E2 TKOF RUN AVBL SIGNS U/S WHEN 11 THR DISPLACED TWY A1, C3, C4, D, V2 AND T CLOSED ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 10</p>					RWY	TORA	TODA	ASDA	LDA	11	2160 (7087)	2250 (7382) (2.15)	2160 (7087)	2100 (6890)	29	2100 (6890)	2160 (7087) (2.0)	2100 (6890)	2100 (6890)
RWY	TORA	TODA	ASDA	LDA															
11	2160 (7087)	2250 (7382) (2.15)	2160 (7087)	2100 (6890)															
29	2100 (6890)	2160 (7087) (2.0)	2100 (6890)	2100 (6890)															
<b>Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)</b>		<p>RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision). RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 ENG RUN UP AND COMPASS SWING AVBL</p>																	
STAGE 10 NOTAM																			
<p>RWY 18/36 CLOSED DUE WIP TWY C1 CLOSED REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 10</p>																			

### 3.5 RTAO - Stage 9B

Planned dates	21-Apr-24 to 24-Apr-24	Drawing	ANNEX B – STAGE 9B
Phase	Main Construction	RWY 11-29 TORA	During Stage 9B RTS: 29 RWY 1643m 11 RWY 1690m
Zones	On-pavement: 4-4, 4-6, 5, 6, 7, 8 Off-pavement (drainage): D, F, H Off-pavement (AGL): E	Shift timing	During Stage 9B RTS (0200 to 1130 Local). All other times, revert to Stage 10 29 RWY 2100m 11 RWY 2160m
Activities	<b>Stage 9B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 10.</b> <ul style="list-style-type: none"><li>• Works in Stage 9B include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li></ul>		
Restrictions: Manoeuvring Area			
Runway 11-29	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
Runway 18-36	Runway 18/36 closed.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway D closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

3.5.1 RTAO - Stage 9B NOTAM

Stage 9B NOTAM																			
<p>THR RWY 11 DISPLACED 1934M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1651M DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY IDENT LGT HJ, PILOT MNT OBST 18FT AGL 1823M FM START OF TORA RWY 29</p> <p>REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>1690 (5545)</td><td>1780 (5840) (2.15)</td><td>1690 (5545)</td><td>1420 (4659)</td></tr><tr><td>29</td><td>1643 (5391)</td><td>1703 (5587) (4.0)</td><td>1643 (5391)</td><td>1643 (5391)</td></tr></table>					RWY	TORA	TODA	ASDA	LDA	11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)	29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)
RWY	TORA	TODA	ASDA	LDA															
11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)															
29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)															
<p>SUPPLEMENTARY TKOF DIST: RWY 11 1409 (4623) (1.6) 1625 (5331) (1.9) RWY 29 1479 (4852) (1.6) 1559 (5115) (1.9) 1604 (5262) (2.2) 1633 (5358) (2.5) 1679 (5509) (3.3)</p> <p>RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT</p> <p>RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M TWY A1, C3, C4, D, V2, AND T CLOSED</p> <p>INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 9B</p>																			
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	RWY 11/29 reclassified as a Code 2 Runway (Non-Instrument)																		
	RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 ENG RUN UP AND COMPASS SWING AVBL																		
STAGE 9B NOTAM																			
<p>RWY 18/36 CLOSED DUE WIP TWY C1 CLOSED REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 9B</p>																			



### 3.6 RTAO - Stage 11A

Planned dates	29-Apr-24 to 6-May-24	Drawing	ANNEX B – STAGE 11A
Phase	Main Construction	RWY 11-29 TORA	During Stage 11A RTS: 29 RWY 1420m 11 RWY 1480m
		RWY 18-36 TORA	18 RWY 990m
Zones	On-pavement: 4-2, 4-3, 4-4, 4-6, 5, 6, 7, 8 Off-pavement (drainage): C, F, G, H Off-pavement (AGL): E	Shift timing	During Stage 11A RTS (0200 to 1130 Local). All other times, revert to Stage 12 29 RWY 2100m 11 RWY 2160m
Activities	<b>Stage 11A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 12.</b> <ul style="list-style-type: none"><li>• Works in Stage 11A include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li></ul>		
Restrictions: Manoeuvring Area			
Runway 11-29	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
Runway 18-36	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway E1 closed. Taxiway E2 closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

**3.6.1 RTAO - Stage 11A NOTAM**

Stage 11A NOTAM

THR RWY 11 DISPLACED 1934M DUE WIP  
RWY 11/29 OPR LEN REDUCED BY 1874M  
DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND  
RWY IDENT LGT HJ, PILOT MNT  
OBST 15FT AGL 1612M FM START OF TORA RWY 29  
REVISED DECLARED DISTANCES  
RWY      TORA                      TODA                      ASDA                      LDA  
11    1480 (4856)    1570 (5151) (2.15)    1480 (4856)    1420 (4659)  
29    1420 (4659)    1480 (4856) (4.0)    1420 (4659)    1420 (4659)  
SUPPLEMENTARY TKOF DIST:  
RWY 11    1199 (3934) (1.6)    1415 (4642) (1.9)  
RWY 29    1199 (3934) (1.6)    1274 (4180) (1.9)    1337 (4387) (2.2)    1381 (4531) (2.5)  
1450 (4757) (3.3)  
RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ  
RWY 11 PAPI U/S WHEN THR DISPLACED  
RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT  
RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT  
RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED  
RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M  
TWY A1, C3, C4, E1, E2 AND V2 CLOSED  
INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY  
REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 11A

Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)

RWY 11/29 reclassified as a Code 2 Runway (Non-Instrument)  
RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED  
TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X  
TWY C4 ENG RUN UP AND COMPASS SWING AVBL

Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)

RWY 18/36 REDUCED LENGTH  
CODE 2 NON-INSTRUMENT  
RWY 18 DEPARTURES  
RWY 36 ARRIVALS

STAGE 11A NOTAM

RWY 18/36 OPR LEN REDUCED BY 534M N END DUE WIP  
RWY 18 DEP ONLY  
RWY 36 LDG ONLY  
SUPPLEMENTRY TKOF DIST:  
RWY    TORA                      TODA                      ASDA                      LDA  
18    990 (3248)    1050 (3445) (1.69)    990 (3248)  
36

### 3.7 RTAO - Stage 12

Planned dates	29-Apr-24 to 3-Jun-24	Drawing	ANNEX B – STAGE 12
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2100m 11 RWY 2160m
		RWY 18-36 TORA	18 RWY 990m
Zones	On-pavement: 5, 6, 7, 8 Off-pavement (drainage): C, F, G, H Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 12 is concurrent with Stage 11A or 11B)
Activities	<ul style="list-style-type: none"><li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>Installation of associated drainage.</li><li>Flank regrading and AGL secondary trenching.</li></ul>		
Restrictions: Manoeuvring Area			
Runway 11-29	DTHR11 by 1254m / 1194m W END RWY 11/29 CLOSED. DTHR11 at CH1254. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 12.		
Runway 18-36	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway E1 closed. Taxiway T closed.		
Aircraft type restrictions	RWY29 intersection departure from TWY D available to Light Single Engine Aircraft only.		
	RWY29 intersection departure from TWY E2 not available.		

**3.7.1 RTAO - Stage 12 NOTAM**

Stage 12 NOTAM

THR RWY 11 DISPLACED 1254M DUE WIP  
RWY 11/29 OPR LEN REDUCED BY 1194M WESTERN END  
DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND  
RWY THR IDENT LGT HJ, PILOT MNT  
OBST 15FT AGL ON RWY 2501M FM START OF TORA RWY 29  
REVISED DECLARED DISTANCES  
RWY      TORA                      TODA                      ASDA                      LDA  
11      2160 (7087)      2250 (7382) (2.15)      2160 (7087)      2100 (6890)  
29      2100 (6890)      2160 (7087) (2.0)      2100 (6890)      2100 (6890)  
SUPPLEMENTARY TKOF DIST:  
RWY 11 1879 (6165) (1.6) 2095 (6874) (1.9)  
RWY 29 2074 (6804) (1.6) 2156 (7074) (1.9)  
RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ  
RWY 11 PAPI U/S WHEN THR DISPLACED  
RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT  
RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT  
RWY 29 DIST TO RUN MARKERS U/S WHEN 11 THR DISPLACED  
RWY 29 TWY D, E1 AND E2 TKOF RUN AVBL SIGNS U/S WHEN 11 THR DISPLACED  
TWY A1, C3, C4, E1, V2, AND T CLOSED  
ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS  
OTHER INST APCH PROCEDURES AVB TO CIRCLING MINIMA ONLY  
ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS  
REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 12

Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)

RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision).  
RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED  
TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X  
TWY C4 ENG RUN UP AND COMPASS SWING AVBL

Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)

RWY 18/36 REDUCED LENGTH  
CODE 2 NON-INSTRUMENT  
RWY 18 DEPARTURES  
RWY 36 ARRIVALS

Stage 12 NOTAM

RWY 18/36 OPR LEN REDUCED BY 534M N END DUE WIP  
RWY 18 DEP ONLY  
RWY 36 LDG ONLY  
SUPPLEMENTARY TKOF DIST:  
RWY      TORA                      TODA                      ASDA                      LDA  
18      990 (3248)      1050 (3445) (1.69)      990 (3248)       
36

### 3.8 RTAO - Stage 11B

Planned dates	7-May-24 to 3-Jun-24	Drawing	ANNEX B – STAGE 11B
Phase	Main Construction	RWY 11-29 TORA	During Stage 11B RTS: 29 RWY 1643m 11 RWY 1690m
		RWY 18-36 TORA	18 RWY 990m
Zones	On-pavement: 4-4, 4-5, 4-6, 5, 6, 7, 8 Off-pavement (drainage): C, F, G, H Off-pavement (AGL): E	Shift timing	During Stage 11B RTS (0200 to 1130 Local). All other times, revert to Stage 12 29 RWY 2100m 11 RWY 2160m
Activities	<b>Stage 11B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 12.</b> <ul style="list-style-type: none"><li>• Works in Stage 11B include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li></ul>		
Restrictions: Manoeuvring Area			
Runway 11-29	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
Runway 18-36	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway B1 closed. Taxiway B2 closed. Taxiway E1 closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

### 3.8.1 RTAO - Stage 11B NOTAM

Stage 11B NOTAM																			
<p>THR RWY 11 DISPLACED 1934M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1651M DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY IDENT LGT HJ, PILOT MNT OBST 18FT AGL 1823M FM START OF TORA RWY 29</p> <p>REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>1690 (5545)</td><td>1780 (5840) (2.15)</td><td>1690 (5545)</td><td>1420 (4659)</td></tr><tr><td>29</td><td>1643 (5391)</td><td>1703 (5587) (4.0)</td><td>1643 (5391)</td><td>1643 (5391)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 1409 (4623) (1.6) 1625 (5331) (1.9) RWY 29 1479 (4852) (1.6) 1559 (5115) (1.9) 1604 (5262) (2.2) 1633 (5358) (2.5) 1679 (5509) (3.3)</p> <p>RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT</p> <p>RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M TWY A1, C3, C4, B1, B2, E1, D, V2, AND T CLOSED INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 11B</p>					RWY	TORA	TODA	ASDA	LDA	11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)	29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)
RWY	TORA	TODA	ASDA	LDA															
11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)															
29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)															
<b>Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)</b>		RWY 11/29 reclassified as a Code 2 Runway (Non-Instrument) RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 ENG RUN UP AND COMPASS SWING AVBL																	
<b>Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)</b>		RWY 18/36 REDUCED LENGTH CODE 2 NON-INSTRUMENT RWY 18 DEPARTURES RWY 36 ARRIVALS																	
STAGE 11B NOTAM																			
<p>RWY 18/36 OPR LEN REDUCED BY 534M N END DUE WIP RWY 18 DEP ONLY RWY 36 LDG ONLY</p> <p>SUPPLEMENTRY TKOF DIST:</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>18</td><td>990 (3248)</td><td>1050 (3445) (1.69)</td><td>990 (3248)</td><td></td></tr><tr><td>36</td><td></td><td></td><td></td><td>930 (3051)</td></tr></table> <p>RWY 18 TKOFF TO COMMENCE AT RED AND WHITE CONES TWY C1 CLOSED REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 11B</p>					RWY	TORA	TODA	ASDA	LDA	18	990 (3248)	1050 (3445) (1.69)	990 (3248)		36				930 (3051)
RWY	TORA	TODA	ASDA	LDA															
18	990 (3248)	1050 (3445) (1.69)	990 (3248)																
36				930 (3051)															

### 3.9 RTAO - Stage 15

Planned dates	4-Jun-24 to 14-Jul-24	Drawing	ANNEX B – STAGE 15
Phase	Main Construction	RWY 11-29 TORA	During Stage 15 RTS: 29 RWY 1420m 11 RWY 1480m
Zones	On-pavement: 4-2, 4-3, 4-4, 4-5, 4-6, 5, 7, 8 Off-pavement (drainage): F, G, H Off-pavement (AGL): E	Shift timing	During Stage 15 RTS (0200 to 1130 Local). All other times, revert to Stage 16 29 RWY 2631m 11 RWY 2691m
Activities	<b>Stage 15 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 16.</b> <ul style="list-style-type: none"><li>• Works in Stage 15 include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li><li>• HIAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway V2 closed. Taxiway B1 closed. Taxiway B2 closed. Taxiway E1 closed. Taxiway E2 closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

3.9.1 RTAO - Stage 15 NOTAM

Stage 15 NOTAM																
<p>THR RWY 11 DISPLACED 1934M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1874M DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY IDENT LGT HJ, PILOT MNT OBST 15FT AGL 1612M FM START OF TORA RWY 29</p> <p>REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>1480 (4856)</td><td>1570 (5151) (2.15)</td><td>1480 (4856)</td><td>1420 (4659)</td></tr><tr><td>29</td><td>1420 (4659)</td><td>1480 (4856) (4.0)</td><td>1420 (4659)</td><td>1420 (4659)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST:</p> <p>RWY 11 1199 (3934) (1.6) 1415 (4642) (1.9) RWY 29 1199 (3934) (1.6) 1274 (4180) (1.9) 1337 (4387) (2.2) 1381 (4531) (2.5) 1450 (4757) (3.3)</p> <p>RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT</p> <p>RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M TWY A1, B1, B2, E1, E2 AND V2 CLOSED</p> <p>INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 15</p>		RWY	TORA	TODA	ASDA	LDA	11	1480 (4856)	1570 (5151) (2.15)	1480 (4856)	1420 (4659)	29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)
RWY	TORA	TODA	ASDA	LDA												
11	1480 (4856)	1570 (5151) (2.15)	1480 (4856)	1420 (4659)												
29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)												
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	<p>RWY 11/29 Reclassified as Code 2 Non-Instrument RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 AND Z WEST OF TWY V1 MARKED WITH BLUE EDGE LGT TO ACCESS RWY 11/29</p>															



### 3.10 RTAO - Stage 16

Planned dates	3-Jun-24 to 14-Jul-24	Drawing	ANNEX B – STAGE 16
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2631m 11 RWY 2691m
Zones	On-pavement: 7, 8 Off-pavement (drainage): F, G, H Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 16 is concurrent with Stage 15)
Activities	<ul style="list-style-type: none"><li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>Installation of associated drainage.</li><li>Flank regrading and AGL secondary trenching.</li><li>HAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 723m / 663m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 16.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway E1 closed.		
Aircraft type restrictions	RWY29 intersection departure from TWY D available (with new RDS data).  RWY29 intersection departure from TWY E2 available to Light Single Engine Aircraft Only.  RWY29 intersection departure from TWY B1 and B2 not available.		

3.10.1 RTAO - Stage 16

Stage 16 NOTAM																			
<p>THR RWY 11 DISPLACED 723M DUE WIP RWY 11/29 OPR LEN REDUCED BY 663M WESTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 15FT AGL ON RWY 2931M FM START OF TORA RWY 29 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2691 (8829)</td><td>2781 (9121) (2.15)</td><td>2691 (8829)</td><td>2631 (8632)</td></tr><tr><td>29</td><td>2631 (8632)</td><td>2691 (8829) (2.0)</td><td>2631 (8632)</td><td>2631 (8632)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 2410 (7907) (1.6) 2626 (8616) (1.9) RWY 29 2610 (8563) (1.6) 2678 (8786) (1.9) RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 29 DIST TO RUN MARKERS U/S WHEN 11 THR DISPLACED RWY 29 TWY D, E1 AND E2 TKOF RUN AVBL SIGNS U/S WHEN 11 THR DISPLACED TWY A1, E1 CLOSED ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 16</p>					RWY	TORA	TODA	ASDA	LDA	11	2691 (8829)	2781 (9121) (2.15)	2691 (8829)	2631 (8632)	29	2631 (8632)	2691 (8829) (2.0)	2631 (8632)	2631 (8632)
RWY	TORA	TODA	ASDA	LDA															
11	2691 (8829)	2781 (9121) (2.15)	2691 (8829)	2631 (8632)															
29	2631 (8632)	2691 (8829) (2.0)	2631 (8632)	2631 (8632)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)																			
	<p>RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision). RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 AND Z WEST OF TWY V1 MARKED WITH BLUE EDGE LGT TO ACCESS RWY 11/29</p>																		

### 3.11 RTAO - Stage 17A

Planned dates	15-Jul-24 to 4-Aug-24	Drawing	ANNEX B – STAGE 17A
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2721m 11 RWY 2781m
Zones	On-pavement: 8 Off-pavement (drainage): F, H Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works. (0600 – 1900 Local 2030 - 0930 UTC when Stage 17A is concurrent with Stage 17B)
Activities	<ul style="list-style-type: none"><li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>Installation of associated drainage.</li><li>Flank regrading and AGL secondary trenching.</li><li>HIAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 723m / 573m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 17A.		
Taxiways	Taxiway A1 closed, north of TWY W.		
Aircraft type restrictions	RWY29 intersection departure from TWY D available (with new RDS data).  RWY29 intersection departure from TWY E1 and E2 available to Light Single Engine Aircraft Only.  RWY29 intersection departure from TWY B1 and B2 not available.		

3.11.1 RTAO - Stage 17A NOTAM

Stage 17A NOTAM																			
<p>THR RWY 11 DISPLACED 723M DUE WIP RWY 11/29 OPR LEN REDUCED BY 573M WESTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 17FT AGL ON RWY 3021M FM START OF TORA RWY 29 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2781 (9124)</td><td>2871 (9412) (2.15)</td><td>2781 (9124)</td><td>2631 (8632)</td></tr><tr><td>29</td><td>2721 (8927)</td><td>2781 (9124) (2.0)</td><td>2721 (8927)</td><td>2721 (8927)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 2500 (8202) (1.6) 2716 (8911) (1.9) RWY 29 2710 (8891) (1.6) 2766 (9075) (1.9)</p> <p>RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 29 DIST TO RUN MARKERS U/S WHEN 11 THR DISPLACED RWY 29 TWY D, E1 AND E2 TKOF RUN AVBL SIGNS U/S WHEN 11 THR DISPLACED TWY A1 CLOSED</p> <p>ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 17A</p>					RWY	TORA	TODA	ASDA	LDA	11	2781 (9124)	2871 (9412) (2.15)	2781 (9124)	2631 (8632)	29	2721 (8927)	2781 (9124) (2.0)	2721 (8927)	2721 (8927)
RWY	TORA	TODA	ASDA	LDA															
11	2781 (9124)	2871 (9412) (2.15)	2781 (9124)	2631 (8632)															
29	2721 (8927)	2781 (9124) (2.0)	2721 (8927)	2721 (8927)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)		<p>RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision). RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X</p>																	

### 3.12 RTAO - Stage 17B

<b>Planned dates</b>	15-Jul-24 to 4-Aug-24	<b>Drawing</b>	ANNEX B – STAGE 17B
<b>Phase</b>	Main Construction	<b>RWY 11-29 TORA</b>	29 RWY 2721m 11 RWY 2781m
<b>Zones</b>	On-pavement: Zone 8 and select RWY 18-36 locations as per Drawing for Stage 17B Off-pavement (drainage): F, H Off-pavement (AGL): E	<b>Shift timing</b>	During Stage 17B RTS (1900 to 0600 Local). All other times, revert to Stage 17A 29 RWY 2721m 11 RWY 2781m
<b>Activities</b>	<ul style="list-style-type: none"><li>• Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li><li>• Maintenance pavement works to RWY 18/36 as per the locations marked in the Stage 17B Drawing.</li><li>• HIAL demolition and installation of new.</li></ul>		
<b>Restrictions: Manoeuvring Area</b>			
<b>Runways</b>	DTHR11 by 723m / 573m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 17B.  Runway 18/36 closed.		
<b>Taxiways</b>	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed.		
<b>Aircraft type restrictions</b>	RWY29 intersection departure from TWY D available (with new RDS data).  RWY29 intersection departure from TWY E1 and E2 available to Light Single Engine Aircraft Only.  RWY29 intersection departure from TWY B1 and B2 not available.		

### 3.12.1 RTAO - Stage 17B NOTAM

Stage 17B NOTAM																
<p>THR RWY 11 DISPLACED 723M DUE WIP RWY 11/29 OPR LEN REDUCED BY 573M WESTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 17FT AGL ON RWY 3021M FM START OF TORA RWY 29 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2781 (9124)</td><td>2871 (9412) (2.15)</td><td>2781 (9124)</td><td>2631 (8632)</td></tr><tr><td>29</td><td>2721 (8927)</td><td>2781 (9124) (2.0)</td><td>2721 (8927)</td><td>2721 (8927)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 2500 (8202) (1.6) 2716 (8911) (1.9) RWY 29 2710 (8891) (1.6) 2766 (9075) (1.9)</p> <p>RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 29 DIST TO RUN MARKERS U/S WHEN 11 THR DISPLACED RWY 29 TWY D, E1 AND E2 TKOF RUN AVBL SIGNS U/S WHEN 11 THR DISPLACED TWY A1, C3, AND C4 CLOSED</p> <p>ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 17B</p>		RWY	TORA	TODA	ASDA	LDA	11	2781 (9124)	2871 (9412) (2.15)	2781 (9124)	2631 (8632)	29	2721 (8927)	2781 (9124) (2.0)	2721 (8927)	2721 (8927)
RWY	TORA	TODA	ASDA	LDA												
11	2781 (9124)	2871 (9412) (2.15)	2781 (9124)	2631 (8632)												
29	2721 (8927)	2781 (9124) (2.0)	2721 (8927)	2721 (8927)												
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	<p>RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision). RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X</p>															
Stage 17B NOTAM																
<p>RWY 18/36 CLOSED DUE WIP TWY C1 CLOSED REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 17B</p>																
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	<p>Section of RWY 18/36 between RWY 11/29 and TWY A marked with Blue edge lights</p>															

### 3.13 RTAO - Stage 18

Planned dates	4-Aug-24 to 28-Aug-24	Drawing	ANNEX B – STAGE 18
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2631m 11 RWY 2691m
Zones	On-pavement: 7, 8 Off-pavement (drainage): F, H, I Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works. (1130-0200 Local). 0200-1630 UTC when Stage 18 is concurrent with Stage 19A and Stage 19B)
Activities	<ul style="list-style-type: none"><li>Removal and reconstruction of Runway 11-29 pavement at the Western end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>Installation of associated drainage.</li><li>Flank regrading and AGL secondary trenching.</li><li>HIAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 723m / 663m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 18.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway B1 closed.		
Aircraft type restrictions	RWY29 intersection departure from TWY D available (with new RDS data).  RWY29 intersection departure from TWY E1 and E2 available to Light Single Engine Aircraft Only.  RWY29 intersection departure from TWY B1 and B2 not available.		

3.13.1 RTAO - Stage 18 NOTAM

Stage 18 NOTAM																			
<p>THR RWY 11 DISPLACED 723M DUE WIP RWY 11/29 OPR LEN REDUCED BY 663M WESTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 15FT AGL ON RWY 2931M FM START OF TORA RWY 29 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2691 (8829)</td><td>2781 (9121) (2.15)</td><td>2691 (8829)</td><td>2631 (8632)</td></tr><tr><td>29</td><td>2631 (8632)</td><td>2691 (8829) (2.0)</td><td>2631 (8632)</td><td>2631 (8632)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 2410 (7907) (1.6) 2626 (8616) (1.9) RWY 29 2610 (8563) (1.6) 2678 (8786) (1.9) RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 29 DIST TO RUN MARKERS U/S WHEN 11 THR DISPLACED RWY 29 TWY D, E1 AND E2 TKOF RUN AVBL SIGNS U/S WHEN 11 THR DISPLACED TWY A1, B1 CLOSED ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 18</p>					RWY	TORA	TODA	ASDA	LDA	11	2691 (8829)	2781 (9121) (2.15)	2691 (8829)	2631 (8632)	29	2631 (8632)	2691 (8829) (2.0)	2631 (8632)	2631 (8632)
RWY	TORA	TODA	ASDA	LDA															
11	2691 (8829)	2781 (9121) (2.15)	2691 (8829)	2631 (8632)															
29	2631 (8632)	2691 (8829) (2.0)	2631 (8632)	2631 (8632)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision).																		
	RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 AND Z WEST OF TWY V1 MARKED WITH BLUE EDGE LGT TO ACCESS RWY 11/29																		



### 3.14 RTAO - Stage 19A

Planned dates	4-Aug-24 to 11-Aug-24	Drawing	ANNEX B – STAGE 19A
Phase	Main Construction	RWY 11-29 TORA	During Stage 19A RTS: 29 RWY 1420m 11 RWY 1480m
Zones	On-pavement: 4-2, 4-3, 4-4, 4-5, 4-6, 5, 7, 8 Off-pavement (drainage): F, H, I Off-pavement (AGL): E	Shift timing	During Stage 19A RTS (0200 to 1130 Local). All other times, revert to Stage 18 29 RWY 2631m 11 RWY 2691m
Activities	<b>Stage 19A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</b> <ul style="list-style-type: none"><li>• Works in Stage 19A include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li><li>• HIAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway V2 closed. Taxiway B1 closed. Taxiway B2 closed. Taxiway E1 closed. Taxiway E2 closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

3.14.1 RTAO - Stage 19A NOTAM

Stage 19A NOTAM																			
<p>THR RWY 11 DISPLACED 1934M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1874M DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY IDENT LGT HJ, PILOT MNT OBST 15FT AGL 1612M FM START OF TORA RWY 29</p> <p>REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>1480 (4856)</td><td>1570 (5151) (2.15)</td><td>1480 (4856)</td><td>1420 (4659)</td></tr><tr><td>29</td><td>1420 (4659)</td><td>1480 (4856) (4.0)</td><td>1420 (4659)</td><td>1420 (4659)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST:</p> <p>RWY 11 1199 (3934) (1.6) 1415 (4642) (1.9) RWY 29 1199 (3934) (1.6) 1274 (4180) (1.9) 1337 (4387) (2.2) 1381 (4531) (2.5) 1450 (4757) (3.3)</p> <p>RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT</p> <p>RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M TWY A1, B1, B2, E1, E2, V2 AND T CLOSED</p> <p>INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 19A</p>					RWY	TORA	TODA	ASDA	LDA	11	1480 (4856)	1570 (5151) (2.15)	1480 (4856)	1420 (4659)	29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)
RWY	TORA	TODA	ASDA	LDA															
11	1480 (4856)	1570 (5151) (2.15)	1480 (4856)	1420 (4659)															
29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)																			
	<p>RWY 11/29 Reclassified Code 2 Runway Non-Instrument RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 AND Z WEST OF TWY V1 MARKED WITH BLUE EDGE LGT TO ACCESS RWY 11/29</p>																		

### 3.15 RTAO - Stage 19B

Planned dates	12-Aug-24 to 28-Aug-24	Drawing	ANNEX B – STAGE 19B
Phase	Main Construction	RWY 11-29 TORA	During Stage 19B RTS: 29 RWY 1643m 11 RWY 1690m
		RWY 18-36 TORA	18 RWY 990m
Zones	On-pavement: 4-4, 4-5, 4-6, 5, 6, 7, 8 Off-pavement (drainage): F, H, I Off-pavement (AGL): E	Shift timing	During Stage 19B RTS (0200 to 1130 Local. All other times, revert to Stage 18 29 RWY 2631m 11 RWY 2691m
Activities	<b>Stage 19B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</b> <ul style="list-style-type: none"><li>• Works in Stage 19B include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li><li>• HIAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runway 11-29	DTHR11 by 1934m / 1651m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
Runway 18-36	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 closed. Taxiway V2 closed. Taxiway B1 closed. Taxiway B2 closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

### 3.15.1 RTAO - Stage 19B NOTAM

Stage 19B NOTAM																
<p>THR RWY 11 DISPLACED 1934M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1651M DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY IDENT LGT HJ, PILOT MNT OBST 18FT AGL 1823M FM START OF TORA RWY 29</p> <p>REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>1690 (5545)</td><td>1780 (5840) (2.15)</td><td>1690 (5545)</td><td>1420 (4659)</td></tr><tr><td>29</td><td>1643 (5391)</td><td>1703 (5587) (4.0)</td><td>1643 (5391)</td><td>1643 (5391)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST:</p> <p>RWY 11 1409 (4623) (1.6) 1625 (5332) (1.9) RWY 29 1479 (4852) (1.6) 1559 (5115) (1.9) 1604 (5262) (2.2) 1633 (5358) (2.5) 1679 (5509 ) (3.3)</p> <p>RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT</p> <p>RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M TWY A1, C3, C4, B1, B2, V2, AND T CLOSED</p> <p>INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 19B</p>		RWY	TORA	TODA	ASDA	LDA	11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)	29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)
RWY	TORA	TODA	ASDA	LDA												
11	1690 (5545)	1780 (5840) (2.15)	1690 (5545)	1420 (4659)												
29	1643 (5391)	1703 (5587) (4.0)	1643 (5391)	1643 (5391)												
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	<p>RWY 11/29 Reclassified Code 2 Runway Non-Instrument RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X</p>															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	<p>RWY 18/36 REDUCED LENGTH CODE 2 NON-INSTRUMENT RWY 18 DEPARTURES RWY 36 ARRIVALS</p>															
Stage 19B NOTAM																
<p>RWY 18/36 CLOSED DUE WIP TWY C1 CLOSED REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 19B</p>																
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	<p>TWY C4 AVBL FOR ENG RUN AND COMPASS SWING</p>															

### 3.16 RTAO - Stage 20

Planned dates	29-Aug-24 to 18-Oct-24	Drawing	ANNEX B – STAGE 20
Phase	Main Construction	RWY 11-29 TORA	During Stage 20 RTS: 29 RWY 1481m 11 RWY 1421m
Zones	On-pavement: 4-2, 4-1, 3, 2, 1 Off-pavement (drainage): C, B, A, I Off-pavement (AGL): E	Shift timing	During Stage 20 RTS (0200 to 1130 Local). All other times, revert to Stage 21 29 RWY 2480m 11 RWY 2420m
Activities	<b>Stage 20 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 21.</b> <ul style="list-style-type: none"><li>• Works in Stage 20 include the asphalt overlay of the existing Runway 11-29 pavement, inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>• Installation of associated drainage.</li><li>• Flank regrading and AGL secondary trenching.</li><li>• HIAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR29 by 1933m / 1873m E END RWY 11/29 CLOSED DTHR29 at CH1421. Temp Displaced Threshold at the RWY 29 end for RTS times only.		
Taxiways	Taxiway A6 closed, east of the FRA. Taxiway D closed. Taxiway E1 closed. Taxiway E2 closed. Taxiway B1 closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.  RWY11 Intersection departures from TWY C3 & C4 available to Light Single Engine Aircraft only.		

3.16.1 RTAO - Stage 20 NOTAM

Stage 20 NOTAM																			
<p>THR RWY 29 DISPLACED 1933M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1873M E END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 15 FT AGL ON RWY 1611M FM START OF TORA RWY 11 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>RWY 11</td><td>1421 (4662)</td><td>1481 (4859) (4.0)</td><td>1421 (4662)</td><td>1421 (4662)</td></tr><tr><td>RWY 29</td><td>1481 (4859)</td><td>1571 (5154) (1.2)</td><td>1481 (4859)</td><td>1421 (4662)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 1238 (4061) (1.6) 1294 (4245) (1.9) 1343 (4406) (2.2) 1385 (4541) (2.5) 1448 (4751) (3.33) ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR RWY 29 DISPLACED 1933M RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 29 PAPI NOT AVBL WHEN THR DISPLACED RWY 29 TEMPO PAPI AVBL LH SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 11 DIST TO RUN MARKERS READ INCORRECTLY WHEN 29 THR DISPLACED RWY 11 TWY B1, B2, E1, E2, C3 AND C4 TKOF RUN AVBL SIGNS READ INCORRECTLY WHEN 29 THR DISPLACED TWY A6, D, B1, E1 AND E2 CLOSED  INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 20</p>					RWY	TORA	TODA	ASDA	LDA	RWY 11	1421 (4662)	1481 (4859) (4.0)	1421 (4662)	1421 (4662)	RWY 29	1481 (4859)	1571 (5154) (1.2)	1481 (4859)	1421 (4662)
RWY	TORA	TODA	ASDA	LDA															
RWY 11	1421 (4662)	1481 (4859) (4.0)	1421 (4662)	1421 (4662)															
RWY 29	1481 (4859)	1571 (5154) (1.2)	1481 (4859)	1421 (4662)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	RWY 11/29 Reclassified as a Code 2 Runway Non-Instrument																		
	Refer Airservices NOTAM published notifying ILS GP 'IDN' 333.2 RWY 29 U/S DUE DTHR																		
	RWY 11/29 EASTERN HOOKCABLE NOT AVBL WHEN 29 THR DISP TWY A6 AVBL BETWEEN TWY D AND FRA FOR MIL ACFT																		

### 3.17 RTAO - Stage 21A

<b>Planned dates</b>	25-Oct-24 to 27-Oct-24	<b>Drawing</b>	ANNEX B – STAGE 21A
<b>Phase</b>	Cut Over	<b>RWY 11-29 TORA</b>	29 RWY 2480m 11 RWY 2420m
<b>Zones</b>	On-pavement: 1, 2 Off-pavement (drainage): A, B, I Off-pavement (AGL): E	<b>Shift timing</b>	Non-RTS, 24/7 works.
<b>Activities</b>	Ground Checks and Flight Checks of the newly installed (unpowered) Runway 11-29 Airfield Ground Lighting system and the Cut Over to the 45m width AGL system.  Initially, the medium intensity runway lighting system will operate until the high intensity runway lights can be cut over to the new 45m AGL. Indicatively this will take a period of up to two (2) calendar days.		
<b>Restrictions: Manoeuvring Area</b>			
<b>Runways</b>	DTHR29 by 1046m / 874m E END RWY 11/29 CLOSED. DTHR29 at CH2308. Temp Displaced Threshold at the RWY 29 end during the entirety of Stage 21A.		
<b>Taxiways</b>	Taxiway A6 closed, east of the FRA. Taxiway B1 closed.		
<b>Aircraft type restrictions</b>	RWY11 Intersection Departures from TWY E1 & E2 Not available.  RWY11 Intersection Departures from TWY B1 & B2 available to Light Single Engine Aircraft only.		

3.17.1 RTAO - Stage 21A NOTAM

Stage 21A NOTAM																			
<p>THR RWY 29 DISPLACED 1046M DUE WIP RWY 11/29 OPR LEN REDUCED BY 874M EASTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 16 FT AGL ON RWY 2720M FM START OF TORA RWY 11 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2420 (7949)</td><td>2480 (8137) (2.0)</td><td>2420 (7949)</td><td>2420 (7949)</td></tr><tr><td>29</td><td>2480 (8137)</td><td>2570 (8432) (1.2)</td><td>2480 (8137)</td><td>2308 (7573)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 2416 (7926) (1.6) 2469 (8100) (1.9) ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR DISPLACED 1046M RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 29 PAPI NOT AVBL WHEN THR DISPLACED RWY 20 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LIGHTS AND TEMPO PAPI PILOT MNT RWY 11 DIST TO RUN MARKERS NOT AVBL WHEN 29 THR DISPLACED RWY 11 TWY B1, B2, E1, E2, C3 AND C4 TKOF RUN AVBL SIGNS NOT AVBL WHEN 29 THR DISPLACED TWY A6, B1 CLOSED ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 21A</p>					RWY	TORA	TODA	ASDA	LDA	11	2420 (7949)	2480 (8137) (2.0)	2420 (7949)	2420 (7949)	29	2480 (8137)	2570 (8432) (1.2)	2480 (8137)	2308 (7573)
RWY	TORA	TODA	ASDA	LDA															
11	2420 (7949)	2480 (8137) (2.0)	2420 (7949)	2420 (7949)															
29	2480 (8137)	2570 (8432) (1.2)	2480 (8137)	2308 (7573)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)		All works Stage 21A will be carried out under the NOTAM issued for Stage 21.																	



### 3.18 RTAO - Stage 21

Planned dates	29-Aug-24 to 12-Nov-24	Drawing	ANNEX B – STAGE 21
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2480m 11 RWY 2420m
Zones	On-pavement: 1, 2 Off-pavement (drainage): A, B, I Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works.
Activities	<ul style="list-style-type: none"><li>Removal and reconstruction of Runway 11-29 pavement (29 Threshold) at the Eastern end inclusive of the reinstatement of Runway 11-29 AGL lighting and installation of new AGL lighting to suit the cut-over to 45m width.</li><li>Installation of associated drainage.</li><li>Flank regrading and AGL secondary trenching.</li><li>HIAL demolition and installation of new.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR29 by 1046m / 874m E END RWY 11/29 CLOSED. DTHR29 at CH2308. Temp Displaced Threshold at the RWY 29 end during the entirety of Stage 21.		
Taxiways	Taxiway A6 closed, east of the FRA. Taxiway B1 closed.		
Aircraft type restrictions	RWY11 Intersection Departures from TWY E1 & E2 Not available.  RWY11 Intersection Departures from TWY B1 & B2 available to Light Single Engine Aircraft only.		

3.18.1 RTAO - Stage 21 NOTAM

Stage 21 NOTAM																			
<p>THR RWY 29 DISPLACED 1046M DUE WIP RWY 11/29 OPR LEN REDUCED BY 874M EASTERN END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 16 FT AGL ON RWY 2720M FM START OF TORA RWY 11 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>2420 (7949)</td><td>2480 (8137) (2.0)</td><td>2420 (7949)</td><td>2420 (7949)</td></tr><tr><td>29</td><td>2480 (8137)</td><td>2570 (8432) (1.2)</td><td>2480 (8137)</td><td>2308 (7573)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 2416 (7926) (1.6) 2469 (8100) (1.9) ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR DISPLACED 1046M RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 29 PAPI NOT AVBL WHEN THR DISPLACED RWY 20 TEMPO PAPI AVBL 3.0 DEG 52FT RWY THR IDENT LIGHTS AND TEMPO PAPI PILOT MNT RWY 11 DIST TO RUN MARKERS NOT AVBL WHEN 29 THR DISPLACED RWY 11 TWY B1, B2, E1, E2, C3 AND C4 TKOF RUN AVBL SIGNS NOT AVBL WHEN 29 THR DISPLACED TWY A6, B1 CLOSED ALTERNATE APCH PROCEDURES IN PROGRESS SEPARATE NOTAM REFERS OTHER INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY ADVISE DN APCH ON FIRST CTC OF APCH INTENTIONS REFER METHOD OF WOTKING PLAN YPDN 23/02 STAGE 21</p>					RWY	TORA	TODA	ASDA	LDA	11	2420 (7949)	2480 (8137) (2.0)	2420 (7949)	2420 (7949)	29	2480 (8137)	2570 (8432) (1.2)	2480 (8137)	2308 (7573)
RWY	TORA	TODA	ASDA	LDA															
11	2420 (7949)	2480 (8137) (2.0)	2420 (7949)	2420 (7949)															
29	2480 (8137)	2570 (8432) (1.2)	2480 (8137)	2308 (7573)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	RWY 11/29 remains Code 4 Runway (Instrument/Non-Precision).																		
	Refer Airservices NOTAM published notifying ILS GP 'IDN' 333.2 RWY 29 U/S DUE DHTR																		
	RWY 11/29 EASTERN AAS NOT AVBL WHEN 29 THR DISPLACED																		
	TWY A6 AVBL BETWEEN TWY D AND FRA FOR MIL ACFT																		

### 3.19 RTAO - Stage 22

Planned dates	13-Nov-24 to 20-Dec-24 6-Jan-25 to 29-Jan-25	Drawing	ANNEX B – STAGE 22
Phase	Grooving	RWY 11-29 TORA	During Stage 15 RTS 29 RWY 1420m 11 RWY 1480m  At all other times the full Runway 11-29 TORA will be available.
Zones	On-pavement: 5, 4-6, 4-5, 4-4, 4-3, 4-2 Off-pavement (drainage): n/a Off-pavement (AGL): E	Shift timing	13-Nov-24 to 9-Dec-24 RTS (0145 - 0545 Local)  9-Dec-24 to 20-Dec-24 RTS (0145 – 0445 Local) or RTS (0145 - 0545 Local) depending on the day of the week as per NOTAM  6-Jan-25 to 29-Jan-25 RTS (0145 – 0445 Local)
Activities	<ul style="list-style-type: none"><li>• Works in Stage 22 include grooving inclusive of line marking reinstatement.</li><li>• Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 1934m / 1874m W END RWY 11/29 CLOSED DTHR11 at CH1934. Temp Displaced Threshold at the RWY 11 end for RTS times only.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway V2 closed. Taxiway B1 closed. Taxiway B2 closed. Taxiway E1 closed. Taxiway E2 closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.		

3.19.1 RTAO - Stage 22 NOTAM

Stage 22 NOTAM																
<p>THR RWY 11 DISPLACED 1934M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1874M DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY IDENT LGT HJ, PILOT MNT OBST 15FT AGL 1612M FM START OF TORA RWY 29</p> <p>REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>11</td><td>1480 (4856)</td><td>1570 (5151) (2.15)</td><td>1480 (4856)</td><td>1420 (4659)</td></tr><tr><td>29</td><td>1420 (4659)</td><td>1480 (4856) (4.0)</td><td>1420 (4659)</td><td>1420 (4659)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST:</p> <p>RWY 11 1199 (3934) (1.6) 1415 (4642) (1.9) RWY 29 1199 (3934) (1.6) 1274 (4180) (1.9) 1337 (4387) (2.2) 1381 (4531) (2.5) 1450 (4757) (3.3)</p> <p>RWY 11 TAKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 11 PAPI U/S WHEN THR DISPLACED RWY 11 TEMPO PAPI AVBL LEFT SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT</p> <p>RWY 29 DIST TO RUN MARKERS READ INCORRECTLY WHEN 11 THR DISPLACED RWY 29 TWY D TKOFF RUN AVBL SIGN U/S WHEN 11 THR DISPLACED 1934M TWY A1, B1, B2, E1, E2 AND V2 CLOSED</p> <p>INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 22</p>		RWY	TORA	TODA	ASDA	LDA	11	1480 (4856)	1570 (5151) (2.15)	1480 (4856)	1420 (4659)	29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)
RWY	TORA	TODA	ASDA	LDA												
11	1480 (4856)	1570 (5151) (2.15)	1480 (4856)	1420 (4659)												
29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)												
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	<p>RWY 11/29 Reclassified as Code 2 Non-Instrument RWY 11/29 WESTERN AAS NOT AVBL WHEN 11 THR DISPLACED TWY A1 AVBL MIL ACFT FOR ACCESS TO TWY W AND X TWY C4 AND Z WEST OF TWY V1 MARKED WITH BLUE EDGE LGT TO ACCESS RWY 11/29</p>															

### 3.20 RTAO - Stage 23

Planned dates	30-Jan-25 to 31-Mar-25	Drawing	ANNEX B – STAGE 23
Phase	Grooving	RWY 11-29 TORA	During Stage 23 RTS 29 RWY 1481m 11 RWY 1421m  At all other times the full Runway 11-29 TORA will be available.
Zones	On-pavement: 4-2, 4-1, 3, 2, 1 Off-pavement (drainage): n/a Off-pavement (AGL): E	Shift timing	RTS (0145 – 0445 Local)
Activities	<ul style="list-style-type: none"><li>Works in Stage 23 include grooving inclusive of line marking reinstatement.</li><li>Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights.</li></ul>		
Restrictions: Manoeuvring Area			
Runways	DTHR29 by 1933m / 1873m E END RWY 11/29 CLOSED DTHR29 at CH1421. Temp Displaced Threshold at the RWY 29 end for RTS times only.		
Taxiways	Taxiway A6 closed, east of the FRA. Taxiway D closed. Taxiway E1 closed. Taxiway E2 closed. Taxiway T closed.		
Aircraft type restrictions	Aircraft operations above Code 2 at discretion of the aircraft operator.  RWY11 Intersection Departures from TWY B1 & B2 Not available.  RWY11 Intersection Departures from TWY C3 & C4 available to Light Single Engine Aircraft only.		

3.20.1 RTAO - Stage 23 NOTAM

Stage 23 NOTAM																			
<p>THR RWY 29 DISPLACED 1933M DUE WIP RWY 11/29 OPR LEN REDUCED BY 1873M E END DISPLACED THR MARKED BY GREEN THR LGT EACH SIDE OF RWY HN AND RWY THR IDENT LGT HJ, PILOT MNT OBST 15 FT AGL ON RWY 1611M FM START OF TORA RWY 11 REVISED DECLARED DISTANCES</p> <table><tr><th>RWY</th><th>TORA</th><th>TODA</th><th>ASDA</th><th>LDA</th></tr><tr><td>RWY 11</td><td>1421 (4662)</td><td>1481 (4859) (4.0)</td><td>1421 (4662)</td><td>1421 (4662)</td></tr><tr><td>RWY 29</td><td>1481 (4859)</td><td>1571 (5154) (1.2)</td><td>1481 (4859)</td><td>1421 (4662)</td></tr></table> <p>SUPPLEMENTARY TKOF DIST: RWY 11 1238 (4061) (1.6) 1294 (4245) (1.9) 1343 (4406) (2.2) 1385 (4541) (2.5) 1448 (4751) (3.33) ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR RWY 29 DISPLACED 1933M RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ RWY 29 PAPI NOT AVBL WHEN THR DISPLACED RWY 29 TEMPO PAPI AVBL LH SIDE 3.0 DEG 29FT RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT RWY 11 DIST TO RUN MARKERS READ INCORRECTLY WHEN 29 THR DISPLACED RWY 11 TWY B1, B2, E1, E2, C3 AND C4 TKOF RUN AVBL SIGNS READ INCORRECTLY WHEN 29 THR DISPLACED TWY A6, D, E1 AND E2 CLOSED  INST APCH PROCEDURES AVBL TO CIRCLING MINIMA ONLY REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 23</p>					RWY	TORA	TODA	ASDA	LDA	RWY 11	1421 (4662)	1481 (4859) (4.0)	1421 (4662)	1421 (4662)	RWY 29	1481 (4859)	1571 (5154) (1.2)	1481 (4859)	1421 (4662)
RWY	TORA	TODA	ASDA	LDA															
RWY 11	1421 (4662)	1481 (4859) (4.0)	1421 (4662)	1421 (4662)															
RWY 29	1481 (4859)	1571 (5154) (1.2)	1481 (4859)	1421 (4662)															
Remarks (Details of any special restrictions and the requirements for the issue of NOTAMs)	RWY 11/29 Reclassified as a Code 2 Runway Non-Instrument																		
	Refer Aircservices NOTAM published notifying ILS GP 'IDN' 333.2 RWY 29 U/S DUE DTHR																		
	RWY 11/29 EASTERN HOOKCABLE NOT AVBL WHEN 29 THR DISP TWY A6 AVBL BETWEEN TWY D AND FRA FOR MIL ACFT																		

#### **4 DECLARED EMERGENCIES AND ADVERSE WEATHER**

All work zones can only be conducted during normal visual meteorological conditions (VMC) and will be terminated during periods of reducing visibility in accordance with Darwin Airports low visibility procedures.

The work sequence is to be managed in order to enable vacate of works site within 30 minutes with no return to operational status.

ARFF vehicles responding to a declared emergency will have access to the works site under direction of WSO.

Under the direction of Air Traffic Control (ATC), DAR ARO or Base Aviation Safety Officer (BASO), the Works Safety Officer (WSO) is responsible for instructing the works contractor to vacate the work site in the event of a declared emergency.

Note that provision of AFIS includes SARWATCH, In-Flight Emergency Response (IFER) and Alerting Services outside operational ATC hours. The AFIS controller will pass/receive emergency details as required including passing details of arriving emergency aircraft to the DIA Safety Officer and ARFF.

The WSO is to remain in contact with ATC (during operational hours) and or monitor the CTAF frequency 133.1, when ATC is not active.

Weather conditions including thunderstorms will be monitored by the WSO via BOM and / or thunderstorm alerting software.

The WSO, in consultation with the Works Contractor, will advise ATC whether reinstatement of the manoeuvring area is possible or not possible.

Works will not be carried out during periods where Low Visibility Operations are declared. All stages could be adversely affected by wet weather and may result in delays or temporary stoppages of the works.

All works are to vacate the airfield when lightning is within 5 nautical miles of the aerodrome, WSO to direct the Works Contractor.

## 5 NOTAM

The ADG Head of Airside Operations or approved delegate is responsible for approving and issuing the NOTAM for each stage of the works.

DIA will confirm that the NOTAM has been raised for the relevant stage of the works prior to the commencement.

The NOTAM per Work Stage is described in the above section, **2 RESTRICTIONS TO AIRCRAFT OPERATIONS (RTAO)**.

The actual date and time of commencement will be advised by a NOTAM, to be issued not less than 48 hours before work commences.

## 6 Return To Service Timings

During periods where the runway is displaced under RTS conditions the commencement time of the displacement has been set to ensure works are able to be conducted with minimal disruption to operators. Given the complexity of the staging and scope of works these times are fixed, with any changes to timings having impacts to the works program. The DIA Scheduling Guidelines, as published on the Airport Coordination Australia website has been amended to reflect the timings.

In the event that a late arrival/departure will be impacted by the commencement of the displacement, the decision to defer the works is at the discretion of the DoD. Upon realisation of a late arrival/departure, the operator is to notify the DIA Airport Duty Manager of the delay, this will trigger a notification process with DoD to make an assessment and ultimate decision on the displacement taking place at the scheduled timing. Operators are to be aware that any late arrival/departure may result in cancelation of inbound and/or outbound flights.



## **7 PERSONNEL AND EQUIPMENT**

### **7.1 General**

The works are to take place on and in the vicinity of aircraft manoeuvring areas and the specific requirements of this MOWP and conditions contained within CASA 07/24 – Darwin Aerodrome (Relevant Activities in Obstacle Restriction Area – Runway 11/29), together with site instructions from the Works Safety Officer (or the DIA Terminal and Airside Operations Officer) must be strictly followed at all times.

While at the work site, all vehicles, plant and personnel must remain within the limits of the designated works area. All vehicles and plant not actually engaged in the works are to be parked clear of the works and movement area in an area nominated by the Works Safety Officer.

The limits of the work areas are to be defined by row of orange road markers (non-reflective witches' hats) and lights in accordance with Part 139 MOS, across the runways or taxiways in accordance with the relevant NOTAM. The Works Organisation must not move beyond these lines.

Works are to comply with the Fulton Hogan Work Health and Safety Plan for the project, including all requirements for Personal Protective Equipment (PPE).

Smoking is not permitted airside or within any restricted areas of the aerodrome.

### **7.2 Control of Works Personnel, Security and Safety of Aircraft Operations**

All personnel associated with the work are bound by any instructions issued by the WSO, who has the right to refuse access to persons likely, in his/her opinion, to compromise aircraft safety on the airfield.

Any breaches of aviation safety and aircraft safety occurrences (not detected by the WSO) must be reported to the WSO.

The WSO must initiate an immediate response in consultation with ATC, ADG-DIA (Safety 1) and the BASO.

The BASO will prepare and submit an Aviation Safety Report (ASR) if required, and provide details to the P0009 PMCA, Defence personnel and the DIA Head of Airside.

### 7.3 Vehicles and Plant

Vehicles and plant used for these works will include various vehicles, trucks, and trailers; asphalt profiler and paver; and suction sweeper. All vehicles plant and equipment used for airside access are to be fitted with flashing beacons and use dipped headlights during nightworks. Vehicles and equipment used in these works are not to exceed the equipment maximum heights above ground level detailed in each Stage Drawing.

No movement of vehicles or plant is to take place outside the works areas or access routes without the consent of the WSO. Only vehicles and plant engaged in the work activities shall be permitted at the work site. Private vehicles will not be permitted at the airside work site.

At the end of each work period, all vehicles, plant, equipment, and material are moved clear of the works area and parked in the designated parking area.

Vehicles and self-propelled items of plant are to have vehicle warning lights as detailed in CASR MOS Part 139 Section 14.05: Airside vehicle lighting requirements.

The Works Contractor Vehicle Management Plan is to be developed and approved by DIA and RAAF Darwin prior to any works commencing.

### 7.4 Critical and Sensitive Areas - CNS Equipment

The Glide Path will be switched-off by Airservices during all works stages at the eastern end (Displaced Thresholds - RWY 29), and the Localiser will be switched-off during all works stages at the western end (Displaced Thresholds – RWY 11) and there are no restrictions for vehicles or equipment operating in the proximity of the critical and sensitive areas during the respective works stages.

### 7.5 Access to the Works and Security

Access to all works area is to be agreed with the RAAF BAEO and the WSO. Movement of vehicles, plant and equipment must be confined to designated access routes.

DIA TAOO staff may require access to the work site to conduct wildlife hazard management. These activities could include the use of flashing lights, sirens and discharge of firearms and will be conducted in consultation with the WSO.

All personnel are to have on their person and visible at all times a valid security pass issued by the RAAF Base Darwin Pass Office or equivalent in accordance with DI (AF) ADMIN 14-7 – Visits to Air Force Establishments.

Personnel are only permitted to move about the designated work areas, and only using the designated access routes. Any person detected on the site outside these limits may be evicted from the site and denied return.

All works at RAAF Base Darwin are to be conducted in accordance with:

1. DAR SI(ADMIN) 14-01 – *Visits to RAAF Base Darwin*
2. DAR SI(ADMIN) 09-10 – *Photography-imagery at RAAF Base Darwin*
3. DAR SI(LOG) 14-01 – *Request to Conduct Works*
4. DAR Aerodrome Manual – *Aerodrome works Safety/Management*

Additional instructions maybe applicable for specific works; the Contractor is to consult with the RAAF BAEO prior to undertaking works for access to the abovementioned documents.

## **7.6 Visual Ground Aids**

Markings, markers, and ground lighting are not to be installed, altered, or removed without the approval of the Works Safety Officer. Any markings or markers that are required to be moved or removed due to works in progress must be advised to the DIA Terminal and Airside Operations Officer and reinstated prior to the completion of the works shift.

Any accidental damage to the markers must immediately be reported to the Works Safety Officer and to the DIA Terminal and Airside Operations Officer.

## **7.7 Works Permits**

To prevent damage to airport lighting systems and other airport facilities the Defence Personnel must obtain dig permits from the local Defence Support; contact Mr Jeff Grose, prior to undertaking any excavation on the site.

All works are to be undertaken in accordance with the P0009 Construction Environmental Management Plan (CEMP) and approved Environmental Clearance Certificate (ECC).

## **7.8 Protection of Electrical Services**

The Contractor must confirm the location of all underground services within the vicinity of the works to be undertaken. Any works on or near electrical cables must be referred to the DIA Technical Team Leader a minimum of 48 hours prior to commencement of works to arrange all necessary isolations or temporary connections.

## **7.9 Crane Permit**

A permit must be obtained prior to erection of any crane on airport and/or use of equipment that will exceed the equipment maximum heights above ground level detailed in each Stage Drawing.

Applications for approval must be sent to [airportoperations@ntairports.com.au](mailto:airportoperations@ntairports.com.au)

### **7.10 Other Restrictions**

All loose material and equipment must be secured against movement in strong winds or aircraft propeller wash or jet blast.

Any damage to aerodrome facilities or property must be reported immediately to the Works Safety Officer and the DIA Terminal and Airside Operations Officer.

Personnel and equipment may need to partially withdraw from a work area to avoid propeller wash or jet blast from a departing or passing aircraft. The Works Safety Officer will direct the Works Contractor to vacate to a safe working distance before aircraft movement.

### **7.11 Environmental**

Environmental impacts have been assessed with controls documented within the Fulton Hogan P0009 Construction Environmental Management Plan (CEMP), approved Environmental Clearance Certificate (ECC) and the DIA / RAAF Base Darwin Wildlife Hazard Management Plan.

### **7.12 Foreign Object Debris (FOD) Control**

The Works Contractor is to ensure that aircraft pavements used or crossed during the works are kept clean and free of debris. Any debris is to be immediately removed by the Works Contractor to the satisfaction of the WSO.

All loose material and equipment are to be secured against movement in strong winds or aircraft blast. Measures shall be taken at all times for control of dust or other nuisance materials and the Works Contractor shall immediately respond to any direction by the DIA Terminal and Airside Operations Officer, WSO, BAEO or BASO to eliminate any problem. The Works Contractor is responsible for implementing appropriate control measures.

On completion of each work period where airfield movement areas are required to be returned to active use, the Works Contractor is to ensure the works area is made serviceable, including the removal of all FOD hazards, to the satisfaction of the WSO.

Prior to vacating the work site when returning a works area back to service, a joint inspection will occur inclusive of a DIA representative, RAAF Darwin representative and the WSO at the end of each shift. Following the joint written approval of the suitability of the works area for aircraft activity, the Works Contractor will vacate the work site.

## **8 AERODROME MARKERS, MARKINGS and LIGHTS**

The works contractor shall mark, paint, and light the unserviceable areas of the airfield affected by the works in accordance with the requirements of CASA Part 139 MOS – Aerodromes and this will be reviewed by RAAF Base Darwin / Darwin International Airport.

The Works Contractor is responsible for deploying and removing all AGL, works limit markings (non-reflective orange witches' hats) and temporary runway end markers (red and white cones).

The works contractor is responsible for deploying and removing 36m high unserviceability markers (white crosses) for the temporary runway closures and displaced thresholds.

Aerodrome markers, markings, and lights (visual aids) associated with this MOWP are detailed in the following subsections. All markers are to be appropriately secured against jet blast and or high winds.

### **8.1 Unserviceability Markers**

Closed portions of the manoeuvring area will be marked by red and white unserviceability markers (refer to CASA Part 139 MOS Section 8.108) during the day, and red lights at night.

Unserviceability markers for the runway (white crosses) are recommended by CASA Part 139 MOS at international and frequent aircraft movement aerodromes. These will accompany the temporary runway threshold displacements for RWY 11-29 and partial runway closures of RWY 11-29.

### **8.2 Works Limit Markers**

The limit of works is marked with Works limit markers – non-reflective orange witches' hats (and orange lights at night). The installation of the Works Limits markers is the responsibility of the Works Contractor. All personnel (and equipment) must remain within the designated works area, this includes when working in the runway strip.

A clearance from ATC when active or broadcast on CTAF when ATC not active, to enter the runway is required to proceed past the limit of works markers and/or lights, this includes to access the portion of the runway between the limit of works and the red and white cones.

### **8.3 Lighting**

All lighting within and directly leading into the closed portion of the manoeuvring area will be obscured or extinguished by the Works Contractor as instructed by the WSO. The contractor shall make sure not obscure or move any temporary runway or taxiway lighting associated with the works.

#### **8.4 RWY 11-29 Temporary Displaced Thresholds**

Temporary displaced threshold markings ("Vee-bars") are not required for the displacement of RWY 29 threshold which are indicated with Runway Threshold Identification Lights (RTIL) for scheduled international transport operations which is in accordance with Part 139 (Aerodromes), MOS Section 8.27(3).

RTIL must be placed as detailed in CASA Part 139 MOS Section 9.59 (5) will be used to identify temporarily displaced thresholds (green threshold lights each side of the runway at night).

#### **8.5 RWY 11-29 Temporary PAPIs**

Temporary PAPI wing bars (double-sided PAPI's) shall be installed for non-RTS Stages as per CASA Part 139 MOS Section 9.44, to service the agreed runway threshold displacements for RWY 11-29, with runway threshold displacements as stated in preceding sections of this MOWP.

Temporary PAPI wing bar (single-sided PAPI) shall be installed for non-RTS Stages as per CASA Part 139 MOS Section 9.44 (3)(4), when there is a physical obstruction and a double-sided PAPI is not reasonably practical to be installed.

Temporary PAPI wing bars (single-sided PAPI's) shall be installed for RTS Stages as per CASA Part 139 MOS Section 9.44, to service the agreed runway threshold displacements for RWY 11-29, with runway threshold displacements as stated in preceding sections of this MOWP.

The location of the temporary PAPI wing bars is indicated on the drawings included in Appendix B.

The deployment of the temporary PAPI wing bars shall be by the Works Contractor, with the necessary survey associated with the deployment of the wing bar to be arranged by the Works Contractor.

#### **8.6 Works within the Runway Strip**

Works within the Runway 11-29 Strip are only to occur in accordance with CASA 07/24 – Darwin Aerodrome (Relevant Activities in Obstacle Restriction Area – Runway 11/29) and as detailed in the Stage's work extents, Stage's working times, and maximum vehicle heights.

Works within the Runway 18-36 Strip will remain clear of the transitional surfaces at all times, subject to WSO approval.

## 9 ADMINISTRATION

### 9.1 Design Consultant (DC)

The Design Consultant for P0009 is **Aurecon Australasia Pty Limited (Aurecon)**. The Works Organisation and WSO are subsequently sub-contractors as per sub-contractor agreements.

The DC Consultant's Representative for P0009 is Mr Tim Meinecke [not on site]. The DC's on-site Representative is included in the table in section **7.6 Contact Details**.

The Design Consultant's Representative may be contacted on the following numbers:

Mobile: +61 425 794 411

Email: [tim.meinecke@aurecongroup.com](mailto:tim.meinecke@aurecongroup.com)

### 9.2 Works Organisation / Contractor

The Contractor's Project Manager will be Mr Edward Callaghan (Mobile: 0439 281 658)

The Contractor's Works Manager will be Mr Dayne Clarke (Mobile: 0429 000 743)

The Fulton Hogan duty phone number will be (Mobile: 0499 573 099)

The Contractor's Works Manager or his/her delegate must be present on site during all work periods and is responsible for complying with the requirements of this MOWP.

All contact, with the Base, by the Contractor, in relation to the work, is to include PMCA and the E&IG Project Officer.

### 9.3 Project Manager Contract Administrator (PMCA)

The PMCA for P0009 is Mr Pete Muir [not on site].

The PMCA may be contacted on the following numbers:

Mobile: +61 401 348 371

Email: [pete.muir@beca.com](mailto:pete.muir@beca.com)

The PMCA's on-site Representative is included in the table in section **7.6 Contact Details**.

## 9.4 Works Safety Officer

The nominated Works Safety Officers (WSOs) for these works will be from Oz Airports and Tarmac Aerodrome Operations.

The Tarmac Aerodrome Operations lead WSO will be Jason Dechaineux (Mobile: 0429 467 481) and Tarmac Aerodrome Operations will be responsible for the operational safety of the works for RTS shifts.

The Oz Airports duty phone number will be (Mobile: 0483 208 157) and Oz Airports will be responsible for the operational safety of the works at all other times, including during non-RTS shifts and outside of scheduled working hours.

A joint DIA and RAAF approval process for WSOs is in place for works within the JUA. A letter is to be provided to DIA by the Base Aviation Safety Officer (BASO) to confirm that the nominated WSO has the appropriate level of training to undertake the tasks as detailed in this MOWP.

The WSO contact details are included in section **7.6 Contact Details.**

The WSO is responsible for the operational safety of the works and carrying out WSO duties in accordance with the requirements CASA MOS Part 139 13.04 Works safety officer; and 15.04 Management and Control of Aerodrome Works, CASA 07/24 – Darwin Aerodrome (Relevant Activities in Obstacle Restriction Area – Runway 11/29) and this MOWP.

The WSO must be present on site at all times while work is in progress.

The WSO must maintain radio communications with Darwin SMCV on 119.55 MHz when ATC is active in accordance with procedures agreed with RAAF ATC and monitor CTAF 133.1 when ATC not active.

The WSO must have a copy of this MOWP accessible at all times.

## 9.5 Base Aviation Safety Officer

The BASO will provide airside induction training to the personnel involved in carrying out any works on the manoeuvring areas, including competency check of WSOs involved in these works.

The BASO will be the main point of contact for any aviation safety issues during the Works.

The BASO for the works will be SQNLDR Jay Murray.



## 9.6 Contact Details

<b>RAAF Base Darwin – 13 Squadron</b>		
CO 13 Squadron SADFO	WGCDR Lauren Guest	T: 08 8974 4474 M: 0408 485 621 E: <a href="mailto:Lauren.guest@defence.gov.au">Lauren.guest@defence.gov.au</a>
Air Base Executive Officer	SQNLDR Andrew Miller	M: 0407 615 214 E: <a href="mailto:andrew.miller10@defence.gov.au">andrew.miller10@defence.gov.au</a>
Base Aviation Safety Officer	SQNLDR Jay Murray	M: 0409 669 214 E: <a href="mailto:dar.baso@defence.gov.au">dar.baso@defence.gov.au</a>
Base Airfield Engineering Officer	FLGOFF Patrick Tanner	M: 0458 134 234 E: <a href="mailto:patrick.tanner@defence.gov.au">patrick.tanner@defence.gov.au</a>
<b>RAAF ATC - 452 SQN DAR FLT</b>		
452SQN DAR FLT CDR	SQNLDR James Lee	T: 08 7929 4671 M: 0408 892 476 E: <a href="mailto:452sqndar.fltcdr@defence.gov.au">452sqndar.fltcdr@defence.gov.au</a>
452SQN DAR FLT OPS CDR	FLTLT Joshua McNickle	T: 08 7929 4817 (APP SPVR) M: 0408 809 864 E: <a href="mailto:452sqndar.opscdr@defence.gov.au">452sqndar.opscdr@defence.gov.au</a>
ATC Duty Controller	Various	T: 08 7929 4816 (TWR SPVR) E: <a href="mailto:dar.atc@defence.gov.au">dar.atc@defence.gov.au</a>
<b>CFI</b>		
Director General Capital Facilities and Infrastructure	AIRCDRE Ron Tilley	T: 02 6266 8075 M: 0467 714 744 E: <a href="mailto:ron.tilley@defence.gov.au">ron.tilley@defence.gov.au</a>
Director – National Projects	GPCAPT Adrian Carswell	T: (02) 5108 6615 M: 0448 736 766 E: <a href="mailto:adrian.carswell@defence.gov.au">adrian.carswell@defence.gov.au</a>
Project Director - National Airfield Projects	WGCDR Sunil Nayaran	M: 0451 131 844 E: <a href="mailto:sunil.nayaran1@defence.gov.au">sunil.nayaran1@defence.gov.au</a>
Senior Project Officer - National Airfields Projects	Paul Smit	T: 02 6266 8081 M: 0420 977 063 E: <a href="mailto:paul.smit@defence.gov.au">paul.smit@defence.gov.au</a>
Assistant Project Manager	Simon Ganter	T: 02 6266 8814 M: 0429 446 538 E: <a href="mailto:simon.ganter1@defence.gov.au">simon.ganter1@defence.gov.au</a>

<b>DEIC</b>		
Base Infrastructure Officer	FLTLT David Champion	M: 0400 821 116 E: <a href="mailto:david.champion2@defence.gov.au">david.champion2@defence.gov.au</a>
<b>DEEP</b>		
Senior Civil Engineer – DEEP	SQNLDR Kathleen Pearce	T: 02 6266 8207 E: <a href="mailto:adf.ces@defence.gov.au">adf.ces@defence.gov.au</a>
Assistant Director Aerodrome Policy – DEEP	Anthony Wade	T: 08 7374 1538 E: <a href="mailto:Anthony.wade1@defence.gov.au">Anthony.wade1@defence.gov.au</a>
<b>SDD</b>		
Regional Environment and Sustainability Officer	Katina Croft	M: 0409 883 566 E: <a href="mailto:Katina.croft@defence.gov.au">Katina.croft@defence.gov.au</a>
Base Manager – RAAF Base Darwin	Kerryn Luby	T: 08 7971 2853 M: 0438 630 377 E: <a href="mailto:kerryn.luby@defence.gov.au">kerryn.luby@defence.gov.au</a>
Assistant Base Manager	Diane Popple	T: 08 7971 1274 M: 0427 953 862 E: <a href="mailto:diane.popple@defence.gov.au">diane.popple@defence.gov.au</a>
<b>Darwin International Airport</b>		
Executive General Manager Operations	Rob Porter	T: 08 8920 1832 E: <a href="mailto:rob.porter@adgnt.com.au">rob.porter@adgnt.com.au</a>
Head of Airside Operations	Glen Dodds	T: 0447 572 766 E: <a href="mailto:Glen.dodds@adgnt.com.au">Glen.dodds@adgnt.com.au</a>
Airside Manager	Mike Clancy	M: 0423 797 355 E: <a href="mailto:Mike.clancy@adgnt.com.au">Mike.clancy@adgnt.com.au</a>
Aerodrome Safety & Standards Manager	Bob Calaby	M: 0402 088 163 M: <a href="mailto:Bob.calaby@adgnt.com.au">Bob.calaby@adgnt.com.au</a>
<b>Beca Consultants (PMCA)</b>		
PMCA	Pete Muir	T: 07 3117 6694 M: 0401 348 371 E: <a href="mailto:pete.muir@beca.com">pete.muir@beca.com</a>
Assistant Project Manager	Kristian Smith	M: 0404 385 389 E: <a href="mailto:kristian.smith@beca.com">kristian.smith@beca.com</a>
a/ Assistant Project Manager	Lindsay Murray	M: 0404 135 339 E: <a href="mailto:lindsay.murray@beca.com">lindsay.murray@beca.com</a>

<b>Aurecon Australasia Pty Ltd (DSC)</b>		
Consultant's Representative	Tim Meinecke	M: 0425 794 411 E: <a href="mailto:tim.meinecke@aurecongroup.com">tim.meinecke@aurecongroup.com</a>
Project Manager	James Kelleher	M: 0407 761 987 E: <a href="mailto:james.kelleher@aurecongroup.com">james.kelleher@aurecongroup.com</a>
Design Manager	Kevin Dearden	T: 03 9975 3000 M: 0438 297 771 E: <a href="mailto:kevin.dearden@aurecongroup.com">kevin.dearden@aurecongroup.com</a>
<b>Contractor – Fulton Hogan</b>		
Project Manager	Edward Callaghan	M: 0439 281 658 E: <a href="mailto:Edward.Callaghan@fultonhogan.com.au">Edward.Callaghan@fultonhogan.com.au</a>
Works Manager	Dayne Clarke	M: 0429 011 396 E: <a href="mailto:Dayne.Clarke@fultonhogan.com.au">Dayne.Clarke@fultonhogan.com.au</a>
<b>OZ Airports - Works Safety Officer (WSO)</b>		
Director	Rod Cecchini	M: 0407 721 664 E: <a href="mailto:admin@ozairports.com.au">admin@ozairports.com.au</a> <a href="mailto:rod.cecchini@ozairports.com.au">rod.cecchini@ozairports.com.au</a>
NT Manager	Simon Spence	M: 0447 544 724 E: <a href="mailto:simon.spence@ozairports.com.au">simon.spence@ozairports.com.au</a>
<b>Tarmac Aerodrome Operations (WSO)</b>		
Director	Jason Dechaineux	M: 0429 467 481 E: <a href="mailto:jason@taops.com.au">jason@taops.com.au</a>

## 9.7 Distribution

This MOWP is to be distributed to all of the persons and agencies listed in the Distribution List attached at **ANNEX A**.

10 AUTHORITY

10.1 Issue

This MOWP is issued in accordance with CASA Part 139 MOS – Aerodromes (CASA, 2019).

All work must be carried out in accordance with these documents and the specific requirements of this MOWP.

10.2 Variation



Requests or proposals to vary the MOWP, as well as queries on its content or meaning, are to be directed to the RAAF Base Representative FLGOFF Patrick Tanner and DIA Representative Glen Dodds.

10.3 Expiry

This MOWP will remain effective until 31 March 2025 unless extended by amendment.

10.4 Approval

Under the authority of the following signatures, this MOWP is approved for release.

	Digitally signed by Rob Porter Date: 2024.04.26 14:15:02 +09'30'		Digitally signed by Lauren.Guest Date: 2024.04.26 13:32:04 +09'30'
<hr/>		<hr/>	
<b>Rob Porter</b> EGM - Airports Airport Development Group		<b>WGCDR Lauren Guest</b> CO 13 Squadron RAAF Base Darwin	

## 11 ANNEX A – DISTRIBUTION LISTS

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452 SQN DAR FLT – RAAF ATC		
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FLTLT Joshua McNickle	452SQN DAR FLT OPS CDR	<a href="mailto:452SQNDAR.OPSCDR@defence.gov.au">452SQNDAR.OPSCDR@defence.gov.au</a>
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NOTAM Office, Brisbane	<a href="mailto:nof@airservicesaustralia.com">nof@airservicesaustralia.com</a>
Airservices NOC Supervisor	<a href="mailto:Asa_noc_supervisor@airservicesaustralia.com">Asa_noc_supervisor@airservicesaustralia.com</a> <a href="mailto:mowp@airservicesaustralia.com">mowp@airservicesaustralia.com</a>
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CASA Aviation Safety Advisor	<a href="mailto:PETER.BALL@casa.gov.au">PETER.BALL@casa.gov.au</a>
<b>Airlines and Other Operators</b>	
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<b>Air Frontier</b>	<a href="mailto:admin@airfrontier.com.au">admin@airfrontier.com.au</a> <a href="mailto:chiefpilot@airfrontier.com.au">chiefpilot@airfrontier.com.au</a>
<b>Air New Zealand</b>	<a href="mailto:aircraftperformance@airnz.co.nz">aircraftperformance@airnz.co.nz</a>



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<b>Alliance Airlines</b>	<a href="mailto:opscontrol@allianceairlines.com.au">opscontrol@allianceairlines.com.au</a> <a href="mailto:charterplanning@allianceairlines.com.au">charterplanning@allianceairlines.com.au</a> <a href="mailto:flightperformance@allianceairlines.com.au">flightperformance@allianceairlines.com.au</a> <a href="mailto:gorman@allianceairlines.com.au">gorman@allianceairlines.com.au</a> <a href="mailto:rbryant@allianceairlines.com.au">rbryant@allianceairlines.com.au</a> <a href="mailto:jclia@allianceairlines.com.au">jclia@allianceairlines.com.au</a>
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<b>Nautilus Helicopters</b>	<a href="mailto:aaron@morrisaviationaus.com.au">aaron@morrisaviationaus.com.au</a> <a href="mailto:barry.blacker@nautilusaviation.com.au">barry.blacker@nautilusaviation.com.au</a> <a href="mailto:tommy.smith@nautilusaviation.com.au">tommy.smith@nautilusaviation.com.au</a> <a href="mailto:emily@morrisgroup.com.au">emily@morrisgroup.com.au</a>
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<b>NT Police Air Wing</b>	<a href="mailto:AirWingSchedule.PFES@pfes.nt.gov.au">AirWingSchedule.PFES@pfes.nt.gov.au</a>
<b>Omni International</b>	<a href="mailto:groundops@oai.aero">groundops@oai.aero</a>
<b>Panasonic</b>	<a href="mailto:Luke.Briguglio@panasonic.aero">Luke.Briguglio@panasonic.aero</a>
<b>Paspaley Pearling</b>	<a href="mailto:atonkin@trepang.com.au">atonkin@trepang.com.au</a> <a href="mailto:jbolton@paspaley.com.au">jbolton@paspaley.com.au</a>
<b>Pearl Aviation</b>	<a href="mailto:dwnops@pearlav.com.au">dwnops@pearlav.com.au</a>
<b>Pearl Flight Centre</b>	<a href="mailto:pfc@paspaley.com.au">pfc@paspaley.com.au</a>
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