

DARWIN INTERNATIONAL AIRPORT

DEPARTMENT OF DEFENCE

METHOD OF WORKING PLAN

YPDN 23/02

AERODROME:	RAAF Base Darwin / Darwin International Airport
PROJECT DESCRIPTION:	P0009 - National Airfields Works at RAAF Base Darwin - Package 1 - RWY 11-29 Reconstruction
DATES:	
Approval of MOWP	31 July 2023
Revision Date	03 June 2024
Commencement of works	15 August 2023
Completion of works	31 March 2025
Expiry of MOWP	31 March 2025

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 V2.3
- Current revision - MOWP YPDN 23/02 V2.4

Ref.	Change	Section	Description	MOWP V2.3	MOWP V2.4
1	Issue Number	Throughout	Change of Issue Number	V2.3	V2.4
2	Supplementary Take Off Distance	3.3.1 RTAO Stage 15	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 1570 (5151) (2.15) RWY 11- 1199 (3934) (1.6) 1415 (4642) (1.9)	RWY 11 TODA 1570 (5151) (2.16) RWY 11- 1163 (3816) (1.6) 1395 (4577) (1.9)
3	Supplementary Take Off Distance	3.5.1 RTAO Stage 16B	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 2764 (9069) (2.15) RWY 11- 2393 (7852) (1.6) 2609 (8560) (1.9)	RWY 11 TODA 2764 (9069) (2.16) RWY 11- 2357 (7733) (1.6) 2589 (8495) (1.9)
4	Supplementary Take Off Distance	3.6.1 RTAO Stage 17A	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 2871 (9412) (2.15) RWY 11- 2500 (8202) (1.6) 2716 (8911) (1.9)	RWY 11 TODA 2871 (9412) (2.16) RWY 11- 2464 (8085) (1.6) 2696 (8846) (1.9)
5	Supplementary Take Off Distance	3.7.1 RTAO Stage 17B	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 2871 (9412) (2.15) RWY 11- 2500 (8202) (1.6) 2716 (8911) (1.9)	RWY 11 TODA 2871 (9412) (2.16) RWY 11- 2464 (8085) (1.6) 2696 (8846) (1.9)
6	Supplementary Take Off Distance	3.8.1 RTAO Stage 18	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 2764 (9069) (2.15) RWY 11- 2393 (7852) (1.6) 2609 (8560) (1.9)	RWY 11 TODA 2764 (9069) (2.16) RWY 11- 2357 (7733) (1.6) 2589 (8495) (1.9)
7	Supplementary Take Off Distance	3.9.1 RTAO Stage 19A	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 1570 (5151) (2.15) RWY 11- 1199 (3934) (1.6) 1415 (4642) (1.9)	RWY 11 TODA 1570 (5151) (2.16) RWY 11- 1163 (3816) (1.6) 1395 (4577) (1.9)
8	Supplementary Take Off Distance	3.10.1 RTAO Stage 19B	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 1780 (5840) (2.15) RWY 11- 1409 (4623) (1.6) 1625 (5332) (1.9)	RWY 11 TODA 1780 (5840) (2.16) RWY 11- 1373 (4504) (1.6) 1605 (5266) (1.9)
9	Supplementary Take Off Distance	3.14.1 RTAO Stage 22	Change of RWY 11 Supplementary Take Off Distance	RWY 11 TODA 1570 (5151) (2.15) RWY 11- 1199 (3934) (1.6) 1415 (4642) (1.9)	RWY 11 TODA 1570 (5151) (2.16) RWY 11- 1163 (3816) (1.6) 1395 (4577) (1.9)
10	Gradient Change	n/a	Changes above due to gradient change from 2.15 to 2.16.		Change of gradient following updated OLS survey.

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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.

Package	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.
Stage	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. The MOWP is restricted to working under only one (1) Stage per work shift. The Stage Sequencing is presented in <u>1.5 Works sequence</u> .
Phase	Phase: A series of Stages, describing the works progress. There are four (4) phases under MOWP YPDN 23/02: <ul style="list-style-type: none"> ▪ Main Construction, ▪ Cut Over of AGL for the new 45m runway width requirements, ▪ Grooving and ▪ Remaining AGL Works.
Zone	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
RTS	RTS: Return to Service. 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.

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	11B to 21 (excluding 21A)	<ul style="list-style-type: none"> ▪ Pavement reconstruction. ▪ Asphalt overlays. ▪ Drainage installation inclusive of subsoil drain, swale and stormwater pipes and culverts. ▪ Airfield Ground Lighting (AGL) removal / protection. ▪ AGL installation inc. cabling. ▪ Grooving activities.
Cut Over	21A	<ul style="list-style-type: none"> ▪ Pre-commissioning of AGL whilst existing 60m wide RWY lighting remains. ▪ Cut Over from 60m wide RWY lighting to new 45m wide RWY lighting.
Grooving	22 and 23	<ul style="list-style-type: none"> ▪ 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. ▪ Decommissioning of redundant 60m wide RWY lighting. ▪ Installation of inset AGL within Runway 11-29 grooving extent.

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 11B	7-May-24	3-Jun-24
	Stage 12	7-May-24	3-Jun-24
	Stage 15	4-Jun-24	10-Jun-24
	Stage 16	3-Jun-24	10-Jun-24
	Stage 15	10-Jun-24	27-Jun-24
	Stage 17A	10-Jun-24	27-Jun-24
	Stage 15	27-Jun-24	13-Jul-24
	Stage 16B	27-Jun-24	13-Jul-24
	Stage 17A	13-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 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 11B; the RTS (return to service) arrangement will be Stage 12.

For Stage 15; the RTS (return to service) arrangements will either be Stage 16, 16B or 17.

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 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	<p>Stage 11B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 12.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. 		
RWY 11-29 Displaced Threshold	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.		
RWY 18-36	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		

2.6.2 Works sequence – 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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. 		
RWY 11-29 Displaced Threshold	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.		
RWY 18-36	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		

2.6.3 Works sequence - Stage 15

Planned dates	4-Jun-24 to 13-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). Between 3-Jun-24 and 10- Jun-24, revert to Stage 16 29 RWY 2614m 11 RWY 2674m Between 10-Jun-24 and 27- Jun-24, revert to Stage 17A 29 RWY 2721m 11 RWY 2781m Between 27-Jun-24 and 13- Jul-24, revert to Stage 16B 29 RWY 2614m 11 RWY 2674m
Activities	<p>Stage 15 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 16, Stage 16B or Stage 17 as per the Shift timing dates above.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
Displaced Threshold	<p>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.</p>		

2.6.4 Works sequence – Stage 16

Planned dates	3-Jun-24 to 10-Jun-24	Drawing	ANNEX B – STAGE 16
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2614m 11 RWY 2674m
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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Displaced Threshold	DTHR11 by 723m / 680m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 16.		

2.6.5 Works sequence – Stage 16B

Planned dates	27-Jun-24 to 13-Jul-24	Drawing	ANNEX B – STAGE 16B
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2614m 11 RWY 2674m
Zones	On-pavement: 7, 8 Off-pavement (drainage): F, H Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 16B is concurrent with Stage 15)
Activities	<ul style="list-style-type: none"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Displaced Threshold	DTHR11 by 723m / 680m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 16B.		

2.6.6 Works sequence – Stage 17A

Planned dates	10-Jun-24 to 27-Jun-24 13-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. (1130-0200 Local 0200-1630 UTC when Stage 17A is concurrent with Stage 15) (0600 – 1900 Local 2030 - 0930 UTC when Stage 17A is concurrent with Stage 17B)
Activities	<ul style="list-style-type: none"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Displaced Threshold	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.		

2.6.7 Works sequence – Stage 17B

Planned dates	15-Jul-24 to 4-Aug-24	Drawing	ANNEX B – STAGE 17B
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2721m 11 RWY 2781m
Zones	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	Shift timing	During Stage 17B RTS (1900 to 0600 Local). All other times, revert to Stage 17A 29 RWY 2721m 11 RWY 2781m
Activities	<ul style="list-style-type: none"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. Maintenance pavement works to RWY 18/36 as per the locations marked in the Stage 17B Drawing. HIAL demolition and installation of new. 		
Displaced Threshold	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.		

2.6.8 Works sequence – 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 2614m 11 RWY 2674m
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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Displaced Threshold	DTHR11 by 723m / 680m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 18.		

2.6.9 Works sequence – 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	<p>Stage 19A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
Displaced Threshold	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 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	<p>Stage 19B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
RWY 11-29 Displaced Threshold	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.		
RWY 18-36	RWY 18/36 OPR LENGTH REDUCED BY 534M N END RWY 18 DEPARTURES ONLY RWY 36 LANDING ONLY		

2.6.11 Works sequence – 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	<p>Stage 20 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 21.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
Displaced Threshold	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.		

2.6.12 Works sequence – Stage 21A

Planned dates	25-Oct-24 to 27-Oct-24	Drawing	ANNEX B – STAGE 21A
Phase	Cut Over	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	<p>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.</p> <p>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.</p>		
Displaced Threshold	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.		

2.6.13 Works sequence – 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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Displaced Threshold	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.		

2.6.14 Works sequence – 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"> • Works in Stage 22 include grooving inclusive of line marking reinstatement. • Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights. 		
Displaced Threshold	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 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"> • Works in Stage 23 include grooving inclusive of line marking reinstatement. • Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights. 		
Displaced Threshold	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 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	<p>Stage 11B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 12.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. 		
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.		

3.1.1 RTAO - Stage 11B NOTAM**Stage 11B NOTAM**

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

REVISED DECLARED DISTANCES

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)

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)

RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
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

PAPI RWY 11 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

TWY A1, TWY C3, TWY C4, TWY B1, TWY B2, TWY E1, TWY D, TWY V2, TWY T CLOSED DUE
DISPLACED THR RWY 11

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 11B

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 11B 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				930 (3051)

RWY 18 TKOFF TO COMMENCE AT RED AND WHITE CONES
TWY C1 CLOSED

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 11B

3.2 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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. 		
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.		

3.2.1 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 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

PAPI RWY 11 U/S WHEN THR DISPLACED
RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT
RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT

TWY A1, TWY C3, TWY C4, TWY E1, TWY V2, TWY T CLOSED DUE DISPLACED THR RWY 11
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
SUPPLEMENTRY TKOF DIST:

RWY	TORA	TODA	ASDA	LDA
18	990 (3248)	1050 (3445) (1.69)	990 (3248)	-
36	-	-	-	930 (3051)

RWY 18 TKOF TO COMMENCE AT RED AND WHITE CONES

TWY C1 CLOSED
REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 12

3.3 RTAO - Stage 15

Planned dates	4-Jun-24 to 13-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). Between 3-Jun-24 and 10-Jun-24, revert to Stage 16 29 RWY 2614m 11 RWY 2674m Between 10-Jun-24 and 27-Jun-24, revert to Stage 17A 29 RWY 2721m 11 RWY 2781m Between 27-Jun-24 and 13-Jul-24, revert to Stage 16B 29 RWY 2614m 11 RWY 2674m
Activities	<p>Stage 15 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 16, Stage 16B or Stage 17 as per the Shift timing dates above.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
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.		

3.3.1 RTAO - Stage 15 NOTAM**Stage 15 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

DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	1480 (4856)	1570 (5151) (2.16)	1480 (4856)	1420 (4659)
29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)

SUPPLEMENTARY TKOF DIST:

RWY 11- 1163 (3816) (1.6) 1395 (4577) (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 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
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

PAPI RWY 11 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

TWY A1, TWY B1, TWY B2, TWY E1, TWY E2, TWY V2 CLOSED DUE DISPLACED THR RWY 11

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 15

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

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

3.4 RTAO - Stage 16

Planned dates	3-Jun-24 to 10-Jun-24	Drawing	ANNEX B – STAGE 16
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2614m 11 RWY 2674m
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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 723m / 680m 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.		

3.4.1 RTAO - Stage 16**Stage 16 NOTAM**

THR RWY 11 DISPLACED 723M DUE WIP
 RWY 11/29 OPR LEN REDUCED BY 680M 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
 DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	2674 (8774)	2764 (9069) (2.15)	2674 (8774)	2631 (8632)
29	2614 (8577)	2674 (8774) (2.0)	2614 (8577)	2614 (8577)

SUPPLEMENTARY TKOF DIST:
 RWY 11- 2393 (7852) (1.6) 2609 (8560) (1.9)
 RWY 29- 2593 (8508) (1.6) 2661 (8731) (1.9)

RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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

PAPI RWY 11 U/S WHEN THR DISPLACED
 RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT
 RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT

TWY A1, TWY E1 CLOSED DUE DISPLACED THR RWY 11
 REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 16

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 TEMPORARY BLUE
 EDGE LGT

3.5 RTAO - Stage 16B

Planned dates	27-Jun-24 to 13-Jul-24	Drawing	ANNEX B – STAGE 16B
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2614m 11 RWY 2674m
Zones	On-pavement: 7, 8 Off-pavement (drainage): F, H Off-pavement (AGL): E	Shift timing	Non-RTS, 24/7 works. (1130-0200 Local 0200-1630 UTC when Stage 16B is concurrent with Stage 15)
Activities	<ul style="list-style-type: none"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 723m / 680m W END RWY 11/29 CLOSED. DTHR11 at CH723. Temp Displaced Threshold at the RWY 11 end during the entirety of Stage 16B.		
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 E2 available to Light Single Engine Aircraft Only. RWY29 intersection departure from TWY B1 and B2 not available.		

3.5.1 RTAO - Stage 16B**Stage 16B NOTAM**

THR RWY 11 DISPLACED 723M DUE WIP
RWY 11/29 OPR LEN REDUCED BY 680M 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

DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	2674 (8774)	2764 (9069) (2.16)	2674 (8774)	2631 (8632)
29	2614 (8577)	2674 (8774) (2.0)	2614 (8577)	2614 (8577)

SUPPLEMENTARY TKOF DIST:

RWY 11- 2357 (7733) (1.6) 2589 (8495) (1.9)
RWY 29- 2593 (8508) (1.6) 2661 (8731) (1.9)
RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
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

PAPI RWY 11 U/S WHEN THR DISPLACED
RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT
RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT

TWY A1 CLOSED DUE DISPLACED THR RWY 11

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 16B

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 TEMPORARY BLUE
EDGE LGT

3.6 RTAO - Stage 17A

Planned dates	10-Jun-24 to 27-Jun-24 13-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. (1130-0200 Local 0200-1630 UTC when Stage 17A is concurrent with Stage 15) (0600 – 1900 Local 2030 - 0930 UTC when Stage 17A is concurrent with Stage 17B)
Activities	<ul style="list-style-type: none"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
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.		

3.6.1 RTAO - Stage 17A NOTAM**Stage 17A NOTAM**

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
 DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	2781 (9124)	2871 (9412) (2.16)	2781 (9124)	2631 (8632)
29	2721 (8927)	2781 (9124) (2.0)	2721 (8927)	2721 (8927)

SUPPLEMENTARY TKOF DIST:
 RWY 11- 2464 (8085) (1.6) 2696 (8846) (1.9)
 RWY 29- 2710 (8891) (1.6) 2766 (9075) (1.9)
 RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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

PAPI RWY 11 U/S WHEN THR DISPLACED
 RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT
 RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT

TWY A1 CLOSED DUE DISPLACED THR RWY 11

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 17A

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
 RWY 18/36 BTN INT RWY 11/29 AND TWY A MARKED WITH TEMP
 BLUE EDGE LGT AVBL MIL ACFT FOR ACCESS TO/FROM RWY 11/29

3.7 RTAO - Stage 17B

Planned dates	15-Jul-24 to 4-Aug-24	Drawing	ANNEX B – STAGE 17B
Phase	Main Construction	RWY 11-29 TORA	29 RWY 2721m 11 RWY 2781m
Zones	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	Shift timing	During Stage 17B RTS (1900 to 0600 Local). All other times, revert to Stage 17A 29 RWY 2721m 11 RWY 2781m
Activities	<ul style="list-style-type: none"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. Maintenance pavement works to RWY 18/36 as per the locations marked in the Stage 17B Drawing. HIAL demolition and installation of new. 		
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 17B. Runway 18/36 closed.		
Taxiways	Taxiway A1 closed, north of TWY W. Taxiway C1 closed. Taxiway C3 closed. Taxiway C4 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.		

3.7.1 RTAO - Stage 17B NOTAM**Stage 17B NOTAM**

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
 DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	2781 (9124)	2871 (9412) (2.16)	2781 (9124)	2631 (8632)
29	2721 (8927)	2781 (9124) (2.0)	2721 (8927)	2721 (8927)

SUPPLEMENTARY TKOF DIST:
 RWY 11- 2464 (8085) (1.6) 2696 (8846) (1.9)
 RWY 29- 2710 (8891) (1.6) 2766 (9075) (1.9)
 RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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

PAPI RWY 11 U/S WHEN THR DISPLACED
 RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT
 RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT

TWY A1, TWY C3, TWY C4 CLOSED DUE DISPLACED THR RWY 11
 REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 17B

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

Stage 17B NOTAM

RWY 18/36 CLOSED DUE WIP
 TWY C1 CLOSED DUE WIP
 REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 17B

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

RWY 18/36 BTN INT RWY 11/29 AND TWY A MARKED WITH TEMP
 BLUE EDGE LGT AVBL MIL ACFT FOR ACCESS TO/FROM RWY 11/29

3.8 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 2614m 11 RWY 2674m
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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
Restrictions: Manoeuvring Area			
Runways	DTHR11 by 723m / 680m 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.		

3.8.1 RTAO - Stage 18 NOTAM**Stage 18 NOTAM**

THR RWY 11 DISPLACED 723M DUE WIP
 RWY 11/29 OPR LEN REDUCED BY 680M 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
 DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	2674 (8774)	2764 (9069) (2.16)	2674 (8774)	2631 (8632)
29	2614 (8577)	2674 (8774) (2.0)	2614 (8577)	2614 (8577)

SUPPLEMENTARY TKOF DIST:
 RWY 11- 2357 (7733) (1.6) 2589 (8495) (1.9)
 RWY 29- 2593 (8508) (1.6) 2661 (8731) (1.9)
 RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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

PAPI RWY 11 U/S WHEN THR DISPLACED
 RWY 11 TEMPO PAPI AVBL 3.0 DEG 52FT
 RWY THR IDENT LGTS AND TEMPO PAPI PILOT MNT

TWY A1, TWY E1 CLOSED DUE DISPLACED THR RWY 11

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 18

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

3.9 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	<p>Stage 19A is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
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.		

3.9.1 RTAO - Stage 19A NOTAM**Stage 19A 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
 DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	1480 (4856)	1570 (5151) (2.16)	1480 (4856)	1420 (4659)
29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)

SUPPLEMENTARY TKOF DIST:
 RWY 11- 1163 (3816) (1.6) 1395 (4577) (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 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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

PAPI RWY 11 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

TWY A1, TWY B1, TWY B2, TWY E1, TWY E2, TWY V2, TWY T CLOSED DUE DISPLACED THR RWY 11

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 19A

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

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

3.10 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	<p>Stage 19B is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 18.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
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.		

3.10.1 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 DECLARED DISTANCE AND GRADIENT CHANGES</p> <table border="1"> <thead> <tr> <th>RWY</th> <th>TORA</th> <th>TODA</th> <th>ASDA</th> <th>LDA</th> </tr> </thead> <tbody> <tr> <td>11</td> <td>1690 (5545)</td> <td>1780 (5840) (2.16)</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> </tbody> </table> <p>SUPPLEMENTARY TKOF DIST: RWY 11- 1373 (4504) (1.6) 1605 (5266) (1.9) RWY 29- 1479 (4852) (1.6) 1559 (5115) (1.9) 1604 (5262) (2.2) 1633 (5358) (2.5) 1679 (5509) (3.3) RWY 11 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ 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</p> <p>PAPI RWY 11 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>TWY A1, TWY C3, TWY C4, TWY B1, TWY B2, TWY V2, TWY T CLOSED DUE DISPLACED THR RWY 11</p> <p>REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 19B</p>		RWY	TORA	TODA	ASDA	LDA	11	1690 (5545)	1780 (5840) (2.16)	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) (2.16)	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 DUE WIP 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>															

3.11 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	<p>Stage 20 is specific to works during the RTS nightshift. At all other times outside of the RTS nightshift, revert to Stage 21.</p> <ul style="list-style-type: none"> • 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. • Installation of associated drainage. • Flank regrading and AGL secondary trenching. • HIAL demolition and installation of new. 		
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.		

3.11.1 RTAO - Stage 20 NOTAM**Stage 20 NOTAM**

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
 DECLARED DISTANCE AND GRADIENT CHANGES

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)

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)
 RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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
 ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR RWY 29 DISPLACED 1933M

PAPI RWY 29 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

TWY A6, TWY D, TWY B1, TWY E1, TWY E2 CLOSED DUE DISPLACED THR RWY 29

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 20

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

3.12 RTAO - Stage 21A

Planned dates	25-Oct-24 to 27-Oct-24	Drawing	ANNEX B – STAGE 21A
Phase	Cut Over	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	<p>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.</p> <p>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.</p>		
Restrictions: Manoeuvring Area			
Runways	<p>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.</p>		
Taxiways	<p>Taxiway A6 closed, east of the FRA. Taxiway B1 closed.</p>		
Aircraft type restrictions	<p>RWY11 Intersection Departures from TWY E1 & E2 Not available.</p> <p>RWY11 Intersection Departures from TWY B1 & B2 available to Light Single Engine Aircraft only.</p>		

3.12.1 RTAO - Stage 21A NOTAM

Stage 21A NOTAM

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
 DECLARED DISTANCE AND GRADIENT CHANGES

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)

SUPPLEMENTARY TKOF DIST:
 RWY 11- 2416 (7926) (1.6) 2469 (8100) (1.9)
 RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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
 ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR DISPLACED 1046M

PAPI RWY 29 NOT AVBL WHEN THR DISPLACED
 RWY 20 TEMPO PAPI AVBL 3.0 DEG 52FT
 RWY THR IDENT LIGHTS AND TEMPO PAPI PILOT MNT
 TWY A6, TWY B1 CLOSED DUE DISPLACED THR RWY 29
 REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 21A

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.

3.13 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"> 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. Installation of associated drainage. Flank regrading and AGL secondary trenching. HIAL demolition and installation of new. 		
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.		

3.13.1 RTAO - Stage 21 NOTAM**Stage 21 NOTAM**

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
 DECLARED DISTANCE AND GRADIENT CHANGES

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)

SUPPLEMENTARY TKOF DIST:
 RWY 11- 2416 (7926) (1.6) 2469 (8100) (1.9)
 RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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
 ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR DISPLACED 1046M

PAPI RWY 29 NOT AVBL WHEN THR DISPLACED
 RWY 20 TEMPO PAPI AVBL 3.0 DEG 52FT
 RWY THR IDENT LIGHTS AND TEMPO PAPI PILOT MNT

TWY A6, TWY B1 CLOSED DUE DISPLACED THR RWY 29

REFER METHOD OF WOTKING PLAN YPDN 23/02 STAGE 21

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 Aircservices 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

3.14 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"> Works in Stage 22 include grooving inclusive of line marking reinstatement. Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights. 		
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 22 NOTAM**Stage 22 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
DECLARED DISTANCE AND GRADIENT CHANGES

RWY	TORA	TODA	ASDA	LDA
11	1480 (4856)	1570 (5151) (2.16)	1480 (4856)	1420 (4659)
29	1420 (4659)	1480 (4856) (4.0)	1420 (4659)	1420 (4659)

SUPPLEMENTARY TKOF DIST:
RWY 11- 1163 (3816) (1.6) 1395 (4577) (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 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

PAPI RWY 11 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

TWY A1, TWY B1, TWY B2, TWY E1, TWY E2, TWY V2 CLOSED DUE DISPLACED THR RWY 11

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 22

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

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

3.15 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"> Works in Stage 23 include grooving inclusive of line marking reinstatement. Reinstatement of inset AGL lighting and secondary cable slotting following the grooving works including commissioning and powering the reinstated lights. 		
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.		

3.15.1 RTAO - Stage 23 NOTAM**Stage 23 NOTAM**

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
 DECLARED DISTANCE AND GRADIENT CHANGES

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)

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)
 RWY 29 TKOF TO COMMENCE AT RED LGTS HN AND RED AND WHITE CONES HJ
 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
 ACTIVE LAND AND HOLD SHORT OPS (LAHSO) NOT AVBL WHEN THR RWY 29 DISPLACED 1933M

PAPI RWY 29 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

TWY A6, TWY D, TWY E1, TWY E2 CLOSED DUE DISPLACED THR RWY 29

REFER METHOD OF WORKING PLAN YPDN 23/02 STAGE 23

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

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

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

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

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

RAAF Base Darwin – 13 Squadron		
CO 13 Squadron SADFO	WGCDR Lauren Guest	T: 08 8974 4474 M: 0408 485 621 E: Lauren.guest@defence.gov.au
Air Base Executive Officer	SQNLDR Andrew Miller	M: 0407 615 214 E: andrew.miller10@defence.gov.au
Base Aviation Safety Officer	SQNLDR Jay Murray	M: 0409 669 214 E: dar.baso@defence.gov.au
Base Airfield Engineering Officer	FLGOFF Patrick Tanner	M: 0458 134 234 E: patrick.tanner@defence.gov.au
RAAF ATC - 452 SQN DAR FLT		
452SQN DAR FLT CDR	SQNLDR James Lee	T: 08 7929 4671 M: 0408 892 476 E: 452sqndar.fltcdr@defence.gov.au
452SQN DAR FLT OPS CDR	SQNLDR Stephanie Gartshore	T: 08 7929 4673 (APP SPVR) M: 0408 809 864 E: 452sqndar.opscdr@defence.gov.au
ATC Duty Controller	Various	T: 08 7929 4816 (TWR SPVR) E: dar.atc@defence.gov.au
CFI		
Director General Capital Facilities and Infrastructure	AIRCDRE Ron Tilley	T: 02 6266 8075 M: 0467 714 744 E: ron.tilley@defence.gov.au
Director – National Projects	GPCAPT Adrian Carswell	T: (02) 5108 6615 M: 0448 736 766 E: adrian.carswell@defence.gov.au
Project Director - National Airfield Projects	WGCDR Sunil Nayaran	M:0451 131 844 E: sunil.nayaran1@defence.gov.au
Senior Project Officer - National Airfields Projects	Paul Smit	T: 02 6266 8081 M: 0420 977 063 E: paul.smit@defence.gov.au
Assistant Project Manager	Simon Ganter	T: 02 6266 8814 M: 0429 446 538 E: simon.ganter1@defence.gov.au
DEIC		

Base Infrastructure Officer	FLTLT David Champion	M: 0400 821 116 E: david.champion2@defence.gov.au
DEEP		
Senior Civil Engineer – DEEP	SQNLDR Kathleen Pearce	T: 02 6266 8207 E: adf.ces@defence.gov.au
Assistant Director Aerodrome Policy – DEEP	Anthony Wade	T: 08 7374 1538 E: Anthony.wade1@defence.gov.au
SDD		
Regional Environment and Sustainability Officer	Katina Croft	M: 0409 883 566 E: Katina.croft@defence.gov.au
Base Manager – RAAF Base Darwin	Kerryn Luby	T: 08 7971 2853 M: 0438 630 377 E: kerryn.luby@defence.gov.au
Assistant Base Manager	Diane Popple	T: 08 7971 1274 M: 0427 953 862 E: diane.popple@defence.gov.au
Darwin International Airport		
Executive General Manager Operations	Rob Porter	T: 08 8920 1832 E: rob.porter@adgnt.com.au
Head of Airside Operations	Glen Dodds	T: 0447 572 766 E: Glen.dodds@adgnt.com.au
Airside Manager	Mike Clancy	M: 0423 797 355 E: Mike.clancy@adgnt.com.au
Aerodrome Safety & Standards Manager	Bob Calaby	M: 0402 088 163 M: Bob.calaby@adgnt.com.au
Beca Consultants (PMCA)		
PMCA	Pete Muir	T: 07 3117 6694 M: 0401 348 371 E: pete.muir@beca.com
Assistant Project Manager	Kristian Smith	M: 0404 385 389 E: kristian.smith@beca.com
a/ Assistant Project Manager	Lindsay Murray	M: 0404 135 339 E: lindsay.murray@beca.com
Aurecon Australasia Pty Ltd (DSC)		
Consultant's Representative	Tim Meinecke	M: 0425 794 411 E: tim.meinecke@aurecongroup.com

Project Manager	James Kelleher	M: 0407 761 987 E: james.kelleher@arecongroup.com
Design Manager	Kevin Dearden	T: 03 9975 3000 M: 0438 297 771 E: kevin.dearden@arecongroup.com
Contractor – Fulton Hogan		
Project Manager	Edward Callaghan	M: 0439 281 658 E: Edward.Callaghan@fultonhogan.com.au
Works Manager	Dayne Clarke	M: 0429 011 396 E: Dayne.Clarke@fultonhogan.com.au
OZ Airports - Works Safety Officer (WSO)		
Director	Rod Cecchini	M: 0407 721 664 E: admin@ozairports.com.au rod.cecchini@ozairports.com.au
NT Manager	Simon Spence	M: 0447 544 724 E: simon.spence@ozairports.com.au
Tarmac Aerodrome Operations (WSO)		
Director	Jason Dechaineux	M: 0429 467 481 E: jason@taops.com.au

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.

RPorter
Digitally signed by
Rob Porter
Date: 2024.04.26
14:15:02 +09'30'

Rob Porter
EGM - Airports
Airport Development Group

Lauren.G
uest
Digitally signed by
Lauren.Guest
Date: 2024.04.26
13:32:04 +09'30'

WGCDR Lauren Guest
CO 13 Squadron
RAAF Base Darwin

11 ANNEX A – DISTRIBUTION LISTS

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13 SQN – RAAF Darwin		
WGCDR Lauren Guest	SADFO	Lauren.guest@defence.gov.au
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FLGOFF Patrick Tanner	BAEO	patrick.tanner@defence.gov.au dar.baeo@defence.gov.au
SQNLDR Jay Murray	BASO 13 SQN	Dar.baso@defence.gov.au
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WGCDR Sunil Narayan	Project Director – National Airfield Projects	sunil.narayan1@defence.gov.au
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WSO – Oz Airports		
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Simon Spence	NT Manager	Simon.spence@ozairports.com.au
WSO – Tarmac Aerodrome Operations		
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Darwin International Airport		
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Bob Calaby	Aerodrome Safety & Standards Manager	bob.calaby@adgnt.com.au
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Allan Woo	Aviation Development Manager	Allan.woo@adgnt.com.au

TAOO - Various	Terminal & Airside Operations Officers	Dia.TAOO@adgnt.com.au
TSO - Various	Technical Services Officer	Diatechs@adgnt.com.au

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AirAsia Indonesia	maa_scheduleplanning@airasia.com
Air Frontier	admin@airfrontier.com.au chiefpilot@airfrontier.com.au
Air New Zealand	aircraftperformance@airnz.co.nz
Airnorth	compliance@airnorth.com.au fltopstech@airnorth.com.au david.hancock@airnorth.com.au operations@airnorth.com.au william.pasquini@airnorth.com.au russell.quinn-kent@airnorth.com.au andrew.lockett@airnorth.com.au simon.gibbons@airnorth.com.au georgina.mommers@airnorth.com.au brian.huddy@airnorth.com.au daniel.bowden@airnorth.com.au

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Virgin Australia Regional Airlines	Selven.ramsamy@virginaustralia.com VARAflighttechnical@virginaustralia.com
Westonia Aviation	operations@westoniaav.com.au

NOTES:

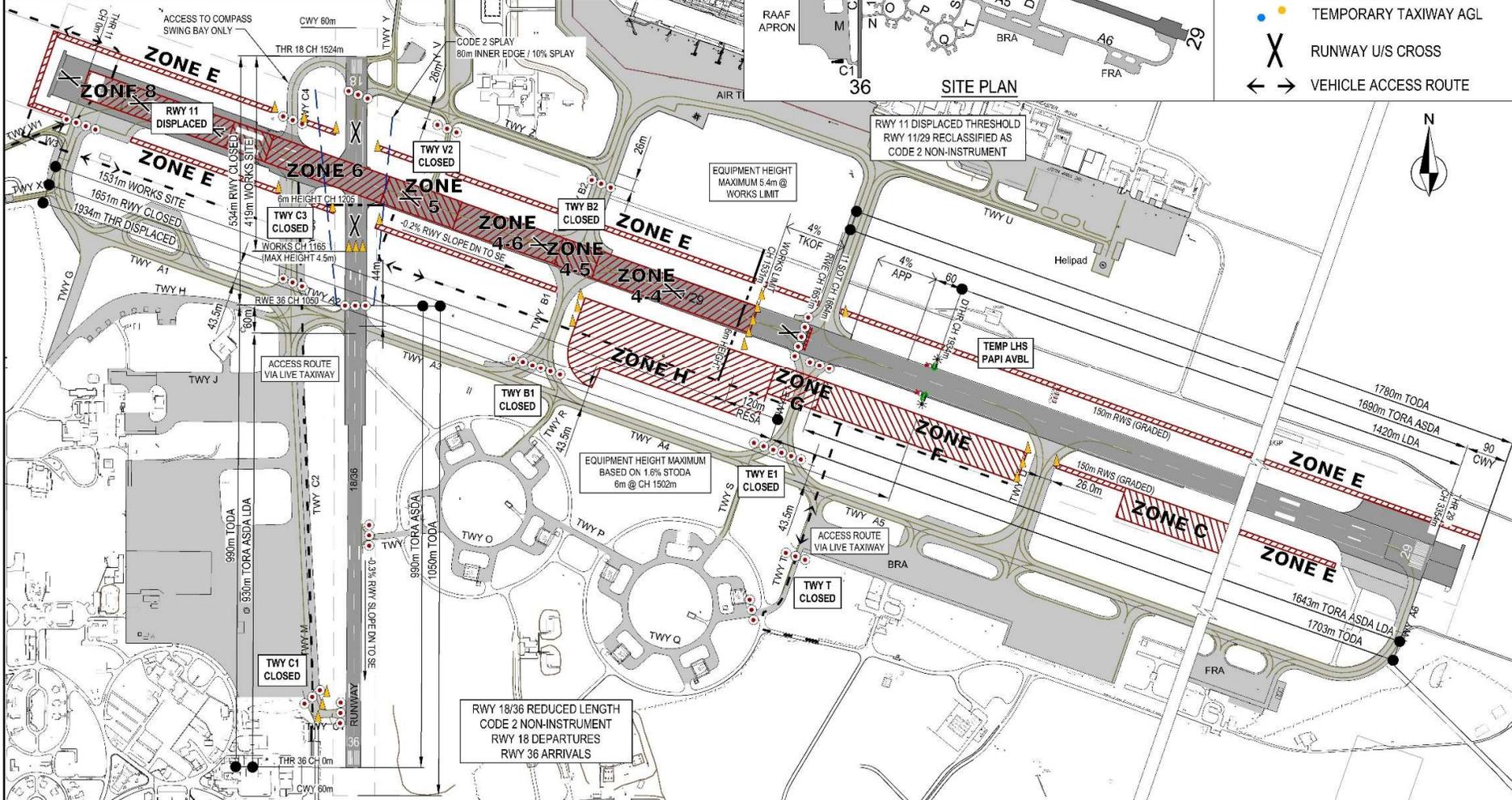
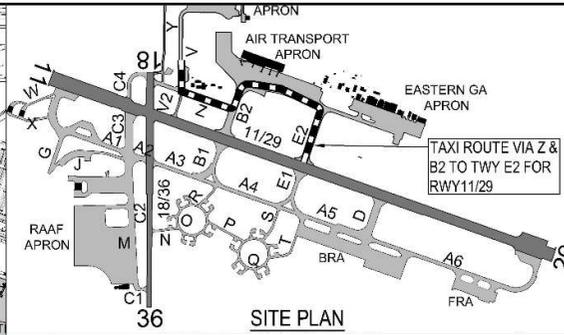
1. PLAN IS DIAGRAMMATIC ONLY. USE DIMENSIONS AS SHOWN.
2. REFER TO MOWP FOR STAGING TIMES.
3. DISPLACEMENT VISUAL AID MARKINGS TO BE IN ACCORDANCE WITH PART 139 MOS 2019.
4. ALL MAE TO VACATE RUNWAY FOR RWY 11 AIRCRAFT DEPARTURES WITH SIGNIFICANT JETBLAST/PROPWASH.
5. ACCESS TO WORKS AREA BY DARWIN AIRPORT APPROVED VEHICLE ROUTE.

ABBREVIATIONS / ACRONYMS:

- | | |
|------|--------------------------|
| AGL | AIRFIELD GROUND LIGHTING |
| CWY | CLEARWAY |
| TWY | TAXIWAY |
| RWY | RUNWAY |
| RTS | RETURN TO SERVICE |
| SOT | START OF TAKEOFF |
| DTHR | DISPLACED THRESHOLD |
| THR | THRESHOLD |

LEGEND:

- WORKS AREA
- U/S CONES AND LIGHTS
- WITCHES HATS
- DENOTES DISPLACED THRESHOLD BY RTLS
- TEMPORARY TAXIWAY AGL
- RUNWAY U/S CROSS
- VEHICLE ACCESS ROUTE



REV	DATE	DETAILS
B	11.04.24	RWY 18/36 REDUCED LENGTH
A	28.03.24	PRELIMINARY ISSUE



RAAF BASE
DARWIN, NT

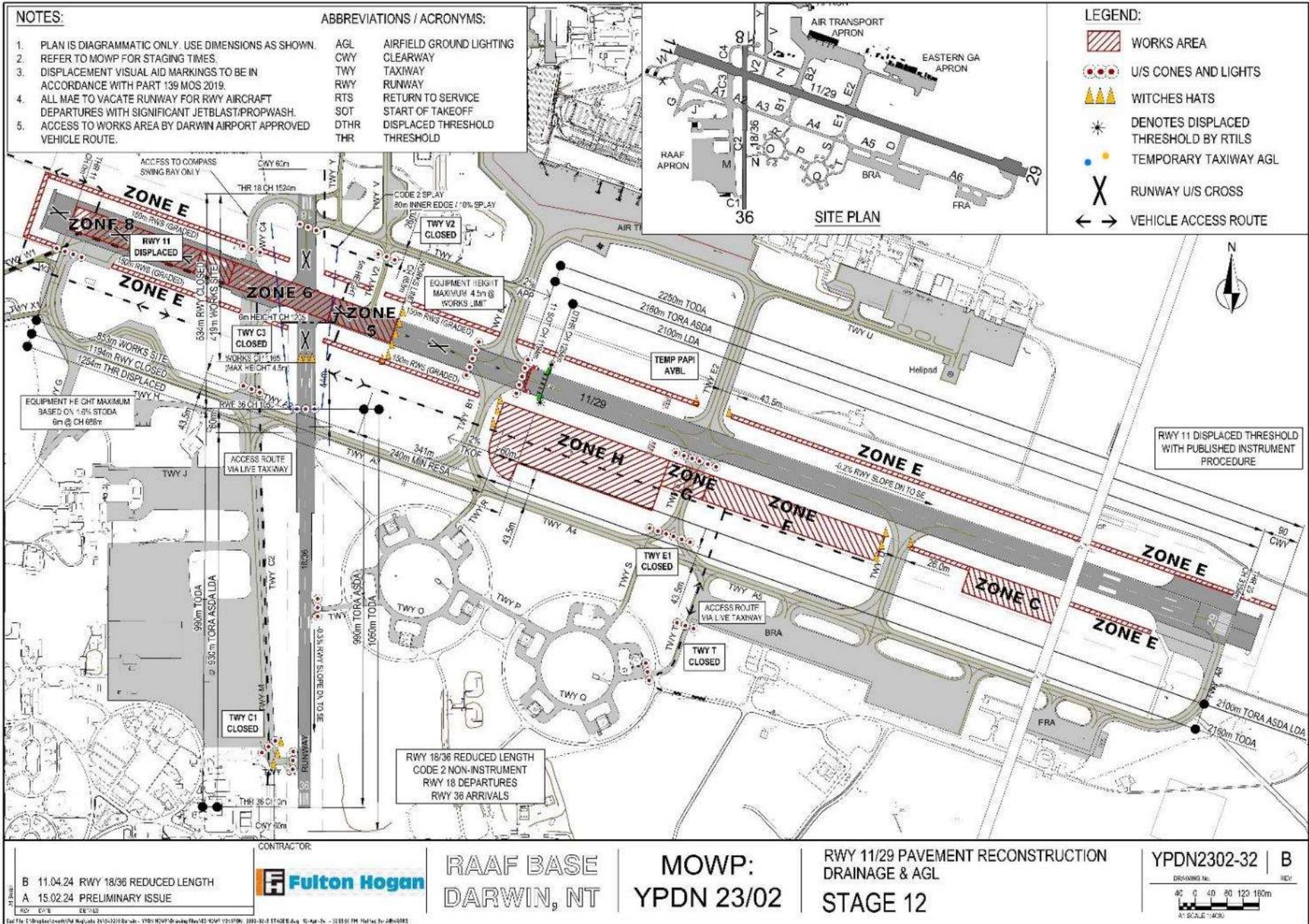
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YPDN 23/02

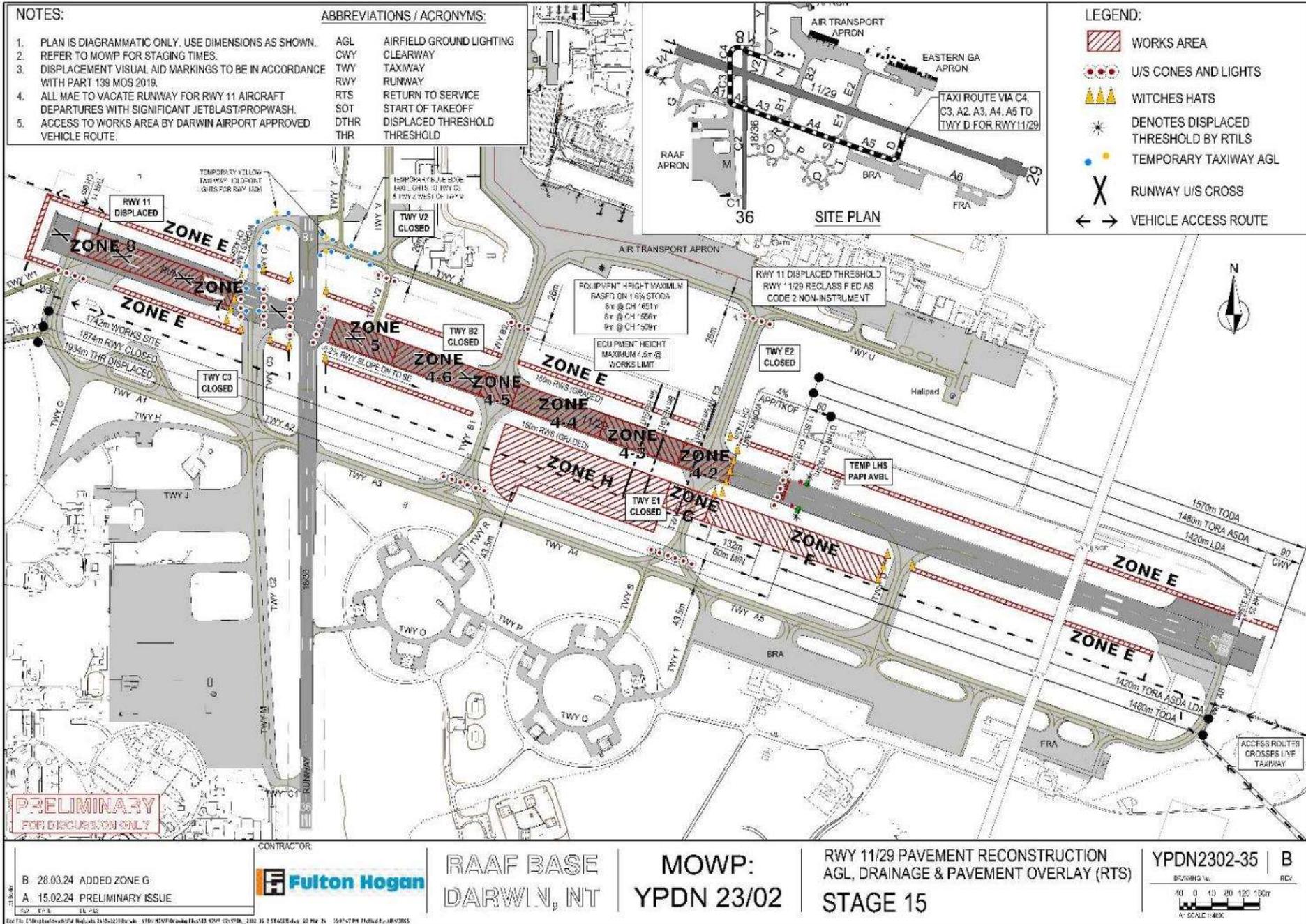
RWY 11/29 PAVEMENT RECONSTRUCTION
AGL, DRAINAGE & PAVEMENT OVERLAY (RTS)
STAGE 11B

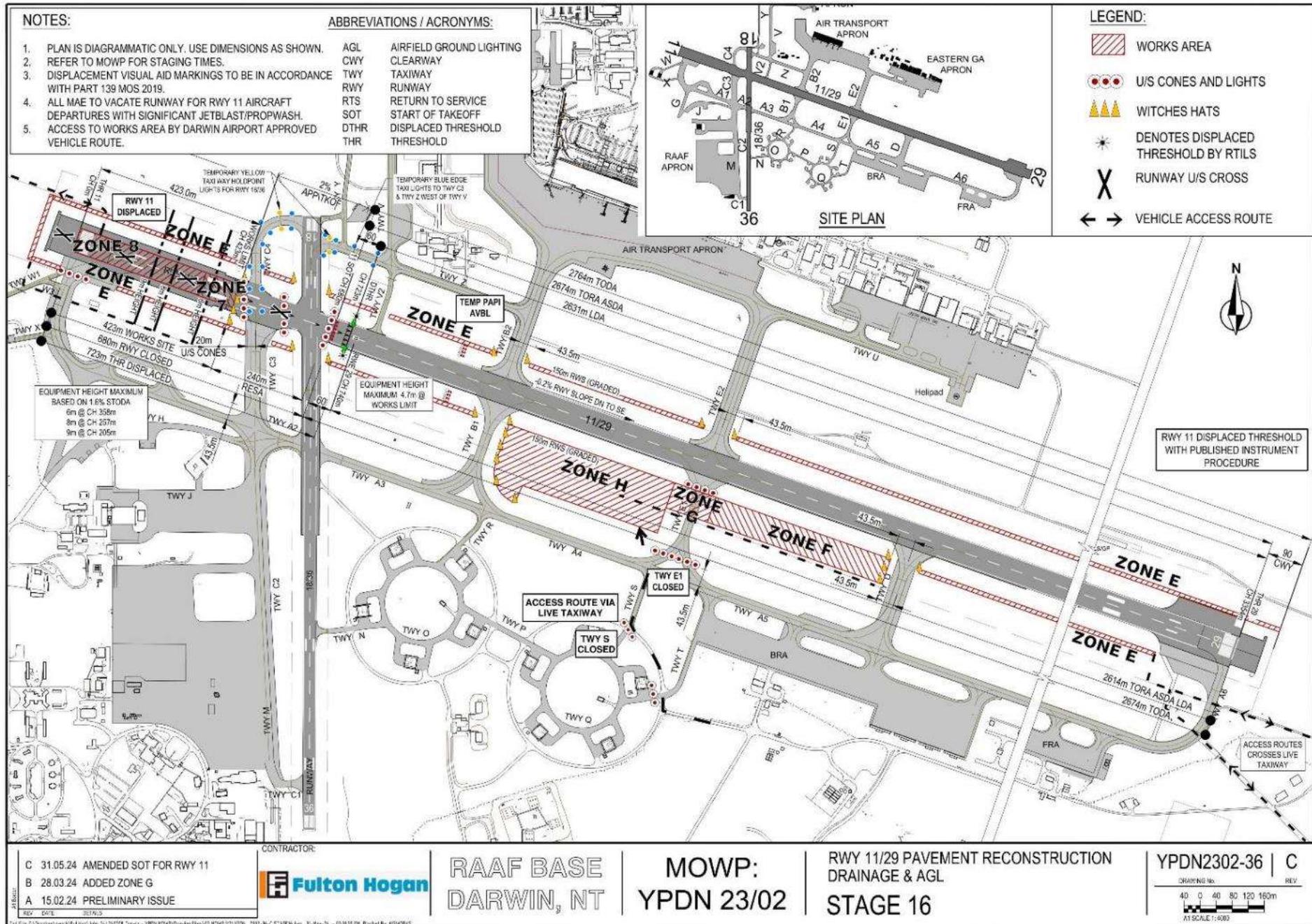
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DRAWING No. REV

A1 SCALE 1:4000







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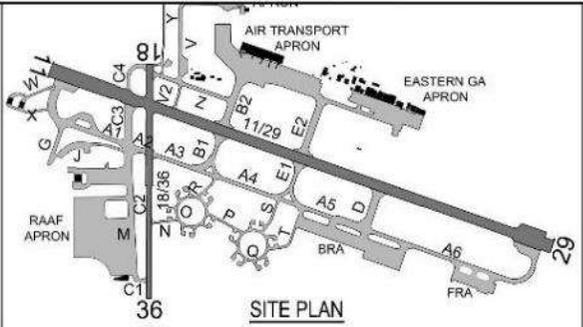
1. PLAN IS DIAGRAMMATIC ONLY. USE DIMENSIONS AS SHOWN.
2. REFER TO MOWP FOR STAGING TIMES.
3. DISPLACEMENT VISUAL AID MARKINGS TO BE IN ACCORDANCE WITH PART 139 MOS 2019.
4. ALL MAE TO VACATE RUNWAY FOR RWY 11 AIRCRAFT DEPARTURES WITH SIGNIFICANT JETBLAST/PROPWASH. ACCESS TO WORKS AREA BY DARWIN AIRPORT APPROVED VEHICLE ROUTE.

ABBREVIATIONS / ACRONYMS:

AGL	AIRFIELD GROUND LIGHTING
CWY	CLEARWAY
TWY	TAXIWAY
RWY	RUNWAY
RTS	RETURN TO SERVICE
SOT	START OF TAKEOFF
DTHR	DISPLACED THRESHOLD
THR	THRESHOLD

LEGEND:

- WORKS AREA
- U/S CONES AND LIGHTS
- WITCHES HATS
- DENOTES DISPLACED THRESHOLD BY RTILS
- RUNWAY U/S CROSS
- VEHICLE ACCESS ROUTE



EQUIPMENT HEIGHT MAXIMUM BASED ON 1.6% STODA
 6m @ CH 358m
 8m @ CH 257m
 9m @ CH 205m

EQUIPMENT HEIGHT MAXIMUM 4.7m @ WORKS LIMIT

RWY 11 DISPLACED THRESHOLD WITH PUBLISHED INSTRUMENT PROCEDURE

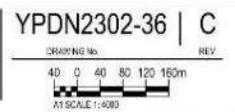
CONTRACTOR:	Fulton Hogan	
REV	DATE	DESCRIPTION
C	31.05.24	AMENDED SOT FOR RWY 11
B	28.03.24	ADDED ZONE G
A	15.02.24	PRELIMINARY ISSUE

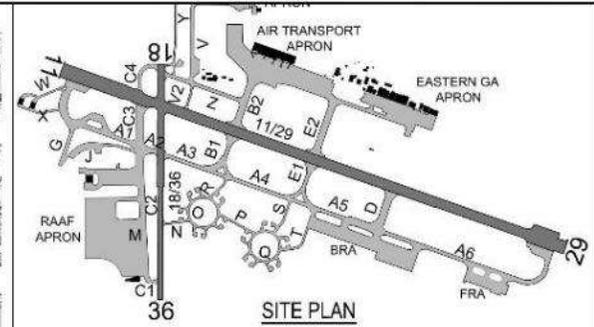
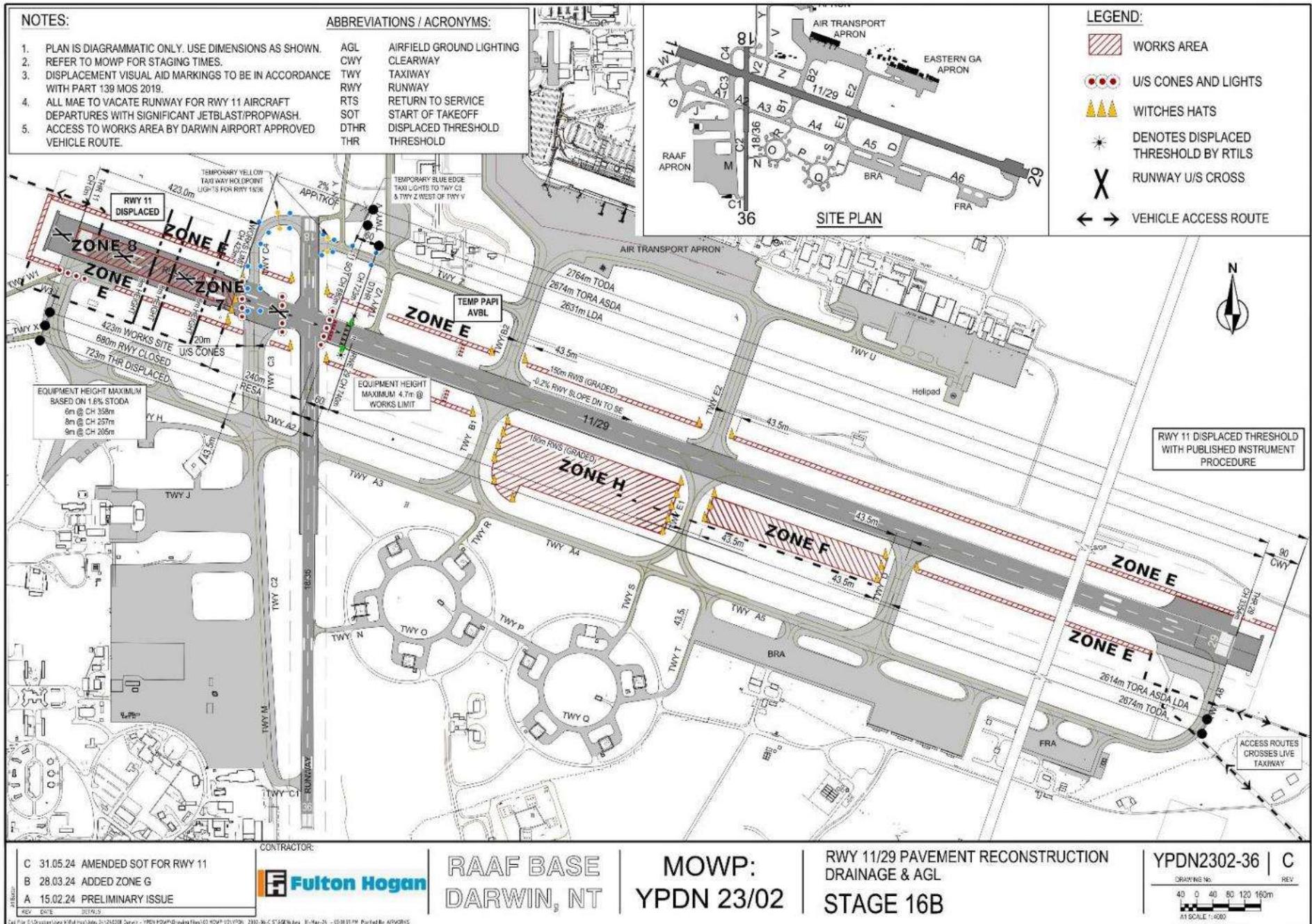
RAAF BASE DARWIN, NT

MOWP: YPDN 23/02

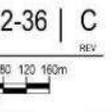
RWY 11/29 PAVEMENT RECONSTRUCTION DRAINAGE & AGL STAGE 16

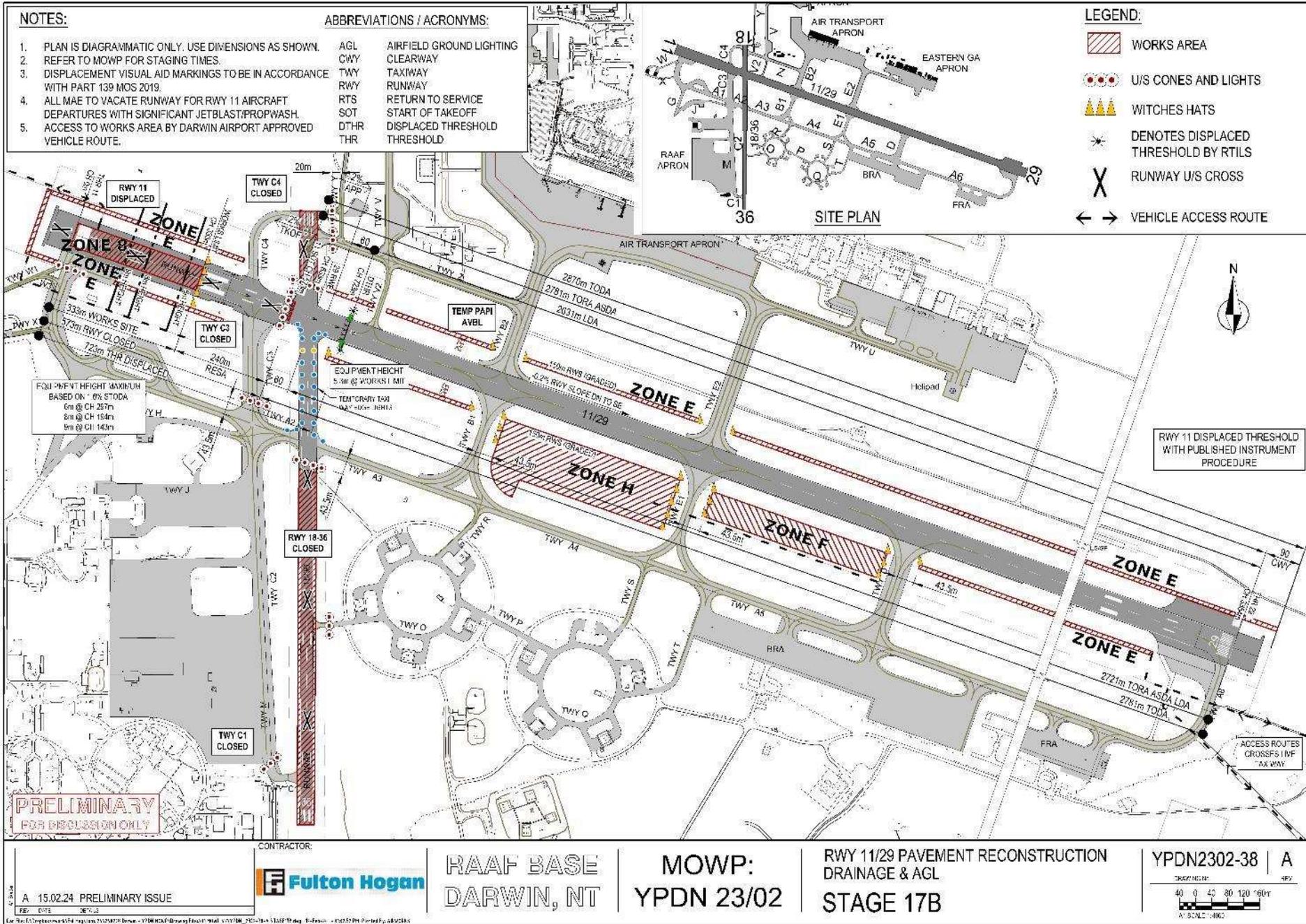
YPDN2302-36 | C

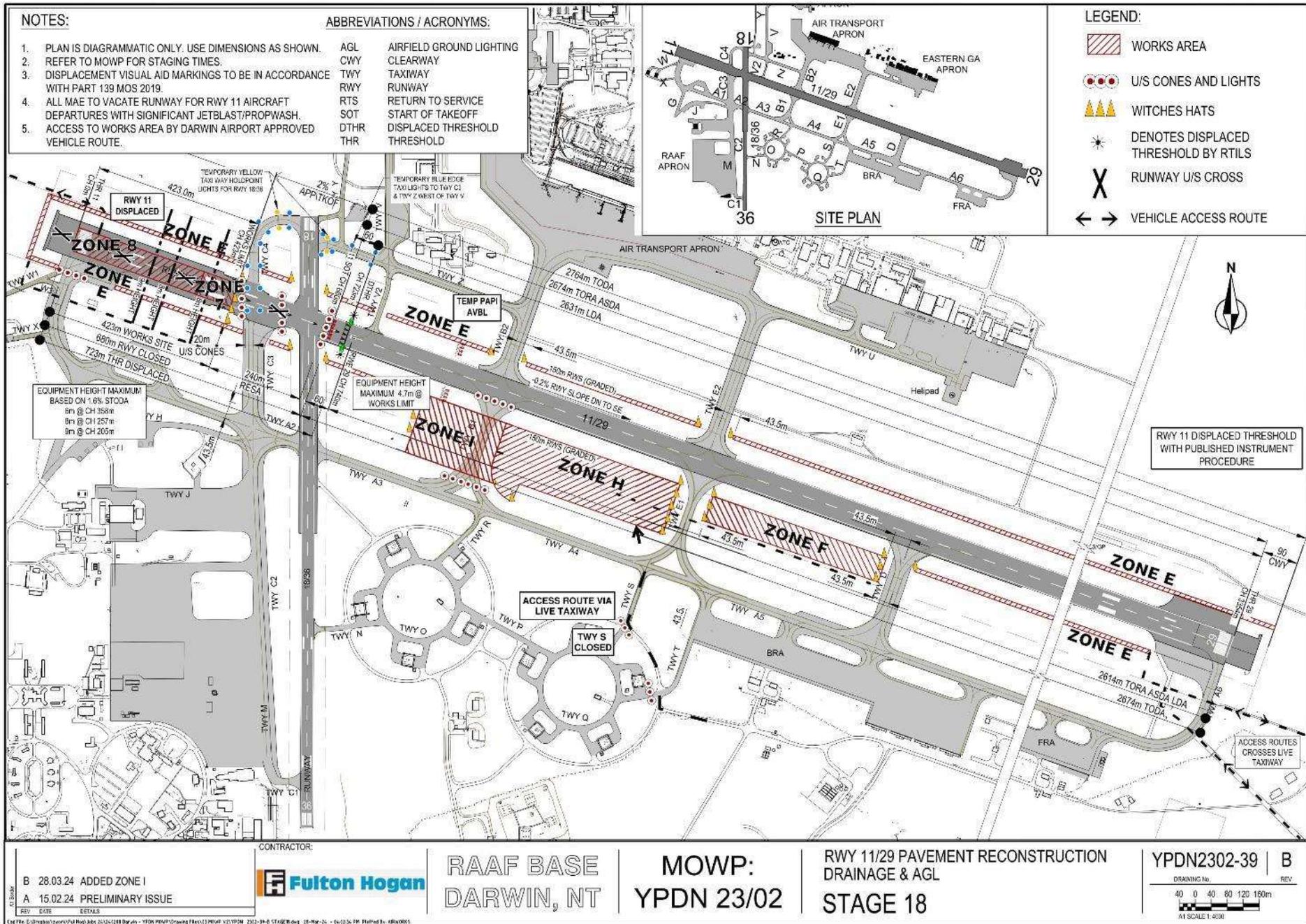


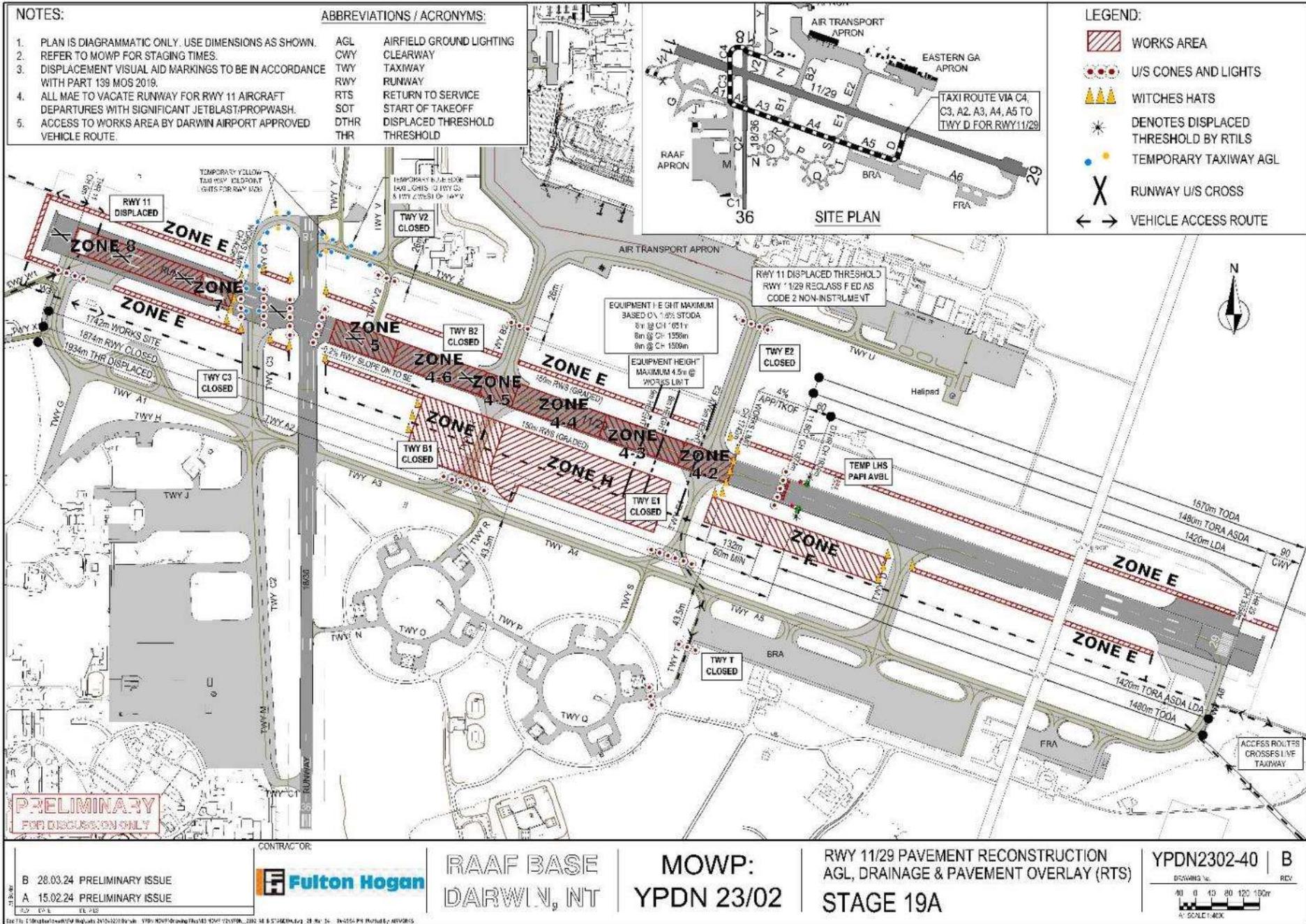


RWY 11 DISPLACED THRESHOLD WITH PUBLISHED INSTRUMENT PROCEDURE







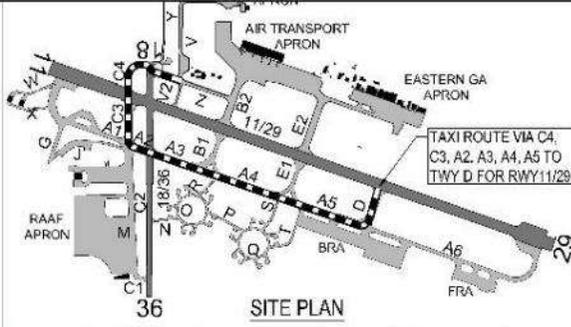


NOTES:

1. PLAN IS DIAGRAMMATIC ONLY. USE DIMENSIONS AS SHOWN.
2. REFER TO MOWP FOR STAGING TIMES.
3. DISPLACEMENT VISUAL AID MARKINGS TO BE IN ACCORDANCE WITH PART 139 MDS 2019.
4. ALL MAE TO VACATE RUNWAY FOR RWY 11 AIRCRAFT DEPARTURES WITH SIGNIFICANT JETBLAST/PROPWASH.
5. ACCESS TO WORKS AREA BY DARWIN AIRPORT APPROVED VEHICLE ROUTE.

ABBREVIATIONS / ACRONYMS:

AGL	AIRFIELD GROUND LIGHTING
CWY	CLEARWAY
TWY	TAXIWAY
RWY	RUNWAY
RTS	RETURN TO SERVICE
SOT	START OF TAKEOFF
DTHR	DISPLACED THRESHOLD
THR	THRESHOLD



LEGEND:

- WORKS AREA
- U/S CONES AND LIGHTS
- WITCHES HATS
- DENOTES DISPLACED THRESHOLD BY RTILS
- TEMPORARY TAXIWAY AGL
- RUNWAY U/S CROSS
- VEHICLE ACCESS ROUTE

PRELIMINARY
FOR DISCUSSION ONLY

CONTRACTOR:	
B	28.03.24 PRELIMINARY ISSUE
A	15.02.24 PRELIMINARY ISSUE

RAAF BASE
DARWIN, NT

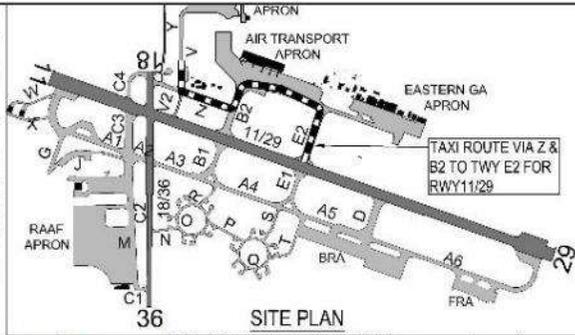
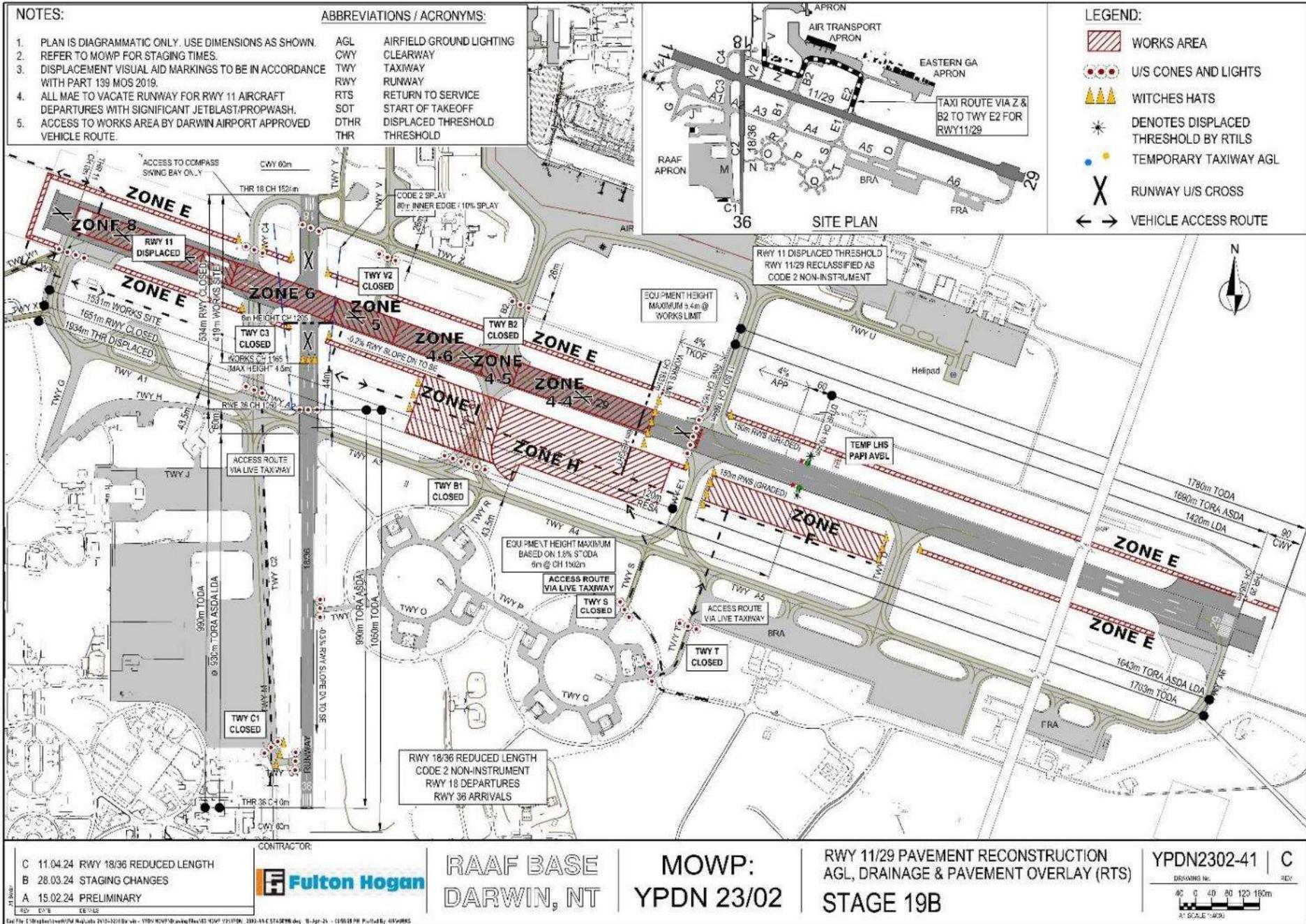
MOWP:
YPDN 23/02

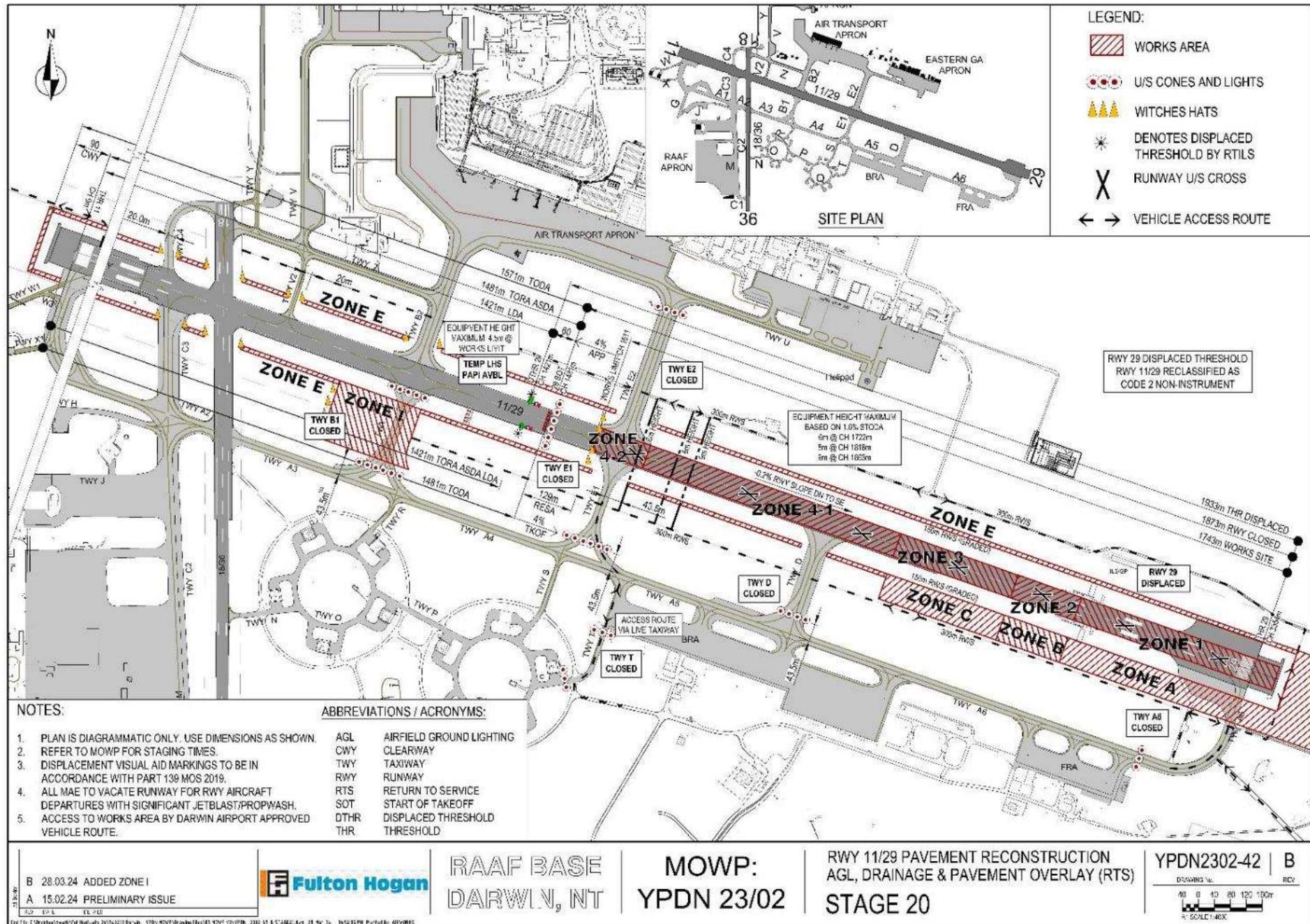
RAAF BASE
DARWIN, NT

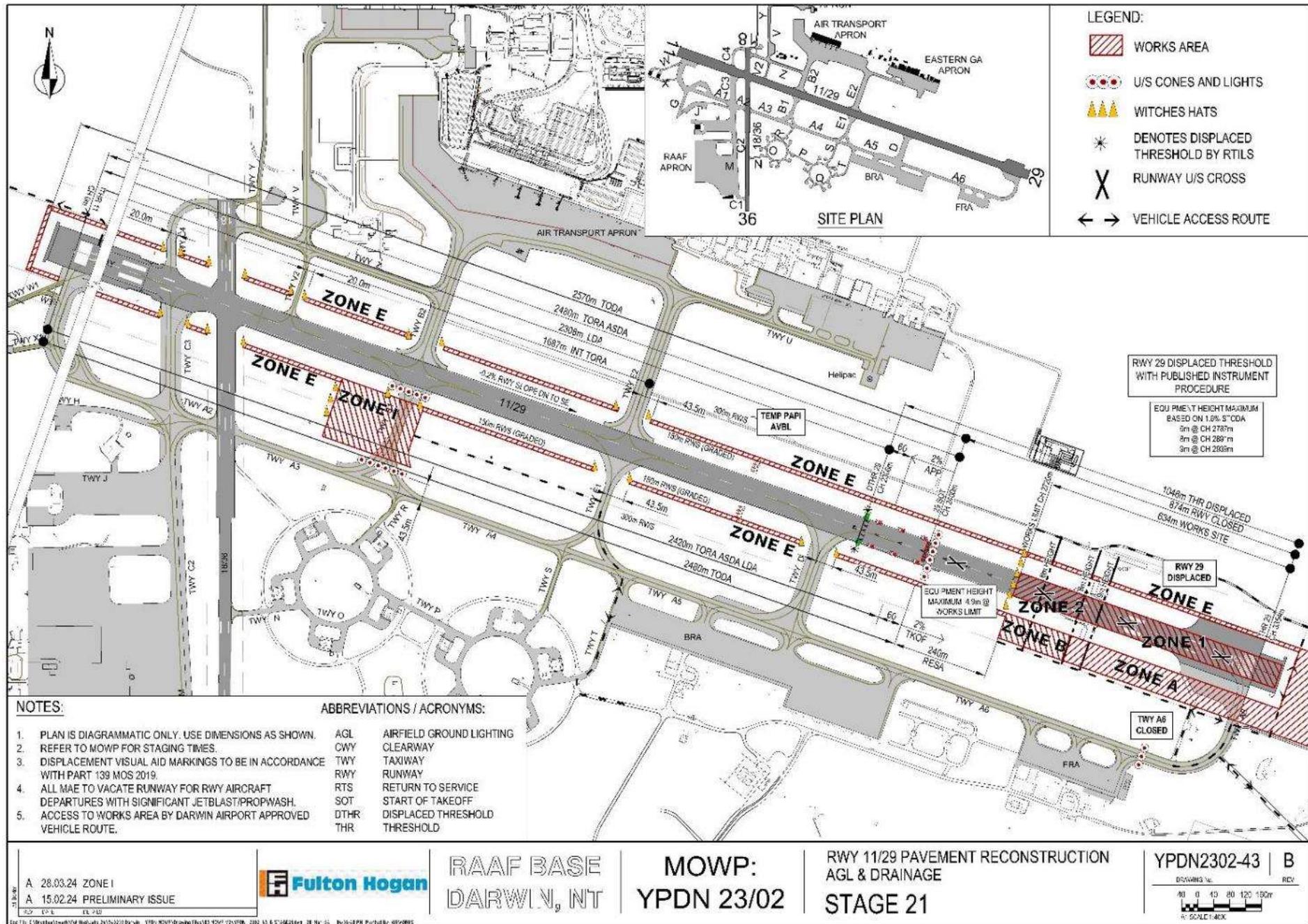
RWY 11/29 PAVEMENT RECONSTRUCTION
AGL, DRAINAGE & PAVEMENT OVERLAY (RTS)
STAGE 19A

YPDN2302-40 | B
DRAWING No. | REV.

SCALE: 1:400







LEGEND:

- WORKS AREA
- U/S CONES AND LIGHTS
- WITCHES HATS
- DENOTES DISPLACED THRESHOLD BY RTILS
- RUNWAY U/S CROSS
- VEHICLE ACCESS ROUTE

RWY 29 DISPLACED THRESHOLD WITH PUBLISHED INSTRUMENT PROCEDURE

EQU PMENT HEIGHT MAXIMUM BASED ON 1.6% S'COA
 9m @ CH 278m
 9m @ CH 289m
 9m @ CH 295m

- NOTES:**
1. PLAN IS DIAGRAMMATIC ONLY. USE DIMENSIONS AS SHOWN.
 2. REFER TO MOWP FOR STAGING TIMES.
 3. DISPLACEMENT VISUAL AID MARKINGS TO BE IN ACCORDANCE WITH PART 139 MOS 2019.
 4. ALL MAE TO VACATE RUNWAY FOR RWY AIRCRAFT DEPARTURES WITH SIGNIFICANT JETBLAST/PROPWASH.
 5. ACCESS TO WORKS AREA BY DARWIN AIRPORT APPROVED VEHICLE ROUTE.

ABBREVIATIONS / ACRONYMS:

AGL	AIRFIELD GROUND LIGHTING
CWY	CLEARWAY
TWY	TAXIWAY
RWY	RUNWAY
RTS	RETURN TO SERVICE
SOT	START OF TAKEOFF
DTHR	DISPLACED THRESHOLD
THR	THRESHOLD

A 28.03.24 ZONE I
 A 15.02.24 PRELIMINARY ISSUE



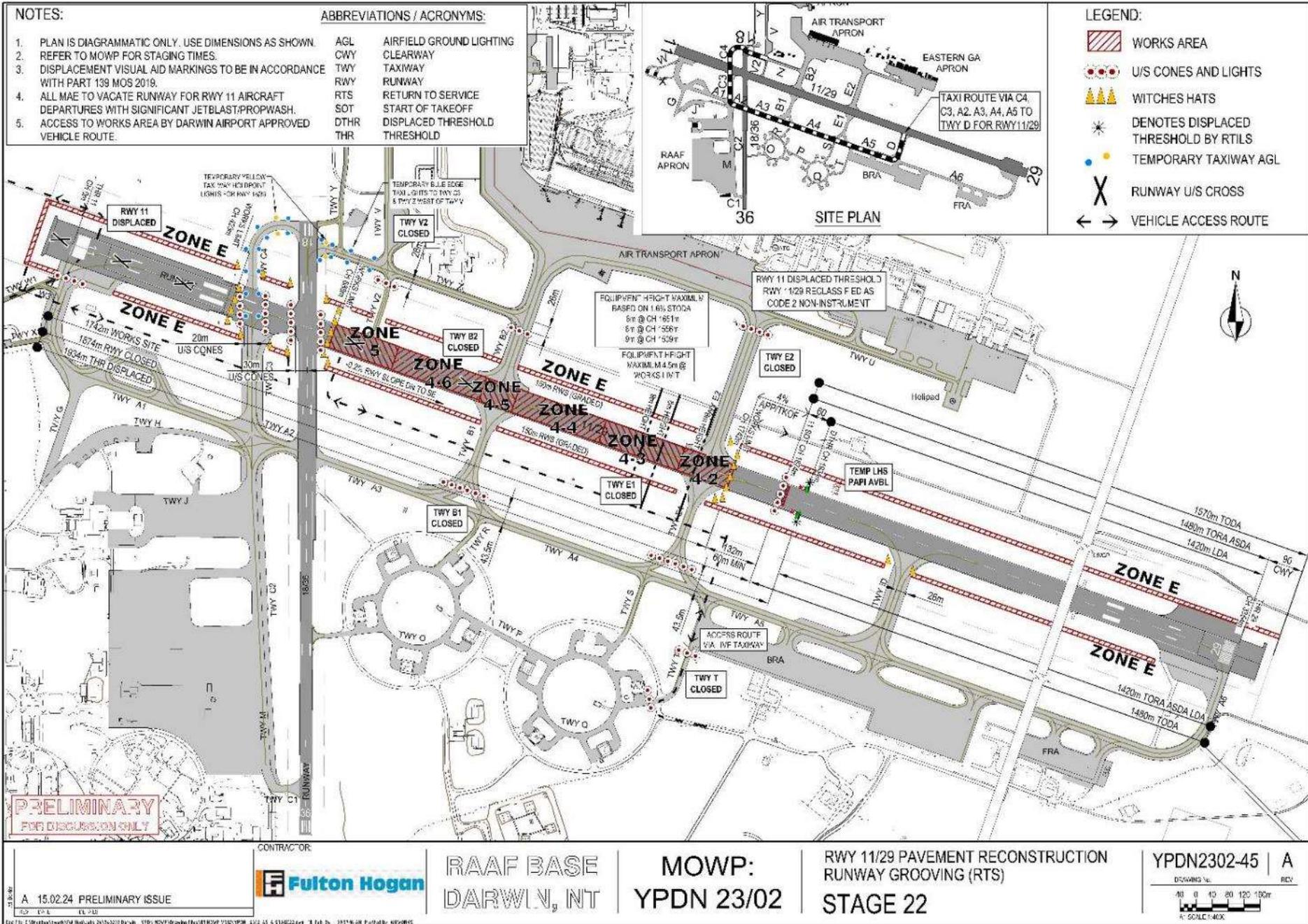
RAAF BASE
 DARWIN, NT

MOWP:
 YPDN 23/02

RWY 11/29 PAVEMENT RECONSTRUCTION
 AGL & DRAINAGE
 STAGE 21

YPD2302-43 | B

SCALE: 1:400

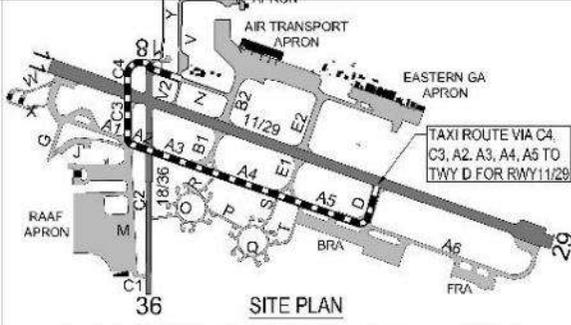


NOTES:

1. PLAN IS DIAGRAMMATIC ONLY. USE DIMENSIONS AS SHOWN.
2. REFER TO MOWP FOR STAGING TIMES.
3. DISPLACEMENT VISUAL AID MARKINGS TO BE IN ACCORDANCE WITH PART 139 MOS 2019.
4. ALL MAE TO VACATE RUNWAY FOR RWY 11 AIRCRAFT DEPARTURES WITH SIGNIFICANT JETBLAST/PROPWASH.
5. ACCESS TO WORKS AREA BY DARWIN AIRPORT APPROVED VEHICLE ROUTE.

ABBREVIATIONS / ACRONYMS:

AGL	AIRFIELD GROUND LIGHTING
CWY	CLEARWAY
TWY	TAXIWAY
RWY	RUNWAY
RTS	RETURN TO SERVICE
SOT	START OF TAKEOFF
DTHR	DISPLACED THRESHOLD
THR	THRESHOLD

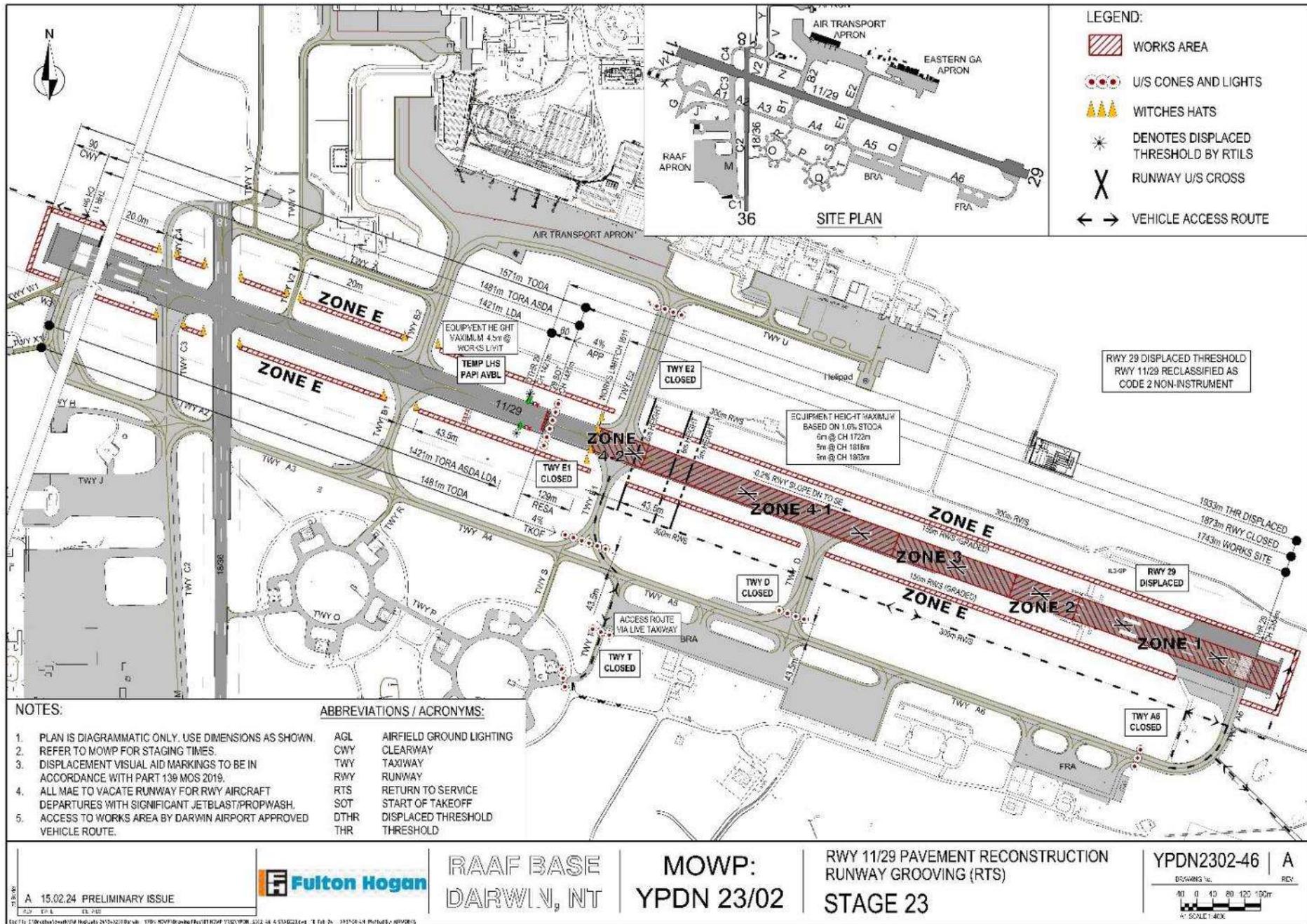


LEGEND:

- WORKS AREA
- U/S CONES AND LIGHTS
- WITCHES HATS
- DENOTES DISPLACED THRESHOLD BY RTLS
- TEMPORARY TAXIWAY AGL
- RUNWAY U/S CROSS
- VEHICLE ACCESS ROUTE

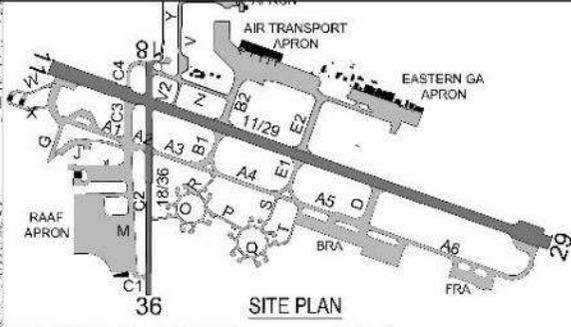
PRELIMINARY FOR DISCUSSION ONLY

<p>CONTRACTOR: Fulton Hogan</p> <p>A 15.02.24 PRELIMINARY ISSUE</p>	<p>RAAF BASE DARWIN, NT</p>	<p>MOWP: YPDN 23/02</p>	<p>RWY 11/29 PAVEMENT RECONSTRUCTION RUNWAY GROOVING (RTS) STAGE 22</p>	<p>YPD2302-45 A</p> <p>DRAWING No. REV</p> <p>0 40 80 120 160m</p> <p>SCALE: 1:400</p>
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LEGEND:

- WORKS AREA
- U/S CONES AND LIGHTS
- WITCHES HATS
- DENOTES DISPLACED THRESHOLD BY RTLS
- RUNWAY U/S CROSS
- VEHICLE ACCESS ROUTE



RWY 29 DISPLACED THRESHOLD
RWY 11/29 RECLASSIFIED AS
CODE 2 NON-INSTRUMENT

NOTES:

1. PLAN IS DIAGRAMMATIC ONLY. USE DIMENSIONS AS SHOWN.
2. REFER TO MOWP FOR STAGING TIMES.
3. DISPLACEMENT VISUAL AID MARKINGS TO BE IN ACCORDANCE WITH PART 139 MOS 2019.
4. ALL MAE TO VACATE RUNWAY FOR RWY AIRCRAFT DEPARTURES WITH SIGNIFICANT JETBLAST/PROPWASH.
5. ACCESS TO WORKS AREA BY DARWIN AIRPORT APPROVED VEHICLE ROUTE.

ABBREVIATIONS / ACRONYMS:

AGL	AIRFIELD GROUND LIGHTING
CWY	CLEARWAY
TWY	TAXIWAY
RWY	RUNWAY
RTS	RETURN TO SERVICE
SOT	START OF TAKEOFF
DTHR	DISPLACED THRESHOLD
THR	THRESHOLD

<p>15.02.24 PRELIMINARY ISSUE</p> <p>Fulton Hogan</p>	<p>RAAF BASE DARWIN, NT</p>	<p>MOWP: YPDN 23/02</p>	<p>RWY 11/29 PAVEMENT RECONSTRUCTION RUNWAY GROOVING (RTS) STAGE 23</p>	<p>YPDN2302-46 A</p> <p>REV</p> <p>0 10 20 40 60 80 100m</p> <p>SCALE 1:400</p>
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