

# **METHOD OF WORKING PLAN 02/23**

Aerodrome:	Karratha Airport
Project Title:	2023 Heliport Tarmac Refurbishment
Project Description:	Removal and replacement of the refuelling sealant, repair transfer joint, and refurbishing accessway drainage.
MOWP Serial Number:	YPKA 02/23
MOWP Amendment Number:	REV 00
MOWP Approval Date:	Monday 12 <sup>th</sup> June 2023
MOWP Commencement Date:	Friday 16 <sup>th</sup> June 2023
Works Commencement Date:	Monday 19 <sup>th</sup> June 2023
Works Completion Date (Scheduled):	Sunday 23 <sup>rd</sup> July 2023
MOWP Expiry Date:	Monday 7 <sup>th</sup> August 2023

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## 1 WORKS INFORMATION

#### 1.1 Description of Works

Management, supply, and construction of heliport pavement joints to the concrete refuelling area, asphalt joint repair to the north and south transvers joint (concrete to asphalt joint), refurbishment and reshaping of the loading area easement drain and pavement line-marking repairs where required as described in the Technical Scope of Work (TSoW). The works are expected to take 33 days to complete, and will be carried out in 4 phases see below:

- Phase 1: Transversal joint removal and reinstatement to concrete refuelling station
- Phase 2: Asphalt joint seal repairs to the concrete refuelling area
- Phase 3: Concrete Apron-Joint sealant replacement
- Phase 4: Install new box culvert drain to loading pathway

#### 1.2 Execution of Works

#### Phase 1: Transversal joint removal and reinstatement to concrete refuelling station

Works to include:

- Remove the deteriorated field moulded joint sealant along the concrete / asphalt longitudinal and transfer joints to spoil.
- Saw cut localised asphalt edge deterioration along the concrete / asphalt longitudinal and transfer joints, excavate to a depth of at least 41 mm and remove to spoil.
- Mill asphalt to existing construction joint as shown in in green in figure 1. Milling to minimum 40 mm remove to spoil.
- Fill current washed out material and compact to original level (some investigating may be required as to why it has washed out).
- Prepare excavation floor and apply a cationic rapid setting emulsion grade CRS/170 60 tack coats, mixed 50:50 by volume with water applied to the milled surface floor and vertical edges to promote adhesion.
- Backfill the excavation with a 10 mm Dense Graded Asphalt (DGA) MRWA approved wearing course with C320 unmodified binder to a nominal thickness of 40 mm and compact to at least 94% of Maximum density.
- Repaint all line markings to match existing (to include broken, unbroken, and symbols where required, with retro-reflective beads).

Area Affected: Refuelling area.

#### Phase 2: Asphalt joint – Joint seal repairs

Works to include:

- Saw cut new 20 mm wide joint in the asphalt-wearing course where required to an average depth not exceeding 40 mm (asphalt wearing course thickness).
- Clean the longitudinal and transfer joints by honing both sides and blowing with compressed air where required.
- Install backer rod and seal using silicone joint sealant (Dow corning 890 or similar approved) to manufactures recommendations.
- Repaint all line markings to match existing (to include broken, unbroken and symbols where required, with retro-reflective beads).
- Remove waste from site.

Area Affected: Refuelling area.

#### Phase 3: Concrete Apron – Joint Sealant replacement

Works to include:

- Set up for night shift.
- Remove aged and brittle joint sealant to set out area for the shift using hand tools and diamond honing blades.
- Clean and prepare areas as per TSOW.
- Install sealant to areas cleaned identified to achieve per shift.
- Sweep area prior to finishing shift ready for Heliport Day work.
- Thorough clean of job site prior to hand over.

Area Affected: Refuelling area.

#### Phase 4: Install box culvert drain to loading pathway

Works to include:

- Scan ground for services prior to excavating and cut asphalt ready for excavations.
- Excavate down to blinding height and set invert levels ready for slab install.
- Install base slab IMC assumes single layer of SL72 mesh to be installed.
- Install box culverts and lock into position IMC assumes cranage by site cranage MEA.
- Install head walls and rock pitching protection.
- Reinstate surface material to match existing.

Area Affected: Hotspot Accessway.

#### 1.3 Timing of the Works

Works on the tarmac will commence once the VIVA Energy Hydrant works are completed. The expected start date is 19<sup>th</sup> June 2023. The current schedule has the work completed in 33 days, provided no significant delays occur.

#### 1.3.1 Commencement Date

Iron Mining Contracting (IMC) are anticipating starting site works on Monday 19th June 2023.

#### 1.3.2 Duration of Works

The works are expected to take 33 days. In the event of delays or adverse weather, the works may extend.

#### 1.3.3 Completion Date

Works are anticipated to be competed Sunday 23<sup>rd</sup> July 2023.

#### 1.3.4 Hours of Work

The work for the sealant repair and transfer joint will be completed on 12hr night shifts running on a thirteen on one off roster continuously until scope is completed. The night shift commences at 1800hrs (AWST) and completes at 0600hrs the next morning. The work related to the culvert installation will be carried out on day shift work 5-day weeks on 10-hour days.

#### 1.4 Notification of Commencement of Works

The actual date and time of commencement will be advised by a NOTAM, to be issued not less than 48 hours before work commences. The NOTAM will be issued by airport staff on Friday 16<sup>th</sup> June 2023, as detailed in section 2.4.

The timing for the release of this MOWP is not compliant with *Part 139 (Aerodromes) Manual of Standards 2019* section 15.02(3) as the works are unforeseen and of an urgent nature, and as such meets the criteria for the provisions of section 15.02(4).

#### 1.5 Consultation With Stakeholders

To facilitate all the needs of the affected stakeholders, consultation meetings have been held to discuss individual requirements.

#### 1.5.1 Air Transport Operators

As there will be no effect on RPT operations, RPT operators have not been consulted on, but informed of, this project.

#### 1.5.2 Aeromedical Evacuation and Emergency Aviation Service Providers

The RFDS and aeromedical evacuation operators' parking and taxi routes will not be affected by these works. They have been made aware of the works.

#### 1.5.3 Ground Handling Agents

Menzies Aviation who services CHC aircraft, have been consulted through CHC. Operators are aware of the roadway restrictions, and the works occurring in the area.

#### 1.5.4 Air Traffic Control Services

There has been no consultation with AirServices Australia as these works will not affect the airspace or manoeuvring area.

#### 1.5.5 Airport Rescue Fire Fighting Service (ARFFS)

ARFF have been made aware of the works on the helipad apron.

#### 1.5.6 Refuelling Agents

VIVA Energy are aware of the restrictions of refuelling access routes for these works. The fuel skid will be in place until the VIVA Hydrant project is complete, then refuelling operations will revert to bowser refiling in accordance with CHC Operations Manual.

AirBP were not consulted by the airport management team directly.

## 2 RESTRICTIONS TO AIRCRAFT OPERATIONS

#### 2.1 General

There will be minimal restrictions to aircraft ground movements and no restrictions to flight schedules are expected. CHC will be engaged for approval prior to operational restrictions being imposed. This will be limited to aircraft parking spots on the helipad apron being made unavailable.

#### 2.2 Changes to Markings

Unserviceability cone markers will be required to delineate the immediate works area for all four phases and be moved accordingly as the teams' progress through the scope. As crews are working on night shifts, the cones will be supplemented with red eFlare markers.

Further information on how markings will be utilised are detailed in section 4.

#### 2.3 Emergencies, Adverse Weather and Late Aircraft

Under certain emergency situations or in the event of adverse weather conditions, the works organisation may be denied access to the airside of the airport and to the work areas.

During these events, access will be determined on a case-by-case basis at the discretion of the Airport Operations Coordinator (AOpC), and in the absence of the AOpC, by the WSO.

Further information regarding response to emergencies is detailed in section 3.5 and 3.6.

#### 2.4 NOTAMS

A NOTAM advising the activation of the MOWP will be issued Friday 16<sup>th</sup> June 2023 with the following wording:

HELIPAD APRON LAYOUT CHANGED DUE WIP. REFER METHOD OF WORKS PLAN YPKA 02/2023".

#### 2.5 Restoration of Works Areas

For the duration of the works, the works areas will be under the control of the works contractor. Only the works contractor or their sub- contractors are to access the inside of the works areas.

Prior to releasing the works areas back to aviation operators, the AOpC is to be satisfied that:

- Any surface penetrations have been restored to as detailed in the Reconstitution Specification, including sufficient curing time for the settling of asphaltic surfaces.
- All surfaces, vehicle transit routes, vehicle access points, material storage areas, and plant processing spaces have been cleared of surface debris and swept clean.
- All aircraft wayfinding markings are to be reinstated.
- Any sub-surface services are to be covered using the appropriate materials and marked with appropriate warning tape / placards.
- Where services are terminated, any above ground infrastructure remaining in place is to be annotated as such.

The WSO, AOpC, PM, and CHC Base Manager are to inspect the work site to confirm that the above tasks have been completed to their satisfaction, prior to releasing the works areas back to CHC.

## 3 PERSONNEL AND EQUIPMENT

#### 3.1 General

The Airport Operations Coordinator (AOpC) has absolute authority to direct the Contractor on airfield operational requirements. This authority may be delegated to the Works Safety Officer (WSO) for the day-to-day monitoring and supervision of the works. The contactor shall comply with all instructions from the AOpC, WSO, or designated representative, including an Aerodrome Reporting Officer (ARO).

Works in each stage will be confined to the areas shown in section 8.2. The limits of the works areas are to be defined in accordance with *Part 139 (Aerodromes) Manual of Standards 2019.* 

The Works Organisation's site representative shall contact the WSO at least one (1) hour prior to the start of each working period to ascertain the status for the proposed work with respect to the operational requirements of the airport.

Prior to commencing each works period, the Works Organisation's personnel shall meet with the WSO to ensure that all parties including sub-contractors are aware of the working requirements and the work restrictions for each stage.

#### 3.2 Inductions, Certifications, and Identity Cards

Prior to commencement of works, all contracted personnel are to have completed the Airside Safety Awareness Induction package through the AirDAT Passport system to the satisfaction of the AOpC. Access to site will be refused for all personnel not completing this requirement.

Access to airside is restricted to personnel holding an Aviation Security Identity Card (ASIC) or a Visitor Identity Card (VIC). Personnel holding a VIC are to be always under the direct supervision of an ASIC holder. Personnel without appropriate airside access qualifications will not be allowed within the airside boundary.

#### 3.3 Smoking and the Use of eCigerettes

Smoking (including the use of vapes and eCigarettes) is not permitted airside, or within any Karratha Airport buildings. Designated smoking areas (if any) will be advised by the WSO at the contractor induction toolbox meetings.

#### 3.4 Vehicles and Plant

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 shall be permitted at the work site. Private vehicles will not be permitted airside.

All vehicles entering the aerodrome must do so only via the allocated Vehicle Access Points (VAP). Refer section 8 figure 5 for a diagram of access routes. All vehicles are to be checked for FOD and loose materials prior to entering the airfield.

The vehicles entering the airport are to be in a roadworthy state. All vehicles shall comply with the requirements of *Part 139 (Aerodromes) Manual of Standards 2019.* 

At the end of each work period, all vehicles, plant, equipment, and materials are to be shut down and made secure within the works area or removed to landside and parked in a designated parking area.

Vehicles and self-propelled items of plant are to have an orange rotating warning light operating whenever they are within the airside movement area. Passenger vehicles not fitted with an orange rotating warning light shall activate hazard lights whenever they are in the airside movement area.

To enable aircraft operations at night, the lights from vehicles and any portable lighting systems engaged in night work must not dazzle or cause confusion to pilots. Vehicle light fittings should be checked to ensure that the lights are not directed unduly upwards and portable lights should be shielded as required. Drivers are to be briefed that, as a matter of course, high beam is not to be used.

Passenger vehicles and vehicles operating plant are to be equipped with a portable fire extinguisher.

#### 3.5 Emergencies or Adverse Weather Conditions

Under certain emergency situations or in the event of adverse weather conditions, there may be a requirement to vacate the works area and move personnel and plant landside. The scenarios which may trigger this requirement are too numerous to be listed here; however, the supervising WSO will consult with the AOpC / DARO and the Project Manager and determine what (if any) action is to be taken during the emergency.

Provided it is safe to do so, all loose materials are to be secured, plant shut down and made safe, and barriers / beacons to be re-erected. The WSO is then to ensure that all personnel vacate from airside. He is also to account for all personnel and advise the AOpC when all personnel are clear, or if there are any unaccounted-for persons.

Additionally, the works organisation may be denied access to the airside of the airport and to the work areas. During these events, access will be determined on a case-by-case basis at the discretion of the AOpC and in the absence of the AOpC, by the Manager Airport.

Emergencies occurring during these works will be managed in accordance with the Aerodrome Emergency Plan.

In the event of adverse weather conditions preventing works form continuing safely, the contactor is to secure all equipment, materials, and work areas, and then vacate the works site(s). Prior to departure, the provisions put in place for marking, protecting, or otherwise making safe the works area during night hours.

#### 3.6 Initiating Emergency Response

Karratha Airport operates with an Aviation Rescue Fire Fighting Service (ARFFS). This resource can be called upon to provide aid to any emergency at the airport – including confined space rescue. Emergency services should first be notified via placing a call to 000. When time permits, and if it is safe to do so, an additional call should be made to the ARFFS emergency number: 08 9183 6299.

#### **Contacting Emergency Services**

Emergency Services: 000

ARFFS Emergency Line: 08 9183 6299

Poisons Information Centre: 13 11 26 (including snake bites)

Spill Response Karratha: 08 9119 5500

Duty Aerodrome Reporting Officer: 04 1879 9460

#### 3.7 Airside Security

All personnel are to always display their valid ASIC or Airport issued Visitor Identity Card (VIC) on their person above the waist. Those personnel who only have a VIC are to be always accompanied by a red ASIC-holder while airside.

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.

#### 3.8 Access to the Works Areas and Vehicle Access Routes

Specific vehicle access routes to and from the works areas will be managed by the WSO each shift and a key shall be obtained prior to the project commencing.

The access routes to each work possession area from the Western Manual Vehicle Access (Gate 9) Vehicle Access Point (behind the CHC hangar) is shown in green on figure 5.

Access to and from the airfield for works on the Woodside heliport apron will be via the Non-Automatic Western Vehicle Gate beside the Woodside hangar. The Works Organisation will provide a suitably rated padlock for the gate to provide dual access, which will be managed by the WSO. The padlock is to be "daisy-chained" with the current security lock to ensure that airport staff have access through the gate. The gates are NOT to be left open unattended.

If a gate is to remain open, a sentry holding a current red Aviation Security Identification Card (ASIC) must control and monitor any movements through the gate.

## 4 AERODROME MARKERS, MARKINGS, AND LIGHTS

#### 4.1 Works Limits

All works and the Works Organisation's plant, equipment and personnel shall be confined to the areas directed by the WSO. The layout of works limitation markings / unserviceability markings is included on figure 5.

#### 4.2 Marking of Unserviceable Areas

White Unserviceability Markers, with central 25 cm red band, will be used in accordance with *Part 139 (Aerodromes) Manual of Standards 2019.* These markers will be used for areas where product is curing, or machinery is working.

#### 4.3 Works Limit Markers

The work possession areas shall be demarcated with orange cones as the work parties will be working in a progressive form throughout the night. The contractor shall provide enough cones and other work limit markers to ensure that the prescribed markings are installed for each stage of the work.

The WSO will establish each work site before the Works Organisation will be allowed access to the work area. No equipment or personnel associated with the work shall be permitted to move outside of the works area, defined by orange cones, without the approval of the WSO.

The Contractor shall protect and maintain the works limit markers in good condition throughout their use in the works. Where markers remain in place overnight, red eFlares are to be co-located with cones to ensure visibility in the dark hours.

All works limit cones for the identification of the limits of work areas are to be placed in accordance with *Part 139 (Aerodromes) Manual of Standards 2019* as directed by the Works Safety Officer (WSO).

The Contractor shall maintain all works limit markers so that they are clearly visible and are in the required locations.

The Contractor shall ensure that all works limit markings are established at the start of each phase of the works and removed at the completion of each phase as required by the MOWP.

The WSO shall ensure that the works limit markings are appropriate and always maintained.

## 5 SPECIAL REQUIREMENTS

#### 5.1 Foreign Object Debris / Damage (FOD) Control

The 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 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 always taken for control of dust or other nuisance materials. The Contractor shall immediately respond to any direction by the WSO or Karratha Airport to eliminate any problem. The 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 Supervisor is to inspect the works area to ensure potentially affected aerodrome areas are made serviceable, including the removal of all FOD hazards, to the satisfaction of the WSO.

#### 5.2 Prevention of Spills

Winyama will take every precaution to prevent any spillage of material on or in the vicinity of aircraft movement areas, or in transit to and from the work site. Any spillage which does occur is to be immediately removed by the Contractor to the satisfaction of the WSO.

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

When personnel and equipment are required to vacate aircraft movement areas, all directions of the WSO are to be followed immediately.

Any breaches of aviation safety by project personnel or airfield users must be reported to the WSO. The WSO is to initiate an immediate response in consultation with Karratha Airport. All incidents are to be reported in writing (preferably via AVCRM) to the AOpC within two (2) working days of the incident.

#### 5.3 Protection of Electrical and Underground Services

The Works Organisation shall liaise with Karratha Airport to ensure that no sub-terranean services are disrupted during works. Where cable location is required, this is to be organised by the Works Organisation directly in consultation with Karratha Airport management.

Underground services such as fuel hydrant lines and fire mains shall be protected from damage by the Works Organisation. The works organisation shall ensure that any underground service is appropriately marked on the surface so as these restrictions may be enforced.

#### 5.4 Other Restrictions

Measures shall be always taken to control dust or other nuisance materials and the Works Organisation shall immediately respond to any direction by the WSO to eliminate a problem.

Stockpiles and equipment parking must only be in designated areas as detailed in Figure 5.

Lights for general floodlighting of the area shall be shielded above the horizontal and not directed towards approaching aircraft. No lighting tower shall be located outside the limit of works area unless permitted by the WSO.

Hot Works Permits are to be obtained prior to any hot works commencing.

Toilet facilities are available in the Woodside hangar toilets.

#### 5.5 Continuation of RPT Operations

During this project there will be no disruptions to RPT flights and CHC operational disruptions have been considered. As a result, WCG have chosen to work the project on Nights shifts. There are no night flights scheduled during the work hours.

#### 5.6 Communications and Navigations Systems (CNS)

There are no CNS facilities contained within the works areas, nor is it expected that the works will interfere with, or disrupt power to, any CNS systems.

#### 5.7 Helicopter Start up Positions

There will be minimal impact during day operations with helicopter start up positions however this will be managed by on site supervision around the sealant product drying times and communicating this to CHC operations.

#### 5.8 Management of Change Planner

CHC have conducted their own Management of Change Assessment for the modified operations on the heliport apron. CHC has given KTA Management a copy of this document, who are satisfied that all practical steps have been taken to maintain the required safety practices for conducting works and flight operations concurrently. This includes assessment for refuelling operations, taxi route clearances, FOD mitigation, emergencies, and passenger management.

The Management of Change Planner document is available on request.

## 6 ADMINISTRATION

#### 6.1 Works Organisation

The Works Organisation will be Winyama Contracting Group Pty Ltd.

The Works Organisation Project Manager will be Darryn Dhu, who will be contactable on mobile number +61 432732624.

#### 6.2 Airport Representative

The Airport representative for these works will be the Airport Operations Coordinator, Dan Coe. The AOpC can be contacted via mobile phone on +61 417904053.

All questions concerning this MOWP are to be directed to the AOpC.

#### 6.3 Work Safety Officers

The Designated Works Safety Officer will be Luke Chambers. The WSO can be contacted via mobile phone on +61 400732535. In addition, where a stand-in WSO is required, the roll will be filled by Todd McLaren.

The WSO has completed and Aerodrome Reporting Officer / Works Safety Officer course through Aerodrome Management Services (AMS) Ltd, with the practical component of their ARO course being supervised by the SARO on Karratha Aerodrome.

The Manger Airport is satisfied that the training and qualifications of the WSOs meets the requirements of *Part 139 (Aerodromes) Manual of Standards 2019* section 13.04.

A list of the WSO's duties and responsibilities are detailed at Appendix A.

#### 6.4 Completion of Works

The WSO is to advise Karratha Airport when all works are completed.

## 7 AUTHORITY

#### 7.1 Issue

This Method of Working Plan is issued in accordance with Chapter 16 of the *Part 139 (Aerodromes) Manual of Standards 2019.* All works must be carried out in accordance with the MOWP.

#### 7.2 Variation from MOWP

The approval of the Karratha Airport Operations Coordinator is to be obtained before any change is made to the MOWP. Any changes will be promulgated by reissuing the MOWP or by raising of an amendment to this MOWP.

#### 7.3 Expiry Date

This MOWP is to remain in force until the conclusion of the works unless amended or reviewed by an amendment to this MOWP. Any alternation to the expiry date is to be indicted by a published amendment to the MOWP showing the new expiry date on the title page and appropriate sections.

#### 7.4 Signatures

#### 7.4.1 Works Organisation Project Manager

Name	Darryn Dhu	Signature:
Organisation	Winyama Contracting Group	the former of the second secon
Date	07 June 2023	

#### 7.4.2 Works Safety Officers

Name	Luke Chambers	Signature:
Organisation	Woodside	TMal anon
Date	08 June 2023	maturen

Name	Todd McLaren	Signature:
Organisation	CPC Engineering Pty Ltd	LChambers
Date	08 June 2023	

## 7.4.3 Airport Operations Coordinator

Name	Daniel Coe	Signature:
Organisation	City of Karratha	INCO
Date	09 June 2023	Phile

## 7.4.4 Manager Airport

Name	Amol Virkar	Signature:
Organisation	City of Karratha	
Date	09 June 2023	

## 8 DRAWINGS, DIAGRAMS, AND IMAGES

#### 8.1 General

Drawings have been provided as per the table below, in accordance with *Part 139 (Aerodromes) Manual of Standards 2019 section 16.09 Drawings* 

MOS Requirement	Details	Provisions
Specific details of Works Area	Asphalt Joint - Joint Seal Repairs	Figures 1 to 4
Restrictions to Aircraft	There are no restrictions to aircraft within the manoeuvring area	Not Applicable
Locations of CNS equipment, including the associated critical or sensitive areas in proximity to the works area		Not Applicable
The location of visual ground aids and markings in proximity to the works area, including any unserviceability markers or markings required by works	Details of where unserviceability cones will be located.	Figure 5
Details of the height and location of critical obstacles		Not applicable
The location of temporary parts of the Movement Area (if applicable)		Not Applicable
Access information, including standard routes for vehicle and equipment not normally operated on the aerodrome	Vehicle access to Heliport Apron and vehicle access to Aircraft Stand.	Figure 5
Storage areas for material and equipment (if applicable)	Plant holdpoints shown. All other material stored landside	Figure 5
The location of critical electrical services and control cables which may be distributed in proximity to the works area (if applicable)	Survey found no other critical electrical infrastructure in works area	Not Applicable

#### 8.2 Works Area Locations Overview

The works are to occur on the refuelling apron, and the personnel loading foot path heading to the CHC baggage and personnel loading bay.



Figure 7. P2 – Taxiway Asphalt Joint (Section 1)

1 shift



1 31111



Figure 9. P2 – Taxiway Asphalt Joint (Section 3). \*To complete after Viva Fuel Line Scope

\*1 shift



Figure 1: Highlighted areas shown are the areas to be removed



Figure 2: Image showing sealant to be removed and reinstated.



Figure 3: Image showing area new culvert will be installed.



Figure 4: Image showing typical GA of new drain.



Figure 5: Heliport Apron Works Possession Area and Access Routes

## 9 DISTRIBUTION LIST

This MOWP (and any subsequent amendments) is to be distributed to the personnel, organisations, entities, and stakeholders detailed below.

NAME	POSITION	COMPANY	EMAIL
Amol Virkar	Manager Airport		amol.virkar@karratha.wa.gov.au
Dan Coe	Airport Operations Coordinator		daniel.coe@karratha.wa.gov.au
Sue O'Toole	Airport Terminal and Commercial Coordinator	City of Karratha	airportservices@karratha.wa.gov.au
Matthew Bowles	Senior Airport Reporting Officer		matthew.bowles@karratha.wa.gov.au
Phillip Halligan	Airport Safety and Compliance Coordinator		phillip.halligan@karratha.wa.gov.au
Karratha Tower	Duty Air Traffic Controller		karratha.tower@airservicesaustralia.com
Dave O'Hanlan	Superintendent ARFFS Line Leader	AirServices	dave.ohanlon@airservicesaustralia.com
Yas Hishmeh	Fire Commander	Australia	yaser.hishmeh@AirservicesAustralia.com
Candice Ryan	Team Leader - Tech Controllers		teamleader.toc@airservicesaustralia.com
Darryn Dhu	Works Contractor – Project Manager		ddhu@imcpl.com.au
Michael Green	Works Contractor – Site Supervisor		mgreen@nemmsjv.com.au

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NAME	POSITION	COMPANY	EMAIL
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#### Continued...

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## 10 APPENDICES

#### 10.1 Appendix A – Work Safety Officers (WSO) Responsibilities

The Works Safety Officer is responsible for ensuring that the works, insofar as they affect the safe operation of aircraft, are conducted in accordance with *Part 139 (Aerodromes) Manual of Standards 2019* section 13.04, CASA directions related to aerodrome works, and this MOWP.

In particular, the Works Safety Officer shall:

- ensure the safety of aircraft operations in accordance with:
  - o the standard for aerodrome works; and
  - the procedures in the aerodrome manual; and
  - the procedures in the applicable MOWP (the MOWP);
- ensure that, if applicable, aerodrome works are notified by the issue of a NOTAM whose text reflects the MOWP;
- ensure that ATC (if applicable) is provided with whatever information is necessary for the safety of aircraft operations;
- ensure that the works party or organisation is briefed, daily, on any matters necessary for the safety of aircraft operations;
- ensure that unserviceable portions of the movement area, temporary obstructions, and the limits of the works area are correctly marked and lit in accordance with the standards in this MOS and the MOWP;
- ensure that vehicles, plant, and equipment carrying out aerodrome works are:
  - o properly marked and lit; or
  - under works safety officer supervision; or
  - within a properly marked and lit works area.
- ensure that all other requirements of the directions within the MOWP are complied with relating to vehicles, plant, equipment, and materials;
- ensure that access to work areas is restricted to clearly identified access routes in accordance with the MOWP;
- ensure that excavation is carried out in accordance with the MOWP and to avoid damage
  or loss of calibration to any underground power or control cable associated with a lighting
  system or any navigational aid;
- ensure reports are immediately made to the aerodrome reporting officer of any incident, or damage to facilities, likely to affect:
  - o ATC services; or
  - the safety of aircraft; or
  - o published information in the AIP;
- ensure works are continually supervised while in progress, and that the aerodrome is open to aircraft operations.

- ensure that works vehicles, plant and personnel are evacuated from the movement area when necessary for the safety of aircraft operations;
- ensure that the movement area is returned to a safe condition for aircraft operations following removal of vehicles, plant, equipment, and personnel from the works area;
- in the case of time-limited works ensure that all reasonable measures are taken to return the works area to normal safety standards not less than 5 minutes before the time scheduled or notified for an aircraft movement;
- ensure that floodlighting, and any other lighting required for carrying out aerodrome works, is managed so as not to represent a hazard to aircraft operations.

#### 10.2 Appendix B – Operations Continuation Plan

It is expected that the Tarmac Refurb works will prioritise heliport operations scheduled by CHC. In the event of concurrent operations (particularly for the replacement of the culvert at the access way to the Hotspot) the below is to be used as a guide for separating aircraft / passengers and works personnel:

- 1. On notification that the area is to be used for flight operations, all works are to cease. The Works Supervisor and WSO are to be notified of the requirement to use the area.
- 2. Work area is to be tidied and cleared of all FOD.
- 3. IMC shall maintain communications with CHC to actively ensure that all aircraft movements are not impeded (e.g., by works or vehicle). UNDER NO CIRCUMSTANCES are unsterile personnel to interact with passengers or flight crew on the apron. It is the responsibility of the WSO to actively ensure this.
- 4. All portable hand tool and power tools are to be secured, within vehicles or within site boxes.
- 5. A physical barrier is to be erected around any active work zones to ensure that no unauthorised individuals may access the works area, and to prevent passengers tripping on the unprepared surfaces. Physical barriers and equipment are to be secured so as not to affect the taxi path of the aircraft or become a hazard in jet- wash.
- 6. All works personnel are to withdraw to vehicles onsite, or to move to the landside areas.
- 7. These measures are to remain in force until the aircraft has departed the airfield to ensure that there is no obstruction to the aircraft if it is required to return to the bay.
- 8. The works area will not be released to the Works Organisation until the WSO is satisfied that the works can resume without operational or safety risk.

## 10.3 Appendix C – List of Abbreviations

This table details the abbreviations used throughout this document.

AIRDAT	AIRDAT (Company)	HWP	Hot Works Permit
AOC	Air Operators Certificate	ІМС	Iron Mine Contracting
АОрС	Airport Operations Coordinator	КТА	Karratha Airport
ARFFS	Aviation Rescue Fire Fighting Service	LTD	Limited
ARO	Aerodrome Reporting Officer	MOS	Manual of Standards
ASIC	Aviation Security Identity Card	MOWP	Method of Working Plan
AVCRM	Aviation Compliance and Risk Management (Software)	MSS	MSS Security (Company)
AWST	Australian Western Standard Time	ΝΟΤΑΜ	Notice to Airman
CASA	Civil Aviation Safety Authority	PHI	PHI International Helicopters Ltd (Company)
СНС	CHC Helicopter (Company)	PRI	Primary
CHTR	Charter (Flight)	ΡΤΥ	Proprietary
CNS	Communications and Navigation System (NavAids)	RFDS	Royal Flying Doctors Service
DGA	Dense Graded Asphalt	RPT	Regular Passenger Transport
FLT	Flight	SRY	Secondary
FOD	Foreign Object Damage	TSOW	Technical Scope of Work
GHA	Ground Handling Agent	VAP	Vehicle Access Point
GSE	Ground Support Equipment	VIC	Visitor Identity Card
HNZ	Helicopters New Zealand Ltd (Company)	wso	Works Safety Officer