

AOP 13 –

Apron

Management

Document Control

1 SECTION 1 Apron Management General / Safety Responsibilities

1.1 Aims and Objectives

Whilst the Airport Company will set the framework for safety management, it is fundamental to safe airside working that all airport users work together to ensure the presence of a 'safety culture' and the use of 'best practice' to reduce the risk of accidents. To this end each organisation operating at the airport has a responsibility to ensure that safety standards are maintained and wherever possible improved. Therefore the following requirements apply to all organisations operating at the airport:

- Managers must have terms of reference for safety responsibilities.
 - All staff must be provided with safe systems of working and be adequately trained to undertake the tasks that they are required to undertake.
 - Managers must ensure that risk assessments have been undertaken for all tasks/procedures and that all reasonable steps to reduce risks have been considered and implemented in accordance with the relevant legislation.

1.2 Procedures

It is the responsibility of all managers or section heads to ensure their staff are trained, briefed and understand the requirements of apron/airside safety procedures and that a system is established by each organisation to ensure these procedures are complied with. The procedures must cover such aspects as individual discipline in airside/apron areas, driver and vehicle operations, safety aspects of equipment use, equipment serviceability, equipment parking, control and guidance of passengers and safety aspects close to aircraft, engines and propellers.

1.3 Mobile Telephones

In line with widespread guidance on the potential effects of mobile telephones, LBA requires that no mobile telephones are used in airside areas as follows:

- Within 10 metres of a refuelling aircraft or bowser that is refuelling an aircraft.
- Within 10 metres of a vehicle refuelling operation.
- By passengers who are outside of the Terminal Buildings or airbridges.

Handling agents and airlines are to ensure that passengers are instructed to turn off their mobile telephones when outside of the Terminal Building or airbridges.

All staff operating in airside areas and who are required to use a mobile telephone for operational duties may use mobile telephones in compliance with the requirements above. However, when doing so they must exercise care and caution in regard to their surroundings and immediate activities that may be taking place. Under no circumstances must a mobile phone be used whilst driving a vehicle unless it is equipped with hands free capability.

1.4 Airside Driving Permissions

Airside drivers are responsible to ensure they only operate in the areas their driving pass authorises them to do so. All airside drivers with ‘manouvering area privileges’ must obtain permission from ATC (and remain in contact with) before entering the manouvering area. Drivers included in the free ranging scheme are excluded from this requirement. Notwithstanding this, ALL persons are required to contact ATC before entering the runway.

1.5 Smoking

Smoking (including Electronic Cigarettes) in airside areas is NOT PERMITTED.

1.6 Walkways and Crossing Points

Pedestrian walkways and road pedestrian crossing points are clearly marked and all users are to pay particular attention to passenger/pedestrian movements to/from aircraft in the vicinity of vehicle/equipment operations.

1.7 Passenger Escort

Handling agents that are responsible for the safe escort of passengers in airside areas are to ensure that there are sufficient staff available to adequately supervise passengers on the apron. This is to include the safe supervision of passengers walking to/from the terminal building and the issue of appropriate guidance to ensure passenger safety. Escorts are responsible to ensure that excessive build-up of traffic is not caused on the apron road by the crossing of passengers. CAP 642 provides further guidance for airside users. Whilst passengers always take priority over vehicles, passengers should be held short of any designated walkways to allow vehicles to proceed. Discretion should be applied however by all airside users to find a balance between flow of passengers and flow of vehicles.

1.8 Remote Stands

For passengers requiring access to remote stands (Stand 1 and stands 19-21C) passenger transfer coaches will be provided as required. Access to the above stands for those undertaking tasks related to aircraft parked on these stands should ideally be achieved with the use of a vehicle. However, those staff that are familiar with the layout and have the relevant personal protective equipment to meet the requirements below may access these areas as a pedestrian but must pay due attention to vehicular and aircraft movements in the area, ideally utilising the verge around the edge of the apron. Staff are not permitted to walk to this area during hours of darkness or in LVP's

1.9 High Visibility Clothing

The wearing of hi-visibility clothing has long been regarded as one of the key elements of managing safety in the airside environment. The airport company makes it a mandatory requirement for all staff, and contractors entering the area, including contractors to meet this requirement.

Hi Vis clothing must be worn properly fastened so that the wearer is afforded 'all round' protection, the front of Hi Vis waistcoats and jackets must not be left unfastened. The definition of Hi Vis clothing that has been adopted by LBA, as a minimum, is defined as '*a waistcoat that is day-glow yellow or orange in colour (blue for use on GPU) and incorporates retro-reflective material to a standard that meets BSEN 47: 2003*'. Orange apparel is only to be worn by members of AOU and approved operational members of staff. Such waistcoats are readily available from many stockists of safety supplies. Should an organisation wish to use an alternative colour scheme for their Hi Vis clothing, this must be approved by AOU/Head of Airfield Services prior to its introduction.

It should be noted that all persons working in any external airside areas, including walkways, engineering yards, storage areas etc. are required to wear Hi Vis at all times, including transit to/from their place of work when starting or ending their period of duty. Aircraft crews are not exempt from this requirement and are required to comply. Aircraft passengers are the responsibility of the appropriate aircraft crews and/or the handling agent who must ensure that they are escorted by persons correctly dressed in the appropriate Hi Vis clothing.

Staff are responsible for ensuring their PPE is maintained correctly and is always in clean and good condition.

1.10 Lighting of Apron Activities during the Hours of Darkness

All non-standard activities on the apron, regardless of the time of day, require prior permission from AOU who can be contacted on 0113 391 3231 (internal extension 3231) / 07813 817314.

Upon receipt of permission, it is the responsibility of the party undertaking the activity to ensure that sufficient lighting is in place to provide safety.

1.10.1 Mobile Lighting Columns

Should the need arise; two mobile lighting columns will be available on the apron.

AOU will hold the key and control placement. All requests for access to additional task lighting should be made through AOU.

The maximum operating wind speed is 43 knots and these units should not be used in conditions when the wind speed is likely to exceed this limit.

1.10.2 Lighting Tower Operation Procedures

Instructions for the erection of the tower and switching the generator and lighting are clearly shown on the top of the housing.

It is extremely important to ensure that the two supporting legs are lowered and locked into position with the adjustable locking arms set to ensure that both feet are firmly on the ground (as per the instructions on the unit). The units will blow over very easily if this is not done.

The units must only be placed on level ground to ensure stability.

When positioning the units, it is far easier to move the units with the telescopic assembly (fully retracted when in storage) in the vertical position to balance the weight of the unit evenly.

If additional fuel is required, the units operate on red diesel.

1.11 Aircraft Arriving on Stand

Staff must not approach an aircraft that has maneuvered on to stand until:

- All engines have been shut down
- The anti-collision beacons and strobe lights have been turned off.
- The engineers or the handling agent has applied chocks to the nose or main wheels.
- Protective cones been deployed
- The only exception to this rule is noted - Connection of Ground Power Unit with Engines Running Procedures

1.12 Use of Cones

It is MANDATORY to use protective cones across all apron parking stands and the cones to be used should be of sufficient weight and design that they do not present a hazard to vehicles, aircraft or pedestrians if wind blown on the apron. Cones must comply with British Standard BS873 and the average weight of each cone is approximately 5Kg.

The high visibility reflective jacket attached to the cone should be adequately secured to the cone and replaced if it becomes significantly damaged.

The ground handler is responsible for the immediate return of the cones to the designated safe storage area after use,. The airline handlers' procedures should determine the use of cones during strong wind warnings and apply them accordingly if the wind speed restrictions are lower than that stipulated by LBA.

1.12.1 Positioning of Cones

For guidance purposes, cones would normally be placed 1m outside the plan profile of each wing tip, the tail and each engine.

Airlines and ground handlers should develop their own procedures to achieve this and, if their risk assessment identifies, introduce additional cone positions around the aircraft.

1.12.2 Storage and Transportation

All cones are to be stored in such a way so as not to create a FOD hazard or impede passenger movement. Consideration must also be given to any weather warnings that could affect the storage/use of the cones (e.g. strong wind warnings).

Once the cones have been used and are no longer required after an aircraft turnaround has been completed they are be transported immediately to their designated storage area.

1.12.3 Weather Limits

Due to the risk of cones becoming a FOD hazard they are not to be used when winds exceed 30kts.

1.13 Passenger Inert Guidance Systems (PIGS)

Irrespective of whether the aircraft is being boarded by the rear steps, PIGS should always be deployed.

PIGS deployed on the ramp should be in serviceable condition. We would request that operators introduce a system to keep track of PIGS and their condition.

1.14 Storage of Aircraft Chocks

There should not be more than two chocks on any vehicle that enters any taxiway.

Vehicles moving on apron roads should only carry sufficient chocks so as to enable an aircraft to be fully chocked in accordance with the appropriate airlines handling instructions.

Chocks that are not in use are to be stored in the appropriate designated yellow chock bins should they not have a designated storage location such as tug baskets etc. (the exception to this is the fixed sided red Jet2 trolley which was provided internally for storage of cones and chocks)

4 bins have been provided for the main apron and are located on stands 5, 8, 9, 10, 11 and 13.

Chock Bins have been painted with high conspicuity yellow paint as shown below.



Chock Bins have been created by the airport to minimise congestion airside by improving and refining the parking and storage of equipment in the respective bays. Chocks (however in the bays) are frequently thrown on the ground after use which is restricting the use of the equipment bay for the GSE it is intended to serve.

1.15 Airside Warning Lights – Fire Station Warning Lights

There are a number of reasons why the red warning lights on each side of the fire station may be illuminated. The specific purpose of the lights is to provide an alerting system for pedestrian or vehicular traffic of the potential for fire vehicles to be leaving the fire station for a number of scenarios. These could include:-

- Aircraft Emergency
- Whenever the airport siren is activated
- Emergency Exercise Response

There are two sets of warning lights in relation to the fire station. One set are located on the apron side corner of the baggage hall B airside facility. The second set is located on the western side of the fire station. All lights are located on raised steelwork that can be seen by both pedestrian and vehicular traffic using the route across the front of the fire station.

A visible check of the hatched area is required to ensure it is safe to proceed if the lights are not illuminated. When the Red warning lights are flashing all vehicles **must stop** as fire vehicles are likely to be exiting the fire station or about to do so. Vehicles must not proceed across the hatched area unless permission has been obtained from one of the fire vehicles that it is safe to do so. Once the fire vehicles have responded to an incident, the hatched area will be designated as the Rendezvous Point (RVP) for external emergency services. Airside drivers must be aware of this and operate with extreme caution, paying particular attention to any directions given by the RVP co-ordinator

1.16 Low Visibility Procedures (LVP) Indication Lights

There are a number of LVP warning signs located on the aerodrome. On the main aircraft apron side of the airfield, these are located as follows:

- Western side of the fire station mounted on the facing wall as vehicles and staff proceed from the main security control.
- On the structure of the stand 7 passenger boarding bridge
- On the structure of the stand 8 passenger boarding bridge
- On the centre of the remote gate building abeam stand 15
- On the corner of the apron road as you approach stand 19
- On the Southside of the airfield, a sign is located adjacent to the Multiflight security entrance.

AOU are responsible for illuminating and extinguishing LVP beacons as appropriate (with the exception of the beacon on the West Side of the Fire station which is illuminated by Security)

At the initiation of LVP conditions, ATC will complete a check-list of the following parties.

- AOUS
- Fire Operations
- Fuellers
- Southside Security Gatehouse
- Security Gate House
- Multiflight
- Jet2
- AGL
- ATE
- Swissport
- Groundsman

Similarly, on cessation of LVP procedures, those above will be advised in order that the signs can be extinguished.

1.17 Connection of Ground Power Unit with Engines Running

1.17.1 General

There have always been situations where airside workers need to be in the vicinity of aircraft with engines running (e.g. connection of GPU when the APU is unserviceable or during pushback). However there has been a general understanding that no-one should approach an aircraft until engines are spooled down and the anti-collision lights have been switched off, unless specifically trained and authorized to do so.

This procedure is required to be used when there is an operational requirement to connect the Ground Power Unit (GPU) whilst the engines are running.

The basic rule of not approaching an aircraft with engines running and anti-collision lights on cannot be applied in nonstandard situations such as an unserviceable APU on an arriving aircraft. The following procedures will be carried out by fully trained and competent employees.

All workers in the vicinity must have a comprehensive understanding that there is a nonstandard operation underway, and who has overall responsibility of this procedure when carried out.

All signals should be given in line with the requirements of CAP 637 Visual Aids Handbook.

It is strongly recommended, to maximise visibility, that the GPU Supervisor is wearing a long sleeved yellow hi-vis jacket beneath the blue tabard.

1.17.2 Procedures

Once the flight crew give the “brakes on” signal, see diagram (A) the GPU SUPERVISOR (identified by a blue Hi-ViS tabard printed with APU on the front and back, see diagram (B) will check the blades of the engines to establish which engine is still running and subsequently, the GPU SUPERVISOR will approach the aircraft by the safe route on the opposite side. The safe route is to approach the aircraft from the front and walk down relevant side no further than the GPU connection point. Under NO circumstances should an individual walk down the live side of the aircraft as engine will be running. See diagram (C) and place two chocks (one to front and one to rear) of the nose wheel of the aircraft.

No-one else is to approach the aircraft at this time. All other staff to watch the aircraft for movement and to watch out for anyone else approaching the aircraft.

Once the aircraft is chocked, the GPU SUPERVISOR can then attach the GPU lead to the aircraft using the safe route.

Once the power is connected, The GPU SUPERVISOR will return to the head of stand and give the signal to flight crew that the power is attached, see diagram (D) The GPU supervisor will then remove the blue tabard.

If the power does not work when connected, give the “power not available” signal. Diagram (E). The flight crew will then shut down the running engine and anti-collision lights.

Once the anti-collision lights have been turned off, the engines have spooled down and the aircraft protection cones have been deployed, it is safe for everyone else to approach the aircraft.

If the aircraft is required to depart with the APU problem unresolved, the aircraft will be allowed to start its engines on stand with the assistance of an air start and be pushed back and towed to the breakaway point, before the tug releases and the aircraft moves off under its own power.

Equally, if an aircraft develops a problem/failure with its APU on stand, then the same parameters will apply

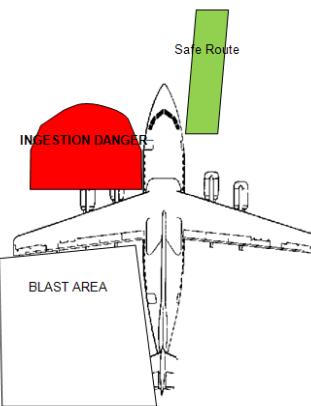
1.17.3 Diagram (A)"Brakes On" signal



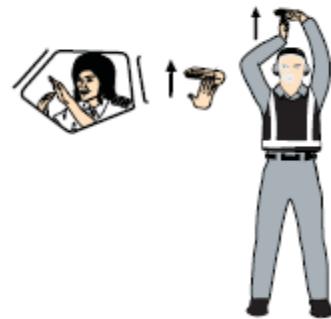
1.17.4 Diagram (B) GPU Supervisor Tabard



1.17.5 Diagram (C) Example Safe Route



1.17.6 Diagram (D) “Power connected” signal



1.17.7 Diagram (E) “Power not Available” signal



Followed by

1.18 Towing/Taxiing of Aircraft

Whilst an aircraft is under tow, the tug driver is responsible for the safety of the aircraft just as the aircraft commander is when it is taxiing. It should be remembered that, irrespective of any instructions issued by ATC, the tug driver is responsible at all times for ensuring that the aircraft does not collide with vehicles, aircraft, building or any other obstructions.

When towing an aircraft, it is particularly important to be aware of the extent of the extremities, such as wingtips, of the aircraft and their proximity to obstructions. In the event that a tug driver is unsure whether there is sufficient space for an aircraft under tow to be moved safely, he or she should safely bring the aircraft to a stop and request assistance. If the aircraft stops on the manoeuvring area, ATC should be advised accordingly.

1.19 Speed Detection & Warning Signs (SDWS)

The SDWS are solar powered with large battery storage capacity and will be operational H24. The devices

give LBA the ability to collect traffic data of approaching vehicles, showing vehicle speed classes,

average speed highest speed and percentile speed counts.

- 13 MPH - Speed is indicated in the top circle.
- 15 MPH - activates the SLOW DOWN command.

Multiple CCTV cameras are focused on the signs and apron road which further assist in identifying any

airside driver breaching the respective speed limits. The Airside Operations Unit (AOU) will issue non-compliances against any Airside Driver who is observed breaking the speed limit. The number of points allocated to the Airside Driving Permit (ADP) will be issued proportionately to the severity of the breach of speed limit, up to an including removal of ADPs where appropriate. To reaffirm, vehicles responding to an emergency are exempt from apron speed limits. (Whilst maintaining responsibility for the safe operation of their vehicle). Further reaffirmation that in accordance with Aerodrome Manual V1.6 Para 33.8 - The apron road speed limit is reduced to 5 mph in LVPs.

2 SECTION 2 – Parking

2.1 Stand Dimensions

The table below shows each stand dimension, maximum aircraft size allowed plus if the stand has an Inter-stand Clearway.

**Restrictions on size of CODE E A/C due equipment bays etc. Consultation with AOU

Stand	Stand Length (M) (m)	Stand Width (M)	Interstand Clearway (m)	Maximum Aircraft
1L	20		n/a	J41
1	36.6	2x 19.0 Or 1x 34.0	n/a	B733W
1R	20	1x 34.0	n/a	J41
3	38	21	n/a	SF340
5	36	28.9	n/a	F100/B733
6	34	28.9	n/a	B733W
7	42	36	7.0	A320
8	63	40	7.0	B752W (B763W*)
9	52.0	41.9	7.15	B752W
10	52.0	36.6	7.15	A321/B738
11	52.0	41.9	7.15	B752W
12	52	36.6	7.15	A321/B738
13	52	36.6	7.15	A321/B738
14	56.0	41.9	7.15	B752W
14A				CODE E **
15L	52		n/a	A321/B738
15R	52		n/a	B752
16L	52.0		n/a	B733W
16R	52.0	M.A.R.S 1x 36.0 & 3 x 32.0	n/a	B752W
17	52.0		n/a	B733W
18L	52.0	or 3 x 42.0	n/a	B752W
18R	52.0		n/a	B733W
19	48	42	n/a	B752W
20A	40	36	n/a	B738W/A320
20B	48	42	n/a	B752W
21A	48	42	n/a	B752W
21B	40	36	n/a	B738W/A320
21C	48	42	n/a	B752W

required before use.

2.2 M.A.R.S (Multi Aircraft Ramp System)

Stands 15L-18R have been designed to give greater flexibility for increased parking capacity of larger aircraft through installation of a Multiple Aircraft Ramp System (M.A.R.S) across these stands.

The following tables show the various aircraft parking options available across stands 15-18 with the aircraft type currently operating from LBA.

2.2.1 Option 1

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15L	36.0	52.0	B738/A321
16L	29.7	52.0	B733W
17	29.7	52.0	B733W
18R	29.7	52.0	B733W

2.2.2 Option 2

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15 R	41.50	52.0	B752
16R	47.0	52.0	B752/A320/B738
17	0	0	UNAVAILABLE
18L	47.0	52.0	B752/A320/B738

2.2.3 Option 3

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15L	36.0	52.0	B738W/A321
16R	47.0	52.0	B752/A320/B738
17	0	0	UNAVAILABLE
18R	29.7	52.0	B733

2.2.4 Option 4

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15R	41.5	52.0	UNAVAILABLE
16L	29.7	52.0	B733
17	0	0	UNAVAILABLE
18L	47.0	52.0	B752/A321/B738

2.2.5 Option 5

STAND	WIDTH(M)	LENGTH(M)	AIRCRAFT TYPE
15R	41.5	52.0	B752
16L	0	0	UNAVAILABLE
17	0	0	UNAVAILABLE
18L	47.0	52.0	B752/A321/B738

PLEASE NOTE THAT AIRCRAFT CANNOT PARK ON STAND 15R AND STAND 16L SIMULTANEOUSLY.

2.3 Standard Nose-In Parking

It is LBA policy that all aircraft parking on the main apron will be parked nose-in except when:

- Strong current or forecast winds that may require “into-wind” parking
- No suitable tow/push bar is available
- The aircraft exceeds the stand dimensions

Aircraft **must not** enter an allocated parking stand until visual guidance from the marshaller is received.

Parking stand allocation is at the discretion of the AOU. Any applications for changes to stand allocation must be made to AOU by telephoning 0113 391 3231 or internal extension 3231.

Stand dimensions vary. Full details of the current stand dimensions and typical aircraft types that may utilise the stand can be obtained from AOU.

Larger aircraft may be parked where suitable safety measures are employed to the satisfaction of the AOU. These may include measures such as closing the inter-stand clearway, use of wing tip markers etc. However, the minimum wing tip clearances for aircraft utilising a marshaller or approved stand entry guidance of 4.5 metres should never be compromised.

2.4 Into Wind Parking

Whilst nose-in parking is the standard policy at LBA, it is understood that occasions may exist when this cannot be achieved. Primarily these will be when:

- Strong existing or forecast winds could result in structural damage to aircraft
- It is not possible to push the aircraft back due to tow bar failure or incompatibility.
- Aircraft size precludes standard parking.
- Engineering maintenance work requires the operation of aircraft weather radar on stand.

In such circumstances, the AOU will advise Air Traffic Control (ATC) that non-standard parking is to be employed, the stand to be used and the orientation required (i.e. facing east / west / south / north).

During non-standard marshalling manoeuvres, the marshaller must use a ‘wingman’ to assist and ensure adequate obstacle clearance is achieved.

Any requests for nose out parking must be made to the AOU.

On receiving such request, AOU must consider the effects that non-standard parking will have on adjacent stands. Points to consider include:

- Jet blast on adjacent stands and apron road during the arrival or departure phases of the turnaround.

- The possibility of rendering adjacent stands unusable due to wing, nose or tail overhang.
- The aircraft size in relation to the stand dimensions.
- Safety measures to protect both personnel and aircraft during the arrival and departure phases of the turnaround.

2.5 Aircraft that Exceed Stand Dimensions

In such circumstances, the AOU will plan carefully whether to park nose-in or non-standard ensuring:

- The proposed parking location does not infringe any part of the taxiway system delineated by a double white line.
- No aircraft surfaces (especially the tail) infringe the runway transitional surface
- Sufficient distance exists between wing tips, tail, nose etc. and aircraft on adjacent stands.

In the event that any parts of the aircraft extend beyond the marked limits of a stand, these extremities must be protected immediately after parking by marker boards (lit at night) to prevent the danger of collision. Where appropriate inter-stand clearways should be closed or restricted using appropriate marker boards to prevent equipment coming into contact with an aircraft. The additional use of aircraft protection cones in vulnerable areas should be used to supplement the marker boards

2.6 Parking B767W on Stand 8

The inter-stand clearways between stands 7-8 and 8-9 must be barriered off by the means of bad ground markers at the apron road end for the arrival and the departure of the B767W.

The use of the interstand clearway between stand 7-8 is to be kept to a minimum. This is due to the reduced clearances available whilst the B767W is parked on Stand 8. Also, the B767W takes its fuel on via the port side wing so the refueller will need to be parked there until fuelling is complete.

Stand 9 is not to be used for aircraft parking during the turnaround of the B767W. Stand 9 is to be held solely for the use of vehicles involved in servicing the aircraft.

Stand 7 can still be used for aircraft turnarounds up to aircraft size B733.

2.7 Aircraft Parking on Stand 1

Stand 1 is designated a bussing stand for all arrivals and departures.

In exceptional circumstances, aircraft may be marshalled nose out onto stand 1. This caveat should only be utilised in the event a visiting aircraft that requires a tow bar not available at LBA. AOU is responsible for the safe coordination of this activity and are responsible to ensure that the aircraft dimensions and operating parameters are compatible with the stand. Two marshallers will be required to be in attendance for this procedures.

2.8 Stand 1 Parking Options

2.8.1 Option 1

Stand	Aircraft Type	Aircraft Position
1 Left	UNAVAILABLE	UNAVAILABLE
1	Up to B733W	Nose In
1 Right	UNAVAILABLE	UNAVAILABLE

2.8.2 Option 2

Stand	Aircraft Type	Aircraft Position
1 Left	J41	Nose In
1	UNAVAILABLE	UNAVAILABLE
1 Right	J41	Nose In

2.9 Marshaller Responsibilities

It is the **responsibility of the marshaller** to ensure that:

- They are in position at the head of the stand in good time to meet the arriving aircraft.
- A thorough visual check of the stand is made to ensure it is free of FOD and equipment prior to the aircraft arrival.
- Safe wing tip and tail clearance is maintained throughout the parking manoeuvre.
- Standard marshalling signals are employed at all times.
- In the event that the stand becomes unsafe at any time (e.g. pedestrian, vehicle or FOD incursion) during marshalling, the aircraft is stopped and held until the stand has been made safe.
- If operating on stand 7/8, to ensure that the air bridge is fully retracted.

3 SECTION 3 – Pushbacks

3.1 Procedure

When a controller issues a pushback clearance the ground crew will ensure that the pushing aircraft does not push further than the adjacent stand. The option of a longer push to exit via a specific holding point still exists at the controller's discretion.

A minimum of 4 stands must separate 2 aircraft that are pushing back to face in opposite directions and are converging on taxiway Alpha.

The option of a longer push back / non-standard pushback to exit via a specific holding point still remains at the controller's discretion.

All push-back drivers must be fully trained, competent and possess documentary evidence of the training for the push back operation. Such evidence must be available for inspection by the Airport Company (AOU), or any other regulatory body, at any reasonable time.

Tail guards should be employed to safeguard the rearward movement of the aircraft and also prevent collisions with other aircraft, vehicles and personnel.

A competent “wing walker”, in constant two-way communication with the aircraft commander, must be used during push-back procedures. Use of a headset and microphone provides the best communication and is the normal requirement for push backs at LBA. Where such equipment is exceptionally not available, the use of recognised hand signals is acceptable where appropriate training has been provided and documented.

Two-way communication between the aircraft and ATC must be established prior to moving the aircraft. Where an aircraft is being moved with the use of an Aircraft Engineer the engineer must comply with the provisions for the Taxying of Aircraft by Engineers. Where a tug is being used and an engineer does not possess the relevant R/T qualifications, the push back tug operator must ensure that full and proper R/T communication is used with ATC at all times. This should follow standard radio procedures as below:

- Aircraft (or tug) call ATC and await acknowledgement.
- Aircraft (or tug) state call sign, position and request.
- ATC will give permission (or otherwise) for the requested manoeuvre.
- Aircraft (or tug) will read back the ATC clearance and await confirmation.
- On receipt of confirmation, details of the clearance will be passed to the wing walker and tug driver who will then follow approved company push-back procedures.

Standard push back instructions will include the direction for aircraft to face once the push back has been completed. Exceptionally, for smaller aircraft, up to and including the DH8D, the requirement may be to “Push Straight Back”. The subsequent turn on the taxiway will then be made under the aircraft’s own power after the tug has been disconnected and returned to the stand that has been vacated. ‘Wingtip walkers / headset man’ should remain abeam the apron road to ensure clearance whilst the aircraft taxies left of right onto the taxiway.

Push back drivers should aim to complete push back with the aircraft nose wheel straight and on the centre line of the taxiway (except on straight pushbacks), thereby minimising the amount of engine power required to move the aircraft.

3.1.1 Cross Bleed Starts

In the event that an aircraft asks for a cross bleed start on taxiway Alpha this may only be approved where there is the equivalent of a 4 stand sterile area behind the aircraft.

No cross bleed start from stands 14,15,16,17 or 18 facing west will be permitted unless the aircraft is pulled to abeam stand 14 prior to commencing the cross bleed.

3.1.2 Cross Bleed Starts from Stands 19-21C

Cross bleed starts (from pushback into N4) from stands 19-21C are not permitted.

Aircraft up to 737 sizes off stands 19-21C must be pushed to face east into the neck of November 3. Aircraft larger than 737's will be instructed to push back along November until the tug is past N2 or D2.

3.2 Aircraft “Push and Park”

The optimum use of prime stands close to the Terminal Building, especially those equipped with airbridges, is essential for efficiency. Where an aircraft is fully ready for departure but awaiting an ATC slot allocation it may be preferable to relocate the aircraft away from the prime stands. The aim is for an aircraft to be pushed back to a remote location where it is available

for engine start, and to facilitate a more expeditious departure should the slot time improve at short notice.

AOU has the responsibility for apron stand planning and will initiate any ‘Push and Park’ requirement.

Where a decision to initiate “push and park” procedures, the AOU and the duty Air Traffic Controller will identify the most suitable location for the aircraft to be re-located to. Consideration must be given to other aircraft parked on the apron and any current departure delays in place for other customer airlines. The location should allow the aircraft to taxi away from its position without a further push back being required.

The AOU will advise the airline handling agent of the requirements and the expected time that the current stand must be vacated.

Prior to repositioning, the aircraft will be required to make radio contact with ATC who will approve the manoeuvre ‘Push and Park’. The Air Traffic Controller will already be aware of the position and orientation of the aircraft prior to any move being made.

Once the aircraft has reached its new location, the tow bar will be removed and the aircraft commander will be responsible for safe engine start up, either with or without ground crew assistance, according to individual airline policy. Should subsequent access to the aircraft be required, this must be done with a vehicle and driver in two way communication with Air Traffic Control.

4 SECTION 4 - Gate and Stand Planning Protocol

4.1 Gates

On schedule Departures take priority over on schedule Arrivals.

On schedule Departures have priority over off schedule Departures.

On schedule Arrivals have priority over off schedule Departures for turnaround purposes. An on schedule Arrival is defined as a flight that is on blocks between STA -10 mins and STA + 10mins.

In order to reduce the risk of FOD, Gate staff should remind all passengers to dispose of items in the bins provided, prior to exiting the Gate.

4.2 Stands

AOU is responsible for the allocation of aircraft parking stands. Aircraft arriving off schedule +/- 20 mins cannot be guaranteed the allocated stand.

Aircraft arriving in advance of STA (-20) when their allocated stand is still occupied shall hold for their allocated stand. After STA -20 a new stand will be allocated. Early aircraft that are parked remote become off schedule departing aircraft for the purposes of this instruction.

AOU may request some airlines to tow aircraft after first departures from remote areas to contact stands.

Stand occupancy of greater than 2 hours will render an aircraft liable to be towed to a remote stand.

Aircraft arriving after their STA shall not be allocated to their planned stand if allocating them their planned stand causes consequential stand allocation problems for other aircraft.

Aircraft will from time to time be required to tow to contact stands to accommodate a balance between walking & coaching operations.

Aircraft without a tow bar will not be prioritised for contact stands

5 SECTION 5 - Aircraft Ground Engine Runs

5.1 General

The use of the term 'Engine Run' is a generic term that applies to any combination of the following

- Aircraft Engine Ground Run - Any engine start up not followed immediately by the departure of the aircraft concerned.
- Auxiliary Power Unit Run - Any APU start up that is not immediately connected with the pre-flight sequence for an aircraft departure.
- Ground Power Unit Run - Any GPU start up that is not immediately concerned with the pre-flight sequence for an aircraft departure. This includes GPU maintenance runs of greater than 1 hour.

5.2 Procedures

Due to strict noise restrictions aircraft engine runs will not be permitted within the following periods:

- Nightly between 2300-0700 hours local
- Armistice Day between 1055-1105

Note: In exceptional circumstances when the aircraft concerned is required to operate a scheduled LBA service and significant operational disruption would occur permission may be given at the discretion of the Head of Airfield Services to carry out a ground engine run up to 1 hour prior to the scheduled departure time. Positioning flights are excluded from this proviso.

Approval for any engine run at greater than idle power, must be obtained IN ADVANCE from LBA AOU (Airside Operations Unit) who can be contacted by telephone on 0113 391 3231.

Approved ground engine running operations will be monitored by ATC and LBA AOU. If the parameters contained within the approval detail are not adhered to, the operation will be terminated by LBA AOU through ATC.

5.3 Safety

All personnel concerned with engine ground running must be fully conversant with this instruction, which must be complied with at all times. Aircraft shall be positioned such that noise and engine efflux are directed away from the noise sensitive areas or areas prone to ignition or any loose surfaces that may produce debris, this would usually be dictated by prevailing wind conditions.

A trained member of airline, operating company or handling agent staff is to be positioned on the stand in verbal contact with the flight deck. They will communicate by the R/T or inter-phone with the flight deck to ensure that the engine(s) are shut down if persons or vehicles move into

the danger area in front of, behind or in the vicinity of a live engine. For this purpose and if the R/T or inter-phone link is unserviceable, hand signals by day and light signals by night may be used.

All persons involved in engine runs are to utilize appropriate safety clothing and equipment. The minimum standard of high visibility clothing on the aircraft manoeuvring area is a waistcoat incorporating retro-reflective materials that meets the standard BSEN 471:2003.

The person managing the ground run must ensure that the aircraft is adequately restrained so that it cannot move under any circumstances. Details will be dictated by the ground operations manual of the relevant operator.

5.4 Aircraft Positioning Criteria

5.4.1 Apron Areas

On stands 6 -18R, engine ground runs will be limited to check-starts that do not exceed ground idle power. For checks requiring the use of higher power settings, a move to a suitable location will be required. Location details will be contained within the approval and coordinated by AOU. The aircraft must be positioned correctly at the location stipulated in such a way that the engine running will not present any danger to persons, aircraft, vehicles, buildings or installations.

On stands 3 and 5, idle aircraft engine ground runs will Not be permitted due to the volume of traffic and proximity of the apron road at the rear of the stands unless approved and supervised by AOU.

On stand 1 idle aircraft engine ground runs will not be permitted if the aircraft is facing nose out on stand.

If applicable, where runs are approved on stands 19 -21C or the area between N3 and N4, the rear of stand road must be closed to safeguard vehicular traffic, before any approved engine run is permitted.

Any ground equipment must be placed at a safe distance from the aircraft.

Ground running must not take place when passengers are being embarked / disembarked on any adjacent stands.

5.4.2 Manoeuvring Area

Engine running in other parts of the manoeuvring area will be carefully coordinated between AOU and Air Traffic Control before any approval is given. This may include parts of the taxiway system that may need to be closed to facilitate the engine(s) run accordingly.

6 SECTION 6 – Power Units & Line Maintenance

6.1 Auxiliary Power Units (APU)

Wherever possible, airlines / operators and handlers are to ensure that APU's are used for no more than 5 minutes after arrival on stand and no more than 30 minutes before planned departure. Also, wherever possible, APU's are not to be used whilst passengers are embarking / disembarking.

GPU's are to be used in preference to APU's wherever possible.

6.2 Ground Power Units (GPU)

Operators are to ensure that when GPU's are in use, that the connection cable between the GPU and the aircraft is routed, so that as far as is reasonably practicably, it does not present a trip hazard to persons. Additional identification measure such as hi-visibility tape should be considered as part of a further hazard reduction technique.

6.3 Line Maintenance

When aircraft maintenance is undertaken on an apron stand, which may inhibit the ability to remove that aircraft from the stand, the flexibility for allocating that particular stand to an arriving / departing aircraft is lost. To avoid this, no such maintenance is to be started without the prior permission from the AOU who can be contacted on 0113 391 3231. (Internal Ext 3231)

7 SECTION 7 – Airbridge Operations

7.1 VDGS Operations

LBA no longer operate any Visual Docking Guidance Systems (VDGS) systems. Aircraft are to be marshalled onto stands 7 and 8.

7.1.1 Marshalling onto Stands 7 and 8

It is the responsibility of the handling agent to arrange for the provision of a marshalling service for aircraft arrival on that stand.

The nose wheel stop positions are marked on the stand centreline. The marshaller will bring the nose wheel to rest on the relevant mark and the airbridge can then be connected in manual mode to the aircraft side.

7.1.2 Stop Short Procedures

The need to "stop short" will be indicated to the flight crew by;

- Marshalling signals

It is the responsibility of the airbridge operator to immediately inform AOU of any airbridge un-serviceability or condition that may affect the safe parking of aircraft on the stand.

7.1.3 Emergency Stop Procedure

The emergency stop facility provided within the airbridge 7 cabin and on the airbridge Apron Drive Unit are to facilitate the safe stop of the airbridge in the event of an emergency.

The red emergency stop buttons are TO BE USED IN AN EMERGENCY ONLY. When one or more of the buttons is depressed all power to the airbridge will be isolated and all airbridge movements will stop.

Should an emergency stop button be depressed during airbridge operation that results in an aircraft being stopped during the docking procedure, it is the airbridge operator's responsibility to immediately contact AOU and state the reason why an emergency stop has been activated.

7.1.4 Vehicle Driving

The apron surface on which an airbridge will manoeuvre is hatched with white markings.

Regardless of whether or not the airbridge is being used, the hatched area beneath the airbridge must be kept free of equipment and vehicles at all times.

7.2 Airbridge Operation

The issue of an airbridge operator's access code is subject to successful completion of the airbridge training course followed by a practical airbridge driving test, where candidates must be able to demonstrate a high standard of proficiency in the operation of the airbridge.

7.2.1 Operating Conditions

An airbridge must not be operated at wind speeds above 58 knots.

A thorough check must be made to ensure that the airbridge is free from debris both prior to aircraft arrival and after aircraft departure.

The airbridge must be correctly parked before an aircraft enters the stand. This is defined as:

- During airbridge operation, when the airbridge has moved to the PRE-SET position following selection of the aircraft type.
- During airbridge operations when the airbridge is “HOME” with the drive wheels are within the parking box contained within the hatched area on the apron surface.

Under no circumstances should the airbridge operator attempt to preposition an airbridge using the Manual Operation Mode prior to aircraft arrival on stand. Only when the aircraft has stopped, the wheel chocks are in place, the anti-collision beacon have been extinguished and the engines have been run down, may an airbridge be moved from its pre-set position or parked position in Manual mode to dock to the aircraft.

After an airbridge has docked to the aircraft, it is the airbridge operator's responsibility to ensure that AUTO MODE has been engaged and that:

- The cabin door is in the up position.
- The auto-leveller device is extended and is in contact with the aircraft fuselage.
- The canopy is extended and is in contact with the aircraft fuselage.
- The safety shoe is placed under the aircraft door for outward opening aircraft doors.

The adjustable cabin floor must be positioned in order that there is only a minimal gap between the cabin floor and aircraft fuselage. In the event of the loading or unloading of heavy cargo, the airbridge must be withdrawn from the aircraft. The instantaneous trim change of the aircraft is beyond the capability of the airbridge auto-leveller system.

7.2.2 Removal of Airbridge

Prior to the removal of the airbridge from an aircraft it is the airbridge operator's responsibility to ensure that:

- MANUAL CONTROL has been engaged.
- The aircraft door is closed
- The safety shoe is correctly stowed.
- The auto-leveller has been retracted.
- Only the airbridge operator is to remain within the cabin area of the airbridge during any movements of the bridge when the bridge door is open. All other staff should remain behind the relevant barrier that should be in place across the tunnel area of the bridge ahead of the bridge door being closed.

It is the airbridge operator's responsibility to ensure that the airbridge has been retracted to its HOME parking position.

Prior to leaving the airbridge, it is the airbridge operator's responsibility to ensure that the airbridge is fully retracted into the parking box marked on the apron and the cabin door is down. The airbridge operator is also to ensure that they have logged off at the airbridge control panel using the "CONTROL OFF" button. A login display should be visible.

7.2.3 Side Stairs

The side stairs attached to the airbridge are for the use of the airbridge operator and other ground staff. The stairs are not to be used while the airbridge is moving, or by persons carrying large or bulky items.

7.2.4 Fault Reporting

In the event of any fault/malfunction/failure occurring on an airbridge, a message will be displayed on the airbridge control panel. It is the airbridge operator's responsibility to immediately contact the AOU by the quickest possible method (usually by radio or telephone).

8 SECTION 8 – Aircraft Operations higher than CODE 4E

When assessing the possibility of operation of aircraft whose code letter is higher than the code letter of the aerodrome reference code, LBA must, amongst other issues, assess the impact of the characteristics of the aircraft on the aerodrome, its facilities, equipment and its operation, and vice versa.

Aircraft characteristics to be assessed include, but are not limited to:

- (a) fuselage length;
- (b) fuselage width;
- (c) fuselage height;
- (d) tail height;
- (e) wingspan;
- (f) wing tip vertical clearance;
- (g) cockpit view;
- (h) distance from the pilot's eye position to the nose landing gear and to the main landing gear;
- (i) outer main gear wheel span;
- (j) wheelbase;
- (k) main gear steering system;
- (l) landing gear geometry;
- (m) engine data;
- (n) flight performance; and
- (o) technology evolution.

Further guidance on this issue is contained in ICAO Circular 305-AN/177 and ICAO Circular 301-AN/174.

In any case, the elements that have to be taken into account for the safety assessment are, without prejudice to other assessments that may have to be conducted, in accordance with other applicable requirements contained in Part ADR.OPS.

Such assessments should include, but are not limited to:

- (a) the aircraft mass, tire pressure and ACN values — with regard to overload operations; and
- (b) maximum passenger and fuel carrying capacity — with regard to level of RFFS protection to be provided and the aerodrome emergency planning.

Only competent persons should conduct this assessment and in accordance with GM1 ADR.OR.B.040 (a) ; (b) (h), the operations of aircraft exceeding Code 4 E parameters must be approved by the CAA.

9 SECTION 9 - Non Standard Parking

9.1 General

When making the decision to park on elements of the taxiway system AOU should take account of a number of key operational matters. The list below is not exhaustive but an indication of the complexity of parking on parts of the manoeuvring area:

- The minimum taxiway separation distances from the parked aircraft and the related taxiway junction to protect the use of the secondary taxiway for the most critical aircraft type.
- Any infringements that the aircraft will have on the protected surfaces of the Aerodrome (particularly the Instrument Strip and critical areas)

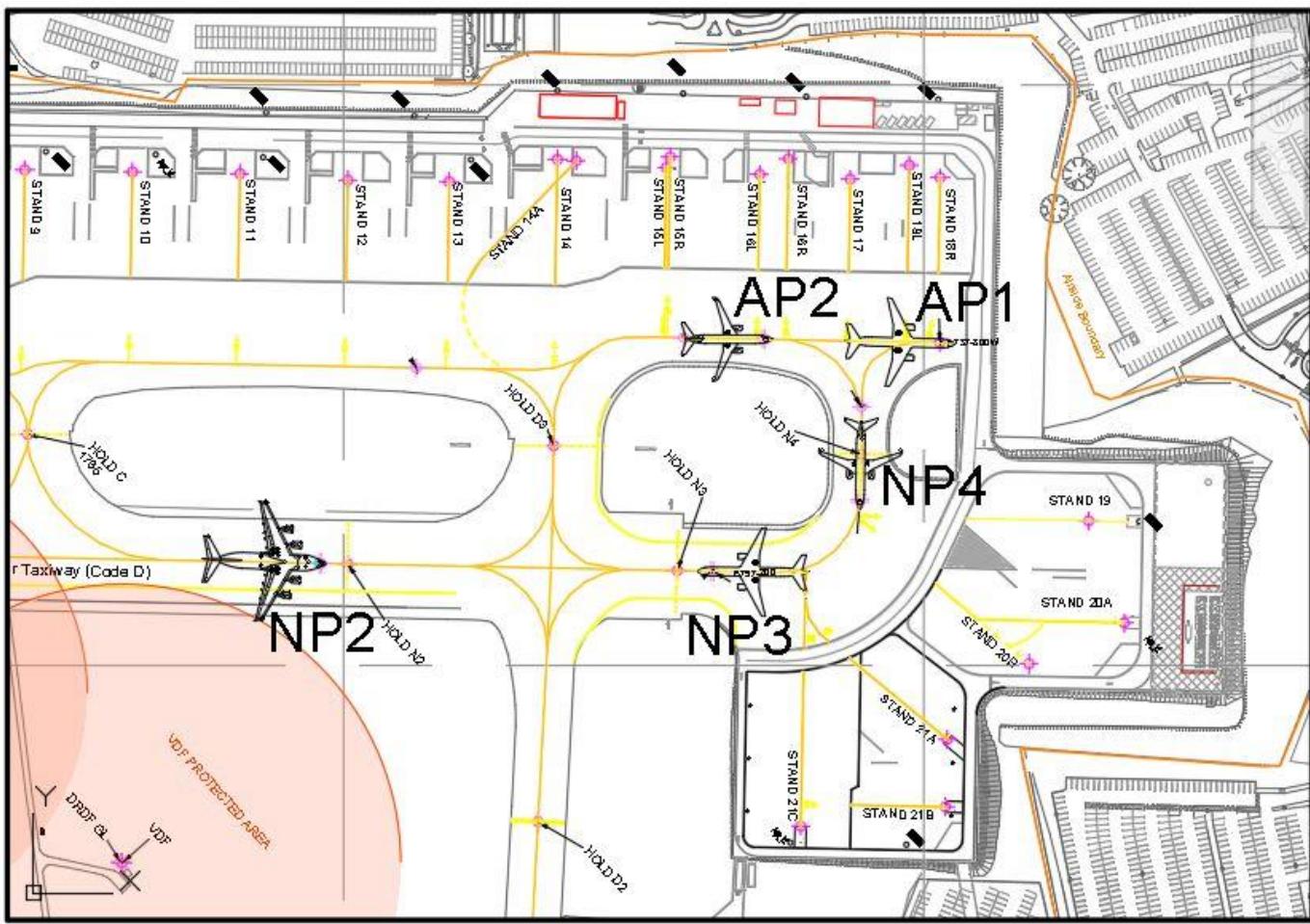
- The access and egress route for the aircraft to be parked on the taxiway ensuring that the orientation of the aircraft on the taxiway does not require it to taxi via a taxiway of insufficient width to exit
- The area required around the aircraft to facilitate ground servicing equipment such as mobile steps, baggage vehicles, passenger transfer coaches and fuel bowsers
- The lighting available for the side of the aircraft that is not directly lit from the apron high masts
- Access to/from the aircraft for emergency vehicles.

All non standard parked aircraft must have BGM markers placed at the front and rear of the aircraft in during night time & LVPs.

All vehicle movements to and from the parked aircraft are to be essential movements only.

Any vehicle proceeding to or from the parked aircraft may only do so if equipped with a radio competent individual on board and the driver has a valid Airside Driving Permit for the Manoeuvring Area.

9.2 Location Map



9.3 NP4

9.3.1 Max Aircraft Size

B737-300W

9.3.2 Vehicle Movements & Servicing

Apron Ops will commence once the aircraft is in position at NP4 and AOU confirm with ATC via channel 1 that the aircraft is correctly parked. If the aircraft has been towed to NP1, when the tug calls complete apron ops will commence.

Excluding vehicles operating according to the free ranging procedures, all vehicles are confined to roadways / stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is R/T licensed and a clearance is received from ATC. When the area of Taxiway November is secured for apron use (Bad Ground Markers are in place at N3 and N4) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. AOU will advise ATC when areas of Taxiway November are closed or subsequently reopened.

Aircraft engineering and basic servicing for crew operations is approved at NP4 however fuelling and passenger operations is not approved..

9.3.3 Miscellaneous

9.3.4 Miscellaneous

Aircraft are permitted to arrive under their own power whilst under the guidance of an aircraft marshaller.

9.4 NP3

9.4.1 Max Aircraft Size

B753-200W

9.4.2 Vehicle Movements & Servicing

Apron Ops will commence once the aircraft is in position at NP3 and AOU confirm with ATC via channel1 that the aircraft is correctly parked. If the aircraft has been towed to NP2, when the tug calls complete apron ops will commence.

Excluding vehicles operating according to the free ranging procedures, all vehicles are confined to roadways / stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is R/T licensed and a clearance is received from ATC. When the area of Taxiway November is secured for apron use (Bad Ground Markers are in place at N3 and N4) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. AOU will advise ATC when areas of Taxiway November are closed or subsequently reopened.

Full servicing and passenger operations are approved at NP3.

9.4.3 Miscellaneous

Aircraft are permitted to arrive under their own power whilst under the guidance of an aircraft marshaller.

9.5 NP2

9.5.1 Max Aircraft Size

CODE E

9.5.2 Vehicle Movements & Servicing

NP2 is not available in LVP's, if a Fog warning has been issued or if fog is on the TAF except in exceptional circumstances such as to accommodate an emergency etc.

Aircraft engineering and basic servicing for crew operations is approved at NP2 however passenger operations is not approved.

Aircraft cannot be fuelled, de-iced or serviced in this position during night time hours.

Only full manoeuvring area pass holders may proceed to any aircraft parked at NP2. All requests to proceed to NP2 / return to the Apron must be made with ATC via Channel 1 unless operating under a free ranging licence. Should there be a requirement for any non-manoeuvring area drivers to operate/serve the respective aircraft parked at NP2 (such as fuellers); they must be escorted to and from the area by suitably qualified drivers. Once inside the confines of the BGM's, Non-manoeuvring area drivers may position to service the aircraft as necessary.

9.5.3 Miscellaneous

Aircraft are permitted to arrive under their own power at NP2

The parking position of NP2 allows aircraft up to and including Code E to park on taxiway November whilst continuing normal taxiway operations on the surrounding taxiways of Delta/Charlie and Alpha

9.6 AP1

9.6.1 Max Aircraft Size

B757-200W

9.6.2 Vehicle Movements & Servicing

Excluding vehicles operating according to LBA free ranging procedures, all vehicles are confined to roadways/stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is qualified to drive on the manoeuvring area (therefore proficient on RT) and a clearance is received from ATC.

When the taxiway is secured for apron use (when BGM are in place) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. This requirement is only applicable to Aircraft parked in AP1/AP2.

9.6.3 Miscellaneous

Aircraft are permitted to arrive under their own power at AP1

9.7 AP2

9.7.1 Max Aircraft Size

B737-800

9.7.2 Vehicle Movements & Servicing

Excluding vehicles operating according to LBA free ranging procedures, all vehicles are confined to roadways/stands. Access to taxiways is only allowed if the vehicle is fitted with an appropriate radio, the driver is qualified to drive on the manoeuvring area (therefore proficient on RT) and a clearance is received from ATC.

When the taxiway is secured for apron use (when BGM are in place) vehicle movements may take place on the manoeuvring area within the designated area without the need for ATC clearance. This requirement is only applicable to Aircraft parked in AP1/AP2.

9.7.3 Miscellaneous

In the event another aircraft is parked at AP2 the BGM from AP1 shall be repositioned to the rear of the aircraft at AP2 after the aircraft engines are shut down and anti-collision lights have been extinguished.

Aircraft are permitted to arrive under their own power at AP2

10 SECTION 10 – Tug Release Points

10.1 General

To improve efficiency and reduce complexity, Leeds Bradford Airport (LBA) utilises Tug Release Points (TRPs) for the use from stands 12 – 21C.

10.2 ATC Clearances

The use of TRPs is at the discretion of ATC. All standard pushback instructions from stand 14 – 21C will be given using the TRPs.

Standard ATC clearances for the use of these stands will be given in the following format.

“CALL SIGN, PUSH BACK & START UP APPROVED, TUG RELEASE POINT ‘X’”

NOTE: No direction of push will be advised as all TRPs are uni directional. Ground crew will need to be familiar with the location and direction of the TRPs.

Subject operational reasons ATC may at any time use a ‘nonstandard clearance’ to continue the safe, orderly and expeditious flow of traffic.

10.3 Positioning the Aircraft

When a clearance has been obtained from ATC, the pushback crew are to push the aircraft back and position it as required (pulling it forward as necessary) onto the relevant TRP. This is always achieved by pushing the aircraft back and establishing it at 90 degrees to the stand on the taxiway centreline via the shortest route. The exception to this can be found where ground crews are permitted to use the neck of N4 to enable them to pull forward onto the cleared TRP, for example Stand 18R pushes for TRP 7 - the ground crew will push north initially towards N4 before pulling forwards.

Any pushbacks where more than one potential route is available, ATC will specify the route to be taken in the pushback clearance.

10.4 Push & Park

Push and parking of aircraft is available. This is to better improve stand usage during busy periods and where applicable to assist airlines in meeting their own operational requirements. All requests to push and park are at the explicit approval of ATC with consultation of the Airside Operations Unit (AOU). Should a crew wish to push and park, the crew should make the request as soon as possible to allow ATC and AOU to assess feasibility. Once approval has been given from ATC, the aircraft is to be positioned to the relevant TRP, disconnected and push back crew return to the Apron. Should the specific airline operating procedures require ground handling presence during start up, crews are permitted to remain with the aircraft either in contact with ATC or with ATC via constant communication with the flight deck.

10.5 Pushback crew returning to Apron

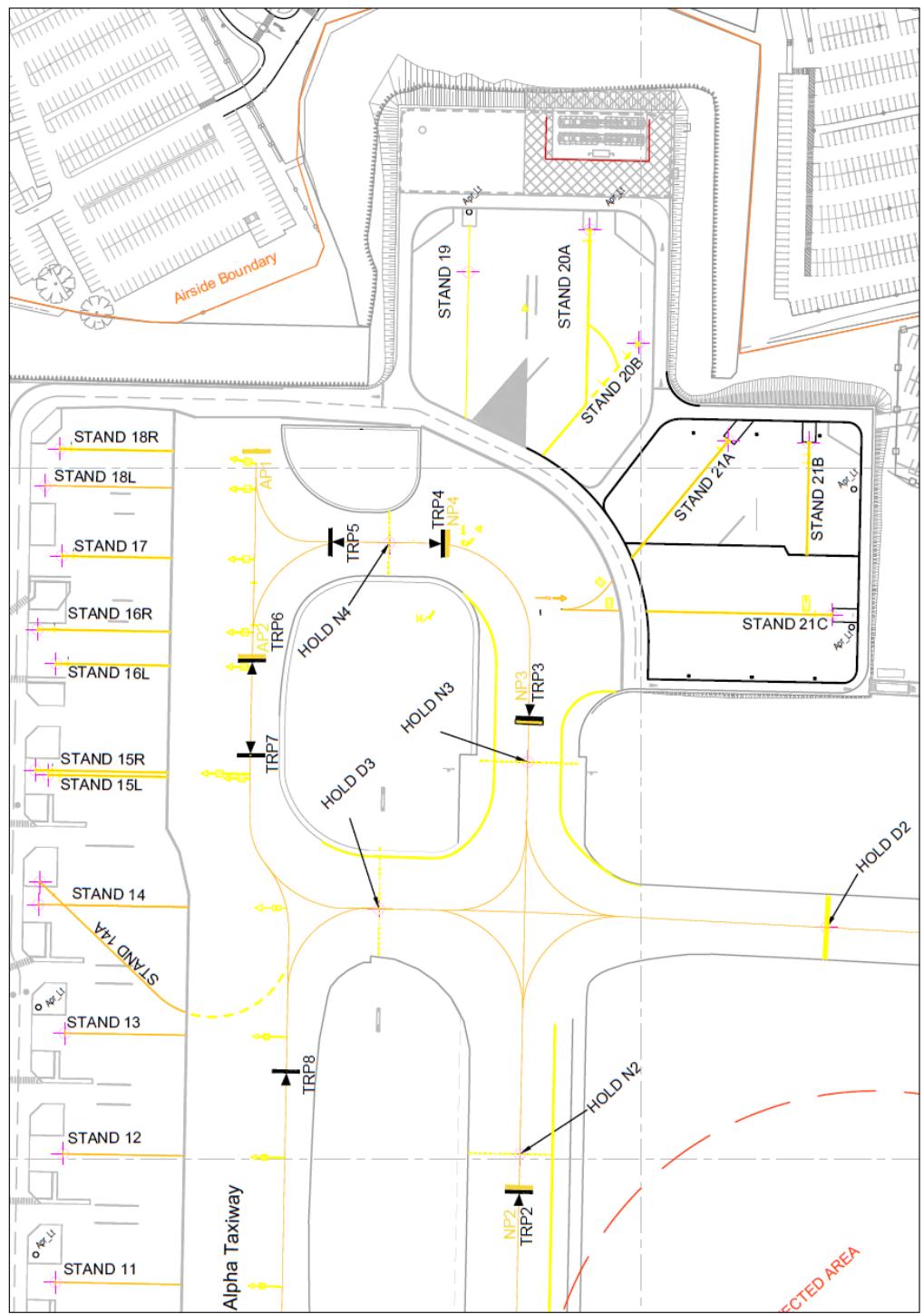
Once the aircraft is correctly positioned onto the relevant TRP, the pushback crew are to vacate the manoeuvring area by the shortest possible route.

NOTE requirement for crews to obtain permission from ATC for all pushbacks to TRP 2

10.6 Cross Bleed Starts at TRPs

ATC will adhere to the standard 4 stand clearance behind an aircraft wishing to conduct a cross bleed start. In accordance with this rule, cross bleed starts are not approved at TRP3, TRP4, TRP5, and TRP7. This is further highlighted by the pushback tables. Should an Aircraft need to Cross Bleed Start, It will be instructed by ATC to position in a suitable location as to adhere to this rule.

10.7 Airfield Map - TRPs & amended Non Standard Parking Positions



10.8 Standard Pushbacks Table

TRPs available from each stand with **no aircraft in the adjacent taxiways**.

All stands will naturally have their default TRPs - pushes to TRPs located away from the vicinity of the stand will only be requested if operationally necessary.

TUG RELEASE POINTS (TRPs)							
STAND	TRP 2	TRP 3	TRP 4	TRP 5	TRP 6	TRP 7	TRP 8
		NO CROSS BLEED START	NO CROSS BLEED START	NO CROSS BLEED START		NO CROSS BLEED START	
12-18R	✓	✓	✓	Code C or less	Code C or less	✓	✓
19	✓	Code C or less	Code C or less	Code C or less	Code C or less	✓	✓
20A-21C	✓	✓	✓	Code C or less	Code C or less	✓	✓

10.9 Multiple Pushbacks Table

TRPs available when other TRPs are active. The top row of white boxes represents the TRP that is blocked and the coloured squares represent the availability from the relevant stand.

LIVE AIRCRAFT							
STAND	TRP 2	TRP 3	TRP 4	TRP 5	TRP 6	TRP 7	TRP 8
		NO CROSS BLEED START	NO CROSS BLEED START	NO CROSS BLEED START		NO CROSS BLEED START	
12 - 13	✓	4 UNAVAILABLE	5 UNAVAILABLE	4 UNAVAILABLE	✓	✓	X
14	✓	4 UNAVAILABLE	5 UNAVAILABLE	4 UNAVAILABLE	7 UNAVAILABLE	6 UNAVAILABLE	2 / 7 ONLY
15L/R	✓	4 UNAVAILABLE	5 UNAVAILABLE	4 UNAVAILABLE	X	X	✓
16L/R	✓	4 UNAVAILABLE	5 & 7 UNAVAILABLE	6 & 7 UNAVAILABLE	X	X	✓
17 – 18R	✓	4 UNAVAILABLE	X	X	2 ONLY	X	✓
19 – 20B	✓	X	X	X	7 UNAVAILABLE	6 UNAVAILABLE	✓
21A – 21C	✓	X	3 & 5 UNAVAILABLE	X	7 UNAVAILABLE	6 UNAVAILABLE	✓

10.10 Parked Aircraft Pushbacks Table

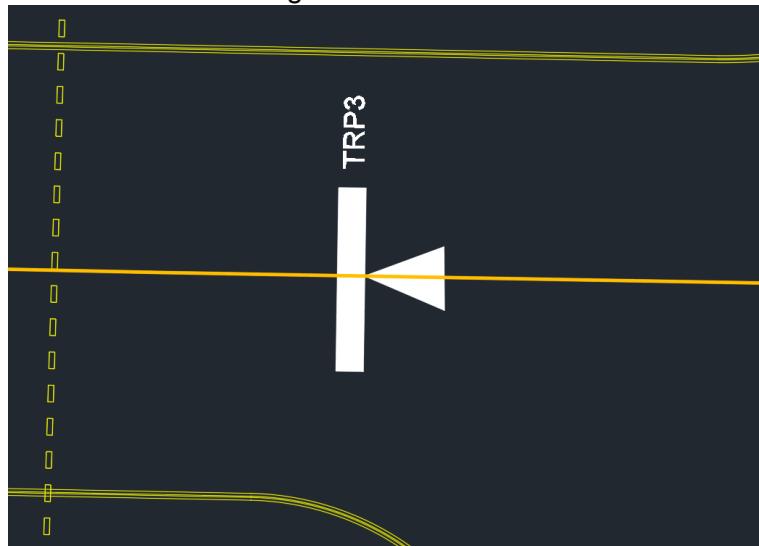
TRPs available from each stand when aircraft are parked in the taxiways.

PARKED AIRCRAFT					
STAND	AP1	AP2	NP2	NP3	NP4
14	2, 3, 8	2, 3, 8	✓	2, 7, 8	2, 7, 8
15L/R	2, 3, 8	X	✓	2, 7, 8	2, 7, 8
16L	2, 3, 8	X	✓	2, 7, 8	2, 7, 8
16R	(IF AP1 = 752 = N) (IF AP1 = 733 & 16R = 733 (or less) TRP 2, 3, 8) ***	X	✓	2, 7, 8	2, 7, 8
17	(IF AP1 = 733 & 17 = 733 (or less) TRP 2, 3, 8) *** All larger = N	X	✓	2, 7, 8	2, 8
18L/R	X	X	✓	2, 7, 8	2, 8
19 – 20B	2, 3, 8	2, 3, 8	✓	X	X
21A – 21C	2, 3, 8	2, 3, 8	✓	X	2, 7, 8

*** If AP1 = B738 & 16R = B738, PUSHBACK ONLY WITH AOU CONFORMATION IS APPROVED, TRP 2 / 3 / 8,
WING TIP MARSHALLERS REQUIRED

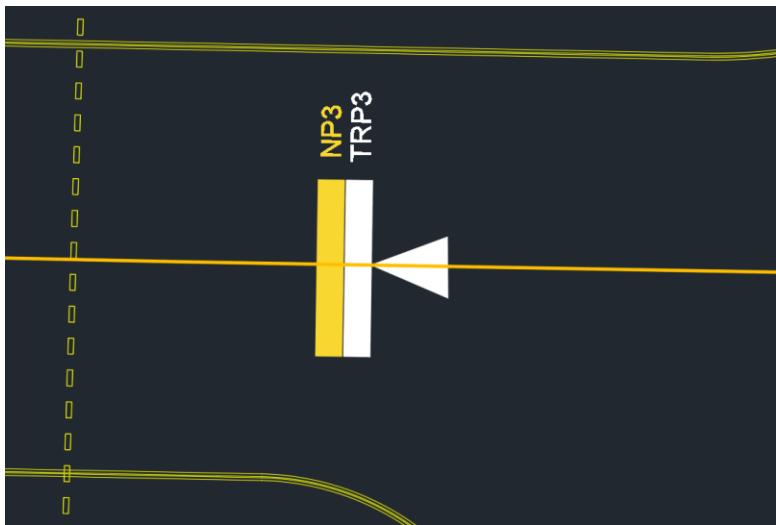
10.11 TRP markings

TRPs are marked on the taxiway surface in WHITE with a BLACK border and the TRP Number detailed alongside.



10.12 TRP & Non Standard Parking position markings

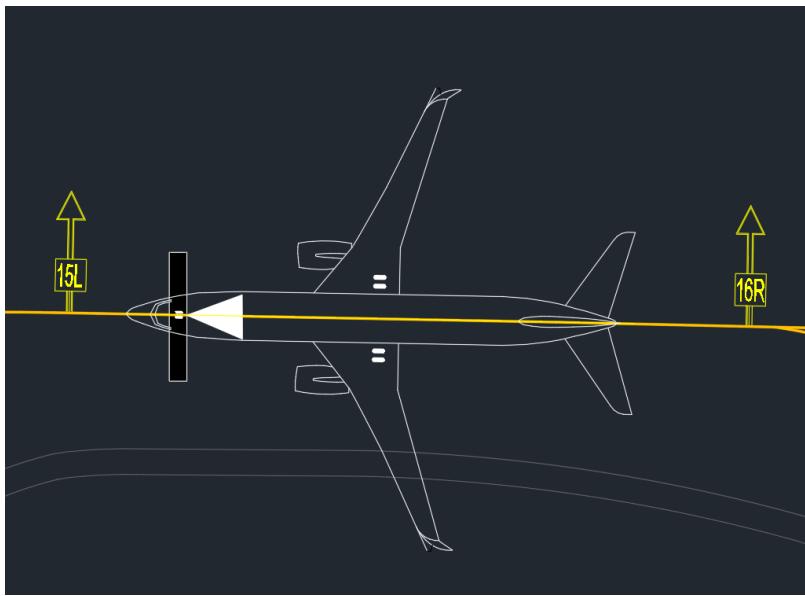
TRPs that are also aligned with a Non Standard Parking Position will contain an additional YELLOW rectangle to indicate it is also an aircraft parking position.



10.13 Aircraft positioning on TRPs (General)

All TRPs are uni-directional (Aircraft can only push onto them in one direction). This is indicated by the arrow head that points towards the 'T' Bar.

NOTE: The colours have been changed in this technical drawing to show contrast and existing apron markings have been removed for clarity.



10.14 Aircraft positioning on TRPs (Nose Gear)

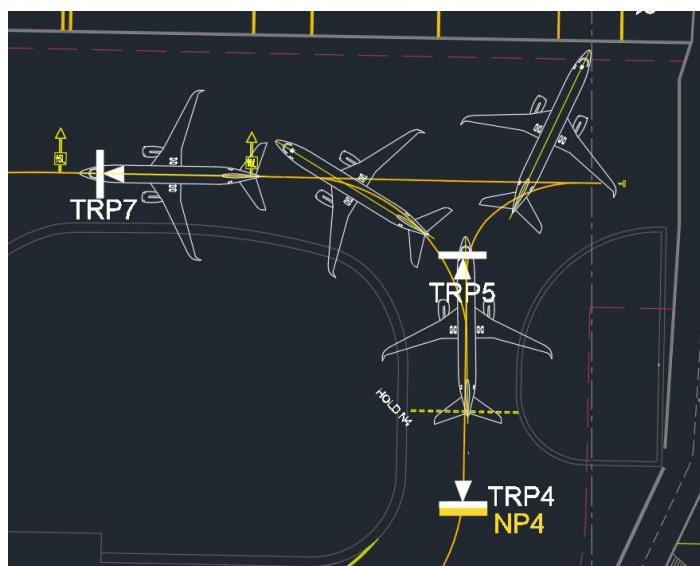
When an aircraft is instructed to pushback, the nose of the aircraft must be positioned so that the nose gear is positioned on the relevant TRP.

10.15 Pushback crew guidance table.

TRP	LOCATION	GUIDANCE
2	Near holding point N2 facing EAST	Pushback crews must contact ATC on Chanel 1 to obtain clearance before returning to stand.
3	Near holding point N3 facing WEST	If pushing tail towards Holding Point N4 – DO NOT push nose gear back past TRP4/NP4
4	SOUTH side of holding point N4 facing SOUTH	DO NOT push nose gear back past TRP4/NP4
5	NORTH side of holding point N4 facing NORTH	DO NOT push nose gear back past TRP5
6	Abeam Stand 16L facing EAST	-
7	Abeam Stand 15R facing WEST	If pushing tail towards Holding Point N4 – DO NOT push nose gear back past TRP5
8	Abeam Stand 13 facing EAST	-

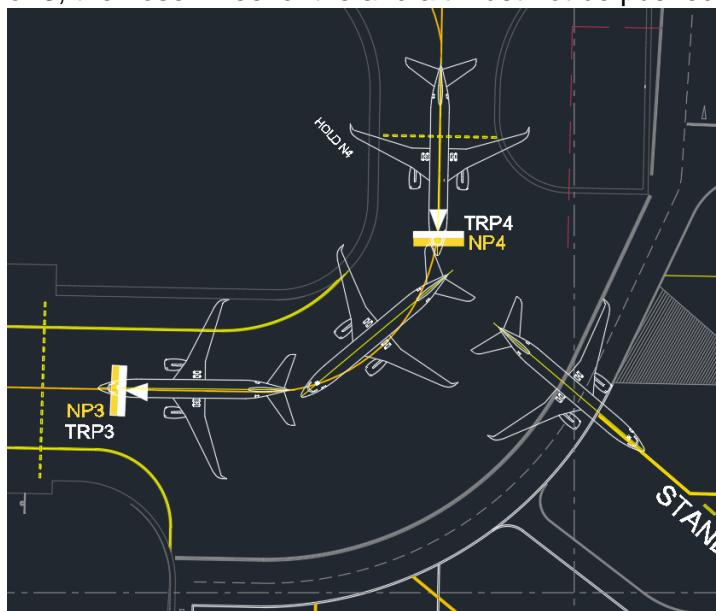
10.16 Push back using N4 - Main Apron

If ground crews are required to use the neck of N4 holding point, either to position on TRP 5 or 7, the nose wheel of the aircraft must not be pushed back past TRP 5.



10.17 Push back using N4 – East Apron

If ground crews are required to use the neck of N4 holding point, either to position on TRP 4 or 3, the nose wheel of the aircraft must not be pushed back past TRP 4.

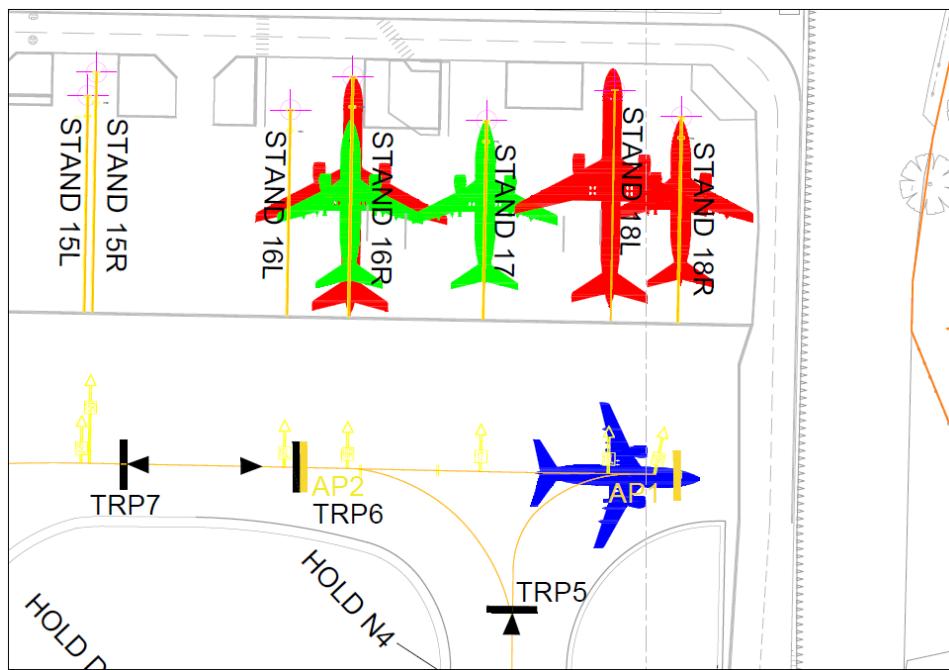


10.18 APPENDIX 31 – Parking Maps

(BLUE = Parked | RED = Blocked | GREEN = Available)

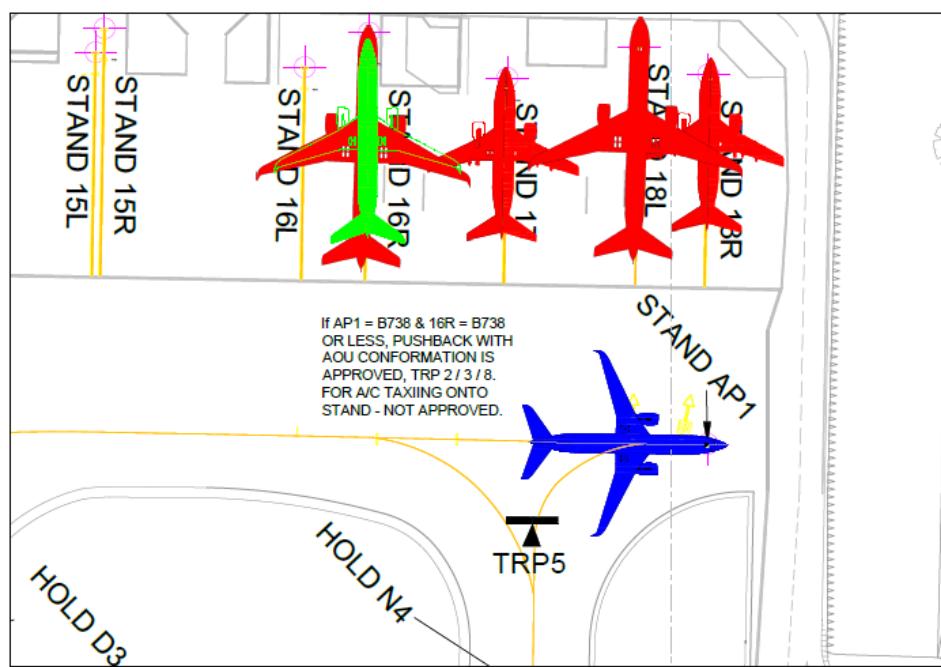
10.18.1

AP1 - B733



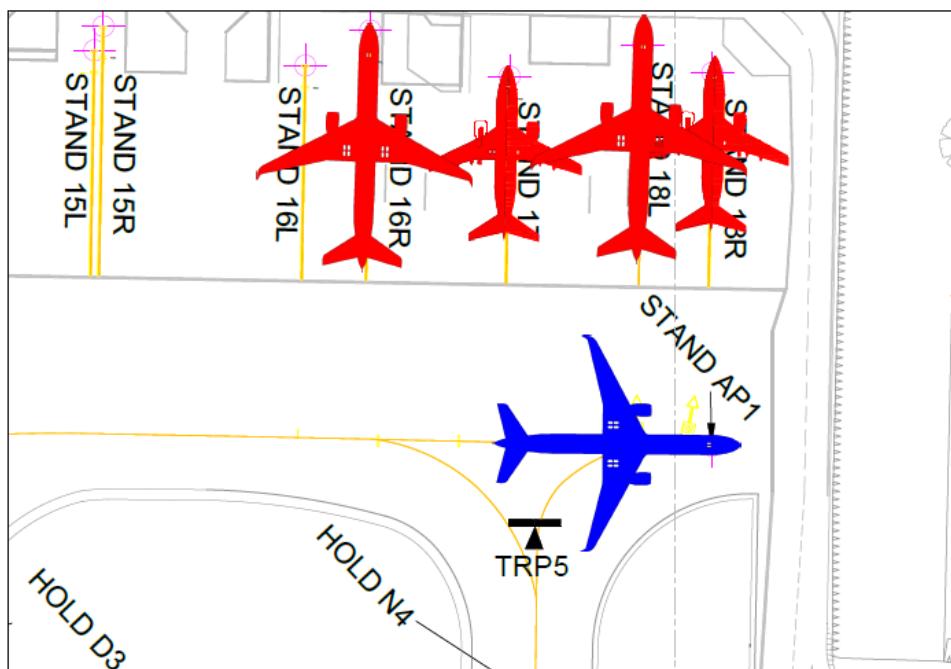
10.18.2

AP1 - 738



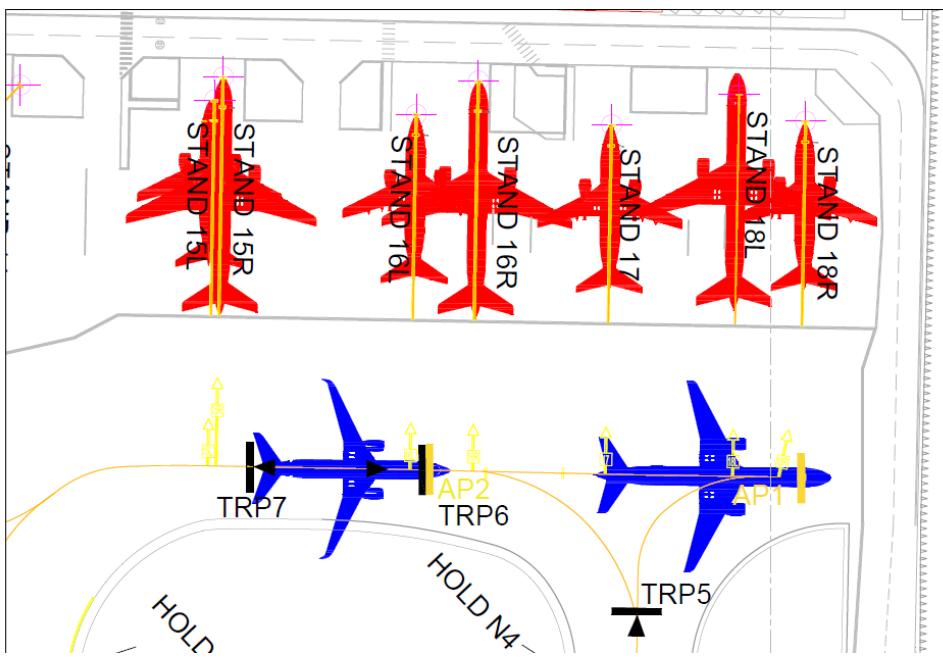
10.18.3

AP1 – B752



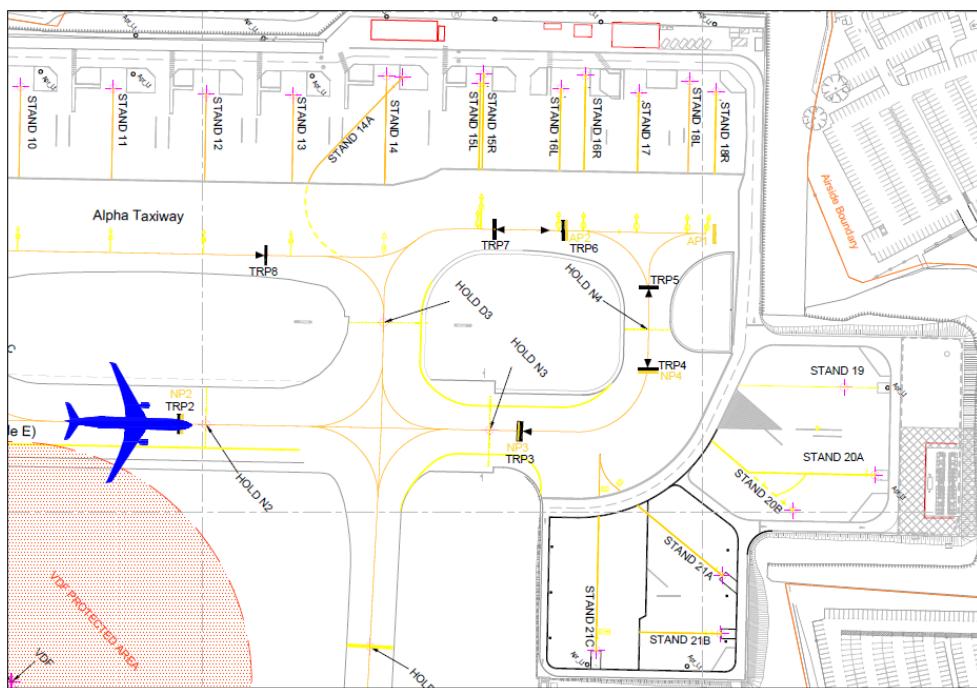
10.18.4

AP2 - B738



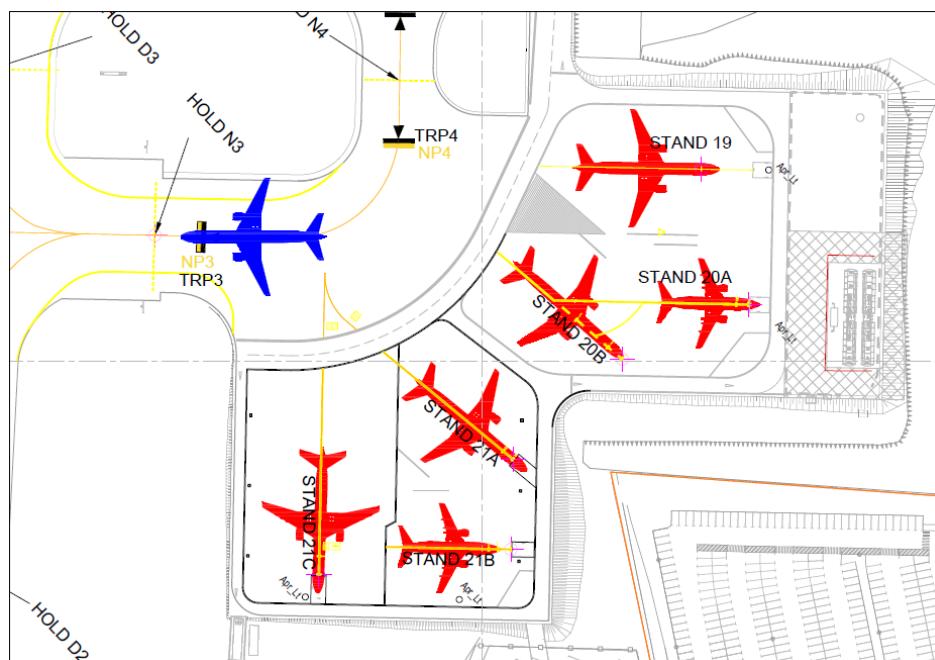
10.18.5

NP2



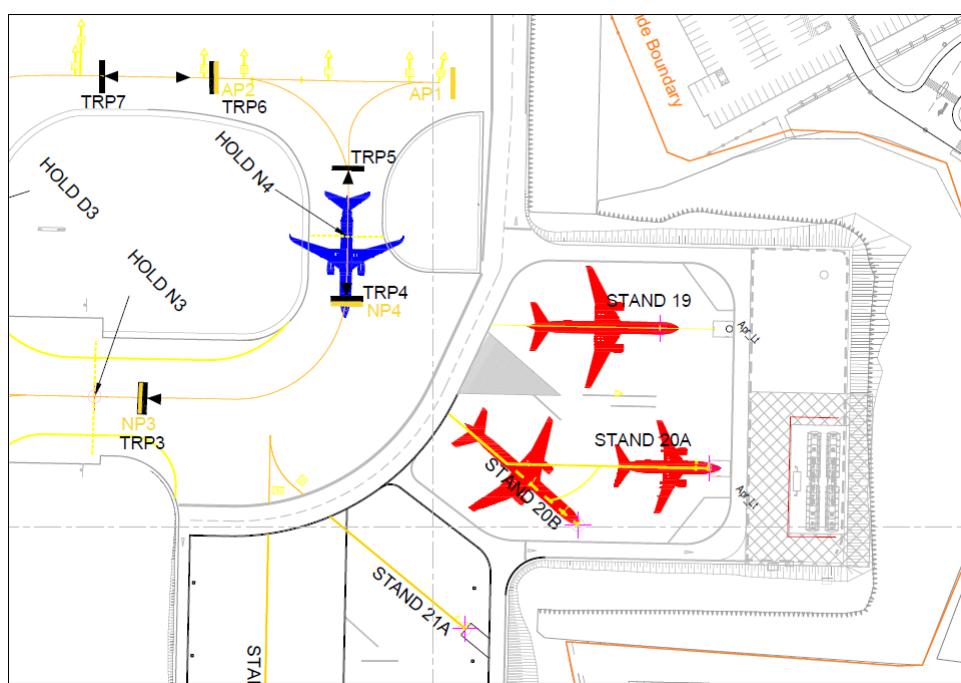
10.18.6

NP3



10.18.7

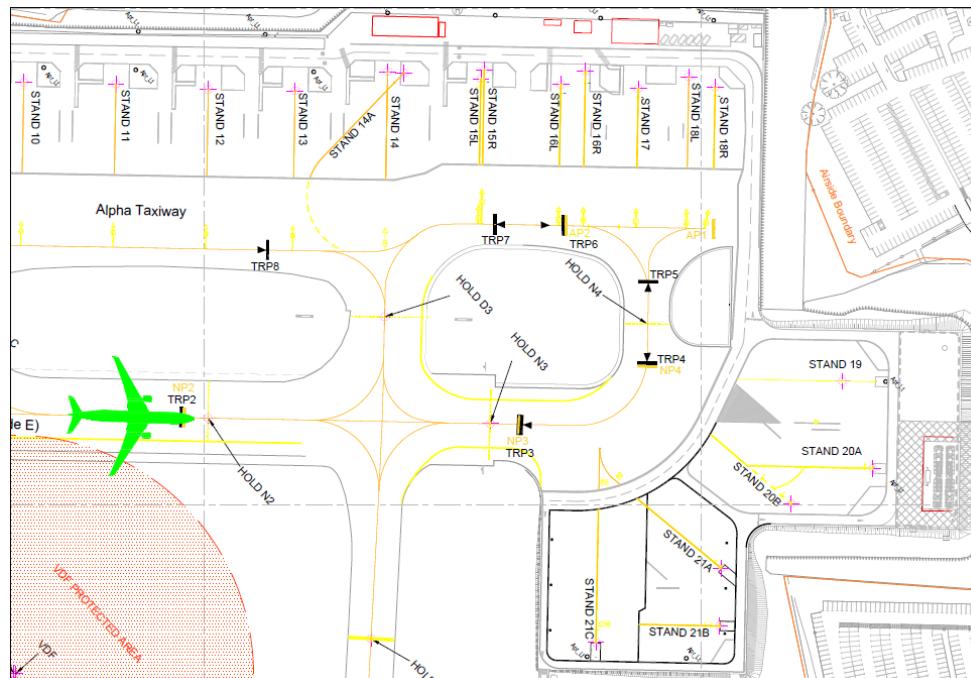
NP4



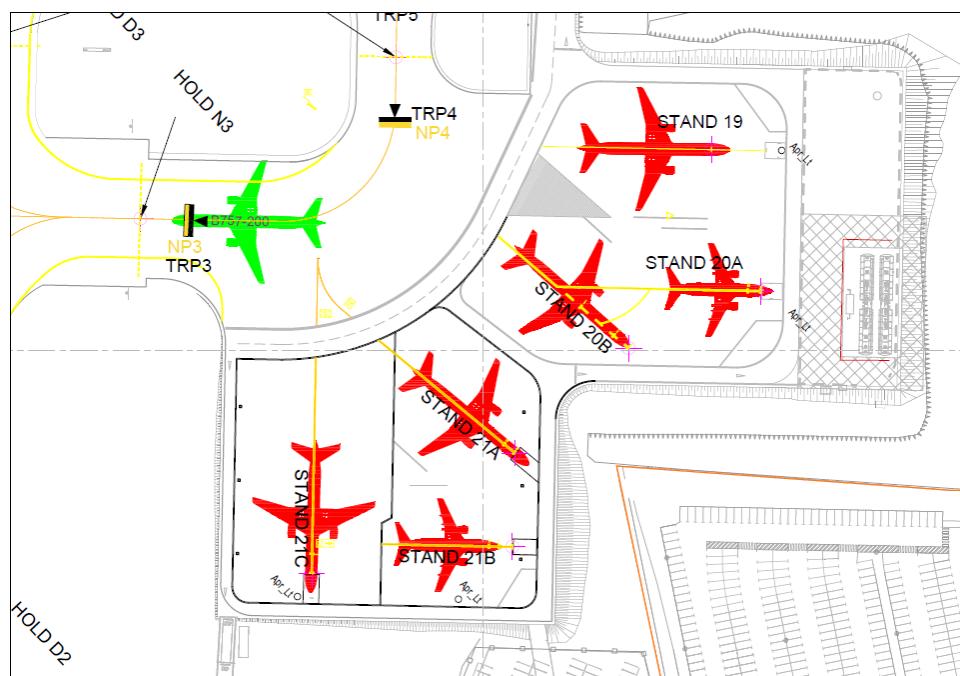
10.19 APPENDIX 32 – TRP Maps

GREEN = Active | RED = Blocked

10.19.1 TRP 2

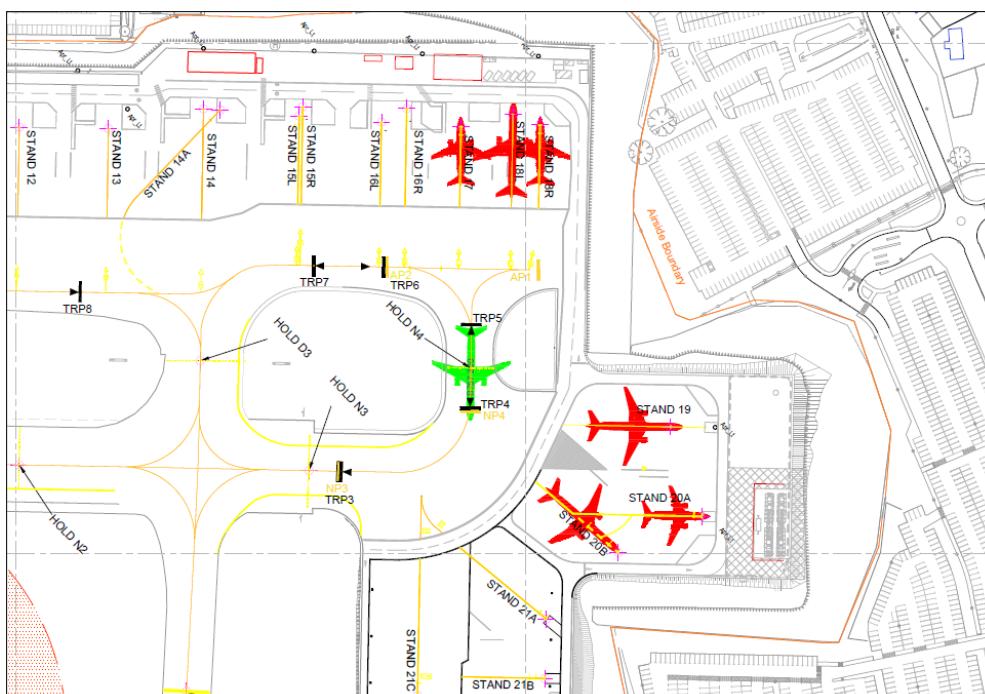


10.19.2 TRP 3



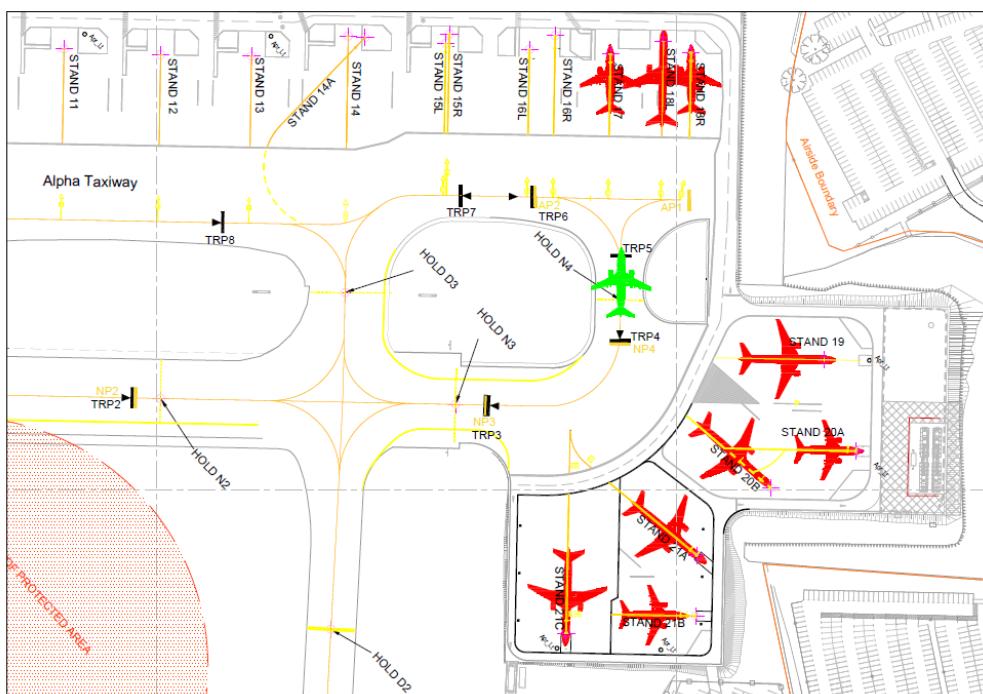
10.19.3

TRP 4



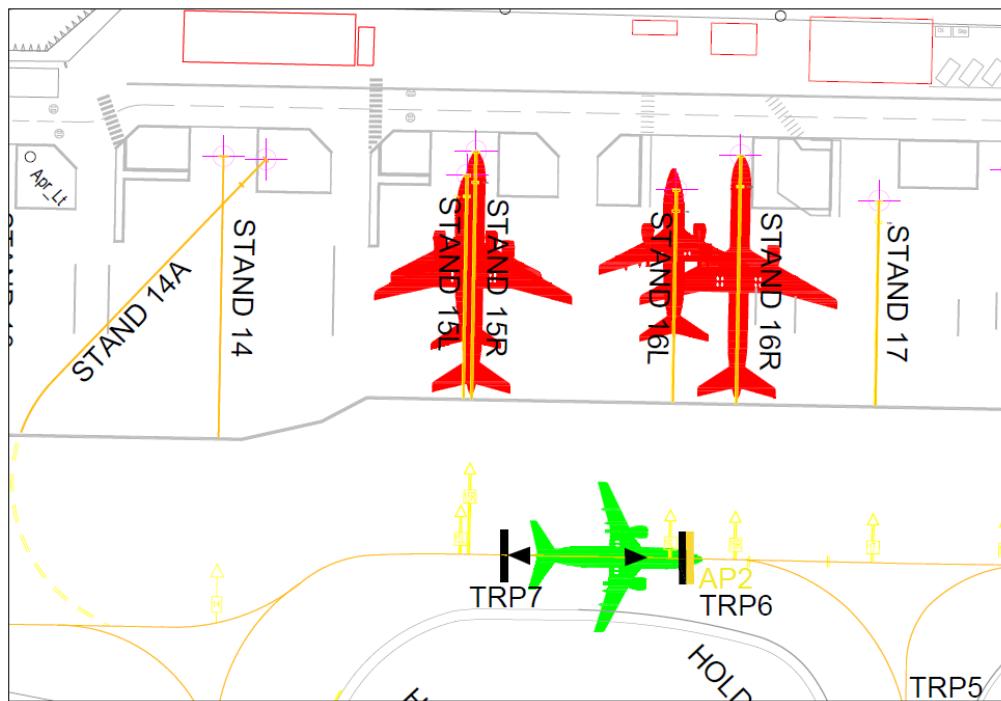
10.19.4

TRP 5



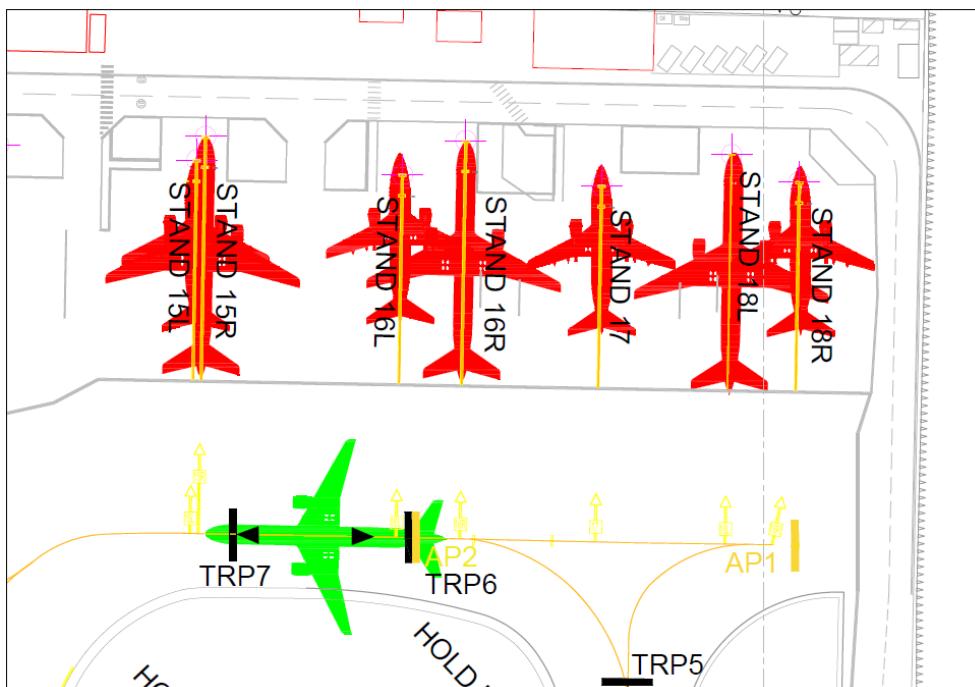
10.19.5

TRP 6



10.19.6

TRP 7



10.19.7

TRP 8

