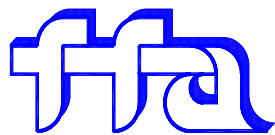


Construction & Environmental Management Plan

**Waterford Airport.
Runway Extension.**



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1.0 Introduction

In conjunction with the multi-disciplinary Design Team, Waterford Airport PLC commissioned Frank Fox & Associates, to input and coordinate an “Outline Construction Management Plan” to accompany a planning application for the site at Waterford Airport, Killowen, Co. Waterford. The Construction Management Plan defines the physical and legal limitations within which a person or persons can carry out development works that affect the existing nature of public roads, footpaths and the surrounding environment for a duration of time.

The site currently comprises an existing runway, taxi way, aprons, terminal building, control tower, car park, hanger buildings and search & rescue facility building. The site is adjoined by the Airport Business Park and residential properties at the outer boundary of the runway.

Access to the terminal building is from the R708, with secondary access points to the north end of the runway from the R708 and the south end of the runway from the R685.

The proposed development comprises widening the existing runway & taxi way, with matching extensions to the north and south runway ends, demolition of 2No. Houses at the north end and alterations to associated runway lighting. It is also proposed to extend the existing carpark at the front of the terminal building.

This Outline Construction Management plan identifies an indicative sequence of the works from the initial enabling works through to construction completion. It is noted that this can only be considered an outline plan and the final Construction Management Plan would be agreed with Waterford City & County Council (by the appointed Contractor) prior to construction commencing.

2.0 Outline Construction Management Plan

2.1 Site Access

The site is accessed by the public from a single access point from the R708. The site otherwise is fully fenced beyond the terminal building, which contains the runway, aprons and taxi ways, generally referred to as airside i.e. area of activities under the direction of tower control.

It is proposed to use the existing public access point and existing haulage routes for construction movement at either of the runway, as indicated on the diagram below (see Fig.1.0).

It is further proposed to establish holding areas inside these access points, that will be designated as landside i.e. contactor can move without tower control direction. These points will be controlled by airport staff in liaison with tower control, to allow access onto the airside side of the airport. A second fall back area will be designated airside for contactor vehicles to step back under supervision of tower control, for regular flight operations and or emergency landings.

A further lighting access entrance point is proposed to lands north of the airport, on the opposite side of the R708. This is to facilitate installation and maintenance of new lighting in this area as indicated on drawing 218034/S/02.

Site material is to be reused around the site. The construction access points are proposed for the importation of fill material, for the runway & carpark construction.



Fig. 1.0

2.2 Runway Construction

It is proposed to extend the runway at the north end by approximately 491m and at the south end by approximately 363m, while widening the existing runway at each side by 7.5m to form an overall width of 45m over the length of the new runway, approximately 2,287m long.

It is proposed to cut the ground at the north end of the runway by approximately 1.6m and raise the south end by approximately 3.0m. these works are required for the runway to comply with design requirements for aircraft landing and take-off requirements. The surplus soil from the north end will be used along with regraded runoff area material to form the build up at the south end. It is therefore envisaged, to only import the necessary capping/grading stone directly and new asphalt required for surfacing.

The existing runway drainage is currently serviced by herringbone constructed land drains, which percolates into the existing ground. Due to the runway widening, it is proposed to reinstate this system from the edge of the runway out to 25m either side of the runway edge over its entire new length.

It is also proposed to provide new approach lighting for the runway extension at either end as indicated on drawing 218034/S/02.

2.3 Taxiway Widening

It is proposed to widen the exiting taxiway (i.e. link from runway to apron) by 4.0m at each side to 23m wide. There is no level difference to this works and will therefore require only capping/grading stone and asphalt surfacing material

2.4 Apron

There is no proposed works envisaged on to the apron (i.e. stand area for airplanes in front of terminal building). It is envisaged however, to upgrade the drainage system for the aprons, by creating a holding / attenuation tank to deal with surface water run-off after a cold weather de-icing event.

2.5 Car Park

It is proposed to construct a new 205 space carpark in front of the existing terminal building and car park as indicated on drawing 218034/S/02. It is proposed to work to the existing contours, so the import of stone and asphalt will only be required. All material removed will be used for grading works to and around the runway. The car park will have its own petrol interceptor & attenuation cell and will discharge to the adjacent watercourse.

2.5 Demolition

It is proposed to demolish 2No. Houses to the north of the proposed runway on drawing 218034/S/02. Access for demolition is direct from the R708 into the existing sites.

3.0 Environmental Issues

3.1 Dust & Dirt

The Contractor shall continuously monitor dust & dirt over the variation of weather and material disposal to ensure the limits are not breached throughout the project. It is proposed to use a spray cannon machine in order to contain dust on site.

3.2 Noise

The site is currently used as airport and noise in excess or regular levels is not envisaged. The Contractor shall implement measures to eliminate where possible and reduce noise levels where not. The proposed development shall comply with BS 5228 “Noise Control on Construction and open sites Part 1: Code of practice for basic information and procedures for noise control” (or such further limits as imposed by the local authority).

3.3 Vibration

The Contractor shall provide and maintain vibration monitoring equipment for the duration of the works. Condition surveys of adjoining buildings will be required before excavations commence. Vibrations shall be monitored in accordance with BS 7385-1:1990 “Evaluation and Measurement for Vibration in Buildings”, with a limit of 5mm/s ppv.

3.4 Harmful Materials

Harmful materials shall be stored on site for use in connection with the construction works only. These materials shall be stored in a controlled manner. Where on site fueling facilities are used there shall be a bunded filling area using a double bunded steel tank at a minimum.

4.0 Contents of Contractors Construction Management Plan

4.1 Temporary Signage

The Contractor is required to provide appropriate signage which must conform to Traffic Signs Manual for Temporary Traffic Measures and Signs for Roadworks, Department of Transport 2010.

4.2 Temporary Road Markings

The Construction Management Plan shall include proposals for any proposed Temporary Road Markings. These markings must conform to Traffic Signs Manual for Temporary Traffic Measures and Signs for Roadworks, Department of Transport 2010.

4.3 Operation of a Contra Flow

There are no proposals to operate a Contra Flow system.

4.4 Temporary Road Closure

There are no proposals to introduce temporary road closures. Any proposals should conform to Traffic Signs Manual for Temporary Traffic Measures and Signs for Roadworks, Department of Transport 2010. Any road closure can only be operated under agreement with the Local Authority.

4.5 Temporary Traffic Signals

There are no proposals to operate Temporary Traffic Light Signals. Any proposals should conform to Traffic Signs Manual for Temporary Traffic Measures and Signs for Roadworks, Department of Transport 2010.

4.6 Arrangements for Local Access, Pedestrian and Cyclist Access

There are no proposals to alter the existing local access to the surrounding areas. Covered footways if required shall be built in accordance with Traffic Management Guidelines.

4.7 Proposed Lighting Arrangements

There are no proposals to alter the existing lighting arrangements in the area. Any proposals to alter existing lighting arrangements can only be carried out under agreement with the Local Authority.

4.8 Proposed Use of Flag Men

The use of Flag Men/Banks Men is to be incorporated into the Construction Management Plan to direct vehicles accessing/egressing and shall be agreed with the Local Authority as part of the Contractors construction management plan.

4.9 Proposed Use of Barriers

The use of barriers is to be referred to in the Traffic Management Plan and the details of which are laid out in accordance with Chapter 8 of the Traffic Signs manual.

5.0 Construction Traffic

5.1 Compounds & Haulage Routes

It is proposed to access the site from three locations as indicated on the above diagram and construct three compounds, all landside. It is further proposed to locally access the lands north of the airport, on the opposite side of the R708. This is to facilitate installation and maintenance of new lighting in this area as indicated on drawing 218034/S/02.

The main contractors compound will be adjacent the existing airport hangar as indicated on drawing 218034/S/02 and accessed from the public access road. Two on site compounds are proposed, at the north and south end.

The contractors compound north will be accessed from an existing haulage road from the R708. This haulage road will be upgraded with stone, with out of season cutting of ditches. It is further proposed to extend this haulage road to a new fenced landside compound as indicated on drawing 218034/S/02. Both the extended haulage road and compound are to be constructed of geotextile and stone.

The contractors compound south will be accessed from an existing haulage road from the R685. This haulage road will be upgraded with stone with out of season cutting of ditches. It is further proposed to construct a new fenced landside compound as indicated on drawing 218034/S/02. Both the extended haulage road and compound are to be constructed of geotextile and stone.

There is no requirement for construction traffic to park on the public road when delivering to the onsite compounds, therefore not affecting public traffic movement. The Contractor must submit a Construction Traffic Management plan to the Local Authority for approval. Haulage vehicle movements will be fully coordinated to comply with the requirements of the layout and requirements herein.

5.2 Working Hours

The hours of construction activity will be limited to avoid unsociable hours where possible. Construction operations shall generally be restricted to between 07:00 hours and 19:00 hours Monday to Saturday. However, to ensure that optimal use is made of fair weather windows, or at critical periods within the programme, it could occasionally be necessary to work out with these hours. Any such out of hours working would be agreed in advance with the local planning authority.