

# Arab Republic of Egypt

## Ministry of Civil Aviation

Egyptian Civil Aviation Authority

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# LAND USE HAZARD

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Safeguarding Workshop Cairo 4-6 December 2017

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# Land Use Hazard:

Introduction

Master Plan

Related Problems

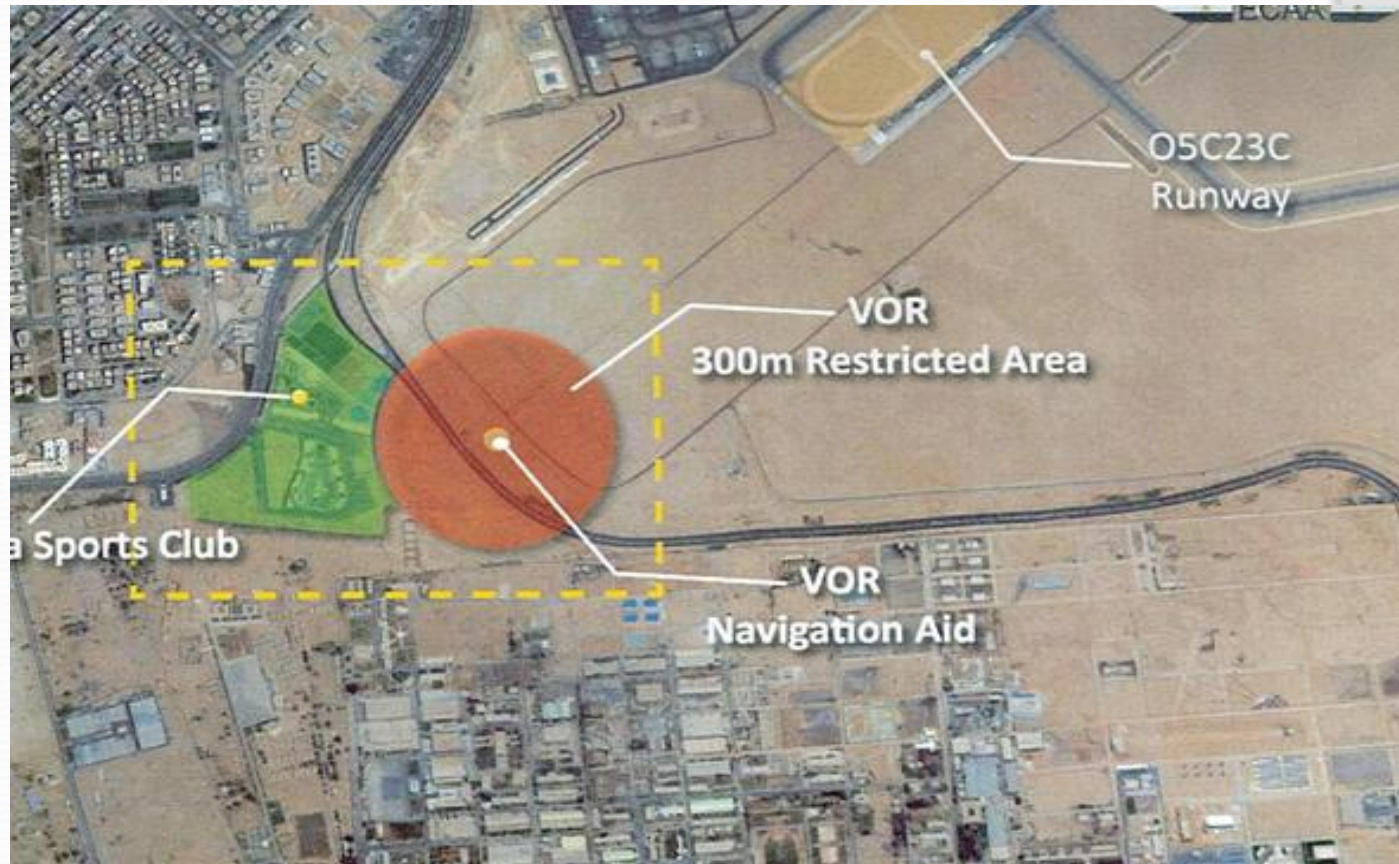
- Airport A is one of the largest airports; it contains more than 1 runway; 1 radar; 2 VORs and each runway equipped with 2 ILS ;
- Due to urban development in this airport; an investment area is planned to be established around the airport;
- One land use of these areas has been allocated to be a sport club;
- The project area was so close to one of the VORs restricted areas in this airport

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Introduction

Master Plan

Related Problems



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Master Plan

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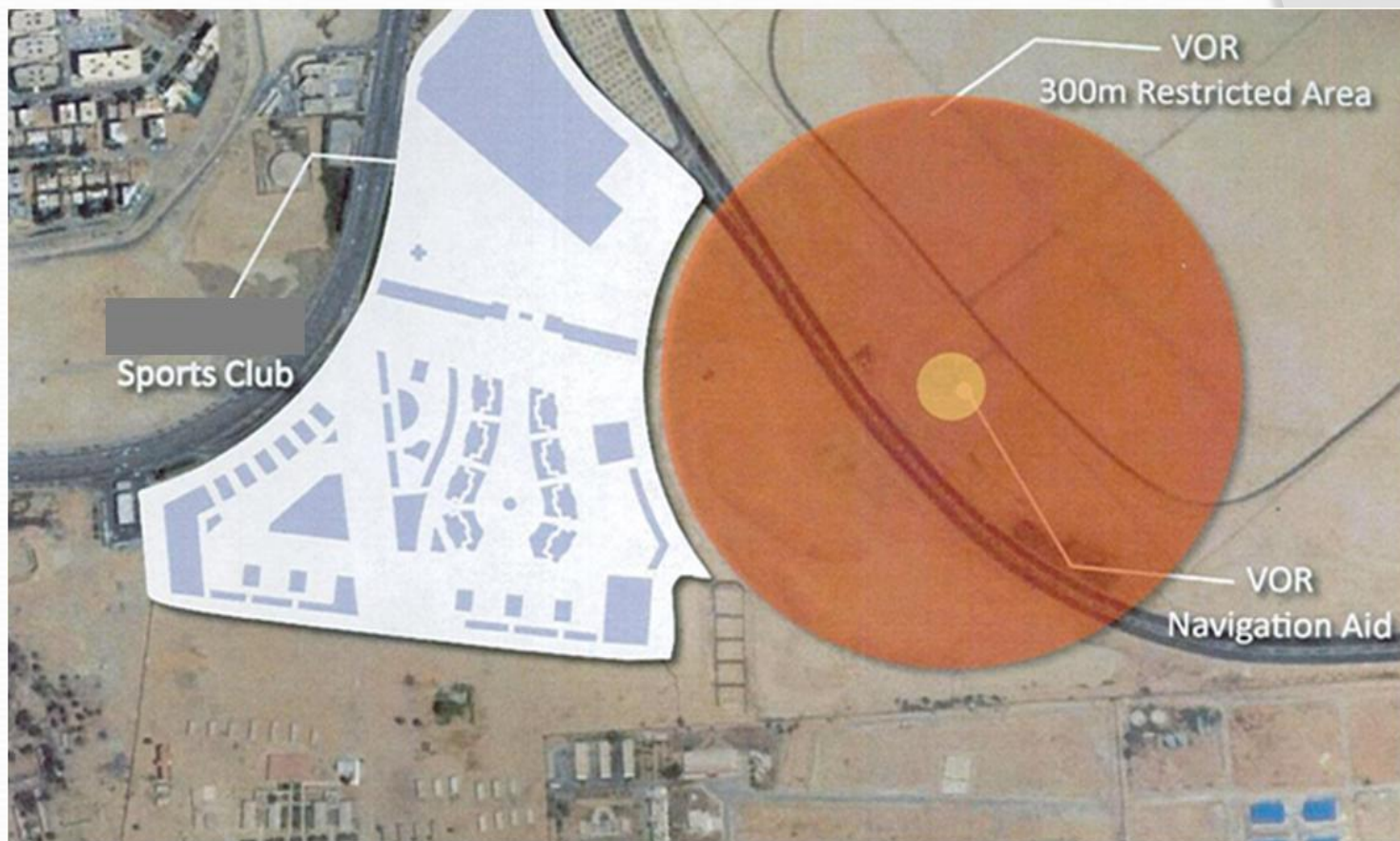
- The project area (total or # buildings ) were send to the safeguarding department; Study showed that :
  - Natural land elevation exceeding the max. allowed heights
  - Project location is in the final approach of one of the runways.
  - part of the area located within the restricted VOR area
  - Some land use may affect aerodrome's safety

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Introduction

Master Plan

Related Problems



# Land Use Hazard:

Introduction

Master Plan

Related Problems

- Master layout been modified many times to comply with ECAA requirements and safety restrictions



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Introduction

Master Plan

Related Problems



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Introduction

Master Plan

Related Problems

Land elevation

- Natural land surface exceeding the max. allowed heights:
  - Earth moving took place and ground leveling was lowered to meet the allowed heights

Affecting surfaces

Swimming Pool

Fence

Advertising signs



# Land Use Hazard:

Introduction

Master Plan

Related Problems

Land elevation

**Affecting surfaces**

Swimming Pool

Fence

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## Affecting Surfaces :

- Approach surface; a notification placed in the issued permit warning of possibility of noise level
- Restricted VOR area: area was marked on permits map banning construction or any change of land's nature in this area

Layout was modified many times to meet the above

# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Affecting surfaces

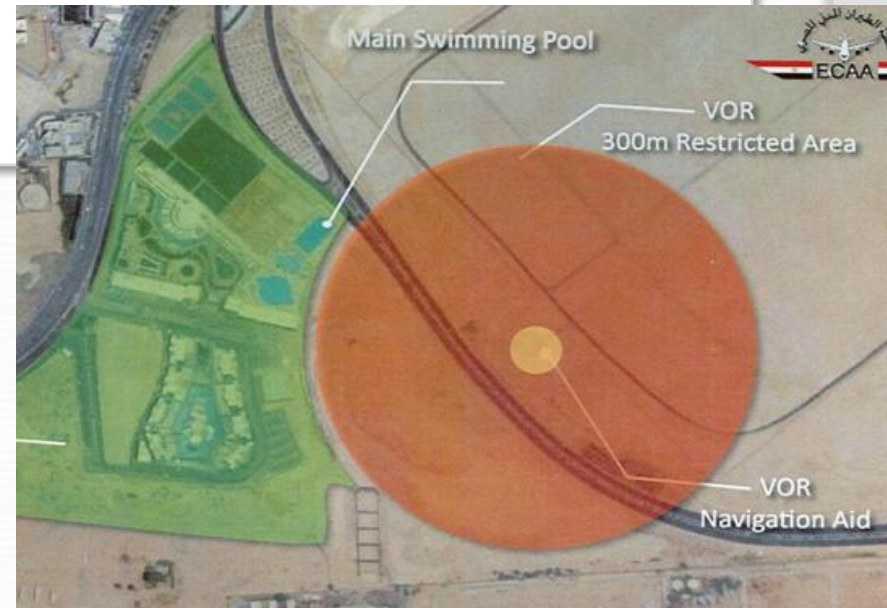
Swimming Pool

Fence

Advertising signs

## Main swimming pool :

- Swimming pool lighting height was complying with the issued permit; but the light reflection on the water surface may cause glare to pilots;



# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Affecting surfaces

Swimming Pool

Fence

Advertising signs

## Solutions :

- Restriction on issued permit to provide and technical report evaluating the light poles' lax before official opening;



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Introduction

Master Plan

Related Problems

Location

## Small pools :

- Has no problem with height but due to the required number of light pools it was restricted

Affecting surfaces

Swimming Pool

Fence

Advertising signs



# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Solution :

- Be covered by non metal material and coated with no-radiation reflector

Affecting surfaces

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# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Affecting surfaces

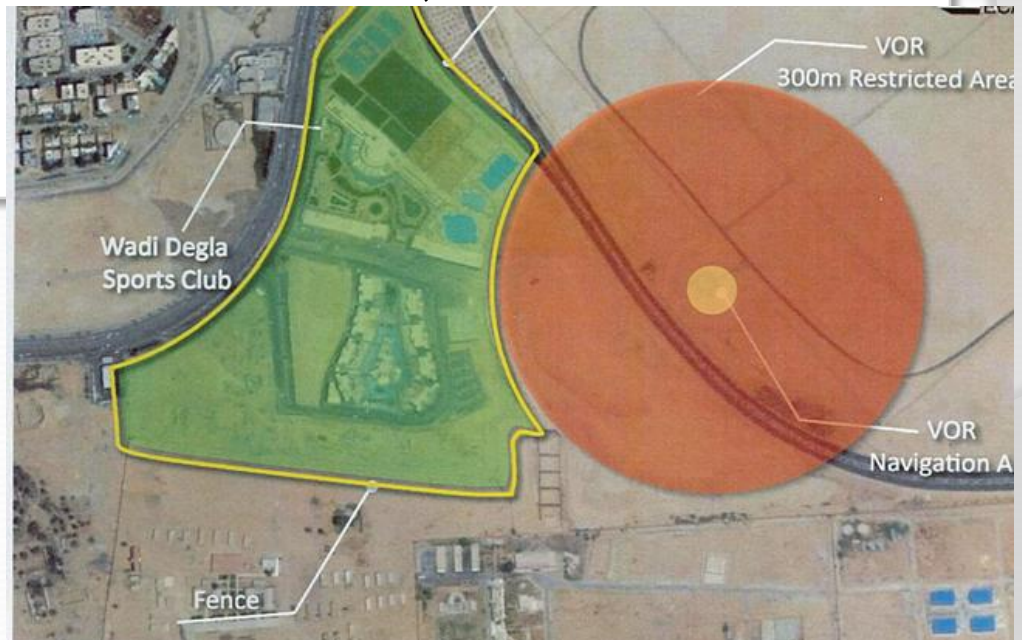
Swimming Pool

Fence

Advertising signs

## Fence :

- The area need to be fenced; but due to the sensitivity of the location due to the closer of each of RADAR and VOR; some restriction needed:



# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Affecting surfaces

Swimming Pool

Fence

Advertising signs

- Height not exceed 3m above ground level
- No metal surfaces used; should be replaced by hollow bars;
- Swimming pool been shaded with same height of pools and with non-metal material



# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Advertising Signs :  
The project requires some advertising signs on  
the main road

Affecting surfaces

Swimming Pool

Fence

Advertising signs





# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Solution :

- Max. allowed height was defined
- Restriction on using lights or evacuation of the type of light and direction should be provided

Affecting surfaces

Swimming Pool

Fence

Advertising signs



# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Affecting surfaces

Swimming Pool

Fence

Advertising signs



Open foot ball green area with height mast penetrating approach surface

# Land Use Hazard:

Introduction

Master Plan

Related Problems

Location

Post being replaced by electrical net covered on top to prevent distraction lights

Affecting surfaces

Swimming Pool

Fence

Advertising signs

Cases



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Introduction

Master Plan

Related Problems

Location

Affecting surfaces

Swimming Pool

Fence

Advertising signs

Cases

In the coming days with charismas and new year's celebrations Laser attacks and decoration lights will likely be used



## 4 – Safeguarding Structure :

