

November 2020

+BOWMER KIRKLAND

Nanaksar Primary School

Crane Operation Plan



Project Details	
Name	Nanaksar Primary School
Address	Beaconsfield Road, Hayes, UB4 0LT

COP Approval	Prepared By	Reviewed By	Approved By
Name	Paul Smith	Scott Millington	Hillingdon Borough Council through discharge of planning condition 13 of planning application: 4450/APP/2020/515.
Position	IMS Advisor	Contracts Manager	
Date	25th November 2020	25th November 2020	

Issue	Date	Reason
P1	12th November 2020	Initial Draft for Internal Review.
A	25th November 2020	For issue to discharge planning condition.

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1. Introduction

1. Introduction

This Crane Operation Plan (COP) defines how cranes and other tall construction equipment will be used on the Nanakar Primary School Project.

The project has been approved by Hillingdon Borough Council through planning application ref 4450/APP/2020/515 and Planning Condition 13.:

13. Prior to above ground works a Crane Operation Plan shall be submitted to and approved in writing by the Local Planning Authority, in consultation with the Ministry of Defence (RAF Northolt) and Heathrow Airport Limited. The submitted plan shall include details of:

- cranes and other tall construction equipment (including the details of obstacle lighting) - Such schemes shall comply with Advice Note 4 'Cranes and Other Construction Issues' (available at www.aoa.org.uk/policy-campaigns/operationssafety).

The approved Crane Operation Plan (or any variation approved in writing by the Local Planning Authority) shall be implemented for the duration of the construction period.

REASON

In the interests of aircraft safety in compliance with Policy DMAV 1 of the London Borough of Hillingdon Local Plan Part 2 - Development Management Policies (January 2020).

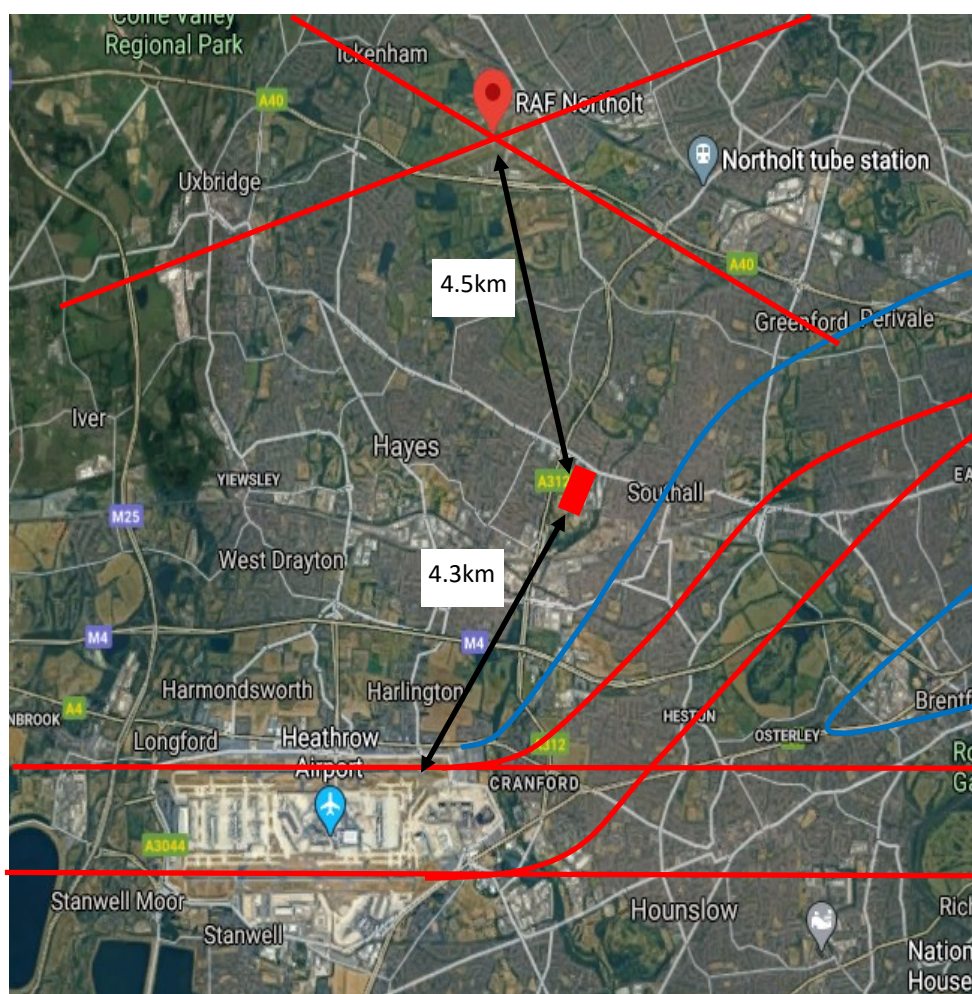
2. Scope of Works

2. Scope of Work

Construction of a new 3 story primary school (to replace the existing Nanaksar Primary School), with associated hard and soft landscaping, outdoor sports provision, car parking and new access arrangements. The grid reference for the site is TQ 11364 80052.



Fig 1 – Location Map



The **red** lines are the flight path centre lines, and the **blue** lines are the Noise Preferential Routes (NPRs) and nominal approach routes.

Fig 2 – Known Flight Paths

3. Construction Management

3. Construction Management

Maximum Heights

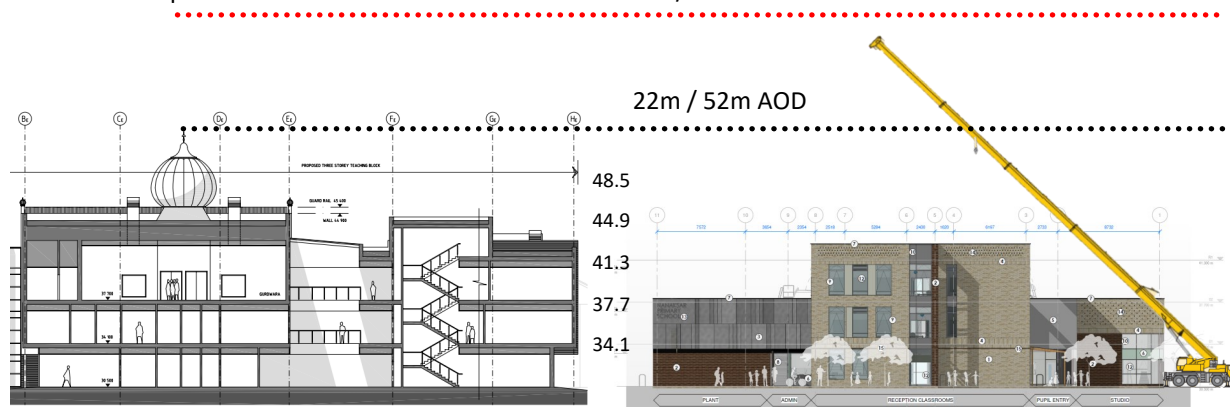
Maximum Heights for construction works will be as follows:

Description	Maximum Height (AOD)	Maximum Height (AGL)
Ground Level	30m AOD	0 ft
Building Height Under Construction	42m AOD	39 ft
Tallest Structure (nearby)	52m AOD	72 ft
Maximum Crane Height	62m AOD	104 ft

The tallest structure is the point of the roof dome on the existing school next (grid ref TQ 11257 80071) to the site at 22m or 52m AOD, therefore the an Authorisation Permit will be required where the top of the jib exceeds 62m.

Permit Required above 62m AOD

32m / 62m AOD



Crane Operations

All lifting operations will be carried out in accordance with B+K H&S procedures SP 12.3 to BS 7121.

The following table summarises the construction activities that will be carried out where the operational height may exceed >10m of surrounding structures.

Activity	Location (see appendix B)	Plant Type	Operating Height / m AOD
Steel Erection	Approved crane locations within grid TQ 11364 80052	Mobile Crane	30.9m / 62m AOD
PCC Planks	Approved crane locations within grid TQ 11364 80052	Mobile Crane	30.9m / 62m AOD
Roofing (material loading)	Approved locations within grid TQ 11364 80052	Mobile / Mobile Self Erect Tower	32m / 62m AOD
Air Handling Units	Approved locations within grid TQ 11364 80052	Mobile Crane	32m / 62m AOD

3. Construction Management

Project Specifics / Impacts

The following table summarises the construction specifics and impact risks of the site to RAF Northolt and Heathrow Airport.

Description	Risk	
	RAF Northolt	Heathrow
Birds A Bird Hazard Management Plan has been issued to discharge planning condition 14 by a competent ecologist (Delta Simons) The recommendations of which will be implanted during construction. A copy of which will be submitted with any required authorisation permit applications with either RAF Northolt or Heathrow Airport.	Low	Low
Dust The control of dust is a prime concern for all construction projects, particularly during periods of dry and windy weather, the uncontrolled release of significant dust may cause an risk to aircraft on landing / take off flight paths. Dampening down of haul roads and stocked pile materials.	Low	Low
Smoke The burning of waste is not permitted on any B+K Construction site.	Low	Low
Material Storage Materials will be stored in designated areas and will be secured to prevent from escape from the site particularly during periods of windy weather. Material storage areas are subject to daily inspection by site management. All materials stored on the roof will be secured down by netting.	Low	Low
Waste All waste will be stored in enclosed skips, any stock piled materials such as soils, will either be sheeted or seeded.	Low	Low
Lighting In accordance with BS 7121 all cranes at this location that require Aviation Warning Lights (AWL) rated at 200 Candela will be fitted to the end of the Boom and used in all conditions (daytime and night) where specified. Site lighting will be limited to security lighting. Note that there is a football ground located directly next to the site that use's floodlights	Low	Low
Plant Management All mobile cranes will be lowered at the end of the working day.	Low	Low
Permits Under the Safe Guarding of Aerodromes, ref CAP 738 rev 3 (UK Civil Aviation Authority) a Crane Notification (CAP1096) will be submitted to the CAA as formal notification of mobile cranes to being used on the site. The CAA will in turn inform any aerodrome impacted and advise B+K of any permit requirements that maybe required from either RAF Northolt or Heathrow. The highest structure is the dome on the existing school next to the site at 22m (52m AOD) therefore authorisation permits would be required if a crane jib exceeds 32m or 62m AOD.	Low	Low

Appendix A

General Arrangement

Site Masterplan & Landscape

Proposed Layout

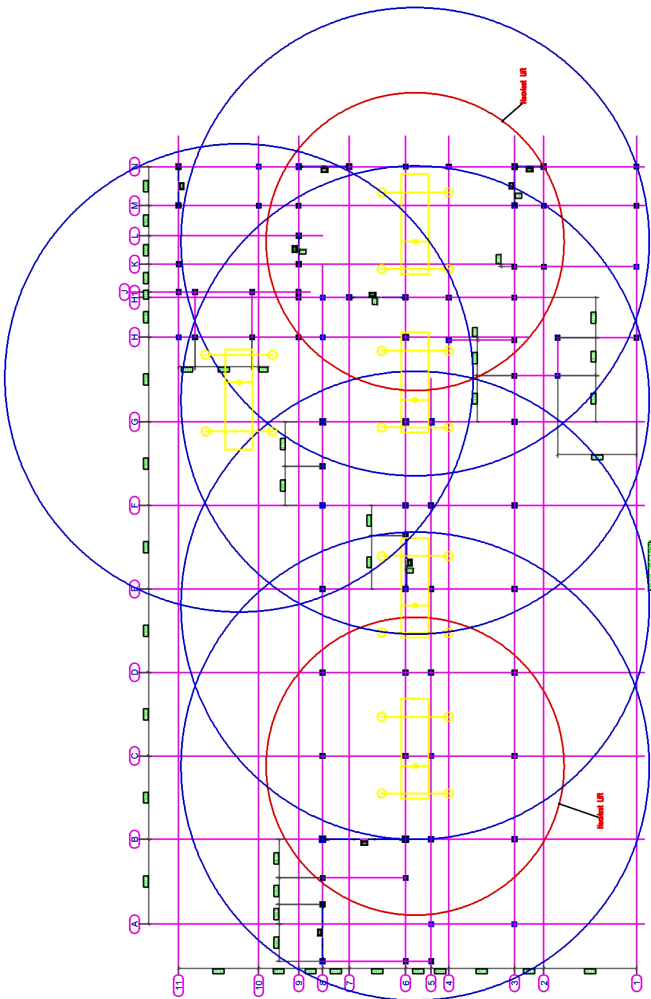
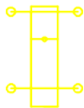
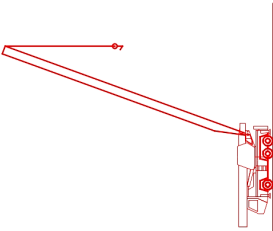


NANAKSAR PRIMARY SCHOOL
CLIENT ENGAGEMENT MEETING 06 | OCT 2019



Appendix B

Lifting Plans



Nanekar Primary School	
CRANE TYPE	TADARNO FAUN ATF 45G-3
CRANE CAPACITY	45t
MAXIMUM WORKING RADIUS 14 M (Heaviest Lift)	
MAXIMUM WORKING RADIUS 22 M (Maximum Jib Config. 30.9 M for airport restrictions)	
FLY JIB LENGTH	N/A
TOTAL JIB LENGTH	Jib Length restricted to 30.9 M
SWL - 6.7t (Heaviest Lift) / 5.0t at 22 M radius	
AWL - 6.05t (Heaviest Lift)	
RIGGER SPREAD	7.075 M X 6.3 M
COUNTER BALANCE	8.5 T
WEIGHT OF HOOK AND BLOCK	0.15T
OUTRIGGER LOADINGS	41.835T
OUTRIGGER MAT SIZE	1 M Diameter X 50MM NYLON
APPOINTED PERSON	Tom Leighton
LIFT SUPERVISOR	Dom Cheeseman
OTHER INFORMATION-USING A SET OF DOUBLE LEG 4.20T CHANES	

IT IS THE RESPONSIBILITY OF THE LIFT SUPERVISOR APPOINTED PERSON AND THE CRANE DRIVER TO ENSURE THE CORRECT POSITION AND STABILITY OF THE CRANE IS CHECKED REGULARLY IN ACCORDANCE WITH THE LIFTING PLAN

SIGN AND PRINT

APPOINTED PERSON Tom Leighton

LIFT SUPERVISOR Dom Cheeseman

CRANE DRIVER

K. ROBINSON	
COMPANY NAME	CRANE LIFTING
CONTACT PERSON	Nanekar Primary School
CONTACT NO.	01777
DATE	11/11/2020
SCALE	1:50
REVISIONS	0