

Abbey School Reading

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The Abbey School

Abbey School Reading

Introduction and Technical Details

Introduction

This document details the external lighting to the netball courts at the Abbey School Kendrick Road site.

The netball courts layout and associated lighting are being modified as part of the proposed redevelopment with a new car parking area being created.

The lighting has been modelled using Relux to provide indicative lighting renders of the proposed external lighting installation as well as calculation results of the lighting levels.

Reference should also be made to the architectural drawings forming the original planning application for details of the site location and arrangement, and the position relative to any neighbours.

This note also includes a drawing showing the proposed lighting arrangement.

The technical details for the external luminaires are shown on the following pages.

Technical Design

The external lighting proposals will re-use the existing floodlights to the north and east of the netball courts area. An existing flood light is to be relocated to the southwest corner of the courts and a new floodlight is to be provided.

The existing floodlights lighting have a controlled light distribution to reduce light overspill and glare with a forward throw of light and low light pollution.

Lighting Schedule

The exact details of the existing floodlights are to be confirmed. However the installation has been modelled using luminaires of similar physical appearance and known lamp type and output.

Technical details for the proposed luminaires are as detailed in the table below.

Reference should be made to the external arrangement drawings for the locations.

Ref	Description	Manufacturer and Type	Lamp Type and Lumen output	Image	Location	Dimensions (mm)
EX1	Existing / Proposed Floodlight Luminaire to Netball courts mounted on 8m column.	Abacus Challenger 1	2kW HQI 230000 lm 115 lm/W		Refer to drawing	431 x 753
EX2	Proposed Luminaire to Carpark. Mounted on wall at 6.5m	Thorn R2L2	15W 2053 lm 137 lm/W		Refer to drawing	598 x 232 x 149

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External Lighting Arrangement

- Existing floodlight retained in current position
- New floodlight position
- Proposed wall/post mounted flood light to car park.



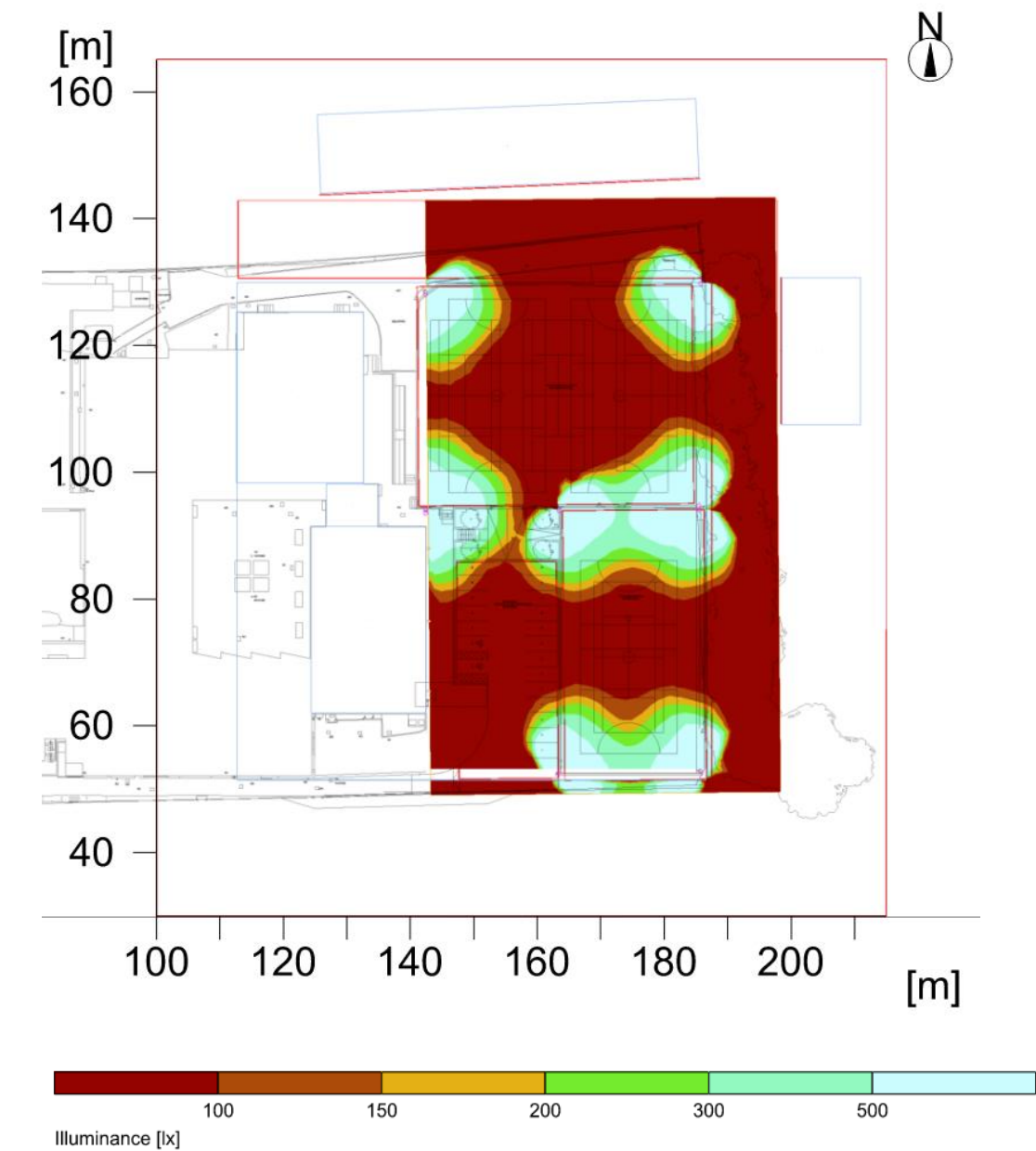
Typical existing floodlight retained in current position (South East Corner)

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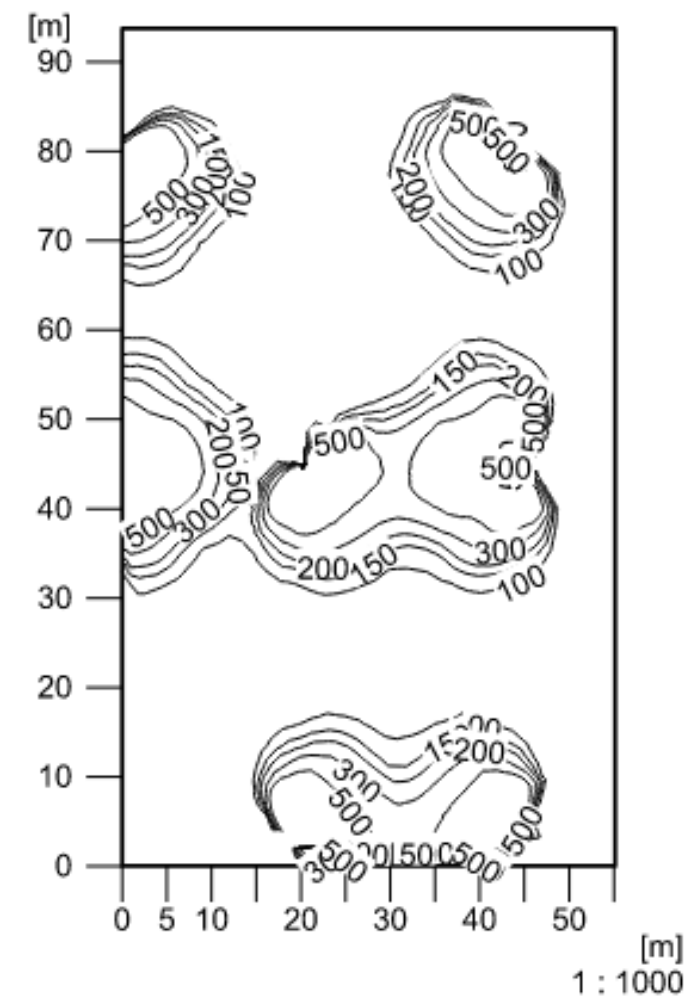
Lighting Analysis

Lighting Analysis

The existing floodlights have a reduced light overspill and glare distribution. The forward throw distribution of the luminaires illuminates the court with some side spill where the luminaires are located at the corners.



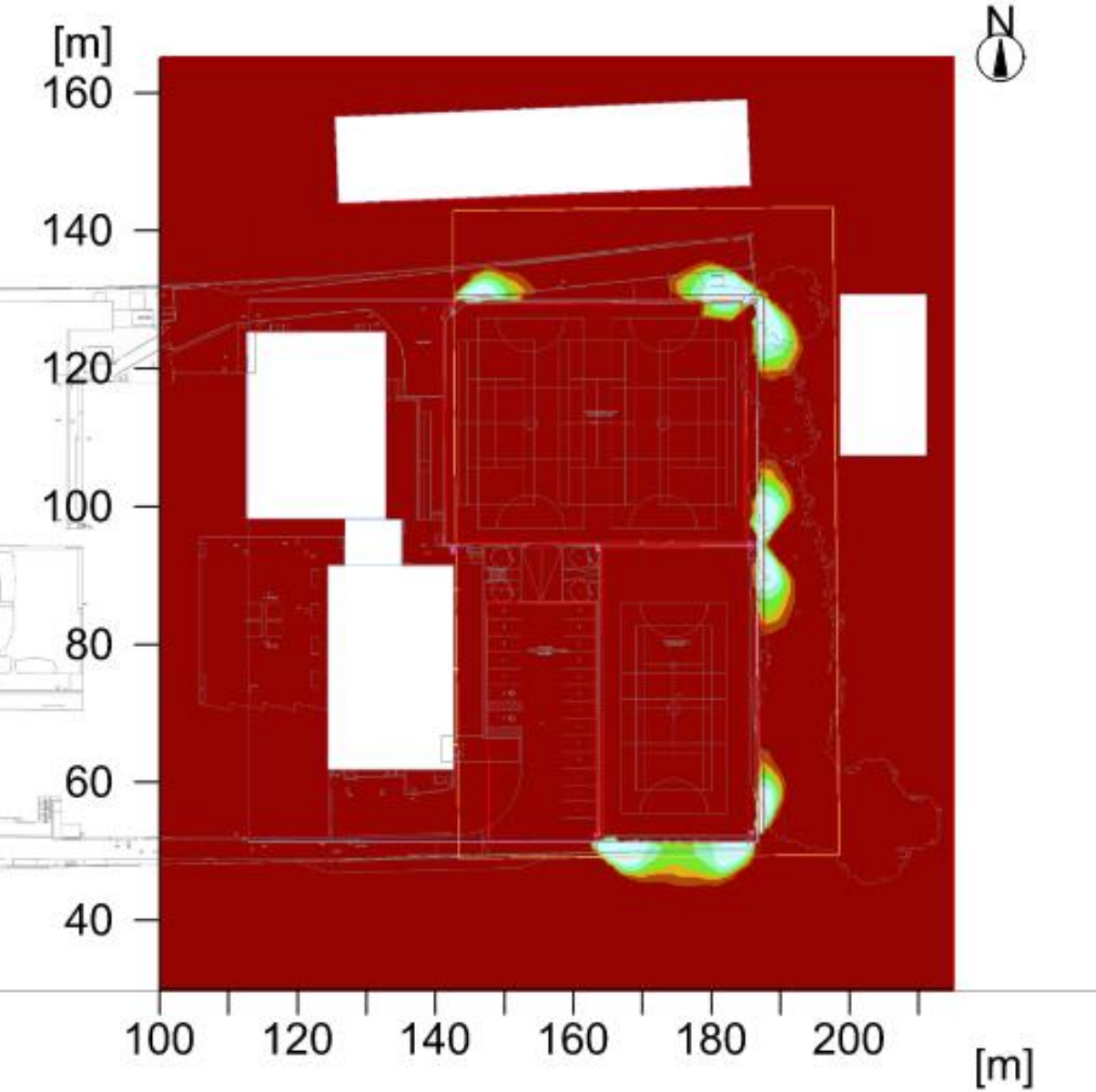
Results Overview to entire area.



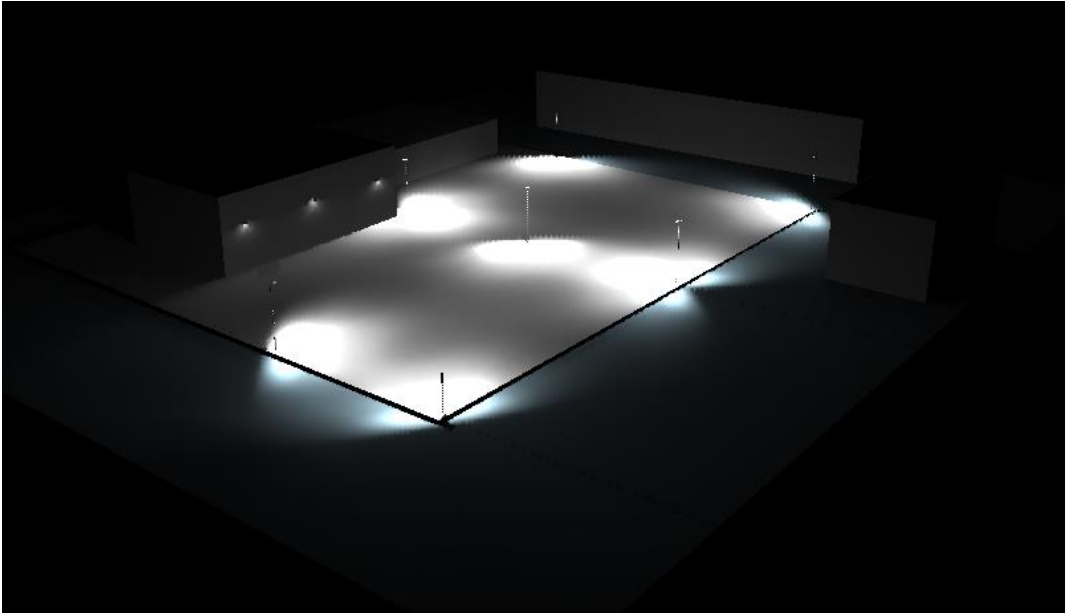
Isoline Plots for entire area.

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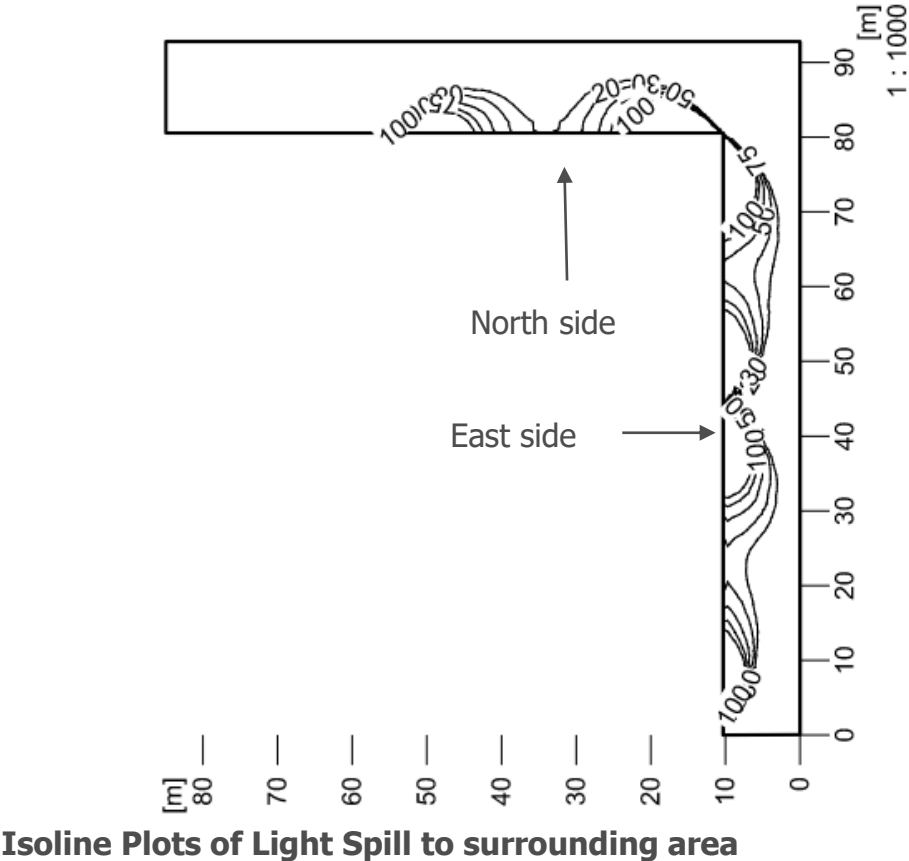
Lighting Analysis



Overview of light spill outside of netball courts area.



Render of proposed external lighting



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