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HAZARD IDENTIFICATION BOX
This table is provided to assist the Principal Contractor to fulfil their obligations under the CDM Regulations 2007

Construction Hazard	Maintenance / Cleaning Hazard	Demolition / Adaption Hazard

- SURFACE WATER DRAINAGE LEGEND**
- Existing 225Ø surface water sewer
 - Existing surface water manhole
 - New surface water sewer
 - New surface water manhole
 - New soakaway (high void ratio geo-cellular unit)
 - New permeable paving
- LEVELS LEGEND**
- Existing site levels
 - Proposed site levels (as per Architect's drawing)

Rev	Date	Amendment	By	Chk.

Status: Preliminary

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Client: RBC Property Developments Ltd

Job: Land at Kingsmead Cuffley

Title: Proposed Surface Water Drainage

Scale: 1:200 @ A1 Date: March 2014

Drawn By: M.M. Eng. Check: Tech. Check:

Drawing No. C82880-SK-001

EXISTING SURFACE WATER DRAINAGE

- The British Geological Survey map indicates that the site is underlain by London Clay with permeable sands and gravels present to the west of the site. The Strategic Flood Risk Assessment for Welwyn Hatfield Borough Council (WHBC) indicates that the sands and gravels are River Terrace Deposits.
- Although WHBC has indicated that soakaways are not always effective in this area due to the presence of clay, a drainage survey carried out by AB Pipelines (Reference AB 2533) was unable to locate any surface water sewers or manholes from the existing property, suggesting soakaways may be present.

PROPOSED SURFACE WATER DRAINAGE

- In accordance with Building Regulations (Part H), the preferred option for discharge of surface water is infiltration. It is proposed that clean roof runoff will be directed to high void ratio geo-cellular soakaways designed in accordance with BRE 365, to be at least 5m from dwellings and accommodate up to the 1 in 100 + 30% storm event. The soakaways shown have been sized up using a rate of 1.0 x 10⁻⁷ m/s to represent poor permeability.
- Surface water runoff from private parking areas will infiltrate to ground via permeable paving and runoff from the adopted road will drain to a highway soakaway. Further consultation should be undertaken with the SuDS Approving Body (SAB) to establish whether a high void ratio geo-cellular soakaway meets adoptable standards.
- A Site Investigation should be carried out in due course to confirm the geology and establish whether suitable soakage rates can be achieved.
- If infiltration is not feasible, the alternative is to connect to public sewers.
- The cul-de-sac at the end of Kingsmead fronts the development and Thames Water (TW) records indicate that an existing 225mØ surface water sewer is located to the rear of No. 30 (as shown in Figure 1). TW has suggested that MH 3105 may pick up road drainage from the cul-de-sac and other properties, but that there is no record of this. On-site demolition works will be required to confirm a connection from the existing property to Manhole 3105, prior to the detailed design stage.
- The surface water drainage strategy will be designed to accommodate runoff for up to the 1 in 100 + 30 storm event ensuring that there is no increased flood risk both on and off site.

