



Local seepage water - dewatering system.

### Seepage water local dewatering proposal.

The following dewatering proposal being subject to contractor's detailed design.

1. Ground Investigation undertaken by GEA and the following Report dated January 2021 indicates that localised seepages of the groundwater from local slightly sandy horizons within the clay formation might be expected within the basement excavation, however, any such inflows are likely to be relatively minor in nature. The possible local water inflows will be adequately dealt with through sump pumping.

2. In the event that ground water is encountered during the course of excavation a localised, excavated sump is to be formed at a level lower than the progressive base of excavation being carried out. Settlement of the soils may also occur if the dewatering system abstracts suspended sediment in the groundwater thus resulting in a reduction in volume in the substrate (i.e. loss of fines). A perforated shell is to be constructed to support the perimeter of the temporary working sump and placed within the excavated zone. The shell to be wrapped with geotextile to prevent loss of fines.

3. Any ground water which is present will naturally pull within the sump area and at this point a water pump unit is to be introduced with a discharge hose. Water to be pumped to previously prepared settlement tanks, located at the suitable level to allow water to be discharged by gravity to the nearest existing drain outlet.

4. Monitoring the loss of fines  
Loss of fines will be monitored as part of the dewatering scheme. The abstracted water will be fed to a settlement tank to allow sediment to settle prior to discharge. The volume of water discharged will be measured and recorded continuously via a V – notch weir and a water level monitoring device. Samples of water will be taken from an off-take on the ring main (i.e. prior to entering the settlement tank) and suspended sediment content established using an Imhoff cone. The results will be recorded throughout the duration of the works. Samples will be taken daily.

19.07.2021 - Issued for information KRB

# engineersHRW

Project Title:

**7 Greenaway Gardens**

Drawing Title:

**Seepage water - dewatering proposal**

Scale at A3:

**NTS**

Drawn by:

**KRB**

Date:

**July 2021**

Checked:

**SR**

Drawing Status:

**Preliminary**

Project No:

**2095-HRW-XX-XX-SK-S-002 P1**

Drawing Type:

Drawing No:

Revision: