EXAMPLE METHOD STATEMENT –

Installation of underground rainwater harvesting tank

WARNING: This is an example only – site specific information to be added before use

Company:
Company Address:

Project:
Project Address:

Assessment date	Review date	Name of assessor	Unique reference

PPE

				
Protective footwear	Hi-vis	Protective gloves	Hard hat	Safety glasses

PLANNED TASK ACTIVITIES

Unloading and moving rainwater harvesting storage tanks must be undertaken by briefed and authorised personnel, and involves the activities listed below.

- Taking delivery of the tank (if not already on site)
- Unloading the tank and transporting to the location it is to be installed (see separate risk assessment and method statement
- Marking out the installation location, ensuring alignments with the water ingress and overflow ducts and the services duct
- Digging the excavation to the correct depth, position, alignment and size
- Providing a bed for the tank at the base of the excavation
- Installing and levelling the tank
- Part backfilling with concrete
- Making the ingress, overflow and service duct connections
- Fitting the extended neck and lid
- Completing the backfill to finished ground level
- Establishing an exclusion zone for subsequent vehicular traffic

METHOD TO BE USED

The bullet point list below shows the method statement for installing this underground rainwater harvesting storage tank. The main elements are included within this list. However, additional precautions/requirements may be required on site for site-specific reasons.

- Arrangements should be made for the tank to be delivered, coincident with the day it is due to be installed; with this in mind, when delivery is expected, ensure

- Suitable access and parking arrangements have been made for the delivery vehicle
- Plant is available to unload the tank
- A clear route has been designated between the delivery vehicle and the installation site
- The installation site is level and clear of obstacles and site debris and, ideally:
  - The water ingress pipework is complete and ready for connection
  - The water overflow pipework is complete, ready for connection, and is itself connected to the surface water management system (soakaway, storm-drain or attenuation ass appropriate)
  - The service duct is ready for connection

- Before starting the installation, confirm no added precautions apply, i.e.
  - Install in heavy clay (in which case it is necessary to encase the tank in approx. 220mm concrete)
  - Install in a high water table (in which case, encase the tank in approx. 220mm concrete)
  - Carry the weight of vehicular traffic (in which case, a structural engineer's design is required)
  - Locate closer than 4 meters to adjacent foundations (in which case, a structural engineer's design is required)
  - Install adjacent to an earth bank or raised patio (in which case, a structural engineer's design is required)
- Complete and sign off a risk assessment
- Complete and sign off the method statement
- Calculate depth of excavation by using the position your rainwater pipe (the pipe which takes your water from your roof to the tank) as a datum
  - Allow an additional depth for the concrete base
  - The top of the tank must be not more than 500mm below ground level
- Line-mark the dig area, allowing for
  - Alignment of tank water entry and exit connections and the service duct connection
  - Tank footprint + 200-300mm for tank manoeuvre/access + a suitable allowance for battering and back fill, depending on ground conditions
- Dig the excavation, anticipating that ground water ingress may be experienced in the process; if necessary, keep water interference to a minimum by use of a pump
- Bed the bottom of the excavation with pea shingle and a concrete base. Allow to dry.
- Position the tank on the base and check the vertical and horizontal alignments between tank connectors and the drainage runs/service duct, allowing for 10mm of tank settlement at the next step
- Fill 1/3 of the tank with water to settle it and bring connectors and pipework into final alignment
- Connect all pipework
- Install neck and lid to ensure that no backfill material can enter the tank.
- Backfill with a minimum of 450mm deep all around the base of the tank with concrete
- Once the concrete has set, backfill remaining around tank body and sides with pea shingle and surround materials
- Fill the tank with water to the level of its inlet/outlet connections
- Continue backfilling the tank with pea shingle until the crown of the tank is covered with pea shingle
- Backfill to finished ground level with free flowing material
- Once the installation is complete and the tank is connected
  - Install filter (if not already installed)
  - Secure tank lid

- Mark out an exclusion zone 2m outside the original excavation footprint to prevent vehicles driving over the tank.

WARNINGS

- Care must be taken to ensure that site debris/dust is not allowed to enter the tank during or after its installation
- Under no circumstances
  - Tamp down the infill with machinery
  - Tamp down finished ground level with machinery
  - Drive vehicles over tanks installed as above
- When exceptional conditions are experienced, tanks are only to be installed in accordance with the design instructions of a qualified structural engineer who takes responsibility for the integrity of the installed tank.

ACCESS REQUIRED

Directed access will be required for the delivery vehicle.

WORKING ENVIRONMENT RESTRICTIONS

The working environment is on a fully operational construction site, with all tank unloading and movement related activities to be undertaken in accordance with the site induction briefing

In particular, it is anticipated that open excavation works will be taking place around the tank installation site, in which location all activities are to be undertaken strictly in accordance with the site induction briefing and the verbal instructions of the tank unloading/positioning team

EMERGENCY PROCEDURES

These are to be in accordance with the site induction briefing

OPERATIVES

The unloading/position team are fully competent, briefed and authorised to undertake the task.

PLANT, TOOLS AND MACHINERY

The tank unloading/positioning task requires the use of a suitable lifting machine and suitable lifting accessories such as lifting chains and D-shackles, lifting straps and a load-spreading bar

APPROVALS

This method statement has been prepared and approved by:

Signed: ……. Name: …… Date: ……

Please sign below and confirm that you are aware of and understand the above risk assessment:

Signed: ……. Name: …… Date: ……

(Task operatives)