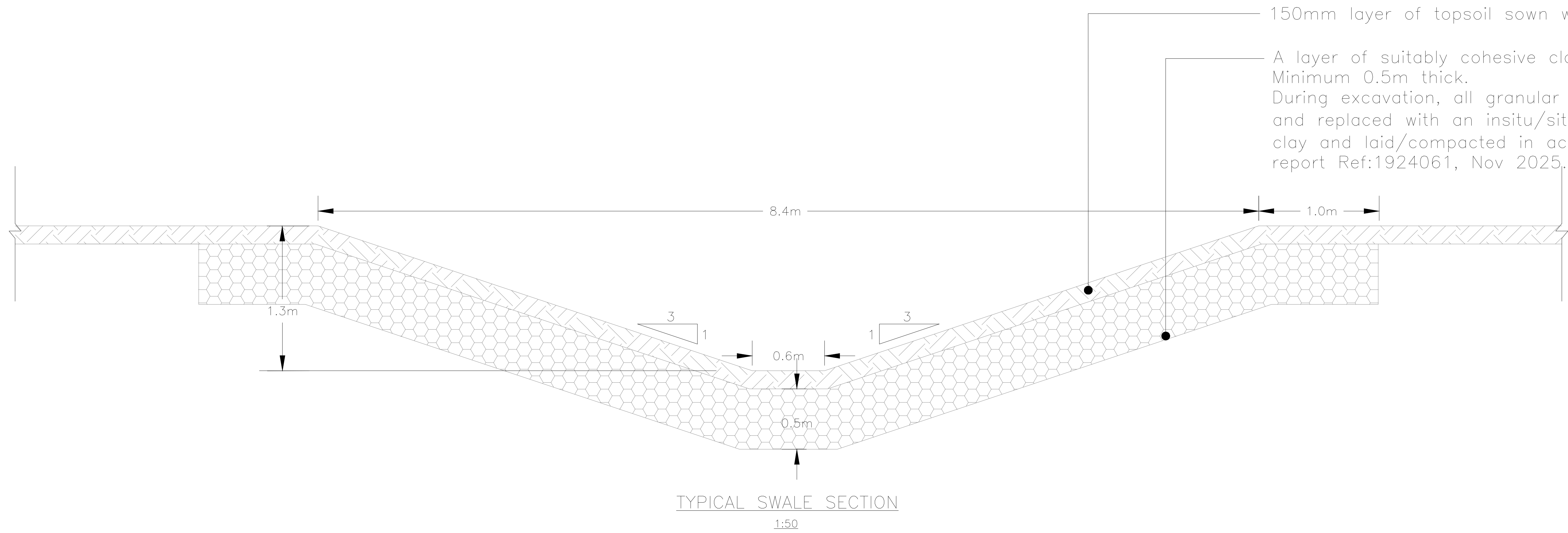
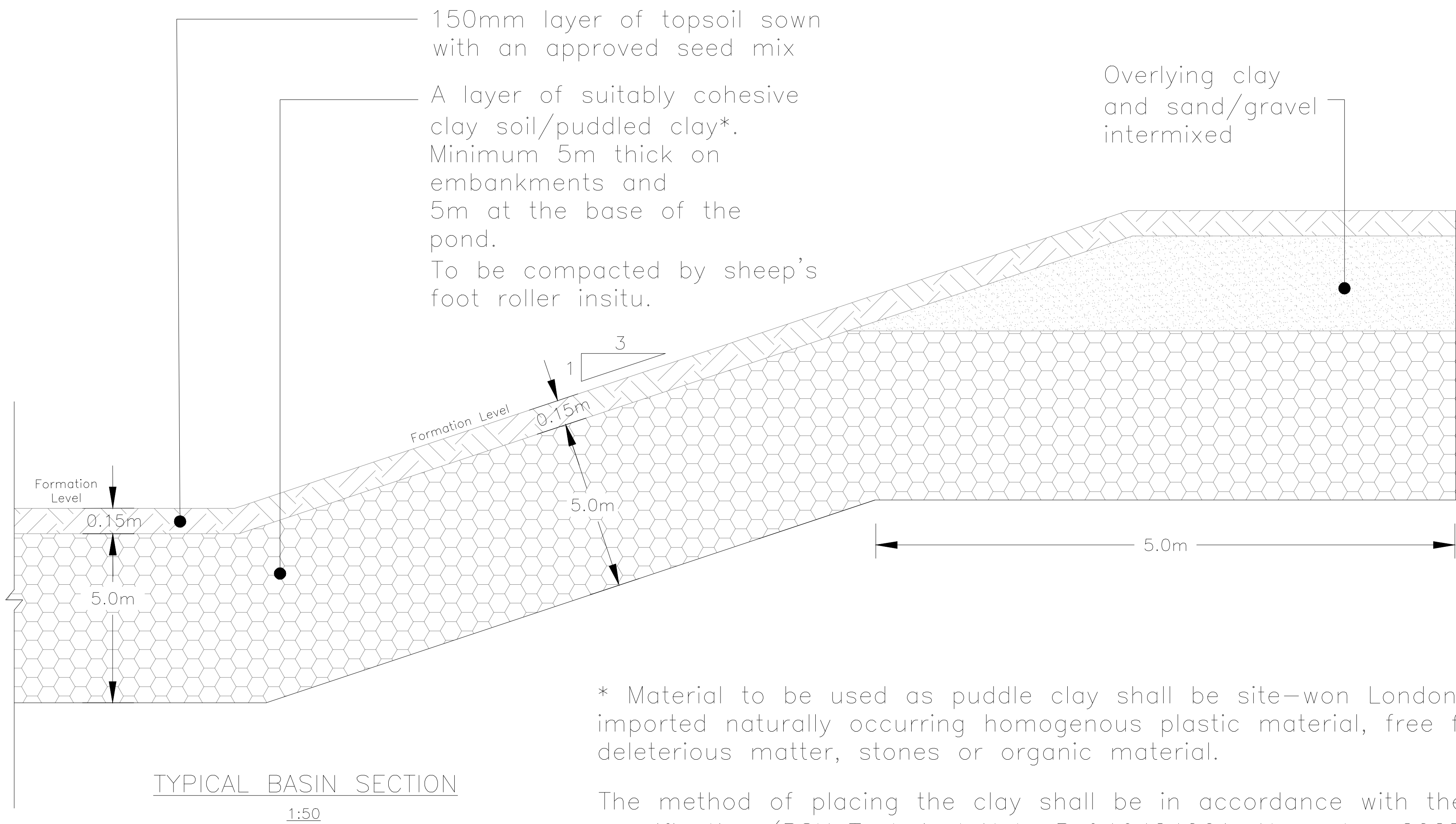
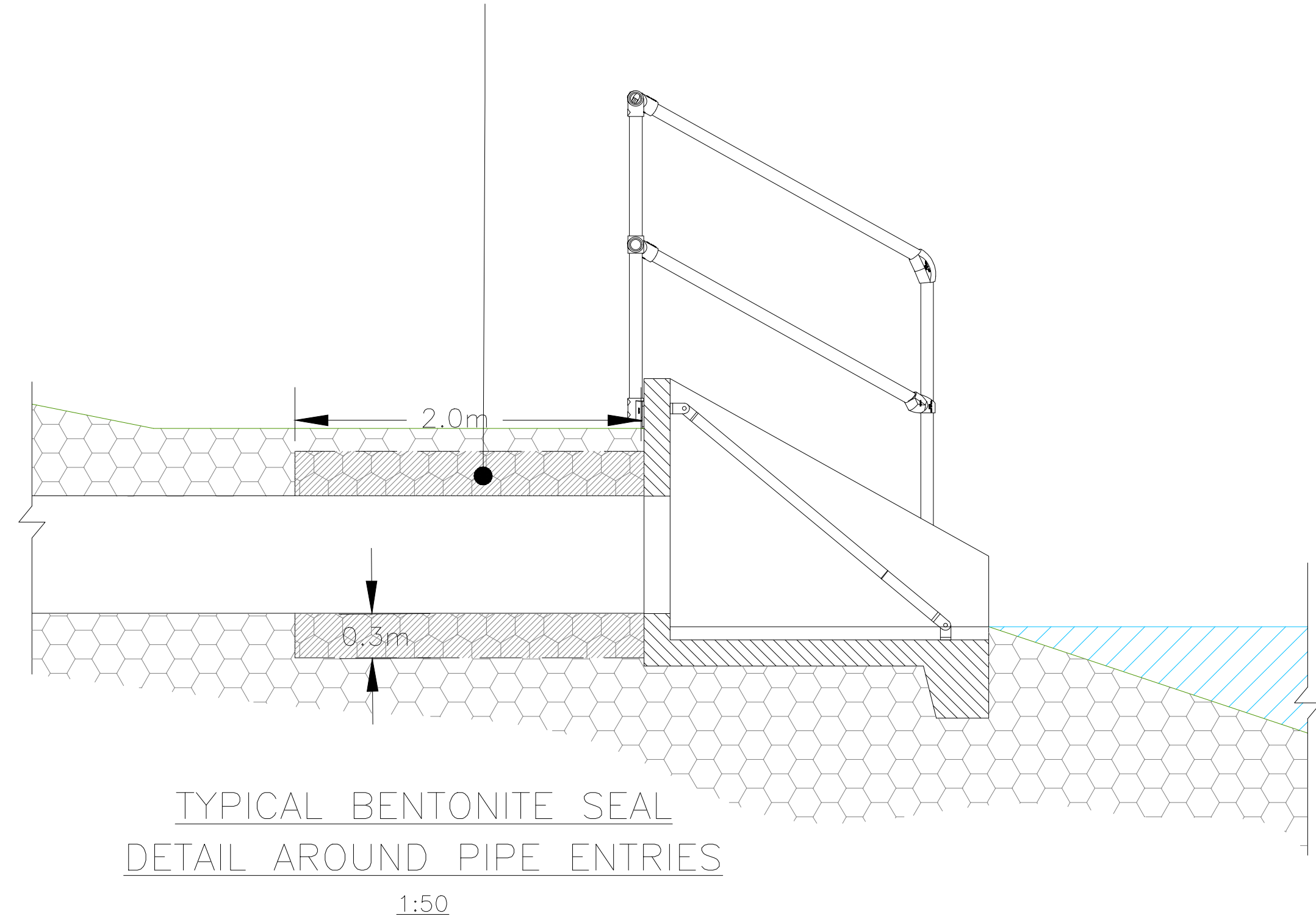




Sodium bentonite powder/granules (30% mix) to be mixed with clay (70% mix) to create a putty and placed around pipe entries into headwalls in a minimum layer of 300mm and compacted by hand, tamper or mallet to remove voids. Extend collar for 2m outward from headwall to create a swelling collar around the pipe to prevent groundwater ingress along the pipe wall.



* Material to be used as puddle clay shall be site-won London Clay or imported naturally occurring homogenous plastic material, free from deleterious matter, stones or organic material.

The method of placing the clay shall be in accordance with the approved specification (RSK Technical Note Ref:19424061, November 2025) to produce a continuous homogeneous plastic mass of puddle clay effectively free from voids, laminations or imperfections. The clay shall be placed in horizontal layers not exceeding 150mm consolidated thickness and compacted by an approved method to produce a waterproof barrier.

For pipes entries/headwalls, a Sodium Bentonite powder shall be mixed with the puddle clay and compacted around the exterior of the pipe to seal any gaps and create a watertight seal around pipe entries.

P3	26.11.25	Swale detail updated, Pipe entry detail added.	CP	TC
P2	17.10.25	Undated to puddle clay liner option.	CP	TC
P1	20.11.24	First Issue.	TRB	TC
REV. No.	DATE	DESCRIPTION	DRAWN	CHECKED
Client		 BARRATT DEVELOPMENTS PLC	MJA CONSULTING CIVIL & STRUCTURAL ENGINEERS Ipsum Court, 24 The Quadrant, Abingdon Science Park, Abingdon Oxon, OX14 3YS Tel: 01235 555173 Email: mail@mjaconsulting.co.uk	
Project		Tars Farm, Barnham		
Title		Attenuation Basin & Swale Details	Scale: NTS @ A3	Status: PRELIMINARY
			Drawn: CP	Project Engineer TC
			MJA Project No: 6838	Date: 11/2024
			Drawing Number: 6838-MJA-SW-XX-DR-C-213	Rev: P3