



# SMURFIT KAPPA, PAPER MILL BASIN

## SNODLAND, TOWNSEND, HOOK

### Water

CLIENT  
**BREHENY CIVIL  
ENGINEERING LTD**

CONTRACT NO.  
**C21681**

PROCESS  
**35T EXCAVATOR INSTALLING  
FROM PONTOON**

SPI Piling Ltd, was appointed by Breheny Civil Engineering to deliver specialist sheet piling and tie-rod works for the remediation of the Paper Mill Basin at Smurfit Kappa's Snodland facility. The basin forms a critical part of the site's water management infrastructure, and deteriorating perimeter walls required reinforcement to ensure long-term structural integrity and resilience. The project involved constructing new permanent retaining structures along the north and south basin edges within a constrained, live industrial environment, much of which required working directly over water.

SPI Piling Ltd's scope included installing over 200 permanent GU23N sheet piles, mostly 12m long, to form twin reinforced caissons. Works also involved installing fabricated twin PFC waling beams and high-capacity Macalloy tie rods to complete the structural system. Operations were supported by a modular floating Linkflote pontoon, attendant cranes, safety boats, and lightweight access pontoons. Piles were installed primarily using Movax side-grip technology, with controlled impact driving where ground conditions required.

Given the confined environment, over-water working, and proximity to live industrial processes, SPI implemented rigorous safety controls. These included detailed RAMS, lift plans, working-over-water procedures, man-overboard systems, exclusion zones, plant inspection regimes, environmental protection measures, and continuous verticality and installation checks. No reportable incidents occurred.

Key challenges included maintaining operational continuity within the live basin, managing floating plant stability, working within narrow caisson widths, and adapting piling methods to variable ground conditions. SPI worked collaboratively with Breheny Civil Engineering to coordinate sequencing, adjust methodologies, and maintain progress without disruption.

SPI Piling Ltd, successfully delivered the full piling and tie-rod package on programme, creating durable reinforced basin walls with minimal impact on ongoing operations. The project demonstrated SPI's specialist capabilities in over-water piling, complex logistics, safety-critical delivery, and collaborative working. It reinforces SPI's suitability for future industrial, marine, and water infrastructure projects requiring technically demanding solutions.



