

SDG

STRONGER
TOGETHER

UPPER CRESCENT WwPS COMBER

MAIN CONTRACTOR
GRAHAM

CLIENT
NI Water/AECOM

DATE
2025

PROJECT SUMMARY

SDG is a trusted supplier to the recently completed Upper Crescent Wastewater Pumping Station in Belfast, designed and delivered by GRAHAM for client NI Water/AECOM. The project involved the construction of a new 245 l/s terminal pumping station with 687,000 litres of storm storage, significantly improving wastewater capacity and resilience in a busy residential area.

THE CHALLENGE

Originally built in the 1970s, the existing wastewater station required a full upgrade to meet modern service requirements. The project was constrained by the tight footprint of the existing site, the need for exceptionally deep excavation, and limited working space within a built-up area. Safe and efficient construction required smart use of temporary works and well-coordinated product deliveries.



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OUR SOLUTION

SDG supplied a full package of civil and formwork solutions to support the successful delivery of the project.



Formwork Solutions

A key element was the use of Pecafil® permanent formwork from MAX FRANK Group to stabilise circular concrete shaft rings. This flexible, easy-to-handle material replaced traditional timber or circular formwork, significantly reducing installation time and labour on-site. Its suitability for curved structures such as manholes made it ideal for use in restricted access areas. An additional concrete coating provided further protection, ensuring the shaft rings remained secure during and after installation.



Precast Lifting Systems

SDG supplied lifting anchors, shackles and formers to support the safe handling of precast components throughout the site.



Reinforcement & Concrete Accessories

Products included tying wire, dowel bars, sleeves and caps, along with concrete spacers — ensuring proper reinforcement placement and structural stability.



Structural Waterproofing

A full range of PVC waterstops and waterbars were delivered to prevent water ingress and protect key construction joints.



Joint Sealing & Movement Protection

Products such as Hyperseal joint sealant, swelling tape, and Expancell helped provide reliable long-term joint performance in aggressive environments.

All items were supplied in close coordination with GRAHAM's site team to maintain programme timelines and reduce site storage requirements.

THE RESULTS

SDG's support and product package helped enable:

- Faster construction thanks to reduced formwork labour and no stripping required
- Safer installation in a confined site through lightweight, easy-to-handle Pecafil®
- Durable, long-term protection of underground structures with waterproofing and joint sealing solutions
- Reliable delivery of technically compliant products across multiple civil works stages

By working closely with the main contractor, SDG once again demonstrated its ability to streamline complex infrastructure supply chains and support high-quality delivery — safely, on time, and within budget.

