

TORYGLEN DRAINAGE SCHEME, GLASGOW	
Description:	Complex main drainage outfall for new developments
Form of Contract:	ECC Option A
Duration:	50 weeks
Contract Value:	£2,500,000
Client:	Glasgow City Council
Clients Representative:	W A Fairhurst & Partners

The scheme required the installation of 1,500 metres of drainage. Much of this was over 6 metres deep - up to over 9 metres - and significant sections were installed through layers of dense slag from former industry on the site. We undertook bulk earthworks in both natural and made ground and constructed a swale, an attenuation pond and a sizeable SUDS retention pond. A large element of earthworks took place in controlled conditions in contaminated ground, where extensive sampling and testing were required to permit accurate classification of soils. The drainage discharged to an existing culvert, which was protected where it passed under the new SUDS pond. The design also required the new pipework to cross a busy main road at depth at two locations.

The project was further challenged by the unexpected discoveries of Japanese Knotweed, asbestos particles in areas of soil and by 'running sand' in one section of pipework. The extended site was surrounded by residential areas, which placed great emphasis on public safety and access control. Community Representatives were kept closely informed and attended the progress meetings.

We promoted and implemented a number of initiatives to reduce cost and programme. We minimised traffic disruption by using trenchless methods to install pipework under the busy Prospecthill Road. We worked closely with the Client's team to optimise the earthworks for the SUDS ponds and successfully retained on site all of the Non-Hazardous material that had originally been scheduled for removal to landfill. We introduced a segmental shaft solution to construct a chamber in a particularly restricted location. The finished works were enhanced by soft landscaping and a network of footpaths.

