RSE were engaged in December 2017 by Scottish Water to work on Turriff Water Treatment Works and develop an additional process to protect against Cryptosporidium failures, resulting in an emergency request to provide a UV treatment stage. SW are reviewing the options for a new WTW at Turriff, the addition of the new UV treatment to the existing plant will ensure that water quality is maintained at the existing works.

Project Overview:
Early investigations determined that proprietary package units were not suitable due to the extremely limited hydraulic profile and prohibitive pumping costs. The optimum solution was to design and build a Transportable Treatment Unit (TTU) containing 2No. Trojan Swift 4L30 UV reactors.

The project moved at pace with on-site ground investigations and preparatory works developed in parallel with the TTU design, minimising the overall design and build period to 20 weeks.

From the ground investigations, it became immediately apparent that the location for installation of the TTU presented many challenges in the form of unknown, buried services and structures, both abandoned and live. Each of these issues were investigated and resolved whilst the design progressed.

Project status:
The installation of the TTU on site is complete, ready for the tie-in to the existing works, these works have been delayed, due to the exceptionally dry weather prohibiting a plant shut down. It is anticipated that the tie in works will be completed in September.

Scope Summary
- Supply and install a UV treatment process capable of treating 33ML/d
- Includes associated new pipework and modifications to existing pipework
- Civil modifications to allow for install of the UV treatment unit;
- Power, control & instrumentation cabling for the UV treatment unit.