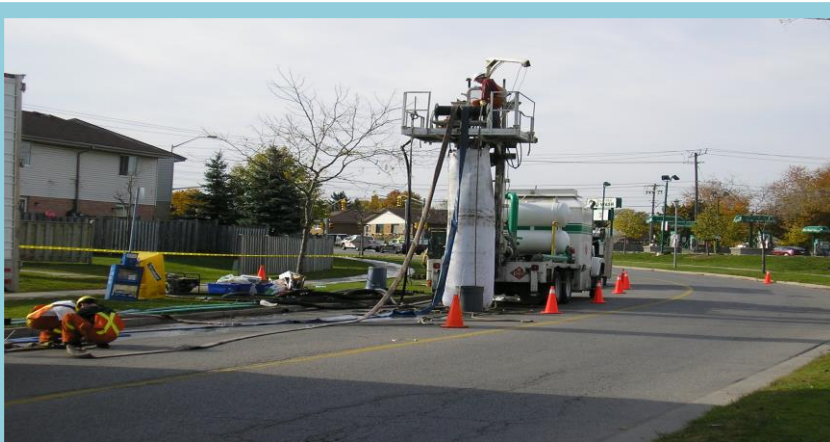


APPENDIX B2: CERTIFICATE OF SATISFACTORY EXECUTION –WORKS ONLY

ACTIVITY <i>(Title of Applicant Activity)</i>	Contractor Entry: Works Contractor and PSCS		
SITE Construction contract: <i>(Title & brief description)</i>	Lower Liffey Valley Regional Sewerage Scheme Phase 3 Contract 3C This project involved the repair of defective sewers and manholes within the drainage networks for Kilcock, Maynooth, Leixlip, Cellbridge, Co.Kildare. The rehabilitation works involved using non-dig techniques of the most severe defects within the Main Drainage Systems. The work involved the rehabilitation of both sewer lines and manholes. In total the project involved cleaning of 19 km of sewers and 112 manholes, 400 localised repairs. Relining of over 100 manholes and approximately 5 km of sewers. CCTV Survey and GPS Survey of over 19km of sewer both before and after rehabilitation works. Acted as Works Contractor and PSCS.		
Site location:	Kilcock, Maynooth, Leixlip, Cellbridge, Co. Kildare		
Proportion of Project undertaken by the Applicant	80%	Tender entity (<i>Sole trader/ Joint Venture</i>):	Joint Venture
VALUE Construction contract value at award stage including cost of services where applicable:	€1,700,000	Construction contract value at completion (including cost of services where applicable:	€1,700,000
GENERAL INFO Role of Company in delivery of Service:	<u>Scope of Works</u> <u>Cleaning</u> Cleaning of Sewers and manholes to remove silt and debris from the specified sewers, to increase the hydraulic the hydraulic capacity and to provide a clean sewer and manhole surface for localised repairs or full relining. <u>Removal of Obstructions</u> Complete removal of various obstructions including intruding connections, which hinder the flow of wastewater in the sewer network. <u>Localised Repairs</u> Repair of isolated or infrequent defects within both sewers and manholes using a system of localised repair which does not severely restrict flow capacity. <u>Complete Relining</u> Sewers and manholes with widespread or frequent defects required a complete relining in order to return the sewer to proper operating order with minimal change in original hydraulic capacity. Manholes, which were affected by Hydrogen Sulphide attack in Leixlip downstream of the rising mains from Cellbridge and Maynooth were relined with a chemical resistant liner. <u>CCTV Survey and Reporting</u> Provision of a visual inspection of the sewers both prior to and after the rehabilitation works. A CCTV Survey of the sewers prior to the rehabilitation works was used to determine the most appropriate repair technique for each sewer line.		

In addition a GPS survey of the network was undertaken to develop as built drawings.



Manhole Survey and Reporting

Provision of an updated SUS25 database for the rehabilitated manholes. A survey of the ground level and sewer inverts, tied to Ordnance Datum at Malin Head. The position of each manhole was determined and related to the National Grid. Following the rehabilitation of each manhole, the manhole was surveyed to update the SUS 25 database.

Odour Control

Odour control was provided on the foul sewers at Old Hill in Lexlip and at the discharge from the Straffan rising main in Celbridge.

Dry chemical scrubbing system was installed, the system was built with the following medias:

- General-purpose Carbon for VOC removal
- Potassium hydroxide and Potassium/Sodium permanganate impregnated media for Hydrogen sulphide, aldehydes and mercaptan removal
- Phosphoric acid impregnated media for the removal of basis compounds such as Ammonia and Amines.

The system also had four fan blowers fitted to the outlet of the odour control unit.

Health & Safety Aspects of the Contract



- Entry into Confined Space
- Excavations
- Structural Stability

	<ul style="list-style-type: none"> • Lifting Operations / Cranes • Road Works • Traffic Management • Scaffolding • Underground Services • Overhead Cables • Working at Heights • Piling • Vibration, Noise and Dust • Working with hazardous materials / live sewers 		
Name & address of Contracting Authority responsible for the project:	Kildare County Council, Naas, Co. Kildare		
Contracting Authority contact name:	Ruwelly Shenje	Phone no.:	045 980200
<p>OTHER INFORMATION</p> <p>Provider of Civil Design : Glan Agua</p> <p>Provider of Civil and Building Construction: Glan Agua</p> <p>Provider of Mechanical, Electrical & Process Design and Installation: Glan Agua</p> <p>Project Supervisor (Construction Stage): Glan Agua</p>			
CONTRACTORS NAME:	Glan Agua Ltd		