Transforming mains replacement

Foam Bag Operation on Stubs (FBOS)

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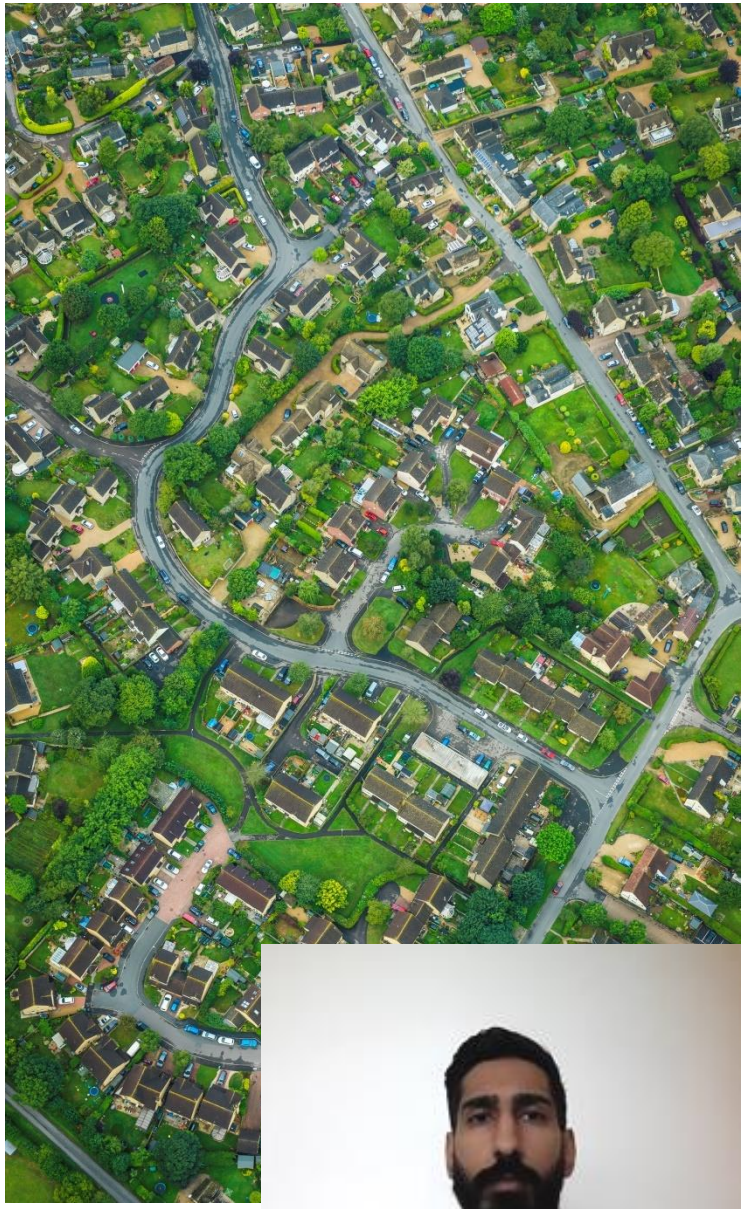
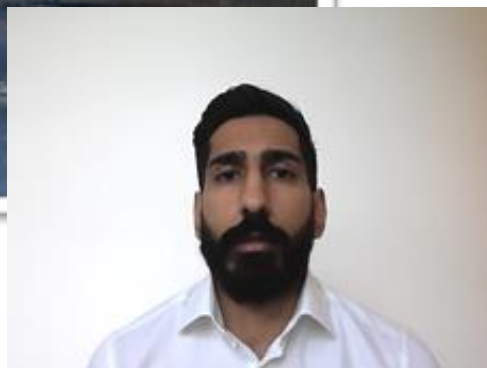
STEVE VICK INTERNATIONAL | Cadent
Your Gas Network

Why FBOS?
A ‘stub-end’ issue

- Stranded mains or stubs have presented significant issue to our mains replacement works in Cadent.
- These sections of main and associated tee pieces into parent mains are often impractical to excavate directly above.
- This is usually due to the location being under a busy junction or a sensitive area whereby the disruption from excavations would be impractical.





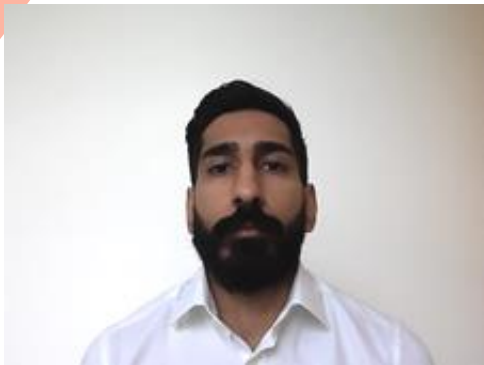
In the field
Our current options

Traditional cut out

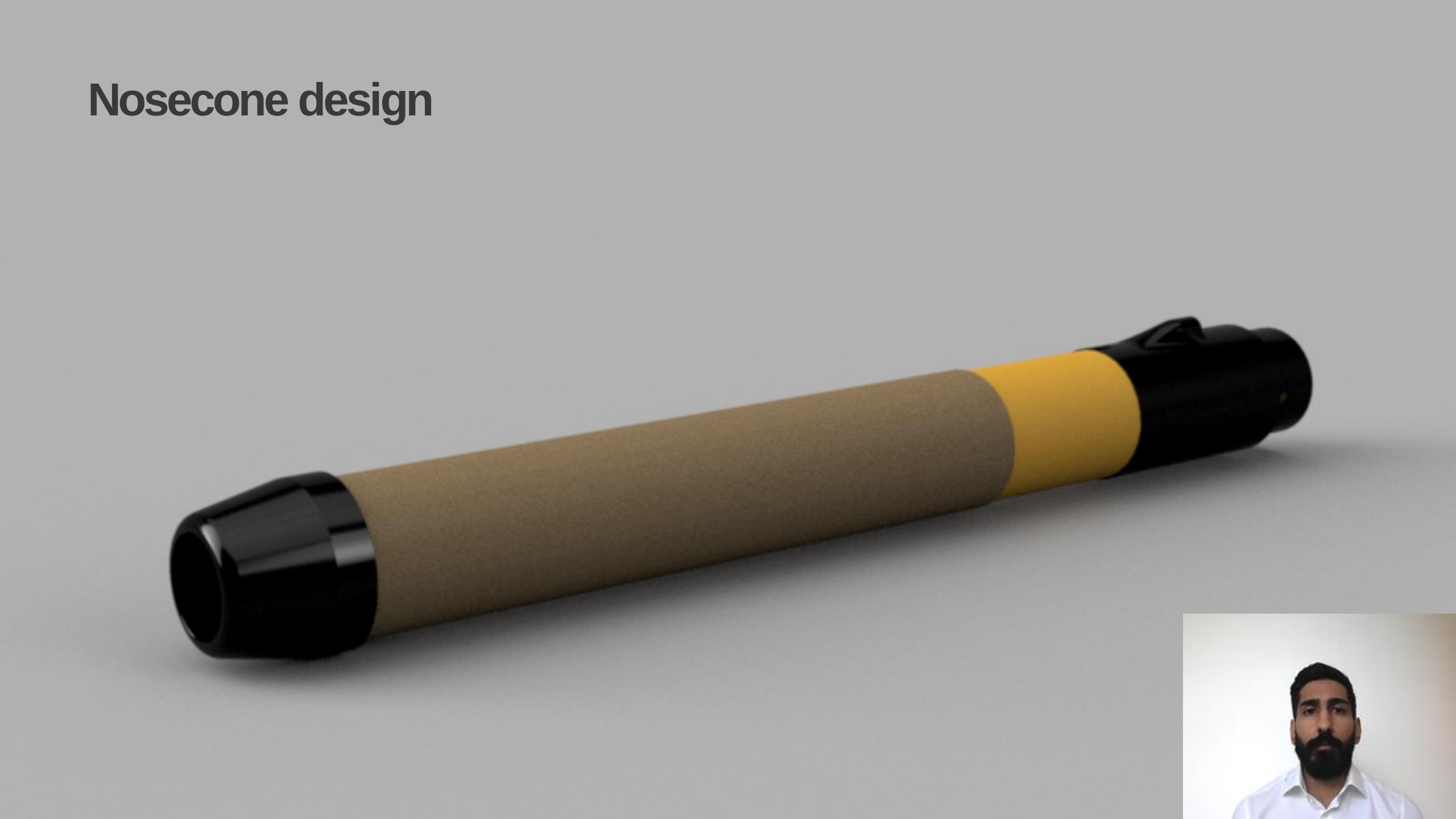
- × Large associated cost
- × Significant disruption to the public
- × Complex traffic management likely
- × Increased safety risk to workforce due to location of works

Sealback 1.5

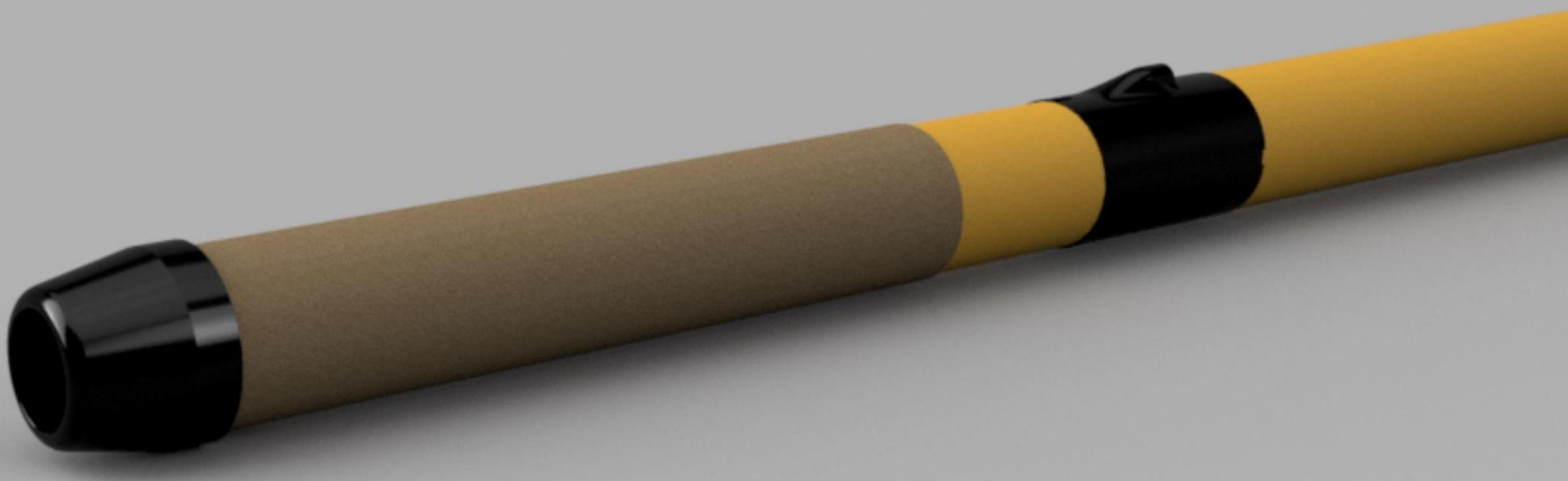
- × Relatively small max insertion lengths
- × Significantly impacted by bends or poor joints
- × Sealing issues if rust or contaminants present
- × Minor obstructions in main can cause insertion issues



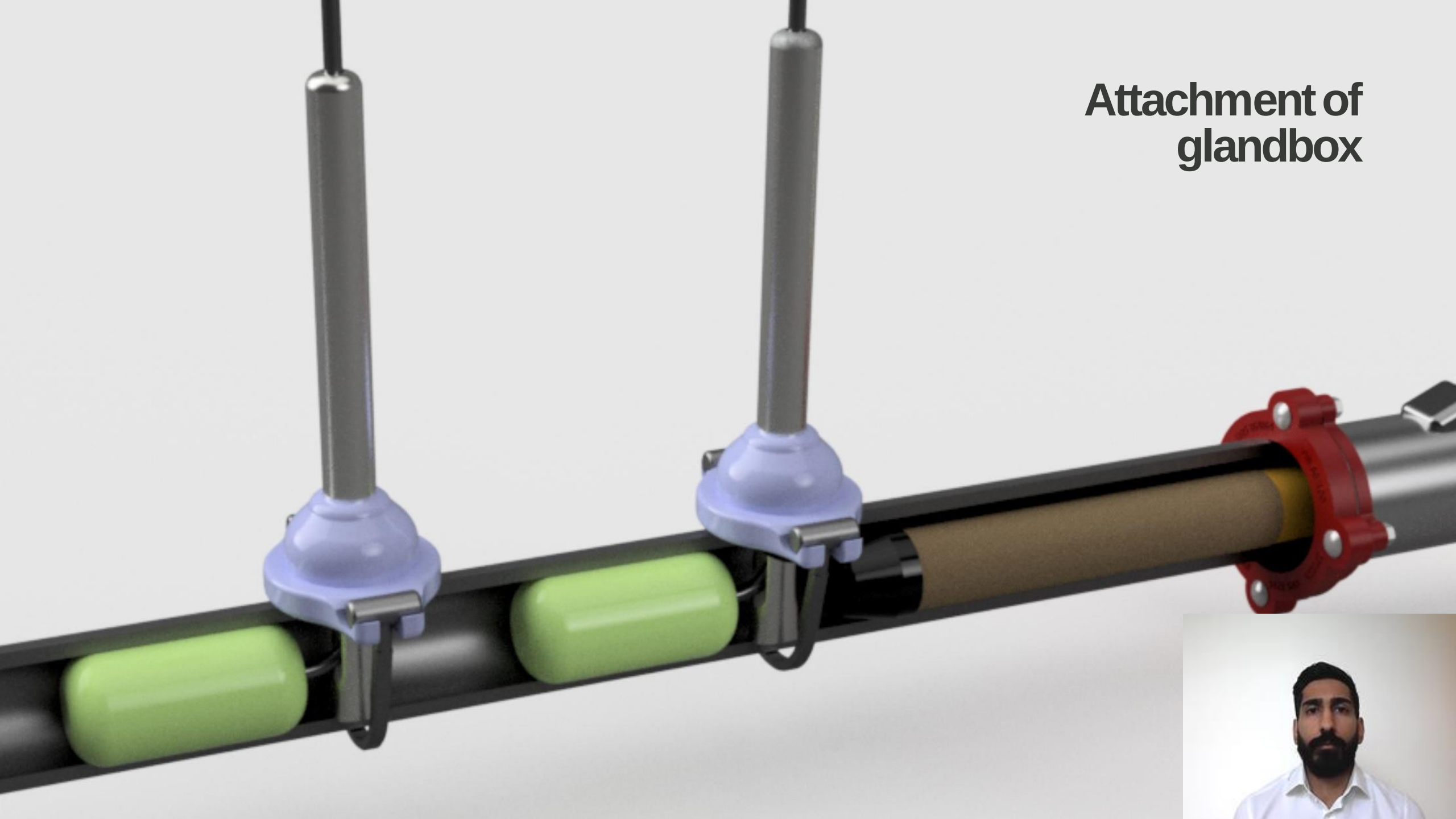
Nosecone design



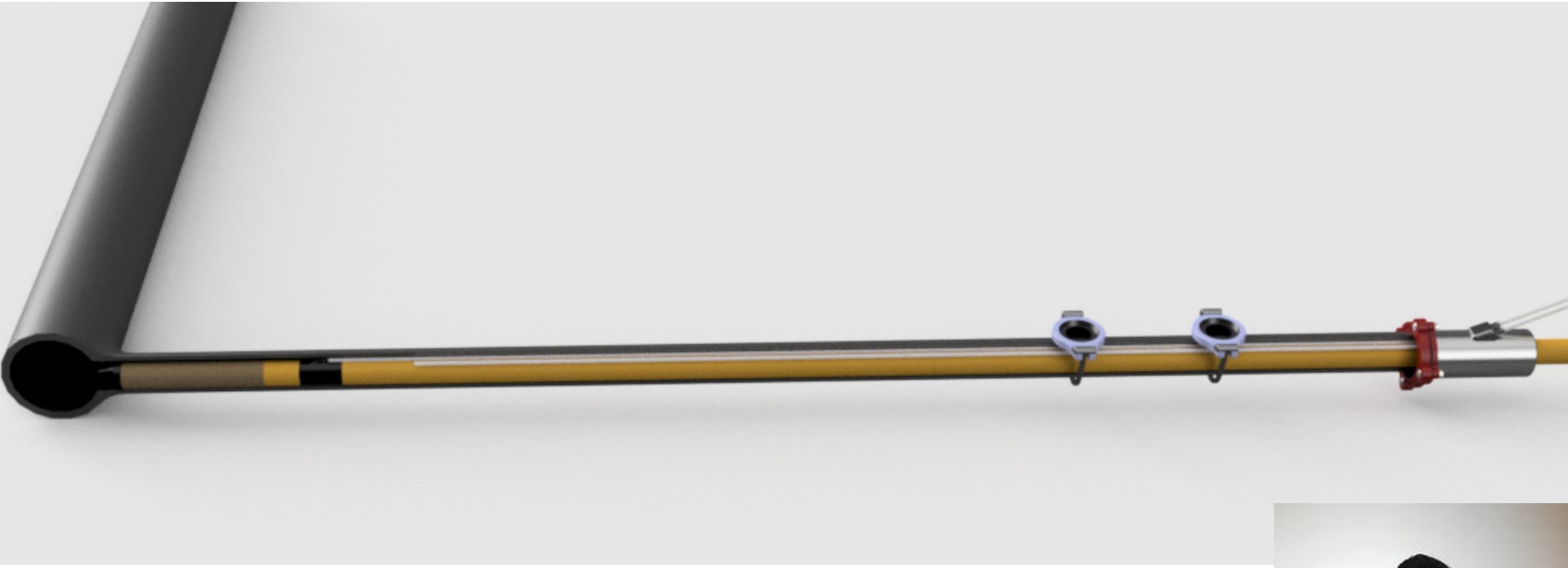
Attaching to 75mm PE



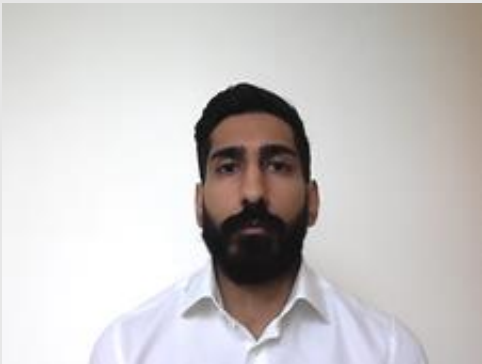
Attachment of glandbox



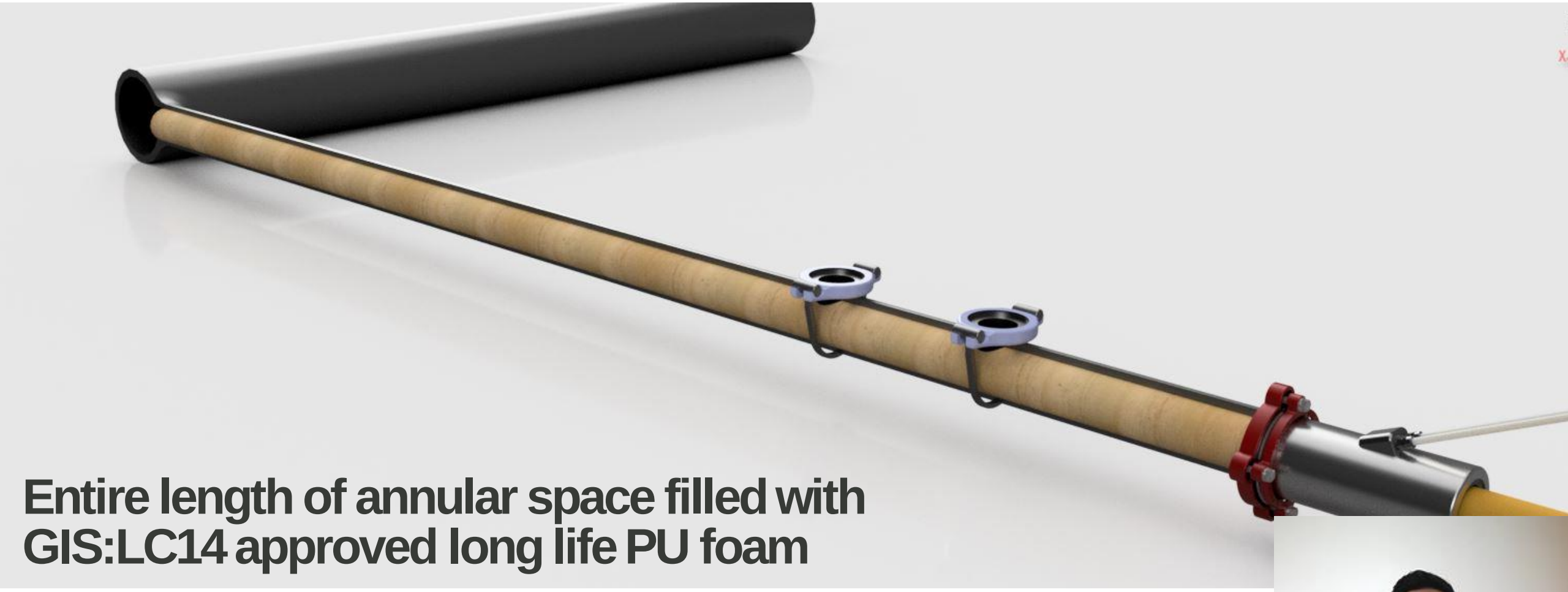
Insertion up to parent main



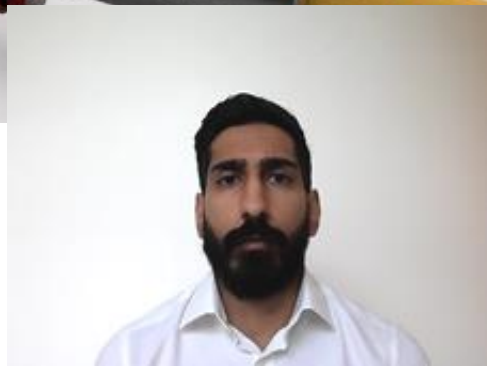
FBOS foambag expanding



Foam expanding in the annular space to fill the entire void



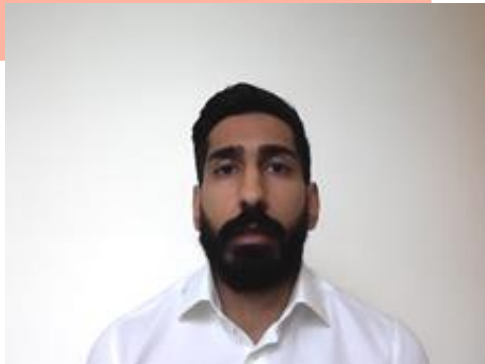
Entire length of annular space filled with GIS:LC14 approved long life PU foam



FBOS overview
Multiple benefits

Key specifications:	4” and 6” operations	Remote live insertion (inc. one-way fed mains)	Total abandonment of T1 pipe

Benefits:	Enables longer insertion lengths	Improved ability to navigate obstructions	Significantly reduced disruption to public	Cost savings



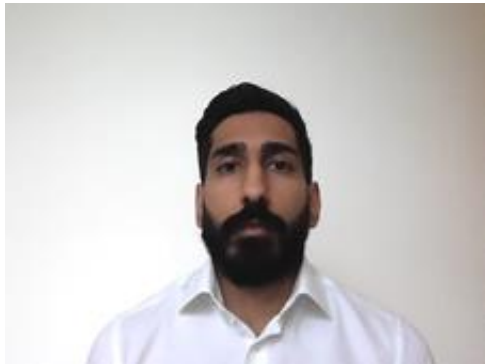
What's next?
Business as usual

Currently being reviewed by Cadent for final policy sign off for use across all networks

Available to other GDNs directly from SVI on completion with field trial and G23 documentation available for sharing

Large opportunity for 75/4" and 125/6" mains across GDN mains replacement portfolio

Potential to be scaled up to 8" – 12", with Cadent currently reviewing work and testing required for 8"



Thank you

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