

'Unlocking the Severn'

**Delivering weir removal
as the first phase**



***Paul Herickx –
Environment Agency Project Manager***

'Unlocking the Severn' – Powick Partial Weir Removal

- Project Background:
 - £19.4M funding via the UK Heritage Lottery Fund (HLF) and EU LIFE
 - £1.2M independent funding by the Environment Agency
 - Largest ongoing single fish passage project in Europe
 - Fish passage at 4 weirs on the River Severn and 2 weirs on the River Teme
 - Powick is the only site possible for weir removal
 - 5 other sites are bespoke fish passes for the European designated Twaite Shad (*Alosa fallax*)
 - Over 250km length of historical spawning habitat opened up by the Unlocking the Severn project on the Teme and Severn



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- Twaite Shad – a fairly fussy fish!
 - Needs laminar (non-obstructed) flow
 - Specific migratory period
 - Minimum water depth
 - Swim in shoals
 - ‘Just’ weir removal isn’t enough!

• SHAD VIDEO

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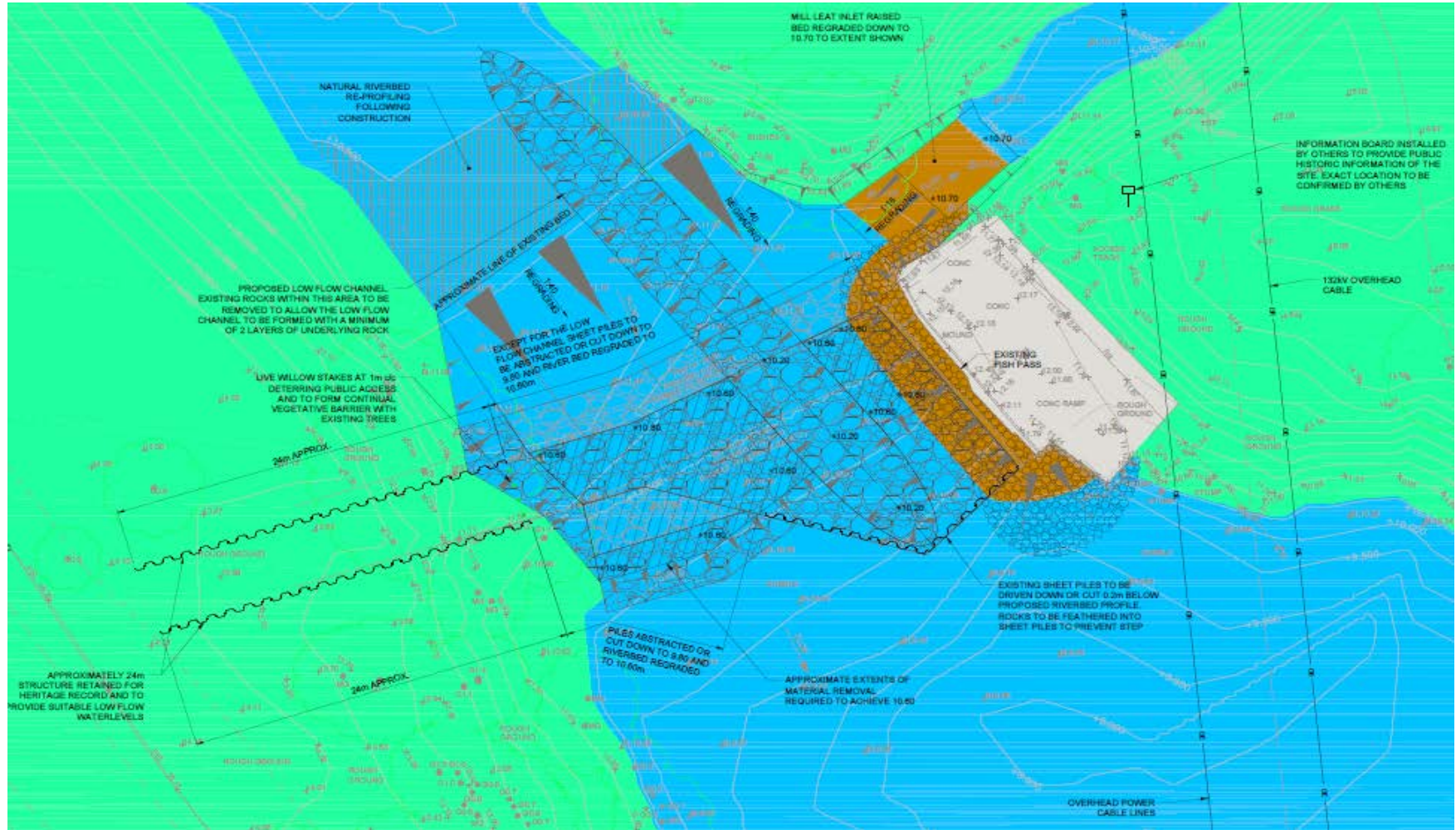
Question:

How do we get from this...



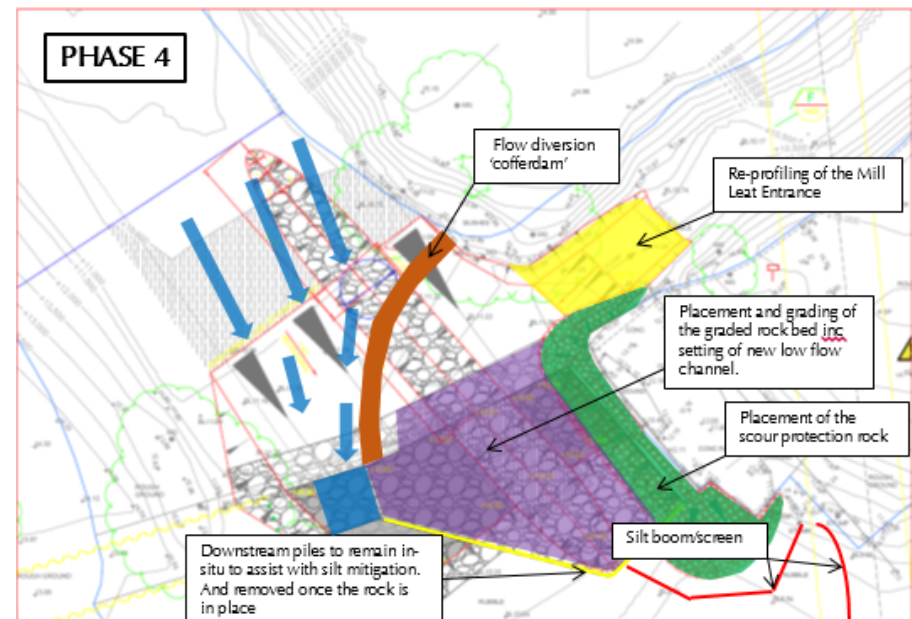
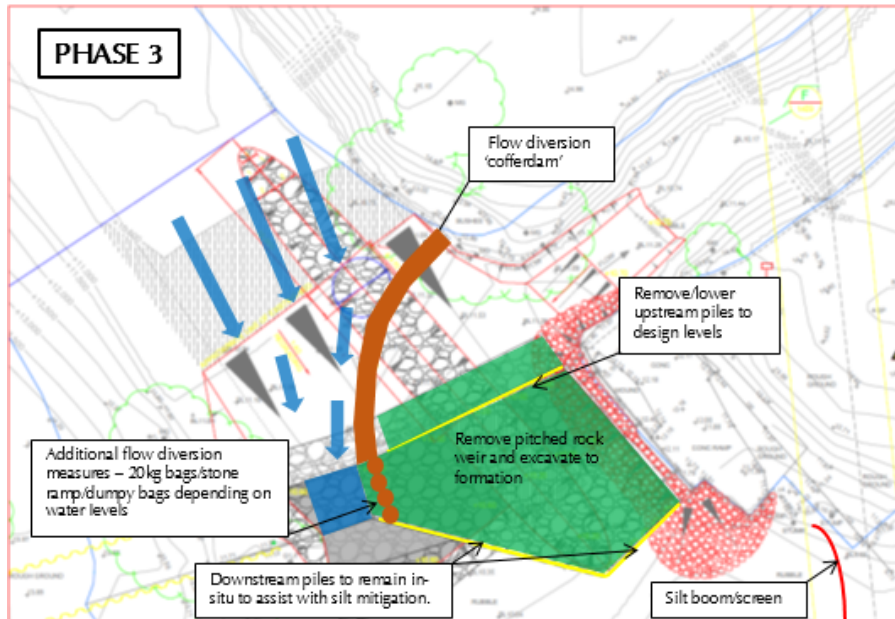
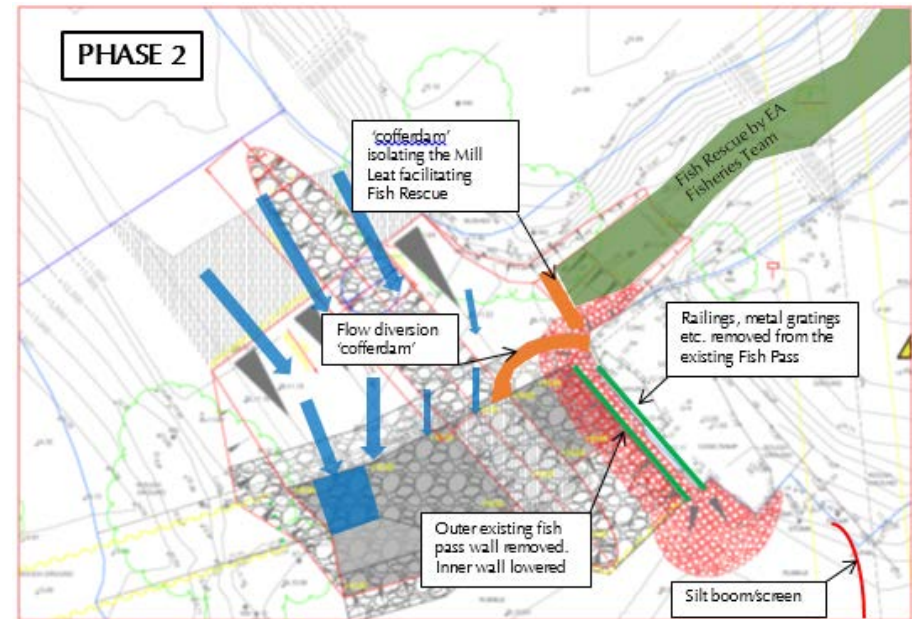
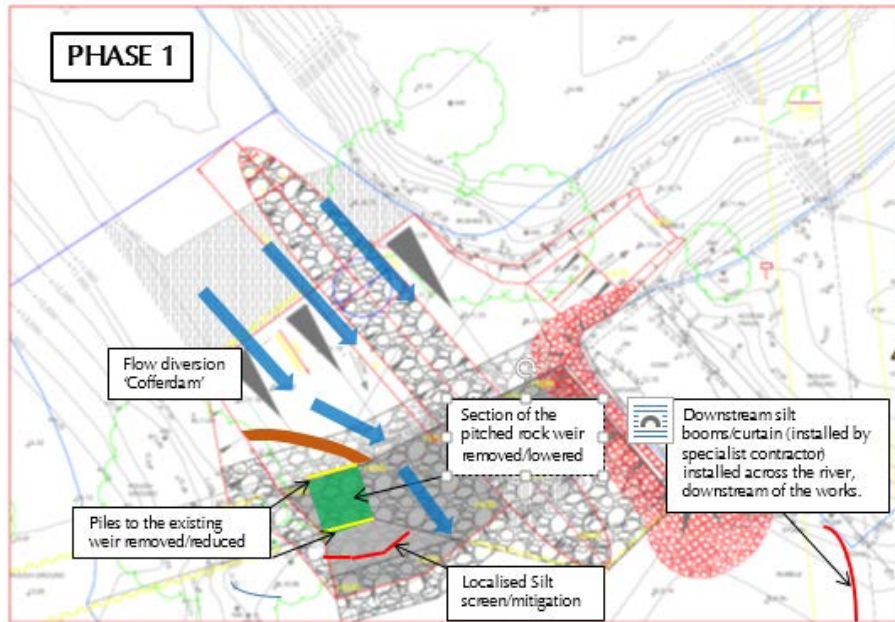
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To this?



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Answer: With some clever engineering and a lot of hard work!



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- CONSTRUCTION VIDEO

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Challenges to date:

- Bedrock
- Archaeology
- Local Anglers



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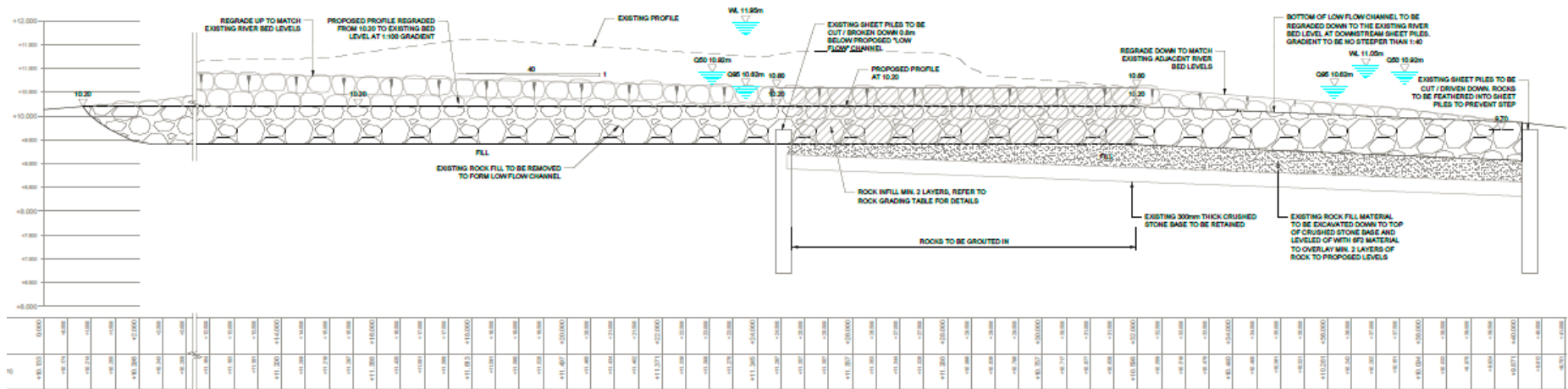
Changes to date:

- Upstream water levels



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What happens next?



Long Section of Low Flow Channel for Powick Partial Weir Removal

Insert low flow channel video

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- Construction works complete on the Teme by end of October
- 2 year monitoring period by Contractor, future years by EA
- Construction works start on the Severn in March 2019 and will be completed in December 2020
- 3 x deep vertical slot fish passes (Diglis, Holt and Lincomb)
- 1 x bypass channel (Bevere)
- Fish populations predicted to increase dramatically in Severn catchment
- Twait shad increase from ~10,000 to hundreds of thousands over next 15 years
- Extensive monitoring, tagging and community engagement programmes



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