

EARL PUMPING STATION

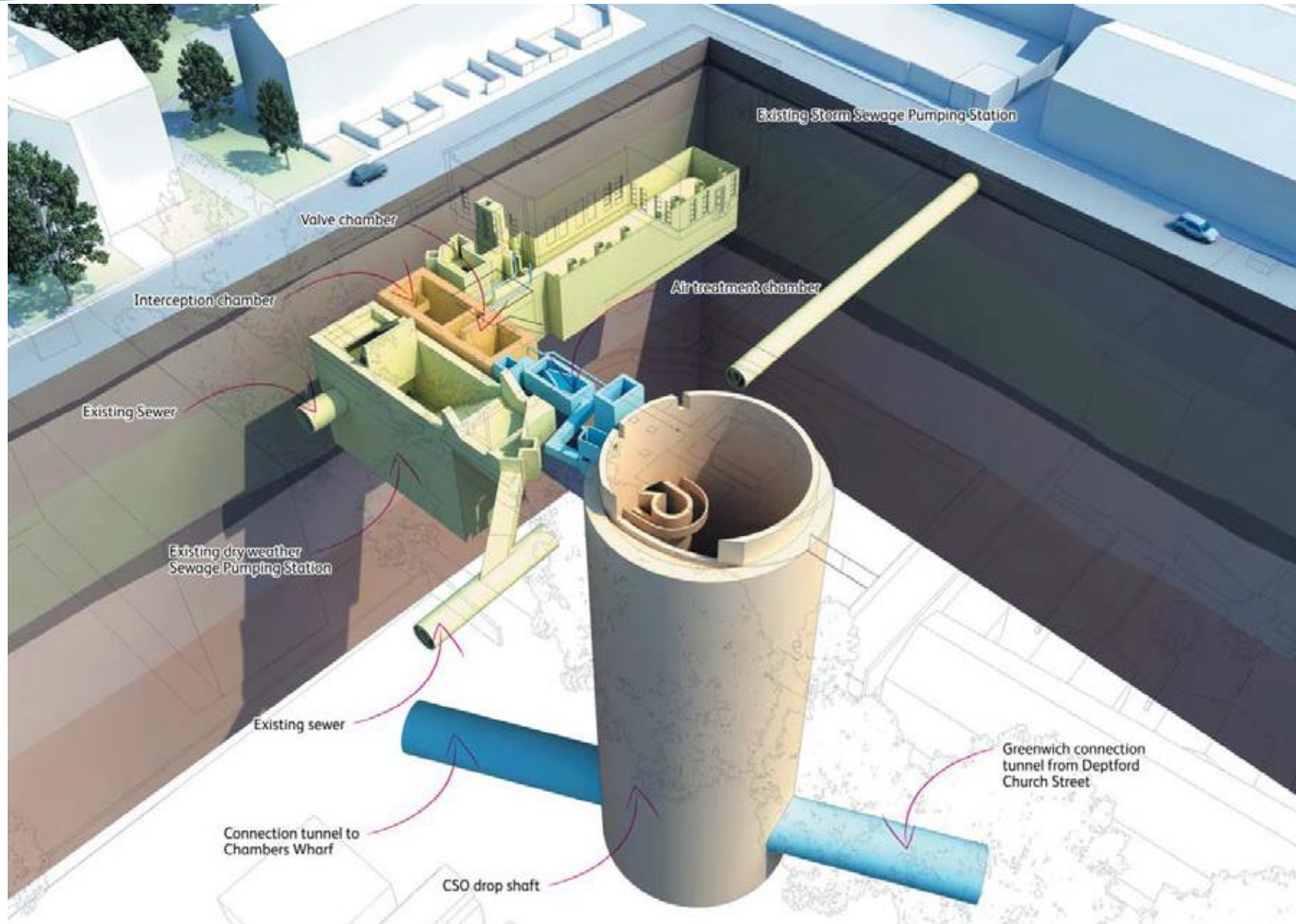
Community Liaison Working Group - Tuesday 20 October 2020



Tideway



What we are building...



- 50m deep drop shaft
- 5m internal diameter tunnel
- 10m deep Combined Sewer Outfall (CSO)
- Various services diversions
- Will reduce annual sewer discharges into the River Thames locally from around 25 to just 4

CONSTRUCTION UPDATE

February 2020 to October 2020



Tideway



CONSTRUCTION UPDATE

February 2020 to October 2020



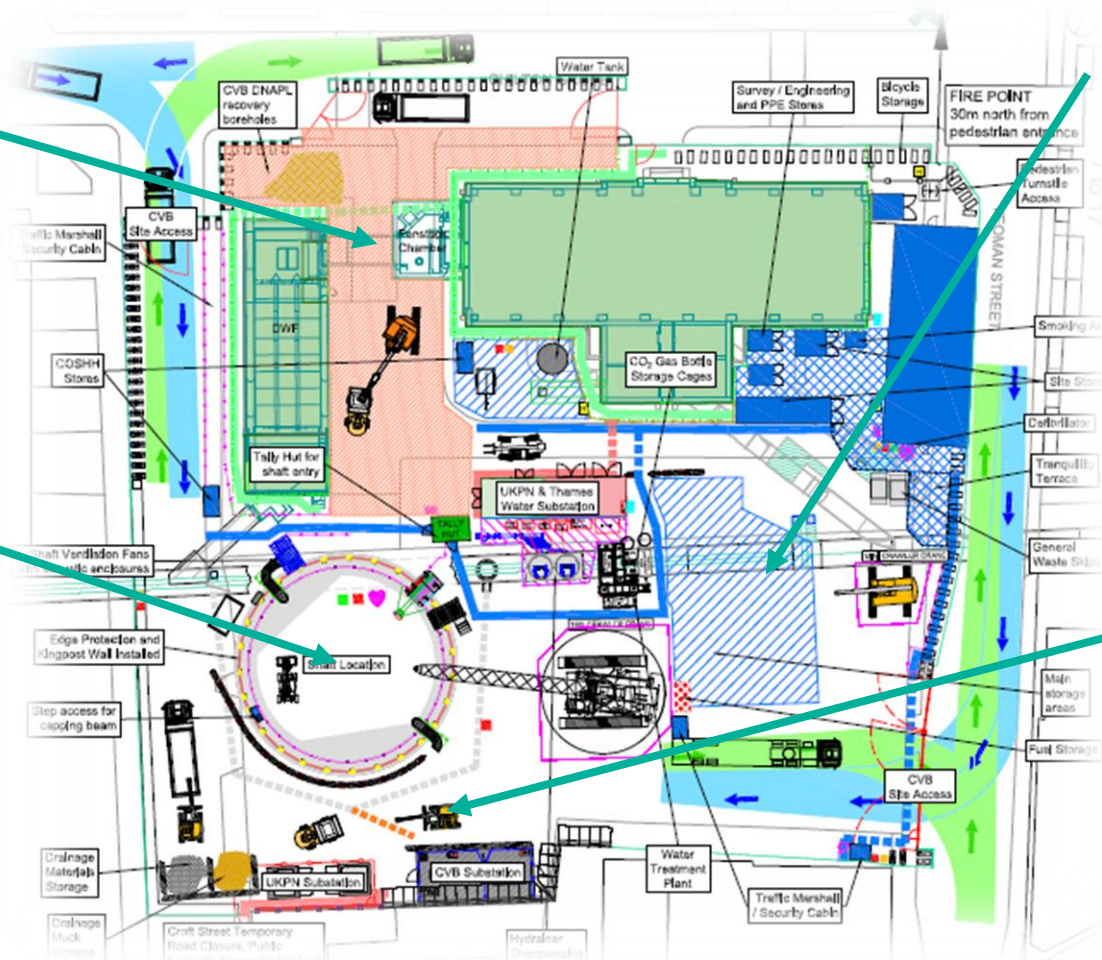
Tideway

CSO

- Telemetry cables diverted
- Hoarding moved on Chilton Grove
- Platform works ongoing

Shaft

- Completed the base slab
- Completed the portals (10m high reinforced concrete chimney inside the shaft to allow for the tunnel boring machine to cross the site)
- Currently constructing internal walls



Other

- Muck bin temporarily backfilled but will be reinstated later this year for the CSO works to come.
- Jet Grouting trial (for future CSO works) completed

Sewer diversion

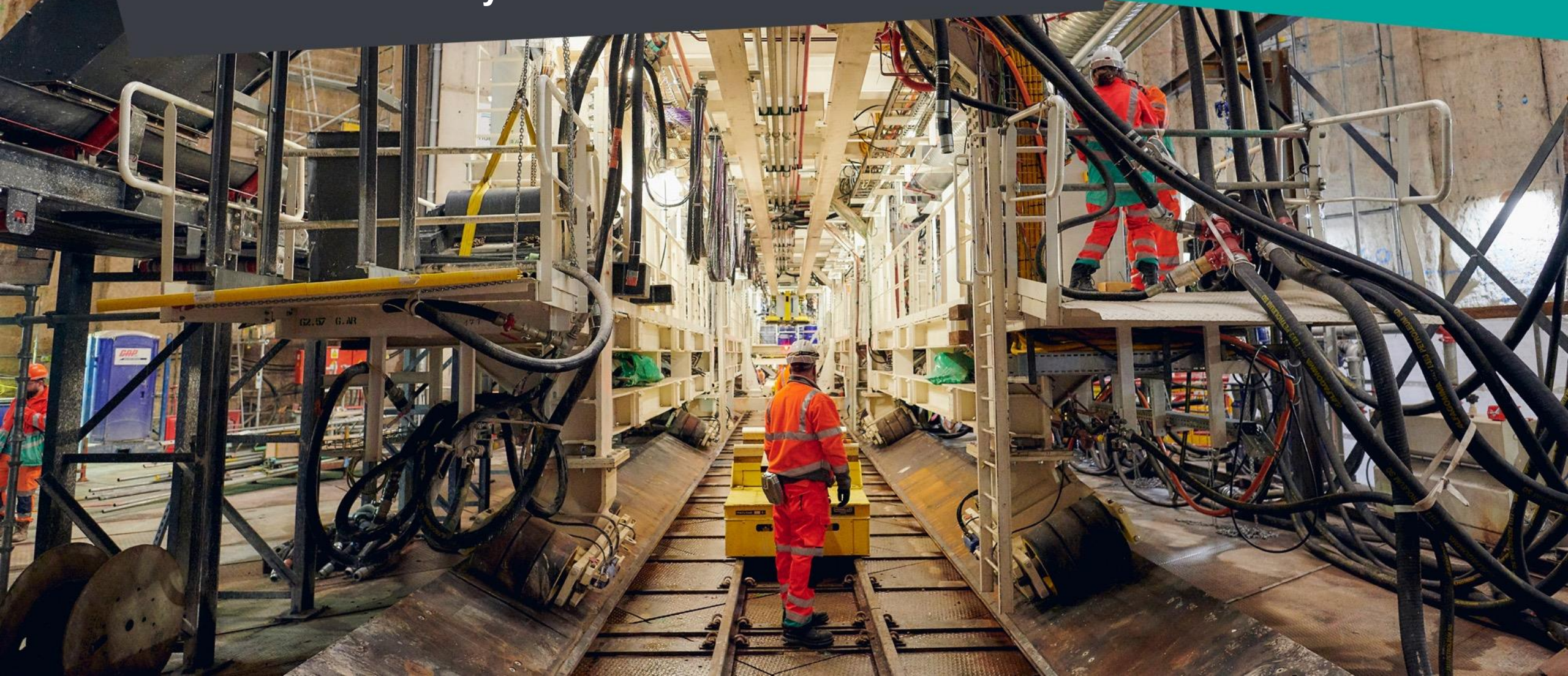
- Phase 1 (around the shaft) of sewer diversion close to completion

WHAT IS COMING NEXT?

October 2020 and beyond...



Tideway



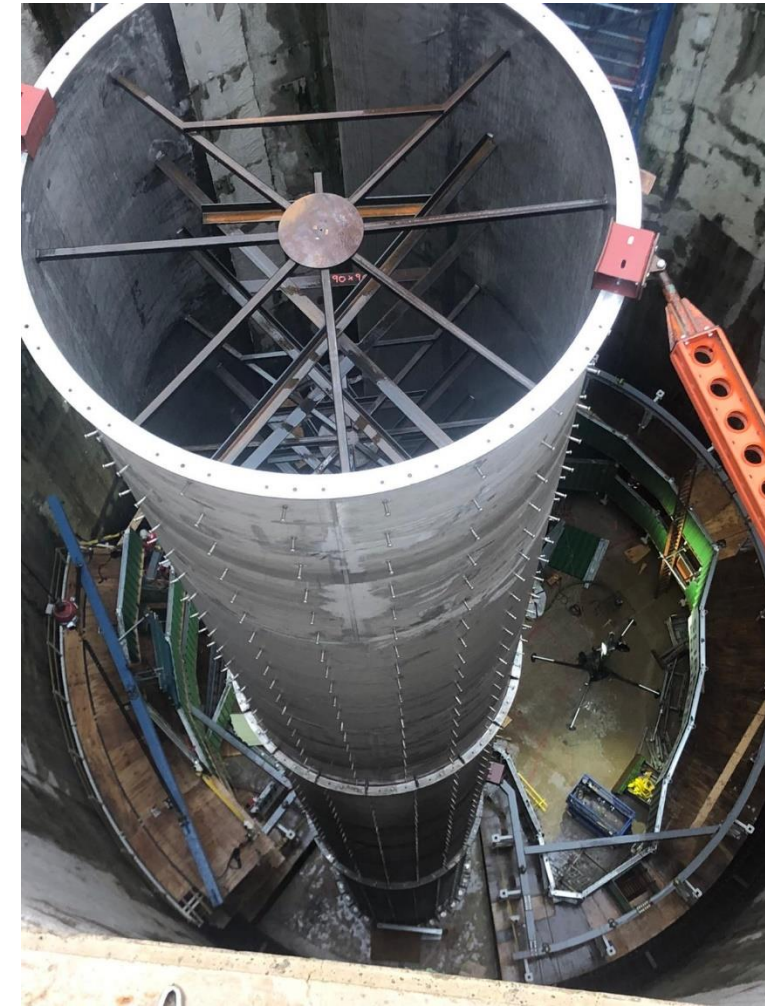
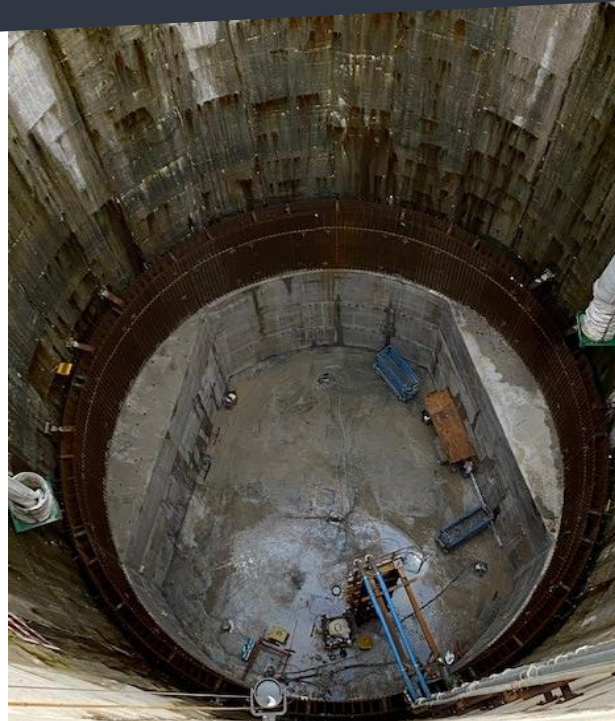
SHAFT WORKS

From October 2020



Tideway

- Current phase of works to construct internal reinforced concrete structures
- The next phase is temporarily backfilling the shaft with a weak grout up to 10m high to allow for the TBM to cross through the shaft when Annie arrives
- At the beginning of 2021, we will be installing a giant 40m long, 3m diameter stainless steel tube in the shaft. This vortex will disrupt flows into the bottom of the shaft
- Following this, the remainder of the shaft secondary lining (internal reinforced concrete chimney) will be completed.



SEWER / CABLE DIVERSION



Tideway

- We have nearly completed phase 2 of the sewer diversion (around the shaft). We are currently in the process of making that section live
- Phase 2 is the connection of upstream drains/sewers in the east part of the site
- HV/LV cables will then be diverted around the shaft which will allow CSO works to progress further.

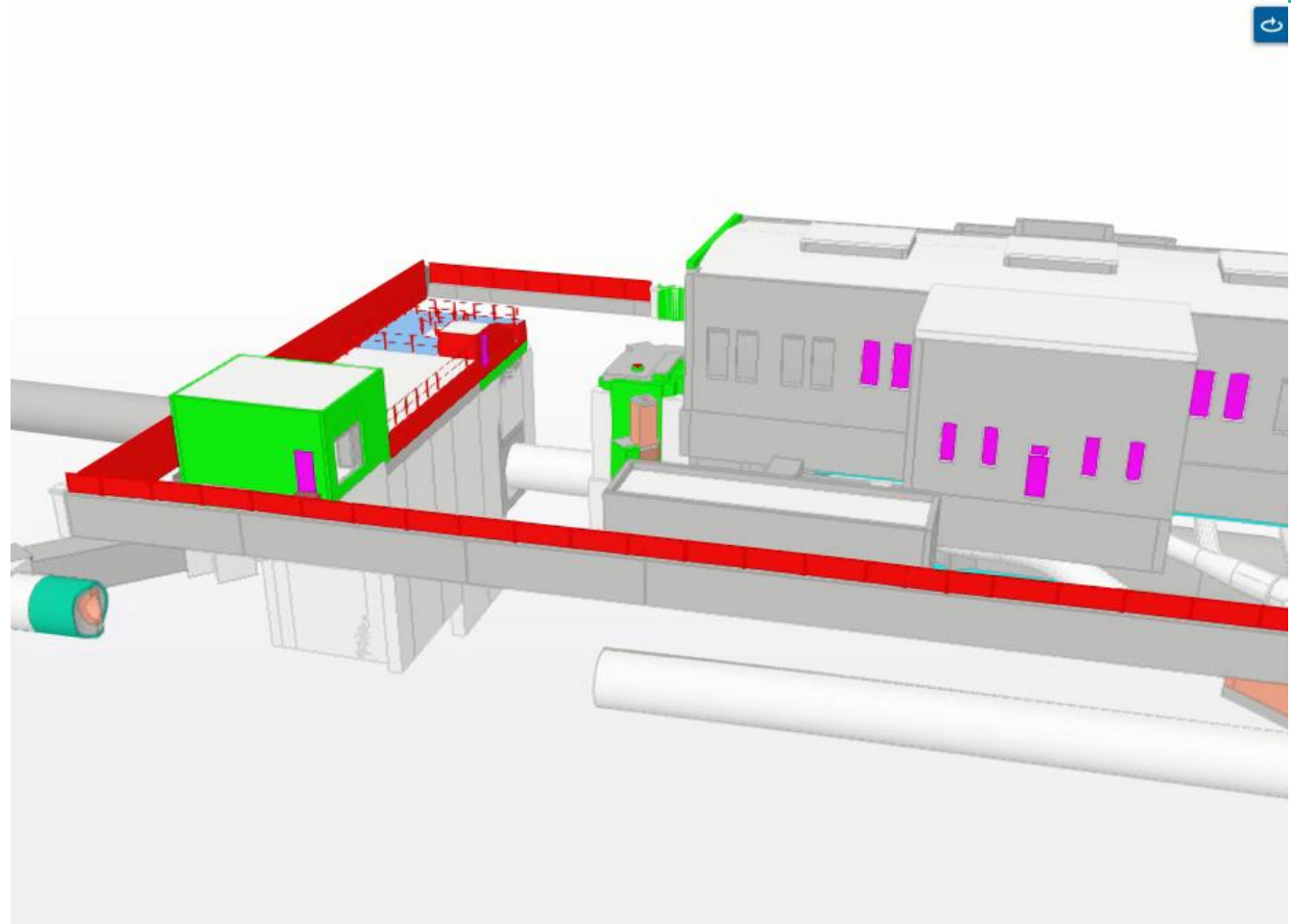


COMBINED SEWER OVERFLOW



Tideway

- Now the telemetry cables have been diverted we can proceed with the platform construction for future CSO works
- A temporary sewer called a “flume” will also be installed underground to allow the storm pumping station to keep working whilst our works are under way
- Once the platform and the flume works are complete, geotechnical works will start. These construction techniques will create a sealed box in the ground to enable us to safely excavate for the CSO.



THE NEXT SIX MONTHS



Programme Overview															
		October		November		December		January		February		March		April	
Shaft internal structures															
Shaft vortex preparation and installation															
Shaft secondary lining															
Sewer/Cables diversion															
CSO platform works (incl. utilities diversion)															
CSO flume works preparation and installation															
CSO geotechnical works															



Standard Working Hours

Extended & Continuous Working Hours

(08:00 - 18:00) Monday to Friday, (08:00 - 13:00) Saturday

(08:00 - 08:00) Monday to Friday, (08:00 - 17:00) Saturday

ENVIRONMENT



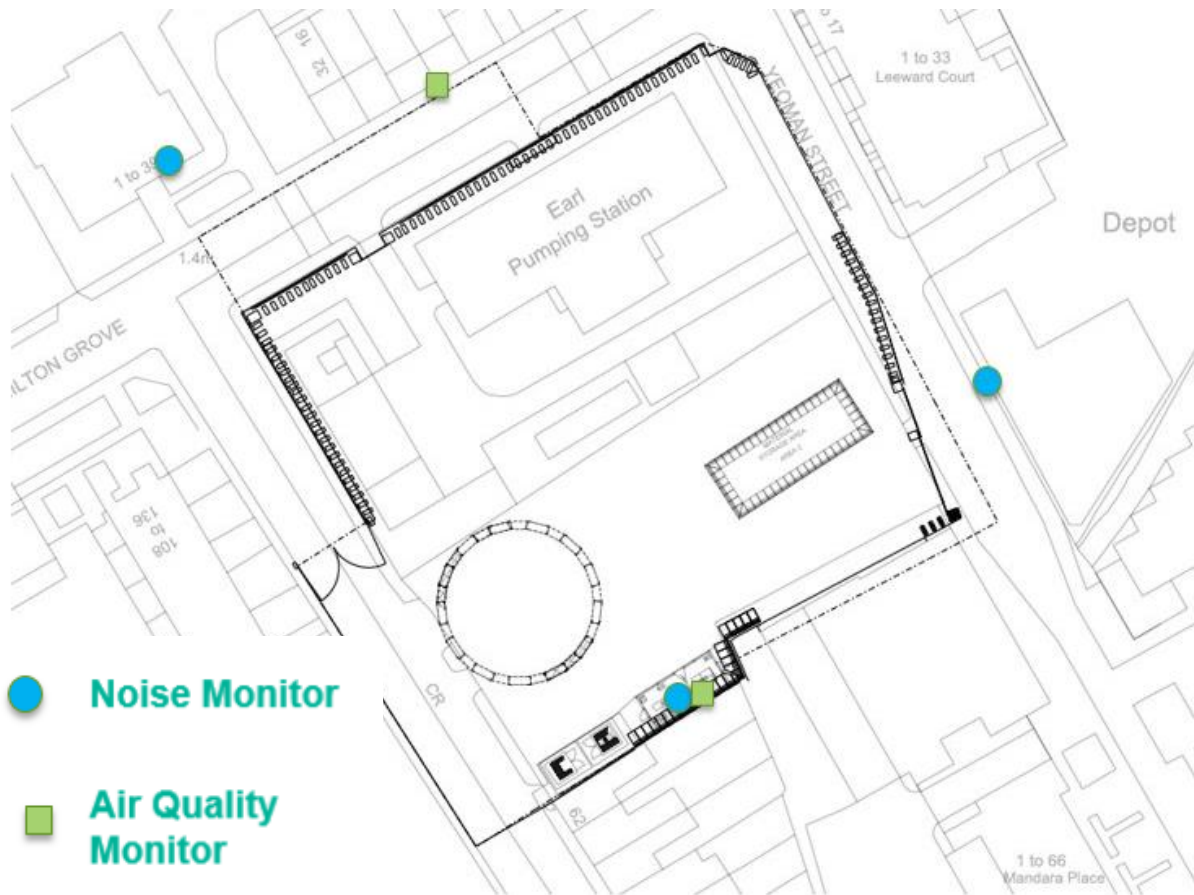
Tideway



NOISE & AIR QUALITY



Tideway



Month	Noise	Air Quality
	S61 Exceedances	24h PM ₁₀ Exceedance
Feb 20	0	0
Mar 20	1	0
Apr 20	0	0
May 20	0	0
Jun 20	0	0
Jul 20	0	0
Aug 20	0	0
Sept 20	0	0

March Exceedance:

Base Slab Pour works: Overrun due to concrete supply delays and blocked lines.

Lewisham and Southwark were notified of overrun

NOISE AND VIBRATION MITIGATION

Full list will be included in the minutes



Measures to reduce Noise and Vibration at EARPS

- i. Section 61 consents. We apply for council agreement for noise levels during future planned works onsite, in line with DCO requirements.]
- ii. Noise monitors on and around site help ensure that noise is managed in line with Section 61 agreement and any exceedances are recorded.
- iii. Noise data is provided to the Local Authority for review and assurance.
- iv. Site noise data is shared and discussed at Community Liaison Working Groups (CLWG)
- v. Notices detailing changes in site activities and working hours are shared with the local community through email updates and information sheets, as well as at CLWGs.
- vi. Whenever possible, noisy activities are planned to take place during normal working hours.
- vii. Choices of methodology/technique for noisy operations are considered, in order to eliminate or reduce noise. Where reasonably practicable, fixed items of construction plant should be electrically powered in preference to diesel or petrol driven.
- viii. Each item of plant will comply with the European Commission Directive 2000/14/EC (Noise Emission by Outdoor Equipment) UK Statutory Instrument (SI) 2001/1701
- ix. Whenever possible, fabrication happens off site.
- x. Noisy plant will be kept as far away as possible from sensitive areas (and may need localised acoustic and visual screening).
- xi. As far as reasonably practicable, the noise from reversing alarms will be controlled or limited by these techniques:
 - a. The site layout will be designed to minimise vehicles reversing;
 - b. Banksman will be used to avoid reversing alarms;
 - c. Reversing alarms will incorporate features such as broadband signals to reduce the level of noise.
- xii. All noise control measures applied to plant and equipment will be maintained in good working order and operated such that noise emissions are minimised, as far as reasonably practicable. Every effort will be made not to use plant, equipment or items fitted with noise control equipment found to be defective, until repaired.
- xiii. Where demolition and other breaking out activities are necessary, consideration will be given to the use of alternatives to percussive or impact breaking equipment/methods.

- xiv. The movement of materials outside of normal working hours will be kept to a minimum and handled in a manner that minimises noise.
- xv. Hoardings or noise barriers will be provided around all worksites.
- xvi. Staff will turn off equipment and plant when not in use.
- xvii. We will handle materials in a manner which minimises noise.
- xviii. Plan the works to use low noise and vibration methodologies wherever possible (eg. use of floor saws, sheet piling designed out etc.)
- xix. Use mobile noise screens at the point of loud works, like concrete breaking, wherever possible.
- xx. Plan works to minimise breaking times, where they are necessary.
- xxi. Try to minimise noise and vibration from concrete breaking through floor sawing the platform into sections in advance, where possible.
- xxii. Minimise the use of idling engines on site
- xxiii. Avoid using vibrating rollers when compacting our working platform (this is generally outside standard practice as it typically takes longer)
- xxiv. All site vehicles are to have less disturbing "broadband" reversing alarms, where possible.
- xxv. Where possible, use of wire sawing to dismantle concrete structures, so that they can be removed from site in sections, reducing our requirements for breaking onsite.



LEGACY



Tideway



MAKE A DIFFERENCE

Happy 5th Birthday Tideway



To mark Tideway's 5th birthday, the 'Make a Difference' campaign was launched on 24 August. Tideway colleagues along with friends and families raised thousands of pounds for charity



The Tunnel Challenge –

- Raised over £5,000 In just five weeks!
- 14 teams, comprising 64 colleagues from across Tideway, collectively walked, ran, cycled, rowed and swam over 15,020km or 600 lengths of the Tideway Tunnel (in simpler terms - just over 1/3 of the way around the globe!).

LEGACY THE NEXT GENERATION



Volunteering hours

People - including Skills and Employment

Community Relations

Innovation and Technology

CVB training case study developed by UCL

London Youth Rowing (LYR)
ACTIVE ROW aims to get children active
through indoor and outdoor rowing



BELIEVING IN OUR APPRENTICES

Community Investment

CELEBRATING INTERNATIONAL WOMEN'S DAY



Tideway East supported a of panel discussions with 120 colleagues and guests to explore the changing culture for women in the construction industry.



STEM BOAT TOUR
BRINGING CLASSROOM TEACHING TO LIFE

TIDEWAY EAST HIGHLIGHTS

Skills and Employment Forum October 2020



Apprentice results:

Some exceptional results with a 93% and four above 70%.
Tunnelling apprentices progressing to final assessment.
Some great feedback on their commitment.

Women In Construction:

Virtual mentoring - A range of staff volunteers were involved to support during lockdown and beyond.

Increase in local employment

Governor role :

Two East staff have roles as Chair of Governors supporting local borough schools. Commitment to dealing with COVID shut-down, re-opening and exam arrangements, staff and pupil mental welfare.

LDE UTC in top 1% (UK) for technical results.

Recruitment reopen:

Tunnelling contractor JGL, liaising directly with East London boroughs, had 30 applications for 2 entry level tunnelling vacancies.

THAMES 21 LITTER SURVEY



Staff volunteered to survey and clean up plastic litter on the Thames foreshore with charity Thames 21, supported by Tideway in their citizen science project along the river

PLOGGING!

The word plogging is an English-Swedish combination of jogging and plocka upp, which means “pick up” in Swedish



Tideway



“SAFE” by choice!



EARPS AND THE CCS



What is the CCS ?

- Independent organization founded to raise standards in the construction industry. Based around:
 - Care about **Appearance**
 - Respect the **Community**
 - Protect the **Environment**
 - Secure everyone's **Safety**
 - Value their **Workforce**
 - Inspire true **Innovation**
- 2 inspections carried out by a CCS inspector this year. Our scores:
 - 46/50
 - 47/50
- A few quotations from the inspection reports

“CVB introduced a monthly meeting to share updates and coordinate works to reduce disturbance to residents and material wastage”

“The information sheets are now sent out monthly recognising the number of residents spending more time working from home due to Covid 19”

“There have been very few complaints and enquiries, all dealt with quickly”

“Windows have been installed on the hoarding for the residents to look into site including low-level construction vehicle shaped windows for children”

“H&S and productivity prize-money donated to London taxi drivers children's charity and Cancer Research UK”





RECONNECTING LONDON WITH THE RIVER THAMES

#SuperSewer

www.tideway.london