

CONSTRUCTION UPDATE





'SELINA'

Tideway

OUR TUNNEL BORING MACHINE



'SELINA'

OUR TUNNEL BORING MACHINE





FULL LENGTH OF THE TBM = ~130m

SHIELD DIAMETER = 8.85m

TOTAL OF 6 BACK-UP GANTRIES

7.8m INTERNAL DIAMETER TUNNEL

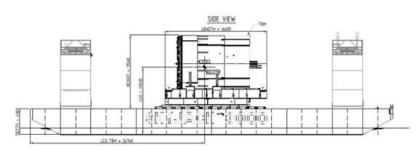
TBM 'SELINA' DELIVERY TO CHAWF

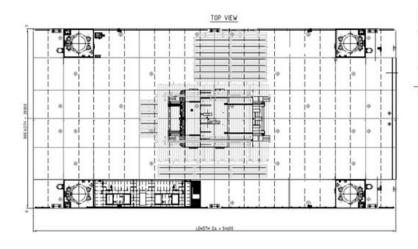


TBM Shield & Gantries (1 to 6) currently in Schiedam NL

- Shield is fully assembled and will be delivered whole

- TBM & Cradle are circa 887 Tonnes – Delivered July 5th 2020



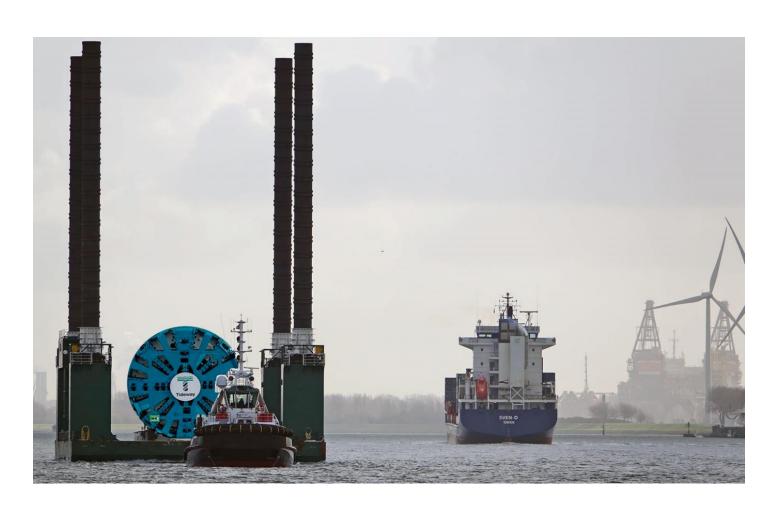






TBM 'SELINA' SAILING





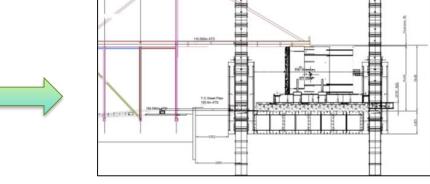
- TBM Shield will sail from the Netherlands to CHAWF
- Over 300kms

TBM 'SELINA' TEMPORARY WORKS

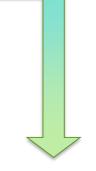


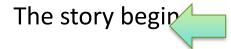


780T TBM Shield on 100T frame delivered by barge



TBM Shield & Frame driven off the barge by SPMT via bridge & ramp

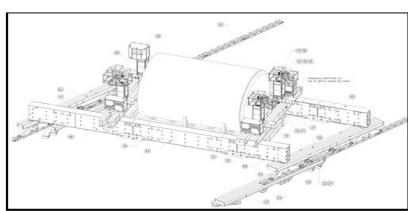






Lower TBM Shield on frame 60m down to the pit bottom





Assemble Strand-jack gantry at surface

TBM 'SELINA'

Preparation Progress and Support Activities



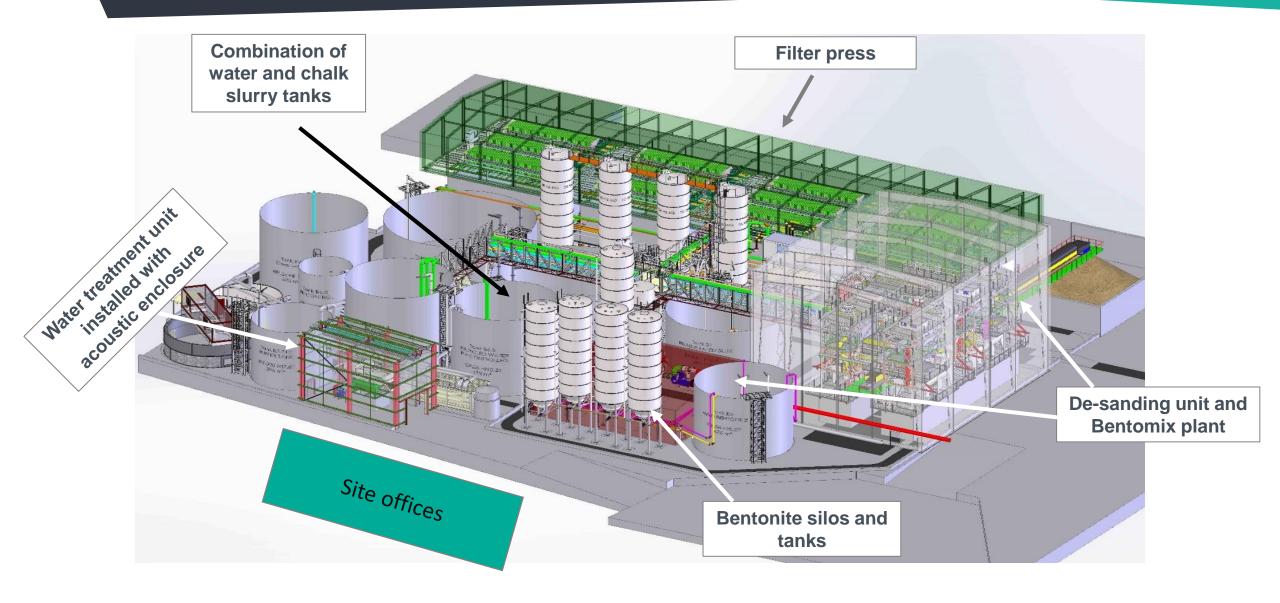






SLURRY TREATMENT PLANT





SLURRY TREATMENT PLANT





- Changes to original design include:
- Shortest tanks closest to adjacent buildings, in the south west of the site
- Highest buildings located on the eastern side of the STP (in the middle of the site)
- Filter press building located north of Luna House, to provide acoustic shielding
- Inlet pipework into tanks to be submerged
- Higher specification of acoustic attenuation (additional cladding added) on buildings, where possible
- Water tanks located adjacent to site hoarding

SECTION 61 - OVERVIEW

Section 61 phase five for tunnelling works – approved by LB Southwark covers: October 2019 to October 2020



Permitted Site Working Hours

Standard Working Hours:

• 08:00 to 18:00 (Monday to Friday) and 08:00 to 13:00 (Saturday)

Extended Working Hours

- 18:00 to 22:00 (Monday to Friday). 08:00 to 17:00 (Saturday)
- General works limited to tidally influenced marine movements, lighting (task specific) and gantry crane movements within shaft enclosure

Continuous Working Hours (24/7)

Tunnelling and tunnel related activities such as;

- Annulus infill
- Launch and reception adit construction
- STP operation
- Shaft set-up for tunnelling, TBM install and launch

Mobilisation and demobilisation Hours •

- 07:00 to 08:00 and 18:00 to 19:00 (Monday to Friday). 07:00 to 08:00 and 13:00 to 14:00 (Saturday)
- 22:00 to 22:30 (Extended working hours activities) (Mon to Fri). 17:00 to 17:30 (Extended working on Saturdays)



Approved S61 for tunnelling works – more detail



This Section 61 covers:

Tunnel adits

- Tunnel adits are the first sections of tunnel at the base of the shaft
- One will be 30 metres long to launch Selina, our tunnel boring machine (TBM). The other adit will extend 16 metres and be the final destination of the TBM that arrives from Tideway's central section
- It will be excavated gradually while the adit is sprayed with concrete
- Concrete supplied by the batching plant inside the acoustic enclosure

Tunnelling

- The TBM will arrive by barge; then lowered into the shaft for tunnelling
- Tunnelling will be a continuous activity: 24 hours / 7 days a week,
 planned from Autumn 2020
- The slurry treatment plant will also run continuously (24 hours / 7 days)
 to support tunnelling activities



An example of a tunnel adit being constructed



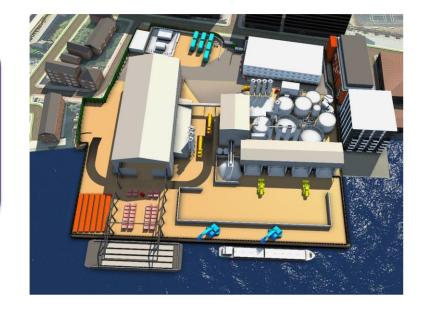
TBM 'Selina'

WHAT TO EXPECT DURING TUNNELLING



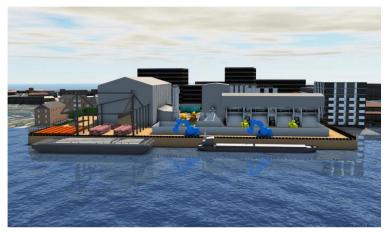
Continuous working inside the acoustic enclosure: 24 hours / 7 days a week

Running of the slurry treatment plant (STP) continuously, to support tunnelling

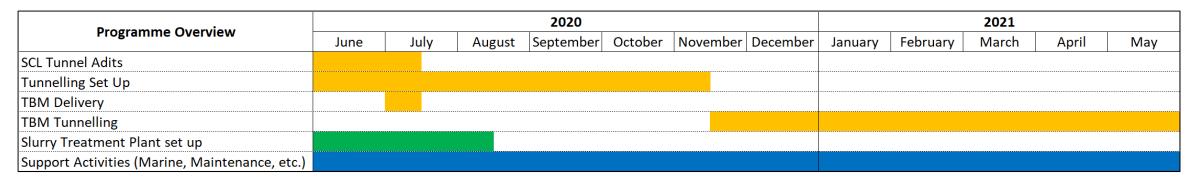


Movement of treated, tunnelled material from the STP into muck bins

Loading excavated materials up to 22:00 Monday to Saturday



Chambers Wharf Programme

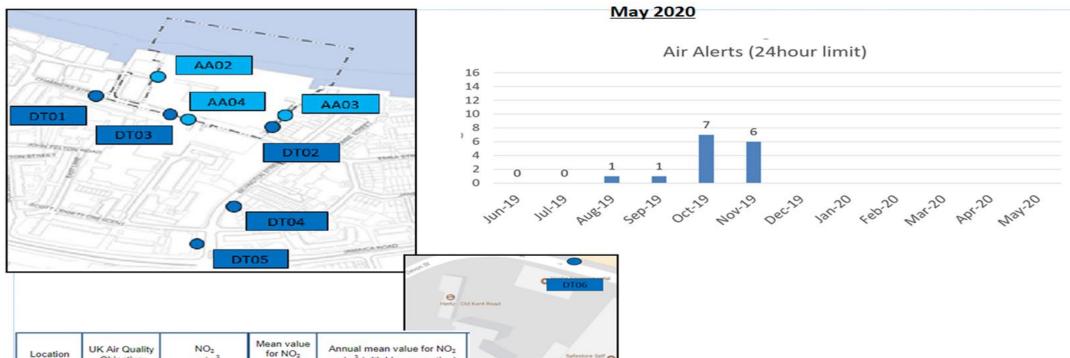


Standard Working Hours (08:00 - 18:00) Monday to Friday, (08:00 - 13:00) Saturday Extended Working Hours (08:00 - 22:00) Monday to Friday - Support activities (08:00 - 13:00) Saturday - (Support activities to 17.00) Continuous Working Hours (00:00 - 00:00) Monday to Sunday



AIR QUALITY





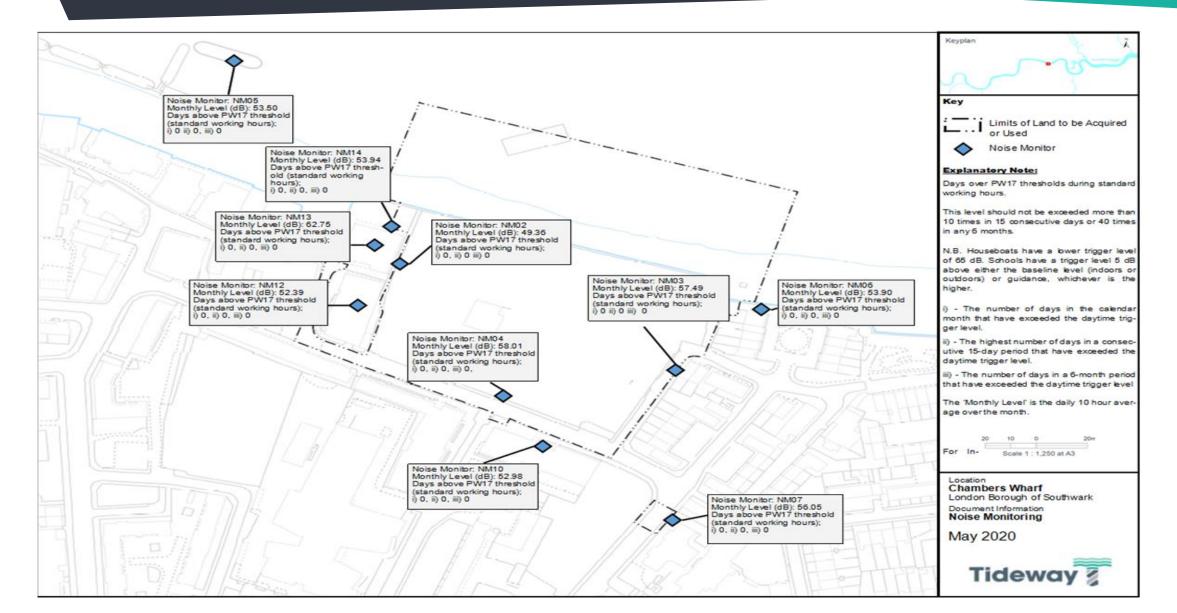
Location	UK Air Quality Objective	NO ₂ µg/m³	Mean value for NO ₂ µg/m ³	Annual mean value for NO ₂ μg/m ³ (with bias correction)
DT1	40	no data	30.06	28.25
DT2		no data	27.00	25.38
DT3		no data	27.14	25.51
DT4		no data	29.92	28.12
DT5		no data	36.52	34.33
DT6		no data	33.17	31.18
Monitoring period				Monitoring period
01/04/2020	-	29/04/2020	02/05/2019	29/04/2020

Please note that NO2 pollutant concentration results are presented one month in arrears. No data since 04/03/2020, due to COVID-19. The Lab are currently not undertaking diffusion tube analysis.

Total Allowable Alerts	35 per year
Total May Alerts	0
Number of Alerts (12-month rolling)	15

NOISE QUALITY







LEGACY

CHARITY AND VOLUNTEERING





Five Tideway teams took part in Race The Thames, an indoor rowing challenge, to raise funds for charity partner London Youth Rowing.



2. DRIVE FORWARD FOUNDATION





Tideway has 167 Trained Mental Health First Aiders

Tideway East supports MATES IN MIND, a charity
that aims to raise awareness of mental health and
improve well-being in construction and related
industries across the UK

LEGACY SCIENCE TECHNOLOGY ENGINEERING AND MATHS





FIRST EVER SOFTWARE ENGINEERING PLACEMENT

FIRST SOFTWARE ENGINEERING PLACEMENT FROM (CYT) CONSTRUCTION YOUTH TRUST

SUPPORTED THE LB SOUTHWARK CAREERS FAIR



OVERSITE FUNCTION FOR THE LONDON DESIGN & ENGINEERING UNIVERSITY TECHNICAL COLLEGE

JUDGED CAREER READY ANNUAL NATIONAL STEM STUDENT OF THE YEAR AWARDS



THREE STEM WORK EXPERIENCE PLACEMENTS

LEGACY THE NEXT GENERATION



Tideway East apprentices visited the Institution of Civil Engineers (ICE) to celebrate their contribution to the project as part of National Apprenticeship Week



BELIEVING IN OUR APPRENTICES

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.

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





STEM BOAT TOUR
BRINGING CLASSROOM TEACHING TO LIFE

LEGACY COMMUNITY INVESTMENT



Our commitment to the communities we are working in is to deliver our work with care and consideration and leave a lasting, positive legacy for London.

Staff working on the Tideway project volunteer their time to support good causes across London, using their professional skills where they can so that we can have an even greater benefit for our charity partners.





Contact US

- If you do have any questions or enquiries, please contact the Tideway Helpdesk:
- •Telephone: 0800 030 80 80
- Email: <u>Helpdesk@Tideway.London</u>

THANK YOU



RECONNECTING LONDON WITH THE RIVER THAMES

#SuperSewer

www.tideway.london