CREDIT OPINION
3 November 2020

Update

Rate this Research

**RATINGS**

**Bazalgette Tunnel Limited**

| | |
|---|---|
| Domicile | London, United Kingdom |
| Long Term Rating | Baa1 |
| Type | LT Corporate Family Ratings |
| Outlook | Negative |

*Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.*


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# Bazalgette Tunnel Limited

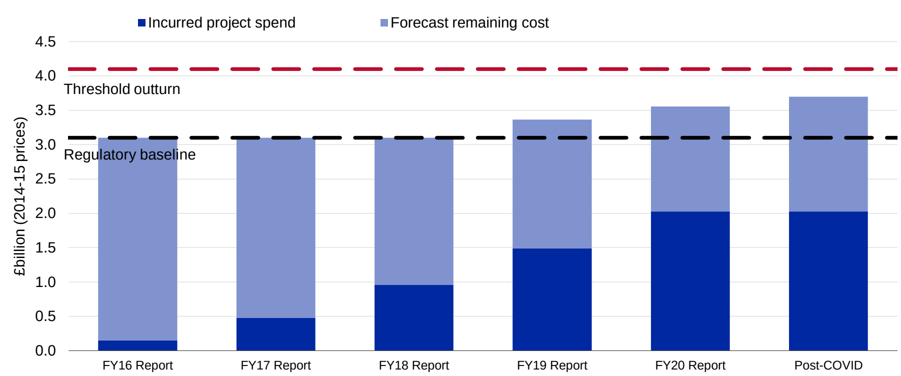
## Update following cost increases and negative outlook

## Summary


The credit quality of Bazalgette Tunnel Limited (Bazalgette, CFR: Baa1 negative) is constrained by the ongoing construction risk and diminishing headroom to the financial targets and completion dates included in the company's licence. On 24 August 2020, Bazalgette announced that it expects the COVID-19 pandemic to delay completion of the project by nine months and to increase total costs by £233 million. Ofwat, Bazalgette's regulator, has acknowledged that the company's decision to pause most construction activity in March 2020 reflected a "pragmatic balance" between the interests of customers, workers and the wider community, and has signalled its willingness to allow the company to recover part of the associated costs. Nonetheless, we expect additional costs to exacerbate the project's overspend against regulatory allowances. We changed Bazalgette's outlook to negative on 9 September 2020.

Bazalgette's credit quality benefits from (1) the Government Support Package (GSP), which provides additional funds in certain defined circumstances and enhances senior debt recovery in most scenarios, (2) a strong regulatory framework that ensures ongoing revenue based on a forward-looking capital expenditure forecast, (3) a financing structure that ensures that Bazalgette will maintain a prudent financial policy and (4) front-loaded equity contribution that enhances recovery prospects for senior lenders during the construction period in the event of project discontinuation, when compensation would be payable by the UK government as part of the GSP. In addition, significant progress has been made in construction works, with 60% of the project complete as of September 2020.


Exhibit 1
**Costs have risen significantly above base case forecasts as the Tideway project has progressed**




*Source: Bazalgette, Moody's Investors Service*

## Credit strengths

- Comprehensive government support package mitigates key construction risks.
- Strong regulatory framework with forward-looking return allowance provides predictable revenues during the construction period.
- Front-loaded equity provision, strong pre-funding and a revolving credit facility provide ample liquidity over the construction period.
- Covenanted financing structure provides additional creditor protection.

## Credit challenges

- The coronavirus outbreak has extended construction timelines by 9 months and increased costs.
- Significant construction risk with complex tunnelling works to deliver a large sewage interceptor tunnel under London's metropolitan area.
- Ongoing funding requirement during the construction period; however, risk largely mitigated by upfront equity injection, deferred drawdown arrangements and bank facilities put in place to date.

## Rating outlook

The negative outlook reflects the project's increasing overspend against regulatory allowances and diminishing headroom to the “threshold outturn” cost limit and longstop completion date embedded in the company's licence.

## Factors that could lead to an upgrade

Given increasing costs and diminishing financial flexibility, an upgrade is unlikely before successful completion.

Upward pressure could develop after successful handover and acceptance of the Thames Tideway Tunnel (TTT), subject to (1) Bazalgette establishing a track record of successful operations and conservative financial policy and (2) a continuing transparent and predictable regulatory approach with allowed returns not less than the company's cost of capital. Any potential upgrade during the operations period would also have to consider the company's capital structure and financial policy at that point in time.

## Factors that could lead to a downgrade

- Failure to reach a settlement with Ofwat that substantially mitigates the COVID-19 impact, absent other measures to strengthen the balance sheet
- Further construction delays or other construction problems that increase liquidity needs or reliance on the liquidity and funding provided under the GSP, or increase the likelihood of project discontinuation
- Unfavourable regulatory developments, adverse changes to the government support package or lengthy disputes between the various stakeholders in the application of funds and/or government support

## Key indicators

**Bazalgette exhibits net RCV gearing of 50% at March 2020, which will increase over time as construction progresses**

| | Mar-16 | Mar-17 | Mar-18 | Mar-19 | Mar-20 |
|---|---|---|---|---|---|
| RCV | 151 | 502 | 1,043 | 1,655 | 2,308 |
| Senior debt (drawn) | 0 | 0 | 824 | 1,188 | 1,695 |
| Shareholder loans | 205 | 529 | 714 | 711 | 720 |
| Cash & cash equivalents (incl. deposits) | 130 | 316 | 896 | 645 | 538 |
| Senior net debt / RCV | n/a | n/a | n/a | 33% | 50% |

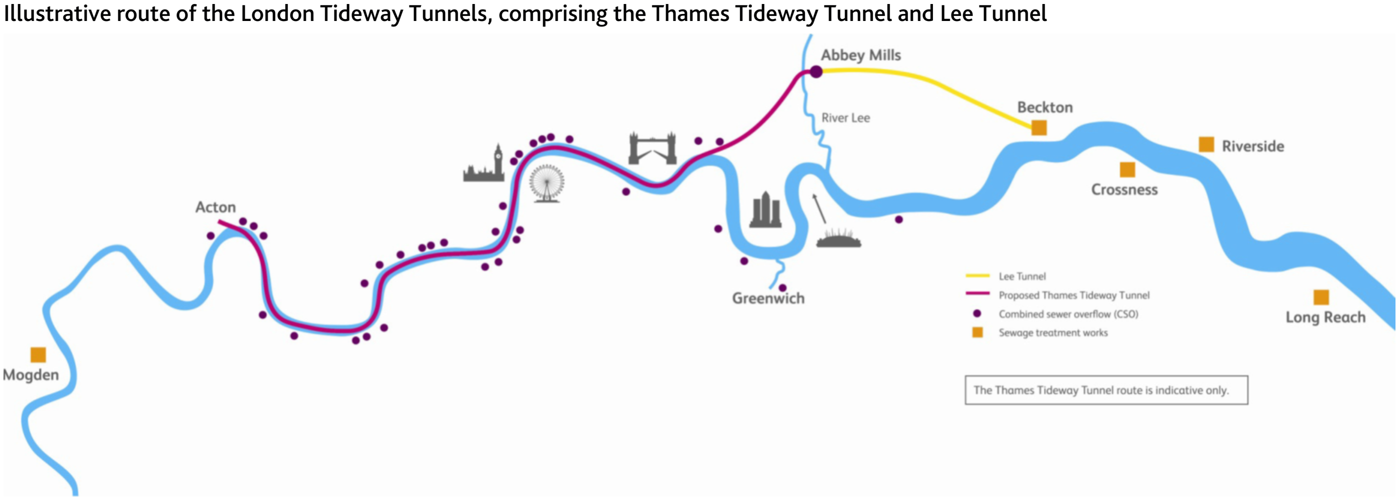
Note: Bazalgette is accounting for its revenue as deferred income during the construction period, while costs are capitalised. Consequently, the company will continue to report zero operating cash flow (before working capital) over the construction period. Since the financial year ending 31 March 2019, Bazalgette is in a net debt position, although senior leverage remains low. Shareholder loan notes are treated as equity for the purpose of the key credit metrics, given their subordinated position within the intercreditor agreements.
*Sources: Company's annual report, Moody's Investors Service*

## Profile

Bazalgette Tunnel Limited is a special purpose entity created to design, construct, own, operate and maintain the Thames Tideway Tunnel, a 25 km tunnel running underneath the River Thames through London to collect excess stormwater and sewer discharge between Acton Storm Tanks and Abbey Mills Pumping Station, from where it will pass through the Lee Tunnel to be treated at Beckton Wastewater Treatment Works. Bazalgette is ultimately owned by a consortium comprising Allianz Infrastructure, INPP and Swiss Life (managed by Amber Infrastructure), Dalmore Infrastructure Investments and DIF.

Bazalgette Finance plc is a special purpose financing conduit, set up to provide its sister company Bazalgette Tunnel Limited with funds raised from bonds issued under a £10 billion MTN programme.

Exhibit 3
**Illustrative route of the London Tideway Tunnels, comprising the Thames Tideway Tunnel and Lee Tunnel**




*Source: Bazalgette*

## Detailed credit considerations

### COVID-19 has exacerbated cost and schedule pressures

In March 2020, Bazalgette temporarily paused construction activities, except for safety-critical and essential work, as a result of the COVID-19 pandemic and associated restrictions.[1] Although work on most sites resumed in May 2020, Bazalgette announced on 24 August 2020 that the suspension and ongoing restrictions would increase the project's costs (Estimate At Completion, EAC) by £233 million and delay handover by 9 months.

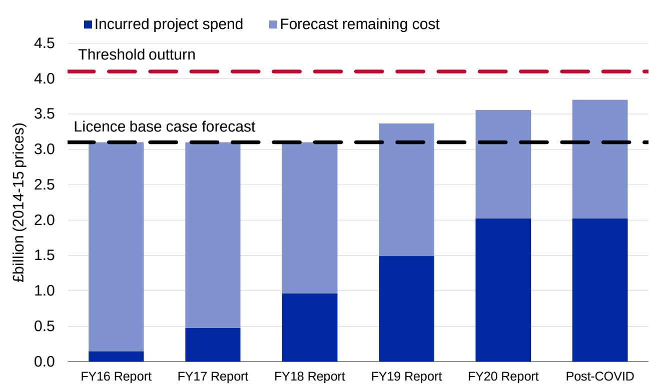
Ofwat has acknowledged that the company's decision to suspend most activities reflected a “pragmatic balance” between the interests of customers, workers and the wider community, and has signalled its willingness to allow the company to recover part of the associated costs. Nonetheless, the additional costs are likely to exacerbate the project's overspend against regulatory allowances. Forecast total costs have grown from £3.1 billion at financial close to £3.7 billion (both in 2014-15 prices), and part of this overspend will be absorbed by Bazalgette through a log-down of its Regulatory Capital Value following System Acceptance.

The cost increases also mean that headroom to the £4.1 billion “threshold outturn” embedded in Bazalgette's licence has been significantly reduced. Bazalgette could be fully responsible for cost increases above this level unless Ofwat or the Competition and Markets Authority (CMA) determine that an additional allowance is appropriate and reasonable, or the government provides additional equity under the terms of the GSP.

Even before the coronavirus outbreak, forecast costs for the project had increased to £3.6 billion in 2014-15 prices, above the £3.1 billion regulatory baseline. Cost pressures included £100 million (in nominal prices) of cost increases because of problems at the interface points between different main works contractors and associated rescheduling of work.

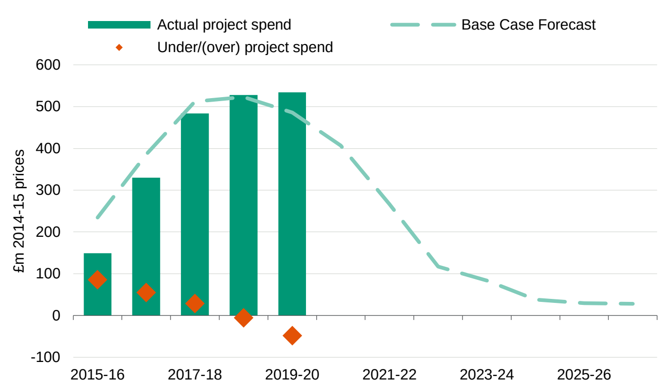
Bazalgette has incurred £2.0 billion of actual project spend as of July 2020. Spend to date has been below the original plan, despite the increases in the EAC, reflecting a slower-than-expected start to the project.

Exhibit 4
**Project costs have risen significantly above the regulatory baseline**




*Source: Ofwat, Bazalgette, Moody's Investors Service*

Exhibit 5
**Project spend has been shifted to later years of the project**
**Expenditure compared to regulatory plan**

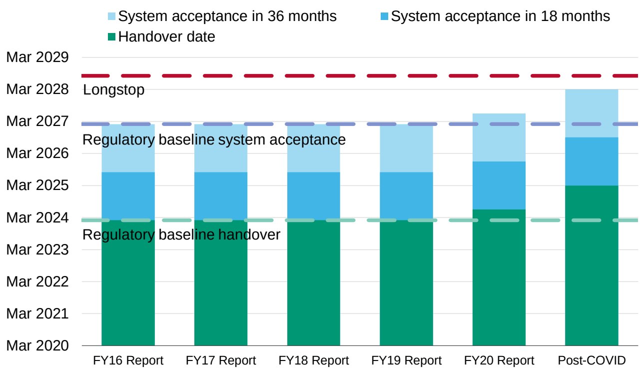



Under/(over) spend calculated by comparing actual project spend to base case forecast.
Base case forecast for 2020-21 onward will be subject to future inflationary adjustments.
*Sources: Company reports, Moody's Investors Service*

Bazalgette now forecasts handover in March 2025, one year later than the relevant regulatory baseline. Handover will be followed by a period of testing in various weather conditions, known as system acceptance, which is expected to take between 18 and 36 months. While system acceptance may still meet the February 2027 regulatory baseline for system acceptance if testing is completed within the shorter end of this range, the project would exceed the baseline if 36 months were required. A “minor delay period” of up to 18 months would mean that Bazalgette's allowed return would be reduced by up to 1 percentage point (to 1.497% from 2.497%) for the period from March 2027 until the March following post construction review.

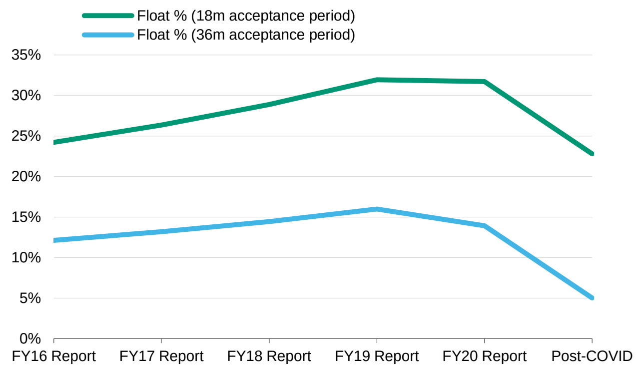
However, in the event of a longer system acceptance period, Bazalgette could have limited headroom to the August 2028 longstop date, which is a principal duty of Bazalgette under the terms of its licence. Based on the revised handover date, a 36-month system acceptance period would leave only a 5% float to the longstop completion date.

Exhibit 6
**Headroom to the longstop completion date has eroded**




*Source: Ofwat, Bazalgette, Moody's Investors Service*

Exhibit 7
**Available float has decreased following recent announcements**
**Days between forecast system acceptance and longstop divided by remaining days to longstop**



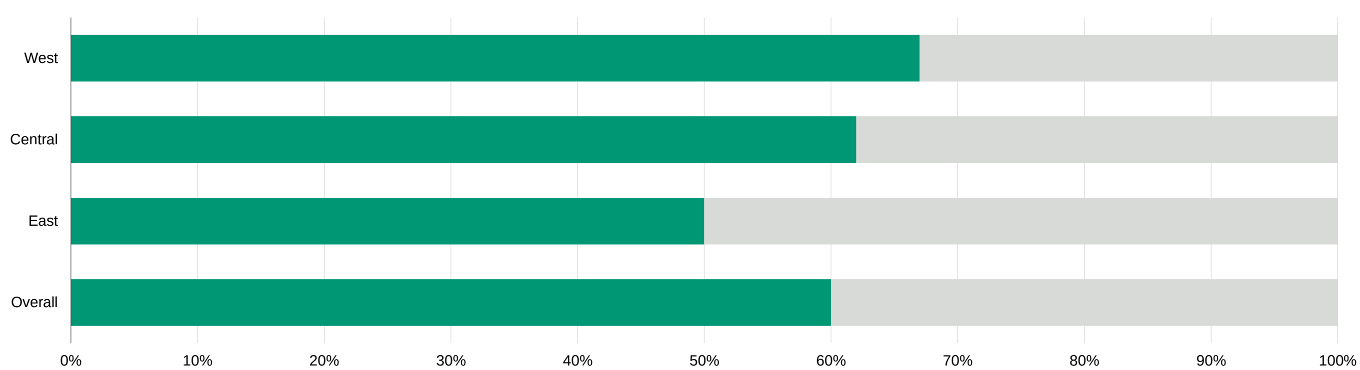

*Source: Moody's Investors Service*

Bazalgette is currently in discussions with Ofwat about the allocation of COVID-19 costs between parties and the potential extension of the longstop date. Bazalgette has the ability to appeal to the CMA if it disagrees with Ofwat's decision.

## Construction risk mitigated by significant progress, strong construction counterparties

As of September 2020, Bazalgette had completed 19.1 km out of 30.8 km of shaft and tunnel primary lining. Most of the tunneling work was completed in the past year.

Exhibit 8
**The project was 60% complete as of September 2020**




*Source: Bazalgette*

Significant uncertainties at the start of the project, particularly around ground conditions, have reduced as work has progressed. Land acquisitions and preparatory works by Thames Water Utilities Limited (Thames Water, CFR Baa2 stable) are also largely complete.

The construction counterparties are well-known international contractors with significant experience of complex projects including, in London, Crossrail, the Lee tunnel (which will connect to the main TTT asset) and the Northern Line extension. However, the interfaces between the various contractors and other relevant parties, including the government (in the context of the support package), regulators and Thames Water, create additional complexity. Thames Water will also need to integrate the TTT assets into its own sewerage network.

Each construction contract specifies a target price, to which a pain/gain share incentive mechanism applies. The target price is subject to change with respect to certain defined compensation events, including a change to the works specifications, archaeological finds, restricted site access, force majeure and unexpected site conditions. The contracts also include certain target and milestone dates, which, however, can also be changed if a compensation event occurs.

The relevant construction contracts are intended to address the risk-sharing between Bazalgette and the contractors, with joint responsibility for, among other things, changes to the works information and design, general liability up to an agreed cap, breakdown and nonperformance of equipment. Bazalgette remains responsible for general liability beyond the contractors' cap, risk of cost escalation, changes in law after two years from contract start date (unless foreseeable), site conditions and availability (including archaeological finds), and force majeure. The £233 million cost increase due to COVID-19 represents Bazlagette's share of the increase, after some costs are absorbed by the contractors.

For all three major works contracts, the contractors have provided performance security, including (1) a performance bond equal to 10% of target price at contract award, provided by an insurer with a minimum A2 rating; and (2) a 3% retention (cash or bond); with a maximum liability cap of the larger of £100 million or 25% of contract value.

We believe that the availability of three construction consortia provides significant protection in a contractor replacement scenario, as other experienced contractors will be on site and familiar with the project, reducing the time and cost to find a replacement. All contracts foresee the possibility of contractors stepping into other main works contracts if that was required.

### PR19 determination incentivises Thames Water to be ready to accept Bazalgette asset

While Bazalgette has essentially fixed regulation during the construction period, the incumbent water and sewerage networks face periodic price control determinations every five years. The latest price control, PR19 which sets allowed revenue between 1 April 2020 and 31 March 2025, contained a number of provisions to incentivise Thames Water to be ready to interface with Bazalgette's assets in a timely manner. In particular, Thames Water faces a £6.3 million penalty (in 2017-18 prices) for each month of delay in completion of enabling works past the system commissioning date, up to a maximum of £75 million. We believe this will encourage timely interfacing between the two companies.

### Comprehensive government support package mitigates key construction risks

The government support package addresses key construction risks, primarily by ensuring that sufficient funding should remain available in the event of cost overrun and/or delay scenarios. It will also compensate senior debt if construction is not completed.

The package includes (1) insurance cover of last resort, for insurance agreed by all parties to be necessary but not available in the market or to a lesser extent than needed; (2) liquidity support in case of market disruption in form of a £500 million Market Disruption Facility; (3) contingent equity funding in the event of construction cost overrun above a defined threshold outturn amount (equivalent to 130% of the P50-risk-adjusted construction costs), from which point Bazalgette's existing shareholders are no longer required to provide additional equity injections; and (4) compensation for discontinuation of the project.

We continue to believe the most significant risks to the project are around time and cost overruns, which could ultimately lead to termination of the project if considered unviable by the parties. We expect the government support to remain available in the most severe outcomes, particularly as project discontinuation compensation will be paid in all circumstances (even if the amount will vary according to those circumstances).

So-called GSP Failure Events may cause elements of the government support to fall away. However, compensation for project discontinuation will still be paid, although excluding amounts for capital expenditure incurred during a GSP Failure Event. Given the front-loaded equity funding, there is significant buffer for senior debt available in a scenario of reduced discontinuation compensation. In addition, insurance cover, which we consider most valuable in a cost overrun or delay scenario, will continue to be available in all circumstances, although at increased cost to Bazalgette under a GSP Failure Event.

While the GSP Failure Events create some uncertainty around the availability of protection for senior lenders, the financing terms allows senior creditors – upon request and approval by the regulator and Secretary of State – to participate in discussion of any potential remedial plan.

### Strong regulatory framework with forward-looking return allowance provides predictable revenue during construction

Bazalgette benefits from a strong regulatory framework (although with some novel and untested features) overseen by Ofwat, which has an established track record in excess of 20 years for transparently regulating the water and sewerage companies in England and Wales.

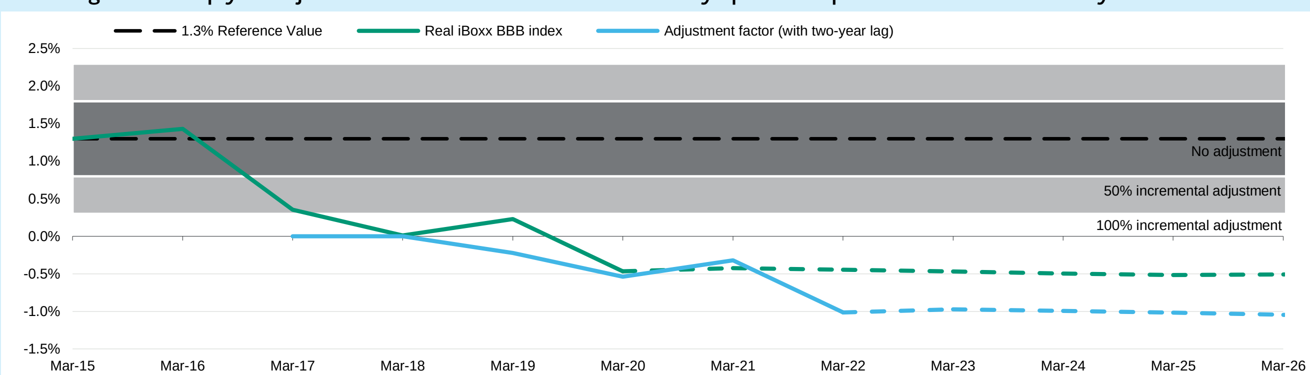
The licence, under which Bazalgette will design, construct and maintain the TTT assets, sets out the detailed formulae for calculating the allowed revenue during the construction and operational periods. During the construction period a forward-looking mechanism provides for an allowed return on a forecast RCV that takes into account any projected capex on a rolling 12-month forward-looking basis. Until 31 March 2030, the return is calculated using the bid WACC of 2.497%, determined during the tender process to set up the infrastructure provider. The licence provides protection against increases in market interest rates through an adjustment mechanism for the WACC, although this does not mitigate against any increase in funding costs that is specific to the TTT project alone.

#### Implications of a low interest-rate environment on the financing cost adjustment factor

With the persistent low interest rate environment, the financing cost adjustment factor will result in a reduction in the allowed return compared with the bid WACC. Current forward gilt rates imply a financing cost adjustment (which applies with a two-year lag) of up to ca. 100 bps over the next five to six years, reflecting real forward rates of the iBoxx for BBB-rated non financial corporates (10+ year maturity) of below ca. -0.5% compared with the 1.3% reference value.

Exhibit 9

**Forward gilt rates imply an adjustment to the cost of debt allowance by up to 100 bps over the next five to six years**




The financing cost adjustment will apply until 2030, and a further fall of the iBoxx could increase the adjustment over time.
*Source: Company, Moody's Investors Service*

While the financing cost adjustment only applies to the debt raised within the relevant period, this still poses a risk for Bazalgette in the context of its pre-funding approach, i.e., locking in interest rates ahead of drawdown in an environment where market rates are still declining. While Bazalgette has benefited from very low funding costs to date, these will still be above the iBoxx rates based on forward prices, which implies a £5-6 million annual downward adjustment.

Upon construction completion and acceptance of the project by Thames Water, Ofwat will perform a post-construction review. At this review the RCV will be adjusted for any under- or overspend relative to the base case forecast, where Bazalgette will have to bear 40% of any overruns. Further delay adjustments may also apply. We note that the financial covenants, included within the financing structure, will reflect cost overruns and construction delays and their resulting penalty adjustment within the calculation of the RCV at each covenant test date. This limits the risk of an immediate covenant breach after the post-construction review.

Once operational, Bazalgette will exhibit a similar risk profile to existing UK water and sewerage companies. On the one hand, we expect the continuing opex and capex requirements to be limited. On the other hand, the unique features of the TTT project mean asset failure could have more significant operational and financial consequences for Bazalgette than for other water companies. Also, the substantial amount of initial funding and small future financing needs (other than refinancing) exposes Bazalgette to a higher portion of embedded debt within its financing structure than most other UK water and sewerage companies. However, this risk is mitigated by Ofwat's indication that it would take this into account when setting the allowed return for Bazalgette at its regular price reviews during the operational period. In addition, around £580 million of EIB debt still outstanding in April 2030 will revert to floating rates at that time. The company also has a number of debt maturities around the regulatory reset date.

## Liquidity analysis

Although the escalating costs of the project make it likely that additional borrowing will be required before system acceptance, Bazalgette's liquidity profile remains strong, underpinned by (1) shareholders having provided equity and shareholder loan notes of around £1.274 billion upfront; (2) a £700 million 35-year loan with the European Investment Bank (EIB), agreed in May 2016, of which £380 million remain undrawn; (3) an aggregate amount of £2.0 billion public and private bond placements under the company's £10 billion medium-term note programme, with remaining drawdowns scheduled up to 2023; and (4) a £160 million committed revolving credit facility, due in 2025, to support ongoing capex requirements, as of March 2020.

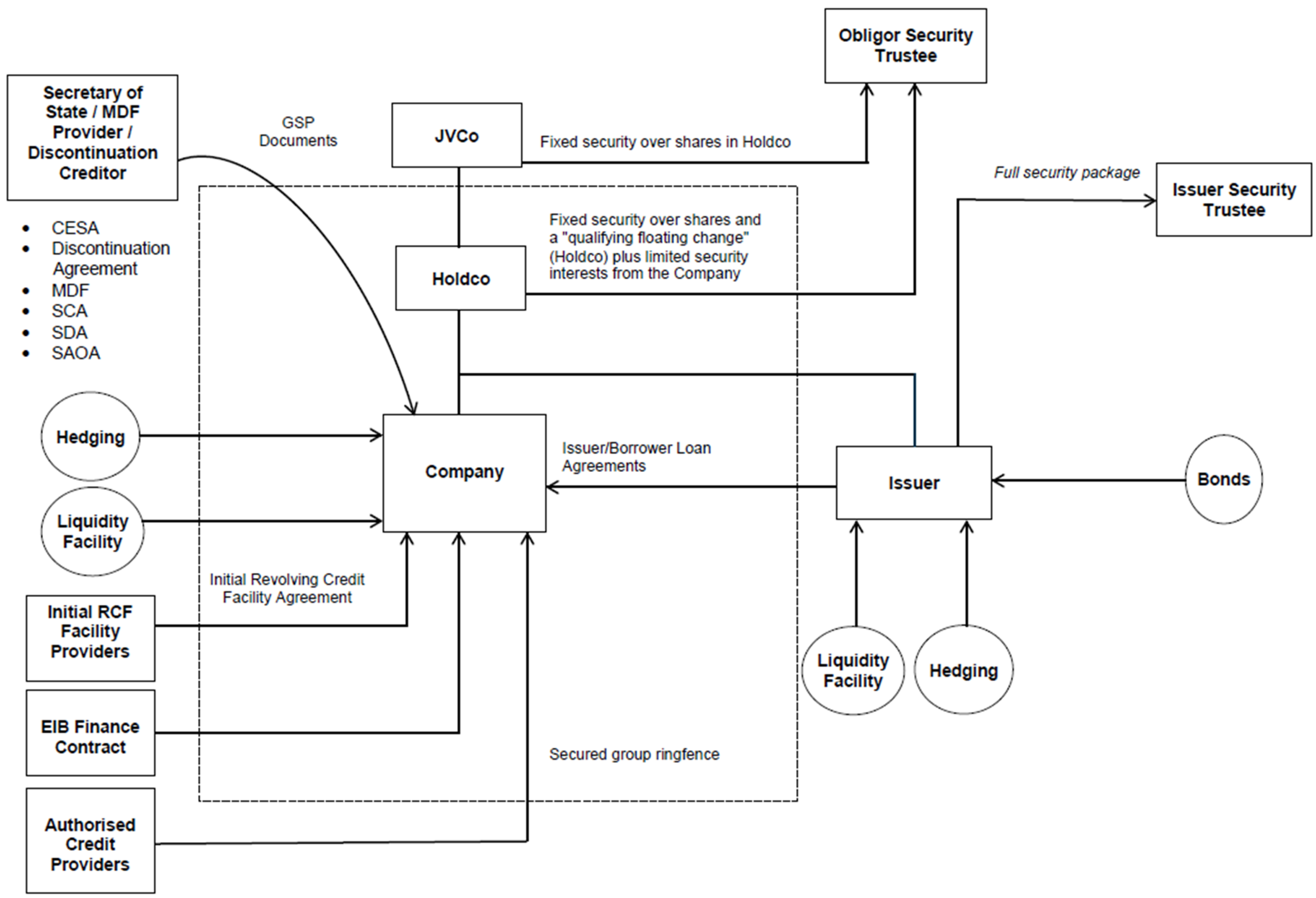
We note that the deferred drawdown notes create counterparty exposure for the project, i.e., the risk that funders may not be able or willing to meet their obligations at the agreed funding date, particularly were the project to encounter problems (please also see Deferred Drawdown Debt Structures For Greenfield Infrastructure Present New Credit Risks, 30 September 2014). However, in light of the projects currently ample liquidity and indeed the first drawdowns being successfully concluded in 2017-19, we believe the existing risk to remain small and manageable in the context of the company's current credit quality.

## Structural considerations

The Baa1 rating assigned to the senior secured notes of Bazalgette Finance plc (Bazalgette Finance) reflects that (1) the proceeds have been on-lent to Bazalgette; and (2) Bazalgette Finance is a senior secured creditor of Bazalgette under the common financing arrangements put in place in August 2015.

An issuer borrower loan agreement between Bazalgette Finance and Bazalgette mirrors the terms and conditions of the bonds and reflects common financing terms and security arrangements incorporated within the ring-fenced, senior secured financing structure of Bazalgette. Under these arrangements, Bazalgette Finance is a senior secured creditor of Bazalgette, ranking pari passu with other lenders to Bazalgette and benefiting from a common security package. Bondholders will in turn benefit from a first-ranking security over the issuer's rights under the common security package.

Exhibit 10
**Relationship between the parties that provide funding to Bazalgette**




Note: company = Bazalgette Tunnel Limited; Issuer = BFP
*Source: BFP's MTN programme prospectus*

Bazalgette Finance has access to a 12-month liquidity reserve, to be held either in cash or in form of a debt service reserve liquidity facility, enabling it to bridge payment delays by Bazalgette under the issuer borrower loan agreement. In addition, Bazalgette has access to 12 months debt service liquidity for obligations under authorised credit facilities, including Bazalgette's obligations under each issuer borrower loan agreement.

Overall, Bazalgette's covenanted financing structure is similar to those put in place by other highly leveraged UK water and sewerage companies, e.g.,. Anglian Water Services Ltd. (Baa1 negative) and Thames Water. Key credit-enhancing features such as (1) cashtrapping triggers; (2) 12 month forward-looking liquidity reserves; (3) step-in rights for creditors to agree a remedial plan; and (4) standstill arrangements providing time to agree an organised sale of the business in a default situation, support the Baa1 CFR. However, we view the covenant and security package as modestly weaker than comparable transactions given, for example (1) the use of an FFO interest cover ratio rather than an Adjusted Interest Cover Ratio (which would include regulatory depreciation where applicable); (2) a looser hedging policy, which does not restrict swaps with break clauses; and (3) the availability of an equity cure for event of default financial covenant breaches.

Exhibit 11

**Financial Covenants**

| Financial Ratios | Outturn Ratio 31/03/2019 | 31/03/2020 | Distribution lock-up tests | Trigger Events (inc. distribution lock-up) | Additional Indebtedness | Events of Default |
|---|---|---|---|---|---|---|
| Senior Average FFO ICR | 4.74x | 4.99x | | <1.4x | | |
| Senior FFO ICR | 3.44x | 5.87x | | <1.3x | | <1.1x |
| Senior RAR | 32.21% | 49.96% | >70% | >70% | >70% [1] | >80% |

Note: [1] Additional Indebtedness raised for capex and working capital requirements as well as to refinance existing debt can be raised as long as the Senior RAR does not exceed 80%.
All ratios will be tested semiannually on 31 March and 30 September and calculated on a 12-months forward and backward-looking basis
*Sources: Tideway's investor reports, Bazalgette's Finance Documentation*

## ESG considerations

The Thames Tideway Tunnel, once operational, will intercept sewage that would otherwise be discharged into the Thames river. Because reducing pollution is its principal objective, Bazalgette is a beneficiary of the environmental trends that underpin political, regulatory and public support for the project. We believe TTT will face very limited technical risks following completion, and that the risk of major pollution incidents is therefore low. Unlike typical water and sewerage companies, Bazalgette is not exposed to the risk of water shortages and associated investment needs.

Bazalgette faces social risks associated with the health and safety of its contractors, particularly during the construction phase. If injuries were to occur, the interruptions to construction activities, as well as direct financial penalties, could impose significant costs for the project. However, health and safety is a clear area of management focus and the company has had no fatalities or major injuries as of March 2020.

The social impact of utilities, particularly the affordability of customer bills, has been high on the UK political agenda (see Regulated Water Utilities – UK: Limited credit exposure to ESG factors, but water supply and regulatory risks rising, 8 October 2020). At the time that Bazalgette's licence was awarded, the TTT project was expected to increase bills by £20-25 per year for Thames Water customers. Despite cost increases, which will partly be borne by customers, the bill impact is likely to be smaller as a result of persistently low interest rates. Because of the relatively small charge, and the fact that Bazalgette will not directly bill customers, we believe it faces less risk than other water companies.

## Rating methodology and scorecard factors

The principal methodology used in these ratings was the global Regulated Water Utilities methodology, published in June 2018. Because this methodology does not fully consider the risks that apply during the project's construction phase, we do not publish a scorecard.

## Ratings

Exhibit 12

| Category | Moody's Rating |
|---|---|
| **BAZALGETTE TUNNEL LIMITED** | |
| Outlook | Negative |
| Corporate Family Rating | Baa1 |
| Bkd Senior Secured -Dom Curr | Baa1 |

*Source: Moody's Investors Service*

## Endnotes

1 Bazalgette Finance plc, COVID-19 update, 27 March 2020

REPORT NUMBER 1245454