

**CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

***Request to Approve a Time Extension for the
Initial Term of the Regulatory Agreement¹ of STE Award***

**TBC – The Boring Company
Application No. 17-SM056**

Tuesday, December 15, 2020

Prepared By: *Matthew Jumps, Program Analyst*

SUMMARY

Applicant – TBC – The Boring Company

Location – Hawthorne, Los Angeles County

Industry – Specialized Concrete Ring Manufacturing

Project – New Specialized Concrete Rings Manufacturing Facility (Advanced Manufacturing)

Total Amount Qualified Property Approved– \$3,160,000

Estimated Sales and Use Tax Exclusion Amount at Approval² – \$266,072

Amount of Time Requested –

- One year and 12 days, until December 31, 2021, for the Initial Term of the Regulatory Agreement (four years and 12 days from the date of initial CAEATFA Board approval)

Staff Recommendation – Approval

¹ All capitalized terms not defined in this document are defined in the Sales and Use Tax Exclusion Program’s statutes and regulations.

² This amount is calculated based on the average statewide sales tax rate at the time of initial approval, which was 8.42%.

REQUEST

On December 19, 2017, the CAEATFA Board approved a sales and use tax exclusion (“STE”) for TBC – The Boring Company (“TBC”) for the purchase of up to \$3,160,000 in Qualified Property to build a concrete batch plant and carousel system to manufacture concrete segments known as “rings” (the “Project”). The Regulatory Agreement (“Agreement”) initial term provided TBC with three years from the date of Board Approval to utilize its STE award. The CAEATFA Board can extend the initial term of the Agreement upon a finding that an extension is in the public interest and advances the purposes of the program.

As of June 30, 2020, TBC has used the STE to purchase \$2,569,879.13 of Qualified Property (81% of the total Qualified Property approved). TBC is requesting to extend the Agreement initial term by one year and 12 days to accommodate COVID-19 pandemic-related closures and delays.

According to TBC, its plants were closed starting in March 2020 due to the pandemic. While TBC was able to resume partial operations by July, TBC states that it has experienced a COVID-19 related slowdown with its suppliers and vendors. TBC states that since it has reopened, it has re-engaged its parts and equipment suppliers to continue making purchases, but the suppliers also experienced delays due to the pandemic. Therefore, TBC explains, its suppliers are backlogged, some for up to nine months due to raw material availability. TBC states that it has already engaged on contracts to purchase equipment amounting in the remaining amount of Qualified Property so that it meets its STE purchasing obligation by December 31, 2021.

THE APPLICANT

TBC, a Delaware corporation, was established in 2017 as a tunneling company focused on providing an alternative transportation option built with advanced processes and less environmental impact compared to standard vehicular travel. TBC plans to construct a network of tunnels beginning in Hawthorne, California, which utilizes advanced technology, including autonomous electric skates that will transport people and cargo. TBC will be manufacturing advanced tunneling segments called “rings” as part of its tunnel-building process.

The major shareholders (10.0% or greater) of TBC – The Boring Company are:
The ERM Trust

The corporate officers of TBC – The Boring Company are:
Steve Davis, President
Jared Birchall, Chief Financial Officer

THE PROJECT

TBC requested a sales and use tax exclusion to purchase equipment to build a concrete batch plant and carousel system to manufacture concrete segments known as “rings.” The rings will be used to line tunnel networks. Using this advanced equipment, TBC represents that it will be capable of manufacturing rings that can withstand both standard and massive earthquakes as well as allow for over 100 years of continuous use.

TBC represents the Project will employ advanced materials, such as the concrete mix that will be utilized to produce the rings. According to TBC, the concrete sets quickly (1-7 days compared to the industry standard 28 days) and will reach strengths in excess of 6,500 pounds per square inch, allowing for rapid segment manufacture and placement. TBC also represents that the concrete has been formulated in such a way that it is dense and subsequently less permeable with added resistance to corrosion compared to the current industry standard.

The system used to produce the concrete rings has been customized by TBC, and the company represents that it is the world's first fully-automated carousel system. This equipment requires precise engineering and will allow for higher precision and speeds than what is currently on the market, according to TBC. Additionally, the fully-automated carousel will enable the production and transportation of the rings without human intervention, but TBC represents that the process will still be monitored by staff for safety and quality from a control center. TBC represents this carousel system and the specialized molds will produce rings that are lighter than standard concrete rings, while maintaining their strength.

TBC maintains that the manufacturing facility will be fully electric, eliminating the use of fossil fuels. The fully-automated carousel system will increase efficiency and eliminate the system's idle time with what TBC maintains is a faster and more efficient production line while the shorter curing time needed for the concrete rings requires less energy for the curing ovens. Overall, TBC has calculated that the manufacturing process will represent a 20% decrease in energy consumption and a 20% decrease in emissions of air pollutants compared to the current industry standard.

AGREEMENT INITIAL TERM EXTENSION REQUEST

TBC has requested that the initial term of the Agreement be extended from December 19, 2020, to December 31, 2021, in order to accommodate COVID-19 pandemic related closures and delays.

Staff Evaluation

According to TBC, the delays in implementation of the Project are solely due to closures and delays in its supply chain, both consequences of the COVID-19 pandemic, and outside of TBC's control. TBC has already purchased 81% of the total Qualified Property approved and expects to purchase the remaining amount by the end of 2021. TBC reported spending over \$390,000 in the first half of 2020, before TBC felt the full effects of the pandemic, and demonstrates a commitment to purchasing equipment and completing the Project. TBC's facilities are now open and operational. TBC has already contracted with suppliers so that TBC will be able to purchase the remaining amount of Qualified Property by the end of the requested extension.

Based on this information, Staff believes extending the initial term of the Agreement will allow for the Project to be completed, and is, therefore, in the public interest and advances the purposes of the program.

LEGAL QUESTIONNAIRE

Staff has reviewed TBC’s responses to the questions contained in the Legal Status portion of the Application. The Executive Director, in consultation with legal counsel, has determined that the legal issues disclosed do not affect the financial viability or legal integrity of TBC.

CAEATFA FEES

In accordance with STE Program Regulations,³ TBC has paid an additional fee of \$500 because extending the initial term qualifies as a modification to TBC’s Agreement.

RECOMMENDATION

Staff recommends that the Board approve TBC – The Boring Company’s request to extend the initial term of the Agreement by one year and 12 days to December 31, 2021, as it is in the public interest and advances the purposes of the program.

Attachments

- Attachment A: TBC – The Boring Company’s letter requesting waiver (October 10, 2020)
- Attachment B: TBC – The Boring Company’s staff summary at the time of approval

³ California Code of Regulations Title 4, Division 13, Section 10036. The fee was \$500 at the time of the request.

**RESOLUTION APPROVING A TIME EXTENSION FOR
TBC – THE BORING COMPANY’S INITIAL TERM FOR
THE REGULATORY AGREEMENT**

December 15, 2020

WHEREAS, on December 19, 2017, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority”), a public instrumentality of the State of California, approved a Sales Tax Exclusion (“STE”) in the amount of \$3,160,000 of Qualified Property for **TBC – The Boring Company** (the “Applicant”); and

WHEREAS, within three years of approval by the Authority, the Applicant must make all Qualified Property purchases (STE Program regulations Section 10035(b)(1)); and

WHEREAS, upon a finding that it is in the public interest and advances the purposes of the program, the Authority may waive the requirement that all purchases of Qualified Property be made within three years of Application approval (STE Program regulations Section 10035(b)(1)(B)); and

WHEREAS, the Applicant has requested a waiver of the requirement to purchase all of the Qualified Property within three years, due to unexpected delays in the Project timeline, extending the term by one year and 12 days to December 31, 2021; and

WHEREAS, granting the waiver will allow the Project to proceed and the state to receive the anticipated environmental and economic benefits that justified the initial approval of the Project in accordance with the law, thereby advancing both the public interest and the purposes of the program.

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Authority finds that it is in the public interest and advances the purposes of the program to extend the initial term of the Regulatory Agreement to December 31, 2021.

Section 2. This resolution shall take effect immediately upon its passage.

Attachment A: TBC – The Boring Company’s Letter Requesting Waiver (October 10, 2020)



October 10, 2020

CAEATFA
915 Capitol Mall Rm 538
Sacramento, CA 95814
916-651-5103

To: Matthew Jumps, STE Program Analyst

This letter stands as a formal request to extend our qualified property purchase requirement from December 19, 2020 to December 31, 2021. We have an active balance of \$590,120.87 as of June 30, 2020 that we will not be able to fulfill before our original deadline.

Due to the unforeseen closures due to COVID-19, our plants were closed for a prolonged period. Upon re-opening, we had to re-engage our suppliers of parts and equipment who also suffered delays due to closures and are working on a back log that is, at times, extending to nine months due to raw material availability.

To ensure we complete the purchases by December 31, 2021 we have engaged on contracts to purchase equipment to fulfill our gap. As of June 30, 2020, we have purchased \$2,569,879.13 worth of qualified materials and equipment.

Best Regards,

A handwritten signature in black ink, appearing to read "Adam Pashaian".

Adam Pashaian, CPA
Corporate Controller
702-810-8102
AdamP@boringcompany.com

TBC – The Boring Company
1435 W 139th St, Gardena, CA 90249

Attachment B: TBC – The Boring Company’s Staff Summary at the Time of Approval

**CALIFORNIA ALTERNATIVE ENERGY AND
ADVANCED TRANSPORTATION FINANCING AUTHORITY**

Request to Approve Project for Sales and Use Tax Exclusion (STE)⁴

**TBC – The Boring Company
Application No. 17-SM056**

Tuesday, December 19, 2017

Prepared By: *Melanie Holman, Program Analyst*

SUMMARY

Applicant – TBC – The Boring Company

Location – Hawthorne, Los Angeles County

Industry – Specialized Concrete Ring Manufacturing

Project – New Specialized Concrete Rings Manufacturing Facility (Advanced Manufacturing)

Value of Qualified Property – \$3,160,000

Estimated Sales and Use Tax Exclusion Amount⁵ – \$266,072

Application Score –

Fiscal Benefits Points:	8,966
<u>Environmental Benefits Points:</u>	<u>60</u>
Net Benefits Score:	9,026

<u>Additional Benefits Points:</u>	<u>54</u>
Total Score:	9,080

Staff Recommendation – Approval

⁴ All capitalized terms not defined in this document are defined in the Program’s statute and regulations.

⁵ This amount is calculated based on the average statewide sales tax rate of 8.42%.

THE APPLICANT

TBC – The Boring Company (“The Boring Company” or the “Applicant”), a Delaware Corporation, was established in 2017 as a tunneling company focused on providing an alternative transportation option built with advanced processes and less environmental impact compared to standard vehicular travel. The Boring Company plans to construct a network of tunnels beginning in Hawthorne, California that utilizes advanced technology including autonomous electric skates that will transport people and cargo. The Applicant will be manufacturing advanced tunneling segments called “rings” as part of its tunnel-building process.

The major shareholders (10.0% or greater) of TBC – The Boring Company are:
The ERM Trust

The corporate officers of TBC – The Boring Company are:
Jared Birchall, President and Chief Executive Officer

THE PROJECT

The Boring Company is requesting a sales and use tax exclusion to purchase equipment to build a concrete batch plant and carousel system to manufacture concrete segments known as “rings” (the “Project”). The rings will be used to line tunnel networks. Using this advanced equipment, The Boring Company represents that it will be capable of manufacturing rings that can withstand both standard and massive earthquakes as well as allow for over 100 years of continuous use.

The Applicant represents the Project will employ advanced materials, such as the concrete mix that will be utilized to produce the rings. According to The Boring Company, the concrete sets quickly (1-7 days compared to the industry standard 28 days) and will reach strengths in excess of 6,500 pounds per square inch, allowing for rapid segment manufacture and placement. The Boring Company also represents that the concrete has been formulated in such a way that it is dense and subsequently less permeable with added resistance to corrosion compared to the current industry standard.

The system used to produce the concrete rings has been customized by The Boring Company and the company represents that it is the world’s first fully-automated carousel system. This equipment requires precise engineering and will allow for higher precision and speeds than what is currently on the market, according to the Applicant. Additionally, the fully-automated carousel will enable the production and transportation of the rings without human intervention, but The Boring Company represents that the process will still be monitored by staff for safety and quality from a control center. The Applicant represents this carousel system and the specialized moulds will produce rings that are lighter than standard concrete rings, while maintaining their strength.

The Applicant maintains that the manufacturing facility will be fully electric, eliminating the use of fossil fuels. The fully-automated carousel system will increase efficiency and eliminate the system’s idle time with what the Applicant maintains is a faster and more efficient production line while the shorter curing time needed for the concrete rings requires less energy for the curing ovens. Overall, the Applicant has calculated that the manufacturing process will represent

a 20% decrease in energy consumption and a 20% decrease in air pollutants compared to current industry standard.

ANTICIPATED COSTS OF QUALIFIED PROPERTY

The anticipated Qualified Property purchases are listed below:

Concrete Batch Plant	\$1,000,000
Carousel System	<u>2,160,000</u>
Total	<u>\$3,160,000</u>

Note: The Qualified Property purchases reported in the Application and shown here in staff's report are estimated costs. At the termination of the master regulatory agreement a finalized project equipment list will be prepared detailing the value of the Project equipment acquired and detailing the actual tax benefit realized pursuant to Revenue and Tax Code Section 6010.8. Variance from the costs shown in the Application and in this report may occur prior to the closing due to increased costs of certain components (of the Project) over original estimates, and other reasons. In addition, such costs may vary after closing due also to increased costs, as well as common design and equipment modifications during construction, differences in equipment due to future changes in law or regulation, or for other reasons.

TIMELINE

Construction of a test portion of the tunnel has commenced with purchases of Qualified Property expected to begin in early 2018. The Applicant represents that most of the property is expected to be purchased within the next 12 months with production ultimately beginning in mid-2018.

PROJECT EVALUATION

NET BENEFITS

The Project received a Total Score of 9,080 points, which exceeds the required 1,000 point threshold, and a total Environmental Benefits Score of 60 points, which exceeds the 20 point threshold.

- A. **Fiscal Benefits (8,966 points)**. The net present value of the total fiscal benefits over the lifetime of the Qualified Property is derived from the Applicant's sales taxes, personal income taxes paid by the firm's employees, firm taxes on profits, property taxes and other indirect fiscal benefits of the Applicant which amounts to \$2,385,590 resulting in a Fiscal Benefits score of 8,966 points for the Project.
- B. **Environmental Benefits (60 points)**. The Project will result in an Environmental Benefits Score of 60 points. The Applicant received points in the following categories:
 - 1. **Environmental Sustainability Plan (20 of 20 points)**. The Applicant will implement an environmental sustainability plan for its Project that it

represents will result in minimizing greenhouse gas emissions, maximizing energy efficiency, and promoting recycling and reuse.

2. **Energy Consumption (20 of 30 points)**. The Applicant represents that its manufacturing process will result in a 20% reduction in energy consumption relative to the industry standard manufacturing process.
3. **Air Pollutants (20 of 30 points)**. The Applicant represents that its manufacturing process will result in a 20% reduction in air pollutants produced relative to the industry standard manufacturing process.

C. Additional Benefits (54 points). Applicants may earn additional points for their Total Score. The Applicant submitted information and received 54 additional points.

1. **Permanent Jobs (45 of 75 points)**. The Applicant represents that the Project will support a total of 24 permanent jobs at its Facility. CAEATFA estimates that approximately one of these jobs will be attributable to a marginal increase in jobs created due to the approved STE resulting in a Permanent Jobs Score of 45 points for the Project.
2. **Construction Jobs (0 of 75 points)**. The Applicant represents that the Project will support no construction jobs at its Facility. Zero points were awarded.
3. **Unemployment (9 of 50 points)**. The Applicant's Project is located in Los Angeles County which has an average annual unemployment rate of 8%. This is above 110% of the statewide average annual unemployment rate which was 7.5% in 2014, the dataset used in the application. This results in an Unemployment Score of nine points for this Project.

STATUS OF PERMITS/OTHER REQUIRED APPROVALS

The Applicant represents that all the necessary permits are in place for the Project to begin.

LEGAL QUESTIONNAIRE

Staff reviewed the Applicant's responses to the questions contained in the Legal Status portion of the Application. The responses did not disclose any information that raises questions concerning the financial viability or legal integrity of this Applicant.

CAEATFA FEES

In accordance with CAEATFA Regulations,⁶ the Applicant has paid CAEATFA an Application Fee of \$1,580 and will pay CAEATFA an Administrative Fee of \$15,000.

⁶ California Code of Regulations Title 4, Division 13, Section 10036

RECOMMENDATION

Staff recommends approval of Resolution No. 17-SM056 for TBC- The Boring Company's purchase of Qualified Property in an amount not to exceed \$3,160,000 anticipated to result in an approximate Sales and Use Tax Exclusion value of \$266,072.

RESOLUTION APPROVING AND AUTHORIZING EXECUTION OF A MASTER REGULATORY AGREEMENT WITH TBC – THE BORING COMPANY

December 19, 2017

WHEREAS, the California Alternative Energy and Advanced Transportation Financing Authority (the “Authority” or “CAEATFA”) has received the Application of **TBC – The Boring Company** (the “Applicant”), for financial assistance in the form of a master regulatory agreement (the “Agreement”) regarding tangible personal property utilized in an Advanced Manufacturing process or for the design, manufacture, production or assembly of Advanced Transportation Technologies or Alternative Source products, components, or systems (“Qualified Property”) as more particularly described in the staff summary and in the Applicant’s Application to the Authority (collectively, the “Project”); and

WHEREAS, the Applicant has requested the Authority to enter into the Agreement to acquire Project equipment with an estimated cost not to exceed \$3,160,000 over a period of three years; and

WHEREAS, the Applicant believes that this form of financial assistance will enable it to avail itself of the benefits of an exclusion from sales and use taxes relative to the Qualified Property pursuant to California Revenue and Taxation Code Section 6010.8; and

WHEREAS, approval of the terms of the Agreement and authority for the Executive Director, Deputy Executive Director, or Chair of the Authority to execute the necessary documents to effectuate the Agreement is now sought;

NOW, THEREFORE, BE IT RESOLVED by the California Alternative Energy and Advanced Transportation Financing Authority, as follows:

Section 1. The Project constitutes a “project” within the meaning of Public Resources Code Section 26003(a)(8)(B).

Section 2. The requested master regulatory agreement constitutes “financial assistance” within the meaning of Public Resources Code Section 26003(a)(6).

Section 3. The Applicant is a “participating party” within the meaning of Public Resources Code Section 26003(a)(7).

Section 4. The Executive Director, Deputy Executive Director, or Chair of the Authority (the “Authorized Signatories”) are hereby authorized for and on behalf of the Authority to approve any changes to the Project as the Executive Director shall deem appropriate, provided that the amount of the Qualified Property to be purchased may not be increased above the amount approved by the Authority.

Section 5. The proposed form of the Agreement between the Applicant and the Authority, as filed with the Authority prior to this meeting, is hereby approved. The Authorized Signatories

are hereby authorized and directed, for and on behalf and in the name of the Authority, to execute, acknowledge and deliver to the Applicant the Agreement in substantially the form filed with or approved by the Authority, with such insertions, deletions or changes therein as the Authorized Signatory executing the same may require or approve, and with particular information inserted therein in substantial conformance with the staff summary and in the Applicant's Application to the Authority, such approval to be conclusively evidenced by the execution and delivery thereof. The Authority understands and agrees that pursuant to the terms of the Agreement, the obligations of the Applicant may, under some circumstances, be carried out or assumed by a successor or assignee entity, or by an affiliate of the Applicant.

Section 6. Each of the Authorized Signatories, acting alone, is hereby authorized and directed to do any and all ministerial acts, including (without limitation) the execution and delivery of any and all documents and certificates they may deem necessary or advisable in order to consummate the Agreement and otherwise effectuate the purposes of this Resolution.

Section 7. The Applicant shall assure CAEATFA that all Qualified Property listed in the semi-annual reports pursuant to the Agreement shall be installed, maintained and operated in compliance with all applicable local, state and federal laws.

Section 8. The Agreement shall only apply to Qualified Property that the Applicant certifies will be installed, maintained and operated at facilities within the State of California.

Section 9. The adoption by the Authority of this Resolution for the Applicant shall not be referred to in any application before any governmental agency as evidence of the feasibility, practicality or suitability of the Project or in any application for any required permission or authority to acquire, construct or operate the Project.

Section 10. This Resolution is effective immediately and will remain in full force and effect unless the Regulatory Agreement, as defined in CAEATFA Regulations Section 10035(a), is not executed within thirty (30) days of the date of this Resolution. The Executive Director may extend the thirty days if necessary.



October 10, 2020

CAEATFA
915 Capitol Mall Rm 538
Sacramento, CA 95814
916-651-5103

To: Matthew Jumps, STE Program Analyst

This letter stands as a formal request to extend our qualified property purchase requirement from December 19, 2020 to December 31, 2021. We have an active balance of \$590,120.87 as of June 30, 2020 that we will not be able to fulfill before our original deadline.

Due to the unforeseen closures due to COVID-19, our plants were closed for a prolonged period. Upon re-opening, we had to re-engage our suppliers of parts and equipment who also suffered delays due to closures and are working on a back log that is, at times, extending to nine months due to raw material availability.

To ensure we complete the purchases by December 31, 2021 we have engaged on contracts to purchase equipment to fulfill our gap. As of June 30, 2020, we have purchased \$2,569,879.13 worth of qualified materials and equipment.

Best Regards,

A handwritten signature in black ink, appearing to read "Adam Pashaian".

Adam Pashaian, CPA
Corporate Controller
702-810-8102
AdamP@boringcompany.com

TBC – The Boring Company
1435 W 139th St, Gardena, CA 90249