

Exhibit A

# **Railroad Pedestrian Underpass**

Preliminary Engineering Proposal

April 7, 2022

Prepared by:

**THE**  
**BORING**  
**COMPANY**

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# Introduction and Project Understanding

Created by Elon Musk, founder of Tesla and SpaceX, The Boring Company (TBC) creates safe, fast-to-dig, and low-cost transportation, utility, pedestrian, and freight tunnels. TBC is a corporation founded in 2017 with its headquarters in Pflugerville, Texas.

TBC is a vertically integrated tunneling company with engineering, manufacturing, and construction capabilities. For the Railroad Pedestrian Underpass, TBC will function as the single contractual point of contact and be responsible for the design, permitting, and construction of the project. Subconsultants and subcontractors will be engaged by TBC, as needed, to deliver the project and meet the expectations of the City of Kyle.

## Project Understanding

The City of Kyle is interested in constructing a pedestrian underpass of the UPRR tracks south of Kyle Parkway/FM 1626 as shown conceptually in Figure 1 to provide connectivity between the Plum Creek subdivision and a vertical mixed-use project with destination dining to the east. The pedestrian underpass will accommodate multimodal transportation options both slow and fast moving, including electric vehicles, bicycles, and pedestrians. The pedestrian underpass will connect people from the region to encourage multimodal movement to leisure and outdoor activities and integrate into the urban environment. The surrounding area will connect to a destination park, adjacent professional offices, dining, and retail options.

**Figure 1 – Railroad Pedestrian Underpass**



## Tunnel

The bored excavation method and structural lining for the Railroad Pedestrian Underpass and TBC's previous tunnels will be the same. TBC has standardized a 12-foot inner diameter and a 13.5-foot outer diameter tunnel with 9-inch-thick reinforced concrete segments installed by the TBM immediately after excavation. Once mining of the tunnel is complete, a flat paved road surface is installed near the invert with a 10 ft width.

The underpass will pass beneath the UPRR tracks and transmission and distribution power lines operated by Pedernales Electric Co-op as shown in Figure 1. Transmission lines are located on the east side of the railroad track and distribution lines are located on both sides. In addition, the underpass will pass beneath detention ponds on both sides of the railroad track. The eastern detention pond includes an approximately six feet tall concrete/masonry retaining wall. TBC's design will include provisions to prevent impacts to existing structures and monitor them closely during construction. Structures will be surveyed and inspected prior to construction and monitored during construction as described further below.

**Figure 2 – TBC Loop Tunnel Pedestrian Application**



## Preliminary Engineering Scope of Work

The conceptual engineering effort includes the following tasks and activities:

1. **Site Visit:** TBC will visit the site to walk the alignment, review the potential launch and retrieval locations and meet with City staff and other stakeholders.
2. **Utility and Existing Structure coordination:** TBC, with support from the City, will collect GIS data for existing utilities and CAD for existing structures to inform the tunnel alignment evaluation.
3. **Geotechnical Investigation:** TBC will retain the services of a geotechnical firm to drilling borings to characterize and sample the ground and groundwater conditions along the tunnel alignment and produce a Geotechnical Data Report.
4. **Phase 1 Environmental Site Assessment (ESA):** TBC will retain the services of an environmental firm to perform a Phase 1 ESA to review publicly available existing data to characterize environmental conditions associated with tunneling, including hazardous materials, brownfields, contaminated groundwater, etc. If hazards are identified a Phase 2 effort may be authorized under separate task order.
5. **Horizontal and Vertical Alignment Development:** TBC will identify and recommend a conceptual horizontal and vertical alignment provides connectivity and accessibility to users with minimal impacts to existing infrastructure.
6. **Union Pacific Railroad Permitting:** TBC will work with Union Pacific to obtain a crossing permit for the tunnel. Union Pacific may require a retainer for their staff to utilize during the review process. The retainer will be provided separately by the City of Kyle.
7. **Preliminary Engineering Drawings:** TBC will prepare 11x17 exhibits of the proposed horizontal and vertical alignment as well as plan views of the work areas and any construction easements required.
8. **Preliminary Project Delivery Schedule:** Based on the preliminary engineering drawings, TBC will prepare a high-level preliminary project delivery schedule for the completion of design, permitting, construction and operation.
9. **Design-Build Construction Proposal:** Based on the preliminary engineering drawings and the information collected during this phase, TBC will prepare a cost proposal to build the Railroad Pedestrian Underpass.

## Deliverables

TBC will provide the following preliminary engineering deliverables to the City of Kyle. All deliverables will be provided as a high-quality PDF.

1. Preliminary Engineering Drawings, plan, and profile of selected horizontal alignment and vertical alignment.
2. Geotechnical Data Report.
3. Phase 1 Environmental Site Assessment.
4. Union Pacific Crossing Permit Application.
5. Design-Build Construction Proposal.
6. Preliminary Engineering Report, formatted as a PowerPoint slide deck.

## Timeframes and Pricing

TBC will provide these deliverables within 45 days of receiving notice-to-proceed from the City.

The firm-fixed lump sum price inclusive of the design services above is \$50,000. Payment will be made on a milestone basis according to the schedule below:

Kickoff, Site Visit: \$5,000

Initiate Drilling for Geotechnical Investigation: \$20,000

Complete Geotechnical Laboratory Testing: \$15,000

Preliminary Engineering Report and Construction Cost Proposal: \$10,000

Consultant

THE BORING COMPANY



By: \_\_\_\_\_

Name: Brian Gettinger

Title: Business Development Lead

Client:

CITY OF KYLE

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_