



Date: September 1, 2015

To: Dan Landon, NCTC

From: Michael Vaughan, Senior Engineer

Subject: SR 89 Mousehole Pedestrian and Bicycle Improvement Project

The State Route 89 Mousehole Bicycle and Pedestrian Improvement project will construct a pedestrian/bicycle railroad undercrossing and connecting trails east of the existing SR 89 Mousehole tunnel in Truckee, California. The trail will extend from Deerfield Drive in Truckee, California to the north to West River Street in Placer County to the south.

The Truckee Town Council awarded the construction contract to Gordon N. Ball, Inc. on September 23, 2014 for a contract amount of \$7,870,230 and a contingency budget of 10% or \$787,000.

Construction Management

Approximately 40% of the work has been completed (on a cost basis). To date, 87 submittals and 26 Requests for Information have been received from Gordon N. Ball, most of which have been reviewed and returned. No Field Change Notices have been issued and one Design Change Notice has been issued for the powder coating of the pedestrian railing. Four change orders have been approved resulting in a \$26,000 (0.3%) net increase in the contract amount. In addition, the contractor has submitted a value engineering cost proposal to change the portal shoring methodology which may result in a cost savings to the project equal to approximately \$43,000.

Construction Activities

Construction activities are summarized below:

- **Jacking Slab and Backstop:** The jacking slab and the backstop for the jacking operation are complete.
- **Retaining Walls:** The footing for retaining wall # 1 (south side of tunnel) and #2 (north side of tunnel) have been completed and the walls are nearing completion. The backfilling of some portions of the walls is also in progress.
- **Tunnel Box:** The tunnel box has been completed and is ready for the jacking operation.
- **Freeze Pipe:** The ground freezing system has been installed and is in the process of freezing the embankment above the tunnel location. The system will continue to function during the jacking operation.
- **Jacking Operation:** The jacking equipment has been installed between the backstop and the tunnel box. The jacking of the tunnel box through the railroad embankment is scheduled to start September 8th, 2015.

The contractor currently hopes to complete construction in 2015, but it is likely that some work will need to continue into 2016.

Union Pacific Railroad Coordination

A full-time railroad flagger is currently on site because operations are occurring near or under the tracks. In addition, the Union Pacific Railroad has reviewed and returned all five of the major submittals that have been sent to them. While some of the submittals were returned with comments, none of the outstanding issues are considered significant.

Please contact Becky Bucar at (530) 582-2932 or bbucar@townoftruckee.com if you have any questions.

SR 89 Mousehole Construction Update

Mousehole Update (August 14, 2015)

Construction Activities:

The prep work at the north portal is complete and all the freeze piping is in place. The freeze process has begun. Check out the photos below - that's ice all over the pipe fittings at the portal wall. It is expected that the soil will reach minus 15 degrees Fahrenheit. At this time, it is expected that the jack and bore operation will begin close to September 1st. Once it starts, it will continue 24 hours a day, 7 days a week for about two weeks. Once started, it can't stop until it's done. During the next two weeks, contractor will be installing the cutting edge on the end of the tunnel box and setting up the jacking equipment between the tunnel box and the backstop. Work is continuing on retaining wall #2 north of the tunnel and also on retaining wall #1 south of the tunnel. And don't forget to check out the "Mouse Cam" to follow our progress. <https://www.workzonecam.com/projects/townoftruckee/mousehole/video>



Traffic Concerns:

Thursday, August 20th, we have a lane closure scheduled for the north side of the tunnel between 5 am and 10 am for pouring concrete at retaining wall #2. For the next several weeks, we will also have a flagman stopping traffic for short periods of time to allow trucks to safely enter and exit the work site on the north side of the tunnel.

Mousehole Update (July 31, 2015)

Construction Activities:

We are getting closer to the big event, the boring of the tunnel wall under the tracks. The prep work at the north and south portals will be complete by July 31 and the soil freezing equipment will be ready to go by August 5. The freezing process will occur 24 hours a day for about 4 weeks. The final concrete pour to complete the construction of the tunnel box south of the tunnel will occur July 31.

The contractor is making good progress on the retaining walls with the final pour of the north part of retaining wall #2 happening August 4. Once the north part of retaining wall #2 is finished, the crews will move to pour retaining wall #1 south of the entrance to the trailer park. Excavation of the south portion of retaining wall #2 (just north of the north portal) will begin next week. As in the past, dump trucks will be entering and exiting the work site so caution should be taken when driving past this area.



Mousehole Update (July 17, 2015)

Construction Activities:

A lot of work has happened in the last two weeks. The first section of retaining wall #2 was poured on the

north side of the tunnel. The rebar is close to finished on the tunnel box and you can see the Styrofoam arch on top that will form the curved arch inside the tunnel. When complete, the tunnel box will weigh about 800 tons. You can imagine how much force that will take to push under



the railroad tracks! The installation of the freeze pipes at the north portal is getting close to completion.

In about two weeks, all the freeze pipes will be in place and the freezing process can begin. That will take about 4 or 5 weeks to completely freeze the soil. The jack and bore operation (the actual pushing of the tunnel box through the hill) should start around the first week in September. Within two weeks, excavation for the remaining retaining wall #2 footing between the south end of the wall and the north portal will take place. This will put several dump trucks on the road. Keep an eye out for them!



<https://www.workzonecam.com/projects/townoftruckee/mousehole/video>

Traffic Concerns:

The concrete pour scheduled for next Monday at retaining wall #2 will require single lane controlled traffic similar to past pours. The lane closure will be from 5 am to 10 am. This same closure will occur next Friday as well. When the excavation at retaining wall #2 resumes in two weeks, dump trucks will be entering and exiting the job site on the north side of the tunnel. A flagman will be there to assist the truck drivers and keep their operation safe.

