

## **Highway 50 Closure: Echo Summit Barrier Replacement Frequently Asked Questions**

**Q: Where is this project taking place?**

- West of Meyers on Highway 50.
- The limits of construction begin at the Echo Summit Caltrans Maintenance Station (PM 66.6) and continue east for 1.2 miles ending at the junction of Highway 50 and Meyers Rd. (PM 67.8).

**Q: When is this project going into construction?**

- April/May (weather permitting) of 2011
- Caltrans would like to begin construction as early as possible in 2011 to ensure completion before the busy season.

**Q: Why is Caltrans building this project?**

- The primary purpose of this project is to improve safety along the section of US 50 known as Upper Meyers Grade at Echo Summit.
- Due to errant vehicles, falling rocks, snow removal equipment, and weather, the existing rock masonry parapets have deteriorated to the point where they no longer serve as a positive barrier to the traveling public.
- In addition the existing parapets do not meet current State and Federal safety standards.

**Q: What is the scope of this project?**

- The main goal of this project is to replace the failed rock masonry parapets with a new concrete barrier.
  - This requires a concrete slab to be placed in the eastbound lane which will serve as an anchor or structural base for the concrete barrier.
- Additional work within the project limits will include:
  - Replacement of thirteen drainage inlets
  - Lining of thirteen cross culverts
  - Reconstruction of existing metal beam guard rail.
  - Hot Mix Asphalt overlay
  - Rehabilitation of an existing Roadway Weather Information System (RWIS)

**Q: How is Caltrans going to create a barrier out of concrete without impacting the aesthetic quality of the existing wall?**

- Even though the new barrier will be built out of concrete, the barrier will be cast with a façade resembling the existing walls texture of rock masonry.
- This concrete façade will also be colored to mimic the existing rock masonry.
- Caltrans will have a test panel made prior to construction and approved by Tahoe Regional Planning Agency (TRPA) to insure an aesthetically pleasing product.

**Q: Will the new concrete barrier be any taller than the existing wall?**

- Yes. The existing wall is only about 18" high and well under current safety standards. The current proposed design height is about 32" in order to meet safety standards.

**Q: Will a wall nearly double in height cause an obstructed view of the Tahoe Basin as people travel down the summit?**

- Even though the wall will increase in height, it is not believed to impact the view of the traveling public.
- Caltrans is working with TRPA regarding this issue to insure the sight of the traveling public is not negatively impacted.

May 5, 2010

**Q: How is Caltrans proposing to build the barrier?**

- In order to make the new barrier structurally sufficient, it must be positively fixed to something below. The existing retaining wall will not provide adequate support. The eastbound lane will be partially excavated and a reinforced concrete slab will be poured creating an ample base for the concrete barrier to be connected.

**Q: With one lane being excavated how will Caltrans handle traffic?**

- In this particular section of Highway 50, the road width is very narrow and confined by a vertical rock cut slope on the mountain side and a nearly vertical downward slope on the Basin side.
- By excavating one lane, the space becomes even more confined. This would allow for minimal movement of the traveling public and construction equipment.
- If standard one-way reversing traffic control were to be used, it is estimated to slow construction progress down and take nearly 3 complete seasons to finish.
- Caltrans has looked into many scenarios to move traffic around the project.
- After many meetings with local agencies and many suggestions, it was informally agreed by most parties that a full detour of Highway 50 away from the work zone would be the fastest and most efficient way to complete the project.
- The closure is estimated to last only 14 consecutive days in early May 2011. The detour around the closure would add 60 to 90 minutes to the drive time into the Basin, depending on the point of beginning.
- This was seen as having the least impact on the traveling public and surrounding communities overall.

**Q: What will Caltrans sign as an official detour?**

- The current plan is to direct traffic heading for South Lake Tahoe off of Highway 50 in Sacramento onto Highway 16 (east) to Highway 49 (south) to Highway 88 (east) to Highway 89 (north) and back onto Highway 50.
- The vehicles that begin their trip on Highway 50 after Sacramento will have the opportunity to take Highway 49 (south) in Placerville to Highway 88.
- Numerous other state highway routes exist that can serve as an option to South Lake Tahoe.

**Q: Why not use Johnson Pass Road (JPR)?**

- It is not owned by Caltrans.
- It does not have the roadway structural section (strength) to support highway type loading.
- Within the steep and narrow section there are two switch back turns. Any vehicle over 16 feet, axle to axle, or any vehicle towing a trailer would not be able to successfully navigate this alignment. Sorting such vehicles from the traffic stream on 50 would be expensive and cause congestion and inconvenience.
- The slowdown of traffic entering and driving on JPR will cause significant delays on 50.
- Use of JPR would significantly impact the residents of the 40 to 50 home and cabins along the route.
- If JPR is used as a detour, it is unavailable for use by emergency vehicles during the construction.
- JPR geometrics, alignment and safety features are far out of Caltrans standards, with tight turns, narrow width, and steep grades. There are better detour routes available on existing State highways.
- In April/May it is likely this route will have some snow on it, but if it is open, locals and those that know about the route can use it on their own accord.

**Q: Wouldn't Mormon Emigrant Trail/Iron Mountain Road (MET) be a better option as a signed detour?**

- Caltrans does not own MET.
- Caltrans has coordinated with USFS to pursue the use of MET; however after an in depth review of requirements and costs, MET it was deemed impracticable.
  - Issues included bringing the road up to Caltrans standards, addressing safety issues, liability responsibilities, maintenance responsibilities, snow removal, repair of damages caused by traffic and snow removal equipment, etc.
  - The overall cost estimates to address these issues proved the use of MET is not a feasible solution. Costs are dependent on many differing issues but the range is from a bare minimum of \$500,000 to a worst case of \$6,000,000. Our best guess is that the costs to use MET would fall in the \$3,000,000 to \$5,000,000 range. The programmed amount for this project is \$6,000,000, which is sufficient to construct the proposed work but not to cover MET costs as well.
  - Use of MET would also have significant impacts on the local community through which the detour traffic would pass. There would be costs to quantify and mitigate those impacts.
- In April/May it is likely this route will have some snow on it, but if it is open, locals and those that know about the route can use it on their own accord.

**Q: Why not build the project later in the summer so that MET and Johnson Pass Rd are sure to be clear of snow allowing travelers more route options?**

- It will be unacceptable for Caltrans to close Highway 50 at Echo Summit during the busy part of the summer (4<sup>th</sup> of July to Labor Day).
- We do not want to close 50 during after Labor Day (October) because October is still a month of high fire danger when compared to May.
- 14 consecutive days of closure will be needed to complete the barrier portion of the project followed by 36 nonconsecutive working days of standard reversing traffic control for remaining work. Building the project later in the summer takes construction through October and runs the risk of not being completed before winter weather sets in. This in turn makes it difficult to administer the incentive/disincentive clauses in the contract that are the best tools to encourage and reward early completion.

**Q: Will the 14 consecutive days of closure be for the entire project or will additional work follow?**

- The 14 days of closure is to ensure the completion of the concrete slab and concrete barrier portion of the project.
- Following these 14 days of closure, the contractor may need up to 36 working days of standard one-way reversing traffic control to complete other aspects of the project scope.

**Q: What is Caltrans doing to guarantee the project goes smoothly and is completed on schedule?**

- Because of the full closure, it is important the contractor gets in and out as fast as possible. Caltrans has incorporated a few things to help with this...
  - Incentive/Disincentive payments
    - Bonus Payment for early completion dates and penalties for late completion dates.
  - 24/7 work operation
- A motivated contractor will also complete additional work concurrently with the slabs and barriers under the full closure.
  - This would reduce the amount of working days under reversing traffic control that may follow the closure.

May 5, 2010

**Q: What if there is an emergency (Fire, Slide, etc) and/or a mass evacuation of the Basin is needed?**

- Caltrans and the contractor will work closely with all first responders who may need immediate access through the construction sight.
- A strong reason to not use Johnson Pass Road as part of the official detour route is to have this road available to move small emergency vehicles (police, ambulance, etc.) across Echo Summit during construction.
- In the project contract, strong wording will be in place to direct the contractor to have the highway open within a short period (i.e., minutes) of being notified to do so, if needed.

**Q: What kind of public outreach is being considered to inform the public of this closure?**

- Caltrans experienced a lot of success with the FIX I-5 closure outreach process.
- Caltrans is anticipating a public out reach campaign much like the FIX I-5.
  - TV ads, News Coverage, Radio time, mass emails, websites, Roadside signs, etc.
- Caltrans wants everyone to know that Tahoe is open and there are still ways to get there.
- It's important that businesses in Tahoe help with the campaign and post information on their websites as well.
- Community outreach for and to affected property owners, businesses, and residents in the Basin and the west slopes.