

2016 Local Streets and Roads Awards Program Nomination

COUNTY ENGINEERS ASSOCIATION OF CALIFORNIA

SAVE CALIFORNIA'S STREETS

NOMINATION DIVISION: Complete Streets and Multi-Mobility Projects

PLACER COUNTY **Kings Beach Commercial Core Improvement** **Project**



Overall Perspective Looking North

KINGS BEACH COMMERCIAL CORE IMPROVEMENT PROJECT
November, 2011

Overall Perspective
DESIGN WORKSHOP
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DEADLINE: January 13, 2016
PROJECT NAME: Kings Beach Commercial Core Improvement Project
PROJECT COMPLETION DATE: November 2016
PUBLIC AGENCY: Placer County

PROJECT LOCATION:

The Kings Beach Commercial Core Improvement Project (Project) is located within the County's unincorporated area of Kings Beach. Kings Beach is on the North Shore of Lake Tahoe near the California/Nevada State Line. The Project represents a public investment in excess of \$45 million to revitalize Kings Beach through constructing storm water drainage and treatment infrastructure, reconfiguring and rebuilding State Route 28, and adding 10-ft nominal wide sidewalks, Class 2 bike lanes, and public bus turn outs. The project is centered on transforming the highway from four lanes to three lanes with roundabouts and limited on-highway seasonal parking. In addition, portions of the "Grid" County roads that intersect the highway will also be improved with stormwater infrastructure, sidewalks, formalized parking areas and traffic calming measures.

Since 2002, Public Works has embraced this project as the highest priority effort in North Lake Tahoe to improve storm water runoff conditions in a densely built area, address safety and the need for enhanced multimodal mobility, and help rejuvenate Kings Beach so in the end, State Route 28 will function more as a town main street than as limited access highway.

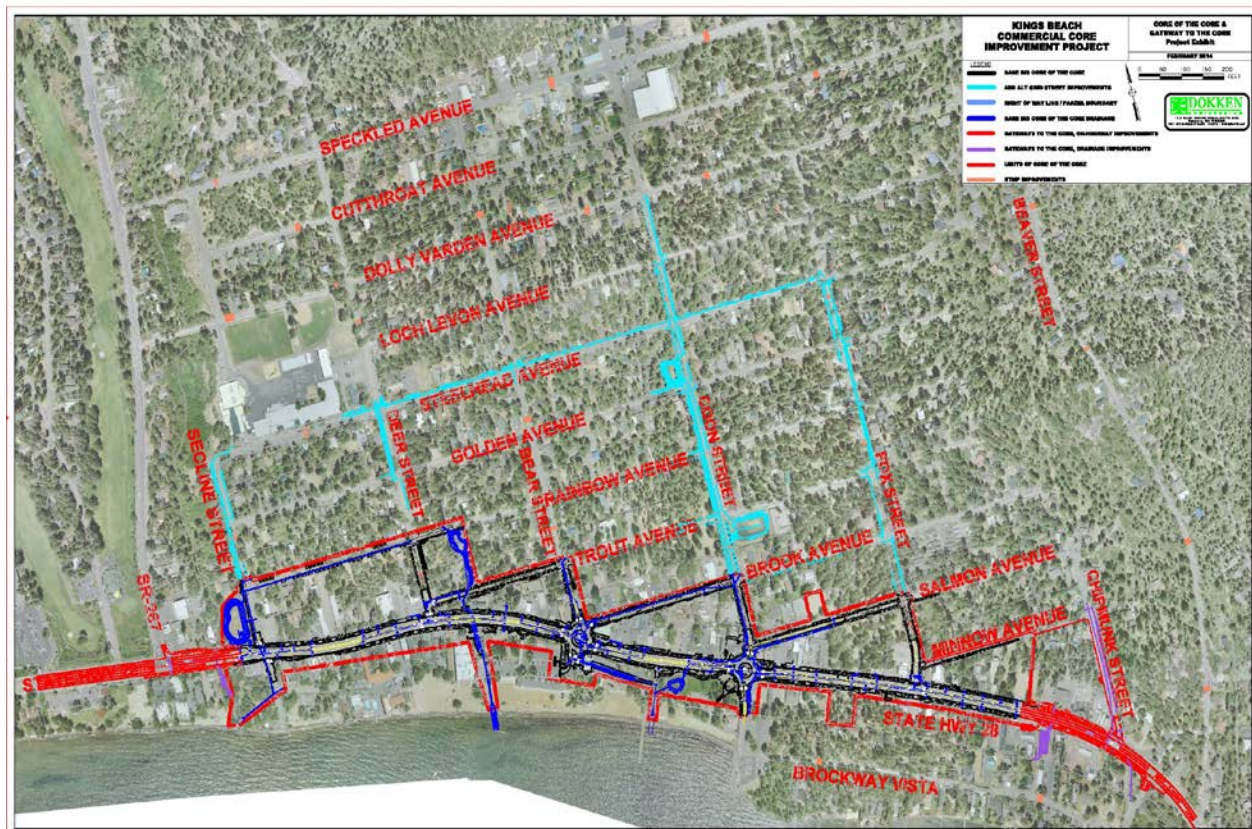


Figure 1: Location Map

SUPPORTING DOCUMENTATION

Schedule:

Construction of The Kings Beach Commercial Core Project began in April 2014 following the design, bid, build process. Q&D Construction Inc., was the lowest responsible and responsive bidder. The project will be completed on November 20, 2015. The project specifications limited the time of year and hours of operations Q&D, however through innovative planning and scheduling Q&D was able to finish the project in two construction seasons.

The Kings Beach Commercial Core Improvement project is using Primavera P6 for tracking the construction schedule. P6 is used to track the project critical path, project float and task completion dates. The base line schedule was setup to construct improvements in the heart of Kings Beach between two new roundabouts at Bear and Coon streets respectively. This area was completed first to be a show case for the surrounding neighbors and business. Show casing this area allowed business owners on the periphery to see the value of what was about to happen in front of their business.

In addition to the monthly updates to the project schedule a 3-week look ahead schedule is discussed at each project team weekly meeting. The 3-week look ahead allowed for the proper planning and staffing so that critical items had the proper staff and inspection. The weekly Owner/Engineer/Contractor meetings were critical to resolving any and all outstanding concerns in a timely manner.

Q&D Construction managed the project with an on-site Project Manager and an on-site Superintendent. With the proper staffing a great relationship was built between Placer County, Dokken Engineering, CH2MHill, and Q&D Construction. Close cooperation and a great working relationship between the team were keys to constructing the complex project.

Q&D Construction focused on all the underground work and the round-a-bouts the first construction season. This allowed for a real focused effort on the surface improvement in season number two.

Construction schedules are always very difficult to deal when working at Lake Tahoe. There are comprehensive regulations and permits that limit working times. The weather is always unpredictable also with summer thunderstorms and early winter snows. Q&D planned ahead and was prepared to adjust during the construction of this project which limited the down days and keep the project on the planned schedule.



Figure 2: Underground Vault Construction

Safety:

We are proud to say that to date there have been no lost man hours due to injuries sustained on the project. As of July 12, 2015 we have worked 189 consecutive days with no reported injuries. We credit this achievement to a safety conscious culture by both the contractor and the construction management team. Every morning prior to starting work the construction crew discusses a new safety topic. . Each meeting held with the construction management team starts with a safety topic/moment. Some of these topics include being alert to vehicular traffic, watching for overhead wires, walking the area prior to digging, no excavation without a spotter, and staying hydrated. The entire team operates on a “don’t walk by” program, meaning, if you see a safety issue you own it, take care if it philosophy.

PPE (personal protective equipment) is required for all employees and site personnel at all times, including hard hats, class three safety vest, safety shoes, and glasses.

Our “Target Zero” injuries has been successful for approximately 125,000 man hours worked on this project.

Environmental Awareness:

Being located in the Lake Tahoe Basin a lot of work went into environmental considerations throughout the entire project process. The Kings Beach project at its core is an erosion control project with roadway and streetscape improvements. The project pre-treats stormwater through sumps and vaults allowing for larger pollutants to drop out. In addition this project installed 7 sets of 15' deep by 12' diameter concrete chambers, each with up to 8 high flow filter cartridges to help remove pollutants from the new installed storm water system. These “Jellyfish” filters remove the fine particulates from the stormwater before it is discharged into Lake Tahoe. The fine particulates are the number one reason the clarity of Lake Tahoe is diminishing.



Figure 3: Jellyfish Construction

To deal with found groundwater during construction of deep facilities an ATS system was brought onsite to treat groundwater that was encountered. The ATS system was able to achieve a discharge to less than 3NTU.

Where every possible on the project recycled materials were used. This includes use of recycled asphalt, recycled concrete, recycled pavers, and reuse of established

vegetation in the new sediment basins just to name a few. Pervious concrete is also included on the project to stabilize eroding road shoulders and provide parking that did not tract fine sediments onto the roadways and eventually into the stormwater runoff. Landscaping was designed and constructed to not burden the scare resource of water and be easily maintained.

Lastly the project considered the “Grid” streets and how changing configuration of the highway would affect the neighborhood. The project included the implementation of the Neighborhood Traffic Calm Plan which helps discourage cut-through traffic through the use of traffic calming devices such as speed humps and speed cushions.

Community Relations:

The Community was involved throughout this project beginning with the selection of the design team. The project was identified in a multitude of planning documents. During the planning and design phase many community meeting were held to inform and receive input from the public. Design review committees were consulted during the design with the engineer showcasing the important design features. Some of the notable details of the community relations effort are listed below

- Over 200 properties/business owner meetings.
- Streetscape amenities selected by community process.
- Selected project hybrid alternative driven by the community through public process
- Public outreach throughout construction by project-specific website with live traffic camera of construction activities, regular e-blasts sent to residence, businesses, and property owners
- Extensive door to door visits to explain project details and limit construction impacts, improving public relations
- Extensive effort to maintain special events even during the most difficult construction activities



Figure 4: Community Relation Signage

Unusual accomplishments:

Project delivery near Lake Tahoe is always challenging being constructed in the Sierra Nevada Mountains at over 6200 feet in elevation. This is due to many reasons including permit requirements, short construction seasons, area visitors, and unique project sites. Excavations in Tahoe are limited to occur between May through October, however seasonal conditions still control whether excavations can proceed or not.

For both 2014 and 2015 the project started in April, a month earlier than planned. Working thru snow storms and high ground water the project was able to proceed and get ahead of schedule. Starting early allow construction of both roundabouts in the first season, and before the July 4th tourist season.

The Kings Beach area has a very active pedestrian contingent as part of the tourist base and working around this large volume of pedestrians required constant vigilance, and guidance to operators, and providing extra guidance to the public.

On numerous occasions the construction crew coordinated their activities around local , special events including the Iron Man triathlon, paddling boarding events, music on the beach, and bicycle road races, All this was done while staying ahead of schedule, keeping traffic delays under 5 minutes, and keeping access open to the adjacent business.



Figure 5: Core Construction

The project funding was also very complicated having various sources with specific restrictions and reporting needs. Specific funds required data collection from the contractor and the subcontractors on the project.

This funding scheme and being on a State Highway produced a complex partnering environment. All parties performed well, taking time to listen to issues and work with each other to resolve the issues. Some of the partners were Caltrans, FHWA, North Lake Tahoe Business Association, North Lake Tahoe Resort Association, and members of the Kings Beach Community.





Figures 6, 7 & 8: Completed Downtown Areas with 'Complete Street' Infrastructure

Additional Considerations:

Through the main core business district in Kings Beach Highway 28 was a four lane highway with no pedestrian or bicycle facilities at all. This project can be considered a “complete street” project also. By using nearly the same right-of-way area and reconfiguring the paved traveled ways the street becomes a true multi-modal project. There are now bike lanes and sidewalks that getting people out of their vehicles and providing safe areas for shopping, visiting, and enjoying Lake Tahoe. In addition the street is much easier to cross three lanes rather than the old four lane configuration. Traffic has been slowed in the area through traffic calming round-a-bouts so that pedestrians can cross safely.

Concerns about maintenance of the new facilities were express many times. The County with the assistance of the North Tahoe Business Association worked together to form and build a Benefit Assessment District of which the funds will support the long term maintenance of the project including snow removal, sweeping, and repair of the landscaping features.

Please see the attached before and after photo set for examples of how this project is a complete street.



Figure 9: Coon St and Highway 28 Roundabout



Figure 10: Aerial View of Project

NOMINATED BY

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