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## Memo

March 12, 2015

TO:

Discovery Bay Community Services District (CSD)

Discovery Bay, CA

FROM:

Mary Halle, Associate Civil Engineer

John Honey, Staff Engineer

Transportation Engineering Division

SUBJECT:

Staff Report - Discovery Bay Area of Benefit (AOB) Update

## **MESSAGE:**

Contra Costa County (County) staff attended the October 15, 2014 Discovery Bay Community Services District (CSD) meeting along with the County's consultant, DKS Associates. DKS Associates presented the results of the Discovery Bay AOB Needs Assessment for transportation infrastructure. The presentation included a list of recommended projects as shown below.

	otential P	rojects for	Upda	ted Li	st
Roadway	Location	Recommended Project	Benefit	Cost	Feasibility
Discovery	Intersection with SR-4	Modify signal timing	High	Low	High
Bay Boulevard	Intersection with Clipper Drive	Modify intersection control	High	Moderate	Moderate
	Between Newport Drive and Discovery Bay Boulevard	Widen roadway	High	Moderate	Moderate
SR-4		Bicycle improvements	High	Moderate	Moderate
	Intersection with Newport Drive	Add traffic signal <sup>2</sup>	High	Moderate	Moderate
Byron Highway	Intersection with Byer Road	Add SB left-turn	High	Moderate	Moderate

The following feedback and questions were received from CSD Board members during the October 15<sup>th</sup> presentation:

1. Comment: If the intersection improvement at Discovery Bay Boulevard and Clipper Drive is a roundabout, will a single lane roundabout work? Reducing the capacity from two lanes to one would result in serious congestion.

Response: The projects on an AOB project list are general in concept to allow flexibility in scope as traffic needs in the future become more apparent. This project is listed as "Modify Intersection Control at Discovery Bay Boulevard and Clipper Drive." The detailed scope and design of the project will be determined at a later date with plenty of opportunity for community feedback on the detailed design. The preliminary cost estimates for the program update are conservative with substantial contingency. Accordingly, the Discovery Bay Blvd./Clipper Drive cost estimate will be based upon a two-lane roundabout to assure that an adequate budget is provided.

2. Comment: Widening State Route 4 to four lanes from Newport Drive to Discovery Bay Boulevard would not increase capacity when the bridge west of Newport Drive only has two lanes.

Response: The cost estimate for this project will include bridge widening west of Newport Drive to assure the estimate is conservative. The detailed project scope will be determined in the future based upon the traffic needs at that time.

3. Comment: It is a high priority for Discovery Bay residents to gain improved access on Balfour Road from Discovery Bay West to Sellers Road.

Response: The Balfour Road shoulder widening project is included on the East County Regional AOB list and the current design is at 65%, moving forward for construction within the next three years. It appears that there is adequate funding to move the project forward so this project will not be added to the Discovery Bay project list.

4. Comment: There is excessive speeding on Newport Drive and Clipper Drive. Can traffic calming measures be added to the project list such as roundabouts?

Response: Yes. Traffic calming measures on Clipper Drive have been added to the proposed project list. The type of traffic calming will potentially include roundabouts and bike lanes.

5. Comment: Bixler Road widening should be considered from SR4 to Byer Road to allow for bike lanes that connect the students from Discovery Bay to Excelsior Middle School. Bike lanes on Byer should also be considered.

Response: The project list has been updated to include a bike lane/shoulder widening project for both Bixler Road and Byer Road.

6. Comment: The project at the intersection of Byron Highway and Byer Road will be a necessary improvement as people are passing on the dirt shoulder every day.

Response: Comment noted. We understand this is a high priority project. Staff is working on a preliminary layout at this time and has been coordinating with the school administration. This project is also included in the East County Regional AOB (ECRAOB) (projects 8 and 14) and can be partially funded through ECRAOB as well as Discovery Bay AOB (DBAOB).

7. Comment: The proposed signal at SR4 and Newport Drive may not be necessary. It is not anticipated that residents from Pantages Bays will be accessing Newport Drive.

Response: This is valuable feedback. Staff understands that traffic modeling does not always correctly predict human behavior and traffic patterns. It is recommended to leave this project on the proposed list as it will provide the flexibility to use AOB funding for any type of operational improvements at this intersection in the future. If the project is eliminated from the list at this time, there will not be an option to use AOB funds at this location in the future.

8. Comment: How does the DBAOB relate to the ECRAOB and should the Discovery Bay Boundary be expanded to include areas to the west?

Response: The map of ECRAOB (attached) shows that all areas of the County are included in a traffic fee program. The Discovery Bay West area is included in the ECRAOB which is a larger area with more projects on the list and a higher fee rate. The ECRAOB list is attached. There are overlapping projects that appear on both the ECRAOB and DBAOB project lists so that each area contributes their fair share towards their respective project list. It is not recommended to change the boundaries as the current format allows growth from Discovery Bay West (DBW) to contribute towards projects within the extents of the ECRAOB boundary and these projects were identified as experiencing impacts due to the DBW development.

9. Comment: Was a fifth Liberty Union High School site factored into the traffic model?

Response: Yes, future trips associated with the high school accommodating 2200 students has been factored into the traffic model.

10. Comment: With less than 100 units yet to develop in Discovery Bay, does the County recognize that limited funds will be generated.

Response: Yes, we recognize that the DBAOB will not generate substantial funding; however, if the DBAOB can contribute \$100,000 towards a project, this can often provide the local funding match required for a state or federal grant that can provide up to 80-90% of the total project funding. It's a great way to stretch the local dollars.

11. During discussion of the proposed project on Byron Highway at Byer Road, there was a question asked whether improvements to Byron Highway were listed in the East County AOB project list.

Response: There are two projects listed in the East County AOB project list that correspond to the proposed project site; please review item numbers 8 and 14 in the East County AOB List in Attachment A. If the Byron/Byer intersection is included in the updated Discovery Bay AOB project list, it will be eligible for fair share funding from both East County and Discovery Bay Areas of Benefit.

12. The CSD Board asked to see a map of the East County AOB boundaries and projects. The East County AOB boundary map and project lists are shown in Appendix A.

Incorporating the feedback from the October 15<sup>th</sup> meeting, Staff recommends the following project list as we move forward to update the Discovery Bay AOB program:

## **Discovery Bay AOB - Modified Project List**

NO.	Project Name	Roadway	Location	Description
1	Discovery Bay-Clipper Drive Intersection Modification	Discovery Bay Boulevard	Intersection with Clipper Drive	Construct Intersection improvements, such as roundabouts, in order to enhance efficiency and safety.
2	Discovery Bay-SR4 Road Widening	SR-4	Between Bixler Road and Discovery Bay Boulevard	Construct new paved section to provide adequate space for four-lanes, bike lanes, shoulders, and modify or replace bridge.
3	Newport Drive Traffic Signal		Intersection with Newport Drive	Install a traffic signal with a left-turn pocket.
4	Byron Highway-Byer Road Intersection Modification	Byron Highway	Intersection with Byer Road	Add a left-turn pocket.
5	Clipper Drive Traffic Calming	Clipper Drive	Between Newport Drive and Discovery Bay Boulevard	Construct two roundabouts with bike lanes at Reef Court and Balboa Way.
6	Bixler Road Widening	Bixler Road	Between SR-4 and Byer Road	Widen roadway to provide adequate space for vehicular lanes two-lane, bike lanes, and shoulders.
7	Byer Road Widening	Byer Road	Between Bixler Road and Byron Highway	Widen roadway to provide adequate space for vehicular lanes two-lane, bike lanes, and shoulders.



## **Next Steps**

County Staff requests the CSD to provide recommendations to Supervisor Piepho's office so that County staff and our consultant can move forward with preparation of the Nexus Study and documentation required to implement an update to the AOB program.

Comments or questions regarding the AOB update for Discovery Bay can be directed to John Honey at (925) 313-2371 (jhone@pw.cccounty.us), or Mary Halle at (925) 313-2327 (mhall@pw.cccounty.us).

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