

BOARD OF DIRECTORS MEETING

MINUTES

REGULAR MEETING

Thursday, February 20th, 2020

2:00 PM

(Paragraph numbers coincide with agenda item numbers)

1. CALL TO ORDER

The regular meeting of the Delta Conveyance Design and Construction Authority (DCA) Board of Directors was called to order in the Sacramento Public Library, Tsakopoulos Library Galleria, 828 I Street, Sacramento, CA 95814, at 2:00 p.m.

2. ROLL CALL

Board members in attendance were Tony Estremera, Sarah Palmer, Steve Blois, and Stephen Arakawa constituting a quorum of the Board.

DCA staff members in attendance were Kathryn Mallon, Carrie Buckman, Joshua Nelson, Phil Ryan, Graham Bradner, and Katano Kasaine.

Guest member in attendance was Dan Adams

3. PLEDGE OF ALLEGIANCE

President Tony Estremera convened the open session at approximately 2:13 p.m. and led all present in reciting the Pledge of Allegiance.

4. CLOSED SESSION

There were no reportable items out of Closed Session.

5. PUBLIC COMMENT

President Estremera opened Public Comment, limiting speaking time to three minutes each.

President Estremera closed Public Comment.

6. APPROVAL OF MINUTES: January 16, 2020 Regular Board Meeting

Recommendation: Approve the January 16, 2020 Regular Board Meeting Minutes

Move to Approve Minutes from January 16, 2020 as Amended: Palmer

Second: Blois

Yeas: Estremera, Palmer, Blois, Arakawa

Nays: None

Abstains: None
 Recusals: None
 Absent: None
 Summary: 4 Yeas; 0 Nays; 0 Abstains; 0 Absent. (Motion passed as MO 20-02-01).

Recommendation: Approve the February 6, 2020 Special Board Meeting Minutes

Move to Approve Minutes from February 6, 2020 as Amended: Palmer

Second: Blois
 Yeas: Estremera, Palmer, Blois, Arakawa
 Nays: None
 Abstains: None
 Recusals: None
 Absent: None
 Summary: 4 Yeas; 0 Nays; 0 Abstains; 0 Absent. (Motion passed as MO 20-02-02).

7. CONSENT CALENDAR

a. None.

8. DISCUSSION ITEMS:

a. Stakeholder Engagement Committee Update

Ms. Mallon gave a brief summary of content that was presented at the last SEC meeting. The discussions have been challenging thus far but the DCA expects to have more input from the committee in terms of flexibility on siting. The next SEC meeting will include information on the Shaft Launch Siting as well as an introduction to the retrievals and launch shafts along the Central and Eastern Corridors. The DCA is currently scheduling some tours for the committee to visit an existing intake, Tee Screen manufacturer, as well as a location with an operating launch shaft to see the tunnel borings machine, the operation of the liner and the tunnel spoils conveying out.

Mr. Arakawa inquired about the attendance of committee members at these SEC meetings. Ms. Mallon responded that the majority of the committee members attend each meeting except for one or two individuals per meeting. Ms. Palmer noted committee members are expressing their viewpoints openly in each meeting.

b. Findings of the Independent Technical Review (ITR) Committee Report

Ms. Mallon introduced Mr. Dan Adams who is the President of McMillen Jacobs & Associates, who specialize in tunneling and other major water resource infrastructure projects. Mr. Adams was the facilitator of the ITR panel. These panels get assembled periodically to take a deeper look, with outside experts, at specific topics.

Mr. Adams went into detail of the process of this ITR, including 6 international experts contributing their feedback. The first major topic they were requested to look at was the tunnel drive lengths. The conclusion they came to was that a drive length up to 15 miles is achievable. Due to the ground conditions being favorable and average water pressure, 15 miles is possible. In additional, the size of

the tunnel provides plenty of space for flexibility in terms of logistics of the work. Lastly, in the operation and planning in the tunnel, it is recommended to set up 1 or 2 smaller maintenance shafts for repairs as needed. Mr. Adams noted that the ITR believes that this project is more of a logistics project rather than a tunnel project.

Mr. Adams discussed the Alignment review that took place which included visiting each of the proposed shaft sites. The take away from this visit was that the Central Corridor was logistically impractical. The Eastern Corridor was deemed favorable due to the proximity of I-5 which offers flexibility on ways to deliver items to the job. The vertical alignment of the tunnel was going to reduce the pressure on the outside of the machine which makes building the tunnel much easier and with less wear and tear.

Mr. Adams discussed logistics and advances in procurement. Planning for off-site production of segments as well as having on-site storage for those segments is recommended. Reusable Tunnel Material (RTM) was discussed extensively due to this being an important consideration in the tunnel industry regarding cost and pricing certainty. The ITR team was concerned about a determination for what this reuse will be like or where can be deposited. Habitat restoration was a suggestion as well as berms. Mr. Adams spoke about tunnel safety with the recommendation to start conversations early with CalOSHA as well as have a tunnel rescue plan in place.

Mr. Adams mentioned that the ITR recommends considering design-build for contract delivery. With this, there is a higher likelihood of achieving desired schedules. It also facilitates early contractor involvement and the shaft size and configuration can be greatly optimized. The contract sizes are expected to be large jobs which resulted in a recommended \$1.5B to 2B contract value to ensure bonding availability.

Lastly, Mr. Adams and his fellow panel members were asked to look over the stakeholder's prior concerns for WaterFix. The concerns that came about were typical for jobs like these and the ITR Board felt that none of these concerns were impediments to this new project.

Ms. Mallon expressed appreciation for the insights that came from the construction industry. While the DCA does not agree with some of the conclusions of the ITR, it is helpful to have their insight and recommendations. Some design evolution came about such as knowing that the ITR Board felt comfortable with longer drive runs. The logistics challenges that were discussed were very helpful in mitigating risk on the project. The RTM material discussions were beneficial but the DCA feels confident that RTM can be reused.

c. Intakes Update

Ms. Mallon introduced Phil Ryan who has 36 years of planning, design, and construction experience in water supply and conveyance.

Mr. Ryan summarized the NOP which includes a description of facilities. The intakes siting study area is from the American River to Sutter Slough. Sites on the East bank were the only ones considered because logistics concerns on the West bank made it infeasible. It has been determined that 1 to 3 intakes are required, depending on the size of the project. A site investigation was done, some of which done in the previous phase of the project and some that was completed more recently. The conclusion was that the outside of the bends of the river are the ideal deepness, there is 1 mile

spacing between one another, there is adequate straight lengths for the structures and lastly negligible effects on flood levels. Other areas of investigation were geotechnical concerns, environmental and habitat disruption and logistical access. What the engineers came to the conclusion with is the same sites to be considered for WaterFix have been preliminarily determined to be appropriate for Delta Conveyance.

Mr. Ryan spoke about how they initially eliminated C-E-1 intake due to all of the impacts to the residential area and unfavorable geotechnical conditions. C-E-4 was similarly eliminated because of the location of it being directly in the town of Hood. Of the remaining intakes, C-E-3 is considered the best because of its depth, the sweeping features, stable hole in the river and the intake would be the shortest at this spot. Both C-E-2 and C-E-5 were preliminarily seen as acceptable which will be decided in the environmental process.

Mr. Ryan discussed the intake types that were studied and concluded that an on-bank structure, rather than an in-river facility, would be ideal. The two different types of screens being considered are the Vertical Flat Plate Screen and the Tee Screens. The Tee Screens have the advantage of being easier to clean and better for operations. Mr. Ryan demonstrated the size difference of each screen and how they would operate. Mr. Ryan discussed potential construction methods and responded to Board questions.

d. Launch Shaft Update

Ms. Mallon introduced Mr. Graham Bradner, the Forebay and Levee lead for the project, who has done a significant amount of work on embankments and levees in California.

Mr. Bradner highlighted some key components of the project which are the tunnel launch shaft, intermediate maintenance shaft and retrieval shafts. The tunnel launch shaft is where the deliveries and segment liners will come from, the RTM will come out of, where the power supplies will go in to, tunnel ventilation systems, worker access and emergency access. The RTM will be comprised of clays and sandy materials. Soil conditioners will be used during the tunneling process. The material would then need to be dried to facilitate reuse. Mr. Bradner demonstrated the sequence of operations starting with coppers loading the conveyer and ending with getting deposited on stackers around the site. Ms. Palmer asked if the conditioners being used would limit the reuse of the material. Mr. Bradner responded although there is still further evaluation needing to be done, the typical conditioners are long chain sugar type material which will allow for reuse.

Soil testing results were reviewed and confirmed that there would not be a human health or ecological risk. Additional sampling will occur for future soil testing. Mr. Bradner discussed the RTM that can be used for construction of the Southern Forebay embankment. In addition, other mitigation projects in the Delta may benefit from this material: levee maintenance, Delta restoration projects and subsidence improvements. Mr. Bradner noted that a lot of the site plan space will be dedicated to the management of the RTM and stockpiling of this material. The rail access shown at the top of the site plan will be an advantage to move the material. Ms. Palmer asked if the rail access would decrease the footprint in which Mr. Bradner stated that it would depend on how frequently material could be off-loaded and how long we want to store it on site.

Mr. Bradner then went in to detail regarding the siting methodology beginning with construction consideration, geologic and geotechnical consideration, property and land use consideration and lastly existing infrastructure. There were also sub-criteria considered which are the logistical issues for siting these launch shaft. To conclude his presentation, Mr. Bradner then discussed the pros and cons of the different alignments and the various siting areas as well as why certain areas were not considered for potential drive sites.

e. February DCA Monthly Report

A written report was provided in the Board package.

9. STAFF REPORTS AND ANNOUNCEMENTS:

a. General Counsel's Report

A written report was provided in the Board package.

b. Treasurer's Report

A written report was provided in the Board package.

c. DWR Environmental Manager's Report

A written report was provided in the Board package. Ms. Buckman gave an update about the CEQA process starting. DWR has conducted 6 out of 8 scoping meetings. An additional scoping meeting was added for the town of Redding due to all the requests for having a meeting north of Sacramento. There have been a significant amount of comments and participation which is greatly appreciated.

d. Verbal Reports

No verbal reports were provided.

10. FUTURE AGENDA ITEMS:

None.

11. ADJOURNMENT:

President Estremera adjourned the meeting at 3:16p.m., in the Sacramento Public Library, Tsakopoulos Library Galleria, 828 I Street, Sacramento, CA.