BOARD OF DIRECTORS MEETING

MINUTES

REGULAR MEETING
Thursday, August 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 remotely - Conference Access Information: Phone Number: 1 (916) 262-7278 Access Code: 1497429855# https://meetings.ringcentral.com/j/1497429855. President Atwater said that in an effort to streamline the public comment process, we are now handling public comment requests through an online request form. Ms. Claudia Rodriguez provided an overview of the new process, with the online form being a more efficient way to capture public comment requests. The link to the form is provided on the Agenda.

2. ROLL CALL

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

DCA staff members in attendance were Kathryn Mallon, Joshua Nelson, Graham Bradner, Nazli Parvizi, and Katano Kasaine. Department of Water Resources (DWR) Staff in attendance were Tony Meyers and Carolyn Buckman.

3. PLEDGE OF ALLEGIANCE

President Richard Atwater convened the open session at approximately 2:01 p.m. and led all present in reciting the Pledge of Allegiance.

4. PUBLIC COMMENT

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

There were no public comment request received for non-agendized items.

President Atwater closed Public Comment.

5. APPROVAL OF MINUTES: July 16, 2020 Regular Board Meeting, July 27,2020 Special Board Meeting, August 5, 2020 Special Board Meeting

Recommendation: Approve the July 16, 2020 Regular Board Meeting Minutes, July 27,2020 Special Board Meeting, August 5, 2020 Special Board Meeting

Ms. Palmer referenced some changes to the minutes that she discussed with Ms. Rodriguez. The last sentence to the bylaws needed to be stricken and stated so in the minutes. Ms. Palmer wished to move to pass the resolution as amended.

Move to Approve Minutes from July 16, 2020, July 27,2020, August 5, 2020 as

Amended:	Palmer
Second:	Estremera
Yeas:	Estremera, Palmer, Blois, Atwater
Nays:	None
Abstains:	None
Recusals:	None
Absent:	None
Summary:	4 Yeas; 0 Nays; 0 Abstains; 0 Absent. (Motion passed as MO 20-08-01).

6. CONSENT CALENDAR

   a. The Board moved the Resolution to Approve Amendment #3 to the Joint Exercise Powers Agreement and Determination Approval is Exempt from the California Environmental Quality Act item from the Consent Calendar to the Discuss Items as Item 7a.

7. DISCUSSION ITEMS:

   a. Resolution to Approve Amendment #3 to the Joint Exercise Powers Agreement and Determine Approval is Exempt from the California Environmental Quality Act

   Recommendation: Pass Resolution Adopting Amendment #3 to the Joint Exercise Powers Agreement and Determine Approval is Exempt from the California Environmental Quality Act

   Mr. Nelson provided an overview of the resolution. The JPA sets forth the work we are providing to DWR during the planning and design phase. Amendment #3 has 3 edits to the agreement related to the budget process, update on funding, and cleanup edits. The DCA proposed that Delta Conveyance Office (DCO) be involved in the preparation of the budget and will approve before it goes to the Board for consideration and approval. The DCA proposed budget amendments be handled in the same fashion. Another item in the amendment relating to the budget process is contracts and task orders. The JPA amendment proposed to require DCA to coordinate with DCO related to approval and edits to those agreements. Then DCO approval would be required, but approval is focused on whether the contract amendment is consistent with the approved budget and it is otherwise consistent with DWR's direction for Delta Conveyance. Regarding funding, the JEPA included an increase in DWR's initial contribution. This is temporary funding that is assisting the DCA until the participating water agencies are able to provide more long-term funding and will also reimburse DWR. Lastly, there were some clean up items in the amendment.

   Ms. Molly Culton, Sierra Club California, requests that all discussion of finance be moved from the consent calendar for public comment and input. Ms. Culton felt that the public has a right to know what DWR is financing, given budget impact and constraints due to Covid-19 and wildfires. Members of the public who will be impacted by these projects deserve a complete and transparent financing story.

Ms. Osha Meserve, Local Agencies of the North Delta, also requested finance items be taken off of the consent calendar in order to have a more open discussion. Ms. Meserve asked to be provided a redlined version of these documents in the future. Ms. Meserve felt that there is the potential for environmental impacts associated with receiving an additional $6M in funding. She felt there is a credible dispute as to whether this is appropriate for DWR to advance funds for the project that has not been reviewed or approved. Ms. Meserve disagreed that this be exempted from California Environmental Quality Act (CEQA) and believes there needs to be more clarity about why DWR is putting forth money into a project at this stage in order to keep DCA going forward. Ms. Meserve asked that the JEPA not be amended to allow the additional funding and that if the DCA is going to move forward, that the DCA members should be the ones funding.

Ms. Barbara Barrigan-Parrilla requested that if money is going to be advanced from DWR, that this get spelled out clearly and to make all of the documents accessible to the public. Ms. Barrigan-Parrilla emphasized the importance of transparency.

Ms. Palmer agreed that a red-lined version of these documents would be useful. Mr. Estremera also expressed his agreement on this. Mr. Atwater echoed these statements and felt this was a reasonable request.

Move to Pass Resolution Adopting Amendment #3 to the Joint Exercise Powers Agreement and Determine Approval is Exempt from the California Environmental Quality Act

as Noted:	Estremera
Second:	Palmer
Yeas:	Estremera, Atwater, Palmer, Blois
Nays:	None
Abstains:	None
Recusals:	None
Absent:	None
Summary:	4 Yeas; 0 Nays; 0 Abstains; 0 Absent. (Motion passed as Resolution 20-08).

b. August DCA Monthly Report

Ms. Mallon provided a brief update on the August monthly Board report. This reflects the new $34M budget that was approved at the June Board meeting. Ms. Mallon recognized the controls team on the DCA for their work on the new e-Builder system. We have inserted all of our master contracts and task orders into this full accounting system. Approximately $31M has been committed in the new task orders and residual contract values from previous years. There is one budget change request regarding an error in the line item for payment to SEC members and corrected this under our unallocated funds.

b. DCA Leadership Spotlight – Graham Bradner, Levees Lead

Mr. Bradner is the DCA's lead for Forebays and Levees. Mr. Bradner has a bachelor's degree in Geology and a master's degree in Hydrogeology. He also is the Vice President and serves as Board of Director at GEI Consultants. GEI specializes in major water infrastructure resource projects. Mr. Bradner discussed the other projects he has been a part of and specializes in levee evaluation, embankment dam & spillway assessment, seepage/slope stability analyses, and more. He had a

significant involvement over the years in flood planning and evaluations for DWR. Mr. Bradner has design and construction experience with Bear and Feather Rivers Setback Levees and the Sacramento River East Levee Improvement Project. Additionally, there are Delta special projects that he has worked on more recently. With the DCA, Mr. Bradner is responsible for addressing flood risk mitigations, establishing forebay configurations and components, and leads the siting study efforts for major surface elements such as shafts and materials depots. Mr. Bradner and team are also responsible for the development of the conceptual designs as well as supporting all of the outreach programs going on. Key accomplishments the DCA has completed to date are: performed updated levee vulnerability evaluation, developed siting methodology and criteria for surface elements, developed design concepts for levee modifications/improvements and forebay facilities, performed system-wide studies, and provides preliminary information to be consider for Environmental Impact Report/Environmental Impact Statement (EIR/EIS).

Mr. Blois asked if there is anything technically challenging in this project that would create excess difficulties. Mr. Bradner responded that one of the key challenges is the lack of available information but given where we are in the program, we have the ability to make do with what we have. As the project progresses, there will be a need for additional site-specific data.

Mr. Atwater wanted to know how often the Board will be update on Mr. Bradner's efforts on the project. Mr. Bradner said as often as requested and appropriate such as after passing key milestones.

Ms. Mallon added that Mr. Bradner is a frequent presenter at the SEC meetings because the importance of the work he is doing on the project.

Ms. Palmer spoke about how useful Mr. Bradner's presentations have been thus far. A major concern by the SEC is the levee upkeep and the work the DCA is doing on this is crucial.

c. Presentation on Delta Conveyance Preliminary Cost Assessment

Ms. Mallon introduced Tony Meyers, the Executive Director of the DCO. On behalf of DWR & DCO, Mr. Meyers commended Ms. Mallon and the DCA staff for the excellent work they have performed to date. Mr. Meyers spoke to the thorough and professional methods the DCA have used in the preparation of this initial cost assessment for the Delta Conveyance Program. While planning and design are in the very early stages, this information is intended to aid the beneficiary public water agencies who are ultimately responsible for funding the planning and environmental review, permitting, and if approved, the design and construction of the proposed Delta Conveyance facility. This cost information provides a preliminary starting point to understand the programs probable costs which will be refined over time and the planning and environmental review proceeds in more precise design and engineering becomes available which will increase confidence and probability level of the potential costs based on industry standards of cost estimating methodologies. Additionally, items not included in the estimate at this time because they are currently in development will need to be quantified in the future as this program progresses to create a more comprehensive assessment of the total program costs. Mr. Meyers also noted that this cost assessment is related to the proposed project as it was identified in the Notice of Preparation (NOP) and is not an indication of any type of project approval by DWR. DWR has made no decisions as to the selection of a specific alternative, as the program planning and design are still in the initial conceptual design phase and alternatives are still being

studied. A final design on whether to approve the proposed Delta Conveyance Project or an alternative, including the No-Tunnel Alternative, will not occur until after the completion of the environmental review under the CEQA and National Environmental Policy Act (NEPA) and any other environmental permitting processes have been completed.

Ms. Mallon gave a presentation that represents an assessment of the DCA program costs for Delta Conveyance. Six topics were covered describing the scope of the project that was estimated, the process that DCA used to create the estimate, an assessment of our estimated costs, our expected confidence level in the generated number, scope advancements in our current work, and future steps necessary to ultimately create a proposed budget for the 20-Year Delta Conveyance Capital Program. Ms. Mallon emphasized that this estimate is merely a snapshot of the potential costs based on the current status of our design work and we are very early in this effort. Ideally, this assessment would have been prepared upon conclusion of our conceptual design efforts, but as Tony Meyers mentioned, water contractors will be looking to go to their Boards soon to decide participation in the upcoming months and costs are a critical part of that decision. This is an "undiscounted" estimate, similar to the method used to develop previous estimates which helps facilitate comparisons. Undiscounted means that it has not been adjusted for the time value of money; this value does not account for the cost escalations that will occur between today and the actual start of construction nor does it account for cost escalations throughout the period of construction.

Ms. Mallon clarified that this estimate is not reflective of our final conceptual design work – this is still in progress and design changes are on-going at this time. The estimate is not representative of final mitigation costs. These actions and associated costs will be developed by DWR during the upcoming CEQA and NEPA processes. The estimate is not inclusive of all components of the cost of the program but rather focuses more narrowly on the costs associated with the design and construction which includes DWR oversite of the DCA. Many key line items such as community benefit funds and DWR planning costs have not been assessed at this time. Finally, as an undiscounted estimate, this assessment does not include the time-value of money. These calculations will be made when the DCA prepares its Baseline Capital Plan for the program which will be submitted to both the DWR and this Board for review and approval.

Ms. Mallon discussed what was evaluated. For this estimate, we focused on the proposed project as described in DWR's NOP. This included a total capacity of 6,000 cubic feet per second (cfs), with two intakes on the Sacramento River near the town of Hood, each at 3,000 cfs capacity. There are 42 miles of 36-foot diameter tunnel and associated shafts, and a pump station, a forebay, and connecting facilities to the existing CA aqueduct, just upstream of the Harvey Banks Pumping Plant. The team adhered to industry standard practices to prepare the estimate as outlined in the Practice Guides of the Association for the Advancement of Cost Engineering. Ms. Mallon noted it was important to the team that we rely on industry standards where possible to help validate our work. Where we had good project information, we developed costs at the activity level including quantity take-offs and build ups of materials, labor and equipment. Where information was lacking known items, we utilized allowances to assess costs. The risk team developed risk avoidance strategies where appropriate and these activities were included as line items in the estimate. Industry standard factors for items such as field management, and contractor overhead and profit were applied to the construction activity costs. After the above items were summed up, a construction contingency was applied, largely based on professional experience. The soft costs which include nearly all of the non-construction items, were

established based on industry standard percentages against the construction estimate. The environmental mitigation costs were extracted from the previous estimate and for the purposes of this estimate only. These costs are considered merely a placeholder at this time until the DWR team has identified the mitigation measures necessary for Delta Conveyance.

Ms. Mallon discussed contingency which represents a relatively large portion of the construction estimate. A common assumption is that contingency is "in addition" to the estimated construction cost and sometimes mistaken as "discretionary spending". Contingency in this estimate is a component of the expected construction costs and represents a best guess at the cost of items that are not shown or known at the time of preparation but based on experience, are expected to result in additional costs. As a point of reference, the final drawings of the intakes that will be included in the bid documents will be in the thousands of pages however our current design is summarized in approximately 100. For Delta Conveyance, each of the design leads worked with the estimators to develop an appropriate contingency level for their respective features based on their understanding of the maturity in the design, the identified risks remaining, and professional judgement. Where the team saw a lot of risk and less complete information, a higher contingency was used. For example, the utilities, logistics, and power estimate contain a significant amount of allowances and minimal design drawings have been produced. In this case, a contingency of 50% was used. In contrast, the pump station is relatively well understood and there is less perceived risk in the design and construction of this facility. In this case, a 30% contingency level was assigned. As the DCA continues to advance the design, these contingency levels will decrease to reflect the revelation of unknown items and the collection of additional data to reduce risks. Ms. Mallon referenced the slide that shows a summary of the estimate cost of construction, broken down by each of the major program elements. The first cost column is the base cost including all deterministic values, allowances, risk mitigations, and field management, overheads and profit. The second column is the contingency and the last column is a sum of the expected construction cost. As shown, the total undiscounted construction estimate is just over $12B. This includes nearly $2B in intake facilities, a little over $6B in tunneling and shafts which makes up just over 50% of the total project costs, $1B for the pumping plant; $2B for the Southern Forebay and associated connecting structures to the existing aqueduct, and about three quarters of a billion dollars in early works, utilities and logistic construction.

Ms. Mallon spoke about estimate accuracy. The AACE has collected a large volume of historical cost data over a wide array of industries and has used this data to develop predictive tools that practitioners can use to assess the expected accuracy of their estimate as compared to the ultimate bid price of the project. They have used this data to create 80% confidence bands for estimates developed at various stages of design development. An 80% confidence band represents a range by which there is an 80% likelihood that the actual project cost as measured at design completion will fall within this band. Ms. Mallon referenced the curve shown on the left side of the slide depicts the expected accuracy range that the DCA anticipates in our estimates as we progress from the design initiation stage all the way to design completion. As the curve shows, in the early phases of design, there is a fairly wide band of expected accuracy and as the design evolves and more information is gained, the band narrows. This narrowing in the range of potential outcomes reflects the greater certainty in the estimated value that is gained as the detailed engineering approaches completion. One thing to note in this curve is that the expected value of the project as represented by the dotted line in the curve should hold steady throughout the process. In the early phases, higher contingency values are used to account for the

unknowns while toward the end of design, there are more known activities in the estimate and thus less contingency is needed. Based on the assessment of the current state of the design, which in this case is very early, the high degree of variability in the public works construction sector, the relative complexity of the project, the amount of effort devoted to estimate development, and a number of other factors, an 80% confidence band of about -50% on the low end and + 80% on the high end was determined.

Ms. Mallon said that it is important that we place the use of "confidence intervals" into proper context so that the estimate is understood within this context and equally, not taken out of context. What the 80% confidence interval means is that the most likely estimate and cost of the project is $12.1B We have conducted a thorough job estimating the drawings, we have accounted for items not shown with allowances, we have mitigated our risks, and we've added an appropriate level of contingency to our number. This thoroughness is why we believe the $12.1B is the most likely value. Now, estimating is just that, it's an estimate that tries to predict a future outcome and things can come up, whether it be an economic downturn that creates a highly competitive market or a trade war that raises the cost of steel, or maybe a new regulatory restriction on work windows that adds a year of delay to construction; all these things are possible and all of these things can have a large impact on the ultimate cost of work. To account for these possibilities, we place confidence bands on the estimate. At the far ends of this confidence band, there is a much lower likelihood of occurrence than in the middle of the band. While we believe with 80% confidence that the actual cost of the project could range as low as 6B and upwards of $22B, there is only a 10% likelihood that the actual cost might be $6B and an equally small likelihood of 10% that the number will increase to the $22B value. Again, the most likely value is the $12.1B. Ms. Mallon noted it would be incorrect to say that there is an equal chance that the cost is $22B as it is $12B.

Ms. Mallon discussed soft costs which are a substantial part of the overall capital cost of a project. In the public works sector, they are often one fourth to one third of the overall program costs. For Delta Conveyance, we used industry standard factors for soft costs which are often expressed as a percentage of the construction costs. Ms. Mallon referenced the table to the right that includes each of the categories of soft costs that the DCA will incur in delivery of the program and the percentage of the construction value that was applied to estimate each of these cost items. For example, the Program Management Office which includes all functions and services that support the entire organization, typically accounts for anywhere from about 2 to 5% of construction and for the Delta Conveyance office, we chose 3.5%. This value considers the economies of scale that a large program benefits from balanced with the enhanced management needed to navigate its complexities. In total, the services and land acquisition identified in this table sums to 28% of the construction costs. When we take into account everything that we have discussed including construction costs, soft costs, and environmental mitigations we get the total undiscounted cost of the program. When we take into account the construction costs, the soft costs and the placeholder number for Environmental Mitigations, the total Program cost comes to just under $16B. Approximately 75% of the total program costs are in the construction of the tunnel and associated infrastructure, while the remaining 25% is in the soft costs and mitigation measures.

Ms. Mallon references the table representing the major design evolutions that have occurred in the past year as the DCA team has advanced our concept design. During the early stages, design changes such as these will be more common than in the later stages of the program. There will

also likely be changes that come out of the environmental assessment and from various regulatory conditions and obligations placed on the project during this concept phase. Each of these items in the table contributed to significant cost differences in the estimate. In some cases, the changes reduced costs such as the removal of the Intermediate Forebay, while others added costs such as the enhancements to ground improvements and foundation designs to help manage the soft ground conditions and high groundwater table in many areas along the alignment. Another area of focus by the team over the past year, was on logistics – how do we move goods and services throughout the Delta given current traffic levels and the high volume of material that needs to reach the sites. This has led to inclusion of additional logistics improvements such as road upgrades, a new rail spurs in key locations to relieve traffic loads and facilitate movement in congested areas. We have also added things like new batch plants to allow on-site production of concrete which is a significant contributor to reducing traffic volumes.

Ms. Mallon spoke about the DCA's next steps to preparing a final budget for the program that we will need to submit to DWR and to this Board for review and approval. First, we will be periodically updating the Board on any major changes that occur in the design that have a significant impact on our assessment of costs. Some key things that will likely result in cost changes are completion of the first round of geotechnical exploration work. Secondly, we will need to wait until we are through the Environmental Planning processes so that we understand the final proposed project configuration and the associated mitigation measures. Third, we need to work with DWR and others to add the additional soft cost items that are outside the oversite and work of the DCA and have been omitted from this estimate. This would include items such as the DWR Planning costs and a Community Benefit Fund. And lastly, we will need to adjust the undiscounted estimate to account for the time value of money by determining the expected value of each of the future contracts in the expected year of procurement.

Mr. James Thuerwachter, California Alliance for Jobs, thanked the DCA for their efforts in moving the project forward. The preliminary cost assessment is a helpful baseline to gauge the size and scope of the project. Mr. Thuerwachter felt the Delta Conveyance Project is of vital importance in protecting California's water supplies against the numerous threats such as impacts from climate change. Our current water infrastructure program is not prepared for the new normal, such as more extreme swings in weather. There is concern about the integrity of our levees during an earthquake. Mr. Thuerwachter emphasized that we cannot wait for a disaster to strike before taking steps to secure our water supply and wishes to move this project through completion.

Mr. Kyle Griffith, Californians for Water Security, spoke about the two-thirds of Californians who rely on water being transported through our states current water distribution infrastructure which is in desperate need of an overhaul. Mr. Griffith expressed support for moving forward with modernizing our Delta Conveyance System to improve the reliability of our water system and protect against natural disasters.

Ms. Meserve expressed concern about the massive investment being proposed, an infrastructure that she does not feel is resilient. Ms. Meserve spoke about the huge opportunity cost of not perusing other more resilient and less harmful alternatives. Ms. Meserve referenced alternatives she has suggested through the CEQA process but saw at the last SEC meeting that those alternatives would not be analyzed in the environmental document. This cost estimate should also take into consideration the sunk costs from the prior iterations of the project. Ms. Meserve

felt that other options should be pursued and believes the cost estimate provided is incorrect and doesn't take into account the cost on the communities and the environment.

d. Stakeholder Engagement Committee Update

Ms. Nazli Parvizi spoke about the July SEC meeting which included an update from Ms. Buckman on DWR's environmental process as well as information regarding design alternatives. Mr. Bradner also gave a presentation about feedback and illustrated how we have implemented that into our design. Soil conditioners were discussed at this meeting about the need for them in this project. The next SEC meeting will include the release of our new virtual tours and an opportunity for the SEC to have an open discussion about the process and items they wish to learn more about. Ms. Parvizi mentioned the recent in person tour we had of a Tee-Screen manufacturing facility in the Delta.

Ms. Palmer recognized Ms. Parvizi and Ms. Martinez's contributions to the SEC. She felt that they do a great job at making information made easily available to the SEC members.

e. Presentation on Stakeholder Engagement Committee Member Input

Due to not having representatives from the SEC speaking today, Ms. Mallon thought she would use the time to highlight some of the work that the DCA has done with the committee to help demonstrate how their input has been incorporated in our conceptual design work. There are about 20 members on the committee representing a wide array of Delta interests. They give hours of their time each month reviewing the material and participating in marathon meetings that often go beyond the three-hour schedule. While it is clear that most of the members are opposed to the project, they continue to share their opinions and insights in the event that should the project happen, they want it to be a better project. Ms. Mallon understands that for many, this is not an easy concession, which speaks to their commitments to their communities and the DCA is especially grateful for all the time and energy they put into this process.

Ms. Mallon shared a presentation that was intended to cover some of the highlights in changes we have made in the design largely based on conversations with the committee. At each meeting, we gain a better understanding of the critical issues to people in the Delta and we circle back to the drawings looking for ways to address their concerns. Ms. Mallon hit on examples of changes made in six areas that garnered a significant amount of discussion and feedback during the process. Regarding barging, many members of the committee boat in this area and believed the frequent barging would be detract from recreational uses. We took a closer look at using barging versus Hwy 12 for moving major materials to the Bouldin Island Launch shaft site and believe we can meet our program objectives better by expanding Hwy 12 rather than utilizing the barge landing on Bouldin Island. We also eliminated the barge landing that was included in the Eastern alignment. Therefore, at this point there is no major barging operations as part of the program.

A lot of time was spent going through the construction space needed for the program and a common comment was to minimize how much land is used, particularly designated ag land. One of the largest sites in the program is the Twin Cities launch shaft site. We took a hard look at

space requirements and determined that we could substantially reduce our space needs by switching to mechanical drying process rather than land application to dry out the RTM. The RTM requires drying to remove excess moisture to make it viable for structural fill. We plan to use all of the RTM generated at this site largely for construction of the Southern Forebay and to build the construction pads at the shaft sites. In addition to minimizing the land needed during construction, there were also discussions on how to restore impacted land after construction. Ms. Mallon referenced the figure that shows the decrease in the final construction space needed for the site. We worked with agricultural scientists to develop plans for restoring this land for either agricultural use or for natural areas. Ms. Mallon thanked Lindsey Liebig who was very helpful setting up a meeting with the Sac Co Farm Bureau to review our plans and provide feedback which was incorporated into our work. Logistics and traffic were a major concern to many of the members of the panel. It's a significant quality of life factor and we dedicated an entire session to reviewing the estimated traffic loads and follow-up presentations to optimize the plans. Ms. Mallon highlighted some of our efforts to reduce loads based both on feedback and our own deep dives into activities that were creating traffic spikes.

With the shaft construction, each of the shaft sites requires essentially a dirt collar to create a working platform. We noticed significant spikes in truck traffic to the sites to import the borrow material needed to build these shafts. We went back and found ways to reduce the diameter of the shafts as well as the working surface height which cut the amount of borrow material needed in about half which by extension, cut the traffic count in half as well. We talked previously about removing the barge landing at Bouldin and shifting to truck traffic. The chart shows the existing conditions of traffic on State Route 12 and the results after adding an additional lane to the highway to take our new loads. This will ensure our trucks can get to the site effectively as well as provide additional capacity to the Delta. Traffic on Hwy 4 including crossing the Old River Bridge was a significant issue. We took a close look at our facilities along the highway and found a way to reconfigure our shaft intervals to eliminate the Victoria Island shaft site that would have required Hwy 4 and the old river bridge for access. Finally, Bryon Highway actually has some of the worst traffic levels of any of the major highways through the Delta and Delta Conveyance requires construction of substantial facilities along the highway, just west of the existing Clifton Court Forebay and CA Aqueduct. While the rail took thousands of trucks off the highway – primarily the tunnel liners and the movement of RTM from Twin Cities down to the forebay site, it also helps ensure that our trucks aren't stalled in traffic trying to access the site. However, we did notice a huge spike in the chart that didn't benefit from rail. This spike was traffic associated with moving excess borrow material created when constructing the aqueduct connecting facilities and taking it across Byron highway to the forebay where it's needed to construct the embankments. We added a temporary bridge over the highway in our logistics plan and were able to remove the peak from our traffic counts. The excess borrow material will be able to shift from south to north without utilizing the highway. This is a benefit to the community as well as the project.

Proximity to natural areas was also a major area of discussion, in particular, the Stone Lakes Refuge as well as the Woodbridge Ecological Reserve. Ms. Mallon referenced a map that shows the boundaries of the Stone Lakes Refuge. Major facilities of the program, in particular the intakes and the Twin Cities launch shaft straddle the current boundaries and access to the intakes will require truck traffic crossing through the boundaries. We approached this in two ways; first remove as many of the facilities outside the boundaries where feasible. In our original scheme for the Twin Cities Site, we planned to bring the liners onto the site and truck over to the Glanville

launch shaft and also to convey the reusable tunnel material (RTM) from the Glanville launch shaft over to the Twin Cities site for drying and off-site transport. After further study, we felt shifting the Glanville shaft over to the Twin Cities provided substantial operational benefit by consolidating the liner and RTM management to a single location and benefited the Refuge by removing a major structure and significant truck traffic and conveyor noise out of the boundaries. We also looked at many iterations on the haul routes from the I-5 corridor and Twin Cities materials depot over to the intake sites and narrowed in on building a park and ride near the Hood Franklin interchange and using electric busses to bring workers to the site. This substantially reduced car traffic in the area during peak periods and reduces the amount of parking space that would need to be provided at the intake sites. And we also selected Lambert as the sole east west corridor rather than distributing the traffic between the 3 major east-west routes from I-5 toward the river. There was a preference for concentrating the load rather than distributing. We also added a haul road located at the toe of the abandoned elevated rail line just to the west of the Refuge. The rail berm doubles as a visual and noise buffer between the refuge and our truck traffic. Finally, we had located a maintenance shaft between the two parcels that comprise the Woodbridge Ecological Reserve and Sean Wirth helped us relocate this shaft a mile north of the reserve boundaries and closer to an existing road off I-5 to reduce construction impacts from noise and traffic.

The final topic Ms. Mallon covered concerns of the use of RTM conditioners. These conditioners are a necessary component of the drilling process allowing the drilled material to pass easily through the cutter head and into the conveyer system for transport out of the tunnel. Several members of the committee expressed concern over the application of these chemicals to the cutter head and the impact of any underground residual. We conducted research on the latest composition of these components and were able to commit to using a highly biodegradable material using only naturally based polymers. At the time of construction, all compounds will be tested and approved for conformance with the requirements prior to use. We also committed to conducting additional studies as the tunnel design advances. Ms. Mallon thanked the SEC members who have contributed to the process which has been very helpful.

Ms. Palmer felt it would be useful to have a list of the permanent infrastructure improvements this project contributes, including traffic and job improvements.

2. STAFF REPORTS AND ANNOUNCEMENTS:

a. General Counsel's Report

A written report was provided in the Board package. Mr. Nelson said he could answer any questions about his report.

b. Treasurer's Report

A written report was provided in the Board package. Ms. Kasaine noted on August 14th we received money from DWR, paid some bills, and ended with $3.6M in funds. In addition, we had to reinstate and expense our CIP.

c. Verbal Reports
None.

3. FUTURE AGENDA ITEMS:
None.

4. ADJOURNMENT:
President Atwater adjourned the meeting at 3:40p.m., remotely - Conference Access Information:
Phone Number: 1 (916) 262-7278 Access Code: 1497429855#
https://meetings.ringcentral.com/j/1497429855