



Agenda Item No. (7)

To: Building and Operating Committee/Committee of the Whole
Meeting of August 25, 2022

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Subject: **STATUS REPORT ON ENGINEERING PROJECTS**

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The following report is provided for informational purposes and no action is required. *Items that have changed since the last report are in this typeface.*

Summary

BRIDGE FACILITIES

Design Services for the Golden Gate Bridge Physical Suicide Deterrent System, RFP No. 2011-B-2. On January 22, 2010, the District issued the Final Environmental Impact Report and Environmental Assessment and Section 4(f) Evaluation with Finding of No Significant Impact for the Golden Gate Bridge Physical Suicide Deterrent System Project (Project) with the horizontal Net System as the environmentally superior alternative. On February 12, 2010, the Board of Directors approved a resolution that certified the Final Environmental Impact Report, adopted the Project, and adopted Findings of Fact, which includes a Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Plan.

The District has a Project website to inform the public regarding the Project. All Project documents, such as the Wind Report and the environmental studies, are available at the website: www.ggbsuicidebarrier.org.

On July 28, 2010, the Metropolitan Transportation Commission (MTC) voted to provide \$5 million for the design of the Physical Suicide Deterrent System. On August 13, 2010, the Board of Directors, by Resolution No. 2010-068, authorized acceptance of \$5 million from MTC for design and added the design Project to the Fiscal Year 10/11 Bridge Division Capital Budget.

On August 13, 2010, the District posted on its website a Request for Proposals (RFP) to engage consultants to design and prepare construction bid documents for the Suicide Deterrent Net System. On June 24, 2011, the Board authorized the General Manager to award a Professional Services Agreement (PSA) for Design Services for the Golden Gate Bridge Physical Suicide Deterrent System, Contract No. 2011-B-2, to HNTB Corporation in an amount not to exceed \$3,990,000 upon receiving FHWA/Caltrans approvals of the Agreement. After receiving a waiver of the contract audit from Caltrans, the General Manager awarded the Contract to HNTB Corporation on July 28, 2011. On August 31, 2012, staff met with the consultant to review progress and the 35% designs for the net, net support systems, and traveler systems. Staff prepared renderings of the proposed net design at the south and north approach structures to verify conformance of the design with the adopted environmental documents. On September 4, 2012, staff met with Caltrans to review the renderings. Caltrans requested that a NEPA/CEQA re-validation form be completed to document the renderings. On October 8, 2012, staff met with the Suicide Deterrent consultant, HNTB Corporation, and the Seismic Retrofit consultant, HDR Engineering, Inc., to coordinate the design work between the two projects. On January 22, 2013, consultant submitted the 65% completion design plans for the net, net support systems, and traveler systems. The wind tunnel consultant performed additional wind tunnel testing of the bridge model modified to include the current design of the suicide deterrent and modifications to the wind fairing. The wind tunnel testing confirmed that the bridge capability to withstand strong winds will not be affected by the netting system and modifications to the wind fairing. On June 20 and September 9, 2013, staff met with the consultant to review status of the design and outstanding issues. On October 11, 2013, the Board authorized execution of the Second Amendment to the Professional Services Agreement in the not-to-exceed amount of \$130,000 for the design of power supply lines to electric battery charging stations. The consultant submitted the

95% completion design plans for the traveler system in November 2013. On May 23, 2014, the Board authorized execution of a Fourth Amendment to the Professional Services Agreement with HNTB Corporation, in an amount not to exceed \$72,743, for review and coordination of the construction contract documents. On September 26, 2014, the Board authorized execution of a Fifth Amendment to the Professional Services Agreement with HNTB Corporation, in an amount not to exceed \$75,227 for a Value Engineering Study and a Sixth Amendment in an amount not to exceed \$65,492 for the design of a training rescue net. The consultant completed the design and assisted the District with finalizing the construction bid documents.

On June 12, 2014, staff met with representatives from FHWA and Caltrans to discuss the status of the Project and the oversight requirements of FHWA and Caltrans should the Project receive federal and state funding.

On August 14, 2014, staff met with representative from the California Highway Patrol, Coast Guard and Marin Fire Department to begin discussion on procedures, roles and responsibilities for rescuers and retrievals from the net systems for recommended Board actions.

On August 28, 2014, staff had a follow up meeting with FHWA and Caltrans to discuss status of the Project including funding and oversight agreement. FHWA and Caltrans confirmed that an environmental revalidation will be required as well as a Value Engineering Study and Analysis.

On October 28-30, 2014, a Value Engineering Study meeting was held with the consultant and staff. On November 7, 2014, the consultant submitted a draft Value Engineering Study Report for review. On December 5, 2014, staff had a follow-up discussion with FHWA and Caltrans to discuss the status of the Project, including funding, the oversight agreement, the environmental revalidation, and the value engineering. On July 30, 2015, the final Value Engineering Study Report was sent to Caltrans.

On December 18, 2014, the Board, by Resolution No. 2014-107: 1) approved the final design of the Project; 2) approved the installation of the Physical Suicide Deterrent System as defined in the final design plans and technical specifications; 3) approved construction of the Physical Suicide Deterrent System in conjunction with the Suspension Bridge Wind Retrofit as part of the same construction contract; 4) approved the sequence of construction requiring installation of the Wind Retrofit prior to installation of the net fabric on the west side of the Suspension Bridge main span; 5) approved the conclusion of SDS Project's environmental revalidation that, based on the Project's final design review and an examination of the current conditions and supporting information, the original environmental document remains valid and there is no need for subsequent environmental review under state or federal law; and, 6) confirmed that the interpretation of the policy-level project criterion, listed in the Board of Directors Resolution No. 2005-033 as the tenth criterion, which states that the physical suicide deterrent system: "Must not in and of itself create undue risk of injury to anyone who comes in contact with the suicide deterrent system" is not applicable to nor intended to ensure that individuals who jump into the net, or otherwise end up in the net, would be free from injury.

On July 31, 2015, consultant submitted the draft 100% design plans.

On August 21, 2015, the NPS provided a draft Special Use Permit (SUP) associated with the use of staging areas and access roads required for construction of the Project. On September 2, 3, and 9, 2015, staff met with the NPS representative to discuss the permit requirements. On September

23, 2015, staff sent written comments to NPS on the draft permit. On October 1, 2015, NPS provided a revised draft SUP. On October 5 and 6, 2015, staff met and discussed the permit conditions with the NPS representatives. On October 7, 2015, staff & NPS negotiated the final terms of the SUP. On October 9, 2015, the Board, by Resolution No. 2015-089, approved the permit and authorized the General Manager to execute the NPS SUP. The permit was executed on October 9, 2015.

On December 20, 2019, the Board, by Resolution No. 2019-086, authorized Amendment No. 1 to the National Park Service's Special Use Permit for construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, to extend the permit term to December 31, 2023, to pay an annual permit fee in an amount of \$48,717, and to increase the Project #1526 budget by \$194,868.

On August 21, 2015, the Board, by Resolution No. 2015-070, authorized the Ninth Amendment with HNTB Corp. for construction support services during advertisement and transferred \$355,182 from the construction project budget (1526) to the design project budget (1118) to finance this amendment.

On December 16, 2016, the Board, by Resolution No. 2016-089, authorized the Twelfth Amendment to PSA No. 2011-B-2, in the not to exceed amount of \$6,000,000 with HNTB Corporation for providing engineering support services during construction of the Physical Suicide Deterrent System Project as part of construction Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit, and also authorized a contingency amount of \$600,000.

Golden Gate Bridge Physical Suicide Deterrent System Environmental Revalidation, PSA No. 2015-B-10. On September 26, 2014, the Board of Directors, by Resolution No. 2014-081, authorized execution of Professional Services Agreement No. 2015-B-10, with AECOM in the not-to-exceed amount of \$30,000 and authorized an increase in FY14/15 Bridge Division Capital Budget in the amount of \$33,000. The Notice to Proceed was issued effective October 28, 2014. The consultant completed the Revalidation Report. The report was submitted to Caltrans on September 15, 2015.

Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit, Contract No. 2016-B-1. On June 27, 2014, the Board of Directors, by Resolution No. 2014-066, amended the FY 14/15 Bridge Division Capital Budget to include the construction of the Golden Gate Bridge Physical Suicide Deterrent System Project (Project) in the amount of \$76 million, with the understanding that the Project will be funded with \$22 million of federal Local Highway Bridge Program funds programmed by Caltrans, \$27 million of federal Surface Transportation Program funds programmed by the Metropolitan Transportation Commission, \$7 million of California Mental Health Service Act Funds, and \$20 million from District Reserves.

On December 19, 2014, the Board, by Resolution No. 2014-107, approved inclusion of the Golden Gate Bridge Wind Retrofit Construction Project, as a separate project in the fiscal year 2014-2015 Bridge Division Capital Budget, with the budget of \$8 million to be 100% federally funded.

On March 26, 2015, the Board, by Resolution No. 2015-026, adopted a finding that the Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit is unique and substantially complex,

and therefore approved that up to a 10% retention may be withheld from progress payments due to the construction contractor until satisfactory completion of the work.

On September 16, 2015, staff submitted a request for authorization to proceed with construction of the project to Caltrans. On September 28, 2015, Caltrans and Federal Highway Administration authorized the project construction.

On October 13, 2015, the District advertised the construction contract, Contract No. 2016-B-1, for the Physical Suicide Deterrent System and Wind Retrofit. The pre-bid conference was held on December 9, 2015. On July 12, 2016, two bids were received and opened. The Board, by Resolution No. 2016-062, authorized staff to seek a 90 day extension of the bid validity period for all bids received for Contract No. 2016-B-1, in order to allow the development of a revised funding plan. Both bidders agreed to the 90 day extension of the bid validity.

On December 16, 2016, the Board, by Resolution No. 2016-087, approved actions relative to a revised funding plan for the construction of the Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit. The Board also authorized award of a contract to construct the Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Contract No. 2016-B-1, to Shimmick Construction Company, Inc./Danny's Construction Company LLC, JV, in the amount of \$142,051,868, and a contingency of \$27,578,969. The Notice to Proceed was issued effective February 13, 2017.

On April 13, 2017, a ceremony commemorating the beginning of construction was held.

On January 27, 2017, the Board of Directors, by Resolution No. 2017-003 authorized the execution of an on-call service agreement with the California Highway Patrol in an amount not to exceed \$2,000,000, for enforcement services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Project.

On February 24, 2017, the Board, by Resolution No. 2017-018, approved revised General Manager's Authorization Limits for change orders to Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Project, and for Amendments to the related Professional Services Agreements.

The Contractor is continuing preparing and submitting work plans and submittals and performing field verifications of existing conditions for the net system and travelers. On August 7, 2017, the Contractor began installing the temporary security fencing on the west sidewalk.

On August 14, 2017, the Contractor began installing the temporary security fencing on the east sidewalk. On September 7, 2017, the Contractor completed installation of the temporary security fencing.

On March 7, 2018, the Contractor began fabricating the SDS net supports, the new traveler rails, and the new west sidewalk bridge railing at their fabricator's facility in Oregon. The fabrication is essentially complete. *On August 3, 2022, the Contractor's new steel fabricator began fabrication of the remaining structural steel elements, including the new travelers and the remaining net support and North Anchorage Housing vertical barrier structural steel elements.* Fabrication is progressing.

On March 14, 2018, Engineering staff met with the Contractor and its net system supplier to discuss fabrication and installation of a net mock-up to be used to verify full scale installation procedures. On May 11, 2018, the net supplier began fabrication of the stainless steel wire rope for the net mock-up. On September 28, 2018, the net mock-up fabrication was completed and on October 5, 2018, the material was delivered to the Contractor's yard in Richmond, CA. On August 30, 2018, the Contractor began construction of the mock-up in their yard in Richmond. On January 28, 2019, the Contractor completed the construction of the mock-up and submitted the installation report. On January 30, 2019, the District brought representatives from suicide prevention advocacy groups to view the mock-up.

On April 15, 2019, the Contractor's net manufacturer began fabrication of the net to be installed on the Bridge. The fabricator has completed fabrication of several sections of the net. The net sections for the west side of the North Approach Viaduct, the west and east sides of Suspension Bridge Span 4, the west and east sides of Suspension Bridge Span 1 and the west and east sides of Suspension Bridge Spans 2 and 3 have been delivered to the Contractor's yard. The fabrication is ongoing.

The Contractor is continuing to develop designs of work access platforms for accessing various work locations on the Bridge. The fabrication of the Suspension Bridge work access platforms began at the Contractor's yard in Richmond, California, on February 15, 2018. On July 11, 2018, the Contractor began nighttime bridge lane closures to facilitate preparatory work for the installation of the work platforms to be installed below the stiffening trusses of the Suspension Bridge. Nighttime lane closures are ongoing.

On June 14, 2018, the Contractor began paint abatement and primer coat painting at the new SDS bracket locations on the Suspension Bridge. Paint work is ongoing.

On August 14, 2018, the Contractor began installing the first work access platform in the Suspension Bridge to be used for the installation of the net supports, the interior traveler rails and the bottom traveler trolley beams. On September 24, 2018, the Contractor began installing the second and third work access platforms in the Suspension Bridge. The first platform was completed and ready for use on October 16, 2018. The second platform was completed and ready for use on December 14, 2018. The third platform was completed and ready for use on January 22, 2019. The fourth platform was completed and ready for use on February 25, 2019. On September 16, 2019, the Contractor began installing the fifth work access platform on Span 1 of the Suspension Bridge. The fifth platform was completed and ready for use on November 12, 2019.

On September 3, 2020, the Contractor began installation of the first of 60 fixed access platforms located in the Suspension Spans. A total of 58 fixed access platforms have been installed. The Contractor is continuing with the ten electric charging station platform installations. Electrical equipment placement is *continuing* at all ten locations.

On February 11, 2019, the Contractor installed the first work access platform in Span 3 on the west side of the Suspension Bridge to be used for removal of the existing side traveler rails, trolley beams and rail chairs, and the installation of the new side traveler rails, trolley beams and rail chairs. By August 22, 2019, the Contractor installed 14 work platforms in Span 3 and 8 platforms in Span 2 of the Suspension Bridge. On June 13, 2019, the Contractor began removing the existing west side crane rail, trolley beams and rail chairs. The Contractor added an additional 2 platforms,

modified the platforms and positioned 12 in Span 2 and 12 in Span 3. The access platforms have been removed and relocated to Span 1 and Span 4.

On December 4, 2019, the Contractor began installing containment, abrasive blasting and painting the west sidewalk stringer and new side traveler rail support locations in Span 3 of the Suspension Bridge. On December 12, 2019, the Contractor began installing the new side traveler rail supports and trolley beams in Span 3 on the west side of the Suspension Bridge. The removal and replacement of the west side crane rails, trolley beams and rail chairs in Span 2 and Span 3, is complete.

On October 31, 2018, the Contractor began removal of the existing inner traveler crane rails and the bottom traveler trolley beams in Span 3 of the Suspension Bridge using work access platform no. 1. On November 2, 2018, the Contractor began removal of the existing crane rail and trolley beam support brackets. On November 15, 2018, the Contractor began paint abatement operations for the new crane rails and trolley beams. On November 30, 2018, the Contractor began installing the new crane rail and trolley beam brackets. On December 7, 2018, the Contractor began installation of the new crane rails and trolley beams.

Inner and bottom traveler rail removal and replacement is complete in Span 2 and Span 3 of the Suspension Bridge except at the north and south locations where the existing travelers were located and at mid-span. Inner and bottom traveler rail removal and replacement in Span 1 began on November 18, 2019. Installation of inner and bottom traveler rails and trolley beams and net supports is continuing in Span 1 of the Suspension Bridge.

On April 14, 2020, the Contractor began removal of the west side traveler crane rails, rail chairs and trolley beams and installation of new crane rail chairs in Span 1 of the Suspension Bridge. On October 30, 2020, the Contractor began installing side access platforms on the west side of Span 1 of the Suspension Bridge. A total of 16 side access platforms were installed. All of the Span 1 west side traveler crane rails, rail chairs and trolley beams have been removed and replaced. Final relative alignment of the trolley beams and crane rails near Pylon S1 and the South Main Tower remains to be completed and final painting at various locations is continuing. All of the previously installed west side access platforms have been removed. On June 9, 2021, the Contractor began removing existing east side traveler rails and beams. On June 17, 2021, the Contractor began installing access platforms to be used for removing and replacing east side existing traveler rail chairs. On July 1, 2021, the Contractor began removal of the east side existing traveler rail chairs. The Span 1 east side traveler rail, trolley beam and rail chair removal is complete and the installation of the new rail chairs, crane rail and trolley beams is complete. Final relative alignment of the crane rail and trolley beams and painting are complete.

On November 29, 2018, the Contractor began installing the first net supports on the Suspension Bridge. On November 19, 2019, the Contractor began installing the net supports in Span 1. On December 3, 2019, the Contractor began installing net supports in Span 4 of the Suspension Bridge.

On September 24, 2020, the Contractor began removal of the existing inner traveler crane rails and bottom traveler trolley beams in Span 4. Replacement has not yet commenced. On April 1, 2020, the Contractor began removal of the existing west side traveler crane rails, trolley beams and rail chairs and on November 19, 2020, began installing the new rail chairs. On October 5, 2020, the Contractor began installing side access platforms on the west side of Span 4 of the Suspension

Bridge. A total of 18 platforms were installed and work using these platforms has been completed. Installation of new revised access platforms began on January 6, 2021 to perform side traveler crane rail removal and replacement. On January 11, 2021, the Contractor began installation of new side traveler crane rails in Span 4. All of the Span 4 west side traveler crane rails, rail chairs and trolley beams have been removed and replaced. All of the previously installed side access platforms have been removed. On April 27, 2021, the Contractor began removing existing east side traveler rails and beams. On May 11, 2021, the Contractor began installing access platforms to be used for removing and replacing east side existing traveler rail chairs. On May 21, 2021, the Contractor began removal of the east side existing traveler rail chairs. All of the Span 4 east side traveler rail, trolley beam and rail chair removal has been completed, all of the new chairs have been installed and all of the new rails and trolley beams have been installed. Final relative alignment of trolley beams and crane rails and final painting are **complete**.

On March 12, 2021, work to remove the existing Span 4 west side maintenance traveler from the bridge was completed. Removal of the existing Span 4 east side maintenance traveler has also been completed. On April 5, 2021, work began removing the existing Span 1 east and west side travelers. Removal of the Span 1 east and west side travelers has been completed. On May 4, 2021, work began removing the existing Span 2 east and west side travelers. By May 21, 2021, removal of the Span 2 east and west side travelers was completed. On May 26, 2021, work began removing the existing Span 3 east and west side travelers. By June 18, 2021, removal of the Span 3 east and west side travelers was completed.

On March 12, 2021, the Contractor began installing in Span 3 on the east side of the Suspension Bridge work access platforms that will be used for removal of the existing side traveler rails, trolley beams and rail chairs, and the installation of the new side traveler rails, trolley beams and rail chairs. On April 14, 2021, the Contractor began installation of new side traveler rail chairs on the east side of Span 3. The Span 3 east side traveler rail and rail chair removal is complete and installation of the new rail chairs, crane rails and trolley beams is complete. Final relative alignment of trolley beams and crane rails and painting are complete.

On May 10, 2021, the Contractor began removal of the Span 2 east side existing side traveler rails and trolley beams. On August 9, 2021, the Contractor began installation of new side traveler rail chairs. The Span 2 east side traveler rail and rail chair removal is complete and installation of the new rail chairs, crane rails and trolley beams is complete. Final relative alignment of trolley beams and crane rails and painting are complete.

On April 6, 2022, the Contractor began in Span 3 installation of the temporary side platforms that will be used to install the net system. Installation of the temporary platforms was completed on April 21, 2022. The Contractor began the interior and exterior border cable installation on April 22, 2022. **On August 15, 2022, the Contractor completed installation of the border cables in Span 3, except at the North Main Tower interface and the mid-span weather station interface. On August 15, 2022, the Contractor began installing the temporary auxiliary cables between the interior and exterior border cables in preparation of the net installation. On August 17, 2022, the Contractor began installing the net between the Span 3 interior and exterior border cables. Installation is progressing.**

On April 27, 2022, the Contractor began in Span 2 installation of the temporary side platforms to be used to install the net system. Installation of the temporary platforms is complete. The

Contractor began the interior and exterior border cable installation on May 31, 2022. Installation of the border cables is continuing.

On February 19, 2019, the Contractor began removal and replacement activities for the Suspension Bridge west sidewalk railing. Removal of the west sidewalk railing is complete. Final painting is on-going.

On March 11, 2020, the Contractor began installation of the wind fairing in Span 3 of the Suspension Bridge. On March 30, 2020, the Contractor began installation of the wind fairing in Span 2 of the Suspension Bridge. Installation of the wind fairings is complete. Final painting is on-going.

On August 12, 2019, the Contractor began installing in the North Approach Viaduct the temporary access system to be used to perform the floorbeam strengthening activities. The access installation was completed on June 26, 2020. On March 12, 2020, the Contractor began layout work for the floorbeam strengthening. On June 10, 2020, the Contractor began tensioning the floorbeam high strength rods. On June 17, 2020, the work stopped. On May 13, 2021, the Contractor resumed work on the floorbeam strengthening. The strengthening of the last of the 42 floorbeams has been completed. On January 31, 2021, the Contractor began removing the floorbeam strengthening access system. Removal of the access system is continuing.

On January 15, 2020, the Contractor began installing on the west side of the North Approach Viaduct the temporary access system to be used to perform the net support and net installation activities. In September 2021, the temporary access system installation was completed. On January 8, 2021, the Contractor completed the installation of the first net support on the west side of the North Approach Viaduct. 9 of the 9 Type 1 net supports are complete. In October 2021, the remaining 4 of the 15 total Type 2 net supports were installed. Net support installation on the west side of the NAV is complete. On November 15, 2021, the Contractor began installation of the North Approach Viaduct net border cables. On February 3, 2022, the Contractor began installation of the first of four net mesh panels at west side of the North Approach Viaduct. All four panels were installed by February 8, 2022. The Contractor has completed sewing the mesh panels to the border cables. The Contractor is continuing installation of the smaller untensioned net panels within the North Approach Viaduct. The Contractor has begun removing the temporary access system. Temporary access system removal operations are continuing.

On April 7, 2022, the Contractor began installing the east side of the North Approach Viaduct the temporary access system to be used to perform the net support and net installation activities. Temporary access system installation is continuing.

The suicide deterrent barrier on and immediately adjacent to the North Anchorage Housing will consist of a tall vertical steel railing. On March 2, 2022, the Contractor began installation of a portion of the vertical steel railing on the west side of Span 4 Suspension Bridge near Pylon N2. On March 8, 2022, the Contractor began installation of a portion of the vertical steel railing on the east side of the Span 4 Suspension Bridge near Pylon N2. The work is continuing.

On February 28, 2022, the Contractor began installing on the South Approach Viaduct east side the upper level temporary access system to be used to install the east side sidewalk stringer net support brackets. On March 3, 2022, the Contractor began installing the east side sidewalk stringer net support brackets. This work is complete except for the most southerly and northerly support

brackets. On March 17, 2022, the Contractor began installing the east side lower level temporary access system to be used for installing the east side net supports. This work is continuing. The Contractor has installed **four** of the thirteen east side net support arms.

On April 18, 2022, the Contractor began installing on the South Approach Viaduct west side the upper level temporary access system for the installation of the east side sidewalk stringer net support brackets. Two brackets have been installed. The west side work is on hold while the contractor is progressing work on the east side.

On August 15, 2022, the Contractor began installing on the South Approach Viaduct girder spans the ground supported scaffolding to be used to install the girder span net supports. Work on the scaffolding installation is progressing.

On August 23, 2019, the Board, by Resolution No. 2019-060, authorized Contract Change Order No. 62 to Contract No. 2016-B-1, Golden Gate Bridge Suicide Deterrent System and Wind Retrofit Project, in the amount of \$420,685 for modifications to the suicide deterrent system wire mesh splice details.

On April 24, 2020, the Board, by Resolution No. 2020-021, approved Contract Change Order No. 20 to Contract No. 2016-B-1, Golden Gate Bridge Suicide Deterrent System and Wind Retrofit Project, in the amount of \$428,332, for modifications to the North Approach Viaduct floorbeam strengthening details.

On August 28, 2020, the Board, by Resolution No. 2020-054, approved a \$2,000,000 budget increase in the FY 2020/21 Bridge Division Capital Budget to the Golden Gate Bridge Physical Suicide Deterrent System Project (Project #1526), to finance additional administration and construction engineering staff costs relative to construction Contract No. 2016-B-01.

On February 25, 2021, the Board of Directors, by Resolution No. 2021-012, approved Contract Change Order No. 31 to Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Project, in the amount of \$1,132,331, for modifications to the Suspension Bridge Suicide Deterrent System end net panel configuration.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-044, approved a \$5,270,000 budget increase in the FY 2020/21 Bridge Division Capital Budget to the Golden Gate Bridge Physical Suicide Deterrent System Project (Project #1526), to finance through approximately November 2022, the District staff contract administration and construction engineering costs.

Physical Suicide Deterrent System and Wind Retrofit Environmental Compliance Monitoring Services, RFQ/RFP No. 2017-B-09. On November 21, 2016, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) to engage consultants to provide environmental compliance monitoring services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit. On December 20, 2016, the Office of the District Secretary received proposals from two teams. On January 27, 2017, the Board of Directors, by Resolution No. 2017-002, approved the award of a Professional Service Agreement to Environmental Science Associates, of San Francisco, CA, in an amount not to exceed \$882,831. The Notice to Proceed was issued effective February 16, 2017. The consultant is performing site surveys and employee training, and assisting the District with review of the construction Contractor's environmental submittals.

Physical Suicide Deterrent System and Wind Retrofit Construction Scheduling and Claim Review Services, RFQ/RFP No. 2018-B-07. On August 8, 2017, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) to engage consultants to provide cost estimating and construction scheduling and claim review services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit. On September 12, 2017, the Office of the District Secretary received eight proposals. The selection committee reviewed the proposals and on September 29, 2017, interviewed the three top-ranked proposers.

On November 17, 2017, the Board, by Resolution No. 2017-105, authorized the award of Contract No. 2018-B-07, Construction Scheduling and Claim Review Services, to Secretariat International in an amount not to exceed \$2,264,332.41 subject to the District receiving the California Department of Transportation's (Caltrans) approval of the PSA prior to its execution. The proposed contract and supporting documentation have been submitted to Caltrans for review and approval. On May 22, 2018, Caltrans approved the PSA and supporting documentation. The Notice to Proceed was issued effective July 9, 2018. The consultant is assisting the District with reviews of the Contractor's schedule and schedule updates.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-044, authorized execution of the Second Amendment to Professional Services Agreement No. 2018-B-07, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Construction Scheduling and Claim Review Services, to Secretariat International for continued scheduling and claim review services in an amount not to exceed \$925,000.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Steel Fabrication Shop Inspection Services, RFQ/RFP No. 2018-B-06. On August 29, 2017, the District issued a Request for Qualifications/Request for Proposals (RFQ/RFP) to engage fabrication inspection firms to provide structural steel fabrication shop inspection services during construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit. On October 3, 2017, the Office of the District Secretary received six proposals. The selection committee reviewed the proposals and on November 7, 2017, interviewed the three top-ranked proposers.

On December 15, 2017, the Board, by Resolution 2017-115, approved execution of Professional Services Agreement (PSA) No. 2018-B-06, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Steel Fabrication Shop Inspection Services, to Materials Testing & Inspection, Boise, ID, in an amount not to exceed \$1,500,000, subject to the Golden Gate Bridge, Highway and Transportation District receiving the California Department of Transportation's approval of the PSA prior to its execution. On February 23, 2018, Caltrans approved the PSA and supporting documentation. The Notice to Proceed was issued effective February 28, 2018. A kick-off meeting and fabrication site visit was held in Oregon on March 6, 2018. Quality Assurance inspections began on March 7, 2018.

On May 29, 2020, the Board, by Resolution No. 2020-027, approved the Second Amendment to Professional Services Agreement (PSA) No. 2018-B-06, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Steel Fabrication Shop Inspection Services with Material Testing & Inspection in an amount not to exceed \$180,000, to provide additional shop inspection services. The structural steel fabrication is essentially complete, and this contract has been closed.

Physical Suicide Deterrent System and Wind Retrofit, Suicide Deterrent Net System Fabrication Shop Inspection Services, RFQ/RFP No. 2018-B-075. On March 29, 2018, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP), RFQ/RFP No. 2018-B-044, to engage fabrication inspection firms to provide fabrication shop inspection services of the suicide deterrent net system at the Contractor's fabrication facility located near Burr Ridge, Illinois. By the proposal due date of May 1, 2018, no proposals were received. On May 9, 2018, the District re-advertised the Contract under RFQ/RFP No. 2018-B-075. On June 6, 2018, the Office of the District Secretary received three proposals. The consultant selection committee reviewed the proposals and interviewed the proposers on June 29, 2018 and July 2, 2018.

On August 24, 2018, the Board, by Resolution No. 2018-059, approved the award of Professional Services Agreement (PSA) No. 2018-B-075, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Suicide Deterrent Net System Fabrication Shop Inspection Services, to David Engineering, LLC., Chicago, IL, in an amount not to exceed \$400,000, subject to the District receiving Caltrans approval of the PSA prior to its execution. On September 18, 2018, Caltrans approved the PSA and supporting documentation. The PSA has been executed and the District issued the Notice to Proceed with the work effective October 8, 2018. On November 2, 2018, the District held a kick-off meeting with the consultant at the fabrication shop in Illinois. Quality Assurance inspections began on April 15, 2019, and are ongoing.

On February 25, 2021, the Board, by Resolution No. 2021-013, approved the Third Amendment to PSA No. 2018-B-075, Golden Gate Bridge Physical Suicide Deterrent Net System Fabrication Shop Inspection Services with David Engineering, LLC., in an amount not to exceed \$163,000, for continuation of the suicide deterrent net system fabrication inspection services through December 2021.

On March 25, 2022, the Board, by Resolution No. 2022-016, approved the Sixth Amendment to PSA No. 2018-B-075, Golden Gate Bridge Physical Suicide Deterrent Net System Fabrication Shop Inspection Services with David Engineering, LLC, in an amount not to exceed \$134,000, for continuation of the suicide deterrent net system fabrication inspection services.

Temporary Structures Engineering Advisor Support Services for the Construction of the Golden Gate Bridge Physical Suicide Deterrent System and Traveler System, RFQ/RFP No. 2018-B-082. On August 3, 2018, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) No. 2018-B-082, to engage engineering firms to provide Temporary Structure Engineering Advisor Support Services related to the reviews of construction Contractor's temporary structures and construction Contractor's engineering evaluations of the sufficiency of bridge members' structural capacity under service loads and construction loads. On September 4, 2018, the Office of the District Secretary received one proposal.

On October 26, 2018, the Board, by Resolution No. 2018-066, approved the award of Professional Services Agreement (PSA) No. 2018-B-082, Temporary Structures Engineering Advisor Support Services for the Construction of the Golden Gate Bridge Physical Suicide Deterrent and Traveler Systems to TJA Engineering, Inc., Livermore, CA, in an amount not to exceed \$870,500, subject to the Golden Gate Bridge, Highway and Transportation District receiving the California Department of Transportation's approval of the PSA prior to its execution. On October 31, 2018, Caltrans approved the PSA and supporting documentation. The PSA has been executed and the District issued the Notice to Proceed with the work effective November 8, 2018. The consultant

is assisting the District with reviews of the Contractor's temporary structures.

On October 23, 2020, the Board, by Resolution No. 2020-082, authorized execution of the Second Amendment to PSA No. 2018-B-082, Temporary Structures Engineering Advisor Support Services for the construction of the Golden Gate Bridge Physical Suicide Deterrent and Traveler Systems, with TJA Engineering, Inc., in an amount not to exceed \$1,340,000, for continuation of engineering support services during construction of the Golden Gate Bridge Physical Suicide Deterrent System Project.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Field Inspection Support Services, RFQ/RFP No. 2018-B-084. On August 24, 2018, the District issued a Request for Statement of Qualifications and Proposals (RFQ/RFP) No. 2018-B-084, to civil engineering construction management consultants to provide field inspection support services during the construction of Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit.

On September 21, 2018, the Office of the District Secretary received one proposal. The consultant selection committee reviewed the proposal and interviewed the proposer on October 11, 2018.

On December 20, 2018, the Board, by Resolution No. 2018-080 approved the award of Professional Services Agreement (PSA) No. 2018-B-084, Golden Gate Bridge Physical Suicide Deterrent Field Inspection Support Services, to Summit Associates, in an amount not to exceed \$3,700,000, subject to the District receiving the California Department of Transportation's approval of the PSA prior to its execution. The District received Caltrans' approval on January 14, 2019. The PSA has been executed and the District issued the Notice to Proceed with the work effective January 28, 2019. The consultants began assisting the District with field inspections on January 28, 2019. Field inspections are ongoing.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-044, authorized the execution of the Second Amendment to Professional Services Agreement No. 2018-B-84, Golden Gate Bridge Physical Suicide Deterrent Field Inspection Support Services, with Summit Associates for continuation of field inspection services in an amount not to exceed \$1,715,000.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Maintenance Traveler System Fabrication Shop Inspection Services RFQ/RFP No. 2019-B-007. On April 24, 2019, the District issued a Request for Statement of Qualifications and Proposal (RFQ/RFP) No. 2019-B-007 to structural steel fabrication inspection firms to provide steel fabrication shop inspection services during the construction of the Project at the fabrication shops located in Alabama and Georgia. On May 21, 2019, the Office of the District Secretary received one proposal. The consultant selection committee reviewed the proposal and interviewed the proposer on June 18, 2019.

On July 26, 2019, the Board, by Resolution No. 2019-048, approved the award of Professional Services Agreement (PSA) No. 2019-B-007, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Maintenance Traveler System Fabrication Shop Inspection Services, to Bureau Veritas North America, Inc.(BV), Lisle, IL, in an amount not to exceed \$640,000, subject to the District receiving the California Department of Transportation's approval of the PSA prior to its execution. The District received Caltrans' approval on July 29, 2019. The PSA has been

executed and the District issued the Notice to Proceed with the work effective September 23, 2019. The District held a kick-off meeting with the consultant at the Bureau Veritas home office in Lisle, Illinois on September 26, 2019.

The construction contractor informed the District that they will no longer fabricate the travelers in Alabama and Georgia and have contracted with a fabricator in Oregon and Washington. The consultant did not have available resources to perform the shop inspections at the new fabrication facility and has agreed that the PSA be rescinded.

Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Maintenance Traveler System Fabrication Shop Inspection Services RFQ/RFP No. 2021-B-073. To replace the rescinded PSA No. 2019-B-007, on December 17, 2021, the District issued a Request for Statement of Qualifications and Proposal (RFQ/RFP) No. 2021-B-073 to structural steel fabrication inspection firms to provide steel fabrication shop inspection services at the fabrication shops located in Oregon and Washington. On January 21, 2022, the Office of the District Secretary received five proposals.

On March 25, 2022, the Board, by Resolution No. 2022-016, authorized execution of Professional Services Agreement No. 2021-B-073, Golden Gate Bridge Physical Suicide Deterrent System, Maintenance Traveler Fabrication Shop Inspection Services, with Smith Emery Laboratories, in an amount not to exceed \$2,600,000. On June 28, 2022, Caltrans completed its review of the PSA and Smith Emery's billing rates. The Notice to Proceed was issued effective July 13, 2022. *On August 5, 2022, a fabrication site kick-off meeting was held with representatives from the District, Smith Emery and the contractor's fabricator. Quality assurance inspections began on August 5, 2022, and are on-going.*

Golden Gate Bridge Seismic Retrofit Phase IIIB, Design Services PSA No. 2010-B-1. On June 2, 2009, the District issued a Request for Statement of Qualifications and Proposals, Golden Gate Bridge Design Services, to engineering firms and on June 30, 2009, the Office of the District Secretary received proposals from four engineering teams. Based on the proposals and consultant interviews, HDR Engineering, Inc., was determined to be the top-ranked consultant. On August 14, 2009, the Board authorized the General Manager to execute the Contract with HDR Engineering, Inc., upon receiving FHWA/Caltrans approval. The Notice to Proceed was issued effective November 17, 2010.

The consultant has completed preparation of the base plan sheets, review of record documents, and computer modeling of the Suspension Bridge and is progressing with structural analyses. On March 20, 2012, and on June 5, 2012, staff met with the consultant to review progress and results of the structural analyses and development of preliminary retrofit strategies.

Geotechnical investigations involving test borings for the Toll Plaza Undercrossing and Lincoln Boulevard Overcrossing occurred on June 13-15, 2012. The geotechnical report, including foundation recommendations, has been completed and submitted by the consultant.

On October 8, 2012, staff met with the Suicide Deterrent consultant, HNTB Corporation, and the Seismic Retrofit consultant, HDR Engineering, Inc., to coordinate the design work between the two projects.

On November 16, 2012, the Board, by Resolution No. 2012-086, authorized District's participation in the FHWA Pooled Fund Study relative to the Phase IIIB Project structural analysis. On January 8, 2013, staff and the design consultant met with U.S. Army Corps of Engineers (USACE) and FHWA to discuss the Pooled Fund Study relative to the Phase IIIB Project. On February 6, 2013, staff, the design consultant and the USACE, by means of a telephone conference, discussed the progress of USACE's analysis and coordination between the consultant and the USACE. The District, with approval of FHWA and Caltrans, reached an agreement with the FHWA administrator of the Pool Fund Study regarding the scope of the structural analyses relative to the Phase IIIB Project to be performed by USACE. On May 14, 2013, staff, the design consultant, and the USACE met and discussed the progress of USACE's analysis and potential retrofit strategies. Staff, the design consultant, and USACE continued discussions on December 17, 2013, and January 8, 2014. USACE has submitted to the District a report summarizing the results of analyses to-date.

On April 3, 2013, staff and the consultant discussed the progress. On May 7, 2013, staff met with representatives of Caltrans and FHWA to discuss the project's design review process.

On January 24, 2014, the Board authorized the establishment of the Design Technical Review Panel (TRP). The first meeting of the TRP was held on February 20 and 21, 2014. The second meeting of the TRP was held on April 23 and 24, 2014. The third meeting of the TRP was held on July 9-11, 2014. At the third meeting, staff met with representatives of Caltrans and FHWA, and the TRP to discuss the status of the project. The fourth meeting was held on October 3-4, 2014, with Caltrans, FHWA and the TRP. The consultant presented the draft strategy report to Caltrans, FHWA and to the TRP for review and comments. The fifth meeting was held on December 11, 2014. At this meeting, the TRP concurred with the retrofit strategy as described in the Draft Strategy Report dated September 23, 2014.

On February 19, 2015, the Board of Directors, by Resolution No. 2015-008, authorized the Fourth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc., to Perform Energy Dissipation Device Testing. The Notice to Proceed for the Fourth Amendment was issued to the consultant effective March 9, 2015. The testing was performed in two phases. Phase one was the fabrication and testing of a 0.4 scale model of the EDD and the phase two was the fabrication and testing of a full scale specimen. The consultant completed the design of the phase one and phase two prototype Energy Dissipation Devices (EDDs) and entered into an agreement with a fabricator to fabricate the prototype EDD test specimens. The phase one fabrication began on April 13, 2015. On May 18, 2015, fabrication of the 0.4 Scale model of the EDD was completed and shipped to the University of New York at Buffalo, NY. On June 1, 2015, testing of the 0.4 Scale model began. The 0.4 Scale model testing was completed in November 2015. The consultant analyzed the test results and on November 18, 2015, a teleconference was held with the consultant, TRP, FHWA, and Caltrans to discuss the 0.4 Scale model testing results. The group concurred that the phase one testing objectives were met and that work could proceed on the next phase of EDD testing.

On November 30, 2015, the consultant was authorized to begin fabrication of the phase two test specimen. Fabrication was completed on June 27, 2016. The test specimen was shipped to U.C. San Diego testing facility on June 29, 2016 and the testing facility began installing the specimen into the testing equipment on August 15, 2016. The full scale test specimen testing began on September 9, 2016 and was successfully completed on September 28, 2016. On October 7, 2016,

the specimen was delivered to the Bridge. The consultant and U.C. San Diego completed the test report and documentation and consultant is using the test results to update the bridge model and finalize the retrofit design. On November 4, 2016, December 1, 2016, and December 2, 2016, staff met with the consultant to review the progress on the design. On December 6, 2016, staff met with the consultant, the TRP members and representatives from FHWA and Caltrans to discuss the results of the phase two full scale specimen testing performed at U.C. San Diego. On February 1, 2017 and February 2, 2017, staff met with the consultant, the TRP members, FHWA representatives and Caltrans representatives to review the progress of the seismic design, strategize on procurement process for the construction contract, clarify FHWA and Caltrans' project requirements, and confirm next steps in project design.

On October 9, 2015, the Board, by Resolution No. 2015-090, authorized the Fifth Amendment to Professional Services Agreement (PSA) No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, in the not to exceed amount of \$70,500, with HDR Engineering, Inc., for providing bid support services during the advertising period for construction contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit and authorized a contingency of \$7,000.

On December 16, 2016, the Board, by Resolution No. 2016-088, authorized the Seventh Amendment to Professional Services Agreement (PSA) No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, in the not to exceed amount of \$300,000, with HDR Engineering, Inc., for providing engineering support services during construction of the Suspension Bridge Wind Retrofit as part of construction Contract No. 2016-B-1, Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, and authorized a contingency of \$30,000.

On May 29, 2020, the Board, by Resolution No. 2020-028, approved the Second Addendum to the Seventh Amendment to Professional Services Agreement (PSA) No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc. in the not to exceed amount of \$106,752 to provide additional engineering support services during construction.

On February 24, 2017, the Board, by Resolution No. 2017-017, approved actions relative to the Eighth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Seismic Retrofit Phase IIIB Design Services with HDR Engineering, Inc., for additional design services to develop temporary supports and bracing, EDD access platforms, repairs to the main towers, replacement of the Fort Point Arch EDD friction elements and replacement of the roadside seismic isolation joint at the Marin Abutment in an amount not to exceed \$2,200,000, subject to the Golden Gate Bridge, Highway and Transportation District receiving approval from the California Department of Transportation, and to establish a contingency in an amount of \$220,000 for this amendment. The Notice to Proceed with the services under the Eighth Amendment was issued on March 6, 2017.

On April 4 and 5, 2017, staff met with the consultant, the TRP members, FHWA representatives and Caltrans representatives to review the 65% design plan submittal, discuss project timeline to complete bid documents, and next steps in project design.

On May 26, 2017, the Board, by Resolution No. 2017-047, authorized the Ninth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Project

Phase IIIB Design Services, with HDR Engineering, Inc., in an amount not to exceed \$191,000, to perform a wind study of the Suspension Bridge to take into account the addition of temporary bracing supports and construction work platforms, and established a contingency in an amount of \$19,100 for this amendment. The Notice to Proceed with the services under the Ninth Amendment was issued on May 30, 2017. The wind tunnel tests of the bridge model were performed during the week of October 2, 2017. Additional tests were performed the week of October 30, 2017. On May 11, 2018, the consultant submitted the wind tunnel test results.

On November 8 and 9, 2017, staff met with the consultant, the TRP members, FHWA representatives and Caltrans representatives to review the 85% design plan submittal, discuss project timeline to complete bid documents, and next steps in preparing the project for construction. On April 17, 2018, staff met with the consultants, the TRP members, FHWA representatives and Caltrans representatives to review the status of the project.

On November 17, 2017, the Board, by Resolution No. 2017-106, authorized the First Addendum to the Ninth Amendment of Contract No. 2017-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc. in an amount not to exceed \$216,500 to perform additional wind tunnel testing of the Suspension bridge to optimize the wind retrofit required to satisfy the wind retrofit criteria and to optimize the configuration of the temporary construction supports and work platforms. The additional tests were performed the week of January 15, 2018.

On July 24, 2020, the Board, by Resolution No. 2020-044, authorized the Second Addendum to the Ninth Amendment, in an amount not to exceed \$260,218, of Contract No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Phase IIIB Design Services, with HDR Engineering, Inc. to perform wind tunnel testing and acoustic studies on full-scale specimens of the new bridge railing and fairing in order to replicate, in the laboratory, the wind-induced sounds caused by wind passing through the new Suspension Bridge railing, and to determine what modifications, if any, could be made to reduce or eliminate the sound without impairing the effectiveness of the wind retrofit. The fabrication of the full-scale specimens has been completed and on October 23, 2020, wind tunnel testing began. The initial testing was completed on November 5, 2020. The District and consultant have evaluated the test results and developed details of measures that could potentially mitigate the wind induced sound.

On June 25, 2021, the Board of Directors, by Resolution No. 2021-043, authorized execution of the Fourth Addendum to the Ninth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Suspension Bridge Seismic and Wind Retrofit Project Phase IIIB Design Services, with HDR Engineering, Inc. in an amount not to exceed \$130,420 to conduct additional wind tunnel tests of potential sound mitigation measures. The additional testing of potential mitigation measures have been completed and the consultant has submitted a final report of the findings.

On December 18, 2021, the Board of Directors, by Resolution No. 2021-093, authorized actions relative to reducing wind induced sound emanated by the Golden Gate Suspension Bridge West Railing.

On July 28, 2017, the Board, by Resolution No. 2017-068, authorized the Tenth Amendment to Professional Services Agreement No. 2010-B-1, Golden Gate Bridge Seismic Retrofit Project Phase IIIB Design Services, with HDR Engineering, Inc., in an amount not to exceed \$399,000, for assistance with preparation of a Risk Assessment Plan and a Major Project Management Plan

(MPMP), and established a contingency in an amount of \$39,900 for this amendment. The Notice to Proceed with the services under the Tenth Amendment was issued on August 14, 2017. On September 12, 2017, staff met with the consultant to discuss the content of the MPMP. On January 2, 3 and 4, 2018, staff met with the consultant, TRP representatives, FHWA representatives and Caltrans representatives to develop a Project Risk Register as required by FHWA.

On June 21, 2019, the Board, by Resolution No. 2019-037, approved the Eleventh Amendment to Professional Services Agreement with HDR Engineering, Inc. for testing of stainless steel welding procedures for fabrication of the energy dissipation devices. The Notice to Proceed with the services under the Eleventh Amendment to the PSA was issued with an effective date of July 1, 2019. On September 25, 2019, welding began on a stainless steel specimen at a fabrication facility in Oregon. On October 14, 2019, welding began as a test specimen at a fabrication facility in Alabama. The welding of the stainless steel plates and testing of the welded plates has been completed, including the finalization of non-destructive testing protocols for the stainless steel welds. The report documenting the acceptable welding techniques and testing procedures is being finalized. On March 3, 2022 the final report was submitted by Vigor Industrial.

On July 27, 2018, the Board, by Resolution No. 2018-049, approved the use of the Construction Manager/General Contractor (CMGC) procurement method, authorized by and in conformance with Section 6970 et seq. of the Public Contract Code, for procuring construction of the Golden Gate Bridge Seismic Retrofit Phase IIIB project.

On September 12, 2018, staff met with FHWA and Caltrans representatives to develop a Project Oversight Agreement, as required by FHWA. FHWA, Caltrans and District are finalizing the Project Oversight Agreement, which assigns each party responsibilities for preparation, review and approval of project actions and documents during construction.

On September 13, 2018, staff attended a CMGC training workshop presented in Sacramento by Caltrans and FHWA. Staff is drafting various documents required for the solicitation of statement of qualifications from construction companies for the Phase IIIB CMGC Preconstruction Services.

On December 11, 2020, staff met with the design consultant, the TRP members, FHWA representatives and Caltrans representatives to discuss project timeline to complete CMGC bid documents, and to present a summary of the Energy Dissipation Device Testing report and the information contained in the Addendum A to the Seismic Retrofit Strategy Report. The TRP members reviewed the information and requested additional information prior to preparing their report documenting the results of their reviews of the retrofit strategies and design details and specifications. On July 15, 2021, staff provided the requested additional information. The TRP members reviewed the additional information and recommended minor edits to the Seismic Retrofit Strategy Report. The TRP members are working on finalizing their report.

On January 22, 2021, the Board, by Resolution No. 2021-007, authorized the following amendments to Professional Services Agreements Nos. 2014-B-7, 2014-B-8 and 2014-B-9, Golden Gate Bridge Seismic Retrofit Phase IIIB Technical Review Panel Member Services:

1. Sixth Amendment to PSA No. 2014-B-7 with Mr. Michel Bruneau, in an amount not to exceed \$100,000;

2. Sixth Amendment to PSA No. 2014-B-8 with Mr. Karl H. Frank, in an amount not to exceed \$100,000; and,
3. Sixth Amendment to PSA No. 2014-B-9 with Mr. David J. Nash, in an amount not to exceed \$100,000;

for continuation of technical review services of the Golden Gate Bridge Seismic Retrofit Phase IIIB Project design through the Construction Manager/General Contractor (CMGC) preconstruction phase of the Project.

Aluminum Clip Fabrication for Suspension Bridge Sound Reduction Project, Contract No. 2022-B-036. On March 15, 2022, the District advertised for the procurement of aluminum u-shaped clips that will be installed on the Suspension Bridge west sidewalk railing to reduce wind induced sounds. By the bid opening date of April 6, 2022, no bids were received. On April 7, 2022, the procurement was re-advertised with a bid opening date of April 26, 2022. On April 26, 2022, staff received one bid.

On May 20, 2022, the Board, by Resolution 2022-036, authorized the award of Contract No. 2022-B-036, Aluminum Clip Fabrication for Suspension Bridge Sound Reduction Project to RushCo Energy Specialist, Fort Worth, TX. The Notice to Proceed was issued with an effective date of June 6, 2022. The fabricator is preparing shop drawings and other submittals in preparation of the work. *The fabricator has provided paint samples for review and approval and is progressing with fabrication of the clip samples.*

Toll Plaza Pavement Overlay Project. On April 27, 2017, the Board of Directors, by Resolution No. 2017-039, approved the addition of the Toll Plaza Pavement Overlay project to the FY 16/17 Bridge Division Capital Budget in the amount of \$3,500,000 to be funded by District Reserves. Staff is finalizing the design plans and bid documents for the project.

Lead Cleanup Phase II Feasibility Study, Remedial Action Plan and Construction Drawings for Golden Gate Bridge North and South Approaches, RFP No. 2010-B-2. A Request for Proposal (RFP) to engage consultants to prepare a feasibility study, remedial action plan, construction drawings, and a revegetation plan(s) for cleanup of lead paint contaminated soils and sandblast residue at the North and South land approaches to the Golden Gate Bridge was posted on the District's website on October 20, 2009, and on December 1, 2009, seven proposals were received by the District. Staff evaluated the proposals and interviewed the top four ranked firms on February 3, 2010. On June 25, 2010, the Board authorized execution of a Professional Services Agreement (PSA) with Erler & Kalinowski, Inc., in an amount not to exceed \$980,057, with a contingency amount of \$98,000. The Notice to Proceed was issued with an effective date of September 1, 2010. The State Department of Toxic Substances Control (DTSC) has regulatory oversight of the project. The consultant has completed two rounds of soil sampling verification studies and has submitted the reports to the DTSC for review. Staff and consultant met with the National Park Service (NPS) for a project briefing. Consultant has prepared draft reports for various field investigations, including a topographical survey of the site, a landslide-potential survey, and inventories of the biological, wetland, archaeological, and cultural resources that exist on the site; and has developed draft cleanup alternatives and has prepared a draft Feasibility Study (FS). Staff and consultant met with the DTSC and with the NPS at separate meetings in January 2012 and discussed the draft remedial alternatives. On December 21, 2012, the Draft Golden Gate Bridge Lead Cleanup Phase

II Feasibility Study was sent to DTSC and NPS for review. In February 2013, NPS and DTSC representatives participated in a site walk-through of the proposed cleanup areas as part of their review of the cleanup alternatives in the Feasibility Study. On June 19, 2015, NPS sent a general reply letter on the Draft Feasibility Study (FS). NPS stated they are supportive of the project and generally agree with the proposed alternatives listed in the draft FS. On October 16, 2015, staff met with DTSC representatives to discuss comments on the FS and the required clean up levels. On October 23, 2015, DTSC sent a letter with its comments on the FS. Staff and the consultant are reviewing the DTSC's comments and their effect on the project scope. On August 1, 2016, the second amendment was executed extending the time of completion to September 1, 2017. On September 11, 2017, staff met with DTSC to further review the DTSC comments on the Feasibility Study and the cleanup level being proposed by DTSC. DTSC agreed to consider different cleanup levels and requested the District submit its proposal for consideration. On April 10, 2020, staff and its consultant had a teleconference with DTSC to discuss status of project, allowable cleanup level, and cleanup strategies. DTSC requested District to review current and future land use of areas and develop cleanup plan based on land use. On December 17, 2020, the District sent a letter to DTSC responding to DTSC's letter regarding the cleanup level and a site specific site management plan.

On June 3, 2021 the District received a letter from DTSC in response to the District's December 17, 2020 letter on lead cleanup goals. On June 10, 2021 the District sent a letter to DTSC expressing the District's interest in pursuing a land-use based cleanup program referred to as a Soil Management Plan (SMP) strategy. On July 20, 2021, DTSC responded to the District's June 10, 2021 letter. On August 13, 2021, a virtual conference meeting with the District, its consultant and DTSC was held to discuss the recent correspondence. Subsequent to the call, staff and DTSC compiled a list of items to be addressed in order to move the project forward. Staff and its consultant are working with DTSC staff on addressing each of the items.

On November 19, 2021, the District sent a letter to the National Park Service (NPS) informing NPS of the District's recent discussions with DTSC and the District's plan for moving this cleanup project forward. Staff and its consultant are continuing to work with DTSC and NPS on the cleanup goal for the Phase II areas.

On March 28, 2022, staff and its consultant met with representatives from DTSC and NPS to perform a field review of the Phase I areas to assess whether the measures implemented during Phase I to protect workers and the public were still functioning as intended. DTSC found that the measures, including fencing and signage, were functioning as planned. DTSC requested that a report of the site review be prepared and submitted to DTSC and uploaded to the DTSC website. Staff and its consultant prepared the field review report and, on May 25, 2022, transmitted the report to DTSC and NPS for their review and comments. *DTSC requested additional information on the report and on August 4, 2022, the District's consultant transmitted the revised final report and additional information to DTSC.*

Mandatory Bridge Inspection Program. In order to ascertain the structural condition of the bridge and to comply with FHWA (Federal Highway Administration) regulations, the District conducts a Biennial Bridge Inspection. Staff prepared and submitted to Caltrans the inspection work plans for the Biennial Bridge Inspection, including Underwater Inspection Plan of the North Pier, South Pier, and South Pier Fender, the Fracture Critical Elements Inspection, the Complex Bridge Element Inspection and the Routine Bridge Inspection Plans.

In January 2019, the District commenced the 2019-2020 Biennial Bridge Inspection. Engineering staff completed the inspection for the four auxiliary bridges on March 17, 2020, and on June 3, 2020, submitted the reports to Caltrans. On October 12, 2020, staff completed the 2019-20 biennial bridge inspection for the Golden Gate Bridge. On December 30, 2020, the final 2019-2020 biennial inspection report for the Golden Gate Bridge was submitted to Caltrans.

In January 2021, the District commenced the 2021-2022 Biennial Bridge Inspection. The inspections are continuing on the Suspension Spans. On March 24, 2022, Engineering staff completed bridge inspections of four auxiliary bridges - the Bunker Road Undercrossing, the East Road Undercrossing, the Lincoln Boulevard Undercrossing and the Toll Plaza Undercrossing, and is preparing final inspection reports for the auxiliary bridges. On June 2, 2022, the District submitted to Caltrans the final inspection reports for these auxiliary bridges.

Golden Gate Bridge Inspection Services, RFQ/RFP 2020-B-053. The Engineering Department prepared and on November 4, 2020, advertised a Request for Qualifications/Request for Proposals (RFQ/RFP) for the Golden Gate Bridge Inspection Services. The District is seeking proposals from qualified professional engineering firms to provide bridge inspection services, including (1) designing, furnishing, installing on the entire length of the Golden Gate Bridge (Bridge) and, when no longer required, removing from the Bridge rope climbing access systems to be used for bridge inspections; (2) using the rope climbing access systems to perform (a) Fracture Critical Member Inspections of select floor beams, girders, main cable and truss members, (b) Routine or Special Close Up Bridge Inspection of select non fracture critical members at the Bridge; and (3) preparing inspection reports. By the due date of December 8, 2020, the Office of the District Secretary received one proposal. Staff reviewed the proposal, found that it complied with the requirements of the RFQ, and negotiated scope and pricing of the services with the consultant.

On February 25, 2021, the Board, by Resolution 2021-014, approved the award of Professional Services Agreement No. 2020-B-053, Bridge Inspection Services, to HDR Engineering, Inc., Walnut Creek, CA, in an amount not to exceed \$9,063,000, to perform two cycles of the 23 CFR 650 mandated bridge inspections at the Golden Gate Bridge. The consultant has prepared their work plans and on April 26, 2021, began rope inspections of fracture critical members in the Span 4 of the Suspension Bridge. The Week 2 inspections were performed during the week of May 17, 2021, during which the Suspension Bridge Span 4 inspection was completed and the Suspension Bridge Span 3 began. The drone inspection pilot program was performed at the Suspension Bridge Span 4 during the week of May 24, 2021. The Week 3 inspections were performed during the week of June 28, 2021 and included inspections in the Suspension Bridge Spans 3 and 2. The Week 4 inspections were performed during the week of July 19, 2021, during which the North Approach Viaduct inspection was completed. The Week 5 inspections of the Suspension Spans 2 and 3 were performed during the week of August 23, 2021. The Week 6 inspections of the Suspension Spans 1 and 2 were performed during the week of September 20, 2021. The Week 7 inspections were performed during the week of October 18, 2021 and consisted of inspections of the Suspension Span 2, the Fort Point Arch, the South Approach Viaduct and portions of the Main Cable. The Week 8 inspections were performed during the week of November 15, 2021 and consisted of inspections of the remaining items requiring rope inspection. The 2021/2022 rope inspection field work is now complete. During the months of February and March of 2022, the consultant submitted final inspection reports for the 2021/2022 rope inspections.

Golden Gate Bridge Main Cable Access System Design Services, RFQ/RFP 2013-B-8. The Engineering Department prepared and advertised on May 14, 2013, a Request for Qualifications/Request for Proposals (RFQ/RFP) for the Golden Gate Bridge Main Cable Access System Design Services. On July 23, 2013, three proposals were received by the District. Staff evaluated the proposals and interviewed the top two firms on August 7, 2013. On September 20, 2013, the Board authorized the execution of a Professional Services Agreement, PSA No. 2013-B-8, with NCM Engineering Corporation, in an amount not to exceed \$799,756, with a contingency amount of \$79,976. The Notice to Proceed was issued effective October 17, 2013. The consultant submitted the main cable access concepts for District's review and staff selected a traveler system as the preferred concept to be advanced into the final design. On March 5, 2015, the consultant submitted the 100% design review plans and estimated construction cost, and staff met with the consultant to discuss the submittal. On May 28, 2015, the consultant submitted revised 100% design review plans and estimated construction cost.

On December 16, 2016, the Board, by Resolution No. 2016-090, approved the Seventh Amendment to PSA No. 2013-B-8 in the not to exceed amount of \$95,000, with NCM Engineering Corporation, for converting the technical special provisions to a new format and for reviewing and coordinating the administrative and technical special provisions and drawings. Staff has been holding progress meetings with the consultant to review the construction and operation sequences for the travelers.

On June 22, 2018, the Board, by Resolution No. 2018-041, approved execution of the Tenth Amendment to Professional Services Agreement No. 2013-B-8, Golden Gate Bridge Main Cable Access System, with NCM Engineering Corporation, of Gold River, California, in a not-to-exceed amount of \$173,133, for developing a traveler trolley system testing program, including testing technical specifications and drawings and established a contingency for this amendment in the amount of \$34,626. The consultant has submitted for staff review 90% completion plans, specifications and protocols for the testing.

Seismic Instrumentation. In 1995, the State of California, Division of Mines and Geology – Strong Motion Instrumentation Program (SMIP) installed and tested the Phase I seismic instrumentation system. Seventy-six seismic sensors and two recording stations were installed on the Golden Gate Bridge as part of this phase.

On April 10, 2001, and September 21, 2004, the Seismic Instrumentation Advisory Panel (Panel) approved the Phase II sensor locations for the South Approach Structures. Twenty-five additional sensors were proposed for the South Approach and were included as part of the Phase II Seismic Retrofit project. On September 24, 2002, the Panel approved the design plans for the Phase II Seismic Instrumentation, North Approach Structures. Twenty-four additional sensors for the North Approach were added to the Seismic Instrumentation System. Subsequent panel meetings were held on September 30, 2003, September 21, 2004, and October 25, 2006, to review the progress on construction of the Phase II Seismic Instrumentation and the MEMS system (Micro-Electro-Mechanical System) developed by the U.C. Berkeley Citris program. The MEMS has been tested with satisfactory results and was removed by U.C. Berkeley in March 2007.

On October 25, 2006, the Panel recommended installing a wind monitoring system on the Golden Gate Bridge. On April 27, 2007, the Board authorized SMIP to install the wind monitoring system,

including an anemometer and a seismic recorder connected to selected, existing and new seismic sensors on the Suspension Bridge.

On August 29, 2007, the Panel approved the design of the wind monitoring system, and recommended measuring ambient vibration and analyzing the bridge computer model with data recorded from the 1999 Bolinas and 2000 Napa earthquakes. The wind monitoring system was completed in October 2008.

During the week of October 17, 2016, SMIP technicians inspected and performed maintenance on the seismic sensors on and around the Bridge. During the week of November 7, 2016, SMIP technicians performed additional inspections and maintenance on the seismic sensors.

On April 18, 2017, SMIP tested the alarm panel located in the Sergeant's office. The alarm performed as intended.

On April 27, 2017, staff met with representatives from California Department of Conservation in Sacramento to discuss upgrades to the District's equipment in order to receive data quicker after a seismic event. On September 20, 2018, staff met with representatives from SMIP office of California Department of Conservation to further discuss upgrading the alarm system. The meeting with representatives from SMIP office took place on May 15, 2019, as on-going efforts to upgrade the seismic alarm system.

On July 24, 2019, the seismic alarm panel and seismic sensor located inside the Sergeant's Office were upgraded to streamline and improve earthquake notifications and post-earthquake responses. The new system has two alarms: 1) light shaking; and 2) moderate and more serious seismic shaking.

On October 25, 2019, the Board, by Resolution No. 2019-074, authorized execution of Professional Services Agreement No. 2019-B-056, Golden Gate Bridge Strong Motion Instrumentation Program, with the State of California, Division of Mines and Geology, in an amount not to exceed \$357,421.00 and authorized a contingency in the amount of \$35,742,00.

On February 28, 2020, the Board, by Resolution No. 2020-005, authorized execution of Professional Services Agreement (PSA) No. 2019-B-056, Golden Gate Bridge Strong Motion Instrumentation Program, with the State of California, Division of Mines and Geology. The Notice to Proceed was issued effective February 28, 2020.

On April 5, 2021, SMIP technicians were onsite to install new seismic recorders at the North and South Tower, North Anchorage and Pylon S1. The installation of the new seismic recorders were completed on April 14, 2021. On May 12, 2021, SMIP technicians were onsite to connect the fiber optic cables to the new seismic recorders. On October 4 2021, SMIP technicians were on site to connect the Ethernet for the new equipment. The final communication test of the new seismic recorders were completed on October 19, 2021.

Please see separate staff report regarding PSA No. 2022-B-061, Golden Gate Bridge Strong Motion Instrumentation Program, with the State of California, Division of Mines and Geology, to perform for three years monitoring, testing, inspections and repairs of the Golden Gate Bridge seismic instrumentation system.

Earthquake Response Plan. Engineering staff have developed a revised Earthquake Response Plan that accounts for the to-date constructed seismic retrofit measures on the bridge approach structures and further defines detailed procedures for response actions to be taken by the District's forces depending on severity of an earthquake.

In 2002, SMIP installed an independent seismic sensor with a warning light and buzzer in the Sergeant's control room. On March 1, 2007, the Bridge Earthquake Response Pager System successfully recorded and transmitted the Lafayette Earthquake with 1% g ground acceleration at the bridge. On October 30, 2007, the Bridge Earthquake Response Pager System successfully recorded and transmitted the Alum Rock Earthquake with a 1% g ground acceleration of the bridge.

On June 28, 2010, a small nearby earthquake triggered the sensors and recorded the earthquake.

On March 5, 2012, a 4.0 magnitude earthquake occurred on the Hayward fault near El Cerrito. The ground acceleration registered at the Bridge was insignificant to trigger the Bridge Earthquake Response Pager System. In accordance with the triggering criteria described in the "Bridge Earthquake Response Plan," a Level 1 inspection was performed by Sergeant's Office personnel with video cameras and a driving inspection of the roadway. It was determined that there was no damage to the bridge caused by the earthquake.

On August 24, 2014, a 6.0 magnitude earthquake occurred at 3:20 a.m. on the West Napa Fault, located west of the city of Napa, along the edge of the foothills. The ground acceleration registered at the Bridge was insignificant to trigger the Bridge Earthquake Response Pager System. In accordance with the triggering criteria described in the "Bridge Earthquake Response Plan," a Level 1 inspection was performed by Sergeant's Office personnel with video cameras and a driving inspection of the roadway. It was determined that there was no damage to the bridge caused by the earthquake.

On August 25, 2014, engineering staff performed a complete Level 1 inspection of all of the bridges under the District's jurisdiction. No damage was found at any of the structures.

On January 4, 2018, a 4.5 magnitude earthquake occurred on the Hayward fault near Berkeley. In accordance with the triggering criteria described in the "Bridge Earthquake Response Plan," a Level 1 inspection was performed by Sergeant's Office personnel with video cameras and a driving inspection of the roadway. In addition, Engineering performed a field inspection at the Bridge. It was determined that there was no damage to the bridge caused by the earthquake.

During the month of December 2020 and early January 2021, there were a number of small earthquakes in the larger Bay Area. None of these earthquakes were felt at the Bridge and none triggered an alarm at the Bridge.

On June 28, 2021, a 3.9 magnitude earthquake occurred on the Hayward fault near San Leandro. The earthquake was felt throughout the Bay Area. The earthquake did not trigger an alarm at the Bridge.

On August 1, 2022, the Pager System was tested with satisfactory results.

Golden Gate Bridge Toll Gantry Design Services, RFQ/RFP 2017-B-15. The Engineering Department prepared and advertised on May 2, 2017, a Request for Statement of Qualifications

and Proposals, Golden Gate Bridge Toll Gantry Design Services. On May 30, 2017, two proposals were received by the District. Consultant interviews were held on June 16, 2017.

On July 28, 2017, the Board, by Resolution No. 2017-067, authorized award of Professional Services Agreement, PSA No. 2017-B-15, Golden Gate Bridge Toll Gantry Design Services, to AECOM, in an amount not to exceed \$1,039,086, and established a contingency in an amount of \$155,863 for this PSA. The Notice to Proceed was issued effective August 21, 2017. A project kick-off meeting was held on August 25, 2017. The consultant is reviewing background information. On August 30 and September 22, 2017, the consultant's drilling sub-consultant drilled soil borings for the design of gantry foundations and cut core samples of the existing roadway structural section for the design of the roadway section near the gantry. The consultant is preparing the Geotechnical Report. The consultant surveyed the general area of the proposed gantry location on September 25, 2017, and September 26, 2017. The consultant prepared different gantry concepts for District review.

On January 30, 2018, staff and the consultant met with representatives of the American Institute of Architects (AIA) of San Francisco and a member of San Francisco Beautiful to discuss preliminary concepts and receive general feedback on the concepts. On February 16, 2018, staff and the consultant met with representatives from SF Heritage to discuss preliminary concepts. Staff and the Consultant modified the concepts based on the received feedback. On March 23, 2018, staff and the consultant presented three architectural toll gantry concepts during the Board of Directors' meeting for the Board's consideration and comments. On April 27, 2018, the Board approved Scheme C, Bridge Light Style, of the gantry architectural design for the project.

On June 1, 2018, the consultant submitted the 35% design review plans. On November 1, 2018, the District and consultant participated in a coordination teleconference with Kapsch, the new all electric toll equipment consultant.

On December 27, 2018, the consultant submitted the 65% design review plans. On February 7, 2019, the District and consultant participated in a coordination meeting with Kapsch to review the 65% submittal. The District provided the consultant with comments on the 65% submittal.

On March 22, 2019, the consultant submitted 75% design review plans with updated structural details. The District and Kapsch reviewed the 75% design review plans. District staff sent structural review comments on the 75% design review plan to AECOM on April 26, 2019, and stage construction and traffic handling review comments to AECOM on July 15, 2019.

On August 7, 2019, the District and consultant participated in a coordination meeting with Kapsch to resolve outstanding items prior to the 95% design submittal, including a revised Installation Plan to be submitted by Kapsch.

On November 6, 2019, staff presented the 75% design to the National Park Service (NPS) for the NPS review.

On November 27, 2019, the consultant submitted the 95% design plans and specifications. On December 6, 2019, the consultant submitted the 95% cost estimate. District staff reviewed the 95% submittal and on February 11, 2020, submitted comments on the design plans to the

consultant. On March 6, 2020, the consultant provided responses to the District's comments on the 95% design plans and determined some items required further discussion. On March 30, 2020, and on April 8, 2020, the District and the consultant discussed the District's outstanding comments on the 95% design plans. On October 29, 2020, the District submitted comments on the 95% specifications to the consultant.

On December 5, 2019, Kapsch submitted their revised Installation Plan and Installation Drawings. To properly coordinate the future 100% design plans, specifications and cost estimate, on March 26, 2020, the District and consultant participated in a coordination meeting with Kapsch to resolve the District's comments on Kapsch's revised Installation Plan and Installation Drawings.

On December 21, 2020, the consultant submitted the draft 100% design plans and specifications. The District staff has reviewed these documents and submitted to the consultant comments for incorporation into the final design package.

On May 29, 2020, the Board, by Resolution No. 2020-029 approved the Third Amendment to Professional Services Agreement (PSA) No. 2017-B-15, Golden Gate Bridge Toll Gantry Design Services, with AECOM, Oakland, CA, in the not to exceed amount of \$149,793.11, to perform additional design services.

On February 10, 2021, Kapsch submitted revised Installation Drawings and on August 10, 2021, Kapsch submitted the revised Installation Plan. The Installation Drawings include changes to the toll equipment that will require revisions to the 100% draft toll gantry design plans from the consultant. District staff have reviewed these revisions from Kapsch and on October 12, 2021, provided comments on the plan. Kapsch has provided further clarifications and is working on completing revisions to the Installation Plan.

Truss Span Staging for South Viaduct Restoration Project. On April 15, 2019, Bridge staff began installation of scaffolding in a portion of Span 4 of the South Approach Viaduct. Installation of the Span 4 partial scaffolding is complete and has been approved for use. Installation of scaffolding in the upper half of the truss in Spans 5 and 6 of the South Approach Viaduct have also been completed and approved for use.

On January 6, 2020, Bridge Paint department began clean and paint operations in containment area #5 which is located at the southern end of the Span 4 just north of tower 1. On March 6, 2020, blasting and primer application in containment area #5 was completed and minor steel repairs commenced. On April 17, 2020, intermediate coat and final coat operations began. On August 13, 2020, final paint operations in area #5 were completed.

On April 10, 2020, blasting and primer applications began in containment area #4 located at tower 1 and the south end of Span 4. On May 22, 2020, blasting and primer application in containment area #4 was completed. On August 26, 2020, rivet and bolt replacements were completed. On September 23, 2020, intermediate and top coat applications in area #4 were completed.

On August 10, 2020, blasting and prime coat applications began in containment area #6 located in the upper half of the truss at Tower Span 2 and south end of Span 5. On December 22, 2020, rivet and bolt replacements and miscellaneous steel repairs commenced in containment area #6.

Intermediate coat and final coat operations were performed from March 18, 2021 through May 6, 2021.

On January 11, 2021, blasting and primer application began in containment area #8, which is located at the north end of Span 6. On April 3, 2021, rivet and bolt replacements and miscellaneous steel repairs commenced. On August 9, 2021, fastener replacements and miscellaneous steel repairs were completed. On October 26, 2021, intermediate coat and final coat operations were completed.

On July 12, 2021, blasting and primer application began in containment area #9, which is located at the north end of Span 4, and were completed on September 7, 2021. On February 10, 2022, Quality Assurance tests for newly installed bolts were performed with satisfactory results. Fastener replacement and miscellaneous steel repairs in this area are complete. Intermediate and top coat application inside containment area #9 are continuing.

Blasting and prime coat applications were performed in containment area #7, which is the last containment at the SAV Truss Spans, from November 10, 2021 to January 7, 2022. On June 14, 2022, fastener replacements and miscellaneous steel repairs commenced. Operations inside Containment #7 are continuing.

Toll Plaza Administration Building Elevator Repairs and Improvements, Construction Contract No. 2021-B-052. Staff prepared design plans and bid documents to repair the existing elevator at the Toll Plaza Administration Building. On March 22, 2022, the District advertised Construction Contract No. 2021-B-052. On April 7, 2022, a pre-bid meeting was held at the Toll Plaza. On April 26, three bids were received.

On May 20, 2022, the Board, by Resolution 2022-037, authorized the award of award of Contract No. 2021-B-052 to Trico Construction, San Francisco, and authorized a capital budget increase in the amount of \$944,000 in the FY 21/22 Bridge Division Capital Budget for Project #2121, Toll Plaza Administration Building Elevator Replacement. The Notice to Proceed was issued effective June 13, 2022. The contractor is *continuing* performing field verifications and preparing work plans and submittals for the work. *On August 1, 2022, the contractor began work on the new elevator machine room. Work is progressing.*

BUS TRANSIT FACILITIES

Novato Bus Facility – Site Remediation. A site remedial investigation report regarding previous fuel leaks at the site was submitted to the San Francisco Regional Water Quality Control Board (SFRWQCB) in May of 1997. The SFRWQCB reviewed and approved the recommended corrective actions identified in the report, which included replacing the existing diesel Underground Storage Tanks (USTs). Two existing 12,000-gallon single-walled underground storage diesel tanks were removed in 1998 and replaced with two new double-walled 15,000-gallon USTs nearby.

In June 1999, the District submitted a report for implementation of the remaining corrective actions, which included quarterly groundwater monitoring, closure of a deep well, installation of additional monitoring wells and a sensitive receptor survey. The groundwater monitoring results

indicated that the fuel from the leak was confined to the site; however, it is not diminishing at a rate that would allow site closure.

The fourth quarter 2003 round of monitoring discovered a spike in contaminant levels in the monitoring wells. The District reported the findings to the SFRWQCB in its April 2004 progress report and included recommendations that would lead to site closure. The SFRWQCB approved the recommendations, added a few of its own, and required that the District implement those recommendations. The District implemented two rounds of quarterly groundwater monitoring that were concluded in March 2005. On November 8, 2005, the District advertised an RFP for a new contract to perform additional testing and monitoring as required by the SFRWQCB. On February 24, 2006, the Board authorized execution of a Professional Services Agreement with PES Environmental, Inc. The Notice to Proceed was issued to the consultant on March 6, 2006. The consultant prepared a work plan and submitted the plan to the SFRWQCB for approval. The District received a conditional approval of the work plan from the SFRWQCB. The consultant has performed extensive soil and groundwater sampling throughout the site. Consultant developed a plan to determine the extent of residual diesel fuel that has been discovered in the subsoil and groundwater. The plan was approved by the SFRWQCB.

Consultant completed the fieldwork delineating the extent and zones of residual diesel fuel and free-phase diesel fuel in the soil and groundwater and submitted the reports to the SFRWQCB for review and comment. On August 14, 2013, staff met with representatives of the SFRWQCB to discuss site closure requirements based on the new guidelines of the Water Board's recent "Low-Threat Underground Storage Tank Case Closure Policy." On April 7, 2015, the consultant completed the work tasks listed in the Professional Services Agreement.

The Water Board's representatives indicated that the free-phase product in soil and groundwater must be cleaned up before closure is granted.

Novato Bus Facility Underground Storage Tank Site Cleanup and Closure Design Services, Contract No. 2015-BT-02. A Request for Statement of Qualifications and Proposals (RFQ/RFP) to engage consultants to finalize environmental clearance, design and construction documents in order to complete site cleanup and obtain environmental closure of the site was advertised on September 2, 2014. On October 7, 2014, three proposals were received and on October 22, 2014, staff interviewed all three firms. On February 20, 2015, the Board of Directors authorized the award of Professional Services Agreement No. 2015-BT-02 with Brunsing Associates, Inc., in the amount not to exceed \$400,500, and established a contingency in the amount of \$40,500. The Notice to Proceed was issued effective March 16, 2015. The project kick-off meeting was held on March 18, 2015. The consultant has reviewed historical documents, performed groundwater sampling on March 25, 2015, and has performed a preliminary survey of the site. On May 22, 2015, the District sent a letter to the Water Board outlining the proposed tasks the District intends to perform in support of completing the Feasibility Study and Corrective Action Plan (FS/CAP) required by the Water Board. On June 30, 2015, the District received a letter from the Water Board granting approval to submit the FS/CAP by October 30, 2015. The consultant has prepared and submitted the draft topographic map, draft utility map, and draft boundary survey map. Staff is reviewing these documents. The consultant identified locations requiring additional subsurface investigation and submitted work plans to perform the investigations. On August 11-13, and 17, 2015, the consultant performed the site investigation work. On October 30, 2015, the FS/CAP report was submitted to the Water Board. On December 18, 2015, the Water Board notified the

District that a public notification and comment period on the proposed site cleanup is required. The Water Board requested a mailing list of property owners within a 500-foot radius of the site, a list of other interested parties and relevant public agencies, and a draft notification invitation to comment on the proposed cleanup at the site. The District provided the information to the Water Board and on January 6, 2016, the Water Board issued to the District the final Notice of Invitation to Comment. The District's consultant sent the Notice to all property owners and entities on the Interested Party list on January 7, 2016. The comment period ended on February 9, 2016. Staff sent responses to the public comments to the Water Board on March 7, 2016. On April 22, 2016, the Water Board requested that the scope of work presented in the FS/CAP be revised. Staff and consultant met with the Water Board on May 18, 2016 to discuss the Water Board's request, and explained the rationale for the preferred option in the FS/CAP. The Water Board requested the District prepare a document that further explains the cleanup goal described in the FS/CAP. The document was submitted to the Water Board on June 16, 2016. The Water Board issued a conditional approval of the FS/CAP on October 26, 2016, and requested the preparation of a Remedial Action Plan (RAP) for implementing the proposed cleanup work. The District submitted a focused RAP to the Water Board on January 13, 2017. The Water Board issued a conditional approval of the RAP on February 3, 2017. Staff has requested a time extension for completion of the cleanup from the Water Board in order to incorporate the RAP conditions into the design and complete the construction documents. On April 21, 2017, the Water Board approved a time extension for completion of the cleanup to the end of 2018 and approved reducing the frequency of testing of groundwater to twice a year.

On October 31 and November 30, 2017, staff submitted a Remedial Action Plan Implementation Progress Report to the Water Board. On December 28, 2017, staff submitted a progress report to the Water Board and requested a time extension for completion of the Project as described in the RAP. On February 28, 2018, staff submitted another progress report to the Water Board. In November 2019, staff met with the Water Board and presented the current schedule for completing design and commencing construction. Staff informed the Water Board that they are modifying the design and will advertise for construction in 2020. The Water Board stated the cleanup must take place as soon as possible and requested monthly updates on progress.

On September 25, 2020, the Board, by Resolution No. 2020-076, authorized execution of the Fourth Amendment to Professional Services Agreement No. 2015-BT-02, Novato Bus Facility Underground Storage Tank Site Cleanup and Closure Design Services, with Brunsing Associates, Inc., Santa Rosa, CA, in an amount not to exceed \$112,500.00, for engineering support services and post construction monitoring. On September 1, 2021, the consultant submitted to the Water Board the Remedial Action Plan Implementation Report. On September 30, 2021, the consultant performed groundwater sampling at the site. On October 28, 2021, the consultant submitted to the Water Board the ground water monitoring report and recommended that, based upon the monitoring results, the Water Board approve moving forward with site closure.

On June 13, 2022, the Water Board approved the August 31, 2021, RAP Implementation Report, the June 30, 2021, Semi-Annual Post-Construction Groundwater Monitoring Report, the October 28, 2021, Semi-Annual Post-Construction Groundwater Monitoring Report, and the February 24, 2022, Request for Site Closure report for the site, and requested that the District prepare and submit a Soil and Groundwater Management Plan and an interested party list, which are required in order to receive site closure. Engineering staff and the consultant are working on preparing the

requested information. The consultant is continuing to provide the post construction monitoring services.

San Rafael Parking Lot Improvements and Solar Panel Installation Project, Construction Contract No. 2021-BT-031. Staff is preparing design plans and bid documents to perform improvements to the employee and visitor parking lots and install a solar panel carport at the San Rafael Bus Facility.

Santa Rosa Bus Facility Resurfacing, Construction Contract No. 2021-BT-075. Staff prepared design plans and bid documents to perform asphalt concrete resurfacing, placement of concrete pavement, installation of new fencing, placement of pavement delineation and other improvements to the bus and customer parking lots at the Santa Rosa Bus Facility. On February 2, 2022, the District advertised Construction Contract No. 2021-BT-075. On March 1, 2022, 2 bids were received and opened.

On March 25, 2022, the Board, by Resolution No. 2022-015, approved award of Contract No. 2021-BT-075, Santa Rosa Bus Facility Resurfacing, to Argonaut Constructors, in an amount not to exceed \$1,429,211. The Notice to Proceed was issued with an effective date of April 18, 2022. The Contractor has prepared its initial material submittals and work plans and on June 6, 2022, began work. The Contractor has installed water pollution prevention measures, traffic control devices and has begun the phase 1 site demolition activities. The Contractor has completed placement of concrete pavement and utility conduits. On June 27, 2022, the Contractor started grinding existing asphalt pavement and placing new hot mix asphalt (HMA) overlay. On July 1, 2022, placement of HMA overlay at the bus lot and commuter parking lots have been completed. *Striping of the bus lot and commuter parking lots have been completed. Contractor is continuing with the installation of new security fencing and is working on completing punch list items.*

FERRY FACILITIES

Damage Assessment and Structural Analysis of the San Francisco Ferry Terminal Inner and Outer Berths, PSA 2021-F-049.

On June 30, 2021, during a facility inspection at the San Francisco Ferry Terminal, District staff discovered a crack in one of the outer berth steel framing elements. Subsequent inspections on July 6th and 7th, 2021, revealed additional cracks at both the outer and inner berths.

In accordance with Public Contract Code Section 22050 and the District's Procurement Policy, on July 14, 2021, the General Manager authorized an emergency procurement to hire Moffatt & Nichol to perform a thorough damage assessment and structural analysis in order to determine the cause of the cracks and the structural condition of the berths. The consultant completed the assessment and analysis and developed a repair for the inner berth. On March 11, 2022, staff submitted a construction permit application to the Port of San Francisco for the repairs. The Port issued the permit on April 18, 2022. *The consultant is providing engineering support during the construction.*

San Francisco Ferry Terminal West Berth Ramp Repairs, Contract 2022-F-035. Under the General Manager's authority, staff negotiated an emergency contract with Power Engineering Construction ("Power"), in the not-to-exceed amount of \$612,600, to perform the repairs.

On May 12, 2022, the Contractor began submitting its initial work plans and submittals for the repairs. The Contractor is continuing to prepare its work plans and submittals. *On August 8, 2022, the Contractor mobilized to the site and began installation of a temporary access platform that will be used during the work on repairing the existing concrete beam that supports the inner berth. On August 16, 2022, the Contractor completed the installation of the temporary access platform and began the concrete beam repair work. The repair work is continuing.*

Larkspur Ferry Terminal Emergency Utility Repairs, Contract No. 2022-F-050. On February 14, 2022, Ferry Division staff informed the Engineering Department that they found a corroded section of 2-inch diameter potable water pipe under the Larkspur Ferry Terminal and requested Engineering staff to perform an inspection to confirm the pipe's condition. This 2-inch pipe is the main water pipe feeding the terminal and berths from the water meter located near the flagpole within the terminal parking lot. Engineering Department staff performed an investigation of the water line and determined that it is in very poor condition and should be replaced as soon as possible. In addition, while performing site investigations, Engineering staff discovered a gas line running from under the terminal to the parking lot that is severely corroded and also in need of repair. Engineering staff developed a scope of work and drawings for the pipe removal and replacement.

In accordance with Public Contract Code Section 22050 and the District's Procurement Policy, , on June 14, 2022, the General Manager authorized an emergency procurement, Contract No. 2022-F-050, with Valentine Corporation, in the lump sum amount of \$227,169 to perform the repairs. The Notice to Proceed was issued effective July 18, 2022. Valentine is performing field verifications, preparing work plans and submittals for the work.

Larkspur Ferry Terminal Fuel Tank Cleaning, Inspection, and Rehabilitation, Contract No. 2022-F-014. District staff is preparing a request for proposals for services to clean, inspect and perform minor repairs to the District's four (4) 75,000 gallon above ground diesel fuel storage tanks located at the District's Larkspur Ferry Terminal.

Conceptual Designs, Environmental Studies and Engineering Services for Modifications and Improvements to the Larkspur, San Francisco, and Sausalito Ferry Terminal Facilities, PSA No. 2010-FT-3. A Request for Proposal (RFP) to engage consultants to perform this work was advertised on May 19, 2009, and on July 7, 2009, six proposals were received. On September 25, 2009, the Board authorized execution of a Professional Services Agreement with Moffatt & Nichol. The Notice to Proceed was issued effective November 2, 2009. Soil borings for evaluating geotechnical conditions at the San Francisco site and Sausalito site were performed between November 5 and November 12, 2010. The consultant completed the site surveys and alternative designs for each terminal. Staff completed evaluation of the alternative designs. Staff presented the design concepts to the Building and Operating Committee at its January 27, 2011, meeting.

The District's environmental consultant prepared draft environmental documents for the Sausalito and San Francisco Ferry Terminals. The draft documents were reviewed by District staff and on April 3, 2012, transmitted to the Federal Transit Administration (FTA) for review. FTA requested that the documents be modified prior to publishing them for public comments. The San Francisco

Terminal and the Sausalito Terminal documents have been revised and presented to FTA and FTA has determined they are acceptable.

San Francisco Ferry Terminal. On February 14, 2011, the design consultant presented the conceptual designs at the Ferry Passenger Advisory Committee meeting. On April 11, 2011, the design consultant presented the conceptual designs of the San Francisco Ferry Terminal to the Port of San Francisco and the Water Emergency Transit Authority (WETA). The Port and its design consultants then presented their conceptual design for the landside improvements behind the Ferry Building and the addition of new WETA ferry berths. It was agreed that these meetings will continue periodically as working sessions to ensure that both projects interface smoothly.

In October 2011, staff met with BART and business representatives of the San Francisco Ferry Building to brief them on the status of the project. Staff also met with BART and WETA to discuss schedule and potential construction impacts of projects. On February 18, 2014, staff and the consultant met with Port of San Francisco representatives to discuss the permitting requirements associated with the San Francisco Ferry Terminal project. On March 20, 2014, staff met with representatives from the Port of San Francisco, Bay Conservation and Development Commission (BCDC), San Francisco Bicycle Coalition, WETA, and the Ferry Building property management and Ferry Plaza tenants to discuss this project and other upcoming projects, the impacts the project will have on the area and how public access may be improved in the Ferry Plaza.

The consultant completed revisions to the San Francisco Ferry Terminal environmental technical documents and prepared the draft regulatory agency consultation letters for the FTA. The District submitted the revised letters and documents to the FTA for review and approval. The FTA requested additional edits to the consultation letters and environmental technical documents. The revised letters and environmental documents were submitted to the FTA on October 3, 2014.

On June 19, 2014, the FTA submitted to the State Historic Preservation Officer (SHPO) a request for concurrence that the proposed San Francisco Ferry Terminal Vessel Boarding Rehabilitation Project will have no adverse effect on historic properties, in accordance with Section 106 of the National Historic Preservation Act. On July 23, 2014, the SHPO concurred that the project will have no adverse effect on historic properties.

On November 6, 2014, the FTA submitted to the National Marine Fisheries Service a request for concurrence under Section 7 of the Endangered Species Act and the Magnuson-Stevens Fishery Conservation and Management Act, that the San Francisco Ferry Terminal Vessel Boarding Rehabilitation Project will have no effects or will not likely adversely affect federally listed species. On November 6, 2014, the FTA submitted to the U.S. Fish and Wildlife Service a request for concurrence that this project will have no effect or will not likely adversely affect certain listed species. The National Marine Fisheries Service (NMFS) requested additional information on the project. The District submitted the information to the FTA and on April 3, 2015, FTA submitted the information to NMFS. On April 13, 2015, NMFS concurred that the proposed project is not likely to adversely affect certain subject listed species and designated critical habitats.

Sausalito Ferry Terminal. The District presented the conceptual design for the Sausalito Ferry Terminal at the Sausalito City Council meeting on May 3, 2011, and also to the Director of Public Works on May 4, 2011. The City Council was amenable to the design with only minor comments and suggestions.

On September 19, 2012, the District filed a Notice of Intent to Adopt a Mitigated Negative Declaration, in conformance with the requirements of the California Environmental Quality Act (CEQA), for the proposed improvements at the Sausalito facility. On October 2, 2012, a public meeting was held at the Sausalito City Hall Chambers. The public comment period concluded on October 19, 2012. On December 14, 2012, the Board, by Resolution No. 2012-100, adopted a Mitigated Negative Declaration and approved the project design for the Sausalito Ferry Terminal.

On April 11, 2013, staff and the consultant met with BCDC to review the project and requirements for the submittal of a draft BCDC permit application. The consultant prepared and the District submitted the additional information requested by BCDC on the Sausalito Project.

On July 24, 2013, staff and the consultant met with the City of Sausalito Public Works Department to review the status of the project and coordination issues for the project.

On August 9, 2013, staff and the consultant participated on a teleconference with the FTA and the National Marine Fisheries Service (NMFS) discussing the impacts associated with the Sausalito Ferry Terminal improvements. The NMFS was concerned with impacts to the fish habitat as a result of the additional shading associated with the improvements and stated that the District must propose mitigation for the loss of habitat due to the additional shading. The FTA concurred and on September 13, 2013, wrote to NMFS committing to mitigate for the habitat loss and requesting concurrence with the District's determination that the project may affect, but is not likely to adversely affect, protected fish species and marine mammals. Staff, the FTA and NMFS negotiated mitigation measures to address the NMFS' concerns. The District entered into an agreement with the State Coastal Conservancy to implement the mitigation measures. The District and FTA met on December 5, 2013, to review the status of the project. The District submitted to FTA on December 10, 2013, in conformance with the new FTA format, documentation requesting concurrence that the Sausalito Ferry Terminal Project is categorically excluded under the National Environmental Policy Act (NEPA). On February 13, 2014, the FTA concurred with the District's determination that the project qualifies as a categorical exclusion under NEPA.

On December 20, 2013, the Board approved actions regarding an amendment to the consultant's contract for additional design services associated with a temporary terminal at Sausalito and vessel studies.

On January 29, 2014, staff submitted a permit application for the Sausalito Ferry terminal to BCDC. On February 27, 2014, BCDC requested additional information be prepared and submitted for their reviews. On April 29, 2014, District sent the additional information and responses to comments to BCDC. The District and the consultant presented the project to BCDC's Design Review Board (DRB) on October 6, 2014. BCDC staff requested additional information on the design of the facility. Staff submitted the information to BCDC on November 3, 2014. On December 4, 2014, staff presented the project to BCDC at a public hearing. BCDC requested further information from its staff regarding the specifics of the project. The District worked with BCDC on scheduling a date to bring the project back for consideration. On October 17, 2014, the City of Sausalito issued an encroachment permit for the temporary terminal and other work elements located outside the District's lease area. On December 2, 2014, staff made a presentation of the project to the City of Sausalito City Council. Staff worked with the City of Sausalito staff on establishing a project review process that would allow the City residents and officials to provide additional input on the project design. At its February 10, 2015 meeting, the City Council approved

the process. On March 11, 2015, the District presented the project to the Sausalito Joint Planning Commission/Historic Landmark Board meeting. On March 21 and 22, 2015, the District provided a story pole equivalent demonstration between 8:00 AM and 10:00 AM at the project site. On March 24, 2015, the District submitted its final design drawings and additional information requested by the City of Sausalito, of the Sausalito Ferry Terminal Improvements. On April 1, 2015, the District presented the project to the Sausalito Joint Planning Commission/Historic Landmarks Board meeting. On April 15, 2015, the District participated in the second Sausalito Joint Planning Commission/Historic Landmarks Board public meeting. On May 5, 2015, the District participated in the City of Sausalito Council meeting during which the City Council voted to not provide consent on the project. On June 27, 2015, staff attended a workshop with representatives of the Sausalito City Council and Sausalito residents to further discuss the project. On October 10 and November 14, 2015, staff met with members of the Sausalito City Council and Sausalito residents. The District presented a proposed revised design to the Sausalito Planning Commission and Historic Landmarks Board on March 16, 2016 and on March 29, 2016. Sausalito City staff compiled design questions for the Project from both meetings. The City of Sausalito has also hired consultants to independently peer review the District's proposed float size and renderings showing the proposed ferry terminal from different views along the Sausalito shoreline. On April 8 and 19, 2016, the City of Sausalito requested information related to the renderings and the size of the float. The District provided this information on April 19 and 26, 2016. The City of Sausalito and its peer reviewer requested additional information on June 1, 6, 9 and 17, 2016 and the District responded to these requests by June 29, 2016. The City of Sausalito requested information on July 22, 2016, related to the ferry schedule, number of passengers and operations. The District provided the information on August 11, 2016. On August 18, 2016, the District submitted a revised design package to the City of Sausalito and requested the City to provide its consent to the project within 45 days. On August 22, 2016, the City of Sausalito requested an extension to the 45-day review period in order for them to investigate whether further environmental reviews of the project were warranted. On September 2, 2016, the District withdrew its submittal requesting the City of Sausalito's review. On September 13, 2016, the City of Sausalito filed a lawsuit against the District. On October 25, 2016, the District attended a settlement meeting with the City of Sausalito to discuss the lawsuit and find resolution. On December 8, 2016, the District attended another settlement meeting with the City of Sausalito where the District's Consultant and the City's third party reviewer further discussed the size of the proposed facility. The City of Sausalito and its consultant requested more clarification and information on the design assumptions. On January 12, 2017, staff provided a response to the City's request.

On November 18, 2016, the Board approved actions relative to the Fifth Amendment to PSA No. 2010-FT-3 with Moffatt & Nichol for additional environmental and design services associated with the Sausalito and San Francisco ferry terminals.

On May 26, 2017, the Board, by Resolution No. 2017-045, approved the Sixth Amendment to PSA No. 2010-FT-3 with Moffatt & Nichol, in an amount not to exceed \$122,000, to perform an inspection and evaluation of the Sausalito Ferry Boarding facility, and established a contingency in an amount of \$12,200 for this amendment. Engineering is coordinating inspections of the float with the Ferry Division. Between December 4, 2017 and December 8, 2017, the Consultant performed in-water and above water inspections of the Sausalito float and the gangway.

On December 15, 2017, the Board, by Resolution No. 2017-116, authorized execution of the First Addendum to the Sixth Amendment to Professional Services Agreement, PSA No. 2010-FT-3, Conceptual Designs, Environmental Studies and Engineering Services for Modifications and Improvements to the Larkspur, San Francisco, and Sausalito Ferry Terminal Facilities, with Moffatt & Nichol, in an amount not to exceed \$19,200 to perform additional inspections and evaluation of the Sausalito Ferry boarding facility. The consultant submitted the final inspection report on March 26, 2018.

On May 26, 2017, the Board, by Resolution No. 2017-044, approved the First Addendum to the Sausalito Ferry Terminal Initial Study/Mitigated Negative Declaration, as amended to remove the selection of a specific construction staging area, authorized the filing of a Notice of Determination, and authorized proceeding with implementation of the modified Sausalito Ferry Terminal Vessel Boarding Rehabilitation Project.

On July 8, 2017, the District and the City executed a Memorandum of Understanding (MOU). The District submitted revised photo renderings of the project on August 17, 2017 and submitted revised plans on August 29, 2017. The District presented the revised plans and responded to questions from the City of Sausalito and the public at the September 12, 2017 and September 26, 2017 Sausalito City Council meetings. On October 10, 2017, the Sausalito City Council, at its Council Meeting, voted unanimously 4-0 to approve the project with conditions.

On October 27, 2017, the Board, by Resolution 2017-097, approved the First Amendment to the Lease of Public Tide and Submerged Land with the City of Sausalito, agreed to the Conditions of Approval set by the Sausalito City Council Resolution No. 5670, and authorized Staff to proceed with the implementation of the modified Project.

On June 25, 2018, the consultant submitted the 65% detailed design package. Staff has provided comments on the 65% design package to the consultant. On December 21, 2018, the consultant submitted the 95% detailed design package. Staff has provided comments on the 95% design package to the consultant.

On April 29, 2019, the consultant submitted the 100% detailed design package. Staff provided comments on the 100% design package to the consultant.

The consultant prepared the draft BCDC permit application for the construction. In November 2019, staff transmitted the BCDC permit application to the City for their signature. The City staff requested a meeting to discuss the permit application. Staff is working with the City to finalize the permit application.

Golden Gate Ferry Sausalito Landing Rehabilitation Environmental Mitigation Project, Contract No. 2015-FT-2. On June 27, 2014, the Board of Directors, by Resolution No. 2014-058, approved two (2) actions relative to the establishment of a new capital project, Golden Gate Ferry Sausalito Landing Rehabilitation Environmental Mitigation Project, in the amount of \$100,000 and authorized the General Manager to execute an agreement with the State Coastal Conservancy (SCC), in the same amount to implement the mitigation. The mitigation will be included in the State Coastal Conservancy's Living Shorelines Project that involves the planting and monitoring of eelgrass beds in the Central San Francisco Bay. The agreement has been executed and the SCC is proceeding with implementing the mitigation. On April 13, 2017, the SCC submitted the Eelgrass Habitat Creation and Monitoring at the San Rafael Living Shorelines Site Report as

required by the 2014 Cooperation Agreement between the District and the SCC. On December 13, 2017, the State Coastal Conservancy submitted the Annual Summary Reports for 2015 and 2016 as required by the Cooperation Agreement. On July 24, 2018, the SCC submitted the final Annual Summary Report for 2017.

Wetland Restoration Design and Permitting Support Services at Corte Madera Ecological Reserve, RFP No. 2014-FT-13. As a condition of a 1988 USACE permit for maintenance dredging of the Larkspur Ferry Terminal, the District was required to perform a study to assess the potential impact of ferry operations on erosion of the shoreline at the CMER. The study also investigated creating replacement habitat for a native bird species, the Clapper Rail, due to erosion of their existing habitat. The study was inconclusive regarding the impact of ferry operations on erosion of the shoreline. In consultation with the USACE and USFWS (U.S. Fish & Wildlife Service), the District agreed to create two acres of tidal marsh habitat on the District's 72-acre parcel adjacent to CMER, as mitigation for the erosion impacts. In addition, in 1995 the District negotiated an agreement with local environmental groups to create two more acres of tidal marsh habitat as mitigation for the introduction of the first fast catamaran ferry vessel to the Larkspur fleet, for a total of 4 acres of habitat restoration. A conceptual design report and a draft environmental IS (Initial Study) for the marsh restoration project prepared in 1999, proposed the restoration of three and one-half acres of tidal wetlands, two acres of seasonal wetlands, and the relocation of a public access easement that exists on the levee surrounding the parcel. Preparation of Final Plans and Specifications and acquisition of permits from the Town of Corte Madera, the USACE, USFWS and BCDC resumed in September 2003 with the award of a Professional Services Agreement to Philip Williams & Associates. The USACE met with District staff in March 2004 and stated they wanted to re-evaluate the proposed mitigation plan as well as perform a new JD (Jurisdictional Determination) of the entire 72-acre parcel. In 2006, the consultant performed the new JD in which a significant portion of the parcel was designated by the USACE as seasonal wetlands, because the land has subsided and now collects rainwater.

An environmental group, the Marin Baylands Advocate, expressed interest in purchasing the parcel and converting same to wetlands. Staff has been meeting with the group to discuss long-term use as a mitigation site for current and future Ferry Terminal projects. The District met with the USACE in March 2011 and September 2011 to discuss the status of the project and a revised design of the mitigation. The USACE performed a field review of the parcel on April 3, 2012, to compare existing conditions with the 2006 JD site map. The District will incorporate the USACE's comments in a new JD site plan.

The Engineering Department prepared and advertised on December 3, 2013, a Request for Statement of Qualifications and Proposals (RFQ/RFP) for Wetland Restoration Design and Permitting Support Services. On January 28, 2014, five proposals were received. On March 10, 2014, the District interviewed the top three ranked consultant firms. On April 25, 2014, the Board authorized the General Manager to award a Professional Services Agreement to WRA Inc.

A project kick-off meeting was held on May 22, 2014. The consultant prepared submittals and work plans and performed the site surveying and field investigation work of the entire 72-acre parcel and its immediate surrounds. The consultant submitted a draft title report, topographic and boundary survey report, draft wetland delineation report, and draft Phase I environmental report. Staff reviewed the reports and met with the consultant to discuss the comments. The title report and boundary survey report have been finalized and filed with the county. On July 16, 2015, staff

and consultant met with the U.S. Army Corp representative to review the draft wetland delineation map and compare to actual site conditions. U.S. Army Corp concurred with the wetland delineation, sent an informal concurrence email to Staff, and will follow up with a formal concurrence letter.

Consultant has completed the following reports: A Wetland Jurisdictional Delineation Report, Phase I Environmental Site Assessment, Hydrology Report, the Biological Resources Inventory, Geotechnical Report, Cultural Resources Inventory Report and Preliminary Restoration Concepts Report. Consultant presented the mitigation bank concepts of the project to District senior management staff on June 16, 2016, and made a presentation of the project's goals to the Board of Directors Building & Operating Committee members on August 25, 2016. Consultant prepared project alternatives and schedules for public outreach meetings with interested stakeholders to discuss the restoration project and invite public input and regulatory agency input. On November 2, 2016, staff and the consultant presented project alternatives to representatives from the U.S. Army Corps of Engineers. On November 10, 2016, staff and the consultant presented the project alternatives to representatives from the California Department of Fish and Wildlife. On November 16, 2016, staff provided updated project status to the Marin Audubon Society. On January 25, 2017, staff and the consultant presented the project concept to the Marin Audubon Society and the Marin Baylands Advocates. On February 28, 2017, staff and the consultant met with Marin Audubon Society and Marin Baylands Advocates on Site to continue discussions about the project concept plan.

On March 21, 2017, staff presented the project alternatives to the Corte Madera Town Council.

On June 15, 2017, staff and the Consultant presented the project to representatives of the U.S. Fish and Wildlife Service (USFWS).

On September 20, 2017, staff met with representatives from the Town of Corte Madera to discuss arrangements for a project information meeting with the town residents. The Town of Corte Madera representatives inform staff of the town residents request for maintaining the existing walking path on the parcel.

On December 4, 2017, the Consultant submitted the Draft Prospectus for the single-user Corte Madera Mitigation Bank to the Interagency Review Team (IRT). The IRT consists of US Army Corp of Engineers (USACE), Environmental Protection Agency (EPA), San Francisco Bay Water Quality Control Board (SFRWQCB), US Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and National Marine Fisheries Service (NMFS) representatives. On January 17, 2018, staff and the consultant met with representatives of the IRT to discuss the project. On February 9, 2018, staff and the consultant met with representatives of BCDC to brief them on the project. On February 20, 2018, staff and the consultant discussed the project details with the IRT. The IRT stated they preferred a project that separated public access from the restored area. The IRT did not provide any assurances that the District would be successful in establishing a single-user mitigation bank.

On June 6, 2018, staff and the consultant met with representatives of the US Army Corps of Engineers to review a revised project alternative. Staff presented a new concept of restoring 4 acres to tidal marsh. The US Army Corp of Engineers approved the concept and advised that the District should submit a US Army permit application for the proposed 4-acre project. On July 2,

2018, staff and the consultant presented the new concept to members of the Marin Audubon Society and the Marin Baylands. The consultant submitted, and on August 6, 2018, staff approved, a work plan for progressing the with the 4-acre project. On September 17, 2018, staff and the consultant reviewed the project with BCDC staff. On October 2, 2018, staff and the consultant presented the project to the Town of Corte Madera City Council. On October 19, 2018, staff and the consultant met with the Regional Water Quality Control Board to review the soil characterization work plan associated with the project. The RWQCB approved the plan and the soil sampling work took place on October 24 and 25, 2018. The consultant is analyzing the soil and progressing with the 35% design and regulatory agency permit applications. On November 2, 2018, the consultant submitted for District's review the draft Initial Study/Mitigated Negative Declaration (IS/MND). On December 18, 2018, staff returned to the consultant comments on the draft IS/MND. On December 17, 2018, the consultant submitted the 35% design plans. On December 24, 2018, the consultant submitted draft regulatory agency permit applications. Staff provided to the consultant comments on the applications.

On January 30, 2019, staff and the consultant met with representative of the SFRWQCB to present results from the October soil sampling, testing and characterization. The consultant incorporated feedback from the SFRWQCB into the regulatory permit applications.

On March 14, 2019, staff and the consultant met with representatives of the BCDC to present the project and discuss the upcoming permit application from the District. The consultant is incorporating feedback from the BCDC meeting into the project design. On April 3, 2019, the consultant submitted the Administrative Permit Application to BCDC on behalf of the District. On May 2, 2019, BCDS sent comments on the application and requested additional information. On September 12, 2019, the District responded to the comments and resubmitted the permit application. On November 21, 2019, the District received a letter from BCDC dated November 7, 2019, requesting additional information and clarification on the items the District submitted on September 12, 2019. On February 5, 2020, staff and the consultant had a teleconference with BCDC staff to discuss BCDC's comments on the permit application. On April 3, 2020, the District responded to BCDC's November 7, 2019 letter and resubmitted the permit application. In a letter dated May 1, 2020, BCDC responded to the District's re-submittal and requested additional information. On June 15, 2020, the District responded to BCDC's request for additional information on the permit application. On August 13, 2020, the District received the BCDC permit for the project construction.

On April 3, 2019, the consultant submitted a combined Regulatory Permit Application package to the US Army Corp of Engineers and to SFRWQCB on behalf of the District.

On April 18, 2018, the USACOE initiated Section 7 consultation with the US Fish and Wildlife Service and with the National Marine Fisheries Service.

On May 3, 2019, the SFRWQCB sent comments on the application and requested additional information. On September 12, 2019, the District responded to the comments and submitted the requested information. On November 25, 2019, the SFRWQCB sent comments on the District's September 12, 2019, responses and requested additional information. On April 3, 2020, the District responded to SFRWQCB's comments and request for additional information. On June 30, 2020, the District received the Section 401 Water Quality Certification.

On June 14, 2019, the US Fish and Wildlife Service issued their Biological Opinion for the project. On June 28, 2019, the National Marine Fisheries Service concurred with the USACOE conclusion that the project is not likely to adversely affect listed fish species or designated critical habitat.

On April 26, 2019, the District filed a Notice of Availability and Intent to Adopt an Initial Study/Mitigated Negative Declaration in conformance with the requirements of the California Environmental Quality Act (CEQA) for the Corte Madera 4-Acre Tidal Marsh Restoration Project.

By the end of the comment period, on May 26, 2019, the District had received 8 comments. On July 26, 2019, the Board, by Resolution 2019-049, approved the adoption of a mitigated negative declaration and approved action relative to the Corte Madera Tidal Marsh Restoration Project. On July 26, 2019, the District filed a Notice of Determination with the County Clerk of Marin County and the State CEQA Clearinghouse. On February 14, 2020, the consultant submitted the 95% design submittal. On April 15, 2020, staff provided comments on the 95% design submittal. On May 11, 2020, the consultant submitted the 100% design submittal. On May 21, 2020, staff provided comments on the 100% design submittal. Staff finalized the bid documents and on July 23, 2020, advertised the project for construction.

On November 15, 2019, the USACOE issued their Nationwide Permit (NWP) 27 authorization for the Project.

On September 25, 2020, the Board, by Resolution No. 2020-075, authorized execution of the Fourth Amendment to Professional Services Agreement No. 2014-FT-13, in an amount not to exceed \$550,000.00, for engineering support services and post construction monitoring.

The consultant has begun the post-construction monitoring services, including performing weeding and maintaining the new plants. On January 25, 2022, the consultant submitted the first year monitoring report to the US Army Corps of Engineers, BCDC, the Regional Water Board and to the California Department of Fish and Wildlife. The monitoring is continuing.

Larkspur Ferry Terminal Berth and Channel Maintenance Dredging Design, Pile Design and Permit Support Services RFQ/RFP 2021-F-018. A Request for Qualifications and Proposal (RFQ/P) to engage consultants to secure permits and authorizations and perform the design for the Larkspur Ferry Terminal Berth and Channel maintenance dredging and pile design was advertised on June 8, 2021. On July 12, 2021, three proposals were received.

On August 27, 2021, the Board, by Resolution No. 2021-068, approved the award of Professional Services Agreement No. 2021-F-018, Larkspur Ferry Terminal Berth and Channel Dredging and Pile Design and Permit Support Services, to Anchor QEA, LLC., in an amount not to exceed \$632,000.00. The Notice to Proceed was issued with an effective date of September 3, 2021. During the week of September 14, 2021, the consultant performed bathymetric surveying of the berths, turning basin, navigation channel and inlet near San Quentin prison. The consultant prepared a sediment sampling and analysis plan based upon the sediment volume determined from the survey and on November 3, 2021 presented the plan to the Dredged Material Management Office (DMMO). The DMMO approved the plan, with conditions. The consultant has completed the sediment sampling in accordance with the approved plan and received the analytical test results. On November 9, 2021, the consultant performed geotechnical borings to support the new berth mooring pile design. The District submitted its dredging permit application to the San

Francisco Bay Long Term Management Strategy (LTMS) agency and on April 5, 2022, received approval of the District's dredge material Alternative Analysis (AA). The approved AA specifies disposing of 30% of the dredge spoil material at an in-bay site and disposing 70% of the material at a beneficial re-use site. On April 8, 2022, the District received the San Francisco Water Board permit for the dredging work. The BCDC and USACOE permits for the dredging work are pending. The USACOE informed the District that the issuance of a nationwide permit for the new pile installation work now requires a more in depth environmental review. In order to keep the dredging work on schedule, the piling work has been removed from this project and will be included in a separate upcoming project. The consultant has completed the dredging design documents and assisted the District with finalizing the construction documents and bid package for the dredging work. The consultant is continuing work on the new piling design documents and is continuing work securing required regulatory permits for the piling work.

On June 24, 2022, the Board, by Resolution No. 2022-051, authorized execution of the First Amendment to Professional Services Agreement No. 2021-F-018, Larkspur Ferry Terminal Berth and Channel Maintenance Dredging Design, Pile Design and Permit Support Services, with Anchor QEA, LLC., for construction engineering support services during the performance of the dredging project. The Notice to Proceed with these services was issued effective July 6, 2022.

Larkspur Ferry Terminal Berth & Channel Maintenance Dredging, Construction Contract No. 2022-F-083. Staff and its consultant prepared design plans and bid documents to perform maintenance dredging of the berths, turning basin and navigation channel at Larkspur Ferry Terminal. On April 12, 2022, the District advertised Construction Contract No. 2022-F-083.

On June 1, 2022, three proposals were received. On June 24, 2022, the Board, by Resolution No. 2022-050, approved award of Contract No. 2022-F-083, Larkspur Ferry Terminal Berths and Channel Maintenance Dredging, to Manson Construction, Inc., of Seattle, WA, and authorized a capital budget decrease in the amount of \$5,600,000 in the FY 22/23 Ferry Division Capital Budget for Project #2340, Larkspur Ferry Terminal Berth and Channel Dredging – Construction. The Notice to Proceed was issued with an effective date of July 6, 2022. The contractor is *continuing* preparing submittals and work plans for the work. *On July 21, 2022, the Dredge Operation Plan (DOP) was submitted to the USACOE, BCDC and the San Francisco Regional Water Quality Control Board for approval and authorization to dredge. On August 12, 2022, the District received final approval of the DOP and authorization to dredge. The contractor is finalizing its schedule for mobilization of equipment and the commencement of dredging.*

Construction Contract Time Expended as of August 14, 2022					
Project	Contract	Contract Working Days	Elapsed Contract Days	Contract Extension Days	Contract Time Expended
Physical Suicide Deterrent System and Wind Retrofit (Shimmick/Danny's JV) NTP 02/13/17	2016-B-1	1,430	2009	0	140.00%
Santa Rosa Bus Facility Resurfacing Project (Argonaut Constructors) NTP 04/18/22	2021-BT-075	120	82		68.33%
San Francisco Ferry Terminal West Berth Ramp Repairs (Power Engineering Construction Co.)	2022-F-035	120	104		86.67%
<i>Larkspur Ferry Terminal Emergency Utility Repairs (Valentine Corporation Co.)</i>	<i>2022-F-050</i>	<i>120</i>	<i>27</i>		<i>22.50%</i>
Golden Gate Bridge Toll Plaza Administration Building Elevator Repairs and Improvements (TRICO Construction Co.)	2021-B-052	270	27		21.85%
Larkspur Ferry Terminal Berths and Channel Maintenance Dredging (Manson Construction Co.)	2022-F-083	147	40		27.21%
*Change orders in process to extend time					
NTP= Notice to Proceed					
NOC=Notice of Completion					

Fiscal Impact

There is no fiscal impact relative to this status report.