



Item No. 26 Town of Atherton

CITY COUNCIL STAFF REPORT – REGULAR AGENDA

TO: HONORABLE MAYOR AND CITY COUNCIL
GEORGE RODERICKS, CITY MANAGER

THROUGH: MICHAEL KASHIWAGI, COMMUNITY SERVICES DIRECTOR

FROM: MARTY HANNEMAN, CITY ENGINEER

DATE: SEPTEMBER 20, 2017

SUBJECT: BAYFRONT CANAL/ATHERTON CHANNEL FLOOD
PROTECTION AND RESTORATION PROJECT PLANNING,
DESIGN, AND ENVIRONMENTAL PERMITTING
MEMORANDUM OF UNDERSTANDING (MOU)

RECOMMENDATION

- 1) Authorize the City Attorney to prepare and the City Manager to execute a Memorandum of Understanding (MOU) in partnership with the City of Redwood City, City of Menlo Park, Town of Atherton, and the County of San Mateo (The Collaborative) to complete the planning, design, environmental permitting, and secure property access rights for the proposed Bayfront Canal/Atherton Channel Flood Protection and Restoration Project (Project); or
- 2) Receive the proposed Project MOU and request The Collaborative to delay its approval of the MOU until after a substantial portion of the design work has been completed on the Holbrook-Palmer Park Water Capture Project to determine the project benefits this may have for the Project.

BACKGROUND

The Atherton Channel and Bayfront Canal watersheds are multi-jurisdictional watersheds, crossing the Town of Woodside, Town of Atherton, City of Menlo Park, City of Redwood City and the County of San Mateo (County). Both watersheds have experienced 60 years of repetitive flooding, with 40 significant flood events from 1951 to date. During a flood event, areas in Atherton, Redwood City, Menlo Park, and the County are impacted by flooded streets, residences, and businesses particularly in areas adjacent to the Bayfront Canal and Atherton Channel. These events frequently inundate local roads with nuisance flooding and have damaged private property in larger events. As recent as the February 7, 2017 storm, the Atherton Channel, which flows into the Bayfront Canal, flooded on Marsh Road, near the Highway 101 exit. Residents of the Cities and unincorporated County, most of which are disadvantaged communities, have urged local

politicians to take actions to improve the safety and public health of their neighborhoods.

There have been numerous studies and analysis in the past 30 years that investigate the chronic and widespread flooding and describe the hydraulic capacity limitations in this area. The most recent study, titled “Bayfront Canal Hydrology and Hydraulic Evaluation,” was prepared by BKF Engineers and commissioned by Stanford University in June 2017. These studies have recommended the Bayfront Canal and Atherton Channel Project (Project), which is the focus of this MOU, a critical first step to resolving the flooding issues and completing future watershed-wide improvements.

The Town of Woodside, Town of Atherton, City of Menlo Park, City of Redwood City and the County of San Mateo have participated in general discussions relative to the Bayfront Canal/Atherton Channel Flood Management and Restoration Project for several years, but have not had dedicated funding for significant participation in a flood protection and restoration project until recently when the County of San Mateo offered to take a leading role and dedicated funding from the County Flood Resilience Program to coordinate the necessary efforts to reduce flooding from a collaborative of the affected agencies.

On March 20, 2017, the Regional Water Quality Control Board (RWQCB) met with representative parties to the MOU to discuss the proposed Project. This meeting was attended by representatives from the office of Congresswomen Jackie Speier; the City of Redwood City; the City of Menlo Park; the County of San Mateo; and the South Bay Salt Pond Restoration Project Manager. During this meeting the RWQCB indicated its intent to support this Project.

On May 11, 2017, City Managers from the City of Redwood City, the City of Menlo Park, and the Town of Atherton, met with the Deputy County Manager about collaborating on this Project. The consensus from the meeting was to draft an MOU for planning, design, and environmental permitting for the Project. No commitment from the Town of Atherton was made at that time. The County took the lead the preliminary work effort.

On May 16, 2017, the County Board adopted a Resolution, authorizing County on-call consultants to be retained to provide engineering and professional services for the Flood Resilience Program under the direction of the Director of Public Works when and if services are needed.

The purpose of the MOU is to establish the terms and conditions for the cost sharing and responsibilities of the Bayfront Canal/Atherton Channel Collaborative (Collaborative), which consists of the City of Redwood City, the City of Menlo Park, the Town of Atherton (Cities) and the County of San Mateo (County). The Town of Woodside was invited to participate; however, on July 26, 2017 the Town of Woodside notified the County that the town was not interested in participating.

Proposals from three County on-call consultants were received on August 1, 2017 to provide engineering and professional services for the Flood Resilience Program. These proposals are currently under evaluation by members of the Collaborative. Consultant services will not be retained until the MOU has been approved by all members of the collaborative; however, the County is considering giving a notice to proceed on the first task, Review of the Hydraulic Model,

on or about September 20, 2017. This task would be performed at risk by the County as it would begin prior to the entire Collaborative' schedule of approval.

The current schedule of approval for the MOU is as follows:

- Town of Atherton: September 20, 2017
- City of Menlo Park: September 26, 2017
- City of Redwood City: October 2, 2017
- County of San Mateo: October 17, 2017

ANALYSIS

The Bayfront Canal (Canal) is located north of Highway 101 (Hwy 101) and is generally located parallel to Hwy 101 in the City of Redwood City. It extends between Woodside Road and Marsh Road. The Canal is bounded to the north by Cargill's salt ponds and to the south by residential and industrial properties.

The Atherton Channel has approximately 6.5 square miles of tributary drainage area from the Town of Woodside, Town of Atherton, City of Menlo Park, City of Redwood City, and an unincorporated area of the County. The Channel joins the Canal near Marsh Road before the Canal drains into Flood Slough and the Bay adjacent to Bayfront Bedwell Park. The Canal has an additional 3.0 square miles of tributary drainage area, most of which is located on the south side of Highway 101. The combined flow from Atherton Channel and the Canal, a total of 9.5 square miles of contributing area, discharges into the Flood Slough through a tide gate control structure.

The flow from each jurisdiction that discharges to the Bay has been prepared for Stanford Hospital & Clinic in October 2013 by BKF and was used to calculate the proportional jurisdictional flow based on watershed areas to be: Town of Atherton (38%), the City of Redwood City (26%), County of San Mateo (22%), City of Menlo Park (10.5%), and the Town of Woodside (3.5%). Since the Town of Woodside has opted not to participate, the other parties in the Collaboration absorb the Town of Woodside's (3.5%) flow contribution as follows: Town of Atherton, 39.378%, City of Redwood City, 26.943%, County of San Mateo 22.798%, City of Menlo Park 10.881%, and Town of Woodside 0.0%.

The MOU has a not-to-exceed value of one million dollars (\$1,000,000), which is anticipated to fund only the planning, design, environmental permitting, and secure property access rights for the Project, but can be amended at a future date to include construction, operations, and maintenance. The consultant work associated with the Project will be issued through "Task Orders" to the County on-call consultant agreements. The planning, design, and environmental permitting efforts for the Project are anticipated to occur concurrently when possible to ensure that feasible solutions are identified, vetted through discussions with the regulatory agencies, and an implementable Project is designed. The County will serve as the contracting agency for work associated with the Project. The County will be reimbursed by the Collaborative as outlined in the MOU.

The MOU may be terminated, without cause, by any member of the Collaborative with 30 days

written notice to all of the members of the Collaborative. If a member of the Collaborative terminates the MOU, they will be responsible for their share of the cost of work performed up to the effective date of the termination. The remaining members of the Collaborative will stop work temporarily to address this change and may continue the Project, if agreed upon, through an amendment to the MOU. It should be noted that since the Town of Atherton has the greatest financial contribution of any of the other members, the remaining members of the Collaborative may not be able to continue to fund the Project should the Town of Atherton terminate the MOU or opt not to participate at all; therefore, the Town of Atherton should be fully committed to the Project before approving the MOU.

The MOU outlines responsibilities for the first of a series of projects that will provide a regional approach for flood risk management. It allows a collaborative community partnership to be formed with other agencies to provide multi-jurisdictional solutions to flooding which occurs over multiple jurisdictional boundaries in the same watershed. The MOU would be instrumental in the successful completion of this project and maintain a comprehensive list of the current known flood risk reduction projects in the Bayfront Canal and Atherton Channel watersheds to help ensure successful collaboration towards the completion of future regional flood management projects.

The MOU provides a percentage of flow contribution approach to determine the expected financial contribution of each member in the collaborative for this project. This same approach will probably be used to determine the expected financial contribution of each member for construction costs and future projects. There is a process to modify the contribution percentages following the consultant's review of this project and contributions from other projects that could impact flow contributions, such as Atherton's Holbrook-Palmer Park Project that will act as an upstream detention basin for this project.

A regional approach to watershed management is always good and using a flow contribution approach to determine the expected financial contribution of each member in the Collaborative is appropriate; however, at this time it is unclear how many regional projects, including this Project, Atherton will be asked to participate in.

The Project MOU will help provide a foundation for acquiring grants and other funding opportunities as appropriate for the Project. The City of Redwood City has already received a \$1,135,000 construction grant funding from the Proposition 84 Integrated Regional Water Management Implementation Grant to complete the Project and there are at least two immediate opportunities for grant applications this fall that would be compromised should the MOU be postponed or not be approved:

1. **FEMA/Cal OES Hazard Mitigation Grant Program** - due November 14, 2017 - potential for up to \$3,000,000 award for construction funding. This opportunity is to support communities implementing hazard mitigation measures following Presidential Major Disaster Declarations. The County had previously submitted an NOI on behalf of the Collaborative and have been approved to submit a full application.
2. **State Coastal Conservancy Prop 1 Grant** - due October 31, 2017 - potential for award TBD for construction funding or land acquisition. This opportunity is for water

sustainability, fish habitat, wetland restoration, urban greening, and benefits to disadvantaged communities. The Collaborative could apply for projects that supports restoration projects located within a DWR Disadvantaged Community. The Collaborative can leverage existing grants that have been awarded to the project or grants that hinge on this project being completed

Any grants that are awarded for planning, design, and environmental permitting throughout the duration of the MOU will be credited by the same contribution percentage of each Collaborative member, decreasing the overall project cost to the Collaborative.

Holbrook-Palmer Park Water Capture Project

The 2017 BKF study of the Bayfront Canal Project mentions a possible corrective action of storing runoff within the Town of Atherton, but the study does not consider this in the combinations of corrective measures that are currently presented. Considering that the Holbrook-Palmer Park Water Capture project, will be designed by the fall 2018 and completed in the spring 2020, before the Project, it may be prudent for the Collaborative to postpone the approval of the MOU and Project until a substantial portion of the design work has been completed on the Holbrook-Palmer Park Water Capture project to determine its downstream benefits to the Bayfront Canal.

At the September 6, 2017 City Council meeting, Council:

- Adopted a Resolution for the Town of Atherton to enter in to a Cooperative Implementation Agreement (CIA) with the California Department of Transportation (Caltrans); and
- Authorized the City Attorney to review and the City Manager to sign a CIA with Caltrans to receive State funds to construct a stormwater capture facility at Holbrook-Palmer Park; and
- Authorized staff to issue a request for qualifications (RFQ) for an engineering design consultant.

The Holbrook-Palmer Park Water Capture project, which is located at 150 Watkins Avenue, will act as an upstream detention basin for the Project and will reduce the flood flows and improve the water quality within the watershed. The Holbrook-Palmer Park project would include a diversion structure to re-direct all dry weather urban runoff and the first flush of wet-weather runoff from the Atherton Channel through a pre-treatment device to remove trash, debris, and sediment before conveying the water into a buried multi-chambered storage/infiltration facility with a targeted storage capacity of eight (8) to ten (10) acre-feet. Depending on the results of a geotechnical analysis, engineered dry well(s) on the bottom of the storage chamber are proposed to be constructed to facilitate infiltration. The density, depth, and diameter of these drains (dry wells) will be determined during the site evaluation stage of project design.

The proposed Holbrook-Palmer Park project will initially involve an evaluation of how to best achieve the multiple objectives of 1) capturing dry weather runoff in order to eliminate the transport of mercury, PCBs, trash and other pollutants to San Francisco Bay during dry weather; 2) capturing at least the first flush of wet-weather runoff to reduce the load of pollutants transported

downstream to the Bay during wet weather, 3) diverting potential flood flows from the Atherton Channel that flows parallel to the park, 4) minimizing the on-going operations and maintenance costs, and 5) reusing storm water for park irrigation, i.e., purple pipe systems. The Holbrook–Palmer Park Water Capture project would capture discharges from a tributary area of approximately 2,875 acres. The drainage area is split between four jurisdictions: Atherton, Menlo Park, Woodside, and unincorporated San Mateo County.

POLICY FOCUS

The Town has the opportunity to receive \$13.6 million in Caltrans funds to implement the Water Capture Facility at the Holbrook-Palmer Park site, an identified Tier 1 project in the 2015 Townwide Drainage Study Update. Prior to committing additional funding of approximately \$390,000 for the proposed Bayfront Canal/Atherton Channel Flood Protection and Restoration Project for the planning, design, and environmental permitting for the project, City Council may consider delaying their decision to participate in the MOU until after a substantial portion of the design work has been completed on the Holbrook-Palmer Park Water Capture Project to determine the project benefits this would have for the Bayfront canal.

FISCAL IMPACT

Funding for the planning, design, and permitting efforts have been budgeted by the County. The anticipated cost would be distributed among the Collaborative with the entire consulting efforts having a not to exceed cost of \$1,000,000. The Town of Atherton's share (39.378%) would be for a not to exceed amount of \$393,780.

If the Council desires to participate, the County and/or Redwood City have offered to assist the Town in financing its portion of the project over a period of years.

PUBLIC NOTICE

Public notification was achieved by posting the agenda, with this agenda item being listed, at least 72 hours prior to the meeting in print and electronically. Information about the project is also disseminated via the Town's electronic News Flash and Atherton Online. There are approximately 1,200 subscribers to the Town's electronic News Flash publications. Subscribers include residents as well as stakeholders – to include, but be not limited to, media outlets, school districts, Menlo Park Fire District, service providers (water, power, and sewer), and regional elected officials.

ATTACHMENTS

- Bayfront Canal/Atherton Channel Flood Protection and Restoration Project Memorandum of Understanding (MOU).
- Bayfront Canal/Atherton Channel Flood Protection and Restoration Project Memorandum of Understanding Exhibit A.

**MEMORANDUM OF UNDERSTANDING AMONG
THE CITY OF REDWOOD CITY, CITY OF MENLO PARK,
TOWN OF ATHERTON, AND COUNTY OF SAN MATEO
(BAYFRONT CANAL AND ATHERTON CHANNEL
FLOOD MANAGEMENT AND RESTORATION PROJECT)**

This Memorandum of Understanding (“MOU”) is made and entered into this ___ day of _____, 2017 by and between the City of Redwood City, the City of Menlo Park, and the Town of Atherton (“Cities”), municipal corporations of the State of California, and the County of San Mateo (“County”), collectively referred to as Bayfront Canal/Atherton Channel Collaborative (“Collaborative”).

1. Purpose. The purpose of this MOU is to establish the terms and conditions for the cost sharing and responsibilities for the design phase of the Bayfront Canal and Atherton Channel Flood Management and Restoration Project (hereinafter referred to as “PROJECT”), which will include the engineering planning, design drawings, technical specifications, and cost estimates; environmental compliance and construction permitting; and securing property access rights necessary to initiate construction bidding. This includes initial site surveys, hydraulic analysis, environmental and construction permitting approval, design drawings, specifications and engineering design estimates for the Bayfront Canal and Atherton Channel Flood Management and Restoration Project, as listed in the “Scope” section of Exhibit A to this MOU titled, Bayfront Canal and Atherton Channel Flood Management and Restoration Project. This MOU does not include construction and operation and maintenance activities, but it will serve as a template for future agreements with the Collaborative.

This MOU outlines responsibilities for the first of a series of projects that will provide a regional approach for flood risk management. The Collaborative will maintain a comprehensive list of the current known flood risk reduction projects in the Bayfront Canal and Atherton Channel watersheds. Flow contribution percentages, as shown in Exhibit A, pending review by the initial task of consulting engineers, will be used to determine the initial expected financial contribution of each member in the Collaborative. The flow contributions will be reviewed and confirmed by the Collaborative. This initial engineering Task will be performed on behalf of all parties as part of the first task of the consulting engineers. Exhibit A addresses the process to modify contribution percentages following the consultant review. Additional projects that could impact flow contributions, including but not limited to the projects described in Table 2 of Exhibit A, will not be included until significant design and funding of those projects is completed.

PROJECT construction, operation, and maintenance cost responsibilities will be addressed in future Agreements, or MOUs, subject to the agreement of all parties.

2. Term of MOU and Termination. This MOU is effective upon the day and date last signed and executed by the duly authorized representatives of the Collaborative to this MOU and the governing bodies of the Collaborative’s respective jurisdictions and shall remain in full force and effect until the completion of the PROJECT. This MOU includes all

consultant costs to complete this PROJECT incurred as of the Notice to Proceed to the Consultant(s) executed on or after September 26, 2017. This MOU may be terminated, without cause, by any of the parties in the Collaborative upon 30 days written notice to all members of the Collaborative. If a party terminates the MOU, they will be responsible for their share of the cost of work performed up to the effective date of the termination. The remaining Collaborative parties will stop work temporarily to address this change and may continue the Project if agreed upon through an amendment to the MOU. A final invoice will be sent to all Collaborative parties for costs incurred through the term of the MOU. All members in the Collaborative will have 30 days from the date of the final invoice to remit payment for services to the County.

3. Authorizations. The City Managers of the City of Redwood City, the City of Menlo Park, and the Town of Atherton, are authorized to approve extensions to the term of this MOU, to modify due dates, to resolve conflicts, or otherwise grant approvals on behalf of the Cities, provided such approvals are not vested in the authority of the Cities' Council, and provided that any approval requiring payment of funds in excess of appropriated funds shall require Cities' Council approval of the appropriations of those funds.

The San Mateo County Manager, serving as the County Board of Supervisors' designee, is authorized to approve extensions to the term of this MOU, to modify due dates, to resolve conflicts, or otherwise grant approvals on behalf of the County, provided that any approval requiring payment of funds in excess of appropriated funds requires the County Board of Supervisors' approval of the appropriation of those funds.

4. Responsibilities of the Collaborative. The County will serve as the lead and contracting agency for the PROJECT's design and environmental consultants. Consultants will be selected from the County's On-Call Engineering Service Agreements by a Collaborative Selection Committee. The County will manage the day to day work of the consultants as it relates to the objectives of the PROJECT, handle official communications regarding the contract, and reimburse the consultants under contract with the County for the work performed. Temporary and permanent land and easement negotiations with Caltrans, Cargill, West Bay Sanitary District, and other organizations will be facilitated by the County. The County of San Mateo Real Property Division will provide support for right of way acquisition services and real property expertise if the Collaborative needs these services. Each jurisdiction may be party to negotiating and securing easements or access for construction activities within their jurisdiction, and will be responsible for purchasing these easements, with the cost to be borne by the Collaborative. Land rights resulting from legal transfer and holding of easements will belong to the jurisdiction in which the land exists.

A designated staff member from each party in the Collaborative will participate in a working committee to ensure that the project direction and guidance needed from the Collaborative is communicated to the County. The working committee will update their respective jurisdictions as progress is made to obtain feedback that will form the final design.

5. Payment. Up to \$1,000,000 (depending on final cost of PROJECT) of the PROJECT outlined in this MOU will be paid for by the Collaborative. The costs will be allocated based on the contributing percentages of the Cities and the County in the Atherton

Channel and Bayfront Canal watershed boundaries. A description of the contribution percentages is outlined in Exhibit A. The Town of Woodside has decided not to participate and the 3.5% (up to \$35,000) financial responsibility will be split by flow contribution across the Collaborative. The updated MOU financial contribution percentages are as follows: Town of Atherton 39.8% (up to \$398,000); City of Redwood City 26.1% (up to \$261,000); County of San Mateo 22.6% (up to \$226,000); City of Menlo Park 11.5% (up to \$115,000), and Town of Woodside 0.0% (\$0). The flow contributions may be amended through the term of this MOU pending initial consultant review and review of additional projects in the watershed area that reduce or alter flow contributions. Any modifications to the contributing percentages will require approval of each party in the Collaborative and an Amendment to this MOU.

The intent of this MOU is to cover consulting costs for planning, design, environmental permitting and land acquisition. This MOU includes all consultant costs to complete this PROJECT incurred as of the Notice to Proceed to the Consultant(s). This Agreement and terms can be amended at a future date to include construction, operations, and maintenance. Any funding opportunities, including but not limited to grants and co-op agreements, that are awarded for planning, design, and environmental permitting throughout the duration of this MOU will be prorated by the same contribution percentage of each Collaborative member at the date of the execution of that funding agreement. This is intended to decrease the overall Project project cost to the Collaborative. Funding opportunities for construction will be assessed in a subsequent Agreement or Agreements.

The County will serve as the Project Manager and as such will coordinate with the consultant teams and manage the consultant contracts. The County will invoice the Collaborative for payment to the On-Call Engineering Service Agreements as described in Exhibit A. Project Management Support by the County will include invoicing the Collaborative, managing the consultant contracts, and project coordination. Each of the Cities in the Collaborative will be invoiced for the Consultant services on a quarterly basis and will remit a check payable to the County of San Mateo within 30 days of the invoice date. A table that illustrates how the financial responsibilities of each member of the Collaborative will be tracked and invoiced by the County is included as Attachment 1 to Exhibit A.

6. General Provisions

A. Indemnification. Pursuant to Government Code Section 895.4, each party agrees to fully indemnify, defend, and hold the other party (including its appointed and elected officials, officers, employees, and agents) harmless from any damage or liability imposed for injury (as defined by Government Code section 810.8) occurring by reason of the negligent acts or omissions or willful misconduct of the indemnifying party, its appointed or elected officials, officers, employees, or agents, under or in connection with any work, authority, or jurisdiction delegated to such party under this MOU. No party, nor any appointed or elected official, officer or employee, or agent thereof shall be responsible for any damage or liability occurring by reason of the negligent acts or omissions or willful misconduct of the other party hereto, its appointed or elected officials, officers, employees, or agents, under or in connection, with any work, authority, or jurisdiction delegated to such other party under this MOU.

B. Amendments. Each party in the Collaborative may request changes to this MOU. Any changes, modifications, revisions or amendments to this MOU including contribution limits by parties, which are mutually agreed upon by and between the Collaborative to this MOU, shall be incorporated by written instrument, and effective when executed and signed by all parties in the Collaborative to this MOU.

C. Severability. If any provision of this MOU shall be held to be invalid, void, or unenforceable, the validity, legality, or enforceability of the remaining portions hereof shall not in any way be affected or impaired thereby.

D. Applicable Law. The construction, interpretation and enforcement of this MOU shall be governed by the laws of the State of California. The courts of the State of California shall have jurisdiction over any action arising out of this MOU and over the Collaborative.

E. Notices. Any and all notices required to be given hereunder shall be deemed to have been delivered upon deposit in the United States mail, postage prepaid, addressed to each party in the Collaborative at the following address or such other address as is provided by such party in writing:

To City: City of Redwood City Melissa Stevenson Diaz City Hall 1017 Middlefield Road Redwood City, CA 94063 Attn: City Manager	To City: City of Menlo Park Alex McIntyre Admin Bldg /City Hall, 2nd Floor 701 Laurel St Menlo Park, CA 94025 Attn: City Manager	To Town: Town of Atherton George Rodericks 91 Ashfield Drive Atherton, CA 94027 Attn: City Manager	To County: County of San Mateo John Maltbie 400 County Center, 1 st Floor Redwood City, CA 94063 Attn: County Manager
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F. Entirety of Agreement. This MOU, consisting of five pages, signature pages, one Exhibit A represents the entire and complete MOU between each party in the Collaborative and supersedes any prior negotiations, representations and agreements, whether written or oral.

G. Debt Limitation. The Collaborative is subject to laws or policies which limit their ability to incur debt in future years. Nothing in this MOU shall constitute an obligation of future legislative bodies of the Cities or County to appropriate funds for the purpose of this MOU.

H. Conflict of Interest. The Collaborative shall avoid all conflicts of interest in the performance of this MOU and shall immediately notify the Collaborative should a conflict of interest arise that would prohibit or impair the Collaborative’s ability to perform under this MOU.

I. Disputes. The Collaborative agrees that, with regard to all disputes or disagreements arising under this MOU that are not resolved informally at the staff level after a good faith attempt by the Collaborative, the Collaborative may, at their sole and mutual discretion, agree to engage in mediation. The costs of the mediation shall be divided equally between the parties of the Collaborative, unless otherwise agreed.

J. Non-Discrimination. Neither the Cities nor County will discriminate, in any way, against any person based on sex, pregnancy, childbirth or related medical conditions, race, veteran status, religion, color, national origin or ancestry, physical or mental disability, medical condition, marital status, age, gender (including gender identity and gender perception), sexual orientation, use of family medical leave, genetic testing, or any other basis protected by federal or state law. This policy shall apply to all employment practices.

K. Counterparts. This Agreement may be executed in any number of counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, taken together, shall be deemed to be one and the same instrument.

7. Signatures. In witness whereof, the Collaborative to this MOU through their duly authorized representatives have executed this MOU on the days and dates set out below, and certify that they have read, understood, and agreed to the terms and conditions of this MOU as set forth herein.

The effective date of this MOU is the date of the signature last affixed to this page.

Exhibit A - Bayfront Canal and Atherton Channel Flood Management and Restoration Project, September 12, 2017.

[SIGNATURES ON FOLLOWING PAGES]

**MEMORANDUM OF UNDERSTANDING AMONG
THE CITY OF REDWOOD CITY, CITY OF MENLO PARK,
TOWN OF ATHERTON, AND COUNTY OF SAN MATEO
FOR THE BAYFRONT CANAL AND ATHERTON CHANNEL
FLOOD MANAGEMENT AND RESTORATION PROJECT**

IN WITNESS WHEREOF, the Collaborative hereto, by their duly authorized representatives, have executed this Memorandum of Understanding.

Each party in the Collaborative has executed a separate signature page.

APPROVED AS TO FORM:

City of Redwood City, a California
Municipal Corporation

By: _____
Veronica Ramirez
City Attorney

By: _____
Melissa Stevenson Diaz
City Manager

Date: _____

Date: _____

cc: Aaron Akin, Redwood City; Ramana Chinnakotla, P.E., Redwood City; Justin Murphy, P.E., Menlo Park; Marty Hanneman, Town of Atherton; Jim Porter, P.E. County of San Mateo

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THE CITY OF REDWOOD CITY, CITY OF MENLO PARK,
TOWN OF ATHERTON, AND COUNTY OF SAN MATEO
FOR THE BAYFRONT CANAL AND ATHERTON CHANNEL
FLOOD MANAGEMENT AND RESTORATION PROJECT**

IN WITNESS WHEREOF, the Collaborative hereto, by their duly authorized representatives, have executed this Memorandum of Understanding.

Each party in the Collaborative has executed a separate signature page.

APPROVED AS TO FORM:

City of Menlo Park, a California
Municipal Corporation

By: _____
William L. McClure
City Attorney

By: _____
Alex D. McIntyre
City Manager

Date: _____

Date: _____

cc: Aaron Aknin, Redwood City; Ramana Chinnakotla, P.E., Redwood City; Justin Murphy, P.E., Menlo Park; Marty Hanneman, Town of Atherton; Jim C. Porter, P.E. County of San Mateo

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THE CITY OF REDWOOD CITY, CITY OF MENLO PARK,
TOWN OF ATHERTON, AND COUNTY OF SAN MATEO
FOR THE BAYFRONT CANAL AND ATHERTON CHANNEL
FLOOD MANAGEMENT AND RESTORATION PROJECT**

IN WITNESS WHEREOF, the Collaborative hereto, by their duly authorized representatives, have executed this Memorandum of Understanding.

Each party in the Collaborative has executed a separate signature page.

APPROVED AS TO FORM:

Town of Atherton, a California
Municipal Corporation

By: _____
William B. Conners
City Attorney

By: _____
George Rodericks
City Manager

Date: _____

Date: _____

cc: Aaron Aknin, Redwood City; Ramana Chinnakotla, P.E., Redwood City; Justin Murphy, P.E., Menlo Park; Marty Hanneman, Town of Atherton; Jim Porter, P.E. County of San Mateo

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THE CITY OF REDWOOD CITY, CITY OF MENLO PARK,
TOWN OF ATHERTON, AND COUNTY OF SAN MATEO
FOR THE BAYFRONT CANAL AND ATHERTON CHANNEL
FLOOD MANAGEMENT AND RESTORATION PROJECT**

IN WITNESS WHEREOF, the Collaborative hereto, by their duly authorized representatives, have executed this Memorandum of Understanding.

Each party in the Collaborative has executed a separate signature page.

APPROVED AS TO FORM:

County of San Mateo, a California
Municipal Corporation

By: _____
Brian Wong
Deputy County Council

By: _____
John Maltbie
County Manager

Date: _____

Date: _____

cc: Aaron Akin, Redwood City; Ramana Chinnakotla, P.E., Redwood City; Justin Murphy, P.E., Menlo Park; Marty Hanneman, Town of Atherton; Jim Porter, P.E. County of San Mateo



Exhibit A

Bayfront Canal and Atherton Channel Flood Management and Restoration Project
 Prepared by County of San Mateo
 September 12, 2017

Purpose:

To complete the planning, design, environmental permitting, and secure property access rights for the Bayfront Canal and Atherton Channel Flood Management and Restoration Project (Project) on behalf of the Cities of Redwood City and Menlo Park, the Town of Atherton (Cities), and the County of San Mateo (the County) also referred to as the Bayfront Canal/Atherton Channel Collaborative (Collaborative). This is the first project in a series of anticipated future projects that will provide flooding relief to this cross-jurisdictional region.

Project Background:

The Bayfront Canal is located just north of Highway 101 in the City of Redwood City. The Bayfront Canal extends from west to east, from Douglas Court to Marsh Road and is bounded to the north by Cargill’s salt ponds and to the south by residential and industrial properties. The Atherton Channel has approximately 6.5 square miles of tributary drainage area and discharges into the Bayfront Canal near Marsh Road. The Bayfront Canal has an additional 3 square miles of tributary drainage area, most of which is located on the south side of Highway 101. The combined flow from the Atherton Channel and Bayfront Canal, a total of 9.5 square miles of contributing area, discharges into Flood Slough through a tide gate control structure. The watershed area, Project location, and planned future projects within the watershed are summarized in Figure 1.

Hydrology:

The peak flow rates from the Bayfront Canal Hydrology and Hydraulic Evaluation, prepared for Stanford Hospital & Clinic in October 2013 by BKF, was used to calculate the proportional jurisdictional flow based on watershed areas. The flow contribution percentages presented in Table 1 will provide a baseline funding strategy. These contributions will be expanded upon based on participation and for funding of the construction and operation and maintenance phases of the Project. A reduction of flow contributions per jurisdiction will be evaluated if upstream detention and storm water capture projects are implemented within the watershed.

Table 1. Jurisdictional Flow Contributions

Jurisdiction	Watershed Area %	Flow Contribution %	Financial Contribution %	Financial Contribution \$
Town of Atherton	44	38.0	39.8	398,000
City of Redwood City	13	26.0	26.1	261,000
San Mateo County	20	22.0	22.6	226,000
City of Menlo Park	17	10.5	11.5	115,000
Town of Woodside	6	3.5	0.0	0

This Project is the first step towards providing capacity for future projects within the watershed to reduce flooding. The most recent proposed solution recommends the installation of 4 – 63” HDPE siphon pipes is shown in Figure 2. The alignment passes under Marsh Road to the north of Highway 101 and connects



Exhibit A

to Pond S5 of the South Bay Salt Pond Restoration Project. This alternative needs to be developed adequately to be considered in the environmental permitting process.

Stakeholders

- **Project partners (the Collaborative):** The Collaborative is composed of the City of Redwood City, City of Menlo Park, Town of Atherton, and the County of San Mateo.
- **Regulatory Stakeholders:** Regulatory stakeholders who require permits include the California Department of Fish and Wildlife (CAFWS), the Regional Water Quality Control Board (RWQCB), the US Army Corps of Engineers, the US Fish and Wildlife Services (USFWS), Caltrans, and the San Francisco Bay Conservation and Development Commission (BCDC).
- **Additional Stakeholders:** Additional key stakeholders who have contributed to the evolution of the project improvements include: Cargill, Stanford University, Stanford Medical, and the South Bay Salt Pond Restoration Project (SBSRP).

Preliminary Design Workshop:

The Collaborative hosted a Preliminary Design Workshop to validate and agree on the preferred design of the proposed Project. The Preliminary Design Workshop included planning, hydraulic, geotechnical, structural engineering, and environmental compliance resources from the County's On-Call Engineering Service Agreements. The goal of the Preliminary Design Workshop effort was to validate and optimize the proposed design and to ensure that it considers environmental permitting and operational limitations and conditions that may impact the life and resiliency of the project. The following list summarizes the goals and outcomes of the workshop:

- **Review of existing conditions and Information.** Summarize existing information and garner support for a comprehensive alternative to use in the environmental permitting process.
- **Implementation strategy.** Collaborate on most recent hydraulic model results and agree on an implementation approach that best meets the environmental compliance and permitting requirements for the preferred alternatives.
- **Funding.** Develop high level engineering cost estimate for the preferred alternative and a funding strategy, which explores and considers multiple sources of funding in addition to Capital and traditional sources of funding.
- **Schedule.** Develop a preliminary schedule that includes Local, Regional, State and Federal stakeholder updates at key milestones.

Following the Preliminary Design Workshop, a representative member from each jurisdiction of the Collaborative will participate in the selection of the planning and design team. Regular Review Sessions will be held to incorporate stakeholder input and generate the most effective and resilient solution. Collaboration will take place through subject-specific workshops with project owners and stakeholders.

Scope:

The scope of work for this Project is defined below. Representatives from the Collaborative will review and select consultants based on proposals submitted by planning, design, and environmental permitting teams from the County's On-Call Engineering Services Agreements to deliver the scope of services listed below. The Consultants will be responsible for validating and calibrating technical information and ensuring that the Project objectives, budget, and key milestones are met.



Exhibit A

Task 1. Initial Hydraulic Analysis, Conceptual Design, and Review: A planning and design team will review previous hydraulic analysis and prepare preliminary designs necessary to initiate environmental permit negotiations. These initial designs will be reviewed in a Preliminary Design Review Workshop. This workshop will provide an opportunity for Cargill, a key stakeholder to review the proposed design. Consultants with potential conflict of interest will be excluded as the lead for this initial task.

Task 2. Land and Easement Negotiations: Land and easement negotiations with Cargill, Caltrans, and West Bay Sanitary District will be facilitated by the planning and design team to secure anticipated easements or to negotiate access for construction activities.

Task 3. Environmental Review and CEQA/NEPA Documentation: The environmental permitting team will prepare the necessary documents. The planning and design team will support the environmental permitting team through review, project description, and the purpose and need statements. This task will build upon the work completed by others for the SBSRP Phase 2 EIR/EIS.

Task 4. Final Design and Construction Documents: Plans and specifications will be prepared at the 60%, 90%, and 100% design stages. The final deliverable will be a set of construction ready plans, specifications and engineering estimates (PS&E). This Task will include construction permitting and grant acquisition.

Task 5. Bidding and Construction: Construction services such as contract bidding support, support for requests for information (RFI), and construction services will be part of an amended MOU or separate agreement.

Cost and Funding:

Current estimates for planning, design, environmental permitting, and land negotiation tasks are estimated at approximately \$1,000,000. The initial funding contribution for this work from each jurisdiction was estimated based on the percentages listed in the flow allocations listed in Table 1, which will be reviewed under consultant Task 1. The Town of Woodside has decided not to participate and the 3.5% financial responsibility will be by flow contribution across the Collaborative. The updated MOU financial contribution percentages are as follows: Town of Atherton - 39.8%, City of Redwood City - 26.1%, County of San Mateo - 22.6%, City of Menlo Park - 11.5%, and Town of Woodside - 0.0%. This MOU includes all consultant costs to complete this PROJECT incurred as of the Notice to Proceed to the Consultant of September 26th, 2017(s). Funding contributions per jurisdiction, for construction, and operations and maintenance will need to be assessed and negotiated in an amended MOU or separate agreement. The Collaborative will actively pursue grant opportunities for funding planning, design, and construction throughout the duration of the MOU. Any grant awards will be distributed by contribution percentages, resulting in an overall reduction of project costs.

See Future Work below for potential reallocation of contributions.

Public Outreach and Education:

A public outreach and education plan will be developed as part of the project. This outreach plan will be used to inform and educate the public and other stakeholders on the specifics of existing flood risks, potential solutions, and necessary green/grey infrastructure and operation and maintenance investments



Exhibit A

needed to alleviate flooding in the area. Consistent messaging and informational materials will be shared with the Collaborative to publish on their respective websites and for public distribution. The goal of this effort is to ensure that the impacted communities and stakeholders have a clear understanding of the flood risk reduction this Project will provide, and to educate them on other projects in the system that will need to be completed to ensure the region remains resilient to flooding to the extent possible.

Future Work:

The Project is limited to the planning, design, environmental permitting, and easement negotiations necessary to advertise for bidding. The deeds will be held by each jurisdiction. Negotiations of any necessary easements or land acquisitions will be facilitated with support from the County, the Collaborative, and the design Consultant. Future Addendums, MOUs, or Agreements will be required to address the construction and maintenance of the Project.

In addition to this Project, potential flood mitigation provided by upstream stormwater retention projects in the Bayfront Canal and Atherton Channel watersheds will be analyzed by the Collaborative as needed. Flow allocations per jurisdiction may need to be adjusted if it appears that upstream detention improvements reduce flow contributions to the Project. Table 2 below describes the potential future projects that may affect the existing flow contribution allocations listed in Table 1.

Table 2. Potential Future Projects

<u>Project</u>	<u>Responsible Party</u>	<u>Goal</u>	<u>Cost¹</u>	<u>Contribution²</u>
Bayfront Canal and Atherton Channel Flood Management and Restoration Project	All Parties	Mitigate flooding adjacent to Bayfront Canal	\$7,000,000-\$8,000,000	N/A
Holbrook-Palmer Detention Basin (Las Lomas School District)	Town of Atherton	Retain dry weather flow and first flush for water quality treatment	\$13,600,000	TBD
Tide Gate Upgrades	All Parties	Prevent high tide waters from entering the watershed	TBD	N/A
South Bay Salt Pond Restoration Phase II	Coastal Conservancy	Receive flood waters from Bayfront Canal/Atherton Channel	TBD	TBD
Chrysler Pump Station	Menlo Park	Convey flood waters to Flood Slough	\$7,000,000	TBD
Douglas Ave Pump Station	Redwood City	Convey flood waters to Bayfront Canal	TBD	TBD
Broadway Pump Station	Redwood City	Convey flood waters to Bayfront Canal	TBD	TBD
Fifth Ave Pump Station	Redwood City	Convey flood waters to Bayfront Canal		TBD
Athlone Terrace Pump Station	San Mateo County	Convey flood waters to Atherton Channel (ultimately Bayfront Canal)	TBD	TBD

¹ Costs are approximate and do not include construction permitting, easements, or O&M.

² Flow reductions to system will be determined following hydrologic analysis.



Exhibit A

Figure 2. Moffat and Nichol Design Alternative

