

# C/CAG

## CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

Atherton • Belmont • Brisbane • Burlingame • Colma • Daly City • East Palo Alto • Foster City • Half Moon Bay • Hillsborough • Menlo Park  
Millbrae • Pacifica • Portola Valley • Redwood City • San Bruno • San Carlos • San Mateo • San Mateo County • South San Francisco • Woodside

### TASK ORDER FORM

**Date/Start Date:** July 1, 2020

**Consultant Name:** Larry Walker & Associates

**Contract:** Countywide Water Pollution Prevention Program Technical Support

**Task Order No.:** LWA-06

**Task Order Name:** Municipal Stormwater NPDES Permit Compliance Assistance

**Scope of Work:** Green Infrastructure and Mercury & PCBs

**Deliverables:** See attached scope of work

**Budgeted Cost:** Per attached Fiscal Year 2020-21 scope of work, Tasks 9.6.a, 9.6.b, and 9.9 are authorized for a total not to exceed \$59,321. Subsequent tasks may be authorized via new Task Orders or amendments to this Task Order. No other tasks shall be implemented without receipt of a new or amended Task Order.

**Completion Date:** June 30, 2021

*The parties indicated herein agree to execute this Task Order per the scope indicated above. No payment will be made for any work performed prior to the start date of this Task Order. Unless otherwise indicated, receipt of this executed Task Order is your Notice to Proceed with the work specified herein.*

C/CAG

LWA

\_\_\_\_\_  
Sandy Wong, Executive Director      Date

\_\_\_\_\_  
Date

# Draft Scope of Services

## Fiscal Year 2020-2021

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### Scope of Services

Services described in this scope of work identify planned task and optional tasks with the LWA Team’s service areas for SMCWPPP for Fiscal Year (FY) 2020-2021. Optional tasks provide menu of tasks that have been identified by the Program Manager and LWA Team that could augment and improve GI and pollutant load reduction planning. Planned task and optional tasks will not exceed the assigned team budget. Work on the optional tasks will be further discussed with the Program Manager and undertaken at the direction of SMCWPPP.

### Task 5. Green Infrastructure (GI) Planning

#### Sub-Task 5.9 Assess Potential Refinements to Green Infrastructure Opportunities

The following describes scoping and budget for base and optional tasks for analyzing the impacts of the Water Board’s proposed changes to the definition of C.3 regulated projects focusing on lowering the new or replaced impervious surface area threshold to 5,000 square feet and removing the exemption for street and single family residential projects. SMCWPPP is interested in understanding the implications of this proposed change on the mix of private and public projects that are needed for jurisdictions to satisfy their targets for impervious area treated. This would be done by doing an analysis of how the proposed C.3 regulated project changes would affect the extent of regulated projects in two example local jurisdictions in San Mateo County.

Two optional tasks are also defined. The first would assess the additional implications of jurisdictions requiring new or redevelopment projects to make green streets improvements along adjacent street frontages as is being done by Redwood City and being considered by other communities, such as Atherton. The second optional task would be to assess MTC’s updated Plan Bay Area development projections for all jurisdictions in San Mateo County, and the revised projections could change the amount of private green infrastructure projected to be implemented by 2040.

#### **Sub-Task 5.9.a      *Analyze lower C.3 thresholds in MRP update***

In this task, CD+A will work with SMCWPPP staff and local jurisdictions in San Mateo County to determine a subset of two “case study” jurisdictions to take through the analysis. The goal will be to

select communities that have development data available to support the analysis and which are representative of the mix of land use types and densities that vary across the jurisdictions in San Mateo County. For example: Atherton and Redwood City, or Hillsborough and the City of San Mateo. CD+A will prepare a data request memorandum to be distributed to jurisdictions to verify they have the desired information readily available.

Once the two case study jurisdictions are determined, CD+A will compile GIS data for overall land use designations, green infrastructure opportunities identified through the Stormwater Resource Plan, the Countywide Sustainable Streets Master Plan, and each community's green infrastructure plan.

CD+A will work with the two communities' staff to review building permit tracking information to identify proposed and permitted new and redevelopment projects that would have met or exceeded the proposed threshold that did not meet the previous threshold because of project size or type. Jurisdictions will also be asked how defining streets with a 5,000 square foot or greater impact to pavement as regulated projects would affect the extent of street projects that may be implemented by 2040. This information will be used to make an estimate of the land area and treated impervious area of future projects up to 2040 that would meet or exceed the proposed threshold.

The resulting land area data will then be used to see how the project increase in future new and redevelopment projects, and regulated green streets projects potentially decrease the need for new green street projects, other green infrastructure projects, or regional projects for these jurisdictions. CD+A will provide SMCWPPP and local jurisdiction staff with tables summarizing the initial analysis for review and feedback, and make one update to the estimates, if needed.

CD+A will prepare a draft memorandum for review by SMCWPPP staff and local jurisdiction staff describing the methodology, results, and potential green infrastructure policy and programming implications of the proposed C.3 threshold changes. Following receipt of comments, CD+A will work with SMCWPPP staff to resolve comments and then prepare a final memorandum.

### ***Meetings and Deliverables***

- Call with SMCWPPP staff to discuss potential jurisdictions to select for the analysis.
- Up to two coordination calls with each of the two selected jurisdictions during the data compilation and analysis efforts.
- Draft and final analysis tables.
- Draft and final analysis memorandum.
- GIS dataset and Excel sheet analysis files.

### ***OPTIONAL Sub-Task 5.9.b Analyze additional impact of requiring treatment of adjacent streets of private development***

Several jurisdictions in San Mateo County have expressed interest in the GI Plans to consider implementing a policy to require new or redevelopment projects of a defined minimum or larger size or dollar value to construct green street infrastructure for the streets adjacent to their development projects. In this task, CD+A would make an estimate of the treatment area increase that could result through the two case study jurisdictions implementing this type of policy. Estimates would be made for the jurisdictions' GI Plan projections of new and redevelopment, and for the adjusted projections developed in Sub-Task 5.9.a.

CD+A will prepare a draft memorandum for review by SMCWPPP staff and local jurisdiction staff describing the methodology, results, and potential additional street green infrastructure treatment area that would be implemented through private development. Following receipt of comments, CD+A will work with SMCWPPP staff to resolve comments and then prepare a final memorandum.

### ***Meetings and Deliverables***

- Draft and final analysis memorandum.

### ***OPTIONAL Sub-Task 5.9.c Analyze potential impact on green infrastructure implementation of Plan Bay Area projections update***

MTC is currently working with regional stakeholders to update Plan Bay Area and are anticipating to have the regional growth projections through to 2050 completed by the Fall of 2020. Earlier Plan Bay Area projections were the basis for the future land use developments used in the earlier SMCWPPP and local jurisdiction land use development and resulting potential private green infrastructure implementation out to 2040 analysis.

In this task, CD+A would gather data from MTC's updated projections through to 2040 to compare with the earlier development projections used in the Stormwater Resource Plan to get an understanding of the increase or decrease in types of development within San Mateo County local jurisdictions, and how this could affect the projected amount of private green infrastructure.

This analysis would be done for the original 2040 projections used for the Stormwater Resource Plan and for the projections for the two case study jurisdictions prepared in Sub-Task 5.9.a.

### ***Deliverables***

- Draft and final analysis tables.
- Draft and final analysis memorandum.
- Excel sheet analysis files.

## **Task 9. Mercury and PCBs Load Reduction**

### **Sub-Task 9.6 Develop final phase of a Reasonable Assurance Analysis to demonstrate how the County will collectively achieve the load reductions for mercury and PCBs required via GI**

The RAA for green infrastructure has been peer reviewed and is planned for submittal to the Regional Water Board in FY 2020-2021. There are a number of considerations for updates to the RAA that may result from Regional Water Board comments, modifications to GI projects planned by Permittees, potential changes to PCB/mercury load reduction targets for GI, or the development of new GI performance metrics that can link to parallel countywide planning objectives. The LWA Team will support C/CAG with updates to the RAA or provide additional information to contribute to the development of the countywide PCBs and Mercury Control Measure Implementation Plan (CMIP) developed by EOA (which will include the RAA Phase I and II reports as appendices). Through coordination with C/CAG, these updates may include the following:

#### ***Sub-Task 9.6.a Finalization and Regional Water Board approval of the RAA***

The Regional Water Board will provide a formal review of the RAA Phase I and Phase II reports as part of the CMIP submitted in FY 2020-2021. On an as-needed basis, the LWA Team will support meetings with the Regional Water Board to present and discuss the RAA, and address their comments developed during the review process. The LWA Team will coordinate with C/CAG on any responses to Regional Water Board comments or necessary updates to the RAA Phase I and Phase II reports to address comments.

### ***Deliverables***

- Updated RAA Phase I and II reports addressing potential comments received from the Regional Water Board.

### ***OPTIONAL Sub-Task 9.6.b Determine Additional GI to Meet PCB/mercury TMDL Wasteload Allocations***

Additional GI to meet PCB/mercury load reduction goals – Through the development of the CMIP and associated RAA addressing source/institutional controls for PCBs and mercury, it may be determined that source/institutional controls are insufficient to provide load reductions to meet the countywide TMDL wasteload allocations for PCBs and mercury (in combination with existing and planned GI projects). If this is the case, additional GI projects may be needed to be incorporated in the Sub-Task 9.6 RAA (addressing GI) to provide additional load reduction. The result will be that the combined implementation of planned GI and source/institutional controls will provide the necessary reductions of PCBs and mercury to meet wasteload allocations at future schedule milestones. If additional GI is determined by the CMIP to be needed, then the LWA Team will revisit the Sub-Task 9.6 RAA results and develop tables and associated graphics that demonstrate the amount of additional GI projects within each Permittee jurisdiction. Since the original Sub-Task 9.6 RAA produced optimization results (curves) that demonstrated increased load reductions with increased GI implementation (beyond the current load reduction goals specified by the RAA for GI), no additional modeling is needed to determine the amount of additional GI that will be needed. Rather, processing of previous RAA results will be needed to develop necessary tables and graphics, demonstrating the additional GI projects within each Permittee jurisdiction, that can be incorporated within the CMIP. The LWA Team will coordinate with EOA and C/CAG to efficiently develop the additional materials that may be needed to update the CMIP.

#### ***Deliverables***

- Updated RAA results for inclusion in the CMIP (potentially addressing potential increase in GI needed to meet PCB and mercury TMDL wasteload allocations).

### ***OPTIONAL Sub-Task 9.6.c Update to RAA to Incorporated Changes to Planned Green Infrastructure***

Parallel efforts by Permittees may result in updates to GI project design considerations that can alter their effectiveness at reducing PCBs and mercury. For instance, the County of San Mateo is currently partnering with the San Bruno, Belmont, and Redwood City to develop engineering designs for three regional projects currently included in the RAA. These efforts are likely to result in refinements to project design assumptions, which can be incorporated within updates to the RAA. C/CAG is also planning to identify additional regional project opportunities that can be incorporated within the RAA, which could provide further cost-efficiency and reduce the number of additional distributed GI projects (i.e., LID and green streets). The LWA team will coordinate with C/CAG and determine if updates to the RAA would be beneficial to include new identified regional projects or modify modeling assumptions for revised regional project designs. If an update to the RAA is performed, revised projections of GI associated with new development and redevelopment (Task 5.9) can also be incorporated in the model.

#### ***Deliverables***

- Draft Updated RAA Phase II report including refinements to planned GI projects.
- Final Updated RAA Phase II report including refinements to planned GI projects.

### ***OPTIONAL Sub-Task 9.6.d Assessment of Alternative Benefits of GI***

Through development of the countywide Sustainable Streets Master Plan (SSMP), C/CAG has updated the baseline hydrology and pollutant loading models for simulation of alternative future

climate change scenarios and the impact of changes to rainfall intensities. To provide a link between GI planning efforts to address PCB and mercury load reduction and parallel SSMP efforts to plan for climate resiliency, the RAA models can be updated to fully incorporate climate change scenarios and evaluate the parallel benefits for GI. The LWA team will coordinate closely with C/CAG to determine methods for utilizing the RAA model to inform ongoing discussions with the County of San Mateo Office of Sustainability, the San Mateo County Flood and Sea Level Rise Resiliency District, and Permittees to quantify the climate change adaptation benefits of planned GI projects and model output that can inform parallel planning objectives.

### ***Deliverables***

- Draft technical memo addressing potential new modeling results for climate change scenarios.
- Final technical memo addressing potential new modeling results for climate change scenarios.

### **Sub-Task 9.9 C/CAG, BASMAA, and Team Coordination; and Project Management**

The LWA Team will coordinate with C/CAG and BASMAA, attending meetings and participating in regional workgroups focused on RAA compliance efforts and other related information that may be developed through C/CAG and BASMAA activities during this fiscal year.). At the request of C/CAG, the LWA Team will prepare and provide presentations summarizing approaches and results of RAAs performed for San Mateo County.

### ***Deliverables***

- Participate in team coordination calls and prepare progress reports.
- Participate in cross consultant team coordination calls.
- As needed, participate and present at C/CAG and BASMAA workgroup meetings.

## Proposed Budget

Task	Scope of Work Fiscal Year 2020-2021	Task Type	LWA Sub-Total	WLC Sub-Total	Paradigm Sub-Total	CD+A Sub-Total	Sub-Contractor Markup	Task Cost (incl 10% sub markup)
<b>5</b>	<b>Green Infrastructure Planning</b>							
5.9	Assess Potential Refinements to Green Infrastructure Opportunities							
5.9.a	Analyze lower C.3 thresholds in MRP update	Planned	\$ 3,737	\$ 4,440	\$ -	\$20,218	\$ 2,466	\$ 30,861
5.9.b	Analyze additional impact of requiring treatment of adjacent streets of private development	Optional	\$ -	\$ -	\$ -	\$11,162	\$ 1,116	\$ 12,278
5.9.c	Analyze potential impact on green infrastructure implementation of Plan Bay Area projections update (optional)	Optional	\$ -	\$ -	\$ -	\$16,554	\$ 1,655	\$ 18,209
<b>9</b>	<b>Mercury and PCBs Load Reduction</b>							
9.6	Develop final phase of a RAA							
9.6.a	Finalization and Regional Water Board approval of the RAA	Planned	\$ -	\$ -	\$ 15,300	\$ -	\$ 1,530	\$ 16,830
9.6.b	Determine Additional GI to Meet PCBs/mercury TMDL Wasteload Allocations	Optional	\$ -	\$ -	\$ 29,250	\$ -	\$ 2,925	\$ 32,175
9.6.c	Update to RAA to Incorporated Changes to Planned Green Infrastructure	Optional	\$ -	\$ -	\$ 51,200	\$ -	\$ 5,120	\$ 56,320
9.6.d	Assessment of Alternative Benefits of GI	Optional	\$ -	\$ -	\$ 37,000	\$ -	\$ 3,700	\$ 40,700
9.9	C/CAG, BASMAA, and team coordination	Planned	\$ 3,221	\$ -	\$ 6,450	\$ -	\$ 645	\$ 10,316
	<b>Total Planned Tasks</b>		\$ 6,958	\$ 4,440	\$ 21,750	\$20,218	\$ 4,641	\$ 58,007
	<b>Total Optional Tasks</b>		\$ -	\$ -	\$ 117,450	\$27,716	\$ 14,517	\$ 159,683