File No. 200520 **Committee Item No.** 4
Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Budget & Finance Committee **Date** June 10, 2020

Board of Supervisors Meeting **Date** _____

Cmte Board

Cmte	Board	
☐	☐	**Motion**
☒	☐	**Resolution**
☐	☐	**Ordinance**
☐	☐	**Legislative Digest**
☐	☐	**Budget and Legislative Analyst Report**
☐	☐	**Youth Commission Report**
☐	☐	**Introduction Form**
☒	☐	**Department/Agency Cover Letter and/or Report**
☐	☐	**MOU**
☒	☐	**Grant Information Form**
☒	☐	**Grant Budget**
☐	☐	**Subcontract Budget**
☐	☐	**Contract/Agreement**
☒	☐	**Form 126 – Ethics Commission**
☒	☐	**Award Letter**
☒	☐	**Grant Application**
☐	☐	**Public Correspondence**

OTHER **(Use back side if additional space is needed)**

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Completed by: Linda Wong **Date** June 5, 2020
Completed by: Linda Wong **Date** _____

FILE NO. 200520 RESOLUTION NO.

[Accept and Expend Grant - Retroactive - Federal Emergency Management Agency through California Office of Emergency Services - Hazard Mitigation Grant Program - 2019 Update of Local Hazard Mitigation Plan - $150,000]

Resolution retroactively authorizing the Office of the City Administrator to accept and expend funds in the amount of $150,000 from the Federal Emergency Management Agency through the California Office of Emergency Services for the Hazard Mitigation Grant Program to support San Francisco's 2019 update to the 2014 Local Hazard Mitigation Plan for the project period from September 16, 2019, through April 16, 2022.

WHEREAS, Local hazard mitigation planning is governed by the Stafford Act, as amended by the Disaster Management Act of 2000 (DMA 2000), and by federal regulations implementing the Stafford Act; and

WHEREAS, As revised by DMA 2000, the Stafford Act requires state, local, and tribal governments to develop and submit for approval a mitigation plan that outlines processes for identifying the natural hazards, risks, and vulnerabilities of the jurisdiction; and

WHEREAS, Federal Emergency Management Agency approval of such plans is a prerequisite to receiving federal hazard mitigation grant funds and they are required to be updated every five years; and

WHEREAS, San Francisco last updated its Hazard Mitigation Plan in 2014 and is therefore due for an update; and

WHEREAS, Senate Bill 379 (2016) requires that when a jurisdiction update its Local Hazard Mitigation Plan, they must also update the Safety Element of the General Plan to address climate adaptation and resiliency strategies; and

WHEREAS, The City and County of San Francisco has experienced new and unprecedented climate-related hazard events since 2014 such as the Labor Day 2017 heat wave and November 2018 air quality events; and

WHEREAS, Climate change is expected to make some natural hazard events more severe and frequent; and

WHEREAS, The Office of Resilience and Capital Planning within the Office of the City Administrator is leading the effort to update the Local Hazard Mitigation Plan in partnership with other departments and including additional assessment of climate change risks and climate resilience strategies; and

WHEREAS, The Office of Resilience and Capital Planning submitted a grant application to California Office of Emergency Services (Cal OES) on September 4, 2018; and

WHEREAS, The Office of Resilience and Capital Planning received notification from Cal OES on October 3, 2019, that FEMA approved the grant application for a September 16, 2019, start date; and

WHEREAS, The total eligible cost is $202,352; and

WHEREAS, The actual eligible expenditures are estimated to be $150,000; and

WHEREAS, The grant terms require a minimum of 25% local cost share; and

WHEREAS, The grant is eligible for reimbursement of grant management costs, which are funded 100 percent federal share of actual expenditures, up to five percent of overall approved costs; and

WHEREAS, The grant terms prohibit including indirect costs in the grant budget, and now, therefore, be it

RESOLVED, That the Board of Supervisors authorizes the Office of the City Administrator to accept and expend $150,000 in funds allocated by the California Office of Emergency Services funding through the Hazard Mitigation Grant Program (FEMA-4353-DR-

CA, Project #PL0171, FIPS #075-00000, CFDA 97.039) funded in part by the Federal Emergency Management Agency (FEMA) for the purpose of updating the 2014 Hazard Mitigation Plan and related activities including updating risk assessment information, development mitigation strategies, engaging stakeholders, and be it

FUTHER RESOLVED, That the Board of Supervisors authorizes the Office of the City Administrator to expend 25% of project costs, or approximately $52,352, for local cost share (accounting chartfields 207645-10020-16632-10022481-0006); and be it

FURTHER RESOLVED, That the Board of Supervisors hereby waives inclusion of indirect costs in the grant budget, and be it

FURTHER RESOLVED, That the Board of Supervisors hereby authorizes Director of the Department of Emergency Management or the Controller or the Deputy Controller to execute any documents required to enter into the grant, including any applications, contracts, agreements, amendments, augmentations or extensions thereto, and to adhere all conditions specified in the grant agreement.

Recommended: Approved: /s/
Mayor

/s/
Department Head Approved: /s/
Controller

File Number: _____
(Provided by Clerk of Board of Supervisors)

Grant Resolution Information Form
(Effective July 2011)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a Department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

1. Grant Title: Hazard Mitigation Grant Program (HMGP) #4353-171-46P City and County of San Francisco, Hazard Mitigation Plan Update

2. Department: Office of the City Administrator

3. Contact Person: Melissa Higbee Telephone: 415-554-4939

4. Grant Approval Status (check one):

   [X] Approved by funding agency [ ] Not yet approved

5. Amount of Grant Funding Approved or Applied for: $150,000

6. a. Matching Funds Required: $52,352
   b. Source(s) of matching funds (if applicable): General Fund

7. a. Grant Source Agency: Federal Emergency Management Agency (FEMA)
   b. Grant Pass-Through Agency (if applicable): California Office of Emergency Services (CalOES)

8. Proposed Grant Project Summary: The goal of this work is to update the San Francisco 2014 Hazard Mitigation Plan (HMP) to better include the impact of climate change on natural hazards risks, while also continuing a robust assessment and mitigation of our non-climate hazards, such as seismic hazards. We will conduct a vulnerability assessment and develop adaptation strategies using best practices identified in the CA Adaptation Planning Guide as well as the recent update to the CA General Plan Guidance. This approach will allow for the 2019 HMP to support the City and County in completing an SB 379-compliant Safety Element update. Our goal is for this plan to become a key strategic guiding document for the City and County of San Francisco and for it to serve as a model for other cities on how to update their own local HMP in a manner complying with SB 379.

9. Grant Project Schedule, as allowed in approval documents, or as proposed:

   Start-Date: September 16, 2019 End-Date: April 16, 2022

10. a. Amount budgeted for contractual services: $50,000
    b. Will contractual services be put out to bid? No
    c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements? Yes
    d. Is this likely to be a one-time or ongoing request for contracting out? One-time

11. a. Does the budget include indirect costs?
    [ ] Yes [X] No
    b. 1. If yes, how much? $
    b. 2. How was the amount calculated?

c. 1. If no, why are indirect costs not included?
[X] Not allowed by granting agency [ ] To maximize use of grant funds on direct services
[ ] Other (please explain):
c. 2. If no indirect costs are included, what would have been the indirect costs? $5,000

12. Any other significant grant requirements or comments:

****Disability Access Checklist***(Department must forward a copy of all completed Grant Information Forms to the Mayor's Office of Disability)**

13. This Grant is intended for activities at (check all that apply):

[ ] Existing Site(s)	[ ] Existing Structure(s)	[X] Existing Program(s) or Service(s)
[ ] Rehabilitated Site(s)	[ ] Rehabilitated Structure(s)	[ ] New Program(s) or Service(s)
[ ] New Site(s)	[ ] New Structure(s)	

14. The Departmental ADA Coordinator or the Mayor's Office on Disability have reviewed the proposal and concluded that the project as proposed will be in compliance with the Americans with Disabilities Act and all other Federal, State and local disability rights laws and regulations and will allow the full inclusion of persons with disabilities. These requirements include, but are not limited to:

1. Having staff trained in how to provide reasonable modifications in policies, practices and procedures;
2. Having auxiliary aids and services available in a timely manner in order to ensure communication access;
3. Ensuring that any service areas and related facilities open to the public are architecturally accessible and have been inspected and approved by the DPW Access Compliance Officer or the Mayor's Office on Disability Compliance Officers.

If such access would be technically infeasible, this is described in the comments section below:

Comments:
In addition to following Items 14-1 & 2 above, staff should provide all public-facing information regarding the Plan in accessible formats. Please consult with MOD and Digital Services on best practices for achieving this.

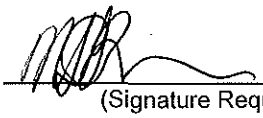
Departmental ADA Coordinator or Mayor's Office of Disability Reviewer:

Nicole Bohn

(Name)
Director, Mayor's Office on Disability

(Title)

Date Reviewed: April 23, 2020


(Signature Required)

Department Head or Designee Approval of Grant Information Form:

Kenneth A. Bukowski

(Name)
Deputy City Administrator

(Title)

Date Reviewed: 5/20/20

Kenneth Bukowski
(Signature Required)

2019 Hazard Mitigation Plan Update – Cost Estimate

Detailed Cost Estimate

	Position Title	Principal Resilience Analyst (PM)	Emergency Planner II	City Planner III	City Planner II	Climate Program Manager	Climate Analyst	Public Health Analyst	Consultant Fees			
	Code	1824	8602	5291	5278	5644	5638	1822				
	Direct Cost Rate	$ 63.79	$ 48.31	$ 54.04	$ 48.31	$ 59.58	$ 39.16	$ 47.29				
	Direct Cost Rate + Benefits (1.41 multiplier)	$ 89.94	$ 68.12	$ 76.20	$ 68.12	$ 84.01	$ 55.22	$ 66.68				
Item	Item Name									**Hours**	**Unit Cost**	**Total Cost**
1	Develop and Engage Planning Team	72	24	24	48	48	24	24		**264**	**$ 76.39**	**$ 20,167**
2	Develop Stakeholder and Public Engagement Strategy	16	6	6	6	16		6		**56**	**$ 79.61**	**$ 4,458**
3	Implement Engagement Strategy - Staff Time	40	16	40	16	16	40	16		**184**	**$ 73.07**	**$ 13,445**
4	Implement Engagement Strategy - Consultant Fee								$ 100,000			**$ 100,000**
5	Update Hazard Profiles	24	100		8			16		**148**	**$ 71.50**	**$ 10,582**
6	Vulnerability and Risk Assessment	40	40		40	12	120	40		**292**	**$ 66.26**	**$ 19,348**
7	Mitigation Strategy Development	24	24	4	16	16	80	16		**180**	**$ 66.76**	**$ 12,016**
8	Maintenance Plan Development	8	16	2		2				**28**	**$ 76.07**	**$ 2,130**
9	Develop Draft Plan	40			24	8	120			**192**	**$ 65.26**	**$ 12,531**
10	CalOES/FEMA Review/Revisions	16	16				8			**40**	**$ 74.27**	**$ 2,971**
11	Local Plan Adoption	16	8	8		8				**40**	**$ 81.64**	**$ 3,266**
12	Grant Closeout	16								**16**	**$ 89.94**	**$ 1,439**
	Total Hours	**312**	**250**	**84**	**158**	**126**	**392**	**118**		**1,440**		**$ 202,352**

Cost Estimate Narrative

Staff Roles

The staff listed on the detailed cost estimate represent an interdepartmental team who will be leading development of the 2019 Hazard Mitigation Plan Update. Below are the key roles that these team members will play:

- Principal Resilience Analyst from the Office of Resilience and Capital Planning is serving as the Project Manager (PM) for this effort. She will lead interdepartmental coordination, including engagement with the Planning Team and oversee the development deliverables, and local adoption.
- Emergency Planner II from the Department of Emergency Management will play a major role in updating the hazard profiles, including updating hazard maps. She participated in the 2014 Hazard Mitigation Plan update so she will also provide context from this previous planning effort. She will also participate in the vulnerability assessment and strategy development for emergency response facilities, such as the Emergency Operations Center, Police, and Fire.
- City Planner III from the Planning Department will participate in engagement with the citywide Planning Team and implementation of the stakeholder and public engagement strategy. She will participate in strategy development particularly relating to planning process and regulations.
- City Planner II from the Planning Department will participate in engagement with the citywide Planning Team, and implantation of the stakeholder and public engagement strategy. She lead the city's sea level rise planning work, so she will provide key expertise on flooding impacts for the hazard profile updates and vulnerability and risk assessment.
- Climate Program Manager from the Department of the Environment will play a leading role in climate hazards and making connections between this effort and the City's Climate Action Strategy. She will play a key role in engaging the citywide Planning Team, developing the stakeholder and public engagement strategy, and mitigation strategy development.
- Climate Analyst from the Department of the Environment will play a lead role in the vulnerability and risk assessment, particularly the impacts of climate hazards, including flooding, extreme heat, drought, and fire. This person will also play a lead role in drafting and revising the plan.
- Public Health Analyst from the Department of Public Health will play a key role in assessing the health impacts of hazards and strategy development related to health.

Descriptions of Cost Items

1. Develop and Engage Planning Team

The PM will review the Planning Team roster from 2014 and identify additional participations. There will be an estimated six Planning Team meetings over the course of the project. For each meeting, the PM will spend approximately 12 hours per meeting preparing content and agenda, delivering the meeting, and with follow up. City Planner II and Climate Program Manager will play leading roles in these meetings, spending approximately eight hours in preparation and delivery of each meeting. Emergency

Planner II, Planner II, Climate Analyst, and Public Health Analyst will spend three hours each per meeting to support with facilitation.

2. Develop Stakeholder and Public Engagement Strategy

The PM and Climate Program Manager will lead the development of the Engagement Strategy, reviewing the engagement process from 2014, and successful engagement models from other cities and counties (16 hours per staff member). Two meetings will be held with the additional team members from Emergency Planning, City Planning, and Public Health to develop the strategy and they will review and provide feedback on the draft strategy (6 hours per staff member).

3. Implement Stakeholder and Public Engagement Strategy – Staff Time

Team members will contribute to implementation of the engagement strategy. The PM, City Planner III, and Climate Program Manager will develop the request for proposal, review consultant submissions, and select a consultant with whom to contract (20 hours per staff member). The PM, City Planner III, and Climate Analyst will develop stakeholder contact lists, review meeting agendas, make presentations, and attend public meetings (20 hours per staff member). The Emergency Planner II, City Planner II, and Climate Analyst will attend the public meetings (16 hours per staff member).

4. Implement Stakeholder and Public Engagement Strategy

A consultant will be hired to implement the public engagement strategy, including developing and maintaining a project website, developing and analyzing a survey, developing communications materials, and planning and facilitating several public meetings. The consultant fee will be an estimated $100,000. For a detailed breakdown of the estimated consultant fee, please see Supporting Document B.

5. Update Hazard Profiles

The hazard profiles will be updated to reflect any new hazard identified, any hazard events since 2014 and the latest hazard mapping. Emergency Planner II will lead this effort spending approximately 10 hours on each of the 10 hazard profiles(100 hours). The PM will also support this effort, particularly for climate hazards (24 hours). City Planner II will support with flooding (8 hours), and the Public Health Analyst with extreme heat and pandemic (16 hours).

6. Vulnerability and Risk Assessment

A major effort of the vulnerability and risk assessment will be to expand the asset inventory beyond just City facilities, to include vulnerable populations, critical infrastructure, critical community services, and open space. The PM will oversee the development on the asset database with support from Emergency Planner II (40 hours each). The Climate Analyst will collection information on the vulnerabilities and risks of the assets to hazards and developing vulnerability profiles, (120 hours). City Planner II will provide information on vulnerabilities to the privately owned building stock and community services (40 hours). The Public Health analyst will provide an assessment of vulnerable populations related to hazards and an assessment of the vulnerability of hospitals and other critical health facilities for approximately (40 hours). The Climate Program Manager will support the development of a vulnerability profile template, analyzing examples from other cities and counties (12 hours).

7. Mitigation Strategy Development

Emergency Planner II will provide information on the implementation status of actions from the 2014 strategy and support strategy development related to emergency response facilities (24 hours). City Planner III and City Planner II will support with strategy development related to the privately owned buildings, community services, and the Planning and Zoning Codes (4 hours and 16 hours, respectively). The Climate Analyst will develop a Strategy Idea Form to be distributed to the Planning Team to collect new ideas. The Climate Analyst will also lead the development of evaluation criteria to develop a short-list of strategies from all of the ideas collected. The Climate Analyst will also support with development of implementation considerations, such as funding and policy, for the prioritized strategies. The Climate Analyst is expected to provide approximately 80 hours of work for these tasks. The Public Health Analyst will support with strategy development related to health (16 hours). The Climate Program Manager will support the strategy development that connects hazard mitigation with climate change mitigation actions, e.g. building retrofits, transportation improvements, and energy resilience (16 hours).

8. Maintenance Plan Development

Emergency Planner II will review the maintenance plan from 2014 and identify any needed improvements (16 hours). City Planner III and Climate Program Manager will identify ways to align maintenance with other planning efforts, including the Safety Element and Climate Action Strategy (2 hours and 2 hours). The Project Manager will provide overall support to this task (8 hours).

9. Develop Draft Plan

The drafting of the plan will be led by the Climate Analyst, who will compile deliverables developed for the hazard profiles, vulnerability and risk assessment, and the mitigation strategy into a single document that is easy to read for decision makers and the public (120 hours). City Planner II will also provide graphic support (24 hours). The PM will oversee the revision process based on feedback from the Planning Team and public comments (40 hours). The Climate Program Manager will provide copyediting support (8 hours).

10. CalOES/FEMA Review/Revisions

The PM will oversee revisions to the plan based on CalOES and FEMA review (16 hours) with support from the Emergency Planner (16 hours) and Climate Analyst (8 hours).

11. Local Plan Adoption

The PM will oversee adoption of the Plan by the Board of Supervisors and Mayor (16 hours) with support from Emergency Planner II (8 hours). City Planner III will help make connections between the hazard mitigation plan and the Safety Element Update (8 hours) and Climate Program Manager will help make connections with the Climate Action Strategy Update (8 hours).

12. Grant Close Out

The PM will oversee grant close out activities (16 hours).

HAZARD MITIGATION GRANT PROGRAM
PLANNING SUBAPPLICATION

DISASTER NUMBER:	DR-4353
JURISDICTION NAME:	City and County of San Francisco
PLAN TITLE:	San Francisco Local Hazard Mitigation Plan 2019 Update
CONTROL NUMBER:	0171

THE CONTROL NUMBER IS RECEIVED AT TIME OF SUCCESSSFUL NOI SUBMITTAL

Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

Notice of Interest (NOI) approved subapplications are due postmarked to Cal OES by:

DR-4344: July 2, 2018

DR-4353: September 4, 2018

HAZARD MITIGATION GRANT PROGRAM (HMGP) INTRODUCTION

INTRODUCTION

As a result of the declaration of a major federal disaster, the State of California is eligible for HMGP funding. The State has established priorities to accept subapplications from subapplicants statewide, state agencies, tribal governments, local governments, and private non-profits.

Hazard mitigation activities are aimed at reducing or eliminating future damages. Activities include hazard mitigation plans approvable by the Federal Emergency Management Agency (FEMA).

HMGP is successful in meeting the FEMA requirements to qualify as an Enhanced State Hazard Mitigation Plan (ESHMP) state. ESHMP accreditation has resulted in additional millions of dollars available for local agencies' hazard mitigation plan and project funding. In order to maintain ESHMP status, further information is requested by FEMA. This information is requested as a means of assessing the pro-activity of your community or agency.

REGULATIONS

Federal funding is provided under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) through FEMA and the California Governor's Office of Emergency Services (Cal OES). Cal OES is responsible for identifying program priorities, reviewing subapplications and forwarding recommendations for funding to FEMA. FEMA has final approval for activity eligibility and funding.

The federal regulations governing HMGP are found in Title 44 of the Code of Federal Regulations (44 CFR), Part 201 (Planning) and Part 206 (Projects), and in Title 2 of the Code of Federal Regulations (2 CFR), Part 200 (Uniform Administrative Requirements).

The subapplicant is responsible for complying with the regulations set forth in the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000–15387) and any other state/local permits or requirements.

FEMA GUIDANCE

FEMA requires that all plans adhere to the Local Mitigation Planning Handbook March 2013 and Hazard Mitigation Assistance Unified Guidance February 2015.

QUESTIONS

Submit all HMGP subapplication questions to the following mailbox: HMGP@caloes.ca.gov

SUBAPPLICATION FORMAT INSTRUCTIONS

Cal OES requires the following format to be used for all HMGP subapplications. Two complete subapplications must be submitted to Cal OES. Each subapplication must be in separate binders. The first copy is logged and retained for Cal OES records. The second copy will be forwarded to FEMA for review and final determination.

COMPLETE SUBAPPLICATION PACKAGE CONSISTS OF THE FOLLOWING:

☒ **TWO** identical printed subapplications must be provided in 3-ring binders:
- Each binder section must be tabbed in the format outlined below.
- Each binder must be large enough to hold all of the contents.
- The use of additional binders is permitted as needed.
- All printed attachments must be clearly titled.

☒ **TWO** identical CD-RWs must include functional electronic versions of all documents/attachments:
- Attachments must be in one of the following formats: Microsoft Word version 2007 (or newer), Microsoft Excel or Adobe PDF.
- All electronic attachments must be clearly titled.

ORGANIZATION OF THE BINDER SECTIONS MUST BE TABBED IN THE FOLLOWING FORMAT:

0. Table of Contents
1. Subapplication
2. Scope of Work
3. Schedule (Additional documentation work schedule components, Gantt chart, etc.)
4. Budget (HMGP Cost Estimate Spreadsheet and cost estimate narrative in Microsoft Word)
5. Match (Local Match Commitment Letter Template)
6. Letters of Commitment **for Multi-Jurisdictional Local Hazard Mitigation Plans only** (Letter of Commitment Template)
7. Supporting Docs (Any extra supporting documentation)

MAIL OR DELIVER COMPLETED SUBAPPLICATIONS TO:

California Governor's Office of Emergency Services
Hazard Mitigation Grants Program Unit
Attention: HMGP
3650 Schriever Avenue
Mather, CA 95655

PLANNING SUBAPPLICATION FORM

SUBAPPLICANT INFORMATION

1. SUBAPPLICANT: City and County of San Francisco

NAME OF STATE AGENCY, TRIBAL GOVERNMENT, LOCAL GOVERNMENT, OR SPECIAL DISTRICT APPLYING FOR FUNDING.

2. TYPE:

STATE/LOCAL GOVERNMENT	FEDERALLY RECOGNIZED TRIBE	SPECIAL DISTRICT
☒	☐	☐

3. FIPS #: 6075

IF YOU DO NOT KNOW YOUR FEDERAL IDENTIFICATION PROCESSING SYSTEM NUMBER (FIPS #), REQUEST BY EMAILING THE HMGP@CALOES.CA.GOV MAILBOX.

4. DUNS #: 70384255

IF YOU DO NOT KNOW YOUR DATA UNIVERSAL NUMBERING SYSTEM (DUNS) #, CALL DUN & BRADSTREET (D&B) @ 1-866-705-5711 OR VISIT WWW.SAM.GOV.

5. POLITICAL DISTRICT NUMBERS:

CONGRESSIONAL:	12
STATE ASSEMBLY:	17 19
STATE LEGISLATIVE:	11

PROVIDE ONLY THE NUMBERS OF THE POLITICAL DISTRICTS FOR THE SUBAPPLICANT.

6. PRIMARY CONTACT:

POINT OF CONTACT FOR YOUR PLAN. CAL OES WILL CONTACT THIS PERSON FOR QUESTIONS AND/OR REQUESTS FOR INFORMATION.

NAME: ☐ Mr. ☒ Ms. **FIRST:** Melissa **LAST:** Higbee

TITLE: Principal Resilience Analyst

ORGANIZATION: City and County of San Francisco

ADDRESS: 1 Dr. Carlton B. Goodlett Place

CITY: San Francisco **STATE:** CA **ZIP CODE:** 94102

TELEPHONE: (415) 554-4939 **FAX:**

EMAIL: melissa.higbee@sfgov.org

7. ALTERNATIVE CONTACT:

BACK-UP POINT OF CONTACT FOR YOUR PLAN. CAL OES WILL CONTACT THIS PERSON IF PRIMARY CONTACT IS UNAVAILABLE

NAME: ☐ Mr. ☒ Ms. **FIRST:** Heather **LAST:** Green

TITLE: Deputy Resilience Officer

ORGANIZATION: City and County of San Francisco

ADDRESS: 1 Dr. Carlton B. Goodlett Place

CITY: San Francisco **STATE:** CA **ZIP CODE:** 94102

TELEPHONE: (415) 554-5166 **FAX:**

EMAIL: heather.green@sfgov.org

LOCAL HAZARD MITIGATION PLAN INFORMATION

8. PLAN TYPE:

A. ACTIVITY TYPE:

Planning activity types are classified as one of the choices listed below. Pick **one** of the following choices that best describes the type of plan this subapplication will deliver:

1. ☐ **New** Single Jurisdiction Local Hazard Mitigation Plan
   Select for single jurisdictions that have no existing hazard mitigation plan.

2. ☒ **Update** to Single Jurisdiction Local Hazard Mitigation Plan
   Select for single jurisdiction that have a FEMA approved plan in place.
   FEMA APPROVAL DATE: 11/4/2014

3. ☐ **New** Multi-Jurisdictional Local Hazard Mitigation Plan
   Select if there is no existing plan, and multiple jurisdictions will be included.

4. ☐ **Update** to Multi-Jurisdictional Local Hazard Mitigation Plan
   Select for multi-jurisdictions that have a FEMA approved plan in place.
   FEMA APPROVAL DATE:

5. ☐ **New** Tribal Mitigation Plan (in accordance with 44 CFR Section 201.7)
   Select for tribal federally recognized tribes that have no existing hazard mitigation plan.

6. ☐ **Update** to Tribal Mitigation Plan (in accordance with 44 CFR Section 201.7)
   Select for federally recognized tribes that have a FEMA approved plan in place.
   FEMA APPROVAL DATE:

7. ☐ Other Planning-Related Activities
   Describe planning activities:

COMPLETE SECTION B IF YOU SELECTED 8.A.2., 8.A.4., OR 8.A.6. ABOVE:

B. PLAN UPDATES:

Describe why the update to your plan is needed and describe how the update will build on your existing approved mitigation plan.

The goal of this work is to update the San Francisco 2014 Hazard Mitigation Plan (HMP) to better include the impact of climate change on natural hazards risks, while also continuing a robust assessment and mitigation of our non-climate hazards, such as seismic hazards. We will conduct a vulnerability assessment and develop adaptation strategies using best practices identified in the CA Adaptation Planning Guide as well as the recent update to the CA General Plan Guidance. This approach will allow for the 2019 HMP to support the City and County in completing an SB 379-compliant Safety Element update. Our goal is for this plan to become a key strategic guiding document for the City and County of San Francisco and for it to serve as a model for other cities on how to update their own local HMP in a manner complying with SB 379.

Our more specific objectives for improvements from the 2014 HMP include:
(1) Improving our hazard profiles to incorporate how hazards are changing in frequency, extent, and intensity due to climate change using the Association of Bay Area Government's (ABAG's) FEMA-funded Risk Landscapes Report, the most up to date CA Sea Level Rise Guidance, CalAdapt, the state's fourth climate change assessment and the 2018 Update to Safeguarding California.
(2) Defining sectors and asset categories in the asset inventory and developing an agreed upon list of citywide critical assets using the approach in ABAG's Local Hazard Mitigation and Adaptation Risk Assessment and Strategy Development Process Handbook and the Bay Conservation and Development Commission's (BCDC's) Adapting to Rising Tides (ART) Program.
(3) Developing vulnerability and risk profiles by asset category;
(4) Identifying strategy implementation steps using similar resources as described above.

COMPLETE SECTION C IF YOU SELECTED 8.A.3 OR 8.A.4 ABOVE:

C. MULTI-JURISDICTIONAL LOCAL HAZARD MITIGATION PLAN INFORMATION:

If your plan type is multi-jurisdictional, a Letter of Commitment (LOC) from each participating jurisdiction is required. Use the template here. A separate LOC must be executed by each participating jurisdiction and submitted to the lead agency and Cal OES jointly. The subapplication must include an LOC for each identified jurisdiction clearly stating commitment to participate in the development of the plan. Being recognized as a member of an approved multi-jurisdictional plan verifies a local agency's eligibility for hazard mitigation grant funds as long as they meet the participation criteria set forth in the letter.

- Enter the names of all the jurisdictions that will be included in your plan.
- Enter the county name included in the plan.
- Enter all the congressional district(s) within plan jurisdictions from https://www.census.gov/mycd/.
- Enter the exact title of the Letter of Commitment (LOC) electronic file that will be included on the required CD-RW Discs and place hard copies of each LOC in the LOC tabbed section of the binder.
- Identify the population of the jurisdiction applying for the planning grant using current census data.

#	JURISDICTION	COUNTY	CONGRESSIONAL DISTRICT #	TITLE OF ATTACHED LOC	POPULATION
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					

14.					
15.					

If more than 15 jurisdictions will be participating in your multi-jurisdictional plan attach all information on a separate sheet and type the name of the attachment in box 1.

PLANNING INFORMATION

9. SCOPE OF WORK (SOW):

STATE EXACT SOW DOCUMENT TITLE: Scope of Work - 2019 Hazard Mitigation Plan Update

- Describe the entire SOW of planning in clear, concise detail.
- Must provide a thorough description of **all activities** to be undertaken.
- Must be written in sequential order from start to finish of the plan.
- Describe method and schedule of monitoring, evaluating, and updating the plan within the 5-year cycle.

STOP ☒ **INSERT THIS DOCUMENT IN THE SOW SECTION OF THE BINDER.**

WORK SCHEDULE INFORMATION

10. PLANNING WORK SCHEDULE:

The intent of the work schedule is to provide a realistic appraisal of the time and components required to complete the plan.

- Describe the major milestones and the duration of time to complete each one.
- Show activity duration in months.
- The work schedule must include six months for State and FEMA review/revisions/approval, appropriate time for local adoption and 90 days for grant close-out.

WORK SCHEDULE EXAMPLE		
#	DESCRIPTION	TIMEFRAME
1.	Procure a consultant	3 months
2.	Develop planning team	2 months
3.	Community and stakeholder outreach	3 months
4.	Planning process for hazard identification	3 months
5.	Planning process for risk assessment	3 months
6.	Mitigation strategy	2 months
7.	Maintenance plan development	1 month
8.	Plan draft (with community/stakeholder input)	3 months
9.	Cal OES/FEMA Review/Revisions	6 months
10.	Local Plan Adoption	2 months
11.	Grant Close-out	3 months
	TOTAL MONTHS:	**31 months**

TOTAL PLANNING DURATION (INCLUDING CLOSE-OUT) CANNOT EXCEED A 36 MONTH PERIOD OF PERFORMANCE (POP).

#	DESCRIPTION	TIMEFRAME
1.	Develop and Engage Planning Team	1 month
2.	Develop Stakeholder and Public Engagement Strategy	3 months
3.	Implement Stakeholder and Public Engagement Strategy	8 months
4.	Update Hazard Profiles	3 months
5.	Vulnerability and Risk Assessment	6 months
6.	Mitigation Strategy Development	3 months
7.	Maintenance Plan Development	1 months
8.	Develop Draft Plan	3 months
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.	**STANDARD VALUE (DO NOT CHANGE)** Cal OES/FEMA Review/Revisions	6 months
17.	Local Plan Adoption	2 months
18.	**STANDARD VALUE (DO NOT CHANGE)** Grant Close-out	3 months
	TOTAL MONTHS:	31

If more lines are needed than provided, indicate the title of document in box 1 and attach a separate work schedule in the schedule section of binder.

HAZARD INFORMATION

11. HAZARD & RISK ANALYSIS:

A. HAZARD ANALYSIS TYPE:

Select the hazard(s) below that this plan will address. Select as many as needed.

☐ BIOLOGICAL	☒ EARTHQUAKE	☐ LAND SUBSIDENCE	☒ TERRORIST
☐ CHEMICAL	☒ FIRE	☒ MUD/LANDSLIDE	☐ TORNADO
☐ CIVIL UNREST	☐ FISHING LOSSES	☐ NUCLEAR	☐ TOXIC SUBSTANCES
☒ COASTAL STORM	☒ FLOOD	☐ SEVERE ICE STORM	☒ TSUNAMI
☐ CROP LOSSES	☐ FREEZING	☐ SEVERE STORM(S)	☒ WINDSTORM
☐ DAM/LEVEE BREAK	☐ HUMAN CAUSE	☐ SNOW	☒ OTHER (describe below):
☒ DROUGHT	☐ HURRICANE	☐ SPECIAL EVENTS	Exterme Heat, Pandemic, Hazardous Materials Release, Cyberterror

B. DESCRIBE PAST AND FUTURE PROBLEMS/HAZARDS/RISKS:

1. Describe the problem(s) this plan is attempting to solve and the expected outcome. Describe in detail how the plan will reduce the effects of hazards and how the plan will eliminate or reduce risks.

Through this effort, vulnerability to natural hazards will be mitigated, including ground shaking, liquefaction, earthquake-induced landslide, tsunamis, drought, flood, heat, poor air quality, landslide, and wildfire. The impacts of sea level rise, higher temperatures, and changing precipitation patterns due to climate change on the frequency, extent, and intensity of natural hazards will be considered. San Francisco is anticipated to experience more frequent and severe hazard events in the future as a result of a changing climate. The record-breaking and unprecedented extreme heat and wildfire-driven poor air quality events of Fall 2017 are just two examples of the hazards that San Francisco needs to plan for and mitigate in a strategic way. In addition, San Francisco will continue to mitigate the risks of well-known and existing hazards, such as earthquakes.

This plan will reduce risks by developing mitigation strategies that directly inform capital planning and prioritization, area planning, policy, and program development.

2. History: Describe the past hazards, risk to life and risk to safety in the community. Describe the type, location and extent of hazards. Include previous occurrences (repetitive losses) and the probability of future events.

Earthquakes:
Earthquakes represent one of the most significant sources of risk and vulnerability for San Francisco in terms of recent history and the probability of future events. Historically, the San Andreas fault system is the most active fault system in northern California and is capable of generating very strong earthquakes of M 7.0 or greater. The last major earthquake on the northern portion of the fault occurred in 1906. Known as the Great San Francisco earthquake, this event lasted 45 to 60 seconds at an estimated Richter magnitude of 8.3. The San Andreas and other regional faults,

including the Hayward fault, have generated 69 recorded M 5.0 or greater earthquakes since 1800.

In 2014, the Working Group on California Earthquake Probabilities (WGCEP) issued its Third Uniform California Earthquake Rupture Forecast (UCERF3). UCERF3 indicates there is a 72 percent chance that an earthquake of moment magnitude 6.7 or greater will strike the nine-county San Francisco region over a 30-year period (2014–2043) along one of the Bay Area fault systems identified in the forecast.

Liquefaction occurs when vibrations from an earthquake cause soil particles to lose contact with each other and may lose the ability to support weight, resulting in structural damage, including cracking of foundations, damage to support structures, and even collapse, potentially causing injuries and leaving structures unusable. The United States Geological Survey (USGS) has mapped liquefaction occurrences in San Francisco for earthquakes occurring in 1838, 1852, 1865, 1868, 1906, 1954, and 1989.

The 1906 earthquake generated more than 10,000 landslides throughout the region, killing 11 people and causing substantial damage to buildings and infrastructure. Landslides from the Loma Prieta earthquake were reported in San Francisco, in the Lake Merced area, in the weakly-cemented sand, silt, and clay of the Merced Formation.

Floods:
Historical flood data indicates that San Francisco has experienced 12 flood events from 1996 through July 2013. Coastal flood hazards affect the Pacific Ocean coast and the shoreline of San Francisco Bay. Flooding from the bay also affects Treasure Island. Most of San Francisco's Pacific coastline consists of bluffs, beaches, and sand dunes and the Great Highway is frequently closed during storm events and was severely damaged during a storm in 2010. Based on previous flood occurrences, San Francisco can expect to experience at least one flood event every 15 months. With sea level rise, the number and intensity of these inundations are likely to increase. Surrounded on three sides by water, San Francisco is particularly vulnerable to rising sea levels. Sea level rise has been increasing globally for the past century. As global temperatures increase, the rate of sea level rise will increase accordingly. Using conservative modeling with emission scenarios, the California Climate Change Center estimated in 2009 that the number of San Franciscans at risk to a 100-year flood will increase from 190 to 3,800 individuals, assuming a 1.4 meter (55 inch) rise in sea level by 2100.

Drought:
According to the Climate Readiness Institute at UC Berkeley, 10-year droughts occurred across the west in previous millennia. Statewide droughts have been declared in 1976-1977, 1987-1992, 2008, and 2013-2016. In the winter of 2013,

California experienced record warmth and dryness with some locations in northern California experiencing 50 consecutive days with no measurable precipitation.
In San Francisco, the primary impact of drought is reduced availability of water for residential and commercial use. During the drought of 2013-2016, the San Francisco Public Utilities Commission called on its retail customers to reduce water use by at least 10 percent. Mayor Edwin M. Lee also issued an executive directive requiring all City departments to develop individual water conservation plans and take immediate steps to achieve a mandatory 10 percent reduction in their water consumption. Long-term climate forecast models suggest that a warming planet will lead to changes in precipitation distribution, including a reduced Sierra snowpack and earlier melting of the snowpack. With projected drier conditions and increasing population, a greater number of water users will lead to greater water demand and a reduction in water supplies, increasing the challenge of managing drought in San Francisco.

Extreme Heat:
Using data from the National Weather Service (NWS) since 1875, San Francisco's daily temperature has exceeded 100 degrees only 12 times. However, during the 2017 Labor Day weekend, San Francisco experienced the highest temperature ever recorded, with temperatures of 106 degrees observed. It is estimated that during this event, at least three people died and 50 people were hospitalized due to heat-related illness in the city. The number of 911 calls overwhelmed ambulances and forced San Francisco to request mutual aid from neighboring counties. A California Energy Commission study indicates that over the past 15 years, heat waves have claimed more lives in California than all other declared disaster events combined. Historically, San Francisco has experienced temperatures in excess of 85 degrees six to seven days per year, generally between May and October. Climate change is expected to increase the frequency and severity of extreme heat events. Average yearly temperatures are projected to increase between 1.3°F and 3.1°F by mid-century 3.3°F and 5.5°F by end-of-century. Annual extreme heat days are expected to increase from about six currently, to 15-40 by 2050, up to 90 per year by 2100.

Fire:
The largest fire to affect San Francisco to date occurred as a result of the Great San Francisco Earthquake of 1906. Within two hours of the quake, 52 fires had ignited within San Francisco. San Francisco's most recent large urban fire occurred as a result of the Loma Prieta earthquake on October 17, 1989 when a total of 41 fires were reported in San Francisco. Gas pipe and main ruptures ignited 27 fires within the City, including a major blaze in the Marina District that destroyed four buildings and claimed the lives of five people.

The Rim Fire, which began on August 17, 2013, in Tuolomne County, burned over 257,000 acres, and threatened the Hetch Hetchy Regional Water System, which provides approximately 85 percent of San Francisco's total water needs. The Rim Fire reached the edges of the Hetch Hetchy Reservoir watershed, but did not impact

water quality or water delivery operations. However, the fire did cause damage to San Francisco-owned property and infrastructure in the area.

Landslides:
Non-earthquake-induced landslides in San Francisco generally occur during or after prolonged winter rainstorms. On January 3-5, 1982, a catastrophic rainstorm in the Central California coast triggered landslides in San Francisco, which resulted in approximately $399,000 in damages. Landslides also occurred in February 1998, as a result of El Niño storms. In 2007, after three days of rainfall, a 75-foot-wide mass of Telegraph Hill slid down a granite and sandstone slope above Broadway Street. Approximately 120 people from a 45-unit condominium were evacuated until the property owner stabilized the hillside. Similarly, in January 2012, extensive rainfall resulted in a rockslide on Telegraph Hill, which crushed a car and required the partial evacuation of a condominium complex. Based on previous occurrences, San Francisco can expect to experience a landslide every seven to 10 years, particularly during winters in which a strong El Niño increases the frequency and intensity of Pacific storms.

Wind:
In San Francisco, high winds generally between the months of November through March. Data from the Golden Gate Weather Service on some of the larger high wind storm events in San Francisco occurred in 1955, 1962, 1982, 1995, 2002, 2008, and 2009. Based on previous wind events, San Francisco can continue to expect to experience at least one winter wind storm annually.
San Francisco as a whole is subject to strong southeasterly winds associated with powerful winter cold fronts. However, strong sea winds from the Pacific Ocean generally have a greater impact on the west side of San Francisco. Each year, at least one winter storm typically results in closure of the Great Highway on San Francisco's western boundary, when wind gusts deposit large amounts of sand on the roadway.

Tsunami:
A tsunami is a series of waves generated in a body of water by a disturbance that vertically displaces the water. Tsunamis not only affect beaches open to the ocean, but also may cause damage to ports, harbors, bays, tidal flats, and the shores of large coastal rivers. Since 1850, 53 tsunamis have been recorded or observed in San Francisco Bay. A 4-inch wave run-up was recorded at the Presidio gauge station shortly after the 1906 earthquake.
Areas within San Francisco shown to be subject to tsunami inundation include coastal areas of Lake Merced, the Sunset and Richmond Districts; and bayside areas of Sea Cliff, the Presidio, the Marina District, North Waterfront, Fisherman's Wharf, China Basin, Mission Bay, Potrero Hill, Bayview, and Hunter's Point Districts. In addition, tsunami inundation may affect Treasure Island, and portions of Yerba Buena Island and SFO that are adjacent to San Francisco Bay.

3. Describe the vulnerability to identified hazards. Include an overall summary of each hazard and its effect on the community, including a general description of types of structures affected by each hazard.

Earthquakes:
The 2014 Uniform California Earthquake Rupture Forecast indicated that there is a 72 percent chance that a major earthquake of moment magnitude 6.7 or greater will strike the nine-county Bay Area region over a 30-year period. The impact of an earthquake of this magnitude may include: slight damage in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse; damage great in poorly-built structures; fall of chimneys, factory stacks, columns, monuments, walls; and heavy furniture overturned.

After the 1989 Loma Prieta earthquake, liquefaction in the Marina District caused vertical settlement, lateral displacement of buildings, buckling of sidewalks, cracking of asphalt pavement, and breaking of water pipes and gas lines. Over 70 sand boils were reported in garages and backyards; some sand boils were nearly four feet in depth. Liquefaction during the Loma Prieta quake also impacted the Auxiliary Water Supply System (AWSS), which provides the City with water for firefighting purposes.

Floods:
Along the bay shoreline, inundation may close roadways and cause damage to nearby structures; wave action can damage waterfront facilities. Operation of the stormwater system may also be disrupted when vegetation or other debris blocks inlets or pipes. In these situations, runoff may “pond” in low-lying areas, such as street intersections, or may enter nearby structures. In addition to causing flood damage, stormwater ponding can create a pollution problem when floodwaters carry debris, chemicals, trash, and other pollutants that have collected on streets. Areas of severe stormwater ponding have been identified by the Department of Public Works and include the ocean-front areas of the Lakeshore, Outer Parkside, and Outer Sunset neighborhoods, and portions of the Lake District, Mission Bay, North Waterfront, Inner Mission, Bayview District, Bernal Heights, and Mission Terrace neighborhoods. In addition, during winter storms, coastal flooding often occurs in the South Beach and Rincon Hill neighborhoods along The Embarcadero near Pier 14 and Rincon Park and at the foot of Mission Street.

Sea level rise will increase flooding hazards in many coastal areas of San Francisco, including Ocean Beach, the Marina, the Embarcadero, and the entire bayside edge, as well as parts of Treasure Island. Flooding from sea level rise will likely damage buildings and roads in these areas. In addition, salt water intrusion will likely cause damage to underground infrastructure, such as pipes and foundations. Coastal flooding also presents a risk to major transportation infrastructure in the region, especially to the Port of San Francisco and to San Francisco International Airport (SFO).

Drought:
Drought is not localized to San Francisco, but occurs simultaneously across the region, and may extend statewide or across a larger expanse of western states. The majority of San Francisco's water is brought to the city from the Hetch Hetchy watershed located in the Sierra Nevada mountains through a complex series of reservoirs, tunnels, pipelines, and treatment systems. As a result, shortages in precipitation in the Sierra Nevada impacts the water supply in the Bay Area. Because so much of the city's water is generated from outside of the City, drought must be considered a regional hazard that is not confined to a single geographic area. Drought has impacts on San Francisco's residential, commercial, and industrial customers.

Heat:
Given that San Francisco has such a relatively mild climate, a sudden spike in temperatures has a much greater impact on local residents compared with noncoastal communities. Though air conditioning is the leading protective factor against heat-related illness and death, most residential units in San Francisco lack air conditioning. Though an excessive heat event in San Francisco would impact all areas of the city, it would not affect all San Franciscans equally. The elderly, the very young, and those with chronic health problems are most at risk when extreme heat occurs. Using socioeconomic and census tract data for the entire city, the San Francisco Department of Public Health has developed a Heat Vulnerability Index to determine neighborhoods with the highest concentration of residents at risk in excessive heat events.

Fire:
In 2013, the San Francisco Department of Emergency Management mapped fire hazards and rated neighborhoods from very low to extreme. This analysis considered building construction material, land use, and structural age as primary factors for fire danger. Wood frame structures are assumed to be more vulnerable to fire than other construction types. Commercial and industrial land use are calculated as a higher fire risk. Older buildings were built to different fire code standards, thus making them more susceptible to fires. Based on this analysis, most of the City is considered at moderate risk for fire hazard.
The most likely scenario leading to widespread fires in San Francisco is a severe earthquake in the Bay Area, particularly on the North San Andreas Fault zone. Because San Francisco's building stock is composed predominantly of wood, the fires resulting from such earthquakes may cause far more damage. Given the strong likelihood of a major earthquake in the San Francisco Bay Area within the next 30 years, fire must be considered as a possible risk. Fire can destroy buildings and damage infrastructure, including utilities.

Landslide:
Landslides may result in property damage, closure of roadways and loss of life. The areas most susceptible to landsliding in San Francisco are steep slopes on hills and

cliffs. These landslide-prone areas include the Outer Richmond, Sea Cliff, Lake Shore, Bayview Heights, Midtown Terrace, Twin Peaks, Clarendon Heights, Golden Gate Heights, Forest Hills, Diamond Heights, Eureka Valley/Castro, Dolores Heights, and Noe Valley neighborhoods, the Presidio, and Yerba Buena Island. Landslides can damage buildings and infrastructure, including utilities and roads.

High Winds:
During the summer months in San Francisco, temperature and pressure differences between the Pacific Ocean and the interior valleys of California create strong afternoon and evening sea breezes. San Francisco's hilly terrain breaks up strong winds, but occasionally strong storms with significant wind gusts halt normal activity in the city, and cause widespread power line damage and electrical outages due to toppled trees and broken limbs.
Storms combining strong winds with heavy rain have the largest impact on San Francisco during the winter months. Sustained winds of more than 50 mph have been recorded in San Francisco during various Pacific Storms. During isolated storm incidents, gusts may peak at more than 100 mph along the coast and at higher elevations. In such conditions, Bay Area bridges become hazardous, especially for big rig trucks that may overturn on bridges during high wind events. High winds can damage overhead utilities, resulting in power outages.

Tsunamis:
Tsunamis may travel across the ocean at speeds of about 500 miles per hour. The height or amplitude of a tsunami wave in deep water is generally one to three feet or less, and thus may not be noticeable to people on ships. However, as tsunami waves approach land, and as the ocean shallows, the waves slow to around 30 to 60 miles per hour, but grow significantly in height.
The inundation modeling used to create the 2009 inundation maps estimates that maximum tsunami wave run-up elevation at the Golden Gate would be 13 feet at the shoreline, with run-up to 19 feet along northern portions of San Francisco near Crissy Field (National Geodetic Vertical Datum). This wave run-up would dissipate as it moved east, north, and south, out of the gate, and into San Francisco Bay. By the time it reached the eastern shoreline of the Bay at Alameda, run-up would be 13 feet. Maximum wave heights at SFO from the scenarios used to create the inundation maps are below three feet. A tsunami would cause significant damage to buildings and infrastructure.

4. List improvements to the community that eliminated or reduced hazards/risks for at least the last 25 years.

Completed Projects:
Community Action Plan for Seismic Safety (CAPSS) Project (2010)
San Francisco Unified School District (SFUSD) Capital Improvements (2010)
SFO Upper Viaduct Seismic Retrofit (2011)
Critical Infrastructure Buffer Zone (2013)
Public Safety Building (2014)

San Francisco General Hospital (SFGH) Seismic Rebuild (2015)
San Francisco International Airport (SFO) Air Traffic Control Tower Replacement Project (2015)
SFO Shoreline Protection Feasibility Study (2015)
SFO Terminal 3 Improvement Projects (2015)
SFO Runway Safety Area (RSA) Enhancement (2015)
Neighborhood Fire stations and Support Facilities (2017)

Current and Ongoing Projects:
Sewer System Improvement Program
Auxiliary Water Supply System Upgrade
Seawall Earthquake Safety Program
Unreinforced Masonry Building (UMB) Retrofit Program (1992 – Present)
Soft Story Retrofit Program (2013- present)
Earthquake Safety and Emergency Response (ESER) Bond Program (2006 – Present)
CCSF Participation in National Flood Insurance Program (NFIP) (2010 – Present)
Sewer System Improvement Program (2012-2032)
National Weather Service (NWS) TsunamiReady and StormReady Status (2008 – Present)
Sea Level Rise Vulnerability and Consequences Assessment (2017 - present)

5. Describe types and numbers of existing and future structures and facilities that have the potential to incur damages and an estimate of potential dollar losses.

Many billions of dollars of assets are at risk to natural hazards in San Francisco. According to a 2015 study by Risk Management Solutions, approximately $77 billion of private and public property is at risk of flooding from a 100-year storm with 66" of sea level rise. A HAZUS analysis conducted by the Office of Resilience and Capital Planning estimates the potential for $1.9 billion in economic losses just from General Fund public buildings in a M7.2 earthquake on the San Andreas Fault. Under the same scenario, a 2010 study by the Applied Technology Council estimated the total cost to repair or replace buildings damaged by shaking at $30 billion. The actions stemming from this planning effort will help reduce the amount of assets at risk from natural hazards.

6. Describe mitigation goals and objectives to reduce or avoid long-term vulnerabilities to the identified hazards.

For this 2019 plan update, our preliminary goals to reduce or avoid long-term vulnerabilities are as follows:
- Protect the public health, safety, quality of life, environment, and economic and social capital of San Francisco by reducing the risk of damage and disruption from current and future hazards.
- Build and support the capacity of City government and the greater San Francisco community to prevent, protect against, respond to, mitigate, and recover from current and future hazards.

- Advance local, regional, state, federal, private, and community collaboration and partnerships to deliver actionable, effective, innovative risk reduction solutions and data to support decisions.
- Proactively seek to eliminate racial, health, and economic inequities of current and future hazard impacts and advance equity through the just distribution of risk reduction and resilience benefits.
- Increase public awareness of current and future hazards, risks, and city action to build resilience through education, empowerment, and engagement.

COST ESTIMATE INFORMATION

12. HMGP COST ESTIMATE SPREADSHEET:

A. COST ESTIMATE INSTRUCTIONS:

☒ **Using the HMGP Cost Estimate Spreadsheet, provide a detailed cost estimate breakdown.**

- Cost estimate describes the anticipated costs associated with the SOW for the proposed mitigation plan.
- Cost estimates must include detailed estimates of cost item categories.
- Only include costs that are directly related to performing the mitigation activity.
- Documentation that supports the cost estimate must be added to the budget section of the binder.
- Eligible costs must be included in both the cost estimate spreadsheet and the Scope of Work to be reimbursed.

COST ESTIMATE SPREADSHEET EXAMPLE				
ITEM NAME	UNIT QTY	UNIT	UNIT COST	COST EST TOTAL
PLAN INITIATION	80	HR	$120	$9,600
PUBLIC ENGAGEMENT	40	HR	$60	$2,400
REVIEW OF PLANS	140	HR	$80	$11,200
HAZARD/RISK ASSESSMENT	100	HR	$150	$15,000
LOCAL PLAN UPDATES	200	HR	$67	$13,400
COMPILE DRAFT	120	HR	$120	$14,400
REVIEW OF DRAFT	67	HR	$120	$8,040
APPROVAL/ADOPTION	50	HR	$150	$7,500
PLANNING CLOSE-OUT	80	HR	$150	$12,000
			TOTAL COST ESTIMATE:	$93,540

DO NOT COPY EXAMPLE TO SUBAPPLICATION

B. INELIGIBLE COSTS:

The following are ineligible line items:

- Lump Sums
- Contingency Costs
- Miscellaneous Costs
- "Other" Costs
- Indirect Charges
- Overhead Costs
- Cents (must use whole dollar amounts, round unit prices up to whole dollars)

C. PRE-AWARD COSTS:

Eligible pre-award costs are costs incurred after the disaster date of declaration, but prior to grant award. Pre-award costs directly related to developing the application may be funded.

- Submission of subapplication
- Workshops or meetings related to development

SUBAPPLICANTS WHO ARE NOT AWARDED FUNDS WILL NOT RECEIVE REIMBURSEMENT FOR PRE-AWARD COSTS.

D. COST ESTIMATE NARRATIVE:

FEMA requires a cost estimate narrative that explains all projected expenditures in detail. The cost estimate narrative must mirror the cost estimate spreadsheet and should include a full detailed narrative explaining and supporting the costs listed in the Cost Estimate Spreadsheet. If your cost estimate includes city, county, or state employees' time, include personnel titles and salary/hourly wages plus benefits for a total hourly cost. Detailed, functional timesheets must be retained.

☒ Title the document "Cost Estimate Narrative" and include in the budget section of binder.

13. FEDERAL/NON-FEDERAL SHARE INFORMATION:

A. FUNDING RESTRICTIONS:

HMGP funding is restricted to a maximum of $150,000 for each single jurisdictional planning subapplication and up to $250,000 if multi-jurisdictional. FEMA will contribute up to 75% of the total planning cost. A minimum of 25% of the total eligible costs must be provided from a non-federal source. State does not contribute to local cost share.

A jurisdiction may contribute an amount greater than the 25% non-federal share.

B. TOTAL PLANNING COST ESTIMATE:

202,352
ENTER $ IN BOX ABOVE

Enter total cost formulated on HMGP Cost Estimate Spreadsheet

FEDERAL SHARE (75% MAXIMUM)	REQUESTED AMOUNT:	150,000
		ENTER $ IN BOX ABOVE
	PERCENTAGE AMOUNT:	74%
		ENTER % IN BOX ABOVE
NON-FEDERAL SHARE (25% MINIMUM)	REQUESTED AMOUNT:	$52,352
		ENTER $ IN BOX ABOVE
	PERCENTAGE AMOUNT:	26%
		ENTER % IN BOX ABOVE

VERIFY ALL AMOUNTS ENTERED ARE ACCURATE.

INCORRECT AMOUNTS WILL DELAY PROCESSING OF YOUR SUBAPPLICATION.

C. NON-FEDERAL MATCH SOURCE - MATCH COMMITMENT LETTER:

☒ Use the Local Match Commitment Letter Template to complete this section and add completed letter to the match section of the binder.

- A signed Match Commitment Letter must be provided on agency letterhead.
- The non-federal source of matching funds must be identified by name and type.
- If "other" is selected for funding type, provide a description.
- Provide the date of availability for all matching funds.
- Provide the date of the Funding Match Commitment Letter.
- Funds must be available at the time of submission unless Cal OES prior approval has been received.
- If there is more than one non-federal funding source, provide the same information for each source on an attached document.
- Match funds must be in support of cost items listed in the cost estimate spreadsheet.
- Requirements for donated contributions can be found in 2 CFR 200.306.

PRINT THIS PAGE – ORIGINAL SIGNATURE IS REQUIRED

AUTHORIZATION

The undersigned does hereby submit this subapplication for financial assistance in accordance with the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP) and the State Hazard Mitigation Administrative Plan and certifies that the subapplicant (e.g., organization, city, or county) will fulfill all requirements of the program as contained in the program guidelines and that all information contained herein is true and correct to the best of our knowledge.

Subapplicant Authorized Agent

NAME: Kenneth Bukowski

TITLE: Chief Financial Officer

ORGANIZATION: Office of the City Administrator, City and County of San Francisco

SIGNATURE:

DATE: 8/28/2018

GAVIN NEWSOM
GOVERNOR

Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

MARK S. GHILARDUCCI
DIRECTOR

October 15, 2019

Kenneth Bukowski
Deputy City Administrator, Chief Financial Officer
San Francisco, City and County of
1 Dr. Carlton B. Goodlett Place, Room 362
San Francisco, CA 94102

Subject: **Notification of Subapplication Approval**
Hazard Mitigation Grant Program
FEMA-**4353**-DR-CA, Project #**PL0171**, FIPS #**075-00000**

Dear Mr. Bukowski:

The California Governor's Office of Emergency Services (Cal OES) received notification that the Federal Emergency Management Agency (FEMA) has approved your organization's subaward application in the amount of **$150,000.00**. A copy of the FEMA award package is enclosed for your records.

In order to receive payment, all subrecipients must have a current (within the last 3 years), valid Governing Body Resolution and updated Grant Assurances on file with our office (sample copies enclosed). These forms may be downloaded in an electronic format at www.caloes.ca.gov following the links: *Cal OES Divisions; Recovery; Disaster Mitigation & Technical Support; 404 Hazard Mitigation Grant Program; HM Post Obligation Documents*. An active DUNS Number registration with the federal System for Award Management (SAM) website is also required for obtaining payment for the duration of this grant subaward. For your convenience, information regarding completing and renewing a SAM registration is included in this package. Please complete the electronic forms as well as the enclosed Supplemental Grant Subaward Information sheet and return them to the address below within 30 days. Payments will be made on a reimbursement basis using the Hazard Mitigation Reimbursement Request Form. A ten percent (10%) retention will be withheld from all reimbursement payments and will be released as part of the subaward closeout process.

Reimbursements can be made only for items listed on the approved subaward application; expenditures for any other work should be separately maintained and are the sole responsibility of the subrecipient. Any funds received in excess of current needs or approved amounts, or those found owed as a result of a final inspection or audit, must be refunded to the State within 30 days of receipt of an invoice from Cal OES.

For further assistance, please contact the Recovery Grants Processing Unit at (916) 845-8110 for payment related questions, or Hazard Mitigation Grants at (916) 845-8150 for program related questions.

Recovery Grants Processing Unit

Enclosures

c: Applicant's File

*The Recovery Grants Processing Unit has universal resolution 400-16, passed on 9/22/16, on file. A copy of the resolution is included in this package for your review. With the permission of an Authorized Agent, the resolution can be applied to this project.

Andrew

U.S. Department of Homeland Security
Region IX
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

RECEIVED
OCT 1 9 2019
691249
GRANTS PROCESSING UNIT

RECEIVED
N19-1560
SEP 30 2019
HAZARD MITIGATION

September 16, 2019

Mark S. Ghilarducci
Governors Authorized Representative
California Governor's Office of Emergency Services
3650 Schriever Avenue
Mather, California 95655

Reference: Application Approval, HMGP #4353-171-46P
City and County of San Francisco, Hazard Mitigation Plan Update
Supplement #14 FIPS 075-00000

Dear Mr. Ghilarducci:

We have approved and issued Hazard Mitigation Grant Program (HMGP) funds for the above-referenced Local Hazard Mitigation Plan Update for HMGP #4353-171-46P.

The total eligible cost is $202,352. As shown in the enclosed Supplement #14 Obligation Report, we have obligated $150,000 federal share reimbursement of eligible costs. These funds are now available in Smartlink for eligible disbursements, and this approval is based on the following:

1. These funds are obligated based on the City and County of San Francisco's scope of work (SOW) for a plan update.

2. The award of funds is subject to the enclosed Standard Hazard Mitigation Grant Program Conditions, August 2018. Federal funds may be de-obligated for work that does not comply with these conditions.

3. The project schedule in the application identified that all work will be completed in 31 months or by April 16, 2022. Please be advised that all federal funds may be de-obligated for work that is not completed within schedule, and for which no extension is approved.

4. In compliance with the National Environmental Policy Act (NEPA), this undertaking is categorically excluded (CE) from the need to prepare either an environmental assessment or environmental impact statement.

If you have any questions or need further assistance, please contact Linda Ortiz, Hazard Mitigation Assistance Specialist, at (510) 627-7096.

Sincerely,

Juliette Hayes
Director
Mitigation Division
FEMA Region IX

Enclosures (3):

Supplement #14
Project Management Report
Standard HMGP Conditions

LONDON N. BREED
Mayor

NAOMI M. KELLY
City Administrator

BRIAN E. STRONG
Chief Resilience Officer

ONESF
Building Our Future

To:	Angela Calvillo, Clerk of the Board of Supervisors
From:	Brian Strong, Chief Resilience Officer; Melissa Higbee, Principal Resilience Analyst
Date:	
Subject:	Accept & Expend Resolution for Subject Grant
Grant Title:	Hazard Mitigation Grant, HMGP #4353-171-46P City and County of San Francisco, Hazard Mitigation Plan Update

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Attached please find the original* and 1 copy of each of the following:

___ Proposed grant resolution; original* signed by Department, Mayor, Controller

___ Grant information form, including disability checklist

___ Grant budget

___ Grant application

___ Grant award letter from funding agency

___ Ethics Form 126 (if applicable)

___ Contracts, Leases/Agreements (if applicable)

___ Other (Explain):

Special Timeline Requirements:

Departmental representative to receive a copy of the adopted resolution:

Name: Melissa Higbee Phone: 415-554-4939

Interoffice Mail Address: City Hall Room 347

Certified copy required Yes ☐ No ☒

From:	Peacock, Rebecca (MYR)
To:	BOS Legislation, (BOS)
Cc:	Kittler, Sophia (MYR); Quetone, Tal (ART); Barnes, Bill (ADM); Higbee, Melissa (ADM); Strong, Brian (ADM); Kirkpatrick, Kelly (MYR); Patil, Lillian (MYR)
Subject:	Mayor -- [Resolution] -- [Accept and Expend Grant - California Office of Emergency Services – Hazard Mitigation Grant Program– 2019 update of Local Hazard Mitigation Plan - $150,000]
Date:	Tuesday, May 19, 2020 4:24:44 PM
Attachments:	RE Update Local Hazard Mitigation Plan AE - Request for Controller"s Office Mayor"s Office Approval.msg 1. A&E Cover Letter.docx 2. Accept and Expend Resolution_FINAL.docx 3. Grant_Information Form_MOD.pdf 4. Cost Estimate Narrative_rev.pdf 5. Grant Application.docx 6. Award Letter.pdf CAO Approval_HMGP.pdf

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Attached for introduction to the Board of Supervisors is a **resolution retroactively authorizing the Office of the City Administrator to accept and expend Hazard Mitigation Grant Program (HMGP) funds in the amount of $150,000 from the Federal Emergency Management Agency through the California Office of Emergency Services (Cal OES) to support San Francisco's update to the 2014 Local Hazard Mitigation Plan for the project period from September 16, 2019 through April 16, 2022.**

Please see attached emails from the Controller's office and Ken Bukoskwi indicating approval. @Kirkpatrick, Kelly (MYR), can you please reply to this email to indicate approval? Thank you!

Please let me know if you have any questions.

Rebecca Peacock (they/she)
(415) 554-6982 | Rebecca.Peacock@sfgov.org
Office of Mayor London N. Breed
City & County of San Francisco
*** I am working remotely. Please call me at 267-663-8648 with any questions ****

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Incomplete - Pending Signature

San Francisco Ethics Commission
25 Van Ness Avenue, Suite 220, San Francisco, CA 94102
Phone: 415.252.3100 . Fax: 415.252.3112
ethics.commission@sfgov.org . www.sfethics.org

Received On:

File #:

Bid/RFP #:

Notification of Contract Approval

SFEC Form 126(f)4
(S.F. Campaign and Governmental Conduct Code § 1.126(f)4)
A Public Document

Each City elective officer who approves a contract that has a total anticipated or actual value of $100,000 or more must file this form with the Ethics Commission within five business days of approval by: (a) the City elective officer, (b) any board on which the City elective officer serves, or (c) the board of any state agency on which an appointee of the City elective officer serves. For more information, see: https://sfethics.org/compliance/city-officers/contract-approval-city-officers

1. FILING INFORMATION

TYPE OF FILING	DATE OF ORIGINAL FILING (*for amendment only*)
Original	
AMENDMENT DESCRIPTION – Explain reason for amendment	

2. CITY ELECTIVE OFFICE OR BOARD

OFFICE OR BOARD	NAME OF CITY ELECTIVE OFFICER
Board of Supervisors	Members

3. FILER'S CONTACT

NAME OF FILER'S CONTACT	TELEPHONE NUMBER
Legislative Clerks Division	415-554-5184
FULL DEPARTMENT NAME	**EMAIL**
Office of the Clerk of the Board	Board.of.Supervisors@sfgov.org

4. CONTRACTING DEPARTMENT CONTACT

NAME OF DEPARTMENTAL CONTACT	DEPARTMENT CONTACT TELEPHONE NUMBER
Melissa Higbee	415-554-4939
FULL DEPARTMENT NAME	**DEPARTMENT CONTACT EMAIL**
ADM Office of Resilience & Capital Planning	melissa.higbee@sfgov.org

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Incomplete - Pending Signature

5. CONTRACTOR	
NAME OF CONTRACTOR Lowercase Productions	**TELEPHONE NUMBER** 415-994-6653
STREET ADDRESS (including City, State and Zip Code) 309 Lyon Street	**EMAIL** daniel@lowercaseproductions.com

6. CONTRACT		
DATE CONTRACT WAS APPROVED BY THE CITY ELECTIVE OFFICER(S)	**ORIGINAL BID/RFP NUMBER**	**FILE NUMBER (*If applicable*)**
DESCRIPTION OF AMOUNT OF CONTRACT $49,042		
NATURE OF THE CONTRACT *(Please describe)* Assist with document layout, design, and content population for the Hazards and Climate Resilience Plan; to modify the existing ONESF website to reflect San Francisco's update to the 2014 Hazard Mitigation Plan. All efforts involved make use of the design templates developed during the last update of ORCP's website and plan.		

7. COMMENTS

8. CONTRACT APPROVAL	
This contract was approved by:	
☐	**THE CITY ELECTIVE OFFICER(S) IDENTIFIED ON THIS FORM**
☒	**A BOARD ON WHICH THE CITY ELECTIVE OFFICER(S) SERVES** Board of Supervisors
☐	**THE BOARD OF A STATE AGENCY ON WHICH AN APPOINTEE OF THE CITY ELECTIVE OFFICER(S) IDENTIFIED ON THIS FORM SITS**

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Incomplete - pending signature

9. AFFILIATES AND SUBCONTRACTORS			
List the names of (A) members of the contractor's board of directors; (B) the contractor's principal officers, including chief executive officer, chief financial officer, chief operating officer, or other persons with similar titles; (C) any individual or entity who has an ownership interest of 10 percent or more in the contractor; and (D) any subcontractor listed in the bid or contract.			
#	**LAST NAME/ENTITY/SUBCONTRACTOR**	**FIRST NAME**	**TYPE**
1	Reider	Daniel	Other Principal Officer
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Incomplete - pending signature

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#	**LAST NAME/ENTITY/SUBCONTRACTOR**	**FIRST NAME**	**TYPE**
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#	**LAST NAME/ENTITY/SUBCONTRACTOR**	**FIRST NAME**	**TYPE**
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50			
☐	Check this box if you need to include additional names. Please submit a separate form with complete information. Select "Supplemental" for filing type.		

10. VERIFICATION	
I have used all reasonable diligence in preparing this statement. I have reviewed this statement and to the best of my knowledge the information I have provided here is true and complete. **I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.**	
SIGNATURE OF CITY ELECTIVE OFFICER OR BOARD SECRETARY OR CLERK BOS Clerk of the Board	**DATE SIGNED**