*ENVIRONMENTAL DECLARATION

(CALIFORNIA FISH AND GAME CODE SECTION 711.4)

LEAD AGENCY NAME AND ADDRESS

FOR COUNTY CLERK USE ONLY

Zone 7 Water Agency
Elke Rank
100 North Canyons Parkway
Livermore, CA 94551

FILE NO:	

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT:

(PLEASE MARK ONLY ONE CLASSIFICATION)

1. NOTICE OF EXEMPTION / STATEMENT OF EXEMPTION

- [X] A STATUTORILY OR CATEGORICALLY EXEMPT
 - \$ 50.00 COUNTY CLERK HANDLING FEE

2. NOTICE OF DETERMINATION (NOD)

- [] A NEGATIVE DECLARATION (OR MITIGATED NEG. DEC.)
 - \$ 2,480.25 STATE FILING FEE
 - \$ 50.00 COUNTY CLERK HANDLING FEE
- [] B ENVIRONMENTAL IMPACT REPORT (EIR)
 - \$ 3,445.25 STATE FILING FEE
 - \$ 50.00 COUNTY CLERK HANDLING FEE

-		
9	OTHER:	

A COPY OF THIS FORM MUST BE COMPLETED AND SUBMITTED WITH EACH COPY OF AN ENVIRONMENTAL DECLARATION BEING FILED WITH THE ALAMEDA COUNTY CLERK.

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FEES ARE EFFECTIVE JANUARY 1, 2021

MAKE CHECKS PAYABLE TO: ALAMEDA COUNTY CLERK

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Form No. 110-37 (Rev. 4/81 B30)

COUNTY OF ALAMEDA

White & Yellow - Auditor Pink - Furnishing Dept. Goldenrod - Ordering Dept.

INTER - DEPARTMENT SERVICE ORDER

Nº 81209

Service furnished by: KEVIN Hing (Name) IDSO Acct. No.:5215 Elke Rank Service ordered by: (Name) Dept.: Clerk-Recorder 270722 Zone 7 Water Agency 140300 No.: No.: QIC: 90201 Phone: 2636Z 925-454-5045 2020 Phone: ESTIMATED COST ACCOUNT **DESCRIPTION OF SERVICES** ACTUAL CHARGE 610361 50.00 Routine Maintenance Agreement 610361 0.00 610361 0.00 610361 0.00 610361 0.00 Name of Contact Person: Teri Yasuda QIC: 90201 925-454-5045 03/05/2021 Date Date Ordered Completed Digitally signed by Teri Yasuda DN: cn=Teri Yasuda, o=Zone 7 Water Authorized Teri Yasuda Authorized Signature



NOTICE OF EXEMPTION

To: Office of Planning and Research

For U.S. Mail: P.O. Box 3044

Sacramento, CA 95812-3044

Street Address:

1400 Tenth Street, Room 121 Sacramento, CA 94514 From: ZONE 7 WATER AGENCY

100 North Canyons Parkway

Livermore, CA 94551 925-454-5000 **Attn. Elke Rank**

To: County Clerk

County of Alameda 1106 Madison Street Oakland, CA 94612 Date:

March 22, 2021

Project Title: Routine Channel Maintenance

Project Number (Zone 7): n/a

Project Location – Specific: Various; Zone 7's owned channels and facilities (see attached)

Project Location - City: Livermore, Pleasanton, Dublin

Project Location - County: Alameda

Description of Nature, Purpose, and Beneficiaries of Project:

Zone 7 Water Agency (Zone 7) owns and maintains approximately 37 miles of engineered, modified, and natural channels throughout the Livermore-Amador Valley. The channels also play an integral role in local groundwater management and water supply. Zone 7's maintenance program includes routine maintenance of, and repairs to, the flood protection facilities. Such activities are directed toward preventing minor problems from becoming major flooding problems, minimizing unnecessary damage to private property through proactive planning, preserving and maximizing flood carrying capacity of existing creeks and channels, and post-storm rehabilitation of damaged flood protection facilities. Work occurs on Zone 7 channels and facilities as shown on the attached map. Some activities are district-wide, like mowing. Other activities occur on as as-needed basis typically as a result of past winter storms, like site-specific bank repairs.

In a typical year, Zone 7 conducts routine channel maintenance work including the following:

- Vegetation maintenance work including district-wide mowing of tall weeds and grasses along
 most channels for fire fuels management, and district-wide pruning/removing of hazardous
 vegetation like fallen trees as well as to maintain access for emergency vehicle.
- Debris and sediment removal, including spot removal of small amounts of sediment or debris from existing structures like bridge piers to maintain the integrity of the infrastructure. (approx. 50 sites)
- Structure maintenance and repair including site-specific work at stormdrain outfalls to ensure water flowing from city stormdrains can reach the flood control channels. (approx. 10 sites)
- Bank repair work, which is typically identified only after storm events. (approx.. 10 sites)

Zone 7's mission is to deliver safe, reliable, efficient, and sustainable water and flood protection services. Zone 7's strategic planning priorities include a stated goal to "Provide Eastern Alameda County with an effective system of flood protection" which is further described to "Continue the stream maintenance program to maintain the effectiveness of flood protection facilities". Most of the cost of routine repair and maintenance is funded by property taxes (enabling legislation in the District Act). For federally declared storm disasters, Zone 7 may also apply for reimbursement from the Federal Emergency Management Agency or the U.S. Army Corps of Engineers. Specific budgeting for work is done and approved by the Board on a continuous bi-annual basis.

Name of Public Agency Approving Project: Zone 7 Water Agency

Name of Person or Agency Carrying Out Project: Zone 7 Water Agency

☐ Ministerial (Sec. 21080(b)(1); 15268);
Declared Emergency (Sec. 21080(b)(3); 15269(a));
Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
☐ Categorical Exemption. State type and section number: Class 1, Class 2, Class 3, Class 4
Statutory Exemptions. State code number:

Reasons Why Project is Exempt:

Exempt Status: (check one)

The project qualifies for a Categorical Exemption under CEQA Guidelines as follows:

- 15301 Class 1 Existing Facilities: "...operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination..."
- 15302 Class 2 Replacement or Reconstruction: "...replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced..."
- 15303 Class 3 New Construction or Conversion of Small Structures: "... construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure..."
- 15304 Class 4 Minor Alterations to Land: "... minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes."

None of the conditions noted under the California Environmental Quality Act (CEQA) Guidelines 15300.2 (as revised) will occur. Furthermore, this project will not result in potential for significant environmental impacts because:

- The project site will look and function the same (or nearly) as it has in the past.
- Work will be limited to the smallest footprint practicable, and within any set limits in applicable regulatory permits.
- There will be minimal native ground disturbance.

- Routine maintenance is typically within Zone 7's property and will have minimal constructionrelated nuisances to local residents, businesses, or recreational areas, such as disruptions to traffic and increased noise or dust, etc.
- Best Management Practices will be employed during construction to reduce the potential for localized erosion or impact to water quality.
- No impacts to sensitive habitat or wildlife are expected.
- Pre-construction biological surveys will be performed as needed.
- There is not a reasonable possibility that the project could result in a significant impact.

Signature:	Elke Rank	o, ou, e7water.com,
Title	Associate Water Resources F Zone 7 Water Agency	
	Zone 7 Water Agency	
Date received for	or filing at County Clerk:	
Date received f	or filing at OPR:	

ATTACHMENT 1: DESCRIPTION OF WORK

A. Allowed Activities

Routine channel maintenance includes the following activities. Each year specific locations requiring maintenance will be identified. As needed, site specific surveys will be completed to ensure the sites are free from sensitive biological and historic resources.

Vegetation Management:

- Removal of parts of woody and herbaceous plants, fallen trees, or trunks or limbs lodged in the
 bed or bank causing flow restriction shall be cutoff at the bed or bank invert with small tools and
 removed with winch and cable or other equipment operated from top of bank. Root structures are
 not to be disturbed and the debris disposed at a place where it cannot reenter State waters. No
 heavy equipment may be operated in the streambed.
- Control of weeds and grasses on channel access roads, shoulders, and banks by mowing or
 herbicide application. This may take place between April 15 and October 31 of each year.
 Herbicide application will conform to all applicable County, State, and Federal Regulations and
 licenses. Only EPA registered herbicides shall be use in channels for vegetation control.
- Vegetation enhancement associated with other routine maintenance activities including replanting, new planting, and maintenance of plantings.
- Installation and maintenance of native riparian vegetation (trees, bushes, shrubs, and grasses) for the purpose of bank reinforcement and/or erosion control. Work beyond the seasonal restriction is allowed in instances where such timing promotes the success of native plantings and reduces need for added irrigation. All other restrictions still apply.

Debris and Sediment Removal:

- Physical removal of silt, debris, rubbish, algae and other non-living materials from concrete lined channels where no flow or minimal flow is present. If water is present a flow diversion structure would be constructed up stream and water would be discharged downstream through a sediment control structure.
- Removal of small amounts of debris and sediment from within and around structures (less than 50 cubic yards) affecting no more than 50 feet of watercourse in natural channels and 100 feet in constructed flood control channels.
- Removal of sediment and debris from waterways affecting no more than 50 feet of a watercourse in a natural stream channel, 100 feet for an artificial earthen channel, and 500 feet in a concrete lined channel.
- These activities will not exceed a cumulative annual total of 500 feet in a natural stream and 1,000 feet in a flood control channel or 3,000 feet in concrete lined channel.

Structure Maintenance and Repair:

• Repair, replacement in kind, or maintenance of drainage and erosion control structures including but not limited to: storm drain outfalls, tide gates, slide gates, culverts, revetments, bank protection, energy dissipaters, grade structures, sediment basins, weirs, trash racks, stream gauge

structures, fish ladders, fish screens, utility line crossings, bridges (including support structures), road embankments, and access ramps.

• Repair, maintain or resurface existing roads, bike lanes, paths, and sidewalks within the riparian corridor or stream zone so long as the width of the paved surface is not increased.

Bank Repair:

- Repair of concrete lined channels in-kind.
- Repair of constructed engineered channels 200 linear feet in any three-month period, using the method of least impact to complete the repair. The primary repair method shall be bioengineering techniques such as turf reinforcement brush walls, etc. If bioengineering techniques do not provide a solution to the repair of the eroded banks (because of such as poor soils, percolation of water, limited space or steepness of slopes) other methods shall be explored. Riprap would be the last resort in that no other method would be effective. Repair in natural channels would be limited to 100 feet using the method of least impact to accomplish the repair.
- In order to prevent instability in certain channels, dewatering of channel banks by use of drilling and installation of plastic drainpipes may be used. All equipment would be isolated from the channel by silt fencing or other barrier to keep any contaminates from entering the channel.

Temporary Water Diversions

 Temporary water diversions associated with other related maintenance activities using structures such as cofferdams not exceeding 3 feet in height or sumps, with or without pumps, provided that all water is discharged into a silt control structure before release and provided that the channel is restored to its original configuration after work is completed.

B. Best Management Practices

Proactive Monitoring & Maintenance

Zone 7 proactively monitors and maintains the agency-owned flood control channels. This includes regular on-the-ground monitoring of channels, documenting issues that are specific to certain reaches, and promptly addressing issues – especially catching minor issues before they become larger future problems that require more intensive treatments.

For example, in channels which historically have had a number of bank failures, Zone 7 continually monitors the areas for early evidence of bank movement (like tension cracks) or signs of potential future issues (like gopher or fox holes). When these early indicators are discovered, often relatively simple solutions are implemented, such as:

- a) eliminating squirrel and fox holes;
- b) sealing cracks on the slope and on road to prevent saturation of the slope and road;
- c) re-grading the access road drainage to eliminate ponding water and preventing drainage into the slope; and
- d) planting trees and/or deep-rooted grasses on channel banks to improve bank stability.

The photographs below demonstrate our proactive approach to address maintenance needs early to prevent needing to do larger and more intensive projects later.

EXAMPLES of proactive solutions that can help avoid or reduce the need for bigger repairs.

Some channels in Pleasanton have unstable soils that are prone to bank sliding and slumping. In collaboration with the RCD, Zone 7 is testing some long-rooted sod and plants to see if these can help stabilize banks in this area.

New plantings on Pleasanton Canal on left; New native sod on Line G-1-1 on right.





Filling cracks at the top of the bank and re-grading trails/roads at top of bank to reduce or avoid excessive penetration of water into the bank, which causes saturation of the bank soils resulting in bank movement.





Seek Low-Impact Options

Commonly there is a range of solutions for maintenance work – from small interim repairs to complete overhauls. Zone 7 seeks to minimize environmental impacts by using biotechnical or other non-invasive solutions wherever feasible; hardscape, such as riprap or concrete is applied only if other solutions will not work and the physical bank conditions or hydraulic flow conditions require that level of bank shear strength. For example, if a bank failure is identified, the initial plan of action calls for immediately covering the slide area in order to minimize additional saturation from rainfall. Then an engineer will identify and document the root cause of the failure, and determine if a low-impact fix is suitable. Finally, the site is seeded before the rainy season to promote stability. These tactics often allows (if needed) one to two winters to plan, design, and fund an appropriate project. The next step is to evaluate suitable biotechnical solutions – like brush walls, willow planting or brush layering. Depending on the mechanism and the severity of the bank failure, among other factors, these options offer either a temporary or a permanent fix. These techniques are low impact in that there is minimal or no soil or vegetation disturbance and they do not require heavy equipment in the channel.

EXAMPLES of low-impact techniques:

1) Willow plantings / Brush walls help to stabilize areas of active toe erosion. This low-impact method can minimize further erosion in some locations.





2) "Geoweb" (woven fabric cells) backfilled with native soils to repair eroded slope surfaces. In this example, after a brush wall was built the eroded areas were rebuilt with cellular confinement, then seeded and covered with erosion fabric, and seeded again. This low-impact method can be successful in some locations.







Site Conditions Drive the Engineering Design

If the biotechnical approaches described above are deemed unsuitable or have not worked well previously at the site, Zone 7 then consider more structural/hardened solutions. In some cases, biotechnical solutions are not the most suitable option for repairing a bank failure, and an engineered rock-based design is required if softer approaches would continue to fail. Zone 7 will consider a rock-based design in order to achieve a satisfactory result — one that alleviates the need for repeated repairs and thereby repeated potential environmental impacts, and increases the flood protection in the adjacent communities. Table 2 identifies the key site conditions that could trigger the need for a more extensive bank repair.

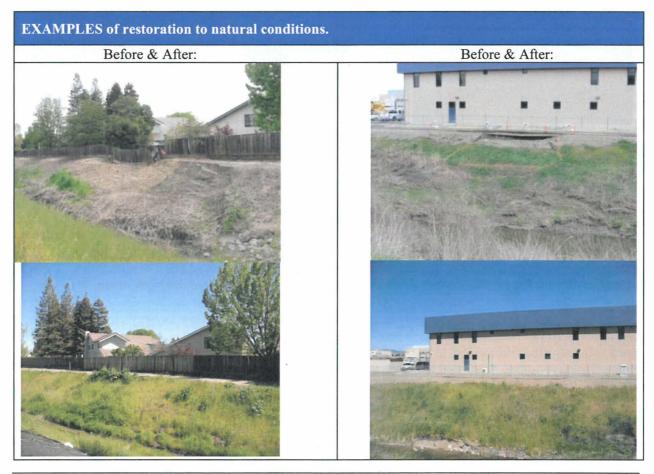
Zone 7 has found that rock-based repairs installed 15+ years ago with shallow keyways, small rock size, and minimal riprap have since failed. Therefore, the keyway size, size of riprap, and thickness of riprap need to be adjusted with respect to the specific physical and site characteristics of each channel. The riprap thickness is directly related to the riprap size required. Larger riprap size is required for deeper channels and channel subject to high velocities / shear stress.

Table 1. Key Site Conditions and Constraints that Drive the Design

SITE CONDITION	NOTES
Rotational bank failure	If the bank failure is a deeper rotational failure, the most appropriate solution may be to excavate the bank deeper, re-compact bank soils, and use riprap to anchor the toe of the bank, or in particularly vulnerable locations the whole bank.
Quality of native soils	Expansive soils or highly mixed soils often result in unstable banks. Less stable, poorer quality soils exist in the area of Arroyo De La Laguna, Alamo Canal, Arroyo Mocho, Alamo Canal, Line G-1-1, and Pleasanton Canal. Such soils may limit the use of certain biotechnical approaches.
Stream velocity / shear stress	Some streams are subject to higher water velocity / shear stress. In particular, Arroyo de la Laguna, Chabot Canal and South San Ramon Creek are subject to highER velocities. High velocities can also limit the selection of treatments.
Bank slope Groundwater table	Steep slopes often prove difficult to repair without rock support. High groundwater table can result in saturated channel banks that are difficult to repair without rock support.

Restore the Site to Natural-like Conditions

All channel repair designs include post-construction restoration such that the repair is nearly indistinguishable from surrounding areas. This can include applying a layer of soil over the repair, then seeding with native, deep-rooted grasses. In some cases, new shrubs or trees can be installed, but this is highly dependent on the channel flood capacity. See examples below.



Site Specific BMPs

Site-specific Best Management Practices (BMPs) are included in all of Zone 7's work in and near channels. These measures can range from completing bird nest surveys prior to construction or tree pruning during nesting season, to conducting environmental trainings for staff, to installing silt fencing around worksites to ensure no incidental fallback of loose materials into the waterway.

C. Project Location Map

